

SUZUKI · POWERTRAIN

P1450

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1450 · Suzuki

Barometric Pressure Sensor Too Low Or Too High

P1450 on Suzuki vehicles means the engine control module (ECM) has detected a barometric pressure (BARO) sensor signal that is outside the expected range for the current conditions. The ECM compares the BARO reading with other pressure sensors and expects a plausible value; when the voltage or calculated pressure is too low or too high, it stores this code and illuminates the check engine light.

SYSTEM

Powertrain

CODE TYPE

Suzuki specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Auxiliary emission controls

Symptoms you may notice

- Check engine light illuminated, often with no other noticeable symptoms.
- Rough idle or poor engine performance if the BARO signal is far off.
- Reduced fuel economy due to incorrect air density calculations.
- Hesitation or stumble during acceleration in some cases.
- In rare instances, the engine may stall or be hard to start.

Common causes, most likely first

- 1 Faulty barometric pressure sensor integrated into the mass airflow (MAF) sensor or engine control module (ECM).
- 2 Wiring damage (open, short, or high resistance) between the BARO sensor and the ECM.
- 3 Corroded or loose electrical connector at the BARO sensor or ECM.
- 4 Vacuum leak or blockage in the sensor's pressure port or hose.
- 5 Contaminated sensor element due to dirt, oil, or moisture ingress.
- 6 ECM internal fault causing incorrect interpretation of the sensor signal.
- 7 Aftermarket air intake or modifications that affect sensor readings.



How to diagnose and fix it

- 1 Use a scan tool to read the BARO value in live data and compare it with actual atmospheric pressure for your altitude.
- 2 Visually inspect the BARO sensor (often part of the MAF sensor) and its connector for damage, corrosion, or loose pins.
- 3 Check the sensor's vacuum hose or port for cracks, blockage, or disconnection.
- 4 Perform a voltage drop test on the sensor's reference, signal, and ground circuits to rule out wiring issues.
- 5 If wiring and connections are good, test the sensor with a multimeter or replace it with a known-good unit.
- 6 Clear the code and test-drive the vehicle to see if the code returns.
- 7 If the code persists after sensor replacement, diagnose the ECM and its programming.

Barometric sensor faults often misdiagnosed

- The BARO sensor on many Suzuki models is integrated into the MAF sensor, so a faulty MAF can set P1450 without any MAF-related codes.
A dirty or contaminated MAF sensor can cause incorrect BARO readings, so cleaning the sensor element may resolve the issue before replacement.
- Altitude changes can cause temporary BARO deviations, but the ECM should adapt; a persistent code indicates a real fault.
- Wiring problems, such as a chafed harness near the intake, are common causes that are often overlooked when only the sensor is replaced.
The ECM may use BARO data for fuel injection and ignition timing, so ignoring the code can lead to poor performance and increased emissions.

Can I keep driving with P1450?

You can generally continue driving with P1450, but avoid aggressive acceleration or heavy loads until the fault is repaired. If you notice rough running or stalling, have the vehicle checked promptly to prevent further issues.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Basic hand tools (screwdrivers, socket set)
- Sensor cleaner (MAF cleaner)
- Vacuum pump or pressure gauge (for testing sensor response)



Reading P1450

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

Often seen with

P0105 MAP/Barometric Pressure Circuit Malfunction · **P0106** MAP/Barometric Pressure Circuit Range/Performance · **P0107** MAP/Barometric Pressure Circuit Low Input · **P0108** MAP/Barometric Pressure Circuit High Input · **P0171** System Too Lean (Bank 1)

See it working

Watch the animated explainer [How a Gyroscope Works: Gimbals and Precession](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/suzuki-p1450/>

