



P1454 · Jaguar

Evaporative Emission Control System Vacuum Test

P1454 on a Jaguar means the engine control module (ECM) ran its vacuum test on the evaporative emission control (EVAP) system and did not see the vacuum level it expected, so it flagged the test as failed. The ECM typically pulls a vacuum on the fuel tank and charcoal canister circuit and watches a pressure sensor; when the sensor does not register the correct drop or hold, P1454 is stored.

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

Symptoms you may notice

- Often no symptoms besides the warning light, because the EVAP leak is small and does not affect driveability.
- A faint fuel smell around the rear of the car or near the filler neck after refuelling.
- The check engine light may come on intermittently and clear itself after several drive cycles.
- Rough idle or a slight hesitation if a large vacuum leak is present in the purge line.
- Fuel economy may drop slightly when the purge system is stuck open or closed.
- A hissing or whistling noise from the engine bay or under the rear of the car when the engine is running.

Common causes, most likely first

- 1 A loose, damaged or missing fuel filler cap, which is the most common cause of a failed EVAP vacuum test.
- 2 A cracked or disconnected EVAP hose between the charcoal canister, purge valve and fuel tank.
- 3 A faulty purge valve (also called the EVAP canister purge solenoid) that is stuck open or closed and cannot hold vacuum.
- 4 A leaking fuel tank pressure sensor or a sensor that is reading inaccurately during the vacuum test.
- 5 A cracked charcoal canister or a canister vent valve that will not seal during the test.
- 6 A small leak at the fuel tank seal, filler neck or rollover valve.
- 7 A wiring fault or corroded connector at the purge valve or tank pressure sensor that prevents the ECM from running the test correctly.



How to diagnose and fix it

- 1 Check the fuel filler cap first: make sure it is the correct Jaguar cap, the seal is clean and undamaged, and it clicks tightly when fitted.
- 2 Inspect all visible EVAP hoses under the bonnet and under the rear of the car for cracks, splits, loose clamps or disconnected lines.
- 3 Use a scan tool to command the purge valve open and closed and listen for a click; compare commanded state with actual vacuum behaviour.
- 4 Perform a smoke test on the EVAP system with a professional smoke machine to pinpoint the leak location.
- 5 Test the purge valve electrically and mechanically: check coil resistance, apply vacuum and confirm it holds when closed and flows when open.
- 6 Check the fuel tank pressure sensor live data during the ECM vacuum test and compare it with a known-good sensor or a manual vacuum gauge.
- 7 Repair or replace the faulty component, clear the code and run the Jaguar EVAP monitor to confirm the repair before returning the car.

What a Jaguar EVAP vacuum test really checks

- A P1454 is often set by a fuel filler cap that looks fine but has a hardened or slightly misaligned seal, so always fit a genuine cap and check the filler neck for scoring.
- The ECM only runs the vacuum test under specific conditions such as a cold start, a certain fuel level and a steady throttle, so a code that appears only after refuelling points strongly at the cap or filler neck.
- A purge valve that leaks internally can pass a static vacuum test but fail when the ECM commands it closed during the monitor, so command the valve with a scan tool rather than only checking it at rest.
- Jaguar models share EVAP architecture with other Ford-era platforms, but the ECM test thresholds and enable criteria differ, so do not apply generic Ford EVAP diagnosis blindly.
- A weak battery or low charging voltage can abort the EVAP monitor before it completes, leaving a P1454 stored even though the system has no physical leak.

Can I keep driving with P1454?

It is safe to keep driving with P1454 because the fault affects only the evaporative emission system and not engine performance, but have it diagnosed soon to prevent a small leak becoming a larger one. Avoid topping off the fuel tank past the first click and avoid parking in a garage with a strong fuel smell until the leak is repaired.



Tools that help

- OBD-II scan tool with Jaguar-specific live data and bidirectional control
- Hand vacuum pump with gauge
- Smoke machine for EVAP leak testing
- Digital multimeter for purge valve and sensor wiring checks
- Fuel filler cap tester or a known-good genuine cap
- Basic hand tools for hose clamp and trim removal

Reading P1454

P Powertrain: engine, transmission and emissions.

1 Manufacturer-specific code (Jaguar): its meaning depends on the make.

4 Auxiliary emission controls.

54 The exact fault within that area.

Often seen with

P0442 EVAP System Leak Detected (Small) · **P0443** EVAP Purge Control Valve Circuit Malfunction · **P0453** Evaporative Emission System Pressure Sensor/Switch High · **P0455** EVAP System Leak Detected (Large) · **P0456** Evaporative Emission System Leak Detected (very small leak)

See it working

Watch the animated explainer [How a Manual Transmission Works: Four-Speed Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/jaguar-p1454/>

