

GENERIC · POWERTRAIN

P0246

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0246

Turbo/Super Charger Wastegate Solenoid 'A' High

P0246 means the engine computer has detected an abnormally high voltage on the control circuit for the wastegate solenoid 'A', which is the valve that regulates boost pressure on a turbocharged or supercharged engine. The computer commands the solenoid to open or close, but the voltage it sees on the return side is higher than expected, so it flags the circuit as faulty and may limit boost to protect the engine.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering (injector circuits)

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Reduced engine power or a sudden loss of boost, making the car feel sluggish
- The turbo or supercharger may produce less power than normal, especially under acceleration
- In some cases, the engine may enter limp mode and limit RPM
- A slight hesitation or stumble when accelerating from a stop
- No drivability change at all if the fault is intermittent and the solenoid still functions

Common causes, most likely first

- 1 A short to voltage or a damaged wire in the wastegate solenoid control circuit
- 2 A failed wastegate solenoid that has an internal short or open coil
- 3 Corroded or loose electrical connector pins at the solenoid or at the engine computer
- 4 A faulty engine computer driver for that solenoid circuit, though this is less common
- 5 A pinched or chafed harness that has rubbed against a hot or moving component
- 6 Water intrusion into the solenoid connector causing high resistance or a short



How to diagnose and fix it

- 1 Scan all modules for stored codes and freeze-frame data to confirm P0246 is the only wastegate-related fault
- 2 Inspect the wastegate solenoid connector and wiring for corrosion, chafing, or loose pins, and repair as needed
- 3 Measure the resistance of the solenoid coil with a multimeter and compare it to the manufacturer's specification
- 4 Back-probe the solenoid control circuit with the key on and engine off to check for an unexpected voltage present on the ground side
- 5 Check the solenoid's ground circuit for continuity to the battery negative terminal and repair any open or high-resistance ground
- 6 If the wiring and ground are good, substitute a known-good solenoid and clear the code to see if it returns
- 7 If the code persists after all circuit checks pass, diagnose the engine computer driver circuit or replace the computer as a last resort

What the wastegate solenoid voltage really means

- A high voltage on the solenoid control circuit often means the computer is seeing battery voltage on the ground side, which points to a short to power rather than a failed solenoid.
- Many technicians replace the wastegate solenoid first, but a chafed wire near the turbo heat shield is a more common cause of this specific high-voltage code.
- The wastegate solenoid is pulse-width modulated, so a standard test light can give misleading results; use a multimeter or oscilloscope to check the signal.
- This code can set intermittently from water intrusion after a car wash or heavy rain, so always check for moisture in the connector before condemning parts.
- A stuck-open wastegate actuator rod can cause the computer to command the solenoid to a position that triggers a high-voltage fault, so inspect the mechanical linkage as well.

Can I keep driving with P0246?

You can usually drive the car with this code, but avoid hard acceleration and towing because the computer may limit boost and the engine could enter limp mode unexpectedly. Have the fault diagnosed soon, since a short in the solenoid circuit can damage the engine computer if left unrepaired.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Back-probe kit or fine test leads
- Wiring diagram for the wastegate solenoid circuit
- Socket set and trim removal tools for access



Reading P0246

- 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).
- 46** The exact fault within that area.

Often seen with

P0033 Turbo Charger Bypass Valve Control Circuit · **P0234** Engine Overboost Condition · **P0245** Turbo/Super Charger Wastegate Solenoid 'A' Low · **P0247** Turbo/Super Charger Wastegate Solenoid 'B' · **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/p0246/>

