

My Not So Cool Refrigerator

Question: First, thanks for all you do for us. I purchased a new (2013) 27' Classic in April and took it on the Newfoundland caravan this summer. Of course, it was not too hot up there, but we did notice from time to time that the temperature in the reefer box would go up when we traveled on gas or dry camped. Back in the states, with higher ambient temperatures, things got worse. Traveling on a 90-degree day, it would get up into the 50s. The freezer was always solid cold. We stopped by Jackson Center to get other stuff fixed, and they said to put the thermistor on the fourth fin with gas pressure at 11 and the fridge should work fine! Of course, it was a cold day to begin with. We then stopped off at our dealer in St. Louis and my favorite shop guy said that they always send them out with 14.5 inches of water and the thermistor on the first fin high up. The reefer box was 50 when we left and two hours later, it was still 50.

I decided to do my own test. With the outside temperature at 60, I started the fridge using gas on the #4 setting. At 9:00 pm, that evening, the outside temperature was 65 and it was 60 in the box. I switched to #5 and 12 hours later, there was frozen ice in the freezer. It was 77 outside but only 50 in the box. I then switched to electric and 10 hours later, it was 32 in the reefer box and still freezing in the freezer. I switched back to gas and 12 hours later (overnight) it was 33 in the reefer box.

From all this I conclude,

1. It works fine on electric.
2. The freezer freezes on gas.
3. The reefer will hold the temperature down when it is cool outside but not when it warms up.

The gas flame looks fine. I am looking at a 12-volt fan that comes on at 100 degrees. There is precious little room to install it however. As always, I would appreciate your thoughts.

Answer: The setting of the thermistor determines the temperature of the main fridge box. The higher the thermistor is set the colder the reefer box. Essentially, you are balancing the temperature between the freezer and the main fridge compartment. The reefer box should be about 40 degrees to insure that your food will not spoil.

I am not familiar with the 2013 fridge set up. Is your fridge exhaust on the roof or is it a side panel just above the main fridge access panel?

Your refrigerator appears to be working correctly on both gas and electric. However, the heat must be removed from the back of the fridge in order to get adequate cooling. A gas pressure of 11 inches of water has always been the correct gas pressure as far as I know. I believe the factory gave you the correct info. The coldest temperature in the main fridge compartment would be with the thermistor on the last fin (to the right) and as high as it will go.

A fan is a great idea, however, with your new trailer it should easily cool properly at a 90-degree ambient temperature. Unfortunately, I think that high ambient temperatures are gone for the season so you will not get much troubleshooting in this year. I would have the dealer check the exhaust chamber in the back of the fridge to make sure there are no blockages that are preventing good heat flow. Also have him check the gas flame to be sure that it is hot enough.

After you make sure the fridge is working properly and the exhaust is OK, then installing a fan is a good idea for the 100-degree days. The fan should be mounted as high as possible. In fact installing it on the roof just below the exhaust shroud is the best spot. Otherwise, use a clamp mount that is designed to attach to one of the coils and put it on the highest coil you can reach.

It is serving as an exhaust fan, which is pulling the heat from the coils, and pushing it out of the ceiling vent. You want to bypass the fan thermostat (usually set to 100 degrees). By the time you reach 100 degrees, it is too late to recover and you will have lost your cool (joke).

You want the fan turned on all day, starting in the cool morning, so that you do not lose the fridge 40-degree temperature during the day. Bypass the fan thermostat and wire a panel switch directly to the fan. A lighted fan switch, which goes on when you turn the fan on, works best. Mount this in the trailer near the fridge. This type of switch requires three wires; power to the fan, 12 volts, and ground. You never want to lose the cold temperature since on a 100-degree day, with a load of food, you may not be able to get the 40 degrees back. These fans draw very little battery current and significantly improve your refrigerator performance.

To recap:

1. Your fridge does not appear to be working correctly especially for a new unit.
2. The problem appears to be getting rid of the heat from the ammonia coils in the back of the unit.
3. A fan will always help but should be switch-operated in the cool morning and allowed to run all day or all of the time on a really hot day.
4. Get the fridge operating correctly under warranty before you make any modifications.