

GENERIC · POWERTRAIN

P2527

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2527

Vacuum Reservoir Pressure Sensor Circuit Low

P2527 indicates that the powertrain control module (PCM) has detected a low voltage signal from the vacuum reservoir pressure sensor circuit, which is used to monitor the vacuum stored in the reservoir for systems like the brake booster or emission controls. The PCM expects the sensor signal to stay within a specific voltage range, and a low reading means the circuit is shorted to ground, the sensor has failed, or there is a wiring issue.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- Illumination of the check engine light (malfunction indicator lamp) on the dashboard
- Often no other symptoms besides the warning light, especially if the vacuum reservoir is still functioning
- Reduced brake assist, making the brake pedal feel harder to press
- Poor engine performance or rough idle if the vacuum reservoir affects engine operation
- Possible hissing sound from a vacuum leak, though this is more common with a pressure issue than a sensor circuit fault

Common causes, most likely first

- 1 Faulty vacuum reservoir pressure sensor
- 2 Short to ground in the sensor signal circuit
- 3 Damaged or corroded wiring harness or connector at the sensor
- 4 Failed PCM (rare, but possible if other causes are ruled out)
- 5 Water or debris intrusion into the sensor connector causing a short
- 6 Aftermarket accessories improperly tapped into the sensor circuit



How to diagnose and fix it

- 1 Use an OBD-II scanner to verify the code and check for any related codes in other systems.
- 2 Visually inspect the sensor and its connector for damage, corrosion, or loose pins.
- 3 Disconnect the sensor and check the signal circuit for a short to ground using a digital multimeter.
- 4 Measure the sensor's resistance or voltage output according to the manufacturer's specifications, if available.
- 5 Check the wiring harness for chafing or breaks, especially near sharp edges or hot components.
- 6 If the circuit tests good, replace the vacuum reservoir pressure sensor with a known-good unit.
- 7 Clear the codes and test-drive the vehicle to confirm the repair.

Don't overlook the wiring harness

- A short to ground in the signal circuit is more common than a failed sensor, so always check the wiring before replacing parts.
- The vacuum reservoir pressure sensor is sometimes integrated into the brake booster or vacuum pump, making diagnosis more complex.
- A low voltage code can be set by a poor ground connection at the sensor or PCM, which is often missed during diagnosis.
- Aftermarket electrical accessories tapped into the sensor circuit can cause intermittent low voltage codes that appear only under certain conditions.
- The code may be stored without any drivability symptoms, leading some to ignore it, but it can affect brake assist and should be addressed.

Can I keep driving with P2527?

If the brake pedal feels normal and there are no other symptoms, you can drive the vehicle to a repair shop, but avoid heavy braking or towing. If the brake pedal is hard or braking performance is reduced, stop driving and have the vehicle towed to avoid an accident.

Tools that help

- OBD-II scanner
- Digital multimeter
- Wire probe set
- Service manual with wiring diagrams
- Basic hand tools (sockets, wrenches)



Reading P2527

- P** Powertrain: engine, transmission and emissions.
- 2** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 5** Vehicle speed, idle control and auxiliary inputs.
- 27** The exact fault within that area.

Often seen with

P1479 High Fan Control Primary Circuit · **P1479** Transmission Fan Relay Circuit Open Or Shorted · **P0556** Brake Booster Pressure Sensor Circuit Range/Performance · **P0557** Brake Booster Pressure Sensor Circuit Low Input · **P2526** Vacuum Reservoir Pressure Sensor Circuit Range/Performance · **P2528** Vacuum Reservoir Pressure Sensor Circuit High

See it working

Watch the animated explainer [Manual Car Driving Simulator: Learn Clutch Control](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2527/>

