



P1337 · Volkswagen

CMP Sensor Bank 1 Short To Ground

P1337 on Volkswagen vehicles means the engine control module has detected a short to ground on the camshaft position sensor circuit for bank 1. The computer monitors the signal wire and sees a constant low voltage instead of the expected pulsing signal, so it flags the circuit as shorted to ground.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Volkswagen specific	Medium	Intermediate	Ignition system and misfire

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Engine may stall or crank but not start if the short is severe
- Rough running or misfire due to incorrect camshaft timing signal
- Reduced engine performance and poor fuel economy
- Intermittent hesitation or surging while driving

Common causes, most likely first

- 1 Camshaft position sensor internal short to ground
- 2 Chafed or damaged sensor wiring harness rubbing against metal
- 3 Corroded or loose electrical connector at the sensor
- 4 Faulty engine control module (less common)
- 5 Aftermarket alarm or remote start wiring tapped into sensor circuit
- 6 Oil or coolant contamination in the sensor connector

How to diagnose and fix it

- 1 Scan all modules for stored codes and freeze-frame data to confirm P1337 is active
- 2 Visually inspect the camshaft sensor connector and wiring for damage, corrosion, or oil intrusion
- 3 Disconnect the sensor and measure resistance from the signal wire to ground; a near-zero reading indicates a short
- 4 Wiggle-test the harness while monitoring live data or a multimeter to locate intermittent shorts
- 5 Repair any chafed wires with proper solder and heat-shrink, then clear codes and retest
- 6 If wiring is intact, replace the camshaft position sensor with a quality OEM part
- 7 After repair, verify camshaft signal on a scan tool and confirm the code does not return



Don't overlook the wiring harness

- A short to ground can be caused by the sensor's internal electronics failing, but a chafed wire behind the engine is equally common and often missed during a quick visual check.
- Aftermarket accessories like alarm systems or remote starters that tap into the cam sensor circuit can introduce a short to ground that only appears when the accessory is powered.
- P1337 does not always mean the sensor is dead; the circuit can test fine at the sensor but short further upstream where the harness passes near hot or moving components.
- On some Volkswagen engines, oil leaking from the valve cover gasket can soak the cam sensor connector and cause a short that mimics a failed sensor.
- A short to ground on the cam sensor circuit can also set misfire codes and camshaft correlation codes, so always check for related codes before replacing parts.

Can I keep driving with P1337?

If the engine runs normally and only the check engine light is on, you can drive cautiously to a repair shop, but avoid hard acceleration and long trips. If the engine stalls, misfires badly, or fails to start, stop driving and have the vehicle towed to prevent further damage or safety risk.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wire piercing probes or back-probe kit
- Soldering iron and heat-shrink tubing
- Electrical tape and wire loom
- Basic socket set

Reading P1337

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (Volkswagen): its meaning depends on the make.
3	Ignition system and misfire.
37	The exact fault within that area.

Often seen with

P0016 Crankshaft/Camshaft Position Correlation (Bank 1 Sensor A) · **P0340** Camshaft Position Sensor A Circuit Malfunction (Bank 1) · **P0341** Camshaft Position Sensor A Circuit Range/Performance · **P0342** Camshaft Position Sensor A Circuit Low Input · **P0343** Camshaft Position Sensor A Circuit High Input



See it working

Watch the animated explainer [Engine Cooling System Trainer: How Engines Stay Cool](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/volkswagen-p1337/>

