

GENERIC · POWERTRAIN

P0258

OBD-II TROUBLE CODE

P0258

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

P0258 indicates that the powertrain control module (PCM) has detected a low voltage condition on the fuel metering control circuit for injection pump output 'B', which is often associated with the cam ring, rotor, or injector timing components. The PCM monitors this circuit for expected electrical feedback and sets the code when the signal falls below the calibrated threshold, indicating an open circuit, short to ground, or a faulty actuator.

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 engine misfire, particularly when cold or under light load
- Reduced engine power or limp mode due to fuel delivery miscalculation
- Hard starting or extended cranking before the engine fires
- Poor fuel economy or increased exhaust smoke
- Intermittent hesitation or stumble during acceleration

Common causes, most likely first

- 1 Damaged or corroded wiring harness or connector at the injection pump metering control solenoid
- 2 Failed fuel metering control solenoid or actuator on the injection pump
- 3 Open circuit or high resistance in the control circuit between the PCM and the pump
- 4 Short to ground in the control wire, often from chafing against engine components
- 5 Faulty powertrain control module (PCM) driver circuit, though rare
- 6 Internal mechanical binding in the injection pump cam ring or rotor affecting solenoid operation
- 7 Contaminated fuel or debris causing solenoid valve sticking and low feedback signal



How to diagnose and fix it

- 1 Inspect the injection pump electrical connector and harness for corrosion, chafing, or loose pins, and repair as needed
- 2 Measure resistance of the fuel metering control solenoid and compare to manufacturer specification
- 3 Check for short to ground or open circuit in the control wire between the PCM and the pump using a multimeter
- 4 Verify power and ground supplies to the injection pump control circuit with the key on and engine cranking
- 5 Perform a bidirectional scan tool test of the fuel metering actuator to confirm solenoid response
- 6 If electrical checks pass, test fuel pressure and inspect for mechanical binding in the pump cam ring or rotor
- 7 Replace the faulty fuel metering solenoid or injection pump assembly if internal failure is confirmed, then clear codes and verify repair

Before you replace the injection pump

- A loose or corroded connector at the pump is a far more common cause than a failed pump, so always wiggle-test the harness while watching live data.
- The code can set intermittently from vibration-related wire chafing, so a static resistance check may pass while the fault only appears during driving.
- Low fuel pressure from a restricted filter or weak lift pump can mimic a metering control fault by causing the solenoid to draw abnormal current.
- Some scan tools show fuel metering control 'B' as a separate parameter from 'A', and misreading the live data can lead to replacing the wrong component.
- After repairs, a relearn or adaptation reset may be required for the PCM to accept the new metering control values and turn off the light.

Can I keep driving with P0258?

The vehicle may enter limp mode or suffer reduced power, so avoid sustained high-speed driving or heavy towing until the fault is repaired. Short trips to a repair shop are acceptable if the engine runs smoothly, but stop driving immediately if rough running or stalling occurs.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter with back-probe pins
- Wiring diagram for the injection pump control circuit
- Fuel pressure test gauge
- Hand tools for connector and harness inspection



Reading P0258

- 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).
- 58** The exact fault within that area.

Often seen with

P0216 Injector/Injection Timing Control Circuit · **P0251** Injection Pump Fuel Metering Control 'A' (Cam/Rotor/Injector) · **P0252** Injection Pump Fuel Metering Control 'A' Range/Performance (· **P0257** Injection Pump Fuel Metering Control 'B' Range/Performance (· **P0259** Injection Pump Fuel Metering Control 'B' High (Cam/Rotor/Inj

See it working

Watch the animated explainer [How Push-Button Start Works: Keyless Ignition](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0258/>

