

VOLKSWAGEN · POWERTRAIN

P1136

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1136 · Volkswagen

Long Term Fuel Trim Add Fuel Bank 1 System Too Lean

P1136 on Volkswagen vehicles means the engine computer has detected a lean condition on bank 1 that it cannot correct with normal fuel trimming, specifically in the long-term additive fuel trim range. The computer has reached the limit of its ability to add fuel and still sees a lean exhaust, indicating unmetered air or insufficient fuel delivery.

SYSTEM

Powertrain

CODE TYPE

Volkswagen specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Rough idle or stumbling, especially when the engine is cold
- Hesitation or flat spots during acceleration
- Occasional misfire codes or a flashing check engine light under load
- Poor fuel economy despite the lean condition
- Hard starting or stalling after startup in some cases

Common causes, most likely first

- 1 Vacuum leak from a cracked or disconnected intake hose, intake manifold gasket, or vacuum line
- 2 Faulty mass air flow (MAF) sensor under-reporting airflow
- 3 Leaking intake manifold gasket or throttle body gasket
- 4 Weak or failing fuel pump, clogged fuel filter, or restricted fuel line
- 5 Leaking or stuck-open purge valve in the evaporative emissions (EVAP) system
- 6 Faulty positive crankcase ventilation (PCV) valve or hose
- 7 Exhaust leak upstream of the oxygen sensor causing a false lean reading



How to diagnose and fix it

- 1 Connect a scan tool and record freeze-frame data and fuel trim values to confirm the lean condition on bank 1
- 2 Visually inspect all intake air hoses, vacuum lines, and the PCV system for cracks, loose clamps, or disconnected fittings
- 3 Perform a smoke test on the intake system to pinpoint vacuum leaks that are not visible
- 4 Check fuel pressure and volume against Volkswagen specifications to rule out a weak pump or restricted filter
- 5 Clean or replace the MAF sensor if testing shows it is under-reporting airflow
- 6 Inspect the EVAP purge valve for proper operation and check for a stuck-open condition
- 7 Verify oxygen sensor operation and check for exhaust leaks upstream of the sensor

Lean Codes Often Start With Unmetered Air

- A smoke test is the fastest way to find intake leaks that are invisible to the eye, and many technicians skip it only to replace parts unnecessarily.
- The long-term additive fuel trim range on Volkswagen engines is most active at idle, so a vacuum leak often shows up as a high positive trim at idle that improves with engine speed.
- A failing MAF sensor on Volkswagen engines can under-report airflow without setting a MAF-specific code, leading directly to P1136.
- A stuck-open EVAP purge valve acts like a vacuum leak and is a commonly overlooked cause of lean codes on turbocharged and naturally aspirated Volkswagen engines.
- Do not assume a lean code means the oxygen sensor is bad; the sensor is usually reporting a real lean condition, and replacing it without finding the root cause will not fix the problem.

Can I keep driving with P1136?

You can usually drive the vehicle short distances to a repair shop, but avoid hard acceleration and heavy loads because a persistent lean condition can cause misfires and overheating of the catalytic converter. If the check engine light flashes or the engine runs very rough, stop driving and have it towed.

Tools that help

- OBD-II scan tool with live data and fuel trim capability
- Smoke machine for intake leak detection
- Fuel pressure gauge
- Hand tools for hose and sensor inspection
- Digital multimeter for sensor and wiring checks



Reading P1136

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

Often seen with

P0171 System Too Lean (Bank 1) · **P0172** System Too Rich (Bank 1) · **P0300** Random/Multiple Cylinder Misfire Detected · **P0301** Cylinder 1 Misfire Detected · **P0442** EVAP System Leak Detected (Small)

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-p1136/>

