Installing the Deadeyes and Chainplates

We now come to one of the more delicate building steps. AL shows what they call "wales" along the side of the ship (these would have been added in step A.16 if you were following AL's instructions). These don't exist on the real ship. The chainplates must go down through – not outside - the rails and lie right up against the side of the ship. This is the delicate part, because you need to cut the slots in the rails for the chainplates.

First, mark the location of each deadeye on the rails. There are four deadeyes forward and five deadeyes aft (I know AL's plans show 5 forward and 6 aft, but trust me for now and install just these). The forward deadeyes are located over stanchions 11-14 (counting forward from the break beam) and the aft deadeyes are located over stanchions 3-7 (counting aft from the break beam). If you installed your pin rails correctly in Part 4, you should find that the deadeyes are in the same area. Use a piece of scrap chainplate material to determine the width of the slots needed for the chainplates. Use a #75 drill bit to remove the bulk of the material then remove the remainder with a hobby knife. As I mentioned – this is a very delicate operation because it's easy to tear off the edge of the rail – so take it easy. You'll find the greatest difficulty on the aft deadeyes where you must go through two rails. I used the scrap chainplate material to be sure I could slide the finished chainplates down through the slots.

With the slots cut, make up the deadeyes and chainplates. You can follow the instructions that AL provides but one thing they fail to mention is annealing the brass strip. If you try to bend the strip sharply to go around the brass rings, it will likely break. This is easy to prevent. Hold the brass strip over a flame (such as the burner on a gas stove) until the brass turns cherry red (You ARE holding the strip with pliers, right?!). Then remove the brass strip from the flame and allow it to cool to room temperature (this only takes a couple seconds). This process anneals the brass and makes it very pliable and easy to bend. You don't need to anneal the entire strip – just the part you want to bend. Use fine sand paper after annealing to make the strip clean and shiny again.

The split brass rings were a bit too large so I snipped off about 1/32" to make them fit tightly around the deadeyes. I bent the brass strip (chainplate) around the ring, then inserted the deadeye and carefully squeezed the ring to close it around the deadeye. I hid the joint in the ring under the chainplate. There can be a fair amount of stress on the deadeyes when the boat is rigged, so it's best not to rely solely on mechanical bending of the chainplate over the ring. I soldered mine, which is what I'd recommend. At the very least, put some CA or epoxy in the joint and hope for the best.

Before you install the chainplates, you need to determine how long they should be. On the real Bluenose II, the chainplates extend below the waterline. Masking the chainplates for painting later will be VERY difficult if they extend into the waterline, so I advise cutting them short. Look on the plans to determine where the waterline should be and make your chainplates short enough that they don't go into or below the waterline. Cut all the chainplates to the same length and drill two holes in the end farthest from the deadeye. You'll put brass pins into these holes when you attach the deadeyes to the ship,

so make sure the holes are large enough for the pins. Finally, carefully slide the completed chainplate/deadeye assemblies down through the slots in the rails and use a bit of CA to fix them in place. Drill holes in the planking material for the brass nails and insert and glue the nails in place.

Now – what about those deadeyes we didn't install? The extra deadeyes are used for the outriggers (ropes that come from the top of the mast, over the crosstrees, and down to the deadeyes). On the real Bluenose II, there is a small deadeye for the outrigger between the 1st and 2nd larger deadeyes (see page 107 of Jenson). Unfortunately, the deadeyes provided in the kit are much too large and don't allow enough space to put a smaller deadeye in between them. I've simplified this bit of rigging by using an eyebolt there instead. All of the rigging on the model is greatly simplified anyway, so this simplification isn't out of character with the kit and will, I think, look better in the end. You can see this added eyebolt in Photo 1 (these are the aft deadeyes) as well as another eyebolt behind the deadeyes, which can be used for the backstays. Install these eyebolts both forward and aft and, of course, on both port and starboard sides.



Photo 1: Aft deadeyes and fore sheet horse

Also shown in the picture above is a sheet horse just abaft the break beam. The sheet horse is made from 0.040 in. brass wire, bent into a squared-off "U" shape and is about 15mm wide. There is a ring (traveler) that slides along the sheet horse and a double block attached to the ring. There are similar sheet horses just forward of the poop cover just forward of the foremast. These horses are slightly narrower (about 12mm) and have only a single-sheave block attached to the traveler ring. See pages 110 and 111 of

Jenson. I simplified the foresheet horse somewhat on the model. Note also that there is a single block behind the horse in Photo 1 (used to direct the fore sheet to the main bitts).

Painting the Hull

Using the plan for reference, measure and mark the height of the waterline close to the bow and stern. Then, turn the hull upside down on a flat, smooth surface (I used my dining room table) and adjust the boat to bring the two waterline marks parallel with the table top. Once you're satisfied that the waterline is level, put masking tape over the hull to hold it firmly in place on the table.



Photo 2: Preparing to mark the waterline

You can buy a commercial waterline marker or simply make one from a scrap block of wood with a pencil taped to it. Just be sure everything is good and solid – you don't want the pencil moving around as you try to mark the waterline (a groove cut in the top of the block will help to hold the pencil solidly). Move the marker along the table top with the point of the pencil lightly touching the hull and draw a line on both sides from stem to stern. Note that at this stage, I have not yet attached the rudder or the propeller assemblies. They will be added later, once the model is ready for mounting.

I painted the bottom of the hull first using several coats of a color called "Black Cherry" from the Delta Ceramcoat line of paints. I masked along the waterline using ¼" vinyl tape. Don't use brown paper masking tape for this type work. I've found it's nearly impossible to get a clean, sharp line with the brown stuff. The vinyl tape has to be burnished along its edge to seal it to the wood. You can buy a metal burnishing tool or you can make one of your own from a length of wooden dowel cut at an angle and sanded smooth.

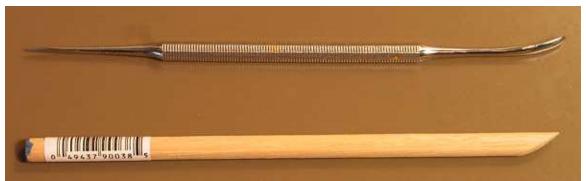


Photo 3: Burnishing tools

Paint the waterline next. You'll have to mask over the bottom paint, of course, so make sure it is completely dry. I'd wait at least 24 hours after the last coat. I made my waterline about 3/64" wide and painted it white.

According to the Jenson book, the topsides are a "midnight blue". I started with a dark blue paint and added a small amount of black to it to get the shade I wanted. As I was mixing the paint, I made sure to mix enough to cover the topsides with some left over for later touchups. Be sure to save the extra paint in an airtight container. Note, as you're painting the topsides that the outboard edges of the rails are all white, so try not to get blue paint on them – it's hard to cover up later – but you can sand off any paint that gets on them accidentally before painting the rail edges white.

The real Bluenose II has a yellow band along its length above the scuppers. I elected not to add this because it's VERY difficult to paint well. The biggest problem is in masking over the chain plates. It's very hard to get a good seal around the metal with even the vinyl masking tape and, as a result, you wind up with ragged edges. I was happy enough with my paint job at this point that I didn't want to chance making a mess of it with the yellow line. If you'd like to add it, the best illustration is on pages 114 & 115 of the Jenson book. It needs to be quite narrow – no more than 1/32" wide.

You can now add the scroll work around the hawse hole and the name board. Draw a pattern for the scroll work on a piece of paper, then make a cutout for the hawse hole so the paper can fit around it and lie flat on the hull. Use a pin to mark the line on the hull and paint the line with yellow paint. In Photo 4, you can see both the pattern and the end result painted on the hull.

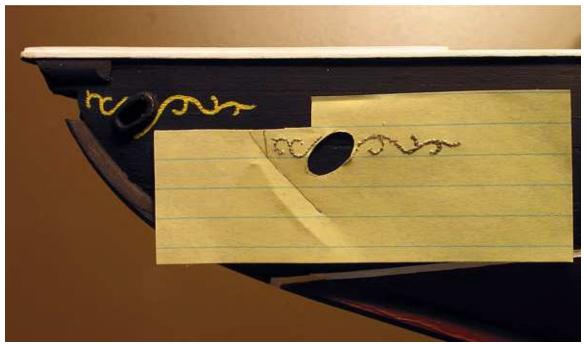


Photo 4: Painting the scroll on the bow

The Name Board

The name board is made up separately and glued onto the hull after completion. The name board was shaped first from a bit of scrap wood, then painted the same color as the hull. I used 1/8" high dry-transfer letters from a company called Woodland Scenics (check train shops or buy online). Then I painted the decorative figures on each end and sprayed it all with a coat of matte varnish. Hopefully, you'll be able to do a better job of painting those decorative bits than I was, but I did the best I could. I think mine look rather like yellow lobsters. I also added the name to the transom by applying the letters directly onto the surface of the transom itself. I sprayed the transom with matte varnish after the letters were in place.

The actual placement of the name board was somewhat problematic. The location shown on the drawings in the Jenson book seem to differ from the images of the real vessel on the 1997 cruise video. In the end, I decided to follow Jenson.

You will need to make up two "chain plates" for the bowsprit shrouds. These should be fabricated from brass strip with an attached ring. See page 107 in the Jenson book for their placement. Finally, add the eyes for the footrope and the bobstays.

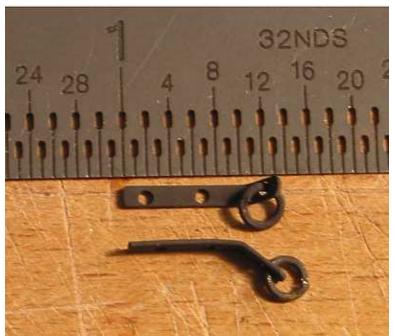


Photo 5: Bow shroud chainplates

With the painting of the hull complete, you can now attach the rudder and the propeller assemblies. I painted the propeller shafts the same color as the hull bottom. I also painted the props a brass color. All the iron work on the rudder is painted the same as the bottom – don't leave it bright brass.

At this point, you should mount your model on a temporary baseboard. There are many ways to mount the hull. I used 1/8" threaded brass rod epoxied into holes in the keel. I covered these rods with brass pedestals. Wherever you mount your pedestals, you want to assure that the waterline is parallel with the base.

Rigging the Bowsprit

Now, we can make up and rig the bowsprit, which is considerably different from what AL shows. If you haven't already done so, go ahead and ream out the hole in the bow for the bowsprit. If you need to drill a hole first, drill a small one, then use a round needle file to carefully enlarge the hole to the proper size. Insert your bowsprit material into the hole, all the way back to but up solidly against the bowsprit bitt. You can then determine the overall length of the bowsprit. As for the material, you can use the supplied 5mm doweling if you like since the bowsprit will be completely painted.

I must confess to a bit of confusion about the bowsprit length. The table of specifications on page 17 of Jenson lists the bowsprit total length as 34 feet and the projection as 17 feet 6 inches. On page 117, however, the drawing of the bowsprit shows its projection from the stem as 15 feet. 15 feet translates to about 61mm at our 1:75 scale and, frankly, this "looks" too short. 17.5 feet is just over 71mm, which definitely looks better, although

still perhaps a bit short. The question has to be asked, from which point on the hull is the bowsprit projection measured? It could be from the stem at the under side of the bowsprit or it could be from the tip of the rail cap. Whatever the correct answer, I think the bowsprit looks better if it's a bit longer, so I measured out about 71mm from the tip of the rail cap. This places the end of the bowsprit just about at the same point as shown on the AL plans.

Cut the bowsprit to length and taper the ends. If you look at the drawing on page 117 of Jenson, you'll see two iron wyes on at the tip of the bowsprit. These are easy to solder up from brass strip if you're so inclined and want to improve the appearance of your model. Otherwise, add a band and some small eyes to simulate each wye.

Let's briefly digress and talk about making bands around spars. You can make these from brass strip by annealing the brass, then bending it around the dowel and gluing in place with a bit of CA. You can also make them even more easily from paper. Cut a narrow strip of paper, glue one end to the spar using yellow or white glue, then apply a thin coat of glue to the rest of the strip and wrap it around the spar to make a band and cut off the excess. Usually two or three wraps are enough to give you the right thickness. Once the glue has dried, you can lightly sand the cut end and it will all but disappear. The band can be painted if you're simulating black iron or varnished if you like the white look. A fellow modeler has suggested using acid-free paper for this and although I can't say that it's necessary one way or the other, it certainly can't hurt.

In addition to the wyes, there are two bands farther down the bowsprit. There are also two wooden pieces called battens that are mounted on top of the bowsprit (after making the bands). These battens hold thin ropes (stops) that are used to tie up the jib when it is lowered on top of the bowsprit. Mount the battens on the bowsprit first, then drill small holes for the stops (to be added after painting). The stops get progressively longer toward the tip of the bowsprit. This is necessary because there is a greater bulk of sail material to tie up at the stay when the jib is lowered.

Paint the bowsprit black outboard and white inboard. When dry, glue the bowsprit and the bowsprit bitts in place. Next, make up and install the gammon iron using cut off brass nails to simulate the bolts. Paint this black. Finally, you can rig the bowsprit shrouds and footropes. The footropes should not be taut but should drape in a gentle curve. The shrouds should be tight however. When you're making up the shrouds, don't tie a simple knot on each end. The real boat would use an eye splice on each end of the shroud.

Making real eye splices at this scale is more than I'd care to tackle, but they are easy to simulate. Make a small loop in your rigging line, then use waxed thread to make 5 or 6 wraps around the location where the two parts of the line join (called seizing). Tie off the thread and put a tiny dot of CA on the knot. Also, apply some CA to the short part of the rigging line so you can snip it off cleanly, close to the seizing and you're done.

Attach one end of the shroud to the wye on the bowsprit using a split ring. The aft end is attached with a turnbuckle on the real boat. You can use a simple seizing that will allow you to put the shroud tight. To make the seizing, tie a piece of thread to the eye on the shroud. Run the end of the thread through the ring on the chainplate, back through the eye, then back through the ring. Repeat several times then tie off the loose end with a couple of half hitches.

The last pieces to add are the upper and lower bobstays. These are made from steel bar on the real vessel, so simulate them from blackened brass rod. Use heavy pliers to flatten the ends so you can drill holes for the rings that hold the bobstays in place. Photo 6 shows the completed bowsprit and rigging.

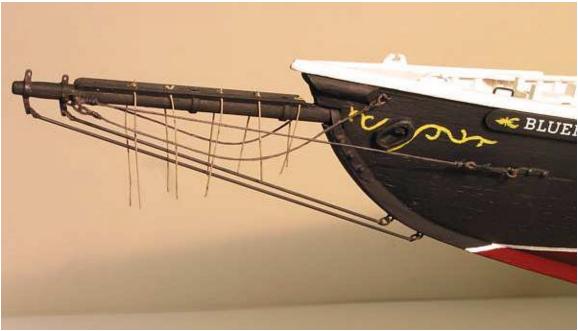


Photo 6: Completed bow rigging

End of Part 6