

GENERIC · POWERTRAIN

P06C2

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P06C2

Cylinder 10 Glow Plug Circuit Range/Performance

P06C2 indicates that the engine control module (ECM) has detected an out-of-range or performance fault in the glow plug circuit for cylinder 10, typically on diesel engines with a high cylinder count. The ECM monitors the circuit for expected electrical behavior and flags this code when the voltage or current does not match the commanded state during glow plug activation.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Computer and output circuits

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Hard starting or rough idle when the engine is cold
- Excessive white smoke from the exhaust after a cold start
- Misfire or rough running during the warm-up period
- Reduced fuel economy or increased emissions during cold operation

Common causes, most likely first

- 1 Faulty glow plug on cylinder 10
- 2 Damaged or corroded electrical connector at the cylinder 10 glow plug
- 3 Open or shorted wiring in the glow plug circuit for cylinder 10
- 4 Failed glow plug control module or relay affecting that circuit
- 5 Poor ground connection for the glow plug circuit
- 6 ECM software issue or internal driver fault (less common)

How to diagnose and fix it

- 1 Inspect the glow plug connector and wiring for cylinder 10 for damage, corrosion, or looseness
- 2 Measure the resistance of the cylinder 10 glow plug and compare to specification
- 3 Check for battery voltage and ground at the glow plug connector during the glow plug activation period
- 4 Test the glow plug control module output for cylinder 10 with a multimeter or oscilloscope
- 5 Repair or replace any damaged wiring or connectors in the circuit
- 6 Replace the faulty glow plug if resistance is out of range
- 7 Clear the diagnostic trouble codes and verify the repair with a cold-start test



Glow plug circuit checks that prevent misdiagnosis

- A glow plug that tests good on resistance can still be faulty under load, so a voltage drop test while the circuit is active is more reliable than a simple ohmmeter check.
- Corroded terminals at the glow plug often cause this code without any visible damage to the plug itself, so always inspect the connector pins closely.
- The glow plug control module may set this code for a single cylinder even when the module is failing internally, so testing the module output is essential before replacing parts.
- On some engines, a weak battery or charging system can cause glow plug circuit codes because the ECM sees unexpected voltage during the glow phase.
- This code does not always mean the glow plug is dead; a wiring short to ground or a faulty relay can trigger the same range/performance fault.

Can I keep driving with P06C2?

You can usually drive the vehicle, but cold starting may be difficult and prolonged driving with a faulty glow plug can lead to excessive smoke and emissions. Avoid heavy loads or long idling until the fault is repaired, and address the issue promptly to prevent further damage to the glow plug system.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Glow plug removal socket
- Wiring diagram for the glow plug circuit
- Oscilloscope (optional for waveform analysis)

Reading P06C2

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.
C2	The exact fault within that area.

Often seen with

P0380 Glow Plug/Heater Circuit A Malfunction · **P0670** Glow Plug Module Control Circuit · **P067A** Cylinder 4 Glow Plug Control Circuit Low · **P06C1** Cylinder 9 Glow Plug Circuit Range/Performance · **P06C3** Cylinder 11 Glow Plug Circuit Range/Performance



See it working

Watch the animated explainer **Fuel Trims Explained: Short-Term and Long-Term** on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p06c2/>

