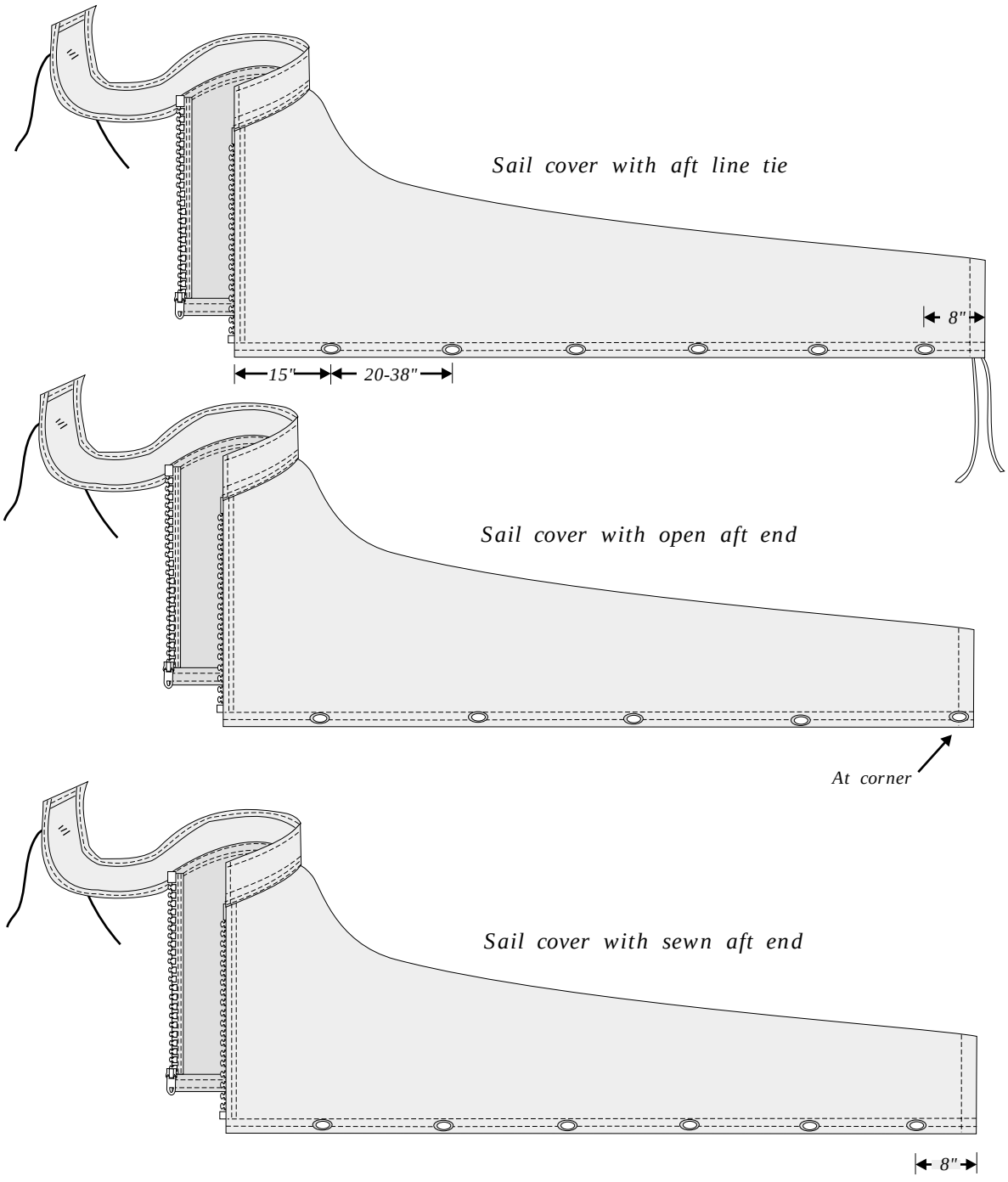
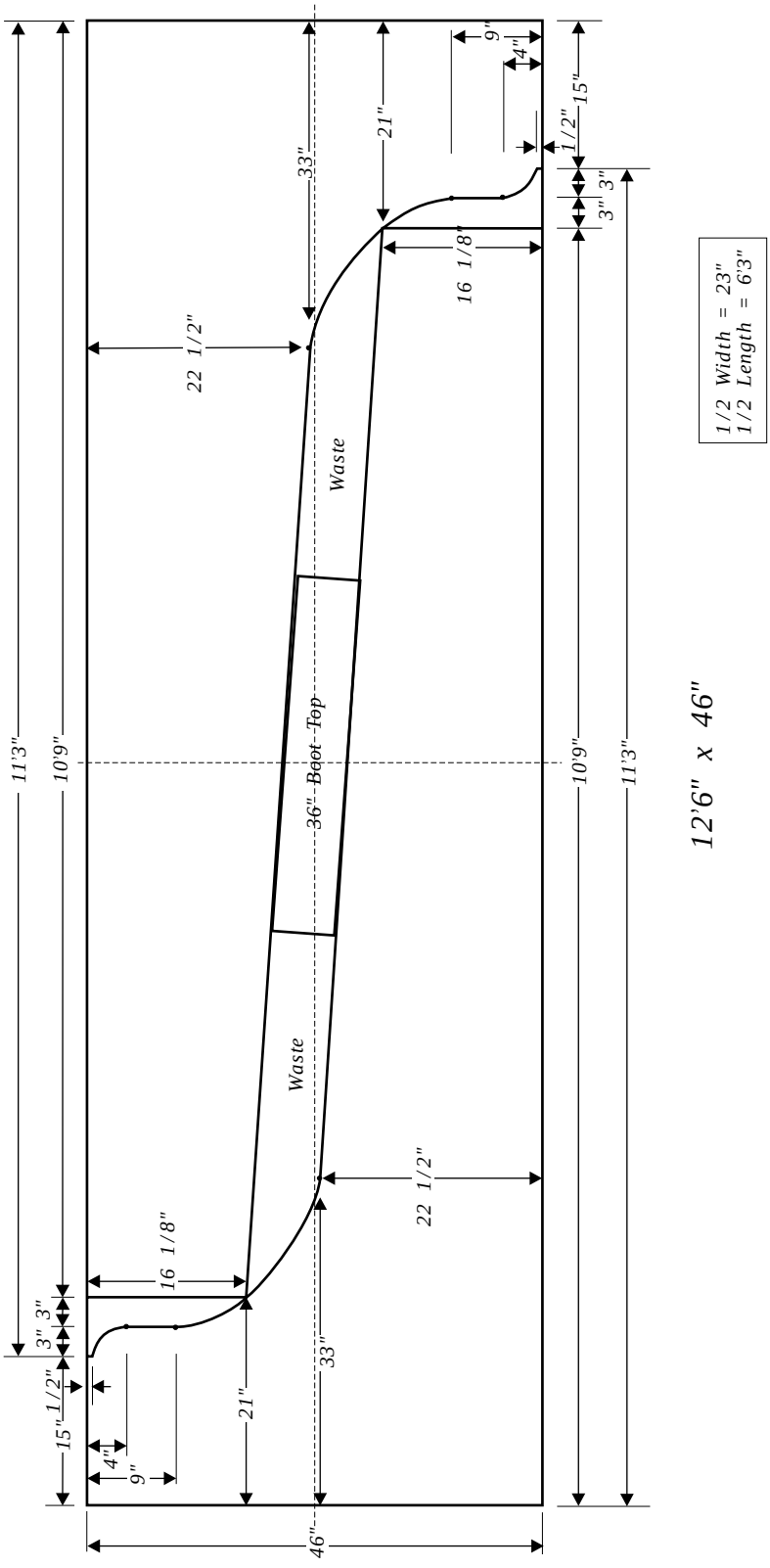
Sail Covers


Sail cover with aft line tie
8"
15"
20-38"
Sail cover with open aft end
At corner
Sail cover with sewn aft end
8"

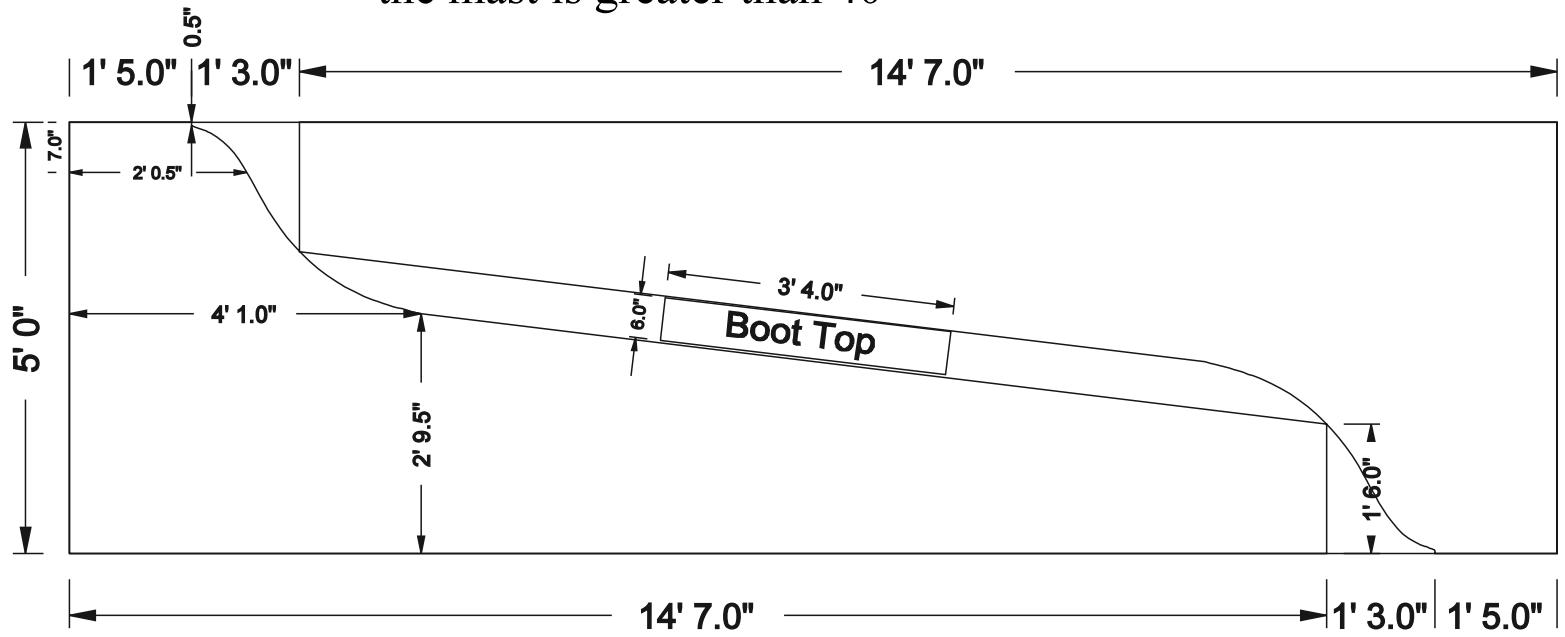
Sailcover

Kit #1151 / SC-04

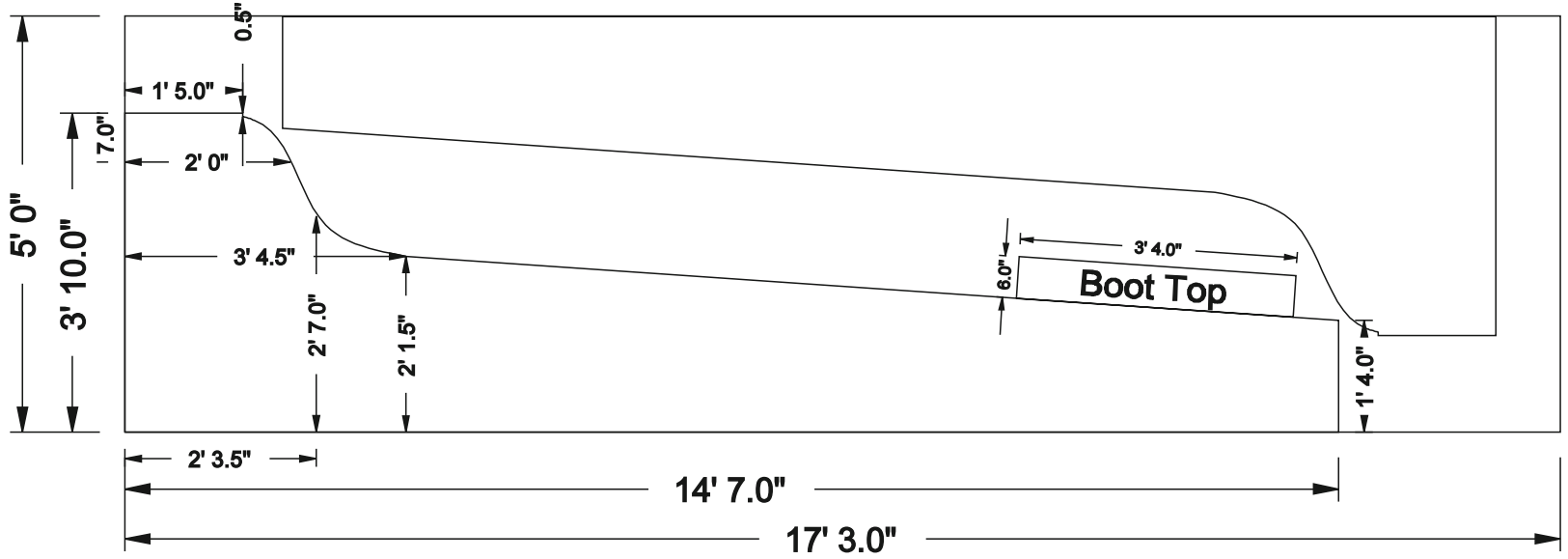


Kit #1152 / SC-05

Pattern A --- Use this pattern if the sail stack along the mast is greater than 40"

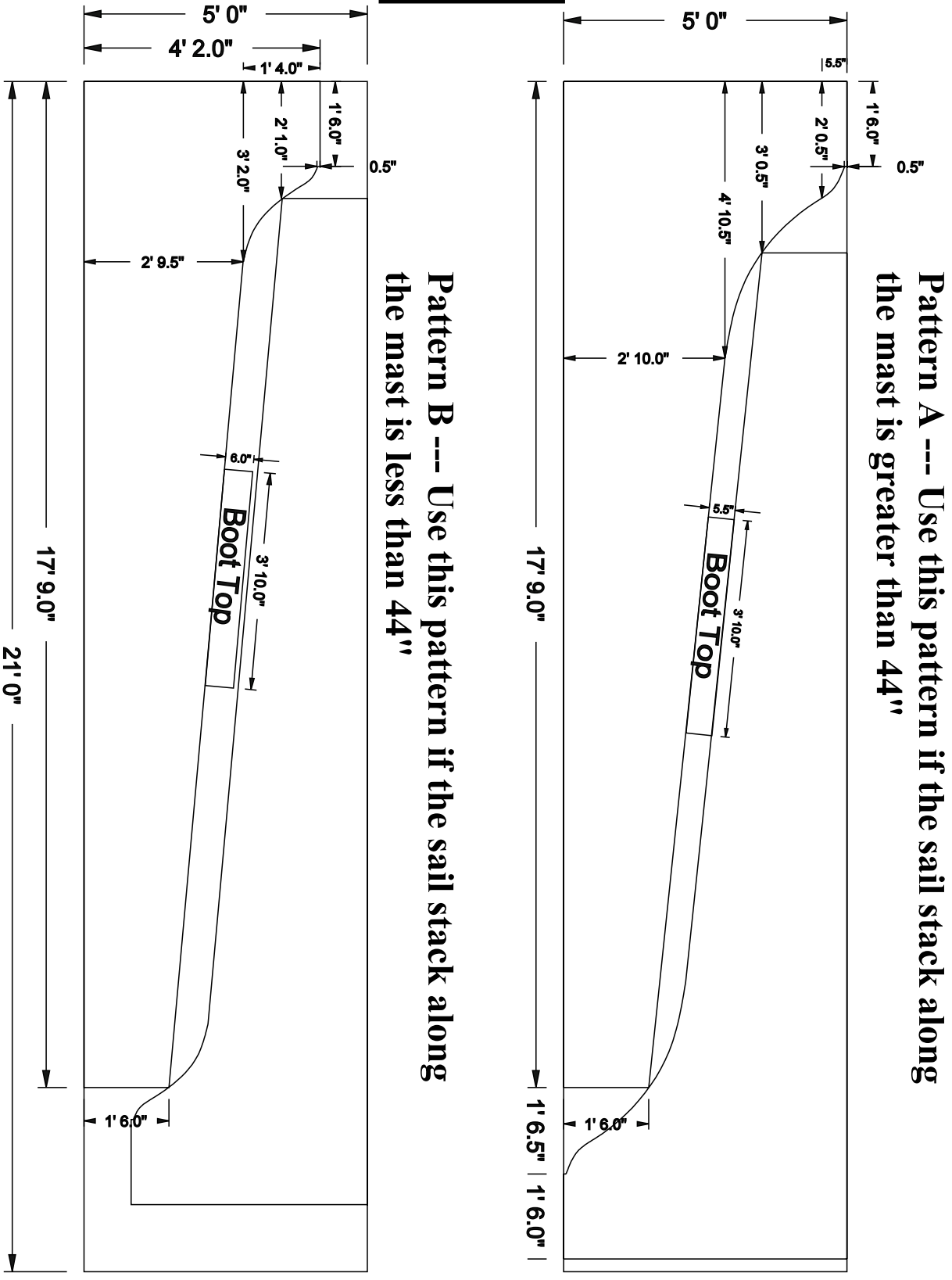


Pattern B --- Use this pattern if the sail stack along the mast is less than 40"



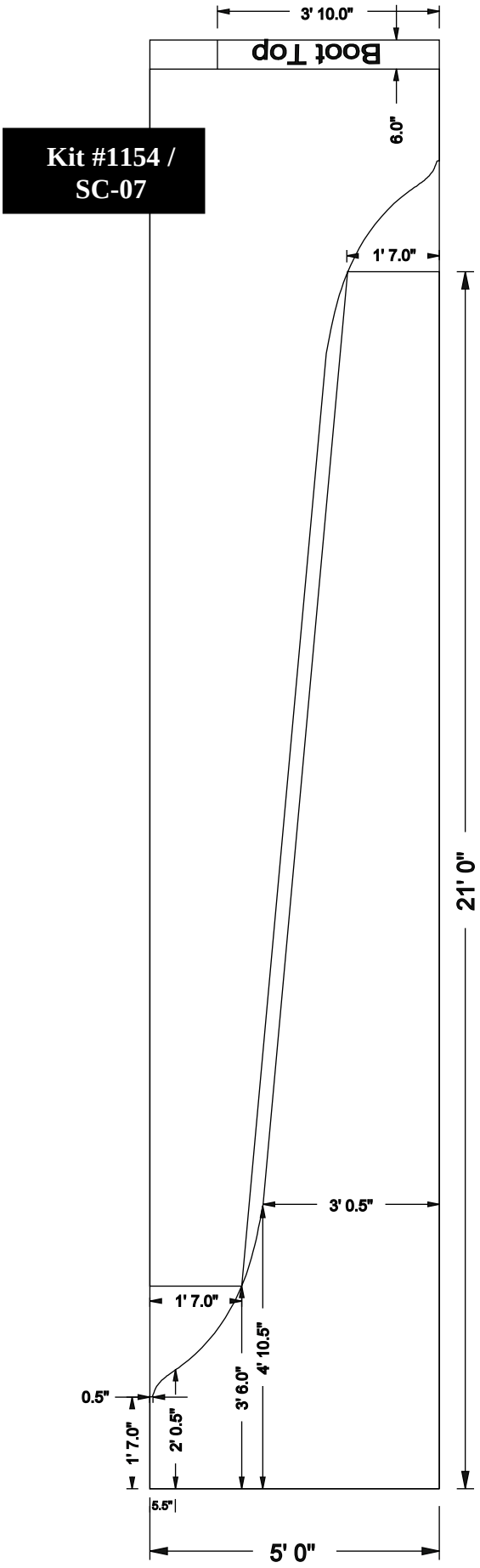
Sailcover

Kit #1153 / SC-06



Pattern A --- Use this pattern if the sail stack along the mast is greater than 44"

Pattern B --- Use this pattern if the sail stack along the mast is less than 44"



Making a Sail Cover

Sail covers should be made of a fabric which "breathes" in order to prevent condensation. It should also, needless to say, be quite resistant to sunlight, stretch, and abrasion. Both polyester and acrylic fabrics fulfill these requirements, but certainly the best sail covers are made of the latter. The acrylics are more colorfast and tend to drape a bit better than the polyesters. The only drawback to the acrylic is their tendency to abrade but this can be overcome by adding additional fabric or patches of leather at critical spots.

There are only a few materials, other than fabric, necessary for boom sail covers: thread, leather, fasteners, zipper, tie line and basting tape. The thread should be V-69 polyester. White is generally used even with colored fabric although colored thread is available.

Machine stitching in boom sail covers is primarily straight. Make the stitches as long as possible. Some cover fabrics tend to “needle pucker” so the fewer times the needle penetrates the cloth the better the seam will look.

Leather is used for chafe protection wherever necessary. It is also a means by which handwork can be attractively covered.

There are several fasteners used for boom sail covers. A favorite is the “twist-lock fastener" (also called “common sense fastener" and sometimes “carriage fastener").

Construction Procedures

Begin by studying the cover parts outlined on the length of cloth. Compare the pattern(s) on the cloth with the corresponding pattern(s) for the kit illustrated above. (**Note:** for kits #1152 and #1153 there are **two patterns on the cloth and two illustrated here**. To determine which pattern to use (either "A" or "B"), measure the stack of

Figure 1

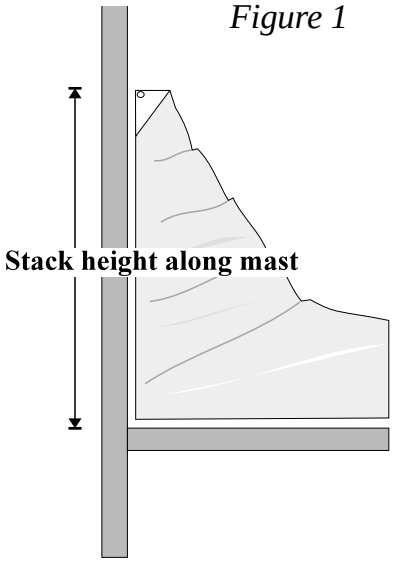
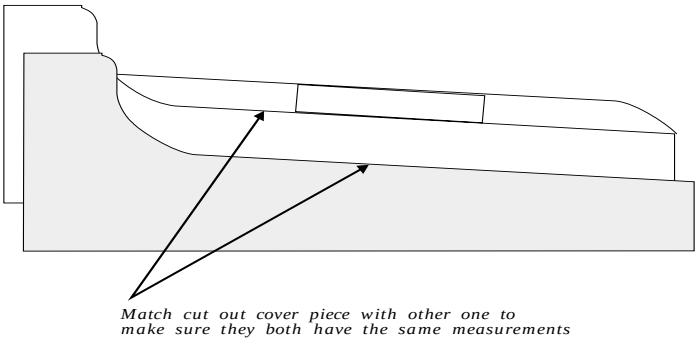


Figure 2



the flaked sail along the mast (see Figure 1). **For Kit #1152**, if the stack is greater than 40", cut the cloth using Pattern A. If the stack is less than 40", use Pattern B. **For Kit #1153**, if the stack is greater than 44", use Pattern A and, if less than 44", use Pattern B.)

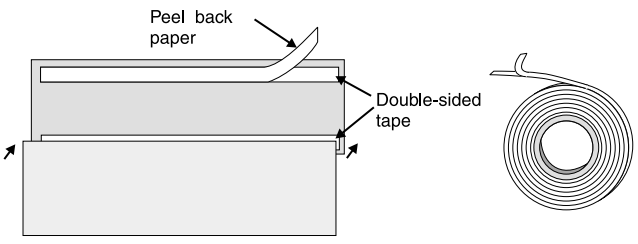
If a "Customized" prepatterned kit has been ordered (for a customized kit, Sailrite will have been given specific measurements of either the existing sail cover or the flaked sail), these instructions will not include any illustration of the pattern. Simply cut out the computer generated pattern on the cloth and follow the rest of these instructions to finish the kit.

Each pattern contains one extra piece of fabric to increase the height of the cover up the mast—this piece is called the “boot top”. Patterning for the boot top may or may not be found on the cloth. If it is not, simply follow the patterning illustrated on preceeding pages for the boot top for that kit.

NOTE: that on the cloth the cutting lines are not quite complete. Simply extend the lines out to the edge following the appropriate pattern, i.e., #1151, #1152, #1153 or #1154. All lines are complete on “customized” prepatterned kits.

Cut out the cover parts on the cloth. This can be done with an ordinary pair of scissors since all edges will be hemmed. Even so, if possible, use a hotknife (a soldering iron or a wood burning tool will work) to seal the cut edges of the fabric and keep them from raveling. It is a good idea to cut out one side and lay it over the outline of the second to be sure that the two conform before cutting the second one out (Figure 2).

Join both main boom panels together down their “backbone”. Lay one panel directly over the other. The surfaces now facing outward will be on the inside of the cover when done. Use the double-sided acrylic basting tape to stick the panels together. This new tape really helps hold



Basting Tape Application
The tape is left permanently in place.

Figure 3
(Inside-out)

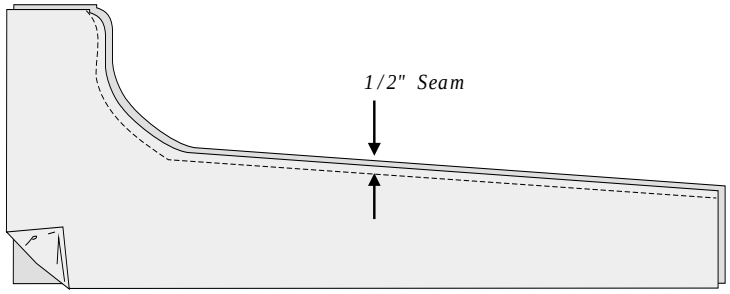


Figure 4
(Right-side out)

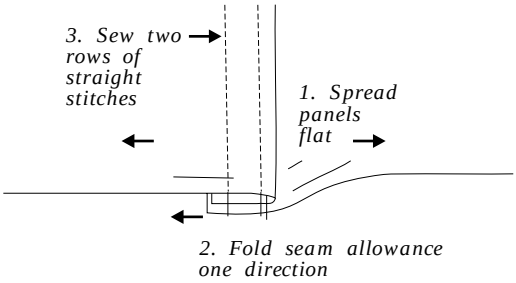
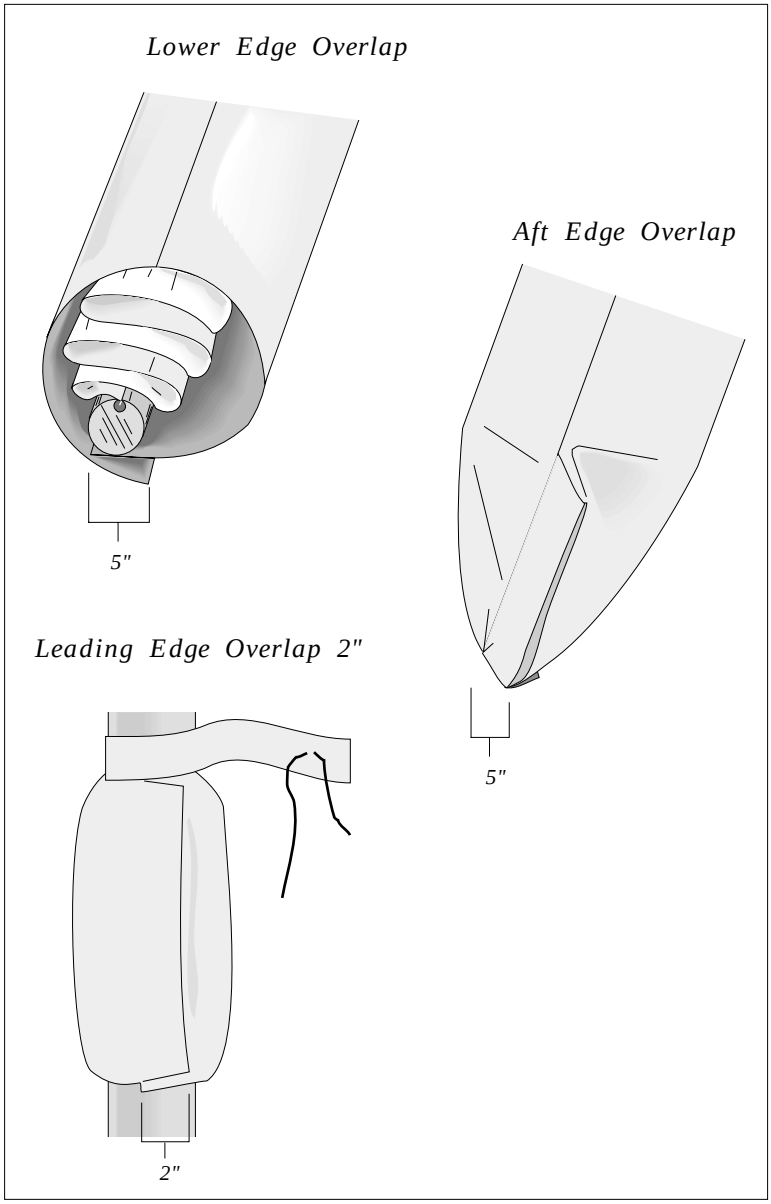


Figure 5



things in place for sewing and should be used throughout the construction of the sail cover. Now sew a line of straight stitches 1/2 inch inside the matched, curved edges along the backbone of the cover (Figure 3).

Open the sewn panels and spread them flat. Fold over the 1/2 inch of seam allowance cloth and sew it to one of the two main panels with two lines of straight stitches (Figure 4).

Place the cover over the sail furled in its normal way on the boom. The cover should encircle the boom and overlap itself approximately two inches with a 3 inch further allowance for hems. The overlap at the leading edge of the mast should be two inches. At the end of the boom the amount of overlap needed depends on the method of closure. A five inch overlap as shown in Figure 5 is plenty. If the cover is too small, try to devise a method of furling the sail which results in a better distributed bundle of fabric and which thus

provides for the needed overlap.

There will probably be excess cloth at all edges. If the cover is too big anywhere, use scissors, a soldering gun or a wood burning tool to trim it down to hemmable size. Start with a 1/2" hem and press the folded edge with a heavy, flat object to provide a clear sewing guide—do not use heat. Run a row of straight stitches right along the folded edge. Then run a second row of stitches 3/8-inch or so inside that edge (this hem can be less than 1/2-inch if there is little cloth available). Now turn one full inch under and inside the cover. This will create a double reinforced edge with no raw edges visible. Again put a row of straight stitches right along the folded edge and just inside the inner hem edge. See Figure 6.

At the aft end of the cover there are three options as shown in the illustrations on page 1. This end can be sewn closed if the boom rests on a crutch. To do this simply tuck in the extra cloth allowed (trim if there is way too much) and stitch the end shut. If the topping lift will be secured to the end of the boom and the end of cover will have to open to slip around it, either hem the end and place a fastener on the corner or create a sleeve into which a tie line can be inserted. The latter is our preference. Follow the hemming instructions already used for the bottom of the cover in both instances but make the second fold (as shown in Figure 6) two inches wide if inserting a tie line.

Also hem all four edges of the boot top strip (Figure 7). The boot top should be long enough to circle the mast roughly 1 1/2 times. It need be no

Figure 6

Finished Edge

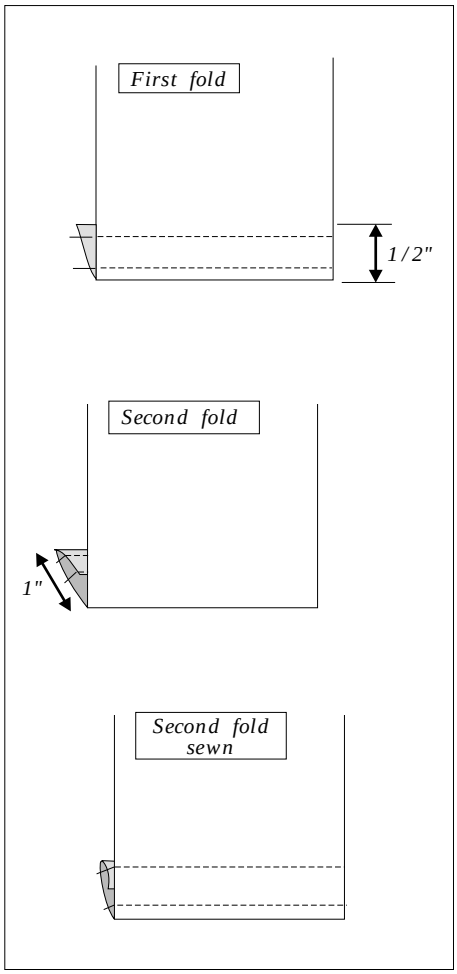


Figure 7

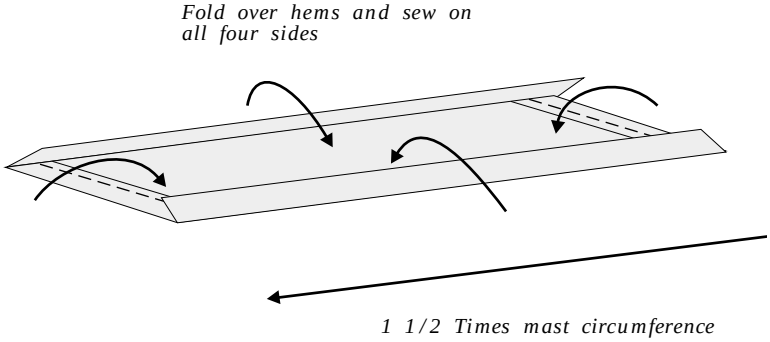
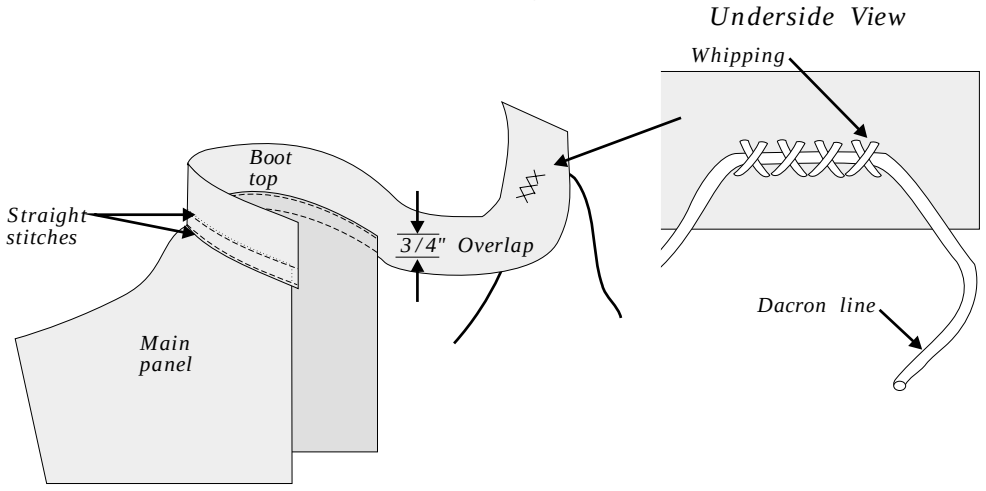


Figure 8



longer than this. If it is, simply cut it down.

Sew the boot top to the top of the main panel (Figure 8). Overlap the two about 3/4-inch with the boot strip outside and run two straight stitches over the overlap about 1/2-inch apart.

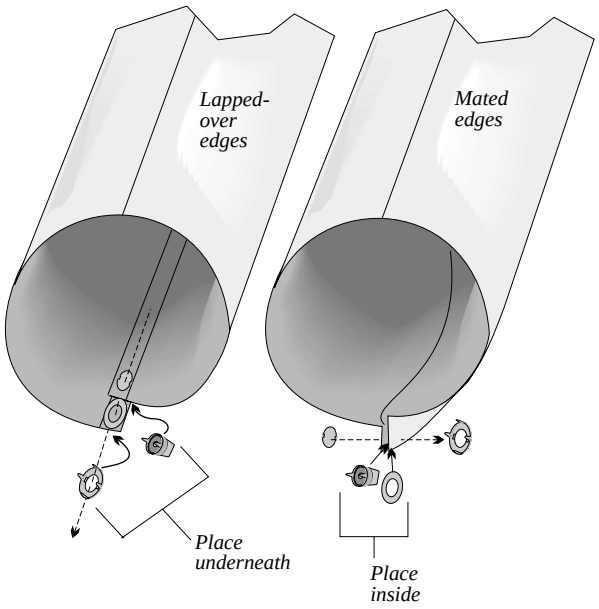
Now sew a length of Dacron line across the middle of the boot top strip at or near its free end (Figure 8). This line will be used to tie the boot off around the mast, making it weather tight.

The cover should now be placed over the furled sail again and the fastening system installed.* It is best to install twist-lock fasteners so that the cloth laps over itself rather than mating inside surface to inside surface. See Figure 9. The lapped closure puts stress on the fasteners in sheer, and it means that the finished side of the fastener will be on the outside of the cover.

The only tool required is a small knife. Fasteners are placed, as shown on the beginning illustration, from 20 to 38 inches apart between the corners to assure that the wind will not lift an edge and cause it to flap. Press the fastener socket into the cloth where it is to be placed so that its prongs leave slight indentations. (It helps

Figure 9

Two installation procedures for common sense cloth-to-cloth fasteners



*If your sail has lazy jacks, turn to the end of these instructions and prepare slits for them before installing fasteners.

to place the fabric on a phone directory or some fairly yielding surface.) Make small slits in the cloth with the point of a knife over these indentations. With synthetic cloth it is a good idea to heat the knife blade before making the slit so that it will be well sealed. Insert the prongs of the socket through these slits and place an appropriate backing plate inside them on the other side of the cloth. Then bend the prongs over onto the backing plate with a pair of pliers. The hole which must be cut in order to insert the stud into the socket can be made with the same knife or scissors or with a hotknife to seal synthetic fabric. See Figure 10. Sailrite is now providing cloth-to-cloth common sense fasteners with buttons for all sail covers. Instead of using a two prong stud, a two screw flat base stud is installed using a snap fastener installation tool and two rivets. See Figure 11.

Finally, a nice way to close the forward side of the cover along the mast is to use a finished-length zipper (Figure 12). To install a zipper along the front opening of the sail cover (or anywhere else, for that matter), simply finish the opening with hems so that the two edges just meet (there need be no overlap). Then sew the zipper tape in place along each side with two rows of straight stitches. Note that the stitches nearest the zipper teeth are placed roughly 3/16-inch away from those teeth to allow room for the passage of the zipper slider. If the zipper is installed as shown, the teeth will be completely covered by flaps of cloth when the opening is zipped closed.

Finished zippers can be shortened to just the length needed by cutting off their tops (the end that closes last). Melt two or three of the teeth at the new top end of the zipper to keep the slider from coming off or simply bend back the last half inch or so of each zipper tape and sew it in place—this sudden widening of the teeth will keep the slider from coming off (Figure 13). The zipper should close as it is pulled down.

A small piece of pearl gray leather can be

Figure 10

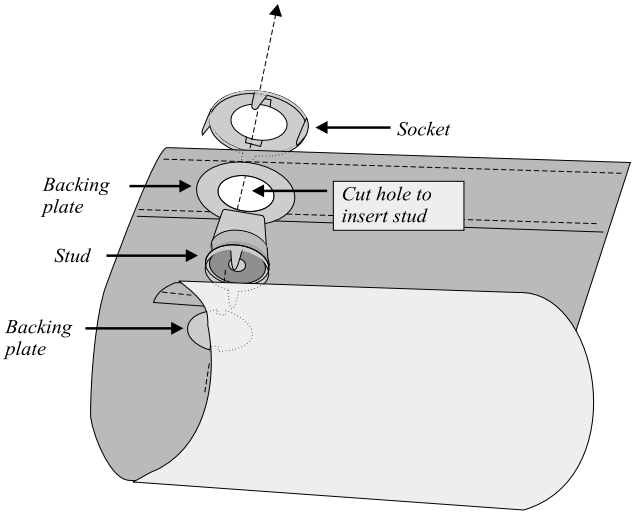


Figure 11

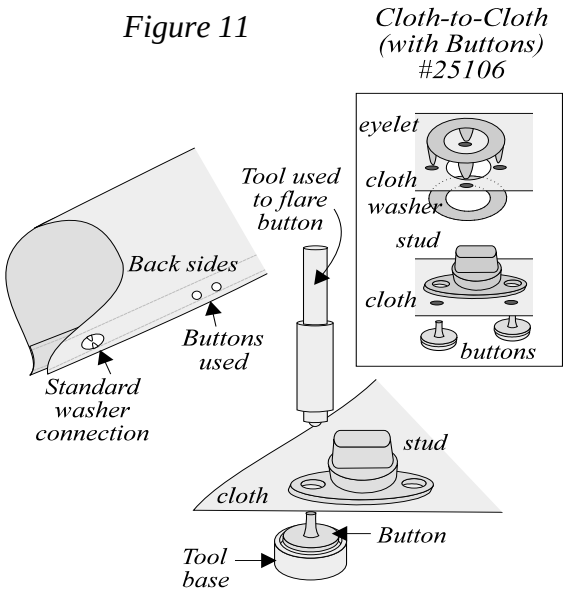
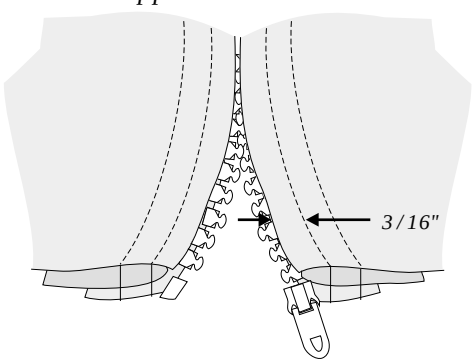


Figure 12
Zipper Installation



used to protect edges which may be subjected to chafing, such as in the area around the topping lift. It can also be used to build in leather patches near the center of the cover to provide protection for exit slits provided for a halyard sling (Figure 14). Most machines are capable of sewing this leather—try that first. If the machine balks, simply sew the leather in place with a needle and seven or eight strands of Dacron thread or some sail twine.

The construction of a halyard sling requires two pieces of scrap roughly 1 1/2 times as long as the diameter of the boom where it will be used, and three or four inches wide (Figure 15). Cut the two pieces so that they are the same size. Then place them together one on top of the other and sew all around, except for one short edge, with a straight stitch 1/2-inch from their edges. Turn the assembly right side out and sew down the remaining edge after first folding the raw edges inside. Place this last stitch very near the folded edge of the fabric and continue it all around the sling to give it a nice finished appearance.

Grommets should be placed in the end of the sling. Lengths of fabric (six or seven inches) folded several times lengthwise and sewn to the ends to form loops will serve quite well also. See Figure 16. The halyard can be shackled to these grommets or loops to keep it from banging the mast or chafing against the rigging.

Instructions for covering winches placed on the mast in the way of the cover are included here. In some cases the kit may have enough fabric to allow for them but additional fabric may be needed. Winches can be handled in two ways: when trimming, enough extra cloth can be left to cover them “tent” fashion. A neater appearance, however, will result if a hole is cut in the cover to allow the winch to protrude and a special winch cover is made up (Figure 17). To fashion this cover, cut from scrap cloth a rectangle equal in width to the height of the winch plus two inches and equal in length to the circumference of the

Figure 13
Bend Ends of Zipper Tapes

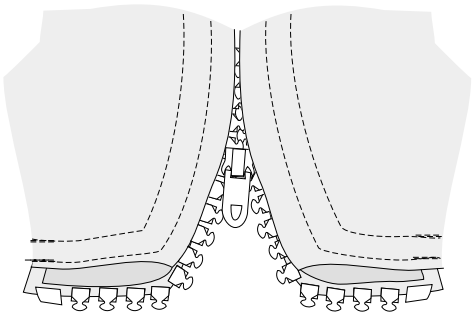


Figure 14

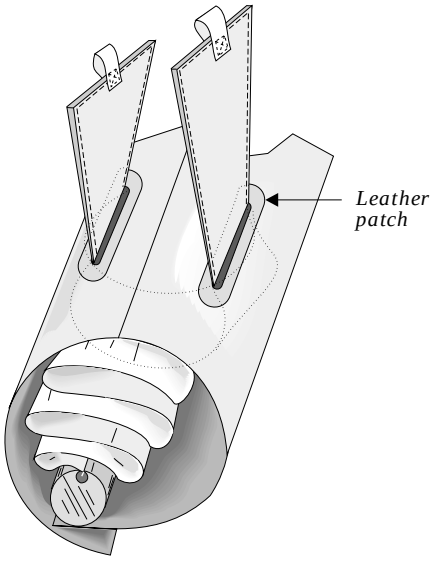


Figure 15

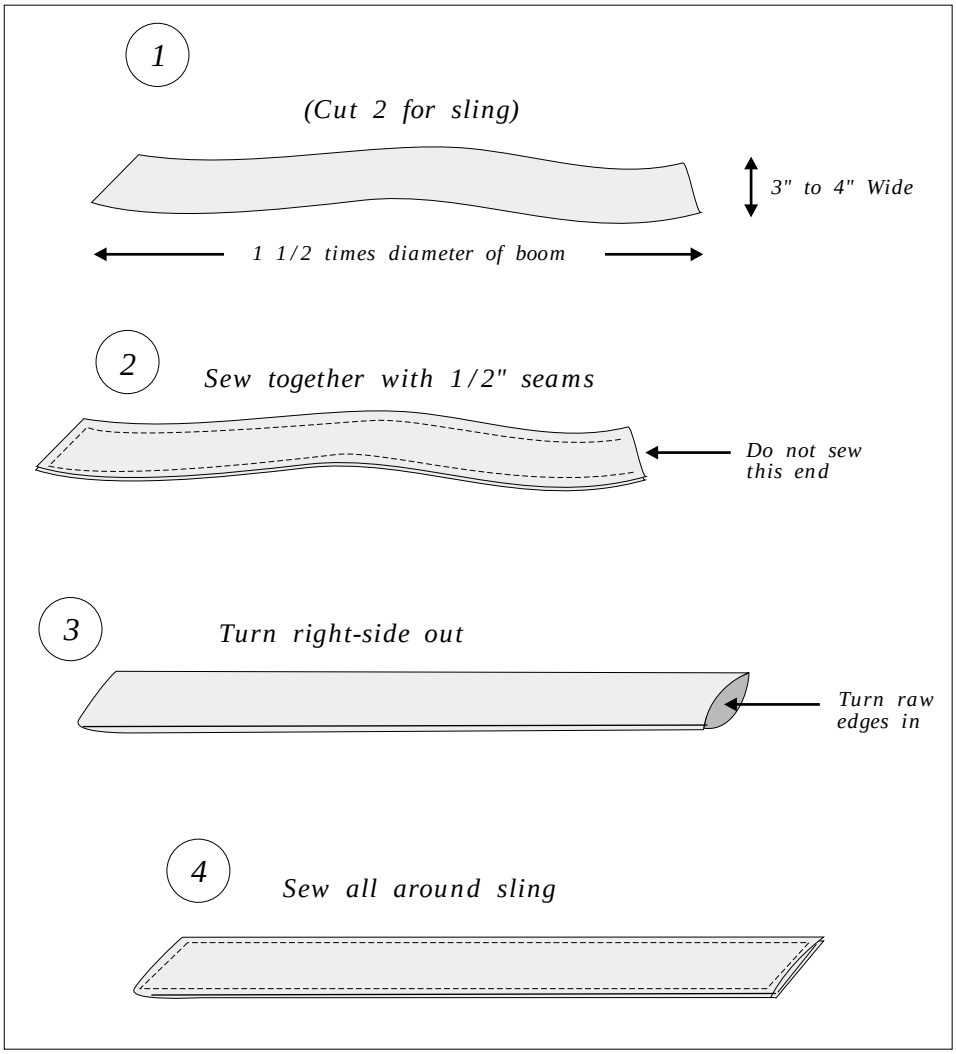
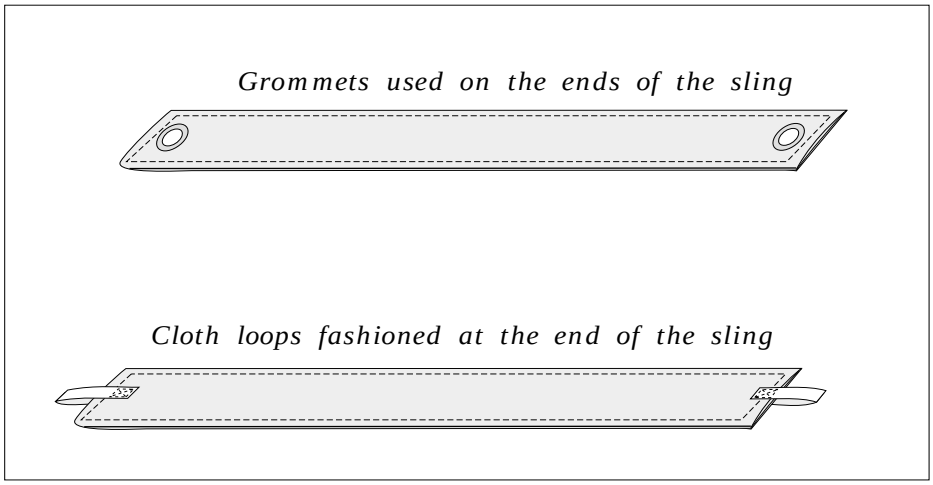


Figure 16



hole which was cut in the cover plus four inches (to allow for closing the barrel and attaching it to the cover).

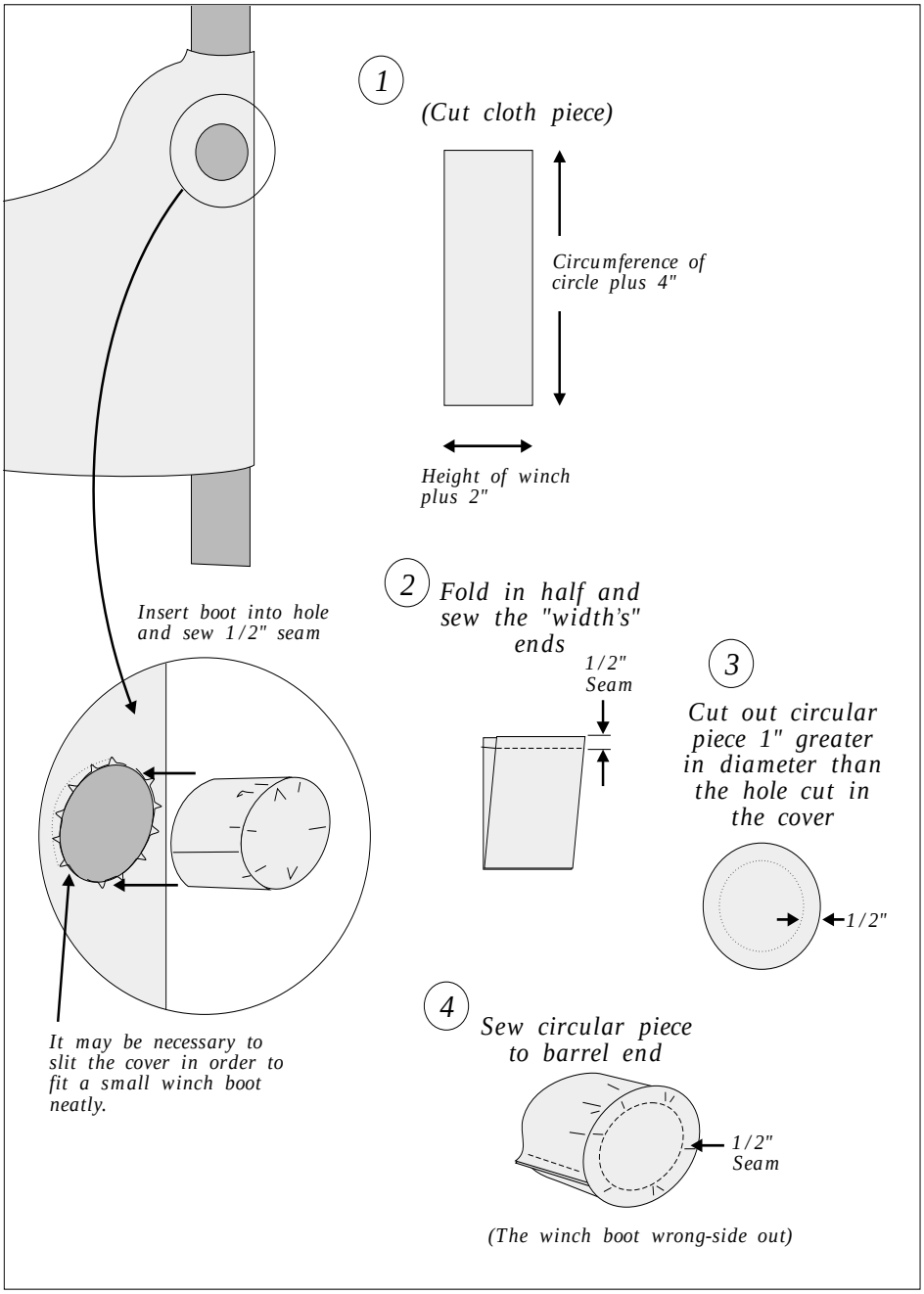
Form a barrel with this rectangle by folding it in half across its length and sewing across the two narrow ends with a row of straight stitches 1/2-inch inside the edges. Cut out a circular piece of cloth one-inch in diameter greater than the diameter of the barrel just formed. Cut out this circle roughly and oversized. Then pin it in place 1/2-inch inside one end of the barrel. It can then be sewn with a line of straight stitches directly over the row of pins. Any extra cloth in the circle can then be cut away.

Now turn the resulting winch pocket right side out and insert it in the cover hole. Pin it in place so that its bottom edge is flush with the opening in the cover. Run a line of stitches all around this opening 1/2-inch inside the two edges.

To prevent any of the raw edges from raveling, overcast them with a short zigzag stitch. Or install binding tape over them.

The sail cover is now complete. If there are problems or suggestions, please call.

Figure 17



Sailrite
Self-Reliance Under Sail

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Instructions for Optional Lazy Jack Slits

Slits must be made for lazy jack systems, before twist lock fasteners are installed along the bottom of the cover. First, locate and mark the positions where the slits are needed by placing the cover over the boom and marking where the lazy jack wires must pass through the sail cover. (In some cases Sailrite will have premarked the correct locations).

At each location use a hot knife or scissors to cut slits 2/3rds of the way up the cover. At the top of each slit cut a 3 inch slit perpendicular to the first slit and equally spaced on each side of the first slit (see Figure 18). The raw edges of these slits should be sandwiched with acrylic binding tape. Sew the binding tape in place with straight stitches.

From the scrap left from building the cover, cut rectangular pieces as long as the height of each slit and 5 inches in width. Cut two rectangles for each slit, i.e., if there are two lazy jack slits, four rectangles should be cut. Hem all four edges of each rectangle. Then, reinforce one long edge of each rectangle by rolling the fabric over and hemming it again. Twist lock fasteners will be placed on this edge to close these rectangular mini-covers against the sail cover.

Place each rectangle over the proper lazy jack slit with the long single hemmed edge facing the mast. Note that the rectangles are now shorter in length than the lazy jack slits. This is intentional. Allow the top of the slit with its "T' top to stick out (see Figure 19). Sew the single hemmed long edge to the sail cover.

Begin fastener installation. Follow the general instructions which start on page 9 but begin by positioning two fasteners in the sail cover right next to the bottom corners of each rectangle. Now position fasteners to hold the open edge of each rectangle closed against the sail cover. Place a fastener at the top and bottom corners of the open edge and add one or more in the middle as needed. The sail cover is now usable with a lazy jack system.

Figure 18

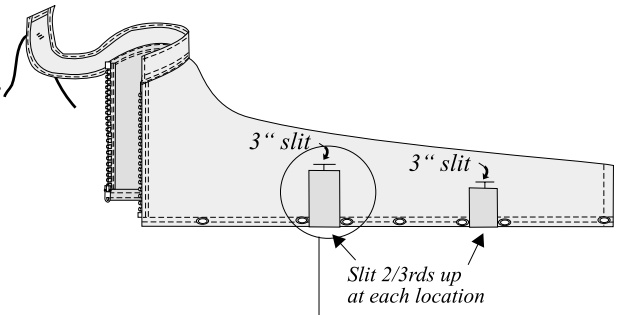

Figure 19