

FORD · POWERTRAIN

P1392

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1392 · Ford

Glow Plug Circuit High Input Bank 1

P1392 on Ford vehicles means the powertrain control module (PCM) has detected an abnormally high voltage on the glow plug circuit for bank 1, which usually points to an open circuit or a missing ground path rather than a failed glow plug itself. The PCM commands the glow plug control module to energize the plugs, then monitors the feedback circuit and sets this code when the voltage stays above the expected threshold for the commanded state.

SYSTEM

Powertrain

CODE TYPE

Ford specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Ignition system and misfire

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Hard cold starting or extended cranking before the engine fires
- White or blue exhaust smoke after a cold start that clears as the engine warms
- Rough idle and misfire-like shaking for the first minute or two after startup
- Reduced fuel economy during short-trip driving in cold weather
- A stored pending code that returns after clearing even when the engine runs normally

Common causes, most likely first

- 1 Open or damaged glow plug harness on bank 1, including chafed wires near the valve cover or exhaust manifold
- 2 Corroded or loose glow plug control module connector pins causing a high-resistance feedback signal
- 3 Failed glow plug control module that no longer reports correct voltage to the PCM
- 4 Poor engine ground or chassis ground strap near the bank 1 glow plug circuit
- 5 One or more glow plugs with an open internal element on bank 1
- 6 PCM software calibration issue or faulty PCM driver on the glow plug monitor circuit



How to diagnose and fix it

- 1 Inspect the bank 1 glow plug harness and connectors for chafing, corrosion, and loose pins before replacing any parts
- 2 Measure resistance of each bank 1 glow plug at the harness connector and compare against the Ford specification for the engine
- 3 Check the glow plug control module ground and power feeds with a loaded test light or multimeter under load
- 4 Verify the feedback voltage signal at the PCM connector matches the commanded state during a cold-start glow plug cycle
- 5 Test the glow plug control module by substituting a known-good unit only after wiring and plugs have passed inspection
- 6 Check for Ford technical service bulletins or calibration updates for the PCM related to glow plug monitoring
- 7 Clear the code and perform a cold-start relearn drive cycle to confirm the repair before returning the vehicle

Why bank 1 glow plug codes mislead

- A high-input code on a glow plug circuit almost always means the PCM sees voltage where it expects a pull-down, so an open plug or broken ground wire is far more likely than a shorted plug.
- Technicians often replace all glow plugs on bank 1 when only the harness connector at the rear of the engine is corroded, so inspect the connector before condemning the plugs.
- The glow plug control module on many Ford diesels shares a ground with other engine sensors, and a single bad ground strap can set P1392 along with unrelated sensor codes.
- This code can be stored intermittently by a cold-start strategy that commands glow plugs after the engine is already running, so a warm-weather scan may show no active fault.
- Aftermarket glow plugs with different resistance values can trigger P1392 even when they function, so use the Ford-specified plug for the engine calibration.

Can I keep driving with P1392?

You can usually drive the vehicle, but cold starting will be harder and prolonged driving with failed glow plugs can load the battery and starter. Avoid repeated long cranking and fix the circuit before winter temperatures drop, because a no-start condition becomes likely in cold weather.

Tools that help

- Digital multimeter with min/max recording
- Glow plug socket set
- Ford-specific scan tool or compatible OBD-II scanner with live data
- Test light with a load bulb
- Wiring diagram for the bank 1 glow plug circuit
- Torque wrench for glow plug installation



Reading P1392

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Ford): its meaning depends on the make.
- 3** Ignition system and misfire.
- 92** The exact fault within that area.

Often seen with

P1393 Ignition Coil Power Output Stage 1 Malfunction · **P1394** Ignition Coil Power Output Stage 2 Malfunction · **P1393** Variable Valve Timing Solenoid A Circuit High Input · **P1393** Wheel Speed Sensor 1 G-Sensor Circuit High Voltage · **P1394** Wheel Speed Sensor 1 G-Sensor Circuit Intermittent · **P1393** Glow Plug Circuit Low Input Bank 2 · **P1394** Glow Plug Circuit High Input Bank 2 · **P1393** Wheel Speed Sensor 1, G-Sensor Circuit High Voltage · **P1394** Wheel Speed Sensor 1, G-Sensor Circuit Intermittent · **P0380** Glow Plug/Heater Circuit A Malfunction · **P0670** Glow Plug Module Control Circuit · **P0671** Cylinder 1 Glow Plug Circuit

See it working

Watch the animated explainer [Helicopter Simulator: Take Off, Hover and Land](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1392/>

