

GENERIC · CHASSIS

C0670

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0670

Electric Park Brake Actuator Left Circuit

The code C0670 indicates that the electric park brake (EPB) control module has detected a fault in the electrical circuit for the left-side parking brake actuator. This typically means the module sees an open circuit, short to ground, or short to power in the wiring, connector, or actuator motor itself, preventing proper engagement or release of the left parking brake.

SYSTEM

Chassis

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Brakes, steering and suspension

Symptoms you may notice

- Parking brake warning light illuminated on the dashboard
- Left rear parking brake may not engage or release, causing a dragging wheel or no hold on a slope
- Audible warning chime or message on the driver information display
- Often no symptoms besides the warning light, with the brake functioning normally
- Uneven parking brake application, with the right side working and the left side not
- Automatic parking brake feature may be disabled or behave erratically

Common causes, most likely first

- 1 Damaged or corroded wiring harness or connector at the left rear brake actuator
- 2 Failed left electric park brake actuator motor (open winding or seized mechanism)
- 3 Blown fuse or relay supplying power to the EPB actuator circuit
- 4 Faulty EPB control module (internal driver failure)
- 5 Water intrusion or road debris damaging the actuator connector or wiring
- 6 Poor ground connection for the EPB system



How to diagnose and fix it

- 1 Check the EPB system fuse and relay, and replace if blown or faulty
- 2 Inspect the left rear actuator connector and wiring for corrosion, damage, or loose pins; clean or repair as needed
- 3 Measure resistance across the left actuator motor terminals and compare with the right side; replace actuator if out of specification
- 4 Check for continuity and short to ground/power in the wiring between the EPB module and the left actuator
- 5 Verify power and ground at the EPB module connector; repair any faulty grounds
- 6 If all wiring and actuator test good, suspect the EPB control module; reprogram or replace as required
- 7 Clear codes and perform a functional test of the parking brake system to confirm repair

Left EPB actuator circuit pitfalls

- A common misdiagnosis is replacing the EPB module when the actual fault is a chafed wire behind the left rear wheel well liner.
The actuator motor can test fine statically but fail under load; a dynamic test with a scan tool that commands the brake on and off is more reliable.
- Water intrusion into the actuator connector is frequent on vehicles driven in wet or snowy climates, causing intermittent C0670.
- Some vehicles require a calibration or relearn procedure after replacing the actuator, which if skipped will set the code again.
The code can be set by a low battery or voltage drop during EPB operation, so always check battery health and charging system first.

Can I keep driving with C0670?

If the parking brake still holds the vehicle securely, you may drive cautiously to a repair shop, but avoid parking on steep inclines. If the brake drags or fails to release, do not drive, as it can overheat the brake and cause loss of control.

Tools that help

- OBD-II scan tool with EPB capability
- Digital multimeter
- Basic hand tools (socket set, screwdrivers)
- Wiring diagram for the specific vehicle
- Brake caliper piston retractor tool (if replacing actuator)



Reading C0670

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

Often seen with

C0671 Electric Park Brake Actuator Right 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/c0670/>

