

GENERIC · CHASSIS

C0037

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0037

Right Rear Wheel Speed Sensor Circuit

C0037 indicates that the anti-lock brake system (ABS) control module has detected an abnormal condition in the electrical circuit for the right rear wheel speed sensor, which is used to monitor wheel rotation for ABS and traction control. The module typically sets this code when the sensor signal is missing, erratic, or outside the expected voltage range during a self-test or while the vehicle is in motion.

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 be deactivated, reducing grip 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

- Damaged or corroded wiring harness or connector at the right rear wheel speed sensor.
- Failed right rear wheel speed sensor due to debris, moisture, or mechanical damage.
- Debris or metal particles stuck to the sensor tip or tone ring, disrupting the signal.
- Worn or damaged tone ring (reluctor ring) on the right rear hub or axle.
- Excessive air gap between the sensor and tone ring caused by hub bearing wear or incorrect installation.
- Faulty ABS control module, though less common, can misinterpret sensor signals.
- Electrical interference or poor ground connection affecting the sensor circuit.



How to diagnose and fix it

- 1 Inspect the right rear wheel speed sensor and its wiring for visible damage, corrosion, or loose connections; clean or repair as needed.
- 2 Remove the sensor and check for metallic debris or damage on the sensor tip and tone ring; clean the tone ring and sensor.
- 3 Measure the sensor's resistance and compare to manufacturer specifications; replace the sensor if out of range.
- 4 Check the air gap between the sensor and tone ring using a feeler gauge; adjust or replace components if the gap is incorrect.
- 5 Perform a wiggle test on the wiring harness while monitoring sensor signal with a scan tool to detect intermittent faults.
- 6 Use a scan tool to view live wheel speed data for the right rear wheel and compare with other wheels to confirm signal consistency.
- 7 If all sensor and wiring checks pass, diagnose the ABS control module and its connectors for faults.

Common misdiagnosis traps for C0037

- A dirty or debris-covered tone ring often mimics a failed sensor, so cleaning the ring and sensor can resolve the code without parts replacement.
- Wiring harness damage near the wheel arch or suspension components is a frequent cause that is overlooked when only the sensor is replaced.
- The code can be set by a weak or failing wheel bearing that alters the air gap, so bearing play should be checked before condemning the sensor.
- Intermittent C0037 may appear only during certain driving conditions, such as turning or hitting bumps, indicating a loose connection rather than a dead sensor.
- After repairs, the ABS module may require a recalibration or a short drive cycle to clear the code and turn off the warning light.

Can I keep driving with C0037?

The vehicle remains safe to drive under normal conditions because conventional braking is unaffected, but avoid hard braking or slippery surfaces where ABS and traction control would be beneficial. Have the fault diagnosed promptly to restore full safety system functionality.



Tools that help

- OBD-II scan tool with ABS capability
- Digital multimeter
- Feeler gauge set
- Jack and jack stands
- Wheel chocks
- Basic hand tools (sockets, wrenches, screwdrivers)

Reading C0037

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.
37	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 · **C0038** Right Rear Wheel Speed Sensor Circuit Range/Performance · **C0040** Left Rear Wheel Speed Sensor Circuit · **C0050** Right Rear Wheel Speed Sensor Circuit Malfunction

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/c0037/>

