

GENERIC · NETWORK

U302B

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U302B

Ignition Output Accessory/On/Start

U302B is a generic network communication code indicating that a control module has lost or received invalid data from the ignition output accessory/on/start circuit, which is responsible for reporting the ignition switch position to various modules. The computer detected a mismatch or missing signal on the communication bus regarding the ignition status, often due to a wiring fault, a failing ignition switch, or a module that is not reporting correctly.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Network	Generic (all makes)	Medium	Intermediate	Network wiring and bus faults

Symptoms you may notice

- The warning light (check engine or service vehicle soon) illuminates on the dashboard.
- The vehicle may fail to start or may start intermittently because modules are unsure of the ignition position.
- Accessories such as the radio or interior lights may not power on or may stay on after the key is removed.
- The engine may stall unexpectedly or hesitate during acceleration due to conflicting ignition status signals.
- Multiple unrelated warning lights may illuminate because several modules rely on the ignition status message.
- Often no symptoms besides the warning light, especially if the fault is intermittent and does not affect starting.

Common causes, most likely first

- 1 A faulty ignition switch or ignition cylinder that fails to send a clean accessory/on/start signal.
- 2 Damaged or corroded wiring in the ignition switch circuit, including the harness connectors at the switch or body control module.
- 3 A failing body control module (BCM) or ignition control module that cannot process or transmit the ignition status correctly.
- 4 A weak or failing battery or poor ground connection causing voltage drops that disrupt the ignition signal.
- 5 A software or calibration issue in one of the modules on the communication network, requiring a reflash or update.
- 6 Aftermarket accessories improperly wired into the ignition circuit, causing interference or excessive load.
- 7 A short or open in the communication bus (CAN, LIN, or other) that prevents the ignition status message from reaching all modules.



How to diagnose and fix it

- 1 Perform a battery and charging system test to rule out low voltage or a weak battery as the root cause.
- 2 Inspect the ignition switch and its connectors for corrosion, loose pins, or mechanical wear, and test the switch with a multimeter for continuity in each key position.
- 3 Check all ground connections related to the ignition circuit and the body control module for tightness and cleanliness.
- 4 Use a scan tool to read live data for ignition switch status and compare it with the actual key position to identify discrepancies.
- 5 Perform a voltage drop test on the ignition switch circuit wiring to locate excessive resistance or a bad connection.
- 6 If the ignition switch and wiring are good, check for technical service bulletins (TSBs) or software updates for the body control module or other modules that may address the communication error.
- 7 As a last resort, substitute a known-good ignition switch or body control module to confirm the fault before replacing expensive components.

Ignition Switch Faults That Mimic Network Errors

- A worn ignition switch can produce intermittent open circuits that set U302B without any obvious starting problem, so testing the switch under load is essential.
- Corrosion inside the ignition switch connector is a common cause that is often overlooked because the outside looks clean; always inspect the terminals closely.
- This code can be set by a low battery or a failing alternator because voltage spikes or drops confuse the modules that monitor the ignition status.
- Aftermarket remote starters or alarm systems tapped into the ignition wiring frequently cause this code by introducing noise or incorrect signals.
- Some vehicles require a relearn procedure after replacing the ignition switch or body control module, and skipping it will leave U302B stored even after the repair.

Can I keep driving with U302B?

If the vehicle starts and runs normally, you can drive it to a repair shop, but avoid long trips or heavy electrical loads until the fault is fixed. If the engine stalls, fails to start, or multiple warning lights appear, stop driving and have the vehicle towed to prevent safety risks.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Test light
- Wiring diagram for the ignition switch circuit
- Basic hand tools (screwdrivers, socket set)
- Battery load tester

Reading U302B

U	Network: communication between the vehicle's control modules.
3	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
0	Network wiring and bus faults.
2B	The exact fault within that area.

Often seen with

U0100 Lost Communication With ECM/PCM A · **U0140** Lost Communication With Instrument Panel Cluster · **U3000** Control Module · **U3001** Control Module Improper Shutdown Performance · **U3003** Battery Voltage

See it working

Watch the animated explainer **Four-Stroke Engine Cutaway: Intake to Exhaust** on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u302b/>

