MyAirHat Fabrication

Last updated June 23, 2025

# Sewing notes

* Stitch pattern A/B unless noted.
* Stitch width 5 unless noted.
* Stitch length 4 unless noted.
* Thread tension always 4.
* All sewing is done from the wrong side, except the buttonhole

Equipment

Serger – Juki MO-634DEN

Sewing Machine – Baby Lock BL35B – has automatic buttonhole maker

Seam allowance for vertical seam is ½” (1/4” on each side).

# Pattern for Blank

1. 43” wide x 15” high. (34 cm) diameter is 42” around, plus 1” for the back-seam.
2. Window opening is centered along the top, 1” below the top edge.: Use pattern that matches shield pattern. Top center is 1” below the center of the top edge.
3. Iron a 1” square of Pellon SF101 fusible interfacing behind the buttonhole location. Buttonhole is ¾” wide and is centered along the bottom 3/4” from the bottom of the pattern.
4. Sew the buttonhole.

# Cylinder Fabrication Instructions

1. Serge the top edge
   * 1. Remove left Yellow) needle (for narrow overlock)
     2. Stitch length 2.5
     3. Right needle tension 4 (Green)
     4. Upper Looper Tension 4 (Blue)
     5. Lower Looper tension 7 (Red)
2. Sew the buttonhole: 3/4” button.
   * 1. Remove left Yellow) needle (for narrow overlock
     2. Stitch pattern A/B
     3. Stitch width 5
     4. Stitch length 0.5
     5. If doing multiple buttonholes, remember to Reset the pattern between holes
3. Fold fabric to center and mark then cut 2 layers at once of the window opening at the edge using half + ¼” (for edge allowance of front seam) of the window pattern. Top center of the pattern is 1” below the top edge.
4. Sew the window opening with 3-thread narrow (right-needle) roll hemmer. Loses 1/16” on each edge.
   * 1. Stitch length 1.5
     2. Overlocking width knob (Roll hem lever) pulled back (toward you)
     3. Don’t notch corners. Fold a triangle pleat and sew straight across them[. See Corners and Curves | Serger Tips and TricksCorners and Curves | Serger Tips and Tricks](https://youtu.be/AEaWfrjkHZQ?si=OBaXLzrwRis08uFu) at 5:20.
5. Sew the front (vertical seam) with 3-thread overcast
   * 1. Stitch length 2.5
     2. Overlocking width knob (Roll hem lever) pushed forward back (away from you)
     3. Carefully align the window roll hems. On the bottom section where starting on top of the roll hem, straight stitch at the first ¼” or so at the roll hem, and lift the foot to start the front seam with the roll hem section under the foot. Check ASAP to see if they are lined up okay.
6. Serge the bottom hem with drawstring casing
   * 1. Remove left Yellow) needle (for narrow overlock)
     2. Stitch length 2.5
     3. Right needle tension 2 (Green)
     4. Lower Looper tension 7 (Red)
     5. On the wrong side, fold up 5/8”, leave 1/16” – 1/8” of raw edge sticking out to cut off
     6. Iron
     7. Stitch, then fold out
7. Sew the bottom 2 inches overcast on both edges, not to each other, for the drawstring exits.
8. Sew the window over the opening and the hem. Be sure to sew from the wrong side.

Serge the back seam, but not across the bottom hem. Sew from the wrong side

1. Sew to the cylinder to the hat
   * 1. TBD
2. Cut the two drawstring cords to 39” (top) and 36” (bottom) and thread them through the top and bottom hems. Add cord locks and knot each of the four ends.
3. Reverse the cylinder (turn it inside out). Check that the back seam is tight.

# Window

* The window is 7 mil (0.007”) clear plastic that comes in 12” x 12” squares. Use a paper shear to shear it into two halves, each 6” x 12”
* Chamfer the corners about 1/8” so they won’t poke holes in the fabric later.

# Hat Fabrication Instructions

Currently we are using purchased Beekeeping Hats and removing the veils etc. beneath the hat brim.

# Serger (Juki)

## Top edge

* Remove left Yellow) needle (for narrow overlock)
* Stitch length 2.5
* Right needle tension 4 (Green)
* Upper Looper Tension 4 (Blue)
* Lower Looper tension 7 (Red)

## Bottom Hem

* Remove left Yellow) needle (for narrow overlock)
* Stitch length 2.5
* Right needle tension 2 (Green)
* Lower Looper tension 7 (Red)
* On the wrong side, fold up 5/8”, leave 1/16” – 1/8” of raw edge sticking out to cut off
* Iron
* Stitch, then fold out