

GENERIC · NETWORK

U3027

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U3027

Control Module A Disable Circuit High

U3027 is a generic network communication code indicating that a control module has detected a high voltage condition on the disable circuit for Control Module A. The disable circuit is a dedicated wire used by one module to command another module to shut down or enter a low-power state, and a high voltage on this line means the commanding module sees the circuit stuck at or near battery voltage when it should be low or pulsing.

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

Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL) or a message on the driver information center
- One or more electronic features controlled by the disabled module may be inoperative, such as stability control, adaptive cruise, or a body function
- The vehicle may enter a reduced power or limp mode if the disabled module is part of the powertrain network
- Intermittent operation of accessories that share the same network segment
- Often no symptoms besides the warning light, especially if the disable circuit is only used for diagnostics or non-critical shutdown
- A no-start condition if the disabled module is the engine control module or a security module

Common causes, most likely first

- 1 A short to voltage on the disable circuit wiring, often from chafed insulation against a power wire or a pinched harness
- 2 A faulty control module that is internally shorted and pulling the disable line high
- 3 Corrosion or water intrusion in a connector on the disable circuit, creating a high-resistance path to voltage
- 4 A failed or improperly installed aftermarket accessory tapping into the disable circuit
- 5 A defective relay or solenoid that is backfeeding voltage onto the disable line
- 6 A poor ground connection for the module that receives the disable signal, causing it to misinterpret the line state
- 7 A software or calibration issue in one of the modules on the network, though this is less common



How to diagnose and fix it

- 1 Connect a scan tool and record all stored codes in every module, then clear codes and verify whether U3027 returns immediately or after a drive cycle
- 2 Inspect the disable circuit wiring and connectors for signs of damage, corrosion, or aftermarket taps, paying attention to areas near heat sources and moving components
- 3 With the key on and the disable circuit disconnected at both ends, measure voltage on the disable wire to ground; a reading near battery voltage indicates a short to voltage
- 4 Disconnect the module that receives the disable signal and recheck the circuit voltage to see if the high voltage disappears, which would point to an internal fault in that module
- 5 Perform a wiggle test on the harness while monitoring the disable circuit voltage to catch intermittent shorts
- 6 Check the ground integrity for both the commanding and receiving modules, as a bad ground can cause a false high reading on the disable line
- 7 If the wiring and grounds are good, substitute a known-good module or reflash the module with the latest calibration before replacing parts

What a high disable circuit really means

- A high voltage on the disable circuit does not always mean the module is bad; a shorted aftermarket accessory or a pinched wire in the door jamb is a frequent culprit that technicians overlook.
- The disable circuit is often a low-current signal line, so a high reading can be caused by a tiny strand of wire bridging to a 12-volt source, which is easy to miss without a careful visual inspection.
- Some vehicles use the disable circuit only for non-emergency shutdown of comfort modules, so the code may set with no drivability symptoms and the fix can be deferred safely.
- A common misdiagnosis is replacing the receiving module when the actual fault is a backfeeding relay or a faulty ground on the commanding module, so always check grounds before condemning parts.
- This code can be set by a low battery or charging system fault that causes modules to boot in an unexpected state, so verify battery voltage and charging system operation first.

Can I keep driving with U3027?

If the vehicle drives normally and only the warning light is on, you can usually continue driving to a repair shop, but avoid using any features that seem disabled. If the vehicle enters limp mode or stalls, stop driving and have it towed, because the disable circuit may be affecting a critical module.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter with min/max recording
- Wiring diagram for the specific vehicle
- Back probe pins and jumper wires
- Test light or logic probe



Reading U3027

- 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.
- 27** The exact fault within that area.

Often seen with

U3000 Control Module · **U3001** Control Module Improper Shutdown Performance · **U3002** Vehicle Identification Number · **U3003** Battery Voltage · **U3004** Accessory Power Relay

See it working

Watch the animated explainer [How a Rotary Engine Works: Wankel in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u3027/>

