

GENERIC · NETWORK

U0042

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0042

Vehicle Communication Bus B (-) Open

U0042 means the vehicle's communication network has lost the negative side of Bus B, so modules that rely on that wire can no longer exchange data. The computer detects an open circuit on the Bus B (-) line, which is typically a low-speed or dedicated body bus, and it sets this code when the expected voltage or signal is missing.

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 on the dashboard, often including the check engine light, ABS, and airbag lights
- One or more electronic modules stop responding or appear offline during a scan tool session
- Intermittent or complete failure of features controlled by body modules, such as power windows, door locks, or climate control
- The engine may start and run normally, or it may crank but not start if the affected bus carries immobilizer or powertrain data
- Often no symptoms besides the warning light, especially if the open is on a bus segment that only serves non-critical accessories
- Scan tool cannot communicate with certain modules or shows a 'no communication' error for them

Common causes, most likely first

- A broken or chafed wire in the Bus B (-) circuit, often at a door hinge, trunk hinge, or under the dash
- Corroded or loose connector pins at a module or inline harness connector on the Bus B (-) path
- A failed module that internally shorts or opens the Bus B (-) line, pulling down the entire bus
- Water intrusion into a connector or module causing corrosion and an open on the negative bus wire
- Aftermarket accessories or poor previous repairs that cut or bypassed the Bus B (-) wire
- A faulty termination resistor or bias circuit inside a module that affects Bus B (-) voltage levels
- Physical damage to the harness from rodents, collision repair, or repeated flexing



How to diagnose and fix it

- 1 Connect a scan tool and record which modules are online and which are missing; note that U0042 is stored in the module that detected the open, not necessarily the one with the fault.
- 2 Obtain the factory wiring diagram for the vehicle and identify all connectors and modules on the Bus B (-) circuit, then inspect those connectors for corrosion, pushed pins, or water intrusion.
- 3 Measure resistance from the Bus B (-) pin at the diagnostic connector to the same pin at each module; an open reading indicates a break in that segment, so isolate by disconnecting modules one at a time.
- 4 Perform a voltage check on Bus B (-) with the key on and all modules connected; a correct bias voltage is typically around 0 to 2.5 volts depending on the bus, and a stuck high or low reading points to a shorted module or wiring.
- 5 Wiggle-test the harness at known flex points, such as door jambs and trunk hinges, while watching scan tool communication to catch an intermittent open.
- 6 Repair the open circuit by soldering and sealing the wire, replacing the affected harness section, or replacing the faulty connector terminals; do not use crimp connectors on data bus wiring.
- 7 Clear the code and verify that all modules communicate and that U0042 does not return after a test drive that includes operating the accessories on the affected bus.

What a Bus B open really means

- U0042 is often set by a module that is still communicating fine; the code points to the bus segment, not to the module that reported it, so replacing that module is a common misdiagnosis.
- A single failed module can pull the entire Bus B (-) line low or open, making every other module on that bus appear dead; disconnecting modules one at a time is the fastest way to find the culprit.
- Many technicians overlook the diagnostic connector itself, where a bent pin or pushed terminal can create an open on Bus B (-) and set U0042 without any harness damage elsewhere.
- Aftermarket radios, alarms, and remote starters are frequently tapped into Bus B wiring, and a poor splice can open the negative line; always check for non-factory wiring before condemning a module.
- On some vehicles Bus B is a low-speed body bus that does not affect engine operation, so the car may drive normally while U0042 is stored, leading owners to postpone a repair that later disables safety systems.

Can I keep driving with U0042?

If the engine starts and runs normally and only accessory features are affected, you can drive to a repair shop, but avoid using the affected accessories and do not tow a trailer or rely on systems that may be offline. If the engine cranks but does not start or safety systems such as ABS or airbags are disabled, stop driving and have the vehicle towed.



Tools that help

- OBD-II scan tool with live module communication and CAN bus voltage reading
- Digital multimeter with resistance and voltage measurement
- Factory service information or wiring diagram for the vehicle
- Back-probing pins and terminal removal tools
- Soldering iron and heat-shrink tubing for data bus wire repair

Reading U0042

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

Often seen with

U0041 Vehicle Communication Bus B (+) High · **U0043** Vehicle Communication Bus B (-) Low · **U0044** Vehicle Communication Bus B (-) High · **U0100** Lost Communication With ECM/PCM A · **U0140** Lost Communication With Instrument Panel Cluster

See it working

Watch the animated explainer [How Drive-by-Wire Works: Electronic Throttle Body](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0042/>

