



P1382 · Nissan

CYP Sensor A No Signal

P1382 on Nissan vehicles means the engine control module (ECM) is not receiving a signal from the cylinder 1 position sensor, also called the CYP sensor or cylinder identification sensor. The ECM expects a pulse from this sensor every time cylinder 1 approaches top dead center, and when that pulse is missing the ECM cannot reliably identify cylinder position for sequential fuel injection and ignition timing.

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

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Rough idle or misfire that may feel like a slight stumble at low engine speeds
- Hard starting or extended cranking before the engine fires
- Reduced engine power or limp-home mode on some models
- Poor fuel economy and increased emissions due to incorrect injection timing
- Occasional stalling when coming to a stop or during deceleration

Common causes, most likely first

- 1 Faulty cylinder 1 position sensor (CYP sensor) inside the distributor or on the camshaft
- 2 Damaged or corroded wiring harness between the CYP sensor and the ECM
- 3 Loose or contaminated electrical connector at the sensor or ECM
- 4 Failed distributor assembly or camshaft phaser affecting sensor signal
- 5 Metal debris or excessive air gap between the sensor and the reluctor wheel
- 6 ECM internal fault not processing the CYP signal correctly

How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm P1382 is the only CYP-related code
- 2 Inspect the CYP sensor connector and wiring for corrosion, chafing, or loose pins
- 3 Measure sensor resistance and compare to the manufacturer's specification for your Nissan model
- 4 Check for metal shavings or debris on the sensor tip and reluctor wheel, and verify air gap
- 5 Back-probe the sensor signal wire at the ECM and look for a pulsed waveform with an oscilloscope while cranking
- 6 Replace the CYP sensor or distributor assembly if the signal is absent or distorted
- 7 Clear the code and perform a road test to verify the repair and confirm the monitor runs to completion



CYP sensor signal diagnosis traps

- A missing CYP signal often produces no driveability complaint at all, so many owners replace unrelated parts before checking the sensor circuit.
- The CYP sensor is frequently misdiagnosed as a crankshaft position sensor fault because both can cause no-start conditions, but P1382 specifically points to cylinder identification.
- Aftermarket distributors and sensors for Nissan engines sometimes have incorrect reluctor wheel spacing that sets P1382 even when the part is new.
- Wiring harness damage near the exhaust manifold or under the timing cover is a common hidden cause that a simple sensor swap will not fix.
- On some Nissan models the CYP signal is shared with the camshaft position sensor circuit, so a short in that shared wiring can set P1382 without the sensor itself being faulty.

Can I keep driving with P1382?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration, towing, or long highway trips because the ECM may default to a less efficient injection strategy. If the engine stalls or runs very rough, stop driving and arrange a tow to prevent damage to the catalytic converter.

Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter for resistance and voltage checks
- Oscilloscope for viewing the CYP sensor waveform
- Basic hand tools for connector and sensor access
- Feeler gauges for checking sensor air gap

Reading P1382

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

Often seen with

P1381 CYP Sensor A Intermittent Interruption · **P1381** CYP Sensor A Intermittent Interruption · **P1381** Misfire Detected No Communication with Brake Control Module · **P1381** Cam Timing Advance is Excessive · **P1383** Cam Timing Advance is Excessive · **P1381** Misfire Detected No Communication with Brake Control Module · **P0300** Random/Multiple Cylinder Misfire Detected · **P0335** Crankshaft Position Sensor A Circuit Malfunction · **P0340** Camshaft Position Sensor A Circuit Malfunction (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-p1382/>

