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## HARD EDGES & WOOD FINISHING



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## FINISHED PRODUCT

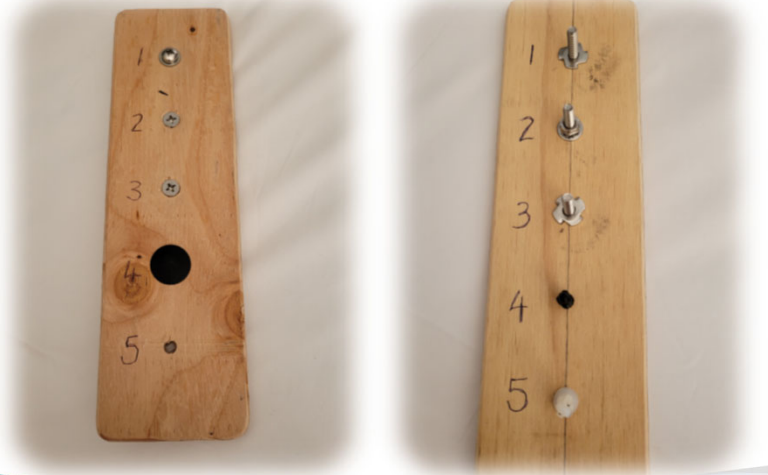
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## PANEL ATTACHMENT

- 1- Tee nut with Pan head
- 2- Phil flat w/ lock washer
- 3- Tee nut w/ Phil flat and why it doesn't work
- 4- Christmas T clip
- 5- Double sided Christmas T clip



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## PATTERNING

- Copy or pattern from scratch?
- Inside curves
- Stretch Allowances
- Design Factors

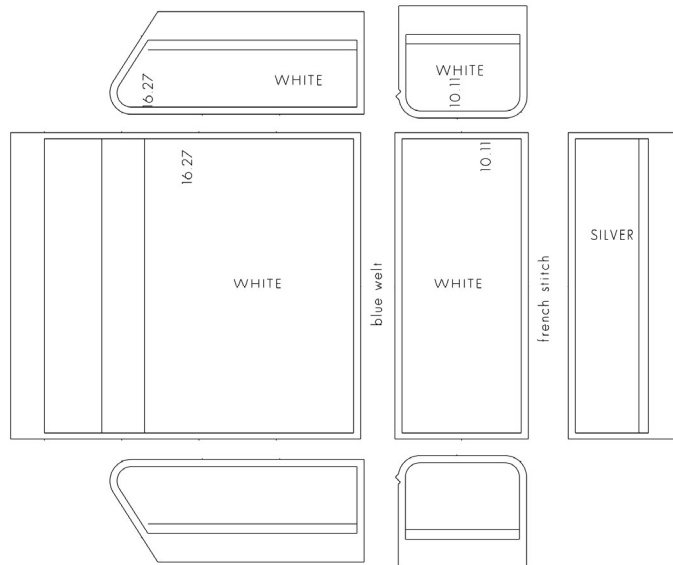


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## SHOULD I PATTERN OFF ORIGINAL?



- If piece is simple curves and geometric shape, pattern mathematically.



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- If piece has compound curves and organic shape, use a combination of copying old and custom patterning.



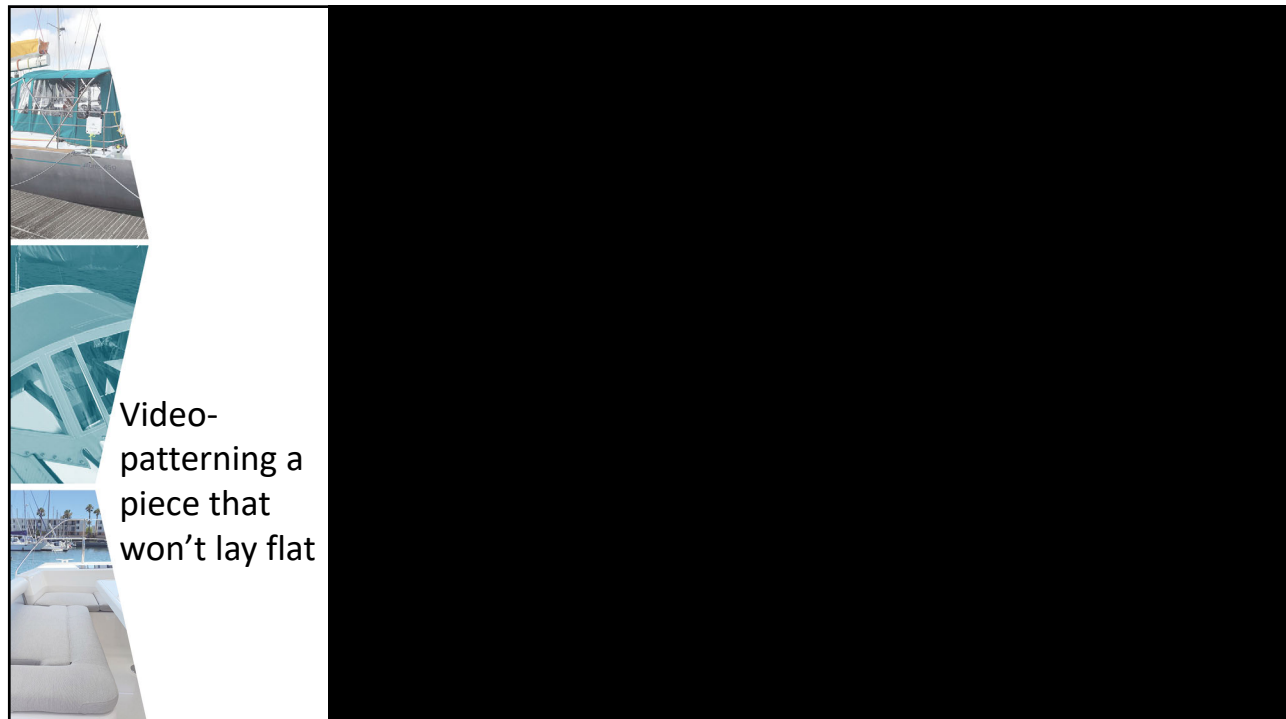
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## THINGS TO REMEMBER


- Take detailed pictures of original
- Mark for notches/alignment marks before dismantling.
- Pattern from seam line not cut line
- Look for things you would like to fix like crooked seam lines or poor shaping and make notations
- Techniques demonstrated in these videos.



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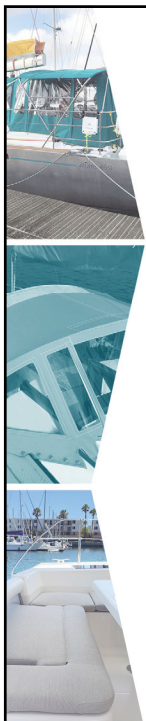


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- CENTER LINES FOR SYMMETRICAL PIECES

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## INSIDE CURVES & THOSE PESKY WRINKLES

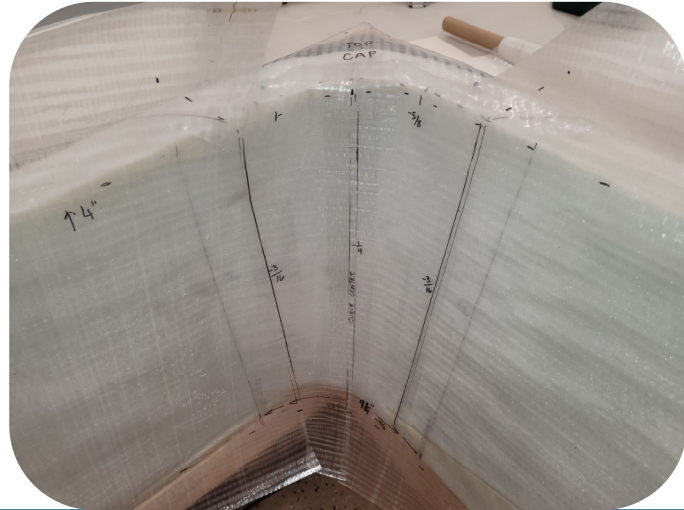
- Sew foam changes radius.
- Material wants to cut the corner.



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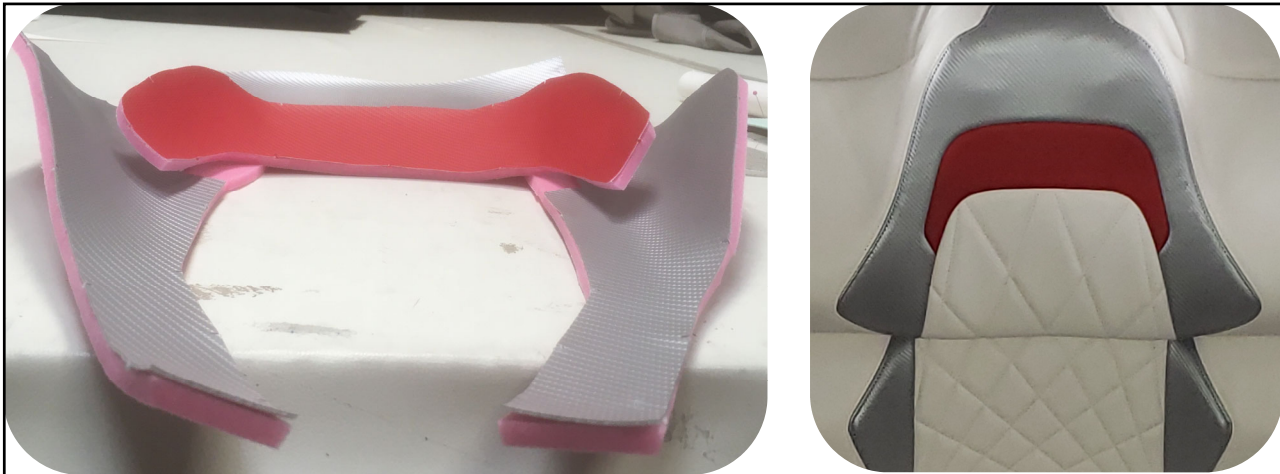
## REMOVE MATERIAL FROM CURVE

- Remove approx 1/16" per inch.
- Stretch as you sew to top and bottom band/cap
- Use lots of alignment marks for consistent stretch



If not using  
pre  
laminated  
vinyl, glue  
foam to  
vinyl in  
curve





- Including graphics or stripes that run through the curve



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## STRETCH ALLOWANCE

- Adjust for stretch along length of cushion or panel
- Approx 1/8" /ft of panel cut along length of vinyl. Will vary depending on material.
- Allowance in both directions if large panel like engine hatch.

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## DESIGN FACTORS – CREATIVE SEAM LINES



- Piece too large for width of fabric



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Moving seam lines to create design interest.



...and to simplify sewing & install



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## DESIGN FACTORS



- CARRY THROUGH GRAPHICS OR STRIPES



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## SEWING

- Stacking order when sewing
- Relief cut rules
- Creating Shoulders
- Top Stitching
- Pulls/Listing
- Welt





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## STACKING ORDER




- Place outside curve on top of straight
- Place straight on top of inside curve





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## RELIEF CUTS



- Take minimum necessary
- Place evenly throughout curve
- Alternate placement- most important when not using sew foam and for amateurs.
- Don't cut too deep



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## CREATING SHOULDERS

- Purpose- create compound curve "bulge". Usually in knee roll corners and knee roll ends. PICS



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## WHAT'S WRONG HERE?



- POSSIBLE FIXES
- Steam foam
- Cut off end of foam and replace with firm new foam
- Create shoulder using ease techniques



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## THINGS TO REMEMBER



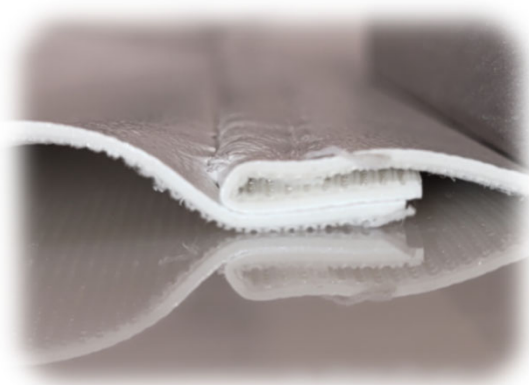
- Maximum ease approx .1 or 3/32"/inch.
- Stretch main piece while sewing or use gather stitch
- Use lots of alignment marks.



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## TOP STITCHING

Key to good top stitching is seam management



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## OTHER FACTORS

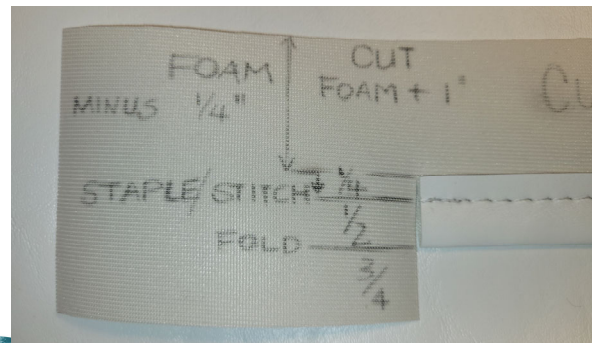
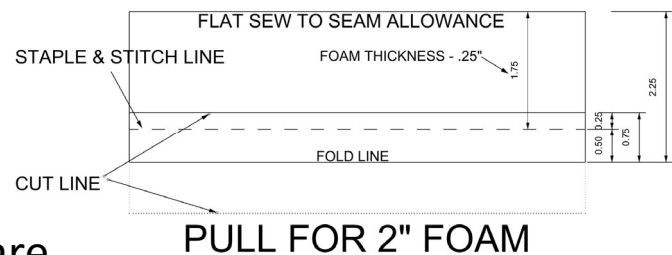
- Type – Single, Double or None
- Check bobbin before starting.
- Stitch length – for what we do I like 3/16"
- Thread – 138 or larger




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## PULLS/LISTINGS

- Accurate & Consistent
- Staple through 2 layers
- Vinyl allows movement especially for cushions that are stepped on.
- Flat sew to seam allowance- strength and less strain on external stitching
- The non pull pull




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- Video - The non pull pull and welt

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## WELT

- BIGGEST MISTAKES
- Loose
- Unnecessary joins
- Wavy
- Cutting corners.
- Not so critical when there is an angle change, like on an end cap.

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## CUTTING CORNERS

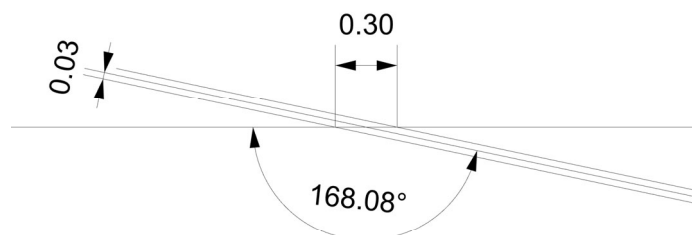
- Critically important on flat panels. Welt needs to “cover” seam
- OTHER FACTORS
  - Needle Size
  - Correct Foot



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## GRAPHICS

- 1/4” Seam
- Lots of alignment marks
- Keep back stitch within seam allowance
- Accuracy critical – mistakes can multiply



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**PINKING**

- Bacterial and Chemical
- Prevention is Best
- Use Antimicrobial foam and pinking warranty vinyl
- Provide good drainage
- Keep clean
- Educate customer on care
- Moisture Barrier?

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## REFERENCES



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- <https://gestaltsscientific.com/overview/>
- <https://www.xanigomarine.com/>
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