

GENERIC · NETWORK

U0029

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0029

Vehicle Communication Bus A (Performance)

U0029 is a generic network communication code indicating that the vehicle's main communication bus, typically the high-speed Controller Area Network (CAN), is not performing to the expected standard. The computer has detected that the bus is active but that signal quality, timing, or message integrity falls outside the manufacturer's acceptable parameters, which can disrupt communication between control 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 illuminated simultaneously, often including the check engine light, ABS, and traction control
- Intermittent or complete failure of dashboard gauges and instrument cluster displays
- The engine may start but run poorly, or the vehicle may fail to start at all
- Erratic operation of electronic features such as power windows, locks, or climate control
- Often no symptoms besides the warning light if the performance degradation is minor or intermittent
- Communication loss with scan tool during diagnostics, preventing access to some modules

Common causes, most likely first

- Damaged or chafed wiring on the CAN bus, especially where harnesses flex or pass through tight spaces
- Corroded, loose, or backed-out pins in a module connector or splice pack
- A failing control module that is corrupting bus messages or pulling the bus voltage out of spec
- Improperly installed aftermarket electronics tapping into the CAN bus and introducing noise or impedance faults
- A shorted or open termination resistor inside one of the modules, altering bus impedance
- Water intrusion into a connector or module causing intermittent signal degradation
- Poor ground connection for one or more modules on the bus, leading to unstable reference voltage



How to diagnose and fix it

- 1 Connect a scan tool and record all stored codes across every module to identify which modules are offline or reporting communication faults
- 2 Inspect the CAN bus wiring for visible damage, chafing, or corrosion, paying close attention to areas near moving components and known moisture paths
- 3 Measure resistance across the CAN high and CAN low circuits at the diagnostic link connector (DLC) with the battery disconnected; a reading near 60 ohms indicates proper termination, while a significantly different value points to a wiring or termination fault
- 4 Check for aftermarket accessories wired into the CAN bus and disconnect them temporarily to see if the code clears
- 5 Perform a voltage drop test on the ground circuits for modules on the affected bus to rule out poor grounding
- 6 Use an oscilloscope to view the CAN bus waveform and identify signal integrity issues such as noise, incorrect voltage levels, or missing messages
- 7 If wiring and grounds are confirmed good, isolate modules one at a time by disconnecting them to see if bus performance returns to normal, identifying the faulty module

What Most Techs Miss on U0029

- A common misdiagnosis is replacing the instrument cluster or engine control module when the real fault is a single chafed wire behind the dashboard or in the door jamb boot.
- Aftermarket remote starters, alarm systems, and dash cameras tapped into the CAN bus are frequent culprits because they introduce extra capacitance and noise that degrade bus performance without setting a hard fault.
- U0029 can be set by a module that is still communicating but sending malformed or out-of-timing messages, so a module that responds to a scan tool is not automatically healthy.
- Low battery voltage or a failing alternator can cause bus performance codes on many vehicles because modules drop offline or reset when supply voltage sags during cranking.
- A single bad termination resistor inside one module can pull the entire bus out of specification, yet the module itself may still appear to function normally in other respects.

Can I keep driving with U0029?

If the vehicle runs and drives normally with only a warning light, you can drive it cautiously to a repair shop, but avoid long trips and high-speed driving. If multiple warning lights are on, the engine runs poorly, or the vehicle fails to start, stop driving and have it towed because communication loss can affect safety systems.



Tools that help

- OBD-II scan tool with bidirectional communication and module access
- Digital multimeter with resistance and voltage measurement
- Oscilloscope with CAN bus decoding capability
- Wiring diagram and connector pinout reference for the vehicle
- Breakout box or back-probe kit for the diagnostic link connector

Reading U0029

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

Often seen with

U0001 Loss of Bus Communication · **U0002** High Speed CAN Communication Bus (Performance) · **U0100** Lost Communication With ECM/PCM A · **U0121** Lost Communication With Anti-Lock Brake System (ABS) Control · **U0140** Lost Communication With Instrument Panel Cluster

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/u0029/>

