

NISSAN · POWERTRAIN

P1302

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1302 · Nissan

Cylinder 2 Misfire

P1302 on a Nissan indicates that the engine control module (ECM) has detected a misfire specifically on cylinder number 2, based on crankshaft speed fluctuations that deviate from the expected pattern. The ECM monitors the crankshaft position sensor signal and flags this code when the firing event for cylinder 2 is not contributing its fair share of power, often within a specific RPM and load window.

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

Symptoms you may notice

- Check engine light illuminated, often flashing if the misfire is severe enough to risk catalytic converter damage.
- Noticeable engine shake or vibration at idle, particularly when the engine is cold or under light load.
- Rough running or hesitation during acceleration, sometimes accompanied by a loss of power.
- A distinct popping or ticking sound from the exhaust or engine bay, especially on cold start.
- Often no symptoms besides the warning light when the misfire is intermittent or only occurs under specific conditions.
- Slightly reduced fuel economy or a faint raw fuel smell from the exhaust if the misfire is frequent.

Common causes, most likely first

- 1 Worn or fouled spark plug on cylinder 2, often due to incorrect gap or oil contamination.
- 2 Failed ignition coil or coil-on-plug boot for cylinder 2, causing a weak or no spark.
- 3 Faulty fuel injector for cylinder 2, such as a clogged nozzle or electrical failure.
- 4 Vacuum leak near the intake runner for cylinder 2, leaning out the mixture.
- 5 Low compression on cylinder 2 from worn rings, valve issues, or a head gasket leak.
- 6 Damaged or chafed wiring to the cylinder 2 injector or ignition coil, especially near hot or moving components.
- 7 Mechanical fault such as a worn camshaft lobe or a sticking valve specific to cylinder 2.



How to diagnose and fix it

- 1 Perform a visual inspection of the cylinder 2 ignition coil, spark plug, and injector connectors for damage or corrosion.
- 2 Swap the ignition coil from cylinder 2 with a known-good cylinder and see if the misfire follows the coil.
- 3 Remove and inspect the spark plug from cylinder 2; replace it if fouled, worn, or of the wrong type, and check the gap.
- 4 Use a noid light or injector pulse tester to verify the injector is receiving a command signal from the ECM.
- 5 Run a compression test on cylinder 2 and compare with adjacent cylinders to rule out mechanical issues.
- 6 Perform a cylinder balance test or use a scan tool with misfire counters to confirm which cylinder is misfiring under load.
- 7 If electrical and fuel delivery are ruled out, conduct a leak-down test or inspect the valve train for cylinder 2.

Why cylinder 2 misfires are often misdiagnosed

- A P1302 can be set by a misfire that only occurs during specific driving conditions, such as steady cruise or after a cold start, so a simple idle test may not reproduce the fault.
- Nissan engines are known for ignition coil failures that can be intermittent when hot, so swapping coils and test-driving under load is more reliable than a bench test.
- A vacuum leak at the intake manifold gasket near cylinder 2 can cause a lean misfire that mimics a bad injector, so always check fuel trims and spray carb cleaner around the runners.
- The ECM may set P1302 even when the misfire is caused by a worn spark plug that still fires under no load, so never skip a plug inspection based on a smooth idle.
- A failing crankshaft position sensor or damaged reluctor ring can create false misfire counts on a specific cylinder, so check for erratic RPM signals if all other components test good.

Can I keep driving with P1302?

You can drive cautiously to a repair shop if the check engine light is steady and the engine runs smoothly, but avoid hard acceleration and heavy loads. If the light is flashing or the engine shakes violently, stop driving immediately to prevent catalytic converter damage and further engine harm.

Tools that help

- OBD-II scan tool with live misfire data and fuel trim display
- Spark plug socket and ratchet set
- Ignition coil removal tool or pry bar
- Compression tester
- Noid light or injector pulse tester
- Digital multimeter for checking wiring continuity



Reading P1302

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

Often seen with

P0171 System Too Lean (Bank 1) · **P0202** Injector Circuit Malfunction - Cylinder 2 · **P0300** Random/Multiple Cylinder Misfire Detected · **P0302** Cylinder 2 Misfire Detected · **P0352** Ignition Coil B 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-p1302/>

