

From 2002 Factory Service Manual:

[PDF Version](#)**POWERTRAIN CONTROL MODULE (Continued)****DIAGNOSTIC TROUBLE CODE**

Remember that DTC's are the results of a system or circuit failure, but do not directly identify the failed component or components.

DESCRIPTION

A Diagnostic Trouble Code (DTC) indicates the PCM or TCM has recognized an abnormal condition in the system.

NOTE: For a list of DTC's, refer to the charts in this section.

(M) Malfunction Indicator Lamp (MIL) will illuminate during engine operation if this Diagnostic Trouble Code was recorded.		
(G) Generator Lamp Illuminated		
GENERIC SCAN TOOL CODE	DRB SCAN TOOL DISPLAY	DESCRIPTION OF DIAGNOSTIC TROUBLE CODE
P0016	Crankshaft/Camshaft Timing Misalignment	A rationality error has been detected for camshaft position out of phase with crankshaft
P0030	O2 sensor 1/1 Heater Circuit	Shorted condition detected in the oxygen sensor heater element control feedback sense circuit.
P0031	O2 sensor 1/1 Heater Circuit	Shorted condition detected in the oxygen sensor heater element control feedback sense circuit.
P0036	O2 sensor 1/2 Heater Circuit	Shorted condition detected in the oxygen sensor heater element control feedback sense circuit.
P0037	O2 sensor 1/2 Heater Circuit	Shorted condition detected in the oxygen sensor heater element control feedback sense circuit.
P0038	O2 sensor 1/2 Heater Circuit	Shorted condition detected in the oxygen sensor heater element control feedback sense circuit.
P0043	O2 sensor 1/3 Heater Circuit	Shorted condition detected in the oxygen sensor heater element control feedback sense circuit.
P0044	O2 sensor 1/3 Heater Circuit	Shorted condition detected in the oxygen sensor heater element control feedback sense circuit.
P0050	O2 sensor 2/1 Heater Circuit	Shorted condition detected in the oxygen sensor heater element control feedback sense circuit.
P0051	O2 sensor 2/1 Heater Circuit	Shorted condition detected in the oxygen sensor heater element control feedback sense circuit.
P0052	O2 sensor 2/1 Heater Circuit	Shorted condition detected in the oxygen sensor heater element control feedback sense circuit.
P0056	O2 sensor 2/1 Heater Circuit	Shorted condition detected in the oxygen sensor heater element control feedback sense circuit.
P0057	O2 sensor 2/2 Heater Circuit	Shorted condition detected in the oxygen sensor heater element control feedback sense circuit.
P0058	O2 sensor 2/2 Heater Circuit	Shorted condition detected in the oxygen sensor heater element control feedback sense circuit.
P0068	Manifold Pressure/Throttle Position Correlation	MAP sensor signal does not correlate to throttle position sensor signal. Possible vacuum leak.
P0070	Ambient Temp Sensor Stuck	A rationality error has been detected in the ambient temp. sensor test.
P0071 (M)	Ambient Temp Sensor Performance	Ambient change less than 3° C in 200 Miles
P0072	Ambient Temp Sensor Low	Ambient temp. sensor input below the minimum acceptable voltage

POWERTRAIN CONTROL MODULE (Continued)

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GENERIC SCAN TOOL CODE	DRB SCAN TOOL DISPLAY	DESCRIPTION OF DIAGNOSTIC TROUBLE CODE
P0073	Ambient Temp Sensor High	Ambient temp. sensor input above the maximum acceptable voltage
P0106 (M)	Barometric Pressure Out of Range	MAP sensor input voltage out of an acceptable range detected during reading of barometric pressure at key-on.
P0107 (M)	Map Sensor Voltage Too Low	MAP sensor input below minimum acceptable voltage.
P0108 (M)	Map Sensor Voltage Too High	MAP sensor input above maximum acceptable voltage.
P0110	Intake Air Temp Sensor Stuck	A rationality error has been detected for the intake air temp. sensor.
P0111 (M)	Intake Air Temp Sensor Performance	Intake Air change less than 3° C in 200 Miles
P0112 (M)	Intake Air Temp Sensor Voltage Low	Intake air (charge) temperature sensor input below the minimum acceptable voltage.
P0113 (M)	Intake Air Temp Sensor Voltage High	Intake air (charge) temperature sensor input above the maximum acceptable voltage.
P0116	Engine Coolant Temp Performance	A rationality error has been detected in the coolant temp sensor.
P0117 (M)	ECT Sensor Voltage Too Low	Engine coolant temperature sensor input below the minimum acceptable voltage.
P0118 (M)	ECT Sensor Voltage Too High	Engine coolant temperature sensor input above the maximum acceptable voltage.
P0120 (M)	Throttle Position Sensor Signal Circuit	Throttle angle out of range or abrupt angle change
P0121 (M)	TPS Voltage Does Not Agree With MAP	TPS signal does not correlate to MAP sensor signal.
P0122 (M)	Throttle Position Sensor Voltage Low	Throttle position sensor input below the acceptable voltage range.
P0123 (M)	Throttle Position Sensor Voltage High	Throttle position sensor input above the maximum acceptable voltage.
P0125 (M)	Engine Coolant Temp Not Reached	Time to enter Closed Loop Operation (Fuel Control) is excessive.
P0128	Thermostat Rationality	A rationality error has been detected for the thermostat
P0129	Barometric Pressure Out-of-Range low	MAP sensor input voltage out of an acceptable range detected during reading of barometric pressure.
P0130	1/1 O2 Sensor Heater Relay Circuit	An open or shorted condition detected in the ASD or CNG shutoff relay control ckt.
P0131 (M)	1/1 O2 Sensor Shorted To Ground	Oxygen sensor input voltage maintained below normal operating range.
P0132 (M)	1/1 O2 Sensor Shorted To Voltage	Oxygen sensor input voltage maintained above normal operating range.
P0133 (M)	1/1 O2 Sensor Slow Response	Oxygen sensor response slower than minimum required switching frequency.
P0134 (M)	1/1 O2 Sensor Stays at Center	Neither rich or lean condition is detected from the oxygen sensor input.

POWERTRAIN CONTROL MODULE (Continued)

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(G) Generator Lamp Illuminated		
GENERIC SCAN TOOL CODE	DRB SCAN TOOL DISPLAY	DESCRIPTION OF DIAGNOSTIC TROUBLE CODE
P0172 (M)	1/1 Fuel System Rich	A rich air/fuel mixture has been indicated by an abnormally lean correction factor.
P0174 (M)	2/1 Fuel System Lean	A lean air/fuel mixture has been indicated by an abnormally rich correction factor.
P0175 (M)	2/1 Fuel System Rich	A rich air/fuel mixture has been indicated by an abnormally lean correction factor.
P0176	Flex Fuel Calibration Signal	No calibration voltage present from flex fuel sensor.
P0178	Flex Fuel Sensor Volts Too Low	Flex fuel sensor input below minimum acceptable voltage.
P0179	Flex Fuel Sensor Volts Too High	Flex fuel sensor input above maximum acceptable voltage.
P0201 (M)	Injector #1 Control Circuit	An open or shorted condition detected in control circuit for injector #1 or the INJ 1 injector bank.
P0202 (M)	Injector #2 Control Circuit	An open or shorted condition detected in control circuit for injector #2 or the INJ 2 injector bank.
P0203 (M)	Injector #3 Control Circuit	An open or shorted condition detected in control circuit for injector #3 or the INJ 3 injector bank.
P0204 (M)	Injector #4 Control Circuit	Injector #4 or INJ 4 injector bank output driver stage does not respond properly to the control signal.
P0205 (M)	Injector #5 Control Circuit	Injector #5 output driver stage does not respond properly to the control signal.
P0206 (M)	Injector #6 Control Circuit	Injector #6 output driver stage does not respond properly to the control signal.
P0207	Injector #7 Control Circuit	Injector #7 output driver stage does not respond properly to the control signal.
P0208	Injector #8 Control Circuit	Injector #8 output driver stage does not respond properly to the control signal.
P0209	Injector #9 Control Circuit	Injector #9 output driver stage does not respond properly to the control signal.
P0210	Injector #10 Control Circuit	Injector #10 output driver stage does not respond properly to the control signal.
P0218	High Temperature Operation Activated	When overheat shift schedule is activated 116° C (240 F)
P0234	Boost Limit Exceeded	
P0243	Wastegate Solenoid Circuit	
P0300 (M)	Multiple Cylinder Mis-fire	Misfire detected in multiple cylinders.
P0301 (M)	CYLINDER #1 MISFIRE	Misfire detected in cylinder #1.
P0302 (M)	CYLINDER #2 MISFIRE	Misfire detected in cylinder #2.
P0303 (M)	CYLINDER #3 MISFIRE	Misfire detected in cylinder #3.
P0304 (M)	CYLINDER #4 MISFIRE	Misfire detected in cylinder #4.
P0305 (M)	CYLINDER #5 MISFIRE	Misfire detected in cylinder #5.
P0306 (M)	CYLINDER #6 MISFIRE	Misfire detected in cylinder #6.

POWERTRAIN CONTROL MODULE (Continued)

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(G) Generator Lamp Illuminated		
GENERIC SCAN TOOL CODE	DRB SCAN TOOL DISPLAY	DESCRIPTION OF DIAGNOSTIC TROUBLE CODE
P0403 (M)	EGR Solenoid Circuit	An open or shorted condition detected in the EGR solenoid control circuit.
P0404 (M)	EGR Position Sensor Rationality	EGR position sensor signal does not correlate to EGR duty cycle.
P0405 (M)	EGR Position Sensor Volts Too Low	EGR position sensor input below the acceptable voltage range.
P0406 (M)	EGR Position Sensor Volts Too High	EGR position sensor input above the acceptable voltage range.
P0412	Secondary Air Solenoid Circuit	An open or shorted condition detected in the secondary air (air switching/aspirator) solenoid control circuit.
P0420 (M)	1/1 Catalytic Converter Efficiency	Catalyst 1/1 efficiency below required level.
P0432 (M)	1/2 Catalytic Converter Efficiency	Catalyst 2/1 efficiency below required level.
P0440	General EVAP System Failure	General system failure.
P0441 (M)	Evap Purge Flow Monitor	Insufficient or excessive vapor flow detected during evaporative emission system operation.
P0442 (M)	Evap Leak Monitor 0.040 Leak Detected	A 0.040 leak has been detected in the evaporative system.
P0443 (M)	Evap Purge Solenoid Circuit	An open or shorted condition detected in the EVAP purge solenoid control circuit.
P0452	NVLD Pressure Switch Stuck Closed	NVLD pressure switch stuck closed.
P0453	NVLD Pressure Switch Stuck Open	NVLD pressure switch stuck open.
P0455 (M)	Evap Leak Monitor Large Leak Detected	A large leak has been detected in the evaporative system.
P0456 (M)	Evap Leak Monitor 0.020 Leak Detected	A 0.020 leak has been detected in the evaporative system.
P0460	Fuel Level Unit No Change Over Miles	No movement of fuel level sender detected.
P0461	Fuel Level Unit No Changeover Time	No level of fuel level sender detected.
P0462	Fuel Level Sending Unit Volts Too Low	Fuel level sensor input below acceptable voltage.
P0463	Fuel Level Sending Unit Volts Too High	Fuel level sensor input above acceptable voltage.
P0480	Low Speed Fan Relay Control Circuit	An open or shorted condition detected in the low speed rad. fan relay control circuit.
P0481	High Speed Fan Relay Control Circuit	An open or shorted condition detected in the high speed rad. fan relay control circuit.
P0498	NVLD Canister Vent Valve Solenoid Circuit Low	A shorted low condition detected in NVLD solenoid circuit.
P0499	NVLD Canister Vent Valve Solenoid Circuit High	A shorted high condition detected in NVLD solenoid circuit.
P0500 (M)	No Vehicle Speed Sensor Signal	No vehicle speed sensor signal detected during road load conditions.

POWERTRAIN CONTROL MODULE (Continued)

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(G) Generator Lamp Illuminated		
GENERIC SCAN TOOL CODE	DRB SCAN TOOL DISPLAY	DESCRIPTION OF DIAGNOSTIC TROUBLE CODE
P0600 (M)	PCM Failure SPI Communications	No communication detected between co-processors in the control module.
P0601 (M)	Internal Controller Failure	Internal control module fault condition (check sum) detected.
P0604 (M)	Internal TCM	Transmission control module RAM self test fault detected.
P0605 (M)	Internal TCM	Transmission control module ROM self test fault detected.
P0613 (M)	Internal TCM	Transmission control module ROM self test fault detected.
P0615	Starter Relay Circuit	Open or shorted condition detected in the starter relay control circuit.
P0622 (G)	Generator Field Not Switching Properly	An open or shorted condition detected in the generator field control circuit.
P0627	Fuel Pump Relay Circuit	An open or shorted condition detected in the fuel pump relay control circuit.
P0630	VIN Not Programmed In PCM	VIN is not programmed in the control module EEPROM.
P0632	Odometer Not Programmed In PCM	Odometer is not programmed in the control module EEPROM.
P0633	SKIM Key Not Programmed In PCM	SKIM secret key is not programmed in the control module EEPROM.
P0645	A/C Clutch Relay Circuit	An open or shorted condition detected in the A/C clutch relay control circuit.
P0660	Manifold Tune Valve Solenoid Circuit	An open or shorted condition detected in the manifold tuning valve solenoid control circuit.
P0685	ASD Relay Control Circuit	An open or shorted condition detected in the ASD relay control circuit.
P0688	ASD Relay Sense Circuit Low	ASD voltage sensed when ASD relay is energized or ASD voltage not sensed when ASD relay is not energized.
P0700 (M)	Check Transmission DTC's	This SBEC III or JTEC DTC indicates that the EATX has an active fault and has requested illuminated the MIL via a BUS message. The specific fault must be acquired from the EATX.
P0703 (M)	Brake Switch Stuck Pressed or Released	Incorrect input state detected in the brake switch circuit. (Changed from P1595).
P0706	Check Shifter Signal	3 occurrences in one key start of an invalid PRNDL code which lasts for more than 0.1 second.
P0711	Trans Temp Sensor, No Temp Rise After Start	Relationship between the transmission temperature and overdrive operation and/or TCC operation indicates a failure of the Transmission Temperature Sensor. OBD II Rationality.
P0712	Trans Temp Sensor Voltage Too Low	Transmission fluid temperature sensor input below acceptable voltage.
P0713	Trans Temp Sensor Voltage Too High	Transmission fluid temperature sensor input above acceptable voltage.
P0715 (M)	Input Speed Sensor Error	Excessive input RPM change in any gear detected.

POWERTRAIN CONTROL MODULE (Continued)

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(G) Generator Lamp Illuminated		
GENERIC SCAN TOOL CODE	DRB SCAN TOOL DISPLAY	DESCRIPTION OF DIAGNOSTIC TROUBLE CODE
P0841 (M)	LR Pressure Switch Sense Circuit	LR pressure switch open or closed at wrong time in given gear.
P0845 (M)	2/4 Hydraulic Pressure Test Failure	Two failures of OFF element pressure switch status check.
P0846 (M)	2/4 Pressure Switch Circuit	2/4 pressure switch open or closed at wrong time in given gear.
P0850	Park/Neutral Switch Performance	A rationality error has been detected for park/neutral switch performance.
P0870 (M)	OD Hydraulic Pressure Test Failure	Two failures of OFF element pressure switch status check.
P0871 (M)	OD Pressure Switch Sense Circuit	OD pressure switch open or closed at wrong time in given gear.
P0884	Power Up at Speed	TCM powers up and senses a valid forward gear PRNDL DTC, and the output RPM is > 800.
P0888 (M)	Relay Output Always Off	Less than 3 volts present at relay output circuit when the controller is energizing the relay.
P0890 (M)	Switch Battery	Voltage sensed on pressure switch input prior to TCM energizing control relay
P0891 (M)	Transmission Relay Always On	Welded contacts. Greater than 3 volts sensed at relay output terminal prior to controller energizing the relay.
P0897	Worn Out/Burnt Transaxle Fluid	When vehicle shudder is detected during partial engagement (PEMCC).
P0992	2-4/OD Hydraulic Pressure Test Failure	Two failures of OFF element pressure switch status check.
P0944	Loss of Prime	Transmission slip and improper pressure switch status detected.
P0951	Autostick Sensor Circuit	Upshift or downshift switch closed with shifter NOT in Autostick mode or both switches closed with shifter in Autostick mode.
P1105	Baro Read Solenoid Circuit	Open or shorted condition detected in the baro read solenoid control circuit.
P1115	General Temperature Rationality	General temperature sensor rationality error.
P1192 (M)	Inlet Air Temp. Circuit Low	Inlet Air Temp. sensor input below acceptable voltage
P1193 (M)	Inlet Air Temp. Circuit High	Inlet Air Temp. sensor input above acceptable voltage.
P1194	PWM O2 Heater Performance	Incorrect or irrational performance has been detected for the PWM O2 heater circuit.
P1195 (M)	1/1 O2 Sensor Slow During Catalyst Monitor	A slow switching oxygen sensor has been detected in bank 1/1 during catalyst monitor test. (was P0133)
P1196 (M)	2/1 O2 Sensor Slow During Catalyst Monitor	A slow switching oxygen sensor has been detected in bank 2/1 during catalyst monitor test. (was P0153)
P1197	1/2 O2 Sensor Slow During Catalyst Monitor	A slow switching oxygen sensor has been detected in bank 1/2 during catalyst monitor test. (was P0139)

POWERTRAIN CONTROL MODULE (Continued)

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(G) Generator Lamp Illuminated		
GENERIC SCAN TOOL CODE	DRB SCAN TOOL DISPLAY	DESCRIPTION OF DIAGNOSTIC TROUBLE CODE
P1399	Wait To Start Lamp Circuit	An open or shorted condition detected in the Wait to Start Lamp circuit.
P1403	No 5 Volts to EGR Sensor	Loss of 5v feed to the EGR position sensor.
P1476	Too Little Secondary Air	Insufficient flow of secondary air injection detected during aspirator test.(was P0411)
P1477	Too Much Secondary Air	Excessive flow of secondary air injection detected during aspirator test (was P0411).
P1478 (M)	Battery Temp Sensor Volts Out of Limit	Internal temperature sensor input voltage out of an acceptable range.
P1479	Transmission Fan Relay Circuit	An open or shorted condition detected in the transmission fan relay circuit.
P1480	PCV Solenoid Circuit	An open or shorted condition detected in the PCV solenoid circuit.
P1481	EATX RPM Pulse Performance	ETAX RPM pulse generator signal for misfire detection does not correlate with expected value.
P1482	Catalyst Temperature Sensor Circuit Shorted Low	Catalyst temperature sensor circuit shorted low.
P1483	Catalyst Temperature Sensor Circuit Shorted High.	Catalyst temperature sensor circuit shorted high.
P1484	Catalytic Converter Overheat Detected	A catalyst overheat condition has been detected by the catalyst temperature sensor.
P1485	Air Injection Solenoid Circuit	An open or shorted condition detected in the air assist solenoid circuit.
P1486 (M)	Evap Leak Monitor Pinched Hose Found	LDP has detected a pinched hose in the evaporative hose system.
P1487	Hi Speed Rad Fan CTRL Relay Circuit	An open or shorted condition detected in the control circuit of the #2 high speed radiator fan control relay.
P1488	Auxiliary 5 Volt Supply Output Too Low	Auxiliary 5 volt sensor feed is sensed to be below an acceptable limit.
P1489 (M)	High Speed Fan CTRL Relay Circuit	An open or shorted condition detected in the control circuit of the high speed radiator fan control relay.
P1490 (M)	Low Speed Fan CTRL Relay Circuit	An open or shorted condition detected in control circuit of the low speed radiator fan control relay.
P1491	Rad Fan Control Relay Circuit	An open or shorted condition detected in the radiator fan control relay control circuit. This includes PWM solid state relays.
P1492 (M,G)	Ambient/Batt Temp Sen Volts Too High	External temperature sensor input above acceptable voltage.
P1493 (M,G)	Ambient/Batt Temp Sen Volts Too Low	External temperature sensor input below acceptable voltage.
P1494 (M)	Leak Detection Pump Sw or Mechanical Fault	Incorrect input state detected for the Leak Detection Pump (LDP) pressure switch.

POWERTRAIN CONTROL MODULE (Continued)

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(G) Generator Lamp Illuminated		
GENERIC SCAN TOOL CODE	DRB SCAN TOOL DISPLAY	DESCRIPTION OF DIAGNOSTIC TROUBLE CODE
P1687	No Communication with the MIC	No BUS messages received from the Mechanical Instrument Cluster (MIC) for approximately 25 seconds.
P1693	DTC Detected in Companion Module	A fault has been generated in the companion engine control module.
P1694	BUS Communication with Engine Module	No BUS messages received from the powertrain control module for 10 seconds.
P1695	No CCD/J1850 Message From Body Control Module	No CCD/J1850 messages received from the body control module.
P1696 (M)	PCM Failure EEPROM Write Denied	Unsuccessful attempt to write to an EEPROM location by the control module.
P1697 (M)	PCM Failure SRI Mile Not Stored	Unsuccessful attempt to update Service Reminder Indicator (SRI or EMR) mileage in the control module EEPROM.
P1698 (M)	No CCD/J1850 Message From TCM	No CCD/J1850 messages received from the electronic transmission control module (EATX) or the Aisin transmission controller.
P1719	Skip Shift Solenoid Circuit	An open or shorted condition detected in the transmission 2-3 gear lock-out solenoid control circuit.
P1740	TCC or O/D Solenoid Performance	Rationality error detected in either the torque converter clutch or solenoid or overdrive solenoid system.
P1756	GOV Press Not Equal to Target @ 15-20 PSI	The requested pressure and the actual pressure are not within a tolerance band for the Governor Control System which is used to regulate governor pressure to control shifts for 1st, 2nd, and 3rd gear. (Mid Pressure Malfunction)
P1757	GOV Press Not Equal to Target @ 15-20 PSI	The requested pressure and the actual pressure are not within a tolerance band for the Governor Control System which is used to regulate governor pressure to control shifts for 1st, 2nd, and 3rd gear. (Zero Pressure Malfunction)
P1762	Gov Press Sen Offset Volts Too Low or High	The Governor Pressure Sensor input is greater than a calibration limit or is less than a calibration limit for 3 consecutive park/neutral calibrations.
P1763	Governor Pressure Sensor Volts Too Hi	The Governor Pressure Sensor input is above an acceptable voltage level.
P1764	Governor Pressure Sensor Volts Too Low	The Governor Pressure Sensor input is below an acceptable voltage level.
P1765	Trans 12 Volt Supply Relay CTRL Circuit	An open or shorted condition is detected in the Transmission Relay control circuit. This relay supplies power to the TCC
P1775 (M)	Solenoid Switch Valve Latched in the TCC position	Three unsuccessful attempts are made to shift into 1st gear in one given ignition start.