

## Using Articles

### NOTES:



### Using a Built-In Article

- When the software is first opened, it opens to the Home Screen.
- Click on Embroidery Canvas.
- Select Design> Background and Display Colors.
- Place a dot by Factory Article.
- Click on the drop down by Name and select Ladies.
- Choose the Sweatshirt> Hooded Back.
- Click on the drop-down arrow by Color 1 and choose Rose (the first color chip in the last row).
- Click OK.
- In the Zoom drop-down, select Zoom to Article. This shows the entire article in full screen.



### Inserting a Design

- Select Insert Embroidery.
- Navigate to Libraries> Embroidery> BERNINA 9 Embroidery> Celebrations & Seasons> HD441.
- Select it and click on Open.
- The design is centered on the article.
- If the hoop is showing, deactivate the hoop by clicking on Show Hoop.
- Select the design, and move the design toward the neckline by clicking and dragging on the design.
- To center the design, change the Position X in the Transform Toolbar to 0. Press Enter to activate the change.



### Editing the Design

- It is easy to see that the design is too small for the back of a sweatshirt.
- Notice that the design is a Grade A design. Look at the lower right corner of the status bar to see the design grade.
- A Grade A design will give you more editing capabilities because the design has more information saved with the file.
- Notice also the stitch count in the lower right corner, 15,738.
- With the design selected, change the Width % to 175.
- Press Enter to activate.
- Notice the increase in stitch count; the stitch count increased to about 28,800. This is why Grade A designs give you more editing capabilities; stitches are recalculated. You cannot do this with Grade C and D designs.
- With the increase in size, you may wish to move the design. If you use your up/down arrow keys, the design will not have to be re-centered.



See page 893 in the Reference Manual for information on grading of designs.

To calculate the % change in stitch count, subtract the original value from the new value. Divide the difference by the original number; then multiply by 100%. In this case, the stitch count increased about 83%.

## Changing the Hoop



- Click on Show Hoop to activate the hoop.
- The default hoop is the Large Oval Hoop, but the displayed hoop will be the last one you used.
- This design will fit within the Large Oval Hoop, but to have more “wobble-room” when you are placing the design, select the BERNINA Midi Hoop from the drop-down options. Click OK.
- This will give more room to move the design if needed to align the center of the design with the center of the hoop.

## Activating Fabric

- To further edit the design for stitching, select Design> Fabric.
- Place a check mark by Apply Fabric.
- Click on the drop-down arrow by Fabric Type and choose F3, Knit Heavy Weight if you plan to use a heavy sweat shirt.
- Click OK.
- Apply fabric to existing objects is checked by default; click OK.
- Notice the stitch count changed again and the designation F3 Knit Heavy Weight is given in the status bar.
- The underlay, pull compensation, number of stitches have been updated for the fabric you indicated.

## Resizing the Article

- To make sure that the article on screen is the correct size for your actual sweatshirt, press the M on the keyboard and measure from shoulder to shoulder. Record the measurement.
- Press Esc twice to deactivate the measurement tool.
- Next measure across your actual sweatshirt. For the example, let's use 16.5”.
- To calculate how you need to increase the size of the article, divide the actual size by the article size and multiply by 100. For the example, this is 107%.
- Select Design> Background & Display Colors and enter 107% in the Scale box. Press OK. This will give you a more accurate picture of the sweatshirt in your size.
- You can make further decisions about the size of the design or perhaps, insert another design to complement the design you are working with.

## Saving the Design



- Save the file as Built-In Article.
- The best method to use to place this design accurately on your project is to mark the desired design center on the center of the actual sweatshirt.
- Select Print Preview. In Options, make sure that Start & End Crosshairs is checked. Click OK. Click Print Now.
- You can use the printed template to mark the desired location of the design center on your sweatshirt.

## NOTES:



*Calculation: 16.5 divided by 15.35 x 100 = 107.49185%*

## SECOND OPTION:

*Another option for marking the sweatshirt is to measure the distance from the bottom of the hood to the design center. Switch to Design View to see the white cross hair that marks the design center. Press T on the keyboard. Activate the measurement tool using M. Measure and record the distance. Mark this location on your sweatshirt and find the vertical center between the shoulder seams. Use this cross mark to position the center of your design.*

## Saving a Pattern Piece to Use as An Article

### Preparing the Scan



- Scan a pattern piece at 100% size and save the scan as a bit-map on your computer.
- Select New Blank Design.
- Select Insert Artwork.
- Navigate to the location of the saved pattern piece.
- Open the image.
- To crop in the Embroidery Canvas, add a guideline by clicking on the horizontal ruler.
- Move the guideline to align with the center front of the pattern piece by clicking and dragging on the yellow triangle at the top of the guideline. Zoom in for accuracy.
- Select the Crop tool in the Auto Digitize Toolbox.
- A floating row of icons appears. Select the Rectangle Crop.
- Click and drag on the pattern piece to crop.
- Release the mouse to set the crop.
- Select Edit> Duplicate.
- Click on Mirror X.
- Use the right arrow key until the pattern pieces meet at center front. Zoom in for accuracy.



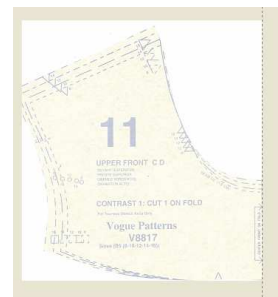
### Cropping in Artwork Canvas (only DesignerPlus)



- Switch to Artwork Canvas.
- You will notice a split at the center front. This occurs because the pattern piece was cropped in Embroidery Canvas.
- Return to Embroidery Canvas. Close the file without saving.
- Select New Blank Design.
- Switch to Artwork Canvas.
- Select Insert Artwork.
- Navigate to the location of the image. Select Import; press Enter.
- Select the Crop tool and click and drag to outline the crop area.
- Adjust the control points as needed.
- Double click to set the crop.
- Select the Pick tool.
- Select Copy; Paste.
- Reselect the design and make sure that the move control points are activated and not rotate control points.
- Hold the Ctrl key and click on the middle left control point and drag to the right to mirror the pattern horizontally.
- Select File> Export.
- Navigate to C: Users> Public> Public Pictures> BERNINA 9 Pictures. Click on New Folder and name the folder Custom Articles. Open the folder.
- Name the file as desired. Select PNG as file type.
- Click on Export. In the dialog box, click on OK.
- Return to Embroidery Canvas to insert a design.

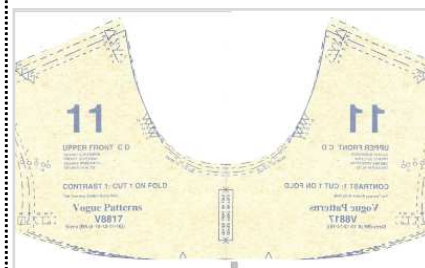
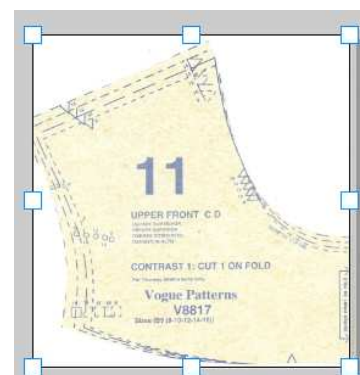


### NOTES:



*Remove the guideline by clicking on the yellow triangle at the top of the screen and drag to the vertical ruler.*

*Pattern pieces cropped in Embroidery Canvas will have a split at the middle where the pattern pieces overlapped. Creator-level owners must crop in Embroidery Canvas.*



*By exporting the design in Artwork Canvas, you can access the pattern piece for other projects as a Custom Article without repeating these steps. This is one of the advantages of using Articles. The pattern piece will have a white background.*

## Tips for Using the Pattern Piece



- When the pattern piece is not inserted as an article, it should be locked to keep from accidentally moving the pattern piece.
- Right click on the sailboat in Color Film and select Lock. This will keep you from accidentally moving the pattern pieces.
- When the pattern piece is used as an Article, it can't be selected so it doesn't have to be locked.
- Select Insert Embroidery. Navigate to the design you wish to use. Duplicate and edit as desired.
- As you are placing designs, remember that patterns have seam allowances. Be sure to allow for them.
- Also, keep in mind that the design must fit within a hoop unless you want to multi-hoop the design.
- Remember all the fun and utilitarian tools you have in your software as you compose and create your design:
  - ◆ Group/ungroup
  - ◆ Use only parts of a design
  - ◆ Break Apart
  - ◆ Knife
  - ◆ Copy/ Paste
  - ◆ Quick Clone
  - ◆ Mirror Merge
  - ◆ Resize
  - ◆ Rotate
  - ◆ Mirror tools
  - ◆ Re-color
  - ◆ Change fill and outline type



## NOTES:



*If you do not see a sailboat, but instead see pattern pieces, deactivate Show Objects at the top of Color Film.*

*The inserted design used in the example below is FQ157\_48 in the Decorative Accents folder.*

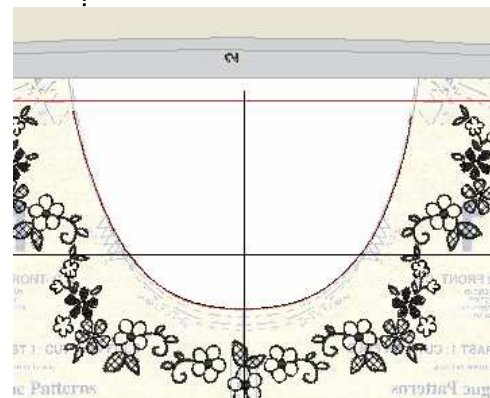


*This design will fit in a rotated Mega Hoop. To rotate a hoop, have nothing selected and enter 90 degrees in the Rotate value box.*

## Adding a Placement Line



- This method is usually used in conjunction with a placement line for accurately placing the designs.
- Activate the hoop before adding the placement line by clicking on Show Hoop so that the placement line will be placed inside the hoop.
- Select the Open Object tool.
- The Single Outline is selected by default; choose a contrast color.
- Using right and left clicks, digitize around the neckline of the pattern piece.
- Press Enter to activate the line. Reshape as needed.
- Select the placement line in Color Film.
- Select Move to Start in Color Film.
- Save the file as Placement Line.
- The placement line is stitched first on sticky-back stabilizer.
- Place the fabric on the stabilizer, aligning the edge of the fabric with the placement line.
- Stitch the design.



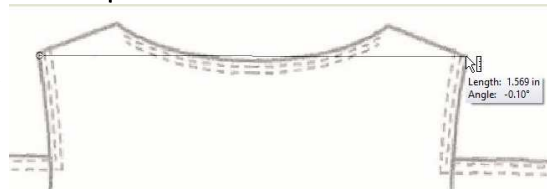


## Using a Black & White Pattern Drawing

### NOTES:



- Scan, save, and crop a black and white pattern illustration.
- Open a New Blank Design.
- Select Insert Artwork.
- Navigate to the location of your saved illustration. Select Open. Zoom in to the image.
- Press the M on your keyboard to access the measurement tool.
- Measure across the shoulders of the drawing using two left clicks. Zoom in for accuracy.
- Make note of the measurement. Press Esc twice to deactivate the tool.
- Measure across your finished garment and make note of that measurement. For this exercise, let's use 15" from shoulder to shoulder.



*This illustration does not have any lines to eliminate, so it is not necessary to save it as a vector image. It will have a white background, however.*

*If you wish to eliminate the white background, it must be converted to a vector before saving it as an article.*

### Resize the Image

- Open the calculator on your computer.
- Divide the actual garment measurement (15") by the on-screen measurement (1.569"). Multiply that by 100%.
- Round that to the nearest whole number (956%).
- Select the image.
- Enter the calculated number in the % for the width.
- Press Enter.
- Press 0 on your keyboard to show the entire image on your screen.
- Check the accuracy using the Measurement tool in the software.
- Design your embroidery if you do not wish to save the image for later use.



### Save the Image for Later Use



- Switch to Artwork Canvas. Press F4 to show the image.
- Select File> Export.
- Navigate to the created Custom Article folder. (C: Users> Public> Public Pictures> BERNINA 9 Pictures> Custom Article).
- Open the folder.
- Name the file as desired. Select PNG as file type.
- Click on Export. In the dialog box, click on OK.
- Delete the image. Switch to Embroidery Canvas.

*To save the image for future use as a Custom Article, you must have DesignerPlus software.*



### Retrieve the Image

- Select Design> Background & Display Colors.
- Place a dot in front of Custom Article. Click on Browse.
- Navigate to the location of the Custom Article folder.
- Select the article and click on Open; click on OK.
- Design your design!

*When an image is imported in this way vs just inserted into the design screen, the image cannot be selected and accidentally moved. It is imported at the size it needs to be since it was saved that way. Because it wasn't converted to a vector, the white background remains, even though it is an article.*

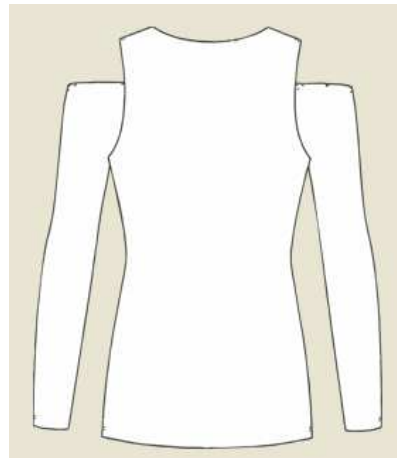
## Eliminating the White Background

- The image must be converted to a vector image to eliminate the white background.
- Select Design> Background and Display Colors.
- Click on Color inside hoop to deactivate the Custom article.
- Click OK.
- Switch to Artwork Canvas.
- Select Insert Embroidery.
- Navigate to your scanned black and white image.
- Select Trace Bitmap> Quick Trace.
- Select the Objects docker tab on the right side of the screen.
- Open Layer 1 if needed by clicking on the arrow in front of the layer.
- Select the bitmap (jpg) image and press Delete.
- Right click on the Group of objects and select Ungroup All.
- Select the white background by clicking in a corner of the image. Press delete.
- Select Ctrl + A and right click and select Group.
- Make sure Lock Ratio is locked.
- Change the % Width to what was previously calculated. In this case, 956%. Press Enter.
- Repeat the previous steps to save the black and white image as an article.
- Delete the image after exporting.



### NOTES:

*Complete these steps before resizing the design to save time.*



*When the image is converted to a vector, then the white background can be deleted. When the image is exported as a PNG file to use as a Custom Article, the white background is no longer there.*

## Using a Color Screen Capture



- Find a colored image to screen capture and save the capture on your computer.
- Select New Blank Design.
- Click on Insert Artwork.
- Navigate to the location of your saved screen capture.
- Select it and click on open.
- Switch to Artwork Canvas.
- Crop the design as outlined previously.
- Select the Pick tool.

### To Vectorize the Image

- Select Trace Bitmap in the Property Bar.
- Select Outline Trace> Clipart.
- After the image processes, click OK.
- Open the Object tab on the right side of the screen.
- Open Layer 1 if needed.
- Select the bitmap and select Delete.

### Changing the Size in Artwork Canvas



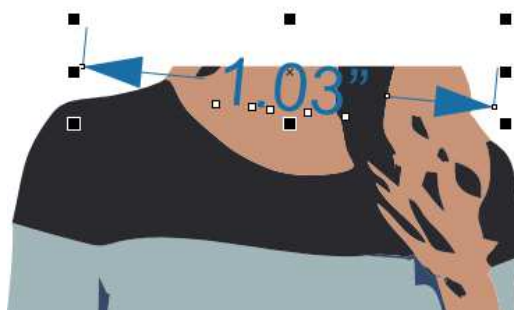
- Access the Corel tools by right clicking in the gray space of the Property Bar and selecting Toolbox.
- This image will be harder to measure accurately because there is no clear shoulder line and the model's hair is in the way.
- Select the Parallel Dimension Tool.
- Click on one shoulder and hold the mouse down to drag across to the other shoulder.
- Click again and drag the mouse upward. When you release the mouse, the measurement will show.
- Record the measurement and press Delete while it is still selected.
- Select the Pick tool and click on the image.
- Open the calculator on the computer.
- Use the same formula to calculate the %.
- This will be 15" divided by 1.03; then multiply by 100%.
- You can drag across the measurement in the calculator.
- Make sure Lock Ratio is in the locked position.
- You can drag across the measurement in the calculator to select it.
- Select Ctrl + C to copy.
- Then click in the Width % of the Property Bar.
- Select Ctrl + V to paste. Press Enter to activate.
- Select F4 to fit the image on the screen.
- Follow the same steps as earlier to save the image in the Custom Folder without a white background.
- This image can now be accessed as a Custom Article.

### NOTES:



**When to create a vector:**  
Vectorizing the image is necessary to reduce the number of colors of a bitmap, to delete parts of the image that can't be cropped from the image, or to eliminate the white background of the bitmap.

*Note: If it is easier for you to measure in Embroidery Canvas, switch to access the measurement tool and then return to Artwork Canvas. Make sure Show Vector Objects is activated or the vector image will not be visible.*





- Switch to Embroidery Canvas if you wish to start designing using your screen capture as an article.
- If you are just using the image in the background without accessing it through Custom Article, make sure to activate Show Vector Image in the Embroidery Canvas.
- You will not be able to select the vector image in Embroidery Canvas so it is not necessary to lock the image.
- For articles that you save that have less definite centers, you may use the Open Object Tool to digitize a short line indicating the center (see illustration below).
- Check for accuracy using the Measurement Tool.
- You will want to zoom in as you insert designs.

**NOTES:**

*This is of course the least accurate method; however, if you have ordered a garment from a catalog, this can give you the best depiction of a garment for planning your design.*