



P1235 · Ford

Fuel Pump Control Out of Range

P1235 on a Ford means the fuel pump control module (FPDM) has detected that the commanded fuel pump duty cycle or voltage is outside the range it expects for the current operating conditions. The powertrain control module (PCM) sets this code when the feedback signal from the pump driver does not match the commanded output, indicating a fault in the pump circuit or module.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Ford specific	Medium	Intermediate	Fuel and air metering (injector circuits)

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Engine cranks but fails to start or starts then stalls immediately
- Intermittent loss of power or hesitation during acceleration
- Fuel pump may not prime when the key is turned to the run position
- Rough idle or stalling at low speeds
- Reduced fuel economy or rich/lean fuel trim codes stored alongside

Common causes, most likely first

- 1 Failed fuel pump control module (FPDM), commonly corroded or water-damaged on Ford models
- 2 Wiring damage or corrosion in the fuel pump circuit between the FPDM and the fuel pump
- 3 Faulty fuel pump assembly with a worn commutator or open winding
- 4 Poor electrical connection at the fuel pump connector or chassis ground
- 5 Blown fuel pump fuse or faulty fuel pump relay in the power distribution box
- 6 PCM software calibration issue or internal driver fault (less common)

How to diagnose and fix it

- 1 Check for any related diagnostic trouble codes (DTCs) and inspect the fuel pump fuse and relay first
- 2 Visually inspect the FPDM and its connectors for corrosion, water intrusion, or loose pins
- 3 Measure voltage and ground at the fuel pump connector while cranking to verify power delivery
- 4 Perform a fuel pump duty cycle and current draw test using a scan tool with bidirectional controls
- 5 Check the feedback signal wire from the FPDM to the PCM for continuity and short to ground
- 6 Replace the FPDM if it fails to respond correctly to commanded duty cycle tests
- 7 If the pump circuit tests good, replace the fuel pump assembly and retest the system



Why the fuel pump module fails on Fords

- The FPDM on many Ford models is mounted under the rear of the vehicle where road splash and salt corrode the connector pins, causing intermittent out-of-range feedback long before the module fails completely.
- A weak or failing fuel pump can draw excessive current that the FPDM interprets as out of range, so replacing the module alone without checking pump current draw often leads to a repeat failure.
- P1235 can be set by a momentary voltage drop during engine cranking if the battery is weak, so always verify battery condition and charging system output before condemning the fuel pump circuit.
- Some Ford vehicles require a fuel pump control module reprogramming or parameter reset after replacement, and skipping this step can leave the code stored even with a new module.
- The code does not always mean the pump is dead; a chafed signal wire between the FPDM and PCM can produce the same out-of-range feedback with a perfectly functioning pump.

Can I keep driving with P1235?

If the engine starts and runs normally, you can drive cautiously to a repair shop, but avoid hard acceleration and long trips because the pump may fail without warning. If the engine cranks but will not start or stalls repeatedly, do not drive and have the vehicle towed.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter with min/max recording
- Fuel pressure gauge
- Test light or fused jumper wire
- Socket set and trim removal tools

Reading P1235

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Ford): its meaning depends on the make.
- 2** Fuel and air metering (injector circuits).
- 35** The exact fault within that area.

Often seen with

P0087 Fuel Rail/System Pressure - Too Low · **P0191** Fuel Rail Pressure Sensor Circuit Range/Performance · **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 [Excavator Simulator: Hydraulics You Can Operate](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1235/>

