

GENERIC · POWERTRAIN

P00CB

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P00CB

Fuel Volume Regulator Solenoid Supply Voltage Control Circuit/Open

P00CB indicates that the powertrain control module (PCM) has detected an open circuit or supply voltage fault in the control circuit for the fuel volume regulator solenoid, which is used on high-pressure fuel systems to meter fuel delivery. The PCM monitors the voltage on the solenoid's supply control circuit and sets this code when the expected voltage is not present, indicating a break or high resistance in the wiring or a failed solenoid.

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

- Illumination of the check engine light, often with no other noticeable symptoms
- Extended cranking time or a no-start condition, especially when the engine is cold
- Rough idle or stumbling during acceleration due to incorrect fuel pressure
- Reduced engine power or limp mode as the PCM limits fuel delivery
- Poor fuel economy or excessive black smoke from the exhaust (on diesel engines)
- Intermittent stalling or hesitation under load

Common causes, most likely first

- 1 Open or damaged wire in the supply voltage control circuit to the fuel volume regulator solenoid
- 2 Corroded, loose, or disconnected electrical connector at the solenoid or PCM
- 3 Failed fuel volume regulator solenoid (open internal coil)
- 4 Blown fuse or relay supplying power to the solenoid circuit
- 5 High resistance in a ground circuit shared with the solenoid
- 6 Faulty PCM driver for the solenoid control circuit (rare)



How to diagnose and fix it

- 1 Inspect the solenoid connector and wiring for obvious damage, corrosion, or looseness; clean and reseal as needed
- 2 Check the fuse and relay that supply power to the fuel volume regulator solenoid circuit
- 3 Measure resistance across the solenoid coil with a multimeter and compare to the manufacturer's specification
- 4 Perform a voltage drop test on the supply control circuit while cranking or running to detect high resistance
- 5 Check for continuity between the solenoid connector and the PCM connector to rule out an open wire
- 6 If the circuit tests good, substitute a known-good solenoid and clear the code to see if it returns
- 7 If the code persists after all circuit and component checks, diagnose the PCM driver or seek professional scan tool actuation tests

Don't overlook the simple wiring checks

- A loose or corroded connector at the fuel volume regulator solenoid is a frequent cause of this code, often overlooked because the connector looks fine until wiggled.
The code can set intermittently due to vibration or heat, so a wiggle test of the harness while monitoring live data may be necessary to reproduce the fault.
- On some vehicles, the fuel volume regulator solenoid shares a power supply with other components, so a blown fuse may cause multiple codes and a no-start.
- A failed solenoid can sometimes test good when cold but fail when hot; resistance checks should be done both cold and after warming the engine.
This code does not always mean the solenoid itself is bad; the PCM may set it if the supply voltage is low due to a weak battery or charging system issue.

Can I keep driving with P00CB?

Driving with P00CB is possible but not recommended because the engine may enter limp mode or stall unexpectedly, especially under load. Avoid towing or heavy acceleration, and have the fault diagnosed promptly to prevent potential fuel system damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Test light
- Wiring diagram for the specific vehicle
- Socket set and trim removal tools



Reading P00CB

- 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.
- CB** 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 · **P0091** Fuel Pressure Regulator 1 Control Circuit Low · **P0092** Fuel Pressure Regulator 1 Control Circuit High

See it working

Watch the animated explainer [How a Car Thermostat Works: Wax Pellet and Cooling Fan](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p00cb/>

