

GENERIC · CHASSIS

C003B

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C003B

Right Rear Wheel Speed Sensor Supply

C003B indicates that the antilock braking system (ABS) control module has detected a fault in the electrical supply circuit for the right rear wheel speed sensor. This typically means the sensor is not receiving the voltage or ground it needs to generate a reliable speed signal, which can disable ABS and traction control functions.

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
- Traction control system (TCS) warning light may also be on
- Often no symptoms besides the warning light, with normal braking performance
- In some cases, the ABS may activate intermittently or at low speeds without cause
- Loss of ABS and traction control assistance during hard braking or slippery conditions
- Cruise control may become inoperative if it relies on wheel speed data

Common causes, most likely first

- 1 Damaged or corroded wiring harness to the right rear wheel speed sensor
- 2 Poor electrical connection at the sensor connector or ABS module
- 3 Failed right rear wheel speed sensor (internal short or open circuit)
- 4 Blown fuse or faulty relay supplying power to the ABS module or sensor circuit
- 5 Corrosion or damage to the sensor mounting area or tone ring affecting signal
- 6 Faulty ABS control module (less common but possible)

How to diagnose and fix it

- 1 Inspect the right rear wheel speed sensor connector and wiring for damage, corrosion, or loose pins
- 2 Check the ABS fuse and relay, and verify power and ground at the sensor connector with a multimeter
- 3 Measure the resistance of the wheel speed sensor and compare to manufacturer specifications
- 4 Perform a wiggle test on the harness while monitoring sensor signal with a scan tool to detect intermittent faults
- 5 Replace the right rear wheel speed sensor if it fails electrical tests
- 6 Repair or replace damaged wiring harness sections as needed
- 7 Clear the code and verify the repair with a test drive, ensuring the ABS light stays off



Don't overlook the simple electrical checks

- A common mistake is replacing the wheel speed sensor without first checking the connector for corrosion or water intrusion, which can mimic a failed sensor.
- The code can be set by a weak battery or charging system issue that causes low voltage to the ABS module, so always verify battery health.
- On some vehicles, a faulty ABS module ground can cause this code even when the sensor and wiring test good.
- The right rear wheel speed sensor supply circuit may share a ground with other sensors, so a bad ground can affect multiple systems.
- After replacing the sensor, the ABS module may require a calibration or relearn procedure on certain models, so consult the service manual.

Can I keep driving with C003B?

The vehicle remains safe to drive under normal conditions because conventional braking is unaffected, but you should avoid hard braking or slippery surfaces since ABS and traction control may not function. Have the fault diagnosed soon to restore full safety system operation.

Tools that help

- OBD-II scan tool with ABS capability
- Digital multimeter
- Jack and jack stands
- Wiring diagram for the specific vehicle
- Basic hand tools (sockets, wrenches, screwdrivers)

Reading C003B

- 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.
- 3B** The exact fault within that area.

Often seen with

C0035 Left Front Wheel Speed Sensor Circuit Range/Performance · **C0036** Left Front Wheel Speed Sensor Circuit Intermittent · **C0037** Right Rear Wheel Speed Sensor Circuit · **C0038** Right Rear 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/c003b/>

