



P0C24

Electric/Auxiliary Transmission Fluid Pump Control Module Circuit Low

P0C24 means the transmission control module (TCM) has detected a low-voltage condition on the electrical circuit that controls the auxiliary transmission fluid pump, which is the electric pump used in many automatic transmissions to maintain fluid pressure when the engine is stopped. The TCM monitors the control circuit for the pump module and sets this code when the voltage on that circuit falls below the expected threshold, indicating a short to ground, an open circuit, or a faulty pump control module.

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
- The transmission may enter limp mode or fail to engage drive or reverse smoothly
- Harsh or delayed shifting, especially when the vehicle is cold or during auto start-stop events
- The engine may stall or hesitate when the auto start-stop system tries to restart the engine
- A noticeable whine or lack of pump operation from the transmission area when the engine is off
- Reduced fuel economy or unusual transmission behavior during stop-and-go driving

Common causes, most likely first

- 1 A short to ground or open circuit in the wiring harness between the TCM and the auxiliary transmission fluid pump control module
- 2 A faulty auxiliary transmission fluid pump control module, often due to internal electronics failure or fluid contamination
- 3 Corroded, loose, or damaged electrical connectors at the pump module or TCM
- 4 A failed auxiliary transmission fluid pump motor drawing excessive current or creating an open circuit
- 5 Low or contaminated transmission fluid causing the pump to overheat and damage its control module
- 6 A software or calibration issue in the TCM that misinterprets circuit voltage
- 7 A weak or failing battery or charging system causing low system voltage that affects the pump control circuit



How to diagnose and fix it

- 1 Verify battery voltage and charging system operation, as low system voltage can falsely trigger this code
- 2 Inspect the wiring harness and connectors at the auxiliary pump module and TCM for corrosion, chafing, or loose pins
- 3 Measure resistance and voltage on the pump control circuit to check for a short to ground or an open circuit
- 4 Test the auxiliary transmission fluid pump motor for proper resistance and operation using a bidirectional scan tool
- 5 Check transmission fluid level and condition, and service the fluid if it is contaminated or low
- 6 Replace the auxiliary transmission fluid pump control module if testing confirms it is faulty
- 7 Clear the code and perform a relearn or adaptation procedure with a scan tool, then road test to verify the repair

Hidden causes of P0C24 you should check

- A weak battery or a failing alternator can cause system voltage to drop below the threshold that the TCM expects on the pump control circuit, setting P0C24 even when the pump module itself is healthy.
- Transmission fluid that has degraded or become contaminated with debris can cause the auxiliary pump to draw excessive current, damaging the control module and setting this code without any obvious external wiring fault.
- The auxiliary transmission fluid pump often runs only during auto start-stop events or when the engine is off, so a failing pump may not show symptoms during a normal test drive and the code may be the only clue.
- Corrosion inside the connector at the pump module is a common missed cause, especially on vehicles driven in wet or salty conditions, and it can mimic a failed module.
- This code does not always mean the pump module is defective; a simple chafed wire against the transmission case can short the control circuit to ground and trigger P0C24.

Can I keep driving with P0C24?

You can usually drive the vehicle to a repair shop, but avoid relying on the auto start-stop feature and avoid aggressive acceleration or towing until the fault is repaired. If the transmission enters limp mode or shifts harshly, stop driving and have the vehicle towed to prevent further damage.

Tools that help

- OBD-II scan tool with bidirectional control and transmission module capability
- Digital multimeter for voltage and resistance measurements
- Wiring diagram for the auxiliary transmission fluid pump circuit
- Socket and ratchet set for accessing the pump module and connectors
- Transmission fluid level dipstick or scan tool to check fluid level
- Electrical contact cleaner and dielectric grease for connector service



Reading P0C24

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

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0A0E** High Voltage System Interlock Circuit A Intermittent · **P0C25** Electric/Auxiliary Transmission Fluid Pump Control Module Ci · **P0C26** Electric/Auxiliary Transmission Fluid Pump A Motor Current · **P0C27** Electric/Auxiliary Transmission Fluid Pump A Motor Current L

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/p0c24/>

