

GENERIC · POWERTRAIN

P2634

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2634

Fuel Pump 'B' Control Circuit High

P2634 indicates that the powertrain control module (PCM) has detected an abnormally high voltage on the control circuit for fuel pump 'B', which is typically a secondary or auxiliary pump used in some vehicles for fuel transfer or high-demand situations. The PCM commands the pump on or off via a low-side driver, and a high voltage on the control wire suggests an open circuit, a short to power, or a failed driver inside the PCM.

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 stalling under heavy load or low fuel level if the auxiliary pump is not functioning
- Difficulty starting or extended cranking in conditions that require the secondary pump
- Intermittent loss of power or hesitation during acceleration
- A fuel pump-related noise that may be absent or abnormal when the pump should activate

Common causes, most likely first

- 1 Open circuit in the control wire between the PCM and the fuel pump 'B' relay or module
- 2 Short to battery voltage on the control circuit, often due to chafed wiring or connector damage
- 3 Failed fuel pump 'B' relay or control module
- 4 Corroded or loose electrical connectors at the pump, relay, or PCM
- 5 Faulty PCM driver for the fuel pump 'B' control circuit
- 6 Aftermarket accessories or improper wiring repairs tapping into the circuit



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related codes in other modules
- 2 Inspect the wiring harness and connectors at the fuel pump 'B' relay, pump module, and PCM for damage or corrosion
- 3 Test the control circuit for continuity and short to power using a digital multimeter with the key off
- 4 Check the fuel pump 'B' relay by swapping with a known-good relay of the same part number and clearing the code
- 5 Measure voltage and resistance on the control wire while commanding the pump on and off with a scan tool to confirm PCM output
- 6 If the circuit tests good, suspect the PCM and perform pin and voltage checks at the PCM connector before replacement
- 7 Repair any wiring faults, replace failed components, clear the code, and verify the repair with a test drive

Don't Replace the PCM Too Quickly

- A high voltage on the control circuit often means the PCM is not seeing the expected voltage drop when the pump is commanded on, which can be caused by a simple open fuse or relay rather than a failed PCM.
- Some vehicles use fuel pump 'B' only for transferring fuel between saddle tanks, so the code may set without any driveability symptoms until the tank level equalization fails.
- Aftermarket remote starters or alarm systems that tap into the fuel pump circuit are a common source of induced high voltage codes on this circuit.
- The PCM driver for fuel pump 'B' can be damaged by a shorted relay coil or a back-feeding accessory, so always check for voltage on the control wire with the PCM disconnected before installing a new module.
- A loose ground for the fuel pump 'B' circuit can cause the PCM to see a high voltage on the control side, so do not overlook ground integrity during diagnosis.

Can I keep driving with P2634?

You can generally continue driving if the only symptom is the warning light, but avoid heavy loads, towing, or running the fuel level very low until the fault is repaired. If the vehicle stalls or loses power, stop driving and have it towed to prevent a safety hazard.

Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter (DMM)
- Wiring diagram for the specific vehicle
- Relay puller and test light
- Terminal pick and electrical contact cleaner



Reading P2634

- 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.
- 34** The exact fault within that area.

Often seen with

P0230 Fuel Pump Primary Circuit Malfunction · **P0231** Fuel Pump Secondary Circuit Low · **P0232** Fuel Pump Secondary Circuit High · **P2633** Fuel Pump 'B' Control Circuit Low · **P2635** Fuel Pump 'A' Low Flow / Performance

See it working

Watch the animated explainer [Helicopter Flight Simulator: Learn the Three Controls](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2634/>

