

## DIAGNOSTIC TROUBLE CODE CHART

### 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 the check mode, check the circuit for the codes 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 *1	Memory
P0100 (05-177)	Mass Air Flow Circuit Malfunction	<ul style="list-style-type: none"> <li>• Open or short in air flow meter circuit</li> <li>• Air flow meter</li> <li>• ECM</li> </ul>	○	○
P0101 (05-182)	Mass Air Flow Circuit Range/Performance Problem	<ul style="list-style-type: none"> <li>• ECM</li> </ul>	○	○
P0110 (05-183)	Intake Air Temp. Circuit Malfunction	<ul style="list-style-type: none"> <li>• Open or short in intake air temp. sensor circuit</li> <li>• Intake air temp. sensor (built into air flow meter)</li> <li>• ECM</li> </ul>	○	○
P0115 (05-186)	Engine Coolant Temp. Circuit Malfunction	<ul style="list-style-type: none"> <li>• Open or short in water temp. sensor circuit</li> <li>• Water temp. sensor</li> <li>• ECM</li> </ul>	○	○
P0116 (05-189)	Engine Coolant Temp. Circuit Range/Performance Problem	<ul style="list-style-type: none"> <li>• Water temp. sensor</li> <li>• Cooling system</li> <li>• Thermostat</li> </ul>	○	○
P0120 (05-190)	Throttle / Pedal Position Sensor / Switch "A" Circuit Malfunction	<ul style="list-style-type: none"> <li>• Open or short in throttle position sensor circuit</li> <li>• Throttle position sensor</li> <li>• ECM</li> </ul>	○	○
P0121 (05-195)	Throttle / Pedal Position Sensor / Switch "A" Circuit Range / Performance Problem.	<ul style="list-style-type: none"> <li>• Throttle position sensor</li> </ul>	○	○
P0125 (05-196)	Insufficient Coolant Temp. for Closed Loop Fuel Control	<ul style="list-style-type: none"> <li>• PCV hose</li> <li>• Open or short in oxygen sensor circuit</li> <li>• Oxygen sensor</li> <li>• Air induction system</li> <li>• Fuel pressure</li> <li>• Injector</li> <li>• Gas leakage on exhaust system</li> <li>• ECM</li> </ul>	○	○
P0128 (05-201)	Thermostat Malfunction	<ul style="list-style-type: none"> <li>• Thermostat</li> <li>• Cooling system</li> <li>• Engine coolant temperature sensor</li> <li>• ECM</li> </ul>	○	○
P0130 (05-203)	Heated Oxygen Sensor Circuit Malfunction (Bank 1 Sensor 1)	<ul style="list-style-type: none"> <li>• Open or short in oxygen sensor circuit</li> <li>• Oxygen sensor</li> <li>• Air induction system</li> <li>• Fuel pressure</li> <li>• Injector</li> <li>• ECM</li> </ul>	○	○
P0133 (05-208)	Heated Oxygen Sensor Slow Response (Bank 1 Sensor 1)	<ul style="list-style-type: none"> <li>• Open or short in oxygen sensor circuit</li> <li>• Oxygen sensor</li> <li>• Air induction system</li> <li>• Fuel pressure</li> <li>• Injector</li> <li>• ECM</li> </ul>	○	○

## DIAGNOSTICS – SFI SYSTEM (2ZZ-GE)

P0135 (05-212)	Heated Oxygen Sensor Heater Circuit Malfunction (Bank 1 Sensor 1)	<ul style="list-style-type: none"> <li>• Open or short in heater circuit of oxygen sensor</li> <li>• Oxygen sensor heater</li> <li>• ECM</li> </ul>	○	○
P0136 (05-203)	Heated Oxygen Sensor Circuit Malfunction (Bank 1 Sensor 2)	<ul style="list-style-type: none"> <li>• Open or short in oxygen sensor circuit</li> <li>• Oxygen sensor</li> </ul>	○	○
P0141 (05-212)	Heated Oxygen Sensor Heater Circuit Malfunction (Bank 1 Sensor 2)	<ul style="list-style-type: none"> <li>• Open or short in heater circuit of oxygen sensor</li> <li>• Oxygen sensor heater</li> <li>• ECM</li> </ul>	○	○
P0171 (05-216)	System too Lean (Fuel Trim) (Bank 1)	<ul style="list-style-type: none"> <li>• Air induction system</li> <li>• PCV hose</li> <li>• Injector blockage</li> <li>• Mass air flow meter</li> <li>• Engine coolant temp. sensor</li> <li>• Fuel pressure</li> <li>• Gas leakage on exhaust system</li> <li>• Open or short in oxygen sensor circuit</li> <li>• Oxygen sensor</li> <li>• ECM</li> </ul>	○	○
P0172 (05-216)	System too Rich (Fuel Trim) (Bank 1)	<ul style="list-style-type: none"> <li>• Injector leak, blockage</li> <li>• Mass air flow meter</li> <li>• Engine coolant temp. sensor</li> <li>• Ignition system</li> <li>• Fuel pressure</li> <li>• Gas leakage on exhaust system</li> <li>• Open or short in oxygen sensor circuit</li> <li>• Gas leakage on exhaust system</li> <li>• Oxygen sensor</li> <li>• ECM</li> </ul>	○	○
P0300 (05-220)	Random/Multiple Cylinder Misfire Detected	<ul style="list-style-type: none"> <li>• Open or short in engine wire</li> <li>• Connector connection</li> <li>• Vacuum hose connection</li> </ul>	○	○
P0301 (05-220)	Cylinder 1 Misfire Detected	<ul style="list-style-type: none"> <li>• PCV hose</li> <li>• Ignition system</li> <li>• Injector</li> </ul>		
P0302 (05-220)	Cylinder 2 Misfire Detected	<ul style="list-style-type: none"> <li>• Fuel pressure</li> <li>• Mass air flow meter</li> </ul>		
P0303 (05-220)	Cylinder 3 Misfire Detected	<ul style="list-style-type: none"> <li>• Engine coolant temp. sensor</li> <li>• Compression pressure</li> <li>• Valve clearance</li> </ul>		
P0304 (05-220)	Cylinder 4 Misfire Detected	<ul style="list-style-type: none"> <li>• Valve timing</li> <li>• VVTL system</li> <li>• ECM</li> </ul>		
P0325 (05-225)	Knock Sensor 1 Circuit Malfunction (Bank 1)	<ul style="list-style-type: none"> <li>• Open or short in knock sensor circuit</li> <li>• Knock sensor (looseness)</li> <li>• ECM</li> </ul>	○	○
P0335 (05-228)	Crankshaft Position Sensor "A" Circuit Malfunction	<ul style="list-style-type: none"> <li>• Open or short in crankshaft position sensor circuit</li> <li>• Crankshaft position sensor</li> <li>• Crank angle sensor plate</li> <li>• ECM</li> </ul>	○	○
P0340 (05-231)	Camshaft Position Sensor Circuit Malfunction	<ul style="list-style-type: none"> <li>• Open or short in camshaft position sensor circuit</li> <li>• Camshaft position sensor</li> <li>• Intake camshaft</li> <li>• ECM</li> </ul>	○	○
P0420 (05-233)	Catalyst System Efficiency Below Threshold (Bank 1)	<ul style="list-style-type: none"> <li>• Gas leakage on exhaust system</li> <li>• Oxygen sensor</li> <li>• Three-way catalytic converter</li> </ul>	○	○

P0440 (05-236)	Evaporative Emission Control System Malfunction	<ul style="list-style-type: none"> <li>• Hose or tube cracked, hole, damaged or loose seal</li> <li>• Fuel tank cap incorrectly installed</li> <li>• Fuel tank cap cracked or damaged</li> <li>• Vacuum hose cracked, hole, clogged, damaged or disconnected</li> <li>• Fuel tank cracked, hole or damaged</li> <li>• Charcoal canister cracked, hole or damaged</li> <li>• Open or short in vapor pressure sensor circuit</li> <li>• Vapor pressure sensor</li> <li>• Fuel tank over fill check valve cracked or damaged</li> <li>• ECM</li> </ul>	○	○
P0441 (05-245)	Evaporative Emission Control System Incorrect Purge Flow	<ul style="list-style-type: none"> <li>• Vacuum hose cracked, hole, blocked damaged or disconnected</li> <li>• Fuel tank cap incorrectly installed</li> <li>• Fuel tank cap cracked or damaged</li> <li>• Open or short in vapor pressure sensor circuit</li> <li>• Vapor pressure sensor</li> <li>• Open or short in VSV circuit for EVAP</li> <li>• VSV for CCV</li> <li>• Open or short in VSV circuit for vapor pressure sensor</li> <li>• VSV for vapor pressure sensor</li> <li>• Charcoal canister cracked, hole or damaged</li> <li>• Fuel tank over full check valve cracked or damaged</li> <li>• ECM</li> </ul>	○	○
P0442 (05-236)	Evaporative Emission Control System Malfunction	<ul style="list-style-type: none"> <li>• Same as DTC No. P0440</li> </ul>	○	○
P0446 (05-236)	Evaporative Emission Control System Malfunction	<ul style="list-style-type: none"> <li>• Same as DTC No. P0441</li> </ul>	○	○
P0450 (05-260)	Evaporative Emission Control System Pressure Sensor Malfunction	<ul style="list-style-type: none"> <li>• Open or short in vapor pressure sensor circuit</li> <li>• Vapor pressure sensor</li> <li>• ECM</li> </ul>	○	○
P0451 (05-260)	Evaporative Emission Control System Pressure Sensor Range / Performance	<ul style="list-style-type: none"> <li>• Open or short in vapor pressure sensor circuit</li> <li>• Vapor pressure sensor</li> <li>• ECM</li> </ul>	○	○
P0500 (05-262)	Vehicle Speed Sensor Malfunction	<ul style="list-style-type: none"> <li>• Combination meter</li> <li>• Open or short in vehicle speed sensor circuit</li> <li>• Vehicle speed sensor</li> <li>• ECM</li> </ul>	○	○
P0505 (05-264)	Idle Control System Malfunction	<ul style="list-style-type: none"> <li>• Open or short in ISC valve circuit</li> <li>• PCV hose</li> <li>• ISC valve is stick or closed*2</li> <li>• A/C switch circuit</li> <li>• Air induction system*2</li> <li>• ECM</li> </ul>	○	○
P1300 (05-267)	Igniter Circuit Malfunction (No. 1)	<ul style="list-style-type: none"> <li>• Ignition system</li> <li>• Open or short in IGF or IGT1 circuit from No. 1 ignition coil with igniter to ECM</li> <li>• No. 1 ignition coil with igniter</li> <li>• ECM</li> </ul>	○	○
P1305 (05-267)	Igniter Circuit Malfunction (No. 2)	<ul style="list-style-type: none"> <li>• Ignition system</li> <li>• Open or short in IGF or IGT2 circuit from No. 2 ignition coil with igniter to ECM</li> <li>• No. 2 ignition coil with igniter</li> <li>• ECM</li> </ul>	○	○

## DIAGNOSTICS – SFI SYSTEM (2ZZ-GE)

P1310 (05-267)	Igniter Circuit Malfunction (No. 3)	<ul style="list-style-type: none"> <li>Ignition system</li> <li>Open or short in IGF or IGT3 circuit from No. 3 ignition coil with igniter to ECM</li> <li>No. 3 ignition coil with igniter</li> <li>ECM</li> </ul>	○	○
P1315 (05-267)	Igniter Circuit Malfunction (No. 4)	<ul style="list-style-type: none"> <li>Ignition system</li> <li>Open or short in IGF or IGT4 circuit from No. 4 ignition coil with igniter to ECM</li> <li>No. 4 ignition coil with igniter</li> <li>ECM</li> </ul>	○	○
P1335 (05-273)	Crankshaft Position Sensor Circuit Malfunction (During engine running)	<ul style="list-style-type: none"> <li>Open or short in crankshaft position sensor circuit</li> <li>Crankshaft position sensor</li> <li>Crank angle sensor plate</li> <li>ECM</li> </ul>	–	○
P1346 (05-274)	VVT Sensor/Camshaft Position Sensor Circuit Range/Performance Problem (Bank 1)	<ul style="list-style-type: none"> <li>Mechanical system (Jumping teeth of timing chain, chain stretched)</li> <li>ECM</li> </ul>	○	○
P1349 (05-275)	VVT System Malfunction (Bank 1)	<ul style="list-style-type: none"> <li>Valve timing</li> <li>OCV</li> <li>VVT controller assembly</li> <li>ECM</li> </ul>	○*2	○
P1520*2 (05-280)	Stop Light Switch Circuit Malfunction	<ul style="list-style-type: none"> <li>Open or short in stop light switch signal circuit</li> <li>Stop light switch</li> <li>ECM</li> </ul>	○	○
P1600 (05-284)	Back-Up Power Source Circuit Malfunction	<ul style="list-style-type: none"> <li>Open in back up power source circuit</li> <li>ECM</li> </ul>	○	○
P1656 (05-287)	OCV Circuit Malfunction (Bank 1)	<ul style="list-style-type: none"> <li>Open or short in OCV circuit</li> <li>OCV</li> <li>ECM</li> </ul>	○	○
P1690 (05-290)	OCV for VVTL circuit Malfunction	<ul style="list-style-type: none"> <li>Open or short in OCV circuit</li> <li>OCV for VVTL</li> <li>ECM</li> </ul>	○	○
P1692 (05-294)	OCV for VVTL Open Malfunction (Bank 1)	<ul style="list-style-type: none"> <li>Open or short in OCV circuit</li> <li>OCV for VVTL</li> <li>Oil pressure switch for VVTL</li> <li>ECM</li> </ul>	○	○
P1693 (05-294)	OCV for VVTL Close Malfunction (Bank 1)	<ul style="list-style-type: none"> <li>Same as DTC No. P1692</li> </ul>	○	○
P1780*2 (05-298)	Park / Neutral Position Switch Malfunction	<ul style="list-style-type: none"> <li>Short in neutral start switch circuit</li> <li>Neutral start switch</li> <li>ECM</li> </ul>	○	○

\*1: ○ ... MIL light up.

\*2: Only for A/T models.