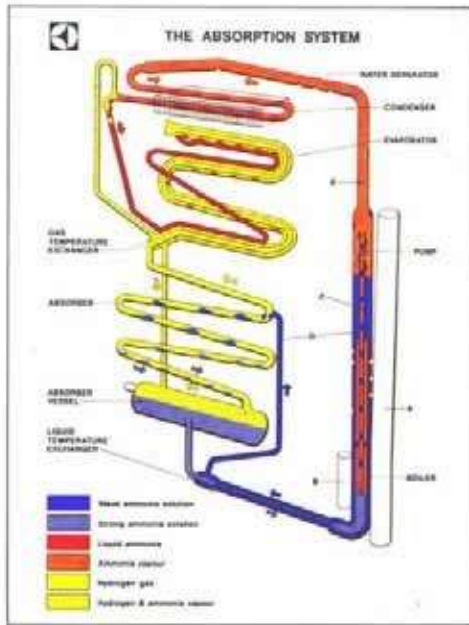


**Refrigerators:** As the weather turns warmer and we start hitting the roads with our Airstreams, the issue of loading your refrigerator and keeping the contents cool will come up. Everyone understands the RV refrigerator right? It is where we keep the beer, soda and other goodies cool just like at home.

RV refrigerators (absorption refrigerators) work differently than house type refrigerators in that they don't have a compressor but instead rely on a source of heat that heats a mixture of chemicals (water, sodium chromate, ammonia and hydrogen) and as the chemicals cool, they absorb heat. In this case from the inside of the box.



The main operating difference is that this absorption process takes longer to do the job than a compressor unit (and it relies on gravity, so it must remain relatively level in order to function efficiently. If it gets too far out of level (more than 3 degrees) it may not cool at all.)

One thing to remember that may help you understand the RV refrigerator is that “cold is the absence of heat.” The RV refrigerator for example does not put anything into the interior of the box. It is designed to remove heat from whatever is inside and transfer that heat outside the refrigerator box. If you remember that statement, it will help make you more aware of doing the little things that make your refrigerator operate more efficiently. An absorption refrigerator will take longer to absorb heat from the contents of the refrigerator box than a residential style refrigerator that has a compressor. The air inside of the refrigerator box contains heat too and as we know, heat rises and colder air settles. Once the unit has removed the heat from the inside air, every time you open the door, that cold air cycles out the bottom of the opening and in the process draws in replacement air at the top of the refrigerator box.

Now your unit has to cool that new batch of air. Obviously you have to open the door so warm air will always want to come in, if you keep the refrigerator box as full as possible there will be less air to cycle out each time you open the door. The contents will replace the air and will not absorb as much new heat from outside the box from briefly opening the door. If you don't have that much food to take with you, fill the inside with empty water jugs or bottles. It will take a little longer to initially bring the interior temperature down but overall your refrigerator will work a lot less to keep food at the desired temperature and the unit will last longer. A full refrigerator will work better than an empty one as long as air can still circulate (don't over pack) between the items inside.

The absorption refrigerators can take up to 24 hours to cool the contents, so it's a good idea to start the refrigerator up a day before it is stocked. Make sure you always cool the items before you put THEM in your RV refrigerator (when possible). Also check the refrigerator door seals to see if they are sealing properly. If they are not sealing, the refrigerator will not be operating at maximum efficiency.

**Take away:** The absorption refrigerator is not a residential refrigerator and functions differently but can perform effectively if you follow some simple guidelines.

1. Make sure you always cool the items before you put in your RV refrigerator (when possible).
2. Keep your refrigerator full.

3. Don't open door any longer than necessary.
4. Always set up your RV as level as possible for maximum operating efficiency.
5. Perform regular maintenance: proper system gas pressure, clean burner tube, doors close and gaskets seal.
6. Cleaning: Clean the shelves and walls of the refrigerator with a half-and-half solution of water and white distilled vinegar. You can also cut the grime on the exterior of the refrigerator with a paper towel or microfiber cloth and full-strength white distilled vinegar.