



## P025D

### Fuel Pump Module A Control Circuit High

P025D indicates that the powertrain control module (PCM) has detected an abnormally high voltage on the control circuit for fuel pump module A, which is the primary fuel delivery module on most vehicles. The PCM commands the fuel pump on or off via this circuit, and a high voltage reading typically means the circuit is open, shorted to voltage, or the module's internal electronics are not providing the expected load.

| SYSTEM     | CODE TYPE           | SEVERITY | FIX DIFFICULTY | AREA                                      |
|------------|---------------------|----------|----------------|-------------------------------------------|
| Powertrain | Generic (all makes) | High     | Intermediate   | Fuel and air metering (injector circuits) |

### Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Engine cranks but fails to start because the fuel pump does not run
- Engine stalls shortly after starting or during driving
- Reduced engine power or limp mode due to fuel delivery issues
- Intermittent no-start condition that may be temperature or vibration related
- Audible fuel pump operation may be absent when the key is turned on

### Common causes, most likely first

- 1 Open circuit in the fuel pump control wire between the PCM and fuel pump module
- 2 Corroded, loose, or damaged electrical connector at the fuel pump module or PCM
- 3 Failed fuel pump module (internal control electronics or pump motor open circuit)
- 4 Blown fuse or faulty fuel pump relay supplying power to the module
- 5 Short to voltage on the control circuit from chafed wiring or adjacent power wires
- 6 Faulty PCM driver for the fuel pump control circuit (rare but possible)



## How to diagnose and fix it

- 1 Connect a scan tool and verify P025D is current; check for related fuel system codes and freeze-frame data
- 2 Inspect the fuel pump module connector and PCM connector for corrosion, loose pins, or water intrusion
- 3 Test the fuel pump control circuit for continuity and short to voltage with a digital multimeter, referencing the factory wiring diagram
- 4 Check the fuel pump fuse and relay; swap the relay with a known-good identical relay and retest
- 5 Command the fuel pump on with the scan tool and listen for pump operation; measure voltage and current at the module connector
- 6 If the circuit tests good, remove the fuel pump module and bench-test the pump motor and internal control board for open circuits
- 7 Replace the faulty fuel pump module or repair wiring as needed, then clear codes and verify the repair with a road test

## High Voltage Does Not Always Mean Short

- A high voltage reading on a control circuit often indicates an open circuit rather than a short to power, because the PCM pulls the circuit high when no load is present.
- Many fuel pump modules use a pulse-width modulated (PWM) signal, and a failed module can report high voltage without any driveability symptom until the pump stops completely.
- Corrosion inside the fuel pump module connector is a frequent cause that is easily overlooked when only the pump motor is tested.
- A faulty fuel pump relay can backfeed voltage onto the control circuit, setting P025D even when the module and wiring are intact.
- Some vehicles set P025D when the fuel pump control module loses its ground connection, which mimics a high-voltage fault on the control side.

## Can I keep driving with P025D?

Do not continue driving with P025D because the fuel pump may stop without warning, causing an unexpected stall that is dangerous in traffic. Have the vehicle towed to a repair shop or diagnose the fault immediately before driving further.

## Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter with voltage, resistance, and current measurement
- Factory wiring diagram for the fuel pump control circuit
- Fuel pressure gauge
- Relay puller and test light
- Basic hand tools for connector and module access



### Reading P025D

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 2** Fuel and air metering (injector circuits).
- 5D** The exact fault within that area.

### Often seen with

**P0087** Fuel Rail/System Pressure - Too Low · **P0230** Fuel Pump Primary Circuit Malfunction · **P025A** Fuel Pump Module A Control Circuit/Open · **P025B** Fuel Pump Module A Control Circuit Range/Performance · **P025C** Fuel Pump Module A Control Circuit Low

### See it working

Watch the animated explainer [How Push-Button Start Works: Keyless Ignition](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p025d/>

