

GENERIC · BODY

B00CA

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

B00CA

Passenger Seat Occupant Position Sensor D

B00CA indicates that the occupant classification system (OCS) has detected a fault with the passenger seat occupant position sensor 'D', which is used to determine the passenger's seating position for airbag deployment logic. The computer sets this code when the sensor signal is out of range, erratic, or missing entirely, often disabling the passenger airbag as a safety precaution.

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

Symptoms you may notice

- Airbag warning light illuminated on the dashboard
- Passenger airbag status indicator may show 'OFF' even with an adult seated
- Often no symptoms besides the warning light
- In some vehicles, the passenger airbag may be disabled entirely
- Intermittent warning light that comes and goes with seat movement

Common causes, most likely first

- Faulty passenger seat occupant position sensor
- Damaged or pinched wiring harness under the seat
- Loose or corroded electrical connector at the sensor
- Occupant classification module (OCM) software or hardware fault
- Seat track or mounting damage affecting sensor alignment
- Aftermarket seat covers or heavy objects interfering with sensor operation

How to diagnose and fix it

- Inspect the under-seat wiring and connectors for damage or corrosion
- Check for and remove any aftermarket seat covers or objects pressing on the seat
- Use a scan tool to read live data from the occupant position sensor and compare to specifications
- Perform a zero-point calibration or relearn procedure for the occupant classification system
- Test the sensor resistance and signal output with a multimeter
- Replace the passenger seat occupant position sensor if faulty
- Replace or reprogram the occupant classification module if the sensor and wiring test good



Before you replace the occupant sensor

- A common oversight is a loose connector or chafed wire under the passenger seat that mimics a failed sensor, so always perform a wiggle test and inspect the harness before condemning the sensor.
- Aftermarket seat covers, cushions, or heavy items left on the passenger seat can alter the sensor's readings and set this code, so verify the seat is bare and free of cargo during diagnosis.
- The occupant classification system often requires a calibration or relearn procedure after any service, and skipping this step can cause the code to return even with new parts.
- This code does not always mean the sensor itself has failed; a weak battery or charging system issue can cause low voltage faults that set B00CA intermittently.
- On some vehicles, the occupant position sensor is part of the seat cushion assembly and cannot be replaced separately, so check the service information before ordering parts.

Can I keep driving with B00CA?

The vehicle is safe to drive, but the passenger airbag may be disabled, increasing injury risk for a front passenger in a crash. Avoid carrying passengers in the front seat until the fault is repaired, and have the system diagnosed promptly.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Trim removal tools
- Socket and wrench set
- Service information for occupant classification system calibration

Reading B00CA

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

Often seen with

B00C8 Passenger Seat Occupant Position Sensor B · **B00C9** Passenger Seat Occupant Position Sensor C · **B00CB** Passenger Seat Occupant Position Sensor E · **U0151** Lost Communication With Restraints Control Module



See it working

Watch the animated explainer [Inline-Four Engine X-Ray: Firing Order 1-3-4-2](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/b00ca/>

