

VOLKSWAGEN · POWERTRAIN

P1238

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1238 · Volkswagen

Cylinder 2 Injector Circuit Open Circuit

P1238 on Volkswagen vehicles means the engine control module (ECM) has detected an open circuit in the electrical path for cylinder 2's fuel injector, so no current can flow through the injector coil when the ECM commands it to fire. The ECM monitors injector circuit voltage or current and flags this code when the expected electrical load is missing, which prevents that cylinder from receiving fuel.

SYSTEM

Powertrain

CODE TYPE

Volkswagen
specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air
metering (injector
circuits)

Symptoms you may notice

- Rough idle or misfire that is most noticeable when the engine is cold or under light load
- Noticeable loss of power and sluggish acceleration because one cylinder is not contributing
- Check engine light illuminated, often accompanied by a flashing light if the misfire is severe
- Fuel smell from the exhaust or increased fuel consumption in some cases
- Often no symptoms besides the warning light if the injector circuit fails intermittently or only at certain temperatures
- Engine may enter limp mode or show reduced power on some Volkswagen models

Common causes, most likely first

- 1 Broken or chafed wire in the injector harness between the ECM and cylinder 2 injector, often near the cylinder head or intake manifold
- 2 Corroded or loose electrical connector at the cylinder 2 injector, sometimes caused by oil or coolant contamination
- 3 Failed cylinder 2 fuel injector with an open internal coil winding
- 4 Damaged or pushed-back terminal pins in the injector connector or ECM connector
- 5 Rodent damage to the engine wiring harness
- 6 Faulty ECM driver for the cylinder 2 injector circuit, though this is rare



How to diagnose and fix it

- 1 Clear the code and road test to confirm it returns, then check for any related misfire codes on cylinder 2
- 2 Inspect the cylinder 2 injector connector for corrosion, loose pins, or oil intrusion and clean or repair as needed
- 3 Measure the resistance of the cylinder 2 injector with a multimeter and compare it to the manufacturer's specification; an open circuit confirms a failed injector
- 4 Disconnect the ECM and injector connectors and perform a continuity test on both wires from the ECM to the injector to find an open circuit
- 5 Wiggle-test the harness while monitoring injector resistance or continuity to expose intermittent breaks in the wiring
- 6 Repair or replace the damaged section of the injector harness, using proper crimp and seal techniques
- 7 If the wiring and injector test good, substitute a known-good injector or test the ECM driver circuit before condemning the ECM

What a P1238 open circuit really tells you

- A P1238 does not always mean the injector itself has failed; a chafed wire near the cylinder head or a corroded connector pin is just as common and costs far less to fix.
- Volkswagen engines often route the injector harness tightly around the intake manifold and cylinder head, so heat cycling and vibration can break the wire internally while the insulation looks intact.
- An intermittent open circuit may only set the code when the engine is hot or cold, so a resistance test on a cold engine can pass even though the injector coil opens when warm.
- Do not overlook oil or coolant wicking into the injector connector on some Volkswagen engines, which corrodes the terminals and creates a high-resistance or open circuit.
- If the misfire is severe and the check engine light is flashing, continued driving can overheat the catalytic converter, so diagnose the circuit promptly rather than clearing the code and hoping it stays off.

Can I keep driving with P1238?

You can drive a short distance to a repair shop if the engine runs smoothly enough and the check engine light is steady, but avoid hard acceleration and long trips. If the check engine light is flashing or the engine is misfiring badly, stop driving because unburned fuel can damage the catalytic converter.

Tools that help

- OBD-II scan tool with live misfire and injector data
- Digital multimeter with resistance and continuity functions
- Back probe pins or breakout leads for testing connectors without damage
- Factory wiring diagram for the specific Volkswagen model and engine
- Basic hand tools for removing the engine cover and intake components



Reading P1238

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

Often seen with

P1237 Cylinder 1 Injector Circuit Open Circuit · **P1239** Cylinder 3 Injector Circuit Open Circuit · **P1237** VSV 2 Circuit · **P1237** Injector Circuit Cylinder 6 Intermittent · **P1237** Fuel Pump Secondary Circuit Fault · **P1239** Speed Fuel Pump Positive Feed Fault · **P1237** Injector Circuit Cylinder 6 Intermittent · **P0202** Injector Circuit Malfunction - Cylinder 2 · **P0300** Random/Multiple Cylinder Misfire Detected · **P0302** Cylinder 2 Misfire Detected

See it working

Watch the animated explainer [How a Padlock Works: Pin Tumbler Lock in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/volkswagen-p1238/>

