

GENERIC · CHASSIS

C066B

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C066B

Right Rear Wheel Speed Sensor B Correlation

C066B indicates that the anti-lock brake system (ABS) control module has detected a correlation error between the right rear wheel speed sensor signal and the other wheel speed sensors. The module compares the right rear wheel speed to the vehicle's expected speed and the speeds of the other three wheels, and it sets this code when the right rear signal deviates beyond an acceptable threshold for a calibrated period of time.

SYSTEM

Chassis

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Brakes, steering and suspension

Symptoms you may notice

- Anti-lock brake system (ABS) warning light illuminated on the dashboard
- Traction control or stability control warning light also illuminated on many vehicles
- Often no symptoms besides the warning light, with normal braking performance
- Momentary wheel lockup or ABS activation at low speeds during braking
- Reduced or disabled traction control and stability control functions
- Speedometer fluctuation or inaccuracy if the right rear sensor is used for vehicle speed

Common causes, most likely first

- 1 Damaged or corroded right rear wheel speed sensor connector or wiring harness
- 2 Debris, metal shavings, or rust buildup on the sensor tip or tone ring
- 3 Cracked, chipped, or excessively rusted tone ring (reluctor ring) on the right rear hub or axle
- 4 Failed right rear wheel speed sensor
- 5 Excessive wheel bearing play or hub runout on the right rear corner
- 6 Internal fault in the ABS control module or a software calibration issue
- 7 Incorrect tire size or mismatched tire circumference on the right rear wheel



How to diagnose and fix it

- 1 Inspect the right rear wheel speed sensor, connector, and wiring for physical damage, corrosion, or loose pins
- 2 Clean the sensor tip and tone ring of metal debris, rust, or mud, then clear the code and road test
- 3 Check the tone ring for cracks, missing teeth, or excessive rust and replace the hub or axle if damaged
- 4 Measure the air gap between the sensor and tone ring with a feeler gauge and compare to specification
- 5 Perform a live data scan of all four wheel speed sensors while driving to compare right rear speed to the others
- 6 Check the right rear wheel bearing for play or roughness and replace if worn
- 7 Verify tire sizes and pressures are matched across the axle, then reflash or replace the ABS module only after all other causes are ruled out

What the correlation code really means

- A correlation code does not automatically mean the right rear sensor is faulty; the module is comparing that signal to the other three, so a problem with another sensor or a mismatched tire can set it.
Rust and debris on the tone ring are common causes that are frequently missed because the sensor itself tests good on a bench.
- A failing right rear wheel bearing can produce a speed signal that looks plausible but drifts under load, triggering the correlation code without any obvious noise.
- After replacing a sensor or hub, the ABS module may need a calibration or learn procedure before the code will clear permanently.
Incorrect tire circumference from mismatched sizes or uneven wear can create a persistent correlation error that no sensor replacement will fix.

Can I keep driving with C066B?

The vehicle remains safe to drive under normal braking because the base hydraulic brakes are unaffected, but avoid hard braking or emergency maneuvers until the fault is repaired. Traction control and stability control may be disabled, so reduce speed in wet or slippery conditions and have the system diagnosed promptly.

Tools that help

- OBD-II scan tool with live data and ABS capability
- Digital multimeter
- Feeler gauge set
- Jack and jack stands or a lift
- Wheel chock and lug wrench
- Brake cleaner and a soft brush



Reading C066B

- 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.
- 6B** 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 · **C066A** Right Rear Wheel Speed Sensor B Intermittent/Erratic · **C066C** Right Rear Wheel Speed Sensor B Incorrect Component Installed

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/c066b/>

