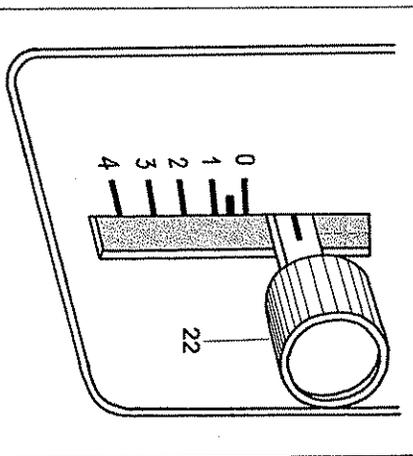
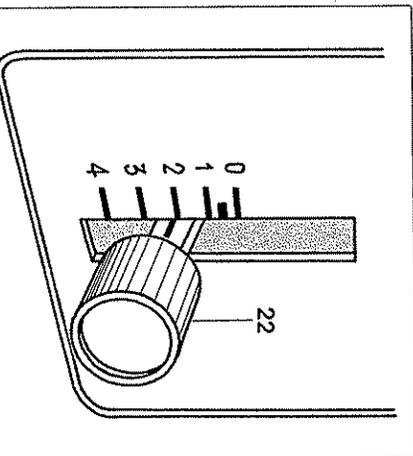
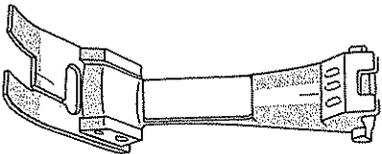


Straight stitching

Zigzag foot 000
 Needle:
 normally 80
 at times 70—100
 depending on the
 material and thread
 Thread:
 adapted to the
 fabric sewn



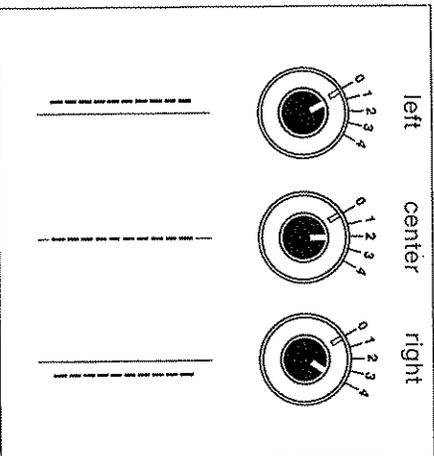
Straight stitch

Stitch width: (# 19) 0
 Stitch length: (# 22) 1—4
 Needle position: (# 20) center
 Feed control:
 Automatic: $\overline{0}$ WWWW (# 14)
 and MW (# 15)

Set stitch length lever at desired length.
 Normal stitch length: about 1½—2

Reverse sewing and securing threads

For reverse stitching push stitch length lever (22) upward (where no numbers are marked).

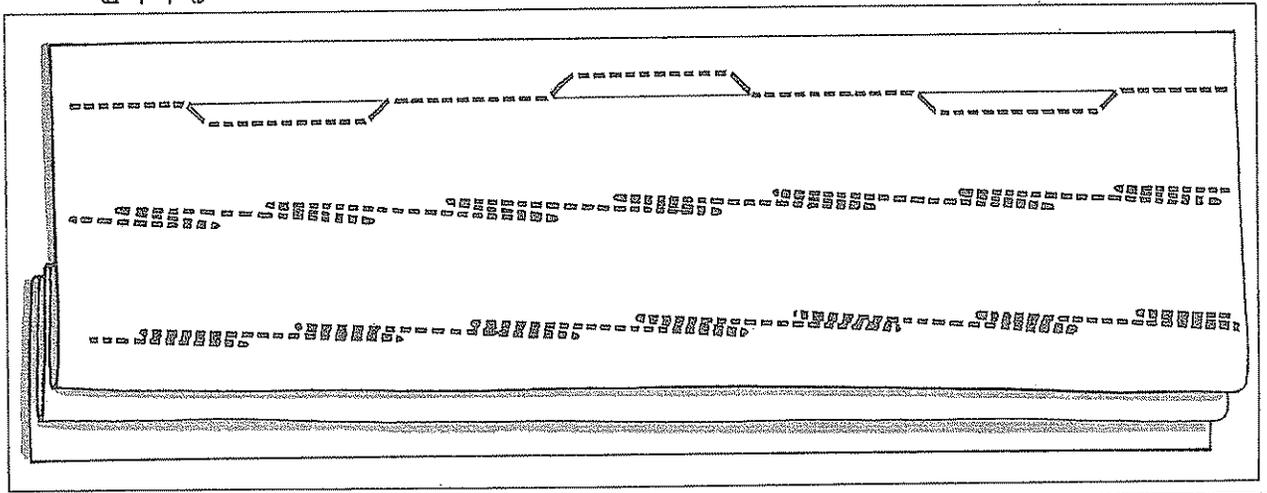


Needle position

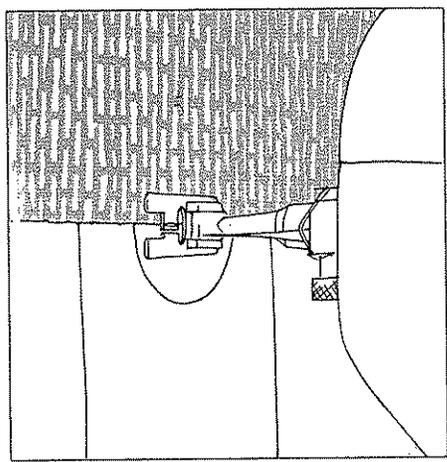
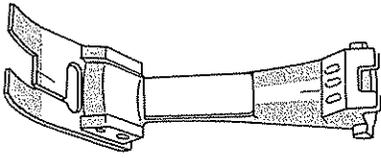
With the needle position knob 20 the needle can be set at right or at left for buttonholes, blind hemming zippers, etc.
For normal sewing the needle remains in the center.

Securing in thick seams

(Stitch length not too short.)
 Before stitching in reverse always leave the needle completely down in the material, then move lever to reverse sewing. The same applies when sewing forward again.

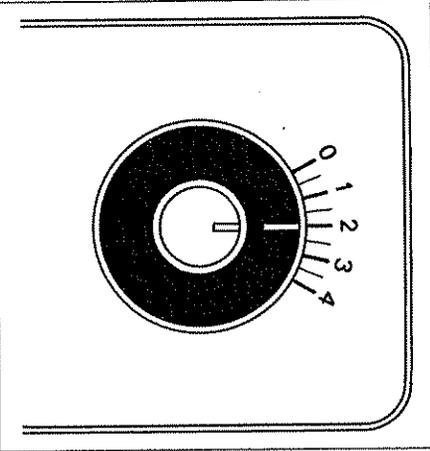


Zigzag foot 000
Needle:
 normally 80
 at times 70-100
 depending on the
 material and thread
Thread:
 adapted to the
 fabric sewn
 if possible 50

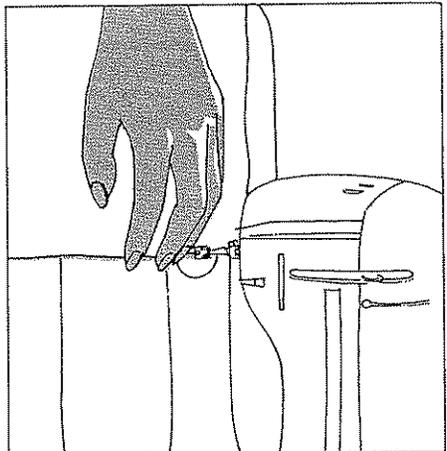


Guide the cut edge under the center of the foot so that the needle actually goes once into the material and once outside.

As a general rule the following is valid: zigzag not too wide, stitch length not too long. First trim the edge neatly.



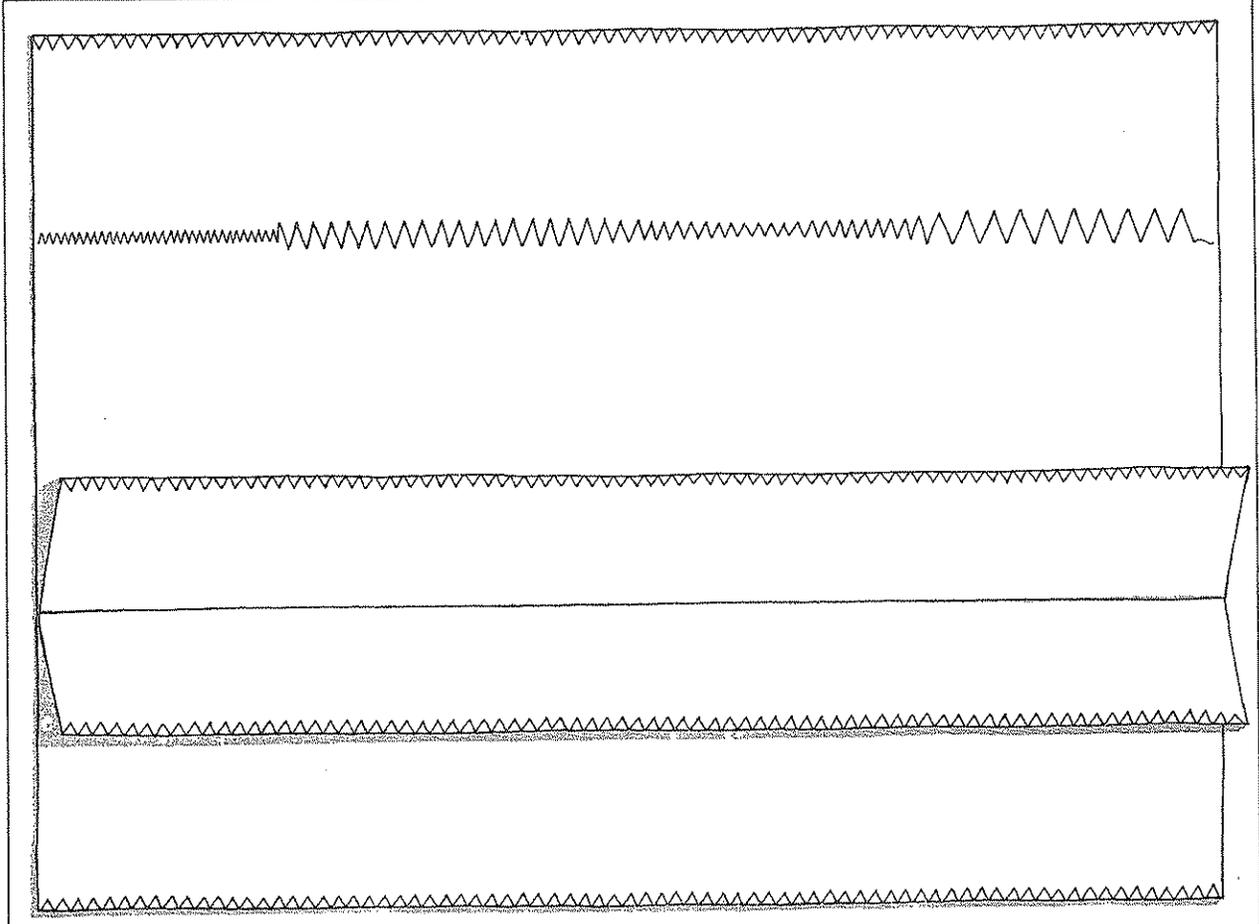
Zigzag sewing
 Set zigzag width (#19) according to work and material.



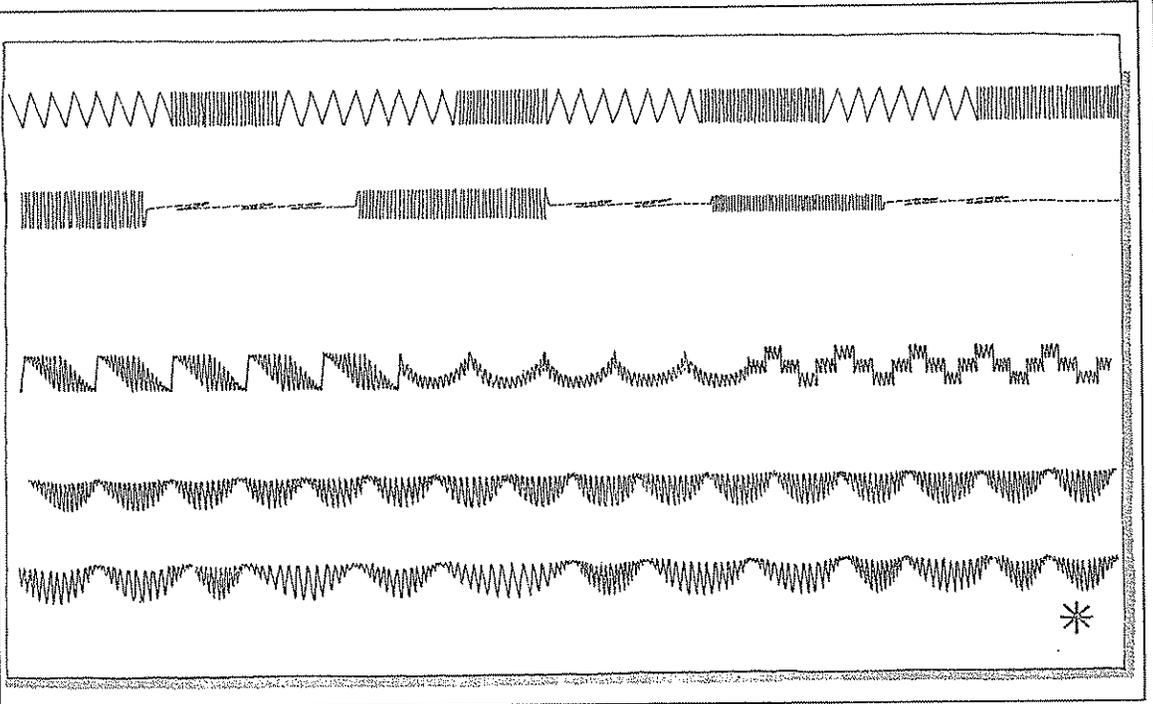
If you guide the work like this: From the front, close to the foot, fingers on the edge, you will easily get a neat finish.

Finishing Edges
 Stitch width: (#19) 2 1/2-4
 Stitch length: (#22) 1-2
 Needle position: (#20) center
 Automatic: 0 WWW (#14) and MWV (#15)

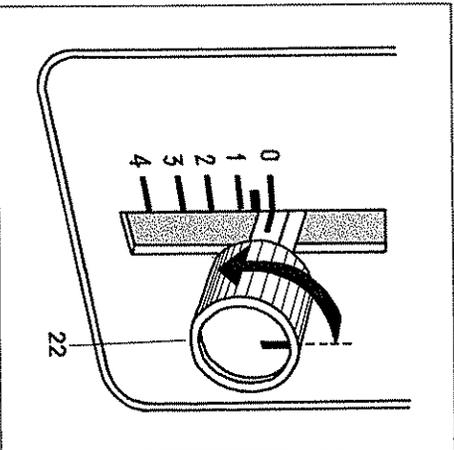
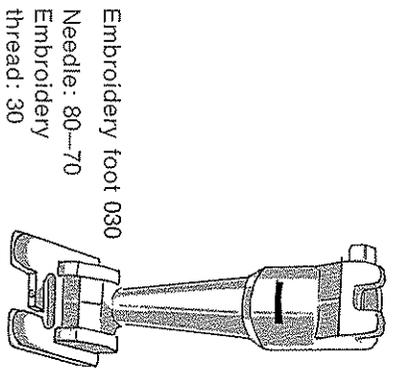
Feed control:
 MWM



Automatic stitches



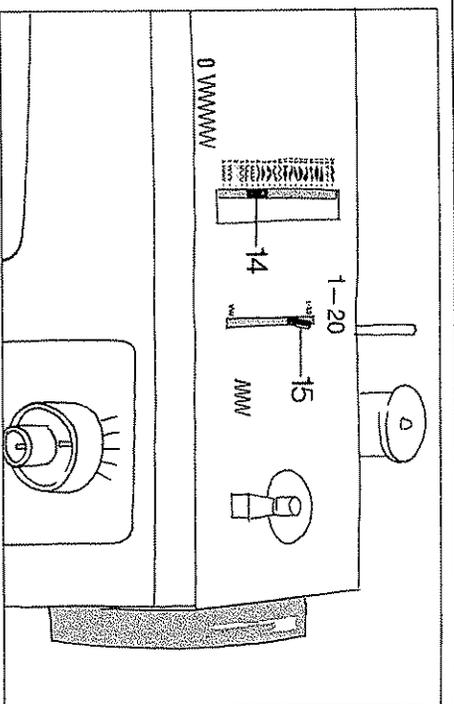
* When embroidering always use the slide-on sewing table so that the work can enter **evenly** under the foot. Pushing or pulling produces irregular patterns.



Satin stitch (Close zigzag)

- Stitch width: (# 19) 4-1 1/2
- Stitch length: (# 22) almost 0
- Needle position: (# 20) center
- Automatic: 0 WWWW (# 14) and MW (# 15) MW
- Feed control: MW

By turning the stitch length knob (22) the satin stitch spacing can be finely regulated. (See also page 8.)

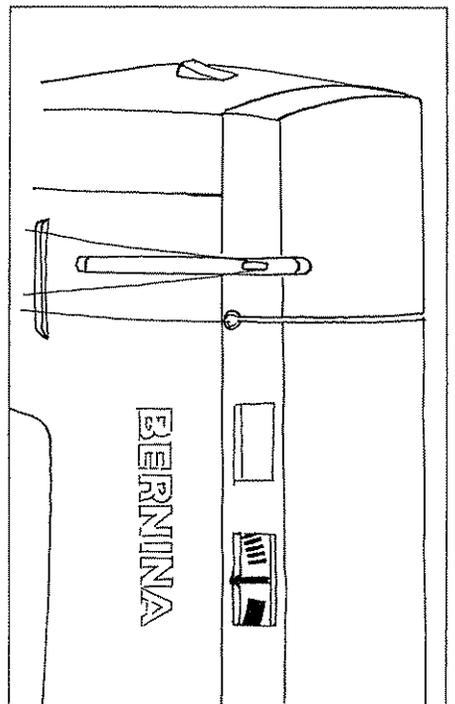


Automatic

To connect the automatic patterns: push lever 15 to rear (away from you). Pull lever 14 to right and set it next to desired pattern. When doing this do not leave the needle down in the material.

- Stitch width: (# 19) 4
- Stitch length: (# 22) almost 0
- Needle position: (# 20) center
- Feed control: MW
- Paper underlay when needed

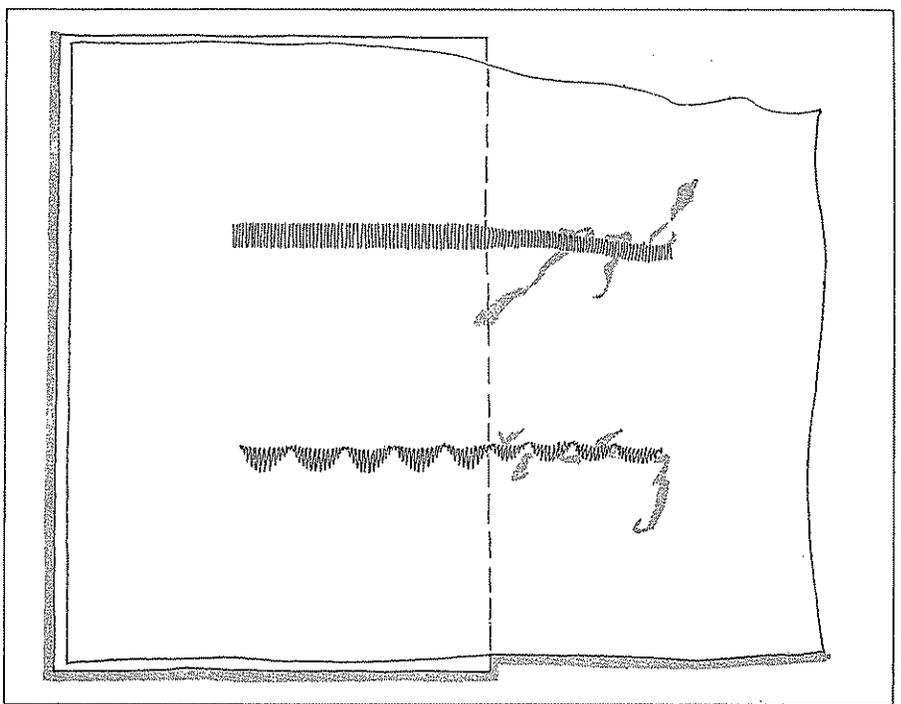
Automatic patterns



Pattern indicator

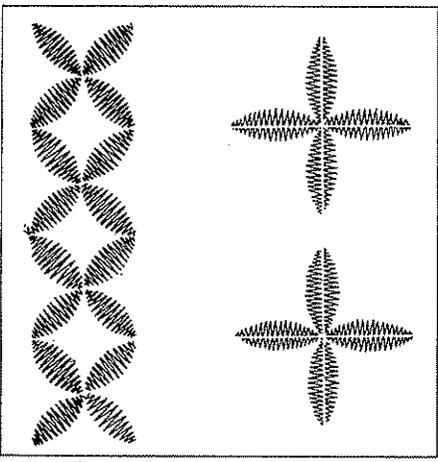
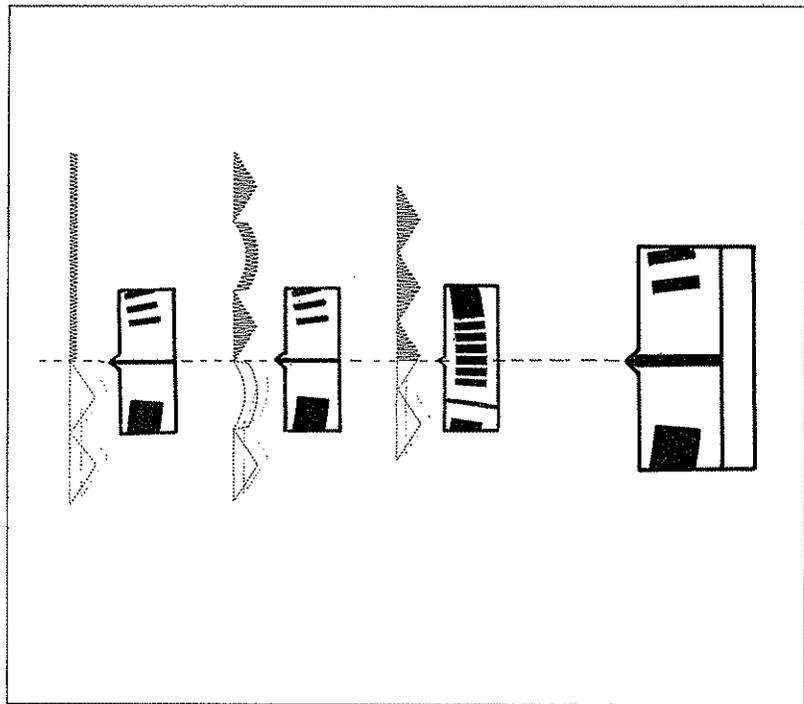
The pattern indicator 13 shows the position of a pattern. Every time the red line reaches the center, one pattern is finished and another started. (Indicator disc makes one complete rotation.)

This indicator is especially useful when embroidering borders, making up stars and flowers, etc., and when combining different patterns together.



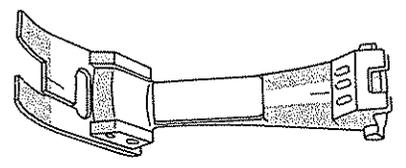
When embroidering it is advisable to lay paper underneath to prevent the material from puckering. (Do not use tissue paper, as this is too soft. Typewriting paper is excellent.)

Note: Use "spray starch" when fabric permits using it. This works very well and it is not necessary to use paper underneath.



Hems on Jersey material

Zigzag foot 000
 Needle: 80-70
 Thread:
 30 or 50



Hems for Jersey underwear

Needle position: (#20) center
 Automatic: 0 WWWW (#14) and MW (#15) MW
 Feed control: MW

Single turned-in hems

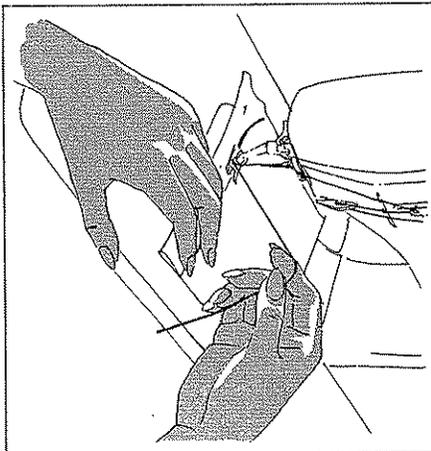
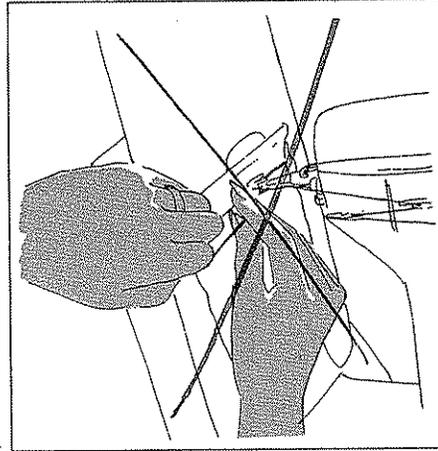
Stitch width: (#19) 3
 Stitch length: (#22) 1 1/2

Double turned-in hems

Stitch width: (#19) 2 1/2
 Stitch length: (#22) 1 1/2

The Waving of Jersey

To prevent the Jersey from waving, guide an extra thread inside the zigzag. (Not only for hems but whenever jersey stretches, e. g. patching, oversewing, etc.)
 Press with a damp cloth before removing the extra thread.

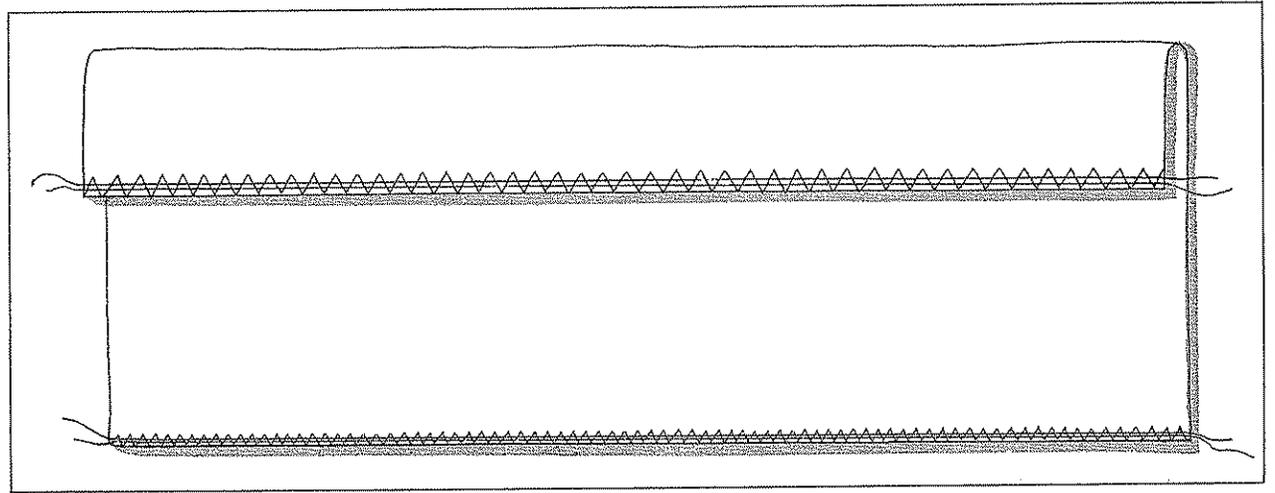


How to hold the extra thread
 Not like this, because you obscure the view of the work.

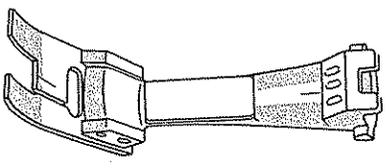
But like this: This way the view is clear and the work can be guided easily.

Important
 Hold the thread slightly taut while sewing and the Jersey will not stretch so much.

The thread can also be guided through the hole in the needle plate like pintuck cord. See page 51. (Especially useful for a large patch.)



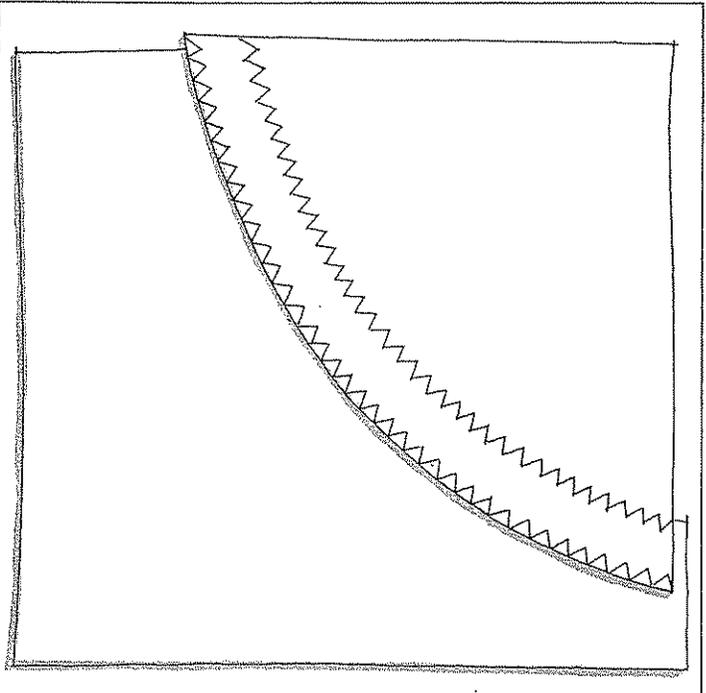
Zigzag foot 000
 Needle: 80-70
 Thread:
 30 or 50



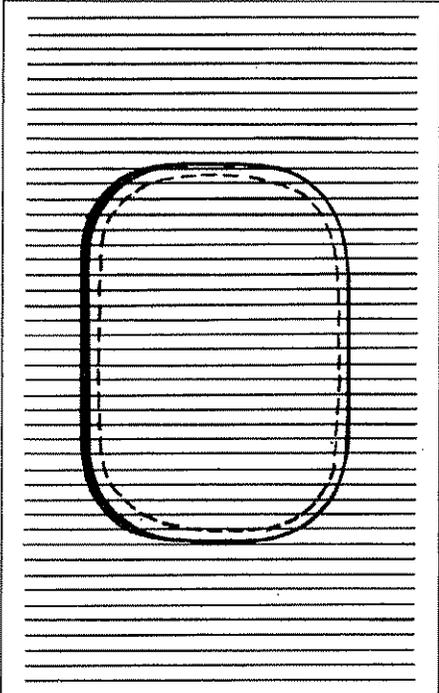
Patching Jersey

Stitch width: (# 19) about 3
 Stitch length: (# 22) 1-1 1/2
 Needle position: (#20) center
 Automatic: 0 WWW (# 14) and MMW (# 15)
 Feed control: MM

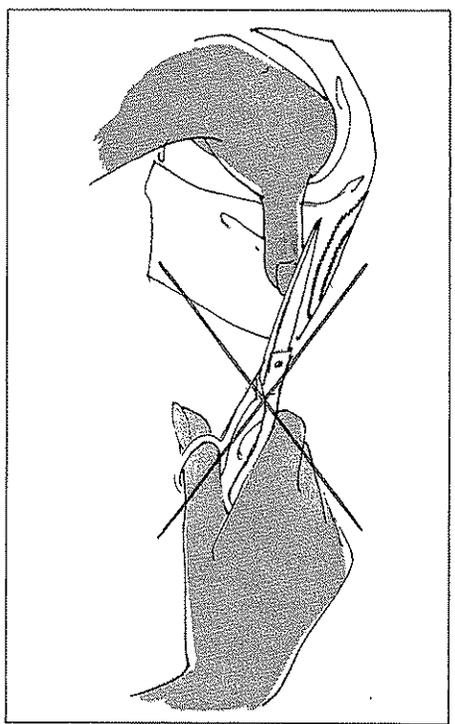
Baste the new piece on to the right side of the work, then sew it on, first with the zigzag just covering the edge, then a second time one presser foot width from the first seam. For cotton Jersey use the extra thread to avoid waving.
 Afterwards cut the damaged piece out on the wrong side. (Hold the scissors correctly.)



Whenever possible make the patches in round shapes.

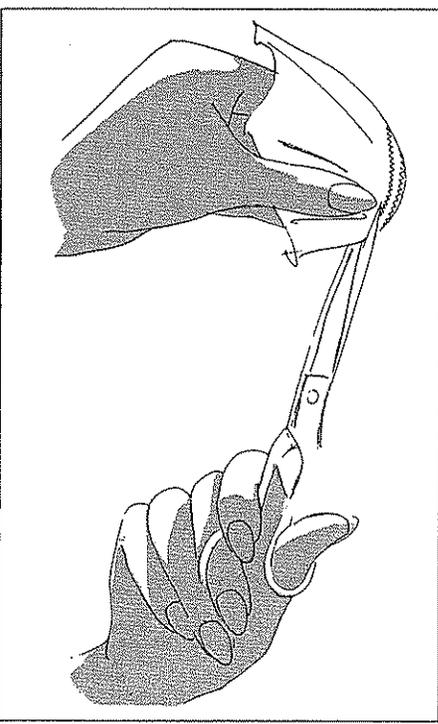


When square patches are unavoidable at least the corners should be rounded.

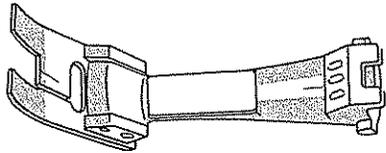


How not to hold the scissors

Whenever you have to trim close to a zigzag the scissors should **not** be held like this (with the backs of the hands towards you). There is a risk that you might cut into the stitches.



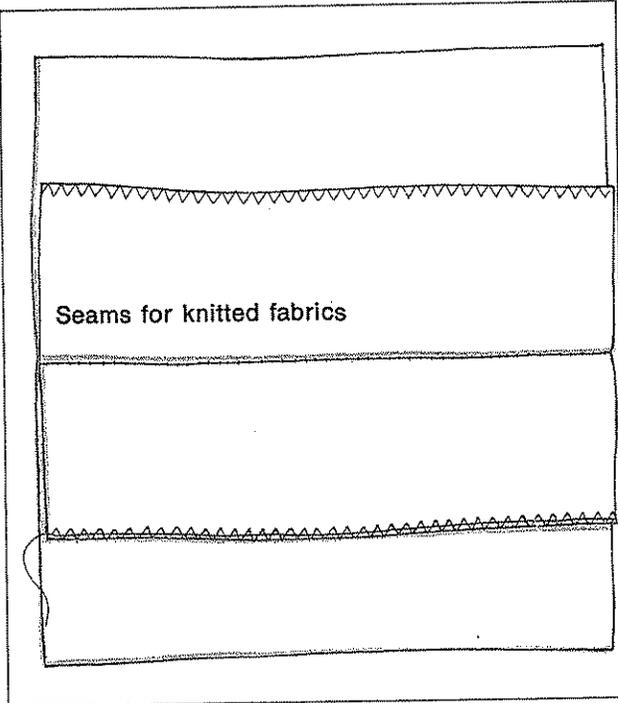
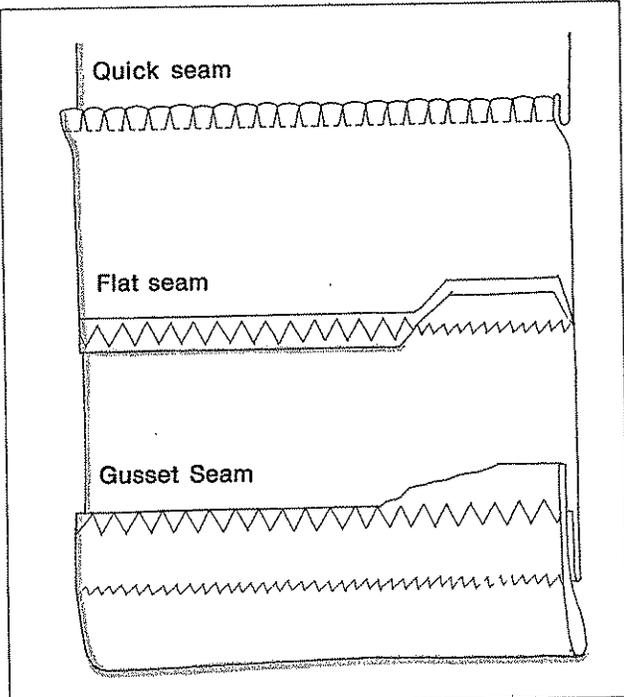
This way is much easier. **Palm of the hand towards you holding the scissors quite flat!!!** Cut only with the points of the scissors. The thumb of the left hand should be close to the seam just where the scissors are cutting.



Zigzag foot 000
 Needle: 80-70
 Thread: 30

Four important points when sewing Jersey

1. Baste always with darning thread.
2. Use only a perfect needle. A blunt needle leaves holes.
3. Use fine mercerised thread.
4. Press each seam after sewing and not all seams together when the work is completed.



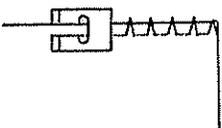
Seams on Jersey

Needle position: center
 Feed control: \overline{MM}
 Automatic: 0 WMMW (# 14) and MW (# 15)

Quick seam

Stitch width: (# 19) 3-4
 Stitch length: (# 23) 1/2-1
 Automatic: Blindstitch (Pattern No. 1) and lever 15 at 1-20

Joins up and oversews simultaneously. Important! Cut edges must be on left.



Flat Seam — Cotton Jersey Underwear

1st run: Join up at **one presser foot width.**
 Stitch width: 1 (# 19) Stitch length: 1-1 1/2 (# 22)
2nd run: press seam open and sew over it on right side.
 Stitch width: 3 (# 19) Stitch length: 1-1 1/2 (# 22)

To finish off cut the remaining material. Hold the scissors correctly.

Gusset Seam

1st run
 Stitch width 1: Stitch length: 1-1 1/2
 Pin the pieces together leaving the double layer (gusset) protruding about 1/4 inch. **Sew at one presser foot width from the inner edge.**

2nd run

Stitch width 3: Stitch length: 1-1 1/2
 Press the whole seam towards single layer of Jersey and **sew at one presser foot width along first seam on right side.** Trim off turnings. Hold scissors correctly.

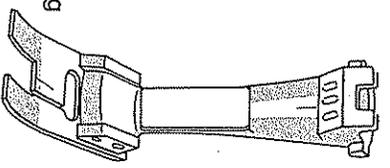
Seams for Knitted Fabrics:

Dresses — Skirts — Sweaters

Stitch width: 1 (# 19) Stitch length: 1 (# 22)
 Knitted fabrics can be joined up like other materials. Seams are pressed open but remain stretchy.

Very elastic seams

Zigzag foot 000
 Needle: 80
 Thread:
 Mercerised sewing
 thread 30-50

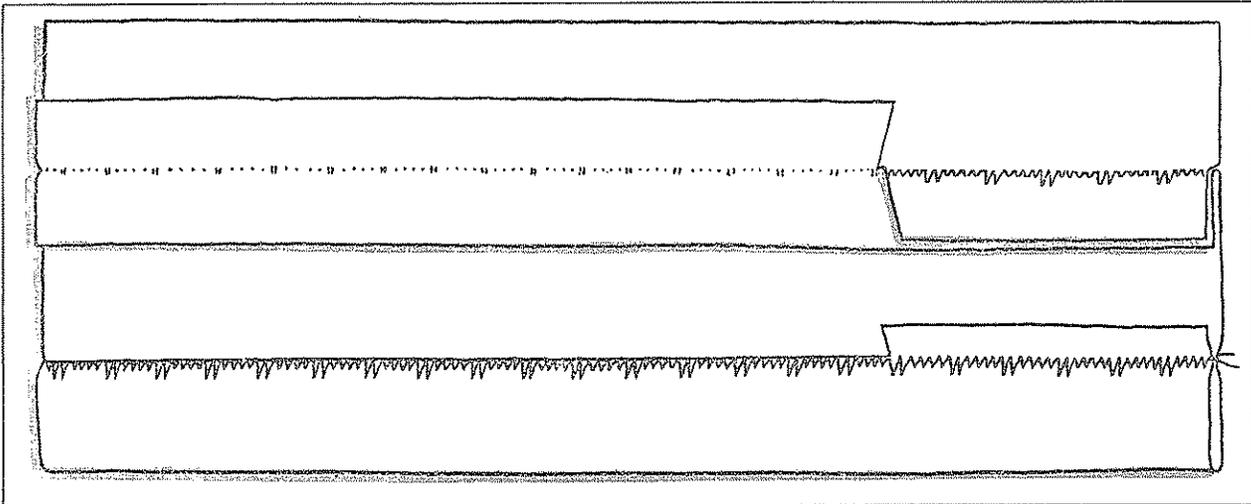
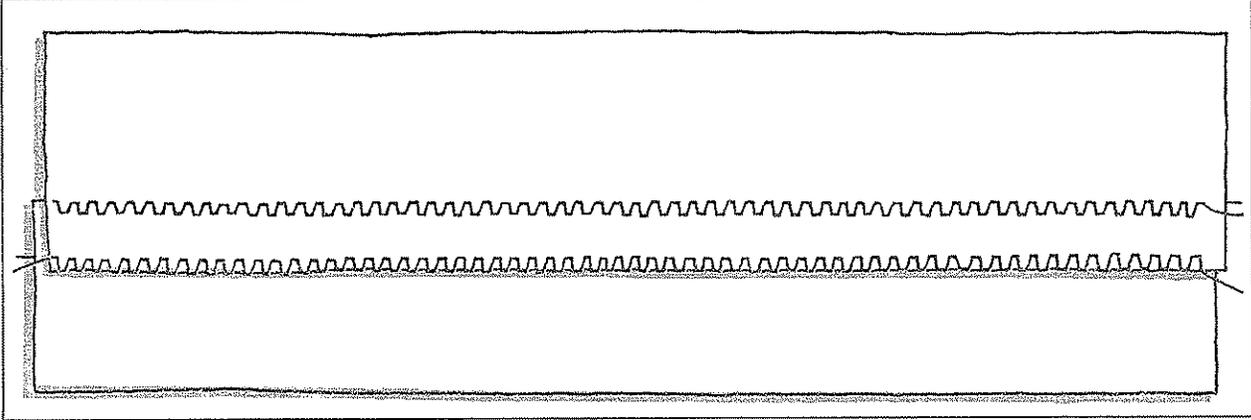


Flat joining seam

Especially for Lycra fabric
 (e.g. Girdles)

Stitch width: (# 19) 2 1/2
 Stitch length: (# 22) 1/2-3/4
 Automatic: Universal stitch
 (Nr. 3) and 1-20
 Needle position: center
 Feed control: MM

Lay cut edges approximately 1/4" over each other, then oversew edges.



Stretch seam

for ski trousers and very elastic fabrics like Helanca, Crimplene etc.

Stitch width: (# 19) 1-1 1/2
 Stitch length: (# 22) 1/2-3/4
 Automatic: Stretch (Nr. 4)
 Needle position: and 1-20 (lever 15)
 Feed control: center
MM

Sew tacked seam. (Lay the work under the presser foot in such a way that the somewhat wider zigzag stitch is directed towards the cut edge.) Press seam open and if necessary overcast.

Stretch seam as hem

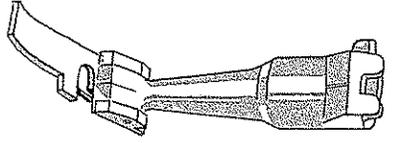
only for Jersey underwear.

Stitch width: (# 19) 3-4
 Stitch length: (# 22) approx. 3/4
 Automatic: Stretch (Nr. 4)
 Needle position: and 1-20 (lever 15)
 Feed control: center
MM

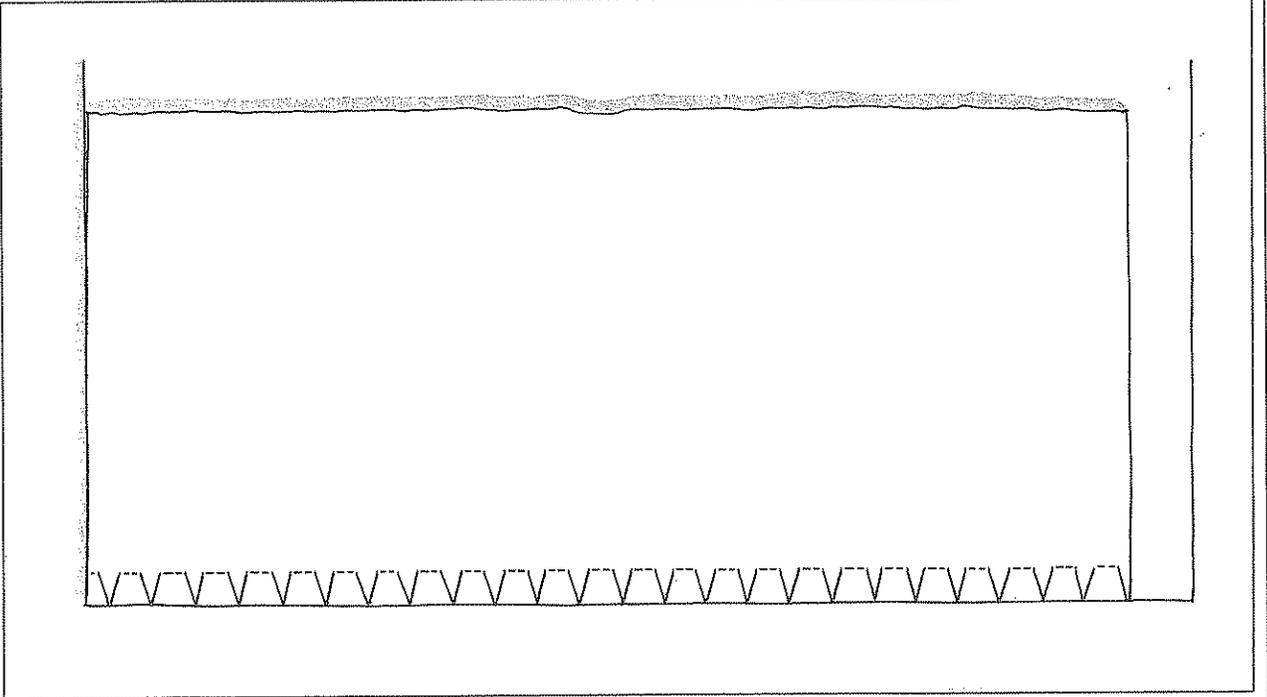
Iron hem. (Do not turn under the edge.) Measure depth of hem and then sew. (Lay the work under the presser foot so that the somewhat wider zigzag stitch is directed towards the edge of the hem.) Finish by cutting away surplus fabric on the sewn edge.

Overlock

Overlock foot 470



The following point must be observed with overlock sewing:
Synthetic fabrics should always be sewn with a synthetic thread.



Overlock seam

Stitch width: (##19) 4

Stitch length: (##22) 0.5-2

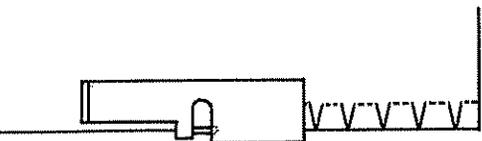
Needle position: (##20) right

Automatic: overlock (Nr. 5) and 1-20 (##15)

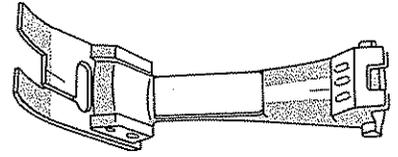
Feed control: mm

The overlock seam is used for sewing together and neatening in one operation.

Warning: material edge must lie to the right.



Zigzag foot 000
 Needle: 80-70
 Thread: 50



Shell Edging

Stitch width: (# 19) 4
 Stitch length: (# 22) 1
 Needle position: (# 20) center
 Automatic: blindstitch (Pattern No. 1) and lever No. 15 at 1-20
 Feed control: MM

Place folded edge to the **left** as for quick seam.

Lace on Jersey

Stitch width: (# 19) 1 1/2-2
 Stitch length: (# 22) 1/4-1/2
 Needle position: (# 20) center
 Automatic: 0 WMMW and MW
 Feed control: MM

Pin or baste lace on and sew straight on with zigzag. Trim off surplus on wrong side along zigzag. Hold the scissors correctly.

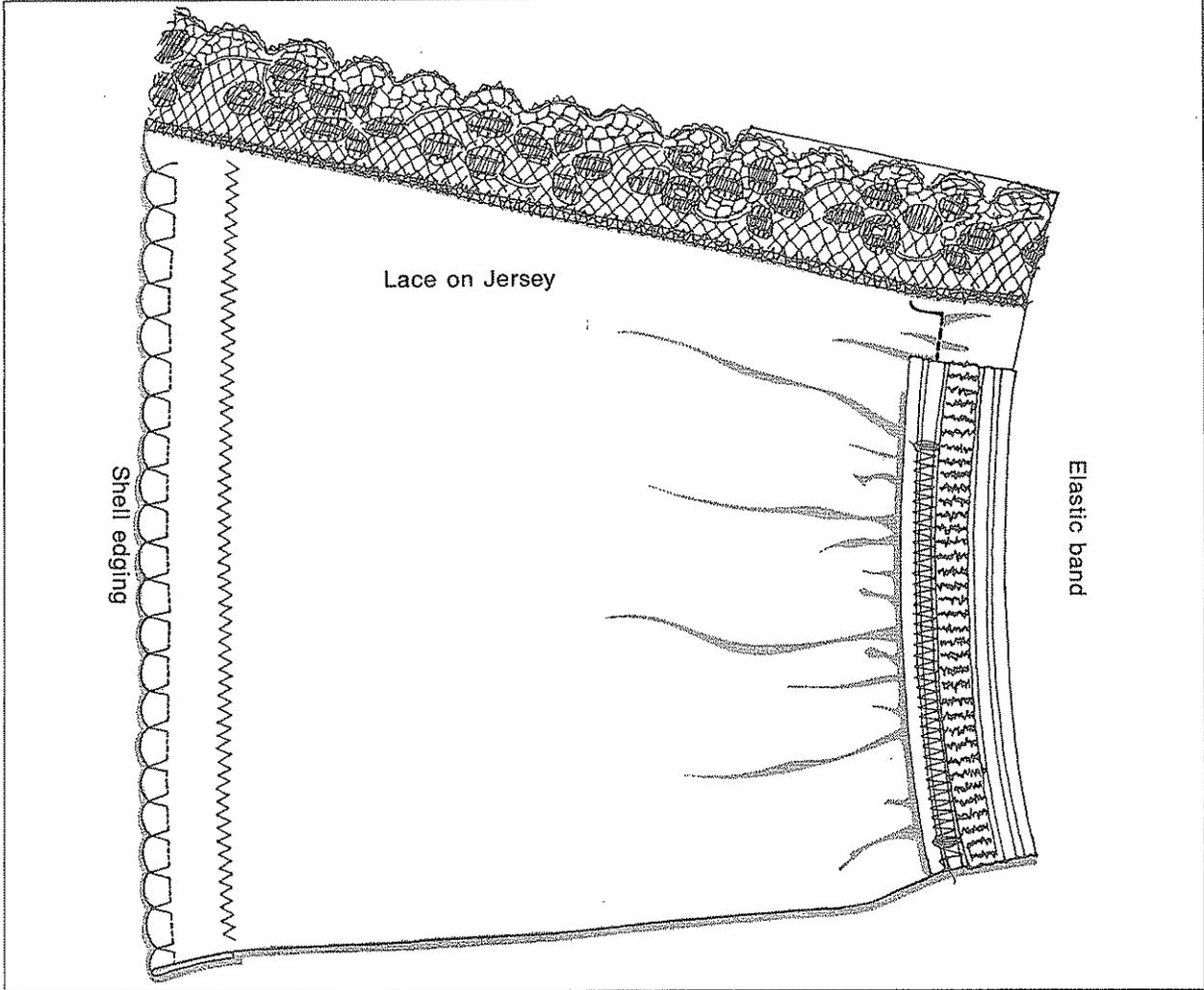
Elastic band

Stitch width: (# 19) 3
 Stitch length: (# 22) 1-1 1/2
 Needle position: (# 20) center
 Automatic: Universal stitch (Nr. 3) and 1-20
 Feed control: MM

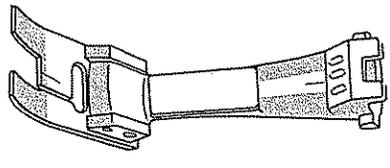
Do **not** pull the elastic while sewing. The zigzag stitch stretches as much as the elastic.

The easiest way when sewing Jersey is to gather it up first, sewing long straight stitches, then draw the under thread and pull work up to desired length.

After this, pin on the elastic and sew it with zigzag. Trim off surplus material on the wrong side. (Hold the scissors correctly.)



Zigzag foot 000
 Needle: 80-70
 Thread: 50



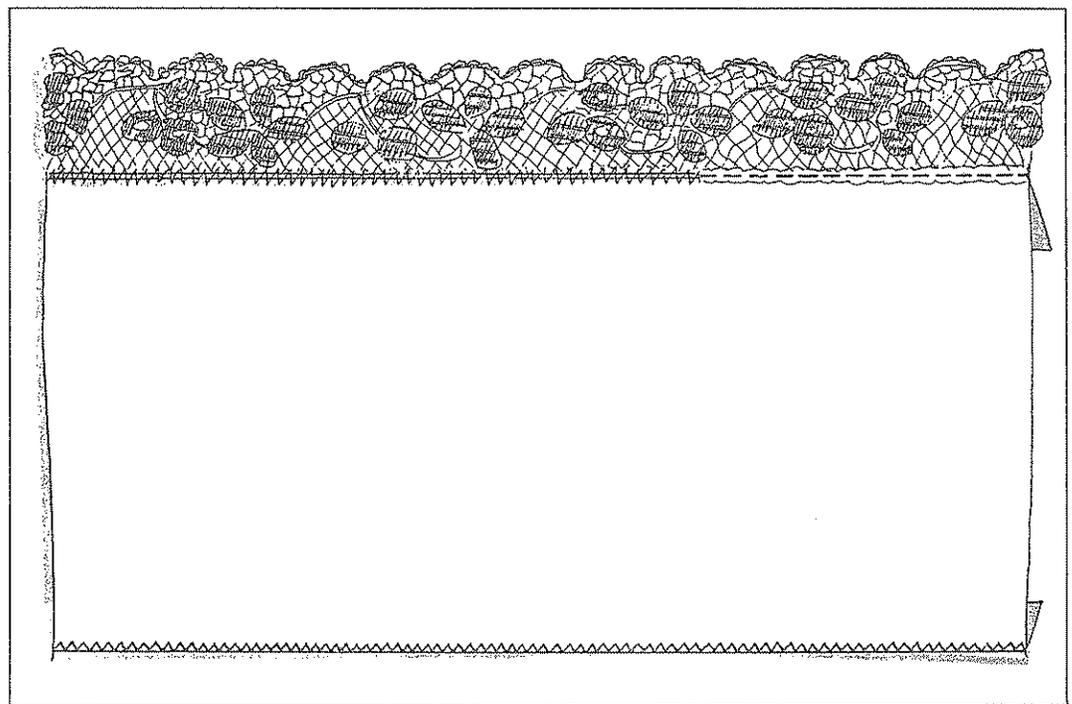
Lace (and insertion) in material

Needle position: (#20) center
 Automatic: 0 WWWW (#14) and MWV (#15)
 Feed control: MWV

1st run
 Stitch width: (#19) 0
 Stitch length: (#22) about 1
 Pin in place, baste it and sew on with straight stitch.

2nd run
 Stitch width: (#19) 1 1/2-2 1/2 according to lace
 Stitch length: (#22) about 1/4-1/2

Fold turning to wrong side against straight stitch and press. Sew a zigzag seam over the straight stitch. Then cut off the turnings along the zigzag seam. Hold the scissors correctly.

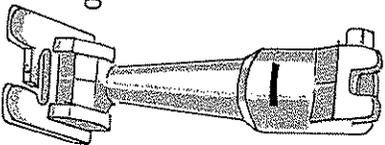


Narrow edging

Stitch width: (#19) about 1 1/2-2
 Stitch length: (#22) about 1/4-1/2
 Needle position: (#20) center
 Automatic: 0 WWWW (#14) and MWV (#15)
 Feed control: MWV

Prepare and press turnings. Sew zigzag over this pressed edge as for oversewing. (Guide work as for oversewing.) Finally trim away turnings. Hold scissors correctly.

Embroidery foot 030
 Needle: 80
 Thread: 30-50

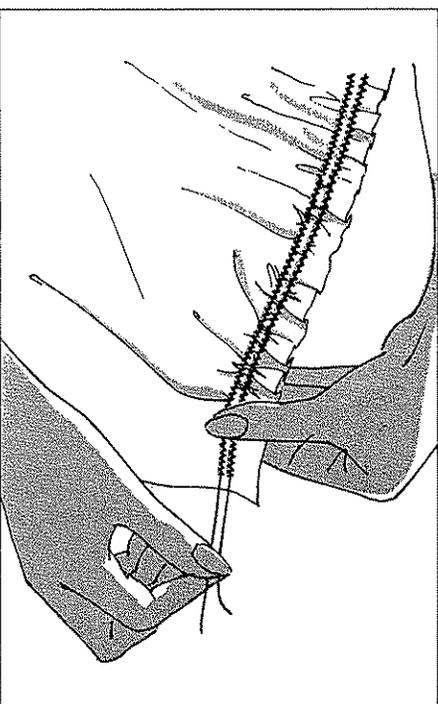
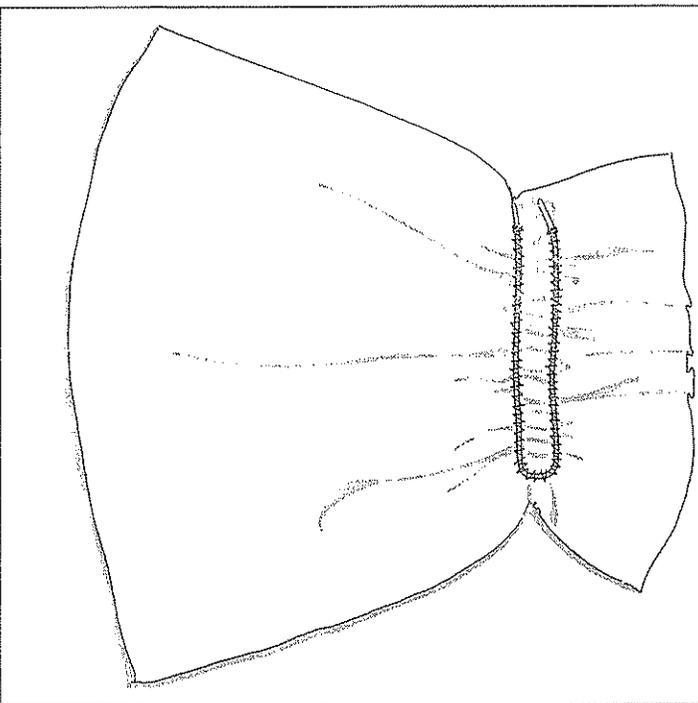
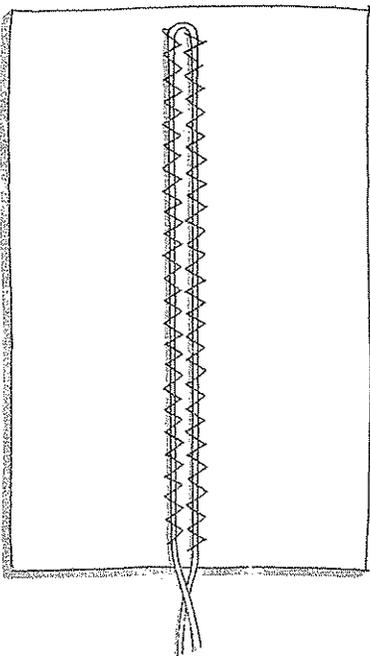


Applying elastic thread

Stitch width: (# 19) 2
 Stitch length: (# 22) 2
 Needle position: (#20) center
 Automatic: 0 WWWW (# 14) and MW (# 15)
 Feed control: MM

Thread the elastic through the hole in the embroidery foot and pull it while sewing. The more you pull the more it gathers. For a second row (one presser foot width) **pull material straight while sewing.**

When doing it on socks do not pull the elastic too much.



Gathering material

Stitch width: (# 19) 2
 Stitch length: (# 22) 2 (for heavy fabrics up to 4)
 Needle position: (#20) center
 Feed control: MM
 Automatic: (# 14) 0 WWWW and MW (# 15)

Pearl Cord

The pearl cord is threaded through the hole of the embroidery foot (as with elastic thread) and oversewn with zigzag. Contrary to elastic, the cotton is not pulled while sewing but only **afterwards**. (Hold both yarns and gather material.) Always sew two rows at a distance of 2 cm (3/4 inch.).

Normal gathering

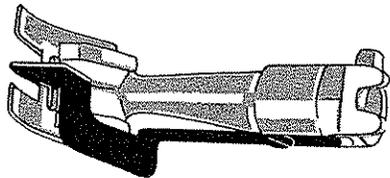
Short pieces or sheer fabrics can also be gathered in this way:

Stitch width: (# 19) 0
 Stitch length: (# 22) 4

Sew two rows of straight stitch, then hold both bottom threads and gather up to the desired width.

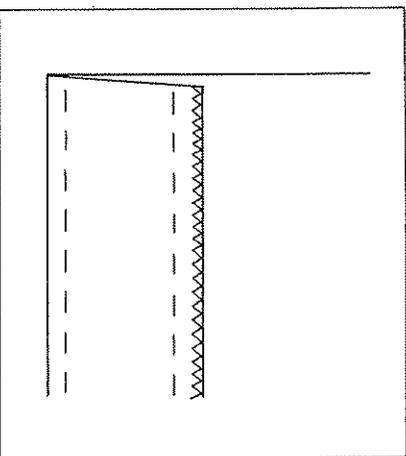
Blind hem stitch

Blindstitch foot 016
 Needle: 80-70
 Darning thread: 50

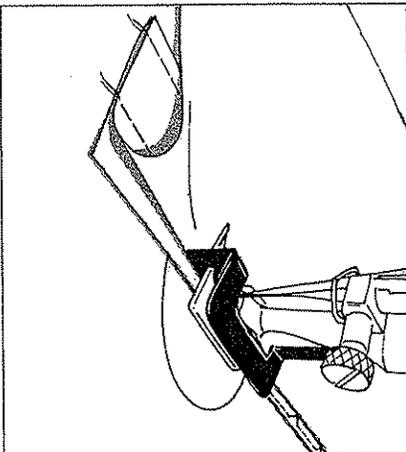


Basic Setting

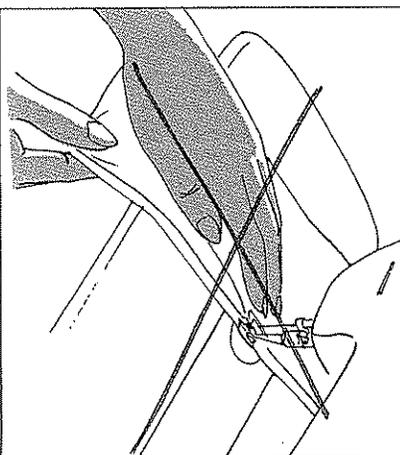
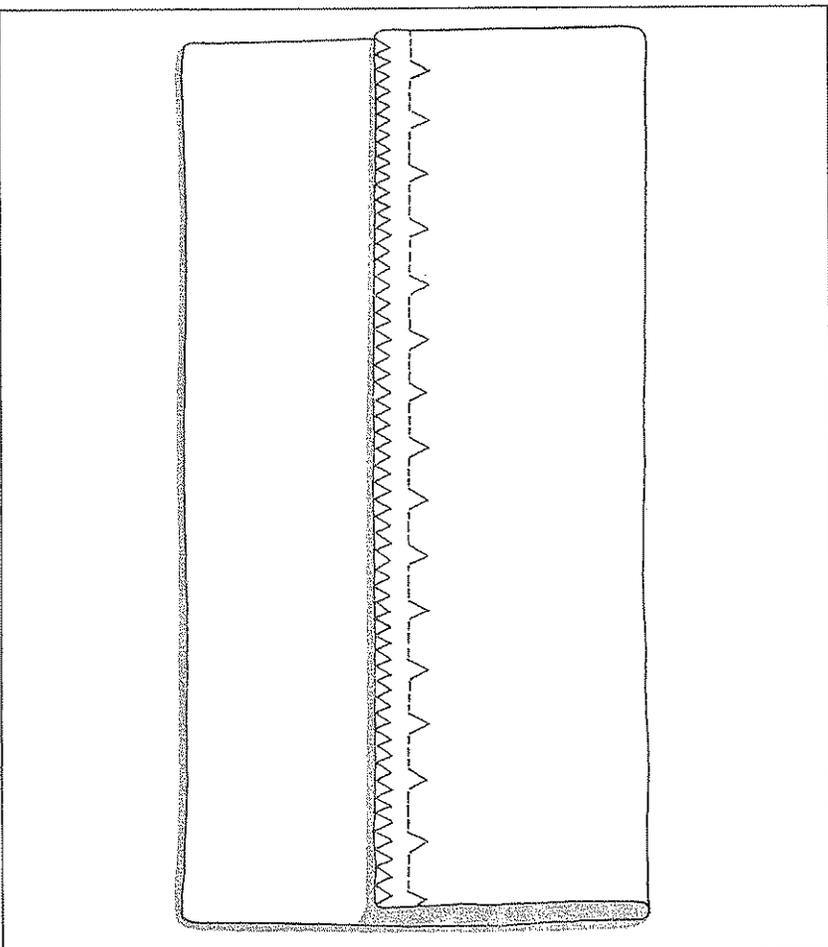
Stitch width: (# 19) about 2 1/2
 Stitch length: (# 22) about 2 1/2
 Needle position: (# 20) right
 Feed control: MM
 Automatic: Blindstitch (Nr. 1)
 and 1-20 (lever 15)



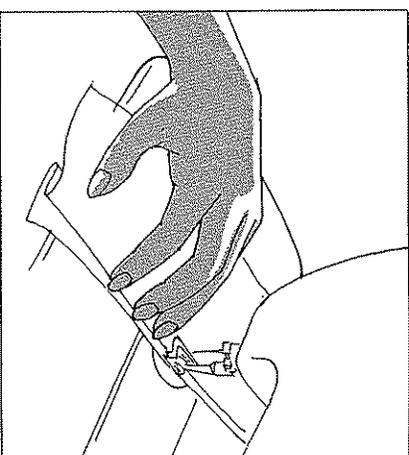
Oversew and prepare the hem as diagram, baste with machine or by hand a 1/4" from edge and press.



This is how the work is placed under the foot. Adjust the zigzag so that the needle just catches the **edge** of the fold.



Very poor position.



This is the correct way. Fingers of left hand must lie on the folded edge so that they can "feel" the regular feeding of the work. Hold the work very lightly while sewing.