

GENERIC · NETWORK

U01B6

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U01B6

Lost Communication With Fuel Heater Control Module

U01B6 is a generic network communication code indicating that one or more control modules on the vehicle's controller area network (CAN) bus have lost contact with the fuel heater control module. The computer detects this when the fuel heater module stops broadcasting its periodic status messages or fails to acknowledge requests from other modules, typically setting the code in the module that was expecting that data.

SYSTEM

Network

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Lost communication with a control module

Symptoms you may notice

- Illumination of the check engine light or a dedicated communication fault warning on the dashboard
- Often no symptoms besides the warning light, especially in warm weather when the fuel heater is not needed
- Hard starting or rough running in cold ambient temperatures if the fuel heater is inoperative and fuel gelling occurs
- Other unrelated warning lights or module communication codes appearing simultaneously due to shared bus wiring
- Intermittent no-start or stalling if the fuel heater module shares a power or ground circuit with the engine control module

Common causes, most likely first

- 1 Open or chafed wire in the CAN bus circuit between the fuel heater control module and the rest of the network
- 2 Corroded or loose electrical connector at the fuel heater control module or at a shared bus splice point
- 3 Failed fuel heater control module, often due to internal water intrusion or thermal damage
- 4 Blown fuse or faulty relay supplying power to the fuel heater control module
- 5 Poor ground connection for the fuel heater control module, causing intermittent communication loss
- 6 Another module on the same bus segment shorting the CAN lines and disrupting communication for the fuel heater module
- 7 Software or configuration mismatch in a module that was recently replaced or reprogrammed



How to diagnose and fix it

- 1 Connect a scan tool and record all stored codes in every module, then verify that U01B6 is current and not history
- 2 Inspect the fuel heater control module connector and the CAN bus wiring for corrosion, chafing, or loose pins
- 3 Check the fuse and relay that supply power to the fuel heater control module and confirm battery voltage at the module
- 4 Measure resistance on the CAN high and CAN low circuits to check for opens, shorts to ground, or shorts to voltage
- 5 Perform a voltage drop test on the fuel heater control module ground circuit to rule out a bad ground
- 6 Substitute a known-good fuel heater control module or use a breakout box to confirm the module is not responding
- 7 Clear codes and perform a road test to verify communication is restored and the code does not return

What most technicians miss on U01B6

- A failed fuel heater control module often sets communication codes in several modules at once, so technicians who only scan the engine control module may miss the root cause entirely.
- The fuel heater control module can lose communication intermittently due to water intrusion in the connector, which does not show up in a static resistance test and requires a wiggle test while monitoring live data.
- A shorted CAN bus wire from a different module can pull down the entire network and make the fuel heater module appear faulty when it is actually fine.
- Replacing the fuel heater control module without checking power and ground circuits is a common misdiagnosis that leads to repeat failures.
- Some vehicles use a LIN bus or a dedicated serial line for the fuel heater module rather than the main CAN bus, so the code may point to a sub-network fault rather than a main bus issue.

Can I keep driving with U01B6?

You can generally drive the vehicle with U01B6 stored, but avoid cold-weather operation where the fuel heater is needed to prevent fuel gelling and hard starting. If the vehicle runs poorly or stalls, stop driving and have the communication fault diagnosed promptly.

Tools that help

- OBD-II scan tool with bidirectional communication and live data capability
- Digital multimeter with resistance and voltage drop functions
- Wiring diagram for the specific vehicle's CAN bus and fuel heater circuit
- Breakout box or back-probe kit for testing module connectors
- Test light or power probe for checking power and ground at the module



Reading U01B6

- U** Network: communication between the vehicle's control modules.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 1** Lost communication with a control module.
- B6** The exact fault within that area.

Often seen with

U0100 Lost Communication With ECM/PCM A · **U0101** Lost Communication with TCM · **U0121** Lost Communication With Anti-Lock Brake System (ABS) Control · **U0140** Lost Communication With Instrument Panel Cluster · **U0155** Lost Communication With Body Control Module

See it working

Watch the animated explainer [How a Gyroscope Works: Gimbals and Precession](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u01b6/>

