

# *Constructing a Bifurcated Garment- Trousers and Shorts*



*By: T. Rasigha*

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## Introduction

A bifurcated garment is an under garment that is divided into two sections. It is worn both by men and women with variations in length. There are many types of bifurcated garments. For example trousers and shorts may not have much difference in the style and only their length plays an important role.

This article gives a brief idea about how to construct a bifurcated garment by providing step by step procedure along with relevant diagrams and figures. The article contains the other details like various types of shorts, different materials of fabric used for knitted shorts, materials required for constructing, patterns and finally the step by step procedure for the construction of bifurcated garments.

Generally a bifurcated garment can be constructed as simply. But the construction of some of its parts like making a fly and sewing it to the trousers or shorts and making the waistbands makes it little complicated. We believe that this article is filled with enough information to construct a bifurcated garment

## Bifurcated Garment

### Definition:

**Bifurcation** means the splitting of a main body into two parts.

A **bifurcated garment** is an under garment that is divided into two sections and the sections will be exact replica of each other. Bifurcated garments are worn by both men and women over their pelvic area, circling the waist, and covering the upper part of the legs, sometimes extending down to or even below the knee, either as outer or undergarment, which makes them comfortable and easy to wear. E.g. Shorts, trousers, etc.

Shorts are a bifurcated garment worn by both men and women. It is wear over the pelvic area covers the hips but not the entire legs. Shorts started to be worn for casual comfort. Women's Shorts combine the comfort and performance without any inconvenience. Shorts are highly known for their perfect fitness elegance of women.

## Different Kinds of Shorts

1. Baggies
2. Bermuda shorts
3. Board shorts
4. Boxer shorts
5. Boy shorts
6. Bun huggers
7. Cargo shorts
8. Culottes
9. Cut-offs or Daisy Dukes
10. Cycling shorts
11. Dolphin shorts

12. Gym shorts
13. Hot pants
14. Jean shorts
15. Lederhosen
16. Leather shorts
17. Plaid shorts
18. Running shorts
19. Short trousers
20. Skirts
21. Slackettes

## **Bermuda shorts**

Approximately knee-length short trousers commonly worn in Bermuda (with long socks and a blazer and tie) for business attire and even at cocktail parties. The style has also been adopted as a casual style in other locales. Usually has pockets and waist loops for an optional belt.

**Bermuda Shorts** are also known as **walking shorts** or **dress shorts**, are a particular type of short trousers, now widely worn as semi-casual attire by both men and women. The hem can be cuffed or un-cuffed, around one inch above the knee.

Bermuda Styles beach clothing, men's shorts, pants, Bermuda shorts women's skirts.

Designed by Bermudians for comfort and style. Bermuda swim shorts with fun prints. Preppy pants. Microfiber women's short skirts. Perfect for the beach and warm weather. Ideal for activities like swimming, fishing, golf, and sailing. Perfect for cocktail parties, wedding.

## **Why are knitted shorts popular?**

Knitted shorts are popular category of clothing for men because of the following:

- Fashionable
- Practical, cool, light weight
- Comfortable and allows for wide range of movement.

## **Materials used to make knitted shorts**

- Cotton
- Spandex
- Nylon
- Jersey
- Polyester
- Interlock knit combed cotton shorts
- Flat knit rib band on side seams
- 100% Polyester super poly thick brushed fabric
- Interlock Shorts
- Knitted Shorts
- JERSEY SHORT
- Imported Honey Comb Weave Material For High Level Comfort And Durability

## Styles of Knitted Shorts

Knitted shorts are available in wide variety of designs and patterns and colors. There are stripes or checks or printed shorts. Plain shorts are also popular. Most shorts have side pockets with elastic drawstring waist. To give a formal look, some shorts are available with a ribbed waistband with loops for a belt and they either have a zippered fly or buttoned fly opening. The yarns used to make shorts are finely rib-knit for a comfortable fabric that won't fade or lose its shape, even with frequent washing. The drawstring waist shorts adds comfort to the hip style. There are decorative stitching along the waist and down the sides. There are shorts with contrast striping and logos. Pair with a white tee or matching tank top, the shorts really give a cool and casual look.



### ***Materials Required:***

- Medium weight twill or chino for woven or brushed fabric for knits.
- Sewing thread matching with base fabric
- One inch width elastic material
- Draw string

### ***Machines and Equipments Required for Construction:***

- Single needle lock stitch sewing machine
- Three or four thread overload sewing machine
- Button hole sewing machine
- Multi thread chain stitch sewing machine

# PATTERNS

WAIST BAND



## ***(Sewing operation)***

### ***Back preparation***

- Joint the seat seam single lock stitch sewing machine

### ***Front and back joining***

- Join the two front panels

### ***Front and back joining***

- Join the inside leg using over lock sewing machine  
↓
- Join the outside leg using over lock sewing machine  
↓
- Bottom hem the leg open using flat lock sewing machine  
↓
- Prepare the elastic band  
↓
- Attach the elastic band using over lock sewing machine  
↓
- Mark the button hole in the waist area  
↓
- Sew button hole using button hole sewing machine  
↓
- Insert draw string manually

## Trouser

Knit Pants are favourite form of wear for both men and women. Pants can be either woven or knitted. Men's knit pants are very popular as they have the unique feature of stretchability which is not available in woven pants. Knit pants are very comfortable and is an integral part of the men's knitted garments.



## Types of Men's Knitted Pants

- **Knitted Trousers:** Formal form of pants. Preferred by both men and women to give a formal kind of look. Men's trousers are the loose fitting ankle length pants, with a waistband and buttoned fly for side buttoned at the waist for women. Women's trousers can also have elastic or draw cord waistband.
- **Knitted Capris:** These are the knee-length pants meant for regular wear. Preferred by young men and women for casual occasions.
- **Knitted Cargos:** These are loose fitting pants with lots of pockets.
- **MATERIALS USED TO MAKE KNITTED PANTS**
- **Cotton:** Cotton is the most common material used to make knitted pants. The trousers have a cotton weave in a lightweight knit.
- **Poly Cotton:** Knitted pants blended with usually 60% polyester and 40% cotton.
- **Cotton-Stretch Twill:** Cotton mixed with spandex that is woven in a subtle diagonal texture. The spandex gives comfort, stretch and a refined look and finish to casual trousers.
- **Jersey Knit:** This is a popular fabric for cool, comfortable pants. The fabric has a smooth side at the outside and a textured side at the inside.

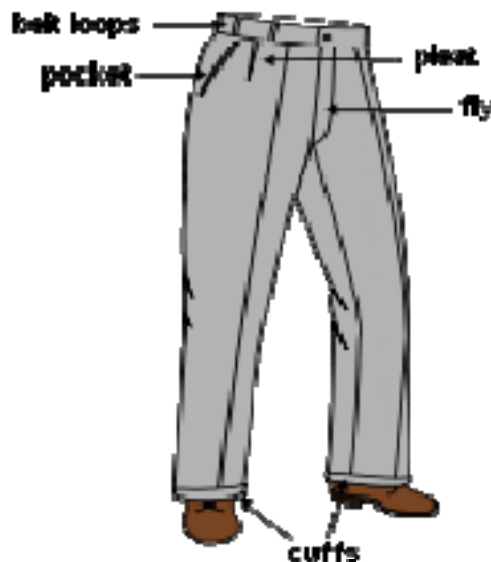
## Styles of Pants

- **Length:** Pants are always ankle length. Regular pants button at the waist. While men have only the option of waist-length pants, women can go for various other styles like hipsters, belly-button, low waist etc.

- **The straight cut:** A common style worn by males and females. The pant is pretty straight.
- **Boot-cut pant:** A little wide at the bottom to allow for boots.
- **Tapered pant:** Non-gender specific. The ends of the pant becomes smaller.
- **Bell-bottom/Flared pants:** The legs have a flared or bell shaped cut.
- **Pockets:** There are front pockets which are usually insets. There are back pockets which are usually patched.
- **Pleats:** Vertical folds in the front for a loose fit.
- **Waist band:** May be elasticized for women's pants and with buttons or zipper at the front for men.
- **Belt loops:** These are present in man's pants to support a belt which may be used to adjust the tightness in the waist, and for decoration

## Pants

An outer garment for covering the body from the waist to the ankles, divided into sections to fit each leg separately or an outer garment, especially for men and boys, extending from the waist generally to the ankles, and divided into separate coverings for the legs;



## PARTS OF TROUSERS

### Pleats

Pleats just below the waistband on the front typify many styles of formal and casual trousers, including suit trousers and khakis. There may be one, two, three, or no pleats, which may face either direction.

### Cuffs



Most trouser-makers finish the legs by hemming the bottom to prevent fraying. Trousers with turn-ups (cuffs in American English), after hemming, are rolled outward and sometimes pressed or stitched into place. The main reason for the turn-ups is to add weight to the bottom of the leg, to help the drape of the trousers.

### Fly

A fly is a covering over an opening join concealing the mechanism, such as a zipper, velcro or buttons, used to join the opening which makes the pants easier to put on or take off.

### Trouser support

At present, most trousers are held up through the assistance of a belt which is passed through the **belt loops** on the waistband of the trousers. However, this was traditionally a style acceptable only for casual trousers and work trousers; suit trousers and formal trousers were suspended by the use of braces attached to buttons located on the interior or exterior of the waistband.

## SEWING PANTS WITH SIMPLE FLY

### FRONT AND BACK PIECES

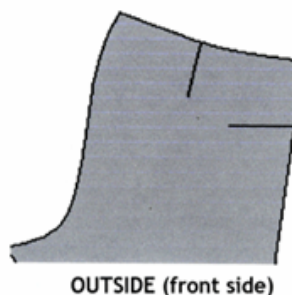
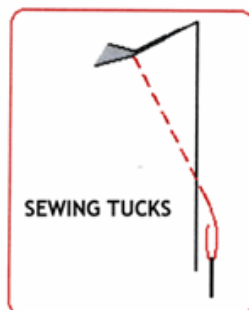
INSIDE



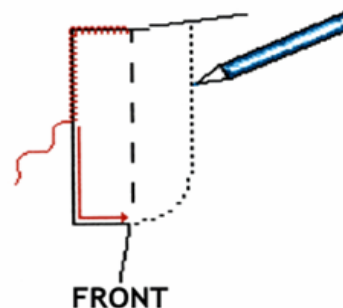
OUTSIDE



Sew the tucks in the back piece

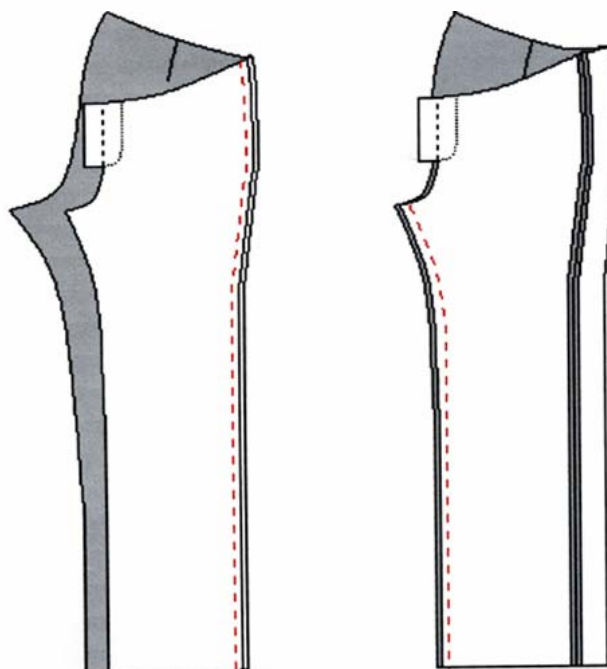


On the front piece sew zigzag stitch over the edges of both flaps (separately, not together) and using a removable pencil or dress makers chalk, mark the curve on the front of the left hand side.

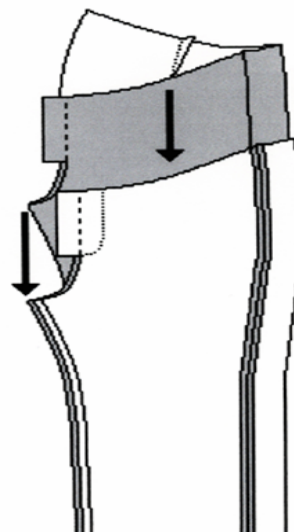


### SEW LEGS

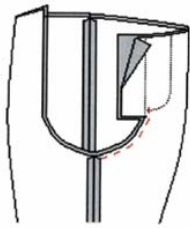
Line up the sides of front and back pieces, right sides facing in, and sew side leg seam. For both legs this has to be done. Line up the inside leg sides and sew together. Press seam open. For both legs this has to be done.



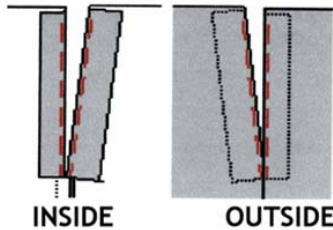
Leave one leg with wrong sides facing out, and turn the other leg so that the right sides are facing out. Put the right side out leg into the other leg, lining up the crotch seam.



### SEW FLY



With legs lined up inside each other, sew the front crotch

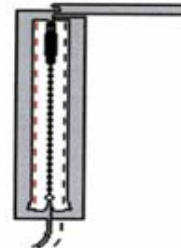


Then by pressing the seam, and following the line, press and HAND stitch the flaps so that the left side overlaps the right side.

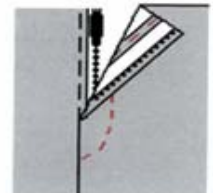


Turn the pants to the outside and attach the zip on the right side.  
Then, close the overlapping flaps and pin together.

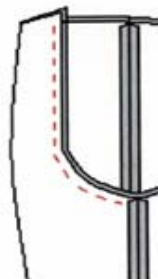
Turn the pants to the inside and carefully open the flaps (you should have the remaining 'unattached' flap to the left side with zip pinned to its top). Make sure you do not dislodge the pins on the outside. Attach the zip to the SINGLE layer of the left flap. The zip is now attached to the right side of the front piece (including right flap) and the left flap of the fly.



Turn pants to the outside again and overstretch the curved line to join the flaps and give the fly its style.

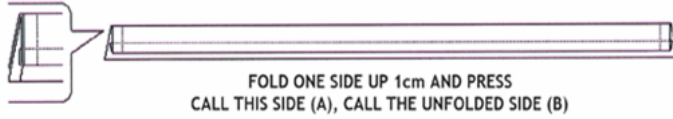


Finally, finish sewing the back seam of the crotch.

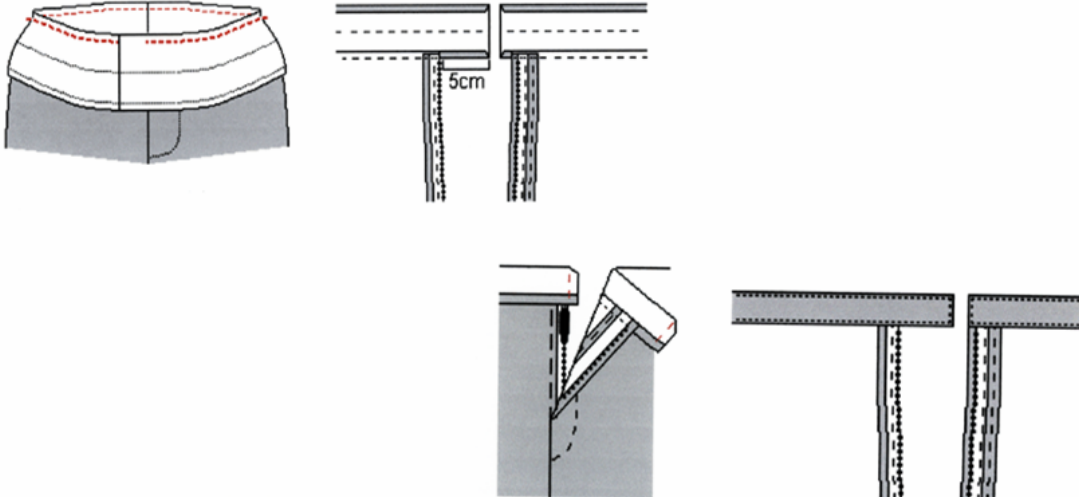


## WAISTBAND

Fold and press as shown



Attach the unfolded side (B) edge to the top of the pants, right sides of the fabric facing each other. Make sure that the 5 cm overlap is on the left side. Stitch on. Fold up the waistband and press seams up towards the waistband.

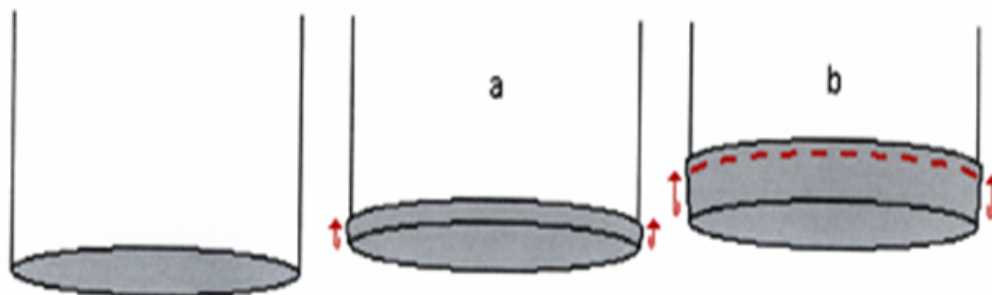


Fold waistband right sides together and sew edges. turn right side out and press well, being sure to pull out the corners.

Then

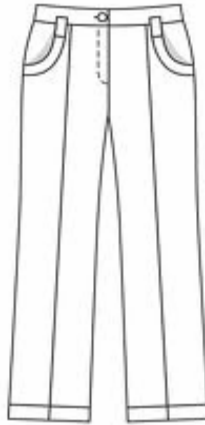
NOTE! Corners are shown cut in the picture but you should cut the corners AFTER you have sewn the edge. Top stitch over waistband, joining it totally to the pants.

## CUFFS



- Fold up a small edge of around 1 cm and press.
- Fold up a larger edge, of around 1,5-2 cm, press and sew.

## BASIC TROUSER



## CONSTRUCTION PROCEDURE

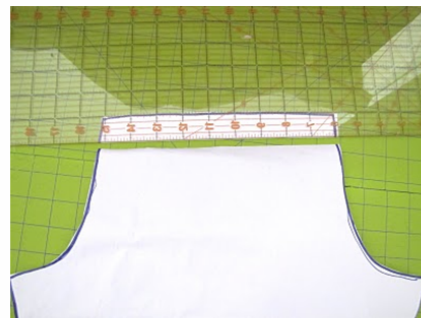
- Stitch the side pocket on both sides and also back pocket if desired(SNLS)  
↓
- Stitch the front pleats and back darts on both sides of the trouser if desired(SNLS)  
↓
- Finish the fly opening with zip and buttons on the front(SNLS)  
↓
- Stitch the inside leg of the front to the back separately for right and left side(OVERLOCK)  
↓
- Stitch the belt to both right and left sides of the trousers, starting from the right side of the material(OVERLOCK or FLATLOCK)  
↓
- Stitch loops for the belt loops can be attached to the belt before the belt is stitched to the trousers(SNLS)  
↓
- Stitch the remaining part of the leg-hole starting from the end of the zipper to the back part end corresponding to the exact measurement of waist(SNLSL)  
↓
- Fold and stitch the lower leg exactly along the front and back line(OVERLOCK or FLATLOCK)



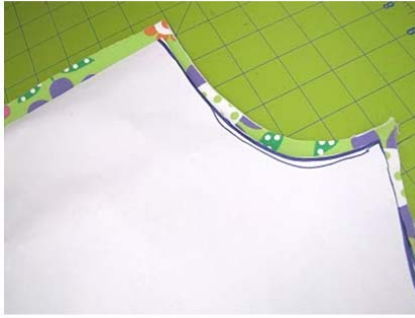
Start by taking the pants and pulling the front seam forward as shown. Place on the paper and trace all around the pants other than the straight side on the right.



Now pull out the back seam of the pants. Line the pants up with where we are tracing left off and trace around the right side of your pants.



Notice that the waistband will slant slightly upwards toward the back and usually the front seam will be slightly higher and smaller than the back.



Now the top inch of pattern piece is cut.



The fabric is folded so that we have a double layer. Put the pattern piece on top and cut. We are doubling the fabric so we end up with two legs. Also cut the piece about 1/4 inch larger on all sides of the piece to accommodate your seam allowance.



We should also need to cut a piece for the waistband. Measure the waist and cut a piece that is 75-80% of that measurement plus 1/2 inch for seam allowances

*In this example cotton lycra is used for pants and waist. If we are using anything other than cotton lycra for pants (interlock or jersey) it is a good idea to use cotton lycra for the waistband if we want the fold over waist like this. Cotton lycra has the best recovery and is stretchy so will hold the pants up!*



Right sides together sew the left and right seams on the pants (which will be the front and back seams).



In this the finishing of seam is given with a zig zag but it is not necessary! Knit won't unravel, This is done since it looks better.



Now, if we pull the pants apart and put the seams at the front and back this is what we will have.



Starting at the bottom of one pant leg and sewing all the way up to the crotch, around and down the other leg join the pants. Set pants aside.



Grab the rectangle which has been cut for waistband. Right sides sew together into a tube



This a Tube effect



Fold in half wrong sides together matching up raw edges.



Make quarter marks on the waistband and on the top of the pants. Right sides together pin waistband to pants aligning raw edges at quarter marks. Make sure the seam on the waistband lines up with the back seam of the pants. Sew waistband to pants and remove pins.





The waist looks extra high because it is not yet folded over



A lettuce edge!! Set the machine to the narrowest zig zag stitch we can get (it will not look like a zig zag it will be so close).

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- Shoben, M.M and J.P. Ward, 1999, Pattern cutting and Making up, CBS Publishers, New Delhi.
- Carr and Latham, Technology of clothing manufacture.

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