

VOLKSWAGEN · POWERTRAIN

P1213

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1213 · Volkswagen

Cylinder 1 Fuel Injector Circuit Short To B+

P1213 on Volkswagen vehicles means the engine control module (ECM) has detected a short to battery voltage on the fuel injector circuit for cylinder 1. The ECM commands the injector on, but the circuit voltage stays high or the current flow is abnormal, indicating the control wire is touching a power source or the injector has an internal short.

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 when the engine is cold
- Hesitation or stumble during acceleration
- Poor fuel economy due to incorrect fuel delivery
- Strong fuel odor from the exhaust or engine bay if the injector is stuck open
- In rare cases, the engine may crank but not start if the injector driver is damaged

Common causes, most likely first

- 1 Chafed or damaged injector wiring harness shorting to a nearby power wire
- 2 Faulty fuel injector with an internal short to the coil
- 3 Corroded or loose electrical connector at the cylinder 1 injector
- 4 Failed engine control module (ECM) injector driver
- 5 Aftermarket alarm or remote start wiring improperly spliced into the injector circuit
- 6 Rodent damage to the injector harness insulation



How to diagnose and fix it

- 1 Scan all modules for fault codes and record freeze-frame data to confirm the fault is current
- 2 Visually inspect the cylinder 1 injector harness and connector for chafing, corrosion, or loose pins
- 3 Disconnect the injector and measure resistance across its terminals; compare to the manufacturer's specification
- 4 With the injector disconnected and key on, measure voltage on the control wire; it should be near zero, not battery voltage
- 5 Check for continuity between the injector control wire and battery positive or other power sources to locate the short
- 6 Repair or replace the damaged section of the harness, using proper soldering and heat-shrink techniques
- 7 If the harness and injector test good, test the ECM driver circuit or substitute a known-good ECM to confirm internal failure

Before you replace the injector or ECM

- A short to B+ on the injector control wire often comes from the harness rubbing against the intake manifold or a sharp bracket, not from the injector itself.
- The ECM may set P1213 even when the injector still functions normally, because the short is intermittent and only occurs under vibration or heat.
- Aftermarket electrical accessories spliced into the injector circuit are a frequent cause that many technicians overlook during diagnosis.
- A failed injector driver inside the ECM can mimic a wiring short, so always verify the circuit integrity before condemning the module.
- P1213 is often accompanied by misfire codes for cylinder 1, but the misfire may not appear until the short becomes severe.

Can I keep driving with P1213?

You can drive the vehicle short distances to a repair shop, but avoid hard acceleration and long trips because a shorted injector can dump excess fuel into the cylinder, causing bore wash and catalytic converter damage. If the engine runs very rough or smells strongly of fuel, stop driving and have it towed.

Tools that help

- OBD-II scan tool with manufacturer-specific software
- Digital multimeter with back-probing pins
- Wiring diagram for the specific Volkswagen model
- Torx and hex bit socket set
- Electrical tape and heat-shrink tubing for harness repair



Reading P1213

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

Often seen with

P1214 Cylinder 2 Fuel Injector Circuit Short To B+ · **P1215** Cylinder 3 Fuel Injector Circuit Short To B+ · **P1214** Fuel Injector 2 Circuit High Voltage · **P1215** Fuel Injector 3 Circuit High Voltage · **P1214** Injection Pump Timing Offset · **P1215** Ground Fault Detection Indicated · **P1214** Pedal Position Sensor B Circuit Intermittent · **P1215** Pedal Position Sensor C Circuit Low Input · **P1214** Injection Pump Timing Offset · **P1215** Ground Fault Detection Indicated · **P0201** Injector Circuit Malfunction - Cylinder 1 · **P0261** Cylinder 1 Injector Circuit Low · **P0301** Cylinder 1 Misfire Detected

See it working

Watch the animated explainer [Car Relay Test Bench: Test 4-Pin and 5-Pin Relays](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/volkswagen-p1213/>

