

GENERIC · POWERTRAIN

**P0259**

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

**P0259**

## Injection Pump Fuel Metering Control 'B' High (Cam/Rotor/Injector)

P0259 indicates that the powertrain control module (PCM) has detected an abnormally high voltage or current on the fuel metering control circuit for injection pump output 'B', which is often associated with the cam ring, rotor, or injector timing advance circuit. The computer compares the commanded fuel metering signal with the actual feedback from the pump's control actuator and sets this code when the circuit remains above the expected threshold for a calibrated time.

SYSTEM

**Powertrain**

CODE TYPE

**Generic (all makes)**

SEVERITY

**Medium**

FIX DIFFICULTY

**Professional**

AREA

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

### Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or intermittent misfire, especially when the engine is cold
- Reduced engine power or limp mode under acceleration
- Poor fuel economy or excessive black smoke from the exhaust
- Hard starting or stalling shortly after startup
- A noticeable surge or hesitation during light-throttle cruising

### Common causes, most likely first

- 1 Faulty fuel metering control solenoid or actuator on the injection pump
- 2 Damaged or chafed wiring in the 'B' control circuit, including shorts to power or ground
- 3 Corroded or loose electrical connector pins at the pump or PCM
- 4 Internal mechanical wear in the injection pump's cam ring or rotor assembly
- 5 Failed PCM driver circuit for the metering control output
- 6 Restricted fuel flow or low fuel pressure causing the pump to overcompensate electrically



## How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm the code is current and not history
- 2 Visually inspect the injection pump harness and connector for chafing, corrosion, or loose pins
- 3 Measure resistance and voltage on the 'B' control circuit at the pump and PCM, comparing to manufacturer specifications
- 4 Perform a fuel pressure and volume test to rule out supply-side restrictions before condemning the pump
- 5 Command the metering control actuator with a bidirectional scan tool and observe pump response and circuit feedback
- 6 If the circuit tests good, remove and bench-test the injection pump or replace the metering control solenoid as required
- 7 Clear codes, perform a road test with live data monitoring, and verify the repair with a full drive cycle

## What the metering code hides

- A loose ground strap between the engine block and chassis can elevate the 'B' circuit voltage enough to set P0259 without any pump fault at all.
- Technicians often replace the injection pump when the real problem is a single chafed wire behind the timing cover that only shorts when the engine torques under load.
- This code can be set by a failing fuel pressure regulator that forces the pump's metering actuator to run at an extreme duty cycle, so always check rail pressure first.
- On some systems, a weak battery or charging system ripple can corrupt the PCM's reference voltage and trigger a false high metering code.
- P0259 does not always mean the pump is mechanically failing; a sticky metering valve inside a otherwise healthy pump can cause the same high feedback signal.

## Can I keep driving with P0259?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration, towing, or sustained high-speed driving because the pump may enter limp mode or cause further mechanical damage. If the engine stalls or loses power abruptly, pull over safely and arrange a tow.

## Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter with back-probing pins
- Fuel pressure test gauge
- Wiring diagram and manufacturer service information
- Hand tools for connector and pump access



## Reading P0259

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 2** Fuel and air metering (injector circuits).
- 59** The exact fault within that area.

## Often seen with

**P0087** Fuel Rail/System Pressure - Too Low · **P0216** Injector/Injection Timing Control Circuit · **P0251** Injection Pump Fuel Metering Control 'A' (Cam/Rotor/Injector) · **P0258** Injection Pump Fuel Metering Control 'B' Low (Cam/Rotor/Injector) · **P0260** Injection Pump Fuel Metering Control 'B' Intermittent (Cam/R

## See it working

Watch the animated explainer [How the PCV System Works: Crankcase Ventilation](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0259/>

