

VOLKSWAGEN · POWERTRAIN

P1527

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1527 · Volkswagen

Intake Camshaft Control Circuit Bank 1 Short To Ground

P1527 on Volkswagen vehicles means the engine control module (ECM) has detected a short to ground on the intake camshaft control circuit for bank 1. The ECM commands the camshaft adjuster solenoid to change valve timing, but the circuit voltage stays near zero volts, indicating the control wire is touching ground or the solenoid has failed internally.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Volkswagen specific	Medium	Intermediate	Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Rough idle or unstable engine operation, especially when cold
- Reduced engine power or sluggish acceleration due to incorrect camshaft timing
- Poor fuel economy or increased emissions
- In rare cases, the engine may stall or hesitate during acceleration

Common causes, most likely first

- 1 Faulty intake camshaft adjuster solenoid with an internal short to ground
- 2 Damaged or chafed wiring harness between the ECM and the camshaft adjuster solenoid, shorting to ground
- 3 Corroded or loose electrical connector at the camshaft adjuster solenoid
- 4 ECM internal driver failure causing a short to ground on the control circuit
- 5 Oil contamination or sludge in the solenoid connector causing a short
- 6 Aftermarket or incorrectly installed electrical accessories tapping into the circuit



How to diagnose and fix it

- 1 Scan all modules for fault codes and verify P1527 is current; clear the code and test-drive to see if it returns
- 2 Visually inspect the camshaft adjuster solenoid connector and wiring for damage, corrosion, or chafing against ground
- 3 Measure resistance of the intake camshaft adjuster solenoid and compare to factory specification; replace if out of range
- 4 Disconnect the solenoid and check for short to ground on the control wire using a multimeter; repair harness if shorted
- 5 Check the ECM connector for corrosion or loose pins; perform a wiggle test on the harness while monitoring live data
- 6 If the circuit tests good, substitute a known-good solenoid and retest; if the code persists, suspect the ECM
- 7 After repair, clear codes and verify the camshaft adjuster operates correctly with a scan tool bidirectional test

Don't Replace the ECM Too Quickly

- A short to ground in the camshaft adjuster circuit is often caused by a rubbed-through wire near the cylinder head where heat and vibration are constant, not by the solenoid itself.
- Volkswagen's camshaft adjuster solenoids can fail intermittently when hot, so a resistance check on a cold engine may pass even though the solenoid is faulty.
- The ECM driver for the camshaft adjuster can be damaged by a shorted solenoid, so always repair the circuit before installing a new ECM to avoid repeat failure.
- This code can be set by a poor ground connection at the engine block, which causes the ECM to see unexpected voltage on the control circuit; check grounds before condemning parts.
- Some aftermarket alarm or remote start installations tap into the camshaft sensor wiring and can introduce a short to ground that triggers P1527 without any mechanical fault.

Can I keep driving with P1527?

You can usually drive the vehicle with P1527, but avoid heavy acceleration and prolonged driving because incorrect camshaft timing can cause poor performance and increased emissions. If the engine runs roughly or stalls, have it diagnosed promptly to prevent further damage.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter
- Wiring diagram for the specific Volkswagen model
- Socket set and torx bits for accessing the solenoid
- Electrical contact cleaner and dielectric grease



Reading P1527

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Volkswagen): its meaning depends on the make.
- 5** Vehicle speed, idle control and auxiliary inputs.
- 27** The exact fault within that area.

Often seen with

P1528 Intake Camshaft Control Circuit Bank 1 Open · **P1528** Governor · **P1528** Governor · **P1528** A Camshaft Position Actuator Control Circuit Signal High Ban · **P0010** 'A' Camshaft Position Actuator Circuit (Bank 1) · **P0011** 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0016** Crankshaft/Camshaft Position Correlation (Bank 1 Sensor A) · **P0340** Camshaft Position Sensor A Circuit Malfunction (Bank 1)

See it working

Watch the animated explainer [Four-Stroke Engine Cutaway: Intake to Exhaust](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/volkswagen-p1527/>

