

DARTS, EASE, GATHERS, PLEATS, SHIRRING, TUCKS

Darts are used to shape fabric to fit the body. They provide fullness to body curves. Sometimes darts are used decoratively to provide a design line and are not used for fitting. It is important to be accurate when fitting, marking, stitching, and pressing darts.

Standards

A well-constructed fitting dart should:

- Be directed toward the body curve.
- Usually end $\frac{1}{2}$ to 1 inch from the fullest part of the body curve.
- Be tapered so it is smooth and free of puckers.
- Be even and smooth in appearance.
- Be pressed before being crossed by another line of stitching, and after the garment has been fitted. Uncut horizontal darts are usually pressed down; uncut vertical darts are usually pressed so the fold is toward the center front or center back.
- Have threads secured at both ends by tying a knot, lock stitching, or backstitching (use only on medium to heavy fabric or in seamline).

General Rules

There are a few general rules that will help you understand what darts are and how best to handle them during the construction of a garment.

- The wider the dart base, the more fullness it will provide to the body curve. For example, a large bust will require a wider dart base.

- Stitch darts from wide to narrow, with the last two or three stitches on the edge of the fold.
- Darts are usually straight and merge into the fabric (slide down the hill, not jump off the cliff). (Figure 1)



Figure 1

- For a neat finish in sheers; double stitch darts, trim, and overcast or bind the edge.
- Threads at the point of the dart must be secured. The method of fastening (backstitch, tying a knot, lockstitch, or working threads back into the stitching) depends on your fabric. For example, do not use the backstitch or lockstitch on sheer or lightweight fabrics since it builds up thread and is bulky. It can also damage the fabric.
- Slash darts open ONLY when the fabric is bulky. Stop the slash about $\frac{1}{2}$ to 1 inch from the dart point. (Figure 2)

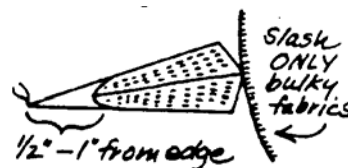


Figure 2

Marking

Darts may be marked by using dressmaker's tracing paper and wheel, tailor's tacks, chalk or soap slivers, marking pencils or pens, pins, or short snips. The method used will depend on the fabric and your skill. Always check the marking method on the fabric scrap. Be sure it will wash out and does not damage the fabric. (Figure 3)

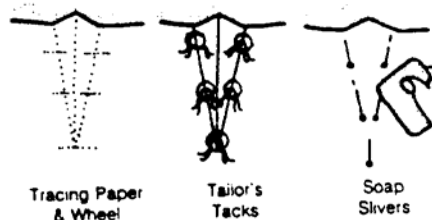


Figure 3

Sewing

Fold dart in the center on the fold line. Pin baste or hand baste. Usually darts are stitched from the wide end to the narrow end. On a double-pointed dart, start your stitching at the widest part and stitch to each end. Be sure that the last few stitches are on the very edge of the fold of the dart. (Figure 4)

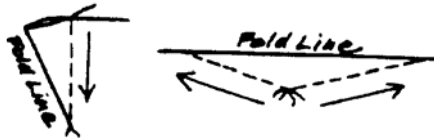


Figure 4

Fitting

Since darts are part of the pattern design to fit a garment to the body, be sure they are correctly positioned on the figure. Darts should be directed toward the fullest part of the body curve. If you have a large body curve, two small darts will usually fit better than one large dart. Always check dart placement and make any necessary adjustments before permanently stitching and pressing.

How to Lower/Raise Darts

On the garment or the pattern (when pattern-fitting), mark the bust point with a pin. Remove pin basting or dart stitching. Use the pattern to re-mark the dart, lowering or raising it exactly

the same distance as the bust point marking. (Figure 5)

Another alternative is to use the same dart base lines at the seam (largest portion of dart), and redraw a new dart end pointed to the newly marked bust point. See illustration below. (Figure 5)



Figure 5

How to Shorten or Lengthen Darts

On the garment or pattern (when pattern-fitting), mark where the dart should end. Remove pin basting or stitching, and then redraw the dart stitching lines from the dart base to the new dart end. (Figure 6)



Figure 6

Finishing

After stitching darts, be sure to secure the ends by tying a knot, lock-stitching (running off fabric about 1/2-inch), backstitching (use only on medium to heavy fabric or in seamline), or leave a length of thread and run it back into your stitching. Backstitching requires a lot of practice and skill. It is not recommended for the average sewer. Lock-stitching is *only* recommended when the threads are protected and will not experience very much wear, i.e., a lined garment. (Figure 7)

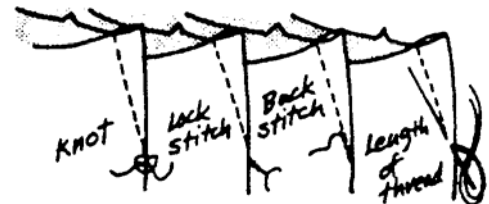


Figure 7

Pressing

Since stitched darts provide shape to a piece of fabric, be sure to carefully position these curves over a tailor's ham or the end of the ironing board when pressing. Remember to press darts **ONLY** after you are sure they are correctly positioned on the body.

Press darts before they are crossed with another line of stitching. Protect the fabric by using a press cloth or protective sole plate on the iron. Like seams, darts should first be pressed as they are sewn to set the stitches. Then, press over a tailor's ham turning vertical darts toward the center and horizontal darts down. If a dart is bulky, slash and press open with the point pressed flat.

Hint:

- *By pressing darts in the opposite direction first, you will get a sharper pressing of the dart line.*
- *To prevent a ridge showing on the right side from pressing, slip paper between the garment and the dart. (Figure 8)*



Figure 8

TYPES OF DARTS

There are several different types of darts. Learn the basic types, their shape, and when they are used.

- **Straight** – a straight stitching line from seamline to point. Frequently used on underarm of front bodice, back skirt, elbow, shoulder, and back neckline. (Figure 9)



Figure 9

- **Curved Outward** – curves outward from seamline to point. Gives a snugger fit. Sometimes used on a bodice front to make mid-body fit snug. (Figure 10)



Figure 10

- **Curved Inward** – curves inward from seamline to point for better fit of body curve. Frequently used on pant and skirt fronts. (Figure 11)



Figure 11

- **Neckline** – a solid line marking on the back neckline indicating a 1/8-inch straight dart. (Figure 12)

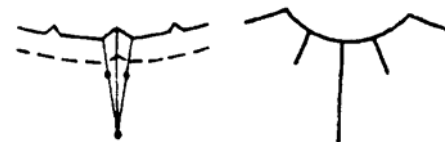


Figure 12

- **Double Pointed** – from waistline (widest point) tapers in a straight line both ends. Clip at the widest part. Frequently used on princess and A-line dresses, overblouses, and jackets. (Figure 13)

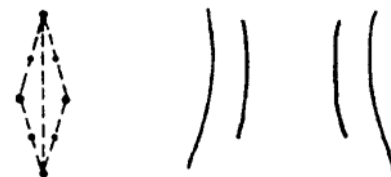


Figure 13

- **Dart in Interfacing** – slashed on the fold line, then lapped on the stitching lines and zigzagged to hold in place. (Figure 14)

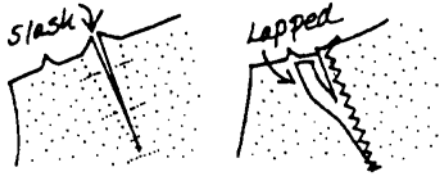


Figure 14

THINGS TO THINK ABOUT

Darts

- Pin mark darts to save time, provided pin marking is suitable to fabric.
- Convert vertical darts to gathers.
- Mark the end of the dart with a pin or cross marks so they will be the same length on each side.

CONTROLLING FULLNESS – EASING AND GATHERING

Easing and gathering are used to provide and/or control fullness when joining one piece that is longer than another piece. The primary difference between them is in the amount of fullness. Easing relates to only a small amount of fullness and gathering involves more fullness.

Ease

Easing is required in a number of situations on a variety of pattern pieces. It is often done along a princess seam, at the shoulder seam, when attaching a skirt to a waistband, adjusting fullness in a flared hem or a set-in sleeve. (Figure 15)

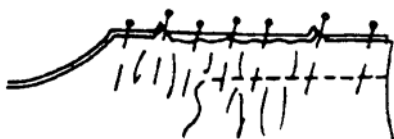


Figure 15

Standard

Well-constructed ease will:

- Have fullness slightly visible, but no gathers.
- Be evenly distributed along marked area.

How to Ease:

Ease can usually be handled by using machine basting, or pin basting right at the line of stitching. If you are using machine basting, pull the thread until the two edges are the same length. Distribute the ease. Pin at frequent intervals (insert pin right at seamline) keeping the eased seam edge on top. Stitch, removing pins as you sew.

For small amounts of ease, the seam may be sewn with the eased side towards the feed dog on the machine. The feed dog will feed the extra fabric faster than the top piece, easing the difference. Setting the differential feed on the Serger to 1.5 – 2.0 will do the same when sewing a serged or overlock seam.

Gathers

Gathers are visible fullness that is a part of the garment design. They may be functional or decorative. Gathers are used on sleeve caps, sleeve cuffs, waistlines, yokes, and ruffles.

Standard

Well-constructed gathers will:

- Be evenly distributed.
- Neatly stitched to the adjoining piece.
- Be controlled by one or more lines of stitching.

Methods of Controlling Gathers

There are several methods for controlling the fullness of gathers. They include:

- Using two rows of machine basting (with a slightly looser upper tension) with one row exactly on the stitching line and one row above.
- Using three rows of machine basting (with a slightly looser upper tension) with one row exactly on the stitching line, one row above, and one row below. Use only if stitches do not damage the fabric when removed. (Figure 16)

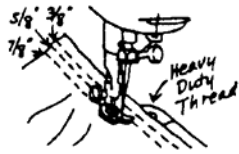


Figure 16

- Zigzagging or serging over a small cord.
- Using elastic thread in the bobbin.
- Using a gathering foot.
- Using hand basting.

How to Gather:

- Select the desired method of controlling fullness.
- Match pattern markings and seamlines of garment pieces by pinning along stitching line on the side of the fullness.
- Between each set of markings, pull on the bobbin thread or cord for fullness.
- Distribute evenly using fingernail or pin. Secure long threads by wrapping them around a pin. When sufficient gathering has been achieved, add additional pins (right at the stitching line), as needed.
- Machine baste on the seamline (gathered side up), removing pins as you come to them.
- Check to see that the gathers are evenly distributed as you sew.
- Stitch on top of machine basting with a permanent stitch.

When attaching gathering to gathering add twill tape, stay tape, or seam tape to one piece in order to stabilize before joining the second gathered piece.

THINGS TO THINK ABOUT

Gathers and Ease

- Use heavy duty or buttonhole thread in the bobbin so your thread will not break when you pull to gather. (Figure 17)

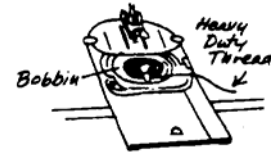


Figure 17

- Divide garment sections into fourths or eighths. Pin at these points and adjust gathers or ease in between.
- Machine baste on the side of the gathers; this makes them easier to control. (Figure 18)



Figure 18

- If handling a lot of fullness, place a row of pins about 1 inch below the stitching line to hold your fabric. Also, you may need to do this above the stitching line.
- Use elastic thread – stitch over paper to get rows even, remove paper, adjust fullness.
- Place the eased side of the garment next to the feed dog when stitching.

PLEATS

Pleats can also be used to control fullness in a garment design. They may be pressed or unpressed, soft or crisp. When selecting fabric for a pleated design, be sure it has good drape and is resilient.

Care should be taken when cutting and marking to see that pleats are on grain to ensure proper hang of the garment.

Standard

Well-constructed pleats will:

- Have a smooth, neat appearance on the outside/inside of a garment.
- Provide ease for comfort and/or design silhouette.

Marking

When marking pleats you will need to mark the foldline, roll line, and placement line. Use the marking method most suitable for your fabric.

Fitting

As always, it is important that you carefully check the fit of pleats before permanently stitching and pressing. If there are pleats on either side of the center front or center back, be sure they are balanced on each side in relation to the area.

A pleated skirt design should hang straight from the hipline – unless it is a tapered pleat design line. Remember to allow for some ease at the waistline when fitting pleats.

Types of Pleats

- **Knife or Side** – are flat and are turned to one side, usually right to left on the outside of garment. They are used in kilts, skirts, and on shoulders of bodices.
- **Box** – are two straight pleats with folds turned away from each other. They are used in skirts, dresses, shirts, and jackets.
- **Inverted** – are two straight pleats with folds turned toward each other. They meet in the center and are used primarily in skirts.
- **Accordion** – are narrow pleats at the top and radiate to a wider width at the bottom. They are not stitched down and are used in skirts, sleeve designs, and lingerie. (Figure 19)

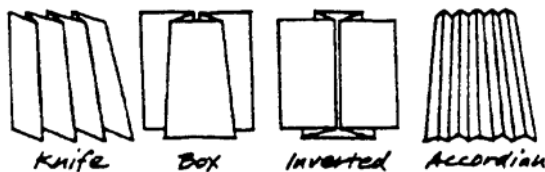


Figure 19

Hemming

You usually hem garments with pleats before the pleats are pressed. In bulky fabrics, remember to open and grade the seams in the hem, then clip above the hem if the seam is pressed to one side.

After pressing, you may want to stitch the hem on the inside fold. This helps to hold the pleats in position.

Pressing

Pressing is critical for all garments. Even on unpressed pleated garments, press pleats down about one inch beginning at the top. On garments with pressed down pleats:

- Support overhanging fabric so pleats can be kept on grain.
- Slip paper underneath pleat to prevent press marks.
- Press on right and wrong side of pleats.
- Be sure the folds are sharp when you complete pressing.
- Heavier or slippery fabrics may require basting to hold in place for pressing.

THINGS TO THINK ABOUT

Pleats

- Fit carefully before stitching or pressing.
- To mark pleats, leave pattern pinned onto fabric and lightly press fold lines.

SHIRRING

Shirring is created by rows of stitching that is gathered. On very lightweight fabrics, it is sometimes called decorative gathering. Shirring is used primarily on bodices and cuffs of garments. When stitching, be sure the rows of machine stitching are even and parallel. The distance between the rows of stitching is your choice.

Shirring may be done by using basting stitches, a gathering attachment, or with elastic thread. If using elastic thread, be sure to hand wind the elastic thread onto the bobbin only stretching it slightly as it is wound. Stitch all seams in the part of the garment that will be shirred, except one. Next stitch using the elastic thread and the longest stitch on your sewing machine. Stitch across the ends of the elastic thread at the seamlines. Join seam of the garment. (Figure 20)

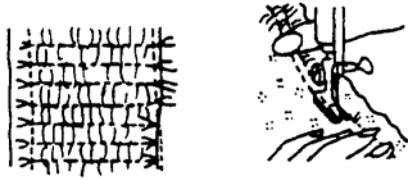


Figure 20

After the shirring is completed, it is frequently “stayed” in order to maintain its shape. You may stay by using a stay tape or a lightweight fabric in back of the shirring. Attach fabric using small hidden stitches or by machine, if from a seam to another seam. (Figure 21)

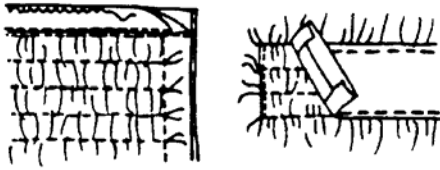


Figure 21

A decorative hand or machine embroidery stitch may be added to the shirred fabric to give the look of smocking. (Figure 22)



Figure 22

Another method of shirring is **corded shirring**. It is created by stitching tucks, then pulling a cord or yarn through the tuck to create the desired fullness. Another method is to press seam allowance open and stitch on either side of a seam, insert the cord or yarn and pull until fullness is as you desire. (Figure 23)

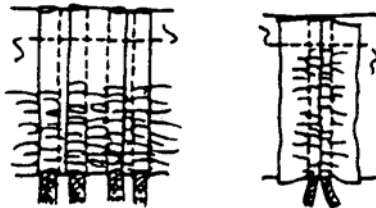


Figure 23

TUCKS

A tuck is a stitched fold of fabric. Tucks are primarily used for decoration. However, released

tucks may be used for shaping fabric to the body. (Figure 24)

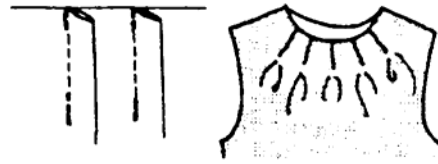


Figure 24

Standard

A well-constructed tuck will:

- Provide relaxed but defined fullness.
- Be neat in appearance.

How to Make Tucks:

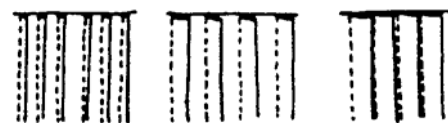
- Mark tucks with the appropriate method for your fabric.
- Remove the pattern. Fold on the designated pattern marks and stitch. (Figure 25)



Figure 25

Types of Tucks

- **Pin Tucks** – the small ones (right on the fold of the fabric).
- **Spaced Tucks** – have spaces between the stitching. (Figure 26)



Pin Spaced Blind

Figure 26

- **Blind Tucks** – overlap the stitching on another tuck.
- **Shell Tucks** – stitched by hand or by using the sewing machine to blindstitch creating an even design. (Figure 27)

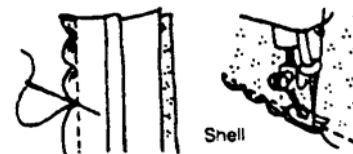


Figure 27

- **Released Tucks** – not stitched the entire length of the area. They may be on the right side or wrong side of the fabric. (Figure 28)



Figure 28

Other Suggestions

- Tucks may have yarn or cord pulled through them to create a different look.
- Another decorative idea is to tuck lengthwise, then to tuck crosswise (across the first tuck). This is especially nice for pin tucking or for very narrow tucks. (Figure 29)

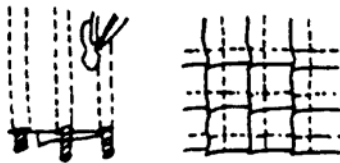


Figure 29

- You may find it is easier to tuck your fabric, and then cut the garment piece. (Figure 30)

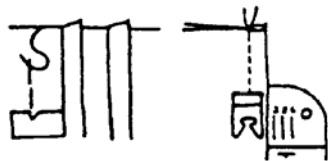


Figure 30

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Prepared by Nadine Hackler, Associate Professor Extension Clothing Specialist (retired)

Adapted for use in Kentucky by:
Linda Heaton, Ph.D.,
Extension Specialist for Clothing & Textiles (retired)

- A cardboard gauge, throat plate markings, or machine presser foot can assist you in making straight stitching lines.

THINGS TO THINK ABOUT

- Tuck fabric, and then cut out pattern. (Figure 31)

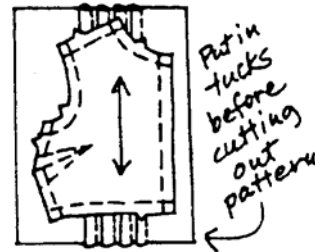


Figure 31

- To mark tucks leave pattern pinned on press and mark fold line;
 - Snip, pull thread, fold on this line;
 - Machine baste on fold line;
 - Snip at top and bottom and fold on this line. (Figure 32)

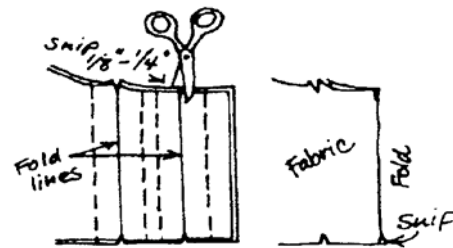


Figure 32

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1990; revised December 1997; revised May 2004;
revised May 2007

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