

GENERIC · NETWORK

U302E

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U302E

Ignition Output On

U302E is a generic network fault code indicating that a control module received a message reporting the ignition output circuit is commanded on when the module expected it to be off, or the circuit is stuck in the on state. The computer detected a mismatch between the commanded ignition output state and the actual feedback signal, which can affect how modules power up or communicate.

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

Symptoms you may notice

- Often no symptoms besides the warning light, especially if the fault is intermittent
- Intermittent no-start or crank-no-start condition because modules may not power up correctly
- Accessory circuits or modules staying powered after the ignition is switched off
- Battery drain if the ignition output remains energized when the vehicle is parked
- Multiple unrelated warning lights or communication codes as modules lose proper power sequencing
- Erratic operation of systems that depend on ignition-switched power, such as radio or climate control

Common causes, most likely first

- 1 Faulty ignition switch or push-button start module not releasing the ignition output
- 2 Sticking ignition relay or power distribution module internal failure
- 3 Chafed or shorted ignition output wiring harness rubbing against metal or heat sources
- 4 Corrosion or water intrusion in a connector on the ignition output circuit
- 5 Failed body control module (BCM) or gateway module that controls ignition output state
- 6 Software or calibration issue in a module causing false ignition output reporting
- 7 Aftermarket alarm or remote start installation tapping into the ignition circuit incorrectly



How to diagnose and fix it

- 1 Verify battery voltage and condition, then clear the code and test-drive to see if it returns immediately or only under specific conditions
- 2 Use a scan tool to monitor ignition output status and compare commanded state to actual feedback on the affected circuit
- 3 Inspect the ignition switch, push-button start module, and ignition relay for sticking contacts or mechanical binding
- 4 Check wiring harness routing for chafing, heat damage, or corrosion at connectors on the ignition output circuit
- 5 Test the ignition relay and power distribution module by substitution with a known-good unit if accessible
- 6 Check for aftermarket accessories wired into the ignition circuit and disconnect them temporarily to isolate the fault
- 7 If all external circuits test good, reprogram or replace the module that controls the ignition output after confirming power and ground integrity

Ignition output faults that fool good technicians

- A sticking ignition relay can keep the ignition output energized long after the key is removed, causing a parasitic drain that only shows up after the vehicle sits for hours.
- Aftermarket remote start or alarm systems are a common culprit because they splice into the ignition output wire and can back-feed voltage into the circuit even when the module commands off.
- This code does not always mean the ignition switch is bad; a failed body control module or a corrupted software calibration can report the output as on when the circuit is actually functioning correctly.
- Water intrusion into a connector near the floor or underhood fuse box can create a partial short that mimics a stuck ignition output only in damp weather.
- Technicians often replace the ignition switch prematurely when the real fault is a chafed wire behind the dash that only shorts when the steering column is tilted or the vehicle hits a bump.

Can I keep driving with U302E?

You can usually drive the vehicle if it starts and runs normally, but avoid leaving it parked for long periods because a stuck ignition output can drain the battery. If the engine will not start or accessories stay powered after shutdown, have it diagnosed promptly to prevent a no-start situation.

Tools that help

- OBD-II scan tool with live data and bidirectional control capability
- Digital multimeter for voltage and continuity testing
- Test light for checking ignition output circuit power
- Wiring diagram for the ignition output circuit
- Socket set and trim removal tools for accessing modules and harnesses



Reading U302E

- 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.
- 2E** 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/u302e/>

