

GENERIC · NETWORK

U0022

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0022

Low Speed CAN Communication Bus (+) Low

U0022 means the vehicle's low-speed Controller Area Network (CAN) data bus has a fault on the CAN+ (high-side) wire, so modules on that bus cannot communicate reliably. The computer detects an abnormal voltage or signal condition on the CAN+ line of the low-speed bus, which is typically a single-wire or fault-tolerant bus used for body and comfort modules.

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, airbag, and ABS lights
- Intermittent or complete failure of body control functions such as power windows, door locks, or interior lighting
- The engine may start and run normally because the low-speed bus usually does not control powertrain operation
- Modules on the low-speed bus may not respond to a scan tool, or the scan tool may fail to communicate with some modules
- Often no symptoms besides the warning light if the fault is intermittent or affects only non-critical modules
- Erratic operation of climate control, radio, or instrument cluster features that share the low-speed bus

Common causes, most likely first

- Damaged or chafed CAN+ wire on the low-speed bus, often from rodent damage, pinched harnesses, or corrosion
- Poor connection at a module connector or a damaged terminal on the low-speed bus
- A module on the low-speed bus internally shorting the CAN+ line to ground or to power
- Corrosion or water intrusion in a connector or splice on the low-speed bus
- A failed terminating resistor or fault-tolerant bus component inside a module
- Aftermarket accessories improperly tapped into the low-speed bus wiring
- A faulty body control module or gateway module that is not properly isolating the low-speed bus



How to diagnose and fix it

- 1 Scan all modules and record which modules are offline or setting communication codes to map the affected segment of the low-speed bus
- 2 Inspect the low-speed bus wiring and connectors for visible damage, corrosion, or loose pins, starting at the modules that are not communicating
- 3 Measure resistance and voltage on the CAN+ wire at the diagnostic connector and at each module to check for shorts to ground or power
- 4 Disconnect modules one at a time to see if the bus voltage returns to normal, isolating a module that is shorting the line
- 5 Repair or replace damaged wiring, terminals, or connectors on the CAN+ circuit and clear the codes
- 6 If a module is found to be internally shorting the bus, replace or reprogram that module as required
- 7 Verify repair by confirming all modules communicate and the code does not return after a test drive

Low-speed CAN faults hide in body harnesses

- The low-speed CAN bus is often a single-wire or fault-tolerant bus, so a short on CAN+ can take down many body modules at once while the engine still runs normally.
- A common mistake is replacing the body control module when the real fault is a chafed wire in a door jamb or trunk hinge that only shorts when the harness flexes.
- Aftermarket alarms, remote starters, or phone chargers tapped into the wrong wire can pull the low-speed bus voltage out of range and set U0022 without any factory component being defective.
- U0022 does not always mean the bus is dead; an intermittent fault can set the code only when a module wakes up or when temperature and vibration affect a marginal connection.
- Some vehicles use a gateway module to isolate the low-speed bus from the high-speed bus, so a fault in the gateway can mimic a low-speed bus wiring problem.

Can I keep driving with U0022?

The vehicle is usually safe to drive because the low-speed bus mainly handles body and comfort functions, but avoid long trips until the fault is repaired. If multiple warning lights are on or the vehicle exhibits electrical oddities, have it diagnosed promptly to prevent a dead battery or loss of accessory functions.

Tools that help

- OBD-II scan tool with module communication and live data capability
- Digital multimeter with resistance and voltage measurement
- Oscilloscope for viewing CAN bus waveforms
- Wiring diagram and connector pinout for the vehicle
- Terminal removal tools and wire repair kit



Reading U0022

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

Often seen with

U0001 Loss of Bus Communication · **U0021** Low Speed CAN Communication Bus (+) Open · **U0023** Low Speed CAN Communication Bus (+) High · **U0024** Low Speed CAN Communication Bus (-) Open · **U0100** Lost Communication With ECM/PCM A

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/u0022/>

