

GENERIC · NETWORK

U3576

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U3576

Stack Differential Pressure Sensor Circuit

U3576 is a generic network code indicating that the vehicle's control module has detected a fault in the circuit for the stack differential pressure sensor, which is typically used to monitor pressure differences across a component such as a diesel particulate filter. The computer compares the sensor's signal voltage against expected values and flags the code when the signal is out of range, erratic, or missing entirely.

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

Symptoms you may notice

- Illumination of the check engine light or service engine soon light, often with no other noticeable symptoms.
- Reduced engine performance or limp mode if the fault affects emissions control strategies.
- Poor fuel economy or increased regeneration frequency in diesel applications.
- In rare cases, a message on the driver information center indicating an emissions system fault.
- Intermittent warning light that may clear and reset under certain driving conditions.

Common causes, most likely first

- 1 Faulty stack differential pressure sensor or sensor element contamination.
- 2 Damaged, disconnected, or corroded wiring harness at the sensor connector.
- 3 Clogged or blocked pressure ports and hoses leading to the sensor.
- 4 Exhaust leaks upstream of the sensor causing false pressure readings.
- 5 Failed sensor reference voltage or ground circuit from the control module.
- 6 Internal control module fault, though this is less common.

How to diagnose and fix it

- 1 Perform a visual inspection of the sensor, connector, and associated hoses for damage, corrosion, or blockage.
- 2 Use a scan tool to read live data from the stack differential pressure sensor and compare to expected values.
- 3 Check reference voltage and ground at the sensor connector with a digital multimeter.
- 4 Inspect and clean the pressure ports and hoses, replacing any that are cracked or clogged.
- 5 Perform a smoke test on the exhaust system to identify leaks that could affect pressure readings.
- 6 If all electrical and mechanical checks pass, replace the stack differential pressure sensor.
- 7 Clear the code and verify the repair by test-driving the vehicle and monitoring sensor data.



Don't overlook the pressure hoses

- A clogged or disconnected pressure hose is a frequent cause of this code that is often missed when technicians focus only on the sensor itself.
- The code can set intermittently due to a loose connector that tests fine when the harness is manipulated during diagnosis.
- Exhaust leaks before the sensor can create pressure differentials that mimic a sensor failure, leading to unnecessary replacement.
- On some vehicles, the stack differential pressure sensor is part of a combined sensor assembly, so a fault in one circuit may require replacing the entire unit.
- A weak battery or charging system issue can cause erratic sensor readings and set this code without any sensor fault.

Can I keep driving with U3576?

You can generally continue driving with this code, but avoid heavy loads or long trips until it is diagnosed, as the fault may affect emissions compliance and could lead to more serious issues if left unchecked. If the vehicle enters limp mode or performance is noticeably reduced, seek service promptly.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Hand tools for connector and hose removal
- Smoke machine for exhaust leak testing
- Vacuum/pressure gauge

Reading U3576

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.
76	The exact fault within that area.

Often seen with

P2452 Diesel Particulate Filter Pressure Sensor Circuit · **P2453** Diesel Particulate Filter Pressure Sensor Circuit Range/Perf · **P2454** Diesel Particulate Filter Pressure Sensor Circuit Low · **P2455** Diesel Particulate Filter Pressure Sensor Circuit High · **U0100** Lost Communication With ECM/PCM A



See it working

Watch the animated explainer [Car Relay Test Bench: Test 4-Pin and 5-Pin Relays](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u3576/>

