

GENERIC · POWERTRAIN

P2625

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2625

Injector Control Pressure Regulator Circuit High

P2625 indicates that the powertrain control module (PCM) has detected an abnormally high voltage on the injector control pressure regulator circuit, which is used to manage fuel pressure in diesel injection systems. The regulator is commanded by the PCM to adjust pressure, and a high voltage reading typically means the circuit is open, shorted to voltage, or the regulator itself has failed.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Computer and output circuits

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough running or misfire under load due to incorrect fuel pressure
- Reduced engine power or limp mode
- Hard starting or stalling, especially when cold
- Poor fuel economy or excessive black smoke from the exhaust

Common causes, most likely first

- 1 Faulty injector control pressure regulator (solenoid) itself
- 2 Open or high-resistance wiring in the regulator control circuit
- 3 Short to voltage on the regulator signal wire
- 4 Corroded or loose electrical connector at the regulator
- 5 Failed powertrain control module (PCM) driver circuit
- 6 Low fuel pressure or restricted fuel filter causing the regulator to overcompensate

How to diagnose and fix it

- 1 Verify the stored code and check for any related trouble codes using a scan tool
- 2 Inspect the regulator electrical connector for corrosion, tightness, and damaged pins
- 3 Measure resistance of the regulator solenoid and compare to manufacturer specifications
- 4 Check for battery voltage on the regulator control wire with the key on and engine off
- 5 Perform a voltage drop test on the ground circuit and repair any excessive resistance
- 6 If the circuit tests good, replace the injector control pressure regulator and clear codes
- 7 Relearn the fuel pressure regulator and road test to confirm the repair



Don't overlook the fuel pressure regulator connector

- A loose or corroded connector at the pressure regulator is a frequent cause of P2625 that is often missed during visual inspections.
- The code can set intermittently due to vibration or heat, so a wiggle test of the harness while monitoring live data is essential.
- A failing fuel pressure regulator can sometimes test good when cold but fail when hot, so resistance checks should be done at operating temperature.
- Low fuel pressure from a clogged filter or weak lift pump can cause the regulator to run at maximum duty cycle and set a high voltage code.
- Replacing the regulator without checking the circuit for a short to voltage can lead to repeat failures and unnecessary parts replacement.

Can I keep driving with P2625?

It is not recommended to drive long distances with P2625 because incorrect fuel pressure can cause engine damage or stalling. If the vehicle is running roughly or lacks power, have it towed to a repair shop rather than risk a breakdown.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Test light
- Wiring diagram for the specific vehicle
- Basic hand tools for connector and component access

Reading P2625

- P** Powertrain: engine, transmission and emissions.
- 2** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 6** Computer and output circuits.
- 25** The exact fault within that area.

Often seen with

P0087 Fuel Rail/System Pressure - Too Low · **P0088** Fuel Rail/System Pressure - Too High · **P0191** Fuel Rail Pressure Sensor Circuit Range/Performance · **P2624** Injector Control Pressure Regulator Circuit Low · **P2626** O2 Sensor Pumping Current Trim Circuit/Open (Bank 1 Sensor 1)



See it working

Watch the animated explainer [How a Turbocharger Works, Step by Step](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2625/>

