

NISSAN · POWERTRAIN

P1248

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1248 · Nissan

Accelerator Position Sensors 1 & 2 Improper Correlation

P1248 on Nissan vehicles means the engine control module (ECM) has detected that the two accelerator pedal position sensors are not reporting voltages that correlate with each other as expected. The ECM compares the signals from sensor 1 and sensor 2, and when the relationship between them falls outside the programmed tolerance, it stores this code and typically illuminates the check engine light.

SYSTEM

Powertrain

CODE TYPE

Nissan specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air
metering (injector
circuits)

Symptoms you may notice

- The check engine light is illuminated, often with no other noticeable symptoms.
- The accelerator pedal may feel unresponsive or sluggish when pressed.
- The engine may enter limp mode, limiting speed and power.
- Intermittent hesitation or stumble during acceleration.
- A stored code P1248 may be accompanied by other throttle-related codes.
- Rough idle or stalling in some cases, though less common.

Common causes, most likely first

- 1 Dirty or contaminated accelerator pedal position sensor contacts.
- 2 Worn or damaged accelerator pedal assembly, causing sensor misalignment.
- 3 Corroded or loose electrical connectors at the pedal sensors.
- 4 Damaged wiring harness between the sensors and the ECM.
- 5 Failed accelerator pedal position sensor (one or both).
- 6 ECM software issue or internal fault, though rare.
- 7 Aftermarket floor mats or debris obstructing pedal movement.



How to diagnose and fix it

- 1 Inspect the accelerator pedal area for debris or floor mats that may restrict movement.
- 2 Check the electrical connectors at the accelerator pedal sensors for corrosion or looseness; clean and reseal as needed.
- 3 Use a scan tool to view live data for both accelerator position sensors and compare their voltage signals through the full pedal travel.
- 4 Perform a visual inspection of the wiring harness between the pedal and ECM for chafing or damage.
- 5 If sensor correlation is off, replace the accelerator pedal assembly as a unit, as sensors are often integrated.
- 6 After repair, clear the code and perform a throttle pedal relearn procedure if required by the vehicle.
- 7 Verify the repair by test-driving and confirming no code returns and live data correlates properly.

Common Misdiagnosis Traps for P1248

- A dirty or sticking accelerator pedal can cause this code without any sensor failure, so always check for physical obstructions first.
The two sensors are designed to have opposite voltage swings; a technician must verify both signals with a scan tool rather than assuming one sensor is bad.
- Corrosion at the pedal connector is a frequent culprit on older Nissans, especially in humid climates, and is often overlooked.
- Replacing the accelerator pedal assembly without checking wiring integrity can lead to a repeat code if the harness is damaged.
This code can be set by a weak battery or charging system issue causing voltage glitches, so check battery health before condemning sensors.

Can I keep driving with P1248?

If the vehicle is in limp mode or the accelerator response is erratic, avoid driving until diagnosed. If the only symptom is the check engine light and the car drives normally, you can drive cautiously to a repair shop, but avoid heavy acceleration or long trips.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Basic hand tools (screwdrivers, socket set)
- Contact cleaner
- Factory service information for voltage specifications



Reading P1248

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

Often seen with

P0222 Throttle Position Sensor B Circuit Low Input · **P0223** Throttle Position Sensor B Circuit High Input ·
P2122 Accelerator Pedal Position Sensor D Circuit Low · **P2127** Accelerator Pedal Position Sensor E Circuit Low
 · **P2138** Throttle/Pedal Position Sensor D/E Voltage Correlation

See it working

Watch the animated explainer [How a Knock Sensor Works: Spark Timing and Octane](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/nissan-p1248/>

