

#34301
JIFFY REEFING KIT
(Placement of parts)

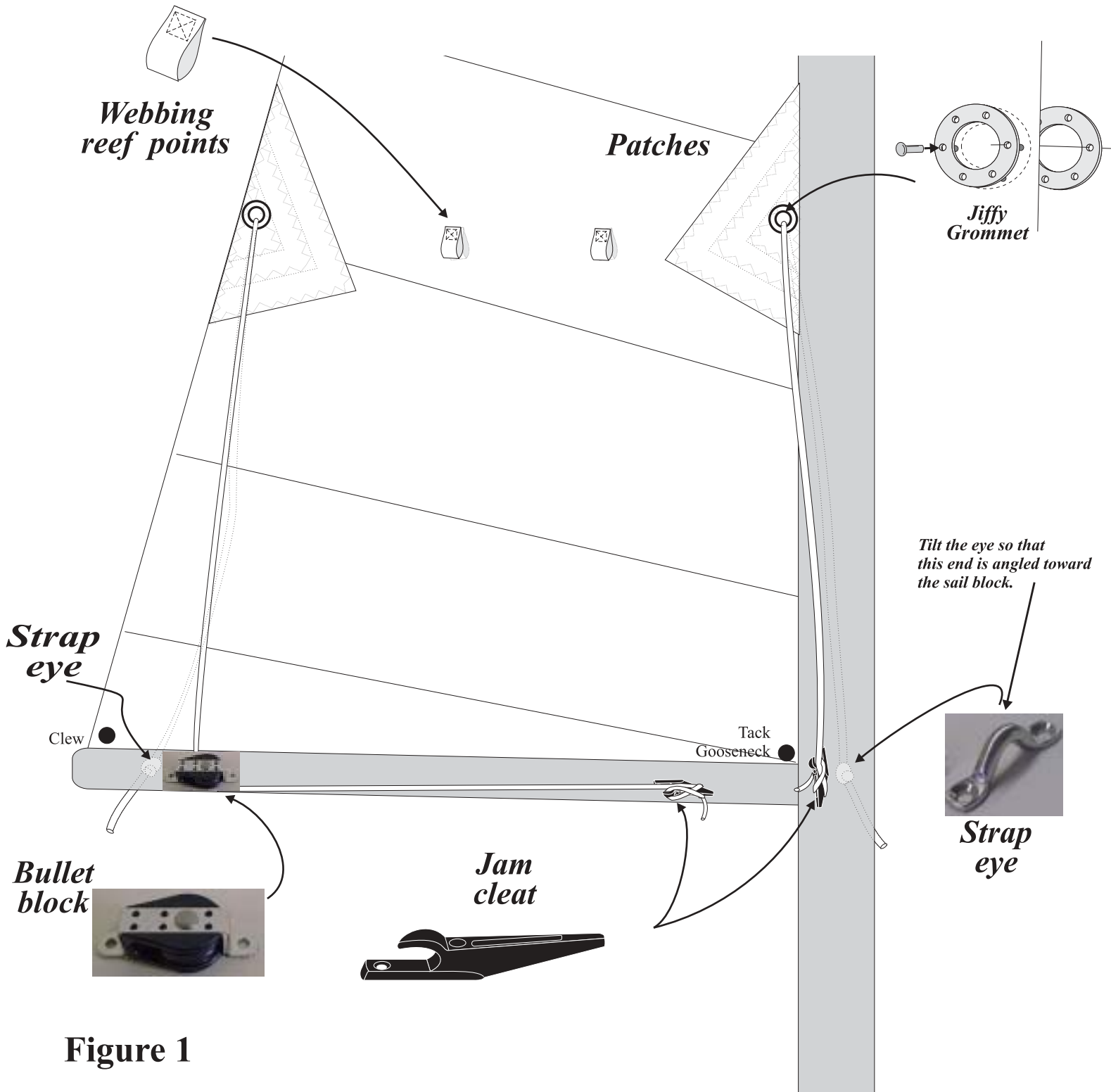


Figure 1

The jiffy reef system makes use of two lines. One at the leech and the another at the luff of the sail. The leech line is secured to an eye strap on the port side of the boom. Then it is run up through a jiffy grommet on the leech above the clew and down to a cheek block on the other side of the boom. From there the line is lead forward to a jam cleat near the gooseneck. The other line is secured to an eye strap at the gooseneck. It is run up through a jiffy grommet on the luff above the tack and back down to a cleat on the side of the mast just opposite the eye strap.

I. Begin your work by determining reef point position.

There is no hard and fast rule regarding the proper height of the reef points, but most prefer to install the first line of reef points parallel to the boom and just under the first batten. The jiffy grommet which is placed on the luff should be slightly lower (2 to 3 inches) in the sail than the leech grommet. This will raise the end of the boom slightly and make it less likely that the boom will dip in the water when the boat rolls in heavy weather. (Be careful not to get the boom so high that it hits the backstay when tacking.) Mark the jiffy grommet position on the leech and luff with pencil (Figure 2).

II. Install intermediate reef points.

Two intermediate points should be installed through the center of the sail 3/4 inch lower than the line from one block to the other. These points are fashioned of 3 inch loops of nylon webbing as shown in Figure 2 and sewn opposite one another. Lengths of shock cord with hooks

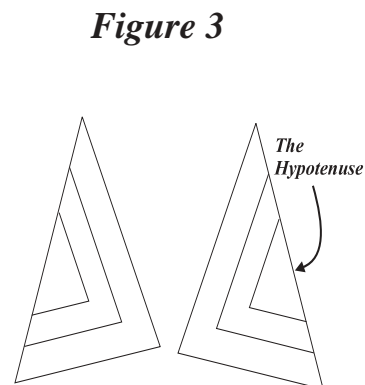
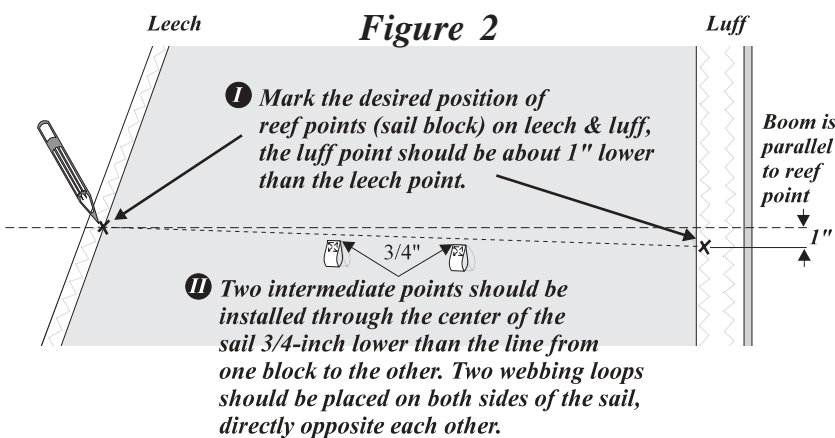
on each end can then be run under the boom and through the loops in order to hold the reefed sail in place.

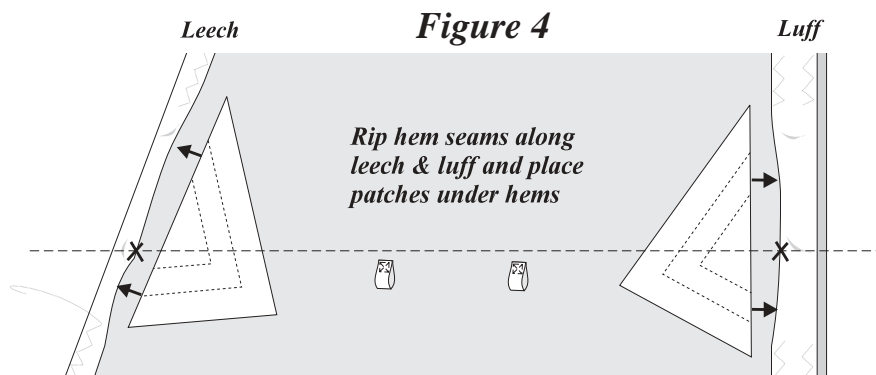
III. Installing the patches on leech & luff

The jiffy grommets should be placed as close as possible to the leech and the luff while allowing for free movement of any leech line or boltrope. There should be at least four layers of cloth under each grommet. Moreover, these layers of cloth should extend out into the sail in tiers so that stress is distributed over a broad area. This is why there are three different patch sizes.

A. Make up two patch assemblies by gluing together with seamstick a small, medium and large patch so that their longest edges are flush and the others are equally spaced. Stack the patches as shown in Figure 3. One assembly should be made up with the smaller patch on top of the medium patch on top of the largest patch with the hypotenuse facing right while the other assembly should have smaller patches on top of larger ones with the hypotenuse facing left.

B. The two patch assemblies should be placed on the same side of the sail as the existing patches found at the head, tack, and clew of the sail. Locate the points on the leech and the luff where you want to place the jiffy grommets. Place the patch assemblies directly over those points with the long flush hypotenuse of the patches along the edge of the sail at the leech and right behind the bolt rope at the luff. The patches should be placed so that the smaller ones are under the large one.





If your sail has a hem along the leech, rip the stitches that hold it down and place the patch assembly underneath that hem. If there is a sleeve of tape along the luff, rip the stitches securing it and slide the luff patch as far under as possible so that it is right next to the luff rope (Figure 4). If there are sail slide grommets in the way of the patches, cut out small pockets in the patch assemblies to make way for these grommets.

C. Attach the patch assemblies to the sail with the seamstik. (The seamstik is not of structural importance. It simply provides a means of holding the cloth in place while you sew.) Sew the patch assemblies to the sail. Use a number 16 needle for best results. If your machine skips stitches, try a ball point needle. If it still does not sew well, paper clip a small cloth soaked in liquid silicone oil to the top thread as it comes over the machine. Use a zigzag stitch about 3/16" long if possible. A straight stitch will be acceptable but it will not look as good nor will it secure the edge of the patches as well as the zigzags.

First sew down the long edge of the patch assemblies. This will secure all three patches in one pass. Keep the leech hem and the luff tape on the top of the patch assembly up and out of the way while making this pass—they will be sewn down later.

Now sew along the two inner edges of all three pieces of cloth in each patch assembly. On the large outer patch, if a straight stitch is being used, put in two rows of stitches on each edge. One approximately 1/8th of an inch within the edge and the other in 1/2" from it.

D. When all the edges of all the pieces in each patch are secured, the leech hem and luff tape can be sewn down over the patches. Basting the hem and tape with seamstick or using a

stapler to secure it in place prior to sewing will help prevent puckers.

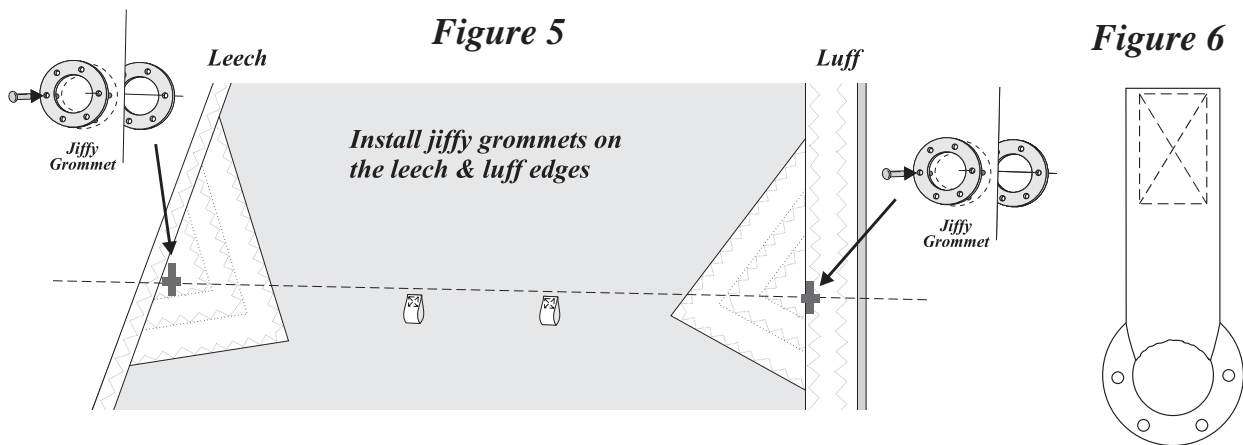
IV. Installing the jiffy grommets on the patches

E. The patches are now finished. The next step is to install jiffy grommets on the patches along the leech and luff edges of the sail. Position a jiffy grommet over one patch with the "coined" (slightly rounded) inside edge out so that there will be little chafe when line runs through the grommet (Figure 5). The grommets should be roughly 1/4" inside the boltrope and 3/16" inside the leech edge. Use an electric drill and a 1/8-inch drill bit to open holes in the cloth for the rivets which will secure the two sides of the grommets. Push all of the soft aluminum rivets through one ring and the cloth; then fit another ring to these rivets from the other side of the cloth. (Again be sure to place the "coined" inside edge of this ring facing out.)

Turn the assembly so that the rivet heads are down. Place those heads on a heavy, flat object, such as an anvil or vise and flatten the protruding rivet ends slightly with a few hammer blows. Cut away the cloth inside the grommet with a sharp knife. Use a soldering gun or hot knife to trim the hole.

For extra strength one can loop a four-inch length of nylon webbing through the grommet and run it back in the direction of strain. Sew it in place either by hand or by machine with a "Box-X" stitch as shown in Figure 6.

The jiffy grommet will provide a perfect Cunningham purchase or a reef cringle. It has been tested up to 300 pounds and will work nicely on boats up to 22 feet.



V. Installation of hardware on the mast and boom.

Fasten an eye strap to the port side of the mast at the gooseneck's lowest position (rating rules normally require a band at this point). *If there is nothing preventing your gooseneck from sliding all the way to the deck, it will be necessary to install a stop (available in the Sailrite catalog under "Sail Track Stops")* since the sail will not hold the boom up at the tack when a reef is in use. Tilt the eye so that it will be angled toward the jiffy grommet in its position just above the sail tack (Figure 1).

On the other side of the mast place a cleat tilted in the same direction as the eye.

Secure a length of line to the eye strap. This line should be one foot longer than twice the distance from the tack of the sail to the luff jiffy grommet.

Raise the sail on a calm day while the boat is tied to a dock. Raise the sail only to its reefed position. Run the line on the mast through the luff jiffy grommet and tie it off on the cleat so that the jiffy grommet is fully down.

Now pull the jiffy grommet on the leech out and down to the boom until there is a sharp fold of cloth from luff grommet to leech grommet along the boom. (This will require that the cloth be stretched a bit-don't fear to pull hard.) Mark the boom showing the position of the leech grommet.

Three inches aft of this mark secure an eye strap to the port side of the boom. Again, tilt the eye so that it will be angled toward the grommet in its reefed position.

On the starboard side of the boom, mount the bullet block just below and slightly aft of the mark on the boom (Figure 1).

Now fasten the last cleat in the kit to the starboard side of the boom near the gooseneck. Secure a line to the eye strap that is one foot longer than the length of the boom plus two times the distance between the clew and leech jiffy grommet. Run this line through that grommet, down to the bullet block, and forward to the boom cleat.

VI. Go Sailing!

Your jiffy reef system is now complete. To use it, simply ease the main sheet until the sail flogs; pull the boom up to the leech jiffy grommet; ease the halyard the proper amount (place a mark on it to indicate where it should be secured); and pull the luff block down to the gooseneck. That is all there is to it.



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