

GENERIC · CHASSIS

C0870

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0870

Adaptive Cruise Control Brake Request Performance

C0870 indicates that the adaptive cruise control (ACC) system's brake request signal has failed a performance check, meaning the ACC module commanded braking but the vehicle did not decelerate as expected or the brake system did not acknowledge the request. The computer typically detects a mismatch between the requested brake pressure or deceleration and what the wheel speed sensors and brake pressure sensor actually report.

SYSTEM

Chassis

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Brakes, steering and suspension

Symptoms you may notice

- Adaptive cruise control disengages or refuses to activate, often with a 'cruise not available' message
- A warning light or message on the dashboard indicating a cruise control or brake system fault
- The vehicle may brake abruptly or not at all when ACC is active, though this is less common
- Often no symptoms besides the warning light, with normal driving unaffected
- The conventional cruise control may still work, but adaptive features are disabled
- In some cases, the brake pedal may feel different or the ABS light may illuminate if the fault affects shared components

Common causes, most likely first

- 1 Faulty brake pressure sensor or brake pedal position sensor sending incorrect signals
- 2 Worn or contaminated wheel speed sensors causing inaccurate deceleration readings
- 3 Software glitch or outdated calibration in the adaptive cruise control module
- 4 Damaged wiring or corroded connectors between the ACC module and brake system components
- 5 A failing ABS pump or hydraulic modulator that cannot build pressure on command
- 6 Low brake fluid level or air in the brake system affecting pressure response
- 7 A malfunctioning ACC module itself, though this is less common than sensor or wiring issues



How to diagnose and fix it

- 1 Scan all modules for stored codes and freeze-frame data to confirm C0870 and identify related faults
- 2 Inspect brake fluid level and condition, and check for leaks in the hydraulic system
- 3 Test the brake pressure sensor and brake pedal position sensor with a scan tool to verify live readings
- 4 Check wheel speed sensors for debris, damage, or erratic signals using a graphing scan tool
- 5 Inspect wiring and connectors between the ACC module, ABS module, and brake sensors for corrosion or damage
- 6 Perform a calibration or software update on the ACC module if applicable, following manufacturer procedures
- 7 If all else fails, diagnose the ACC module and ABS pump with advanced testing, and replace only after confirming faulty operation

Before you replace the ACC module

- A weak or failing battery can cause voltage drops that trigger C0870 because the ACC module and brake sensors are sensitive to low voltage during cranking or high electrical load.
After any brake system repair or fluid service, the ACC system may need a recalibration or a relearn procedure, and skipping this step can set C0870 even though the hardware is fine.
- Debris or rust on the tone ring of a wheel speed sensor can cause intermittent signal loss that only shows up during ACC braking, not during normal driving.
- A misadjusted brake pedal position sensor, often after pedal work or a floor mat replacement, can make the ACC module think the driver is braking when they are not, setting this code.
Some vehicles set C0870 when the adaptive cruise control radar is misaligned or blocked, because the module cannot verify brake request performance without a clear forward view.

Can I keep driving with C0870?

You can generally drive the vehicle normally because the conventional braking system remains fully functional, but adaptive cruise control will be unavailable and should not be used. Avoid relying on cruise control until the fault is repaired, and have the system diagnosed promptly to prevent any unexpected braking behavior.

Tools that help

- OBD-II scan tool with live data and graphing capability
- Digital multimeter for voltage and resistance checks
- Brake pressure gauge
- Wheel speed sensor tester or oscilloscope
- Manufacturer-specific diagnostic software for calibration and relearn procedures



Reading C0870

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

Often seen with

C0035 Left Front Wheel Speed Sensor Circuit Range/Performance · **C0040** Left Rear Wheel Speed Sensor Circuit · **C0050** Right Rear Wheel Speed Sensor Circuit Malfunction · **P0571** Brake Switch 'A' Circuit · **U0122** Lost Communication With Vehicle Dynamics Control Module

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/c0870/>

