

SEWING TECHNIQUES

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The interesting world of fibers and fabrics grows larger every day. From the few natural fibers of yesterday we now have great families of synthetic fibers that make possible a wide variety of new fabrics.

They have qualities that may be an advantage from one viewpoint but may also be a disadvantage. Common to all are:

PERMANENT CREASES -- Nice for pleating but unfortunate as a non-removable fold in yard goods. Distortion of grain may be permanent too.

CRISP, NON-SHRINK FINISHES -- Give a perky look but make it difficult to ease in fullness.

STRENGTH -- Creating a long wearing garment but causing needles, pins and scissors to become dull more quickly.

COMFORT -- Do to "Give" of fabric -- requiring selection of simple patterns with few details and easy fit. Seams may fray and/or stretch out of shape.

Preparation for sewing any of the new fabrics includes: adjustment of the machine for proper tension and pressure; selection of the appropriate thread, needles and stitch length; and construction of samples to insure a professional looking garment -- one you may wear proudly!

Sewing on many of the new fabrics requires machine adjustment. Follow these simple steps for best results.

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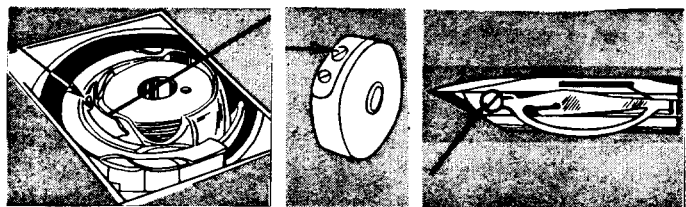
Choose a fine sharp needle. Stretch fabrics require 14-15 stitches per inch; knitted fabrics, 12-15; bonded fabrics, 9-11; and manmade fibers and their blends in sheer fabrics require 10-12 stitches per inch.

Set the pressure to suit the fabric. To check the pressure, place a double thickness of the fabric under the pressure foot. Drop the pressure foot. Be sure the needle is not in the fabric. Pull the fabric out from under the pressure foot. It should pull neither easily nor with great difficulty, but there should be some resistance to your pull. This keeps the fabric from sliding around when it is being sewn.

Thread your machine with mercerized thread. Sew through a double thickness of the fabric you intend to work with. Sew both crosswise and lengthwise of the grain. Remove fabric from the machine and pull the fabric, first lengthwise and then crosswise. If the threads do not break, the machine is in perfect adjustment for this fabric and no further adjustments are needed.

If the tension is too tight, both top and bottom threads may break when the seams are stretched. In this case, release both top and bottom tensions. If only the top thread breaks, release the top tension. If only the bottom thread breaks, release the bobbin tension.

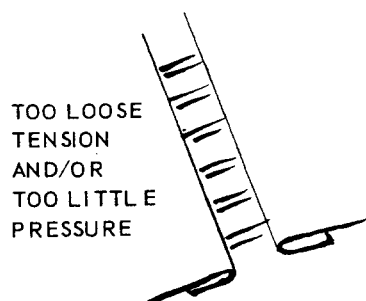
All sewing machine bobbins have springs that release the tension. This spring is on the bobbin case, secured by one or two screws. The screw nearest the end of the spring regulates the tension. See illustration below.



Pull the bobbin thread to feel the amount of tension. Then regulate the tension by using a small screwdriver to adjust the screw. "Right to tighten" and "Left to loosen" is the rule to follow. Turn 1/4 turn in the di-

rection desired and pull on the bobbin thread again. You should be able to feel the difference. Make another seam and test for stretching without breaking. Remember the total amount you turn the screw so that you can tighten up the tension again to sew on conventional materials.

Continue stitch test and adjustments until threads do not break when fabric is stretched in either direction. Note: If seam pulls apart and a step ladder effect is seen the pressure may be too light and/or the tensions may be too loose. See illustration.



Occasionally a fabric has so much give that the machine cannot be adjusted to accommodate all of the stretch. In this case you may wish to stretch the fabric slightly as you sew. Mark the seamline with clay chalk as stretch distorts the fabric. Then sew along the markings and stretch the fabric evenly before and behind the pressure foot. Permit the machine to sew at its usual pace to ensure even stitches.

Man-made fibers tend to dull scissors, pins and needles much more quickly than do natural fibers. Dull equipment may cause snags or runs in the fabric, so you may need to replace the needles and pins more often and have the scissors sharpened frequently for best results.

BONDED FABRICS

Fabric bonded to fabric such as flannel bonded to tricot and fabric bonded to foam are included in this category.

PATTERN SELECTION -- Choose a simple pattern with few seams or extra details.

FABRIC SELECTION -- Select fabrics with straight grain. Off-grain bonded fabrics cannot be straightened.

PRESSING -- Press with temperature suitable for most sensitive fiber. Press foam fabrics on the outside with temperature setting for shell fabric.

INTERFACING -- If stability is desired a sheer fabric interfacing may be used. Preshrink interfacing before cutting.

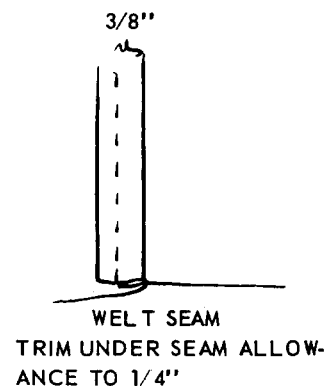
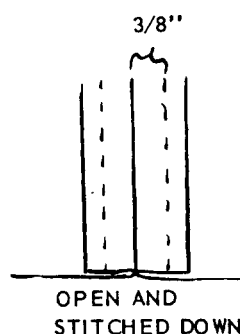
UNDERLINING AND LINING -- Not necessary with the lined bonded fabrics. Any lining may be used to underline, or preferably to line, laminated garments. Be sure to shrink underlining or lining before cutting.

CUTTING AND MARKING -- With fabric right side up, place pattern so lengthwise grain matches markings. Cut a single thickness at a time, flipping the patterns on the fold line to cut other half. If possible, cut garment and facing in one piece to eliminate bulk of seam. Pin on the fabric side at short intervals. As foam will not hold the tracing marks well, use tailor tacks or pin straight through fabric and mark with a soft lead pencil. Tailor tacks are best for bonded fabrics.

STITCH LENGTH, TENSION, AND PRESSURE -- Use 10 stitches per inch, loose balanced tension, and minimum pressure.

THREAD -- Use thread appropriate to outer fabric.

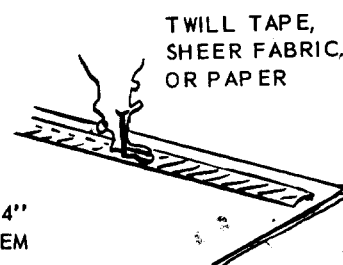
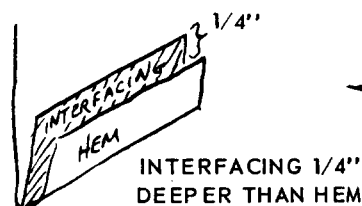
SEAM FINISHES -- Hand baste, if necessary for fitting. Grade seams. In bulky areas peel foam from seam allowances. If seams will not lie flat, stitch them down (illustrated below). Top stitch opened seams or press seams to one side, trim under seam allowance to 1/4 inch, and top stitch (welt seam). Slash darts and press open.



BUTTONHOLES -- Either bound or machine buttonholes may be made.

STAYSTITCHING -- Staystitch (1/2 inch from raw edge) all curved and bias edges as they may stretch in sewing.

HEMS -- Stitch and pink edge of hem and fasten by hand. Hem stitches through foam for most security, or interface hem with fabric 1/4 inch deeper than hem; fasten hem to interfacing and interfacing to garment. Hems on other bonded garments may be hand hemmed to tricot or inner fabric only. (See illustration below.)



SEWING FOAM LAMINATES -- When sewing with right sides together (foam sides out) the fabric tends to stick to the machine. To make stitching easier, use twill tape, strips of sheer fabric 1/2 inch wide or paper strips. See illustration. Turn wheel by hand for first few stitches when using paper. After sewing, tear off paper. Leave tape or sheer fabric for reinforcement.

KNITTED FABRICS

PATTERN SELECTION -- Avoid circular skirts and bias cuts. The bulkier the knitted fabric, the more simple your pattern should be.

FABRIC SELECTION -- Be sure the wales (lengthwise ribs of fabric) and the courses (crosswise rows of fabric) run at right angles to each other or the fabric may cause the skirt to sag or hang crooked. Preshrink fabric if it is not so labeled.

PRESSING -- Using a press cloth and/or steam iron, press out the fold. If it remains after pressing, arrange the pattern to avoid use of this area. Press, do not iron knits, as they are easily stretched out shape. Press as you sew. See illustration at bottom of page.

INTERFACING -- Use matching interfacing of fine cotton (like batiste) wherever reinforcement is needed, such as collars, cuffs, facings, button and buttonhole areas. If fabric is stretchy use iron-on interfacing in the buttonhole and zipper areas to avoid distortion of the fabric. For machine buttonholes iron the interfacing to the facing to avoid a stiffened appearance. For bound buttonholes iron the interfacing to the outer fabric. Preshrink interfacing before cutting.

UNDERLINING AND LINING -- Underline loose or lacy knits to help maintain shape. Cut underlining pieces the same as the garment pieces. Stitch underlining to garment piece by piece with 1/2 inch seam allowances. Then assemble garment as if one fabric, using 5/8 inch seam allowances. Underlining and lining fabrics should be of fabric that requires the same care as the outer fabric. Preshrink before cutting. For wool knits good choices are china silk, crepe, and stretch linings. Bulky knit facings may be made of lining material.

CUTTING AND MARKING -- Cut tubular knits open along a lengthwise rib or wale. Press as directed under "Pressing". Check grainline and straighten before cutting. Pull on bias and steam press to straighten grain. Avoid stretching while pinning and cutting.

STITCH LENGTH, TENSION AND PRESSURE -- Use 12-15 stitches per inch, a loose balanced tension and a medium to light weight pressure. Make a test

seam and adjust machine until seam will not break when it is stretched.

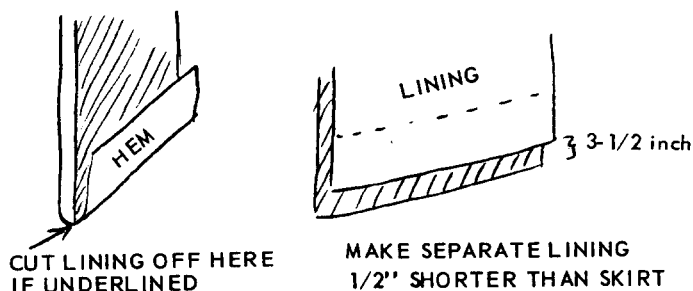
THREAD -- Mercerized cotton is most suitable. Textured nylon such as Taslan* may be used if preferred.

SEAM FINISHES -- Plain seams are usually suitable for firm tight knits; may be pinked after sewing. Loose or lacy knits will require overcast or stitched and pinked seams.

BUTTONHOLES -- Tightly knitted materials will take either machine or bound buttonholes. Loose or lacy knits are better without buttonholes, or, if iron-on interfacing is used, machine buttonholes may be made.

STAYSTITCHING -- As knits stretch, staystitch all seams. Reinforce shoulders and waistlines with twill tape.

HEMS -- On tightly knitted fabrics, edgestitch, pink and loosely hem, catching underside of stitching to skirt. If separate lining, make 1/2" shorter than skirt hem. If underlined, cut the underlining off at hemline and stitch hem to the lining only. See illustration below.

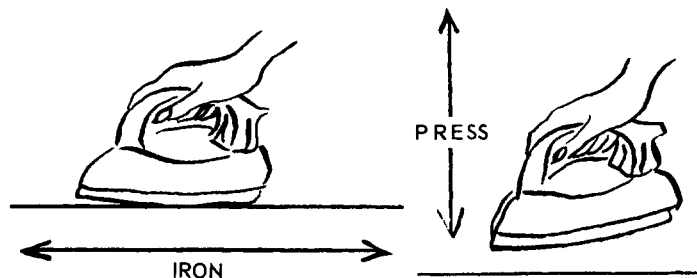


SEWING STRETCH FABRICS

Most stretch fabrics on the market today are made with either crosswise or lengthwise stretch, not both.

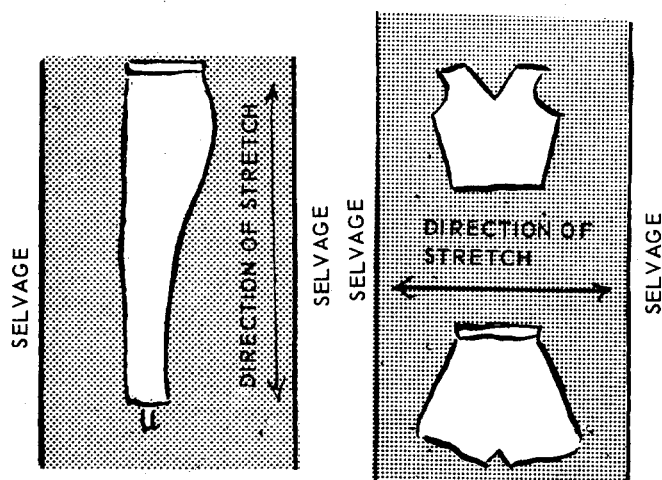
PATTERN SELECTION -- Select pattern with few seams, rather easy fit. Avoid circular skirts, bias cuts and buttonholes.

PRESSING -- Use steam iron or dry iron and dampened press cloth to press. Press up and down; do not iron back and forth or fabric may be distorted. See illustration below. Suit iron temperature to fabric content.



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FABRIC SELECTION -- Use only vertical stretch for stretch pants. Use horizontal for all other garments. Preshrink fabric if not so labeled. See illustration below.



INTERFACING -- Interface details where stretch is not important with a light weight cotton fabric. (See buttonholes for interfacing in that area)

UNDERLINING OR LINING -- Use tricot or a stretch lining that stretches the same amount as the outer fabric. (Preshrink fabric.)

CUTTING AND MARKING -- Fabric should be laid out flat 24 hours before cutting so that it may assume its relaxed state. Keep fabric flat and relaxed during pinning and cutting. Do not permit the fabric to hang over the edge of the table as this will stretch the fabric. Place pins perpendicular to the stretch. Tailor tacks or clay chalk are the best marking choices.

STITCH LENGTH, TENSION, AND PRESSURE -- Use 14-15 stitches per inch, a loose balanced tension, and medium to light pressure for most fabrics.

THREAD -- Mercerized cotton thread works well. A stretch nylon thread such as Taslan* may be used. Make test seams and adjust machine until you achieve a satisfactory seam that stretches as much as the fabric without breaking.

SEAM FINISHES -- Stitch and pink, zig-zag, or overcast by hand as stretch fabrics ravel easily.

BUTTONHOLES -- Make buttonholes perpendicular to stretch. Use iron-on interfacing for least distortion. For machine buttonholes iron the interfacing to the facing to avoid a stiffened appearance. For bound buttonholes iron the interfacing to the outer fabric.

STAYSTITCHING -- Staystitch (1/2 inch from raw edge) all curved and bias edges as they may stretch in sewing.

HEMS -- Let garments hang 24 hours before marking and sewing hems. Zig-zag or stitch 1/4 inch in from

edge with a loose balanced tension. Using a catch stitch or a slip stitch, hand hem in place.

FABRICS OF POLYESTER OR NYLON FIBERS AND THEIR BLENDS

Whipped Cream*, Parfait*, Pussy Willow*, and Creme Puff*, are examples of sheer polyester fabrics.

PATTERN SELECTION -- To avoid a puckered look, select a pattern with few seams and little top stitching. Fullness is difficult to shrink or ease so avoid this requirement in a pattern.

PRESSING -- Press out the fold with a steam iron. Use a dry iron with a dampened press cloth. Avoid pressing in unwanted creases as they are difficult to remove. Use the same procedure in pressing as you sew. If fold cannot be ironed out, arrange the pattern to avoid using the fold.

INTERFACING -- Self interfacing is good if the fabric is not too heavy or a sheer print which might show through. Test for both weight and visibility. Batiste and other fine cottons also are good choices. Preshrink before cutting.

UNDERLINING AND LINING -- Use lining that requires the same care as the outer fabric. Preshrink before cutting.

CUTTING AND MARKING -- Test effect of pinning. If the marks are retained, pin in seam allowance only. Use tailor tacks or clay chalk, which is more easily removed than wax chalk.

STITCH LENGTH, TENSION, AND PRESSURE -- Use 10-12 stitches per inch, medium or loose tension, and medium to heavy pressure for sheer fabrics. Make test seams first. If seams persist in puckering after machine has been adjusted, stretch seams slightly as you sew.

THREAD -- Mercerized cotton works well. A stretch nylon thread such as Taslan* may be used.

SEAM FINISHES -- Very firm fabrics may be pinked or stitched or both. Pink seams only after garment is completed. Fabrics that ravel may be overcast by hand or machine or turned and stitched. French seams are good for sheer fabrics. Flat felled and top stitched seams may cause a puckered look.

BUTTONHOLES -- Test with sample buttonholes of type desired. Machine buttonholes may be better choice for materials that ravel easily.

STAYSTITCHING -- Staystitch (1/2 inch from raw edge) all curved and bias edges as they may stretch in sewing.

HEMS -- Turn and stitch by machine; fasten with loose hand hemming.