

GENERIC · NETWORK

U354A

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U354A

Hydrogen Tank A Temperature Sensor 1 Circuit

U354A indicates that the powertrain control module (PCM) has detected an abnormal condition on the temperature sensor circuit for Hydrogen Tank A, specifically Sensor 1. This sensor monitors the temperature inside the high-pressure hydrogen storage tank, and the circuit fault prevents the PCM from receiving a valid temperature reading, which can affect fuel system and safety strategies.

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

Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL) on the dashboard
- Often no symptoms besides the warning light
- Reduced power or limited driving range due to protective fuel system strategies
- Inability to refuel the hydrogen tank or refueling interrupted
- Rough running or stalling if the PCM enters a limp-home mode
- Other warning messages related to the hydrogen system on the driver information display

Common causes, most likely first

- 1 Faulty hydrogen tank temperature sensor (Sensor 1) internal failure
- 2 Damaged or corroded wiring harness or connector at the sensor
- 3 Open or short circuit in the sensor signal or ground circuit
- 4 Water or contaminant intrusion into the sensor connector
- 5 PCM internal fault affecting the sensor input circuit
- 6 Loose or improperly seated sensor connector
- 7 Aftermarket accessories or improper previous repairs disturbing the circuit



How to diagnose and fix it

- 1 Connect a scan tool and record all stored codes and freeze-frame data to confirm U354A is current and not history
- 2 Visually inspect the hydrogen tank temperature sensor and its wiring for obvious damage, corrosion, or loose connections
- 3 Disconnect the sensor connector and check for water intrusion, bent pins, or pushed-out terminals
- 4 Measure the sensor resistance with a multimeter and compare to the manufacturer's specification for the ambient temperature
- 5 Check the signal and ground circuits for continuity and short-to-ground or short-to-power using a wiring diagram
- 6 If the circuit tests good, substitute a known-good sensor and clear codes to see if the fault returns
- 7 If the sensor and wiring are verified good, diagnose the PCM input circuit or replace the PCM as a last resort

Hydrogen sensor circuit checks that techs miss

- A common oversight is assuming the sensor itself is faulty when the real problem is a chafed wire hidden behind a protective shield or near a heat source.
- The PCM may set U354A intermittently if the connector is only loose when the vehicle is cold or vibrating, so wiggle tests while monitoring live data are essential.
- This code does not always mean the sensor has failed; a poor ground connection at the tank frame can skew the signal and set the same fault.
- On some vehicles, a low 12-volt battery or charging system issue can cause false circuit codes, so verify battery voltage and ground integrity before condemning parts.
- Hydrogen tank temperature sensors are often integrated into a tank valve assembly, so a sensor fault may require service of the entire assembly rather than a simple sensor swap.

Can I keep driving with U354A?

The vehicle may enter a reduced-power or no-refuel mode, so avoid long trips and refueling until the fault is repaired. Driving with the warning light is generally safe for short distances, but do not ignore the code because it can affect hydrogen system safety monitoring.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the hydrogen tank sensor circuit
- Terminal pick and connector release tools
- Insulation resistance tester (megohmmeter)



Reading U354A

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

Often seen with

P0A0F Engine Failed to Start · **P0A1F** Battery Energy Control Module A Performance · **U354B** Hydrogen Tank A Temperature Sensor 2 Circuit · **U354C** Hydrogen Tank B Temperature Sensor 1 Circuit · **U354D** Hydrogen Tank B Temperature Sensor 2 Circuit

See it working

Watch the animated explainer [How ABS Works: Anti-Lock Brakes in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u354a/>

