

GENERIC · BODY

B0050

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

B0050

Driver Pretensioner Deployment Control

B0050 is a supplemental restraint system (SRS) code indicating that the restraint control module has detected a fault in the driver's seat belt pretensioner deployment circuit. The module monitors the circuit's resistance and continuity and sets this code when the signal falls outside the expected range, which can prevent the pretensioner from firing in a collision.

SYSTEM

Body

CODE TYPE

Generic (all makes)

SEVERITY

High

FIX DIFFICULTY

Professional

AREA

Airbags, seats, doors, lights and comfort systems

Symptoms you may notice

- SRS or airbag warning light illuminated on the instrument cluster
- Seat belt warning chime or light staying on when the belt is buckled
- Often no symptoms besides the warning light
- Pretensioner may not deploy in a frontal impact
- Other SRS codes stored alongside B0050

Common causes, most likely first

- 1 Faulty clock spring (spiral cable) in the steering wheel, which carries the driver pretensioner circuit
- 2 Damaged or chafed wiring harness under the driver seat or along the sill
- 3 Corroded or loose connector at the pretensioner or restraint control module
- 4 Open or shorted pretensioner squib (the deployment element itself)
- 5 Water intrusion or crash damage affecting the pretensioner circuit
- 6 Restraint control module internal fault

How to diagnose and fix it

- 1 Scan all modules and record every SRS code before clearing anything
- 2 Inspect the driver seat belt pretensioner connector and wiring for corrosion, chafing, or looseness
- 3 Check the clock spring and steering column wiring for continuity and damage
- 4 Measure pretensioner squib resistance with a proper meter and compare to specification
- 5 Repair or replace damaged wiring, connectors, or the clock spring as needed
- 6 Replace the pretensioner or restraint control module only after circuit tests confirm the fault
- 7 Clear codes and verify the SRS light stays off through a full key cycle



What most technicians miss on B0050

- A weak or failing battery can cause the restraint module to log this code, so always check charging system health before condemning parts.
- The clock spring is a common culprit because the driver pretensioner circuit often routes through it, and a worn spiral cable can test fine at one steering angle and fail at another.
- After any SRS repair, the module may need a learn or calibration procedure, and skipping it can leave the light on even with a good circuit.
- Never use a standard ohmmeter on a live pretensioner circuit; always disable the SRS system and wait the specified time before probing connectors.
- This code does not always mean the pretensioner is bad; a loose connector or chafed wire under the seat is just as likely and far cheaper to fix.

Can I keep driving with B0050?

The vehicle is drivable, but the driver's pretensioner may not deploy in a crash, so have it diagnosed promptly and avoid relying on the seat belt alone for protection until repaired.

Tools that help

- OBD-II scan tool with SRS capability
- Digital multimeter
- SRS simulator or pretensioner test tool
- Trim removal tools
- Service information for SRS disable and wait times

Reading B0050

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

Often seen with

B0001 Driver Frontal Stage 1 Deployment Control Circuit · **B0010** Driver Frontal Stage 2 Deployment Control Circuit · **B0051** Driver Frontal Deployment Control Open · **B0052** Passenger Seat Belt Sensor · **B0053** Passenger Pretensioner Deployment Control



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/b0050/>

