

GENERIC · CHASSIS

C0639

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0639

Brake Pressure Sensor H Circuit/Open

C0639 means the antilock braking system (ABS) control module has detected an open circuit in the wiring for the 'H' brake pressure sensor, which is typically the rear or secondary pressure sensor depending on the vehicle's hydraulic layout. The module expects a specific voltage or resistance range from that sensor and sees a signal that is out of range or missing entirely, so it flags the circuit as open.

SYSTEM

Chassis

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Brakes, steering and suspension

Symptoms you may notice

- ABS warning light illuminated on the dashboard, often accompanied by the traction control and stability control lights
A soft or unusually firm brake pedal feel, depending on whether the failed sensor is the primary or secondary pressure input
- Reduced or disabled antilock braking function during hard stops, which may only be noticeable in slippery conditions
- Traction control and electronic stability control systems may stop working because they rely on brake pressure data
- Often no symptoms besides the warning light, especially if the vehicle's base braking system still functions normally

Common causes, most likely first

- 1 Broken, chafed, or corroded wire in the brake pressure sensor H circuit, commonly at the sensor connector or where the harness flexes near the master cylinder
- 2 Loose or contaminated electrical connector at the brake pressure sensor, allowing moisture and road salt to degrade the terminals
- 3 Failed brake pressure sensor itself, where the internal element opens or drifts out of range
- 4 Faulty ABS control module driver circuit for the sensor reference or signal line, though this is less common than wiring faults
- 5 Corrosion or damage to the sensor ground circuit shared with other pressure sensors, which can mimic an open on the H circuit
- 6 Aftermarket or incorrect sensor installed previously that does not match the vehicle's expected resistance curve



How to diagnose and fix it

- 1 Inspect the brake pressure sensor H circuit connector and harness for corrosion, loose pins, or chafed insulation, and clean or repair as needed
- 2 Measure resistance across the sensor H circuit between the sensor connector and the ABS module to confirm an open, then wiggle-test the harness to find intermittent breaks
- 3 Check the sensor's reference voltage and ground at the connector with the key on, comparing to the manufacturer's specification for that circuit
- 4 Test the brake pressure sensor itself with a multimeter or scan tool live data to see whether it responds to brake pedal application within the expected range
- 5 If wiring and sensor test good, perform a continuity and load test on the H circuit to rule out a high-resistance connection inside the ABS module connector
- 6 Replace the faulty brake pressure sensor or repair the open circuit, then clear the code and verify the ABS warning light stays off through a road test with several hard stops
- 7 If the code returns after repair, check for a software update or known issue with the ABS module calibration before condemning the module

What the H circuit open really means

- The letter H in this code refers to a specific pressure sensor circuit designation, not necessarily the 'high' side of the system, so technicians who assume it means high pressure can chase the wrong sensor.
- A common misdiagnosis is replacing the ABS module when the actual fault is a corroded ground splice shared by multiple pressure sensors, which is cheaper and easier to fix.
- Some vehicles set C0639 only after a certain number of drive cycles with an out-of-range signal, so a cleared code may not return immediately even if the fault is still present.
- Brake pressure sensor circuits are often routed near the master cylinder where brake fluid can drip during service, causing terminal corrosion that looks like a sensor failure but is really a connector issue.
- The code can be set by a low battery or charging system fault that causes the ABS module to log a momentary open circuit during cranking, so check system voltage before condemning parts.

Can I keep driving with C0639?

You can usually drive the vehicle with this code because normal hydraulic braking remains, but the antilock braking system (ABS) and stability control may be disabled, so avoid hard stops, slippery roads, and towing until the fault is repaired. Have the circuit inspected soon, since a brake pressure sensor fault can affect the accuracy of brake assist and stability functions.



Tools that help

- OBD-II scan tool with ABS live data capability
- Digital multimeter with back-probing pins
- Wiring diagram for the brake pressure sensor circuit
- Contact cleaner and dielectric grease for connector repair
- Jack and jack stands or a lift for underhood and underbody access

Reading C0639

- C** Chassis: brakes, steering and suspension.
-
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
-
- 6** Brakes, steering and suspension.
-
- 39** The exact fault within that area.

Often seen with

C0040 Left Rear Wheel Speed Sensor Circuit · **C0050** Right Rear Wheel Speed Sensor Circuit Malfunction · **C0110** ABS Pump Motor Circuit Malfunction · **C0638** Brake Pressure Sensor G Range/Performance · **C0640** Brake Pressure Sensor J Range/Performance

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/c0639/>

