

GENERIC · CHASSIS

C00A2

OBD-II TROUBLE CODE

C00A2

Driveline Control Module Power Transfer Unit Control Circuit Driver

This code indicates that the driveline control module has detected a fault in the electrical circuit that drives the power transfer unit (PTU) control actuator, which engages or disengages the rear axle on all-wheel-drive vehicles. The module monitors the driver circuit for open circuits, short circuits, or excessive current draw and sets this code when the expected voltage or current is outside the normal range.

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

Symptoms you may notice

- All-wheel-drive or four-wheel-drive system may be disabled, leaving the vehicle in front-wheel drive only
- Illumination of the driveline or AWD warning light on the instrument cluster
- Often no symptoms besides the warning light, especially if the PTU remains in its default engaged or disengaged position
- A noticeable clunk or hesitation when the vehicle attempts to engage the rear axle during acceleration or low-traction conditions
- Reduced traction in slippery conditions because the rear wheels no longer receive torque
- In rare cases, the vehicle may enter a limp mode that limits engine power or vehicle speed

Common causes, most likely first

- Damaged or corroded wiring harness between the driveline control module and the PTU actuator, often due to road debris or chafing
- Failed PTU control actuator solenoid or motor, which can short internally or seize
- Blown fuse or faulty relay that supplies power to the PTU control circuit
- Poor electrical connection at the PTU actuator connector, caused by water intrusion or loose pins
- Internal fault in the driveline control module driver circuit, though this is less common
- Corroded ground connection for the driveline control module or PTU actuator
- Aftermarket accessories or improper wiring repairs that interfere with the circuit



How to diagnose and fix it

- 1 Inspect the PTU actuator fuse and relay, and replace any that are blown or faulty
- 2 Disconnect the PTU actuator connector and check for corrosion, water intrusion, or loose pins; clean or repair as needed
- 3 Perform a resistance and voltage drop test on the control circuit wiring between the module and actuator to locate opens or shorts
- 4 Command the PTU actuator with a scan tool to verify that it moves and that the circuit responds correctly
- 5 If the actuator fails to respond, remove it and bench-test its resistance and operation, replacing it if out of specification
- 6 Check the driveline control module ground connections and repair any corrosion or loose fasteners
- 7 If all external circuits and components test good, suspect the driveline control module and follow the manufacturer's diagnostic flow for module replacement

What the PTU actuator circuit really needs

- A common oversight is assuming the actuator itself is faulty when the real problem is a chafed wire hidden behind a splash shield or near the exhaust, so always perform a thorough visual inspection of the harness before replacing parts.
- The driveline control module may set this code intermittently if the actuator connector is only slightly loose, so wiggle-testing the harness while monitoring live data can reveal the fault without any parts replacement.
- Some vehicles default the PTU to an engaged state when the circuit fails, which can cause binding or tire scrubbing in tight turns; this mechanical symptom is often misdiagnosed as a transmission problem.
- A weak or failing battery or charging system can cause voltage spikes that trigger this code, so check battery health and ground integrity before diving into the PTU circuit.
- After a collision repair or underbody work, the PTU actuator wiring is easily pinched or left disconnected, so always review recent repair history when this code appears suddenly.

Can I keep driving with C00A2?

You can usually continue driving with this code because the vehicle remains safe in front-wheel drive, but avoid slippery conditions where all-wheel drive is needed and do not ignore the warning light for an extended period. Have the circuit inspected soon to prevent further damage to the actuator or module.

Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter with voltage and resistance measurement
- Wire piercing probes or back-probe kit
- Test light
- Socket and ratchet set
- Electrical contact cleaner and dielectric grease



Reading C00A2

- 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.
- A2** The exact fault within that area.

Often seen with

C00A1 Driveline Control Module · **C00A3** Driveline Control Module Rear Differential Unit A Control Ci · **U0102** Lost Communication with Transfer Case Control Module

See it working

Watch the animated explainer [Master the Four-Stroke Engine Cycle](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/c00a2/>

