

NISSAN · POWERTRAIN

P1440

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1440 · Nissan

EVAP Control System Small Leak

P1440 on Nissan vehicles indicates the engine computer has detected a small leak in the evaporative emission control system, which captures fuel vapor from the tank and burns it through the engine. The computer runs a vacuum-decay test and sees pressure bleed off slower than a large leak but faster than a sealed system should allow, so it flags a small leak rather than a gross one.

SYSTEM

Powertrain

CODE TYPE

Nissan specific

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Auxiliary emission controls

Symptoms you may notice

- Often no symptoms besides the warning light, because a small vapor leak does not affect how the engine runs.
- A faint raw fuel smell around the rear of the car or near the fuel filler after parking, especially on warm days.
- The check engine light may come and go over several drive cycles as the monitor passes and fails intermittently.
- Slightly increased fuel odor when refueling or when the tank is topped off.
- No drivability complaints in most cases, though a rough idle can appear if the leak is near a purge line.

Common causes, most likely first

- 1 A fuel filler cap that is loose, missing, or has a hardened or damaged seal.
- 2 Cracks or splits in the rubber EVAP hoses running from the tank to the canister and purge valve.
- 3 A leaking or stuck-open EVAP purge solenoid that bleeds vacuum when it should hold.
- 4 A cracked or rusted EVAP canister, common on older Nissans exposed to road salt.
- 5 A faulty fuel tank pressure sensor giving inaccurate readings during the leak test.
- 6 A small crack in the fuel tank itself or a deteriorated seal at the fuel pump module.
- 7 A leaking or improperly seated rollover valve or vent valve on the tank.



How to diagnose and fix it

- 1 Inspect the fuel filler cap first: check the seal for cracks or hardening, clean the mating surface, and tighten it until it clicks.
- 2 Clear the code and drive several complete drive cycles to see whether the small leak monitor passes before doing any parts replacement.
- 3 Visually inspect all EVAP hoses under the hood and along the tank for cracks, loose clamps, or disconnected lines.
- 4 Use a scan tool to command the purge and vent valves and watch fuel tank pressure to confirm the system holds vacuum.
- 5 Perform a smoke test on the EVAP system to pinpoint the exact leak location, paying attention to the canister, filler neck, and tank seals.
- 6 Test the purge solenoid for correct resistance and for sealing when de-energized, replacing it if it bleeds vacuum.
- 7 If no external leak is found, check the fuel tank pressure sensor reading against a known-good value and inspect the tank and pump module seals.

Small leaks that fool good technicians

- A small leak code often sets because the fuel filler cap was left loose at the last fill-up, so always verify cap condition and seating before chasing hoses.
- Nissan EVAP monitors are sensitive to fuel level; testing with a tank that is too full or nearly empty can produce a false small-leak result, so run the test between one-quarter and three-quarters full.
- A purge solenoid that sticks slightly open can bleed vacuum and mimic a small leak even when every hose and the canister are sealed perfectly.
- The fuel tank pressure sensor on older Nissans drifts with age and can report a decay that is not real, leading to unnecessary canister replacement.
- Smoke testing is far more reliable than guessing at hoses, because a pinhole in a line above the tank is invisible from underneath and only shows under smoke pressure.

Can I keep driving with P1440?

You can keep driving with P1440 because a small EVAP leak does not affect engine safety or performance, but avoid topping off the tank past the first click and get the system smoke-tested soon to prevent the leak from growing or allowing fuel vapor to escape.



Tools that help

- OBD-II scan tool with EVAP system test capability
- EVAP smoke machine
- Hand vacuum pump with gauge
- Digital multimeter
- Flashlight and mirror for inspecting lines above the tank

Reading P1440

- P** Powertrain: engine, transmission and emissions.
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- 1** Manufacturer-specific code (Nissan): its meaning depends on the make.
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- 4** Auxiliary emission controls.
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- 40** The exact fault within that area.

Often seen with

P1441 EGR Valve Circuit Open Short To Ground · **P1441** Fuel Tank Pressure Control System High Input · **P1441** Vacuum Cut Valve Bypass Valve · **P1441** ELC System 1 · **P1441** Evaporative Emission (EVAP) System Flow During Non-Purge · **P1441** Evaporative Emission (EVAP) System Flow During Non-Purge · **P1441** Leakage Diagnostic Pump Control Open Circuit · **P0440** Evaporative Emission Control System Malfunction · **P0442** EVAP System Leak Detected (Small) · **P0455** EVAP System Leak Detected (Large) · **P0456** Evaporative Emission System Leak Detected (very small leak)

See it working

Watch the animated explainer [Turbocharger Trainer: Boost, Wastegate and Intercooler](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/nissan-p1440/>

