

## CHAPTER - 4

### Construction of Design Elements in Garments

#### 4.1 Various Kinds of Plackets

Most of the garments need an opening to get in and get out of the garment. Positioning of the opening is of equal importance. Generally the opening in the garment is placed at Centre Front, Centre Back, Side Seam, Shoulder, Sleeve, etc.

A placket is a finished opening in a garment or at a section of the garment. Placket should be designed and styled in sufficient length to permit ease and convenience of dressing. They are used on front or back neckline opening instead of a zipper. Plackets are planned as extension for placement of buttonholes, snaps and other fasteners. Placket openings are used on sleeves to allow expansion of the narrow end and to provide room, when the cuff is opened.

The type and length of placket selected depends on:

- ▶ Placement of placket.
- ▶ Function of placket.
- ▶ Style and design of garment.
- ▶ Use of garment.
- ▶ Type and weight of fabric.
- ▶ Care of garment.
- ▶ Method of construction.

##### 4.1.1 Continuous Placket

This type of placket is easy to make and serves as the basis for a Number of variations in both menswear and womenswear. It is one piece placket that is widely used on cuffed sleeve openings to permit hand to fit through sleeve circumferences, bloomers, children's' dresses, on skirts and trousers, where zipper application would detract from appeal of the garment and as a neckline opening alternative to other fasteners or closures.

##### Pattern Piece Required

Cut the pattern piece for length of the piece take double the length of the finished placket opening and add 1" extra. (The 1" extra length of the binding strip is for emergency only. If measurements are accurate and the placket is properly made, this amount should be cut off after the binding is stitched in place.) The width of the piece will be twice the width of finished placket facing (which is usually  $\frac{1}{2}$ " for 1 side) plus two times seam allowances (which usually is  $\frac{1}{4}$ " )

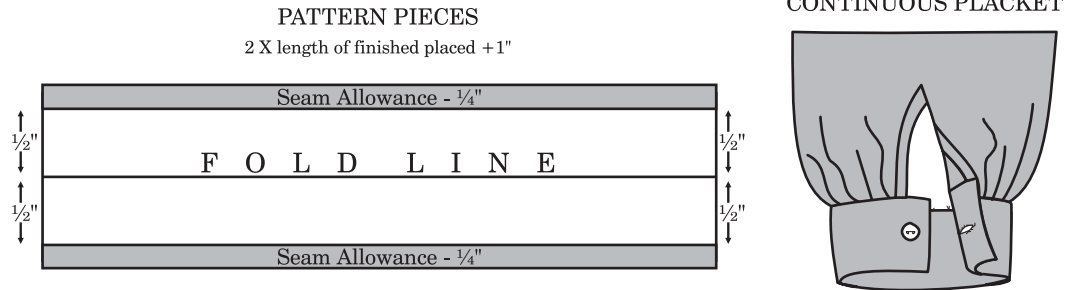
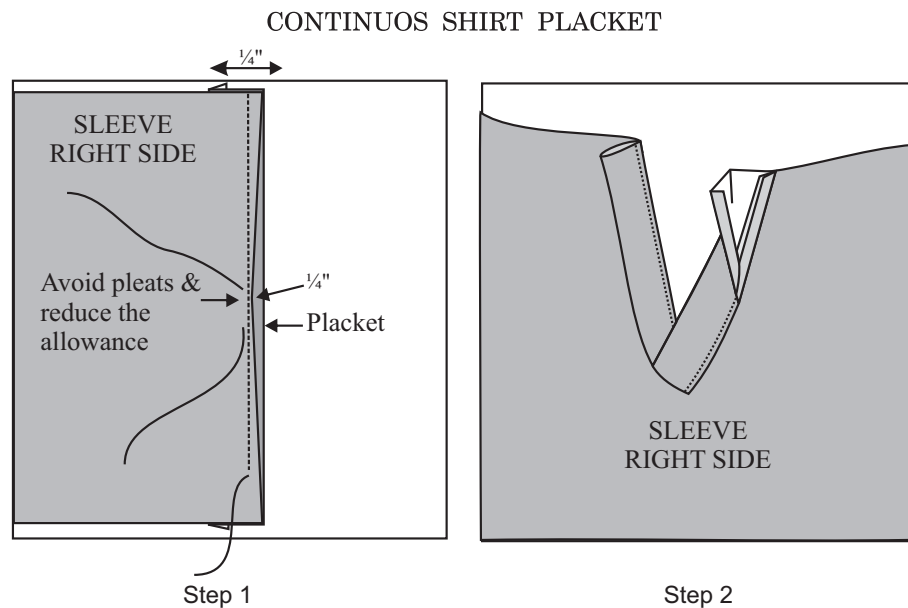


Figure - 11: Continuous Placket

### Steps of Construction

1. Place the right side of the placket on the wrong side of the sleeve opening and start stitching near the edge leaving a distance of  $\frac{1}{4}$ ". As you come in the center of the placket, maintain  $\frac{1}{4}$ " seam allowance of placket piece and reduce the allowance of the garment piece. Take care so that no pleat formation takes place at this point.
2. Fold the allowance (other side) of the placket and place it on first stitching line. Then stitch in place from right side of the sleeve. Take care that stitching at the back should be same i.e. if it is on top, it should be maintained on top throughout and if it is in ditch then maintain it throughout. In good quality plackets, this seam is on top at the back.
3. From wrong side of the sleeve, stitch both the upper and under of the placket, 2 to 3 times diagonally (at  $45^\circ$ ) near end. This is known as Bar Tack.



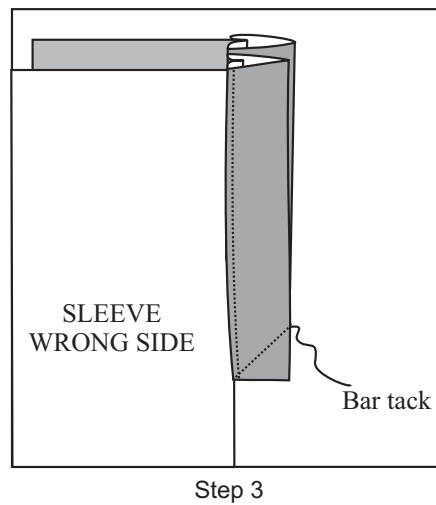
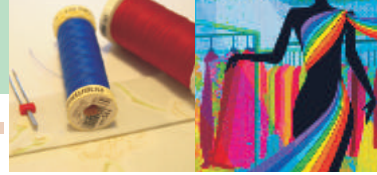


Figure - 12: Continuous Placket Construction Step 1, 2, 3

#### 4.1.2 Diamond Placket

A tab design consisting two stripes of unequal width, which enclose the raw edges of an opening. The wider, top stitched strip overlaps and conceals the narrower binding strip and unfinished edge.

- ▶ When placket is planned as a design detail.
- ▶ To emphasize placket opening.
- ▶ On sleeve and garment openings with overlap closure.
- ▶ On sleeve openings of sports shirts.
- ▶ On skirt opening where a zipper is not used.
- ▶ Kurta Placket

Top stitched placket section shows on face of the garment. The placket produces a strong and flat finished opening.

##### Pattern pieces

1. Make two facings together, facing 1 and facing 2, each 1" wide. One will be 5" long and the other will be 6½" long. Mark seam allowance of ½" on the top as that is going to be stitched with cuff. Mark an allowance of ¼" on the remaining sides as illustrated.
2. To make the under placket, make a facing of size 5"x1½" and then make another facing of the same size very near to it. Give allowance of ¼" along all sides except top side where the seam allowance will be ½".

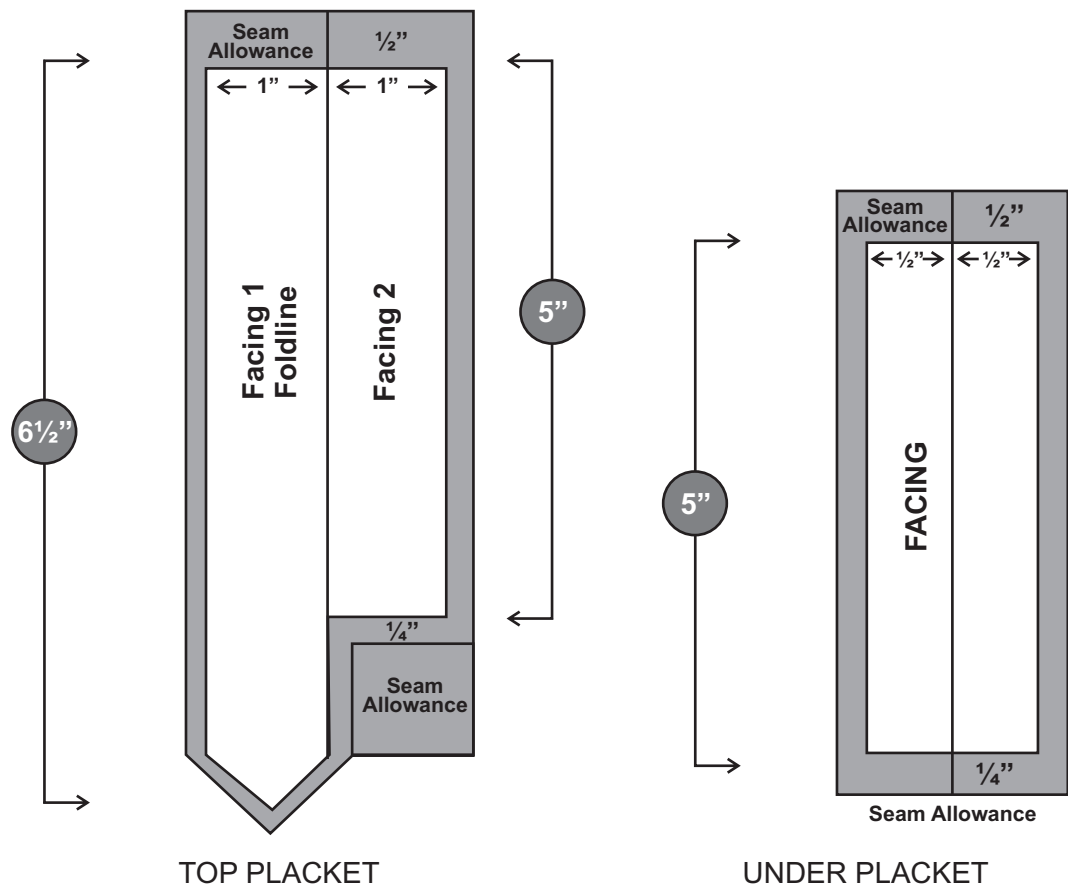
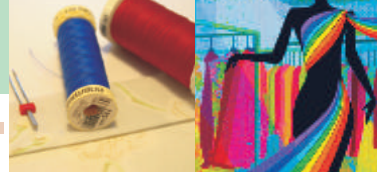


Figure - 13: Diamond Placket

### Steps of Construction

1. Place right side of the placket to the wrong side of the garment piece. Match the slash lines of garment and placket. Place reinforcing stitches within placket top, then to corners. Determine the front and back edges of the opening.
2. With seam lines aligned, pin and stitch right side of underlay raw edges to wrong side of the back placket edges. Secure stitches at top corner of placket. Now fold underlay to right side, pin its folded edge over stitch line. Edge stitch through all thickness. Stop at corner and secure stitches.
3. At placket top, flip triangular piece up towards wrong side and pin to under lap. Stitch across base of triangle, securing stitches at beginning and end. Tapper square corners of under lap.
4. Pin right sides of overlaps extended edge o wrong side remaining (front) placket edge. Align seam lines and kept raw edges at bottom even, stitch. Secure stitches at top.
5. Press seam flat towards overlap. Bring folded edge of overlap to stitching line and pin it in place.



6. Pin the top portions of overlap to sleeve completely covering the top portion of under lap, pin down as far as placket corner. Baste along all pinned edges.
7. Topstitch along unbasted fold of overlap (be sure not to catch any part of underlay in stitching) pull threads to wrong side at stopping point and knot.
8. Top stitch (through all the thickness) across overlap and around basted edges. Follow direction of arrows. Secure stitches at beginning, remove basting and press.

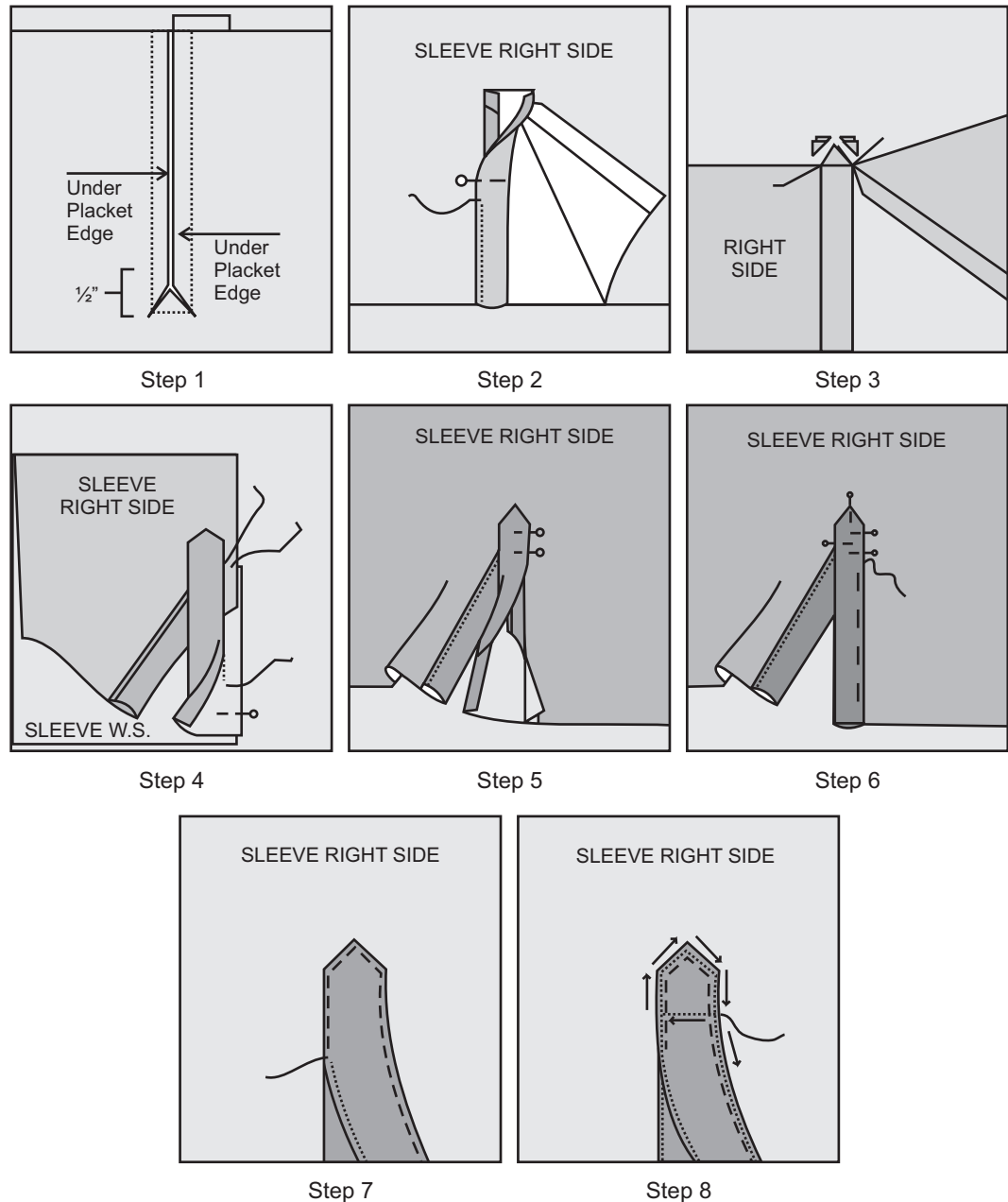


Figure - 14: Steps of Construction



### 4.1.3 Simple Shirt Placket

Men and women shirts generally have a front opening which is built in the garment/ pattern piece of the garment. For men's shirt the placket opening is right over left and for women's shirt, it is left over right.

**Pattern pieces** required are two one for upper part and other for the under part.

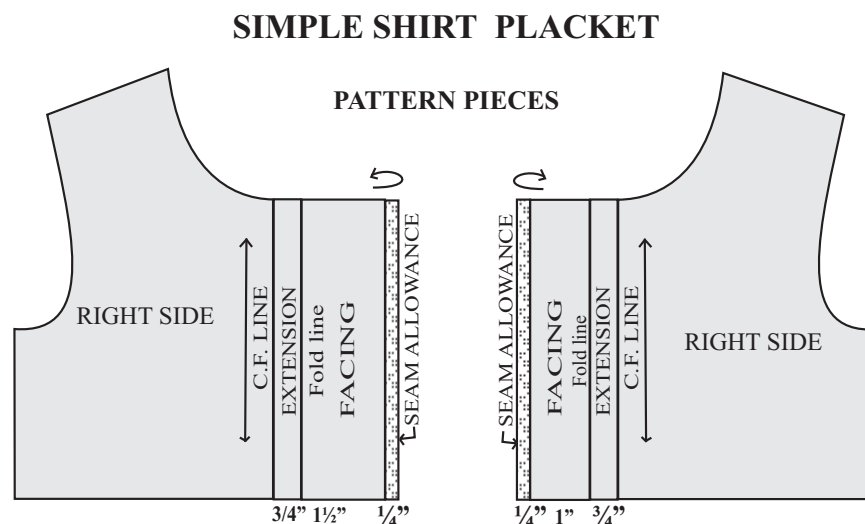
#### Upper Part

Trace the bodice till centre front line. Mark the extension; which is taken as half the button + 1 cm i.e. Radius of the button + 1cm = extension. Or it is taken as the diameter of the button. Other wise a standard measurement of  $\frac{1}{2}$ " or  $\frac{3}{4}$ " is taken for men's shirts.

The line of extension is the fold line. After this a standard facing of  $1\frac{1}{2}$ " is made, an allowance of  $\frac{1}{4}$ " is then taken. Turn the allowance towards wrong side of the facing. Then turn fold line towards wrong side of the garment piece. (If facing has to be aligned to the selvedge when placed on fabric then no seam allowances is taken). Cut out the pattern.

#### Under Part

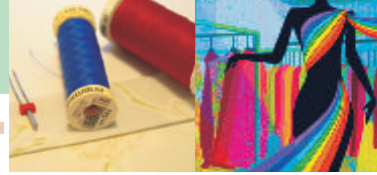
Flip the pattern horizontally, trace it. Under part is made in the same way as you make the over part but the difference being the facing, which is 1". Otherwise stitching line of under part will be visible on the front of the placket.



#### Steps of Construction

##### Upper Part

1. Trace the pattern on the fabric and mark the position of the lines.



2. Turn the allowance towards the wrong side of the fabric. Turn the facing also in the same way from fold line i.e. towards wrong side of fabric.
3. Machine stitch on the edge of facing from wrong side, as illustrated.

#### Under Part

1. Trace the pattern on the fabric and mark the position of all lines.
2. Turn the allowance towards wrong side of the fabric. In same way turn the facing also.
3. Machine stitch on the edge of facing from wrong side, as illustrated.

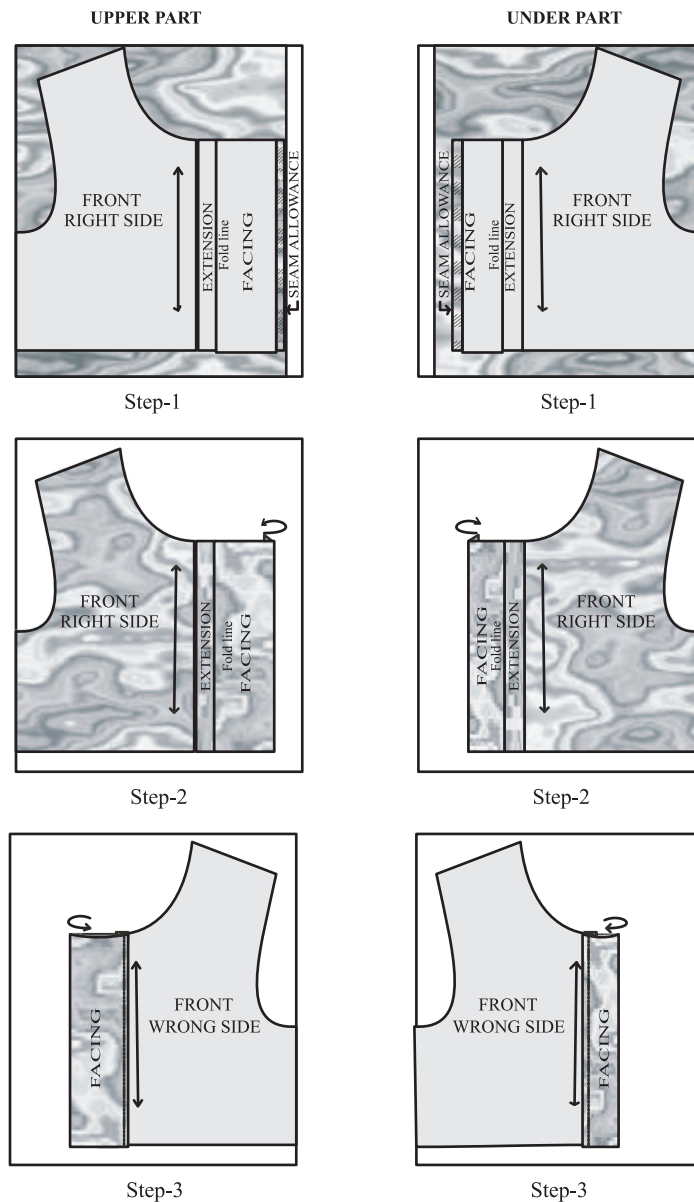


Figure - 16: Simple Shirt Placket Upper and Under Part





#### 4.1.4 Shirt Placket with Facing and Pleat

Sometimes the shirts may have a placket in a different color/ grain/ fabric as a design detail. The shirt band/the strip on the right side of shirt front in which the buttonholes are made, eliminates the need for facing. An extended self-facing is used on the left front. The finished shirt band is 1½" wide but construction techniques vary depending on the fabric and style of the shirt.

##### Pattern Pieces Required

**Under Part:** Trace the bodice and make extension of ¾" which is half of finished placket. Then give an allowance of ¼".

**Facing:** A straight strip of the length same as placket opening is taken, mark ¼" seam allowance on one side and ½" seam allowance on the other side.

**Under Part:** Flip and trace the other half of bodice and mark extension of ¾" and facing of 1" then mark the seam allowance of ¼".

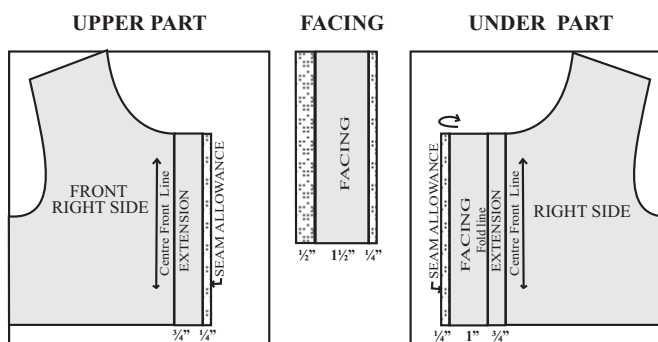


Figure - 17: Shirt Placket with Facing

##### Steps of Construction

###### Upper Part

1. Place right side of the facing over wrong side of garment piece and then stitch leaving the ¼" allowance near edge.
2. From right side of the fabric, turn facing towards right side. Press the seam allowance (½") of facing towards wrong side of facing. Iron in place.
3. Leave allowance of ¼" from both the sides and stitch in place from right side.

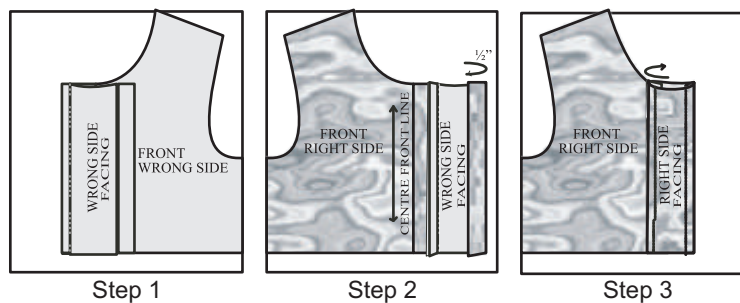
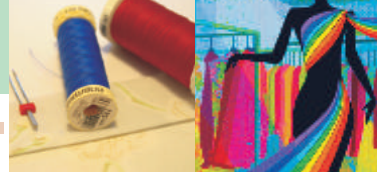


Figure - 18: Construction of Shirt Placket with Facing





### Under Part

Trace the pattern for under part on the fabric. Fold the seam allowance of the facing towards the wrong side of the fabric. Again turn this facing towards the wrong side of the fabric, stitch in place.

(For diagram refer steps of construction for under part of simple shirt placket.)

## 4.2 Placement of Buttons

The button extension is equal to the width of the button. As a general rule, the neckline of the front bodice is lowered by  $\frac{1}{4}$ " at the centre front for comfort, whenever a basic neckline is required. The first buttonhole is placed on center front, down from neckline an amount equal to the width of the button. This ensures that the button will not extend into the neck. Placement of the last button hole depends on the need or the requirement of the garment. The rest of the button holes are marked on the even division between the first and the last. It is a good idea to place a button close to the apex or bust point this ensures that the garment does not gape open at centre front due to movement which may cause a pull on the bust.

The size of the button hole equals the width of the button plus  $\frac{1}{8}$ " for the button to go in easily. The button hole is marked so that width of the button is on the garment side of the centre front and extra  $\frac{1}{8}$ " is on the extension.

## 4.3 Various kinds of Pockets

A fashion designer and a pattern master have to keep in mind about different types of pockets as for different garments the requirement of pockets changes. It is important that pocket size, shape, and placement should complement the design of the garment. Pocket is a pouch that has a closed end is usually stitched on a garment or even inside the garment. Pocket can be both functional and decorative purpose. Pocket helps in holding and small article temporarily. It is important that pocket size, shape, and placement should complement the design of the garment.

Pockets can be classified in three categories:

- ▶ Outside Pockets
- ▶ Inseam Pockets
- ▶ Welt Pockets

### 4.3.1 Outside Pocket/ Patch pocket

Pockets of any size or shapes that are stitched over the garments are called outside pockets. These are also called Patch pockets.



Figure - 19: Outside Pockets



#### 4.3.2 In-seam Pockets

A pouch is stitched inside of the garment into a straight and stylized seam.



Figure - 20: In-Seam Pockets

#### 4.3.3 Welt pocket

An inset pocket with the lower lip finished by an upstanding welt. The welt may be from 3/8" to 1" wide. It can have one or two lips finishing the opening edges. This pocket are used mainly found as the chest pocket of a jacket, coat or as back side pocket on trousers.



Figure - 21: Welt Pocket

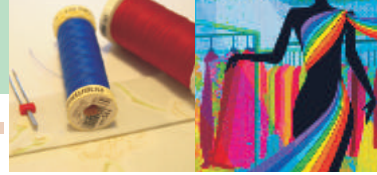
#### 4.3.4 Concept of Slit and seam

Pockets are attached in a seam or can be attached in a seam, the same principle is followed for plackets.

### 4.4 Neckline Facings

A facing is the fabric used to finish raw edges of a garment at such locations as neck, armhole and front and back opening. There are three categories of facings.

- ▶ Extended facings
- ▶ Bias facings
- ▶ Shaped facings



A facing is shaped to fit the edge it will finish either during cutting or just before application. A “shaped facing” is cut out, using a pattern, to the same shape and on the same grain as the edge it will finish. A “bias facing” is a strip of fabric cut on the bias so that it can be shaped to match the curve of the edge it will be applied to. After a facing is attached to the garments edge, it is turned to the inside of the garment and should not show on the outside. In order to reduce bulk, both shaped and bias facings can be cut from a fabric lighter in weight than the garment fabric. Because the extended facing is cut as one with the garment, garment and facing fabric are always the same but some times may vary according to the design.

#### NECK LINES



Figure - 22: Neckline Facings

#### **4.4.1 Bias Strip Preparation**

Bias strip is prepared as a strip of matching or contrasting fabric. In construction it is used to conceal, finish and strengthen seams and raw edges or as a substitute for facings. Bias may be used as decorative binding, piping, or tubing. Bias for binding, piping and tubing is a true bias and is defined as the diagonal line established by a 45° degree angle, intersecting length and cross grain of a square. The bias of the fabric offers the maximum stretch, flexibility, and elasticity needed to conform to a curved edge.

Bias may be self-prepared, specially manufactured for industry, or commercially prepared and purchased in retail stores.

Commercially prepared, pre cut and folded bias bindings are also known as bias tape or “bias fold” they are available in a variety of width and placement of bias selected depends on:

- Style and design of garment
- Type of garment
- Use of garment
- Care of garment
- Choice of fabric
- Method of construction
- Availability of machines and attachments
- Procedures for production



### Steps of construction

- First of all find the true bias of the fabric by folding fabric with lengthwise grain parallel to the crosswise grain. The fold edge is the true bias.
- After locating true bias, draw the width and the desired number of strips needed for desired length of bias and then cut it.
- Many times the bias stripes are not long enough to complete a continuous sewing step. Adequate number of strips must be joined before starting to sew bias binding or facing. Now place the cut out bias strips at right angles, right side facing right side.
- Stitch bias strips with a  $\frac{1}{4}$ " seam allowance at angles.
- Continue to join bias strips as needed for the desired length. Press all seams open and snip extended points.

Once the strip is ready it can be applied on the neckline

#### 4.4.2 Extended Facing/ Bias Binding

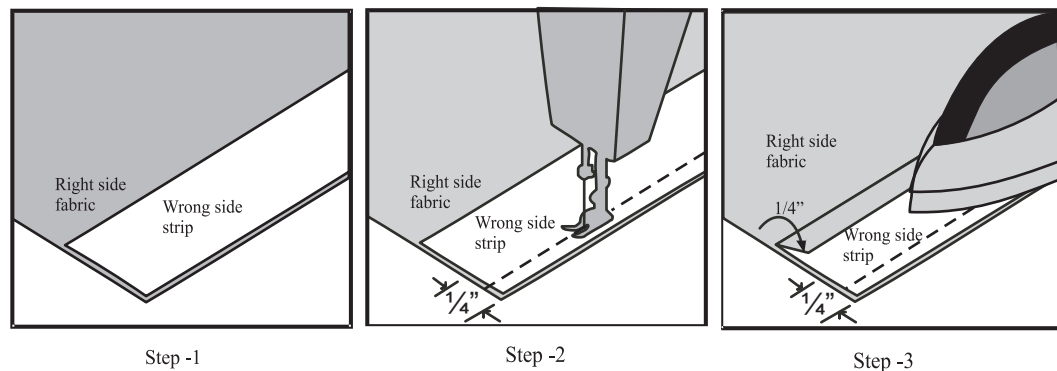
Bias binding is used to finish and strengthen raw edges and also add a decorative trim to garment. In some case it may replace a facing at the neckline, sleeve or armhole edges.

A standard bias strip is 1 to  $\frac{1}{2}$  inch wide (either in the same or contrasting color of the garment). A commercially prepared double fold bias tape can also be used.

### Steps of construction

Place the garment on sewing table wrong side up. Now place the bias strip on the garment with right side facing wrong side (of garment), matching both the raw edges.

- Stitch with a  $\frac{1}{4}$ " seam allowance.
- Fold the bias strip over  $\frac{1}{4}$ " and press down.
- Fold bias binding over along stitch line and press down.
- Fold bias strip over Wrong Side of garment just covering first stitch line.
- Slip stitch along the edge of bias binding.



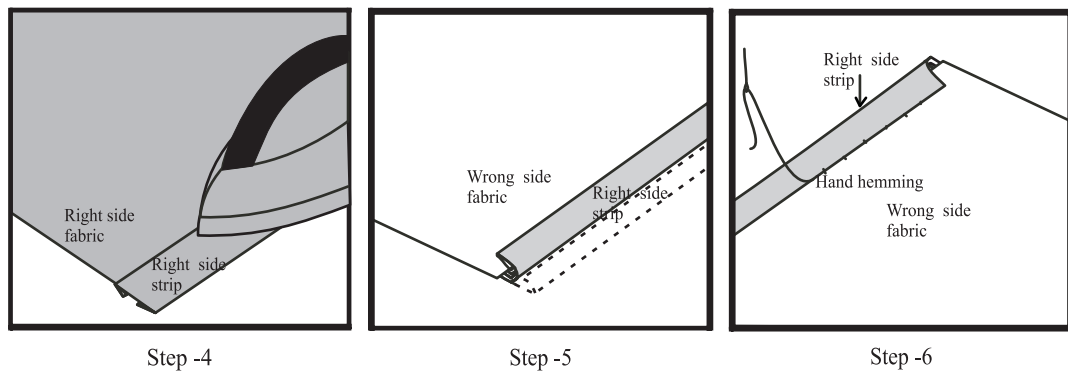


Figure - 23: Bias Binding Construction

#### 4.4.3 Bias Facing

A bias facing is a strip of fabric cut on the bias, which is attached to the garment neckline so that it can be shaped to match the curve of the edge it will be applied to. After a facing is attached to the garment, it is turned to the inside of the garment and should not show on the outside i.e. right side of the garment. (To make bias strip refer steps of construction for the preparation of bias strip)

The finished width of bias facing should not be more than  $\frac{1}{2}$ ".

##### Steps of Construction

- Face right side of bias strip to the right side of the garment neckline. When applying the binding, fold back the starting end  $\frac{1}{2}$ " and align the fold with the garment seam line. Pin binding in place and stitch to within 3" of starting point.
- Trim away excess binding at this end to  $\frac{1}{2}$ " beyond fold of starting end. Overlap this end over the beginning fold and stitch the rest of the way across, through all thickness of the fabric. When the binding will be turned inside, the end folded first will be on top; stitch or slip stitch it with the other end.
- Lapped edge is the fabric edge that is overlapped at the shoulder.
- Clip the curved seam allowance.
- Open the facing away from the garment press all seam allowances towards the facing. To keep facing from rolling to outside of garments, the seam should be under stitched with facing and seam allowance extended away from garment. Stitch from right side close to neck seam line, through facing and seam allowance.
- Turn the other edge of the facing towards its Wrong Side. Press and slip stitch.

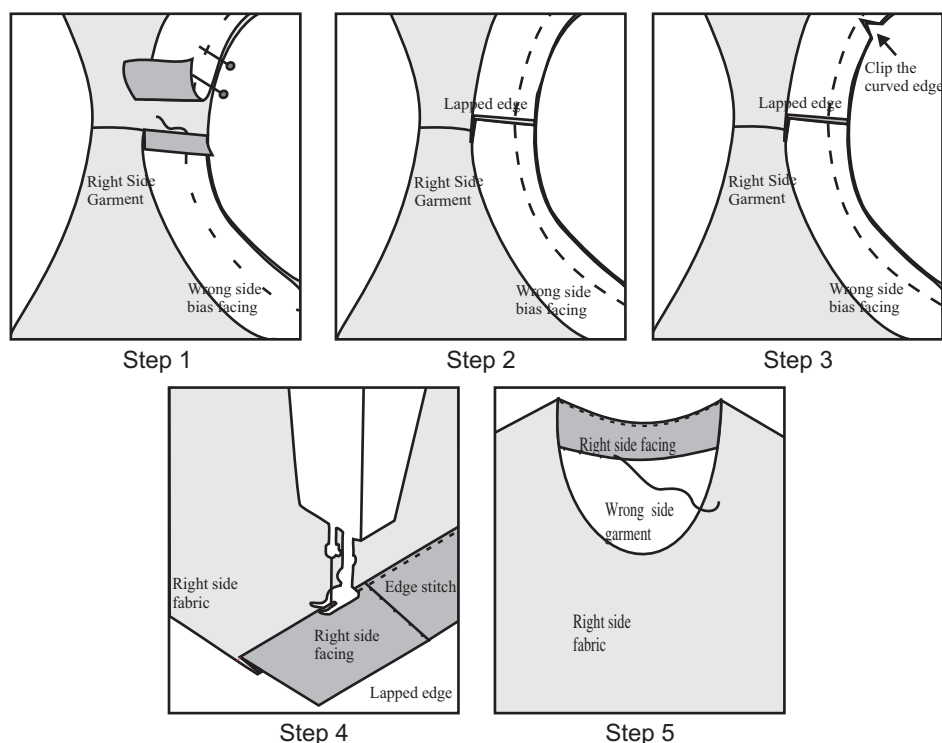


Figure - 24: Bias Facing Construction

#### 4.4.4 Shaped Facing (Slash Neckline)

A neck line shape which is finished with shaped facing i.e. instead of finishing raw edges of fabric at neckline with bias strip as used earlier, it is finished with a facing which is of the same shape as the neckline.

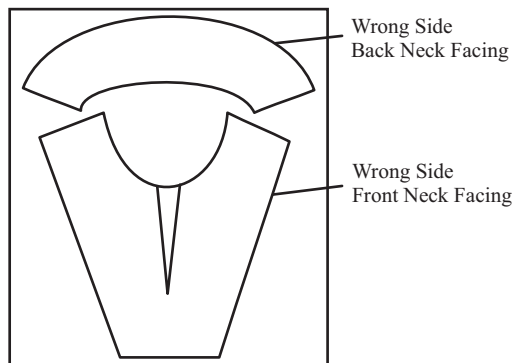
##### Steps of Construction

- ▶ Interface the Wrong Side of the facing of both front back.
- ▶ With Right Side together and the markings matched seam the front facing sections to the back facing sections at shoulders. Press seam flat as stitched then open.
- ▶ Keeping seam allowances open, tailor edge finish the facing by turning under 1/8" Press. Stitch close to folded edge.
- ▶ Right Side together, matching, notches, markings and seam lines, pin facing to neck and machine.
- ▶ Trim diagonally across cross seam allowances at shoulders. Clip curved seams also slash the opening at front neckline and clip the corners.
- ▶ Place seam Wrong Side up, using the tip of the iron press seam open.
- ▶ Turn facing to inside of garment, allowing seam line to roll inside slightly. Now top stitch at a distance of 1/4".

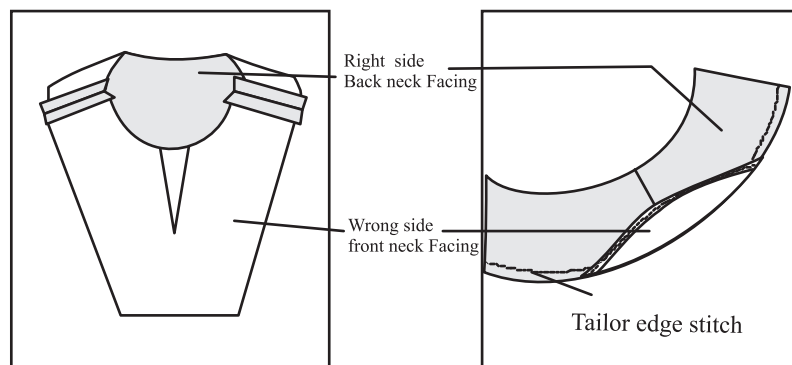


### Steps of Construction

#### Preparation of Facing



Step 1

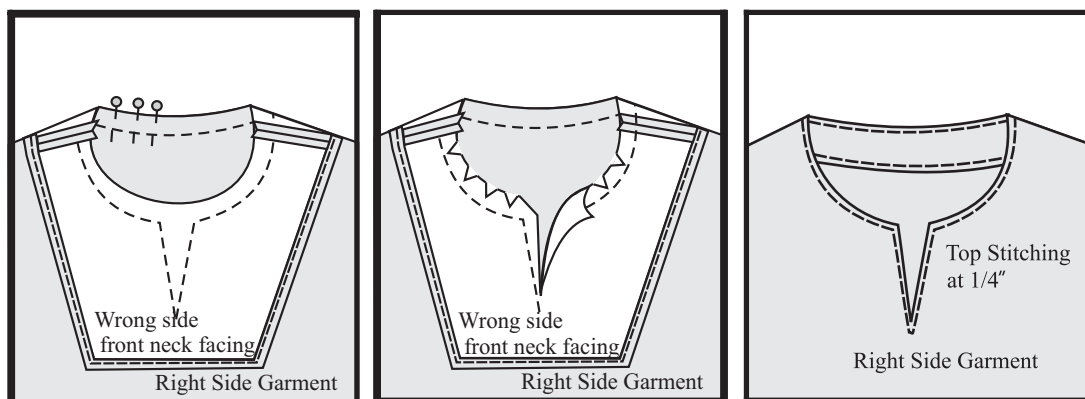


Step 2

Step 3

Figure - 25: Shaped Facing Preparation

### Steps of Construction



Step 4

Step 5

Step 6

Figure - 26: Shaped Facing Construction





#### 4.4.4 Collar Attachment

The peter pan collar is attached with a bias or shaped facing in a similar manner by placing the finished collar on the neck edge from right side and placing the the facing on top. Stitch them together at ¼" from seam edge and turn the facing in and finish with hemming.

### 4.5 Sleeve Attachment

Today's garments are designed with a wide variety of sleeves, which cover greatly in look and in method of construction. A garment for example, may have armholes that are merely finished, producing a sleeveless look, or it may have sleeves, either SET-IN or RAGLAN that are separately made and attached to the garment. Still another possibility, KIMONO sleeves are cut as extensions of the main bodice.

The armscyes of sleeveless garments are cut in such a manner that it comfortably encircles the arm with upper of armscyeedge resting at shoulder point. Garments are sometimes designed with wider than usual shoulder widths that drop over the shoulder to create a little cap. Others are styled with narrow shoulder width's that results in a larger and more angled armhole, and something of a halter effect.

Set-in sleeves are the most widely used type. As the name implies this sleeve is actually set into the armhole of edge, or cap. They can be slightly rounded or fully gathered, the length long or short, the bottom tapered, flared or gathered. The armscye can also vary from standard round armhole in sleeves are designed with a slightly rounded, cap ideally they should fall in a smooth curve from the shoulder edge with no dimpling or puckering. To achieve this, the sleeve cap curvature must be carefully eased into the armscye.

To achieve success with any garment, whether it is sleeveless or made with sleeves, it is wise to observe several principles.

- ▶ Check garment and sleeve fit and alter the pattern accordingly.
- ▶ Carefully and accurately transfer all sleeve and armhole markings to the fashion fabric.
- ▶ Use proper pressing techniques during construction.
- ▶ Whenever possible, finish the lower edge of the sleeve before attaching it to the garment.

#### Steps of Construction

- ▶ Place two rows of stitching on the cap of the sleeve 1/8" away from the stitching line. The distance between the two lines will be 1/4". Take care that the stitch size should be more than the usual one. Leave long threads at the starting & end of both the stitch lines.
- ▶ Face right side to the right side and stitch at the side of the sleeve.
- ▶ Pull the threads and insert the sleeve inside the armhole of the bodice. Adjust the size of the sleeve cap by pulling and releasing the thread. Put pins in position.
- ▶ Stitch the sleeve to the armhole.

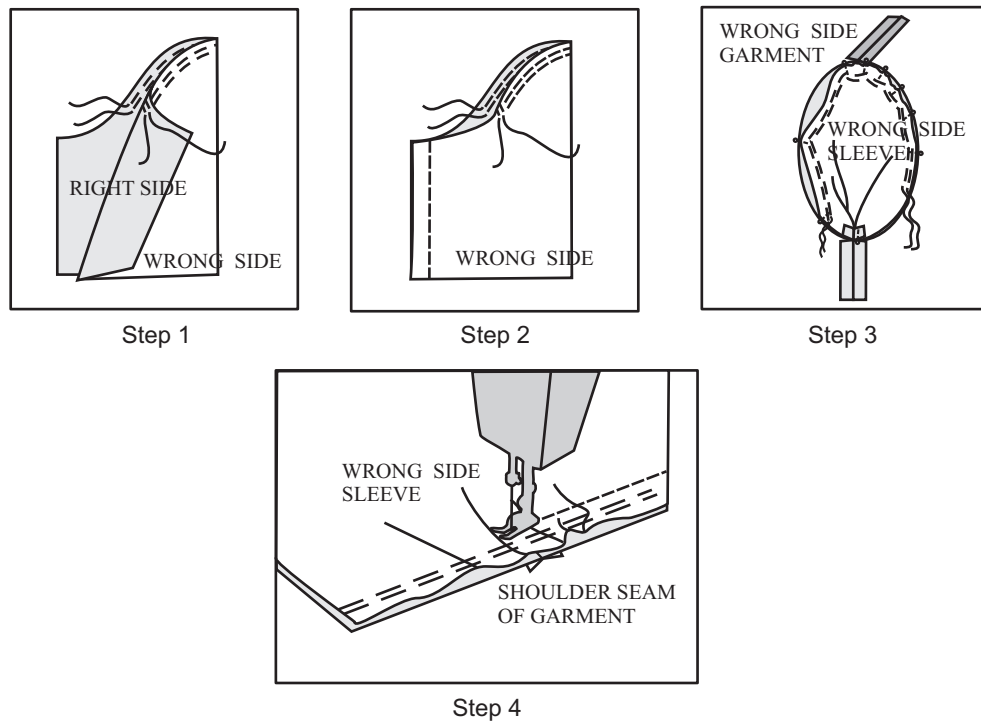


Figure - 27: Sleeve Attachment

## 4.6 Cuff Attachment

Cuffs actually consist of a cuff and a facing section, which may be cut all in one or may be in two pieces. Before starting cuff application, apply the type of placket, which is required for that particular sleeve and then complete the underarm sleeve seam. Prepare pleats or gathers at sleeve edge if any. Note the placement of the cuff end to placket edge.

### 4.6.1 One Piece Straight Cuff

#### Pattern pieces for sample

1. One piece of upper and under cuff each.
2. Micro-dot interfacing for cuff.
3. Sleeve on which cuff will be applied along with sleeve placket.

#### Steps of construction

- Fuse the wrong side of the upper cuff to interfacing, which can come to fold line or can be extended half inch beyond the fold line.
- Turn the seam allowance of the upper cuff to the wrong side of the cuff and give top stitch at a distance of  $\frac{1}{4}$ " or  $\frac{3}{4}$ " as required.
- Fold along fold line right side facing each other and pin the two ends from wrong side, stitch at a distance of half inch from both the sides. Chop off extra seam allowance near the edges.



- Turn inside out and pull the corners.
- Face wrong side of the sleeve to the right side of the under cuff, machine stitch in place.
- Insert all the seam allowance into the cuff. Start machining at the edge, from the right side of the upper cuff on to the right side of the sleeve.
- Optional top stitch at a distance of 1/4" all around the cuff edges.

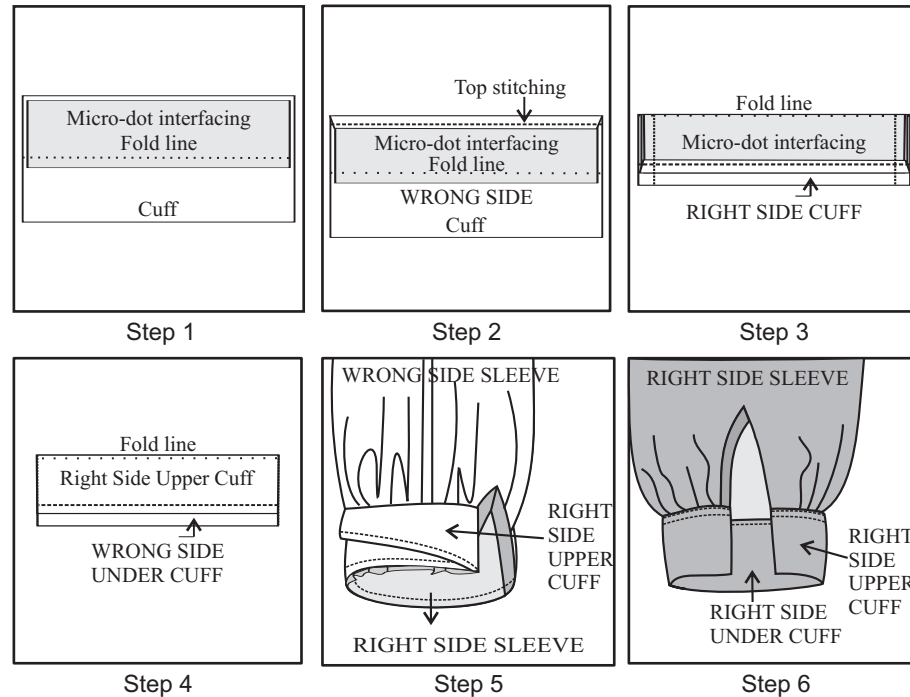


Figure - 28: Cuff Attachment

#### 4.6.2 Waist Band Attachment

The Waist band is attached as in the similar manner of cuff attachment.

### 4.7 Yoke Attachment

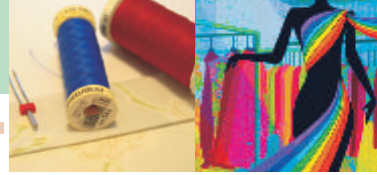
The skirt yoke is fully lined so that all seams are enclosed. The method uses machine sewing throughout, but top stitching. It is not difficult, but demands care in positioning for the stitching of front shoulder seams.

#### Pattern pieces

- Two yoke pieces
- Front and back shirt pieces

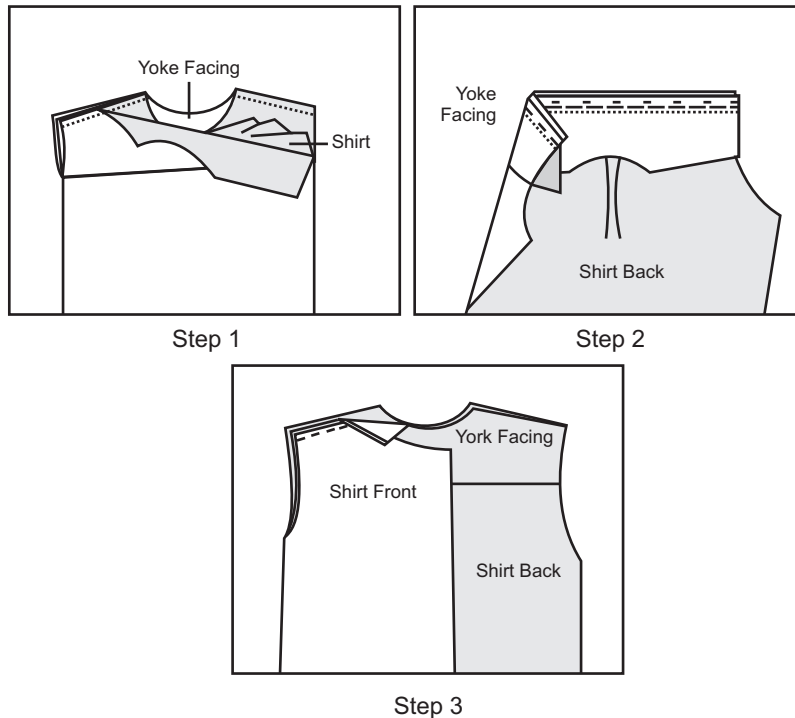
#### Steps of construction

- Right sides together, baste the yoke to the shirt back. Baste the Right Side of the yoke facing to the Wrong Side of the shirt back. Stitch at 1/2" seam allowance. Sewing through



all three layers. Grade seam allowance, leaving yoke seam allowance the widest. Press yoke and facing up, away from shirt into yokes permanent position.

- ▶ Baste Right Side of the yoke facing to wrong side of shirt fronts at shoulder seam. Right sides together match shoulder seam of yoke and shirt front.(shirt will be between yoke and yoke facing)
- ▶ Stitch through yoke, shirt front and yoke facing. Turn shirt to right Side and press.



## ACTIVITY

Get three garments from home one kurta a sari blouse and a shirt for men identify various finishes used like facing, pockets, sleeve, plackets, cuff and other elements.

### Fill in the blanks

1. A placket is a \_\_\_\_\_ opening in a garment. It should be \_\_\_\_\_ with sufficient \_\_\_\_\_ to permit \_\_\_\_\_ and convenience of dressing.
2. Plackets can be used on front or back neckline \_\_\_\_\_ instead of a \_\_\_\_\_.
3. The type and \_\_\_\_\_ of placket selected depends on its \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ of garment.
4. The armscyes of \_\_\_\_\_ garments are cut in such a manner that it \_\_\_\_\_ encircles the armhole.
5. Set-in sleeves are the most \_\_\_\_\_ used; this sleeve is actually \_\_\_\_\_ the armhole of edge, or cap.



## CHAPTER - 5

### Construction of Bodice/Top and Skirt

#### 5.1. Assembling of a Top/Bodice

Lay the pattern on fabric with grain line parallel to the Selvedge as shown in Fig. 5.1.1. Add seam allowance as shown in (Fig. 5.1.1 a). Mark  $\frac{1}{2}$ " seam allowance at shoulder, neckline and armhole and 1" at side seam.

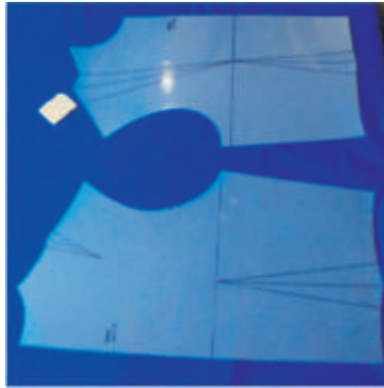


Fig. 5.1.1

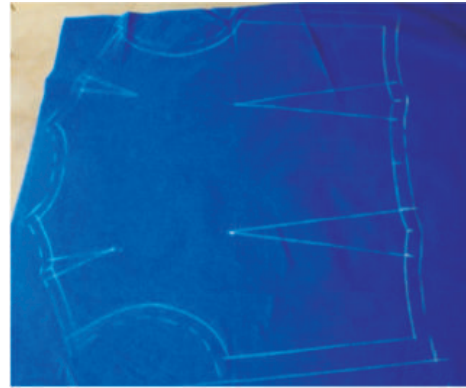


Fig. 5.1.1a

Cut the fabric as shown in Fig. 5.1.1 b



Fig. 5.1.1b

**Step 1:** Stitch the dart starting from the end of the dart leg. Give a back stitch to reinforce the stitch at the dart leg and stitch all dart in same manner.

[Do not give back stitch at the end of dart i.e. the vanishing point.]

At vanishing point of dart, leave 1" of extra thread and tie tailor knot or twist to give a clean finish as shown in Fig. 5.1.2b.