

GENERIC · POWERTRAIN

P06C8

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P06C8

Cylinder 4 Glow Plug Incorrect

P06C8 means the engine control module has detected an incorrect electrical condition on the glow plug circuit for cylinder 4, typically an open circuit, short to ground, or resistance outside the expected range. The module compares the glow plug's current draw or voltage feedback against a stored profile and flags the cylinder when the signal does not match.

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

Symptoms you may notice

- Illuminated check engine light, often with no other symptoms besides the warning light
- Hard cold starting or extended cranking before the engine fires
- Rough idle and white smoke from the exhaust immediately after a cold start
- Misfire-like shudder or hesitation while the engine is warming up
- A stored glow plug-related code alongside P06C8 in the module memory

Common causes, most likely first

- 1 Failed glow plug on cylinder 4, typically an open heating element or a shorted internal coil
- 2 Damaged or corroded electrical connector at the cylinder 4 glow plug
- 3 Chafed, broken, or high-resistance wiring in the glow plug harness
- 4 Faulty glow plug control module or relay affecting individual cylinder output
- 5 Poor engine ground or corroded ground strap increasing circuit resistance
- 6 Moisture intrusion into the glow plug connector or control module housing
- 7 Aftermarket or incorrect-specification glow plug installed during a previous repair



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm P06C8 is active and not a history code
- 2 Inspect the cylinder 4 glow plug connector and harness for corrosion, chafing, and loose pins
- 3 Measure glow plug resistance with a digital multimeter and compare it to the manufacturer's specification
- 4 Check the glow plug control circuit for voltage drop and continuity between the module and the plug
- 5 Test the glow plug control module output and verify the ground circuit is clean and tight
- 6 Replace the faulty glow plug or repair the damaged harness section, then clear codes and re-test from a cold start
- 7 Verify the repair with a cold-start glow plug activation test and confirm no codes return after several drive cycles

Why cylinder 4 glow plug codes mislead

- A glow plug can pass a simple resistance check at room temperature yet still fail to draw correct current when the module commands it, so a load test or current clamp reading is more reliable than ohms alone.
The glow plug control module often stores individual cylinder codes when its own internal driver fails, so replacing the plug without testing module output can leave the code present.
- Corrosion inside the connector boot is a frequent cause that looks like a failed plug on a meter but is resolved by cleaning and re-pinning the connector.
- P06C8 can be set by a brief intermittent open circuit during a cold start, so a plug that tests good when warm may still be the culprit.
On engines with a shared glow plug feed, a single bad plug can drag down circuit voltage enough to set codes for neighbouring cylinders, so always check all glow plugs before condemning one.

Can I keep driving with P06C8?

The vehicle remains safe to drive because the glow plug only assists cold starting, but avoid long cranking periods and expect harder starts and more exhaust smoke in cold weather until the fault is repaired.

Tools that help

- OBD-II scan tool with manufacturer-specific glow plug data
- Digital multimeter with resistance and voltage drop functions
- Current clamp for measuring glow plug current draw
- Glow plug socket and torque wrench
- Electrical contact cleaner and dielectric grease
- Wiring diagram for the glow plug circuit



Reading P06C8

- 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.
- C8** The exact fault within that area.

Often seen with

P0380 Glow Plug/Heater Circuit A Malfunction · **P0674** Cylinder 4 Glow Plug Circuit · **P06C7** Cylinder 3 Glow Plug Incorrect · **P06C9** Cylinder 5 Glow Plug Incorrect · **P06CA** Cylinder 6 Glow Plug Incorrect

See it working

Watch the animated explainer [How Crank and Cam Position Sensors Work](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p06c8/>

