

GENERIC · CHASSIS

C065C

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C065C

Right Front Wheel Speed Sensor B Intermittent/Erratic

C065C means the antilock brake system (ABS) module has detected an intermittent or erratic signal from the right front wheel speed sensor circuit B, which is typically the sensor's signal line. The computer sets this code when the signal drops out, spikes, or becomes inconsistent during driving, often without a permanent hard failure.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Chassis	Generic (all makes)	Medium	Intermediate	Brakes, steering and suspension

Symptoms you may notice

- ABS warning light illuminated on the dashboard, often with no other noticeable symptoms
- Traction control or stability control warning light also on, since those systems rely on wheel speed data
- Momentary ABS activation or pulsing at the brake pedal during low-speed stops
- Intermittent loss of cruise control, if the vehicle uses wheel speed for speed regulation
- Speedometer needle flicker or inaccuracy on vehicles that derive vehicle speed from the right front sensor
- A stored history code that reappears after clearing, especially after driving over bumps or in wet conditions

Common causes, most likely first

- 1 Damaged or chafed wiring harness near the right front wheel, often from road debris or suspension movement
- 2 Corroded or loose electrical connector at the right front wheel speed sensor
- 3 Debris, metal shavings, or rust buildup on the sensor tip or tone ring, disturbing the magnetic signal
- 4 Failing right front wheel speed sensor that breaks down intermittently when hot or vibrating
- 5 Worn wheel bearing or damaged tone ring causing an erratic air gap and inconsistent signal
- 6 Water intrusion into the sensor connector or harness, leading to intermittent shorts
- 7 Loose or damaged ABS module connector pins affecting the right front sensor circuit



How to diagnose and fix it

- 1 Inspect the right front wheel speed sensor connector and harness for corrosion, chafing, or loose pins, and clean or repair as needed
- 2 Remove the sensor and check the tip and tone ring for metal debris, rust, or physical damage, then clean or replace affected parts
- 3 Measure the sensor's resistance and compare it to the manufacturer's specification, looking for an open or shorted winding
- 4 Back-probe the sensor signal circuit at the ABS module and observe the waveform on a lab scope while wiggling the harness and driving over bumps
- 5 Check the wheel bearing for play and the tone ring for cracks or missing teeth, replacing the hub assembly if necessary
- 6 Clear the code and perform a road test with live wheel speed data displayed to confirm the right front signal is now stable
- 7 If the signal remains erratic after all external checks, diagnose the ABS module for internal circuit faults before replacement

Intermittent wheel speed faults that fool technicians

- A common misdiagnosis is replacing the sensor when the real fault is a chafed harness inside the wheel well that only shorts when the suspension compresses over bumps.
- Metal debris or rust on the tone ring can mimic a failing sensor, so always inspect and clean the ring before condemning the sensor.
- This code can be set by a worn wheel bearing that changes the air gap as the hub flexes, even though the sensor itself tests fine on a bench.
- Intermittent codes often do not turn on the warning light immediately; a history code may be the only clue until the fault becomes frequent enough to trigger a pending or current code.
- Water intrusion after driving through deep puddles or steam cleaning the engine bay can cause temporary erratic signals that clear once the connector dries out.

Can I keep driving with C065C?

The vehicle remains safe to drive at normal speeds because the base brakes work normally, but avoid hard braking or emergency maneuvers until the fault is repaired, since ABS and stability control may not function correctly during an intermittent signal loss.



Tools that help

- OBD-II scan tool with live wheel speed data capability
- Digital multimeter
- Automotive lab scope
- Jack and jack stands or a vehicle lift
- Basic hand tools for wheel and sensor removal
- Contact cleaner and dielectric grease

Reading C065C

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.
5C	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 · **C065A** Right Front Wheel Speed Sensor B Circuit Low · **C065B** Right Front Wheel Speed Sensor B Circuit High · **C065D** Right Front Wheel Speed Sensor B Correlation

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/c065c/>

