

DIAGNOSTIC TROUBLE CODE CHART

HINT:

Parameters listed in the chart may be different than your readings depending on the type of instrument used and other factors.

During the Diagnostic Trouble Code (DTC) check, refer to the table below if a malfunction code is displayed. For details about each code, refer to the page number in the DTC Chart's left column.

DTC No. (See Page)	Detection Item	Trouble Area	MIL	Memory
P0010 (05-42)	Camshaft Position "A" Actuator Circuit Bank 1 [VVT OCV (Bank 1) open/short]	<ul style="list-style-type: none"> VVT OCV (bank 1) circuit ECM 	○	○
P0011 (05-46)	Camshaft Position "A" Timing Over Advanced or System Performance (Bank 1) [Camshaft timing stuck advanced]	<ul style="list-style-type: none"> Valve timing (bank 1) VVT OCV (bank 1) VVT actuator 	○*2	○
P0012 (05-46)	Camshaft Position "A" Timing Over Retarded (Bank 1) [Camshaft timing stuck retarded]	<ul style="list-style-type: none"> Valve timing (bank 1) VVT OCV (bank 1) VVT actuator 	○*2	○
P0016 (05-51)	Camshaft Position – Crankshaft Position Correlation (Bank 1 Sensor A) [Misalignment of CMP (Bank 1) and CKP]	<ul style="list-style-type: none"> Timing belt Valve timing (bank 1) 	○	○
P0018 (05-51)	Camshaft Position – Crankshaft Position Correlation (Bank 2 Sensor A) [Misalignment of CMP (Bank 2) and CKP]	<ul style="list-style-type: none"> Timing belt Valve timing (bank 2) 	○	○
P0020 (05-42)	Camshaft Position "A" Actuator Circuit Bank 2 [VVT OCV (Bank 2) open/short]	<ul style="list-style-type: none"> VVT OCV (bank 2) circuit ECM 	○	○
P0021 (05-46)	Camshaft Position "A" Timing Over Advanced or System Performance (Bank 2) [Camshaft timing stuck advanced]	<ul style="list-style-type: none"> Valve timing (bank 2) VVT OCV (bank 2) VVT actuator 	○	○
P0022 (05-46)	Camshaft Position "A" Timing Over Retarded (Bank 2) [Camshaft timing stuck retarded]	<ul style="list-style-type: none"> Valve timing (bank 2) VVT OCV (bank 2) VVT actuator 	○	○
P0031*5 (05-54)	Oxygen Sensor Heater Control Circuit Low (Bank 1 Sensor 1) [HO2S (bank 1 sensor 1) heater current is low]	<ul style="list-style-type: none"> HO2S (bank 1 sensor 1) heater circuit ECM 	○	○
P0032*5 (05-54)	Oxygen Sensor Heater Control Circuit High (Bank 1 Sensor 1) [HO2S (bank 1 sensor 1) heater current is high]	<ul style="list-style-type: none"> HO2S (bank 1 sensor 1) heater circuit ECM 	○	○
P0037*5 (05-54)	Oxygen Sensor Heater Control Circuit Low (Bank 1 Sensor 2) [HO2S (bank 1 sensor 2) heater current is low]	<ul style="list-style-type: none"> HO2S (bank 1 sensor 2) heater circuit ECM 	○	○
P0038*5 (05-54)	Oxygen Sensor Heater Control Circuit High (Bank 1 Sensor 2) [HO2S (bank 1 sensor 2) heater current is high]	<ul style="list-style-type: none"> HO2S (bank 1 sensor 2) heater circuit ECM 	○	○
P0051*5 (05-54)	Oxygen Sensor Heater Control Circuit Low (Bank 2 Sensor 1) [HO2S (bank 2 sensor 1) heater current is low]	<ul style="list-style-type: none"> HO2S (bank 2 sensor 1) heater circuit ECM 	○	○
P0052*5 (05-54)	Oxygen Sensor Heater Control Circuit High (Bank 2 Sensor 1) [HO2S (bank 2 sensor 1) heater current is high]	<ul style="list-style-type: none"> HO2S (bank 2 sensor 1) heater circuit ECM 	○	○
P0057*5 (05-54)	Oxygen Sensor Heater Control Circuit Low (Bank 2 Sensor 2) [HO2S (bank 2 sensor 2) heater current is low]	<ul style="list-style-type: none"> HO2S (bank 2 sensor 2) heater circuit ECM 	○	○

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DTC No. (See Page)	Detection Item	Trouble Area	MIL	Memory
P0058 ^{*5} (05-54)	Oxygen Sensor Heater Control Circuit High (Bank 2 Sensor 2) [HO2S (bank 2 sensor 2) heater current is high]	<ul style="list-style-type: none"> HO2S (bank 2 sensor 2) heater circuit ECM 	○	○
P0100 (05-62)	Mass or Volume Air Flow Circuit [MAF meter voltage is chattering]	<ul style="list-style-type: none"> MAF meter circuit ECM 	○	○
P0102 (05-62)	Mass or Volume Air Flow Circuit Low Input [MAF meter voltage is low]	<ul style="list-style-type: none"> MAF meter circuit ECM 	○	○
P0103 (05-62)	Mass or Volume Air Flow Circuit High Input [MAF meter voltage is high]	<ul style="list-style-type: none"> MAF meter circuit ECM 	○	○
P0110 (05-69)	Intake Air Temperature Circuit [IAT sensor resistance is out of normal range]	<ul style="list-style-type: none"> IAT sensor circuit ECM 	○	○
P0112 (05-69)	Intake Air Temperature Circuit Low Input [IAT sensor resistance is low]	<ul style="list-style-type: none"> IAT sensor circuit ECM 	○	○
P0113 (05-69)	Intake Air Temperature Circuit High Input [IAT sensor resistance is high]	<ul style="list-style-type: none"> IAT sensor circuit ECM 	○	○
P0115 (05-74)	Engine Coolant Temperature Circuit [ECT sensor resistance is out of normal range]	<ul style="list-style-type: none"> ECT sensor circuit ECM 	○	○
P0116 ^{*2} (05-79)	Engine Coolant Temperature Circuit Range/ Performance Problem [ECT sensor resistance stuck]	<ul style="list-style-type: none"> ECT sensor Cooling system 	○	○
P0117 (05-74)	Engine Coolant Temperature Circuit Low Input [ECT sensor resistance is low]	<ul style="list-style-type: none"> ECT sensor circuit ECM 	○	○
P0118 (05-74)	Engine Coolant Temperature Circuit High Input [ECT sensor resistance is high]	<ul style="list-style-type: none"> ECT sensor circuit ECM 	○	○
P0120 (05-80)	Throttle/Pedal Position Sensor/Switch "A" Circuit [TP sensor voltage is chattering]	<ul style="list-style-type: none"> TP sensor (VTA1) circuit ECM 	○	○
P0121 (05-86)	Throttle/Pedal Position Sensor/Switch "A" Circuit Range/Performance Problem [TP sensor voltage is out of normal range]	TP sensor	○	○
P0122 (05-80)	Throttle/Pedal Position Sensor/Switch "A" Circuit Low Input [TP sensor voltage is low]	<ul style="list-style-type: none"> TP sensor (VTA1) circuit ECM 	○	○
P0123 (05-80)	Throttle/Pedal Position Sensor/Switch "A" Circuit High Input [TP sensor voltage is high]	<ul style="list-style-type: none"> TP sensor (VTA1) circuit ECM 	○	○
P0130 ^{*8} (05-87)	Oxygen Sensor Circuit (Bank 1 Sensor 1)	<ul style="list-style-type: none"> HO2S circuit (bank 1 sensor 1) Fuel pressure ECM 	○ ^{*3}	○
P0133 ^{*3} (05-95)	Oxygen Sensor Circuit Slow Response (Bank 1 Sensor 1)	<ul style="list-style-type: none"> HO2S circuit (bank 1 sensor 1) Fuel pressure ECM 	○	○
P0134 ^{*3} (05-101)	Oxygen Sensor Circuit No Activity Detected (Bank 1 Sensor 1)	<ul style="list-style-type: none"> HO2S circuit (bank 1 sensor 1) Fuel pressure ECM 	○	○
P0136 ^{*4} (05-107)	Oxygen Sensor Circuit Malfunction (Bank 1 Sensor 2)	<ul style="list-style-type: none"> HO2S circuit (bank 1 sensor 2) ECM 	○ ^{*7}	○
P0150 ^{*8} (05-87)	Oxygen Sensor Circuit (Bank 2 Sensor 1)	<ul style="list-style-type: none"> HO2S circuit (bank 2 sensor 1) Fuel pressure ECM 	○ ^{*3}	○
P0153 ^{*3} (05-95)	Oxygen Sensor Circuit Slow Response (Bank 2 Sensor 1)	<ul style="list-style-type: none"> HO2S circuit (bank 2 sensor 1) Fuel pressure ECM 	○	○

DTC No. (See Page)	Detection Item	Trouble Area	MIL	Memory
P0154*3 (05-101)	Oxygen Sensor Circuit No Activity Detected (Bank 2 Sensor 1)	<ul style="list-style-type: none"> • HO2S circuit (bank 2 sensor 1) • Fuel pressure • ECM 	○	○
P0156*4 (05-107)	Oxygen Sensor Circuit Malfunction (Bank 2 Sensor 2)	<ul style="list-style-type: none"> • HO2S circuit (bank 2 sensor 2) • ECM 	○*7	○
P0171*4 (05-113)	System Too Lean (Bank 1)	<ul style="list-style-type: none"> • HO2S (bank 1 sensor 1) • Fuel pressure • PCV valve and hose • Air induction system • Exhaust gas leak • MAF meter • ECT sensor 	○	○
P0172*6 (05-113)	System Too Rich (Bank 1)	<ul style="list-style-type: none"> • HO2S (bank 1 sensor 1) • Fuel pressure • PCV valve and hose • Air induction system • Exhaust gas leak • MAF meter • ECT sensor 	○	○
P0174*4 (05-113)	System Too Lean (Bank 2)	<ul style="list-style-type: none"> • HO2S (bank 2 sensor 1) • Fuel pressure • PCV valve and hose • Air induction system • Exhaust gas leak • MAF meter • ECT sensor 	○	○
P0175*6 (05-113)	System too Rich (Bank 2)	<ul style="list-style-type: none"> • HO2S (bank 2 sensor 1) • Fuel pressure • PCV valve and hose • Air induction system • Exhaust gas leak • MAF meter • ECT sensor 	○	○
P0220 (05-80)	Throttle/Pedal Position Sensor/Switch "B" Circuit	<ul style="list-style-type: none"> • TP sensor (VTA2) circuit • ECM 	○	○
P0222 (05-80)	Throttle/Pedal Position Sensor/Switch "B" Circuit Low Input	<ul style="list-style-type: none"> • TP sensor (VTA2) circuit • ECM 	○	○
P0223 (05-80)	Throttle/Pedal Position Sensor/Switch "B" Circuit High Input	<ul style="list-style-type: none"> • TP sensor (VTA2) circuit • ECM 	○	○
P0230 (05-122)	Fuel Pump Primary Circuit	<ul style="list-style-type: none"> • F/PMP relay circuit • ECM 	—	○
P0300*3,9 (05-126)	Random/Multiple Cylinder Misfire Detected	<ul style="list-style-type: none"> • Vacuum hose connection • Valve timing • Fuel pressure • Compression pressure • PCV hose and PCV valve • Spark plug • Injector • Valve clearance • MAF meter • ECT sensor • ECM 	○	○
P0301*3,9 (05-126)	Cylinder 1 Misfire Detected	Same as P0300	○	○
P0302*3,9 (05-126)	Cylinder 2 Misfire Detected	Same as P0300	○	○
P0303*3,9 (05-126)	Cylinder 3 Misfire Detected	Same as P0300	○	○
P0304*3,9 (05-126)	Cylinder 4 Misfire Detected	Same as P0300	○	○

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DTC No. (See Page)	Detection Item	Trouble Area	MIL	Memory
P0305*3, 9 (05-126)	Cylinder 5 Misfire Detected	Same as P0300	○	○
P0306*3, 9 (05-126)	Cylinder 6 Misfire Detected	Same as P0300	○	○
P0307*3, 9 (05-126)	Cylinder 7 Misfire Detected	Same as P0300	○	○
P0308*3, 9 (05-126)	Cylinder 8 Misfire Detected	Same as P0300	○	○
P0325 (05-140)	Knock Sensor 1 Circuit	<ul style="list-style-type: none"> Knock sensor (bank 1) (looseness) ECM 	○	○
P0327 (05-140)	Knock Sensor 1 Circuit low input	<ul style="list-style-type: none"> Knock sensor (bank 1) ECM 	○	○
P0328 (05-140)	Knock Sensor 1 Circuit high input	<ul style="list-style-type: none"> Knock sensor (bank 1) ECM 	○	○
P0330 (05-140)	Knock Sensor 2 Circuit	<ul style="list-style-type: none"> Knock sensor (bank 2) (looseness) ECM 	○	○
P0332 (05-140)	Knock Sensor 2 Circuit low input	<ul style="list-style-type: none"> Knock sensor (bank 2) ECM 	○	○
P0333 (05-140)	Knock Sensor 2 Circuit high input	<ul style="list-style-type: none"> Knock sensor (bank 2) ECM 	○	○
P0335 (05-146)	Crankshaft Position Sensor "A" Circuit	<ul style="list-style-type: none"> CKP sensor circuit Crankshaft timing pulley ECM 	○	○
P0339 (05-146)	Crankshaft Position Sensor "A" Circuit Intermittent	Same as P0335	-	○
P0340 (05-149)	Camshaft Position Sensor "A" Circuit (Bank 1) [VVT sensor (Bank 1)]	<ul style="list-style-type: none"> VVT sensor circuit (bank 1) Camshaft timing gear Timing belt ECM 	○	○
P0341 (05-149)	Camshaft Position Sensor "A" Circuit Range/Performance (Bank 1) [VVT sensor (Bank 1)]	Same as P0340	○	○
P0345 (05-149)	Camshaft Position Sensor "A" Circuit (Bank 2) [VVT sensor (Bank 2)]	<ul style="list-style-type: none"> VVT sensor circuit (bank 2) Camshaft timing gear Timing belt ECM 	○	○
P0346 (05-149)	Camshaft Position Sensor "A" Circuit Range/Performance (Bank 2) [VVT sensor (Bank 2)]	Same as P0345	○	○
P0351 (05-152)	Ignition Coil "A" Primary Circuit [Ignition Coil No. 1 Primary Circuit]	<ul style="list-style-type: none"> No.1 Ignition coil (igniter) circuit ECM 	○	○
P0352 (05-152)	Ignition Coil "B" Primary Circuit [Ignition Coil No. 2 Primary Circuit]	<ul style="list-style-type: none"> No. 2 Ignition coil (igniter) circuit ECM 	○	○
P0353 (05-152)	Ignition Coil "C" Primary Circuit [Ignition Coil No. 3 Primary Circuit]	<ul style="list-style-type: none"> No. 3 Ignition coil (igniter) circuit ECM 	○	○
P0354 (05-152)	Ignition Coil "D" Primary Circuit [Ignition Coil No. 4 Primary Circuit]	<ul style="list-style-type: none"> No. 4 Ignition coil (igniter) circuit ECM 	○	○
P0355 (05-152)	Ignition Coil "E" Primary Circuit [Ignition Coil No. 5 Primary Circuit]	<ul style="list-style-type: none"> No. 5 Ignition coil (igniter) circuit ECM 	○	○
P0356 (05-152)	Ignition Coil "F" Primary Circuit [Ignition Coil No. 6 Primary Circuit]	<ul style="list-style-type: none"> No. 6 Ignition coil (igniter) circuit ECM 	○	○
P0357 (05-152)	Ignition Coil "G" Primary Circuit [Ignition Coil No. 7 Primary Circuit]	<ul style="list-style-type: none"> No. 7 Ignition coil (igniter) circuit ECM 	○	○
P0358 (05-152)	Ignition Coil "H" Primary Circuit [Ignition Coil No. 8 Primary Circuit]	<ul style="list-style-type: none"> No. 8 Ignition coil (igniter) circuit ECM 	○	○

DTC No. (See Page)	Detection Item	Trouble Area	MIL	Memory
P0420*3 (05-183)	Catalyst System Efficiency Below Threshold (Bank 1)	<ul style="list-style-type: none"> • Catalyst converter (bank 1) • Front exhaust pipe (rear catalyst converter) • HO2S (bank 1 sensor 1) • HO2S (bank 1 sensor 2) • Exhaust gas leak 	○	○
P0430*3 (05-183)	Catalyst System Efficiency Below Threshold (Bank 2)	<ul style="list-style-type: none"> • Catalyst converter (bank 2) • Front exhaust pipe (rear catalyst converter) • HO2S (bank 2 sensor 1) • HO2S (bank 2 sensor 2) • Exhaust gas leak 	○*2	○
P0443*2 (05-170)	Evaporative Emission Control System Incorrect Purge Flow [EVAP VSV malfunction]	<ul style="list-style-type: none"> • EVAP VSV circuit • ECM 	○	○
P0500 (05-172)	Vehicle Speed Sensor "A"	<ul style="list-style-type: none"> • Vehicle Speed Sensor (VSS) circuit • ECM 	○	○
P0504 (05-176)	Brake Switch "A"/"B" Correlation	<ul style="list-style-type: none"> • Stop lamp switch circuit • ECM 	—	○
P0505*7 (05-182)	Idle Air Control System	<ul style="list-style-type: none"> • Throttle body • Air induction system • PCV hose and PCV valve • ECM 	○	○
P0560*2 (05-184)	System Voltage	<ul style="list-style-type: none"> • ECM power source circuit • ECM 	○	○
P0604 (05-187)	Internal Control Module Random Access Memory (RAM) Error	ECM	○	○
P0606 (05-187)	ECM/PCM Processor	ECM	○	○
P0607 (05-187)	Control Module Performance	ECM	○	○
P0617 (05-188)	Starter Relay Circuit High	<ul style="list-style-type: none"> • STARTER relay • Ignition switch • ECM 	○	○
P0657 (05-187)	Actuator Supply Voltage Circuit / Open	ECM	○	○
P0660*2 (05-192)	Intake Manifold Turning Valve Control Circuit/ Open	<ul style="list-style-type: none"> • ACIS VSV circuit • ECM 	○	○
P1340 (05-196)	Camshaft Position Sensor "A"	<ul style="list-style-type: none"> • CMP sensor • Camshaft timing gear • ECM 	○	○
P1341 (05-196)	Camshaft Position Sensor "A"	<ul style="list-style-type: none"> • CMP sensor • Camshaft timing gear • ECM 	○	○
P2102 (05-200)	Throttle Actuator Control Motor Circuit Low	<ul style="list-style-type: none"> • Throttle actuator circuit • ECM 	○	○
P2103 (05-200)	Throttle Actuator Control Motor Circuit High	<ul style="list-style-type: none"> • Throttle actuator circuit • ECM 	○	○
P2111 (05-203)	Throttle Actuator Control System – Stuck Open [Throttle valve stuck open]	<ul style="list-style-type: none"> • Throttle actuator • Throttle body 	○	○
P2112 (05-203)	Throttle Actuator Control System – Stuck Closed [Throttle valve stuck close]	<ul style="list-style-type: none"> • Throttle actuator • Throttle body 	○	○
P2118 (05-205)	Throttle Actuator Control Motor Current Range/ Performance [ETCS power source]	<ul style="list-style-type: none"> • Open in ETCS power source circuit • ECM 	○	○
P2119 (05-209)	Throttle Actuator Control Throttle Body Range/ Performance [ETCS malfunction]	<ul style="list-style-type: none"> • Throttle actuator • ECM 	○	○
P2120 (05-211)	Throttle/Pedal Position Sensor/Switch "D" Circuit [APP sensor voltage (VPA1) is chattering]	<ul style="list-style-type: none"> • APP sensor (VPA1) circuit • ECM 	○	○

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DTC No. (See Page)	Detection Item	Trouble Area	MIL	Memory
P2121[(05-217)]	Throttle/Pedal Position Sensor/Switch "D" Circuit Range/Performance [APP sensor voltage is out of range]	APP sensor (VPA1) circuit	○	○
P2122[(05-211)]	Throttle/Pedal Position Sensor/Switch "D" Circuit Low Input [APP sensor voltage (VPA1) is low]	• APP sensor (VPA1) circuit • ECM	○	○
P2123[(05-211)]	Throttle/Pedal Position Sensor/Switch "D" Circuit High Input [APP sensor voltage (VPA1) is high]	• APP sensor (VPA1) circuit • ECM	○	○
P2125[(05-211)]	Throttle/Pedal Position Sensor/Switch "E" Circuit [APP sensor voltage (VPA2) is chattering]	• APP sensor (VPA2) circuit • ECM	○	○
P2127[(05-211)]	Throttle/Pedal Position Sensor/Switch "E" Circuit Low Input [APP sensor voltage (VPA2) is low]	• APP sensor (VPA2) circuit • ECM	○	○
P2128[(05-211)]	Throttle/Pedal Position Sensor/Switch "E" Circuit High Input [APP sensor voltage (VPA2) is high]	• APP sensor (VPA2) circuit • ECM	○	○
P2135[(05-80)]	Throttle/Pedal Position Sensor/Switch "A"/"B" Voltage Correlation [TP sensor malfunction]	• TP sensor • ECM	○	○
P2138[(05-211)]	Throttle/Pedal Position Sensor/Switch "D"/"E" Voltage Correlation [APP sensor malfunction]	• APP sensor • ECM	○	○
P2195*8[(05-87)]	Oxygen Sensor Signal Stuck Lean (Bank 1 Sensor 1) [Front HO2S voltage stuck Lean]	• HO2S (bank 1 sensor 1) circuit • ECM	○*3	○
P2196*8[(05-87)]	Oxygen Sensor Signal Stuck Rich (Bank 1 Sensor 1) [Front HO2S voltage stuck Rich]	• HO2S (bank 1 sensor 1) circuit • ECM	○*3	○
P2197*8[(05-87)]	Oxygen Sensor Circuit Signal Stuck Lean (Bank 2 Sensor 1) [Front HO2S voltage stuck Lean]	• HO2S (bank 2 sensor 1) circuit • ECM	○*3	○
P2198*8[(05-87)]	Oxygen Sensor Circuit Signal Stuck Rich (Bank 2 Sensor 1) [Front HO2S Voltage Stuck Rich]	• HO2S (bank 2 sensor 1) circuit • ECM	○*3	○
B2799[(05-3022)]	Immobilizer System Malfunction	Engine immobilizer system	–	○
U0001[(05-219)]	High Speed CAN Communication Bus	ECM	○	○

*1: ○ ... MIL is indicated. – ... MIL is not indicated.

*2: Europe, Australia, New Zealand, G.C.C.

*3: Europe

*4: Europe, Taiwan, Australia, New Zealand

*5: Except G.C.C.

*6: Europe, Taiwan

*7: Except Australia, New Zealand

*8: Europe, Australia, New Zealand

*9: MIL flashes while catalyst-deterioration misfire is detected.