

GENERIC · POWERTRAIN

P06D0

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P06D0

Cylinder 12 Glow Plug Incorrect

P06D0 indicates that the engine control module has detected an incorrect electrical condition on the glow plug circuit for cylinder 12, which is typically found on large diesel engines with many cylinders. The module monitors the glow plug's current draw and response time during the afterglow phase, and it sets this code when the feedback signal does not match the expected profile for that specific cylinder.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Computer and output circuits

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Extended cranking time or rough idle when the engine is cold
- White smoke from the exhaust during cold starts due to incomplete combustion
- Slight misfire or hesitation during the first few minutes of operation after a cold start
- Reduced fuel economy during warm-up if the glow plug remains inactive

Common causes, most likely first

- 1 Faulty glow plug on cylinder 12 with an open or shorted heating element
- 2 Damaged or corroded electrical connector at the cylinder 12 glow plug
- 3 Chafed or broken wire in the glow plug harness near the cylinder 12 location
- 4 Failed glow plug control module that cannot deliver or monitor current for that cylinder
- 5 Poor ground connection for the glow plug circuit affecting the feedback signal
- 6 Engine control module software issue or internal driver fault for that specific cylinder channel

How to diagnose and fix it

- 1 Clear the code and verify whether it returns immediately or only after a cold-start cycle
- 2 Inspect the cylinder 12 glow plug connector for corrosion, looseness, or pushed-back pins
- 3 Measure the resistance of the cylinder 12 glow plug and compare it to the specification for the engine
- 4 Check the glow plug harness for continuity and shorts between the control module and the cylinder 12 glow plug
- 5 Test the glow plug control module output for cylinder 12 with a bidirectional scan tool or oscilloscope
- 6 Replace the faulty glow plug if resistance is out of range, then retest the circuit
- 7 If the circuit tests good, reprogram or replace the engine control module as a last resort



Cylinder 12 Glow Plug Circuit Traps

- A glow plug that ohms out correctly when cold can still fail when hot, so a resistance check alone may miss an intermittent fault that only sets the code during afterglow.
- The glow plug control module often shares feedback circuitry across multiple cylinders, so a single-cylinder code can point to a module fault rather than the plug itself.
- Corrosion inside the connector boot is a common cause that looks like a bad glow plug but is fixed by cleaning and applying dielectric grease.
- On some engines, cylinder numbering for glow plugs does not follow the firing order, so technicians must consult the correct bank and cylinder layout before replacing parts.
- A weak battery or charging system fault can cause glow plug feedback errors because the module expects a stable voltage reference during the self-test.

Can I keep driving with P06D0?

The vehicle is safe to drive because a single glow plug fault mainly affects cold-start smoothness and emissions, but avoid long periods of idling or heavy loads until the engine is fully warm. Address the issue before winter, as cold starting will become harder and may trigger additional codes.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter with resistance and continuity functions
- Oscilloscope for capturing glow plug current waveforms
- Socket set and glow plug removal tool
- Dielectric grease and electrical contact cleaner

Reading P06D0

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
6	Computer and output circuits.
D0	The exact fault within that area.

Often seen with

P0380 Glow Plug/Heater Circuit A Malfunction · **P0670** Glow Plug Module Control Circuit · **P067C** Cylinder 5 Glow Plug Control Circuit Low · **P06CF** Cylinder 11 Glow Plug Incorrect · **P06D1** Internal Control Module Ignition Coil Control Performance



See it working

Watch the animated explainer [Car Won't Start? Step-by-Step No-Start Diagnosis](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p06d0/>

