

GENERIC · NETWORK

U0407

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0407

Invalid Data Received From Glow Plug Control Module

U0407 is a communication fault where the engine control module (ECM) or another controller receives invalid or missing data from the glow plug control module over the vehicle's network. The computer has detected that the messages from the glow plug module are either absent, corrupted, or outside the expected range, so it cannot trust the glow plug system status.

SYSTEM

Network

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Invalid data received from a module

Symptoms you may notice

- Illuminated check engine light or service vehicle soon message
- Hard cold starting or rough idle when the engine is cold
- Glow plug indicator light flashing or staying on
- Reduced engine performance or limp mode in some vehicles
- Often no symptoms besides the warning light, especially in warm weather

Common causes, most likely first

- 1 Faulty glow plug control module
- 2 Damaged or corroded wiring between the glow plug control module and the ECM
- 3 Poor electrical connections at the glow plug module or ECM connectors
- 4 Low battery voltage or charging system issues causing communication glitches
- 5 Failed glow plugs drawing abnormal current and stressing the control module
- 6 Software or calibration issue in the glow plug control module
- 7 Network communication bus fault affecting multiple modules



How to diagnose and fix it

- 1 Perform a battery and charging system test to rule out low voltage
- 2 Inspect and clean the glow plug control module connectors and wiring for corrosion or damage
- 3 Check for technical service bulletins (TSBs) or software updates for the glow plug control module
- 4 Measure resistance of each glow plug to identify a failed plug that may be overloading the module
- 5 Test the communication bus for shorts or opens between the glow plug module and the ECM
- 6 Substitute a known-good glow plug control module to confirm the fault
- 7 Clear the code and verify the repair with a road test and scan tool

What the glow plug module code hides

- A weak battery or poor ground connection can cause U0407 without any fault in the glow plug module itself, so always load-test the battery first.
- The code can be set by a single failed glow plug that draws excessive current and disrupts the module's data reporting, so check plugs before replacing the module.
- On many vehicles, U0407 is stored alongside glow plug circuit codes (P0670-P0678) and the root cause is often the glow plug harness rather than the module.
- A CAN bus fault or a faulty ECM can mimic a glow plug module communication error, so network integrity tests are essential before parts replacement.
- In warm climates, the glow plug system may not be activated during a short test drive, so the code may not reset immediately after repair; a full drive cycle is needed.

Can I keep driving with U0407?

You can usually drive the vehicle, but cold starting may be difficult and the engine may run rough until warmed up. Avoid heavy loads and long trips until the fault is repaired, and do not rely on the glow plug system in freezing conditions.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Battery load tester
- Wiring diagram and connector pinout
- Socket set and trim removal tools



Reading U0407

- U** Network: communication between the vehicle's control modules.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 4** Invalid data received from a module.
- 07** The exact fault within that area.

Often seen with

P0670 Glow Plug Module Control Circuit · **P0671** Cylinder 1 Glow Plug Circuit · **P0672** Cylinder 2 Glow Plug Circuit · **P0673** Cylinder 3 Glow Plug Circuit · **U0100** Lost Communication With ECM/PCM A

See it working

Watch the animated explainer [Fuel Trims Explained: Short-Term and Long-Term](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0407/>

