

GENERIC · NETWORK

U0077

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0077

Vehicle Communication Bus B Off

U0077 is a generic communication fault indicating that a control module has lost communication on Vehicle Communication Bus B, which is the second CAN (Controller Area Network) bus in a multi-bus vehicle network. The module that set the code detected that the bus is off, meaning it is not receiving the expected voltage differential or message traffic on that particular network segment.

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

Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL) or a dedicated communication warning light
- Multiple unrelated warning lights on the dashboard because several modules share the affected bus
- Intermittent or complete failure of features controlled by modules on Bus B, such as body, climate, or infotainment functions
- The vehicle may start and run normally if the fault is isolated to a non-powertrain bus segment
- No noticeable symptoms besides the warning light when the fault is intermittent or affects only a non-critical module
- A no-start condition if the affected bus is required for immobilizer or powertrain communication

Common causes, most likely first

- 1 Open or shorted wiring in the Bus B CAN high or CAN low circuits, often from chafing, corrosion, or rodent damage
- 2 A failed control module on Bus B that is holding the bus lines low or high and disrupting communication for all nodes
- 3 Loose, corroded, or backed-out pins at a module connector or splice pack on the Bus B network
- 4 A defective CAN transceiver inside one of the modules on Bus B, causing the bus to go off
- 5 Water intrusion into a connector or module on Bus B, leading to intermittent or permanent bus failure
- 6 Aftermarket accessories or improper repairs that tapped into the Bus B wiring and introduced a fault
- 7 A faulty gateway module that isolates or routes Bus B traffic and has failed internally



How to diagnose and fix it

- 1 Connect a scan tool and read all stored codes in every module to confirm which modules can and cannot communicate on Bus B
- 2 Inspect the Bus B wiring harness and connectors for visible damage, corrosion, or loose pins, starting at the modules that are offline
- 3 Measure resistance between CAN high and CAN low on Bus B with the battery disconnected; a reading near 60 ohms indicates proper termination, while a very low or very high reading points to a wiring or module fault
- 4 Check for short-to-ground or short-to-voltage on each Bus B line with a multimeter or oscilloscope while wiggling harnesses to catch intermittent faults
- 5 Disconnect modules one at a time on Bus B to see if communication is restored, which isolates a module that is pulling the bus down
- 6 Repair or replace the damaged section of harness, connector, or the faulty module identified by the previous steps
- 7 Clear codes and perform a road test to verify that Bus B communication is stable and the code does not return

What a bus-off code really tells you

- U0077 does not name the module that set it, so the first step is always to check which modules are online and which are missing from the scan tool's module list.
- A single failed module on Bus B can take down communication for every other module on that bus, making it look like a widespread electrical failure when the cause is one component.
- Intermittent U0077 codes are often caused by a harness rubbed through near a body seam or by water entering a connector that looks dry from the outside.
- Some vehicles use Bus B for body and convenience functions only, so the car may drive normally and the code may be the only clue that a module is offline.
- Replacing modules before checking bus termination resistance and wiring integrity is a common and expensive misdiagnosis trap.

Can I keep driving with U0077?

If the vehicle starts, runs, and has no safety-related warnings, you can drive it to a repair shop, but avoid long trips and expect that some accessories may not work. If the engine stalls, the vehicle will not start, or multiple safety systems are disabled, stop driving and have it towed.



Tools that help

- OBD-II scan tool with enhanced manufacturer-level module communication capability
- Digital multimeter with resistance and voltage measurement
- Oscilloscope for viewing CAN bus waveforms
- Wiring diagram and connector pinout for the specific vehicle
- Breakout box or CAN bus test adapter
- Trim removal tools for accessing harnesses and modules

Reading U0077

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.
77	The exact fault within that area.

Often seen with

U0073 CAN Bus A Communication Bus Off · **U0074** Control Module Communication Bus "B" Off · **U0075** Control Module Communication Bus "B" Performance · **U0076** Control Module Communication Bus "C" Off · **U0100** Lost Communication With ECM/PCM A

See it working

Watch the animated explainer [How a Catalytic Converter Works: 3D Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0077/>

