



P1456 · Honda

Evaporative Emission Control System Leak Detected Fuel Tank System

P1456 on a Honda means the powertrain control module has run its evaporative emission system self-test and detected a leak in the fuel tank portion of the system. The computer uses a fuel tank pressure sensor and a vent shut valve to pressurize or vacuum-test the tank, and it flags this code when the tank cannot hold the expected pressure or vacuum.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Honda specific	Low	Intermediate	Auxiliary emission controls

Symptoms you may notice

- Often no symptoms besides the warning light, because the leak is small and does not affect driveability.
- A faint raw fuel smell around the rear of the vehicle or near the fuel filler cap after parking.
- The check engine light may come on intermittently and then clear itself if the leak is temperature or fuel-level dependent.
- A slight hiss or whoosh when removing the fuel cap, or a cap that feels loose or does not click when tightened.
- In severe cases, difficulty refueling or the pump nozzle clicking off repeatedly if the tank vent is restricted.
- No change in engine performance, idle quality, or fuel economy in most cases.

Common causes, most likely first

- 1 Fuel filler cap not tightened, missing, or fitted with a damaged or hardened seal.
- 2 Cracked or deteriorated fuel filler neck, especially where it meets the body or the tank.
- 3 Leaking or rusted fuel tank seam, sending unit gasket, or fuel pump module seal.
- 4 Disconnected, cracked, or hardened evaporative emission hose between the tank and the vent shut valve or canister.
- 5 Faulty fuel tank pressure sensor giving an inaccurate reading during the self-test.
- 6 Sticking or leaking vent shut valve or canister purge valve that prevents the tank from sealing during the test.
- 7 Small rust pinholes or impact damage in the top of the fuel tank that only leak vapor, not liquid fuel.



How to diagnose and fix it

- 1 Check the fuel filler cap first: confirm it is present, the seal is soft and intact, and it clicks when tightened; replace it if any doubt exists.
- 2 Inspect the fuel filler neck and the area around the cap for rust, cracks, or a damaged sealing surface.
- 3 Visually inspect all evaporative emission hoses at the tank, canister, and vent shut valve for cracks, looseness, or disconnected fittings.
- 4 Command the vent shut valve and canister purge valve with a scan tool and verify they seal and hold pressure or vacuum as commanded.
- 5 Perform a smoke test on the fuel tank system with the vent shut valve closed to pinpoint the leak location.
- 6 Compare the fuel tank pressure sensor reading with a known-good gauge or a second sensor during a commanded test.
- 7 Repair the confirmed leak, clear the code, and complete a full drive cycle so the powertrain control module can rerun the tank leak monitor.

What Honda tank leak tests miss

- A cap that looks fine can still fail the tank leak test because the seal hardens with age and does not seal under the vacuum the powertrain control module applies.
- The fuel tank pressure sensor on many Hondas is part of the fuel pump module, so a skewed sensor can set P1456 even when the tank and hoses are completely sealed.
- A leak that only appears when the tank is above a certain fuel level points to the filler neck or the top of the tank, not to the cap or canister.
- The vent shut valve must close completely for the tank test to run; a valve that sticks open will set a tank leak code without any actual hole in the system.
- P1456 is often stored alongside purge flow codes when the real problem is a stuck canister purge valve that keeps the tank from sealing during the self-test.

Can I keep driving with P1456?

It is safe to keep driving with P1456 because the leak is in the fuel tank vapor system and does not affect engine operation or safety. Avoid topping off the tank past the first click and park away from open flames or sparks until the leak is repaired, since raw fuel vapor may be escaping.

Tools that help

- OBD-II scan tool with Honda-specific live data and bidirectional controls
- Smoke machine with a fuel tank adapter
- Hand vacuum pump with gauge
- Fuel filler cap tester
- Basic hand tools and a flashlight



Reading P1456

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

Often seen with

P1457 Exhaust Gas Temperature Sensor 2 Open Short To B+ · **P1457** Evaporative Emission Control System Leak Detected Control Ca · **P1457** Purge Solenoid Control System · **P1457** Purge Solenoid Valve Low System Malfunction · **P1457** Evaporative Emission Control System Leak Detected Control Ca · **P1457** Unable To Pull Vacuum In Tank · **P1457** Heated Catalyst Heater Power Switch Temperature Sensor Elect · **P0441** EVAP System Incorrect Purge Flow · **P0442** EVAP System Leak Detected (Small) · **P0453** Evaporative Emission System Pressure Sensor/Switch High · **P0455** EVAP System Leak Detected (Large)

See it working

Watch the animated explainer [How a Radiator Fan Relay Circuit Works](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/honda-p1456/>

