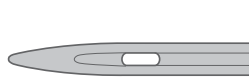# Needles

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

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

Embroidery Needle
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.
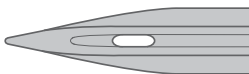
Wing Needle
Wing needles have wide extensions on each side of the needle to poke holes in the fabric when sewing entredeux and other hemstitches on natural fiber fabrics.

Note: For this machine, use wing needle size 100. Wing needle is not included with the machine.

Important Needle Information

Always use a straight needle with a sharp point and make sure the point is not bent or damaged (A).

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

Do not use asymmetrical twin needles (C), they can damage your sewing machine.
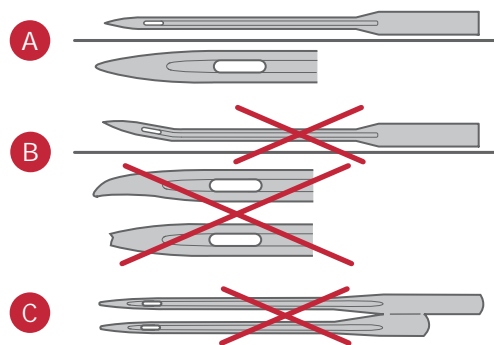
Changing the Needle

1. Use the hole in the multi-purpose tool to hold the needle.
2. Loosen the needle screw. Use the screw driver if necessary.
3. Remove the needle.
4. Insert the new needle, using the multi-purpose tool. Push the new needle upwards with the flat side away from you until it will go no further.
5. Tighten the needle screw as tight as it will go.
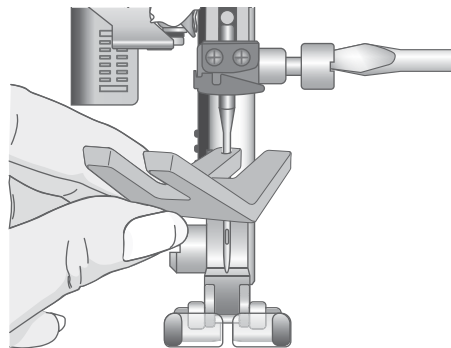
Lowering Feed Teeth

You can lower the feed teeth by moving the switch at the back of the free arm to the left. Move the switch to the right if you wish to raise the feed teeth.
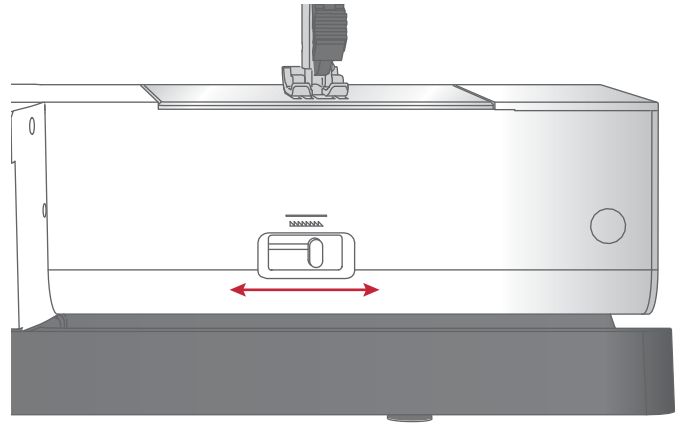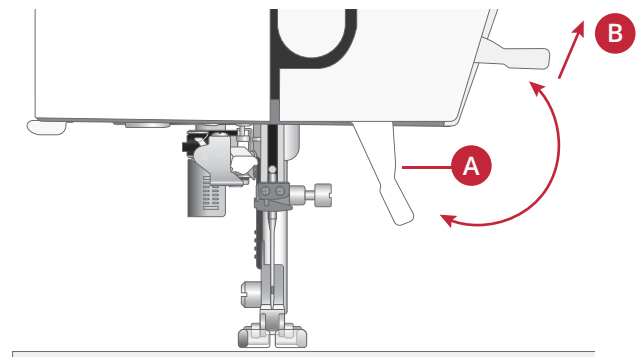
Presser Foot Pressure

The presser foot pressure has been pre-set to the standard value "N". In most cases, you do not need to adjust the presser foot pressure. For specialty techniques, or when sewing on very light or heavy fabric, adjusting the pressure can improve the result. For very light fabrics, turn the dial to a lower number. For heavy fabric, turn the dial to a higher number.
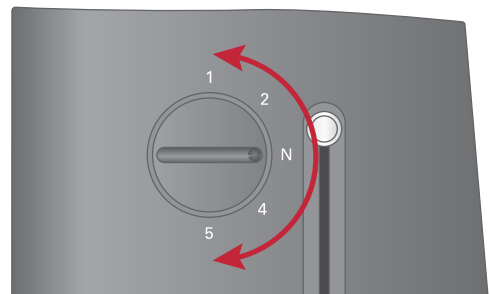
Presser Foot Lift

The presser foot is lowered or raised with the presser foot lift (A). If you are sewing on heavy fabric or several layers of fabric, the presser foot can be raised higher (B) to make it easier to place the fabric underneath the presser foot.

Note: The machine will not start when the presser foot is raised (except for bobbin winding).

Changing the Presser Foot

Remove Presser Foot

Press the presser foot downwards until it disengages from the presser foot holder.

Attach Presser Foot

Place the presser foot under the presser foot holder (A) lining up the notch (B) with the pins (C). Lower the presser foot lift and the presser foot will engage in the presser foot holder.

Note: Check that the presser foot is properly attached by raising the presser foot lift.
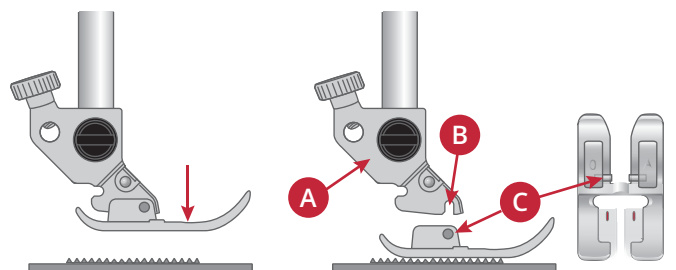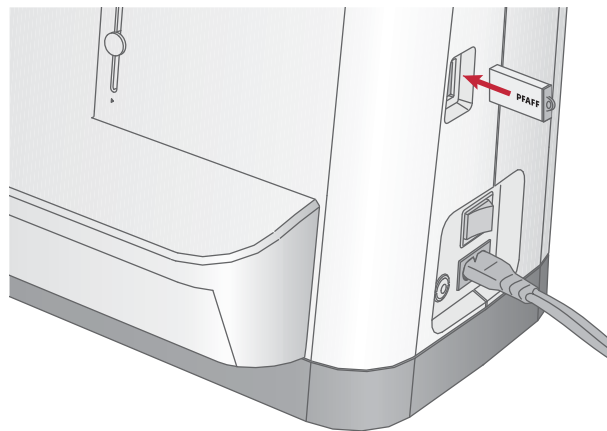
USB Port

Your machine has a USB port to connect your USB embroidery stick.

USB Embroidery Stick

Delivered with your machine is a USB embroidery stick with embroidery designs and PFAFF® **creative™ ambition 640** embroidery collection booklet. Use the stick to store designs and embroidery fonts, or to move files between the computer and sewing machine.

Connect to and Remove From USB Port

Insert the USB embroidery stick in the port with logo facing you. The USB embroidery stick can only be inserted one way – do not force it into the port! To remove, carefully pull the USB embroidery stick out straight.

⚠️ *Do not remove the USB embroidery stick while operating the machine or stitching the embroidery, as this can damage the files on your USB embroidery stick and you will loose all current embroidery design information on screen.*

Complimentary Embroidery Intro Software (PC)

A PC embroidery intro software is available for your PFAFF® **creative™ ambition 640** sewing and embroidery machine.

It adds the following features:

- Helps you to adjust your embroideries on the computer before you sew.
- Personalize your embroideries in true 3D in a real hoop.
- Rotate your embroideries to any degree, mirror them from side to side or end to end and scale or resize your embroideries.
- Adjust an unlimited number of designs and lettering.
- Adjust the colors to the thread shades from your preferred manufacturer. Combine with lettering or shapes. ColorSort to intelligently re-sort the color order of a design and reduce the number of thread changes. Select multiple designs and move them as a group.
- Add multi-line lettering with your choice of 4 line types and flexibility to resize and space letters individually. Use the QuickFont wizard to create new fonts for the embroidery intro software from most TrueType® or OpenType® fonts on your computer. Add SuperDesigns to your project. Surround lettering or designs with a frame.

Go to PFAFF® website at www.pfaff.com and look for support and download the software.

More information and detailed installation instructions are available on a separate PDF file on the USB embroidery stick. A printed product code sheet with your unique product activation code is packed with your machine. Please store the printed product code sheet in a safe place. Together with your sales receipt for your embroidery machine, it forms your proof of ownership for your software. The unique product activation code is needed to activate and use your embroidery intro software.

How to Update Your Machine

Be sure to consult the web site at www.pfaff.com and/or your local authorized PFAFF® dealer for updates and upgrades for your machine and owner's manual.

Updating Instructions

- Go to the PFAFF® web site at www.pfaff.com to find information about available updates.

- Follow the update wizard to prepare your USB embroidery stick for the update.

- Insert the prepared USB embroidery stick into the machine before turning it on.

- To start your machine in update mode, press and hold the reverse button and the needle up/down button, while turning on your machine. Keep the reverse button and needle up/down button pressed until update mode is visible on the graphic display. Follow the instructions to update.
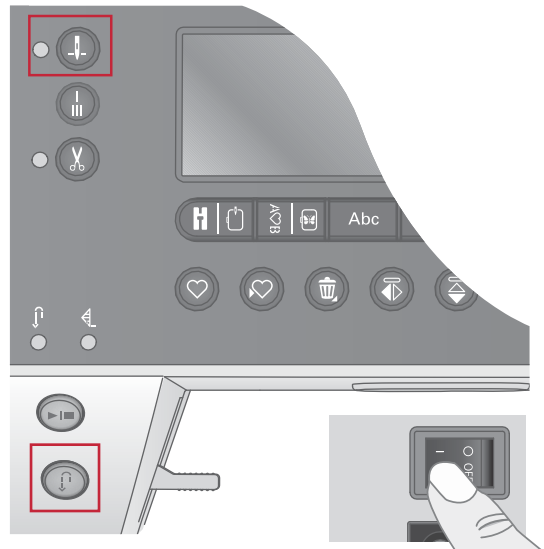
Buttons and Indicators
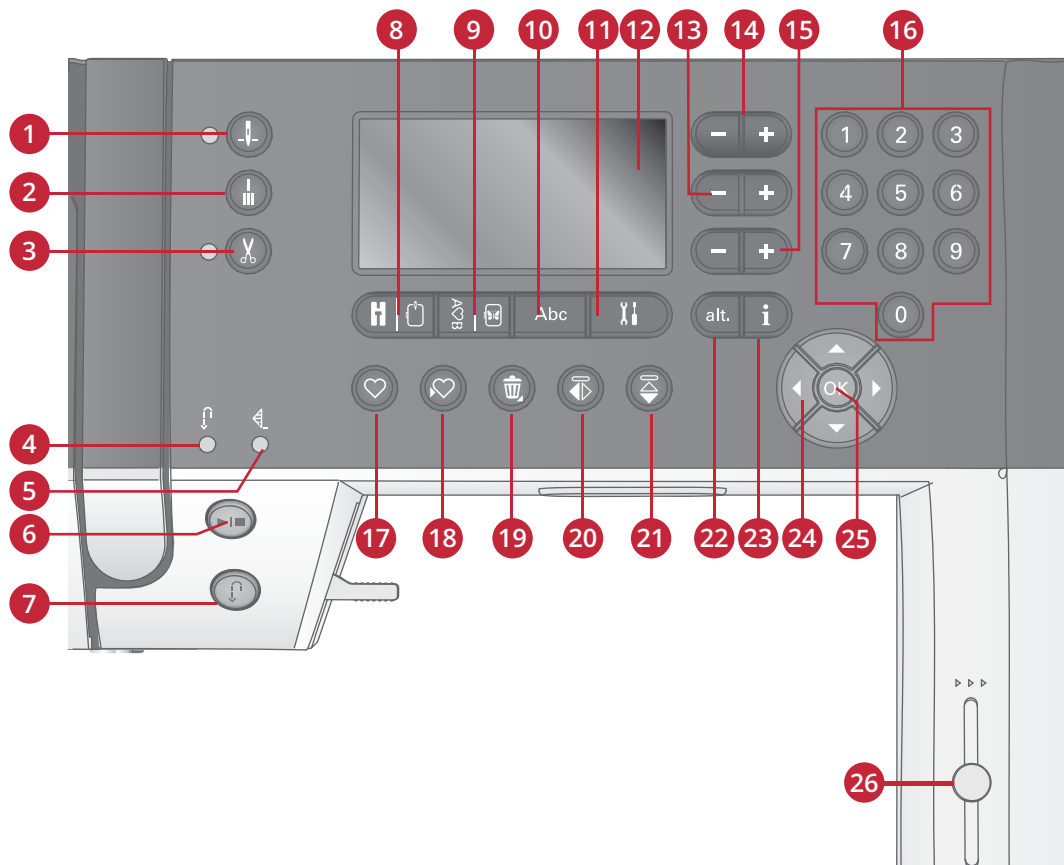
1. Needle stop up/down button with indicator
2. Tie-off button
3. Thread snips button with indicator
4. Indicator for reverse (7)
5. Indicator for tie-off (2)
6. Start/stop button
7. Reverse button with indicator (4)
8. Sewing mode/ embroidery stitch-out mode button

9. Sequencing/embroidery edit mode button
10. Alphabet mode, sequencing button
11. Settings menu button
12. Graphic display
13. Stitch width/stitch positioning buttons
14. Cursor buttons
15. Stitch length/stitch density buttons
16. Direct selection buttons
17. Load button

18. Save personal stitch or sequence button
19. Delete button
20. Mirror side to side button
21. Mirror end to end button
22. Alt button
23. Info button
24. Wheel buttons
25. OK button
26. Speed control lever

Needle Stop Up/Down Button with Indicator

Press this button to move the needle up or down. The setting of the needle stop position is changed at the same time. When needle down is activated, the indicator is lit, the needle will stop in the down position. You can also tap the foot control to raise or lower the needle.

Tie-off Button

Press the tie-off button while sewing and your machine sews a few tie-off stitches and stops automatically. When pressed while not sewing, machine will sew a tie-off and stop automatically at the beginning of next sewing.

Thread Snips Button with Indicator

Press the button when you are not sewing and your sewing machine cuts the top and bobbin threads and raises the needle. The thread snips indicator will be lit. To cut before the needle moves to the start position of the next stitch, press the thread snips button while sewing. The indicators (3 & 5) will be lit and the machine will cut the threads after the stitch or sequence has completed.

Start/Stop Button

Press this button to start or stop the machine without using the foot control. Press the button once to start and press it again to stop.

Reverse Button with Indicator

For permanent reverse, press the button 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 sews 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 darning stitches.

Sewing Mode/Embroidery Stitch-out Mode Button

Press this button to enter sewing mode or embroidery stitch-out mode.

Sequencing/Embroidery Edit Mode Button

Press this button to enter sequencing. In embroidery mode, press this button to open embroidery edit mode.

Alphabet Mode, Sequencing Button

In Sequencing, press this button to create text sequences from various characters in two different fonts.

Settings Menu Button

Press this button to open the menu for machine settings.

Graphic Display

The graphic display lets you view all your selections and options. Stitches are shown in real size (except for buttonholes).

Stitch Width/Stitch Positioning Buttons

Increase or decrease the stitch width using the + and - buttons. For straight stitches, use the + and - buttons to change the stitch position.

In embroidery mode, use the + and - buttons to advance forward through the stitches or step backwards. They are also used for basting and adjusting height.

Cursor Buttons

By pressing the + and - buttons, cursor will move to right and left.

In embroidery mode, the + and - buttons are used to select hoop size, check position and rotation.

Stitch Length/Stitch Density Buttons

Increase or decrease the stitch length using the + and - buttons. For satin stitches, use the + and - buttons to change the density for the selected stitch.

In embroidery mode, use the + and - buttons to step between different color blocks forward/backward, to activate monochrome embroidery, or to adjust the width of a design.

Direct Selection Buttons

By pressing one of, or a combination of, the 0 to 9 buttons, you select the stitch represented by that number immediately.

In embroidery mode: select built-in design (1–15) or built-in font (curlz: 200, 201, 202 or graphite: 300, 301, 302).

Load Button

Press this button to load a previously saved personal stitch or sequence.

In embroidery mode, press this button to load an embroidery design or font from an USB embroidery stick.

Save Personal Stitch or Sequence button

Press this button to save a stitch or sequence to the machine's memory.

Delete Button

For deleting stitches and letters in a sequence. Long touch to delete the whole sequence.

Mirror Side to Side Button

For mirroring stitches and sequences side to side.

Mirror End to End Button

For mirroring stitches and sequences end to end.

Alt Button

When you select a satin stitch, the density settings will be shown on the graphic display. By pressing the alt button, the elongation will be shown instead of the stitch density.

In embroidery mode, this button is used to switch between two views of embroidery stitch-out.

Info Button

Press this button to toggle the recommendations view on and off.

Press this button in embroidery mode to display information about the loaded design.

Wheel Buttons

Use these buttons to move around the graphic display. The wheel has up and down arrow buttons, left and right arrow buttons and a center button, OK, to confirm your selections. The wheel has several functions, for example selecting letters and moving between options in the settings menu.

In embroidery mode, use the wheel to move the design in the hoop.

OK Button

The wheel center button, OK, is used to confirm your selections or clear messages on your screen.

Speed Control Lever

The speed control lever sets the maximum sewing/embroidery speed. To increase sewing/embroidery speed, slide the lever upwards, to decrease sewing/embroidery speed, slide the lever downwards.

Settings Menu

In the settings menu, you can adjust the machine settings, sound settings and screen settings. Open by pressing the settings menu button and select the setting you wish to adjust by pressing the up and down arrow buttons on the wheel. Use the left and right arrow buttons to adjust the values. Activate settings or open a list of choices by pressing OK. A solid box means a function is activated, an empty box means it is not activated.

Note: If a setting cannot be combined with a previously selected setting, the outlines of that box will be dashed. Different settings are available depending on whether you are in sewing or embroidery mode.

Press the settings menu button again to leave the settings menu.

Settings	
Thread tension	4.4
Twin needle	1.6☐
Stitch width safety	☐
Language:	English

Thread Tension

Your sewing machine will electronically pre-set a thread tension for the selected stitch. Depending on the fabric, batting, thread etc, the tension may need to be adjusted. Use the left and right arrow buttons on the wheel to adjust the thread tension. The changes only affect the selected stitch. The setting will go back to default when you select another stitch.

)I(3.6 In sewing mode, press the info button to see the current selected thread tension.

Twin Needle

Activate the twin needle program and use the left and right arrow buttons on the wheel to set the twin needle width. When a twin needle size is selected, the width of all stitches is limited for that needle size to prevent needle breakage.

In sewing mode, press the info button. The twin needle recommendation icon will be shown. The setting is kept until you deactivate it.

Note: Twin needle and stitch width safety cannot be used at the same time.

Note: A warning pop-up will be shown if you select a stitch that is too wide for the set twin needle size.

Stitch Width Safety

Select this function when using a presser foot for quilting, available as an optional accessory, to lock the center needle position for all stitches and prevent damage to the needle or presser foot.

In sewing mode, press the info button. The stitch width safety icon will be shown. The setting is kept until you deactivate it.

When turning on the machine with this setting activated and for every stitch selection that is not a straight stitch, a pop-up informs you that the machine is set to straight stitch.

Note: Twin needle and stitch width safety cannot be used at the same time.

Automatic Stop for Cut

(Only in embroidery mode)

When starting to embroider the machine stops after a few stitches asking you to cut the thread end. Use the OK button to turn on or off this function in the settings menu.

Note: Automatic stop for cut is disabled if you use the foot control when embroidering.

Language

Use the left and right arrow buttons to change the language of all text in your machine.

Audible Alarm

Turn all alarm sounds of the machine on or off. Default setting is on.

Contrast

Adjust the contrast of the graphic display by using the left and right arrow buttons. The value can be set between -3 to 4 in steps of 1.

Software Version

Check the software version for your sewing machine.

Hoop Positions

(Only in embroidery mode)

Use the hoop position functions to move the hoop to different positions.

Current Position

When you want to return to the current stitch and start embroidering again where the embroidery was interrupted, use the wheel to select the current position and press OK. You can also press the start/stop button once to return to the current stitch and start to embroider.
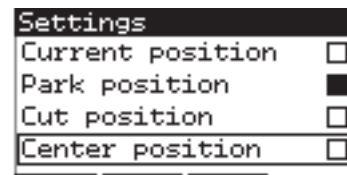
Park Position

When you have finished your embroidery, remove the hoop and open the settings menu. Use the wheel to select the park position option and press OK.

⚠ *It is very important to remove the hoop before selecting park position, otherwise it may be damaged.*

Cut Position

Cut position will move the hoop towards you, making it easier to cut jump stitches and trim fabric when embroidering an appliqué.

Center Position

Use the center position if you want to move the needle to the center position of the hoop.

3 Sewing Mode

Sewing mode is the first view on the graphic display after you turn on the machine. Your selected stitch will be shown in real size in the stitch field. Here you will find all the basic information you need to start sewing. This is also the menu where you adjust the settings of your stitch. Straight stitch is selected by default.

Note: It's not possible to sew with the embroidery unit attached.
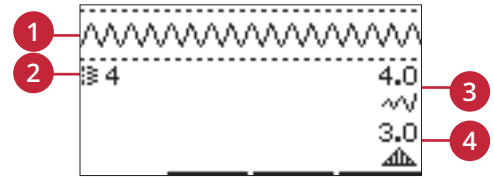
Sewing Mode — Overview

1. Stitch field
2. Selected stitch number
3. Stitch width/stitch positioning
4. Stitch length/density

Note: The tabs on the bottom of the screen indicates which mode is selected. The selected mode is indicated by the black tab disappearing on screen.

Select a Stitch

By pressing one of the direct selection buttons, you select that stitch number immediately. Press two or three digits in quick succession to select a stitch from 10 and up. If the stitch number does not exist, you will hear a beep and the last entered digit will be selected as a stitch. Use the up and down arrow buttons on the wheel to step between stitches.

Sewing Recommendations

Press the info button to show sewing recommendations for the current stitch. Press the button again to hide the information.
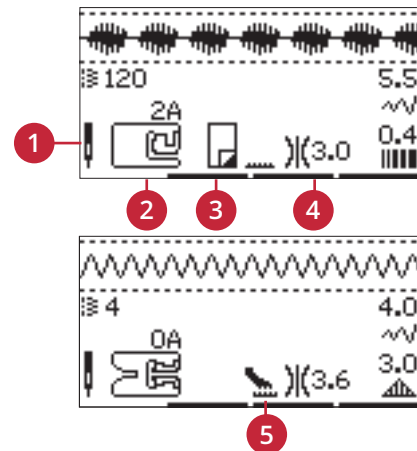
1. Needle recommendation/setting

    Universal needle

    Set for twin needle

    Wing needle recommended

    Set for stitch width safety

2. Presser foot recommendation
3. Stabilizer recommended
4. Thread tension value
5. Feed teeth/IDT™ system recommendation

*Note: All symbols and options will not be shown at the same time.*

Stitch Adjustments

Your machine will automatically select optimal settings for each stitch. You can make adjustments to every stitch as desired. Adjusted settings only affect the selected stitch and will be reset to default when another stitch is selected. Adjusted settings are not automatically saved when the machine is turned off.

The values for stitch length and stitch width are shown to the right of the display. Use the next to the buttons numbers to make adjustments. When a setting is changed the numbers will be highlighted. When trying to exceed minimum or maximum settings for width and length, a warning sound will be heard.

Stitch Width/Stitch Positioning

Increase or decrease the stitch width using + and - buttons. For straight stitches, use + and - to move the stitch position left or right. When a straight stitch is selected, the icon changes to show that stitch positioning is active instead of stitch width.
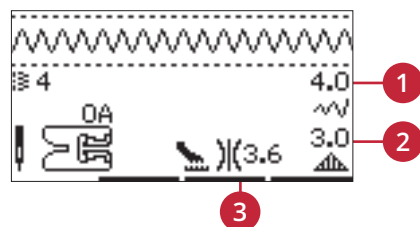
1. *Stitch width/ stitch positioning*

2. *Stitch length/ stitch density/elongation*

3. *Thread tension*

Stitch Length/Stitch Density

Increase or decrease the stitch length using + and - buttons.

For satin stitches, use the + and - buttons to increase or decrease the stitch density. This is often necessary when specialty threads are used or when a less dense satin stitch is desired. The stitch density does not affect the actual length of the entire stitch. When a satin stitch is selected, the icon changes to show that stitch density is active instead of stitch length.

Elongation

Elongation is used to lengthen satin stitches. The entire stitch will be longer but the density will remain the same. Press the alt button to show the elongation setting instead of density for satin stitches. The icon (3) changes to show an elongation symbol. Increase or decrease the elongation of the satin stitch using the + and - buttons. If elongation is not available for the selected stitch, a warning sound will be heard when pressing the alt button and the icon will not change.

Mirroring

To mirror stitches or sequences side to side, press the mirror side to side button. To mirror end to end, press the mirror end to end button.

*Left: mirror side to side button. Right: mirror end to end button.*

Thread Tension

For the best stitch appearance and durability, make sure the needle thread tension is correctly adjusted, i.e. for general sewing, the threads evenly meet between the two fabric layers. Your sewing machine electronically sets a thread tension for the selected stitch. Depending on the fabric, batting, thread etc, the tension may need to be adjusted. See page 30 for instructions on how to change the setting manually.

If the bobbin thread is visible on the top side of the fabric, the needle thread tension is too tight. Reduce the needle thread tension.

If top thread is visible on the underside of the fabric, the needle thread tension is too loose. Increase the needle thread tension.

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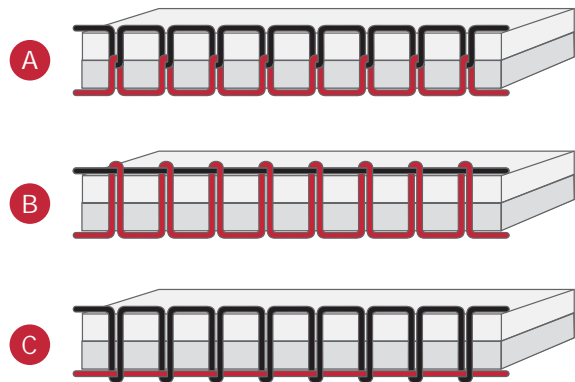
A. Correct tension

B. Tension too tight

C. Tension too loose

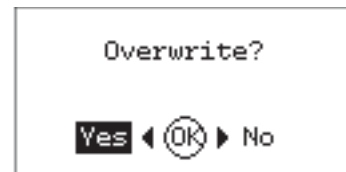## Personal Stitch

Save Personal Stitch

Save your personal stitch in your machine by pressing the save button. Adjustments in stitch length, width, density, elongation, mirroring and thread tension will be saved.

Note: Some special stitches, such as buttonholes, cannot be saved. A pop-up will inform you of this when you try to save such a stitch.

Overwrite Personal Stitch

If the memory is occupied, a pop-up message will appear asking if you wish to overwrite the previously saved stitch or sequence with the new one. Select Yes or No with the arrow buttons and press the OK.


Load Personal Stitch

Load your personal stitch by pressing the load button.

Sewing Techniques

Three-Step Zigzag Stitch

Three-step zigzag stitch is used to overcast raw edges. Make sure the needle pierces the fabric on the left side and overcasts the edge on the right side. The stitch can also be used as an elastic stitch to allow seams to stretch when sewing knit fabrics.
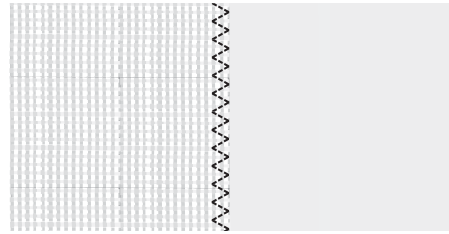
Stitch no. 8

Buttonholes

Your machine's buttonholes are specially adjusted for different kinds of fabric and garments. Look at the stitch table on page 11 in this book to find descriptions of each buttonhole.

The fabric should be interfaced and/or stabilized where buttonholes are to be sewn.

One Step Buttonhole Foot 5

1. Select the buttonhole you want to sew and adjust the width and density as desired (A).

   Note: Always sew a test buttonhole on a scrap piece of fabric.

2. Mark the position of the buttonhole on your project.

3. On the One-Step Buttonhole Foot, push the button holder open by pushing it backwards (B). Insert the button. Push the button holder forward until the button is locked in place. The button will determine the length of the buttonhole.

4. Attach the One-Step Buttonhole Foot.

5. Make sure that the thread is pulled through the hole in the presser foot and placed under the foot.

6. Position your project under the presser foot so that the marking on the fabric is aligned with the center of the buttonhole foot.

7. Lower the buttonhole lever (C) all the way down.

   Note: The machine will not start to sew if the buttonhole lever is not lowered properly or the frame of buttonhole foot is not positioned all the way forward.

8. Hold the end of the upper thread and start sewing. The buttonholes are sewn from the front of the presser foot to the back.

9. Once the machine has sewn the buttonhole, raise the presser foot.
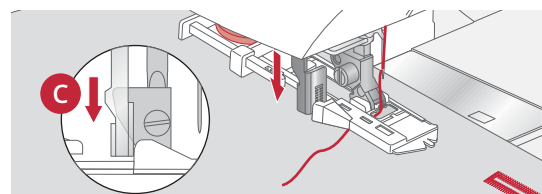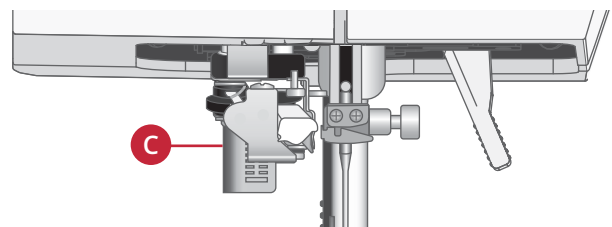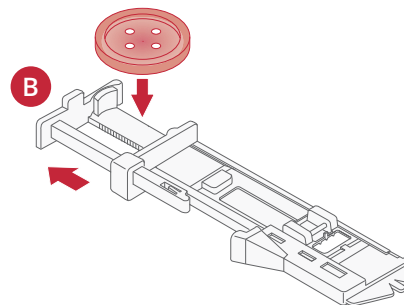
Manual Buttonhole

To sew a buttonhole longer than 25mm, use presser foot 5M.

1. Lower the buttonhole lever and presser foot. Press start/stop button or the foot control to start sewing while pushing the buttonhole lever away from you until the machine starts sewing a straight stitch backwards. Sew until you reach the desired length of the buttonhole.

2. Pull the buttonhole lever towards you until the machine starts sewing the first column forwards.

3. When the column stitching has reached your desired length, push the buttonhole lever away from you until the machine starts sewing a straight stitch backwards.

4. Pull the buttonhole lever towards you until the machine starts sewing the bar tack and second column forwards.

5. When the columns are aligned, push the buttonhole lever away from you until the machine starts sewing the bar tack. The machine will sew a few tie-off stitches and stop automatically. The machine cuts the top and bobbin thread and raises the needle.

Depending on style of buttonhole selected, the sewing sequence will differ, see illustration.
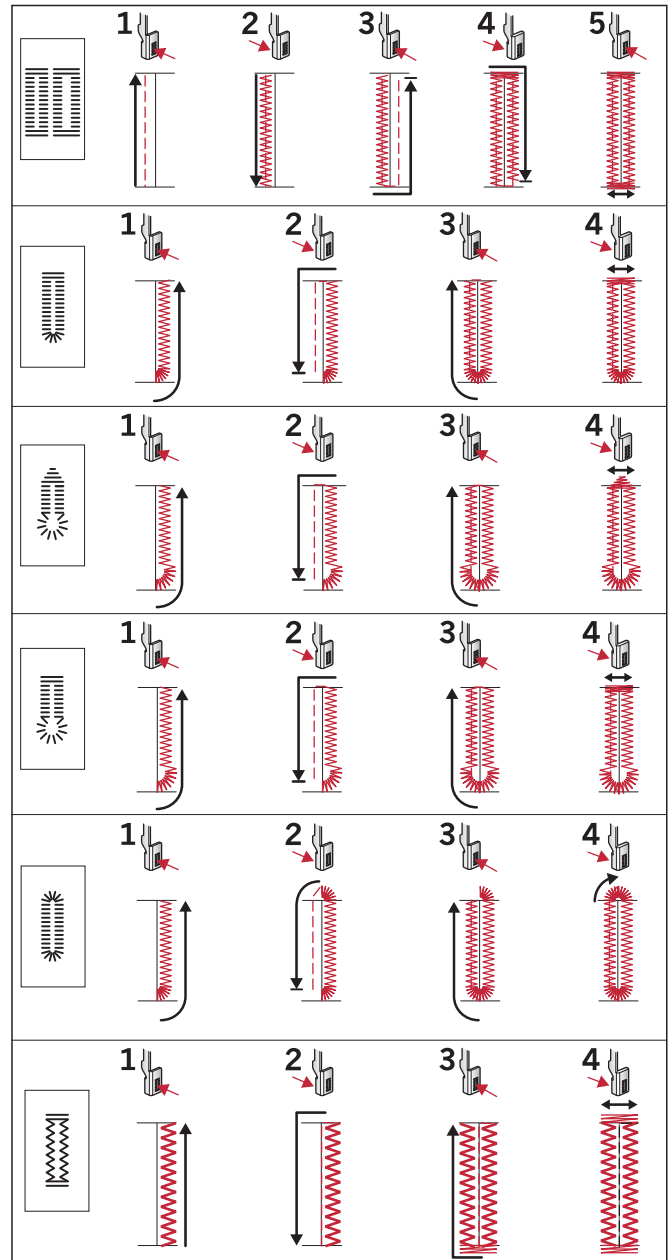
Sewing sequences for buttonhole stitches 25–31.

Corded Buttonhole

Corded buttonholes that are sewn with gimp threads are more stable, durable and have a professional appearance. Use pearl cotton or a regular gimp thread.

1. Loop a piece of heavy thread or pearl cotton over the metal bar extending from the center back of the 5M manual buttonhole foot or of the plastic bar of the 5 one step buttonhole foot. Pull the thread tails under the foot, towards the front, then secure around the finger at the front of the foot.

2. Stitch a buttonhole. The satin buttonhole columns will stitch over the cord.

3. When the buttonhole is finished, lift the cord off the finger and pull out the slack.

4. Cross the cord in front of the needle and thread cord ends into a large needle, pull to the wrong side and knot ends before cutting excess.

5. Use the seam ripper to carefully open the buttonhole.
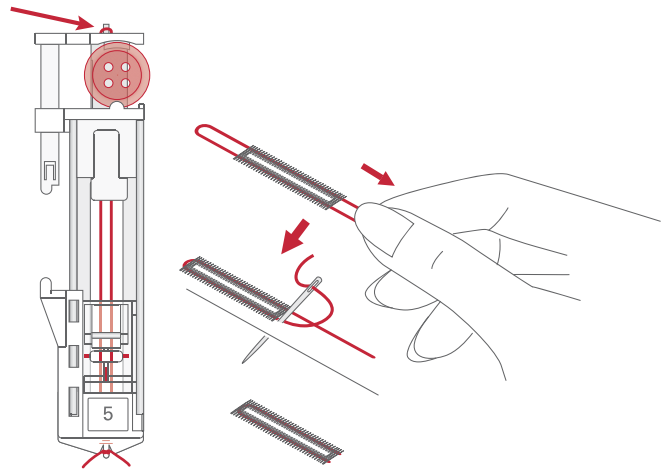
Sew On a Button

1. To sew on a button, remove the presser foot and select the button sewing stitch.

2. Lower the feed teeth.

3. Place the button under the presser foot holder. Use the mirroring function to make sure the holes in the button are aligned with the swing of the needle and the width is appropriate for the actual button. If necessary change the width between holes with the + and - buttons next to stitch width.

4. You can increase or decrease the number of stitches that will fasten the button on the fabric in steps of two, using the third row + and - buttons.

5. Start to sew. The machine will sew the program for you and then tie-off and stop.

Note: Use the multi-purpose tool to create a thread shank for your button. You can also use a sew-on button foot, available as an optional accessory at your local authorized PFAFF® dealer.
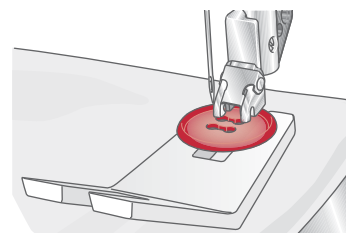
Darning

Darning a small hole or a tear before it becomes larger can save a garment. Choose a lightweight thread in a color as close to your garment as possible.

1. Place fabric or stabilizer in position under the hole or tear in your garment.

2. Select a darning stitch.

3. Start sewing above the hole and over it.

4. Once you have sewn across the hole, press the reverse button to set the length of the stitch. Your sewing machine will automatically complete the stitch.

5. By default, the machine will be set to repeat the same size darning square, just continue sewing.

   Re-select the darning stitch to deactivate repeat.

*Note: The reverse button icon (1) will disappear, indicating that repeat is activated.*

Sewing Hems in Heavy Fabric

When sewing over seams in extra heavy fabric or a blue jeans hem, the foot can tip as the machine climbs over the seam. Use the multi-purpose tool to balance the height of the presser foot as you sew. One side of the multi-purpose tool is thicker than the other. Use the side that suits the thickness of the seam best.

Engage the IDT™ system, see page 22. At the thickest point on the fabric, slow down the sewing speed.

Note: Increasing the stitch length may improve the sewing result when sewing hems in heavy fabric.
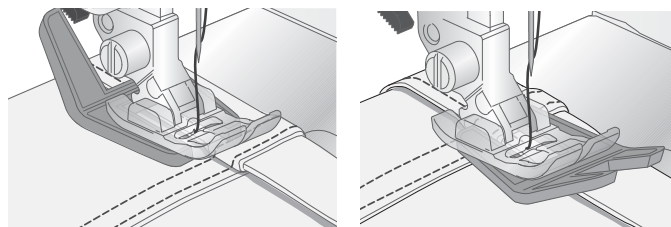
Handlook Quilting

A quilt usually consists of three layers, two layers of fabric with a layer of batting sandwiched between.

1. Baste the completed quilt top to the batting and backing.

2. Thread the needle with an invisible (monofilament) thread. Use needle size 90 and lightweight, soft cotton (60 wt or lighter) thread in the bobbin.

3. Select a quilt stitch and snap on the recommended foot shown in the sewing recommendations view.

4. Engage the IDT™ system.

5. When you sew the stitch you should only see your bobbin thread. You might need to adjust the thread tension depending on which fabric, thread and batting that is used. Make a few tests on a scrap piece of the fabric you are going to sew and check the tension.

Use the edge guide to sew successive rows. Loosen the upper screw of presser foot holder and insert edge guide into the hole. Set the space as you desire and tighten the screw.

38	39	40	41

Recommended stitches for a handlook quilt
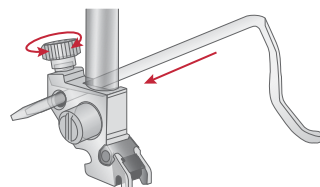
Free-Motion

For free-motion sewing lower the feed teeth on the back of the free arm. Attach the optional Open Toe Free-Motion foot. Move the fabric manually. Maintain a consistent speed and move the fabric in a smooth motion. You are creating the length of the stitch as you move the fabric.

Note: When free-motion sewing using zigzag, replace the short needle clamp screw with the long needle clamp screw found in the included accessories.

Note: When the feed teeth are dropped, the fabric is no longer fed by the machine. You must move the fabric.

Free-Motion Stippling

Free-motion stippling adds texture and interest to your quilt, while keeping the layers together. Free-motion stippling is done with the feed teeth lowered. You move the fabric manually to determine the stitch length.

1. Set your sewing machine for free-motion sewing with a straight stitch.

2. Attach the optional Open Toe Free-Motion foot. Disengage the IDT™ system and lower the feed teeth.

3. Begin by pin basting your quilt through all layers with safety pins, starting from the center of your quilt and working out. Place a pin every 6-8 inches (15-20 cm).

   Note: Practice stippling on scraps of the fabric and batting from your quilt. It is important to move your hands at the same speed as the needle to prevent stitches that are too long or too short. Maintaining a consistent speed while free-motion sewing will also help keep stitches even.

4. Begin near the center of your quilt. Take one stitch and pull the bobbin thread to the top of the quilt. Take a few stitches right next to one another to lock the threads.

5. Plan a path for your stitching, then begin stitching your desired stipple pattern, moving the quilt as you go. The stitching should not cross over itself and should travel in a meandering motion.
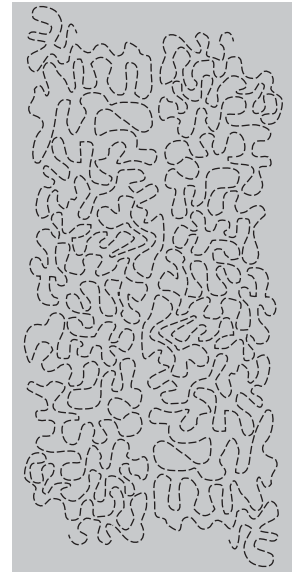
Blind Hem Stitch

The blindhem stitch is used to make invisible hems on skirts, trousers and home décor projects. Use foot number 3 with the IDT™ system.

1. Finish the edge of the hem.

2. Fold and press the hem allowance to the wrong side.

3. Fold the hem back on itself so approximately 3/8" (1 cm) of the finished edge extends beyond the fold. The wrong side of your project should now be facing up.

4. Place the fabric under the presser foot so that the fold runs along edge guide (A).

5. When the needle swings into the fold it should catch a small amount of fabric. If the stitches are visible on the right side, adjust edge guide (A) by turning adjusting screw (B) until the stitch that catches the hem just barely shows.

The elastic blindhem stitch is especially suitable for stretchy fabrics, because the zigzag in the stitch lets the stitch stretch. The hem is finished and sewn at the same time. There is no need to finish the raw edge first on most knits.

Woven fabric   *Stretch fabric*
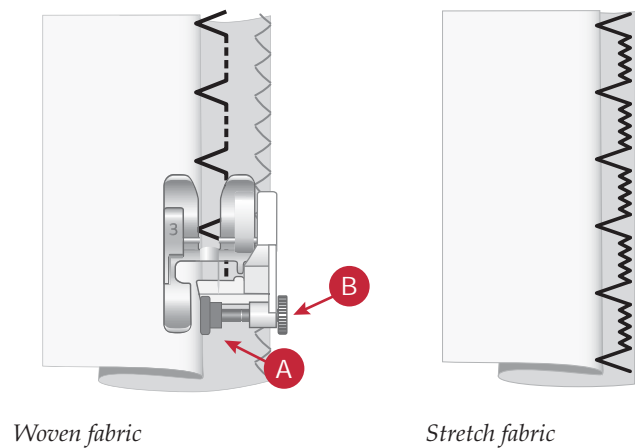
Right side of fabric

Sewing in Zippers

There are different ways to sew in zippers. Follow the directions included with your pattern for best results. For all types of zippers it is important to sew close to the teeth of the zipper. The zipper foot 4 can be snapped to the presser foot bar on the left or right, depending on how you will insert your zipper. Then set the stitch position so that it enters close to the edge of the zipper teeth by using one of the 29 needle positions available for the straight stitch. If the presser foot is attached on the right side, the needle must only be moved to the right. If the foot is attached on the left, the needle must only be moved to the left.
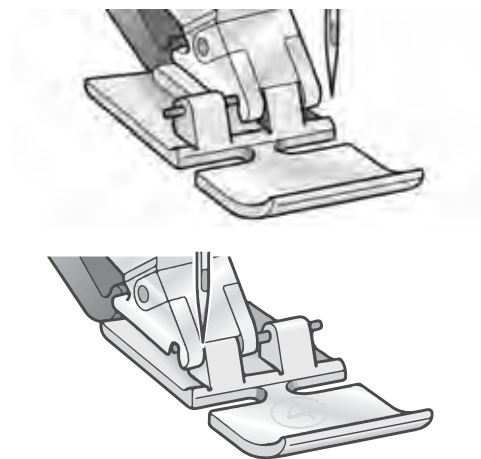
Sewing Pop-Ups

Raise Needle

Some functions are only possible with the needle raised. When trying to perform these functions with the needle lowered this pop-up message is shown. Raise the needle and press the OK button to close the pop-up message.

Please Lower the Presser Foot

Your machine will not sew if the presser foot is raised. Lower the presser foot and press the OK button to close the pop-up message.

Stitch Width Limited for Twin Needle

This message is shown when the machine is set for twin needle and you try to adjust the stitch width to wider than possible with the twin needle. Close the pop-up message by pressing the OK button.

Machine Set for Twin Needle

This pop-up message appears when the twin needle is activated and you turn on your machine. Press the OK button to close the pop-up message.

Remove Thread Jam Under the Stitch Plate

When this pop-up appears you need to clean the area under the stitch plate from thread and lint in order for the cut function to cut properly. Close the pop-up message by pressing the OK button.

This Stitch Cannot Be Combined With Twin Needle

This pop-up message appears when the machine is set for twin needle and you select a stitch that cannot be sewn with twin needle. Press the OK button to close the pop-up message.

This Stitch Cannot Be Sewn With Stitch Width Safety Active

This pop-up message appears when the machine is set for stitch width safety and you select a stitch that is wider than 0 mm. Press the OK button to close the pop-up message.

Machine Needs to Rest. Please Wait a Moment.

If the machine stops and this pop-up appears on the screen, the machine needs to rest. When the pop-up message closes you can resume sewing. The sewing results will not be affected.

Machine Set for Straight Stitch

This message is shown when the stitch width safety is on and you turn on the machine or try to adjust the stitch width or stitch position. Close the pop-up message by pressing the OK button.

Check Needle Thread

The machine stops automatically if the needle thread runs out or breaks. Re-thread the machine, press OK and start sewing again.

4 Sequencing

The sequencing function on your machine makes it possible to combine stitches and letters into sequences. You can add up to 60 stitches and/or letters in a sequence. Save your sequence on your machine; reload and sew any time you like. All stitches in your sewing machine can be used for sequencing except for buttonholes, darning stitch, button sewing and bar tack stitches.

Sequencing - Overview
1. Stitch field
2. Current stitch number
3. Stitch width/stitch positioning
4. Stitch length/density/elongation

Create a Sequence

1. Press the sequencing button to enter sequencing.
2. Select the stitch you wish to use (see page 32 on how to select a stitch). The stitch will appear in the stitch field.
3. Select a letter from the alphabet (2) using the arrow on the wheel and press OK to insert it. The letter will be placed at the cursor position in the stitch field.
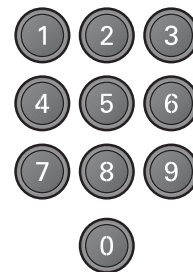
*Note: The current position in the stitch field is marked by a cursor. Inserted stitches will be placed at the cursor position. Move the cursor through the sequence using the - and + arrow buttons just to the right of the stitch field.*

Using the Alphabet

Alphabet Mode, Sequencing- Overview
1. Stitch field
2. Alphabet
3. Character set (upper case/lower case, normal/special symbols)
4. Font selection
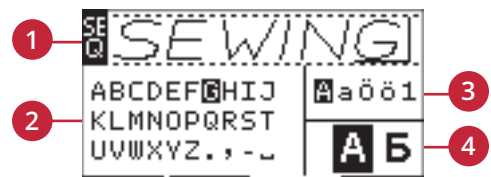
Create a Text Sequence

1. Press the alphabet mode, sequencing button.

2. Move the cursor through the stitch field (1) with the - and + buttons just to the right of the stitch field to where you want to add a letter.

3. Select a letter from the alphabet (2) using the arrow buttons and press OK to insert it. It will be placed at the cursor position in the stitch field.

Note: The selected letter in the alphabet will be highlighted.

Select Character Set and Font

Press the - or + buttons just to the right of the character set indicator (3) to change character set between upper or lower case, normal or special letters and symbols.

Press the - or + buttons just to the right of the font indicator (4) to change fonts.

Adjust Text and Stitches

Press the sequence button to enter sequence view. You can mirror, adjust length and width or change the density, elongation and stitch position of the selected stitch. The adjustments work just like in sewing mode. See page 33. When you have changed a value, the digits will be highlighted on the graphic display to show that the value is not default.

Note: The adjustments will only affect the stitch at the cursor position. If you return to sewing mode, all adjustments made there will affect the entire sequence and will not be saved you return to sequencing.

Delete a Stitch or Letter in a Sequence

If you want to delete a stitch, move the cursor to the stitch you want to delete and press the clear button. To delete the entire sequence from the stitch field, long press the delete button.

Manage Your Sequences

You can save and reload your sequence. The sequence memory has a space of 60 stitches and letters.

Save Sequence

Saving your sequence works just like in sewing mode. See page 34.

Note: If another sequence is already saved, a pop-up will appear asking if you wish to overwrite. Select yes or no with the arrow buttons and press OK.

Load Sequence

Loading your sequence works just like in sewing mode, see page 34. To load your sequence, press the load button.

Note: When loading a sequence into sewing mode, the value displayed for the sequence will be the letter M.

Sewing a sequence

To sew the sequence, return to sewing mode by pressing sewing mode button, the start/stop button or by stepping on the foot control. Your sequence is ready to be sewn out. The sequence will be sewn continuously. If you want to stop at the end of the sequence, press the thread snips while sewing. The machine will tie-off and cut the threads at the end of the sequence.

Note: Adjustments made in sewing mode will affect the whole sequence. However, these adjustments will not be saved if you return to sequencing.

Sequencing Pop-Ups

This Stitch Cannot Be Added in a Sequence

This message is shown if you try to add a buttonhole, eyelet, bartack, darning stitch or the sew-on-button stitch (stitch numbers 25–37) to a sequence. All stitches in your sewing machine can be added in a sequence except for these. Close the pop-up message by pressing the OK button.

Sequence Out of Range

If you try to add more than 60 stitches or letters in the sequence this message is shown. Close the pop-up message by touching the OK button.

Overwrite?

If there is already a stitch or sequence saved in the machine memory and you press the save button this pop-up will appear asking if you wish to overwrite the previously saved stitch/sequence with the new one. Select yes or no with the arrow buttons and press the OK button.

This Stitch Cannot Be Saved

This message is shown if you try to save a buttonhole, eyelet, bartack, darning stitch or the sew-on-button stitch (stitch numbers 25–37) to the machine memory. All stitches in your machine can be saved except for these. Close the pop-up message by pressing the OK button.

Delete All Stitches?

This pop-up message will ask you to confirm when you have chosen to delete an entire sequence in sequencing mode. Select yes or no with the arrow buttons and press OK.