

GENERIC · POWERTRAIN

P0383

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0383

Glow Plug Control Module 1 Control Circuit Low

P0383 indicates that the glow plug control module (GPCM) has detected a low-voltage condition on its control circuit, which is the command wire from the powertrain control module (PCM) to the module. The PCM sets this code when the voltage on that circuit is lower than expected, often because the wire is shorted to ground or the module's internal driver has failed.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Ignition system and misfire

Symptoms you may notice

- Illumination of the check engine light or glow plug warning light
- Hard starting or rough running when the engine is cold
- Extended cranking times before the engine fires
- White smoke from the exhaust after a cold start
- Often no symptoms besides the warning light, especially in warm weather

Common causes, most likely first

- 1 Chafed or broken control wire shorted to ground between the PCM and glow plug control module
- 2 Failed glow plug control module with an internal short in its control circuit
- 3 Corroded or loose electrical connector at the glow plug control module or PCM
- 4 Water intrusion into the glow plug control module or its wiring harness
- 5 Faulty powertrain control module driver circuit (rare)
- 6 Aftermarket accessories or poor previous repairs tapping into the control wire

How to diagnose and fix it

- 1 Inspect the control circuit wiring for obvious damage, chafing, or corrosion, and repair as needed
- 2 Disconnect the glow plug control module and check for a short to ground on the control wire with a multimeter
- 3 Check for battery voltage on the control wire with the key on and the module disconnected to verify PCM output
- 4 Clean and reseat the connectors at both the glow plug control module and PCM, then clear the code and retest
- 5 If the wiring tests good, substitute a known-good glow plug control module and retest the circuit
- 6 If the code persists with a known-good module, diagnose the PCM control circuit or replace the PCM as a last resort

What the control circuit low code really means

- A low control circuit code does not automatically condemn the glow plug control module; a shorted wire is just as common and far cheaper to fix.
- Many technicians replace the module only to find the code returns because the root cause was a rubbed-through wire hidden behind the engine block.
- This code can be set intermittently by water intrusion after a car wash or heavy rain, so always check for moisture in the module connector.
- The glow plug control module often shares a ground with other engine sensors, so a bad ground can mimic a control circuit fault.
- Do not confuse this code with glow plug circuit codes for individual cylinders; P0383 is about the module's command wire, not the glow plugs themselves.

Can I keep driving with P0383?

You can usually drive the vehicle with this code, but cold starting may be difficult and prolonged cranking can wear the starter and battery. Avoid heavy electrical loads and have the fault diagnosed soon, especially if you live in a cold climate where glow plugs are essential.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Wiring diagram for the glow plug control circuit
- Basic hand tools (socket set, screwdrivers)
- Electrical contact cleaner
- Heat shrink tubing and soldering iron for wire repairs

Reading P0383

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
3	Ignition system and misfire.
83	The exact fault within that area.

Often seen with

P0382 Glow Plug/Heater Circuit 'B' · **P0384** Glow Plug Control Module 1 Control Circuit High · **P0670** Glow Plug Module Control Circuit · **P0671** Cylinder 1 Glow Plug Circuit · **P0672** Cylinder 2 Glow Plug Circuit



See it working

Watch the animated explainer [EV Powertrain Trainer: How an Electric Car Drives](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0383/>

