

GENERIC · NETWORK

U0666

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0666

Lost Communication With Reductant Pressure Sensor

U0666 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 pressure sensor, which is part of the diesel exhaust fluid (DEF) system. The module that monitors the sensor, typically the engine control module or a dedicated reductant control module, has stopped receiving valid pressure data over the communication bus, so it cannot verify that the DEF system is building and holding the correct pressure.

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

- Illumination of the check engine light or a dedicated emissions system warning lamp.
- A message on the driver information display indicating a reductant or DEF system fault, often with a countdown to reduced engine power.
- The vehicle may enter limp mode or limit engine torque shortly after the warning appears.
- Rough running or poor acceleration if the engine control module defaults to a reduced-power strategy.
- Often no symptoms besides the warning light, because the fault is a communication loss rather than a mechanical failure of the pressure sensor itself.
- In some cases, the vehicle may refuse to restart after the engine is shut off once the fault is active.

Common causes, most likely first

- 1 A failed reductant pressure sensor or its internal electronics, which stops transmitting data on the CAN bus.
- 2 Damaged, corroded, or chafed wiring in the sensor harness or connector, interrupting the CAN signal or power supply.
- 3 A faulty reductant control module or engine control module that has lost its CAN transceiver or has an internal communication fault.
- 4 Low or contaminated diesel exhaust fluid that causes the sensor to report out-of-range values, leading the module to flag a communication loss.
- 5 A blown fuse or poor ground connection shared by the reductant pressure sensor circuit.
- 6 CAN bus network faults such as a shorted or open data line elsewhere on the bus that disrupts communication with the reductant sensor.
- 7 Software or calibration issues in the control module that incorrectly interpret a brief signal dropout as a permanent communication loss.



How to diagnose and fix it

- 1 Connect a scan tool and retrieve all stored and pending codes from every module to confirm U0666 is active and to identify any related communication codes.
- 2 Inspect the reductant pressure sensor connector and harness for corrosion, loose pins, chafing, or rodent damage, and repair as needed.
- 3 Check the sensor circuit fuses and grounds with a multimeter, and verify that the sensor receives the correct reference voltage and ground.
- 4 Measure the CAN bus resistance and signal integrity at the sensor connector to rule out a network fault before replacing parts.
- 5 If wiring and power are good, substitute a known-good reductant pressure sensor and clear the code to see if communication returns.
- 6 Reprogram or update the reductant control module or engine control module with the latest calibration if a software issue is suspected.
- 7 As a last step, replace the reductant control module or engine control module only after confirming that all external circuits and the sensor are functioning correctly.

Communication loss is not always the sensor

- A common misdiagnosis is to replace the reductant pressure sensor immediately, but a chafed wire or corroded connector pin is just as likely to cause the same communication loss and costs far less to fix.
- U0666 can be set by a low DEF fluid level or contaminated fluid because the sensor may report a pressure value outside the expected range, which the module interprets as a lost communication signal.
- A weak or failing vehicle battery can cause multiple modules to drop off the CAN bus intermittently, setting U0666 along with other communication codes that disappear after a battery replacement.
- The code does not always mean the sensor is dead; a faulty reductant control module or a CAN bus fault elsewhere on the network can prevent the sensor's data from reaching the monitoring module.
- After any repair, the vehicle may require a relearn or adaptation drive cycle before the reductant pressure reading is accepted and the warning lamp clears.

Can I keep driving with U0666?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy loads and long trips because the engine may enter limp mode or refuse to restart once the fault is active. If the warning includes a countdown to reduced power, schedule service immediately.



Tools that help

- OBD-II scan tool with CAN bus and manufacturer-specific software
- Digital multimeter with CAN bus measurement capability
- Wiring diagram and connector pinout for the reductant pressure sensor circuit
- Test light or power probe for checking power and ground
- CAN bus breakout box or oscilloscope for signal integrity testing

Reading U0666

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.
66	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 · **U029D** Lost Communication With NOx Sensor A · **U029E** Lost Communication With NOx Sensor B

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/u0666/>

