

GENERIC · POWERTRAIN

P00CD

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P00CD

Fuel Volume Regulator Solenoid Supply Voltage Control Circuit High

P00CD means the powertrain control module (PCM) has detected a high-voltage condition on the supply circuit for the fuel volume regulator solenoid, which is a component on the high-pressure fuel pump that meters fuel delivery. The PCM monitors the control circuit and sets this code when the voltage on the supply side exceeds the expected range, indicating a short to voltage or an open circuit in the ground path.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Fuel and air metering and auxiliary emission controls

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Reduced engine performance or a sudden loss of power under load
- Rough idle or intermittent misfire
- Hard starting or extended cranking before the engine fires
- Poor fuel economy or increased fuel consumption
- In rare cases, the engine may enter limp mode or stall

Common causes, most likely first

- 1 Damaged or chafed wiring harness on the supply circuit, causing a short to voltage
- 2 Corroded, loose, or disconnected electrical connector at the fuel volume regulator solenoid
- 3 Failed fuel volume regulator solenoid with an internal short
- 4 Open or high-resistance ground circuit for the solenoid
- 5 Faulty powertrain control module (PCM) driver circuit
- 6 Aftermarket electrical accessories improperly tapped into the circuit



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, then clear codes and verify whether P00CD returns immediately.
- 2 Visually inspect the fuel volume regulator solenoid connector and the entire wiring harness for damage, corrosion, or loose pins.
- 3 Measure supply voltage and ground continuity at the solenoid connector with the key on and engine off, comparing to manufacturer specifications.
- 4 Disconnect the solenoid and check for a short to voltage on the control circuit using a multimeter or oscilloscope.
- 5 Test the solenoid resistance and compare to the specified value; replace the solenoid if it is out of range or shorted.
- 6 If the circuit and solenoid test good, inspect the PCM connector and perform a continuity test from the PCM to the solenoid.
- 7 Repair any damaged wiring, replace the faulty solenoid or PCM as needed, then clear codes and confirm the repair with a road test.

What the voltage code does not tell you

- A high-voltage code on the supply circuit often results from a poor ground connection rather than a failed solenoid, so always check ground integrity before replacing parts.
- Intermittent wiring faults from vibration or heat can set P00CD without any driveability complaint, making a wiggle test of the harness essential during diagnosis.
- The fuel volume regulator solenoid is part of the high-pressure fuel pump assembly on many vehicles, and a failed solenoid may require replacing the entire pump rather than just the solenoid.
- Aftermarket alarm systems or remote starters tapped into the fuel system wiring can introduce voltage spikes that trigger this code, so inspect for non-factory wiring.
- P00CD can be set by a low battery or charging system fault that causes voltage irregularities, so verify battery and alternator health before condemning the solenoid circuit.

Can I keep driving with P00CD?

You can usually drive the vehicle with P00CD set, but avoid heavy acceleration or towing until the fault is repaired because the engine may enter limp mode or stall unexpectedly. If the engine runs rough or loses power, have the vehicle inspected promptly to prevent further damage.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Oscilloscope (optional for waveform analysis)
- Wire terminal removal tools
- Electrical contact cleaner
- Factory service information for circuit specifications

Reading P00CD

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
0	Fuel and air metering and auxiliary emission controls.
CD	The exact fault within that area.

Often seen with

P0087 Fuel Rail/System Pressure - Too Low · **P0088** Fuel Rail/System Pressure - Too High · **P0090** Fuel Pressure Regulator 1 Control Circuit · **P00CE** Intake Air Temperature Measurement System - Multiple Sensor · **P00CF** Barometric Pressure - Turbocharger/Supercharger Boost Sensor

See it working

Watch the animated explainer [How Airbags Work: A 50 km/h Crash in Slow Motion](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p00cd/>

