

*Designer Ruby* Royale™

User's Guide



This household 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. Keep the instructions at a suitable place close to the machine. Make sure to hand them over if the machine is given to a third party.

### **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, removing covers, lubricating or when making any other user servicing adjustments mentioned in the instruction manual.

### **WARNING – To reduce the risk of burns, fire, electric shock, or injury to person:**

- Do not allow to be used as a toy. Close attention is necessary when this sewing machine is used by or near children.
- Use this sewing machine only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
- Never operate this sewing machine if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the sewing machine to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
- Never operate the sewing machine with any air openings blocked. Keep ventilation openings of the sewing machine and foot control 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.
- Wear safety glasses.
- 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.
- 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 administered.
- 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.
- The foot control is used to operate the machine. Avoid placing other objects on the foot control.
- Do not use the machine if it is wet.
- If the LED lamp is damaged or broken, it must be replaced by the manufacturer or its service agent or a similarly qualified person, in order to avoid a hazard.
- If the supply cord connected with the foot control is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person, in order to avoid a hazard.
- This sewing machine is provided with double insulation. Use only identical replacement parts. See instructions for Servicing of Double-Insulated Appliances.

## **SAVE THESE INSTRUCTIONS**

### **FOR EUROPE ONLY:**

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

The noise level under normal operating conditions is less than 75dB(A).

The machine must only be used with foot control of type “FR5” manufactured by Shanghai Bioao Precision Mould Co., Ltd.

### **FOR OUTSIDE EUROPE:**

This sewing machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the sewing machine by a person responsible for their safety. Children should be supervised to ensure that they do not play with the sewing machine.

The noise level under normal operating conditions is less than 75dB(A).

The machine must only be used with foot control of type “FR5” manufactured by Shanghai Bioao Precision Mould Co., Ltd.

## **SERVICING OF DOUBLE INSULATED PRODUCTS**

In a double-insulated product, two systems of insulation are provided instead of grounding. No ground means is provided on a double-insulated product, nor should a means for grounding be added to the product. Servicing of a double-insulated product requires extreme care and knowledge of the system and should be done only by qualified service personnel. Replacement parts for a double-insulated product must be identical to those parts in the product. A double-insulated product is marked with the words ‘DOUBLE INSULATION’ or ‘DOUBLE INSULATED’.

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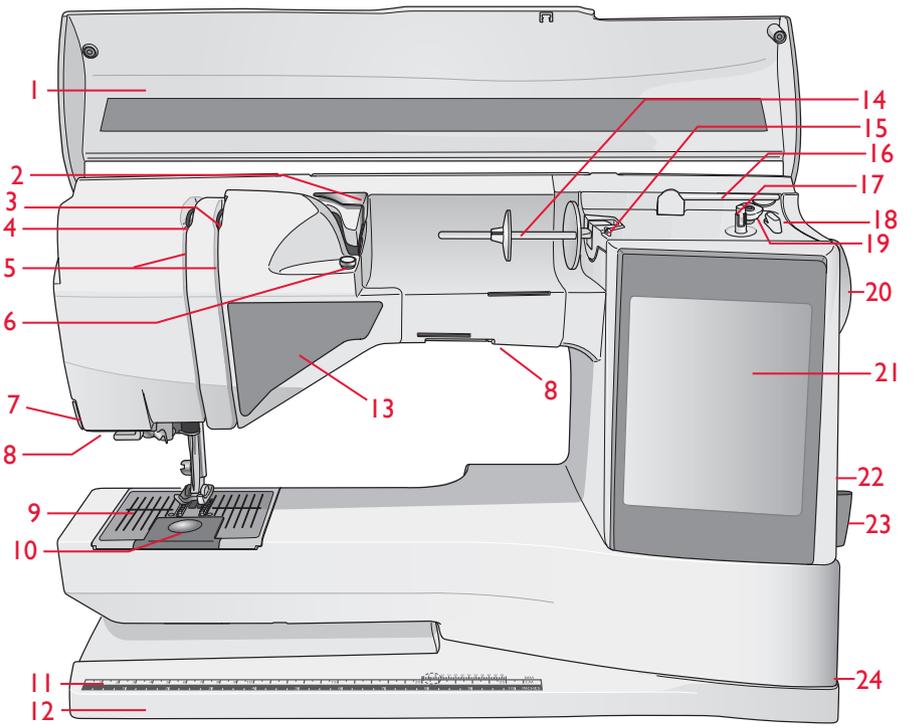
# GETTING TO KNOW YOUR MACHINE

# 1



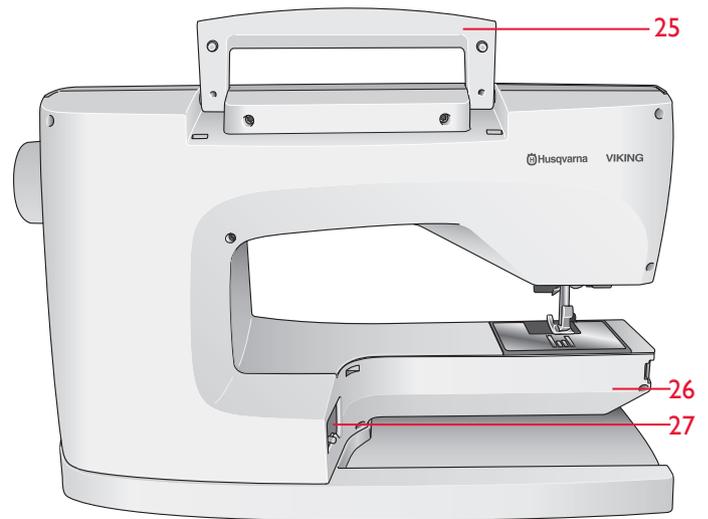
## MACHINE OVERVIEW

1. Lid
2. Pre-Tension Thread guide
3. Thread tension discs
4. Thread take-up lever
5. Thread slots
6. Thread tension disc for bobbin winding
7. Thread cutter
8. LED-lights
9. Needle plate
10. Bobbin cover
11. Button ruler and built-in tape measure
12. Base plate
13. Function button panel
14. Main spool pin
15. Bobbin winding thread guide
16. Auxiliary spool pin
17. Bobbin winder
18. Thread cutter for bobbin winding
19. Bobbin winder lever
20. Handwheel
21. Large Interactive Screen
22. Built-In USB ports
23. Stylus holder
24. ON/OFF switch, connectors for power cord and foot control



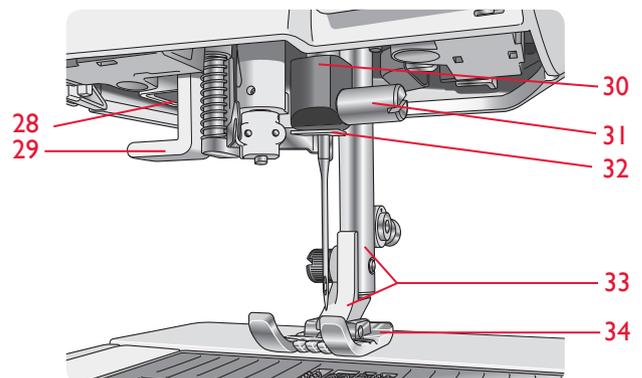
## REAR SIDE

25. Handle
26. Free arm
27. Embroidery unit connection socket



## NEEDLE AREA

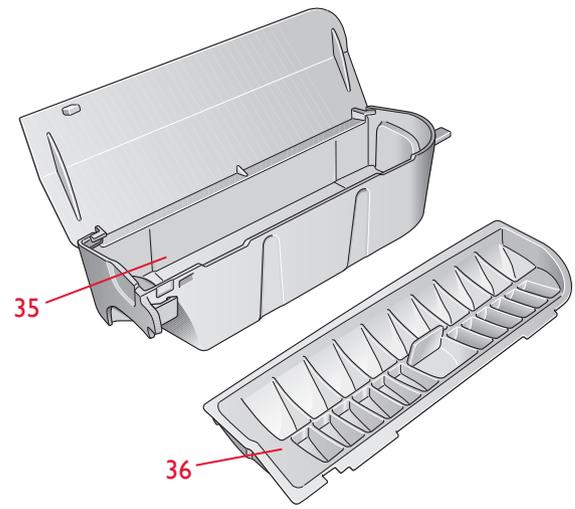
28. Sensor One-Step Buttonhole Foot socket
29. Built-In needle threader
30. Needle bar
31. Needle clamp
32. Needle thread guide
33. Presser foot bar and presser foot ankle
34. Presser foot



## ACCESSORY TRAY

The accessory tray features special compartments for presser feet and bobbins, plus space for needles and other accessories. Store the accessories in the tray so that they are easily accessible.

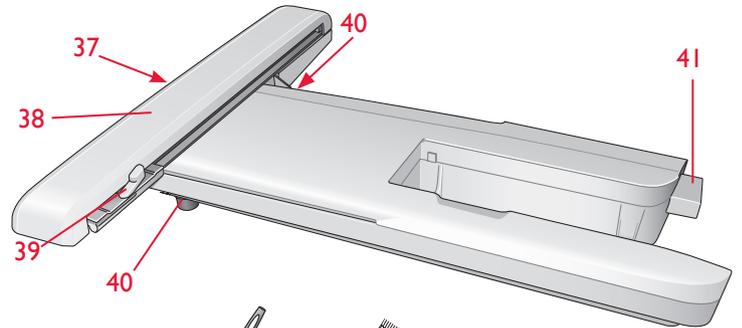
- 35. Space for accessories
- 36. Removable presser feet and bobbin holder



## PARTS OF THE EMBROIDERY UNIT

(type BE 18)

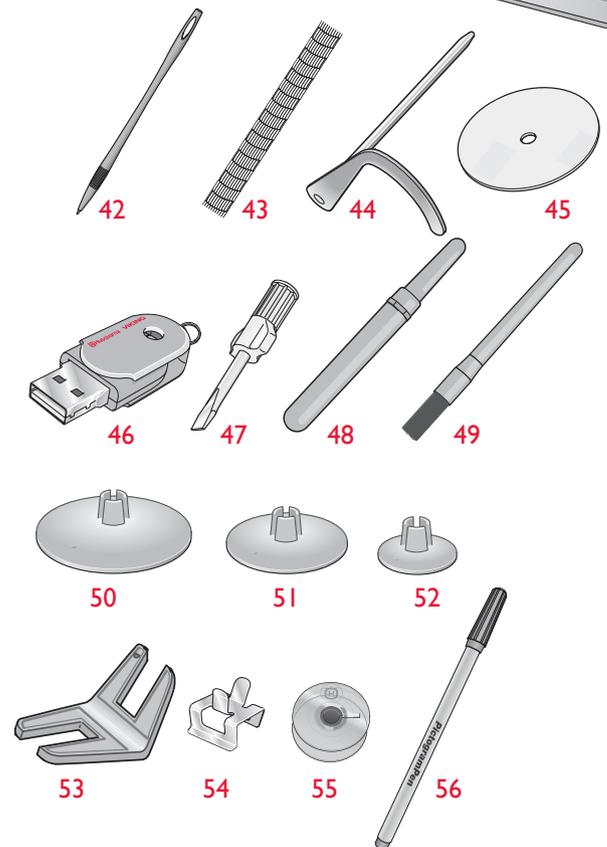
- 37. Embroidery unit release button (underside)
- 38. Embroidery arm
- 39. Embroidery hoop attachment
- 40. Level adjustment feet
- 41. Embroidery unit socket



## ACCESSORIES

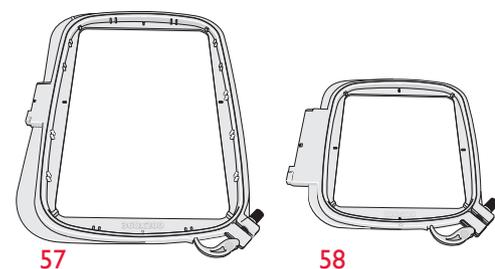
### INCLUDED ACCESSORIES

- 42. Stylus
- 43. Thread net
- 44. Edge/Quilting guide
- 45. Felt pad (2)
- 46. USB embroidery stick (1 GB)
- 47. Screwdriver
- 48. Seam ripper
- 49. Brush
- 50. 2 spool caps, large  
(1 attached on the machine at delivery)
- 51. Spool cap, medium  
(attached on the machine at delivery)
- 52. Spool cap, small
- 53. Multipurpose tool/Button reed
- 54. Hoop clips (16)
- 55. 11 Bobbins (1 in machine at delivery)
- 56. PICTOGRAM™ Pen



### HOOPS INCLUDED

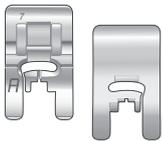
- 57. DESIGNER™ Royal Hoop (360x200)
- 58. DESIGNER™ Splendid Square Hoop (120x120)



## ACCESSORIES INCLUDED - Not in the Picture

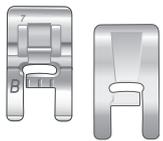
- Complimentary Software (PC) to download
- Classic Collection to download
- Carrying Case (attached on the machine upon delivery)
- Scissors
- Foot control
- Power cord
- USB PC cable
- Needles
- Embroidery thread
- Pieces of fabric and stabilizer
- DESIGNER RUBY *Royale*™ Sampler Book
- User's Guide
- Microfiber cloth

## PRESSER FEET



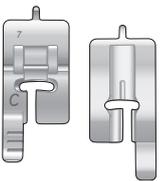
### Utility Foot A

Snapped onto the machine upon delivery. This foot is used mainly for straight stitching and zigzag stitching with a stitch length longer than 1.0.



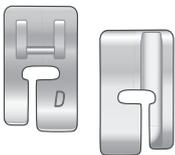
### Decorative Stitch Foot B

For sewing close zigzag stitches (satin stitches) with less than 1.0mm stitch length, other utility stitches or decorative stitches. The tunnel on the underside of the foot is designed to feed smoothly over the stitches.



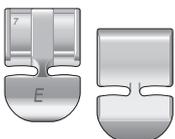
### Buttonhole Foot C

For manual buttonholes. This foot has guide lines to determine buttonhole length. The middle measures a 5/8" (15mm) from the fabric edge. The two tunnels on the underside of the foot ensure a smooth feed over the buttonhole columns. The finger on the back of the foot holds cording for corded buttonholes.



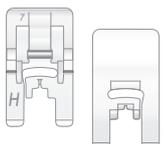
### Blindhem Foot D

This foot is used for blindhem stitches. The inner edge of this foot guides the fabric. The right toe of the foot is designed to ride along the hem edge.



### Zipper Foot E

This foot can be snapped on either to the right or to the left of the needle. This makes it easy to sew both sides of the zipper. Move needle position to right or left to sew closer to zipper teeth or for covering large cording.



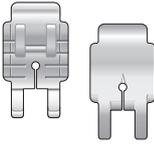
### Non-Stick Glide Foot H

This foot, with a non-stick coating underneath, is used when sewing foam, vinyl, plastic, or leather to keep these materials from sticking to the foot.



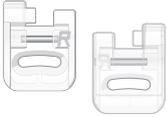
### Edging Foot J

This foot is used for overcasting and seam/overcasting, with stitches that have a stitch width of 5.0mm or wider. Stitches form over the pin which prevents puckering at the edge of the fabric.



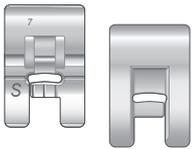
### Quilter's 1/4" Piecing foot P

This foot is used when piecing quilt blocks. The foot has distance guideline marks 1/4" (6mm) and 1/8" (3mm) from the needle.



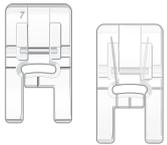
### Embroidery/Darning Foot R

This foot is used for free motion embroidery/quilting/stitching and hoop embroidery.



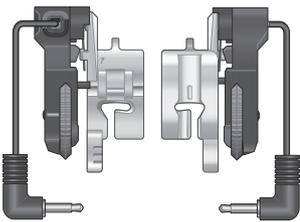
### Side Motion Foot S

This foot is used for side-motion/Omnimotion stitches.



### Decorative Stitch Foot B Transparent

A clear foot for decorative sewing makes it easy to match stitches. Same tunnel on the underside as Presser Foot B.



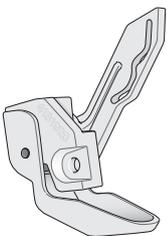
### Sensor One-Step Buttonhole Foot

Plug into the machine then enter the desired buttonhole length to sew Sensor One-Step Buttonholes. The middle mark measures a 5/8" (15mm) from fabric edge.



### Self-Adhesive Glide Plates

Used for Presser Foot C/Sensor One-Step Buttonhole Foot when sewing buttonholes on plastic-coated fabrics, leather, etc.



### Sensor Q-foot

The Sensor Q-foot is always recommended for embroidery.

This foot is also used for Free Motion sewing, quilting and embroidering on especially thick or spongy fabric. When using the Sensor Q-foot for Free Motion, select Free Motion Spring Action in the Free Motion Technique pop-up in Sewing Mode.

# STITCHES

## A – Utility Stitches

Stitches for garment sewing and mending.

<i>Stitch</i>	<i>Stitch description</i>	<i>Presser Foot</i>
	<b>A1,A2,A3 – Straight Stitch, left, center and right needle position</b> For all types of sewing. Touch stitch width and Side-to-Side mirror image to select 29 different needle positions.	<b>A</b>
	<b>A4,A5,A6 – Stretch Stitch, left, center and right needle position</b> For seams in tricot and stretch fabrics.	<b>A</b>
	<b>A7,A8,A9 – Reinforced Straight Stitch, left, center and right needle position</b> Triple and elastic, for reinforced seams. For topstitch, increase the stitch length. 29 different needle positions.	<b>A</b>
	<b>A10,A11,A12 – Zigzag, left, center and right needle position</b> For sewing on lace, bands and appliqués.	<b>A</b>
	<b>A13 – Three Step Zigzag</b> For overcasting, mending, sewing on patches and elastic. Suitable for light and medium weight fabrics.	<b>A</b>
	<b>A14 – Serpentine Stitch</b> For mending and elastic applications.	<b>A</b>
	<b>A15 – Four-Step Zigzag</b> For overcasting, mending, sewing on patches and elastics on loosely woven fabrics.	<b>A</b>
	<b>A16 – Overcast Stitch</b> Seam and overcast in one step along the edge or trim later. For light stretch and non-stretch fabrics.	<b>J</b>
	<b>A17 – Stretch Seam Overcast Stitch</b> Seam and overcast in one step along the edge or trim later. For medium and medium/heavy stretch fabrics.	<b>B</b>
	<b>A18 – Double Overlock Stitch</b> Seam and overcast in one step along the edge or trim later. For heavy stretch and heavy woven fabrics.	<b>B</b>
	<b>A19 – Overlock Stitch</b> Seam and overcast in one step along the edge or trim later. For medium stretch fabrics.	<b>B</b>
	<b>A20 – Flatlock Stitch</b> Decorative hems and overlapped seams, belts and bands. For medium/heavy stretch fabrics.	<b>B</b>
	<b>A21 – Elastic/Casing Stitch</b> For overlapped seams in tricot. To sew casing over narrow elastic.	<b>B</b>
	<b>A22 – Reinforced Zigzag Stitch</b> For joining fabric edge to edge or overlapping leather. For decorative sewing.	<b>B</b>
	<b>A23 – Basting Stitch</b> For joining two pieces of fabric with a long stitch length and reduced tension.	<b>A</b>
	<b>A24 – Stretch Blind Hem Stitch</b> Blind hems in stretch medium and heavy fabrics.	<b>D</b>

<i>Stitch</i>	<i>Stitch description</i>	<i>Presser Foot</i>
	<b>A25 – Woven Blind Hem Stitch</b> Blind hems in medium and heavy woven fabrics.	D
	<b>A26 – Shell Edge Stitch</b> For edgings, sew over the edge on light stretch fabrics, sew woven fabric on bias.	A
	<b>A27 – Elastic or Smocking Stitch</b> Sew over two rows of elastic thread for elastic shirring.	B
	<b>A28 – Bridging Stitch</b> For joining two pieces of fabric with finished edges and for elastic shirring.	B
	<b>A29 – Bartack Stitch</b> Reinforce pockets, shirts openings, belt loops as well as at lower end of a zipper.	B
	<b>A30 – Darning Stitch (Forward and Backward)</b> Darn and mend small holes in work clothes, jeans, tablecloths and linen towels. Stitch over hole, touch reverse for continuous darning and auto stop.	A
	<b>A31 – Darning Stitch (Side to Side)</b> For mending small tears.	A
	<b>A32 – Reinforced Darning Stitch</b> Darn and mend work clothes, jeans, table cloths and linen towels. Stitch over hole, touch reverse for continuous darning and auto stop.	A
	<b>A33 – Bartack, Manual</b> Reinforce pockets, shirts openings, belt loops as well as at lower end of a zipper.	B
	<b>A34 – Gathering Stitch</b> For gathering.	A
	<b>A35 – Belt Loop Stitch</b> For securing belt loops.	A
	<b>A36 – Three-Step Zigzag</b> For overcasting, mending, sewing on patches and elastic. Suitable for light and medium weight fabrics.	J
	<b>A37 – Two-Step Zigzag</b> For joining two pieces of fabric with finished edges and for elastic shirring.	A
	<b>A38 – Straight stitch with FIX</b> Begins and ends with forward and reverse sewing.	A
	<b>A39 – Straight Basting Stitch</b> Use together with the foot control to baste pieces of the fabric together. Feed the fabric by moving to the next baste position when sensor foot lifts. Feed teeth lowered automatically.	A
	<b>A40 – Zigzag Basting</b> Use together with the foot control to baste layers of the fabric by moving to the next baste position when foot lifts.	A

*Note: Fabric Care stitches (A41-A49). Touch Quick Help, then touch the stitch to identify the name of the stitch. Make labels for your garments.*

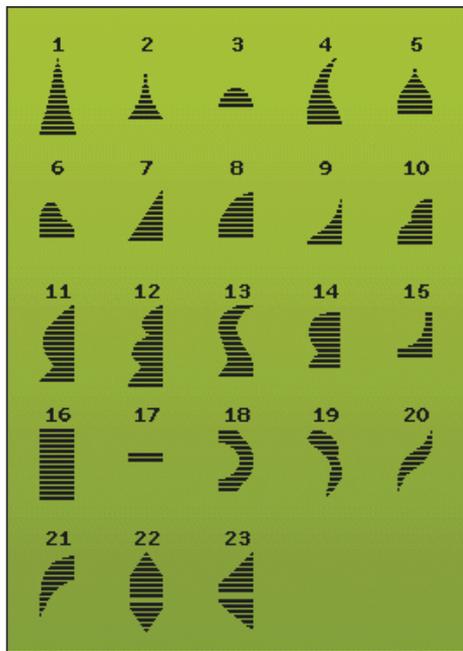
## B - Buttonhole Stitches

Different styles of buttonholes, eyelets and button sewing.

<i>Stitch</i>	<i>Stitch description</i>	<i>Presser Foot</i>
	<b>B1 – Wide Bartack Buttonhole</b> For medium and heavy-weight fabrics with extra cutting space.	Sensor Buttonh. Foot /C
	<b>B2 – Bartack Buttonhole</b> For most fabric weights.	Sensor Buttonh. Foot /C
	<b>B3 – Round-End Buttonhole</b> For blouses and children's garments.	Sensor Buttonh. Foot /C
	<b>B4 – Decorative Fashion Buttonhole</b> For most fabric weights.	Sensor Buttonh. Foot /C
	<b>B5 – Medium Reinforced Buttonhole</b> For medium fabrics.	C
	<b>B6 – Heirloom Buttonhole</b> For hand look on fine and delicate fabrics. <i>Tip: For jeans buttonholes, increase length and width of the buttonhole. Use thicker thread.</i>	Sensor Buttonh. Foot /C
	<b>B7– Rounded Heirloom Buttonhole</b> For hand look on fine and delicate fabrics.	Sensor Buttonh. Foot /C
	<b>B8 – Keyhole Buttonhole</b> Square end for tailored jackets, coats, etc.	Sensor Buttonh. Foot /C
	<b>B9 – Heavy Duty Buttonhole</b> With reinforced bartacks.	Sensor Buttonh. Foot /C
	<b>B10 – Leather Buttonhole (Straight Stitch)</b> For leather and suede.	A
	<b>B11 – Bound Buttonhole (Straight Stitch)</b> With extra cutting space for bound buttonholes.	A
	<b>B12 – Automatic Button Sewing</b> For sewing on buttons	-
	<b>B13 – Round Eyelet</b> For belts, laces, etc.	B
	<b>B14 – Teardrop Eyelet</b> For laces embellishment.	B

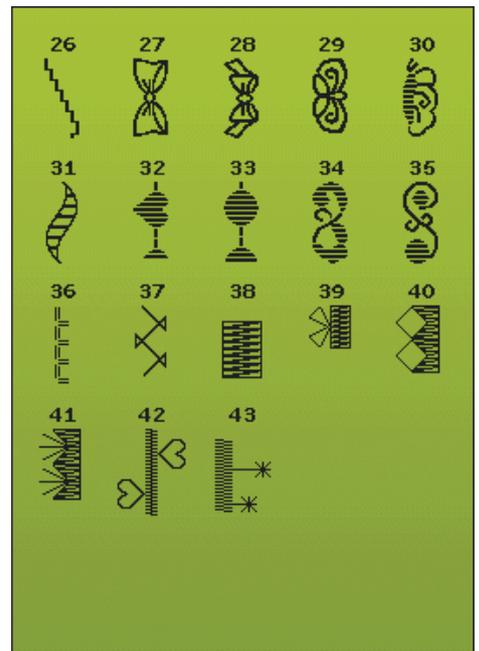
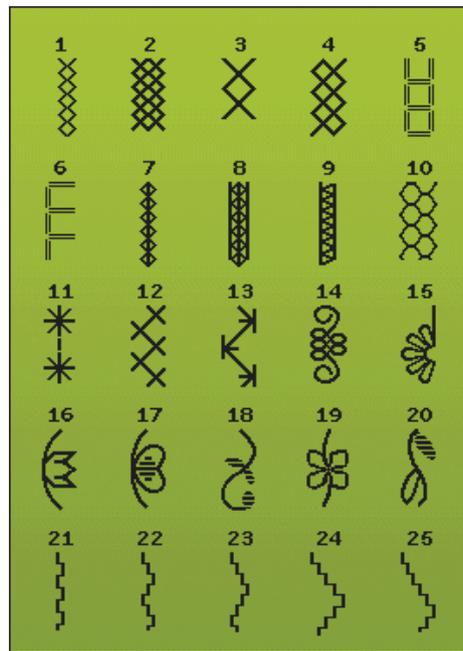
### C - Pictogram Stitches

Pictogram satin elements to program original satin stitch designs.



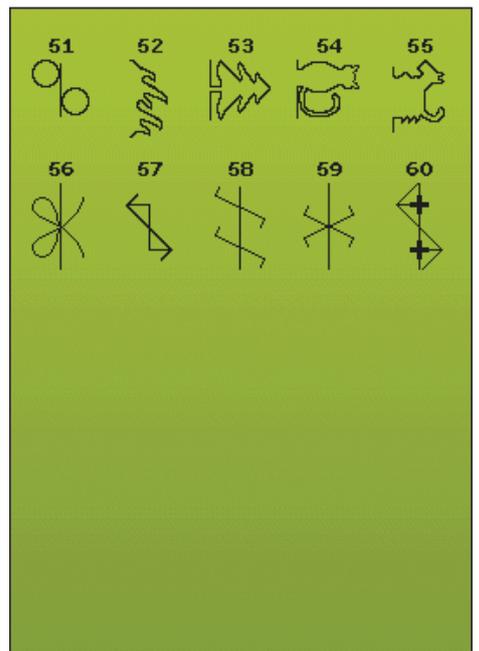
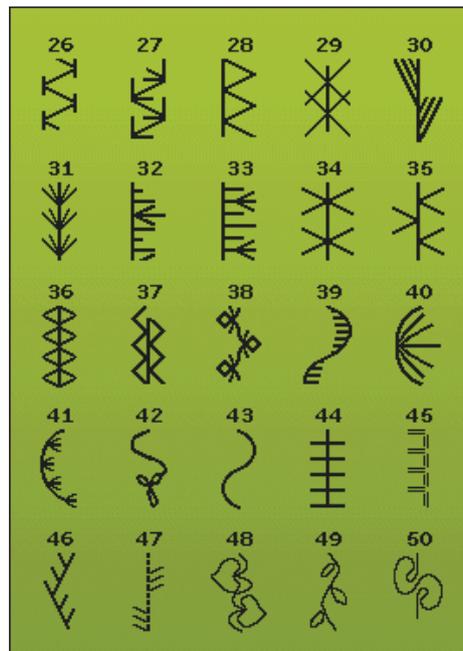
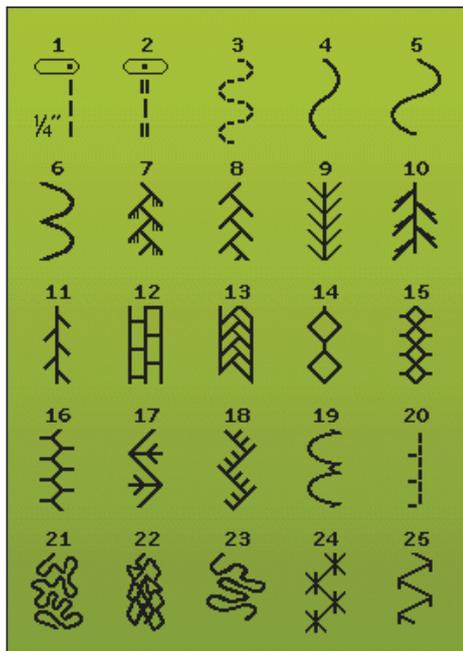
### D - Heirloom Stitches

For hemstitching, smocking and sewing on lace and trims.



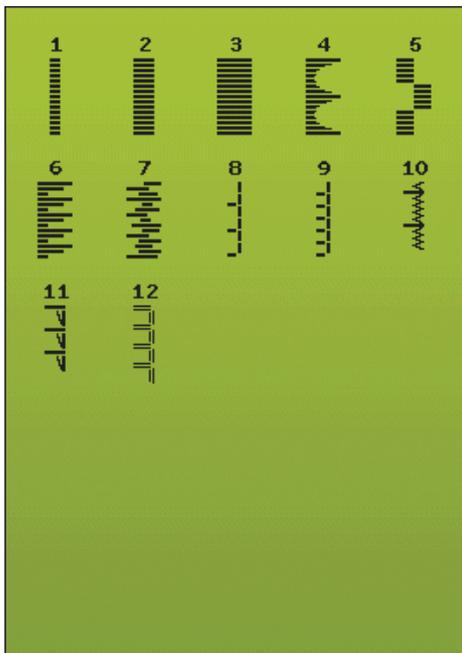
### E - Quilt Stitches

Stitches for all types of quilting techniques.



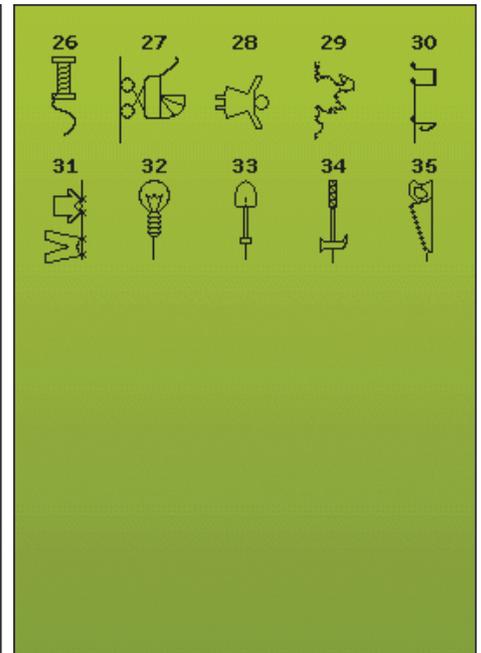
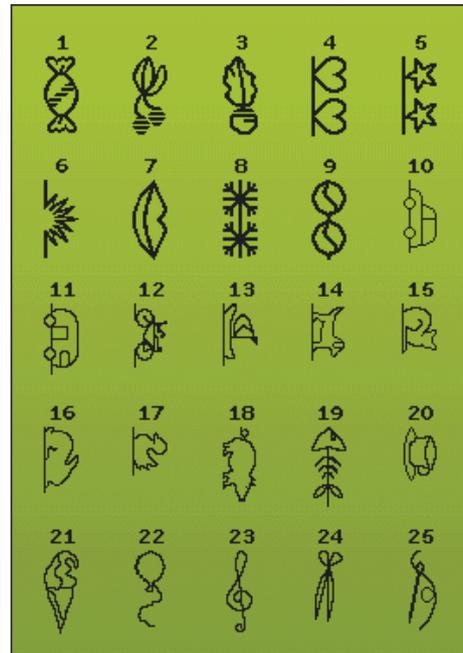
## F - Appliqué Stitches

For sewing appliqués with different effects.



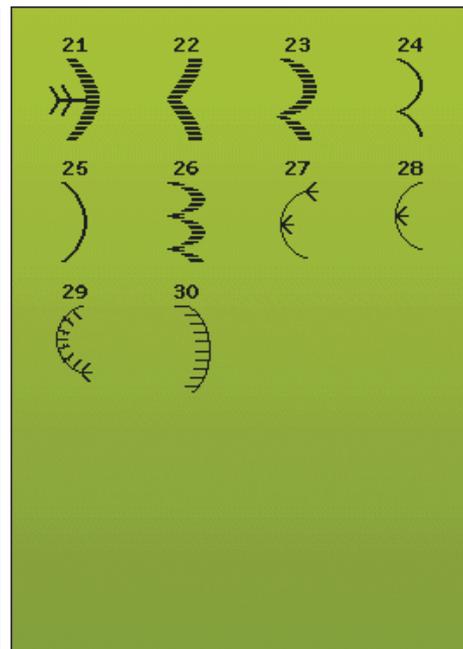
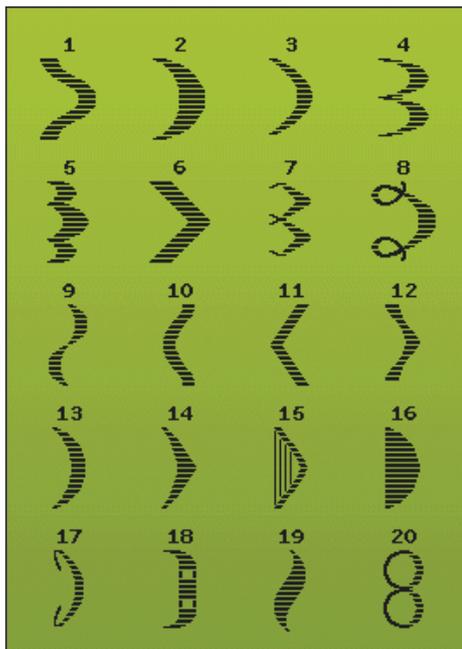
## G - Children Stitches

Stitches suitable for sewing on children's clothes and projects.



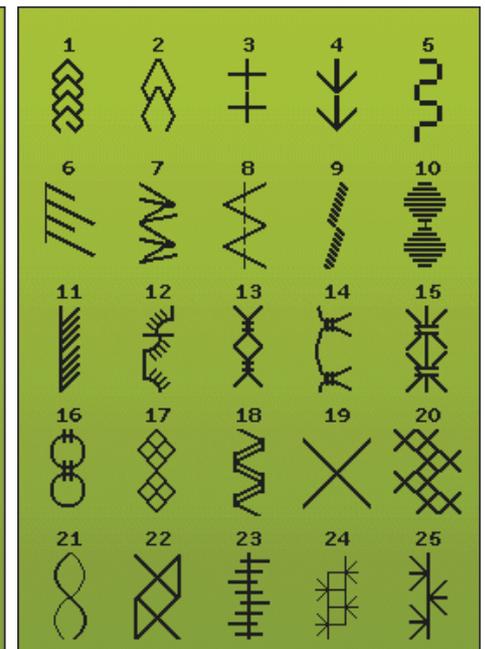
## H - Scallop Stitches

Create scallop details and finish edges with beautiful scallop stitches.



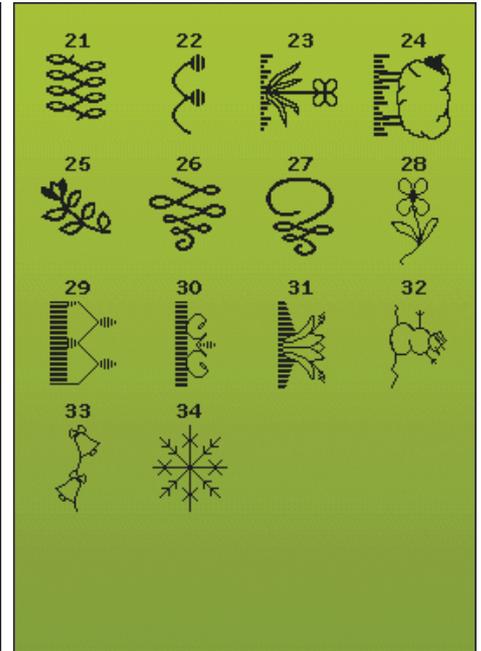
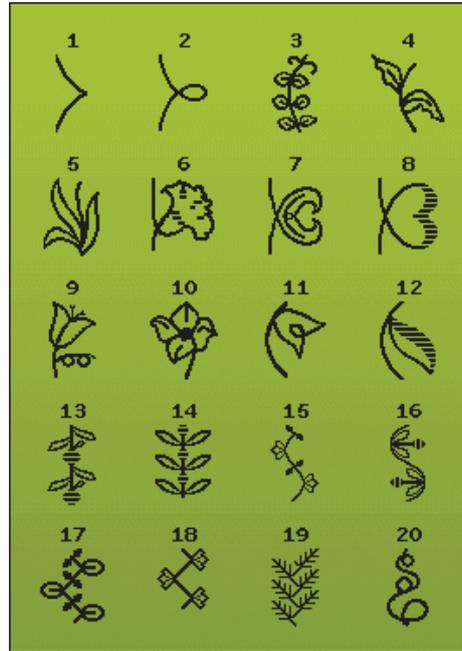
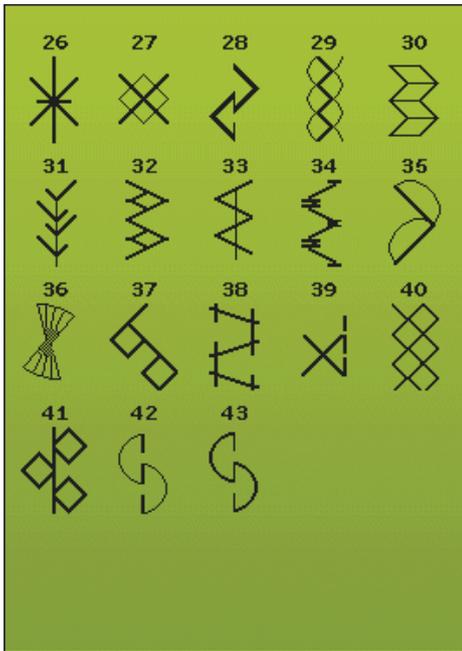
## J - Vintage Stitches

A selection of quilt stitches for crazy patch quilting and decorative stitching.



## K - Omnimotion Stitches

Program these stitches into an unlimited number of combinations. Stitches are formed with side motion. The stitch width can be up to 40 mm wide or more.

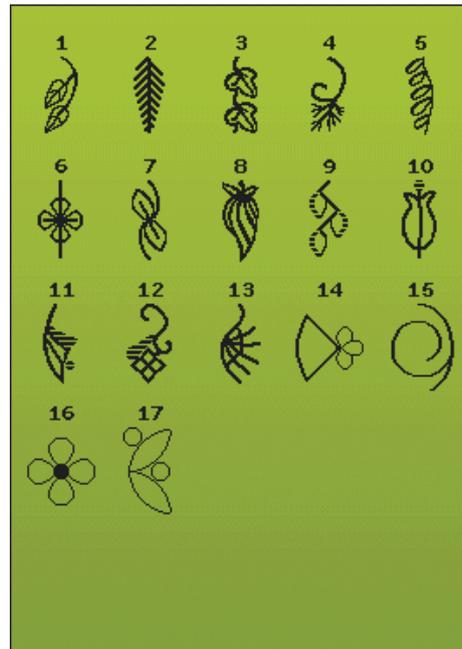
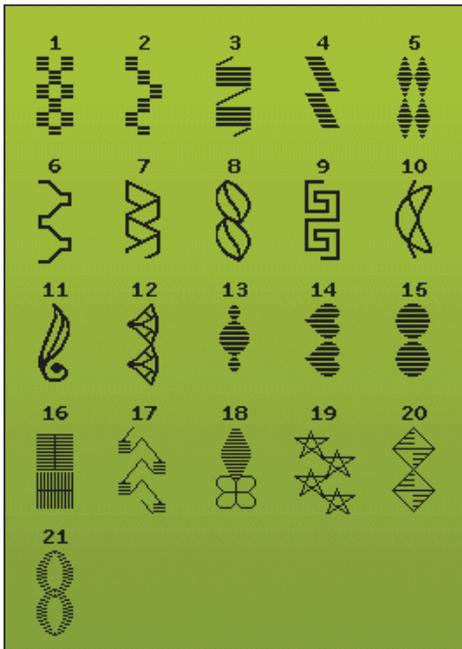


## L - Decorative Stitches

For decorative sewing.

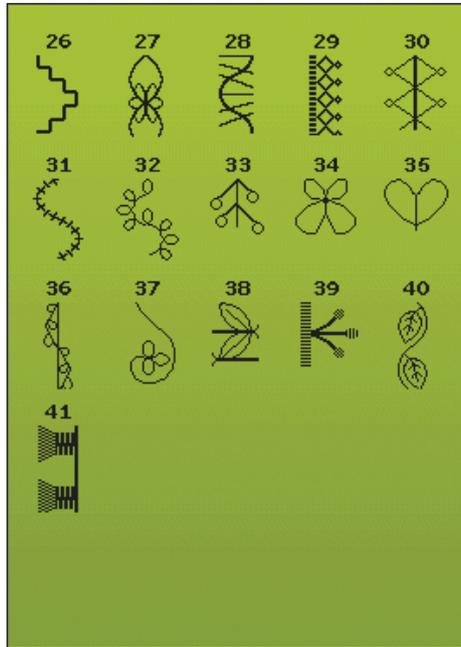
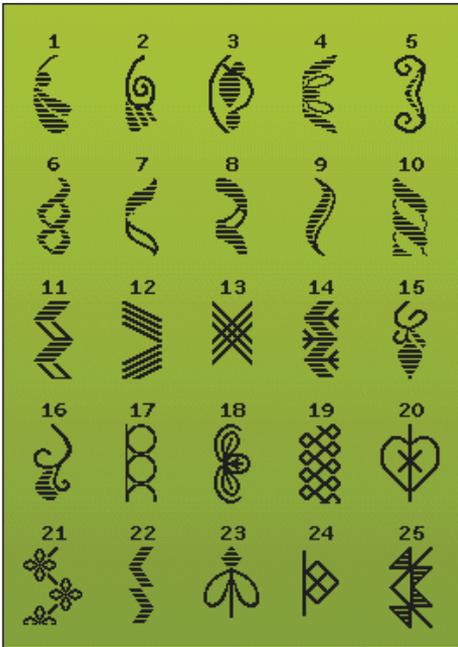
## M - Crafting Stitches

For decorative stitches to embellish crafts.



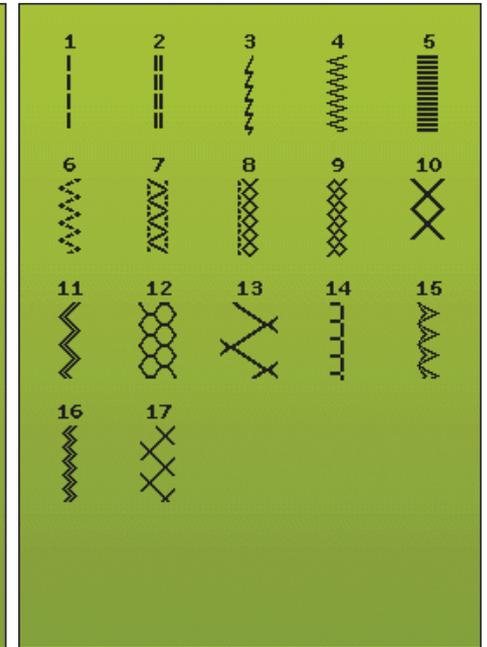
## N - Fashion Stitches

Fashion stitches to decorate clothing and accessories.



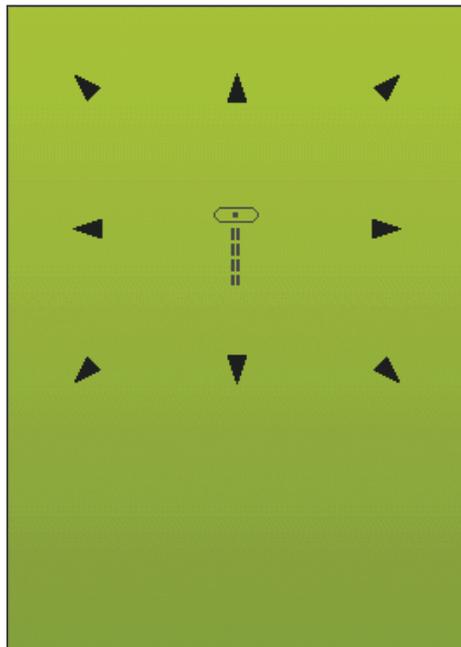
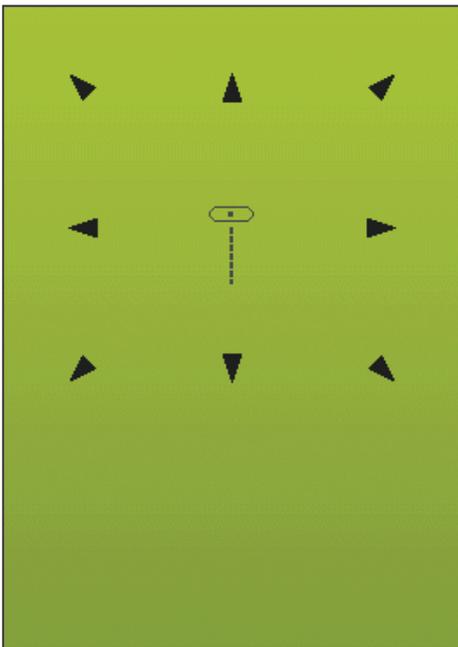
## S - 4-way Stitches

For directional sewing and patching using the free arm.



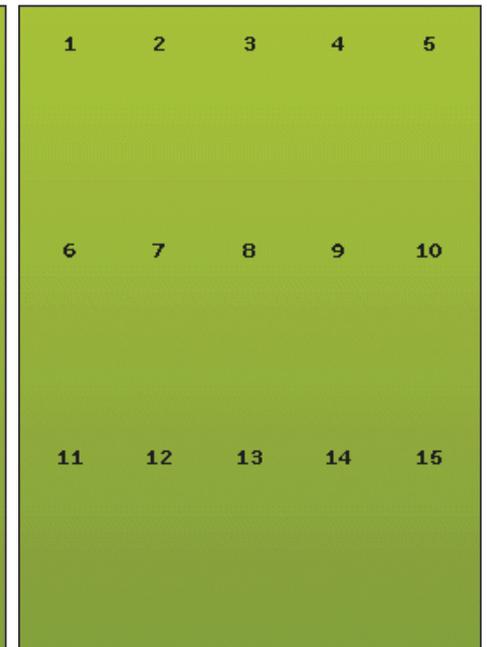
## T - 8-way Stitches

Straight stitch and reinforced straight stitch in eight different directions without turning the fabric.



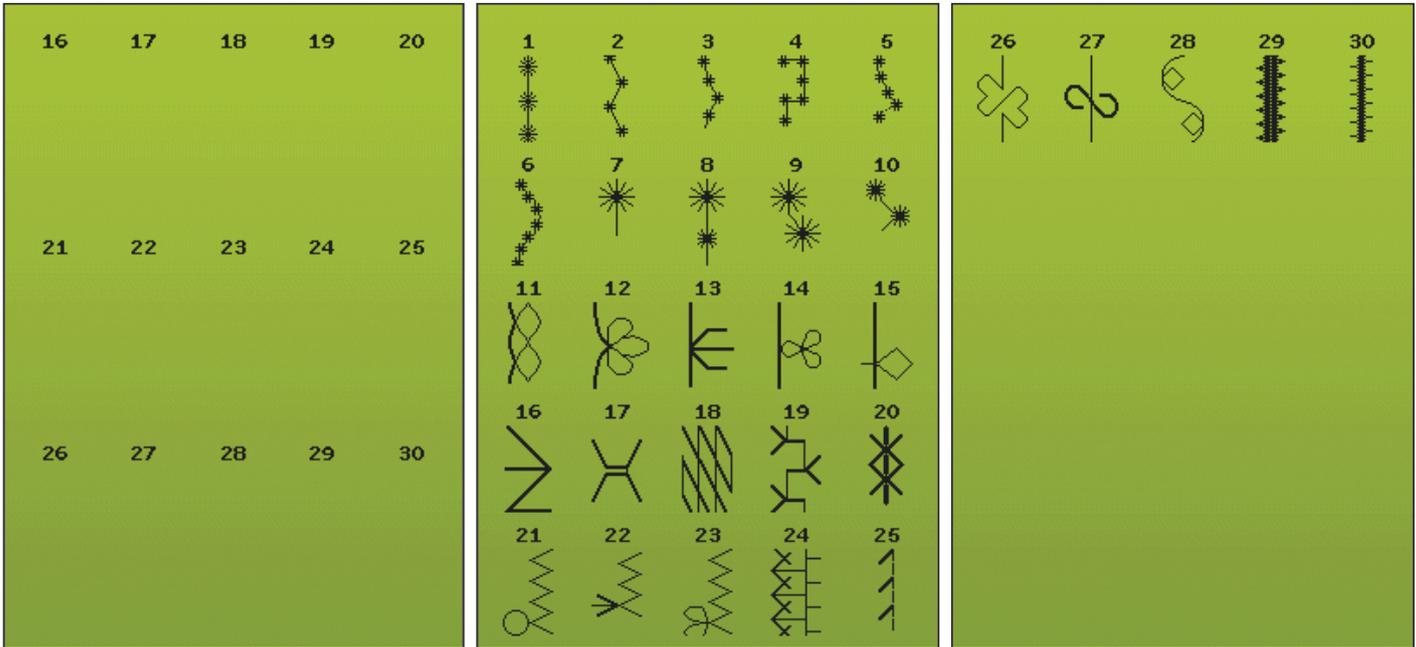
## U - My Stitches

Save your own personally adjusted and favorite stitches and stitch programs.



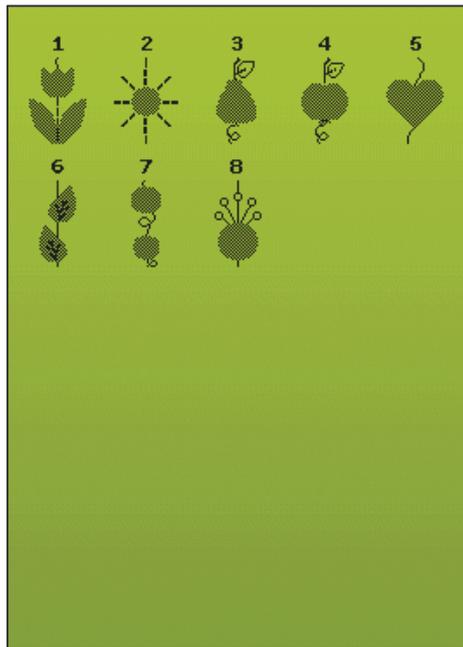
## X - Specialty Stitches

Sew special techniques including candlewicking and edging. Extra accessories may be needed. Use Quick Help for detailed information.



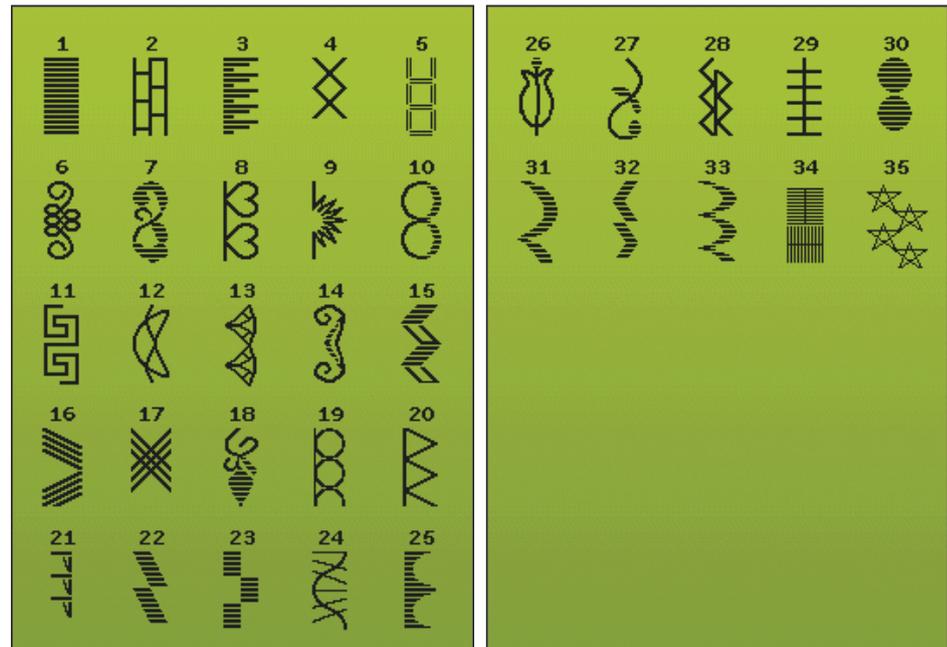
## Y - Dimensional Stitches

Decorative appliqué stitches.



## Z - Decorative Tapering Stitches

Decorative stitches with tapering.



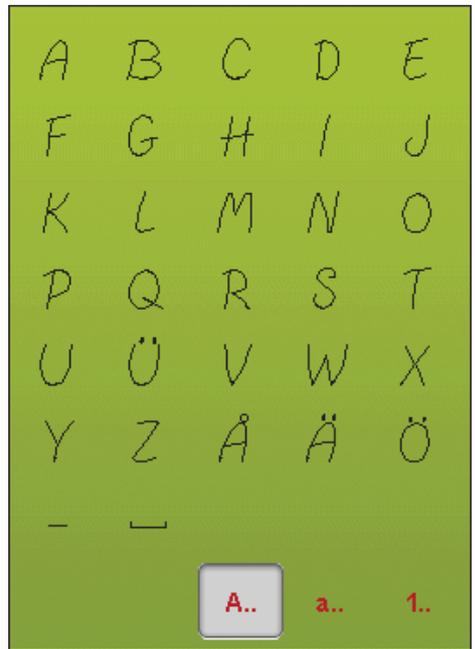
Block Alphabet



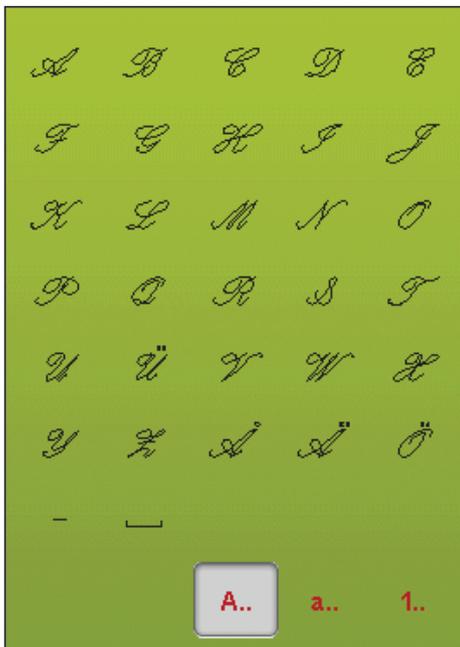
Outline Block Alphabet



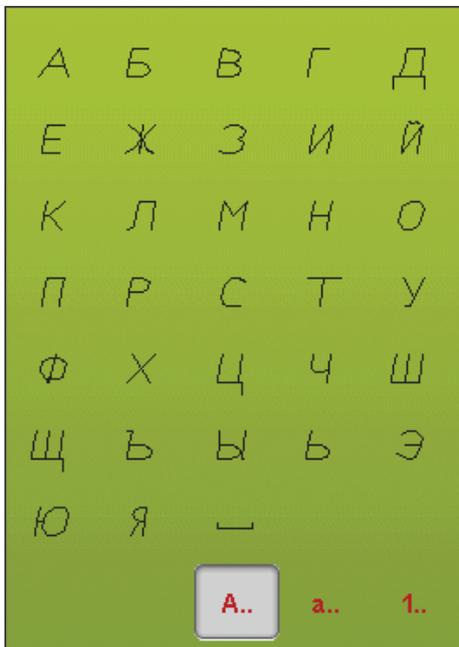
Brush Line Alphabet



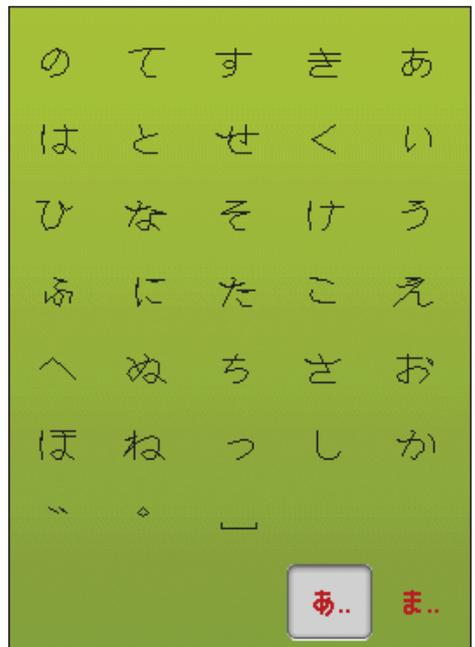
Script Alphabet



Cyrillic Alphabet



Hiragana Alphabet



# SETTINGS & FUNCTIONS

# 3

*Designer Ruby* Royale  
EXCLUSIVE SENSOR SYSTEM



This section of the User's Guide will guide you through the basic settings and functions of your machine. Learn how to navigate the functions and settings on the Large Interactive Screen, and how to use the function buttons on the machine sewing head.

Detailed descriptions of the icons and functions found on the Large Interactive Screen in Sewing Mode, Embroidery Mode and File Manager are described in separate chapters.

## LARGE INTERACTIVE SCREEN

The screen is very easy to use - just touch it with your stylus to make your choices.

## COMMON ICONS/FUNCTIONS

The following icons and functions on the screen are used frequently.

### OK

Confirms settings or changes and returns to previous window.



### CANCEL

Cancels settings and changes and returns to previous window.



### TOUCH & HOLD

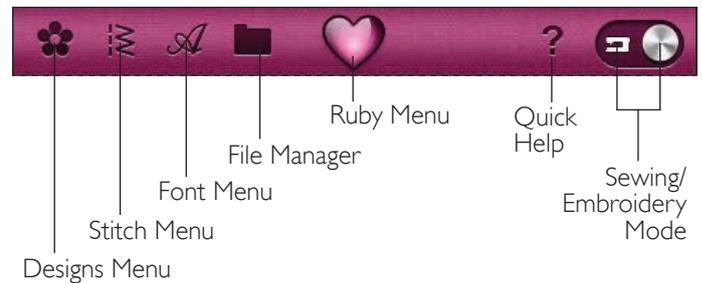
Some icons have additional functions, marked with an arrow at the lower right corner. To access those functions, Touch & Hold the icon for a few seconds.



Touch & Hold

## TOOLBAR

On this toolbar you will find the icons for the following functions: Designs Menu, Stitch Menu, Font Menu, File Manager, Ruby Menu, Quick Help and Sewing/Embroidery Mode toggle.

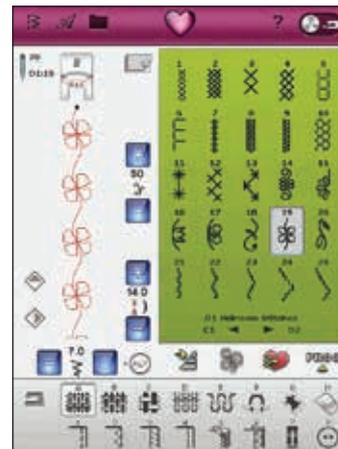


## SEWING/EMBROIDERY MODE

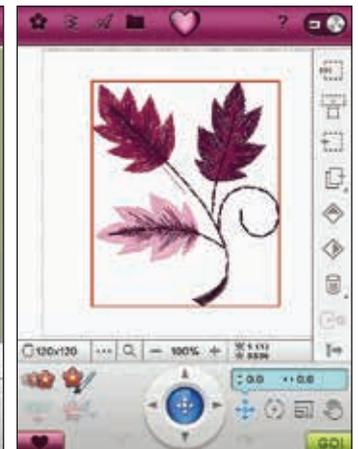
Toggle between the Sewing Mode and the Embroidery Mode by touching the Sewing/Embroidery Mode icon.

Sewing Mode is used for ordinary sewing (see chapter 4 & 5) and Embroidery Mode for embroidering. When entering Embroidery Mode, Embroidery Edit will be active. Here you will be able to change the appearance of your design (see chapter 7). To embroider your design, change from Embroidery Edit to Embroidery Stitch-Out by touching the GO! icon in the lower right corner of the Large Interactive Screen (see chapter 8).

Sewing Mode



Embroidery Mode



## QUICK HELP

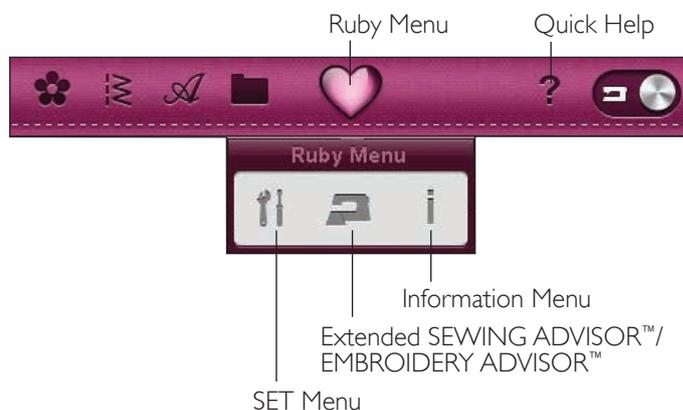
Touch the Quick Help icon in the upper right corner of the screen. The icon flashes indicating that Quick Help is active. Touch the icon and the area on the screen you want information about. A pop-up message gives a short explanation. Touch OK to close the pop-up message and exit Quick Help.

When a USB mouse is connected, it is even easier to use the built-in Quick Help. Place the cursor over the icon you wish to know more about and right click on the mouse. Quick Help will pop-up instantly.



## RUBY MENU

Touch the Ruby Menu icon to open the Extended toolbar. The contents of the Extended toolbar will change depending on which mode you are in. Here you will find the SET Menu, the Extended SEWING ADVISOR™/ EMBROIDERY ADVISOR™ features and the Information Menu. Touch the function you want to activate.



## STITCH MENU

When opening this menu you will find several different stitch menus in the drop down list (see chapter 1 for stitch descriptions).

### HOW TO SELECT A STITCH

To select a stitch, first select a stitch menu. For each menu, there are one or more submenus. A list of stitches is shown for each submenu. Select a stitch by touching it.

## FONT MENU

### SELECTING A FONT

Press the Font Menu icon and the Font Menu drop down list will appear. Both stitch fonts and embroidery fonts are visible in Embroidery Mode. Select a font by touching it. Use the scroll bar to see additional fonts.

When an embroidery font is selected, the Embroidery Text Editor will open automatically. You can select different sizes for each font.

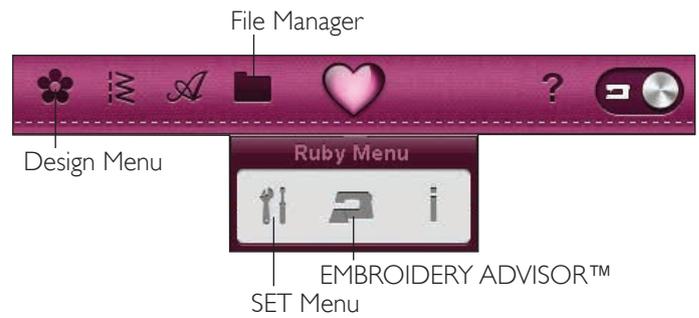
When a stitch font is selected, you will automatically enter the Program mode.

*Note: Embroidery fonts are only visible if the Embroidery Mode is active.*



## DESIGN MENU

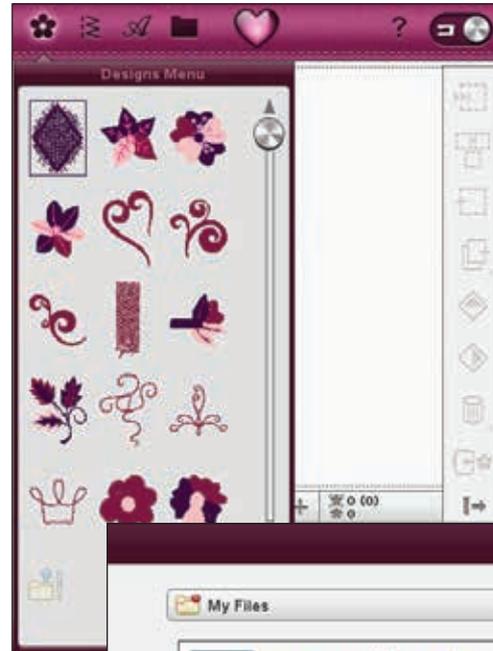
*(Only active in Embroidery Mode)*



## SELECTING A DESIGN

Open embroideries by selecting the flower icon on the toolbar. Select an embroidery design by touching it. Use the scroll bar to browse through additional designs.

*Note: When a design is selected, the machine will automatically switch to Embroidery Mode and the design will be loaded into Embroidery Edit.*



## FILE MANAGER

The File Manager is used to open, organize, add, move, remove and copy your designs, fonts and stitch files. Use either built-in memory or an external device connected to your machine for storing designs and files.

You can select several designs at a time. Touch the designs you want to open, then Touch & Hold (see page 3:2) on the last selected design. All designs that you have selected will open in Embroidery Edit.

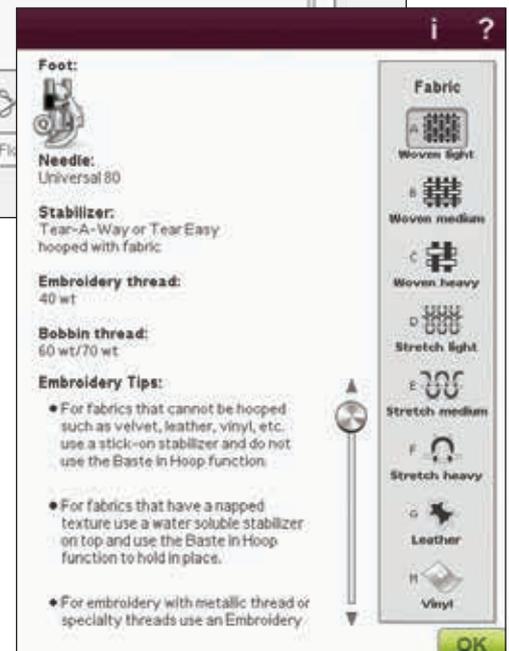
Learn more about the File Manager in chapter 9.



## EMBROIDERY ADVISOR™

*(Only active in Embroidery Mode)*

The EMBROIDERY ADVISOR™ feature recommends the right needle, stabilizer and thread for your fabric. Touch the fabric type and weight you want to embroider on and follow the recommendations. The EMBROIDERY ADVISOR™ feature also gives you tips when embroidering on special fabrics or using special threads. Touch OK to close the EMBROIDERY ADVISOR™ feature.



## SET MENU

In the SET Menu, you can override automatic settings and make personal adjustments to the Stitch Settings, Sewing Settings, Machine Settings, Sound Settings and Screen Settings.

Touch the icons to activate a function or open a list of choices. When changing the Sewing, Machine, Sound or Screen Setting, the settings are saved after turning off the machine, except for Feed Teeth Options in Sewing Settings which is always set to Auto when turning on the machine (see Feed Teeth Options, page 3:7). If you make changes to Stitch Settings, the changes will not be saved after turning off the machine.

## STITCH SETTINGS

*(only active in Sewing mode)*

In the Stitch Settings screen, you can set the presser foot pressure and balance a stitch or buttonhole. These settings will only be valid for the stitch that is currently selected.

If another stitch is selected or the same stitch is selected again, the stitch value is reset to the default value. Default number is black.

## EXCLUSIVE SENSOR SYSTEM™ Feature - Sensor Foot Pressure

Thanks to the Sensor Foot Pressure, the machine actually senses the thickness of the fabric, embroidery or stitching to sew over it smoothly and evenly with perfect, even fabric feed.

Touch + to increase or - to decrease the pressure of the presser foot on the fabric.

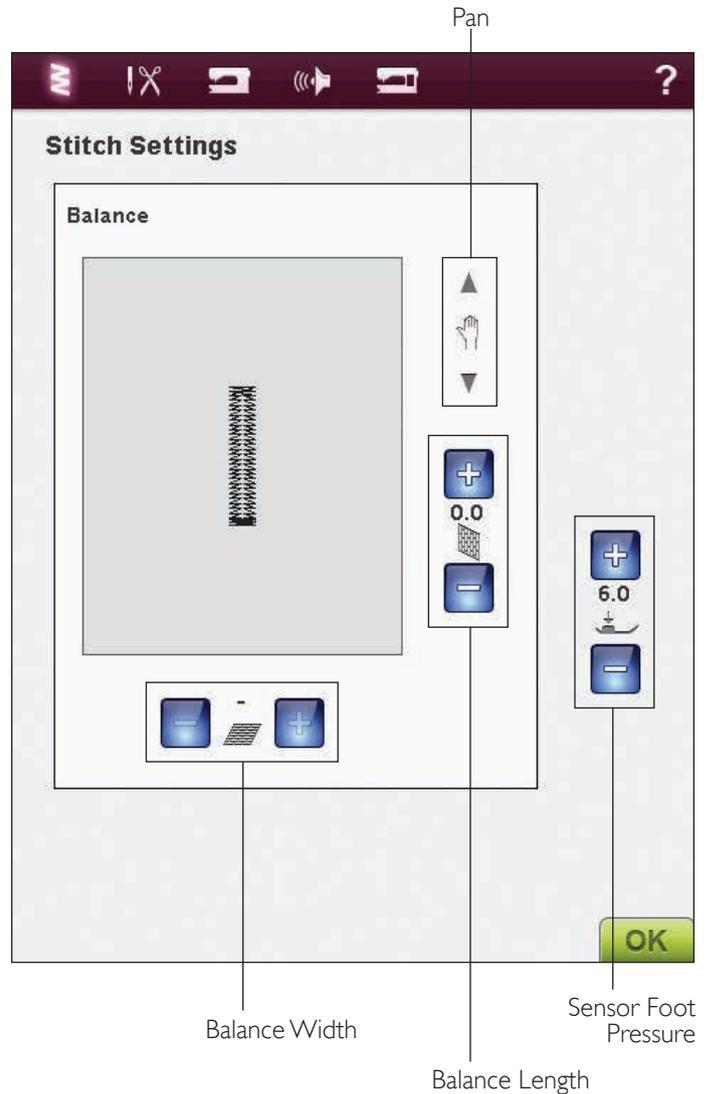
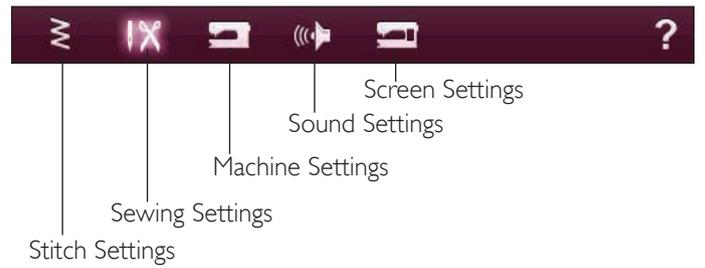
## Balance Controls

When sewing on special fabrics or doing a specialty technique, the balance of the stitch may need to be adjusted.

Start by sewing a stitch on a piece of scrap fabric with stabilizer underneath. In the SET Menu, select Stitch Settings. Change the picture of the stitch on the screen to match your sewn sample, using the + and - icons. Make the stitch on the screen look like your unbalanced stitch-out.

Now when you sew again on the same fabric, the balance will be corrected. The machine will balance the stitch for you.

*Note: Use the Pan icons. The Pan feature lets you see the whole stitch.*



## SEWING SETTINGS

### Twin Needle

Touch the Twin Needle icon to open a list for twin needle width selections. When a twin needle size is selected, the width of all stitches is limited for the selected twin needle size to prevent needle breakage. The setting is kept until you deselect the twin needle width.

When a twin needle size is selected, a pop-up message is shown when turning on your machine. Another warning pop-up message is shown when selecting a stitch that is too wide for the selected twin needle size. The stitch width of those stitches is automatically adjusted to fit the twin needle. Deselect Twin Needle to go back to normal sewing.

### Stitch Width Safety

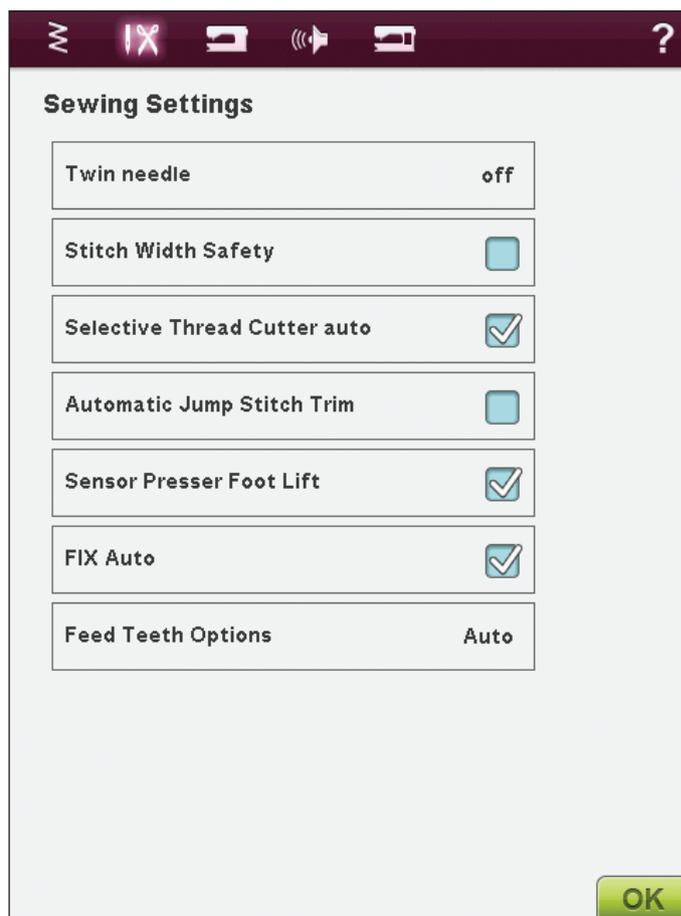
Select the Stitch Width Safety function when using a straight stitch needle plate or a straight stitch presser foot. The needle position is locked to center for all stitches to prevent damage to the needle, presser foot or needle plate.

When turning on the machine with this setting activated and for every stitch selection that is not a straight stitch, a pop-up message informs you that it is set to straight stitch. Deselect Stitch Width Safety to go back to normal sewing.

*Note: Twin Needle and Stitch Width Safety cannot be used at the same time.*

### Selective Thread Cutter Auto

To activate the function select the Selective Thread Cutter Auto in the Sewing Settings. The threads are cut automatically and the presser foot raises at color changes, when an embroidery is finished or when you have completed a buttonhole. When deselected, no Selective Thread Cutter Auto will be performed.



## Automatic Jump Stitch Trim

This machine features Automatic Jump Stitch Trim. This function saves you time trimming after the embroidery is completed. The default setting is on. As you embroider, the machine will trim the top jump stitch thread and pull the thread end to the underside of the fabric.

*Note: The machine will also cut the thread after you have changed to a new color. Hold the thread end when you start embroidering again, so that you can easily remove the thread end when cut.*

Not all designs are programmed for Automatic Jump Stitch Trim. Jump stitch trim commands can be added to any design using the complimentary software (PC). See page 2:12.



Designs marked with this symbol are programmed for Automatic Jump Stitch Trim.

*Note: If the front and back of your embroidery will be visible, turn off the Automatic Jump Stitch Trim and cut the threads manually.*

## Sensor Presser Foot Lift

When selected, the Sensor Presser Foot Lift is activated. The presser foot will raise to pivot height for example when stopping to sew with the needle in the down position. When deselected, the presser foot will stay lowered even if the machine stops with the needle in down position or after a thread cut.

## FIX Auto

When the FIX Auto is activated, the machine will begin a stitch with FIX stitches. If it is not activated use the FIX button on the front of your machine to fix your stitch or to cancel the FIX at the beginning of a stitch.

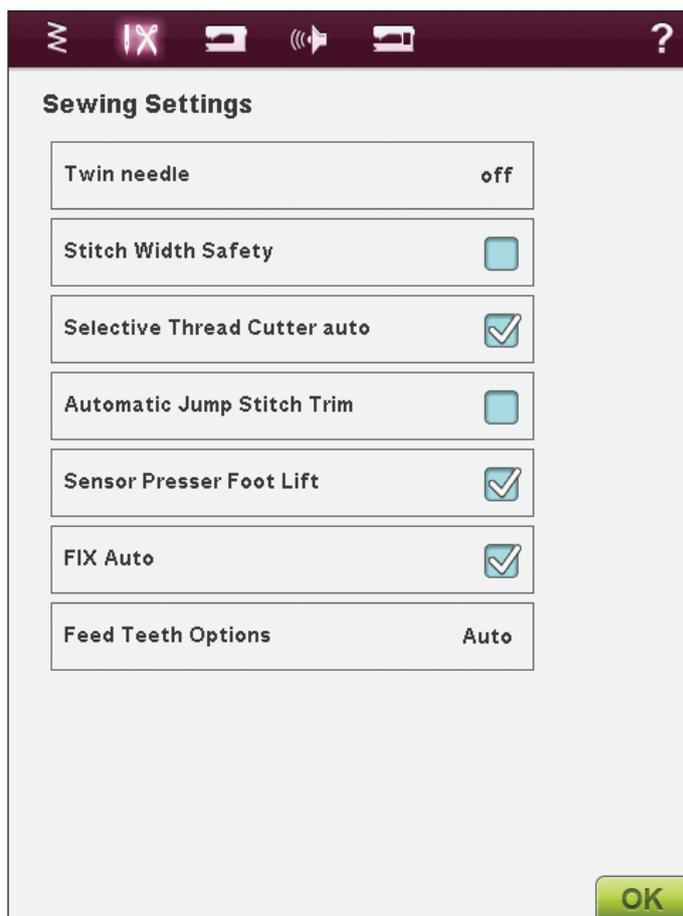
## Feed Teeth Options

Touch to open a pop-up with three options.

The default setting is Auto (recommended). Auto is always selected when turning on your machine. Your machine automatically raises or lowers the feed teeth, depending on the stitch selected. For example, the feed teeth are lowered when sewing on buttons, or when doing free-motion sewing and embroidery. The feed teeth are also lowered automatically when using the Sensor Foot Extra Lift. When a new stitch is selected, the feed teeth are automatically raised again when you start sewing.

Select Up to set the feed teeth raised for all sewing.

Select Down to set the feed teeth lowered for all sewing.



## MACHINE SETTINGS

The settings that are made on the screen will be retained when the machine is turned off.

### Language

Touch the Language icon to view the languages. Select your desired language by touching it.

### Owner's Name

Touch the Owner's Name icon to open a screen that allows you to enter your name.

### Timer

The timer displays of the total sewing and embroidery time of your machine. Touch the icon to reset the timer.

### Hoop Selection

Touch the Hoop Selection icon and select the hoops you own. When you first load a design, the machine will select the most suitable hoop among the ones you have entered in the Hoop Selection.

### Auto Smart Save

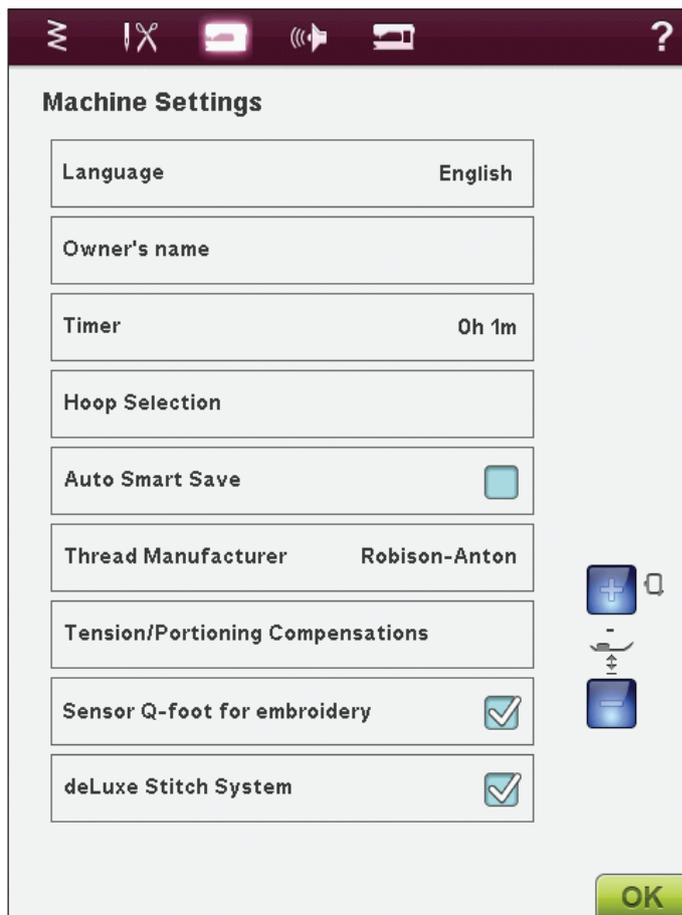
When Auto Smart Save is selected, the machine will do a Smart Save periodically while embroidering and also when you stop embroidering.

*Note: When the Auto Smart Save is activated it will take longer to enter Embroidery Stitch-Out.*

### Thread Manufacturer

Touch to select preferred thread manufacturer. You can select between Gütermann Sulky and Robison-Anton. Color codes from the selected manufacturer will be used when changing colors in a design, or when creating a new design from stitches or fonts in your machine.

*Note: Changing thread manufacturer setting will not automatically convert the colors in existing designs from one thread manufacturer to the other.*



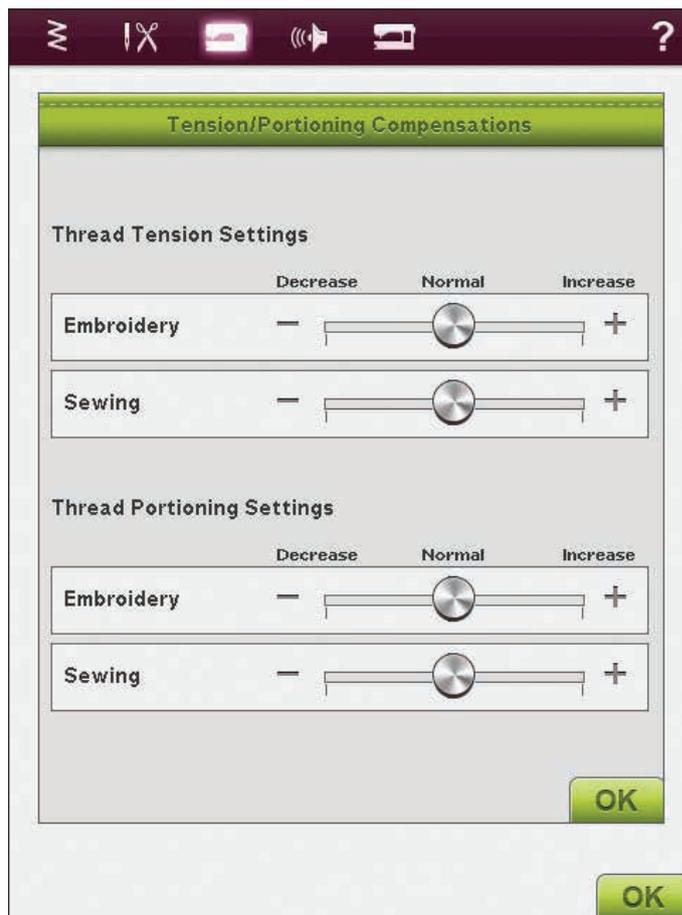
## Tension/Portioning Compensations

If you find that the Thread Tension/Thread Portioning needs to be increased or decreased for most stitches or embroideries, you can change the general setting for embroidering and/or sewing. You may need to adjust the Thread Tension/Thread Portioning controls when you regularly sew or embroider on a special fabric or use a specialty thread.

Touch Tension/Portioning Compensations. Adjust the slider bars to generally decrease or increase the Thread Tension/Thread Portioning for all stitches and/or embroidery. Default setting is Normal.

Once you have increased or decreased the value in the Settings menu, the Thread Tension control icon or Thread Portioning control icon will change to red.

*Note: Contact your authorized HUSQVARNA VIKING® retailer if you experience Thread Tension/Thread Portioning problems that cannot be helped with the Tension/Portioning Compensations.*



## Sensor Q-foot for embroidery

The Sensor Q-foot for embroidery is active by default when you turn on the machine. When embroidering, using the Sensor Q-foot, make sure that the "Sensor Q-foot for embroidery" is selected.

When using another type of foot, e.g., the R-foot, deactivate Sensor Q-foot for embroidery. The *deLuxe*<sup>™</sup> Stitch System will then use Thread Tension instead of Thread Portioning.

## *deLuxe*<sup>™</sup> Stitch System

The *deLuxe*<sup>™</sup> Stitch System has two ways to control the needle thread: Thread Tension and Thread Portioning. When activated, the machine will automatically use Thread Portioning if possible. Depending on your other settings, the machine will automatically use Thread Tension in some cases, e.g. when Free Motion is active.

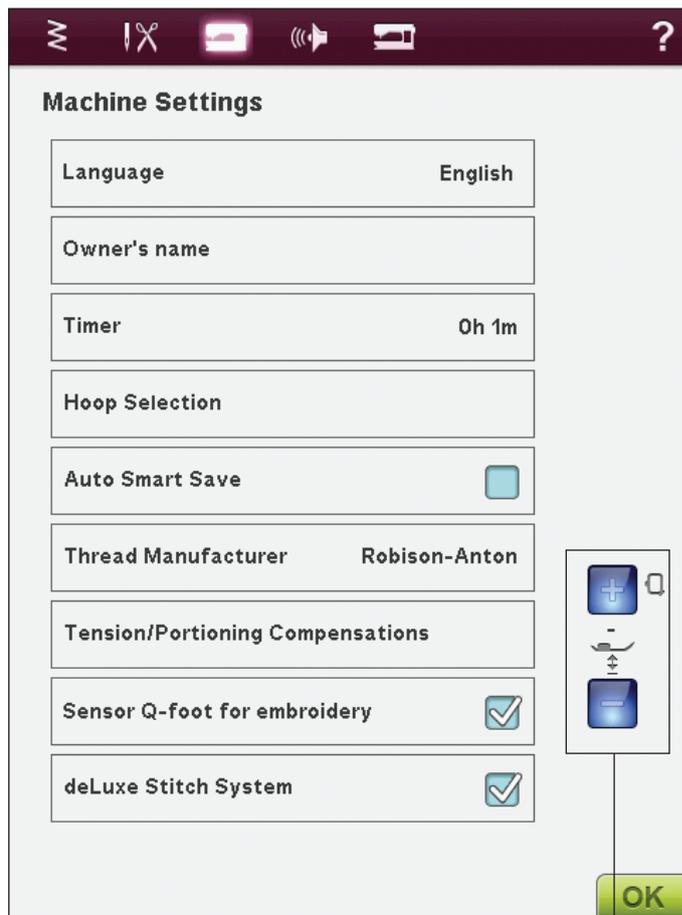
Certain optional accessories or special techniques may require the use of Thread Tension for best results. Deselect the *deLuxe*<sup>™</sup> Stitch System icon to switch to Thread Tension.

Read more about the *deLuxe*<sup>™</sup> Stitch System on page 4:9.

## Presser Foot Height for Embroidery

Adjust the height of the presser foot in embroidery stitch-out mode.

Some embroideries may build up under the presser foot. If there is not enough space between the presser foot and the embroidery, the top thread will form loops on the underside of the embroidery. Increase the presser foot height in small steps until the embroidery moves freely under the presser foot.



Presser Foot Height for Embroidery

## SOUND SETTINGS

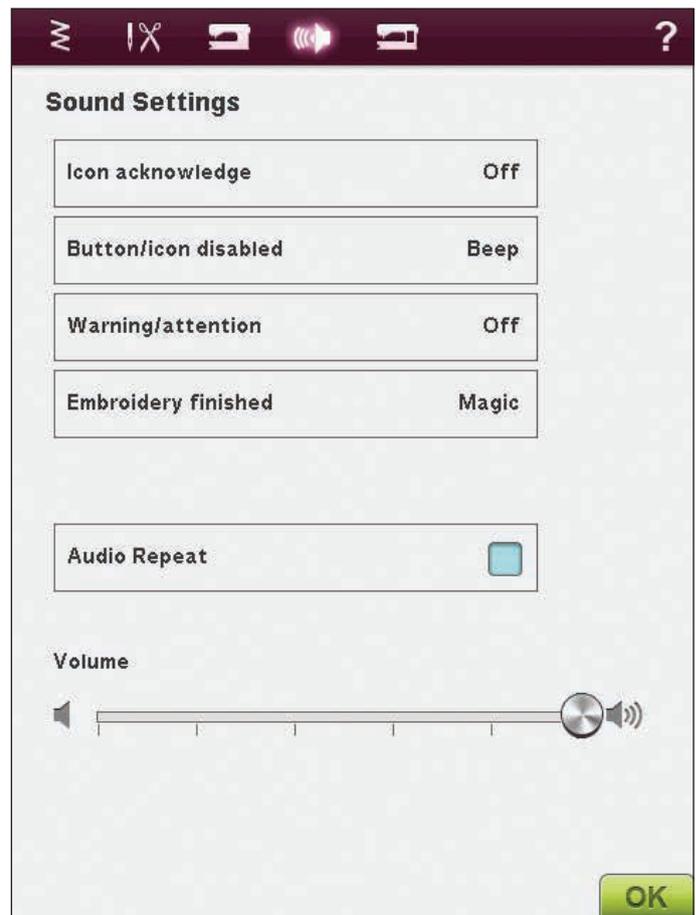
You can change the Sound Settings on your machine to alert you at a variety of situations. Select which sound function you want to change. Then select the sound you want to play by touching the icon. You will be able to hear a preview of the sound when you touch the sound icon. Each alert function can have a different sound. Close the pop-up with the OK icon.

### Audio Repeat

When active, the signal for some warning alerts or attention pop-up messages is repeated in intervals until it is cancelled.

### Volume

You can change the volume using the slider bar. All sounds settings will be affected if the volume setting is changed.



## SCREEN SETTINGS

### Touch Screen Adjust

When touching the icons on the screen, the screen might need calibration to adjust to your touch.

Touch to open a view for calibrating the touch screen. Follow the instructions on the screen to calibrate the screen.

### Lock Screen

If there is the possibility of bumping the Large Interactive Screen and changing the stitch or settings while sewing, it is easy to lock the screen.

When activated, the screen is automatically locked everytime it is inactive for ten seconds. A pop-up is shown on the screen and will remain locked until you touch OK on the pop-up.

### Screen Saver

When activated, the screen shows the startup screen ten minutes after the last touch. Touch the screen or press any button to activate the screen again.



## INFORMATION MENU

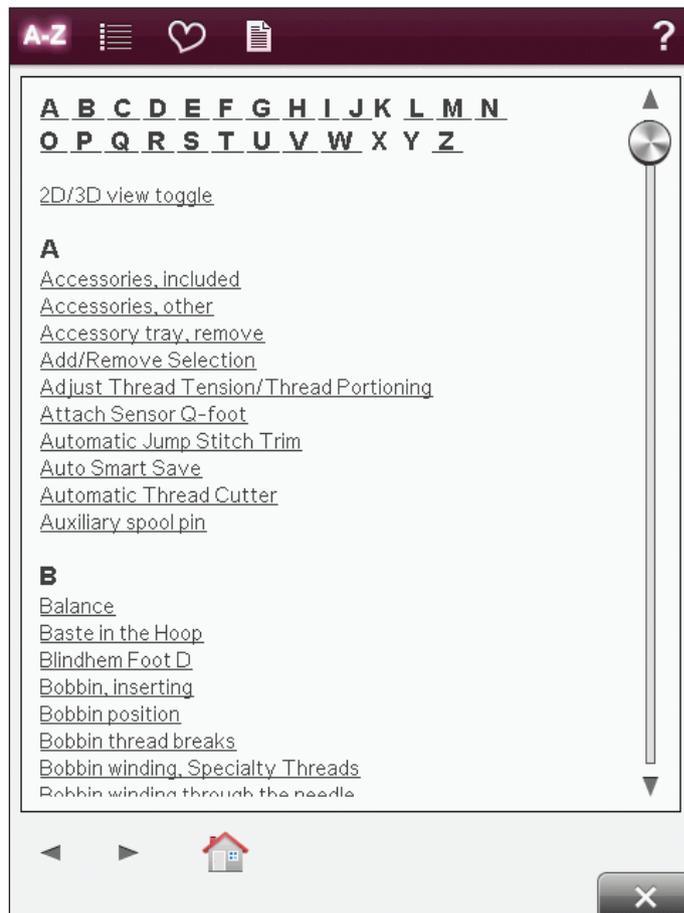
Use the Information menu to easily get Help topics and information. The Info menu is a built-in, abridged version of the User's Guide.

When you touch the Info menu icon on the Extended toolbar, you have four options to select from: Index, Category, My Info and Text.

Browse through the topics using your stylus on the slider bar on the right side of the screen. The left arrow at the lower left corner of the screen opens the previous page. The right arrow takes you to the next page (if there is one). By touching the Home icon you will return to the first page.

### Index

Index shows the Help topics in alphabetical order.



### Category

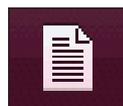
Category shows the Help topics divided into categories following the structure of the User's Guide Table of Contents.

### My Info

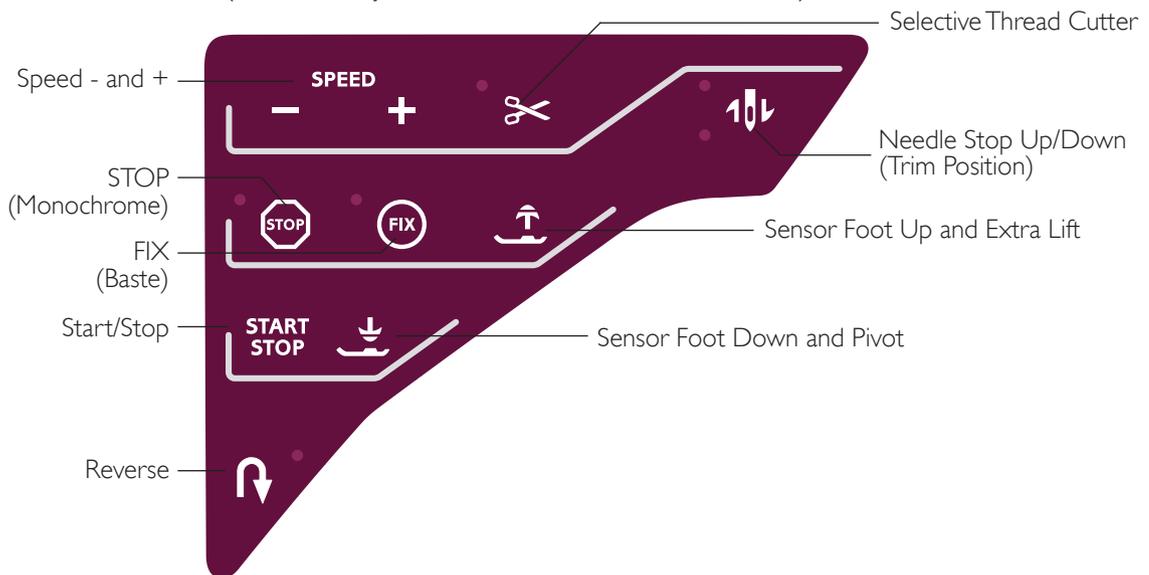
My info contains the owner's name, machine's software information, serial number and available/total machine memory.

### Text

You can open and read text and HTML-files on your machine. To be able to open a text file or HTML-file you need to go to your File Manager and touch My Files. Touch & Hold on the file you wish to open. That file will then open in Text view. It will stay there as long as you have the machine on.



## FUNCTION BUTTONS (Embroidery Mode functions are in brackets)



### SPEED - AND +

All stitches in your machine and each hoop size have a pre-set, recommended sewing/embroidery speed.

Press Speed - or Speed + to increase or decrease the maximum allowed sewing/embroidery speed. When not sewing/embroidering, press Speed and a pop-up message on the screen will indicate the speed setting. You can set the speed by pressing the slider in the pop-up message. If you change the speed setting while sewing/embroidering no pop-up message will appear.

When sewing with metallic threads, or when sewing on delicate fabrics, lower the speed for optimal results.

### STOP (MONOCHROME)

#### Sewing Mode

Select STOP to conclude a stitch. Your machine fixes the thread and stops automatically when one stitch or stitch program has been completed. When STOP is selected only one stitch is displayed on the Large Interactive Screen. The STOP button lights up when you press it. Select STOP again to cancel or by selecting a new stitch. The STOP button light will go out. The STOP function can be programmed, see program chapter. The STOP function is cancelled when the stitch is completed.

#### Embroidery Stitch-Out

Select STOP to eliminate stops for color changes and create monochrome embroidery, see Embroidery Stitch-Out chapter.

### FIX (BASTE)

#### Sewing Mode

FIX is used to tie off a stitch. FIX is automatically activated when you select a stitch, use the Selective Thread Cutter, select Stitch Re-Start, STOP or by pressing FIX while you are sewing. At the beginning, your machine sews a few tie-off stitches and continues with the selected stitch. Press FIX while sewing and your machine sews a few tie-off stitches and stops automatically. The FIX button lights up when the FIX function is active. Press the lit FIX button to turn it off. The FIX function can be programmed, see Program chapter.

*Note: FIX Auto can be cancelled in the SET Menu, Sewing Settings (see page 3:7). No tie-off stitches will be sewn unless you select the FIX button on your machine.*

#### Embroidery Stitch-Out

Press FIX to baste an outline of the embroidery design area or to baste the fabric to the stabilizer.

### START/STOP

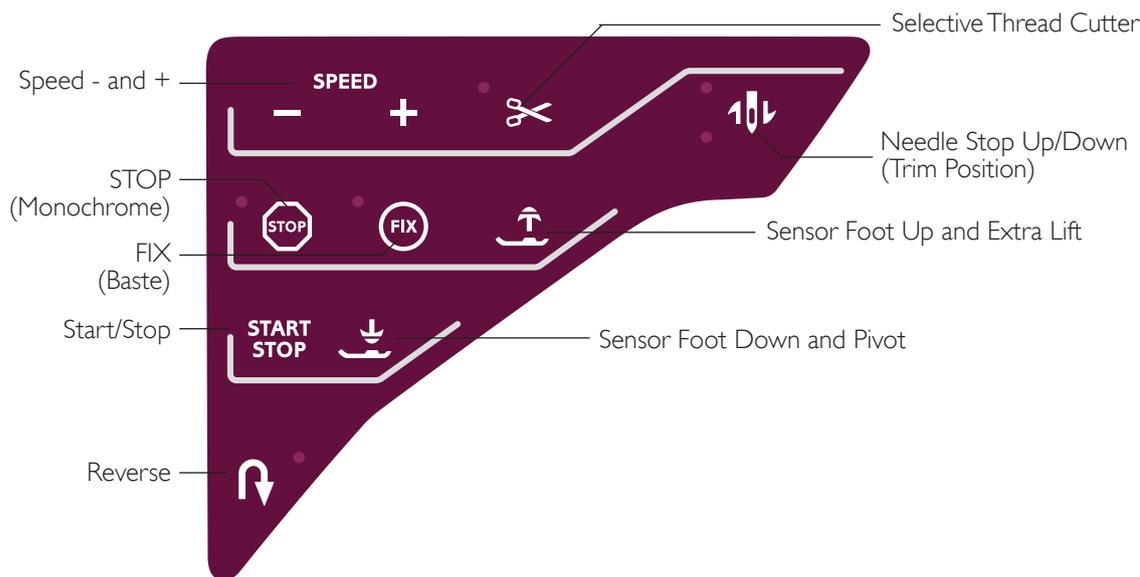
Press this button to start and stop the machine sewing or embroidering without using the foot control. Press START/STOP to begin and press again to stop.

### REVERSE

For permanent reverse, press the Reverse button once before starting to sew. The reverse indicator will be lit and the machine sews in reverse until you press the button again to cancel. If you press the reverse button while sewing, the machine will sew in reverse for as long as you keep the button pressed. The reverse indicator is lit when the reverse button is pressed.

Reverse is also used when sewing buttonholes, darning stitches and tapering stitches to step between the parts of the stitch.

Reverse has no function in Embroidery Mode.



## SELECTIVE THREAD CUTTER

### Sewing Mode

Press the Selective Thread Cutter button and your machine cuts the top and bobbin threads, raises the presser foot and the needle, and activates the FIX function for the next start. To cut threads at the end of a stitch or stitch program, press Selective Thread Cutter while sewing. The button starts to flash, indicating that a cut is requested. When the stitch or stitch program is completed, the upper thread and bobbin thread will be cut. The Selective Thread Cutter function can be programmed, see Program chapter.

*Note: Your machine cuts the threads automatically after certain stitches such as completing a Sensor One Step Buttonhole. Automatic Selective Thread Cutter can be cancelled in the SET Menu, see page 3:6.*

### Embroidery Stitch-Out

The Selective Thread Cutter automatically cuts the threads and raises the presser foot. At the end of a color block the top thread only is cut. When the design is finished, both top and bobbin threads are cut automatically.

## NEEDLE STOP UP/DOWN (TRIM POSITION)

### Sewing Mode

Press the Needle Stop Up/Down to move the needle up or down. The setting of the needle stop position is changed at the same time. This function will also set the needle position up or down when you stop sewing. You can also tap the foot control to raise or lower needle once you stop sewing.

### Embroidery Stitch-Out

The machine will move the hoop forward, towards you, for easy thread trimming.

## SENSOR FOOT UP AND EXTRA LIFT

### Sewing Mode

Press Sensor Foot Up to raise the presser foot. Press it a second time and the presser foot will raise to Extra Lift, and the feed teeth are lowered automatically to make it easy to get thick fabric under the presser foot.

### Embroidery Mode

Press the Sensor Foot Up and Extra Lift to lift the presser foot to Up position. Press once more and the presser foot will raise to Extra Lift, to make it easier to insert or remove the hoop.

## SENSOR FOOT DOWN AND PIVOT

The presser foot is lowered automatically when you start sewing/embroidering.

### Sewing Mode

Press the Sensor Foot Down and Pivot button and the presser foot will be completely lowered. The machine firmly holds the fabric. Press Sensor Foot Down again to get the Pivot position.

### Embroidery Mode

Press Sensor Foot Down to lower the presser foot into the Embroidery “float” position.

## EXCLUSIVE SENSOR SYSTEM™

Thanks to the EXCLUSIVE SENSOR SYSTEM™ feature, the presser foot continuously senses the thickness of fabric, embroidery or stitching and sews over it smoothly and evenly with perfect fabric feed.

Go to the SET Menu, Sewing Settings, to see the actual setting of the Sensor presser foot pressure for the selected fabric and adjust the presser foot pressure.

SET UP 2



## UNPACKING

1. Place the box on a steady, flat surface. Lift off the machine carrying case. Lift your machine out of the box and remove the outer packaging.
2. Remove all other packing material and the plastic bag.

*Note: Your DESIGNER RUBY Royale™ sewing and embroidery machine is adjusted to provide the best stitch result at normal room temperature. Extreme hot and cold temperatures can affect the sewn results.*

## CONNECT THE POWER CORD AND FOOT CONTROL

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

*Note: Before plugging in the foot control, check to ensure that it is type “FR5” (see underside of foot control).*

1. Pull out the cord from the foot control. Connect the foot control cord to the front socket on the bottom right side of the machine (1).
2. Connect the power cord to the rear socket on the bottom right side of the machine (2).
3. Press the ON/OFF switch to “I” to turn on power and light (3).

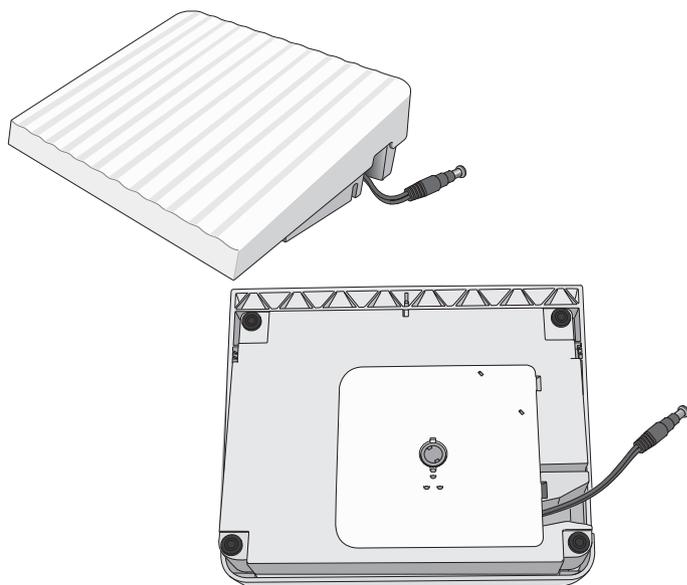


### For the USA and Canada

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.

## PACK AWAY AFTER SEWING

1. Press the ON/OFF (3) switch to “O”.
2. Unplug the cord from the wall socket and then from the machine (2).
3. Unplug the foot control cord from the machine (1). Pull the cord gently and release. The cord will retract itself into the foot control.
4. Place all accessories in the accessory tray. Slide the tray on to the machine, behind the free arm.
5. Place the foot control in the space above the free arm.
6. Place the hard cover over your machine.



## FREE ARM

Slide the accessory tray to the left when you wish to remove it and use the free arm. Use the free arm to facilitate sewing trouser legs and sleeve hems. To replace the accessory tray, slide it onto the machine until it fits in place.

## SPOOL PINS

Your machine has two spool pins; a main spool pin and an auxiliary spool pin. The spool pins are designed for all types of thread. The main spool pin is adjustable and can be used both in a horizontal position (the thread reels off the spool) and a vertical position (the thread spool rotates). Use the horizontal position for regular sewing threads and the vertical position for specialty threads.

### HORIZONTAL POSITION

Place a spool cap and the thread spool on the spool pin. Make sure that the thread reels off the spool counter clockwise and slide on a second spool cap.

*Note: Not all thread spools are manufactured in the same way. If you experience problems with the thread, turn it in the opposite way or use the vertical position.*

Use a spool cap slightly larger than the thread spool. For narrow thread spools, use a smaller spool cap in front of the spool. For large thread spools, use a larger spool cap in front of the spool.

The flat side of the spool cap should be pressed firmly against the spool. There should be no space between the spool cap and the thread spool.

### VERTICAL POSITION

Lift the spool pin up and all the way to the right. Lock the spool pin in the vertical position by slightly pressing it down. Slide on the large spool cap. For spools smaller than the medium size spool cap or when using specialty threads, place a felt pad under the thread spool to prevent the thread from reeling off too fast. For larger spools, the felt pad is not needed.

Do not place a spool cap on top of the vertical spool pin as it may prevent the spool from rotating.

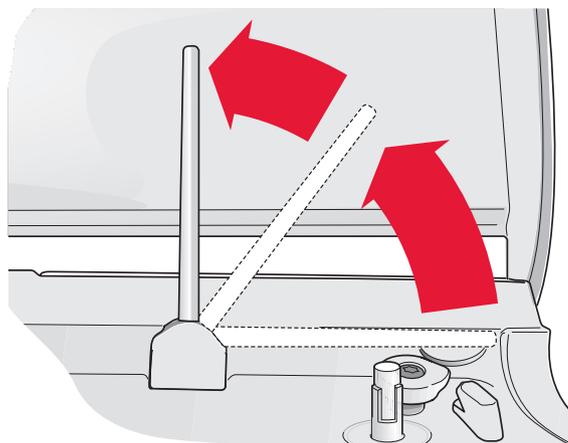
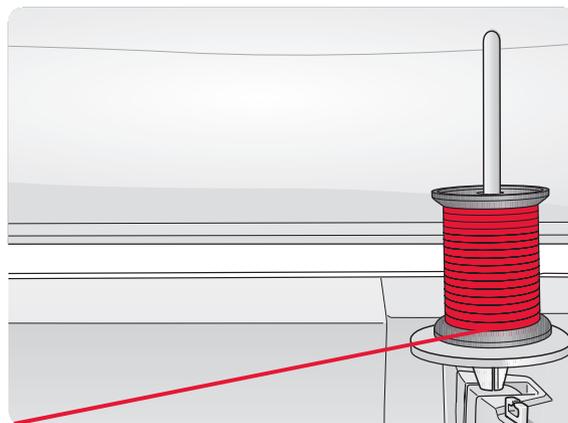
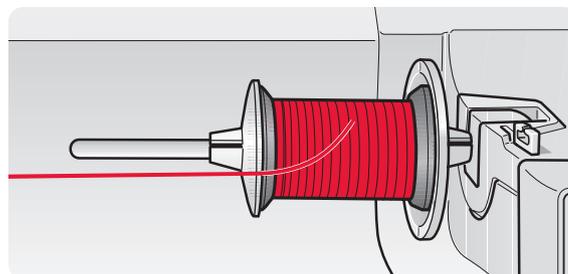
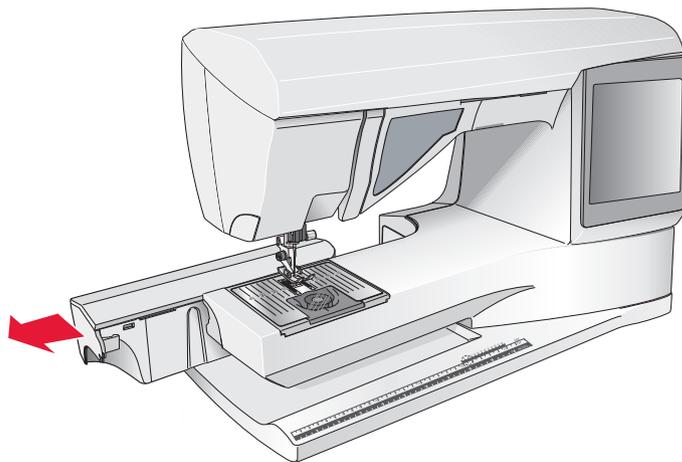
*Note: When the spool pin is used in the vertical position, the thread tension might need to be adjusted manually.*

### AUXILIARY SPOOL PIN

The auxiliary 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.

Lift the auxiliary spool pin up and to the left. Slide on the large spool cap. For spools smaller than the medium size spool cap, place a felt pad under the thread spool to prevent the thread from reeling off too fast. For larger spools, the felt pad shall not be used.

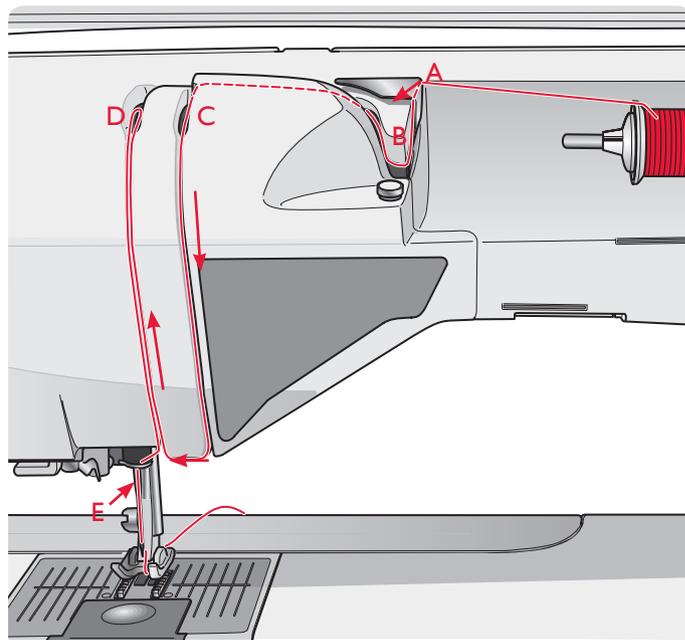
*Note: When sewing with two needle threads, deactivate deLuxe™ Stitch System button in Machine Settings.*



## THREADING THE UPPER THREAD

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

1. Place the thread on the spool pin and the spool cap on the spool as described on page 2:3.
2. **Spool pin in horizontal position:**  
Bring the thread over and behind the pre-tension thread guide (A) and under the thread guide (B).
- Spool pin in vertical position:**  
Instead of bringing the thread into the pre-tension guide (A), bring it directly under the thread guide (B).
3. Bring the thread down between the thread tension discs (C).
4. Continue threading in the direction indicated by the arrows. Bring the thread from the right into the slot on the take-up lever (D).
5. Take the thread down and behind the last guide just above the needle (E).



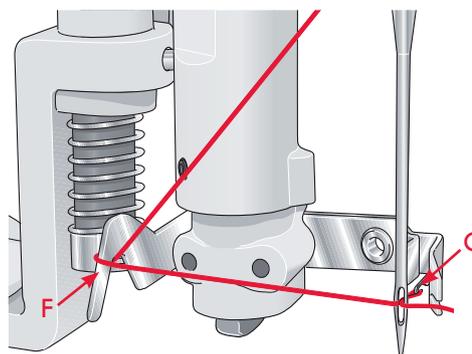
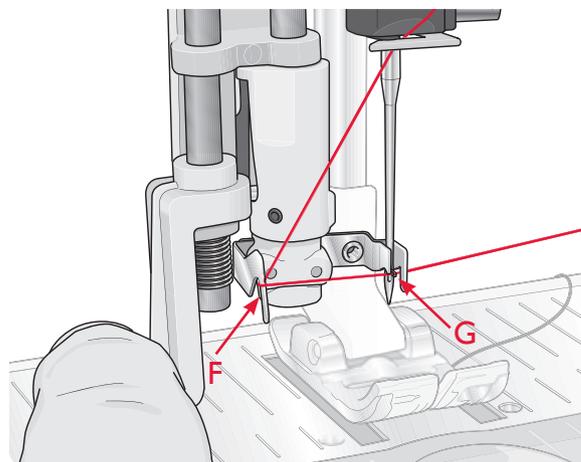
## NEEDLE THREADER

The needle threader allows you to thread the needle automatically. The needle must be in the up position to use the Built-In needle threader. We also recommend lowering the presser foot.

1. Use the handle to pull the needle threader all the way down. The threader hook (G) swivels through the needle eye.
2. Place the thread from the back over the hook (F) and under the thread hook (G).
3. Let the needle threader gently swing back. The hook pulls the thread through the needle eye and forms a loop behind the needle. Pull the thread loop out behind the needle.

*Note: The needle threader is designed to be used for size 70-120 needles. You cannot use the needle threader for needles size 60 or smaller, the wing needle, twin needle, triple needle or when the Sensor One-Step buttonhole foot is attached. There are also some optional accessories that require manual threading of the needle.*

*When threading the needle manually, make sure that the needle is threaded from front to back. The bobbin cover can be used as a magnifying glass to make threading easier.*



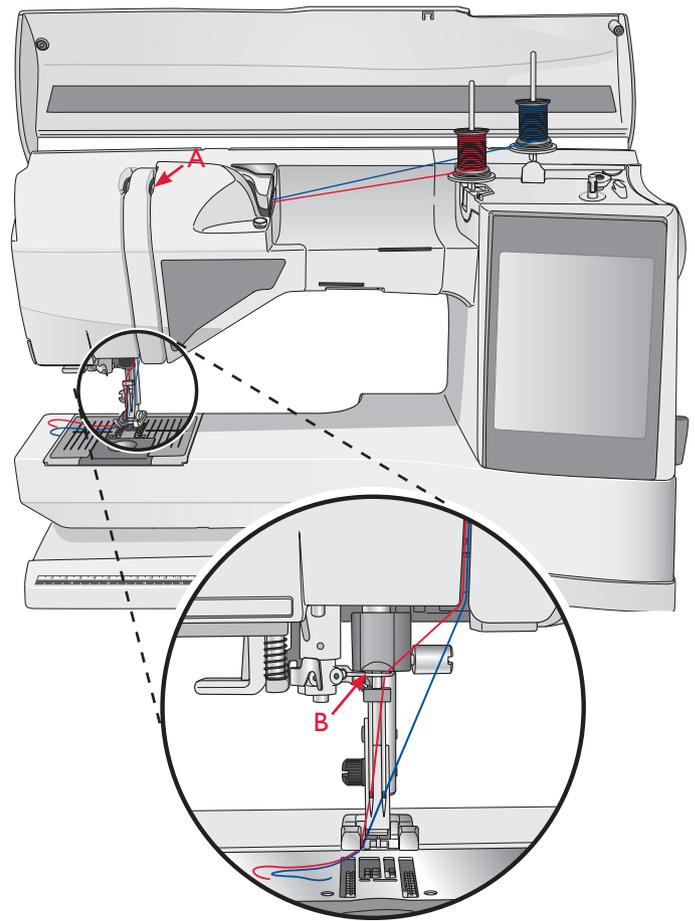
## THREADING FOR TWIN NEEDLE

Replace the sewing needle with a twin needle. Make sure the presser foot is raised and the needle is in the up position.

1. Lift the spool pin up and all the way to the right. Lock the spool pin in the vertical position by slightly pressing it down. Slide on the large spool cap. For spools smaller than the medium size spool cap, place a felt pad under the thread spool.
2. Place the first thread spool on the spool pin. The spool should rotate in a clockwise direction when the thread reels off the spool.
3. **LEFT NEEDLE:** Thread the machine as described on page 2:4. Check to ensure that the thread lies between the left thread tension discs (A). Thread the left needle manually.
4. Pull out the auxiliary spool pin and slide on the large spool cap. For spools smaller than the medium size spool cap, place a felt pad under the thread spool.
5. Place the second thread on the spool pin. The second spool should rotate in a counterclockwise direction when the thread reels off the spool.
6. **RIGHT NEEDLE:** Thread the machine as before but this thread should lie between the right thread tension discs (A) and outside the needle thread guide (B). Thread the right needle manually.

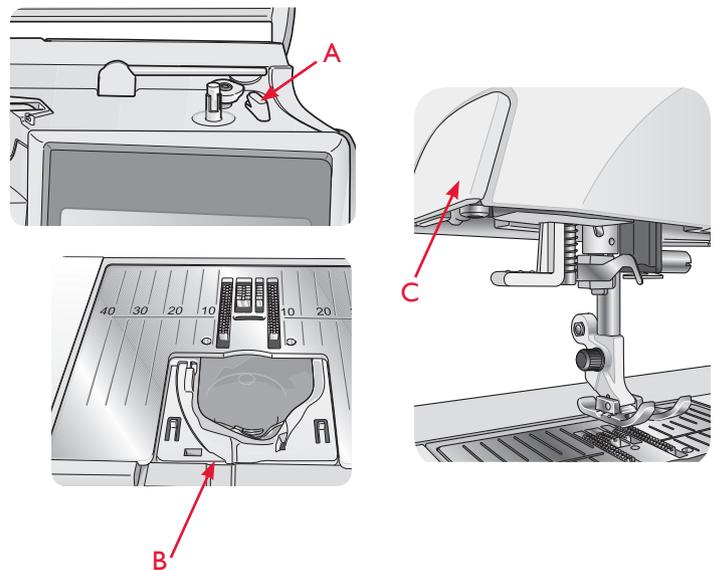
*Note: Activate and choose the correct needle width in Sewing Settings in SET Menu to prevent damage on the needle or the presser foot.*

*Note: The weight and irregular surface of specialty threads such as metallic increases the amount of friction on the thread. By reducing the tension, the risk of needle breakage and thread breakage is reduced.*



## THREAD CUTTER

There are three thread cutters on your machine. The first one is close to the bobbin winder spindle (A) for cutting the thread before and after winding. The second one is next to the bobbin area (B) for cutting the bobbin thread after placing it in the machine. The third one is on left side of the machine (C) for manually cutting top and bobbin threads. Pull both threads into the cutter from the back to the front and pull down quickly.



## BOBBIN WINDING

### BOBBIN WINDING THROUGH THE NEEDLE

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

1. Place an empty bobbin on the bobbin spindle on the top of the machine. The bobbin only fits on one way, with the logo facing up. Use only original HUSQVARNA VIKING® bobbins.
2. Thread the machine with the main spool pin in the horizontal position.

*Note: If the thread spool is too large to be in horizontal position, wind the bobbin as described under “Winding Specialty Threads” below.*

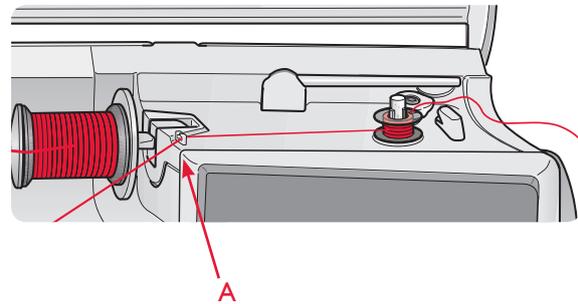
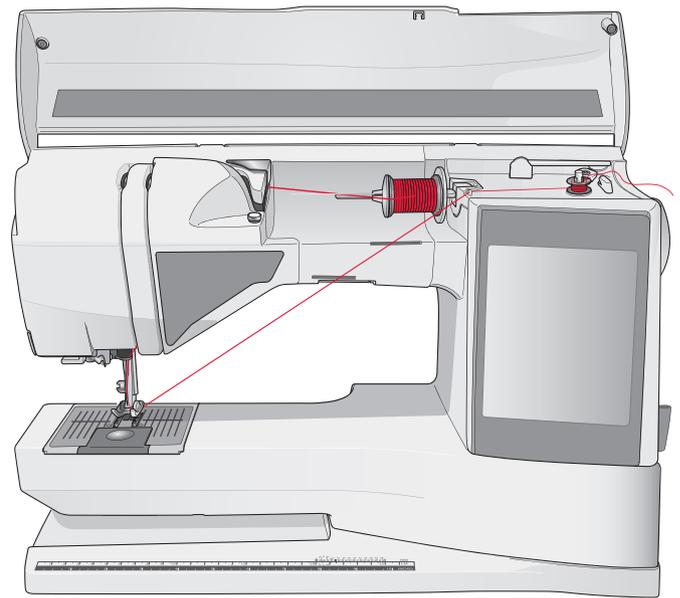
3. Bring the thread up from the needle, under the presser foot and up to the right through thread guide (A).

*Note: Use a metal presser foot when bobbin winding from the needle.*

4. Guide the thread through the hole in the bobbin from the inside to the outside.
5. Push the bobbin winder lever towards the bobbin to wind. A pop-up message appears on screen. To adjust winding speed drag the arrow on the slider with your stylus. Stop and start the bobbin winding with the on-screen buttons. Hold the end of the thread firmly when starting to wind. Once the bobbin begins to wind, cut the excess thread.

*Note: It is important that you cut the thread end close to the bobbin.*

When the bobbin is full, the bobbin winder lever will move back and the winding will stop automatically. The pop-up message closes. Remove the bobbin and cut the thread using the bobbin winding thread cutter.



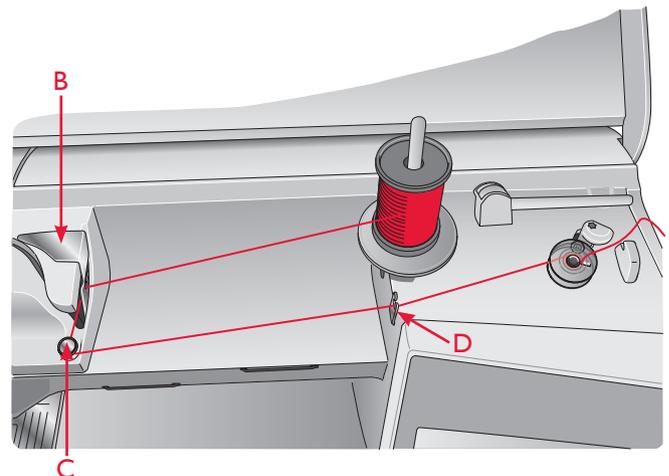
*Note: When using earlier version of HUSQVARNA VIKING® bobbins that do not have a hole, wind several turns of thread on the bobbin to get started.*

### WINDING SPECIALTY THREADS

We do not recommend winding speciality threads such as “invisible” or other stretchy threads, metallic or flat metallic threads through the needle.

Always wind these threads at minimum speed.

1. Place an empty bobbin on the bobbin spindle at the front of the machine. The bobbin only fits on one way, with the logo facing up. Use only original HUSQVARNA VIKING® bobbins.
2. Place the large spool cap and a felt pad under the spool on the main spool pin set in the vertical position.
3. Bring the thread over the Pre-Tension Thread guide (B) and down around the thread tension disc (C), then through thread guide (D) as illustrated.
4. See Bobbin Winding Through the Needle, step 4-5.

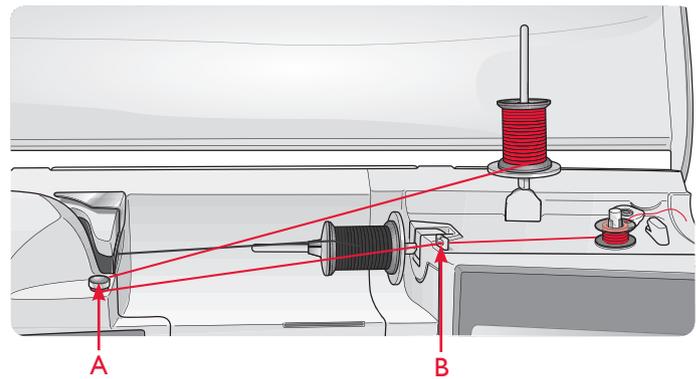


## BOBBIN WINDING WHILE EMBROIDERING OR SEWING

1. Raise the auxiliary spool pin. Place the large spool cap, felt pad and thread spool on the spool pin.
2. Bring the bobbin thread around the thread tension disc (A) and through the thread guide (B) as illustrated.
3. Guide the thread through the hole in the bobbin from the inside to the outside.
4. Push the bobbin winder lever towards the bobbin to wind. A pop-up message appears on screen. To adjust winding speed drag the arrow on the slider with your stylus. Stop and start the bobbin winding with the on-screen buttons. Hold the end of the thread firmly when starting to wind.

When the bobbin is full, the bobbin winder lever will move back and the winding will stop automatically. The pop-up message closes. Remove the bobbin and cut the thread using the bobbin winding thread cutter.

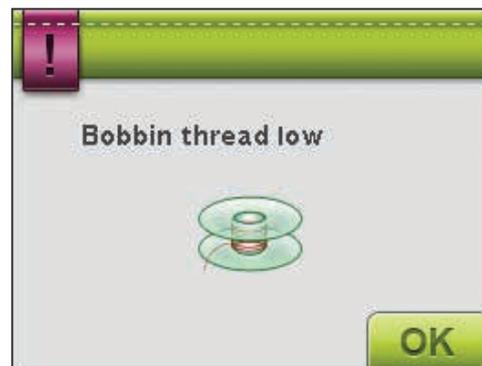
*Note: Make sure that the thread does not touch the cap of the horizontal spool pin when winding the bobbin. If it does, place the cap and spool higher on the vertical spool pin.*



## THREAD SENSOR

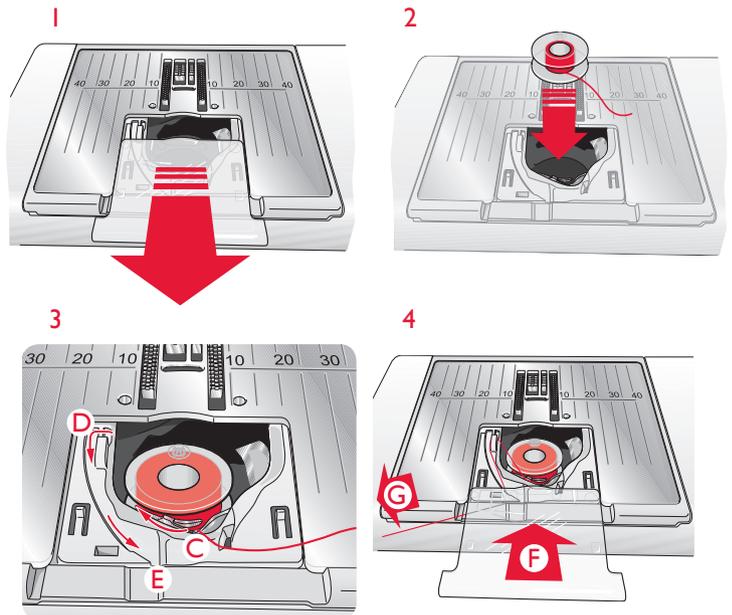
If the needle thread breaks or bobbin thread is running low, the machine stops and a pop-up message appears on the screen.

If needle thread breaks: Re-thread the machine and touch OK on the pop-up message. If bobbin thread is running low: You can continue sewing without closing the pop-up before the bobbin thread runs out completely. This gives you an opportunity to plan when you want to change your bobbin. When the bobbin is replaced with a full one, touch OK in the pop-up.



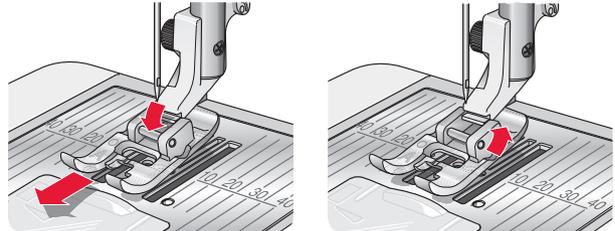
## INSERTING THE BOBBIN

1. Remove the bobbin cover by sliding it towards you.
2. Place the bobbin in the bobbin case. It drops in only one way with the logo facing up. The thread unreels from the left of the bobbin. The bobbin will then rotate counter-clockwise when you pull the thread.
3. Place your finger on the bobbin to keep it from turning as you pull the thread firmly to the right and then to the left into the tension spring (C) until it “clicks” into place.
4. Continue threading around (D) and to the right of the thread cutter (E). Slide on the bobbin cover (F). Pull the thread to the left to cut (G).



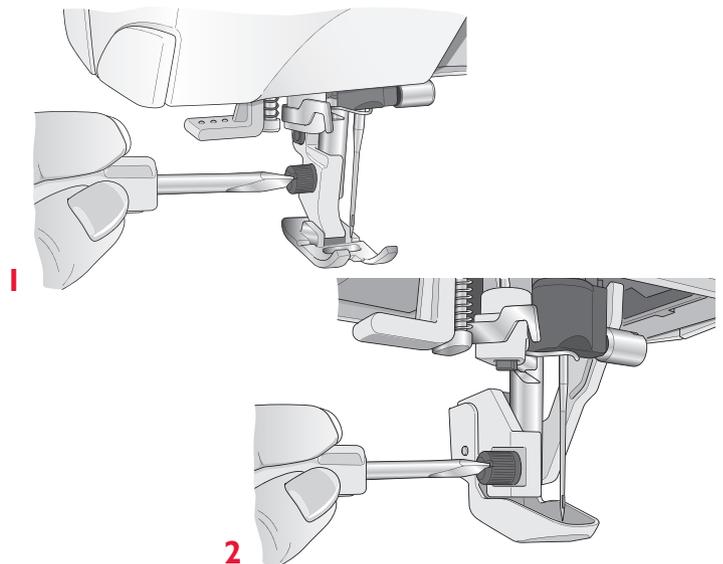
## CHANGING THE PRESSER FOOT

1. Make sure that the needle is in the highest position. Pull the presser foot down and towards you.
2. Line up the cross pin on the foot with the gap in the presser foot ankle.
3. Push the foot into the clip until the foot snaps into place.



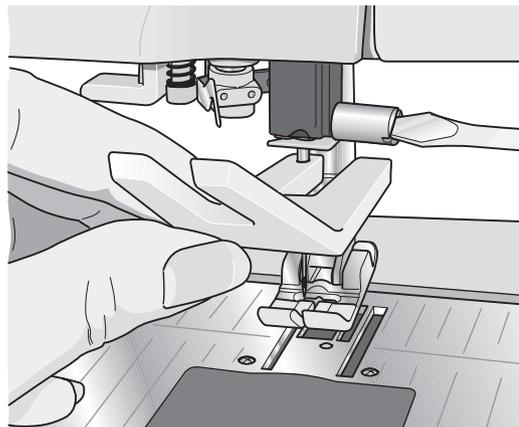
## ATTACHING THE SENSOR Q-FOOT

1. Using the screwdriver, remove the presser foot ankle.
2. Place the Sensor Q-foot from behind, and lower the needle into the opening of the foot by turning the handwheel towards you. Position the foot onto the presser foot bar so that the hole on the foot matches the hole on the presser foot bar. The arm of the presser foot should rest on top of the needle screw. Insert the screw and tighten the screw with a screwdriver.



## CHANGING THE NEEDLE

1. Use the hole in the multipurpose tool to hold the needle.
2. Loosen the needle screw.
3. Remove the needle.
4. Insert the new needle using the multipurpose tool. Push the new needle upwards with the flat side away from you until it will go no further.
5. Tighten the needle screw.



## NEEDLES

The sewing machine needle plays an important role in successful sewing. Use only quality needles. We recommend needles of system 130/705H. The needle package included with your machine contains needles of the most frequently used sizes.

### Universal Needle (A)

Universal needles have a slightly rounded point and come in a variety of sizes. For general sewing in a variety of fabric types and weights.

### Stretch Needle (B)

Stretch needles have a special scarf to eliminate skipped stitches when there is a flex in the fabric. For knits, swimwear, fleece, synthetic suedes and leathers.

### Embroidery Needle (C)

Embroidery needles have a special scarf, a slightly rounded point and a slightly larger eye to avoid damage to thread and materials. Use with metallic and other specialty threads for embroidery and decorative sewing.

### Denim Needle (D)

Denim needles have a sharp point to penetrate tightly woven fabrics without deflecting the needle. For canvas, denim, microfibers.

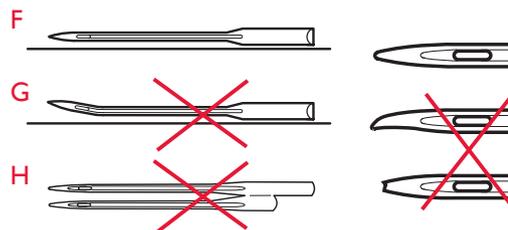
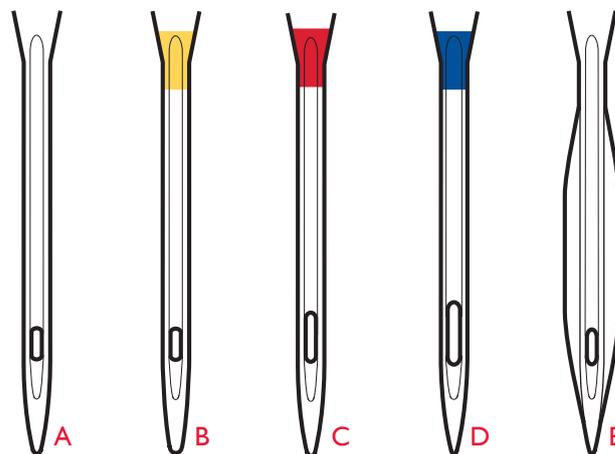
### Wing Needles (E)

The Wing needle has wide wings on the side of the needle to poke holes in the fabric when sewing entredeux and other hemstitches on natural fiber fabrics.

*Note: Change the needle often. Always use a straight needle with a sharp point (F).*

*A damaged needle (G) can cause skipped stitches, breakage or snapping of thread. A damaged needle can also damage the needle plate.*

*Do not use asymmetrical twin needles (H) since they may damage your sewing machine.*



## THREADS

There are many threads on the market today developed for different purposes.

### All Purpose Sewing Thread

All purpose sewing thread is made of synthetic, cotton or cotton covered polyester. This type of thread is used for sewing garments and projects.

### Embroidery Thread

Embroidery thread is made of various fibers: rayon, polyester, acrylic or metallic. These threads create a smooth glossy appearance for embroidery and other decorative stitching.

When embroidering, use embroidery bobbin thread because it is a fine weight and will not build up under embroidery.

*Note: When using a metallic or a flat film thread for embroidering, you may need to use a needle with a larger eye and lower the embroidery speed. Thread the sewing machine with the spool in the vertical position.*

### Transparent Thread

Transparent thread, also called monofilament thread, is single clear synthetic thread. It is used for quilting and other decorative sewing. Thread the sewing machine with the spool in the vertical position. When winding a bobbin, wind at slow speed and wind the bobbin half full.

*Note: Some fabrics have excess dye which can cause discoloration on other fabrics or on your sewing machine. This discoloration may be very difficult or impossible to remove.*

*Fleece and denim fabric, especially red and blue, often contain excess dye.*

*If you suspect that your fabric/ ready-to-wear garment contains a lot of excess dye, always pre-wash it before sewing/ embroidering to prevent discoloration of your machine.*



## STABILIZERS

### Tear-Away Stabilizers

Tear-away stabilizers are used with stable woven fabrics. Place underneath fabric for decorative stitching or hoop with the fabric when embroidering. Tear away excess stabilizer after stitching.

### Iron-on Tear-Away

Iron-on tear-away is a totally stable stabilizer that has a slick side that will iron on to fabric. It is recommended for knits and all unstable fabrics. Fuse it to the wrong side of the fabric before decorative stitching or hooping. Tear away excess stabilizer after stitching.

### Cut-Away Stabilizer

Cut-away stabilizer does not tear so the excess has to be cut away. It is recommended for knits and all unstable fabrics, especially for hoop embroidery.

### Water Soluble Stabilizer

Water soluble stabilizer is placed on top of the fabric when embellishing/embroidering napped and looped fabrics such as terry cloth. When embroidering cutwork, use it underneath the fabric. Place your work in water to dissolve the excess stabilizer. It is available in different thicknesses.

### Disintegrating Stabilizer

Disintegrating stabilizer is a stable, loosely woven fabric that is used for techniques such as cutwork and to crochet off the fabric edge. The stabilizer disappears with heat.

### Sticky Stabilizer

Sticky stabilizer is used for hoop embroidery when the fabric is too delicate or too small to be hooped. Hoop the sticky stabilizer with the paper side up. Remove the paper and stick the fabric onto the sticky surface. Tear away sticky stabilizer after stitching.

## PICTOGRAM™ PEN

Use an air or water soluble marking pen for embroidery and Pictograms on all types of fabrics. The color disappears after a few hours. You can also use cold water to completely remove the markings. Make sure that all markings are removed before ironing or washing with soap or detergent.

## USB PORTS

Your machine has two USB ports: one to connect the sewing machine to your computer, and one to connect either your USB embroidery stick, optional USB hub or optional mouse.

*Note: Make sure that the USB stick you use has the format FAT32.*

## USB EMBROIDERY STICK

Your machine comes with a USB embroidery stick. Use the stick to store designs and other files, or to move files between the computer and sewing machine.

## CONNECT TO AND REMOVE FROM THE USB PORT

Insert the USB embroidery stick or other devices in the upper port. The USB plugs can only be inserted one way – do not force them into the ports!

The USB PC cable packed with your machine (P/N:412 62 59-04) plugs in to the lower port. No other cable should be used in this port. Connect the other end of the cable to your PC.

*Note: Install the complimentary software before connecting the machine to your PC. See page 2:12.*

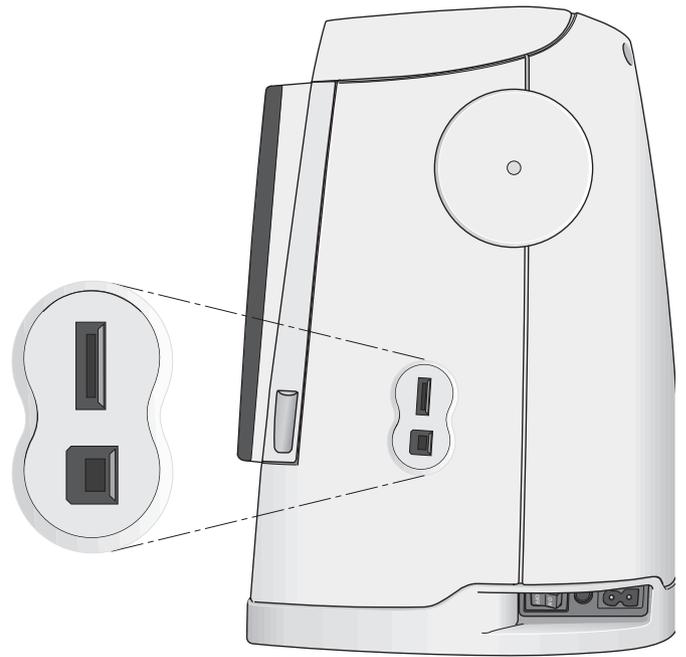
To remove, carefully pull the USB embroidery stick or the plug of the USB cable out straight.

## USING THE USB EMBROIDERY STICK

The External Device icon in File Manager is only activate when a device is connected to the machine USB port. When loading from or saving to the USB embroidery stick an hourglass appears on the screen.

*Note: Do not remove the USB embroidery stick when the hourglass is shown on the screen or while the file manager is shown. Removing the stick at that time can damage the files on your USB embroidery stick.*

*Note: The USB embroidery stick provided with the machine can be left in the machine when putting on the hard cover. Make sure that the cover of the USB stick is turned downwards.*



External Device icon



## COMPLIMENTARY SOFTWARE (PC)

A PC software package is available for your HUSQVARNA VIKING® DESIGNER RUBY *Royale*™ sewing and embroidery machine. It adds the following features:

- Communication module allows you to connect the machine to your computer. Required to use the Send To features in any Embroidery System module.
- QuickFont program to create unlimited number of embroidery fonts from most TrueType® and OpenType® fonts on your computer.
- Plug-in for your Windows Explorer to handle embroidery designs: viewing designs as thumbnail images, reading different embroidery file formats, add trim commands and more.

This software should be installed before the machine is connected to your computer for the first time. Go to HUSQVARNA VIKING® website at [www.husqvarnaviking.com](http://www.husqvarnaviking.com) and look for Support, select your machine model and download the software. When you install you will be asked for an Installation Code. Enter number:

**9200**

More information and detailed installation instructions are available on the download page.

## HOW TO UPDATE YOUR MACHINE

You can update your machine using the USB embroidery stick or the USB cable packed with your machine (P/N:412 62 59-04).

Be sure to consult the web site at [www.husqvarnaviking.com](http://www.husqvarnaviking.com) and/or your local authorized HUSQVARNA VIKING® retailer for updates and upgrades for your machine and User's Guide.

## UPDATING INSTRUCTIONS

Go to the HUSQVARNA VIKING® website at [www.husqvarnaviking.com](http://www.husqvarnaviking.com) and find your sewing machine. Here you will find updates available for your machine.

- Download the update software to your USB embroidery stick. Make sure that your machine is turned off. Connect the USB embroidery stick loaded with the new software version to the USB port on your machine.
- Press and hold the Needle Up/Down  and Selective Thread Cutter  buttons until your machine is turned on.
- Follow the instructions on the Large Interactive Screen.
- When the update is completed the machine will restart automatically. Check the software version number in My Info.

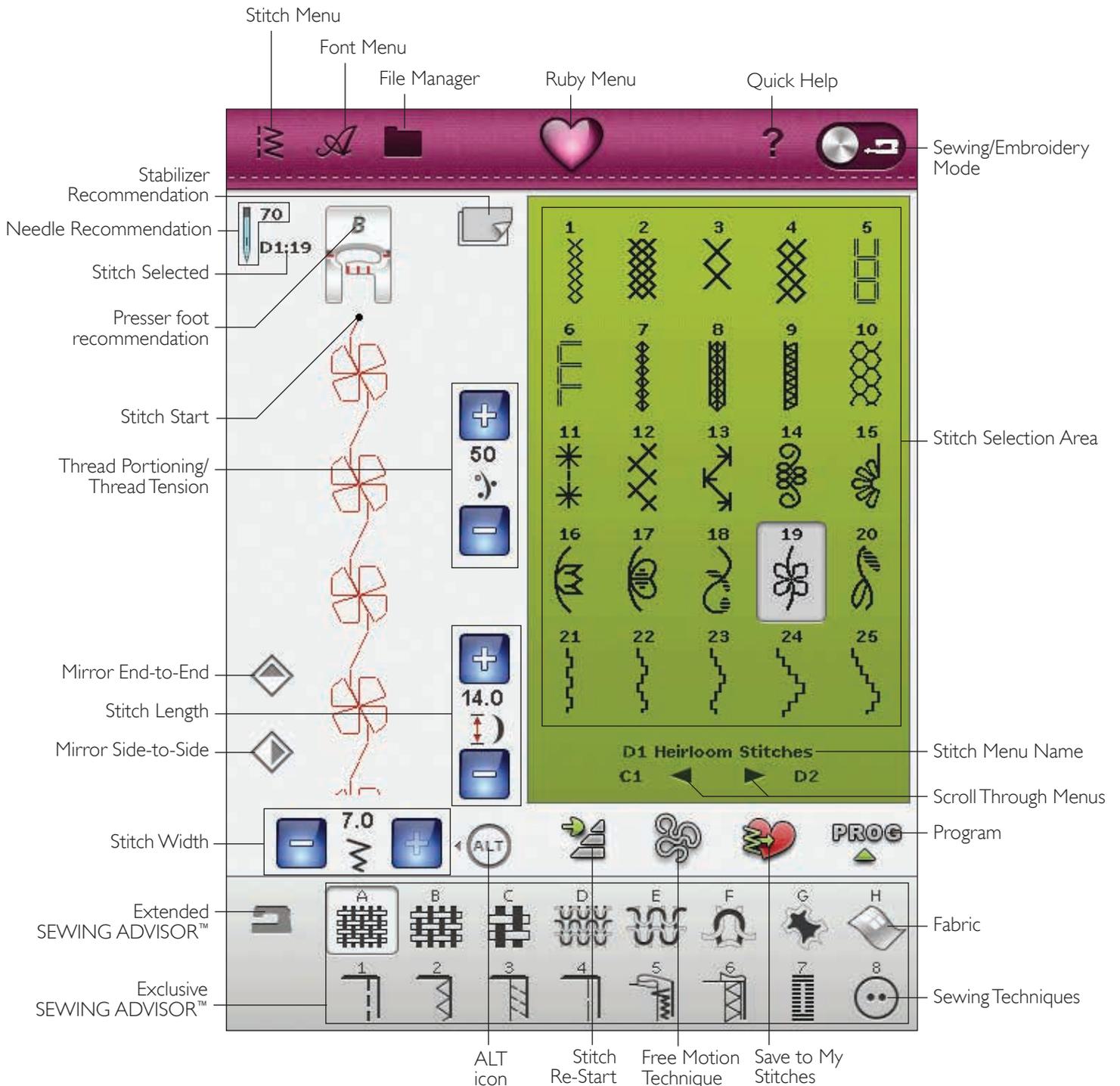
# SEWING 4



# Sewing Mode

In Sewing Mode you can select stitches, adjust and sew them. Your selected stitch will be shown in actual size in the stitch field. The recommendations and machine settings will be shown at the top. You can also go to Program mode to create your own stitch programs. Read more about how to program stitches in the Program chapter.

## SEWING MODE - OVERVIEW OF ICONS

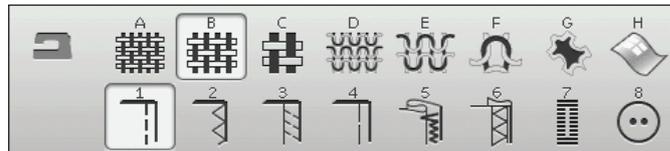


## EXCLUSIVE SEWING ADVISOR™

Your new sewing machine has the HUSQVARNA VIKING® Exclusive SEWING ADVISOR™ feature. It is always active and is located at the bottom of the Large Interactive Screen. When beginning a sewing project, touch your fabric type and weight, then touch the technique you desire.

The Exclusive SEWING ADVISOR™ feature sets the best stitch, stitch length, stitch width, sewing speed, thread tension and sensor foot pressure for your project. The stitch is displayed on screen with presser foot and needle recommendations.

There is also an Extended SEWING ADVISOR™ feature with text. Touch the sewing machine icon to open the Extended SEWING ADVISOR™ feature.



## FABRIC SELECTION

### Woven or Knit

The difference between woven and knit fabric is the way the threads are put together. Woven fabrics are made of two thread systems, warp lengthwise and weft crosswise, that intersect at right angles. A knit fabric is made of one thread system with interlaced stitches. A knit fabric usually has stretch.

As a general rule, enter Woven for stable fabrics that have no stretch and Stretch for fabrics that have stretch.

### Suggested Fabrics

**A WOVEN LIGHT:** chiffon, organza, batiste, silk, wool challis, etc.

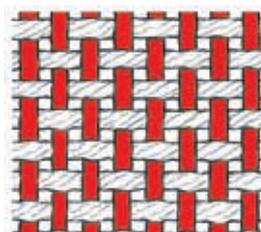
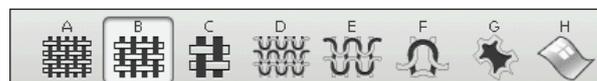
**B WOVEN MEDIUM:** calico, quilting fabrics, wool crepe, broadcloth, etc.

**C WOVEN HEAVY:** denim, wool suiting and coating, canvas, terrycloth, etc.

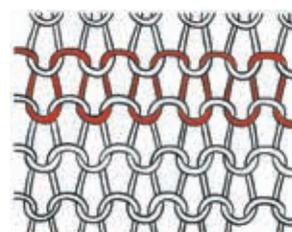
**D STRETCH LIGHT:** charmeuse, nylon, tricot, single knit jerseys, etc.

**E STRETCH MEDIUM:** double knit, velour, swimwear, etc.

**F STRETCH HEAVY:** sweater knits, fleece, etc.



Woven fabric



Knit fabric

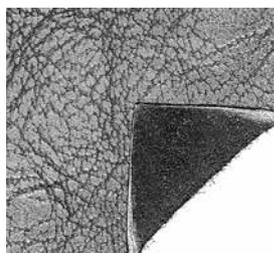
### Leather and Vinyl

Leather is animal skin with the coat (fur) removed. Leather can be smooth or suede and has some give.

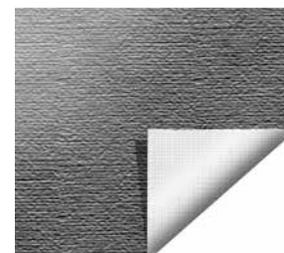
**G LEATHER:** for suede and leather.

Vinyl is a synthetic material which often has a woven wrong side. Vinyl can be smooth or patterned and some vinyls have stretch.

**H VINYL:** for vinyl and synthetic leather and suede.



Leather



Vinyl

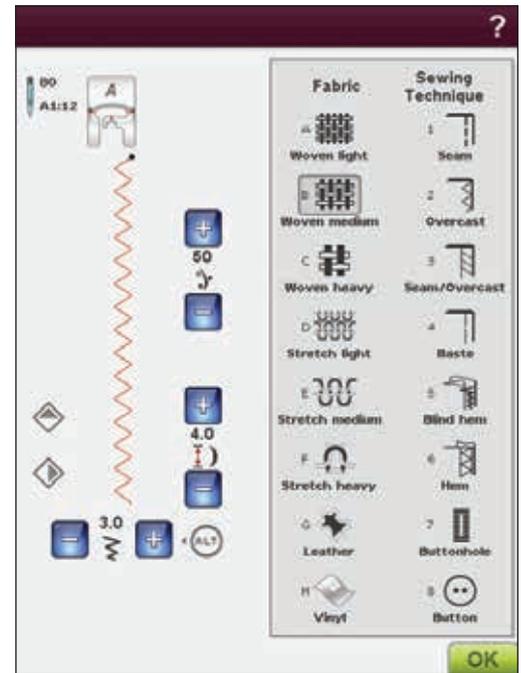
## SEWING TECHNIQUES

- 1 **SEAM:** sews two pieces of fabric together.
- 2 **OVERCAST:** overcast fabric edges to prevent them from fraying and to help them lay flat.
- 3 **SEAM/OVERCAST:** sews the seam and overcasts the edge all at one time.
- 4 **BASTE:** a temporary stitching for fitting garments, gathering and marking.
- 5 **BLIND HEM:** creates an invisible hem on garments. Is not recommended for light weight fabric or for leather/vinyl. Your machine selects the best stitch possible for the fabric you select.
- 6 **HEM:** selects the best visible or top stitch hem for your fabric type and weight.
- 7 **BUTTONHOLE:** the Exclusive SEWING ADVISOR™ feature selects the best buttonhole possible for your fabric.
- 8 **BUTTON:** for sewing on buttons.

*Note: If an unsuitable combination is selected (for example woven light-blind hem), your machine beeps, and the sewing techniques shall be unselected. However, the stitch can still be sewn, but it is not recommended by your machine.*

## EXTENDED SEWING ADVISOR™

The Extended SEWING ADVISOR™ feature identifies each icon with text. Open it by touching the Extended SEWING ADVISOR™ icon. Select your desired fabric and sewing technique by touching the buttons. The stitch selected by the Exclusive SEWING ADVISOR™ feature and its settings are shown to the left, and you can adjust the width, length and mirror the stitch with the buttons. Touch OK to return to the stitch view.



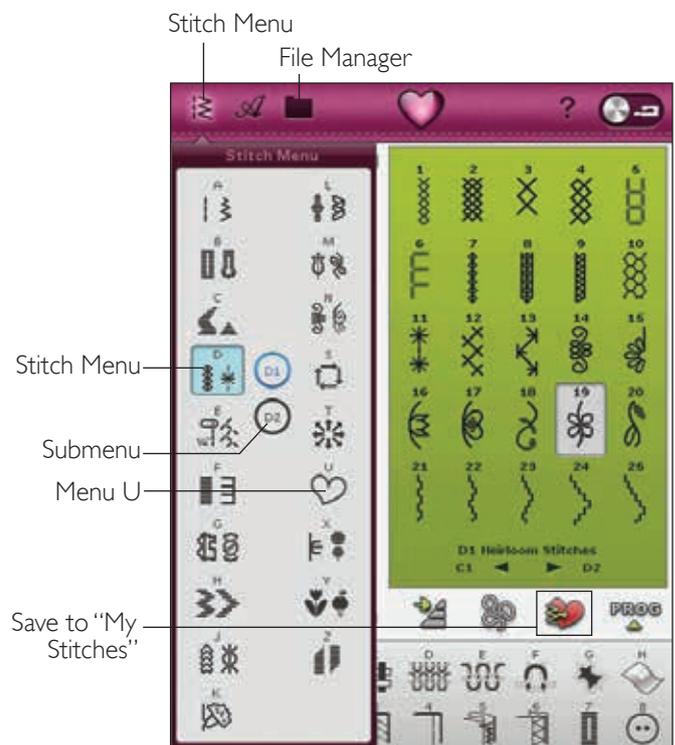
## SELECT A STITCH

To select a stitch, touch the actual stitch in the stitch selection area. You can scroll through all the stitches, using the arrows below the stitches. The name and number of the actual submenu is shown at the bottom of the stitch selection area.

To enter a certain menu, touch the Stitch Menu icon on the toolbar. A foldout menu will appear allowing you to choose from the different menus. Some of the menus have submenus. Touch a menu/submenu button to display the stitches in the stitch selection area.

### My Stitches - Menu U

In menu U you find your own stitches and stitch programs. See Chapter 5 for how to save a program or adjusted stitch in My Stitches.



## Load a Stitch From Another Location

Load stitches that you have saved in File Manager or in other locations. Touch the File Manager icon on the toolbar. The File Manager window will open. Locate your stitch and Touch & Hold or touch OK to load it.

## STITCH SETTINGS

Your machine will set the best settings for each selected stitch. You can make your own adjustments to the selected stitch.

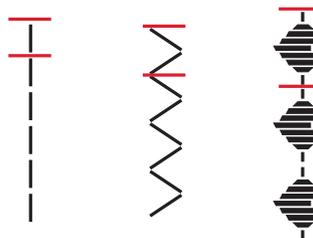
The changes only affect the selected stitch. Your changed settings will be reset to default when selecting another stitch.

The changed settings are not automatically saved when turning your machine off. You can save the adjusted stitch in My Stitches (see Chapter 5, Program).

### What is a Stitch?

A stitch either consists of a single stitch as in a straight stitch, or as two individual stitches e.g in a zigzag.

Furthermore, a stitch is also the complete stitch meaning it's made up by the total of the individual stitches in the stitch, such as a 3 step zigzag or a decorative stitch.



### ALT

The controls on your screen can change depending on what stitch you have chosen. Some stitches have more than two controls, and in those cases the ALT appears. When you touch the ALT (marked in blue color) one or both controls will change. The arrows beside the ALT will indicate which one. Touch the ALT again to change back to the original controls. Below you will find a description of the different controls that can appear when selecting a stitch.



### Stitch Re-Start

When you stop sewing in the middle of a stitch, touch Stitch Re-Start to begin sewing at the beginning of the stitch. The stitch or stitch program will remember any special settings you made.



### Stitch Positioning

On certain stitches, for example straight stitch, the stitch width icon becomes a stitch position icon. Use + to move the stitch to the right and - to move the stitch to the left when using a straight stitch. The machine has a maximum of 29 needle positions (for a straight stitch).



When ALT is selected on a stitch that has width the edge position of the stitch can be moved from right to left. The stitch position can only be changed to the limit of the maximum stitch width. Changing the stitch position will also limit the stitch width adjustment.

### Stitch Width

Decrease or increase the stitch width using - and +. Default settings are shown in black numbers, adjusted settings in red.

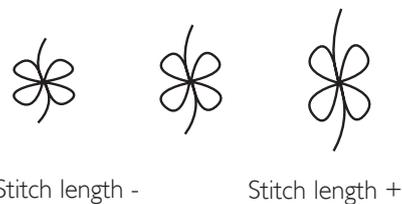
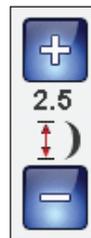


## Stitch Length

Increase or decrease the stitch length using + and -. If lengthening a zigzag stitch or a decorative stitch, the entire stitch will be longer. If lengthening a satin stitch where the density can be adjusted, the entire stitch will be longer but the density will remain the same.

*Note: The set stitch width and the stitch length are shown between the + and -. When trying to exceed minimum or maximum settings for width and length, a warning sound will be heard.*

*The default setting is shown in black. Changed settings are shown in red.*



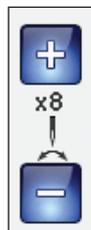
## Button Size

When sewing a buttonhole with the Sensor One-Step buttonhole foot, you can set the button size. Measure your button and enter the button size in the button size control.



## Button Sew On

When sewing on a button, you can set the number of stitch repeats. Touch the + or - to increase or decrease the number of stitch repeats (see 4:16).



## Stitch Density

The stitch density control adjusts the density (the distance between the individual satin stitches that make up the entire stitch). The density does not affect the actual length of the entire stitch.

Touch + to increase the value. Touch - to decrease the value.

*Note: This is often used with specialty threads and when a less dense satin stitch is desired.*



## Mirroring

To mirror stitches or stitch programs sidewise touch Mirror Side-to-Side icon. For mirroring the stitch or stitch programs lengthwise touch Mirror End-to-End icon.

*Note: Buttonholes cannot be mirrored.*



Mirror End-to-End

Mirror Side-to-Side

## STITCH SETTINGS IN SET MENU

Balance and presser foot pressure are set in the SET Menu, see page 3:5.

## FREE MOTION TECHNIQUE

When touching the Free Motion Technique icon a pop-up will appear allowing you to choose between two options: Free Motion Floating and Free Motion Spring Action.

### Free Motion Floating

Activate to set the machine in Free Motion Floating mode for presser foot R, or if using one of the optional free motion feet. The feed teeth will lower automatically.

When sewing Free Motion at low speed the presser foot will raise and lower with each stitch to hold the fabric on the needle plate while the stitch is being formed. At higher speed, the presser foot floats over the fabric while sewing. The fabric must be moved manually.

Skipped stitches can occur if your fabric moves up and down with the needle as you are stitching. Lowering the presser foot height will reduce the space between the presser foot and the fabric and eliminate the skipped stitches.

*Note: Be careful not to reduce the presser foot height too much. The fabric must still move freely under the presser foot.*

To adjust the presser foot height in Free Motion Floating mode, touch the Presser Foot height control to make adjustments.

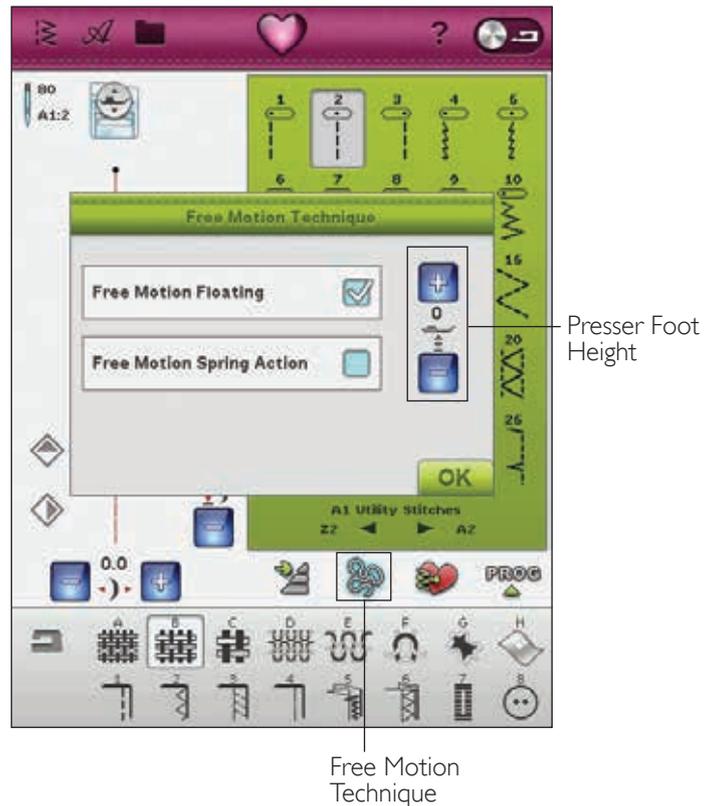
### Free Motion Spring Action

When selecting Free Motion Spring Action the feed teeth will lower automatically. A spring action foot will raise and lower with each stitch to hold the fabric on the needle plate while the stitch is being formed. Activate Free Motion Spring Action option when using the Sensor Q-foot or one of the optional free motion spring feet.

When sewing, you must move the fabric manually.

*Note: If Free Motion Floating is activated, do not use any Spring action foot, as this might damage the presser foot. Activate Stitch Width Safety if the presser foot requires that.*

*Note: The Open Toe Free Motion Spring foot and the Closed Free Motion Spring foot are optional and can be purchased at your local authorized retailer.*



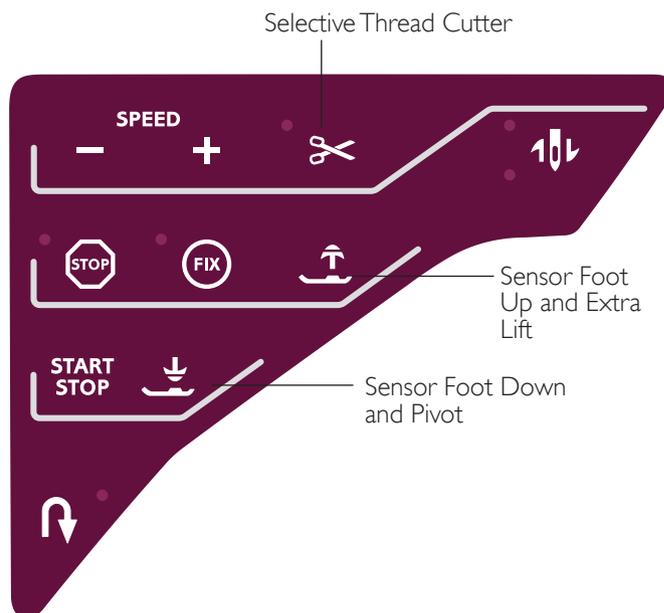
## RAISE AND LOWER THE PRESSER FOOT

The Sensor Foot Up and Extra Lift raises the presser foot. The Sensor Foot Down and Pivot lowers the presser foot.

To lower the presser foot, place the fabric under the presser foot and press the Sensor Foot Down and Pivot button or step on the foot control. To raise the presser foot, press the Sensor Foot Up and Extra Lift or press the Selective Thread Cutter to cut needle and bobbin thread and raise the foot. When the needle stops in the down position, the presser foot raises to pivot position.

You can also lower the presser foot and the needle with your foot control. If you tap your foot control once you will lower the presser foot. If you tap the foot control twice the needle will be lowered into the fabric.

*Note: With Needle Stop Down selected: when you stop sewing and touch Sensor Foot Up the foot will raise but the needle stays in the fabric. Press Sensor Foot Up again to raise the needle.*



## deLuxe™ STITCH SYSTEM

The deLuxe™ Stitch System has two ways to control the needle thread: Thread Tension and Thread Portioning. The deLuxe™ Stitch System improves the correct balance between needle thread and bobbin thread. It will automatically use Thread Portioning when possible, to get the best result.

Thread Portioning automatically and continuously measures the fabric thickness to portion the correct amount of thread for the selected stitch. When using Thread Tension, the tension discs will keep the correct amount of tension on the needle thread.

Certain optional accessories or special techniques may require the use of Thread Tension for best results. Deselect deLuxe™ Stitch System icon in the Machine Settings menu to switch to Thread Tension.

Depending on which function is active in the Machine Settings, the control visible in sewing/embroidery mode will change. Use the controls to adjust the balance between needle thread and bobbin thread, e.g. when using specialty thread.

### Adjust Thread Tension/Thread Portioning

For the best stitch appearance and durability make sure the threads meet evenly between the two fabric layers.

If the bobbin thread is visible on the top side of the fabric, the Thread Tension/Thread Portioning is too tight. Reduce the Thread Tension/Thread Portioning.

If the needle thread is visible on the underside of the fabric, the Thread Tension/Thread Portioning is too loose. Increase the Thread Tension/Thread Portioning.

For decorative stitches and buttonholes the top thread should be visible on the underside of the fabric.

### Tension/Portioning Compensations

If you find that the needle thread in general is too tight or too loose, touch the Tension/Portioning Compensations icon in the Machine Settings menu and adjust the settings with the slider bars. See page 3:9.

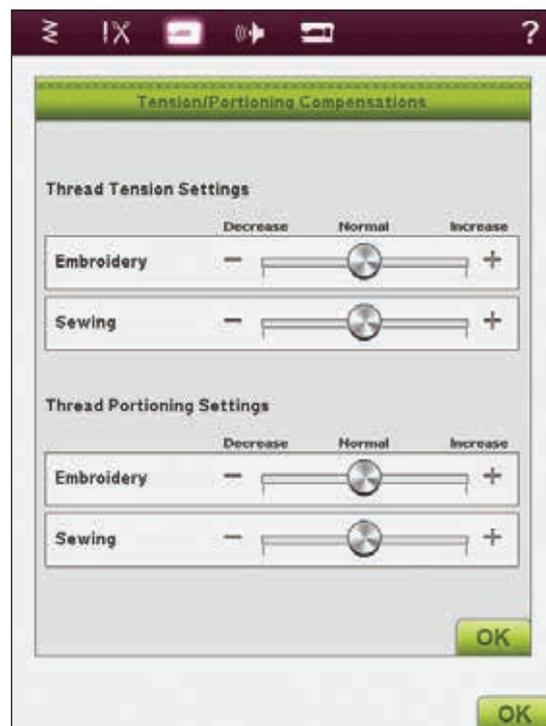
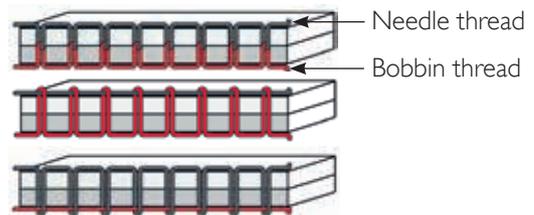
*Note: If the general Thread Tension/Thread Portioning for all stitches has been changed in Tension/Portioning Compensations in the SET Menu, the symbol in the Thread Tension/Thread Portioning control will be red instead of black. Read more about Tension/Portioning Compensations on page 3:9.*



Thread Tension control



Thread Portioning control



# SEWING TECHNIQUES

## SEAM

A seam sews two pieces of fabric together with a seam allowance that will usually be pressed open. In most cases, edges of the seam allowance are finished with an overcast stitch before sewing the seam.

Seams in stretch fabric must stretch with the fabric. The stretch stitch makes a stretchy seam that is suitable for sewing together pieces of light stretch fabric.

**FABRIC:** Woven medium, cut in two.

**SELECT:** Woven medium fabric and Seam technique. (The Exclusive SEWING ADVISOR™ feature selects a straight stitch.)

**USE:** Presser foot A and size 80 needle as recommended.

### SEW:

- Place fabrics right sides together. Put the fabric in position under the presser foot. Line up the edge with the 5/8" (15 mm) seam guide.
- Step on the foot control. The presser foot lowers automatically.
- Sew a seam. When finished, touch the Selective Thread Cutter. The Selective Thread Cutter cuts top and bobbin threads and the presser foot raises so you can remove your project.

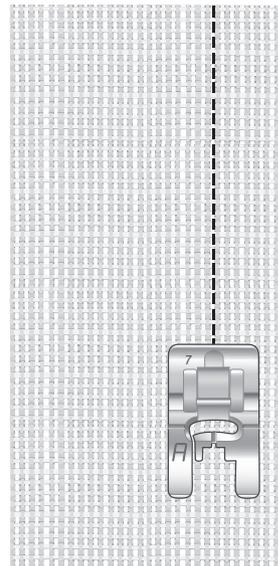
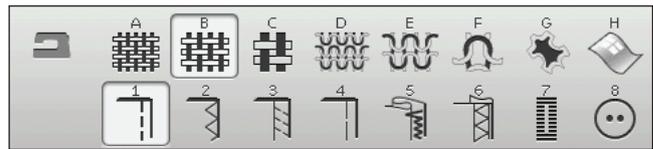
**FABRIC:** Stretch light, cut in two.

**SELECT:** Stretch light fabric and Seam technique. (The Exclusive SEWING ADVISOR™ feature selects a stretch stitch.)

**USE:** Presser foot A and size 75 stretch needle as recommended.

### SEW:

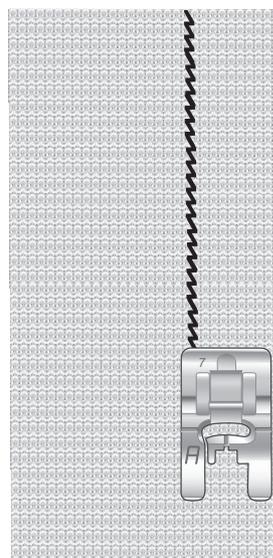
- Place fabric pieces right sides together. Put the fabric in position under the presser foot. Line up the edge with the 3/8" (10 mm) seam guide for a 5/8" seam.
- Step on the foot control. The presser foot lowers automatically.
- Sew a seam. When finished, touch the Selective Thread Cutter. The Selective Thread Cutter cuts top and bobbin threads and the presser foot raises so you can remove your project.



Straight stitch



Straight stitch can also be used for topstitching. For a more visible topstitch, lengthen the stitch and use heavier thread with a larger size needle.



Stretch stitch

## OVERCAST

Overcast fabric edges to prevent fraying and to help them lay flat. It is easiest to overcast before the garment is sewn together. Presser foot J is recommended for light and medium weight fabric to prevent puckering along the edge. Presser foot B is used for heavy weight fabric. Your Exclusive SEWING ADVISOR™ feature will select the best stitch length and stitch width for the fabric weight and recommend the presser foot and needle.

**FABRIC:** Woven medium.

**SELECT:** Woven medium fabric and Overcast technique. (The Exclusive SEWING ADVISOR™ feature selects a three-step zigzag stitch.)

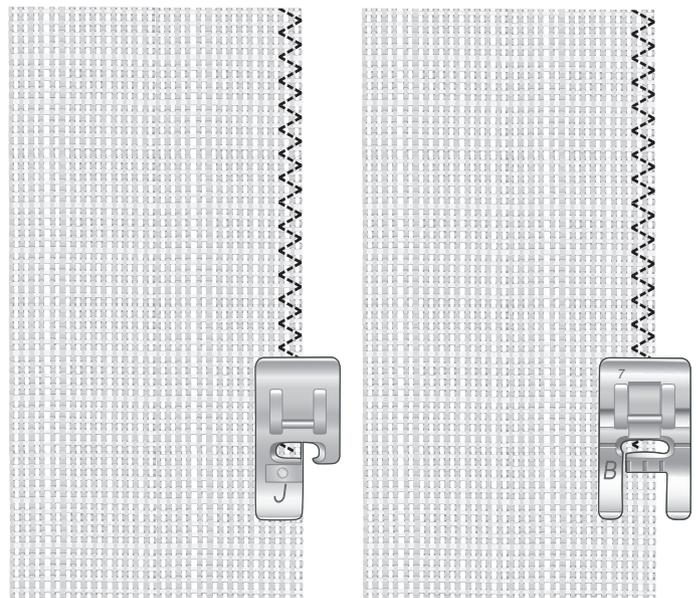
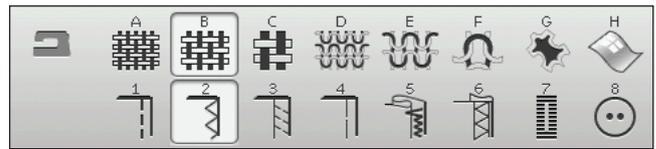
**USE:** Presser foot J and size 80 needle as recommended.

Place the edge of a single thickness of fabric under presser foot J with the wire guide along the edge of the fabric. The three-step zigzag stitch sews over the wire guide to keep the edge of the fabric flat.

**SEW:**

- Step on the foot control. The presser foot lowers automatically.
- Sew to overcast the edge of the fabric.
- Touch the Selective Thread Cutter.

*Note: It is not necessary to overcast leather or vinyl because they do not fray. However, the Exclusive SEWING ADVISOR™ feature allows you to, if desired. Select Leather/Vinyl fabric and Overcast technique on your Exclusive SEWING ADVISOR™ feature. (The Exclusive SEWING ADVISOR™ feature selects a zigzag stitch).*



## SEAM AND OVERCAST

The Seam/Overcast stitch sews the seam and overcasts the edges all at one time. There are a number of different Seam/Overcast stitches on your machine. Your Exclusive SEWING ADVISOR™ feature will select the best one for your fabric and make all adjustments automatically.

**FABRIC:** Stretch light, cut in two.

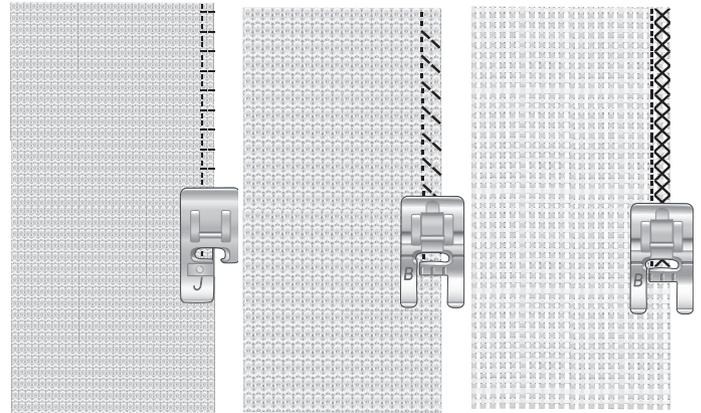
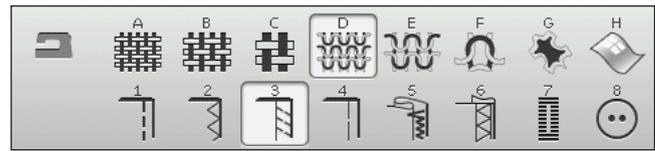
**SELECT:** Stretch light and Seam/Overcast on the Exclusive SEWING ADVISOR™ feature.

**USE:** Presser foot J and size 75 stretch needle as recommended.

**SEW:**

- Place fabric pieces right sides together. Put the fabric in position under the presser foot with the wire guide on the foot along the edge of the fabric.
- Step on the foot control. The presser foot lowers automatically.
- Seam/Overcast along one edge.
- Touch the Selective Thread Cutter.

Repeat the Seam/Overcast technique on stretch heavy fabric and on woven heavy fabric. Your Exclusive SEWING ADVISOR™ feature will select the best stitch, stitch length, stitch width, tension, presser foot pressure and sewing speed for each fabric type. Follow other recommendations given on the Large Interactive Screen.



## SEAM/OVERCAST FOR RIBBING

The Seam/Overcast technique is perfect for stitching ribbed neckbands and cuffs.

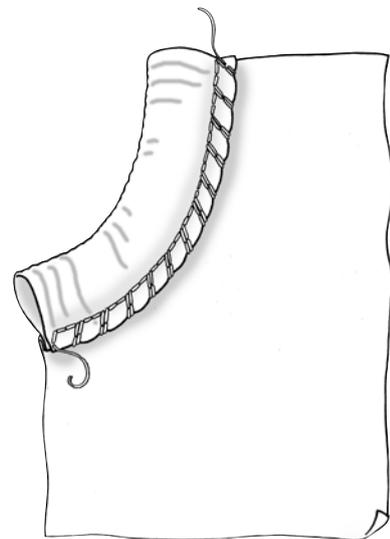
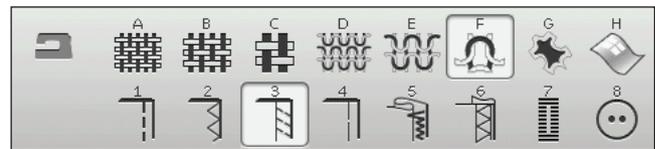
**FABRIC:** Sweatshirt fabric and ribbing strip.

**SELECT:** Stretch medium and Seam/Overcast.

**USE:** Presser foot B and size 90 stretch needle as recommended.

**THREAD:** Regular sewing thread.

Cut a mock neckline in the stretch fabric. Fold the ribbing double. Put the sweatshirt material and the ribbing right sides together. Sew the ribbing to the fabric with a 1/4" (6 mm) seam allowance. Stretch the ribbing while sewing.



## BASTE

Basting is temporary stitching for fitting garments, gathering and marking.

The SEWING ADVISOR™ feature automatically sets a long stitch length and reduces the tension so the threads are easy to remove or to pull for gathering.

**FABRIC:** Woven medium, cut in two.

**SELECT:** Woven medium fabric and Baste.

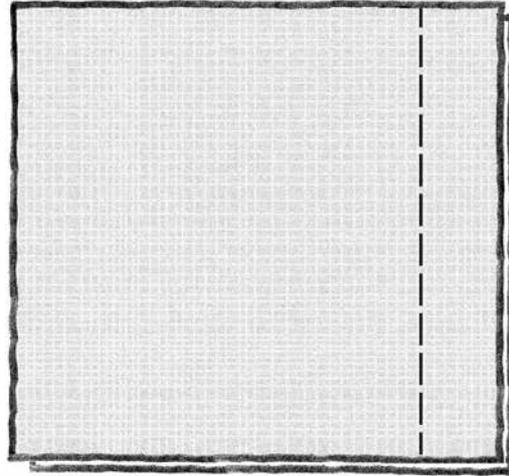
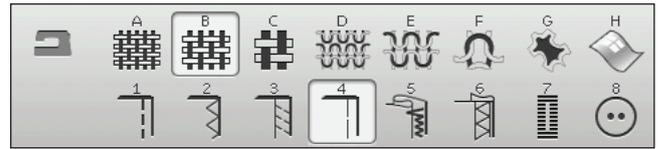
**USE:** Presser foot A and size 80 needle as recommended.

Place the fabrics right sides together. Put the fabric in position under the presser foot.

**SEAM ALLOWANCE:** 5/8" (15 mm).

**SEW:**

- Step on the foot control. The presser foot lowers automatically.
- Stitch along seam line.
- Touch Selective Thread Cutter.
- Pull bobbin thread to remove stitching.



## BLIND HEM

The blind hem creates an invisible hem on garments. There are two types of blind hem; one is recommended for medium to heavy woven fabrics, the other for stretch.

The blind hem is not suggested for light weight fabric, but your Exclusive SEWING ADVISOR™ feature will select the best stitch possible.

**FABRIC:** Wool or other medium-weight materials.

**SELECT:** Woven medium and Blind Hem.

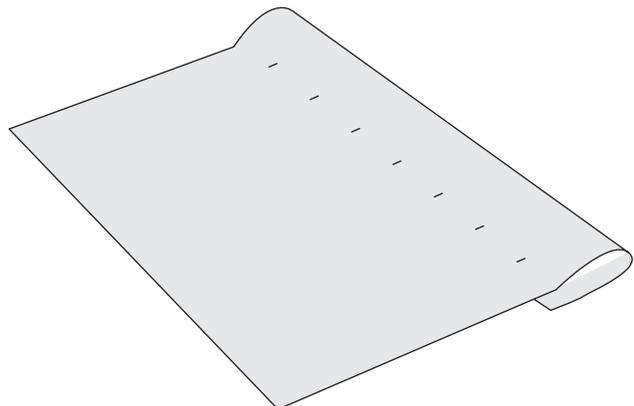
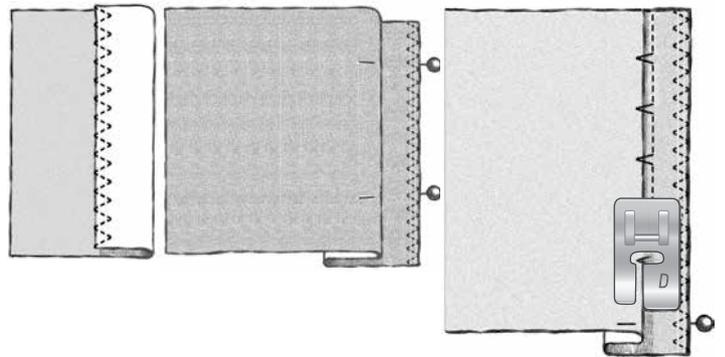
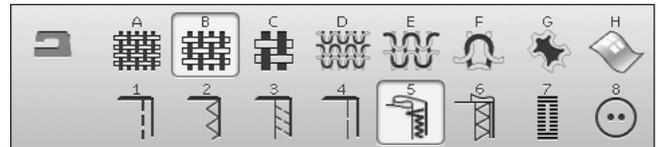
**USE:** Presser foot D and size 80 needle as recommended.

**THREAD:** Regular sewing thread.

Fold the fabric as illustrated. Make sure the folded edge of the fabric follows the inside of the right “toe” of presser foot D.

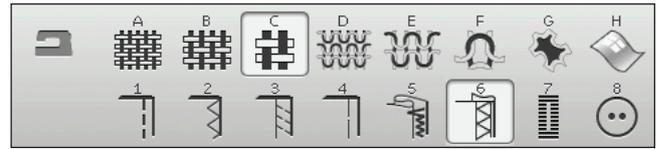
Step on the foot control. The presser foot lowers automatically.

The left swing of the needle should just catch the edge of the folded fabric. If necessary, adjust the stitch width as needed to barely “catch” the fold by touching + or – on the width adjustment icon on your Large Interactive Screen. After finishing your seam, touch the Selective Thread Cutter.



## HEM

The Hem technique on your Exclusive SEWING ADVISOR™ feature will select the visible or topstitch hem that is best for your fabric weight and type. For woven fabric and leather and vinyl, a straight stitch is selected. For stretch fabrics, stitches that stretch are selected.



### Jeans Hem

When sewing over seams in extra heavy fabric or a blue jeans hem, the foot can tip as it rides over the seam. The needle can hit the tipped foot and break. Use the multipurpose tool to balance the height of the hem as you sew.

**FABRIC:** Denim fabric.

**SELECT:** Woven heavy and Hem.

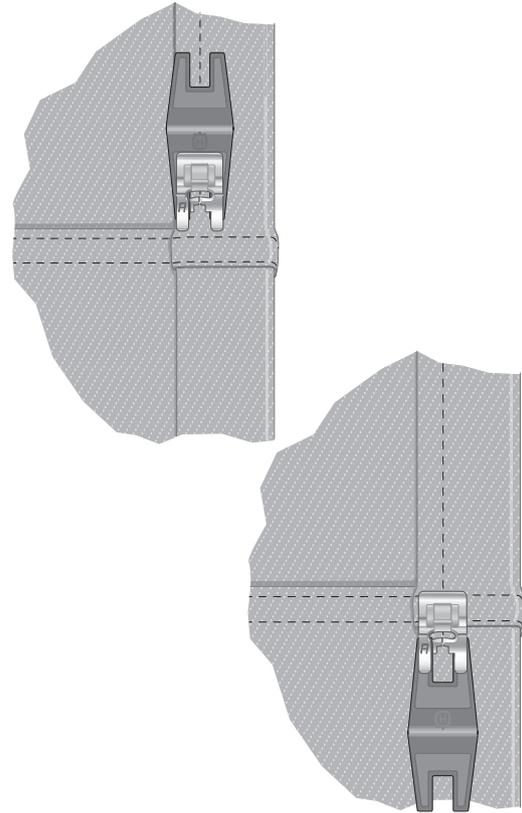
**USE:** Presser foot B as recommended and size 80 jeans needle.

Touch needle stop up/down to select the needle down position. Begin sewing the bottom hem at or near the center back. As you near the side seam, stop sewing. Your machine stops with the needle in the fabric and raises the presser foot. Insert the multipurpose tool from behind.

Both sides of the multipurpose tool are raised. Use the side which corresponds closest to the thickness of the seam. Step on the foot control to lower the presser foot and continue sewing slowly over the thick seam.

Stop sewing again just in front of the seam (notice how the needle is in the fabric). Remove the multipurpose tool and re-insert it under the presser foot from the front.

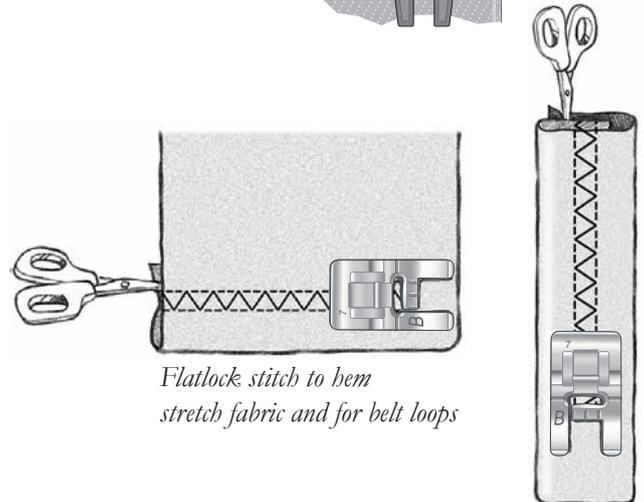
Sew a few stitches until the whole presser foot has passed the seam and is resting on the multipurpose tool. Stop sewing once again. The needle is in the fabric, and the presser foot lifts. Remove the multipurpose tool. Continue sewing the hem.



### Stretch Hem

Select Stretch Medium and the Exclusive SEWING ADVISOR™ feature selects a flatlock stitch. Follow other recommendations given on the Large Interactive Screen.

Fold a hem to the wrong side and stitch with flatlock stitch from the right side. Trim away excess fabric. Use this technique for belt loops too.



*Flatlock stitch to hem stretch fabric and for belt loops*

## PERFECTLY BALANCED SENSOR ONE-STEP BUTTONHOLE

The Exclusive SEWING ADVISOR™ feature will select the best buttonhole and stitch settings for your fabric. Fabric should be interfaced and/or stabilized where buttonholes are to be sewn.

You can also select your buttonhole directly from the Buttonhole Menu B.

**FABRIC:** Woven medium and stabilizer.

**SELECT:** Woven medium fabric and Buttonhole.

**USE:** Size 80 needle as recommended.

1. Snap on the Sensor One-Step Buttonhole Foot.
2. Plug the cord into the socket (A) to the left above the needle area.
3. Place your button on the buttonhole ruler on the baseplate.
4. Set the size of the button in mm on your screen.

Before sewing, line up the white area on the side of the wheel with the white marking line on the foot.

When sewing, your machine automatically sews the buttonhole long enough to fit the selected button size.

The buttonhole size needed will vary with the thickness and style of your button. Always stitch a sample buttonhole on scrap fabric first.

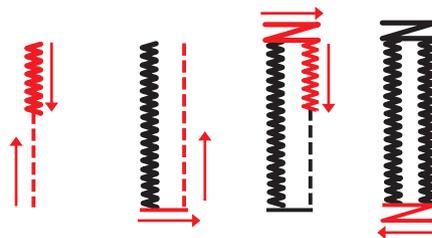
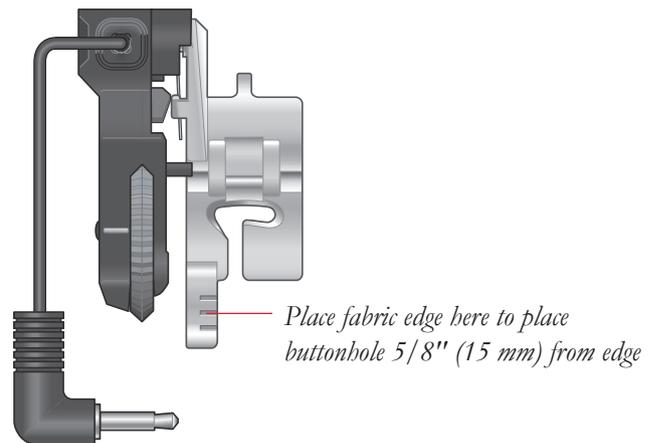
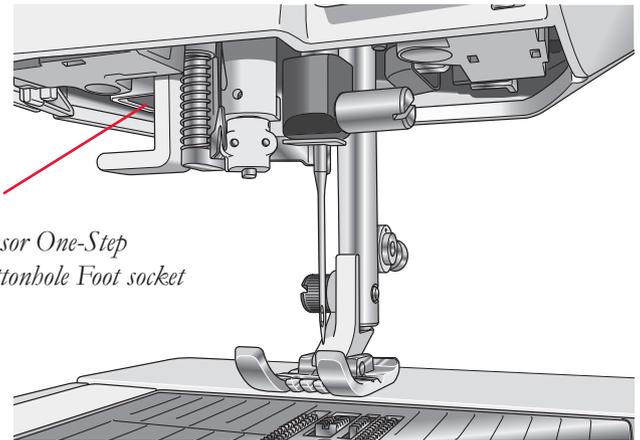
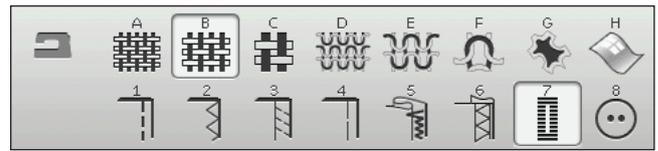
*Note: For woven heavy and leather, the Exclusive SEWING ADVISOR™ feature selects buttonholes that should not be sewn with the Sensor One-Step Buttonhole Foot.*

### Sew the Buttonhole:

- Fold fabric in two and place stabilizer underneath. Mark the buttonhole placement on your fabric with your PICTOGRAM™ Pen. Set the length of the buttonhole.
- Place fabric under Sensor One-Step Buttonhole Foot. The measurement wheel can be raised by lifting it, which makes it easier to place the fabric under the presser foot.

*Note: Use the markings on the left toe of the Sensor One-Step Buttonhole Foot to position the garment edge. Place the edge of the garment at the middle mark to have 5/8" (15 mm) from the edge to the buttonhole.*

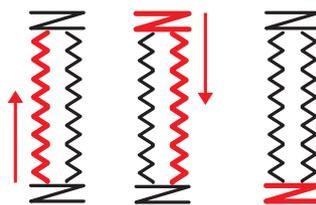
- Step on the foot control. The Sensor One-Step Buttonhole Foot lowers automatically. A straight stitch is sewn away from you stabilizing the left buttonhole column, then the satin column is sewn toward you. This is repeated for the right column. The bartacks are automatic (see illustration 1). Keep the foot control depressed until the Selective Thread Cutter cuts the threads and the Sensor One-Step Buttonhole Foot is raised.



1. Sewing direction for satin stitch buttonholes sewn with the Sensor One-Step Buttonhole Foot

When sewing buttonholes without satin stitches or when using presser foot C, the sewing steps are different (there is no straight stitch step). See illustration 2.

*Note: If you are sewing buttonholes in a very narrow area, snap on the standard foot C and sew your buttonhole according to the instructions below.*



2. Sewing direction for buttonholes without satin stitches or satin stitch buttonholes sewn with presser foot C

## MANUAL BUTTONHOLE

To sew a manual buttonhole, use buttonhole foot C.

- Sew the first column as long as you want the buttonhole to be.
- Press the reverse button. The machine sews the bartack and the second column.
- When the columns are aligned, press the reverse button to sew the second bartack.

## EMBROIDERED BUTTONHOLE

Buttonholes can also be stitched out in an embroidery hoop. See page 7:3.

## PROGRAMMABLE BUTTON SEW ON

Sew buttons, snaps, hooks and eyes quickly with your machine.

**FABRIC:** Woven medium.

**SELECT:** Woven medium and Button on the Exclusive SEWING ADVISOR™ feature. The feed teeth are lowered automatically.

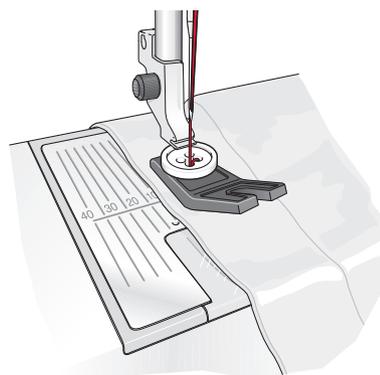
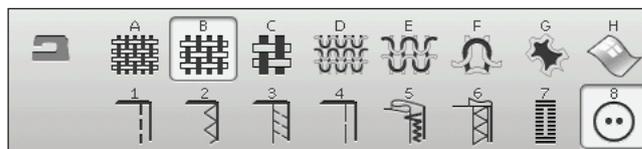
**USE:** Size 80 needle and the multipurpose tool to create a thread shank, as recommended. Snap off presser foot.

**SEW:**

- Place fabric, multipurpose tool and button under the ankle with the holes in the button lined up with the swing of the needle. Check the swing of the needle using the mirror side-to-side button to be sure the needle will not hit the button. Adjust stitch width if needed. Bring the needle down into the hole of the button.
- Set the number of stitches to sew on the button (see page 4:6). 6-8 stitches is normal.
- The machine stitches the button and automatically ties off.

*Note: Place the thin end of the multipurpose tool under the button when sewing on light fabrics. Use the thick end for heavier fabrics. Hold in place on the fabric with transparent tape.*

*Note: The recommended width of 3.0 is set for most buttons. If you sew a tiny button or a very large coat button, decrease (-) or increase (+) the stitch width until the swing of the needle sews in the holes of the button or snap.*



## BARTACKS

Secure elastic ends, drapery pleats, belt loops, and pocket corners with the same look as ready-to-wear.

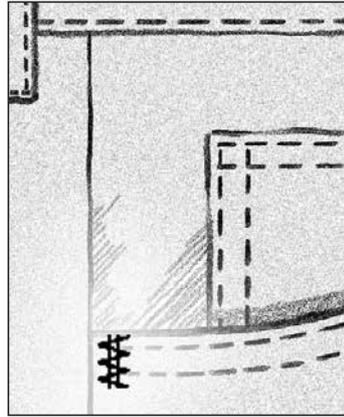
FABRIC: Woven heavy.

SELECT: Woven heavy, and stitch A2:29.

USE: Presser foot B and size 90 needle as recommended.

SEW:

- Place fabric under the presser foot.
- To lower the presser foot, step on the foot control and stitch.
- Your machine will stop automatically when the bartack is completed.



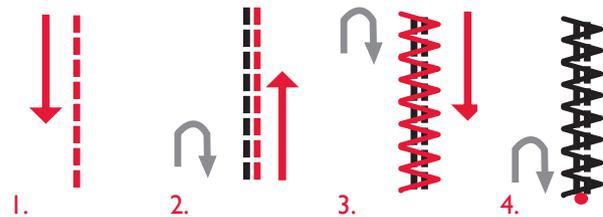
## MANUAL BARTACK

Decide the length of your bartack manually with stitch A2:33.

SEW:

Place fabric under the presser foot. Press Sensor Foot Down and Pivot twice and adjust the fabric if necessary. Step on the foot control, the Sensor Foot lowers automatically and stitch.

- Your machine will sew a straight stitch until you press Reverse.
- Your machine will then sew in reverse until you press reverse again.
- Your machine will then sew a zigzag, covering the straight stitches.
- Touch reverse to automatically tie off and cut the threads.



## 4-WAY STITCHES - MENU S

The 4-way mending stitch allows you to stitch several sturdy stitches in four different directions. You have a choice of 17 different 4-way stitches. You can select the one that is perfect for the weight and type of fabric you are using. This is especially helpful when patching trouser legs on a free arm. The 4-way stitches are programmed at a fixed length and stitch width.

**FABRIC:** Woven heavy, two pieces, one a patch.

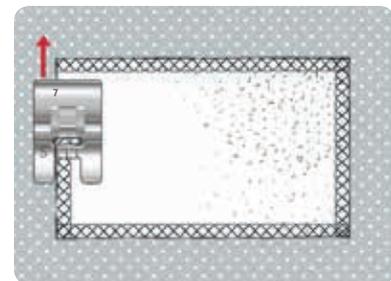
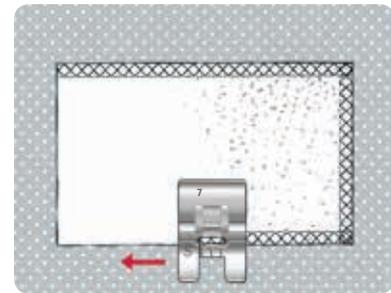
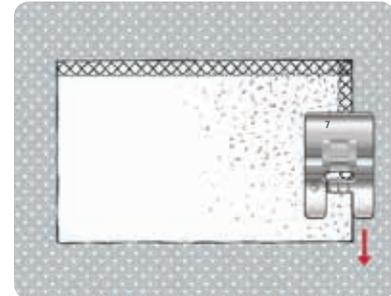
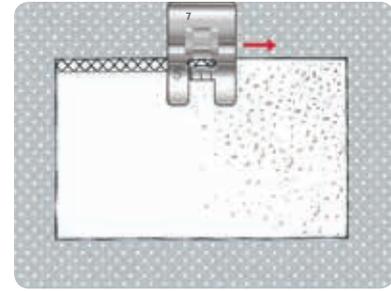
**SELECT:** Woven heavy on your Exclusive SEWING ADVISOR™ feature, menu S - 4-way stitches, stitch S1:8.

**USE:** Presser foot S and size 80 needle as recommended.

### SEW:

- Place the patch on the larger fabric in position under the presser foot. The sewing machine will start to sew across the top of the patch from the top left corner as shown on the screen.
- Press reverse or the 4 Direction Sewing icon and adjust fabric if necessary. Step on the foot control. The presser foot lowers automatically.
- Sew across the top and touch the 4-way symbol or the reverse button to change sewing direction. The direction of the stitch on the screen will change.
- Sew down the side of the patch. Continue sewing around the patch, touching the 4-way icon or the reverse button to change sewing direction.
- Touch the Selective Thread Cutter button.

*Note: Depending on which stitch you are using, the corners may be irregular if changing sewing direction without completing the stitch first. To sew beautiful corners with 4-way stitches, press the STOP button before changing sewing direction. This will complete the current stitch before changing direction.*



## 8-WAY STITCHES – MENU T

There are two different stitches, straight and reinforced straight stitch, in the T menu. Touch the arrows to select one of the pre-set sewing directions. To fine tune the direction of the stitch, use the stitch width and stitch length icons.

*Note: The stitch length and width icons no longer adjust the length and width of the stitch. In menu T, these icons change the sewing direction of the stitch.*

Program these stitches alone or with decorative stitches from other menus to create unique stitches or borders.

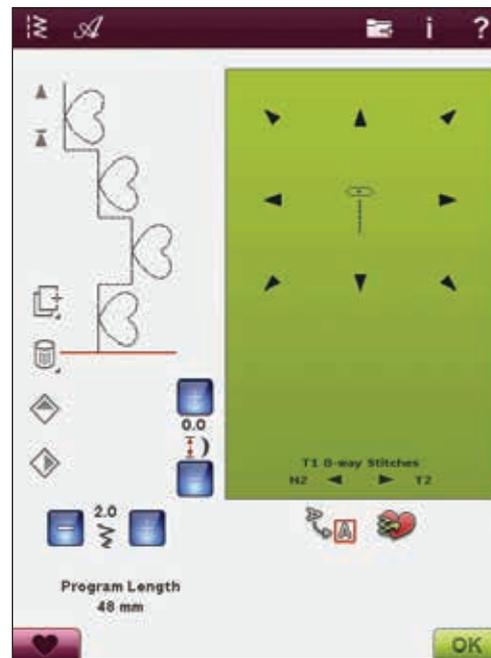
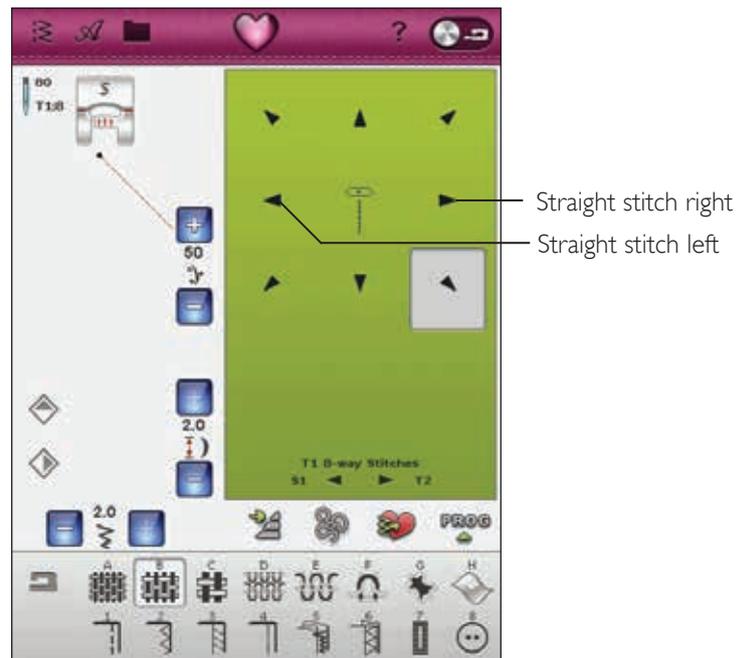
**FABRIC:** Woven medium and stabilizer.

**SELECT:** Woven medium on your Exclusive SEWING ADVISOR™ feature, menu T - 8-way stitches.

**USE:** Thread the top thread with embroidery thread, and use bobbin thread for the bobbin: Use presser foot B and size 80 needle as recommended.

**SEW:**

- Touch the Program icon.
- Select stitch G1:4.
- Select T1 and click three times on the straight stitch to the right.
- Select stitch G1:4.
- Select T1 and click three times on the straight stitch to the right.
- Select stitch G1:4.
- Select T1 and click three times on the straight stitch to the left.
- Select stitch G1:4.
- Select T1 and click three times on the straight stitch to the left.
- Touch OK.
- Place the fabric and stabilizer in position under the presser foot. Press the foot control to lower the presser foot and start sewing your programmed stitch.



## SAVE TO MY STITCHES

If you have made changes to a stitch and want to save them, touch the Save to My Stitches icon. A window will open the U-menu with 12 different spaces on each page to save personalized stitches. Touch a space below a number where you want the stitch to be saved. All your previously saved stitches will be shown.

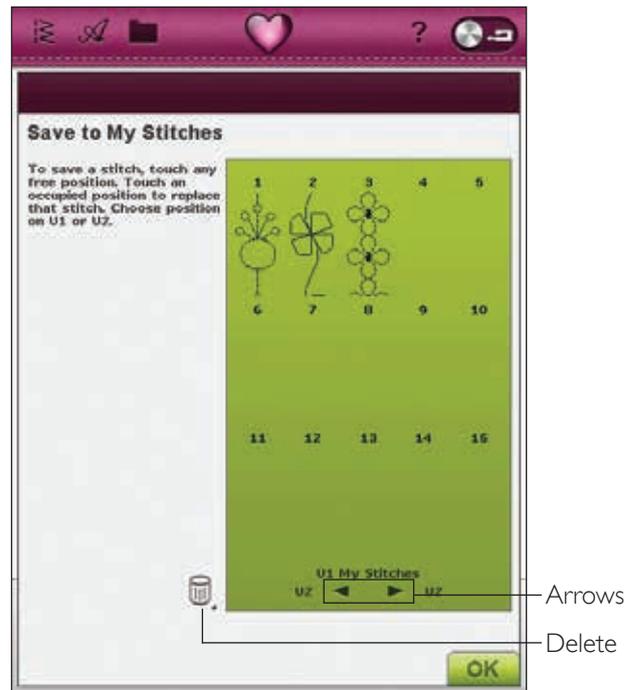
You can scroll through the different menus to find a free position, using the arrows at the bottom. Any box without a stitch is a free position and can be used to save your new stitch. Simply touch the position and your stitch is saved.

Any box with a stitch is an occupied position. You can overwrite a previously stored stitch. Simply touch the stitch to overwrite. A pop-up message will ask you to confirm that you want to overwrite the previously stored stitch. Cancel the saving process by touching the cancel icon. The saving window will close and you return to the previous screen.

To delete a saved stitch or stitch program, touch the delete icon. The delete icon will be active until a stitch is selected and deleted or until the delete icon is touched again. A pop-up message will ask you to confirm the deletion.

Touch & Hold the delete icon to delete all stitches saved in My Stitches at one time. A pop-up message will ask you to confirm the deletion.

See page 5:5 to read more about how to save to My Stitches.



## SPECIAL SEWING TECHNIQUES

The stitch menu X- Specialty Stitches, includes special sewing technique stitches like candlewicking and edge stitches. These techniques may require some special presser feet and accessories. This is indicated by the optional presser foot icon.

*Note: Use the Quick Help to find detailed information for each stitch.*

## TAPER SATIN STITCH

The taper stitch automatically tapers the satin stitch for corners and points and can be used for satin stitch lettering. Stitch a diamond of tapered satin stitch on a piece of stabilized fabric.

**SELECT:** Menu C, Pictogram Stitches, choose stitch C1:22

**USE:** Presser Foot B, as recommended.

**SEW:** The stitch will automatically taper from a point to the 1/4" (6 mm) satin stitch width.

- If you want to change to another angle, touch the tapering icon. Choose what sort of beginning and end you wish to have on your stitch.

*Note: For narrower satin stitch, adjust the stitch width.*

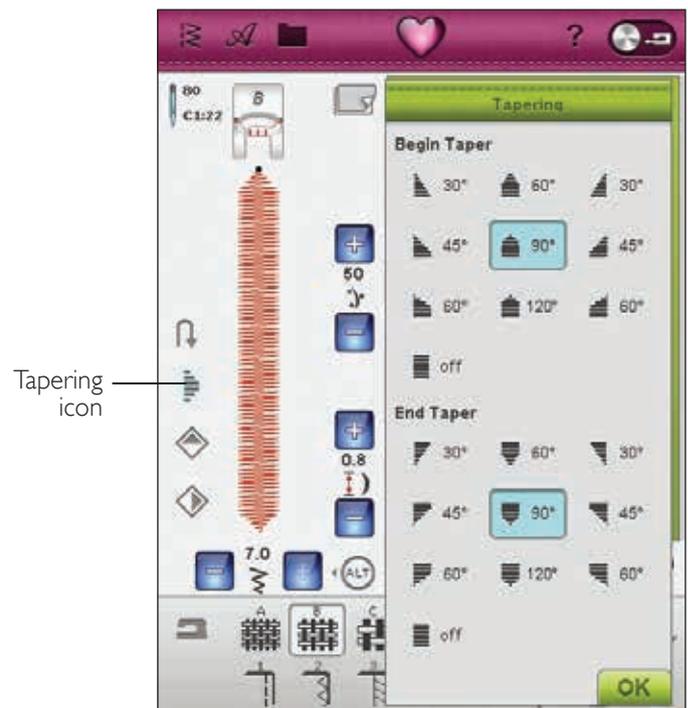
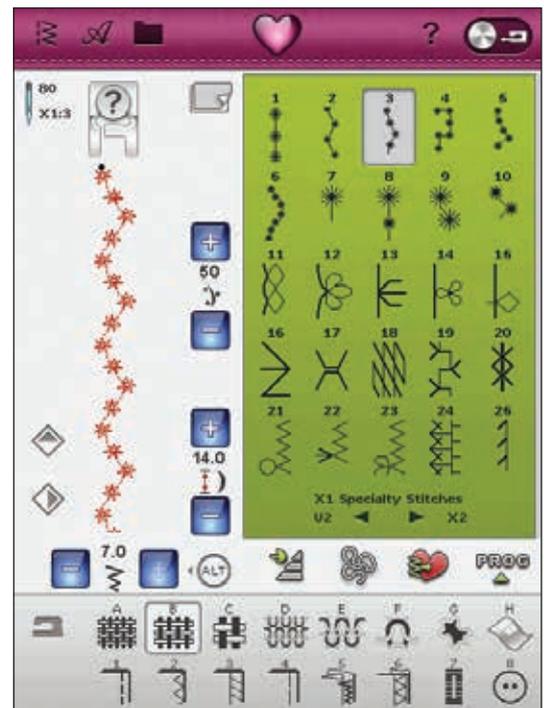
- Start sewing. The machine will sew the tapered point and then continue with a satin stitch at the selected width. When the satin is as long as desired, press the reverse button. This will start the tapering of the end.
- Once the stitch is finished, press the Selective Thread Cutter button.
- Press the STOP button to repeat sewing the same tapered satin stitch automatically.

## DECORATIVE TAPERING STITCHES

Menu Z includes decorative stitches that can be tapered. Touch the tapering icon to change angle. The machine will sew the beginning tapered point and then continue with the selected stitch. When it has sewn the desired length, press the reverse button. The stitch will taper to the end.

### Tapering off

Choose Taper "off" if you don't want Tapering at the beginning or end of the stitch. If you select Taper "off" on both the beginning and end then the stitch will be a regular stitch without tapering.



## DIMENSIONAL STITCHES- MENU Y

Sew beautiful stitches using appliqué stitches in menu Y - Dimensional stitches. Since every stitch is unique, these stitches will give different decorative effects depending on which stitch is selected and what type of fabric you choose.

### Appliqué stitches

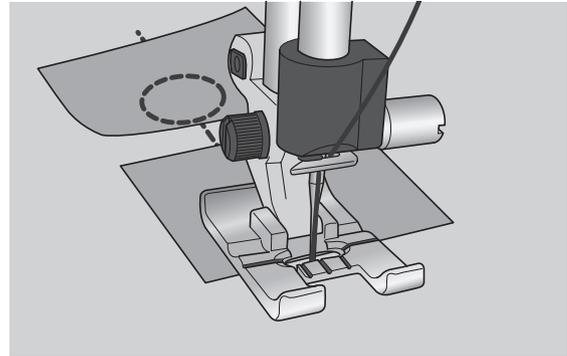
Use: fabric, stabilizer and fabric for appliqué cut in small pieces (1.5"x1.5", 3.5cm x 3.5cm). Choose a fabric that doesn't fray too much.

1. Choose stitch Y1:8. Snap on the recommended presser foot.
2. Place your fabric under the presser foot and activate Needle Stop up/down  to select the needle down position.
3. Step on the foot control and begin to stitch while you gently guide the fabric. The machine will start to sew and then stop automatically and the presser foot will raise to pivot position.
4. Insert a small piece of appliqué fabric under the presser foot, directly behind the needle.
5. Continue sewing until the machine automatically stops again (see illustration 1).
6. Repeat step 3-5 until the desired stitch length is reached.
7. Trim all excess appliqué fabric (see illustration 2).

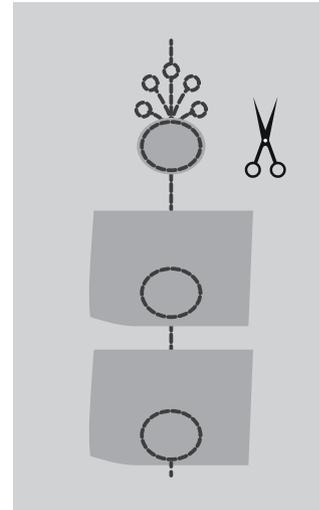
*Note: Dimensional stitches cannot be mirrored. If you experience that the stitch is not perfectly stitched you can use the Balance controls in SET Menu/ Stitch Settings (read more on page 3:5).*

**TIP:** You can make your stitches more secure by adding a piece of paper backed fusible web cut in the same size as your appliqué fabric (the paper part should of course be removed first). After your stitch is stitched you cut away the excess together with the excess appliqué fabric. After everything is cut away, you can press your seam in place.

1.



2.



# SEWING POP-UP MESSAGES

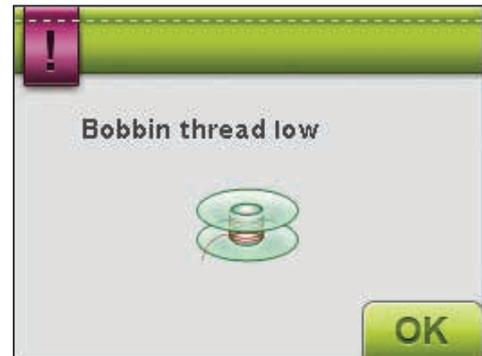
## System Busy

An hour glass is shown when the machine is loading, saving, moving files or anything that takes time.



## Bobbin Thread Low

When the bobbin thread is running low, a pop-up message appears giving you an advanced notice that you'll soon need to change the bobbin. This gives you an opportunity to plan when you want to change your bobbin. If you want to continue sewing without changing the bobbin, touch the foot control, but do not close out the pop-up.



## Check Needle Thread

The machine stops automatically if the needle thread runs out or breaks. Re-thread the needle thread, close the pop-up message and start sewing again.



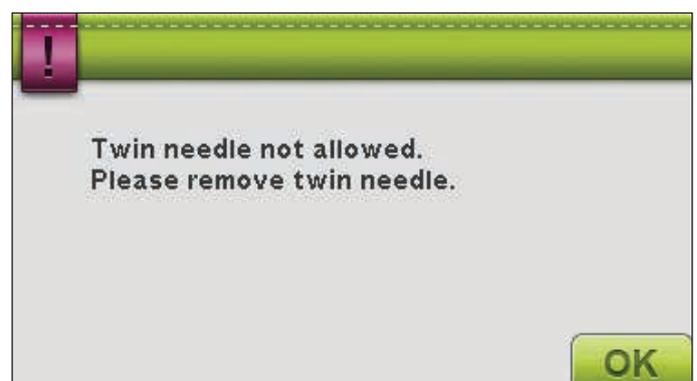
## Remove Sensor One-Step Buttonhole Foot

The Sensor One-Step buttonhole foot is used only for buttonholes. A pop-up message will advise you to remove it for all other sewing.



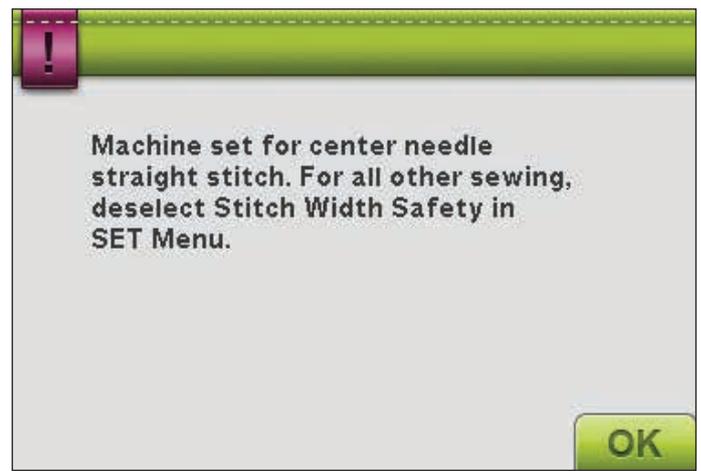
## Twin Needle

The following pop-up message appears when you turn on the machine and choose a stitch not suitable for twin needle or you had the Twin Needle activated before turning the machine off.



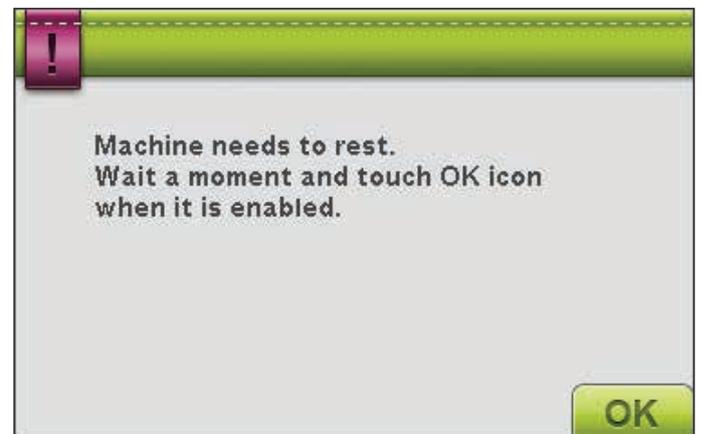
## Stitch Width Safety

When Stitch Width Safety is activated, the following pop-up message appears when you turn on the machine or choose a stitch not suitable for Stitch Width Safety.



## Machine needs to rest

If the machine stops and this pop-up appears on the screen, the machine needs to rest. When the OK icon is enabled you can resume sewing/embroidering. The sewing/embroidery results will not be affected.



PROGRAM

5



For our Princess Sarah  
Your Family is Always  
Your Sheltering Tree.

Quilted with Love  
by Mom 2014.

## PROGRAM

You can combine stitches and/or letters and numbers to create stitch programs. Combine various decorative stitches and stitch fonts from the machine or from an external device.

You can program stitches up to approximately 500mm (20") long. You can see how long your actual stitch program is at the bottom of the window.

You can program in both Sewing and in Embroidery Edit.

*Note: If Sewing Mode is active and your stitch program is ready to be sewn, you can also close the active function by pressing the foot control, or by pressing the Start/Stop button. Not all stitches are available to program. A pop-up message will notify you if you try to select an unavailable stitch.*

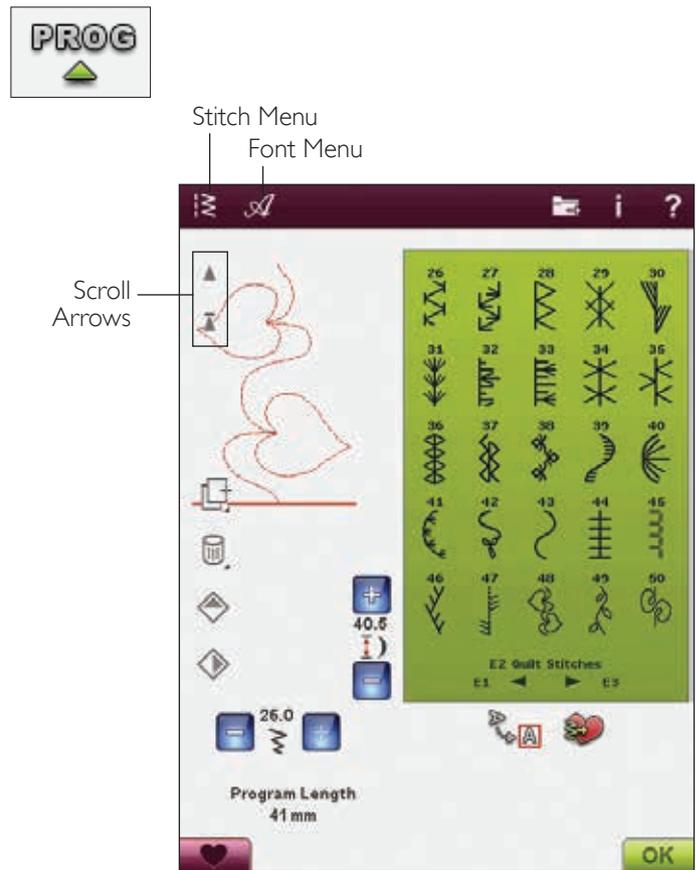
*Note: A straight line at the point of the Scroll Up or Down icon indicates scroll to beginning or end.*

## PROGRAM - OVERVIEW OF ICONS



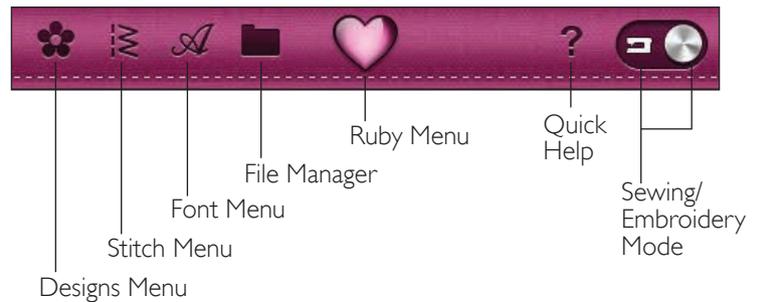
## TO PROGRAM IN SEWING MODE

- To enter the Program window, touch the PROG icon.
- Touch the Stitch Menu or Font Menu to open the stitch or a font you wish to use.
- The active position is marked by a cursor and the selected stitch or letter will be marked in red. Inserted stitches will be placed at the cursor. Only the selected stitch can be adjusted. Move the cursor through the stitch program using the scroll arrows.
- To close the Program window and sew your programmed stitch, touch the OK icon or just press the foot control.



## TO PROGRAM IN EMBROIDERY EDIT

- To enter the Program mode in Embroidery Edit, touch the Stitch Menu or Font Menu to open a stitch or font you wish to use.
- The active position is marked by a cursor and the selected stitch or letter will be marked in red. Inserted stitches will be placed at the cursor. Only the selected stitch can be adjusted. Move the cursor through the stitch program using the scroll arrows.
- To close the Program window and embroider your Stitch program, touch the OK icon.



### To Edit a Programmed Stitch in Embroidery Edit

If you want to edit an already programmed stitch select the stitch and touch the Edit Stitch Program icon and you will enter the Program window again.

*Note: If you have selected tapering in the stitch program, it will be converted to a design when loaded to Embroidery Edit, and cannot be opened for editing again.*



# EDIT YOUR STITCH OR LETTERING PROGRAM

## Insert a Stitch or Letter

Move the cursor where you want to add a stitch or letter. Select the desired stitch you want to insert. It will be placed at the cursor.

## Adjust Text and Stitches

You can mirror, adjust length and width or change the density of the selected stitch, in the same way as when in Sewing Mode.

## Delete a Stitch or Letter

If you want to delete a stitch, move the cursor to the stitch you want to delete (the selected stitch will be red) and touch the Delete icon. Use the Touch & Hold function to delete the entire program.

## Duplicate a Stitch or Letter

To duplicate a stitch, move the cursor to the stitch you want to duplicate (the selected stitch will be red). Touch the Duplicate icon to copy the selected stitch.

*Note: Make your adjustments on the stitch before duplicating and the copied stitch includes the adjustments.*

Use the Touch & Hold function to bring up a pop-up message where you can enter the exact number of copies you want to insert.

## Replace a Stitch or Letter

To replace a stitch, simply select it (using the arrows to select the stitch you wish to replace) and touch Delete. Insert the new stitch. It will be placed at the cursor.

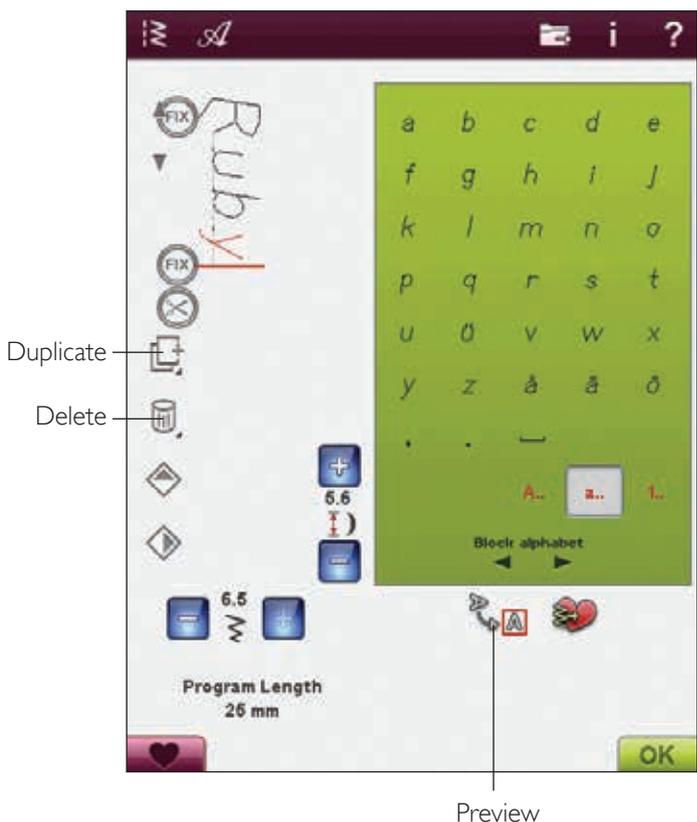
## Zoom to All

If the stitch or stitch program is wider than what can be shown on the screen, you may use the Zoom to All icon to see the entire width of the stitch program.

*Note: Zoom to All is only visible if the stitch or stitch program is wider than the stitch field.*

## Preview

View your stitch program horizontally by touching the Preview icon. A pop-up displays your program in actual size. If the program is too long to be shown in total, use the cursor arrows to scroll through the program. To view the whole program, touch the Zoom to All icon. Touch OK to close the window.



## ADJUST THE ENTIRE PROGRAM

To adjust the entire program, return to the stitch view by touching the OK icon. Adjustments made here will affect the whole program.

## STITCH PROGRAM COMMANDS

You can insert FIX, STOP and thread cut commands into the stitch program. These commands will be included in the stitch program and will always be performed when sewing it.

*Note: If creating a stitch program in Embroidery Mode, tie-offs will be added automatically at the beginning and end, allowing you to create a stitch program in between. The commands can be removed.*

Insert a STOP by pressing the STOP button on your machine, if you want the machine to stop at a certain place in your programmed stitch. This is useful for example at the end of the stitch program if you want to sew it only once or to create a stitch program in several rows.

Insert the thread cut if you want the machine to tie-off and cut the threads and raise the presser foot.

Move the cursor to the position where you want to add a command. Press the button and an icon will be added into the programmed stitch. This confirms that the command is inserted and it also shows where the command will be performed in the stitch program.

*Note: The commands will appear on the screen in the order you program them.*

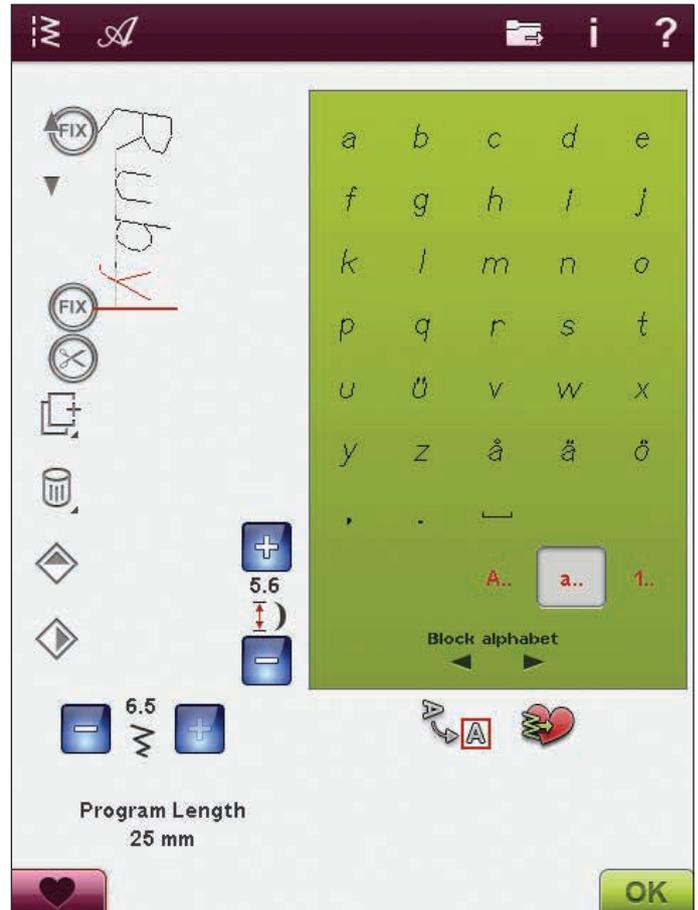
## SEWING A STITCH PROGRAM

To sew the stitch program, return to Sewing Mode or Embroidery Edit. Close Program mode by touching the OK icon.

Adjustments made in Sewing Mode or Embroidery Mode will affect the entire programmed stitch. However, these changes will not be saved if you return to Program mode.

If you make changes while in Embroidery Edit, and you save them, these changes will be saved as a design and can only be edited again in Embroidery Edit.

However, you can always open a stitch program made in Sewing Mode, in Embroidery Mode.



## TO SAVE A STITCH PROGRAM

If Sewing Mode is active, you can save your stitch program in My Files. If Embroidery Mode is active, your stitch program will be loaded to Embroidery Edit, and can then be saved as a design. A stitch program created in Sewing Mode can be loaded manually into Embroidery Edit.

### SAVE TO “MY STITCHES”

Touch the Save to My Stitches icon to open the dialogue for saving a stitch program or an adjusted stitch in “My Stitches”, the U menu. There are two U menus, which you can step between using the arrows at the bottom of the screen.

#### Save on Free Position

Previously saved stitches or stitch programs are shown in the U-menu. The new stitch or program can be saved at any free position. Simply touch a free position, and your stitch or stitch program is stored there.

#### Save on Occupied Position

Touch an occupied position and a pop-up message will ask you to confirm the overwriting of the old stitch. Touch OK to replace the old stitch with the new one. Touch Cancel to close the pop-up message, and choose another saving position.

#### Cancel Save Process

To cancel the save process, close the window with OK instead of touching any storing position. The saving window will close, and you return to the previous screen.

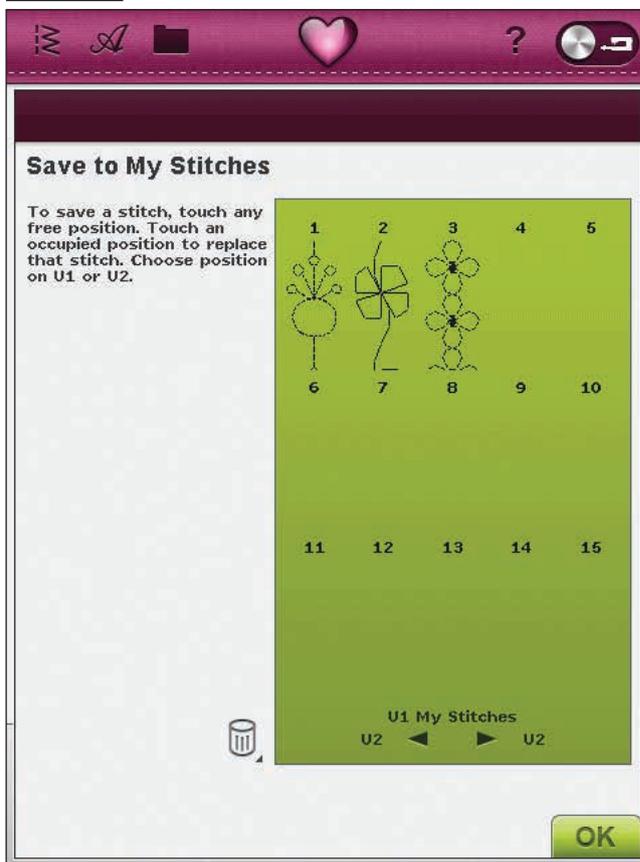
#### Delete Saved Stitch or Program

To delete a saved stitch or program, touch the Delete icon. The Delete icon is active until a program is selected and deleted or until it is touched again. If a stitch is selected to be deleted a pop-up message will ask you to confirm the deletion.

*Note: If you Touch & Hold on the Delete icon, you can delete all your stitches in My Stitches.*



Save to “My Stitches”



## SAVE YOUR PROGRAM IN “MY FILES”

You can also save your program as a stitch file in the “My Files” folder or on a USB device.

In Program mode, touch the Save to My Files icon to open the Save Stitch window. The machine will give you a default name. If you want to change the name touch the Rename icon.

Select which folder to save in with the Touch & Hold function. Touch OK and your file is saved in that location (see File Manager, chapter 9).

## IMPORTANT PROGRAM MODE INFORMATION

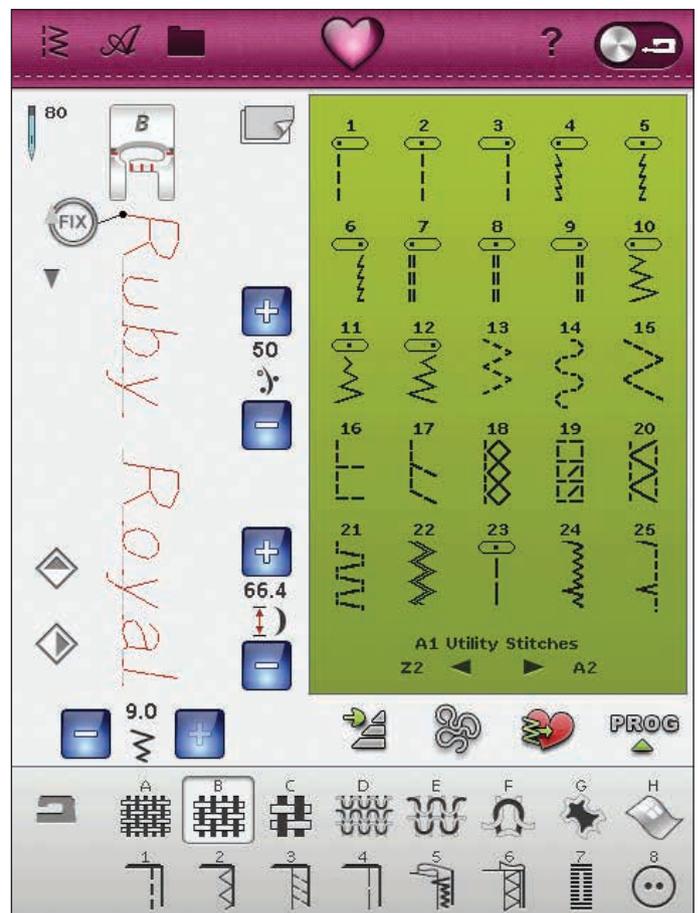
Program can be used in either Sewing Mode or Embroidery Mode. A stitch program created when Embroidery Mode is active will become an embroidery design when saved and cannot be sewn as a stitch in Sewing Mode.

A stitch program created when Sewing Mode is active will not be available when opening Program mode after activating Embroidery Mode and vice versa. The created stitch program will not be transferred to the other mode.

## TO RE-LOAD A STITCH PROGRAM

If Sewing Mode is active when closing the Program mode, your stitch program will be loaded to Sewing Mode and is ready to be sewn. If selecting another stitch in Sewing Mode and then re-opening the Program mode, your stitch program will remain unchanged. Every time Program mode is closed, the stitch program will be loaded to Sewing Mode.

If Embroidery Mode is active, your stitch program will be loaded to Embroidery Edit as a design. If you want to Edit your Stitch, touch the Edit Stitch icon.



## PROGRAM POP-UP MESSAGES

### Not a Programmable Stitch

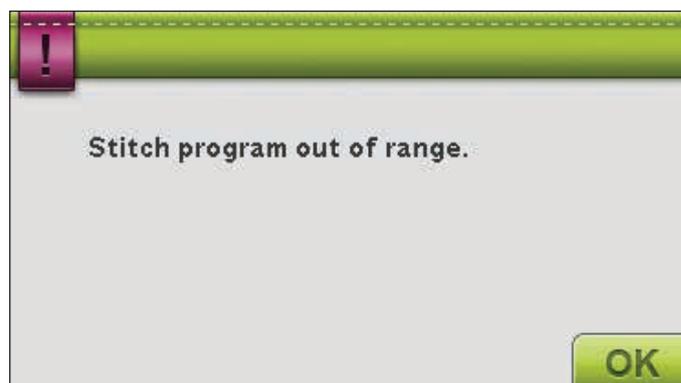
Some stitches are not possible to insert in a stitch program, for example buttonholes and four direction stitches.



### Stitch Program Out of Range

The stitch you are trying to add will make the stitch program too long.

Your stitch program can be up to approximately 500mm (20") long and contain up to 99 stitches. If the stitch program exceeds the maximum length this pop-up message will let you know.



EMBROIDERY SET UP

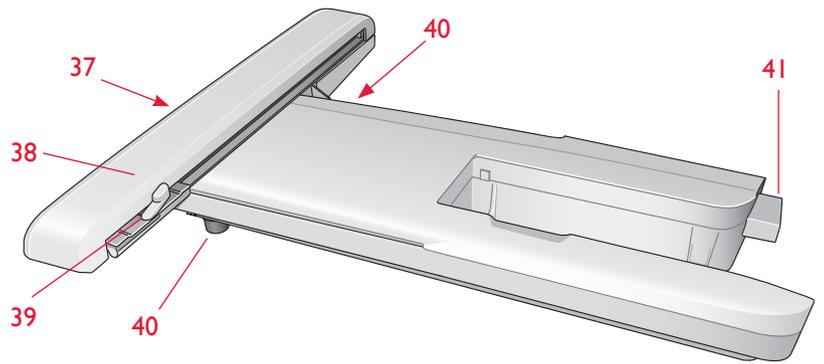
6



## EMBROIDERY UNIT OVERVIEW

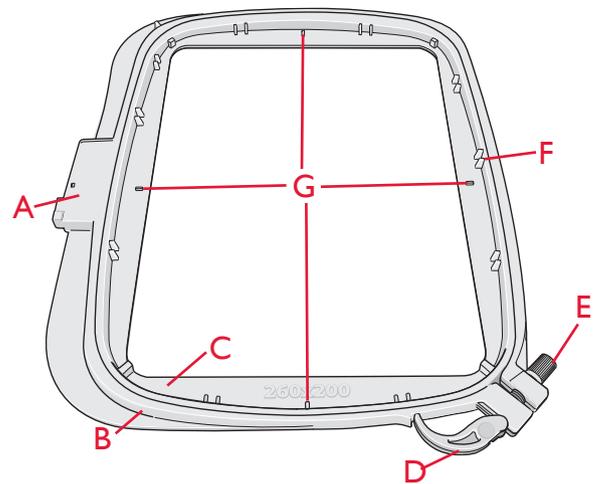
(type BE18)

- 37. Embroidery unit release button (underside)
- 38. Embroidery arm
- 39. Embroidery hoop attachment
- 40. Level adjustment feet
- 41. Embroidery unit socket

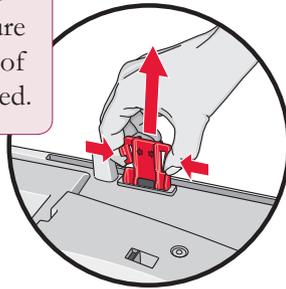


## EMBROIDERY HOOP OVERVIEW

- A Embroidery hoop connector
- B Outer hoop
- C Inner hoop
- D Quick release
- E Retaining screw
- F Ribs for fitting the clips
- G Center marks

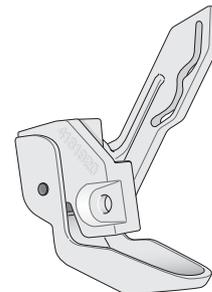


When removing the embroidery unit from the box for the first time, be sure the shipping brace on the underside of the embroidery unit has been removed.



### Sensor Q-foot

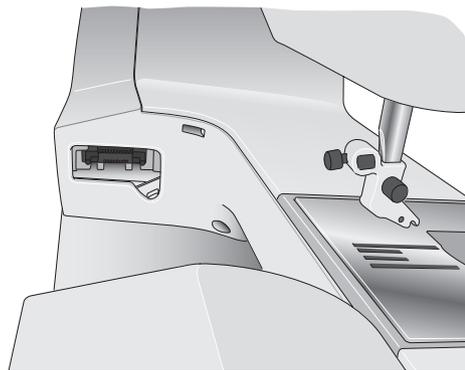
The Sensor Q-foot is always recommended for embroidery. This foot is also used for Free Motion sewing, quilting and embroidering on especially thick or spongy fabric.



## CONNECT THE EMBROIDERY UNIT

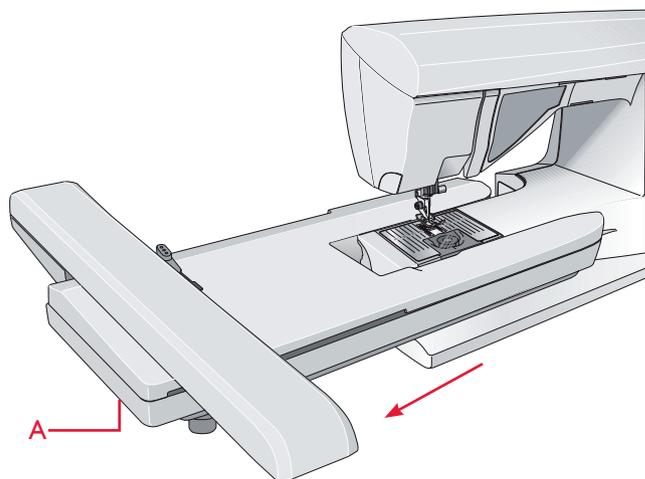
1. Slide the sewing accessory tray off.
2. There is a covered socket at the back of the machine. Turn the cover to the right to open it. The embroidery unit plugs into the socket.
3. Slide the embroidery unit onto the free arm of the machine until it plugs firmly into the socket. If needed, use the level adjusting feet so that the machine and embroidery unit are even. If the machine is turned off, turn it on.
4. A pop-up message tells you to clear the embroidery arm and remove the hoop for positioning. Touch OK. The machine will calibrate and the embroidery arm will move to the ready position.

*Note: DO NOT calibrate the machine with the embroidery hoop attached as this can damage the needle, presser foot, hoop and/or the embroidery unit. Be sure to clear all materials from around the machine before calibrating so that the embroidery arm does not bump into anything while calibrating.*



## REMOVE THE EMBROIDERY UNIT

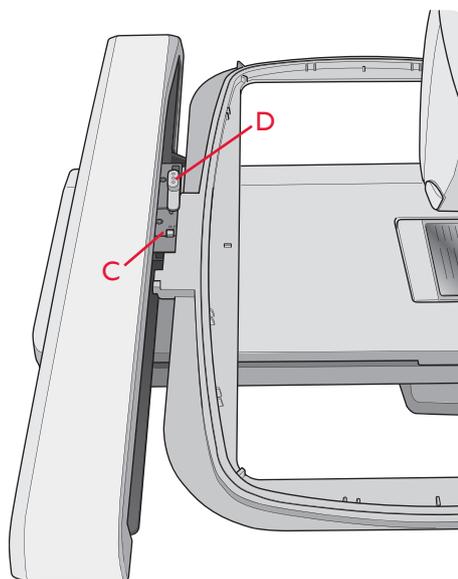
1. To store the embroidery unit in the embroidery case, move the embroidery arm to Park Position by selecting Park Position on the screen in either Embroidery Edit or Embroidery Stitch-Out.
2. Press the button at the left, underneath the embroidery unit (A) and slide the unit to the left to remove it.



## SLIDE ON/OFF THE HOOP

Slide the hoop connector into the hoop attachment (C) from front to back until it clicks into place. Do not depress the grey button (D) when attaching the hoop.

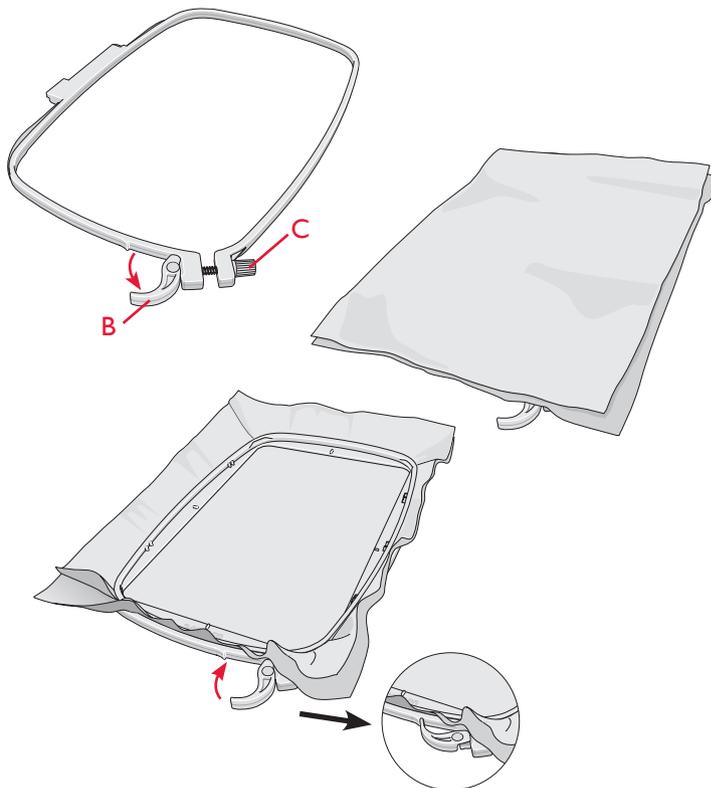
To remove the hoop from the embroidery arm, press the grey button (D) on the hoop attachment and slide the hoop towards you.



## TO HOOP THE FABRIC

For the best embroidery results, place a layer of stabilizer beneath the fabric. When hooping stabilizer and fabric make sure that they are smooth and securely hooped.

1. Open the Quick Release (B) on the outer hoop and loosen the screw (C). Remove the inner hoop. Place the outer hoop on a firm flat surface with the screw on the lower right. There is a small arrow in the center of the lower edge of the hoop which will line up with a small arrow on the inner hoop.
2. Place the stabilizer and fabric, with the right sides facing up, on top of the outer hoop. Place the inner hoop on top of the fabric with the small arrow at the bottom edge.
3. Push the inner hoop firmly into the outer hoop.
4. Close the Quick Release (B). Adjust the pressure of the outer hoop by turning the retaining screw (C). The fabric should be taut in the hoop for the best results.



*Note: When embroidering additional designs on the same fabric, open the quick release, move the hoop to the new position on the fabric and close the quick release. When changing type of fabric, you might need to adjust the pressure using the retaining screw. Do not force the quick release.*

## BUILT-IN DESIGNS

Over 180 designs are included in the memory in your machine. These designs are shown in the DESIGNER RUBY Royale™ Sampler book. In the sampler book you will also find 175 designs from our Classic Collection.

### DESIGNER RUBY Royale™ SAMPLER BOOK

Page through the DESIGNER RUBY Royale™ Sampler book for designs and fonts.

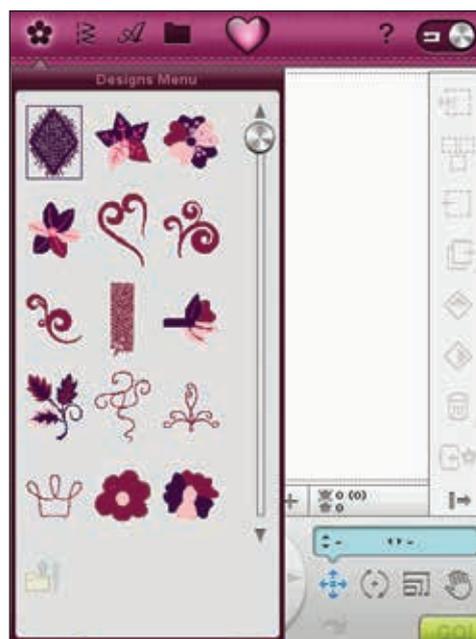
The design number, stitch count (number of stitches in the design) and the design size are displayed next to each design. The suggested thread color for each color block is shown.

### CLASSIC COLLECTION

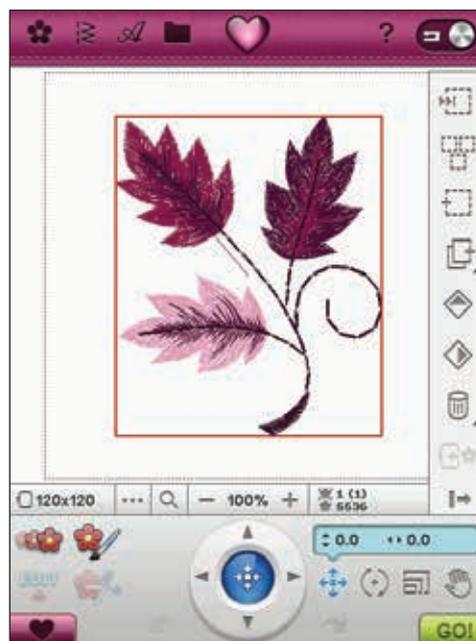
The Classic Collection designs are available for you to download from the HUSQVARNA VIKING® website. Go to [www.husqvarnaviking.com](http://www.husqvarnaviking.com) under Support & Updates/ Designer Ruby Royale/Updates and Downloads. Click on Classic Collection to download the file. Unzip the file and choose the destination on your computer or to a USB stick. When unzipping you will be asked for a password. Enter "D13CC10" and continue. The designs will be unpacked and ready to use.

## GETTING STARTED EMBROIDERING

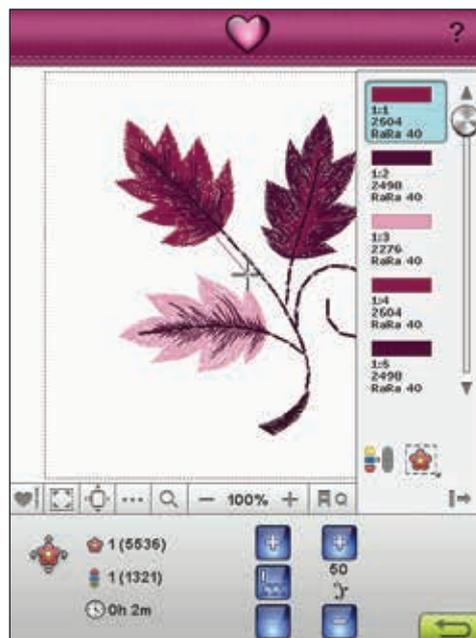
1. Always attach the Sensor Q-foot to get the best result. Read more about attaching the presser foot on page 2:8. After attaching the embroidery unit and embroidery foot, insert a bobbin with bobbin thread.
2. Touch the Designs Menu on the toolbar to open the designs. Touch the design you want to stitch out and it will load to Embroidery Edit.



3. Hoop a piece of fabric and slide the hoop onto the embroidery arm.
4. When you are ready to embroider, switch from Embroidery Edit to Embroidery Stitch-Out by touching the GO! icon on the task bar.



5. Thread the machine with the first color in the Color Block list.



6. Clear sufficient space around the machine to accommodate movement of the embroidery arm and the hoop. Hold the needle thread and press the Start/Stop button or the foot control. The machine starts embroidering.

*Note: This machine features Automatic Jump Stitch Trim. When activated the machine trims the top jump stitch threads and pulls the thread ends to the underside of the fabric. The default setting is on. To turn it off, go to the SET Menu, Sewing Settings and deselect Automatic Jump Stitch Trim. Read more about Automatic Jump Stitch Trim in chapter 3.*

If Automatic Jump Stitch Trim is not activated the machine will stop after stitching a few stitches. A pop-up message will appear on the screen asking you to cut the thread end. Cut the thread and press Start/Stop to continue embroidering.



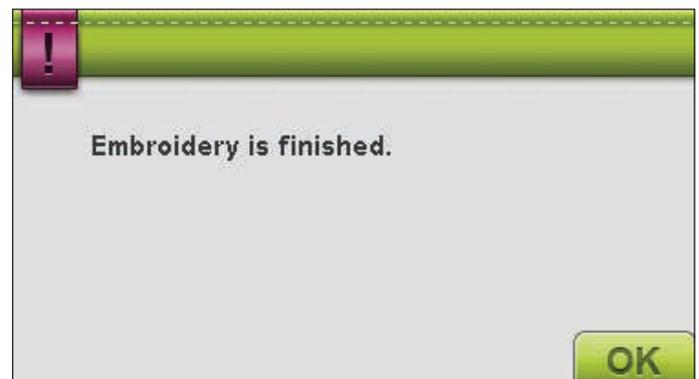
7. When the first color is completed, your machine cuts the thread end and stops. A pop-up message appears asking you to change thread color. Re-thread with the next color and continue embroidering by pressing Start/Stop. Hold the thread end. The machine will trim the top thread and pull the thread to the underside of the fabric.

At the end of each color block, the thread is tied off and the needle thread is cut.



8. When the embroidery is completed, your machine cuts the top thread and bobbin thread and stops. The needle and presser foot raise automatically for easy removal of the hoop.

A pop-up message and sound informs you that your embroidery is finished. Touch OK to keep the design loaded and stay in Embroidery Stitch-Out.



EMBROIDERY EDIT

7



# EMBROIDERY EDIT

Embroidery Edit will be opened when you toggle between the Sewing/Embroidery Mode on the toolbar to activate Embroidery Mode. You will also enter Embroidery Edit when you turn your machine on with the embroidery unit attached. In Embroidery Edit you can adjust, combine, save and delete designs. You do not need to have the embroidery unit connected to your machine to edit your design(s). The loaded design(s) are shown in the Embroidery field.

## EMBROIDERY EDIT - OVERVIEW OF ICONS

The screenshot shows the Embroidery Edit software interface. At the top is a purple header bar with icons for a flower, a zigzag line, a heart, a folder, a question mark, and a play button. The main workspace displays a red maple leaf design within a red rectangular selection box. To the right of the workspace is a vertical toolbar with icons for Step Through Designs, Select All, Add/Remove Selection, Duplicate, Mirror End-to-End, Mirror Side-to-Side, Delete, Move to Hoop, and Fold out Toolbar. Below the workspace is a status bar showing 'My Hoops' with a '120x120' hoop icon, a search icon, a zoom level of '100%', and a design count of '1 (1)' with '5536' stitches. At the bottom is a control panel with icons for Basic Design Appliqué, Undo, Control center (a directional pad), Redo, Position (a four-way arrow), Rotate (a circular arrow), Scale (a square with arrows), Save to My Designs (a heart icon), and Embroidery Stitch-Out (a 'GO!' button). On the left side, labels point to various features: Design Stitch out Order, Total number of stitches in design combination, Zoom In/Zoom Out, Zoom Options, Preferences, My Hoops, Resize, Color Edit, Edit Stitch Program, and Save to My Designs.

## MAIN FUNCTIONS IN THE EMBROIDERY EDIT TOOLBAR

Press the function you want to activate. Touch the Ruby Menu icon to open the Extended toolbar.

### LOAD A DESIGN

To load a design, touch the Designs Menu icon to automatically open the dropdown list. Select designs from the dropdown list. Your personal designs will be shown in the menu. To load a design, touch it on the screen and it will be loaded into Embroidery Edit.

*Note: You can also load designs, fonts and stitches from File Manager.*

### LOAD A STITCH

To load a stitch, touch the Stitch Menu icon on the toolbar. Select a menu and the Program window will open. Touch your desired stitch/stitch program and touch OK to load to Embroidery Edit. Read more about how to make a stitch program in chapter 5.

### Load a buttonhole

Buttonholes can be embroidered in a hoop. Touch the Stitch Menu icon on the toolbar and select menu B. Select desired buttonhole in the window that opens, and set the buttonhole stitch length, width and density. Touch OK to load the buttonhole to the embroidery area.

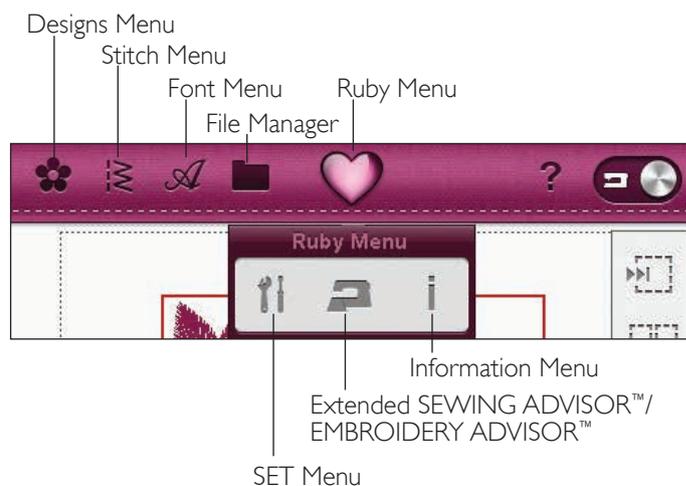
### LOAD A FONT

Text can be created both with embroidery fonts and stitch fonts. Load a font by selecting the Font Menu from the toolbar and touch your desired font on the screen.

Embroidery fonts will be loaded into the Embroidery Font Edit window. Stitch fonts will be loaded to Program. The text created will then be loaded into Embroidery Edit.

### FILE MANAGER

The File Manager helps you add, move, remove and copy designs, fonts and stitch files in an easy way. Touch the File Manager icon to open File Manager to save to the machine memory or external devices connected to the USB-ports, such as your computer or the HUSQVARNA VIKING® USB embroidery stick. Select the place you want to save your design. Touch a folder to select it and Touch & Hold it to open it. Read more about File Manager in chapter 9.



## RUBY MENU

Touch the Ruby Menu icon to open the Extended toolbar. The contents of the Extended toolbar will change depending on which mode you are in. Here you will find the SET Menu, the Extended SEWING ADVISOR™/EMBROIDERY ADVISOR™ and the Information Menu. Touch the function you want to activate.

## SET MENU

In the SET Menu, you can override automatic settings and make manual adjustments to the Sewing Settings, Machine Settings, Sound Settings, and Screen Settings.

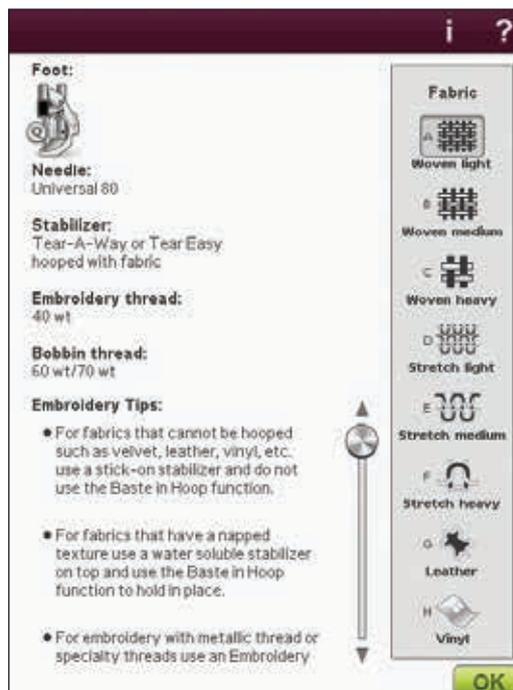
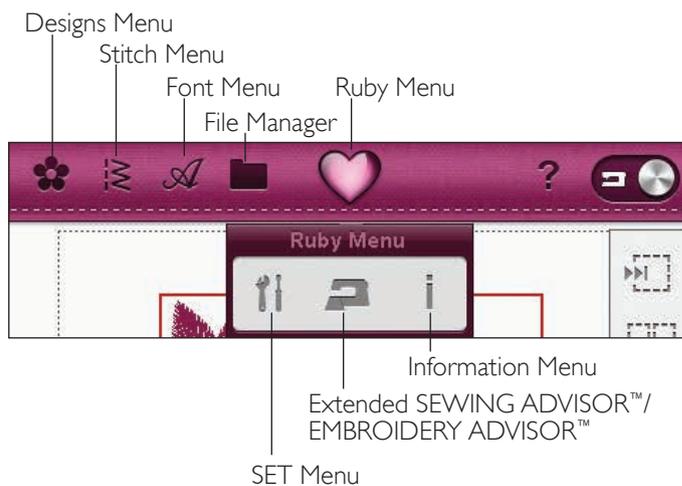
Touch the icons to activate a function or open a list of choices. Read more about the SET Menu in chapter 3.

## EXCLUSIVE EMBROIDERY ADVISOR™

The Exclusive EMBROIDERY ADVISOR™ feature recommends the best needle, stabilizer and thread recommendation for your fabric. Select the fabric you want to embroider on and follow the recommendations. Touch OK to close the EMBROIDERY ADVISOR™ feature.

## INFORMATION MENU

Use the Information menu to easily get Help topics and information. The Info menu is a built-in, abridged version of the User's Guide. Read more about the Information menu on page 3:12.



## FOLD OUT TOOLBAR

In Embroidery Mode several of the functions can be found on the Fold out Toolbar. To hide the functions touch the Fold out Toolbar icon to the lower right. The Fold out Toolbar is unfolded by default.

## HOW TO SELECT DESIGNS

When loading designs into Embroidery Edit, the last design loaded is selected by default.

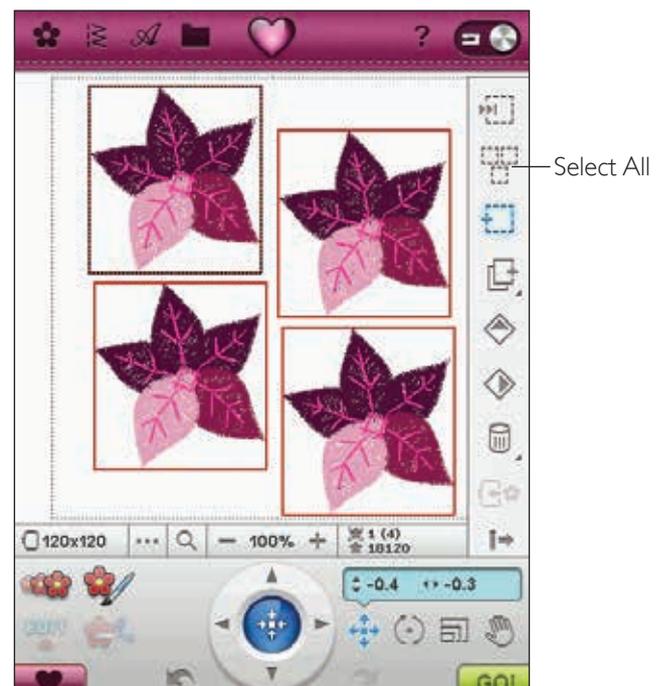
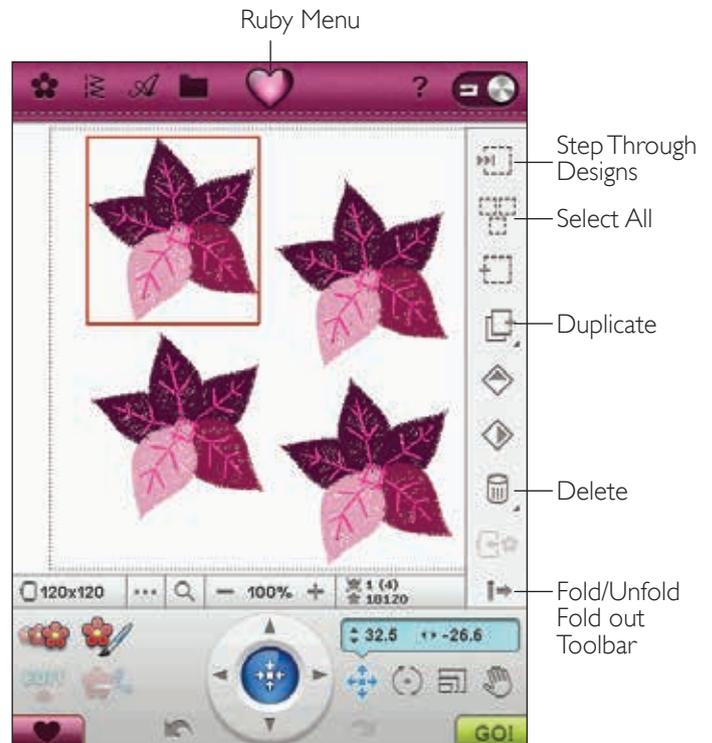
### Select one Design

To select one design you can either touch the design on the screen or touch the Step Through Designs icon. The Step Through Designs icon allows you to select one of the designs on your screen if you wish to alter it in some way. Every time you touch the Step Through Designs icon, you will select the next design in the order in which they were loaded.

1. In Embroidery Edit, touch the Designs Menu.
2. Select a design from the dropdown list by touching it.
3. Touch the Duplicate icon three times. The last design will have a red box around it which means that it is selected.
4. If you want to select the first design you inserted, touch the Step Through Designs icon. Every time you touch that icon, you will move to the next design in the order they have been loaded.
5. Once you have selected the design you want, you can delete, duplicate, position, scale, mirror, resize, and/or rotate it. Only the design that is selected will be affected by your changes.

### Select All

1. If you want to select all designs, simply touch the Select All icon. All the designs on your screen will be selected. You can now move, delete, duplicate, position, scale, mirror, resize and/or rotate them.



## ADVANCED SELECTION

### Selection Modes

There are three different ways a design can be chosen on the screen. This gives you the opportunity to select a subset of the loaded designs and apply changes only to those designs.

1. Selected design (1) - The design is marked with a solid red line. You can make changes to the design(s). You can scale, rotate, resize and edit the selected design.
2. Marked and Selected (2) - The design is marked with a dotted red line. You are able to make changes to the marked and selected design. You can remove this design from the selected designs by pressing the Add/Remove Selection icon.
3. Marked design (3) - When two or more designs are on your screen, you are able to mark a design. The design is marked by a dotted black line. It will not be affected by changes such as scale and rotation. When you select the Add/Remove Selections icon, the black dotted box turns red. Your design is now marked and selected.



1. Selected Design(s) have a red box around them.



2. Marked and Selected Design(s) have a red dotted box around them.

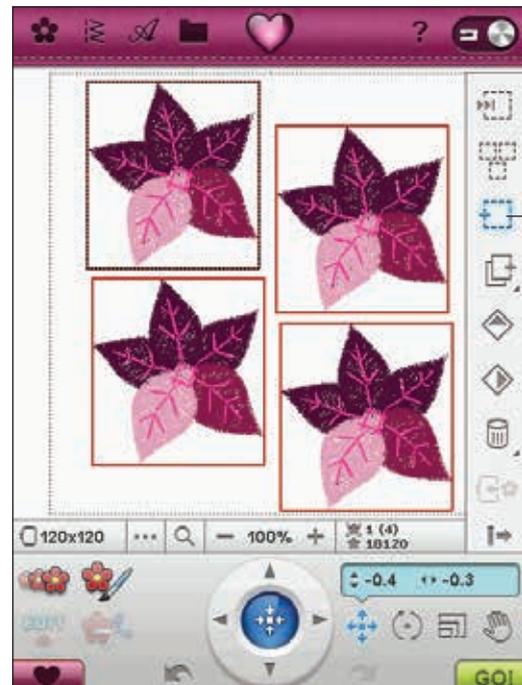


3. A black dotted box around a design means it is marked and not active.

### Add/Remove Selection

If you have loaded several designs and want to change only a few of them, you can use the Add/Remove Selection function. Touch the Add/Remove Selection icon to activate the function. Mark the designs by touching them to add them to the selection.

You can also use this function after the Select All function to remove one or several designs from a group. Then mark the designs you want to remove and click on Add/Remove Selection to remove them from the selection.



Add/Remove Selection

## DUPLICATE

Touch the Duplicate icon to make a copy of the selected design(s).

If you want more than one copy, Touch & Hold the icon and a pop-up window will open where you can enter the desired number of copies.

See page 7:5-7:6 for information about selecting and deselecting designs.

## MIRROR END-TO-END AND SIDE-TO-SIDE

To mirror a design horizontally, touch the Mirror End-to-End icon. To mirror vertically, touch the Mirror Side-to-Side icon.

## DELETE

When you touch the Delete icon, the selected design(s) will be deleted from the embroidery field. If more than one design is selected, a pop-up message will ask you to confirm the deletion.

Touch & Hold the Delete icon to delete all the designs in the embroidery field. A pop-up message to confirm the delete all designs will appear.

## MOVE TO HOOP

Touch Move to Hoop to move any design that is outside the hoop area into the hoop area. The design will be placed at the outer most edge of the hoop.

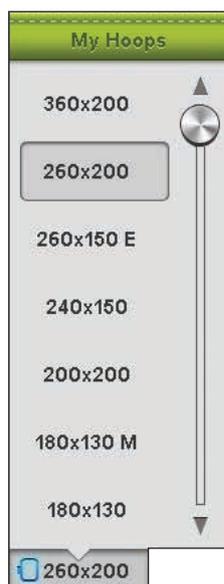


## MY HOOPS

To select the correct hoop size, touch the My Hoops icon. A pop-up will appear with the hoop choices, including hoops that are available to purchase from your authorized HUSQVARNA VIKING® retailer.

After selecting your hoop size, the pop-up message will close automatically.

*Note: Only your selected hoops will be available in the My Hoops List. You can adjust the My Hoops List by choosing the wanted hoops in Hoop Selection under Machine Settings. Read more about Hoop Selection on page 3:8.*



## PREFERENCES

### Grid

Touch the Preferences icon and then touch the Grid icon to activate/deactivate a grid on the embroidery field. The grid is used as a guide when combining or placing designs. The distance between the grid lines equals a maximum of 20 mm. As you zoom in on the embroidery field, the distance between these lines reduces to 10mm and 5mm, indicated with lighter lines.

### 2-dimensional/3-dimensional view toggle

In 2-dimensional view, the designs load faster on the screen and it is easier to see the color blocks in the design. 3-dimensional view gives a more realistic view of the designs, with added shadows and depth.

Touch the Preferences icon and then touch the "3D" icon to change to 3-dimensional view. The icon becomes selected. Touch again to deselect and return to 2-dimensional view.

### Full Screen

To see your design as large as possible, use the Full Screen function. The embroidery will fill the entire screen. To close, touch anywhere on the screen.

### Park Position

Touch the Park Position icon to move the embroidery arm to Park Position for storing the embroidery unit.

*Note: The hoop must be removed before moving to park position to prevent any damage.*



## ZOOM OPTIONS

Zoom in or out of the embroidery field. Use Zoom In (+) to get a close-up of an area within the embroidery design. Use (-) to Zoom Out.

Touch the Zoom Options icon to open a pop up where you can choose to Zoom to All, Zoom to Hoop or Zoom to Box.

### Zoom to All

Zoom to All will show all the design(s) in the embroidery combination.

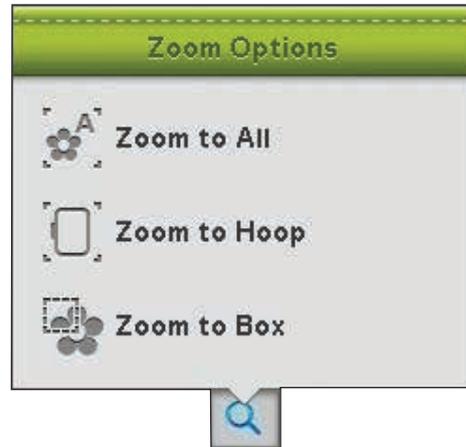
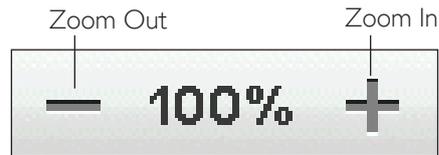
### Zoom to Hoop

Zoom to Hoop will adjust the embroidery field to fit the selected hoop.

### Zoom to Box

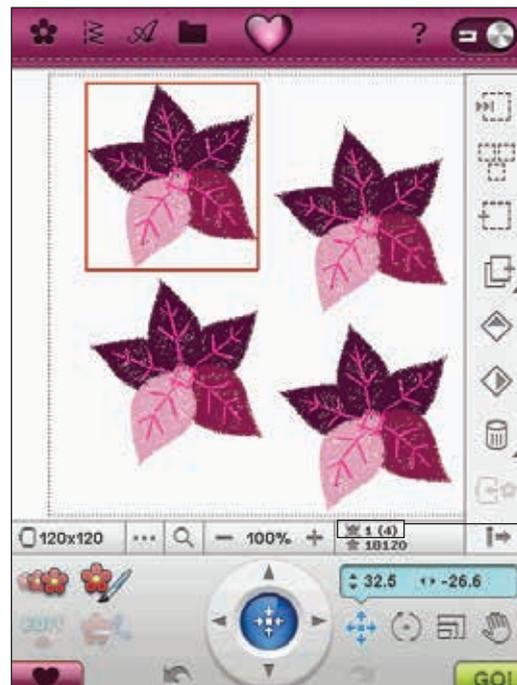
Touch and drag your stylus in the embroidery field on the screen to create a box. The screen zooms to show that specific area.

*Note: As you Zoom In your design gets very large. To locate a specific part of your design touch Pan. Touch and drag or use the control arrows to find the part you wish to work with.*



## DESIGN STITCH OUT ORDER

Designs are stitched out in the order they are loaded to Embroidery edit. When working with several designs at a time it can be useful to know in which order they will be stitched out. Select a design by touching it to see which stitch out number it has. 1 (4) for example means that the selected design is the first out of four designs to be stitched out.



Design Stitch out Order

## TOUCH FUNCTIONS

A selected design has a red box around it. A selected embroidery font text has a blue box around it. To select a design touch it on the screen. You can use your stylus to make adjustments directly on screen by touching and dragging in the embroidery field. You can Pan, Position, Rotate and Scale, depending on which touch function is active. You can also use the arrows in the Control to fine tune.

### Position

When Position is active, you can move the selected design(s) anywhere in the embroidery field. The numbers next to the Control show, in millimeters, the designs current horizontal and vertical position from the center of the hoop.

Touch the Control Center icon and the design(s) will be moved to the center of the hoop.



Control Center

Control

Position

### Rotate

When Rotate is active, the selected design(s) will be rotated around the center point of the selected design(s).

Use the arrows in the Control to rotate the design(s) in one degree increments. Each touch of the Control Center icon will rotate the design(s) 90 degrees clockwise.

Next to the Control you can see the angle in degrees that the design(s) has rotated from its original position.



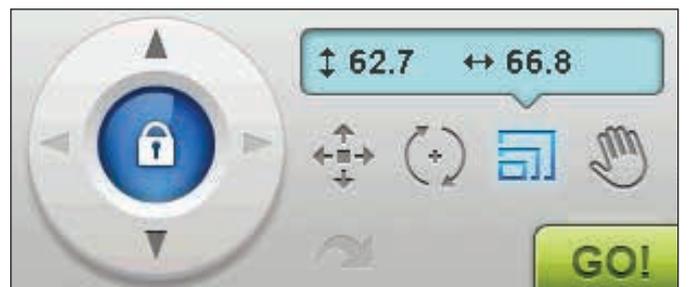
Rotate

### Scale

When Scale is active, you can increase or decrease the selected design or a group of designs by 20%. By default, the proportions are locked. This is indicated with a closed padlock in the Control Center icon. To unlock, just touch the padlock. Height and width can now be changed individually.

If you move the stylus on the screen towards the center of the selected design(s), the size will decrease. If you move the stylus from the center of the selected design(s), the size will increase. Use the Control to fine tune.

*Note: To increase or decrease a design more than 20%, use the Resize function.*



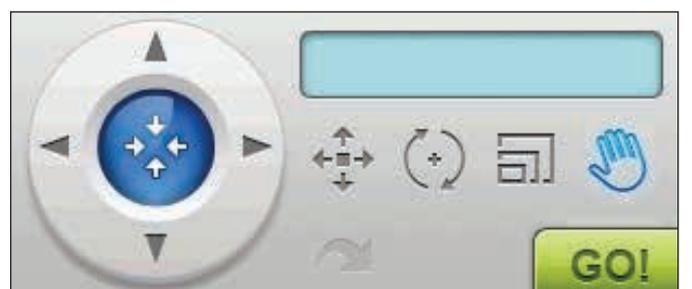
Scale - locked



Scale - unlocked

### Pan

When Pan is active, you can pan the embroidery field in the zoomed view. Touch the Control Center icon to center the view over the hoop.



Pan

## SAVE TO MY DESIGNS

Touch the Save to My Designs icon to save your edited design or design combination. In the window that opens, select where you want to save the design. Select My Designs, My Files or an external device. Designs saved in My Designs are available through the Designs Menu on the Toolbar.



## UNDO

Touch the arrow pointing left to undo your latest design adjustment. Touch repeatedly to step back through your adjustments.

*Note: Not all adjustments can be undone. The arrows will be greyed out if undo is not possible.*

## REDO

Redo is activated when Undo is touched, so you can step forward again through your adjustments.

## GO!

In the lower right corner you will find a GO! icon. Touch the icon to enter the Embroidery Stitch-Out window.

## RESIZE

Resize can reduce an embroidery design up to five times smaller than the original design or increase it up to eight times larger than the original design. The machine recalculates the number of stitches in the design so the original stitch density remains.

*Note: To reduce or increase the design less than 20%, use Scale function. The Scale function does not change the stitch count.*

### Resize Adjustments

Select the design you want to resize. Open the Resize window. Adjust the design size by touching and dragging on the screen or by using the Control. The size of the design is shown in millimeters above the Control. To return to the original size, touch the Control center icon. Adjust the placement of the design in the hoop using Position and Rotate.

### Retain Fill Type

All fill areas in an embroidery design are made in a specific type to get the best effect. When enlarging or reducing a design, the stitches in the fill area will be affected.

There are two ways to handle the fill type and style in the design to be resized.

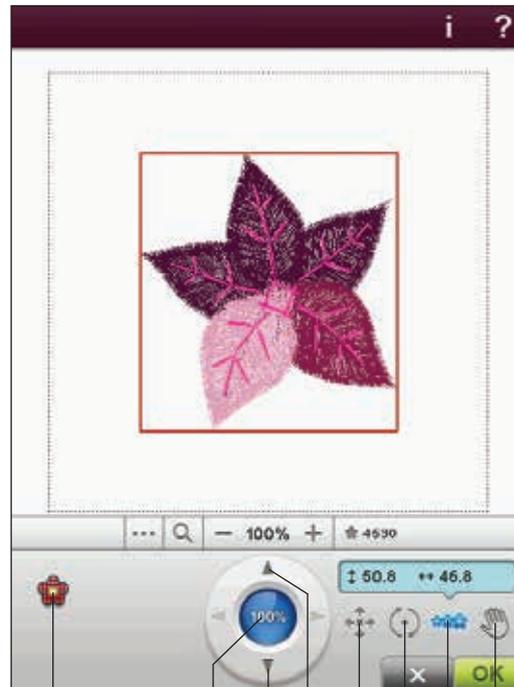
1. The default setting will not retain fill type. This is the fastest way to resize a design. However, the fill areas in the design may look different than the original.
2. When Retain Fill Type is selected, it will take longer to resize but the process will retain the fill types and styles within the design areas. If greatly enlarging a design, Retain Fill Type is recommended for best results.

### To Start Resizing

When you are satisfied with the design size and position, touch OK to close the window and start resizing. An hourglass on the screen shows that it is working. When finished, the resize window will close.

Touch Cancel to return to Embroidery Edit without resizing.

*Note: Stitches and stitch programs cannot be resized.*



Retain  
Fill Type

Control  
center

Rotate  
Position

Resize

Pan

Reduce  
design

Enlarge  
design

## IMPORTANT RESIZE INFORMATION

*Since designs are digitized for a specific design size, it is important to consider the following information about Resize. Always embroider a test sample of your resized design before embroidering on a project.*

- Resize is always proportional. If you reduce a design 30%, it will be 30% smaller in both length and width. If the design is very detailed, some of it may be lost or distorted, and/or it can be very dense. Some designs should not be reduced more than 25% if they have too many details.
- Designs can be increased larger than the hoop, so be sure that the design fits in the hoop. If the design is larger than the hoop size, the machine will not be able to embroider it.
- If you are enlarging a design too much, you may see stitch irregularities. Press the Control Center to return to 100% and resize to a smaller percentage for a better result. Depending on the memory left in the machine, you may find some designs too complex to resize in the machine. Please use the Embroidery Software (PC) to resize very large and complex designs. It is available to purchase from your local authorized retailer.
- Always start with the original design when resizing. This is to ensure the best possible stitch quality. If a resized design is saved, and then resized again, it can cause stitch irregularities. For the best resize result, always start with a design in original size.
- Depending on how much you resize a design and how many stitches it contains, the resize process time will vary. Resizing a very large or complex design may take a few minutes. Once you touch OK, you cannot cancel. You will need to wait for the process to be finished.
- It does not matter in which order you select functions to adjust the size, rotation, mirroring etc. When you touch OK, your machine always resizes first and then adds the rotation, mirroring etc.
- It is recommended that you scale instead of resize to change a design less than 20% and also for designs digitized with single or triple stitches, such as cross stitch embroideries. In this case, you do not want to add stitches to the design, you only want to make the design larger or smaller by making each original stitch larger or smaller.

## COLOR EDIT

Touch Color Edit icon to enter the Color Edit Screen.



### THREAD COLOR CHANGE

In Thread Color Change you can edit the colors in your design. Each color block is described in the Color Block list on the right hand side of the screen.

*Example: 1:2, 2504 RaRa 40, means the second thread color in the first design loaded is thread number 2504 of Robison-Anton 40 weight.*

In the Color Block List, touch the color block that you want to change. Touch the Thread Color Change icon to open a window with 64 different color choices. Touch your new color to select it and touch OK. The window will close and your new color will be applied in the Color Block List and to the design.

### Select more than one color block

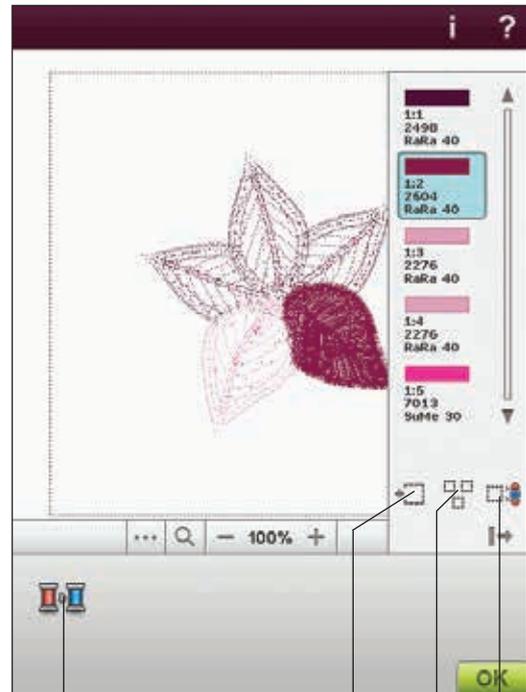
To change more than one color block at a time, touch the Add/Remove Color Selection icon, then touch the color blocks you want to select/deselect.

Touch the Select All icon to make changes to all color blocks at one time. Add/Remove Color Selection is automatically activated. To deselect a color block, just touch it in the list. Touch Add/Remove Color Selection to deactivate the function and deselect all color blocks.

Use Select Equal to change all the same color blocks at one time. Touch the color block you want to change, then touch Select Equal to select all identical color blocks in the color block list. Add/Remove Color Selection is automatically activated. If two or more different color blocks are selected, Select Equal will select all identical color blocks of all selected colors.

### On-screen display of selected and non-selected color blocks

Selected color blocks are shown in 2-dimensional or 3-dimensional view. Color blocks that are not selected are shown as colored dots on the screen, making it easy to see which color areas in the design will be changed.



Thread Color Change

Add/Remove Color Selection

Select All

Select Equal

## EDIT STITCH PROGRAM

If you want to edit a stitch program that you have created and loaded to Embroidery Edit, touch the Edit Stitch Program icon. The Program window will open to let you make adjustments. You can insert new stitches or delete stitches. If you have programmed stitches in Embroidery Mode, you can save the stitches as a part of a design, and they can only be stitched in embroidery mode.

### To save a stitch program in Embroidery Mode

Touch the Stitch Menu. Program your stitch and touch OK in the lower right corner of the screen. You will now load your text to Embroidery Edit. Touch the Save to My Designs icon to save the stitch program in My Designs. A stitch program made in Embroidery Mode will not be able to open in the sewing mode. Read more about how to program a stitch in chapter 5.

## PROGRAM EMBROIDERY FONTS

To open an embroidery font, go to Embroidery Edit and touch the Font menu. Select an embroidery font from the list. The Embroidery fonts are below the stitch fonts.

When selecting an embroidery font in Embroidery fonts list, the Program Embroidery Font window will open automatically. You can also open this window if you want to adjust an existing text already in Embroidery Edit. In that case, select the text and touch the Edit Stitch icon.

*Note: If the text is created of stitch fonts, the Program window will open instead.*

### To use the Editor

Use the stylus and touch the letters you want to add to the text. The text is shown in the text field with the cursor at the active letter. Use the arrows to step forward and backward.

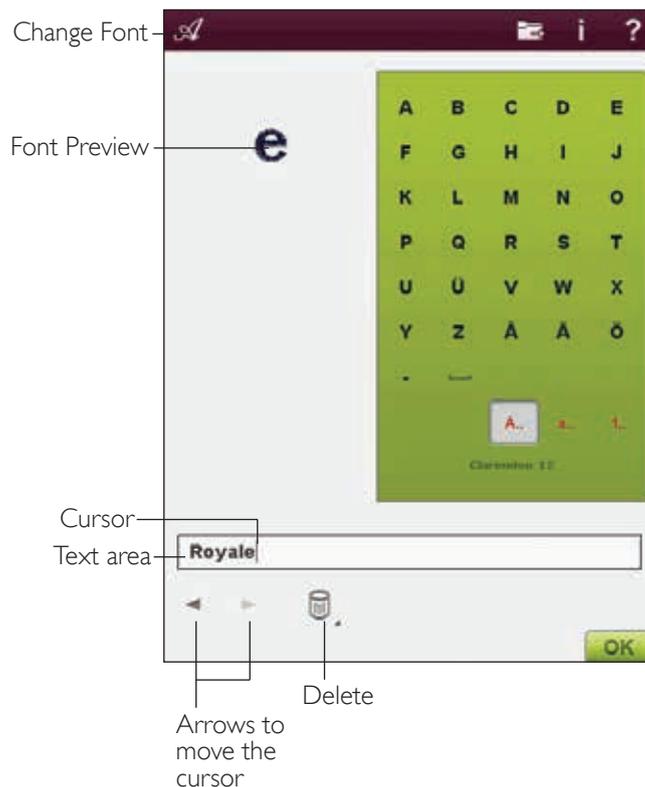
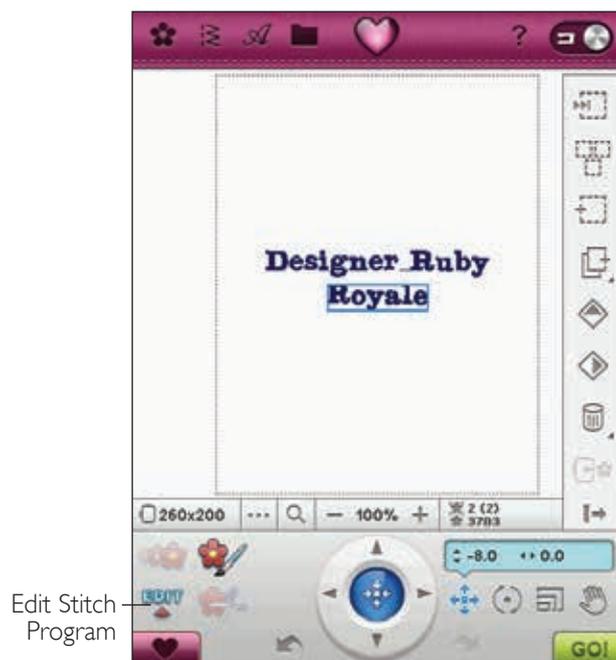
You can change the font and the size of the entire text by touching the Change Font icon. Select a different font/font size and the entire text you have written will change to the new font/font size. A preview of the selected font is shown in the Font Preview area.

### Add a letter into a text

Use the arrows to move the cursor to where you want to add a letter. Touch the letter and it will be inserted at the cursor position.

### Delete a letter

To delete one letter, place the cursor after the letter to be deleted. Touch the Delete icon. If you want to delete all the text you have written, Touch & Hold on the Delete icon. A pop-up message will ask you to confirm the deletion.



## BASIC DESIGN APPLIQUÉ

In Embroidery Edit touch the Basic Design Appliqué icon to open the Basic Design Appliqué window.

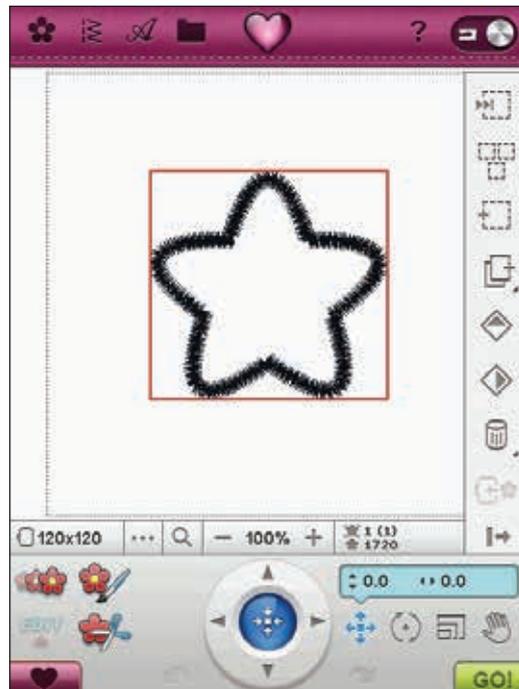
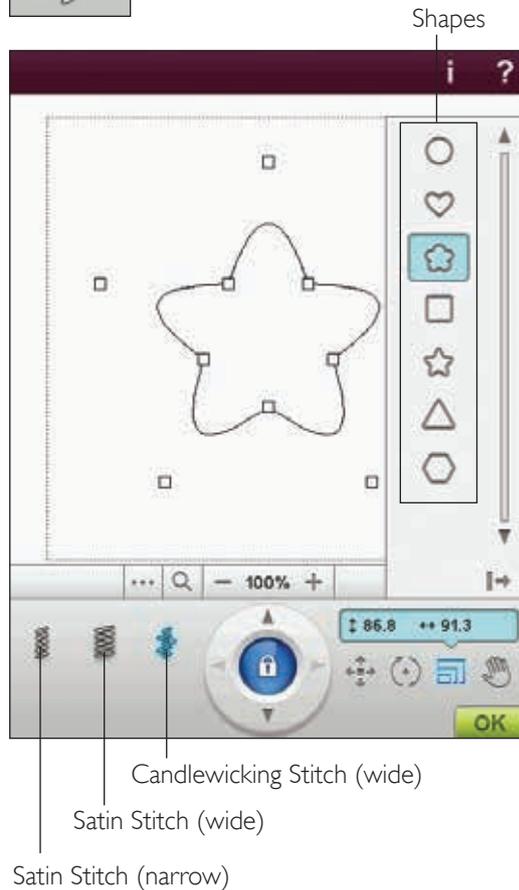
To the right, in the fold out scroll-list you will find different shapes to choose from when creating your appliqué.

There are three different decorative stitches to choose from that will give the appliqué a decorative edge:

- Satin Stitch (narrow) - This stitch will add a narrow Satin Stitch around your appliqué shape.
- Satin Stitch (wide) - This stitch will add a wide Satin Stitch around your appliqué shape.
- Candlewicking Stitch (wide) - This stitch will add a wide Candlewicking Stitch around your appliqué shape.

The decorative stitches will cover the raw edges of the appliqué. The first color block will sew a straight stitch outline on the base fabric to show where the appliqué will be sewn. Place the appliqué fabric on top of the stitched outline. The second color block will sew another straight stitch to secure the appliqué fabric to the base fabric. Trim excess appliqué fabric as close to the stitching line as possible. Color block three begins the stitching that will cover the raw edges.

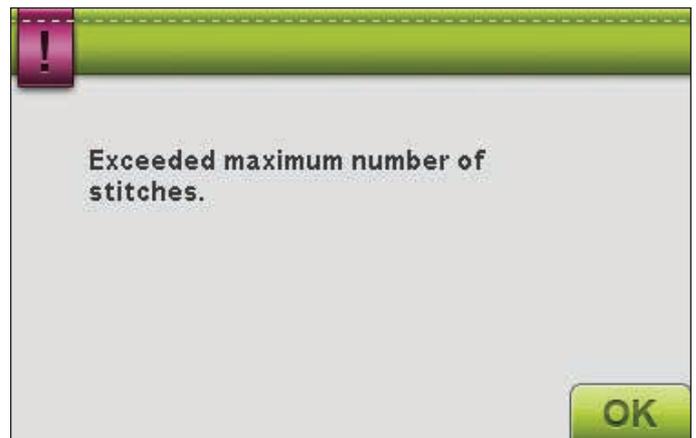
The appliqué stitches will be visible in Embroidery Edit once you touch OK and the Basic Design Appliqué window closes.



## EMBROIDERY EDIT POP-UP MESSAGES

### Exceeded maximum number of stitches

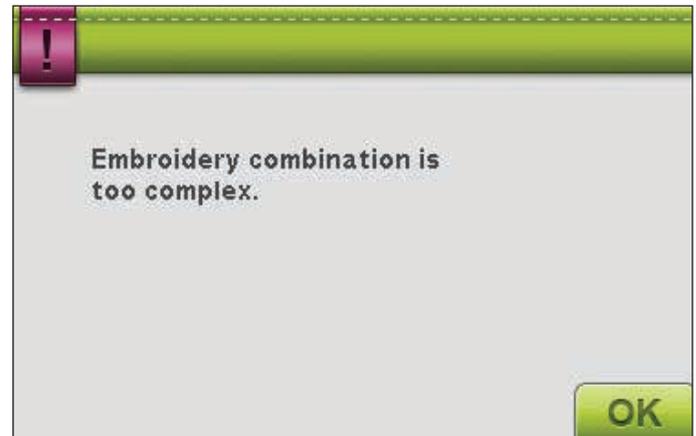
The design combination you are trying to make contains too many stitches. Your design combination can have a maximum of approximately 500,000 stitches.



### Embroidery combination is too complex

This pop-up message appears for one of the following reasons:

- The design combination contains too many color blocks.
- There are too many designs in the combination.





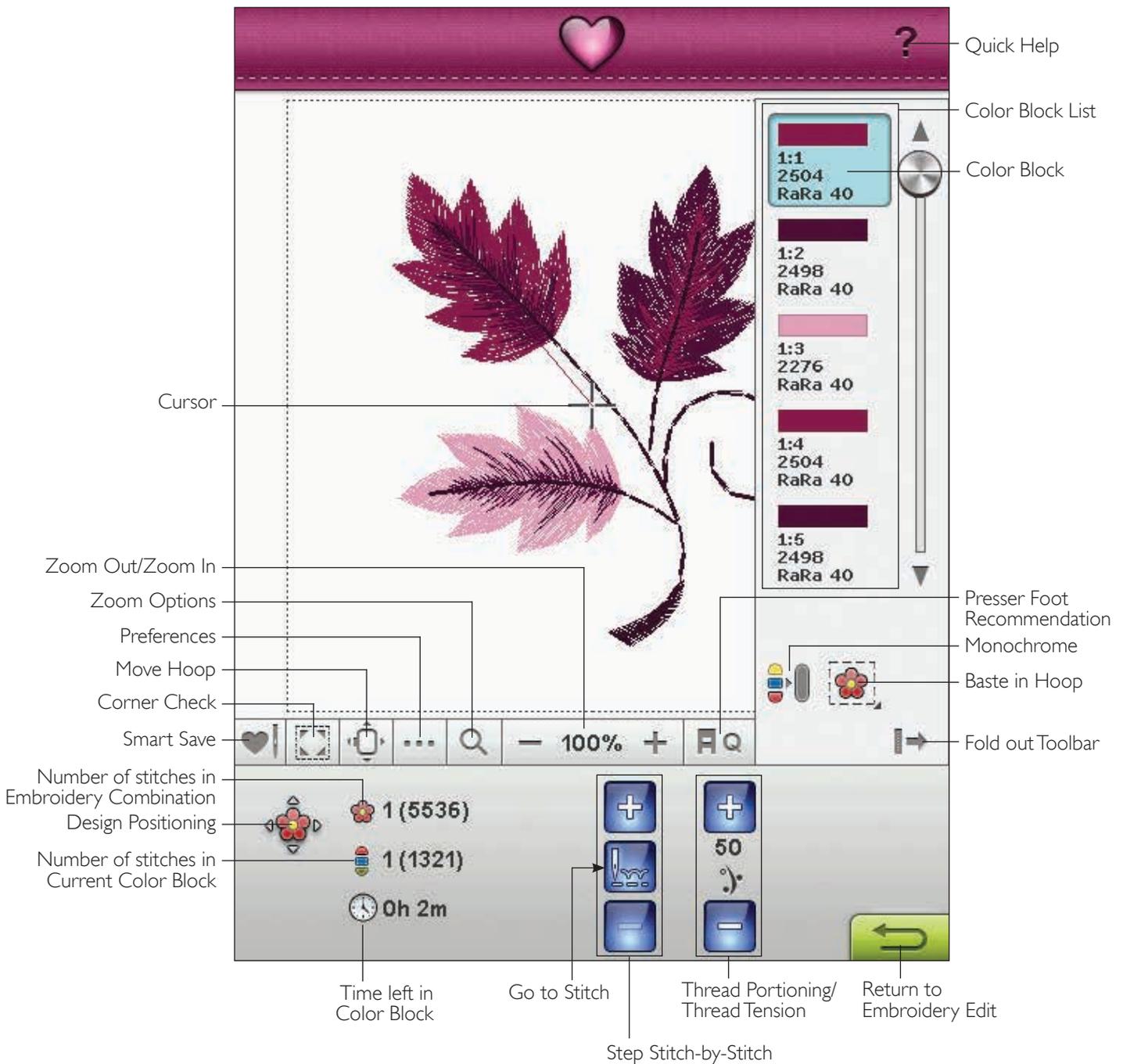
# EMBROIDERY STITCH-OUT 8



## TO ENTER EMBROIDERY STITCH-OUT

To embroider your design(s), enter Embroidery Stitch-Out by touching the GO icon in the lower right corner of the Embroidery Edit window. The embroidery unit must be connected and the correct hoop attached when the machine enters Embroidery Stitch-Out.

## EMBROIDERY STITCH-OUT - OVERVIEW OF ICONS



## SMART SAVE

If you want to stop embroidering and save your current position, touch Start/Stop to stop the embroidery. Then touch the Smart Save icon to save the current position. You can now turn the machine off.

Smart Save remembers and stores all your design adjustments and you can continue to embroider later. Simply go to the Designs Menu and touch the Load Smart Save icon.

A design that you Smart Save is saved until you replace it.

*Note: If you have chosen Auto Smart Save in the SET Menu, the Smart Save icon will be disabled. The design info is automatically stored periodically as you embroider. If you should turn your machine off or loose power, it is easy to bring up the design ready to stitch from the same position. Go to the Designs Menu at the bottom of the Designs, and touch the Load Smart Save icon.*



Smart Save



Load Smart Save

## CORNER CHECK

Corner Check can be used to trace the four corners of the design so that you can see where the design will be on the fabric. Touch the corner check icon. Each time you touch the icon it will move the hoop in the following order: upper left, upper right, lower right, lower left and then go back to the current stitch position.



## MOVE HOOP

Use the Move Hoop functions to move the embroidery arm to different positions.

### Current Stitch Position

When you want to return to the current stitch position and continue embroidering where the embroidery was interrupted, touch the Current Stitch Position icon. You can also press the Start/Stop button once to return to the current stitch position and start to embroider.

### Park Position

When you have finished your embroidery, remove the hoop and select Park Position. The embroidery arm will be placed in the correct position for storage.

Use the Park Position when you want to move the embroidery arm out of the way for sewing.

*Note: It is important that the hoop is removed before selecting Park Position to prevent damage.*

### Bobbin Position

To make it easier to change the bobbin, touch Bobbin Position. The hoop will move away from you, allowing you to open the bobbin cover and replace the bobbin.



### Trim Position

Trim Position will move the hoop towards you making it easier to trim your jump stitches and trim fabric for specialty techniques.

*Note: You can also use touch the Needle Up/Down button on your machine to move the hoop to trim position.*

### Center Position

Use the Center Position if you want to check where the center position of the design will be placed on the fabric.

# PREFERENCES

## Grid

Touch the Grid icon to activate/deactivate a grid on the embroidery field. The grid is used as a guide when combining or placing designs. The distance between the grid lines equals a maximum of 20 mm. As you zoom in on the embroidery field, the distance between these lines reduces to 10mm and 5mm, indicated with lighter lines.

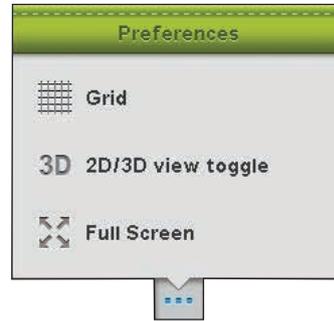
## 2-dimensional/3-dimensional view toggle

In 2-dimensional view, the designs load faster on the screen and it is easier to see the color blocks in the design. 3-dimensional view gives a more realistic view of the designs, with added shadows and depth.

Touch the "3D" icon to change to 3-dimensional view. The icon becomes selected. Touch again to deselect and return to 2-dimensional view.

## Full Screen

To see your design as large as possible, use the Full Screen function. The embroidery will fill the entire screen. To close, touch anywhere on the screen.



# ZOOM OPTIONS

Zoom in or out of the embroidery field. Use Zoom In (+) to get a close-up of an area within the embroidery design. Use (-) to Zoom Out.

Touch the Zoom Options icon to open a pop up where you can choose to Zoom to All, Zoom to Hoop or Zoom to Box.

## Zoom to All

Zoom to All will show all the design(s) in the embroidery combination.

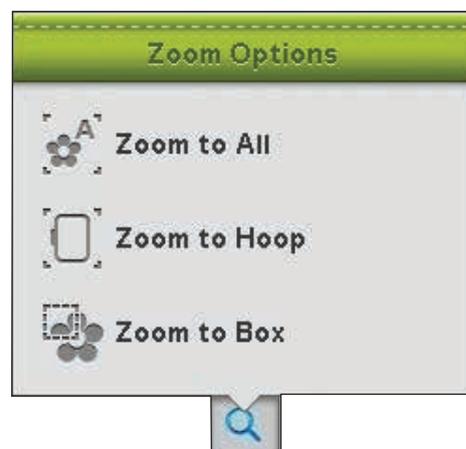
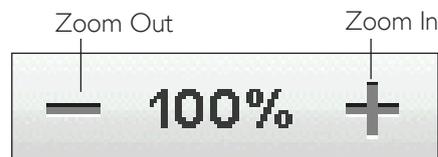
## Zoom to Hoop

Zoom to Hoop will adjust the embroidery field to fit the selected hoop.

## Zoom to Box

Touch and drag your stylus in the embroidery field on the screen to create a box. The screen zooms to show that specific area.

*Note: As you Zoom In your design gets very large. To locate a specific part of your design touch Pan. Touch and drag or use the control arrows to find the part you wish to work with.*



## FOLD OUT TOOLBAR

In Embroidery Stitch-Out you will find the Color Block List, Monochrome and Baste in Hoop on the Fold out Toolbar. Touch the Fold out Toolbar icon to the lower right to access these functions. To hide the functions touch the Fold out Toolbar icon again. The Fold out Toolbar is unfolded by default.

## COLOR BLOCK LIST

All colors in the loaded design(s) are shown in the order they will be embroidered. Each listed color shows color order and design number. Also shown are the thread manufacturer, thread weight and color number. Use the scroll bar to see all of the colors in the list. To go to another color block, just touch it in the Color Block List.

Thread manufacturer and thread number are displayed for designs in .VP3 and .VIP-format. If changing thread color, some thread information may be lost.

*Example: 1:2, 2498 RaRa 40, means the second thread color in the first design loaded is thread number 2498 of Robison-Anton 40 weight.*

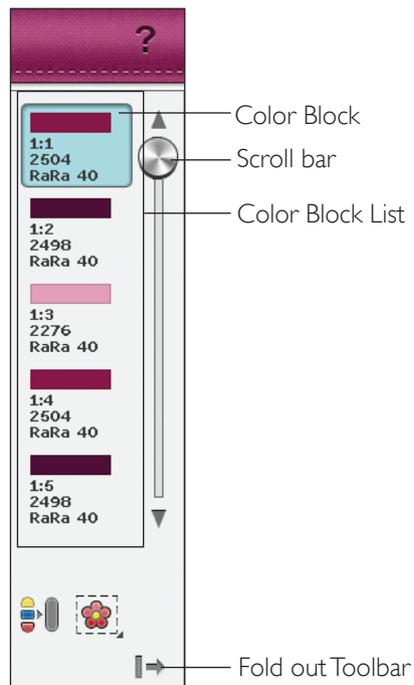
To make changes to the Color Block List, return to Embroidery Edit.

## MONOCHROME

Touch the icon to activate monochrome embroidery. All designs are shown in a grey color and the machine does not stop for color block changes. To deactivate monochrome embroidery, touch the icon again.

*Note: If the Automatic Jump Stitch Trim function is selected in the SET Menu it will still be active between the color blocks.*

*Note: You can also touch the STOP button on your machine to stitch out your design in one color.*



## BASTE IN HOOP

Basting enables you to secure your fabric to a hooped stabilizer. It is especially useful when the fabric to be embroidered cannot be hooped. Basting provides support for stretchy fabrics.

Touch the Baste in hoop icon to add a basting stitch around the design. Touch and hold to open the embroidery basting window.

### Baste around design

Select Baste around design to add a basting stitch around the design, outlining the area where the design will be placed on the fabric.

### Baste around hoop area

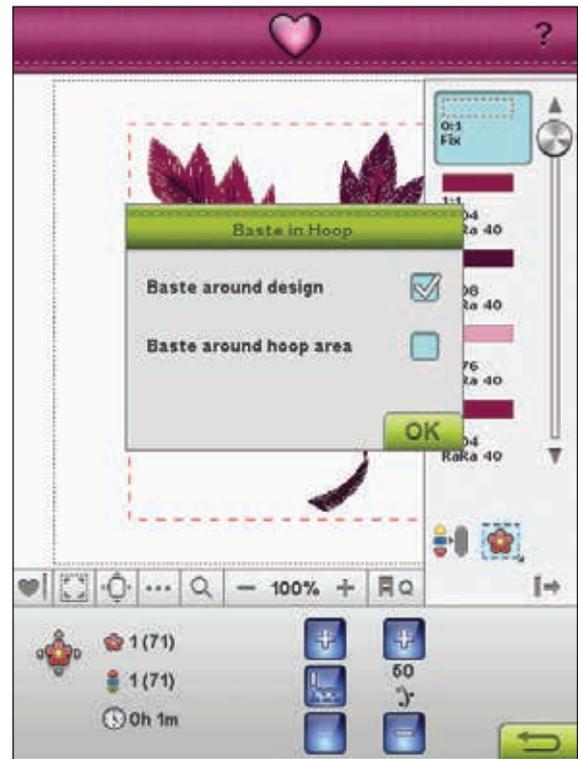
Select Baste around hoop area to add a basting stitch around the inside edge of the hoop.

You can select both basting options to add additional hold for certain fabrics and techniques.

*Note: The baste stitches will be added in the color block list, with the possibility to step stitch by stitch and step in and out of the baste color block/s. The baste color block/s will disappear from the color block list when stitched out.*

*Note: Basting can only be enabled when positioned at the first stitch in the embroidery.*

*Note: Press the FIX button on your machine to activate or deactivate the selected basting techniques.*



## DESIGN POSITIONING

Touch the Design Positioning icon to open the Design Positioning screen. Design Positioning allows you to place a design on an exact location on your fabric. When adding one design to a previously embroidered design, or when matching a design to a patterned fabric, Design Positioning is very useful.

*Note: If you just want to move your embroidery in Embroidery Stitch-Out, open the Design Positioning window and move your design using the Control or your stylus.*

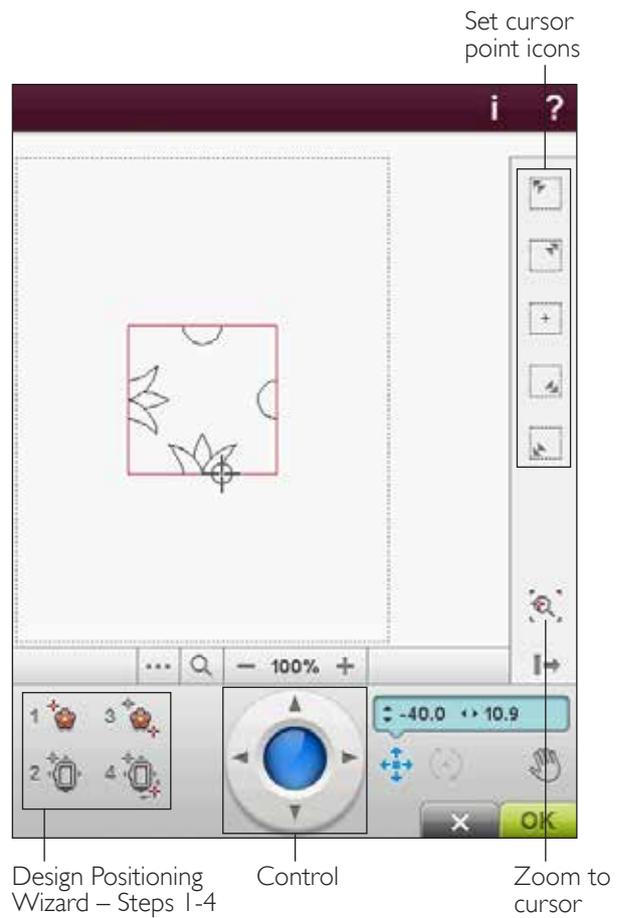
Use Zoom and Pan to be sure that you are placing the design exactly where you want it. Fine tune with the arrows in the Control.

### Zoom to Cursor

Maximizes the zoom and pans the embroidery area so the cursor position is centered on the screen.

### Set cursor point

Move the cursor point to any of the selected corners or the center of the designs. Set cursor point can be used to trace the design field by touching each of the four corner icons.



## HOW TO USE DESIGN POSITIONING

Stitch out design RR\_089.vp3 in a large hoop. Touch Design Positioning icon to position the next design.

### Design Positioning Wizard

Touch the numbered Design Positioning icons to position your design step by step. For information about a step, touch Quick Help and the numbered icon.

#### 1. To select a Locking Point on Screen

Touch number 1 to select a locking point. Place the red cursor where you would like the locking point to be in your embroidery.

#### 2. Move Locked Point on Fabric

Touch number 2. The red cursor will be locked on the screen. It will change color from red to grey with a ring around the center of the locking point. Now you can place the design exactly where you want it on the fabric by using the stylus or the Control. Watch the hoop as it moves when you use the arrows to get the design placed exactly where you want it. The position of the needle will show where the locking point will be placed on the fabric. Use the Control to fine tune.

*Note: If you are happy with the placement of your design, touch OK in the bottom right corner. If you also need to adjust the angle of the design, continue with step 3.*

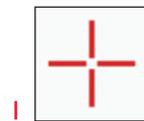
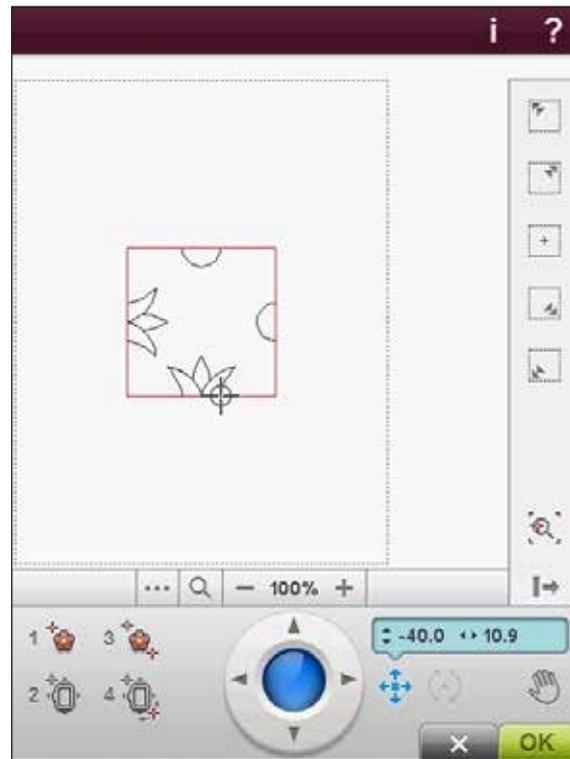
#### 3. Set Matching Point on Screen

Touch number 3 to activate the matching point. You can use a second position within the design to make sure your design is lined up properly and make further adjustments if necessary.

Watch the cursor on the screen to select a matching point. Place the red cursor where you would like the matching point to be in your embroidery.

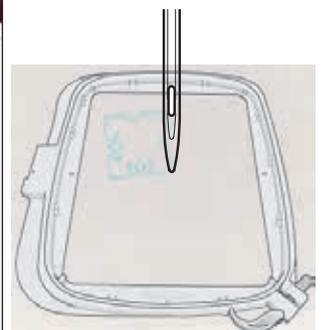
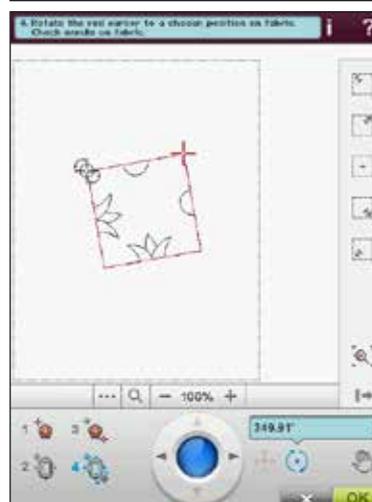
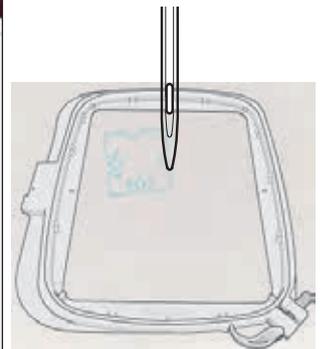
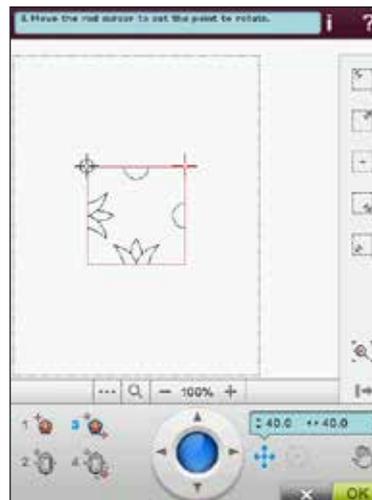
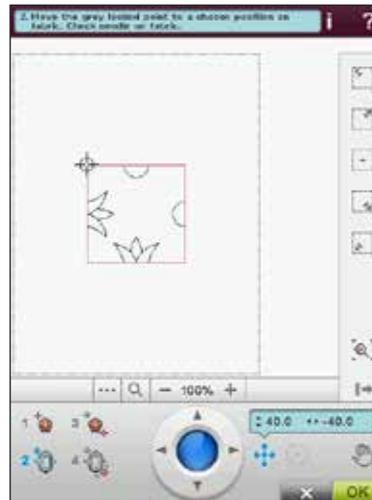
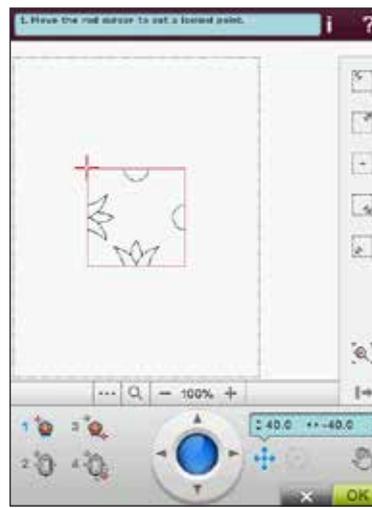
#### 4. Rotate Design on Fabric

Touch number 4. The rotate function is automatically selected. Use the stylus or Control to rotate the design around the locking point. Look at your fabric and rotate the design until the needle is exactly where you want the matching point. Touch OK.



## DESIGN POSITIONING EXERCISE

1. Select Design RR\_089.vp3 and embroider one in the upper left corner of the hoop. Touch number 1. Use the stylus or Control Arrows to move the cursor to the upper left corner of the design. Touch Zoom to Cursor to maximize the zoom so that you will be able to place the cursor accurately on the design. Select Pan to move the design on the screen without moving the cursor. Reselect Position when you want to move the cursor.
2. Touch number 2. The cursor is now locked. Move the locked point to the upper left corner of the embroidered design. Use the Position function and the Control to move the cursor. Watch the hoop move until the needle is exactly above the point where you want the embroideries to connect. Once you are satisfied, touch OK to close the Design Positioning window and start embroidering.
3. If you want to line up the design with the previously embroidered design, you can select a second matching point. Touch number 3 and move the red cursor to a point where you want the second matching point to be. Watch the screen and zoom in as much as you can so that you will be able to place the cursor accurately.
4. Touch number 4 to rotate the design so that it lines up with the previously embroidered design on your fabric. Check that the needle is in the exact position on the fabric.
5. Touch OK to close Design Positioning and start embroidering.

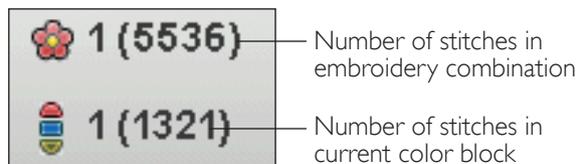


## NUMBER OF STITCHES IN EMBROIDERY COMBINATION

The current stitch position in the design or combination is shown next to the flower. The number in brackets shows the total number of stitches in the design or combination.

## NUMBER OF STITCHES IN CURRENT COLOR BLOCK

The current stitch position in the current color block is shown next to the Color Block picture. The number in brackets shows the total number of stitches in the current color block.



## REMAINING EMBROIDERY TIME BY COLOR

An estimation of the remaining embroidery time for the current color block is displayed in hours and minutes in the lower left corner of the screen. If Monochrome is activated, the estimated remaining embroidery time for the whole embroidery is displayed.

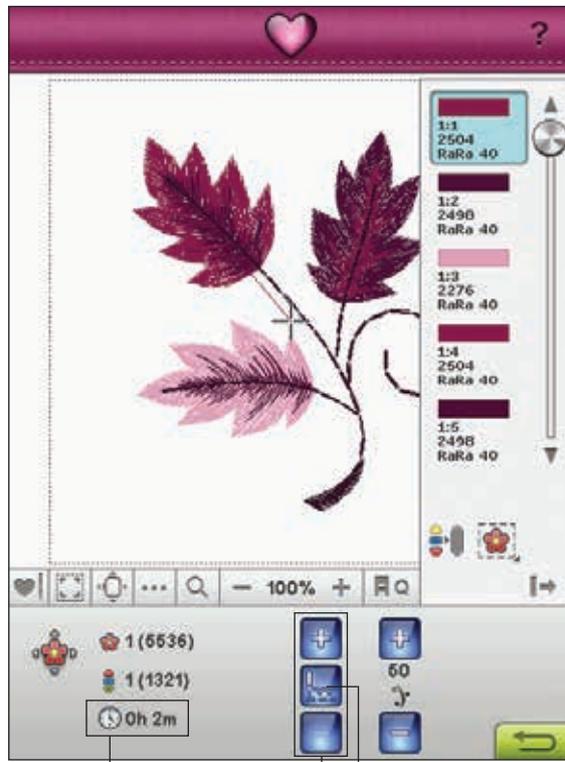
## STEP STITCH-BY-STITCH CONTROL

Touch + to step forward and - to step backwards stitch by stitch. Use the - icon to move backwards a few steps after the needle thread breaks or runs out. Touch & Hold to move through the stitches more quickly. The cursor on the screen will follow the stitches in the embroidery field.

## GO TO STITCH

To go to a particular stitch within the color block, touch in the center of the Step Stitch-by-Stitch control. A pop-up message will appear, where you can enter the stitch number. Step Stitch-by-Stitch will then move to that stitch number. If the number entered is too large, the machine will move to the last stitch in the color block.

*Tip: You can touch a color block in the color block list to set the current stitch to the first stitch in that color block.*



Remaining embroidery time by color

Go to Stitch Step Stitch-by-Stitch

## deLuxe™ STITCH SYSTEM

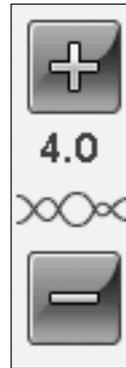
The *deLuxe*™ Stitch System has two ways to control the needle thread, Thread Tension and Thread Portioning. The *deLuxe*™ Stitch System improves the correct balance between needle thread and bobbin thread. Your machine will automatically use Thread Portioning when possible to get the best result.

Thread Portioning automatically and continuously measures the fabric thickness to portion the correct amount of thread for embroidery. When using Thread Tension, the tension discs will keep the correct amount of tension on the needle thread.

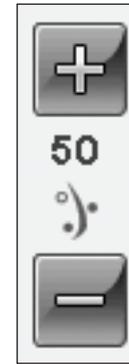
The Sensor Q-foot is always recommended for embroidery. Certain optional accessories or special techniques may require the use of Thread Tension for best results. Deselect *deLuxe*™ Stitch System icon in the Machine Settings menu to switch to Thread Tension.

*Note: If embroidering with Yarn Couching feet, deactivate deLuxe™ Stitch System icon in Machine Settings menu.*

Depending on which function is active in the Machine Settings, the control visible in sewing/embroidery mode will change. Use the controls to adjust the balance between needle thread and bobbin thread, e.g. when using specialty thread.



Thread Tension control



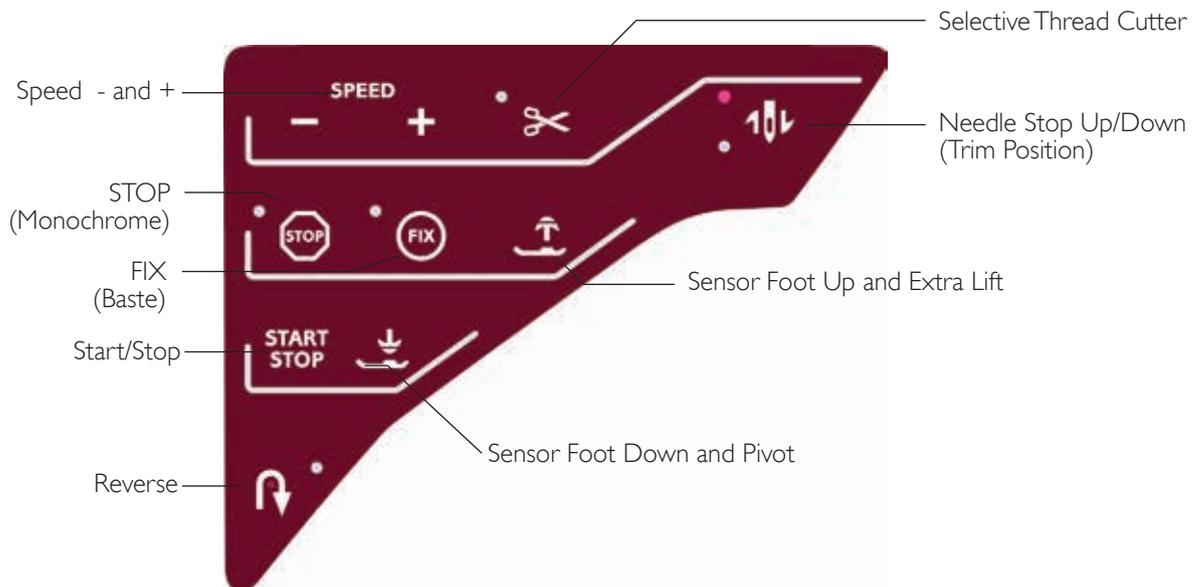
Thread Portioning control

## RETURN TO EMBROIDERY EDIT

Touch this icon to return to Embroidery Edit and make adjustments to your design(s) before you start embroidering. A pop-up message will appear asking if you want to return to Embroidery Edit because any changes made in Embroidery Stitch-Out will be lost.



## FUNCTION BUTTONS IN EMBROIDERY STITCH-OUT



### SPEED - AND +

All stitches in your machine and each hoop size have a preset, recommended sewing/embroidery speed.

Press Speed - or Speed + to increase or decrease the maximum allowed sewing/embroidery speed. When not sewing/embroidering, press Speed and a pop-up message on the screen will indicate the speed setting. You can set the speed by touching the slider in the pop-up message. If you change the speed setting while sewing/embroidering no pop-up message will appear.

When sewing with metallic threads, or when sewing on delicate fabrics, lower the speed for optimal results.

### STOP (MONOCHROME)

Press STOP to eliminate stops for color changes to create monochrome embroidery.

### FIX (BASTE)

Press FIX to baste an outline of the embroidery design area to baste the fabric to the stabilizer.

### START/STOP

Press this button to start and stop the machine sewing or embroidering without using the foot control. Press START/STOP to begin and press again to stop.

### REVERSE

Reverse has no function in Embroidery Mode.

### SELECTIVE THREAD CUTTER

The Selective Thread Cutter automatically cuts the threads and raises the presser foot. At the end of a color block only the top thread is cut. When the design is finished, both top and bobbin threads are cut automatically.

### NEEDLE STOP UP/DOWN (TRIM POSITION)

The machine will move the hoop forward, towards you, for easy thread trimming.

### SENSOR FOOT UP AND EXTRA LIFT

Press the Sensor Foot Up and Extra Lift to lift the presser foot to Up position. Press once more and the presser foot will raise to Extra Lift, to make it easier to insert or remove the hoop.

### SENSOR FOOT DOWN AND PIVOT

The presser foot is lowered automatically when you start sewing/embroidering.

Press Sensor Foot Down to lower the presser foot into the Embroidery “float” position.

# EMBROIDERY STITCH-OUT POP-UP MESSAGES

## Embroidery Unit Calibration

When the embroidery unit is attached, a pop-up message asks you to slide off the hoop and clear the machine area for calibrating the embroidery arm. You will also be reminded to attach the Sensor Q-foot.

*Note: It is very important to remove the hoop, otherwise the hoop or the embroidery unit may be damaged while calibrating.*

## Attach Correct Hoop

If the size of the hoop attached to the machine does not match the size displayed on screen, the machine will not embroider. You must change the hoop to the displayed size or change the hoop setting to match the hoop size attached.

The hoop needs to be inserted properly for the machine to detect it. Slide the hoop connector into the hoop attachment from front to back until it clicks into place.

You will not be able to go to Embroidery Stitch-Out without the selected hoop attached properly.

## Change Thread Color

When it is time to change the needle thread, the machine stops and the upper thread is cut. Change the spool of thread and re-thread the machine. The next recommended color number is shown in the pop-up message.

## Cut Thread End

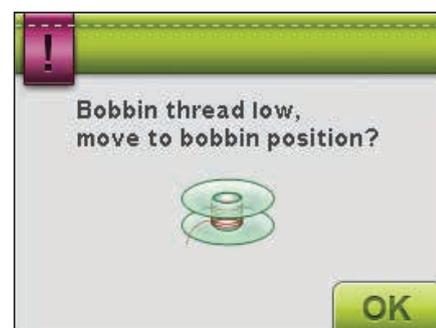
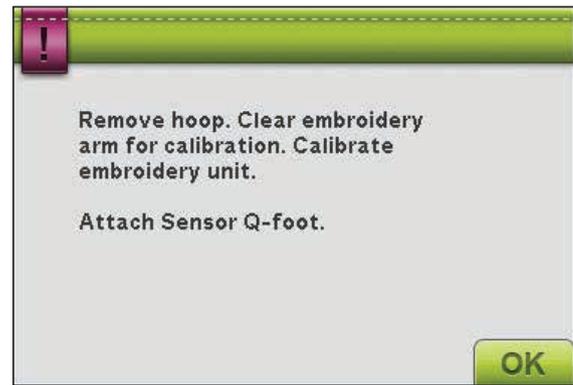
After changing the thread, the machine will sew a few stitches and then stop so you can cut the thread end.

*Note: When Automatic Jump Stitch Trim is selected in the SET menu, the thread end will be cut automatically. Simply remove the thread tail that has been cut.*

## Bobbin thread low - move to bobbin position?

When the bobbin thread is running low, a pop-up message appears giving you an advanced notice that you'll soon need to change the bobbin. This gives you an opportunity to plan when you want to change your bobbin. If you want to continue embroidering just touch the Start/Stop button or the foot control without touching the ok in the pop-up.

It is possible to embroider until the thread has completely run out. Press the start/stop button to continue embroidering without closing the bobbin thread low pop-up. Touch cancel to remain at the current stitch position. Touch OK to move the hoop to bobbin position. The hoop position pop-up opens. Replace the empty bobbin with a full one. Touch Current position and pull back excess needle thread. Press start/stop or press your foot control to continue embroidering.



## Check Needle Thread

The machine stops automatically if the needle thread runs out or breaks. Re-thread the needle thread, close the pop-up message, go back a few stitches using the Step Stitch-by-Stitch control and start embroidering again.



## Embroidery Is Finished

A pop-up will appear when the embroidery is finished. Touch OK to get back to your design and stay in Embroidery Stitch-Out.



## Change to Cutwork Needle (optional accessory)

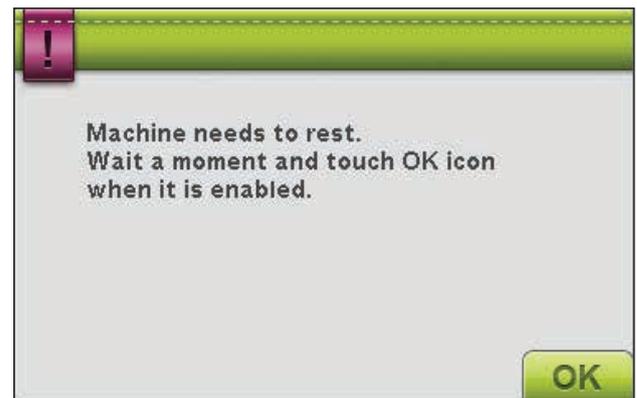
Some cutwork designs can be stitched out using the optional accessory HUSQVARNA VIKING® Embroidery Cutwork Needle Kit, (P/N 920268-096). These designs are marked with a cutwork needle symbol in the DESIGNER RUBY Royale™ Sampler Book. When the machine stops and this pop-up message is shown, insert the corresponding cutwork needle. Touch OK and press the Start/Stop button to resume.

*Note: These cutwork designs can also be stitched out without the cutwork needles, but will then have to be cut manually.*



## Machine needs to rest

If the machine stops and this pop-up appears on the screen, the machine needs to rest. When the OK icon is enabled you can resume embroidering. The embroidery results will not be affected.

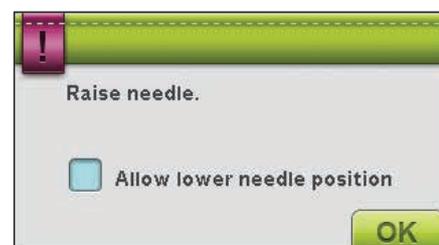


## Raise needle

When the needle is lowered with the handwheel to check the needle position on the fabric, a pop-up message is displayed when trying to adjust the hoop position. Check the box to be able to fine tune the hoop position with the needle lowered.

*Note: Make sure the needle is above the fabric to prevent damage to the needle and fabric.*

*Note: The warning cannot be disabled when the needle is below the stitch plate.*



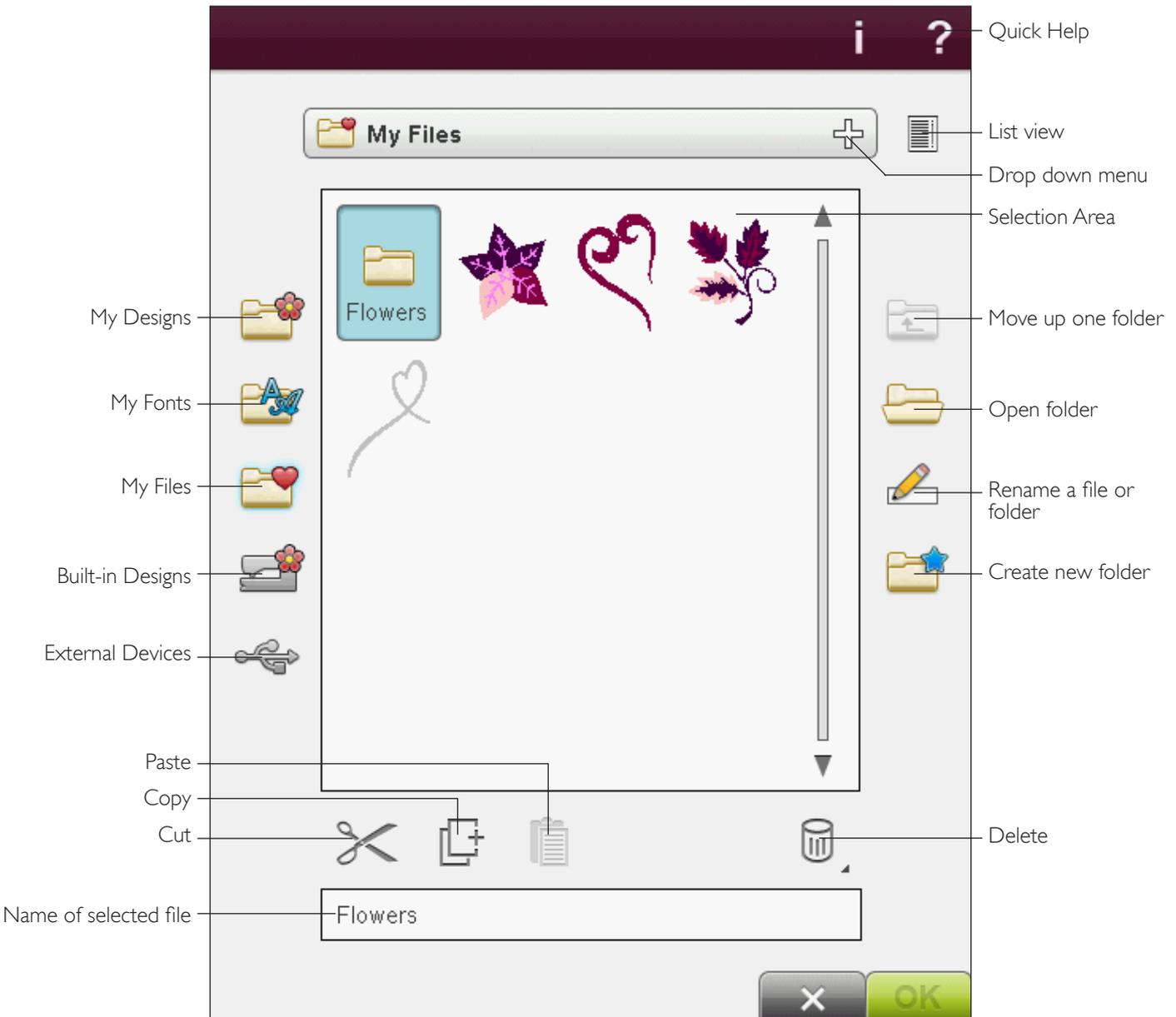
# FILE MANAGER



## FILE MANAGER

The File Manager is used to open, organize, add, move, remove and copy your designs, fonts and stitch files. Use either built-in memory or an external device connected to your machine for storing designs and files.

## FILE MANAGER - OVERVIEW OF ICONS



## AVAILABLE MEMORY

The built-in memory can store designs, fonts, stitches and other files. To check how much memory is still available in the built-in memory, go into File Manager, touch Quick Help and then touch either My Designs, My Fonts or My Files. A pop-up message shows how much memory is available.

## FILE FORMATS

Your machine can load the following file formats:

- .SHV, .DHV, .VP3, .VIP, .HUS, .PEC, .PES, .PCS, .XXX, .SEW, .JEF, .EXP, .10\* and .DST (embroidery files)
- .SH7 (stitch files),
- .VF3 (embroidery font files)
- and also .TXT and .HTM/HTML-files.

*Note: If the file type or file version is not supported by your machine, or the file is damaged, it is shown in the selection area as an unrecognized file.*

## BROWSE FILE MANAGER

To open File Manager, touch the File Manager icon on the toolbar.

Within the built-in memory there are four folders: My Designs, My Fonts, My Files and Built-in Designs. You can also explore external devices connected to the USB ports. The external device folder icon is only available when a device is connected to the machine.

Touch any of these icons to display their contents in the selection area. The path of the open folder is written in the drop down menu. Design files, embroidery font files and stitch font files are displayed as thumbnail images or with an icon.

### List View

Touch the List View icon to show the files in the current folder listed in alphabetical order. For each file, file name and type will be displayed. Touch the List View icon again to switch back to thumbnail/icon view.

### My Designs

Store design files in My Designs. You cannot create folders in My Designs folder. You can reach the Designs Menu from the toolbar and My Designs in File Manager.

If you want to open several designs at one time, click on the ones you want to open. Touch & Hold on the last one. All the designs will open in Embroidery Edit.

### My Fonts

Store embroidery font files in My Fonts. You can reach the fonts from the toolbar and the My Fonts in File Manager. You cannot create folders in the My Fonts folder.

### My Files

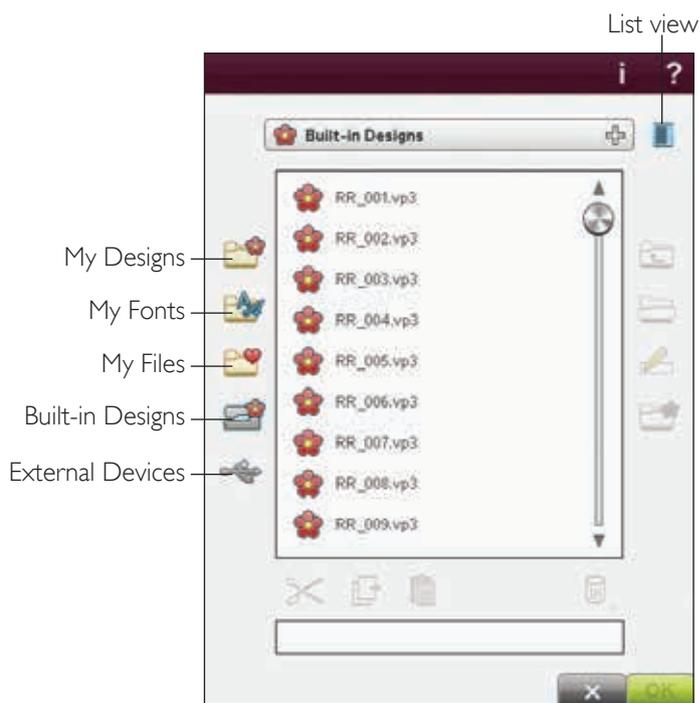
Load My Files with designs, fonts, your customized designs, stitch programs, text files or any file that you want to store. Create folders to keep your files organized.

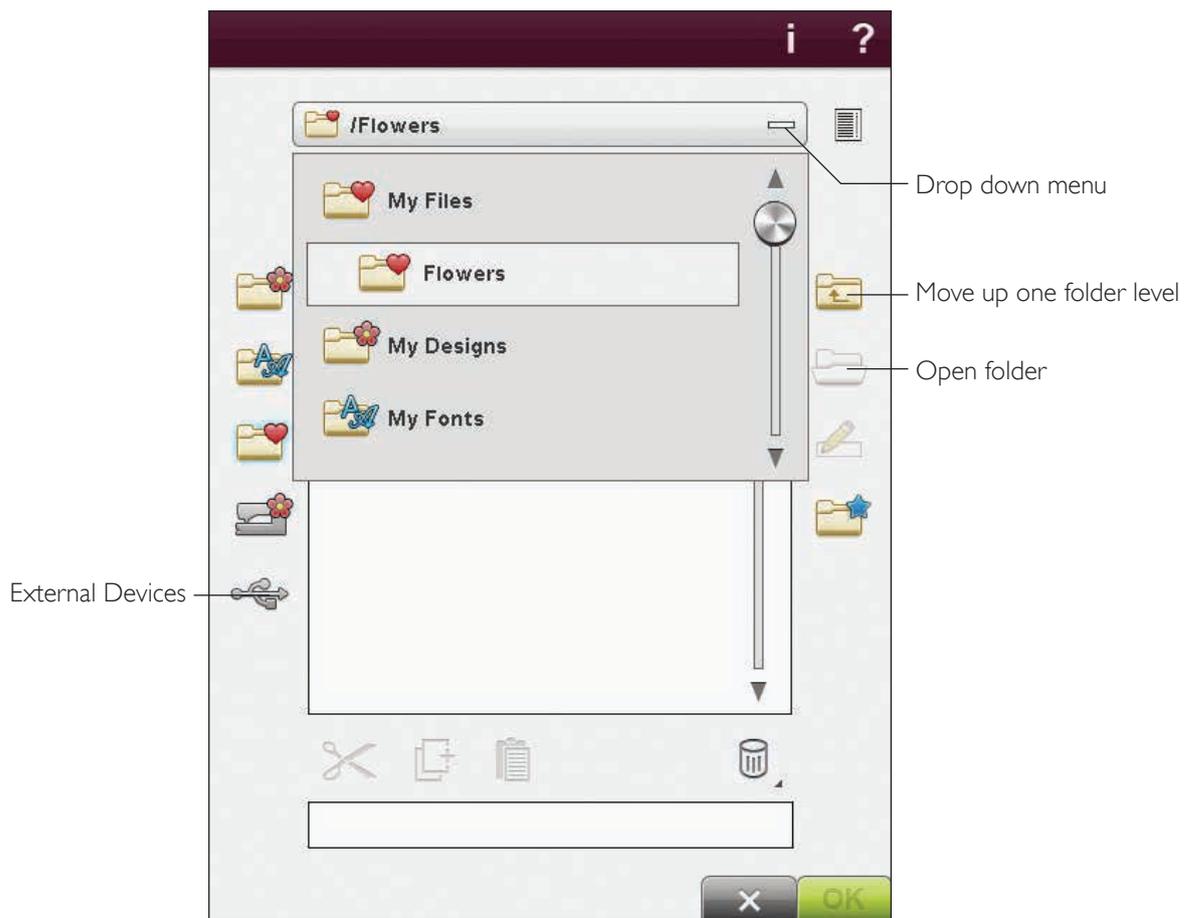
This chapter will discuss how to arrange My Files so that you can find your favorites easily.

### Built-in designs

This folder contains the designs that are stored in the permanent sewing machine memory. No files can be added or removed from this folder, but they can be copied and pasted in another folder. You can reach Built-in Designs from the Design menu on the toolbar and Built-in Designs in File Manager.

If you want to open several designs at one time, click on the ones you want to open. Touch & Hold on the last one. All the designs will open in Embroidery Edit.





### External Device

The external device icon is only active when a device is connected to the machine USB port. Touch External Device to display all connected devices. You can have your computer and another device such as a USB embroidery stick connected at the same time. Use a USB hub to connect more devices at one time. Touch the devices to explore.

### Open a Folder

To open a folder, select it and touch the Open Folder icon or Touch & Hold to open it. The contents of the folder will be shown in the selection area.

### Open a File

To open a file, click on the file with your stylus and touch OK. You can also Touch & Hold on the file to open it.

### Move Up One Folder Level

Use the Move up one folder level icon to step up through the levels of folders. You can step up all the way to the first level. In the selection area you will see the files and folders for each level as you step.

### Folder Structure

Touch the area of the Drop down Menu to open a drop down window that shows the folder levels down to the current folder. Work your way back through the levels by touching a folder at another level.

Use the External Device icon to switch between external devices such as your computer or USB embroidery stick.

	USB Embroidery Stick	Use to store files and/or move files to and from your computer.
	Computer	Load designs or other files directly from your computer. Store all file types here.
	CD-drive	Load or copy files from an external CD drive.

# ORGANIZE

## Create a New Folder

Touch the create new folder icon to create a new folder. A pop-up message opens where you can enter a name for your folder.

## Rename a File or Folder

To change the name of a folder, touch the folder then touch the Rename file or folder icon. A pop-up message opens where you can enter the new name for a file or folder.

## Move a File or Folder

Use cut and paste to move a file or folder to another storage location.

Select the file or folder, then touch Cut. Open the folder where you want to place the file or folder. Touch Paste. The file or folder is now stored in a new location and is removed from the previous location.

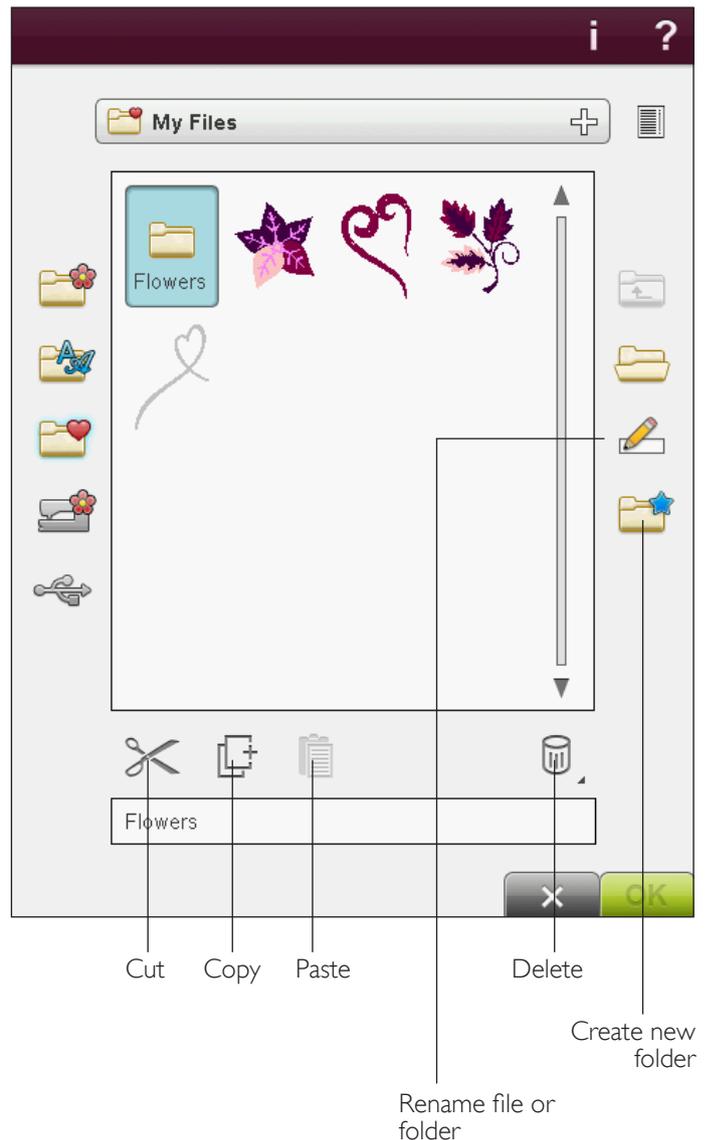
## Copy a File or Folder

Use Copy and Paste to copy a file or folder to another place.

Select the file or folder, then touch Copy. Open the folder where you want to place the file or folder. Touch Paste. The file or folder is now stored here and the original file or folder also remains in the original folder.

## Delete a File or Folder

To delete a file or folder, mark it and touch Delete. A pop-up message asks you to confirm the deletion. If a folder is deleted, all files within the folder are deleted as well. To delete all files or folders, touch and hold the Delete icon for a few seconds.



## FILE MANAGER POP-UP MESSAGES

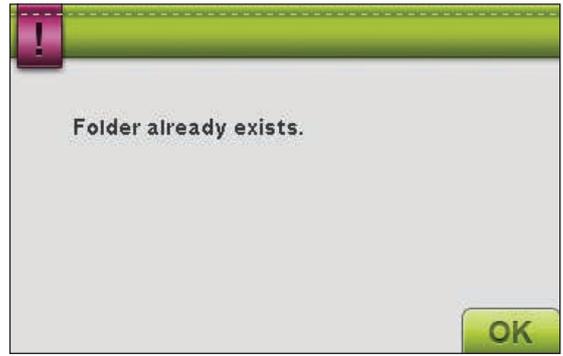
### Delete File or Folder

Your machine will ask you to confirm when you have selected to delete a file or folder. This prevents you from deleting anything by mistake.



### Folder Already Exists

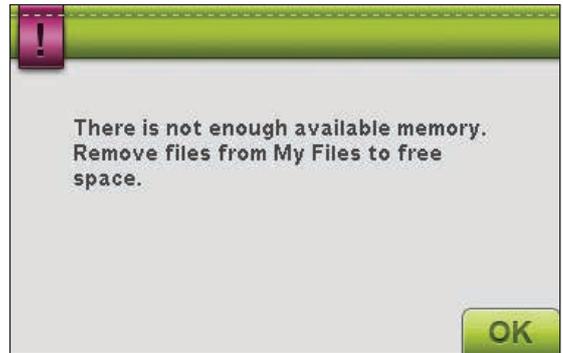
You cannot create a new folder with the same name as another folder on the same level. Create your folder elsewhere or enter a different name for the folder.



### Available Memory is low

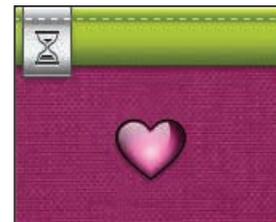
Your machine can store files in the built-in memory. When the memory is full, you can move them to an external device by using the Cut and Paste functions.

When only a small amount of memory is left, your machine will alert you once. If you continue to fill the memory, it will not remind you again, until the memory is completely full.



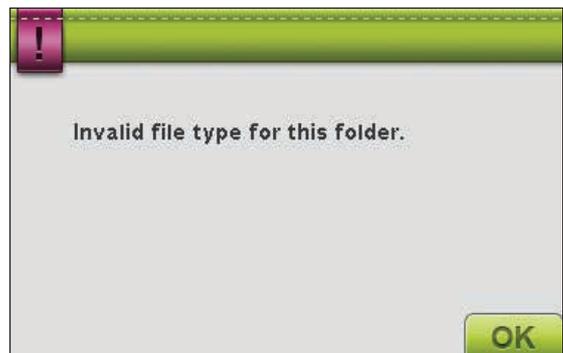
### System Busy

When the machine is loading, saving, moving files or performing a function that takes time, an hour glass is shown.



### Invalid File Type for this Folder

Only embroidery designs can be stored in My Designs, and only font files can be stored in My Fonts. Select the proper folder for each file type.



# MAINTENANCE 10



## CLEANING THE MACHINE

To keep your sewing machine operating well, clean it often. No lubrication (oiling) is needed.

Wipe the exterior surface of your machine with a soft cloth to remove any dust or lint built up.

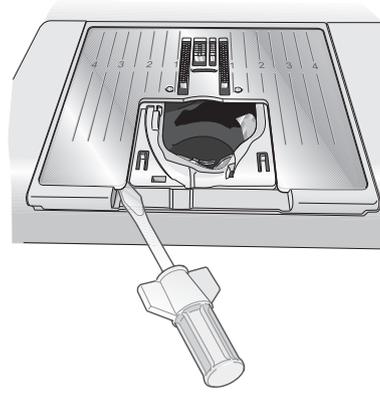
Wipe the screen with a clean, soft and damp cloth.

### Cleaning the Bobbin Area



*Note: Lower the feed teeth by pressing Presser Foot Up and Extra Lift. Turn off the machine.*

Remove the presser foot and slide off the bobbin cover. Place the screwdriver under the needle plate as shown in the picture and gently turn the screwdriver to pop off the needle plate. Clean the feed teeth with the brush found with the accessories.



### Cleaning under the Bobbin Area

Clean the area under the bobbin case after sewing several projects or any time you notice an accumulation of lint in the bobbin case area.

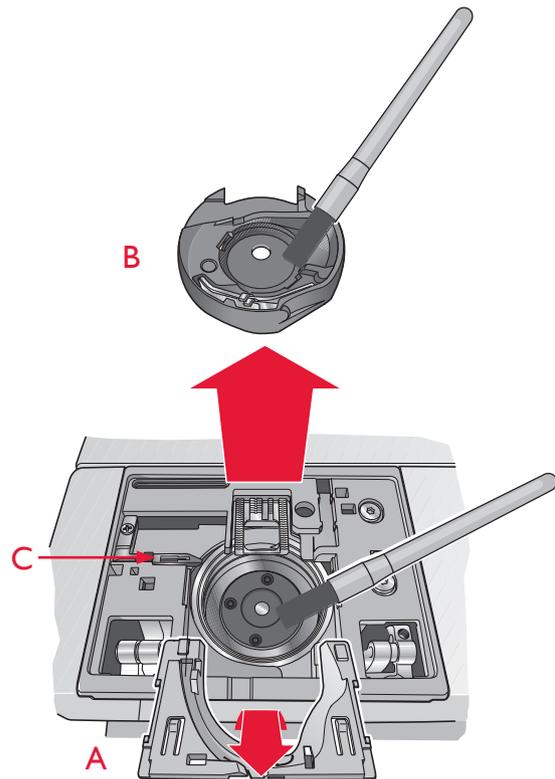
Remove the bobbin case holder (A) covering the front part of the bobbin case by lifting it up. Remove the bobbin case (B) by lifting it up. Clean with the brush.

 *Note: Use caution when cleaning around the Selective Thread Cutter knife (C).*

Put the bobbin case and the bobbin case holder back in place.

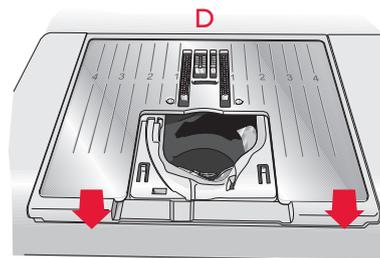
*Note: Do not blow air into the bobbin case area. The dust and lint will be blown into your machine.*

*Note: When using the optional accessory HUSQVARNA VIKING® Embroidery Cutwork Needles, it is necessary to clean the bobbin area after each embroidered design/project.*



### Replacing the Needle Plate

With feed teeth lowered, place the needle plate so that it fits into the notch at the back (D). Press the needle plate down until it clicks into place. Slide on bobbin cover.



# TROUBLESHOOTING

In this troubleshooting guide you will find solutions to the problems you may have with your machine. For further information please contact your local authorized HUSQVARNA VIKING® retailer who will be happy to help you.

## Have Your Sewing Machine Serviced Regularly by your Local Authorized Retailer!

If you have followed this troubleshooting information and still have problems, take your sewing machine to your retailer. If there is a specific problem, it is a great help to test sew with your thread on a scrap of your sewing fabric and bring it to your retailer. A sewing sample will often give much better information than words.

### General Problems

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Bobbin alarm does not work?	Clean lint from bobbin area and use only the original HUSQVARNA VIKING® bobbins approved for this model.
<i>Thread cutter does not cut the thread?</i>	<i>Remove needle plate and clean lint from bobbin area. Enable automatic thread cutter in the SET Menu.</i>
Fabric does not feed?	Make sure that machine is not set in Free Motion mode. Make sure that the Feed Teeth Options is not set for down in Set Menu.
<i>Wrong stitch, irregular or narrow stitch?</i>	<i>Deactivate Twin Needle or Stitch Width Safety Sewing Settings in the SET Menu.</i>
The needle breaks?	Insert needle correctly as described in chapter 2.
<i>The machine will not sew?</i>	<i>Check that all plugs are securely plugged into the machine and into the wall socket.</i>
The screen displays the startup screen?	Touch the screen to activate. Turn off Screen Saver in the SET Menu.
<i>Icons on the screen are not activated when touched?</i>	<i>Calibrate the screen. Calibrate is found in the SET Menu.</i>
The sewing and embroidery machine screen and/or function buttons do not respond to touch?	The sockets and function buttons on the machine can be sensitive to static electricity. If the screen does not respond to touch, turn the machine OFF and then ON again. If the problem persists, contact your authorized HUSQVARNA VIKING® retailer.

### Needle Thread Breaks

---

Did you insert the needle properly?	Insert needle correctly as described in chapter 2.
<i>Did you insert a wrong needle?</i>	<i>Use needle system 130/705 H.</i>
Is the needle bent or blunt?	Insert a new needle.
<i>Is the needle too small for the thread?</i>	<i>Change the needle to the proper size for the thread.</i>
Is the needle plate hole damaged?	Change the needle plate.
<i>Did you thread the machine properly?</i>	<i>Check how the machine is threaded. If needed rethread the machine.</i>
Are you using poor thread with slubs or thread which has become dry?	Change to a new high quality thread purchased from an authorized HUSQVARNA VIKING® retailer.
<i>Is a correct spool cap used?</i>	<i>Attach a spool cap of the right size for the actual thread spool (see chapter 2).</i>
Is the best spool pin position used?	Try a different spool pin position (vertical or horizontal).

### Bobbin Thread Breaks

---

Did you insert the bobbin properly?	Check the bobbin thread.
<i>Is the needle plate hole damaged?</i>	<i>Change the needle plate.</i>
Is the bobbin area full of lint?	Clean lint from bobbin area and use only the original bobbins approved for this model.
<i>Is the bobbin wound correctly?</i>	<i>Wind a new bobbin.</i>

## The Machine Skips Stitches

---

Did you insert the needle properly?	Insert needle correctly as described in chapter 2.
<i>Did you insert a wrong needle?</i>	<i>Use needle system 130/705 H.</i>
Is the needle bent or blunt?	Insert a new needle.
<i>Did you thread the machine properly?</i>	<i>Check how the machine is threaded. If needed rethread the machine.</i>
Is the correct presser foot used?	Attach correct presser foot.
<i>Is the needle too small for the thread?</i>	<i>Change the needle.</i>
Is the fabric moving up and down with the needle when Free Motion sewing or embroidering?	Attach Sensor Q-foot.

## The Seam has uneven Stitches

---

Is the thread tension correct?	Check needle thread tension and the threading.
<i>Are you using too thick or slubbed thread?</i>	<i>Change the thread.</i>
Is the bobbin thread evenly wound?	Check bobbin winding.
<i>Is a correct needle used?</i>	<i>Insert a proper needle correctly as described in chapter 2.</i>

## The Machine does not Feed or Feeds Irregularly

---

Did you thread the machine properly?	Check how the machine is threaded. If needed rethread the machine.
<i>Has sewing lint collected between the feed teeth?</i>	<i>Remove the needle plate and clean the feed teeth with a brush.</i>
Free Motion setting is on?	Turn off Free Motion setting in Sewing Mode.
<i>Is the correct presser foot used?</i>	<i>Attach correct presser foot.</i>

## Thread loops are forming on the underside of the embroidery design

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Has the embroidery built up too much to move freely under the presser foot?	Attach Sensor Q-foot. If using the R-foot, increase the presser foot height in Machine Settings in SET menu in small steps until problem is solved.
---	--

## The Embroidery Design is Distorted

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Is the fabric hooped properly?	The fabric must be tightly hooped.
<i>Is the inner embroidery hoop completely inserted in the outer embroidery hoop?</i>	<i>Hoop the fabric in such a way that the inner hoop exactly matches the outer hoop.</i>
Is the area around the embroidery arm free?	Clear area around the embroidery unit.

## The Embroidery Design has Puckered

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Did you stabilize your fabric sufficiently?	Ensure you use the proper stabilizer for your technique or fabric type.
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## The Machine will not Embroider

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Is the embroidery unit attached?	Make sure that the embroidery unit is properly attached into the socket.
<i>Is the wrong hoop attached?</i>	<i>Slide on the correct hoop.</i>

## 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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