



P0C1C

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

P0C1C indicates that the electric or auxiliary transmission fluid pump control module has detected an internal fault in its temperature sensor circuit. The control module monitors its own internal temperature to protect the pump and transmission, and when the sensor signal falls outside the expected range, it stores this code and may disable the auxiliary pump.

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 service transmission warning
- Transmission may enter limp mode or fail to engage drive or reverse
- Overheating of the transmission during low-speed or stop-and-go driving
- Reduced fuel economy due to improper pump operation
- Often no symptoms besides the warning light

Common causes, most likely first

- 1 Faulty internal temperature sensor inside the transmission fluid pump control module
- 2 Damaged or corroded wiring harness or connector at the control module
- 3 Open or short circuit in the sensor wiring between the module and the sensor
- 4 Failed control module due to internal electronics failure
- 5 Poor ground connection for the control module
- 6 Software glitch or corrupted calibration in the control module

How to diagnose and fix it

- 1 Use a scan tool to verify the code and check for any related pending or history codes
- 2 Inspect the control module connector and wiring for damage, corrosion, or loose pins
- 3 Measure resistance and voltage on the temperature sensor circuit to check for opens or shorts
- 4 Check the control module ground circuit for excessive resistance
- 5 If wiring and connections are good, replace the transmission fluid pump control module
- 6 After replacement, clear codes and perform a relearn or calibration procedure if required
- 7 Road test the vehicle to confirm the code does not return and the auxiliary pump operates correctly



Don't overlook the pump control module ground

- A poor ground connection at the control module can cause the internal temperature sensor to read incorrectly, mimicking a failed sensor.
- The code may set intermittently due to vibration or heat, so always wiggle-test the harness while monitoring live data.
- Some vehicles use the auxiliary pump only during auto start-stop events, so the driver may never notice a performance issue.
- Replacing the control module without checking the sensor circuit can lead to repeat failure if the root cause is damaged wiring.
- This code is often misdiagnosed as a transmission fluid overheating issue when the actual problem is electrical.

Can I keep driving with P0C1C?

It is generally safe to drive with this code if the transmission is not overheating and the vehicle is not in limp mode, but avoid heavy towing or prolonged low-speed driving that relies on the auxiliary pump. If the transmission overheats or shifts harshly, stop driving and seek service immediately.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Socket set and trim removal tools
- Manufacturer-specific diagnostic software

Reading P0C1C

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

Often seen with

P0C1A Drive Motor B Torque Delivered Performance · **P0C1B** Electric/Auxiliary Transmission Fluid Pump Control Module In · **P0C1D** 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



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/p0c1c/>

