

GENERIC · POWERTRAIN

P01FA

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P01FA

Turbocharger Outlet Pressure Sensor B Circuit

P01FA indicates that the powertrain control module has detected an implausible signal or out-of-range voltage from the turbocharger outlet pressure sensor B circuit, which monitors boost pressure after the compressor. The computer compares this sensor's readings against expected values from other sensors and operating conditions, and it sets the code when the signal does not match the model's prediction.

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

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Reduced engine power or a limp-home mode triggered by the powertrain control module
- Poor acceleration or sluggish throttle response due to incorrect boost pressure readings
- Rough running or hesitation under load if the sensor signal is erratic
- Decreased fuel economy as the computer adjusts fueling based on faulty pressure data
- In rare cases, excessive turbocharger boost or overboost if the sensor under-reports pressure

Common causes, most likely first

- 1 Faulty turbocharger outlet pressure sensor B, such as a failed internal element or contaminated sensing port
- 2 Damaged, chafed, or corroded wiring in the sensor circuit, including opens, shorts, or high resistance
- 3 Loose or corroded electrical connector at the sensor or at the powertrain control module
- 4 Leaking or disconnected pressure hose or tube between the turbocharger outlet and the sensor
- 5 Exhaust restriction or turbocharger malfunction causing actual pressure to fall outside the expected range
- 6 Powertrain control module software issue or internal fault, though this is less common
- 7 Intake system leaks or restrictions that affect the pressure ratio the sensor measures



How to diagnose and fix it

- 1 Inspect the sensor and its connector for physical damage, corrosion, or loose pins, and clean or repair as needed
- 2 Check the pressure hose or tube for cracks, disconnects, or blockages, and replace if faulty
- 3 Measure the sensor reference voltage and signal voltage with a multimeter, comparing to manufacturer specifications
- 4 Perform a wiggle test on the wiring harness while monitoring sensor data to identify intermittent faults
- 5 Compare the turbocharger outlet pressure sensor B reading with a known-good mechanical boost gauge to verify accuracy
- 6 If the sensor is confirmed faulty, replace it and clear the code, then verify the repair with a road test
- 7 If the fault persists, diagnose the powertrain control module and its software, updating or replacing only as a last resort

Before you replace the turbo pressure sensor

- A clogged or restricted pressure port at the sensor can mimic a failed sensor, so always check for carbon or oil buildup before condemning the part.
- The code can be set by a simple loose connector or chafed wire that only acts up under vibration, so a thorough harness inspection is essential.
- Actual boost leaks or exhaust restrictions can cause the sensor to read outside the expected range, setting this code even when the sensor itself is healthy.
- On some vehicles, a faulty sensor may cause the computer to default to a safe boost level, masking the underlying issue until the code is cleared.
- After replacing the sensor, a relearn or adaptation drive cycle may be required for the powertrain control module to accept the new sensor's readings.

Can I keep driving with P01FA?

You can usually drive the vehicle with this code, but expect reduced performance and possible limp mode; avoid heavy acceleration or towing until the fault is repaired to prevent potential turbocharger damage.

Tools that help

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



Reading P01FA

- 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.
- FA** The exact fault within that area.

Often seen with

P01F9 Engine Coolant Heater B Control Circuit Driver Current/Tempe · **P01FB** Turbocharger Outlet Pressure Sensor B Range/Performance · **P0235** Turbocharger Boost Sensor A Circuit Malfunction · **P0236** Turbocharger Boost Sensor A Circuit Range/Performance · **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/p01fa/>

