

NISSAN · POWERTRAIN

P1305

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1305 · Nissan

Cylinder 5 Misfire

P1305 on Nissan vehicles indicates that the engine control module (ECM) has detected a misfire on cylinder 5, typically by monitoring crankshaft speed fluctuations. The ECM sets this code when the misfire count exceeds a threshold that could damage the catalytic converter or affect emissions.

SYSTEM

Powertrain

CODE TYPE

Nissan specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Ignition system
and misfire

Symptoms you may notice

- Check engine light illuminated, often flashing if the misfire is severe
- Noticeable engine vibration or shaking, especially at idle or under load
- Reduced engine power and sluggish acceleration
- Rough idle or stalling
- Often no symptoms besides the warning light, especially with mild misfires
- Poor fuel economy

Common causes, most likely first

- 1 Worn or fouled spark plug on cylinder 5
- 2 Faulty ignition coil on cylinder 5
- 3 Vacuum leak at the intake manifold near cylinder 5
- 4 Clogged or failing fuel injector for cylinder 5
- 5 Low compression due to worn piston rings, valves, or head gasket
- 6 Damaged wiring or connector to the cylinder 5 ignition coil or injector
- 7 Mechanical valvetrain issue such as a worn cam lobe or lifter



How to diagnose and fix it

- 1 Perform a visual inspection of the cylinder 5 ignition coil, spark plug, and injector connectors for damage or corrosion
- 2 Swap the ignition coil and spark plug from cylinder 5 with a known-good cylinder to see if the misfire moves
- 3 Use a scan tool to check for pending codes and misfire counters on all cylinders to confirm the misfire is isolated to cylinder 5
- 4 Test the fuel injector for cylinder 5 with a noid light or injector balance test
- 5 Perform a compression test and cylinder leak-down test on cylinder 5 to rule out mechanical faults
- 6 Check for vacuum leaks using a smoke machine or propane enrichment test
- 7 If the misfire persists, inspect the wiring harness for the cylinder 5 coil and injector for shorts or opens

Common Misdiagnosis Traps for P1305

- A misfire on cylinder 5 can be caused by a faulty ignition coil that tests fine when cold but breaks down under heat, so always test or swap coils when the engine is at operating temperature.
Nissan engines often develop intake manifold gasket leaks near cylinder 5 that cause lean misfires; a smoke test is more reliable than visual inspection for these leaks.
- The ECM may set P1305 even when the misfire is intermittent and not felt by the driver, so do not assume the lack of symptoms means the problem is minor.
- A clogged EGR passage or faulty PCV valve can cause misfires that appear cylinder-specific, so check these systems before replacing expensive components.

After repairs, the ECM may need to relearn the crankshaft position sensor; failing to perform a relearn can cause the code to return immediately.

Can I keep driving with P1305?

If the check engine light is flashing, stop driving immediately to avoid catalytic converter damage; if it is steady, you can drive short distances at low speed but avoid heavy acceleration and have it diagnosed promptly.

Tools that help

- OBD-II scan tool with live data and misfire counters
- Spark plug socket and wrench
- Ignition coil puller
- Compression tester
- Noid light or fuel injector tester
- Smoke machine for vacuum leaks



Reading P1305

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

Often seen with

P0171 System Too Lean (Bank 1) · **P0174** System Too Lean (Bank 2) · **P0300** Random/Multiple Cylinder Misfire Detected · **P0305** Cylinder 5 Misfire Detected · **P0420** Catalyst System Efficiency Below Threshold (Bank 1)

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-p1305/>

