

GENERIC · BODY

B0022

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

B0022

Left Side Deployment Stage 1 Loop Open

B0022 indicates that the airbag control module has detected an open circuit in the deployment loop for the left-side frontal airbag stage 1, meaning the wiring or connector to that inflator is broken or disconnected. The module monitors loop resistance and sets this code when the circuit falls outside the expected range, typically because current cannot flow through the squib.

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, with the airbag system otherwise appearing normal
- The left-front airbag may be disabled and will not deploy in a collision
- A stored crash or airbag fault message may appear on the driver information center
- In some vehicles, other safety systems such as seatbelt pretensioners may be inhibited

Common causes, most likely first

- 1 Broken or chafed wire in the left-front airbag deployment loop, often in the steering column or door jamb area
- 2 Loose, corroded, or unseated connector at the left-front airbag inflator or under the seat
- 3 Faulty clock spring (spiral cable) in the steering wheel, which carries the driver airbag circuit
- 4 Damaged airbag squib (inflator connector) or internal open in the airbag module itself
- 5 Water intrusion or corrosion in a wiring harness connector along the left side of the vehicle
- 6 Airbag control module internal fault causing a false open-circuit reading



How to diagnose and fix it

- 1 Scan all airbag modules for stored and pending codes, and record freeze-frame data before clearing anything
- 2 Inspect the left-front airbag connector and wiring for looseness, corrosion, or damage, and reseal the connector firmly
- 3 Check the clock spring continuity and inspect the ribbon cable for cracks or wear, especially if the horn or steering wheel controls also act up
- 4 Measure resistance across the deployment loop at the airbag connector with the battery disconnected and the module isolated, comparing to the manufacturer's specification
- 5 Perform a wiggle test on the harness while watching live resistance or code status to locate an intermittent open
- 6 Repair or replace the damaged section of wiring or the faulty connector, then clear codes and verify the light stays off after a road test
- 7 If the loop tests good but the code persists, substitute a known-good airbag module or control module only after ruling out wiring, following the service manual

What a left-side loop open really means

- An open circuit in an airbag loop is often caused by a connector that was disturbed during unrelated service, such as seat removal or steering column work, rather than a failed airbag.
- The clock spring is a common hidden cause on vehicles where the left-front airbag shares the steering wheel circuit, and it can fail without affecting the horn or cruise control.
- A poor ground or low battery voltage can cause the airbag module to set a false open-loop code, so always verify battery and ground integrity before condemning parts.
- This code does not always mean the airbag itself is defective; the majority of repairs involve wiring, connectors, or the clock spring rather than the inflator.
- After any airbag circuit repair, the module may need a learn or reset procedure, and some vehicles require a scan tool to clear the crash data before the light will go out.

Can I keep driving with B0022?

Because the left-front airbag may not deploy in a crash, have the fault diagnosed promptly and avoid driving if the airbag light is on, especially on the highway. Do not attempt to measure airbag circuits with a standard ohmmeter unless you follow the service manual, as unintended deployment can occur.

Tools that help

- OBD-II scan tool with airbag/SRS capability
- Digital multimeter with low-ohms range
- Airbag simulator or load tool
- Trim removal tools
- Service manual with wiring diagrams



Reading B0022

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

Often seen with

B0012 Right Front/Passenger Frontal Stage 2 Deployment Control · **B0013** Passenger Knee Bolster Deployment Control · **B0021** Left Side Deployment Stage 1 Control · **B0023** Left Side Deployment Stage 1 Loop Short to Ground · **B0024** Right Side 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/b0022/>

