

NISSAN · POWERTRAIN

P1366

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1366 · Nissan

TDC2 Sensor Intermittent

P1366 on a Nissan means the engine control module (ECM) has detected an intermittent signal from the TDC2 sensor, which is the second top dead center reference sensor used to identify cylinder position during starting and running. The ECM compares this signal with the camshaft and crankshaft position signals and flags the code when the TDC2 input drops out or becomes erratic for a brief period.

SYSTEM

Powertrain

CODE TYPE

Nissan specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Ignition system and misfire

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Intermittent hard starting or extended cranking, especially when the engine is hot
- Occasional engine stumble or misfire at idle or under light load
- Rough running or hesitation during acceleration that comes and goes
- In rare cases, the engine may stall unexpectedly and restart after a short wait

Common causes, most likely first

- 1 Faulty TDC2 sensor (internal intermittent failure due to heat or age)
- 2 Damaged or corroded wiring harness connector at the TDC2 sensor
- 3 Chafed or broken wires in the sensor circuit between the sensor and ECM
- 4 Poor electrical connection at the ECM connector
- 5 Metal debris or damage on the sensor tip or reluctor wheel
- 6 Incorrect sensor air gap or loose sensor mounting
- 7 Rarely, an internal ECM fault affecting the sensor input circuit

How to diagnose and fix it

- 1 Scan all modules for stored codes and record freeze-frame data to confirm P1366 is current and not history
- 2 Visually inspect the TDC2 sensor, its connector, and the wiring harness for damage, corrosion, or loose pins
- 3 Measure the sensor resistance and compare it to the Nissan specification for your engine
- 4 Check for a clean and secure sensor mounting and correct air gap to the reluctor wheel
- 5 Backprobe the sensor signal circuit at the ECM and monitor for an intermittent signal while wiggling the harness
- 6 If the signal is erratic and wiring is good, replace the TDC2 sensor with a known-good unit
- 7 Clear codes and perform a road test to verify the repair and ensure the code does not return



TDC2 sensor faults that fool good technicians

- A intermittent TDC2 signal often does not set a hard fault until the engine is at operating temperature, so a cold-engine resistance test can pass even on a failing sensor.
- The TDC2 sensor shares its reference wheel with the crankshaft position sensor on many Nissan engines, so a damaged reluctor tooth can mimic a sensor failure and trigger P1366 without any sensor fault.
- Wiring harness chafing near the exhaust manifold or behind the timing cover is a common hidden cause that only shows up when the engine moves under load or heat.
- Some aftermarket sensors have a different internal resistance curve that causes intermittent signals even when new, so sticking with an OEM-quality part avoids repeat comebacks.
- P1366 can be set by a poor ground connection at the engine block, which affects the sensor return circuit and makes the ECM see a dropout without any sensor or wire fault.

Can I keep driving with P1366?

You can usually drive the vehicle short distances if the only symptom is the warning light, but avoid heavy acceleration, towing, or long trips until the fault is repaired. If the engine starts stumbling, stalling, or becomes hard to start, stop driving and have it diagnosed promptly to prevent a no-start condition.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Oscilloscope (for signal waveform analysis)
- Basic hand tools (socket set, screwdrivers)
- Electrical contact cleaner and dielectric grease
- Factory service information for resistance and air gap specifications

Reading P1366

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



Often seen with

P1365 Cylinder 4 Ignition Circuit Short To B+ · **P1365** Ignition Coil Secondary Circuit · **P1365** Ignition Coil Cylinder 5 No Activation · **P1365** IC Cylinder 5 Not Toggling After Enable · **P1365** Ignition Coil Secondary Circuit Failure · **P1365** IC Cylinder 5 Not Toggling After Enable · **P1365** Misfire Cylinder 12 With Fuel Cut-off · **P0011** 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0335** Crankshaft Position Sensor A Circuit Malfunction · **P0340** Camshaft Position Sensor A Circuit Malfunction (Bank 1) · **P0725** Engine Speed Input Circuit Malfunction

See it working

Watch the animated explainer [Helicopter Flight Simulator: Learn the Three Controls](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/nissan-p1366/>

