

GENERIC · NETWORK

U0677

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0677

Lost Communication With Fuel Level Sensor B

U0677 is a generic network communication code indicating that a control module on the vehicle's Controller Area Network (CAN) bus has lost contact with the fuel level sensor B circuit. The computer sets this code when it expects regular data messages from that sensor but does not receive them within the required time window, often due to a wiring fault, a failed sensor, or a module communication issue.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Network	Generic (all makes)	Low	Intermediate	Network communication

Symptoms you may notice

- The fuel gauge may read empty, full, or fluctuate erratically regardless of actual fuel level.
- A warning light on the dashboard, typically the check engine light or a dedicated fuel system message.
- Often no symptoms besides the warning light, especially if the vehicle uses a secondary fuel level sensor for the main gauge.
- Remote start or fuel door release features may be disabled on some vehicles.
- The trip computer may show incorrect distance-to-empty or average fuel economy readings.

Common causes, most likely first

- A faulty fuel level sensor B, including a worn sending unit or a failed internal resistor track.
- Damaged, corroded, or disconnected wiring or connectors between the sensor and the control module.
- A blown fuse or poor ground connection serving the fuel level sensor circuit.
- A software or communication fault in the module that monitors the sensor, requiring a reset or reprogramming.
- CAN bus communication problems, such as a shorted or open data line, that prevent sensor messages from reaching the module.
- A failed fuel pump module assembly that houses the sensor, especially on vehicles where both are integrated.



How to diagnose and fix it

- 1 Use an OBD-II scanner to confirm U0677 is current and check for related communication codes in other modules.
- 2 Visually inspect the fuel level sensor B wiring and connectors for damage, corrosion, or loose pins, starting at the sensor and working toward the module.
- 3 Test the sensor's resistance or voltage output with a multimeter and compare to the manufacturer's specification while moving the float arm.
- 4 Check the fuse and ground connections for the fuel level sensor circuit and repair any faults found.
- 5 If wiring and sensor test good, perform a module reset or software update as directed by the manufacturer's service information.
- 6 Replace the fuel level sensor B or the integrated fuel pump module if testing confirms it is faulty.
- 7 Clear the code and verify repair by test-driving the vehicle and confirming the fuel gauge operates correctly and the code does not return.

What Most Techs Overlook on U0677

- A weak or failing battery or charging system can cause intermittent communication codes like U0677, so always check battery voltage and ground quality before condemning the sensor.
- On many vehicles, fuel level sensor B is a secondary sensor used for the fuel gauge or for emissions monitoring, so the main fuel gauge may still work normally and mask the fault.
- Aftermarket accessories such as remote starters or alarm systems tapped into the CAN bus can disrupt communication and set U0677 without any fault in the fuel sensor itself.
- A fuel level sensor that reads correctly on a multimeter but has a worn spot in its resistor track can still cause intermittent dropouts that set the code only under certain fuel levels.
- The code can be set by a module that is failing to wake up or communicate properly, so a no-start or dead battery condition may leave U0677 stored even after the sensor circuit is repaired.

Can I keep driving with U0677?

The vehicle is generally safe to drive because the fault affects fuel level information rather than engine operation, but you should refuel based on the trip odometer and avoid relying on the fuel gauge until the fault is repaired.

Tools that help

- OBD-II scanner with live data and CAN communication capability
- Digital multimeter
- Wiring diagram and service information for the specific vehicle
- Socket set and trim removal tools for accessing the fuel tank sending unit
- Test light or power probe for checking circuits



Reading U0677

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

Often seen with

P0460 Fuel Level Sensor Circuit Malfunction · **P0461** Fuel Level Sensor Circuit Range/Performance · **P0462** Fuel Level Sensor Circuit Low Input · **U0100** Lost Communication With ECM/PCM A · **U0155** Lost Communication With Body Control Module

See it working

Watch the animated explainer [Excavator Simulator: Hydraulics You Can Operate](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0677/>

