made to create **BERNINA**

my **BERNINA**
Sewing Machine
Workbook 2

Stitch Fun
For all current BERNINA models
except model 1008

Table of Contents

8 Series

activa

B 380

3 Series

B 530

5 Series

B 750

7 Series

The information in this workbook applies to all current BERNINA sewing machines. *Note: Some exercises apply only to certain models equipped with the feature being highlighted.*

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Welcome to the second workbook in the My BERNINA series. The information and stitching exercises in this book explore the use of decorative stitches and embellishment techniques using BERNINA sewing machines.

Every sewing machine has a straight stitch, practical stitches and a range of decorative stitches. Some models have hundreds of stitches that can be used to embellish almost any type of project—garments, pillows, quilts, purses, baby clothes, and more. To get the best results when sewing decorative stitches, there are several items that you need to address: the type of thread you use, the presser foot you select, and how you prepare your fabric for stitching.

The type of thread you use plays an important part in the look of your final stitching. Workbook 1 (Basic Operation) offers information on the fiber content and properties of threads that are on the market today. There are many from which to choose and if you try them all you'll find a few favorites. Cotton embroidery thread, especially in a heavier weight such as 30, gives a beautiful look to the stitches and has a nice luster to it. If you want a high sheen, rayon or polyester embroidery thread are good choices. It often comes down to a personal preference and what looks best on your project.

The presser foot you select is critical for good results because it can affect the way the fabric feeds under the needle, influencing the stitch formation. Usually the key to selecting the correct presser foot is the sole. If you are creating heavy, satin stitched patterns, you will need a foot that is not flat on the bottom. It should have some type of indentation that allows the foot to ride over the completed stitch without dragging or inhibiting the feed of the fabric. Stitches that are more open and have less thread will stitch well with an all-purpose or zigzag presser foot. Reverse Pattern Foot #1/1C/1D has small indentations in front of and behind the needle that allow the fabric to move in a "back and forth" manner when forming the stitches. Embroidery Foot #6 has a wedge-shaped indentation behind the needle, perfect for allowing heavy compact stitches to flow freely from under the back of the presser foot. Open Embroidery Foot #20/20C/20D and Clear Embroidery Foot #39/39C/39D both have the same shape but offer more visibility of the stitching area.
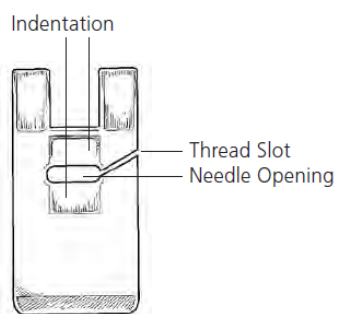
Reverse Pattern Foot #1
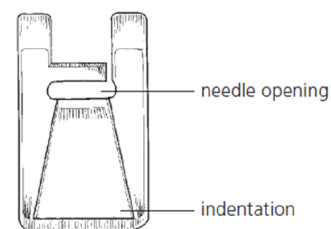
Clear Embroidery Foot #39

Preparing your fabric correctly can take the frustration out of your stitching, giving you a positive experience with beautiful results. The fabric needs to be stable enough to support the stitching without tunneling or puckering. This can be accomplished in several ways, sometimes with a combination of techniques. The fabric itself might be heavy enough to support the stitching but in many cases extra stabilization will be needed. Interfacing (fusible or sew-in) is applied to the wrong side of the fabric and left in the project. Stabilizers are used as a temporary form of support. For the exercises in this class you will be using light-weight tear away stabilizer that can be removed after stitching if desired.

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Fabric: Firm woven fabric, 4" x 6" *and* Lightweight tear-away stabilizer, 4" x 6"
Needle: 80/12 Universal
Thread: 30 wt. cotton embroidery
Needle Position: default
Presser Foot: Open Embroidery Foot #20/20C/20D

Securing Function: Several very short stitches at beginning/end of stitching; can be applied to decorative as well as straight stitches.

Place the stabilizer behind the fabric.

Select a feather stitch.

Engage the Securing Function, if available; the machine will automatically secure the stitches at the beginning of the stitching.

Sew a line of feather stitching. Re-engage the Securing Function when approaching the end of the stitching; the machine will automatically secure the stitching at the end of the current stitch pattern.

Select the checkerboard stitch and sew a line next to the feather stitch. Engage the Securing Function at the beginning and end of the stitching.

Optional: Attach one of the Seam Guides with Rulers to the presser foot. Set the guide 1" or 2" from needle as desired for spacing between the lines of stitching.

780 and 8 Series
Every stitch has an automatic tie-off at the beginning. This securing function can be turned off in Setup.

880: Programming the Foot Control
To customize the Foot Control on the 880 model, touch the Setup icon, then Sewing Settings, and Programming the Foot Control. Touch the Heart icon to customize the following settings using the back heel kick on the Foot Control:

- 2-6 securing stitches at that place (standard 4 stitches)
- 2-6 securing stitches forward (standard 4 stitches)
- Cutting upper and lower thread
- Raising the presser foot
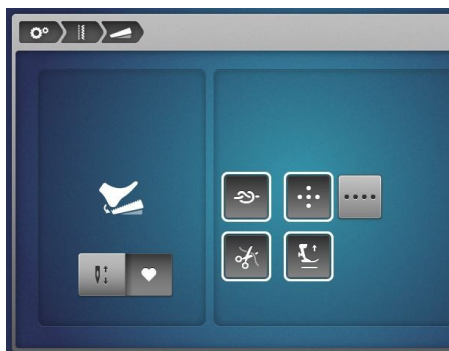
880 Programmable Foot Control

SEW-HOW

Do you know how to:
- Activate the Securing Function at the beginning and end of a stitch pattern?
- Attach and adjust the Seam Guide?
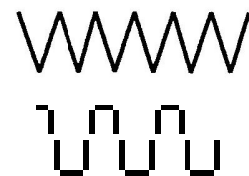
made to create **BERNINA**

Fabric: Firm woven fabric, 4" x 6" *and* Lightweight tear-away stabilizer, 4" x 6"
Needle: 80/12 Universal
Thread: 30 wt. cotton embroidery
Needle Position: default
Presser Foot: Reverse Pattern Foot #1/1C/1D

Temporary Altered Memory: The last stitch alterations made to each stitch will remain in effect until manually changed or until CLR is touched or until the power to the machine is turned off.

Touch CLR to clear any previous stitch alterations.

Place the stabilizer behind the fabric.

Row 1
Select the Zigzag stitch. Align the left edge of the foot with the left edge of the fabric. Sew about 1"-2" of the preprogrammed Zigzag stitch.

Alter the stitch width and length to 5mm; continue sewing the length of the fabric.

Row 2
Select the Running stitch. Begin a second row of stitching and sew about 1"-2" of the preprogrammed Running stitch.

Alter the stitch width and length to 3mm; continue sewing the length of the fabric.

Row 3
Select the Zigzag stitch again. Begin sewing a third row and sew about halfway down the fabric. Notice that the stitch alterations made to the Zigzag stitch remain in effect.

Select the Running stitch again. Continue sewing the third row of stitching. Notice that the stitch alterations made to the Running stitch also remain in effect.

Note: The 780 and 8 Series models also have a History function that remembers the last 15 (780, 830, 880) or 12 (820) stitches sewn even after the power is turned off or disconnected.

1   2   3
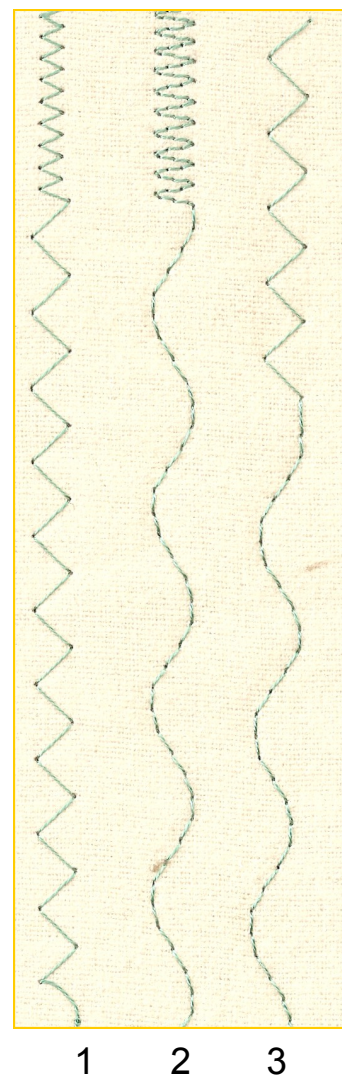
SEW-HOW

Do you know how to:
- Access any stitch?
- Make stitch alterations?
- Clear the Temporary Altered Memory?

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WWWW

Fabric: Firm woven fabric, 4" x 6" *and* Lightweight tear-away stabilizer, 4" x 6"
Needle: 80/12 Universal
Thread: 30 wt. cotton embroidery
Needle Position: as indicated in the directions
Presser Foot: Open Embroidery Foot #20/20C/20D

Touch CLR to clear any previous stitch alterations.

Place the stabilizer behind the fabric.

Select the Zigzag stitch. Adjust the stitch length to satin stitch (0.5mm) and the stitch width to 5-7mm.

Note: A preprogrammed satin stitch is available on most BERNINA models: 8, 7, & 5 Series: Stitch #1354; 380: Stitch #116; 350: Stitch #85.

Move the needle position to the far left and stitch along the left side of the fabric for about 1". While continuing to sew, adjust the width down to 0mm and then widen it back to the original width.

Move the needle position to center and stitch down the

center of the fabric, tapering and widening the stitch while sewing.

Move the needle position to the far right and stitch along the right side of the fabric, tapering and widening the stitch while sewing.

Tension Tips
A slightly tighter bobbin tension will give a beautiful full look to your satin stitch. The best way to achieve this:

- *CB Hook Machines: Insert bobbin thread through the hole in the finger of the bobbin case.*
- *Rotary Hook Machines: Use the embroidery bobbin case and thread the "pigtail".*
- *8 Series Machines: Thread bobbin for embroidery.*
- *7 Series Machines: Thread the same for sewing & embroidery.*

SEW-HOW

Do you know how to:
- Adjust the settings for satin stitching?
- Taper and widen the satin stitch?
- Adjust the needle position?

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Altered Stitches

Fabric: Firm woven fabric, 4" x 6" *and* Lightweight tear-away stabilizer, 4" x 6"
Needle: 80/12 Universal
Thread: 30 wt. cotton embroidery
Needle Position: Default
Presser Foot: Open Embroidery Foot #20/20C/20D

Touch CLR to clear any previous stitch alterations.

Place the stabilizer behind the fabric.

Select a decorative floral stitch.

Align the left edge of the foot with the left edge of the fabric.

Sew a row of the preprogrammed floral stitch.

Adjust the width of the floral stitch to 3 mm and sew a second row of stitching next to the first.

Touch CLR to reset the width. Adjust the length of the floral stitch to 3 mm and sew a third row of stitching.

| Programmed settings | 3mm width | 3mm length |

SEW-HOW

Do you know how to:
- Find the floral stitches on your model?
- Reset the stitch length and width to the preprogrammed settings?

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Pattern Begin

Pattern End

Fabric: Firm woven fabric, 4" x 6" *and* Lightweight tear-away stabilizer, 4" x 6"

Needle: 80/12 Universal

Thread: 30 wt. cotton embroidery

Needle Position: default

BERNINA Presser Foot: Open Embroidery Foot #20/20C/20D

Touch CLR to clear any previous stitch alterations.

Place the stabilizer behind the fabric. Select the satin stitch heart pattern.

Sew 2½ patterns, stopping in the middle of the third pattern.

Lift the presser foot and move the needle down about an inch and then begin sewing again. The pattern will start forming where you left off.

After completing the interrupted heart, start the final heart and press Pattern End. The machine will stop stitching when the pattern is complete. *Tip: To make sure you have a complete pattern, depress the foot control and do not remove your foot until the machine stops.*

Move to a new position and sew 2½ patterns, stopping in the middle of the third pattern. Lift the presser foot and move the needle down about an inch. Before starting to sew again, press Pattern Begin. Start sewing; the pattern will start forming at the beginning. Again, press Pattern End when you start the final heart.

560, 580, 7 Series, 880: Pattern End can be programmed to tie off at the end of the pattern and then cut the thread before stopping. To achieve this same result on the 830 and 820, use the Auto Secure function.
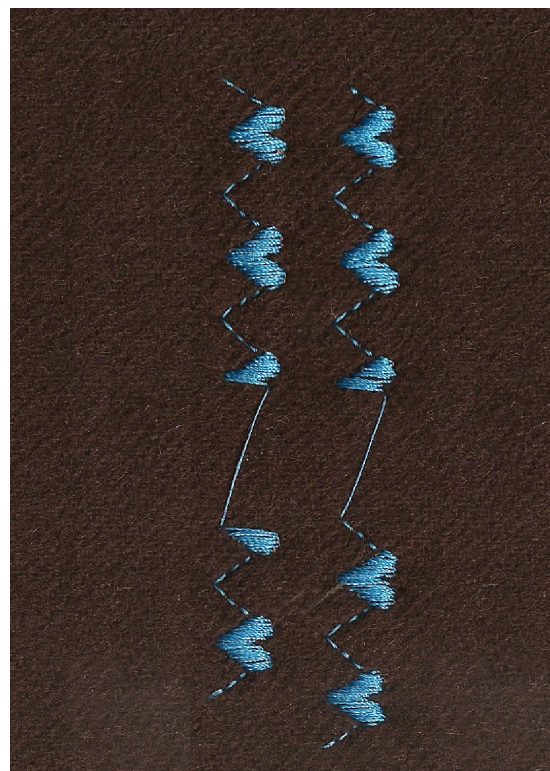
SEW-HOW

Do you know how to:
- Recognize the two different pattern functions (which icon stands for each)?

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Pattern Repeat

Pattern Extend

Fabric: Firm woven fabric, 4" x 6" *and* Lightweight tear-away
    stabilizer, 4" x 6"

Needle: 80/12 Universal

Thread: 30 wt. cotton embroidery

Needle Position: Default

**BERNINA Presser Foot:** Open Embroidery Foot #20/20C/20D

Select the satin stitch scallop; engage Pattern Repeat 1x.

Sew until the machine stops; you will have 1 scallop.

Engage Pattern Repeat 3x. Sew until the machine stops; you will
have 1 stitch pattern. *Note: In this case, one stitch pattern equals the
repeated group of three scallops.*

Engage Pattern Extend 3x and Pattern Repeat 1x. *Note: 560, 580,
7 Series, 880: The Pattern Extend function is measured in Percent-
ages and can be changes in increments of 1%. For this exercise,
select 300% on these models.*

Sew until the machine stops; you will have 1 stitch
pattern. *Note: In this case, one stitch pattern equals
one extended scallop. As the stitch pattern is extended
(lengthened), the stitch density is maintained.*
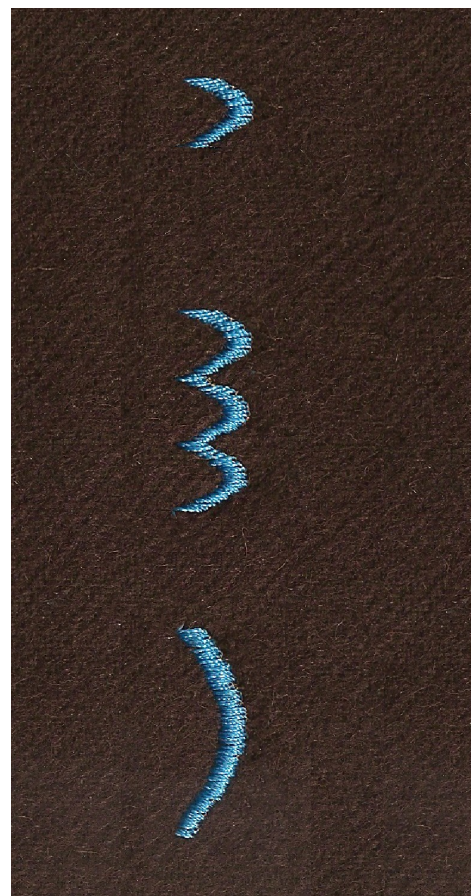
SEW-HOW

Do you know how to:
- Recognize the two different pattern
  functions (which icon stands for each)?

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Mirror Image

Left/Right Mirror Image

Up/Down Mirror Image

Fabric: Firm woven fabric, 4" x 6" *and* Lightweight tear-away stabilizer, 4" x 6"

Needle: 80/12 Universal

Thread: 30 wt. cotton embroidery

Needle Position: Default

BERNINA Presser Foot: Open Embroidery Foot #20/20C/20D

Mirror Images:

Horizontal Mirror Image (Left/Right) – machine sews selected stitch in Horizontal Mirror Image (right/left is determined by the sewing direction)

Vertical Mirror Image (Up/Down) – machine sews selected stitch in Vertical Mirror Image (up/down is determined by the sewing direction)

Place the stabilizer behind the fabric.

Touch CLR to clear any previous stitch alterations.

Left/Right Mirror Image

Select the Blanket stitch.

Sew one row across fabric.

Engage Left/Right Mirror Image and sew a second row next to the first, using the side of the presser foot for spacing.

Up/Down Mirror Image

Select the satin stitched arrowheads; engage Pattern Repeat 4x. Stitch one stitch pattern for a total of four arrowheads. The machine will stop when stitch the pattern is complete. *Tip: To make sure you have a complete pattern, depress the foot control and do not remove your foot until the machine stops.*

Engage Up/Down Mirror Image. The entire stitch pattern (four arrowheads) will be mirror imaged. Stitch one stitch pattern for a total of four arrowheads.

Repeat the previous two steps to stitch four complete sets of arrowheads.
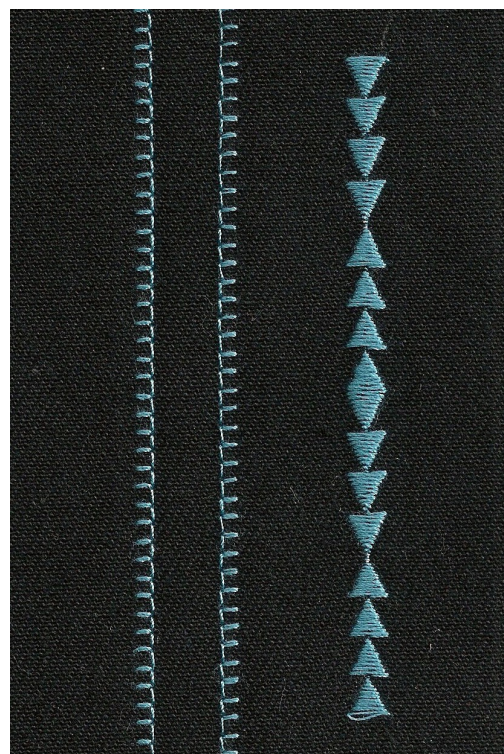
SEW-HOW

Do you know how to:
- Tell the difference between Left/Right and Up/Down Mirror Image functions?

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Balance ⚖

Fabric: Firm woven fabric, 4" x 6" *and* Lightweight tear-away
stabilizer, 4" x 6"
Needle: 80/12 Universal
Thread: 30 wt. cotton embroidery
Needle Position: Default
Presser Foot: Open Embroidery Foot #20/20C/20D

Preprogrammed
Stitch

Spread
Stitch

Condensed
Stitch

*The Balance function is generally reserved for fine tuning the stitch
appearance and is sometimes required because of differences in
fabrics and threads. Balance, however, can also be used as a creative
tool to manipulate the look of a stitch.*

Place the stabilizer behind the fabric. Touch CLR to clear any previous
stitch alterations. Select the Double Overlock stitch; sew about 1½".

Adjust the Balance as described below for your model to spread
the pattern; sew another 1½".

Adjust the Balance as described below to condense the pattern;
sew another 1½".

215, 3 Series: Adjust Balance knob toward "open" symbol to spread pat-
tern; adjust Balance knob toward "closed" symbol to condense it.

530, 550QE: Touch Balance button; press left navigation
arrow to spread stitch pattern (max. 20 steps); press OK to confirm; press
right navigation arrow to condense stitch pattern (max. 20 steps); press
OK to confirm. Press the CLR button to reset balance to basic setting.

560, 580, 710, 750QE: Select the 'i' icon and select Balance; turn the stitch
width and/or length knob so the stitch pattern is identical with the stitch on
the fabric. Sew from this screen or touch the 'i' with the back arrow to return
to the sewing screen, CLR returns the stitch to normal settings.

780, 880: Select the 'i' icon and select Balance; the right side of
screen shows stitch pattern as programmed. Use the multi-
function knobs or the +/- icons to adjust the stitch to match your
sewn sample; stitch. Touch the back arrow twice and the alteration
is saved. Press CLR to return stitch to normal.

820, 830: Select the Balance function; two pictures appear on
the screen, both showing the stitch in its programmed form.
Using the Stitch Length knob, adjust the stitch image on the
right side of the screen so it looks exactly like the stitch sample on
your fabric. Touch OK or press the 'check' to confirm; the
8-series and the 780 automatically correct the stitch balance while
sewing, calculating the proper setting to achieve the
appearance of the original stitch (left screen).

SEW-HOW

Do you know how to:
- Fine-tune the stitch balance on your
  model?

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Balance Bonus / Distortion

Fabric: Firm woven fabric, 4" x 6" *and* Lightweight tear-away stabilizer, 4" x 6"
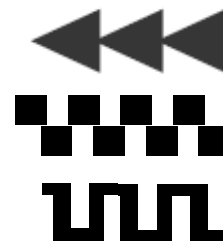**Needle:** 80/12 Universal
Thread: 30 wt. cotton embroidery
Needle Position: Default
Presser Foot: Sideways Motion Foot 40C *only*

**Balance Bonus:
B 780 & 830**

**Distortion:
B 880**

Place the stabilizer behind the fabric.

Touch CLR to clear any previous stitch alterations.

Attach Sideways Motion Foot 40C to the machine. This foot must be used because of the sideways movement of the feed dog. This technique is never sewn with Dual Feed.

Select Stitch #401; select Pattern Repeat 1x. Stitch one pattern.

Select the Balance function; disengage the Pattern Repeat function. As you sew, turn the stitch width knob to alter the feed of the fabric and skew the stitch, moving from positive 14 to negative 14 and back again. The knob may be moved as you sew, creating a waved stitch effect.

After sewing one "row" of stitches, sew two additional ones using #405, and #429. Almost any stitch will work but this technique works especially well and is most attractive with compact stitches.

Note: This is a hidden and exclusive feature on the BERININA 830 and 780 only.

880 Only: Distortion

Previously known as Balance Bonus, this feature now has it's own icon on the 880 model called Distortion!

Select stitch #406 from the 400 folder. Touch the i icon, then the Distortion icon.

Sew while adjusting the Stitch Width and Stitch Length knobs to creatively alter the baseline.

As this is a sideways motion sewn stitch, the machine recommends Foot #40C to produce the best results.

Note: Distortion may NEVER be done with Dual Feed. Dual Feed can not be used with Sideways Motion stitching.
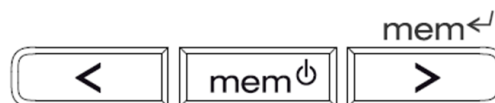
SEW-HOW

Do you know how to:
- Adjust the Balance function as you sew?

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Memory: Accessing and Programming

BERNINA 3 Series

Accessing Memory: Press the center **mem** button on the front of the machine. The memory cursor appears on-screen at left, the number of available spaces blinks, and the word **mem** appears.
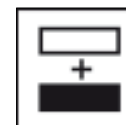
3 Series

Programming Memory: Select the desired stitch; the stitch number appears on screen. Touch the **mem insertion** button; the selected stitch is programmed. The number of available spaces appears on screen. Continue programming in this manner. Scroll through programmed memory using the arrows on either side of the center **mem** button. Altered stitches can be saved in memory, including their adjusted length, width, and needle positions.

BERNINA 5 Series, 750, and 710

Accessing Memory: Press the Home button, navigate to the Combi-Mode icon; press OK.

Programming Memory via Navigation: Navigate to the Decorative Stitch Menu and press OK. Navigate and select one of the numbered menu options and press OK; Navigate to the stitch and press OK to enter the stitch into the combination.

5 Series, 750, 710

Continue to use the navigation arrows to scroll within the menu adding stitches or select the Back button and select stitches from another menu. To work with Lettering, navigate and select the alphabet icon and select from 1 of 4 alphabet choices. Navigate to each letter, number or special character and press OK to create the combination.

Programming Memory via Direct Entry: Press Home; enter the stitch number from the keypad. Each entered stitch number adds the stitch to the combi-edit display.

BERNINA 780, 880, 830, 820

Accessing Memory: Select the Combi-Mode icon and the stitch altering area becomes the combination area. On the 780 and 880, the action bar displayed to the right of the stitch altering area also displays the combination.

780, 880

Programming Memory: Select the desired stitch; it is automatically entered into the Stitch Altering Area and the Action Bar (780/880). A blue background (820, 830), a blue stitch (560, 580, 710, 750QE), or a gray background (780, 880) denotes the selected stitch. Stitch alterations that are made affect the selected stitch. The cursor is indicated by a dotted line and indicates the position of the cursor. Continue programming in this manner until all stitches in the sequence are entered into memory.

830, 820

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Memory: Saving, Deleting & Retrieving

BERNINA 3 Series
Saving in Memory: stitches or letters are saved once entered. Individual stitch patterns, letters or numbers can be deleted or overwritten.

Delete from Memory: To clear all contents from memory, hold the CLR and center mem simultaneously button until a number representing the total number of memory spaces shows on the screen.

Retrieving Stored Memory: Open the Memory by pushing the center mem button.
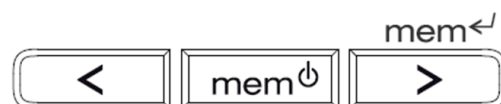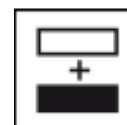
3 Series

BERNINA 530 and 550 QE
Saving in Memory: stitches or letters are saved once entered. Use the trashcan to delete all memory contents at one time.

Delete from Memory:
Press the back button (arrow), navigate to the Trash Can, then press OK.

Retrieving Stored Memory: Navigate to Combi Mode and press OK.

BERNINA 560, 580, 710 and 750 QE
Saving in Memory: Touch the Personal Program Icon and select the Save Icon. Touch the highlighted stitch combination to complete the save operation.

5 Series, 750, 710

Delete Individual Characters: Navigate to the stitch to be deleted using the scroll arrows and then select the Trash Can.

Delete all Contents: Touch the i button, select the Editing Complete Combination icon, and then select the Trash Can. Touch Green Check to confirm.

Retrieving Stored Memory: Open Combi Mode; go to Personal Program. Select the Combination Folder and then select the desired combination.

BERNINA 780, 880
Delete Individual Characters: Touch the character or stitch pattern in the action bar with your finger or stylus, then "swipe" to the right or left.

Delete all Contents: Touch the i button, select the Editing Complete Combination icon, and then select the Trash Can. Touch Green Check to confirm.

B 780
B 880

Retrieving Stored Memory: Open Combi-Mode; go to Personal Program. Touch the File Drawer and then select the desired combination.

BERNINA 820, 830
Once you have programmed the desired stitches & alterations, select the flashing file drawers with Save icon. Touch an empty drawer to save.

Delete from Memory: To delete individual characters, touch the stitch and then select the Trash Can.

8 Series

Delete all Contents: Touch the Multifunction icon (eyeglasses), select and then select the Trash Can. Touch Green Check to confirm.
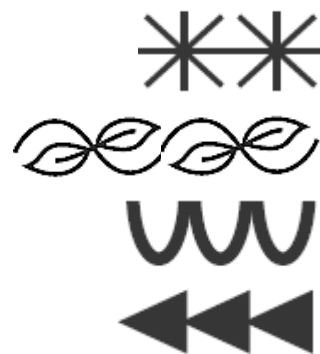
made to create **BERNINA**

Memory/Combi Mode

Fabric: Firm woven fabric, 4" x 6" *and* Lightweight tear-away stabilizer, 4" x 6"
Needle: 80/12 Universal
Thread: 30 wt. cotton embroidery
Needle Position: Default
Presser Foot: Open Embroidery Foot #20/20C/20D

Place the stabilizer behind the fabric. Touch CLR to clear any previous stitch alterations.

Row #1
- Access Memory; program the indicated stitch sequence (1 star, 3 leaves, 1 star).
- Engage Pattern End 1x and the Securing function (if available).
- Stitch one complete combination (if the Securing function is engaged, the machine will stop automatically).

Note: On the 560, 580, 7 Series, and 880, select Pattern Repeat for the combination by touching the 'i' and then select Editing the Complete Combination icon.

Row #2
- Clear Memory.
- Select the Scallop stitch; enter into Memory one time.
- Enter the Scallop stitch into Memory again (one time).
- Engage Left/Right Mirror Image.
- Sew a row along the length of the fabric.

Row #3
- Clear Memory.
- Select the Arrowhead stitch. and Pattern Extend 3x (830, 820) or 300% (580, 7 Series, 880).
- Enter the altered arrowhead into Memory two times.
- Engage the Up/Down Mirror Image.
- Sew a row along the length of the fabric.

1   2   3

The following parameters can be altered separately within a combination:

FOR EACH STITCH: Stitch Length; Stitch Width; Needle Position; Tension; Balance; Long Stitch; Pattern Extend/Elongation; Left/Right Mirror Image; Up/Down Mirror Image; Securing Function; Sub-Divider (560, 580, 7 Series, and 8 Series models only)

FOR EACH COMBINATION: Motor Speed; Left/Right Mirror Image

SEW-HOW

Do you know how to:
- Access the memory on your machine?
- Stitch the combined stitches from your machine's memory?

made to create **BERNINA**

A *A*

Fabric: Firm woven fabric, 4" x 6" *and* Lightweight tear-away stabilizer, 4" x 6"
Needle: 80/12 Universal
Thread: 30 wt. cotton embroidery
Needle Position: Default
Presser Foot: Open Embroidery Foot #20/20C/20D

Touch CLR to clear any previous stitch alterations. Place the stabilizer behind the fabric.

Row 1

Select the Alphabet button or menu. Scroll to select the alphabet style.

Program BERNANA and select Pattern End 1x; stitch. *Note: Use instructions on page 13 for accessing and programming the memory.*

Edit, changing the first "A" to an "I" to spell BERNINA following the appropriate directions below, then stitch the first row.

3 Series: Navigate the cursor to the left of the undesired character (A); press CLR. Navigate to the desired character (I) and press the mem insertion button.

530, 550QE: Use the navigation arrow the cursor to the left of the undesired character (A). Navigate to the Trash Can and select OK. Navigate to the desired character (I) and press OK.

560, 580, 710, 750QE: Touch the undesired character (A) and then touch the Trash Can. Scroll to the desired character (I); select it to insert into the combination.

780, 880: Select, hold, and swipe the undesired character (A) from the action bar to delete. Reposition the cursor in the combination at the place of insertion and select desired character (I).

820, 830: Touch the undesired character (A) and then touch the Trash Can. Reposition the cursor in the combination at the place of insertion and select desired character (I).
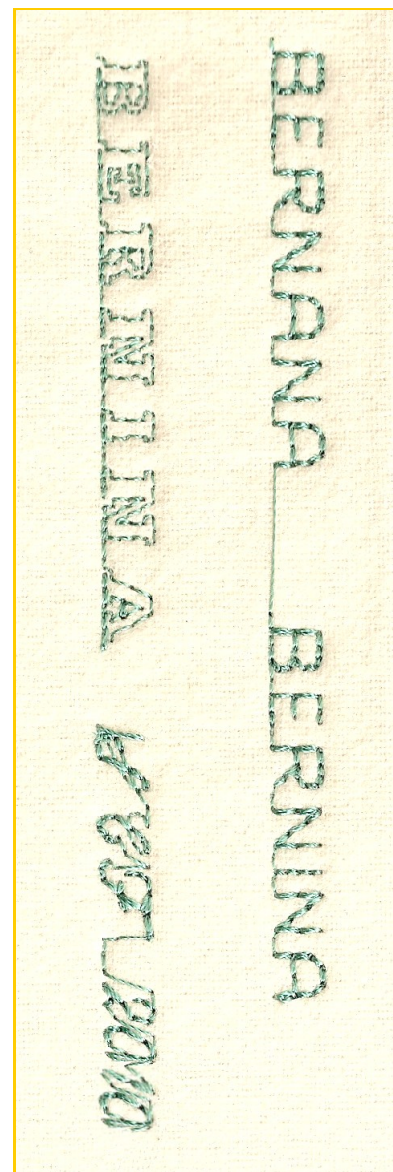
Row 2

Program BERNINA, your name, and/or the date in a mix of styles as available on your model.

SEW-HOW

Do you know how to:
- Program lettering into the memory of your machine?
- Edit lettering already programmed?

made to create **BERNINA**

Fabric: Heavy flannel, 6" x 6" *and* Lightweight tear-away
    stabilizer, 3" x 6"
Needle: 80/12 Universal
Thread: 30 wt. cotton embroidery
Needle Position: Default
Presser Foot: Automatic Buttonhole Foot #3A

Long Term Buttonhole Memory: Save buttonholes that you use over and over (shirts for example).

For all models, you must first make a buttonhole in the desired size using Automatic Buttonhole Foot #3A. (see Basic Operation Workbook 1 for directions). To save the buttonhole in Long Term Memory, follow the steps below for your model.

3 Series
After the buttonhole is complete, press the MEM insertion button; buttonhole is now saved. To retrieve, select the buttonhole type and press the center Mem button. *Note: One buttonhole of each style type can be saved.*

530, 550
After the buttonhole is complete, press OK.

To test, turn machine off and wait 60 seconds. Turn machine back on. Select the Standard Buttonhole and the word MEM will be displayed next to the buttonhole graphic, indicating it will sew the saved buttonhole.

Note: Only one buttonhole may be saved in Long Term Memory on the 530/550 Series machines. To clear a saved buttonhole, Press and hold the CLR button until an audible beep sounds and the word MEM disappears from the screen.

560, 580, 7 Series, 880
After the buttonhole is complete, Select the Personal Program Menu, press the save Icon and select the buttonhole to save.

To test, turn machine off and wait 60 seconds. Turn machine back on. Select the Standard Buttonhole from the Personal Program Menu

Note: Multiple Buttonholes may be stored in the Personal Program and retrieved as needed.

820, 830
Select the Stitch Altering Area (SAA). Select Save Settings. To test, turn machine off and wait 60 seconds. Turn the machine back on. Select the Standard Buttonhole; touch the On-screen Measuring icon; press OK.

Note: To clear a saved buttonhole, a new one must be programmed over the previous one.

SEW-HOW

Do you know how to:
- Program a buttonhole into the memory of your machine?
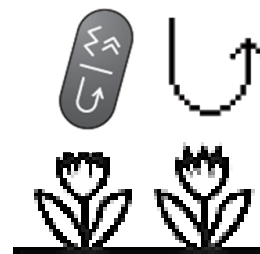- Retrieve a programmed buttonhole?

made to create **BERNINA**

Fabric: Firm woven fabric, 4" x 6" *and* Lightweight tear-away-stabilizer, 4" x 6"
Needle: 80/12 Universal
Thread: 30 wt. cotton embroidery
Needle Position: Default
Presser Foot: Clear Foot #34/34C/34D

As the name implies, Continuous Reverse is a function that sews stitch patterns in reverse. Backstepping does this also, but is more precise as it actually records the last 20 seconds of stitching on the 820 & 830 and will retrace the last 200 needle penetrations on the 780 & 880 to give accurate stitch-by-stitch reverse sewing. This feature is great when you have a thread break or unknowingly run out of bobbin thread. You can re-thread and backstep to the exact location of the last sewn stitch.

Touch CLR to clear any previous stitch alterations.

Place the stabilizer behind the fabric.

Select the Tulip stitch. Engage the Needle Stop Down function if available.

Sew 6 tulips on the fabric and stop with the needle down; do not move the fabric.

Select the Continuous Reverse or Backstepping button. Continue stitching; the machine will now stitch backward, forming tulips on top of the previous ones. While the third tulip is stitching, engage the Pattern End function; the machine will stop at the end of the pattern.

Clip threads. Touch CLR to turn off the function.

To access Continuous Reverse:

- **215, 3 Series:** "Double-click" Quick Reverse button
- **530, 550**: Press & hold Quick Reverse button; wait for beep
- **560, 580, 7 Series, 880:** Press "i" on screen; then press Quick Reverse icon or Backstepping (780 & 880) icon. *Note: On the 780 and 880 models, the quick reverse button on the machine can be programmed in the setup menu to operate as quick reverse or backstepping.*
- **820, 830:** Press Quick Reverse or Backstepping button

SEW-HOW

Do you know how to:
- Sew backward on your model?
- Use the Free Hand System (FHS) on your machine?

made to create **BERNINA**

Fabric: Two pieces medium weight cotton, 12" x 12" each *and one piece* low-loft cotton batting, 12" x 12"
Needle: 80/12 Quilting needle
Thread: King Tut 40 weight quilting (Superior Threads) - needle
　　and Bottom Line (Superior Threads) - bobbin
Needle Position: Default
Presser Foot: Darning Foot #9 *or* Freehand Embroidery Foot #24
　　or Freehand Quilting Foot #29/29C

Free-motion stitching refers to sewing without the feeding aid of the sewing machine. The feed dog is lowered and the fabric stays in the same place unless you manually move it. Free-motion stitching is used in quilting, bobbinplay, and thread painting.

This type of stitching is not difficult but it does take practice to master the continual movement needed to form even and consistent stitches. Moving the fabric too quickly creates long, unattractive stitches, and moving too slowly results in a build-up of thread instead of beautiful areas of decorative stitching.

There are several BERNINA presser feet designed for free-motion stitching, each with a patented hopper mechanism that holds the fabric down as the needle pulls away, making it easy to move the fabric.

To become familiar with this type of stitching, make a "quilt sandwich" with the batting between two layers of fabric, and practice "drawing" a variety of shapes (see below) on fabric as follows:

1. Using the foot control or the Stop/Start button to run the machine, move the fabric in a forward and back motion.
2. Move hands from side to side, then top to bottom, keeping the lines of stitching perpendicular to each other.
3. Move hands in smooth curves from left to right.
4. Move hands in cursive "l" shapes.
5. Create stippling shapes – think of interconnecting puzzle pieces with evenly sized "bumps." Avoid "painting" yourself into a corner and/or stitching across a previously stitched line.
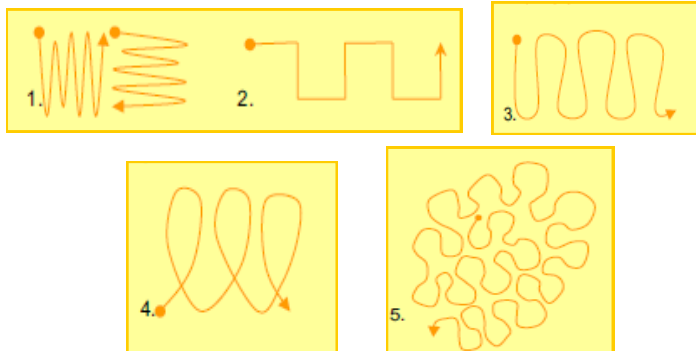
SEW-HOW

Do you know how to:
- Lower the feed dog?
- Move the fabric for even and consistent stitching?

made to create **BERNINA**

The BERNINA Stitch Regulator (BSR) is designed to assist with free-motion stitching techniques by helping to keep the stitch length regular and consistent, eliminating hours of practice.

The BSR Foot is equipped with three unique soles, each designed for different sewing situations. Experiment with each sole; personal preference plays a major role in determining which sole is most appropriate for you to use with each project and/or technique.

- A closed, O-shaped, metal sole for detailed free-motion stitching techniques such as stippling, bobbinplay, and thread painting.

- An open, C-shaped, metal sole for added visibility in front of needle when following printed or marked lines. The "prongs" of this sole are slightly curved, facilitating movement over several layers of fabric and/or thread.

- A large, clear plastic sole for echo-quilting and medium to large-scale free-motion stitching techniques. The large sole moves easily over raised areas; useful for stitching thick batting, as it compresses a larger area around the needle, increasing visibility. Cross-hairs and concentric circle markings aid in accurate stitch placement.

**BERNINA Stitch Regulator
Compatible Models**

880, 830, 820—Straight/Zigzag—Standard
780, 750QE—Straight/Zigzag—Standard
710—Straight/Zigzag—Optional
580, 550QE—Straight/Zigzag—Standard
530, 560—Straight/Zigzag—Optional

BERNINA Stitch Regulator Mode 1

When BSR Mode 1 is selected the needle immediately starts to move up and down, ready for the fabric to be moved for stitching.

BERNINA Stitch Regulator Mode 2

When working in BSR Mode 2, the motor is engaged only when the fabric is moved under the foot, giving the stitcher time to stop and think about the path the needle is taking. *Note: If there is no movement for over approximately seven seconds, the BSR will automatically deactivate.*

Install and activate the BERNINA Stitch Regulator; lower the feed dog (the 8 Series models automatically lower the feed dog when the BERNINA Stitch Regulator is selected). Check to be sure the motor speed is set to full. *Note: It is possible to stitch faster than the BSR can regulate. Engage the audio signal to alert you when you exceed the "speed limit".*

Create a sample using the BERNINA Stitch Regulator using the sole and Mode of your choice, following the Free-motion stitching instructions on the previous page. When stitching is complete, raise the feed dog to sewing position.
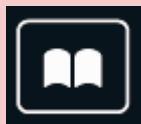
830, 820   780, 880   750 / 710 / 580 / 560

BERNINA 560*, 580, 7 Series* and 8 Series machine owners have information about the BERNINA Stitch Regulator available at any time. Select the Tutorial icon, then BSR to obtain on-screen info.

BSR is optional for models 530, 560, 710

made to create **BERNINA**

Fabric: Two pieces medium weight cotton, 12" x 12" each *and*
Low-loft cotton batting, 12" x 12"
Needle: 80/12 Quilting needle
Thread: King Tut 40 wt. quilting (Superior Threads) - needle *and*
Bottom Line bobbin threads (Superior Threads) - bobbin
Needle Position: Default
Presser Foot: BERNINA Stitch Regulator #42

Use the BSR zigzag option to easily and quickly create freehand embroidery designs, shade or accent fabric motifs, and couch decorative fibers.

Make a "quilt sandwich" with the batting between the fabric.

Connect the BERNINA Stitch Regulator to the machine and select the BSR Zigzag stitch. Select Mode 1 or 2 as desired. Set the presser foot pressure to 1. Lower the feed dog (8 Series models do this automatically).

Using a fabric marker, trace or draw leaf shape (1) on fabric, starting at the upper edge and drawing in one continuous line. Layer fabric and batting to create a "quilt sandwich." Thread machine as indicated above. Place fabric under the BERNINA Stitch Regulator foot.

Select the BSR straight stitch. Stitch the leaf shape, tracing lines several times (2).

Select the BSR zigzag stitch Shade the left side of the leaf (3).

Experiment with different stitch lengths and widths, making note of your preferences.

1

2   3
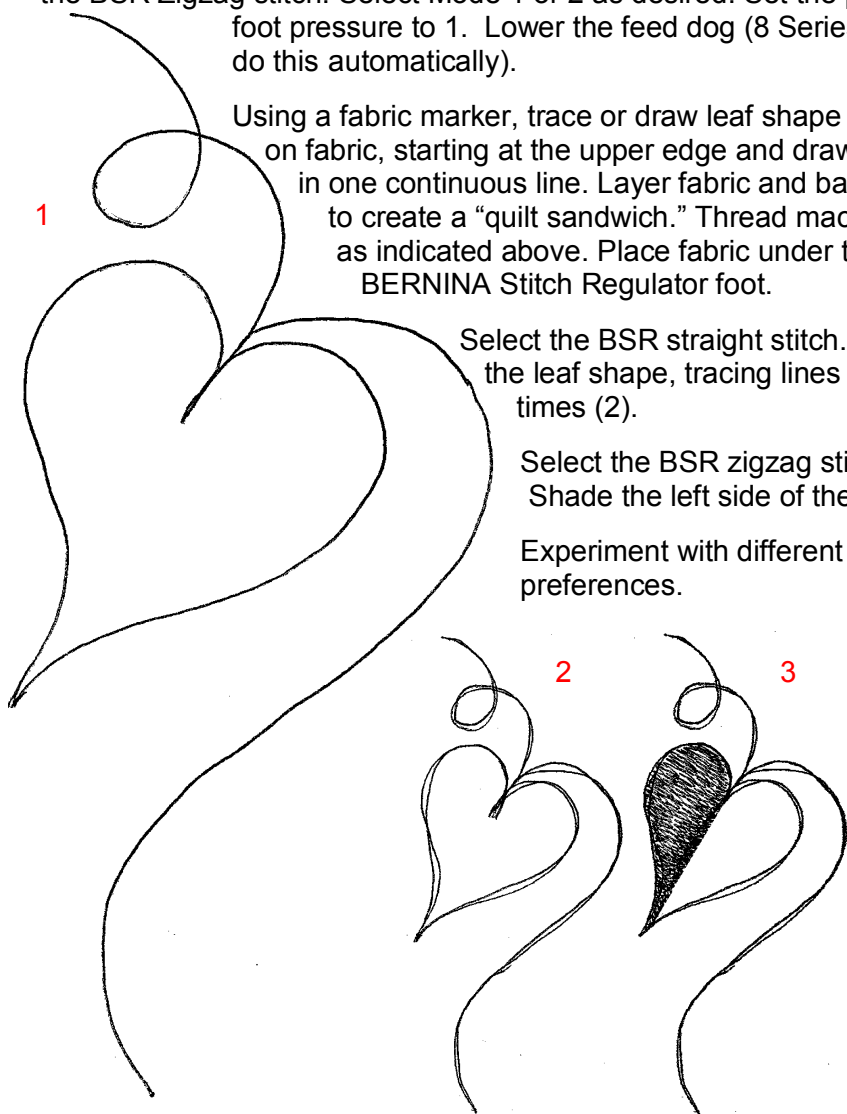
SEW-HOW

Do you know how to:
- Attach the BERNINA Stitch Regulator to the machine?

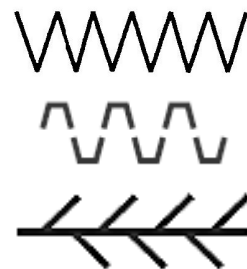*made to create* **BERNINA**

Double Needle Stitching

Fabric: Firm woven fabric, 4" x 6" *and* Lightweight tear-away stabilizer, 4" x 6"
Needle: 2.0 mm or 3.0 mm Double Needle
Thread: Two spools, 30 wt. cotton embroidery
Needle Position: default
Presser Foot: Open Embroidery Foot #20/20C/20D

Touch CLR to clear any previous stitch alterations.

Place the stabilizer behind the fabric.

Insert the Double Needle and thread the machine with 2 colors of thread. Make sure you have the appropriate stitch plate (not the straight stitch plate). *Note: 8 Series models must be manually threaded for double needle stitching.*

Engage the Security Program, if available, selecting the appropriate Double Needle option. *Note: If these features are not available, check to be sure the needles will not strike the foot by turning the handwheel to walk the machine through the first stitch.*

Starting with the stitches shown above (Zigzag, Running, and Feather), select several different stitches and sew across the fabric randomly. Carefully check the stitch width before sewing to avoid breaking your needle.

Double Needle Tips

- *When doing decorative needle work you should sew slowly – change motor to half speed if this option is available.*
- *If your model does not have a Double Needle Limitation function or Security Program, use this formula to determine the widest stitch width possible before the needle strikes the presser foot:*

> *Widest width of the machine*
> *— Width between the two needles*
> *Widest stitch width possible*
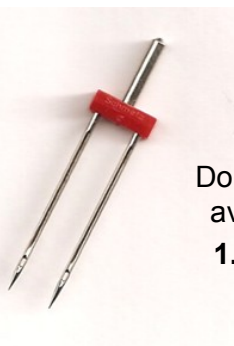
Double Needles are available in sizes:
1.6/70 to 8.0/100

SEW-HOW

Do you know how to:
- Thread for Double Needle sewing?
- Insert a Double Needle?
- Turn a corner with a Double Needle?

made to create **BERNINA**

Wing Needle Stitching

Fabric: Cotton organdy or batiste, or starched linen 4" x 6"
Needle: Wing size 100/16
Thread: 60 wt. cotton embroidery
Needle Position: default
Presser Foot: Clear Foot #34/34C/34D or Open Embroidery
Foot #20/20C/20D
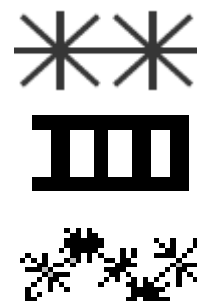
Touch CLR to clear any previous stitch alterations.

Insert the Wing needle.

If available, engage the Security Program, selecting the Wing Needle option. This alters the stitch width so that the "wings" of the needle will not hit the presser foot.

Select the Star stitch and sew one row along the length of the fabric.

Select the Ladder stitch and sew a second line of stitching next to the first, using the edge of the presser foot as a spacing guide.

Select the "Daisy Chain" stitch if available and sew a third row as shown.

Wing Needle Tips

- *When selecting stitches to use with a Wing needle, look for stitches where the needle enters the same hole multiple times.*

- *Stitching on the diagonal (bias) of the fabric allows holes created by the Wing needle to open more easily. To help support fabric and stitching, temporarily bond a layer of heavy, water-soluble stabilizer to wrong side of fabric using a temporary spray adhesive. Remove the stabilizer completely after stitching is finished.*
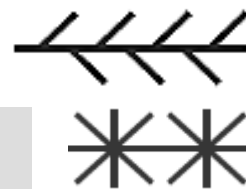
Wing Needles are available in sizes:
100/16 and 120/20

SEW-HOW

Do you know how to:
- ▪ Insert a Wing needle into the machine?
- ▪ Select a stitch suitable for Wing needlework?

made to create **BERNINA**

Fabric: Firm woven fabric, 4" x 6" *and* Lightweight tear away-stabilizer, 4" x 6"
Needle: 80/12 Universal
Thread: 30 wt. cotton embroidery for the needle *and* Heavy decorative thread for the bobbin
Needle Position: Default
Presser Foot: Open Embroidery Foot #20/20C/20D or Clear Embroidery Foot #39/39C
Additional Accessory: Black Latch or auxiliary bobbin case

Place the stabilizer behind the fabric. *Optional: Use temporary spray adhesive to hold the stabilizer in place.*

Wind a bobbin (on the machine at a slow speed) half full of heavy decorative thread, such as Superior Threads Razzle Dazzle, YLI Candlelight or YLI Pearl Crown Rayon.

For CB and Rotary Hook models, insert the bobbin into the Black Latch Bobbin Case; adjust (loosen, in most cases) the tension screw as necessary. For 7 Series machines, insert the bobbin into the 7 Series Red Bobbin Case; make any tension adjustments via the Upper Thread Tension. For 8 Series machines, remove the bobbin from the machine and adjust the tension as directed in the manual using the Multi-function Tool.

Thread the needle with regular sewing thread; select a Feather stitch. *Note: Select stitches that are more open, rather than heavy so the decorative thread has room to form the stitch.*

Place the stabilized fabric *right side down* under the presser foot, with the stabilizer facing up. Use the handwheel to bring the bobbin thread up to the surface. You may need to "tug" on the needle thread to pull the heavy bobbin thread through the fabric. Hold the thread tails behind the presser foot.

Sew a row of stitches; when finished, turn the fabric right side up. The bobbin tension can be adjusted to alter the look of the stitch as desired. Use a hand-sewing needle to bring the decorative thread to the back of the work; knot the thread tails to secure the stitching.

Repeat, using the Star stitch.

Bobbinplay Tips

- *ONLY use an auxiliary bobbin case; do NOT adjust the tension on your regular bobbin case.*

- *Use a contrasting color of bobbin thread; it will be slightly visible on the right side of the fabric, making the decorative stitches resemble hand-stitched embroidery.*

- *Increase the needle tension (along with the loosened bobbin tension) if needed to make the stitch look as desired.*

SEW-HOW

Do you know how to:
- Adjust the bobbin tension?
- Select a stitch suitable for bobbinplay?

made to create **BERNINA**

The following stitches are used in **Workbook 2: Stitch Fun**.
The chart gives the stitch number for each model (— indicates the stitch is not available).

Stitch	8 Series				7 Series			5 Series			3 Series			2 Series
	880	830	820	780	750 QE	710	580	560	550 QE	530	380	350PE	330	215
Alphabet and Monogram Styles	11	11	10	8	6	5	7	5	4	4	2	2	1	—
Arrowhead	401	401	401	401	401	401	401	401	401	401	38	34	22	—
Blanket	1329	1329	1329	1329	1329	1329	1329	1329	1329	1329	107	78	39	—
Checkerboard	405	405	405	405	405	405	405	405	405	405	41	37	28	—
Daisy Chain	114	114	114	114	114	114	114	114	—	—	—	—	—	—
Double Overlock	10	10	10	10	10	10	10	10	10	10	8	8	8	6
Feather	1332	1332	1332	1332	1332	1332	1332	1332	1332	1332	110	81	40	—
Floral	123	123	123	123	123	123	123	—	123	123	34	—	—	—
Geometric	429	429	429	429	429	429	429	429	429	429	53	49	—	—
Heart	413	413	413	413	413	413	413	413	413	413	44	40	25	—
Ladder	702	702	702	702	702	702	702	702	702	702	72	62	35	—
Leaf	717	717	717	717	717	717	717	717	717	717	82	68	—	—
Running	4	4	4	4	4	4	4	4	4	4	4	4	4	3
Scallop	416	416	416	416	416	416	416	416	416	416	46	42	27	—
Standard Buttonhole	51	51	51	51	51	51	51	51	51	51	0	0	0	11
Star	711	711	711	711	711	711	711	711	711	711	78	66	36	—
Straight	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tulips	101	101	101	101	101	101	101	101	101	101	25	23	18	—
Zigzag	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Machine Features & Functions

The following features and functions are used in **Workbook 2: Stitch Fun.**

Feature/Function	8 Series			7 Series			5 Series				3 Series			2 Series
	880	830	820	780	750 QE	710	580	560	550QE	530	380	350PE	330	215
Balance	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
BERNINA Stitch Regulator	Straight Zigzag	Straight Zigzag	Straight Zigzag	Straight Zigzag	Straight Zigzag	Optional Straight/Zigzag	Straight/Zigzag	Optional Straight/Zigzag	Straight Zigzag	Optional Straight/Zigzag	—	—	—	—
Bobbin System	Jumbo	Jumbo	Jumbo	B9	B9	B9	Rotary	Rotary	CB	CB	CB	CB	CB	CB
Continuous Reverse / Backstepping	Both	Both	Both	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR
Free Hand System	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	—
History Stitches	15	15	12	15	—	—	—	—	—	—	—	—	—	—
Long-term Memory/ Stitch Combinations	Multiple Drawers	Multiple Drawers	Multiple Drawers	Multiple Drawers	Multiple Drawers	Multiple Drawers	Multiple Drawers	Multiple Drawers	100 characters	100 characters	30 characters	30 characters	30 characters	—
Mirror Image—Horizontal	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	—	—	—
Mirror Image—Vertical	yes	yes	yes	yes	yes	yes	yes	yes	—	—	—	—	—	—
Needle Stop Up/Down	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Pattern Begin	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	—	—	—	—
Pattern End	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	—
Pattern Extend 2-5x	—	yes	yes	—	—	—	—	—	—	—	—	—	—	—
Pattern Elongation	yes	—	—	yes	yes	yes	yes	—	—	—	—	—	—	—
Pattern Repeat 1-9x	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	—	—	—	—
Presser Foot Pressure	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	—	—	—	—
Security Program	yes	yes	yes	yes	yes	yes	yes	yes	—	—	—	—	—	—
Securing Function	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	—	—	—	—
Slide-on Tray	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	opt	yes
Temp. Altered Memory	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

Presser Foot Chart

The presser feet listed below are included with the purchase of each model as indicated on the chart (-- indicates that the presser foot is not included but may be available as an optional accessory). The BERNINA name and numbers are listed and if the bernette has a corresponding presser foot, it is indicated by the letter stamped on the top of the sole. If the bernette foot does not have a letter, it is indicated by an "X". The highlighted feet have snap-on soles. *Note: This chart shows only a partial listing of optional presser feet available. See your local BERNINA dealer for a complete listing of BERNINA and bernette specialty accessories.*

Presser Feet	8 Series		7 Series				5 Series				3 Series			2 Series	1000 Series	bernette					
	880	830	820	780	750 QE	710	580	560	550 QE	530	380	350 PE	330	215	1008	London 3	London 5	London 7	London 8	Seville 4	Chicago
Reverse Pattern Foot #1/1C/1D	1C, 1D	1C, 1D	1C, 1D	1C, 1D	1C, 1D	1C, 1D	1C	1C	1	1	1	1	1	1	1	J	J	T	T	X	T
Overlock Foot #2/2A	2A	2A	--	2A	--	--	2A	2A	2	--	2	--	2	2	2	opt	G	E	E	--	E
Standard Buttonhole Foot #3/3C	3C	3C	--	--	--	--	--		--	--	--			3	3	B				X	
Auto Buttonhole Foot #3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	--			D	D	D		
Zipper Foot #4/4D	4D	4D	4D	4D	4D	4D	4	4	4	4	4	4	4	4	4	I	I	F	I	X	I
Blind Hem Foot #5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	opt	opt	opt	X	--	F
Jeans Foot #8/8D	--	--	--	8D	--	--	8	--	--	--	8	--	--	--	--	--	--	--	--	--	--
Darning Foot #9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	opt	opt	opt	X	--	X
Button Sew-On Foot #18	18	18	--	--	--	--	--	--	--	--	--	--	--	--	--	X	X	X	X	X	H
Open Embroidery Foot #20/20C/20D	20C	20C	20C	20C	20C	--	20C	20C	20	--	20	20	--	--	--	opt*	X*	A*	A*	--	A*
Embroidery Foot #26	26	26	--	26	26 w/emb	--	26	26 w/emb	--	--	--	--	--	--	--	--	--	--	--	--	--
Patchwork Foot #37/37D	--	--	37D	--	37D	--	--	--	37	--	--	37	--	--	--	--	--	--	--	--	--
Sideways Motion Foot #40C	40C	40C		40C																	
BERNINA Stitch Regulator #42	42	42	42	42	42	--	42	--	42	--											
Walking Foot #50	--	--	--	--	--	--	--	--	50	--	--	50	--	--	--	--	--	--	--	--	--

* satin stitch foot—no open toe