

DIAGNOSTIC TROUBLE CODE CHART

SAE CONTROLLED

HINT:

Parameters listed in the chart may not be exactly the same as your reading due to the type of instrument or other factors.

If a malfunction code is displayed during the DTC check in check mode, check the circuit for that code listed in the table below. For details of each code, turn to the page referred to under the "See page " for the respective "DTC No." in the DTC chart. 

DTC No. (See Page)	Detection Item	Trouble Area	MIL*	Memory
P0100 (DI-22)	Mass Air Flow Circuit Malfunction	• Open or short in mass air flow meter circuit • Mass air flow meter • ECM	○	○
P0101 (DI-26)	Mass Air Flow Circuit Range/Performance Problem	• Mass air flow meter	○	○
P0110 (DI-27)	Intake Air Temp. Circuit Malfunction	• Open or short in intake air temp. sensor circuit • Intake air temp. sensor (built into mass air flow meter) • ECM	○	○
P0115 (DI-31)	Engine Coolant Temp. Circuit Malfunction	• Open or short in engine coolant temp. sensor circuit • Engine coolant temp. sensor • ECM	○	○
P0116 (DI-35)	Engine Coolant Temp. Circuit Range/Performance Problem	• Engine coolant temp. sensor • Cooling system	○	○
P0120 (DI-37)	Throttle/Pedal Position Sensor/Switch "A" Circuit Malfunction	• Open or short in throttle position sensor circuit • Throttle position sensor • ECM	○	○
P0121 (DI-41)	Throttle/Pedal Position Sensor/Switch "A" Circuit Range/Performance Problem	• Throttle position sensor	○	○
P0128 (DI-47)	Thermostat Malfunction	• Thermostat		
P0125 (DI-42)	Insufficient Coolant Temp. for Closed Loop Fuel Control	• Fuel system • Injector • Ignition system • Gas leakage on exhaust system • Open or short in A/F sensor circuit (bank 1, 2 sensor 1) • A/F sensors (bank 1, 2 sensor 1) • ECM	○	○
P0136 (DI-48)	Heated Oxygen Sensor Circuit Malfunction (Bank 1 Sensor 2)	• Heated oxygen sensor	○	○
P0141 (DI-50)	Heated Oxygen Sensor Heater Circuit Malfunction (Bank 1 Sensor 2)	• Same as DTC No. P0135	○*1	○
P0171 (DI-52)	System too Lean (Fuel Trim)	• Air intake (hose loose) • Fuel line pressure • Injector blockage • Mass air flow meter • Engine coolant temp. sensor • A/F sensors (bank 1, 2 sensor 1) • Gas leakage on exhaust system	○*1	○

P0172 (DI-52)	System too rich (Fuel Trim)	• Fuel line pressure • Injector leak, blockage • Heated oxygen sensor malfunction • Mass air flow meter • Engine coolant temp. sensor • A/F sensors (bank 1, 2 sensor 1) • Gas leakage on exhaust system	○*1	○
P0174 (DI-52)	System too Lean (A/F Lean Malfunction)	• Same as DTC P0171	○	○
P0175 (DI-52)	System too Rich (A/F Rich Malfunction)	• Same as DTC P0172	○	○
P0300 (DI-57)	Random/Multiple Cylinder Misfire Detected	• Ignition system • Injector • Fuel line pressure	○*2	○
P0301 P0302 P0303 P0304 P0305 P0306 (DI-57)	Misfire Detected - Cylinder 1 - Cylinder 2 - Cylinder 3 - Cylinder 4 - Cylinder 5 - Cylinder 6	• Compression pressure • Valve clearance not to specification • Valve timing • Mass air flow meter • Engine coolant temp. sensor • Open or short engine wire • Connector connection • ECM		
P0325 (DI-62)	Knock Sensor 1 Circuit Malfunction	• Open or short in knock sensor 1 circuit • Knock sensor 1 (looseness) • ECM		
P0330 (DI-62)	Knock Sensor 2 Circuit Malfunction	• Open or short in knock sensor 2 circuit • Knock sensor 2 (looseness) • ECM		
P0335 (DI-65)	Crankshaft Position Sensor "A" Circuit Malfunction	• Open or short in crankshaft position sensor circuit • Crankshaft position sensor • Starter • ECM		
P0340 (DI-67)	Camshaft Position Sensor Circuit Malfunction	• Open or short in camshaft position sensor circuit • Camshaft position sensor • Starter • ECM		
P0420 (DI-69)	Catalyst System Efficiency Below Threshold	• Three-way catalytic converter • Open or short in heated oxygen sensors (bank 1, sensor 2) circuit • Heated oxygen sensors (bank 1, sensor 2) • Open or short in A/F sensors (bank 1, 2 sensor 1) circuit • A/F sensors (bank 1, 2 sensor 1)	○*2	○
P0440 (DI-72)	Evaporative Emission Control System Malfunction	• Vapor pressure sensor • Fuel tank cap incorrectly installed • Fuel tank cap cracked or damaged • Vacuum hose cracked, holed, blocked, damaged or disconnected ((1) or (2) in fig. 1) • Hose or tube cracked, holed, damaged or loose seal ((3) in fig. 1) • Fuel tank cracked, holed or damaged • Charcoal canister cracked, holed or damaged	○*1	○

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P0441 (DI-78)	Evaporative Emission Control System Incorrect Purge Flow	• Open or short in VSV circuit for EVAP • Open or short in VSV circuit for vapor pressure sensor • Open or short in vapor pressure sensor circuit • VSV for EVAP • VSV for vapor pressure sensor • Vapor pressure sensor • Vacuum hose cracks, holed blocked, damaged or disconnected ((1), (4), (5), (6) and (7) in fig.1) • Charcoal canister cracks, holed or damaged	○	○
P0442 (DI-72)	Evaporative Emission Control System Leak Detected (Small Leak)	• Same as DTC P0440	○	○
P0446 (DI-78)	Evaporative Emission Control System Vent Control Malfunction	• Same as DTC P0441	○	○
P0450 (DI-95)	Evaporative Emission Control System Pressure Sensor Malfunction	• Open or short in vapor pressure sensor circuit • Vapor pressure sensor • ECM	○	○
P0451 (DI-95)	Evaporative Emission Control System Pressure Sensor Range/Performance	• Open or short in vapor pressure sensor circuit • Vapor pressure sensor • ECM	○	○
P0500 (DI-97)	Vehicle Speed Sensor Malfunction	• Open or short in speed sensor circuit • Vehicle speed sensor • Combination meter • ECM	○	○
P0505 (DI-100)	Idle Control System Malfunction	• IAC valve is stuck or closed • Open or short in IAC valve circuit • Open or short in A/C signal circuit • Air intake (hose loose)	○	○

*: ○ ··· MIL lights up, - ··· MIL does not light up

MANUFACTURER CONTROLLED

DTC No. (See Page)	Detection Item	Trouble Area	MIL*	Memory
P1130 (DI-104)	A/F Sensor Circuit Range/Performance Malfunction (Bank 1 Sensor 1)	• Open or short in A/F sensor circuit • A/F sensor (bank 1, sensor 1) • ECM	○	○
P1133 (DI-109)	A/F Sensor Circuit Response Malfunction (Bank 1 Sensor 1)	• A/F sensor (bank 1, sensor 1)	○	○
P1135 (DI-113)	A/F Sensor Heater Circuit Malfunction (Bank1 Sensor 1)	• Open or short in A/F sensor (bank 1, sensor 1) • A/F sensor (bank 1, sensor 1) heater • ECM	○	○
P1150 (DI-104)	A/F Sensor Circuit Range/Performance Malfunction (Bank2 Sensor 1)	• Same as DTC No. P1130	○	○
P1153 (DI-109)	A/F Sensor Circuit Response Malfunction (Bank 2 Sensor 1)	• Same as DTC No. P1133	○	○
P1155 (DI-113)	A/F Sensor Heater Circuit Malfunction (Bank 2 Sensor 1)	• Same as DTC No. P1135	○	○
P1300 (DI-115)	Igniter Circuit Malfunction	• Open or short in IGF or IGT circuit from igniter to ECM • Igniter • ECM	○	○

P1305 (DI-115)	Igniter Circuit Malfunction (No.2)	- Ignition system - Open or short in IGF2 or IGT2 circuit from No.2 ignition coil with igniter to ECM - No.2 ignition coil with igniter - ECM	○	○
P1310 (DI-115)	Igniter Circuit Malfunction (No.3)	- Ignition system - Open or short in IGF2 or IGT3 circuit from No.3 ignition coil with igniter to ECM - No.3 ignition coil with igniter - ECM	○	○
P1315 (DI-115)	Igniter Circuit Malfunction (No.4)	- Ignition system - Open or short in IGF1 or IGT4 circuit from No.4 ignition coil with igniter to ECM - No.4 ignition coil with igniter - ECM	○	○
P1320 (DI-115)	Igniter Circuit Malfunction (No.5)	- Ignition system - Open or short in IGF2 or IGT5 circuit from No.5 ignition coil with igniter to ECM - No.5 ignition coil with igniter - ECM	○	○
P1325 (DI-115)	Igniter Circuit Malfunction (No.6)	- Ignition system - Open or short in IGF1 or IGT6 circuit from No.6 ignition coil with igniter to ECM - No.6 ignition coil with igniter - ECM	○	○
P1335 (DI-121)	Crankshaft Position Sensor Circuit Malfunction (during engine running)	- Open or short in crankshaft position sensor circuit - Crankshaft position sensor - Starter - ECM	-	○
P1346 (DI-122)	VVT Sensor/Camshaft position Sensor Circuit Range/Performance Problem (Bank 1)	- Mechanical system (Jumping teeth of timing belt, belt stretched) - ECM	○	○
P1349 (DI-123)	VVT System Malfunction (Bank 1)	- Valve timing - OCV - VVT controller assembly - ECM	○	○
P1350 (DI-130)	VVT Sensor/Camshaft position Sensor Circuit Malfunction (Bank 2)	Same as DTC No. P1345	○	○
P1351 (DI-122)	VVT Sensor/Camshaft position Sensor Circuit Range/Performance Problem (Bank 2)	Same as DTC No. P1346	○	○
P1354 (DI-123)	VVT System Malfunction (Bank 2)	Same as DTC No. P1349	○	○
P1520 (DI-132)	Stop Light Switch Signal Malfunction	- Short in stop light switch signal circuit - Stop light switch - ECM	○	○
P1600 (DI-135)	ECM BATT Malfunction	- Open in back up power source circuit - ECM	○	○
P1656 (DI-137)	OCV Circuit Malfunction (Bank 1)	- Open or short in OCV circuit - OCV - ECM	○	○
P1663 (DI-137)	OCV Circuit Malfunction (Bank 2)			

DIAGNOSTICS - ENGINE

P1780 (DI-140)	Park/Neutral Position Switch Malfunction	• Short in park/neutral position switch circuit • Park/neutral position switch • ECM	○	○
B2795 (DI-621)	Unmatched key Code	• Immobiliser system	-	○
B2796 (DI-622)	No Communication in Immobiliser System	• Immobiliser system	-	○
B2797 (DI-624)	Communication Malfunction No.1	• Immobiliser system	-	○
B2798 (DI-626)	Communication Malfunction No.2	• Immobiliser system	-	○

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