

GENERIC · POWERTRAIN

P00F8

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P00F8

Turbocharger Outlet Pressure Sensor A Circuit

P00F8 indicates that the powertrain control module has detected an electrical fault in the circuit for the turbocharger outlet pressure sensor, which is the sensor that measures boost pressure after the compressor. The computer monitors the sensor's signal voltage and flags this code when the voltage falls outside the expected range or behaves erratically for a calibrated period.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering and auxiliary emission controls

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Reduced engine power or limp mode due to the computer substituting a default boost value
- Poor acceleration or sluggish throttle response because boost pressure is not being measured correctly
- Rough running or hesitation under load if the fuel mixture is affected by the missing pressure signal
- In some cases, a noticeable whistle or hiss from the engine bay if the sensor is leaking boost pressure

Common causes, most likely first

- 1 Faulty turbocharger outlet pressure sensor (internal failure or contamination)
- 2 Damaged or disconnected wiring harness at the sensor connector
- 3 Corroded or loose electrical terminals in the sensor circuit
- 4 Open or short circuit in the signal, reference voltage, or ground wire
- 5 Boost leak at the sensor mounting point or in the intercooler piping near the sensor
- 6 Failed powertrain control module (rare, but possible if all other circuits test good)



How to diagnose and fix it

- 1 Perform a visual inspection of the sensor, connector, and wiring for obvious damage, corrosion, or disconnection
- 2 Use a scan tool to check live data for the turbocharger outlet pressure sensor and compare it to expected values with the key on, engine off and during a road test
- 3 Check reference voltage (typically 5V) and ground at the sensor connector with a multimeter to verify the circuit integrity
- 4 Inspect for boost leaks around the sensor and intercooler piping using a smoke machine or soapy water test
- 5 Test the sensor signal wire for continuity and shorts to ground or power, repairing the harness as needed
- 6 Replace the turbocharger outlet pressure sensor if the circuit tests good but the signal remains out of range
- 7 Clear the code and perform a drive cycle to verify the repair and ensure the code does not return

What the boost sensor code hides

- A boost leak at the sensor's O-ring or mounting flange can mimic a sensor failure, so always pressure-test the intake tract before condemning the sensor.
- The sensor may be shared with other functions such as barometric pressure or intake air temperature on some engines, so check for related codes that could point to a shared circuit.
- Intermittent wiring faults often appear only when the engine is hot or vibrating, so wiggle-test the harness while watching live data to catch a bad connection.
- The computer may default to a calculated boost value when the sensor fails, allowing the engine to run almost normally, which is why many drivers notice no symptoms beyond the light.
- After replacing the sensor, some vehicles require a relearn or adaptation reset for the new sensor to be recognized correctly, so check service information for the specific procedure.

Can I keep driving with P00F8?

You can generally drive the vehicle with this code, but avoid heavy acceleration or towing until the fault is repaired because the engine may be running on a default boost estimate that can affect performance and emissions. If the engine enters limp mode or runs poorly, seek service promptly.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Smoke machine or boost leak tester
- Basic hand tools (screwdrivers, socket set)
- Wiring repair kit (heat shrink, crimpers, terminals)



Reading P00F8

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 0** Fuel and air metering and auxiliary emission controls.
- F8** The exact fault within that area.

Often seen with

P00F5 Humidity Sensor Circuit High · **P00F6** Humidity Sensor Circuit Intermittent/Erratic · **P00F7** Barometric Pressure - Turbocharger/Supercharger Inlet Pressu · **P0235** Turbocharger Boost Sensor A Circuit Malfunction · **P0236** Turbocharger Boost Sensor A Circuit Range/Performance

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/p00f8/>

