

# Cab vent temperatures

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[Robert Letkeman](#) 18 posts since Jun 6, 2020

**Cab vent temperatures** Jan 10, 2021 3:54 PM

I have a 2021 126 Cascadia MLMD3808. If I use the dash vents and floor vents I get a 20ish degree F difference. The dash vents blow hotter than the floor. If I use the defrost and floor the temp is the same.

Are all vents supposed to have the same temp or is the defrost vent supposed to be the hotter one? It's been like this since new. It doesn't matter if I'm using A/C or heat.



[Steve Reppard](#) 155 posts since Jun 29, 2020

**Re: Cab vent temperatures** Jan 11, 2021 7:01 PM

What was complaint? Vent temps will vary-how were you checking temps?



[Robert Letkeman](#) 18 posts since Jun 6, 2020

**Re: Cab vent temperatures** Jan 11, 2021 8:10 PM

When I have the control on the floor and dash vents, the temp on the floor vents is about 20 degrees F colder than the dash vents. I used an infrared thermometer. If I use the defrost and floor selection then the temperatures of both are within a couple of degrees.

I really dislike cold feet.



[Cromwell Smith](#) 110 posts since Nov 13, 2014

**Re: Cab vent temperatures** Jan 11, 2021 10:10 PM

HAVE YOU TRIED TO MANUALLY RECALIBRATE THEN RECHECK TEMPERATURES?  
w.

## Manual Calibration Mode

It is necessary to calibrate the actuators if they are removed or replaced. To enter calibration mode, perform the following steps.1.Turn the ignition ON (engine OFF).2.Set the blower speed control to OFF.3.Set the temperature control knob to the full clockwise position (HOT).4.Set the mode control knob to the full counter-clockwise position (FACE).5.Press the A/C and RECIRC buttons simultaneously until the A/C and RECIRC indicators begin flashing simultaneouw. The calibration process will begin and will continue until the A/C and RECIRC indicators stop flashing.

Cab vent temperatures



[Robert Letkeman](#) 18 posts since Jun 6, 2020

**Re: Cab vent temperatures** Jan 11, 2021 10:12 PM

Yes, I have tried that a few times and no change.



[Michael Palumbo](#) 1,584 posts since Nov 13, 2014

**Re: Cab vent temperatures** Jan 12, 2021 6:38 PM

All air flows through the heater core or the evaporator, or a combination of the two prior to distribution. The temperature of the air is the same prior to division amongst the ducts. The ducts to the floor are in BOM 701. The ducts to the dash are in BOM 680. Loss of air flow could potentially cause your symptom? Maybe?

The P4 Troubleshooting guide: 2.22.002 Duct Air Temperature Troubleshooting.

It does not contain step based troubleshooting.

It does show the location of Panel Duct Outlet Temperature Sensor, DAT1 and Floor Duct Outlet Temperature Sensor, DAT2.

It also provides a resistance chart you can use to validate those sensors. With the sensors in a cup of ice water and an ohm meter, both sensors should be between 9.60KΩ and 9.82KΩ.

Diagnostic link should be able to monitor these sensors as well.

G66-14822-000 is the schematic.

Edit: the evap temp sensor and the panel COTC (DAT 1) temp sensor are in BOM 700. The floor COTC (DAT 2) temp sensor is in BOM 680.

After a cold soak (engine off for eight hours +) the three sensors should be close to equal.



[Jason Hinde](#) 3 posts since Mar 14, 2019

**Re: Cab vent temperatures** Jan 12, 2021 7:51 PM

We had a 2020 Cascadia in the shop recently with the exact same complaint. We found that this temperature difference only happened when the temperature control was in a specific blended mode - somewhere between 12 and 1 o'clock. We found that if the blend temperature was adjusted hotter or colder the temperature difference went away.

We tested several other new units on the lot, and when the HVAC controls were set to identical positions all of the units exhibited these symptoms (some more extreme than others).

Just like [Michael Palumbo](#) said, the temperature is blended ahead of the mode doors, so in theory there should be no way for the outlet temperature to vary between modes/outlets other than through cooling within the ducts (outlets on the driver's side will be cooler than passenger's side due to distance from HVAC box).

## Cab vent temperatures

Ultimately we never found anything wrong with the truck; it behaved exactly as several other new trucks did. We did open a case with CSC but they didn't have much to suggest...



[Robert Letkeman](#) 18 posts since Jun 6, 2020

**Re: Cab vent temperatures** Jan 13, 2021 2:30 PM

Thanks for trying to help. I find it a little frustrating that Freightliner/Detroit has no fix for the issue especially if there are more than one truck with the problem. A person spends a lot of money for a truck and you would think you could have a truck that operated the way it should.



[Steve Reppard](#) 155 posts since Jun 29, 2020

**Re: Cab vent temperatures** Jan 13, 2021 2:38 PM

Have you taken it to a dealer to get diagnosed? This in my opinion is the first step to getting an issue resolved (is there is an actual failure).



[Robert Letkeman](#) 18 posts since Jun 6, 2020

**Re: Cab vent temperatures** Jan 13, 2021 3:22 PM

It's been there multiple times over the last year for various issues including this and no resolution. I'm only on here asking because I can't have my truck sit at the dealership for 3-10 days and have nothing fixed. I have used an infrared thermometer and proven that the temps are 20 degrees F different.



[Scott Trippel](#) 4,057 posts since Dec 13, 2014

**Re: Cab vent temperatures** Jan 13, 2021 8:12 PM

I would say [Michael Palumbo](#) gave the best answer here.

[Robert Letkeman](#), you might be looking for a quick answer which we cannot give, I do not think there has been enough failures documented here with they symptom you have.

My thought is there is a leak, letting cool air to blend and causing your temperature difference, you will need to take the time to disassemble the HVAC and dash to find the issue.

Not the answer you were looking for, but all the above is all that can be provided at this time.



[Leroy Wagner](#) 31 posts since Nov 11, 2014

**Re: Cab vent temperatures** Jan 14, 2021 7:58 PM

What is the max vent temp you can get out of it with the engine at operating temp? I'm wondering if you have a water flow issue that's aggravating the uneven temperatures from differing air flows.