

GENERIC · NETWORK

# U0308

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

## U0308

### Software Incompatibility with Throttle Actuator Control Module

U0308 is a communication fault indicating that one or more control modules on the vehicle's network cannot exchange software compatibility data with the Throttle Actuator Control Module (TACM), which manages the electronic throttle body. The computer detected a mismatch or missing handshake in the software identification or calibration data shared between the TACM and another module, so it flagged the incompatibility rather than a hardware failure.

|         |                     |          |                |                                       |
|---------|---------------------|----------|----------------|---------------------------------------|
| SYSTEM  | CODE TYPE           | SEVERITY | FIX DIFFICULTY | AREA                                  |
| Network | Generic (all makes) | Medium   | Professional   | Software and configuration mismatches |

#### Symptoms you may notice

- Illumination of the check engine light or service vehicle soon message, often with no other noticeable symptoms
- Reduced engine power or limp-home mode triggered by the throttle control system entering a default state
- Intermittent or unresponsive accelerator pedal feel, sometimes accompanied by a hesitation during acceleration
- Rough idle or stalling when the throttle actuator control module cannot coordinate with the engine control module
- Multiple warning lights on the dashboard if the incompatibility affects several networked modules
- No drivability complaints at all in some cases, with the code stored only as a pending or history fault



## Common causes, most likely first

- 1 Software or calibration mismatch between the Throttle Actuator Control Module and another module after a partial reprogramming or module replacement
- 2 A control module that was replaced with a used or aftermarket unit carrying incompatible software or calibration data
- 3 Corrupted or incomplete software flash in the TACM or a related module due to a failed programming event or low battery during a flash
- 4 Poor electrical connection or damaged wiring in the controller area network (CAN) bus between the TACM and other modules, causing incomplete software handshake data
- 5 A module on the network that is not communicating properly and prevents the TACM from validating software compatibility
- 6 Low battery voltage or a weak charging system that interrupts module initialization and software checks during startup
- 7 Internal fault in the Throttle Actuator Control Module that prevents it from reporting its software identity correctly

## How to diagnose and fix it

- 1 Connect a scan tool and record all stored, pending, and history codes from every module, then clear codes and verify whether U0308 returns immediately or only after a drive cycle
- 2 Check battery voltage and charging system output, as low voltage during module initialization can set false incompatibility codes
- 3 Inspect the TACM connector and the CAN bus wiring for corrosion, loose pins, or chafed wires, and perform a voltage drop or resistance check on the communication lines
- 4 Verify that all modules on the network have the latest known-good software and calibration files, and check for any service bulletins or reprogramming campaigns for the vehicle
- 5 If a module was recently replaced, confirm it was programmed and configured correctly for this vehicle, including any required immobilizer or variant coding
- 6 Perform a software reprogramming or calibration update on the Throttle Actuator Control Module and any module it reports as incompatible, following the manufacturer's programming procedure with a stable power supply
- 7 If the incompatibility persists after programming and wiring checks, substitute a known-good TACM or the conflicting module to isolate an internal software or hardware fault



## What most technicians miss about U0308

- U0308 is frequently set as a ghost code after a battery replacement or a failed programming attempt, and it clears once all modules complete a successful initialization cycle with stable voltage.
- A used or salvage Throttle Actuator Control Module will often store this code because its software and calibration data do not match the vehicle's configuration, even though the module is electrically functional.
- The code does not necessarily mean the throttle body or TACM is defective; a software mismatch in an unrelated module on the same network can prevent the compatibility handshake and trigger U0308.
- Some vehicles require a specific sequence of module programming and ignition cycles to clear software incompatibility codes, and simply clearing the code with a scan tool will not resolve the underlying mismatch.
- A weak battery or poor ground connection can cause intermittent U0308 because the TACM may not complete its software identity broadcast during low-voltage cranking events.

## Can I keep driving with U0308?

The vehicle may enter reduced power mode or limp-home strategy, so avoid highway driving and heavy acceleration until the fault is diagnosed. If the engine runs normally and only the warning light is on, a short trip to a repair shop is acceptable, but do not ignore repeated limp-mode events.

## Tools that help

- OBD-II scan tool with module-level diagnostic and programming capability
- Digital multimeter for battery, ground, and CAN bus voltage checks
- Manufacturer-specific diagnostic software or reprogramming tool
- Wiring diagram and connector pinout for the Throttle Actuator Control Module circuit
- Battery charger or power supply to maintain stable voltage during programming

## Reading U0308

- U** Network: communication between the vehicle's control modules.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 3** Software and configuration mismatches.
- 08** The exact fault within that area.

## Often seen with

**P0638** Throttle Actuator Control Range/Performance (Bank 1) · **P2101** Throttle Actuator Control Motor Circuit Range/Performance · **U0100** Lost Communication With ECM/PCM A · **U0121** Lost Communication With Anti-Lock Brake System (ABS) Control · **U0300** Internal Control Module Software Incompatibility



### See it working

Watch the animated explainer [How a Car Clutch Works: Diaphragm Clutch Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0308/>

