

GENERIC · POWERTRAIN

P06CE

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P06CE

Cylinder 10 Glow Plug Incorrect

P06CE indicates that the engine control module has detected an incorrect electrical condition in the glow plug circuit for cylinder 10, typically an open circuit, short to ground, or resistance outside the expected range. The module compares commanded glow plug activation against feedback from the circuit and sets this code when the two do not agree.

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

Symptoms you may notice

- Illumination of the glow plug warning light or check engine light, often with no other noticeable symptoms
- Hard starting or extended cranking when the engine is cold, especially in low ambient temperatures
- Rough idle or misfire immediately after a cold start that may improve as the engine warms
- Excessive white smoke from the exhaust during cold starts due to incomplete combustion
- Reduced fuel economy and increased emissions during the warm-up phase

Common causes, most likely first

- 1 Failed glow plug on cylinder 10, such as a burned-out element or open internal circuit
- 2 Damaged or corroded electrical connector at the cylinder 10 glow plug
- 3 Chafed, broken, or shorted wiring in the glow plug harness near cylinder 10
- 4 Faulty glow plug control module that cannot deliver or monitor current correctly for that cylinder
- 5 Poor ground connection for the glow plug circuit or engine block
- 6 Engine control module software issue or internal driver fault for the cylinder 10 glow plug output



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm P06CE is the only glow plug-related code and note ambient temperature at fault set
- 2 Visually inspect the cylinder 10 glow plug connector and harness for corrosion, chafing, or loose pins, and repair as needed
- 3 Measure glow plug resistance with a digital multimeter and compare to the manufacturer's specification, replacing the plug if out of range
- 4 Check for voltage drop and continuity on both the power and ground sides of the cylinder 10 glow plug circuit under load
- 5 Test the glow plug control module output for cylinder 10 with a suitable load or oscilloscope to verify commanded activation
- 6 If the control module is suspect, perform pin-out and resistance checks between the module and the glow plug before replacement
- 7 Clear codes, perform a cold-start relearn if required, and verify the repair by monitoring glow plug status parameters during a cold start

Glow plug code traps that fool good technicians

- A glow plug can pass a simple resistance check at room temperature yet still fail to draw correct current when cold, so always compare current draw across all cylinders rather than trusting a single ohm reading.
- The glow plug control module often stores this code when the actual fault is a poor engine ground or a corroded connector, so inspect the entire circuit before condemning the plug or module.
- Cylinder numbering for glow plugs does not always follow the same sequence as fuel injectors, and misidentifying cylinder 10 can lead to replacing a perfectly good plug on the wrong bank.
- Some vehicles set P06CE intermittently only during very cold starts, and the code may not reappear in a warm workshop, so freeze-frame data and overnight cold-soak testing are essential.
- A failed glow plug on one cylinder can cause the control module to disable the entire glow plug system as a protection strategy, making it appear that all plugs have failed when only cylinder 10 is faulty.

Can I keep driving with P06CE?

The vehicle remains safe to drive because the glow plug only aids cold starting and does not affect running once the engine is warm. Avoid repeated long cranking attempts in cold weather and schedule diagnosis soon, since continued operation with a faulty glow plug can stress the control module and worsen cold-start emissions.



Tools that help

- OBD-II scan tool with manufacturer-specific glow plug data
- Digital multimeter with resistance and voltage drop capability
- Current clamp or low-amp probe for glow plug current measurement
- Oscilloscope for waveform analysis of glow plug activation
- Basic hand tools and socket set for glow plug removal
- Contact cleaner and dielectric grease for connector repair

Reading P06CE

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.
CE	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 · **P06CD** Cylinder 9 Glow Plug Incorrect · **P06CF** Cylinder 11 Glow Plug Incorrect

See it working

Watch the animated explainer [How a MAP Sensor Works: Engine Vacuum and Load](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p06ce/>

