

GENERIC · POWERTRAIN

P025E

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P025E

Turbocharger/Supercharger Boost Sensor A Intermittent/Erratic

P025E is a generic OBD-II code indicating that the powertrain control module (PCM) has detected an intermittent or erratic signal from the turbocharger or supercharger boost sensor 'A'. The PCM monitors the sensor's voltage or pressure readings and flags this code when the signal jumps, drops out, or behaves unpredictably rather than following a smooth, expected pattern.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering (injector circuits)

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms.
- Intermittent loss of boost pressure, leading to sluggish acceleration or reduced power.
- Rough running or hesitation under load, especially during hard acceleration.
- A surge or flutter in power delivery as the boost signal fluctuates.
- In some cases, the engine may enter limp mode to protect the turbocharger or supercharger.

Common causes, most likely first

- 1 Loose, corroded, or damaged electrical connector at the boost sensor.
- 2 Chafed, pinched, or intermittently shorted wiring in the sensor circuit.
- 3 Failing boost sensor (manifold absolute pressure or dedicated boost pressure sensor) producing erratic output.
- 4 Vacuum or boost hose connected to the sensor that is cracked, soft, or leaking intermittently.
- 5 Poor ground connection for the sensor or PCM, causing voltage reference instability.
- 6 Internal PCM fault affecting the sensor signal processing (rare but possible).



How to diagnose and fix it

- 1 Inspect the boost sensor connector and wiring for looseness, corrosion, or damage; clean and secure as needed.
- 2 Perform a wiggle test on the sensor harness while monitoring live boost pressure data to identify intermittent wiring faults.
- 3 Check the vacuum/boost hose to the sensor for cracks or soft spots; replace if suspect.
- 4 Verify the sensor's reference voltage and ground circuits with a multimeter; repair any excessive resistance or voltage drop.
- 5 Compare boost sensor readings with a known-good mechanical gauge or scan tool data to confirm sensor accuracy.
- 6 Replace the boost sensor if wiring and hoses are confirmed good and the signal remains erratic.
- 7 Clear the code and road test under various load conditions to confirm the repair.

Intermittent boost sensor faults often misdiagnosed

- A common oversight is replacing the boost sensor without checking the connector terminals for micro-fretting corrosion, which can cause erratic signals that mimic a failed sensor.
- The code can be set by a momentary glitch during cranking or heavy vibration, so always check for loose sensor mounting or damaged harness clips before condemning parts.
- Boost sensor 'A' may be the manifold absolute pressure (MAP) sensor on some engines, so verify the correct component location using the service information rather than assuming a separate sensor.
- Intermittent faults often leave no pending code, so capturing freeze-frame data when the code sets is critical to see the exact conditions (RPM, load, boost) at the time of failure.
- A failing turbocharger wastegate or variable-geometry actuator can cause rapid boost fluctuations that the sensor faithfully reports, leading to a false diagnosis of the sensor itself.

Can I keep driving with P025E?

You can generally continue driving with this code, but avoid aggressive acceleration or heavy towing until it is diagnosed, because erratic boost control can stress the turbocharger and may lead to reduced power or limp mode.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Hand vacuum pump with gauge
- Wiring diagram and service information
- Basic hand tools for connector and hose inspection



Reading P025E

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 2** Fuel and air metering (injector circuits).
- 5E** The exact fault within that area.

Often seen with

P0235 Turbocharger Boost Sensor A Circuit Malfunction · **P0236** Turbocharger Boost Sensor A Circuit Range/Performance · **P0237** Turbocharger Boost Sensor A Circuit Low · **P0238** Turbocharger Boost Sensor A Circuit High · **P0299** Turbo/Supercharger Underboost

See it working

Watch the animated explainer [Turbocharger Trainer: Boost, Wastegate and Intercooler](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p025e/>

