

GENERIC · POWERTRAIN

P019E

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P019E

Alternative Fuel Tank A Pressure Sensor Circuit

P019E indicates that the powertrain control module has detected an electrical fault in the circuit for the alternative fuel tank A pressure sensor, which monitors the pressure inside a compressed or liquefied alternative fuel tank. The computer compares the sensor signal voltage against expected values and sets this code when the signal is out of range, intermittent, or absent.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering

Symptoms you may notice

- Illumination of the malfunction indicator lamp, often with no other noticeable symptoms
- Rough running or hesitation if the vehicle switches to gasoline operation due to the fault
- Reduced power or a fail-safe mode that limits engine speed
- Incorrect or erratic fuel gauge readings for the alternative fuel tank
- Difficulty refueling or a refueling system that stops prematurely
- A message on the driver information center indicating an alternative fuel system fault

Common causes, most likely first

- 1 Faulty alternative fuel tank pressure sensor
- 2 Damaged or corroded wiring or connector at the sensor or PCM
- 3 Open or short circuit in the sensor signal or reference voltage circuit
- 4 Poor ground connection for the sensor or PCM
- 5 Failed fuel pressure regulator or mechanical issue causing actual pressure to be out of range
- 6 PCM software issue or internal fault (rare)



How to diagnose and fix it

- 1 Connect a scan tool and record freeze-frame data and any related codes to understand the conditions when the fault set
- 2 Visually inspect the sensor, its connector, and the wiring harness for damage, corrosion, or loose pins
- 3 Measure reference voltage (usually 5V) and ground at the sensor connector with the key on, engine off
- 4 Check the sensor signal voltage with a multimeter or oscilloscope while monitoring live data to see if it tracks pressure changes
- 5 Perform a voltage drop test on the ground and power circuits to rule out resistance issues
- 6 If the sensor signal is erratic or out of range, replace the sensor and clear codes to verify the repair
- 7 If wiring is faulty, repair or replace the affected section of the harness and recheck

Don't overlook the pressure sensor connector

- A common oversight is assuming the sensor itself has failed when the real problem is a corroded connector pin or chafed wire that only acts up under vibration or temperature changes.
The code can set due to a mechanical pressure issue, such as a failing regulator or a tank that is over-pressurized, so always verify actual pressure with a gauge before condemning the sensor.
- On some vehicles, a weak battery or charging system can cause erratic sensor readings that mimic a circuit fault, so check system voltage first.
- After replacing the sensor, some systems require a relearn or calibration procedure with a scan tool to avoid a repeat code.
This code is specific to alternative fuel systems and will not set on vehicles that do not have a separate alternative fuel tank pressure sensor circuit.

Can I keep driving with P019E?

You can usually continue driving if the vehicle runs normally, but avoid aggressive acceleration or heavy loads until the fault is repaired. If the vehicle enters a reduced-power mode or you smell fuel, stop driving and have it towed to a repair shop.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Oscilloscope (optional but helpful)
- Fuel pressure gauge suitable for alternative fuel systems
- Hand tools for connector and sensor removal



Reading P019E

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 1** Fuel and air metering.
- 9E** The exact fault within that area.

Often seen with

P0087 Fuel Rail/System Pressure - Too Low · **P0088** Fuel Rail/System Pressure - Too High · **P019D** O2 Sensor Delayed Response - Lean to Rich Bank 2 Sensor 3 · **P019F** Alternative Fuel Tank A Pressure Sensor Performance · **P01A0** Alternative Fuel Tank A Pressure Sensor Circuit Low

See it working

Watch the animated explainer [How a MAF Sensor Works: Hot-Wire Airflow Explained](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p019e/>

