

SEWING TODAY'S FABRICS

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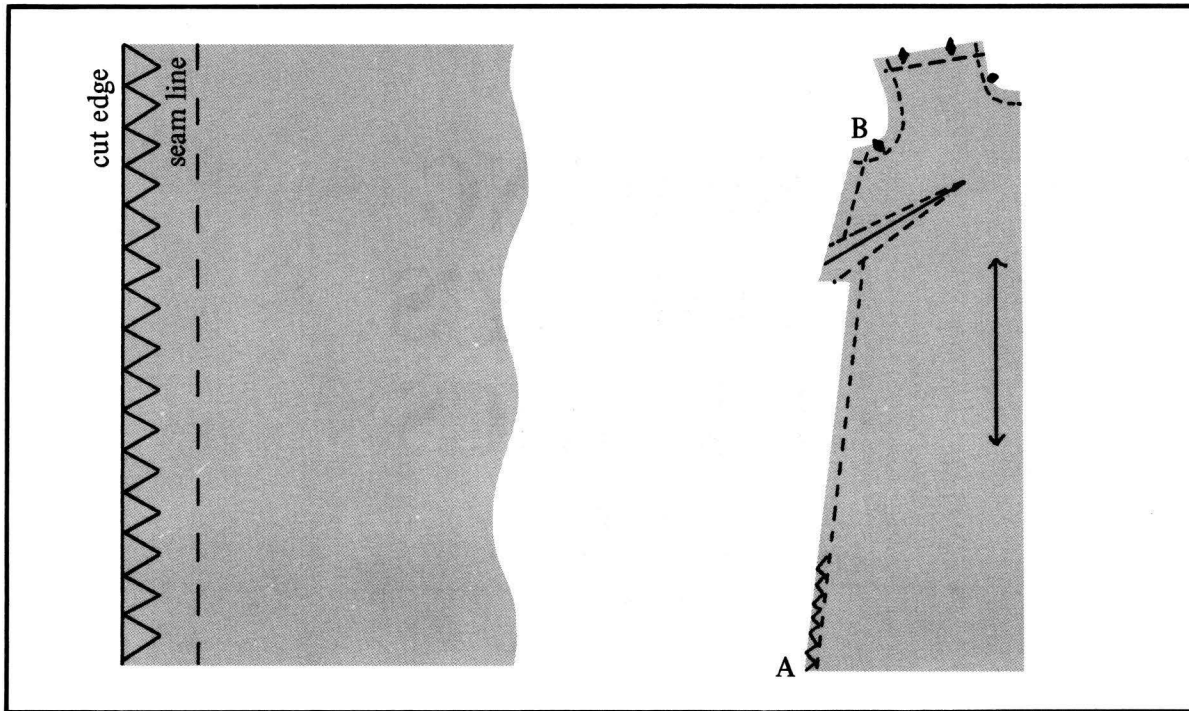


Figure 1.

Figure 2. Multiple zig-zag or serpentine stitch from A to B.

Man-made fabrics need new methods of construction as well as new kinds of thread to give the custom look. Also, the natural fibers treated for crease resistance, drip-dry quality, and water and oil repellence are better treated in the same way as the man-made fabrics.

Today's new fabrics must be constructed (1) to prevent puckered seams, (2) to have flat, open seams, (3) to have unpuckered zippers, and (4) to have flat, inconspicuous hems. To do this:

1. Use fine pins with sharp, smooth points. If pin marks show on the fabric, use weights to hold the paper pattern during cutting or pin only in the seam allowances. Scotch tape is also useful to hold the pattern down in some situations.

2. Shears and scissors must be sharp. Take long, clean strokes with the shears while cutting the garment.

3. When cut, man-made fabrics tend to crawl and ravel. Therefore, the fabric needs to be handled as little as possible and cut edges must be finished as soon as possible.

4. The cut edges are best finished with the multiple zig-zag or serpentine stitch. The widest zig-zag setting should be used with small stitches (approximately 15 to 18 stitches per inch). Allow the needle to go off the edge of the material on the corner stitch. (See Figure 1.)

5. If a zig-zag machine is not available, use small stitches (15 to 18 stitches per inch) for straight stitching not more than 1/8 inch from cut edge.

6. All finishes of the edges, both zig-zag and straight stitching, should be done from the wide to the narrow bias line. (See Figure 2.) Stitch from hem to waist or from hem to underarm.

7. Finish the edges of all pieces before beginning to assemble garment.

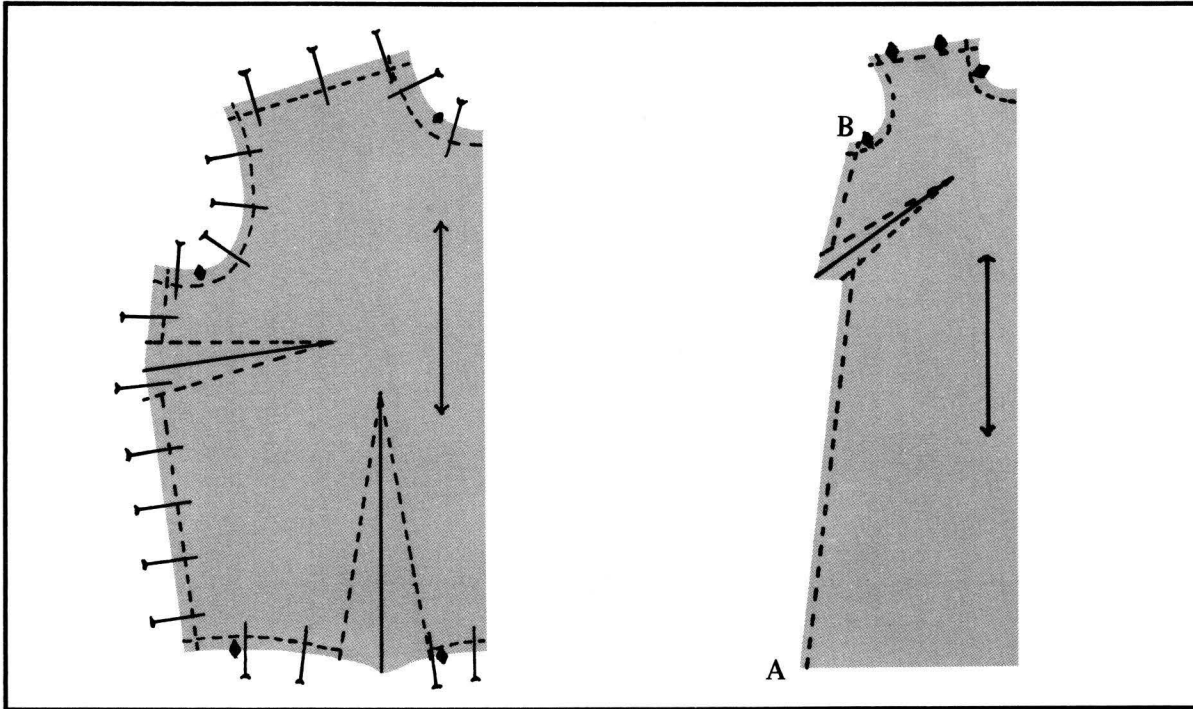


Figure 3.

Figure 4. Stitch seams from B to A.

8. Garments to be backed* with any type of material should have each garment piece pinned to backing not more than 2½ inches apart, with pins perpendicular to the cut edge. (See Figure 3.)

9. Stitch the backed pieces of garment (backing on top of garment) as described in step 4 or 5 above. Plain-stitch center of darts before assembling.

TO ASSEMBLE GARMENTS OF MAN-MADE FABRICS:

1. Make all darts and press before joining any pieces together. In other words, use the unit construction method.

* In a backed garment, each piece of garment has a duplicate piece of another material sewed to it and both pieces are treated as one piece. The backing determines the finished effect of the garment. In a lined garment, the extra material under the garment is made as a garment, then basted in at certain places depending on the design of the garment.

2. Be sure that the sewing machine is clean, well oiled,* and properly adjusted for sewing.

3. Tensions on the top and the bottom of the machine should be very light, and the pressure between presser foot and feed dog should also be light. Test fabric before stitching the garment. This type of adjustment is difficult to get from old-time mechanics. Some machines automatically adjust for various threads and thicknesses of materials.

4. All seams on man-made fabrics and those treated with various finishes need to be sewed from underarm to hem or from waist to hem. This method puts more thread in the seam, making it possible to have smooth and flat seams. (See Figure 4.) Shorter stitches than usual (approximately 12 to 15 stitches per inch) also allow more thread to the inch of sewing, thereby eliminating puckers.

* Oil machines after using. If oiled before using, sew enough on a scrap piece of fabric to remove excess oil before starting on the garment.

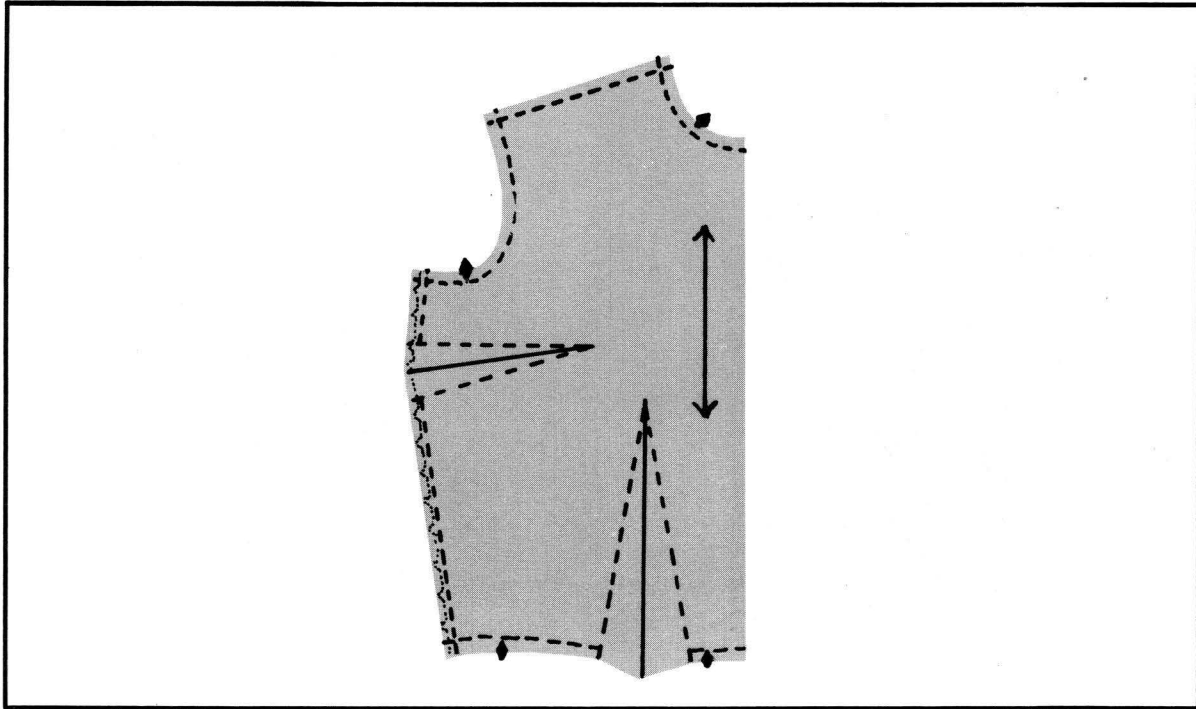


Figure 5. Place garment under arm of machine.

TO STITCH KNITS:

1. Some knits do not need any finish at the edges but others do, to prevent the rolling of seam allowance. For fabrics inclined to roll, use the multiple zig-zag, serpentine stitch, or the blind hemming stitch. The latter type is used by setting the width of stitches to approximately 10 to 12 stitches per inch with a full width of zig-zag. When using this method place the garment under the arm of the machine and cut the edge to the left of the presser foot. The needle needs to go just over the cut edge. (See Figure 5.)

2. Seams should be stitched in the same direction as described in step 4 in the section above. The best seam stitch for knits or other stretch fabrics is a small, narrow zig-zag. This gives the greatest amount of elasticity, which is necessary for these fabrics. The seams will press flat and at the same time give comfort as well as good looks to the garment.

3. On knit garments, tape the shoulder seams and the seams at the waist if there is a seam. Hems are not taped unless with Flexon† tape lace.

4. Seams should be graded, especially when using decorative top stitching. Avoid bulk wherever possible. When top stitching approximately ½- to 5/8-inch seams, hold fingers on each side of the presser foot to prevent grain lines from changing, causing wrinkles on top.

TO SEW BONDED MATERIALS:

Bonded materials should be treated as knits most of the time because they are bonded to an acetate knit for backing.

Seam edges may be treated with the multiple zig-zag to hold both fabrics together during dry cleaning if the garment seams do not show. For

† The mention of commercial names of products is for convenience only and does not imply endorsement of the product by the University of Hawaii Cooperative Extension Service.

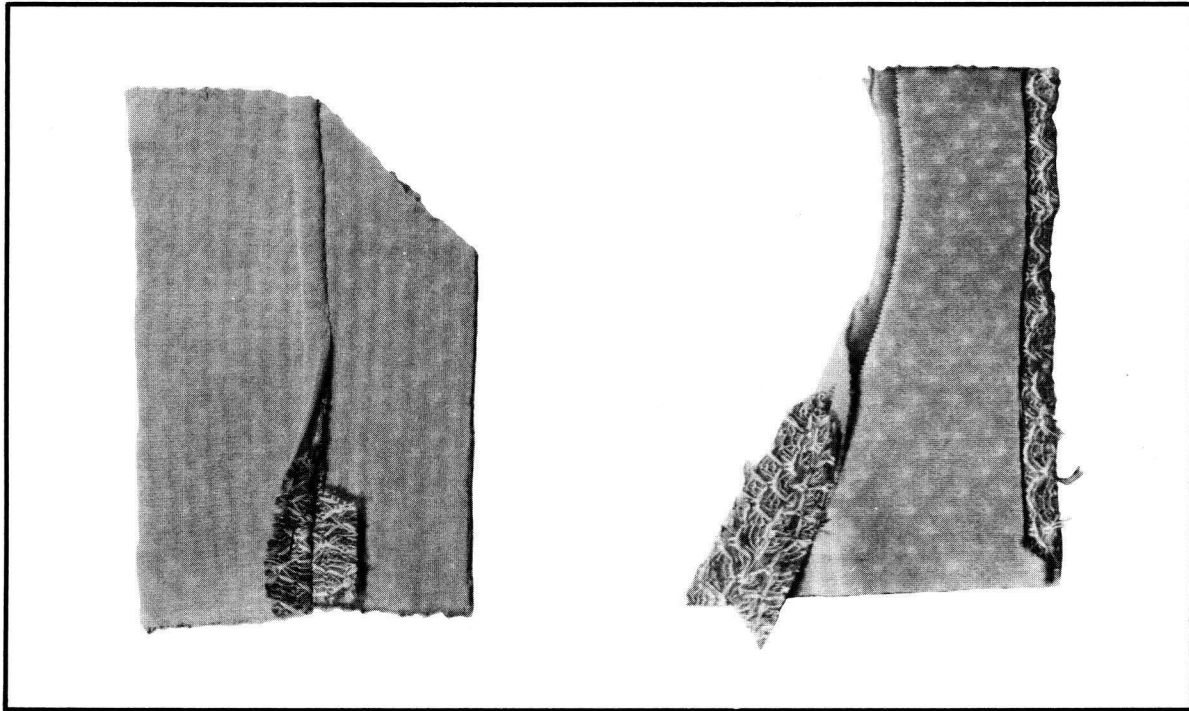


Figure 6.

Figure 7.

jacket or coat seams the following are suggested:

1. Side seams should be stitched on regular seam allowance. To finish seam, trim one seam to $\frac{1}{4}$ -inch wide. The other seam is separated by pulling the fabrics apart. Trim the top side of the garment to the $\frac{1}{4}$ -inch side. Turn the jersey over the $\frac{1}{4}$ -inch seam and flatten on top of the first seam cut. This makes a flat fell and is finished by hand. The hand stitching only goes through the jersey, making the seam invisible from the right side. (See Figure 6.)

2. Seams in set-in sleeves may be done by the mock French method. After the sleeve has been set in, separate the jersey from both seams, trim the top garment material to $\frac{1}{4}$ inch or less. Fold in both jersey seams, leaving no raw edges, and slip stitch together. (See Figure 7.)

OTHER HELPFUL HINTS:

1. Use sharp needles. Needles lose their sharp points due to heat generated in sewing man-made fibers. To sharpen needle points, roll points on fine emery boards.

2. Zig-zag machines need de-linting more often than straight stitching machines.

3. Have sewing machine repaired and adjusted to suit fabrics you sew on.

4. When buying a sewing machine, insist on trying it out on some of your own fabrics. An excellent test is to check machine on nylon or acetate thin jersey. A good machine will not skip stitches or pucker seams.

5. Use blind stitch hemming stitch on seams when sewing nylon acetate or arnel jersey lingerie.

ACKNOWLEDGMENTS

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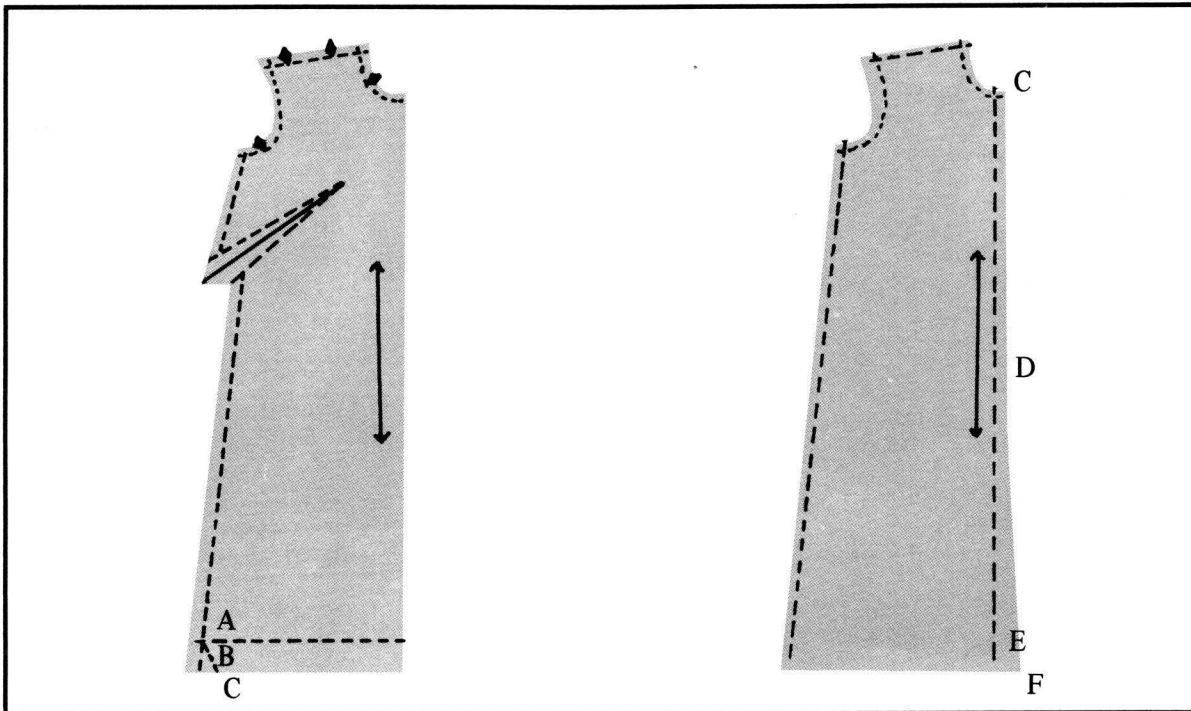


Figure 8. Angle BC is the same grain as AB.

Figure 9. Line CDE is straight. Line DF gives slight bias.

6. Make fitted hems on A-line dresses or where there are four or more seams. This removes extra material, which was formerly gathered. The fitted hem often eliminates all gathers. (See Figure 8.)

7. Hems on double knits and other materials may be put in by blind stitch hemmer with attachment adjusted to not show stitches. Hand hemming may be invisible if a small hand needle is used (size 9 or 10). The long-eyed or embroidery needle is much easier to thread, especially with the man-made thread or dacron core wrapped in cotton. These threads should be cut slanting or on the bias for threading. Hand needle should take up stitches only half the depth of the material to be invisible on the right side. Stretch knits in order to put more thread in the hem. Tack at seams.

8. Mercerized thread may be used on man-made fabrics. For best results, try to obtain and use threads compatible with the fiber in the garment. A good all-around thread to use is one

treated with silicone or, better yet, dacron core wrapped in cotton. Keep an eye out for new threads that will be coming out on the market.

9. Some designs using knits need to be stabilized with interfacings. In some cases the use of "Wonder Under"* to bond facings to garments is sufficient.

10. Not only is the fitting of a garment made better by cutting bias seams in back and/or front but the seams are flatter and look better. Some straight seams always pucker no matter what method of construction is used. (See Figure 9.) Satins and velvets require slightly bias seams for open, flat seams.

11. One-inch seam allowance on the side seams, the back seam for the zipper, and the front seam (if there is one) will allow seams to be pressed open better. The one-inch seam is especially good on drip-dry knits and permanent pressed and disciplined fabrics.

* A Pellon product.

