

GENERIC · NETWORK

U354D

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U354D

Hydrogen Tank B Temperature Sensor 2 Circuit

U354D is a manufacturer-specific network code indicating that the powertrain control module (PCM) has lost valid data from the temperature sensor circuit for hydrogen tank number two. The PCM monitors the sensor's signal over the vehicle's communication bus and sets this code when the expected voltage or message is missing, out of range, or implausible for a calibrated period.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Network	Generic (all makes)	Medium	Intermediate	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 vehicle continues to run normally.
- A message on the driver information display warning of a hydrogen system fault or reduced power.
- Intermittent or complete loss of hydrogen tank temperature readings on a scan tool data stream.
- Possible reduced fuel economy or performance if the PCM defaults to a conservative operating strategy.
- In rare cases, the vehicle may enter a limp-home mode or refuse to start if the fault is interpreted as a safety risk.

Common causes, most likely first

- 1 Faulty temperature sensor 2 on the hydrogen tank, such as an open or shorted thermistor element.
- 2 Damaged, corroded, or disconnected wiring or connector at the sensor or along the harness to the PCM.
- 3 High resistance or an open circuit in the sensor ground or signal return wire.
- 4 Water intrusion or contamination in the sensor connector causing intermittent signals.
- 5 A software or calibration issue in the PCM that misinterprets valid sensor data.
- 6 A failed PCM driver or internal communication fault, though this is less common.
- 7 Aftermarket accessories or improper repairs that disturb the sensor circuit or its shielding.



How to diagnose and fix it

- 1 Connect a scan tool and verify the code is current, then check for any related codes in other modules.
- 2 Inspect the sensor connector and harness for corrosion, chafing, or loose pins, and repair as needed.
- 3 Measure the sensor resistance with a multimeter and compare it to the manufacturer's specification for the ambient temperature.
- 4 Backprobe the sensor signal and ground wires at the PCM to check for continuity and correct voltage with the key on.
- 5 Perform a wiggle test on the harness while watching live data to catch intermittent faults.
- 6 If the circuit checks out, substitute a known-good sensor and clear the code to see if it returns.
- 7 If the sensor and wiring are good, reprogram or replace the PCM only after confirming power and ground integrity.

Hydrogen sensor faults that fool technicians

- A common mistake is replacing the hydrogen tank sensor when the real problem is a corroded ground connection shared with other sensors, which skews the reading.
- The code can be set by a loose connector that only loses contact during vibration, so a static resistance test may pass while the fault is intermittent.
- Some vehicles require a relearn or calibration procedure after sensor replacement, and skipping it will cause the code to reset immediately.
- U354D is often stored alongside communication codes like U0100 or U0155, which can mislead diagnosis toward the PCM rather than the sensor circuit.
- On hydrogen-powered vehicles, the tank temperature sensor is part of a safety-critical system, so the PCM may derate power even if the sensor reading appears normal on a generic scan tool.

Can I keep driving with U354D?

The vehicle is generally safe to drive to a repair shop because the fault usually affects monitoring rather than immediate operation, but avoid long trips or heavy loads until it is diagnosed. If the dashboard displays a hydrogen system warning or the vehicle enters limp mode, stop driving and have it towed to avoid potential safety risks.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Backprobe pins or breakout leads
- Heat gun and freeze spray for temperature simulation



Reading U354D

- 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.
- 4D** The exact fault within that area.

Often seen with

P0A0F Engine Failed to Start · **U0100** Lost Communication With ECM/PCM A · **U0155** Lost Communication With Body Control Module · **U354C** Hydrogen Tank B Temperature Sensor 1 Circuit · **U354E** Hydrogen Tank C Temperature Sensor 1 Circuit

See it working

Watch the animated explainer [How an EGR Valve Works: Exhaust Gas Recirculation](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u354d/>

