



P1135 · Nissan

Intake Valve Timing Control Circuit Bank 2

P1135 on Nissan vehicles indicates that the engine control module (ECM) has detected an electrical fault in the intake valve timing control (IVTC) circuit for bank 2, which is the bank of cylinders that does not include cylinder number one. The ECM monitors the solenoid command circuit and expects a corresponding change in camshaft position; when the signal is out of range or the response is missing, it sets this code.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Nissan specific	Medium	Intermediate	Fuel and air metering

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or stumbling, especially when the engine is cold
- Reduced engine power or sluggish acceleration at low RPM
- Poor fuel economy due to incorrect valve timing
- Occasional engine misfire or hesitation during light acceleration
- In some cases, the engine may enter limp mode and limit RPM

Common causes, most likely first

- 1 Faulty intake valve timing control solenoid (bank 2) due to internal coil failure or contamination
- 2 Damaged or corroded wiring harness or connector at the IVTC solenoid
- 3 Open or short circuit in the IVTC solenoid control wire between the ECM and solenoid
- 4 Sticking or clogged oil control valve inside the IVTC solenoid, often from sludge
- 5 Low engine oil level or incorrect oil viscosity affecting cam phaser operation
- 6 Failed camshaft phaser or timing chain component causing mechanical timing deviation
- 7 ECM software issue or internal driver fault (rare)

How to diagnose and fix it

- 1 Check engine oil level and condition; top up or change oil if contaminated or low
- 2 Inspect the IVTC solenoid connector and wiring for corrosion, damage, or loose pins
- 3 Measure resistance of the IVTC solenoid (bank 2) and compare to factory specification
- 4 Test the solenoid control circuit for power and ground signals using a multimeter or oscilloscope
- 5 Remove and clean the IVTC solenoid and oil control valve; replace if clogged or faulty
- 6 Verify camshaft timing and phaser operation; repair mechanical issues if timing is off
- 7 Clear the code and perform a road test to confirm the repair, rechecking for pending codes



Oil quality and sludge cause most P1135 faults

- A dirty or sludged oil control valve is a frequent culprit that many technicians overlook when replacing the solenoid; cleaning the valve often resolves the code without parts replacement.
- The code can be set by a mechanical timing issue such as a stretched timing chain or worn phaser, so always verify actual camshaft timing before condemning the electrical circuit.
- Intermittent faults often appear only when the engine is cold or under specific load conditions; a wiggle test of the harness while monitoring live data can reveal poor connections.
- Bank 2 on V6 Nissan engines is the bank opposite cylinder 1, which is typically the front bank on transverse engines but can be the rear bank on longitudinal layouts; misidentifying the bank leads to replacing the wrong solenoid.
- After repairs, the ECM may require a idle relearn or cam phaser calibration procedure to prevent the code from returning immediately.

Can I keep driving with P1135?

You can usually drive the vehicle with this code, but avoid aggressive acceleration and high RPM until it is diagnosed, as incorrect valve timing can reduce performance and fuel economy. If the engine runs rough or enters limp mode, have it checked promptly to prevent further damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Oscilloscope (for waveform analysis)
- Socket set and wrench set
- Oil filler funnel and drain pan
- Factory service information or wiring diagram

Reading P1135

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (Nissan): its meaning depends on the make.
1	Fuel and air metering.
35	The exact fault within that area.



Often seen with

P1136 Long Term Fuel Trim Add Fuel Bank 1 System Too Lean · **P1130** Long Term Fuel Trim Bank 2 System Too Lean · **P1130** Air/Fuel Sensor Circuit Range Performance Bank 1 Sensor 1 · **P1130** Front Oxygen Sensor Circuit Malfunction Open Circuit · **P1130** Swirl Control Valve Control Solenoid Valve · **P1130** HO2S Bank 1 Sensor 1 Not Switching Fuel Control Limit Reached · **P1136** HO2S Bank 1 Sensor 1 Heater Circuit High Input · **P1136** Control Box Fan Circuit · **P1130** HO2S Circuit Low Variance Bank 1 Sensor 1 · **P1136** HO2S Rich Average Bank 1 Sensor 1 · **P1130** Lack of Upstream Heated Oxygen Sensor Switch Adaptive Fuel L · **P1130** HO2S Circuit Low Variance Bank 1 Sensor 1 · **P1136** HO2S Rich Average Bank 1 Sensor 1 · **P1136** O2 Sensor Heater Circuit High Voltage Bank 1 Sensor 1 · **P0010** 'A' Camshaft Position Actuator Circuit (Bank 1) · **P0021** 'A' Camshaft Position - Timing Over-Advanced or System Performance · **P0011** 'A' Camshaft Position - Timing Over-Advanced or System Performance

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-p1135/>

