

GENERIC · POWERTRAIN

P0266

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0266

Cylinder 2 Contribution/Balance

P0266 indicates that the engine control module has detected an abnormal power contribution from cylinder 2 during the power stroke, as measured by crankshaft speed fluctuations. The computer compares each cylinder's acceleration to the average and flags cylinder 2 when its contribution falls outside the expected range.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Fuel and air metering (injector circuits)

Symptoms you may notice

- Rough idle or shaking that may be more noticeable when the engine is cold
- Noticeable misfire or hesitation during acceleration
- Often no symptoms besides the warning light, especially under light load
- Decreased fuel economy due to the engine compensating for a weak cylinder
- Possible flashing check engine light under heavy load if the misfire is severe

Common causes, most likely first

- Faulty fuel injector for cylinder 2, such as a clogged nozzle or electrical failure
- Worn or fouled spark plug in cylinder 2
- Defective ignition coil or spark plug wire for cylinder 2
- Vacuum leak affecting cylinder 2 intake port or intake manifold gasket
- Low compression in cylinder 2 from worn rings, valves, or head gasket
- Mechanical valvetrain issue such as a collapsed lifter or worn cam lobe
- Wiring or connector problem at the cylinder 2 injector or ignition coil

How to diagnose and fix it

- Perform a visual inspection of cylinder 2 ignition components and injector wiring for damage or loose connections
- Swap the ignition coil and spark plug from cylinder 2 to another cylinder to see if the misfire follows
- Use a scan tool to check misfire counters and observe cylinder 2 contribution while running
- Test the fuel injector for cylinder 2 with a noid light or injector balance test
- Run a compression test and cylinder leak-down test on cylinder 2 to rule out mechanical faults
- Check for vacuum leaks at the intake manifold and cylinder 2 intake port with a smoke machine
- Repair or replace the confirmed faulty component and clear the code to verify the fix



Cylinder 2 contribution faults often misdiagnosed

- A clogged or failing fuel injector is frequently the root cause, yet many technicians replace ignition parts first without testing injector flow.
- The code can be set by a vacuum leak at the intake manifold gasket that affects only cylinder 2, so a smoke test is essential before condemning internal engine parts.
- A worn spark plug or coil may still fire under light load but break down under compression, so swapping components to another cylinder is a reliable diagnostic step.
- Low compression from a bad valve or ring can cause this code without any other misfire codes, so a compression test should be performed early in the diagnosis.
- The engine control module may set P0266 without illuminating the check engine light immediately if the misfire is intermittent, so always check for pending codes.

Can I keep driving with P0266?

It is generally safe to drive with P0266 if the engine runs smoothly and the check engine light is steady, but avoid heavy acceleration or towing until the fault is repaired. If the light flashes or the engine shakes violently, stop driving and seek professional diagnosis to prevent catalytic converter damage.

Tools that help

- OBD-II scan tool with live data and misfire counters
- Compression tester
- Noid light or injector balance tester
- Vacuum gauge or smoke machine
- Basic hand tools and spark plug socket

Reading P0266

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).
66	The exact fault within that area.

Often seen with

P0261 Cylinder 1 Injector Circuit Low · **P0262** Cylinder 1 Injector Circuit High · **P0263** Cylinder 1 Contribution/Balance · **P0300** Random/Multiple Cylinder Misfire Detected · **P0302** Cylinder 2 Misfire Detected



See it working

Watch the animated explainer [How Airbags Work: A 50 km/h Crash in Slow Motion](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0266/>

