

GENERIC · POWERTRAIN

P0236

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0236

Turbocharger Boost Sensor A Circuit Range/Performance

P0236 means the engine computer has detected that the turbocharger boost sensor A circuit is reporting a signal voltage or pressure value outside the range the computer expects for the current operating conditions. The computer compares the boost sensor reading against other sensors such as the manifold absolute pressure sensor and the mass airflow sensor, and it sets this code when the boost sensor signal does not track correctly or falls outside its plausible range.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering (injector circuits)

Symptoms you may notice

- Often no symptoms besides the warning light, especially if the fault is intermittent or only sets under specific load conditions.
- Reduced engine power or a limp-home mode because the computer limits boost when it cannot trust the boost sensor signal.
- Poor acceleration or sluggish throttle response, particularly during merging or passing maneuvers.
- Rough running or hesitation under load if the computer substitutes a default boost value that is incorrect.
- A noticeable drop in fuel economy because the computer may enrich the mixture or alter boost control strategy.
- In some vehicles, a message on the driver information display warning of reduced engine power or a service engine soon light.



Common causes, most likely first

- 1 A faulty boost sensor A itself, where the internal sensing element drifts or fails and reports an implausible pressure or voltage.
- 2 Damaged, corroded, or loose wiring and connectors in the boost sensor circuit, including the reference voltage, signal, and ground wires.
- 3 A clogged or restricted boost sensor port or hose, often caused by carbon buildup or oil sludge blocking the pressure signal.
- 4 A leaking or disconnected boost hose or intercooler pipe that causes the actual boost pressure to differ from what the sensor reports.
- 5 A failing manifold absolute pressure sensor or mass airflow sensor that provides conflicting data, leading the computer to flag the boost sensor as out of range.
- 6 A stuck or malfunctioning turbocharger wastegate or variable geometry turbo actuator that causes actual boost to deviate from commanded boost.
- 7 Engine computer software issues or a faulty powertrain control module, though this is less common and should be considered only after all other causes are ruled out.

How to diagnose and fix it

- 1 Perform a visual inspection of the boost sensor, its connector, and the wiring harness for damage, corrosion, or loose pins, and repair as needed.
- 2 Check the boost sensor port and hose for blockage or restrictions, and clean or replace the hose if carbon or oil sludge is present.
- 3 Use a scan tool to compare the boost sensor reading with the manifold absolute pressure sensor and mass airflow sensor readings at key-on, engine-off and during a test drive to identify which sensor is inconsistent.
- 4 Measure the reference voltage, signal voltage, and ground at the boost sensor connector with a digital multimeter and compare against the manufacturer's specifications.
- 5 Smoke test or pressure test the intake and boost plumbing to find leaks or disconnected hoses that could cause a pressure discrepancy.
- 6 If the sensor signal is implausible and wiring and plumbing are good, replace the boost sensor with a quality part and clear the code.
- 7 After repairs, clear the diagnostic trouble codes and perform a road test under load to verify the code does not return and that boost control operates correctly.



Before you replace the boost sensor

- A clogged boost sensor port from carbon buildup is a common cause that many technicians overlook, and cleaning the port often resolves the code without replacing the sensor.
- The code can be set by a leaking intercooler or boost hose that causes actual boost pressure to be lower than the sensor's expected range, so always pressure test the intake system.
- A failing manifold absolute pressure sensor can cause conflicting data that makes the computer blame the boost sensor, so compare both sensor readings before condemning the boost sensor.
- In some vehicles, a software calibration issue or a faulty powertrain control module can set this code, but this should only be suspected after all mechanical and electrical checks pass.
- Intermittent wiring faults at the boost sensor connector often set P0236 only during certain driving conditions, so wiggle-test the harness while monitoring live data.

Can I keep driving with P0236?

You can usually drive the vehicle with P0236, but expect reduced engine power and avoid heavy acceleration or towing until the fault is repaired. If the vehicle enters limp mode or runs poorly, limit driving to reach a repair shop safely.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Hand tools for connector and hose removal
- Smoke machine or pressure tester for intake leaks
- Manufacturer service information for wiring diagrams and specifications

Reading P0236

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).
36	The exact fault within that area.

Often seen with

P0106 MAP/Barometric Pressure Circuit Range/Performance · **P0235** Turbocharger Boost Sensor A Circuit Malfunction · **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/p0236/>

