

GENERIC · BODY

B0162

OBD-II TROUBLE CODE

B0162

Sun Load Sensor 2 Circuit

B0162 indicates that the body control module (BCM) has detected an open circuit, short to ground, or short to voltage on the second sun load sensor circuit. The sun load sensor measures sunlight intensity so the climate control system can adjust temperature and fan speed automatically, and this code sets when the BCM sees an out-of-range signal from sensor number two.

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

Symptoms you may notice

- Often no symptoms besides the warning light, because the climate control system may default to manual operation.
- Automatic climate control may fail to adjust temperature or fan speed in response to sunlight changes.
- The HVAC system may blow at a fixed temperature or fan speed regardless of sun load.
- In some vehicles, the air conditioning compressor may not engage or may run continuously.
- A stored B0162 code is the primary indicator, often with no other noticeable drivability issues.

Common causes, most likely first

- Failed sun load sensor number two, which is the most common cause on vehicles equipped with dual sensors.
- Open or damaged wiring between the sensor and the BCM, often due to chafing or rodent damage.
- Corroded or loose electrical connector at the sensor or BCM.
- Short to ground or short to voltage in the sensor signal circuit.
- Faulty BCM, though this is less common and should be diagnosed last.
- Water intrusion into the sensor or connector causing intermittent signals.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related HVAC or BCM codes that may indicate a shared circuit problem.
- 2 Inspect the sun load sensor and its connector for physical damage, corrosion, or loose pins.
- 3 Measure the sensor resistance or voltage output with a multimeter and compare to the manufacturer's specification.
- 4 Check the wiring harness between the sensor and BCM for continuity, shorts to ground, and shorts to voltage.
- 5 If the sensor fails the specification, replace it and clear the code to see if it returns.
- 6 If wiring is faulty, repair the affected section and re-test the circuit.
- 7 As a last step, if all else checks out, diagnose or replace the BCM following proper programming procedures.

Sun Load Sensor 2 Circuit Pitfalls

- Many vehicles use two sun load sensors to distinguish left and right sunlight intensity, so a failure of sensor two may only affect one side of the climate control and be missed during a quick check.
A common misdiagnosis is replacing the BCM when the actual fault is a chafed wire behind the dashboard that only shows up when the vehicle is driven over bumps.
 - The sun load sensor often shares a ground or reference voltage with other sensors, so a fault in a related circuit can set B0162 even though the sensor itself is fine.
 - Some aftermarket window tints or dashboard covers can reduce sunlight reaching the sensor enough to cause intermittent codes, especially if the sensor is partially obscured.
- Always check for technical service bulletins (TSBs) for the specific vehicle, as some manufacturers have known issues with connector corrosion on this circuit.

Can I keep driving with B0162?

The vehicle remains safe to drive because the sun load sensor only affects climate control comfort, not engine or safety systems. You can continue driving, but avoid relying on automatic climate control until the fault is repaired.

Tools that help

- OBD-II scan tool with body code capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Trim removal tools
- Electrical contact cleaner



Reading B0162

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

Often seen with

B0158 Ambient Air Temperature Sensor Circuit · **B0160** In-Vehicle Temperature Sensor Circuit · **B0164** Air Bag In-Vehicle Temperature Sensor Circuit

See it working

Watch the animated explainer [How a Fuel Injector Works: Pulse Width and Spray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/b0162/>

