

NISSAN · POWERTRAIN

P1320

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1320 · Nissan

Ignition Signal

P1320 is a Nissan-specific code that the engine control module (ECM) sets when it detects an abnormal ignition signal from the ignition coil circuit, typically a missing or erratic pulse on the condenser circuit that the ECM uses to monitor ignition events. The ECM compares the expected ignition signal with what it actually receives and flags the code when the signal is absent, intermittent, or out of time, which often points to a failing ignition coil or a wiring fault in the coil harness.

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

Symptoms you may notice

- Engine misfire or rough running, especially under acceleration or load
- Illuminated check engine light, often accompanied by a flashing light if the misfire is severe
- Loss of power or hesitation during acceleration
- Poor fuel economy due to incomplete combustion
- Difficulty starting or an engine that stalls shortly after starting
- Often no symptoms besides the warning light, particularly in early stages of coil degradation

Common causes, most likely first

- 1 Faulty ignition coil (most commonly the coil on the cylinder that is misfiring)
- 2 Worn or damaged spark plugs or spark plug boots
- 3 Damaged or corroded wiring in the ignition coil harness or connector
- 4 Failed ignition condenser (noise suppressor) on the coil circuit
- 5 Poor ground connection for the ignition system
- 6 ECM internal fault (rare, but possible after other causes are ruled out)

How to diagnose and fix it

- 1 Perform a visual inspection of the ignition coils, spark plugs, and wiring for obvious damage or corrosion
- 2 Use an OBD-II scanner to check for misfire counters and identify which cylinder is affected
- 3 Swap the ignition coil from the affected cylinder with a known-good coil to see if the misfire moves
- 4 Test the ignition coil primary and secondary resistance with a multimeter and compare to specifications
- 5 Inspect and test the ignition condenser and its wiring for continuity and proper ground
- 6 Check the ignition coil harness for voltage drops, shorts, or opens while wiggling the connector
- 7 If all else checks out, consult factory service information for pinpoint tests of the ECM ignition signal circuit

Ignition coil swaps that mislead diagnosis

- A coil that tests good on a resistance check can still break down under heat and load, so swapping coils and test-driving is often more reliable than static testing.
- The ignition condenser is frequently overlooked; a failed condenser can corrupt the ignition signal and set P1320 without causing a noticeable misfire.
- P1320 can be set by a loose or corroded ground strap on the engine or chassis, which introduces noise into the ignition signal circuit.
- On some Nissan models, a failing crankshaft position sensor can mimic an ignition signal fault, so always check for related codes like P0335 before condemning coils.
- After replacing a coil, the ECM may need several drive cycles to clear the code and turn off the light, so do not assume the repair failed if the light stays on briefly.

Can I keep driving with P1320?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration or sustained high speeds because a misfire can overheat the catalytic converter and cause costly damage. If the check engine light is flashing, stop driving as soon as it is safe and have the vehicle towed.

Tools that help

- OBD-II scanner with live data and misfire counter capability
- Digital multimeter
- Spark tester
- Socket set and extensions
- Factory service information or wiring diagrams

Reading P1320

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (Nissan): its meaning depends on the make.
3	Ignition system and misfire.
20	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-p1320/>

