

SUBARU · POWERTRAIN

P1245

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1245 · Subaru

Wastegate Control Solenoid Valve Malfunction Fail Safe

P1245 on a Subaru indicates that the engine control module (ECM) has detected a malfunction in the wastegate control solenoid valve circuit, specifically triggering the fail-safe mode. The ECM monitors the solenoid's electrical circuit and, when it sees an unexpected voltage or current condition, it sets this code and limits boost pressure to protect the turbocharger and engine.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Subaru 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 and limited boost pressure, making the vehicle feel sluggish during acceleration.
- The turbocharger may fail to build boost, resulting in poor performance at higher speeds or under load.
- In some cases, the engine may enter a limp mode, restricting RPM and vehicle speed.
- A slight decrease in fuel economy may be observed due to the engine operating in a less efficient fail-safe state.

Common causes, most likely first

- 1 Faulty wastegate control solenoid valve, such as a stuck valve or failed internal coil.
- 2 Damaged or disconnected electrical connector at the solenoid, leading to an open or short circuit.
- 3 Corroded or broken wires in the solenoid circuit, often due to heat or vibration.
- 4 Vacuum or pressure hose leaks or blockages between the solenoid and the wastegate actuator.
- 5 Engine control module (ECM) software issue or internal fault, though less common.
- 6 Contamination or debris in the solenoid valve causing it to seize.
- 7 Wastegate actuator failure that indirectly affects solenoid operation and triggers the fail-safe.



How to diagnose and fix it

- 1 Perform a visual inspection of the wastegate control solenoid valve, its connector, and associated hoses for damage, corrosion, or disconnection.
- 2 Use a scan tool to clear the code and test-drive the vehicle to see if it returns, confirming whether the fault is intermittent.
- 3 Check the solenoid's electrical resistance with a multimeter and compare to the manufacturer's specification to rule out an open or shorted coil.
- 4 Inspect the vacuum hoses for leaks or blockages using a vacuum gauge or smoke tester, and repair or replace as needed.
- 5 Test the solenoid's operation by applying 12 volts and listening for an audible click, or use a bidirectional scan tool to activate it and observe changes in boost pressure.
- 6 If the solenoid fails electrical or functional tests, replace it with a known-good unit and clear the code.
- 7 If the code persists after solenoid replacement, diagnose the wiring harness and ECM for faults, including checking for continuity and shorts to ground or power.

Overlooked Causes of P1245 on Subaru

- A common misdiagnosis is replacing the turbocharger when the actual fault is a simple vacuum hose leak or a clogged solenoid filter, which costs far less to fix.
- The wastegate control solenoid valve often fails intermittently due to heat cycling, so the code may not set during a short test drive and can be missed if the vehicle isn't driven under load.
- On some Subaru models, the ECM's fail-safe strategy may not illuminate the check engine light immediately, so drivers might notice reduced performance before the code is stored.
- Corrosion at the solenoid connector is a frequent culprit, especially in regions with road salt, and can mimic a failed solenoid even when the valve itself is functional.
- A faulty wastegate actuator can cause the solenoid to work harder and eventually trigger P1245, so always inspect the actuator for binding or a torn diaphragm.

Can I keep driving with P1245?

You can generally drive the vehicle with P1245, but expect reduced power and avoid aggressive acceleration or towing until the fault is repaired. Prolonged driving in fail-safe mode may increase fuel consumption and stress the turbocharger, so schedule a diagnosis soon.

Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter
- Vacuum gauge or smoke tester
- Basic hand tools (screwdrivers, pliers, socket set)
- Service manual or wiring diagram for the specific Subaru model



Reading P1245

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Subaru): its meaning depends on the make.
- 2** Fuel and air metering (injector circuits).
- 45** The exact fault within that area.

Often seen with

P0234 Engine Overboost Condition · **P0243** Turbocharger Wastegate Solenoid A Malfunction · **P0245** Turbo/Super Charger Wastegate Solenoid 'A' Low · **P0246** Turbo/Super Charger Wastegate Solenoid 'A' High · **P0299** Turbo/Supercharger Underboost

See it working

Watch the animated explainer [Four-Stroke Engine Cutaway: Intake to Exhaust](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/subaru-p1245/>

