

GENERIC · NETWORK

U0523

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0523

Invalid Data Received From Door Window Motor A

U0523 is a network communication fault indicating that a control module received invalid or corrupted data from the door window motor on the 'A' side, typically the driver's door. The module monitoring the network detected a message from the window motor that failed its internal validity check, meaning the data was present but not trustworthy.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Network	Generic (all makes)	Low	Intermediate	Network communication

Symptoms you may notice

- The window on the affected door may fail to move, move erratically, or stop partway through its travel.
- The power window switch may feel unresponsive or require multiple presses to operate the window.
- A window-related warning message or chime may appear on the instrument cluster.
- The window may reverse direction unexpectedly when using the auto-up feature.
- Other functions on the same door, such as the mirror or door lock, may behave intermittently if they share the same network segment.
- Often no symptoms besides the warning light, with the window operating normally during a static test.

Common causes, most likely first

- A failing door window motor module that is producing corrupted or out-of-range data on the network.
- Damaged or chafed wiring in the door jamb boot, where the harness flexes every time the door opens and closes.
- Corroded or loose electrical connectors at the window motor or the door control module.
- Low battery voltage or a weak charging system causing the window motor module to boot improperly and send invalid data.
- A software or calibration issue in the door module that requires a reflash or relearn procedure.
- Water intrusion into the door cavity that has reached the window motor connector or circuit board.
- A faulty body control module (BCM) that is misinterpreting valid window motor data as invalid.



How to diagnose and fix it

- 1 Perform a battery and charging system test first, as low voltage is a common and inexpensive cause of invalid network data.
- 2 Inspect the wiring harness in the door jamb boot for chafing, broken strands, or corrosion, and repair as needed.
- 3 Disconnect and inspect the window motor connector for corrosion, water intrusion, or loose pins, then clean and reseat it.
- 4 Clear the code and operate the window through several full cycles to see if the fault returns immediately or only under certain conditions.
- 5 Check for technical service bulletins (TSBs) or software updates for the door module that address communication faults.
- 6 If the fault persists, substitute a known-good window motor or use a scan tool to monitor live data from the door module during operation.
- 7 Replace the door window motor module only after wiring and power supply faults have been ruled out, then perform any required relearn or calibration.

Before you replace the window motor

- A door jamb wiring boot that looks fine from the outside can hide broken copper strands inside the insulation, so a continuity test while flexing the harness is often more revealing than a visual inspection.
- Low battery voltage during engine cranking can cause the window motor module to send invalid data frames, setting U0523 without any actual window fault.
- This code does not always mean the window motor is failing; a poor ground connection at the door module can corrupt the data signal just as easily as a bad motor.
- Some vehicles require a window motor initialization or normalization procedure after battery disconnect, and skipping it can set a false U0523.
- A body control module that has water damage or a failing internal network transceiver can misreport valid window motor data as invalid, leading to unnecessary motor replacement.

Can I keep driving with U0523?

The vehicle remains safe to drive because the fault affects a convenience system, not steering, braking, or airbags. Avoid repeated operation of the affected window until the fault is diagnosed, as a failing motor or chafed wiring can worsen and potentially drain the battery.



Tools that help

- OBD-II scan tool with live data and network communication capabilities
- Digital multimeter for voltage, resistance, and continuity testing
- Trim removal tools for door panel access
- Wiring diagram for the affected vehicle's door window circuit
- Battery load tester or charging system tester

Reading U0523

U	Network: communication between the vehicle's control modules.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
5	Network communication.
23	The exact fault within that area.

Often seen with

U0140 Lost Communication With Instrument Panel Cluster · **U0155** Lost Communication With Body Control Module · **U0522** Invalid Data Received From Door Switch G · **U0524** Invalid Data Received From Door Window Motor B

See it working

Watch the animated explainer [How a Boxer Engine Works: Flat Engine Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0523/>

