

Operating Manual

Viking 6000 Series

model 6030





We have prepared this booklet to help you learn how to operate your new Viking sewing machine and how to make use of its sewing possibilities.

We hope you will get many pleasant hours with your new sewing machine.

Manufacturer:

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US Factory Subsidiary:

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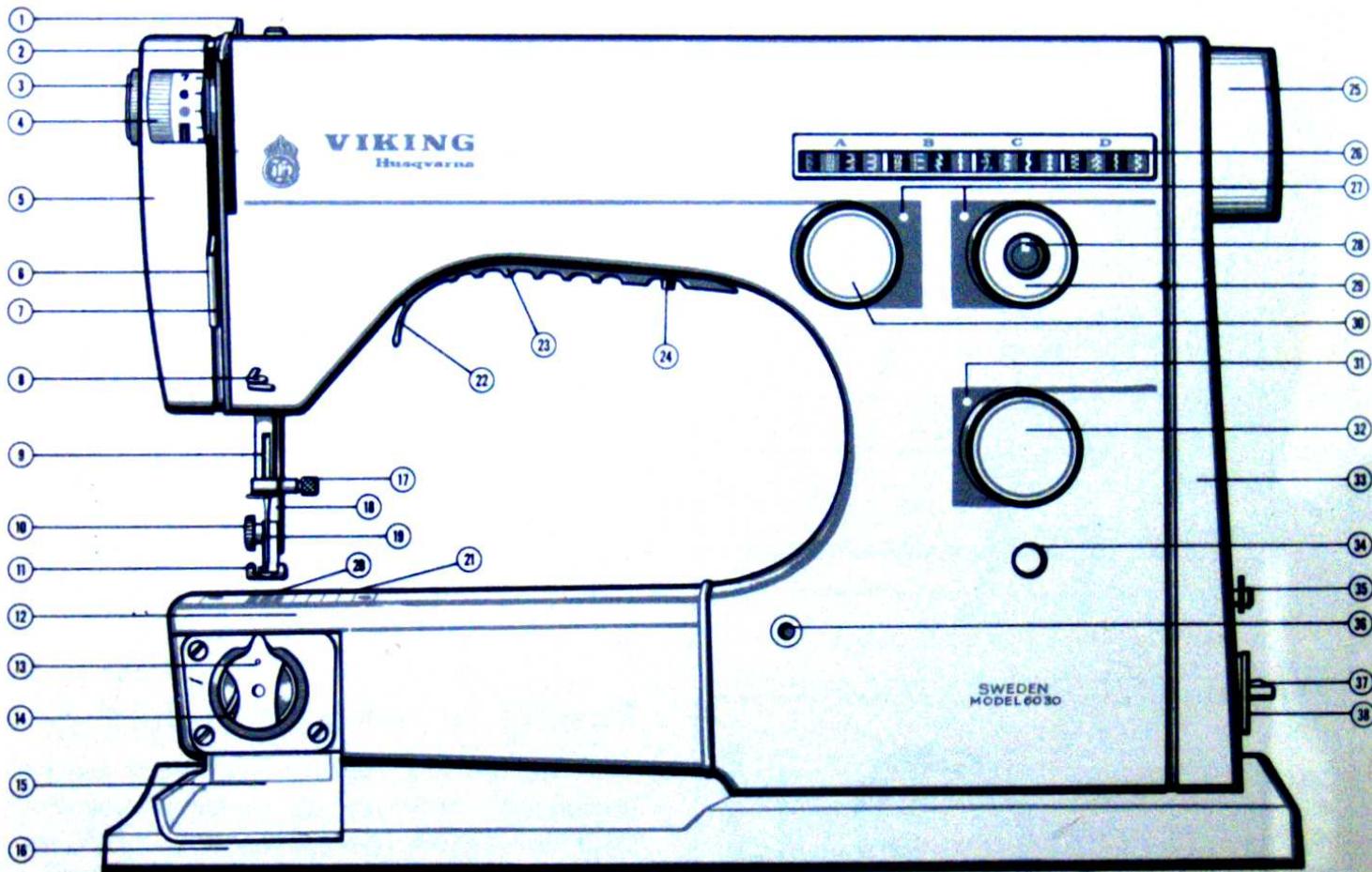
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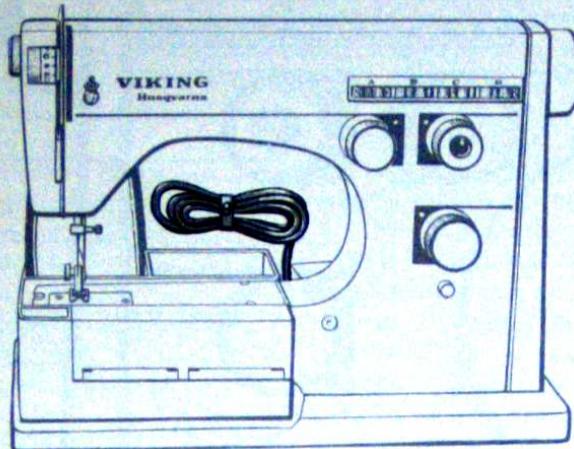
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1. Top thread guide
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Unpacking the machine

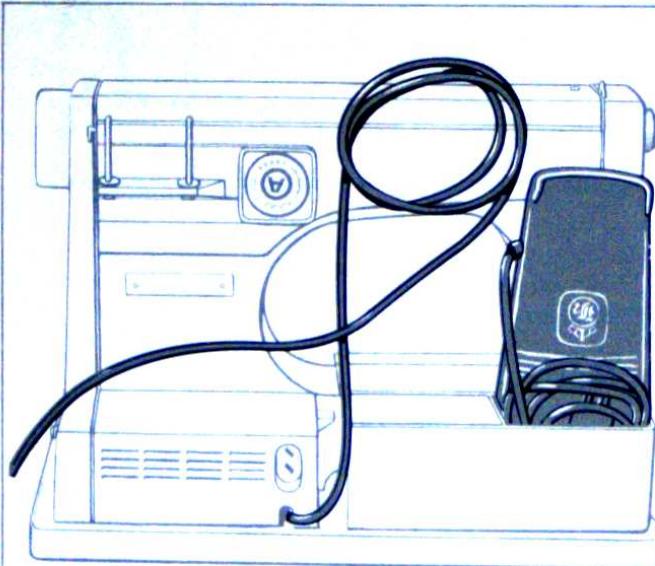
Open the carrying case. Grasp the machine by the hand wheel and under the upper arm of the machine and remove it from the carrying case. Remove the electrical cord. Lift the accessory box somewhat upward and draw it along the length of the free arm.



Putting the machine away

Pull out the foot control plug. Wind the cord around your hand, starting at the control. Press the foot control together and place it in its compartment with the thick end down. The bottom of the foot control should be turned toward the machine, and hold the cord in place beside the foot control in the compartment. Wind the other cord in the same way and put the cord band around the cord.

Lower the presser foot. Make sure that all accessories are correctly placed in the box. Slide the accessory box into place and put the cord in the box. Then lift the machine into the case. Place the extension plate inside the case-lid and the piece of foam plastic as protection between the sewing machine and the extension plate.



Connection to wall outlet

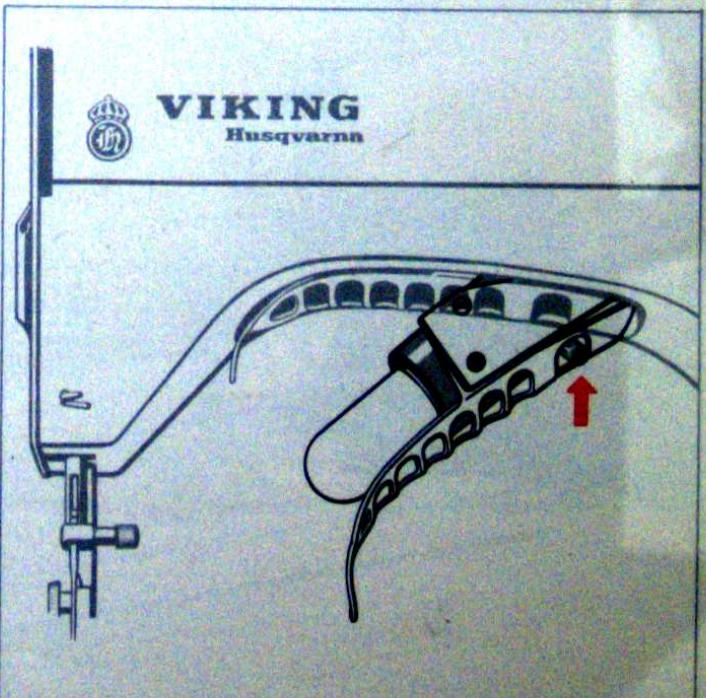
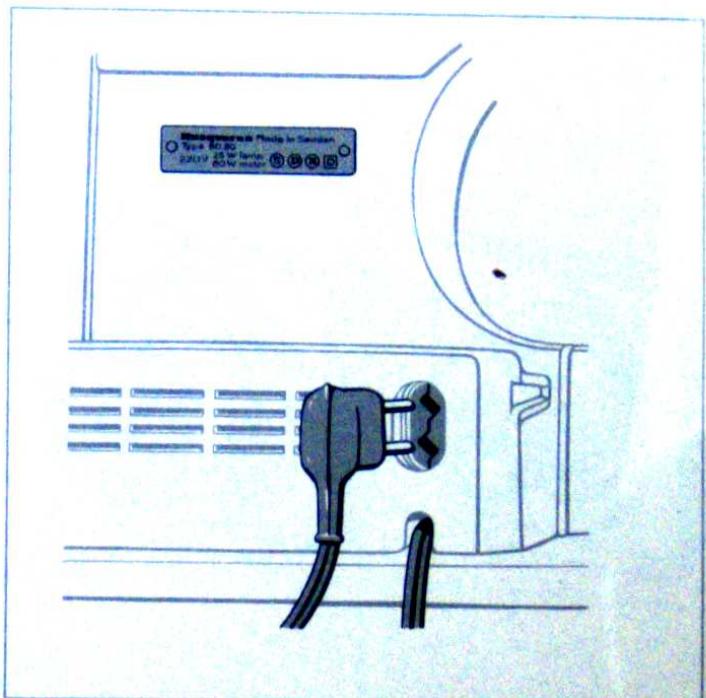
The machine's voltage is given on a plate at the back of the machine. See that your wall outlet voltage is the same as that of the machine. Then connect the machine to the proper wall outlet.

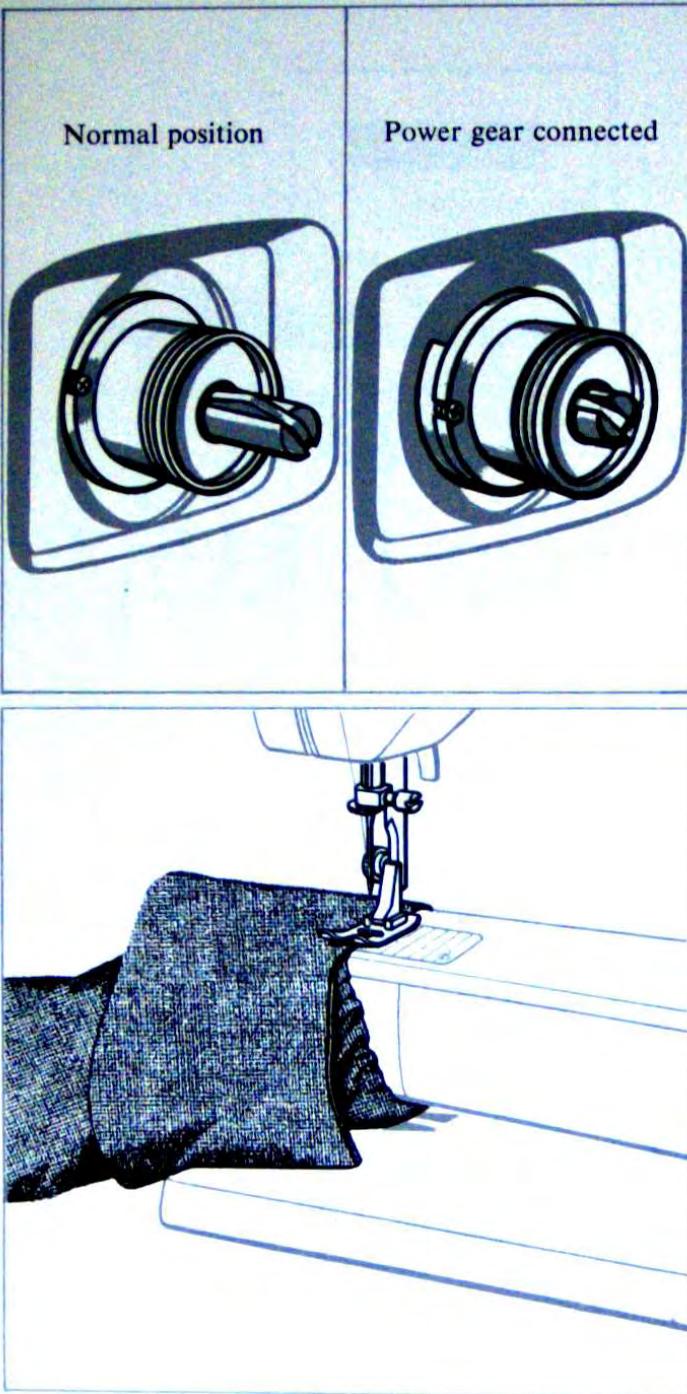
Connecting the foot control

Insert the foot control plug into the socket at the back of the machine.

Lighting

The switch for the light is on the underside of the machine's upper arm. To lower the light assembly in order to have more light for detail work or for changing the light bulb, pull downward on the projection at the left end of the light guard, see page 41.





Power gear

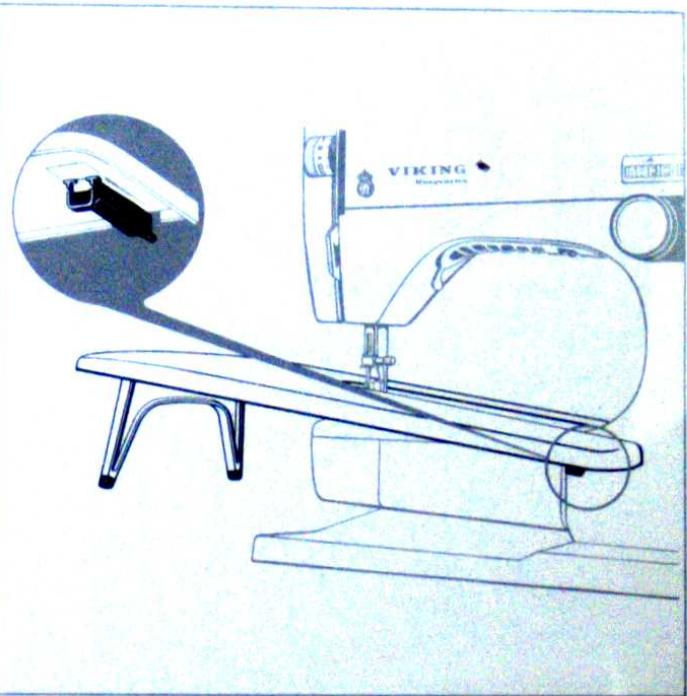
or the "low gear" or "gearshift" as it is also called, is a practical feature. If you grasp the little wheel, which is located on the bobbin spindle on the right side of the machine, and pull it outward, the machine will sew only 1/5 as fast as usual, preserving full motor power. This low speed is of advantage if you wish to sew slowly stitch by stitch, for example when blindstitching.

Free arm

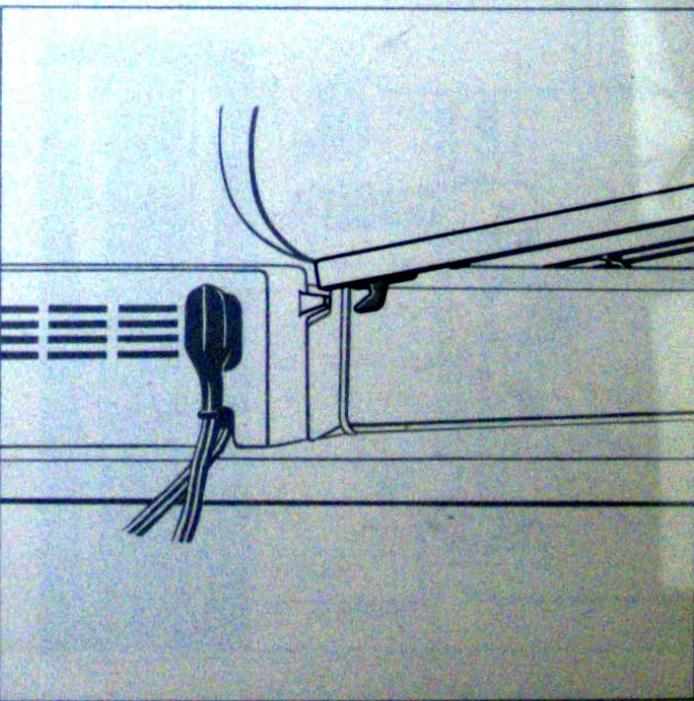
Trouser legs and sleeves can be drawn onto the free arm making it easy to sew, to mend or to patch in these parts. The free arm also makes it much easier to attach collars and cuffs as well as sew small children's clothes, or darn socks and stockings on the machine.

Extension plate

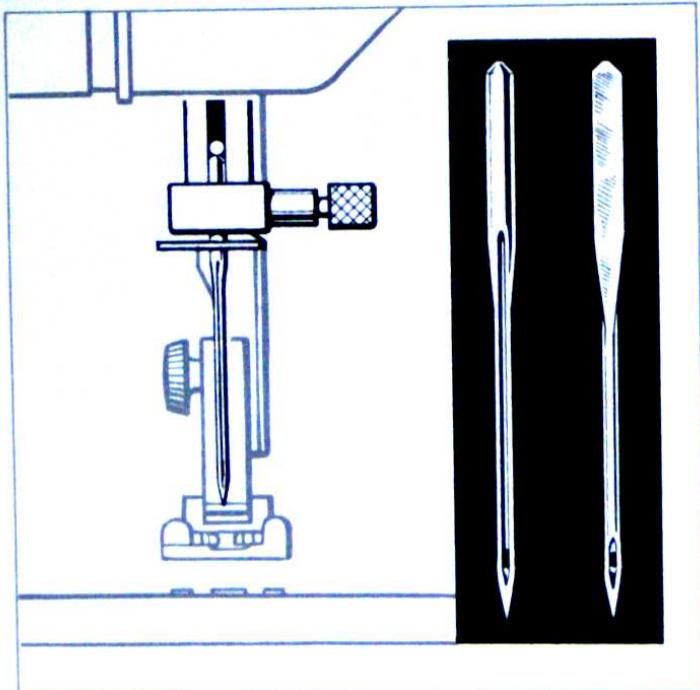
When you need a larger working surface, attach the extension plate. Pull out the catch on the underside of the extension plate with the index finger of your right hand. Then grasp the extension plate support legs with your left hand and lower them.



There is an indentation on the back of the extension plate which should be fitted into a corresponding lip on the back of the sewing machine. You can also use the extension plate with the support legs turned up, when hemming skirts or sewing in larger tubular parts of garments.



Sewing thread English or USA No.	Silk thread	Needle Width No.
60		70
50—60	100/3	80
40—50	100/3	90
40		100
30		110
30		120



Needle and thread

Your Viking sewing machine uses a type 705-H needle. This number refers to the length and configuration of the needle. It is best to purchase your needles from your Viking dealer. However if this is not possible due to some emergency condition in your locality you can get by temporarily with what is commonly called a 15×1 needle which is carried in stock by almost all sewing machine stores or wherever they sell sewing machine needles.

The above-mentioned needles come in various widths. And the larger the width number the larger the eye of the needle.

With regard to the size of the needle it may be generally said that numbers 80 or 90 can be used for most fabrics.

For a finer thread or for sheer or tightly woven fabrics a finer needle can be used.

For a very heavy or stiff fabric a coarse needle can be used, the higher the needle number the coarser the needle. The sizes of thread and needle to be used are shown in the chart to the left.

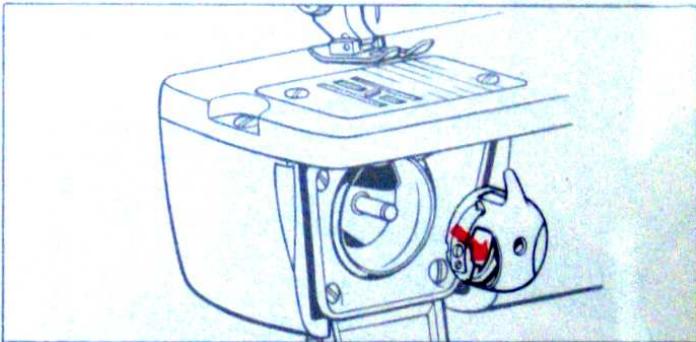
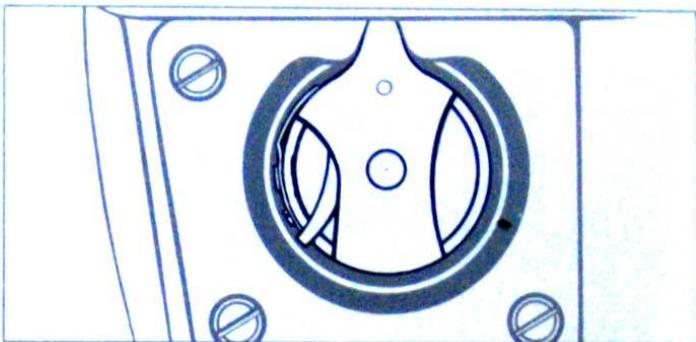
Changing the needle

Loosen the needle clamp screw and remove the needle which is to be changed. When you insert the new needle, turn the flat side away from you and push the needle up into the needle socket as far as the stop. Tighten the screw so that the needle is held firmly.

Removing the bobbin case

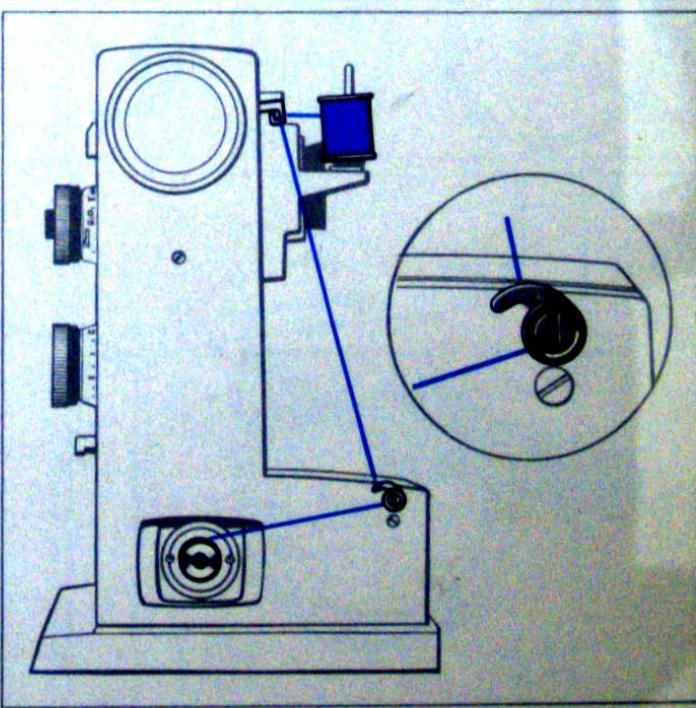
Lift or remove the extension plate, open the shuttle door. There is a small recess on the free arm to facilitate the opening of the shuttle door.

Grasp the bobbin case with the thumb and index finger so that the latch is depressed and draw out the bobbin case. The bobbin will remain in the case as long as the latch is depressed. When you release the catch, the bobbin will be released.



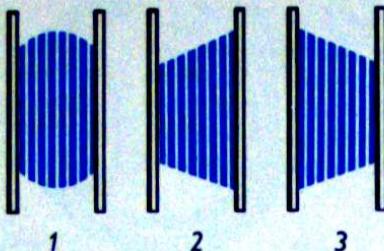
Bobbin winding

Take an empty bobbin from the accessory box. On one side of the bobbin there is a hole. Turn the bobbin with the hole outwards and slide the bobbin onto the bobbin spindle which is located on the right side of the machine. Place the thread over the bobbin. Start from above and wind the thread a few times around the bobbin. Hold the end of the thread while you press down the foot control. Release the thread end as soon as winding starts. Stop winding before the bobbin is completely filled — about $1/32"$ (1 mm) from the rim (outer edge).

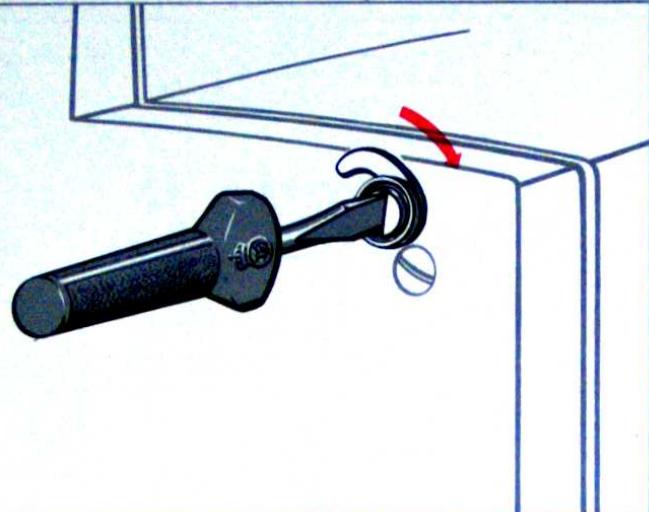


Correct and wrong bobbin winding

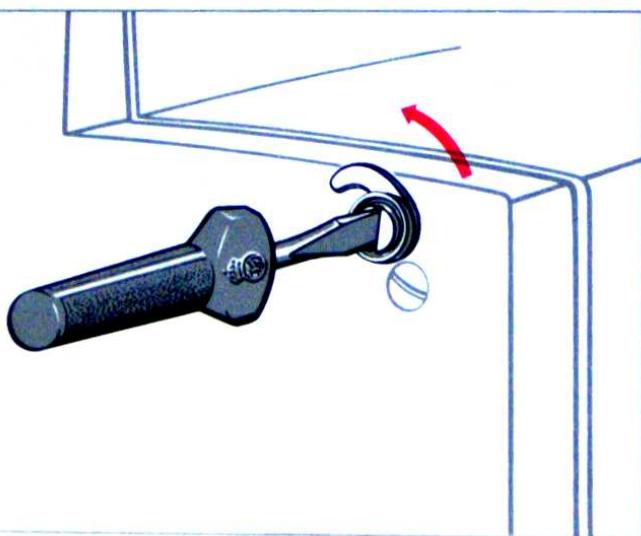
Fig. 1 shows a correctly wound bobbin.



If you notice that the bobbin is winding unevenly as in fig. 2, turn the thread tension device clockwise with the aid of the heavier screwdriver until the winding becomes even.



If the winding looks like fig. 3, check to see if the bobbin is properly pressed in on the spindle. If this is correct, turn the thread tension device counter-clockwise until the winding becomes even.

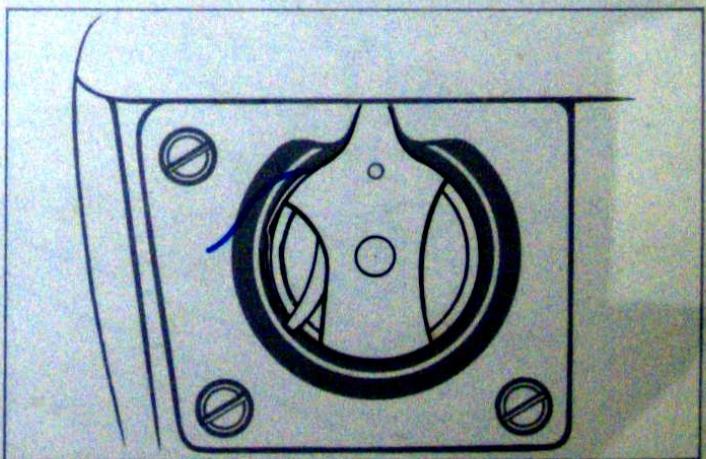
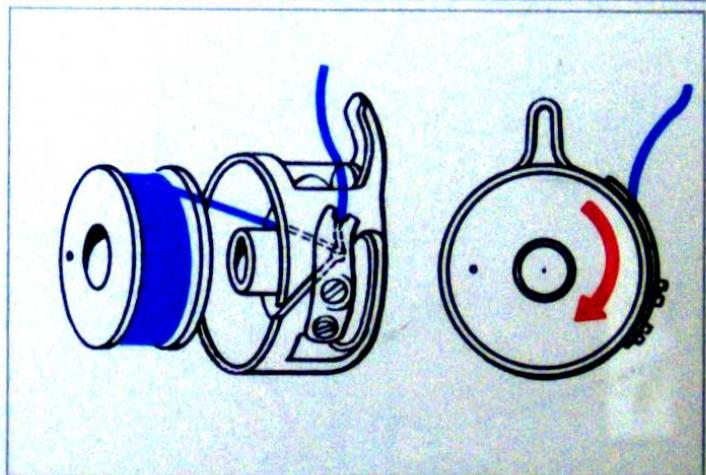
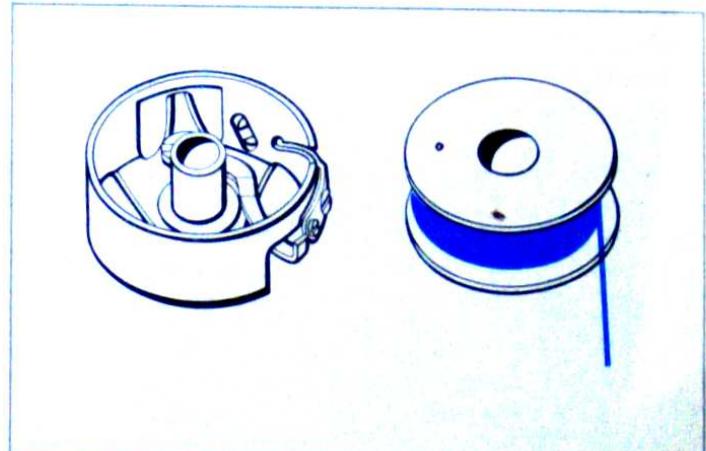


Threading the lower thread

When the bobbin is wound, place it beside its case with the hole upwards. The thread is then running as shown in the fig. Place the bobbin in its case without turning it around.

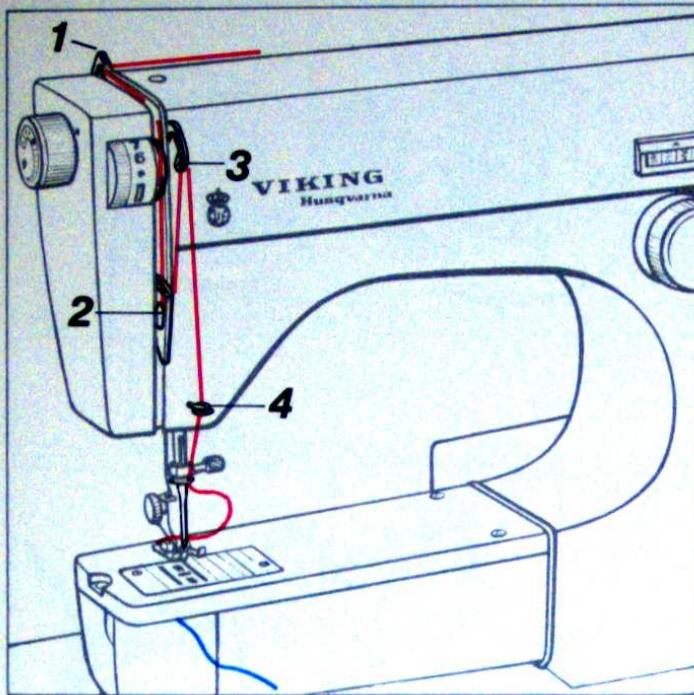
Slide the thread into the slot on the edge of the bobbin case.

Pull the thread in under the tension spring. Check that the bobbin rotates in the direction of the arrow when the thread is pulled.



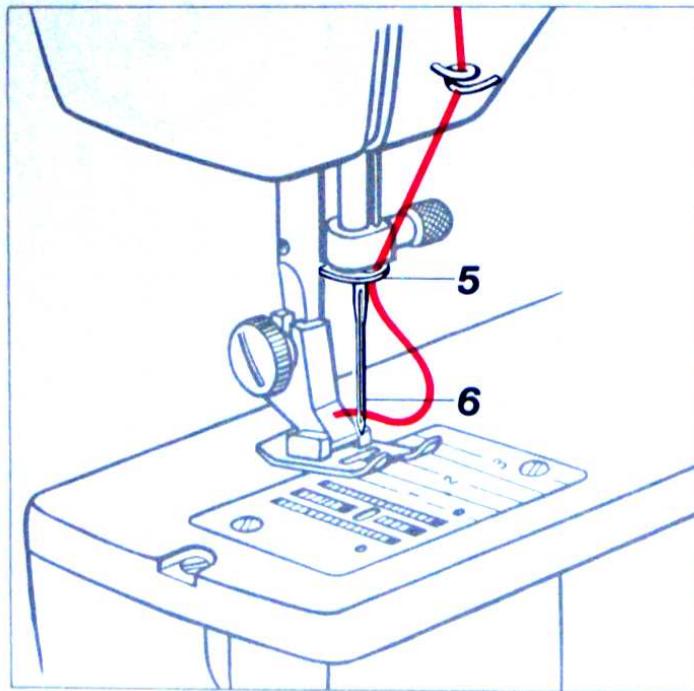
Insertion of the bobbin case

Set the bobbin case onto the center post of the shuttle (hook) so that the projection of the bobbin case fits in the notch at the top of the shuttle cover. Press on the bobbin case slightly to be sure it is latched onto the center post of the shuttle. Let the thread hang. Shut the door.



Threading the upper thread

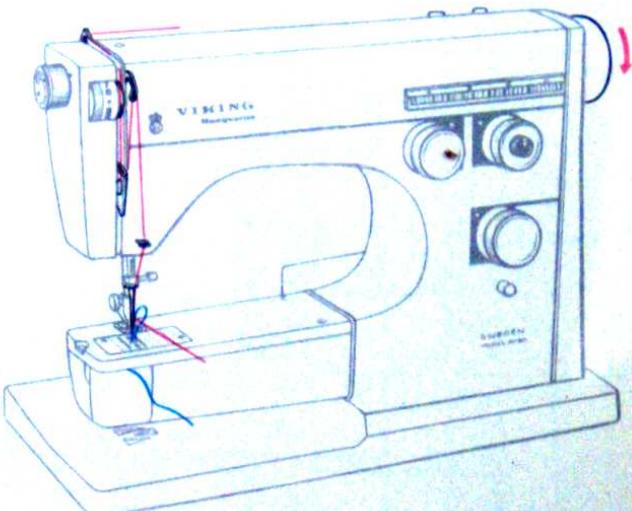
Make sure that the presser foot is raised. Turn the handwheel toward you until the needle is at its highest position. Place the spool of thread on the left-hand spool pin and thread for sewing. Place the thread in the thread guide 1 on the rear of the "upper arm". Then draw the thread to the front and between the tension discs and down around the thread guide 2. Now continue the threading by drawing the thread from left-to-right in the slot on the thread take up lever 3. Then pull the thread through the thread guide coil 4.



Be careful to see that the thread actually lies behind the black thread guide on the needle clamp 5. Thread the needle from the front. Thanks to the white field on the presser foot clamp the needle-eye appears very clearly and in this way the threading of needle 6 is easier.

Bringing up the lower thread

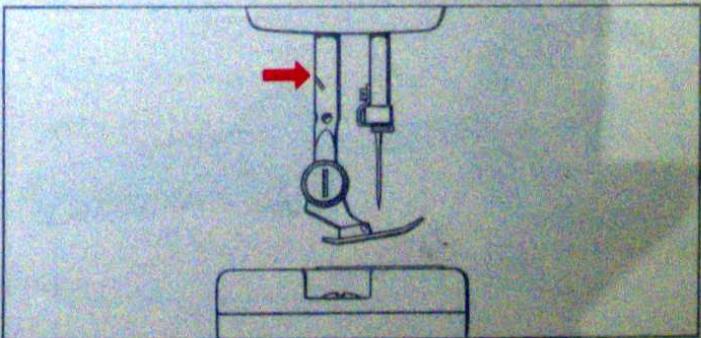
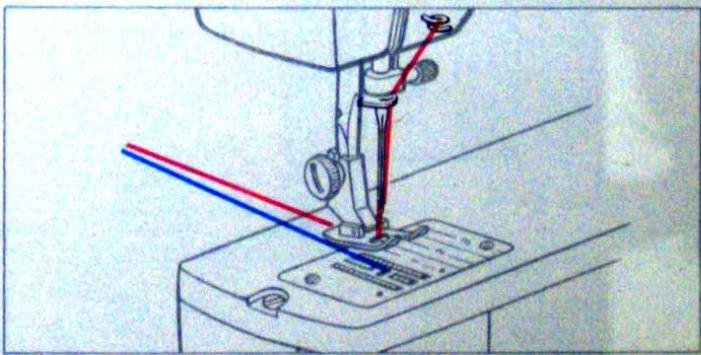
Hold the threaded upper thread and turn the handwheel toward you until the needle goes down and then up again. When the needle is in its highest position, pull the upper thread and you will get a loop of the lower thread which is easy to catch. You shouldn't pull the upper thread too hard as this may bend the needle.



Pull the threads about 6" (15 cm) towards the rear. If the thread ends are too short, the thread may glide out of the eye of the needle when you begin to sew.

Thread cutter

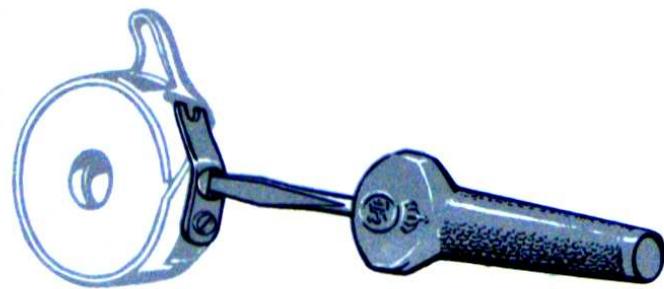
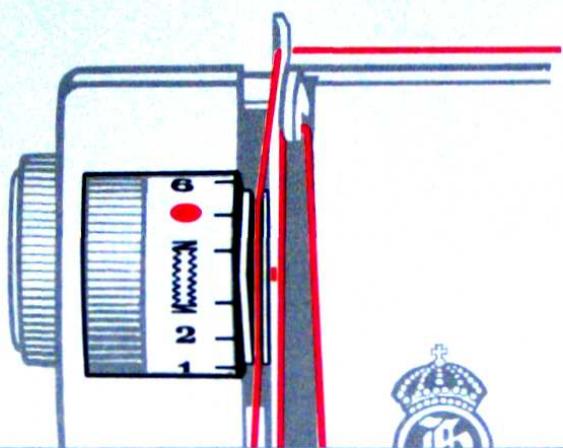
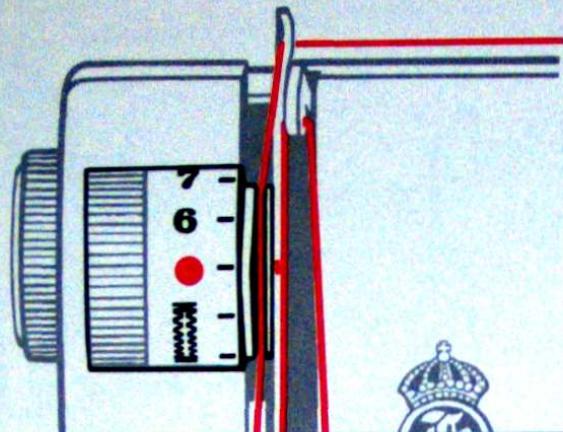
On the back of the presser bar you will find a notch, the thread cutter, which makes it easy for you to cut off the threads.



Tension of upper thread

The dial which regulates the tension of the upper thread is graduated from 0 to 10. Normal thread tension is obtained by setting the red spot at the indicator point. Your machine has been tested with the thread which accompanies it and with the thread tension dial set at the red spot. It may be necessary to adjust the thread tension somewhat if you use thread of another thickness.

For example, a heavier-than-ordinary sewing thread usually requires a heavier upper thread tension.

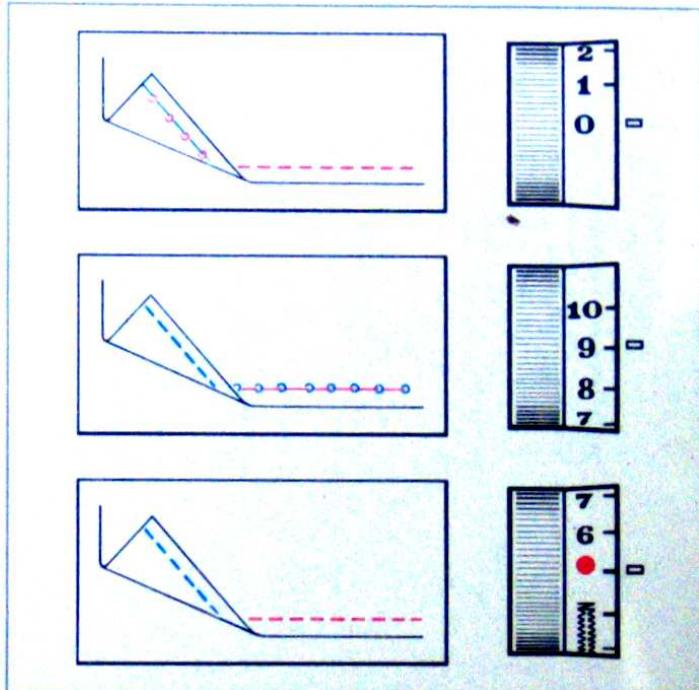


Tension of lower thread

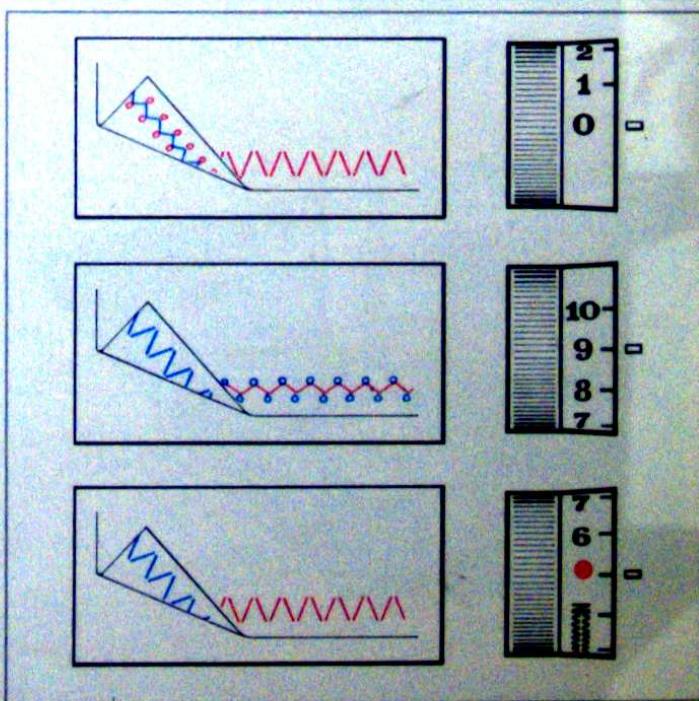
In most special sewing cases it is sufficient to change only the upper thread tension. Rarely do you need to adjust the lower thread tension. If it is necessary to adjust the tension of the lower thread, take out the small screwdriver from the accessory box. Fit it in the larger screw on the thread tension spring and turn it not more than 1/10th of a turn to the left if the thread tension is too hard, to the right if it is too loose.

Correct and wrong thread tension

In order to easily understand the importance of correct thread tension, you can try different thread tensions by sewing two thicknesses of a scrap of cloth. Begin by using an excessively loose tension, i.e. you turn the upper thread tension dial upwards as far as it will go. Look at the cloth and you will find the lower thread lies straight and the upper thread is drawn down into the lower side of the cloth. If you turn the dial downward, the opposite occurs. The upper thread lies straight and the lower thread comes up in loops on the top of the cloth. The thread tension is correct when the threads interlock in the middle of the layers of cloth. Before starting to sew, check the tension by sewing on a piece of the same fabric you intend to work with.



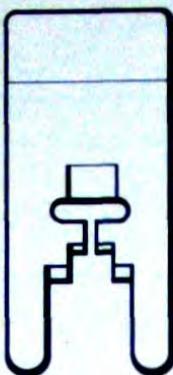
Before you begin to use the zig-zag stitch, check that the thread tension is the same as when you did straight stitching. Use a scrap of material to see how the zig-zag stitches look if you set them first on the loosest (upper picture), then on the heaviest thread tension (middle picture). Then finally the correct thread tension will look about like that in the lower picture.



Upper side



Under side

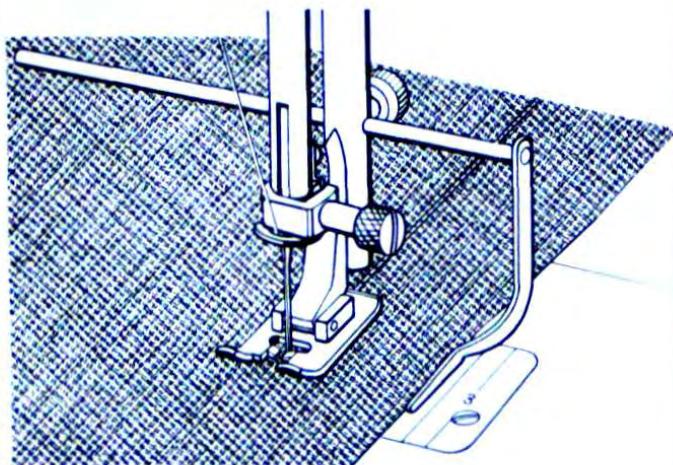


Regular presser foot

The presser foot (383) which is fitted on the machine at delivery is used for normal straight stitching, zig-zag stitching and other utility stitches. As you can see, it has different notches which can be used as guides when sewing. If you wish to have a seam allowance about $1/4"$ (7 mm), let the material run even with the outer edge of the presser foot. (Applies to straight stitching with the needle in the middle position). By moving one step inwards, you will have a seam allowance of about $5/32"$ (4 mm). The innermost notch gives a seam allowance of about $5/64"$ (2 mm).

Edge guide

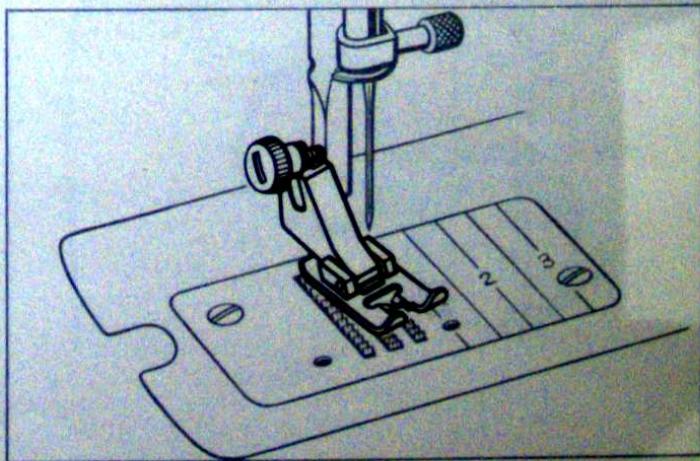
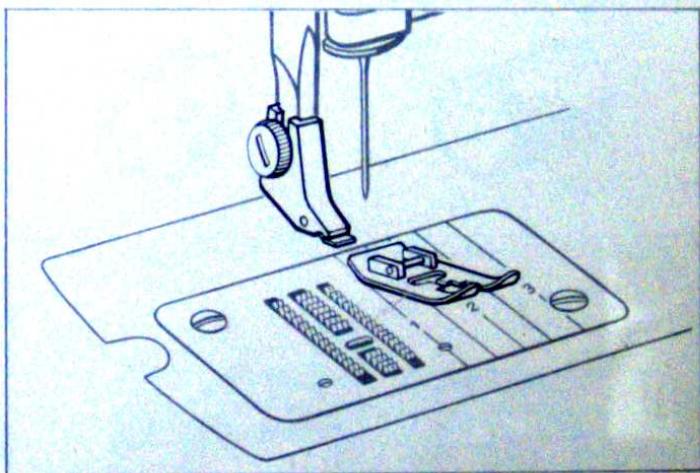
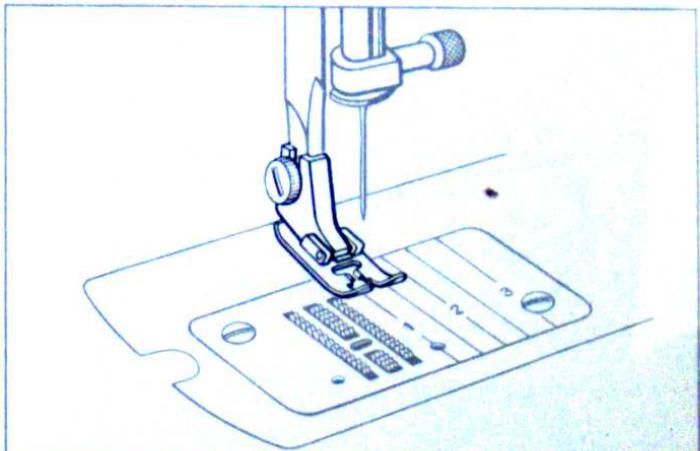
You can easily sew with wider seam allowances with the aid of the edge guide (40 15 420) which you will find in the accessory box. The edge guide is inserted through the hole in the presser bar and is secured to the bar by means of an attachment screw (41 11 399) which is found in the accessory box.



Changing the snap-on presser foot

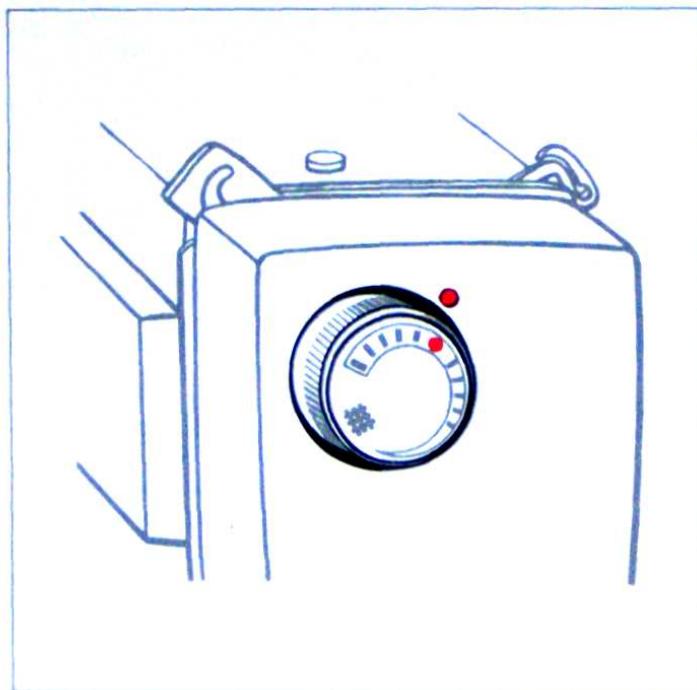
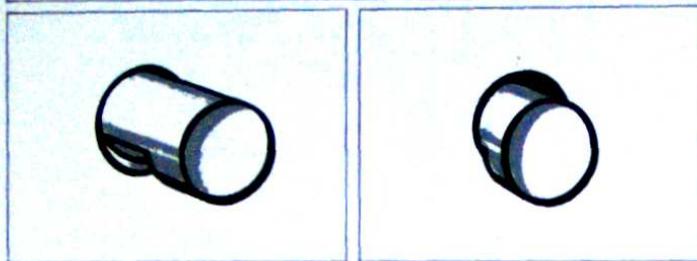
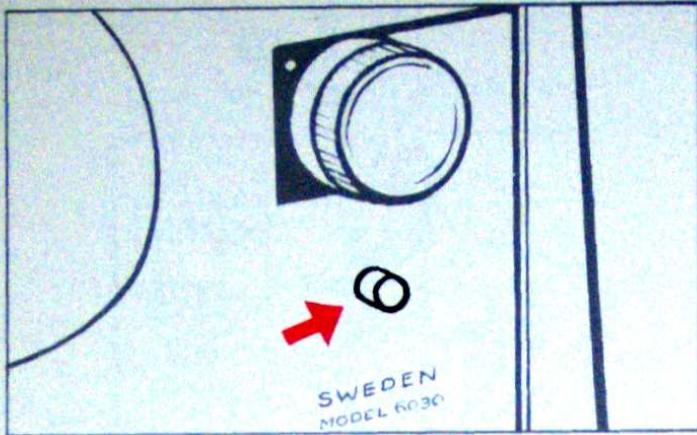
The presser feet which accompany the machine have the form of loose soles which are held in place on the presser foot "ankle" by a spring. If you wish to change the presser foot, turn the hand wheel toward you until the needle is in the highest position. Remove the presser foot by drawing it toward you while pressing slightly downward.

Slide the new presser foot over the front edge of the ankle bracket as shown in the illustration. There is a spring on the lower end of the ankle bracket. Slide on the presser foot so that the round transverse pin on the presser foot fits into the space between the bracket and the spring. Then press lightly backward and downward and the presser foot will snap into the correct position.



Changing the presser foot "ankle"

Certain presser feet cannot be constructed as loose soles and then the ankle bracket must also be changed. Make sure that the needle is in its highest position. Then loosen the retaining screw with your left hand (use the screwdriver if it is too tight) and remove the presser foot with your right hand.



Lowering the feed dog

You lower the feed dog by pressing the drop-feed push-button inwards and downwards at the same time so that the button is held in this position. In order to raise the feed dog again press the button upwards.

Lower the feed dog when you sew on buttons, form closing bars (bartacks) and carry out certain darning work, embroidery, etc.

Presser foot pressure

Presser foot pressure can be adjusted with the aid of a dial located on the face plate on the left-hand side of the machine. Set the red dot opposite the indicator red dot (as shown at left), but for some fabrics it may be better to reduce or increase the pressure somewhat, i.e. turn the dial to smaller or larger lines. When set at the "crosshatch" symbol (■), the presser foot pressure is completely disengaged. This setting is used when darning with darning foot.

Releasing foot pressure

If you turn the dial for adjustment of presser foot pressure to the smallest line and lower the feed dog, it is possible to do mending work with the regular utility stitch presser foot (383). Move the fabric forwards, backwards and sideways by hand. This works best with stitch length dial set at zero.

Selecting the stitch

On the right side of the machine are the three dials for selecting and adjusting the different types of stitching.

1. Pattern scale

Above the three dials is a pattern scale which helps you to choose the stitch you desire. The stitch symbols correspond to the stitches on the various seam formers depending upon which seam former is inserted into the rear of the machine, the colors show you how to set the three dials.

2. Stitch selector

The upper left dial is the stitch selector by means of which you choose the stitch you desire in accordance with the symbols marked on it.

3. Stitch length dial

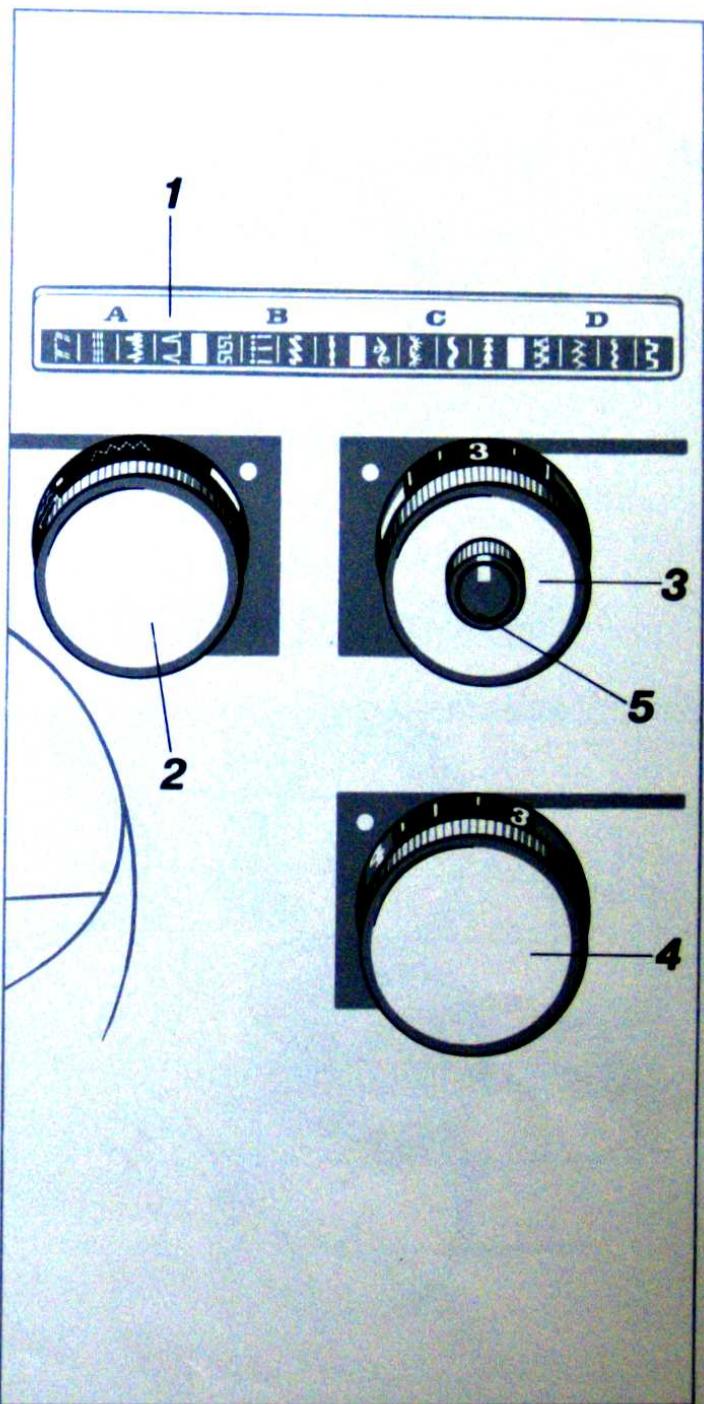
The upper right dial adjusts the stitch length and it is graduated from 0 to 4. The micro-graduation between 0 and 0,5 permits precision adjustment of the smaller stitch lengths.

4. Stitch width dial

With the lower dial you adjust the zig-zag stitch width from 0 to 4 (in pulled-out position the stitch width dial works as buttonhole dial as explained on page 30).

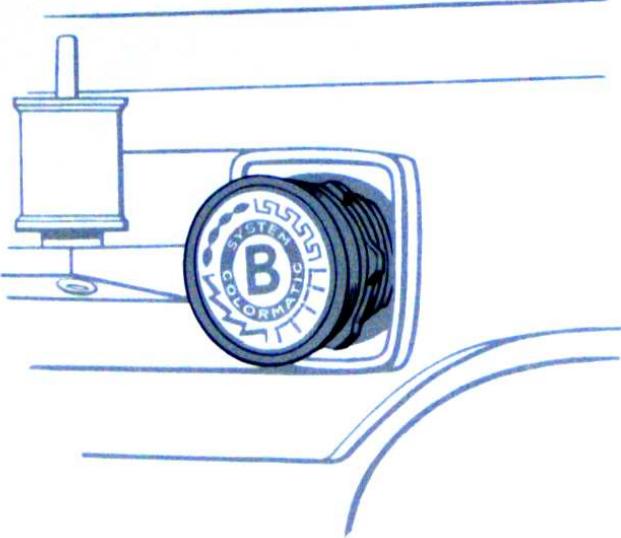
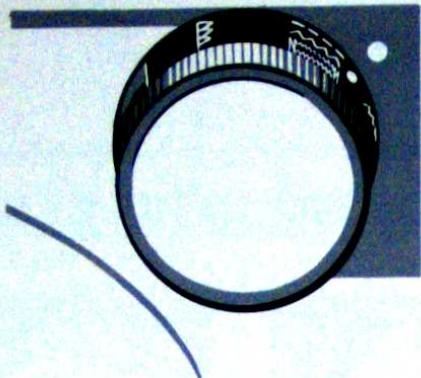
5. Reverse sewing

In the center of the stitch length dial is a button for reverse sewing. By pressing this button in, the machine will sew in reverse, and will resume normal forward sewing as soon as it is released. This is very useful when, for example, backtacking at the end of a seam.



Changing the seam former

Set the dot on the stitch selector opposite the indicator red dot, as shown at left, and take out the seam former at the back of the machine and replace it with the seam former you wish to use.

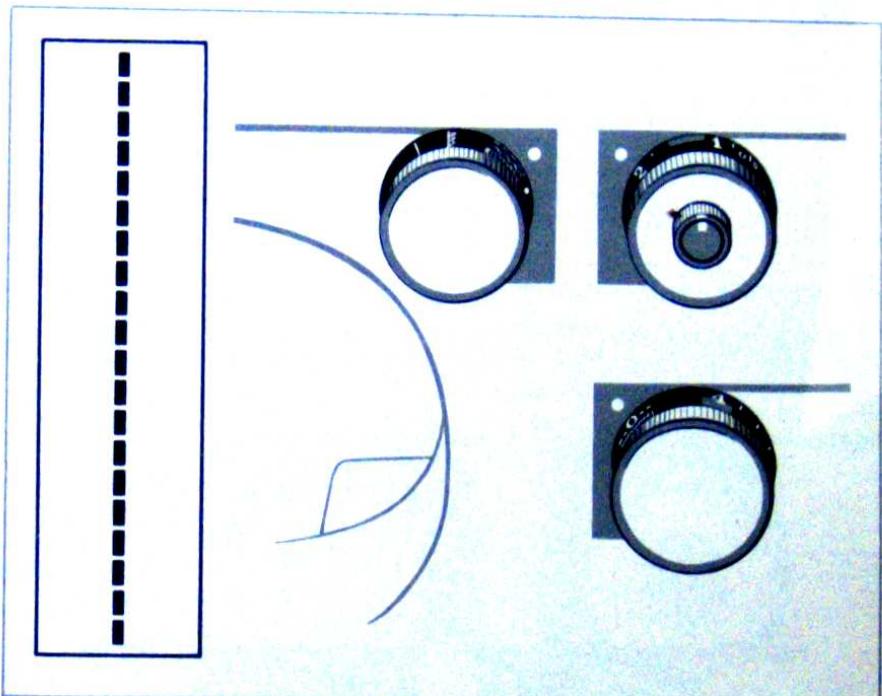


After having placed the seam former in position, press in and at the same time turn it until you can feel that it is engaged.

Straight stitching

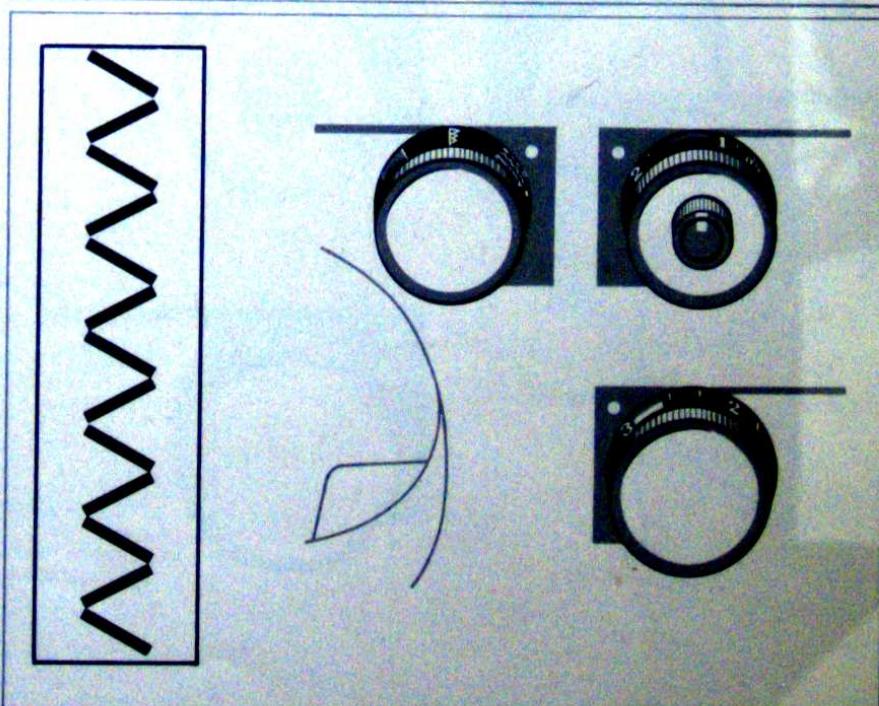
Turn the handwheel toward you until the needle is in its highest position. Set the left-hand dial (the stitch selector) to the straight stitching symbol (----). The upper right dial (the stitch length dial) is graduated from 0 to 4 and is set to the desired length of stitch, normally 2. The lower dial, the stitch width dial, should be set at 0 for straight stitching.

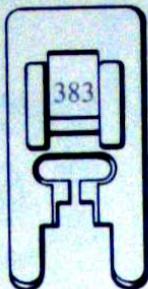
Straight stitching can be set regardless of which seam former is in the machine.



Zig-zag stitching

Turn the handwheel toward you until the needle is in its highest position. Set the left-hand dial (the stitch selector) to the zig-zag symbol. The upper right dial, the stitch length dial, is set to the desired length of stitch. The lower dial, the stitch width dial, should be set to the desired width of stitch. Choose a suitable combination of stitch length and stitch width. The stitch width and length can be adjusted while the machine is running. You can set the zig-zag regardless of which seam former is in the machine.



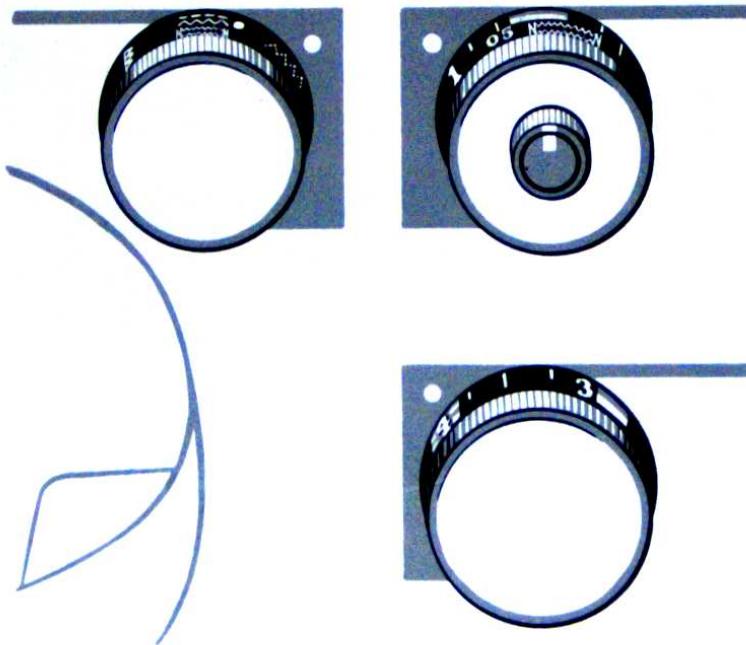


Regular presser foot
for utility stitches
41 11 383



Three-step zig-zag

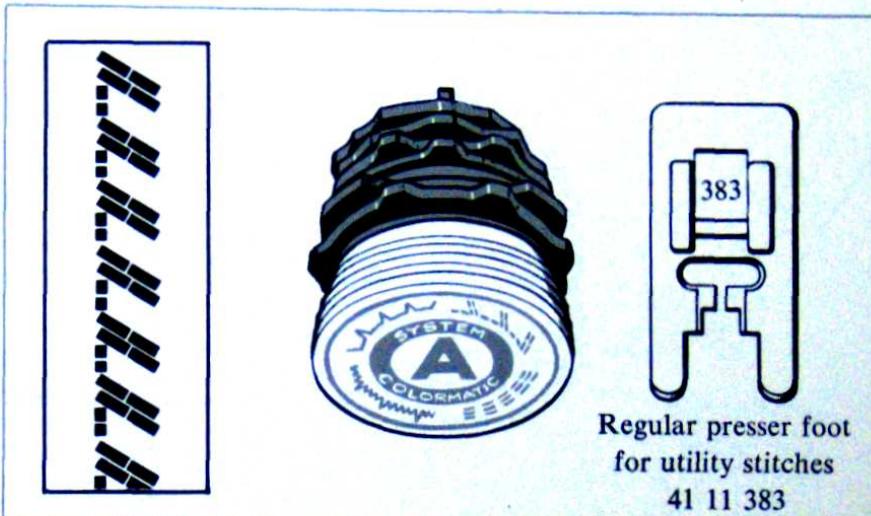
Turn the hand wheel towards you until the needle is in its highest position.



Turn the upper left dial (stitch selector) to the symbol for three-step zig-zag ($\backslash \backslash \backslash \backslash \backslash$) the stitch length dial and the stitch width dial to any setting which suits the work to be done. You might start out with length at 1 and width at 4. You can select the three-step zig-zag regardless which seam former is in the machine. Three-step zig-zag is used for sewing towelling, jersey and knitwear, for overcasting in elastic, thin or easily frayed fabrics and for darning and mending.

Knit stitch

Check that seam former A is inserted in the rear of the machine. Set the needle to the highest position by turning the hand wheel towards you.

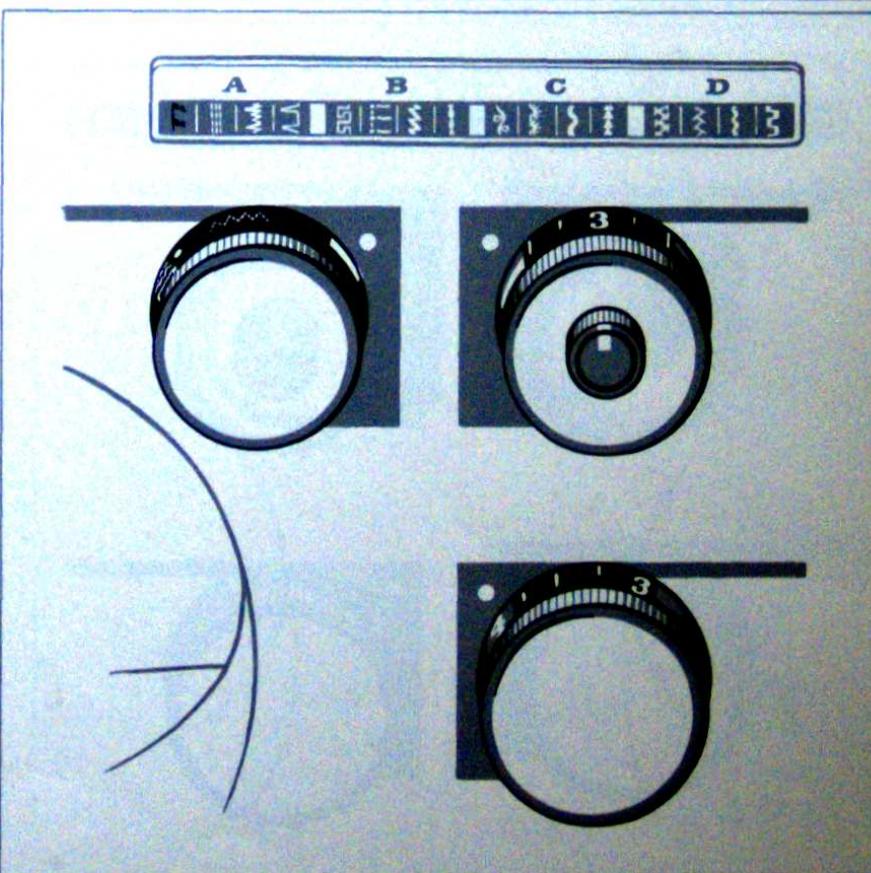


Regular presser foot
for utility stitches
41 11 383

Then set the stitch selector, the stitch length dial and the stitch width dial all to the blue color symbol.

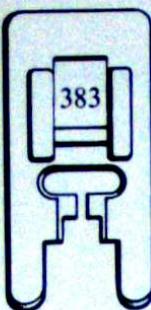
The knit stitch sews a stretchable seam and finishes the seam allowance in one operation. This replaces both straight stitching and zig-zag overcasting. You can use the knit stitch for assembling garments of all types of fabrics, wherever you want a narrow and supple seam. It is especially desirable for knitted and stretch-type fabrics.

Of course, the knit stitch can also be used for overcasting single edges.

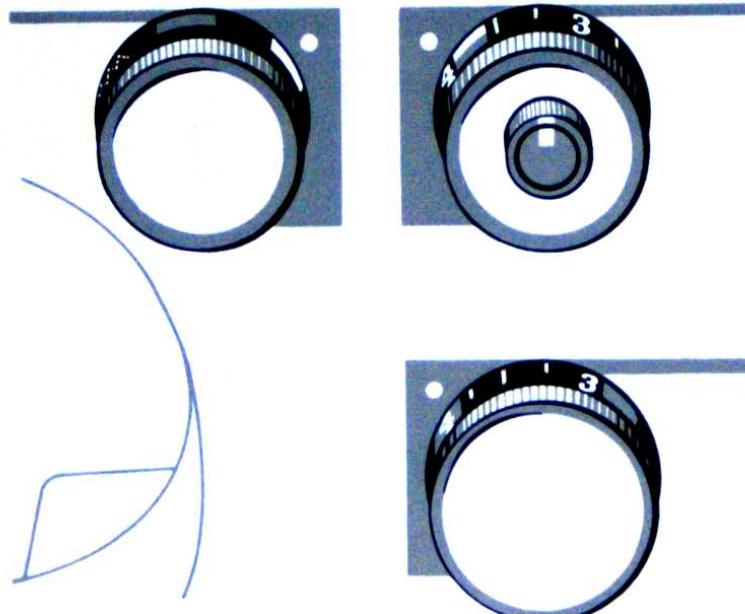
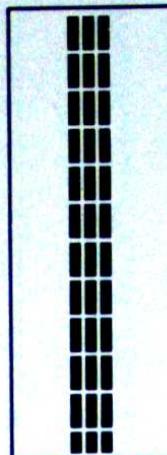


Elastic straight stitch

Check that seam former A is in position in the machine. Set the needle to the highest position by turning the hand wheel towards you.



Regular presser foot
for utility stitches
41 11 383



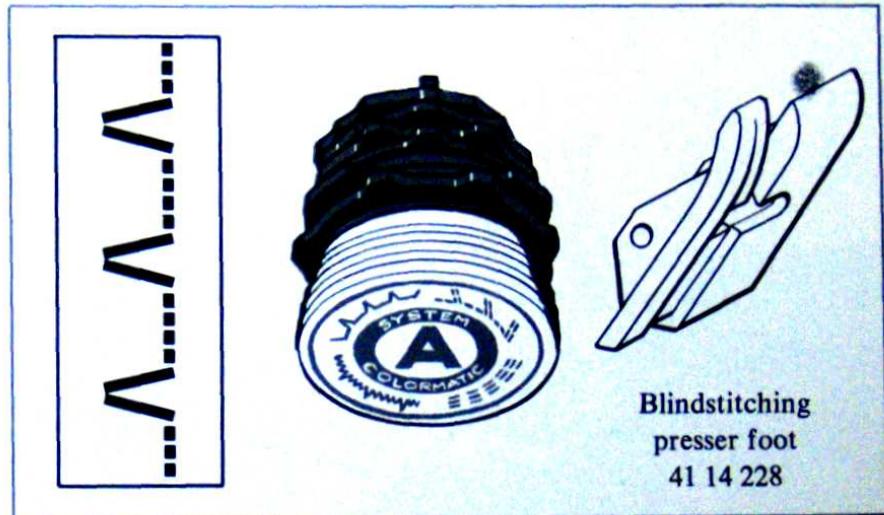
Set the stitch selector, the stitch length dial and the stitch width dial all to yellow symbols. Test sew on a scrap piece of material and check the regularity and appearance of the stitches. More or less equalize the length of the forward and reverse stitches by means of the stitch length dial.

The elastic straight stitch is a triple-lock straight stitch combining stretchability and strength. The stretchability makes it useful for sewing in knits and other stretch fabrics. It is also used for crotch sewing, sewing on the bias and for sleeve insertion.

The elastic straight stitch can also be used for decorative purposes.

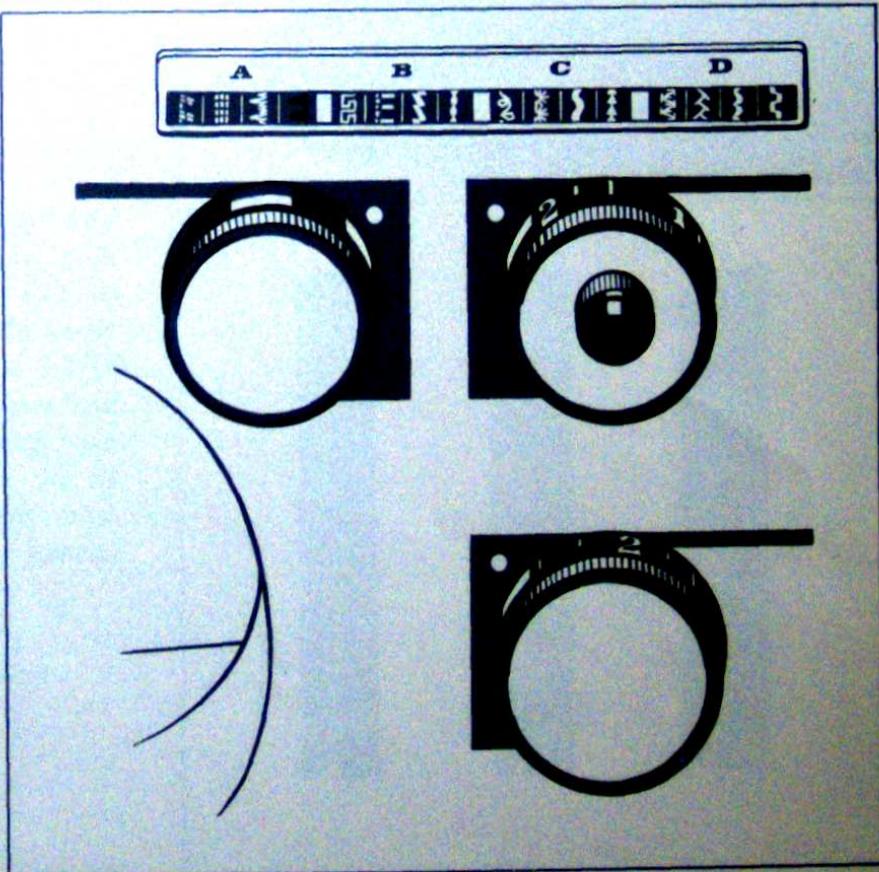
Blindstitching

Check that seam former A is in the machine. Set the needle to the highest position by turning the hand wheel towards you.



Set the three dials (stitch selector, stitch length dial and the stitch width dial) to purple symbols.

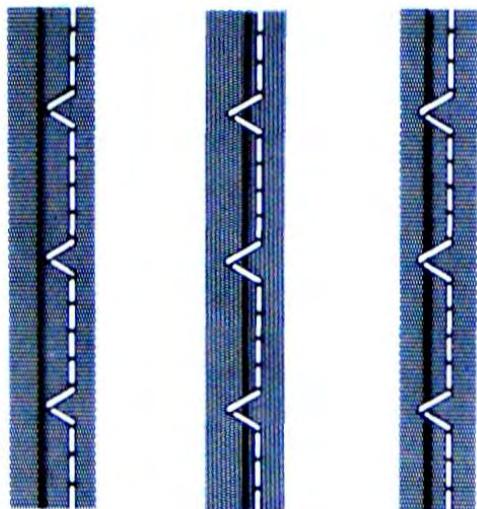
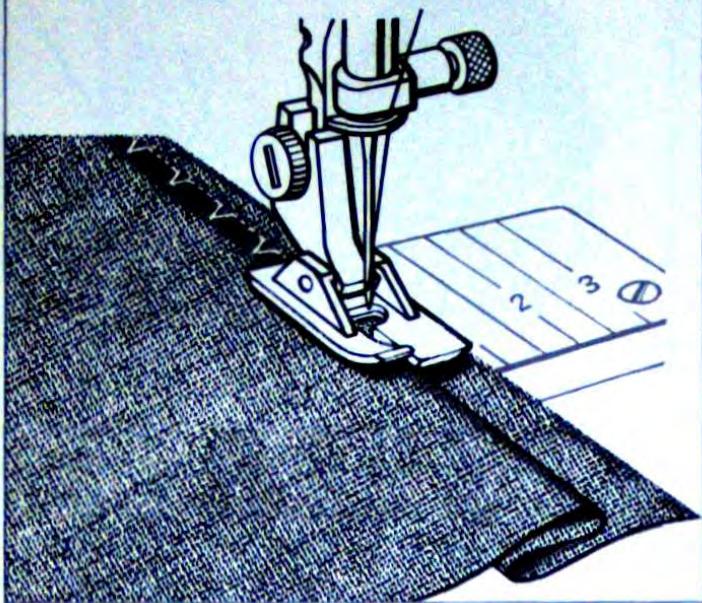
Blindstitching is used for hemming skirts, for example, without the stitches showing on the right side. As you will see from the sketch, it consists of four straight stitches and one zig-zag stitch.



Blindstitching (cont.)

You will find the blindstitching presser foot 4114 228 in the accessory box. Attach it in the same way as the regular presser foot.

Fold the fabric as shown in the sketch and then set all the dials to the purple symbols. This is an average setting, which means that you can either increase or decrease the stitch length to vary the distance between the catches. Before beginning to sew, you might wish to engage the power gear. Make sure that the fold line of the fabric follows the guide line of the presser foot.



The stitch width may also be varied. In the far left illustration can be seen how the stitches fail to reach the fold line of the fabric, indicating you should increase the stitch width.

In the middle illustration the stitch width has been increased too much, leading to excessive "bite", indicating you should decrease the stitch width.

In the right illustration is shown how a correctly sewn blindstitched hem should look. The seam catches only one or two threads of the fold line.