

GENERIC · CHASSIS

C0599

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0599

Brake Booster Control Module Missing Calibration

The brake booster control module has not learned its zero-point calibration, so the module cannot reliably interpret the vacuum or pressure sensor readings it uses to assist braking. The computer detected that the calibration memory is blank or invalid, which typically happens after module replacement, battery disconnection, or a software flash.

SYSTEM

Chassis

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Brakes, steering and suspension

Symptoms you may notice

- A brake warning light or stability control warning light illuminated on the dashboard
- Often no symptoms besides the warning light, with normal brake pedal feel
- A slightly firm or inconsistent brake pedal during the first few stops after startup
- Reduced or disabled hill-start assist and automatic brake hold features
- A chime or message on the driver information display advising a brake system fault
- The cruise control or adaptive cruise control refusing to engage

Common causes, most likely first

- 1 Brake booster control module replaced without performing the required calibration procedure
- 2 Battery disconnected or discharged long enough to erase the module's adaptive calibration memory
- 3 Module software reflashed or updated without running the post-flash calibration routine
- 4 Corroded or loose connector pins at the brake booster control module interrupting the calibration handshake
- 5 A failed brake booster pressure or vacuum sensor that prevents the module from completing calibration
- 6 Low system voltage during a calibration attempt causing the routine to abort and store the code
- 7 Internal fault in the brake booster control module preventing it from writing calibration data



How to diagnose and fix it

- 1 Verify battery voltage and charge the battery if it is below specification, since calibration routines abort on low voltage
- 2 Inspect the brake booster control module connector and wiring for corrosion, loose pins, or chafed harness sections
- 3 Clear the code and attempt the manufacturer's brake booster control module calibration procedure with a capable scan tool
- 4 Check live data from the brake booster pressure or vacuum sensor to confirm it reads plausibly before and during calibration
- 5 If calibration fails, follow the scan tool's guided diagnostic routine for the booster sensor circuit and repair any fault found
- 6 Replace the brake booster pressure or vacuum sensor if it is skewed or inoperative, then repeat the calibration
- 7 If all inputs are correct and calibration still will not complete, replace and program the brake booster control module

Why calibration fails after a battery job

- A battery replacement or long period of disconnection is the most common trigger, because the module loses its learned zero point and needs a scan-tool calibration that many shops skip.
- The code does not mean the brake booster itself has failed; the booster, master cylinder, and hydraulic system are often completely healthy and only the calibration memory is blank.
- A weak or failing brake booster pressure sensor can set this code because the module refuses to calibrate against an implausible sensor signal, so diagnose the sensor before condemning the module.
- Some vehicles require the calibration to be performed with the brake pedal released and the engine off, and attempting it with the engine running causes the routine to abort and reset the code.
- After a software flash or module replacement, the calibration must be run as a separate step; a successful flash does not automatically restore the calibration.

Can I keep driving with C0599?

The vehicle is generally safe to drive because the base hydraulic brakes remain fully functional, but you should avoid relying on hill-start assist, automatic brake hold, or adaptive cruise control until the calibration is restored. Have the calibration performed promptly, and drive cautiously if the pedal feels firmer than normal.

Tools that help

- Manufacturer-level scan tool with bidirectional control and calibration capability
- Digital multimeter for voltage and continuity checks
- Battery charger or power supply to maintain stable voltage during calibration
- Basic hand tools for connector and trim access
- Wiring diagram or service information for the brake booster control module circuit



Reading C0599

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

Often seen with

C0040 Left Rear Wheel Speed Sensor Circuit · **C0050** Right Rear Wheel Speed Sensor Circuit Malfunction · **C0598** Brake System Control Module B Performance · **C0600** Active Yaw Control System Failure · **U0121** Lost Communication With Anti-Lock Brake System (ABS) Control

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/c0599/>

