

GENERIC · CHASSIS

C0583

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0583

Park Brake Release Performance

C0583 indicates the electronic brake control module (EBCM) has detected a performance fault in the electric park brake release circuit, meaning the system cannot fully release the parking brake when commanded. The module monitors release current, motor movement, and switch inputs, and sets this code when the release sequence does not complete within the expected time or current profile.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Chassis	Generic (all makes)	Medium	Professional	Brakes, steering and suspension

Symptoms you may notice

- Parking brake warning light stays illuminated after pressing the release button
- Electric park brake fails to disengage, leaving the rear wheels locked or dragging
- Audible warning chime or message on the driver information center stating park brake fault
- Rear brakes may remain partially applied, causing the vehicle to feel sluggish or hard to move
- Often no symptoms besides the warning light if the fault is intermittent or only affects one release attempt

Common causes, most likely first

- Seized or corroded park brake caliper actuator motor or mechanism
- Faulty park brake release switch or button not sending a valid release request
- Damaged or corroded wiring and connectors between the EBCM and the park brake actuator
- Low system voltage or a weak battery causing the actuator motor to stall during release
- Internal fault in the electronic brake control module (EBCM) or its park brake control logic
- Mechanical binding in the park brake cable or caliper lever on vehicles with a cable-assisted electric park brake



How to diagnose and fix it

- 1 Verify battery voltage and charging system output, as low voltage commonly prevents the park brake actuator from releasing fully
- 2 Scan all modules for related codes and check live data for park brake switch status and actuator motor current during a release command
- 3 Inspect the park brake release switch and its connector for corrosion, damage, or intermittent operation
- 4 Visually inspect the park brake actuator, caliper lever, and wiring harness for corrosion, binding, or chafed wires
- 5 Perform a bidirectional actuator test with a capable scan tool to command release and observe motor current and movement
- 6 Check for mechanical binding by manually retracting the caliper or cable and comparing effort to the opposite side
- 7 If all external checks pass, follow the manufacturer's diagnostic flow for EBCM internal fault confirmation before replacement

Why the park brake release fails silently

- A weak battery or poor ground connection can cause this code without any visible corrosion at the actuator, because the motor draws high current only during release and a marginal voltage drop stalls it.
- The release switch is often overlooked because it feels normal, but a worn contact can send an intermittent release request that the EBCM rejects as a performance fault.
- On vehicles with rear disc brakes, a seized caliper piston or slide pin can mimic an actuator failure by preventing the park brake mechanism from returning fully.
- This code does not always mean the actuator motor is dead; the EBCM may set it when release current is higher than expected due to mechanical binding rather than an electrical open circuit.
- After replacing a park brake actuator or caliper, a calibration or initialization procedure with a scan tool is often required, and skipping it can immediately reset C0583.

Can I keep driving with C0583?

If the parking brake will not release, do not drive the vehicle because dragging rear brakes can overheat and cause a loss of braking performance. If the warning light is on but the brake releases normally, you may drive cautiously to a repair shop, but avoid parking on a hill until the fault is repaired.



Tools that help

- Scan tool with bidirectional control and live data capability
- Digital multimeter
- Battery load tester
- Brake caliper piston retractor tool
- Socket and wrench set
- Wiring diagram for the park brake circuit

Reading C0583

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.
83	The exact fault within that area.

Often seen with

C0561 ABS Disabled Warning Indicator Request · **C0581** Park Brake Apply Performance · **C0582** Brake Booster Motor A Phase U-V-W Circuit Range/Performance · **C0584** Brake Booster Motor B Phase U-V-W Circuit Low · **U0121** Lost Communication With Anti-Lock Brake System (ABS) Control

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/c0583/>

