



P02C4

Cylinder 11 - Injector Restricted

P02C4 indicates that the powertrain control module has detected an abnormal restriction in the fuel injector circuit for cylinder 11, typically by monitoring current or voltage feedback and finding it outside the expected range. The code means the injector is not flowing the commanded amount of fuel, which can cause a misfire or a lean condition on that cylinder.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	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 a noticeable vibration that may be worse when the engine is cold
- Engine misfire, sometimes felt as a stumble or hesitation during acceleration
- Reduced engine power or poor fuel economy
- A strong raw fuel smell from the exhaust if the injector is stuck partially open or leaking
- Hard starting or an engine that stalls shortly after startup

Common causes, most likely first

- 1 Clogged or restricted fuel injector nozzle due to fuel contamination or deposits
- 2 Failed or sticking fuel injector solenoid winding
- 3 Damaged or corroded electrical connector at the injector
- 4 Chafed or open injector wiring harness
- 5 Faulty powertrain control module driver circuit for that injector
- 6 Low fuel pressure or a restricted fuel filter affecting all injectors, though the code may set on the weakest cylinder first

How to diagnose and fix it

- 1 Perform a visual inspection of the cylinder 11 injector connector and wiring for corrosion, chafing, or loose pins
- 2 Measure the injector coil resistance with a multimeter and compare it to the manufacturer's specification
- 3 Check fuel pressure and volume at the rail to rule out a supply issue before condemning the injector
- 4 Use a noid light or oscilloscope to verify the injector pulse signal from the powertrain control module
- 5 Run a fuel injector balance test or cylinder contribution test to confirm the injector is restricted
- 6 Remove and professionally clean or replace the restricted injector, then clear the code and verify the repair with a road test



What the code does not always mean

- A P02C4 can be set by a poor electrical connection at the injector even when the injector itself is mechanically sound, so always check the connector before replacing parts.
- Fuel contamination from a failing fuel pump or a bad batch of fuel can restrict multiple injectors, but the code may only flag cylinder 11 first because it is the most sensitive to the imbalance.
- A restricted injector on cylinder 11 can cause a lean misfire that mimics an ignition coil fault, so swapping coils without checking injector balance often leads to a misdiagnosis.
- On engines with cylinder deactivation, a P02C4 may appear only when the cylinder is reactivated, and the injector may test fine when the engine is idling on all cylinders.
- The powertrain control module driver circuit for the injector can fail intermittently, setting the code only under certain temperature or vibration conditions, which makes a simple resistance check misleading.

Can I keep driving with P02C4?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration, towing, or prolonged idling because a restricted injector can cause a lean misfire that damages the catalytic converter over time. If the check engine light begins flashing or the engine runs very rough, stop driving and have the vehicle towed.

Tools that help

- OBD-II scan tool with live data and injector balance test capability
- Digital multimeter
- Noid light or oscilloscope
- Fuel pressure gauge
- Hand tools for injector removal

Reading P02C4

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).
C4	The exact fault within that area.

Often seen with

P0171 System Too Lean (Bank 1) · **P02C3** Cylinder 11 - Fuel Trim at Min Limit · **P02C5** Cylinder 11 - Injector Leaking · **P0300** Random/Multiple Cylinder Misfire Detected · **P0301** Cylinder 1 Misfire Detected



See it working

Watch the animated explainer [How an Elevator Works: Traction Lift in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p02c4/>

