

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 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*1	Memory
P0010 (05-422)	Camshaft Position "A" Actuator Circuit (Bank 1)	<ul style="list-style-type: none"> • Open or short in OCV (bank 1) circuit • OCV (bank 1) • ECM 	○	○
P0011 (05-428)	Camshaft Position "A" -Timing Over-Advanced or System Performance (Bank 1)	<ul style="list-style-type: none"> • Valve timing • OCV (bank 1) • Camshaft timing gear assy • ECM 	○	○
P0012 (05-428)	Camshaft Position "A" -Timing Over- Retarded (Bank 1)	• Same as DTC No. P0011	○	○
P0016 (05-436)	Crankshaft Position - Camshaft Position Correlation (Bank 1 Sensor A)	<ul style="list-style-type: none"> • Mechanical system (Timing belt has jumped tooth, belt stretched) • ECM 	○	○
P0018 (05-436)	Crankshaft Position - Camshaft Position Correlation (Bank 2 Sensor A)	• Same as DTC No. P0016	○	○
P0020 (05-422)	Camshaft Position "A" Actuator Circuit (Bank 2)	<ul style="list-style-type: none"> • Open or short in OCV (bank 2) circuit • OCV (bank 2) • ECM 	○	○
P0021 (05-428)	Camshaft Position "A" -Timing Over-Advanced or System Performance (Bank 2)	<ul style="list-style-type: none"> • Valve timing • OCV (bank 2) • Camshaft timing gear assy • ECM 	○	○
P0022 (05-428)	Camshaft Position "A" -Timing Over- Retarded (Bank 2)	• Same as DTC No. P0021	○	○
P0031*3 (05-438)	Oxygen (A/F) Sensor Heater Control Circuit Low (Bank 1 Sensor 1)	<ul style="list-style-type: none"> • Open or short in heater circuit of A/F sensor • A/F sensor heater (bank 1 sensor 1) • A/F relay • ECM 	○	○
P0032*3 (05-438)	Oxygen (A/F) Sensor Heater Control Circuit High (Bank 1 Sensor 1)	<ul style="list-style-type: none"> • Short in heater circuit of A/F sensor • A/F sensor heater (bank 1 sensor 1) • A/F relay • ECM 	○	○
P0037 (05-443)	Oxygen Sensor Heater Control Circuit Low (Bank 1 Sensor 2)	<ul style="list-style-type: none"> • Open or short in heater circuit of heated oxygen sensor • Heated oxygen sensor heater (bank 1 sensor 2) • EFI relay • ECM 	○	○
P0038 (05-443)	Oxygen Sensor Heater Control Circuit High (Bank 1 Sensor 2)	<ul style="list-style-type: none"> • Short in heater circuit of heated oxygen sensor • Heated oxygen sensor heater (bank 1 sensor 2) • EFI relay • ECM 	○	○
P0051*3 (05-438)	Oxygen (A/F) Sensor Heater Control Circuit Low (Bank 2 Sensor 1)	<ul style="list-style-type: none"> • Open or short in heater circuit of A/F sensor • A/F sensor heater (bank 2 sensor 1) • A/F relay • ECM 	○	○
P0052*3 (05-438)	Oxygen (A/F) Sensor Heater Control Circuit High (Bank 2 Sensor 1)	<ul style="list-style-type: none"> • Short in heater circuit of A/F sensor • A/F sensor heater (bank 2 sensor 1) • A/F relay • ECM 	○	○

DIAGNOSTICS - SFI SYSTEM (3MZ-FE)

DTC No. (See Page)	Detection Item	Trouble Area	MIL*1	Memory
P0057 (05-443)	Oxygen Sensor Heater Control Circuit Low (Bank 2 Sensor 2)	<ul style="list-style-type: none"> • Open or short in heater circuit of heated oxygen sensor • Heated oxygen sensor heater (bank 2 sensor 2) • EFI relay • ECM 	○	○
P0058 (05-443)	Oxygen Sensor Heater Control Circuit High (Bank 2 Sensor 2)	<ul style="list-style-type: none"> • Short in heater circuit of heated oxygen sensor • Heated oxygen sensor heater (bank 2 sensor 2) • EFI relay • ECM 	○	○
P0100 (05-448)	Mass or volume Air Flow Circuit	<ul style="list-style-type: none"> • Open or short in MAF meter circuit • MAF meter • ECM 	○	○
P0101 (05-455)	Mass or volume Air Flow Circuit Range/Performance Problem	<ul style="list-style-type: none"> • MAF meter 	○	○
P0102 (05-448)	Mass or volume Air Flow Circuit Low Input	<ul style="list-style-type: none"> • Open in MAF meter circuit • Short in ground circuit • MAF meter • ECM 	○	○
P0103 (05-448)	Mass or volume Air Flow Circuit High Input	<ul style="list-style-type: none"> • Short in MAF meter circuit (to +B circuit) • MAF meter • ECM 	○	○
P0110 (05-457)	Intake Air Temperature Circuit	<ul style="list-style-type: none"> • Open or short in IAT sensor circuit • IAT sensor (built in MAF meter) • ECM 	○	○
P0112 (05-457)	Intake Air Temperature Circuit Low Input	<ul style="list-style-type: none"> • Short in IAT sensor circuit • IAT sensor (built in MAF meter) • ECM 	○	○
P0113 (05-457)	Intake Air Temperature Circuit High Input	<ul style="list-style-type: none"> • Open in IAT sensor circuit • IAT sensor (built in MAF meter) • ECM 	○	○
P0115 (05-462)	Engine Coolant Temperature Circuit	<ul style="list-style-type: none"> • Open or short ECT sensor circuit • ECT sensor • ECM 	○	○
P0116 (05-467)	Engine Coolant Temperature Circuit Range/Performance Problem	<ul style="list-style-type: none"> • ECT sensor 	○	○
P0117 (05-462)	Engine Coolant Temperature Circuit Low Input	<ul style="list-style-type: none"> • Short in ECT sensor circuit • ECT sensor • ECM 	○	○
P0118 (05-462)	Engine Coolant Temperature Circuit High Input	<ul style="list-style-type: none"> • Open in ECT sensor circuit • ECT sensor • ECM 	○	○
P0120 (05-469)	Throttle/Pedal Position Sensor/Switch "A" Circuit	<ul style="list-style-type: none"> • Throttle position sensor (built in throttle body) • ECM 	○	○
P0121 (05-478)	Throttle/Pedal Position Sensor/Switch "A" Circuit Range/Performance Problem	<ul style="list-style-type: none"> • Throttle position sensor (built in throttle body) 	○	○
P0122 (05-469)	Throttle/Pedal Position Sensor/Switch "A" Circuit Low Input	<ul style="list-style-type: none"> • Throttle position sensor (built in throttle body) • Short in VTA1 circuit • Open in VC circuit • ECM 	○	○
P0123 (05-469)	Throttle/Pedal Position Sensor/Switch "A" Circuit High Input	<ul style="list-style-type: none"> • Throttle position sensor (built in throttle body) • Open in VTA1 circuit • Open in E2 circuit • VC and VTA1 circuits are short circuited • ECM 	○	○

DTC No. (See Page)	Detection Item	Trouble Area	MIL*1	Memory
P0125 (05-480)	Insufficient Coolant Temperature for Closed Loop Fuel Control	<ul style="list-style-type: none"> •Cooling system •ECT sensor •Thermostat 	○	○
P0128 (05-482)	Coolant Thermostat (Coolant Temperature Below Thermostat Regulating Temperature)	<ul style="list-style-type: none"> •Thermostat (water inlet) •Cooling system •ECT sensor •ECM 	○	○
P0136 (05-485)	Oxygen Sensor Circuit Malfunction (Bank 1 Sensor 2)	<ul style="list-style-type: none"> •Heated oxygen sensor circuit (bank 1) •Heated oxygen sensor (bank 1) •Oxygen sensor heater (bank 1) •A/F sensor (bank 1) •A/F sensor heater (bank 1) 	○	○
P0137 (05-485)	Oxygen Sensor Circuit Low Voltage (Bank 1 Sensor 2)	<ul style="list-style-type: none"> •Heated oxygen sensor circuit (bank 1) •Heated oxygen sensor (bank 1) •Oxygen sensor heater (bank 1) 	○	○
P0138 (05-485)	Oxygen Sensor Circuit High Voltage (Bank 1 Sensor 2)	<ul style="list-style-type: none"> •Heated oxygen sensor circuit (bank 1) •Heated oxygen sensor (bank 1) •Oxygen sensor heater (bank 1) 	○	○
P0156 (05-485)	Oxygen Sensor Circuit Malfunction (Bank 2 Sensor 2)	<ul style="list-style-type: none"> •Heated oxygen sensor circuit (bank 2) •Heated oxygen sensor (bank 2) •Oxygen sensor heater (bank 2) •A/F sensor (bank 2) •A/F sensor heater (bank 2) 	○	○
P0157 (05-485)	Oxygen Sensor Circuit Low Voltage (Bank 2 Sensor 2)	<ul style="list-style-type: none"> •Heated oxygen sensor circuit (bank 2) •Heated oxygen sensor (bank 2) •Oxygen sensor heater (bank 2) 	○	○
P0158 (05-485)	Oxygen Sensor Circuit High Voltage (Bank 2 Sensor 2)	<ul style="list-style-type: none"> •Heated oxygen sensor circuit (bank 2) •Heated oxygen sensor (bank 2) •Oxygen sensor heater (bank 2) 	○	○
P0171 (05-498)	System too Lean (Bank 1)	<ul style="list-style-type: none"> •Air induction system •Injector blockage •MAF meter •ECT sensor •Fuel pressure •Gas leakage in exhaust system •Open or short in A/F sensor (bank 1 sensor 1) circuit •A/F sensor (bank 1 sensor 1) •A/F sensor heater (bank 1 sensor 1) •A/F relay •PCV valve and hose •PCV hose connection 	○	○
P0172 (05-498)	System too Rich (Bank 1)	<ul style="list-style-type: none"> •Injector leak, blockage •MAF meter •ECT sensor •Ignition system •Fuel pressure •Gas leakage in exhaust system •Open or short in A/F sensor (bank 1 sensor 1) circuit •A/F sensor (bank 1 sensor 1) •A/F sensor heater (bank 1 sensor 1) •A/F relay 	○	○

DIAGNOSTICS - SFI SYSTEM (3MZ-FE)

DTC No. (See Page)	Detection Item	Trouble Area	MIL*1	Memory
P0174 (05-498)	System too Lean (Bank 2)	<ul style="list-style-type: none"> • Air induction system • Injector blockage • MAF meter • ECT sensor • Fuel pressure • Gas leakage in exhaust system • Open or short in A/F sensor (bank 2 sensor 1) circuit • A/F sensor (bank 2 sensor 1) • A/F sensor heater (bank 2 sensor 1) • A/F relay • PCV valve and hose • PCV hose connection 	○	○
P0175 (05-498)	System too Rich (Bank 2)	<ul style="list-style-type: none"> • Injector leak, blockage • MAF meter • ECT sensor • Ignition system • Fuel pressure • Gas leakage in exhaust system • Open or short in A/F sensor (bank 2 sensor 1) circuit • A/F sensor (bank 2 sensor 1) • A/F sensor heater (bank 2 sensor 1) • A/F relay 	○	○
P0220 (05-469)	Throttle/Pedal Position Sensor/ Switch "B" Circuit	• Same as DTC No. P0120	○	○
P0222 (05-469)	Throttle/Pedal Position Sensor/ Switch "B" Circuit Low Input	<ul style="list-style-type: none"> • Throttle position sensor (built in throttle body) • Short in VTA2 circuit • Open in VC circuit • ECM 	○	○
P0223 (05-469)	Throttle/Pedal Position Sensor/ Switch "B" Circuit High Input	<ul style="list-style-type: none"> • Throttle position sensor (built in throttle body) • Open in VTA2 circuit • Open in E2 circuit • VC and VTA2 circuits are short circuited • ECM 	○	○
P0300 (05-511)	Random/Multiple Cylinder Misfire Detected	<ul style="list-style-type: none"> • Open or short in engine wire • Connector connection • Vacuum hose connection • Ignition system • Injector • Fuel pressure • MAF meter • ECT sensor • Compression pressure • Valve clearance • Valve timing • PCV hose connection • PCV hose • ECM 	○*2	○
P0301 (05-511)	Cylinder 1 Misfire Detected	• Same as DTC No. P0300	○*2	○
P0302 (05-511)	Cylinder 2 Misfire Detected	• Same as DTC No. P0300	○*2	○
P0303 (05-511)	Cylinder 3 Misfire Detected	• Same as DTC No. P0300	○*2	○
P0304 (05-511)	Cylinder 4 Misfire Detected	• Same as DTC No. P0300	○*2	○
P0305 (05-511)	Cylinder 5 Misfire Detected	• Same as DTC No. P0300	○*2	○

DTC No. (See Page)	Detection Item	Trouble Area	MIL*1	Memory
P0306 (05-511)	Cylinder 6 Misfire Detected	• Same as DTC No. P0300	○*2	○
P0327 (05-527)	Knock Sensor 1 Circuit Low Input (Bank 1 or Single Sensor)	• Short in knock sensor 1 circuit • Knock sensor 1 • ECM	○	○
P0328 (05-527)	Knock Sensor 1 Circuit High Input (Bank 1 or Single Sensor)	• Open in knock sensor 1 circuit • Knock sensor 1 • ECM	○	○
P0332 (05-527)	Knock Sensor 2 Circuit Low Input (Bank 2)	• Short in knock sensor 2 circuit • Knock sensor 2 • ECM	○	○
P0333 (05-527)	Knock Sensor 2 Circuit High Input (Bank 2)	• Open in knock sensor 2 circuit • Knock sensor 2 • ECM	○	○
P0335 (05-532)	Crankshaft Position Sensor "A" Circuit	• Open or short in crankshaft position sensor circuit • Crankshaft position sensor • Crankshaft timing pulley • ECM	○	○
P0339 (05-532)	Crankshaft Position Sensor "A" Circuit Intermittent	• Same as DTC No. P0335	—	○
P0340 (05-536)	Camshaft Position Sensor "A" Circuit (Bank 1 or Single Sensor)	• Open or short in VVT sensor circuit • VVT sensor • Camshaft timing pulley • Timing belt has a jumped tooth • ECM	○	○
P0341 (05-536)	Camshaft Position Sensor "A" Circuit Range/Performance (Bank 1 or Single Sensor)	• Same as DTC No. P0340	○	○
P0345 (05-536)	Camshaft Position Sensor "A" Circuit (Bank 2)	• Same as DTC No. P0340	○	○
P0346 (05-536)	Camshaft Position Sensor "A" Circuit Range/Performance (Bank 2)	• Same as DTC No. P0340	○	○
P0351*4 (05-541)	Ignition Coil "A" Primary/Secondary Circuit	• Ignition system • Open or short in IGF1 or IGT1 circuit from ignition coil with igniter to ECM (ignition coil circuit 1) • Ignition coil with igniter (ignition coil 1) • ECM	○	○
P0352*4 (05-541)	Ignition Coil "B" Primary/Secondary Circuit	• Ignition system • Open or short in IGF1 or IGT2 circuit from ignition coil with igniter to ECM (ignition coil circuit 2) • Ignition coil with igniter (ignition coil 2) • ECM	○	○
P0353*4 (05-541)	Ignition Coil "C" Primary/Secondary Circuit	• Ignition system • Open or short in IGF1 or IGT3 circuit from ignition coil with igniter to ECM (ignition coil circuit 3) • Ignition coil with igniter (ignition coil 3) • ECM	○	○
P0354*4 (05-541)	Ignition Coil "D" Primary/Secondary Circuit	• Ignition system • Open or short in IGF1 or IGT4 circuit from ignition coil with igniter to ECM (ignition coil circuit 4) • Ignition coil with igniter (ignition coil 4) • ECM	○	○
P0355*4 (05-541)	Ignition Coil "E" Primary/Secondary Circuit	• Ignition system • Open or short in IGF1 or IGT5 circuit from ignition coil with igniter to ECM (ignition coil circuit 5) • Ignition coil with igniter (ignition coil 5) • ECM	○	○

DIAGNOSTICS - SFI SYSTEM (3MZ-FE)

DTC No. (See Page)	Detection Item	Trouble Area	MIL*1	Memory
P0356*4 (05-541)	Ignition Coil "F" Primary/Secondary Circuit	<ul style="list-style-type: none"> Ignition system Open or short in IGF1 or IGT6 circuit from ignition coil with igniter to ECM (ignition coil circuit 6) Ignition coil with igniter (ignition coil 6) ECM 	○	○
P0420 (05-551)	Catalyst System Efficiency Below Threshold (Bank 1)	<ul style="list-style-type: none"> Gas leakage in exhaust system A/F sensor (bank 1 sensor 1) Heated oxygen sensor (bank 1 sensor 2) Three-way catalytic converter (inside exhaust manifold) 	○	○
P0430 (05-551)	Catalyst System Efficiency Below Threshold (Bank 2)	<ul style="list-style-type: none"> Gas leakage in exhaust system A/F sensor (bank 2 sensor 1) Heated oxygen sensor (bank 2 sensor 2) Three-way catalytic converter (inside exhaust manifold) 	○	○
P0441 (05-557)	Evaporative Emission Control System Incorrect Purge Flow	<ul style="list-style-type: none"> Vacuum hose has cracks, holes, or is blocked, damaged or disconnected Fuel tank cap is incorrectly installed Fuel tank cap has cracks, or is damaged Open or short in vapor pressure sensor circuit Vapor pressure sensor Open or short in VSV circuit for EVAP EVAP VSV Open or short in VSV circuit for CCV CCV Fuel tank has cracks, holes, or is damaged Charcoal canister has cracks, holes, or is damaged Fuel tank over fill check valve has cracks, or is damaged ECM 	○	○
P0442 (05-563)	Evaporative Emission Control System Leak detected (small leak)	• Same as DTC No. P0441	○	○
P0446 (05-570)	Evaporative Emission Control System Vent Control Circuit	• Same as DTC No. P0441	○	○
P0451 (05-573)	Evaporative Emission Control System Pressure Sensor/Switch Range/Performance	<ul style="list-style-type: none"> Open or short in vapor pressure sensor circuit Vapor pressure sensor ECM 	○	○
P0452 (05-573)	Evaporative Emission Control System Pressure Sensor/Switch Low Input	<ul style="list-style-type: none"> Open in vapor pressure sensor circuit Vapor pressure sensor ECM 	○	○
P0453 (05-573)	Evaporative Emission Control System Pressure Sensor/Switch High Input	<ul style="list-style-type: none"> Short in vapor pressure sensor circuit Vapor pressure sensor ECM 	○	○
P0455 (05-563)	Evaporative Emission Control System Leak Detected (gross leak)	• Same as DTC No. P0441	○	○
P0456 (05-563)	Evaporative Emission Control System Leak Detected (very small leak)	• Same as DTC No. P0441	○	○
P0500 (05-578)	Vehicle Speed Sensor "A"	<ul style="list-style-type: none"> Open or short in VSS circuit VSS sensor Combination meter ECM Skid control ECU 	○	○
P0503 (05-578)	Vehicle Speed Sensor "A" Inter-mittent/Erratic/High	• Same as DTC No. P0500	—	○
P0504 (05-581)	Brake Switch "A"/"B" Correlation	<ul style="list-style-type: none"> Short in stop lamp switch signal circuit Stop lamp switch ECM 	—	○

DTC No. (See Page)	Detection Item	Trouble Area	MIL*1	Memory
P0505 (05-587)	Idle Air Control System	<ul style="list-style-type: none"> • Electric throttle control system • Air induction system • PCV hose connection 	○	○
P0560 (05-590)	System Voltage	<ul style="list-style-type: none"> • Open in back-up power source circuit • ECM 	○	○
P0604 (05-593)	Internal Control Module Random Access Memory (RAM) Error	<ul style="list-style-type: none"> • ECM 	○	○
P0606 (05-593)	ECM/PCM Processor	<ul style="list-style-type: none"> • ECM 	○	○
P0607 (05-593)	Control Module Performance	<ul style="list-style-type: none"> • ECM 	○	○
P0617 (05-595)	Starter Relay Circuit High	<ul style="list-style-type: none"> • Short in PNP switch circuit • PNP switch • Ignition switch • ECM 	○	○
P0630 (05-601)	VIN not Programmed or Mismatch - ECM/PCM	<ul style="list-style-type: none"> • ECM 	○	○
P0657 (05-593)	Actuator Supply Voltage Circuit / Open	<ul style="list-style-type: none"> • ECM 	○	○
P0705 (05-1036)	Transmission Range Sensor Circuit Malfunction (PRNDL Input)	<ul style="list-style-type: none"> • Short in PNP switch circuit • PNP switch • ECM 	○	○
P0710 (05-1042)	Transmission Fluid Temperature Sensor "A" Circuit	<ul style="list-style-type: none"> • Electronic controlled automatic transmission (ECT) 	○	○
P0711 (05-1046)	Transmission Fluid Temperature Sensor "A" Performance	<ul style="list-style-type: none"> • Electronic controlled automatic transmission (ECT) 	○	○
P0712 (05-1042)	Transmission Fluid Temperature Sensor "A" Circuit Low Input	<ul style="list-style-type: none"> • Electronic controlled automatic transmission (ECT) 	○	○
P0713 (05-1042)	Transmission Fluid Temperature Sensor "A" Circuit High Input	<ul style="list-style-type: none"> • Electronic controlled automatic transmission (ECT) 	○	○
P0717 (05-1049)	Input/Turbine Speed Sensor "A" Circuit No Signal	<ul style="list-style-type: none"> • Electronic controlled automatic transmission (ECT) 	○	○
P0724 (05-1052)	Brake Switch "B" Circuit High	<ul style="list-style-type: none"> • Electronic controlled automatic transmission (ECT) 	○	○
P0741 (05-1056)	Torque Converter Clutch Solenoid Performance (Shift Solenoid Valve DSL)	<ul style="list-style-type: none"> • Electronic controlled automatic transmission (ECT) 	○	○
P0746 (05-1061)	Pressure Control Solenoid "A" Performance (Shift Solenoid Valve SL1)	<ul style="list-style-type: none"> • Electronic controlled automatic transmission (ECT) 	○	○
P0748 (05-1065)	Pressure Control Solenoid "A" Electrical (Shift Solenoid Valve SL1)	<ul style="list-style-type: none"> • Electronic controlled automatic transmission (ECT) 	○	○
P0766 (05-1068)	Shift Solenoid "D" Performance (Shift Solenoid Valve S4)	<ul style="list-style-type: none"> • Electronic controlled automatic transmission (ECT) 	○	○
P0771 (05-1072)	Shift Solenoid "E" Performance (Shift Solenoid Valve SR)	<ul style="list-style-type: none"> • Electronic controlled automatic transmission (ECT) 	○	○
P0776 (05-1077)	Pressure Control Solenoid "B" Performance (Shift Solenoid Valve SL2)	<ul style="list-style-type: none"> • Electronic controlled automatic transmission (ECT) 	○	○
P0778 (05-1082)	Pressure Control Solenoid "B" Electrical (Shift Solenoid Valve SL2)	<ul style="list-style-type: none"> • Electronic controlled automatic transmission (ECT) 	○	○
P0793 (05-1085)	Intermediate Shaft Speed Sensor "A" Circuit No Signal	<ul style="list-style-type: none"> • Electronic controlled automatic transmission (ECT) 	○	○

DIAGNOSTICS - SFI SYSTEM (3MZ-FE)

DTC No. (See Page)	Detection Item	Trouble Area	MIL*1	Memory
P0796 (05-1089)	Pressure Control Solenoid "C" Performance (Shift Solenoid Valve SL3)	• Electronic controlled automatic transmission (ECT)	○	○
P0798 (05-1094)	Pressure Control Solenoid "C" Electrical (Shift Solenoid Valve SL3)	• Electronic controlled automatic transmission (ECT)	○	○
P0982 (05-1097)	Shift Solenoid "D" Control Low	• Electronic controlled automatic transmission (ECT)	○	○
P0983 (05-1097)	Shift Solenoid "D" Control High	• Electronic controlled automatic transmission (ECT)	○	○
P0985 (05-1100)	Pressure Control Solenoid "E" Performance (Shift Solenoid Valve SR)	• Electronic controlled automatic transmission (ECT)	○	○
P0986 (05-1100)	Pressure Control Solenoid "E" Electrical (Shift Solenoid Valve SR)	• Electronic controlled automatic transmission (ECT)	○	○
P2102 (05-603)	Throttle Actuator Control Motor Circuit Low	• Open in throttle control motor circuit • Throttle control motor • ECM	○	○
P2103 (05-603)	Throttle Actuator Control Motor Circuit High	• Short in throttle control motor circuit • Throttle control motor • Throttle body • Throttle valve • ECM	○	○
P2111 (05-607)	Throttle Actuator Control System - Stuck Open	• Throttle control motor circuit • Throttle control motor • Throttle body • Throttle valve	○	○
P2112 (05-607)	Throttle Actuator Control System - Stuck Closed	• Same as DTC No. P2111	○	○
P2118 (05-610)	Throttle Actuator Control Motor Current Range/Performance	• Open in ETCS power source circuit • ECM	○	○
P2119 (05-615)	Throttle Actuator Control Throttle Body Range/Performance	• ETCS • ECM	○	○
P2120 (05-617)	Throttle/Pedal Position Sensor/Switch "D" Circuit	• Accelerator pedal position sensor • ECM	○	○
P2121 (05-625)	Throttle/Pedal Position Sensor/Switch "D" Circuit Range/Performance	• Open or short in accelerator pedal position sensor circuit • Accelerator pedal position sensor • ECM	○	○
P2122 (05-617)	Throttle/Pedal Position Sensor/Switch "D" Circuit Low Input	• Accelerator pedal position sensor • VCP1 circuit open • VPA1 circuit open or ground short • ECM	○	○
P2123 (05-617)	Throttle/Pedal Position Sensor/Switch "D" Circuit High Input	• Accelerator pedal position sensor • EPA circuit open • ECM	○	○
P2125 (05-617)	Throttle/Pedal Position Sensor/Switch "E" Circuit	• Same as DTC No. P2120	○	○
P2127 (05-617)	Throttle/Pedal Position Sensor/Switch "E" Circuit Low Input	• Accelerator pedal position sensor • VCP2 circuit open • VPA2 circuit open or ground short • ECM	○	○
P2128 (05-617)	Throttle/Pedal Position Sensor/Switch "E" Circuit High Input	• Accelerator pedal position sensor • EPA2 circuit open • ECM	○	○

DTC No. (See Page)	Detection Item	Trouble Area	MIL*1	Memory
P2135 (05-469)	Throttle Pedal Position Sensor/ Switch "A"/"B" Voltage Correlation	<ul style="list-style-type: none"> • VTA1 and VTA2 circuit are short circuited • Throttle position sensor (built in throttle body) • ECM 	○	○
P2138 (05-617)	Throttle Pedal Position Sensor/ Switch "D"/"E" Voltage Correlation	<ul style="list-style-type: none"> • VPA1 and VPA2 circuit are short circuited • Accelerator pedal position sensor • ECM 	○	○
P2195*3 (05-629)	Oxygen (A/F) Sensor Signal Stuck Lean (Bank 1 Sensor 1)	<ul style="list-style-type: none"> • Open or short in A/F sensor (bank 1 sensor 1) circuit • A/F sensor (bank 1 sensor 1) • A/F sensor (bank 1 sensor 1) heater • A/F relay • Open or short in A/F sensor heater and relay circuits • Air induction system • Fuel pressure • Injector • PCV hose connection • ECM 	○	○
P2196*3 (05-629)	Oxygen (A/F) Sensor Signal Stuck Rich (Bank 1 Sensor 1)	<ul style="list-style-type: none"> • Same as DTC No. P2195 	○	○
P2197*3 (05-629)	Oxygen (A/F) Sensor Signal Stuck Lean (Bank 2 Sensor 1)	<ul style="list-style-type: none"> • Open or short in A/F sensor (bank 2 sensor 1) circuit • A/F sensor (bank 2 sensor 1) • A/F sensor (bank 2 sensor 1) heater • A/F relay • Open or short in A/F sensor heater and relay circuits • Air induction system • Fuel pressure • Injector • PCV hose connection • ECM 	○	○
P2198*3 (05-629)	Oxygen (A/F) Sensor Signal Stuck Rich (Bank 2 Sensor 1)	<ul style="list-style-type: none"> • Same as DTC No. P2197 	○	○
P2238*3 (05-642)	Oxygen Sensor Pumping Current Circuit Low (for A/F sensor) (Bank 1 Sensor 1)	<ul style="list-style-type: none"> • Open or short in A/F sensor (bank 1 sensor 1) circuit • A/F sensor (bank 1 sensor 1) • A/F sensor (bank 1 sensor 1) heater • A/F relay • Open or short in A/F sensor heater and relay circuits • ECM 	○	○
P2239*3 (05-642)	Oxygen Sensor Pumping Current Circuit High (for A/F sensor) (Bank 1 Sensor 1)	<ul style="list-style-type: none"> • Same as DTC No. P2238 	○	○
P2241*3 (05-642)	Oxygen Sensor Pumping Current Circuit Low (for A/F sensor) (Bank 2 Sensor 1)	<ul style="list-style-type: none"> • Open or short in A/F sensor (bank 2 sensor 1) circuit • A/F sensor (bank 2 sensor 1) • A/F sensor (bank 2 sensor 1) heater • A/F relay • A/F sensor heater and relay circuit • ECM 	○	○
P2242*3 (05-642)	Oxygen Sensor Pumping Current Circuit High (for A/F sensor) (Bank 2 Sensor 1)	<ul style="list-style-type: none"> • Same as DTC No. P2241 	○	○
P2252*3 (05-642)	Oxygen Sensor Reference Ground Circuit Low (for A/F sensor) (Bank 1 Sensor 1)	<ul style="list-style-type: none"> • Same as DTC No. P2238 	○	○
P2253*3 (05-642)	Oxygen Sensor Reference Ground Circuit High (for A/F sensor) (Bank 1 Sensor 1)	<ul style="list-style-type: none"> • Same as DTC No. P2238 	○	○
P2255*3 (05-642)	Oxygen Sensor Reference Ground Circuit Low (for A/F sensor) (Bank 2 Sensor 1)	<ul style="list-style-type: none"> • Same as DTC No. P2241 	○	○

DIAGNOSTICS - SFI SYSTEM (3MZ-FE)

DTC No. (See Page)	Detection Item	Trouble Area	MIL*1	Memory
P2256*3 (05-642)	Oxygen Sensor Reference Ground Circuit High (for A/F sensor) (Bank 2 Sensor 1)	• Same as DTC No. P2241	○	○
P2716 (05-1103)	Pressure Control Solenoid "D" Electrical	• Electronic controlled automatic transmission (ECT)	○	○
P2769 (05-1106)	DSL Solenoid Circuit Low	• Electronic controlled automatic transmission (ECT)	○	○
P2770 (05-1106)	DSL Solenoid Circuit High	• Electronic controlled automatic transmission (ECT)	○	○
P2A00 (05-649)	A/F Sensor Circuit Slow Response (Bank 1 Sensor 1)	<ul style="list-style-type: none"> • Open or short in A/F sensor (bank 1 sensor 1) circuit • A/F sensor (bank 1 sensor 1) • A/F sensor heater • A/F relay • Open or short in A/F sensor heater and relay circuits • Air induction system • Fuel pressure • Injector • PCV hose connection • ECM 	○	○
P2A03 (05-649)	A/F Sensor Circuit Slow Response (Bank 2 Sensor 1)	<ul style="list-style-type: none"> • Open or short in A/F sensor (bank 2 sensor 1) circuit • A/F sensor (bank 2 sensor 1) • A/F sensor heater • A/F relay • Open or short in A/F sensor heater and relay circuits • Air induction system • Fuel pressure • Injector • PCV hose connection • ECM 	○	○

HINT:

*1: MIL is illuminated.

*2: MIL is illuminated or flashes continuously.

*3: Although the title (DTC description) says "oxygen sensor", this DTC is related to the "A/F sensor".

*4: This DTC indicates a malfunction related to primary circuit.