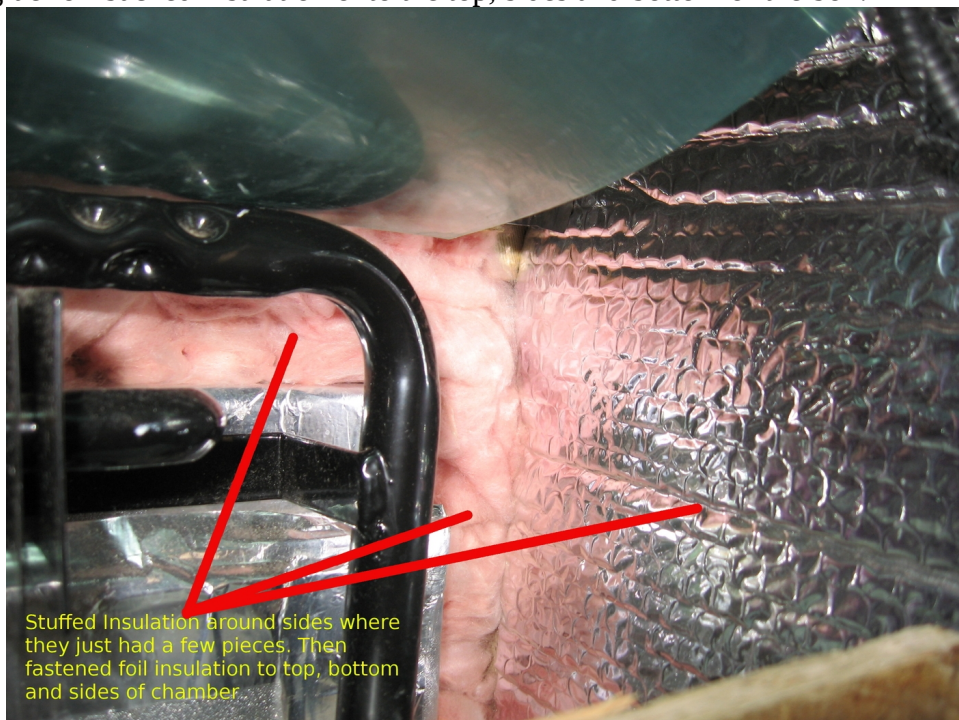


In order to help the refrigerator cool better I decided to “improve” upon the work from the factory. The OEM baffle is nothing more than a piece of particle board 6 ½” from the back of the frig and very little insulation on the sides.



So first step in upgrading the back side was to fill around the sides of the refrigerator with insulation batt and to glue foil backed insulation onto the top, sides and bottom of the box.



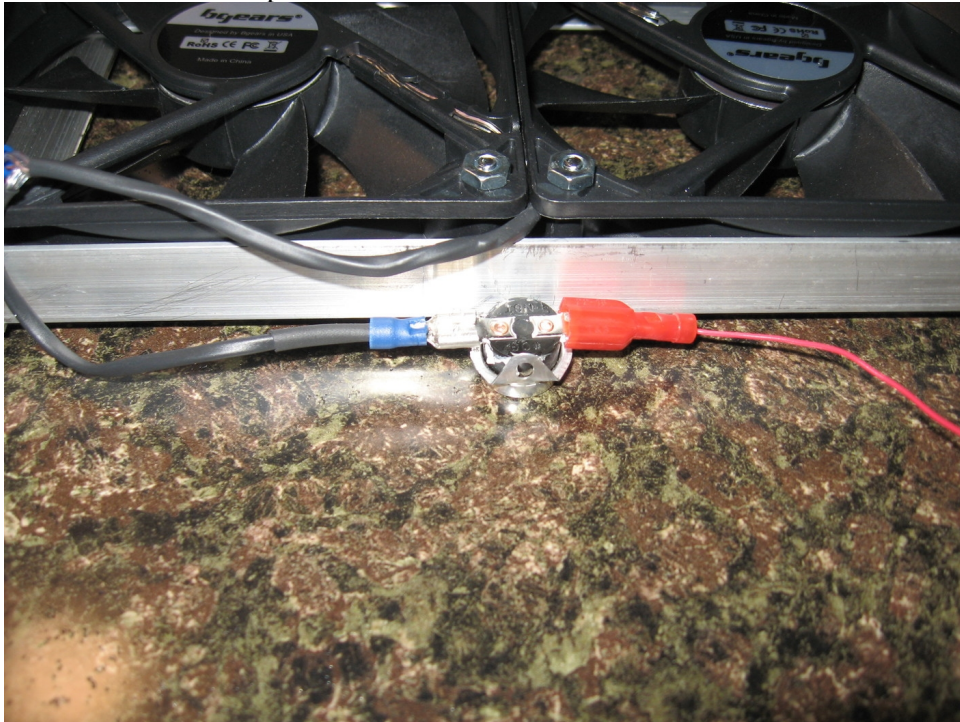
Next I wanted to add fans to help remove the heat so after looking around I found some ball bearing 120mm fans. I had considered using 80mm fans but felt the added CFM gained by using the 120's was the better choice to help remove the heat.



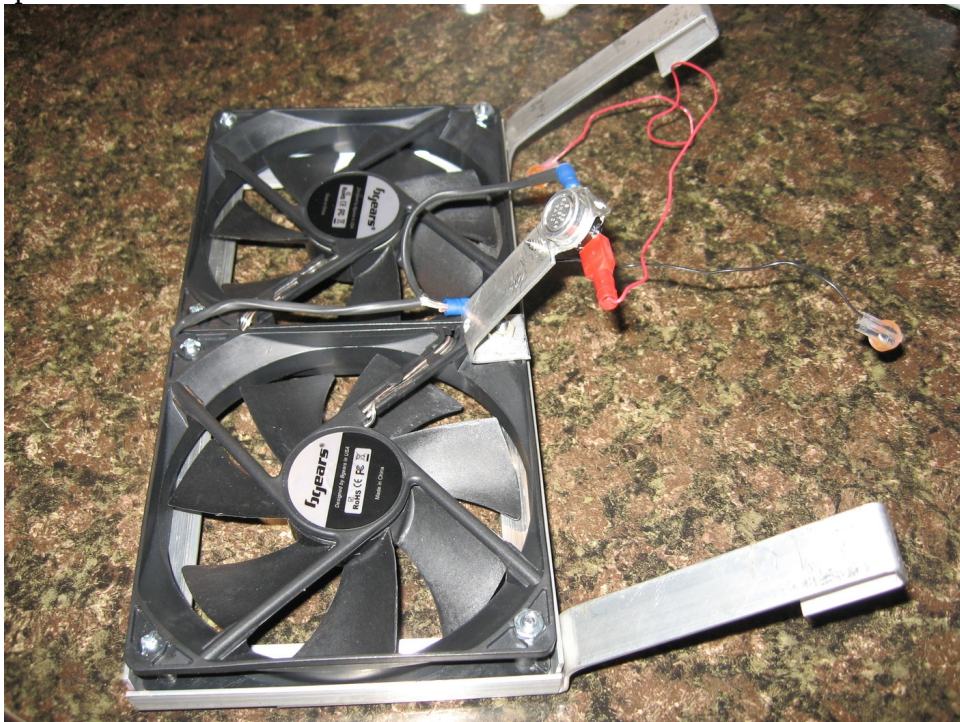




I made it so that it would hook over the existing baffle and angled the fans to, first make it easier the get them in behind the frig and second direct the air over the fins on the back of the refrigerator. In my first frame I mounted the temp sensor that turns the fans on and off to the front of the frame.



After installing the fans I saw the error of my ways, the temp sensor needed to be mounted higher to sense the temp.



With the fans installed the box is full, thinking 80mm fans may have been a better choice. Even so the 120mm do fit nicely and with 103 cfm each there will be plenty of air flow. Here is a pic of them in place before I moved the temp sensor.





And another with the sensor moved.





Next to finish I used some flashing to make another baffle that fits very close to the cooling fins on the back of the refrigerator. Now when the fans are running or using natural convection currents the air flows through the fins instead of behind them. That has gotta make a difference.



After getting it all put together and since my hearing is poor at best I had my other half listen to decide if they were too noisy or not. I can hear a slight whine, she said it was not bothersome to her, in fact it made a good white noise. On the outside of the trailer they can be heard, again it is not terribly loud and since the temp sensor will cycle them I do not think the noise will be an issue. Should the noise be a problem I will simply disconnect one of the fans. One of the 120mm fans will still move more air than the piece of junk that came installed on the trailer and had burned with less than a month of use.