TECHNICAL BULLETIN
Ford Powerstroke Diagnostic Trouble Codes

On-Board-Diagnostic (OBD) trouble codes are one way your vehicle communicates with a mechanic. Every diesel vehicle built since 1996 has an OBD II computer system that monitors and identifies issues. In particular, it looks for issues that may result in harmful and polluting emissions from exhaust gases. When this system identifies an issue it turns on the check engine light and records an OBD II code.

OBD II codes are accessed by plugging a code reader into the vehicle’s OBD II port. These codes provide a mechanic with information about the system and the conditions under which the issue was first identified. However, they can't provide a clear-cut solution to the actual cause of the problem - only clues for where to look.

The diagnostic codes that are required by law on all OBD II systems are standardized and all vehicle manufacturers use the same common code list. This means the misfire code P0300 represents the same failure on a GM/GMC Duramax, Ford Powerstroke, or Dodge Cummins.

OBD-II Check Engine Light Trouble Codes for Ford Powerstroke below:

P1111 System Pass (No DTCs Available)

P0107 BARO Circuit Low Input

P0108 BARO Circuit High Input

P0112 IAT Sensor Circuit Low Input

P0113 IAT Sensor Circuit High Input

P0122 Accelerator Pedal Sensor Circuit Low Input

P0123 Accelerator Pedal Sensor Circuit High Input

P0197 EOT Sensor Circuit Low Input

P0198 EOT Sensor Circuit High Input

P0220 Throttle Switch B Circuit Malfunction

P0221 Throttle Switch B Circuit Performance
P0230 Fuel Pump Relay Driver Fail
P0231 Fuel Pump Relay Driver Circuit Failure
P0232 Fuel Pump Relay Driver Failed Off
P0236 Turbo Boost Sensor A Circuit Performance
P0237 Turbo Boost Sensor A Circuit Low Input
P0238 Turbo Boost Sensor A Circuit High Input
P0261 Injector Circuit Low - Cylinder 1
P0262 Injector Circuit High - Cylinder 1
P0263 Cylinder 1 Contribution/Balance Fault
P0264 Injector Circuit Low - Cylinder 2
P0265 Injector Circuit High - Cylinder 2
P0266 Cylinder 2 Contribution/Balance Fault
P0267 Injector Circuit Low - Cylinder 3
P0268 Injector Circuit High - Cylinder 3
P0269 Cylinder 3 Contribution/Balance Fault
P0270 Injector Circuit Low - Cylinder 4
P0271 Injector Circuit High - Cylinder 4
P0272 Cylinder 4 Contribution/Balance Fault
P0273 Injector Circuit Low - Cylinder 5
P0274 Injector Circuit High - Cylinder 5
P0275 Cylinder 5 Contribution/Balance Fault
P0276 Injector Circuit Low - Cylinder 6
P0277 Injector Circuit High - Cylinder 6
P0278 Cylinder 6 Contribution/Balance Fault
P0279 Injector Circuit Low - Cylinder 7
P0280 Injector Circuit High - Cylinder 7
P0281 Cylinder 7 Contribution/Balance Fault
P0282 Injector Circuit Low - Cylinder 8
P0283 Injector Circuit High - Cylinder 8
P0284 Cylinder 8 Contribution/Balance Fault
P0301 Fault Cylinder A-Misfire? Detected (CYL 1)
P0302 Fault Cylinder B-Misfire? Detected (CYL2)
P0303 Fault Cylinder D-Nlisfire? Detected (CYL 3)
P0304 Fault Cylinder E-Misfire? Detected (CYL 4)
P0305 Fault Cylinder F-Misfire? Detected (CYL5)
P0306 Fault Cylinder G-Nlisfire? Detected (CYL 6)
P0307 Fault Cylinder C-Misfire? Detected (CYL 7)
P0308 Fault Cylinder H-Misfire? Detected (CYL 8)
P0340 CMP Sensor Circuit Malfunction
P0341 CMP Sensor Circuit Performance
P0344 CMP Sensor Circuit Intermittent
P0360 Glow Plug Circuit Malfunction
P0381 Glow Plug Indicator Circuit Malfunction
P0460 Fuel Tank Level Indicator Circuit Malfunction
P0470 Exhaust Back Pressure Sensor Circuit Malfunction
P0471 Exhaust Back Pressure Sensor Circuit Performance
P0472 Exhaust Back Pressure Sensor Circuit Low Input
P0473 Exhaust Back Pressure Sensor Circuit High Input
P0476 Exhaust Pressure Control Valve Malfunction
P0476 Exhaust Pressure Control Valve Performance
P0478 Exhaust Pressure Control Valve High Input
P0500 Vehicle Speed Sensor (VSS) Malfunction
P0503 Vehicle Speed Sensor Noisy
P0541 Manifold Intake Air Heater
P0542 Manifold Intake Air Heater
P0560 System Voltage Malfunction
P0662 System Voltage Low
P0563 System Voltage High
P0666 Cruise 'On' Signal Malfunction
P0566 Cruise 'Off' Signal Malfunction
P0667 Cruise 'Resume' Signal Malfunction
P0668 Cruise 'Set' Signal Malfunction
P0669 Cruise 'Coast' Signal Malfunction
P0571 Brake Switch A Circuit Malfunction
P0603 Internal Control Module KAM Error
P0605 Internal Control Module ROM Error
P0606 PCM Processor Fault
P0640 Manifold Intake Air Heater
P0670 Glow plug control circuit malfunction
P0671 Glow plug #1 circuit failure
P0672 Glow plug #2 circuit failure
P0673 Glow plug #3 circuit failure
P0674 Glow plug #4 circuit failure
P0675 Glow plug #5 circuit failure
P0676 Glow plug #6 circuit failure
P0677 Glow plug #7 circuit failure
P0678 Glow plug #8 circuit failure
P0683 Glow plug diagnostic signal communication fault
P0703 Brake Switch B Circuit Malfunction
P0704 Clutch Pedal Position Switch Input Circuit Malfunction
P0705 TR Sensor Circuit Malfunction
P0707 TR Sensor Circuit Low Input
P0708 TR Sensor Circuit High Input
P0712 Transmission Fluid Temp. Sensor CKT Low Input
P0713 Transmission Fluid Temp. Sensor CKT High Input
P0715 TSS Sensor Circuit Malfunction Fault
P0717 TSS Intermittent Failure
P0718 Noisy TSS
P0720 OSS Sensor Circuit Malfunction
P0721 Noisy OSS
P0722 OSS Intermittent Failure
P0732 Gear Two Ratio Error
P0733 Gear Three Ratio Error
P0741 TCC Circuit Performance
P0743 Torque Converter Clutch System Electrical Failure
P0750 Shift Solenoid 1 Malfunction
P0755 Shift Solenoid B Malfunction
P0781 1-2 Shift Malfunction
P0782 2-3 Shift Malfunction
P0783 3-4 Shift Malfunction
P1000 OBD 11 Monitor Checks Not Complete. More Driving Required
P1105 Dual Alternator Upper Fault (Monitor)
P1106 Dual Alternator Lower Fault (Control)
P1107 Dual Alternator Lower Circuit Malfunction (Control)
P1108 Dual Alternator BATT Lamp Circuit Malfunction
P1118 Manifold Air Temperature Sensor Low Input
P1119 Manifold Air Temperature Sensor High Input
P1139 Water in Fuel Indicator Circuit Malfunction
P1140 Water in Fuel Condition
P1184 Engine Oil Tamp Sensor Circuit Performance
P1209 Injection Control System Pressure Peak Fault
P1210 Injection Control Pressure Above Expected Level
P1211 ICP Not Controllable - Pressure Abow/Below Desired
P1212 ICP Voltage Not at Expected Level
P1218 CID Stuck High
P1219 CID Stuck Low
P1247 Turbo Boost Pressure Low
P1248 Turbo Boost Pressure Not Detected
P1249 Wastagate Fail Steady State Test
P1250 Electronic Passive Anti-Theft? System
P1261 High to Low Side Short - Cylinder 1
P1262 High to Low Side Short - Cylinder 2
P1263 High to Low Side Short - Cylinder 3
P1264 High to Low Side Short - Cylinder 4
P1265 High to Low Side Short - Cylinder 5
P1266 High to Low Side Short - Cylinder 6
P1267 High to Low Side Short - Cylinder 7
P1268 High to Low Side Short - Cylinder 8
P1 High to Low Side Open - Cylinder 1
P2 High to Low Side Open - Cylinder 2
P3 High to Low Side Open - Cylinder 3
P4 High to Low Side Open - Cylinder 4
P5 High to Low Side Open - Cylinder 5
P6 High to Low Side Open - Cylinder 6
P7 High to Low Side Open - Cylinder 7
P8 High to Low Side Open - Cylinder 8
P1280 ICP Circuit Out of Range Low
P1281 ICP Circuit Out of Range High
P1282 Excessive ICP
P1263 IPR Circuit Failure
P1284 ICP Failure - Aborts KOER or CCT Test
P1291 High Side No. 1 (Right) Short to GND or B+
P1292 High Side No. 2 (Left) Short to GND or B+
P1293 High Side Open Bank No. 1 (Right)
P1294 High Side Open Bank No. 2 (Left)
P1295 Multiple Faults on Bank No. 1 (Right)
P1296 Multiple Faults on Bank No. 2 (Left)
P1297 High Sides Shorted Together
P1298 IDM Failure
P1316 Injector Circuit/IDM Codes Detected
P1391 Glow Plug Circuit Low Input Bank No. 1 (Right)
P1393 Glow Plug Circuit Low Input Bank No. 2 (Left)
P1395 Glow Plug Monitor Fault Bank No. 1
P1396 Glow Plug Monitor Fault Bank No. 2
P1397 SYstem Voltage Out of Self Test Range
P1464 A/C On During KOER or CCT Test
P1501 VSS Out Of Self Test Range
P1502 Invalid Self Test - APCM Functioning
P1531 Invalid Test - Accelerator Pedal Movement
P1536 Parking Brake Applied Failure
P1662 IDM EN Circuit Failure
P1663 FDCS Circuit Failure
P1667 CID Circuit Failure
P1668 PCM -IDM Diagnostic Communication Error
P1670 EF Feedback Signal Not Detected
P1690 Wastegate Control Valve Malfunction
P1702 TRS Sensor Intermittent Circuit Malfunction
P1704 Digital TRS Failed to Transition State
P1705 TR Sensor out of Self Test Range
P1711 TFT Sensor Out of Self Test Range
P1713 TFT Stuck in Range Low-Below? 50°F
P1714 Shilt Solenoid A Inductive Signature Malfunction
P1715 Shift Solenoid B Inductive Signature Malfunction
P1718 TFT Stuck in Range High-Above? 25OF
P1728 Transmission Slip Error
P1729 4x4L Switch Error
P1744 Torque Converter Clutch System Performance
P1746 EPC Solenoid Open Circuit
P1747 EPC Solenoid Short Circuit
P1754 CCS (Solenoid) Circuit Malfunction
P1760 EPC Solenoid Short Intermittent
P1780 TCS Circuit Out of self Test Range
P1781 4x4L Circuit Out of Self Test Range
P1783 Transmission Overtemperature Condition