



U064A

Lost Communication With Hybrid/EV Battery Pack Current Sensor A

U064A 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 hybrid or electric vehicle battery pack current sensor designated as Sensor A. The module that sets this code, typically the battery energy control module or hybrid control module, expected to receive regular current readings over the communication bus but stopped seeing those messages for a calibrated amount of time.

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

Symptoms you may notice

- Illumination of the check engine light or a dedicated hybrid system warning light, often with no other noticeable symptoms.
- Reduced power or a limp-home mode as the hybrid control system defaults to a conservative strategy without valid current data.
- The hybrid or electric vehicle may refuse to enter ready mode or may shut down shortly after start-up.
- Inaccurate or frozen state-of-charge and power-flow displays on the dashboard or infotainment screen.
- In some vehicles, the engine may run continuously or the stop-start function may be disabled because the system cannot trust battery current information.

Common causes, most likely first

- 1 A failed or intermittent battery pack current sensor, which is often integrated into the battery pack wiring harness or mounted directly on the pack.
- 2 Damaged, corroded, or loose wiring and connectors between the current sensor and the module that monitors it.
- 3 A faulty battery energy control module or hybrid control module that is not transmitting or receiving CAN messages correctly.
- 4 Low or unstable 12-volt supply voltage to the current sensor or the control module, causing communication dropouts.
- 5 CAN bus faults such as a shorted or open data line, or excessive resistance in the network, that disrupt messages from the current sensor.
- 6 Water intrusion or physical damage to the battery pack connector area, which is common on vehicles that operate in wet or salty environments.



How to diagnose and fix it

- 1 Perform a full scan of all modules to confirm U064A is current and to identify any companion communication codes that point to a shared bus or power issue.
- 2 Inspect the battery pack current sensor connector and the harness routing for corrosion, chafing, or loose pins, and repair any obvious wiring faults before replacing parts.
- 3 Measure the 12-volt power and ground supplies at the current sensor and at the control module that sets the code, and compare them with the manufacturer's specifications.
- 4 Check the CAN bus integrity with a digital multimeter or oscilloscope, looking for correct differential voltage and no shorts to ground or battery voltage.
- 5 If the sensor is a serviceable component, substitute a known-good sensor or perform a resistance and signal output test according to the service information.
- 6 After any repair, clear the code and perform a road test that includes several key cycles and a period of hybrid battery current flow to verify the communication remains stable.
- 7 If the fault returns and all wiring and power supplies are confirmed good, follow the manufacturer's diagnostic flow for replacing and programming the battery energy control module or current sensor as applicable.

Why U064A is often a wiring fault

- A large share of U064A cases are caused by a poor connection at the current sensor connector rather than a failed sensor, especially on vehicles that have had battery pack service or underbody repairs.
- The code can be set by a momentary communication dropout during a low-voltage event such as a weak 12-volt battery or a jump start, so always check battery health and charging system output before condemning the sensor.
- Some vehicles use the current sensor data for more than state-of-charge calculation, including safety shutdown logic, so a communication loss can trigger a reduced-power strategy even when the sensor itself is electrically intact.
- A generic scan tool may show U064A as the only code, but the manufacturer-specific software often reveals additional pending codes in the battery energy control module that pinpoint whether the fault is on the sensor side or the module side.
- Replacing the current sensor without checking the CAN bus termination and shield integrity can lead to a repeat failure, because a marginal network can drop messages only under certain temperature or vibration conditions.

Can I keep driving with U064A?

The vehicle may enter a reduced-power mode or refuse to start, so avoid long trips and high-load driving until the fault is diagnosed. If the hybrid system warning is active and the car will not enter ready mode, do not continue driving and arrange for a scan and inspection.



Tools that help

- OBD-II scan tool with manufacturer-specific software or a capable generic scan tool that can read all modules
- Digital multimeter with min/max recording for voltage and resistance checks
- Oscilloscope for CAN bus signal integrity testing
- Breakout box or back-probe kit for connector testing without damage
- Service information with wiring diagrams and connector pinouts for the specific vehicle

Reading U064A

- 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.
- 4A** The exact fault within that area.

Often seen with

P0AFA Hybrid/EV Battery System Voltage Low · **U0100** Lost Communication With ECM/PCM A · **U0111** Lost Communication With Battery Energy Control Module 'A' · **U064B** Lost Communication With Hybrid/EV Battery Pack Current Senso · **U064C** Lost Communication With Hybrid/EV Battery Pack Current Senso

See it working

Watch the animated explainer [How Regenerative Braking Works in Electric Cars](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u064a/>

