

<b>Fault Code</b>	<b>Refer to Footnote</b>	<b>Circuit Index</b>	<b>Condition Description</b>
P0107	a, b	BARO	Barometric pressure sensor circuit low input
P0108	a, b	BARO	Barometric pressure sensor circuit high input
P0112	b	IAT	Intake air temp. sensor circuit low input
P0113	b	IAT	Intake air temp. sensor circuit high input
P0122	a, b	AP	Accelerator pedal sensor circuit low input
P0123	a, b	AP	Accelerator pedal sensor circuit high input
P0197	a, b	EOT	Engine oil temp. sensor circuit low input
P0198	a, b	EOT	Engine oil temp. sensor circuit high input
P0220	b	IVS	Throttle switch B circuit malfunction
P0221	a, b	AP/IVS	Throttle switch B circuit performance
P0230	—	FP	Fuel pump relay driver failure
P0231	b	FP	Fuel pump circuit failure
P0232	—	FP	Fuel pump circuit failure
P0236	b	MAP	Turbo boost sensor A circuit performance
P0237	a, b	MAP	Turbo boost sensor A circuit low input
P0238	a, b	MAP	Turbo boost sensor A circuit low high
P0261	a, b	INJ	Injector circuit low — Cylinder 1
P0262	—	INJ	Injector circuit high — Cylinder 1
P0263	—	PCED	Cylinder 1 contribution/balance fault
P0264	a, b	INJ	Injector circuit low — Cylinder 2
P0265	—	INJ	Injector circuit high — Cylinder 2
P0266	—	PCED	Cylinder 2 contribution/balance fault
P0267	a, b	INJ	Injector circuit low — Cylinder 3
P0268	—	INJ	Injector circuit high — Cylinder 3
P0269	—	PCED	Cylinder 3 contribution/balance fault
P0270	a, b	INJ	Injector circuit low — Cylinder 4
P0271	—	INJ	Injector circuit high — Cylinder 4
P0272	—	PCED	Cylinder 4 contribution/balance fault
P0273	a, b	INJ	Injector circuit low — Cylinder 5
P0274	—	INJ	Injector circuit high — Cylinder 5

P0275	—	PCED	Cylinder 5 contribution/balance fault
P0276	a, b	INJ	Injector circuit low — Cylinder 6
P0277	—	INJ	Injector circuit high — Cylinder 6
P0278	—	PCED	Cylinder 6 contribution/balance fault
P0279	a, b	INJ	Injector circuit low — Cylinder 7
P0280	—	INJ	Injector circuit high — Cylinder 7
P0281	—	PCED	Cylinder 7 contribution/balance fault
P0282	a, b	INJ	Injector circuit low — Cylinder 8
P0283	—	INJ	Injector circuit high — Cylinder 8
P0284	—	PCED	Cylinder 8 contribution/balance fault
P0301	b	INJ	Fault cylinder 1 — Misfire detected
P0302	b	INJ	Fault cylinder 2 — Misfire detected
P0303	b	INJ	Fault cylinder 3 — Misfire detected
P0304	b	INJ	Fault cylinder 4 — Misfire detected
P0305	b	INJ	Fault cylinder 5 — Misfire detected
P0306	b	INJ	Fault cylinder 6 — Misfire detected
P0307	b	INJ	Fault cylinder 7 — Misfire detected
P0308	b	INJ	Fault cylinder 8 — Misfire detected
P0340	—	CMP	Camshaft position sensor ckt. malfunction
P0341	—	CMP	Camshaft position sensor ckt. performance
P0344	a, b	CMP	Camshaft position sensor ckt. intermittent
P0380	b	GP	Glow plug circuit malfunction
P0381	b	GP	Glow plug indicator circuit malfunction
P0460	—	FLI	Fuel level sensor circuit malfunction
P0470	—	EBP	Exhaust back pressure sensor circuit malfunction
P0471	b	EBP	Exhaust back pressure sensor circuit performance
P0472	b	EBP	Exhaust back pressure sensor circuit low input
P0473	b	EBP	Exhaust back pressure sensor circuit high input
P0475	b	EPR	Exhaust pressure control valve malfunction
P0476	—	EPR	Exhaust pressure control valve performance
P0478	b	EPR	Exhaust pressure control valve high input
P0500	b	VSS	Vehicle speed sensor malfunction
P0503	—	VSS	Vehicle speed sensor noisy
P0541	—	MIAH	Manifold intake air heater...

P0542	—	MIAH	Manifold intake air heater...
P0560	—	PCED	System voltage malfunction
P0562	b	PCED	System voltage low
P0563	—	PCED	System voltage high
P0565	—	PCED	Cruise "On" signal malfunction
P0566	—	PCED	Cruise "Off" signal malfunction
P0567	—	PCED	Cruise "Resume" signal malfunction
P0568	—	PCED	Cruise "Set" signal malfunction
P0569	—	PCED	Cruise "Coast" signal malfunction
P0571	—	BPA	Brake switch A circuit malfunction
P0603	—	PCED	Internal control module KAM error
P0605	—	PCED	Internal control module ROM error
P0606	—	PCED	PCM processor fault
P0640	—	MIAH	Manifold intake air heater...
P0703	—	BOO	Brake switch B circuit malfunction
P0704	—	CPP	Clutch switch input circuit malfunction
P0705	b	TR	TR sensor circuit malfunction
P0707	—	TR	TR sensor circuit low input
P0708	b	TR	TR sensor circuit high input
P0712	c	TFT	Trans. fluid temp. sensor ckt. low input
P0713	c	TFT	Trans. fluid temp. sensor ckt. high input
P0715	b, c	TSS	TSS sensor circuit malfunction
P0717	c	TSS	TSS intermittent failure
P0718	—	TSS	Noisy TSS
P0720	b, c	OSS	OSS sensor circuit malfunction
P0721	—	OSS	Noisy OSS
P0722	c	OSS	OSS intermittent failure
P0741	—	TCC	Torque converter clutch ckt. performance
P0743	b, c	TCC	Torque converter clutch system electrical
P0750	b	SS1	Shift solenoid A malfunction

P0755	b, c	SS2	Shift solenoid B malfunction
P0781	c	—	1-2 Shift malfunction
P0782	c	—	2-3 Shift malfunction
P0783	c	—	3-4 Shift malfunction
P1000	—	N/A	OBDII monitor status
P1105	—	ALT	Dual alternator upper fault (monitor)
P1106	—	ALT	Dual alternator lower fault (monitor)
P1107	b	ALT	Dual alternator lower circuit malf. (control)
P1108	—	ALT	Dual alternator BATT lamp ckt. malf.
P1118	b	MAT	Manifold air temp sensor out of range low
P1119	b	MAT	Manifold air temp sensor out of range high
P1139	—	WIFIL	Water in fuel lamp circuit malfunction
P1140	—	WIF	Water in fuel condition
P1184	—	TEST	Engine oil temp out of self test range
P1209	b	IPR	ICP system fault
P1210	b	ICP	ICP above expected level
P1211	a, b	IPR	ICP pressure above/below desired
P1212	a, b	ICP	ICP voltage not at expected level
P1218	—	PCM/IDM	CID stuck high
P1219	—	PCM/IDM	CID stuck low
P1247	b	MAP	Turbo boost pressure low
P1248	b	MAP	Turbo boost pressure not detected
P1249	b	WG	Waste gate steady state failure
P1261- P1268	—	INJ	High to low side short cyl. # 1-8
P1271- P1278	—	INJ	High to low side open cyl. # 1-8
P1280	a, b	ICP	ICP circuit out of range low
P1281	a, b	ICP	ICP circuit out of range high
P1282	a, b	IPR	Excessive ICP pressure
P1283	—	IPR	IPR circuit failure
P1284	—	N/A	ICP failure — aborts KOER CCT test

P1291	—	INJ	High side # 1 (right) short to grd. or B+
P1292	—	INJ	High side # 2 (left) short to grd. or B+
P1293	—	INJ	High side open bank No. 1 (right)
P1294	—	INJ	High side open bank No. 2 (left)
P1295	a, b	INJ	Multiple faults on bank No. 1 (right)
P1296	a, b	INJ	Multiple faults on bank No. 2 (left)
P1297	—	INJ	High sides shorted together
P1298	—	PCED	IDM failure
P1316	b	IDM	Injector circuit/IDM codes detected
P1391	b	GP	Glow plug circuit low input, bank #1 (right)
P1393	b	GP	Glow plug circuit low input, bank #2 (left)
P1395	b	GP	Glow plug monitor fault, bank #1
P1396	b	GP	Glow plug monitor fault, bank #2
P1397	—	VPWR	System voltage out of self test range
P1464	—	N/A	A/C on during KOER CCT test
P1501	—	N/A	Vehicle moved during testing
P1502	—	TEST	Invalid test — APCM functioning
P1531	—	N/A	Invalid test — accelerator pedal movement
P1536	—	PBA	Parking brake applied fail
P1660	—	PCED	OCC signal high
P1661	—	PCED	OCC signal low
P1662	—	PCED	IDM EN circuit failure
P1663	—	PCM/IDM	FDCS circuit failure
P1667	—	PCM/IDM	CID circuit failure
P1668	—	PCM/IDM	PCM/IDM diag. communication error
P1690	b	WG	Waste gate failure
P1702	c	TRS	TRS sensor intermittent circuit malfunction
P1704	—	TRS	Digital TRS failed to transition state
P1705	—	TR	TR sensor out of self-test range
P1711	—	TFT	TFT sensor out of self-test range
P1713	c	TFT	TFT stuck in range low — below 50°F
P1714	b	SS1	Shift solenoid 1 inductive
P1715	b	SS2	Shift solenoid 2 inductive
P1718	c	TFT	TFT stuck in range high — above 250°F
P1729	c	4x4L	4x4L low switch error
P1744	b	TCC	Converter not functioning
P1746	c	EPC	EPC solenoid open circuit
P1747	c	EPC	EPC solenoid short circuit

P1754	—	CCS	Coast clutch solenoid ckt. malfunction
P1760	c	EPC	EPC solenoid short intermittent
P1780	—	TCS	TCS circuit out of self-test range
P1781	—	4x4L	4x4L circuit out of self-test range
P1783	c	TFT	Transmission overtemperature condition

a MIL (FMEM) illuminates after first fault (Federal calibration only).

b MIL (OBDII) illuminates after second consecutive fault.

c Transmission control indicator (TCIL) flashes when fault is present.

PCED=Powertrain Control/Emissions Diagnosis Manual.

<b>Probable Causes</b>
Open/grounded circuit, PCM
Circuit shorted to 5v, biased sensor, PCM
Grounded circuit, biased sensor, PCM
Open circuit, biased sensor, PCM, short to 5v
Grounded circuit, biased sensor, PCM
Open circuit, biased sensor, PCM, short to 5v
Grounded circuit, biased sensor, PCM
Open circuit, biased sensor, PCM short to 5v
Short/open circuit, switch failure, operator, PCM
Failed pedal assembly
Open FP relay, blown fuse, open/grounded circuit
Fuse, relay, inertia switch, fuel pump, open/short circuit
Relay failure, short circuit, pump failure
Restricted inlet/exhaust/supply hose, missing hose
Circuit open, short to ground, MAP sensor
Circuit short to power, MAP sensor
Harness short to ground
Miswired connector or harness
Power cylinder, valve train or injector problem, circuit
Harness short to ground
Miswired connector or harness
Power cylinder, valve train or injector problem, circuit
Harness short to ground
Miswired connector or harness
Power cylinder, valve train or injector problem, circuit
Harness short to ground
Miswired connector or harness
Power cylinder, valve train or injector problem, circuit
Harness short to ground
Miswired connector or harness

Power cylinder, valve train or injector problem, circuit
Harness short to ground
Miswired connector or harness
Power cylinder, valve train or injector problem, circuit
Harness short to ground
Miswired connector or harness
Power cylinder, valve train or injector problem, circuit
Harness short to ground
Miswired connector or harness
Power cylinder, valve train or injector problem, circuit
Mechanical engine failure
Mechanical engine failure
Mechanical engine failure
Mechanical engine failure
Mechanical engine failure
Mechanical engine failure
Mechanical engine failure
Mechanical engine failure
Open/grounded circuit, sensor fault, short to power
Harness routing, charging circuit, sensor
Harness routing, charging ckt., sensor, int. ckt., improper gap
Open/grounded ckt., solenoid open/shorted, failed PCM
Open/grounded circuit, lamp open, failed PCM
Open/short circuit, cluster, tank unit, open case GND
Biased sensor, open signal return
Plugged, stuck or leaking hose
Open/grounded circuit, biased sensor, PCM
Circuit shorted to 5v, biased sensor, PCM
Open/grounded ckt., solenoid open/shorted, failed PCM
Failed/stuck EPR control, EBP fault, EPR circuit
Plugged sensor line, stuck butterfly, restricted exhaust
Sensor, circuit, PCM, PSOM, TR failure, low trans. fluid
Harness routing, sensor
Open/short circuit

Grounded circuit
Charging system problem/load, glow plugs still enabled
Low sys. voltage, charging sys., internal PCM failure
High sys. voltage, charging sys., internal PCM failure
Open or short circuit, switch failure, PCM failure or failed to activate switch during KOER switch test
Open or short circuit, switch failure, PCM failure or failed to activate switch during KOER switch test
Open or short circuit, switch failure, PCM failure or failed to activate switch during KOER switch test
Open or short circuit, switch failure, PCM failure or failed to activate switch during KOER switch test
Open or short circuit, switch failure, PCM failure or failed to activate switch during KOER switch test
Cruise control codes will be set on every switch test on vehicles not equipped with cruise control
Open PCM pin, disconnected B+, faulty PCM
Internal PCM failure
Internal PCM failure
Circuit open or shorted to ground
Open/short circuit, switch, PCM, failed to activate switch during KOER switch test
Open/short circuit, switch, PCM, failed to activate switch during KOER switch test
Resistance in circuit, faulty sensor, PCM
Open in circuit, biased sensor, PCM
Open in circuit, biased sensor, PCM, short to power
Short to ground, biased sensor, PCM
Open in circuit, biased sensor, PCM, short to power
Short/open circuit, sensor, PCM
Short/open circuit, sensor, PCM
Erratic signal, sensor, intermittent circuit
Short/open circuit, sensor, PCM
Erratic signal, sensor, intermittent circuit
Short/open circuit, sensor, PCM
Circuit failure, faulty solenoid, PCM
Faulty solenoid, circuit, PCM
Circuit failure, faulty solenoid, PCM

Circuit failure, faulty solenoid, PCM
Circuit failure, faulty solenoid, faulty clutch, PCM
Circuit failure, faulty solenoid, faulty clutch, PCM
Circuit failure, faulty solenoid, faulty clutch, PCM
OBDII monitors/drive cycle incomplete
Circuit failure, alternator failure, PCM
Circuit failure, alternator failure, PCM
Circuit failure, alternator failure, PCM
Open/short circuit, lamp, fuse, PCM
Short to GND MAT circuit, MAT sensor
Open/short to PWR circuit, MAT sensor
WIF lamp, circuit failure, fuse, PCM
Water in fuel, grounded circuit, shorted sensor, PCM
Engine too cold/hot, leaking thermostat, ckt., sensor
IPR valve stuck
ICP sensor, open signal return
IPR valve failed, stuck, or shorted to ground
Biased sensor or ckt., open signal return, low oil in reservoir
CID circuit open, probably intermittent
CID circuit short to ground, probably intermittent
MAP hose, sensor, EBP sys, intake leaks, turbo
MAP hose, sensor, EBP sys, intake leaks, turbo
GND short, plugged hose/port, solenoid, actuator
Short circuit, shorted injector, failed IDM
Open circuit, open injector, failed IDM
Open/grounded circuit, biased sensor, PCM
Circuit shorted to 5v, biased sensor, PCM
Faulty IPR regulator (sticking), IPR short to ground
Open/grounded circuit, stuck IPR, loose connection
See codes P1280, P1281, P1282, P1283, P1211

Short circuit, faulty IDM
Short circuit, faulty IDM
Open circuit, faulty IDM
Open circuit, faulty IDM
Miswired connector or harness, short to ground
Miswired connector or harness, short to ground
Shorted wires, faulty IDM
Internal IDM failure
Injector circuit failure/IDM codes detected
Open/short/miswired circuit, faulty relay, glow plugs
Open/short/miswired circuit, faulty relay, glow plugs
One or more glow plugs failed or circuit fault
One or more glow plugs failed or circuit fault
Voltage too high or low for glow plug monitor test
Operator error, A/C circuit shorted to power
Operator error
APCM active while KOER test is running
Accelerator moved during KOER on-demand or CCT test
Circuit, switch, PCM, failed to activate switch KOER
High system voltage, internal PCM fault
Low system voltage, internal PCM fault
Open relay, blown fuse, open/grounded circuit
Open/grounded circuit, faulty IDM
Open/grounded circuit, faulty IDM
Open/shorted EF or FDCS wire, open IDM grd.
WGC circuit or solenoid, PCM
Sensor, wiring, PCM, mechanical alignment
Sensor, wiring, PCM, mechanical alignment
Operator error, circuit failure, faulty sensor, PCM
Circuit failure, faulty sensor, PCM
Sensor, circuit, PCM
Circuit, solenoid, PCM
Circuit, solenoid, PCM
Sensor, circuit, PCM
Circuit failure, faulty switch, PCM
Converter solenoid/hydraulic/mechanical failure
Open circuit, faulty solenoid, PCM
Short circuit, faulty solenoid, PCM shorted to ground

Circuit failure, faulty solenoid, PCM
Switch not detected during self test, circuit, switch
Circuit, switch, PCM, failed to activate switch KOER
Operator error, short to ground, PCM
Internal trans. failure, circuit failure, sensor, PCM