

GENERIC · NETWORK

U050A

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U050A

Invalid Data Received From Seat Control Module B

U050A is a communication fault indicating that a control module on the vehicle's network received invalid or corrupted data from the seat control module B, which manages power seat adjustments, memory positions, and heating or ventilation functions. The computer detected a message from that module that failed its internal validity check, such as a missing checksum, out-of-range value, or counter mismatch, rather than a complete loss of communication.

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

Symptoms you may notice

- The seat may stop responding to adjustment commands, including fore-aft, recline, height, or lumbar movement.
- Memory seat positions may fail to recall or may move to the wrong location when a button is pressed.
- Heated or ventilated seat functions may become inoperative or behave erratically.
- A warning light or message on the instrument cluster indicating a seat system fault or network communication problem.
- Often no symptoms besides the warning light, because the invalid data may be intermittent and the seat may still work normally most of the time.

Common causes, most likely first

- Corroded, loose, or damaged wiring and connectors at the seat control module B, especially under the seat where spills and foot traffic occur.
- A failing seat control module B that intermittently sends corrupted data frames onto the network.
- Low battery voltage or a weak charging system causing modules to reboot and transmit invalid data during voltage dips.
- Water intrusion into the seat control module or its connectors, leading to internal shorting or signal degradation.
- A faulty ground connection for the seat module, causing reference voltage shifts that corrupt the data signal.
- Network bus faults, such as a chafed CAN (Controller Area Network) wire or a failing terminating resistor, that distort messages from the seat module.
- Aftermarket accessories or improper previous repairs tapping into the seat harness and introducing electrical noise.



How to diagnose and fix it

- 1 Perform a full scan of all modules and record all stored and pending codes to establish whether U050A is the only fault or part of a wider network issue.
- 2 Inspect the seat control module B connectors and harness under the seat for corrosion, pin damage, water intrusion, and loose terminals; clean and reseat as needed.
- 3 Check battery voltage and charging system output, and load-test the battery to rule out low-voltage-induced communication errors.
- 4 Measure the ground circuit resistance at the seat module and repair any high-resistance ground connections.
- 5 Use an oscilloscope or a scan tool with live network data to verify the integrity of the CAN bus signal at the seat module and compare it with other modules on the same bus.
- 6 If wiring and power are confirmed good, substitute a known-good seat control module B or reflash the existing module with the latest software, then clear codes and retest.
- 7 After any repair, clear all codes, cycle the ignition, operate the seat through its full range, and verify that U050A does not return during a road test.

Why seat module data goes invalid

- A common cause that technicians miss is a partially unseated connector at the seat module that only loses contact when the seat is moved to a specific position, so the code sets intermittently and never appears during a stationary inspection.
- U050A does not always mean the seat control module itself is faulty; a weak battery or a failing ground elsewhere on the network can corrupt the module's data frames without the module having any internal defect.
- Aftermarket seat covers, phone chargers plugged into seat-mounted USB ports, or alarm installers tapping the seat harness can introduce electrical noise that the network interprets as invalid data from seat module B.
- On vehicles with memory seats, a failed position sensor or motor encoder inside the seat can cause the module to broadcast out-of-range position values, which the network rejects as invalid data even though the module's communication hardware is fine.
- A single chafed CAN wire near the seat track can set U050A alongside codes from other modules on the same bus, so always check for companion codes before condemning the seat module.

Can I keep driving with U050A?

The vehicle remains safe to drive because the seat control module does not affect steering, braking, or powertrain operation, but avoid using the power seat adjustments until the fault is repaired if the seat moves unexpectedly. If the seat is stuck in a position that compromises your driving posture or visibility, address the fault before driving further.



Tools that help

- OBD-II scan tool with full-system module scanning capability
- Digital multimeter for voltage, resistance, and ground checks
- Oscilloscope or CAN bus analyzer for signal integrity testing
- Trim removal tools and socket set for accessing the seat control module
- Contact cleaner and dielectric grease for connector repair
- Battery load tester and charging system tester

Reading U050A

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.
0A	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 · **U050B** Invalid Data Received From Moveable Roof Control Module B · **U050C** Invalid Data Received From Door Control Module H

See it working

Watch the animated explainer [How the PCV System Works: Crankcase Ventilation](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u050a/>

