

DIAGNOSTIC TROUBLE CODE CHART

HINT:

Factors such as instrument type may cause readings to differ slightly from stated values. If any DTCs are displayed during a check mode DTC check, check the circuit for the DTCs listed in the table below. For details of each DTC, refer to the page indicated.

*: MIL flashes when a catalyst damaged misfire is detected.

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) (bank 1) circuit - OCV (bank 1) - ECM	Comes on	DTC stored	ES-67
P0011	Camshaft Position "A" - Timing Over-Advanced or System Performance (Bank 1)	- Valve timing - OCV (bank 1) - OCV filter - Camshaft timing gear assembly - ECM	Comes on	DTC stored	ES-71
P0012	Camshaft Position "A" - Timing Over-Retarded (Bank 1)	- Same as DTC P0011	Comes on	DTC stored	ES-71
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-76
P0018	Crankshaft Position - Camshaft Position Correlation (Bank 2 Sensor A)	- Same as DTC P0016	Comes on	DTC stored	ES-76
P0020	Camshaft Position "A" Actuator Circuit (Bank 2)	- Open or short in OCV (bank 2) circuit - OCV (bank 2) - ECM	Comes on	DTC stored	ES-67
P0021	Camshaft Position "A" - Timing Over-Advanced or System Performance (Bank 2)	- Valve timing - OCV (bank 2) - OCV filter - Camshaft timing gear assembly - ECM	Comes on	DTC stored	ES-71
P0022	Camshaft Position "A" - Timing Over-Retarded (Bank 2)	- Same as DTC P0021	Comes on	DTC stored	ES-71
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 - A/F sensor heater relay - ECM	Comes on	DTC stored	ES-78
P0032	Oxygen (A/F) Sensor Heater Control Circuit High (Bank 1 Sensor 1)	- Short in A/F sensor heater circuit - A/F sensor heater - A/F sensor heater relay - ECM	Comes on	DTC stored	ES-78
P0037	Oxygen Sensor Heater Control Circuit Low (Bank 1 Sensor 2)	- Open in Heated Oxygen (HO2) sensor heater circuit - HO2 sensor heater - EFI relay - ECM	Comes on	DTC stored	ES-83
P0038	Oxygen Sensor Heater Control Circuit High (Bank 1 Sensor 2)	- Short in HO2 sensor heater circuit - HO2 sensor heater - EFI relay - ECM	Comes on	DTC stored	ES-83
P0051	Oxygen (A/F) Sensor Heater Control Circuit Low (Bank 2 Sensor 1)	- Same as DTC P0031	Comes on	DTC stored	ES-78
P0052	Oxygen (A/F) Sensor Heater Control Circuit High (Bank 2 Sensor 1)	- Same as DTC P0032	Comes on	DTC stored	ES-78

DTC No.	Detection Item	Trouble Areas	MIL	Memory	See page
P0057	Oxygen Sensor Heater Control Circuit Low (Bank 2 Sensor 2)	- Same as DTC P0037	Comes on	DTC stored	ES-83
P0058	Oxygen Sensor Heater Control Circuit High (Bank 2 Sensor 2)	- Same as DTC P0038	Comes on	DTC stored	ES-83
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-90
P0101	Mass Air Flow Circuit Range / Performance Problem	- MAF meter - Air induction system - PCV hose connections	Comes on	DTC stored	ES-97
P0102	Mass or Volume Air Flow Circuit Low Input	- Open in MAF meter circuit - Short in ground circuit - MAF meter - ECM	Comes on	DTC stored	ES-90
P0103	Mass or Volume Air Flow Circuit High Input	- Short in MAF meter circuit (+B circuit) - MAF meter - ECM	Comes on	DTC stored	ES-90
P0110	Intake Air Temperature Circuit	- Open or short in Intake Air Temperature (IAT) sensor circuit - IAT sensor (built into MAF meter) - ECM	Comes on	DTC stored	ES-100
P0111	Intake Air Temperature Sensor Gradient Too High	- IAT sensor (built into MAF meter)	Comes on	DTC stored	ES-106
P0112	Intake Air Temperature Circuit Low Input	- Short in IAT sensor circuit - IAT sensor (built into MAF meter) - ECM	Comes on	DTC stored	ES-100
P0113	Intake Air Temperature Circuit High Input	- Open in IAT sensor circuit - IAT sensor (built into MAF meter) - ECM	Comes on	DTC stored	ES-100
P0115	Engine Coolant Temperature Circuit	- Open or short in Engine Coolant Temperature (ECT) sensor circuit - ECT sensor - ECM	Comes on	DTC stored	ES-109
P0116	Engine Coolant Temperature Circuit Range / Performance Problem	- Thermostat - ECT sensor	Comes on	DTC stored	ES-114
P0117	Engine Coolant Temperature Circuit Low Input	- Short in ECT sensor circuit - ECT sensor - ECM	Comes on	DTC stored	ES-109
P0118	Engine Coolant Temperature Circuit High Input	- Open in ECT sensor circuit - ECT sensor - ECM	Comes on	DTC stored	ES-109
P0120	Throttle / Pedal Position Sensor / Switch "A" Circuit	- Throttle Position (TP) sensor (built into throttle body) - ECM	Comes on	DTC stored	ES-117
P0121	Throttle / Pedal Position Sensor / Switch "A" Circuit Range / Performance Problem	- TP sensor (built into throttle body)	Comes on	DTC stored	ES-125
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-117
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-117
P0125	Insufficient Coolant Temperature for Closed Loop Fuel Control	- Cooling system - ECT sensor - Thermostat	Comes on	DTC stored	ES-127

DTC No.	Detection Item	Trouble Areas	MIL	Memory	See page
P0128	Coolant Thermostat (Coolant Temperature Below Thermostat Regulating Temperature)	- Thermostat - Cooling system - ECT sensor - ECM	Comes on	DTC stored	ES-130
P0136	Oxygen Sensor Circuit Malfunction (Bank 1 Sensor 2)	- Open or short in HO2 sensor (bank 1 sensor 2) circuit - HO2 sensor (bank 1 sensor 2) - HO2 sensor heater (bank 1 sensor 2) - A/F sensor (bank 1 sensor 1) - EFI relay - Gas leakage from exhaust system	Comes on	DTC stored	ES-133
P0137	Oxygen Sensor Circuit Low Voltage (Bank 1 Sensor 2)	- Open in HO2 sensor (bank 1 sensor 2) circuit - HO2 sensor (bank 1 sensor 2) - HO2 sensor heater (bank 1 sensor 2) - EFI relay - Gas leakage from exhaust system	Comes on	DTC stored	ES-133
P0138	Oxygen Sensor Circuit High Voltage (Bank 1 Sensor 2)	- Short in HO2 sensor (bank 1 sensor 2) circuit - HO2 sensor (bank 1 sensor 2) - ECM internal circuit malfunction	Comes on	DTC stored	ES-133
P0141	Oxygen Sensor Heater Circuit Malfunction (Bank 1 Sensor 2)	- Open or short in HO2 sensor heater circuit - HO2 sensor heater - EFI relay - ECM	Comes on	DTC stored	ES-83
P0156	Oxygen Sensor Circuit Malfunction (Bank 2 Sensor 2)	- Open or short in HO2 sensor (bank 2 sensor 2) circuit - HO2 sensor (bank 2 sensor 2) - HO2 sensor heater (bank 2 sensor 2) - A/F sensor (bank 2 sensor 1) - EFI relay - Gas leakage from exhaust system	Comes on	DTC stored	ES-133
P0157	Oxygen Sensor Circuit Low Voltage (Bank 2 Sensor 2)	- Open in HO2 sensor (bank 2 sensor 2) circuit - HO2 sensor (bank 2 sensor 2) - HO2 sensor heater (bank 2 sensor 2) - EFI relay - Gas leakage from exhaust system	Comes on	DTC stored	ES-133
P0158	Oxygen Sensor Circuit High Voltage (Bank 2 Sensor 2)	- Short in HO2 sensor (bank 2 sensor 2) circuit - HO2 sensor (bank 2 sensor 2) - ECM internal circuit malfunction	Comes on	DTC stored	ES-133
P0161	Oxygen Sensor Heater Circuit Malfunction (Bank 2 Sensor 2)	- Same as DTC P0141	Comes on	DTC stored	ES-83
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 (bank 1 sensor 1) circuit - A/F sensor (bank 1 sensor 1) - A/F sensor heater (bank 1 sensor 1) - A/F sensor heater relay - A/F sensor heater and A/F sensor heater relay circuits - PCV hose connections - PCV valve and hose - ECM	Comes on	DTC stored	ES-152

DTC No.	Detection Item	Trouble Areas	MIL	Memory	See page
P0172	System Too Rich (Bank 1)	<ul style="list-style-type: none"> - Injector leakage or blockage - MAF meter - ECT sensor - Ignition system - Fuel pressure - Gas leakage from 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 sensor heater relay - A/F sensor heater and A/F sensor heater relay circuits - ECM 	Comes on	DTC stored	ES-152
P0174	System Too Lean (Bank 2)	<ul style="list-style-type: none"> - Air induction system - Injector blockage - MAF meter - ECT sensor - Fuel pressure - Gas leakage from 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 sensor heater relay - A/F sensor heater and A/F sensor heater relay circuits - PCV hose connections - PCV valve and hose - ECM 	Comes on	DTC stored	ES-152
P0175	System Too Rich (Bank 2)	<ul style="list-style-type: none"> - Injector leakage or blockage - MAF meter - ECT sensor - Ignition system - Fuel pressure - Gas leakage from 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 sensor heater relay - A/F sensor heater and A/F sensor heater relay circuits - ECM 	Comes on	DTC stored	ES-152
P0220	Throttle / Pedal Position Sensor / Switch "B" Circuit	<ul style="list-style-type: none"> - TP sensor (built into throttle body) - ECM 	Comes on	DTC stored	ES-117
P0222	Throttle / Pedal Position Sensor / Switch "B" Circuit Low Input	<ul style="list-style-type: none"> - TP sensor (built into throttle body) - Short in VTA2 circuit - Open in VC circuit - ECM 	Comes on	DTC stored	ES-117
P0223	Throttle / Pedal Position Sensor / Switch "B" Circuit High Input	<ul style="list-style-type: none"> - 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-117
P0230	Fuel Pump Primary Circuit	<ul style="list-style-type: none"> - Open or short in fuel pump relay circuit - Fuel pump relay - ECM 	-	DTC stored	ES-164

DTC No.	Detection Item	Trouble Areas	MIL	Memory	See page
P0300	Random / Multiple Cylinder Misfire Detected	<ul style="list-style-type: none"> - 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 hose connections - PCV valve and hose - Air induction system - ECM 	Comes on/ Blinks *	DTC stored	ES-169
P0301	Cylinder 1 Misfire Detected	- Same as DTC P0300	Comes on/ Blinks *	DTC stored	ES-169
P0302	Cylinder 2 Misfire Detected	- Same as DTC P0300	Comes on/ Blinks *	DTC stored	ES-169
P0303	Cylinder 3 Misfire Detected	- Same as DTC P0300	Comes on/ Blinks *	DTC stored	ES-169
P0304	Cylinder 4 Misfire Detected	- Same as DTC P0300	Comes on/ Blinks *	DTC stored	ES-169
P0305	Cylinder 5 Misfire Detected	- Same as DTC P0300	Comes on/ Blinks *	DTC stored	ES-169
P0306	Cylinder 6 Misfire Detected	- Same as DTC P0300	Comes on/ Blinks *	DTC stored	ES-169
P0327	Knock Sensor 1 Circuit Low Input (Bank 1 or Single Sensor)	<ul style="list-style-type: none"> - Short in knock sensor 1 circuit - Knock sensor 1 - ECM 	Comes on	DTC stored	ES-181
P0328	Knock Sensor 1 Circuit High Input (Bank 1 or Single Sensor)	<ul style="list-style-type: none"> - Open in knock sensor 1 circuit - Knock sensor 1 - ECM 	Comes on	DTC stored	ES-181
P0332	Knock Sensor 2 Circuit Low Input (Bank 2)	<ul style="list-style-type: none"> - Short in knock sensor 2 circuit - Knock sensor 2 - ECM 	Comes on	DTC stored	ES-181
P0333	Knock Sensor 2 Circuit High Input (Bank 2)	<ul style="list-style-type: none"> - Open in knock sensor 2 circuit - Knock sensor 2 - ECM 	Comes on	DTC stored	ES-181
P0335	Crankshaft Position Sensor "A" Circuit	<ul style="list-style-type: none"> - Open or short in Crankshaft Position (CKP) sensor circuit - CKP sensor - Sensor plate (CKP sensor plate) - ECM 	Comes on	DTC stored	ES-187
P0339	Crankshaft Position Sensor "A" Circuit Intermittent	- Same as DTC P0335	-	DTC stored	ES-187
P0340	Camshaft Position Sensor "A" Circuit (Bank 1 or Single Sensor)	<ul style="list-style-type: none"> - Open or short in Variable Valve Timing (VVT) sensor circuit - VVT sensor - Camshaft timing gear - Jumped tooth of timing chain - ECM 	Comes on	DTC stored	ES-192
P0342	Camshaft Position Sensor "A" Circuit Low Input (Bank 1 or Single Sensor)	- Same as DTC P0340	Comes on	DTC stored	ES-192
P0343	Camshaft Position Sensor "A" Circuit High Input (Bank 1 or Single Sensor)	- Same as DTC P0340	Comes on	DTC stored	ES-192
P0345	Camshaft Position Sensor "A" Circuit (Bank 2)	- Same as DTC P0340	Comes on	DTC stored	ES-192
P0347	Camshaft Position Sensor "A" Circuit Low Input (Bank 2)	- Same as DTC P0340	Comes on	DTC stored	ES-192

DTC No.	Detection Item	Trouble Areas	MIL	Memory	See page
P0348	Camshaft Position Sensor "A" Circuit High Input (Bank 2)	- Same as DTC P0340	Comes on	DTC stored	ES-192
P0351	Ignition Coil "A" Primary / Secondary Circuit	- Ignition system - Open or short in IGF1 or IGT circuit (1 to 6) between ignition coil with igniter and ECM - No. 1 to No. 6 ignition coils with igniters - ECM	Comes on	DTC stored	ES-199
P0352	Ignition Coil "B" Primary / Secondary Circuit	- Same as DTC P0351	Comes on	DTC stored	ES-199
P0353	Ignition Coil "C" Primary / Secondary Circuit	- Same as DTC P0351	Comes on	DTC stored	ES-199
P0354	Ignition Coil "D" Primary / Secondary Circuit	- Same as DTC P0351	Comes on	DTC stored	ES-199
P0355	Ignition Coil "E" Primary / Secondary Circuit	- Same as DTC P0351	Comes on	DTC stored	ES-199
P0356	Ignition Coil "F" Primary / Secondary Circuit	- Same as DTC P0351	Comes on	DTC stored	ES-199
P0420	Catalyst System Efficiency Below Threshold (Bank 1)	- Gas leakage from exhaust system - A/F sensor (bank 1 sensor 1) - HO2 sensor (bank 1 sensor 2) - Exhaust manifold (TWC)	Comes on	DTC stored	ES-210
P0430	Catalyst System Efficiency Below Threshold (Bank 2)	- Gas leakage from exhaust system - A/F sensor (bank 2 sensor 1) - HO2 sensor (bank 2 sensor 2) - Exhaust manifold (TWC)	Comes on	DTC stored	ES-210
P043E	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-218
P043F	Evaporative Emission System Reference Orifice High Flow	- Same as DTC P043E	Comes on	DTC stored	ES-218
P0441	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-223
P0450	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-230
P0451	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-230
P0452	Evaporative Emission Control System Pressure Sensor / Switch Low Input	- Same as DTC P0451	Comes on	DTC stored	ES-230
P0453	Evaporative Emission Control System Pressure Sensor / Switch High Input	- Same as DTC P0451	Comes on	DTC stored	ES-230

DTC No.	Detection Item	Trouble Areas	MIL	Memory	See page
P0455	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-239
P0456	Evaporative Emission Control System Leak Detected (Very Small Leak)	- Same as DTC P0455	Comes on	DTC stored	ES-239
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-243
P0504	Brake Switch "A" / "B" Correlation	- Short in stop light switch signal circuit - STOP fuse - Stop light switch - ECM	-	DTC stored	ES-247
P0505	Idle Control System Malfunction	- ETCS - Air induction system - PCV hose connections - ECM	Comes on	DTC stored	ES-251
P050A	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-255
P050B	Cold Start Ignition Timing Performance	- Same as DTC P050A	Comes on	DTC stored	ES-255
P0560	System Voltage	- Open in back up power source circuit - EFI fuse - ECM	Comes on	DTC stored	ES-261
P0604	Internal Control Module Random Access Memory (RAM) Error	- ECM	Comes on	DTC stored	ES-265
P0606	ECM / PCM Processor	- ECM	Comes on	DTC stored	ES-265
P0607	Control Module Performance	- ECM	Comes on	DTC stored	ES-265
P0617	Starter Relay Circuit High	- Park/Neutral Position (PNP) switch (A/T) - Clutch start switch (M/T) - Starter relay circuit - Ignition switch - ECM	Comes on	DTC stored	ES-267
P0630	VIN not Programmed or Mismatch - ECM / PCM	- ECM	Comes on	DTC stored	ES-273
P0657	Actuator Supply Voltage Circuit / Open	- ECM	Comes on	DTC stored	ES-265
P0724	Brake Switch "B" Circuit High	- Short in stop light switch signal circuit - Stop light switch - ECM	Comes on	DTC stored	ES-275
P1500	AC Inverter Malfunction	- Open or short in speed signal circuit - Short between idle-up signal and +B circuits - Voltage Inverter - ECM	Comes on	DTC stored	ES-278
P2102	Throttle Actuator Control Motor Circuit Low	- Open in throttle actuator circuit - Throttle actuator - ECM	Comes on	DTC stored	ES-282

DTC No.	Detection Item	Trouble Areas	MIL	Memory	See page
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-282
P2111	Throttle Actuator Control System - Stuck Open	- Throttle actuator - Throttle body assembly - Throttle valve	Comes on	DTC stored	ES-286
P2112	Throttle Actuator Control System - Stuck Closed	- Same as DTC P2111	Comes on	DTC stored	ES-286
P2118	Throttle Actuator Control Motor Current Range / Performance	- Open in ETCS power source circuit - ETCS fuse - ECM	Comes on	DTC stored	ES-289
P2119	Throttle Actuator Control Throttle Body Range / Performance	- ETCS - ECM	Comes on	DTC stored	ES-293
P2120	Throttle / Pedal Position Sensor / Switch "D" Circuit	- Accelerator Pedal Position (APP) sensor - ECM	Comes on	DTC stored	ES-296
P2121	Throttle / Pedal Position Sensor / Switch "D" Circuit Range / Performance	- APP sensor - ECM	Comes on	DTC stored	ES-304
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-296
P2123	Throttle / Pedal Position Sensor / Switch "D" Circuit High Input	- APP sensor - Open in EPA circuit - ECM	Comes on	DTC stored	ES-296
P2125	Throttle / Pedal Position Sensor / Switch "E" Circuit	- APP sensor - ECM	Comes on	DTC stored	ES-296
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-296
P2128	Throttle / Pedal Position Sensor / Switch "E" Circuit High Input	- APP sensor - Open in EPA2 circuit - ECM	Comes on	DTC stored	ES-296
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-117
P2138	Throttle / Pedal Position Sensor / Switch "D" / "E" Voltage Correlation	- Short between VPA and VPA2 circuits - APP sensor - ECM	Comes on	DTC stored	ES-296
P2195	Oxygen (A/F) Sensor Signal Stuck Lean (Bank 1 Sensor 1)	- 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 sensor heater relay - A/F sensor heater and relay circuits - Air induction system - Fuel pressure - Injector - ECM	Comes on	DTC stored	ES-307
P2196	Oxygen (A/F) Sensor Signal Stuck Rich (Bank 1 Sensor 1)	- Same as DTC P2195	Comes on	DTC stored	ES-307

DTC No.	Detection Item	Trouble Areas	MIL	Memory	See page
P2197	Oxygen (A/F) Sensor Signal Stuck Lean (Bank 2 Sensor 1)	- 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 sensor heater relay - A/F sensor heater and relay circuits - Air induction system - Fuel pressure - Injector - ECM	Comes on	DTC stored	ES-307
P2198	Oxygen (A/F) Sensor Signal Stuck Rich (Bank 2 Sensor 1)	- Same as DTC P2197	Comes on	DTC stored	ES-307
P2238	Oxygen (A/F) Sensor Pumping Current Circuit Low (Bank 1 Sensor 1)	- 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 sensor heater relay - A/F sensor heater and relay circuits - ECM	Comes on	DTC stored	ES-324
P2239	Oxygen (A/F) Sensor Pumping Current Circuit High (Bank 1 Sensor 1)	- Same as DTC P2238	Comes on	DTC stored	ES-324
P2241	Oxygen (A/F) Sensor Pumping Current Circuit Low (Bank 2 Sensor 1)	- 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 sensor heater relay - A/F sensor heater and relay circuits - ECM	Comes on	DTC stored	ES-324
P2242	Oxygen (A/F) Sensor Pumping Current Circuit High (Bank 2 Sensor 1)	- Same as DTC P2241	Comes on	DTC stored	ES-324
P2252	Oxygen (A/F) Sensor Reference Ground Circuit Low (Bank 1 Sensor 1)	- Same as DTC P2238	Comes on	DTC stored	ES-324
P2253	Oxygen (A/F) Sensor Reference Ground Circuit High (Bank 1 Sensor 1)	- Same as DTC P2238	Comes on	DTC stored	ES-324
P2255	Oxygen (A/F) Sensor Reference Ground Circuit Low (Bank 2 Sensor 1)	- Same as DTC P2241	Comes on	DTC stored	ES-324
P2256	Oxygen (A/F) Sensor Reference Ground Circuit High (Bank 2 Sensor 1)	- Same as DTC P2241	Comes on	DTC stored	ES-324
P2401	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-329
P2402	Evaporative Emission Leak Detection Pump Stuck ON	- Same as DTC P2401	Comes on	DTC stored	ES-329
P2419	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-335

DTC No.	Detection Item	Trouble Areas	MIL	Memory	See page
P2420	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-335
P2610	ECM / PCM Internal Engine Off Timer Performance	- ECM	Comes on	DTC stored	ES-341
P2A00	A/F Sensor Circuit Slow Response (Bank 1 Sensor 1)	- Open or short in A/F sensor (bank 1 sensor 1) circuit - A/F sensor - A/F sensor heater - ECM	Comes on	DTC stored	ES-343
P2A03	A/F Sensor Circuit Slow Response (Bank 2 Sensor 1)	- Open or short in A/F sensor (bank 2 sensor 1) circuit - A/F sensor - A/F sensor heater - ECM	Comes on	DTC stored	ES-343