

Fault overview



Note!

- ◆ *The following table contains the fault codes for the DME 7.1.1 in V8 naturally aspirated and turbocharged engines and in V6 naturally aspirated engines in the USA. It also includes the codes for countries adhering to the EU4 emission standard and rest of the world countries.*
- ◆ *In Tiptronic vehicles, the fault memory for the Tiptronic control module may also have to be read out because the Check Engine light can also be switched on from there.*

FAULT TYPES AND THEIR MEANINGS

| | |
|---------------|--|
| Fault type 1: | Signal implausible/implausible operating range/malfunction (Plaus) |
| Fault type 2: | Open circuit/no signal (Sig) |
| Fault type 3: | Short to ground/lower limit value not reached/lean limit (Min) |
| Fault type 4: | Short to B+/upper limit value exceeded/rich limit (Max) |

*: The fault types have a different meaning in the case of misfire faults.

| | |
|---------------|---|
| Fault type 1: | Exhaust-related fault after engine start-up |
| Fault type 3: | Exhaust-related fault during driving |
| Fault type 4: | Fault causing damage to catalytic converter, CE flashes |

STATUS OF CHECK ENGINE LIGHT AND ITS MEANING FOR USA/countries adhering to the EU4 emission standard

| | |
|----------|--|
| CE (MIL) | Check Engine light (Malfunction Indicator Light) |
| 0 | CE is off, no fault memory entry |
| 1 | CE flashes immediately, fault causing damage to catalytic converter |
| 2 | CE permanently lit, fault exhaust-related |
| 3 | CE permanently lit after 2 driving cycles |
| 4 | CE permanently lit after 5 seconds |
| 5 | CE off, fault memory entry, fault output to Scan Tool |
| 6 | CE off, fault not exhaust-related |
| 7 | Fault caused by short test |
| 11 | Fuel supply fault, CE on after 2 driving cycles, higher freeze frame priority |
| 30 | CE permanently lit after 3 driving cycles |
| 31 | CE permanently lit after 3 driving cycles with misfires or faults causing damage to the catalytic converter after start-up |

- 32 CE off, fault memory entry, fault output to Scan Tool after 3 driving cycles
- 33 Fuel supply fault, CE permanently lit after 3 driving cycles, higher freeze frame priority
- 34 Major leak, CE permanently lit after 2 driving cycles, goes out immediately after OK check
Fault memory entry for diagnosis

Fault overview for V8 & V8 Turbo

| <i>Fault text</i> | <i>Fault type 1 Plaus</i> | <i>Fault type 2 Sig</i> | <i>Fault type 3 Min</i> | <i>Fault type 4 Max</i> | <i>CE status USA/EU4</i> |
|---|-------------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------------|
| Output stage for inlet camshaft adjuster, bank 1 | | P0010 | | | 3/6 |
| Inlet camshaft adjustment, bank 1 | P0011 | | | | 5/5 |
| Camshaft position on bank 1 vis-a-vis crankshaft | | | P0016 | P0016 | 3/6 |
| Camshaft position on bank 2 vis-a-vis crankshaft | | | P0018 | P0018 | 3/6 |
| Output stage for inlet camshaft adjuster, bank 2 | | P0020 | | | 3/6 |
| Inlet camshaft adjustment, bank 2 | P0021 | | | | 5/5 |
| Output stage for oxygen sensor heater in front of catalytic converter, bank 1 | | P0030 | P0031 | P0032 | 3/3 |
| Output stage for oxygen sensor heater behind catalytic converter, bank 1 | | P0036 | P0037 | P0038 | 3/3 |
| Oxygen sensors in front of catalytic converter interchanged | P0040 | | | | 3/3 |
| Output stage for oxygen sensor heater in front of catalytic converter, bank 2 | | P0050 | P0051 | P0052 | 3/3 |
| Output stage for oxygen sensor heater behind catalytic converter, bank 2 | | P0056 | P0057 | P0058 | 3/3 |

| <i>Fault text</i> | <i>Fault type 1 Plaus</i> | <i>Fault type 2 Sig</i> | <i>Fault type 3 Min</i> | <i>Fault type 4 Max</i> | <i>CE status USA/EU4</i> |
|---|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|
| Pressure sensor signal comparison: boost pressure/ambient pressure | P0069 | | | | 5/5 |
| Ambient temperature (via CAN from instrument cluster) | P0071 | P0074 | | P0073 | 5/6 |
| MAF sensor | P0101 | | P0102 | P0103 | 3/5 |
| Intake air temperature sensor | P0111 | | P0112 | P0113 | 3/5 |
| Engine temperature sensor | | P0116 | P0117 | P0118 | 3/5 |
| Accelerator pedal: potentiometer 1 | P0121 | | P0122 | P0123 | 5/5 |
| Intake air temperature sensor | | | | P0127 | 3/5 |
| Oxygen sensor in front of catalytic converter, bank 1 | P0130 | | P0133 | | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 1, Nernst voltage wire | | | P0131 | P0132 | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 1, pumping voltage wire | P0134 | P0134 | | P0134 | 3/3 |
| Oxygen sensor heater in front of catalytic converter, bank 1 | P0135 | P0135 | P0135 | P0135 | 3/3 |
| Oxygen sensor behind catalytic converter, bank 1 | P0136 | P0140 | P0137 | P0138 | 3/3 |
| Oxygen sensor holder behind catalytic converter, bank 1 | | | P0139 | P0139 | 3/3 |
| Oxygen sensor heater behind catalytic converter, bank 1 | P0141 | | | | 3/5 |
| Oxygen sensor in front of catalytic converter, bank 2 | P0150 | | P0153 | | 3/3 |

| <i>Fault text</i> | <i>Fault type 1 Plaus</i> | <i>Fault type 2 Sig</i> | <i>Fault type 3 Min</i> | <i>Fault type 4 Max</i> | <i>CE status USA/EU4</i> |
|---|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|
| Oxygen sensor in front of catalytic converter, bank 2, Nernst voltage wire | | | P0151 | P0152 | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 2, pumping voltage wire | P0154 | P0154 | | P0154 | 3/3 |
| Oxygen sensor heater in front of catalytic converter, bank 2 | P0155 | P0155 | P0155 | P0155 | 3/3 |
| Oxygen sensor behind catalytic converter, bank 2 | P0156 | P0160 | P0157 | P0158 | 3/3 |
| Oxygen sensor holder behind catalytic converter, bank 2 | | | P0159 | P0159 | 3/3 |
| Oxygen sensor heater behind catalytic converter, bank 2 | P0161 | | | | 3/5 |
| Oil temperature sensor | | P0199 | P0197 | P0198 | 6/6 |
| Injection valve on cylinder 1 | | P0201 | | | 3/3 |
| Injection valve on cylinder 2 | | P0202 | | | 3/3 |
| Injection valve on cylinder 3 | | P0203 | | | 3/3 |
| Injection valve on cylinder 4 | | P0204 | | | 3/3 |
| Injection valve on cylinder 5 | | P0205 | | | 3/3 |
| Injection valve on cylinder 6 | | P0206 | | | 3/3 |
| Injection valve on cylinder 7 | | P0207 | | | 3/3 |
| Injection valve on cylinder 8 | | P0208 | | | 3/3 |
| Maximum speed exceeded | | | | P0219 | 6/6 |
| Accelerator pedal: potentiometer 2 | P0221 | | P0222 | P0223 | 5/5 |
| Output stage for fuel pump relay 1 | | P0230 | P0230 | P0230 | 5/5 |

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|--|-------------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------------|
| Boost pressure control: control limit exceeded | | | | P0234 | 5/5 |
| Boost-pressure sensor | P0236 | | P0237 | P0238 | 5/5 |
| Output stage for boost pressure control valve | | P0243 | P0245 | P0246 | 5/5 |
| Injection valve on cylinder 1 | | | P0261 | P0262 | 3/3 |
| Injection valve on cylinder 2 | | | P0264 | P0265 | 3/3 |
| Injection valve on cylinder 3 | | | P0267 | P0268 | 3/3 |
| Injection valve on cylinder 4 | | | P0270 | P0271 | 3/3 |
| Injection valve on cylinder 5 | | | P0273 | P0274 | 3/3 |
| Injection valve on cylinder 6 | | | P0276 | P0277 | 3/3 |
| Injection valve on cylinder 7 | | | P0279 | P0280 | 3/3 |
| Injection valve on cylinder 8 | | | P0282 | P0283 | 3/3 |
| Boost pressure control deviation | | | P0299 | | 5/5 |
| Totals fault in misfire detection | P0300* | | P0300* | P0300* | 1 - 2 / 1 - 2 |
| Misfire detection in cylinder 1 | P0301* | | P0301* | P0301* | 1 - 2 / 1 - 2 |
| Misfire detection in cylinder 2 | P0302* | | P0302* | P0302* | 1 - 2 / 1 - 2 |
| Misfire detection in cylinder 3 | P0303* | | P0303* | P0303* | 1 - 2 / 1 - 2 |
| Misfire detection in cylinder 4 | P0304* | | P0304* | P0304* | 1 - 2 / 1 - 2 |
| Misfire detection in cylinder 5 | P0305* | | P0305* | P0305* | 1 - 2 / 1 - 2 |
| Misfire detection in cylinder 6 | P0306* | | P0306* | P0306* | 1 - 2 / 1 - 2 |
| Misfire detection in cylinder 7 | P0307* | | P0307* | P0307* | 1 - 2 / 1 - 2 |
| Misfire detection in cylinder 8 | P0308* | | P0308* | P0308* | 1 - 2 / 1 - 2 |

| <i>Fault text</i> | <i>Fault type 1 Plaus</i> | <i>Fault type 2 Sig</i> | <i>Fault type 3 Min</i> | <i>Fault type 4 Max</i> | <i>CE status USA/EU4</i> |
|---|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|
| Knock control – zero test | P0324 | | | | 5/6 |
| Knock sensor 1 | | | P0327 | P0328 | 5/6 |
| Knock sensor 2 | | | P0332 | P0333 | 5/6 |
| Engine speed signal transmitter | | P0335 | | | 3/5 |
| Crankshaft position sensor | P0336 | P0339 | P0337 | P0338 | 3/5 |
| Hall sender 1 | P0341 | P0344 | P0342 | P0343 | 3/5 |
| Hall sender 2 | P0346 | P0349 | P0347 | P0348 | 3/5 |
| Bar ignition module on cylinder 1 | | P0351 | P0351 | P0351 | 3/5 |
| Bar ignition module on cylinder 2 | | P0352 | P0352 | P0352 | 3/5 |
| Bar ignition module on cylinder 3 | | P0353 | P0353 | P0353 | 3/5 |
| Bar ignition module on cylinder 4 | | P0354 | P0354 | P0354 | 3/5 |
| Bar ignition module on cylinder 5 | | P0355 | P0355 | P0355 | 3/5 |
| Bar ignition module on cylinder 6 | | P0356 | P0356 | P0356 | 3/5 |
| Bar ignition module on cylinder 7 | | P0357 | P0357 | P0357 | 3/5 |
| Bar ignition module on cylinder 8 | | P0358 | P0358 | P0358 | 3/5 |
| Output stage for secondary air pump relay, bank 1 | | P0418 | | | 3/5 |
| Output stage for secondary air pump relay, bank 2 | | P0419 | | | 3/5 |
| Catalytic conversion, bank 1 | | | | P0420 | 3/3 |
| Pre-catalytic conversion, bank 1 | | | | P0421 | 3/3 |
| Catalytic conversion, bank 2 | | | | P0430 | 3/3 |
| Pre-catalytic conversion, bank 2 | | | | P0431 | 3/3 |
| Tank system | | | P0441 | P0441 | 3/6 |

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|--|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|
| Tank system (minor leak) | | | | P0442 | 3/0 |
| Tank valve output stage | | P0444 | P0445 | P0445 | 3/3 |
| Tank diagnosis – active carbon filter shut-off valve blocked | | | P0446 | | 3/0 |
| Output stage for active carbon filter shut-off valve | | P0447 | P0448 | P0448 | 3/0 |
| Tank system (major leak) | | | P0455 | | 34 |
| Tank system (minor leak) | | | P0456 | | 3/0 |
| Output stage for fan control 1 | | P0480 | P0480 | P0480 | 6/6 |
| Output stage for fan control 2 | | P0481 | P0481 | P0481 | 6/6 |
| Secondary air system, bank 1 | | | P0491 | | 3/5 |
| Secondary air system, bank 2 | | | P0492 | | 3/5 |
| Fan stiff | | P0494 | P0494 | P0494 | 6/6 |
| Vehicle speed signal (up to MY 04) | | P0501 | | | 3/6 |
| Vehicle speed signal (as of MY 05) | P0501 | P0503 | P0502 | P0503 | 3/6 |
| Idle speed control at stop | | | P0506 | P0507 | 3/5 |
| Immobiliser | P0513 | | | | 5/5 |
| Supply voltage | P0560 | | P0562 | P0563 | 3/5 |
| Cruise control – operating lever fault | P0564 | | | | 6/6 |
| Stop light switch | P0571 | | | | 6/6 |
| CAN timeout – Tiptronic | | P0600 | | | 3/6 |
| Checksum fault control module | P0601 | | | | 4/4 |
| Control module coded incorrectly (transmission coding) | P0602 | | | | 4/4 |
| Control module faulty | P0603 | | | | 6/6 |
| Control module faulty | P0604 | | | | 5/5 |

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|---|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|
| Control module faulty | P0605 | | | | 5/5 |
| Control module faulty | P0606 | P0606 | P0606 | | 3/3 or 6/6 |
| Control module faulty | P0607 | P0607 | | | 5/5 |
| Throttle adjusting unit: spring check | | | P0638 | P0638 | 4/4 |
| Main relay | | P0685 | P0686 | P0687 | 5/5 |
| CE light on as a result of transmission fault | P0700 | | | | 6/6 |
| Clutch switch | P0830 | | | | 5/5 |
| MAF sensor (HFM1): electrical fault | | | P1090 | P1091 | 3/5 |
| MAF sensor (HFM2): electrical fault | | | P1092 | P1093 | 3/5 |
| Mass air flow in front of throttle (HFM1) implausi- ble | P1095 | P1096 | P1097 | P1098 | 3/5 |
| Mass air flow in front of throttle (HFM2) implausi- ble | P1095 | P1096 | P1099 | P1100 | 3/5 |
| Oxygen sensing adapta- tion in lower load range, bank 1 (FRAU1) | | | P1107 (=P2178) | P1126 (=P2177) | 11/11 |
| Oxygen sensing adapta- tion in lower load range, bank 2 (FRAU2) | | | P1108 (=P2180) | P1133 (=P2179) | 11/11 |
| Deviation in oxygen sensing as a result of short test, bank 1 | | | P1127 | P1142 | 7/7 |
| Deviation in oxygen sensing as a result of short test, bank 2 | | | P1134 | P1143 | 7/7 |
| Oxygen sensor in front of catalytic converter, bank 1 | | | | P1145 | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 2 | | | | P1155 | 3/3 |
| Intake air temperature sensor | | | P1175 | | 3/5 |
| Output stage for posi- tive crankcase ventila- tion heater | | P1182 | P1181 | P1180 | 6/6 |

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|--|-------------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------------|
| Function monitoring of safety fuel cutoff | P1266 | | | | 4/4 |
| Offset knock control | P1385 | | | | 5/6 |
| Test pulse knock control | P1386 | | | | 5/6 |
| Output stage for brake booster pump | | P1429 | P1428 | P1427 | 5/6 |
| Brake booster system | P1431 | | | | 5/6 |
| Throttle adjusting unit: emergency air position | P1504 | | | | 6/6 |
| Throttle adjusting unit: booster compensation | P1507 | | | | 6/6 |
| Function monitoring of torque comparison | P1508 | | | | 4/4 |
| Torque limit | | | | P1509 | 5/6 |
| Throttle adjusting unit: lower mechanical stop | P1514 | | | | 6/6 |
| Throttle adjusting unit: interruption check due to violated environmental conditions | | | P1511 | P1517 | 6/6 |
| Vehicle electrical system voltage via main relay | P1525 | P1525 | | | 6/6 |
| Function monitoring of speed | P1550 | | | | 4/4 |
| Function monitoring of load sensor | P1551 | | | | 4/4 |
| Function monitoring of control module fault, group a | P1552 | | | | 4/4 |
| Function monitoring of control module fault, group b | P1553 | | | | 4/4 |
| Function monitoring of accelerator pedal module | P1554 | | | | 4/4 |
| Movement of accelerator pedal module | P1575 | | | | 6/6 |
| CAN timeout – PSM | | P1600 | | | 6/6 |
| CAN timeout – instrument | | P1601 | | | 6/6 |

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|--|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|
| CAN timeout – airbag | | P1603 | | | 6/6 |
| CAN – implausible signal from airbag | P1604 | | | | 6/6 |
| CAN – all-wheel message | P1605 | | P1605 | | 6/6 |
| CAN timeout – ASR/MSR | P1606 | | | | 6/6 |
| CAN – cruise control | P1608 | | P1608 | P1608 | 6/6 |
| CAN – internal fault | | P1609 | | | 6/6 |
| CAN timeout – air-conditioning system | | P1610 | | | 6/6 |
| CAN timeout – vehicle electrical system control module | | P1613 | | | 6/6 |
| CAN timeout - steering angle sensor | | P1614 | | | 6/6 |
| CAN timeout – level control | P1615 | P1615 | P1615 | P1615 | 6/6 |
| CAN timeout, ignition lock | P1616 | | | | 6/6 |
| Monitoring of crash signal | P1620 | P1620 | | P1620 | 6/6 |
| CAN message counter – transmission fault | P1621 | | | | 6/6 |
| CAN – implausible signal from Tiptronic control module | P1622 | | | | 6/6 |
| Output stage for ambient air valve | | P1657 | P1659 | P1658 | 6/6 |
| Ambient air valve | P1666 | | | | 6/6 |
| Pressure sensor for brake booster | P1914 | P1914 | P1913 | P1912 | 6/6 |
| Relay output stage for auxiliary water pump | | P1917 | P1916 | P1915 | 6/6 |
| Inlet camshaft output stage, bank 1 | | P2089 | P2088 | P2089 | 3/3 |
| Inlet camshaft output stage, bank 2 | | P2093 | P2092 | P2093 | 3/3 |
| Output stage for throttle adjusting unit | P2100 | | | | 4/4 |
| Throttle adjusting unit | P2101 | | P2102 | P2103 | 4/4 |

| <i>Fault text</i> | <i>Fault type 1 Plaus</i> | <i>Fault type 2 Sig</i> | <i>Fault type 3 Min</i> | <i>Fault type 4 Max</i> | <i>CE status USA/EU4</i> |
|--|-------------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------------|
| Throttle adjusting unit – lower mechanical stop | P2108 | | | | 4/4 |
| Throttle adjusting unit – open spring check | | | P2119 | P2119 | 4/4 |
| Throttle adjusting unit potentiometer 1 | P2121 | | P2122 | P2123 | 5/5 |
| Throttle adjusting unit potentiometer 2 | P2126 | | P2127 | P2128 | 5/5 |
| Accelerator pedal module/accelerator pedal | P2135 | | | | 5/5 |
| Throttle | P2138 | | | | 5/5 |
| Recording cylinder-fill input quantities | | | P2174 | P2172 | 5/5 |
| Throttle adjusting unit (replacement detection without adaptation) | P2176 | | | | 4/4 |
| Oxygen sensing adaptation in lower load range, bank 1 (FRAU1) | | | P2178 | P2177 | 11/11 |
| Oxygen sensing adaptation in lower load range, bank 2 (FRAU2) | | | P2180 | P2179 | 11/11 |
| Thermostat blocked | P2181 | | | | 3/6 |
| Oxygen sensing adaptation in idling range, bank 1 (RKAT1) | | | P2188 | P2187 | 11/11 |
| Oxygen sensing adaptation in idling range, bank 2 (RKAT2) | | | P2190 | P2189 | 11/11 |
| Oxygen sensing adaptation in upper load range, bank 1 (FRAO1) | | | P2192 | P2191 | 11/11 |
| Oxygen sensing adaptation in upper load range, bank 2 (FRAO2) | | | P2194 | P2193 | 11/11 |
| Ambient pressure sensor | P2227 | P2230 | P2228 | P2229 | 3/5 |
| Oxygen sensor in front of catalytic converter, bank 1 | | P2231 | | | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 2 | | P2234 | | | 3/3 |

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|---|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|
| Oxygen sensor in front of catalytic converter, bank 1, Nernst voltage wire | | P2243 | P2245 | P2246 | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 2, Nernst voltage wire | | P2247 | P2249 | P2250 | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 1, virtual ground wire | | P2251 | P2252 | P2253 | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 2, virtual ground wire | | P2254 | P2255 | P2256 | 3/3 |
| Output stage for secondary air pump relay, bank 1 | | | P2257 | P2258 | 3/5 |
| Output stage for secondary air pump relay, bank 2 | | | P2259 | P2260 | 3/5 |
| Leak in front of throttle | | | P2281 | P2281 | 6/6 |
| Output stage for leak diagnosis pump | | P2400 | P2401 | P2402 | 3/0 |
| Reed switch for leak diagnosis pump | | | P2404 | P2403 | 3/0 |
| Oxygen sensor in front of catalytic converter, bank 1, pumping voltage wire | | P2626 | P2627 | P2628 | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 2, pumping voltage wire | | P2629 | P2630 | P2631 | 3/3 |
| Output stage for fuel pump relay 2 | | P2632 | P2632 | P2632 | 5/5 |
| Engine temperature sensor | P3081 | | | | 3/5 |

Fault overview for Cayenne V6

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|---|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|
| Output stage for inlet camshaft adjuster | | P0010 | | | 3/6 |
| Inlet camshaft adjustment | P0011 | | P0011 | P0011 | 5/5 |
| Output stage for exhaust camshaft adjuster | | P0013 | | | 3/6 |
| Exhaust camshaft adjustment | P0014 | | P0014 | P0014 | 3/6 |
| Inlet camshaft position vis-a-vis crankshaft | | | P0016 | P0016 | 3/6 |
| Exhaust camshaft position vis-a-vis crankshaft | | | P0017 | P0017 | 3/6 |
| Output stage for oxygen sensor heater in front of catalytic converter, bank 1 | | P0030 | P0031 | P0032 | 3/3 |
| Output stage for oxygen sensor heater behind catalytic converter, bank 1 | | P0036 | P0037 | P0038 | 3/3 |
| Oxygen sensors in front of catalytic converter interchanged | P0040 | | | | 3/3 |
| Output stage for oxygen sensor heater in front of catalytic converter, bank 2 | | P0050 | P0051 | P0052 | 3/3 |
| Output stage for oxygen sensor heater behind catalytic converter, bank 2 | | P0056 | P0057 | P0058 | 3/3 |
| Ambient temperature (via CAN from instrument cluster) | P0071 | P0074 | | P0073 | 5/6 |
| Intake air temperature sensor | P0111 | | P0112 | P0113 | 3/5 |
| Coolant temperature sensor | | P0116 | P0117 | P0118 | 3/5 |
| Accelerator pedal: potentiometer 1 | P0121 | | P0122 | P0123 | 5/5 |

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|---|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|
| Intake air temperature sensor | | | | P0127 | 3/5 |
| Oxygen sensor in front of catalytic converter, bank 1 | P0130 | | P0133 | | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 1, Nernst voltage wire | | | P0131 | P0132 | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 1, pumping voltage wire | P0134 | P0134 | | P0134 | 3/3 |
| Oxygen sensor heater in front of catalytic converter, bank 1 | P0135 | P0135 | P0135 | P0135 | 3/3 |
| Oxygen sensor behind catalytic converter, bank 1 | P0136 | P0140 | P0137 | P0138 | 3/3 |
| Oxygen sensor holder behind catalytic converter, bank 1 | | | P0139 | P0139 | 3/3 |
| Oxygen sensor heater behind catalytic converter, bank 1 | P0141 | | | | 3/5 |
| Oxygen sensor in front of catalytic converter, bank 2 | P0150 | | P0153 | | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 2, Nernst voltage wire | | | P0151 | P0152 | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 2, pumping voltage wire | P0154 | P0154 | | P0154 | 3/3 |
| Oxygen sensor heater in front of catalytic converter, bank 2 | P0155 | P0155 | P0155 | P0155 | 3/3 |
| Oxygen sensor behind catalytic converter, bank 2 | P0156 | P0160 | P0157 | P0158 | 3/3 |
| Oxygen sensor holder behind catalytic converter, bank 2 | | | P0159 | P0159 | 3/3 |

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|---|-------------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------------|
| Oxygen sensor heater behind catalytic converter, bank 2 | P0161 | | | | 3/5 |
| Oil temperature sensor | | P0199 | P0197 | P0198 | 6/6 |
| Injection valve on cylinder 1 | | P0201 | | | 3/3 |
| Injection valve on cylinder 2 | | P0202 | | | 3/3 |
| Injection valve on cylinder 3 | | P0203 | | | 3/3 |
| Injection valve on cylinder 4 | | P0204 | | | 3/3 |
| Injection valve on cylinder 5 | | P0205 | | | 3/3 |
| Injection valve on cylinder 6 | | P0206 | | | 3/3 |
| Maximum speed exceeded | | | | P0219 | 6/6 |
| Accelerator pedal: potentiometer 2 | P0221 | | P0222 | P0223 | 5/5 |
| Output stage for fuel pump relay 1 | | P0230 | P0230 | P0230 | 5/5 |
| Injection valve on cylinder 1 | | | P0261 | P0262 | 3/3 |
| Injection valve on cylinder 2 | | | P0264 | P0265 | 3/3 |
| Injection valve on cylinder 3 | | | P0267 | P0268 | 3/3 |
| Injection valve on cylinder 4 | | | P0270 | P0271 | 3/3 |
| Injection valve on cylinder 5 | | | P0273 | P0274 | 3/3 |
| Injection valve on cylinder 6 | | | P0276 | P0277 | 3/3 |
| Totals fault in misfire detection | P0300* | | P0300* | P0300* | 1 - 2 / 1 - 2 |
| Misfire detection in cylinder 1 | P0301* | | P0301* | P0301* | 1 - 2 / 1 - 2 |
| Misfire detection in cylinder 2 | P0302* | | P0302* | P0302* | 1 - 2 / 1 - 2 |
| Misfire detection in cylinder 3 | P0303* | | P0303* | P0303* | 1 - 2 / 1 - 2 |

| <i>Fault text</i> | <i>Fault type 1 Plaus</i> | <i>Fault type 2 Sig</i> | <i>Fault type 3 Min</i> | <i>Fault type 4 Max</i> | <i>CE status USA/EU4</i> |
|--|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|
| Misfire detection in cylinder 4 | P0304* | | P0304* | P0304* | 1 - 2 / 1 - 2 |
| Misfire detection in cylinder 5 | P0305* | | P0305* | P0305* | 1 - 2 / 1 - 2 |
| Misfire detection in cylinder 6 | P0306* | | P0306* | P0306* | 1 - 2 / 1 - 2 |
| Knock control – zero test | P0324 | | | | 5/6 |
| Knock sensor 1 | | | P0327 | P0328 | 5/6 |
| Knock sensor 2 | | | P0332 | P0333 | 5/6 |
| Crankshaft sensor | | P0335 | | | 3/5 |
| Crankshaft sensor | P0336 | P0339 | P0337 | P0338 | 3/5 |
| Inlet camshaft sensor | P0341 | P0344 | P0342 | P0343 | 3/5 |
| Bar ignition module on cylinder 1 | | P0351 | P0351 | P0351 | 3/5 |
| Bar ignition module on cylinder 2 | | P0352 | P0352 | P0352 | 3/5 |
| Bar ignition module on cylinder 3 | | P0353 | P0353 | P0353 | 3/5 |
| Bar ignition module on cylinder 4 | | P0354 | P0354 | P0354 | 3/5 |
| Bar ignition module on cylinder 5 | | P0355 | P0355 | P0355 | 3/5 |
| Bar ignition module on cylinder 6 | | P0356 | P0356 | P0356 | 3/5 |
| Exhaust camshaft sensor | P0366 | P0369 | P0367 | P0368 | 3/5 |
| Secondary air valve | P0413 | P0413 | P0414 | P0414 | 3/5 |
| Output stage for secondary air pump relay | | P0418 | | | 3/5 |
| Pre-catalytic conversion, bank 1 | | | | P0421 | 3/3 |
| Pre-catalytic conversion, bank 2 | | | | P0431 | 3/3 |
| Tank system | | | P0441 | P0441 | 3/6 |
| Tank system (minor leak) | | | | P0442 | 3/0 |
| Tank valve output stage | | P0444 | P0445 | P0445 | 3/3 |
| Tank diagnosis – active carbon filter shut-off valve blocked | P0446 | | | | 3/0 |

| <i>Fault text</i> | <i>Fault type 1 Plaus</i> | <i>Fault type 2 Sig</i> | <i>Fault type 3 Min</i> | <i>Fault type 4 Max</i> | <i>CE status USA/EU4</i> |
|--|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|
| Output stage for active carbon filter shut-off valve | | P0447 | P0448 | P0448 | 3/0 |
| Tank system (major leak) | | | P0455 | | 34 |
| Tank system (minor leak) | | | P0456 | | 3/0 |
| Output stage for fan control 1 | | P0480 | P0480 | P0480 | 6/6 |
| Output stage for fan control 2 | | P0481 | P0481 | P0481 | 6/6 |
| Secondary air system, bank 1 | | | P0491 | | 3/5 |
| Secondary air system, bank 2 | | | P0492 | | 3/5 |
| Fan stiff | | P0494 | P0494 | P0494 | 6/6 |
| Vehicle speed signal (up to MY 04) | | P0501 | | | 3/6 |
| Vehicle speed signal (as of MY 05) | P0501 | P0503 | P0502 | P0503 | 3/6 |
| Idle speed control at stop | | | P0506 | P0507 | 3/5 |
| Immobiliser | P0513 | P0513 | | | 5/5 |
| Supply voltage | P0560 | | P0562 | P0563 | 3/5 |
| Cruise control – operating lever fault | P0564 | P0564 | P0564 | P0564 | 6/6 |
| Stop light switch | P0571 | | | | 6/6 |
| CAN timeout – Tiptronic | P0600 | P0600 | | | 3/6 |
| Checksum fault control module | P0601 | | | | 4/4 |
| Control module coded incorrectly (transmission coding) | | | | P0602 | 4/4 |
| Control module faulty | P0603 | | | | 6/6 |
| Control module faulty | P0604 | | | | 5/5 |
| Control module faulty | P0605 | | | | 5/5 |
| Control module faulty | P0606 | P0606 | P0606 | | 3/3 or 6/6 |
| Control module faulty | P0607 | | | | 5/5 |
| Throttle adjusting unit: spring check | | | P0638 | P0638 | 4/4 |

| <i>Fault text</i> | <i>Fault type 1 Plaus</i> | <i>Fault type 2 Sig</i> | <i>Fault type 3 Min</i> | <i>Fault type 4 Max</i> | <i>CE status USA/EU4</i> |
|---|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|
| Intake pipe switch-over valve | | P0660 | P0661 | P0662 | |
| Main relay | | P0685 | P0686 | P0687 | 5/5 |
| CE light on as a result of transmission fault | P0700 | | | | 6/6 |
| Clutch switch | | P0830 | | | 5/5 |
| Oxygen sensors behind catalytic converter interchanged | P1009 | | | | 3/6 |
| Mass air flow sensor (MAF): electrical fault | | | P1090 | P1091 | 3/5 |
| Mass air flow in front of throttle (HFM) implausible | P1094 | | | | 3/5 |
| Mass air flow in front of throttle (HFM) implausible | P1095 | P1096 | P1097 | P1098 | 3/5 |
| Oxygen sensing adaptation in lower load range, bank 1 (FRAU1) | | | P1107 (=P2178) | P1126 (=P2177) | 11/11 |
| Oxygen sensing adaptation in lower load range, bank 2 (FRAU2) | | | P1108 (=P2180) | P1133 (=P2179) | 11/11 |
| Deviation in oxygen sensing as a result of short test, bank 1 | | | P1127 | P1142 | 7/7 |
| Deviation in oxygen sensing as a result of short test, bank 2 | | | P1134 | P1143 | 7/7 |
| Oxygen sensor in front of catalytic converter, bank 1 | | | | P1145 | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 2 | | | | P1155 | 3/3 |
| Intake air temperature sensor | | | P1175 | | 3/5 |
| Output stage for positive crankcase ventilation heater | | P1182 | P1181 | P1180 | 6/6 |
| Function monitoring of safety fuel cutoff | P1266 | | | | 4/4 |
| Offset knock control | P1385 | | | | 5/6 |

| <i>Fault text</i> | <i>Fault type 1 Plaus</i> | <i>Fault type 2 Sig</i> | <i>Fault type 3 Min</i> | <i>Fault type 4 Max</i> | <i>CE status USA/EU4</i> |
|--|-------------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------------|
| Test pulse knock control | P1386 | | | | 5/6 |
| Brake booster system | P1431 | | | | 5/6 |
| Throttle adjusting unit: emergency air position | P1504 | | | | 6/6 |
| Throttle adjusting unit: booster compensation | P1507 | | | | 6/6 |
| Function monitoring of torque comparison | P1508 | | | | 4/4 |
| Torque limit | | | | P1509 | 5/6 |
| Throttle adjusting unit: lower mechanical stop | P1514 | | | | 6/6 |
| Throttle adjusting unit: interruption check due to violated environmental conditions | | | P1511 | P1517 | 6/6 |
| Check fuel supply system on the left side in the direction of travel | | | | P1522 | 6/6 |
| Check fuel supply system on the right side in the direction of travel | | | | P1523 | 6/6 |
| Vehicle electrical system voltage via main relay | P1525 | P1525 | | | 6/6 |
| Function monitoring of speed | P1550 | | | | 4/4 |
| Function monitoring of load sensor | P1551 | | | | 4/4 |
| Function monitoring of control module fault, group a | P1552 | | | | 4/4 |
| Function monitoring of control module fault, group b | P1553 | | | | 4/4 |
| Function monitoring of accelerator pedal module | P1554 | | | | 4/4 |
| Movement of accelerator pedal module | P1575 | | | | 6/6 |
| CAN timeout – PSM | | P1600 | | | 6/6 |
| CAN timeout – instrument | | P1601 | | | 6/6 |

| <i>Fault text</i> | <i>Fault type 1 Plaus</i> | <i>Fault type 2 Sig</i> | <i>Fault type 3 Min</i> | <i>Fault type 4 Max</i> | <i>CE status USA/EU4</i> |
|--|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|
| CAN timeout – airbag | P1603 | P1603 | | | 6/6 |
| CAN – implausible signal from airbag | P1604 | | | | 6/6 |
| CAN – all-wheel message | P1605 | P1605 | P1605 | | 6/6 |
| CAN timeout – ASR/MSR | P1606 | P1606 | | | 6/6 |
| CAN – cruise control | P1608 | P1608 | | P1608 | 6/6 |
| CAN – internal fault | | P1609 | | | 6/6 |
| CAN timeout – air-conditioning system | P1610 | | | | 6/6 |
| CAN timeout – vehicle electrical system control module | P1613 | | | | 6/6 |
| CAN timeout - steering angle sensor | P1614 | | | | 6/6 |
| CAN timeout – level control | P1615 | P1615 | P1615 | P1615 | 6/6 |
| CAN timeout – ignition lock | P1616 | | | | 6/6 |
| Monitoring of crash signal | P1620 | P1620 | | P1620 | 6/6 |
| CAN message counter – transmission fault | P1621 | | | | 6/6 |
| CAN – implausible signal from Tiptronic control module | P1622 | P1622 | | | 6/6 |
| Pressure sensor for brake booster | P1914 | P1914 | P1913 | P1912 | 6/6 |
| Relay output stage for auxiliary water pump | | P1917 | P1916 | P1915 | 6/6 |
| Output stage for inlet camshaft adjuster | | | P2088 | P2089 | 3/3 |
| Output stage for exhaust camshaft adjuster | | | P2090 | P2091 | 3/3 |
| Output stage for throttle adjusting unit | P2100 | | | | 4/4 |
| Throttle adjusting unit | P2101 | | P2102 | P2103 | 4/4 |
| Throttle adjusting unit – lower mechanical stop | P2108 | | | | 4/4 |

| <i>Fault text</i> | <i>Fault type 1 Plaus</i> | <i>Fault type 2 Sig</i> | <i>Fault type 3 Min</i> | <i>Fault type 4 Max</i> | <i>CE status USA/EU4</i> |
|--|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|
| Throttle adjusting unit – open spring check | | | P2119 | P2119 | 4/4 |
| Throttle adjusting unit potentiometer 1 | P2121 | | P2122 | P2123 | 5/5 |
| Throttle adjusting unit potentiometer 2 | P2126 | | P2127 | P2128 | 5/5 |
| Accelerator pedal module/accelerator pedal | P2135 | | | | 5/5 |
| Throttle | P2138 | | | | 5/5 |
| Recording cylinder-fill input quantities | | | P2174 | P2172 | 5/5 |
| Throttle adjusting unit (replacement detection without adaptation) | P2176 | | | | 4/4 |
| Oxygen sensing adaptation in lower load range, bank 1 (FRAU1) | | | P2178 | P2177 | 11/11 |
| Oxygen sensing adaptation in lower load range, bank 2 (FRAU2) | | | P2180 | P2179 | 11/11 |
| Thermostat blocked | P2181 | | | | 3/6 |
| Oxygen sensing adaptation in idling range, bank 1 (RKAT1) | | | P2188 | P2187 | 11/11 |
| Oxygen sensing adaptation in idling range, bank 2 (RKAT2) | | | P2190 | P2189 | 11/11 |
| Oxygen sensing adaptation in upper load range, bank 1 (FRAO1) | | | P2192 | P2191 | 11/11 |
| Oxygen sensing adaptation in upper load range, bank 2 (FRAO2) | | | P2194 | P2193 | 11/11 |
| Ambient pressure sensor | P2227 | P2230 | P2228 | P2229 | 3/5 |
| Oxygen sensor in front of catalytic converter, bank 1 | | P2231 | | | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 2 | | P2234 | | | 3/3 |

| <i>Fault text</i> | <i>Fault type 1 Plaus</i> | <i>Fault type 2 Sig</i> | <i>Fault type 3 Min</i> | <i>Fault type 4 Max</i> | <i>CE status USA/EU4</i> |
|---|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|
| Oxygen sensor in front of catalytic converter, bank 1, Nernst voltage wire | | P2243 | P2245 | P2246 | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 2, Nernst voltage wire | | P2247 | P2249 | P2250 | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 1, virtual ground wire | | P2251 | P2252 | P2253 | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 2, virtual ground wire | | P2254 | P2255 | P2256 | 3/3 |
| Output stage for secondary air pump relay, bank 1 | | | P2257 | P2258 | 3/5 |
| Output stage for leak diagnosis pump | | P2400 | P2401 | P2402 | 3/0 |
| Reed switch for leak diagnosis pump | | | P2403 | P2404 | 3/0 |
| Oxygen sensor in front of catalytic converter, bank 1, pumping voltage wire | | P2626 | P2627 | P2628 | 3/3 |
| Oxygen sensor in front of catalytic converter, bank 2, pumping voltage wire | | P2629 | P2630 | P2631 | 3/3 |
| Output stage for fuel pump relay 2 | | P2632 | P2632 | P2632 | 5/5 |
| Engine temperature sensor | P3081 | | | | 3/5 |