

GENERIC · CHASSIS

C0048

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0048

Brake Booster Travel Sensor

C0048 indicates that the antilock braking system (ABS) control module has detected a fault in the brake booster travel sensor circuit, which monitors the position of the brake booster pushrod to determine how far the brake pedal has been applied. The computer compares the sensor's voltage signal against expected values and sets this code when the signal is out of range, erratic, or missing entirely.

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
- Traction control or stability control warning light also on
- Often no symptoms besides the warning light
- Reduced or disabled ABS function during hard braking
- Brake pedal feels normal but cruise control may deactivate
- In some cases, a soft or inconsistent brake pedal feel

Common causes, most likely first

- 1 Faulty brake booster travel sensor
- 2 Damaged or corroded wiring harness at the sensor connector
- 3 Open or shorted circuit in the sensor wiring
- 4 Poor electrical connection at the ABS control module
- 5 Failed ABS control module
- 6 Brake booster pushrod misadjusted or mechanically binding

How to diagnose and fix it

- 1 Scan all modules for stored and pending codes to confirm C0048 is current and not history
- 2 Inspect the brake booster travel sensor connector and wiring for corrosion, chafing, or loose pins
- 3 Measure sensor reference voltage and ground at the connector with a multimeter
- 4 Check sensor signal voltage while slowly pressing the brake pedal to verify smooth sweep
- 5 Compare live sensor data on a scan tool against the service manual specification
- 6 Replace the brake booster travel sensor if signal is out of range or erratic
- 7 Clear codes and perform a road test to verify the repair and confirm the light stays off



What the brake booster travel sensor really does

- The brake booster travel sensor is often confused with the brake pedal position sensor, but they are separate components and a failure in one will not always set a code for the other.
- A weak or failing battery can cause intermittent voltage drops that mimic a sensor fault, so always check charging system health before condemning the sensor.
- On many vehicles the ABS module shares a ground with other chassis electronics, and a corroded ground point can set C0048 along with unrelated codes.
- The sensor is frequently misdiagnosed as a bad ABS module when the actual problem is a chafed wire near the booster that only shorts when the engine moves under load.
- After replacing the sensor, some vehicles require a calibration or relearn procedure through the scan tool, and skipping it will leave the code stored.

Can I keep driving with C0048?

The vehicle remains safe to drive under normal conditions because the base brakes still work, but avoid hard braking or emergency stops until the fault is repaired since ABS may not engage. If the brake pedal feels abnormal or the warning light is accompanied by a red brake light, stop driving and have the system inspected immediately.

Tools that help

- OBD-II scan tool with ABS capability
- Digital multimeter
- Service manual with wiring diagrams
- Socket and wrench set
- Brake pedal depressor

Reading C0048

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

Often seen with

C0045 Left Rear Wheel Speed Sensor Circuit Malfunction · **C0046** Right Front Wheel Speed Sensor Circuit Intermittent · **C0047** Brake Booster Pressure Sensor · **C0050** Right Rear Wheel Speed Sensor Circuit Malfunction · **C0110** ABS Pump Motor Circuit Malfunction



See it working

Watch the animated explainer **Turbocharger Trainer: Boost, Wastegate and Intercooler** on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/c0048/>

