How to Make a Spinnaker Sock

Bob DeRoeck May 23, 2005

Do you need to replace your cracked vinyl Chrysler spinnaker sock or make a new one for your newly installed spinnaker snout? If so, and you know the basics of how to operate a sewing machine, here's instructions and dimensions for getting the job done.

The sock width measurements follow. You will have to determine the length of the sock to fit your boat. These width dimensions work fine for both my Mutt and Buc spinnakers, even though the Buc spinnaker is larger. The chute slides in easily even when the spinnaker is soaking wet from a dunking dousing.

First, attach a messenger line to the back of the old sock that is currently installed. Remove the snout. Remove the front end of the sock from the snout. Pull the sock out via the snout hole in the foredeck, trailing the messenger line up into the old sock location. Using your messenger line, run another line back through the CB trunk marked with a magic marker, then remove the line and measure the length of sock you need from the attachment point on the end of the snout to the attachment point on the front end of the small fiberglass piece at the back of the CB trunk. Don't make it clothesline tight. Instead allow a bit of slack so that the sock will rest on the top of the foam flotation material in the bow of the boat.

The measurements I'm giving you are based on the sock being flat on the floor and compressed flat. The sock is made out of a piece of fabric that is folded in half (lengthwise) and then the two edges, which are lying directly on top of each other, are sewn together. I recommend a double row of stitches about 3/8" apart from each other. The measurements are the distance from the fold of the fabric to the innermost row of stitches with the material lying compressed and flat on the floor. This translates into 1/2 of the circumference of the inner part of the sock.

Snout end. Make the sock a snug fit to the outside of the backend of the snout. Then attach it with a good quality SS hose clamp.

6" from the front. Centerline fold to innermost row of stitches when lying flat = 10"

48" from the front. Centerline fold to innermost row of stitches when lying flat = 10"

72" from the front. Centerline fold to innermost row of stitches when lying flat = 8.5". Taper from 108 to 6.5" between 48" and 72" from the front.

Between 72" from the front and the back end of the sock, taper sock so that the back end is a snug fit to the front of the fiberglass piece at the backend of the CB trunk.

I made socks for my Mutt and my Buc out of dacron sailcloth. It's relatively easy to sew on a home sewing machine as long as you don't try to sew more than 2 layers thick. It

will not rot (it will be sitting in water a lot of the time). It's very strong (won't rip unless cut with a sharp edge). It's also "slippery" so that the spinnaker will slide in and out relatively easily.

You could use used dacron from an old worn out sail and it would be perfectly good for this application. If there is a sail loft in your area, you can try to get some old stuff cheap or for free. If not, I bought new dacron from Defender Industries (see their website). You can buy their regular dacron sailcloth for about \$10/yard (in 4-5 oz weight). Or, you can order a dacron sailcloth scrap bundle of various weights for about \$20 which will contain a minimum of 12 yards. I would definitely buy the bundle. It's no problem having one or two cross seams in the spinnaker sock to get the length you need.

Use 100% nylon thread when sewing the seams on your sewing machine for maximum strength. You can usually get 100% nylon thread in a good sewing notions store. Or you can order Dacron "C" thread from Defender for \$8.25 for a 1/4 lb spool (more than you'll ever need unless you start making sails).

The process:

- 1. Sew together enough pieces to get the length you require. The seams will be running port to starboard on these cross seams when the sock is installed. Use a flat seam. This means overlap the two pieces about 3/4". Then sew the first seam using a zigzag stitch along the edge of one piece of fabric. Then sew the second seam along the edge of the second piece of fabric. If your machine does not have zigzag capability, you can use a straight stitch, but bring it in 1/8" to 3/16" from the edge. But, zigzag is better. Add 1.5 inches to the front end and another 1.5" to the back end of the sock to allow for hemming.
- 2. Once you have a piece of adequate length, lay out the pattern. Draw a centerline down the center of the fabric using a straight edge and pencil. Then using the dimensions I gave you, mark off the distance from the centerline (CL) at the different distances from the front of the sock. Remember these are "inner" dimensions. Add at least 1" on each side of the CL for hemming. So if the dimension is 10", measure 11" on either side of the CL. Smoothly taper the transition points where the width of the sock is changing. Mark, both the "inner" hem line and the outer hem line (the two should be about 1"apart) with pencil. Don't do any cutting of the fabric until all of the seams are double-stitched.
- 3. Next, do the front-end hem. Get some 1/8" dacron line, enough to go around both the front end and the back end hems of the sock. Cut it to the correct length allowing for about a 2" overlap. Heat-seal the cut ends. Measure this length by putting it around the outside of the snout's backend. Then handsew the 1/8" line to the outside of the sock, 1.5" in from the front end. After this is done, bend the edge back around the line and with the sewing machine sew a stitch row right up close to the rope using a straight stitch. Then do a second stitch row at the end of the fabric using a zigzag stitch. Next, handsew the ends of the rope down to the fabric. Note, the line is to provide the hose clamp with a positive "stop".

- 4. Next, sew the long seam. Use common pins to attach the two edges together with the pins about 2" in from the edges. If your pins are too weak, use a office stapler and remove the stables when finished. Use a straight stitch to sew the inner seam with the two inner seam pencil marks lying on top of each other. Then use a zigzag stitch to sew the outer seam with the two outer seam pencil marks lying on top of each other. Stop both inner and outer long seams about 6" from the end of the sock.
- 5. Next, sew the backend seam just like you did with the front seam using the 1/8" dacron line. After the backend hem is finished, sew the last 6" of the long seam, both inner and outer stitches.
- 6. Finally use good scissors to cut the excess material starting about 1/4" beyond the outer seam stitch line.
- 7. Install the sock with the long seam facing upwards to minimize leaking of water entering the snout going into the between-hull area. You want most of it to go out the back of the sock and into the cockpit so the bailer can remove the water. Remember to install the sock with the spinnaker takedown line already in the sock.

Step back, open a cool one, and admire your work.

Fair winds and Fly that Chute,

Bob DeRoeck, MCA & BCA