DIAGNOSTIC TROUBLE CODE CHART

HINT:

- *1: MIL flashes when a catalyst damaging misfire is detected.
- *2: A/T denotes Automatic Transaxle models and M/T denotes Manual Transaxle models.
- *3: Only for vehicles except those with Mexico specifications.

DTC No.	Detection Item	Trouble Areas	MIL	Memory	See page
P0010	Camshaft Position "A" Actuator Circuit (Bank 1)	- Open or short in Oil Control Valve (OCV) circuit - OCV - ECM	Comes on	DTC stored	ES-56
P0011	Camshaft Position "A" - Timing Over-Advanced or System Performance (Bank 1)	- Valve timing - OCV - OCV filter - Camshaft timing gear assembly - ECM	Comes on	DTC stored	ES-60
P0012	Camshaft Position "A" - Timing Over-Retarded (Bank 1)	- Same as DTC P0011	Comes on	DTC stored	ES-60
P0016	Crankshaft Position - Camshaft Position Correlation (Bank 1 Sensor A)	- Mechanical system (Timing chain has jumped tooth or chain stretched) - ECM	Comes on	DTC stored	ES-66
P0031	Oxygen (A/F) Sensor Heater Control Circuit Low (Bank 1 Sensor 1)	- Open in Air-Fuel Ratio (A/F) sensor heater circuit - A/F sensor heater (sensor 1) - Integration relay (EFI relay) - ECM	Comes on	DTC stored	ES-68
P0032	Oxygen (A/F) Sensor Heater Control Circuit High (Bank 1 Sensor 1)	- Short in A/F sensor heater circuit - A/F sensor heater (sensor 1) - Integration relay (EFI relay) - ECM	Comes on	DTC stored	ES-68
P0037	Oxygen Sensor Heater Control Circuit Low (Bank 1 Sensor 2)	- Open in Heated Oxygen (HO2) sensor heater circuit - HO2 sensor heater (sensor 2) - Integration relay (EFI relay) - ECM	Comes on	DTC stored	ES-74
P0038	Oxygen Sensor Heater Control Circuit High (Bank 1 Sensor 2)	- Short in HO2 sensor heater circuit - HO2 sensor heater (sensor 2) - Integration relay (EFI relay) - ECM	Comes on	DTC stored	ES-74
P0100	Mass or Volume Air Flow Circuit	- Open or short in Mass Air Flow (MAF) meter circuit - MAF meter - ECM	Comes on	DTC stored	ES-80
P0101 *3	Mass Air Flow Circuit Range / Performance Problem	- MAF meter - Air induction system - PCV hose connections	Comes on	DTC stored	ES-87
P0102	Mass or Volume Air Flow Circuit Low Input	- Open or short in MAF meter circuit - MAF meter - ECM	Comes on	DTC stored	ES-80
P0103	Mass or Volume Air Flow Circuit High Input	- Open or short in MAF meter circuit - MAF meter - ECM	Comes on	DTC stored	ES-80
P0110	Intake Air Temperature Circuit Malfunction	- Open or short in Intake Air Temperature (IAT) sensor circuit - IAT sensor (built into MAF meter) - ECM	Comes on	DTC stored	ES-90
P0112	Intake Air Temperature Circuit Low Input	- Short in IAT sensor circuit - IAT sensor (built into MAF meter) - ECM	Comes on	DTC stored	ES-90

DTC No.	Detection Item	Trouble Areas	MIL	Memory	See page
P0113	Intake Air Temperature Circuit High Input	- Open in IAT sensor circuit - IAT sensor (built into MAF meter) - ECM	Comes on	DTC stored	ES-90
P0115	Engine Coolant Temperature Circuit Malfunction	- Open or short in Engine Coolant Temperature (ECT) sensor circuit - ECT sensor - ECM	Comes on	DTC stored	ES-95
P0116 *3	Engine Coolant Temperature Circuit Range / Performance Problem	- Thermostat - ECT sensor	Comes on	DTC stored	ES-101
P0117	Engine Coolant Temperature Circuit Low Input	- Short in ECT sensor circuit - ECT sensor - ECM	Comes on	DTC stored	ES-95
P0118	Engine Coolant Temperature Circuit High Input	- Open in ECT sensor circuit - ECT sensor - ECM	Comes on	DTC stored	ES-95
P0120	Throttle Pedal Position Sensor / Switch "A" Circuit Malfunction	- Throttle Position (TP) sensor (built into throttle body) - ECM	Comes on	DTC stored	ES-104
P0121	Throttle / Pedal Position Sensor / Switch "A" Circuit Range / Performance Problem	- TP sensor (built into throttle body)	Comes on	DTC stored	ES-111
P0122	Throttle / Pedal Position Sensor / Switch "A" Circuit Low Input	- TP sensor (built into throttle body) - Short in VTA1 circuit - Open in VC circuit - ECM	Comes on	DTC stored	ES-104
P0123	Throttle / Pedal Position Sensor / Switch "A" Circuit High Input	- TP sensor (built into throttle body) - Open in VTA1 circuit - Open in E2 circuit - Short between VC and VTA1 circuits - ECM	Comes on	DTC stored	ES-104
P0125	Insufficient Coolant Temperature for Closed Loop Fuel Control	- Cooling system - ECT sensor - Thermostat	Comes on	DTC stored	ES-113
P0128	Coolant Thermostat (Coolant Temperature Below Thermostat Regulating Temperature)	- Thermostat - Cooling system - ECT sensor - ECM	Comes on	DTC stored	ES-116
P0136	Oxygen Sensor Circuit Malfunction (Bank 1 Sensor 2)	- Open or short in HO2 sensor (sensor 2) circuit - HO2 sensor (sensor 2) - HO2 sensor heater (sensor 2) - Air-Fuel Ratio (A/F) sensor (sensor 1) - Integration relay (EFI relay) - Gas leakage from exhaust system	Comes on	DTC stored	ES-119
P0137	Oxygen Sensor Circuit Low Voltage (Bank 1 Sensor 2)	- Open in HO2 sensor (sensor 2) circuit - HO2 sensor (sensor 2) - HO2 sensor heater (sensor 2) - Integration relay (EFI relay) - Gas leakage from exhaust system	Comes on	DTC stored	ES-119
P0138	Oxygen Sensor Circuit High Voltage (Bank 1 Sensor 2)	- Short in HO2 sensor (sensor 2) circuit - HO2 sensor (sensor 2) - ECM internal circuit malfunction	Comes on	DTC stored	ES-119
P0141	Oxygen Sensor Heater Circuit Malfunction (Bank 1 Sensor 2)	- Open or short in HO2 sensor heater circuit - HO2 sensor heater (sensor 2) - Integration relay (EFI relay) - ECM	Comes on	DTC stored	ES-74

DTC No.	Detection Item	Trouble Areas	MIL	Memory	See page
P0171	System Too Lean (Bank 1)	- Air induction system - Injector blockage - MAF meter - ECT sensor - Fuel pressure - Gas leakage from exhaust system - Open or short in A/F sensor (sensor 1) circuit - A/F sensor (sensor 1) - A/F sensor heater (sensor 1) - Integration relay (EFI relay) - A/F sensor heater and EFI relay circuits - PCV hose connections - PCV valve and hose - ECM	Comes on	DTC stored	ES-136
P0172	System Too Rich (Bank 1)	- Injector leakage or blockage - MAF meter - ECT sensor - Ignition system - Fuel pressure - Gas leakage from exhaust system - Open or short in A/F sensor (sensor 1) circuit - A/F sensor (sensor 1) - A/F sensor heater (sensor 1) - Integration relay (EFI relay) - A/F sensor heater and EFI relay circuits - ECM	Comes on	DTC stored	ES-136
P0220	Throttle / Pedal Position Sensor / Switch "B" Circuit	- TP sensor (built into throttle body) - ECM	Comes on	DTC stored	ES-104
P0222	Throttle / Pedal Position Sensor / Switch "B" Circuit Low Input	- TP sensor (built into throttle body) - Short in VTA2 circuit - Open in VC circuit - ECM	Comes on	DTC stored	ES-104
P0223	Throttle / Pedal Position Sensor / Switch "B" Circuit High Input	- TP sensor (built into throttle body) - Open in VTA2 circuit - Open in E2 circuit - Short between VC and VTA2 circuits - ECM	Comes on	DTC stored	ES-104
P0300	Random / Multiple Cylinder Misfire Detected	- Open or short in engine wire harness - Connector connection - Vacuum hose connection - Ignition system - Injector - Fuel pressure - MAF meter - ECT sensor - Compression pressure - Valve clearance - Valve timing - PCV valve and hose - PCV hose connections - Air induction system - ECM	Comes on/ Blinks *1	DTC stored	ES-145
P0301	Cylinder 1 Misfire Detected	- Same as DTC P0300	Comes on/ Blinks *1	DTC stored	ES-145
P0302	Cylinder 2 Misfire Detected	- Same as DTC P0300	Comes on/ Blinks *1	DTC stored	ES-145
P0303	Cylinder 3 Misfire Detected	- Same as DTC P0300	Comes on/ Blinks *1	DTC stored	ES-145
P0304	Cylinder 4 Misfire Detected	- Same as DTC P0300	Comes on/ Blinks *1	DTC stored	ES-145
P0327	Knock Sensor 1 Circuit Low Input (Bank 1 or Single Sensor)	- Short in knock sensor circuit - Knock sensor - ECM	Comes on	DTC stored	ES-157

DTC No.	Detection Item	Trouble Areas	MIL	Memory	See page
P0328	Knock Sensor 1 Circuit High Input (Bank 1 or Single Sensor)	- Open in knock sensor circuit - Knock sensor - ECM	Comes on	DTC stored	ES-157
P0335	Crankshaft Position Sensor "A" Circuit	- Open or short in Crankshaft Position (CKP) sensor circuit - CKP sensor - CKP sensor plate - ECM	Comes on	DTC stored	ES-161
P0339	Crankshaft Position Sensor "A" Circuit Intermittent	- Same as DTC P0335	-	DTC stored	ES-161
P0340	Camshaft Position Sensor "A" Circuit (Bank 1 or Single Sensor)	- Open or short in Camshaft Position (CMP) sensor circuit - CMP sensor - Camshaft - Jumped tooth of timing chain - ECM	Comes on	DTC stored	ES-167
P0351	Ignition Coil "A" Primary / Secondary Circuit	- Ignition system - Open or short in IGF1 or IGT circuit (1 to 4) between ignition coil with igniter and ECM - No. 1 to No. 4 ignition coils with igniters - ECM	Comes on	DTC stored	ES-172
P0352	Ignition Coil "B" Primary / Secondary Circuit	- Same as DTC P0351	Comes on	DTC stored	ES-172
P0353	Ignition Coil "C" Primary / Secondary Circuit	- Same as DTC P0351	Comes on	DTC stored	ES-172
P0354	Ignition Coil "D" Primary / Secondary Circuit	- Same as DTC P0351	Comes on	DTC stored	ES-172
P0420	Catalyst System Efficiency Below Threshold (Bank 1)	- Front exhaust pipe (with Three-Way Catalytic Converter) - Gas leakage from exhaust system - A/F sensor (sensor 1) - HO2 sensor (sensor 2)	Comes on	DTC stored	ES-180
P043E *3	Evaporative Emission System Reference Orifice Clog Up	- Canister pump module (Reference orifice, leak detection pump, vent valve) - Connector/wire harness (Canister pump module - ECM) - EVAP system hose (pipe from air inlet port to canister pump module, canister filter, fuel tank vent hose) - ECM	Comes on	DTC stored	ES-187
P043F *3	Evaporative Emission System Reference Orifice High Flow	- Same as DTC P043E	Comes on	DTC stored	ES-187
P0441 *3	Evaporative Emission Control System Incorrect Purge Flow	- Purge VSV - Connector/wire harness (Purge VSV - ECM) - Canister pump module - Leakage from EVAP system - Leakage from EVAP line (Purge VSV - Intake manifold) - ECM	Comes on	DTC stored	ES-192
P0450 *3	Evaporative Emission Control System Pressure Sensor / Switch	- Canister pump module - EVAP system hose (pipe from air inlet port to canister pump module, canister filter, fuel tank vent hose) - ECM	Comes on	DTC stored	ES-199
P0451 *3	Evaporative Emission Control System Pressure Sensor Range / Performance	- Canister pump module - Connector/wire harness (Canister pump module - ECM) - EVAP system hose (pipe from air inlet port to canister pump module, canister filter, fuel tank vent hose) - ECM	Comes on	DTC stored	ES-199

DTC No.	Detection Item	Trouble Areas	MIL	Memory	See page
P0452 *3	Evaporative Emission Control System Pressure Sensor / Switch Low Input	- Same as DTC P0451	Comes on	DTC stored	ES-199
P0453 *3	Evaporative Emission Control System Pressure Sensor / Switch High Input	- Same as DTC P0451	Comes on	DTC stored	ES-199
P0455 *3	Evaporative Emission Control System Leak Detected (Gross Leak)	- Fuel cap (loose) - Leakage from EVAP line (Canister - Fuel tank) - Leakage from EVAP line (Purge VSV - Canister) - Canister pump module - Leakage from fuel tank - Leakage from canister	Comes on	DTC stored	ES-209
P0456 *3	Evaporative Emission Control System Leak Detected (Very Small Leak)	- Same as DTC P0455	Comes on	DTC stored	ES-209
P0500	Vehicle Speed Sensor "A"	- Open or short in speed signal circuit - Vehicle speed sensor - Combination meter - ECM - Skid control ECU	Comes on	DTC stored	ES-213
P0504	Brake Switch "A" / "B" Correlation	- Short in stop light switch signal circuit - STOP fuse - IGN fuse - Stop light switch - ECM	-	DTC stored	ES-218
P0505	Idle Control System Malfunction	- ETCS (Electronic Throttle Control System) - Air induction system - PCV hose connections - ECM	Comes on	DTC stored	ES-222
P050A *3	Cold Start Idle Air Control System Performance	- Throttle body assembly - MAF meter - Air induction system - PCV hose connections - VVT system - Air cleaner filter element - ECM	Comes on	DTC stored	ES-226
P050B *3	Cold Start Ignition Timing Performance	- Same as DTC P050A	Comes on	DTC stored	ES-226
P0560	System Voltage	- Open in back up power source circuit - Battery - Battery terminals - EFI fuse - ECM	Comes on	DTC stored	ES-232
P0604	Internal Control Module Random Access Memory (RAM) Error	- ECM	Comes on	DTC stored	ES-236
P0606	ECM / PCM Processor	- ECM	Comes on	DTC stored	ES-236
P0607	Control Module Performance	- ECM	Comes on	DTC stored	ES-236
P0617	Starter Relay Circuit High	- Park/Neutral Position (PNP) switch (A/T *2) - Clutch start switch (M/T *2) - Starter relay circuit - Ignition switch - ECM	Comes on	DTC stored	ES-238
P0630 *3	VIN not Programmed or Mismatch - ECM / PCM	- ECM	Comes on	DTC stored	ES-244
P0657	Actuator Supply Voltage Circuit / Open	- ECM	Comes on	DTC stored	ES-236
P0724	Brake Switch "B" Circuit High	- Short in stop light switch signal circuit - Stop light switch - ECM	Comes on	DTC stored	ES-246

DTC No.	Detection Item	Trouble Areas	MIL	Memory	See page
P2102	Throttle Actuator Control Motor Circuit Low	- Open in throttle actuator circuit - Throttle actuator - ECM	Comes on	DTC stored	ES-249
P2103	Throttle Actuator Control Motor Circuit High	- Short in throttle actuator circuit - Throttle actuator - Throttle valve - Throttle body assembly - ECM	Comes on	DTC stored	ES-249
P2111	Throttle Actuator Control System - Stuck Open	- Throttle actuator - Throttle body assembly - Throttle valve	Comes on	DTC stored	ES-253
P2112	Throttle Actuator Control System - Stuck Closed	- Same as DTC P2111	Comes on	DTC stored	ES-253
P2118	Throttle Actuator Control Motor Current Range / Performance	- Open in ETCS power source circuit - Battery - Battery terminals - ETCS fuse - ECM	Comes on	DTC stored	ES-256
P2119	Throttle Actuator Control Throttle Body Range / Performance	- ETCS - ECM	Comes on	DTC stored	ES-263
P2120	Throttle / Pedal Position Sensor / Switch "D" Circuit	- Accelerator Pedal Position (APP) sensor - ECM	Comes on	DTC stored	ES-266
P2121	Throttle / Pedal Position Sensor / Switch "D" Circuit Range / Performance	- APP sensor - ECM	Comes on	DTC stored	ES-273
P2122	Throttle / Pedal Position Sensor / Switch "D" Circuit Low Input	- APP sensor - Open in VCP1 circuit - Open or ground short in VPA circuit - ECM	Comes on	DTC stored	ES-266
P2123	Throttle / Pedal Position Sensor / Switch "D" Circuit High Input	- APP sensor - Open in EPA circuit - ECM	Comes on	DTC stored	ES-266
P2125	Throttle / Pedal Position Sensor / Switch "E" Circuit	- APP sensor - ECM	Comes on	DTC stored	ES-266
P2127	Throttle / Pedal Position Sensor / Switch "E" Circuit Low Input	- APP sensor - Open in VCP2 circuit - Open or ground short in VPA2 circuit - ECM	Comes on	DTC stored	ES-266
P2128	Throttle / Pedal Position Sensor / Switch "E" Circuit High Input	- APP sensor - Open in EPA2 circuit - ECM	Comes on	DTC stored	ES-266
P2135	Throttle / Pedal Position Sensor / Switch "A" / "B" Voltage Correlation	- Short between VTA1 and VTA2 circuits - TP sensor (built into throttle body) - ECM	Comes on	DTC stored	ES-104
P2138	Throttle / Pedal Position Sensor / Switch "D" / "E" Voltage Correlation	- Short between VPA and VPA2 circuits - APP sensor - ECM	Comes on	DTC stored	ES-266
P2195 *3	Oxygen (A/F) Sensor Signal Stuck Lean (Bank 1 Sensor 1)	- Open or short in A/F sensor (sensor 1) circuit - A/F sensor (sensor 1) - A/F sensor heater (sensor 1) - Integration relay (EFI relay) - A/F sensor heater and EFI relay circuits - ECM	Comes on	DTC stored	ES-276
P2196 *3	Oxygen (A/F) Sensor Signal Stuck Rich (Bank 1 Sensor 1)	- Same as DTC P2195	Comes on	DTC stored	ES-276
P2238	Oxygen (A/F) Sensor Pumping Current Circuit Low (Bank 1 Sensor 1)	- Open or short in A/F sensor (sensor 1) circuit - A/F sensor (sensor 1) - A/F sensor heater (sensor 1) - Integration relay (EFI relay) - A/F sensor heater and EFI relay circuits - ECM	Comes on	DTC stored	ES-290

DTC No.	Detection Item	Trouble Areas	MIL	Memory	See page
P2239	Oxygen (A/F) Sensor Pumping Current Circuit High (Bank 1 Sensor 1)	- Same as DTC P2238	Comes on	DTC stored	ES-290
P2252	Oxygen (A/F) Sensor Reference Ground Circuit Low (Bank 1 Sensor 1)	- Same as DTC P2238	Comes on	DTC stored	ES-290
P2253	Oxygen (A/F) Sensor Reference Ground Circuit High (Bank 1 Sensor 1)	- Same as DTC P2238	Comes on	DTC stored	ES-290
P2401 *3	Evaporative Emission Leak Detection Pump Stuck OFF	- Canister pump module (Reference orifice, leak detection pump, vent valve) - Connector/wire harness (Canister pump module - ECM) - EVAP system hose (pipe from air inlet port to canister pump module, canister filter, fuel tank vent hose) - ECM	Comes on	DTC stored	ES-296
P2402 *3	Evaporative Emission Leak Detection Pump Stuck ON	- Same as DTC P2401	Comes on	DTC stored	ES-296
P2419 *3	Evaporative Emission System Switching Valve Control Circuit Low	- Canister pump module (Reference orifice, leak detection pump, vent valve) - Connector/wire harness (Canister pump module - ECM) - EVAP system hose (pipe from air inlet port to canister pump module, canister filter, fuel tank vent hose) - ECM	Comes on	DTC stored	ES-302
P2420 *3	Evaporative Emission System Switching Valve Control Circuit High	- Canister pump module (Reference orifice, leak detection pump, vent valve) - Connector/wire harness (Canister pump module - ECM) - ECM	Comes on	DTC stored	ES-302
P2610 *3	ECM / PCM Internal Engine Off Timer Performance	- ECM	Comes on	DTC stored	ES-308
P2A00 *3	A/F Sensor Circuit Slow Response (Bank 1 Sensor 1)	- Open or short in A/F sensor circuit - A/F sensor - ECM	Comes on	DTC stored	ES-310