



## **Embroidery Machine Basics** For all current BERNINA and bernette models

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Congratulations on your purchase of a BERNINA embroidery machine and/or module! This workbook is designed to be used in conjunction with the My BERNINA Classes offered at your BERNINA store, and contains a series of exercises intended to familiarize you with the features of your new BERNINA embroidery machine.

In addition, you will learn about needles, threads, stabilizers, embroidery hoops and accessories, all of which will increase your knowledge of sewing and assist you in achieving success in all of your embroidery endeavors.



Introduction

Once you have completed the exercises designated for your BERNINA machine, keep this workbook as a reference guide as you use your machine and explore the creative possibilities it affords.

BERNINA of America strives to provide its customers not just with quality sewing machines, but with informative publications and classes. You'll find additional information on the BERNINA of America website –www.bernina.com – offering free projects and embroidery designs, inspirational stories, and interviews with creative stitchers.

Learn to use your BERNINA embroidery machine to its fullest extent and enjoy being creative with fabric and thread!





#### deco 340 Embroidery Machine

- Turn the machine OFF; insert the machine plug into the machine. *Note: The symbol "0" indicates the switch is in the "off" position*.
- Connect the machine to a power outlet and turn it on. Note: After turning on the power, it takes about six seconds for the machine to boot up and the pattern selection window to be displayed on the touch screen.

#### bernette Chicago 7 Embroidery Machine

- · Remove the sewing table to the left side
- Move the feed dog control to lower the feed dog (b)

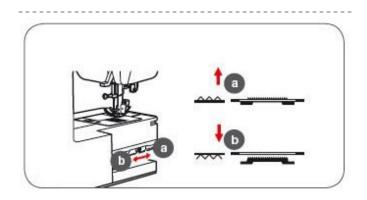
· Insert the embroidery module connection into the

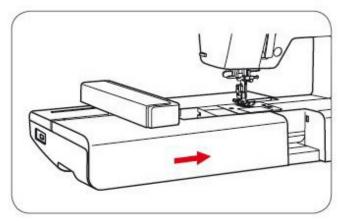
Push lightly until the module clicks into place

machine connection port

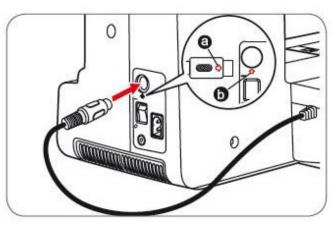
#### deco 340 Tips

- Always provide sufficient clearance for the embroidery carriage behind your machine before starting to stitch.
- Do not force to move the carriage by hand.
- Return the carriage to the idle position before turning the power off.





• Insert the plug into the embroidery module connector of the machine, aligning the arrow on the plug (a) with the arrow on the machine (b)





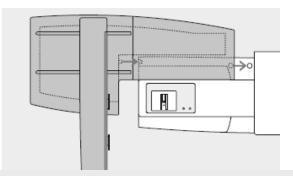
## Machine/Module Set-up

### BERNINA 560 & 580 Embroidery Module

- Module Connection Cable
  - Stored on the bottom back edge of the module
  - Make sure the FLAT side of the cable plug is to the FRONT
- Attaching the Module
  - Place the machine on a flat surface (such as a table or countertop)
  - Place the module on the machine behind the free arm
  - Slide module on from left until lugs engage in base plate
- Removing Module
  - Remove cable plug from sewing/embroidery computer
  - Lift module slightly (do NOT use the embroidery arm to lift the module!); slide the module to the left

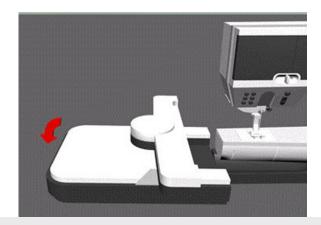
## BERNINA 750 QE, 770 QE, 780, 790, 880 Embroidery Module

- Attaching the Module
  - Place the machine on a flat surface (such as a table or countertop) sturdy enough to support the weight of the machine without sagging
  - Slide the module at an angle from left to right to attach
- Removing Module
  - Detach by lifting left end and sliding to the left



## BERNINA 560 and 580 Tips

- When connecting the embroidery module, make sure that the machine and module are on a flat and even surface.
- Make sure that there is enough space around the sewing computer and embroidery module to allow the unimpeded movement of the embroidery arm.
- Always separate the module and sewing computer for transporting—never transport them as a single unit.



## BERNINA 750, 770, 780, 790 & 880 Tips

- The slide-on table must not be attached while the embroidery module is being attached or removed.
- Make sure there is enough space around the machine and embroidery module to allow the unimpeded movement of the embroidery arm.
- Always separate the machine and embroidery module from one another before transporting – do not transport as a single unit.

## **Preparing to Embroider**

pigtail

#### **Presser Foot**

- Attach Teardrop Embroidery Foot #26 to the machine (BERNINA 5 Series, 7 Series, 8 Series)
- Attach (Simple) Embroidery Foot to the machine (bernette Chicago, deco 340)

#### Needle

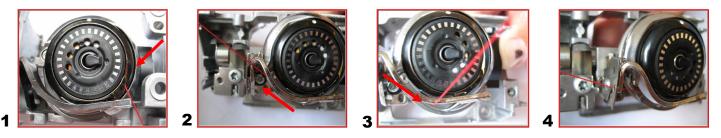
- Use the proper needle for the thread and fabric being used; insert a new needle for each project.
- Needle should be in the highest position when attaching the hoop to prevent snagging fabric and/or bending the needle.

#### **Straight Stitch Plate**

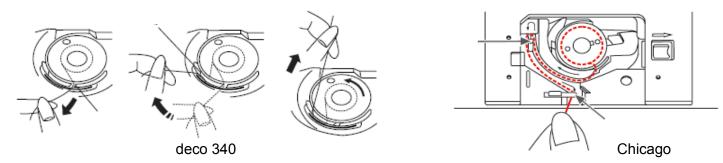
- Reduces flagging of fabric, resulting in improved stitching
- Standard accessory for B 780, 790, 880, 790
- Optional accessory for B 560, 580, 750 QE, 770 QE

### Bobbin

- For BERNINA machines, select models are threaded for increased tension.
- B 560, 580: Use the Embroidery (gold latch) Bobbin Case, threading the "pigtail".
- 7 Series: The bobbin case is threaded the same way for embroidery and sewing.
- B 880: Pull the bobbin thread clockwise, guiding it into the slit on the right hand side of the hook area as shown (1). Then up (2) and down the curve of the retaining finger (3). Bring the thread back to the left, over the thread cutter and cut the thread (4).



- bernette Chicago 7: bobbin case is threaded the same way for embroidery and sewing.
- deco 340: embroidery only, bobbin case is threaded one way.



### **Threading Tips**

- Thread machine with the presser foot up (this releases tension).
- Thread using either the horizontal or vertical spool pin for models with these options:
  - use the horizontal spool pin with cross-wound threads; match spool cap size to end of spool
  - smallest spool cap fits into the end of large cones/spools such as Isacord embroidery thread
  - use the vertical spool pin with stacked threads and for some decorative threads (metallic threads); use the foam disc under the spool to avoid extra tension on the thread.
- Use a thread net to prevent thread from forming loops which might interfere with consistent feeding.



## **Embroidery Thread**

Most designs are digitized for 40-weight rayon or polyester thread, which are the most commonly used types by machine embroiderers. Both have a beautiful rich look; both are widely available. Polyester is stronger, more colorfast, and more abrasion resistant making it especially good for embroidering children's clothing. Polyester is also usually more economical than rayon.

Select high-quality embroidery thread because bargain brands may cause excessive thread breakage while stitching, and may produce undesirable final results. Specialty threads such as metallics, acrylics, and silk may also be used but are often employed as accents rather than for full designs.

## **Bobbin Thread**

Use a lightweight fine thread will help avoid thread build-up on the bottom side of your project, keeping the design supple and avoiding a thick, hard result. Bobbin thread is designed to be strong so it will withstand the high-speed stitching of an embroidery machine. They are usually more economical than embroidery thread and will save time in thread changes if you use the same neutral-colored bobbin thread for all needle thread changes. Most thread companies offer a bobbin

thread, sometimes in a wide array of colors. Because bobbin threads are so fine, your bobbin will hold more so you will be changing the bobbin less frequently than with heavier thread.

## **Embroidery Needles**

Not all needles are appropriate for use in embroidery machines. As with all sewing projects, needle choice is determined by the fabric, thread, and application. For most embroidery, an Embroidery needle is the best choice. They are designed to withstand the faster speed of embroidery machines as well as the wear and tear of stitching through dense designs.

Occasionally, other needles may be recommended for specially digitized techniques, such as a Wing needle for heirloom embroidery.

The size of the needle depends on the fabric you are using. As with any sewing you do, heavier fabric requires a larger needle (higher number) and finer fabrics use a smaller needle (lower number). Note: If stitching a dense design, use a small needle so it will slide into the stitches. You also want to select a point that relates to your fabric. For example, use a Universal for most fabrics, Ballpoint for knits, etc.

Ballpoint needles (designated by SUK) have also shown to have positive results when embroidering with metallic thread. Due to the wiry nature and memory of this type of thread, a traditional embroidery needle with a sharp point can cut the thread, causing breakage. Ballpoint needles are blunt enough to avoid this.

Titanium-coated Embroidery needles are a great choice because they last 3 times longer than regular embroidery needles. They work well for almost any type of embroidery and are especially useful when using an adhesive-coated stabilizer. The coating on the needle helps it move in and out of the stabilizer, resisting any adhesive residue. Titanium needles are often gold-colored and should be changed after 90,000 stitches.

Change your embroidery needle every 2-3 hours or about every 50,000 stitches. This may seem frequent but remember how fast your embroidery machine runs and how many times that needle has to go through the fabric and through layers of stitches and stabilizer compared to regular sewing.







## **Needle and Thread**



Used extensively in machine embroidery, stabilizers are also useful when sewing decorative stitches across the surface of fabric. Adding stabilizer to fabric (usually on the wrong side), provides a foundation that will support the stitching. Without the stabilizer, there will often be puckering of fabric and tunneling of stitches, ruining the beautiful look of embellishment you desire. While there are dozens of stabilizers on the market, there are classified by how they are removed from the fabric after stitching:

### **Tear-Away Stabilizer**

- Most commonly used type of stabilizer, designed to provide temporary support of stitching
- Placed on the wrong side of the project and carefully pulled away once stitching is complete
- Usually available in three weights heavy, medium, and light.
- Stabil-Stick is a tear-away with a peel-away backing that exposes a sticky adhesive
- Hydro-Stick is an adhesive tear-away with a water-activated adhesive on one side that provides a secure bond and a high degree of stabilization for very dense and/or intricate designs.
- Available in white and black
- · Available in several sizes; use one that fits the selected hoop size

### Cut-Away Stabilizer

- Most widely used stabilizer in the commercial embroidery market.
- Does not break down under dense stitching, due to the high fiber – rather than paper – content
- Excess stabilizer is trimmed away after stitching (leave about ¼" of stabilizer around the edges)
- Remaining stabilizer continues to support stitches throughout life of garment/project
- Stabil-Stick is available as a cut-away stabilizer
- Available in fusible and non-fusible versions
- Available in white, black, and beige
- Available in several sizes; use one that fits the selected hoop size

### Water-Soluble Stabilizer

- Used for backing and topping, in single or multiple layers
- Excellent for decorative stitching and cutwork as there are no remnants of stabilizer left after removal (it dissolves)
- As a topping, it keeps stitches from being lost in heavily napped fabrics such as velvet and corduroy
- Aqua Mesh Plus is an adhesive water-soluble stabilizer

## Tips and General Guidelines

Use Cut-away for knit fabrics and Tearaway for woven fabrics.

Stabilizers

Wash-away is great for free-standing lace and when you want no stabilizer to remain in the project (fabric must be able to be moistened).

Multiple lightweight layers of tear-away may be preferable to one heavy layer, as they are easier to remove.

Use PolyMesh behind lightweight or light -colored fabrics as it is designed to minimize "show-through".

Keep a minimum of one roll or package of each of the three types so you'll be ready for almost any stitching situation.





## **BERNINA Hoops**



Small Hoop 72mm x 50mm (approximately 2.7" x 2")



Medium Hoop 100mm x 130mm (approximately 3.9" x 5.1")



Large Oval Hoop 145mm x 255mm (approximately 5.7" x 10")



Mega Hoop 150mm x 400mm (approximately 5.9" x 15.8")



Maxi Hoop\* 210 x 400 mm (approximately 8.3" x 15.8")



Jumbo Hoop 260mm x 400mm (approximately 10.3" x 15.8")

### B 560, 580 Hoops

Standard: Medium, Large Oval Optional: Small, Mega; Freearm Adapter

## B 750 QE, B 770 QE, 780, 790 Hoops Standard: Small, Medium, Large Oval Optional: Mega, Maxi, Jumbo (partial use)

### B 880 Hoops

Standard: Small, Medium, Large Oval Optional: Mega, Maxi, Jumbo

Note: All hoops come with template for centering designs on projects.

## Attaching and Removing **BERNINA Hoops**

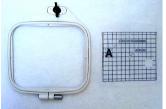
- When attaching hoops, seat the frame securely
- Release the clamp completely before removing the frame from the machine

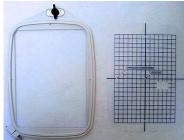




#### deco 340 Hoops

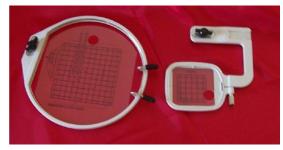
*Standard:* Medium (A), Large (B) *Optional:* Small Free-Arm (C), Round (F)





Medium Hoop A 110mm x 126mm (approx. 4.25" x 5")

Large Hoop B 140mm x 200mm (approx. 5.5" x 8")



Round Hoop F

Free-arm C 50mm x 50mm (approx. 2" x 2")

## Attaching and Removing deco 340 Hoops

- Fit the pins into the carriage holes.
- Turn the attaching knob clockwise so it is parallel with the hoop to lock in place.



## bernette Chicago 7 Hoops

Standard: Large Optional: Medium, Small



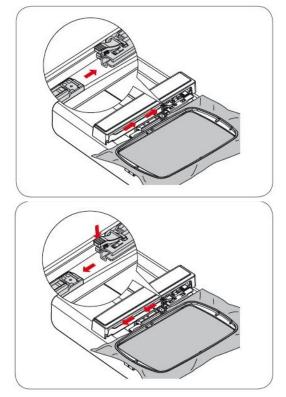
Large Hoop 110mm x 170mm (approx. 4.5" x 6.7") Medium Hoop 100mm x 100mm (approx. 4" x 4")

Small Hoop 40mm x 40mm (approx. 1.6" x 1.6")



## Attaching and Removing Chicago Hoops

- Raise the presser foot.
- Place the embroidery hoop under the presser foot
- To attach the embroidery hoop, slide the hoop connector into the hoop securing lever from front to back until it clicks.
- To remove the hoop, press the snap-on embroidery hoop holder down and pull the hoop toward you smoothly and carefully.



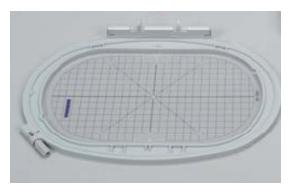




Loosen screw or knob; lay hoop on flat surface



Lay fabric on outer hoop; position inner hoop on fabric and push into place



Place template in hoop to ensure the design is centered

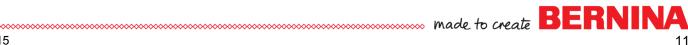
## Hooping

- Find the center of the fabric; mark the center
- Separate the embroidery hoop sections
  - Loosen the screw or knob. It should be loose enough that fabric and stabilizer both will EASILY fit into the hoop
- · Secure fabric/stabilizer in the hoop
  - Lay the outer hoop on a HARD, FLAT surface
  - (deco 340 only: Place so the clamp lies off the edge of the surface and the hoop lies flat.)
  - Secure stabilizer to the back of the fabric by lightly spraying stabilizer with temporary adhesive spray (see Hooping Tip box below)
  - Place fabric and stabilizer on a firm surface
  - Position template inside the inner hoop
  - Position inner hoop on fabric, aligning markings
  - Grasping both inner hoop and fabric/stabilizer, insert them into the outer hoop, making sure that the arrows align at the edges of both the inner and outer hoops
  - DO NOT DISTORT THE FABRIC when tightening the screw on the hoop
  - Hooped fabric should be taut, but not stretched or distorted
  - Place template into hoop to ensure that the design is centered in the hoop
  - Remove template before stitching. Note: There are finger holes to facilitate easy removal of the small and medium hoop templates; special attachment clips are included with the Large Oval, Mega, and Jumbo hoop templates to facilitate easy removal.

## Hooping Tip

For easier hooping of the layers, adhere the stabilizer to the fabric using a temporary spray adhesive. Great for basting or holding layers of fabric and/or batting together. Can be used as a repositionable spray, allowing items to stay sticky but be repositioned on other surfaces. Works well for securing "hard-to-hoop" items such as collars and cuffs to hooped stabilizer for embroidering. Note: For best results, spray the stabilizer or batting, not the fabric.





# **Hoop Calibration**



## Adjusting the Hoop Reference Position

This process calibrates the needle to the center of the hoop.

The Oval, Mega, Maxi & Jumbo Hoops need to be calibrated when they are new to the machine and after every update. Calibration is essential because the variance of the basting box is only a couple a millimeters when selected to go around the hoop edge. For the most accuracy in calibration, have fabric hooped (project or stabilizer), use the template with hoop holders attached lay the template on the 'fabric' and calibrate. *Having fabric in the hoop takes the play out of the field when using the template with nothing hooped*.

## B 560, 580, 750 QE, 770 QE, 780, 790, 880

- Touch Setup Program icon.
- Select Embroidery Setting option
- Select Calibrating Embroidery Hoop icon and desired hoop
- Place embroidery template into the large oval embroidery hoop
- Start the adjustment by pressing the green check; the hoop is checked and the needle positioned to the center.
- If the needle is **not** positioned exactly in the center of the template, it has to be centered by using the arrow icons
- Confirm with the Green Check; the adjustment is saved



BERNINA 560, 580, 750 QE



BERNINA 770 QE, 780, 790, 880

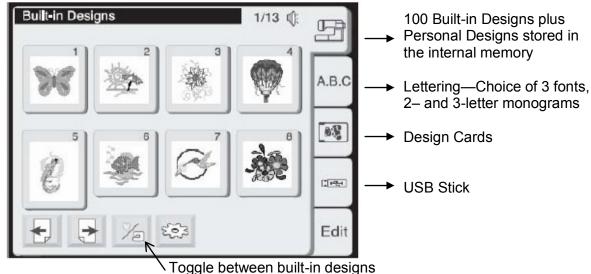


# Accessing Designs



## deco 340

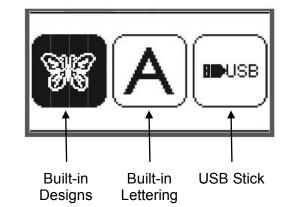
Pattern Selection window comes up automatically when machine is turned on.



and personal saved designs

## Chicago 7

Selection screen comes up automatically when machine is turned on and the embroidery module is attached.

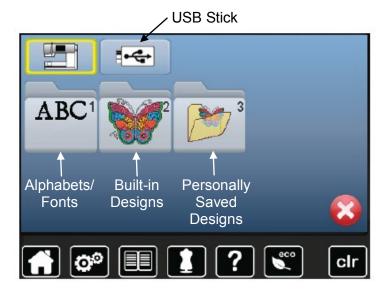


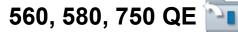
Use the right/left arrow buttons to select the desired choice, and press the OK button.



## **Accessing Designs**







560: 70 built-in motifs and 4 alphabets 580: 100 built-in motifs and 7 alphabets 750 QE: 70 built-in motifs and 4 alphabets



## B 780, 790, 880 🖆

B 780: 130 built-in motifs and 8 alphabets B 790: 270 built-in motifs and 8 alphabets B 880: 400 built-in motifs and 12 alphabets





140 built-in designs and 6 alphabets



## Chicago 7 — Trace

After adjusting the position of the design, press the Trace button on the front of the machine to check the boundary of the design in the hoop. The hoop will continue rotating to all four corners of the design until the Trace button is pushed again.

## Deco 340 — Trace

After adjusting the position, check the position of the of the embroidery area by pressing the Trace key. The carriage will trace the outline in a rectangle, corner to corner without stitching. The carriage will return to the starting position after tracing and the screen will return to the previous display.

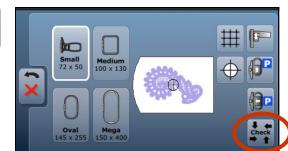
## B 560, 580, 750 QE — Check

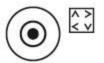
Check confirms stitching area of the selected motif. Select Hoop icon and then touch Check. The hoop moves to lower left corner of stitching area; touch OK to confirm. Hoop moves to lower right corner; touch OK. Hoop moves to upper right corner; touch OK. Hoop moves to upper left corner; touch OK.

## B 770 QE, 780, 790, 880 — Check

Check confirms the stitching field of the motif. After the design is selected, select "i" and select check. Select each corner arrow to move the needle to trace around the design in a box fashion. Provides a method to verify placement of the embroidery motif on a project.







35 min

Size F



X20

١÷

8.0

Edit

10 Color

93x47mm

B:140x200mm





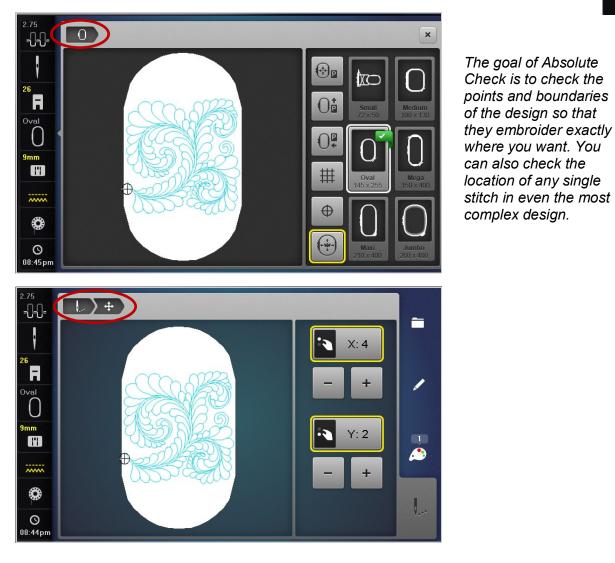


Ready to Sew

Orange 1102

## Absolute Check





Hoop fabric & stabilizer; attach hoop to machine.

## B 750 QE, 770 QE, 780, 790, 880

The Virtual Positioning default setting is active, therefore, when the motif is on the embroidery edit screen, *reference points can be selected and checked for perfect placement.* 

Continue selecting points along the edge or within the design. To fine tune placement, use the Move function.

## B 560, 580

Select desired design; touch Select Hoop icon. Select Virtual Positioning icon; touch Back Arrow.

Select a reference point on the design by touching that point on the screen of the machine. The embroidery hoop moves so that the needle is positioned above the fabric, in the location that the selected design reference point will stitch.

Continue selecting points along the edge or within the design. To fine tune design placement, use the Move Function.

Note: Motif Center (see page 17) must be deactivated to use Absolute Check.

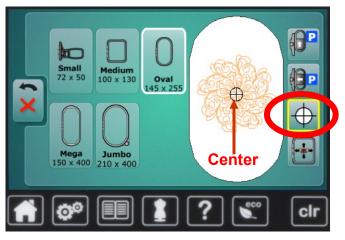


## **Motif Center**

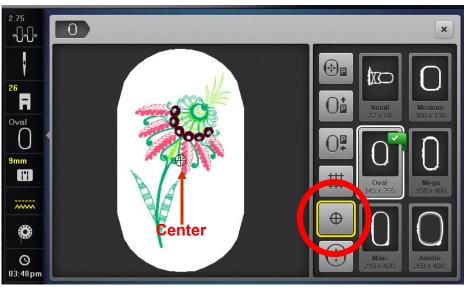


## **Motif Center**

Touch the Center icon. The exact motif center is displayed in the motif and the embroidery hoop moves to place the needle exactly over the center of the motif. Touch the icon again and the first stitch of the embroidery design is marked in the display again.



BERNINA 560, 580, 750 QE



BERNINA 770 QE, 780, 790, 880



## **Basting Boxes**



## **Basting Boxes**

Pre-programmed basting outlines stitch along the inside of the hoop or around a selected design. This serves as an additional anchoring to hold the fabric and stabilizer together.

### B 560, 580, 750 QE

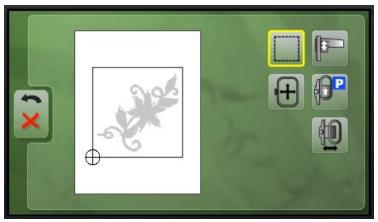
- Touch Needle icon to go to the stitching screen.
- Touch Hoop Selection icon.
- Touch Basting icon: toggle the icon between the choice of basting around the outline of the hoop, basting around the design, or turning basting off. A yellow outline indicates basting is activated.

### B 770 QE, 780, 790, 880

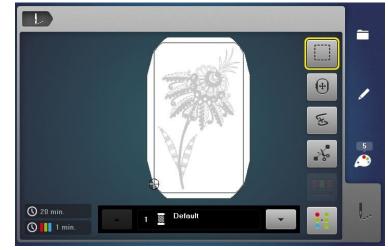
- Touch the Needle icon to go to the stitching screen.
- Touch the Basting Box icon: toggle the icon between the choice of basting around the outline of the hoop, basting around the design, or turning basting off. A yellow outline indicates basting is activated.

### Other Models

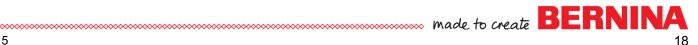
Basting files are available for all hoops on deco, aurora, and artista models at www.bernina.com.



BERNINA 560, 580, 750 QE



BERNINA 770 QE, 780, 790, 880



# **Customizing Designs**



Customize embroidery designs using functions found on your embroidery machine. Take an existing design and make changes to suit your personal tastes, the sewing situation, or the demands of your current project. With so many functions available on the various BERNINA embroidery machines, it is easy for anyone, no matter what skill level, to adapt a design for embroidering on garments, craft projects, and items for your home. Use the functions shown below to customize designs on your particular model of embroidery machine. *Note: Specific exercises for customizing designs are found on pages 24-27.* 

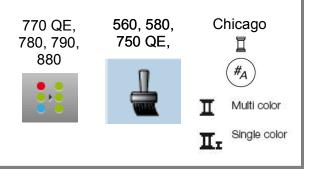
	bernette Chicago 7	Deco 340	BERNINA 580	BERNINA 560, 750 QE	BERNINA 770 QE	BERNINA 780, 790, 880
Rotate	<b>○</b> (=)	45°)	¢	¢	Ð	Ċ
Move	÷	★ →	*	*	ŧ	<b></b>
Mirror Image: Right/Left						
Mirror Image: Up/Down						
Duplicate						
Resize/ Rescale	€´ (L)					
Resequence*						

\*When designs are duplicated, it causes duplicated color stops. After selecting the sewout option, select the Resequence Icon to group like color changes and consolidate the number of repeated color changes. The Resequence function only groups colors if it does not interfere with the artistic order of color arrangement.

## **Single Color Embroidery**

To stitch a multi-colored design in one color, set your machine to bypass color changes.

- On BERNINA models, touch the single/multi-color symbol
- If the symbol is active, the machine will not stop at the color changes and the entire motif will be stitched in one color.
- If the symbol is inactive, the machine will stop at color changes for thread changes.
- On the bernette Chicago, press the Single/Multi-Color Button on the front of the machine. The onscreen indicator will show which mode is active.





# Stitching A Design



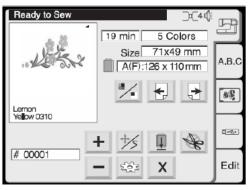
Isacord 40 3543 / 3 min.

### **Fabric Preparation**

Deco 340, Chicago 7

Hoop a piece of firm woven fabric backed with tear-away stabilizer in the Large hoop.

5 Series, 7 Series, and 8 Series Hoop a piece of firm woven fabric backed with tear-away stabilizer in the Large Oval hoop.



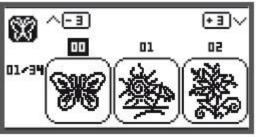
Ready to Sew screen

### deco 340

- Select the indicated motif.
- Lower the presser foot and press the start/stop button to start embroidery.
- The machine will stop after 5 stitches and request the user to cut the thread tail.
- After trimming the thread tail, press the start/ stop button again to continue stitching.
- Change thread colors as prompted onscreen.
- When the motif is complete, press the Carriage to Front icon to return the carriage to the stored position.



deco 340: 64 - floral border 2-color design 98mm x 34mm



## bernette Chicago 7

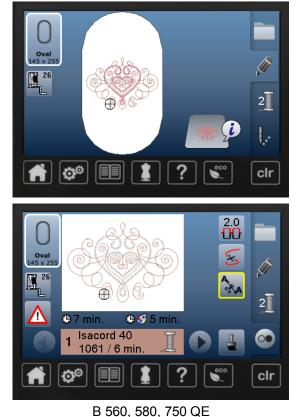
- From the Built-in Designs icon, select Design 02, Jewel Flower.
- Lower the presser foot, and press the Start/ Stop button to stitch.
- Change thread colors as prompted onscreen.
- When the motif is complete, a check mark appears indicating that the stitching is finished. Press the OK (check) button.



Chicago: 12-Jewel Flower 2-color design 81mm x 95mm



## **Stitching A Design**



## B 560, 580, 750 QE, 770QE

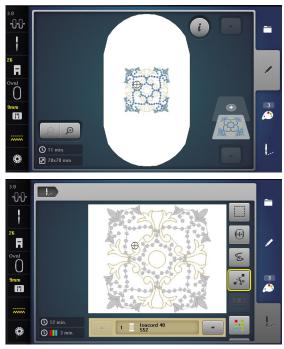
- From the Built-in Designs folder, select the folder and design as referenced to the right. (*Design appears on the Embroidery Editing screen.*)
- Touch Needle icon to go to Embroidery screen.
- Press the Start/Stop button to begin stitching.
- Change thread colors as prompted onscreen.
- When the motif is complete, touch the green check (B 770 QE: checkered flag).



lsacord 40 3543 / 3 min.

B 560, 580: Folder 2, Design 3 B 750 QE: Folder 1, Design 7 B 770 QE: Folder 2, Design 16

2-color design 128 mm x 92 mm

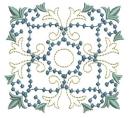


B 780, 790, 880

## B 780, 790, 880

- From the Built-in Designs folder, select the folder and design as referenced to the right. (*Design appears on the Embroidery Editing screen.*)
- Touch Needle icon to go to Embroidery screen.
- Press the Start/Stop button to begin stitching.
- Change thread colors as prompted onscreen.
- When the motif is complete, touch the checkered flag.





780: Folder 1, Design 3 790: Folder 1, Design 13 880: Folder 8, Design 1

3-color design 78mm x 78mm

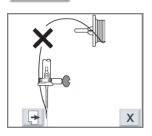


## **Embroidery Sequence Control**



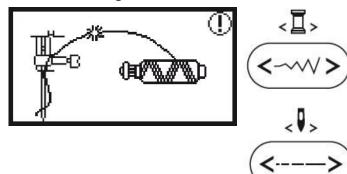
deco 340





- The machine stops automatically and shows the screen at left, if the upper thread runs out or breaks. Press next page key to continue.
- Raise the presser foot and remove the hoop; snip away any excessive threads from back of the project.
- Place the hoop back onto the machine; replace upper thread spool if required and thread upper thread.
- The last screen reminds you to move back several stitches in your project before continuing to stitch. The number of stitches required depends on how many you cut out of your project. Press the Cancel key, then use the key in the Embroidery window to move the appropriate number of stitches back.
- Press the Start/Stop button to continue stitching.

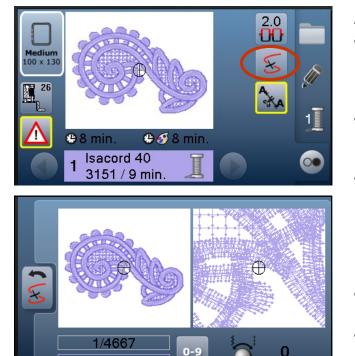
bernette Chicago 7



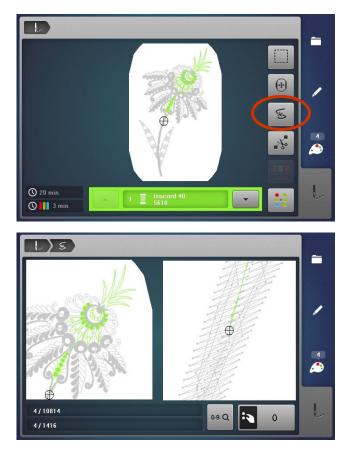
- When the thread breaks, the machine stops and the screen at left appears.
- Raise the presser foot and remove the hoop; snip away any excessive threads from back of the project.
- Place the hoop back onto the machine; replace upper thread spool if required and thread upper thread.
- Press the stitch width button to move the design to the last embroidered color.
- Press the stitch length button to move the design to the last embroidered stitch position
- Press the Start/Stop button to continue stitching.

## **Embroidery Sequence Control**





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#### B 560, 580, 750 QE

- Touch the Embroidery Sequence Control icon; motif is enlarged for a better view of the exact place of the thread breakage and an Information Area appears.
- Turn the stitch width knob counter clockwise (or clockwise) to move the embroidery hoop backward (or forward) in the embroidery sequence.
- Turn the stitch width knob to move the hoop stitch by stitch. Turn the stitch length knob to move larger stitch increments (53 stitches per each movement). The number in the information area shows the number of stitches in the embroidery sequence; use the 0-9 field to go directly to a stitching position.
- Touch Back icon to close display or begin stitching from this screen.
- To resume stitching, press the Start/Stop button on head frame and the Embroidery screen reappears.

### B 770 QE, 790, 780, 880

- Touch the Embroidery Sequence Control icon; the motif is enlarged for a better view of the exact place of the thread breakage and an Information Area appears.
- Turn the stitch width knob counter clockwise (or clockwise) to move the embroidery hoop backward (or forward) in the embroidery sequence.
- Turn the stitch width knob slowly to move the hoop stitch by stitch.
- Go back stitch by stitch to a position several stitches before thread breakage occurred to resume stitching.
- To resume stitching, the Start/Stop button on head frame and the Embroidery screen reappears.



## deco 340

The deco 340 rotates designs in clockwise increments of 45° ( $1x = 45^{\circ}$ ,  $2x = 90^{\circ}$ ,  $3x = 135^{\circ}$ ...); also rotates designs clockwise & counterclockwise, in 1° increments. Onscreen duplication is not available on this model.

- Select indicated motif; select Editing tab.
- Use positioning arrows or touch screen to move the motif up and to the right.
- Select Pattern selection tab; select motif again.
- Touch Rotate 45°. Move design to right.
- Select Pattern selection tab; select motif again.
- Touch Rotate 45° two times. Move design to left and down.
- Hold the rotate key for more than one second, then use the plus and minus keys to adjust the flowers as desired.

## bernette Chicago 7

The bernette Chicago model rotates designs in clockwise increments of 90° ( $1x = 90^{\circ}$ ,  $2x = 180^{\circ}$ ...). Onscreen duplication and combining of designs is not available on this model.

- Select indicated motif.
- To move the motif, press the OK √ button first. Then, use the positioning arrows on the front of the machine to move the motif down approximately 10 mm. *Note: Pressing an arrow key will move the motif* ~.2mm, press and hold the positioning arrow button to move the motif in 5 mm increments.
- Push the rotation button on the front of the machine 3 times to rotate the design 270°.





63 - Floral Border









45



## Move, Rotate, Duplicate





### B 580

The B580 E rotates design in 1° increments using stitch width knobs or in 90° steps by touching the +90 rotate icon.

- Select indicated motif from Built-in Motifs (butterfly), Folder 3, Design 1.
- Select "i" or Edit icon; select the Move function.
- Using the Stitch Length and Width knobs (or touch motif on screen) move design to upper left of the hoop. Touch Back arrow.
- Select duplicate > touch "I" on layer 2 > touch Move function > touch Center
- Touch Back > select Rotate > touch +90 icon one time > touch Back arrow > select first motif on screen.
- Select Duplicate again > touch "I" on layer 3 > Select Rotate. Touch +90 icon two times > touch Back.
- Select Move Function > Use Stitch Length and Width knobs to position.
- Select each motif to fine tune the positioning as shown.
- Touch Back arrow. Select Layer with All Motifs (no number).
- Select "I" > Select Move function > Touch Center > Touch Back arrow two times.
- Touch Needle icon > OK.

## B 560, 750 QE, 770 QE

- Select indicated motif: 560: Folder 2, Design 10 750 QE: Folder 1, Design 4
- Touch Hoop Selection icon; select Large Oval Hoop; activate Design Center icon; close Hoop screen.
- Touch Rotate Motif; Touch 90°; close Rotate Motif screen.
- Touch Move Motif icon; rotate Stitch Length knob to move motif up 35 mm; close Move Motif screen.
- Touch Needle icon; stitch motif; touch Green Check when finished.
- Touch Rotate Motif; Touch +90° two times until reading is 270; close Rotate Motif screen.
- Touch Move Motif icon; rotate Stitch Length knob to move motif down 70 mm; close Move Motif screen.
- Touch Needle icon; stitch motif; Touch Green Check (B 770 QE Checkered Flag) when finished.



B 560: Folder 2, Design 10 B 750 QE: Folder 1, Design 4 B 770 QE: Folder 2, Design 13







## Move, Rotate, Duplicate



#### B 780, 790

- Select Motif—Folder 10, Design 6, Floral Branch.
- Move Motif 1 (Drag and Drop) to the upper left of the Oval hoop.
- Select "i" and duplicate.
- Rotate second motif 56° using the stitch width knob.
- Touch the "I" breadcrumb; select duplicate.
- Rotate the third motif 75° and move into place.
- Touch the "I" breadcrumb; select duplicate.
- Rotate the fourth motif 63° and move into place.

TIP: Using the breadcrumb navigation will allow the information menu to remain available (open) for during onscreen editing.



B 780: Folder 10, Design 6 B 790: Folder 5, Design 27

#### B 880

- Select Motif—Folder 5, Design 18, Branch.
- Move Motif 1 (Drag and Drop) to the upper left of the Oval hoop.
- Select "i" and duplicate.
- Rotate second motif 70° using the stitch width knob and move into place so that the stems at the center are close together but not touching.
- Repeat the previous steps 4 times to create a wreath of 5 designs.

TIP: Using the breadcrumb navigation will allow the information menu to remain available (open) during onscreen editing.



Folder 5, Design 18



# **Rescale, Mirror Image**



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#### deco 340

- Select the indicated motif; select the Editing tab.
- Resize motif to 90%; use positioning arrows to move the motif to the left.
- Select Pattern selection tab; select motif again. Resize motif to 90%.
- Touch the Right/Left Mirror Image icon; use arrows to move motif to the right.
- Select Pattern selection tab; select motif again.
- Touch the Up/Down Mirror Image icon. Resize motif to 90%.
- Use arrows to move motif to the left and up.
- Select Pattern selection tab; select motif again. Resize motif to 90%.
- Touch the Right/Left and Up/Down Mirror Image icons.
- Use arrows to move motif to the right and up, arranging the four motifs as shown.

## bernette Chicago 7

- Select the motif 94, Deer Head.
- Press the Resizing button on the front of the machine and the resizing display will open. Use the arrow buttons reduce the size of the design to 80% (the size will change in 5" increments each time you press the arrow button).
- Press the OK button to save the new size and return to the editing display.
- Use the arrow buttons to move the motif to the right side of the hoop, +25 mm.
- Stitch the design.
- Return to the Embroidery screen.
- Press the Mirror Image Left/Right button.
- Use the arrow buttons to move the motif to the left side of the hoop, -25 mm.
- Stitch the design.
- Note: Use the trace button to check the placement of each motif before stitching.



Design 65 Evergreen Corner



Design 94: Deer Head



# **Rescale**, Mirror Image







## B 580

- Select indicated motif.
- Select Hoop icon and select Oval hoop, touch Back arrow.
- Touch "i" to Edit.
- Select Rescale > rescale to 90 % > select Back arrow.
- Select Duplicate icon > there are now two motifs on screen.
- Touch "i" on Layer 2 > Select Right/Left Mirror Image. The active motif is flipped.
- Select Move function.
- Select motif on screen and move so motifs are side by side.
- Use the Stitch Width and Length knobs to fine tune the position of motif.
- Touch Back arrow two times, Select the Layer with both motifs (no number).
- Touch "i" > Select Duplicate .There are now four motifs on the screen.
- Touch "i" on Layer 3 > Select Up/Down Mirror Image.
- Select Move function.
- Select motif on screen and move duplicated motifs above original motifs as shown.
- Use the Stitch Width and Length knobs to fine tune the position of motif.
- Touch Back arrow two times and Select the Layer with All motifs (no number).
- Select "i" > Select Move function> Touch Center > Touch Back arrow two times.
- Touch Needle icon and embroider.

## B 560, 750 QE, 770 QE

- Select indicated motif and rescale as desired. Move design to the left of center (to allow room for the mirror design).
- Stitch the design.
- Return to the embroidery screen and mirror image the motif.
- Move motif into the desired position.
- Use Absolute Check/Virtual Positioning to guarantee accurate placement for the next motif and embroider.



B 560: Folder 2, Design 5 (not shown) B 750 QE: Folder 1, Design 8 (not shown) B 770 QE: Folder 3, Design 7 (shown)





Folder 2, Design 5

# **Rescale, Mirror Image**





### B 780, 790

- Select Motif—Folder 10, Design #9, floral spray.
- Select Hoop Selection and the Oval Hoop; Close.
- Select "i" and proportional rescale 90%; move design left of center.
- Select the "i" breadcrumb; select Duplicate.
- Select Mirror Image Left/Right and move into place.
- You may want to use Zoom (5 levels) for better visibility when aligning designs; use the multi-function knobs to fine tune placement; Un-zoom.
- Select the bottom-most layer to select All.
- Select Duplicate.
- Select Mirror Image top/bottom and move into place using the multifunction knobs.
- Touch the "i" breadcrumb; select the lowest layer to select All.
- Select Move and select Center to center the design in the hoop.
- Touch Needle icon and embroider.

Tip: Using the breadcrumb navigation will allow the information menu to remain available (open) for functions in the information screen during onscreen editing.

### B 880

- Select Motif—Folder 5, Design 13, floral spray.
- Select Hoop Selection and the Oval Hoop; Close.
- Select "i" and proportional rescale 90%; move design left of center.
- Select "i" breadcrumb; select Rotate Motif; use the stitch width knob to rotate to 45°.
- Select the "i" breadcrumb; select Duplicate.
- Select Mirror Image Left/Right and move into place.
- You may want to use Zoom (5 levels) for better visibility when aligning designs; use the multi-function knobs to fine tune placement; Un-zoom.
- Select the bottom-most layer to select All.
- Select Duplicate
- Select Mirror Image top/bottom and move into place using the multifunction knobs.
- Touch the "i" breadcrumb; select the lowest layer to select All.
- Select Move and select Center to center the design in the hoop.
- Touch Needle icon and embroider.

Tip: Using the breadcrumb navigation will allow the information menu to remain available (open) for functions in the information screen during onscreen editing.



B 780: Folder 10, Design 9 B 790: Folder 5, Design 29



Folder 5, Design 13



## Saving & Deleting Designs



After customizing an embroidery motif or creating a combination that you want to be able to quickly access and use again, follow these steps.

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#### deco 340

## Saving a Design to Machine

- Select Editing tab. Touch Save File Key (1)
- Touch the Personal Memory Key (2)
- Touch Name key to assign file name.
- Key in file name.
- Touch OK; touch OK.

## Saving a Design to a USB Stick

- Select Editing tab. Touch Save File Key (1)
- Insert USB stick into the machine
- Touch the USB Key (4)
- Create a new folder (5) or select an existing folder (9)
- Touch Name key to assign file name.
- Key in file name.
- Touch OK; touch OK.

## Saving a Design to a Personal Design Card

- Select Editing tab. Touch Save File Key (1)
- Insert Personal Design Card into machine
- Touch the Personal Design Card Key (3)
- Touch File Name key to assign file name.
- Key in file name.
- Touch OK; touch OK.

## **Deleting a Design**

Select Editing tab.

Touch Delete key symbol (trashcan).

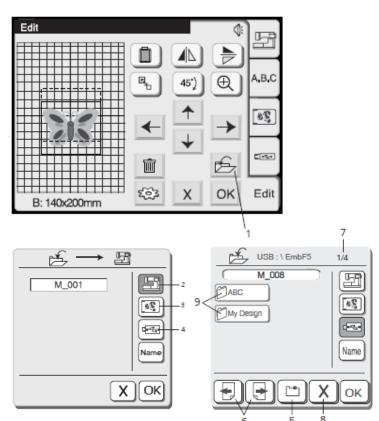
### **Retrieving a Saved Design**

- Select Pattern Selection Window (default)
- Select from the Machine, Personal Design Card or **USB Stick Tabs**

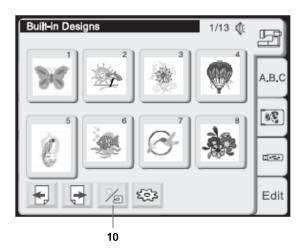
- For designs saved in the machine, touch Built-in/ Personal Designs Key (10) to toggle between built-in motifs and personal designs saved internally.
- Touch OK.

## bernette Chicago 7

Note: Motifs may not be stored on or saved from the bernette Chicago model.



Total number of pages in a window are indicated (7). Use the page scroll keys (6) to navigate the pages.





## **Saving & Deleting Designs**



## BERNINA 560, 580, 750 QE, 770 QE, 780, 790 880 Saving a Design to Machine

- In the Embroidery Selection Menu, select Save icon. The motif to be saved is displayed as with a yellow border around it.
- The folder defaults to the Machine's My Designs folder when saving a design.
- In the Save screen, the Embroidery Machine icon is activated and the My Designs folder is automatically opened.
- Select the motif to be saved; the Edit screen appears again.

## Saving a Design to a USB Stick

- In the Embroidery Selection Menu, select Save icon. The motif to be saved is displayed as with a yellow border around it.
- The motif to be saved is displayed with a yellow border around it.
- Insert the USB stick; touch USB Stick icon in the Save screen.
- Select the motif to be saved; the embroidery motif is saved on the USB stick; the Edit screen appears again.

### **Deleting a Design**

- In the Embroidery Selection Menu, select the Delete icon (trashcan).
- Select the USB Stick icon or Embroidery Machine/ My Designs folder.
- Select the motif to be deleted in the opened screen.
- In the Delete screen, select the Green Check to confirm; the motif is deleted.
- Touch the Selection icon to return to embroidery.

## **Retrieving a Saved Design**

- In the Embroidery Selection Menu, select the Open New Motif icon and select the USB Stick icon or Embroidery Machine/My Designs folder.
- Select design of choice and the Embroidery Edit screen appears with the selected design.

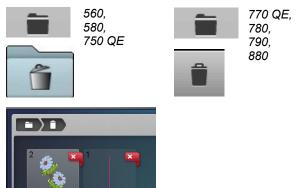


## SAVING DESIGNS





## **DELETING DESIGNS**







#### **Fabric Preparation**

Deco 340, bernette Chicago Hoop a piece of firm woven fabric backed with tear-away stabilizer in the Large hoop. BERNINA 560, 580, 750 QE, 770 QE, 780, 790, 880

Hoop a piece of firm woven fabric backed with tear-away stabilizer in the Large Oval hoop.



Gothic AB (*)	F
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Lettering screen

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#### deco 340

- Select Alphabet tab
- Select desired alphabet & medium size font.
- Select vertical lettering.
- Enter your first name, selecting upper and lower case letters as desired; touch OK.
- Touch Edit; touch Alphabet tab.
- Enter your last name, selecting upper and lower case letters as desired; touch OK.
- Use the Positioning Arrows to move the last name into position below the first name; touch OK.
- Embroider sample. Press the carriage return key after finishing to return the carriage to the stored position.



102/04

word

#### bernette Chicago 7

- Use the arrow button to choose the built-in Embroidery Lettering, and press the OK button.
- Press the arrow buttons to choose the letters, press OK to choose a letter.
- Press the clr button to delete a letter.
- To move forward or back by 3 letters, press the up/down arrow buttons.
- Move the cursor to the icon at the lower right corner, press the OK. button to switch between upper case, lower case, special character, and numbers/symbols.
- After editing, move the cursor to the icon on the right side of the middle of the screen (shown at left).
- Press the OK button to enter the Embroidery Editing display.
- Press the OK button after completing any resizing or rotation.
- Press OK to confirm, and press the Start/Stop button to begin stitching.
- Note: Screen displays the label "word" and not the actual typed lettering.



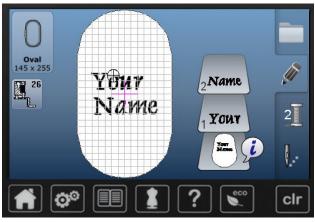
## Lettering



- Select the Alphabet folder; select desired font.
- Enter your first name, selecting upper and lower case letters as desired; touch Green Check to confirm.
- Select Hoops and select Oval hoop. Touch Back arrow
- Touch Selection icon; touch Add Motif; enter last name using upper and lower case letters as desired. Touch Green Check to confirm.
- Select "i" on Layer 2.
- Select Hoop and Touch Show Grid icon 2 times to activate grid.
- Touch Back arrow. Select Move function, Use Stitch Length knob to move last name into position below first name.
- Touch Back arrow two times. Select Layer with All motifs, Touch "i"
- Select Move function and touch Center to move to center of hoop.
- Touch Back arrow. Select Rotate; touch +90° if needed to fit in hoop
- Touch Back arrow two times; touch Needle icon (OK). Stitch.

### BERNINA 560, 750 QE, 770 QE

- Select the Alphabet folder; select desired font.
- Enter your first name, selecting upper and lower case letters as desired; touch Green Check to confirm.
- Select Hoops; touch Oval hoop. Touch Back arrow.
- If the name is too wide for the hoop, Select "i" and rotate the name 90°; stitch the name.
- Touch Selection icon; and select desired font
- Select Hoops; touch Oval hoop. Touch Back arrow.
- If the name is too wide for the hoop, Select "i" and rotate the name 90°.
- Enter last name using upper and lower case letters as desired. Touch Green Check to confirm.
- Use Absolute Check to plan the placement for the last name in conjunction with the stitched first name on the fabric; touch Needle icon (OK). Stitch.



B 580



B 560, 750 QE





## BERNINA 780, 790, 880

- Select Alphabet folder; select desired horizontal font.
- Enter your first name, selecting upper and lower case letters as desired; touch Green Check to confirm..
- Select Hoops; select Oval hoop then close the window.
- Select the ADD symbol on upper layer.
- Select a font; enter your last name using upper & lower case letters as desired. Touch Green Check to confirm.
- Select "i" and the Move Icon; use the multifunction knobs to move the last name below the first name.
- Select Hoops; touch Show Grid icon 2x to activate grid.
- Close the Hoops Window and Select "i".
- Select the Move function, and use multi-function knobs to arrange the lettering in a pleasing arrangement.
- Select the lowest layer to select all motifs.
- Select Move & Center icon to center the motif in hoop.
- Select Rotate; touch +90° if needed to fit in hoop
- Close the information window.
- Touch Needle icon (OK). Stitch.



## **Changing Lettering Height**



Note: While the Lettering Height cannot be changed on the Deco machine, it is possible to stitch letters in three sizes, small, medium, and large.

- Select Alphabet tab and desired font. Select small font size (10mm).
- Select the Large Hoop.
- Enter **Deco**; touch OK. Use Positioning arrows to move word up.
- Select Alphabet tab and desired font. Select medium font size (20mm).
- Enter Deco: touch OK. Use Positioning arrows to move word up.
- Select Alphabet tab and desired font. Select large font size (30mm).
- Enter **Deco**; touch OK. Position as needed.
- Embroider. Return carriage to stored position.

## bernette Chicago 7

*Note: Lettering size may be adjusted using Rescaling on the Editing screen.* 

- Select Alphabets icon and type Chicago.
- Using the arrow buttons, move the cursor to the icon on the right side of the display and press the OK button.
- Press the Rescale button on the front of the machine.
- Use the right or left arrows to increase or decrease the lettering by 5% increments from a minimum of 80% to a maximum of 120%
- Press OK to accept the size change, and OK again to stitch out the lettering.

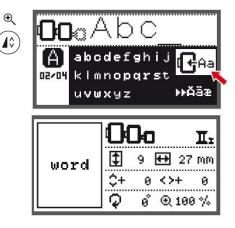
### **BERNINA 580**

While lettering can't be resized directly on the 580 E, the size of the lettering object can be changed using the Rescale Motif Proportionally tool.

- Select Alphabets folder: select folder #5 Chateau fonts.
- Enter BERNINA; touch Green Check to confirm.
- Select Hoop icon and select Oval Hoop, touch Back arrow.
- Touch "i" and select Duplicate; repeat for a total of three words.
- Select each word onscreen and move to arrange words as shown.
- Starting with the top word make changes to the size of each selected word; Select the word, touch the "I". Select Rescale using the Stitch Width knob to make changes to size.
- Touch the next word to be changed and use the Stitch Width knob to make change. Repeat for the third word.
- Touch Back arrow two times.











made to create BE

## **Changing Lettering Height**



### BERNINA 560, 750 QE, 770 QE

Enter single letters or words and use the Rescale Motif Proportionally tool to change the size of the lettering object.

- In the Embroidery Selection Menu, select Open New Motif, select Alphabets folder: select folder #4 Drifter fonts.
- Enter BERNINA; touch Green Check to confirm.
- Select Hoop icon and select Oval Hoop, touch Back arrow.
- Select "i"; select Rescale using the Stitch Width knob to make changes to size; Rescale to 90%.
- Select the Embroidery Menu (needle icon); stitch word (optional).
- Continue changing the size of the word and stitching until 3 text lines have been stitched.



## BERNINA 780, 880

Enter single letters or words and use the Rescale Motif Proportionally and the Rescale Motif Width and Height to change the size of the lettering object.

- In the Embroidery Selection Menu, select Open New Motif, select Alphabets folder: select folder #1 Drifter font.
- Enter BERNINA; touch Green Check to confirm.
- Select Hoop icon and select Oval Hoop; close screen.
- Touch "i"; select Duplicate 2x to create 3 words total.
- Move the text on screen by selecting on the touch screen or selecting the layers to the right of the hoop on screen. Arrange the text as shown.
- Select "i"; select the top word and select Rescale Motif Proportionally.
- Adjust Stitch Width knob and size of lettering to 90%.
- Select the second layer (or second text line) and the Rescale Motif Width and Height.
- Adjust Stitch Length knob to change lettering height to 70%.
- Select the third layer (or third text line) and the Rescale Motif Width and Height.
- Adjust the Stitch Width knob to change the lettering width to 70%.
- Select Close Box.
- Select the Embroidery Menu (needle icon); stitch words





..... made to create BER

### **Changing Lettering Spacing**

BERNINA 580, 780, 790, 880 only

*This exercise involves changing the spacing between individual letters within a word. The following machines have this feature: BERNINA 580, 780, 790, and 880.* 

### **BERNINA 580**

- Select Alphabets folder: select folder #1 King Charles alphabet.
- Select Letters in Lower Case. Enter bernina; touch Green Check to confirm.
- Touch Selection icon and Select Add Motif, select folder #1 King Charles alphabet.
- Enter BERNINA; touch Green Check to confirm.
- Repeat Add Motif process to create a total of three words.
- Starting at the top make changes as follows: Select the word and touch 'i''. Select Letter Manipulation.
- Use the Stitch Width knob to make changes:
  - 1st **bernina** Stitch Width knob = 0; Touch next word.
  - 2nd **bernina** Stitch Width knob = 25; Touch next word.
  - 3rd **bernina** Stitch Width knob = 45

Note: Lettering that is duplicated does not retain the Letter Manipulation (Word Art) properties, each word must be added new to create the combination.

### BERNINA 780, 790, 880

- Select Alphabets folder: select folder #1 Drifter alphabet.
- Select Letters in Lower Case. Enter bernina; touch Green Check to confirm.
- Touch the Hoop Icon and select Oval Hoop; select Close
- Select Add Motif (from the layers), select #1 Drifter alphabet and lower case
- Enter BERNINA; touch Green Check .
- Repeat Add Motif process to create a total of 3 words.
- Starting at the top make changes as follows: select the word and touch "i"; select Letter Manipulation.
- Use the Stitch Width knob to make changes:
  - 1st **bernina** Stitch Width knob = 0; Touch next word.
  - 2nd **bernina** Stitch Width knob = 25; Touch next word.
  - 3rd **bernina** Stitch Width knob = 45

Note: Lettering that is duplicated does not retain the Letter Manipulation (Word Art) properties, each word must be added new to create the combination





bernina bernina bernina



## Stitch Density/Stitch Type

BERNINA 580, 780, 790, and 880 only

#### **BERNINA 580**

- Select Alphabets folder: select folder #4 Guinevere alphabet.
- Enter the letter B. Touch Green Check to confirm.
- Select Hoop icon and select Oval Hoop, touch Back arrow. Touch "I".
- Select the Rescale Proportionally icon and increase size of letter to 200% using the Stitch Width knob. Touch Back arrow.
- Select Duplicate design, touch "i", and select Duplicate design. There are now 3 Bs on screen.
- Select and move motifs so that they are aligned left to right. Note: Select Hoop icon and Touch Grid icon two times to see grid and center mark.
- Touch B on right, touch "i".
- Select Change Stitch Type icon; alter satin density to160%. Touch Green Check (OK).
- Touch B on left. Select Change Stitch Type icon; alter satin density to 40%. Touch Green Check to confirm.
- Select Embroidery Menu and embroider sample, noting stitch density of each letter.

Note: Notice that the satin stitches moved closer together or further apart, while the straight stitches under the design remained unchanged.

### BERNINA 770QE, 780, 790, 880

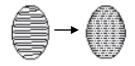
- Select the Alphabets folder: select folder #1 Drifter font.
- Enter the letter **B**; touch the Green Check to confirm.
- Select Hoop icon and select Oval Hoop, close screen.
- · Select "i"; select the Rescale Proportionally icon and increase size of letter.

to 200% using the Stitch Width knob.

- Select the "i" breadcrumb (to keep the "i" menu open).
- Duplicate design 2 times so that there are 3 Bs on screen.; use the "i" breadcrumb to go back.
- Select the Move icon; move motifs so that they are aligned left to right.
- To Center, touch the center icon within the Move icon menu.
- Select B on right or the layer; Select Embroidery Stitch Density; alter satin density to 160%.
- Select B on left or the layer. Select Embroidery Stitch Density; alter satin density to 40%.
- Select Embroidery Menu and embroider sample, noting stitch density of each letter.

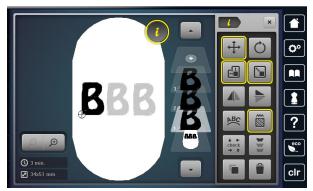
### Stitch Type

Satin Stitching can be changed to Step Stitching in addition to changing Stitch Density. Step Stitch length can be increased or decreased.





light default heavy









Workbook 4—Embroidery Basics

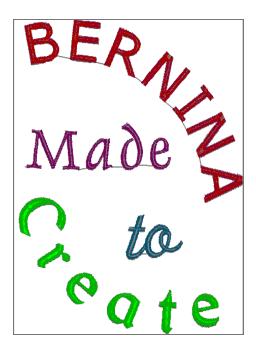
### Letter Manipulation / Word Art

BERNINA 580, 780, 790 and 880 only



#### BERNINA 580, 780, 790, 880

- Select Alphabets folder: select a desired font.
- Enter BERNINA; touch Green Check to confirm.
- Select Hoop icon and select Oval Hoop, close screen.
- Touch "i", Select the Letter Manipulation icon (ABC): Use the Stitch Width multi-function knob to add space between each character. Use the Stitch Length multifunction knob to change the baseline.
- Select Add Motif and add each of the following words one at a time, selecting a desired font and using upper and lowercase choices: Made; to; Create.
- Select each word and manipulate the character spacing and baseline using the Letter Manipulation function. Select Rotate icon for additional changes if desired.
- To center the combined design, select the bottom grouped layer. Select the Move Icon and select the Center icon.
- Select Embroidery Menu and embroider sample.





B 580



B 780, 790, 880

**Endless Embroidery** 

BERNINA 780, 790, 880 only



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Endless Embroidery helps you line up embroidery designs in a vertical orientation and indicates the most precise placement for borders and rehooping with the use of registration marks. With Endless Embroidery, you are successful every time.

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90x77 mm

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### BERNINA 780, 790, 880

- In the Embroidery Menu, select the Built-in Designs Folder.
- B 780: Select Folder 1, Design 11 B 790: Select Folder 11, Design 21 B 880: Select Folder 8, Subfolder 1, Design 8
- Select the Hoop Icon and the Oval Hoop; Close.
- Select "i" and Rotate Motif; rotate +15°.
- Select Endless Embroidery.
- Set the Design Repeat to 4 and select Fit to Hoop.
- Deselect the Registration Marks.
- Select Green Check to confirm.
- Select the 2nd motif and Mirror Image Left/Right.
- Select the 4th motif and Mirror Image Left/Right.
- Close the Embroidery Editing Screen. Select the Embroidery Stitch-out (needle) icon to stitch-out.
- Select the Color Resequence and Basting Box Around the Hoop.
- Stitch.

### Notes: Endless Embroidery

The embroidery motif is duplicated as many times as possible to fill the selected hoop size.

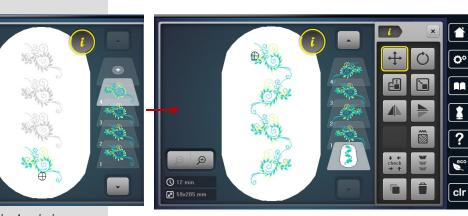
The lower reference points are the default. Side and upper reference points can be added.

The number of motifs can be increased or reduced via the Stitch Width knob or the + or - icons. The space between each motif can be Increased or decreased via the

Stitch Length knob or the + or - icons. Display is in mm.

Should more motifs be entered manually than will fit in the hoop, the hoop appears in red. Select Fit to Hoop to automatically adjust the size of the motifs so they all fit in the hoop.

Touch the field in the center to reset of any of these functions to reset.





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Importing stitches into embroidery offers the ability and precision of embroidering backgrounds of individual stitches and stitch combinations. Buttonholes and Sideways Motion stitches can be imported and embroidered with perfection.

### BERNINA 780, 790, 880

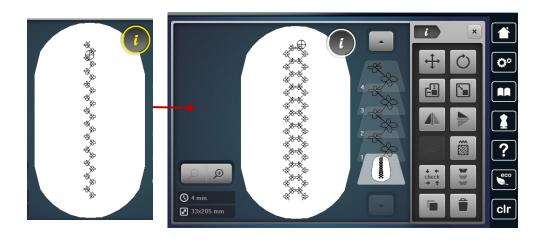
- In the Embroidery Menu, select the Sewing Stitches folder.
- Select the Decorative Stitches folder > Filigree Sideways Motion Stitches Folder #1201 > Stitch #11. The stitch will then appear on the Embroidery Edit screen.
- Select the Hoop icon and select the Oval Hoop. Close to return to the Embroidery Edit Screen.
- Touch "i" and select the Endless Embroidery icon.
   Select Fit to Hoop and deselect the Registration Marks. Touch the Green Check to confirm.
- Touch "i" and select Duplicate, then Mirror Image Left/Right.
- Use Drop and Drag to move the second set into place.
- To center the combined design, select the bottom grouped layer. Select the Move Icon and select the Center icon.
- Close the Embroidery Editing Screen. Select the Embroidery Stitch-out (needle) icon to stitch-out.
- Select Single Color and deselect Cutting of Jump Stitches.
- Stitch Design.

### Notes: Importing Stitches

Stitches can be edited.

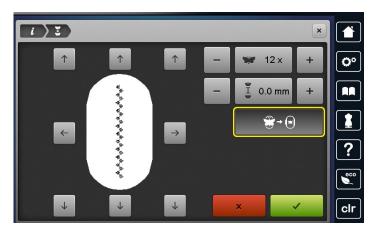
Stitches used as single stitches or in combinations.

In the B 880, try using stitches with the Shaping Function to create a wide variety of frames.





BERNINA 780, 790, and 880 Only



# Shape Designer

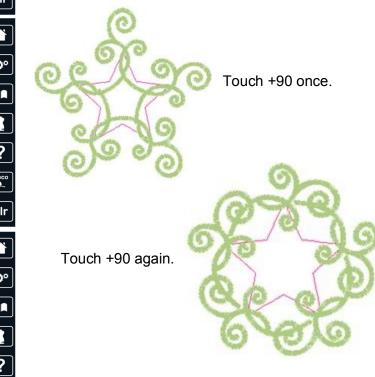


#### BERNINA 880

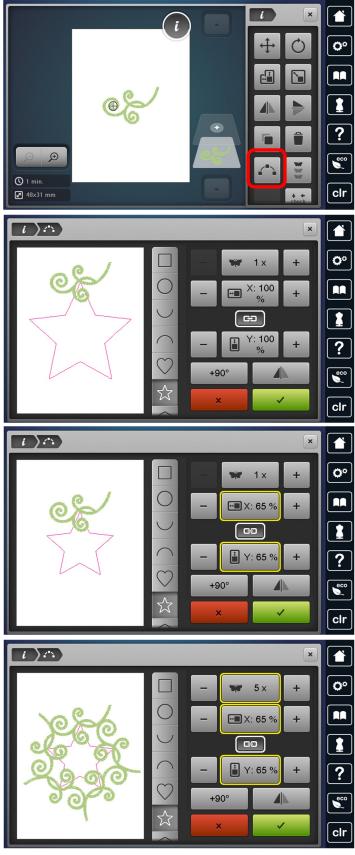
• In the Embroidery Menu, select Folder 5, Design 5.

BERNINA 880 only

- Select the Hoop icon, and select the Medium hoop, close.
- Select "I" and the Shaping icon.
- Select the star shape.
- Change size to 65%. With the lock engaged, the shape size is changed proportionately; Unlock to change height and width independently. Changing the size of the shape can provide spacing between motifs.
- Change number of motifs to 5.
- Touch +90 one time. Rotates each design 90 degrees; selecting +90 again will provide a different arrangement.







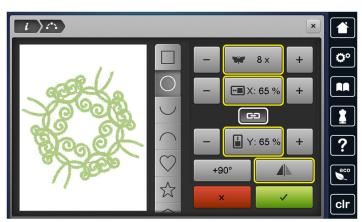
# Shape Designer



- Select Folder 5, Design 5.
- Select the Hoop icon, and select the Medium hoop, close.

BERNINA 880 only

- Select "i" and the Shaping icon.
- Select Circle, 8 motifs, Mirror Image, Deactivate +90.
- Select Square, Deactivate Mirror Image, engage +90 one time.
- Select Green Check to confirm.





### Workbook 4—Embroidery Basics

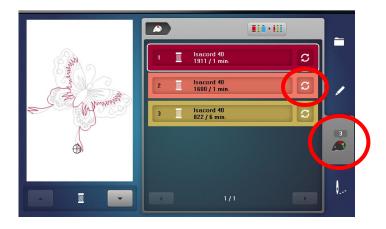
### **Re-assigning Thread Color**







Individual thread colors and thread brands can be re-assigned on-screen.



## *Re-assigning Thread Colors B 770QE, 780, 790, 880*

- In the Embroidery Menu, select the Built-in Designs Folder. Select a multi-color design of choice.
- Select the Colors (palette) icon.
- Touch the Thread Color icon.
- Use the arrows beneath the thread colors to scroll until the desired color appears. (*B* 770 QE, swipe colors up/down to select.)
- Select the color.
- Thread colors can also be selected by color number via the 0-9 keyboard.
- The new color is reallocated and the altered color is displayed in the design on-screen.

### B 560, 580, 770QE

- In the Embroidery Menu, select the Built-in Designs Folder. Select a multi-color design of choice.
- Select the Colors (thread spool) icon.
- Select the Change Thread (palette) icon.
- Use the side arrows to scroll through thread colors until the desired color appears.
- Select the color.
- Thread colors can also be selected by color number via the 0-9 keyboard.



### Changing Thread Brand B 770QE, 780, 790, 880

- In the Embroidery Menu, select the Built-in Designs Folder. Select a multi-color design of choice.
- In the Colors Menu, touch the Thread Color icon. Use the arrow icons above the thread colors to scroll until the desired brand appears.
- Touch the Thread Brand icon.
- The thread brand in the display changes and the new thread details appear.

### B 560, 580, 750 QE

- In the Embroidery Menu, select the Built-in Designs Folder. Select a multi-color design of choice.
- In the Colors Menu, select the Change Thread (palette) icon. Use the arrow icons above the thread colors to scroll until the desired brand appears.
- Touch the Thread Brand to select.
- The thread brand in the display changes and the new thread details appear.

Note: Different thread brands can be assigned within one design.



## **Color Wheel**

BERNINA 880 only



Use the Color Wheel function to quickly change color-ways of your motifs on-screen; the new thread colors are assigned to motifs.



### **BERNINA 880**

- Select Folder 1, Design 11.
- Select the Color Tab.
- Select the Color Wheel icon.

• Turn the slider on the center wheel clockwise using your touch screen stylus (or rotate the Stitch Width knob) to change the color palette of the design.

- Adjust the brightness of the design by moving the slider at the bottom of the screen left or right.
- The new thread colors are automatically assigned.
- When satisfied with the new color-way, select the Embroidery Stitch-out (needle) tab to stitch.



# **BERNINA 880 Embroidery Functions**

EMBROIDERY MOTIF SELECTION									
	Selection Overview - Open New Motif		Selection Overview - Add Motif	Ŷ	Selection Overview - Save	Î	Selection Overview - Delete Motifs		
9	Embroidery Computer - Select Motifs from Folders		USB Stick - Select Motifs from Stick						
	Embroidery Motifs Folder	ABC	Alphabet Folder		Stitch Patterns Folder	•	My Designs Folder		
			EMBROIDERY	FUNC	TIONS	•			
4.5 	Upper Thread Tension	~	Confirm Selection		Mirror Image (Left/Right)		Virtual Positioning		
ł	Security Program - Needle	×	Leave Active Display		Mirror Image (Up/Down)		Basting - Motif/Hoop		
	Presser Foot Indicator	Ð	Move View of Motif	<u>ප</u> (	Alter Characters - Word Art	પ્રિ	Embroidery Sequence Control		
Medium	Select Hoop	\$	Move View of Motif within the Hoop	٤	Change Stitch Type	.**	Cut Connecting Stitches		
Omm	Security Program - Stitch Plate	(÷	Zoom Plus 1 - 5x	***	Endless Embroidery		Color Numbers		
	Feed Dog Up/Down	Q	Zoom Minus 1 - 5x		Shaping	1	Isacord 40 3543 / 3 min. Color Information		
	Filling of Bobbin	÷	Add Embroidery Motif		Duplicate Motif	Q	Change Thread Brand		
1	Edit	Q	Rotate Motif	4	Delete Motif		Convert Thread Brand to Another		
	Embroidery Menu	÷	Rescale Motif in Height or Width	\$	Move Motif Move Hoop		Color Resequence		
l	Information		Rescale Motif Proportionally	P	Hoop Relocator		Single/Multi-color Motif		
×	Close	$\oplus$	Motif Center	enter Move Hoop to the Back			Color Wheel		
<b>O</b> 16:06	Time/Alarm	+ + check → ↑	Check Hoop & Motif Size		Park Embroidery Module	X	Embroidery Speed		
#	Show Grid					163	Embroidery Finish		



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# **BERNINA 790 Embroidery Functions**

EMBROIDERY MOTIF SELECTION									
	Selection Overview - Open New Motif	Đ	Selection Overview - Add Motif	40	Selection Overview - Save		Selection Overview - Delete Motifs		
9	Embroidery Computer - Select Motifs from Folders		USB Stick - Select Motifs from Stick						
**	Embroidery Motifs Folder	ABC	Alphabet Folder		Stitch Patterns Folder	•	My Designs Folder		
			EMBROIDERY	FUNC	TIONS				
4.5 	Upper Thread Tension	>	Confirm Selection	4	Mirror Image (Left/Right)		Virtual Positioning		
ł	Security Program - Needle	×	Leave Active Display		Mirror Image (Up/Down)		Basting - Motif/Hoop		
	Presser Foot Indicator	Ð	Move View of Motif	BC(	Alter Characters - Word Art	દરન	Embroidery Sequence Control		
Medium	Select Hoop	4	Move View of Motif within the Hoop	٤	Alter Stitch Type		Cut Connecting Stitches		
Omm	Security Program - Stitch Plate	( <del>)</del>	Zoom Plus 1 - 5x	***	Endless Embroidery	4	Color Numbers		
	Feed Dog Up/Down	Q	Zoom Minus 1 - 5x		Duplicate Motif	1	Isacord 40 Color 3543 / 3 min. Information		
<b>\$</b> -	Filling of Bobbin	÷	Add Embroidery Motif	Î	Delete Motif	C	Change Thread Brand		
	Edit	Ċ	Rotate Motif	ŧ	Move Motif Move Hoop		Convert Thread Brand to Another		
1	Embroidery Menu	÷	Rescale Motif in Height or Width	<b>P</b>	Move Hoop to the Left		Color Resequence		
i	Information		Rescale Motif Proportionally		Move Hoop to the Back		Single/Multi-color Motif		
×	Back	$\oplus$	Motif Center		Park Embroidery Module	X	Embroidery Speed		
		+ + check → ↑	Check Hoop & Motif Size	#	Show Grid	163	Embroidery Finish		



# **BERNINA 780 Embroidery Functions**

EMBROIDERY MOTIF SELECTION									
*	Selection Overview - Open New Motif	Đ	Selection Overview - Add Motif	Selection Overview - Save		4	Selection Overview - Delete Motifs		
9	Embroidery Computer - Select Motifs from Folders		USB Stick - Select Motifs from Stick						
the second secon	Embroidery Motifs Folder	ABC	Alphabet Folder		Stitch Patterns Folder	•	My Designs Folder		
			EMBROIDERY	FUNC	TIONS				
4.5 	Upper Thread Tension	>	Confirm Selection	4	Mirror Image (Left/Right)	(- <u>+</u> +-)	Virtual Positioning		
ł	Security Program - Needle	×	Leave Active Display		Mirror Image (Up/Down)		Basting - Motif/Hoop		
	Presser Foot Indicator	Ð	Move View of Motif	BC(	Alter Characters - Word Art	દિસ્	Embroidery Sequence Control		
Medium	Select Hoop	4	Move View of Motif within the Hoop	₹⊠	Alter Stitch Type	**	Cut Connecting Stitches		
Omm	Security Program - Stitch Plate	( <del>)</del>	Zoom Plus 1 - 5x	***	Endless Embroidery	4	Color Numbers		
	Feed Dog Up/Down	Q	Zoom Minus 1 - 5x		Duplicate Motif	1	Isacord 40 3543 / 3 min. Color Information		
<b>\$</b> _	Filling of Bobbin	+	Add Embroidery Motif	Î	Delete Motif	Q	Change Thread Brand		
	Edit	Ċ	Rotate Motif	<b>†</b>	Move Motif Move Hoop		Convert Thread Brand to Another		
	Embroidery Menu	÷	Rescale Motif in Height or Width	*** P	Move Hoop to the Left		Color Resequence		
i	Information		Rescale Motif Proportionally		Move Hoop to the Back		Single/Multi-color Motif		
×	Back	$\oplus$	Motif Center		Park Embroidery Module	1	Embroidery Speed		
		+ ← check → ↑	Check Hoop & Motif Size	#	Show Grid	163	Embroidery Finish		



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# BERNINA 770 QE **Embroidery Functions**

EMBROIDERY MOTIF SELECTION								
	Selection Overview - Open New Motif	Đ	Selection Overview - Add Motif	Č,	Selection Overview - Save	4	Selection Overview - Delete Motifs	
t,	Embroidery Computer - Select Motifs from Folders		USB Stick - Select Motifs from Stick					
	Embroidery Motifs Folder	ABC	Alphabet Folder	•	My Designs Folder			
			EMBROIDERY	' FUNC	TIONS			
۹.5 	Upper Thread Tension	>	Confirm Selection	÷	Zoom In 1 - 4x	(- <u>+</u>	Virtual Positioning	
	Security Program - Stitch Plate & Needle	×	Cancel	Q	Zoom Out 1 - 4x		Basting - Motif/Hoop	
	Presser Foot Indicator	\$	Move Motif	Ð	Move View of Motif	ાર	Embroidery Sequence Control	
Medium	Select Hoop		Rescale Motif Proportionally	<b>+</b>	Move View of Motif within the Hoop	*	Cut Connecting Stitches	
	Feed Dog Up/Down	Ċ	Rotate Motif	#	Show Grid	4	Color Numbers	
	Filling of Bobbin		Alter Stitch Type/ Stitch Density		Move Hoop to the Left	1	Isacord 40 Color 3543 / 3 min. Information	
	Edit		Mirror Image (Left/Right)		Move Hoop to the Back	Q	Change Color / Thread Brand	
	Embroidery Menu		Mirror Image (Up/Down)		Park Embroidery Module		Convert Thread Brand to Another	
i	Information	Î	Delete Motif	(+)	Move Hoop	σ	Color Selection by Number	
×	Close	$\textcircled{\ }$	Motif Center	+ + check → †	Check Motif Size	•••	Single/Multi-color Motif	



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# BERNINA 750 QE Embroidery Functions

EMBROIDERY MOTIF SELECTION								
	Embroidery Compute Select Motifs from Fo	r - Iders		USB Stick - Select Motifs from Stick				
	Motifs Folder ABC Alphabet Folder			My Designs Folder				
			EMBROIDERY	' FUNC	TIONS			
	Selection	+ <b>(</b> )-+	Move View of Motif within the Hoop	2.0	Upper Thread Tension	( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (	Motif Center	
٦	Return to Selection Menu	Ð	Zoom Plus 1 - 5x		Security Program - Needle; Stitch Plate		Virtual Positioning	
<b>A</b>	Edit	O	Zoom Minus 1 - 5x	26	Presser Foot Indicator		Basting - Motif/Hoop	
<b>0</b>	Embroidery Menu		Mirror Image (Left/Right)	Medium 100 × 130	Select Hoop	AA	Cut Connecting Stitches	
i	Information		Mirror Image (Up/Down)	+	Move Hoop	LE	Embroidery Sequence Control	
î	Back	*	Move Motif		Hoop Relocator	<b>1</b> 77	Color Numbers	
	Confirm Selection	¢	Rotate Motif		Move Hoop to the Back	1 <sup>Isacord</sup> 1840 / 1		
8	Leave Active Display		Alter Motif Proportionally	P	Park Embroidery Module	Ø	Change Thread Brand	
	New Motif		Save Motif		Delete Motif		Single/Multi-color Motif	



# BERNINA 580 Embroidery Functions

EMBROIDERY MOTIF SELECTION									
Q	Embroidery Menu		Embroidery Computer - Select Motifs from Folders	Ŷ	USB Stick				
ABC	Selecting Alphabets Folder	₹	Selecting Motifs Folder	3	Selecting My Designs Folder				
EMBROIDERY FUNCTIONS									
į	Information		Confirm Selection	X	Leave Active Display				
1	Back to Previous Display	ſ	Return to Selection Menu		Delete Motif				
	New Motif	, F	Add Motif		Duplicate Motif				
O	Zoom Plus	O	Zoom Minus	* <b>Q</b> *	Move View of Motif within Hoop				
	Rescale Motif Proportionally		Rotate Motif	*	Move Motif				
	Mirror Image (Left/Right)		Mirror Image (Up/Down)	\$	Alter Stitch Type				
₽ <sup>B</sup> C	Letter Manipulation	) I	Save	-	Single/Multi-Color Motif				
7	Color Numbers	3	Change Thread Brand		Embroidery Sequence Control				
<b>A</b>	Edit	2.0	Upper Thread Tension	(H)	Embroidery Sequence Control				
Oval 145 × 255	Hoop Selection	#	Grid	$\oplus$	Motif Center				
Check	Check Hoop & Motif Size		Virtual Positioning	ŧ	Move Hoop				
Ð	Hoop Relocator		Move Hoop to Back		Park the Embroidery Module				
	Calibrate Embroidery Module		Basting Boxes	A.KA	Cut Jump Stitches				
	Security Program - Needle; Stitch Plate	26	Presser Foot Indicator						

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# **BERNINA 560 Embroidery Functions**

Ĩ	EMBROIDERY MOTIF SELECTION								
<b>V</b>	Embroidery Menu		Embroidery Computer - Select Motifs from Folders	ł	USB Stick				
ABC	Selecting Alphabets Folder		Selecting Motifs Folder	3	Selecting My Designs Folder				
EMBROIDERY FUNCTIONS									
į	Information		Confirm Selection	$\otimes$	Leave Active Display				
î	Back to Previous Display	ſ	Return to Selection Menu		Delete Motif				
2	New Motif	¢	Rotate Motif	*	Move Motif				
Ð	Zoom Plus	O	Zoom Minus		Move View of Motif within Hoop				
	Rescale Motif Proportionally		Mirror Image (Left/Right)		Mirror Image (Up/Down)				
7	Color Numbers		Change Thread Brand	-1	Single/Multi-Color Motif				
,	Edit		Save	26	Presser Foot Indicator				
$\land$	Security Program - Needle; Stitch Plate	2.0	Upper Thread Tension	(K)	Embroidery Sequence Control				
Oval 145 × 255	Hoop Selection		Basting Boxes	A	Cut Jump Stitches				
↓ Check	Check Hoop & Motif Size		Virtual Positioning	( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (	Motif Center				
	Hoop Relocator	<b>P</b>	Move Hoop to Back		Move Hoop				
	Calibrate Embroidery Module				Park the Embroidery Module				



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# **Deco 340 Embroidery Functions**

EMBROIDERY MOTIF SELECTION							
	Embroidery Computer - Select Motifs from Folders						
A.B.C	Select Alphabets Folder		Select Design Card		USB Stick		
×9	Select Personally Saved Designs		Move from folder to folder or page to page				
		EMBR	OIDERY FUNCTIONS	_			
503	Utility	Edit	Go to Edit Screen	Stitching Time Total # of colo	rs 19 min 5 Colors		
$\Rightarrow$	Setup		Hoop Selection	Size of Motif Hoop / Size of	Size 71x49 mm A(F):126 x 110 mm		
?	Help		Mirror Image (Left/Right)	$^{+}$	Jog Keys		
	Hoop Centering		Mirror Image (Up/Down)	*	New Folder		
	Return Carriage	45°)	Rotate Motif	AA	Font Selection		
1	Image Key—complete or separated by color	Ð	Magnifier	l L	Letter Size—small, medium, and large		
+/5	Jog / Stitch	+ +	Position / Move Motif	ABC	Letter Alignment		
+ -	Stitch Forward / Backward		Delete Motif	<b>←</b> →	Move Cursor		
	Carriage to Front	4	Save Motif	$\mathbf{x}$	Letter Delete		
	Trace	Х	Close	A	Upper / Lower case		
Se .	Disable Thread Cutter	ОК	OK / Confirm	0~9 A~Z	Numbers / Alphabets		
	Resize Motif	Color Change	Multi-colored Lettering	ABAB	Direction of Text		



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# bernette Chicago 7 **Embroidery Functions**

EMBROIDERY MOTIF SELECTION								
	Navigation Arrows, and OK (check) button							
<b>ME</b>	Built-in Designs	A	Built-in Alphabets		Import Designs from USB			
		EMBR	OIDERY FUNCTIONS					
$\bigcirc \bullet$	Start/Stop		Go to Main Embroidery Screen	< <u>₹</u> <> M	ove through embroidery colors			
	Mirror Image (Left/Right)	00	Hoop Selection		ove through embroidery stitch ositions			
<b>€</b> ( (1¢)	Resize Motif	(° (B)	Rotate Motif	#A	Single / Multi Color			
(mem)	Embroidery Setup and Advanced Settings		Trace	<b>€</b> Aa	Enter Editing Display from Lettering Screen			
	OK / Confirm		Directional Arrow Buttons— used for screen navigation and moving the motif					

