

GENERIC · POWERTRAIN

P0476

OBD-II TROUBLE CODE

P0476

Exhaust Pressure Control Valve Range/Performance

P0476 indicates that the powertrain control module (PCM) has detected an out-of-range or performance fault in the exhaust pressure control valve circuit, meaning the valve is not responding as commanded or its feedback signal does not match expected values. The PCM compares commanded valve position or pressure to actual sensor readings and sets this code when the correlation falls outside calibrated limits.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

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 the PCM limiting torque to protect the exhaust system
- Rough running or hesitation during acceleration if the valve is stuck partially closed
- Increased exhaust backpressure leading to poor fuel economy or sluggish performance
- A noticeable exhaust leak or hissing sound from the valve area if the valve is stuck open
- In some cases, a stored code without any drivability complaint at all

Common causes, most likely first

- 1 Faulty exhaust pressure control valve solenoid or actuator
- 2 Wiring damage (open, short, or chafed insulation) in the valve control circuit
- 3 Corroded or loose electrical connector at the valve or PCM
- 4 Sticking or carbon-fouled valve mechanism due to soot buildup
- 5 Failed exhaust pressure sensor providing inaccurate feedback to the PCM
- 6 PCM software calibration issue or internal driver fault (less common)



How to diagnose and fix it

- 1 Connect a scan tool and verify P0476 is active, then check for related codes and freeze-frame data
- 2 Inspect the valve connector and wiring harness for corrosion, chafing, or loose pins, and repair as needed
- 3 Measure resistance and voltage at the valve solenoid and compare to manufacturer specifications
- 4 Command the valve open and closed with a bidirectional scan tool while observing feedback and listening for movement
- 5 Remove and inspect the valve for carbon buildup or mechanical binding, cleaning or replacing if necessary
- 6 Test the exhaust pressure sensor signal for accuracy and replace if readings are implausible
- 7 After repairs, clear codes and perform a road test to confirm the monitor runs and the code does not return

What the exhaust pressure valve code hides

- A sticking valve due to soot accumulation is a frequent cause that many technicians overlook while chasing electrical faults first.
- The code can be set by a failing exhaust pressure sensor even when the valve itself is functioning correctly, so always verify sensor feedback before replacing the valve.
- Incorrect oil or fuel quality can accelerate carbon buildup on the valve, leading to repeated P0476 occurrences after repair.
- Some vehicles use the exhaust pressure control valve for both emissions and engine braking, so a fault may only appear under specific driving conditions.
- A poor ground connection at the chassis can mimic a faulty valve and cause intermittent P0476 without any hard failure.

Can I keep driving with P0476?

You can usually continue driving to a repair shop, but avoid heavy acceleration or towing because a stuck valve can raise exhaust backpressure and stress the turbocharger or emissions system. If the engine enters limp mode or you notice severe power loss, stop driving and seek professional diagnosis.

Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter for circuit testing
- Hand tools for valve removal and inspection
- Vacuum pump or pressure gauge for testing valve operation
- Wiring diagram and service information for the specific vehicle



Reading P0476

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 4** Auxiliary emission controls.
- 76** The exact fault within that area.

Often seen with

P0299 Turbo/Supercharger Underboost · **P0475** Exhaust Pressure Control Valve · **P0477** Exhaust Pressure Control Valve Low · **P0478** Exhaust Pressure Control Valve High · **P0479** Exhaust Pressure Control Valve Intermittent

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/p0476/>

