

VOLKSWAGEN · POWERTRAIN

P1157

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1157 · Volkswagen

Manifold Absolute Pressure Sensor Circuit Power Supply Malfunction

P1157 on Volkswagen vehicles indicates that the engine control module has detected a malfunction in the power supply circuit feeding the manifold absolute pressure sensor, which measures intake manifold vacuum and boost pressure. The computer monitors the sensor's reference voltage and flags this code when the supply is out of range, shorted, or intermittent.

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 unstable engine speed, especially when cold
- Hesitation or stumble during acceleration
- Poor fuel economy or rich-running exhaust smell
- Reduced engine power or limp mode in some models
- Intermittent stalling when coming to a stop

Common causes, most likely first

- 1 Damaged or chafed wiring in the MAP sensor power supply circuit
- 2 Corroded or loose electrical connector at the MAP sensor
- 3 Failed manifold absolute pressure sensor with an internal short
- 4 Blown fuse or faulty relay supplying the sensor reference voltage
- 5 Poor ground connection shared with the MAP sensor circuit
- 6 Faulty engine control module driver for the sensor power supply (rare)

How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm P1157 is the primary fault
- 2 Inspect the MAP sensor connector and wiring for corrosion, chafing, or loose pins
- 3 Check the fuse and relay that supply power to the MAP sensor circuit
- 4 Measure reference voltage at the MAP sensor connector with the key on and compare to specification
- 5 Perform a voltage drop test on the power and ground circuits to rule out resistance
- 6 Substitute a known-good MAP sensor only after circuit tests pass
- 7 Repair or replace damaged wiring, then clear codes and verify the repair with a road test



What most technicians overlook on P1157

- A chafed wire harness near the intake manifold or timing cover often causes an intermittent power supply fault that never appears during a static voltage check.
- The MAP sensor shares its reference voltage with other sensors on many Volkswagen engines, so a short in a neighbouring sensor can set P1157 without the MAP sensor itself being faulty.
- Aftermarket air intake or boost gauge installations frequently disturb the MAP sensor wiring, creating a power supply malfunction that looks like a failed sensor.
- A weak battery or failing voltage regulator can cause the reference voltage to drop below threshold intermittently, setting P1157 along with other unrelated codes.
- Clearing the code without repairing the circuit often leads to a repeat failure because the ECM re-learns the fault only after a complete drive cycle.

Can I keep driving with P1157?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration or towing because a faulty MAP sensor signal can cause poor fuel mixture and reduced power. If the engine runs rough or stalls, stop driving and arrange a tow.

Tools that help

- OBD-II scan tool with manufacturer-specific software
- Digital multimeter with back-probing pins
- Wiring diagram for the specific Volkswagen model
- Torx and hex socket set for intake and sensor fasteners
- Electrical contact cleaner and dielectric grease

Reading P1157

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

Often seen with

P0106 MAP/Barometric Pressure Circuit Range/Performance · **P0107** MAP/Barometric Pressure Circuit Low Input · **P0108** MAP/Barometric Pressure Circuit High Input · **P0236** Turbocharger Boost Sensor A Circuit Range/Performance · **P0237** Turbocharger Boost Sensor A Circuit Low



See it working

Watch the animated explainer [How ABS Works: Anti-Lock Brakes in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/volkswagen-p1157/>

