

GENERIC · NETWORK

U0047

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0047

Vehicle Communication Bus C (Performance)

U0047 is a generic network communication code indicating that the vehicle's communication bus C, one of the controller area network (CAN) data buses that modules use to talk to each other, is not performing as expected. The computer that set the code detected missing, corrupted, or out-of-spec messages on that bus, which can prevent modules from sharing critical information.

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 at once, often including the check engine light, ABS, and traction control
- Intermittent or complete failure of dashboard gauges, climate controls, or infotainment functions
- The engine may start and run, but other systems like power windows or door locks behave erratically
- A no-start condition if the bus failure prevents the engine control module from receiving necessary signals
- Often no symptoms besides the warning light, especially if the fault is intermittent and only affects non-critical messages

Common causes, most likely first

- Damaged or chafed wiring on the bus C circuit, often from rodent damage, corrosion, or previous repair work
- Loose, corroded, or backed-out pins in a connector on the bus C network
- A failed module on bus C that is shorting the bus or transmitting invalid data
- Open or shorted termination resistor on the bus, which disrupts signal integrity
- Water intrusion into a connector or module on bus C, causing intermittent communication
- Aftermarket accessories improperly tapped into the bus wiring, introducing noise or loading the bus



How to diagnose and fix it

- 1 Connect a scan tool and record all stored codes across every module to identify which modules are offline and confirm bus C is the affected network
- 2 Inspect the bus C wiring and connectors for obvious damage, corrosion, or loose pins, starting at the modules that are not communicating
- 3 Measure resistance across the bus C CAN high and CAN low pins at the diagnostic link connector (DLC) to check for proper termination, typically around 60 ohms
- 4 With the bus powered down, check for shorts to ground or battery voltage on each bus line using a multimeter
- 5 Perform a voltage drop or oscilloscope test on the bus lines while wiggling harnesses to locate intermittent faults
- 6 Disconnect modules one at a time to see if the bus recovers, isolating a faulty module that is dragging the network down
- 7 Repair or replace the damaged wiring, connector, or module, then clear codes and verify communication on bus C with a scan tool

What most technicians miss on bus C faults

- A single failed module can pull the entire bus C network down, so disconnecting modules one by one is often faster than chasing wiring through the whole car.
- Aftermarket alarms, remote starters, or phone chargers plugged into the DLC can backfeed voltage onto the bus and set U0047 without any factory component being faulty.
- The code does not always mean the bus wiring is broken; a module that is awake and transmitting garbage data can trigger the same performance code.
- Water leaks into a kick panel or under the hood often corrode bus C connectors long before the driver notices any other symptom.
- Resistance checks at the DLC only confirm termination, not signal quality, so an oscilloscope is the definitive tool for spotting intermittent bus C faults.

Can I keep driving with U0047?

If the vehicle starts, runs, and drives normally with only a warning light, you can drive it to a repair shop, but avoid long trips and expect other systems to act unpredictably. If the engine will not start or multiple safety systems are disabled, do not drive and have the vehicle towed.

Tools that help

- OBD-II scan tool with enhanced manufacturer software
- Digital multimeter
- Oscilloscope
- Wiring diagram for the specific vehicle
- Terminal pick and connector release tools



Reading U0047

- 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.
- 47** The exact fault within that area.

Often seen with

U0001 Loss of Bus Communication · **U0002** High Speed CAN Communication Bus (Performance) · **U0046** Vehicle Communication Bus C · **U0048** Vehicle Communication Bus C (+) Open · **U0100** Lost Communication With ECM/PCM A

See it working

Watch the animated explainer [Car Won't Start? Step-by-Step No-Start Diagnosis](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0047/>

