

GENERIC · NETWORK

U0313

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0313

Software Incompatibility with Battery Energy Control Module B

U0313 is a network communication fault indicating that a control module on the vehicle's data bus has detected a software incompatibility with the Battery Energy Control Module B (BECM B). The computer is not reporting a hardware failure of the battery pack itself, but rather that the software versions, calibration levels, or configuration data exchanged between the BECM B and another module do not match what the system expects.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Network	Generic (all makes)	Medium	Professional	Software and configuration mismatches

Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL) or a dedicated service vehicle soon message on the dashboard.
- Often no symptoms besides the warning light, with the vehicle driving and charging normally.
- Inability to complete a high-voltage battery state-of-health check or hybrid system self-test during a scan tool session.
- Intermittent failure of battery-related features such as state-of-charge display, EV range estimation, or charge scheduling.
- A no-start condition or refusal to enter ready mode if the incompatibility blocks the power-up handshake between modules.
- Multiple unrelated warning lights or communication codes appearing simultaneously because the bus is disrupted.



Common causes, most likely first

- 1 Software or calibration mismatch between the BECM B and another module following a partial or incorrect reprogramming event.
- 2 A replacement BECM B installed without performing the required configuration, coding, or software alignment procedure.
- 3 Corrupted or incomplete flash memory in the BECM B or a related module after a failed update or low-voltage event during programming.
- 4 Aftermarket performance tuner or piggyback device that alters CAN (Controller Area Network) messages and confuses the BECM B software handshake.
- 5 Low battery voltage or poor ground connections causing modules to boot with incomplete software checksums.
- 6 A faulty BECM B internal processor that cannot execute the expected software routine, though this is less common than configuration errors.
- 7 Wiring or connector issues on the CAN bus that corrupt the software version exchange between modules.

How to diagnose and fix it

- 1 Connect a capable scan tool and read all modules for stored codes, software part numbers, and calibration IDs to identify which module reports the incompatibility.
- 2 Verify battery voltage and condition, then clear the code and perform a full ignition cycle to see if U0313 returns immediately or only after a specific event.
- 3 Check for and complete any outstanding manufacturer software updates or service bulletins that address BECM B communication or calibration compatibility.
- 4 Perform the BECM B configuration or coding procedure with the scan tool, ensuring the correct software and variant are written for the vehicle.
- 5 Inspect CAN bus wiring and connectors at the BECM B and related modules for corrosion, loose pins, or chafed wires that could corrupt data.
- 6 If configuration fails or the code persists, substitute a known-good BECM B only after confirming all software and wiring are correct, then reprogram and align it.
- 7 After any repair, clear all codes, perform a full system scan, and road-test the vehicle through several drive cycles to confirm the incompatibility is resolved.



Why a simple reprogram often fixes U0313

- U0313 is frequently set after a battery replacement or module swap when the new BECM B is not flashed with the correct software for that vehicle's configuration.
- A weak 12-volt battery can cause modules to boot with corrupted software checksums, setting U0313 even though the BECM B hardware is perfectly healthy.
- Technicians sometimes replace the BECM B unnecessarily when the real fault is a missing or failed software update on a different module that communicates with it.
- Aftermarket charging or telematics accessories that inject messages on the CAN bus can trigger U0313 by mimicking or interfering with the BECM B software handshake.
- The code can be stored in a module other than the BECM B itself, so always check all modules for U0313 and related communication codes before condemning the battery controller.

Can I keep driving with U0313?

The vehicle may remain drivable, but the software incompatibility can disable battery management safeguards or prevent the hybrid system from starting, so avoid long trips and do not ignore the warning. Have the fault diagnosed promptly, especially if the vehicle shows reduced power or charging issues.

Tools that help

- Manufacturer-level scan tool with module programming and configuration capability
- Digital multimeter for battery voltage and continuity checks
- CAN bus breakout box or oscilloscope for signal integrity testing
- Battery charger or power supply to maintain stable voltage during programming
- Socket and trim tools for accessing the BECM B and related modules

Reading U0313

U	Network: communication between the vehicle's control modules.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
3	Software and configuration mismatches.
13	The exact fault within that area.

Often seen with

U0100 Lost Communication With ECM/PCM A · **U0111** Lost Communication With Battery Energy Control Module 'A' · **U0312** Software Incompatibility with Battery Energy Control Module · **U0314** Software Incompatibility with Four-Wheel Drive Clutch Contro · **U3003** Battery Voltage



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/u0313/>

