

GENERIC · NETWORK

U0411

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0411

Invalid Data Received From Drive Motor Control Module

U0411 is a communication fault indicating that a control module received invalid or corrupted data from the drive motor control module over the vehicle's network. The computer detected a message from the drive motor controller that was missing expected parameters, out of range, or otherwise not usable, so it flagged the data as invalid rather than treating it as a valid signal.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Network	Generic (all makes)	Medium	Professional	Invalid data received from a module

Symptoms you may notice

- Illumination of the check engine light or service vehicle soon message, often with no other noticeable symptoms
- Reduced power or limp mode, where the vehicle limits acceleration or speed to protect the drive system
- Intermittent stalling or failure to start, particularly in hybrid or electric vehicles where the drive motor is essential for propulsion
- Unusual noises or vibrations from the drive motor area, though these may be unrelated to the communication fault itself
- Other warning lights such as ABS, traction control, or stability control, because those systems also rely on data from the drive motor controller
- Erratic operation of the gear selector or drive mode indicator, if the invalid data affects the controller's status messages

Common causes, most likely first

- 1 Corroded, loose, or damaged wiring and connectors in the controller area network (CAN) bus between the drive motor control module and the module that set the code
- 2 Failing drive motor control module, often due to internal circuit faults or heat damage
- 3 Low or unstable battery voltage, which can cause modules to send corrupted data frames
- 4 A software or calibration issue in either the drive motor controller or the receiving module, sometimes resolved by a reflash
- 5 Electromagnetic interference from aftermarket accessories or degraded shielding on communication wires
- 6 A faulty power or ground connection to the drive motor control module, leading to intermittent operation



How to diagnose and fix it

- 1 Use a scan tool to record all stored codes and freeze-frame data, then clear the code and test-drive to see if U0411 returns immediately or only under specific conditions
- 2 Inspect the battery state of charge and charging system output, as low voltage is a common cause of invalid data messages
- 3 Visually inspect the wiring harness and connectors at the drive motor control module and along the CAN bus for corrosion, chafing, or loose pins
- 4 Perform a voltage drop test on the power and ground circuits feeding the drive motor control module to rule out resistance issues
- 5 Check for technical service bulletins (TSBs) or software updates for the drive motor control module and the module that set the code
- 6 If wiring and power are good, substitute a known-good drive motor control module or perform a continuity and resistance test on the CAN bus to isolate the fault
- 7 After repair, clear codes and verify that U0411 does not return during a thorough test drive that includes the conditions noted in the freeze-frame data

What invalid data really means here

- U0411 is often set by a momentary voltage dip during engine cranking or a weak battery, so the drive motor controller is not necessarily defective.
- A poor ground connection at the drive motor controller can cause it to send corrupted messages without any visible wiring damage.
- Aftermarket electronic accessories wired into the CAN bus can introduce interference that the drive motor controller interprets as invalid data.
- Some vehicles set U0411 when the drive motor controller is healthy but the receiving module has a software glitch, so a reflash may be the correct fix.
- The code can be stored alongside transmission or hybrid system codes that mislead diagnosis, so always address communication faults before replacing major components.

Can I keep driving with U0411?

If the vehicle drives normally with only the warning light on, you can usually continue driving to a repair shop, but avoid heavy acceleration or long trips until the fault is diagnosed. If the vehicle enters limp mode, stalls, or shows multiple warning lights, stop driving and have it towed to prevent unsafe loss of power.



Tools that help

- OBD-II scan tool with CAN bus capability and live data recording
- Digital multimeter for voltage, resistance, and continuity testing
- Wiring diagram and connector pinout for the specific vehicle
- Battery load tester and charging system analyzer
- CAN bus breakout box or oscilloscope for signal integrity checks

Reading U0411

- U** Network: communication between the vehicle's control modules.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 4** Invalid data received from a module.
- 11** The exact fault within that area.

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **U0100** Lost Communication With ECM/PCM A · **U0111** Lost Communication With Battery Energy Control Module 'A' · **U0410** Invalid Data Received From Fuel Pump Control Module · **U0412** Invalid Data Received From Battery Energy Control Module A

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/u0411/>

