GENERIC · BODY

B009D

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

B009D

Right Side Restraints Sensor 4

B009D indicates that the restraints control module has detected a fault in the circuit for the right-side restraints sensor number 4, which is typically a side impact or pressure sensor mounted in the right door or pillar area. The module monitors the sensor's signal and sets this code when the voltage, resistance, or communication from that sensor falls outside the expected range.

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

Symptoms you may notice

- The airbag warning light on the instrument cluster stays illuminated after the bulb check.
- A message such as 'Service Airbag' or 'Restraint System Fault' may appear on the driver information center.
- The right-side airbags and seatbelt pretensioners may be disabled as a fail-safe measure.
- Often no symptoms besides the warning light, because the fault is stored without affecting drivability.
- In some vehicles, the passenger airbag status indicator may show 'off' even with an occupant present.
- Intermittent warning light if the fault is caused by a loose connection or chafed wire that only acts up over bumps.

Common causes, most likely first

1. A faulty right-side restraints sensor (sensor 4) internally open or shorted.
2. Damaged or chafed wiring harness between the sensor and the restraints control module, often at a door hinge or seat track.
3. Corroded or loose electrical connector at the sensor or at the control module.
4. Water intrusion into the sensor or connector, especially in door-mounted sensors.
5. A failed restraints control module (less common but possible).
6. Aftermarket accessories or previous repairs that disturbed the restraint wiring.
7. Low battery voltage or a charging system issue causing erratic sensor readings.

How to diagnose and fix it

1. Verify the code with a scan tool that can read body codes and record any freeze-frame data.
2. Inspect the right-side sensor and its connector for physical damage, corrosion, or loose pins.
3. Check the wiring harness for chafing, pinches, or breaks, especially around door hinges and seat tracks.
4. Measure resistance and voltage on the sensor circuit and compare with the manufacturer's specification.
5. If the sensor is suspect, substitute a known-good sensor and clear the code to see if it returns.
6. Repair or replace damaged wiring and connectors, then clear codes and verify the repair with a scan tool.
7. If all external circuits test good, follow the manufacturer's diagnostic flow for the restraints control module.

What a B009D really tells you

- This code does not always mean the sensor itself has failed; wiring and connector problems are just as common and often cheaper to fix.
- A weak or failing battery can cause false restraint codes, so always check battery voltage and connections before condemning a sensor.
- The restraints control module may disable the entire right-side airbag system when this code is set, so the vehicle may not protect occupants in a side impact.
- After any repair, the code must be cleared and the system re-verified; simply replacing parts without clearing codes can leave the light on.
- Some vehicles require a special reset procedure or calibration after replacing a restraint sensor, which a generic scan tool may not support.

Can I keep driving with B009D?

You can usually drive the vehicle, but the right-side airbags and pretensioners may be disabled, reducing protection in a collision. Avoid rough roads and have the fault diagnosed soon, especially if the warning light is accompanied by other restraint codes.

Tools that help

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

Reading B009D

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.
9D	The exact fault within that area.

Often seen with

B009C Left Side Restraints Sensor 6 · **B009E** Right Side Restraints Sensor 5 · **B009F** Right Side Restraints Sensor 6 · **B00A0** Occupant Classification System · **U0151** Lost Communication With Restraints Control Module

See it working

Watch the animated explainer **How Airbags Work: A 50 km/h Crash in Slow Motion** on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: https://www.autoveteran.tech/dtc-codes/b009d/