

P0128: COOLANT THERMOSTAT (COOLANT TEMPERATURE BELOW THERMOSTAT REGULATING TEMPERATURE)

OVERVIEW

Severity	:	<div><div>Medium</div></div>
DIY Difficulty Level	:	<div><div>Beginner</div></div>
Repair Cost	:	\$10-\$500
Can I Still Drive?	:	Yes (Short-term only)

What Does The P0128 Code Mean?

This means that the engine's powertrain control module (PCM) has detected that the engine has not reached the required temperature level within a specified amount of time after starting the engine. Often, the intent of the P0128 code is to indicate a faulty thermostat (likely stuck in the open condition). Similar codes: P0125

In determining that the engine did not reach a "normal" temperature, it takes into account the length of time the vehicle has been running, the intake air temperature (IAT) sensor reading, the engine coolant temperature (ECT) sensor reading, and the speed of the vehicle.

What Are The Symptoms Of The P0128 Code?

You will likely not notice any drivability problems other than the MIL illumination. In some cases you may experience symptoms such as:

- Engine takes longer to warm up
- Engine temperature drops while driving at higher speeds

What Are The Potential Causes Of The P0128 Code?

A code P0128 may mean that one or more of the following has happened:

- Low engine coolant level
- Leaking or stuck open thermostat (likely)
- Faulty cooling fan (running too much)
- Faulty coolant temperature (ECT) sensor
- Faulty intake air temperature (IAT) sensor

How Can You Fix The P0128 Code?

Note: Please be sure the engine is turned off and cool when doing work on the cooling system. When the engine is warm, the cooling system is pressurized and very hot and can cause burns or other personal injuries if you are not careful.

Past experience indicates that the most likely solution for a P0128 is to replace the thermostat. However here are some suggestions on troubleshooting and repairing a P0128 OBD-II code:

- Verify coolant strength & level
- Verify proper cooling fan operation (check if it's running more than it should). Replace if necessary.
- Verify proper engine coolant temperature (ECT) sensor operation, replace if necessary.
- Verify proper intake air temperature (IAT) sensor operation, replace if necessary.
- If the above items check out good, replace the thermostat
- If Nissan vehicle, check for Technical Service Bulletins (TSBs), as the ECM may need to be reprogrammed to correct the P0128 code

Regardless of what vehicle year, make and model, it is advisable to check for TSBs because if there is a known fix set out by the automaker, it can save you time and money in the diagnosis and repair.

An example of the importance of checking for TSBs or technical service bulletins, is if you have a Honda Accord, bulletin #01-164 may apply to you. TSBs are also called manufacturer communications.

Other ECT engine coolant sensor and circuit related DTCs include but are not limited to: [P0115](#), [P0116](#), [P0117](#), [P0118](#), [P0119](#), [P011A](#), [P011B](#), [P0125](#), and [P0126](#).

Reference Sources

[ENGINE CONTROL SYSTEM \[GASOLINE ENGINE \(V-6\)\] SERVICE MANUAL for P0128](#) - Pages 414-417.