

GENERIC · POWERTRAIN

P06E5

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P06E5

Glow Plug Control Module 1 Performance

P06E5 indicates that the glow plug control module (GPCM) for bank 1 has reported a performance fault to the engine control module (ECM), meaning the module's internal self-diagnosis or the ECM's monitoring has detected that the glow plug system is not operating within expected parameters. The ECM sets this code when it receives a signal from the GPCM indicating a problem with the module's ability to control the glow plugs correctly, which can affect cold starting 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 (CEL) on the dashboard.
- Hard starting or rough idle when the engine is cold, especially in low temperatures.
- Increased white smoke from the exhaust during cold starts due to incomplete combustion.
- Reduced fuel economy or power output as the engine may stay in a cold-start enrichment mode longer.
- In some cases, the vehicle may enter limp mode or limit engine performance to protect the system.
- Often no symptoms besides the warning light, as the glow plug system may still function partially.

Common causes, most likely first

- 1 Faulty glow plug control module (GPCM) internal failure or degraded performance.
- 2 Corroded, damaged, or loose wiring or connectors between the GPCM, glow plugs, and ECM.
- 3 Poor electrical ground connection for the GPCM or glow plug circuit.
- 4 Low battery voltage or charging system issues causing the GPCM to malfunction.
- 5 ECM software calibration issues or internal ECM fault misinterpreting GPCM signals.
- 6 Aftermarket or incorrect glow plugs that do not meet the required specifications, leading to GPCM performance errors.



How to diagnose and fix it

- 1 Perform a visual inspection of the GPCM, glow plugs, and all related wiring and connectors for signs of damage, corrosion, or looseness.
- 2 Check the battery voltage and charging system to ensure the GPCM receives adequate power during glow plug operation.
- 3 Use a scan tool to retrieve all stored codes and freeze-frame data, and check for any related codes that may indicate a root cause.
- 4 Test the glow plugs for resistance and continuity according to the manufacturer's specifications to rule out failed plugs.
- 5 Verify the integrity of the ground circuits for the GPCM and glow plug system using a multimeter or test light.
- 6 If all external components check out, follow the manufacturer's diagnostic flow chart for the GPCM, which may involve testing signal outputs or performing a module reset/adaptation.
- 7 Replace the glow plug control module if diagnostics confirm an internal fault, and clear codes and verify the repair with a test drive.

Common Misdiagnosis Traps for P06E5

- A weak or failing battery often causes the GPCM to log performance codes because the module cannot supply the high current needed for the glow plugs, so always load-test the battery before condemning the module.
- Corroded ground connections on the engine block or chassis are a frequent culprit that mimic a failed GPCM, and cleaning them can resolve the code without any parts replacement.
- Some vehicles require a software update or recalibration of the GPCM or ECM to correct overly sensitive performance monitoring, so check for technical service bulletins before replacing hardware.
- The code can be set by a single faulty glow plug that draws excessive current, causing the GPCM to self-protect and report a performance fault, so test each glow plug individually.
- After replacing the GPCM, some models require a learn or adaptation procedure using a scan tool to register the new module, otherwise the code may persist.

Can I keep driving with P06E5?

You can generally continue driving with this code, but cold starting may be difficult and the engine may run rough until warmed up; avoid heavy loads or long idling until the fault is repaired, and address it promptly to prevent further damage to the glow plug system or emissions components.

Tools that help

- OBD-II scan tool with live data and bidirectional control capabilities
- Digital multimeter with resistance and voltage measurement
- Test light or power probe for circuit testing
- Socket set and wrenches for accessing glow plugs and module
- Manufacturer-specific diagnostic software or repair information



Reading P06E5

- 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.
- E5** The exact fault within that area.

Often seen with

P0380 Glow Plug/Heater Circuit A Malfunction · **P0670** Glow Plug Module Control Circuit · **P06E6** Sensor Power Supply C Circuit/Open · **P06E7** Sensor Power Supply C Circuit Low · **P06E8** Sensor Power Supply C Circuit High

See it working

Watch the animated explainer [How a Car Clutch Works: Diaphragm Clutch Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p06e5/>

