

GENERIC · CHASSIS

C0287

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0287

ESP Performance

C0287 indicates that the Electronic Stability Program (ESP) control module has detected a performance fault within the system, meaning the stability control cannot reliably intervene to prevent skids or loss of control. The computer monitors wheel speed, steering angle, yaw rate, and brake pressure inputs, and when the calculated vehicle motion does not match the driver's intended path, it sets this code and disables ESP.

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

Symptoms you may notice

- The ESP or traction control warning light illuminates steadily on the dashboard.
- The stability control system may be disabled, allowing wheelspin or skids in slippery conditions.
- An intermittent or constant 'Service ESP' or 'Stability Control Off' message appears in the driver information center.
- The vehicle may feel less stable during evasive maneuvers or on wet roads.
- Often no symptoms besides the warning light, with normal driving behavior otherwise.
- In some cases, the anti-lock brake system (ABS) may also be disabled if the fault affects shared sensors.

Common causes, most likely first

- A faulty wheel speed sensor or damaged sensor wiring at one of the wheels.
- A dirty or defective steering angle sensor that requires recalibration or replacement.
- A failing yaw rate and lateral acceleration sensor, often due to internal electronic failure.
- Low brake fluid level or a hydraulic issue affecting the ESP pump and valve block.
- A weak or failing vehicle battery or poor ground connection causing voltage drops to the ESP module.
- A software glitch or corrupted calibration in the ESP control module.
- A malfunctioning ESP control module itself, though this is less common than sensor faults.



How to diagnose and fix it

- 1 Use an OBD-II scanner with ESP capability to read all stored codes and freeze-frame data, then record them before clearing.
- 2 Visually inspect each wheel speed sensor and its wiring for damage, corrosion, or debris, and clean or repair as needed.
- 3 Check the brake fluid level and inspect the ESP hydraulic unit for leaks or external damage.
- 4 Test the battery and charging system to ensure stable voltage, and clean and tighten ground connections.
- 5 Perform a steering angle sensor calibration or relearn procedure using a scan tool if the sensor is suspect.
- 6 If sensor faults are ruled out, follow the manufacturer's diagnostic flow for the yaw rate sensor and ESP module.
- 7 After repairs, clear codes and perform a road test to verify the ESP system operates correctly and the light stays off.

Before you replace the ESP module

- A common oversight is a weak battery or poor ground causing intermittent ESP faults that mimic a failed module; always load-test the battery first.
- The steering angle sensor often loses calibration after a wheel alignment or battery replacement, setting C0287 without any physical fault.
- Debris or metallic particles on a wheel speed sensor can cause erratic signals that the ESP interprets as a performance fault, so clean sensors before condemning them.
- C0287 can be set by a mismatched tire size or uneven tire wear, which alters wheel speed ratios and confuses the ESP logic.
- Do not assume the ESP module is defective until all sensor inputs and wiring have been thoroughly tested, as module replacement is rarely the cure.

Can I keep driving with C0287?

You can usually continue driving if the vehicle feels normal, but remember that stability control and possibly ABS are disabled, so avoid aggressive maneuvers and slippery conditions. Have the fault diagnosed soon to restore full safety system function.

Tools that help

- OBD-II scanner with ESP and ABS capabilities
- Digital multimeter for testing sensors and wiring
- Battery load tester
- Brake fluid level gauge
- Scan tool with bidirectional control for calibration and relearn procedures



Reading C0287

- 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.
- 87** 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 · **C0110** ABS Pump Motor Circuit Malfunction

See it working

Watch the animated explainer [How a Supercharger Works: Roots Blower in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/c0287/>

