



P0C1D

Electric/Auxiliary Transmission Fluid Pump Control Module Internal Temperature Sensor Circuit Range/Performance

P0C1D indicates that the electric or auxiliary transmission fluid pump control module has detected an implausible signal from its internal temperature sensor, meaning the sensor's output does not match expected values for the current operating conditions. The control module monitors this sensor to protect the pump from overheating, and when the signal falls outside a valid range or behaves erratically, it stores this code and may disable the pump or enter a fail-safe mode.

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

Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL) on the dashboard, often with no other noticeable symptoms.
- The transmission may enter a fail-safe or limp-home mode, limiting vehicle speed and gear selection.
- Harsh or delayed shifting, especially when the transmission is cold or under load.
- The auxiliary transmission fluid pump may not activate, leading to reduced cooling and potential overheating during heavy use or towing.
- In some cases, a warning message about transmission temperature or a service transmission notice appears on the driver information display.

Common causes, most likely first

- 1 A faulty internal temperature sensor within the electric auxiliary transmission fluid pump control module.
- 2 Corrosion, water intrusion, or damaged pins in the electrical connector at the pump control module.
- 3 An open or short circuit in the wiring harness between the temperature sensor and the control module.
- 4 Internal failure of the pump control module electronics affecting sensor signal processing.
- 5 Low or contaminated transmission fluid causing the pump to work harder and generate excessive heat, which can skew sensor readings.
- 6 A software glitch or calibration error in the control module that misinterprets valid sensor data.



How to diagnose and fix it

- 1 Use a scan tool to retrieve all stored codes and freeze-frame data, then clear the code and test-drive to see if it returns.
- 2 Visually inspect the pump control module connector and wiring for corrosion, chafing, or loose pins, and repair as needed.
- 3 Measure the resistance of the internal temperature sensor with a multimeter and compare it to the manufacturer's specification for the current ambient temperature.
- 4 Check the transmission fluid level and condition; service the fluid if it is low or contaminated, and verify that the pump operates without excessive noise or heat.
- 5 Backprobe the sensor signal circuit at the control module and monitor the voltage while wiggling the harness to detect intermittent faults.
- 6 If the sensor or module is integrated and not serviceable separately, replace the electric auxiliary transmission fluid pump control module and perform any required programming or calibration.
- 7 After repairs, clear codes and verify that the pump activates correctly and that no new codes set during a thorough test drive.

When the pump module lies about temperature

- A common oversight is replacing the entire pump module when the real problem is a corroded connector or chafed wire that intermittently shorts the sensor signal to ground.
- This code can set even when the transmission fluid temperature is normal, because the module compares the internal sensor signal to other temperature inputs and flags a discrepancy.
- Some vehicles use the auxiliary pump only during engine stop-start events, so the fault may not trigger a drivability symptom until the vehicle is driven in heavy traffic or under load.
- A weak or failing battery can cause voltage drops that disrupt the module's internal sensor circuit, setting this code without any actual sensor fault.
- After replacing the pump control module, some manufacturers require a relearn or calibration procedure; skipping it can cause the code to reset immediately.

Can I keep driving with P0C1D?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy loads, towing, or sustained high-speed driving because the auxiliary pump may be disabled, risking transmission overheating. If the transmission enters limp mode or you notice slipping or harsh shifting, stop driving and seek professional service.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram and service information for the specific vehicle
- Backprobe kit or breakout box
- Transmission fluid level gauge and fluid pump

Reading P0C1D

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
C	Hybrid propulsion.
1D	The exact fault within that area.

Often seen with

P0C1C Electric/Auxiliary Transmission Fluid Pump Control Module In · **P0C1E** Electric/Auxiliary Transmission Fluid Pump Control Module In · **P0C1F** Electric/Auxiliary Transmission Fluid Pump Control Module In · **P0C20** Electric/Auxiliary Transmission Fluid Pump Phase U-V-W Circu · **P0C21** Electric/Auxiliary Transmission Fluid Pump Phase U-V-W Circu

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/p0c1d/>

