

GENERIC · NETWORK

U0027

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0027

Low Speed CAN Communication Bus (shorted to Bus)

U0027 indicates that the vehicle's low-speed Controller Area Network (CAN) data bus has been detected as shorted to the bus itself, meaning the two communication wires are touching or have an abnormal low-resistance path between them. The modules that rely on this bus cannot exchange messages reliably, so the computer that monitors bus integrity sets this code and may disable or limit communication with affected systems.

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
- Intermittent or complete failure of communication with scan tool for some or all modules
- Erratic operation of accessories such as power windows, door locks, or climate control
- The engine may start and run normally, or may not start at all depending on which modules are affected
- Often no symptoms besides the warning light if the short is intermittent or confined to a non-critical segment
- Unexplained battery drain if the short keeps a module awake

Common causes, most likely first

- Chafed or pinched CAN bus wiring harness causing the two data lines to contact each other
- Water intrusion into a connector or module, creating a conductive path between bus pins
- A faulty module internally shorting the CAN bus lines together
- Damaged or improperly installed aftermarket electronics tapping into the bus wiring
- Corrosion or bent pins in a CAN bus connector
- A shorted inline connector or splice in the low-speed bus segment



How to diagnose and fix it

- 1 Connect a scan tool and record all stored codes and which modules are communicating to map the affected bus segment
- 2 Inspect the low-speed CAN wiring harness for visible damage, chafing, or pinched areas, especially near moving components and under carpets
- 3 Disconnect the battery and measure resistance between the two CAN bus lines at the diagnostic link connector; a very low resistance confirms a short
- 4 Isolate bus segments by unplugging modules one at a time and rechecking resistance to locate the shorted section or module
- 5 Repair or replace the damaged wiring section, connector, or module causing the short, then clear codes and verify communication
- 6 Perform a road test and recheck for stored codes to confirm the repair is complete

When the bus short is not the harness

- A module that has suffered water damage can internally short the CAN bus lines even when the external wiring looks perfect, so unplugging modules one by one is often the fastest way to find the culprit.
- Aftermarket alarms, remote starters, and dash cameras are frequently spliced into the low-speed bus and can introduce a short that only appears when the device is powered, making them a common missed cause.
- The code can set intermittently from a short that only occurs when the vehicle flexes over bumps or when temperature changes, so a wiggle test of the harness while monitoring bus resistance is essential.
- A shorted low-speed CAN bus does not always prevent the engine from running because the powertrain may use a separate high-speed bus, leading some drivers to ignore the warning until multiple systems fail.
- Battery voltage that is low or unstable can cause modules to behave erratically and set bus communication codes that mimic a physical short, so always verify charging system health before chasing wiring.

Can I keep driving with U0027?

If the vehicle drives normally and only the warning light is on, you can drive cautiously to a repair shop, but avoid long trips and be prepared for systems like ABS or airbags to be disabled. If multiple warning lights are on or the engine runs poorly, stop driving and have the vehicle towed because safety and drivability systems may be compromised.

Tools that help

- OBD-II scan tool with CAN bus capability
- Digital multimeter
- Wiring diagram for the vehicle
- Breakout box or back-probe kit
- Insulation piercing probes



Reading U0027

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

Often seen with

U0001 Loss of Bus Communication · **U0002** High Speed CAN Communication Bus (Performance) · **U0028** Vehicle Communication Bus A · **U0029** Vehicle Communication Bus A (Performance) · **U0100** Lost Communication With ECM/PCM A

See it working

Watch the animated explainer [How the EVAP System Works: Fuel Vapour and Leak Test](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0027/>

