Building your Syren Ship Model Company Ship's Stove mini kit.





Step1....Assemble the four 1/8" cedar pieces that will become the foundation for the stove. Note the

bottom "B" in the photo. The two larger pieces are glued to each side of "B" so the ends are flush. The final smaller piece is glued to what will be the aft end of the stove. The top edges are flush. Sand all edges flush and there is no need to remove all the laser char but the fore and aft surfaces should be sanded smooth for painting black later.



Step 2 - Glue the aft face (1/32" thick) onto the aft end. The top is flush. Note how the bottom edge hangs lower a bit. That is by design.



Step 3 - Glue the 1/32" thick sides into position. Make sure you orient them the correct way. Note how the aft edges and top and bottom are flush. Sand them smooth with fine 320 grit sandpaper.



Step 4 - Glue the top into position. Sand all edges and corners flush. Once again be careful to glue it on in the correct orientation.



Step 5 - Glue the grill into position. Outside surface is flush with the stove's side edges. Photo top right.



Step 6 - Although indicated as step six because I built the prototype in this order...I now realize that the above step should be done after you complete steps 7 and 8. It will just be easier. So skip ahead and then return to step 6. In this step the two larger platforms are glued into position followed by the lids for the pots. This is pretty easy as you just have to follow the laser etched outlines. Sand them smooth for painting.



Step 7 - Glue the strips around the perimeter as shown above. These are thin so be careful. Add the three lengths for the legs first keeping them even so it wont wobble. Then add the cross piece along the top edge. The edges are flush as you can see. Sand them flush after you glue them. Dont worry about the laser char as the whole thing will soon be painted black.



Step 8 - Glue the doors into position. Dont worry about the laser char. You can also see above that I glued the two halves of the hood together so it can be shaped and sanded smooth.



Step 9 - Glue the round vent you see on the top of the stove. You can also see the hood has been shaped. It was sanded free of char and smooth. The front edge of the hood has a slope aft. This needed to be sanded into the hood. It is not a very severe slope but you should check the plans for details. The hood was laser cut a bit wider than needed to leave you room to sand it for a nice fit and all squared up.



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Photo on next page



Step 11 - assemble the stack and drain pan. Get them ready for painting. The short ends of the drip pan were glued on first followed by the long sides. The stack is laser cut with very thin sheetsbut they are really not thin enough to look in scale. So you should at least sand the walls along the top edge much thinner to make them look in scale and more fragile. Not the whole stack but just gradually sand the sides tapered so it has the appearance of being much thinner sheet metal. This would be a great time to paint all of these parts as well. Go ahead and paint the stove and these two other pieces black. Keep the surface smooth and free of brush strokes. Sand regularly between coats as you finish up the remaining details.



Step 12 - The stove has its first coat of black paint. At this stage you can glue the laser board

hinges onto the stove for all of the doors on each side. Then paint those black as well.



Step 13 - It's going to look a bit messy now because it's hard to not see all of the dust on the black painted surfaces. But ignore that for now and press on. Glue the two brackets onto to stove as shown. Line up the square area of the bracket with the other one you already glued on each side. Center it so there is equal distance on the top and bottom of the tiny squared area already on the stove. Keep these brackets lined up on both sides and level. They are very delicate so be careful. Then there is one last tiny square or should I say rectangle of laser cut wood that is also glued to the top of the squared section of each bracket. This finishes the simulation that the brackets are sliding through these small clamps on the side of the stove, Paint them black when done.

Note that I also cut some 19 gauge black wire to length which will span across the brackets. I glued the tiny disc to one end of the wire as shown above. Then I also line up all the pieces for making the pulleys. The pullies are made in three layers. The center layer is very fragile so be careful.

Photo next page.



Step 14 - To assemble the pullies...glue one of the discs over the top of those in the center layer. The outside layers are slightly larger than the center layers. Then repeat this process on the other side. These discs on the outer layers will simulate a pulley nicely. Just remember to keep the holes for those pulleys lined up. See the photo below that shows the entire assembly completed.



Step 15 - Glue the pulley assembly onto the other end of the long 19 gauge wire you made earlier. You will also need to cut a shorter

length that will be inserted in the smaller pully of the assembly. See above.

Also not that because you may build your stove slightly different than someone else, I have laser cut three sets of "center layer" pulleys. The top one on the sheet is the longest. I used this one. But you may have to use one of the other sizes depending on how you do in the next step.



Step 16 - You must drill a hole into the side of the hood. The shorter wire on the pulley assembly will be inserted into it. Depending on where you drill this hole will determine if you need a shorter or longer pulley assembly. So place the pulley on one of the bracket arms to get a sense of where you need to drill that hole. I ended up drilling it dead center (left to right) on the hood but slightly lower than center (up and down). If that make sense. You can also use a shorter pulley assembly and place it on the next level above on the bracket arms as well. You have many possibilities.

I have also started to take care in finishing the black painted surfaces properly. Sanding the rough spots with 420 grit and repainting. I have also used some weathering powder as well to make it look like metal.



Step 17 - 24 gauge black wire was used to shape the handles for the pot lids. I drilled out the holes in the lid deeper and test fit the handles carefully so the black paint wouldn't be damaged. I had to bend the wire a few times into the handle shape so it was the correct length so the holes lined up. The stack was also glued on top as you can see.

You can see that I finished the base of this small model. I sanded the char off the four side pieces of the base and glued them in position. The shorter lengths with no etched lettering should be added first. Sand the ends flush so you can add the two lengths with the wording etched onto them.



Ample amounts of weathering powder were used on all surfaces once completed. The powder achieves two things. First when using a rust or brownish tint it makes the whole stove look more like metal. But most importantly, the entire stove was coated with an ash or grungy black powder first. Every surface. The powder really smooths the surfaces out and covers up the brush strokes etc.It makes the surface smoother to a degree but all care should be taken to have a smooth painted surface ahead of time. I used the grimy grungy black powder first. Then I followed that up with some rust powder. I tried not to over do it with the rust because you dont want it to look too "rusty". You just want to use it to define certain areas. You can see the difference in the surface quality as my stove assembly progressed. With each new photo I spent time working on the surface quality and applying more powder. I also sprayed the entire stove lightly with Dull coat before adding a final layer of weathering powder.

That finishes up the stove.

