

Building your Winnie Capstan

Step One- As we build the capstan, we will be sliding our layers onto a 1/16" x 1/16" strip. Before we begin, I want to mention an important point. When gluing each layer together as you slide them onto the strip, DO NOT glue the layers to the strip. You want to be able to slide the finished lower and upper capstan off of the strip when they are finished. So it is really important to ONLY glue each segment to each other without getting any glue on the strip as you do so. We will be starting with the lower capstan first. If you are building this capstan for you model of the HMS Winchelsea, you will want to keep the lower and upper capstans separate. The photo (left) shows it all put together as a stand along model on its base. Another option.

At the bottom of this page you can see step one completed.

Glue one ¼" thick column section along with three 3/16" Column sections together after sliding all of them onto the 1/16" strip. These column sections look like five sided pieces.

The $\frac{1}{4}$ " piece can be found on sheet A. The $\frac{3}{16}$ " pieces can be found on sheet B.

Remember to dry fit them all first on the strip because these need to be oriented properly to make one column. Leave a little bit of the stick showing on what will be the bottom of the lower capstan. Note that the ¼" thick piece is the first one slid onto the stick. After you glue all four sections together make sure you can still slide the assembly back and forth on the stick.



Step 2-



Use a sanding stick or nail file to remove the char. BUT....and this is important, only remove the char from the thinner smaller sides of the column. See the photo above. The wider sides of the column don't need to be sanded and if you did remove that char it may be problematic. It may change the diameter of the column and the size of those faces so the whelps wont fit properly.

The smaller faces will show between the whelps. They should be smooth up and down the column. You may decide to paint this capstan red on your model as well which is typical for capstans from this time period.



The whelps have been carefully glued to the column. Note that the whelps are glued to the wider faces of the column that still have the char remaining on them. The whelps should cover the char on those faces.

The top edge of each whelp should be flush with the top of the column. Just as shown below.



Step – 3

Then remove the laser cut whelps from sheet C after lightly sanding both sides to clean them up. The laser etched grooves should not be sanded. Once free from the sheet, sand the char from the outside face of each whelp. Don't remove too much. Use a light touch and very fine grit sandpaper. See the photo above right.

Try and space them evenly around the column when viewed from the top or bottom.

Step 4 –



There are two types of chocks that will fit between the whelps. The lower chocks have concave outer edges. The upper are convex.

Start with the lower chocks from sheet D.

Remember to sand the top and bottom of the sheet gently to remove the char before you remove them from the sheet.

Take your time with these. If you were careful to line up the whelps flush with the top of the column, the engraved slots for the chocks should line up. The chocks have been laser cut slightly wider than you will need them just in case you spaced your whelps too far apart. So you need to sand each chock to custom fit between two whelps. Sand off the char from the sides and test its fit. Slide it into the slots so it fits snug up against the column. You will no doubt have to tweak these several time for a proper fit depending on how you glued on your whelps.

I preferred to glue all of my chocks into position and then I finish sanded the outboard edges with a nice clean concave curve. By doing them all at one I was able to keep the edges consistent. I also sand them flush to the front faces of the whelps where they fit into the slots. Examine that photo to the left.

Step 5 –



You guessed correct!! In this step you will add the upper chocks all around the capstan. Its no different than the lower. Fit each chock for its own unique and tight fit between the whelps.

Then sand the outside edges to a convex curve as shown above. Note how each chock is tight up against the column after sliding them into their slots.

These upper chocks can be found on sheet E. Slide the capstan off the stick or grab another length of 1/16" x 1/16" strip for the next step.

Step 6-



Building the drum for the lower capstan.

Using a new strip, slide the three pieces onto it. The two outer circles are quite thin and can be found on sheet F. The notched part between them can be found on sheet D. Glue them together but remember you will need to remove the finished drum from the stick at some point. So don't glue it to the stick.

To finish off step 6 sand the char off the outside edge of the drum. This isn't as easy as it might seem. You have to keep this drum round. You don't want to remove too much or the drum will be sanded too small in diameter. So only sand lightly until all the char is removed using a fine grit sandpaper. Now its up to you...but some may find it easier to remove the char by removing the glued drum from the stick first.

Step 7- More drum layers...



On sheet G you will find the two remaining drum layers. You may want to sand the edges of each piece first before you slide them onto the stick. I also chamfered or knocked off the edge of these two layers. Once glued to each side of the drum they are slightly larger in diameter and give the drum a decorative edge. By knocking off the hard edge it gives the appearance of a round trim bead around the drum.

Note that the layer with the five holes is the top of the drum. The holes are aligned with the notches in the drum for the capstan handles. They would have inserted a pin into these holes and into the capstan bars to keep the secure while working the capstan.

Remove the finished drum from the stick when you are done.

Step 8-

In this step we will finish off the lower capstan. To start, slide the drum onto the stick with the bottom of the capstan so the drum sits level on the whelps. If the drum doesn't sit level on the whelps, remove the drum and sand the top of the whelps level until it does.



You can see the drum sitting nicely on top of the whelps. You will also notice the black iron band glued atop the drum. You can add this now as well. This is laser cut on black laserboard. They are both the same so just use either of them on the sheet. The remaining ring will be used on the upper capstan.

Be careful when centering it...

In the photo above you can also see the simulated bolts on the whelps and chocks. I used the 15 lb black fishing line supplied with the capstan kit. Pre drill your holes. The holes should not be too big. Test your drill bits by drilling some holes into scrap wood first. The black fishing line should be a tight fit in each hole. No glue is needed. Then snip off the excess leaving the fishing line stand proud of the surface ever-soslightly to simulate a bolt head.

When finished, glue the drum permanently atop the whelps.

Step 9 –



On sheet A you will find washer-like piece with laser cut grooves going down its side. This piece should be glued to a thinner piece that is the same diameter. This thinner piece does not have grooves. It can be found on sheet D. After these two layers are glued together slide them off the stick and sand the outside edges. Remember to keep the outside diameter round and consistent. Just take off the laser char. This should leave the darker grooves showing which is what you want.

In the photo above you can see the two pieces glued together with the grooved end facing up.

Below that in the same photo is and 8 sided piece that can be found on sheet B. Sand the laser char off carefully maintaining nice sharp edges so it looks like a "nut". This piece goes below the grooved piece as seen in the photo above. But I did round off the top edge slightly. NOT the bottom edges because I want this piece to sit flush on top of the lower capstan drum.

Then glue them all together atop the capstan drum in the order shown above.

That completes the lower capstan...

If you intend to use this on the gun deck of your model, set it aside. You don't want to glue the upper capstan in position yet. It is best to wait until you frame the quarter deck and have the upper capstan partners in position.

But if you are just building this for separate display on its decorative capstan base, you can proceed to building the upper capstan.

You can always build it anyway but keep it separate from the lower capstan until its needed.



Building the upper capstan......

The upper capstan is almost identical to build as the lower capstan. The only differences are the sizes and number of pieces. To avoid being repetitive I will only briefly describe each step and point out which sheets each part can be found on. You should build the upper capstan on an entirely different 1/16" x 1/6" stick.

Step 1 –



Same as before...glue one 3/16" piece and two ¼" thick pieces together on a stick to create the column. This is different than before.

The 3/16" piece on the bottom of the column.

You can find the 3/16" piece on sheet H. The $\frac{1}{4}"$ pieces are on sheet I.

Sand the thinner faces like before...leave a bit more of the stick on the bottom this time.

Step 2-



Find the spacer on sheet J. Sand the outside edges and glue this to the bottom of the column. Under the 3/16" thick piece.

Step 3 -



Glue on the whelps from sheet K. This time there are six of them. Remember they are flush with the top of the column.

Step 4 –



Glue on the lower chocks....you will find them on sheet L.

Then glue in the upper chocks which you can find on sheet J.

Remember to do these carefully and get a nice fit. Especially if you wont be painting your capstan red.

Step 5 –



Time for the drum of the upper capstan.

Same as before...

First the central three layers. You can find these on sheet L and sheet M.

Sand them neatly and keep the circular.

Then add the two larger discs from sheet N.

The one with holes goes on top with the holes aligned with the notches for the capstan bars. Round off the outside edges of these larger discs like before. Then glue them in position to finish the upper drum.

Step 6 – Finish it up like before...

-Slide the drum head on top of the whelps and once glued in position, remove the upper capstan from the stick.

-Add the laser board black ring on top of the drum.

-add the 15 lb. fishing line bolts.

- add the laser cut disc from sheet N to the very top of the drum. There was room on the sheet for me to give you guys an extra



one. But you only need one. Sand the char off first and soften the top outside edges.

That's it....if you are using this for a standalone display. You can slide the upper capstan onto the stick of the lower capstan. See above.

I didn't apply wipe on poly. Instead I used just a sanding sealer. You can also spray it with dull coat. It can be painted red as well.

The base is pretty simple. Just add the sides without the legs first and glue them to the edge of the base on opposite sides. Sand the ends flush with the base. Then add the two remaining sides with the legs. Just make sure you align them so you can read the sentence etched into the sides....if you



mix them up it wont make sense when you read it.