

GENERIC · CHASSIS

C0827

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0827

Steering Effort Sensor Stuck

C0827 means the steering control module has detected that the steering effort sensor signal is stuck within a plausible range instead of changing as the driver turns the wheel. The sensor is used to measure how much torque the driver is applying, and a stuck signal prevents the module from correctly assisting or correcting steering effort.

SYSTEM

Chassis

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Brakes, steering and suspension

Symptoms you may notice

- The stability control or power steering warning light is illuminated on the dashboard.
- Steering feel may become heavier or lighter than normal, especially at low speeds.
- The vehicle may pull or wander because the assist is not responding to driver input.
- Stability control and lane-keep assist features may be disabled or behave erratically.
- Often no symptoms besides the warning light, particularly if the stuck value is close to the normal center position.

Common causes, most likely first

- 1 A failed steering effort sensor that is internally shorted or mechanically stuck.
- 2 Damaged or corroded wiring between the sensor and the steering control module.
- 3 A poor electrical connection at the sensor connector or module harness.
- 4 A steering column or sensor mounting issue that prevents the sensor from moving freely.
- 5 A software fault or internal error in the steering control module.
- 6 Contamination or debris inside the sensor assembly causing it to seize.

How to diagnose and fix it

- 1 Connect a scan tool and read the live steering effort sensor data while turning the wheel to confirm the signal is frozen.
- 2 Inspect the sensor connector and wiring for corrosion, chafing, or loose pins, and repair as needed.
- 3 Check the sensor mounting and steering column for mechanical binding or damage that could hold the sensor stuck.
- 4 Perform a calibration or relearn procedure for the steering angle and effort sensor using the scan tool.
- 5 If the signal remains stuck after electrical and mechanical checks, replace the steering effort sensor.
- 6 Clear the code and verify the repair by test-driving while monitoring live data for a changing sensor signal.



Why a stuck sensor is not always the sensor

- A stuck steering effort sensor signal is frequently caused by a poor ground connection at the steering column or chassis, which offsets the sensor voltage and makes it appear frozen.
- After replacing the sensor, many vehicles require a steering angle and effort sensor calibration with a factory-level scan tool, or the code will reset immediately.
- The code can be set by a binding steering shaft universal joint or column bearing that prevents the sensor from returning to center, mimicking an internal sensor failure.
- Some vehicles use the steering effort signal for both power steering assist and stability control, so a stuck signal may disable multiple driver-assist features even when the steering feels normal.
- A low battery or charging system fault can cause the steering control module to log a stuck sensor code during cranking, so always check system voltage before condemning the sensor.

Can I keep driving with C0827?

You can usually drive the vehicle to a repair shop, but expect reduced or inconsistent steering assist and disabled stability control, so avoid high-speed maneuvers and heavy steering loads until the fault is repaired.

Tools that help

- OBD-II scan tool with live data and steering calibration capability
- Digital multimeter
- Wiring diagram and service information for the steering effort sensor circuit
- Basic hand tools for trim and column access
- Contact cleaner and dielectric grease

Reading C0827

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

Often seen with

C0051 Front Left ABS Solenoid 1 Circuit Malfunction · **C0830** Steering Wheel Angle Sensor Center Position Not Learned · **U0126** Lost Communication With Steering Angle Sensor Module



See it working

Watch the animated explainer [Inline-Four Engine X-Ray: Firing Order 1-3-4-2](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/c0827/>

