

GENERIC · CHASSIS

C057F

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C057F

Brake Booster Motor A Phase U-V-W Circuit/Open

C057F indicates that the antilock brake system (ABS) control module has detected an open circuit in one of the three phase windings (U, V, or W) of the electric brake booster motor. The booster motor is a brushless DC motor that provides vacuum assistance or direct hydraulic pressure, and an open phase prevents it from operating correctly.

SYSTEM

Chassis

CODE TYPE

Generic (all makes)

SEVERITY

High

FIX DIFFICULTY

Professional

AREA

Brakes, steering and suspension

Symptoms you may notice

- Illumination of the ABS, traction control, and brake warning lights
- A hard brake pedal that requires excessive force to stop the vehicle
- Reduced or loss of power brake assist, especially at low speeds
- The brake pedal may feel normal during light braking but become stiff under hard braking
- Often no symptoms besides the warning light, as the system may default to a fail-safe mode

Common causes, most likely first

- 1 Damaged or corroded wiring harness between the ABS module and the brake booster motor
- 2 Open phase winding inside the brake booster motor itself
- 3 Loose or corroded connector pins at the booster motor or ABS module
- 4 Failed ABS control module driver circuit for the motor phases
- 5 Blown fuse or relay supplying power to the booster motor (if applicable)
- 6 Physical damage to the motor windings from heat or debris

How to diagnose and fix it

- 1 Perform a visual inspection of the booster motor wiring and connectors for damage or corrosion
- 2 Check for continuity and resistance on each phase wire from the ABS module to the motor
- 3 Verify power and ground supplies to the ABS module and booster motor
- 4 Use a scan tool to command the booster motor and observe live data for phase current or voltage
- 5 Inspect the motor windings for open circuits using a multimeter
- 6 Replace the faulty wiring harness or connector if an open circuit is found
- 7 Replace the brake booster motor or ABS module if internal faults are confirmed



Before you replace the brake booster motor

- A common oversight is assuming the motor is faulty when the real problem is a chafed wire in the harness near the booster, so always perform a thorough continuity test before condemning the motor.
- The ABS module may set this code if its internal driver circuit fails, even when the motor and wiring are intact, so module testing is essential.
- Some vehicles use a shared power supply for the booster motor and other ABS functions, so a blown fuse can cause multiple codes and mislead diagnosis.
- The code can be intermittent, appearing only when the motor is hot or under load, so wiggle-test the harness while monitoring live data.
- Replacing the booster motor without clearing adaptive values or performing a calibration may leave the system in a degraded state, so always follow the manufacturer's relearn procedure.

Can I keep driving with C057F?

Driving with this code is unsafe because you may lose power brake assist, significantly increasing stopping distance. Avoid driving until the fault is repaired, and if you must move the vehicle, do so at very low speed with extreme caution.

Tools that help

- OBD-II scan tool with ABS capabilities
- Digital multimeter
- Wiring diagram for the specific vehicle
- Back probe pins
- Socket set and trim removal tools

Reading C057F

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.
7F	The exact fault within that area.

Often seen with

C0040 Left Rear Wheel Speed Sensor Circuit · **C0050** Right Rear Wheel Speed Sensor Circuit Malfunction · **C057E** Brake Booster Temperature Sensor A/B Correlation · **C0580** Brake Booster Motor A Phase U-V-W Circuit Low · **C0581** Park Brake Apply Performance



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/c057f/>

