

GENERIC · CHASSIS

C0619

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0619

Brake Pedal Position Sensor A Offset Exceeded Learning Limit

This code means the electronic brake control module has learned a baseline voltage for the brake pedal position sensor, and that learned offset has moved beyond the limit the module considers acceptable. The computer no longer trusts the sensor's resting position, so it flags the calibration as out of range and may disable certain brake-assist or stability functions.

SYSTEM

Chassis

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Brakes, steering and suspension

Symptoms you may notice

- The antilock brake system (ABS) warning light and often the traction control light stay illuminated.
- The brake pedal may feel normal, or it may feel slightly low or spongy if the sensor is physically misadjusted.
- Cruise control may refuse to engage or may drop out unexpectedly because the module cannot confirm brake pedal release.
- Hill-start assist or electronic parking brake functions may be disabled.
- Often no symptoms besides the warning light, with normal braking performance in everyday driving.
- A stored code may return immediately after clearing if the sensor offset is still out of range.

Common causes, most likely first

- 1 Brake pedal position sensor mounting bracket bent or loosened, changing the sensor's rest angle.
- 2 Sensor linkage or pushrod worn, disconnected, or incorrectly adjusted after pedal or booster work.
- 3 Brake pedal position sensor itself failing internally and drifting in output voltage.
- 4 Wiring harness damage, corrosion, or poor terminal tension at the sensor connector or module.
- 5 Brake pedal assembly bushings worn, allowing excess lateral or vertical pedal movement.
- 6 A recent brake booster, pedal, or master cylinder replacement that was not followed by a sensor relearn.
- 7 Low system voltage or a weak battery causing the module to lose its learned offset memory.



How to diagnose and fix it

- 1 Inspect the brake pedal position sensor bracket, linkage, and connector for looseness, bending, or corrosion before replacing anything.
- 2 Check battery voltage and charging system output, then clear the code and perform the manufacturer's brake pedal sensor relearn procedure.
- 3 Measure sensor signal voltage at rest and through the full pedal travel with a scan tool or multimeter, comparing to the manufacturer's specification.
- 4 If the sensor signal is erratic or out of range, replace the brake pedal position sensor and repeat the relearn.
- 5 Repair any damaged wiring or terminals between the sensor and the electronic brake control module, then clear and recheck.
- 6 If the code persists after a known-good sensor and wiring, inspect the brake pedal assembly bushings and booster pushrod adjustment.
- 7 Verify the repair by completing a full drive cycle and confirming the offset learning completes without resetting the code.

Why a brake pedal relearn often fixes C0619

- Many C0619 cases are set after a brake booster or pedal replacement because the new sensor rest position was never learned, and a simple relearn clears it.
- A bent sensor bracket from a careless foot or recent under-dash work is a common cause that technicians miss when they jump straight to replacing the sensor.
- The code does not always mean the sensor is bad; a weak battery or low charging voltage can corrupt the learned offset and set the code without any sensor fault.
- Aftermarket brake pedal pads or pedal covers that change pedal rest height can shift the sensor offset enough to trigger this code on some vehicles.
- A brake pedal position sensor that reads correctly at rest can still fail the offset learning if its signal is noisy through the first few degrees of travel.

Can I keep driving with C0619?

The vehicle usually brakes normally, but ABS, traction control, and cruise control may be disabled, so avoid towing, steep descents, or slippery conditions until the fault is repaired. If the brake pedal feels abnormal or the warning light is accompanied by a hard pedal, stop driving and have it inspected immediately.

Tools that help

- Scan tool with ABS and brake pedal sensor relearn capability
- Digital multimeter
- Brake pedal depressor or assistant to hold pedal positions
- Socket and wrench set for bracket and pedal inspection
- Manufacturer service information for sensor voltage specifications and relearn procedure



Reading C0619

- 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.
- 19** The exact fault within that area.

Often seen with

C0040 Left Rear Wheel Speed Sensor Circuit · **C0051** Front Left ABS Solenoid 1 Circuit Malfunction · **C0618** Park Brake Control Module Control Circuit High · **C0620** Park Assist Module Communication · **P0571** Brake Switch 'A' 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/c0619/>

