



U0506

Invalid Data Received From Door Control Module G

U0506 is a communication fault indicating that a control module on the vehicle's network received invalid or corrupted data from the door control module located on the G circuit or designated as module G. The receiving module detected that the data frames from that door module did not match the expected format, checksum, or message content, so it flagged the signal as unusable rather than acting on bad information.

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

Symptoms you may notice

- The warning light (check engine or service vehicle soon) illuminates, often with no other noticeable symptoms.
- One or more power door locks, windows, or mirrors on the affected door stop responding or operate intermittently.
- The door ajar indicator may stay on, flash, or fail to illuminate when that door is opened.
- Remote keyless entry or interior lighting functions tied to that door may behave erratically.
- The vehicle may set additional communication codes for other modules on the same network segment.

Common causes, most likely first

- 1 Corroded, loose, or damaged wiring and connector pins in the door harness or at the door control module connector.
- 2 A failing door control module that is powering up but transmitting corrupted or incomplete data frames.
- 3 Low or unstable battery voltage causing the door module to reset or transmit malformed messages.
- 4 Water intrusion into the door cavity or module connector, common after window or weatherstrip leaks.
- 5 A shorted or open controller area network (CAN) or local interconnect network (LIN) wire between the door module and the receiving module.
- 6 Aftermarket accessories tapped into the door harness, such as alarms or window modules, introducing signal interference.
- 7 A software or configuration mismatch after module replacement without proper programming.



How to diagnose and fix it

- 1 Scan all modules and record every stored code, then verify whether U0506 is current or history and whether other modules on the same network also report communication faults.
- 2 Inspect the door harness and connector at the door control module for corrosion, bent pins, chafed wires, or water intrusion, and clean or repair as needed.
- 3 Check battery voltage and charging system output, then clear codes and retest to see if low voltage was the trigger.
- 4 Perform a wiggle test on the door harness while watching live data or codes to expose an intermittent connection.
- 5 Check network continuity and resistance on the communication bus between the door module and the receiving module against the manufacturer's specification.
- 6 If wiring and power are good, substitute a known-good door control module or reflash the existing module with the latest software, then verify communication.
- 7 Clear all codes, cycle the ignition, and road test with the door opened and closed to confirm the fault does not return.

Why door module data goes invalid

- A door control module can pass a basic power and ground check yet still transmit invalid data because internal circuitry is failing, so voltage tests alone do not condemn or clear the module.
- Water intrusion from a failed window regulator or clogged sunroof drain often corrodes the door module connector long before the driver notices any lock or window problem.
- U0506 is frequently a secondary code set by a weak battery during cranking, and replacing the door module without checking voltage first is a common and expensive misdiagnosis.
- Aftermarket alarm or remote start installations that splice into the door harness are a frequent source of corrupted data on the door network, especially if the connections were made with crimp connectors.
- The receiving module, not the door module, stores U0506, so the fault may actually lie in the receiving module's network interface rather than in the door itself.

Can I keep driving with U0506?

The vehicle is generally safe to drive because the fault affects convenience features rather than engine or brake control, but do not ignore it if door locks, windows, or the door ajar warning behave unpredictably. Avoid relying on the affected door's lock or window functions until the fault is repaired, and address any battery or charging issue promptly.



Tools that help

- OBD-II scan tool with bidirectional module communication capability
- Digital multimeter with continuity and resistance functions
- Wiring diagram and connector pinout for the vehicle
- Trim removal tools for door panel access
- Contact cleaner and dielectric grease
- Test light or logic probe for network signal checks

Reading U0506

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.
06	The exact fault within that area.

Often seen with

U0501 Invalid Data Received From Door Control Module B · **U0502** Invalid Data Received From Door Control Module C · **U0503** Invalid Data Received From Door Control Module D · **U0504** Invalid Data Received From Door Control Module E · **U0505** Invalid Data Received From Door Control Module F

See it working

Watch the animated explainer [How a Rotary Engine Works: Wankel in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0506/>

