

GENERIC · NETWORK

U3558

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U3558

Hydrogen Tank C Valve

U3558 is a generic network code indicating that the hydrogen tank C valve, which controls hydrogen flow from a specific storage tank, has reported a fault to the vehicle's control module. The computer detected an abnormal electrical condition on the valve's control circuit, such as an open, short, or out-of-range signal, and stored this code to alert the driver.

SYSTEM Network	CODE TYPE Generic (all makes)	SEVERITY Medium	FIX DIFFICULTY Professional	AREA Network communication
-------------------	----------------------------------	--------------------	--------------------------------	-------------------------------

Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL) on the dashboard
- Often no symptoms besides the warning light, especially if the valve is not actively needed
- Reduced hydrogen supply leading to poor acceleration or power loss
- Inability to refuel the hydrogen tank or slow refueling
- Rough running or stalling if the valve fails to open when required
- Audible clicking or no sound from the valve area when the ignition is turned on

Common causes, most likely first

- 1 Faulty hydrogen tank C valve solenoid or internal mechanical failure
- 2 Damaged or corroded wiring harness or connector at the valve
- 3 Blown fuse or faulty relay supplying power to the valve circuit
- 4 Poor electrical ground connection for the valve or control module
- 5 Failed tank pressure sensor providing incorrect feedback to the control module
- 6 Software or calibration issue in the control module managing the valve
- 7 Contamination or debris in the hydrogen system causing valve sticking

How to diagnose and fix it

- 1 Use a scan tool to verify U3558 is current and check for related codes in other modules
- 2 Inspect the valve's electrical connector and wiring for damage, corrosion, or loose pins
- 3 Test the valve's resistance and compare to manufacturer specifications
- 4 Check the fuse and relay that supply power to the hydrogen tank C valve circuit
- 5 Measure voltage and ground signals at the valve connector during activation
- 6 If electrical tests pass, perform a functional test of the valve using a bidirectional scan tool
- 7 Replace the hydrogen tank C valve if it fails electrical or functional testing, then clear codes and verify repair



Hydrogen valve faults that mislead technicians

- A weak or failing 12-volt battery can cause spurious network codes like U3558 because low voltage disrupts module communication during startup.
- The hydrogen tank C valve often shares a ground circuit with other sensors, so a single bad ground can set multiple codes and mimic a valve failure.
- Some vehicles require a relearn or calibration procedure after valve replacement, and skipping it will cause the code to return immediately.
- A stuck-open valve may not trigger drivability symptoms until the tank pressure drops, so the code can appear long before any noticeable issue.
- Aftermarket alarm or remote start installations that tap into the CAN bus can interfere with valve control signals and set U3558 without any valve fault.

Can I keep driving with U3558?

It is generally safe to drive with U3558 if the vehicle runs normally, but avoid aggressive acceleration or long trips until the fault is repaired. If you notice rough running, stalling, or a strong hydrogen smell, stop driving and have the vehicle inspected immediately.

Tools that help

- OBD-II scan tool with bidirectional control and live data capability
- Digital multimeter for voltage, resistance, and continuity tests
- Wiring diagram and service information for the specific vehicle
- Basic hand tools for connector and component access
- Fuse puller and test light for circuit checks

Reading U3558

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

Often seen with

U0100 Lost Communication With ECM/PCM A · **U3557** Hydrogen Tank C Valve Enable Circuit · **U3559** Air Inlet Pressure Sensor Circuit



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/u3558/>

