

GENERIC · NETWORK

U3022

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U3022

Ignition Input Accessory/Off

The U3022 code indicates that a control module has detected an implausible or missing signal on the ignition input accessory/off circuit, which tells the module whether the key is in the accessory or off position. The computer sets this code when the voltage on that circuit does not match the expected state, often due to a wiring fault, a failing ignition switch, or a module communication issue.

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 (malfunction indicator lamp) illuminates on the dashboard.
- Accessories such as the radio or power windows may remain powered when the key is turned off.
- The engine may not crank or start because the module does not recognize the key position.
- Intermittent electrical issues, such as flickering interior lights or random accessory operation.
- Often no symptoms besides the warning light, especially if the fault is stored but not currently active.

Common causes, most likely first

- A faulty ignition switch that fails to send the correct accessory/off signal.
- Damaged or corroded wiring in the ignition switch circuit, including open or shorted wires.
- A poor ground connection at the module or chassis, causing voltage irregularities.
- A failing body control module (BCM) or other control module that interprets the ignition input.
- Blown fuses or relays in the ignition accessory circuit.
- Aftermarket accessories improperly wired into the ignition circuit, causing signal interference.



How to diagnose and fix it

- 1 Verify the battery voltage and condition, as low voltage can cause false codes; recharge or replace as needed.
- 2 Check all fuses related to the ignition switch and accessory circuits, and replace any blown fuses.
- 3 Inspect the ignition switch and its connector for wear, corrosion, or loose pins; clean or replace as necessary.
- 4 Perform a voltage drop test on the ignition accessory/off circuit to identify excessive resistance or open circuits.
- 5 Check ground connections at the module and chassis for tightness and corrosion; clean and tighten as required.
- 6 Use a scan tool to clear the code and verify if it returns; if it does, follow the manufacturer's diagnostic flow chart for the ignition switch circuit.
- 7 If all wiring and switches test good, suspect a faulty control module and perform further module diagnostics or replacement.

Ignition Switch Circuit Faults You Might Overlook

- A common oversight is assuming the ignition switch is bad when the real problem is a chafed wire harness near the steering column or under the dash.
- Aftermarket alarm systems or remote starters tapped into the ignition circuit often introduce voltage spikes that trigger this code.
- The code can set intermittently due to a loose battery terminal or a failing alternator causing voltage fluctuations that the module misreads.
- On some vehicles, a weak or failing body control module may set this code without any driveability symptoms, leading to unnecessary switch replacement.
- Always check for technical service bulletins (TSBs) specific to the vehicle make and model, as some models have known issues with the ignition switch connector.

Can I keep driving with U3022?

If the vehicle starts and runs normally, you can drive it to a repair shop, but avoid turning the key to accessory mode repeatedly or using accessories with the engine off. If the engine stalls or fails to start, do not continue driving and seek professional assistance.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Test light
- Wiring diagram for the vehicle
- Basic hand tools (screwdrivers, socket set)



Reading U3022

- 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.
- 22** 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 · **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/u3022/>

