

NISSAN · POWERTRAIN

P1318

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1318 · Nissan

Spark Plug Voltage Detection Module Reset Circuit Malfunction Front Bank

P1318 on Nissan vehicles indicates that the engine control module (ECM) has detected a malfunction in the reset circuit of the spark plug voltage detection module for the front bank of cylinders. The ECM expects a specific voltage signal on the reset line when it commands the module to reset, and it has seen an unexpected value that falls outside the normal operating range.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Nissan specific	Medium	Intermediate	Ignition system and misfire

Symptoms you may notice

- Illumination of the check engine light (malfunction indicator lamp) on the dashboard.
- Often no symptoms besides the warning light, with the engine running normally.
- In some cases, a slight hesitation or misfire may be felt during acceleration.
- Rough idle or unstable engine speed may occur if the fault affects ignition timing.
- Reduced fuel economy if the module fails to properly detect spark voltage.
- In rare instances, the engine may enter limp mode, limiting power.

Common causes, most likely first

- 1 Damaged or corroded wiring in the reset circuit between the spark plug voltage detection module and the ECM.
- 2 Faulty spark plug voltage detection module (also known as the ignition coil module) on the front bank.
- 3 Poor electrical connection at the module or ECM connector, such as loose pins or water intrusion.
- 4 Failed ECM driver circuit for the reset signal, though this is less common.
- 5 Aftermarket or incorrect spark plugs causing abnormal voltage feedback that stresses the detection circuit.
- 6 Engine ground strap corrosion or loose ground connections affecting module operation.



How to diagnose and fix it

- 1 Scan all modules for stored codes and record freeze-frame data to confirm P1318 is the only relevant fault.
- 2 Visually inspect the wiring harness and connectors at the front bank ignition coil module and ECM for damage, corrosion, or loose pins.
- 3 Perform a voltage drop test on the reset circuit wiring to check for excessive resistance or open circuits.
- 4 Check the resistance of the spark plug voltage detection module according to the factory service manual specifications.
- 5 Verify that the spark plugs are the correct type and properly gapped, and replace if worn or incorrect.
- 6 If wiring and module test good, substitute a known-good module to see if the code clears.
- 7 As a last resort, test the ECM reset signal output with an oscilloscope, and replace the ECM if it fails to produce the correct waveform.

Don't overlook the reset circuit grounds

- A common oversight is ignoring the engine ground strap that serves the ignition module; corrosion there can mimic a failed module and set P1318.
- The code can be set by a momentary glitch in the reset signal caused by a loose battery terminal or a weak battery, so always check battery and charging system first.
- Some technicians replace the ignition coil module unnecessarily when the real problem is a chafed wire in the harness near the exhaust manifold, so a thorough wiggle test is essential.
- P1318 does not always mean the module is dead; it can be triggered by a faulty spark plug that causes excessive voltage spikes, so inspect plugs before condemning the module.
- On older Nissan models, the reset circuit shares a ground with other sensors, and a bad ground can set multiple codes including P1318, so look for companion codes.

Can I keep driving with P1318?

You can generally continue driving with P1318 if the engine runs smoothly, but avoid heavy acceleration or long trips until the fault is repaired. If you notice misfiring, reduced power, or the check engine light flashing, stop driving and seek service immediately to prevent catalytic converter damage.

Tools that help

- OBD-II scan tool with manufacturer-specific code reading capability
- Digital multimeter for voltage and resistance checks
- Oscilloscope for waveform analysis of the reset signal
- Factory service manual or wiring diagrams for the specific Nissan model
- Basic hand tools for connector and component access



Reading P1318

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Nissan): its meaning depends on the make.
- 3** Ignition system and misfire.
- 18** The exact fault within that area.

Often seen with

P1319 Knock Sensor 1 Circuit Short To Ground · **P1317** Spark Plug Voltage Detection Circuit Malfunction Rear Bank · **P1319** Spark Plug Voltage Detection Module Reset Circuit Malfunction · **P1319** Injection Timing Piston Position Sensor Circuit Range Perfor · **P1317** Spark Plug Voltage Detection Circuit Malfunction Rear Bank · **P1319** Spark Plug Voltage Detection Module Reset Circuit Malfunction · **P1317** Injector Circuit IDM Codes Not Updated · **P1317** B Camshaft Position Plausibility · **P0300** Random/Multiple Cylinder Misfire Detected · **P0301** Cylinder 1 Misfire Detected · **P0351** Ignition Coil A Primary/Secondary Circuit Malfunction

See it working

Watch the animated explainer [Four-Stroke Engine Cutaway: Intake to Exhaust](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/nissan-p1318/>

