

VOLKSWAGEN · POWERTRAIN

P1471

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1471 · Volkswagen

EVAP Emission Control System LDP Circuit Short To B+

P1471 on Volkswagen vehicles means the engine control module has detected a short to battery voltage on the electrical circuit that controls the Leak Detection Pump, a key component of the evaporative emission system. The computer expects a specific voltage behavior when it commands the pump, but instead it sees voltage that is too high, indicating a wiring fault rather than a mechanical leak.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Volkswagen specific	Low	Intermediate	Auxiliary emission controls

Symptoms you may notice

- Often no symptoms besides the warning light, because the leak detection pump only runs during specific self-tests.
- A faint fuel odor may be present if the short prevents the EVAP system from sealing properly.
- The check engine light may illuminate intermittently if the short is temperature or vibration sensitive.
- In rare cases, the engine may run slightly rough after refueling due to EVAP purge interference.
- No noticeable performance or fuel economy change in most instances.

Common causes, most likely first

- 1 Chafed or damaged wire in the LDP circuit touching a positive voltage source, often near the fuel tank or under the rear seat.
- 2 Corroded or water-intruded connector at the leak detection pump, causing voltage to backfeed.
- 3 Failed leak detection pump with an internal short to its power feed.
- 4 Faulty engine control module driver for the LDP circuit, though this is less common.
- 5 Aftermarket alarm or remote starter wiring improperly spliced into the EVAP circuit.
- 6 Rodent damage to the wiring harness near the fuel tank vent line.



How to diagnose and fix it

- 1 Verify the code is current and not a stored history code by clearing it and performing a test drive that includes an EVAP self-test.
- 2 Visually inspect the leak detection pump connector and wiring for corrosion, chafing, or signs of rodent damage.
- 3 Disconnect the LDP connector and measure voltage on the control circuit with the key on; a reading near battery voltage confirms a short to B+.
- 4 Isolate the circuit by wiggling the harness and checking for voltage changes while monitoring the LDP control wire.
- 5 Repair any damaged wire by soldering and sealing with heat shrink, then clear the code and re-test the EVAP system with a scan tool.
- 6 If the wiring is intact, substitute a known-good leak detection pump and re-check for the code.
- 7 As a last resort, check the engine control module connector for corrosion or internal short, and replace the module only after all other causes are ruled out.

What a short to B+ really means here

- A short to B+ does not always mean the pump is faulty; the wiring harness often rubs through near the fuel tank filler neck or under the rear seat where it flexes.
- Volkswagen's leak detection pump only activates under specific conditions, so a short may not set a code immediately after clearing, making a thorough wiggle test essential.
- A common misdiagnosis is replacing the leak detection pump when the actual fault is a corroded connector pin that backfeeds voltage from the tail light circuit.
- Aftermarket accessories wired into the rear harness can introduce a short to B+ that mimics a failed pump, so always check for non-factory wiring first.
- The code can also be set by a faulty fuel tank pressure sensor sharing the same reference voltage, so inspect related EVAP sensor circuits before condemning the LDP.

Can I keep driving with P1471?

You can continue driving with this code because it does not affect engine performance or safety, but have it diagnosed soon to prevent a more costly wiring repair and to ensure the EVAP system can detect fuel vapor leaks. Avoid topping off the fuel tank excessively, as this can force liquid fuel into the EVAP system and worsen the fault.



Tools that help

- OBD-II scan tool with Volkswagen-specific software
- Digital multimeter
- Wire piercing probes or back-probe kit
- Heat shrink tubing and soldering iron
- Trim removal tools for accessing rear harness

Reading P1471

- P** Powertrain: engine, transmission and emissions.
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- 1** Manufacturer-specific code (Volkswagen): its meaning depends on the make.
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- 4** Auxiliary emission controls.
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- 71** The exact fault within that area.

Often seen with

P1470 EVAP Emission Control System LDP Circuit Electrical Malfunc · **P1470** Pressure Control Flap Vacuum Transducer Y312 · **P1470** Leakage Diagnostic Pump Control Circuit Electrical · **P0442** EVAP System Leak Detected (Small) · **P0455** EVAP System Leak Detected (Large) · **P0456** Evaporative Emission System Leak Detected (very small leak) · **P2404** Evaporative Emission System Leak Detection Pump Sense Circui

See it working

Watch the animated explainer [How Coil-on-Plug Ignition Works: Coil and Spark Plug](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/volkswagen-p1471/>

