

GENERIC · NETWORK

U0635

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0635

Lost Communication With Hybrid/EV Battery Pack Coolant Temperature Sensor B

U0635 is a network communication code indicating that one or more control modules have lost contact with the hybrid or electric vehicle battery pack coolant temperature sensor B, which is typically a second sensor in the pack cooling circuit. The computer detected that the expected periodic message from that sensor or its dedicated module stopped arriving on the vehicle's communication bus.

SYSTEM

Network

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Network communication

Symptoms you may notice

- Illumination of the check engine light or a hybrid system warning light on the dashboard.
- Often no symptoms besides the warning light, especially if the vehicle continues to operate normally.
- Reduced hybrid system power or a forced limp mode if the battery pack cooling strategy cannot be confirmed.
- Inconsistent or disabled cabin climate control because pack cooling and cabin cooling may share components.
- A message on the driver information display indicating a hybrid system fault or service required.
- Possible reduced electric-only range or reluctance to enter EV mode under load.

Common causes, most likely first

- 1 A failed coolant temperature sensor B itself, causing it to stop transmitting data on the bus.
- 2 Damaged, chafed, or corroded wiring in the sensor circuit between the sensor and its control module.
- 3 A loose or corroded connector at the sensor or at the module that relays the sensor signal.
- 4 A fault in the battery pack control module or the module that acts as the gateway for sensor B.
- 5 Low or contaminated coolant causing the sensor to read out of range and the module to drop its message.
- 6 A software or calibration issue in the battery pack control module that interrupts sensor reporting.
- 7 A network bus fault, such as a short or open on the communication line, that prevents the sensor message from reaching other modules.



How to diagnose and fix it

- 1 Connect a scan tool and record all stored codes in every module, then verify that U0635 is current and not history.
- 2 Inspect the coolant temperature sensor B and its connector for physical damage, corrosion, or loose pins.
- 3 Check the coolant level and condition, and pressure-test the cooling system for leaks or air pockets.
- 4 Measure resistance or voltage at the sensor and compare it to the manufacturer's specification for the ambient temperature.
- 5 Perform a wiggle test on the sensor harness while watching live data to reveal intermittent wiring faults.
- 6 Check for communication bus integrity on the relevant network using a scan tool or oscilloscope.
- 7 If the sensor and wiring test good, follow the manufacturer's diagnostic flow for the battery pack control module, including software updates or module replacement.

What a coolant sensor B code really means

- U0635 is a communication code, not a direct sensor performance code, so replacing the sensor without checking the bus and connectors often fails to fix the fault.
- The sensor is often part of a battery pack cooling circuit that also conditions cabin air, so a fault can affect climate control even when the engine runs normally.
- A weak or failing 12-volt battery can cause multiple U-codes by disrupting module communication, so always check battery health before condemning hybrid components.
- Some vehicles use a dedicated battery energy control module that relays sensor data, and a fault in that module can set U0635 without any problem at the sensor itself.
- After repairs, the code may remain stored until a specific drive cycle completes, so clearing codes and verifying a full readiness cycle is essential.

Can I keep driving with U0635?

The vehicle is usually safe to drive short distances to a repair facility, but avoid heavy acceleration, sustained high speeds, and extreme temperatures because the battery pack may not be cooled properly. If the hybrid system warning is red or the vehicle enters limp mode, stop driving and arrange a tow.

Tools that help

- OBD-II scan tool with live data and module communication capabilities
- Digital multimeter
- Oscilloscope for bus and sensor signal analysis
- Manufacturer service information for wiring diagrams and diagnostic flow charts
- Coolant refractometer or tester
- Terminal pick and contact cleaner for connector inspection



Reading U0635

- 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.
- 35** The exact fault within that area.

Often seen with

P0A93 Inverter A Cooling System Performance · **P0A94** DC/DC Converter A Performance · **U0100** Lost Communication With ECM/PCM A · **U0634** Lost Communication With Hybrid/EV Battery Pack Coolant Tempe · **U0636** Lost Communication With Hybrid/EV Battery Pack Coolant Contr

See it working

Watch the animated explainer [Engine Cooling System Trainer: How Engines Stay Cool](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0635/>

