

Pattern guide sheet

ElectricThreads

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Body Measurements	Measurements	Conversions
1. Bust <i>Round</i>		
2. Waist <i>Round</i>		
3. Stomach <i>Round</i>		
4. Hip <i>Round</i>		
5. Back Length <i>Neck to Waist</i>		
6. Width of Back		
7. Neck <i>Round</i>		
8. Shoulder Length <i>Neck to Shoulder</i>		
9. Sleeve Length		
10. Upper Arm <i>Round</i>		
11. Wrist <i>Round</i>		
12. Neck to Bust		
13. Bust to Waist		
14. Waist to Surface		
Extra Body Measurements	Measurements	Conversions
Upper Thigh <i>Round</i>		
Crotch Length		
Front Panties		
Back Panties		
Armhole		

Body Measurements (1)

1. Bust Round

The person is measured while standing, with measurements taken over the chest, under the arms, and horizontally across the back.

2. Waist Round

Around the waist. The measurement should correspond to the measurement of the skirt or trouser waistband.

3. Stomach Round

Approximately 10 cm below the waist, a horizontal measurement taken between the waist and the hips.

4. Hip Round

Approximately 20 cm below the waist, measured horizontally around the widest part. Make sure the measuring tape is below any protruding stomach.

5. Back Length Neck to Waist

From the base of the neck to the waist; protruding shoulder blades increase the length.

6. Width of Back

Horizontally across the shoulder blades, between the indentations that form when the upper arms rest against the body.

7. Neck Round

Align the measuring tape around the neck. The measurement should be as low and even as the neckline.

8. Shoulder Length Neck to Shoulder

From the neckline to the outer shoulder joint.

9. Sleeve Length

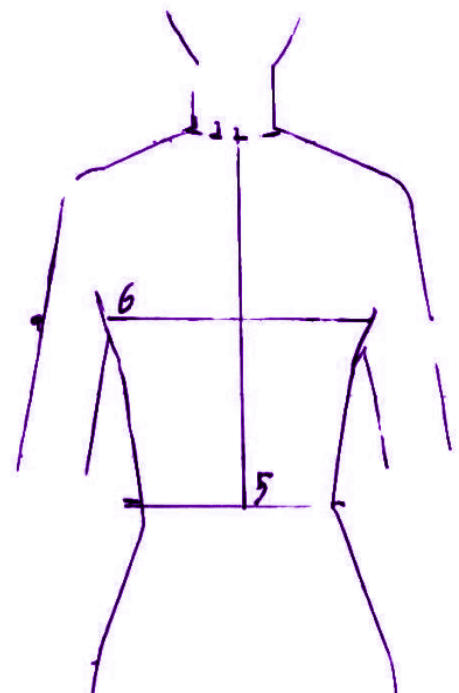
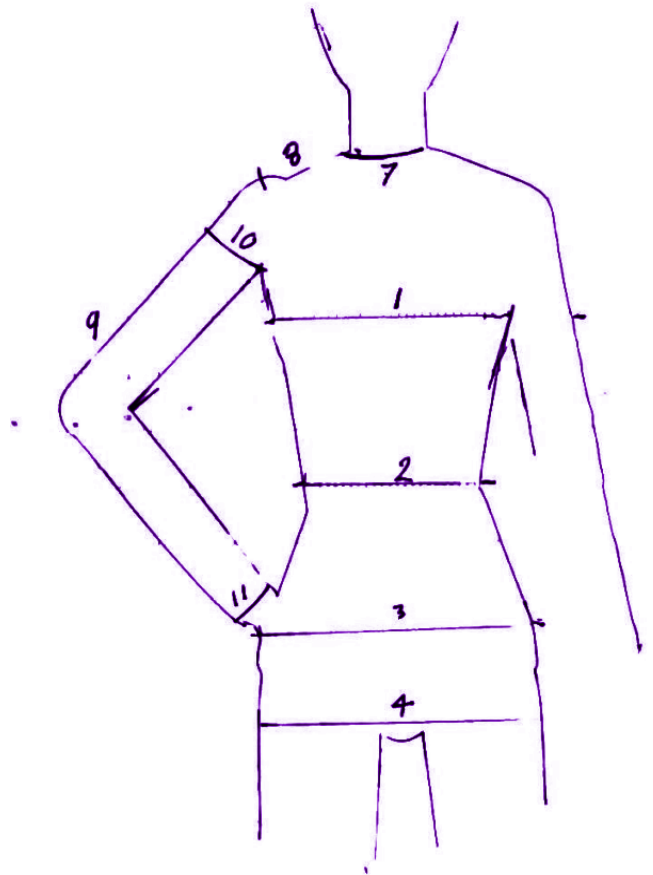
From the outer shoulder joint, over a slightly bent elbow, to the wrist. Note the measurement at the elbow for the placement of the elbow seam.

10. Upper Arm Round

Around the widest part of the upper arm.

11. Wrist Round

Around the wrist.



12. Neck to Bust

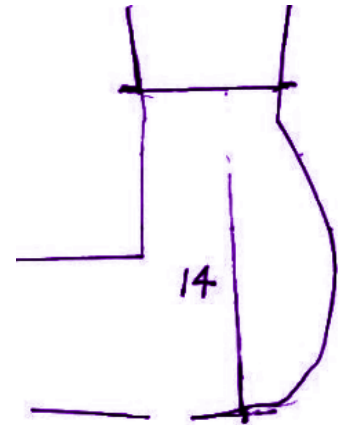
From the base of the neck, along the neck, to the bust point.

13. Bust to Waist

Like the bust height, but continue down to the waist.

14. Waist to Surface

The person being measured is sitting, with the measurement taken from the waist to the lower edge at the side, straight down to the surface.



Extra Body Measurements (1)

Upper Thigh *Round*

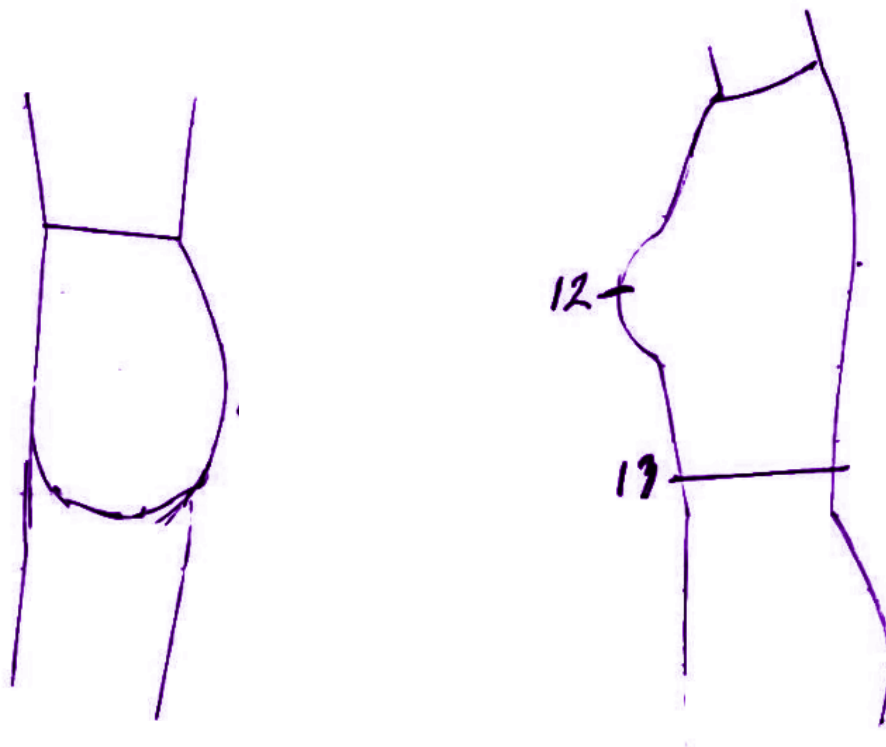
Around the thigh, approximately 5 cm below the crotch.

Crotch Length

Tie a string around the waist and measure from front waist through crotch to back waist. Compare your measurement to measurement below for your size. if length needs adjusting, add or deduct

Front and Back Panties

Half the amount on front panty and back panty pattern pieces



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Material (1)

Texti 1

Texti 2

BOM (2025)

Items	Amount	ISK	USD	EUR	Where
Fabric 93%pl/7%el	150cm	3.495 kr	25,51 \$	23,86 €	Store Föndra
Fabric 70%vi/27%ny/3%sp	150cm	3.750 kr	27,37\$	25,6 €	Store Föndra
Fabric 50-70%	50cm	2.500 kr	18,25 \$	17,06 €	Store Föndra
Standaard Elastiek 6mm 60%pl/40%el	1000 cm	995 kr	7,26 \$	6,79 €	Store Föndra
Gütermann thread col. 20 100%pl	1000 m - 1094 yds	350 kr	2,55 \$	2,39 €	Store Föndra
Elastic diagonal band 75%pa/25%sp	60cm	1.740 kr	12,7 \$	11,88 €	Store Föndra
Rit ColorStay Dye Fixative	236 mL	1.490 kr	10,88 \$	10,17 €	Store Föndra
Rit Liquid-Tan bronze	236 mL	1.490 kr	10,88 \$	10,17 €	Store Föndra
Silicone Grip Elastic Band 2cm	300cm	266 kr	1,94 \$	1,82 €	Temu
Batch Nylon, With Button 4cm	91 cm	129 kr	0,94 \$	0,88 €	Temu
Polyester Boning for Sewing 8mm	500 cm	381 kr	2,78 \$	2,6 €	Temu

Assemble the pattern T-shirt

This basic pattern is made for jersey fabric with a lot of stretch or Lycra material. If the fabric has little stretch, additional ease must be added for movement.

Body Measurements	Measurements	Conversions
1. Bust <i>Round</i>		
5. Back Length <i>Neck to Waist</i>		
Armhole		
6. Width of Back		
7. Neck <i>Round</i>		
9. Sleeve Length		
11. Wrist <i>Round</i>		

Top

- 0-1. Draw a line perpendicular from point 0, back length plus 1 cm; draw a perpendicular line across.
- 0-2. Body length; draw a perpendicular line across.
- 0-3. Armhole depth minus 3 cm; draw a perpendicular line across.
- 0-4. $\frac{1}{2}$ the length from 0 to 3; draw a perpendicular line across.
- 0-5. $\frac{1}{8}$ of the length from 0 to 4; draw a perpendicular line across.
- 0-6. $\frac{1}{6}$ of the neck width; draw a perpendicular line upward.
- 6-7. 1.3 cm; draw a curved neckline.
- 3-8. $\frac{1}{2}$ back width minus 2.5 cm; draw a perpendicular line up to points 9 and 10.
- 10-11. 1 cm; connect points 7 to 11.
- 3-12. $\frac{1}{4}$ chest circumference minus 3 cm; draw a perpendicular line down to point 13 on the waistline and point 14 on the hemline.
Draw the armhole curve from point 11 through point 9 to point 12.
- 13-15. 3 cm; draw the side seam from point 12 to 15 to 14.
- 0-16. $\frac{1}{6}$ of the neck width minus 1 cm; draw a curved front neckline.

Back and front pieces are the same, except the front neckline is curved and extends lower.

Sleeves

Draw a perpendicular line from point 17.

17-18. $\frac{1}{2}$ the length from point 0 to 3 plus 1 cm.

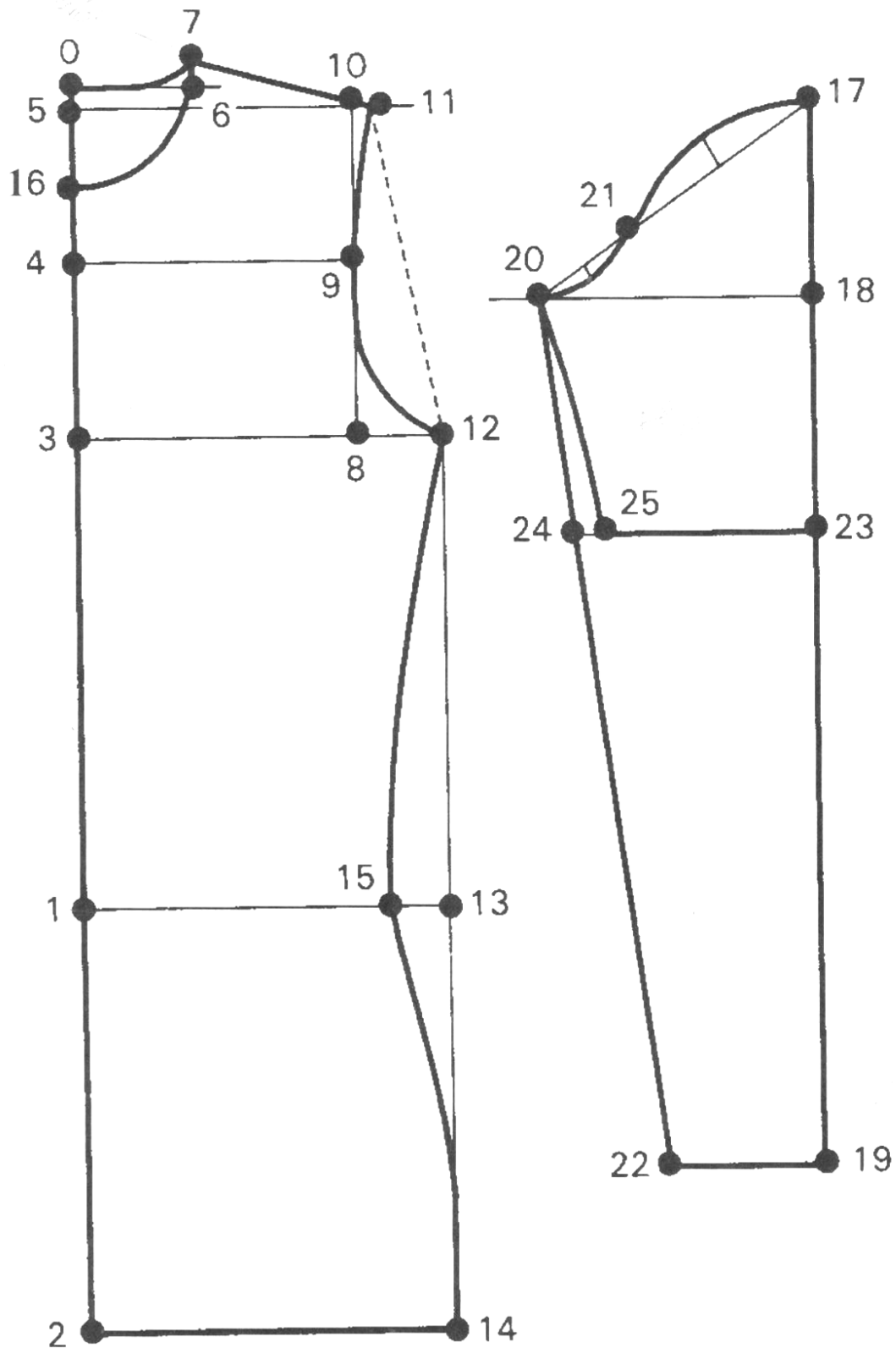
17-19. Sleeve length for jersey plus 3 cm; draw a perpendicular line across.

17-20. Measure the armhole according to the guideline between points 11–12 on the bodice, plus 0.5 cm. Draw the sleeve cap. Divide the line from point 20 to 17 in half. Mark point 21, which is $\frac{1}{3}$ from point 20.

20-21. Curve the line inward by 0.6 cm.

21-17. Raise the line by 2 cm.

19-22. $\frac{1}{2}$ wrist width plus 0.5 cm; connect points 20 to 22.



Assemble the pattern with a raglan sleeve

Trace the basic pattern for jersey T-shirt.

Body Measurements	Measurements	Conversions
1. Bust <i>Round</i>		
8. Shoulder Length <i>Neck to Shoulder</i>		
9. Sleeve Length		
11. Wrist <i>Round</i>		

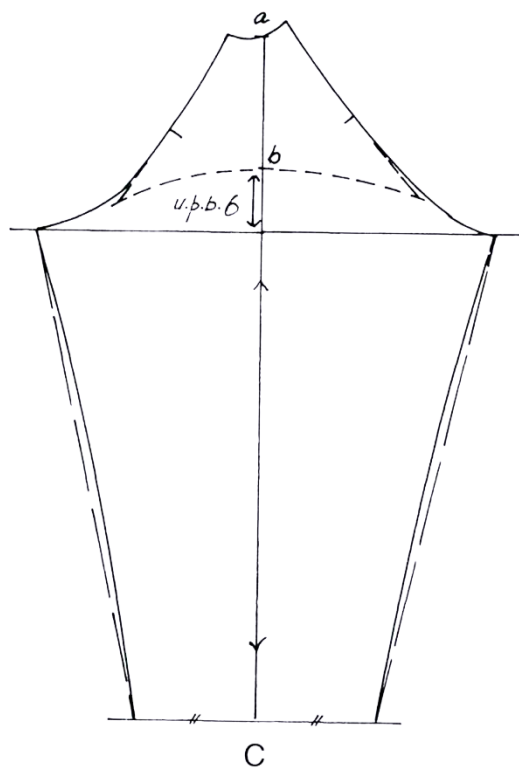
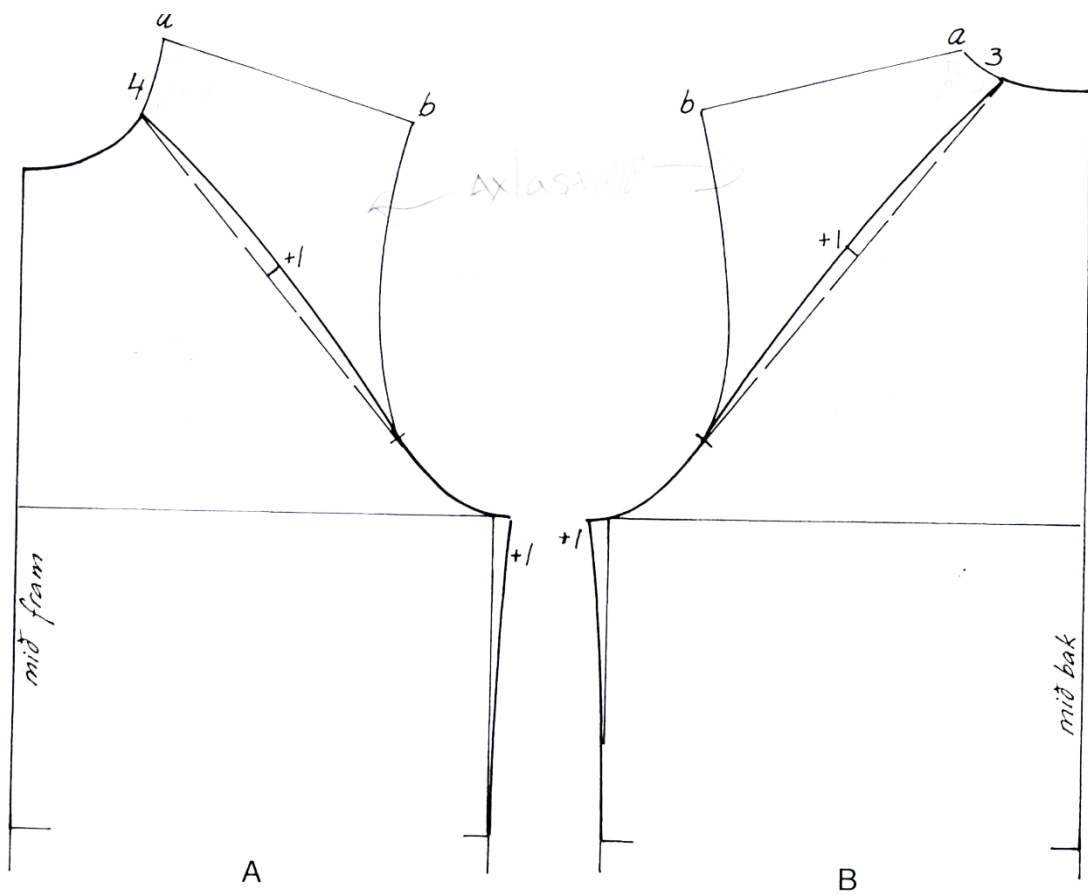
The sleeve cap is approximately 6 cm, which corresponds to half of the original height

Front and Back Pieces

1. **Mark raglan cutting lines** at the neckline (here: 4 cm on the front, 3 cm on the back).
2. **Draw guide lines** to the armhole and decide on reference points. Divide the lines in half. Shape the raglan lines according to the illustration.
3. **Add 1 cm to the side seams** and shape the side seams smoothly.
4. **Trace the shoulder pieces.**

Sleeve

5. **Draw a straight line from point a to b** and determine the shoulder width (here: 14.5 cm). Measure approximately 6 cm further (corresponding to $\frac{1}{2}$ the sleeve cap height) and draw a perpendicular line = upper arm line. Decide the **sleeve length from point b** (the shoulder point). Draw a right angle at the bottom and **mark $\frac{1}{2}$ wrist width** on both sides.
6. **Take the front shoulder piece** and align it with line a–b up to the shoulder width line. Repeat the same process with the **back shoulder piece**.
7. **Shape the raglan seams**, making sure they are the same length as the seams on the garment.
8. **Shape the sides of the sleeve.**



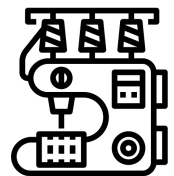
Cut and Prepare Fabric Pieces

Carefully cut out all fabric pieces according to the pattern. Double-check each piece to ensure accuracy and label them if needed to stay organized.



1 Sew Individual Sections

Start by sewing smaller sections and details individually. This prepares the major components before joining everything together.



1.1 Sew *Front Side* to *Front Medial*

Align and stitch the front side panels to the medial front section. Make sure seams are clean and edges are properly matched.



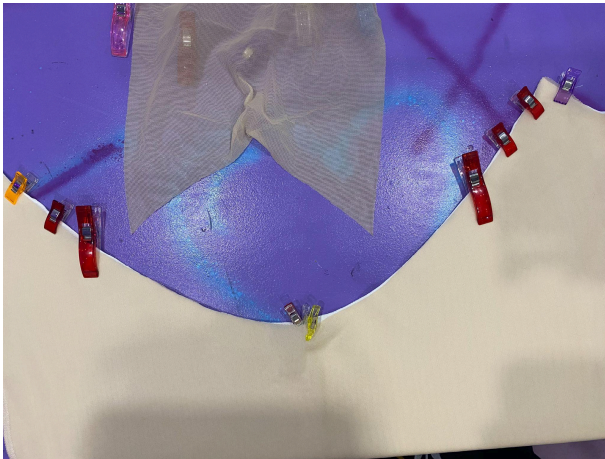
1.2 Sew *Lower Back* Section

Assemble the lower back piece by sewing along the designated edges. Ensure the shape remains consistent with the overall pattern.



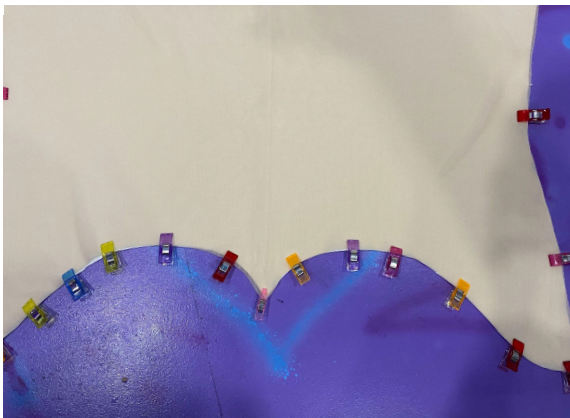
1.3 Sew *Upper Medial Back* to *Pocket Back*

Attach the upper medial back section to the back pocket panel. This creates the foundation for later fitting and structural details.



1.4 Join *Upper Medial Back* to *Lower Back*

Sew the upper medial back onto the lower back piece, completing the basic structure of the back of the garment.



1.5 Connect *Front Side* to *Upper Medial Back*

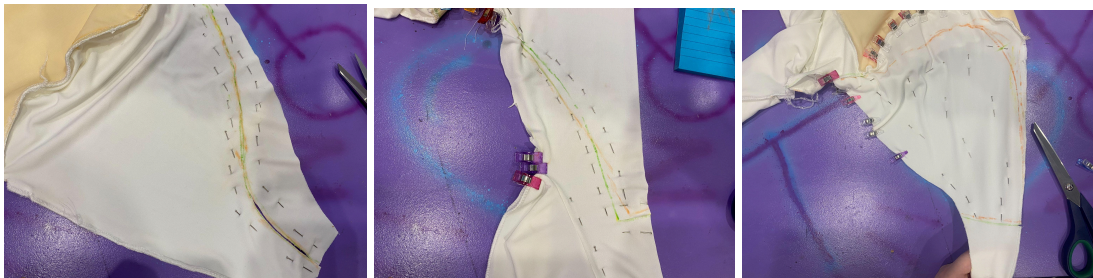
Join the front side panels to the upper medial back. This step connects the front and back of the garment for the first time.

1.6 Attach *Lower Front* to *Front Medial*

Sew the lower front panel to the front medial section, creating a seamless transition along the torso.

2 Make *Adjustments* to Fit

Try on or fit the assembled pieces to a form. Pin, trim, or modify areas as necessary to improve the fit before continuing.

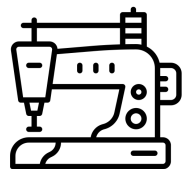


3 Sew Adjusted Sections

Secure all adjusted areas with final stitching to lock in the updated fit and ensure durability.

3.1 *Zigzag* Stitch Down Seams

Apply a zigzag stitch over the seam allowances. This prevents fraying and adds flexibility, especially important for tight-fitting garments.



3.2 Attach *Elastic Band* to *Pocket Back*

Sew an elastic band onto the pocket back area to provide stretch and allow better fit or function depending on the design.

3.3 Sew *Elastic* to *Upper Medial Back*

Attach another elastic section across the upper medial back. This helps maintain structure while allowing movement.

3.4 Sew *Elastic* to *Mid Lower Back*

Sew elastic bands to the mid-lower back area for shaping and better support of the lower garment.

3.5 Sew *Elastic* from *Side Lower Front* to *Lower Back*

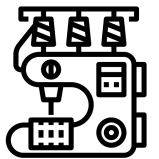
Stretch and attach elastic from the lower front side panels across to the lower back. This gives tension and flexibility where needed.

3.6 Insert *Boning* for Structure

Slide boning into designated channels or seams. Boning provides extra structure, helping the garment maintain its shape.

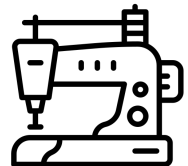
3.7 Begin Sewing *Sleeves*

Start assembling the sleeves by matching and sewing smaller sleeve sections together.



4 Sew Sleeve Sections Together

Complete the sleeves by sewing all necessary parts together, shaping them to fit the arms comfortably.

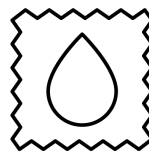
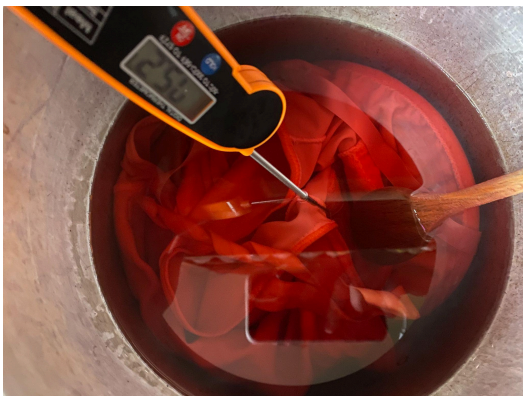


4.1 Attach *Elastic Band* to *Upper Section*

Attach an elastic band to the upper body portion (or neckline area) for additional hold and flexibility.

5 Dye the Fabric or Components

Apply dye to fabric sections or completed pieces as needed to achieve desired color effects. Allow time for drying and setting.

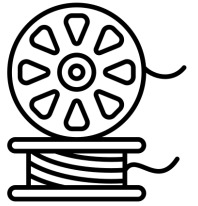


6 Print Designs onto Fabric

Print any logos, patterns, or artwork onto the fabric. This could be done with screen printing, vinyl transfers, or other techniques.

7 Prepare **LED** Setup

Lay out the design for LED placement. Test LEDs, conductive thread, and battery systems before stitching them into the garment.



7.1 Sew **Conductive Thread** into **Sleeve**

Carefully sew conductive thread into the sleeve along the planned pathways for the LEDs, ensuring electrical connections are secure.

7.2 Sew **LEDs** with **Conductive Thread** onto **Sleeve**

Sew the LEDs directly onto the sleeve, connecting them to the conductive thread paths for proper function.

7.3 Attach **Elastic Band** to **Sleeve**

Add an elastic band at the end of the sleeve (wrist area) to ensure a snug and comfortable fit.

7.4 Attach **Stud Snaps** for **Fastening**

Install stud snaps onto the garment in the appropriate locations. These provide strong, easy-to-use closures.



19.4.2025

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