

GENERIC · NETWORK

U061C

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U061C

Lost Communication With Reductant Temperature Sensor A

U061C 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 Reductant Temperature Sensor A, which is part of the diesel exhaust fluid (DEF) system. The module that sets this code is not receiving the expected temperature data message from that sensor over the communication bus, so it cannot monitor reductant temperature for emissions control.

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

Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL) on the dashboard.
- Often no symptoms besides the warning light, especially if the fault is intermittent.
- Possible activation of limp mode or reduced engine power after repeated drive cycles.
- A driver information message indicating a DEF system fault or service emissions system.
- Slightly increased fuel consumption or altered regeneration behavior in some vehicles.
- In rare cases, the engine may enter a derate strategy that limits vehicle speed.

Common causes, most likely first

- 1 A faulty reductant temperature sensor A or its internal circuitry.
- 2 Damaged, corroded, or disconnected wiring or connector at the sensor or along the harness.
- 3 A blown fuse or poor ground connection shared by the sensor circuit.
- 4 A software or calibration issue in the control module that publishes the sensor data on the CAN bus.
- 5 A failed control module that is responsible for relaying the reductant temperature signal.
- 6 CAN bus communication faults such as a shorted or open data line affecting multiple modules.
- 7 Aftermarket accessories or poor electrical repairs that introduce interference on the network.



How to diagnose and fix it

- 1 Connect a scan tool and record all stored and pending codes, then verify that U061C is current and not history.
- 2 Inspect the reductant temperature sensor A connector and harness for corrosion, chafing, or loose pins, and repair as needed.
- 3 Check the sensor's resistance or voltage output against the manufacturer's specification using a multimeter.
- 4 Test the CAN bus data lines for continuity, shorts to ground, or shorts to voltage, and repair any wiring faults.
- 5 Verify that the control module that publishes the reductant temperature message is powered and grounded correctly.
- 6 If the sensor and wiring test good, reflash or update the control module software per any applicable technical service bulletin.
- 7 Replace the reductant temperature sensor A only after all electrical and communication checks have passed.

When the sensor is not the real culprit

- A loose or corroded connector at the reductant temperature sensor is far more common than a failed sensor, and simply reseating it can clear the code.
- This code can be set by a low battery or charging system fault that causes modules to drop off the CAN bus intermittently, so always check battery voltage and grounds first.
- U061C often appears alongside other U-codes when a single module or shared power feed fails, so diagnosing the root communication fault is more important than chasing each code individually.
- Some vehicles require a relearn or adaptation reset after repairing the circuit, and the code may remain stored until several clean drive cycles are completed.
- Aftermarket remote starters or poor electrical repairs can introduce CAN bus interference that mimics a sensor communication failure, so inspect for non-factory wiring.

Can I keep driving with U061C?

The vehicle is generally safe to drive short distances to a repair shop, but avoid long trips or heavy loads because the fault can escalate to a limp mode or emissions-related derate. Do not ignore the warning light, as continued driving may lead to more severe communication faults or emissions system damage.

Tools that help

- OBD-II scan tool with CAN bus capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- CAN bus breakout box or oscilloscope
- Socket and ratchet set
- Contact cleaner and dielectric grease



Reading U061C

- 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.
- 1C** The exact fault within that area.

Often seen with

P20B9 Reductant Heater A Control Circuit/Open · **P20BA** Reductant Heater A Control Performance · **U0100** Lost Communication With ECM/PCM A · **U0101** Lost Communication with TCM · **U0121** Lost Communication With Anti-Lock Brake System (ABS) Control

See it working

Watch the animated explainer [How a Padlock Works: Pin Tumbler Lock in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u061c/>

