

GENERIC · CHASSIS

C061D

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C061D

Variable Effort Steering Actuator Control Circuit Low

The variable effort steering system adjusts power steering assist based on vehicle speed and driving conditions, and code C061D means the control module has detected an abnormally low voltage or current on the actuator control circuit. This typically indicates a short to ground, an open circuit, or a faulty actuator that prevents the system from commanding the intended steering effort.

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

Symptoms you may notice

- The steering may feel heavier than normal, especially at low speeds or during parking maneuvers.
- A stability control or power steering warning light may illuminate on the dashboard.
- The steering assist may feel inconsistent, switching between firm and light without driver input.
- In some vehicles, the system may default to a fixed assist level, reducing the variable effort feature.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- A short to ground in the actuator control circuit wiring, often due to chafed insulation or pinched harness.
- An open circuit in the actuator control circuit, such as a broken wire or disconnected connector.
- A faulty variable effort steering actuator solenoid with an internal short or open coil.
- Corrosion or water intrusion at the actuator connector or control module connector.
- A failed steering control module that cannot correctly monitor or drive the actuator circuit.
- Poor ground connection for the steering system or actuator, causing reference voltage issues.



How to diagnose and fix it

- 1 Inspect the actuator connector and wiring for visible damage, corrosion, or loose pins, and repair as needed.
- 2 Measure resistance of the actuator solenoid with a multimeter and compare to the manufacturer's specification to check for an open or shorted coil.
- 3 Disconnect the control module and check the actuator control circuit for continuity to ground and to the actuator; repair any short or open.
- 4 Check for water intrusion or corrosion at the control module connector and clean or replace terminals if necessary.
- 5 If wiring and actuator test good, substitute a known-good actuator or control module to isolate the fault before replacement.
- 6 After repairs, clear the code and perform a steering angle sensor calibration or system reset as required by the manufacturer.

What the low circuit code really means

- A low circuit code does not automatically mean the actuator is bad; a short to ground in the wiring is just as common and often cheaper to fix.
- Intermittent faults often occur when the steering wheel is turned fully to one side, stretching or pinching the harness near the actuator.
- Some vehicles use the same actuator for both variable effort and active steering features, so a fault can affect multiple systems and set related codes.
- A weak or failing battery or charging system can cause low voltage codes on the actuator circuit even when the circuit itself is healthy.
- After replacing the actuator or control module, a steering angle sensor calibration is often required to restore proper variable assist operation.

Can I keep driving with C061D?

You can usually drive the vehicle, but expect heavier steering at low speeds and reduced assist, which can make parking and tight maneuvers more difficult. Avoid aggressive driving or towing until the fault is repaired, and have the system diagnosed promptly to prevent further damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the variable effort steering circuit
- Socket set and trim removal tools
- Contact cleaner and dielectric grease



Reading C061D

- 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.
- 1D** The exact fault within that area.

Often seen with

C061C Variable Effort Steering Actuator Control Circuit/Open · **C061E** Variable Effort Steering Actuator Control Circuit High · **U0126** Lost Communication With Steering Angle Sensor Module

See it working

Watch the animated explainer [How Crank and Cam Position Sensors Work](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/c061d/>

