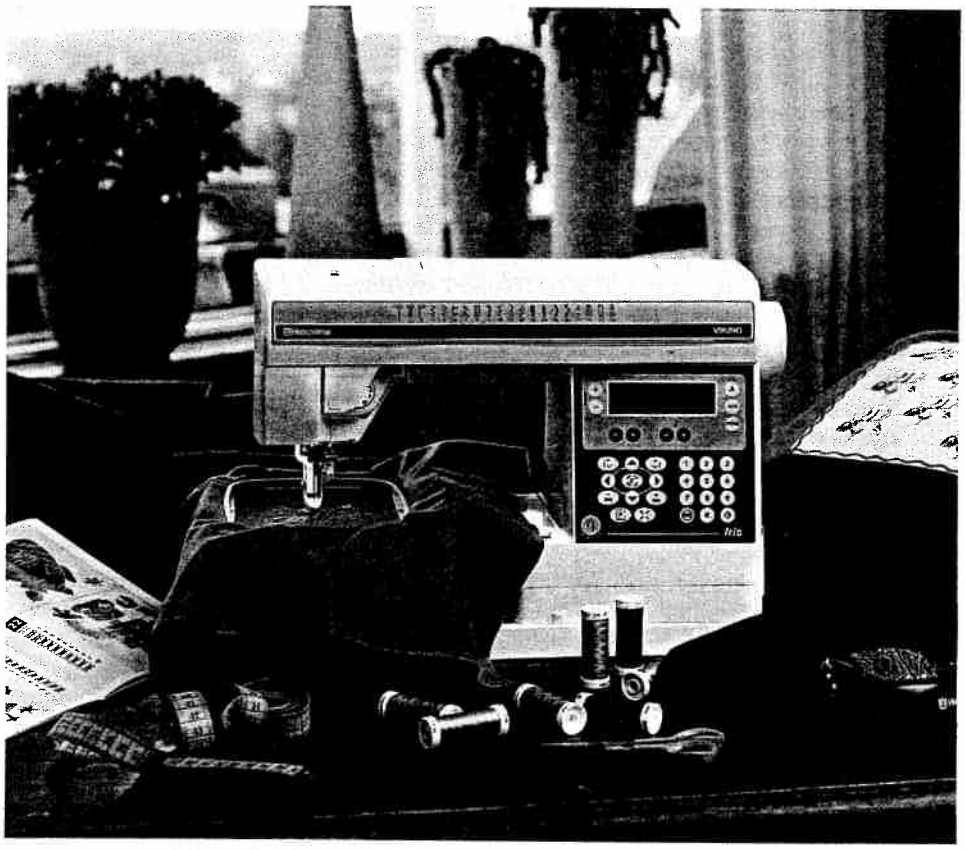
Husqvarna VIKING

User's Guide

Iris



KEEPING THE WORLD SEWING

IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic safety precautions should always be followed, including the following:
Read all instructions before using this household sewing machine

DANGER - To reduce the risk of electric shock:

- A sewing machine should never be left unattended when plugged in. Always unplug this sewing machine from the electric outlet immediately after using and before cleaning.
- Always unplug before relamping. Replace bulb with same type rated 5 Watts.

WARNING - To reduce the risk of burns, fire, electric shock, or injury to persons:

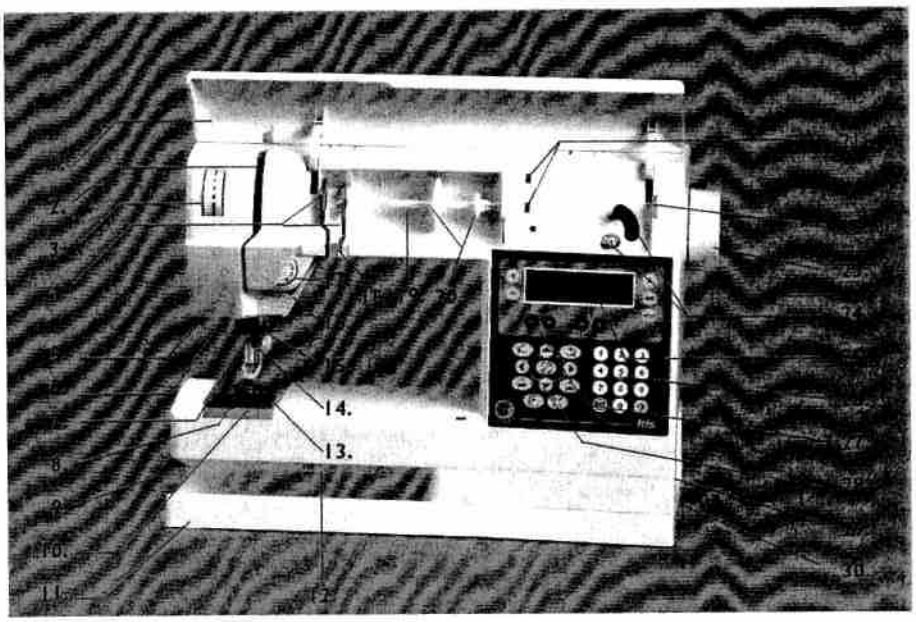
- Do not allow to be used as a toy. Close attention is necessary when this sewing machine is used by or near children.
- Use this sewing machine only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
- Never operate this sewing machine if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the sewing machine to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
- Never operate the sewing machine with any air openings blocked. Keep ventilation openings of the sewing machine and foot controller free from the accumulation of lint, dust, and loose cloth.
- Keep fingers away from all moving parts. Special care is required around the sewing machine needle.
- Always use the proper needle plate. The wrong plate can cause the needle to break.
- Do not use bent needles.
- Do not pull or push the fabric while stitching. It may deflect the needle causing it to break.
- Switch the sewing machine off ("0") when making any adjustments in the needle area, such as threading needle, changing needle, threading bobbin, or changing presser foot, etc.
- Always unplug the sewing machine from electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.
- Never drop or insert any object into any opening.
- Do not use outdoors.
- Do not operate where aerosol (spray) products are being used or where oxygen is being administrated.
- To disconnect, turn all controls to the off ("0"), then remove plug from outlet.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.

SAVE THESE INSTRUCTIONS

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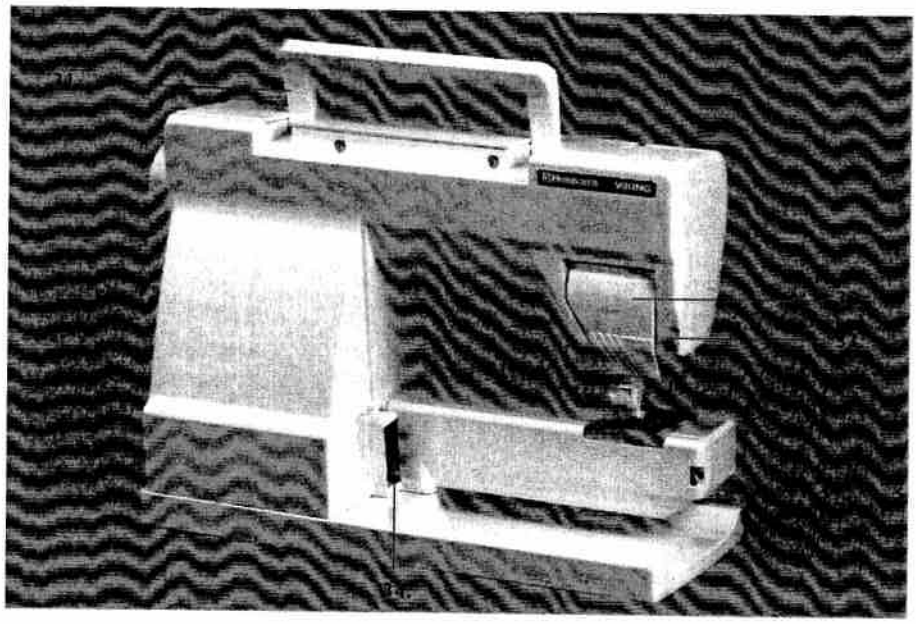
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Summary



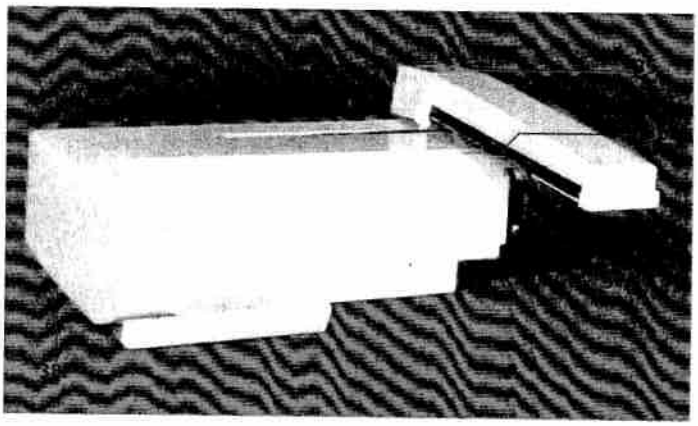
1. Lid
2. Thread take-up lever
3. Presser foot pressure dial
4. Thread guide
5. Buttonhole sensor socket
6. Light
7. Needle bar
8. Presser foot
9. Free arm
10. Bobbin cover
11. Base plate
12. Drop feed dial
13. Needle plate
14. Presser bar
15. Needle clamp screw
16. Thread tension discs
17. Thread tension dial
18. Thread guide for bobbin winding
19. Spool pin
20. Spool holders
21. Recess for additional spool pin
22. Thread cutter for bobbin winding
23. Handwheel
24. Bobbin spindle, Bobbin stop
25. Infodisplay
26. Numeral buttons Stitch selection
27. Function selectors
28. Function selectors Embroidery
29. Embroidery card socket
30. Main power switch, Connection to power supply

Summary



31. Handle
32. Presser foot lever
33. Thread cutter
34. Embroidery unit socket

Embroidery Unit



35. Embroidery arm
36. Embroidery Hoop attachment
37. Embroidery unit socket
38. Release button

Unpacking

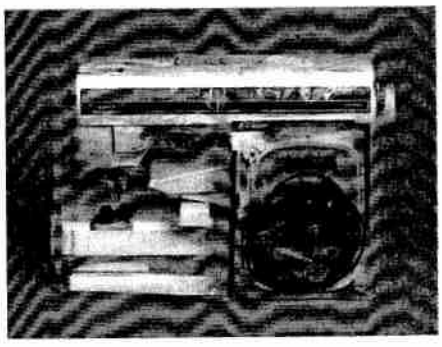


1. Place the machine on the table or cabinet, remove the packaging.
2. Remove the side parts of the packing material, the foot control and finally the protection cover.
3. The machine is delivered with a plastic cover, an accessory bag, a main cord and a foot control cord. There is also a test kit for embroidery and a bag containing embroidery accessories (see page 19).
4. Wipe the machine, particularly around the needle and needle plate to remove any soil before sewing.

Packing away after sewing



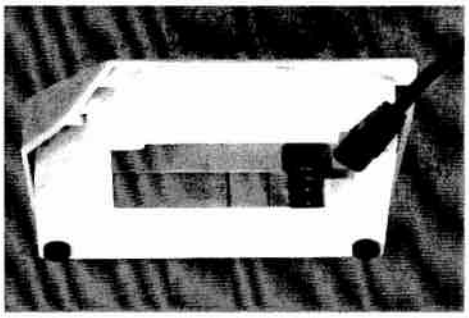
1. Unplug the cords from the wall socket and the machine.
   Wind the cords around your hand and place the foot control cord in the foot control storage space. Place the foot control as illustrated. Lower the presser foot. Remove the embroidery card.
2. Slide the cover over the machine. Place the main cord in the pocket of the cover. There is also space provided for the operating manual, the embroidery accessories and the other accessories.

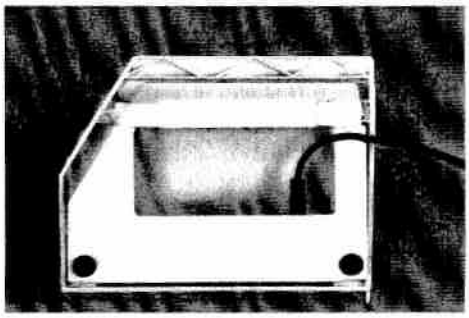


Connecting the foot control

Among the accessories you will find the foot control cord and the main cord.

1. Place the foot control on its narrow side. Fit the plug into the socket inside the foot control compartment.
2. Push it firmly to make sure it is properly connected. This operation is only necessary the very first time you are going to use the machine.
3. To correctly turn away the cord, place it into the slot, see picture.



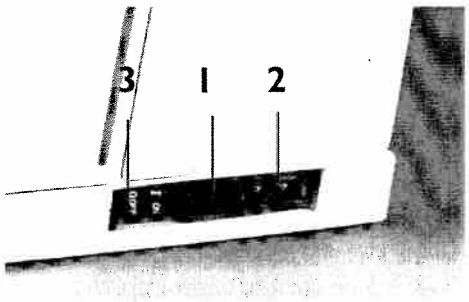


Note: Before plugging in, check to ensure that the foot control is of "type FR2".

Connecting to the power supply

On the underside of the machine you will find information about the power supply (V) and the frequency (Hz). Check the power supply setting in the machine to ensure that this agrees with the main supply before you connect the machine.

1. Connect the foot control cord to the first socket on the bottom right side of the machine.
2. Connect the main cord to the back socket on the bottom right side of the machine.
3. When you press the power switch, both the machine and the light are switched on.

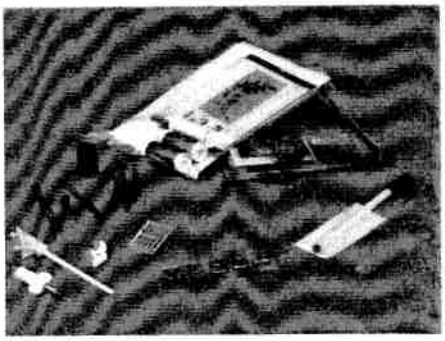


For the USA and Canada

Husqvarna Viking Iris has a polarized plug (one blade wider than the other). To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not modify the plug in any way.

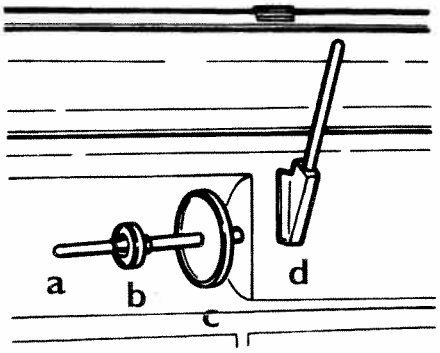
Accessories

You will find a great number of accessories included with your sewing machine. How to use them will be shown on the following pages of this user's guide.

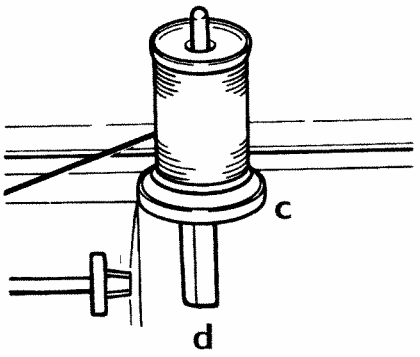


Spool pin

The machine has spool pins suitable for all types of thread. The main spool pin (a) is horizontal - the thread reels off the stationary spool. Place the spool so that the thread reels counter-clockwise.
There are two spool holders on the spool pin. With narrow thread spools, the small holder (b) is placed in front of the thread. If you use large thread spools, the large holder (c) is placed in front of the thread.
Slide the correct size spool holder in place so the flat side is pressed firmly against the spool. No space between spool holder and spool.

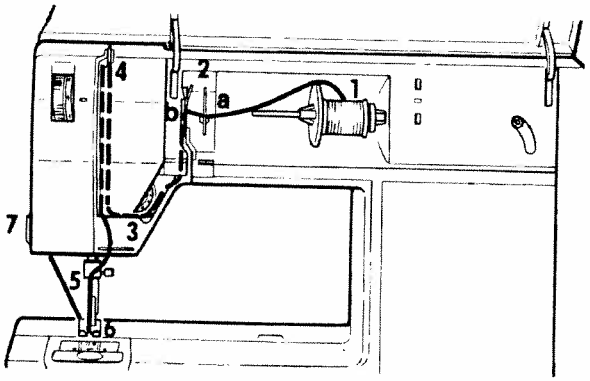


There is also a separate vertical spool pin (d) to be attached onto the machine. The fingers on the extra spool pin fit into the two holes to the right of the fixed spool pin. Push downward to snap in place. The large spool holder (c) is placed under the thread. This spool pin is used when winding a bobbin from a second spool of thread or for a second spool when sewing with a twin needle.

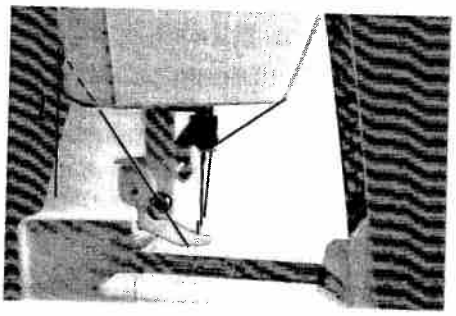


Threading the upper thread

Make sure the presser foot is raised and the needle is in the up position



1. Pull the spool pin out. Place the thread on the spool pin and the spool holder on the spool pin as described. Push the spool pin back in.
2. Bring the thread in the direction of the arrow under the thread guide (a) and over the thread guide (b).
3. Bring the thread down between the thread tension discs.
4. Continue threading by drawing the thread from the right into the slot on the take-up lever.
5. Thread last guide just above needle.
6. The needle is threaded from front to back. The white on the presser foot ankle makes it easy to see the eye of the needle.
7. Place thread under the presser foot and into the thread cutter where it is cut.



Upper thread warning

If the upper thread breaks or if thread spool runs out, the machine stops and gives a signal. The symbol ⊢⊣ is flashing on the display.
If thread breaks: Re-thread the machine. The symbol goes out.
If thread spool runs out: Remove your work and the bobbin. Re-thread the machine. Replace the bobbin and restart.

Threading for twin needle



1. Insert a twin needle (optional).

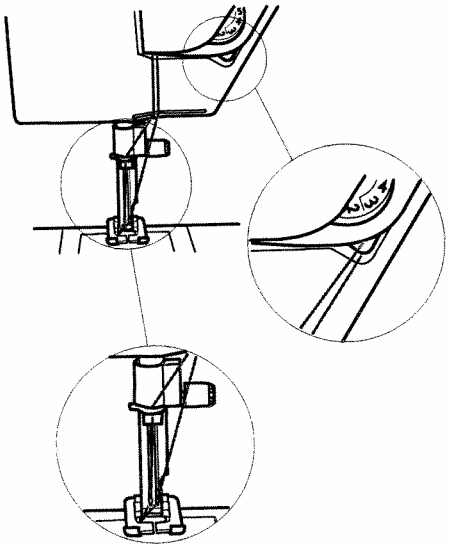
2. Wind a bobbin with the thread you are going to use as the second upper thread

3. Thread the machine as described and check to ensure that the thread lies between the inner thread tension discs, outside the lowest thread guide. Thread left needle.

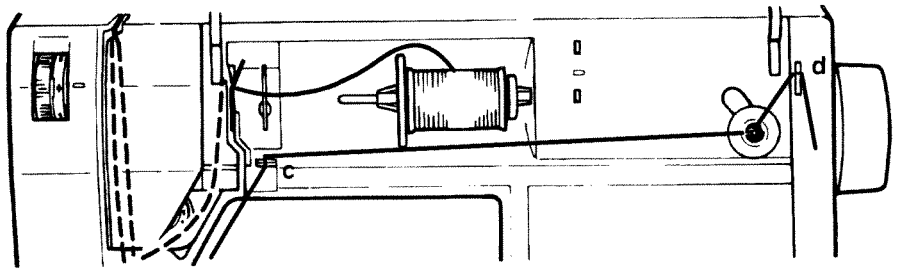
4. Attach the extra spool pin onto the machine. Place a spool holder under the thread.

5. Place the bobbin with the second thread on the spool pin.

6. Thread the machine as before but this thread should lie between the outer thread tension discs, outside the lowest thread guide. Thread right needle.



Bobbin winding with the machine threaded



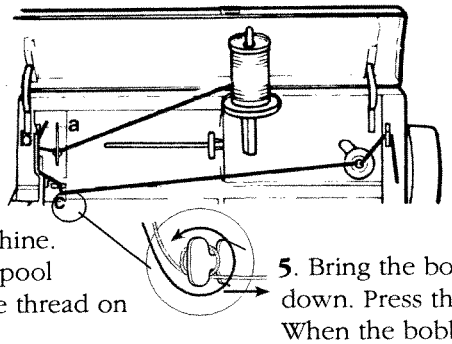
Make sure that the presser foot is up and the needle is in the highest position.

Note! Do not use a plastic presser foot when bobbin winding.

1. Place your empty bobbin with the small mark Ⓜ outwards on the bobbin spindle on the front of the machine.
2. Pull the thread from the needle under the presser foot and to the right over the thread guide (c).
3. Start from above and wind a few turns of thread around the bobbin. Cut off the thread on the thread knife (d).
4. Bring the bobbin spindle down. Press the foot control. When the bobbin winding is finished, the bobbin will stop automatically. Remove the bobbin, cut off the thread and bring the bobbin spindle up.

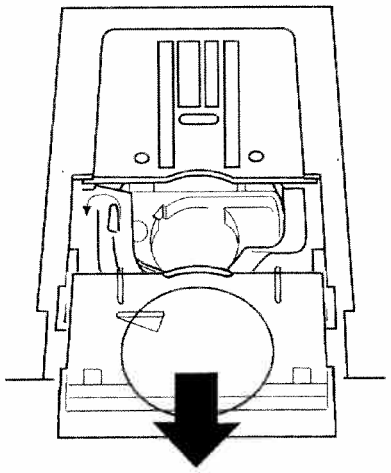
Note! We do not recommend winding specialty threads such as clear nylon or other stretchy threads through the needle. Instead see "Bobbin winding - vertical spool pin" below.

Bobbin winding - vertical spool pin

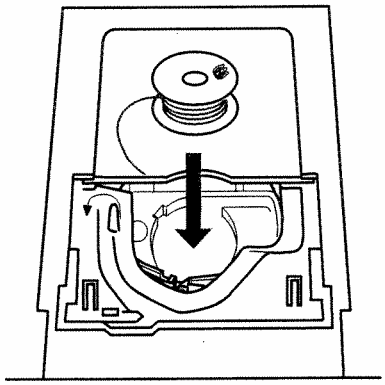


1. Place an empty bobbin with the mark Ⓜ outwards on the bobbin spindle on the front of the machine.
2. Place the large spool holder under the thread on the spool pin.
3. Bring the thread under the thread guide (a) and over thread guide (b),then **around** thread guide (c) as illustrated.
4. From above wind a few turns of thread around the bobbin and into the knife.
5. Bring the bobbin spindle down. Press the foot control. When the bobbin winding is finished, the bobbin will stop automatically. Remove the bobbin, cut off the thread and bring the bobbin spindle up.

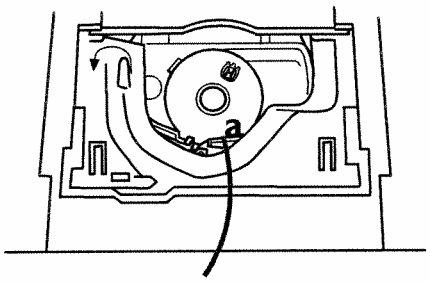
Placing the bobbin in the machine



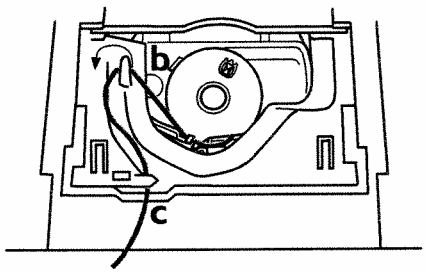
1. Open the cover by slightly pulling it towards you and take it away.



2. Place the bobbin in the bobbin case with the mark (M) facing upward and the thread to the left of the bobbin. The bobbin will then rotate counter clockwise while drawing out the thread.



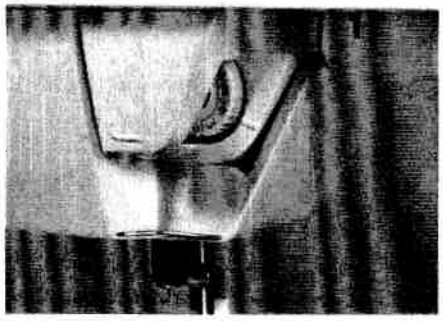
3. Hold the bobbin and draw the thread to the right passing (a).



4. Hold the thread tight and draw it to the left so that the thread falls correctly into the tension spring. Continue threading around (b) and to the right of the thread knife (c).
Replace the cover and slide it into position. Then pull the thread to the left to cut it.

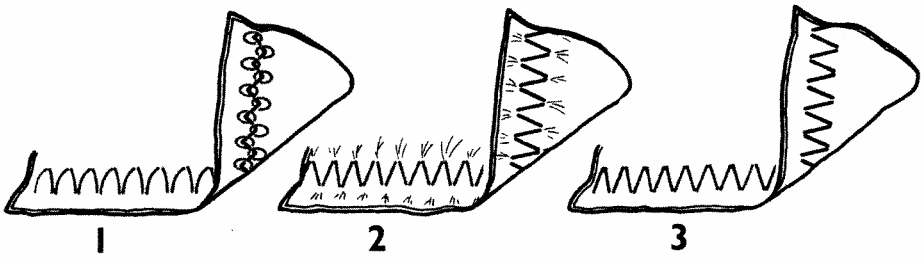
Thread tension

The thread tension is adjusted automatically when you select a stitch or an embroidery. This is shown by the thread tension indicator being reset.
You can also adjust the thread tension by pressing the buttons , see page 16. Using the button (-) you decrease the tension and using the button (+) you increase the tension. The adjustment affects all stitches and will remain until the machine is turned off or until changed manualy.
Normal thread tension is 4.
When selecting buttonholes and decorative stitches the thread tension is reduced.



When topstitching with a heavy thread in thick fabric, increase the tension to 7-9.
When the machine is turned on, the tension is set to normal automatically.

Correct and incorrect thread tension

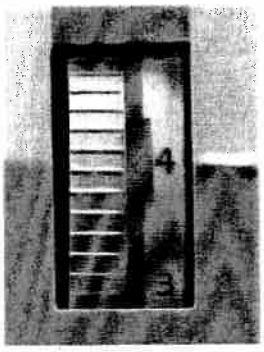


To understand the correct thread tension, sew a few sample stitches at different settings.

1. Begin with a tension that is too loose, i.e. set at "1". The lower thread will lie straight and the upper thread will be drawn down on the underside.
2. If you set the tension at the highest number, the opposite will occur, and the seam may pucker.
3. The correct thread tension is provided when the threads interlock in the middle of both layers of material or, in the case of decorative stitches, on the underside.

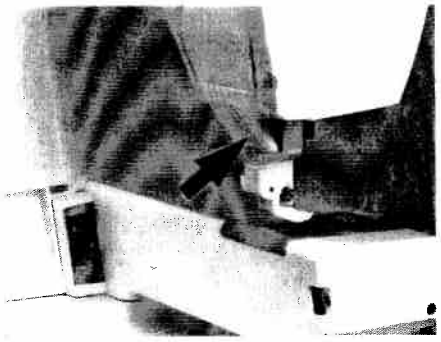
Make a few tests on a scrap piece of the material you are going to sew and check the tension.

Presser foot pressure



The presser foot pressure is adjusted with the dial on the front of the machine. Normal setting is 4. The higher the number the more pressure on the fabric. Knit and Soft fabrics should be sewn at low pressure.

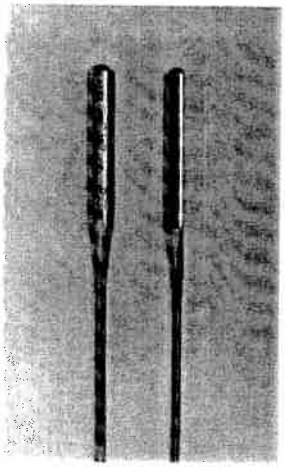
Presser foot lever



The presser foot is raised and lowered with the presser foot lever. The presser foot must be lowered when sewing. The machine will not start if the presser foot is in the raised position.

By raising the presser foot lever as far as it goes and holding it there, the lift height of the presser foot can be increased by several millimeters.

Changing the needle



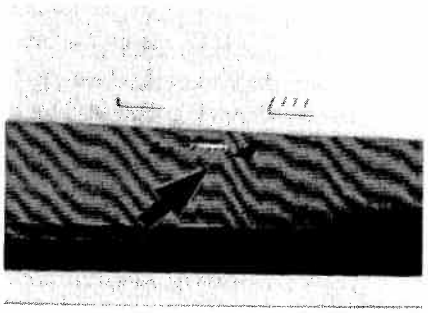
1. Loosen the screw in the needle clamp.
2. Remove the needle.
3. Push up the new needle with the flat side away from you until it will go no further.
4. Tighten the screw properly.

Always use needles of system 130/705H.

Lowering the feed teeth

The feed teeth are lowered automatically when the embroidery unit is in place.
When removing the embroidery unit, the feed teeth will raise as you start to sew.

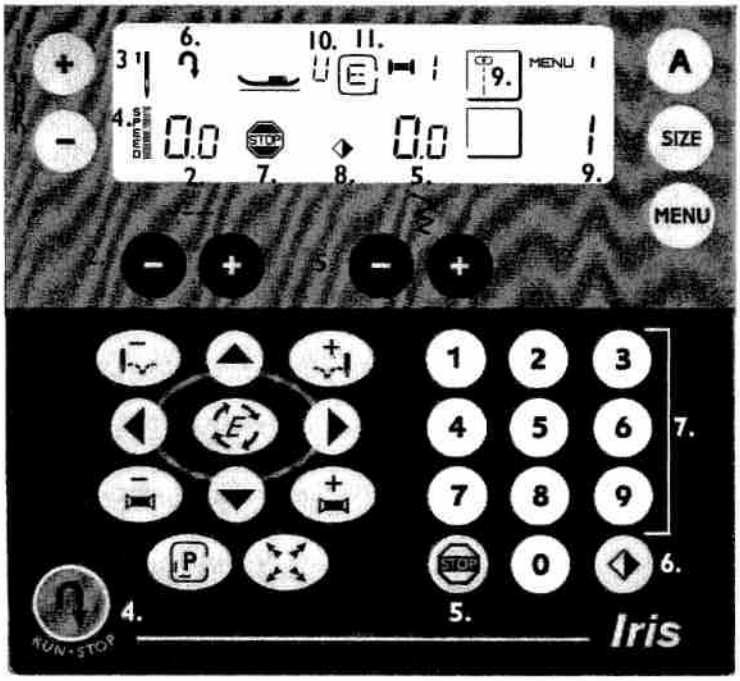
The feed teeth are lowered when you turn the dial to the left to ▬. Turn the dial to the right to ▲▲▲ if you wish to raise the feed teeth. The feed teeth will not come up until you begin to sew.



The feed teeth are lowered when sewing buttons and for free-hand work.

By lowering the feed teeth it is easier to get thick garments under the presser foot. Do not forget to raise the feed teeth before starting to sew.

Functions / Infodisplay



1. Thread tension - adjustment



Use these buttons to adjust the thread tension manually. The adjustment affects all stitches and will remain until the machine is turned off or until reset manually.

2. Stitch length



When you select a stitch, the machine will automatically set the best stitch length which will be indicated by numbers on the Infodisplay. You can change the stitch length by pressing either the (+) or (-) button. Certain stitches have a limited stitch length.

When sewing embroideries the length can be set between 2 and 6 to change size of embroidery.

3. Needle stop recommendation

This symbol shows the normal stop position of the needle, up. You regulate the needle stop position with the foot control. To raise or lower the needle after stopping, lightly tap the foot control.

When sewing embroideries only the up position can be used.

4. Sewing speed

This symbol shows the sewing speed for the actual stitch/ embroidery.

All stitches in the machine have a pre-set maximum speed at which they can be sewn. When you select a stitch the machine automatically sets the correct maximum speed.

Functions / Infodisplay

5. Stitch width



When you select a stitch, the machine automatically sets the best stitch width which is displayed with numbers on the Infodisplay. You can change the stitch width by pressing the (+) or (-) button. The width can be adjusted between 0 and 6 mm.

When sewing embroideries the width can be set between 2 and 6, to change size of embroidery.

6. Reverse



Your machine sews backwards when this button is pressed. The machine sews forward when the button is released. The longest stitch length when reverse feeding is 3 mm.

For permanent reverse, press the button twice in quick succession before starting to sew. An arrow ↶ to the top left on the display indicates reverse sewing. To sew forward again, press the button once more.

The reverse button is also used when starting and stopping the Embroidery unit, (the foot control can also be used)

7. STOP



The **STOP** button is used to finish a stitch. i.e. the machine fastens the thread and stops automatically when the stitch has been completed. The symbol STOP on the display indicates that **STOP** is selected. **STOP** is cancelled when you press the button again or select a new stitch.

(See "Satin taper...", page 43.)

For Embroidery sewing without thread color change, see page 26.

8. Mirror image



You can mirror a stitch by using the button ◆, mirror image side to side. The symbol will be displayed.

9. Stitch/Embroidery selection

The machine has one row of stitches shown on the front of the lid. To select a stitch or an embroidery, touch the numeral buttons - for example 1, 2 to select stitch/ embroidery number 12.

10. Recommended presser foot

The letter shows which presser foot is correct for the stitch you have selected. The corresponding letter is found on the presser foot.

11. Embroidery

Refer to pages 18-29,

Optional - Sensor buttonhole foot

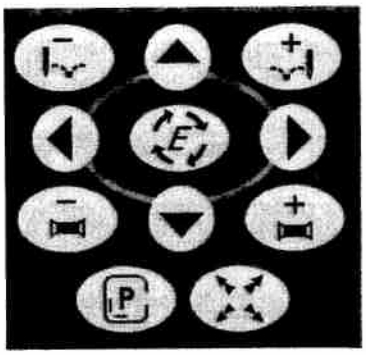
When you plug the buttonhole sensor foot into the machine and place the white field of the measurement wheel against the white mark, the symbol will be show brightly on the display.

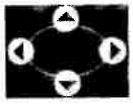
Optional Accessories - Letters



As an optional accessory an embroidery card containing three different alphabet styles are available. These buttons are used together with this embroidery card. Read more about these buttons on page 19.

Functions / Embroidery





Positioning
These buttons allow you to move the embroidery in four directions.



Rotation Touch this button once and your embroidery will rotate a quarter of a turn.



Stitch advance
These buttons allow you to step stitch by stitch forward (+) or backward (-) within your embroidery.



Color advance
Many of the embroideries include several colorblocks. These buttons allow you to step forward (+) or backward (-) to the beginning of each thread color change.



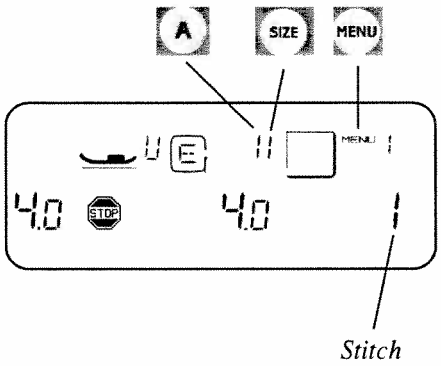
Check size
This button allow you to step from one corner to another within your embroidery to check the finished size of your design.



When your embroidery is finished, touch this button The embroidery arm returns to parking position. The embroidery unit can now be removed. Read more about embroidery sewing on page 20-29

Optional Embroidery cards

The buttons to the right of the Infodisplay - **A, SIZE** and **MENU** can only be activated together with Embroidery Card No 21. This card contains three alphabet styles - Palace Script, Clarendon and Kalligraphia. Together with the card you will get a embroidery booklet showing all the alphabeth styles, sizes and menus.



This button is used to select the alphabet style - **1** Palace Script, **2** Clarendon or **3** Kalligraphia.

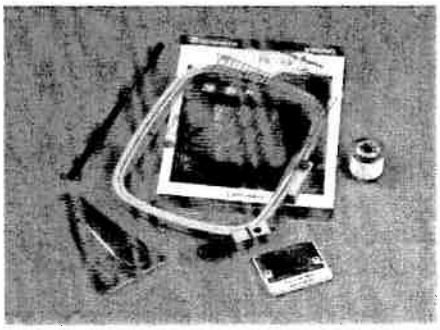
With this button you select the size of the letters - **1** 30 mm, **2** 12 mm.

This button is used to select between **1** upper case letters - ABC...., **2** lower case letters - abc... or **3** numbers - 123... and special characters.

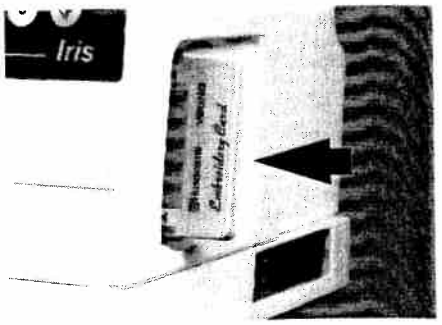
There are also several Embroidery cards with more than one menu available.

Embroidery

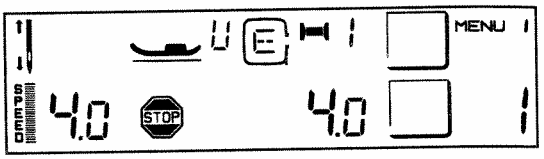
The Embroidery accessory bag contains embroidery hoop, embroidery booklet, embroidery template, template pencil, embroidery card, a pair of scissors, thread and a test kit.
To prevent misplacing your embroidery accessories, store them in the pocket of the plastic cover after sewing.



Get started



1. Insert the embroidery card (Iris Collection) into the slot on the right side of the machine. To remove the card, pull it straight out.
2. Turn the machine on. If the presser foot is in lower position the symbol is flashing on the display. When raising the presser foot, the machine carries out a self test. If the needle is in its down position it will automatically go to up position. The embroidery unit will take its parking position.



3. When you have finished your embroidery work, touch P. The arm returns to ready position. Turn off the machine.

Iris Collection - Embroidery booklet



In the Embroidery booklet you will find all the embroideries in actual size. Each embroidery is placed in a square where the center of each side is marked and a cross marks the center point to the design.

You will also see how each embroidery is placed related to the center point of your sewing space.
The row of thread spools next to the embroideries shows the number of thread color changes and the order of changes.

Thread

Use rayon embroidery thread 40 wt. When reducing the size of the embroidery we recommend a finer thread, 60 wt. When enlarging, we recommend a thicker thread, 30 wt.

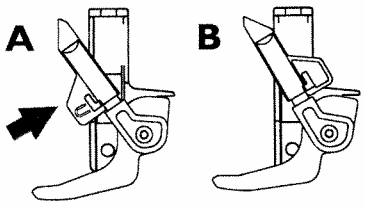


Place the net over the thread spool, especially when using rayon thread. Use a very fine thread as bobbin thread. There is a special bobbin thread called bobbin fill or basting thread available for this kind of embroideries.

Embroidery presser foot

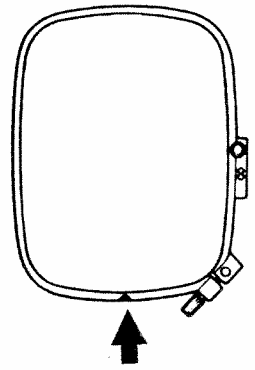
Embroidery: The lever on the arm of the presser foot should be downward (A). The mark U on the lever corresponds to the symbol U on the display.

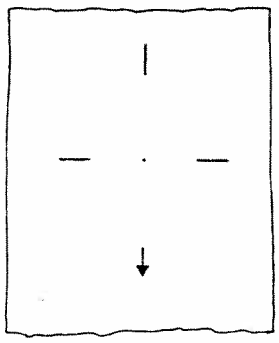
Quilting or sewing terry cloth: When selecting a quilt stitch turn the lever upward (B). Also when sewing terry cloth or other thick fabrics, use setting (B).

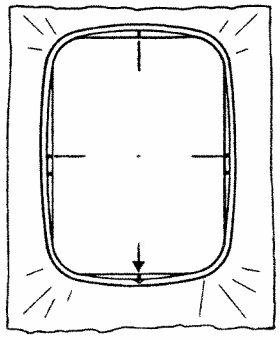


Embroidery hoop

1. Loosen the screw on the outer hoop, place the outer hoop so that the screw is down to the right.
2. At the front edge of the hoop there is an arrow.
3. A corresponding arrow is located on the inner hoop as well as center marks in the two directions. You should take notice of the back marks.
4. Place the embroidery template on your fabric. Use the Pictogram™ pen to mark within the grooves and in the center.
5. Place the inner hoop, the marks matching the ones on the fabric. Side marks should line up with the top marks on the sides of the hoop. We recommend using a tear-away stabilizer in the hoop under the fabric. Press hoop and fabric down, stabilize fabric as needed, into the outer hoop and tighten the screw. The arrows of the outer and the inner hoops should both be at the bottom.
6. Slide the hoop under the presser foot - raise up the presser foot lever to take advantage of the extra lift of the presser foot. Slide hoop from the front onto the embroidery arm.
   Note: Always sew a sample Embroidery on a scrap of the same fabric you will embroider.
7. Raise the presser foot before removing the embroidery hoop from the machine. Press the purple button located to the right on the hoop and pull the hoop towards you.





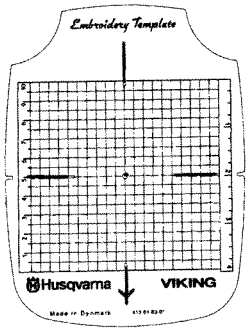


Note: Always touch  before you turn off the machine. Otherwise the embroidery arm will not come to the correct position to remove the unit from the machine.

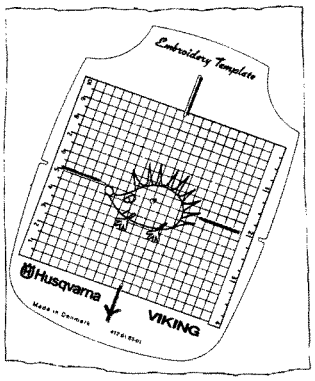
Using the Embroidery template

When you wish to sew the embroidery at a specific place on your fabric or garment, you can take advantage of the embroidery template to mark where the embroidery is to be sewn. In the Embroidery Booklet you will find all the embroideries pictured in actual size.

1. Place the template with the arrow pointing downward and matching the other marks. Draw the outer lines of your selected embroidery on the template using the template pencil. The markings can later be removed with an eraser.

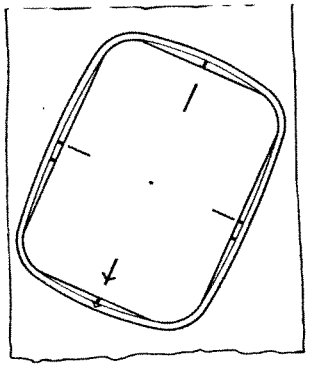


2. Place the template on your fabric where you wish to sew the embroidery.



3. Draw marks on the fabric in the four grooves and in the center with your Pictogram™ pen.

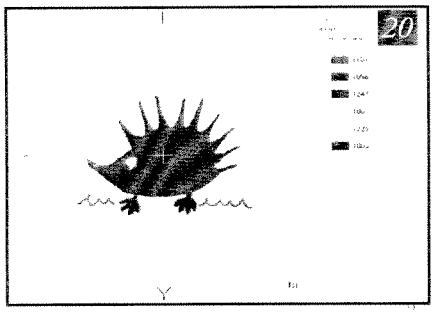
4. Place the embroidery hoop matching the arrow pointing downward to the arrow mark on the fabric. Insert the fabric into the hoop, see "Embroidery hoop", page 22.



Make final adjustments using the positioning buttons  until the needle will start at the center.

Sewing embroideries

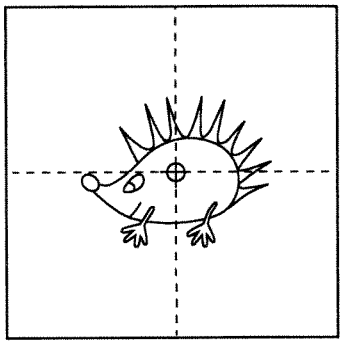
1. Place the enclosed net over the thread spool. Thread the machine with embroidery thread as upper thread. In this case you need not place thread under the presser foot. Use a fine thread as bobbin thread.
2. Thread the bobbin thread according to "Threading" on page 12 and check to be sure the thread lies under the tension springs. Cut the thread at the thread cutter. **Hint:** Slide bobbin cover on, then cut thread. Always check there is enough bobbin thread before starting a new embroidery.
3. Insert the embroidery card. The symbol flashing on the infodisplay indicates if the embroidery card is not inserted or not inserted fully.
4. Select desired embroidery motif from the Embroidery booklet. Each embroidery has a number. The buttons 1-0 are used to select embroideries, for example, to select embroidery no 20 touch 2, 0.



Select the number of the desired embroidery on the stitch panel.

5. Start sewing by touching the button or by pressing the foot control. Hold the thread tails when starting.

   The machine always starts from the center of the embroidery area, makes a jump stitch up to the beginning of the embroidery, sews a few stitches, gives a "beep" and stops. A pair of scissors flashing on the infodisplay indicates that you can cut the starting thread tail.

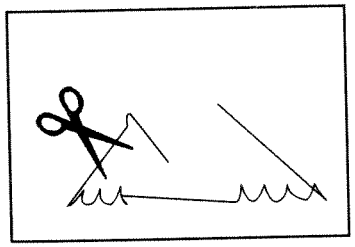


6. Touch the button and the machine sews the rest of the embroidery or up to next thread color change.

Note: Be careful when working within the needle and presser foot area to avoid touching the start/stop button or the foot control by mistake.

Sewing embroideries

7. The machine stops automatically when it is time to change thread color. The infodisplay indicates which thread color change you have reached by a flashing number next to the thread spool. The flashing number indicates the first stitch of the "new" thread color. The number stops flashing when you begin to sew.
8. Once thread is changed, start sewing again. The machine stops for cutting the thread tail and at the next thread color change etc, until the embroidery is completed.



During the sewing the embroidery hoop moves to different places within the embroidery, where jump stitches are sewn. Cut off these stitches as you sew, i.e. when the machine stops for thread color change.

In most cases the embroidery is sewn over the jump stitches, but in some cases a part of the thread can be visible and difficult to cut off afterwards.

If the upper thread breaks while sewing, the machine stops and gives a signal. The symbol is flashing on the display. Rethread the machine.

Go back a few stitches using the button and restart. The symbol goes out.

The machine also stops when the thread spool runs out. When this occurs, simply re-thead the top thread. Go back a few stitches past the point where the bobbin thread run out, using the button. Re-start and the embroidery will be completed.

If the bobbin thread runs out, toutch to move the hoop and give enough space around the bobbin area to change bobbins. Wind and replace the work. Touch again and the hoop moves back to where you stopped sewing. Go back a few stitches using the button. Re-start and the embroidery will be completed.

To check how much bobbin thread is left, touch . The embroidery arm returns into parking position.

Touch to move the embroidery arm back to stitch position and pull the upper thread back.

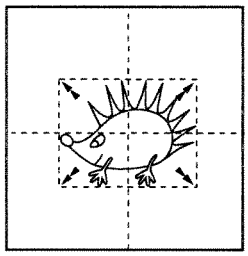
Hint: When bobbin winding with the embroidery unit connected, thread the machine as described. Then touch (RUN/STOP). The bobbin will stop automatically when bobbin winding is finished.

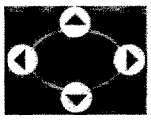
Function buttons - embroidery



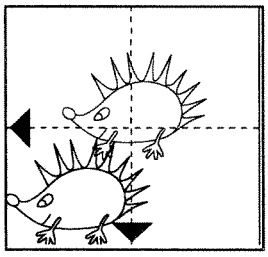
The check size button allows you to step from one corner to another within your embroidery, so that you will know the size of the embroidery and where on your fabric it will be placed.

All embroideries begin from the center. The sewing space within the embroidery hoop is 100 mm x 100 mm (approx. 4" x 4").



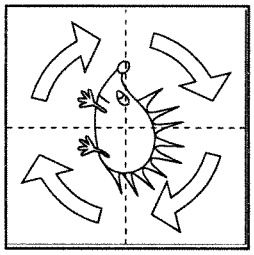


These positioning buttons allow you to move the embroidery in four directions. The limit in each direction is indicated by a "beep" and the symbol flashing on the display.



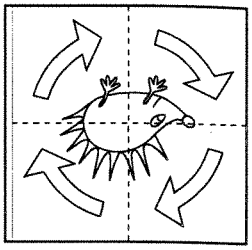


Touch this button once and your embroidery will rotate a quarter of a turn.





Touch the button twice and your embroidery will be sewn *upside-down.* Watch the display to see how the symbol has been rotated after each touch on the button.





These buttons allow you to step *stitch by stitch* through your embroidery, e.g. if thread has run out or broken, you can step back a few stitches.



Most of the embroideries include several colors. These buttons allow you to step *forward* (+) or *backward* (-) to the beginning of each thread color change. On the display the number next to the thread spool will flash to indicate the starting stitch at each thread color change.

One color embroidery

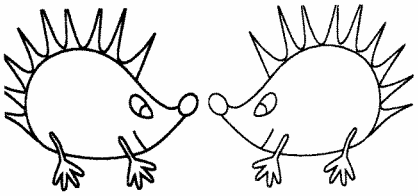
Touch **STOP** and all stops for thread color change will be cancelled. The machine sews the entire embroidery without stopping.

Embroideries using several menus (optional)

If you have an embroidery card including 2 or 3 menus you can change menu by touching the **MENU** button.

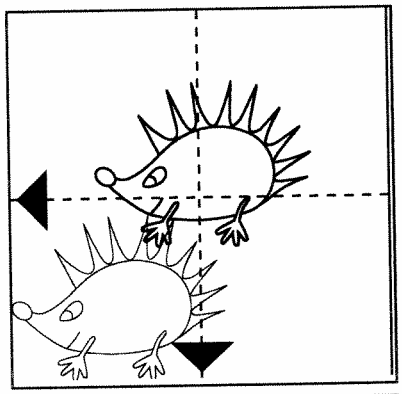
Mirror image embroideries

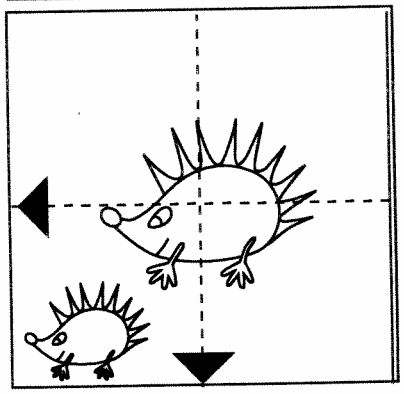
You can mirror image the embroidery side to side . The symbol ◆ is shown on the display.



Enlarging and reducing embroideries

You can make the embroidery designs larger and smaller with the stitch length and stitch width buttons between 2 and 6 maximum. The size changes are individually limited for each embroidery design.
When enlarging or reducing the embroidery we recommend changing the thread thickness for the best result, see "Thread", page 21.
A "beep" indicates when a limit is reached. You can change stitch width and stitch length independently.
Change the size before moving from the center position. If the embroidery is moved first the size change may be limited by the design reaching the edge of the 100 x 100 mm area.



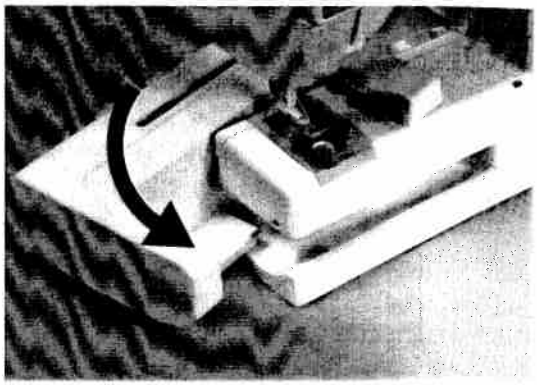


After finishing the embroidery

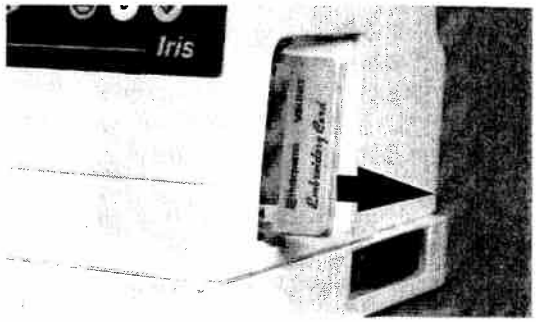
1. Remove the embroidery hoop by pressing the purple button to the right on the hoop. Pull the hoop toward you.
2. Touch and the embroidery arm returns to parking position. Now you may remove the embroidery unit from the machine (by pushing the release button on the center left underside), after turning the machine off (see page 28).

Removing the Embroidery unit

Make sure the machine is turned off while removing the embroidery unit. Press the release button at the center of the left side on the underside of the unit and slide it off.

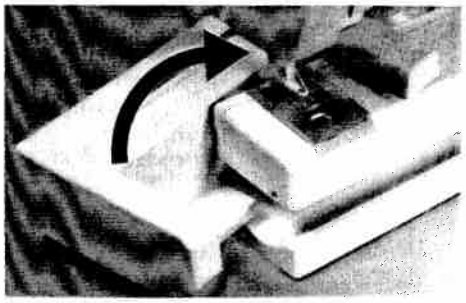


Remove the embroidery card.

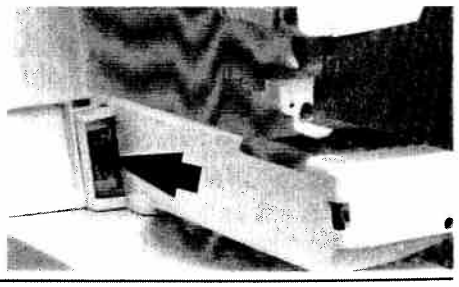


Connecting the Embroidery unit

Slide the arm of the embroidery unit to the right of the needle and the presser bar and push the unit to the right until it plugs into the socket.

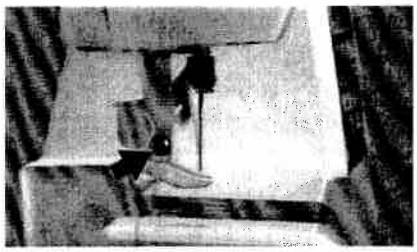


The embroidery unit is now connected for sewing embroideries. The feed teeth will be lowered automatically.



Removing the Embroidery presser foot

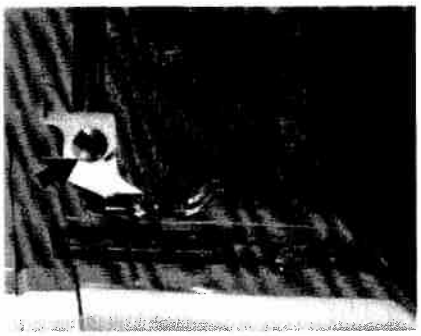
1. Make sure the machine is switched off. Raise the presser foot lever.
2. Unscrew the presser foot.



3. Remove the presser foot U from behind out of the presser bar.
4. Push the presser foot downward.



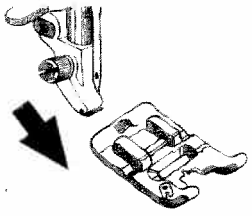
5. Insert the presser foot ankle, screw and tighten. Snap on the desired presser foot (see below).



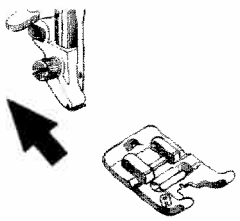
To change back to the embroidery presser foot, you do this in reverse order.

Changing the presser foot

1. Make sure that the needle is in the highest position. Pull the presser foot down and towards you.

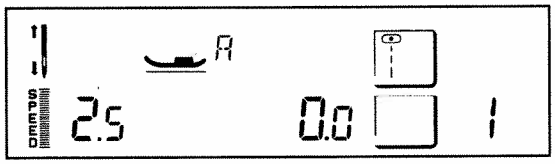


2. Line up the cross pin on the foot between the spring and the presser foot ankle. Press back until the foot snaps into place.



Utility sewing / Stitch selection





When you turn on the machine without having the embroidery unit connected, it always selects straight stitch and the number **1** as well as is displayed.
The machine has one row of stitches shown on the front of the lid. To select a stitch or an embroidery, touch the numeral buttons - for example to select stitch/embroidery number 12 - touch 1, 2.

To the very right on the Infodisplay the number of the selected stitch is displayed.

Stitch table

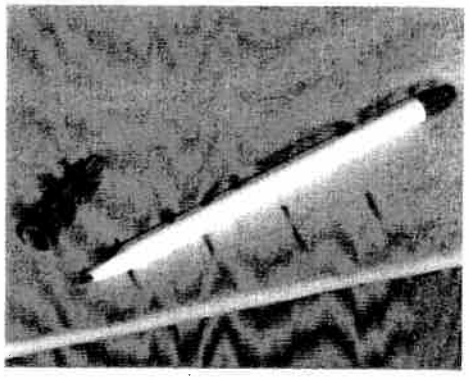
1 Straight stitch see page 34	For all kind of sewing in woven fabrics, 25 different needle positions
2 Reinforced straight stitch see page 37	For seams which are subject to considerable strain, i.e. to reinforce and topstitch sportswear and working clothes. 25 needle positions.
3 Stretch stitch see page 37	For seams in tricot and stretch fabrics
4 Zigzag see page 37-38	For lace edging and sewing on braids
5 Three-step zigzag see page 39	For overcasting, mending, sewing on patches and elastics
6 Seam and overcast stitch see page 42	Seam and overcast in one step along the edge or trim later. For light stretch and non-stretch fabrics.

Stitch table



7 Overlock see page 42	Seam and overcast in one step along the edge or trim later. For medium and heavy stretch fabrics
8 Flatlock see page 40	Decorative hems and overlapped seams, belts and bands
9 Blind hem see page 41	Invisible hems in stretch or woven medium and heavy fabrics
10 Bridging stitch see page 42	For joining two pieces of fabric with finished edges and for elastic shirring
11 Hand look Appliqué stitch see page 43	Hand look appliqué stitching
12 Feather stitch	Decorative stitching and for quilting
13 Hemstitch see page 45	For hemstitching, use a wing needle (optional)
14 Satin stitch see page 38	For appliqués, rounded edge, sewing on laces and bands
15 Decorative edging see page 45	For decorative edges. Sew 15 mm from the edge and trim close to the stitching.
16 Decorative stitch see page 45	For decorating clothes, tablecloths and curtains
17 Tapered satin stitch see page 43-44	Automatic tapering for sewing monograms and other decorations
18 Darning stitch see page 43-44	Darn and mend work clothes, jeans, tablecloths and linen towels
19 Bartack Buttonhole see page 32	Suitable in medium and heavy fabrics
20 Keyhole buttonhole see page 32	For tailored garments suitable in compact woollen cloth

Buttonholes

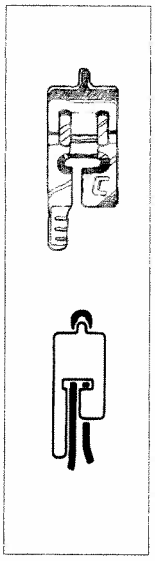


You can select different buttonhole styles.
Buttonhole the bartack buttonhole, used for medium and heavy fabrics.
Buttonhole keyhole buttonhole for tailored garments.

1. Select a buttonhole.
2. Use the presser foot C or the optional buttonhole sensor foot.
3. Mark the buttonhole location on your fabric.

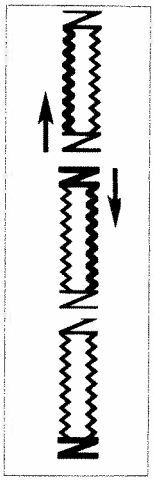
When sewing stretch fabrics, use a fusible stabilizer or a cord.

The buttonhole feet has guide lines to determine buttonhole length. The middle mark on foot C gives a 1.5 cm buttoning edge. Place the button on the presser foot against the needle and you will be able to see which mark on the foot corresponds to the button. You will sew until the first buttonhole column reaches this mark. There is a small finger at the back of the presser foot. For a corded buttonhole, loop your cord around the finger as illustrated.



For better visibility the machine sews buttonholes away from you.

4. Place the material in the machine and begin at the bottom of the buttonhole.
5. Sew the first column of the buttonhole to the required length, use the markings.
6. Touch the reverse button .
7. Continue to sew the buttonhole until the other column is the same length as the first, touch the button again.
8. The machine will bartack the other end, make a few tie off stitches in the first column of the buttonhole and then stop.



NOTE: Always stitch a sample buttonhole on scraps of the garment fabric to check size before sewing buttonholes on the garment.

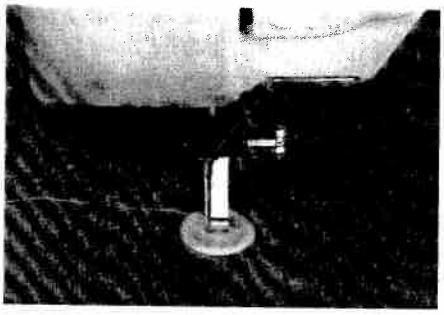
Buttonhole knife

The knife is used to cut buttonholes. It is also useful for removing stitches sewn in error.



Sewing buttons

1. Mark the fabric where the button is to be located.
2. Select zigzag ≷.
3. Lower the feed teeth with the dial. See page 15.
4. Snap off the presser foot.
5. Place the material under the presser foot ankle.
6. Place the button on marking and lower the presser bar so that the presser foot ankle is between the holes of the button (see picture).
7. Hold the thread ends to one side. Turn the handwheel and check to be sure that the needle goes into the left hole of the button.
8. Touch the mirroring button ◆ to check that the needle also goes into the right hole.
9. Sew as many stitches as you consider necessary.

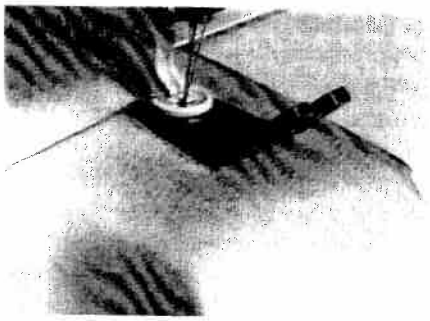


10. Touch **STOP**. The machine will then tie off in one of the holes and stop.
11. Touch **STOP** to cancel it. Move to the next pair of holes or the next button.

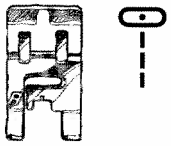
If you have a button with a different hole spacing, you can adjust this by pressing one of the stitch width buttons (+) or (-).

Button with a shank

Use the clearance plate for this purpose. Use the thin end when sewing buttons on light fabrics, the thick end for heavier fabrics.
Place the plate between the button and the fabric. Lower the presser bar and sew on the button.
Pull the threads between the button and the fabric.
Wind the threads a few times around the shank and tie the ends.



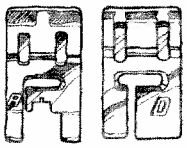
Straight stitch



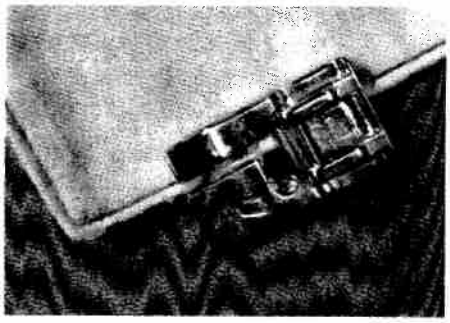
Straight stitching is used to join fabric which does not stretch and for seams which will not be subjected to great strain.
When you select straight stitch the machine will automatically set the average stitch length.
Experiment until you arrive at the exact setting for the actual work you will be doing.

Example: Increase the stitch length when basting and when topstitching.

25 Needle Positions



When topstitching using straight stitch and reinforced straight stitch, the needle position can be adjusted in steps. Use the stitch width button (+), 0 is the center position, width 6 is left needle position, width 6 mirror imaged ◆ is right needle position. To return to center position, use the stitch width button (-) and step back to 0. Adjust the width between 0-6 for additional positions.



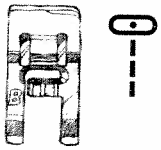
To edge stitch, you should take advantage of the possibility to set the needle to the left or the right position.

To sew about 2 mm from the edge, snap on presser foot A when sewing light fabrics and presser foot D for other fabrics.
Select left needle position, place the fabric and sew so that the edge follows the inside right edge of the presser foot D or the first mark of the left edge of the presser foot A.
If you wish to sew about 5 mm from the edge or sew a narrow hem, use presser foot A and set the needle to the right position.

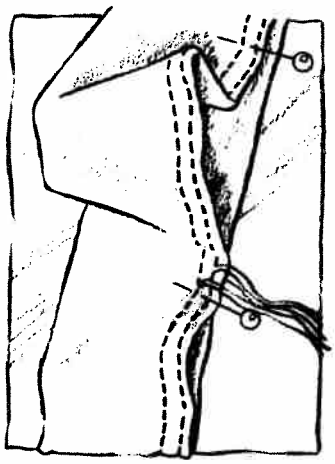
Place the edge of the fabric so that it follows the outside right edge of the presser foot and sew the hem.

Gathering with straight stitch

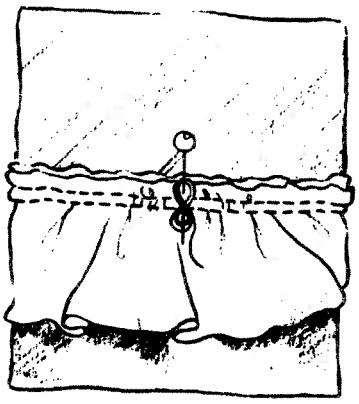
Use a slightly longer stitch than normal straight stitch, 3.5-5.0. Always sew two gathering threads next to each other.



1. Pin the gathered part to the corresponding garment section. Make sure that the marks and the seams correspond to each other, or match notches.



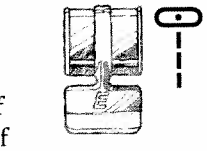
2. Pull both bobbin threads from the same direction and distribute the gathering evenly. When half the distance is gathered, wind the threads around a pin. Then gather the other half from the other direction. Distribute the gathering evenly.



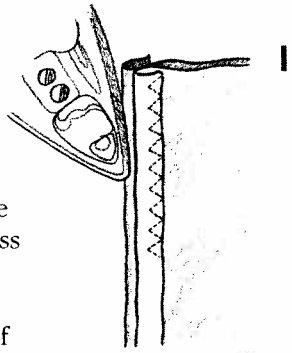
3. Join the pieces with straight stitch, the gathered material facing up. Sew between the straight gathering rows. Hold the gathering with your fingers on both sides of the needle to avoid folds. Remove any gathering thread that is visible from the right side..

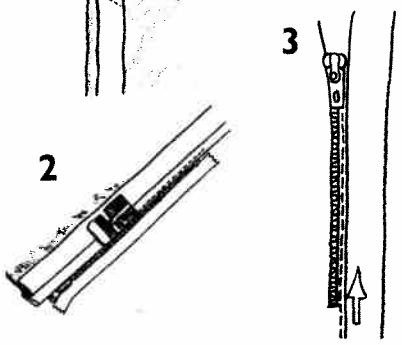
Sewing zippers

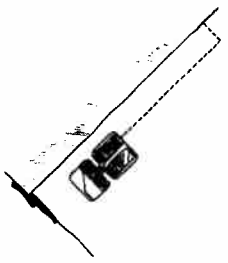
The zipper foot E can be snapped on so that it is located either to the right or to the left of the needle, making it easy to sew both sides of the zipper. To sew the other side of the zipper, reposition the zipper foot.



Lapped zipper







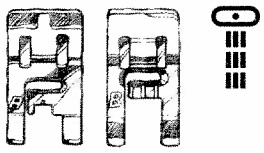


1. Sew the seam together to the bottom of the zipper placket. Baste the rest of the seam. Leave about 2 cm open at the top. Press seam open. **Set the needle to the right position.**
2. Place presser foot E to the left of the needle. From the wrong side fold the fabric to one side so both seam allowances are free. Fold and press the left allowance under approximately 0.5 cm from the basted seam.
3. Place the zipper under the folded seam allowance with the teeth as near to the fold as possible and stitch zipper to fabric close to fold. Begin sewing at the bottom of the zipper. Before reaching the zipper pull, lift the presser foot and slide the zipper pull down past the zipper foot. Lower the foot and sew to the top of the zipper.
4. Snap on the zipper foot so it is to the right of the needle. **Set the needle to the left position.** Turn the garment to the right side. It is important that the seam on the right side is sewn straight. Before you begin to sew, mark the seam line. Sew the other side of the zipper.

Begin stitching across the bottom and continue upwards. Remove the basting.
If you want to sew a "gentleman's zipper", follow the instructions but insert in the other direction.

Reinforced straight stitch

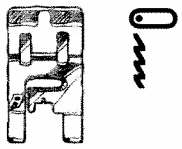
The reinforced straight stitch is stronger than ordinary straight stitch, due to the fact that it is a triple and elastic stitch.
The reinforced straight stitch can be used for heavy stretch fabrics, for crotch seams which are subject to considerable strain and for topstitching in heavy fabrics.





Stretch stitch

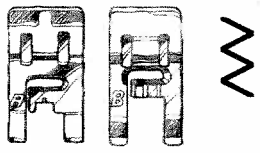
The stretch stitch makes a pliable, stretchy seam that is suitable for sewing together pieces of light stretch fabric.
The stretch stitch is ideal for topstitching in light stretch fabrics.



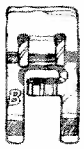
Zigzag

The zigzag is utilized for sewing on lace, bound edging and appliqués.
When you select the zigzag the machine will automatically set stitch length 2 and width 3.

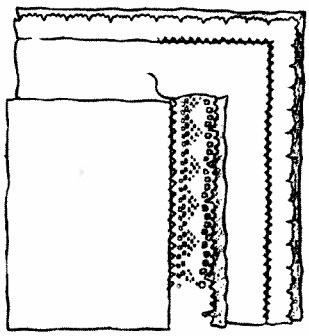
You can change this setting by pressing either the (+) or (-) button on the width and/or length.
Experiment until you reach the best setting for your actual work.



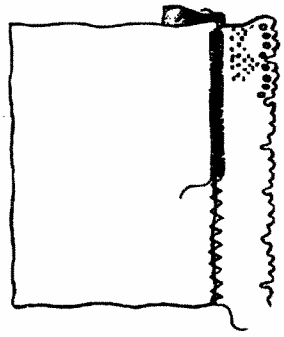
Lace edging



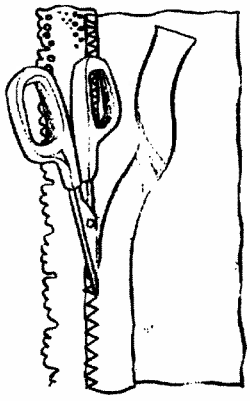
1. Place wrong side of lace to right side of fabric matching edges. Sew along inner edge of lace with zigzag, stitch length 1.5, stitch width 1.5.



2. Press seam allowance towards fabric. Sew with satin stitch , stitch width 2.0, on the right side over the zigzag seam.



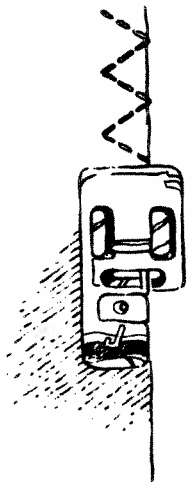
3. Cut off the seam allowance up to the stitching on the wrong side.



Three-step zigzag

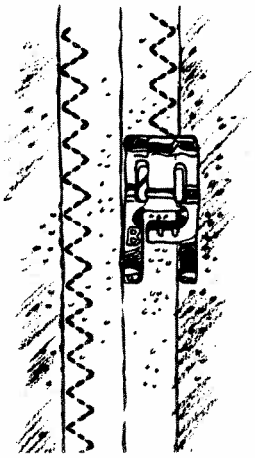
Overcasting

Three-step zigzag is suitable for overcasting most fabrics. Trim the edges of the fabric before overcasting.
Make sure that the needle sews over the edge of the fabric. Place the fabric according to the presser foot (see picture).



Sewing terry cloth

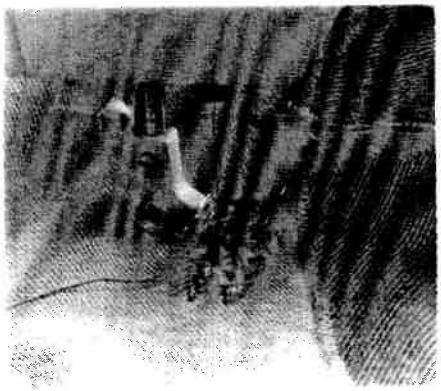
Terry cloth is a rather loosely woven fabric in which seams easily break. Sew the garment together with straight stitch. Trim the seams and press the seam allowance flat and sew the edges down against the garment on the wrong side with three-step zig-zag.
Even though the stitching goes right through to the "right" side of the garment, it is nearly invisible and even the wrong side looks neat. The stitching will also be considerably stronger.
Necklines and armholes are finished in a similar way.



Mending and darning

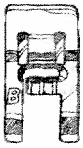
Three-step zig-zag can be utilized for mending and darning. A threadbare spot is mended by sewing back and forth with three-step zig-zag.

Use the reverse feed button . For every row of stitching, guide the fabric slightly to the side. If the fabric is very worn, a piece of fabric or lining may be attached to the reverse side of the material as reinforcement.



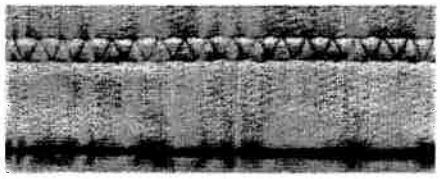
Flatlock

The flatlock , is suitable for sewing overlapped seams and decorative hems. Reduce the pressure foot pressure to 2 when sewing stretch fabric.



You can produce a decorative hem by folding a single hem to the wrong side and sewing the flatlock from the right side.

Trim excess hem to stitching from the wrong side.

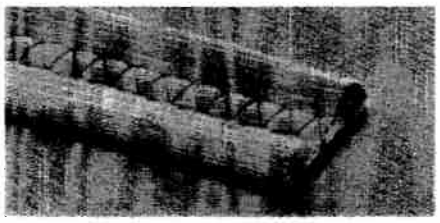


To sew an overlapped seam, lap one piece of fabric over the other piece and sew flatlock stitch over the fabric edge on the right side.

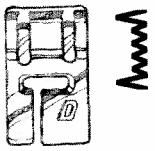
Trim from the wrong side or sew another seam from the right side.



Narrow belts and bands
Fold the fabric in thirds and sew in the center. Trim excess material from underneath.

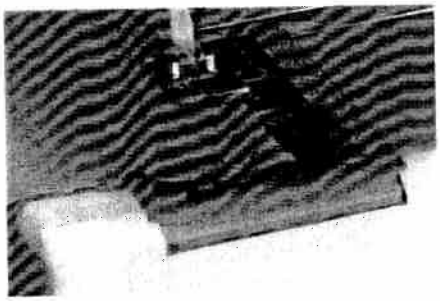


Blind hem

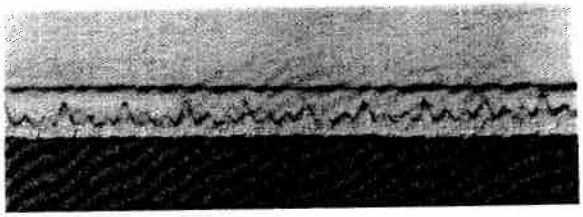


Snap on presser foot D for blind hem .

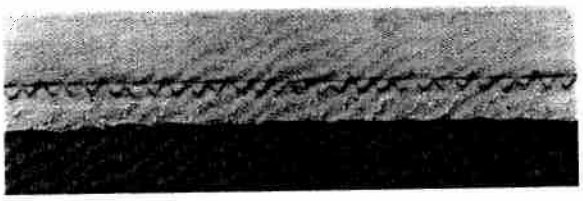
Fold the material as shown. Make sure that the fold line of the fabric rides in the groove to the right side of the presser foot. Practice using a scrap of material and compare with the illustrations.



1. If the stitch does not catch the folded edge, increase the stitch width (+).



2. If the stitch catches too much of the fold, decrease the stitch width (-).

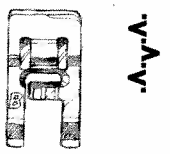


3. For an invisible hem the needle catches a single thread of the folded edge.



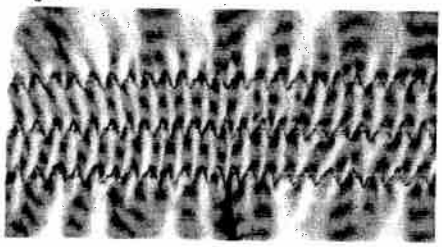
Bridging stitch

The bridging stitch is suitable for joining two pieces of fabric with folded edges.
Leather and vinyl are joined by butting the edges close to each other using the bridging stitch. Also use to join lace and ribbon.





Elastic shirring
The bridging stitch is also useful for gathered elastic shirring. Use the buttonhole foot C, tighten the upper thread tension.
On the wrong side of your fabric draw lines to sew the stitched rows straight.
Remember that the elastic will always be stitched double, so take this into account when calculating how much you will need.
Place the shirring elastic (elastic thread) around the finger of the presser foot C.



Sew from the wrong side over both lengths of the elastic following marked lines. Gather the shirring by pulling the elastic threads.

Seam and overcast

Some stitches can be used for seaming and overcasting directly on the edge where a 5 mm (1/4") seam is allowed. Place the fabric so that the inside right "toe" of the presser foot follows the edge of the fabric.

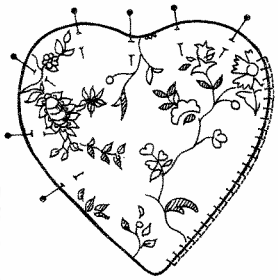
Overlock is chiefly used for sewing medium and heavy stretch fabric. Snap on presser foot B.

Seam and overcast stitch, may be used to sew light and medium non-stretch fabric and light stretch fabric. Snap on presser foot J.



Presser foot J is also used to overlock and overcast many different fabrics with the exception of heavy, firm fabrics. The pin on the presser foot should follow the edge of the fabric and will prevent the fabric from puckering. Stitch width 5-6 mm. When using stitch width 4.5 or lower, use presser foot A.

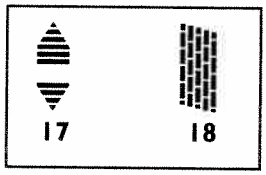
Appliqué



Use presser foot B.

1. Sew the hand look appliqué stitch number 11, around a binding at the edge, or for hand look appliqué.
2. The satin stitch number 14, stitch width 2 mm sews beautiful appliqués. Fuse or pin applique in place and satin stitch around the outside edges.

Darning and taper satin stitches



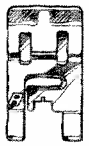
The stitches 17-18 can not be combined but are set individually and automatically. There are stitch memories where the number of stitches, length or width changes are stored.

1. Sew until the stitch has reached the desired length.
2. Touch the button. The machine now completes the stitch.
3. When you have the result you wish, touch **STOP.**
4. The stitch will now repeat in succession and the machine will stop automatically when the stitch is completed

If you wish to sew another stitch and then return to your stitch, you only select this stitch and touch **STOP.**
The repeated stitch is retained even if you switch off the machine.

Read more on page 44.

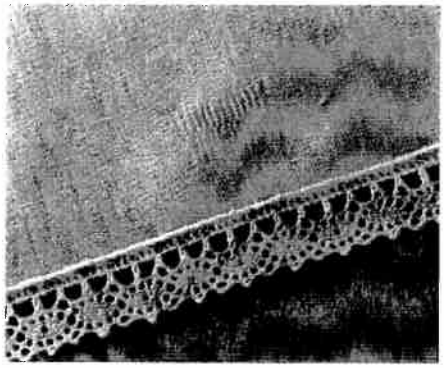
Darning stitch



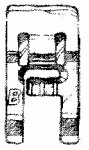


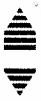
is a perfect stitch for mending and darning. Use presser foot A.

1. Sew the first row of stitches as long as you need to cover your tear or worn spot.
2. Touch the reverse button and the machine continues sewing the remaining stitches at the same length and fastens the thread.
3. When the first stitch is finished, touch **STOP** to put into memory. Move the fabric so that the needle is right over the last stitch. Repeat as many times as needed to cover the hole. See "Satin taper and darning stitches" page 43.

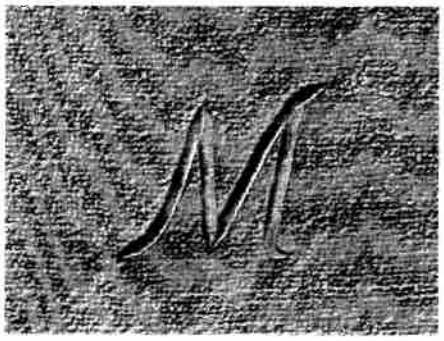


Automatic taper stitch





The tapered satin stitch , is a tapered satin stitch which makes it suitable for sewing monograms and other embellishments. Use presser foot B.



1. Trace the monogram on the fabric and sew over the lines.
2. Select .
3. Sew until the desired length is reached.
4. Touch the reverse button to taper the end. See "Satin taper and darning stitches" page 43.
5. Touch STOP if you wish to repeat the same stitch with retained length.

Decorative stitches

These stitches are mainly used as decorative stitches.

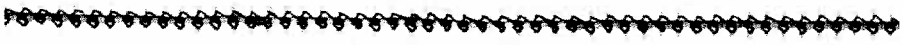
Examples:



Stitch 16 sewn with yarn gives a decorative effect.

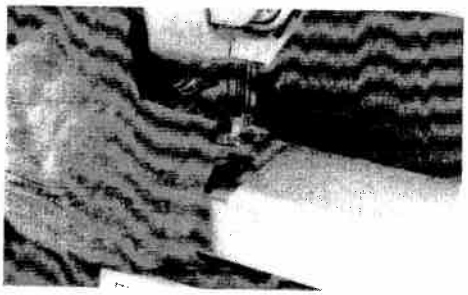


An effective edging can be produced with Stitch 15. Sew a short distance from the edge and trim close to the stitching.



Using Stitch 13 together with an optional wing needle you can produce a hemstitch around your embroidered table cloth.

Sewing hints



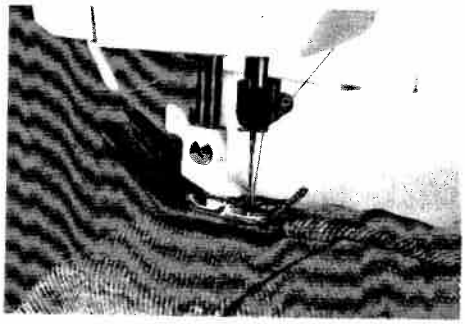
Free arm

To facilitate sewing trouser legs and sleeve hems use the free arm.

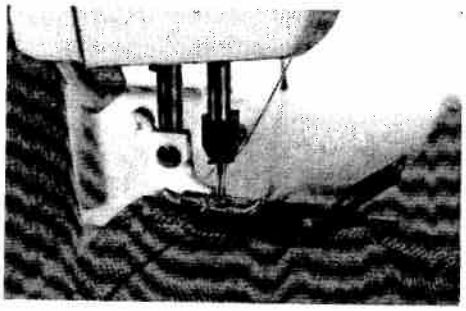
The free arm also allows you to darn socks (the darning foot is an optional accessory).

"Jeans hem"

When sewing over seams in extra heavy fabric or a blue jeans hem, the foot can tip as the machine climbs over the seam. The needle can hit the tipped foot and break. In this case, use the clearance plate to balance the height of the hem as you sew.

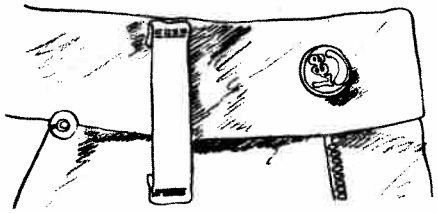


Place the clearance plate behind the foot as you approach the hem and in front of the foot as you sew over the hem thickness. Remove the clearance plate before sewing in to it.



Sewing on belt loops

Use presser foot B and lower the feed teeth. Fold in about 1 cm on the short ends. Place the belt loop on the garment and under the presser foot. Set a wide zigzag stitch.

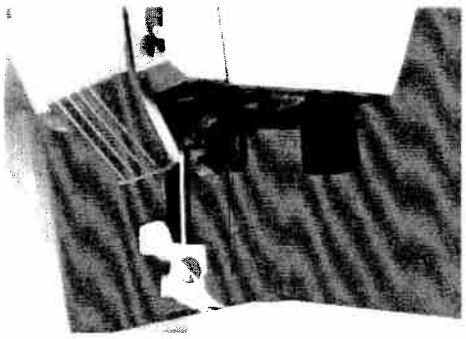


Sew a bartack from the outer edge to the center of the loop, move the material and sew a new bartack. Continue to sew along the entire length of the loop's short side.

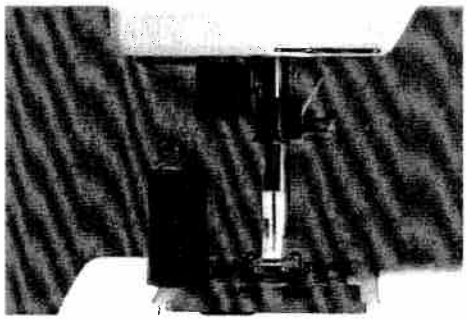
Maintenance

Changing the light bulb

The light bulb is placed to the left of the needle. Place the rubber sheath found in the accessory bag with its deep hole around the bulb. Do not turn the bulb, just pull it down to remove the bulb.



When inserting, place the rubber sheath with its shallow hole around the new bulb, insert the bulb by pushing it up.
Use light bulb designed as indicated on the front of the machine.

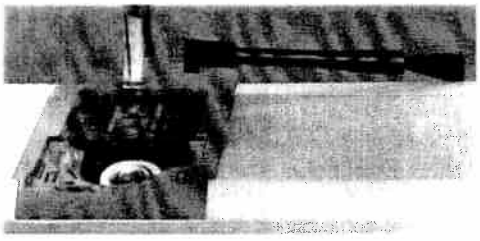


Care of the machine

To keep your sewing machine operating satisfactorily, it requires, like other precision machines, regular cleaning. No lubrication (oiling) is needed.

Removing the stitch plate

Remove the presser foot and the bobbin cover. Lower the feed teeth. Place the stitch plate opener on the brush. There is a recess at the rear of the stitch plate. Insert the stitch plate opener at the recess and turn.



Cleaning

When necessary, the feed teeth and the bottom of the bobbin area must be cleaned with the brush, which you will find with the accessories.



Replacing the stitch plate

Replace the stitch plate about 5 mm in front of the rear edge and push it backward. Replace the bobbin cover.

Trouble shooting

Always start by checking the needle
Always start with a new needle as soon as you discover that a stitch is not what you expected. Test sew on a scrap of the fabric you are sewing. Check that you have chosen the correct needle and see that it is correctly inserted. See page 15.

Unattractive stitches
The thread tension is not correct. See page 13. Make sure that the thread is not catching. Certain thread spools are unsuitable for spooling from the horizontal spool pin. Try instead with the vertical spool pin.
The machine may be incorrectly threaded. Be sure to place spool holders correctly.
The correct threading is shown on page 9.
Wrong bobbin thread. It should be of the same thickness as the upper thread except when sewing embroidery.

The needle breaks
The needle can strike against stitch plate and break. Change the needle. See page 15.

The upper thread breaks
Check the thread spool to see that it has not caught in any way.
The needle eye may have sharp edges which cut the thread. If so, change the needle. See page 15.
The upper thread is incorrectly threaded. See page 9.
The upper thread may have too much tension. Refer to page 13.
The hole in the stitch plate may be chipped and have sharp edges. We recommend that you replace it.

The bobbin thread breaks
The bobbin thread may be incorrectly threaded. See page 12.
The stitch plate hole is damaged. See "Upper thread breaks".

Irregular thread tension
This may be due to poor quality thread. When sewing with cotton thread, increase the thread tension. See page 12.

Irregular bobbin winding
The machine is not correctly threaded for bobbin winding. See page 11.

The fabric puckers
The upper thread tension is too tight. See page 13 for correct thread tension.
Use the correct presser foot as recommended by the infodisplay.

The machine does not feed the fabric
The stitch length is too short. Increase stitch length.
The feed teeth may be lowered. Raise them by turning the dial to ▲▲▲. See page 15.
The feed teeth are full of dust and dirt. Clean with the brush. See page 47.

Fault-finding

The stitch is too loose - fabric layers not held together
The thread tension is far too loose. Page 13 shows how to adjust the thread tension.

Incorrect stitch
If the machine does not sew the stitch indicated by the infodisplay, it is possible that the electronics have been disturbed in some way, perhaps by a short power cut or electrical disturbance. Shut off the main switch, wait a few seconds and try again. If the fault remains, contact your dealer.

Machine runs sluggishly
Dirt or lint has built up under the stitch plate. Loosen the plate and brush clean between the feed teeth and in the bottom area. See page 47.

Main motor does not work
The electronic overload protector may have switched off. Shut off the main switch, wait about a minute. Then switch the machine back on.

Balance setting for buttonhole
Balance can only be set if a buttonhole is selected. Press the buttons  and  until the letters **BAL** are indicated to the left on the display. Instead of the stitch length indication, a balance indication is now shown. When you wish to increase the density of the right column, press stitch length button (-). When you wish to decrease the density, press stitch length button (+).

The balance can be set between -5 to +5. The balance indication on the infodisplay will change in steps with each touch. When you select another stitch, the display goes back to show the sitch length indication. The machine always retains the last made balance setting.

Expert assistance
Have your machine "tuned up" regularly by your dealer. If you have followed the preceding points and still do not get satisfactory results, you should contact the dealership where you bought the machine. When the machine is being checked, it is a great help if it can be test sewn under as similar conditions as possible as when you used it. Remember to take a sewing sample along with you, preferably of the fabric and with the thread you intend to use.
A sewing sample will often give much better information than words.

Non-original parts and accessories
The warranty does not cover any defect or damage caused by use of non-original accessories or parts.

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Declaration of Conformity to EC-directive

Herewith we confirm that this Sewing Machine in its essential parts, fulfils the LVD Directive 73/23/EEC, EMC directive 89/336/EEC and the CE Marking Directive 93/68/EEC.
This confirmation is based upon Certificate or Technical Construction Files, performed by SEMKO.
The complete archive file is drawn up and maintained by:

Viking Sewing Machines AB
Research & Development
Department VP-TX
SE-561 84 Huskvarna
Sweden

Husqvarna Viking reserves the right to change the machine equipment and the assortment of accessories without prior notice, or make modifications to the performance or design. Such modifications, however, will always be to the benefit of the user and the product.



Purchase your top-of-the-line from your local authorized Husqvarna Viking Dealership:

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