

GENERIC · NETWORK

U055A

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U055A

Invalid Data Received From Special Purpose Vehicle Control Module A

U055A means a control module on the vehicle's network received data from the Special Purpose Vehicle Control Module A that it judged invalid or corrupted, so it flagged the message as untrustworthy. The module that set the code is not necessarily the special purpose module itself; it is the receiver that detected the bad data, which is why the fault can appear in a module far from the component named in the definition.

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

Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL) or a message on the driver information center, often with no other noticeable change in vehicle behavior.
- Intermittent operation of the special purpose function, such as a body, chassis, or accessory system that works normally on some drives and not others.
- A warning that a driver-assist, suspension, or specialty control feature is temporarily unavailable, with the system returning to a default mode.
- Multiple unrelated warning lights appearing at once when the network message carrying the special purpose module's data is disrupted.
- No symptoms besides the warning light in many cases, because the invalid message may be an isolated event that the module logged and then recovered from.
- Rough or inconsistent operation of the affected special purpose system, such as delayed response or a function that defaults to a fixed setting.



Common causes, most likely first

- 1 A failing or intermittently powered Special Purpose Vehicle Control Module A that transmits malformed or incomplete data frames.
- 2 Corroded, loose, or damaged wiring and connectors on the controller area network (CAN) bus or other serial data bus linking the special purpose module to the rest of the vehicle.
- 3 Low or unstable battery voltage and poor grounds that cause the special purpose module to reset mid-message and send invalid data.
- 4 A software or calibration mismatch in the special purpose module or in a receiving module after a repair, replacement, or battery disconnect.
- 5 Electrical interference from a failing component on the same bus, such as a shorted sensor or an aftermarket accessory wired into the network.
- 6 A receiving module with an internal fault that misinterprets valid data from the special purpose module and stores U055A incorrectly.
- 7 Water intrusion or heat damage at the special purpose module connector, common on modules mounted low in the body or near high-heat areas.

How to diagnose and fix it

- 1 Record all stored and pending codes from every module with a scan tool that reads manufacturer-specific body and chassis codes, then clear them and test-drive to see whether U055A returns immediately or only intermittently.
- 2 Inspect the battery, charging system, and main grounds, because low voltage is a frequent trigger for invalid data messages and is the cheapest thing to rule out first.
- 3 Locate Special Purpose Vehicle Control Module A and inspect its connectors and harness for corrosion, pushed pins, chafing, and water intrusion, repairing any damaged terminals.
- 4 Check the data bus wiring between the special purpose module and the modules that store the code, looking for shorts to ground, shorts to voltage, and excessive resistance.
- 5 Verify the special purpose module is receiving correct power and ground at its connector under load, then check for any aftermarket accessories spliced into the network.
- 6 If wiring and power are sound, follow the manufacturer's diagnostic flow for the special purpose module, which may call for a software update, reflash, or module replacement followed by configuration.
- 7 After any repair, clear codes across all modules and confirm U055A does not return during a road test that exercises the special purpose system through its full range of operation.



Why the receiver stores this code, not the sender

- U055A is stored by the module that received the bad data, so replacing Special Purpose Vehicle Control Module A first is a common and expensive misdiagnosis when the real fault is a chafed bus wire or a weak ground elsewhere.
- A single low-voltage event, such as a battery that was drained or jumped, can set this code without any hardware failure, so clearing it and monitoring for a repeat is a legitimate first step before parts are ordered.
- Aftermarket accessories tapped into the CAN bus, including alarms, telematics units, and dash cameras, frequently corrupt messages and set invalid-data codes that disappear once the accessory is disconnected.
- The special purpose module may be a body, chassis, or driver-assist controller depending on the vehicle, so the definition stays generic and the actual component must be identified from the service information for that platform.
- A module that has been replaced without proper configuration or calibration can transmit data the other modules consider invalid, so programming and setup are part of the repair, not an afterthought.

Can I keep driving with U055A?

The vehicle is generally safe to drive when U055A is the only code and the affected special purpose system has defaulted to a safe mode, but avoid relying on any driver-assist or specialty function until the fault is repaired. If the warning light is accompanied by multiple system failures or reduced power, have the vehicle inspected before continuing to drive.

Tools that help

- Scan tool capable of reading manufacturer-specific body and chassis codes from all modules
- Digital multimeter for voltage, ground, and resistance checks
- Wiring diagram and connector pinout for the special purpose module and data bus
- CAN bus breakout box or oscilloscope for signal integrity testing
- Battery load tester and charging system tester
- Terminal pick and connector repair kit

Reading U055A

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.
5A	The exact fault within that area.



Often seen with

U0100 Lost Communication With ECM/PCM A · **U0121** Lost Communication With Anti-Lock Brake System (ABS) Control · **U0140** Lost Communication With Instrument Panel Cluster · **U055B** Invalid Data Received From Special Purpose Vehicle Control M · **U055C** Invalid Data Received From Special Purpose Vehicle Control M

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/u055a/>

