

GENERIC · NETWORK

U0503

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0503

Invalid Data Received From Door Control Module D

U0503 is a communication fault where the module that coordinates vehicle networks receives invalid or missing data from the door control module on the D circuit. The computer detected that the door module's data messages are absent, corrupted, or outside the expected format, so it cannot trust door status information.

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

Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL) or a communication fault warning on the dashboard
- One or more doors fail to lock or unlock with the central locking system or key fob
- Interior dome light or puddle lamp stays on or fails to activate when a door opens
- Power window or power mirror on the affected door stops responding
- Door ajar warning stays on or never appears even when a door is open
- Often no symptoms besides the warning light if the fault is intermittent

Common causes, most likely first

- 1 Damaged or corroded wiring in the door jamb boot where the harness flexes with every open and close cycle
- 2 Loose, backed-out, or corroded connector pins at the door control module or the body control module
- 3 Failed door control module internally unable to transmit valid data on the network
- 4 Network bus wiring fault such as a short to ground, short to voltage, or open circuit on the data line serving the door module
- 5 Low battery voltage or poor ground connection at the door module causing corrupted data frames
- 6 Aftermarket alarm or remote start installation that tapped into the door module wiring and disturbed the network signal
- 7 Water intrusion into the door module connector or into the door cavity corroding the terminals



How to diagnose and fix it

- 1 Scan all modules for stored codes and record which modules report U0503 and whether the fault is current or history
- 2 Inspect the door jamb wiring boot for chafed, broken, or corroded wires and repair any damaged conductors
- 3 Disconnect and inspect the door control module connector for corrosion, water intrusion, and loose pins, then clean and reseat
- 4 Measure battery voltage and check the door module ground circuit for excessive resistance
- 5 Perform a voltage drop or resistance test on the network data line between the door module and the module that set the code
- 6 If wiring and power are good, substitute a known-good door control module and verify communication restores
- 7 Clear codes and road test with several door open and close cycles to confirm the fault does not return

Door jamb wiring fails more often than modules

- The flexible rubber boot between the door and body is the most common failure point because the wires inside fatigue and break from constant flexing, and the break is often hidden inside intact insulation.
- A door control module that communicates perfectly on a scan tool can still set U0503 if its data frames are intermittently corrupted by a poor ground, so voltage drop testing matters more than module replacement.
- Aftermarket alarms, remote starters, and dash camera installers frequently splice into door module wiring and introduce network faults that only appear after the installation.
- U0503 can be set by a low or failing battery because the door module may boot up and transmit invalid data during cranking when supply voltage drops below its threshold.
- Replacing the door control module without first checking the connector for water intrusion often leads to a repeat failure because the source of the corrosion was never corrected.

Can I keep driving with U0503?

The vehicle remains safe to drive because the fault affects convenience features rather than engine, steering, or braking, but avoid relying on central locking and check that doors latch manually. Repair the fault promptly because a door that will not lock or a window that will not close creates a security and weather exposure risk.

Tools that help

- OBD-II scan tool with bidirectional module communication capability
- Digital multimeter with voltage drop and resistance functions
- Wiring diagram for the door control module network circuit
- Trim removal tools for door panel and jamb boot access
- Electrical contact cleaner and dielectric grease
- Soldering iron and heat shrink tubing for wire repair



Reading U0503

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

Often seen with

U0100 Lost Communication With ECM/PCM A · **U0140** Lost Communication With Instrument Panel Cluster · **U0155** Lost Communication With Body Control Module · **U0502** Invalid Data Received From Door Control Module C · **U0504** Invalid Data Received From Door Control Module E

See it working

Watch the animated explainer [How an Elevator Works: Traction Lift in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0503/>

