

FORD · POWERTRAIN

P1394

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1394 · Ford

Glow Plug Circuit High Input Bank 2

P1394 is a Ford-specific code indicating that the glow plug control module has detected an abnormally high voltage or current on the glow plug circuit for bank 2, which is the cylinder bank that does not contain cylinder number one. The computer expects a certain electrical load when the glow plugs are commanded on, and a high input means the circuit is drawing too much current or the voltage is higher than expected, often due to a short to power or a failed glow plug.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Ford specific	Medium	Intermediate	Ignition system and misfire

Symptoms you may notice

- Illuminated check engine light, often with no other symptoms besides the warning light
- Hard cold starting or extended cranking before the engine fires
- Rough idle and white smoke from the exhaust immediately after a cold start
- Reduced engine performance and poor fuel economy during warm-up
- In severe cases, the engine may enter limp mode or fail to start in cold weather

Common causes, most likely first

- 1 Failed glow plug on bank 2 causing a short or excessive current draw
- 2 Chafed or shorted glow plug wiring harness contacting ground or power
- 3 Faulty glow plug control module internal short on the bank 2 circuit
- 4 Corroded or damaged glow plug connector pins creating high resistance or intermittent shorts
- 5 Water intrusion into the glow plug harness or control module connector
- 6 Aftermarket or incorrect glow plugs with wrong resistance installed on bank 2



How to diagnose and fix it

- 1 Scan all modules for stored codes and freeze-frame data to confirm P1394 is current and not history
- 2 Visually inspect the bank 2 glow plug harness, connectors, and control module for chafing, corrosion, or water damage
- 3 Measure resistance of each bank 2 glow plug with a digital multimeter and compare to Ford specifications; replace any that are out of range
- 4 Disconnect the glow plug control module and check for short to power or ground on the bank 2 glow plug feed circuits using a wiring diagram
- 5 Test the glow plug control module with a bidirectional scan tool to command glow plugs on and verify actual current draw per cylinder
- 6 If the module commands but current is excessive, substitute a known-good glow plug or module to isolate the fault
- 7 Clear codes and perform a cold-start drive cycle to verify the repair and ensure P1394 does not return

What Ford Techs Check Before Replacing Glow Plugs

- A high input code on bank 2 often results from a single shorted glow plug, but technicians who replace all glow plugs without testing the harness may miss a chafed wire that will set the code again.
- The glow plug control module on Ford diesels can fail internally and command full power continuously, which mimics a shorted glow plug and is frequently misdiagnosed as a plug issue.
- Water intrusion into the glow plug connector at the rear of the bank 2 valve cover is a common cause on certain Ford Power Stroke engines, especially after pressure washing or heavy rain.
- P1394 can be set by a poor ground connection at the glow plug control module or engine block, which raises circuit voltage and triggers the high input threshold without any faulty glow plug.
- Aftermarket glow plugs with incorrect resistance values are a frequent culprit; always verify resistance against Ford service specifications before condemning the module.

Can I keep driving with P1394?

You can usually drive the vehicle to a repair shop, but avoid heavy loads and cold starts until the fault is repaired. In cold weather, the engine may be hard to start or run roughly, so plan for a diagnostic appointment soon.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter with resistance and voltage measurement
- Ford service information wiring diagrams for the glow plug circuit
- Glow plug socket and torque wrench
- Hand tools for harness and connector inspection



Reading P1394

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

Often seen with

P1393 Ignition Coil Power Output Stage 1 Malfunction · **P1395** Ignition Coil Power Output Stage 3 Malfunction · **P1393** Variable Valve Timing Solenoid A Circuit High Input · **P1393** Wheel Speed Sensor 1 G-Sensor Circuit High Voltage · **P1395** Wheel Speed Sensor 2 G-Sensor Circuit · **P1393** Glow Plug Circuit Low Input Bank 2 · **P1395** Glow Plug Monitor Fault Bank 1 · **P1393** Wheel Speed Sensor 1, G-Sensor Circuit High Voltage · **P1395** Wheel Speed Sensor 2, G-Sensor Circuit · **P0380** Glow Plug/Heater Circuit A Malfunction · **P0670** Glow Plug Module Control 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/ford-p1394/>

