

GENERIC · POWERTRAIN

P06FC

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P06FC

Glow Plug Control Module 2 to PCM Communication Circuit

P06FC means the powertrain control module (PCM) has lost or detected an invalid communication signal on the dedicated circuit linking it to glow plug control module 2. The PCM monitors this circuit for expected voltage or message activity and sets the code when the signal is missing, out of range, or implausible for a calibrated amount of time.

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

Symptoms you may notice

- Illuminated check engine light or glow plug warning lamp, often with no other symptoms
- Hard cold starting or extended cranking before the engine fires
- Rough idle and white exhaust smoke immediately after a cold start
- Reduced engine power or limp mode in some vehicles
- Glow plug monitor or readiness status not completing during inspection
- No noticeable drivability change once the engine is warm

Common causes, most likely first

- 1 Open or shorted communication wire between glow plug control module 2 and the PCM
- 2 Corroded, loose, or pushed-back terminal in the module or PCM connector
- 3 Failed glow plug control module 2 internal communication circuit
- 4 PCM internal fault on the communication driver or receiver
- 5 Chafed harness or damaged connector caused by heat, vibration, or rodent activity
- 6 Poor ground or power feed to glow plug control module 2 causing it to drop offline
- 7 Aftermarket electrical accessories or poor prior repairs disturbing the circuit



How to diagnose and fix it

- 1 Scan all modules and record every stored and pending code before clearing anything
- 2 Inspect the glow plug control module 2 connectors and PCM connectors for corrosion, loose pins, or pushed-back terminals
- 3 Check the module's power and ground feeds with a multimeter and verify they are within specification
- 4 Perform a voltage-drop and continuity test on the communication circuit between the module and PCM
- 5 Wiggle-test the harness while watching live communication status or a scope to expose intermittent faults
- 6 If the circuit tests good, substitute a known-good glow plug control module 2 and recheck communication
- 7 If communication returns only with a replacement PCM, program and adapt the new PCM to the vehicle

What the communication circuit code hides

- A failed glow plug control module 2 can set this code without any glow plug fault codes, so technicians who only scan for glow plug circuit codes miss the real problem.
- The communication circuit is often a low-current signal wire, and a poor ground at the module can corrupt that signal even when the wire itself tests continuous.
- Intermittent P06FC is frequently caused by heat-soaked connectors near the engine, so the fault may only appear after the engine reaches operating temperature.
- Replacing the PCM first is a common and expensive misdiagnosis; the module, its power feed, and its ground should be ruled out before condemning the PCM.
- Some vehicles set P06FC when battery voltage is low during cranking, so a weak battery or charging system can mimic a communication failure.

Can I keep driving with P06FC?

The vehicle can usually be driven, but cold starting and cold-running emissions may be affected, and some vehicles may enter limp mode. Avoid long periods of cold idling and have the circuit diagnosed before winter or repeated hard starts cause further damage.

Tools that help

- OBD-II scan tool with module communication and live data capability
- Digital multimeter with voltage-drop and continuity functions
- Oscilloscope for signal waveform analysis
- Electrical connector pin removal and terminal repair kit
- Vehicle-specific wiring diagram and connector pinout
- Battery load tester and charging system tester



Reading P06FC

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.
FC	The exact fault within that area.

Often seen with

P0380 Glow Plug/Heater Circuit A Malfunction · **P0670** Glow Plug Module Control Circuit · **P06FB** Glow Plug Control Module 2 Memory Checksum Error · **P06FD** Glow Plug Control Module 2 to PCM Communication Circuit Rang · **U0106** Lost Communication With Glow Plug Control Module

See it working

Watch the animated explainer [How Misfire Detection Works: Crankshaft Speed](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p06fc/>

