

GENERIC · POWERTRAIN

P2261

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2261

Turbo/Super Charger Bypass Valve - Mechanical

P2261 indicates that the powertrain control module has detected a mechanical fault in the turbocharger or supercharger bypass valve circuit, meaning the valve is not moving or sealing as commanded. The computer typically compares the expected boost pressure or valve position against actual sensor feedback and sets this code when the discrepancy exceeds a calibrated threshold.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	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 triggered by the control module
- Audible hissing, fluttering, or whistling from the turbocharger area during acceleration or deceleration
- Poor throttle response or delayed boost buildup
- Rough idle or stalling after lifting off the throttle
- Increased fuel consumption due to incorrect air metering

Common causes, most likely first

- 1 Sticking or seized bypass valve linkage due to carbon buildup or corrosion
- 2 Torn or deteriorated bypass valve diaphragm
- 3 Failed bypass valve solenoid or vacuum actuator
- 4 Damaged or disconnected vacuum supply hose to the bypass valve
- 5 Wiring fault such as an open circuit, short, or poor connector contact at the valve
- 6 Mechanical interference or misalignment of the valve assembly
- 7 Failed turbocharger recirculation valve integrated into the compressor housing



How to diagnose and fix it

- 1 Connect a scan tool and record freeze-frame data and any related codes before clearing anything
- 2 Inspect the bypass valve, its linkage, and vacuum hoses for obvious physical damage or disconnection
- 3 Command the bypass valve open and closed with a bidirectional scan tool while watching for smooth movement and listening for actuation
- 4 Measure vacuum supply at the actuator with a vacuum gauge and compare to specification
- 5 Check the electrical connector and wiring for continuity, shorts, and corrosion using a multimeter
- 6 Remove the valve and bench-test it for free movement and diaphragm integrity, replacing it if it sticks or leaks
- 7 Clear codes and perform a road test with live data to confirm the commanded and actual boost pressures now agree

What a sticking bypass valve really costs you

- A bypass valve that sticks closed can cause compressor surge and eventually damage the turbocharger, so ignoring the code is riskier than it appears.
Many technicians replace the turbocharger when the actual fault is a five-dollar vacuum hose or a corroded connector pin at the valve.
- This code can be set by a perfectly functional valve if the boost pressure sensor is skewed, so always verify sensor readings before condemning the valve.
- On some vehicles the bypass valve is integrated into the turbocharger assembly, making replacement a much larger job than on units with a separate valve.
A dirty air filter or a restricted intercooler can alter boost dynamics enough to trigger this code without any fault in the valve itself.

Can I keep driving with P2261?

You can usually drive the vehicle to a repair shop, but avoid hard acceleration and sustained high boost because a stuck bypass valve can overstress the turbocharger. If the engine enters limp mode or you hear loud mechanical noises, stop driving and arrange a tow.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Hand vacuum pump with gauge
- Digital multimeter
- Socket and wrench set
- Mirror and flashlight for visual inspection



Reading P2261

- P** Powertrain: engine, transmission and emissions.
- 2** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 2** Fuel and air metering (injector circuits).
- 61** The exact fault within that area.

Often seen with

P0234 Engine Overboost Condition · **P0243** Turbocharger Wastegate Solenoid A Malfunction · **P0299** Turbo/Supercharger Underboost · **P2262** Turbo Boost Pressure Not Detected - Mechanical · **P2263** Turbo/Super Charger Boost System Performance

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/p2261/>

