

GENERIC · CHASSIS

C0295

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0295

Steering Sensor Indicates Bias

C0295 means the steering angle sensor is reporting a persistent offset or bias from its expected zero point, so the electronic stability control module cannot trust the steering input signal. The computer detects this when the sensor's raw voltage or digital message stays shifted away from the calibrated center value even when the steering wheel is held straight ahead.

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

Symptoms you may notice

- Traction control and stability control warning lights illuminated on the dashboard
- Steering angle reading in live data does not return to zero degrees with the wheel centered
- Stability control or traction control intervention feels overly sensitive or activates unexpectedly
- Cruise control may be disabled or drop out on vehicles that share the steering angle signal
- Often no symptoms besides the warning light, with normal steering feel and braking
- A steering angle offset may appear after an alignment or suspension repair without recalibration

Common causes, most likely first

- 1 Steering angle sensor not recalibrated after an alignment, suspension repair, or battery disconnect
- 2 Faulty steering angle sensor or its internal optical/electrical element drifting out of range
- 3 Damaged or corroded wiring and connectors between the sensor and the stability control module
- 4 Dirty or damaged sensor ring or code disc inside the steering column assembly
- 5 Low or unstable battery voltage causing the sensor's learned zero point to be lost
- 6 Stability control module software or calibration issue that rejects a valid sensor signal
- 7 Steering column or clock spring assembly wear affecting sensor alignment

How to diagnose and fix it

- 1 Connect a scan tool and read live steering angle data to confirm the offset with the wheel centered
- 2 Inspect the battery, charging system, and grounds for low voltage that could corrupt the learned zero point
- 3 Check the steering angle sensor connector and wiring for corrosion, chafing, or loose pins
- 4 Perform the manufacturer's steering angle sensor calibration or zero-point reset procedure
- 5 If calibration fails, remove and inspect the sensor and code disc for contamination or mechanical damage
- 6 Replace the steering angle sensor or clock spring assembly if the offset persists after calibration
- 7 Clear the code and verify the steering angle reads zero with the wheel straight, then road test



Before you replace the steering sensor

- A large share of C0295 codes are set simply because the steering angle sensor was never recalibrated after an alignment or suspension work, so a calibration procedure fixes it without any parts.
- The code does not always mean the sensor is bad; a weak battery or a voltage drop during cranking can erase the learned zero point and set the same bias fault.
- Technicians sometimes replace the sensor only to find the code returns because the code disc or sensor ring inside the column is dirty or damaged, not the electronics.
- On many vehicles the steering angle signal is shared with adaptive headlights, lane keeping, and cruise control, so those systems may act up or disable alongside the stability control light.
- A scan tool that can display raw steering angle degrees is essential; clearing the code without verifying the zero point will usually let it return on the next drive cycle.

Can I keep driving with C0295?

The vehicle remains steerable and braking is normal, but stability and traction control may not intervene correctly, so keep speeds moderate and avoid aggressive maneuvers or slippery roads until repaired. Do not ignore the warning light, because a biased steering signal can cause unexpected stability control activation.

Tools that help

- OBD-II scan tool with live steering angle data and calibration capability
- Digital multimeter for voltage and continuity checks
- Battery load tester and charging system tester
- Basic hand tools for trim and steering column access
- Manufacturer service information for the calibration procedure

Reading C0295

C	Chassis: brakes, steering and suspension.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
2	Brakes, steering and suspension.
95	The exact fault within that area.

Often seen with

C0050 Right Rear Wheel Speed Sensor Circuit Malfunction · **C0051** Front Left ABS Solenoid 1 Circuit Malfunction · **U0126** Lost Communication With Steering Angle Sensor Module



See it working

Watch the animated explainer [How Coil-on-Plug Ignition Works: Coil and Spark Plug](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/c0295/>

