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PATTERN ALTERATION

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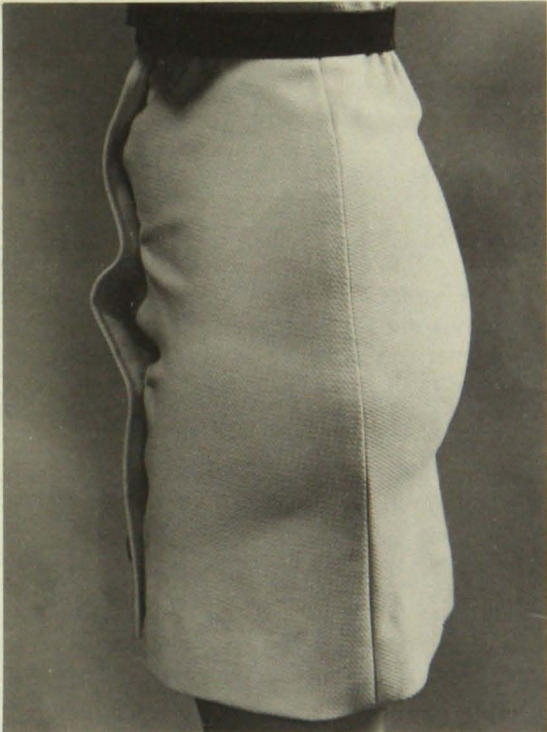
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KNOW YOUR FIGURE

To make attractive clothing that fits well is the goal of everyone who sews. But it takes careful forethought to achieve a product you are proud of. You have to take accurate and complete measurements, analyze your figure type, select the correct pattern, and do any needed pattern alterations before cutting out the garment.

Take a Hard Look

In addition to taking measurements, you need to look analytically at your figure in a full-length mirror. Are you well-proportioned, tall or short, long- or short-waisted, fully mature or developing, full through the waist, etc.? The following list is a description of "average" proportions. Compare yourself to it.

Average waist position — halfway between your underarms and the fullest part of your hips.

Average bust position — halfway between your shoulder and your elbow when your arms are at your sides.

Average arm length — your wrists come at the fullest part of your hips when your arms are at your sides.

Average hip width — your hips and shoulders are the same width.

SELECTING THE PATTERN

Pattern type and age are not related. All the major pattern companies base their types and sizes on the same body measurements, which have been approved by the Measurement Standards Committee of the Pattern Fashion Industry.

Misses'

Misses' patterns are designed for a well-proportioned and developed figure, about 5'5" to 5'6" without shoes. Average bust position; average waist length.

Women's

Women's patterns are designed for the larger, more fully mature figure, about 5'5" to 5'6" without shoes. Average bust position, average waist length.

Junior

Junior patterns are designed for a well-proportioned, shorter waisted figure, about 5'4" to 5'5" without shoes. High bust position.

Half-Size

Half-size patterns are for a fully developed figure with a short back-waist length and a low bust position. Waist and hip are larger in proportion to bust than other figure types. About 5'2" to 5'3" without shoes.

Miss Petite

This size range is designed for the shorter Miss figure, about 5'2" to 5'4" without shoes. Average bust position, short waist length.

Junior Petite

Junior Petite patterns are designed for a well-proportioned, petite figure, about 5' to 5'1" without shoes. Average bust position, short waist length.

Young Junior/Teen

This size range is designed for the developing pre-teen and teen figure, about 5'1" to 5'3" without shoes. High bust position, short waist length.

After selecting the type you think you might be from the descriptions above, compare your measurements with those in pattern sizing charts in counter pattern catalogues. If your measurements and figure type fit exactly into one type and size, you are fortunate. Most people's do not.

Generally, it is suggested that the bust measurement be used to select patterns for dresses, blouses, coats, and similar garments. Patterns are made for people who wear B-cup bras. For this reason, it is important to compare the high bust and bust measurements. If there is much more than 2 inches difference, a pattern purchased by high bust measurement will generally fit better. It will be necessary to alter the bust area of the pattern to fit, but the rest of the pattern will fit body frame well, especially in the chest and neck area.

Patterns for skirts and pants are usually selected by the waist measurement. If the hips are much larger than the pattern proportions or if a hip-hugger pattern is being used, select the pattern by the hip measurements.

If body proportions are very different from the sizes, it may be helpful to purchase two patterns — one for the bodice and one for the skirt. Adjustments can easily be made at the waistline.

DOES YOUR PATTERN NEED ALTERING?

The major pattern companies use the same standard body measurements for chest or bust, waist, hip, and back waist lengths for each pattern type and size. However, not all patterns in the same type and size will fit you exactly the same, because each pattern company may allow different amounts of ease for different parts of the body. You need this ease for comfort and body movement.

Three ways to determine if your pattern will need altering are: 1) try on a garment made from a similar pattern; 2) pin the pattern together and try it on; 3) measure yourself and compare these measurements to a pattern sizing chart.

Try on Similar Garment

If you have a friend your size who has constructed a garment from an unaltered pattern of the same type and size, try it on for fit. Or, try on a garment you have made from a pattern of the same type and size.

Are there wrinkles or is there pulled fabric anywhere? Do seamlines fall in the right places? Do darts point to but not beyond the fullest parts of the body? Does the neckline fit comfortably and attractively? Do the center front and back of the garment hang perpendicular to the floor? Do side seams hang perpendicular to the floor?

In your analysis, be sure to make allowances for differences in design detail, such as an A-line skirt instead of a straight skirt or a raglan sleeve instead of a set-in sleeve.

Try on Pattern

To try on the pattern, pin in darts and pin seamlines together. Put on pattern over undergarments, being sure to position center front and back accurately on the figure. Check fit.

Measure and Compare

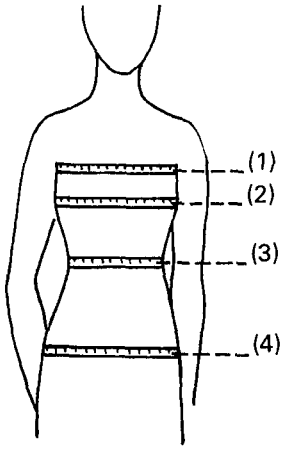
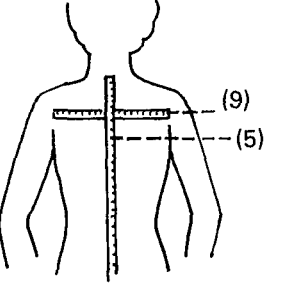
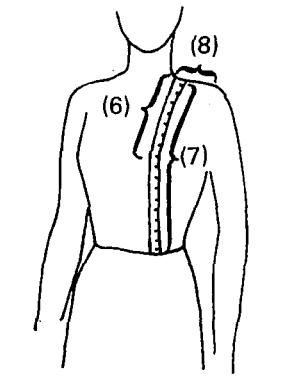
The best method of determining the need for pattern alterations is to measure carefully and accurately and record your measurements on the "Pattern Alteration Worksheet" (Page 5).

Take your measurements over the undergarments you plan to wear with the garment. Tie a string snugly around the natural waistline. Record* each measurement (Column A) and add minimum ease allowance (Column B) to obtain total measurement needed (Column C).

Measure your pattern at the same location on the pattern pieces as on your figure. Be sure to measure only from seamline to seamline and exclude the width of the darts and tucks. Record these figures in Column D. The difference between columns C and D will indicate what alterations you'll need to make, if any (Column E). Think metric as you record. (Remember one inch equals 2.5 centimeters.) Also be sure to record the date.

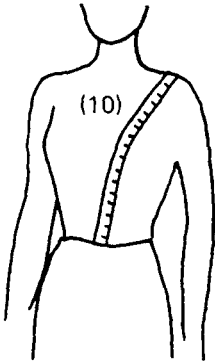
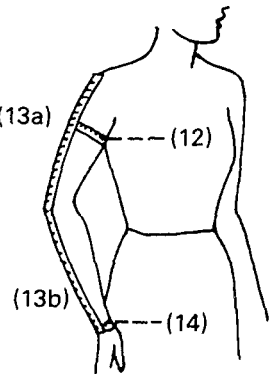
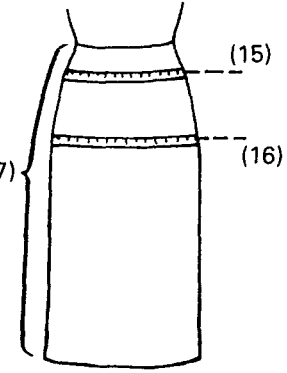
Date _____

PATTERN ALTERATION WORKSHEET*

Measurements to take (take all measurements over good-fitting undergarments)	Determine your pattern size with circumference measurements-around your body (1-4)	A My body measurements**		B Plus minimum ease*		C Equals total measurements needed		D Patterns measurements		E Adjust-ment needed +or-	
		in.	cm.	in.	cm.	in.	cm.	in.	cm.	in.	cm.
	1. <i>High bust</i> -under the arm, straight across back and above the bust.										
	2. <i>Bust</i> -around fullest part and parallel to the floor.			3"-4"							
	3. <i>Waist</i> -circumference at natural waistline.			½"-1"							
	4. <i>Hip</i> -over fullest part-varies, but approximately 7"-9" below string at waistline.			2"							
	Determine your pattern type with vertical measurements (up and down).	My height (without shoes) _____feet _____inches _____cm.									
	5. <i>Back waist length</i> -from prominent bone at back of neck to string at waistline.			¼"-½"							
	Additional measurements needed to determine needed pattern alterations.										
	BODICE										
	6. <i>Shoulder to bust</i> -from center of shoulder to tip of bust (to check location of bust).			0"							
7. <i>Front waist length</i> -from neck end of shoulder to string at waistline.			¼"-½"								

*Ease is the amount added to a basic pattern to give room for movement and comfort. Because of design, a pattern may include more ease than is indicated on this worksheet. The amount listed in the ease needed column is for woven or stable knit fabrics. Ease needed for stretchy knits depends on the design of the pattern and the type of knit being used. Usually this is indicated on the pattern envelope.

**Make all entries in pencil so chart can be updated.

Measurements to take (take all measurements over good-fitting undergarments)	Additional measurements needed to determine needed pattern alterations.	A My body measurements**		B Plus minimum ease*		C Equals to total measurements needed		D Patterns measurements		E Adjustment needed +or-	
		in.	cm.	in.	cm.	in.	cm.	in.	cm.	in.	cm.
	BODICE continued										
	8. <i>Shoulder length</i> -from neck to tip of shoulder bone.			0"							
	9. <i>Back shoulder width</i> -armhole to armhole 4" below base of neck in back.			1"							
	10. <i>Front shoulder slope</i> -from center front waistline across bustline to outer end of shoulder. Measure both left and right sides.	Left									
		Right									
	11. <i>Back shoulder slope</i> -from center back waistline to outer end of shoulder. Measure both left and right sides.	Left									
		Right									
	SLEEVE										
	12. <i>Sleeve width</i> -around fullest part of upper arm with elbow bent.			2"- 3"							
	13. <i>Sleeve length</i> -with arm bent (to check location of elbow dart or ease). a. shoulder to elbow b. elbow to wristbone			1/4" 1/4"							
	14. <i>Wrist</i> (circumference)			1/2"- 1"							
	SKIRT										
	15. <i>High Hip</i> -3" below waist.			1/2"- 1"							
	16. <i>Waist to full hip</i> -at center back.			0"							
	17. <i>Skirt length</i> -(waistline to finished hemline) a) center front b) right side c) center back d) left side			hem allow- ance							

NOTES

USE THESE GUIDELINES

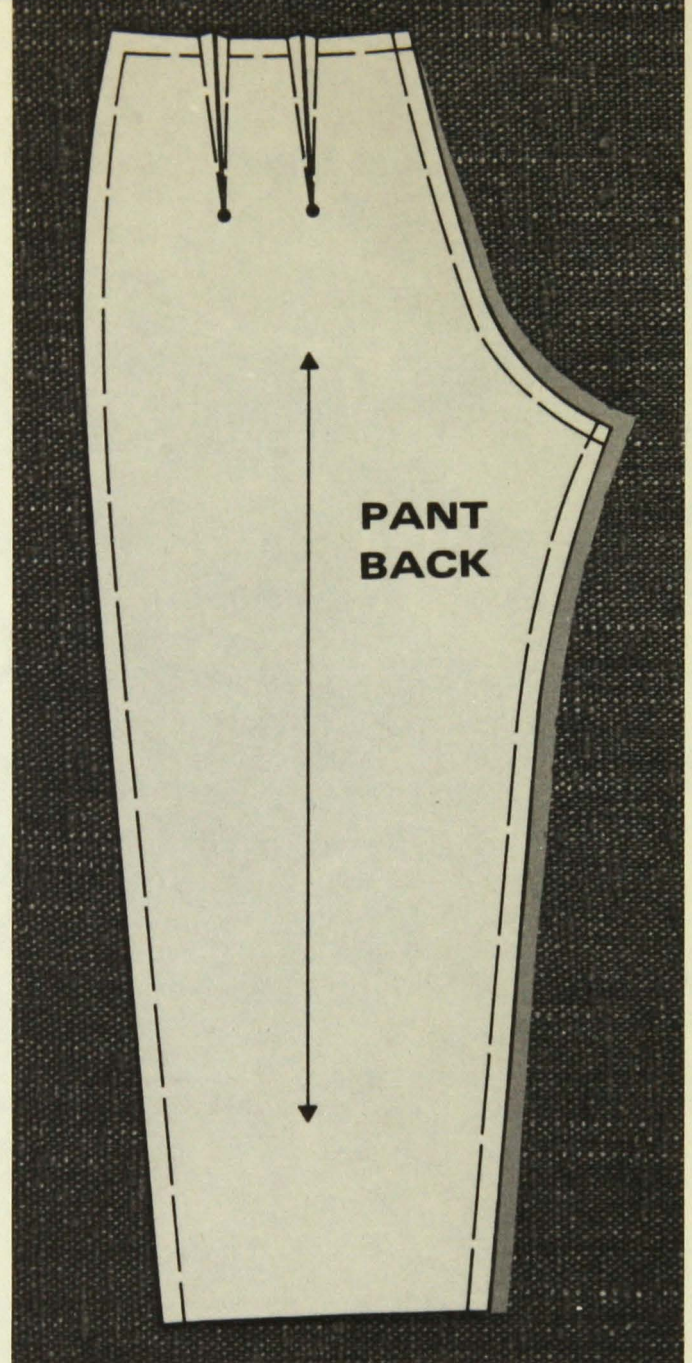
There are two general ways to alter — at the outer edge of the pattern and within the pattern at the place of the problem.

At Outer Edge

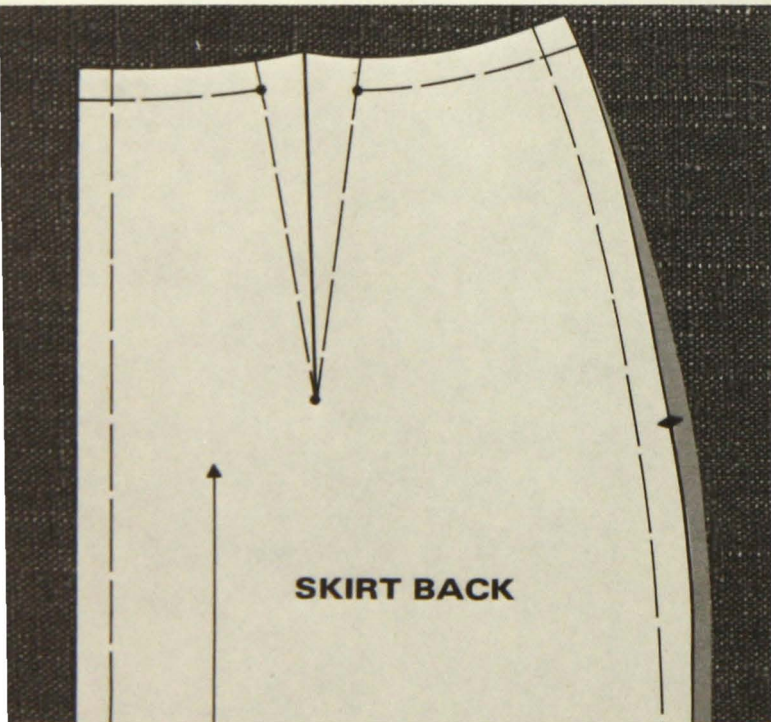
This method of altering patterns is often used when the amount to add to each pattern piece or subtract from it is $\frac{1}{4}$ inch or less. It seems to be the easiest method. But if the alteration is very great, there are some disadvantages. These include:

- Redrawn cutting lines, especially in curved areas, may not be accurate.
- You may change pattern proportions.
- The problem you are trying to solve may not occur at a seamline.
- When using the pattern in the future, you may not remember what you did.

This may work if you don't need to add too much.



1



2

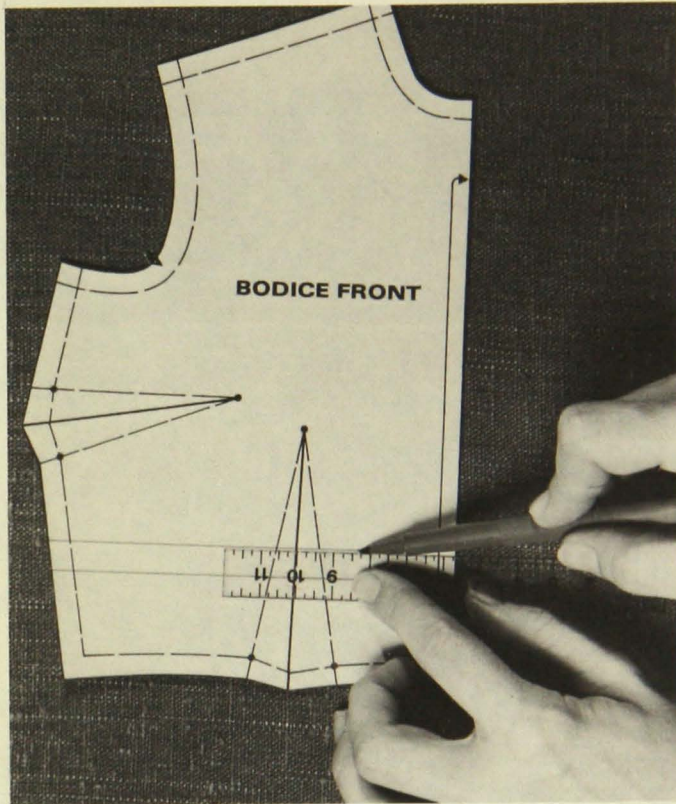
What happened to the crotch depth? Did you mean to shorten that in adding width to the pants?

Within Pattern

When alterations are done within the pattern, the result is a permanently altered pattern with the alterations where the fitting problem occurred instead of at seamlines. Alterations within the pattern are done by three general methods: 1) fold a pleat; 2) slash and spread; and 3) slash and lap. The fold a pleat and slash and lap methods make pattern pieces smaller. The slash and spread method is used to make pattern pieces larger.

How to "Fold a Pleat"

(used to make the entire pattern piece narrower or shorter)

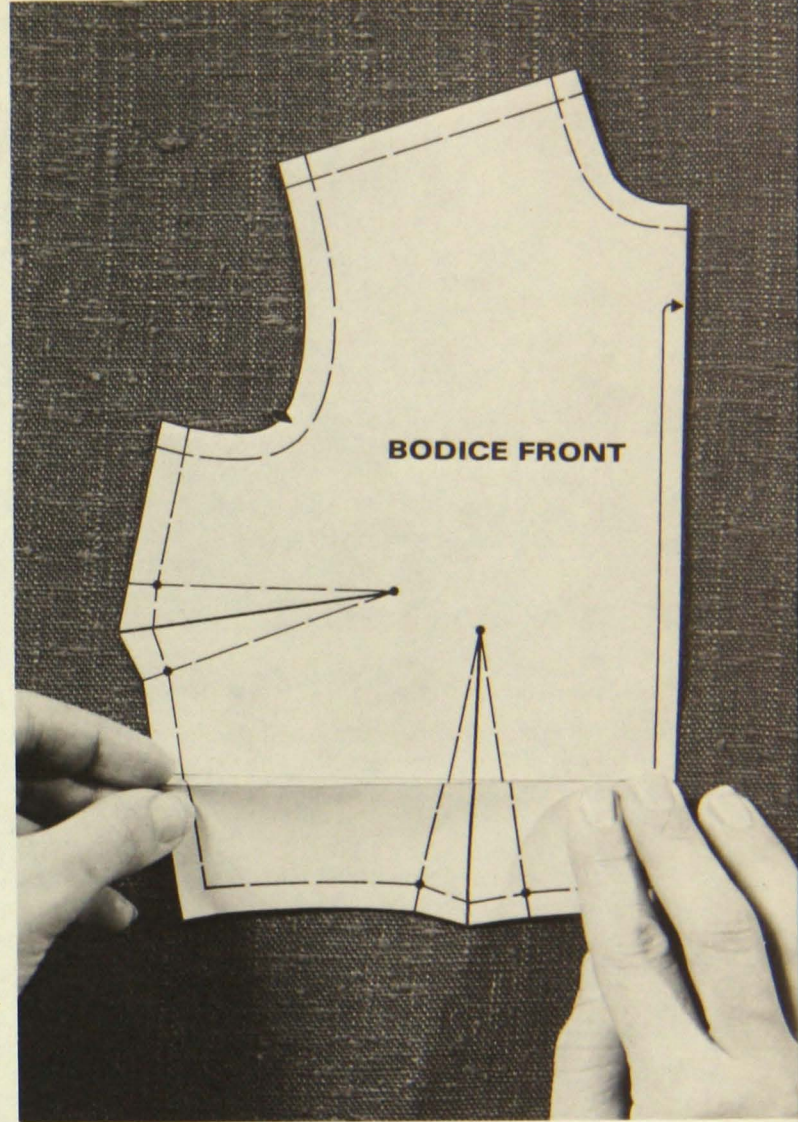


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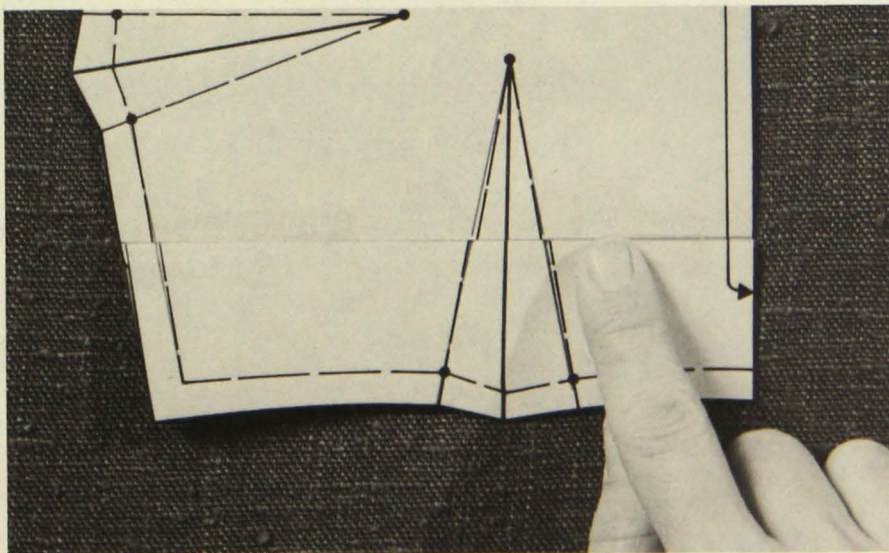
Draw two lines on the pattern where you want to make it smaller. The lines should be parallel, with the distance between them equal to the amount to be removed. A transparent ruler helps you work more accurately.

Fold the pattern along one line and bring the fold to the second line.

Pin or tape the fold in place. Redraw dart stitching lines and seamlines. Use tissue paper to make the cutting line even.



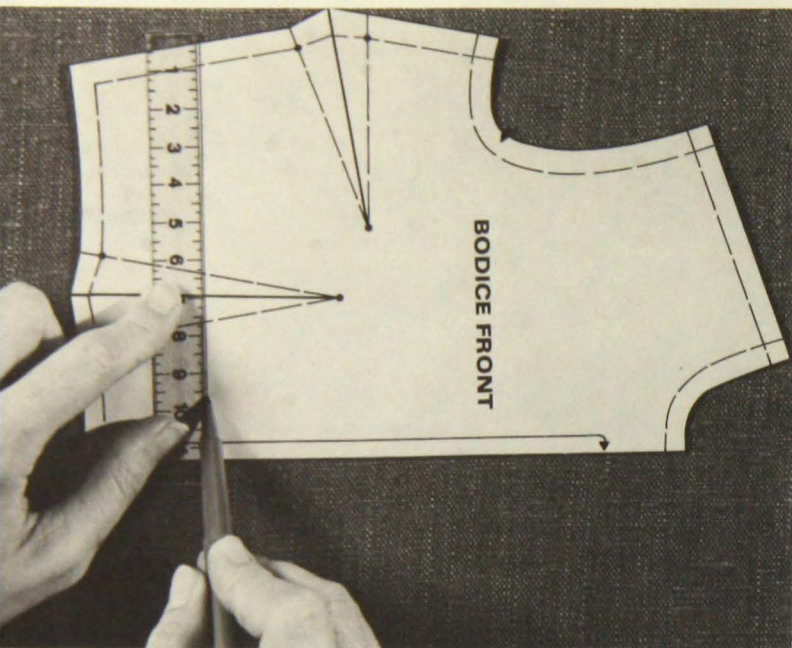
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How to "Slash and Spread"

(used to make the entire pattern piece longer or wider)

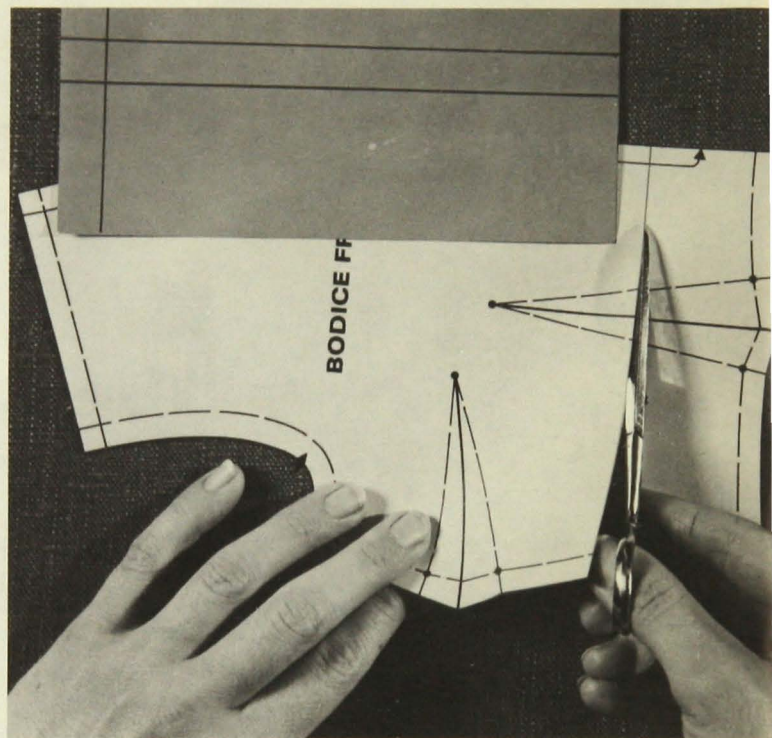


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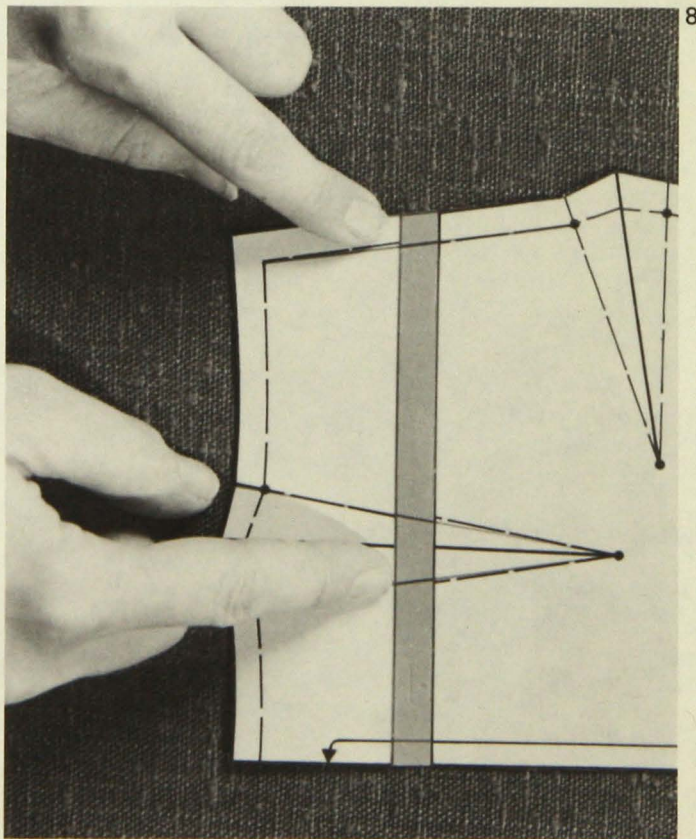
Draw a line across the pattern where it needs altering.

Slash pattern on that line. Draw two parallel lines on tissue paper. The distance between the lines is the amount to be added. Add another line at right angles to the two lines.

7



Pin or tape the two parts of the pattern to the parallel lines lining up the pattern grainline with the third line. Redraw dart, stitching lines, seamlines, and cutting lines that were affected by the alteration.



8

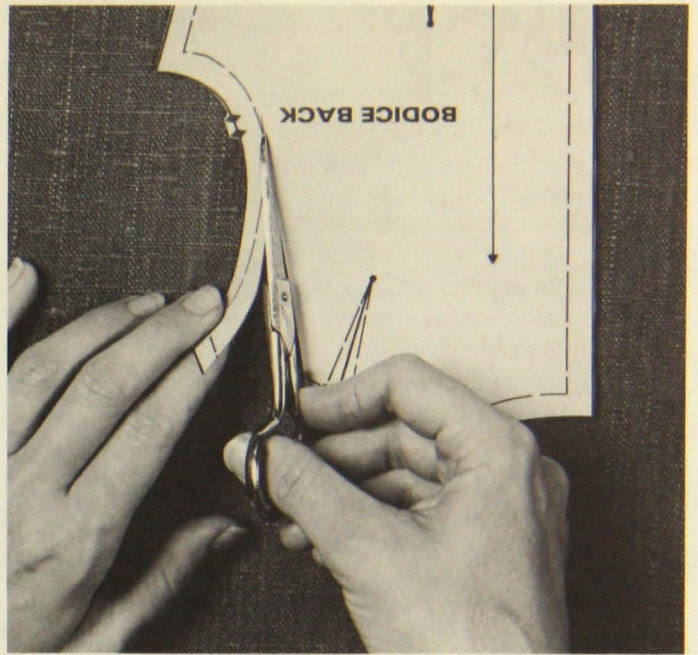
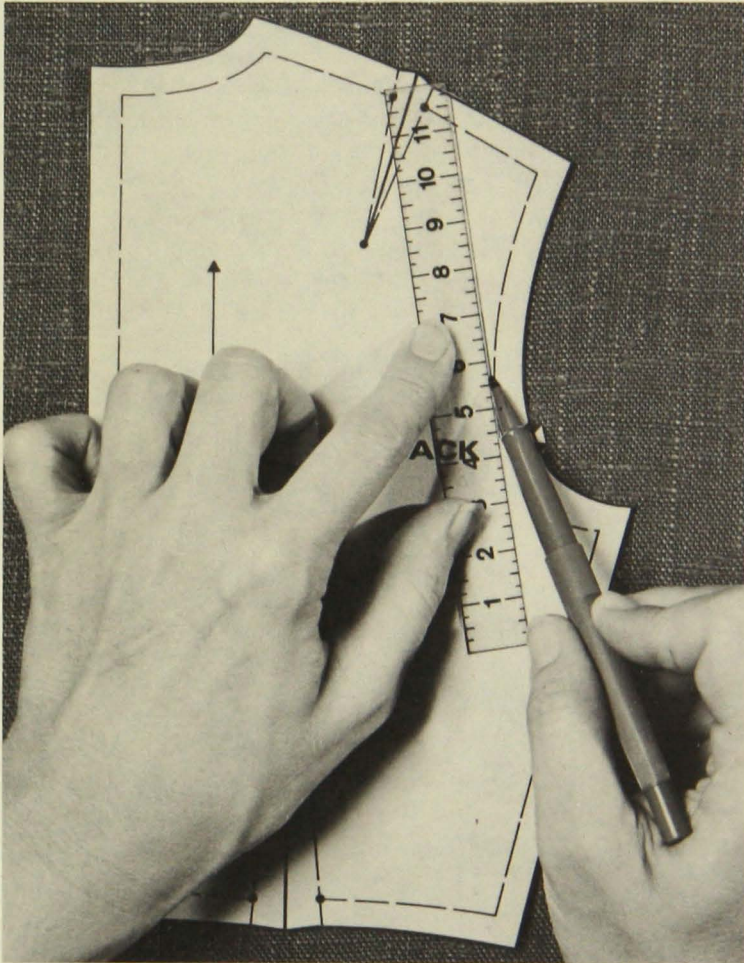
If the spread needs to go only part way through a pattern piece, slash the pattern only to the seamline that is to stay the same. Spread the pattern the amount needed and fasten to tissue paper.

How to "Slash and Lap"

(used when the amount to be removed from the pattern does not go all the way through a pattern piece.)

Draw a line across the pattern where it needs altering. The line does not go through the seamline that remains the same.

▼ 9

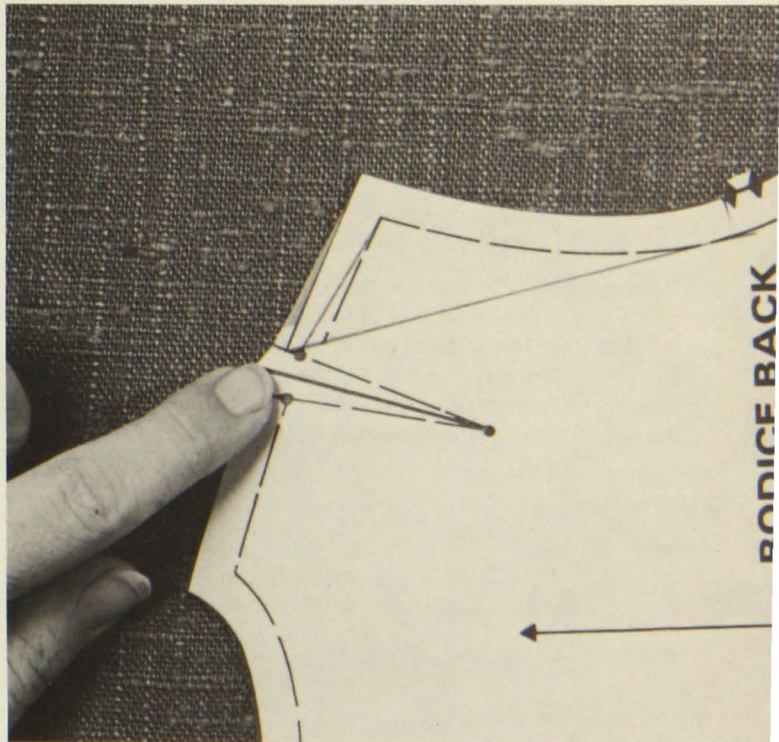


▲ 10

Slash the pattern on that line to the seamline.

Overlap the pattern as needed and tape or pin pattern pieces in place. Use tissue paper to make the cutting line even. Redraw the seamline.

▼ 11



GENERAL GUIDELINES AND PRINCIPLES OF ALTERING

Keep in mind the following guides and principles as you make alterations. Use them to check on your accuracy.

1. Keep the pattern grainline straight and in the original location on the pattern piece. (Extend grain line markings to the edges of pattern pieces. Then you can see the grain through each alteration.)
2. Avoid changing the basic design of the pattern. If possible, make changes between darts and outside edges of pattern. Preserve all pattern markings or other fitting details as you alter.
3. Keep the silhouette of the garment the same.
4. Pattern pieces that join at seamlines must be altered so the length of adjoining seams corresponds. Be certain to alter all pieces affected by that change. Example: if you are shortening a jacket, be sure to shorten the front facing also.
5. Make lengthwise alterations between joints such as between waist and hips or shoulder and elbow. Bodice length alterations are made above or below the bustline and shoulder blades. Most patterns will clearly indicate where to alter.
6. Locate problem areas and work from there.
7. The larger the curve, the larger the darts must be to fit. Darts to control bustline fullness should point toward tip of bust and should not extend closer to tip of bust than one inch.
8. An altered pattern must lie flat. When folding or spreading the pattern causes jogs along the edges, correct line by dividing differences between the two pieces.
9. Center front and center back are seldom alteration points.
10. When alterations have been completed, measure again to be sure they are accurate.

If many alterations are needed, if you change size frequently, or if you don't feel sure of your ability in altering, you might want to trace the original pattern onto tracing paper. You can then keep the pattern and do the alterations on the traced one. If you have problems in altering, you can start over with another traced pattern instead of buying a new one.

Armhole seam is a smooth curve over end of shoulder

Underarm and waistline darts point at fullest part of bust

Hipline fits smoothly

Side seams perpendicular to floor

Skirt length becoming to you

TEST YOUR ALTERATIONS

If you question the way a pattern will fit, make the garment in muslin or an inexpensive gingham check before cutting out your good fabric. If you are working with a knit, try the pattern in an inexpensive knit with give similar to your good fabric. This step is especially important if you have made several changes in altering or new kinds of alterations. When you cut out the garment, plan for one inch seam allowances at waistline and side seams for any necessary letting out.

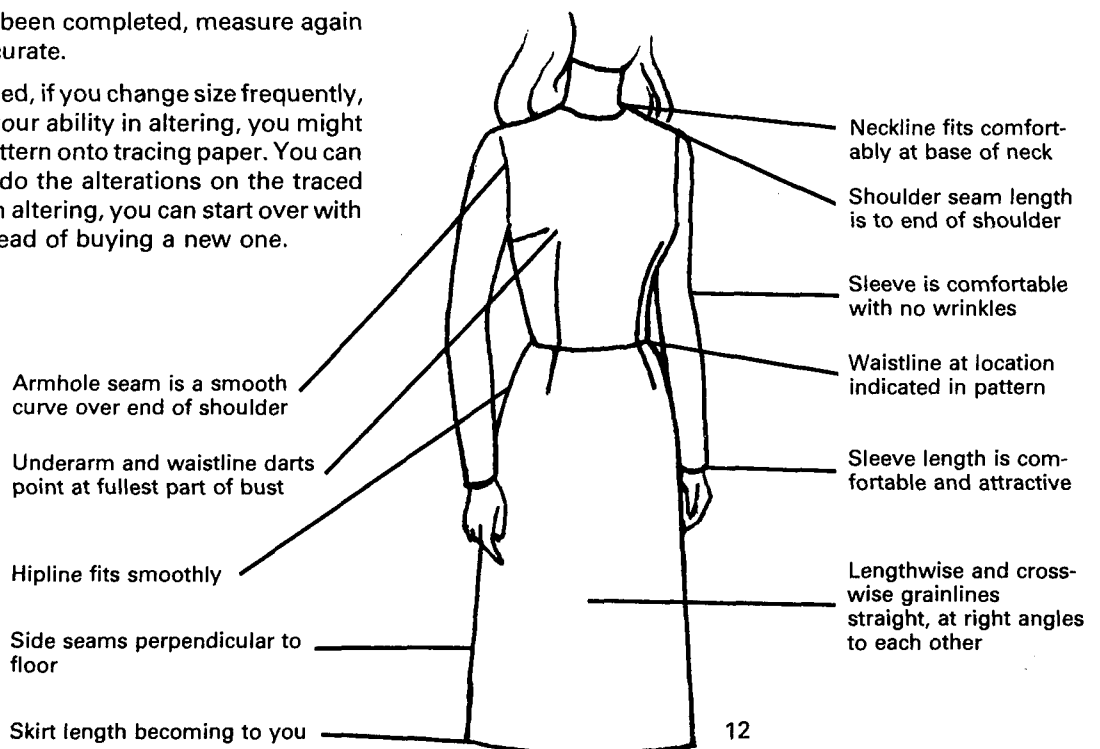
It is not necessary to make and finish the whole garment to check fit. You just need to sew the basic parts of the garment together. Don't bother with facings, pockets, collars, etc. But if the garment has sleeves, be sure to sew them both in so one sleeve doesn't pull the garment out of line on the body. Also, turn up hems as indicated on pattern.

Have someone help you check the fit of the garment. Put the garment on right side out with the kinds of undergarments and shoes you plan to wear with it.

Analyze the fit carefully using the drawing. Then look for wrinkles. Wrinkles or pulled fabric anywhere in a garment are clues that something is wrong with the fit. You will need to let out or take in seams or darts to eliminate these problems.

In fitting be careful not to make the garment too tight. Try moving, sitting, walking, bending, and stretching after fitting to see if you are comfortable. If the pattern is for "stretch knits only" remember the ease for movement is built into the fabric, not the pattern.

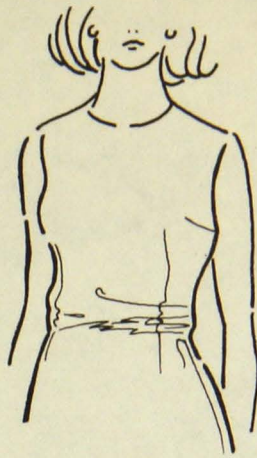
Where to Check for Fit



ALTER YOUR PATTERN

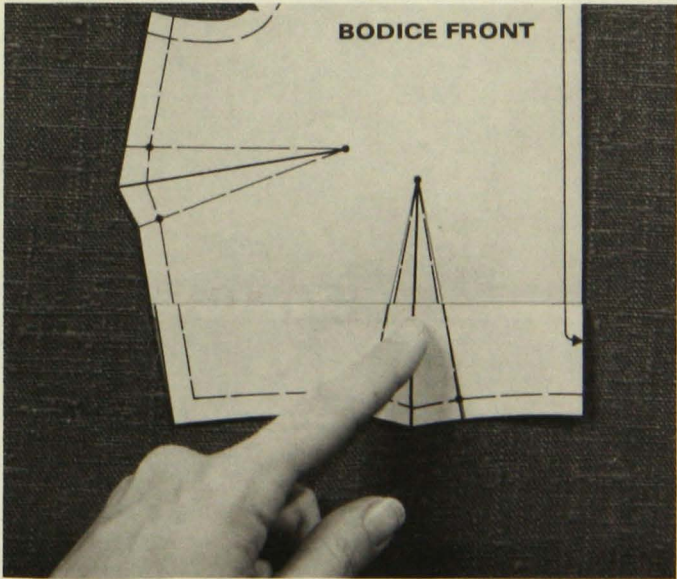
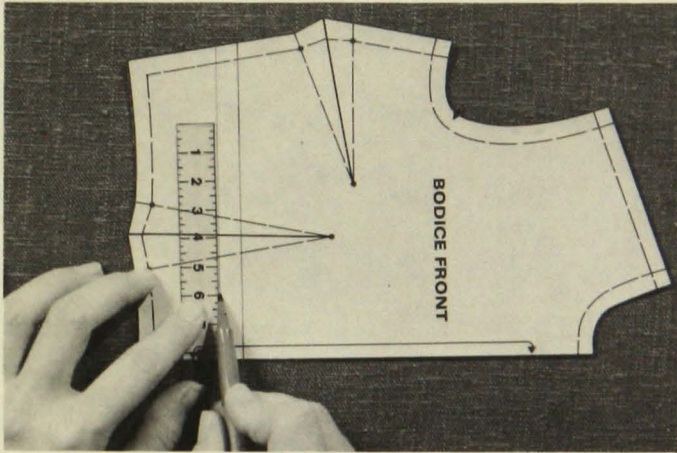
Long-Waisted Problems

To prevent a garment from being long-waisted, adjust the pattern before cutting out a garment. Decide how much the pattern needs to be changed by using the pattern alteration worksheet. (Page 5)



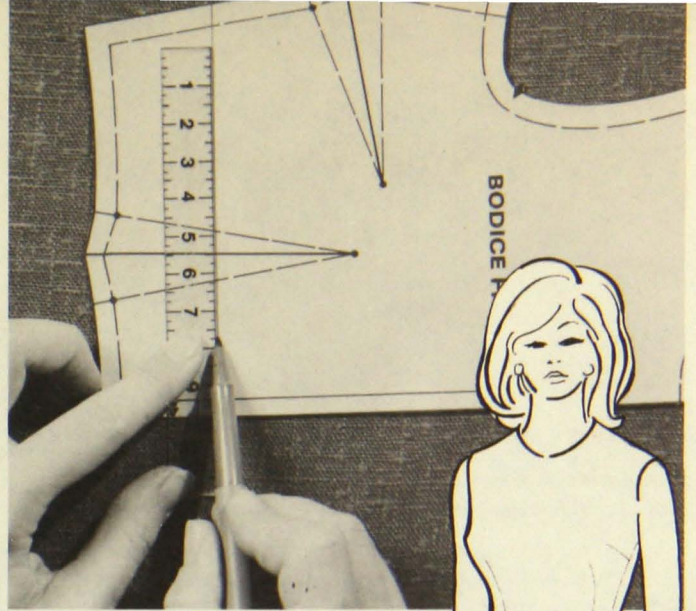
Between the underarm dart and the waistline, draw two parallel lines at right angles to the grainline. The distance between the two lines is the amount you need to shorten the pattern.

13



14

Fold on one line and bring the fold to the other line making a pleat. Tape in place. Redraw the side seam by folding in the dart and using a ruler from waistline to underarm. Also, redraw waistline dart stitching lines, keeping end points the same. Alter both front and back bodice pieces and any facings the same.



15



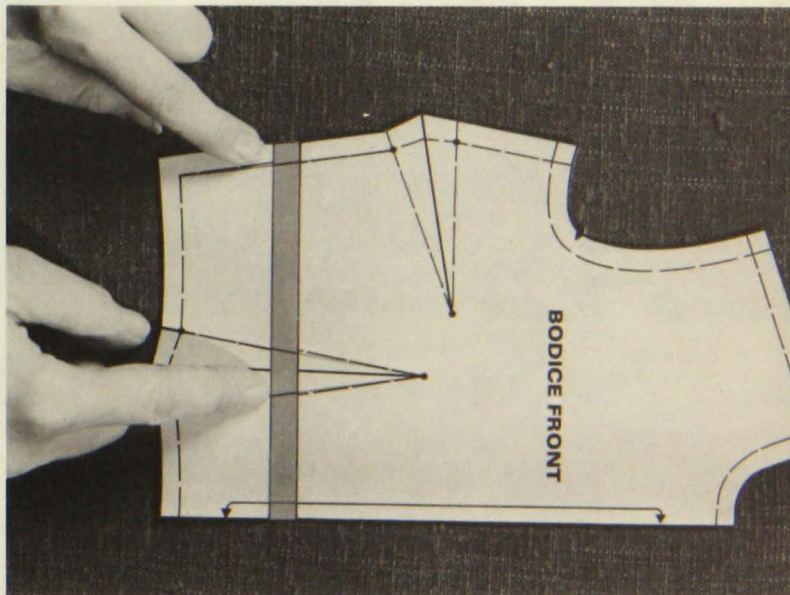
Short-Waisted Problems

To prevent a garment from being short-waisted, alter the pattern before cutting out a garment.

Draw a line across the pattern at right angles to the grainline between the underarm dart and the waistline. Cut the pattern apart on this line. On a piece of tissue paper draw two parallel lines. The distance between the lines is the amount you need to add. Draw a line at right angles to these near one end.

Tape the upper part of the pattern to one of the lines, matching the pattern grainline with the vertical line. Tape the lower pattern piece to the second line, again matching grainline to the vertical line. Redraw waistline dart, stitching lines and pattern seamlines as described in Fig. 14.

16

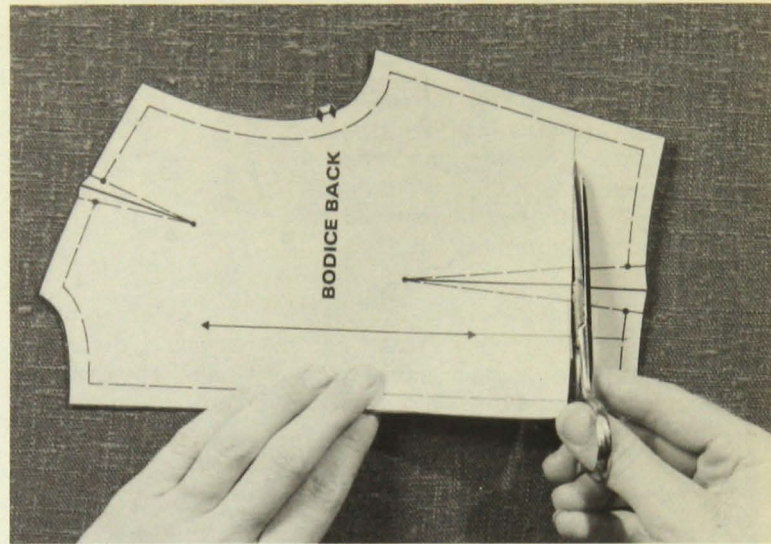


Adjusting Center Back, Front With a Waistline Seam

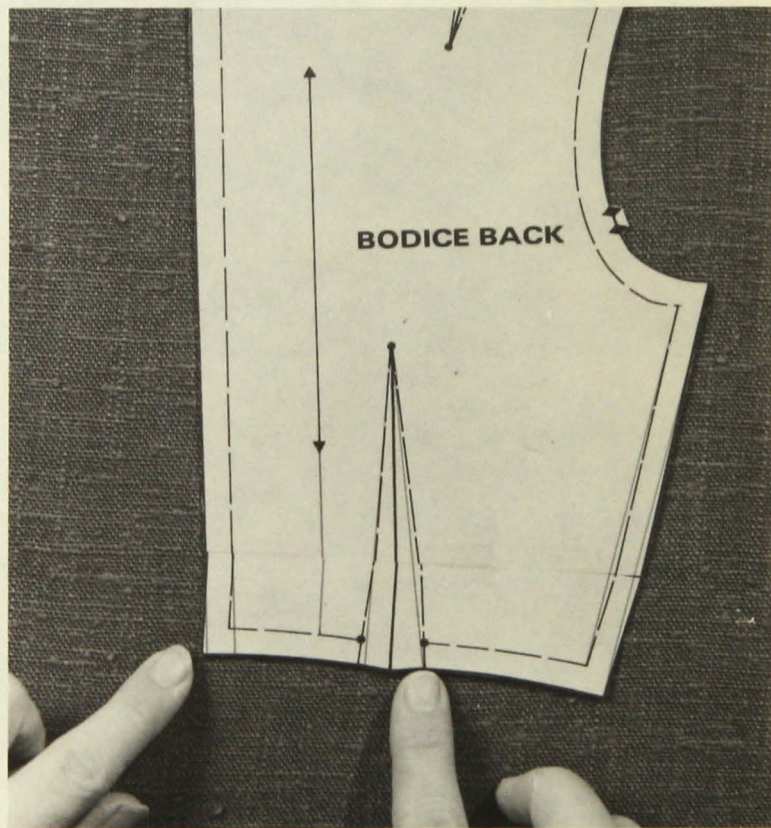
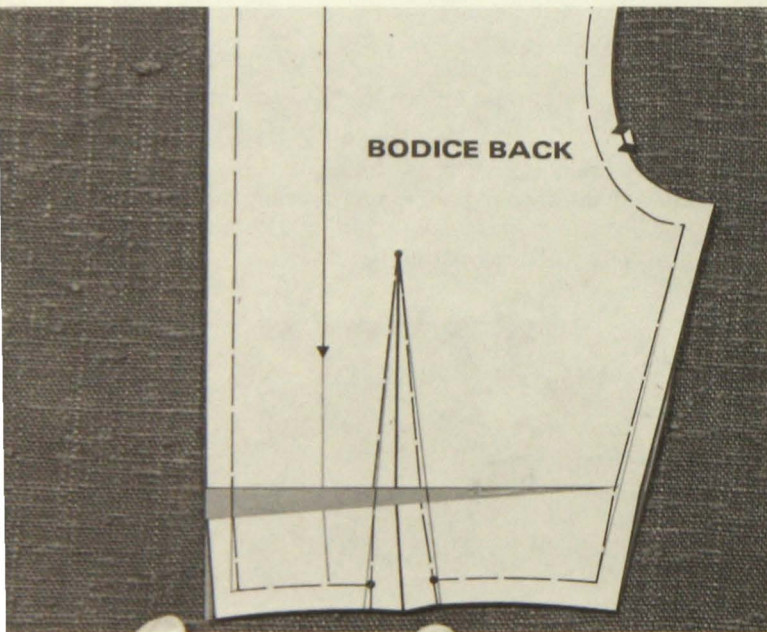
Sometimes patterns need to be lengthened or shortened just at center back or front but not at the side seam.

To either lengthen or shorten, draw a line across the pattern just above the waistline at right angles to the grainline. Cut the pattern on this line through center front or back just to the side seam. To keep the pattern flat, clip through the seam allowance to the side seamline, being careful not to cut the pattern apart.

To lengthen center front or back, place the slash over tissue paper. Tape upper part in place. Swing lower part down until the amount needed is added at the center front or back. Tape in place. Use a ruler to redraw the center line. Redraw the dart, making it larger at the waistline to remove the amount added at the center back or front. Redraw side seam to make it straight.



18



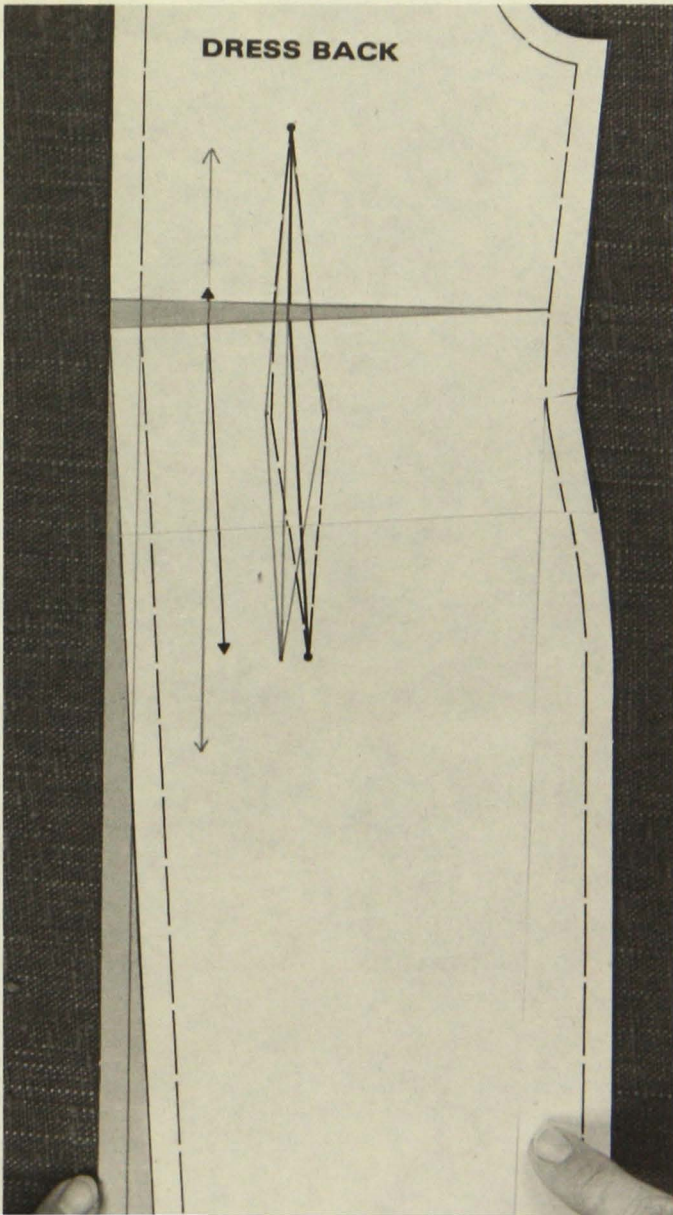
19

To shorten center front or back, overlap the pattern at that point, removing the extra length. Tape pattern together. Redraw center front or back line and side seam. Redraw the stitching line of the waistline dart, making it smaller at the waistline to add the amount removed at the center line.

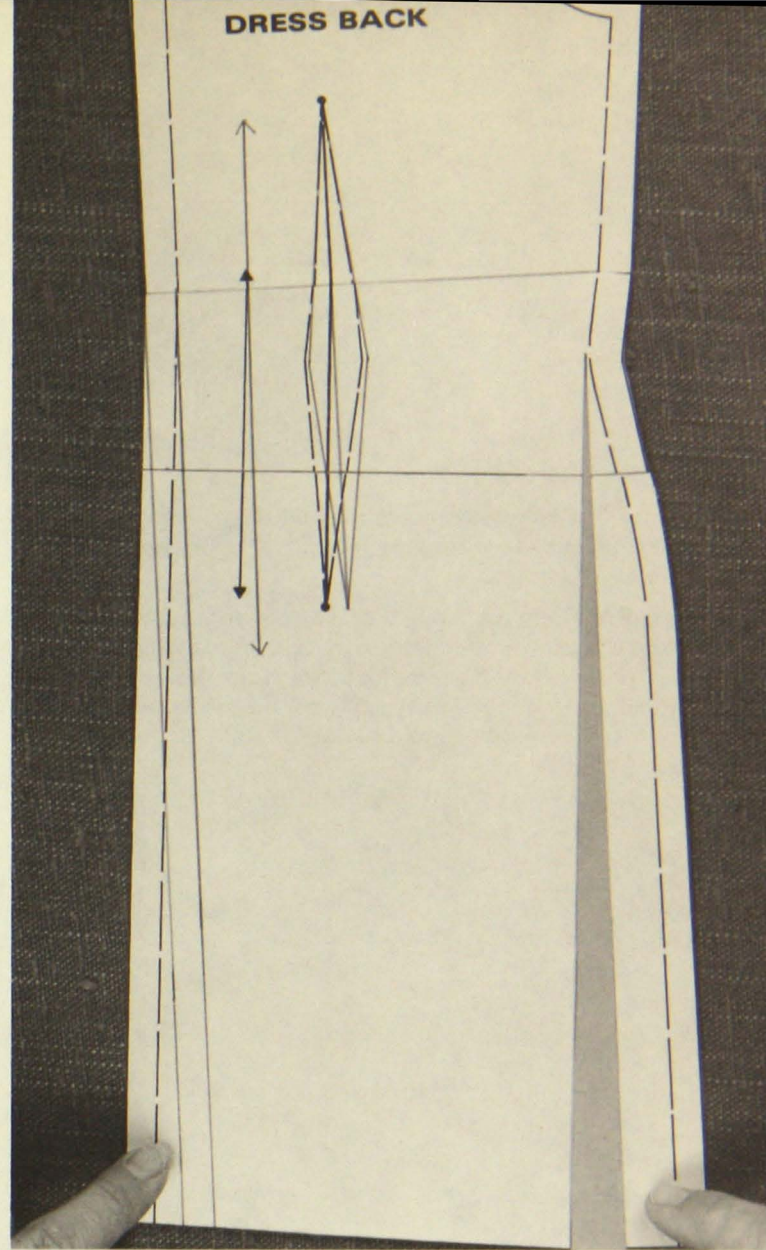
Adjusting Center Back, Front Without a Waistline Seam

A garment with no waistline seam can be lengthened the same as was shown in Figure 18. After altering the pattern, straighten the center back or front line by placing a yardstick on the center line of the bodice and drawing a straight line from there to the hem. Straighten the grainline and the dart by keeping lines straight with the upper bodice section. Remove the extra width from the skirt by drawing a line from the hemline to the waistline side seam. Cut and overlap at the hemline the amount that was added at the center line.

20

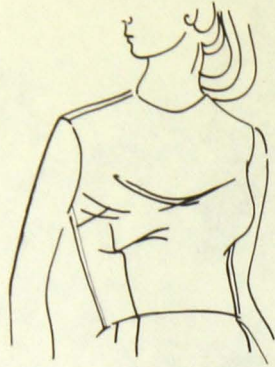


15



21

To shorten the pattern, overlap as shown in Figure 19. Place paper under the pattern center back or center front edge. Straighten the line by placing a yardstick on the upper bodice section and keeping the line straight to the hemline. Straighten the dart and grainline, keeping the lines straight with those in the upper bodice. To widen the skirt to its original width, slash from the hemline to the side seam at the waist. Spread at the hemline the amount removed from the center line.

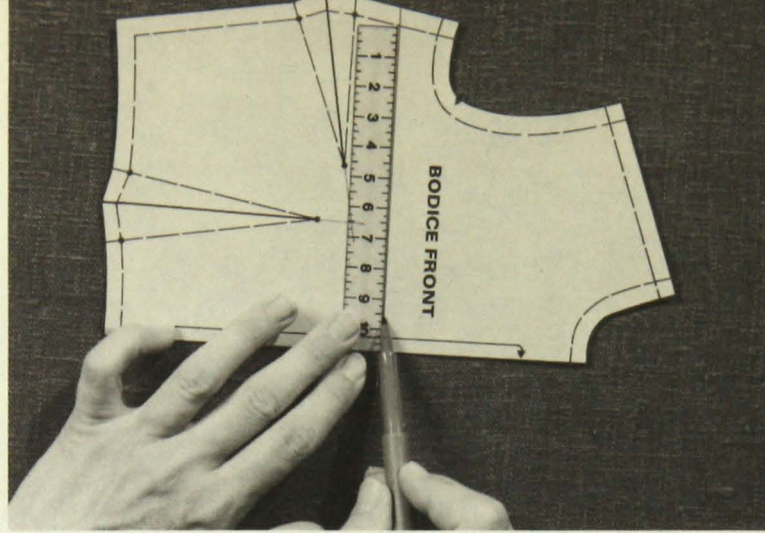
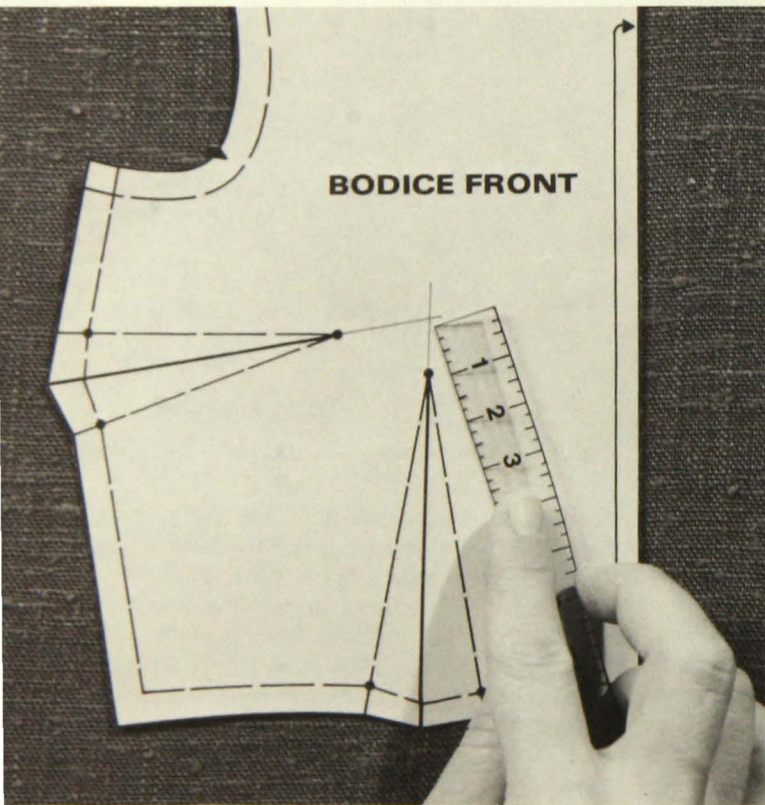


Bustline Darts Too High

Darts should always point to the fullest part of a curve in the body, not above or below. In the illustration the bust darts are pointing too high.

To check where darts point, draw a line through the centers of the waistline and underarm darts. Where they cross is the bust point of the pattern. Measure from the center of the shoulder seam to the bust point on the pattern and on you. The measurements should be the same.

22

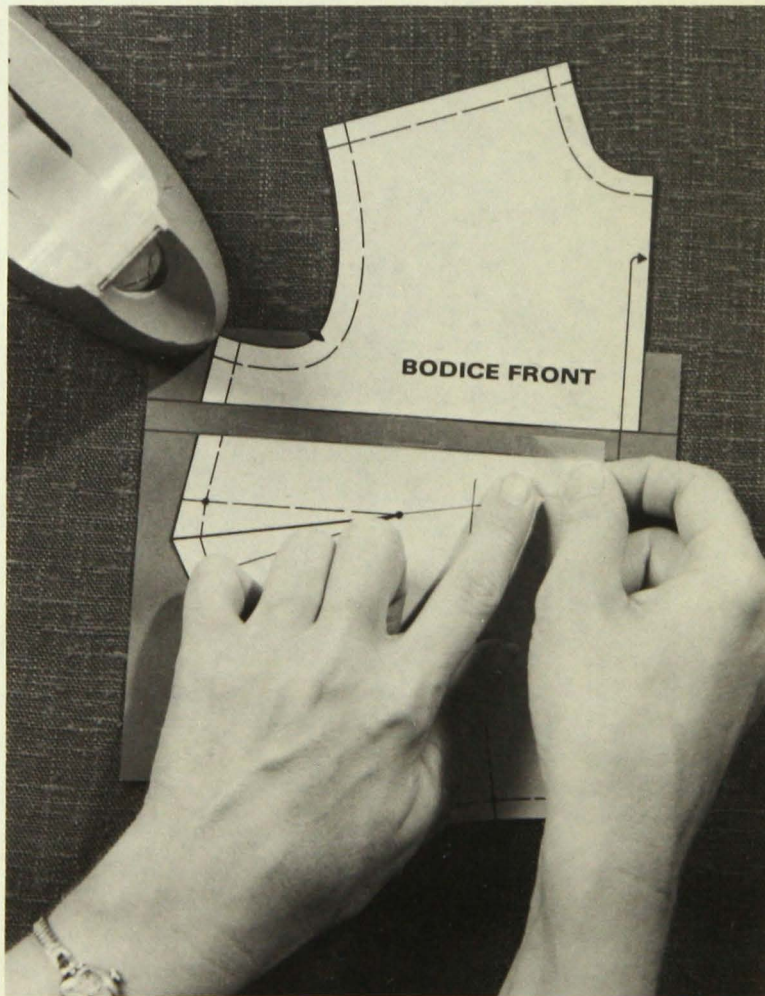


23

If the pattern is short between the shoulder and bust point, draw a line across the pattern between the underarm dart and the armscye which is at right angles to the grainline. Cut on this line.

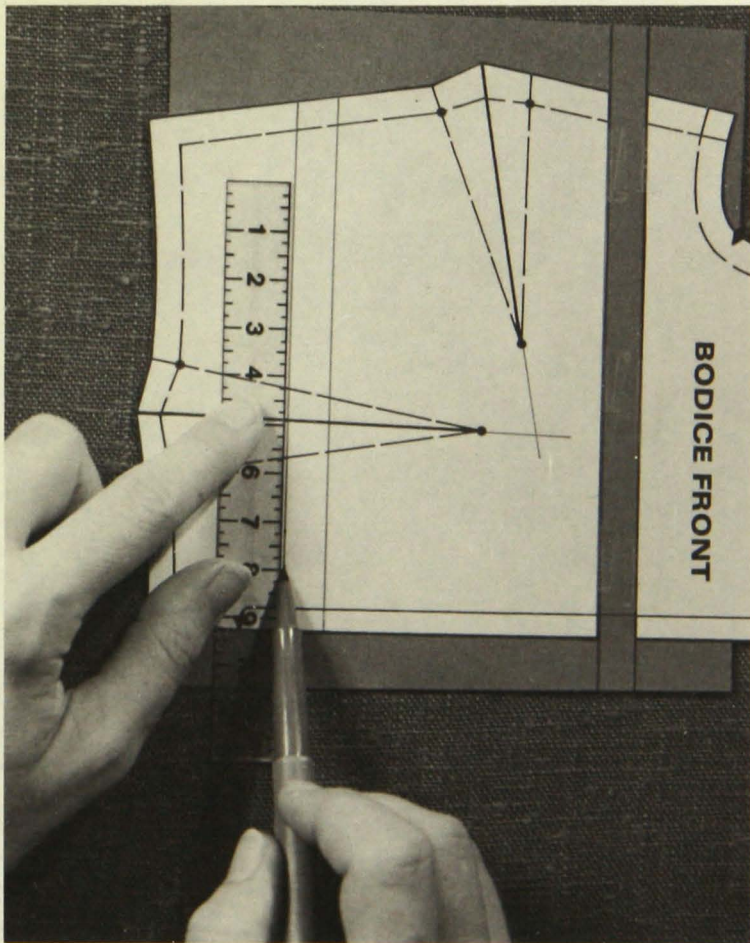
On a piece of tissue paper, draw two parallel lines. The distance between the lines should equal the amount the pattern needs to be lengthened. Tape the pattern to the lines being sure to line up pattern grainline.

24



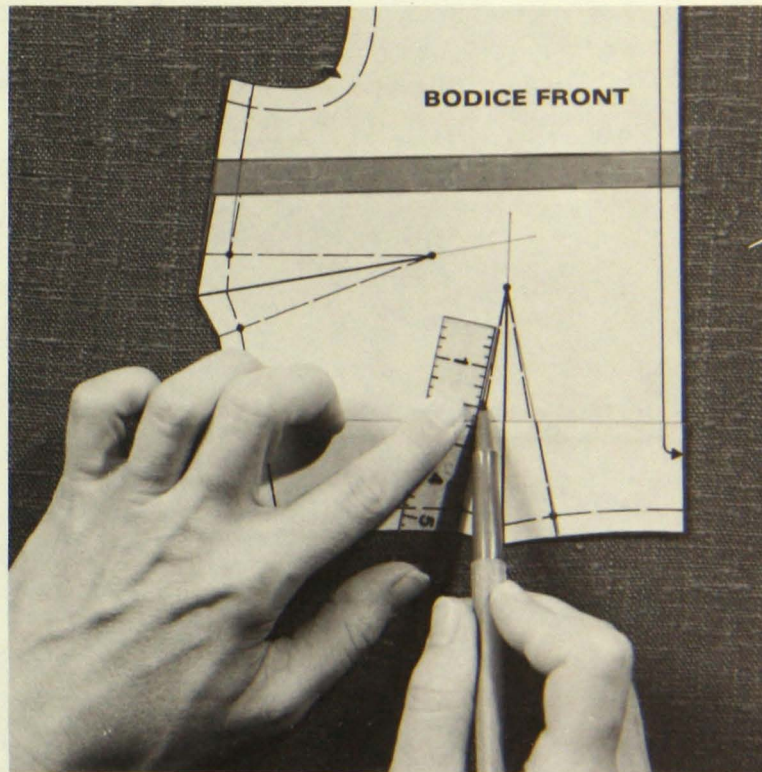
To return the waistline to its original position, draw two parallel lines between the bustline and the waistline. The distance between the lines is the same amount added above the bustline.

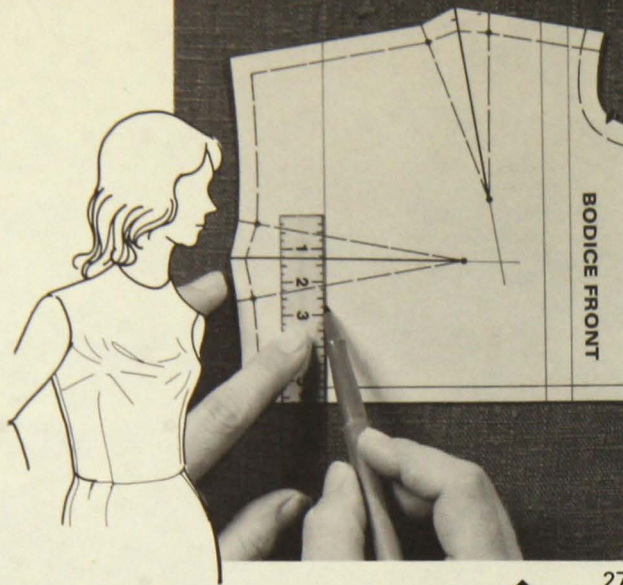
25



Fold on one line and tape the two lines together. Correct the underarm seam and cutting lines and waistline dart.

26





27

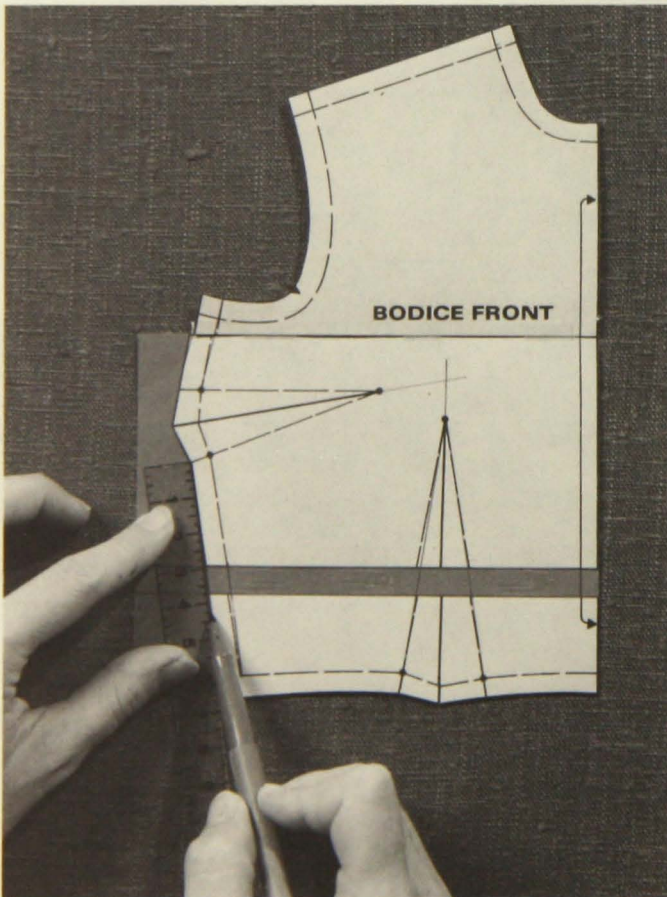
Bustline Darts Too Low

If the pattern is long between the bustline and the shoulder, you will need to shorten it above the bustline dart and lengthen it below the bustline dart.

Draw one line at right angles to the grainline between the underarm dart and the waistline. Draw two parallel lines between the underarm dart and the armscye. The distance between the two lines is the amount the pattern needs to be shortened.

Fold a pleat using the two parallel lines. Cut on the line under the bustline and spread the pattern the amount you shortened it. Redraw the dart seam and cutting lines.

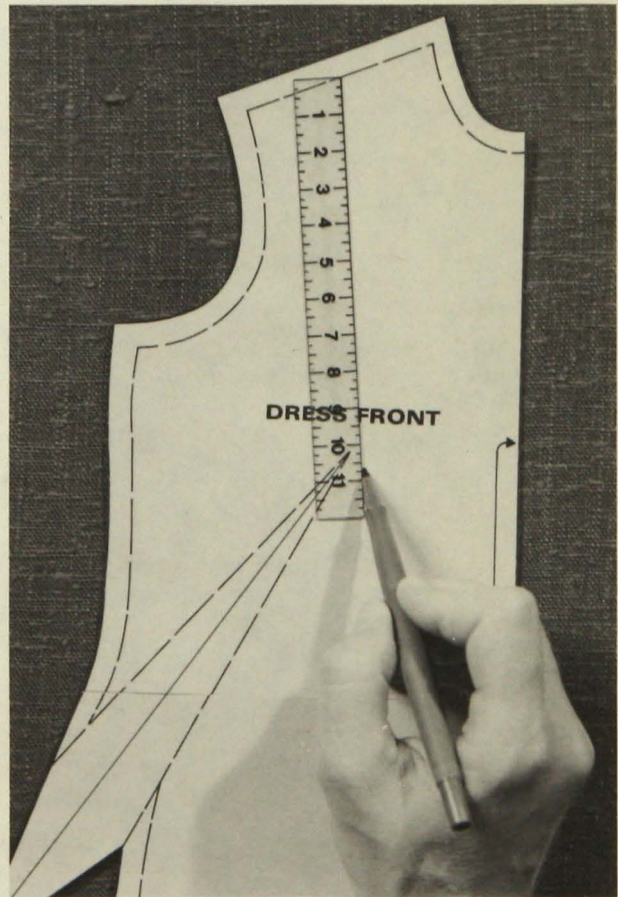
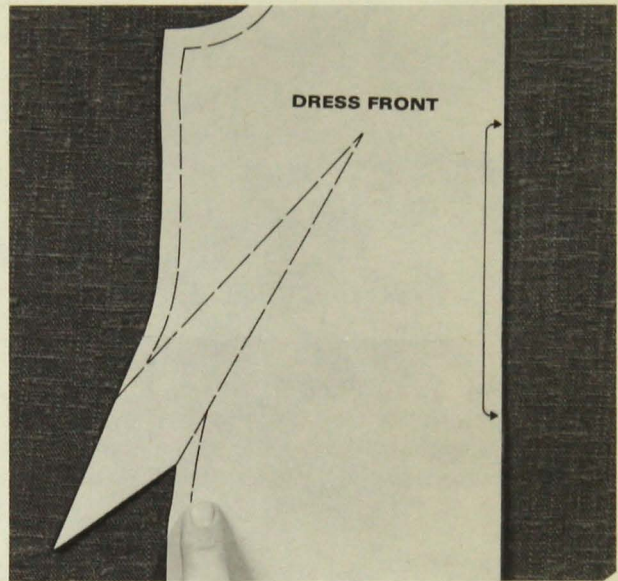
28



Changing Diagonal Dart Direction

Changing the direction of a diagonal dart is a relatively easy process.

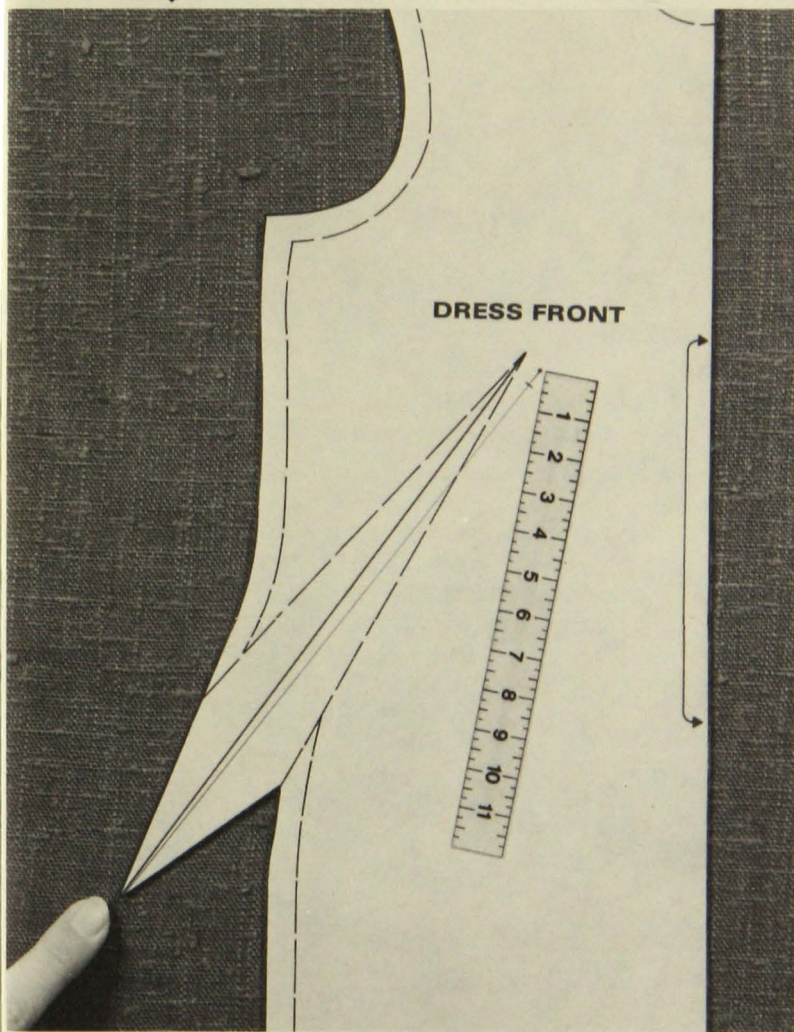
29



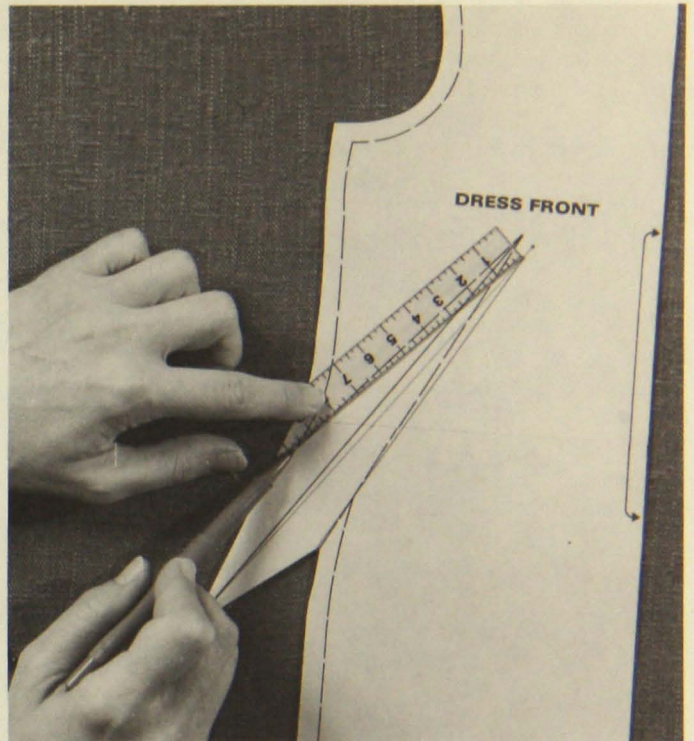
30

Mark the position of the fullest part of your bust on the pattern by measuring your shoulder to the tip of the bust and measuring the pattern in the same place.

Draw a line from the new bust point to the side seam end of the dart fold line. Measure $\frac{1}{2}$ in. (1.25 cm.) from the bust point along that line. This will be the end of the dart.



31

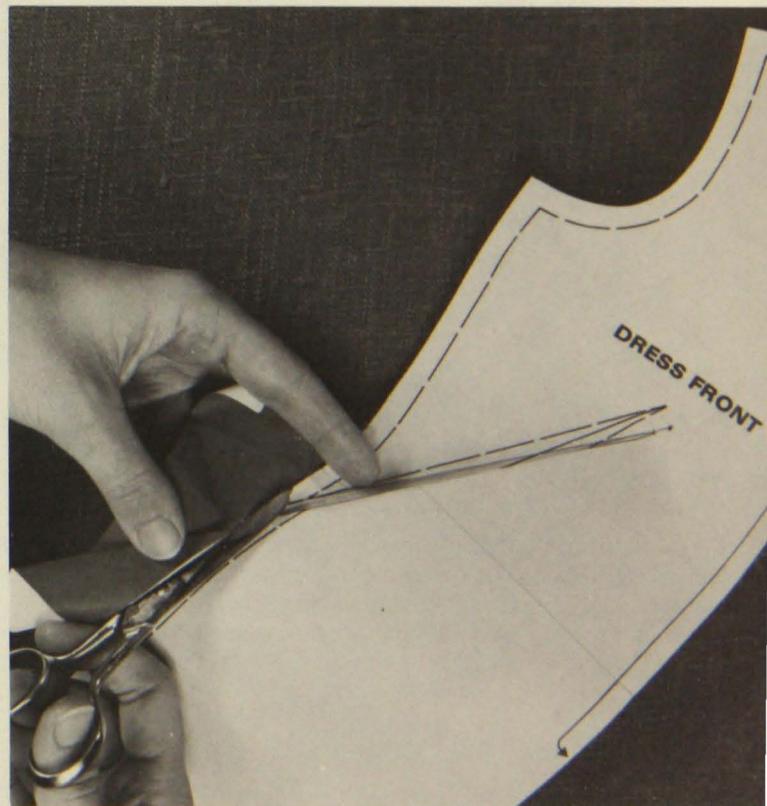


32

Redraw the dart connecting the original side seam end of the dart and the new dart point.

Tape tissue paper to the edge of the pattern. Fold the dart as if it had been stitched and pressed. Cut a new side cutting line keeping edges even.

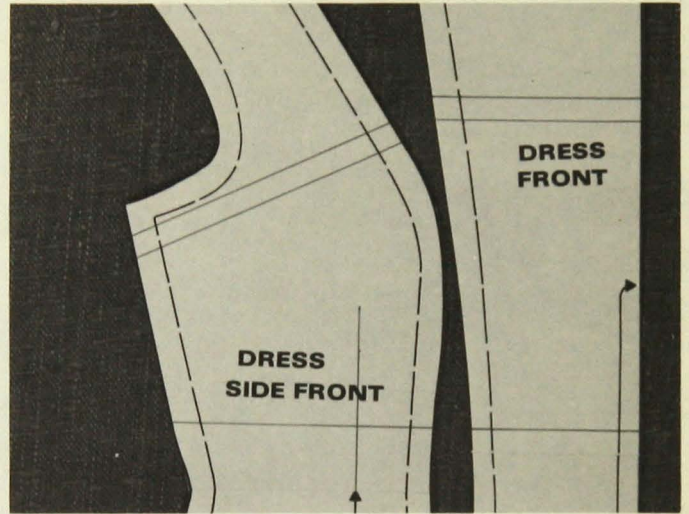
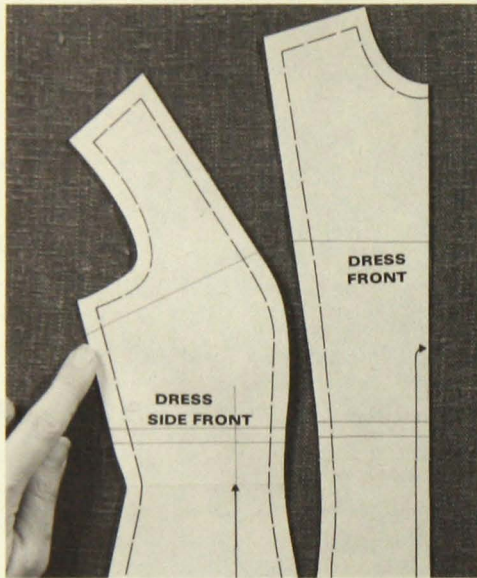
33



Changing Princess Line Bust Fullness

To lower the bustline of a princess style pattern, draw a line across the pattern from just under the armhole at the side seam through the side front seam over the bustline curve. Also, draw a line across the front pattern section in the same location. Draw two parallel lines across both pattern pieces below the bustline to remove length.

34

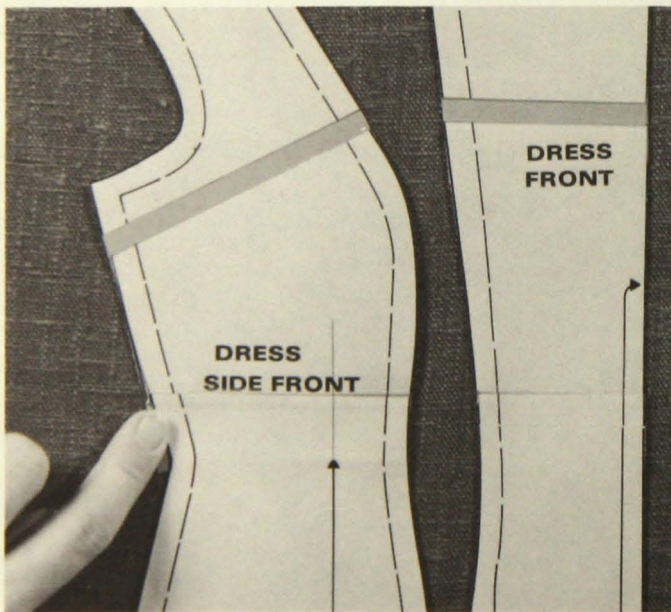


36

To raise the bustline, draw two lines above the bust in the pattern pieces and one between the bust and waist.

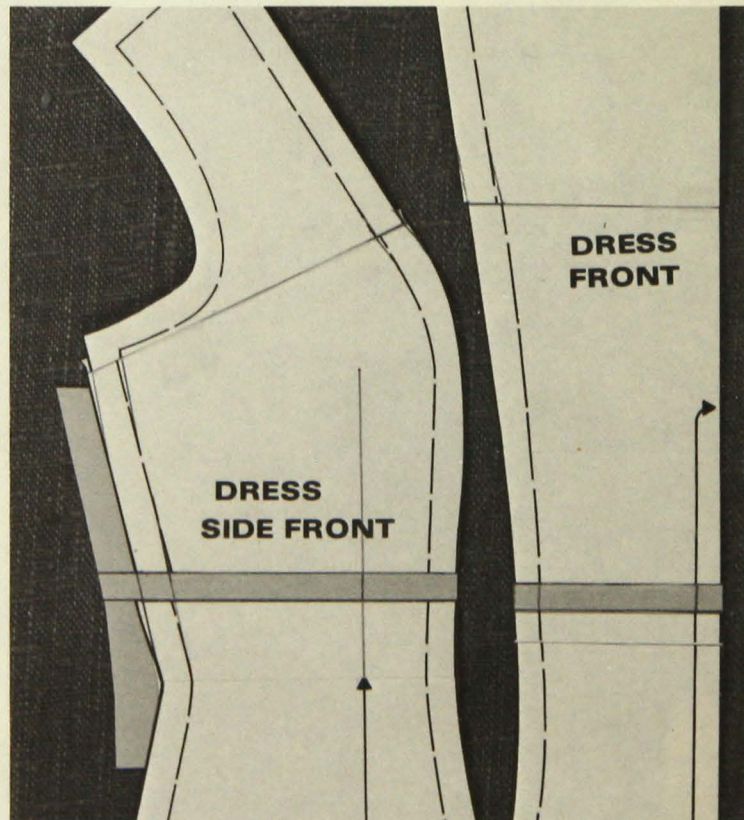
Fold a pleat in the pattern above the bustline. Cut the pattern and lengthen it below the bustline to keep the waistline where it belongs. Redraw seamlines and cutting lines.

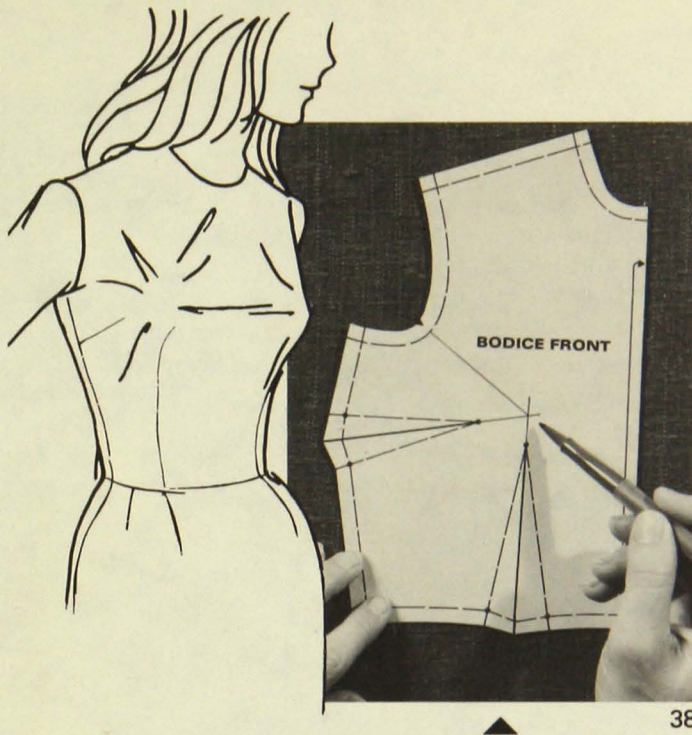
35



Cut the pattern on the line above the bustline. Tape the pattern pieces to tissue paper, lining up the pattern edges and lowering the full part of the pattern to the full part of your bust. Fold a pleat in the pattern below the bustline to keep the waistline in its correct position. Redraw seamlines and cutting lines.

37





38

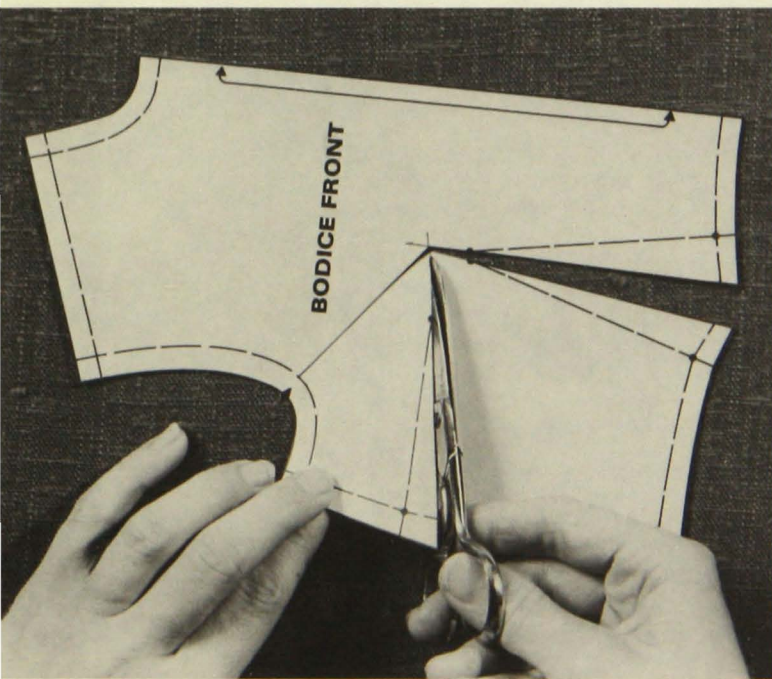
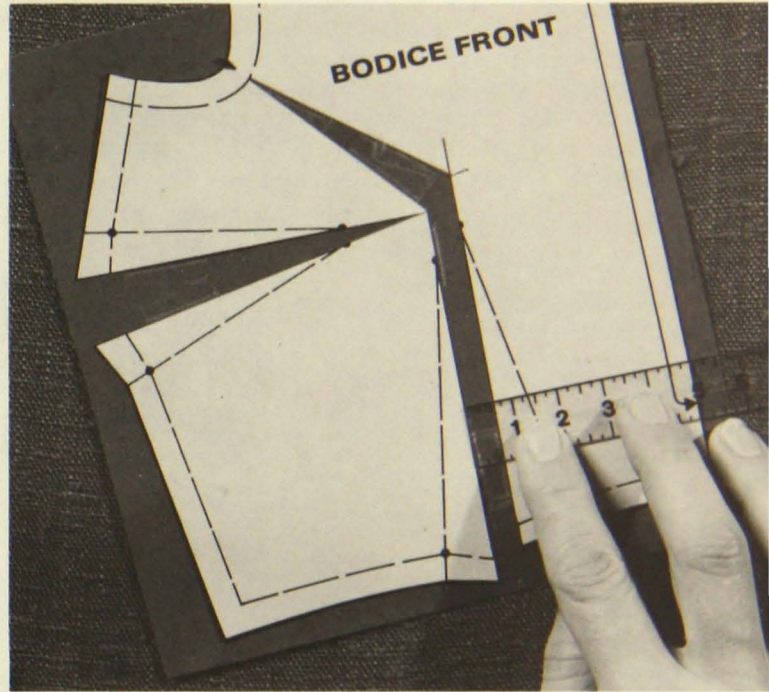
Bustline Too Tight

If you wear a bra cup size larger than B, the patterns probably do not allow room for your bustline.

To alter a basic bodice, first find the bust point by lengthening the center line of both the waistline and underarm darts. Where the two lines cross is the bust point. Draw a line from the bust point to the armscye seam at the underarm notch.

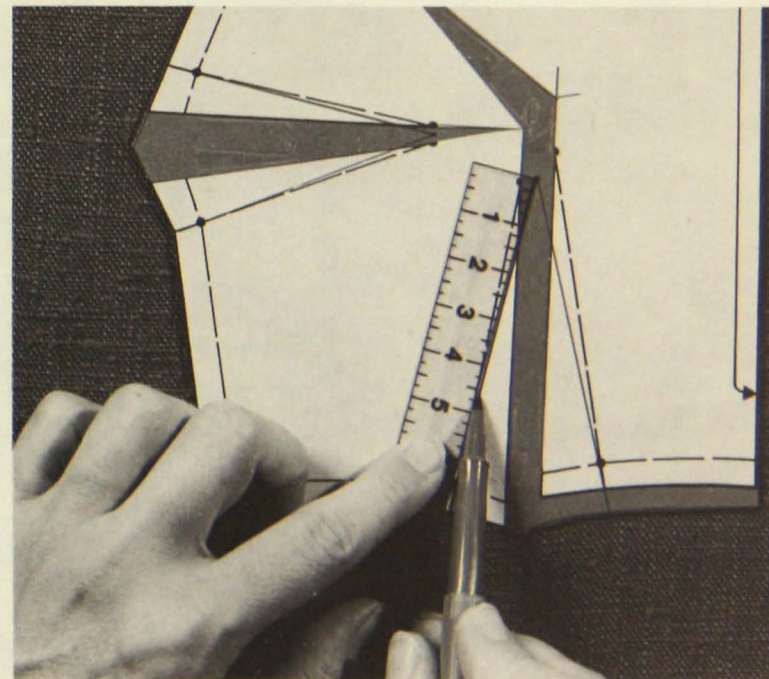
Place tissue paper under the pattern. Tape down the front section of the pattern. Spread the pattern apart at the bustline adding one half the total amount needed at the bust point. Tape in place. Line up the edges of the vertical cut so they are parallel. This will make the slashes to the armscye and through the underarm dart spread. To make the pattern lie flat, clip the armscye seam allowance to the seamline. Tape in place.

40



39

Cut through the waist seamline to the bust point and over to the armscye seam along the drawn lines. Cut through the underarm dart just to the bust point. Be careful not to cut the pattern into two pieces.



41

Redraw the darts by locating the tip of each dart in the center of the slash. Redraw the waistline seam lengthening the front section to match the side to give added length needed to go over a larger bustline.

Bustline Too Loose

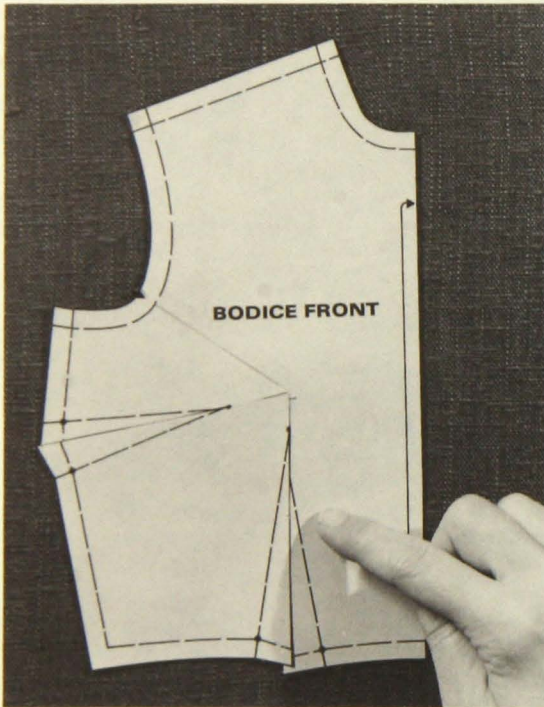
If your bra cup size is smaller than B, you may find folds of extra fabric and a droopy look in the bustline area of garments.

Cut the pattern apart as shown in Figures 38 and 39. Then lap the side section of the pattern over the front section at the bust point, removing one half the excess from each side of the garment. Lap the vertical slash the same amount from the bust point to the waistline. This will cause the other

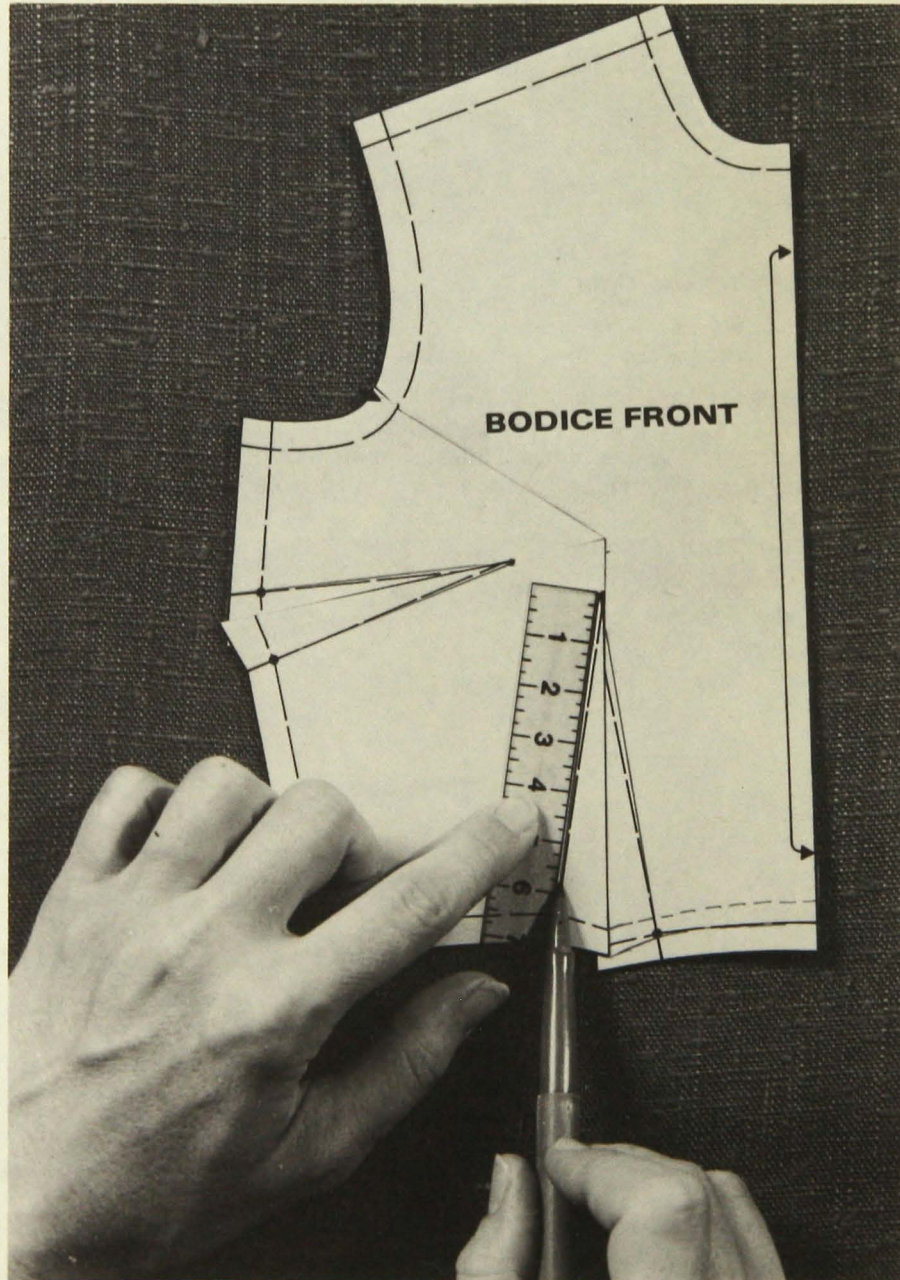
slashes to lap over also. To make the pattern lie flat, cut through the armhole seam allowance to the seam line. Tape in place.

Draw new darts by locating the points at the center of the lapped area and using the same seamline ends. Shorten the front section of the pattern to match the length of the side piece.

42

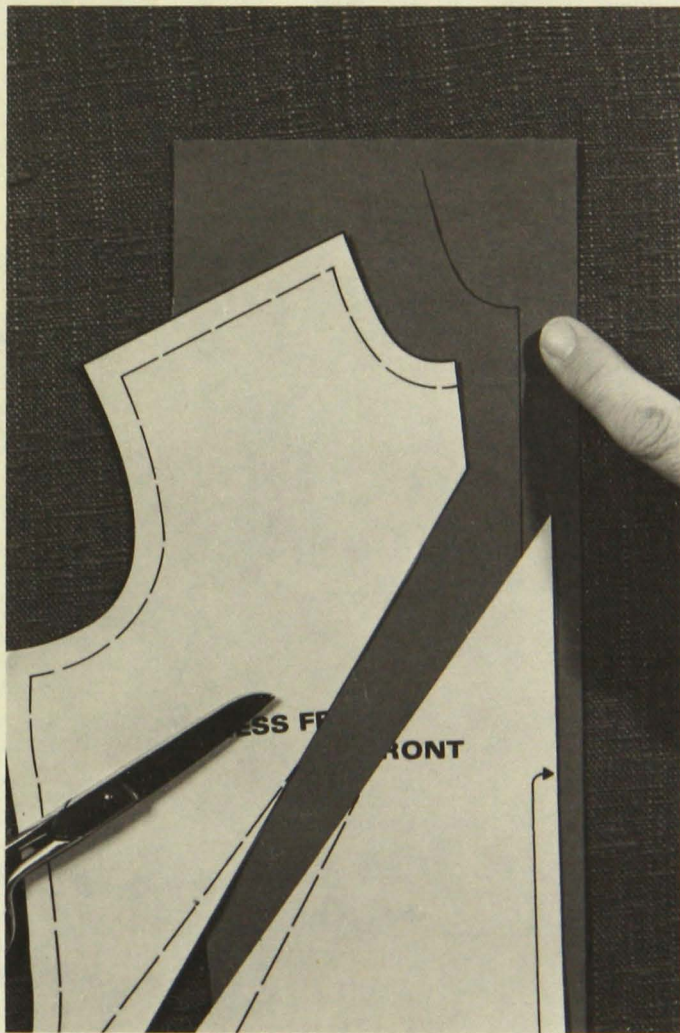


43

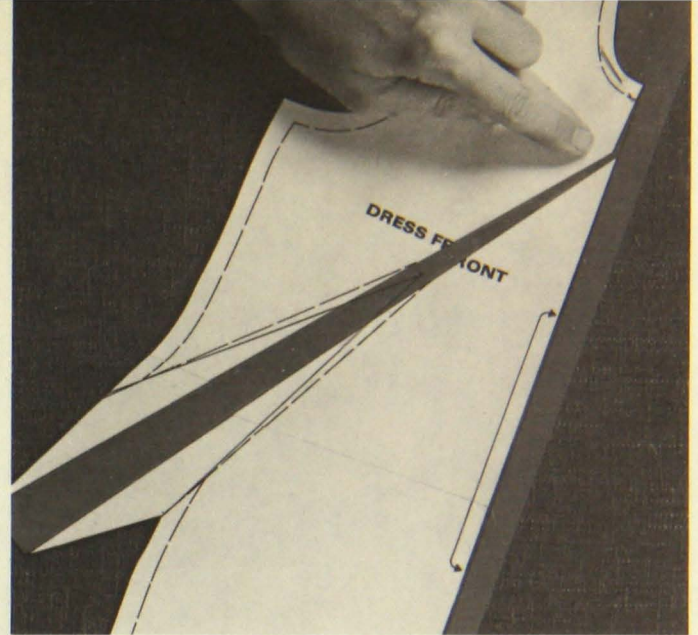


Dresses With Diagonal Darts

To alter this type of dress, begin by tracing the center front line and neckline on a piece of tissue paper. Draw a line extending the dart to center front. Cut the pattern apart on that line.

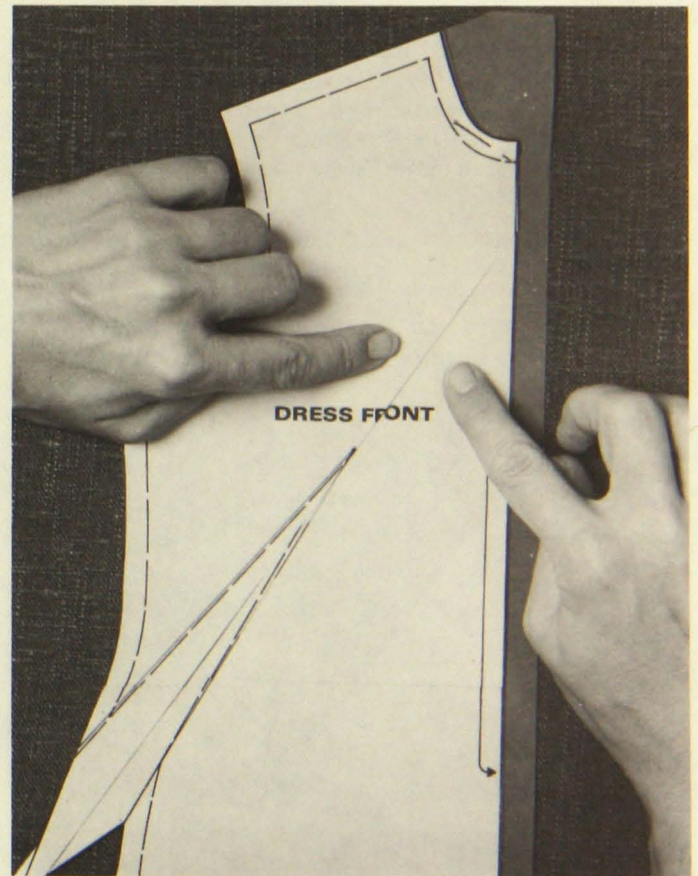


44



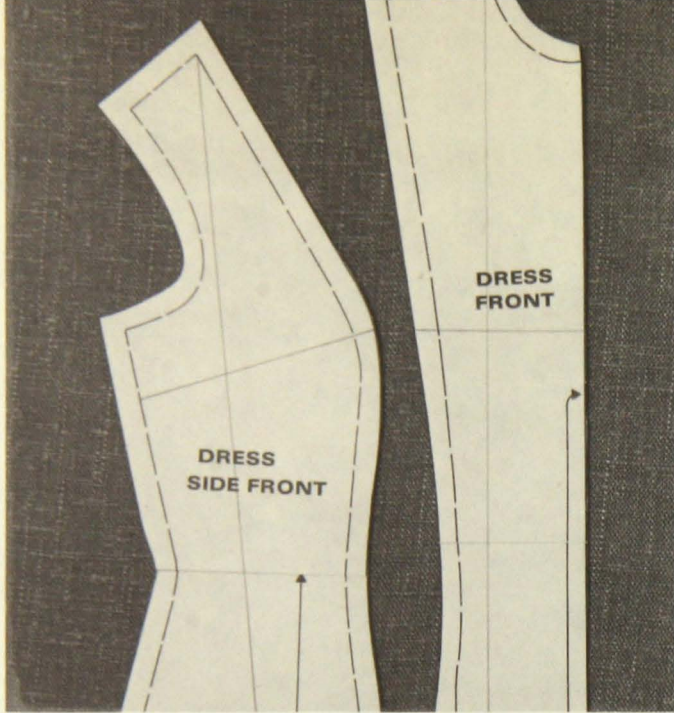
45

To make the bustline larger, place pattern pieces over traced section of the pattern. Tape the lower section in place. Pin front neck edge to line. Then pivot the upper pattern piece until the pattern is spread apart one half the total amount needed at the tip of the dart. Tape in place. Redraw the center front and the dart, stitching lines as shown.



46

To make the bustline smaller, place pattern pieces over tracing of pattern. Tape the lower section in place. Pin front neck edge to the line. Pivot upper pattern piece until the pattern is lapped one half the amount to be removed at the tip of the dart. Tape in place. Redraw the center front and the dart stitching lines as shown.



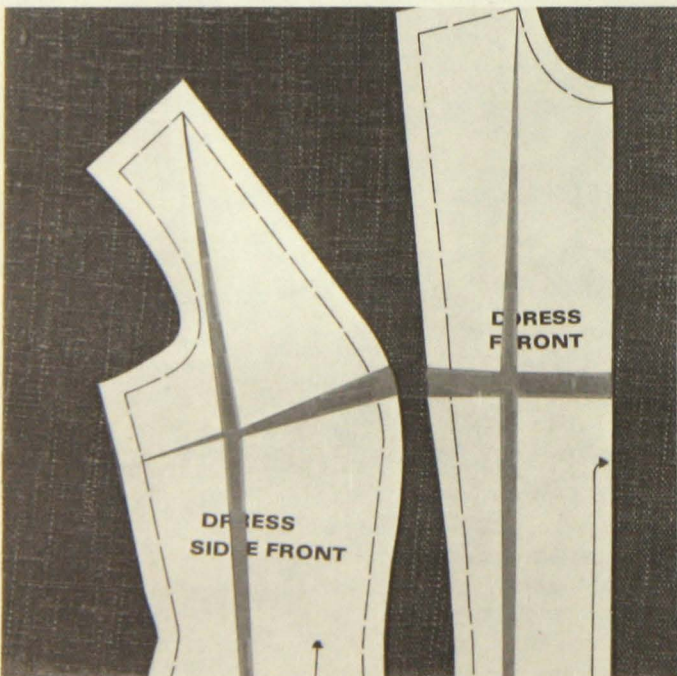
47

Altering Princess Style Dresses

On the side front panel of a princess style dress, draw a line from the fullest part of the bustline curve to the side seam about two inches below the armhole seam. Draw a second line from the intersection of the shoulder seam and side front seam to the hemline. On the front panel draw a horizontal line at right angles to the grainline from the fullest part of the bustline to the center front. Draw another line parallel to the grainline from the neck and shoulder seam intersection to the hemline. Cut the pattern pieces on these lines only to the shoulder seam and side seam.

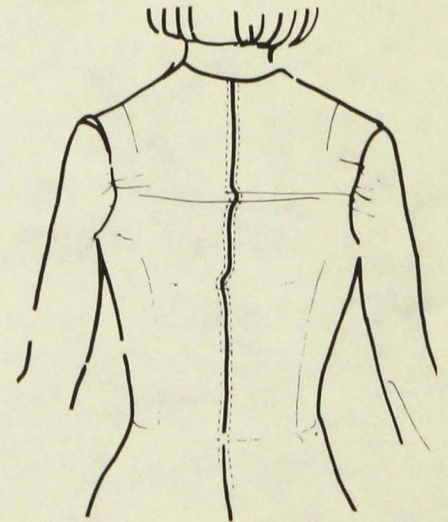
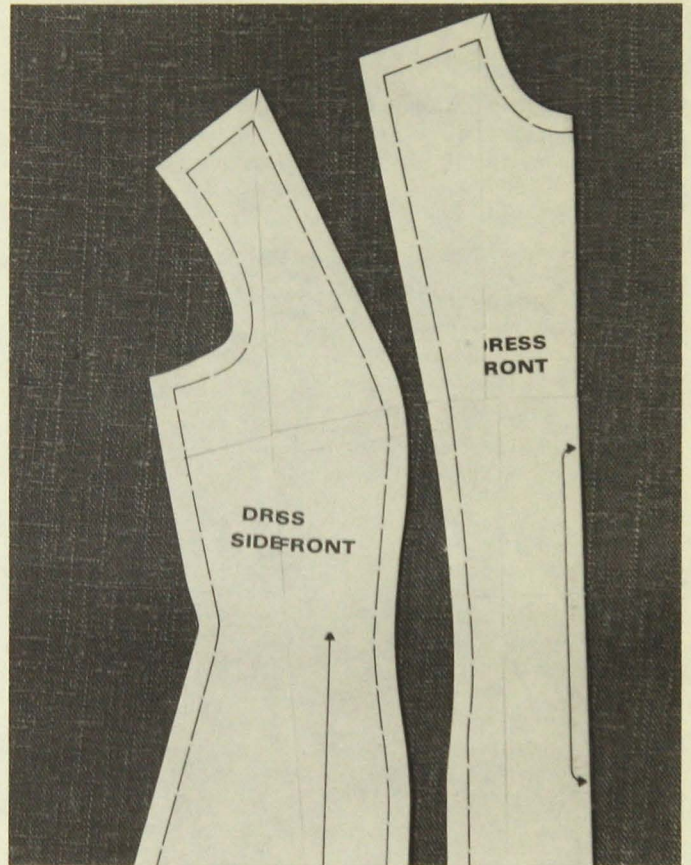
To make this pattern larger, divide the amount you need to add by four. Add one fourth to each section. To determine the length to add to the front section and front edge of the side panel, measure yourself and the side panel from the shoulder to just under the bust. Make these measurements equal.

48



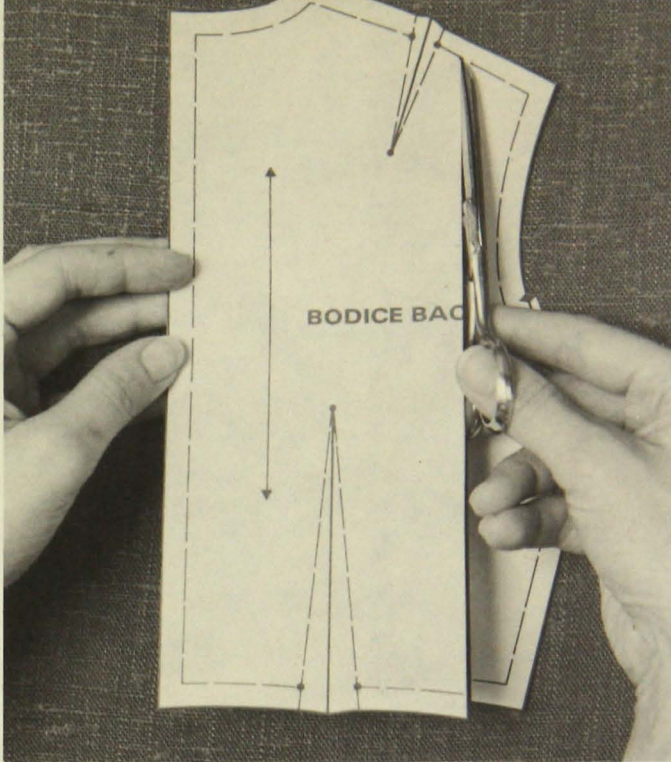
To make this pattern smaller, divide the amount you need to remove by four. Overlap the pattern pieces removing one fourth of the excess at the bustline from each pattern piece. Overlap the horizontal edges to remove excess length. Decide how much to overlap as described in Figure 48.

49



Bodice Back Too Narrow

Do sleeve seams often tear out at the lower back? If so, you may have a wider back than the pattern allows for. Check the pattern alteration worksheet on page 5 to see how much you need to alter the back shoulder width.

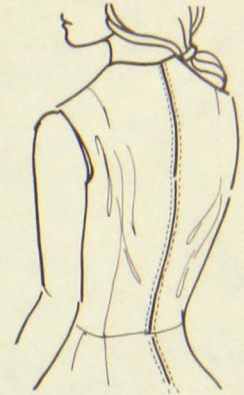
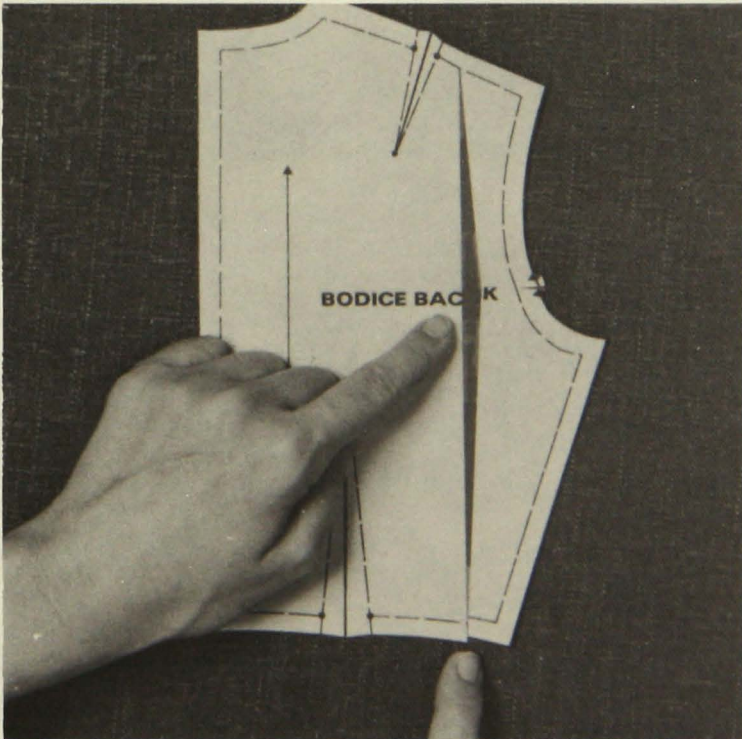


50

Along the shoulder seam measure in 2 inches (5 cm.) from the armhole seam. Draw a line from that point on the shoulder seam to the waistline parallel to the grainline. Cut on that line through the waistline seam to the shoulder seam. Also, cut horizontally from that slash to the armhole seam at the notch.

Tape the main part of the pattern to tissue paper. At the horizontal slash, spread the vertical slash one-half the amount you need to add (find this amount on the pattern alteration worksheet on page 5). Tape the top section in place. Swing the pattern back together at the waistline, letting the pattern overlap at the horizontal slash. Redraw the waistline seam.

51

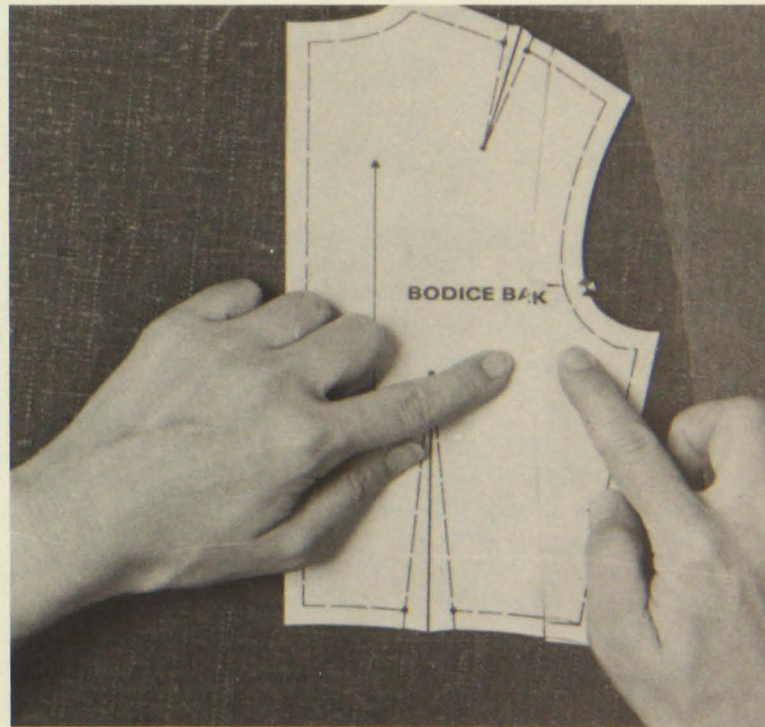


Bodice Back Too Wide

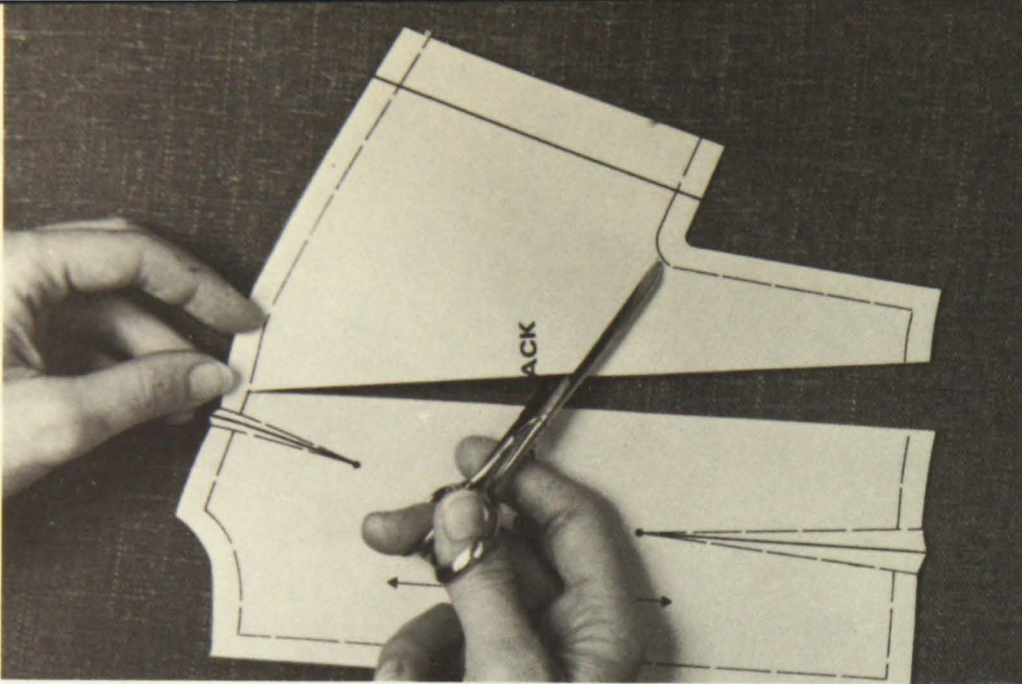
If you always seem to have extra fabric in the back of the bodice, you may be narrow through the back. To alter for this, cut the pattern as described in Figure 50.

At the horizontal slash, overlap the vertical slash one-half the amount you need to remove (find this amount on the pattern alteration worksheet on page 5). Tape the top section in place. Swing the pattern back out to the original waistline. Tape in place. Redraw the waistline seam.

52



To alter the width of the back on other styles of garments, the alteration must be done to avoid changing the size of the neckline or shoulder seam unless these also need altering. The following suggestions will help you alter these patterns without changing the pattern design.



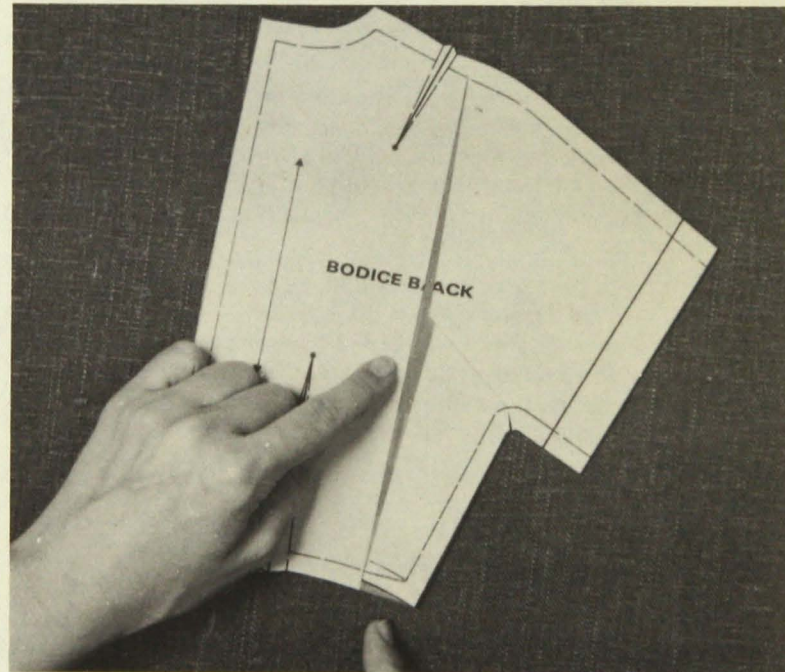
53

Kimono Sleeve

Measure 3 inches (7.5 cm.) from the neckline and draw a line parallel with the grainline to the waistline. In the lower half of the kimono sleeve, draw a diagonal line from a point on the first cut to the underarm curve. Cut on these lines, being careful not to cut through the shoulder seam or the underarm seam.

To enlarge the back, spread the vertical slash at the diagonal slash one-half the amount to be added and tape to the tissue paper. Swing the pattern back together at the waistline and redraw the waist seamline. ▶

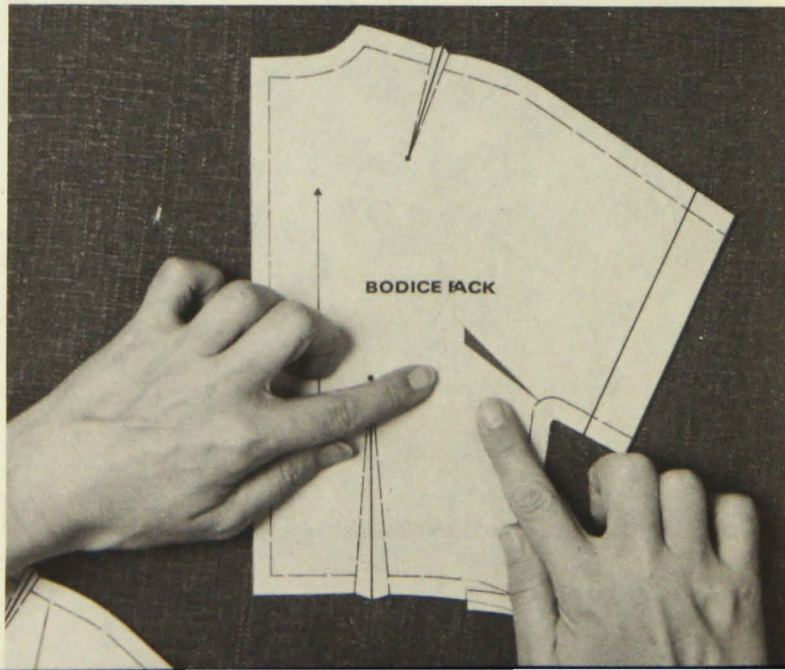
To make the back smaller, overlap the vertical slash at the diagonal slash one-half the amount to be removed. Tape together. Swing the pattern piece out at the waistline to the original size. Redraw the waistline seam. ▶

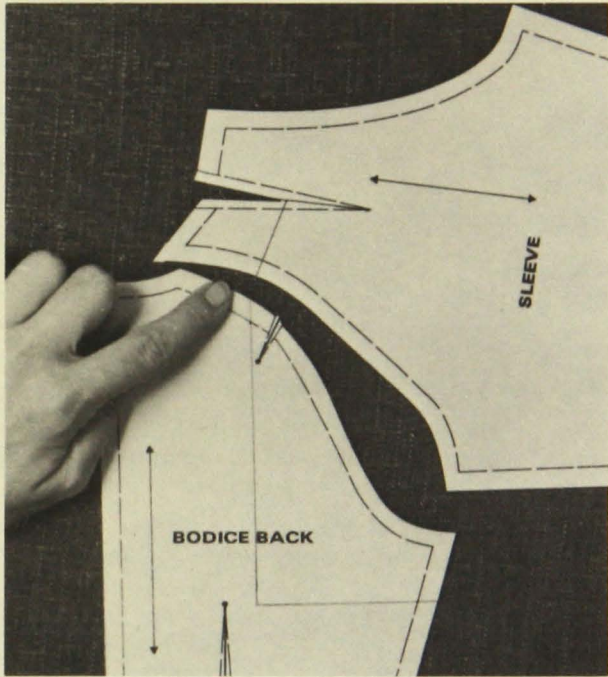


54

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26

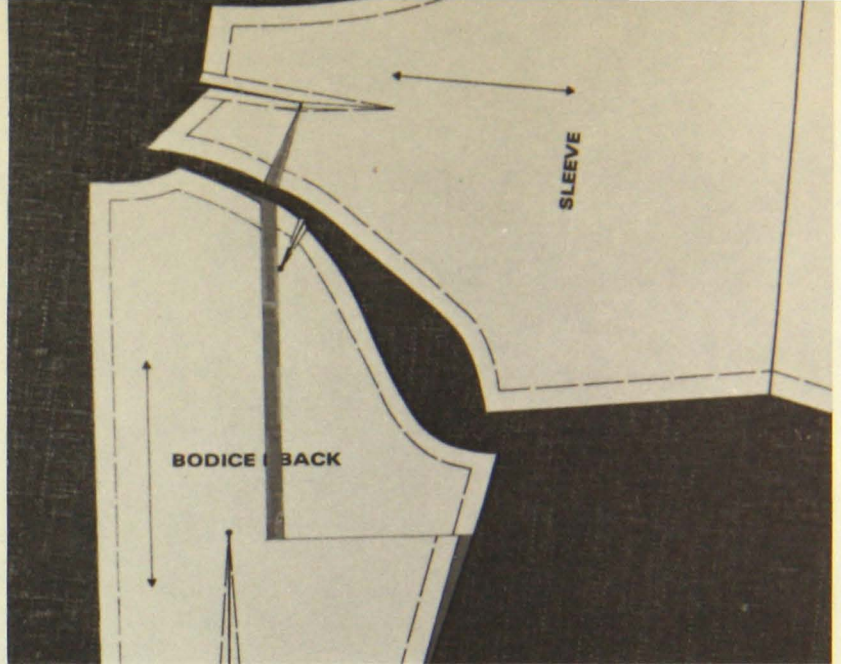




56

Raglan Sleeve

To change the back of a garment with a raglan sleeve, both the sleeve and the bodice back must be altered. On the sleeve pattern draw line from the center of the shoulder dart at right angles to the sleeve back seam. From a matching point on the bodice back, draw a line parallel to the grainline to a point 2 inches (5 cm.) below the armhole. Draw another line horizontally to the underarm seam 2 inches (5 cm.) below the armhole. Cut the bodice back into two parts. Cut the sleeve through the back seam to the center dart line.

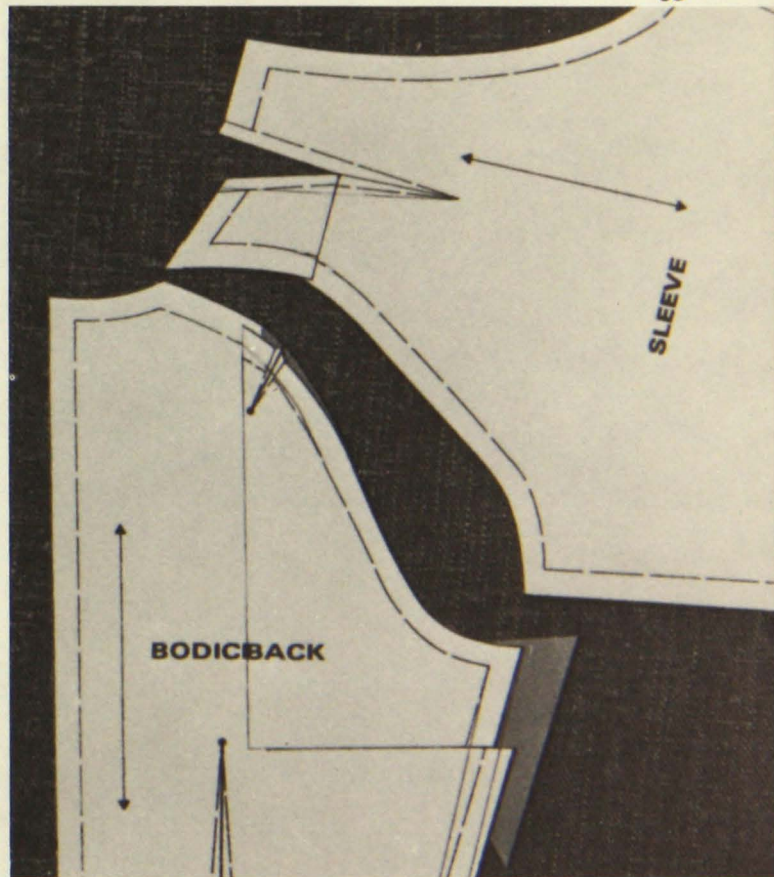


57

To make the back larger, tape the back pattern to tissue paper. Add one-half the amount needed along the vertical slash. Redraw the side seam. Spread the back seamline of the sleeve adding the amount added to the back. Redraw the sleeve seam and dart.

To make the back smaller, overlap the back, removing one-half the extra along the vertical slash. Tape together and redraw the side seam and dart. Overlap the back seamline of the sleeve, removing the amount removed from the back. Redraw the sleeve seam and dart.

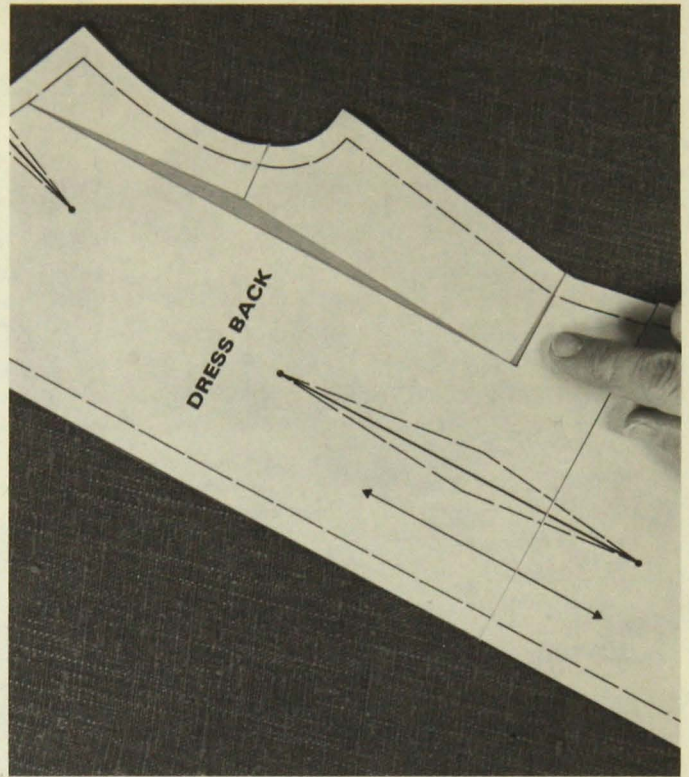
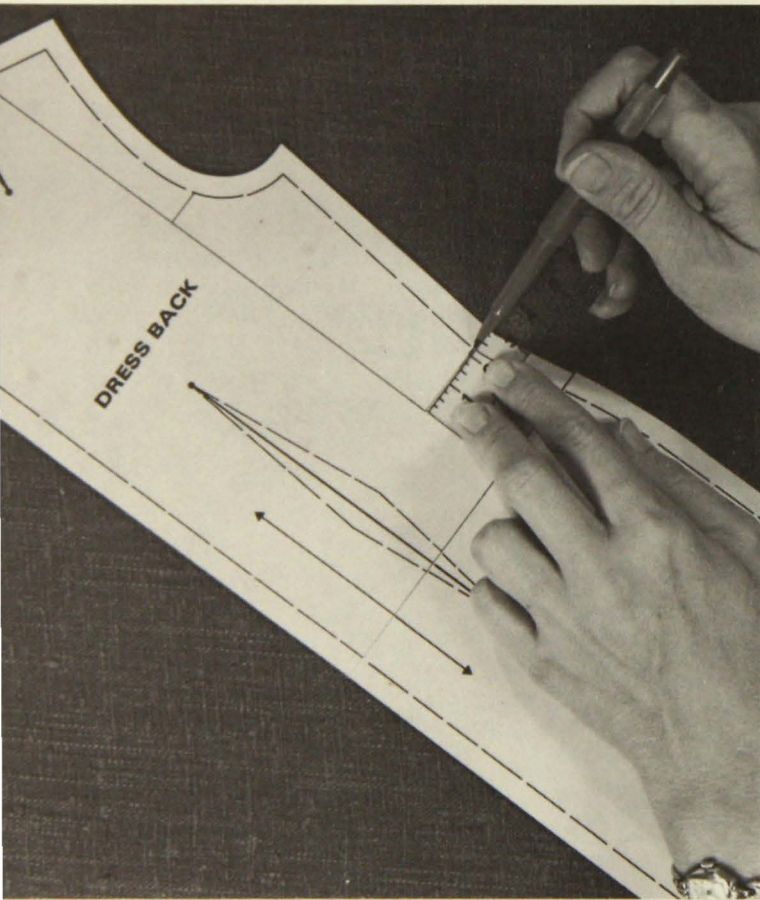
58



No Waistline Seam

If there is no waistline seam, draw the lines on the pattern as described in Figure 50. Draw a line from the long vertical line through the side seam at the waistline.

59

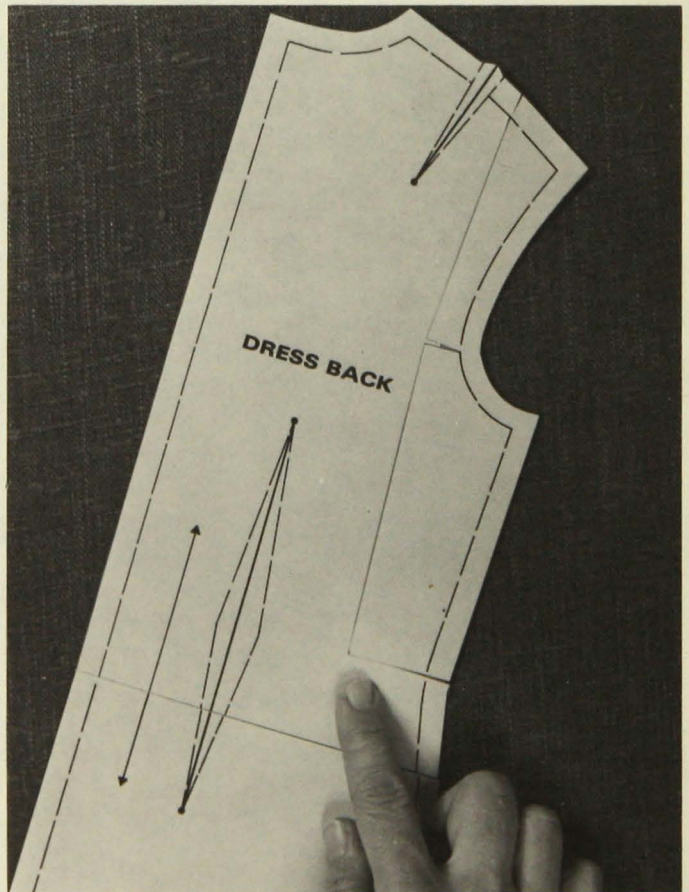


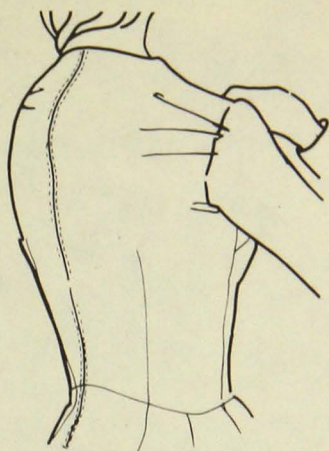
60

To make the back bigger, spread the back as described in Figure 51. Redraw the side seam at the waistline.

To make the back smaller, overlap the back as described in Figure 52. Redraw the side seam at the waistline.

61





Upper Bodice Back Too Short

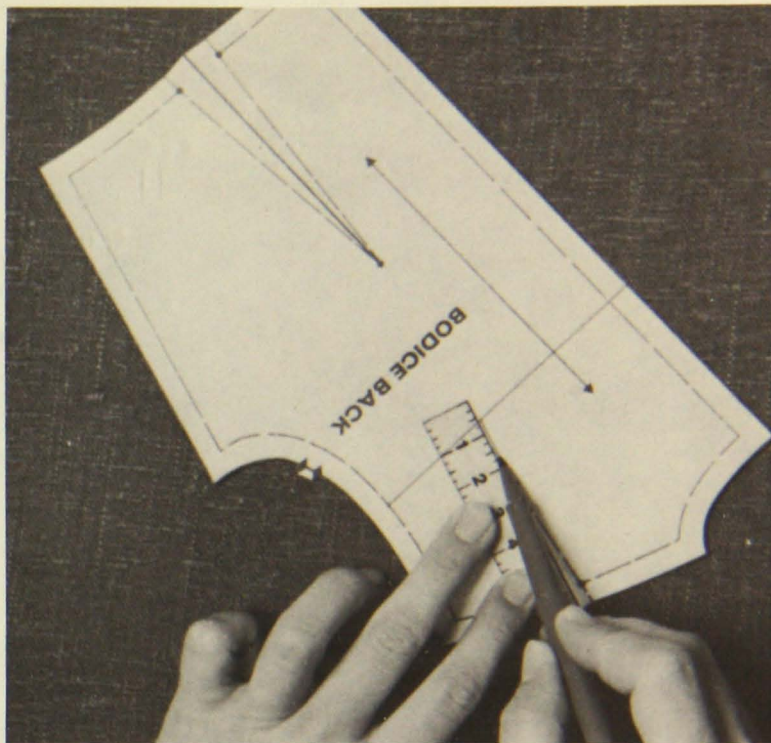
Do your clothes always seem to have wrinkles from the armhole to the center back? Is the grainline pulled up at center back in your upper back area? Do jackets and coats always seem shorter at center back? Your back may be more rounded in the upper back than the pattern allows for. The correction must be made in the upper back, not at the bottom of the pattern to keep the grainline correct.

To add length to the upper back, draw a line across the pattern at right angles to the grain line from the center back to the armhole seam. This should be about 5 inches (13 cm.) from the neckline at center back. Draw another line through the shoulder dart to the horizontal line. Cut on these lines from center back just to the armhole seam and from the shoulder just to the horizontal slash.

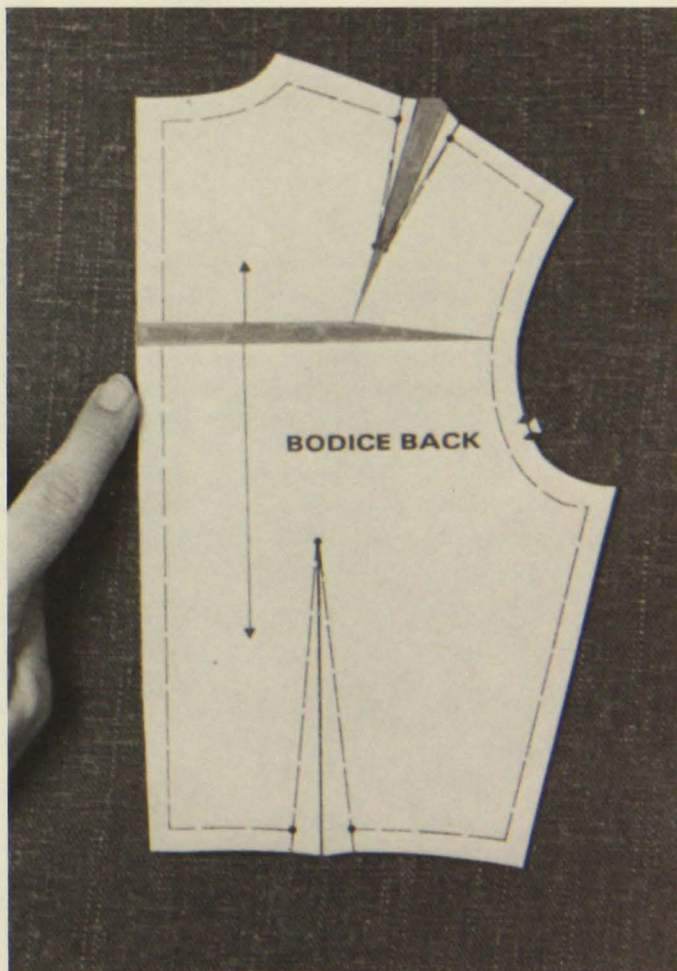
Place tissue paper under the pattern. Spread the pattern at center back enough to add the length you need. Tape to tissue paper keeping center back line straight. Spread the slash from the shoulder line as much as is needed to keep center back straight. Redraw the shoulder dart keeping end in center of slash and the same length as it was originally.

People who have a rounded back often are short in front between the bustline and neckline. This causes garments to have folds of extra fabric in the chest area. Before altering the pattern trace the part of the pattern above the bustline dart.

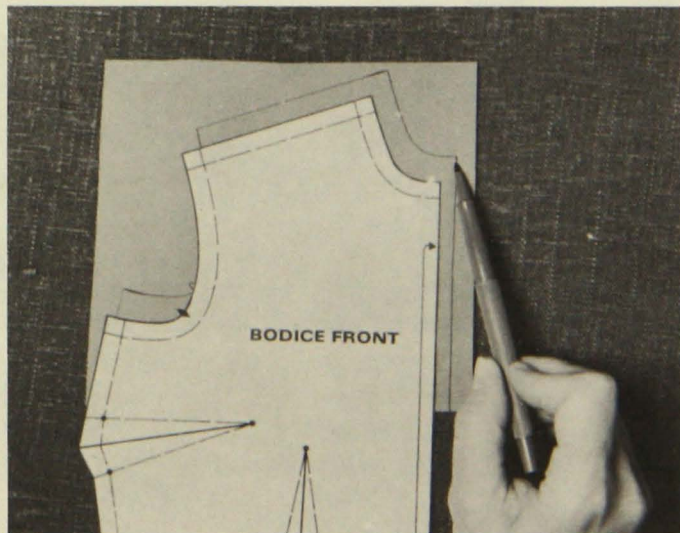
62

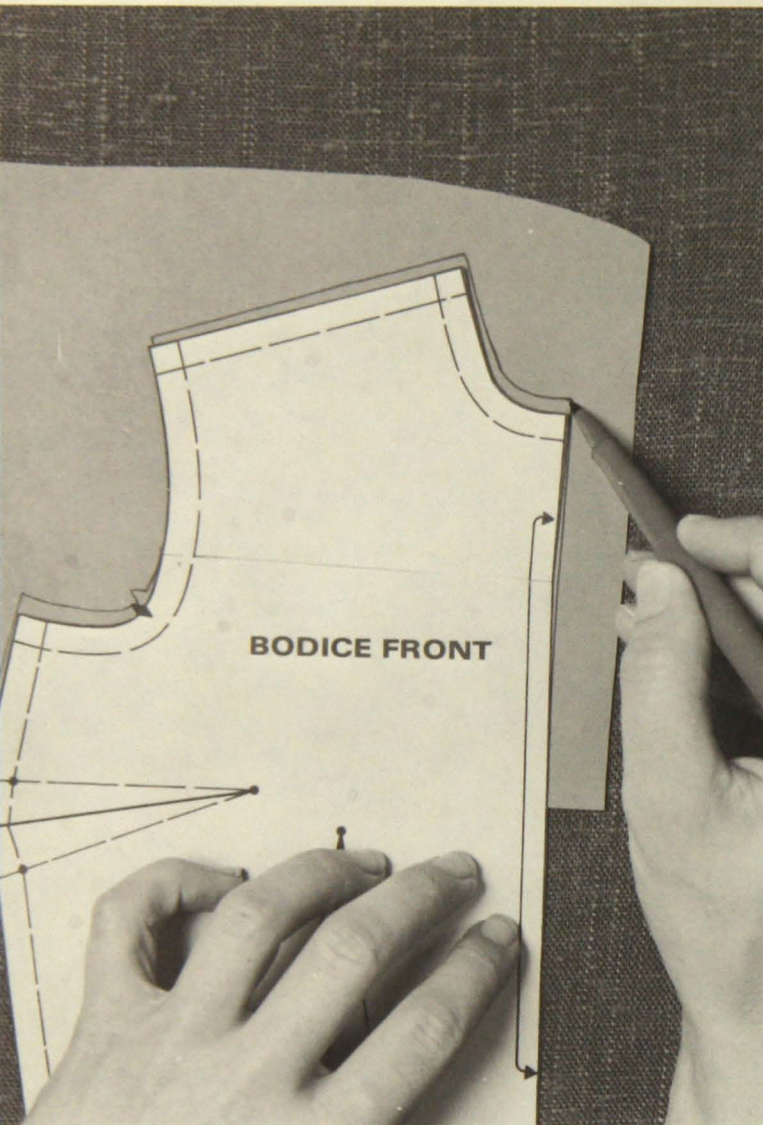


63



64





65

To shorten a pattern in the chest area, draw a line across the pattern 3 to 4 inches (7.5 to 10 cm.) below the neckline at right angles to the grainline. Cut on this line through center front and over to the armhole seam. Overlap the pattern at center front enough to make the pattern the right length. Place the traced pattern under the altered one matching them at center front. Follow the neckline edge and shoulder cutting line on the tissue paper instead of on the pattern. Follow the armhole cutting seam lines on the pattern.

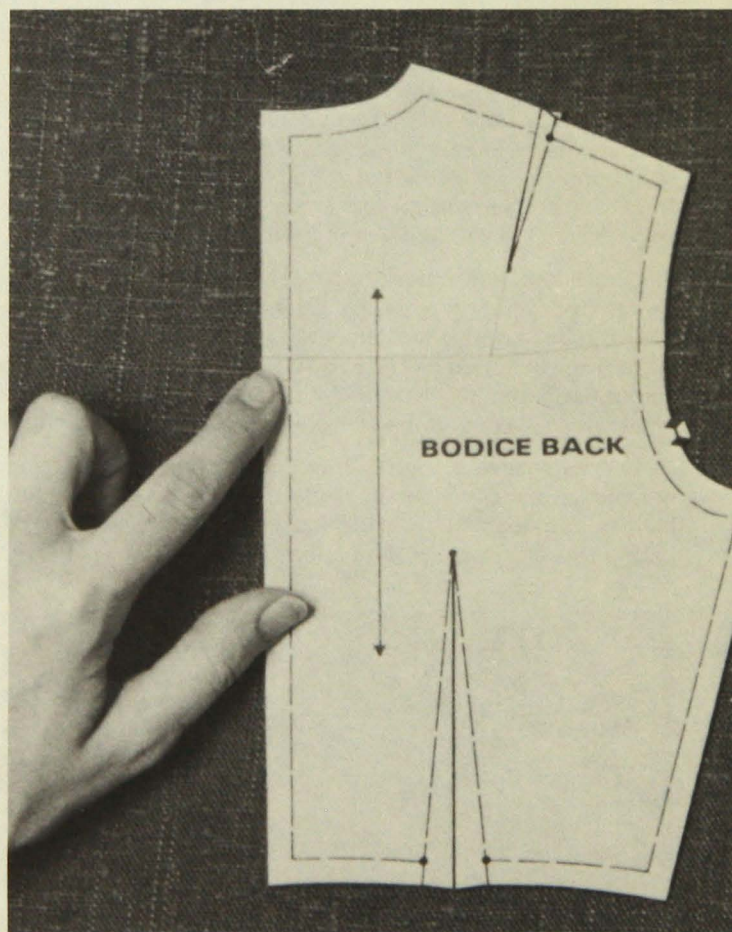


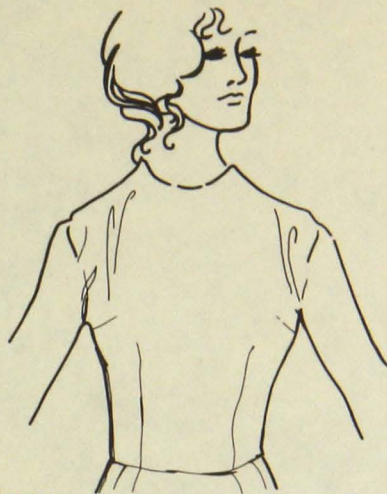
Upper Bodice Back Too Long

If your back is very straight, you may find the grainline drooping between your shoulders and shoulder blades. Garments are too long in the upper back.

To shorten the pattern in the upper back, draw lines on the pattern and cut as described in Figure 62. At center back overlap the pattern to remove excess length. Let shoulder slash overlap to keep center back straight and allow the pattern to lie flat. Redraw the shoulder dart.

66



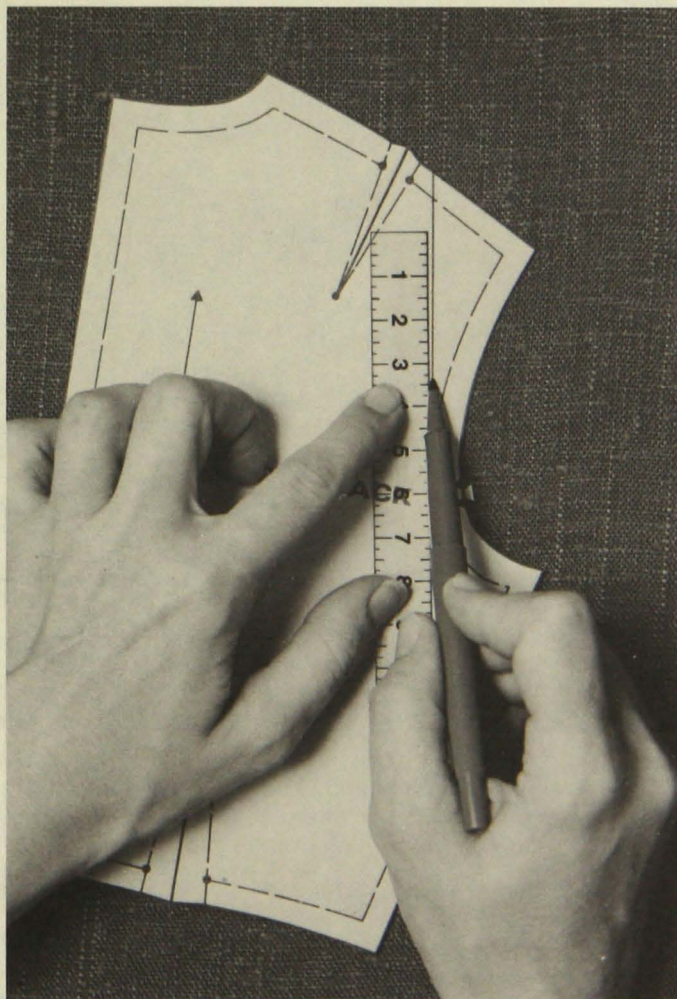


Shoulder Seams Too Long

If garments you make have shoulder seams that go beyond the end of your shoulder, measure from the base of your neck to the end of your shoulder to find out how long the seam should be. Then measure the front shoulder seam on the pattern. It should be the same length.

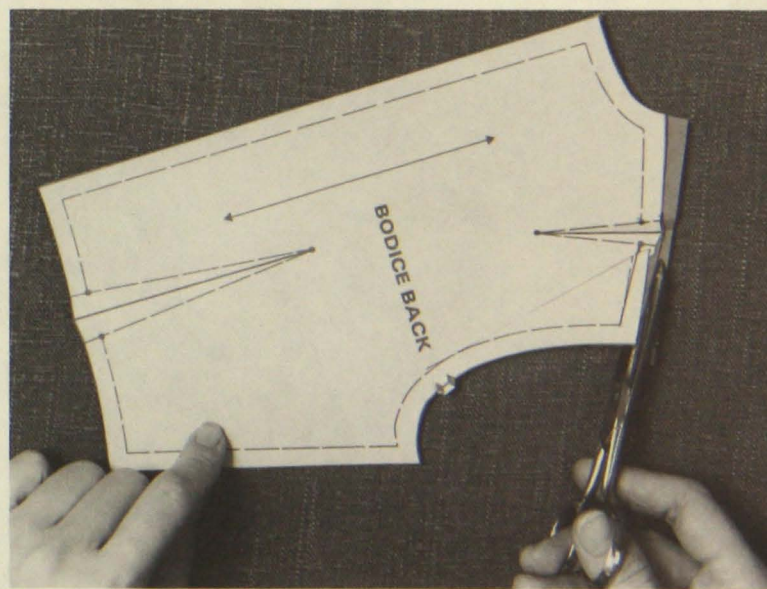
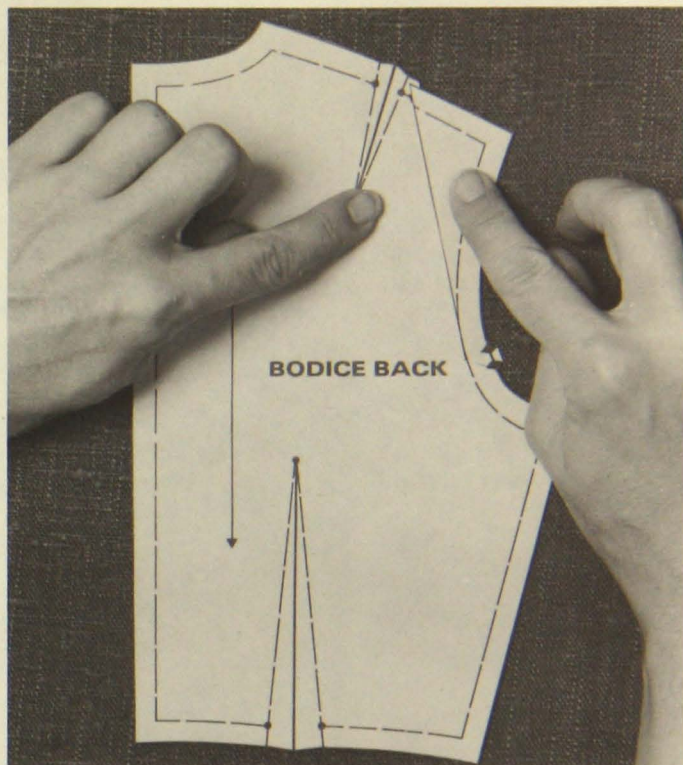
Measure in from the armscye seam along the shoulder seam 2 inches (5 cm.) and put a mark on the seamline. Draw a diagonal line from that mark to the armscye seam at the notch. Cut along this line just to the armscye seam.

67



How much shorter does the shoulder seam need to be? Measure that distance from the cut toward the neckline and put a mark on the shoulder seam. Lap the cut edge over to that mark and tape the pattern together.

68

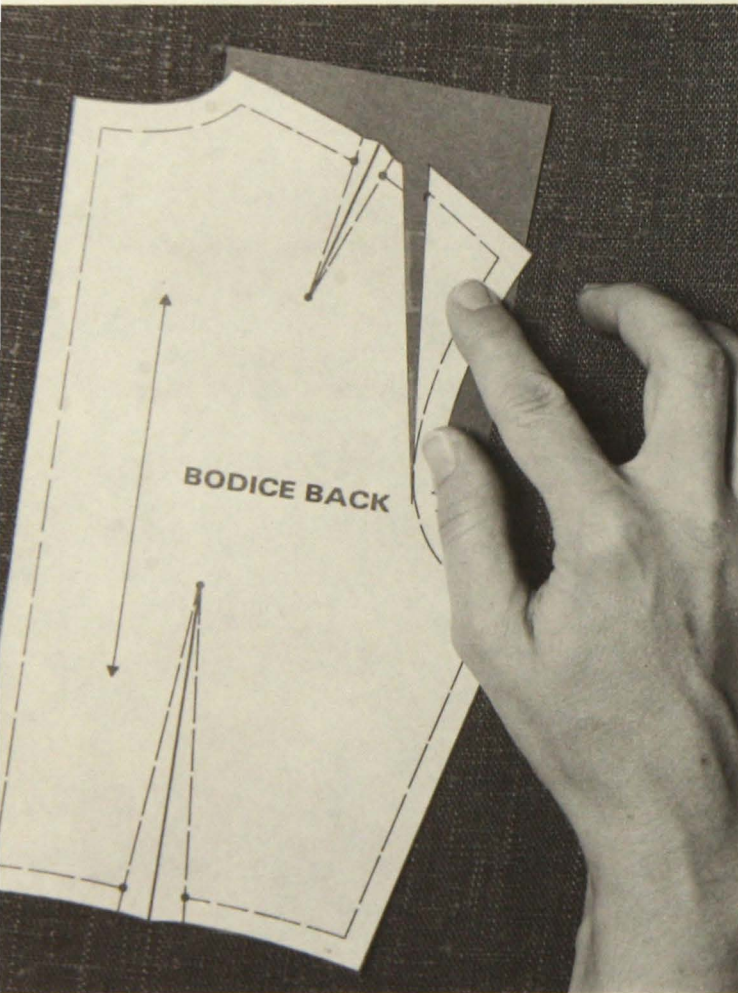
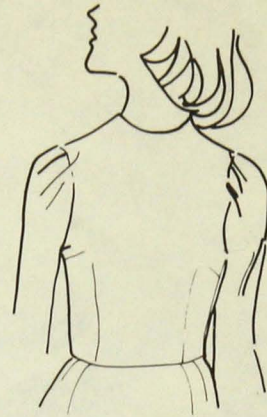


69

Use a ruler to straighten the seamline and cutting line. If the seamline has a dart in it, fold in the dart before drawing the new lines. Be sure to alter the front and back pattern pieces the same way.

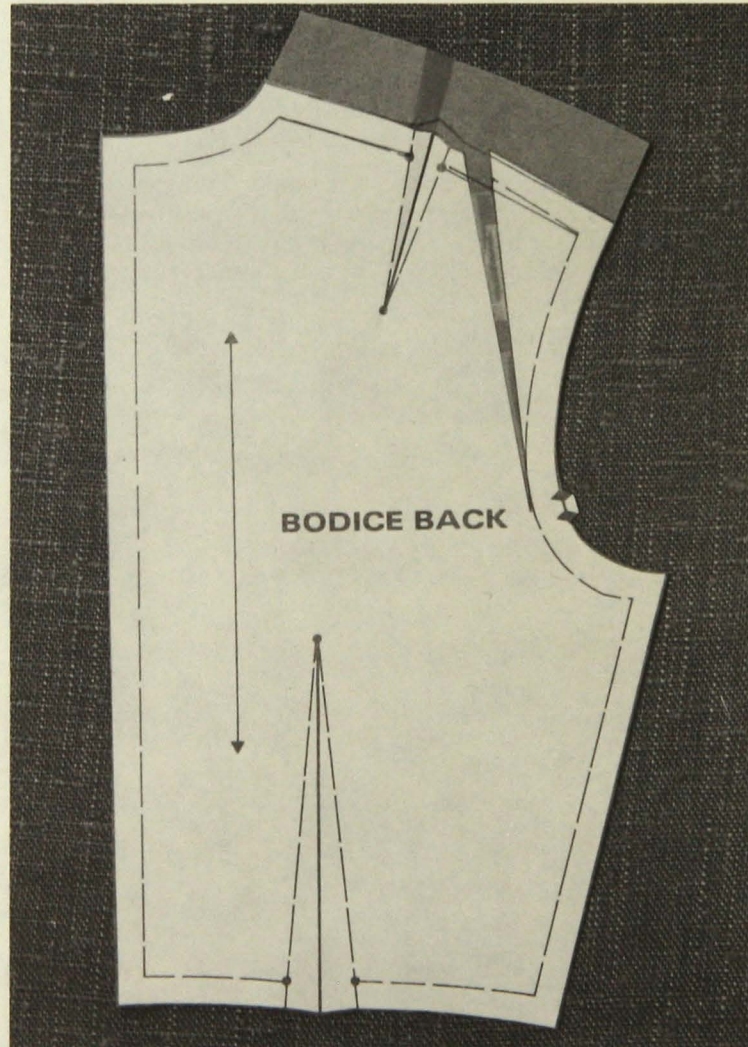
Shoulder Seams Too Short

If your problem is a shoulder seam that is too short, measure from the base of your neck to the end of your shoulder to find out how long the seam should be. The front shoulder seam should be the same length as your shoulder. Then cut the pattern as in Figure 67.



70

Tape the edge closest to the neckline to a piece of tissue paper. Measure from the cut edge the amount you need to add to the seamline. Put a mark on the tissue paper.



71

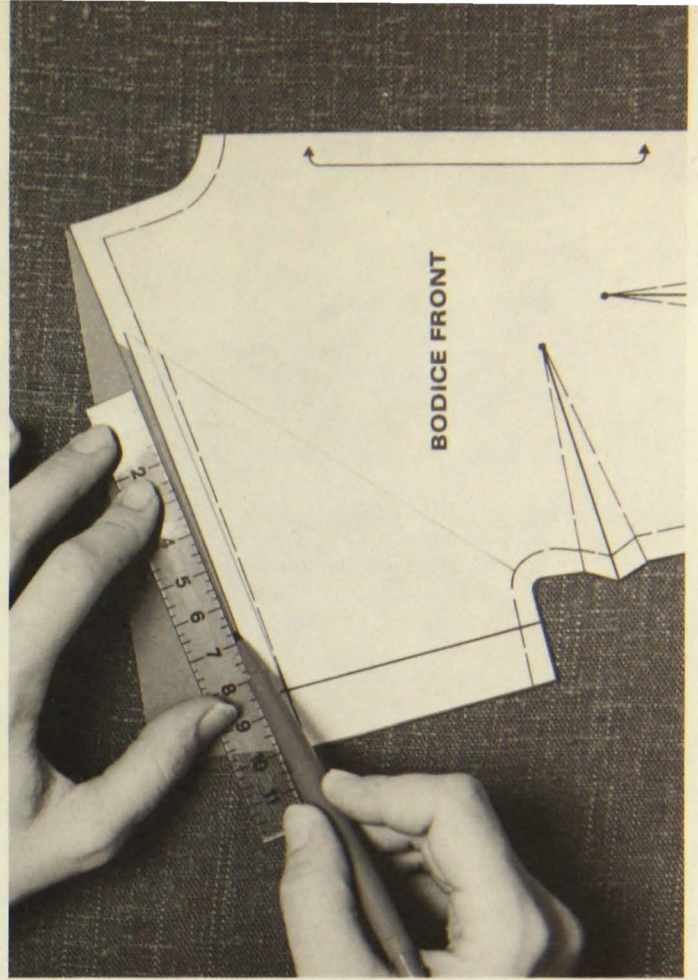
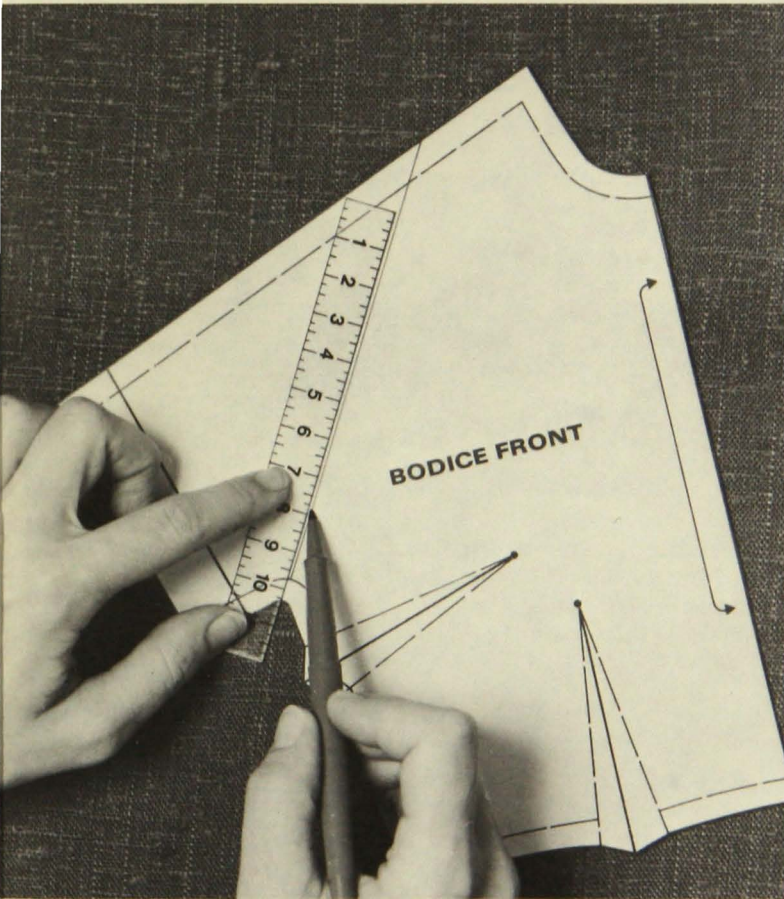
Tape the free edge of the shoulder seam to that mark. Fold in any darts and use a ruler to straighten the shoulder seam. Alter front and back pattern pieces the same way.

Raglan, dolman, and kimono sleeves do not eliminate the problem of shoulder length. These patterns must be altered to allow the right amount of shoulder room, also. Alter these patterns the same amount as you alter a basic shoulder seam.

Dolman and Kimono Sleeves

Measure from neckline seam along shoulder line $3\frac{1}{2}$ inches (9 cm.). Draw a diagonal line from that point to the high part of the underarm seamline. Cut through the shoulder seam to the underarm seam.

72

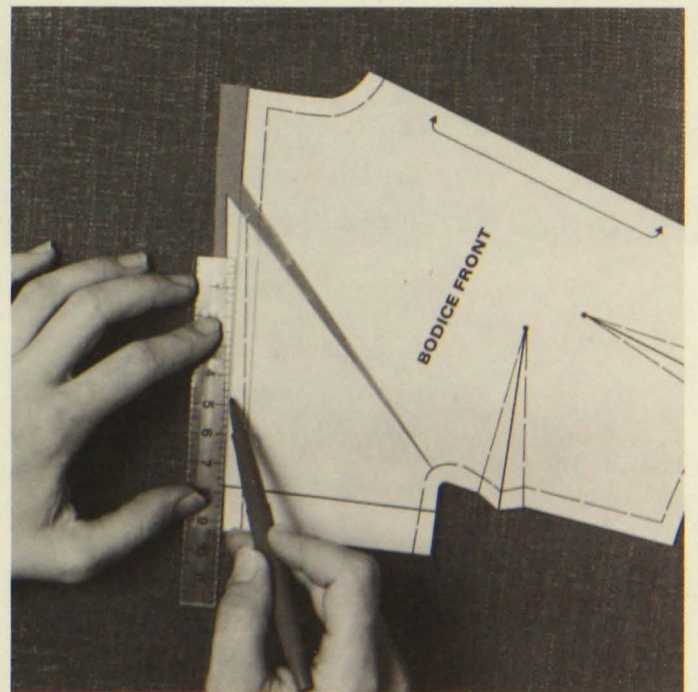


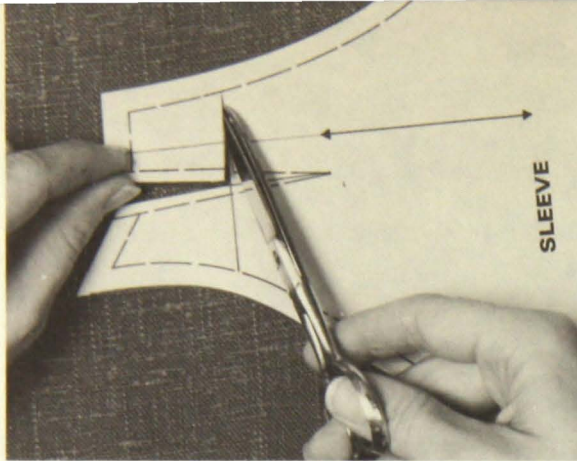
73

To shorten the seamline, lap shoulder seam edges the amount you need to remove. Tape. Place a piece of tissue paper under the shoulder seam. Redraw the shoulder seam and cutting lines.

To lengthen the seamline, place tissue paper under the pattern and spread the pattern the amount you need to add. Tape to paper. Redraw the shoulder seam and cutting lines.

74





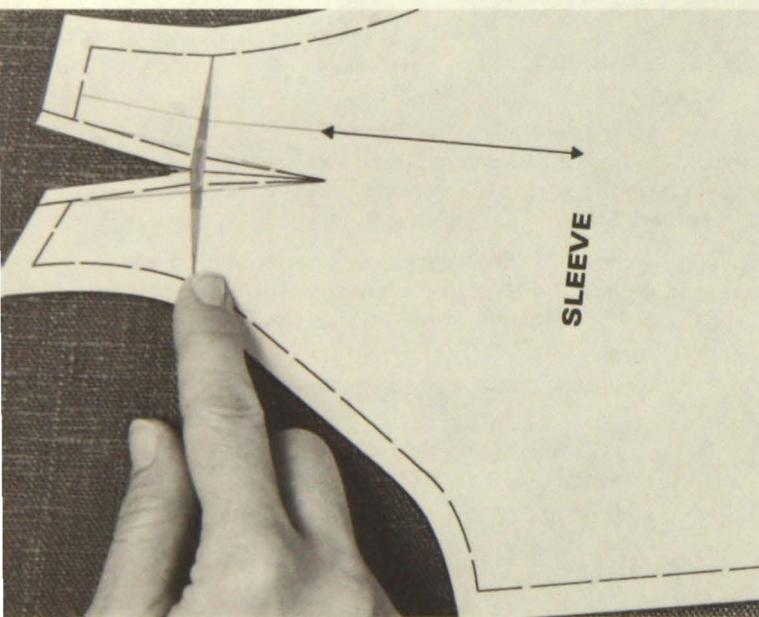
75

Raglan Sleeves

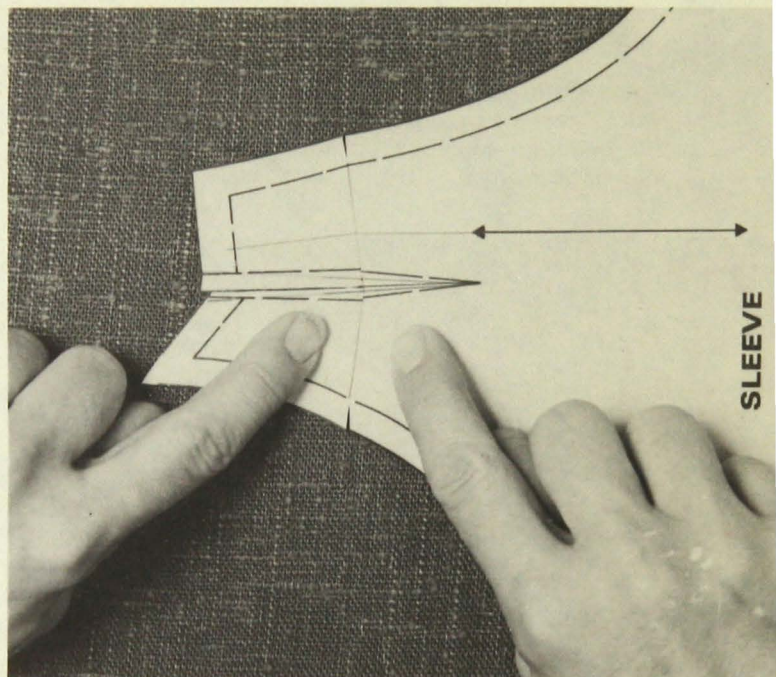
Draw a line across the sleeve perpendicular to the grainline at the center of the shoulder dart. If alteration is to be a small amount ($\frac{3}{4}$ in. or less), cut on that line through the dart to both armscye seams.

If shortening the shoulder line, lap the pattern the needed amount at the dart line and redraw the dart stitching line.

If lengthening the shoulder line, spread the pattern the needed amount at the dart line and correct the dart stitching line.



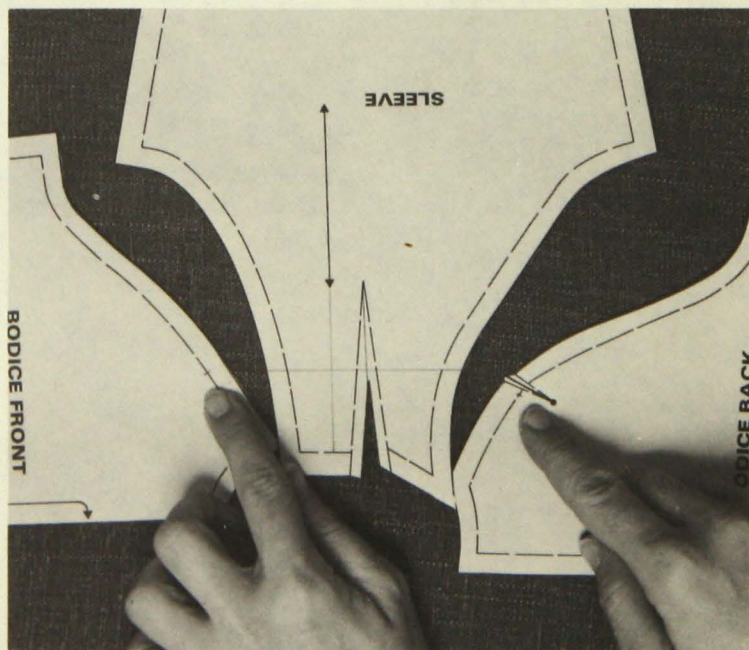
77

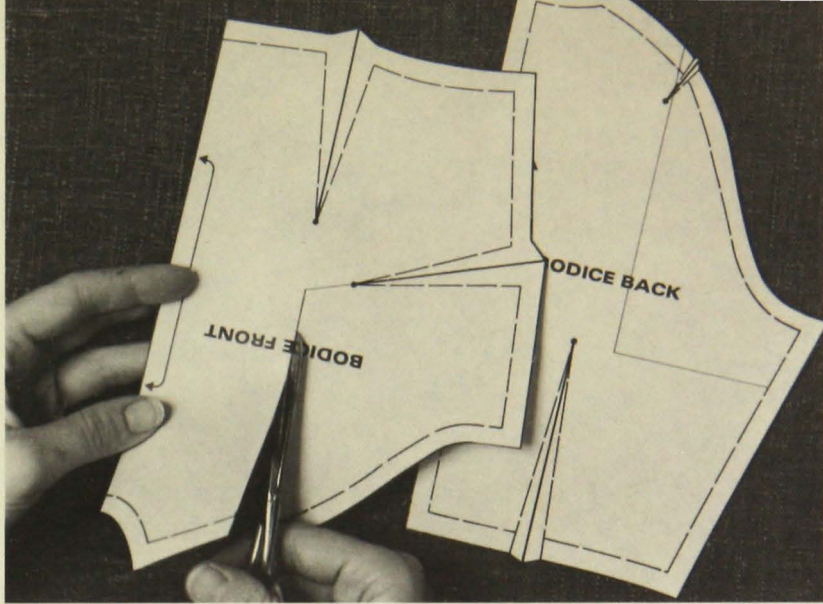


76

If the alteration is to be over $\frac{3}{4}$ inch, measure the armscye seam from the neckline to the line drawn in Figure 75 on both front and back of sleeve. Mark armscye seam on bodice front and back at these same points.

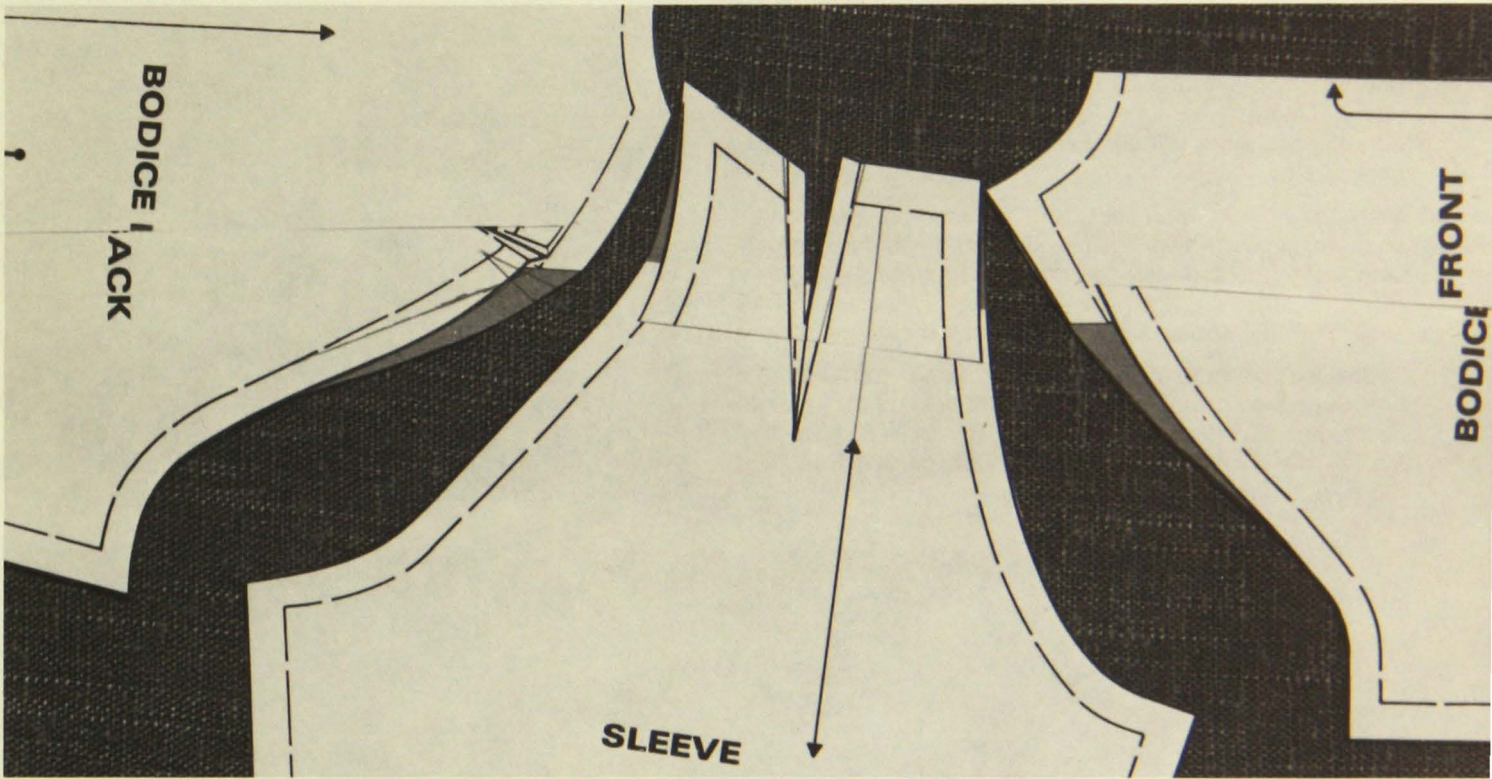
78





79

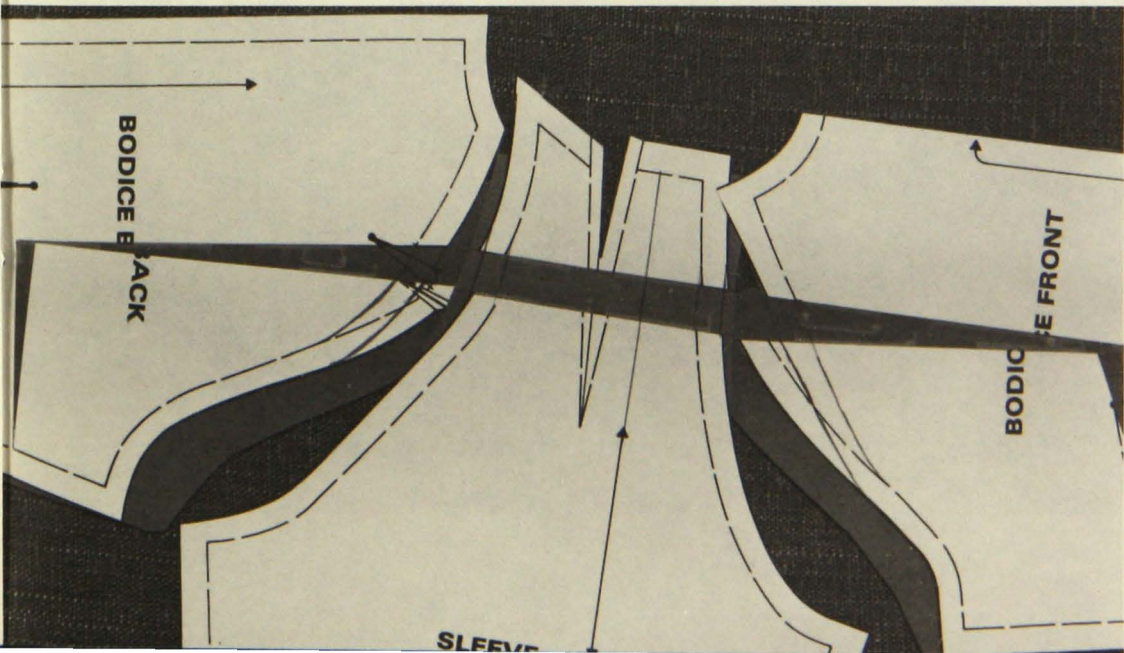
Draw a line on the bodice front from that mark to the bustline area and through the underarm dart to the seamline. On the back draw the line in a similar position. Cut on these lines. Cut the sleeve apart on the line drawn across the sleeve top.



80

To shorten the shoulder seam, lap the edges on the sleeve and correct the dart line and the armhole seam and cutting lines. Overlap the armhole seams in the bodice front and back the same amount. Tape together and redraw seamlines.

To lengthen the shoulder seam, place pattern pieces over tissue paper and spread the amount needed on all pattern pieces. Redraw dart seamline and armhole seam and cutting lines.



81

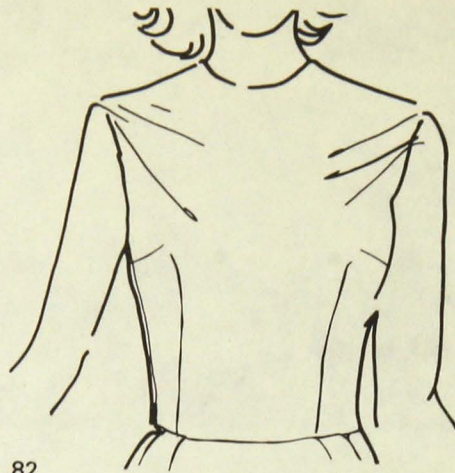
Pattern Shoulder Slope Too Slanted

Do you have wrinkles in garments from the end of the shoulder to the bustline or the shoulder blades? Your shoulders may have less slant than patterns allow in front or in back. You'll need to alter the front and/or back to allow for square shoulders. You may find that one shoulder is more square than the other. Or you may have to make the back pattern shoulder line more square and the front pattern shoulder line more sloped to accommodate your figure. The shoulder seam should follow the top of your shoulder.

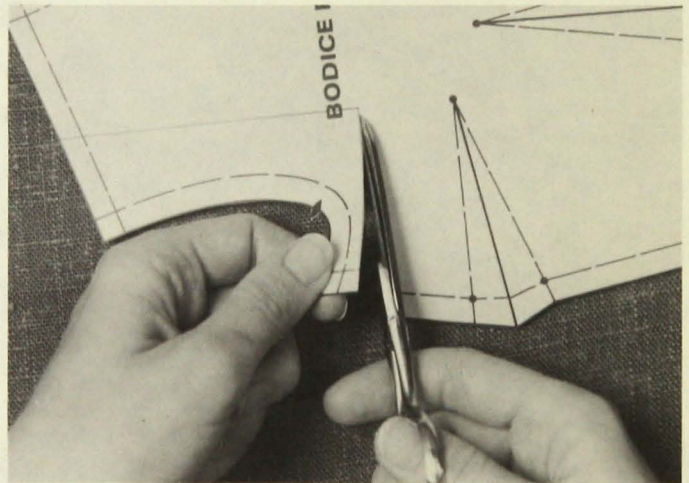
To decide how much the shoulder slant needs to be changed, measure your pattern from center front waistline to the armscye end of the shoulder seam. This should measure the same as measurements 10 and 11 on page six. Check the pattern for both front and back and both left and right sides. If your two sides are over $\frac{3}{8}$ " different, trace your pattern and alter the two sides differently or plan to use a shoulder pad on one side.

Measure in 2 inches (5 cm.) from the armscye seam on the shoulder seam. Draw a line parallel to the grainline from the shoulder to just below the armscye seam. At right angles to this line, draw a line to the side seam. Cut on both lines separating the armscye section from the rest of the pattern.

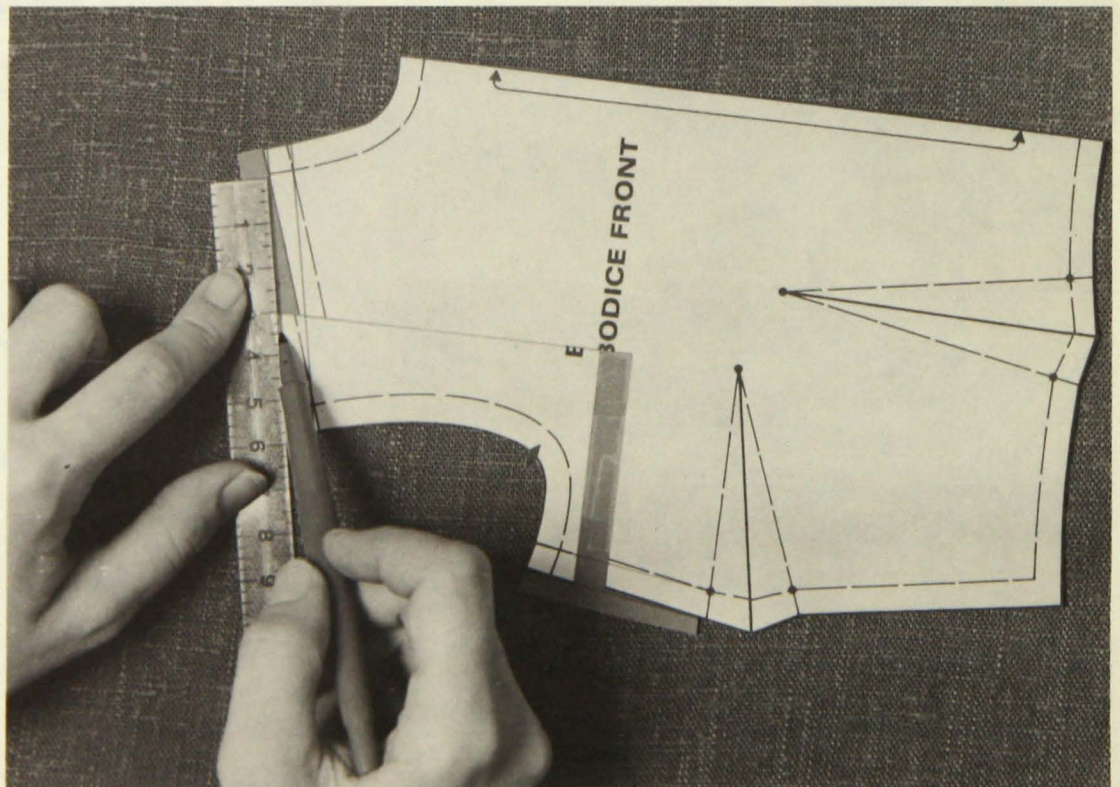
Tape tissue paper to the bodice. Measure up from the waistline. Slide the armhole section up until the end of the shoulder seam is in the right location. Tape to bodice section. Redraw the shoulder seam folding in any darts before drawing it.



82



83



Pattern Shoulder Slope Too Square

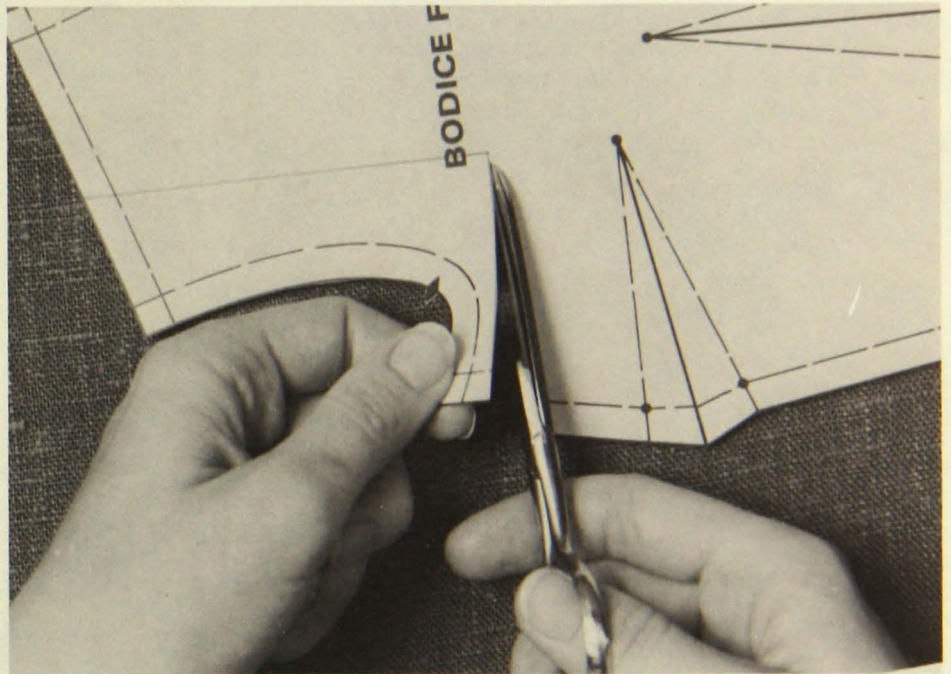
Do your dresses and blouses always have wrinkles from the neckline to the underarm area? If so, your shoulders may have more slant than patterns allow. You may find that one shoulder slants more than the other. If so, you'll want to alter the pattern differently for each side.

To decide how much the shoulder slant needs to be changed, measure your pattern from center front waistline to the armscye end of the shoulder seam. This should measure the same as measurements 10 and 11 on page 6. Check the pattern for both front and back and both left and right sides. If your two sides are over $\frac{3}{8}$ " different, trace your pattern and alter the two sides differently or plan to use a shoulder pad on one side.



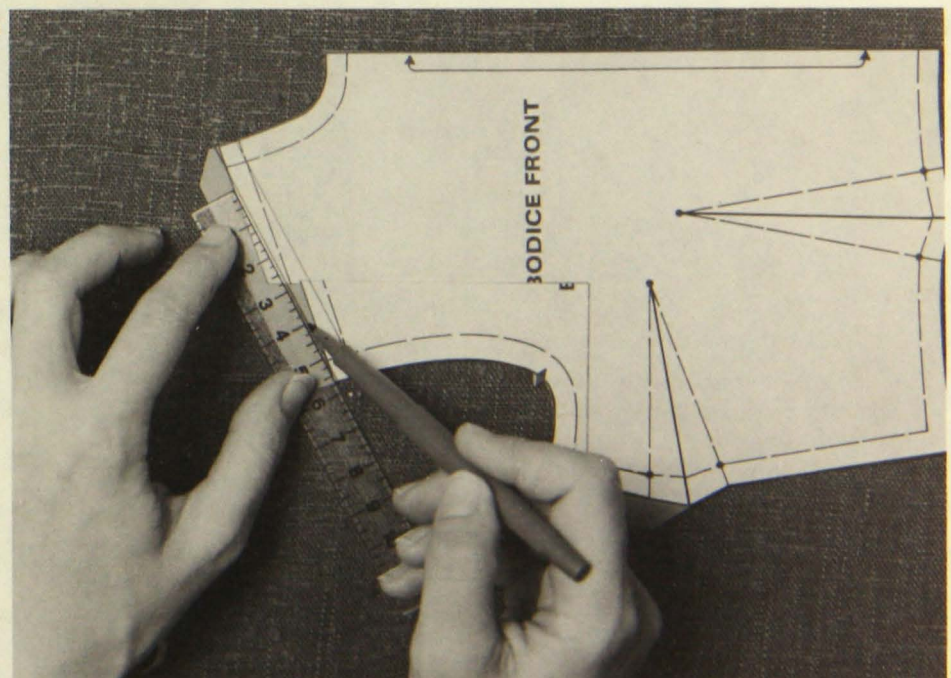
84

Measure in 2 inches (5 cm.) from the armscye seam on the shoulder seam. Draw a line parallel to the grainline from the shoulder to just below the armscye seam. At right angles to this line, draw a line to the side seam. Cut on both lines separating the armscye section from the rest of the pattern.



85

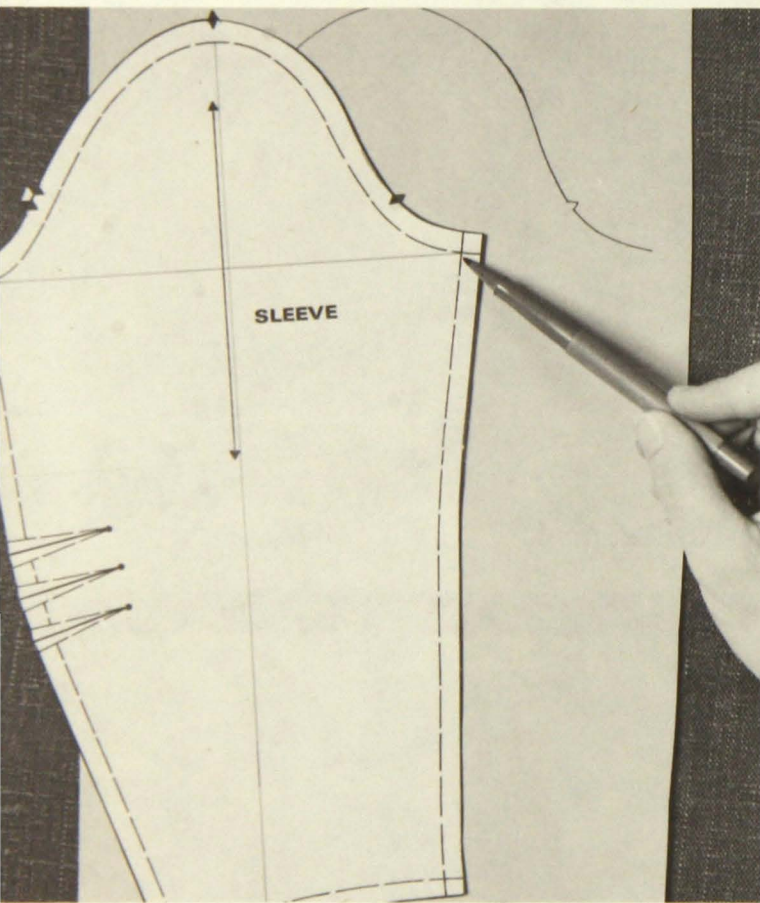
Slide the armscye section toward the waistline until the end of the shoulder seam is in the right location. Tape to bodice section. Redraw the shoulder seams folding in any darts before re-drawing it.





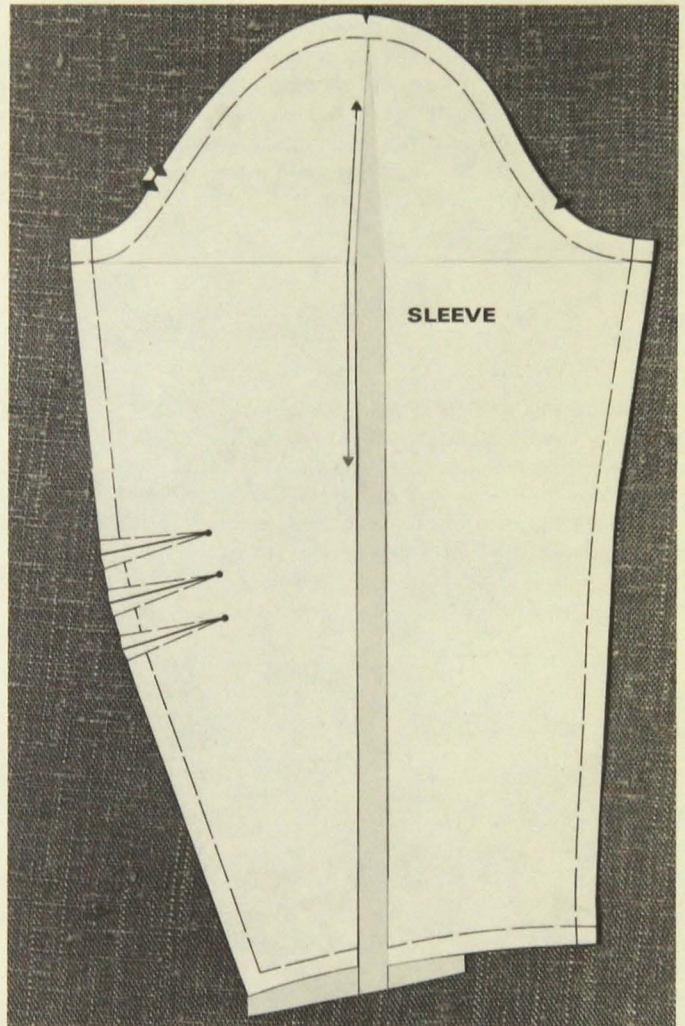
Sleeves Too Tight

Do sleeves always seem to pull and wrinkle in the upper arm area? Does the fabric pull up at the sleeve cap? If so, the sleeve is probably too small for your arm. A sleeve needs at least two inches of ease to fit comfortably.



86

To make a sleeve larger, draw a line from the top of the sleeve cap parallel to the pattern grainline down through the bottom of the sleeve. At the largest part of your arm, draw a line between sleeve seamlines at right angles to the grainline. On a piece of tissue paper, trace the cutting line of the sleeve cap and hem.

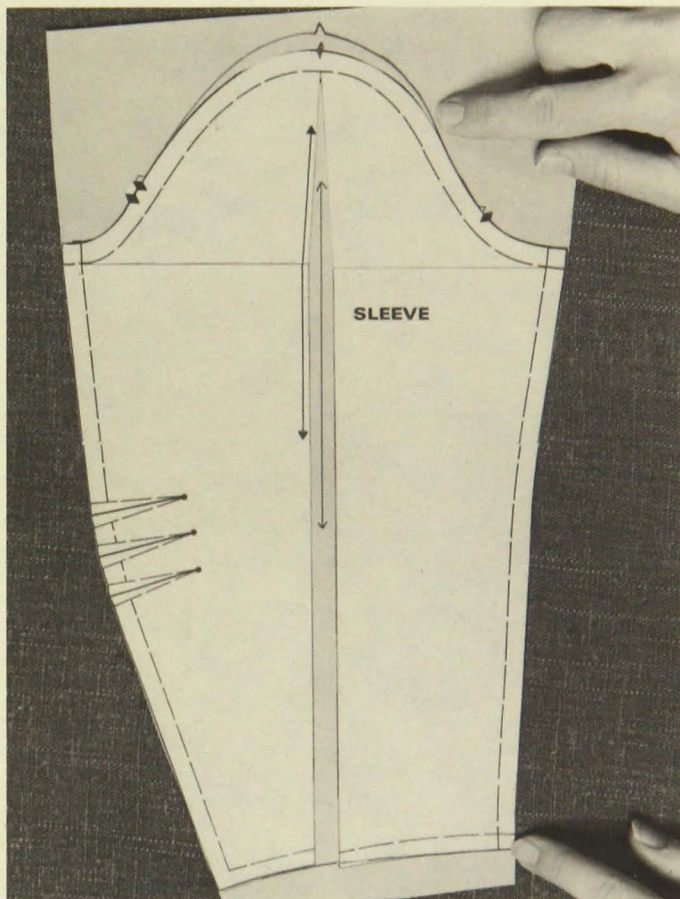


87

Cut the pattern through the bottom of the sleeve to the seamline at the sleeve cap. Cut the other line to the sleeve seamlines. Spread the pattern apart at the horizontal line enough to have at least 2 inches (5 cm.) of ease. Two parallel lines on the tissue paper can make this easier. Tape the top part of the sleeve to tissue paper. If the sleeve is too small only in the upper arm, pull the sleeve back together at the wrist allowing the horizontal slashes to lap over. If the sleeve is also tight in the wrist, spread the pattern the same amount from upper arm to wrist.

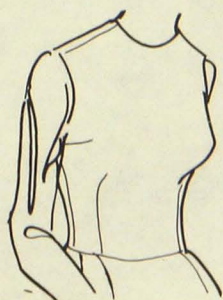
sleeve an even amount from the fullest part of the arm to the wrist. Tape in place.

89



88

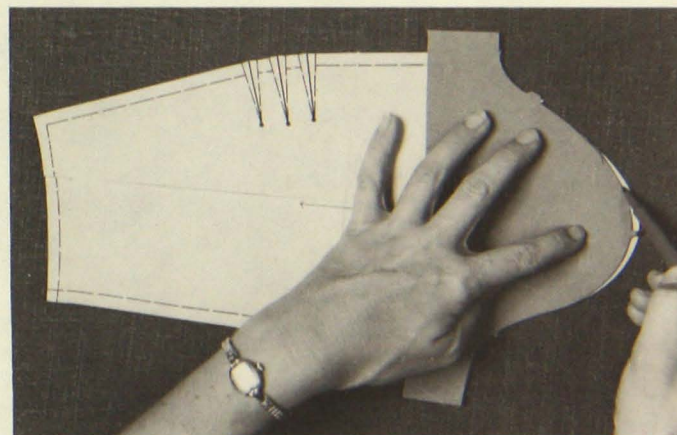
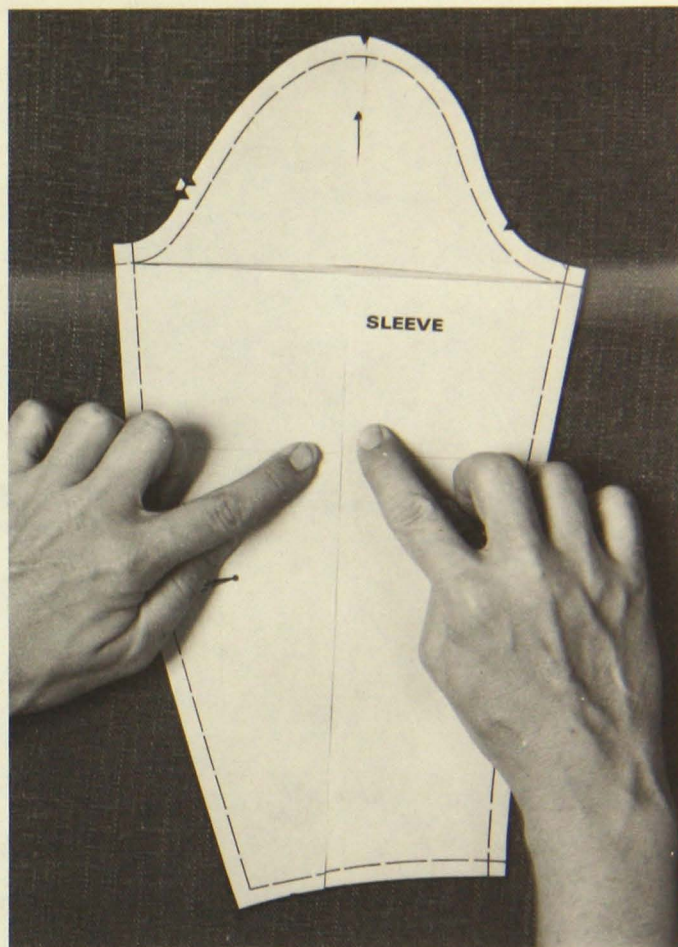
The slashing and spreading of the sleeve cap area will have lowered the sleeve cap. To return this to its original length, place the tracing of the sleeve under the pattern. Follow the cutting line on the tissue paper for the upper part of the sleeve cap. Draw a new pattern grainline from the center of the sleeve cap through the slashed and spread area.



Sleeves Too Loose

If sleeves are too wide and they hang in folds from the sleeve cap, you will want to make the sleeve pattern smaller.

Draw the lines suggested in Figure 86 and cut them as described in Figure 87. Instead of spreading, overlap the slash at the fullest part of the arm. This will make the horizontal slashes spread apart. If your whole arm is small, overlap the



90

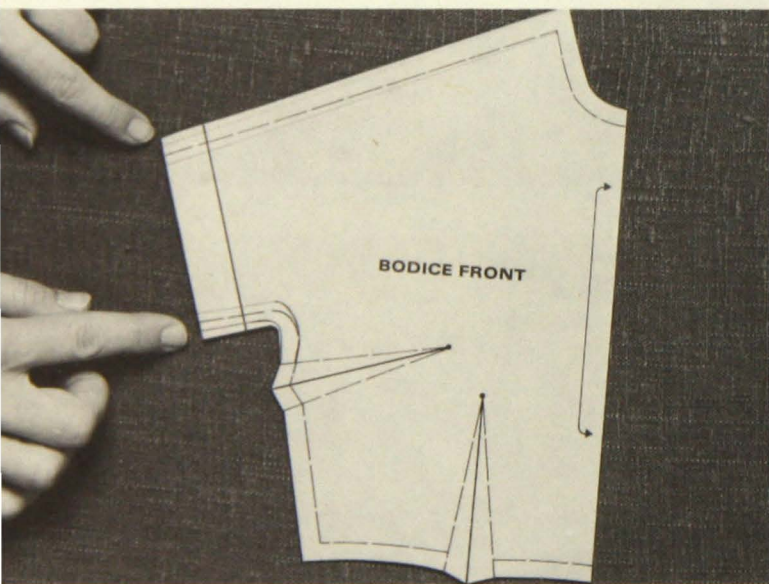
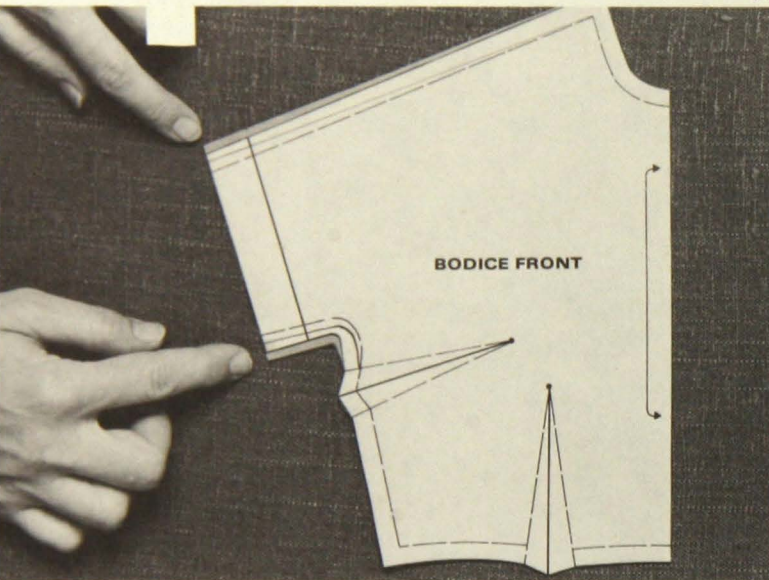
Place the tracing of the sleeve cap over the pattern to reshape the sleeve cap. Draw a new pattern grainline from the center of the sleeve cap through the center of the lapped area.

When working with other styles of sleeves, you may need to enlarge or reduce the sleeve size. Some sleeve styles, such as the dolman sleeve, may not need altering because of the extra fullness in the style. Measure each pattern to be sure of the amount to be altered.

Kimono or Dolman Sleeve

To make a kimono or dolman sleeve larger, first decide how much must be added. Adding over 1½" (3.75 cm.) may distort the shape of the sleeve too much. Divide the amount you need to add by four. This amount must be added to the underarm and shoulder seams at the widest part of the arm. Taper the original seamline at the neckline and waistline.

91



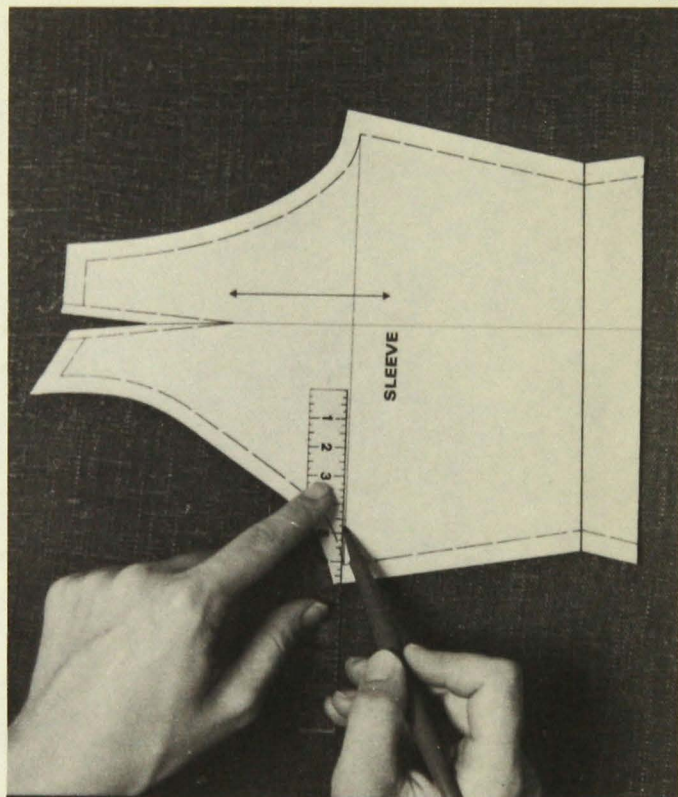
92

To make a kimono or dolman sleeve smaller, remove equal amounts (¼ of total) from the fullest part of the sleeve at both the underarm and shoulder seam. Taper to original seamline at neckline and waist.

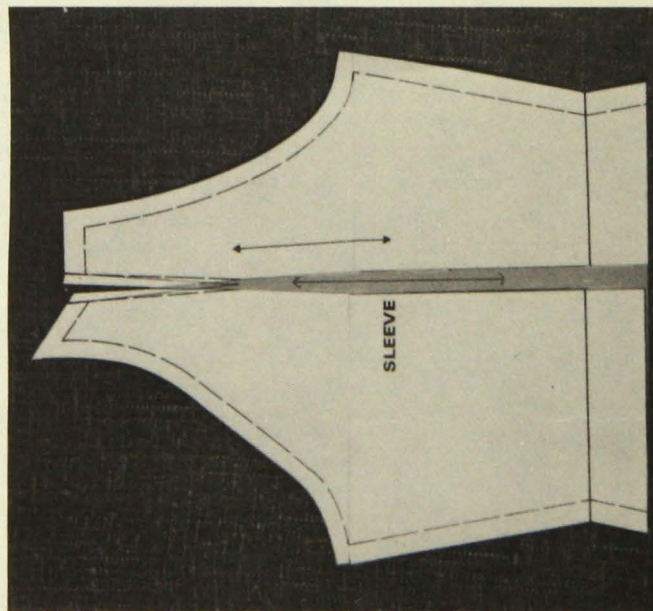
Raglan Sleeve

To make a raglan sleeve larger, draw a line from the point of the shoulder dart to the hem parallel to the grainline. Draw another line between underarm seamlines. Cut through the bottom of the sleeve through the point of the dart to the cutting line of the shoulder dart. Cut from this slash to the underarm seamline on both sides of the sleeve.

93

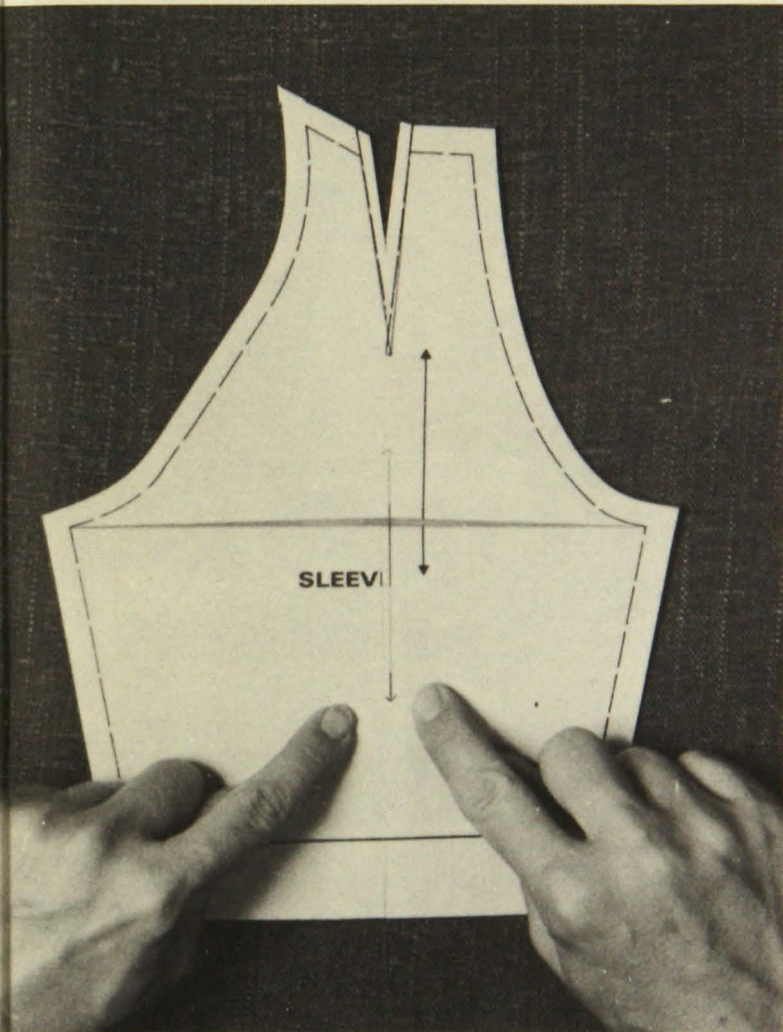


94



Place tissue paper under the pattern. Spread it apart the amount you need at the horizontal slash. Tape upper part of the sleeve to tissue. If the pattern is small all the way to the

wrist, spread the pattern evenly from the fullest part to the wrist. If the sleeve is small only in the upper arm, pull the pattern together at the wrist. Allow pattern to overlap at horizontal slashes. Redraw dart. Draw new grainline in center of the slash.



95

To make a raglan sleeve smaller, draw lines on the pattern and slash as described in Figure 94. Overlap slashed area to remove fullness at the horizontal slash. Tape upper part of sleeve at overlap. If the pattern is large all the way to the wrist, overlap the pattern evenly from the fullest part to the wrist. If it is large only in the upper arm, pull the pattern out to the original size at the wrist. Redraw the dart. Draw a new grainline in the center of the lapped area.

Necklines

Three kinds of problems occur at the neckline. The neckline may be too tight, too large, or gaping. If any of these problems occur, they can be corrected easily before you cut out the garment.

Check the shape and placement of the neckline by pinning shoulder seams of the pattern together. Hold the pattern in wearing position and check the location and shape of the neckline seam (not the cutting line).



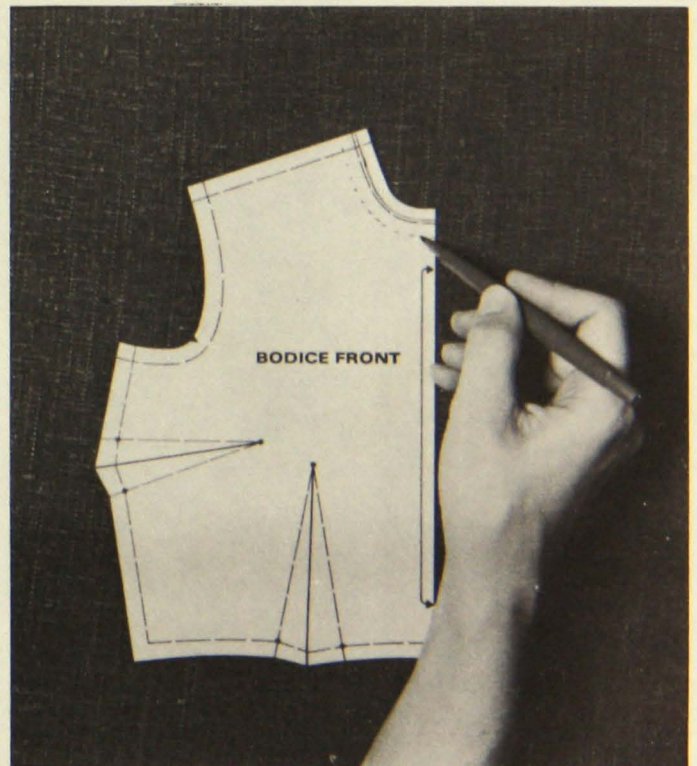
Neckline Too Tight

If neckline tends to be too tight and the seams cut into your neck, your neck may be fuller than the patterns allow for or you may hold your head slightly forward. When trying on the pattern, decide how much the neckline needs to be lowered to allow more room.

Measure down from the neckline seam the amount the neckline needs lowering. Measure this same distance several places along the neckline. Draw a new neckline seam and cutting line. Alter the facings the same way.

Also add onto the outer edge of the facing that same amount to maintain the width of the facing. Alter front and back, facing, and collar pattern pieces.

96

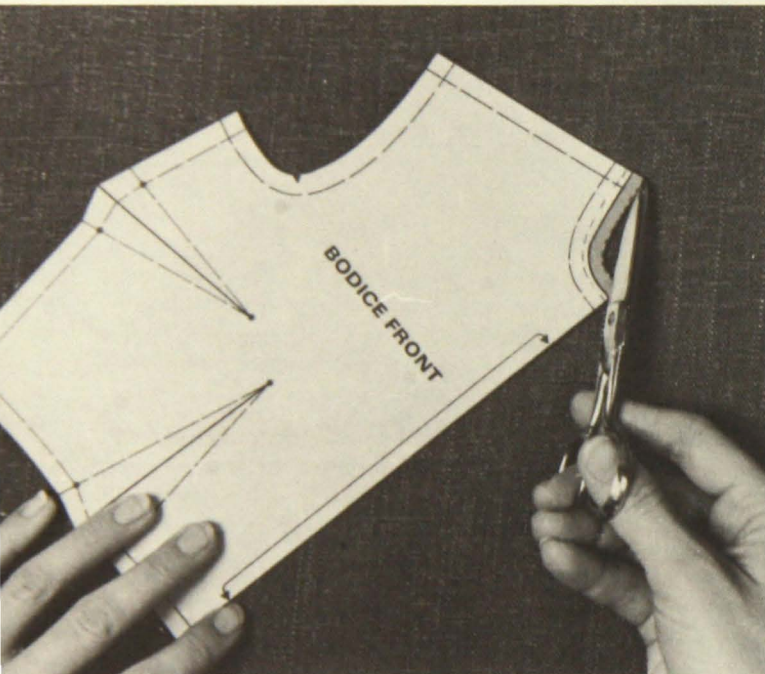


Neckline Too Loose

If necklines tend to hang loosely, it may mean that you have a slender neck. A whole garment will look too big if this problem is not corrected before cutting out the garment.



97

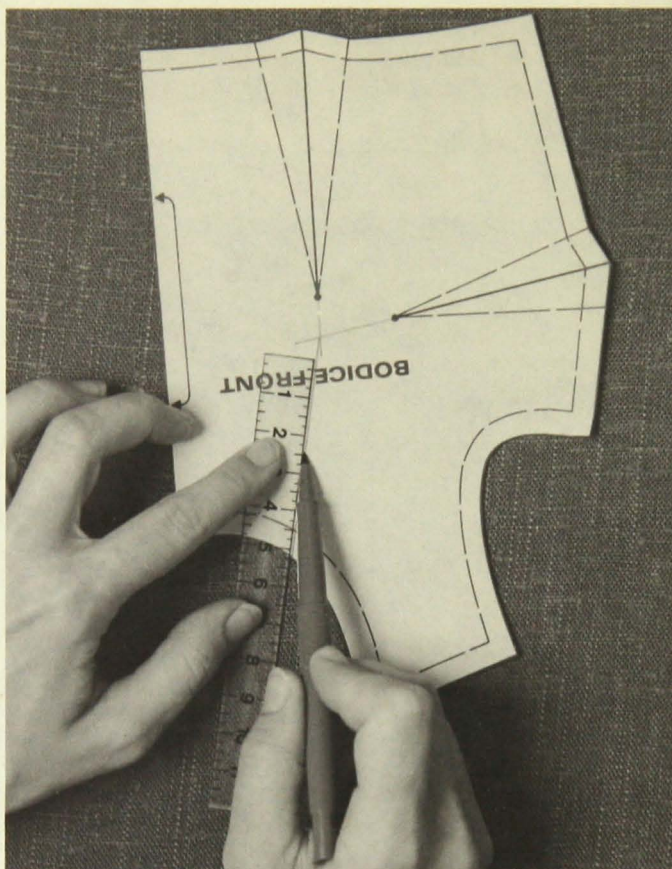


▲ Tape tissue paper under the neckline edge of the pattern. Decide how much the neckline needs to be raised. Measure up from the neckline seamline, putting marks every half inch. Connect the marks, creating new neckline seam and cutting lines. Alter the facings the same way. Trim the same amount off the outer edge of the facing to keep its width the same. Collars will also need altering.



Neckline Gaps

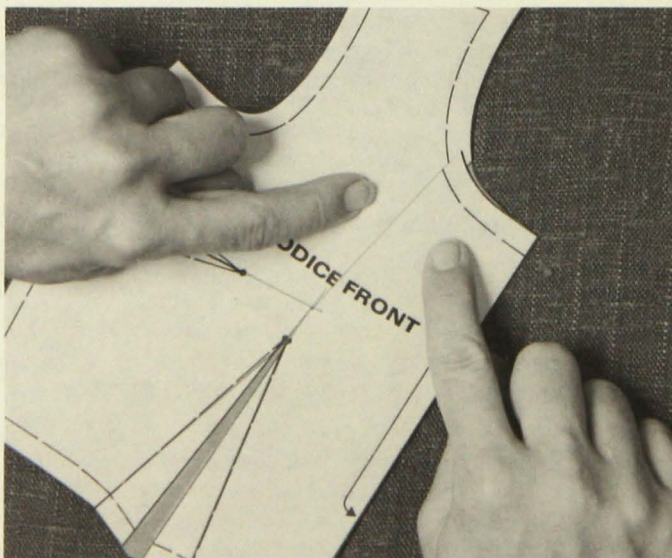
When you wear a scooped neck garment, does the neckline gap? If so, the chest area and neckline are too large for you. Some of the fullness must be moved from the neckline using a slash and overlap technique.



98

▲ Locate the bust point of the pattern by extending the dart fold lines to the point where they cross. From the lower curve of the neckline, draw a line to the bust point. Cut through the neckline seam to the bust point. Cut again through the waistline dart just to the bust point.

Pivot the shoulder and side front area forward, removing excess fullness from the neckline. This will make the waistline dart larger. Redraw the neckline and the dart stitching lines. Alter the facing to match the new neckline. Alter the collar, too.



99

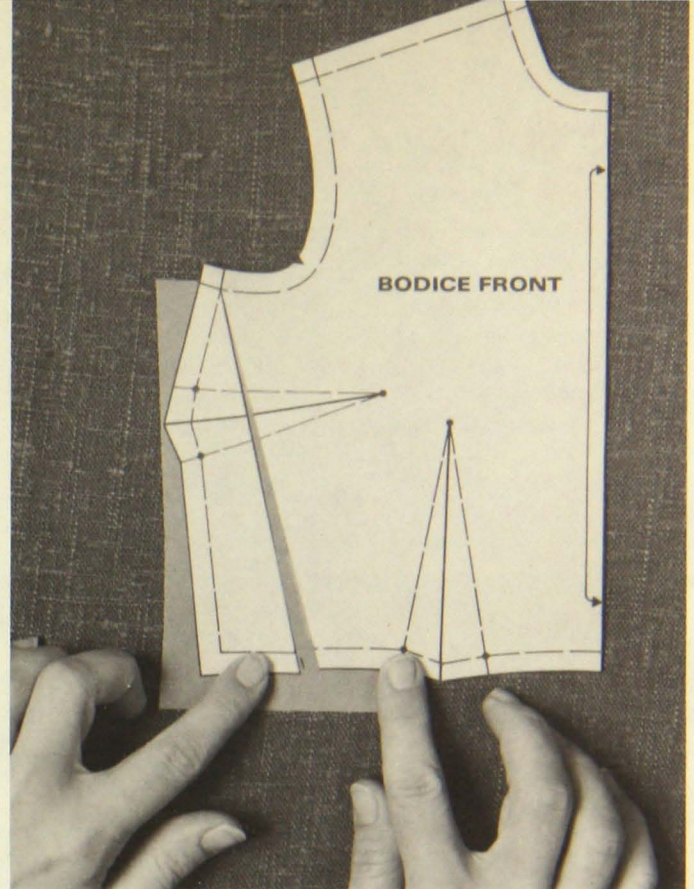
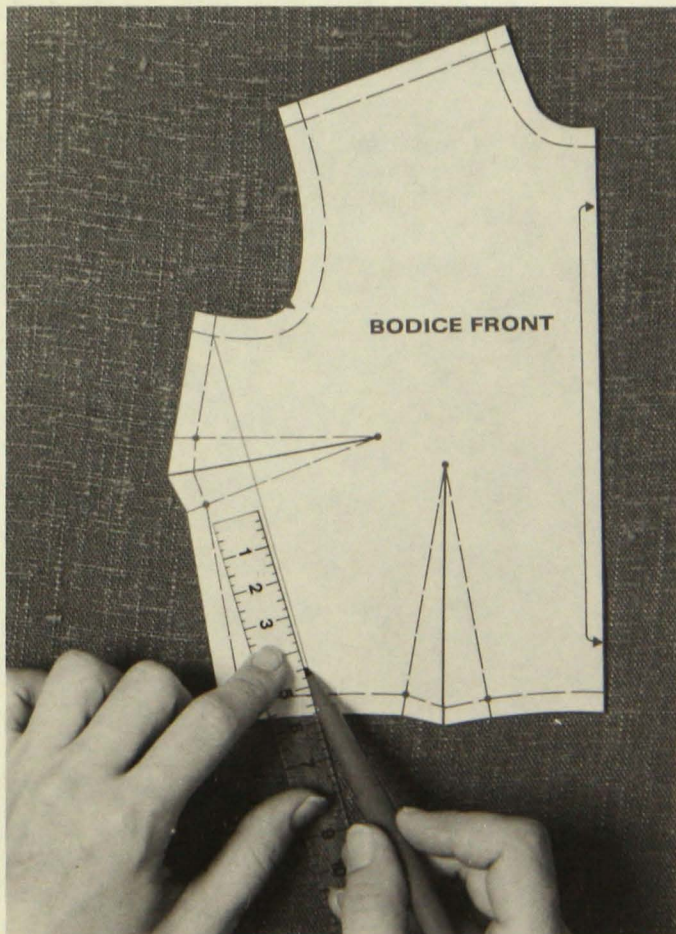
Waistline Too Tight

Bodice (Alter both bodice back and front)



Measure in from the side seam along the waistline seam 2 inches (5 cm.). Draw a line from that point to the intersection of the side seam and armhole seam.

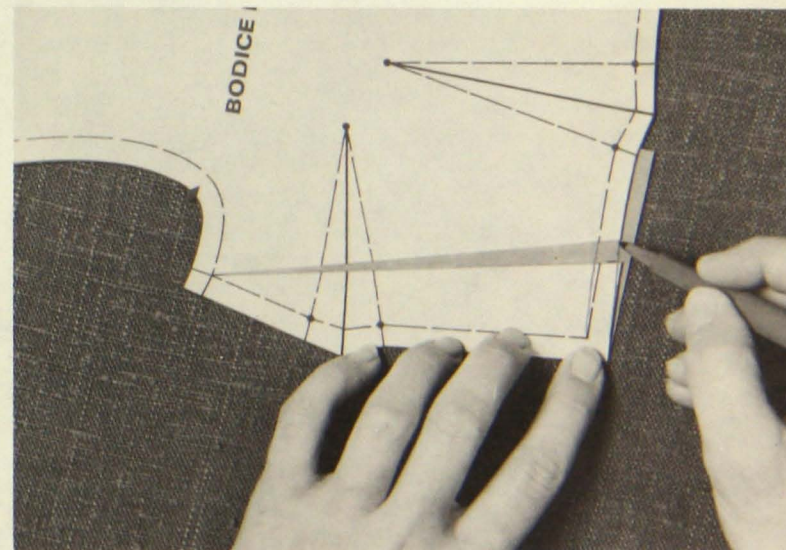
100



101

To enlarge the waistline, cut on this line through the waistline seam to the underarm seam intersection. Place the pattern over a piece of tissue paper. Tape the main part of the bodice to the paper. Use the worksheet on page 5 to determine the amount to be added. At the waistline seam measure toward the side seam one-fourth the total amount you need to add to the waistline. Mark this distance on the tissue paper. Tape down the side part of the pattern piece.

Redraw the bustline dart, the waistline seam and cutting line.

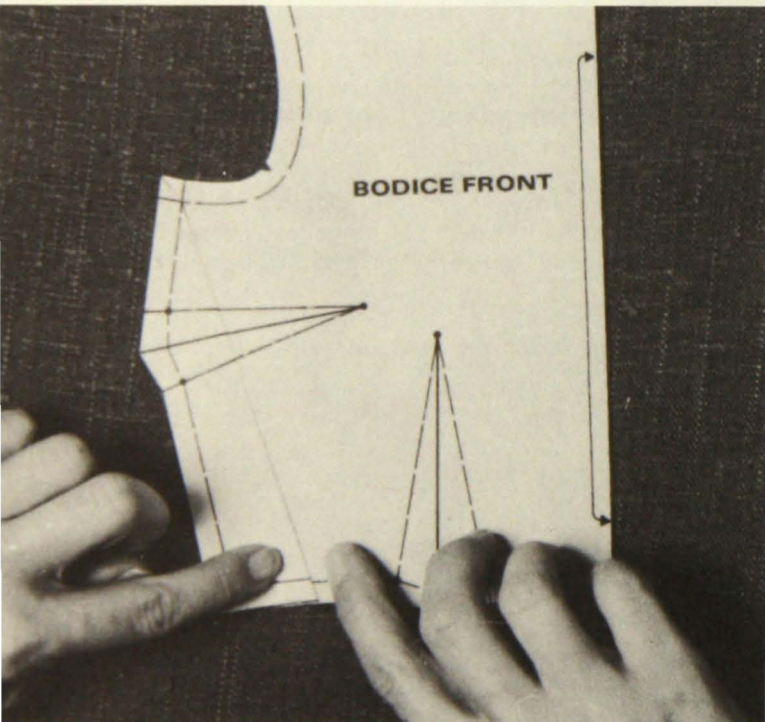


102

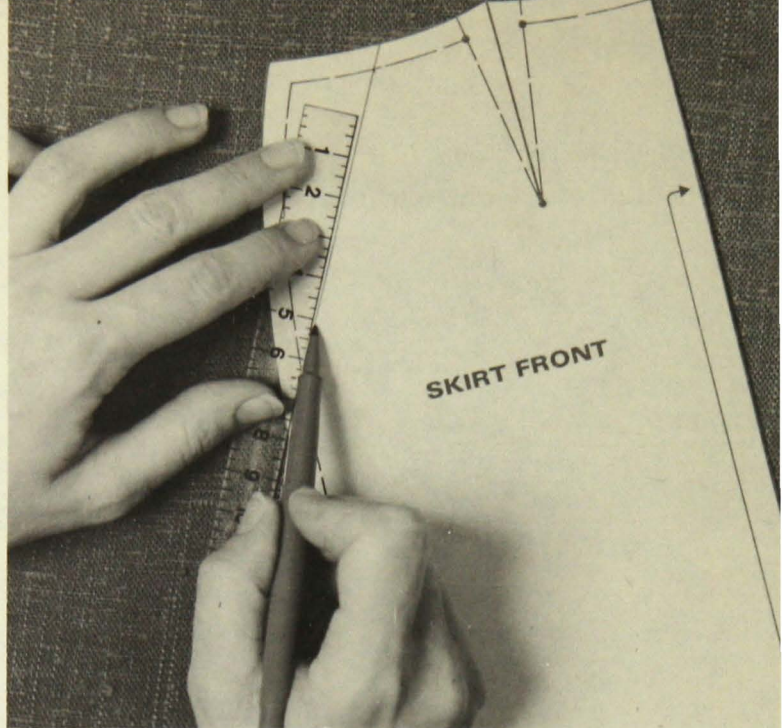


Waistline Too Loose (Alter both bodice back and front)

To make the waistline smaller, overlap one-fourth the amount needed to be taken in. Tape down. Redraw the bustline dart. Tape tissue paper along the waistline cutting line and redraw.



103



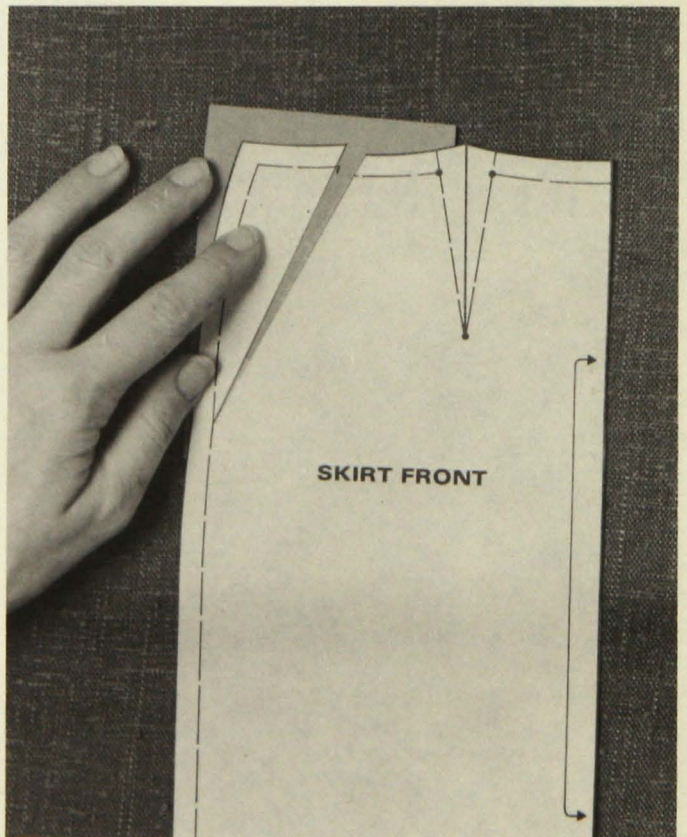
104

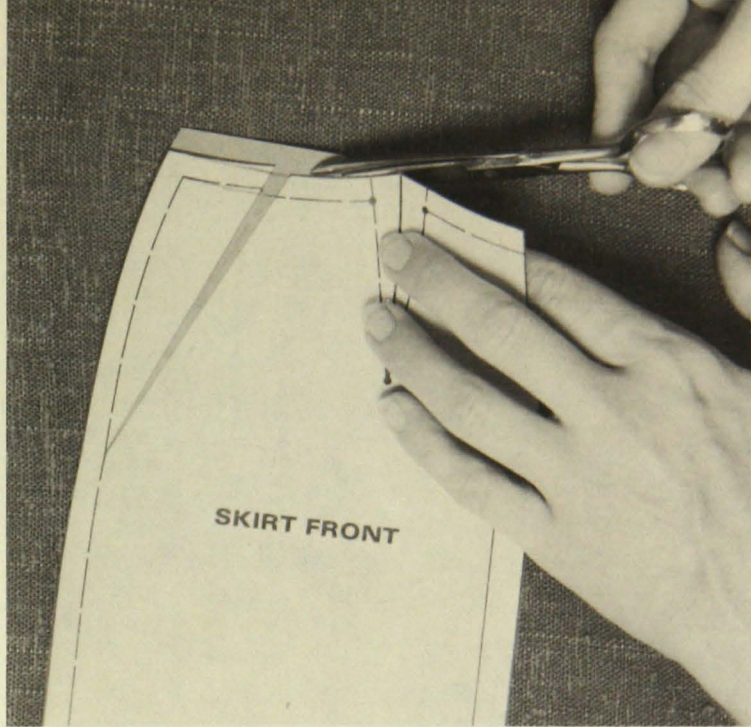
Skirt or Pants Waistline (Alter both back and front)

Measure in from the side seam along the waistline seam 2 inches (5 cm.). Draw a diagonal line through the waistline to the side seam at the hipline. Cut on this line.

To make the waistline larger, place the pattern over tissue paper. Tape the main part of the pattern to the tissue paper. At the waistline seam measure toward the side seam one-fourth the total amount you need to add to the waistline. Mark this distance on the tissue paper. Tape down the side part of the pattern piece.

105

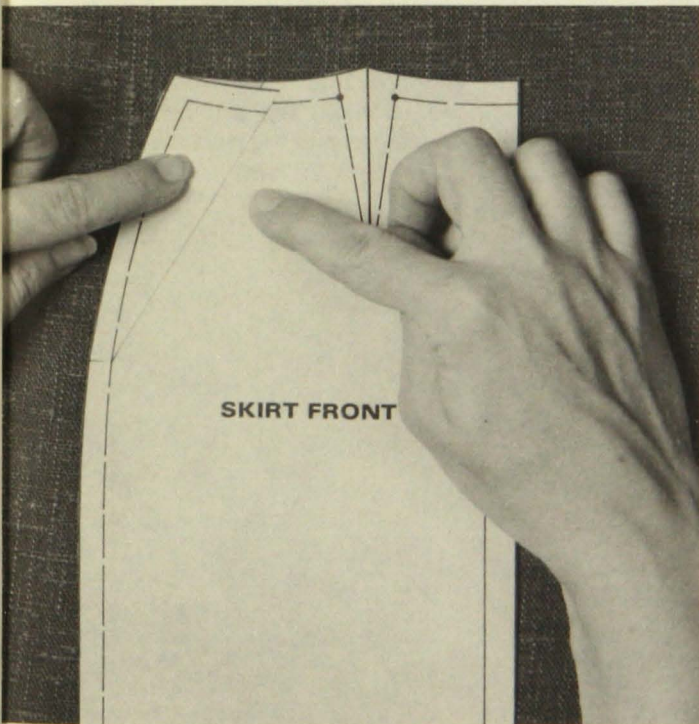




106

Redraw waistline seam and cutting line.

To make the waistline smaller, overlap one-fourth the amount needed to be taken in. Tape down. Redraw the waistline seam and cutting line over a piece of tissue paper.

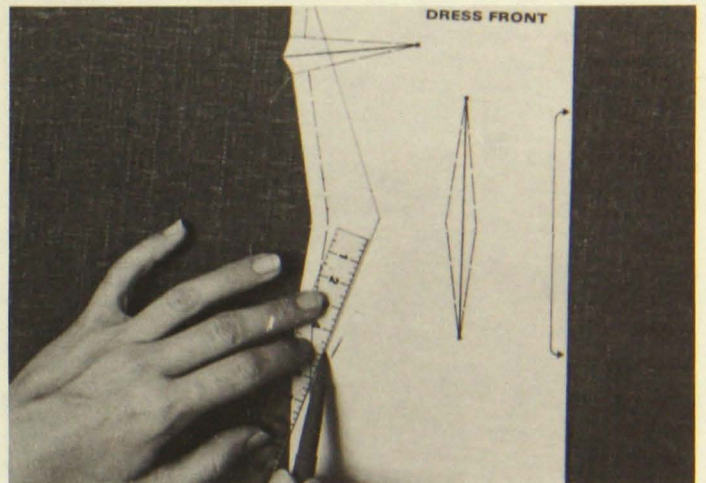


107

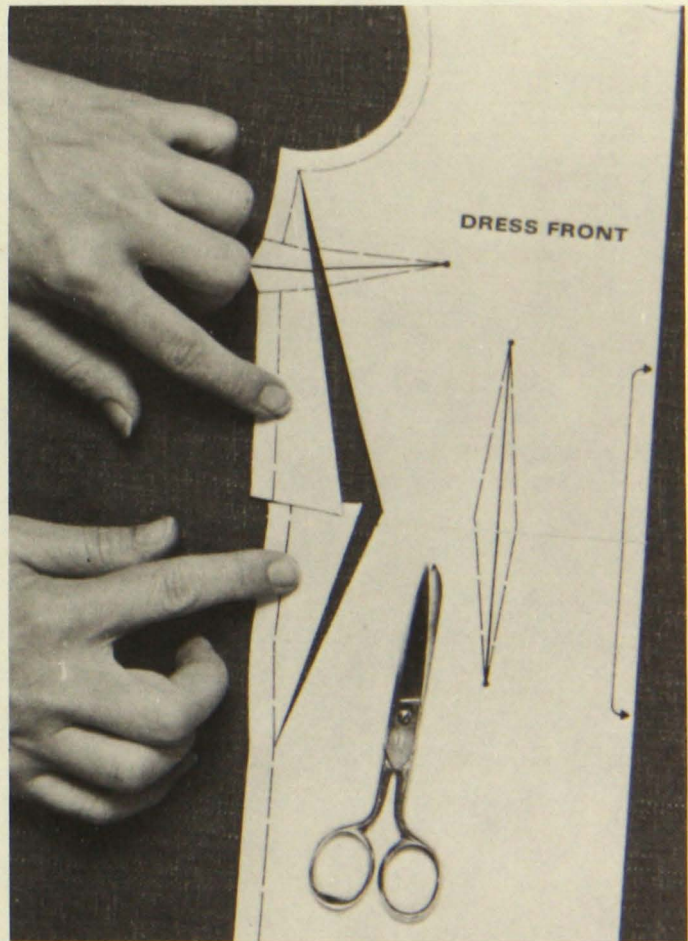
Shift or Princess Style Dress (No waistline seam)

This alteration is done on the pattern sections which have the side seams — not along center front or center back.

Measure at waistline from side seam toward center front or center back 2 inches (5 cm.). Draw a diagonal line from that point to the intersection of the side seam and armhole seam and another to the side seam at the hipline.



108

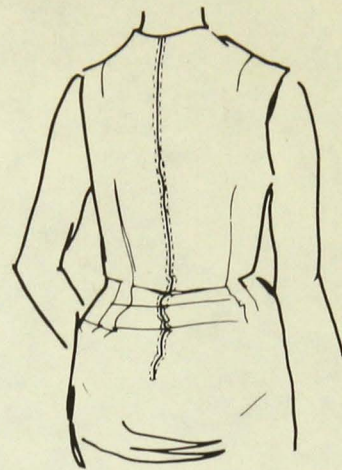
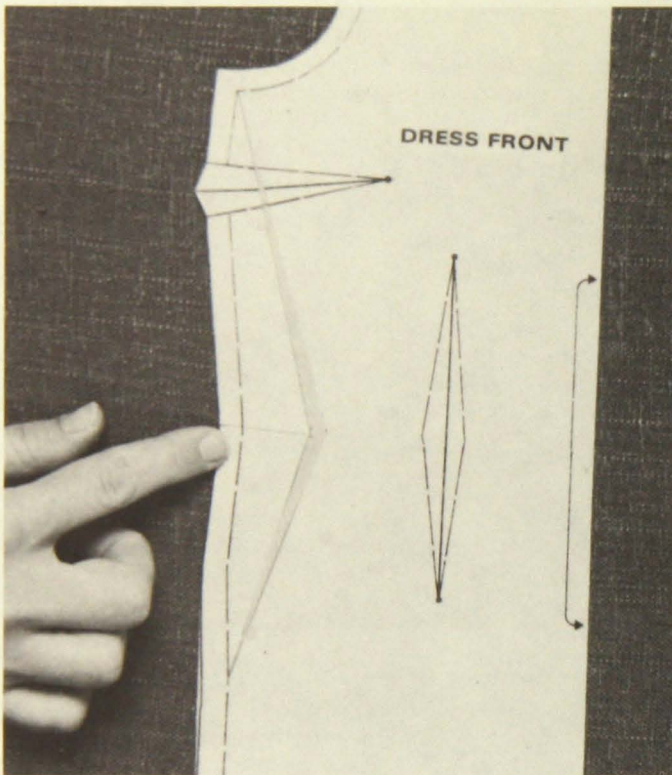


109

Cut horizontally through the side seam to the point of the diagonal lines. Cut along the diagonal lines to the side seam.

To make the waistline larger, spread the pattern the amount to be added. Tape slashed portions to tissue paper. Correct dart stitching line and side seam at the hipline.

110

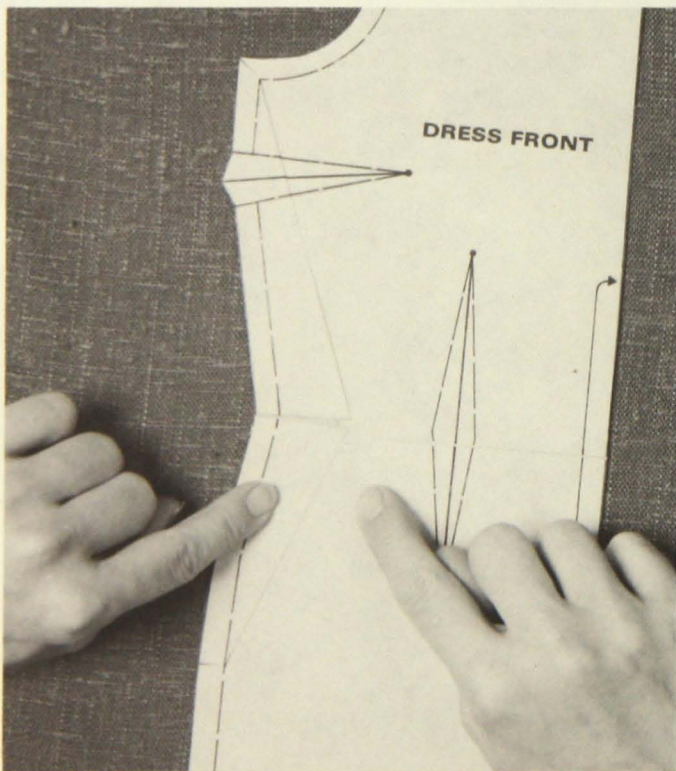


Hip Area Too Tight

A garment too tight through the hips will usually have wrinkles across the hipline and will tend to ride up. It may also cup in under the hip area in back.

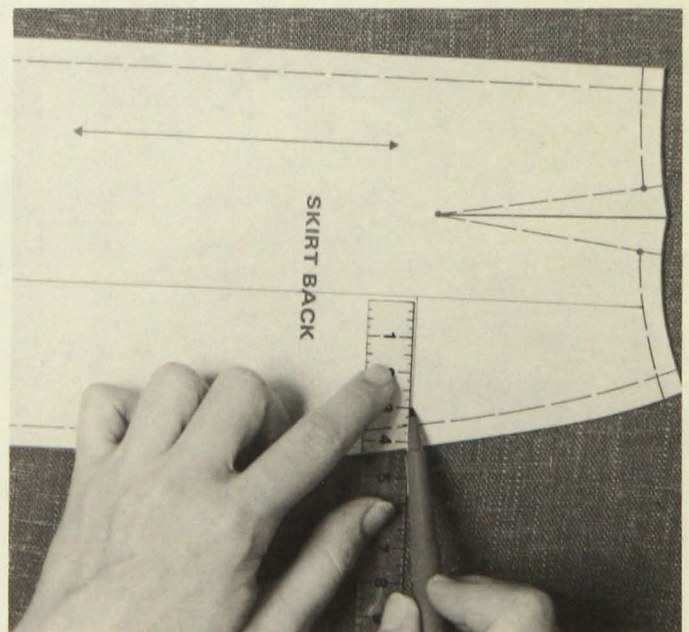
Before altering a pattern, look at your figure and determine if the excess in your hip area is well distributed or mostly in back. You may need to alter both front and back pattern pieces or just back, depending on your figure.

Measure in from the side seam along the waistline 2 inches (5 cm.) and put a mark on the seamline. Draw a line from that mark to the bottom cutting line parallel to the grainline. At the hipline, draw a line from the first one to the side seam.

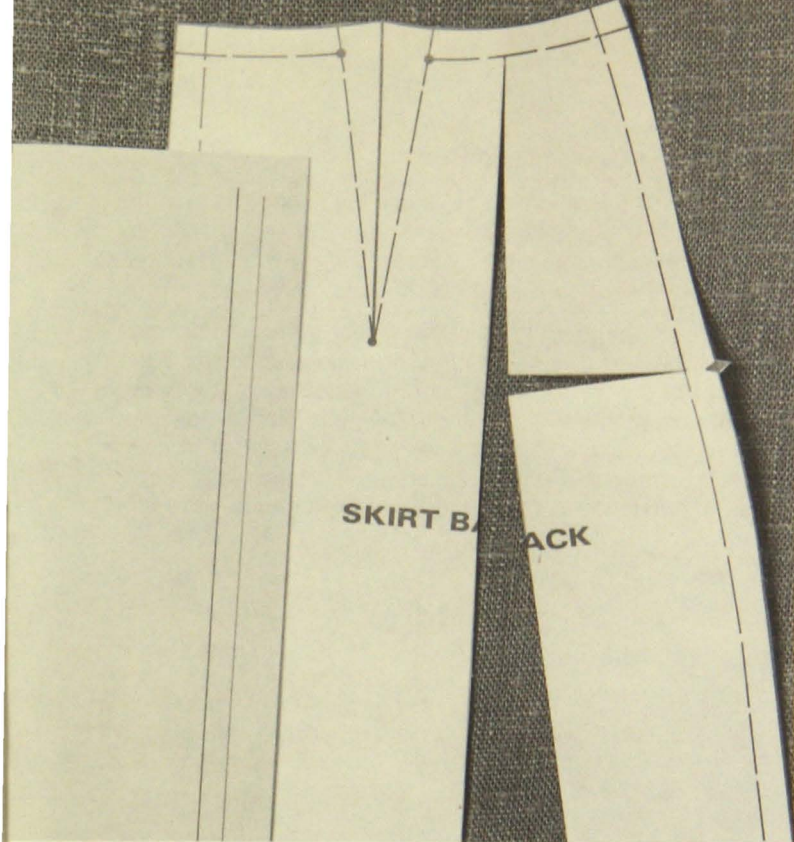


111

To make the waistline smaller, overlap instead of spreading out. Tape down. Redraw dart stitching line and side seam at hipline.



112

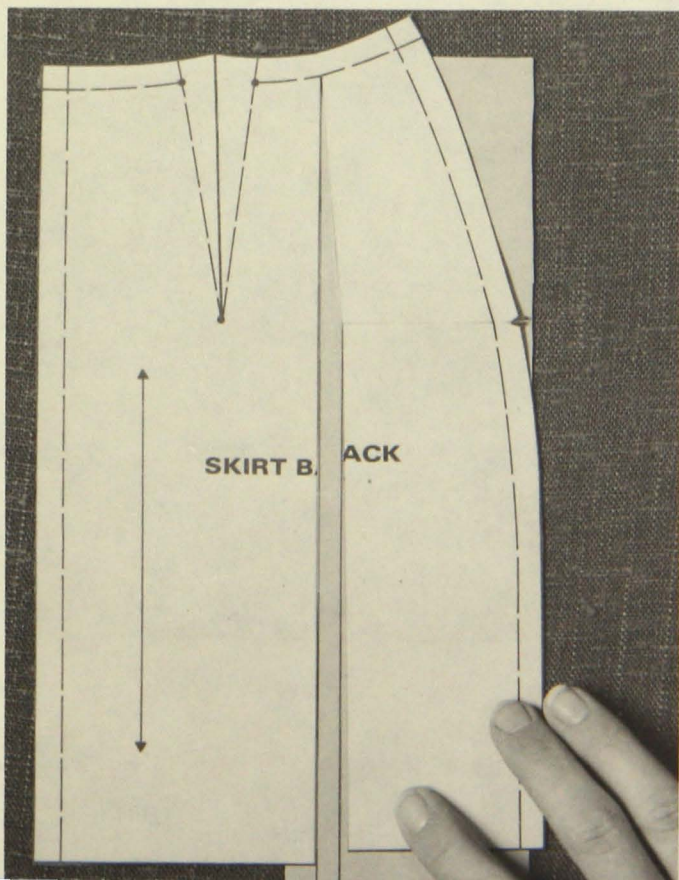


113

Cut on the two lines being sure not to cut through the waistline seamline or side seamline. On a piece of tissue paper the length of the pattern piece, draw two parallel lines. The distance between the lines is the amount to add to each pattern piece (one-fourth the total alteration if altering front and back; one-half if altering only back).

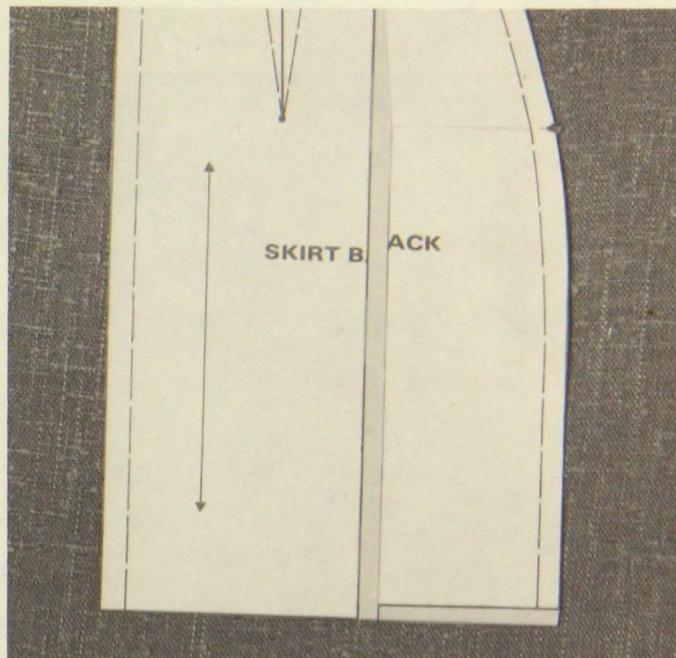
Tape the main part of the pattern to the left parallel line. Swing the side panel of the pattern out so that at the hipline it touches the second line.

114

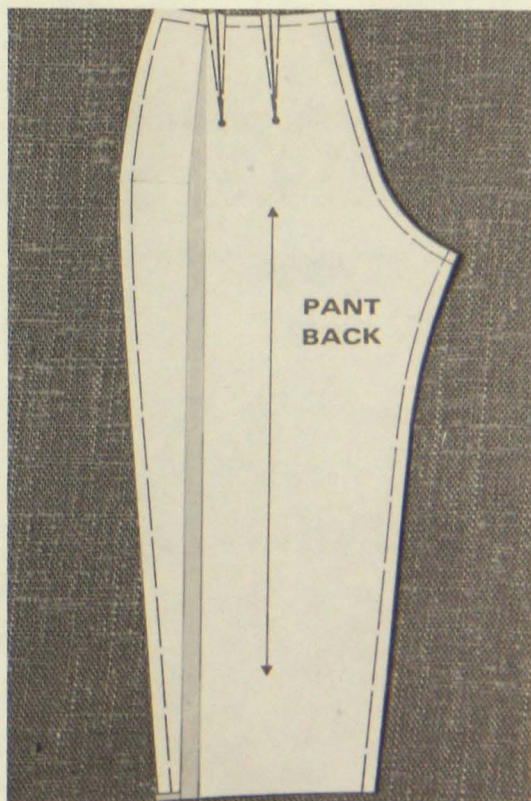


47

To avoid making an A-line skirt or flared pants, swing the rest of the side panel back and tape it to the second line. It will overlap along the horizontal slash at the hipline. Redraw the bottom line of the pattern. To make the pattern lie flat, you may need to clip in from the cutting line to the seamline at the hip.



115



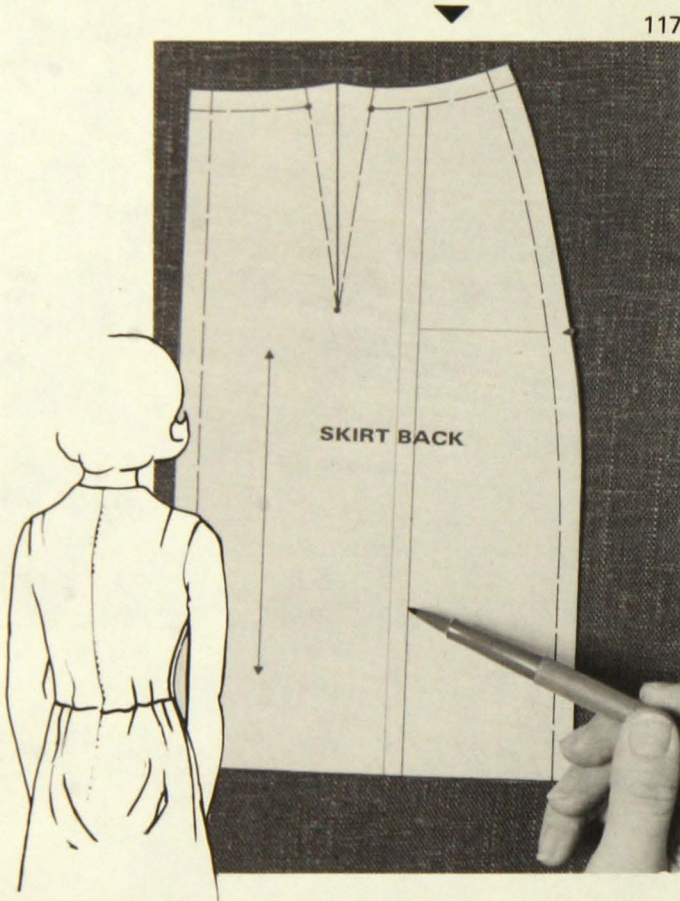
116

Hip alterations can also be done on pants (above) and on one-piece dresses. The bottom line of the pattern needs to be redrawn as with a skirt.

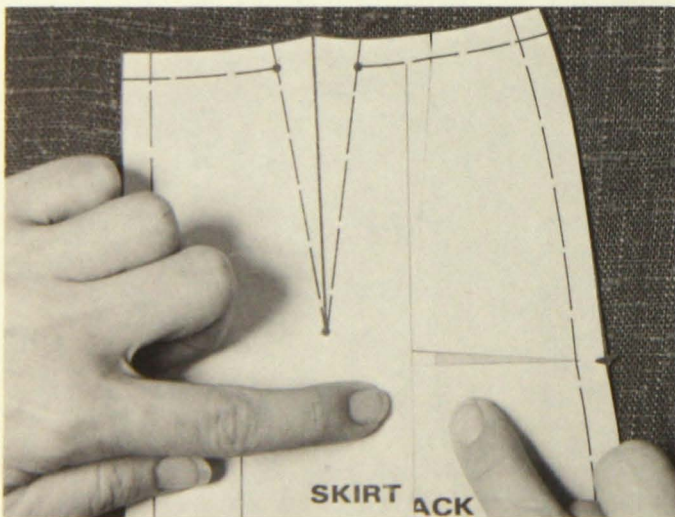
Hip Area Too Loose

A garment too large in the hip area will have folds over the hip usually near the center back.

Do as indicated in Figure 113. Then draw a second line parallel to the line from waistline to bottom cutting line. The distance between the two lines is the amount to subtract from the pattern piece.



117



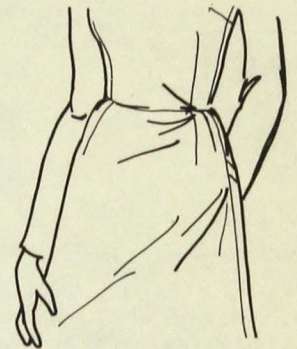
118

Swing side panel in at the hipline so it touches the second line. Place the rest of the side panel along that second line. There will be a gap at the hipline along the horizontal slash. Redraw the bottom line of the pattern.

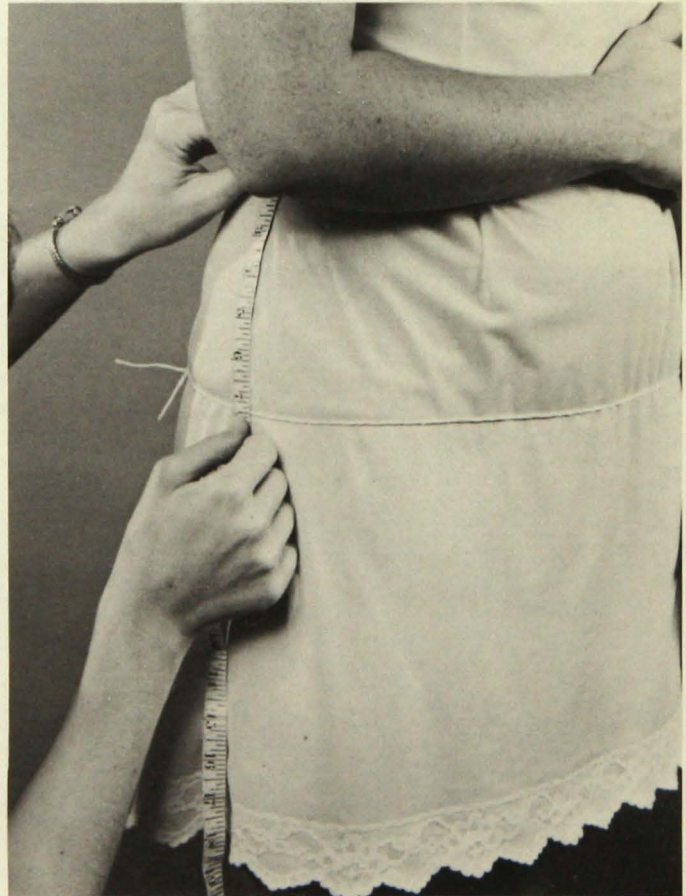
Wrinkles on One Side of Hip

Do your skirts seem to ride up one side making the hemline uneven and swinging center front and center back off center? You may have one hip higher or more curved than the other. Study your figure closely.

Tie a string around your waistline and another around your hipline. Make sure the hipline string is parallel to the floor. Measure between the strings at both side seams. Compare the measurements to find the difference in hipline position. Mark center front and back. Measure from center front to center back about 3 inches (7.5 cm.) below the waist. Compare the two sides to see if width needs to be added to one side.



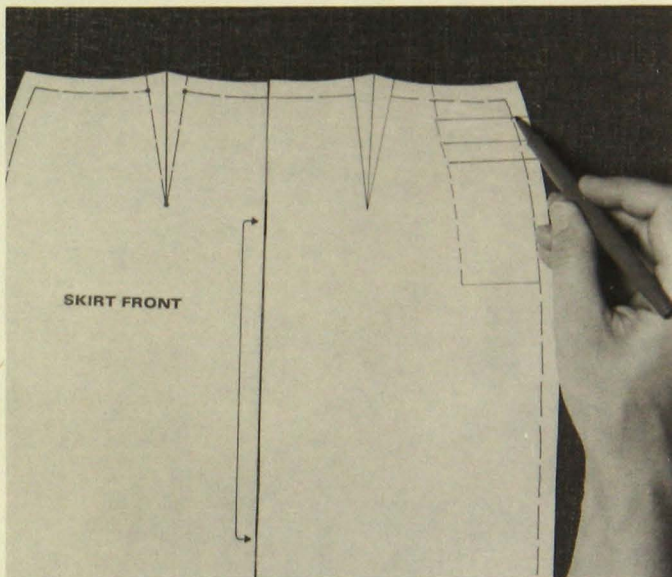
119



No Waistline Seam

A pattern with no waistline seam offers special problems when making this alteration. If the garment fits loosely, an alteration may not be necessary.

Trace the pattern so that only one side will be altered. Cut into the pattern at the waistline 3 inches (7.5 cm.) from the side seam. Draw a diagonal line from the end of the slash to the side seam just below the hipline. Cut on the diagonal line to the side seam. Cut through the side seam to the diagonal line in the upper hip area along each of the three lines.

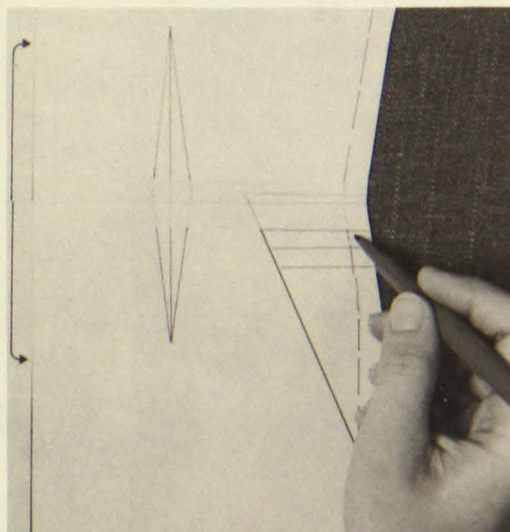
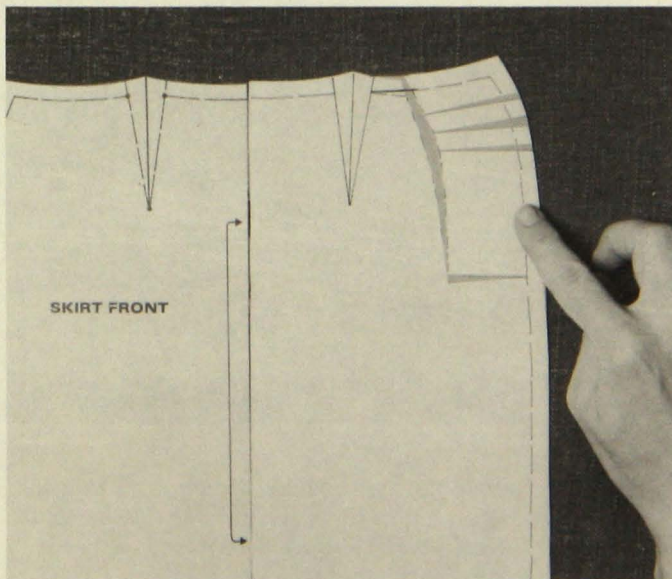


120

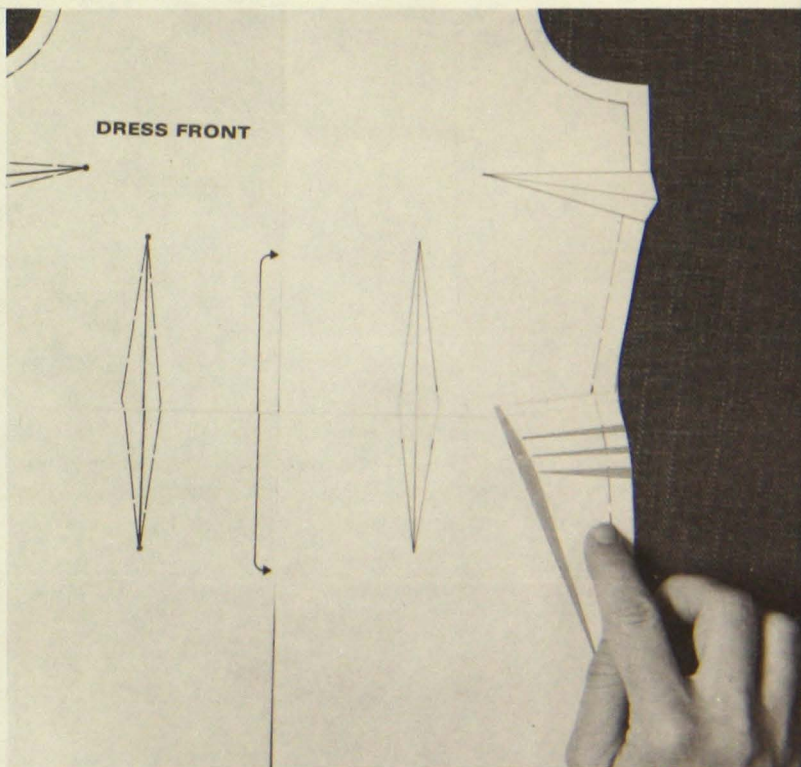
Make a copy of the pattern for the side that needs altering. Measure 3 inches (7.5 cm.) from the side seam along the waistline seam. From that point draw a line parallel to the side seam to just below the hipline. Continue the line across the side seam. In the upper hip area draw two or three lines to the line parallel to the side seam. Cut through the waistline to the hipline along the parallel line. Cut through the hipline to the side seam along the horizontal line in the lower hip area. Cut through the side seam to the parallel line along each of the three lines in the upper hip area.

Spread the pattern to get the length and width needed. Redraw the waistline seam. Attach the altered pattern to the original at center front. Alter both front and back patterns.

121



122



123

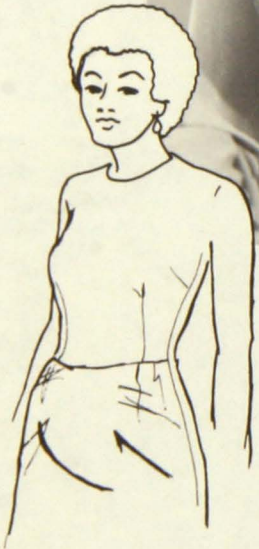
Tape tissue paper to the edge of the slashed pattern. Pull the triangular piece out at the upper hip and waistline area until the width needed by the hip has been added. Tape to the tissue paper. Redraw the side seam.

Eliminating Wrinkles in Front Below Waist (Large Abdomen)

If garments have wrinkles from your abdomen to the side seam at the hipline, the waistline rides up in front and the skirt is short in front, your abdomen may be more prominent than a pattern allows for.

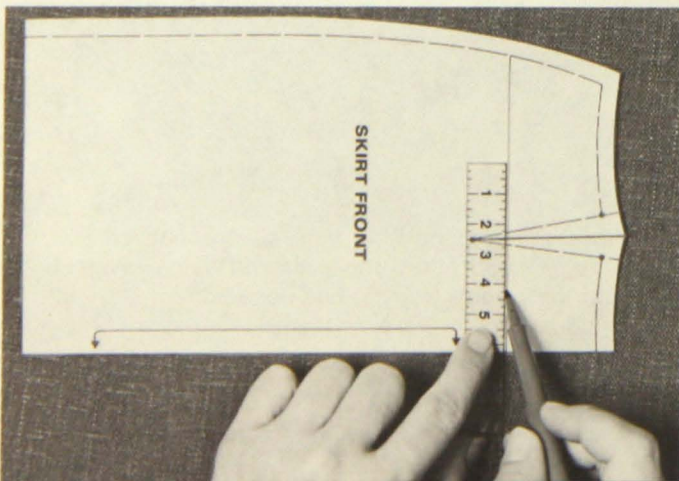
Tie a string around your waist and another around your hips. Be sure the hipline string is parallel to the floor. Have someone measure from the hipline to the string at the side seam and at center front. Use the side seam measurement to find the hipline on the pattern. Draw a line across the pattern perpendicular to the grainline at the hipline. Measure from this line to the waist at center front.

124



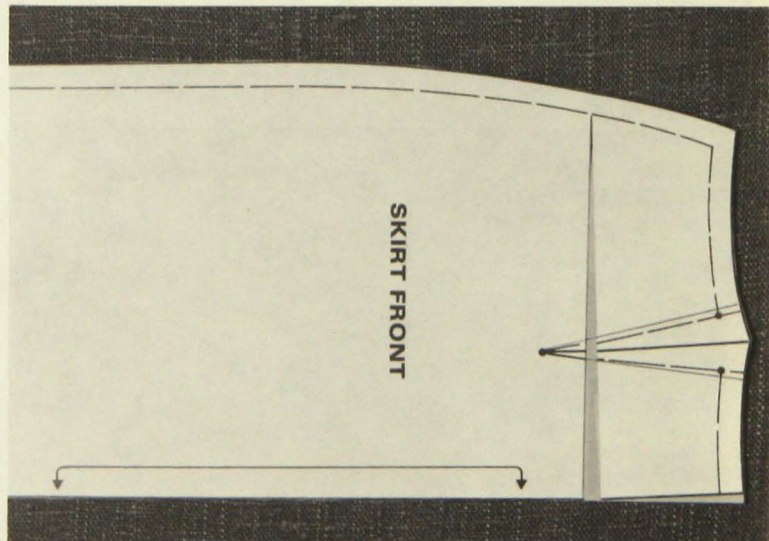
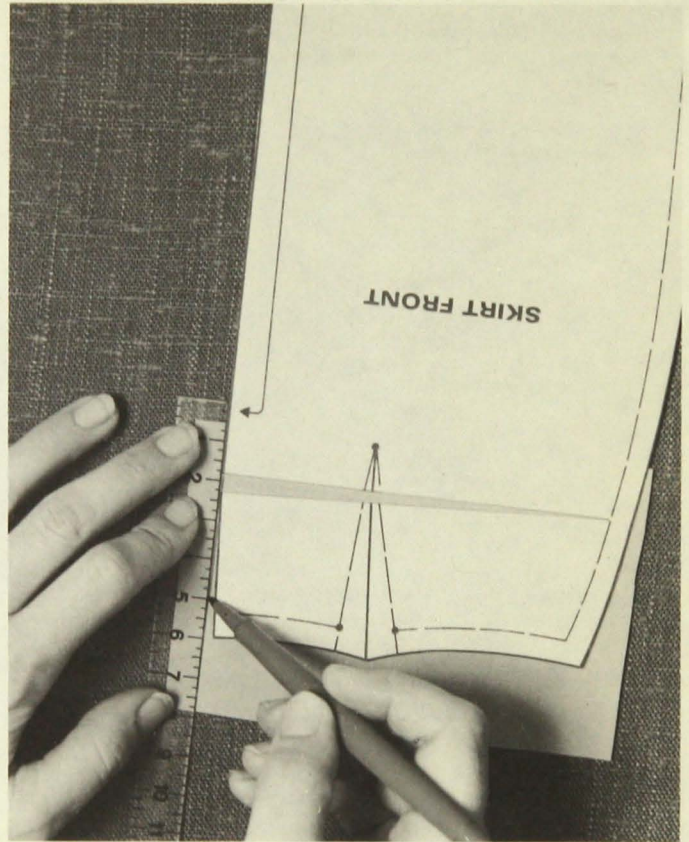
Draw a line 3 inches (7.5 cm.) below the waistline from center front to the side seam perpendicular to the grainline. Cut pattern on this line.

125



Redraw the center front line with a ruler. Tape bottom of skirt to tissue paper. At center front spread the pattern so the measurement from the hipline to the waistline at center front equals your measurement. Tape in place.

126



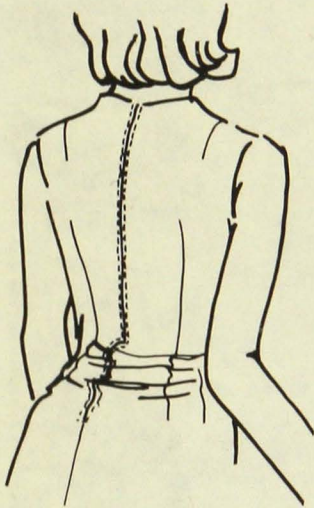
127

This adds some width to the waistline. Redraw the waistline dart so it ends at the original point and is enough wider at the waistline to keep the waist measurement the same as it was unless you need the extra width.

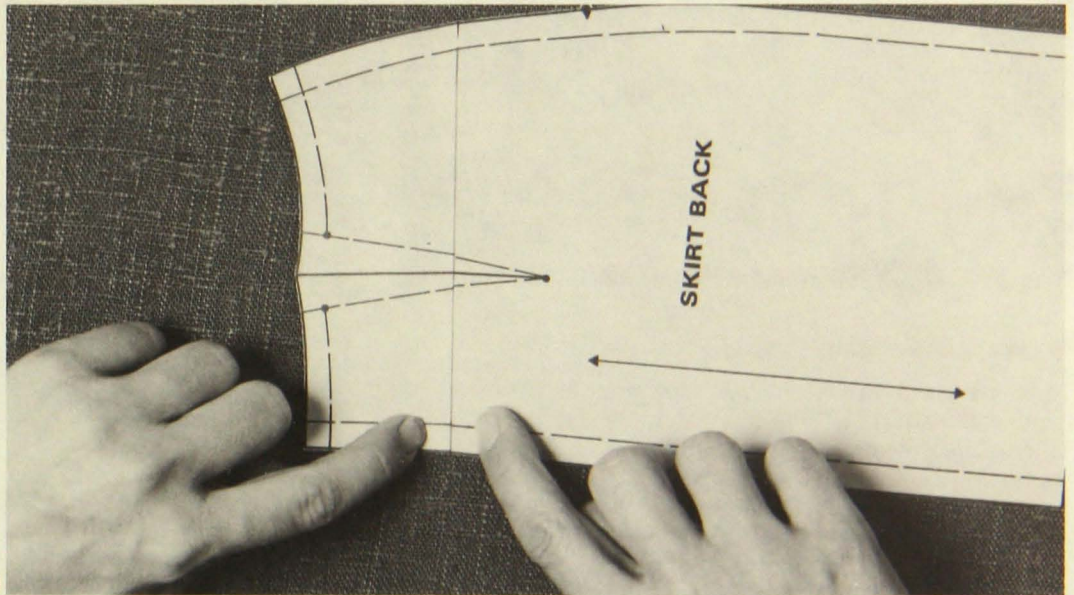
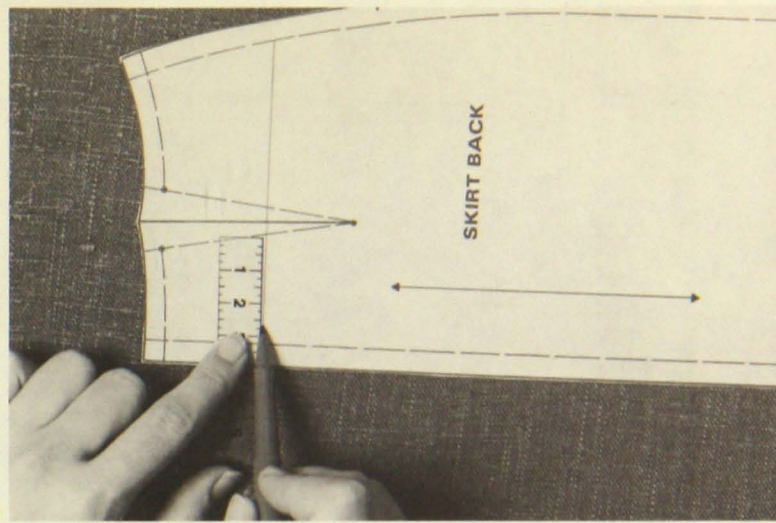
Eliminating Wrinkles in Back Below Waist

If folds of fabric appear between the waist and hips along center back, you may have a swayback. To find out, have someone measure you from hipline to waistline at center back as described in Figure 124.

Draw a line 3 inches (7.5 cm.) below the waistline from center back to the side seam perpendicular to the grainline. Cut the pattern on this line. ▶



128

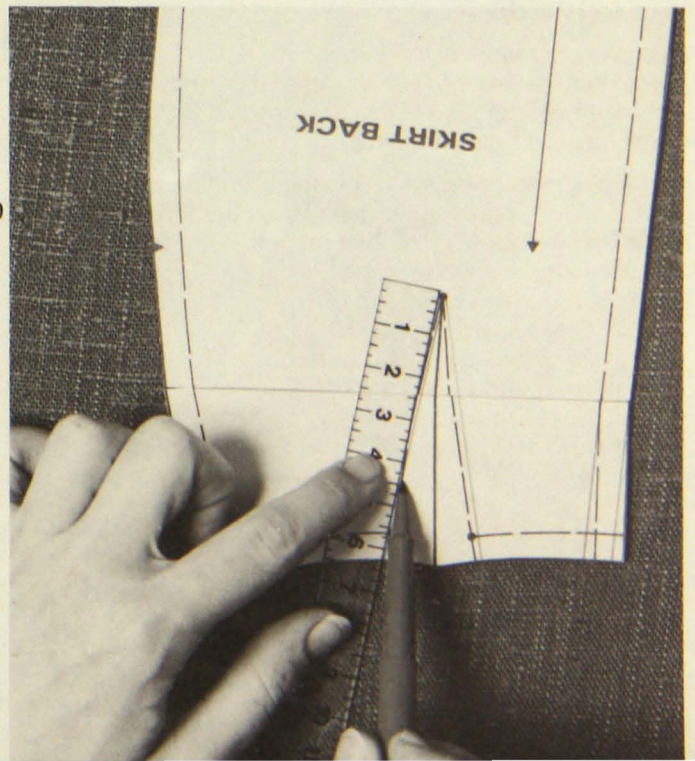


129

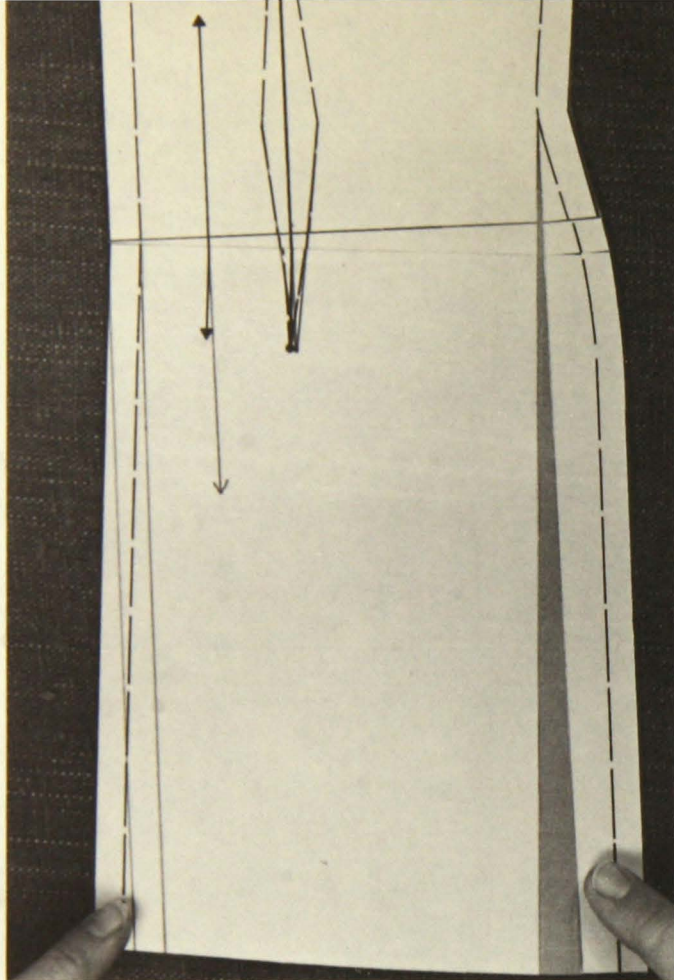
Lap the pattern over at center back so the pattern hipline to waistline measurement equals yours.

Using a ruler straighten the back cutting and seam lines. Redraw the dart stitching lines so you add the width removed at center back. ▶

130



51



131

No Waistline Seam

To alter a garment with no waistline seam, follow steps in Figures 128 and 129. Then straighten the center back seam by placing a yardstick on the bodice back seamline and continuing it straight to the hem. Straighten the grainline and dart to correspond to the bodice. To make the skirt return to its original width, slash from hemline to side seam at the waist and spread the pattern the amount removed from center back.

Don't Overdo It

When you've made all the pattern alterations you need, do your pattern pieces look like this one? If so, maybe you have altered your pattern too much. You need to think about what alterations can be combined.

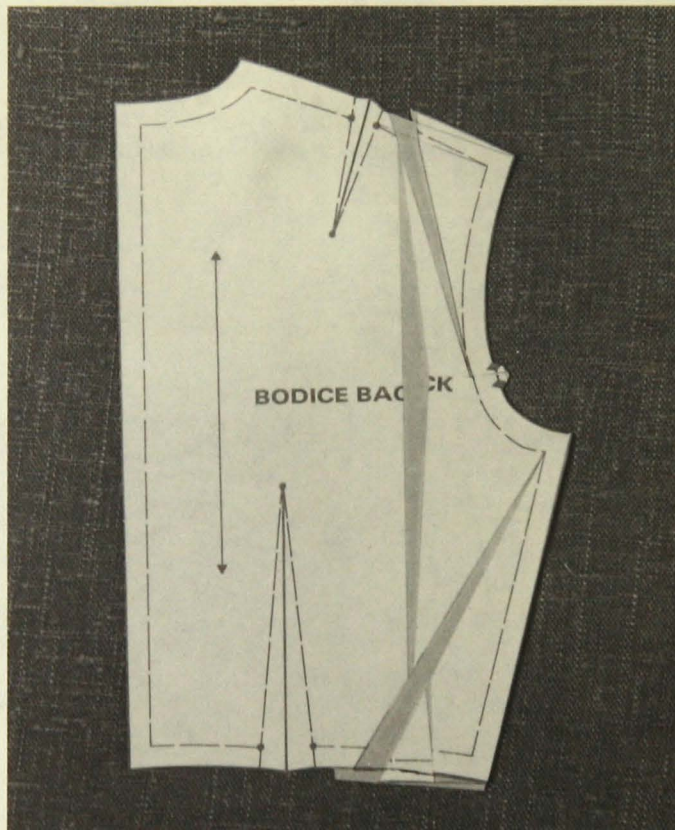
Alterations made through the same seamline can often be combined into one simpler alteration. Some examples of alterations that can be combined are making the

- back wider and waist larger;
- waist larger and hips larger;
- waist smaller and hips smaller;
- bust lower and waist shorter;
- bust lower and waist longer;
- bust fuller and waist larger;
- and shoulders more sloping and narrower.

133

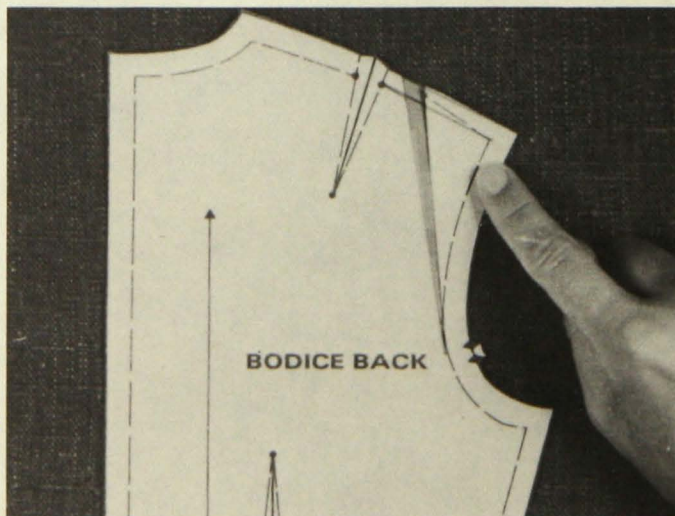
The list could go on. Think about the alterations you make in the same general area of a pattern and decide how you could make one slash or fold take the place of two or more.

132

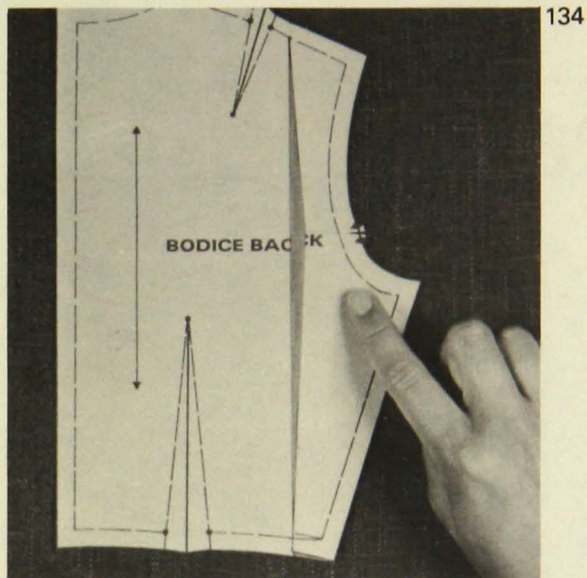


Example 1: Alter to Enlarge Shoulder, Back and Waist

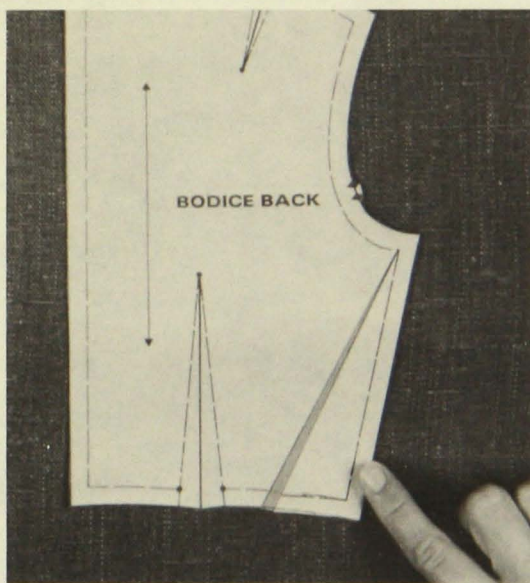
A pattern piece altered to make it longer in the shoulder seam looks like this (for instructions see page 32).



A pattern piece altered to make it wider in the back looks like this (for instructions see page 25).

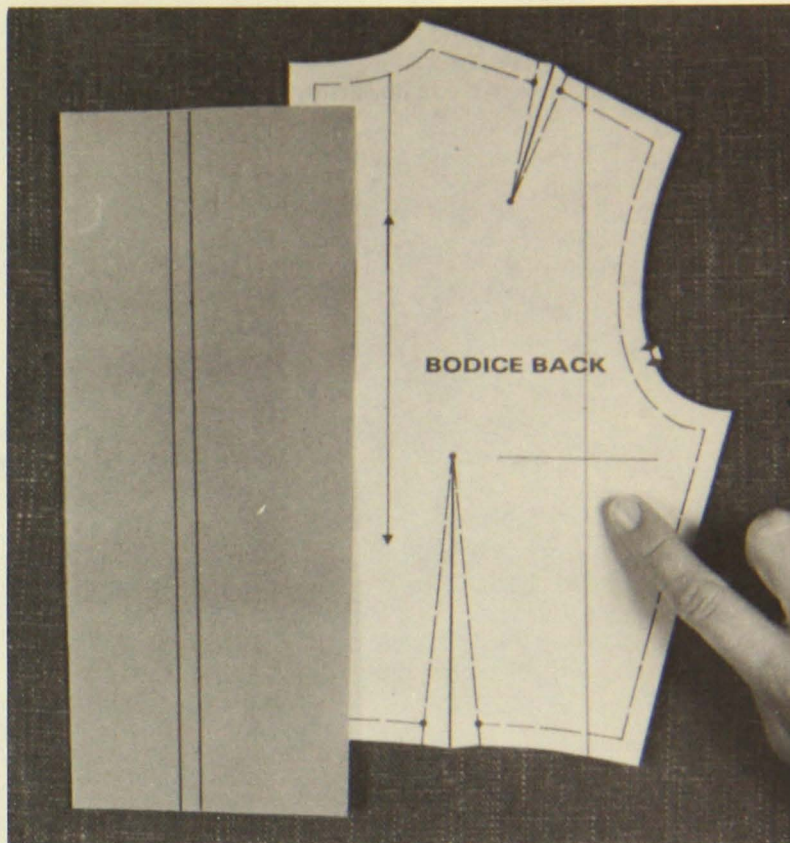


135



A pattern piece altered to make it bigger in the waist looks like this (for instructions see page 43).

To combine these alterations, measure from the armhole seam 2 inches (5 cm.) along the shoulder seam. From that point draw a line parallel to the grainline to the waist. Somewhere along this line draw a perpendicular line. Cut the pattern into two parts along the vertical line. Prepare tissue paper by drawing two parallel lines. The distance between

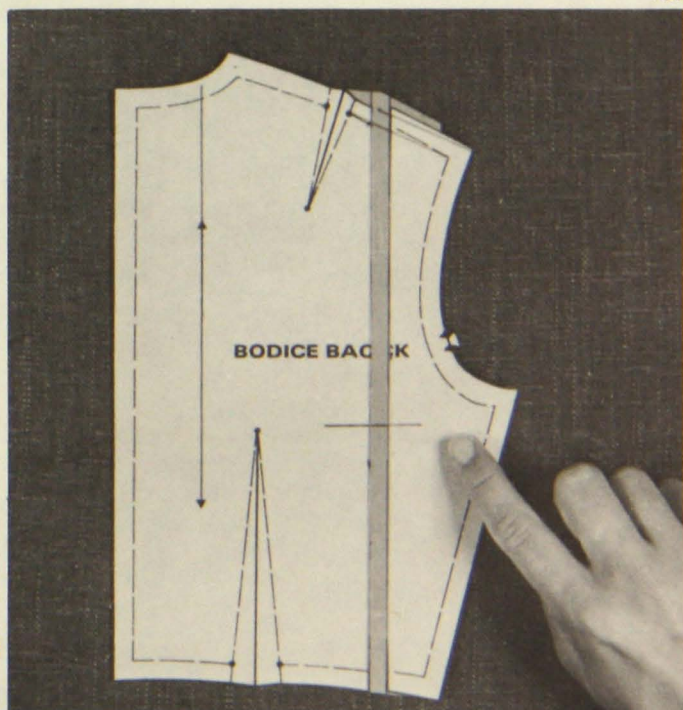


136

them is the amount to add to the back. If different amounts are needed at each place, draw additional lines to correspond.

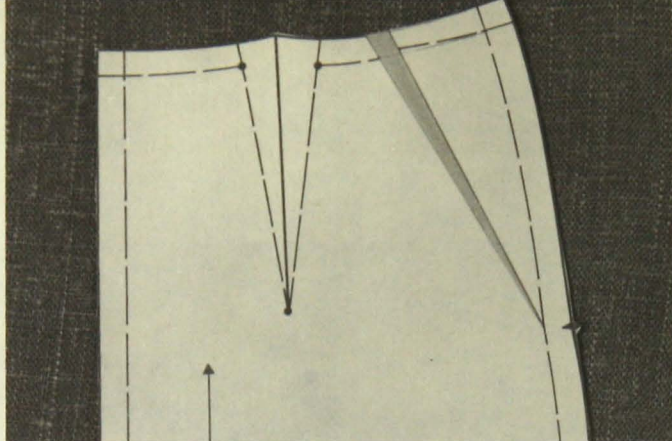
Tape the center back section of the pattern to the left line on the paper. Using the horizontal line to match the pieces, tape the side back to the other line adding the needed amount at shoulder, back, and waist. If different amounts are needed each place, you will need to slash the side section from the vertical slash to the armhole seam at the notch in the armhole and overlap as needed for the pattern to be flat.

137



Example 2: Alter to Enlarge Waist and Hips

A pattern piece altered to make it larger through the waistline looks like this (for instructions see page 43). ▶



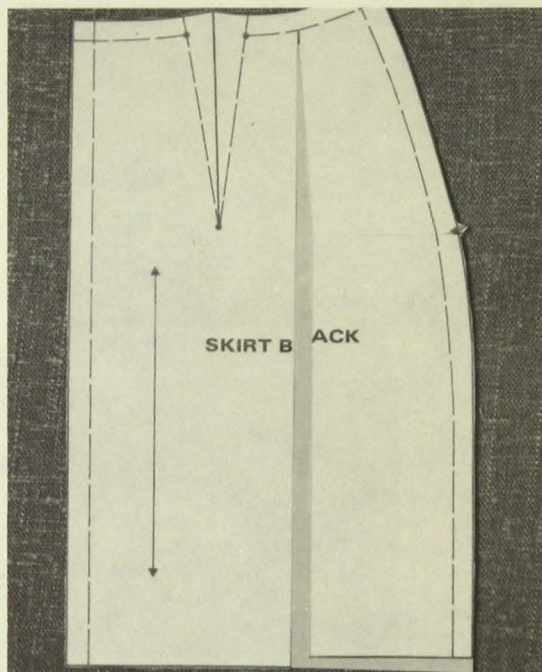
138

A pattern piece altered to make it larger through the hip looks like this (for instructions see pages 46-47). ▶

To combine these alterations, measure from the side seam along the waistline seam 2 inches (5 cm.). Draw a line parallel to the pattern grainline from that point through the hemline. Draw another line from the first line to the side seam at the hipline.

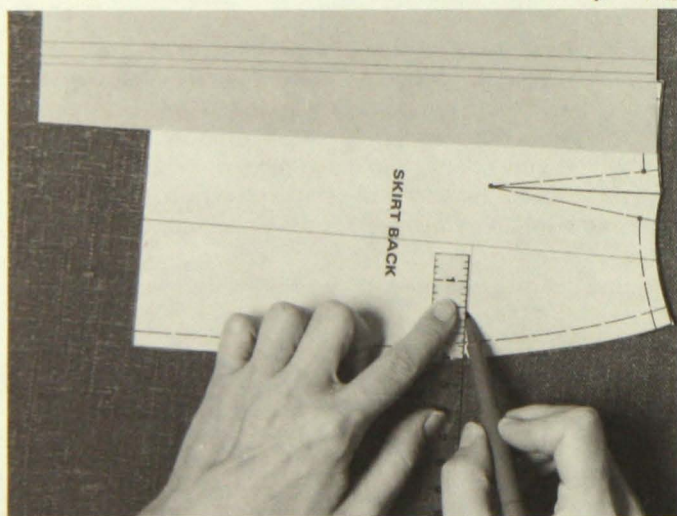
Cut the pattern along the vertical line into two pieces. If different amounts are to be added to the waist and hip, cut to the side seam at the hipline.

Prepare tissue paper by drawing two parallel lines. The distance between the lines is the amount to add to the waistline. If the amount to add to the hip is different, draw a third parallel line.

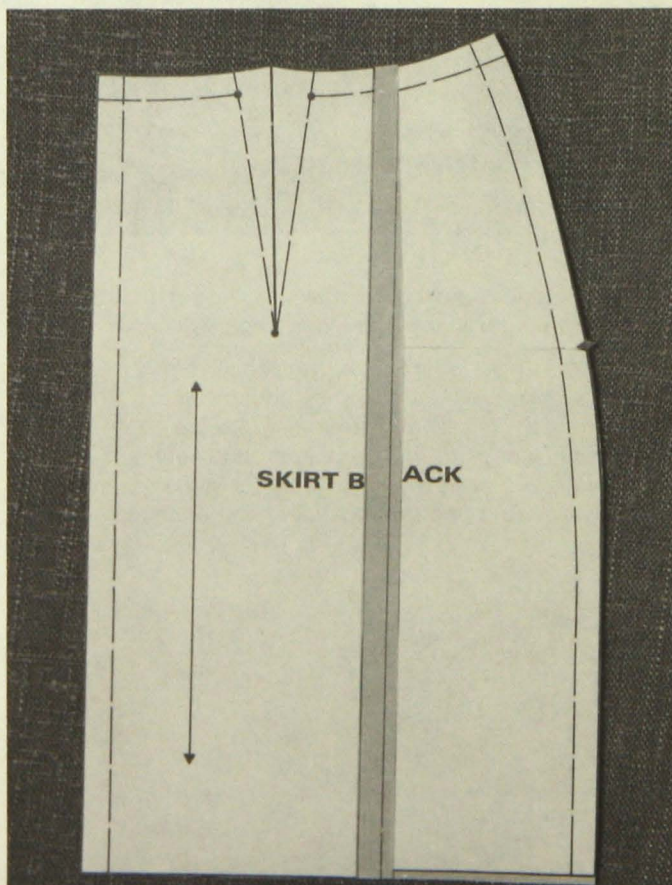


139

▼ 140



141

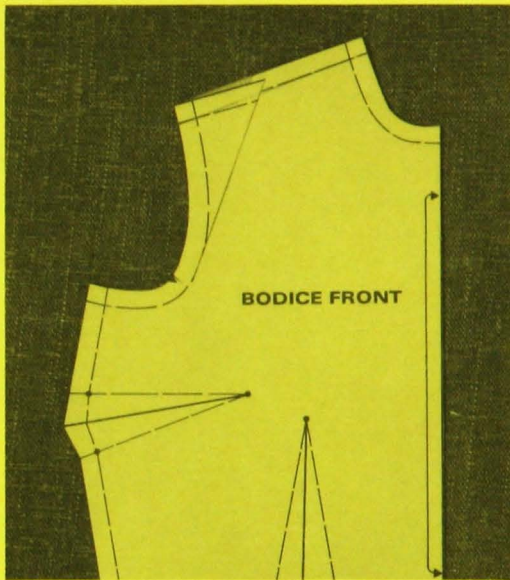


Tape the center section of the pattern to the left line on the tissue paper. Tape the waistline to the parallel line matching the waistline stitching line across the gap. At the hipline swing the side part of the pattern to the line for the hip increase. Tape in place at the hipline. Continue the same amount of spread to the bottom of the skirt. ▶

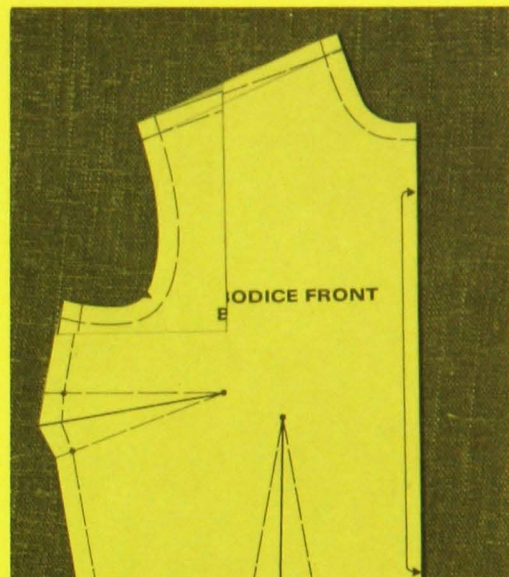
Example 3: Alter to Make Shoulders More Narrow and Sloping

The alteration for narrow shoulders looks like this (for instructions see page 31).

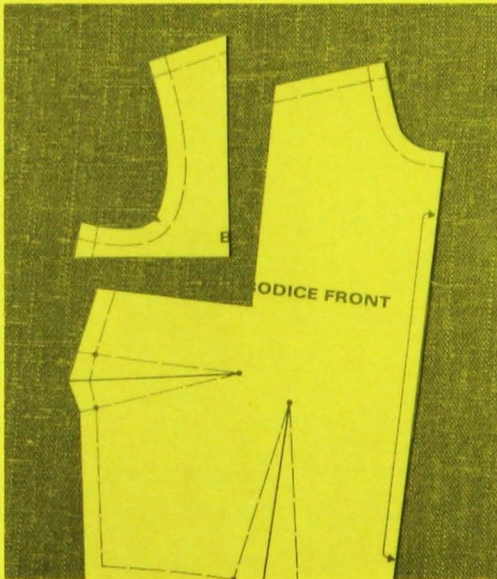
142



143

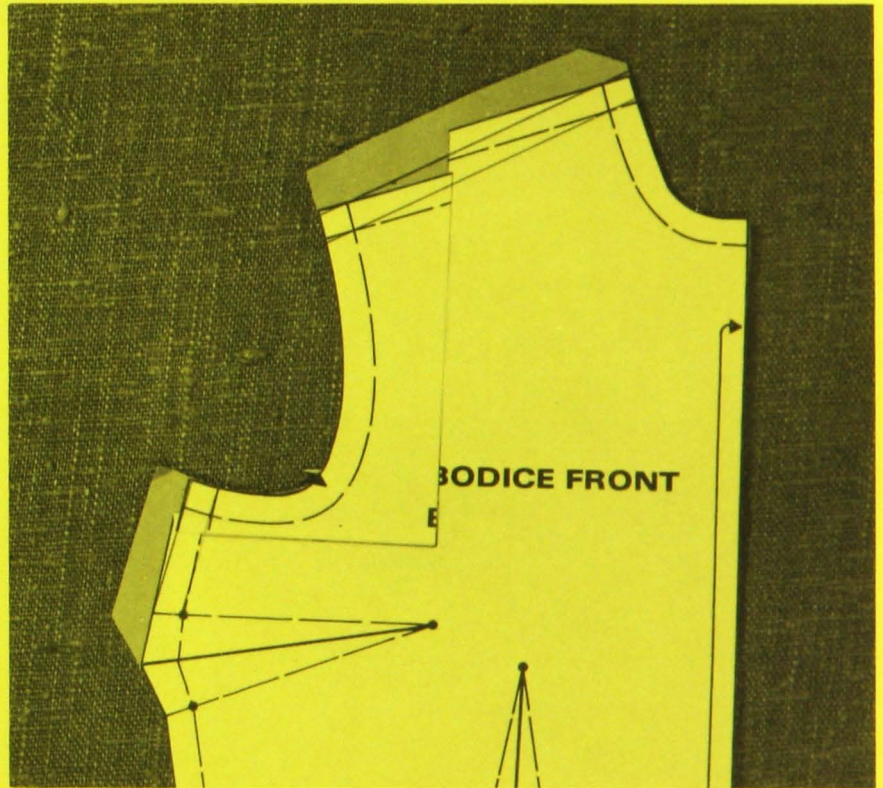


The alteration for sloping shoulders looks like this (for instructions see page 37).



144

To combine these alterations, measure 2 inches (5 cm.) from the armhole seam. Draw a line parallel to the grainline from the shoulder to just below the armhole seam. At right angles to this line draw a line to the side seam. Cut the armhole section out of the pattern.



145

At the underarm area overlap the armhole and bodice sections the amount you need to lower the end of the shoulder line. Slide the armhole section toward center front and, if needed, tilt forward slightly until the shoulder seam is the correct length. Tape in position. Redraw underarm and shoulder seam lines and cutting lines by folding in darts and placing a ruler on both ends of the seamline.

Information and photographs for this publication originally prepared by Lois Ingels while Extension textiles and clothing specialist, Iowa State University. Revised for use in Wisconsin by Lenore Landry, professor of textiles and clothing, University of Wisconsin-Extension. This publication is a recent revision by the original author.

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