



Building a Kegerator with a tower from a chest freezer.

The requirements for my Kegerator were pretty simple: I have very limited space and needed as small a floor footprint as possible. The only option that fit in the corner of the room was a 5 cu unit. Since I had an issue with converting a fridge, and they are becoming more and more difficult to find, I went with a chest freezer. My cost on the freezer on Craigslist was \$75.

Since floorspace is an issue, a standard collar was not going to be the best solution in this case as that would add to the horizontal space taken up. As it is a commonly used area and cramped, I was worried about the protruding tap and handle getting caught on things. Since I already had a tower from my failed front loading fridge conversion, that seemed to make the most sense. Now I had the issue that mounting the tower through the lid would cause the tower to rotate and possibly bang into the wall when opening the top. It would also completely eliminate the ability to return the freezer to its original purpose.

That is when I decided to completely remove the lid. Now, I can try to get my \$75 dollars back when I move somewhere and can upgrade my kegerator. Since the lid was coming off I could do just about anything with top. I had a plan to split the top into sections. One section would be firmly affixed and never move, which is where the tower would go. Another section would be for loading the keg in and out. and the final section would be the remainder of space available, but at least large enough to load my fermentor. With my plans laid out it was time to start construction.



Okay, So here is what I was starting with. Pretty standard affair. It's a freezer. The first thing I did was grab a socket set and remove the bolts that attach the lid hinge to the base. After that was removed I could start measuring and cutting.

Here it is with the top off from the back. If you look really close you can see the holes from where the bolts came out.

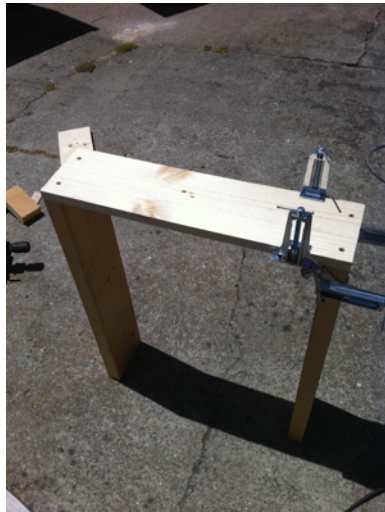


Then after measuring the total dimensions, I cut the two boards that run the full length of the top edge of the freezer. I then cut the two boards that ran the width of the top. I then cut the boards for the second edge, after taking into account the thickness of the the first two boards.



I used 2x6's for two of the sides and 1x6's for the other sides. The reason for changing board thickness was simple—that is what I had on hand without buying anything extra.

If I were buying all the lumber anyway, I'd have bought the same dimension because it saves a step. The board width will be determined by the internal height you need. With my fridge I needed about 3 inches of additional height to allow for a 5 gallon fermentor and airlock. There will be an additional 2 inches used by the top, so I had to go with at least 5 inches of collar height.



So, now it was time to test fit the boards that were cut. Since everything looked good it was time to attach them together. For this process I used 2 corner clamps, some screws, a bit of glue, and some corner brackets. This was overkill, but if I am ever in a tight spot I should be able to beat a buffalo to death with this thing without having to rebuild it.

I use the corner clamps to get a square corner on the boards, then put a bit of glue on the edge of one side just to make sure there were no gaps. I then screwed them together and moved my way around. Since the corner clamps make sure each corner was square I knew the whole thing was going to be square. However, since catastrophe follows me closely, I test fit it again.



They lined up, so I measured and cut 2 more 1x6's that would go on the inside of outer 1x6's to create a full 2" thick collar. This is the step I could have skipped by not using leftover wood I had laying around. I mounted the second 1x6's with glue and a few nails, then put in the corner brackets to make tripley sure it was square and that it wouldn't flex.

I test fit again since I'm paranoid, and it lined up perfectly.





Next I cut another piece of 1x6 to go in the middle as a brace. I then placed the collar on the ground and placed a corny keg inside and the lid to my 5 gallon bucket inside. I used this to guide where I was putting my brace. I already knew it was a close fit, but this way I couldn't screw up the measurement. I placed the centerboard accordingly, and screwed it in. I tossed it back on and to reassure myself I slid in my keg and bucket. All was well.

Now, to secure the collar on top of the freezer. I cut a piece of 1x10 the overall width of the collar plus add an inch and a half. I then attached this piece to the collar with $\frac{3}{4}$ inch on either side and 2 inches of overhang on the bottom. I put the glue on the collar section and use finishing nails to attach the board. This time I actually cared about the face of the board since this will be my finished edge. Next I put the sides on the collar. The 1x10 length will be the same length as the sides of the collar. I glued and nailed them the same as the first board and finally put the last board on the back section.



Now when the collar goes on top of the freezer the 1x10's will hang over the top of the freezer by 2 inches and prevent the collar from shifting in any direction. They will also be above the 2x6 collar by around 2 inches. This will provide what will hold the top pieces in place.



Measuring the inside area to the center of the 1x6 middle support, I cut a piece of plywood to fit. In my case, I again some ugly particle board on hand, so I simply purchased a small piece of nice quality $\frac{1}{4}$ inch finished plywood to go on top of my ugly particle board. I could have just bought half inch quality plywood, but again, I was spending less on material and more on time.

I then figured the size of the piece for my tower. The tower had a 4" footprint. I decided to make the board 7" deep, and put the tower in the center. I had to cut this piece and the next piece separately.



If I had cut the entire side to fit and then cut the two pieces apart, it would leave a $\frac{1}{8}$ th an inch gap between the two boards because of the wood lost to the saw blade. I cut the final piece and made all the pieces fit snugly. It looked good, so I drilled and cut the hole for the tap line in the tower.



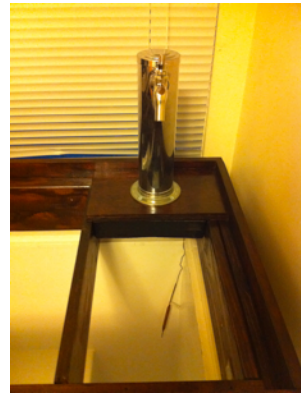
Since I was using nice wood on top of ugly wood, I cut and glued the finishing pieces. I left my finishing pieces a little larger than the base piece, and sanded them down. This way there are no gaps on the top.



After everything was dry and sanded I put the freezer in place and set the hardware on there to get an idea of how it would look.



I gave everything a nice stain and several coats of polyurethane. After it was all dry I tacked a bit of neoprene around the bottom edge to give it a real good seal and eliminate the minor wobble from running the temp probe over the edge of the freezer.



The next step was to cut the insulation foam and mount it under the tower. For this part I cut two pieces of inch thick foam and put a bit of glue on them and stuck them together. I then wrapped the outside edge in Gorilla tape to improve the look of the edge, and to help keep it together. I also made it nice and tight to help keep it in place. After fitting it in, I put 4 screws in just to make sure it didn't go anywhere. Just make sure you don't put the screw all the way through the nice beautiful top.

On the two fully removable pieces I did the same 2 layers of glued foam with gorilla tape around the edge. I glued the foam to the board and ran 4 screws in them as well, and let them sit with a stack of books on top of the wood to make sure there was a nice solid glue bond.

The next day when everything was dry, I mounted all the hardware and put it together. An hour after plugging it in, it was nice and cool. The only thing left to do was load it up and start pouring.

