

GENERIC · NETWORK

U0020

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0020

Low Speed CAN Communication Bus (Performance)

U0020 means the modules on the low-speed Controller Area Network (CAN) bus are not communicating reliably, so the computer has detected a performance fault on that data link. The low-speed CAN bus is a two-wire network used for body and comfort functions, and this code is set when a module sees the bus voltage, message timing, or signal integrity fall outside the expected range.

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

Symptoms you may notice

- The warning light may be the only sign, with no noticeable change in how the vehicle drives.
- Body control functions such as interior lights, door locks, or power windows may operate intermittently or not at all.
- The instrument cluster may show spurious warnings or fail to display certain information.
- Some modules may stop responding to scan tool requests or drop off the network during a diagnostic session.
- Accessory features like remote keyless entry or memory seats may work only some of the time.

Common causes, most likely first

- A poor or corroded connection at a low-speed CAN bus splice pack or module connector.
- Damaged, chafed, or pinched wiring on the low-speed CAN high or CAN low circuit.
- A module on the low-speed bus that is internally faulty and pulling the bus voltage out of range.
- Water intrusion or corrosion in a connector or module housing on the body network.
- An aftermarket accessory wired into the low-speed bus without proper isolation.
- A weak or failing body control module or gateway that cannot translate messages correctly.
- Terminating resistor or bias voltage fault within one of the modules on the low-speed network.



How to diagnose and fix it

- 1 Connect a scan tool and record all stored codes across every module, then note which modules are reachable and which are not.
- 2 Inspect the low-speed CAN wiring and connectors for corrosion, water damage, or loose pins, starting at the splice pack and the modules that are offline.
- 3 Measure the low-speed CAN bus voltage with a digital multimeter and compare it to the manufacturer's specification for the idle and active states.
- 4 Use an oscilloscope to view the CAN high and CAN low waveforms and look for distortion, noise, or a module holding the bus dominant.
- 5 Disconnect suspect modules one at a time to see whether the bus performance recovers, which isolates the faulty node.
- 6 Repair or replace damaged wiring, connectors, or the faulty module, then clear the codes and verify communication with all modules.
- 7 Perform a road test and recheck for U0020 to confirm the repair is complete and no intermittent fault remains.

Low-speed CAN faults that fool good technicians

- A module that is completely dead on the low-speed bus can drag the entire network down, so the fault often lies in a module that appears unrelated to the symptoms the driver reports.
- Aftermarket alarms, remote starters, and phone chargers plugged into the data link connector can introduce noise or incorrect bias voltage on the low-speed CAN bus and set U0020 without any factory component being faulty.
- The low-speed CAN bus is a body network, so a code U0020 rarely affects engine operation; technicians who chase powertrain faults first waste time before checking body module communication.
- Water leaks into a rear quarter panel or liftgate can corrode a low-speed CAN splice that is hidden behind trim, and the resulting intermittent code often appears only after rain or a car wash.
- A battery that is weak or a charging system that is noisy can cause low-speed CAN performance codes because the bus bias voltage depends on a stable supply, so always check battery health before replacing modules.

Can I keep driving with U0020?

The vehicle is generally safe to drive because the low-speed CAN bus controls body and comfort functions rather than engine or braking, but avoid long trips until the fault is repaired. If multiple warning lights appear or the vehicle fails to start reliably, have it diagnosed promptly because a failing module can leave you stranded.



Tools that help

- OBD-II scan tool with module-level communication capability
- Digital multimeter
- Oscilloscope
- Wiring diagram and connector pinout reference
- Trim removal tools

Reading U0020

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

Often seen with

U0001 Loss of Bus Communication · **U0002** High Speed CAN Communication Bus (Performance) · **U0010** Lost Communication With ECM/PCM · **U0028** Vehicle Communication Bus A · **U0100** Lost Communication With ECM/PCM A

See it working

Watch the animated explainer **Four-Stroke Engine Cutaway: Intake to Exhaust** on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0020/>

