

NISSAN · POWERTRAIN

P1316

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1316 · Nissan

Spark Plug Voltage Detection Circuit Malfunction Front Bank

P1316 on Nissan vehicles means the engine control module (ECM) has detected an abnormal signal from the spark plug voltage detection circuit on the front bank of cylinders. The ECM uses this circuit to monitor ignition performance and misfire events, and it sets the code when the voltage feedback falls outside the expected range during engine operation.

SYSTEM

Powertrain

CODE TYPE

Nissan specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Ignition system and misfire

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Rough idle or engine misfire, especially when cold or under light load
- Hesitation or stumble during acceleration
- Reduced fuel economy compared to normal driving
- In rare cases, a flashing check engine light if the misfire becomes severe

Common causes, most likely first

- 1 Faulty ignition coil or spark plug on the front bank causing abnormal voltage feedback
- 2 Damaged or corroded wiring in the spark plug voltage detection circuit
- 3 Loose or poor connection at the ignition coil harness connector
- 4 Failed spark plug voltage detection sensor or module (where equipped)
- 5 Engine control module (ECM) internal fault affecting the detection circuit
- 6 Excessive ignition system interference from worn spark plugs or incorrect gap

How to diagnose and fix it

- 1 Inspect the front bank ignition coils and spark plugs for wear, damage, or incorrect gap
- 2 Check the harness connectors at each front bank ignition coil for corrosion or looseness
- 3 Measure resistance and continuity of the spark plug voltage detection circuit wiring
- 4 Swap ignition coils between front and rear banks to see if the code follows a specific coil
- 5 Test the spark plug voltage detection sensor or module if the vehicle is equipped with one
- 6 Verify ECM ground and power supply integrity before condemning the ECM
- 7 Replace the faulty component (coil, plug, wiring, or sensor) and clear the code to confirm repair



What Nissan Technicians Check First for P1316

- A loose or corroded ignition coil connector on the front bank is a frequent cause that many DIYers overlook when replacing coils.
- The code can be set by a marginal spark plug that still fires but produces an abnormal voltage waveform, so always inspect plugs before replacing expensive coils.
- On some Nissan models, the spark plug voltage detection circuit is integrated into the ignition coil assembly, so a coil replacement may be the only fix.
- A P1316 can sometimes be a false alarm caused by electrical interference from aftermarket ignition components or poor grounding.
- Do not assume the ECM is faulty until all wiring and component tests have been completed, as ECM failure is rare.

Can I keep driving with P1316?

You can usually continue driving with P1316 if the engine runs smoothly, but avoid heavy acceleration or towing until the fault is repaired. If the check engine light flashes or the engine misfires noticeably, stop driving and seek service immediately to prevent catalytic converter damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Spark plug socket and wrench
- Ignition coil puller (if applicable)
- Feeler gauge or spark plug gap tool

Reading P1316

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

Often seen with

P0300 Random/Multiple Cylinder Misfire Detected · **P0301** Cylinder 1 Misfire Detected · **P0302** Cylinder 2 Misfire Detected · **P0303** Cylinder 3 Misfire Detected · **P0304** Cylinder 4 Misfire Detected



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-p1316/>

