

GENERIC · BODY

B0320

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

B0320

Passenger Seat Position Sensor Circuit

B0320 indicates that the body control module (BCM) or occupant detection module has detected a fault in the passenger seat position sensor circuit, which is used to determine the fore-aft location of the front passenger seat for airbag deployment logic. The computer monitors the sensor's signal voltage and sets this code when the voltage falls outside the expected range or the circuit is open or shorted.

SYSTEM

Body

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Airbags, seats, doors, lights and comfort systems

Symptoms you may notice

- Airbag warning light illuminated on the instrument cluster
- Passenger airbag may be automatically disabled even with an adult seated
- Seat position memory or easy-entry feature may not function correctly
- Often no symptoms besides the warning light
- In some vehicles, a message on the driver information center indicating a restraint system fault

Common causes, most likely first

- 1 Faulty passenger seat position sensor
- 2 Damaged or chafed wiring harness under the seat
- 3 Loose or corroded electrical connector at the sensor or BCM
- 4 Failed seat position sensor magnet or track
- 5 Water intrusion or debris in the seat track area
- 6 BCM internal fault or software issue

How to diagnose and fix it

- 1 Inspect the seat position sensor connector and wiring for damage or corrosion
- 2 Check for technical service bulletins (TSBs) related to the seat position sensor circuit
- 3 Measure sensor resistance and voltage with a multimeter and compare to specifications
- 4 Verify sensor signal at the BCM using a scan tool with live data
- 5 Replace the seat position sensor if faulty
- 6 Repair or replace damaged wiring harness sections
- 7 Clear codes and perform a system relearn or calibration if required



Seat position sensor faults often misdiagnosed

- A common mistake is replacing the seat position sensor when the real problem is a chafed wire under the seat that only shorts when the seat is moved.
- The passenger seat position sensor is part of the occupant classification system (OCS) and can be affected by spilled liquids or debris in the seat track.
- Some vehicles require a scan tool to recalibrate the occupant detection system after any seat component replacement, or the code will return.
- A weak or dead battery can cause erratic sensor signals and set this code, so always check battery health first.
- The code can be set by a faulty seat position sensor magnet that has weakened over time, even if the sensor itself tests good.

Can I keep driving with B0320?

The vehicle is generally safe to drive, but the passenger airbag may not deploy correctly in a crash, so have the fault diagnosed promptly and avoid carrying passengers in the front seat until repaired.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Trim removal tools
- Socket set
- Service manual or wiring diagram

Reading B0320

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

Often seen with

B0325 Driver Seat Memory Set Switch · **B0330** HVAC Rear Blower Motor Circuit · **U0151** Lost Communication With Restraints Control Module



See it working

Watch the animated explainer [Readiness Monitors and the OBD-II Drive Cycle](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/b0320/>

