

GENERIC · BODY

B0240

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

B0240

Headlamp Switch Circuit

B0240 indicates that the body control module (BCM) has detected an abnormal condition in the headlamp switch circuit, which includes the switch itself, its wiring, and the BCM input. The BCM monitors voltage or resistance on the circuit and sets this code when the signal is outside the expected range for the current switch position.

SYSTEM

Body

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Airbags, seats, doors, lights and comfort systems

Symptoms you may notice

- Headlamps may not turn on in any switch position
- Headlamps may stay on continuously regardless of switch position
- Parking lamps, tail lamps, or instrument cluster lighting may fail to illuminate
- Intermittent headlamp operation when the switch is jiggled or in certain positions
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Faulty headlamp switch assembly (worn contacts or internal failure)
- 2 Open or shorted wiring in the headlamp switch circuit
- 3 Corroded or loose electrical connector at the switch or BCM
- 4 Blown fuse or poor ground connection for the headlamp circuit
- 5 Failed body control module (BCM) input driver
- 6 Aftermarket accessories tapped into the headlamp circuit causing voltage irregularities

How to diagnose and fix it

- 1 Verify the complaint and check for any related technical service bulletins (TSBs) for the vehicle
- 2 Inspect the headlamp switch connector and wiring for corrosion, damage, or loose pins
- 3 Test the headlamp switch with a multimeter to confirm it opens and closes circuits correctly in each position
- 4 Check fuses and grounds associated with the headlamp circuit
- 5 Backprobe the BCM connector to measure voltage or resistance on the headlamp switch input while operating the switch
- 6 If the switch and wiring test good, substitute a known-good BCM or perform a relearn procedure as required
- 7 Clear the code and verify the repair by operating the headlamp switch through all positions and confirming the code does not return



What the headlamp switch code really means

- A B0240 can be set by a simple blown fuse that powers the headlamp switch, so always check fuses before condemning the switch or BCM.
- The BCM often monitors the headlamp switch through a resistor ladder; a poor ground at the switch can mimic a failed switch and set this code.
- Intermittent B0240 codes are frequently caused by a worn ignition switch or relay that interrupts power to the headlamp circuit, not the headlamp switch itself.
- Aftermarket LED or HID headlamp conversions can draw different current and confuse the BCM, leading to a false B0240.
- Some vehicles require a BCM relearn or configuration after replacing the headlamp switch, and skipping this step can leave the code stored.

Can I keep driving with B0240?

If the headlamps are working normally, the vehicle is safe to drive during daylight, but avoid driving at night or in low-visibility conditions until the fault is repaired. If the headlamps fail to operate, do not drive the vehicle after dark or in bad weather because you may be difficult to see and unable to see the road clearly.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Test light
- Trim removal tools
- Vehicle-specific wiring diagram

Reading B0240

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

See it working

Watch the animated explainer [How the EVAP System Works: Fuel Vapour and Leak Test](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/b0240/>

