

GENERIC · BODY

B0019

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

B0019

Right Front/Passenger Frontal Deployment Loop Resistance Low

B0019 means the airbag control module measured too little electrical resistance in the right front or passenger frontal deployment loop, which is the circuit that fires the passenger front airbag. The module runs a small test current through the loop at key-on and flags the code when the resistance falls below the expected threshold, indicating a short or a fault inside the inflator.

SYSTEM

Body

CODE TYPE

Generic (all makes)

SEVERITY

High

FIX DIFFICULTY

Professional

AREA

Airbags, seats, doors, lights and comfort systems

Symptoms you may notice

- The airbag warning light stays on after the bulb check, and on many cars the passenger airbag status indicator reads off or fault.
- Often no symptoms besides the warning light, because the fault is in the deployment circuit rather than the airbag module itself.
- The supplemental restraint system (SRS) may be disabled for the passenger front airbag, so it will not deploy in a crash.
- In some vehicles the passenger seat belt pretensioner or occupant classification system may also be inhibited depending on how the module groups the circuits.
- Intermittent warning light flicker over bumps if the low resistance is caused by a chafed harness rather than a failed inflator.
- No change in engine performance or drivability, since this is a body safety system code.

Common causes, most likely first

- 1 A shorted or internally failed passenger frontal airbag inflator, which is the most common cause of a low-resistance reading.
- 2 Harness wires pinched or chafed together between the airbag module and the passenger airbag connector, creating a near-short across the loop.
- 3 A damaged or contaminated passenger airbag connector with bent pins or corrosion that bridges the terminals.
- 4 Water intrusion into the passenger airbag connector or kick panel area causing a conductive path across the circuit.
- 5 Aftermarket accessories or audio wiring routed through the passenger airbag circuit and accidentally shorting the deployment wires.
- 6 A faulty airbag control module that misreads loop resistance, though this is far less likely than a wiring or inflator fault.



How to diagnose and fix it

- 1 Disconnect the battery and wait the manufacturer-specified time, then scan all modules for SRS codes and record freeze-frame data before touching any yellow airbag connector.
- 2 Inspect the passenger frontal airbag connector and the harness routing for pinches, corrosion, or aftermarket wiring, and repair any obvious damage.
- 3 Measure resistance across the deployment loop at the airbag module connector with the airbag disconnected, comparing to the manufacturer's specification to isolate the harness from the inflator.
- 4 Substitute a known-good airbag simulator or resistor at the module connector to see whether the low-resistance code changes, which separates a harness fault from an inflator fault.
- 5 If the harness tests good, replace the passenger frontal airbag inflator or module as required, following the manufacturer's deployment and handling procedures.
- 6 Clear the codes, perform the SRS verification test, and confirm the warning light goes out and stays out through a key cycle and a short drive.

Low resistance is not always the inflator

- A low-resistance code often comes from a pinched harness or a connector with corrosion bridging the terminals, so technicians who replace the airbag first sometimes find the code returns.
- The airbag module measures resistance with a very small test current, so a partially shorted wire that looks fine on a visual inspection can still set B0019.
- Aftermarket alarms, remote starters, and audio installers frequently route wiring near the passenger airbag harness and create this fault without the owner realizing it.
- B0019 does not mean the airbag has deployed or that the module is bad; it only reports that the loop resistance is below the expected range at the time of the test.
- On some vehicles the passenger frontal loop shares a connector with the seat belt pretensioner or occupant detection circuit, so a fault in that shared connector can set B0019.

Can I keep driving with B0019?

The vehicle is safe to drive mechanically, but the passenger frontal airbag may not deploy in a crash, so avoid carrying a front passenger until the fault is repaired. Do not attempt to measure or probe the airbag circuit with a powered meter or test light, because that can trigger deployment.

Tools that help

- OBD-II scan tool with SRS capability
- Digital multimeter with low-ohm resolution
- Manufacturer service information for SRS connector locations and resistance specifications
- Airbag simulator or resistor kit
- Trim removal tools for accessing passenger airbag and module connectors
- Battery disconnect tool and safety glasses



Reading B0019

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

Often seen with

B0018 Right Front/Passenger Frontal Deployment Loop Resistance Hig · **B0020** Passenger Frontal Stage 1 Deployment Control Circuit · **B0021** Left Side Deployment Stage 1 Control · **B0022** Left Side Deployment Stage 1 Loop Open · **B0023** Left Side Deployment Stage 1 Loop Short to Ground

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/b0019/>

