

GENERIC · BODY

B0820

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

B0820

Left Headlamp High Beam Circuit

B0820 indicates that the body control module (BCM) has detected a fault in the electrical circuit for the left headlamp high beam, which may be an open circuit, short to ground, or short to voltage. The BCM monitors the circuit and sets this code when the feedback voltage or current does not match the expected value for the commanded state.

SYSTEM

Body

CODE TYPE

Generic (all makes)

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Airbags, seats, doors, lights and comfort systems

Symptoms you may notice

- The left high beam may not illuminate when activated.
- The high beam indicator on the instrument cluster may stay on or flash.
- A warning message such as 'Check Left High Beam' may appear on the driver information center.
- The left high beam may be stuck on continuously, even when the switch is off.
- Other lights on the same circuit, such as the left low beam or turn signal, may also malfunction.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- 1 Failed left high beam bulb (most common).
- 2 Corroded or damaged bulb socket or connector.
- 3 Open or shorted wiring between the BCM and the left high beam bulb.
- 4 Faulty BCM (body control module) output driver.
- 5 Blown fuse or relay in the high beam circuit (if applicable).
- 6 Water intrusion or physical damage to the headlamp assembly.
- 7 Poor ground connection for the left headlamp circuit.



How to diagnose and fix it

- 1 Verify the left high beam bulb is not burned out by visual inspection or swapping with the right side.
- 2 Inspect the bulb socket and connector for corrosion, melting, or loose pins.
- 3 Check the high beam fuse and relay (if equipped) and replace if faulty.
- 4 Measure resistance and voltage on the left high beam circuit from the BCM to the bulb to detect opens or shorts.
- 5 Test the BCM output with a scan tool by commanding the left high beam on and off while monitoring circuit voltage.
- 6 Repair any damaged wiring or connectors and clear the code to see if it returns.
- 7 If all else checks out, replace the BCM and reprogram as needed.

Before you replace the BCM

- A bad ground for the left headlamp can cause the BCM to set B0820 even though the bulb and wiring appear fine.
Intermittent faults often stem from a chafed wire in the steering column or near the headlamp assembly, not the BCM itself.
- Some vehicles use a single high beam bulb for both left and right, so a failure on one side may indicate a faulty relay or shared ground.
- The BCM may set B0820 if the high beam bulb is an aftermarket LED or HID unit that draws different current than expected.
Always check for technical service bulletins (TSBs) for the specific vehicle, as BCM software updates can resolve false B0820 codes.

Can I keep driving with B0820?

You can continue driving with B0820, but the left high beam may not work, reducing visibility at night. Avoid driving in low-light conditions until repaired, and if the high beam is stuck on, it may dazzle other drivers, so have it fixed promptly.

Tools that help

- OBD-II scan tool with bidirectional control
- Digital multimeter
- Test light
- Wire probe and jumper wires
- Socket set and trim removal tools



Reading B0820

- B** Body: airbags, seats, doors, lights and comfort systems.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 8** Airbags, seats, doors, lights and comfort systems.
- 20** The exact fault within that area.

Often seen with

B0821 Right Headlamp High Beam Circuit · **B0830** Left Front Turn Signal Circuit · **B0831** Right Front Turn Signal Circuit

See it working

Watch the animated explainer [How a Boxer Engine Works: Flat Engine Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/b0820/>

