

GENERIC · NETWORK

U0048

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0048

Vehicle Communication Bus C (+) Open

U0048 is a generic network communication code indicating that the vehicle's Controller Area Network (CAN) bus C positive circuit is open, meaning the computer cannot detect the expected voltage on that communication line. The module that set the code has detected a loss of signal on the CAN C+ wire, which prevents normal data exchange between control units on that bus segment.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Network	Generic (all makes)	Medium	Professional	Network wiring and bus faults

Symptoms you may notice

- Multiple warning lights illuminated on the dashboard, often including the check engine light, ABS, and airbag lights
- The engine may start and run, but other electronic features like stability control or climate control may be inoperative
- Intermittent or complete failure of communication with scan tools on the affected bus
- Erratic operation of modules such as the radio, power windows, or instrument cluster
- Often no symptoms besides the warning light if the open circuit is on a non-critical bus segment
- The vehicle may enter a limp mode or fail to start if the open circuit affects a critical module

Common causes, most likely first

- A broken or chafed wire in the CAN C+ circuit, often due to flexing at a door hinge or near a connector
- Corroded or loose pins in a CAN bus connector, especially in areas exposed to moisture
- A failed control module that internally shorts or opens the CAN C+ line
- Damage from rodent chewing or previous collision repair that pinched the harness
- Improperly installed aftermarket electronics that tapped into the CAN bus wiring
- A faulty termination resistor inside a module that disrupts bus voltage levels
- Water intrusion into a connector or module causing an open circuit on the positive line



How to diagnose and fix it

- 1 Connect a scan tool and record all stored codes and freeze-frame data from every module to identify which bus segment is affected
- 2 Perform a visual inspection of the CAN C+ wiring and connectors, looking for chafing, corrosion, or loose pins
- 3 Measure resistance between CAN C+ and CAN C- at the diagnostic link connector (DLC) with the battery disconnected; a reading near 60 ohms indicates proper termination, while an open reading suggests a break
- 4 Disconnect modules one at a time and recheck bus resistance to isolate a faulty module or a shorted segment
- 5 Use a digital multimeter to check for continuity and voltage on the CAN C+ wire from the DLC to each module, repairing any open circuit found
- 6 Repair or replace damaged wiring, connectors, or pins, then clear codes and verify communication with all modules
- 7 If a module is found to be the cause, replace it and perform any required programming or initialization

What most technicians miss on U0048

- A single open on CAN C+ can cause multiple modules to set communication codes, so always check for other U-codes to map the affected bus segment before replacing parts.
- The CAN C+ and CAN C- wires are twisted together to reduce interference; an open on the positive line often shows normal voltage on the negative line, misleading some into thinking the bus is healthy.
- Aftermarket accessories like remote starters or dash cams spliced into the CAN wiring are a frequent cause of opens that are overlooked during diagnosis.
- A module that is completely dead can pull the entire bus down, but an open circuit on CAN C+ may still allow some modules to communicate on other buses, so not all modules will be silent.
- Resistance checks at the DLC are only valid with the battery disconnected and all modules asleep; measuring with the key on can give false readings.

Can I keep driving with U0048?

If the vehicle starts and runs without obvious drivability issues, you can drive it cautiously to a repair shop, but avoid relying on advanced driver aids or stability control. If the engine stalls, refuses to start, or multiple critical systems fail, stop driving and have the vehicle towed.

Tools that help

- OBD-II scan tool with CAN bus capability
- Digital multimeter with resistance and continuity functions
- Wiring diagram for the specific vehicle
- Back probe pins or breakout box for connector testing
- CAN bus analyzer or oscilloscope for advanced signal inspection



Reading U0048

- U** Network: communication between the vehicle's control modules.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 0** Network wiring and bus faults.
- 48** The exact fault within that area.

Often seen with

U0001 Loss of Bus Communication · **U0047** Vehicle Communication Bus C (Performance) · **U0049** Vehicle Communication Bus C (+) Low · **U0100** Lost Communication With ECM/PCM A · **U0140** Lost Communication With Instrument Panel Cluster

See it working

Watch the animated explainer [How a Starter Motor Works: Pre-Engaged Starter](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0048/>

