

GENERIC · BODY

B0490

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

B0490

Display Backlight Circuit

B0490 indicates that the body control module (BCM) has detected a fault in the electrical circuit that powers the backlighting for a display, such as the instrument cluster or center stack screen. The BCM monitors the circuit for abnormal voltage or current and sets this code when the feedback does not match expected values, often due to a wiring issue, a failed bulb or LED, or a faulty display assembly.

SYSTEM Body	CODE TYPE Generic (all makes)	SEVERITY Low	FIX DIFFICULTY Intermediate	AREA Airbags, seats, doors, lights and comfort systems
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Symptoms you may notice

- The display backlight may not illuminate at all, making the screen unreadable in low light. Backlighting may flicker or dim intermittently while driving over bumps or when using other electrical accessories.
- One section of the display may be darker than the rest if multiple bulbs or LEDs share the circuit.
- Often no symptoms besides the warning light, especially if the fault is intermittent or only affects a secondary display.
- Other interior lights or dash illumination may also be affected if they share the same power or ground circuit.

Common causes, most likely first

- A burned-out backlight bulb or failed LED within the display assembly.
- A loose, corroded, or damaged connector at the display or BCM.
- A chafed or broken wire in the backlight circuit, often where the harness flexes near the dashboard or steering column.
- A faulty display assembly with an internal short or open circuit in the backlight driver.
- A defective BCM that is unable to supply or monitor the backlight circuit correctly.
- Poor ground connection for the display or BCM, causing voltage irregularities.
- Aftermarket accessories tapped into the illumination circuit, causing excessive current draw or interference.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related body codes that might indicate a shared circuit fault.
- 2 Inspect the display and BCM connectors for looseness, corrosion, or pushed-out pins, and reseal them securely.
- 3 Test the backlight circuit with a multimeter to check for power and ground at the display connector when the lights are turned on.
- 4 Check the ground connection for the display and BCM, cleaning and tightening as needed.
- 5 If power and ground are present, remove the display and test the backlight bulbs or LEDs individually for continuity or resistance.
- 6 If the bulbs or LEDs are good, substitute a known-good display assembly to see if the code clears and backlighting returns.
- 7 If the display is not the cause, diagnose the BCM and its programming, looking for internal faults or corrupted software that affect the backlight output.

What the backlight circuit code hides

- A common oversight is replacing the display assembly when the real problem is a chafed wire behind the dashboard that only shorts when the vehicle is moving.
- The BCM may set B0490 even when the backlight works perfectly, if the circuit's current draw is slightly out of range due to a wrong bulb or LED replacement.
- On some vehicles, the backlight circuit is shared with other interior illumination, so a fault in a door switch or dimmer module can trigger this code without any display issue.
- Aftermarket radio or accessory installations often tap into the illumination wire, causing excessive load that the BCM interprets as a backlight circuit fault.
- A weak battery or charging system problem can cause voltage spikes that the BCM misreads as a backlight circuit failure, so always check system voltage first.

Can I keep driving with B0490?

The vehicle remains safe to drive because the backlight circuit does not affect engine, braking, or steering systems, but you may have difficulty reading the display at night. Avoid driving in low-light conditions until the fault is repaired, and do not ignore the code if it is accompanied by other electrical symptoms.

Tools that help

- OBD-II scan tool with body control module capability
- Digital multimeter
- Trim removal tools
- Test light
- Wiring diagram for the specific vehicle



Reading B0490

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

Often seen with

U0140 Lost Communication With Instrument Panel Cluster

See it working

Watch the animated explainer [How a Catalytic Converter Works: 3D Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/b0490/>

