



P1236 · Ford

Fuel Pump Control Out of Range

P1236 on Ford vehicles means the powertrain control module (PCM) has commanded a specific fuel pump duty cycle but the fuel pump control module (FPDM) reports the actual pump circuit voltage or current is outside the expected range. The PCM detects this mismatch through the fuel pump monitor circuit and sets the code when the commanded and actual values disagree beyond a calibrated threshold.

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 only after extended cranking
- Intermittent engine stall while driving, especially under load or at low fuel levels
- Reduced engine power or a limp-home mode with limited RPM
- Audible fuel pump noise that is absent, erratic, or unusually loud from the fuel tank area

Common causes, most likely first

- 1 Faulty fuel pump control module (FPDM), commonly corroded or water-damaged on Ford models
- 2 Wiring damage or corrosion in the fuel pump circuit, including the inertia switch connector and ground points
- 3 Failed fuel pump assembly with a worn brush card or open winding in the pump motor
- 4 Blown fuel pump fuse or faulty fuel pump relay in the power distribution box
- 5 Poor electrical ground for the FPDM or fuel pump, often at the chassis or rear body panel
- 6 Corroded or loose connector at the fuel tank harness, especially in salt-belt vehicles

How to diagnose and fix it

- 1 Verify battery voltage and inspect the fuel pump fuse and relay in the power distribution box
- 2 Perform a visual inspection of the FPDM and its connectors for corrosion, water intrusion, or loose pins
- 3 Check fuel pump circuit wiring for continuity and voltage drop between the FPDM, inertia switch, and pump
- 4 Command the fuel pump on with a scan tool and compare commanded duty cycle to actual pump operation and fuel pressure
- 5 Measure fuel pump current draw with a low-amp clamp to identify a failing pump motor or excessive resistance
- 6 Substitute a known-good FPDM and clear the code to see if P1236 returns
- 7 If the pump is faulty, replace the fuel pump assembly and retest the circuit under load



FPDM corrosion and hidden wiring faults

- The fuel pump control module on many Ford vehicles is mounted under the rear of the car where road splash and salt corrode its connector, causing P1236 without any driveability complaint.
- A failing fuel pump can draw excessive current that the FPDM reports as out of range, so replacing the module alone often leads to a repeat failure if the pump is not tested under load.
- The inertia switch in the fuel pump circuit can develop high resistance at its connector and set P1236 even though the switch itself has not tripped.
- P1236 can be set by a low battery or charging system fault that drops voltage to the FPDM, so always verify battery and charging voltage before condemning the module.
- On some Ford models the fuel pump driver module shares a ground with the rear lighting harness, and a bad ground there can trigger P1236 along with unrelated lighting symptoms.

Can I keep driving with P1236?

You can usually drive a short distance to a repair shop if the engine runs normally, but avoid heavy acceleration, towing, or low fuel levels because a failing pump can stall without warning. If the engine stalls or loses power, pull over safely and have the vehicle towed rather than risk a breakdown in traffic.

Tools that help

- OBD-II scan tool with Ford-specific live data and bidirectional fuel pump control
- Digital multimeter with voltage drop and resistance capability
- Low-amp clamp meter for fuel pump current draw
- Fuel pressure gauge
- Wiring diagram for the specific Ford model and year
- Basic hand tools for connector and module access

Reading P1236

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (Ford): its meaning depends on the make.
2	Fuel and air metering (injector circuits).
36	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 [Disc Brake Trainer: How Car Brakes Stop a Wheel](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1236/>

