



P1248 · Ford

Turbo Boost Pressure Not Detected

P1248 on Ford vehicles means the powertrain control module (PCM) commanded a turbo boost condition but did not see the expected rise in boost pressure from the manifold pressure sensor. The PCM compares desired boost against actual measured boost and flags this code when the actual value stays too low for the operating conditions.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Ford specific	Medium	Intermediate	Fuel and air metering (injector circuits)

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Reduced engine power or a limp-home mode feeling during acceleration
- Sluggish throttle response and poor acceleration from a stop
- Noticeable lack of turbo boost, especially during highway merging or passing
- Possible black smoke from the exhaust under load on diesel models
- Rough running or hesitation under acceleration

Common causes, most likely first

- 1 Split, disconnected, or leaking charge-air hose or intercooler pipe
- 2 Faulty manifold absolute pressure (MAP) sensor or boost pressure sensor
- 3 Sticking or failed turbocharger wastegate or variable-geometry turbo actuator
- 4 Clogged or restricted air intake or air filter
- 5 Exhaust restriction upstream of the turbo, such as a blocked diesel particulate filter
- 6 Wiring damage or poor connection at the MAP or boost sensor
- 7 Turbocharger internal failure, such as seized vanes or a damaged compressor wheel

How to diagnose and fix it

- 1 Inspect all charge-air hoses and intercooler pipes for splits, loose clamps, or disconnected joints
- 2 Check the air filter and intake tract for blockage or collapse
- 3 Use a scan tool to read live boost pressure and compare commanded versus actual boost
- 4 Test the MAP or boost pressure sensor signal and wiring for opens, shorts, or corrosion
- 5 Verify wastegate or variable-geometry turbo actuator movement and vacuum or electronic control
- 6 Check for exhaust restrictions, especially on diesel models with a particulate filter
- 7 If all external checks pass, perform a turbocharger inspection for internal damage or seizure



What Ford techs check before replacing the turbo

- A loose or cracked intercooler pipe is the most common cause of P1248 on Ford vehicles, and it often looks fine until you pressurize the system.
- The code can set from a lazy MAP sensor that still reads plausibly at idle but fails to respond quickly under boost.
- On Ford diesels, a partially blocked diesel particulate filter can restrict exhaust flow enough to prevent boost from building without setting a filter-specific code.
- A sticking wastegate or carboned-up variable-geometry turbo mechanism can cause this code without any boost leak at all.
- Do not replace the turbocharger based on this code alone; verify actual boost pressure with a gauge or scan tool first.

Can I keep driving with P1248?

You can usually drive the vehicle gently to a repair shop, but avoid hard acceleration and heavy loads because the engine is running without proper boost control. Continued driving with a significant boost leak or turbo fault can lead to over-fueling, higher exhaust temperatures, and further damage.

Tools that help

- OBD-II scan tool with live data and boost pressure PIDs
- Hand vacuum pump or pressure tester for wastegate and boost leak checks
- Digital multimeter for sensor and wiring tests
- Basic socket and wrench set for hose and sensor access
- Flashlight or inspection mirror for checking hoses and turbo plumbing

Reading P1248

- P** Powertrain: engine, transmission and emissions.
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- 1** Manufacturer-specific code (Ford): its meaning depends on the make.
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- 2** Fuel and air metering (injector circuits).
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- 48** 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 · **P0234** Engine Overboost Condition · **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/ford-p1248/>

