

GENERIC · POWERTRAIN

# P0B00

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

## P0B00

### Electric/Auxiliary Transmission Fluid Pump Motor Phase U Current

P0B00 indicates that the electric auxiliary transmission fluid pump motor has a current fault on phase U of its three-phase motor circuit. The transmission control module monitors the current flowing through each phase and sets this code when the phase U current is outside the expected range, which can mean an open circuit, a short to ground or power, or a faulty pump motor winding.

| SYSTEM     | CODE TYPE           | SEVERITY | FIX DIFFICULTY | AREA              |
|------------|---------------------|----------|----------------|-------------------|
| Powertrain | Generic (all makes) | Medium   | Professional   | Hybrid propulsion |

#### Symptoms you may notice

- Illumination of the check engine light or transmission warning light, often with no other noticeable symptoms
- Harsh or delayed shifting, especially when the engine is cold or during auto start-stop events
- The vehicle may enter limp mode or refuse to move after an automatic stop-start event
- A whining or grinding noise from the transmission area when the auxiliary pump should be running
- Intermittent loss of transmission fluid pressure, leading to slipping or shuddering under load
- The engine may stall or fail to restart smoothly in vehicles with start-stop systems

#### Common causes, most likely first

- 1 Damaged or corroded wiring harness at the auxiliary pump motor connector, particularly the phase U wire
- 2 Open or shorted phase U winding inside the auxiliary transmission fluid pump motor
- 3 Faulty transmission control module (TCM) driver circuit for phase U
- 4 Blown fuse or relay supplying power to the auxiliary pump motor
- 5 Contaminated or degraded transmission fluid causing pump motor overload
- 6 Loose or damaged ground connection for the auxiliary pump motor
- 7 Internal failure of the auxiliary pump assembly, such as a seized rotor or bearing



## How to diagnose and fix it

- 1 Inspect the auxiliary pump motor connector and harness for corrosion, chafing, or loose pins, and repair as needed
- 2 Check the fuse and relay that supply power to the auxiliary pump motor and replace if faulty
- 3 Measure resistance of the phase U winding at the pump motor connector and compare to specifications
- 4 Perform a voltage drop test on the phase U circuit while commanding the pump on with a scan tool
- 5 Check for short circuits between phase U and ground or battery power using a multimeter
- 6 If wiring and power supply are good, replace the auxiliary transmission fluid pump motor or assembly
- 7 After repair, clear codes and verify the pump operates correctly during a road test with start-stop activation

## What the phase U current code really means

- A phase U current fault often originates from a chafed wire near the pump connector rather than the pump itself, so always inspect the harness before condemning the motor.
- Some vehicles set P0B00 only after multiple drive cycles with the fault present, so a single occurrence may not indicate a hard failure.
- Low transmission fluid level or a restricted filter can cause the auxiliary pump to draw excessive current and set this code, mimicking an electrical fault.
- The auxiliary pump may only run during auto start-stop events, so the fault might not appear during a standard test drive unless those conditions are met.
- A faulty TCM can command the pump incorrectly and set a phase U current code even when the pump and wiring are healthy, so module diagnostics should be part of the workflow.

## Can I keep driving with P0B00?

You can usually drive the vehicle short distances to a repair shop, but avoid relying on the auto start-stop feature and do not tow heavy loads or drive in extreme heat until the fault is repaired. If the transmission slips or the vehicle enters limp mode, stop driving and seek professional assistance.

## Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter with resistance and voltage drop capabilities
- Wiring diagram for the auxiliary transmission fluid pump circuit
- Socket set and trim removal tools for accessing the pump connector
- Insulation piercing probes or back probe pins



## Reading P0B00

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- B** Hybrid propulsion.
- 00** The exact fault within that area.

## Often seen with

**P0A94** DC/DC Converter A Performance · **P0B01** Electric/Auxiliary Transmission Fluid Pump Motor Phase U Cur · **P0B02** Electric/Auxiliary Transmission Fluid Pump Motor Phase U Cur · **P0B03** Electric/Auxiliary Transmission Fluid Pump Motor Phase V Cur · **P0C00** Drive Motor A Current Low

## See it working

Watch the animated explainer [How an Automatic Transmission Works, Gear by Gear](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0b00/>

