






MasterWorks II – Heirloom Cutwork

I. Introduction

- A. This class is for users of MasterWorks II and for MasterWorks.
 - 1. If you are still using the original MasterWorks, you will be able to follow the directions for MasterWorks II to complete this project.
 - 2. There is a separate class on this project for users of MasterWorks Lite because there are significant differences in the way the butterfly is created in MasterWorks Lite.
- B. In today's class you will:
 - 1. See how creating a path for a design will make it easy to create a design that sews out smoothly
 - 2. Learn how to create traveling stitches to keep the machine sewing instead of stopping to trim and jump
 - 3. Learn how to adjust the stitch settings on Motif stitches
 - 4. And how to control the direction of those motif stitches
 - 5. And best of all, how to create and save single motifs
 - a) And you will have a new appreciation for Quick Picks
 - 6. You will learn how to create and sew reverse appliqué
 - 7. How to create cutwork openings in your embroidery designs
 - 8. And how to add Richelieu bars to your cutwork
 - 9. And you will discover how to use Preserve as Stitches to make it easier to sew appliqué and cutwork

II. Set Up To Begin And Bring In Backdrop

- A. Open a **New Page**  and turn on **3D** .
- B. Select the **Backdrop** tool 
 - 1. In the Artwork folder there is an image called Lineart13. Select **Lineart13** and click **Open**.

- a) In MasterWorks II (C:\Designer's Gallery\MasterWorks II\Artwork\Lineart13)
- b) In MasterWorks (C:\Designer's Gallery\MasterWorks \Artwork\Lineart13)

2. Double click on the **Magnifying Glass**  to zoom to fit.

III. Take A Moment To Plan The Sewing Order

A. It is tempting to just jump in and start creating stitches, but if you take a moment to plan first you will spend less time editing and re-sequencing later.

1. If you make a list of the elements of your design in the order you want to sew them and note what type of stitching you want to use in each area you will be able to follow your list to quickly create an embroidery design that will sew out in the most efficient manner possible.

B. When planning cutwork embroidery, think about the texture of the stitch effects you are selecting.


1. Traditional cutwork designs are most often sewn with thread that is the same color as the background fabric.
2. In this type of embroidery the open holes of the cutwork, and the texture created by the embroidery stitches become very important.
3. Although we will use satin stitches for most of the design, we will also add some detailing with column fill stitches, chain stitches and Candlewicking knots.




C. The butterfly list

1. Outline lower left wing - satin outline
2. Outline of lower right wing - satin outline
3. Run stitch travel stitches up middle of body to upper wing
4. Outline of upper right wing - satin outline
5. Outline of upper left wing - satin outline
6. Run stitch travel stitches up middle of body to antennae
7. Left and right antenna - motif chain stitch
8. Single candlewick knot at the end of each antenna
9. Body – Auto Column
10. Detail on upper wings - reverse appliqué.
11. Small spots on lower wings –cutwork
12. Large spots on lower wings - cutwork with Richelieu bars.




IV. Step 1 - The Lower Left Wing

A. Trace the outline of the lower left wing

1. Select the **Line** tool from the Pen tool fly-out tool bar. 
2. Left click along the outline of the wing to trace it.
 - a) If you hold down the **Control** key on your keyboard the line will automatically curve.

- b) If you want a re-do on any of your points, use the **Backspace** key on the keyboard. Each time you touch Backspace one blue Bezier point will be removed.
 - c) **Right click** to end the line.
- B. Select stitch effect for the wing
 - 1. Left click on **Satin**  to put a satin stitch outline around the wing
 - 2. In the Properties box, change the Width to **4.0mm** and click **Apply**.
- C. Edit the stitching for the smoothest sewing path.
 - 1. Left click on the **Reform** tool 
 - 2. Move both the **green start point** and the **red stop point** to the end of the line next to the body of the butterfly.
 - a) To move the start and stop points simply click and drag them to the desired position.
 - b) Either click **Apply** in the Properties box or **right click** to make the start and stop points remain in their new positions.
- D. You may also want to smooth some of your points for a prettier curve on your wing.
 - 1. Left click on the **Reform** tool 
 - 2. In areas where the curve of the wing is not as smooth as you would like, right click on the Bezier points and select **Symmetrical** for the type of point.
 - 3. Right click or click **Apply** in the Properties box when you have changed the affected points and the satin stitch will adjust.



V. Step 2 - The Lower Right Wing

- A. Use Copy and Paste to create a wing on the lower right.
 - 1. Left click on the **Select** arrow 
 - 2. Select the wing stitching
 - 3. Right click and **Copy**
 - 4. Right click and **Paste**
 - 5. Left click on **Flip Horizontal** 
 - 6. Click and drag the wing into position on the right side of the butterfly using the backdrop picture to guide the placement of the wing.
- B. Edit the stitching for the smoothest sewing path.
 - 1. Left click on the **Reform** tool 
 - 2. Confirm that both the green start point and the red stop point are at next to the body of the butterfly.
- C. Note that it is not necessary to smooth the wing because we already did that before we copied it.

VI. Step 3 – Run Stitches Travel up the Middle of the Body to the Upper Right Wing

- A. The next step will be to add some straight stitches that will allow us to “travel” to the spot where the upper right wing will begin.
1. Using traveling stitches will allow the machine to sew continuously instead of stopping to tie off, trim, and move the carriage to the next piece of embroidery.
 - a) Traveling stitches were not needed for the two lower wings because the distance between the wings was short enough that a jump stitch will be created.
 2. Both the jump and the traveling stitches will be covered up when the body is satin stitched.
- B. Draw the line for the traveling stitches






1. Select the **Line** tool from the Pen tool fly-out tool bar.
 2. Left click up from the end of the lower wing up the body to the top of the right upper wing where it joins to the body.
 3. **Right click** to end the line
- C. Select the line and left click on **Run** 
1. Note in the Properties box that the stitching is a Single run with a stitch length of 3.0mm.
 2. Left click on the **Reform** tool 
 3. Make sure that the green start point is at the bottom of the line and the red stop point is at the top of the line.

VII. Step 4 – The Upper Right Wing

- A. Draw the line for the upper right wing




1. Select the **Line** tool from the Pen tool fly-out tool bar.
 2. Left click along the outline of the wing to trace it.
 3. **Right click** to end the line
- B. Select stitch effect for the wing
1. Left click on **Satin**  to put a satin stitch outline around the wing
 2. In the Properties box, change the Width to **4.0mm** and click **Apply**.
- C. Edit the stitching for the smoothest sewing path.
1. Left click on the **Reform** tool 
 2. Move both the green start point and the red stop point to the top end of the line next to the body of the butterfly and click **Apply**.
- D. You may also want to smooth some of your points for a prettier curve on your wing.

1. Left click on the **Reform** tool 
2. In areas where the curve of the wing is not as smooth as you would like, right click on the Bezier points and select **Symmetrical** for the type of point.
3. Right click or click **Apply** in the Properties box when you have changed the affected points and the satin stitch will adjust.

VIII. Step 5 – The Upper Left Wing


A. Use Copy and Paste to create a wing on the upper left.

1. Left click on the **Select** arrow 
2. Select the wing stitching
3. Right click and **Copy**
4. Right click and **Paste**

5. Left click on **Flip Horizontal** 

6. Click and drag the wing into position on the left side of the butterfly using the backdrop picture to guide the placement of the wing.

B. Edit the stitching for the smoothest sewing path.


1. Left click on the **Reform** tool 
2. Check that both the green start point and the red stop point are at the end of the line next to the body of the butterfly.

C. Note that it is not necessary to smooth the wing because we already did that before we copied it.


D. Run the **Sewing Simulator** to see that the wing outlines are sewing correctly.

IX. Step 6 – Run Stitches to the End of the Antennae

A. Draw the line for the traveling stitches


1. Select the **Line** tool from the Pen tool fly-out tool bar. 
2. Left click from the end of the wing up the body to the top of the head and then up the center of the antenna. Take the line all the way up to the tip of the antenna.
3. **Right click** to end the line

B. Select the line and left click on **Run** 


1. Note in the Properties box that the stitching is a Single run with a stitch length of 3.0mm.
2. Left click on the **Reform** tool 
3. Make sure that the green start point is at the bottom of the line and the red stop point is at the top of the line.

X. Using Run Motif Stitches

A. We will be using motif stitches for the antennae, so let's take a look at how these stitches work before we create our antennae

1. Left click on **New**  to open a new design page.

2. Turn on **3D** 

3. Select the **Line** tool from the Pen tool fly-out tool bar. 

4. Draw a horizontal line on the page

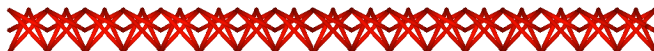
- Left click once at the left end of the line
- Then left click at the right end of the line
- Right click to end the line

5. Left click on **Run (Motif)** .

6. Double click on the **Magnifying Glass**  to zoom to fit.

B. Select a motif stitch

- Open the **Motif list** and select **motif f023**.
- Click **Apply**.



C. In the Properties box

- Stitch Length controls the size of the motif.
 - Change the stitch length to **6.0** and click **Apply**.
 - And the stars get bigger.



c) The stars are taller and fewer stars fit onto the line because they are also wider.

2. Run Spacing changes the space between motifs.

a) Change the run spacing to **1** and click **Apply**. A straight stitch appears between the stars and the points of the stars no longer touch each other.



b) Change the run spacing to **5** and click **Apply**. A longer stitch is placed between the stars.




D. Select a new motif stitch

1. Open the **Motif list** and select **motif f013**
2. Click **Apply**.
3. Change the Stitch Length to **5**
4. Click **Apply**
5. All of the arms on this feather stitch are angled toward the right.



E. How to control which way the motif stitch faces

1. Left click on the **Reform** tool 
 - a) The line of stitches is being sewn from left to right.
 - b) We know that because the green start point is at the left end of the line and the red stop point is at the right end of the line.





2. To turn the motif in the other direction we will need to sew it in the other direction.
 - a) Click and drag to move the green start point to the right end of the line.
 - b) Click and drag to move the red stop point to the left end of the line.
 - c) Click **Apply**.
 - d) And the stitches face in the other direction!



F. Create a single motif stitch


1. Draw a line to be used to create our single motif

- a) Select the **Line** tool from the Pen tool fly-out tool bar. 
- b) Draw a horizontal line that is about an inch long on the page.
 - (1) Use the ruler at the top of the page to guide this.
 - (2) It does not have to be exact, close counts!
- c) **Right click** to end the line
- d) Left click on **Run (Motif)** 

2. Select a new motif stitch
 - a) Open the **Motif list** and select **candlewicking03**.
3. Click **Apply**.
4. Change the Stitch Length to **5**
5. Click **Apply** and you will have a row of Candlewicking knots.



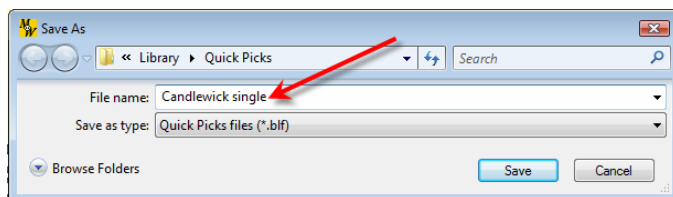
6. In order to have just one motif on the line what we will need to do is make the line exactly the same length as one motif


- a) We know the length of one motif.
- b) Our stitch length is 5.0mm
- 7. **Right click** on the ruler and select **Metric** so measurements will be given in millimeters for this next step
- 8. Left click on the **Transform** tab in the Properties box
 - a) Remove the check mark from the **Maintain Aspect Ratio** box
 - b) Change the width of the line to **5.0mm**
 - c) Click **Apply**
- d) And you will have a single knot! 


XI. Save the Candlewicking Knot

- A. The easiest way to save the Candlewicking knot is to save it as a Quick Pick 

- 1. Select the Candlewicking knot
- 2. Open the **Tools** menu
- 3. Scroll down and select **Save Quick Picks...** (In MasterWorks select **Save Quick Picks/Embossing...**)
- 4. Give your knot a name in the line for File name:
- 5. Left click **Save**.

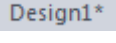


- B. To use your new Quick Pick 

- 1. Left click on **Quick Pick**  on the edit tool bar at the left side of the page.
- 2. A Quick Pick window will appear in the Properties box
- 3. Open the window and select your candlewick knot.
 - a) The Quick Picks are listed in alphabetical order.
- 4. Left click on the design page and a Candlewicking knot will be placed on the design page.
- 5. Left click again and you will get another knot.
- 6. Now adding individual Candlewicking knots to your designs is just a matter of a couple of clicks!

XII. Step 7 – Antennae

- A. To return to the butterfly design

- 1. Select the tab at the top of the design page for **Design 1**  to return to the design page with the butterfly

- B. Draw the line for the right antenna


- 1. Select the **Line** tool from the Pen tool fly-out tool bar.



2. Left click along the middle of the antenna from the tip back to the top of the head.

3. **Right click** to end the line


C. Select stitch effect for the antenna

1. Left click on **Run (Motif)** 

2. Open the **Motif window** and scroll all the way to the bottom of the motif list.

3. Select **Pattern 1** and click **Apply**


4. Change the stitch length to **2.5** and click **Apply**

D. Left click on the **Reform** tool  to check that the green start point is at the tip of the antenna and the red stop point is at the base of the antenna.

1. If necessary, click and drag the start and stop points to the correct position and click **Apply**.

2. Sewing the antenna from the tip toward the head places the chain stitch so the points are facing the end of the antenna.

E. Add traveling run stitches to the second antenna

1. Select the **Line** tool from the Pen tool fly-out tool bar. 

2. Left click across the head and up the center of the other antenna all the way to the tip

3. **Right click** to end the line

4. Left click on **Run** 

5. Left click on the **Reform** tool 

6. Make sure that the green start point is at the bottom of the line and the red stop point is at the tip of the antenna.


F. Draw the line for the second antenna

1. Select the **Line** tool from the Pen tool fly-out tool bar. 

2. Left click along the middle of the antenna from the tip back to the top of the head.

3. **Right click** to end the line


G. Select stitch effect for the antenna

1. Left click on **Run (Motif)** 

2. Open the **Motif window** and scroll all the way to the bottom of the motif list.


3. Select **Pattern 1** and click **Apply**



4. Change the stitch length to **2.5** and click **Apply**

H. Left click on the **Reform** tool  to check that the green start point and the red stop point are both at the tip of the antenna.

1. If necessary, click and drag the start and stop points to the correct position and click Apply.



XIII. Step 8 - Add Candlewicking Knots to the Tips of the Antennae

A. You will be able to use your Quick Pick  Candlewicking knot


1. Left click on **Quick Pick** 
2. Open the Quick Pick list in the Properties box and select your knot.
3. Left click on the design page to place a knot
4. Left click again to place a second knot on the design page
5. Left click on **Select** 
6. Select each knot and click and drag it to the tip of an antenna.

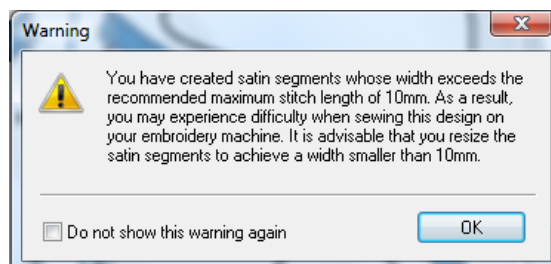
XIV. Step 9 – The Body



A. Draw the outline of the body

1. Select the **Line** tool from the Pen tool fly-out tool bar. 
2. Left click around the body of the butterfly
3. Left click on **Close Shape**  and right click to finish the shape

B. Apply stitches to the body

1. Left click on **Auto Column**  to fill the body with satin stitches
2. And a warning box opens to tell us that we have created satin stitches that are more than 10mm wide
 - a) *Note: the warning box is not a feature of MasterWorks.*
 - (1) *If you are using MasterWorks, you will need to be aware when using Column fills that areas wider than 10mm cannot be filled with a satin column.*
 - (2) *The built in ruler located in the Magnifying Glass fly-out can be used to measure areas if you need to check the size.*
 - b) Stitches wider than 10mm are a problem because embroidery machines will generally not sew satin stitches that are wider than 10mm.
 - c) This could cause us to have a bug body with gaps where the stitches were not sewn.
3. Click **OK** to close the warning box
4. Open the **Pattern window** in the Properties box and select any pattern other than satin stitch and we will not longer have those too long stitches to worry about.



- a) Select the **Snake Skin** pattern and click **Apply**
- 5. Select the **Reform** tool 
 - a) Confirm that both the green Start point and the red Stop point are at the top of the butterfly body
 - b) If necessary click and drag them to the correct position and click **Apply**
- 6. Stitch settings for the bug body
 - a) Column fills generally can be sewn with a slightly looser density than standard fills.
 - (1) This saves both time and thread, and you will have less density to consider when choosing a stabilizer.
 - (2) In the Properties box, change the Density to **0.5** and click **Apply**
 - b) Select the **Underlay** tab on the Properties box
 - (1) Select both **zig zag** and **contour** underlay
 - (2) Click **Apply**
 - (3) I added more underlay to this section of the design after sewing the design the first time
 - (4) The body looked very flat next to the satin stitches of the wings.
 - (5) Adding more underlay gave this section of the design more dimension.
- C. Run the **Sewing Simulator**
 - 1. Before adding the decorative details to the wings this is a good time to double check the sewing order of what has been done so far.
- D. If any of the ends of the satin stitch outlines on the wings are not completely covered you can adjust that by moving the Bezier points
 - 1. Select the affected wing section
 - 2. Left click on the **Reform** tool 
 - 3. Click and drag the Bezier points at the end of the line to lengthen the line so that the end of the stitching will be covered.
 - 4. Click **Apply**

XV. Change The Color Of The Butterfly

- A. Select **All Items** at the top of the Sequence View.
 - 1. Left click on a pale yellow color chip in the color palette.
 - 2. Left click outside the butterfly on the design page so nothing is selected.

XVI. Step 10 – Create Reverse Appliqué for the Details on the Upper Wing

- A. In Reverse Appliqué the appliqué fabric is placed under a hole in the background fabric instead of being sewn on top of the background fabric.
 - 1. This is a technique that is useful when trying to use specialty fabrics that may be too heavy for traditional appliqué techniques.

- a) Heavy fabrics like fake fur may look better if they are applied from the back.
- b) This can also work well with fabrics that are too heavy to be easily trimmed if they are applied on top.
- c) With reverse appliqué, any raw edges that are not completely covered by the satin stitch will be on the wrong side of the fabric.
- d) And if necessary, you can always cover those raw edges with a fusible interfacing.

(1) I use a fusible tricot interfacing for this.

(2) White fusible tricot interfacing can be ordered through Nancy's Notions.

(a) PEK130W – White Pellon Fusible Easy Knit Interfacing

(b) PEK130B – Black Pellon Fusible Easy Knit Interfacing

2. The other use for Reverse Appliqué is to create a window in your fabric that is filled with a sheer fabric or lace

- a) This is what we will do with the large spots on the upper wings of the butterfly
- b) These spots could be filled with organza, or lace.
- c) Or for a true heirloom look you could use English netting.
- d) In this case you will not want to back the embroidery with interfacing since we are creating an embroidery design with open spaces.
- e) However, the netting, lace or organza will not ravel, so if a fabric edge is exposed on the wrong side of the design, it will not be a problem.

B. Trace the shapes of the spots on the upper wings

- 1. Left click outside of the design so nothing is selected.
- 2. Select a turquoise blue in the color palette

3. Open the Pen tool fly-out and select the **Magic Wand**



4. Left click in the center of each of the spots in the upper wings

C. Apply stitches to the spots

1. Left click on **Select**



2. Select all four spots

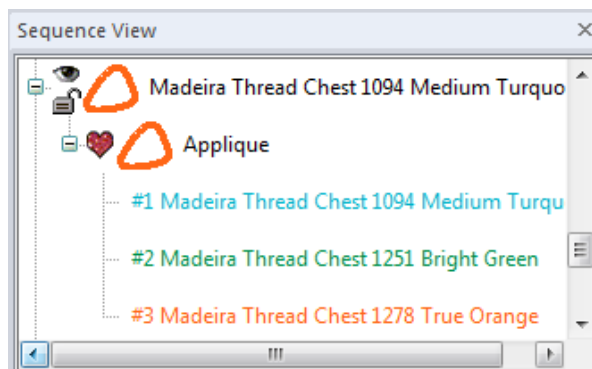
a) The easiest way to do this is to select them in the Sequence View

b) Simply select the blue part of the design in the Sequence View

3. Left click on **Appliqué**



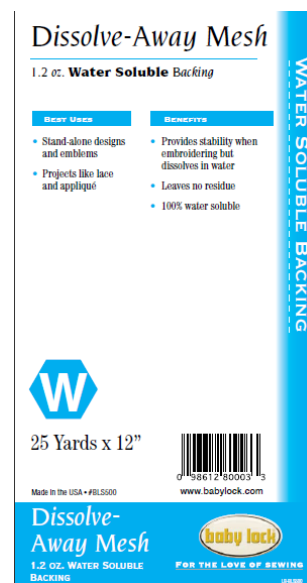
D. So why are the appliqué spots not turquoise?



1. To see what happened with the colors
 - a) In the Sequence View, left click on the **plus sign** to the left of the first appliqué
 - b) Then left click on the **plus sign** to the left of the appliqué in the Sequence View.
 2. The turquoise is the first color of the appliqué
 3. The appliqué stitch effect uses color change to force the machine to stop sewing between the steps of the appliqué.
- E. Set the stitch settings
1. Select all four appliqué spots in the Sequence View
 2. Change the Stitch length to **2.0** and click **Apply**
 - a) The stitch length setting controls the stitch length of the straight stitches sewn in the first two color changes of the appliqué.
- F. How will the appliqué sew?
1. Run the **Sewing Simulator** to see how the appliqué spots will sew.
 2. Each spot will sew the three steps for its appliqué, and then the three steps for the next spot will sew.

XVII. To Sew A Reverse Appliqué

- A. The steps to sew a reverse appliqué are different from a typical appliqué because the appliqué fabric is applied to the back of an open hole on the background fabric.
1. As discussed above, use organza, lace or English netting to fill these areas.
- B. To sew the reverse appliqué
1. Hoop the fabric with Dissolve-Away Mesh stabilizer.
 - a) This is a water soluble stabilizer so it can be completely removed from the open areas of the design with warm water.
 2. A run stitch outline will sew first to define the shape of the spot and then the machine will stop.
 3. Remove the hoop from the machine, but do not take the fabric out of the hoop
 4. Carefully trim the fabric out from the *inside* of the outline.
 - a) Do not trim the stabilizer out of the hole
 - b) The easiest way to lift the fabric so you can trim the fabric without cutting the stabilizer is to use a large pin.
 - (1) I use a corsage pin, but any large pin will work
 - (2) Place the pin through the fabric.



(3) You can turn the hoop over and check the back to make sure the pin is not going through the stabilizer.

(4) Insert the point of your scissors into the same hole where the pin goes in.

(5) Again, if necessary you can look to the back to make sure you have only penetrated through the fabric, and not into the stabilizer.

(6) Once you have cut the first slit in the fabric, you can remove the pin.

(7) Cut with your scissors turned sideways and you will be able to trim just the fabric.



5. Place the hoop back on the machine and slide the appliqué fabric under the hoop with the right side up.

6. Sew the second straight stitch step of the appliqué

7. Remove the hoop from the machine

8. Trim the appliqué fabric around the outside of the straight stitching

a) You will be working on the back side of the fabric for this step

9. Put the hoop back on the machine and sew the satin stitch.

a) The satin stitch will cover both the raw edge of the hole and the raw edge of the appliqué fabric on the back.

b) Remove the stabilizer to reveal the window created by the sheer fabric.



XVIII. Step 11 – Small Spots on Lower Wings

A. Trace the small spots

1. Left click outside the design so nothing is selected.




2. Select a green color chip in the Color Palette

3. Select the **Magic Wand**  from the Pen tool fly-out

4. Left click in the middle of each of the small circles.

B. To sew cutwork




1. Traditionally hand sewn cutwork was created by first sewing tiny straight stitches around the area that would be cut out.

- a) These little straight stitches act as stay stitches to keep the cut edge from stretching
- 2. Then satin stitches were sewn to cover the raw edge.
- 3. The stitch effect we have in MasterWorks that will sew straight stitches around an area and then follow with a satin stitch is Appliqué 
- 4. Left click on **Select**  and then select both of the small circles.
- 5. Left click on **Appliqué**  to place appliqué stitches on the two small circles.
- C. Adjust the stitch settings in Properties
 - 1. Change the Stitch Length to **2.0**.
 - a) The Stitch Length setting controls the length of the straight stitches.
 - 2. Change the Appliqué width to **3.0**
 - 3. Left click **Apply**





XIX. To Sew Cutwork







- A. Sew the straight stitches
- B. To cut the fabric out of the center of the design
 - 1. Remove the hoop from the machine, but do not remove the fabric from the hoop
 - 2. Use a straight pin to lift the fabric away from the stabilizer
 - 3. Slide the point of the scissors in next to the pin to begin trimming. The goal is to trim the fabric without cutting the stabilizer.
 - 4. Cut with scissors flat against fabric to avoid cutting stabilize
 - 5. Put the hoop back on the machine and sew the satin stitch around the opening.

XX. Step 12 – The Large Spots on The Lower Wings

- A. Trace the large spots
 - 1. Left click outside the design so nothing is selected.
 - 2. Select a pink color chip in the Color Palette
 - 3. Select the **Magic Wand** from the Pen tool fly-out 
 - 4. Left click in the middle of each of the large circles.
- B. Apply a stitch effect to the large circles
 - 1. Left click on **Select**  and then select both of the pink circles.
 - 2. Left click on **Appliqué**  to place appliqué stitches on the two large circles.
- C. Adjust the stitch settings in Properties
 - 1. Change the Stitch Length to **2.0**.
 - 2. Change the Appliqué width to **3.0**
 - 3. Left click on **Apply**

XXI. Richelieu Bars

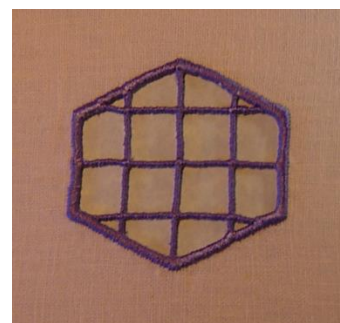
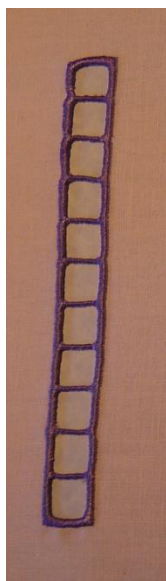
- A. Richelieu Bars are used to add support to large cut areas.
 1. They are made up of lines of straight stitches bundled together by satin stitches sewn over them.
- B. Richelieu bars need to be anchored in the fabric under the satin stitching around the cut area.
 1. The bars should extend into the fabric outside of the straight stitching around the cut area.
- C. Create a Richelieu bar
 1. Select the large spot on the left wing
 - a) Zoom **To Selection**
 - b) Change the Appliqué density to **2.0** so you can see the straight stitches through the zig zag.
 2. Select the **Line** tool 
 - a) Left click outside the straight stitches on one side and left click outside the straight stitches on the other side, and then right click to complete the line.
 - b) This line should start and end as far outside the straight stitches as possible while still remaining under the zig zag stitches.
 3. Left click on the **Satin**  stitch effect.
 - a) Select the **Reform** tool  to confirm that the green Start point is on one end of the line and the red Stop point is on the other end of the line.
 - (1) If necessary, click and drag the start and stop points to position them at opposite ends of the line.
 - (2) Click **Apply**
 - b) Change the Stitch width to **2.0** and click **Apply**
 - c) Select the **Underlay** tab in the Properties box
 - d) Put checkmarks in both the **Contour** and the **Zig-Zag** types of underlay and click **Apply**.
 4. To see how the bar will sew
 - a) Right click on the selected bar in the Sequence View and select **Hide Other**
 - b) To see the stitches that have been hidden, left click on the **Ghost** 
 - c) Run the **Sew Simulator** to see how the bar will sew
 - (1) The Contour underlay creates a straight stitch up one side and down the other
 - (2) Then the Zig-Zag underlay sews a zig-zag up and back
 - (3) The Satin stitch then sews over the top completing the bar.

5. Right click on any item in the Sequence View and select **Show All** and all of the design will again be visible
- D. Create another Richelieu bar to form a cross in the open area
 1. Create running stitches to run over to the starting point for the next Richelieu bar
 - a) Select the **Line** tool 
 - b) Create a line just outside the straight stitches that runs over to where the end of the next Richelieu bar will be.
 - c) Left click on **Run** 
 - d) In the Properties box,
 - (1) Set the stitch length at **1.5**.
 - (2) Confirm that the line is a single run
 - (3) Left click **Apply**
 - e) Left click on the **Reform** tool  and confirm that the start and stop points are in the correct position.
 2. Select the **Line** tool 
 - a) Draw the line for the second Richelieu bar
 - b) Left click on the **Satin**  stitch effect.
 - c) Change the width to 2.0 and click **Apply**
 - d) Select the **Reform** tool  to confirm that the green Start point is on one end of the line and the red Stop point is on the other end of the line.
 - e) Select the **Underlay** tab in the Properties box
 - f) Put checkmarks in both the **Contour** and the **Zig-Zag** types of underlay and click **Apply**.
 3. Now that the bars are in place we can select the Appliqué shape around the cut area and change the stitch length back to **0.4**.
 - a) The bars are on top of the appliqué, but we will take care of the re-sequencing after we create the bars for the spot on the other wing.
- E. Use Copy and Paste to create Richelieu bars for the other wing
 1. In the Sequence View, select both Richelieu bars and the travel stitches between them
 2. Right click and **Copy**
 3. Right click and **Paste**
 4. Click and drag to move the pasted bars into place on the right wing.

XXII. Note That There Are Many Patterns Used for Richelieu Bars

- A. Richelieu bars are used both as decorative elements and as a way to stabilize larger cutwork openings

1. You can use a ladder in some areas
2. Other areas could be filled with a cross or asterisk
3. Use a fan shape
4. Or fill an area with a grid



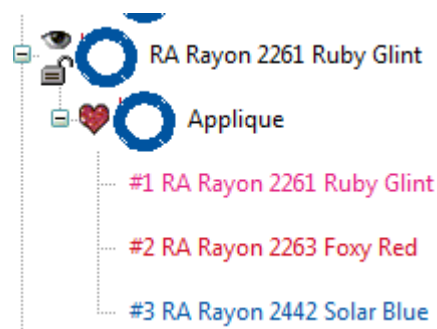
XXIII. Re-sequence the sewing order

A. You will want all the steps involved in cutting, sewing the Richelieu bars, and satin stitching to happen in the most efficient order.

1. The most efficient way to do this would be to cut all of the openings for the reverse appliqué on the upper wings and the cutwork on the lower wings at the same time.
2. And the Richelieu bars need to sew after the straight stitches of the appliqué and before the satin cover stitch.

B. Unfortunately, although we can see the three separate steps of the appliqué process in each of these areas, we cannot move the straight stitches to one position in the sewing sequence and put the satin stitch in another position.

1. Left click on the plus sign to the left of one of the appliqué spots and you will see that spot with the word appliqué next to it.



2. Left click on the plus sign to the left of Appliqué and the list will open to show the three steps with their different colors that make up the appliqué ring.

XXIV. Use Preserve as Stitches to Simplify the Sewing Process

A. Is there a way to break up the appliqué steps so we can re-sequence them with the straight stitches all sewing first and the satin stitches sewing last?

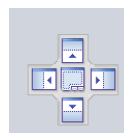
1. Yes!

B. Let's take a look at the reverse appliqué on the upper wings first.

C. Tab the Sequence View to make it easier to see the entire stitching order of your design.

1. Left click and drag the title bar of the Sequence View toward the right edge of the design page.

- a) As the Sequence View is pulled onto design page, you will see a 4 headed
- b) Left click in the center to change the runs the entire length of the page. If you also tab the Color Palette and Properties box you will be able to select what you want to look at by selecting the tabs along the bottom edge of the panel.



the edge of the arrow.
Sequence View so it

2. Ideally the most efficient way to sew these spots would be to sew the first straight stitch outline on all four spots and then trim the fabric out of all four spots at the same time.

3. Then if we could use a piece- of appliqué fabric large enough to cover all four spots and sew the second outline of all four spots, we could trim the appliqué fabric for all of the spots at the same time.

4. Then the hoop could go back on the machine and sew all of the satin stitches at the same time.

5. This would reduce the number of times we have to take the hoop off the machine to just twice instead of eight times!

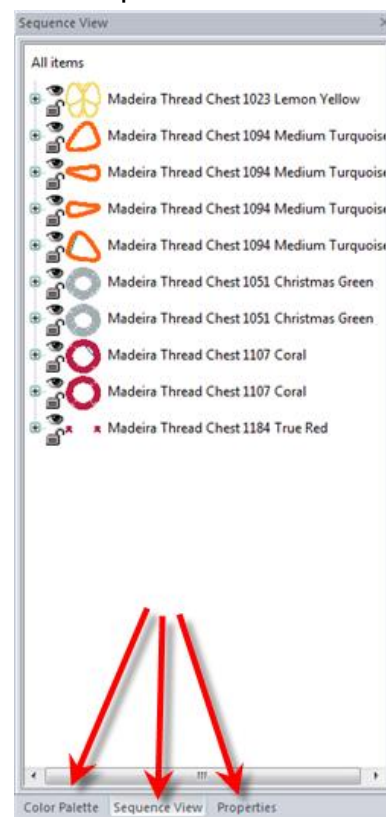
D. Select both spots on the left wing




1. Left click on the first appliqué in the Sequence View, then hold down the **Control** key on the keyboard and select the second appliqué in the list.

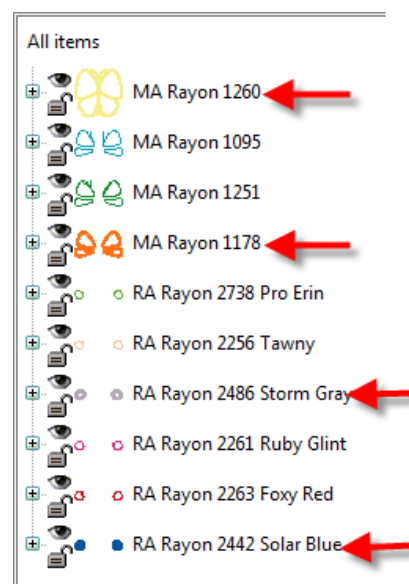
2. With both spots selected, right click and select **Preserve as Stitches** from the pop up list.


3. And the appliqués have been changed to three separate steps!

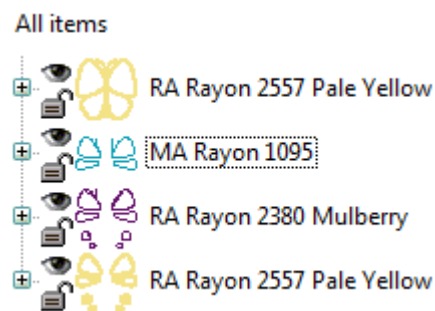
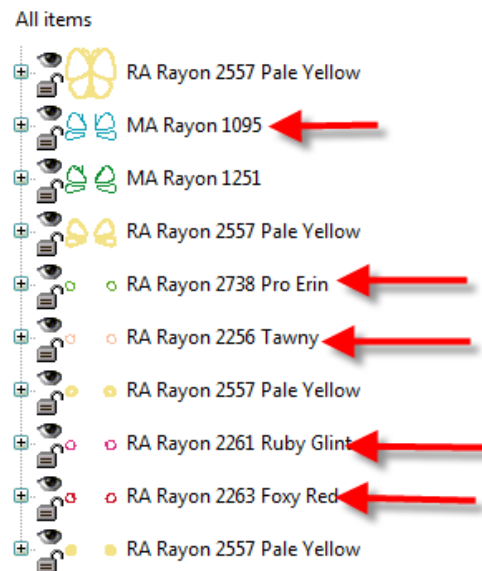
E. The Preserve as Stitches tool has taken the appliqué and saved it as stitches instead of a BLF editing object.



1. You can no longer change the stitch settings in the Properties box
 - a) And the stitch effects tool bar across the bottom of the page is grayed out when you select the pieces of this appliqué.
 - b) And the Reform tool  is also grayed out for the three appliqué steps.
 - c) The rest of your butterfly is still a BLF and if you select any other object in the Sequence View, you will have full access to your stitch properties, stitch effects and Reform tool .
 2. You will want to wait and use Preserve as Stitches when you have completed your other editing.
 3. But the good news is that we will now be able to change the sewing order of the appliqué steps!
- F. Use Preserve as Stitches to separate the steps of all of the wing appliqués.
1. Select the next two spots
 2. Right click and select **Preserve As Stitches**
 3. Repeat for the cutwork spots on the lower wings.
 4. The Preserve as Stitches tool will work on one or two appliqué objects at a time, so select the appliqués in pairs. The tool is unable to break up three appliqués at the same time.
- G. Find the rings with the Richelieu bars in the Sequence View.
1. The stitch order needs to be changed so the ends of the Richelieu bars are under the satin stitched rings.
 2. Left click on the **plus sign** to the left of the rings to see the various stitch objects that make up these areas.
 - a) Select the two rings and move them to sew last.
 - b) Either click and drag them to the end of the list
 - c) Or right click, select **Move** and select **Last**
- H. Now the design can be re-sequenced
1. Select **All Items** at the top of the Sequence View
 2. Left click on **Color Sort**  and the design is grouped by color.
 - a) The color sort has grouped the straight stitches and the satin stitches by color, and part of our job has been done for us.
 3. Right click on any item in the Sequence View and select **Collapse All**



- a) The details of the Sequence View are closed up and we see just the list of colors in the design
4. Hold down the **Control** key on the keyboard and select the four satin stitch colors.
- a) Left click on a pale yellow color chip in the Color Palette to change all of the satin stitches to the same color.
5. Hold down the **Control** key on the keyboard and select all of the straight stitch colors except the second straight stitch for the reverse appliqué.
- a) Left click on a purple color chip in the Color Palette to change the selected straight stitches to the same color.
- b) The second straight stitch of the reverse appliqué needs to be a different color and sew separately to sew the appliqué fabric in place.
6. Select **All Items** at the top of the Sequence View and left click on **Color Sort**  and the design is grouped by color.
- a) Right click on any item in the Sequence View and select **Collapse All**
7. We are almost there!
- a) The only thing that needs to be changed now is moving the purple straight stitches up so they sew before the blue straight stitches.
- b) You can either:
- (1) Select the purple stitches and click and drag them to move them before the blue stitches
 - (2) Or you can right click on the purple stitches, select **Move** and select **Up**.



XXV. Sewing the Butterfly

- A. Run the Sewing Simulator to see that the design is now sewing in the exact order needed.
1. The outline of the wings, the antennae, and the body will sew first.
 2. Then the straight stitch outlines of all the cut areas will sew.
 3. Remove the hoop from the machine and carefully cut out all of the open areas from the fabric without cutting the stabilizer
 4. Return the hoop to the machine

5. Place the appliqué fabric under the hoop. Use a piece of fabric that is large enough so you can see it beyond the edges of the hoop and know that it is in the right place.

6. Sew the second set of straight stitches around the appliqués in the top wing

7. Remove the hoop from the machine and trim the appliqué fabric on the back of the hoop.

8. Return the hoop to the machine and sew the remaining satin stitches.

B. NOTE THAT THE DIFFERENT COLORS IN THIS DESIGN ARE USED TO FORCE THE MACHINE TO STOP SEWING WHEN WE NEED TO TRIM.

1. The design should be sewn with the same color thread for all steps.

C. If you are using the six needle Embroidery Professional you need to remember that this machine treats a color change differently.


1. Most embroidery machines see a color change as an instruction to stop sewing so the thread can be changed.

2. The Baby Lock multi needle machines see a color change as an instruction to switch to a different needle and keep on sewing!


3. If you are using a Baby Lock multi needle machine you will need to go to the Color Palette to instruct the machine to stop.

a) Touch the Color Palette key



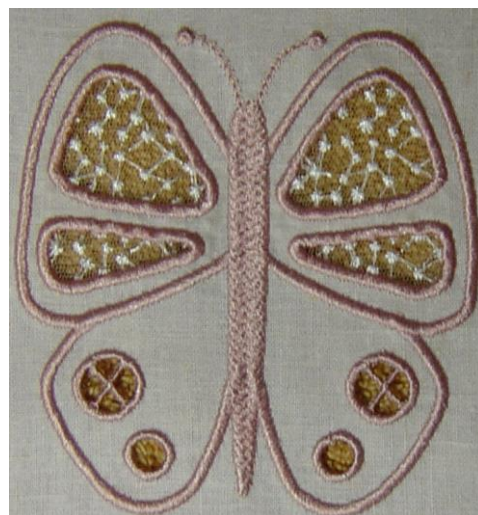
b) Touch the next color key  to move the first of the straight stitch colors to the top of the list.

c) Touch the key with a hand 

d) You will see the hand appear in the color list . This hand tells the machine that it should stop before this color is sewn.

e) Repeat the steps above to place a hand next to the second straight stitch color

f) Once the instruction for the stop is in place, you can change all of the colors in the design to the same color in your Baby Lock multi needle machine so that the whole design will be sewn with the same needle.





Companion Products for this Sew at Home Class

Sew at Home classes

Upgrade to MasterWorks III #EDG-MW3TU

Madiera Embroidery thread 40 wt

Baby Lock Dissolve-Away Mesh #BLS 500

Embroidery needles size 75/11

Finishing Touch Bobbin Thread

Gingher 4 inch curved scissors #G-4C for trimming embroidery threads

Gingher 5 inch sewing scissors #G-5 for trimming applique fabric