SENSED PARAMETER	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA AND THRESHOLD VALUE(S)	SECONDARY PARAMETERS AND ENABLE CONDITIONS	TIME LENGTH AND FREQUENCY	MIL ILLUMINATION TYPE
Manifold Pressure/Throttle Position Sensor Rationality AMT	P0105	Detects a MAP or TP Sensor that is stuck or out of range	Change in MAP > or < Table value	600 > RPM > 6375 Engine run time > 40 Sec Δ TCC < 2.5% Δ RPM < 50 RPM Δ IAC < 5 steps Δ TPS < 2% Above condition met for 1.5 Sec None of the following DTC's set: 107, 108, 117, 118, 122, 123, 131, 132, 171, 172, 200, 300, 336, 340, 341, 440, 1441, 442, 502, 506, 507	70/80 Cts 125 ms/Ct Continuous check	DTC Type B
Manifold Pressure/Throttle Position Sensor Rationality SMT	P0105	Detects a MAP or TP Sensor that is stuck or out of range	Change in MAP > or < Table value	900 > RPM > 6375 Engine run time > 40 Sec Δ RPM < 50 RPM Δ IAC < 5 steps Δ TPS < 2% Above condition met for 1.5 Sec None of the following DTC's set: 107, 108, 117, 118, 122, 123, 131, 132, 171, 172, 200, 300, 336, 340, 341, 440, 1441, 442, 502, 506, 507	70/80 Cts 125 ms/Ct Continuous check	DTC Type B
Manifold Pressure Too Low	P0107	Detects a continuous short to ground or a MAP sensor signal that is out of range low	MAP < 0.08 V (11.8 kPa)	RPM < 1000 Or RPM > 1000 TP Sensor >15.2 % None of the following DTC's set: 122, 123	400/500 Cts 15.6 ms/Ct Continuous check	DTC Type B
Manifold Pressure Too High	P0108	Detects a continuous short to voltage or a MAP sensor signal that is out of range high	MAP > 3.80 V (82 kPa)	TP Sensor < 12% VSS < 1 MPH Engine run time > 20 - 40 sec None of the following DTC's set: 122, 123	80/100 Cts 15.6 ms/Ct Continuous check	DTC Type B
Intake Air Temperature Sensor Shorted	P0112	Detects a continuous short to voltage or an IAT sensor signal that is out of range high	IAT < 48 Cts (> 128°C)	VSS > 15 MPH Engine run time > 320 sec None of the following DTC's set: 117, 118, 125, 502, 503	25/100 Cts 125 ms/Ct Continuous check	DTC Type B
Intake Air Temperature Sensor Open	P0113	Detects a continuous short to ground or an open in the IAT sensor signal	IAT > 253 Cts (< -57°C)	VSS < 15 MPH Engine run time > 320 sec ECT > -40°C None of the following DTC's set: 117, 118, 125, 502, 503	25/100 Cts 125 ms/Ct Continuous check	DTC Type B
Coolant Temperature Sensor Shorted	P0117	Detects a continuous short to voltage or an ECT sensor signal that is out of range high	ECT < 4 Cts (> 138°C) (High R) Or ECT < 36 Cts (> 142°C) (Low R)	Engine run time > 128 sec	50/100 Cts 125 ms/Ct Continuous check	DTC Type B
Coolant Temperature Sensor Open	P0118	Detects a continuous short to ground or an open in the ECT sensor signal	ECT > 251 Cts (< -50°C) (High R) Or ECT > 252 Cts (< -71°C) (Low R)	Engine run time > 60 sec	50/100 Cts 125 ms/Ct Continuous check	DTC Type B

SENSED PARAMETER	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA AND THRESHOLD VALUE(S)	SECONDARY PARAMETERS AND ENABLE CONDITIONS	TIME LENGTH AND FREQUENCY	MIL ILLUMINATION TYPE
TP Sensor Low	P0122	Detects a TP Sensor that is open or shorted to ground	TP Sensor < .10 V	Engine running	50/200 Cts 125 ms/Ct Continuous check	DTC Type B
TP Sensor High (Part "A")	P0123	Detects a TP Sensor signal that is shorted to voltage	TP Sensor > 3.91 V	Engine running RPM < 1500 MAP < 60 kPa None of the following DTC's set: 107, 108	110/200 Cts 125 ms/Ct Continuous check	DTC Type B
TP Sensor High (Part "B")	P0123	Detects a TP Sensor signal that is shorted to voltage	TP Sensor > 4.86 V	Engine running None of the following DTC's set: 107, 108	110/200 Cts 125 ms/Ct Continuous check	DTC Type B
Closed Loop Engine Coolant Temperature Rationality	P0125	Detects if engine coolant temperature rises too slowly due to an ECT or cooling system fault	If actual accumulated air flow is > predicted air flow before engine coolant reaches 40°C	30 sec < engine runtime < 20 min. Min Average flow > 10 g/sec Min distance traveled > .5 miles Min MPH to update distance > 25 mph Min air flow to update distance > 10 g/sec IAT > -7°C Start up ECT < 35°C None of the following DTC's set: 105, 107, 108, 112, 113, 117, 118, 122, 123,130, 171, 172, 200, 300, 336, 480, 481, 502, 503, 602, 1621 (481 w/dual fans and 503 w/auto trans)	30 Cts 1 sec/Ct Once per ignition cycle	DTC Type B
Thermostat Engine Coolant Temperature Rationality	P0128	Detects if engine coolant temperature rises too slowly due to an ECT or cooling system fault	If actual accumulated air flow is > predicted air flow before engine coolant reaches 70°C	30 sec < engine runtime < 20 min. Min Average flow > 15 g/sec Min distance traveled > 1.5 miles Min MPH to update distance > 25 mph Min air flow to update distance > 10 g/sec IAT > -7°C Start up ECT < 65°C None of the following DTC's set: 105, 107, 108, 112, 113, 117, 118, 122, 123,130, 171, 172, 200, 300, 336, 480, 481, 502, 503, 602, 1621 (481 w/dual fans and 503 w/auto trans)	30 Cts 1 sec/Ct Once per ignition cycle	DTC Type B
O2S 1 Closed Loop Rationality	P0130	Detects when a vehicle goes open loop or will not remain closed loop	Not in Closed Loop	Engine runtime > 140 Coolant temp > 65°C 1200 < RPM < 3410 10% < TP < 40% None of the following DTC's set: 107, 108, 117, 118, 122, 123, 131, 132, 134, 200, 300, 325, 336, 440, 1441, 442, 446, 502, 601, 602, 1621	40/100 125 ms/Ct Continuous check	DTC Type B

SENSED PARAMETER	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA AND THRESHOLD VALUE(S)	SECONDARY PARAMETERS AND ENABLE CONDITIONS	TIME LENGTH AND FREQUENCY	MIL ILLUMINATION TYPE
O2S 1 Lean	P0131	Detects an O2S 1 signal which is below the range considered lean	O2S 1 < 52 mV	ECT > 70°C Air flow > 3 g/sec Above conditions met for 20 sec 8% < TP < 50.2% Above condition met for 3.8 sec None of the following DTC's set: 105, 107, 108,112, 113, 117, 118, 122, 123, 171, 200, 300, 336, 440, 1441, 442, 446, 506, 507, 601, 602	999/1000 Cts 125 ms/Ct Continuous check	DTC Type B
O2S 1 Rich	P0132	Detects an O2S 1 signal which is above the range considered rich	O2S 1 > 946 mV or O2S 1 > 1042 mV for 2.5 sec while in DFCO	ECT > 70°C Air flow > 3 g/sec Above conditions met for 20 sec 8% TP 50.2% Above condition met for 3.8 sec None of the following DTC's set: 105, 107, 108,112, 113, 117, 118, 122, 123, 171, 200, 300, 336, 440, 1441, 442, 446, 506, 507, 601, 602	399/400 Cts 125 ms/Ct Continuous check	DTC Type B
O2S 1 Slow Response AMT	P0133	Determines if the O2S 1 is functioning properly by checking its response time	Avg. O2S 1 Response Times: R/L > 1199 ms L/R > 600 ms R/L + L/R > 1200	Engine run time > 200 sec TP between 8% & 15% RPM between 1800 & 2300 EVAP > 80% PWM ECT > 75°C PLM > 220 Engine operating in Closed Loop None of the following DTC's set: 105, 107, 108,112, 113, 117, 118, 122, 123, 171, 200, 300, 336, 440, 1441, 442, 446, 506, 507, 601, 602	30 sec Once per ignition cycle	DTC Type B
O2S 1 Slow Response SMT	P0133	Determines if the O2S 1 is functioning properly by checking its response time	Avg. O2S 1 Response Times: R/L > 1199 ms L/R > 600 ms R/L + L/R > 1200	Engine run time > 200 sec TP between 8% & 16% RPM between 1600 & 2400 EVAP > 80% PWM ECT > 75°C PLM > 220 Engine operating in Closed Loop None of the following DTC's set: 105, 107, 108,112, 113, 117, 118, 122, 123, 171, 200, 300, 336, 440, 1441, 442, 446, 506, 507, 601, 602	30 sec Once per ignition cycle	DTC Type B
O2S 1 Not Enough Switches AMT	P1133	Determines if the O2S 1 is functioning properly by checking the number of switches	O2S 1 Switch Numbers L/R < 1 Cts R/L < 1 Cts	Engine run time > 200 sec TP between 8% & 15% RPM between 1800 & 2300 EVAP > 80% PWM ECT > 75°C PLM > 220 Engine operating in Closed Loop None of the following DTC's set: 105, 107, 108,112, 113, 117, 118, 122, 123, 171, 200, 300, 336, 440, 1441, 442, 446, 506, 507, 601, 602	30 sec Once an ignition cycle	DTC Type B

SENSED PARAMETER	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA AND THRESHOLD VALUE(S)	SECONDARY PARAMETERS AND ENABLE CONDITIONS	TIME LENGTH AND FREQUENCY	MIL ILLUMINATION TYPE
O2S 1 Not Enough Switches SMT	P1133	Determines if the O2S 1 is functioning properly by checking the number of switches	O2S 1 Switch Numbers L/R < 1 Cts R/L < 2 Cts	Engine run time > 10 sec TP between 8% & 16% RPM between 1600 & 2400 EVAP > 80% PWM ECT > 75°C PLM > 220 Engine operating in Closed Loop None of the following DTC's set: 105, 107, 108,112, 113, 117, 118, 122, 123, 171, 200, 300, 336, 440, 1441, 442, 446, 506, 507, 601, 602	30 sec Once an ignition cycle	DTC Type B
O2S 1 Open	P0134	Detects an O2S 1 signal that is not switching at bias voltage	399 mV < O2S 1 < 499 mV	ECT > 70°C Air flow > 3 g/sec Above conditions met for 20 sec Engine run time > 30 sec 8% < TP < 56% None of the following DTC's set: 105, 107, 108,112, 113, 117, 118, 122, 123, 171, 200, 300, 336, 440, 1441, 442, 446, 506, 507, 601, 602	999/1000 Cts 125 ms/Ct Continuous check	DTC Type B
O2S 2 Lean	P0137	Detects an O2S 2 signal which is below the range considered lean	O2S 2 < 44 mV	ECT > 40°C Air flow > 5.5 g/sec Above conditions met for 140 sec 8% < TP <50.2% Above condition met for 3.8 sec None of the following DTC's set: 105, 107, 108,112, 113, 117, 118, 122, 123, 171, 200, 300, 336, 440, 1441, 442, 446, 506, 507, 601, 602	1199/1200 Cts 125 ms/Ct Continuous check	DTC Type B
O2S 2 Lean in PE	P1137	Detects and O2S 2 signal which is below the range considered lean while in power enrichment	O2S 1 > 700 O2S 2 < 399	Vehicle operating in PE Engine operating in Closed Loop Fuel level > 10% None of the following DTC's set: 105, 107, 108,112, 113, 117, 118, 122, 123, 171, 200, 300, 336, 440, 1441, 442, 446, 506, 507, 601, 602	48/80 Cts 125 ms/Ct Continuous check	DTC Type B
O2S 2 Rich	P0138	Detects an O2S 2 signal which is above the range considered rich	O2S 2 > 1042 mV	ECT > 40°C Air flow > 5.5 g/sec Above conditions met for 140 sec 8 % < TP < 50.2% Above condition met for 3.8 sec None of the following DTC's set: 105, 107, 108,112, 113, 117, 118, 122, 123, 171, 200, 300, 336, 440, 1441, 442, 446, 506, 507, 601, 602	399/400 Cts 125 ms/Ct Continuous check	DTC Type B
O2S 2 Rich in DFCO	P1138	Detects and O2S 2 signal which is above the range considered rich while in a fuel cutoff condition	O2S 2 > 650	Vehicle operating in DFCO Engine operating in Closed Loop Fuel Level > 10% None of the following DTC's set: 105, 107, 108,112, 113, 117, 118, 122, 123, 171, 200, 300, 336, 440, 1441, 442, 446, 506, 507, 601, 602	48/80 Cts 125 ms/Ct Continuous check	DTC Type B

SENSED PARAMETER	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA AND THRESHOLD VALUE(S)	SECONDARY PARAMETERS AND ENABLE CONDITIONS	TIME LENGTH AND FREQUENCY	MIL ILLUMINATION TYPE
O2S 2 Open	P0140	Detects a signal that is not switching at bias voltage	425 mV < O2S 2 < 460 mV	ECT > 40°C Air flow > 5.5 g/sec Above conditions met for 140 sec 8% < TP < 56% None of the following DTC's set: 105, 107, 108,112, 113, 117, 118, 122, 123, 171, 200, 300, 336, 440, 1441, 442, 446, 506, 507, 601, 602	999/1000 Cts 125 ms/Ct Continuous check	DTC Type B
O2S 2 Heater Circuit Malfunction	P0141	Checks for sensor activity within a given period of time after cold start	O2S 2 Voltage Changes < ±148 mV From Mean O2S 2 Bias Voltage	Engine run time < 255 sec SUC and SUM < 45°C Difference in ECT & IAT < 7°C Average flow prior to activity must be < 20 g/sec Battery voltage > 11.6 V, < 16 V 395 mV < O2 S2 mV @ Start-up < 491 mV None of the following DTC's set: 105, 107, 108,112, 113, 117, 118, 122, 123, 171, 200, 300, 336, 440, 1441, 442, 446, 506, 507, 601, 602	Time determined by table Once per ignition cycle	DTC Type B
Fuel Trim Lean AMT	P0171	Monitors fuel control system during normal operating range of FTI 110 < FTI < 145	Fuel Trim Index > 165	Baro > 72 kPa ECT > 60°C & < 115°C IAT > -25°C & < 115 °C MAP > 28 kPa RPM between 550 & 3600 VSS < 82 MPH Fuel level > 9.8 % None of the following DTC's set: 105, 107, 108, 112, 113, 117, 118, 122, 123, 125, 131, 132, 133, 134, 1133, 200, 300, 325, 336, 340, 341, 1441, 446, 502, 503, 601, 602	Continuous check	DTC Type B
Fuel Trim Lean SMT	P0171	Monitors fuel control system during normal operating range of FTI 110 < FTI < 145	Fuel Trim Index > 165	Baro > 72 kPa ECT > 60°C & < 115°C IAT > -25°C & < 115 °C MAP > 26 kPa RPM between 750 & 3600 VSS < 82 MPH Fuel level > 9.8 % None of the following DTC's set: 105, 107, 108, 112, 113, 117, 118, 122, 123, 125, 131, 132, 133, 134, 1133, 200, 300, 325, 336, 340, 341, 1441, 446, 502, 503, 601, 602	Continuous check	DTC Type B

SENSED PARAMETER	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA AND THRESHOLD VALUE(S)	SECONDARY PARAMETERS AND ENABLE CONDITIONS	TIME LENGTH AND FREQUENCY	MIL ILLUMINATION TYPE
Fuel Trim Rich AMT	P0172	Monitors fuel control system during normal operating range of FTI 110 < FTI < 145	Fuel Trim Index < 70	Baro > 72 kPa ECT > 60°C & < 115°C IAT > -25°C & < 115 °C MAP > 28 kPa RPM between 750 & 3600 VSS < 82 MPH Fuel level > 9.8 % None of the following DTC's set: 105, 107, 108, 112, 113, 117, 118, 122, 123, 125, 131, 132, 133, 134, 1133, 200, 300, 325, 336, 340, 341, 1441, 446, 502, 503, 601, 602	16 sec Continuous check Once every 280 seconds purge vapor test is executed	DTC Type B
Fuel Trim Rich SMT	P0172	Monitors fuel control system during normal operating range of FTI 110 < FTI < 145	Fuel Trim Index < 70	Baro > 72 kPa ECT > 60°C & < 115°C IAT > -25°C & < 115 °C MAP > 26 kPa RPM between 850 & 3410 VSS < 82 MPH Fuel level > 9.8 % None of the following DTC's set: 105, 107, 108, 112, 113, 117, 118, 122, 123, 125, 131, 132, 133, 134, 1133, 200, 300, 325, 336, 340, 341, 1441, 446, 502, 503, 601, 602	16 sec Continuous check Once every 280 seconds purge vapor test is executed	DTC Type B
Injector Circuit Problem	P0201 P0202 P0203 P0204	Monitors fuel injectors for proper electrical operation	Injector Current < 4 Amps	Engine running Battery Voltage > 9 V	7 sec Continuous check	DTC Type B
Random Misfire Cylinder 1 Misfire Cylinder 2 Misfire Cylinder 3 Misfire Cylinder 4 Misfire	P0300 P0301 P0302 P0303 P0304	Detects a change in crankshaft angular velocity	FTP Threshold - 1 % I/M Threshold - 1 % Catalyst Damage - see speed/load chart	Engine run time > 5 sec RPM Between 469 & 6406 -7°C < ECT < 123°C Fuel level > 10% Battery voltage > 9 V, < 17 V None of the following DTC's set: 105, 107, 112, 113, 117, 118, 122, 123, 125, 131, 132, 133, 134, 1133, 171, 172, 325, 336, 340, 341, 1336, 502, 503, 506, 507, 601, 1621, 740, 742	Emission Level One "early" exceedence or four normal exceedences Catalyst Damage Level Three exceedences in FTP region or one exceedence outside FTP region Continuous check	DTC Type B EMISSION DTC Type A CATALYST DAMAGING
Knock Sensor (KS) Output	P0325	Detects a disconnected or faulty knock sensor	Inst. Voltage - Avg. Voltage < .1562 V or Inst. Voltage - Avg. Voltage < -.2344 V	1800 < RPM < 2400 ECT > 56°C MAP > 60 kPa Engine run time > 20 sec 34 < Vacuum < 45 None of the following DTC's set: 122, 123	117/120 Cts Continuous check	DTC Type B
Crankshaft Sensor Position Resync	P0336	Detects an open crank sensor or too many resyncs	7x Resync Counter > 15 Counts	Engine Running No 340 or 341 DTC set	256 sec Continuous check	DTC Type B

SENSED PARAMETER	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA AND THRESHOLD VALUE(S)	SECONDARY PARAMETERS AND ENABLE CONDITIONS	TIME LENGTH AND FREQUENCY	MIL ILLUMINATION TYPE
Camshaft Sensor Missing	P0340	Checks for a missing camshaft sensor signal	No Change In Cam Activity > 30 Cycles	Engine Running	30 Cycles Cycle = 180°Crankshaft rotation Continuous check	DTC Type B
Camshaft Sensor Position Resync too often	P0341	Monitors for too many resyncs in the camshaft sensor signal	Cam Resync Counter > 15 Counts	Engine Running MAP > 30 kPa	256 seconds Continuous check	DTC Type B
Misfire Crank Angle Sensing Error	P1336	Detects invalid crankshaft angle correction factors	CCF Sum above or below 2 by 7 Counts (2 = 65536 counts)	None of the following DTC's set: 336, 340, 341	.5 sec Once per ignition cycle	DTC Type A
Catalyst Monitor AMT	P0420	Detects a catalytic converter with unacceptable amounts of oxygen storage capabilities	Oxygen Storage Capability (OSC) Time Difference $\geq$ 0.142 sec OSC Time Difference = OSC Worst Pass Thresh - OSC Compensation Factor * (O2S 2 Response Time - O2S 1 Response Time) OSC Worst Pass Thresh = 1.400 sec	Engine speed $\geq$ 1000 RPM for minimum of 35 sec since end of last idle period Predicted catalyst temp $\geq$ 501°C, < 627°C Baro $\geq$ 72.3 kPa IAT between -20.5°C & 80°C ECT between 70°C & 125°C Idle $\leq$ 45 sec MPH < 3 Test attempted this trip $\leq$ 12 -75 RPM $\leq$ (Engine Speed - Desired Speed) $\leq$ 150 RPM Engine run time > 520 sec Battery voltage > 9 V Flow < 8 g/sec <u>Rapid Step Response Enable Criteria</u> OSC Time Difference Step $\geq$ .460 sec OSC Time Difference Step $\geq$ 0.00 sec None of the following DTC's set: 105, 107, 108, 112, 113, 117, 118, 122, 123, 131, 132, 133, 134, 1133, 137, 138, 140, 141, 171, 172, 200, 300, 325, 336, 340, 341, 440, 1441, 442, 446, 452, 453, 480, 481, 502, 503, 506, 507, 601, 602, 1621	Maximum 1 test attempt per idle period Minimum of 1 test per trip Maximum of 6 tests per trip Maximum of 6 trips to detect failure when Rapid Step Response is enabled 15.6 Ms/Ct	DTC Type A

SENSED PARAMETER	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA AND THRESHOLD VALUE(S)	SECONDARY PARAMETERS AND ENABLE CONDITIONS	TIME LENGTH AND FREQUENCY	MIL ILLUMINATION TYPE
Catalyst Monitor SMT	P0420	Detects a catalytic converter with unacceptable amounts of oxygen storage capabilities	Oxygen Storage Capability (OSC) Time Difference ≥ 0.120 sec OSC Time Difference = OSC Worst Pass Thresh - OSC Compensation Factor * (O2S 2 Response Time - O2S 1 Response Time) OSC Worst Pass Thresh = 1.500 sec	Engine speed ≥ 1000 RPM for minimum of 45 sec since end of last idle period Predicted catalyst temp ≥ 501°C, < 627°C Baro ≥ 72.3 kPa IAT between -20.5°C & 80°C ECT between 70°C & 125°C Idle ≤ 45 sec MPH < 3 Test attempted this trip ≤ 12 -75 RPM ≤ (Engine Speed - Desired Speed) ≤ 150 RPM Engine run time > 520 sec Battery voltage > 9 V Flow < 8 g/sec Rapid Step Response Enable Criteria OSC Time Difference Step ≥ .390 sec OSC Time Difference Step ≥ 0.00 sec None of the following DTC's set: 105, 107, 108, 112, 113, 117, 118, 122, 123, 131, 132, 133, 134, 1133, 137, 138, 140, 141, 171, 172, 200, 300, 325, 336, 340, 341, 440, 1441, 442, 446, 452, 453, 480, 481, 502, 503, 506, 507, 601, 602, 1621	Maximum 1 test attempt per idle period Minimum of 1 test per trip Maximum of 6 tests per trip Maximum of 6 trips to detect failure when Rapid Step Response is enabled 15.6 Ms/Ct	DTC Type A
EVAP System Large Leak Detected	P0440	Checks for adequate vacuum being held in the fuel tank when applied	Vac > 1.0 V	Baro > 75 kPa SUC and SUM between 4°C & 30°C SUC - SUM < 8°C Fuel Level between 15% - 85% 7% < TPS < 35% MPH < 70 Purge Solenoid enabled None of the following DTC's set: 105, 107, 108, 112, 113, 117, 118, 122, 123, 125, 131, 132, 133, 134, 1133, 452, 453, 502, 503, 601, 602, 1621	400 sec Once per ignition cycle	DTC Type A
EVAP Purge Valve Leaking	P1441	Checks for a stuck open purge solenoid	Vac < 2.0 V	Baro > 75 kPa SUC and SUM between 4°C & 30°C SUC - SUM < 8°C Fuel Level between 15% - 85% 7% < TPS < 35% MPH < 70 Engine running None of the following DTC's set: 105, 107, 108, 112, 113, 117, 118, 122, 123, 125, 131, 132, 133, 134, 1133, 452, 453, 502, 503, 601, 602, 1621	75 sec Once per ignition cycle	DTC Type A

SENSED PARAMETER	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA AND THRESHOLD VALUE(S)	SECONDARY PARAMETERS AND ENABLE CONDITIONS	TIME LENGTH AND FREQUENCY	MIL ILLUMINATION TYPE
EVAP System Small Leak Detected	P0442	Checks for a small leak in the fuel vapor handling system	0.024 - 0.10 V Per Sec Decay Varies With Fuel Level	Baro > 75 kPa SUC and SUM between 4°C & 30°C SUC - SUM < 8°C Fuel Level between 15% - 85% 7% < TPS < 35% MPH < 70 Purge Solenoid enabled None of the following DTC's set: 105, 107, 108, 112, 113, , 117, 118, 122, 123, 125, 131, 132, 133, 134, 1133, 452, 453, 502, 503, 601, 602, 1621	15 sec Once per ignition cycle	DTC Type A
EVAP Canister Vent Blocked	P0446	Checks for excessively high vacuum in the vapor handling system	Vac < 0.7 V	Baro > 75 kPa SUC and SUM between 4°C & 30°C SUC - SUM < 8°C Fuel Level between 15% - 85% 7% < TPS < 35% MPH < 70 Purge Solenoid enabled None of the following DTC's set: 105, 107, 108, 112, 113, 117, 118, 122, 123, 125, 131, 132, 133, 134, 1133, 452, 453, 502, 503, 601, 602, 1621	100 sec Once per ignition cycle	DTC Type A
EVAP Tank Vacuum Sensor Low	P0452	Detects a continuous short to ground or a disconnected tank vacuum sensor	Tank vacuum transducer < .1 V	Engine running	25 sec Continuous check	DTC Type A
EVAP Tank Vacuum Sensor High	P0453	Detects a tank vacuum sensor that is shorted to voltage	Tank vacuum transducer > 4.9 V	Engine running	25 sec Continuous check	DTC Type A
Low Speed Fan Fault	P0480	Checks commanded fan state against output to fan relay	Battery voltage > 9.5 V		50/100 Cts Continuous check	DTC Type A
High Speed Fan Fault	P0481	Checks commanded fan state against output to fan relay	Battery voltage > 9.5 V		50/100 Cts Continuous check	DTC Type A
Vehicle Speed Sensor Loss SMT	P0502	Detects a missing VSS signal	VSS < 2 MPH	RPM between 1700 & 3600 TPS < 1% Vacuum between 70 kPa & 80 kPa	5 sec Continuous check	DTC Type B
Idle Speed Low	P0506	Detects an idle speed which is less than a delta from desired	IAC > 145 Steps	Engine run time > 20 sec Baro > 72 kPa ECT > 40°C Idle Speed > 100 RPM below desired Idle stabilized for 5 sec Battery voltage > 11.6 V, < 17.1 V None of the following DTC's set: 105, 107, 108, 112, 113, 117, 118, 122, 123, 125, 128, 130, 131, 132, 133, 134, 1133, 171, 172, 200, 300, 336, 440, 1441, 442, 446, 452, 453, 480, 502, 503	18.8 sec Continuous check	DTC Type B

SENSED PARAMETER	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA AND THRESHOLD VALUE(S)	SECONDARY PARAMETERS AND ENABLE CONDITIONS	TIME LENGTH AND FREQUENCY	MIL ILLUMINATION TYPE
Idle Speed High	P0507	Detects an idle speed which is greater than a delta from desired	IAC < 2 Steps	Engine run time > 20 sec Baro > 72 kPa ECT > 40°C Idle Speed > 60 RPM above desired Idle stabilized for 5 sec Battery voltage > 11.6 V, < 17.1 V None of the following DTC's set: 105, 107, 108, 112, 113, 117, 118, 122, 123, 125, 128, 130, 131, 132, 133, 134, 1133, 171, 172, 200, 300, 336, 440, 1441, 442, 446, 452, 453, 480, 502, 503	12.5 sec Continuous check	DTC Type B
PCM Has EE PROM Flash Error	P0601	Checks for an incorrect checksum or Program ID failure	Checksum Detection Incorrect > 3 Times		Continuous check	DTC Type A
EE PROM Not Programmed	P0602	Checks for a PCM that is not programmed	Unprogrammed EE PROM		Immediately Once per key cycle	DTC Type A
EE PROM General Fault	P1621	Checks for a write error	Incorrect Checksum		Immediately on next key up if flagged on previous key down Once at key down	DTC Type A