



P06C5

Cylinder 1 Glow Plug Incorrect

P06C5 is a generic powertrain code that indicates the engine control module (ECM) has detected an incorrect condition for the glow plug in cylinder 1, typically an unexpected resistance or voltage reading outside the expected range. The ECM monitors the glow plug circuit and sets this code when the feedback signal does not match the commanded state, which can affect cold-start performance and emissions.

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

Symptoms you may notice

- Illumination of the check engine light or glow plug warning lamp
- Hard starting or rough running when the engine is cold
- Excessive white smoke from the exhaust during cold starts
- Reduced fuel economy or power during warm-up
- Often no symptoms besides the warning light, especially in mild weather

Common causes, most likely first

- 1 Faulty glow plug in cylinder 1 (open or shorted element)
- 2 Damaged or corroded electrical connector at the glow plug
- 3 Chafed or broken wiring in the glow plug circuit
- 4 Failed glow plug control module or relay
- 5 Poor ground connection for the glow plug circuit
- 6 Carbon buildup on the glow plug tip causing incorrect resistance

How to diagnose and fix it

- 1 Scan all modules for stored codes and freeze-frame data to confirm P06C5 is current
- 2 Visually inspect the cylinder 1 glow plug, connector, and wiring for damage or corrosion
- 3 Measure the resistance of the glow plug and compare it to the manufacturer's specification
- 4 Check for battery voltage and ground at the glow plug connector during the glow phase
- 5 Test the glow plug control module or relay operation with a bidirectional scan tool
- 6 Replace the faulty glow plug if resistance is out of range, using anti-seize on the threads
- 7 Clear codes and perform a road test to verify the repair and ensure the monitor runs



Glow plug code traps to avoid

- A glow plug that tests good when cold can still fail when hot, so always check resistance both cold and after a brief warm-up.
- The ECM may set P06C5 due to a faulty control module even when the glow plug itself is perfect, so never replace parts without testing the circuit.
- Corroded connectors are a frequent cause on older vehicles, and simply cleaning them can resolve the code without replacing the glow plug.
- This code can be set by a weak battery or charging system issue that causes low voltage during the glow plug pre-heat phase.
- Always verify the glow plug part number and voltage rating match the vehicle's original specification, as incorrect plugs can trigger this code.

Can I keep driving with P06C5?

You can generally drive the vehicle with this code, but cold starting may be difficult and prolonged driving with a faulty glow plug can damage the engine over time. Avoid heavy loads or high speeds until the fault is repaired, and address the issue promptly to prevent further complications.

Tools that help

- OBD-II scan tool with bidirectional control
- Digital multimeter
- Glow plug socket set
- Wire brush and electrical contact cleaner
- Factory service information for resistance specifications

Reading P06C5

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.
C5	The exact fault within that area.

Often seen with

P0380 Glow Plug/Heater Circuit A Malfunction · **P0671** Cylinder 1 Glow Plug Circuit · **P06C6** Cylinder 2 Glow Plug Incorrect · **P06C7** Cylinder 3 Glow Plug Incorrect · **P06C8** Cylinder 4 Glow Plug Incorrect



See it working

Watch the animated explainer [Inline-Four Engine X-Ray: Firing Order 1-3-4-2](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p06c5/>

