

## Serger Sewing Flatlocking

Flatlocking can be used as a decorative stitch. Most sergers can flatlock if they have a two-thread or three-thread capability, but the tension range of some sergers may be too limited to sew perfect flatlock stitches.



### Flatlocking Facts:

- Flatlocking is a decorative stitch.
- Use the standard presser foot.
- Disengage the upper blade so the folded fabric will not be cut.
- Use the left needle for the widest flatlock stitch.
- Decorative thread usually goes in the upper looper.
- Stitching is done on the fold of the fabric.
- Wrong sides of the fabric are folded together in order for the loops to show on the right side.
- Right sides of the fabric are folded together in order for ladder stitches to show on the right side.
- Flatlocking on a folded edge creates a decorative stitch through the middle of the fabric piece.

### Machine set up for Three-Thread Flatlocking:

*Always check the serger manual for the settings for flatlocking.*

- If the machine has two needles, remove the right needle. Thread the left needle, the upper looper, and lower looper.
- Loosen the needle tension almost all the way. The needle thread should pull to the underside of the fabric and form a "V" (**Figure 1**). If the fabric is thick, loosen the needle tension even more. If the stitching will not pull completely flat, the needle tension is too tight.
- Tighten lower looper tension. The lower looper almost forms a straight line on the edge of the folded fabric (**Figure 1**).
- The upper looper tension usually needs no adjustment unless the fabric is thick. The tension may need to be loosened to flatten the loop.
- At least half of the stitch width needs to hang over the edge of the fabric (**Figure 2**). For thicker fabrics most of the stitch may need to hang over the edge of the fabric.
- Pull the fabric flat. Do not try to press the stitches flat.
- Flatlocking will always appear flattest when the loops and the ladder are the same width.

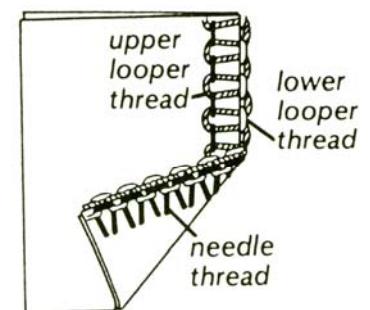


Figure 1

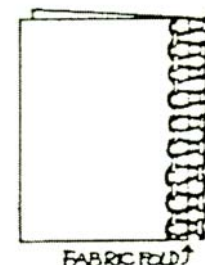
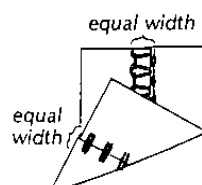


Figure 2



## HINTS:

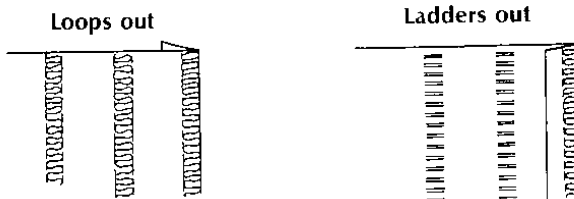
- *The best way to understand the tension and identify tension adjustment is to experiment with three different thread colors until you master flatlocking. **Practice. Practice. Practice.***
- *If the lower looper tension has been tightened as tight as possible and is not tight enough, loosen the tension dial and wrap the thread around a thread guide two or three times. Gradually tighten the tension dial while serging slowly (so you won't bend the lower loop or break the thread) and check the stitch until it is adjusted as necessary).*
- *If the needle tension has been loosened as much as possible and it needs to be loosened even more, bypass the tension by taking the thread out of the tension disk or dial. A piece of tape may be placed over the tension slot so the thread won't drop back in the tension disks.*

## Steps for Decorative Flatlocking:

1. Select design.
2. Mark the design on fabric. A good method is to use the marking pen that disappears when touched with cold water. If decorative loops will be used, mark the design on the right side of the fabric. If the ladder stitches will be used, mark design on the wrong side of the fabric.
3. Set up the serger for flatlocking. (Disengage the upper knife). Practice using the same type of thread and fabric scraps that will be used for the actual decorative flatlocking.

**HINT:** *It will be easier to know how to adjust the tension to get a good flatlock stitch if different color but the same type threads are used in the needle, upper looper, and lower looper.*

4. Fold fabric on stitching line with wrong sides of fabric together for loops or right sides of fabric together for the ladder stitches.
5. Serge the stitches with at least half of the stitch width hanging off the fabric.
6. Pull the fabric flat.
7. Secure thread ends.



## Decorative Flatlock Seams:

Two pieces of fabric may also be joined together using the decorative flatlocking technique. Use the widest stitch width possible. Along seam edge, place wrong sides of fabric together (instead of a folded edge) and follow the same procedure as described. When fabric is pulled flat, the fabric edges should butt up against each other, creating a flat seam with decorative loops on the top. This works best with a tightly woven or knit fabric. Loosely woven fabric may pull apart under the stress of flattening the seam. If fabric does ravel, it is recommended that you fold the seam allowances under first so that the folded edges butt up against each other within the completed flatlock seam.

We gratefully acknowledge permission to use material from the following books:

*Creative Serging* by Pati Palmer, Gail Brown, and Sue Green. Published by Palmer /Pletsch Inc., 1987  
*Sewing with Sergers* by Gail Brown and Pati Palmer. Published by Palmer/Pletsch Inc., 1991.

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