A comfortable, attractive garment fits properly. It is neither too large nor too small and conforms to the contours of the body without binding, pulling, sagging, straining, or wrinkling.

Pattern adjustments and alterations are often necessary to achieve a good fit, especially in a form-fitting garment. Making adjustments or alterations before the garment is cut from fabric will eliminate many problems later. Use this collection of alteration guidelines to solve women’s most common fitting problems.

A pattern can be altered and adjusted three ways:

1. By folding out excess fullness to make an area smaller.

2. By slashing and spreading or overlapping along pattern lines to increase or decrease dimensions.

3. By redrawing darts or seamlines.

Fitting problems usually involve one or more of these basic body areas: neckline, bustline, hipline, arms, shoulderline, back waistline, or abdomen.

As time passes, you may find that the problems of fitting your figure may change. Because of this, you will want to compare your current body measurements (Table 1) plus ease to the particular pattern you are using. The amount of ease in a pattern is determined by how close- or loose-fitting the pattern design is.

Make appropriate adjustments or alterations when you find differences between your measurements plus ease and the pattern. After adjusting or altering the pattern, do a careful pin-fitting to further ensure that your garment will fit well.

As you alter the pattern, remember these guidelines:

- Keep all fabric grainlines, the center front, and the center back on the fabric’s straight of grain.

- Make adjustments carefully in order to preserve the garment’s original style or design lines.

- Maintain ease allowance for comfort.

- Whenever possible, use adjustment lines already provided on a pattern.

- When you alter a pattern, make corresponding changes on all related pieces.

**ALTERING BODICE PATTERNS**

**Full Bust (large cup size)**

Slash across the pattern along bust dart foldline to center front. Slash across the pattern from waist to shoulder along waist dart foldline. Spread the desired amount at center front and bust area. Do not spread at shoulder seam. Redraw seamlines and darts. (New darts will be larger than the original darts.)

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1. These guidelines pertain to women’s fashions only.
2. Professor and CES Grants and Contracts Development Specialist, Media Productions Department, New Mexico State University.
3. Ease is the amount of give or movement a pattern has allowed beyond actual body measurements for flexibility of movement (e.g., a pattern may be sized to fit a 36-inch bust but may also include 2.5 inches of ease in the bust, providing a pattern bust measurement of 38.5 inches).
Table 1. Determining Total Pattern Measurements Using Personal Measurements Plus Ease

<table>
<thead>
<tr>
<th>Measurements</th>
<th>How to Take Body Measurements</th>
<th>My Measurements + Ease* (inches) =</th>
<th>Total Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bust</td>
<td>Remove clothing or wear only undergarments; gently wrap tape around body keeping tape level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Bust</td>
<td>Measure just above breasts, under the arms, and across the fullest part of the back</td>
<td></td>
<td>3–4</td>
</tr>
<tr>
<td>Low Bust</td>
<td>Measure just under breasts and around back</td>
<td></td>
<td>3–4</td>
</tr>
<tr>
<td>Neckline</td>
<td>Measure neck circumference 1 inch above base of neck</td>
<td></td>
<td>0.5–1</td>
</tr>
<tr>
<td>Shoulders</td>
<td>Measure from base of neck to top of shoulder bone</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>Back</td>
<td>Measure shoulder to shoulder across back</td>
<td></td>
<td>1–1.5</td>
</tr>
<tr>
<td>Shoulder cap (depending on sleeve length, you may need up to 4 measurements)</td>
<td>Measure with arm slightly bent (as if you were going to slip your hand into a front pants pocket)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Shoulder Cap</td>
<td>Top of shoulder to 0.5 inch below wrist bone</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>b. Upper Arm Length</td>
<td>Measure top of shoulder to outside center of elbow</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>c. Upper Arm Circumference</td>
<td>Measure around upper arm at armpit</td>
<td></td>
<td>0.5–2</td>
</tr>
<tr>
<td>d. Wrist</td>
<td>Measure around widest part of hand</td>
<td></td>
<td>0.5–1</td>
</tr>
<tr>
<td>Derriere</td>
<td>Measure widest part of hips</td>
<td></td>
<td>2–4</td>
</tr>
<tr>
<td>Back</td>
<td>Measure down your back from the prominent bone at base of neck down to your waistline</td>
<td></td>
<td>1–2</td>
</tr>
<tr>
<td>Thighs</td>
<td>Measure 9 inches down from waistline, around heaviest part of single thigh</td>
<td></td>
<td>1–3</td>
</tr>
<tr>
<td>Inseam</td>
<td>Measure from crotch to ankle bone on inside of leg</td>
<td></td>
<td>0.5–1</td>
</tr>
</tbody>
</table>

* The chart provides a range of ease measurements for constructing a fitted garment. Be cautious when determining the exact amount of ease to include with your measurements. Ease amounts vary depending on your pattern instructions, the type of fabric used, and your fit and style preferences.

**Small Bust (small cup size)**
Slash across the pattern along bust dart foldline to center front. Slash across pattern from waist to shoulder along waist dart foldline. Overlap darts the desired amount to decrease the bust area. Do not overlap at shoulder seam. (New darts will be smaller than the original darts.)

**High Bust**
Slash below dart and up to armseyc (or armhole) level. Fold out desired amount above the dart. Lengthen the waistline dart as needed. Redraw seamline below dart.
**Low Bust**
Slash above dart and down to waist. Fold out desired amount below dart. Shorten the waistline dart as needed. Redraw seamline above dart.

**Small Neck**
Redraw neckline to raise it the desired amount. Add the same amounts to the facing and collar patterns.

**Large Neck**
Redraw neckline to lower it the desired amount. Alter the facing and collar patterns to match the new neckline.

**Gapping Neckline**
Slash from neckline down through bust area to waist. Overlap the desired amount on neck edge; the waistline dart will become larger. Remember to alter the neckline facing and collar patterns to fit the altered neckline.
**Sloping Shoulders**
Redraw shoulder seam and armscye seams, sloping and lowering them the desired amount. Be sure to redraw seams on both front and back pattern pieces.

**Broad Shoulders**
Slash from midpoint of shoulder down and across to the middle of armscye. Spread pattern the desired amount. Redraw seam from neckline to armscye. Be sure to complete alterations for both bodice front and back.

**Round Shoulders**
Slash across the back from center back to armscye. Slash down from middle of neckline curve. Spread the desired amounts, making the addition at the neckline a new dart.

**Square Shoulders**
Redraw shoulder seam and armscye seams, raising them the desired amount. Be sure to redraw seams on both front and back pattern pieces.

**Narrow Shoulders**
Slash from midpoint of shoulder down and across to middle of armscye. Overlap pattern the desired amount, and redraw. Be sure to complete alterations for both bodice front and back.

**Narrow Back**
Slash from shoulder to waist. Slash from underarm side seam to first slash. Overlap pattern sections the desired amount, but do not overlap at shoulder or waistline.
**Broad Back**
Slash down from midpoint of shoulder to bottom of armscye and across. Spread pattern the desired amount. Redraw side seam and shoulder dart. (The new dart will be larger than the original one.)

**Sleeve Cap Too Narrow**
Slash from top of sleeve to elbow, then across to side seam. Spread the desired amount at the top. Redraw cap. Add 1/2 the amount added to the shoulder cap to the shoulder seam on both the bodice front and back.

**Large Upper Arm**
Measure the length of the original seam at the top of the sleeve and record the measurement. Slash sleeve down the center from top to bottom. Slash across cap. As you pull the sleeve open to make it wider, the cap will become shorter; redraw the cap to its original height. Measure the length of the new seam at the top of the sleeve. Figure the difference from the original seam. Add 1/2 of the difference to the underarm seams of both the bodice front and back.

**Small Arm**
Measure the length of the original seam at the top of the sleeve and record the measurement. On the pattern, fold out the desired amount along a line from top to bottom of sleeve. Redraw lines at hem of sleeve and cap to make a smooth seamline. Measure the length of the new seam at the top of the sleeve; figure the difference from the original seam. Remove 1/2 the difference from the underarm seams of both the bodice front and back.

**Large Arm**
Slash sleeve down the center from top to bottom and spread the desired amount. Add 1/2 the amount added to the sleeve to the bodice front and back side seam.
ALTERING SKIRT PATTERNS

Protruding Derriere
Slash from waistline to hemline parallel to center back through waistline dart. In hip area, slash across pattern from center back to side seam. Spread the pattern the width and length desired. Redraw dart and seamlines. (The new dart will be larger than the original dart.)

Flat Derriere
Slash parallel to center back from waistline to hemline through the waistline dart. In hip area, slash across pattern from center back to side seam. Overlap pattern in hip area the desired amount to reduce width and length. Redraw dart and seamlines. (The new dart will be smaller than the original.)

Sway Back
On bodice back just above waistline, fold out desired amount and redraw side seam, dart, and center back seam. On skirt back just below waistline, fold out desired amount and redraw side seam, dart, and center back seam.

Protruding Abdomen
Slash from waistline to hemline parallel to center front through waistline dart. In the abdomen area, slash across the pattern from center front to side seam. Spread the pattern the desired amount to increase in width and length. Redraw dart and seamlines. (The new dart will be smaller than the original, and the waistline seam will curve up.)

Bulging Thigh or Wide Hips
Slash parallel to the side seam from hemline up to thigh or hip area, then across to side seam. Spread the desired amount. Redraw seamline from waistline to hem.

Flat Side Hip
Fold out the desired amount along the side seam of skirt front and skirt back. Fold should be parallel to center front and center back.
**ALTERING PANTS PATTERNS**

**Protruding Derriere**
Slash pattern back from waistline down center of leg parallel to grainline. In hip area, slash across from center back to side seam. Spread to add desired amount. Redraw darts. Redraw crotch seam and inseam to add needed length.

**Flat Derriere**
Fold pattern at center back to decrease fullness the desired amount, tapering waistline to the side seam. Fold out desired amount at side hip of back pattern piece only.

**Sway Back**
Fold out the desired amount below the waistline to decrease the length of center back crotch seam. Redraw side seam, darts, and center back seam.

**Protruding Abdomen**
Slash at center front and spread to add the desired amount at waistline. Taper the waistline to the side seam and redraw darts. Redraw crotch seam and inseam to add amount needed to front crotch length and leg.

**Bulging Thighs**
Slash at front side hip and spread pattern the desired amount. Redraw to smooth seamline. Repeat for back side hip.

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