

GENERIC · BODY

B0003

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

B0003

Driver Frontal Deployment Loop Resistance Low

B0003 indicates that the airbag control module has measured resistance in the driver's frontal airbag deployment loop that is below the expected threshold, meaning the circuit is completing too easily. The module continuously monitors the loop and sets this code when the low-resistance condition is present during its self-test, which can prevent the driver's frontal airbag from deploying properly in a crash.

SYSTEM

Body

CODE TYPE

Generic (all makes)

SEVERITY

High

FIX DIFFICULTY

Professional

AREA

Airbags, seats, doors, lights and comfort systems

Symptoms you may notice

- Airbag warning light illuminated on the instrument cluster
- Often no symptoms besides the warning light
- Airbag system may be disabled, so the driver's frontal airbag will not deploy in a collision
- In some vehicles, a chime or message on the driver information center about the airbag system
- Intermittent warning light if the low resistance is caused by a loose connection or chafed wire

Common causes, most likely first

- 1 Damaged or pinched wiring harness in the steering column or under the driver's seat
- 2 Corroded or loose connector at the driver's frontal airbag module or clock spring
- 3 Faulty clock spring (spiral cable) in the steering wheel that has shorted turns
- 4 Aftermarket or incorrect airbag module installed with lower internal resistance
- 5 Water intrusion or contamination in the airbag connector causing a short
- 6 Internal short in the driver's frontal airbag inflator or module



How to diagnose and fix it

- 1 Verify the code with a scan tool that can read airbag module data and check for other stored codes
- 2 Inspect the driver's frontal airbag connectors and wiring for damage, corrosion, or loose pins
- 3 Disconnect the battery and wait the recommended time, then measure resistance across the airbag loop at the module connector
- 4 Check the clock spring resistance through its full range of steering wheel rotation
- 5 Substitute a known-good airbag module or use a simulator to isolate whether the fault is in the module or the wiring
- 6 Repair or replace damaged wiring, connectors, or the clock spring as needed
- 7 Clear the code and perform a full airbag system verification with the scan tool

Low resistance is not always a bad airbag

- A common misdiagnosis is replacing the driver's airbag when the real problem is a chafed wire shorting to ground in the steering column.
The clock spring is a frequent culprit because its internal ribbon can short turns together, lowering loop resistance without any visible external damage.
- Aftermarket airbags or modules with incorrect internal resistance often set B0003 even though they physically fit and function, so always verify part compatibility.
- Water leaks into the driver's footwell or A-pillar can corrode connectors and create a low-resistance path that mimics a failed airbag.
B0003 can be stored intermittently by a loose connector that only loses tension over bumps, so wiggle-testing the harness while monitoring resistance is essential.

Can I keep driving with B0003?

Do not drive the vehicle until the airbag system is repaired, because the driver's frontal airbag may not deploy in a crash. If you must move the vehicle a short distance, avoid any situation where a collision is possible and have it towed to a repair facility.

Tools that help

- Airbag-capable scan tool
- Digital multimeter
- Battery disconnect tool
- Terminal pick and connector release tools
- Airbag simulator or load tool



Reading B0003

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

Often seen with

B0001 Driver Frontal Stage 1 Deployment Control Circuit · **B0002** Driver Frontal Stage 2 Deployment Control · **B0004** Driver Frontal Deployment Loop Resistance High · **B0005** Driver Frontal Deployment Loop Open · **B0012** Right Front/Passenger Frontal Stage 2 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/b0003/>

