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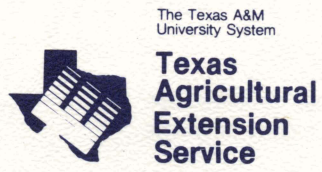
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All About ...

- Fabric Facts
- Pattern Selection
- Notions and Tools
- Sewing Tips
- Pressing

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ALL ABOUT SEWING KNITS

Becky Saunders*

Knits are important in any wardrobe. They may be very stretchy or fairly stable, light or heavy, soft or crisp, dull or shiny, porous or compact and plain or patterned. The versatility of knit fabrics insures a suitable choice for any garment or occasion. Knits continue to change with fashion and manufacturing trends. You may need to "look twice" to recognize some of the new knits available.

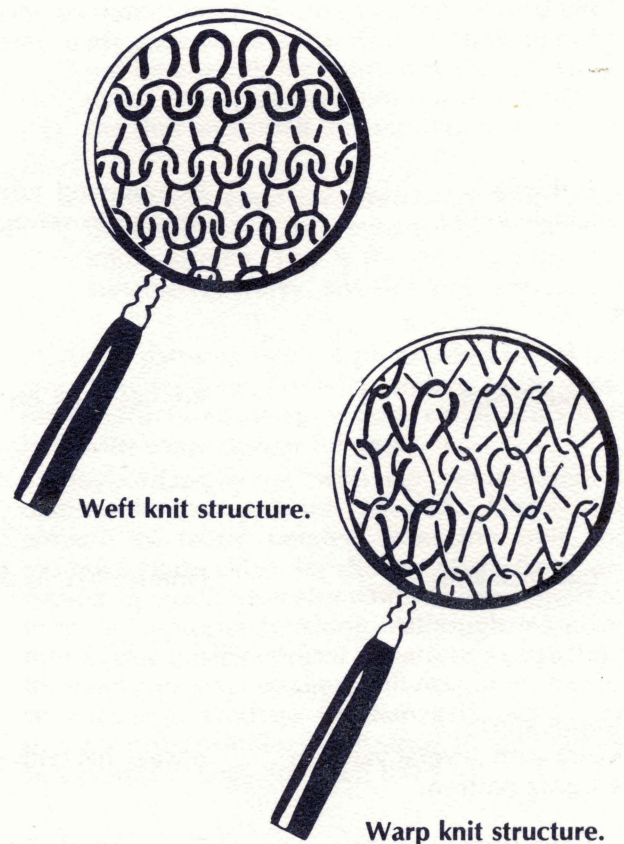
Fabric Facts

Knits are made by looping yarns together, while the yarns of woven fabrics are interlaced. This looped structure provides elasticity, stretch and wrinkle resistance. However, the knit fabric construction also has a tendency to snag. In general, knits with a small and tight loop structure are more durable. Other characteristics vary, depending on the fiber content and finish of the fabric. Refer to the chart "Knits Up Close" for a summary of major knit varieties and their characteristics.

Due to their structure, knits vary considerably from woven fabrics. Some important differences include:

- **Design changes.** Weft knits (i.e. jerseys, rib, purl, double or interlock) can be adapted very rapidly to fashion changes in manufacturing, so new looks are seen most often in a weft knit first.

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- **Insulation.** Bulky knits are excellent insulators because they trap air near the body. However, their loopy structure does not provide protection against the wind. Tightly woven fabrics provide better wind resistance.
- **Movement.** Knits move with the body for aided comfort.

Knits Up Close

Knit Varieties	Appearance	Characteristics
<p>WEFT KNITS Made with a single continuous yarn.</p>	<p>Circular (tubular) or flat with selvages.</p>	
<p>Plain jersey knits (single knit — sweater, t-shirt, terry and velour knits)</p>	<p>Flat, smooth surface on right side; may be bonded to another fabric; vertical ridges on front and horizontal rows that look like half circles on the back or back may have a mottled appearance.</p>	<p>Light; soft; more crosswise stretch than lengthwise; may sag and run; when stretched in crosswise direction, crosswise edge will curl to right side of fabric; can be unraveled in crosswise direction.</p>
<p>Rib knits (single knit)</p>	<p>Pronounced vertical ridges for wavy appearance; both sides identical.</p>	<p>Considerable crosswise stretch for a close fit; may sag and run; edges do not curl; good insulator.</p>
<p>Purl knits (single knit)</p>	<p>Pronounced horizontal ridges from selvage to selvage.</p>	<p>Excellent crosswise and lengthwise stretch, but may stretch more in lengthwise direction; may sag and run; edges do not curl.</p>
<p>Double knits</p>	<p>Rib-like look on both sides.</p>	<p>Tendency to snag; holds shape; firm and stable; resists wrinkles and runs; limited stretch.</p>
<p>Interlock knits</p>	<p>Fine rib-like look on both sides.</p>	<p>Runs in one direction from crosswise cut edge; soft, drapeable, tendency to snag.</p>
<p>WARP KNITS Made with several yarns in a zigzag pattern.</p>	<p>Always flat with selvages.</p>	
<p>Tricot knits (may be single, double or triple warp)</p>	<p>Fine vertical ribs on front and crosswise ribs on back.</p>	<p>Resists bagging and creasing; snag resistant; strong, but drapeable; crosswise stretch; run-proof except for single tricots; non-raveling; stable; elastic.</p>
<p>Rachel knits</p>	<p>Lacy; surface pattern; often has alternating thick and thin yarns.</p>	<p>Durable and run-proof.</p>

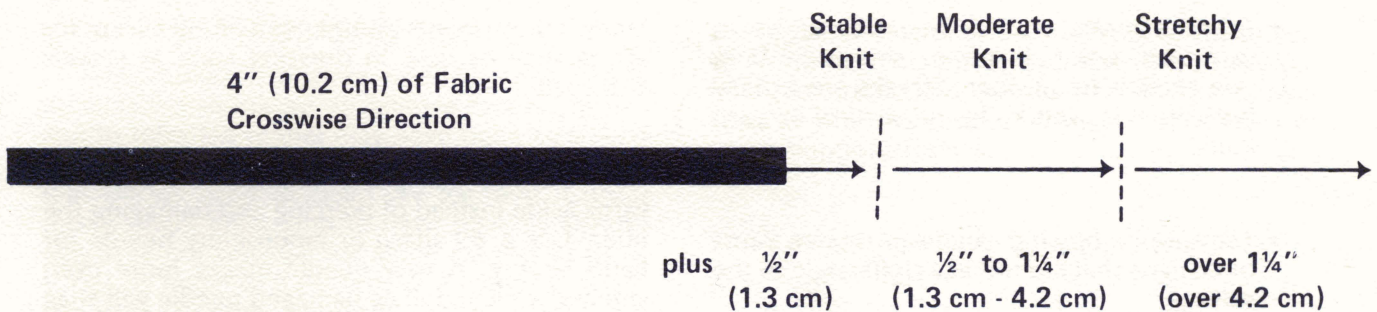


Figure 1. Stretchability of knits.

- *Mobility and elasticity.* Knits tend to mold and fit easily to body shapes.
- *Recovery from wrinkling.* Knits recover from wrinkling more readily than wovens, making them ideal for travel and prolonged wear. However, knits do not crease as sharply as wovens.

Pattern and Fabric Selection

The amount and direction of fabric stretch have the greatest influence on fabric and pattern compatibility. Always test crosswise stretch when selecting patterns and fabrics. Patterns designed especially for knits usually have less ease than those designed for woven fabrics or stable knits. Many patterns for stretchy knits have a stretch gauge printed on the pattern envelope. To determine the stretchability without a gauge, mark off 4 inches (10.2 cm) in the crosswise direction. Place one edge on a ruler and hold firmly. Stretch the opposite edge gently with the thumb. If the fabric begins to curl, you have stretched too much. As a general rule, stable knits will stretch less than 1/2 inch (1.3 cm). Moderate knits stretch from 1/2 to 1 1/4 inch (1.3 to 4.2 cm) and stretchy knits more than 1 1/4 inch (4.2 cm). See Figure 1. When released, the knit should immediately spring back to its original shape. Most double knits are stable while many jersey and sweater knits are stretchy.

Patterns are available in three categories:

- Those *recommended for knits* or woven fabrics are most suitable for stable, heavier single knits, most double knits and dress-weight warp knits.

- Those designed *for knits only* have less ease and require knits with moderate stretch. Many times they are designed without darts, especially bust darts. The ease allowed may not be enough for comfort if a stable knit is used. These patterns are more suitable for the thin and small busted figure.
- Those designed for *stretchable knits* allow minimum ease and require knits with maximum stretch. This is the only type pattern suitable for bulky, sweater knit fabrics.

Avoid patterns with crisply pressed pleats and large bias sections. For very stretchy knits, avoid highly structured designs. Soft, clingy knits look best with some design fullness.

Buy yardage by the "with nap" requirement to determine the amount needed. Unroll the amount of fabric needed from the bolt and examine both sides for flaws. Most flaws are caused by machine malfunctions, yarn imperfections or improper finishing. Although manufacturers have quality control departments to screen for flaws and most retailers will refund money for or exchange yardage of damaged fabric, the primary responsibility is still yours to get the best buy possible. Look for such flaws as:

- *Boardy or sleazy.* Avoid harsh or flimsy fabrics caused by the wrong size stitches, yarns or finishes.
- *Broken or dropped stitches.* Avoid holes or runs.
- *Needle line.* Look for any lengthwise line(s) that result from one row being too tight or loose.

- *Fabric streaks.* Notice any differences in yarn size, color, luster or shrinkage from one section to another. Streaks are usually horizontal in weft knits and vertical in warp knits.
- *Skewing or bowing.* Avoid crosswise yarns or designs that are not at a right angle to the selvage.
- *Tucking.* Look for any unintentional tucking caused by a defective knitting needle.

Notions and Tools

Basting glue and double stick tape. These timesaving products aid in matching plaids or holding seams, zippers or trim in place before stitching.

Elastic. For waistband casings, wristbands or necklines, use a synthetic-blend elastic of the desired width. Non-roll types are ideal for waistbands. For lingerie use "soft" elastic. It may have one or both edges fluted for a special finish.

Fusibles. Use $\frac{3}{4}$ inch (2 cm) pre-cut strips or cut your own for hemming and holding down facings, etc.

Inner fabrics. Select woven or non-woven interfacings in a compatible weight for the fashion fabric. Some fabrics such as sweater knits and ribbing do not need interfacing. If used, consider the effect needed such as:

- Fusible non-wovens for shaping, crispness and stabilization.
- Fusible knits for soft shaping and stabilization, but no crispness.
- Sew-in woven, all bias or sew-in non-woven with one-way stretch for soft shaping, slight crispness and some support. One-way stretch interfacings provide stability in the lengthwise direction. Woven non-stretch interfacings provide stability where no stretch is needed.
- Sew-in wovens, cut on the bias, for soft shaping but no stabilization.

Many knit garments do not need lining except for appearance or ease in dressing such as jackets and coats.

Needles. Use ball point needles that push the yarns aside instead of piercing and damaging the fiber. Use a #9 sharp or embroidery needle for hand sewing. A new needle makes more even stitches while a dull or damaged needle will snag or cause skipped stitches. All-purpose and knit needles are also designed for use on knits.

Pattern weights. Use household objects or commercial weights. Commercial weights may be turned to different sides for various weight fabrics.

Pins. Use ball point pins which slip between the yarns, rather than piercing them. Fine, sharp-pointed pins are also suitable. Avoid dull or damaged pins which snag fabrics.

Seam binding or twill tape. Some seams such as the shoulder, waistline and crotch need stabilizing to prevent stretching. A non-stretchable, pre-shrunk $\frac{1}{4}$ inch (6 mm) tape is best.

Shears. Use bent handle shears because they lift the fabric less. Wipe lint from blades frequently. Special shears are available that are designed to stay sharp when used for synthetic knits. Pinking shears are not suitable.

Thread. For general purpose sewing, use cotton polyester core or all polyester thread. Both are strong and have "give". If your sewing machine has stretch stitches and a specific kind of thread is recommended such as all cotton, use the thread(s) specified by your machine manufacturer.

Tissue paper (optional). Tissue paper strips aid in even feeding and help prevent bunching and skipped stitches. Tissue tape marked with seam allowances is available or you may cut your own.

Zippers. Use light, flexible zippers. The ones with knitted tapes and synthetic coils are best.

Pre-Stitching Tips

Preshrinking is recommended to prevent additional fabric shrinkage, to remove excess finishes and to relax fabric that may have been stretched on the bolt. Use the same method to preshrink that will be used to clean the garment. Cotton jersey single knits tend to have residual shrinkage. It is not unusual for some novelty knits to shrink as much as 8 percent or 3 inches (7.6 cm) per yard. Zippers, nonfusible inner fabrics and twill tape or seam binding should also be preshrunk. A fabric softener in the final rinse cycle may help prevent skipped stitches caused by static electricity.

Press out creases or folds before laying out the pattern. Avoid any which do not press out.

Use a "with nap" layout since knits frequently appear different when viewed up and down the fabric. Pinning the pattern to the fabric in the seam allowance will eliminate the possibility of snags or pulls. If fabric slides on the cutting surface, pin it to tissue paper along the selvage and the folded edge. Or cover the cutting table tightly with an old sheet before laying out the fabric. A commercial cutting board may also be used since it has a soft surface and the fabric will not slip as easily on it. Do not let extra fabric hang off the cutting surface (such as a table) since the extra weight can cause the fabric to pull. Cut with very sharp shears to prevent ragged edges.

Cut any strips for binding across the ribs instead of on the bias, as knits are stretchiest in the crosswise direction. Use the crosswise direction for all bias pattern pieces except for decorative effects.

Use tailor's tacks, chalk or washable (or new water erasable) dressmaker's pencil or carbon paper. Do not use lead pencil or non-erasable dressmaker's carbon paper because it is difficult to wash out. Test the marking wheel before using as some serrated wheels may damage or stretch the fabric. Use transparent cellophane tape to mark the wrong side of the fabric if it is difficult to distinguish from the right side.

Sewing Machine Adjustments

Always make a test seam using two layers of fabric scraps. Test for best stitch length, pressure and tension for each type of stitch to be used.

Pressure. Adjust for light to normal, depending on the fabric weight. To check pressure, stitch two even lengths of fabric (about 2x12 inches or 5.1x30.5 cm) without thread. If layers come out

uneven after stitching, the pressure is not adjusted properly. Too much pressure can cause the fabric to stretch and the seam to ripple and may snag or mar the fabric. Too little pressure can cause skipped stitches.

Stitch length. Use 12 to 16 (2.5 to 3 mm) stitches per inch for most knits.

Tension. Use a loose, balanced tension. The top and bottom of the seam should look the same, with stitches interlocked between fabric layers. For topstitching, the top thread may be looser than the bottom.

Throat plate. Use a straight stitch throat plate with a small hole when stitching with a straight stitch. If your machine only has a general purpose throat plate with an oval hole, set the needle to the left of center when stitching a straight seam. Using the wrong throat plate or centering the needle in a general purpose throat plate allows the fabric to follow the needle into the bobbin area.

Stitching Tips

To prevent edges from curling, place pins close together and perpendicular to the fabric edge. Spraying edges with starch may also be helpful. When sewing fabric that curls, begin with a wide seam allowance and trim after stitching. Use double stick tape along the seamline and seam allowance for curly edges. Do not stitch through the tape.

Hold the thread ends at the beginning of a seam to keep the fabric taut behind the presser foot. When beginning a seam, start stitching ¼ inch (6 mm) in front of the fabric edge. Backstitch or stitch one or two times in place; stitch seams.

Change needles often or for every 8 hours of continuous machine sewing. Dull and burred needles snag fabrics and cause skipped stitches. Too large a needle may cause seam puckering. For any stitching problems, first try changing the needle.

Tissue-paper strips may help difficult-to-sew knits feed more evenly or prevent skipped stitches. Place the paper between the fabric and the presser foot. Dampen or wet the paper after seaming to help remove it. A special presser foot may be recommended for sewing certain knits on your machine.

Holding the fabric firmly in front and behind the needle may help make better stitches.

Static electricity sometimes causes skipped stitches on synthetic knits. This can be reduced by washing the fabric with a fabric softener, rubbing the seamline with a moist sponge or using a commercial needle lubricant.

For fabrics that ravel, ravel out some yarn from a straight cut edge for handstitching. To remove kinks, press gently with a warm steam iron.

Seams

The key to sewing with knits is making a knit seam that stretches. Consider the softness, bulkiness and stretch of the knit, as well as the use of the garment. Since knit fabrics have built-in stretch, seams should also stretch. This will prevent threads from breaking when the seam is put under stress. The knit seam can be made with any kind of machine.

The choice of seam depends first on the capabilities of the sewing machine and then on the type of knit and garment. Regardless of the stitches used, always do a test seam on fabric scraps to make needed adjustments before sewing the garment.

Figure 2.



Using a straight-stitch machine

Straight stitch along the seamline, stretching the fabric as you sew. The amount of stretching depends on the fabric. Do not stretch the seam out of shape. Although stretching makes the stitches look slightly loose, the slack helps the seam stretch without breaking the thread. When the fabric is stretched, the width of the seam allowance becomes slightly less. For example, if you make the stretched seam about $\frac{1}{2}$ inch (1.27 cm) wide, the relaxed seam will be closer to $\frac{5}{8}$ inch (1.5 cm).

A $\frac{5}{8}$ to 1 inch (1.5 to 2.5 cm) seam allowance can be used with most double knits. Then the seam can be pressed open and left without any finish. Use this for skirts and slacks, when possible, to give a smooth line and to make altering easier.

Some knits do not press well and seams will not stay pressed open. The edges roll up, creating ridges along the seamline. Solve the problem by making a second row of straight stitches, $\frac{1}{8}$ to $\frac{1}{4}$ inch (3 to 6 mm) to the right of the seamline. Trim away the extra seam allowance (see Figure 2). A row of straight stitches along the edge of the seam allowance may prevent rolling if a wide seam allowance is preferred.

Figure 3.

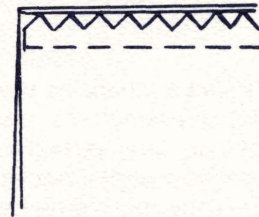


Figure 4.

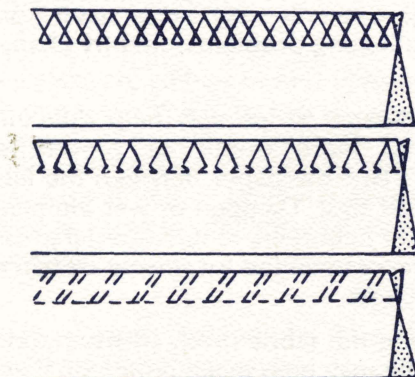
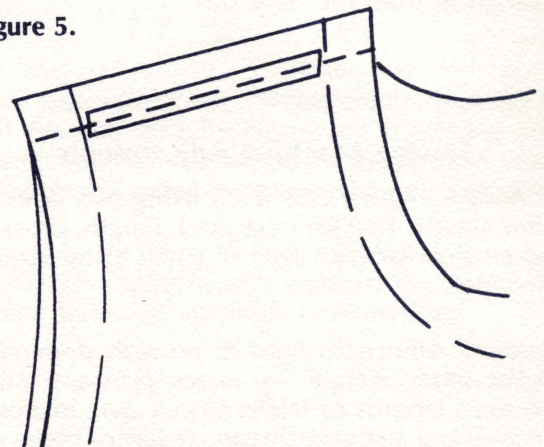


Figure 5.



Using a zigzag machine

Stitch along the seamline with a straight or narrow zigzag stitch. For a ¼ inch (6 mm) seam allowance, close the seam with a wide zigzag stitch (see Figure 3). For a ⅝ inch (1.5 cm) seam allowance, zigzag close to the first line of stitching and then trim away the extra seam allowance. When using a zigzag stitch, it is not usually necessary to stretch the fabric.

If seams look corded or the fabric does not lie flat between stitches, then the zigzag stitch is probably too wide for the sheerness of the fabric, or the tension is incorrect, or both. Test upper and bobbin thread tensions and use a slightly narrower stitch width. Do a test seam. If necessary, stitch over tissue paper.

Using an automatic stretch-stitch machine

These stitches are difficult to rip out so make sure the seam is in the proper place before stitching. If the machine does a straight-stretch stitch, do not stretch when sewing the seam. Depending on the fabric and garment, trim the seam allowance to ¼ inch (6 mm) or leave wide. Use a zigzag or multiple zigzag stitch to finish the seam allowances if necessary. If the machine has an over-edge stretch stitch (a straight-stretch plus an over-edge stitch), use it to sew the seam and finish the edges in one operation (see Figure 4). Depending on the stitch, the seam allowance can be trimmed either before or after stitching.

Seam stays

Seam stays are used to prevent stretching in shoulder, crotch and waistline seams, as well as collarless, faced necklines. However, do not stabilize these seams if the garment pulls over the head or if it has elastic casings. Stays are also used to reinforce areas of stress, such as patch pockets. Seam binding and narrow twill tape can be used; the tape is particularly good for deep curves. To stay a seam, cut tape to pattern piece. Place the tape over the stitching line on the wrong side of the fabric. Stitch in place when the seam is permanently sewn (see Figure 5).

Topstitching

Topstitching can be done during or after construction of the garment, depending upon the location. In general, do all seams during construction. Other items — collars, cuffs and lapels

— vary and can be done before or after the garment is completed. Make all fitting adjustments before topstitching anything.

To topstitch, adjust the sewing machine to six to eight stitches per inch, use a size 16 (100) needle and loosen the top tension.

Use buttonhole twist, two strands of regular thread or a special topstitching thread in the needle. Also, use a basting line, quilting foot, tape or some other aid as a guide for straight stitching.

Sew rows that are close together in the same direction to avoid fabric bubbles or pulls. Leave about 2 inches (5 cm) of thread at the end of the rows. Pull the bobbin thread from the wrong side. The top thread will form a loop and can be pulled through to the wrong side. Tie securely and trim to knot.

Pressing

Use moisture and pressure to obtain the desired look on knits. Some are resistant to pressing and seam flattening so make a test seam to check pressing.

Set the iron temperature for the fiber content and thickness of the fabric. Use a press cloth to avoid fabric shine. Then iron with a lowering and lifting motion rather than a sliding motion.

Press the stitching line of seams and darts as sewn, before pressing the seams open. This embeds the stitches in the fabric. Then open the seams and press flat. Each dart and each seam should be pressed open before being crossed by another seam.

Place brown paper strips under the seam and hem allowances and darts to prevent impressions on the outside. Press with the lengthwise rib to avoid stretching. If the knit has a raised design, use a turkish towel under it to prevent flattening. Some knit fabrics (acrylics, cottons, acetates, sweater knits and poor quality knits) stretch when they are warm and moist. Let these cool and dry before picking them up.

Special Techniques

Patterns designed especially for knit fabrics will recommend appropriate sewing techniques. Many are time-savers and easier than traditional sewing methods. Select techniques compatible to your sewing ability, knit type and garment design and function.

Hems

Always let the garment hang before marking and hemming. Refer to Extension publication MP-1057 *Hems* for specific techniques. Particularly suitable hems include double-stitched, fused, lettuce and topstitched. If blind-stitching by machine, use a stretch blindstitch if available.

Buttonholes

Consider the stretch and thickness of the knit before deciding whether or not to use buttonholes. Experiment on a fabric scrap. Zippers or tie or loop closures may be more suitable.

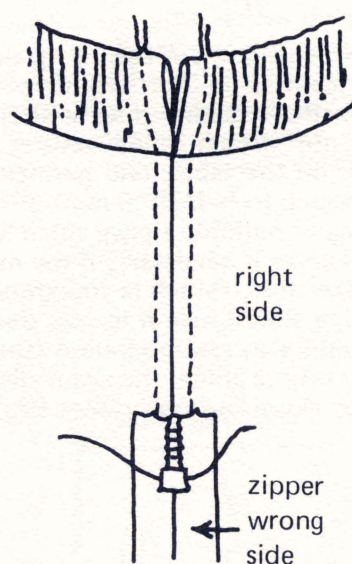
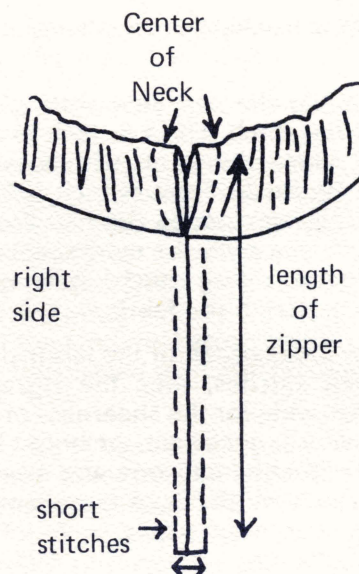
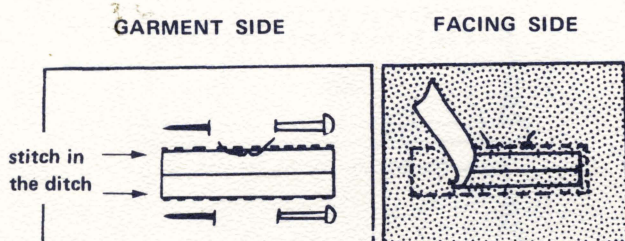
Smaller-sized and lengthwise, machine-sewn buttonholes are better for stretchy knits because they reduce the tendency for buttonholes to lose their shape. When using a buttonhole attachment, place a piece of stiff paper over the garment to help slide it in place. Also reinforce with interfacing and stitch with heavyweight thread to help eliminate stretching.

Bound buttonholes are suitable for stable knits such as double knits. For knits that do not ravel, attach the facing by stitching in the ditch or along the buttonhole seam from the topside rather than turning under. Cut away facing (see Figure 6).

Exposed zipper

The exposed zipper application is used in sportswear when there is no center seam and a larger neck opening is needed. Apply it before or

Figure 6.

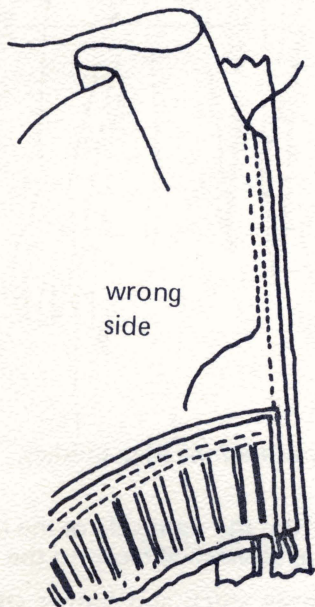
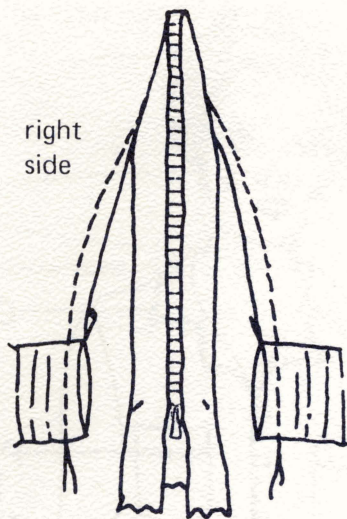


Figures 7 and 8.

after the neckline edge is finished and preferably while the garment section is flat.

Draw a line the length of the zipper down the center of the garment, starting at the neck seam-line or finished edge. Stay-stitch exactly $\frac{1}{8}$ inch (3 mm) on each side of this line and across the bottom. Use very small stitches across the bottom and for $\frac{1}{2}$ inch (1.72 cm) up on each side, to reinforce the corners (see Figure 7). Sheer weight interfacing can be fused or stitched to the wrong side for extra stability.

Center the zipper face down on the right side of the garment. The bottom of the zipper teeth should be just below the stitching. Using the zipper foot, stitch back and forth across the tapes



Figures 9 and 10.

the width of the zipper teeth ($\frac{1}{4}$ inch or 6 mm) several times (see Figure 8).

Cut between the stitching from the neck to within $\frac{1}{2}$ inch (1.72 cm) of the bottom of the zipper opening. Angle the cutting line to each corner of the bottom forming a triangle. Turn the zipper to the wrong side (see Figure 9).

Working from the wrong side, pin the fabric to the zipper tape with the right sides together. Stitch from the bottom of the zipper to the top on each side, making sure the edges of the neck are even (see Figure 10). Turn the ends of the zipper tapes down and finish. Trim away any interfacing that was stitched on.

Ribbing

Three basic necklines use stretchy ribbing. They are the turtleneck, where the ribbing extends upward and then folds back on itself; the mock turtleneck, where the ribbing does not fold back down; and a crew neck. Crew neck ribbing is applied so that the neckline edge ends at the base of the neck.

The stretch and recovery of ribbing on different fabrics vary. Test them for the desired effect and fit. A self fabric may be used, depending upon added closures and the stretchable characteristics of the fabric.

Cut ribbing the width and length needed. For a turtleneck, ribbing is often cut 9 to 10 inches (22.9 to 25.4 cm) wide; for a mock turtleneck, 4 to $4\frac{1}{2}$ inches (10.2 to 11.9 cm) wide; and for a crew neck, 3 inches (7.6 cm) wide. The finished width is half the cut width minus two seam allowances.

The length of ribbing is determined by its stretchiness and recovery. Consider the parts of the body it must be pulled over and the requirements for fit during wear. One way to determine length is to fold the width in half, raw edges together and stretch it around the head. Add $\frac{1}{2}$ inch (2.54 cm) to relaxed length for seam allowance. Usually the ribbing is several inches shorter than the neckline edge. Refer to the instructions in the pattern or the ribbing package.

Stitch narrow ends with a $\frac{1}{4}$ inch (6 mm) seam, press open and fold in half with the wrong sides together.

Construct the shoulder seams. For a turtleneck and mock turtle, trim the neckline seam allowances to $\frac{1}{4}$ inch (6 mm). For a crew neck, trim so the neck stitching line is approximately 1 inch (2.54 cm) below the original line.

Divide both the ribbing and neckline in quarters. Match them together, beginning at the center front and center back. The shoulder seams will not be at quarters (see Figure 11).

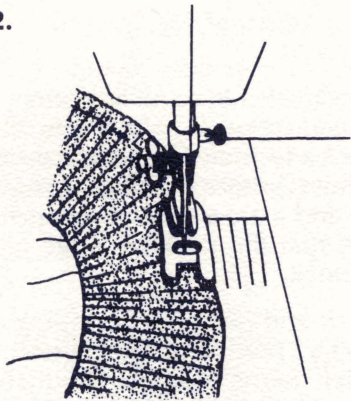
Stitch the ribbing to the neckline, stretching the ribbing to fit. Use $\frac{1}{4}$ inch seam allowance. Stitch with the garment side next to the feeddog (see Figure 12). Press the seam allowance down toward the garment.

Finish the neckline by topstitching the garment $\frac{1}{8}$ inch (3 mm) from the seamline. For a very

Figure 11.



Figure 12.



sporty look, topstitch only the front or back neckline and shoulder seams. Or, finish the neckline seam allowance on the inside before pressing, using a second row of stitching for a less sporty look.

The same ribbing technique may be adapted for sleeve hems or the bottom edge of a blouse or shirt. Check length by pulling the ribbing over the hand for a sleeve and over the body for a hemline, or refer to the instructions in the pattern or ribbing package.

Stitched-edge finishes

The turn-and-stitch edge finish is often used for armholes, curved necklines and hems. Fold under $\frac{5}{8}$ inch (1.5 cm) or the width of the seam allowance from the cut edge of the fabric. Press. Topstitch close to the folded edge. Sewing in the same direction, topstitch a second row $\frac{1}{4}$ inch (6 mm) from the previous stitching line. For curved areas, stretch the seam allowances while stitching. Trim the edge of the fabric close to the stitching (see Figure 13).

Consider unique-edge finishes for single thickness collars, center front closures, belts, ties or hems on soft, lightweight or sheer knits. This technique eliminates the bulk and time involved with rolled edges and adds a decorative finish (see Figure 14).

Omit facing and turn under the edge along the seamline. If a seam allowance is not included, allow a $\frac{1}{2}$ inch (1.75 cm). Use a medium-width, short-length matching or contrasting zigzag

Figure 13.

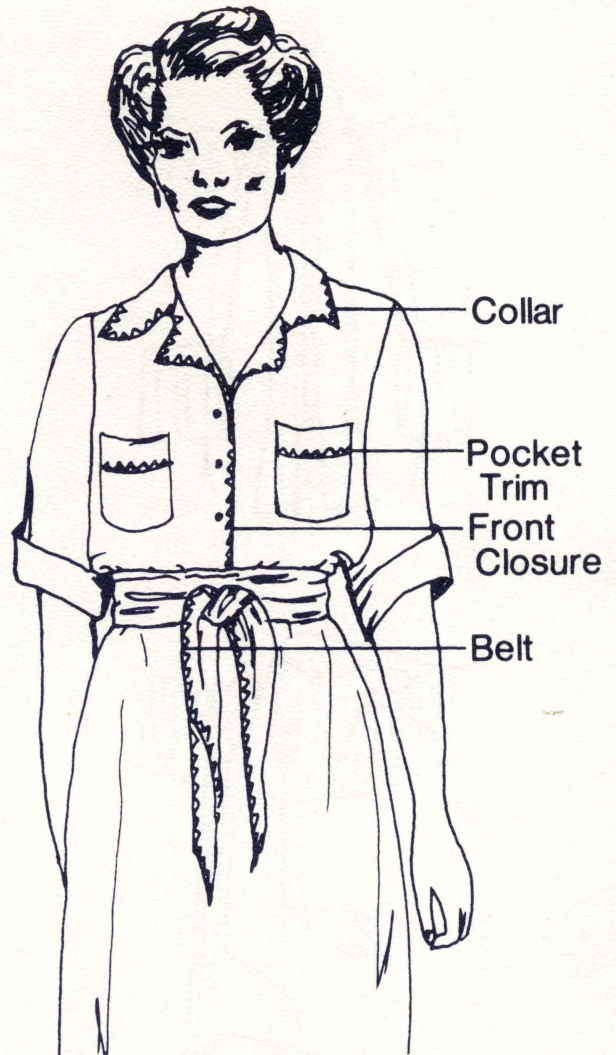
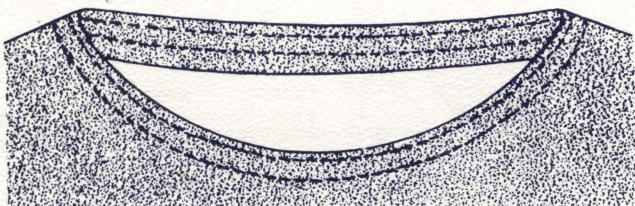
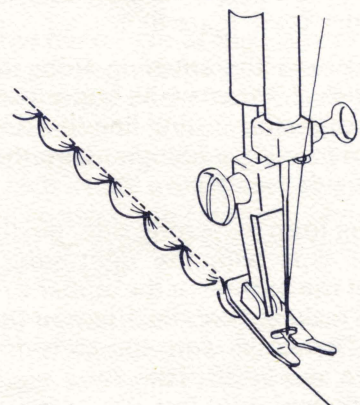


Figure 14. Application of edge finishes.

stitch. Stitch from the right side of the fabric. Trim any extra seam allowance close to the stitching.

A wide zigzag stitch and longer stitch length produces a scalloped look. For a shell-stitched edge, which is popular for lingerie, use the straight blindstitch. The zigzag part of the stitch forms the scallops (see Figure 15).

Figure 15.



APPLIED ELASTIC (self band)

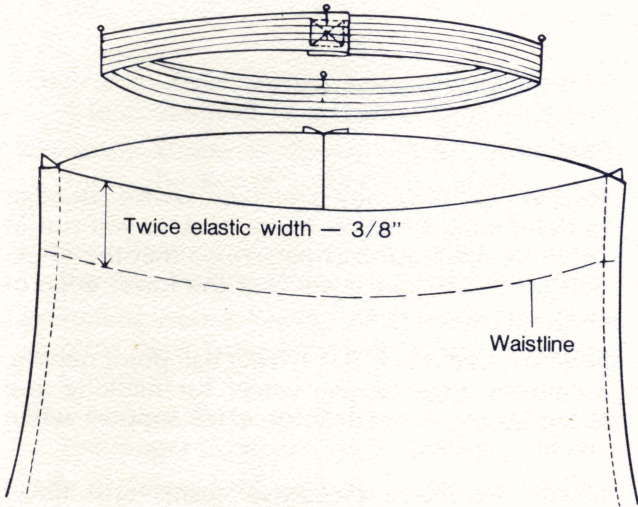


Figure 16.

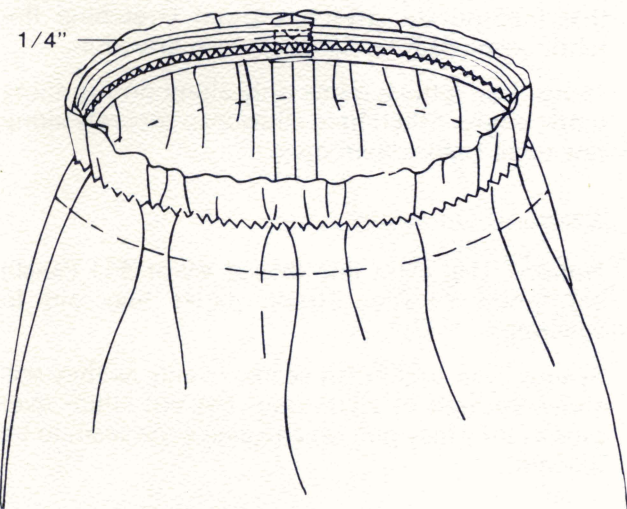


Figure 17.

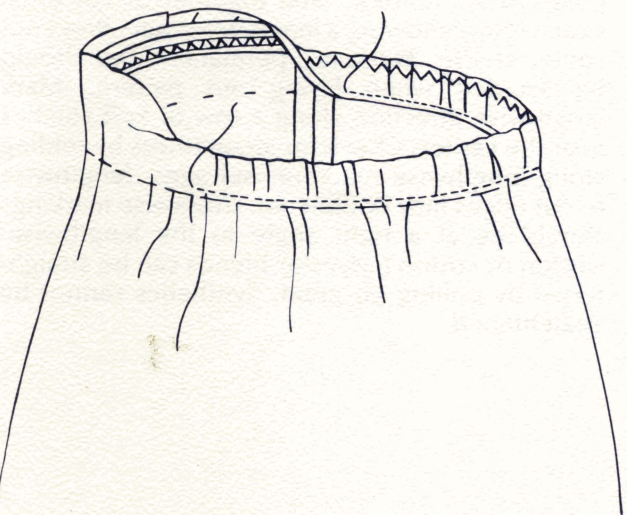


Figure 18.

Elastic waistband (self band)

Elastic waistbands are popular for skirts and pants. To eliminate the twisting which occurs in a loose casing, stitch the elastic to the band. Use the following technique only on garments that do not have waistline darts.

If the garment does not have an extended facing, add two times the width of the elastic plus $\frac{3}{8}$ inch (9 mm) above the natural waistline.

Cut the elastic the length of the waist measurement plus $\frac{1}{2}$ inch (12 mm). Overlap ends of the elastic and stitch securely.

Mark the natural waistline on the garment. Divide the elastic into fourths (see Figure 16).

Pin the elastic to the inside of the waistband. Match quarter sections of the elastic to the sides and center front and back. Place pin $\frac{1}{4}$ inch (6 mm) from the outside of the waistband edge.

Stitch the bottom of the elastic to the garment, stretching to fit. Use a multiple zigzag stitch if possible. Otherwise, use a zigzag or straight stitch (see Figure 17).

Turn the elastic toward the inside, covering the elastic. Stitch through the garment, facing and elastic along the natural waistline, stretching to fit (see Figure 18).



Special Tips for Special Knits*

Bulky (sweater)

Notions. Use extra long pins, #11 or #14 (80-90) ball point needles.

Seams. Use 10 to 12 (2 to 2.5 mm) stitches per inch and light pressure. Reduce seam allowances to ¼ inch (6 mm). Use appropriate techniques to reduce curling. For loopy surfaces such as terry cloth, cover toes of presser foot with tape. Eliminate bulk by grading and trimming. Topstitch to flatten seams.

Pressing. Since seams may be difficult to press flat, chose patterns with a minimum of seams. Let cool and dry before moving off ironing board to prevent stretching.

Buttons. Reinforce by stitching to interfacing.

Lightweight

Notions. Use extra fine thread, #9 or #11 (70-80) ball point needles. Tissue paper may aid in stitching.

Seams. Do not stitch over pins as they may pull up and cause the seam to be uneven. In general, use light pressure and loose balanced tension. Hold fabric taut under presser foot to reduce skipped stitches.

Knits with spandex (swimwear, disco wear, exercise tights)

Pattern Layout. Greatest direction of fabric stretch should go around body. Some fabrics will stretch more in length so pattern should lay on crosswise direction.

Seams. Topstitch or edge stitch for a decorative look and to flatten seams. Double stitch or use stretch stitches on tight fitting seams for strength.

Pressing. Test iron temperature on fabric scrap before using. If iron is too hot, fabric will glaze or pucker. Press carefully to prevent stretching out of shape.

Interlocks

Pattern Layout. Gently stretch crosswise cut edge to determine direction of run. Fabric will run in only one direction. Lay pattern so that the direction of the crosswise run is at the lower edge of each garment piece.

Notions. Use #9 or #11 (70-80) ball point needle, a smooth edge tracing wheel for marking and tissue paper if needed for extra support when stitching seams.

Seams. Reinforce crosswise seams and finish edges to prevent runs from crossing seamlines. Handle carefully and staystitch raw edges to prevent runs. If possible, select machine stitches that incorporate stretch without stretching the fabric, especially in the crosswise direction.

Hems. Use lettuce hems only along non-running fabric edges. Stitch hem allowance securely along raw edge before hemming.

Sheers

Notions. Use extra fine thread #9 or #11 (90-80) ball point needle. Tissue paper may aid in stitching.

Seams. Trim and finish seams evenly as they will show through to right side. Do not stitch over pins as they may pull up and cause the seam to be uneven.

Tubular

Pattern Layout. To layout pattern, cut along temporary seam holding tube together or cut open near a fold, following a lengthwise wale. Press out center crease. Some are permanent and should be avoided when laying out pattern. Mark lengthwise direction along a row of knit stitches near the center. Check for straightness by folding along lengthwise marking; selvages, lengthwise or cut edges may not line up. Crosswise markings should be at a right angle to the lengthwise. Cotton or cotton/polyester blends can be straightened by pulling on grain. Synthetics cannot be straightened.

*General principles for most knits are included in the text of the publication. Only unique considerations are listed here.

REFERENCES

- Coats and Clark's Sewing Book, Newest Methods A to Z.* Stanford: Coats and Clark, Inc., 1976.
- Complete Guide to Sewing.* Pleasantville, New York: The Reader's Digest Association, Inc., 1976.
- Corbin, Krestine. *Creative Sewing.* Sacramento: Creative Sewing Company Publishers, 1978.
- Everything About Sewing Knits from Vogue Patterns.* New York: Butterick Fashion Marketing Company, 1971.
- How to Sew Fashion Knits.* Boulder, Colorado: The Singer Company, 1972.
- How to Sew a Knit.* New York: Hoechst Fibers, Inc. (undated leaflet).
- Jersey Single Knits.* Stanford: Coats and Clark, Inc., 1978.
- Knit Know-How.* New York: Simplicity Pattern Company, Inc., 1979.
- Person, Ann. *The Ann Person Method Sewing Book I.* Eugene, Oregon: Stretch 'n Sew, Inc., 1979.
- Pizzuto, Joseph J. *Fabric Science.* New York: Fairchild Publications, Inc., 1974.
- Potter, Geneva. *Selecting and Sewing with Knits.* Knoxville, Tennessee: Agricultural Extension Service, 1977.
- The Vogue Sewing Book, Revised Edition.* New York: Butterick Division — American Can Company, 1973.
- Whole Sewing Catalog.* New York: Simon and Schuster, 1979.

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