

GENERIC · BODY

**B0503**

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

## B0503

### Right Rear Power Window Circuit Malfunction

B0503 indicates that the body control module (BCM) has detected an electrical fault in the right rear power window circuit, which includes the motor, wiring, switches, and ground connections. The BCM monitors the circuit for abnormal voltage or current and sets this code when the signal falls outside the expected range, often disabling the window to protect the system.

SYSTEM

Body

CODE TYPE

Generic (all makes)

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Airbags, seats, doors, lights and comfort systems

### Symptoms you may notice

- The right rear window may not move in either direction when using the master switch or the local switch.
- The window may move slowly, intermittently, or only in one direction.
- A grinding or clicking noise may be heard from the door when the switch is pressed.
- The window may operate normally at times, especially after slamming the door or hitting a bump.
- Often no symptoms besides the warning light, as the window may still function normally in some cases.

### Common causes, most likely first

- 1 Faulty right rear window motor or regulator assembly, including a worn motor or binding regulator.
- 2 Damaged wiring in the door jamb boot, such as a broken wire or chafed insulation from repeated flexing.
- 3 Corroded or loose electrical connectors at the window motor or switch.
- 4 Failed right rear window switch, either the local switch or the master switch on the driver's door.
- 5 Poor ground connection for the window circuit, often at the door or body ground point.
- 6 Water intrusion into the door causing corrosion or short circuits in the motor or connectors.
- 7 Body control module (BCM) internal fault, though this is less common and should be diagnosed last.



## How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related body codes that might indicate a broader communication issue.
- 2 Inspect the wiring harness in the door jamb boot for broken or chafed wires, repairing as needed.
- 3 Test the window switch by checking for continuity and voltage signals, replacing if faulty.
- 4 Measure voltage and ground at the window motor connector while operating the switch to confirm power and ground delivery.
- 5 Check the ground connection for the window circuit, cleaning and tightening as necessary.
- 6 If power and ground are good, remove the door panel and test the window motor directly with a known good power source; replace the motor or regulator if it fails.
- 7 After repairs, clear the code and verify the window operates smoothly in both directions and the code does not return.

## Common misdiagnosis traps for B0503

- A binding window regulator can cause the motor to draw excessive current, setting this code without any wiring fault, so always check for mechanical binding before replacing electrical parts.
- The door jamb wiring boot is a frequent failure point that is often overlooked; flex the boot while operating the window to reveal intermittent breaks.
- A weak or failing battery can cause voltage drops that trigger this code, so verify battery and charging system health before condemning the window circuit.
- The BCM may set this code if the window motor is disconnected during service, so check for a history of recent repairs before diagnosing.
- Aftermarket window accessories or improper previous repairs can introduce resistance or shorts that set this code, so inspect for non-factory wiring.

## Can I keep driving with B0503?

The vehicle remains safe to drive because the right rear window is not a safety-critical system, but avoid operating the window repeatedly if it is stuck or making noise to prevent further damage. Have the fault repaired at your convenience to restore full window function and prevent battery drain.

## Tools that help

- OBD-II scan tool with body code capability
- Digital multimeter
- Trim removal tools
- Test light
- Torx or Phillips screwdrivers



## Reading B0503

- B** Body: airbags, seats, doors, lights and comfort systems.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 5** Airbags, seats, doors, lights and comfort systems.
- 03** The exact fault within that area.

## Often seen with

**B0502** Left Rear Power Window Circuit Malfunction · **B0510** Driver Door Open Switch · **U0200** Lost Communication With 'Door Control Module B'

## See it working

Watch the animated explainer [EV Powertrain Trainer: How an Electric Car Drives](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/b0503/>

