

GENERIC · BODY

B0055

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

B0055

Second Row Right Seat Belt Sensor

B0055 indicates that the body control module (BCM) or occupant classification system has detected a fault in the second row right seat belt sensor circuit, which typically monitors buckle status and belt tension. The computer sets this code when the sensor signal voltage or resistance falls outside the expected range, or when the circuit is open or shorted.

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

Symptoms you may notice

- Seat belt warning light illuminated on the dashboard
- Chime or reminder that does not stop even when the belt is buckled
- Airbag warning light may also be on if the system disables the passenger restraint
- Often no symptoms besides the warning light
- Inconsistent operation of the seat belt reminder for that seating position
- Remote start or other features that rely on seat occupancy may be affected

Common causes, most likely first

- Faulty seat belt buckle sensor (integrated into the buckle assembly)
- Damaged or chafed wiring harness under the seat or along the floor
- Corroded or loose electrical connector at the sensor or BCM
- Failed occupant detection sensor or weight sensor in the seat cushion
- BCM software glitch or internal fault
- Aftermarket seat covers or objects interfering with the sensor
- Liquid spill or physical damage to the seat belt latch mechanism



How to diagnose and fix it

- 1 Inspect the seat belt buckle and surrounding area for debris, damage, or aftermarket accessories that could interfere with the sensor
- 2 Check the wiring harness and connectors under the second row right seat for chafing, corrosion, or loose pins
- 3 Use a scan tool to view live data for the seat belt sensor and confirm the signal changes when the belt is buckled and unbuckled
- 4 Measure resistance and voltage at the sensor connector and compare to manufacturer specifications
- 5 If the sensor signal is erratic or out of range, replace the seat belt buckle assembly
- 6 If the circuit tests good but the code persists, check for BCM software updates or diagnose the BCM
- 7 Clear the code and verify the repair by cycling the ignition and confirming the warning light stays off

Seat belt sensor faults that fool technicians

- A common oversight is replacing the seat belt buckle when the real problem is a corroded connector under the seat that causes high resistance and sets the code.
The second row right seat belt sensor often shares a ground with other sensors, so a bad ground can set multiple codes and mislead diagnosis.
- After a collision repair, the seat belt pretensioner may have deployed and the buckle sensor may be damaged, but the code can appear only after the battery is reconnected.
- Some vehicles use a hall-effect sensor in the buckle that can be tested with a magnet; a quick magnet test can confirm sensor operation without a scan tool.
The code may be set by a low battery or voltage spike, so always clear the code and verify it does not return before replacing parts.

Can I keep driving with B0055?

The vehicle remains safe to drive because the seat belt itself still functions, but the airbag system may be affected if the fault disables the passenger restraint, so have it diagnosed soon. Avoid ignoring the warning light for extended periods, as the restraint system may not deploy correctly in a crash.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Trim removal tools
- Magnet (for hall-effect sensor testing)
- Service manual or wiring diagram for the specific vehicle



Reading B0055

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

Often seen with

B0050 Driver Pretensioner Deployment Control · **B0051** Driver Frontal Deployment Control Open · **B0052** Passenger Seat Belt Sensor · **B0053** Passenger Pretensioner Deployment Control · **B0054** Second Row Center Seat Belt Sensor

See it working

Watch the animated explainer [How a MAP Sensor Works: Engine Vacuum and Load](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/b0055/>

