

NISSAN · POWERTRAIN

P1108

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1108 · Nissan

BARO Circuit High Input

P1108 on Nissan vehicles indicates that the engine control module (ECM) has detected a high input voltage from the barometric pressure (BARO) sensor circuit, which measures atmospheric pressure for fuel and ignition calculations. The ECM expects the BARO signal to stay within a specific voltage range, and a high reading typically means the sensor is reporting an abnormally high pressure or the circuit is seeing a short to voltage.

SYSTEM

Powertrain

CODE TYPE

Nissan specific

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Fuel and air
metering

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or poor engine performance due to incorrect fuel mixture
- Reduced fuel economy as the ECM compensates for inaccurate pressure data
- Hesitation or stumble during acceleration
- In rare cases, the engine may stall or have difficulty starting

Common causes, most likely first

- 1 Faulty barometric pressure sensor (often integrated into the mass air flow sensor on many Nissan models)
- 2 Short to voltage in the BARO sensor signal circuit
- 3 Corroded or damaged electrical connector at the BARO sensor
- 4 Open or high-resistance ground circuit for the BARO sensor
- 5 Failed engine control module (ECM) (less common)
- 6 Wiring harness damage from chafing or heat exposure



How to diagnose and fix it

- 1 Connect a scan tool and verify the BARO sensor voltage reading with the key on, engine off; compare it to expected atmospheric pressure for your altitude.
- 2 Visually inspect the BARO sensor and its connector for corrosion, loose pins, or damage; repair or replace as needed.
- 3 Check the sensor's reference voltage and ground circuits with a multimeter to ensure they are within specification.
- 4 Backprobe the signal wire at the sensor and at the ECM to check for a short to voltage or an open circuit; repair the harness if faulty.
- 5 If the sensor is integrated into the mass air flow sensor, test the MAF sensor's BARO output according to the factory service procedure.
- 6 Replace the BARO sensor or MAF sensor if testing confirms it is faulty.
- 7 Clear the diagnostic trouble code and perform a road test to verify the repair.

BARO sensor faults often misdiagnosed

- On many Nissan models, the BARO sensor is built into the mass air flow (MAF) sensor, so a faulty MAF sensor can set P1108 without any MAF-related codes.
- A high BARO voltage can be caused by a short to voltage in the signal wire, which may only occur intermittently due to wire chafing near hot engine components.
- Technicians sometimes replace the ECM prematurely when the real issue is a poor ground connection at the sensor or ECM, leading to incorrect voltage readings.
- P1108 can be set by a dirty or contaminated MAF sensor element that affects the BARO reading, so cleaning the sensor may resolve the code before replacement.
- Altitude and weather changes can cause slight variations in BARO voltage, but the ECM should adapt; a code sets only when the signal exceeds the expected range for the current conditions.

Can I keep driving with P1108?

The vehicle is generally safe to drive with P1108 because the ECM uses default values if the BARO signal is implausible, but you may experience reduced performance and fuel economy. Avoid heavy acceleration or towing until the issue is diagnosed and repaired.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Factory service information for voltage and resistance specifications
- Basic hand tools for connector and sensor removal
- Wire piercing probes or backprobe pins



Reading P1108

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

Often seen with

P1107 Oxygen Sensor Heating Circuit Bank 2 Sensor 1 Short To B+ · **P1109** Oxygen Sensor Circuit Bank 2 Sensor 2 Voltage Too Low/Air Le · **P1107** AIR System Diagnosis Solenoid Circuit Fault · **P1107** BARO Circuit Low Input · **P1107** BARO Circuit Low Input · **P1107** MAP Sensor Voltage Intermittent Low · **P1109** Secondary Port Throttle System · **P1107** Dual Alternator Lower Circuit Malfunction · **P1109** IAT B Sensor Intermittent · **P1107** MAP Sensor Circuit Intermittent Low Voltage · **P1109** Secondary Port Throttle System · **P0101** Mass/Volume Air Flow Circuit Range/Performance · **P0102** Mass/Volume Air Flow Circuit Low Input · **P0103** Mass/Volume Air Flow Circuit High Input

See it working

Watch the animated explainer [How a Starter Motor Works: Pre-Engaged Starter](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/nissan-p1108/>

