

GENERIC · CHASSIS

C0497

OBD-II TROUBLE CODE

C0497

Yaw Rate Sensor Range/Performance

The C0497 code means the vehicle's stability control computer has detected that the yaw rate sensor is producing a signal outside its expected range or is not performing reliably. The computer compares the sensor's reported rotation rate around the vertical axis with other inputs such as wheel speed, steering angle, and lateral acceleration, and it sets this code when the yaw signal is implausible, erratic, or stuck within a key-on self-test.

SYSTEM

Chassis

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Brakes, steering and suspension

Symptoms you may notice

- The stability control (ESC) warning light or traction control light illuminates steadily on the dashboard. The stability control system may be disabled, so the vehicle will not intervene during a skid or loss of traction.
- A related message such as 'Stability Control Off' or 'Service Stability Control' may appear in the driver information center.
- The ABS light may also illuminate if the stability system shares the same warning lamp or module.
- Often no symptoms besides the warning light, with the vehicle driving normally in dry conditions.
- In some cases, the vehicle may feel less stable in slippery conditions because the stability system is not correcting yaw.

Common causes, most likely first

- 1 A faulty yaw rate sensor, often due to internal electronic failure or contamination.
- 2 Damaged, corroded, or loose wiring and connectors at the yaw rate sensor or stability control module.
- 3 A yaw rate sensor that has lost its calibration or requires a zero-point reset after battery or suspension work.
- 4 Low or unstable battery voltage causing the sensor to report out-of-range values.
- 5 A malfunctioning stability control module that cannot process the yaw signal correctly.
- 6 Improper mounting or physical damage to the sensor, such as after a collision or interior trim removal.
- 7 Interference from aftermarket electronics or a poorly installed accessory near the sensor.



How to diagnose and fix it

- 1 Verify battery voltage and charging system output, as low voltage can set this code without a failed sensor.
- 2 Inspect the yaw rate sensor connector and wiring for corrosion, looseness, or damage, and repair as needed.
- 3 Use a scan tool to read live yaw rate data and compare it with expected values during a slow turn; an erratic or stuck reading points to the sensor.
- 4 Perform the manufacturer's specified yaw rate sensor calibration or zero-point reset procedure with a capable scan tool.
- 5 If calibration fails or live data is implausible, replace the yaw rate sensor and recalibrate it.
- 6 Check for related codes in the ABS and stability control modules and diagnose any communication or voltage faults first.
- 7 After repair, clear codes and perform a road test to confirm the stability control system operates correctly and the code does not return.

Yaw sensor faults that mimic other failures

- A weak battery or poor ground connection can cause the yaw rate sensor to report out-of-range values, so always check voltage and grounds before condemning the sensor.
- The yaw rate sensor often shares a module with the lateral acceleration sensor, and a fault in that combined unit may set C0497 along with other stability codes.
- After a wheel alignment, suspension repair, or battery replacement, the yaw sensor may need a zero-point calibration; skipping this step can set C0497 even with a good sensor.
- A damaged or misaligned steering angle sensor can cause the stability computer to reject the yaw signal as implausible, leading to a C0497 code that is not the sensor's fault.
- Some vehicles require the yaw sensor to be initialized with a factory-level scan tool, and a generic OBD-II reader cannot perform this calibration.

Can I keep driving with C0497?

You can usually drive the vehicle normally in dry conditions, but the stability control system will not assist you in a skid or emergency maneuver. Avoid aggressive driving, towing, or slippery road conditions until the fault is repaired, and have the system diagnosed promptly.

Tools that help

- OBD-II scan tool with live data and stability control calibration capability
- Digital multimeter for voltage and continuity checks
- Factory service information for calibration procedures and wiring diagrams
- Basic hand tools for trim removal and sensor access
- Battery load tester or charging system tester



Reading C0497

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

Often seen with

C0040 Left Rear Wheel Speed Sensor Circuit · **C0050** Right Rear Wheel Speed Sensor Circuit Malfunction · **C0496** Yaw Rate Sensor Circuit · **C0498** Lateral Acceleration Sensor Circuit · **U0126** Lost Communication With Steering Angle Sensor Module

See it working

Watch the animated explainer [How a Catalytic Converter Works: 3D Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/c0497/>

