

GENERIC · CHASSIS

C00A6

OBD-II TROUBLE CODE

C00A6

4WD/AWD Transfer Case Unit Actuator

C00A6 indicates a fault in the 4WD/AWD transfer case actuator circuit, which is the motor or solenoid that engages or disengages the transfer case to switch between two-wheel drive and four-wheel drive. The control module has detected an electrical problem such as an open circuit, short to ground or power, or an implausible signal from the actuator, and it has set this code while disabling the system.

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

Symptoms you may notice

- The 4WD or AWD warning light illuminates steadily on the dashboard.
- The vehicle remains stuck in two-wheel drive and cannot engage four-wheel drive.
- A grinding or clunking noise may be heard from the transfer case when engagement is attempted.
- The transfer case may fail to shift between high and low range, leaving the selector unresponsive.
- In some cases, the vehicle may default to four-wheel drive and feel binding during tight turns.
- Often no symptoms besides the warning light, with the vehicle driving normally in two-wheel drive.

Common causes, most likely first

- 1 A failed transfer case actuator motor or solenoid, often due to internal wear or water intrusion.
- 2 Damaged or corroded wiring and connectors between the actuator and the control module.
- 3 A blown fuse or relay that supplies power to the actuator circuit.
- 4 A faulty transfer case control module or a software calibration issue that misinterprets actuator feedback.
- 5 Mechanical binding inside the transfer case that prevents the actuator from moving through its full range.
- 6 A weak or failing vehicle battery that causes low voltage during actuator operation.



How to diagnose and fix it

- 1 Verify battery voltage and charge the battery if it is low, because weak voltage can trigger false actuator codes.
- 2 Check the fuse and relay for the transfer case actuator circuit and replace any that are blown or faulty.
- 3 Inspect the actuator wiring harness and connectors for corrosion, chafing, or loose pins, and repair as needed.
- 4 Use a scan tool to command the actuator through its range and observe live data to confirm whether it responds.
- 5 Measure resistance and voltage at the actuator connector and compare with the manufacturer's specifications.
- 6 If electrical checks pass, remove the actuator and inspect for mechanical binding or a stripped gear inside the transfer case.
- 7 Replace the actuator or control module only after confirming the fault, then clear the code and verify proper 4WD engagement.

Before you replace the transfer case actuator

- A low or failing battery is a common cause of this code because the actuator draws high current, and voltage drops can set a false fault.
- Corroded connectors at the transfer case are frequently overlooked, especially on vehicles that see road salt or off-road water crossings.
- The code can be set by a mechanical bind inside the transfer case rather than an electrical fault, so always command the actuator and watch for movement before condemning parts.
- Some vehicles require a relearn or calibration procedure after actuator replacement, and skipping it will leave the code returning immediately.
- A faulty transfer case control module can mimic an actuator failure, so check for communication codes and power/ground integrity at the module before replacement.

Can I keep driving with C00A6?

You can usually continue driving in two-wheel drive, but avoid off-road use, slippery conditions, or any situation where four-wheel drive is needed because the system is disabled. Do not ignore the warning light for an extended period, as a binding transfer case can cause further damage.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter
- Fuse puller and test light
- Socket and wrench set
- Vehicle service information for wiring diagrams and actuator specifications



Reading C00A6

- C** Chassis: brakes, steering and suspension.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 0** Brakes, steering and suspension.
- A6** The exact fault within that area.

Often seen with

P1870 Transmission Component Slipping · **C00A5** Driveline Control Module Transfer Case Unit Control Circuit
 · **C00A7** 4WD/AWD Transfer Case Unit Actuator Position Sensor A · **C00A8** 4WD/AWD Transfer Case Unit Actuator Position Sensor B · **U0102** Lost Communication with Transfer Case Control Module

See it working

Watch the animated explainer [How a Jet Engine Works: Two-Spool Turbofan](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/c00a6/>

