

VOLKSWAGEN · POWERTRAIN

P1466

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1466 · Volkswagen

Additive Pump Open Short To Ground

P1466 on Volkswagen vehicles means the engine control module has detected an open circuit or a short to ground on the electrical path for the additive pump, which is part of the diesel particulate filter regeneration system. The computer monitors the pump's control circuit and flags this code when the expected voltage or current is outside the normal range, indicating a wiring or pump fault rather than a mechanical regeneration failure.

SYSTEM

Powertrain

CODE TYPE

**Volkswagen
specific**

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

**Auxiliary emission
controls**

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Reduced engine performance or limp mode in some models
- Diesel particulate filter regeneration may be inhibited, leading to eventual soot accumulation
- Possible rough running or hesitation if the additive pump is completely inoperative
- A stored pending code or freeze frame data showing the fault occurred during a regeneration attempt

Common causes, most likely first

- 1 Damaged or corroded wiring harness between the additive pump and the engine control module
- 2 Failed additive pump (open winding or internal short to ground)
- 3 Blown fuse or poor ground connection for the additive pump circuit
- 4 Loose or corroded electrical connector at the additive pump
- 5 Water intrusion or road debris damage to the pump connector or wiring
- 6 Faulty engine control module driver for the additive pump circuit (rare)



How to diagnose and fix it

- 1 Verify the code with a Volkswagen-specific scan tool and check for related codes in other modules
- 2 Inspect the additive pump fuse and relay, and test for power and ground at the pump connector
- 3 Visually inspect the wiring harness from the pump to the engine control module for chafing, corrosion, or damage
- 4 Measure resistance of the additive pump circuit and compare to factory specifications to identify an open or short
- 5 Perform a continuity test on the ground circuit and repair any high-resistance connections
- 6 If wiring and connections are good, test the additive pump directly with a known-good power source or replace it
- 7 Clear the code and perform a regeneration drive cycle to confirm the repair and ensure the code does not return

Additive pump circuit faults often misdiagnosed

- A short to ground in the additive pump circuit can be caused by a pinched wire behind the fuel tank or near the rear axle, which is often overlooked during visual inspection.
- The additive pump is only commanded during specific regeneration conditions, so a fault may not appear until the vehicle attempts a regeneration cycle, leading to intermittent symptoms.
- A weak battery or charging system fault can cause the engine control module to set this code falsely, so always check battery voltage and ground integrity first.
- Replacing the additive pump without checking the wiring harness is a common misdiagnosis; the harness connector often suffers from water ingress and corrosion.
- This code does not always mean the pump is dead; an open circuit in the ground path can trigger the same fault, so test both power and ground sides of the circuit.

Can I keep driving with P1466?

You can usually drive the vehicle short distances to a repair shop, but avoid long trips or heavy loads because the diesel particulate filter will not regenerate and may eventually clog. If the engine enters limp mode, stop driving and seek professional diagnosis.

Tools that help

- Volkswagen-specific OBD-II scan tool
- Digital multimeter
- Wiring diagram for the additive pump circuit
- Socket set and trim removal tools
- Test light or power probe



Reading P1466

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

Often seen with

P1465 Additive Pump Short To B+ · **P1467** EVAP Canister Purge Solenoid Valve Short To B+ · **P1465** EPW Power · **P1465** A/C Relay Circuit Malfunction · **P1465** Heated Catalyst Battery Temperature Sensor 1 or 2 Plausibili · **P1467** Heated Catalyst Comparison Battery Voltages of Power Switches · **P2002** Particulate Trap Efficiency Below Threshold (Bank 1) · **P20EE** NOx Catalyst Efficiency Below Threshold (Bank 1) · **P2463** Diesel Particulate Filter Restriction - Soot Accumulation

See it working

Watch the animated explainer [Four-Stroke Engine Notebook: The Otto Cycle Explained](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/volkswagen-p1466/>

