

GENERIC · BODY

B0182

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

B0182

Right Front/Passenger Side Buckle Tension Sensor Circuit

B0182 indicates that the restraint control module has detected an out-of-range signal from the right front passenger seat belt buckle tension sensor, which is used to determine belt tension for airbag deployment strategy. The computer compares the sensor voltage to expected limits and sets this code when the reading falls outside the valid range for a calibrated period.

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
- Seat belt reminder chime may stay on or behave erratically even when the belt is buckled
- Passenger airbag may be automatically disabled or default to a reduced deployment strategy
- Often no symptoms besides the warning light, with normal belt operation and no drivability issues
- In some vehicles, a message such as 'Service Airbag System' appears in the driver information center

Common causes, most likely first

- 1 Faulty seat belt buckle tension sensor internal to the buckle assembly
- 2 Damaged or chafed wiring harness at the buckle connector or under the seat
- 3 Corroded or loose electrical connector at the buckle tension sensor
- 4 Restraint control module software calibration issue requiring update
- 5 Water intrusion or contamination in the buckle sensor connector
- 6 Failed restraint control module (rare, but possible after other causes are ruled out)



How to diagnose and fix it

- 1 Inspect the buckle tension sensor connector and wiring for damage, corrosion, or loose pins, and repair as needed
- 2 Check for technical service bulletins or software updates for the restraint control module that address false tension sensor codes
- 3 Measure the sensor resistance or voltage at the buckle connector and compare to manufacturer specifications
- 4 Perform a wiggle test on the harness while monitoring live data to identify intermittent faults
- 5 If the sensor signal is out of range with good wiring, replace the seat belt buckle assembly with the integrated tension sensor
- 6 Clear the code and verify the repair by cycling the ignition and confirming the airbag light stays off
- 7 If the code persists after sensor and wiring repairs, diagnose the restraint control module and its power/ground circuits

Before you replace the buckle assembly

- A common oversight is replacing the buckle when the real fault is a chafed wire under the seat that only loses contact when the seat is moved, so always wiggle-test the harness first.
- Some vehicles set B0182 when the battery is disconnected or voltage is low during a restraint module self-test, so check for a history of low voltage before condemning parts.
- The tension sensor is often part of the buckle pretensioner assembly, and on many models it cannot be replaced separately, which affects repair strategy.
- After any restraint system repair, the airbag light may stay on until the code is cleared with a scan tool, leading some to think the fix failed.
- A faulty passenger occupancy sensor or its wiring can sometimes cause related codes that mimic tension sensor faults, so scan all restraint module codes before diagnosing.

Can I keep driving with B0182?

The vehicle remains safe to drive in most cases because the seat belt still latches and restrains, but the airbag system may not deploy optimally for the passenger. Avoid delaying diagnosis, and do not ignore the warning light, because a compromised restraint system can affect insurance and safety inspections.

Tools that help

- OBD-II scan tool with restraint system capability
- Digital multimeter
- Wiring diagram for the restraint system
- Trim removal tools
- Torque wrench for seat belt anchor bolts



Reading B0182

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

Often seen with

B0184 Rear Blower Motor Circuit · **U0151** Lost Communication With Restraints Control Module

See it working

Watch the animated explainer [Helicopter Flight Simulator: Learn the Three Controls](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/b0182/>

