

GENERIC · POWERTRAIN

**P0283**

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

**P0283**

## Cylinder 8 Injector Circuit High

P0283 means the powertrain control module (PCM) has detected an abnormally high current or voltage on the control circuit for cylinder 8's fuel injector. The PCM commands the injector to fire, but the electrical feedback on that circuit is outside the expected range, indicating a short to power or a failed injector.

SYSTEM

**Powertrain**

CODE TYPE

**Generic (all makes)**

SEVERITY

**Medium**

FIX DIFFICULTY

**Intermediate**

AREA

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

### Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Rough idle or misfire felt as a shake or stumble, especially noticeable at idle
- Loss of power or hesitation during acceleration
- Increased fuel consumption due to poor combustion in cylinder 8
- Possible fuel smell from the exhaust if the injector is stuck open
- In some cases, the engine may enter limp mode or run poorly enough to trigger other codes

### Common causes, most likely first

- 1 Faulty fuel injector for cylinder 8 (internally shorted coil or stuck open)
- 2 Short to power in the injector control wiring between the PCM and the injector
- 3 Corroded, damaged, or loose electrical connector at the cylinder 8 injector
- 4 Damaged or chafed wire harness causing a short to voltage
- 5 Failed driver circuit inside the PCM (less common)
- 6 Aftermarket or incorrect injector installed that does not match the PCM's expected resistance



## How to diagnose and fix it

- 1 Inspect the cylinder 8 injector connector and wiring for corrosion, damage, or loose pins; repair or replace as needed
- 2 Measure the resistance of the cylinder 8 injector with a multimeter and compare to the manufacturer's specification
- 3 Check for a short to power on the injector control circuit using a multimeter or test light with the PCM disconnected
- 4 Swap the cylinder 8 injector with a known-good injector from another cylinder (if accessible) to see if the code moves
- 5 Test the PCM driver circuit with a noid light or oscilloscope to confirm the PCM is commanding the injector correctly
- 6 If wiring and injector are good, diagnose the PCM and replace only if confirmed faulty
- 7 Clear codes and verify the repair with a test drive and live data monitoring

## Don't overlook the injector connector

- A shorted injector coil can cause the PCM to shut down the driver, leading to a no-start condition even though the code indicates a high circuit.
- The code can be set by a poor connection at the injector that intermittently shorts to power, so wiggle-testing the harness while monitoring live data is essential.
- Some vehicles use a common power feed for all injectors; a short on that feed can affect multiple cylinders, but P0283 specifically flags cylinder 8.
- Replacing the injector without checking the wiring is a common misdiagnosis that leads to repeat failures.
- A failed PCM driver is rare but possible; always rule out wiring and injector first before condemning the computer.

## Can I keep driving with P0283?

Driving with P0283 is generally not recommended because a misfiring cylinder can damage the catalytic converter and waste fuel. If you must drive, keep speeds low and avoid heavy acceleration, and have the vehicle inspected as soon as possible.

## Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Noid light or injector test light
- Basic hand tools (socket set, screwdrivers, pliers)
- Wiring diagram for the specific vehicle



## Reading P0283

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

## Often seen with

**P0208** Injector Circuit/Open - Cylinder 8 · **P0282** Cylinder 8 Injector Circuit Low · **P0284** Cylinder 8 Contribution/Balance · **P0308** Cylinder 8 Misfire Detected · **P2149** Fuel Injector Group 'B' Supply Voltage Circuit/Open

## See it working

Watch the animated explainer [How a MAF Sensor Works: Hot-Wire Airflow Explained](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0283/>

