



P1242 · Nissan

Throttle Vent Control Motor Circuit 2 Malfunction

P1242 on Nissan vehicles indicates that the engine control module (ECM) has detected an electrical fault in the throttle vent control motor circuit, specifically the second control circuit. The ECM monitors the motor's command and feedback signals and sets this code when the expected current or voltage is outside the normal range, pointing to a problem with the motor, its wiring, or the ECM driver.

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

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms.
- Intermittent or persistent rough idle or unstable engine speed.
- Reduced engine power or limp mode in some cases.
- Poor throttle response or hesitation during acceleration.
- In rare instances, the engine may stall or fail to start.

Common causes, most likely first

- 1 Faulty throttle vent control motor (internal short or open circuit).
- 2 Damaged or corroded wiring in the throttle vent control motor circuit 2.
- 3 Loose or corroded electrical connector at the throttle body or ECM.
- 4 Failed ECM driver for the vent control motor circuit.
- 5 Contamination or carbon buildup inside the throttle body affecting motor operation.
- 6 Aftermarket or improperly installed electronic throttle components.



How to diagnose and fix it

- 1 Verify the code with a Nissan-specific scan tool and check for any related throttle body codes.
- 2 Inspect the throttle body connector and wiring for corrosion, chafing, or loose pins; repair as needed.
- 3 Measure resistance and check for shorts or opens in the vent control motor circuit 2 using a multimeter and the factory wiring diagram.
- 4 Test the throttle vent control motor directly with a bidirectional scan tool or by applying voltage to confirm operation.
- 5 Clean the throttle body and perform a throttle position relearn procedure if contamination is found.
- 6 If the motor or circuit tests faulty, replace the throttle body assembly (motor is typically not serviced separately).
- 7 After repairs, clear the code and perform a road test to confirm the fault does not return.

Don't overlook the throttle body connector

- A common oversight is assuming the throttle body itself is defective when the real problem is a corroded or loose connector pin causing an intermittent circuit 2 fault.
- The vent control motor is part of the electronic throttle body on most Nissans and is not available as a separate component, so diagnosis must rule out wiring before replacing the entire unit.
- This code can be set by a weak battery or charging system issue that causes low voltage during cranking, leading to a false motor circuit fault.
- After replacing the throttle body, a throttle position relearn and idle air volume relearn are required; skipping this step can cause drivability issues and a repeat code.
- Some aftermarket throttle bodies have incompatible motor windings that trigger P1242 even when new, so sticking with OEM or known-good units is advised.

Can I keep driving with P1242?

The vehicle may enter limp mode or exhibit reduced power, so avoid aggressive acceleration and plan to have the fault diagnosed soon. If the engine stalls or runs poorly, stop driving and seek professional repair to prevent safety risks.

Tools that help

- Nissan-specific OBD-II scan tool with bidirectional controls
- Digital multimeter
- Factory service manual or wiring diagram
- Socket set and screwdrivers
- Contact cleaner and dielectric grease



Reading P1242

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

Often seen with

P1241 Cylinder 5 Injector Circuit Open Circuit · **P1243** Cylinder 7 Injector Circuit Open Circuit · **P1241** Throttle Vent Control Motor Circuit 1 Malfunction · **P1243** Throttle Position Insufficient · **P1241** Sensor Power Supply Low Input · **P1243** Analog Ground · **P1241** Throttle Vent Control Motor Circuit 1 Malfunction · **P1243** Throttle Position Insufficient · **P1243** Injector Circuit Cylinder 8 Intermittent · **P1243** Second Fuel Pump Faulty or Ground Fault · **P1243** Open Or Shorted Condition Detected In The Turbocharger Surge · **P0507** Idle Control System RPM Higher Than Expected · **P2135** Throttle/Pedal Position Sensor A/B Voltage Correlation · **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-p1242/>

