

GENERIC · BODY

B0160

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

B0160

In-Vehicle Temperature Sensor Circuit

B0160 indicates that the body control module (BCM) or climate control module has detected an abnormal voltage signal from the in-vehicle temperature sensor circuit, which is used to measure cabin air temperature for automatic climate control. The computer sets this code when the sensor signal falls outside the expected range, typically indicating an open circuit, short to ground, or short to voltage.

SYSTEM

Body

CODE TYPE

Generic (all makes)

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Airbags, seats, doors, lights and comfort systems

Symptoms you may notice

- Automatic climate control may blow air at the wrong temperature or fail to maintain the set cabin temperature.
- The HVAC system may default to a fixed temperature setting or run the blower at a constant speed.
- Often no symptoms besides the warning light, especially if the driver rarely uses the automatic climate control mode.
- The temperature display may show incorrect readings or dashes instead of a temperature value.
- In some vehicles, the air conditioning compressor may be inhibited or the system may enter a fail-safe mode.

Common causes, most likely first

- Failed in-vehicle temperature sensor (thermistor) due to age or contamination.
- Damaged or disconnected wiring harness at the sensor connector, often from being kicked or disturbed during interior work.
- Corroded or loose electrical connector pins at the sensor or control module.
- Open circuit in the signal or ground wire between the sensor and the control module.
- Short to ground or short to voltage on the sensor signal circuit.
- Faulty body control module or climate control module, though this is less common.
- Aftermarket accessories or interior modifications that interfere with the sensor wiring.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related codes in the climate control system.
- 2 Locate the in-vehicle temperature sensor, typically near the dashboard or overhead console, and inspect the connector and wiring for damage or corrosion.
- 3 Measure the resistance of the sensor with a multimeter and compare it to the manufacturer's specification for the current temperature.
- 4 Check for continuity and voltage on the signal and ground circuits between the sensor and the control module.
- 5 Repair any damaged wiring or replace corroded connectors as needed.
- 6 If the sensor is out of specification, replace it with a known-good unit and clear the code.
- 7 If the wiring and sensor are good, diagnose the control module for internal faults following the manufacturer's diagnostic procedure.

Common traps when diagnosing B0160

- A disconnected sensor connector is frequently caused by interior cleaning or accessory installation, so always check the plug before condemning the sensor.
- The in-vehicle temperature sensor is often confused with the ambient temperature sensor, but they serve different purposes and set different codes.
- Some vehicles use a aspirator motor or fan to draw cabin air over the sensor; a failed aspirator can cause erratic readings without setting a separate code.
- The code can be set by a momentary intermittent fault, so clearing it and test-driving may reveal whether the issue is hard or intermittent.
- Resistance specifications for the sensor vary with temperature, so always consult the service information for the correct value at the measured temperature.

Can I keep driving with B0160?

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

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Service information or wiring diagrams
- Trim removal tools
- Contact cleaner and dielectric grease



Reading B0160

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

Often seen with

B0162 Sun Load Sensor 2 Circuit · **B0164** Air Bag In-Vehicle Temperature Sensor Circuit

See it working

Watch the animated explainer [How a Gyroscope Works: Gimbals and Precession](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/b0160/>

