

GENERIC · POWERTRAIN

P222E

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P222E

Barometric Pressure Sensor B Circuit Intermittent/Erratic

P222E indicates that the powertrain control module (PCM) has detected an intermittent or erratic signal from the barometric pressure sensor B circuit, which is used to measure atmospheric pressure for fuel and boost calculations. The PCM sets this code when the sensor voltage momentarily drops out, spikes, or becomes inconsistent beyond a calibrated time window, rather than failing completely.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Fuel and air metering (injector circuits)

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms.
- Rough idle or hesitation during acceleration, especially at high altitudes.
- Poor fuel economy or rich/lean fuel mixture complaints.
- Intermittent stalling or surging while driving.
- Reduced engine performance or limp mode in some vehicles.
- Altitude-related driveability issues that appear only in mountainous terrain.

Common causes, most likely first

- 1 Loose, corroded, or damaged electrical connector at the barometric pressure sensor.
- 2 Chafed or intermittently shorted wiring in the sensor circuit, often near sharp edges or heat sources.
- 3 Failing barometric pressure sensor B that produces erratic voltage when exposed to vibration or temperature swings.
- 4 Poor ground connection for the sensor or PCM, causing reference voltage fluctuations.
- 5 Water intrusion into the sensor or connector, leading to intermittent signal loss.
- 6 Faulty PCM driver circuit, though this is less common than wiring or sensor issues.



How to diagnose and fix it

- 1 Inspect the barometric pressure sensor B connector for looseness, corrosion, or water intrusion and clean or repair as needed.
- 2 Perform a wiggle test on the sensor wiring harness while monitoring live data to reproduce the intermittent signal.
- 3 Check the sensor reference voltage and ground circuits with a multimeter, looking for drops or spikes during vibration.
- 4 Compare barometric pressure sensor B readings with sensor A or a known-good source at key-on and during driving.
- 5 Replace the barometric pressure sensor B if live data shows erratic values that do not correlate with actual atmospheric pressure.
- 6 Repair or replace any damaged wiring or connectors identified during testing, then clear the code and verify the repair with a road test.
- 7 If all external circuits test good, consult factory service information for PCM diagnostics and possible reprogramming or replacement.

Intermittent Baro Sensor Faults Often Misdiagnosed

- A barometric pressure sensor that fails intermittently may test perfectly when the engine is cold, so always monitor live data during a test drive that includes vibration and temperature changes.
- Many technicians replace the sensor only to find the real cause is a chafed wire behind the engine block that shorts only when the engine torques under load.
- This code can be set by a poor ground shared with other sensors, so checking ground integrity at the chassis and engine block is a critical step that is often skipped.
- Altitude changes during normal driving can mimic an erratic signal, so verify that the sensor reading tracks actual barometric pressure smoothly rather than jumping in steps.
- A failing barometric pressure sensor can cause fuel trim shifts that set mixture-related codes, so always address P222E before chasing secondary fuel system faults.

Can I keep driving with P222E?

The vehicle is generally safe to drive short distances because the fault is intermittent, but avoid sustained high-speed driving or heavy towing until repaired, as erratic barometric pressure data can cause poor fuel economy and reduced performance.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the barometric pressure sensor circuit
- Electrical contact cleaner and dielectric grease
- Hand tools for connector and sensor access

Reading P222E

- P** Powertrain: engine, transmission and emissions.
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- 2** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
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- 2** Fuel and air metering (injector circuits).
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- 2E** The exact fault within that area.

Often seen with

P0106 MAP/Barometric Pressure Circuit Range/Performance · **P0107** MAP/Barometric Pressure Circuit Low Input · **P0108** MAP/Barometric Pressure Circuit High Input · **P222D** Barometric Pressure Sensor B Circuit High · **P222F** Barometric Pressure Sensor A/B Correlation

See it working

Watch the animated explainer [How an Oxygen Sensor Works: Live 3D Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p222e/>

