Husqvarna VIKING

# User's Guide

## *Rose* 605




KEEPING THE WORLD SEWING

This houshold sewing machine is designed to comply with IEC/EN 60335-2-28 and UL1594

# 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 Watt.

## 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 or infirm persons.
- 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 authorised 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 fabric while stitching. It may deflect the needle causing it to break.
- Switch the sewing machine off (“0”) when making any adjustment in the needle area, such as threading needle, changing needle, threading bobbin, or changing presser foot, etc.
- Always unplug the sewing machine from the 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”) position, then remove plug from outlet.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- Hold plug when rewinding into cord reel. Do not allow plug to whip when rewinding.

# SAVE THESE INSTRUCTIONS

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# Summary

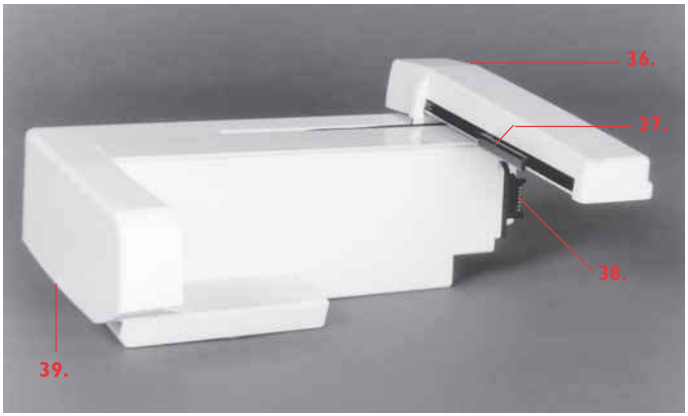



1. Door
2. Thread take-up lever
3. Presser foot pressure dial
4. Thread guide
5. Buttonhole sensor socket
6. Light
7. Needle bar
8. Presser foot
9. Free arm
10. Bobbin cover
11. Base plate
12. Drop feed dial
13. Needle plate
14. Presser bar and Presser foot ankle
15. Needle clamp screw
16. Thread tension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

# Summary




32. Handle
33. Presser foot lever
34. Thread cutter
35. Embroidery unit socket
36. Embroidery arm
37. Embroidery Hoop attachment
38. Embroidery unit socket
39. Release button



## Unpacking



1. Place the machine on the table or cabinet, remove the packaging and lift off the cover.
2. Remove the side parts of the packing material, the extension table, the foot control and finally the protection cover.
3. The machine is delivered with an accessory bag, a main cord and a foot control cord.
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.
2. Wind the cords around your hand and place the foot control cord in the foot control storage space and the main cord in the pocket of the cover. There is also space provided for the operating manual. Remove the embroidery card and the embroidery unit. Replace the cover protecting the socket on the machine.
3. Check to ensure that all accessories are in the accessory tray. Slide it onto the machine behind the free arm.
4. Lower the presser foot.
5. Place the foot control, underside toward you, on the accessory tray at the back of the machine, where also the extension table is placed.

Make sure the extension table is fitted into the right part of the accessory tray and fold the table toward the machine. Fold down the handle and replace the cover.

## 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/FR4".**

## 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**

This Sewing Machine 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.

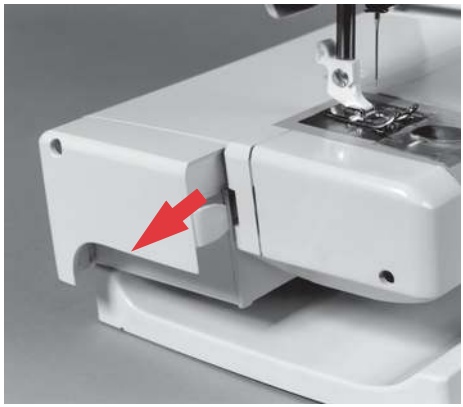
## Accessory box

1. Open the Accessory box by placing your finger in the space on the top and lift upward.
2. In the Accessory box there is a special tray for presser feet and bobbins plus space for other accessories.
3. Store the presser feet and the bobbins in the tray from the beginning so they are always easily accessible (refer to the figure).



## Extended sewing surface

1. Keep the Accessory Tray on the machine to provide a larger flat work surface.
2. Slide the Accessory Tray to the left when you wish to remove it and use the free arm.
3. To facilitate sewing trouser legs and sleeve hems use the free arm.
4. To replace the Accessory Tray, slide it tight onto the machine.

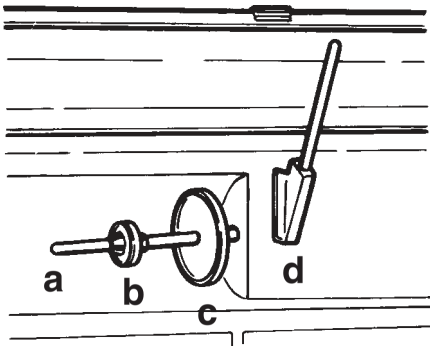


5. The extension table provides an even larger work surface. To attach the extension table, place the rear, right corner to the Accessory Tray and the front, right hook onto the recess on the free arm.
6. To remove it, push slightly in the direction of the arrow at the front right corner, then lift the hook out of the free arm.

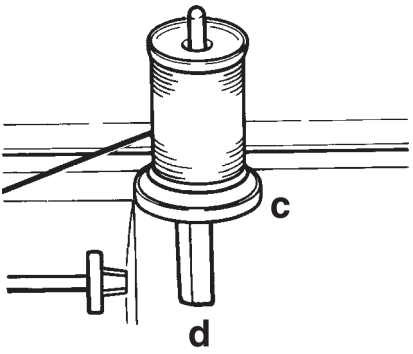


## Spool pin

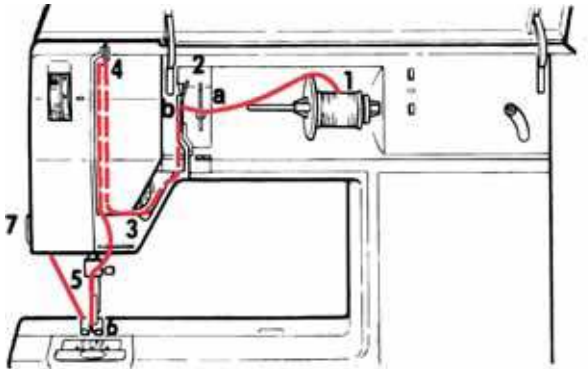
The machine has spool pins suitable for all types of thread. The main spool pin (a) is horizontal - the thread reels off the stationary spool. Place the spool so that the thread reels counter-clockwise.
There are two spool holders on the spool pin. With narrow thread spools, the small holder (b) is placed 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 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.



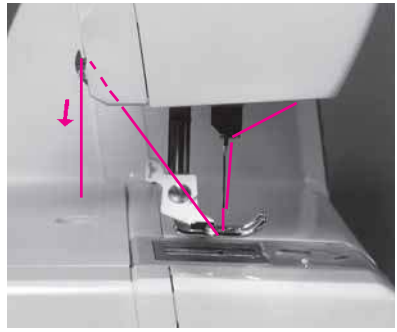
# Threading the upper thread




⚠ Switch off the main switch.

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 knife 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

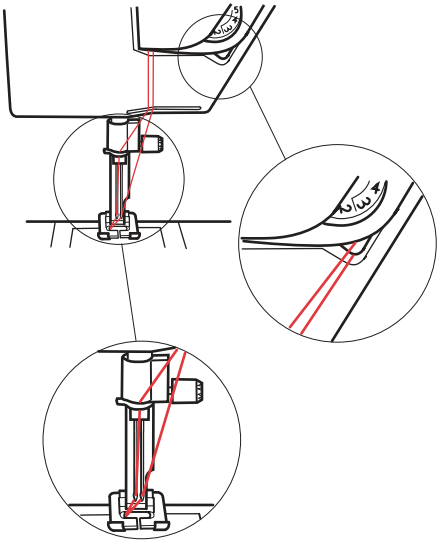
Switch off the main switch.



**1.** Insert a twin needle.

**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.

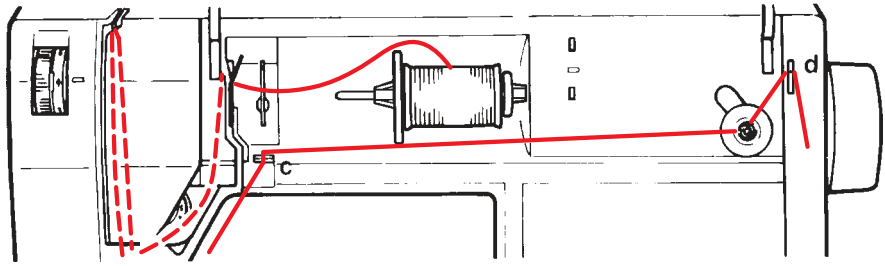


**4.** Attach the extra spool pin onto the machine. Place a spool holder under the thread.

**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




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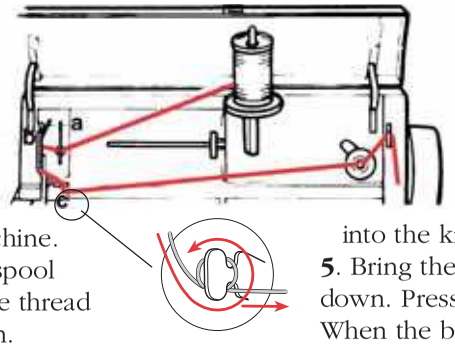
Make sure that the presser foot is up and the needle is in the highest position.

**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.

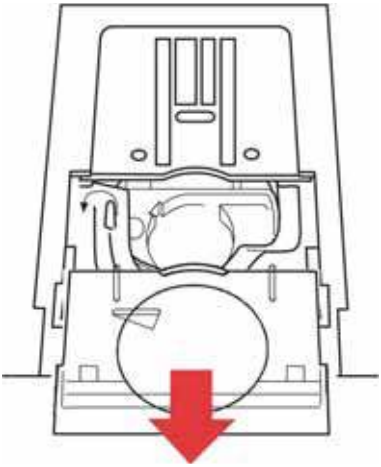
**Note!** We do not recommend winding specialty threads such as clear nylon or other stretchy threads through the needle. Instead see "Bobbin winding - vertical spool pin" below.

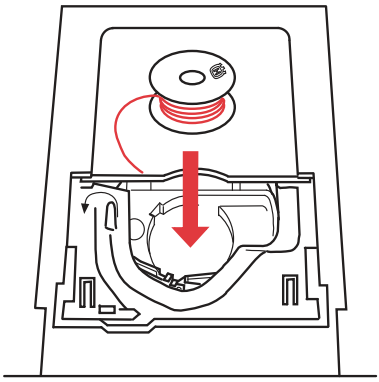
## Bobbin winding - vertical spool pin




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

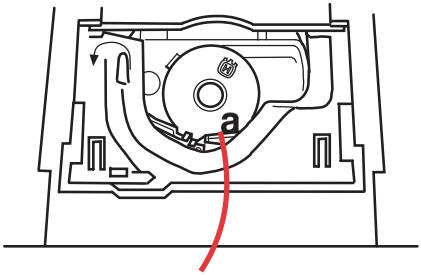


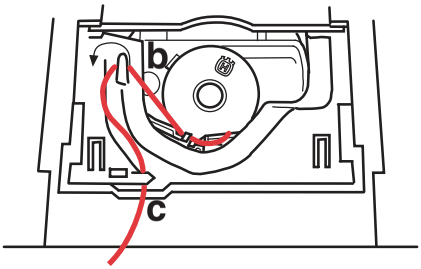


⚠ Switch off the main switch.

**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 (H) 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.

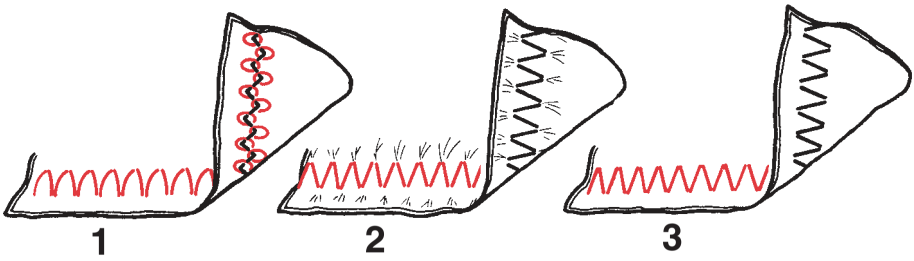
## Thread tension

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 19. 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.
Normal thread tension is 4.
When selecting buttonholes and decorative stitches the thread tension is reduced.




When topstitching with a coarse 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.

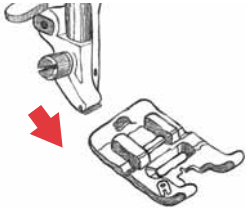
By raising the presser foot lever as far as it goes and holding it there, the lift height of the presser foot can be increased by several millimeters.

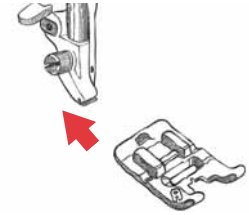


## Changing the presser foot

⚠ Switch off the main switch.

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.





## Changing the needle



Switch off the main switch.

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

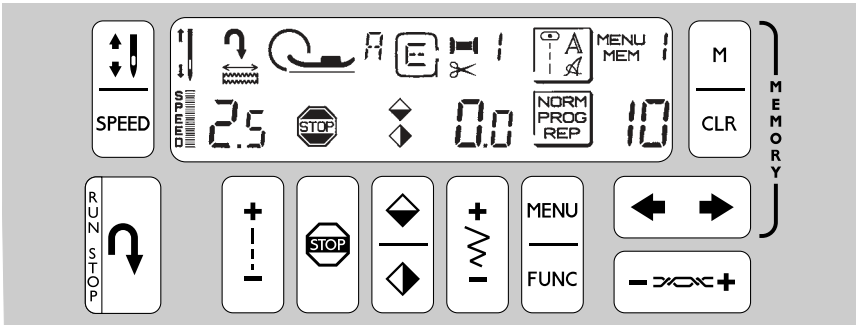


The feed teeth are lowered when you turn the dial to the left to ▬ . Turn the dial to the right to ▲▲▲ if you wish to raise the feed teeth. The feed teeth will not come up until you begin to sew.

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.

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






**Needle stop**

This button sets whether the needle stops up or down in the material when you lift your foot from the foot control and stop sewing. Point the arrow upwards - the needle will stop in the up position. When you touch the button so that the arrow points downward, the machine will stop with the needle in the material.
You can also 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.

**Sewing speed**

Use the **SPEED** button to set the three different maximum speeds. The machine will sew at different maximum speeds when the foot control is fully depressed. For slower speeds within the range simply press the foot control less.

When Embroidery position is set, only the slowest speed can be selected.

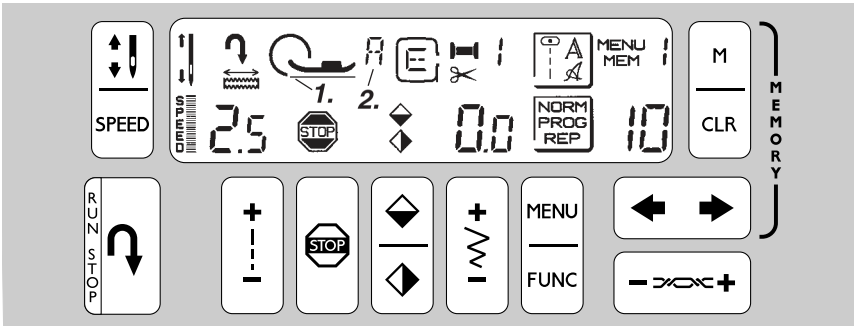
All stitches in the machine have a pre-set maximum speed at which they can be sewn. When you select a stitch the machine automatically sets the correct maximum speed.

**High speed**
**Reduced speed**
**Slow speed**

**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)






### 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. Not active in **REP** position.

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

### 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 by selecting a new stitch. The button has the same function both in **NORM** and **REP** position (See "Satin taper...", page 25, **STOP,** page 24.

Embroidery sewing without thread color change, see page 32.

### Mirror image

You can mirror a stitch by using the buttons ⬗, mirror image side to side and ⬙, mirror image end to end . The symbols will be displayed.

When sewing embroideries only mirror image side to side can be used.

### 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. Not active in **REP** position.

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

# Functions / Infodisplay

### MENU - Selected group of stitches




Your machine has three menus - one for stitches, two for letters.

Your choice is displayed when you have pressed the **MENU** button to select stitches, outline block letters or script letters. The stitch number or the selected letter will also be displayed.



When sewing embroideries the menu number will be displayed to the upper right.

### FUNC - Selected function




When you turn on the machine, the selected function displays **NORM**. Touch the **FUNC** button to **PROG** for programming. If you touch the button again, **REP** = repeat will be displayed to sew your programmed stitches. After a third touch, **NORM** is displayed again.



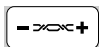
Not used when sewing embroideries.

### Memory - position



These buttons are used to advance or return within a memory, when entering or checking stitches. See page 21.

### 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.

### CLR - Deleting stitches




This button is used while in **PROG** if you wish to delete what you have programmed. See page 25.



After finishing your embroidery sewing, touch the **CLR** button. The embroidery arm returns to ready position.

### Memory - number




The machine has 4 different program memories. Each memory will hold up to 55 stitches or letters. The button is used to advance to the memory required in **PROG** or **REP.** The number is shown on the display to the upper right. See page 21.



Not used when sewing embroideries.

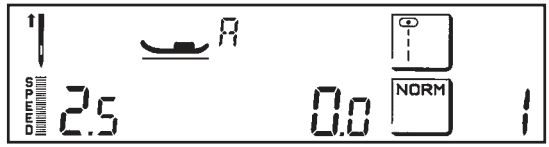
### Buttonhole sensor foot (1)

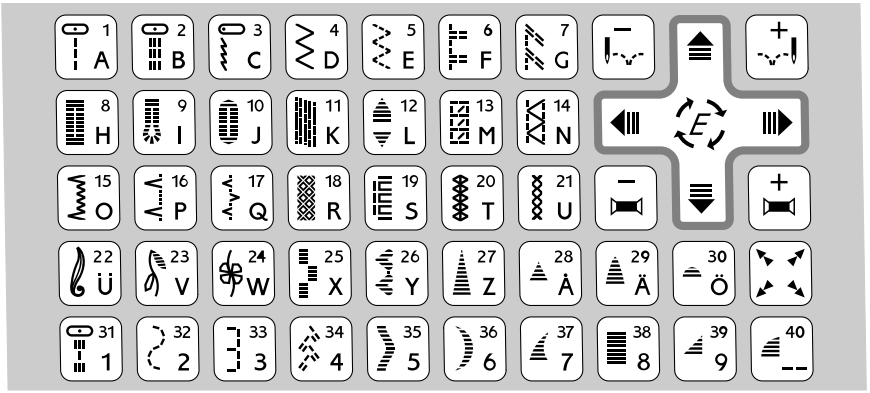
When you plug the buttonhole sensor foot into the machine and place the white field of the measurement wheel against the white mark, the symbol will show brightly on the display. See page 37.

### Recommended presser foot (2)

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

## Function / 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 menu of stitches shown on the selection buttons with white symbols and two menus of letters shown in black symbols.



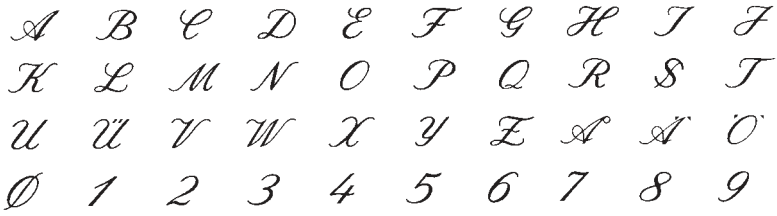

With the **MENU** button you select which menu you wish to sew.

The selected menu will be displayed, for stitches, A or A for letters.

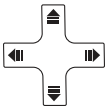
To the very right on the Infodisplay the number of the selected stitch or the selected letter is displayed.

When the embroidery unit is connected only the numbers of the selection buttons are used. In the Embroidery booklet each embroidery has a number.



# Embroidery functions



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



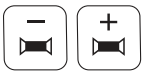
**Rotation** Touch this button once and your embroidery will rotate a quarter of a turn.



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



**Check size**
This button allow you to step from one corner to another within your embroidery.



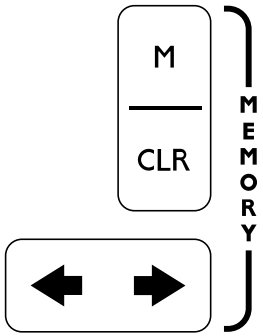
**Color advance**
Many of the embroideries include several colors. These buttons allows you to step forward (+) or backward (-) to the beginning of each thread color change.




When your embroidery sewing is finished, touch **CLR.** The embroidery arm returns to ready position. The embroidery unit can now be removed and stored in the box.
Read more about embroidery sewing on page 26-35.

## MEMORY

The machine has 4 different program memories. Each memory holds up to 55 stitches or letters. You can combine any stitches/letters you wish with the exception of stitches 8-12.
When selecting **PROG** or **REP**, the memory you last used will be displayed. Your machine will remember what you have programmed even when it is switched off.
Use the buttons marked with arrows to advance or return within the memory, ➡ to the right and ⬅ to the left. These buttons are used in **PROG** position when programming and in **REP** if you wish to check what is programmed or if you wish to start sewing a few stitches into the program.



# Programming

Touch **FUNC** so that **PROG** is shown on the display. If you already have a program in the memory this will now be shown.
**1.** Touch **CLR** to empty the memory. See page 25.
**2.** Touch **MENU** to select the desired menu for your new program (stitch, or your choice of lettering style).

In this way you can combine different stitches according to your own taste and imagination. With the button ⬅ you can go backwards to see what you have programmed.

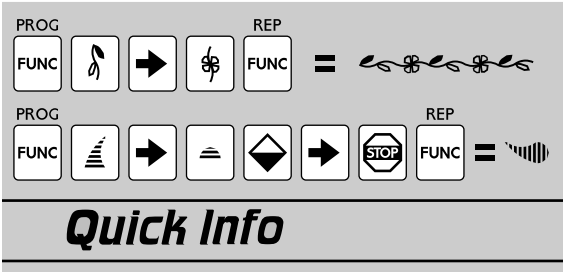
To sew your program, touch **FUNC** to the **REP** position. The machine will be positioned at the first programmed stitch.



### Example

Select a stitch e.g. 
Touch the button ➡. The stitch is now entered in the memory.
Select another stitch e.g. .
Touch the button ➡.

Also see "Quick info" on the machine.



## Programming stitches from different menus

Example:
Select **PROG** function. Select the stitch menu.

Select a stitch, touch ➡.
Change menu to block letters.



Select a letter K, touch ➡.

Select another letter A, touch ➡.

Change to stitch menu.

Select a stitch, touch ➡.
Touch **STOP.**
Touch **REP** to sew.



## Programming with stitch changes

In **PROG** position you can change stitch length and width or mirror stitches. Certain stitches, however, have a limited stitch length.



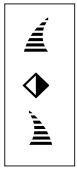
**1.** Select desired stitch.
**2.** Use the stitch length and the stitch width buttons (+) or (-) or the mirroring buttons ◆, ◆ to change the setting before entering with the ➡ button.

## Corrections

If you wish to change a stitch or a letter to another one in your program:
**1.** Touch **FUNC** to **PROG**.
**2.** Use the buttons marked with arrows ➡ or ⬅ until the stitch number or the letter is displayed.
**3.** Select the new stitch or letter.

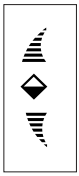
## Mirror images

**Mirror image side to side** ⬗.
In **NORM** and **PROG** only the stitch selected is mirrored. The entire program is mirrored in **REP.** You can also mirror the width when you wish to change the straight stitch needle position, e.g. from left to right.



When mirror image side to side is selected the symbol ⬗ will be shown on the Infodisplay.

**Mirror image end to end** ⬙.
In **NORM** and **PROG** only the stitch selected is mirrored. The entire program is mirrored in **REP.**
When mirror image end to end is selected the symbol ⬙ will be shown on the Infodisplay.



If you have programmed **STOP** at the end of your program and then mirror the entire program in length, the **STOP** will be placed at the beginning. Use the button ➡ and advance to the next stitch to avoid **STOP**.

## Programming STOP

The **STOP** button is used to conclude a stitch program, i.e. the machine fastens the thread and stops automatically when the sewing of your stitch or letter combination is completed. The symbol ⊢ is displayed to the very right.
You can continue your programming even after having pressed **STOP.** In REP position the STOP is displayed. Then, when sewing, the machine stops automatically and fastens the thread in every position where you have programmed **STOP** and at the end of the stitch combination. Just press the foot control again and the machine will sew the rest of what you have programmed.
If you wish to repeat your stitch combination without having the machine stop, press the **STOP** button to cancel the **STOP** in **REP** position.

The symbol STOP will disappear from the Infodisplay.
(If you should forget to enter **STOP** while in **PROG** it is also possible to use the **STOP** button in **REP** position. The **STOP** will remain until you select another function or stitch.)
If you have programmed **STOP** at the end of your program and then mirror the entire program in length, the **STOP** will be placed at the beginning. Use the button ➡ and advance to the next stitch to avoid **STOP**.

If you use the **STOP** button when sewing embroideries, the machine will sew the entire embroidery without stopping to change thread color.



## Look through the program

If you have programmed several of the memories you can press **FUNC** for **PROG** or **REP.** Use the **M** button to select the following memory and then advance with the buttons ◄ ►.

The memory last used will appear on the display when you select **PROG** or **REP.**

## CLR - Deleting stitches

If you wish to delete a certain stitch within the program:

1. In the **PROG** position, use one of the buttons ◄ ► until the actual stitch number is displayed.
2. Touch **CLR**. Now the stitch and everything to the right of it will be deleted.
3. If you wish to delete the whole program, touch the **FUNC** button to return to **PROG.** The machine will be positioned at the first programmed stitch.
4. Touch **CLR. CLR** deletes the program of stitches in the selected menu.

If you by mistake touch **CLR,** simply touch **CLR** again to bring back the balance of your program as long as you have not used another button. When the program memory is empty the stitch length and width is shown as 0.0/0.0 on the display.

Letters are deleted in the same way.

## Darning and taper satin stitches

The stitches 11-12 can only be selected in **NORM** position. They can not be programmed or combined but are set individually and automatically. For stitches 11 and 12 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.
If you attempt to program these stitches in the **PROG** position, **PROG** is flashing to indicate that this is not possible.

# Embroidery

The box contains Embroidery unit, embroidery hoop, embroidery booklet, embroidery template, template pencil, embroidery card, a pair of scissors, two thread nets and a test kit.
To prevent misplacing your embroidery accessories, store them in the box after sewing.



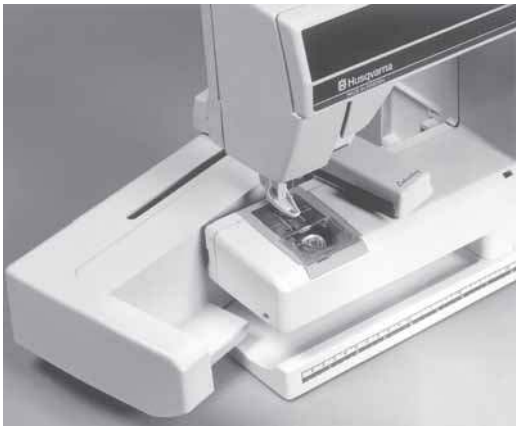

## Connecting the Embroidery unit

Switch off the main switch.

Make sure the machine is turned off while connecting the embroidery unit.



1. Slide off the accessory box.
2. There is a covered socket at the back of the machine. The embroidery unit plugs into this socket. To remove the cover, carefully pry it off with the accessory screwdriver.
3. 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.
To remove, turn the machine off, push in the button at the center of the left side on the underside of the unit and slide off. Remove the embroidery card. Replace the cover protecting the socket on the machine.

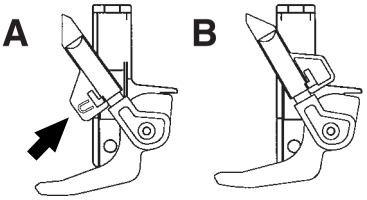
## Changing to the embroidery presser foot

Switch off the main switch.



1. Raise the presser foot lever.
2. Unscrew the presser foot ankle.
3. Place the presser foot U from behind onto the presser bar. The arm of the presser foot should be behind the needle clamp screw.
4. Push the presser foot upward - make sure the holes match each other.
5. Insert the screw and tighten the embroidery presser foot.

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




**Quilting or sewing terry cloth:** When selecting a quilt stitch the symbol appears on the display. Turn the lever upward (B). Also when sewing terry cloth or other thick fabrics, use setting (B).

## 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.

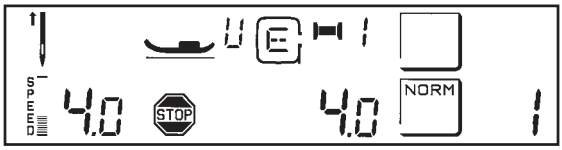
Use a very fine thread as bobbin thread. There is a special bobbin thread called darning cotton or basting thread available for this kind of embroideries.

**Note:** When bobbin winding you can use the button to start and stop. See page 12 "Bobbin winding - vertical spool pin".

## Get started

**1.** Insert the embroidery card into the slot on the right side of the machine. To remove the card, pull it straight out.



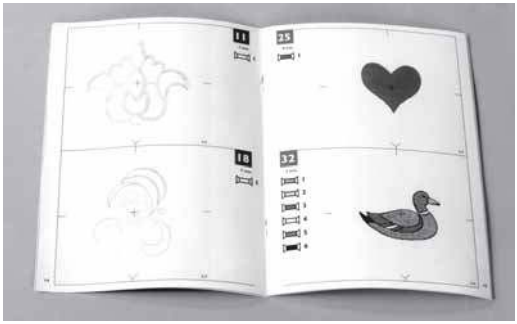




**2.** Turn the machine on. If the presser foot is in lower position the symbol is flashing on the display. When raising the presser foot, the machine carries out a self test. If the needle is in its down position it will automatically go to up position. The embroidery unit will take its ready position.

**3.** When you have finished your embroidery work, touch **CLR**. The arm returns to ready position. Turn off the machine. To remove the Embroidery unit push in the button on the left center underside of the unit and slide it off. Take out the Embroidery card. Replace the cover protecting the socket and slide on the accessory box.

## Embroidery booklet

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

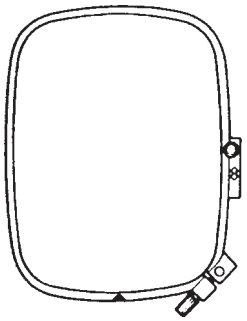


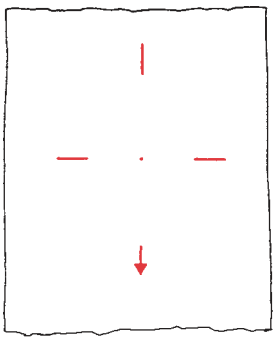
You will also see how each embroidery is placed related to the center point of your sewing space.
The row of thread spools next to the embroideries shows the number of thread color changes and the order of changes.

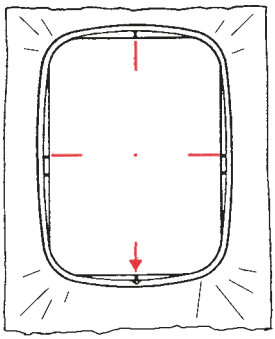
The sewing time - excluding thread color changing, is also given.

# 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 button located to the right on the hoop and pull the hoop towards you.







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

# Sewing embroideries

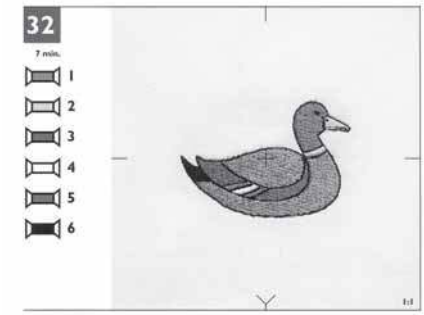
**1.** Put on embroidery presser foot U, see page 27.

**2.** 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.

**3.** Thread the bobbin thread according to "Threading" on page 13 and check to be sure the thread lies under the tension springs. Cut the thread in the thread cutter. **Hint:** Slide bobbin cover on, then cut thread. Always check there is enough bobbin thread before starting a new embroidery.

**4.** Insert the embroidery card. The symbol flashing on the display indicates if the embroidery card is not inserted or not inserted fully.

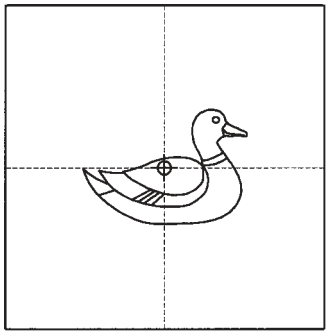
**5.** Select desired embroidery motif from the Embroidery booklet. Each embroidery has a number. The buttons 1-35 are used to select embroideries.




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

**6.** 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, sews a starting stitch up to the beginning of the embroidery, sews a few stitches more, gives a "beep" and stops. A pair of scissors flashing on the display indicates that you can cut the starting thread tail.



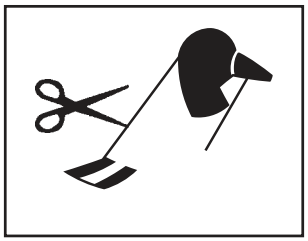
**7.** Touch the button and the machine sews the rest of the embroidery or up to next thread color change.

**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.

**8.** The machine stops automatically when it is time to change thread color. The display indicates which thread color change you have reached by a flashing number next to the thread spool .

A flashing number indicates the first stitch of the "new" thread color. The number stops flashing when you begin to sew.

**9.** Once thread is changed, start sewing again. The machine stops for cutting the thread tail and at 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 stops also when the thread spool runs out. When this occurs, remove the work and the bobbin. Re-thread the machine, replace the bobbin. 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, remove the work and the bobbin. Wind and replace the bobbin. Replace the work, pull the upper thread back. 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 **CLR.** The embroidery arm returns into ready position. Touch **CLR** to move the embroidery arm back to stitch position and pull the upper thread back.

**After finishing the embroidery sewing:**

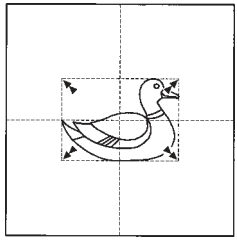
**1.** Remove the embroidery hoop by pressing the button to the right on the hoop. Pull the hoop toward you.

**2.** Touch **CLR** and the embroidery arm returns to ready position. In this position you may remove the embroidery unit from the machine (by pushing the button on the center left underside), after turning the machine off.

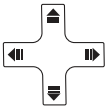
# Function buttons - embroidery



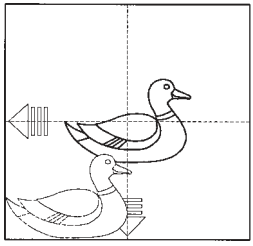
The check size button allows you to step from one corner to another within your embroidery, so that you will know the size of the embroidery and where on your fabric it will be placed.



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

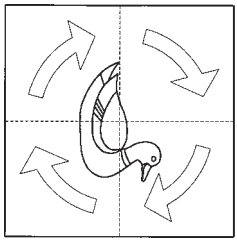


These positioning buttons allow you to move the embroidery in four directions. The limit in each direction is indicated by a "beep" and the symbol flashing on the display.



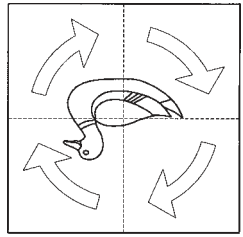


*Touch this button once* and your embroidery will rotate *a quarter of a turn.*



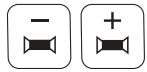


*Touch the button twice* and your embroidery will be sewn *upside-down.* Watch the display to see how the symbol has been rotated after each touch on the button.





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**

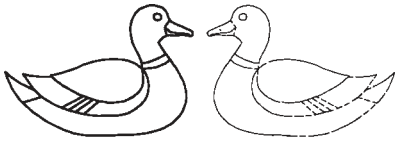
If you have selected an embroidery including several colors and you wish to sew this only in one color: Touch **STOP** and all stops for thread color change will be cancelled. The machine sews the entire embroidery without stop.

**Embroideries using several menus**

If you have an embroidery card including 2 or 3 menus you can change menu by touching the **MENU** button or button 35.

## Mirror image embroideries

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



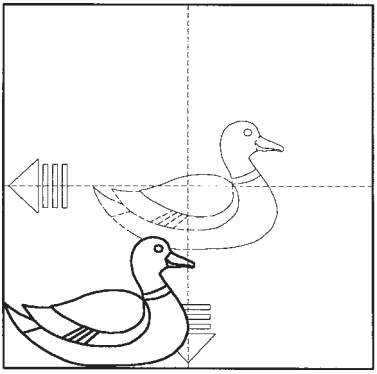
Read more about Mirror image on page 24.

## Color information

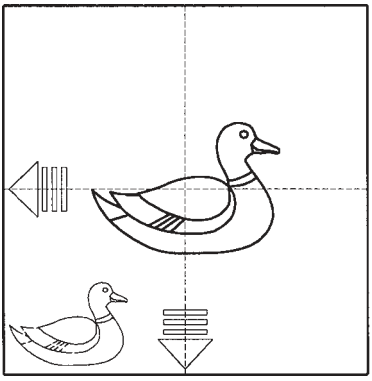
The thread color for each part of the embroidery can be checked by pressing one of the buttons ◀ ▶ . Two letters (or numbers) representing the color will replace the stitch number on the display for a few seconds. A - or a + above the letters indicates light or dark shade of the color. See page 35 for information on how to set the language desired and a table including the colors represented.

## Enlarging and reducing embroideries

You can make the embroidery motifs 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 motif.
When enlarging or reducing the embroidery we recommend changing the thread thickness for the best result, see "Thread", page 27.
A "beep" indicates when a limit is reached. You can change stitch width and stitch length independently.



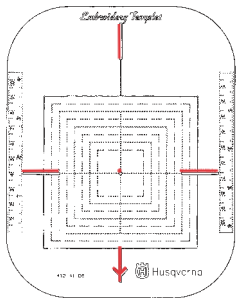
Change the size before moving from the center position. If the embroidery is moved first the size change may be limited by the motif reaching the edge of the 100x 100 mm area.



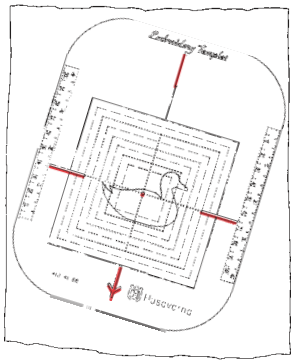
## Use the embroidery template

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 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.

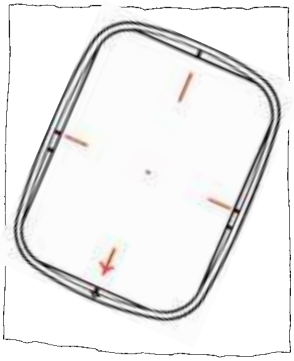



**2.** Place the template on your fabric where you wish to sew the embroidery.




**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 28.



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

# Color information / Language setting

### Color information

The suggested thread color for each part of the embroidery can be checked by pressing one of the buttons ◄ ► . Two letters representing the color will replace the stitch number on the display for a few seconds. A - or a + above the letters indicates light or dark shade of the color.
When delivered, the machine is normally set at language code 0.

| Language Code | Language |
|---|---|
| 0 | (numerical) |
| 1 | Swedish |
| 6 | Danish |
| 11 | Finnish |
| 21 | Norwegian |
| 26 | English |
| 31 | French |
| 36 | Dutch |
| 41 | Italian |
| 46 | Spanish |
| 51 | German |
| 60 | Portuguese |
| 81 | Croatian |
| 82 | Polish |
| 90 | Czeck |

| Color | Numerical indication 26 (Eng.) | 0 (num.) |
|---|---|---|
| Black | BK | 00 |
| Blue | BL | 01 |
| Green | GN | 02 |
| Red | RD | 03 |
| Violet | VT | 04 |
| Yellow | YE | 05 |
| Grey | GY | 06 |
| Orange | OR | 07 |
| Pink | PI | 08 |
| Brown | BR | 09 |
| White | WH | 10 |

### Language setting

To have the thread color information for embroideries adopted to your own language press and hold the **CLR** button while switching on the machine. A language code is now flashing on the display in place of the stitch number. Use the ◄ ► buttons to select the desired language, 26 for English or 0 for numerical color representation, see table. When set, switch off and on the machine again.

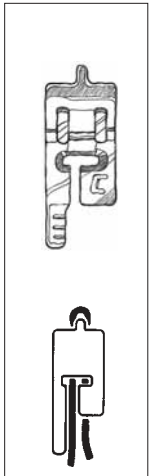
# Buttonholes

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

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

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

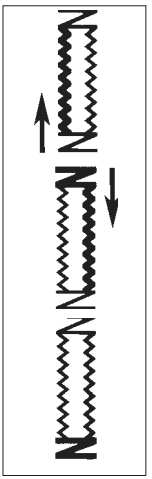
The buttonhole feet has guide lines to determine buttonhole length. The middle mark on foot C gives a 1.5 cm buttoning edge. Place the button on the presser foot against the needle and you will be able to see which mark on the foot corresponds to the button. You will sew until the first buttonhole column 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.
8. The machine will bartack the other end, a few tie off stitches in the first column of the buttonhole and will then stop. Sew the next buttonhole in the same manner.



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

# Buttonhole sensor foot



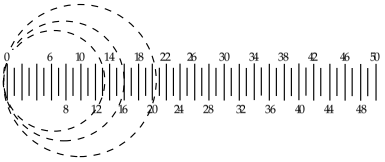
1. Snap on the buttonhole sensor foot. Make sure that the cable is firmly plugged into the yellow socket (see picture). The symbol will flash until a buttonhole is selected.
2. Select a buttonhole on the stitch panel. The buttonhole will be pre-set for a 16 mm button when the machine is turned on. The number 16 is therefore shown on the display in place of the stitch length together with the symbol .
3. If you are using a different size button, measure the button on the buttonhole rule below and set the correct size with the stitch length buttons (+) or (-). The size will change by 2 mm at a time.
4. Turn the measurement wheel so that the white area is lined up with the white mark. When the measurement wheel is correctly set, the circle in the symbol will stop flashing.
   If the circle or the whole symbol is flashing the machine can not be started.

### Buttonhole size

5. The machine will sew the correct size buttonhole for the **button size** you have selected.
   The buttonhole will be sewn in one step, and when the buttonhole is completed the machine will stop automatically.

### Changing the density/stitch length

To change the stitch density of the buttonhole columns, adjust the length setting of the stitch. Unplug the buttonhole sensor. The stitch length will then be shown on the Infodisplay again and you will be able to adjust the density of the buttonhole. When you plug in the buttonhole sensor foot, the display goes back to showing the size of the buttonhole, but remembers the new stitch length setting.




Place the button as shown on the circles on the picture and you can easily see the size needed for your buttonhole.

## 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.** Touch **FUNC** to **NORM** and select zigzag .
**3.** Lower the feed teeth with the dial. See page 16.
**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 presssing one of the stitch width buttons (+) or (-).

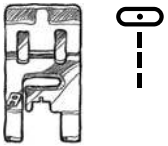
## Button with a shank

Use the clearance plate for this purpose. Use the thin end when sewing buttons on light fabrics, the thick end for heavier fabrics.
Push in 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

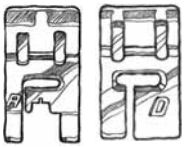
Straight stitching is used to join fabric which does not stretch and for seams which will not be subjected to great strain.
When you select straight stitch the machine will automatically set the average stitch length.
Experiment until you arrive at the exact setting for the actual work you will be doing.



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

## 25 Needle Positions

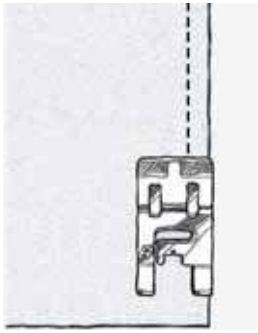
When topstitching using straight stitch and reinforced straight stitch, the needle position can be adjusted in steps. Use the stitch width button (+), 0 is the center position, width 6 is left needle position, width 6 mirror imaged ◆ is right needle position. To return to center position, use the stitch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

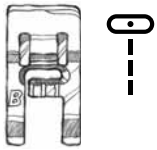
To sew about 2 mm from the edge, snap on presser foot A when sewing light fabrics and presser foot D for other fabrics.
Place the fabric and sew so that the edge follows the inside right edge of the presser foot D or the first mark of the left edge of the presser foot A.
If you wish to sew about 5 mm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



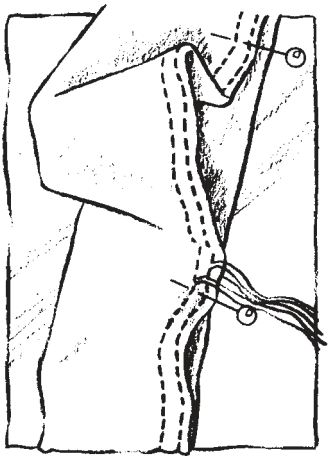
Place the edge of the fabric so that it follows the outside right edge of the presser foot and sew the hem.

# Gathering with straight stitch

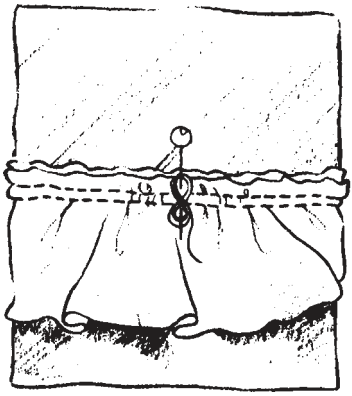
Use a slightly longer stitch than normal straight stitch, 3.5-5.0. Always sew two gathering threads next to each other.



**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.



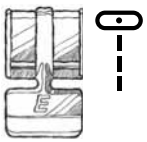
**2.** Pull both bobbin threads from the same direction and distribute the gathering evenly. When half the distance is gathered, wind the threads around a pin. Then gather the other half from the other direction. Distribute the gathering evenly.



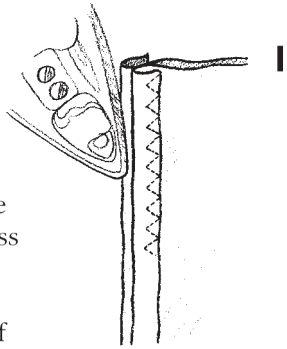
**3.** Join the pieces with straight stitch, the gathered material facing up. Sew between the straight gathering rows. Hold the gathering with your fingers on both sides of the needle to avoid folds. Remove any gathering thread that is visible.

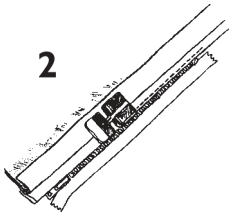
## Sewing zippers

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.



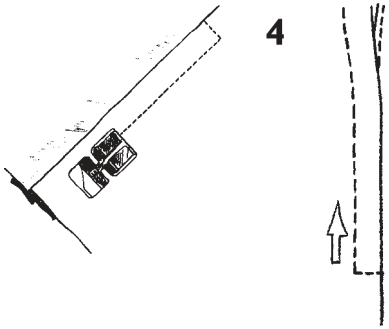
## Lapped zipper







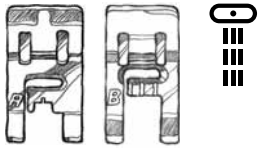



1. Sew the seam together to the bottom of the zipper placket. Baste the rest of the seam. Leave about 2 cm open at the top. Press seam open. **Set the needle to the right position.**
2. Place presser foot E to the left of the needle. From the wrong side fold the fabric to one side so both seam allowances 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

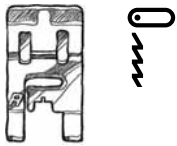
The reinforced straight stitch is stronger than ordinary straight stitch, due to the fact that it is a triple and elastic stitch.
The reinforced straight stitch can be used for heavy stretch fabrics, for crotch seams which are subject to considerable strain and for topstitching in heavy fabrics.






## Stretch stitch

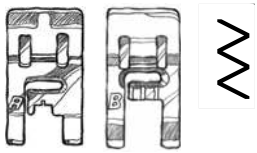
The stretch stitch makes a pliable, stretchy seam that is suitable for sewing together pieces of light stretch fabric.
The stretch stitch is ideal for topstitching in light stretch fabrics.



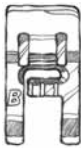
## Zigzag

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.

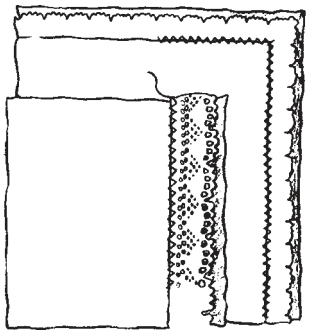
You can change this setting by pressing either the (+) or (-) button on the width and/or length.
Experiment until you reach the best setting for your actual work.



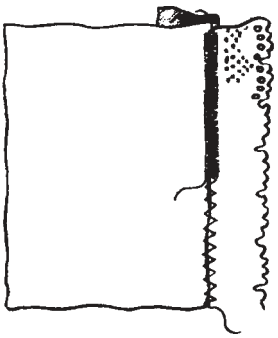
# Lace edging



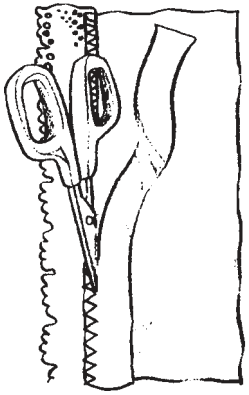
**1.** Place wrong side of lace to right side of fabric matching edges. Sew along inner edge of lace with zigzag, stitch length 1.5, stitch width 1.5.



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



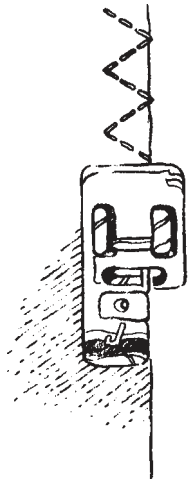
**3.** Cut off the seam allowance up to the stitching on the wrong side.



## Three-step zigzag

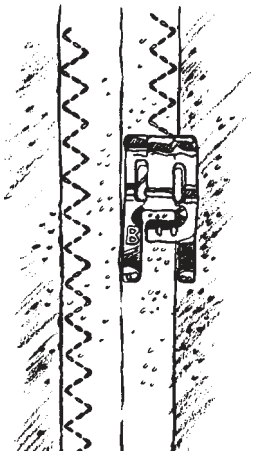
### Overcasting

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

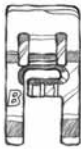
Three-step zig-zag , can be utilized for mending and darning. A threadbare spot is mended by sewing back and forth with three-step zig-zag.

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.



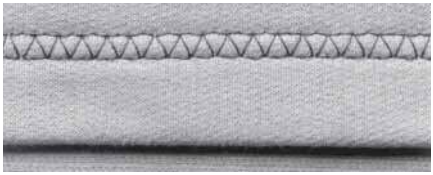
# Flatlock

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



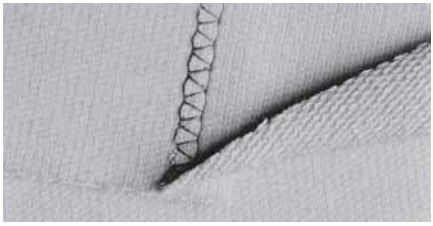
You can produce a decorative hem by folding a single hem to the wrong side and sewing the flatlock from the right side.

Trim excess hem to stitching from the wrong side.

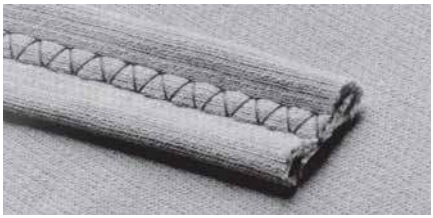


To sew an overlapped seam, lap one piece of fabric over the other piece and sew flatlock stitch over the fabric edge on the right side.

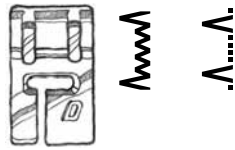
Trim from the wrong side or sew another seam from the right side.



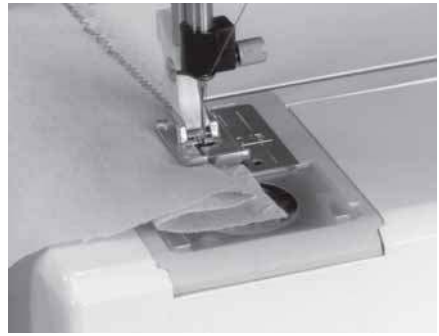
**Narrow belts and bands**
Fold the fabric in thirds and sew in the center. Trim excess material from underneath.



## Blind hem

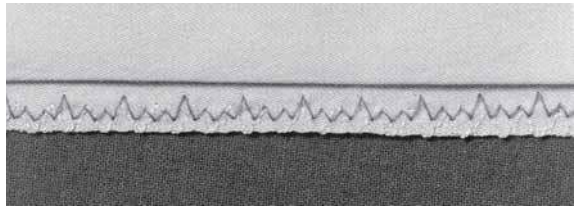


Snap on presser foot D for blind hem. As a general rule the elastic blind hem is used for knit fabrics and the woven blind hem for woven fabrics.



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

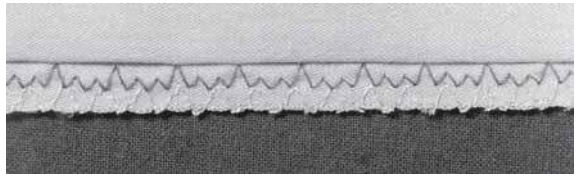
**1.** If the stitch does not catch the folded edge, increase the stitch width (+).



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

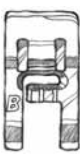


**3.** For an invisible hem the needle catches a single thread of the folded edge.



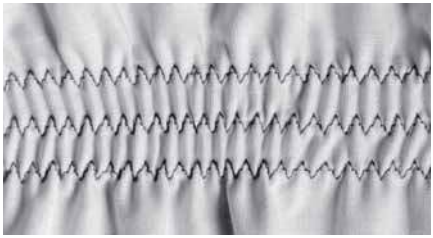
## Bridging stitch

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 heavy stretch fabric. Snap on presser foot B.
**Overcast stitch**, may be used to sew light and medium non-stretch fabric and light stretch fabric. Snap on presser foot J.
**Overlock stitch** is used for medium stretch fabric. Snap on preser foot B.



**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.

## Darning stitch

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

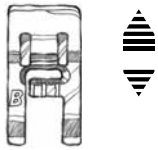


1. Select **NORM**, sew the first row of stitches as long as you need to cover your tear or worn spot.
2. Touch the reverse button and the machine continues sewing the remaining stitches at the same length and fastens the thread.
3. Touch **STOP**. Move the fabric so that the needle is right over the last stitch. Repeat as many times as you need to cover the hole. See "Satin taper and darning stitches" page 25.



## Automatic taper stitch

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



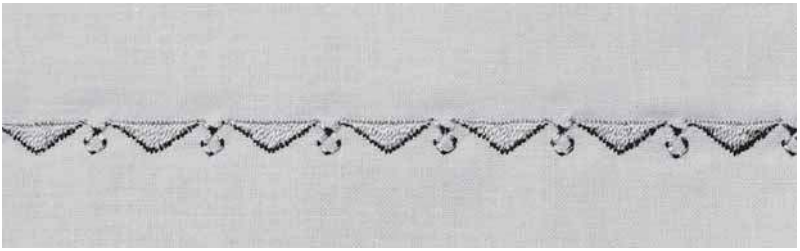
1. Trace the monogram on the fabric and sew over the lines.
2. Touch **FUNC** to **NORM** position and select .
3. Sew until the desired length is reached.
4. Touch the reverse button to taper the end. See "Satin taper and darning stitches" page 25.



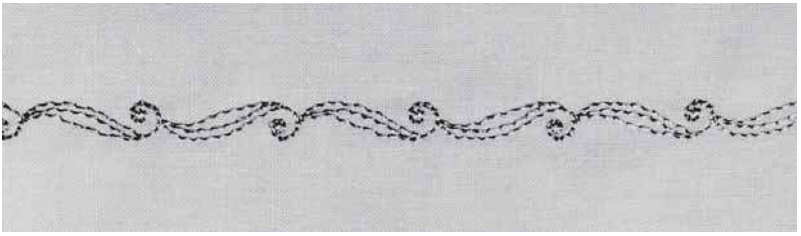
## Decorative stitches

These stitches are mainly used as decorative stitches.

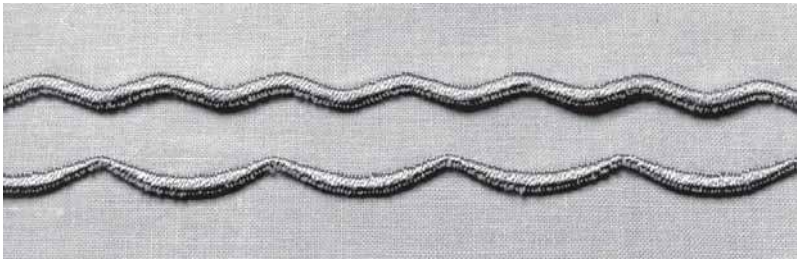
**Examples**:



You can combine and program different patterns one after another.
Stitch 39, 39 ◆, stitch 18 ◆.



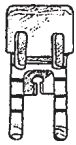
You can program stitches and sew the original way and mirrored every other time. Stitch 22, 22 ◆ .

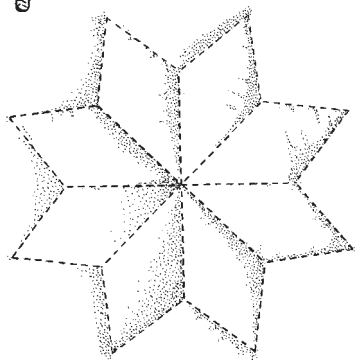


An effective edging can be produced with these stitches. Sew a bit from the edge and trim close to the stitching.
Upper, stitch 35, lower, stitch 36.

## Quilting

The "hand" look quilting stitch No 31, is a perfect stitch for relief stitching. Use presser foot P.

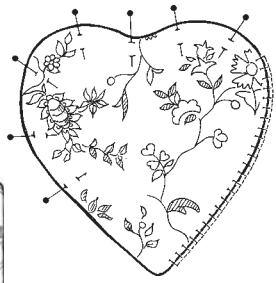


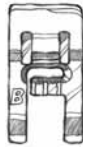


**1**. Mark the design on the top of the fabric you are going to quilt.
*2.* Place the fabric you are going to use as quilt backing, wrong side up.
**3**. Place a layer of batting on wrong side. Finally place the top right side up with the marking.
**4.** Pin all the pieces together.
**5.** Use transparent nylon thread as upper thread and a synthetic thread or embroidery thread as bobbin thread.
**6.** Test sew. On the top side of your work the triple stitch should be filled with the bobbin thread and the single stitch will not be visible thanks to the transparent upper thread.
**7**. Sew along the marked quilt design.

## Applique

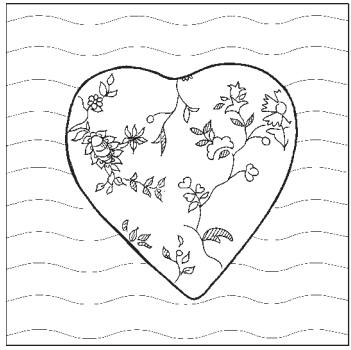
Use presser foot B.





**1.** Sew the heirloom applique stitch number 33, around a binding at the edge, or for hand look applique.

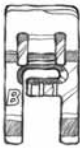
**2.** The satin stitch number 38, set to stitch width 2 mm sews beautiful appliques. Fuse or pin applique in place and satin stitch around the outside edges.

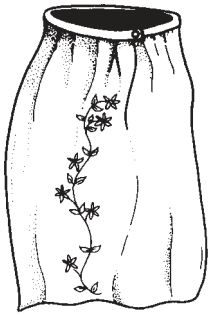


**3.** Use stitch number 32 to quilt. Sew the stitches with a few cm in between.

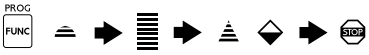
# Pictogram

Read about Programming on page 22. Use presser foot B.





**1.** Program the leaf in an empty memory.




**2.** Select **NORM** and reinforced straight stitch .

**3.** Sew the stem down to the first pair of leaves.

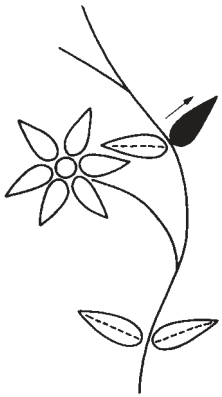
**4.** Select **REP** and sew a leaf from the stem to the top.

**5.** Select straight stitch, stitch length 1,5. Sew from the top of the leaf and back to the stem.

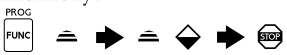
**6.** Sew the other leaf in the same way.

**7.** Select reinforced straight stitch and continue sew the stem down to the flower stem.

**8.** Then sew the stem as far as to the flower.



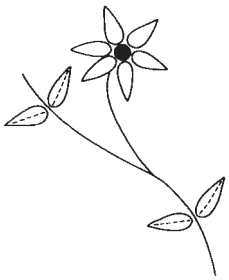
**9.** Program the ball in an empty memory.




**10.** Select **REP** and sew the ball.

**11.** Return to the memory containing the programmed leaf.

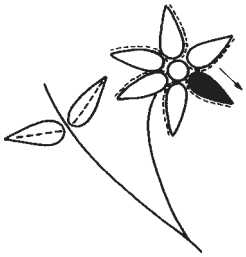
**12.** Select **REP** and sew the flower petal from ball to top. Stop with the needle in the material.



**13.** Change to straight stitch, stitch length 1,5.

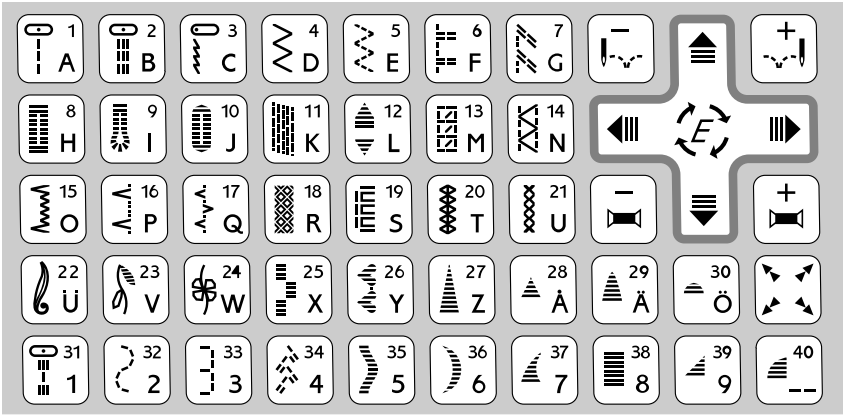
**14.** Sew back close to the petal.

**15.** Sew the rest of the petals in the same way.



Also: Consult **Quick info** for Pictogram steps.

# Stitch table




**1 Straight stitch**
see page 39

For all kind of sewing in woven fabrics, 25 different needle positions

**2 Reinforced straight stitch**
see page 42

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 42

For seams in tricot and stretch farbrics

**4 Zigzag**
see page 42-43

For lace edging and sewing on bands

**5 Three-step zigzag**
see page 44

For overcasting, mending, sewing on patches and elastics

**6 Overcast stitch**
see page 47

Seam and overcast in one step along the edge or trim later. For light stretch and non-stretch fabrics.

**7 Overlock**
see page 47

Seam and overcast in one step along the edge or trim later For medium and heavy stretch fabrics.

**8 Bartack Buttonhole**
see page 36

Suitable in medium and heavy fabrics.

**9 Keyhole buttonhole**
see page 36

For tailored garments suitable in compact woollen cloth

**10 Round End buttonhole**
see page 36

Suitable in light fabrics.

## Stitch table

| | |
|---|---|
| **11 Darning stitch**<br>see page 48 | Darn and mend work clothes, jeans, table-cloths and linen towels. |
| **12 Tapered satin stitch**<br>see page 48 | Automatic tapering for sewing monograms and other decorations |
| **13 Overlock stitch**<br>see page 47 | Seam and overcast in one step along the edge or trim later. For medium stretch fabrics. |
| **14 Flatlock**<br>see page 45 | Decorative hems and overlapped seams, belts and bands. |
| **15 Elastic blind hem**<br>see page 46 | Invisible hems in stretch medium and heavy fabrics. |
| **16 Woven blind hem**<br>see page 46 | Invisible hems in woven fabrics |
| **17 Bridging stitch**<br>see page 47 | For joining two pieces of fabric with finished edges and for elastic shirring |
| **18-20 Hemstitches**<br>Point de Paris 19<br>Entredeux 20 | For hemstitching, use a wing needle(optional) |
| **21 Cross stitch** | For decorating clothes, tablecloths and curtains |
| **22-26 Decorative stitches**<br>see page 49 | For decorating clothes, tablecloths and curtains |
| **27-30, 37-40 Pictograms**<br>see page 51 | Programmable satin elements which can be mirrored and combined with each other, creating beautiful satin embroideries |
| **31-32 Quilting stitches**<br>see page 50 | Outline quilting through batting and backing |
| **33 Heirloom Appliqué**<br>see page 50 | Hand look appliqué stitching **stitch** |
| **34 Feather stitch** | Decorative stitching and for quilting |
| **35-36 Decorative edging**<br>see page 49 | For decorative edges. Sew 15 mm from the edge and trim close to the stitching |
| **38 Satin stitch**<br>see page 43 | For appliqués, rounded edge, sewing on laces and bands |

# 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 (darning foot is an optional accessory).

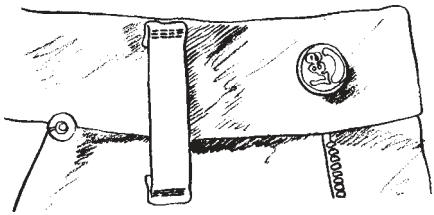


**"Jeans hem"**
The clearance plate is used when sewing over thick seams.

One side of the plate is thicker than the other. Use the side that suits the thickness of the seam best.



**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



Switch off the main switch.he light bulb is placed to the left of the needle. Place the rubber sheath found in the accessory box 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



Switch off the main switch.
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.

# Fault-finding

**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 16.

**Unattractive stitches**
The thread tension is not correct. See page14. 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 10.
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 16.

**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 16.
The upper thread is incorrectly threaded. See page 10.
The upper thread may have too much tension. Refer to page 14.
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 13.
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.

**Irregular bobbin winding**
The machine is not correctly threaded for bobbin winding. See page 12.

**The fabric puckers**
The upper thread tension is too tight. See page 14 for correct thread tension.
Use the correct presser foot as recommended by the display.

**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 16.
The feed teeth are full of dust and dirt. Clean with the brush. See page 55.

# Fault-finding

**The stitch is too loose - fabric layers not held together**
The thread tension is far too loose. Page 14 shows how to adjust the thread tension.

**Incorrect stitch**
If the machine does not sew the stitch indicated by the display, 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 55.

**Balance setting for buttonhole**
Balance can only be set if a buttonhole is selected. Press the buttons ◄ and ► until the letters **BAL** are flashing to the left on the display. In place of the stitch length indication a balance indication is 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 display will change in steps fo 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.

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

**The sewing and embroidery machine screen does not respond to touch**
The socket on the back of the machine where the embroidery unit is connected can be sensitive to static electricity when the embroidery unit is not connected. If the sewing machine screen does not respond to touch, turn the machine off and back on again. If this persists, contact your authorized Husqvarna Viking retailer.

**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 dealer 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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We reserve 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.

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Husqvarna Viking, the world leader in home sewing, continues to add to its list of firsts to ensure your sewing is as fast, fun, and easy as it can be.

| | |
|---|---|
| 1953 | First floating jam-proof hook |
| 1961 | First color-coded stitch selection |
| 1965 | First snap-on presser foot system |
| 1971 | First to eliminate the need for oiling |
| 1980 | First programmable lettering – A writing sewing machine<br>First programmable stitching |
| 1981 | First with dual lights |
| 1982 | First Sewing Advisor® – A thinking sewing machine |
| 1983 | First thinking and writing sewing machine |
| 1989 | First LCD Infodisplay® – A built-in instruction book<br>First LCD Programdisplay® – See before you sew<br>First truly automatic self-adjusting tension |
| 1994 | First embroidery software for home computers |
| 1998 | First Sensor Foot Lift<br>First Sensor Foot Pressure<br>First Selective Thread Cutters<br>First Color Touch Screen<br>First Built-in Disk Drive |

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