Fun with DesignWorks

Created by
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Use BERNINA DesignWorks Software Suite to create PaintWork and CutWork designs from easy to find graphic files and design files

Supplies

Machine & Accessories
- BERNINA DesignWorks Software Suite
- BERNINA Sewing & Embroidery Machine
- BERNINA Large Oval Hoop
- BERNINA PaintWork Tool / CrystalWork Tool / BERNINA CutWork Tool
- Fun with DesignWorks Design Files courtesy of OESD Design Collection #12589 Enchanting Silhouettes

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Graphic files can be classified into two basic groups — vector graphics and bitmap or raster graphics. Vector graphics are the easiest to use and generally produce the best results in DesignWorks Software. Bitmaps or raster graphics can also be used but generally require more editing.

To use a vector graphic file to create PaintWork

- Open BERNINA DesignWorks Software.

- Select *Create New* and click *Next.*

- In the *Fabric* screen, select the plus sign next to *Embroidery Normal* and select *<None>.* Select the white color chip on the right and click *Next.*

- In the *Artwork source* screen that now opens, click the radio dot next to *From File.* Click on the *Browse* icon and navigate to the location of *Design 12589–05 Decal.svg.* Select the file and then click *Open.*

- Use the drop down arrow in the *Hoop* field and select *BERNINA Large Oval Hoop, 255x145, #93. NOTE: change the foot number for the type of tool that wish to work with — PaintWork (#93), CutWork (#44C), or CrystalWork (#48).*

- Select *Next.*

- Select *Finish* in the *Color Reduction* screen.

Selecting a fabric will change the density of an embroidery design to work with a wide variety of fabrics. If you are simply using the DesignWorks tools it usually does not matter what fabric you choose. Selecting a color chip from the grouping to the right will change the color of the background screen.

Click on the drop-down arrow in the Fields of Type Window to view a list of the files that can be used. DesignWorks Software will open the following types of graphic designs: Adobe Illustrator (*.AI), Corel Graphics (*.CMX), AutoCad (*.DXF), Encapsulated Postscript (.EPS). Enhanced windows metafile (*.EMF), Scalable vector graphics (*.SVG), HP GL file (*.PLT), Bitmap files (*.BMP, *.DIB, *.RLE), Jpeg file (*.JPG, *.JPEG, *.JPE, *.JFIF), Gif file (*.GIF), Windows metafile (*.WMF), Tif file (*.TIF, *.TIFF), Png file (*.PNG), Icon file (*.ICO)
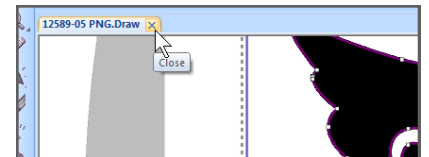
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- Zoom in by selecting 100% in the *Standard Tool Bar* at the top of the screen.

- Position the mouse along the outer edge of the bird without clicking. You will see a pink line around everything except the center flower and the two flourishes on the wing. This is because the flourishes and the flower are now separate objects. These individual objects can be selected and changed individually.

- To combine all the elements so they act as one unit, select *Edit > Select All* (or *Ctrl A* on the keyboard). Right click and select *Combine*. Now when you select the bird, all elements are selected.

- This particular design is a single color design without an outline. Deselect the design by clicking on an empty part of the screen. Notice that the edges do not appear smooth. Adding an outline will neaten these edges.

- Select the design by touching the *Rectangle Selection* icon and touching the bird, or by selecting the design in the *Sequence Manager*.

- Place the mouse inside the upper left (hollow) part of the red color chip in the *Brushes Palette.* Deselect by clicking on an empty place on the screen and notice the differences in the edges.

- The design is now ready to be sent to the machine for PaintWork by selecting the *Export* icon and following the prompts on the screen.

- To save this design to edit it for future use, select *File > Save As* and navigate to the location you would like to store this design. Name the file*12589-05 Paint SVG*. The *Save as type* should be the default *DesignWorks files (*.Draw)*.

- Close the design by touching the "*x"* next to the name above the design.

To use bitmap image files to create PaintWork

*Bitmap files can be used to create DesignWorks elements but they will need more editing.*

- Open BERNINA DesignWorks Software.

- Select *Create New* and click *Next. (If the Software is open, select File > New or select the New icon in the Standard Toolbar.)*

- In the *Fabric* screen, select the plus sign next to *Embroidery Normal* and select *<None>*. Select the pink color chip on the right and click *Next.*

- In the *Artwork source* screen that now opens, click the radio dot next to *From File.* Click on the *Browse* icon and navigate to the location of Design 12589–05 Decal.png. Select the file and then click *Open.*

- Use the drop down arrow in the *Hoop* field and select *BERNINA Large Oval Hoop, 255x145, #93*. *NOTE: change the foot number for the type of tool that wish to work with — PaintWork (#93), CutWork (#44C), or CrystalWork (#48).*

- Select *Next.*

- In the *Artwork Image* screen that now opens select *Trace (convert to outlines)* and then touch *Next.*

- *In the Trace Image* screen that opens leave everything at its default setting and click the *Trace* button.

- In the *Color Reduction* screen note that the software sees two colors— black and white. Touch *Finish.*

- Select *100%* in the tool bar at the top of the screen to see the design more clearly.

- There are a few edits that are needed before we paint. Note that the eye, the center circle of the flower and the swirl on the bird's chest appear grayed out. Note that there are two paint colors in the *Brushes Palette* at the bottom of the screen. Since we want only the black portion to paint, we need to do a little bit of clean up.

- Zoom out with the mouse wheel until you can see the entire bird.

- With the *Rectangle Selection* icon selected, click the mouse to the upper left of the bird. The software is going to paint that area white. Since we don't want to paint that area white, click the screen in that area and touch the Delete key on the keyboard.

- Click at the upper right of the bird and notice the purple line there. Touch the *Delete* key on the keyboard to get rid of that area of paint.

- Click at the lower right of the bird and touch the *Delete* key on the keyboard to remove that area of white.

- Finally click in the small area at the end of the bird's tail and touch *Delete* key on the keyboard.

- Zoom in so you can see the grayed out swirls on the bird's chest. Hover the mouse over the area and you will see pink lines around it.

- Click on that area to select it. Hold down the *Shift* key on the keyboard as you select the bird.

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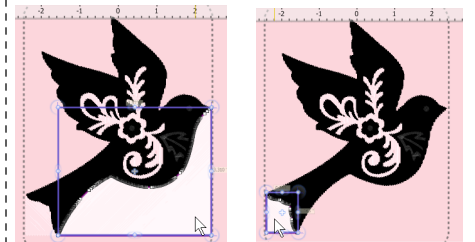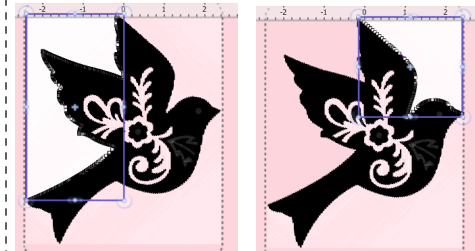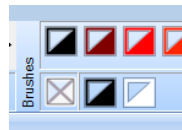
- Hover the mouse over the *Trim* icon on the *Standard* Toolbar above the workspace. You will see the part of the bird that will be trimmed.

- Left click the *Trim* icon to activate those changes.

- Click on an empty part of the screen to deselect.

- Select the bird's eye. Hold down the *Shift* key on the keyboard and select the bird. Left click on the *Trim* icon at the top of the screen.

- Click on an empty part of the screen to deselect.

- Zoom in to the center flower. Move the mouse to the center of the flower until you see the pink line around the circle. Left click to select the circle and hold the *Shift* key on the keyboard as you select the black flower around the circle. Hover the mouse over the *Trim* icon and you will see the part that will be trimmed.

- Left click the *Trim* icon to activate those changes.

- Click on an empty part of the screen to deselect.

- Hold the *Shift* key on the keyboard as you select the two black swirls in the bird's wing and the black flower.

- Continue to hold the *Shift* key as you select the white swirls. Hover over the *Trim* icon at the top of the screen to see the portions that will be trimmed.

- Left click the *Trim* icon to activate the changes.

- Click on an empty part of the screen to deselect.

- Select the white inside swirls. Hold the *Shift* key on the keyboard as you select the bird.

- Hover over the *Trim* icon to see the portions that will be cut from the background of the bird.

- Left click the *Trim* icon to activate those changes.

- We no longer have a need for the background graphic. You should hide this so you can see any changes you make to the design. Select *View* from the *Main Menu*. Select *Backdrop* and place a check next to *Hide.*

- Right click on the lower right part of the white color chip at the bottom of the screen.

- Choose *Select By* and then choose *Fill color.* All of the white parts of the design should be selected.
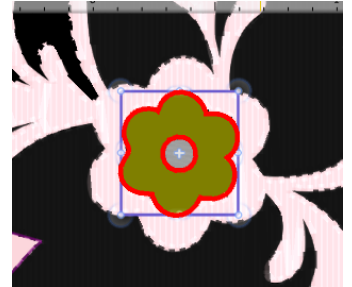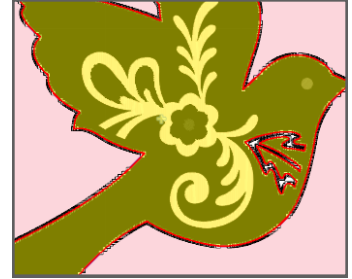
- At this time, you could click in the lower right of any other color in the *Brushes palette* to change the fill color if you wished. But to eliminate the color entirely and create a negative space, touch the *Delete* key on the keyboard.

- This particular design is a single color design without an outline. Select *100%* in the tool bar at the top of the screen to see the design as it will appear when painted. The edges do not appear smooth. Adding an outline will neaten up the edges.

- Select the design by touching the *Rectangle Selection* icon and touching the bird or by selecting the design in the *Sequence Manager*.

- Place the mouse inside the upper left part of the red color chip to create a red outline.

- The design is now ready to be sent to the machine for painting by selecting the *Export* icon.

- Touch *File > Save As* and navigate to the place you would like to store this design for future use. Name the *file12589-05 Paint PNG.* The *Save as type* should be the default *DesignWorks files (*.Draw).*

- Close the design by touching the *x* next to the name above the design.

Editing Fun with graphics

- Select *File > Open* or select the *Open* icon at the top of the screen. Navigate to the location of the saved SVG file (*12589-05 Paint SVG*).

- Select the design and click *Open.*

- Select the design on the screen. The *Fill* tab in *Object Properties* should be open*.*

- With the fill set at *Fill*, place a check mark next to *Density.* Swipe across the field and change the density to 2mm.

- Touch the *Enter* key to activate the changes. Deselect the design by clicking on an empty space on the workscreen to view the changes. Notice that the fill is now much more open. Experiment by changing the *Density* field to various settings. Change the setting back to 2.0 after experimenting.

- Select the *Directions* icon in the *Tools Toolbar* at the side of the workscreen.

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- Click and drag on the screen starting near the point where the wing adjoins the tail and releasing the mouse at the point where the wing joins the head.

- Experiment by clicking and dragging at different areas to change the direction of the paint fill.

- Touch the *Design Selection* tool to select the design.

- Select *Row-Fill*. Leave the check mark beside *Use short/long*. Change the *Density to 2mm.* (Changing the density will help you to see the changes better.)

- Touch *Enter* on the keyboard to activate the changes and deselect by clicking on an empty part of the screen to view the changes. Note that the direction of the paint is now following the curves of the design.

- Select the design. Deselect *Use short/long.* Touch *Enter* on the keyboard to activate the changes and then deselect by clicking on an empty space on the screen to view the changes.

- Experiment with different values in these fields.

- Select the design and select *ZigZag* in the *Fill* tab of *Object Properties. Tip:* Changing the *Density* to a higher number may help you to view the changes better. Experiment with different settings in this field.

The best way to learn to use the tools is to experiment! Send the designs to your machine and watch them paint. If you happen across something that you really like be sure to save the design (use File > Save AS, not just Save or you will overwrite your original design) as a draw file for future use!

To use vector graphics files to create CutWork

- Open BERNINA DesignWorks Software.

- Select *Create New* and click *Next.*

- In the *Fabric* screen, select the plus sign next to *Embroidery Normal* and select *<None>*. Select the white color chip on the right and click *Next.*

- In the *Artwork source* screen that now opens, click the radio dot next to *From File.* Click on the *Browse* icon and navigate to the location of Design 12589–05 Silhouette.svg. Select the file and then click *Open.*

- Use the drop down arrow in the *Hoop* field and select BERNINA Large Oval Hoop, 255x145, #44C. *NOTE: change the foot number for the type of tool that wish to work with — PaintWork (#93), CutWork (#44C), or CrystalWork (#48).*

- Select *Next.*

- Select *Finish* in the *Color Reduction* screen.

`100% ▾`
- Zoom in by selecting 100% in the *Standard Tool Bar* at the top of the screen. Save this design as *12589-05 CutWork-Appl Draw file. Save as type* should be *DesignWorks Files (*Draw).*

We will create a CutWork file and use the CutWork Tool to cut out the fabric for the free appliqué design 12589-05. We can also create our own appliqué design using a graphics file. Let's start with the CutWork portion first.
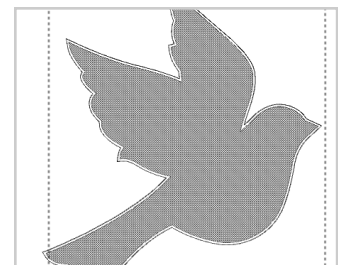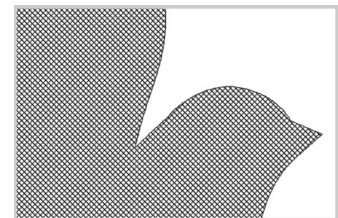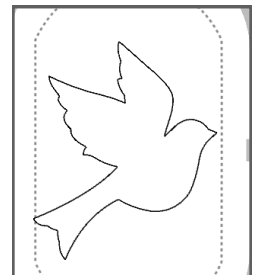
- Select the bird on the screen. Note that the bucket is in the fill portion of the black color chip and the pencil is in the outline portion of the empty color chip. This means there is a fill, but no outline.

- We need to have an outline but no fill to create a CutWork file.

- Place the cursor in the hollow upper left corner of the black color chip and click. An outline has been added.

- Place the cursor in the lower right corner fill portion of the empty color chip just to the right of the word *Brushes* and click. This has removed the fill. The bird is a outline shape on the screen.

- The bird should still be selected on the screen.

- The Outline tab should open in *Object Properties.* Select *Cutwork.* This has created the cutting lines. If you zoom in you will see crosshatches denoting the cut shape.

- Although not totally necessary, it is helpful to add a basting line that will tack the fabric rectangle to the hooped stabilizer for a better cut. To do so select *Running Before.* In the *Offset* field, change the value to 1 mm. An outline will appear around the bird on the screen.

- The basting line (Running Before) makes the design slightly bigger than the hoop. Rotate the design to make it fit. Swipe across the Rotate field and type 65.

- Select the Manage the hoop options icon in the Tool Bar and check Center design to hoop again after it is rotated.)

- The design is now ready to be sent to the machine for cutting using the *Export* icon.

- Save the design as 12589-05 CutWork File. *Save as type* should be *DesignWorks Files (*.Draw).*

Since we are cutting the bird shape to be used in the free appliqué design, we do not need to create an appliqué file. But you can create the appliqué design to be stitched if desired.

If you were going to make any changes to the size or shape of the graphics file, you should do so before saving it as a draw file.
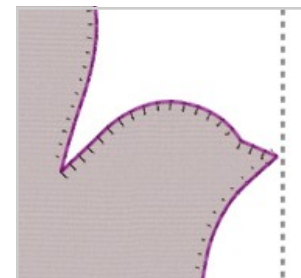
It is best to rotate the design using the Rotate field in the Tool Options by typing in a value rather than manually rotating the design. This will prevent accidental re-sizing while rotating manually.

- Select *File > Open* and navigate to the location of the saved design — 12589-05 CutWork Appl Draw.draw. (Alternatively you can select this file from the list of recently opened files that appear when you select *File > Open.*

- Select the bird on the screen. Note that the pencil is in the bucket is in the fill portion of the black color chip in the *Brushes Palette.* The pencil is in the upper left hollow portion of the empty color chip. This means the design will paint out but have no outline.

- With the design selected, the *Fill* tab should be open in *Object Properties. S*elect *Appliqué.*

- Note that the bucket and black chip have now moved to the *Threads Palette.* The appliqué fabric is represented by the black color. In order to see better, click the lower right corner of any lighter color chip in the group just above it to change the fabric color.

- Place a check mark next to *Cleaning* in the *Object Properties* box. Click on the down arrow and select *Laser Cut.*

- If you hover you mouse over the design on the screen, you will see that a blanket stitch has been added around the appliqué. You could add an outline and then change the type of stitch around the appliqué but we will leave it as a blanket stitch.

- The software has also automatically created a Placement Line that will stitch first on the hooped fabric that will give you a guideline for placing the fabric shape. The software added a tackdown line that the machine will then stitch to hold the shape in place and the design will finish.

- Navigate to the place you would like to save the design and name it 12589-05 Silhouette SVG Appl. The Save as type should be *Design-Works Files (*.Draw).*

- You are ready to send the design to the machine to be stitched but before you actually stitch it, prepare the file for the CutWork Tool to cut out the shape.
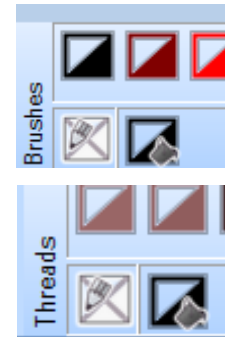
Selecting Laser Cut means that we will use the CutWork Tool to cut out the shape prior to embroidery. This feature will automatically give you the placement line and tackdown line that you need for the appliqué.

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