

FORD · POWERTRAIN

P1250

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1250 · Ford

Lack of Power to FPRC Solenoid

P1250 on Ford vehicles means the powertrain control module (PCM) commanded the fuel pump relay control (FPRC) circuit but detected no voltage on the control side, indicating an open or shorted circuit rather than a commanded fuel pump cut. The PCM monitors the FPRC output and sets this code when the expected feedback voltage is missing, so the fault lies in the wiring, relay, or PCM driver rather than the fuel pump itself.

SYSTEM

Powertrain

CODE TYPE

Ford specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

**Fuel and air
metering (injector
circuits)**

Symptoms you may notice

- Often no symptoms besides the warning light, because the fuel pump may still run through a redundant circuit or the relay may default to on.
- Intermittent or complete no-start condition, especially after the vehicle sits or in damp weather.
- Engine cranks but does not fire, or starts then stalls immediately after the prime pulse.
- Rough running or hesitation under load if the fuel pump relay is not energizing consistently.
- Fuel pump does not prime for two seconds when the key is turned to run, audible silence from the tank area.

Common causes, most likely first

- 1 Open or corroded wiring in the FPRC control circuit between the PCM and the fuel pump relay, commonly at connectors or through the bulkhead.
- 2 Failed fuel pump relay with a burned control coil or stuck open contacts.
- 3 Blown fuse or faulty fuse box connection feeding the relay control circuit.
- 4 Short to ground or short to power on the FPRC wire, often from chafing against a bracket or heat shield.
- 5 Failed PCM driver circuit for the FPRC output, usually after a shorted relay coil or water intrusion into the PCM connector.
- 6 Poor ground at the relay or PCM ground point causing the control circuit to lose its return path.
- 7 Aftermarket alarm or remote start wiring tapped into the fuel pump relay circuit incorrectly.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for related fuel pump and ignition codes before touching any wiring.
- 2 Inspect the fuel pump relay and its socket for corrosion, burn marks, or loose terminals, then swap the relay with a known-good identical relay to see if the code clears.
- 3 Check the fuse that feeds the FPRC circuit and confirm battery voltage at the relay control terminal with the key on.
- 4 Disconnect the PCM connector and the relay, then measure resistance and continuity on the FPRC control wire to rule out an open or short; wiggle the harness while testing.
- 5 Load-test the control circuit with a test light or a bidirectional scan tool to confirm the PCM can actually pull the relay coil low.
- 6 If the wire and relay are good but the PCM cannot command the circuit, check PCM grounds and power feeds before condemning the PCM.
- 7 Repair any chafed or corroded wiring with proper splices and heat shrink, clear the code, and road-test through several key cycles to confirm the repair.

What the FPRC code really tells you

- P1250 is a circuit code, not a fuel pump failure code, so replacing the fuel pump on this code alone is a common and expensive misdiagnosis.
- Ford trucks and vans often route the FPRC wire through a connector behind the kick panel or under the hood where corrosion from water intrusion causes intermittent opens.
- A relay that clicks does not prove the control circuit is good, because the PCM may be backfeeding through another path or the relay may be chattering on a weak ground.
- Aftermarket remote start and alarm installs frequently splice into the fuel pump relay control wire, creating a high-resistance joint that sets P1250 only when the added module is active.
- The PCM driver can be damaged by a shorted relay coil, so always ohm the relay coil before installing a replacement PCM to avoid repeating the failure.

Can I keep driving with P1250?

You can usually drive the vehicle if it starts and runs normally, but avoid long trips or shutting the engine off in remote locations because the fault can progress to a no-start. If the engine cranks without firing or stalls while driving, stop and diagnose the circuit before continuing.



Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter with continuity and resistance functions
- Test light or logic probe
- Wiring diagram for the specific Ford model and year
- Relay puller and terminal pick set
- Heat shrink and soldering tools for wire repair

Reading P1250

P Powertrain: engine, transmission and emissions.

1 Manufacturer-specific code (Ford): its meaning depends on the make.

2 Fuel and air metering (injector circuits).

50 The exact fault within that area.

Often seen with

P1235 Fuel Pump Control Circuit · **P1235** VSV 1/2/3 Circuit Range Performance · **P1233** Fuel Pump Driver Module Off-Line · **P1235** Fuel Pump Control Out of Range · **P0230** Fuel Pump Primary Circuit Malfunction · **P0231** Fuel Pump Secondary Circuit Low · **P0232** Fuel Pump Secondary Circuit High

See it working

Watch the animated explainer [How a Knock Sensor Works: Spark Timing and Octane](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1250/>

