

GENERIC · CHASSIS

C0668

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0668

Right Rear Wheel Speed Sensor B Circuit Low

C0668 indicates that the anti-lock brake system (ABS) control module has detected an abnormally low voltage or current on the right rear wheel speed sensor's 'B' circuit, which is typically the signal return or a second channel in a dual-sensor arrangement. The module compares this circuit's behavior against expected values and other wheel sensors, and when the signal stays below the low threshold for a calibrated time, it stores this code and may disable ABS and traction control.

SYSTEM

Chassis

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Brakes, steering and suspension

Symptoms you may notice

- ABS warning light illuminated on the dashboard, often with the traction control light also on
- Traction control and stability control systems may be disabled, reducing grip on slippery surfaces
- A diagnostic trouble code is stored with no other noticeable driving symptoms in many cases
- During hard braking, the ABS may not activate, allowing wheel lockup and longer stopping distances
- Intermittent flickering of the ABS light over bumps or during turns if the fault is a loose connection
- Speedometer or cruise control may act erratically if the affected sensor signal is used for vehicle speed

Common causes, most likely first

- 1 Damaged or chafed wiring in the right rear sensor harness, often near the suspension or wheel well
- 2 Corroded, loose, or water-intruded electrical connector at the sensor or ABS module
- 3 Failed right rear wheel speed sensor due to debris, metal shavings, or internal open circuit
- 4 Excessive air gap between the sensor tip and the tone ring caused by rust jacking or a worn hub
- 5 Damaged or dirty tone ring (reluctor) with missing teeth or heavy contamination
- 6 Internal fault in the ABS control module affecting only the right rear sensor input channel
- 7 Poor ground connection for the sensor circuit or ABS module, causing a low-voltage reference



How to diagnose and fix it

- 1 Inspect the right rear sensor harness and connector for chafing, corrosion, or loose pins, and repair as needed
- 2 Measure sensor resistance and compare to the manufacturer's specification to check for an open or shorted sensor
- 3 Check the air gap between the sensor and tone ring, and clean or replace the tone ring if damaged or contaminated
- 4 Back-probe the sensor circuit at the ABS module and observe the AC voltage signal while spinning the wheel by hand
- 5 Perform a wiggle test on the harness while watching live wheel speed data to reveal intermittent faults
- 6 If the sensor and wiring test good, verify the ABS module's ground and power feeds before condemning the module
- 7 Clear the code and perform a road test to confirm the repair, ensuring the ABS light stays off and live data matches other wheels

What the low circuit code really means

- A low circuit code often results from a poor connection or chafed wire rather than a failed sensor, so inspect the harness before replacing parts.
- Rust jacking under the rear hub can increase the air gap and set a low-signal code even when the sensor itself is healthy.
- Debris or metal shavings stuck to the tone ring can disrupt the signal and mimic a sensor failure, especially after brake or suspension work.
- On some vehicles, a weak battery or charging system fault can cause the ABS module to misread sensor voltage and set this code.
- The 'B' circuit may refer to a second sensor or a return path in a dual-channel system, so consult the wiring diagram for the specific vehicle before testing.

Can I keep driving with C0668?

You can usually continue driving with this code because the base brakes remain functional, but avoid hard braking or slippery conditions since ABS and traction control may be disabled. Have the fault diagnosed soon to restore full safety system operation.

Tools that help

- OBD-II scan tool with live wheel speed data capability
- Digital multimeter with min/max recording
- Oscilloscope for viewing the sensor waveform
- Jack and jack stands or a lift for wheel access
- Wiring diagram and service information for the specific vehicle
- Basic hand tools for connector and sensor removal



Reading C0668

- 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.
- 68** 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 · **C0666** Right Rear Wheel Speed Sensor B Circuit/Open · **C0667** Right Rear Wheel Speed Sensor B Range/Performance · **C0669** Right Rear Wheel Speed Sensor B Circuit High

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/c0668/>

