



P005F

Turbocharger/Supercharger Boost Control B Supply Voltage Circuit High

P005F indicates that the powertrain control module has detected an abnormally high voltage on the supply circuit for the 'B' turbocharger or supercharger boost control solenoid. This typically means the control wire is shorted to voltage, the solenoid's internal coil is open, or the ground reference is compromised, causing the module to see voltage above the expected range.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	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 disabled boost control
- Poor acceleration and sluggish throttle response
- Decreased fuel economy from incorrect boost pressure
- Possible overboost or underboost conditions depending on the failure mode
- In rare cases, a noticeable whistling or hissing noise from the turbocharger area

Common causes, most likely first

- 1 Short to voltage on the boost control solenoid supply circuit (damaged wire insulation or connector)
- 2 Failed boost control solenoid with an open internal coil
- 3 Corroded or loose electrical connector at the solenoid
- 4 Faulty ground connection for the boost control circuit
- 5 Damaged or shorted wiring harness between the PCM and solenoid
- 6 Internal PCM driver failure (less common)
- 7 Aftermarket electrical accessories improperly tapped into the circuit



How to diagnose and fix it

- 1 Inspect the boost control solenoid connector and wiring for corrosion, chafing, or loose pins
- 2 Disconnect the solenoid and measure resistance across its terminals to check for an open coil
- 3 With the key on and solenoid disconnected, measure voltage on the supply wire to ground; it should be near battery voltage only when commanded
- 4 Check for a short to voltage by measuring the control wire with the PCM disconnected; any voltage indicates a short
- 5 Verify the ground circuit integrity by measuring resistance from the solenoid ground pin to battery negative
- 6 If wiring and solenoid test good, suspect the PCM and perform a driver circuit test with a bidirectional scan tool
- 7 Repair or replace the faulty component and clear the code, then verify the boost control operates correctly

Boost control circuit checks before parts

- A common oversight is assuming the solenoid is bad when a chafed wire shorting to a nearby power source is the real cause.
The code can set intermittently due to vibration or heat, so a wiggle test of the harness while monitoring live data is essential.
- Some vehicles use a PWM signal on the supply circuit; a standard multimeter may not show the true average voltage, so an oscilloscope is more reliable.
- Replacing the solenoid without checking the ground circuit often leads to a repeat failure because a bad ground can mimic a short to voltage.
This code does not always mean the turbocharger itself is failing; the fault is electrical and may not affect boost if the solenoid defaults to a safe position.

Can I keep driving with P005F?

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

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Oscilloscope (optional for PWM signal analysis)
- Wire repair kit with crimpers and heat shrink
- Electrical contact cleaner
- Factory service information for wiring diagrams



Reading P005F

- 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.
- 5F** The exact fault within that area.

Often seen with

P005A B Camshaft Profile Actuator A Control Performance/Stuck Off · **P005B** B Camshaft Profile Actuator A Control Stuck On Bank 1 · **P005C** B Camshaft Profile Actuator A Control Performance/Stuck Off · **P005D** B Camshaft Profile Actuator A Control Stuck On Bank 2 · **P005E** Turbocharger/Supercharger Boost Control B Supply Voltage Cir

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/p005f/>

