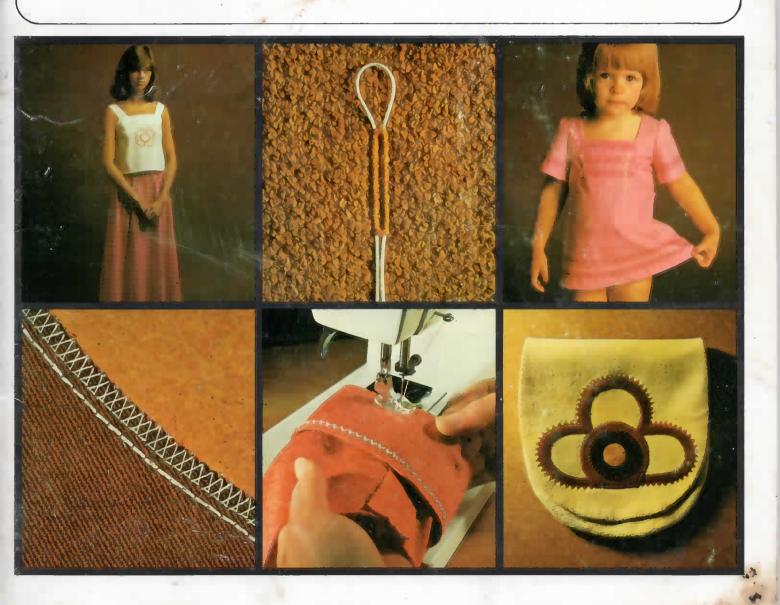
Viking Sewing Manual



CONTENTS

General hints	2-3
Steps in sewing	4–27
Marking	4
Basting	5
Overcasting and assembling	6-9
Top stitching	10–11 12–13
Buttonholes	14-13
Eyelets	14
Loops Sewing on buttons, buckles, etc.	15
Gathering	16–17
Bound edges and facings	18-19
Sewing in zippers – regular method	20-21
Sewing in zippers – Tape-sew method	22-25
Hemming	26–27
Sewing in different materials	28–37
Sewing terry cloth	28-29
Sewing knit and stretch fabrics	30–31
Sewing sweater knits	32
Sewing synthetic fabrics	33–35
Sewing leather and imitation leather	36–37
Decorative effects	38–45
Decorative seams	38-39
Appliqués	40
Raised seams (pintucks)	41
Lace	42-43
Monograms	44
Free-hand monograms and embroidery	45
Mending and darning	46-48
Alphabetical index	49

This is "part two" of the instructional literature that

comes with your Viking sewing machine.

"Part one" is the Operating Manual. Whenever you want to check which dial to turn or what else to do in order to make your machine perform a specific sewing operation, you can look it up in the Operating Manual, quickly.

The Sewing Manual, which you are now reading, contains many additional sewing hints that you might find helpful. By presenting them in this separate booklet it has been possible to give you more complete information while keeping the Operating Manual concise for easy reference.

Together, the Operating Manual and the Sewing Manual will help you utilize more of the fine Viking features to the

greatest possible advantage.

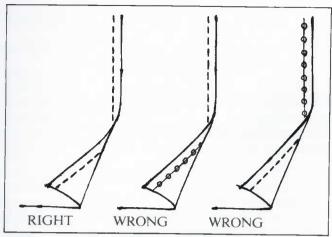
Chellaie Gutarp

Else-Marie Gutarp

Director of the Sewing Academy at the Viking-Husqvarna Factory,

Huskvarna, Sweden

General hints



It is always wise to try a tension test on the fabric you are using before beginning to sew your garment together. To do this fold an off cut of the fabric in half and sew a straight seam in the direction of the grain; the two threads should lock between the two layers of fabrics. If the lower thread lies along the underneath of the seam pulling the top thread through, the top thread tension is too loose, and should be set on a higher number. If the upper thread lies along the top of the seam pulling the lower thread through, the top tension is too tight and should be set at a lower number. In most cases it is sufficient to alter the tension only on the top thread; you will rarely need to adjust the tension on the lower thread. Loose tension reduces the strength of the seam and tight tension will give a puckered seam.

Always start a straight seam by turning the hand wheel towards you so that the needle enters the seam line, then lower the presser foot. When sewing zig-zag and other stitches it is easier to lower the presser foot over the center of the seam, then lower the needle. When sewing on thin and soft fabrics, start the seam about 1/4" from the edge of the fabric to prevent it from being pulled down into the needle hole in the throat plate. If you wish to extend the seam out to the very edge of the fabric, sew a few reverse stitches and then hold the thread behind the presser foot when sewing forward again.

Start the machine gently and increase the speed gradually. Watch the presser foot to ensure that it follows an edge or a seam – don't watch the needle!



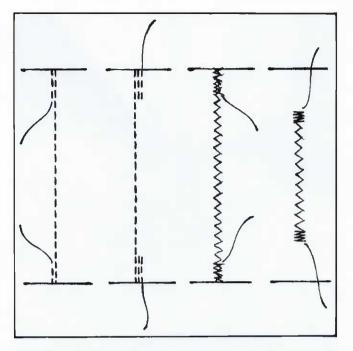
The best way to hold the fabric is illustrated above. The left hand resting lightly on the fabric and helping to guide it forward, the right hand holding the edge of the fabric.

Let the machine feed the fabric. Only guide the fabric toward the presser foot. When sewing very thick seams you can assist the machine by releasing the pressure on the presser foot and gently leading the material forward.

The reduction gear also helps when sewing thick materials.



When turning a corner stop with the needle down in the fabric. This also applies when stopping the machine in order to re-arrange the work.



Lock the seam ends by pressing the reverse button, making the machine sew backwards. This prevents stitches from coming undone. When sewing zig-zag stitches lock the seam end by sewing a few stitches with the feed dog lowered.

With the elastic straight stitch there is no need to lock the end of the seam as this is done automatically. Before you remove the fabric, the machine should have fully completed the last stitch, with the needle in its highest position.

Pull the threads away from you and cut them. Leave at least 6 inches (15 cm) of thread in the needle so that it will not be drawn out of the eye of the needle when the next seam is started.

Marking



Having cut your garment it is necessary to transfer all the instructions from the paper pattern to the fabric. On cotton and other less delicate fabrics you can mark with marking paper and wheel or with chalk or pencil. For finer and more delicate fabrics you use the **Viking marking presser foot (41 13 931).** Set the machine for zig-zag – stitch length 2–2.5 and stitch width 2. Reduce thread tension to the buttonhole symbol (test).



Carefully pin the pattern pieces to the fabric. Cut out the darts and other markings from the paper and sew around the pattern, as close to the edge of the paper as possible. Remove the pattern.

The same of the sa

Pull the pieces of the fabric apart and snip the stitches between the layers of fabric. The threads now remain in the fabric in the form of small tassels and show where the seams are to be sewn.

Tape-Sew hint. Attach pieces of tape to the reverse side of the pieces of garment and write the directions on them i.e. "right sleeve", "left sleeve", "upper collar", etc. The positions of the pockets, buttonholes, etc., can also be marked with the tape.

Basting

thread.



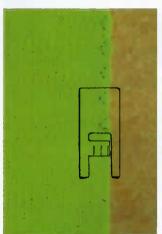
Pin basting saves work when sewing simpler garments. Insert the pins at right-angles to the seam. Then sew the seam and remove each pin as you come to it. If you are careful, use fine pins, and relatively long stitches, you can sew right across the pins. However this involves a risk of blunting the needle.

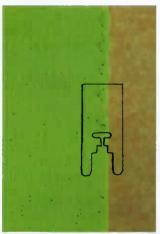
Machine basting allows you to try on the garment before sewing it together. Pin the seams as described above. Set the machine for the longest stitch length with loose top thread tension. Baste the parts of the garment together. You can, after finally sewing the garment, remove the basting by drawing out the lower

Overcasting and assembling

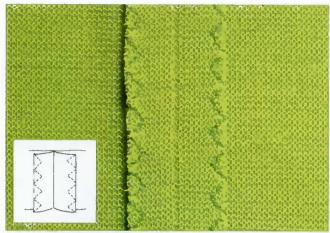
PRESSED OPEN SEAMS

are formed by first overcasting the edges of the fabric with three-step zig-zag or some other type of overcasting seam, and then sewing the pieces together with a straight seam, either ordinary or elastic. It is wise to overcast the edges of every piece individually before sewing the garment together. If it is necessary to adjust the seam and cut off the seam allowance, it can easily be overcast again. On the other hand, armholes and neck lines should not be overcast in advance, unless the fabric frays easily. Pieces to be turned after stitching, such as collars, pocket flaps and so on, need not be overcast either. You may also overcast the seams during the progress of the work, but never sew the garment together before overcasting as the seams will be more difficult to get at and the overcasting will be neither neat nor efficient. Trim the edges of the fabric before overcasting. Use as fine a thread as possible. Make sure that the needle

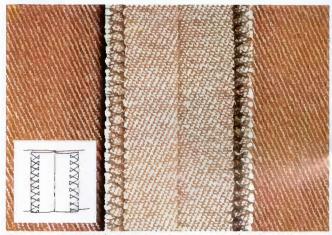




sews over the edge of the fabric. If you use the largest stitch width (4) it will be sufficient if the edge of the fabric follows the notch on the presser foot No. 41 11 383 or the right-hand indication on the presser foot No. 41 14 512 as shown in the pictures. If a narrower stitch width is used, determine the correct measurement by sewing a sample seam on a scrap of the fabric.



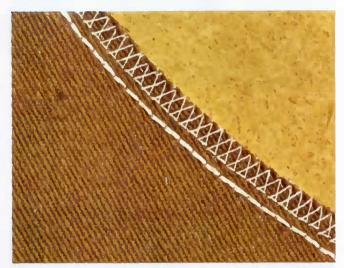
Three-step zig-zag has many advantages over ordinary zig-zag when overcasting. It is more elastic and does not pull the edges of the fabric together when dealing with thin fabrics. It is preferable to use overcast stitch (C, green) for certain thin fabrics.



Double overlock is suitable for overcasting loosely woven or knit fabrics. Threads criss-cross to reinforce the edge.

Straight stitch can be used for joining pieces of fabric which are not elastic and are not likely to be subjected to much strain.

The normal stitch length is 2, but the structure and weave of different fabrics may require different adjustments to the length so that the stitches will blend attractively into the weave of the fabric. In general shorter stitches may be used for thin fabrics, but remember that if the stitches are too short the seam will



become puckered and if they are too long the seam will be too loose.

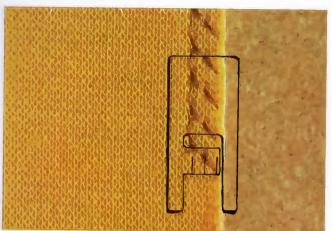
Elastic straight stitch should be used instead of ordinary straight stitching for all elastic material. It is also to be preferred for putting in sleeves and for crotch seams which are always subject to considerable strain, even in non-stretch materials.

Relatively fine thread should be used for elastic straight stitching.

A tip: Baste the seams using ordinary straight stitching, stitch length 6, and a thread the same color as the material. When you have tried on the garment, the seams can be "sewn in" with elastic straight stitching. The tacking thread need not be removed if you sew exactly along the basting seam.

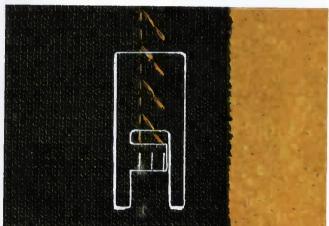


With the help of the edge guide (40 15 420) it is easy to sew at a uniform distance from the edge. With simple garments it is therefore generally unnecessary to mark the seams. Instead, it is enough to set the edge guide for the prescribed seam allowance.



SEAMS WITH EDGES OVERCAST TOGETHER are obtained when you stitch the pieces together and overcast in one step. You can use elastic knit stitch, double overlock or overcast stitch.

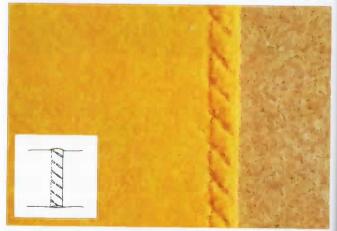
Calculate with a 1/4" seam allowance. Using presser foot No. 41 14 512 you can let the edge of the fabric follow the right-hand marking on the presser foot, as shown.



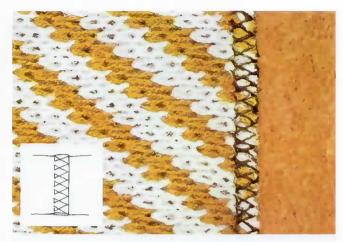
If you prefer it, you can cut the garment with a wider seam allowance, but remember that the left-hand edge of the seam should then follow the marking for the seam. You can see in the picture how the left-hand marking on the transparent presser foot (41 14 512) can be used as a guide.



Trim the remaining seam allowance once you have finished the seam.



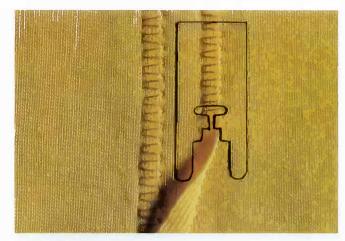
The overlock stitch will stretch and binds the edges of the fabric well. It can be used for any fabric but is especially suitable when thin, elastic seams are required in knit fabrics, double knit and stretch towelling.



Double overlock can be used for sewing and overcasting in one operation in both stretch and non-stretch fabrics. The overcasting is very close-set and is therefore ideal for loosely woven, rough textured materials and fabrics that tend to fray.

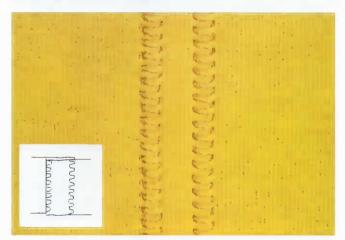


Overcast stitch is suitable for simultaneous sewing and overcasting in sheer materials.



OVERLAP SEAMS

are soft and pliant and therefore ideal for baby and children's clothes and for sewing in leather. Place the seam allowances on top of each other (matching the markings). Stitch along the open edge on the right side. Turn the work and then stitch along the open edge on the wrong side.

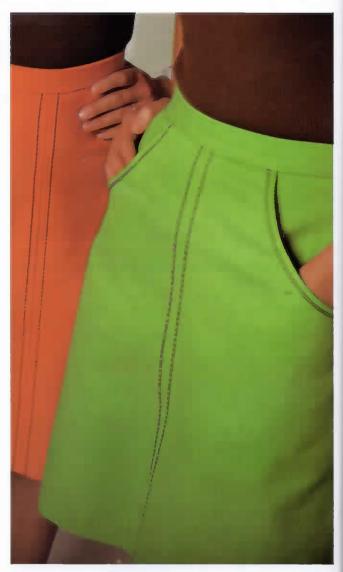


Double action stitch is ideal for overlap seams in almost any type of material.

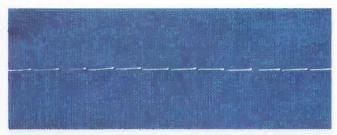
Top stitching



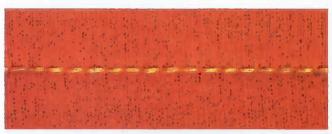
Attractive top stitching can be achieved by using several types of stitches and varying methods, as shown on the opposite page. The jacket shown here has top stitching done with Ric Rac.



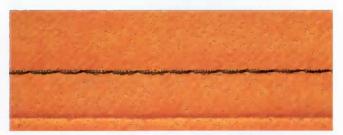
The stitching should be done on double fabric. In thinner fabrics it is even advisable to use interfacing. The top stitching on the skirts shown above has been done using coarse thread and long stitches.



Use fine thread and a fine needle for top stitching on thinner fabrics. The picture shows top stitching on cotton cambric performed with ordinary straight stitch, long stitches and ordinary sewing thread.



Elastic straight stitch gives attractive top stitching in any fabric, especially double knit. Use fine thread.



Coarser thread can be used in thicker materials to give a more pronounced effect. The picture shows top stitching sewn with synthetic buttonhole silk, ordinary straight seam and stitch length 6.



Decorative stitches can also be used for top stitching. The decorative effect can be enhanced by using twin needles and threads of different colors, as shown here.

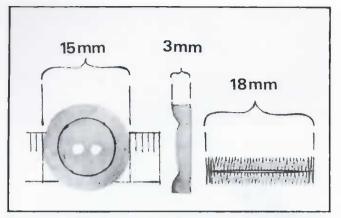


You can achieve parallel stitching by using twin needles. It is best to use a coarse upper thread and a finer lower thread.

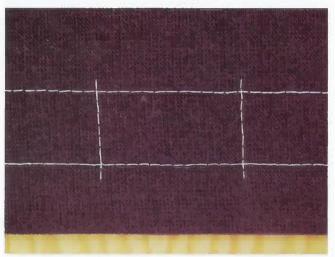


Ric Rac gives pronounced stitching thanks to the triple thread.

Buttonholes



Determine the length of the buttonhole by measuring the button and adding 1/10" to 3/16" depending on the thickness of the button and the fabric. The distance from the edge of the garment should normally be equal to the width of the button.



The position of the buttonhole can be marked with thread, as illustrated, or with chalk or adhesive tape.



When using tape, check first to ensure that the tape does not damage the fabric. The tape should preferably be placed alongside the buttonhole position so that you do not sew into the tape. However in loosely knitted fabrics like sweater knits the buttonhole may be sewn on the tape.

Make a trial buttonhole on a scrap of the material first. If the garment has an interfacing then the trial buttonhole should also have one. Cut open the trial buttonhole and see if the button will go through it. If not, slightly lengthen the buttonhole.



You can make a reinforced buttonhole, by sewing the "columns" twice as described in your Operating Manual, or make a corded buttonhole, by sewing over a coarse thread, buttonhole twist thread or gimp thread. Corded buttonholes are recommended whenever you sew with knitted or stretch fabrics. Attach a gimp thread loop as shown in the picture around the projection at the heel of the buttonhole foot (41 11 650). Draw the gimp threads towards you, one under each groove in the presser foot. Lower the presser foot, and sew the buttonhole in the normal way.



When the buttonhole has been finished, pull the loose ends of the gimp thread so that the loop reinforces one end of the buttonhole. Using a needle, hand sew the loose ends through to the reverse side and tie them.



Making eyelets



With the aid of a special eyelet plate, it is possible to make eyelets in embroidery, belts, etc. Plates are available for holes of 4 mm (5/32") and 6 mm (7/32"). No. 41 15 855-01 and 41 15 855-02 respectively. Lower the feed dog. Remove the presser foot and attach the special eyelet plate by sliding the hooks at the rear of the plate into the feed dog slots and then press down the front of the plate. Darning or preferably embroidery cotton No. 40 or 50 should be used. Loosen the tension on the top thread.

Set the stitch selector at the left-hand starting position, stitch width at 3 or 4. Use an embroidery hoop for thin fabrics. Carefully cut or puncture a small hole in the fabric with the seam ripper and fit it over the stud on the plate. Ensure that the hole fits snugly over the stud. Lower the presser foot lever. Draw up the bottom thread. Hold both thread ends and sew over them, the sewing needle alternately in the stud hole and the fabric. You may use the button reed to protect your fingers and use the low speed gear for more accurate speed control. Rotate the work very slowly and sew the stitches close together in order to obtain an attractive eyelet. Cut off both the loose starting threads just before the eyelet is completed.

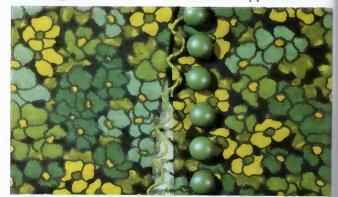
The eyelet may be sewn with greater intervals between stitches the first time round, then a second time with stitches closer together. How close the stitches will be to each other depends on how slowly you rotate the fabric and the speed of the machine.

Making loops



Loops may be made on the machine as follows. Change to the raised seam presser foot (41 11 389). Lower the feed dog. Set the machine on zig-zag, stitch width 2, and loosen the top thread tension. Use buttonhole twist, light cord or ordinary smooth string as a gimp thread and place it under the presser foot. Use fine thread, preferably embroidery cotton, as both upper and lower threads. Sew over the gimp thread with a zig-zag as you carefully draw the gimp away from you by hand.

Remember, the feed dog is lowered so the closeness of the stitches will depend on the pace at which you draw the gimp thread. It is easier to sew the stitches somewhat farther apart and then sew over the gimp thread again to achieve a smooth, neat appearance.



The resulting loop can be used for belts or for button loops. It should be attached with zig-zag stitching. If it is to be used along an edge, it can be attached before the facing is sewn on.

Sewing on buttons, bucklets, etc.





Not only buttons, but also rings, large hooks and eyes, etc. may be sewn on by machine. Remove the presser foot, leaving only the presser foot ankle. Lower the feed dog. Set the stitch selector in the left-hand position and test to find the correct stitch width. Sew on the button, ring or buckle with seven or eight stitches. You can also attach the ring, etc. with a row of stitches, by carefully moving the work forwards. Finally, fasten the thread by setting the stitch width knob at 0 and sewing several stitches in the same place.





The buttons or buckles may be held in place with tape before being placed under the presser bar (provided that the particular fabric is not damaged by the tape; test it first). If you wish to have a thread stem or "shank" under the button, use the button reed (41 11 732).

Gathering



Gathering with increased stitch length is the most common method. The best results are obtained if the stitch length is only increased to approximately 3 or 3.5 and the upper thread tension is loosened slightly. Two rows of gathering stitches are sewn side by side – the lower threads from both rows are then pulled simultaneously to effect gathering.



Gathering by zig-zagging over a coarse thread (sewing thread or buttonhole twist) gives a more durable result, for example at a skirt waistband. This method is useful for the gathering of very wide or long pieces, where the gathering thread may tend to break. Two rows of gathering stitches should be sewn for more uniform gathering.



Easing the fullness by gathering after zig-zagging over a cord or gimp can be done at the lower edge of a circular skirt in order to reduce the circumference slightly for hemming, and also when making a pocket with rounded corners. The gimp should just barely run smoothly in the stitching but naturally must not be stitched down. Recommended setting: stitch length 1, stitch width 1.5 (test).



Gathering with sheer elastic gives soft, stretchable gathering for use on blouses, children's garments and nightwear. Hold the elastic firmly both in front and behind the presser foot and stretch the elastic – not the fabric! The zig-zag stitch should be wide enough so that the elastic can glide within it and the gathers will be evenly spaced when the work is finished. Stitch length 2.5 and stitch width 2 are usually sufficient. In a similar way, double overlock can be used as casing for 1/8" flat elastic.



Gathering with flat elastic is more decorative if the elastic is attached with three-step zig-zag. Stretch the elastic both in front and behind the presser foot and sew along the center of the elastic. The elastic should be uniformly stretched along its entire length.



Gathering with shirring stitch. Use the buttonhole presser foot (41 11 650) and place the elastic thread around its "heel". Remember that the elastic thread will always be stitched in double, so take this into account when calculating how much you will need. Sew over both lengths of the elastic simultaneously. The shirring elastic may either be stretched while sewing or when you have finished the seam. In the latter case it is important that the elastic does not get stitched in by mistake, but can run freely under the stitching.

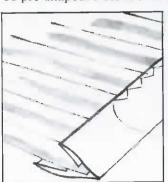


Elastic smocking can be obtained by sewing several rows of gathering next to each other, either using the shirring stitch or zig-zag stitching over shirring elastic.

Bound edges



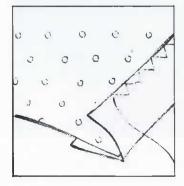
The simplest method is to use ready-made bias binding. If the binding is to be sewn on to a curved edge it should be pre-shaped. Fold it over the edge of the fabric allowing the lower part

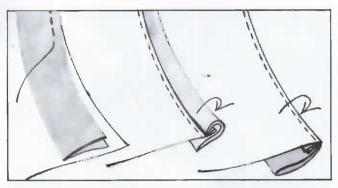


(which will be on the reverse side of the fabric) to be slightly wider. Sew using a straight seam or, even easier, using zig-zag, stitch length 1 and stitch width 1–1.5 (test). A decorative stitch may also be used.



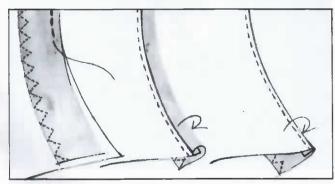
If you have a woven seam binding, just fold it over the edge of the fabric and stitch on the same way as for bias binding.



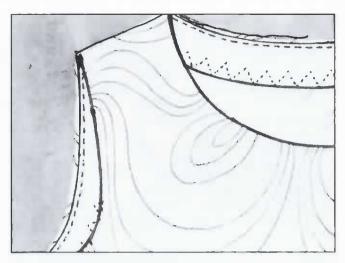


Another method is to use ready-made, unfolded bias tape or to cut strips from the fabric. Fold them double lengthwise and press. Place the strip against the right side of the garment with the cut edges together. Sew on the tape, leaving about 1/8" seam allowance. Fold the strip over to the reverse side, leaving about 1/8" visible on the right side. Stitch from the right side of the material exactly along the last line of stitching so that the strip is secured on the reverse side.

If desired, the strip can be folded under completely so that it is not visible from the right side. Secure it with a line of stitching as close to the edge as possible. In this case the strip need not be so wide to start with.



This method is better for stiffer fabrics: Cut bias strips about 1" wide. Overcast one long side and pre-shape the strip by stretching the overcast side and restraining the other side. Stitch the strip on to the garment, right sides facing, with 1/8" seam allowance. Fold the overcast part of the strip to the reverse side of the garment. Secure as above.



If you do not want the stitches to be visible on the right side, the strip may be sewn down through the seam allowance only. Press well and fasten on the reverse side with a few stitches by hand.



The bias binder (41 11 882) can be used for both prefolded and unfolded bias tapes up to 1" in width, sewing with straight, zig-zag or pattern stitching.

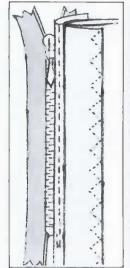
Sewing in zippers: Regular method

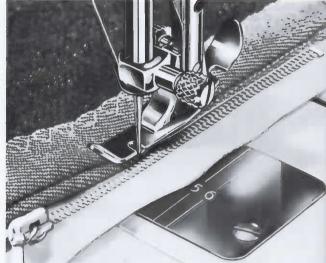
Zipper under the left-hand edge of the opening

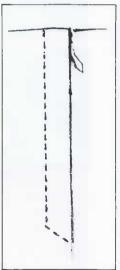
Keep the zipper closed. Baste the opening together by machine using long stitches and loose top thread tension. Leave approximately 3/4" open at the top. Put on the zipper presser foot (41 12 989) so that it is to the left of the needle.

Fold the rear seam allowance 1/8" from the basted seam and sew it to the right-hand edge of the zipper with the work reversed and sewing from the bottom upwards. Stop the machine with the needle down in the fabric about 3/4" from the end of the seam and lift the presser foot, now open the zipper so that the slide is at the back of the needle, lower the presser foot and finish the seam.

Turn the presser foot so that it is to the right of the needle. Turn the garment and sew on the other side of the zipper from the "right" side. Begin with a cross-seam at the lower edge and then sew from the bottom upwards. Remove the basting.







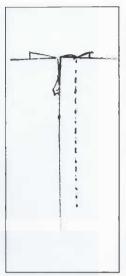


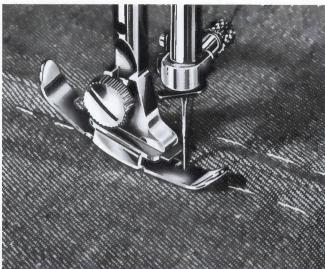
Zipper under the center of the opening.

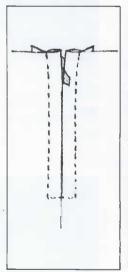
Baste the opening together by machine with long stitches and loose top tension. Leave about 3/4" open at the top of the opening. Press the seam open and baste the zipper under the seam by hand. Change to the zipper presser foot (41 12 989) putting it to the left of the needle.

Sew the left-hand edge from the bottom upwards, leaving the zipper closed. Before the seam is finished stop with the needle down in the fabric, lift the presser foot, open the zipper so that the slide is at the back of the needle, lower the presser foot and finish the seam.

Turn the presser foot so that it is to the right of the needle. Start by sewing the seam across the bottom to join the two long seams. Then sew the right side the same as the left. Remove the basting.









Sewing in zippers: Tape-sew method

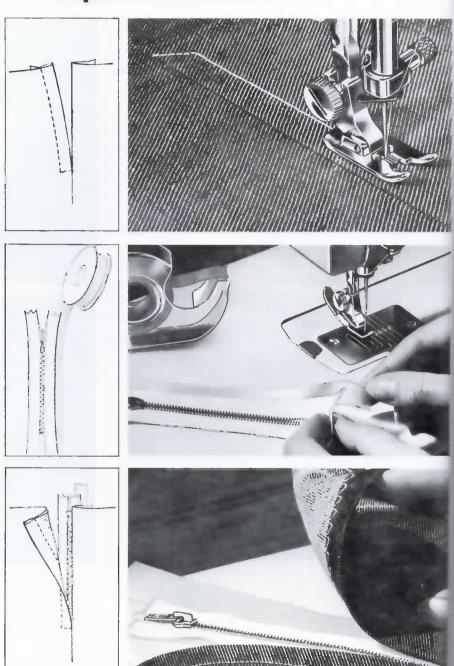
Use a transparent tape that fastens without sticking fast to the fabric. You can use the tape-sew method for almost all types of fabrics. However, use caution with delicate or napped material. Test the tape on a scrap of the fabric first.

Zipper under the left-hand edge of the opening

Baste the opening together by machine using long stitches and loose top thread tension. Leave at least 3/4" seam allowance. Press the seam open. Sew a row of stitches on the "right" side of the fabric about 1/4" from the left-hand (front) edge of the opening, also stitching through the seam allowance. Remove the basting.

Change to the zipper presser foot (41 12 989). Attach the presser foot so that it is to the left of the needle. Attach a strip of the tape to the back right-hand side of the zipper fabric band. The tape should only extend some 1/8" onto the zipper band.

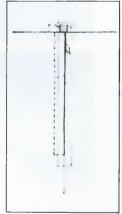
Attach the zipper to the part of the opening which is not being stitched with the help of the tape. Work from the "right" side of the garment. Place the teeth of the zipper as close to the fold as possible, but they should still be visible.



Turn the garment wrong side out. Unfold the pressed seam allowance. Begin to sew from the bottom upwards but do not sew through the tape. Sew on the zipper with a row of stitching in the fold. Remove the tape.



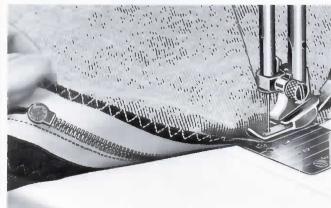
Now tape the opening together from the "right" side so that the edges of the opening overlap slightly (at least 1/8").





Turn the presser foot so that it is to the right of the needle. Turn the garment wrong side out. Fold back the fabric and sew as closely as possible to the stitching through the seam allowance. Sew from the bottom upwards. If it is difficult to avoid the zipper slide, stop 1" or so from the end of the opening, remove the tape and pull down the slide. Finish sewing and fasten the thread.





Zipper under the center of the opening

Baste the opening together by machine using long stitches and loose top thread tension. Ensure that there is at least 3/4" seam allowance. Press the seam open. Top-stitch around the opening keeping about 1/4" from the basted seam, sewing from the "right" side and also through the seam allowance. Remove the basting.

Change to the zipper presser foot (41 12 989). Attach the presser foot to the left of the needle. Attach a piece of tape to the reverse side of the zipper tape. The tape may only extend 1/8" or so onto the fabric band along the zipper.

