

GENERIC · POWERTRAIN

P0204

OBD-II TROUBLE CODE

P0204

Injector Circuit Malfunction - Cylinder 4

P0204 means the engine computer has detected an electrical problem in the fuel injector circuit for cylinder 4, typically an open circuit, short to ground, or short to power. The computer monitors the injector driver circuit and sets this code when the current flow or voltage feedback falls outside the expected range during engine operation.

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

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Rough idle or misfire that feels like a shake or stumble, especially at low speeds
- Noticeable loss of power and sluggish acceleration
- Increased fuel consumption as the engine compensates for a dead cylinder
- Shaking or vibration during acceleration or under load
- In some cases, the engine may enter limp mode or flash the check engine light if the misfire is severe

Common causes, most likely first

- 1 Faulty fuel injector on cylinder 4 (open or shorted internal coil)
- 2 Damaged or corroded electrical connector at the cylinder 4 injector
- 3 Broken, chafed, or shorted wire in the injector harness between the computer and the injector
- 4 Failed injector driver inside the engine control module (ECM) or powertrain control module (PCM)
- 5 High resistance or loose terminal in the injector circuit due to vibration or heat
- 6 Aftermarket or improperly installed electrical accessories tapping into the injector circuit
- 7 Corrosion or water intrusion in the wiring harness or connector causing intermittent contact



How to diagnose and fix it

- 1 Perform a visual inspection of the cylinder 4 injector connector and wiring for damage, corrosion, or loose pins
- 2 Use a noid light or injector pulse tester to confirm whether the computer is commanding the injector and whether the circuit can carry current
- 3 Measure the resistance of the cylinder 4 injector with a multimeter and compare it to the manufacturer's specification
- 4 Check for continuity and short-to-ground or short-to-power on the injector control wire between the ECM/PCM and the injector
- 5 Swap the cylinder 4 injector with a known-good injector from another cylinder to see if the misfire moves, confirming an injector fault
- 6 If the circuit and injector test good, test the ECM/PCM injector driver output with an oscilloscope or by checking for a consistent pulse signal
- 7 Repair or replace the faulty component: injector, connector, harness section, or ECM/PCM as indicated by the tests

What a P0204 often hides

- A P0204 can be set by a completely failed injector, but it also frequently appears when the injector is still functioning and the problem is a poor electrical connection that only acts up when hot or vibrating.
- Many technicians replace the injector first, but a corroded terminal or chafed wire in the harness is just as common and far cheaper to fix, so always test the circuit before condemning the injector.
- The code does not always mean the injector itself is bad; a shorted or open driver inside the engine computer can produce the same code, especially if the injector circuit tests normal but the computer shows no pulse.
- Intermittent P0204 codes that come and go are often caused by a wire that rubs through its insulation near a sharp edge or a connector that loses tension after years of heat cycles.
- A failed injector on one cylinder can cause the computer to set related misfire codes and even affect fuel trim on that bank, so always check for companion codes before assuming the injector is the only problem.

Can I keep driving with P0204?

You can usually drive a short distance to a repair shop, but avoid heavy acceleration, towing, or long trips because a dead cylinder can overheat the catalytic converter and waste fuel. If the check engine light is flashing, stop driving as soon as it is safe and have the vehicle towed.

Tools that help

- OBD-II scan tool with live data and misfire monitoring
- Digital multimeter
- Noid light or injector pulse tester
- Oscilloscope (for advanced circuit testing)
- Basic hand tools and wire repair kit



Reading P0204

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

Often seen with

P0171 System Too Lean (Bank 1) · **P0201** Injector Circuit Malfunction - Cylinder 1 · **P0202** Injector Circuit Malfunction - Cylinder 2 · **P0203** Injector Circuit Malfunction - Cylinder 3 · **P0304** Cylinder 4 Misfire Detected

See it working

Watch the animated explainer [How a Refrigerator Works: The Cooling Cycle](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0204/>

