

GENERIC · CHASSIS

C0061

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0061

Right Rear Wheel Speed Sensor Circuit Range/Performance

C0061 indicates that the anti-lock brake system (ABS) control module has detected an abnormal signal from the right rear wheel speed sensor circuit, where the signal is outside the expected range or performance criteria. The computer compares the right rear wheel speed to the other three wheels and flags this code when the signal is erratic, missing, or implausible during driving.

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 accompanied by the traction control and stability control lights.
- The ABS system may be disabled, leading to conventional braking without anti-lock assistance during hard stops.
- Traction control and stability control systems may not function, reducing vehicle stability on slippery surfaces.
- A wheel speed sensor-related message may appear on the driver information center.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- 1 Damaged or corroded right rear wheel speed sensor wiring harness or connector.
- 2 Debris or metallic particles stuck to the sensor tip or tone ring, disrupting the magnetic signal.
- 3 Worn, cracked, or missing teeth on the right rear tone ring (reluctor wheel).
- 4 Faulty right rear wheel speed sensor itself, due to internal failure or heat damage.
- 5 Excessive air gap between the sensor and tone ring caused by bearing play or incorrect installation.
- 6 Water intrusion or corrosion inside the sensor connector or wiring.
- 7 Rarely, a malfunctioning ABS control module or a software issue.



How to diagnose and fix it

- 1 Inspect the right rear wheel speed sensor, connector, and wiring for visible damage, corrosion, or debris; clean or replace as needed.
- 2 Check the tone ring for cracks, missing teeth, or debris buildup; clean or replace the tone ring or hub assembly if damaged.
- 3 Measure the air gap between the sensor and tone ring with a feeler gauge; adjust or replace components to bring it within specification.
- 4 Test the sensor's resistance and output signal with a multimeter or oscilloscope while spinning the wheel; compare to manufacturer specifications.
- 5 Inspect the wiring harness for continuity and shorts to ground or power; repair any damaged wires.
- 6 If the sensor and wiring are good, check the ABS control module for stored codes and perform a relearn or reprogramming procedure if required.
- 7 Clear the codes and test-drive the vehicle to verify the repair and ensure the code does not return.

Common misdiagnosis traps for C0061

- A dirty or debris-covered tone ring often mimics a failed sensor, so cleaning the ring and sensor tip can resolve the code without replacing parts.
- Wheel bearing play can alter the air gap and trigger C0061 even when the sensor and tone ring appear intact, so always check bearing condition.
- Corroded connectors or chafed wiring near the right rear wheel are frequent culprits, especially on vehicles driven in harsh climates.
- The code can be set by a weak sensor signal that only fails under certain conditions, such as high speed or temperature extremes, making intermittent diagnosis challenging.
- Replacing the sensor without checking the tone ring or wiring often leads to a repeat failure, so a thorough circuit inspection is essential.

Can I keep driving with C0061?

You can usually drive the vehicle with C0061 set, but the ABS and traction control systems may be disabled, increasing stopping distances on slippery surfaces. Avoid hard braking or driving in low-traction conditions until the fault is repaired.

Tools that help

- OBD-II scan tool with ABS capability
- Digital multimeter
- Oscilloscope (optional for signal analysis)
- Feeler gauge set
- Socket and wrench set
- Wire brush or contact cleaner



Reading C0061

- 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.
- 61** 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 · **C0060** Right Rear Wheel Speed Sensor Circuit · **C0062** Right Rear Wheel Speed Sensor Circuit Low

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/c0061/>

