

GENERIC · NETWORK

U0296

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0296

Lost Communication With AC/DC Converter Control Module A

U0296 is a generic network communication code indicating that the engine control module (ECM) or another primary module has lost the controller area network (CAN) signal from the AC/DC converter control module A. The computer detects this when it expects periodic status messages from that converter over the communication bus but receives none within a set time window, often because the converter is unpowered, disconnected, or its CAN wiring is faulty.

SYSTEM Network	CODE TYPE Generic (all makes)	SEVERITY Medium	FIX DIFFICULTY Intermediate	AREA Lost communication with a control module
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Symptoms you may notice

- Illumination of the check engine light or a dedicated service warning for the high-voltage system
- Often no symptoms besides the warning light, with the vehicle driving normally
- Loss of 12-volt accessory power or charging if the AC/DC converter also supplies the low-voltage bus
- Reduced or disabled high-voltage functions such as cabin preconditioning or accessory outlets
- Inability to clear the code with a scan tool because the module remains offline
- Other communication codes stored in multiple modules if the converter shares a bus segment

Common causes, most likely first

- 1 Blown fuse or tripped circuit breaker feeding the AC/DC converter control module
- 2 Corroded, loose, or damaged connector at the converter or its inline harness
- 3 Open or shorted CAN bus wiring between the converter and the gateway or ECM
- 4 Failed AC/DC converter control module internal power supply or CAN transceiver
- 5 Low or unstable 12-volt battery voltage causing modules to drop offline intermittently
- 6 Water intrusion or heat damage affecting the converter or its wiring in the engine bay or underbody
- 7 Aftermarket accessory wired into the converter circuit causing a voltage drop or bus interference



How to diagnose and fix it

- 1 Verify battery voltage and charge or replace the battery if it is below 12.4 volts at rest
- 2 Check all fuses and circuit breakers that supply the AC/DC converter control module, including those in the engine bay and interior fuse boxes
- 3 Inspect the converter connector and harness for corrosion, pushed pins, or chafed wires, and clean or repair as needed
- 4 Measure CAN bus resistance and voltage at the converter connector to confirm the bus is intact and not shorted
- 5 Perform a network communication test with a scan tool to see if the converter responds at all and to check for other lost-communication codes
- 6 If power, ground, and bus signals are good, substitute a known-good converter or perform a module swap test to confirm the fault
- 7 After repair, clear codes and drive the vehicle through a complete communication self-test cycle to verify U0296 does not return

When the converter is not the culprit

- A weak or failing 12-volt battery is a frequent hidden cause of U0296 because the converter may boot up slowly or drop off the bus during cranking, setting the code without any hard fault.
- The AC/DC converter control module A is sometimes called an inverter or power control unit, and technicians who search only for 'converter' may overlook the correct fuse or relay.
- U0296 can be set by a gateway module that is itself failing to route messages, so always check for communication codes in the gateway before condemning the converter.
- Aftermarket alarms or dash cameras tapped into the CAN bus near the converter can corrupt signals and trigger U0296 intermittently, especially if the wiring is unshielded.
- A converter that is completely dead may not set U0296 if the vehicle's network is designed to ignore missing modules after a timeout, so the presence of the code actually confirms the module was expected on the bus.

Can I keep driving with U0296?

You can usually continue driving short distances because the vehicle often remains drivable, but avoid using high-voltage accessories and do not ignore repeated warnings. If the converter also charges the 12-volt battery, monitor battery voltage and seek service soon to prevent a no-start condition.



Tools that help

- OBD-II scan tool with CAN bus communication capabilities
- Digital multimeter with resistance and voltage measurement
- Fuse puller and test light
- Wiring diagram for the AC/DC converter circuit
- Terminal pick and electrical contact cleaner
- Battery charger and load tester

Reading U0296

U	Network: communication between the vehicle's control modules.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
2	Lost communication with a control module.
96	The exact fault within that area.

Often seen with

U0100 Lost Communication With ECM/PCM A · **U0111** Lost Communication With Battery Energy Control Module 'A' · **U0140** Lost Communication With Instrument Panel Cluster · **U0295** Lost Communication with Power Steering Control Module · **U0297** Lost Communication with Hybrid Powertrain Control Module

See it working

Watch the animated explainer [How a Supercharger Works: Roots Blower in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0296/>

