

GENERIC · NETWORK

U042A

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U042A

Invalid Data Received From V2X Module

U042A means the vehicle's computer network received invalid or corrupted data from the V2X (Vehicle-to-Everything) module, which is the system that lets the car communicate with other vehicles and roadside infrastructure. The module is present but its messages are missing required information or contain values the receiving module cannot trust, so the receiving module sets this code and may disable features that depend on V2X data.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Network	Generic (all makes)	Medium	Professional	Invalid data received from a module

Symptoms you may notice

- Warning light or message on the dashboard indicating a communication or driver-assist system fault
- Often no symptoms besides the warning light, especially if V2X features are not used daily
- Inoperative or degraded forward-collision, intersection-assist, or traffic-sign alerts that rely on V2X data
- Intermittent false alerts or missing alerts from advanced driver-assistance features
- A stored code that returns immediately after clearing even when the car appears to drive normally
- Other communication codes stored in multiple modules if the V2X module is disrupting the network

Common causes, most likely first

- Corroded, loose, or damaged wiring and connectors at the V2X module or its network interface
- Low or unstable battery voltage causing the V2X module to send incomplete or corrupted messages
- Software or calibration mismatch in the V2X module after a battery replacement or service visit
- Failed or failing V2X module internal circuitry that cannot format data correctly
- Network bus faults, such as a shorted or open data line, that corrupt messages before they reach the receiving module
- Aftermarket accessories or improper repairs that interfere with the vehicle's communication network
- Water intrusion or physical damage to the V2X module or its antenna connections



How to diagnose and fix it

- 1 Record all stored codes and freeze-frame data from every module before clearing anything, then verify battery voltage and charging system health
- 2 Inspect the V2X module connectors and wiring for corrosion, looseness, or damage, and check for water intrusion around the module
- 3 Check service bulletins and software updates for the V2X module and perform any required reprogramming with a factory-capable scan tool
- 4 Measure network bus voltage and resistance at the V2X module connector to rule out a shorted or open data line
- 5 Substitute a known-good V2X module only after wiring and software checks pass, then clear codes and verify communication
- 6 Clear codes, perform a road test that activates V2X-dependent features, and confirm the code does not return
- 7 If the code persists, perform a guided diagnostic using the manufacturer's scan tool to check live V2X message quality and module status

What most technicians miss on U042A

- A weak or aging battery is a common hidden cause because the V2X module may power up but send incomplete messages under low-voltage conditions, so always load-test the battery before condemning the module.
- This code does not always mean the V2X module is bad; a single chafed wire or a poor ground shared with another module can corrupt data and set U042A without any module failure.
- Aftermarket dash cams, phone chargers, or alarm systems tapped into the wrong circuit can introduce noise on the communication bus and trigger invalid-data codes like this one.
- Some vehicles set U042A after a software update or battery replacement because the V2X module loses its calibration; a relearn or reprogramming procedure resolves it without parts replacement.
- If multiple communication codes are stored alongside U042A, diagnose the network fault first, because a single bus problem can make several modules report invalid data from each other.

Can I keep driving with U042A?

The car is generally safe to drive because V2X is an assistive communication system, but do not rely on V2X-dependent driver aids until the fault is repaired. Avoid long trips or highway driving where those aids would normally operate, and have the fault diagnosed promptly if the warning light is accompanied by other communication codes.



Tools that help

- Factory-capable scan tool with V2X module support
- Digital multimeter for voltage and resistance checks
- Battery load tester
- Wiring diagram and connector pinout for the vehicle
- Oscilloscope for network bus signal analysis
- Trim removal tools for accessing the V2X module

Reading U042A

U	Network: communication between the vehicle's control modules.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
4	Invalid data received from a module.
2A	The exact fault within that area.

Often seen with

U0100 Lost Communication With ECM/PCM A · **U0140** Lost Communication With Instrument Panel Cluster · **U042B** Invalid Data Received From Chassis Control Module A · **U042C** Invalid Data Received From Chassis Control Module B · **U3000** Control Module

See it working

Watch the animated explainer [How a Padlock Works: Pin Tumbler Lock in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u042a/>

