

SUZUKI · POWERTRAIN

P1410

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1410 · Suzuki

Fuel Tank Pressure Control Solenoid Circuit Fault

P1410 on Suzuki vehicles indicates that the powertrain control module has detected an electrical fault in the fuel tank pressure control solenoid circuit, which is part of the evaporative emissions system. The computer monitors the solenoid's command wire and feedback circuit for expected voltage or current, and when the signal falls outside the programmed range, it stores this code and illuminates the check engine light.

SYSTEM

Powertrain

CODE TYPE

Suzuki specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Auxiliary emission controls

Symptoms you may notice

- Check engine light illuminated on the dashboard, often with no other noticeable symptoms
- A faint fuel or gasoline odor around the rear of the vehicle, especially after refueling
- Slight hesitation or rough idle if the solenoid is stuck open and causing a large vacuum leak
- Failed state emissions inspection due to the check engine light and incomplete evaporative system monitors
- Intermittent check engine light that comes and goes with temperature changes or vibration

Common causes, most likely first

- 1 Failed fuel tank pressure control solenoid with an open or shorted internal coil
- 2 Damaged, corroded, or disconnected electrical connector at the solenoid
- 3 Broken or chafed wire in the solenoid control circuit between the powertrain control module and the solenoid
- 4 Faulty powertrain control module driver circuit, though this is rare
- 5 Contamination or debris in the solenoid valve causing it to stick and draw abnormal current
- 6 Corroded ground connection shared by the evaporative emissions system components



How to diagnose and fix it

- 1 Connect a scan tool and record all stored and pending codes, then command the fuel tank pressure control solenoid on and off to listen for a click and verify actuator operation
- 2 Visually inspect the solenoid connector and the wiring harness for corrosion, loose pins, or chafed insulation, and repair any damage found
- 3 Measure the resistance of the solenoid coil with a digital multimeter and compare it to the Suzuki service specification for your model
- 4 Backprobe the solenoid control wire at the powertrain control module and check for battery voltage or a ground signal when commanded, confirming circuit integrity
- 5 Check the solenoid ground circuit for excessive resistance and clean or repair the ground point if needed
- 6 Replace the fuel tank pressure control solenoid if electrical tests confirm an open or shorted coil, then clear the code and verify the repair with a road test
- 7 If the circuit and solenoid test good, perform a pinpoint test of the powertrain control module driver circuit before condemning the module

What Suzuki Evap Codes Hide From You

- A stuck-open fuel tank pressure control solenoid can cause a lean condition at idle that mimics a vacuum leak, so technicians who only chase intake leaks miss the real cause.
- The solenoid coil can test good at room temperature but fail when hot, so a resistance check on a cold engine may pass while the code returns after a long drive.
- Suzuki evaporative systems often share a ground with the fuel pump or rear lighting, and a corroded ground can set P1410 without any fault in the solenoid itself.
- A loose or missing fuel cap can set evaporative codes that some scan tools misreport, so always verify the cap seal and fuel filler neck before replacing parts.
- After replacing the solenoid, the evaporative monitor may take several drive cycles to run, so the check engine light staying off immediately does not prove the repair.

Can I keep driving with P1410?

You can usually continue driving short distances because this fault mainly affects evaporative emissions and fuel vapor containment, but avoid topping off the fuel tank and park outside if you smell fuel. Have the circuit inspected soon, especially if the check engine light is accompanied by a rough idle or fuel odor.

Tools that help

- OBD-II scan tool with bidirectional actuator control
- Digital multimeter
- Backprobe pins or breakout leads
- Suzuki service information for circuit specifications
- Basic hand tools and socket set



Reading P1410

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

Often seen with

P0440 Evaporative Emission Control System Malfunction · **P0441** EVAP System Incorrect Purge Flow · **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 [How Push-Button Start Works: Keyless Ignition](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/suzuki-p1410/>

