

VOLKSWAGEN · POWERTRAIN

P1207

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1207 · Volkswagen

Cylinder 7 Fuel Injector Circuit Electrical Malfunction

P1207 on Volkswagen vehicles indicates that the engine control module (ECM) has detected an electrical fault in the circuit for the fuel injector on cylinder 7. This typically means the ECM sees an unexpected voltage or current condition, such as an open circuit, short to ground, or short to power, that prevents proper injector operation.

SYSTEM

Powertrain

CODE TYPE

Volkswagen specific

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, especially noticeable at idle or low speeds
- Engine hesitation or stumbling during acceleration
- Reduced engine performance and power output
- Increased fuel consumption due to improper fuel delivery
- Possible smell of raw fuel from the exhaust if the injector is stuck open

Common causes, most likely first

- 1 Faulty fuel injector on cylinder 7 (open or shorted coil)
- 2 Damaged or corroded electrical connector at the injector
- 3 Chafed, broken, or shorted wire in the injector harness
- 4 Loose or corroded ground connection for the injector circuit
- 5 Failed engine control module (ECM) driver for that injector (rare)
- 6 Aftermarket or damaged injector with incorrect resistance
- 7 Intrusion of water or oil into the injector harness connector



How to diagnose and fix it

- 1 Perform a visual inspection of the cylinder 7 injector connector and wiring for damage, corrosion, or loose pins
- 2 Measure the resistance of the injector with a multimeter and compare to specification (typically 10-15 ohms)
- 3 Check for battery voltage at the injector connector with the key on and engine off, and inspect the ground side for continuity
- 4 Use a noid light or oscilloscope to verify the injector pulse signal from the ECM
- 5 Test the injector circuit for shorts to ground or power using a multimeter and wiring diagram
- 6 If the circuit tests good, swap the injector with a known-good one from another cylinder to see if the misfire moves
- 7 Replace the faulty injector or repair the wiring as needed, then clear the code and verify the repair with a test drive

Don't overlook the injector harness

- A common cause of P1207 is a chafed wire in the injector harness where it rubs against the engine cover or intake manifold, often hidden from plain view.
- The code can be set by a poor connection at the injector connector even if the injector itself is good, so always check terminal tension and corrosion before replacing parts.
- On some Volkswagen engines, the injector harness is part of the engine wiring harness and can be damaged by heat or oil leaks, leading to intermittent faults.
- A failed ECM driver is rare but possible; however, misdiagnosis often leads to unnecessary ECM replacement when the real issue is a shorted injector or wiring.
- P1207 may be accompanied by misfire codes for cylinder 7, but the absence of a misfire code does not rule out an injector circuit problem if the fault is intermittent.

Can I keep driving with P1207?

Driving with P1207 is possible but not recommended for extended periods, as a faulty injector can cause misfires that may damage the catalytic converter or lead to poor fuel economy. Avoid heavy acceleration and have the vehicle diagnosed promptly.

Tools that help

- OBD-II scanner
- Digital multimeter
- Noid light
- Oscilloscope (optional)
- Wire repair kit
- Basic hand tools



Reading P1207

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Volkswagen): its meaning depends on the make.
- 2** Fuel and air metering (injector circuits).
- 07** The exact fault within that area.

Often seen with

P1203 Cylinder 3 Fuel Injector Circuit Electrical Malfunction · **P1201** Cylinder 1 Fuel Injector Circuit Electrical Malfunction · **P1202** Cylinder 2 Fuel Injector Circuit Electrical Malfunction · **P1203** Cylinder 3 Misfire · **P1201** Cylinder 1 Misfire · **P1202** Cylinder 2 Misfire · **P1203** Cylinder 3 Injector Circuit Open/Shorted · **P1201** Cylinder 1 Injector Circuit Open/Shorted · **P1202** Cylinder 2 Injector Circuit Open/Shorted · **P1202** Cylinder 2 Misfire · **P1203** Cylinder 3 Misfire · **P1201** Cylinder 1 Misfire · **P1202** Alternative Fuel Gas Mass Sensor Circuit Low Frequency · **P1203** Alternative Fuel Gas Mass Sensor Circuit High Frequency · **P1201** Alternative Fuel Gas Mass Sensor Circuit Range Performance · **P1202** (Alternative Fuel) Gas Mass Sensor Circuit Low Frequency · **P1203** (Alternative Fuel) Gas Mass Sensor Circuit High Frequency · **P1201** (Alternative Fuel) Gas Mass Sensor Circuit Range/Performance · **P0207** Injector Circuit/Open - Cylinder 7 · **P0307** Cylinder 7 Misfire Detected

See it working

Watch the animated explainer [Readiness Monitors and the OBD-II Drive Cycle](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/volkswagen-p1207/>

