

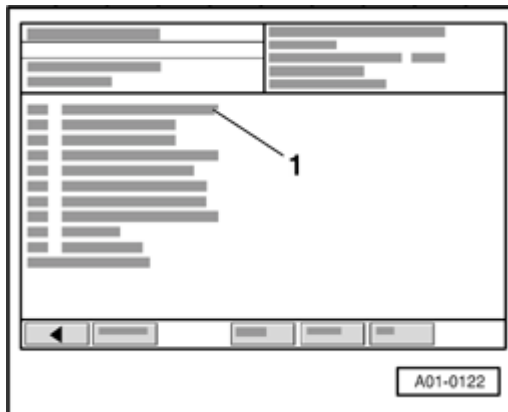
## Diagnostic Trouble Code (DTC) memory, checking and erasing

### Check DTC Memory (function 02)

- Connect VAS5051 tester ⇒ [Page 01-7](#) and select vehicle system "01 - Engine electronics". Engine should run at idle for this.

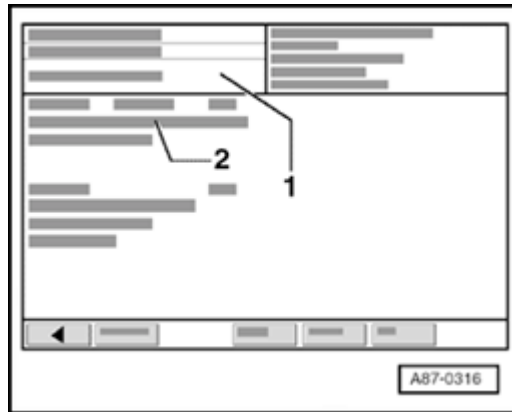
**Note:**

*If engine doesn't start, crank engine using starter for at least 5 seconds. Do not switch ignition off afterward under any circumstance.*



Display on VAS5051:

- In selection -1-, click on the diagnostic function "02 - Check DTC memory".



◀ Display on VAS5051:

1 - DTC memory content:

◆ 0 malfunctions recognized

or

◆ X malfunctions recognized

2 - Malfunction

◆ DTC

◆ malfunction location

◆ malfunction type

**A - If malfunctions were recognized:**

- Print out screen content or On Board Diagnostic (OBD) protocol.
- End function "02 - check DTC memory" by pressing ◀ button.



◀ Display on VAS5051:

- Repair malfunction(s) according to DTC table ⇒ [Page 01-17](#) .

- In selection, click on diagnostic function "02 - Check DTC memory" again and erase DTC memory ⇒ [Page 01-14](#)

- In selection, click on diagnostic function "06 - end output" ⇒ [Page 01-16](#) .

**B - If no malfunctions were recognized:**

- In selection, click on diagnostic function "06 - end output" ⇒ [Page 01-16](#) .

## Erase DTC Memory (function 05)

### **Important note:**

- ◆ *If there are no DTCs in DTC memory, DTC memory should not be unnecessarily erased or else readiness code will be lost.*
- ◆ *If DTC memory was erased, readiness code must be re-generated ⇒ [Page 01-84](#) .*
- ◆ *If DTC memory cannot be erased, check DTC memory again and repair malfunction.*

### **Requirements**

- DTC memory checked ⇒ [Page 01-12](#) .
- All malfunctions repaired.

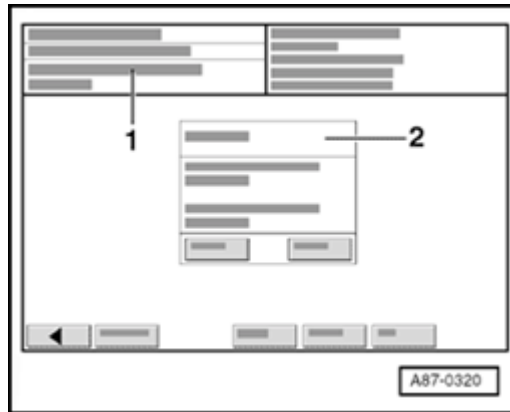
After successful DTC memory check:



Display on VAS5051:

- In selection -1-, click on the diagnostic function "05 - Check DTC memory".





◀ Display on VAS5051:

1 - ♦ no indication (before erasing)

or

♦ DTC memory erased

**Note:**

*If indication -1- appears in display field: "DTC memory has not yet been checked", the work sequence was not adhered to correctly. DTC memory can only be erased if DTC memory was checked before.*

2 - Note: Perform the function?

Note: Data is being erased !

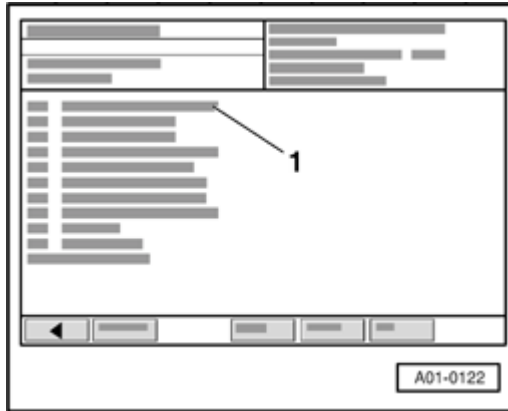
- Press on "OK" button in display -2-.
- End function "05 - erase DTC memory" by pressing on ◀ button.
- Check DTC memory again after repair work:

**Note:**

*This causes DTCs to be erased that were stored during repair of malfunction, e.g. because harness connectors were disconnected.*

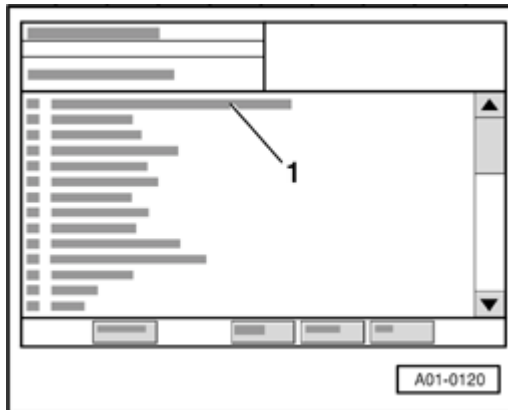
- If DTC memory was erased, readiness code must be re-generated ⇒ [Page 01-84](#) .

### End Output (function 06)



Display on VAS5051:

- Select diagnostic function "06 - end output" in selection -1-.



Display on VAS5051:

- Switch off ignition and disconnect diagnostic connector after this indication is displayed.

## Diagnostic Trouble Code (DTC) table

### Notes:

- ◆ *When malfunctions occur in monitored sensors or components, Diagnostic Trouble Codes (DTCs) are stored in DTC memory with a description of the malfunction type.*
- ◆ *"E-Gas" relevant malfunctions are also indicated in the instrument cluster by the warning lamp for Electronic Power Control ("EPC warning lamp"); Notes for E-Gas system ⇒ [Page 24-120](#) .*
- ◆ *Malfunctions that worsen emissions are indicated by an exhaust warning lamp (MIL) in the instrument cluster. Notes for Malfunction Indicator Lamp (MIL) ⇒ [Page 01-3](#) .*
- ◆ *The DTC table is organized by the 5 digit code at left.*
- ◆ *If a stored DTC does not recur within the next 40 warm-up cycles, the DTC will be erased automatically.*
- ◆ *Malfunctions that occur sporadically (temporarily occurring malfunctions) are identified with "sporadic" on display. The word sporadic means "appearing or occurring at irregular intervals, occasional".*
- ◆ *Do not immediately replace components that the VAS5051 suggests are faulty, instead: Check wire connections and harness connectors to these components according to wiring diagram. Also check Ground (GND) connections according to wiring diagram. This is particularly valid when malfunctions are displayed as "sporadic".*
- ◆ *If the connector is disconnected from the ECM or the battery is disconnected, all adaptation values in the control module are erased. DTC memory content will remain intact however. If the engine is started after this, a rough, uneven idle can result. In this case, engine must be allowed to run at idle for a few minutes until adaptation procedure has been completed.*

◆ *If DTC memory was erased* ⇒ [Page 01-12](#) , *readiness code must be re-generated* ⇒ [Page 01-84](#) .



**DTC codes 16395 - 17624**

DTC		DTC text	Corrective action
SAE	VAG		
P0011	16395	Bank 1 camshaft advance adjustment  Specified value not obtained	⇒ <a href="#">Repair Manual, 1.8 Liter 4-Cyl. 5V Turbo Engine Mechanical, Engine Code (s): AWM, Repair Group 15; Checking camshaft adjustment</a>
P0012	16396	Bank 1 camshaft adjustment  Specified value not obtained	
P0101	16485	Mass Air Flow (MAF) sensor -G70-  Implausible signal	- Check Mass Air Flow (MAF) sensor ⇒ <a href="#">Page 24-59</a>
P0102	16486	Mass Air Flow (MAF) sensor -G70-  Signal too small	
P0103	16487	Mass Air Flow (MAF) sensor -G70-  Signal too large	

01-19

DTC		DTC text	Corrective action
SAE	VAG		
P0106	16490	MAP sensor -G71-/BARO sensor -F96-  Implausible signal <sup>1)</sup>	⇒ <a href="#">Repair Manual, 1.8 Liter 4-Cyl. 5V Turbo Engine Mechanical, Engine Code(s): AWM, Repair Group 21, Charge air system with turbocharger, checking</a>
P0112	16496	Intake Air Temperature (IAT) sensor -G42-  Signal too small	- Intake Air Temperature (IAT) sensor, checking ⇒ <a href="#">Page 28-21</a>
P0113	16497	Intake Air Temperature (IAT) sensor -G42-  Signal too large	
P0116	16500	Engine Coolant Temperature (ECT) sensor -G62-  Implausible signal	- Engine Coolant Temperature (ECT) sensor, checking ⇒ <a href="#">Page 28-31</a>
P0117	16501	Engine Coolant Temperature (ECT) sensor -G62-  Signal too small	
P0118	16502	Engine Coolant Temperature (ECT) sensor -G62-  Signal too large	

1) Intake manifold pressure is determined by the charge air pressure sensor -G31- (instead of -G71- as indicated), air pressure is determined by the Barometric Pressure (BARO) sensor -F96- (in ECM).

01-20

DTC		DTC text	Corrective action
SAE	VAG		
P0130	16514	Bank 1, sensor 1 Electrical malfunction in circuit	- Check Oxygen Sensor (O2S) and oxygen sensor control before Three Way Catalytic Converter (TWC) ⇒ <a href="#">Page 24-71</a>
P0131	16515	Bank 1, sensor 1 Voltage too low	
P0132	16516	Bank 1, sensor 1 Voltage too high	
P0133	16517	Bank1, sensor 1 Signal too slow	
P0134	16518	Bank 1, sensor 1 No activity	
P0135	16519	Bank 1, sensor 1 Heating circuit, electrical malfunction	

01-21

DTC		DTC text	Corrective action
SAE	VAG		
P0136	16520	Bank 2, sensor 1 Electrical malfunction in circuit	- Check Oxygen Sensor (O2S) and oxygen sensor control behind Three Way Catalytic Converter (TWC) ⇒ <a href="#">Page 24-94</a>
P0137	16521	Bank 2, sensor 1 Voltage too low	
P0138	16522	Bank 2, sensor 1 Voltage too high	
P0139	16523	Bank1, sensor 2 Signal too slow	
P0140	16524	Bank 2, sensor 1 No activity	
P0236	16620	Charge air pressure sensor -G31- Implausible signal	⇒ <a href="#">Repair Manual, 1.8 Liter 4-Cyl. 5V Turbo Engine Mechanical, Engine Code(s): AWM, Repair Group 21, Charge air system with turbocharger, checking</a>
P0237	16621	Charge air pressure sensor -G31- Signal too small	
P0238	16622	Charge air pressure	

		sensor -G31- Signal too large	
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01-22

DTC		DTC text	Corrective action
SAE	VAG		
P0300	16684	Combustion misfire detected	<ul style="list-style-type: none"> <li>- Check fuel pressure ⇒ <a href="#">Page 24-32</a></li> <li>- Check fuel injectors ⇒ <a href="#">Page 24-37</a></li> <li>- Check spark plugs and ignition wires with connector</li> <li>- Ignition coils with power output stages Checking ⇒ <a href="#">Page 28-4</a></li> <li>- Check misfire recognition ⇒ <a href="#">Page 28-55</a></li> <li>- Fill fuel tank with fuel</li> </ul>
P0301	16685	Cyl. 1 combustion misfire detected	
P0302	16686	Cyl. 2 combustion misfire detected	
P0303	16687	Cyl. 3 combustion misfire detected	
P0304	16688	Cyl. 4 combustion misfire detected	
P0321	16705	Engine Speed (RPM) sensor -G28- Implausible signal	<ul style="list-style-type: none"> <li>- Check engine speed (RPM) sensor ⇒ <a href="#">Page 28-27</a></li> </ul>
P0322	16706	Engine Speed (RPM) sensor -G28- No signal	

01-23

DTC		DTC text	Corrective action
SAE	VAG		
P0327	16711	Knock Sensor (KS) 1 -G61- Signal too small	- Check knock sensor ⇒ <a href="#">Page 28-45</a>
P0328	16712	Knock Sensor (KS) 1 -G61- Signal too large	
P0332	16716	Knock Sensor (KS) 2 -G66- Signal too small	
P0333	16717	Knock Sensor (KS) 2 -G66- Signal too large	
P0341	16725	Camshaft Position (CMP) sensor -G40- Implausible signal	- Check Camshaft Position (CMP) sensor ⇒ <a href="#">Page 28-49</a>
P0342	16726	Camshaft Position (CMP) sensor -G40- Signal too small	
P0343	16727	Camshaft Position (CMP) sensor -G40- Signal too large	



01-24

DTC		DTC text	Corrective action
SAE	VAG		
P0411	16795	Secondary air system Throughput faulty	⇒ <a href="#">Repair Manual, 1.8 Liter 4-Cyl. 5V Turbo Engine Mechanical, Engine Code(s): AWM, Repair Group 26; Checking Secondary Air Injection (AIR) system</a>  - Check hose setup (Secondary Air Injection -AIR- solenoid valve); check intake system for leaks (false air) ⇒ <a href="#">Page 24-68</a>
P0420	16804	Bank 1, catalytic converter system Not effective enough	- Generate readiness code ⇒ <a href="#">Page 01-84</a> . If the same malfunction is indicated again, replace catalytic converter.  ⇒ <a href="#">Repair Manual, 1.8 Liter 4-Cyl. 5V Turbo Engine Mechanical, Engine Code(s): AWM, Repair Group 26</a>
P0422	16806	Bank 1, main catalytic converter Not effective enough	
P0441	16825	Tank ventilation system Throughput faulty	- Check Evaporative Emission (EVAP) canister purge regulator valve ⇒ <a href="#">Page 24-114</a>

01-25

DTC		DTC text	Corrective action
SAE	VAG		
P0442	16826	Tank ventilation system  Small leak detected	- Checking fuel supply and ventilation systems for leaks  ⇒ <a href="#">Repair Manual, Fuel Supply System, Repair Group 20; Fuel supply; EVAP canister system components, servicing; tank leak diagnostic, performing.</a>
P0455	16839	Tank ventilation system  Large leak detected	- Checking EVAP system for leaks using KLI9210 EVAP tester  ⇒ <a href="#">Repair Manual, Fuel Supply System, Repair Group 20;</a>
P0456	16840	Tank ventilation system  Pinhole leak detected	- Check tank system and tank ventilation systems for leaks  ⇒ <a href="#">Repair Manual, Fuel Supply System, Repair Group 20; EVAP canister system components, servicing; tank leak diagnostic, performing.</a>  - Checking EVAP system for leaks using KLI9210 EVAP tester  ⇒ <a href="#">Repair Manual, Fuel Supply System, Repair Group 20;</a>

DTC		DTC text	Corrective action
P0501	16885	Vehicle speed signal Implausible signal	- Checking Vehicle Speed Signal (VSS) ⇒ <a href="#">Page 24-165</a>
P0506	16890	Idle control RPM below specified value	- Check throttle valve control module ⇒ <a href="#">Page 24-124</a>
P0507	16891	Idle control RPM above specified value	- Check hose setup (Secondary Air Injection -AIR- solenoid valve); check intake system for leaks (false air) ⇒ <a href="#">Page 24-68</a>
P0560	16944	Voltage supply Implausible signal	- Check voltage supply for control module ⇒ <a href="#">Page 28-37</a>
P0562	16946	Voltage supply Voltage too low	
P0563	16947	Voltage supply Voltage too high	
P0571	16955	Brake light switch -F-1) Implausible signal	- Check brake light switch and brake pedal switch ⇒ <a href="#">Page 24-149</a>

1) Brake pedal switch -F47- is monitored in addition to brake light switch -F-.

01-27

DTC		DTC text	Corrective action
SAE	VAG		
P0601	16985	Control module faulty	- Replacing Engine Control Module (ECM) ⇒ <a href="#">Page 24-22</a>
P0604	16988	Control module faulty	
P0605	16989	Control module faulty	
P0606	16990	Control module faulty	
P0685	17069	Main relay -J271- Open circuit	- Check motronic Engine Control Module (ECM) voltage supply relay -J271- ⇒ <a href="#">Page 28-13</a>
P0686	17070	Main relay -J271- Short circuit to Ground (GND)	
P0687	17071	Main relay -J271- Short circuit to B+	
P0688	17072	Main relay, load circuit - J271- Open circuit	

01-28

DTC		DTC text	Corrective action
SAE	VAG		
P1102	17510	Bank 1, sensor 1, heating circuit  Short circuit to B+	- Oxygen sensor heating before catalytic converter Checking ⇒ <a href="#">Page 24-89</a>
P1103	17511	Bank 2, sensor 1, heating circuit  Performance too low	- Check oxygen sensor heating behind catalytic converter ⇒ <a href="#">Page 24-107</a>
P1105	17513	Bank 2, sensor 1, heating circuit  Short circuit to B+	
P1111	17519	Oxygen sensor control, bank 1  System too lean	- Check oxygen sensor control behind catalytic converter ⇒ <a href="#">Page 24-71</a>
P1112	17520	Oxygen sensor control, bank 1  System too rich	
P1113	17521	Bank 1, sensor 1  Internal resistance too high	- Next, check signal wires for contact resistances ⇒ <a href="#">Page 24-82</a> ; if no contact resistances are present: Replace oxygen sensor
P1114	17522	Bank 2, sensor 1	- Next, check signal wires for contact resistances ⇒ <a href="#">Page 24-105</a> ; if no contact

		Internal resistance too high	resistances are present: Replace oxygen sensor
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01-29

DTC		DTC text	Corrective action
SAE	VAG		
P1115	17523	Bank 1, sensor 1, heating circuit Short circuit to Ground (GND)	- Check oxygen sensor heating before catalytic converter ⇒ <a href="#">Page 24-89</a>
P1116	17524	Bank 1, sensor 1, heating circuit Open circuit	
P1117	17525	Bank 2, sensor 1, heating circuit Short circuit to Ground (GND)	- Check oxygen sensor heating behind catalytic converter ⇒ <a href="#">Page 24-107</a>
P1118	17526	Bank 2, sensor 1, heating circuit Open circuit	
P1127	17535	Bank 1, mixture adaptation (mult.) System too rich	<ul style="list-style-type: none"> <li>- Road test vehicle (fuel in oil).</li> <li>- Check fuel system pressure ⇒ <a href="#">Page 24-32</a></li> <li>- Check Mass Air Flow (MAF) sensor ⇒ <a href="#">Page 24-59</a></li> <li>- Check intake system for leaks (false air) ⇒ <a href="#">Page 24-68</a></li> </ul>
P1128	17536	Bank 1, mixture adaptation (mult.) System too lean	

**Note:**

*mult. = multiplicative, means that malfunction is valid across entire range of engine speed and engine load.*



DTC		DTC text	Corrective action
SAE	VAG		
P1136	17544	Bank 1, mixture adaptation (add.)  System too lean	<ul style="list-style-type: none"> <li>- Road test vehicle (fuel in oil).</li> <li>- Check fuel system pressure ⇒ <a href="#">Page 24-32</a></li> <li>- Check Mass Air Flow (MAF) sensor ⇒ <a href="#">Page 24-59</a></li> <li>- Check intake system for leaks (false air) ⇒ <a href="#">Page 24-68</a></li> </ul>
P1137	17545	Bank 1, mixture adaptation (add.)  System too rich	<ul style="list-style-type: none"> <li>- Check oxygen sensor behind catalytic converter ⇒ <a href="#">Page 24-94</a></li> <li>- Check Evaporative Emission (EVAP) canister purge regulator valve ⇒ <a href="#">Page 24-114</a></li> </ul>
P1143	17551	Load detection  Limit exceeded	<ul style="list-style-type: none"> <li>- Check Mass Air Flow (MAF) sensor ⇒ <a href="#">Page 24-59</a></li> <li>- Check throttle valve control module ⇒ <a href="#">Page 24-124</a></li> </ul>

**Note:**

*add = additive, means that malfunction is only valid at closed throttle (idle).*

01-31

DTC		DTC text	Corrective action
SAE	VAG		
P1149	17557	Oxygen sensor control, bank 1  Unplausible control value	<ul style="list-style-type: none"> <li>- Check oxygen sensor adaptation values and control ⇒ <a href="#">Page 24-75</a></li> <li>- Check fuel system pressure ⇒ <a href="#">Page 24-32</a></li> <li>- Check intake system for leaks (false air) ⇒ <a href="#">Page 24-68</a></li> </ul>
P1171	17579	Angle sensor -2- for throttle drive (power accelerator actuation) -G188-  Implausible signal	- Check angle sensor -1- for throttle drive ⇒ <a href="#">Page 24-131</a>
P1172	17580	Angle sensor -2- for throttle drive (power accelerator actuation) -G188-  Signal too small	
P1173	17581	Angle sensor -2- for throttle drive (power accelerator actuation) -G188-  Signal too large	

01-32

DTC		DTC text	Corrective action
SAE	VAG		
P1176	17584	Bank 1, oxygen sensor correction behind catalytic converter  Control limit reached	- Check oxygen sensor ageing of oxygen sensor before catalytic converter ⇒ <a href="#">Page 24-84</a>  - Check oxygen sensor and oxygen sensor control behind catalytic converter ⇒ <a href="#">Page 24-94</a>
P1198	17606	Bank 2, sensor 1, heating circuit  Electrical malfunction	- Check oxygen sensor heating behind catalytic converter ⇒ <a href="#">Page 24-107</a>
P1213	17621	Cylinder 1 fuel injector -N30-  Short circuit to B+	- Check fuel injectors ⇒ <a href="#">Page 24-37</a> .
P1214	17622	Cylinder 2 fuel injector -N31-  Short circuit to B+	
P1215	17623	Cylinder 3 fuel injector -N32-  Short circuit to B+	
P1216	17624	Cylinder 4 fuel injector -N33-  Short circuit to B+	

**DTC codes 17633 - 18261**

DTC		DTC text	Corrective action
SAE	VAG		
P1225	17633	Cylinder 1 fuel injector -N30- Short circuit to Ground (GND)	- Check fuel injectors ⇒ <a href="#">Page 24-37</a> .
P1226	17634	Cylinder 2 fuel injector -N31- Short circuit to Ground (GND)	
P1227	17635	Cylinder 3 fuel injector -N32- Short circuit to Ground (GND)	
P1228	17636	Cylinder 4 fuel injector -N33- Short circuit to Ground (GND)	

01-34

DTC		DTC text	Corrective action
SAE	VAG		
P1237	17645	Cylinder 1 fuel injector -N30-  Open circuit	- Check fuel injectors ⇒ <a href="#">Page 24-37</a> .
P1238	17646	Cylinder 2 fuel injector -N31-  Open circuit	
P1239	17647	Cylinder 3 fuel injector -N32-  Open circuit	
P1240	17648	Cylinder 4 fuel injector -N33-  Open circuit	
P1250	17658	Fuel level too low	<ul style="list-style-type: none"> <li>- Resulting malfunction ⇒ Note</li> <li>- Fill fuel tank with fuel, erase DTC memory</li> <li>- Check DTC memory of instrument cluster</li> </ul> <p>⇒ <a href="#">Repair Manual, Electrical Equipment, Repair Group 01, On Board Diagnostic (OBD) of instrument cluster</a></p>

**Note:**

*The DTC "Fuel level too low" is stored in connection with combustion misfires or malfunctions relating to oxygen sensor control when there is/was too little fuel in fuel tank. The DTC is stored as a static malfunction and is not switched to sporadic even if fuel tank has been filled with fuel in the meantime.*

01-35

DTC		DTC text	Corrective action
SAE	VAG		
P1287	17695	Recirculating valve for turbocharger -N249-  Open circuit	⇒ <a href="#">Repair Manual, 1.8 Liter 4-Cyl. 5V Turbo Engine Mechanical, Engine Code (s): AWM, Repair Group 21, Charge air system with turbocharger, checking</a>
P1288	17696	Recirculating valve for turbocharger -N249-  Short circuit to B+	
P1289	17697	Recirculating valve for turbocharger -N249-  Short circuit to Ground (GND)	
P1296	17704	Malfunction in cooling system	- Check coolant temperature sensor ⇒ <a href="#">Page 28-31</a> - Check coolant regulator  ⇒ <a href="#">Repair Manual, 1.8 Liter 4-Cyl. 5V Turbo Engine Mechanical, Engine Code (s): AWM, Repair Group 19; parts of cooling system, removing and installing</a>
P1297	17705	Connection charger-throttle valve  Pressure drop	⇒ <a href="#">Repair Manual, 1.8 Liter 4-Cyl. 5V Turbo Engine Mechanical, Engine Code (s): AWM, Repair Group 21, Charge air system with turbocharger, checking</a>  - Check air pressure system using VAG 1687 charge air system tester  ⇒ <a href="#">Repair Manual, 1.8 Liter 4-Cyl. 5V Turbo Engine Mechanical, Engine Code (s): AWM, Repair Group 21; Charge Pressure, Leak test with VAG 1687</a>

01-36

DTC		DTC text	Corrective action
SAE	VAG		
P1325	17733	Knock control, cyl. 1 Control limit reached	- Check knock control ⇒ <a href="#">Page 28-41</a>
P1326	17734	Knock control, cyl. 2 Control limit reached	
P1327	17735	Knock control, cyl. 3 Control limit reached	
P1328	17736	Knock control, cyl. 4 Control limit reached	
P1335	17743	Engine torque monitoring 2 Control limit exceeded	- Significant leak; check intake system for leaks (false air) ⇒ <a href="#">Page 24-68</a> - Check Intake Air Temperature (IAT) sensor ⇒ <a href="#">Page 28-21</a>
P1336	17744	Engine torque monitoring Control limit exceeded	



01-37

DTC		DTC text	Corrective action
SAE	VAG		
P1340	17748	Camshaft Position (CMP) / crankshaft position sensor  incorrect allocation	- Unscrew Camshaft Position (CMP) sensor and check whether shutter wheel is mounted properly at camshaft. (If mounted improperly, locking lug will get squished when mounting bolt is tightened.)  - Also check engine timing  ⇒ <a href="#">Repair Manual, 1.8 Liter 4-Cyl. 5V Turbo Engine Mechanical, Engine Code (s): AWM, Repair Group 13; Engine, disassembling and assembling; removing and installing toothed belt</a>
P1355	17763	Ignition timing, cyl. 1  Open circuit	- Ignition coils with power output stages Checking ⇒ <a href="#">Page 28-4</a>
P1356	17764	Ignition timing, cyl. 1  Short circuit to B+	
P1357	17765	Ignition timing, cyl. 1  Short circuit to Ground (GND)	
P1358	17766	Ignition timing, cyl. 2  Open circuit	

01-38

DTC		DTC text	Corrective action
SAE	VAG		
P1359	17767	Ignition timing, cyl. 2 Short circuit to B+	- Ignition coils with power output stages Checking ⇒ <a href="#">Page 28-4</a>
P1360	17768	Ignition timing, cyl. 2 Short circuit to Ground (GND)	
P1361	17769	Ignition timing, cyl. 3 Open circuit	
P1362	17770	Ignition timing, cyl. 3 Short circuit to B+	
P1363	17771	Ignition timing, cyl. 3 Short circuit to Ground (GND)	
P1364	17772	Ignition timing, cyl. 4 Open circuit	
P1365	17773	Ignition timing, cyl. 4 Short circuit to B+	
P1366	17774	Ignition timing, cyl. 4 Short circuit to Ground (GND)	

01-39

DTC		DTC text	Corrective action
SAE	VAG		
P1386	17794	Control module faulty	- Replacing Engine Control Module (ECM) ⇒ <a href="#">Page 24-22</a>
P1387	17795	Control module faulty	
P1388	17796	Control module faulty	
P1410	17818	EVAP canister purge regulator valve -N80-  Short circuit to B+	- Check Evaporative Emission (EVAP) canister purge regulator valve ⇒ <a href="#">Page 24-114</a>
P1421	17829	Secondary Air Injection (AIR) solenoid valve -N112-  Short circuit to Ground (GND)	⇒ <a href="#">Repair Manual, 1.8 Liter 4-Cyl. 5V Turbo Engine Mechanical, Engine Code(s): AWM, Checking Secondary Air Injection (AIR) system</a>
P1422	17830	Secondary Air Injection (AIR) solenoid valve -N112-  Short circuit to B+	

01-40

DTC		DTC text	Corrective action
SAE	VAG		
P1424	17832	Bank 1, Secondary Air Injection (AIR) system  Leak detected	- Check hoses and components of the Secondary Air Injection (AIR) system  ⇒ <a href="#">Repair Manual, 1.8 Liter 4-Cyl. 5V Turbo Engine Mechanical, Engine Code(s): AWM, Checking Secondary Air Injection (AIR) system</a>
P1425	17833	EVAP canister purge regulator valve -N80-  Short circuit to Ground (GND)	- Check Evaporative Emission (EVAP) canister purge regulator valve ⇒ <a href="#">Page 24-114</a>
P1426	17834	EVAP canister purge regulator valve -N80-  Open circuit	
P1427	17835	Activation of brake vacuum pump  Short circuit to B+	⇒ <a href="#">Repair Manual, Brake System, Repair Group 47</a>
P1428	17836	Activation of brake vacuum pump  Short circuit to Ground (GND)	
P1429	17837	Activation of brake vacuum pump	

		Open circuit	
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01-41

DTC		DTC text	Corrective action
SAE	VAG		
P1432	17840	Secondary Air Injection (AIR) solenoid valve -N112-  Open circuit	⇒ <a href="#">Repair Manual, 1.8 Liter 4-Cyl. 5V Turbo Engine Mechanical, Engine Code(s): AWM, Checking Secondary Air Injection (AIR) system</a>
P1433	17841	Secondary Air Injection (AIR) pump relay -J299-  Open circuit	
P1434	17842	Secondary Air Injection (AIR) pump relay -J299-  Short circuit to B+	
P1435	17843	Secondary Air Injection (AIR) pump relay -J299-  Short circuit to Ground (GND)	
P1479	17887	Brake vacuum system  Mechanical malfunction	<ul style="list-style-type: none"> <li>- Perform a short trip in Engine Control Module (ECM) (basic setting; display group 8 with ignition on and selector lever in "P" or "N")</li> <li>- Check hose setup to pump or from the pump to brake booster</li> <li>- Perform output Diagnostic Test Mode (DTM) in Engine Control Module (ECM) to check whether the vacuum pump runs or is activated</li> </ul>

01-42

DTC		DTC text	Corrective action
SAE	VAG		
P1501	17909	Fuel Pump (FP) relay - J17-  Short circuit to Ground (GND)	- Check Fuel Pump (FP) relay ⇒ <a href="#">Page 24-52</a>
P1502	17910	Fuel Pump (FP) relay - J17-  Short circuit to B+	
P1519	17927	Bank 1, camshaft adjustment  Malfunction	⇒ <a href="#">Repair Manual, 1.8 Liter 4-Cyl. 5V Turbo Engine Mechanical, Engine Code (s): AWM, Repair Group 15; Checking camshaft adjustment</a>
P1523	17931	Crash signal from airbag control module  Implausible signal <sup>1)</sup>	⇒ <a href="#">Repair Manual, Body On Board Diagnostic (OBD), Repair Group 01; On Board Diagnostic (OBD) of airbag system</a>
P1529	17937	Camshaft adjustment  Short circuit to B+	⇒ <a href="#">Repair Manual, 1.8 Liter 4-Cyl. 5V Turbo Engine Mechanical, Engine Code (s): AWM, Repair Group 15; Checking camshaft adjustment</a>
P1530	17938	Camshaft adjustment  Short circuit to Ground (GND)	
P1531	17939	Camshaft adjustment	

		Open circuit	
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- 1) DTC is stored upon appropriate signal from airbag control module.



01-43

DTC		DTC text	Corrective action
SAE	VAG		
P1539	17947	Clutch vacuum vent valve switch -F36- Implausible signal	- Check clutch pedal switch ⇒ <a href="#">Page 24-156</a>
P1541	17908	Fuel Pump (FP) relay -J17- Open circuit	- Check Fuel Pump (FP) relay ⇒ <a href="#">Page 24-52</a>
P1542	17950	Angle sensor -1- for throttle drive (power accelerator actuation) -G187- Implausible signal	- Check angle sensor -1- for throttle drive ⇒ <a href="#">Page 24-131</a>
P1543	17951	Angle sensor -1- for throttle drive (power accelerator actuation) -G187- Signal too small	
P1544	17952	Angle sensor -1- for throttle drive (power accelerator actuation) -G187- Signal too large	
P1545	17953	Throttle valve control Malfunction	- Check throttle valve control module ⇒ <a href="#">Page 24-124</a>

01-44

DTC		DTC text	Corrective action
SAE	VAG		
P1546	17954	Wastegate bypass regulator valve -N75-  Short circuit to B+	⇒ <a href="#">Repair Manual, 1.8 Liter 4-Cyl. 5V Turbo Engine Mechanical, Engine Code (s): AWM, Repair Group 21, Charge air system with turbocharger, checking</a>
P1547	17955	Wastegate bypass regulator valve -N75-  Short circuit to Ground (GND)	
P1548	17956	Wastegate bypass regulator valve -N75-  Open circuit	
P1550	17958	Boost pressure  Control difference	
P1555	17963	Maximum boost pressure exceeded	
P1556	17964	Boost pressure regulation  Control limit not reached	
P1557	17965	Boost pressure regulation	

		Control limit exceeded	<a href="#">(s): AWM, Repair Group 21; Charge Pressure, Leak test with VAG 1687</a>
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01-45

DTC		DTC text	Corrective action
SAE	VAG		
P1558	17966	Throttle drive (power accelerator actuation) -G186- Electrical malfunction in circuit	- Check throttle valve control module ⇒ <a href="#">Page 24-124</a>
P1559	17967	Throttle valve control module -J338- Malfunction in basic setting	- Perform adaptation ⇒ <a href="#">Page 24-125</a>
P1560	17968	Maximum engine speed exceeded	- Repair mechanical damage
P1564	17972	Throttle valve control module -J338- Voltage too low during basic setting	- Charge battery, repeat basic setting
P1565	17973	Throttle valve control module -J338- Lower impact not reached	- Check throttle valve control module ⇒ <a href="#">Page 24-124</a>
P1568	17976	Throttle valve control module -J338- Mechanical malfunction	

01-46

DTC		DTC text	Corrective action
SAE	VAG		
P1569	17977	Cruise control switch -E45- Implausible signal	⇒ <a href="#">Repair Manual, Electrical Equipment, Repair Group 01; On Board Diagnostic (OBD) for cruise control system</a>
P1570	17978	Engine Control Module (ECM)locked	- Adapt electronic immobilizer to Engine Control Module (ECM) ⇒ <a href="#">Repair Manual, Electrical Equipment, Repair Group 01, On Board Diagnostic (OBD) for immobilizer</a>
P1579	17987	Throttle valve control module -J338- Adaptation not started	- Perform adaptation of throttle valve control module while maintaining test requirements ⇒ <a href="#">Page 24-125</a>
P1602	18010	Voltage supply, terminal 30 Voltage too low	- Check voltage supply for control module ⇒ <a href="#">Page 28-37</a>

DTC		DTC text	Corrective action
SAE	VAG		
P1603	18011	Control module faulty	- Replacing Engine Control Module (ECM) ⇒ <a href="#">Page 24-22</a>
P1604	18012	Control module faulty	
P1606	18014	Rough terrain info/engine torque from ABS control module  Electrical malfunction in circuit	- Check data exchange between Engine Control Module (ECM) and other CAN capable control modules ⇒ <a href="#">Page 24-178</a>
P1609	18017	Crash shut-off was triggered  (Crash triggered) <sup>1)</sup>	⇒ <a href="#">Repair Manual, Body On Board Diagnostic (OBD), Repair Group 01; On Board Diagnostic (OBD) of airbag system</a>  - Erase DTC memory of the Engine Control Module (ECM) after output Diagnostic Test Mode (DTM) of the airbag system ⇒ <a href="#">Page 01-12</a>

<sup>1)</sup> DTC is stored upon appropriate signal from airbag control module and also during output Diagnostic Test Mode (DTM) of the airbag system.

DTC		DTC text	Corrective action
SAE	VAG		
P1610	18018	Control module faulty	- Replacing Engine Control Module (ECM) ⇒ <a href="#">Page 24-22</a>
P1612	18020	Engine Control Module (ECM) incorrectly coded	- Code Engine Control Module (ECM) ⇒ <a href="#">Page 01-71</a>
P1624	18032	Request for warning lamp on active <sup>1)</sup>	- Exhaust related malfunction of Transmission Control Module (TCM) - Check DTC memory of Transmission Control Module (TCM)  ⇒ <a href="#">Repair Manual, 5-Spd. Automatic Transmission 01V, Repair Group 01, On Board Diagnostic (OBD)</a>
P1626	18034	Powertrain CAN-bus  Missing message from Transmission Control Module	- Check data exchange between Engine Control Module (ECM) and other CAN capable control modules ⇒ <a href="#">Page 24-178</a>

<sup>1)</sup> The Transmission Control Module (TCM) recognized a malfunction that worsens engine emissions. The Transmission Control Module (TCM) sends the DTC to the Engine Control Module (ECM), which then switches on the Malfunction Indicator Lamp (MIL). Notes for Malfunction Indicator Lamp (MIL) ⇒ [Page 01-3](#). The message P1624 is simultaneously stored in the Engine Control Module (ECM) as evidence that the Malfunction Indicator Lamp (MIL) was not switched on due to an engine problem but rather a transmission problem.

01-49

DTC		DTC text	Corrective action
SAE	VAG		
P1630	18038	Throttle Position (TP) sensor -G79- Signal too small	- Throttle Position (TP) sensor, checking ⇒ <a href="#">Page 24-138</a>
P1631	18039	Throttle Position (TP) sensor -G79- Signal too large	
P1633	18041	Sender -2- for accelerator pedal position -G185- Signal too small	
P1634	18042	Sender -2- for accelerator pedal position -G185- Signal too large	
P1640	18048	Control module faulty	



01-50

DTC		DTC text	Corrective action
SAE	VAG		
P1648	18056	Powertrain CAN-bus faulty	- Check data exchange between Engine Control Module (ECM) and other CAN capable control modules ⇒ <a href="#">Page 24-178</a>
P1649	18057	Powertrain CAN-bus Missing message from ABS control module	
P1650	18058	Powertrain CAN-bus Missing message from instrument cluster	
P1654	18085	Check DTC memory of the instrument cluster	⇒ <a href="#">Repair Manual, Electrical Equipment, Repair Group 01, On Board Diagnostic (OBD) of instrument cluster</a>
P1682	18090	Powertrain CAN-bus Implausible message from ABS control module	- Check data exchange between Engine Control Module (ECM) and other CAN capable control modules ⇒ <a href="#">Page 24-178</a>
P1853	18261	Powertrain CAN-bus Implausible message from ABS control module	