CHAPTER 5

THE UNIVERSAL BASICS

o matter what style pattern you choose, what fabric catches your eye, or what your level of sewing skill, there are certain "universal basics" that are common to almost any project you make.

Much of what you'll learn in the following two chapters will challenge some of traditional sewing's hard and fast rules. Fortunately, today's sewer can have it both ways—easy techniques AND professional results—by combining serger sewing with conventional sewing.

So, dust off your conventional sewing machine, take your over-lock out of the box, and get ready to break some of the rules!

FABRIC PRELIMINARIES

Have you ever purchased a readyto-wear garment that turned into a total disaster after its first laundering or dry cleaning? When you sew, it's easy to prevent these unpleasant (and expensive!) surprises. TIP If you're a fabric collector, get into the habit of preshrinking your yardage before you put it away. Then it's always "needle ready"!

PRESHRINKING

The first step, before you even think about cutting out your garment, is to preshrink the fabric.

The simplest preshrinking method is to put washable fabrics in the washing machine and to take dry-clean-only fabrics to the dry cleaner's. Pay attention to the manufacturer's recommendations for water temperatue, drying cycle or dry cleaning solvents.

If the fabric is marked "sponged," "preshrunk," or the label says it will shrink less than 1 percent, you may be tempted to omit this step. However, shrink-

age control is not the only reason you should pretreat your fabric. By preshrinking it, you can discover the fabric's true character.

- Some fabrics contain special finishes or sizings that dissolve the first time the fabric is cleaned. Consequently, your once-crisp garment may come out soft and limp.
- Some knits contain sizings that will cause your sewing machine to skip stitches. Preshrinking removes these sizings—eliminating the problem before it ever starts.

A GLOSSARY OF FABRIC TERMS

Selvage: One of two finished lengthwise edges on a piece of fabric. These edges are usually a little stiffer and firmer than the crosswise, cut edge of the fabric and will not ravel.

TIP Notions, such as tapes, braids, zippers, linings and interfacings, may require preshrinking too. Read the labels and check the fiber content. Trims, braids and zipper tape made from 100 percent polyester do NOT need to be preshrunk. Although most interfacings should be preshrunk, many fusibles do not require it. Check the manufacturer's information.

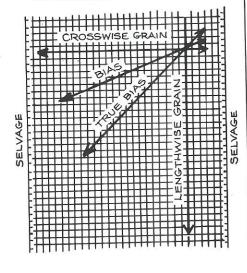
Straight or lengthwise grain:

Refers to the threads (in a woven) or the ribs (in a knit) that are parallel to the selvages. Pattern pieces are usually laid out along the lengthwise grain because it has the least stretch and is the most stable.

Crosswise grain: Refers to the threads that run across the fabric between the two selvages, perpendicular to the lengthwise threads or ribs. Fabric stretches more on the crosswise than on the lengthwise grain.

Bias: Any diagonal direction.

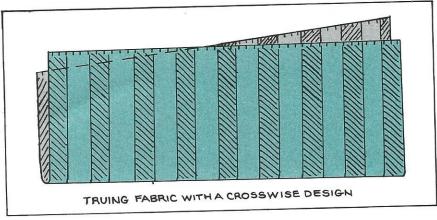
True bias: The diagonal edge formed when fabric is folded so that the lengthwise and crosswise grains match. Fabric has the greatest amount of stretch along the true bias.



STRAIGHTENING

The ideal fabric is "on-grain," with lengthwise and crosswise yarns that are exactly perpendicular to one another.

One of the recurring myths of sewing is that EVERY fabric should be straightened so that it is perfectly on-grain before the pattern pieces are cut out. Otherwise, the theory goes, the finished garment will have out-of-kilter seams and a drooping hem—the



result of yarn's natural tendency to hang perpendicular to the floor. This was true before the advent of knits, modern synthetics, and wonder finishes. When many of these newest fabrics are pulled off-grain during the manufacturing process, the fabric acquires a permanent memory that can't be altered no matter how hard you try.

Truing the Fabric

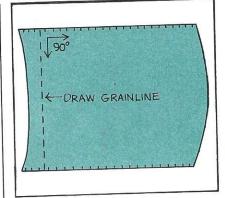
Truing the fabric is today's smart substitute for straightening.

- If the fabric has a crosswise design: fold it so that the design matches across the width of the fabric (see above).
- If the fabric does NOT bave a crosswise design: draw a line at one end of the fabric that is at right angles to a selvage edge. This crosswise line will function as your crosswise grainline. Fold the fabric so that this crosswise line matches at the selvage.

It's possible that the selvages won't match along the length of the fabric. If this is the case, use the lengthwise fold, not the selvage edge, as your reference point when you lay out the pattern pieces.

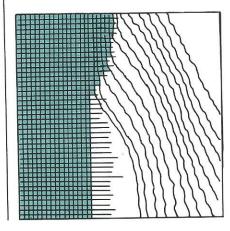
Straightening with Steam

A few fabrics, particularly those made of 100 percent natural fi-



bers such as cotton, wool or linen, do not have a permanent memory. These fabrics, usually can and should be straightened.

Begin by raveling a few crosswise threads until you can pull one thread off across the entire width of the fabric, as shown at the top of the next page. Trim off



TIP If the fabric is a woven plaid, check or crosswise stripe, pulling threads is not necessary. Instead, cut along one of the crosswise bars of the design.

the resulting fringe. Repeat at the other end of the fabric.

Spread the fabric out on a large flat surface and fold it in half lengthwise, matching the selvages and the cut, crosswise end. If the fabric bubbles, or if it ripples along the lengthwise fold, it is offgrain.

To straighten, steam press until the bubbles or ripples disappear. As you press, move the iron in the lengthwise and crosswise directions only. Never move it diagonally as this will further distort the fabric. (See above).

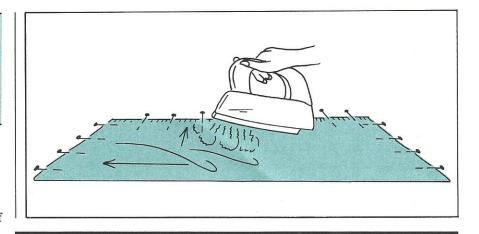
Don't attempt to pull or force any fabric into shape. Fabrics that require more than a gentle steam treatment are probably permanently and forever off-grain. If this is the case, use the truing method described earlier.

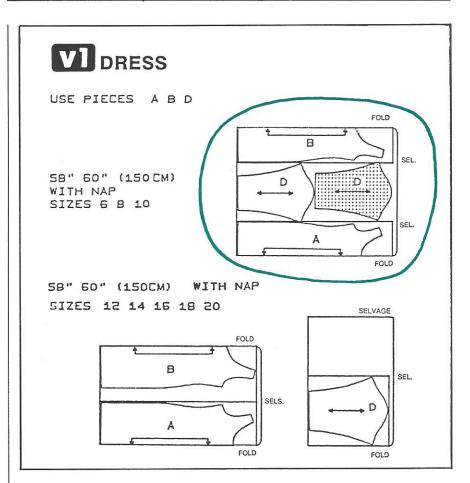
THE CUTTING LAYOUT

Open up your pattern envelope and pull out the instruction sheet. On the first page you'll find a variety of *cutting diagrams*, or *layouts*. To locate the one you need, look for:

- the pattern view you're making;
- the fabric width which is the same as yours;
- your pattern size.

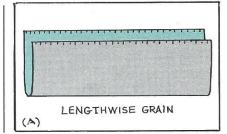
Once you've found the right layout, circle it so it's easy to locate as you refer back and forth from instruction sheet to fabric.





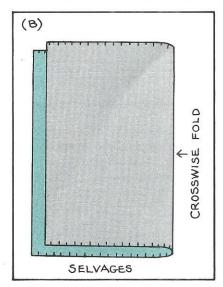
FOLD THE FABRIC

Make careful note of how the fabric is folded in your chosen layout. The most common way of folding fabric for cutting is *in balf lengthwise*, *with the selvage edges matching* (A).



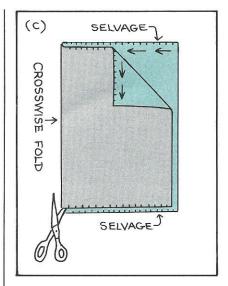
However, because pattern layouts are designed to make the most efficient use of the fabric, this is not the only way the fabric can be folded. Other layouts include:

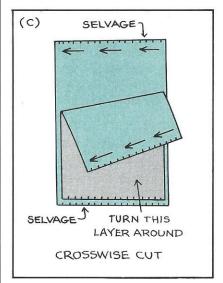
■ a crosswise fold (B). This is used only for fabrics that do not have a nap or a one-way design.



- a crosswise cut (C). This type of "fold" is used for fabrics that have a nap, such as velvet or corduroy, and for fabrics that have a one-way design. The fabric is folded in half along the crosswise grain, then cut along the fold. Next, the top layer is turned around so that the nap is running in the same direction on both layers.
- *single thickness* (D). Fabric is placed right side up.
- a combination of lengthwise fold and single thickness (E). The fabric is folded along a lengthwise grain so that the selvages are parallel to each other but not matching.
- two lengthwise folds (F). The fabric is folded so that the selvages meet in the center.

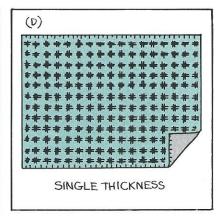
Although fabric can be folded with either the right or the

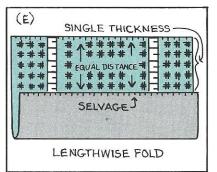


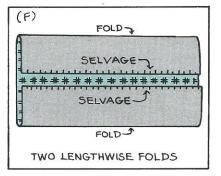


wrong sides together, most sewers prefer to fold it right sides together because:

- It makes it easier to transfer the pattern markings to the fabric.
- Center seams are automatically







matched and ready to sew once the pattern tissue is removed.

However, if your fabric has a bold design or one that requires matching, it's easier to fold it wrong sides together so you can

TIP To make sure you don't miss any important information as you lay out and cut your pattern pieces, look over the pattern instruction sheet before you begin. Start at the upper left-hand corner and, reading each section completely, work your way from left to right. Although this may sound too obvious to have to mention, you'd be surprised at how many people just let their eyes wander over the instruction sheet, reading sections at random. Then they wonder why their garment doesn't turn out right!

readily see the design as you pin and cut. If the fabric has a thick nap, you may prefer to cut it out single thickness. Otherwise, the layers might shift as you pin and cut. For additional information, refer to the section on "Special Layouts" (page 80).

SECURE THE SELVAGES

Your pattern layout will be more accurate if you pin the selvages in place. This keeps the fabric from shifting as you pin and cut. Depending on how your fabric is folded, pin the two selvages together or pin one selvage in place along the length of the fabric.

LAY OUT THE PATTERN PIECES

Check to make sure you have all the pattern pieces you need for the view you are making. You'll find them listed at the beginning of each view's cutting layout. If you followed the guidelines in Chapter 4, you've already adjusted these pattern pieces to give you the best possible fit.

Before laying out your pattern, it's a good idea to press the pieces with a warm, dry iron to remove any creases or wrinkles. This will help make sure that your garment sections are accurate in size and shape.

The cutting layout not only

TIP As your sewing skills progress, you may want to invest in a cutting board. This beavy-duty cardboard surface opens up to 36" × 68" (91.5cm × 173cm) and accordion folds for easy storage. It's marked with a 1" (2.5cm) grid, as well as special markings to aid you in cutting circles, scallops and bias strips.

TIP Examine your cutting layout carefully for any special notations:

- A shading key tells you how to place the pattern:
 - indicates "Pattern Printed Side Up"
- indicates "Pattern Printed Side Down"
 - indicates "Fabric"

and * tells you to look for special instructions printed elsewhere on the instruction sheet.

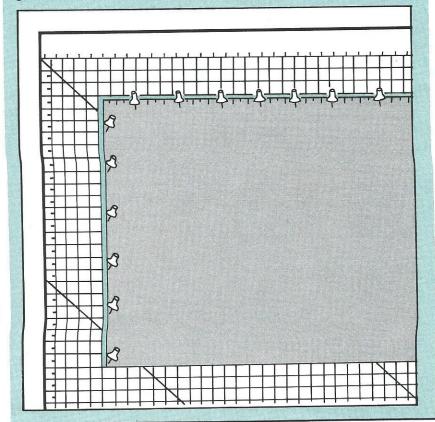
■ If your pattern includes interfacings or linings, these cutting layouts are usually grouped with the fabric layouts for each view.

shows you how to fold your fabric, it also shows you where to place the pattern pieces.

- Position the larger pieces first, beginning with those that should be placed on the fabric fold.
- Position all other pattern pieces so that the grainline arrow is par-

allel to the selvages or to the lengthwise fold. To be sure each piece is parallel, measure from each tip of the grainline marking to the selvage or the fold. Both measurements should be the same. If they don't match, shift the pattern piece a bit until the measurements are equal.

TIP If you're using a cutting board, align the selvage edges with one of the lines on the board. Use pushpins to hold the selvages in place.



- Once a pattern piece is properly positioned, pin it in place at each end of the arrow so it doesn't shift off-grain.
- As you work, don't let the fabric hang over the edge of the table or it might stretch out of shape. Instead, loosely roll up the excess fabric and leave it on the end of the table. Unroll it as you work your way along the cutting layout.

PINNING

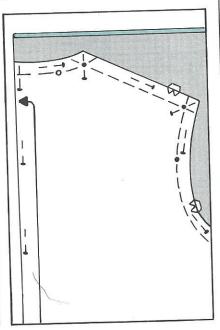
Pin through all the layers of pattern and fabric. First, position the pattern piece on-grain, an-

TIP Keep a magnetic pincushion close by as you pin and cut. It's a fast tool for "sweeping up" all those loose pins from the floor and the cutting surface.

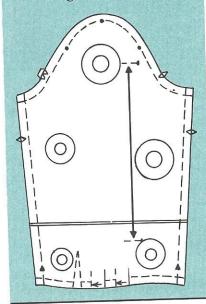


choring it with pins at both ends of the grainline arrow. Next, pin diagonally at the corners, smoothing the pattern out from the grainline arrow as you go. Then add pins around the edge of the pattern. These pins should be placed parallel to the cutting line, at 2"-3" (5cm-7.5cm) intervals. Don't let the pins extend beyond the cutting line.

Depending on the size of your cutting surface, you may want to position all the pattern pieces on-



TIP For fast, "pinless" pinning, use pattern weights. If you don't own pattern weights, cans of tuna fish make a great substitute.



grain first. Once they are all positioned, you can go back and finish pinning each piece. If your cutting surface is small, you may have to work in sections. As you pin, check to make sure none of your cutting lines overlap. And, unless you're following a special layout or your layout requires several different folds, don't do any cutting until ALL your pattern pieces are in place. Cutting as you go means any miscalculations in your layout are permanent.

SPECIAL LAYOUTS

With most fabrics, you can confidently follow the layouts printed on the Pattern Instruction Sheet. However, there are a few fabrics that require some special planning. Some need to be laid out so all the pattern pieces run in the same direction; others must be laid out so that the design either

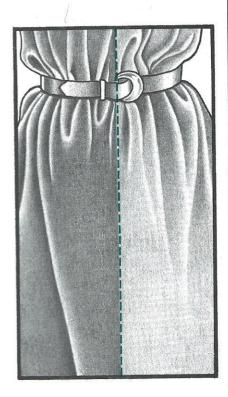
matches at the seamlines or is attractively spaced on the body.

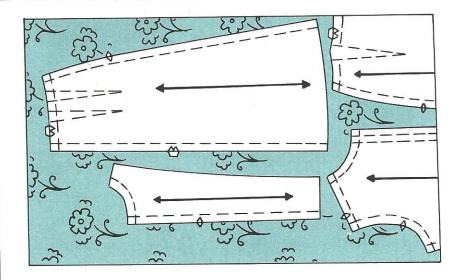
If your fabric requires a special layout, it will be easier to plan if you choose a simple pattern with a limited number of

"WITH NAP" LAYOUT

Some fabrics will change the way they look depending on which way you hold them. Sometimes, the difference is very obvious, as in the case of one-way designs. At other times, the difference might be a very subtle variation in color. For layout purposes, these are called "With Nap" fabrics and include:

■ Pile fabrics, such as velvet, velveteen, velour and corduroy. If you hold the fabric with the nap going down, it feels smoother and the color is lighter. If the nap runs up, the color is darker. For deeper color, the nap should go up; for better wear, the nap should go down.





- Fuzzy-surfaced fabrics, such as brushed flannel and fake fur. Cut with the nap running down.
- Shiny fabrics, such as satin and damask and KNITS. These reflect the light differently, depending on which way you hold them. It doesn't matter which direction you choose, as long as all the pattern pieces run in the same direction.
- Plaids and stripes with an uneven repeat. In addition to following the "With Nap" layout, you'll need to plan the placement of the pattern pieces so that the color bars match.
- Printed or woven motifs with a "this end up" look. For example, all the flowers should "grow" in the same direction on every part of your garment, as shown above.

Take another look at your Instruction Sheet and at the example on pages 34-35. Note that the words "With Nap" or "Without Nap" are printed next to each cutting layout. If your fabric falls into one of the categories listed above, or if you are unsure about whether it has a nap, follow the "With Nap" layout.

Sometimes, because of space

limitations, the pattern doesn't include a "With Nap" layout. In that case, you'll need to develop your own. Use the "Without Nap" layout as a guide, reversing the position of the pattern pieces as necessary so that the tops of all the pattern pieces are pointed in the same direction. To accommodate this new layout, you'll probably need to purchase more fabric than the pattern envelope recommends.

DESIGNS THAT MUST BE MATCHED

Garments made from plaids, bold stripes, big and mediumsized checks, border prints or large design motifs must match at the seams. To accomplish this, you'll have to make some adjustments to the cutting layout provided on your instruction sheet. In general, you'll find it easier to work with the fabric folded right side out or on a single thickness with the right side facing up.

Extra yardage is required to accommodate for this matching. How much extra depends on the size of the motif and the frequency of the repeat. Small, even plaids and stripes require about $\frac{1}{4}$ - $\frac{1}{2}$ yard (.25m-.50m) extra;

- Dominant horizontal bars fall at straight or slightly curved hemlines. As you do this, observe what will happen on the rest of the garment—you may not want a repeat of the dominant bar or motif to fall at the fullest part of the bust, abdomen or hips.
- In the case of a border print or large motif, the hemline should fall just below the lower edge of the design.
- Where possible, motifs should not be chopped off at the seamlines, creating an unattractive effect
- The design matches vertically, as well as horizontally—i.e., center back of collar to center back of garment.

As you lay out the first piece, be sure the grainline arrow is parallel to the selvages or to the bars of the design. Then position the remaining pattern pieces so that the adjoining pieces match at the seams. To match adjoining pieces:

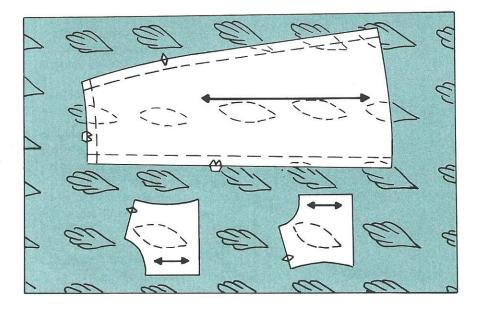
- Trace the design of the fabric onto the pattern at the notch and indicate colors.
- Place the pattern piece to be joined on top of the first piece,

large, even designs require about ½-1 yard (.50m-.95m) extra.

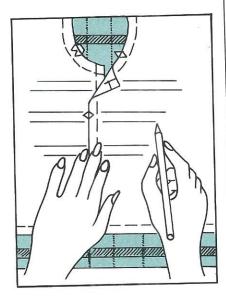
Positioning Bars or Motifs

Think about where you want the most prominent bar or motif to fall on your body. Beginning with the main front section, position the pattern pieces on the fabric (as shown) so that:

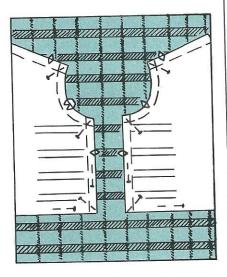
■ Prominent vertical bars and large squares or motifs fall at the center front and back of the garment, and at the center of sleeves, yokes and collars.



lapping seamlines and matching notches.



■ Trace the design onto the second piece, then place it on the fabric so that the traced design matches the fabric.

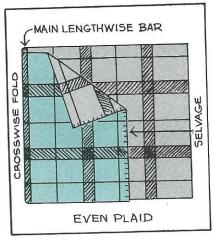


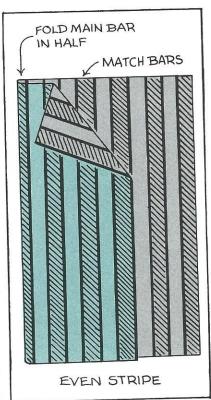
Some details can't be matched, no matter how hard you try. These include raglan seams, shoulder seams, darts, the area above a bust dart on princess seams, the back of the armhole seam, gathered or eased seams and circle skirts. Half-circle skirts will chevron at the seams.

MORE ABOUT PLAIDS AND STRIPES

How you lay out a plaid or a stripe depends on whether the design is even or uneven. In an even plaid or stripe, the arrangement of bars (stripes) is the same on both sides of the main bar. The result is a perfectly balanced design repeat that is easy to match.

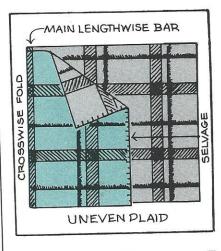
In an uneven plaid or stripe,

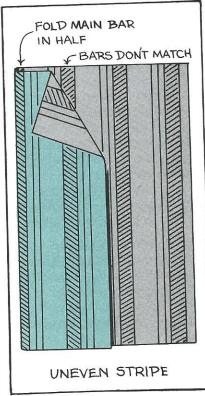




the arrangement or color of bars is different on either side of the main bar.

To see what your fabric is, fold it on the center of a main lengthwise bar. See if the design and colors repeat evenly on either side of it. Do the same for the main crosswise bar. If all the bars on both fabric layers match, the fabric is even; if not, it's uneven.







pieces that must be cut on the fold. Then cut the remaining pieces from a single layer of fabric. For fly-front openings, place the foldline on the center of a main bar. Be sure to place sleeves so that the plaid moves in the same direction on both sleeves.

For a mirror-image effect, the pattern must have a center front and back seam or closure. Work with a single layer of fabric. The main pieces (garment front and back) must be cut once, then reversed and turned upside down before they are cut again. Place center seams or center front lines along the center of a main bar or group of bars. Position the center of the sleeve along a main bar and cut it out. Then, to cut out the second sleeve, reverse and turn the pattern piece. Match the direction of the plaid on the right sleeve to the right side of the bodice front; on the left sleeve to the left side of the bodice front.

For even plaids and stripes,

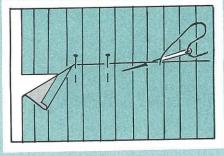
you may use a "Without Nap" layout unless the fabric surface is brushed or napped. In that case, use the "With Nap" (the "this end up") layout. Although cutting a single fabric layer is more accurate, you can use a double layer if you align the bars first. Pin the fabric together along several of the bars to keep it from shifting.

For uneven plaids and stripes, use a "With Nap" layout. An uneven plaid can be made to go around the figure in one direction or in opposite (mirror-image) directions from the center.

To lay out the plaid so it goes around the figure, fold fabric at the center of a main bar or group of bars. Position the pattern

TIP Now that you've matched the fabric motifs in the cutting stage, you'll want to keep it matched as you sew. Use basting tape or glue stick (see "Basting," pages 94-95), or use this slip basting technique:

Press one seam allowance under along the seamline. Lap it over the adjoining section, matching seamlines and fabric design. Pin at right angles. Bring the needle through to the right side at the folded edge, through all three lay-



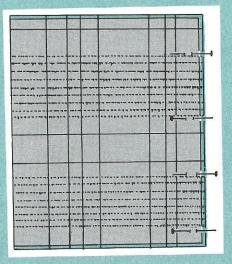
- Insert the needle just opposite the fold, through the single layer of fabric, and bring it back up through the fold, about 3/8" (1cm) to the left of the previous stitch.
- Continue to slip baste the seam in place.
- To sew the seam, remove the pins, open out the fabric, and machine stitch along the basting line.

TIP To eliminate some of the matching—and add visual interest to your garment—cut small detail areas, such as collars, cuffs, pockets and yokes, on the bias.



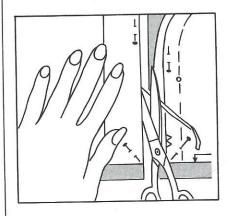
TIP One of the best things about sewing on the overlock machine is that the fabric won't shift or crawl as you serge. As a result, keeping your plaids and stripes matched is a snap. The trick is in the pinning:

- With right sides together, pin the fabric layers together, pinning at right angles to the seamline and matching the motifs as you go. Alternate each pin so that one is pinned from left to right, the next from right to left, etc. Space the pins about 2" (5cm) apart, making sure that the layers are pinned together at the dominant points of the repeat.
- Serge the seam slowly, removing the pins just before the serger knives reach them.



CUTTING

Use a pair of sharp, bent-handled dressmaking shears. The ones with the 7" or 8" (18cm or 20.5cm) blades are the most popular. Use your free hand to hold the edge of the pattern flat as you cut.

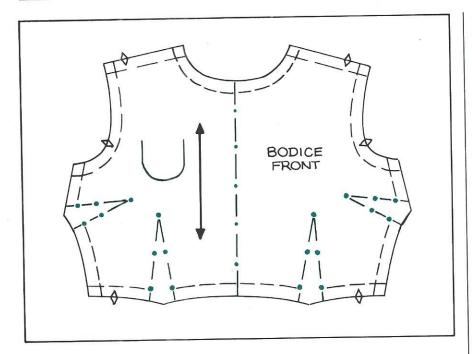


DO NOT use pinking shears to cut out your garment. They won't give you the sharp, straight cutting line that is the necessary guideline for accurate stitching. Pinking shears are meant to be used for finishing seams (see page 99).

When you come to the notches, either cut around them with the tips of your scissors or cut right through them and snipmark later on when you transfer the other markings.

MARKING

As you learned in Chapter 2, a variety of notations, or symbols, are printed on the pattern tissue. Many of these symbols serve as guidelines for matching up garment sections and for sewing details such as darts, pleats, zippers and tucks. In addition to the notches (which you may have already marked as you cut out your



pattern), ALWAYS mark the following:

- **Dots**, including those that indicate dart stitching lines.
- Solid lines that indicate foldlines, as well as position lines for details such as pockets and buttonholes. Do not mark the solid line that indicates the grainline arrow.
- **Lenter front** and **center back**, as indicated by a broken line or a foldline, unless these are located on seamlines.
- Stitching lines that occur within the body of the garment section, such as for pleats, tucks or fly-front zipper openings.

MARKING METHODS

Use the method, or combination of methods, that suit your needs and your fabric.

Fabric marking pens are one of the fastest and easiest ways to mark. These pens contain a disappearing ink that makes it possible to mark on either the right or wrong side of the fabric.

There are two types of disappearing pens:

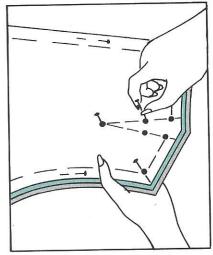
- Water-soluble marking pens contain a blue ink that disappears when the marks are treated with plain water.
- Evaporating or air-soluble marking pens contain a purple ink that simply evaporates from the fabric, usually in less than 48 hours. To guarantee that your markings will still be visible when you need them, don't use these pens until just before you're ready to sew.

No matter which type of marking pen you choose, be sure to test for removability on a scrap

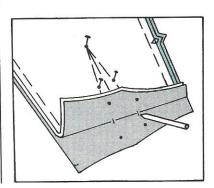
TIP If you've used an evaporating marking pen and your sewing gets interrupted, put your work in a large Ziploc® bag, squeeze out the air and seal it. The markings will remain until you reopen the bag.

of your fashion fabric. If your fabric water-spots or is "dry clean only," then the water-soluble pen is not a good choice. If the evaporating ink leaves an oily residue on the fabric, it's not a good choice either.

To mark with either of these pens, stick pins straight through the pattern tissue and both fabric layers at all marking points.



Starting from the outside edges of the pattern piece, carefully separate the layers of tissue and fabric just enough to place an ink dot where the pin is inserted. Mark both layers of fabric, then remove the pin. As you work your way from the outer cut edges of the pattern to the center or the center fold, continue separating and marking the layers.



TIP With a lightweight fabric, you can mark directly on the pattern tissue. Using a fabric marking pen, press bard so that the ink will bleed through the tissue paper and both layers of fabric.

Dressmaker's Marking Pen-

cils are available in two styles. The first contains a leadlike substance that can be washed out of the garment. The second contains a soft, chalklike substance. The chalk pencils have a stiff brush on one end to "erase" the markings once the garment is completed. Test first on a scrap of your fabric to determine if you can use the chalk on the right side of the fabric. Mark as for the disappearing pens, using straight pins to locate the position of the symbols. Mark on the right or the wrong side of the fashion fabric, as appropriate.

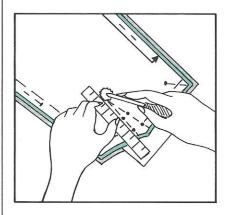
Tracing Paper (sometimes called dressmaker's carbon) and A Tracing Wheel are a good choice for marking smooth, flatsurfaced fabrics. On textured or bulky fabrics, the markings may be hard to see.

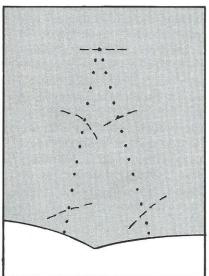
Traditionally, tracing paper markings were permanent. This meant that you couldn't use this method for sheers or for marking on the right side of the fabric. The introduction of "disappearing" tracing paper has changed all that. The markings can be sponged off with clear water. If you use one of these new tracing papers, read the manufacturer's directions carefully. Test first on a scrap of your fashion fabric. The heat of your iron may permanently set some of these formulas. If this is the case, sponge off the markings before you press that area of the garment.

You can usually save time by marking two layers at once. However, heavyweight fabrics must be marked one layer at a time or the markings won't be clearly visible.

Because the tracing wheel has teeth, you may need to protect your work surface by marking on top of your cutting board or by slipping a magazine or a piece of cardboard underneath the fabric and pattern.

To mark, remove any pins that are in your way and position the tracing paper between the layers of fabric and pattern. For standard tracing paper, the carbon sides should face the wrong sides of the fabric; for disappearing tracing paper, the carbon can face either the right or the wrong sides of the fabric. Roll the tracing wheel over any symbols to be marked. Use a ruler as a guide

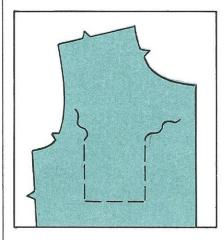




when tracing straight lines. Mark dots with an "X" so that one of the bars of the "X" is on the stitching line, as shown at bottom

Hand- or Machine-Basting is a way to transfer markings from the wrong side to the right side of the fabric. It's particularly useful for indicating placement lines, such as those for pockets or buttonholes, for marking center front and center back along the full length of the pattern piece, or for marking pleat foldlines and placement lines.

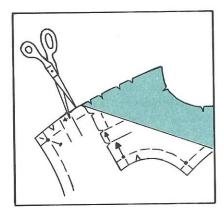
Use any appropriate method to mark on the wrong side of the fabric. Then separate the layers of fabric and hand- or machine-baste along the marking points. Now the markings are visible on the inside and the outside of the garment.



Snip Marking is a fast way to mark the ends of darts, foldlines, pleats and tucks, as well as center fronts and center backs. It's also an alternative way to mark notches. Just make a small

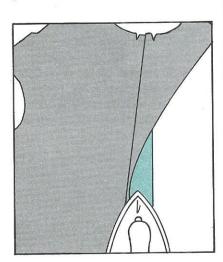
TIP Think before you snipmark. This is not a suitable technique to use if there's any possibility that you'll need to let out the seams later on.

clip (1/8" or 3mm deep) in the seam allowance at the marking point.



Press Marking is used in conjunction with snip marking to mark foldlines for details such as extended facings, folded casings, pleats and tucks.

- Make a tiny clip in the seam allowance at each end of the foldline. If pleats or tucks do not extend the length of the pattern piece, use one of the methods described earlier to mark the end of the foldline.
- Unpin and remove the pattern tissue so you can press mark each fabric layer separately.
- Fold the fabric wrong sides together, using the clip marks as guides, and press the fold.



CONVENTIONAL MACHINE STITCHING

Whether your conventional sewing machine is a basic straight stitch variety, or a space-age computerized model, or something in between, it's the most valuable and useful piece of sewing equipment you own.

Because features and capabilities vary among models and manufacturers, the best advice anyone can give you is to study the manual that comes with your sewing machine. Among other things, you'll learn important information about how to keep the machine in good working order, including:

- how to keep it clean and lintfree;
- whether or not it requires oiling and lubricating—and how often this should be done;
- recommended types and sizes of needles;
- instructions for adjusting tension, pressure and stitch length—in short, all the things that contribute to good quality stitching.

If you've misplaced the manual, write to the manufacturer and ask for a new one. Be sure to include the model number of your machine. You'll find it printed on a small metal plate attached to the machine. On a freearm machine, the plate is located on the back of the machine; on a flatbed machine, it's located on the front. If you don't understand how to operate some of the attachments or special features, stop in at a local dealer and ask about a few lessons. It will be time well spent!

THE PERFECT STITCH

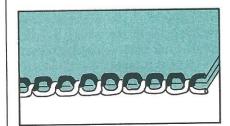
If you follow the recommendations in the manual and keep

your sewing machine in good working order, you can expect it to reward you with good quality stitching. Then you'll be able to make the simple adjustments that fine-tune the stitch quality to match your fabric.

Before you sew even one seam on your garment, test-stitch on scraps of your fashion fabric.

Thread Tension

Tension refers to the amount of drag or tautness exerted on both the needle thread and the bobbin thread as they move through the sewing machine. When the tension is correctly set, the stitches should be perfectly balanced: the two threads interlock in the center of the fabric so that the stitches look the same on both sides of the fabric.



If the tension is not balanced, your manual will tell you how to correct it by adjusting the dial or button that controls the needle tension. Most tension problems can be solved by adjusting the needle tension to match the bobbin tension. Although some machines have a screw on the bobbin case that controls the bobbin tension, most manufacturers do not recommend adjusting this screw. If a bobbin adjustment is required, you'll be better off leaving that to a skilled repairperson.

To test for balanced tension, take a scrap of the fashion fabric and fold it along the bias. Put a row of stitching about ½" (1.3cm) from the fold. Then, pull the fabric until a thread breaks.