

GENERIC · CHASSIS

C0163

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0163

Left Rear ABS Outlet Solenoid Circuit Malfunction

C0163 indicates that the antilock braking system (ABS) control module has detected an electrical fault in the circuit for the left rear outlet solenoid, which is the valve that releases hydraulic pressure from that wheel during ABS operation. The module monitors the solenoid's voltage and current and sets this code when the signal falls outside the expected range, typically because of an open, short, or excessive resistance in the wiring or solenoid coil.

SYSTEM

Chassis

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Brakes, steering and suspension

Symptoms you may notice

- The ABS warning light illuminates steadily on the dashboard.
- The traction control system (TCS) warning light may also turn on if the vehicle is equipped with stability control.
- The ABS system is disabled, so the wheels can lock during hard braking, especially on slippery surfaces.
- A soft or spongy brake pedal may be felt if the solenoid is stuck open and not holding pressure.
- Often no symptoms besides the warning light, because the base brakes continue to function normally.
- In some cases, a slight pull or uneven braking may be noticed during emergency stops.

Common causes, most likely first

- 1 Damaged or corroded wiring between the ABS control module and the left rear outlet solenoid.
- 2 Failed left rear outlet solenoid coil (open or shorted winding) inside the hydraulic control unit.
- 3 Loose, dirty, or corroded electrical connector at the ABS hydraulic unit or at the solenoid.
- 4 Internal fault in the ABS control module driver circuit for that solenoid.
- 5 High resistance in the ground circuit for the solenoid or the ABS module.
- 6 Aftermarket or improper electrical repairs that disturb the solenoid circuit.
- 7 Moisture intrusion into the ABS harness or connector causing intermittent shorts.



How to diagnose and fix it

- 1 Verify the code with a scan tool that can read ABS codes and check for any related codes in other modules.
- 2 Inspect the wiring harness and connector at the left rear outlet solenoid for damage, corrosion, or looseness; clean and repair as needed.
- 3 Measure the resistance of the left rear outlet solenoid with a multimeter and compare it to the manufacturer's specification to check for an open or shorted coil.
- 4 Check for voltage and ground signals at the solenoid connector while commanding the solenoid on and off with the scan tool to verify the control module output.
- 5 Inspect the ground connections for the ABS module and solenoid circuit for tightness and corrosion.
- 6 If the solenoid coil is out of specification, replace the ABS hydraulic control unit or the solenoid as required by the manufacturer's procedure.
- 7 If all external circuits test good, diagnose the ABS control module for an internal driver fault and replace or reprogram it as necessary.

What the outlet solenoid code really means

- The outlet solenoid is responsible for releasing pressure from the wheel during ABS operation, so a fault here can cause that wheel to lock or drag even when the ABS light is the only clue.
- A common misdiagnosis is replacing the ABS module when the actual problem is a chafed wire near the left rear wheel speed sensor harness, because the solenoid wiring often runs in the same loom.
- Some vehicles set C0163 when the battery voltage is low or the charging system is weak, so always check the battery and alternator before condemning the solenoid.
- The code can be intermittent and may not reappear after clearing if the fault was caused by a temporary poor connection, so a wiggle test of the harness is essential.
- If the vehicle has a separate ABS and traction control system, a fault in the left rear outlet solenoid can also disable the stability control, even though the base brakes remain functional.

Can I keep driving with C0163?

You can usually drive the vehicle with the ABS light on, but the antilock braking function is disabled, so avoid hard braking and slippery road conditions until the fault is repaired. If the brake pedal feels abnormal or the vehicle pulls during braking, stop driving and have it inspected immediately.

Tools that help

- Scan tool with ABS code reading capability
- Digital multimeter
- Wire repair kit (solder, heat shrink, crimp connectors)
- Vehicle-specific service information for solenoid resistance specifications
- Basic hand tools for trim and connector removal



Reading C0163

- C** Chassis: brakes, steering and suspension.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 1** Brakes, steering and suspension.
- 63** 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

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/c0163/>

