

NISSAN · POWERTRAIN

P1128

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1128 · Nissan

MAP Lower Than Expected

P1128 on Nissan vehicles means the engine control module (ECM) has detected a manifold absolute pressure (MAP) sensor signal that is lower than the expected value for the current operating conditions. The ECM compares the MAP reading against a calculated model based on throttle position, engine speed, and airflow, and flags the code when the actual sensor voltage corresponds to a pressure below the plausible range.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Nissan specific	Medium	Intermediate	Fuel and air metering

Symptoms you may notice

- Illumination of the 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 smell from the exhaust
- Occasional stalling when coming to a stop
- Reduced engine power or limp mode in severe cases

Common causes, most likely first

- 1 Vacuum leak in the intake manifold, vacuum hoses, or brake booster line
- 2 Faulty or contaminated MAP sensor
- 3 Dirty or sticking throttle body causing incorrect airflow model
- 4 Wiring issue in the MAP sensor circuit (open, short, or high resistance)
- 5 Clogged or restricted engine air filter or intake tract
- 6 Exhaust gas recirculation (EGR) valve stuck open or leaking
- 7 Engine mechanical issue such as low compression or incorrect valve timing



How to diagnose and fix it

- 1 Inspect all intake and vacuum hoses for cracks, loose clamps, or disconnected lines and repair as needed
- 2 Clean the throttle body and perform a throttle position relearn if required
- 3 Check the MAP sensor connector and wiring for corrosion, chafing, or loose pins; repair the harness if faulty
- 4 Test the MAP sensor with a multimeter or scan tool live data against manufacturer specifications and replace if out of range
- 5 Verify engine air filter and intake duct are clean and unrestricted
- 6 Perform a smoke test on the intake system to locate hidden vacuum leaks
- 7 If all else fails, check engine mechanical condition (compression, valve timing) and EGR operation

Hidden causes of a low MAP reading

- A dirty throttle body is a frequent culprit on Nissan engines because it skews the ECM's airflow model, making a healthy MAP sensor appear to read low.
- The MAP sensor on many Nissan models is sensitive to oil contamination from a failing PCV system, which can coat the sensing element and cause a low signal without any wiring fault.
- A leaking brake booster diaphragm can introduce a large vacuum leak that sets P1128 and is often overlooked because the brake pedal feel may seem normal.
- This code does not always mean the MAP sensor itself is bad; technicians who replace the sensor first frequently find the code returns due to an unresolved vacuum leak.
- After repairs, the ECM may need a idle air volume relearn or a drive cycle to clear the code and confirm the fix, especially if the battery was disconnected.

Can I keep driving with P1128?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration, towing, or sustained high-speed driving because a lean or rich condition may damage the catalytic converter over time. If the engine runs rough or stalls, stop driving and arrange a tow.

Tools that help

- OBD-II scan tool with live data capability
- Multimeter for sensor and wiring testing
- Smoke machine for vacuum leak detection
- Throttle body cleaner and soft brush
- Basic hand tools (screwdrivers, socket set, pliers)



Reading P1128

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

Often seen with

P0106 MAP/Barometric Pressure Circuit Range/Performance · **P0171** System Too Lean (Bank 1) · **P0172** System Too Rich (Bank 1) · **P0300** Random/Multiple Cylinder Misfire Detected · **P0505** Idle Control System Malfunction

See it working

Watch the animated explainer [How an EGR Valve Works: Exhaust Gas Recirculation](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/nissan-p1128/>

