

GENERIC · CHASSIS

C0605

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0605

ESC Internal Performance

C0605 means the electronic stability control (ESC) module has detected an internal performance fault, typically a failure in its own processing, memory, or output driver circuitry. The module runs self-tests on its internal hardware and software, and when a result falls outside the expected range it stores this code and disables ESC operation.

SYSTEM

Chassis

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Brakes, steering and suspension

Symptoms you may notice

- The ESC or traction control warning light stays illuminated on the dashboard.
- The stability control system is disabled, so the vehicle will not intervene during a skid or loss of traction.
- The ABS light may also be on if the ESC module shares hardware with the ABS system.
- A message such as 'Service StabiliTrak' or 'ESC Off' may appear in the driver information center.
- Often no symptoms besides the warning light, with the vehicle driving normally in dry conditions.
- Cruise control may be inhibited on some vehicles as a consequence of the ESC fault.

Common causes, most likely first

- 1 Internal failure of the ESC control module itself, such as a faulty processor, memory corruption, or a failed output driver.
- 2 Low or unstable system voltage reaching the ESC module, often from a weak battery or poor charging system.
- 3 Corroded, loose, or damaged power and ground connections at the ESC module connector.
- 4 Water intrusion into the ESC module or its connector, causing internal shorting or corrosion.
- 5 A software or calibration fault within the ESC module that requires reprogramming.
- 6 A failed wheel speed sensor or steering angle sensor that the module interprets as an internal performance problem.
- 7 Aftermarket electronic accessories wired into the ESC circuit causing electrical interference.



How to diagnose and fix it

- 1 Scan all modules for stored codes and record freeze-frame data to confirm C0605 is current and not historical.
- 2 Perform a battery and charging system test, including a load test and voltage drop checks on the ESC module power and ground circuits.
- 3 Inspect the ESC module connector and harness for corrosion, water intrusion, loose pins, and chafed wires.
- 4 Check for technical service bulletins and software updates for the ESC module that address internal performance faults.
- 5 Reprogram or reflash the ESC module with the latest calibration if the manufacturer offers an update.
- 6 If the fault persists after power, ground, and software checks, replace the ESC module and perform any required coding or calibration.
- 7 Clear codes and perform a road test to verify the ESC system completes its self-test and the warning light stays off.

What the ESC module self-test really checks

- C0605 is often set by a momentary voltage dip during engine cranking, so a battery that is marginal but still starts the car can be the root cause.
- The ESC module performs continuous internal checks on its processor, memory, and output drivers, and this code means one of those checks failed, not necessarily that the module is dead.
- A wheel speed sensor or steering angle sensor fault can be misread by the module as an internal performance issue, so always check live sensor data before condemning the module.
- Water intrusion at the module connector is a common hidden cause, especially on vehicles where the module is mounted low in the engine bay or under the floor.
- Replacing the ESC module without checking power and ground integrity frequently results in the same code returning on the new part.

Can I keep driving with C0605?

The vehicle remains controllable because the base brakes and steering are unaffected, but ESC and possibly ABS are disabled, so avoid slippery roads, high-speed maneuvers, and towing until the fault is repaired. If the ABS light is also on, treat the vehicle as having reduced braking assistance in an emergency and drive conservatively.

Tools that help

- OBD-II scan tool with ABS/ESC module capability
- Digital multimeter for voltage and resistance checks
- Battery load tester
- Manufacturer-specific diagnostic software for module reprogramming
- Trim removal tools and electrical contact cleaner



Reading C0605

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

Often seen with

C0600 Active Yaw Control System Failure · **C0601** Active Air Dam Control Circuit/Open · **C0602** Active Air Dam Control Circuit Low · **C0603** Active Air Dam Control Circuit High · **C0604** Active Air Dam Control Circuit Performance

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/c0605/>

