

GENERIC · POWERTRAIN

P0B03

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0B03

Electric/Auxiliary Transmission Fluid Pump Motor Phase V Current

P0B03 indicates that the electric auxiliary transmission fluid pump motor's phase V current is outside the expected range, as detected by the transmission control module monitoring the pump's electrical draw. This pump maintains fluid pressure when the engine is off or during auto start-stop events, so a phase current fault can disable that function and trigger the warning light.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Hybrid propulsion

Symptoms you may notice

- Illumination of the transmission or powertrain warning light, often with no other noticeable symptoms
- Rough or delayed engagement when accelerating from a stop after an auto start-stop event
- Harsh shifting or slipping during low-speed maneuvers when the engine is not running
- The vehicle may enter limp mode or refuse to restart after shutting off at a traffic light
- A whining or humming noise from the transmission area that changes with pump operation
- Inconsistent transmission behavior that worsens in stop-and-go traffic

Common causes, most likely first

- 1 Damaged or chafed wiring in the pump motor phase V circuit, including open or shorted conductors
- 2 Corroded or loose electrical connector at the auxiliary pump motor or transmission control module
- 3 Failed auxiliary transmission fluid pump motor, such as a shorted or open phase winding
- 4 Faulty transmission control module driver circuit for the pump motor
- 5 Low or contaminated transmission fluid causing pump overload and abnormal current draw
- 6 Internal mechanical binding in the auxiliary pump assembly
- 7 Aftermarket electrical accessories improperly tapped into the pump circuit



How to diagnose and fix it

- 1 Verify battery voltage and charging system output, then clear the code and test-drive to confirm it returns
- 2 Inspect the auxiliary pump motor connector and harness for corrosion, chafing, or loose pins, and repair as needed
- 3 Measure resistance and voltage drop on the phase V circuit between the pump motor and control module, comparing to manufacturer specifications
- 4 Check transmission fluid level and condition, and service the fluid if it is low or contaminated
- 5 Perform an active pump test with a scan tool to command the auxiliary pump and observe current draw and pressure response
- 6 If electrical checks pass, remove the auxiliary pump motor and bench-test it or substitute a known-good unit to isolate the fault
- 7 If the pump motor tests good, diagnose the transmission control module driver circuit and replace the module only after confirming all external wiring is sound

What the phase V current code hides

- A weak or aging battery can cause this code because the auxiliary pump draws high current during auto start-stop events, and low system voltage skews the current feedback the control module monitors.
- Technicians often replace the auxiliary pump motor when the real fault is a corroded ground strap or a pin backed out of the connector, so always perform a voltage drop test under load before condemning the pump.
- This code can set intermittently and leave no drivability complaint, especially if the vehicle rarely uses its auto start-stop feature, so a stored history code may be the only clue.
- Transmission fluid that is overfilled or aerated can raise pump current draw enough to set P0B03 without any mechanical failure inside the pump.
- Some vehicles share the auxiliary pump circuit with other low-current accessories, and a failing accessory can back-feed the circuit and mimic a pump phase fault.

Can I keep driving with P0B03?

You can usually drive the vehicle, but the auxiliary pump may be disabled, so the engine may not restart smoothly after an auto start-stop event and the transmission may feel rough at low speeds. Avoid heavy stop-and-go traffic and long idles until the fault is repaired, and do not tow or haul with the vehicle if the warning light is active.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter with voltage drop and resistance capability
- Manufacturer-specific wiring diagram and connector pinout
- Transmission fluid level dipstick or scan tool fluid level check
- Breakout box or back-probe kit for control module connector testing



Reading P0B03

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

Often seen with

P0B00 Electric/Auxiliary Transmission Fluid Pump Motor Phase U Cur · **P0B01** Electric/Auxiliary Transmission Fluid Pump Motor Phase U Cur · **P0B02** Electric/Auxiliary Transmission Fluid Pump Motor Phase U Cur · **P0B04** Electric/Auxiliary Transmission Fluid Pump Motor Phase V Cur · **P0B05** Electric/Auxiliary Transmission Fluid Pump Motor Phase V Cur

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/p0b03/>

