

GENERIC · CHASSIS

C004B

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C004B

Brake Fluid Level Sensor/Switch Circuit/Open

C004B indicates that the antilock brake system (ABS) control module has detected an open circuit in the brake fluid level sensor or switch circuit, meaning the sensor is not sending a valid signal. The module expects a specific voltage or resistance from the sensor and sees a value outside that range, which triggers the warning light and may disable ABS or traction control.

SYSTEM

Chassis

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Brakes, steering and suspension

Symptoms you may notice

- Illumination of the brake warning light, ABS light, or both on the dashboard
- Often no symptoms besides the warning light, with normal brake pedal feel and performance
- A message on the driver information center stating 'Check Brake Fluid' or 'Service Brake System'
- In some vehicles, the ABS and traction control systems may be disabled, reducing safety in slippery conditions
- If the fluid level is genuinely low, the driver may notice a soft or spongy brake pedal or longer stopping distances

Common causes, most likely first

- 1 Low brake fluid level in the master cylinder reservoir, which can trigger the sensor and set the code
- 2 Faulty brake fluid level sensor or switch, causing an open circuit internally
- 3 Damaged or disconnected wiring harness at the sensor connector, often due to corrosion or physical damage
- 4 Open circuit in the wiring between the sensor and the ABS control module, such as a broken wire or poor ground
- 5 Corroded or loose electrical connector pins at the sensor or module
- 6 Failed ABS control module, though this is less common and usually accompanied by other codes



How to diagnose and fix it

- 1 Check the brake fluid level in the master cylinder reservoir and top off if low; inspect for leaks if fluid is consistently low
- 2 Visually inspect the brake fluid level sensor and its connector for damage, corrosion, or loose pins; clean or repair as needed
- 3 Disconnect the sensor connector and check for an open circuit in the sensor using a multimeter; replace the sensor if it fails the resistance test
- 4 Test the wiring harness for continuity between the sensor connector and the ABS module; repair any open or short circuits
- 5 Clear the diagnostic trouble codes and verify if C004B returns; if it does, perform a wiggle test on the harness while monitoring live data
- 6 If all wiring and the sensor are good, consult the factory service information for specific voltage and resistance specifications and follow the diagnostic flow chart
- 7 Replace the ABS control module only after confirming all other possibilities have been ruled out and following proper programming procedures

Common Missteps When Diagnosing C004B

- A low brake fluid level is the most frequent cause of this code, so always check the reservoir before condemning the sensor or wiring.
- The brake fluid level sensor often shares a connector or circuit with the parking brake switch or other brake-related inputs, so inspect those systems as well.
- Corrosion inside the sensor connector can create an open circuit that intermittently sets the code, especially in areas with road salt exposure.
- Some vehicles use a float-type sensor that can stick or sink, causing a false low-level signal; testing the sensor with a multimeter while moving the float can reveal this.
- The code may set without any drivability symptoms, leading some to ignore it, but an open circuit in the brake fluid level circuit can also affect the ABS system's ability to detect low fluid, compromising safety.

Can I keep driving with C004B?

If the brake pedal feels normal and the fluid level is correct, the vehicle is generally safe to drive, but the ABS and traction control may be disabled, so exercise extra caution in wet or slippery conditions. Avoid hard braking and have the system diagnosed promptly to restore full brake system functionality.



Tools that help

- OBD-II scan tool with ABS capability
- Digital multimeter
- Factory service information or wiring diagrams
- Basic hand tools for trim and connector removal
- Brake fluid (for topping off)

Reading C004B

C Chassis: brakes, steering and suspension.

0 Generic (SAE) code: it means the same thing on every OBD-II vehicle.

0 Brakes, steering and suspension.

4B The exact fault within that area.

Often seen with

C0040 Left Rear Wheel Speed Sensor Circuit · **C0045** Left Rear Wheel Speed Sensor Circuit Malfunction · **C0050** Right Rear Wheel Speed Sensor Circuit Malfunction · **C0060** Right Rear Wheel Speed Sensor Circuit · **C0110** ABS Pump Motor Circuit Malfunction

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/c004b/>

