MY
BERNINA

BERNINA
Embroidery Software 8
DesignerPlus

Full Version

Color PhotoStitch

3D Globe

made to cr

BERNINA
**Embroidery
Software 8**

EMBROIDERY
SOFTWARE

BERNINA EMBROIDERY SOFTWARE 8.1
WORKBOOK 3
Advanced Features

made to create **BERNINA**

Table of Contents

INTRODUCTION: ORGANIZATION OF MANUAL 3

Software 8 has many advanced features for creating designs.

This section of the Mastery is divided into five different sections.

Section 1: Advanced Editing Features:

In this section, explore the more advanced editing features of the software. These lessons focus on the editing tools found in the Edit Toolbox of Software 8.

Section 2: Manual Digitizing:

The Manual Digitizing tools of the software let you create whatever you wish to create. In this section, learn how to use the various tools to create all sorts of objects. Apply different types of fills; then edit these fills. This section will focus on the Digitizing Toolbox.

Section 3: Multi-Hooping:

Reach beyond the size limitations of the hoop. Learn how to use the multi-hooping features of Software 8 so that you can split a design and reassemble it in the embroidery machine as it is embroidered. This section will feature the Multi-Hooping Toolbox.

Section 4: Three-Dimensional Effects & Special Effects:

Software 8 has many features that give your embroidery design dimension. In this section, learn how to create these three-dimensional effects. This section includes CutWork, StumpWork, Trapunto, Couching, and PunchWork. Also included in this section are special effects that can be added to certain types of fill stitches. This section focuses on the Effects Toolbar and some of the dockers.

Section 5: Creating Patterns, Borders, & Templates:

Create patterns for outlines, fills, and stamps. Add to the selection of monogram borders by creating your own custom borders. Learn how to create templates.

made to create **BERNINA**

Open a New Blank File

- Click on the New Blank Design icon or select File> New.
- Select Insert Embroidery.
- Navigate to Libraries> Embroidery> Public Embroidery> BERNINA 8 Embroidery> Animals & Bugs.
- Open 12440-02.
- Make sure Proportional Scaling is locked.
- Change the % to 150%. Press Enter.
- Right click on Show Hoop.
    ◊ Select BERNINA 7 series for the Machine.
    ◊ Select BERNINA Large Oval Hoop 255 x 145 for the Hoop.
    ◊ Select Foot #26.
    ◊ Place a check mark by Show Hoop. Click OK.

Removing the Original Spots

- If Color Film isn't visible, click on the Color Film icon in the General Tool bar.
- Click on Auto Hide to keep the Color Film docker open.
- Select Show Objects in Color Film. This will show all the objects used to create the design.
- Deselect the design; then hold the Alt + Ctrl keys down and click each of the light tan circle spots in Color Film to select them (these are the spots on the body and the head). Press Delete.

Adding Holes

- Hold the Alt key down and select the deer's body.
- In the Edit Toolbox, select Add Holes.
- Zoom in on the back area of the deer. Notice that the selected object has outlined squares around the object. This is the Add-Hole mode.
- Make three right clicks in the shape of a circle on the deer's body (one at 12, one at 3, and one at 6 o'clock). Press Enter to enclose the circle. See illustration.
- Continue to make two more circles with three right clicks and press Enter to enclose the shapes.
- When you have completed the three spots, press Enter again to create the holes.

Filling Holes

- Hold the Alt key down and reselect the deer's body.
- In the Edit Toolbox, select Fill Holes.
- A dialog box opens and the underlap can be changed if needed.
- Leave the underlap at 0.039.
- Click OK. The holes fill with the same color as the deer's body.
- Select the holes while holding the Ctrl key.
- Click on the color chip (color #2) to change the color of the spots.
- Select Design> Optimize Color Changes. Click OK in the dialog box.
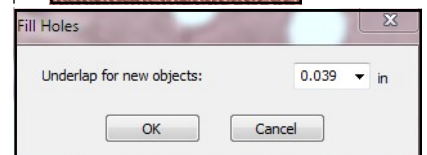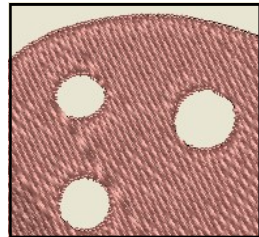- Select File> Save As and name the file Adding Holes.
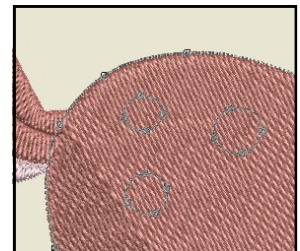
Notes:

Lesson covers:
- *Adding Holes*
- *Filling Holes*
- *Removing Holes*

Fill Holes

Underlap for new objects: 0.039 ▼ in

OK   Cancel

Remove Holes will eliminate the holes under the spots, but will not remove the spots.

Color Blending

Embroidery Library

- Select the New Blank Design icon.
- Select Embroidery Library.
- In the folder tree, select BERNINA 8 Embroidery in the Public Embroidery folder. This shows all the designs that are found in this folder.
- In the Find box, type Wheat.
- Select the design.
- Click on New from Selected.
- The design is inserted into a blank design file. Only the colors used in the design are visible in the Color Toolbar.

My Threads Docker: Adding & Matching

- Click on Add Palette Color three times to add three colors.
- Rest your mouse on these new color chips. Notice these are BERNINA colors.
- Open My Threads/Thread Colors Docker.
- Click on My Thread Charts.
- Select Aurifil in the left side of the Thread Charts.
- Click on the single arrow to move this chart to the right. Click OK.
- In the My Threads Docker, click on Match All. The color chips now show Aurifil or Isacord thread colors and colors have been assigned to the new color chips. .

My Threads Docker: Searching for Colors

- Select Color Chip 6 in the Color Toolbar.
- In the Type Code or Name box of the My Threads Docker, type 1310.
- Double click on the orange color bar to change Color Chip 6 to the searched color.
- Select Show Thread Details in My Threads Docker.
- Select Color Chip 7 in the Color Palette and type in Gold in the search box. Any threads that have the name "Gold" in them appear.
- Double click on Color 0941 to change Color Chip 7 to that color.
- Select Color Chip 8 in the Palette. Type 5510 in the Search box.
- Double click on the color chip in the My Threads docker to change Color 8 to that color.
- Highlight the color number in the docker and press Delete to show all thread colors in My Threads docker.
- Deactivate Show Thread Details.
- Click on the X to close My Threads.

Applying Color Blending to Step Fill

- Select the sun (the half circle in the design).
- In the Edit Toolbox, select Color Blending.
- There are four different blending profiles. Select Profile 3.
- Leave the Bottom layer on Color 0506.
- Click on the drop down arrow for the Top Layer and change the color to 1310. Click OK.

Applying Color Blending to Satin Fill
- Make sure Show Objects is activated in Color Film (the icon will turn yellow).
- Select the wheat kernels in Color Film. Click on the first kernel; then hold the Shift key and use the scroll bar to select the last kernel in Color Film.
- The last kernel is just before the yellow bars of the design.
- Click on Color Blending.
- Notice that the dialog box remembers the last colors that you used to blend.
- Select Profile 2.
- Select Color 2130 Aurifil for the Bottom Layer.
- Select Color 0941 for Top layer.
- For the Bottom layer, select .6 mm.
- For the Top layer, select 3mm.
- Click OK.

Applying Color Blending to Satin Fill
- Deactivate Show Objects in Color Film.
- Select the green color chip in Color Film.
- Click on Color Blending.
- Change the Profile to Profile 3.
- Select Isacord 5400 for the Bottom Layer.
- Select Isacord 5510 for the Top Layer.
- Click OK.

Elastic Fancy Fill Effect
- Select the last color chip in Color Film.
- Right click on Elastic Fancy Fill in the Effects Toolbar.
- From the drop-down choices of patterns, select 006 Jewel.
- Place a dot in front of Single Row.
- Click OK.

Minimize Color Changes
- Select Design> Optimize Color Changes and click OK in the dialog box that opens.
- This combines the color blended objects to stitch after the satin stitches and will create a more efficient stitch out.

Jump Stitches
- If you are in Design View, press T on the keyboard to switch to Artistic View. Notice that there are jump stitches in between some of the wheat kernels. Artistic View shows jump stitches that are too small to be trimmed by the embroidery machine. Jump stitches that are trimmed by the embroidery machine will not be visible in Artistic View.
- Select the wheat kernels color chip in Color Film.
- Open Object Properties. Select the Tie-In/Off tab.
- Place a check mark by "Always Trim". Click OK.
- Notice that the small jump stitches are not visible. The machine will now trim even these small jump stitches.
- Select File> Save As and name the file, Color Blending.

Notes:

With Satin Stitches, the Maximum spacing values must be changed or the objects will be too open.

Elastic Fancy Fill is applied to satin objects or outlines. Any of the Fancy Fills can be selected for this Effect. There are four different ways to apply the Elastic Fancy Fill.
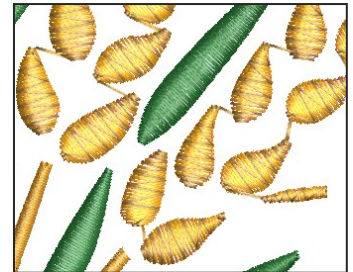
Quilting Backgrounds

Inserting the Design
- Click on the New Blank Design icon or select File> New.
- Select Insert Embroidery.
- Navigate to Libraries> Embroidery> BERNINA 8 Embroidery> Decorative Accents.
- Open HT115.
- Right click on Show Hoop, select BERNINA 8 Series, select the Jumbo Hoop, and select Foot #26 from drop-down choices. Make sure that Show Hoop is checked. Click OK.

Adding the Echo Quilting Background
- In the Edit Toolbox, click on Quilting Background.
- This opens a dialog box.
- Proportional Sizing is checked by default and if it is checked, you may just enter the value in one of the boxes.
- If it is unchecked, then the value will need to be changed in both the width and the height.
- Select 9.5" for the Block Size.
- For Quilting Type, select Echo.
    ◊ For the Design Margin, select .2".
    ◊ For the Block Margin, select .2".
    ◊ For the Line Spacing, select .25".
- Click OK.
- Select File> Save as and name the design, Quilting Background Echo.
- Echo quilting adds concentric lines around a design.
- When it is clipped, there is no square frame stitched around the design. Echoes radiate to the edge of the block. See the example at the right.

Adding a Scroll Clipped Quilted Background
- Select Undo.
- Select the design.
- Click on Quilting Background.
- You can make an off-center quilted design by digitizing the block center.
- In the Quilting Background dialog box, select Scroll Clipped for the Quilting Type and keep all the margins the same as before.
- Place a dot in front of Digitize Center.
- Click OK.
- A shadow line of the block size appears and you can move it around to place the design. See illustration at the right.
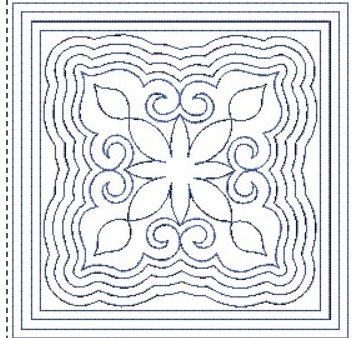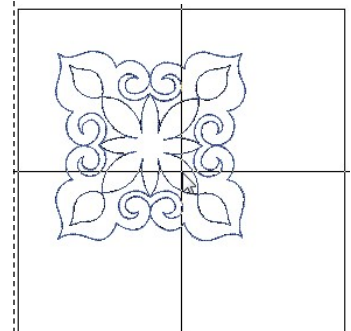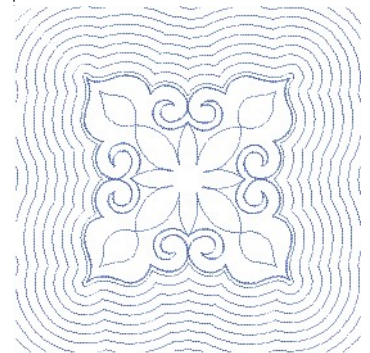

Notes:

Lesson covers:
♦ *Adding Quilting Backgrounds to designs*
♦ *Editing Quilting Backgrounds*

There are five different types of quilting backgrounds that can be added to a design.
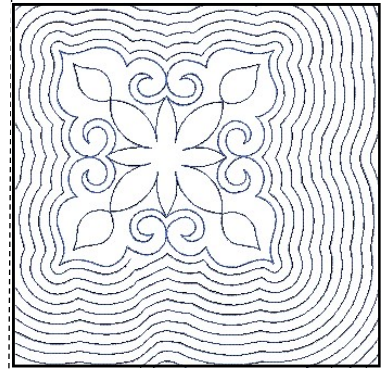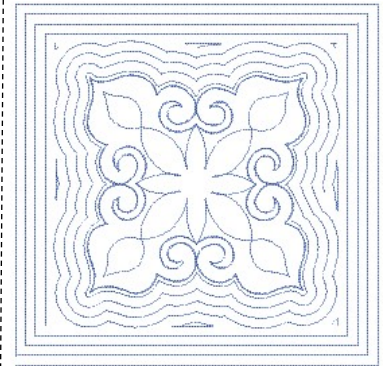
Echo Quilted

Echo Clipped

- Click when you like the off-center design.
- Use Undo to redo the position of the block if necessary. Repeat the steps to add a new off-center design.
- Select the stitching, click on Sculptured Run in the Outline Toolbar.
- Select File> Save As and name the file, Quilting Background Scroll Clipped.
- A scroll design forms a continuous line of stitching that is wrapped around the design. There are not as many tie offs as on the echo quilted design.
- A scroll clipped design doesn't have a square frame around the design, but continues out to the block edge while a scroll design (no clipping) has a square frame around the design.
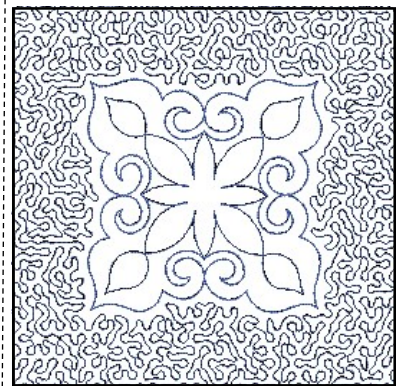
Stipple Quilted Background
- Select Undo twice.
- Select the design.
- Select Quilting Background.
- Select Stipple for the Quilting Type from the drop-down choices.
- Change the Block Center to Use Design Center.
- Change the Design Margin to .1".
- Keep the Block Margin at .2".
- Change the Line Spacing to .2".
- Click OK.
- Double click on the stippling to open Object Properties.
- Change the Stitch Length to 3.
- Click OK.
- Select File> Save As and name the file Quilting Background Stipple.
- Save; then close the file.

Notes:

Scroll Clipped

Scroll

Stipple

A check mark in front of Variable Run Length will place shorter stitches around tighter curves and is best activated when using stipple quilting.

Layouts

Creating a Work Area
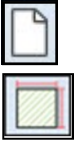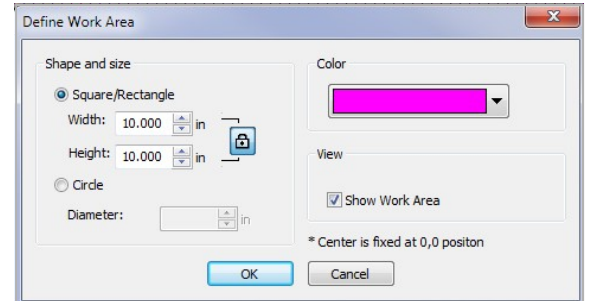- Select New Blank Design.
- Open the Layout Toolbox.
- Click on Define Work Area. A dialog box will open.
- The default type of layout is a Square/Rectangle.
- Change the Width to 10" with Proportional Scaling in the locked position.
- Choose a color for the layout background.
- There should be a check mark by Show Work Area.
- Click OK.

Adding Embroidery
- Select Insert Embroidery.
- Navigate to Libraries> Embroidery> BERNINA 8 Embroidery> Alphabets & Monograms.
- Open FB039.ART80.
- While the design is selected, select Rotate Right two times to rotate the design so it is oriented to the left corner. Rectangular and square layouts use the lower left corner as a reference to place designs around the layout.

Creating the Layout
- With the design selected, click on Layout to Rectangular Work Area to set the designs.
- You can set the distance the corner designs are set from the work area by changing the distance in the Layout Work Area Set.
- Change the distance to 10 mm by clicking on the drop-down arrow and selecting 10mm.
- There is an outlined preview of the positioning of the design.
- Click on the design screen to set the design or press Enter.
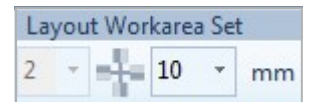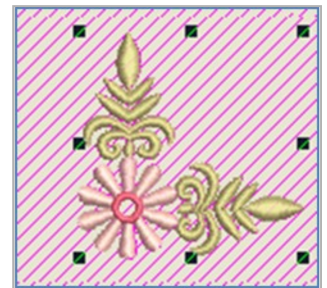
Adding a Center Design
- Select Insert Embroidery.
- Select FB038.ART80. Click Open.

Selecting the Hoop
- Right click on Show Hoop.
- Select BERNINA 8 series.
- Select BERNINA Jumbo Hoop, 256 x 400.
- Select Foot #26.
- Check Show Hoop if it is unchecked. Click OK.
- To hide the work area, click on Show Work Area.
- Select Design> Optimize Color Changes.
- In the dialog box that opens, click OK.
- Save the design as Layout Work Area.

Notes:

Lesson covers:
♦ *Creating Design Layouts*

Rectangular and Circular work areas can be defined. You can also create a Quilt Block Layout.

Layout Workarea Set

©2018 BERNINA of America, Inc.

Creating a Quilt Block
- Select New Blank Design.
- Deactivate Show Work Area if needed.
- Open the Layout Toolbox.
- Click on Define Quilt Block. A dialog box will open.
- Change the Width to 10" with Proportional Scaling in the locked position.
- There should be a check mark by Show Quilt Block. This will give you a visual of the total area of the quilt block.
- Click OK.

Adding Embroidery
- Select Insert Embroidery.
- Navigate to Libraries> Embroidery> BERNINA 8 Embroidery> Decorative Accents.
- Open HT102.
- While the design is selected, select Rotate Left three times to rotate the design so it is oriented to the left corner.
- The Quilt Block layout uses the lower left corner as a reference to place designs around the layout.

Creating the Layout
- With the design selected, click on Layout to Rectangular Quilt Block to set the designs.
- You can set the distance the corner designs are set from the quilt block by changing the distance in the Layout Quilt box.
- Click on the drop-down arrow and select the distance. Choose 7mm.
- There is an outlined preview of the positioning of the design.
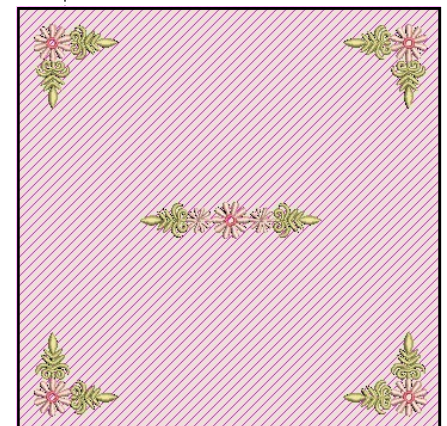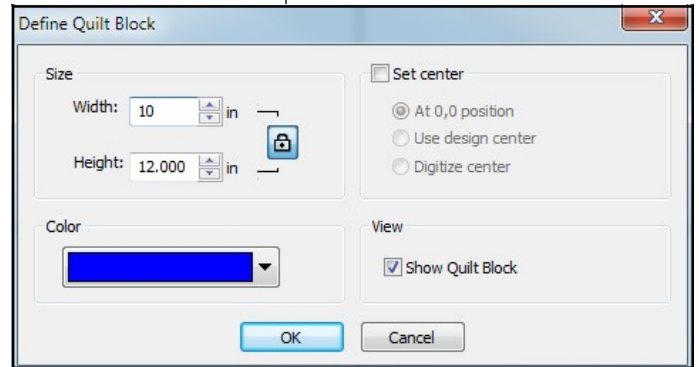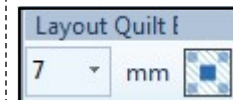- Click on the design screen to set the design around the corners or press Enter.

Adding a Center Design
- Select Insert Embroidery. Open HT105.
- The design is centered in the quilt block.

Blackwork Run
- Select Ctrl + A.
- In the Edit Toolbox, select Blackwork Run.
- Blackwork Run eliminated the jump stitches in the design and the design will stitch a double run outline.
- Press Enter to activate.
- Save the design as Layout Quilt Block.
- Close the file.

Deactivating Show Quilt Block or Show Design Work Area
- To have a New Blank Design open without a work area layout or quilt layout, deactivate the icons in the View Menu.
- Close the software; then reopen the software.

Notes:

Lesson covers:
- *Defining Quilt Blocks*
- *Blackwork Run*

Define Quilt Block

Size
Width: 10 in
Height: 12.000 in

Set center
- At 0,0 position
- Use design center
- Digitize center

Color

View
☑ Show Quilt Block

OK   Cancel

Layout Quilt I
7 ▾ mm

If the desired number is not ilisted n the Layout Quilt Box, type the desired amount in the dialog box; press Enter to activate the number; then click on the design screen to set the desgins.

Knife

Inserting the Artwork
- Select New Blank Design. Select Insert Artwork.
- Navigate to Libraries> Pictures> BERNINA 8 Pictures> Artwork.
- Open A_apples_001.jpg.
- Select Crop Background in the Auto-Digitize Toolbox.
- Select the Rectangle Crop.
- Click and drag a border around the red apple, eliminating what you can of the other apples. Release the mouse to set the crop.

Instant Auto Digitizing
- While the picture is selected, click on Instant Auto Digitize in the Auto Digitize Toolbox.
- Select the white stitching in Color Film. Press Delete.
- Select the picture in Color Film (sailboat). Press Delete.
- Select the stitches outside the apple on the design screen. Delete.

Using the Knife
- Select Edit> Select All.
- Click on Rotate Right to rotate the apple so that it is upright.
- Change the design Width to 150% in the Transform Toolbar. Proportional Scaling should be locked. Press Enter.
- While everything is still selected, select the Knife in the Edit Toolbox.
- Make two left clicks across the apple at an angle. Press Enter.
- Draw a bounding box around the apple that encompasses the split, but doesn't include all the bottom part of the apple.
- Click and drag on the upper part of the apple to split the apple apart.

Adding Lettering
- Press the A on the keyboard.
- In the Object Properties box, type, "Apple of My Eye."
- Change the Font to Medley. Change the Height to 0.4".
- Press OK and click on the screen to activate the lettering.
- Click inside the lettering to access the rotate handles.
- Click and drag on a corner handle to rotate the lettering so it is parallel to the split in the apple.
- Move the lettering in the middle of the split. Change the color.

Finalizing the Design
- Draw a bounding box around the top of the apple.
- Hold the Shift key and resize the apple using the middle black boxes (see illustration above right) so that the size of the upper apple corresponds visually to the size of the lower apple.
- Select any extraneous travel stitches in Color Film and press Delete.
- Select the red sections in Color Film while holding the Ctrl key.
- Select the Fancy Fill icon.
- Click and drag on the top apple section in Color Film to combine with the bottom of the apple. Save the file as Knife.
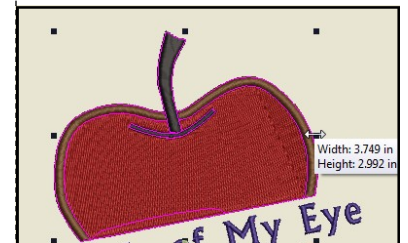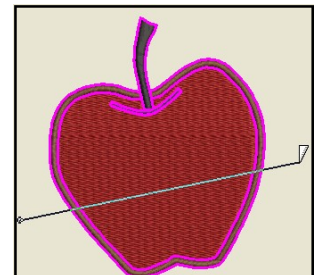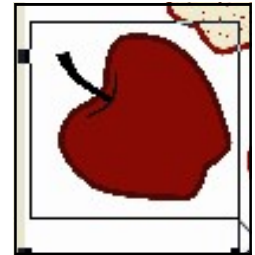
Introduction to Manual Digitizing

Digitizing is the conversion of a graphic or drawn image into a data format that embroidery machines understand. Data is entered into the computer; then the data is defined to represent stitch types, stitch directions, stitching sequence, density settings, and other types of information for the design.

- *The digitizing tools are used to set stitches for all the outlines and shapes in a design.*
- *In manual digitizing, every object must be defined by one of the tools.*

You can create designs in Software 8 using the manual digitizing tools while using artwork as a backdrop. Outlines of objects are created using right and left clicks around the objects. You have the choice to fill these areas with filled stitches or leave them as outlines around the objects.

Manual Digitizing Tools

There are seven basic types of manual digitizing tools in Software 8. These are accessed in the Digitize Toolbox.

◊ ***Open Object Tool:*** *Used for drawing outlines that don't enclose a shape, but are left open. The outline of the object is drawn with right + left clicks.*
◊ ***Closed Object Tool:*** *Used for drawing filled or outlined objects that enclose a shape. The closed shape is drawn with right + left clicks.*
◊ ***Open Freehand Tool:*** *The open outlined shape is drawn by clicking and dragging on the screen vs. using right/left clicks.*
◊ ***Closed Freehand Tool:*** *Used for drawing filled or outlined objects that enclose a shape by clicking and dragging on the screen vs. using right/left clicks.*
◊ ***Block Digitizing Tool:*** *Used for drawing filled or outlined objects that set multiple angles within the object as it is digitized, using right/left clicks that alternate sides.*
◊ ***Ellipse:*** *Used for drawing circles or ovals. You may also digitize a circle using the Closed Object Tool and set three right clicks; then press Enter to set the shape.*
◊ ***Rectangle:*** *Used for drawing rectangles or squares. Holding the Ctrl key with the Rectangle tool creates a square.*

With manual digitizing, you want to start with objects in the background and work toward objects in the foreground. It helps to develop a plan—it will save you time in the long run.

Continued practice and experience will help you learn the basics of manual digitizing.

Introduction to Manual Digitizing

Fill Stitches:

There are fifteen types of fill stitches in DesignerPlus 8. These are accessed by shortcut icons at the bottom of the design screen or through Object Properties, Fill Tab. When you manually digitize designs, you choose the type and properties of the fill or outline, the color of the object, and the angle of the stitch for fill stitches. These decisions can be made prior to digitizing an object or they can be changed after the object is digitized.

Types of Fill Stitches:

◊ *Step Fill*
◊ *Satin Fill*
◊ *Raised Satin Fill*
◊ *Fancy Fill*
◊ *Sculptured Fancy Fill*
◊ *Ripple Fill*
◊ *Contour Fill (only with Block Digitizing tool or Circle tool)*
◊ *Blackwork Fill*
◊ *Candlewicking Fill*
◊ *Lacework Fill*
◊ *Pattern Fill*
◊ *Cross Stitch Fill*
◊ *Stipple Run*
◊ *Stipple Stemstitch*
◊ *Stipple Backstitch*

Outline Stitches:

There are twelve types of outline stitches in DesignerPlus 8. These are accessed by shortcut icons at the bottom of the design screen or through Object Properties, Outline Tab.

Types of Fill Stitches:

◊ *Single Outline*
◊ *Triple Outline*
◊ *Sculptured Run Outline*
◊ *Backstitch Outline*
◊ *Stemstitch Outline*
◊ *Zigzag Outline*
◊ *Satin Outline*
◊ *Raised Satin Outline*
◊ *Blanket Outline*
◊ *Blackwork Outline*
◊ *Candlewicking Outline*
◊ *Pattern Run Outline*

Loading the Artwork
- Click on the New Blank Design icon or select File> New.
- Select Insert Artwork.
- Navigate to Libraries> Pictures> BERNINA 8 Pictures> Artwork.
- Open the floral pattern4.bmp.
- While the picture is selected, change the size percentage in the Transform Toolbar to 200%. Press Enter.
- Select File> Save As and name the file, Manual Digitizing.

Preselecting Thread Colors
- Right click on the Thread Colors icon.
- The first default color in the top section of the dialog box should be selected.
- Choose Isacord 40 from the drop down box of the Thread Chart.
- Click in the Search box.
- Enter the first thread color number from the chart on the right.
- Press Enter.
- Enter the second thread color, press Enter.
- Continue to complete entering the thread colors.
- When finished with all of the colors, click OK.

Default color	New Color
1	5411
2	5415
3	4421
4	2011
5	0608
6	0020

Rotating the Hoop
- Right click on the Show Hoop icon.
    ◊ Make sure that Show Hoop is checked.
    ◊ Choose BERNINA 7 series.
    ◊ Select BERNINA Maxi Hoop, 210 x 400 from the Hoop choices.
    ◊ Select Foot #26.
    ◊ Click OK.
- Select the Multi-Hooping Toolbox.
- Select the hoop by clicking on its outline.
- Click on Rotate Right twice to rotate the hoop 90º.
- Click on the Digitize Toolbox.
- Right click on the picture and select Lock.

Digitizing with the Closed Object Tool
- Click on the Zoom icon and drag a bounding box around the top leaf.
- Select the Closed Object Tool in the Digitize Toolbox.
- The Current Color is 5411, the first assigned color.
- The default fill stitch is Step Fill.
- Using a series of right and left clicks, trace around the leaf shape.
- When you are close to the beginning click, press Enter to enclose the shape.

Notes:

Lesson covers:
- ♦ *Rotating a hoop*
- ♦ *Manual Digitizing tools*
- ♦ *Morphing*
- ♦ *Applying + editing craft fills*
- ♦ *Changing Thread Colors*
- ♦ *Color Blending*
- ♦ *Changing density*
- ♦ *Calligraphy*
- ♦ *Outline Design*
- ♦ *Resequencing*

Analyze the design before you start digitizing. You must digitize the objects in the background first, the objects in the foreground last, then any details that overlay the objects in the foreground.

In Options, Scrolling Tab, make sure that a check mark is placed by Auto Scroll.

See digitizing tips on the next page.

Digitizing Tips:
- ◊ It takes three clicks before the direction of the line takes shape.
- ◊ A left click followed by a left click makes a straight line segment.
- ◊ A left click followed by a right click begins to make a curve.
- ◊ A right click followed by a left begins to make a curve.
- ◊ A right click followed by a right click begins to make a curve.
- ◊ Left clicks are used to change directions and turn corners.
- ◊ Use as few clicks as possible while still defining the shape.
- ◊ When you get close to finishing the shape, let the software enclose the shape when using the Closed Object Tool by pressing Enter on the keyboard.

If you make a mistake:
- ◊ Use the Backspace key to erase one click at a time. Continue to use the Backspace as many times as you need.
- ◊ If you wish to start over, press the Esc key.
- ◊ You can always digitize the shape; then use Reshape to change the digitized points (see information below).

Changing Stitch Angles
- Press Esc to deselect the digitizing tool.
- The default stitch angle for step fills is 45º.
- Select the object; then select Reshape Object.
- Click on the peach-colored square at the end of the line segment.
- Drag the square so that it extends through the tip of the leaf. This changes the stitch angle. You may need to zoom out.

Editing Reference Points
- If you wish to reshape the object, this is also done through Reshape.
- To reshape objects:
  - ◊ To change a reference point—select the digitized point; press the space bar. This changes a left to a right click and vice versa.
  - ◊ To add a reference point—click on the line surrounding the object; right or left click on the line.
  - ◊ To move a reference point—click and drag it to a new location.
  - ◊ To delete a reference point—select the point and press Delete.
- Press Esc when finished.

Adding Dimension by Splitting Objects
- Another method of digitizing leaves is to split the leaf in the middle and then digitize the leaf in two parts.
- Use Pan to move to the other leaf.
- Select the Closed Object Tool.
- Digitize the top part of the lower leaf in the design using Color #1, creating an imaginary line across the center of the leaf.
- Press Enter to activate the stitches.
- Select Color # 2; then digitize the bottom part of the leaf. Make sure you slightly overlap the objects in the middle of the leaf so a gap does not occur when stitching.
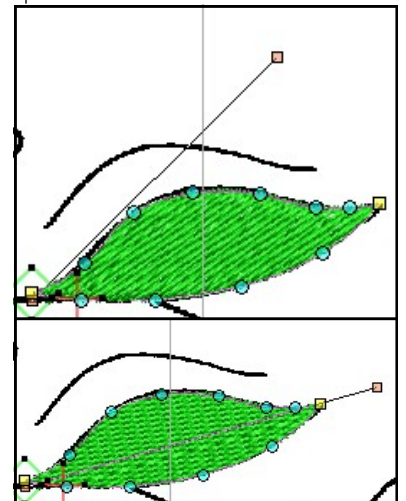
You can always add imaginary lines to the image in your design to create dimension.
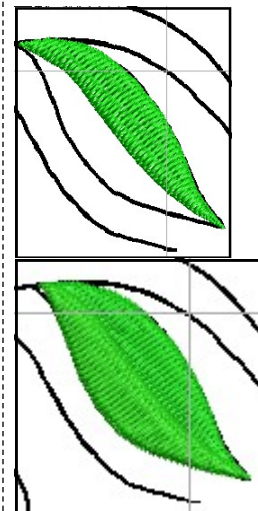
- Press Esc; then select the top part of the leaf.
- Double click to display Object Properties.
- Select the Stitch Angle tab, then change the value to 160.
- Click Apply.
- Select the lower part of the leaf. Change the stitch angle to 105º.
- Click OK; then Esc.

Remove Overlap
- Use Pan to locate the flower on the far left.
- Select Color # 4; then select the Closed Object Tool.
- Digitize around the petals of the far right flower by beginning at an intersecting point (see the red arrow in the illustration to the right).
- Begin with a left click, then digitize around the petals. Remember to use a left click to change direction at the intersection of each of the petals.
- Remember you do not have to follow the exact shape of the picture; you can create your own shaped petals.
- Press Enter to activate the stitches for the petals.
- Select Esc.
- Select Color # 5, then select the Ellipse tool.
- Click in the center of the flower petals and drag to the desired size of the circle and click again.
- Press Enter; then press Esc.
- Select the flower center. Move if desired.
- Select Remove Overlaps from the Edit Toolbox.
- The stitching under the yellow center is removed.

Morphing
- Select the petals of the flower.
- Click on the Morphing Effect tab in the Docker Panels. If the tab is not visible, click on the Morphing Effect icon in the General Toolbar.
- Click on the Ripple Morphing Effect.
- Drag the Ripple Amplitude (vertical bar) to 55.
- Drag the Ripple Frequency (horizontal bar) to 75.
- Click on the Twirl Morphing Effect. Select Esc.

Digitizing Candlewicking
- Pan to another flower.
- Select Color # 4.
- Select the Closed Object Tool in the Digitize Toolbox.
- Digitize around only one petal of the second flower, beginning at the base of the flower center.
- Press Enter to activate the stitches; then Esc.
- Select the petal; then right click on the Candlewicking Fill icon to open the Object Properties dialog box.
- Click on the Select button.
- There are different types of Candlewicking fills.
- Select the 3 mm knot.
- Click OK; then Esc.

Notes:

You can change the angle of an object mathematically as well as visually.
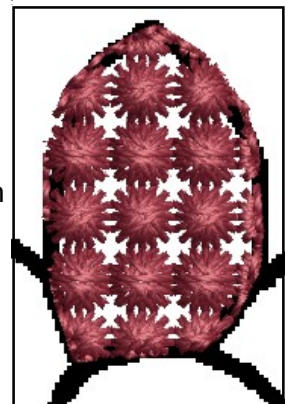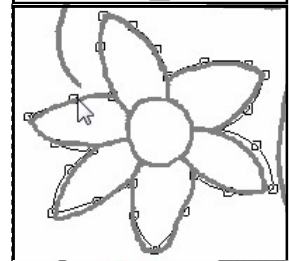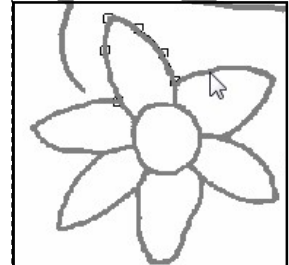
Blackwork Fill
- Right click on the Blackwork Fill icon to open Object Properties.
- Click on the Select button.
- Click on Show True View to see how the stitches will actually look.
- Use the scroll arrows to select Blackwork Fill # B0017a.
- Click OK.
- Select the Closed Object Tool.
- Digitize around another petal and press Enter.
- Click on the Bitmaps icon to hide the picture.
- Press Esc.
- Select the Blackwork petal and click on Object Properties.

Editing Craft Fills
- Click on the Layout button in Object Properties.
- Notice there are three blue repeats of the design surrounded by several yellow repeats. (Zoom in if necessary.)
- Each blue repeat has a different function for making alterations in the craft fills.
    ◊ With the middle repeat, you can resize the fill by clicking and dragging on one of the black boxes. Clicking on a corner box will resize the fill proportionally. The center squares will resize disproportionately.
    ◊ Click in the middle of this repeat.
    ◊ The black squares change to outlined squares and you can now rotate the craft fill by clicking and dragging the outlined squares.
    ◊ If you click and drag on a diamond outlined shape in the middle, this will skew the fill.
    ◊ The top repeat will stagger the repeats—click and move this repeat to see the effect on the columns.
    ◊ The repeat on the right will bring the rows closer together or further apart as you move this blue repeat.
   ◊ Change these as you wish and press Enter to activate.
- Close Object Properties.

Lacework Fills
- Bring the picture back by clicking on the Bitmaps icon.
- Color # 4 should still be selected.
- Select the Closed Object Tool.
- Digitize another petal. Press Esc.
- Select the petal.
- Double click to open Object Properties.
- From the Fill Type in Object Properties, select Lacework.
- Click on Select.
- Select Pattern #L0003a.
- Change the Size X, Size Y, Column Spacing, Row Spacing to .10".
- Press Apply to keep Object Properties open.

Notes:

You may also pre-select the type of fill before digitizing.
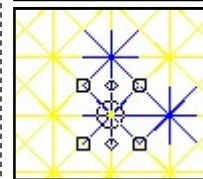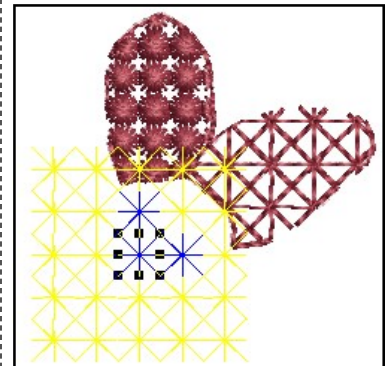
Any of the craft fills can be edited visually in this way.

You can also change the craft stitches mathematically by altering the numbers in Object Properties. These values are updated when you change the properties visually.

Fills may be selected through the Object Properties dialog box or you may click on the corresponding icon to activate the default fill of that fill type. If you right click on the fill icon, Object Properties will open to that particular type of fill.

©2018 BERNINA of America, Inc.

Pattern Fill
- Digitize another petal using the Closed Object Tool.
- Press Enter to complete the shape; then press Esc.
- Select the petal.
- In Object Properties, select Pattern from the drop down box or right click on the Pattern icon.
- Click on the Select button.
- Select the Cross folder from the drop down menu.
- Select # 302. Click OK.
- Change the Size of the X and Y to .15".
- Change the Column and Row Spacing to .15".
- Click OK. Select Esc.

Ripple Fill
- Select the Ripple Fill icon.
- Digitize another petal after selecting the Closed Object Tool.
- Press Esc.

Cross Stitch Fill
- Right click on the Cross Stitch Fill icon.
- Under Stitch Style, select Upright Cross. Click on OK.
- Select the Closed Object Tool.
- Digitize another petal. Press Esc.

Contour Fill
- Select the Ellipse Tool. Click on Contour Fill.
- Digitize the flower center using the Ellipse tool, clicking in the center of the flower and dragging to the edge of the center. Click again and press Enter.

Fancy Fills
- Use Pan to move to the last flower.
- Right click on the Fancy Fill icon to open Object Properties.
- From the drop down Pattern choices, select 034 Sunny.
- Click Apply.
- Select the Closed Object Tool. Digitize around the remaining flower, using Color #4. Place the digitized points as you did for the first flower petal; using left clicks at the petal indentations and right clicks around the petals. Press enter to finish and close the shape.
- Select Esc. Select the flower.

Fussy Cutting Fancy Fills
- You must be in Artistic View to see the Fancy Fill. If necessary, select the T on your keyboard or click on Show Artistic View.
- Click on Layout in Object Properties**.**
- Move the blue sun to the flower center by clicking and dragging the middle blue sun.
- Press Enter. The sun becomes the flower center. Deselect.
- Close Object Properties.

Notes:
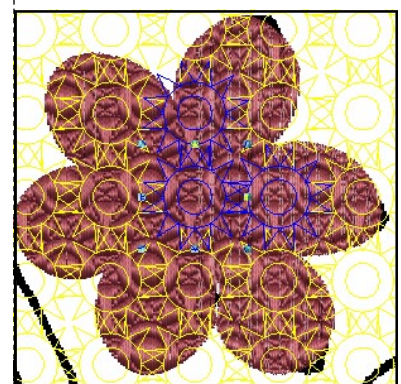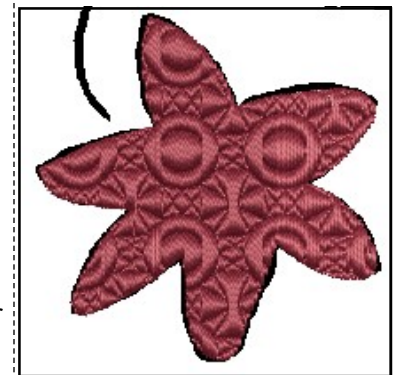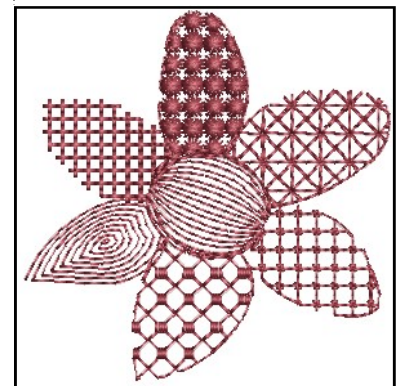
Block Digitizing
- Pan to one of the "shoot-off" spirals.
- Select Color # 2 from the Color Palette. Select the Step Fill.
- Select the Block Tool in the Digitize Toolbox.
- Begin block digitizing with two left clicks at the intersection of the spiral with the main stem. See illustration at right.
- Follow the spiral with right clicks; end with two left clicks.
- You must alternate from one side to the other as you work your way around the spiral.
    ◊ Remember you can use the back space key to go back one stitch, or more if you need to!
    ◊ Esc will take you out of the function.
- When you finish the block digitizing, press Enter.
- Repeat for the other spiral that intersects with the stem.
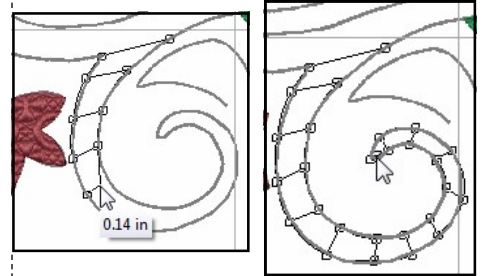
Color Blending
- Select the Closed Object Tool. Select Step Fill.
- Digitize the main part of the "stem", using right and left clicks, clicking around the shape of the stem.
- Press Enter to activate the step fill. Press Esc.
- Select the stem.
- Open Object Properties; Stitch Angle Tab and change the angle to 45 degrees. Press OK.
- Click on the Color Blending tool in the Edit Toolbox.
- In the dialog box that opens, select Isacord 4421 for the bottom layer and Isacord 5415 for the top layer.
- Leave the Spacing at 2 mm for each layer.
- Select Profile 2 for the blend. The profiles determine the point from which the color variation occurs. Click OK.

Changing Density
- Deselect the main spiral; then select each of the block digitized spirals while holding the Ctrl key.
- Double click to open Object Properties.
- Change the Stitch Spacing to .6 Click OK.
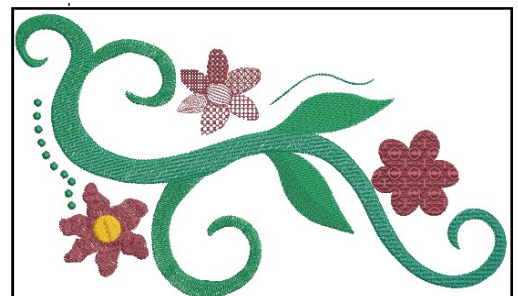
Digitizing Candlewicking Outlines
- Select the Open Object tool in the Digitize Toolbox.
- Select the Candlewicking Outline.
- Select Color #1.
- Using left and right clicks, digitize the single line to the left of the design.
- Press Enter to activate.

Digitizing Backstitch Outlines
- Select the Open Freehand tool in the Digitize Toolbox.
- Select the Backstitch Outline.
- Select Color #2.
- Click and drag following the line above the top leaf.
- Release the mouse to activate the stitches. Press Esc.

Notes:

Color Blending adds shading and color effects to embroidery designs.

Objects that have been Color Blended cannot be sequenced because the colors in the blended object are grouped.

Software 8 provides several Craft Stitches to design and create with. These stitches are designed to mimic hand-worked embroidery.

Calligraphy
- Select the Open Object tool in the Digitize Toolbox.
- Select the Satin Outline. Color #2 should still be selected.
- Using left and right clicks, digitize the line under the main stem.
- Press Enter to activate. Press Esc.
- Double click on the satin line to open Object Properties.
- Change the Satin Width to .12 inches.
- Place a check mark by Calligraphy.
- Change the Calligraphy Angle to 75º. Click OK.

Digitizing Stemstitch Outlines
- Select the Open Object tool in the Digitize Toolbox.
- Select the Stemstitch Outline. Color #2 should still be selected.
- Using left and right clicks, digitize the two remaining lines.
- Press Enter to activate each line. Press Esc.

Deleting the Graphic
- Right click on the sailboat picture in Color Film. Select Unlock.
- Select the white background of the picture. Press the Delete key.

Outlining Objects
- Select the morphed flower, its center, and the Fancy Fill flower while holding the Ctrl key.
- Select Outline and Offsets in the Edit Toolbox.
- In the dialog box that opens, place a check mark by Object Outlines; then select:
    ◊ Backstitch from the Type.
    ◊ Color 2011 from the Color drop-down.
    ◊ Individual Outlines (from Overlapping Objects choices).
    ◊ Uncheck Offset Outlines if it is checked.
    ◊ Press OK.
- Select each of the craft petals while holding the Ctrl key.
- Click on the Outline and Offsets icon.
- In the dialog box that opens, select OK..

Digitizing a Flower Center
- Right click on the Raised Satin outline.
- Change the Satin width to .05". Change the Layers to 2. Click OK.
- Select Color Chip 6.
- Select the Ellipse Tool in the Digitize Toolbox.
- Draw a satin outline circle in the center of the fancy fill flower with two left clicks; then press Enter.

Resequencing
- Select the burgundy petals that stitch after the yellow flower center in Color Film. Click on Back One Color in Color Film to combine the burgundy flower petals.
- Select the green swirls and click on Back 1 Color twice.
- Select the Candlewicking Dots and select Move to Start.
- Select Save.

Notes:
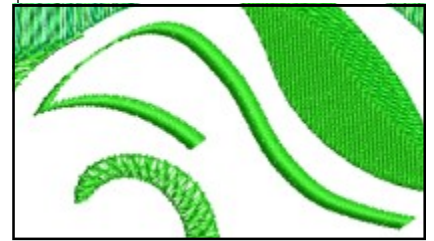
Before outlining objects, you should reshape any objects that you wish to reshape. After re-shaping, press Esc.

Blackwork Run

The software offers the Blackwork Run feature to assist in creating outlined designs. Blackwork Run is designed to join selected outlines to form a single, grouped outline that is correctly sequenced for an efficient stitch-out (no jump stitches).

Important notes regarding Blackwork Run - - -
    ◊ It always follows the color of the first object in the sequence.
    ◊ It works with Open and Closed Object tools and Ellipse and Rectangle Tools.
    ◊ It works with the following outline types: Single, Triple, Backstitch, Stemstitch, Raised Satin, and Satin.

Opening the File
- Click on New Blank Design. Select Insert Artwork.
- Navigate to Libraries> Pictures> BERNINA 8 Pictures> Artwork.
- Open the BERNINA Heart folder.
- Select Multicolored Heart with straight edges.wmf. Click on Open.

Digitize the Heart
- Select To Fit from the Zoom Toolbar.
- Select the Closed Object tool in the Digitize Toolbox.
- Click on the Single Outline icon in the Stitch Toolbar.
- Digitize the outline of the heart at the intersection of the purple border and the multi-colored heart. Press Enter to enclose the heart.
- Select the Open Object tool.
- Digitize the straight lines within the heart with two left clicks, pressing Enter after each straight line. Be sure the lines are touching either the heart outline or another interior line. Ignore the small gold strip in the picture. The order does not matter.
- Click on Bitmaps to hide the picture.
- Check that all the lines touch either the heart outline or another interior line. (Zooming in helps.)
- If they don't, use Reshape to edit. (Press Esc, select the object; then select Reshape.)
- Select Esc if reshaping was necessary.

Applying Blackwork Run
- Switch to Design View by selecting T on the keyboard.
- If jump stitches do not show, click on Show Connectors.
- Notice all the jump stitches that occur in the design.
- Select Edit > Select All.
- Click on the Stemstitch Outline icon.
- Select Blackwork Run in the Edit Toolbox.
- You may enter the Entry point by clicking on the outline of the design or let the software decide by pressing Enter. The software automatically re-sequences the stitching to eliminate jump stitches.
- Select File> Save As; name the file Blackwork Run. Close the file.
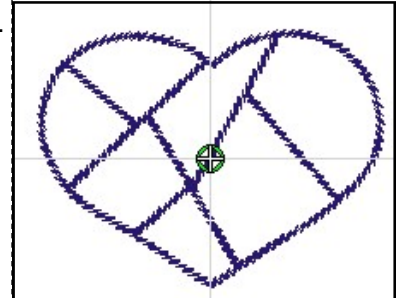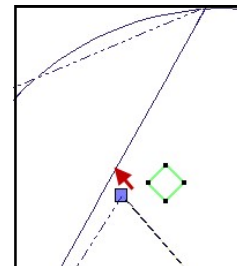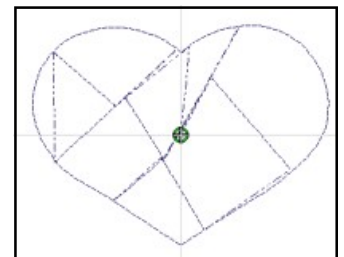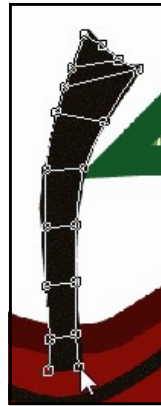
©2018 BERNINA of America, Inc.

Appliqué

Loading the Artwork
- Click on the New Blank Design icon or select File> New.
- Select Insert Artwork.
- Navigate to the Libraries> Pictures> BERNINA 8 Pictures> Artwork.
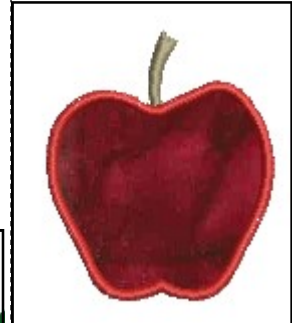- Select A_apple_003.jpg. Select Open.

Block Digitizing
- Select the Zoom tool and click and drag a bounding box around the stem of the apple on the far right.
- If the hoop is over the apple, click on Show Hoop to hide the hoop boundary.
- Select the Block tool in the Digitize Toolbox and Color 43, Brown.
- Select the Satin Fill icon.
- Digitize the stem of the apple. Remember to alternate from side to side with the Block tool. Begin at the top of the stem with two left clicks.
- Press Enter to activate stitches. Press Esc.
- Select the stem and select Reshape if necessary; make the changes needed; then press Esc to deactivate the tool.

Auto Appliqué
- Select the Appliqué tool from the Digitize Toolbox.
- From the Color Palette Toolbar, select Color 5, red.
- Using left and right clicks, digitize around the outside of the apple that has the block digitized stem.
- Remember to let the software close the object by pressing Enter.
- Press Esc.
- You may select the appliqué; then select Reshape to change any of the digitized points.
- After reshaping, select Esc.

Editing the Appliqué
- Open Color Film.
- Notice there are three lines of stitching in the appliqué design:
  ◊ The pink line is the placement line.
  ◊ The purple line is the tackdown.
  ◊ The red is the cover stitch.
- Double click on the apple.
- Object Properties opens and the Appliqué tab should be selected.
  ◊ Change the Cover Stitch Width to 2.5 mm.
  ◊ Click on Apply.
  ◊ The tackdown width automatically changes.

Notes:

Lesson covers:
- ♦ *Block Digitizing*
- ♦ *Auto Appliqué*
- ♦ *Copy/Paste*
- ♦ *Lock*
- ♦ *Clones*
- ♦ *Remove Appliqué Overlaps*

In Options, select the Appliqué & PunchWork tab. Make sure single is selected for the type of Boundary.

Refer to the digitizing and reshaping tips in the Manual Digitizing lesson, page 15.

To pre-select the settings for appliqué, select Object Properties> Appliqué tab and select your settings prior to digitizing.

If you want to place a piece of fabric on a placement line; then cut the shape, you may add a cutting line in Object Properties.

©2018 BERNINA of America, Inc.

Adding Fabrics
- Make sure you still have the appliqué object selected.
- To add fabric, select Choose under the Fabric section in Object Properties.
- A dialog box opens and the fabric can be selected from the options available.
- Click on the + sign in front of Benartex 2013 to open up the folder options.
- Click on the + sign in front of Naturescapes.
- Click on the + sign in front of Geology.
- Select 4718-29 (row 2, color chip 5).
- Click on OK; then OK again. The fabric will be added to the appliqué.
- Click on Show Appliqué Fabric icon to see the fabric.
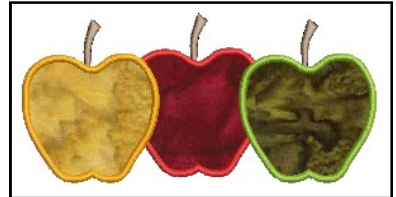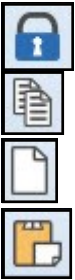- Select File> Save As and save the file as Appliqué Basics.
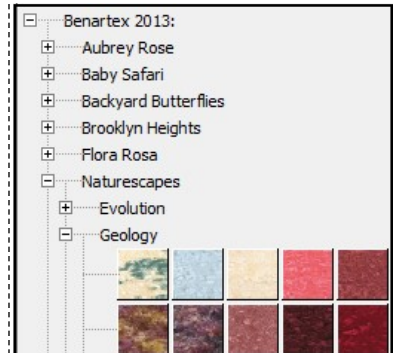
Remove Appliqué Overlaps

Creating a New File
- While the Appliqué Basics file is open, select the white background of the picture and click on the Lock icon in the Arrange Toolbox or right click on the sailboat in Color Film and select Lock. You may also right click on the picture and select Lock from the choices.
- Select the satin-stitch apple and stem by clicking and dragging a bounding box around the apple and stem.
- Select Edit> Copy or click on the Copy icon.
- Click on New Blank Design.
- Select Edit> Paste or click on the Paste icon.

Creating Clones
- Make a quick clone of the stem and apple by right clicking and dragging **to the right** of the original.
- While the copy on the right is still selected, right click and drag **to the left** of the original to create a third apple. Make sure the copies overlap one another.
- Deselect; then select just the apple on the left.
- Click on C49, deep in the Color Toolbar. (Use the scroll arrows.)
- Select just the apple on the right.
- Change the color to C33.

Adding Fabrics
- Open Object Properties. Reactivate Show Appliqué Fabrics.
- The Appliqué tab should be selected.
- While the right apple is still selected:
  - ◊ Select Choose.
  - ◊ Naturescapes> Geology should still be open.
  - ◊ Select 4718-44 (third row, third color chip).
  - ◊ Click on OK in the dialog box; then click Apply.

Notes:

Locking the picture will keep it from being selected in the bounding box.

- Select the left apple:
  - ◊ Select Choose.
  - ◊ Select 4718-33 (third row, color chip 1).
  - ◊ Click on OK in the dialog box.
  - ◊ Click OK.

Move to Start
- Select the second and third brown stem in Color Film and click on Move to Start so that all stems stitch first.

Changing the Cover Stitch
- Deselect by clicking outside the black boxes.
- Double click on the yellow apple to open Object Properties.
- From the drop down box for Cover Stitch, select Blanket. Select Apply.
- Repeat for the green apple, but click OK to close Object Properties.

Remove Appliqué Overlaps
- Select Edit> Select All.
- Click on Remove Appliqué Overlaps in the Edit Toolbox.
- Deactivate Show Appliqué Fabric to see the removed stitches.
- Select File> Save As and name the file, Remove Appliqué Overlaps. Click Save.
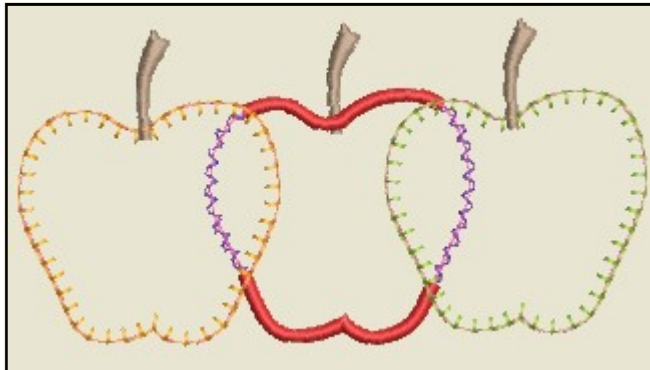
Notes:

Sequencing needs to be determined prior to applying Remove Appliqué Overlaps.

Blanket stitch properties may be altered through Object Properties.

You can look in Color Film to see that the cover stitch is removed from the yellow and red apples.

Advanced Appliqué

Setting Up the Background for Digitizing
- Click on New Blank Design.
- Select Insert Artwork.
- Navigate to Libraries> Pictures> BERNINA 8 Pictures> Artwork.
- Locate Elephant.wmf. Open the picture. Deselect.

Open Object Digitizing
- Objects must be digitized from background to foreground.
- Select the Stemstitch Outline.
- Select the Open Object Tool from the Digitize Toolbox.
- Select Color 14 in the Color Palette Toolbar.
- Using right and left clicks, digitize around the elephant's ears, beginning and ending at the edges that connect with the face.
- Press Enter to activate the shape. Repeat for the opposite ear.
- Select the Satin Outline from the Stitch Toolbar.
- Using right and left clicks, digitize around the elephant's face, beginning and ending at the edge of trunk.
- Press Enter to activate.
- Press Esc.
- Double click on the satin outline to open Object Properties.
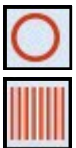- Change the Satin Width to 2mm.
- Press OK.
- Press Esc.

Closed Object Digitizing
- Select the Stemstitch Outline from the Stitch Toolbar.
- Select the Closed Object tool.
- Using right and left clicks, digitize around the elephant's trunk.
- Press Enter to enclose the object.
- Press Esc.

Add the Eyes
- Select the Ellipse icon in the Digitize Toolbox.
- Select the Satin Fill from the Stitch Toolbar.
- Select Color 13.
- Digitize one eye using two left clicks and press Enter to activate. Place your first click in the center of the eye and drag to the desired perimeter of the circle, click again, and press Enter.
- Press Esc; then right click and drag a quick clone and place over the other eye.
- Click on Bitmaps to hide the picture.
- If you need to reshape any of your lines, now is the time to reshape because Advanced Appliqué objects cannot be reshaped.
- Select the object; select Reshape; move, add, delete, change control points as needed; then press Esc.

Notes:

Lesson covers:
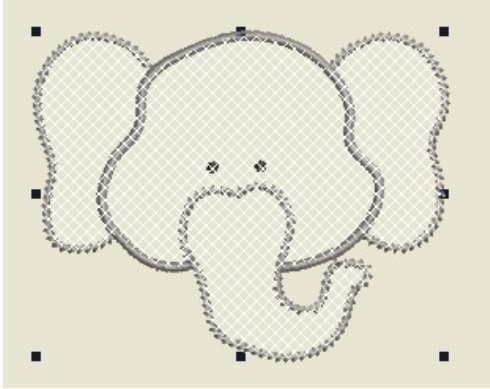- *Advanced Appliqué*
- *Open Object digitizing*
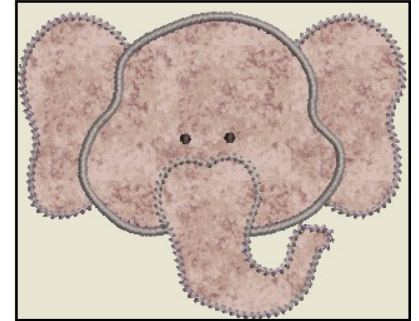
Use this method whenever you need to digitize objects that have open objects within the design, for example, designs that are split into parts. Also use this method for designs that have dimensional accents within the appliqué. Finally, use this method when you want to use other types of outlines besides satin + blanket.

Make sure that you create an underlap when you digitize the objects underneath. It is important that the first and last digitized points are underneath the parts that will be on top of it.

Applying Advanced Appliqué
- Select the gray color chip in Color Film.
- In the Digitize Toolbox, click on Advanced Appliqué.
- The Appliqué Properties dialog box will open.
- White hatch marks will appear inside the elephant.

Adding Fabrics to Advanced Appliqué
- Once your elephant is covered by the white hatch marks, click on Place Fabric and Color in Patches.
  - ◊ Click on the + sign in front of Benartex to open up the folder options.
  - ◊ Click on the + sign in front of Apple Butter.
  - ◊ Select 568-25 (second color chip, fourth row).
  - ◊ Click on each part of the elephant to add the fabric.

Merging Fabrics
- Select Back at the bottom of the dialog box.
- Select Merge Patches Together.
- Click on the left ear and then the face to merge them; then click on the face and the right ear to merge those pieces; then click on the face and the trunk to merge the entire elephant.
- Click on Back.
- Select Close at the bottom of the dialog box.
- Click on Show Appliqué Fabrics to show the fabric.
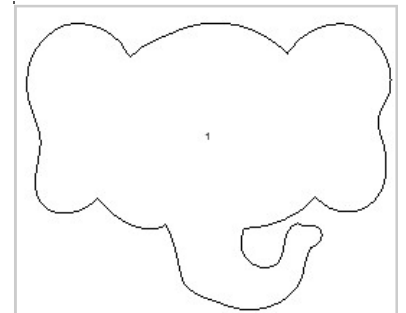
Printing Appliqué Patterns
- Select Print Preview.
- Click on Options.
- Make sure there is a check mark in front of Appliqué patterns.
- Click OK in Print Options.
- This page can be used to print a pattern that can be used if you wish to "scissor cut" your appliqué.
- Click Close to close the Print Preview.
- Select File> Save As and name the file Advanced Appliqué.
- Close the file.

Automatic Multi-Hooping

Opening the Design
- Select New Blank Design.
- Select Insert Embroidery.
- Navigate to Libraries> Embroidery> Public Embroidery> BERNINA 8 Embroidery> Alphabets & Monograms. Open 82011_39.ART80.
- Proportional Scaling should be locked.
- While the design is selected, change the Width Percentage to 120%.
- Press Enter.
- Right click on Show Hoop.
- Select the Large Oval Hoop. Select Foot #26.
- Place a check mark by Show Hoop.
- Click OK.

Multi-Hooping Application
- Select the Multi-Hooping Toolbox.
- The green areas shown in the design are covered by the hoop. Any black areas are outside the hoop.
- Click on Automatically Add Hoops.
- The software automatically splits the design into hoops and automatically displays Calculate Hoopings.
- The software will also automatically rotate hoops if needed and will automatically split objects that need to be split to fit into the hoops with the Splitting Line.
- Click OK in the dialog box.
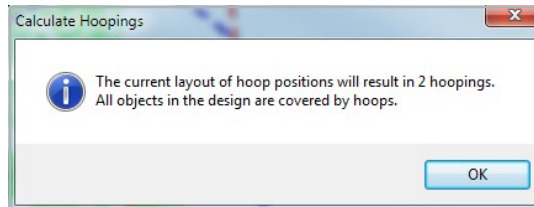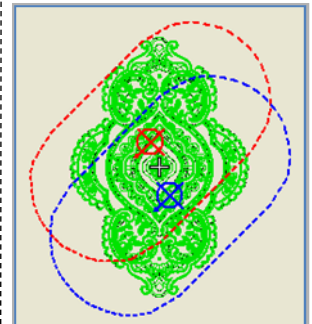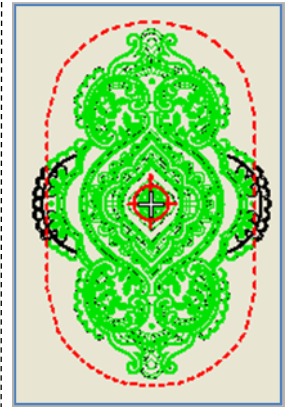
Previewing & Saving the Design
- Select Preview Hoopings.
- The hoop sequence is shown in color as a docker to the right of the screen.
- Hoop centers are clearly marked.
- Click and hold on Hooping 1. That will hide the other hoops of the design and you will be able to see the design in actual stitches on the design screen.
- This can help you identify critical areas to match. The Absolute Check feature on newer machines will really help align these areas.
- Select File> Save As and name the file Multi-Hooping Automatic. This saves the complete design.
- Select File> Export Machine File.
- Navigate to Libraries> Embroidery> My Machine Files.

Calculate Hoopings

The current layout of hoop positions will result in 2 hoopings. All objects in the design are covered by hoops.

OK

Hooping Sequence

Hooping 1

Hooping 2

- Folders can be created within this folder if you wish by clicking on New Folder.
- Select BERNINA USB Stick.EXP in the Save As Type.
- Click Save.
- A dialog box opens.
- Click Yes to Export one file for every hooping.
- The design is split into files as shown in the Hooping Sequence dialog box.
- The directional arrows point toward the top of the hoop.
- Select Save All.
- Select Close.
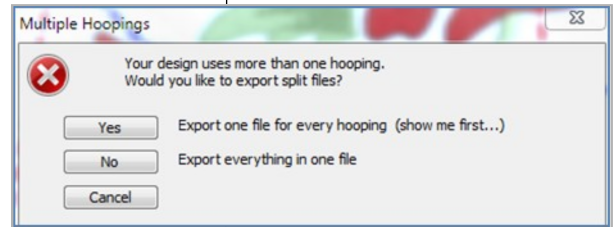
Printing Templates

- The total design is shown after the split files are closed.
- Select Print Preview.
- Click on Options.
- Make sure these are activated:
  ◊ Stitches
  ◊ Hoop Template
  ◊ Guides
- Deactivate Design Information.
- Click OK.
- Click on Print Now.
- Print the total design. For larger designs, multiple pages will be printed and the pages can be taped together using the Guides.
- Click Close to close Print Preview.
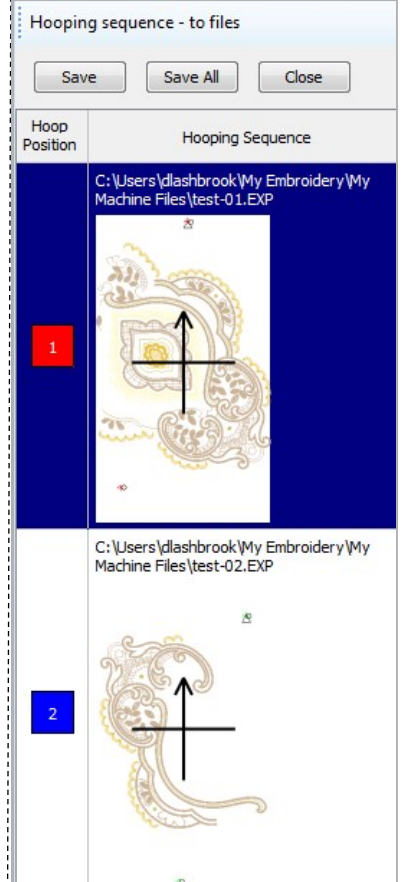
Printing Individual Templates

- Click on Open.
- Navigate to the location of the saved split files.
- In File Type, click on the drop-down arrow and select All Embroidery Files.
- Select the first split file, Multi-Hooping Automatic 01. Click on Open.
- In the Non-Native Design dialog box, click OK.
- Click on Print Preview.
- The same options will be active for this template.
- Click on Print Now.
- Send the design to your machine by clicking on Write to Card/Machine.
- Repeat these steps for the second file, Multi-Hooping Automatic 02.
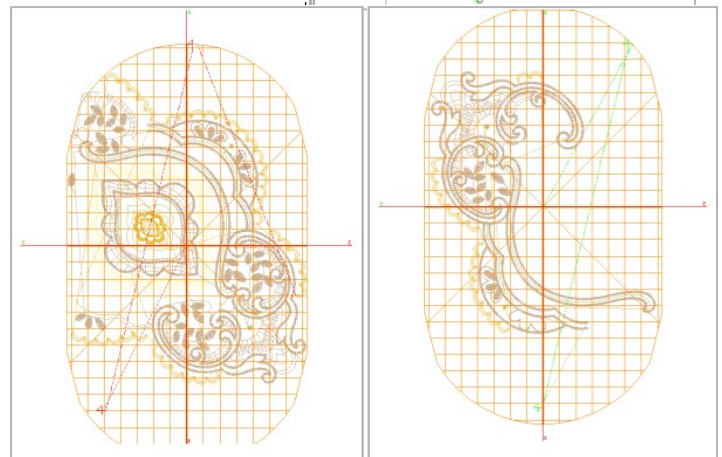
Notes:

Editing the Design
- Select New Blank Design.
- Select Insert Embroidery.
- Navigate to Libraries> Embroidery> Public Embroidery> BERNINA 8 Embroidery> Decorative Accents.
- Open FP900.
- Right click on the Show Hoop icon.
  ◊ Select BERNINA Large Oval Hoop, 255 x 145.
  ◊ Foot #26 is selected.
  ◊ Make sure that Show Hoop is checked. Click OK.
- In the Transform Toolbar, lock Proportional Scaling should be locked.
- Change the size of the Width to 275 mm.
- Press Enter to activate the changes.
- Click on the Object Properties icon while the design is selected.
- Change the Stitch Length to 3 mm. Press OK.

Multi-Hooping
- Select the Multi-Hooping Toolbox.
- Click on Add Hoop.
- Move the hoops so that they overlap on each side of the butterfly's head. All stitches should be green.
- Select Calculate Hoopings.
  ◊ The dialog box should state that all objects are covered by hoops and that you will have two hoopings. If it does not, then you will need to move the hoops prior to saving.
  ◊ Click OK to close the dialog box.

Embroidery Canvas
- Click on the Multi Hooping Options icon in the Toolbox.
- There should be a check mark in front of Add registration marks on output.
- Medium should be selected for the margin. Click OK.
- Select the Digitize Toolbox.
- Select File> Save As and navigate to the location to save the file.
- Name the file Multi-Hooping Placing Hoops. Select Save.
- Select File> Export Machine file.
- My Machine Files opens. If you wish to create a folder or change locations of the saved file, navigate to the location.
- Select Save. Select Yes to export one file for every hooping.
- The Hooping Sequence screen will open.

Saving the Files
- Click on Save All to save the split files.
- The files will be numbered in the order they are to be stitched; Multi-Hooping Placing Hoops 01 will be stitched first.
- Click on Close to return to Embroidery Canvas.
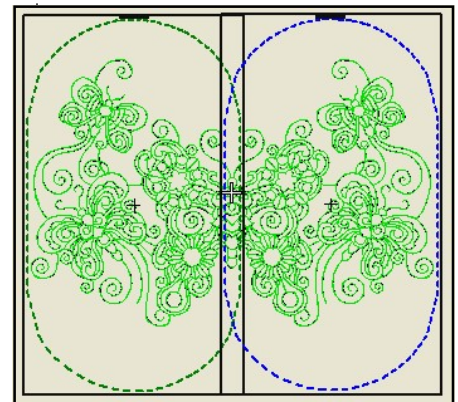- Open the split files to send to the machine.

Notes:

Lesson covers:
- ♦ *Multi-Hooping*
- ♦ *Adjusting Margins*

If you are in the US Measurement System, type mm following 275. The software calculates the entered measurement into inches.

If you select Large for a margin,

there will be more distance between the mark and the hoop boundaries, making it easier for the design to fit in the hoop, but there may be less precision in aligning.

Trapunto & Raised Satin

Open a New File/Blank File
- Click on the New Blank Design icon or select File> New.
- Select Insert Artwork.
- Navigate to Libraries> Pictures> BERNINA 8 Pictures> Artwork.
- Open Hungarian Quilt.

Auto Digitize
- Select the Auto-Digitize Toolbox.
- Click on Auto Digitize.
- In the Bitmap Artwork Preparation dialog box, the value of "Reduce Colors To" should be 3.
- Click OK.
- In the Auto Digitize dialog box, the white background is automatically omitted.
- Click on the drop-down box for the black color chip and select Omit.
- Click on the drop-down box for the turquoise color chip and select Details. The type of detail defaults to Satin Fill.
- Press OK.
- In Color Film, select the picture of the sailboat.
- Press Delete to delete the picture.

Adding Raised Satin
- Select Edit> Select All.
- Right click on the Raised Satin Fill icon in the Stitch Toolbar.
- In Object Properties, change the Layers to 4.
- Click OK.
- Select File> Save As and name the file Raised Satin.

Adding Trapunto
- Select Edit> Select All.
- Click on Create Trapunto Outlines in the Edit Toolbox.
- In the dialog box that opens:
  ◊ Choose your desired color from the drop down box.
  ◊ Leave the offset at 0.020 inches. This allows for the bulk of the raised satin stitch.
  ◊ Select Triple for Outline type.
  ◊ Click OK.
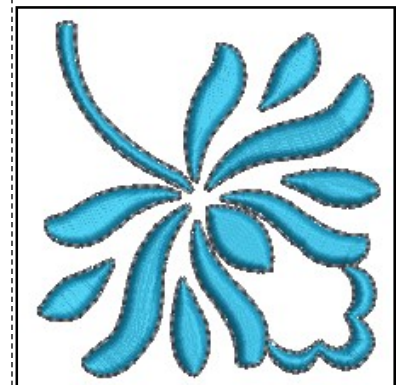- Select File> Save As.
- Name the file Trapunto.
- Close the file.

Lesson covers:
- ♦ *Auto Digitizing*
- ♦ *Converting to Raised Satin*
- ♦ *Editing Raised Satin*
- ♦ *Adding Trapunto*

A piece of sheer fabric is placed over the raised satin stitches before the outline stitches. A color stop is needed to stop the machine.

Open a New File/Blank File
- Click on the New Blank Design icon. Select Insert Embroidery.
- Navigate to Libraries> Embroidery> BERNINA 8 Embroidery> Floral & Garden> NZ651. Select Open.

Adding PunchWork
- Deselect the flower. Open Color Film and hold the Alt key and click on the flower center to select in Color Film.
- Right click and select Delete.
- In the Digitize Toolbox, select PunchWork.
- Digitize the center of the flower with three right clicks around the opening. Place one at 12:00, one at 3, and one at 6.
- Press Enter to close the shape; Press Esc.

Editing PunchWork
- Double click on the flower center.
- Change the density to a 4 in the Object Properties. Press OK.
- While the flower center is selected, click on Move to Start in Color Film.

Adding a Satin Border
- In the Digitize Toolbox, select the Ellipse tool.
- Select Raised Satin Outline. Green should be the Current Color.
- Digitize a circle around the center. Click in the center of the flower, drag to the edge, and click again. Press Enter. Press Esc.

Adding Pattern Stamps
- In the Digitize Toolbox, select Pattern Stamp.
- In the Patterns menu, select 01 Monogram Ornaments.
- Select M004b. Click OK.
- Click to the right of the flower close to the lower edge of the flower.
- Hold the Shift key and rotate upward and drag the mouse to increase the size of the flourish. Click again to set the stamp.
- Select Esc to deactivate the stamp.
- Select the stamp.
- In the Mirror Merge Toolbox, select Mirror Merge Horizontal, drag on screen, and click to set the second stamp to balance the flower.

Rotate Hoop
- Right click on Show Hoop. Select BERNINA Large Oval, 255 x 145. Select Foot # 45. Click OK.
- Select the Multi-Hoop Toolbox.
- Select the hoop, click on Rotate Left two times.
- Select the Digitize Toolbox.
- Select File> Save As and name the file PunchWork. Close the file.

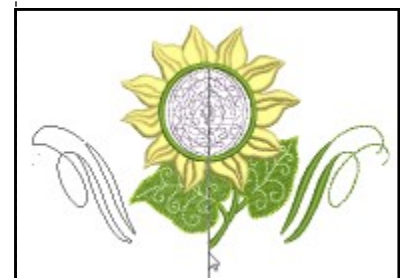*Lesson covers:*
- *Adding PunchWork*
- *Editing PunchWork*
- *Pattern Stamp*
- *Rotating the hoop*

The PunchWork area does not completely fill the circle to allow for the span of the needles in the Needle Punch accessory.

PunchWork cannot be broken apart.

StumpWork: Adding CutWork Border

Creating the Base Design
- Select New Blank Design.
- Click on Show Hoop if a hoop is not visible.
- Select a color from the Color Palette by clicking on a color chip.
- Select the Ellipse tool in the Digitize Toolbox and draw a small circle. Click; then drag and click again to set the radius of the circle.
- Press Enter to activate.
- Press Esc; then click on the circle to select.
- Make sure Proportional Scaling is locked in the Transform Toolbar. Change the value to1 inch in the Width or Height box.
- Change the X and Y values to zero.
- Press Enter to activate.
- Select Zoom to Selected in the Zoom Toolbar.

Carving Stamp
- Open the Carving Stamp Docker.
- Select the Use Pattern tab.
- In Pattern Set, Select BerninaV5. Select NP005-15.
- Click on the outer left edge of the circle at the hoop center line.
- Drag while holding the Shift key and click again on the opposite side of the circle.
- You must be in Artistic View to see the effect of the stamp.
- Press Esc.

Loading the Picture
- Click on the Artwork Canvas icon.
- Click on the Insert Artwork icon.
- Navigate to Libraries> Pictures> BERNINA 8 Pictures> Artwork folder. Select Petal.wmf.
- Select Import and click to the left of the circle.
- Click again to place the vector on the screen.
- Move so that the petal falls just over the edge of the circle.
- With the vector selected, click on the Convert Artwork to Embroidery.
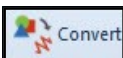
Creating StumpWork
- Open the Color Film docker.
- Select the outline around the petal in Color Film. Press Delete.
- Make sure nothing is selected.
- Open the CutWork Border Docker. In the docker panel, you can pre-select the properties of the border:
  - ◊ Uncheck Stabilizing Run 1.
  - ◊ For Embroidery: Wireline is selected.
  - ◊ For Stabilizing Run 2: Keep the default distance.
  - ◊ For Cutting Line: Use CutWork Tool is selected.
- Open the CutWork Toolbox.
- Select the filled petal.
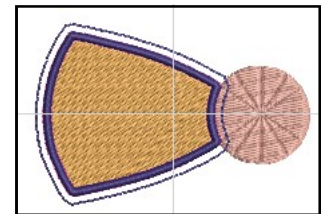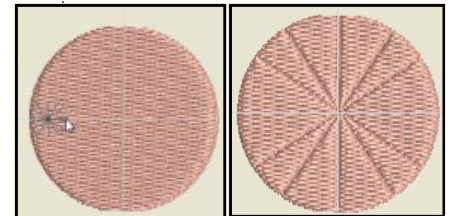- Click on Add CutWork Border.

Notes:
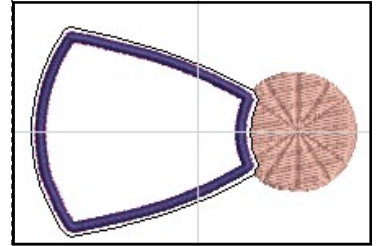
Lesson covers:
- ♦ *Ellipse Tool*
- ♦ *Carving Stamp*
- ♦ *Creating StumpWork from embroidery*
- ♦ *Digitizing StumpWork*
- ♦ *Digitizing a Wireline*

Creating a StumpWork Border

from an existing design creates a Wireline Embroidery unless you change the default docker values prior to clicking on the Create StumpWork Border icon.

If you click on Object Properties by Embroidery in the docker, you can change the gauge of the wire. The gauge defaults to 26.

The Stabilizing Run 1 is not needed for Wireline objects, but may be used for other types of StumpWork.

- A dialog box opens. StumpWork/Piece is selected by default.
  - ◊ You can change the Offset value if you wish in this dialog box.
  - ◊ This changes the distance the border is from the object.
- For this design, leave the properties at the default settings.
- Click OK.
- A cursor with a flag instructs you to place the cursor over the wire-line and click to cut. This will cut the border for the protruding wire ends.
- Press Esc to leave a completely closed embroidered object.

Saving & Sending the Design
- All the StumpWork components are grouped, but they are not grouped with the petal. Make sure that the petal and the Stump-Work components are all selected. Use the Ctrl key if needed.
- In the StumpWork Toolbox, click on Create StumpWork Sub-Design.
  - ◊ This will combine the StumpWork with the petal in a separate layer of the design.
  - ◊ Notice that the StumpWork design no longer shows in Color Film.
- Click on Open StumpWork Sub-Design.
  - ◊ This will open the StumpWork object in a separate layer from the base design and it will make it easier to edit the Stump-Work layer if needed.
  - ◊ The StumpWork object is stitched out separately from the base design and must be sent to the machine via the Sub-Design screen.
  - ◊ There is no need to save the design separately from the base design, but it must be sent to the machine separately.
  - ◊ To send the StumpWork Sub-Design to the machine, click on the Write to Card/Machine icon in this design screen.
  - ◊ To send the design, select the appropriate box in the Device Selection dialog box. Click OK after the design is sent.

- To return to the base design, click on File> Close.
- To send the StumpWork base design, click on Write to Card/Machine from this screen. Only the base design will be sent.
- Click OK in the Write to Machine/Card dialog box that warns that the StumpWork object will not be sent to the machine.
- To send the base design, select the appropriate box in the Device Selection dialog box. Click OK after the design is sent.
- Select File> Save As and save the design as StumpWork From Embroidery. Close the file.

Notes:

If you want the embroidered area to be completely enclosed, press Esc and the StumpWork will change to an enclosed object. You can attach the StumpWork to the base with a zigzag tack stitch if you don't use the wire to attach to the base fabric.

Although it is not necessary to save the StumpWork design separately from the base design, you can save it by clicking on Save StumpWork Sub-Design. This must be done when the StumpWork design is opened in the Open StumpWork Sub-Design screen. The design saves as a machine file (EXP) not ART.

After creating the StumpWork Sub-Design, when you click on Write to Card/Machine to send a design that includes both StumpWork and the base design, a warning dialog box appears to remind you that only the base design will be sent from this screen.

If a design has more than one StumpWork component within the design, each must be sent separately to the machine for stitching.

StumpWork: Digitizing StumpWork

Creating StumpWork from Scratch

- Open a New Blank Design file.
- Click on the Insert Artwork icon.
- Navigate to Libraries> Pictures> BERNINA 8 Pictures> Artwork.
- In the File Name box, begin to type in Petal.
- From the list that appears, select Petal.wmf. Select Open.

Digitizing StumpWork

- Open the CutWork Toolbox.
- Click on the Digitize Piece icon.
- Open the CutWork Border docker. Click on Auto Hide.
- Click on the Object Properties icon next to Wireline and change the Wire Gauge to 28. The Tack Width is automatically updated.
- Click OK.
- The CutWork Tool is the default selection to cut the finished Stump-Work.
- Digitize around the petal as you would digitize any object, with a combination of left and right clicks, using left clicks to turn corners and right clicks to form curves.
- Let the software close the object by pressing Enter to enclose the shape.
- Press Esc.
- Click on the Bitmaps icon to hide the artwork.

Stitch Player

- Select the Stitch Player icon to watch the StumpWork design stitch.
- A stabilizing line stitches first (this can be a placement line for a cut fabric that is to be used for StumpWork).
- A double line stitches next (the pink line in the picture). This is the placement line for the wire.
- The next segment of stitching is the tackdown. This is a zigzag that will attach the wire to the object. Slow the machine's speed.
- The next segment to stitch out is the cover stitch. The machine's speed can be changed back to a higher speed after the wire is tacked down.
- The final stitching is another Stabilizing Run that will secure the object before being cut.
- The machine will stop after this stitching and prompt you to place the CutWork Tool on the machine and will stop for each twist of the blade position.
- If Use Scissors is selected for the Cutting Line, then you may remove the fabric from the hoop when the design is finished and cut around the object between the satin stitch and the stabilizing stitch with a sharp pair of scissors.
- Select File> Save As and name the file StumpWork Digitize Piece.
- Select End on the Stitch Player bar; then close the file.

Notes:

Lesson covers:
- *Digitizing StumpWork*

Press the Backspace key to delete one digitized point at a time; select Esc to start over.

If you wish to cut the closed StumpWork border so that you can insert wire through the channel, you can select the Cut Closed StumpWork Border to add an opening to the closed border.

Machine Recommendations for Tackdown Stitching:
- *Use 44C foot, 24, or 26 foot.*
- *Use the foot control for ease in stopping and starting.*
- *Use the speed slider to reduce the speed.*

This file can be sent directly to the machine for stitching since it is not part of a base design by clicking on the Write to Card/ Machine icon.

©2018 BERNINA of America, Inc.

StumpWork: Digitizing Wirelines

Opening the Design
- Select the New Blank Design icon.
- Click on the Insert Artwork.
- Navigate to Libraries> Pictures> BERNINA 8 Pictures> Artwork.
- Open Petal2.wmf.
- Right click on the picture and select Zoom to Selected.

Digitizing a Wireline
- Open the StumpWork Toolbox.
- Select Digitize Wireline.
- Digitize a line down the center of the leaf as you would any open object, using right and left clicks and pressing Enter to activate the line.
- Press Esc.
- Select the wireline and select a color in the Color Palette.
- You may click on Reshape to edit the line.
- Press Esc when you are finished reshaping.

Adding StumpWork
- Select the CutWork Toolbox.
- Select Digitize Piece.
- Preselect the StumpWork options in the CutWork Docker panel, with StumpWork/Piece selected at the top of the docker.
  ◊ Uncheck Stabilizing Run 1.
  ◊ Leave Wireline selected for Embroidery.
  ◊ Change the passes to one in Stabilizing Run 2.
  ◊ Click on Use Scissors for the Cutting Line.
- Click on a color in the Color Palette.
- Using the picture in the background, digitize around the petal shape using right and left clicks to form the shape.
- Press Enter to activate the StumpWork design.

Finishing the Design
- Press Esc.
- Select the white picture in the background and select Delete.
- Select Edit> Select All.
- In the StumpWork Toolbox, click on Create StumpWork Sub-Design to open the design on the separate layer.
- Click on Open StumpWork Sub-Design.
- Click on Write to Card/Machine to send the design to the machine for stitching.
- Select your option in the Device Selection dialog box. Click OK in the dialog box that opens.
- Click on Save StumpWork Sub Design As.
- Save the design as StumpWork Digitize Wireline. Note that it is saved as an EXP file.
- Close the file.
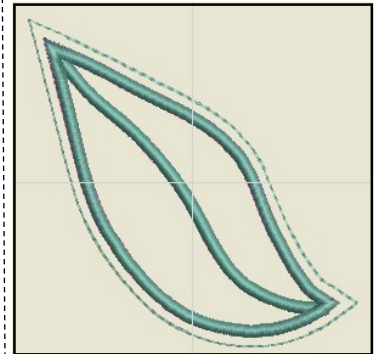
Tips for Digitizing Wireline:

- *Make sure that the Wireline tackdown of this internal line ends before the tackdown around the object so that the wire doesn't get caught when the external wireline border is stitched.*
- *You may cut the wire slightly shorter than the length of the wireline to avoid this as well. This allows you to have the stitching right up to the border to avoid unwanted gaps.*

If you print a template of a StumpWork design, the preview will show the entire StumpWork design including the StumpWork but only the base design will be shown in Color Film. You will need to open the StumpWork Sub-Design to view the components of just the StumpWork design.

made to create **BERNINA**

Selecting the Design in Embroidery Library
- Open a New Blank Design.
- Select Embroidery Library.
- Note: You may need to click the icon twice if you haven't opened the library previously.
- In the Folder Tree on the left, click on the arrow in front of Public Embroidery. This expands the folder to show the contents of that folder.
- Click on the arrow in front of BERNINA 8 Embroidery.
- Select the Arts & Crafts folder.
- The screen will refresh to show the contents of the Arts & Crafts folder.
- Select #12611-14, the teapot.
- Select New from Selected. This sends the design to the Embroidery Canvas.

Selecting the Appliqué Placement Line
- Open Color Film if it is not opened.
- Hold the Alt key and select the satin stitch around the teapot.
- Open the CutWork Toolbox.
- Click on Add CutWork Border.
  - ◊ In the dialog box that opens, select Cut from the Border Type.
  - ◊ Change the Offset to -1.5mm (-0.059").
  - ◊ Uncheck Include Holes.
  - ◊ Click OK.

Creating the CutWork File
- Change to Design View by selecting T on the keyboard.
- Notice that the cutting line jumps are displayed.
- At the end of Color Film, select one of the CutWork boxes.
- Select Cut.
- Open a New Blank Design.
- Select Paste.
- If you don't see the cut lines, make sure you are in Design View or that you have Show Outlines activated.
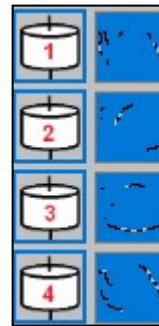
Adding a Running Before Stitch
- With the cutting line selected, click on Outlines and Offsets in the Edit Toolbox.
- Place a check mark by Offset outlines; uncheck Object Outlines.
- Change the Offset to 1 mm, the Offset Count to 1, choose a Single Stitch, and choose a contrasting color. Click OK.
- In Color Film, click on Move to Start.
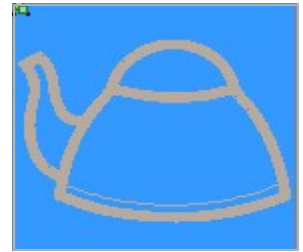
Finalizing the Design
- Right click on Show Hoop.
- Select the Medium Hoop. Select Foot #44C. Click OK.
- While the design is selected, click on Rotate Left two times.
- Save the file as CutWork Teapot.

Notes:

Lesson covers:
- ♦ *Creating CutWork for Appliqué from existing embroidery*

The Embroidery Library shows all your designs on your computer, regardless of their location. It has a powerful search engine that will search through all your designs.

A negative 1.5mm offset will place the cut line in the middle of the satin stitch.

©2018 BERNINA of America, Inc.
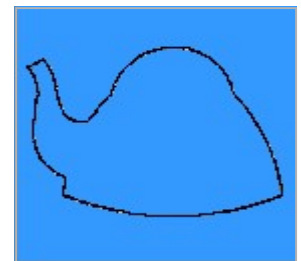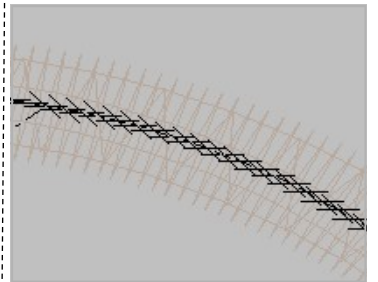
CutWork: Creating CutWork Embroidery

Open the Design

- Select New Blank Design.
- Select Insert Embroidery.
- Select Libraries> Embroidery> Public Embroidery> BERNINA 8 Embroidery> Floral & Garden> Blue Flowers 2.
- Select Open.
- While the design is selected, change the percent to 150% in the Transform Toolbar.
- Press Enter to activate the change.

Select Hoop and Foot

- Right-click on Show Hoop.
- Select BERNINA 5, 7, or 8 Series.
- Select BERNINA Large Oval Hoop, 255 x 145.
- Select Foot #44C to have the actual embroidery area for the Cut-Work Foot.
- Be sure that Show Hoop is activated. Click OK.

Adding the CutWork Line

- Right-click on the design while it is selected and select Ungroup.
- Change zoom-factor To Fit or press 0 on the keyboard.
- Press T on the keyboard to deactivate artistic view.
- Open the CutWork Toolbox.
- Select one of the flowers.
    - ◊ From the CutWork Toolbox, select Add CutWork Border.
    - ◊ In the dialog box, select Cut from the drop down menu for Border Type.
    - ◊ Make sure Include Holes is checked.
    - ◊ Choose Hole-2 from the Hole Border Type.
    - ◊ Change Offset for the Hole Border to 0.3 mm. (Use "mm" after .3 if your measurement system is set to inches.)
    - ◊ Confirm settings with OK.
- Deselect; then select the outer cutting line and delete it.
- Open the CutWork Border Docker if it is not open.
    - ◊ Change the Stabilizing Run Passes to 1.
    - ◊ Click on the Object Properties icon next to Embroidery to open Object Properties.
    - ◊ Change Satin width to 2.5 mm, confirm with OK.
- Repeat the steps, adding the CutWork for the other 2 flowers.
- The software remembers the Hole Border Offset, so this value will not have to be changed for the remaining two flowers.

Notes:

Lesson covers:
- ♦ *Creating traditional embroidered cutwork*
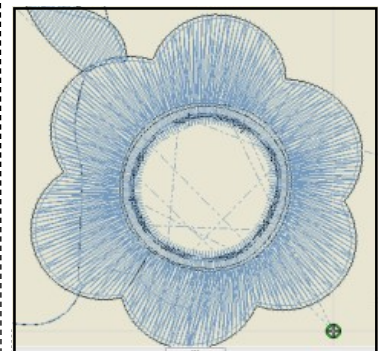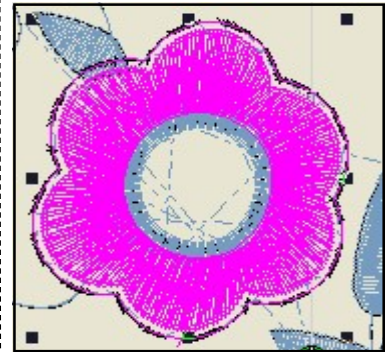
Combine the CutWork objects
- While holding the Ctrl key, click on each cutting line to select it.
- This may be easiest to do in Color Film; make sure that Show Objects is activated.
- In the CutWork Border Docker, select Combine Selected.
- Save the design as CutWork Embroidery.

Embroider the Design
- Start to embroider. When the flowers are finished, a stabilizing line will be stitched.
- Remove needle and upper thread.
- Insert the CutWork tool.
- Work through cut positions 1-4.
- Remove cut pieces.
- Place a piece of self-adhesive, wash-away stabilizer on the back of the cut fabric to stabilize it.
- Reset the machine for normal embroidery.
- Finish the embroidery, the cut edge will be neatened by a satin stitch.

Notes:

Couching

Create a Couching Design
- Select New Blank Design.
- Right click on Show Hoop.
    - ◊ For Machine, select the BERNINA 7 Series.
    - ◊ Select the Maxi Hoop for the hoop.
    - ◊ Select Foot #43.
    - ◊ Place a check mark by Show Hoop and click OK.
- Select Insert Embroidery.
- Select Libraries> Embroidery> BERNINA 8 Embroidery> Arts & Crafts and Design BD798_48.
- Select Open.

Array
- While the design is selected, click on Array in the Mirror-Merge Toolbox to duplicate the design and create rows.
- Set the number of rows to 2 and columns to 4. Use the drop-down arrow to change the number.
- Move your mouse line to the right to create 2 rows.
- You can move your mouse side to side as well as up and down until you get the designs placed as you wish.
- Use your mouse wheel to zoom in to make sure the segments meet.
- Click to confirm.
- Confirm with Yes to merge the overlapped objects.
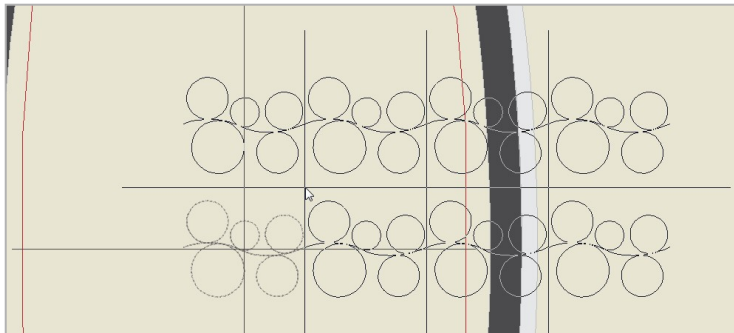
Adding Couching
- Select all (Ctrl+ A).
- Rotate the rows to 90 ° by clicking on Rotate Right two times.
- While both rows are still selected, select Couching in the Effects Toolbar.
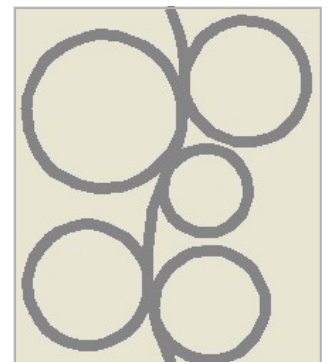- Notice that a thick line appears to represent couching.

Mirror-Merge Settings

Rows 2   Columns 4   2

Array automatically generates continuous embroidery de-signs.

When couching is added, it will be attached with a straight stitch.

©2018 BERNINA of America, Inc.

Combine Embroidery with Couching
- Deselect the design; then select the row on the right side.
- Select Edit> Duplicate to create a duplicate.
- While the copy is selected, change the color to red by clicking on color chip #5. This helps you to see the different layers in Color Film.
- While the copy is still selected, deactivate Couching. This creates a red stitch over the couched design.
- Right-click on the red color chip in Color Film and select Object Properties.
- Change Stitch type to Zigzag by selecting it from the drop-down choices.
- Set Spacing to 3.5.
- Click OK.
- Zoom in to see that editing needs to be done.

Refining the Design
- Click on Auto Underlay in the Effects Toolbar to remove the underlay.
- To eliminate the running stitch underneath, select Reshape.
- Press the 0 on the keyboard to zoom out.
- Move the red cross (End point) to the top of the design.
- The green diamond (Start point) should be at the bottom of the design.
- Press Esc.
- Save the file as Couching.
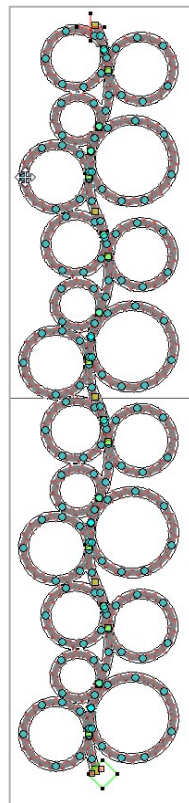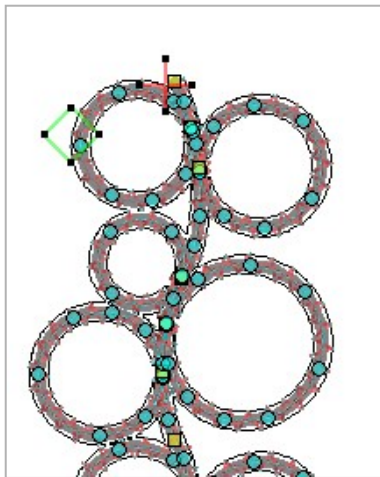
Notes:

It is possible to combine normal embroidery and couching in the same design.
You can also use an outline stitch to cover the cord for a decorative effect.
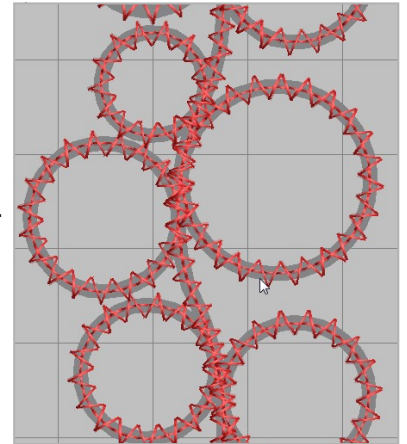
Open a New File

- Select New Blank Design.
- In the Digitize Toolbox, select the Rectangle Tool.
- Click and drag to form a rectangle.
- Press Esc.
- Select the rectangle.
- In the Transform Toolbar, unlock Proportional Scaling.
- Change the Width to 2.75" and the Height to 5". Press Enter.
- Make copies of the rectangle by right clicking and dragging the rectangle away from the original.
- Draw a bounding box around the rectangles.
- In the Arrange Toolbox, select Align Bottoms and Space Evenly Across.
- Press Esc.

3D Globe Effect

- Select the first rectangle.
- Right click on Pattern Fill.
- Click on Select.
- In the Heirloom Pattern Set, select 738. Click OK; then OK again.
- Click on 3D Globe.
- Click on Reshape.
- Click and drag on the control points to reshape the globe.
- Press Esc.

Textured Edge

- Select the second rectangle.
- Click on Satin Outline.
- Right click on the Textured Edge icon.
- Place a check mark in the box by Textured Edge.
- Click the Both Sides icon (the Side icon in the middle).
- Drag the sliders to set the Texture and Span.
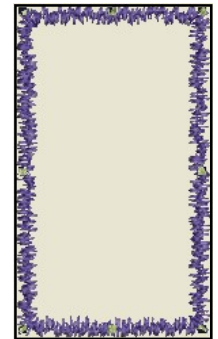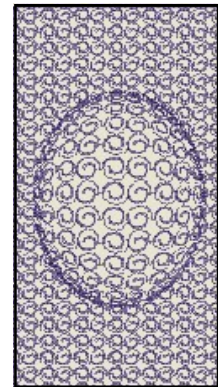- Click OK.

Gradient Fill

- Select the third rectangle.
- Click on Effects.
- Choose the Gradient Fill tab.
- Place a check mark by Gradient Fill.
- Choose one of the four profiles.
- Change the Maximum Spacing to 3mm.
- Click OK.

Star Fill Effect
- Select the fourth rectangle.
- Right click on the Star Fill effect.
- Place a check mark in front of Star Fill.
- Change the Hole Width to 5mm and the Hole Height to 7mm.
- Click Apply.
- Click on the Properties bar at the left corner of the Effects dialog box.
- Change the Stitch Spacing to 1.5mm.
- Click Apply.
- Click on the Effects bar at the left corner of the Object Properties dialog box.
- Select the Underlay tab. Uncheck Underlay 1. Click Apply.
- Select the Others tab. Check Travel on Edges. Click OK.
- While the rectangle is still selected, select Reshape.
- Zoom into the hole.
- Select the center yellow square.
- Click and drag it to a new location.
- Press Esc.

Notes:

Wave Fill Effect
- Select the fifth rectangle.
- Right click on Wave Fill.
- Place a check mark by Wave Fill.
- Click OK.
- Click on the Lacework Fill icon.
- Select Reshape.
- Move the control points by clicking and dragging on the control points. You may also add a control point by clicking on the reshape line.
- Press Esc.

Carving Stamp
- Select the sixth rectangle.
- Make sure you are in Artistic View. (Select T on the keyboard.)
- If the Carving Stamp docker is not open, click on Carving Stamp.
- Select the Use Pattern tab.
- In the Pattern Set drop-down, select Carving Stamps category.
- Scroll to find the heart; select it.
- Click on Use Stamp under the preview screen.
- Set the stamp on the rectangle using two left clicks. The stamp can be rotated by moving your mouse.
- The stamp can be resized by holding the Shift key as you set the two clicks.
- Press Esc.
- Select the rectangle.
- Click on Reshape.
- Change the angle of the rectangle to 0 degrees by clicking and dragging on a peach square.
- Press Esc.

©2018 BERNINA of America, Inc.
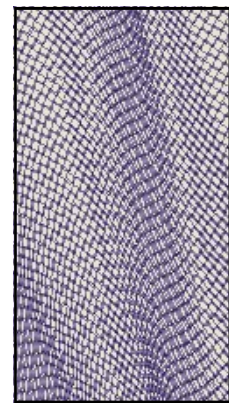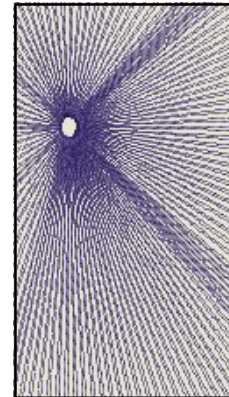
Alternating Patterns
- Select the seventh rectangle.
- Right click on the Pattern Fill icon.
- Click on Select.
- In the Heirloom Pattern Set, select #717.
- Click OK; then Apply.
- Place a check mark by Alternate Pattern in Object Properties.
- Click on Select.
- From the Pattern Set, select Bernina V5.
- Select NP005-01.
- Click OK.
- Change the Row Spacing to .250".
- Click OK.

Elastic Fancy Fill
- In the Digitize Toolbox, select the Closed Object Tool.
- Activate Show Grid.
- Digitize the shape shown at the right, following the diagram for setting right and left clicks.
- Press Enter to enclose the shape.
- Press Esc.
- Select the shape.
- Double click to open Object Properties.
- Click on the Stitch Angle tab and change the Stitch Angle to 0°.
- Select the Fill Stitch tab and change the fill to Satin.
- Click OK.
- Right click on the Elastic Fancy Fill icon.
- Place a check mark by Elastic Fancy Fill.
- Place a dot in front of Single Row.
- Click OK.

Morphing
- In the Digitize Toolbox, select the Open Object Tool.
- Select the Satin Outline icon.
- Digitize a straight vertical line with two left clicks, using the grid as a guideline.
- Press Esc.
- Select the line.
- If the Morphing Docker is not open, select the Morphing icon in the General Toolbar.
- Select the Ripple icon.
- Click and drag on the Amplitude and the Frequency sliders to distort the line.
- Press Esc to deactivate.
- Save the file as Special Effects.
- The designs will need to be split for stitching.

Notes:
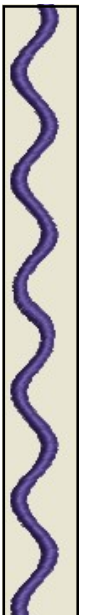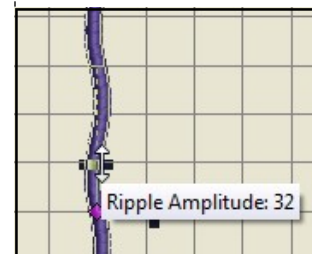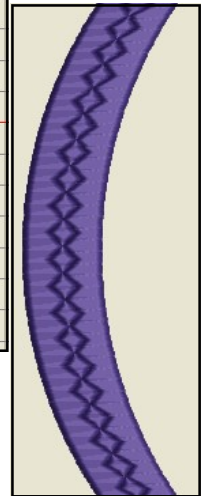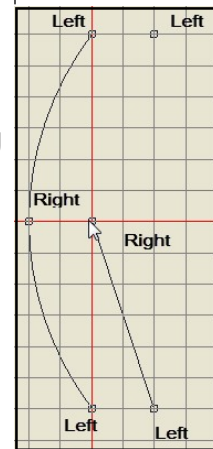
Creating a Monogram Border

Open a New File
- Select New Blank Design.
- Switch to Artwork Canvas.
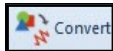- Select the Basic Vector Shapes icon.

- Click on the black triangle of the Perfect Shapes icon in the Property Bar.
- Select the heart from the choices that are displayed.
- Click on the screen; then click and drag to form the heart.
- While it is selected, click on Convert Artwork to Embroidery.
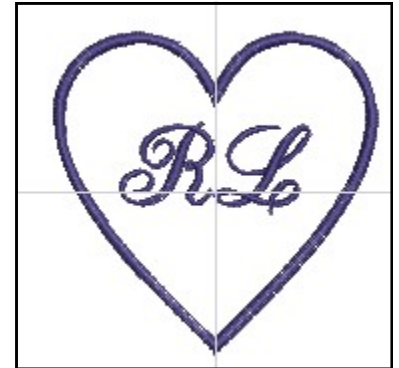
Creating the Border
- The heart should still be selected.
- Select Settings> Create Border.
- In the dialog box that opens, click on Create.
- Name the set, Custom Borders.
- Click OK.
- In New Border Name, enter Heart.
- Click OK.
- Follow the status bar prompts to set the start point and the end point for the border. Click on the border to set these points; they can be at the same spot.
- You will receive a message that the pattern has been created.
- Click OK.
- Delete the object by pressing the Delete key as it is now stored in your program files for BERNINA Embroidery Software 8.

Using the Border
- Open the Monogramming program from the Digitize Toolbox.
- Input your initials in the Letters tab of the Monogramming Docker.
- Click on the Borders tab.
- Select Add.
- In the Border Set, click on the drop down box and select Custom Borders.
- Select the heart.
- Click OK.
- You may now edit and add to the monogram as desired.
- Save the file as Custom Monogram Border.
- Close the Monogramming Docker.
- Close the file.

Notes:

Lesson covers:
- ♦ *Converting artwork to embroidery*
- ♦ *Creating monogram borders*

Create a Pattern

Open a New File
- Select New Blank Design.
- Switch to Artwork Canvas.
- Select the Star from the basic vector shapes. (Click on the Rectangle showing in the toolbar; then select the star).
- Click and drag on screen to draw a star.
- Add a fill color by clicking on a color chip.
- Delete the outline by right clicking on the No Color Chip at the top of the color chips.
- While it is selected, click on Convert Artwork to Embroidery.

Editing the Object
- In the Transform Toolbar, make sure Proportional Scaling is locked and change the Width to .5". Press Enter.
- Zoom into the star.
- With the object selected, select Reshape.
- Move the green square (start point) to the far left and the red cross (stop point) to the far right of the star. (see picture)
- Change the angle to 90 degrees by clicking and dragging on one of the peach squares until the flag attached to the mouse shows 90°.
- Press Esc.
- Select Stitch Player to view how the pattern will stitch.
- Notice that the small pattern has underlay.
- Press End to stop Stitch Player.
- Select the star.
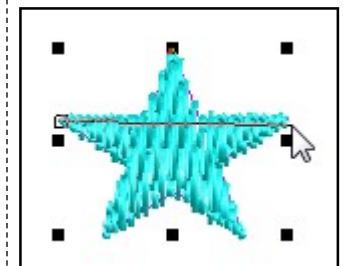- Click on the Auto Underlay icon in the Effects Toolbar to eliminate the underlay.

Creating the Pattern
- While the star is still selected, select Settings> Create Pattern.
- In the dialog box that opens, click on Create.
- Name the set, Created Patterns.
- Click OK.
- In Pattern Name, enter Star.
- Click OK.
- Follow the status bar prompts to digitize the reference line for the pattern from the left tip to the right tip.
- Click on the far left tip and drag to the far right tip and click again.
- You will receive a message that the pattern has been created.
- Click OK.
- You can save this file as Created Pattern Stamp or choose not to save it because it can be accessed as a Patten Outline, a Pattern Fill, or a Pattern Stamp within the software.
- Close the file.

Notes:

Lesson covers:
- ♦ *Creating patterns*
- ♦ *Rotating*
- ♦ *Changing Start & End points*
- ♦ *Removing Underlay*
- ♦ *Using created pattern stamps to create fills, outlines, pattern stamps, and carving stamps*
- ♦ *Creating star effects*

Angle: 90°
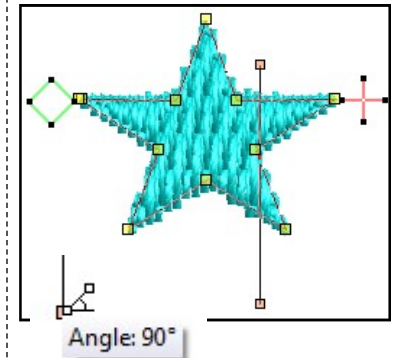
Moving the start and stop points will eliminate jump stitches in the pattern outlines generated from the created pattern.

Using the Pattern: For Outlines
- Select New Blank Design.
- Right click on the Pattern Run Outline icon.
- In Object Properties, click on the Select button.
- In Patterns, click on the drop down arrow and choose, Created Patterns.
- Select the Star.
- Click OK; then OK again.
- Select the Open Object tool in the Digitize Toolbox and digitize a line with two left clicks.
- Press Enter to activate. Press Esc.

Using the Pattern: For Fills
- Right click on the Pattern Fill icon.
- In Object Properties, click on the Select button.
- In Patterns, click on the drop down arrow and choose, Created Patterns.
- Select the Star.
- Click OK; then OK again.
- Select the Rectangle tool in the Digitize Toolbox and digitize a rectangle with two clicks, clicking in the upper left corner, then dragging to the lower right corner and clicking again. Press Esc.
- You may add an outline to the rectangle through Outlines & Offsets.

Using the Pattern: For Pattern Stamps
- Select Pattern Stamp from the Digitize Toolbox.
- In Patterns, click on the drop down arrow and choose, Created Patterns.
- Select the Star.
- Click OK.
- Click and drag and click again to set the stamp.
- You may hold the Shift key down after the first click to change the size. Press Esc.

Using the Pattern for a Carving Stamp
- Select the Rectangle tool in the Digitize Toolbox and the Step fill from the Stitch Toolbar.
- Draw a rectangle with two left clicks.
- Press Esc.
- Open the Carving Stamp docker.
- Click on the Use Pattern tab.
- Navigate to Pattern Set> Created Patterns> Star.
- Select the Star. Set stamps on the step fill rectangle using two left clicks. Press Esc.
- Save the file as Create a Pattern.
- Close the file.

Notes:
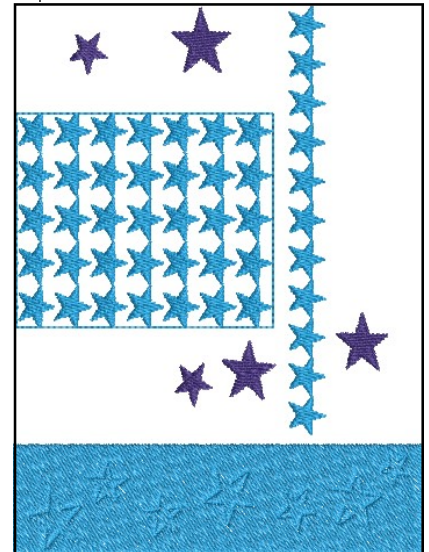
Pattern fills and craft fills often need outlines around the pattern to give a finished look. See page 38.

For the created pattern to be visible as a Carving Stamp, you may need to close; then reopen your software.

You must be in Artistic View to see the stamp. Press T on the keyboard to switch to Artistic View if necessary.

©2018 BERNINA of America, Inc.

Creating Design Templates

Saving the Background Color
- Select New Blank Design.
- Select Design> Background.
- Solid Color is selected by default.
- Click on the drop-down arrow by the default color swatch.
- Select the white color chip.
- Click on the drop-down arrow by Color Inside Hoop.
- Select White. Click OK.
- To save the new background, select File/Save As Template.
- BERNINA Template V8 is the default file type.
- Name the file White Background.
- Click Save.
- Close the file.
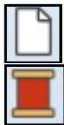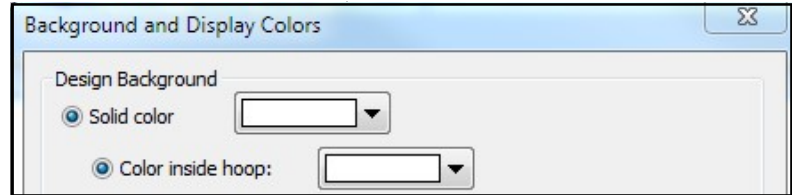
To Create a Thread Template
- Select New Blank Design.
- Right click on Thread Colors.
- In the Thread Chart drop down box, select Isacord 40.
- Select Match & Assign All.
- Click OK.
- The BERNINA default thread colors will be replaced by Isacord equivalents.
- Rest your mouse on one of the color chips.
- To save the new template, select File/Save As Template.
- Name the file Isacord Thread.
- Click Save. Close the file.
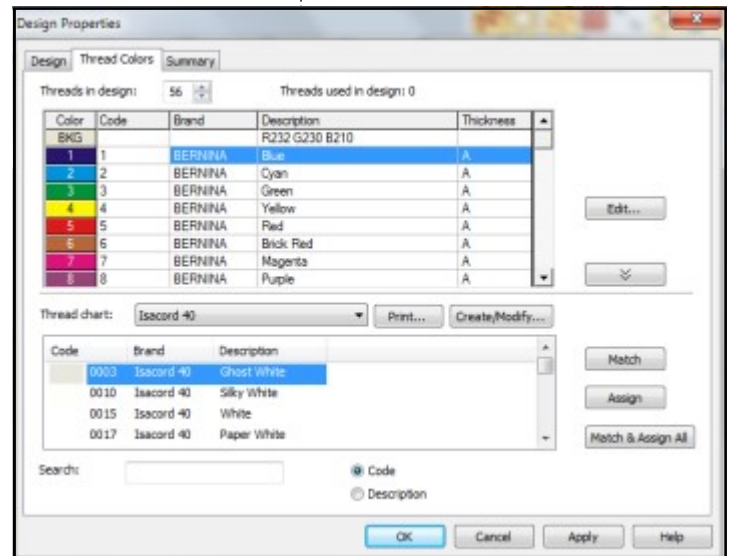
To Open a Saved Template
- Select New Blank Design.
- Select File/ New from Template from the Menu Bar.
- Click on the drop-down arrow next by Template: Normal.
- Select the template of your choice.
- Notice that you can also select your Fabric Settings and your Background Color in this dialog box.
- Click OK.
- To place a design in this template, select Insert Embroidery. This will insert the saved design in your selected template. Close the file.

Notes:
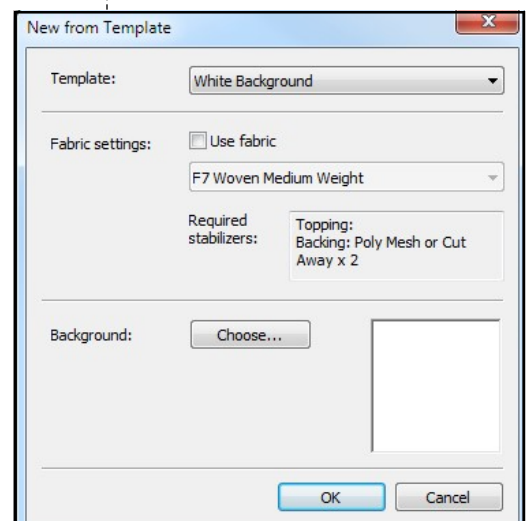
Overwriting the Default Template
- Open Object Properties.
- Make changes to the tabs within Object Properties as desired.
- For this exercise, change the default step pattern to 5.
- Click on Save to Template.
- A dialog box opens up that asks where the properties should be saved.
- Select Other Objects.
- Click OK for the Normal Template message.
- Each time a new file is opened, Step Pattern 5 is now the default.
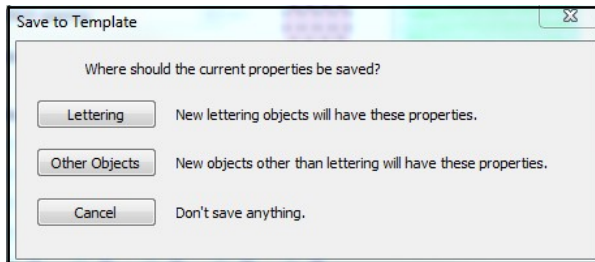
Reverting to Default Template
- Close the software.
- Go to Programs> BERNINA Embroidery Software 8> BERNINA Embroidery Software 8 Tools> Revert.
- For Windows 8 & 10, Revert can be found by typing Revert in the Search box.
- In the dialog box that opens, place a check mark by Templates.
- Click OK.
- The template will revert back to Step Stitch #1 as default when New Blank Design is selected.
- Reopen the software.

Revert To Factory Settings

Select items you wish to restore then click OK

OK   Cancel

- [ ] Defaults
- [ ] Templates
- [ ] Patterns
- [ ] Name group

- NORMAL.AMT80
- START & END.AMT80
- WHITE TEMPLATE.AMT80