

## Introduction

Want fancy quilting designs, but your free motion skills are not quite up to the task? Embroidery machine comes to the rescue! There are several ways to partner with your embroidery machine and end up with a really spectacular quilt. These notes are for the Baby Lock Altair, but this technique will work for similar machines.

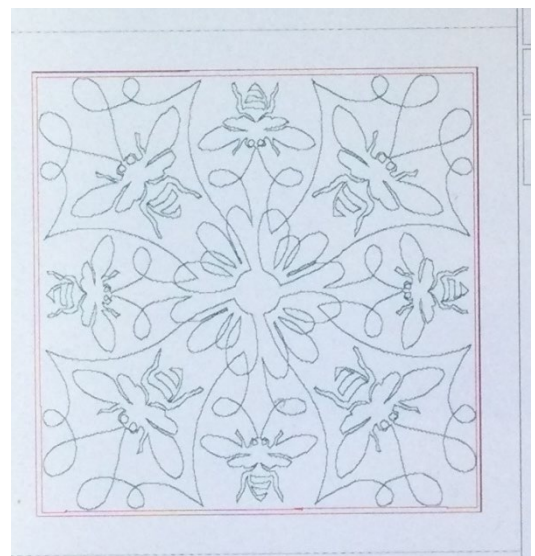
## Supplies

- Quilt top layered with low loft batting and backing
- Safety pins or Spray Adhesive
- Quilting Embroidery Design of your choice
- Cotton Quilting Thread and matching Bobbin or Embroidery Thread and matching Bobbin
- Fusible No-Show Mesh Stabilizer (optional for joining batting)

## Instructions

### *Traditionally Quilted: Hoop the Quilt*

Quilting through all three layers of the quilt (top, batting and backing) with the embroidery machine is very straightforward. After layering the quilt layers and securing them with fusible batting, spray adhesive or even pins, hoop the quilt and “quilt” without additional stabilizer. The three layers of the quilt provide enough structure for the embroidery design to work just as quilting with hand guided stitching would.



## *Consider the following:*

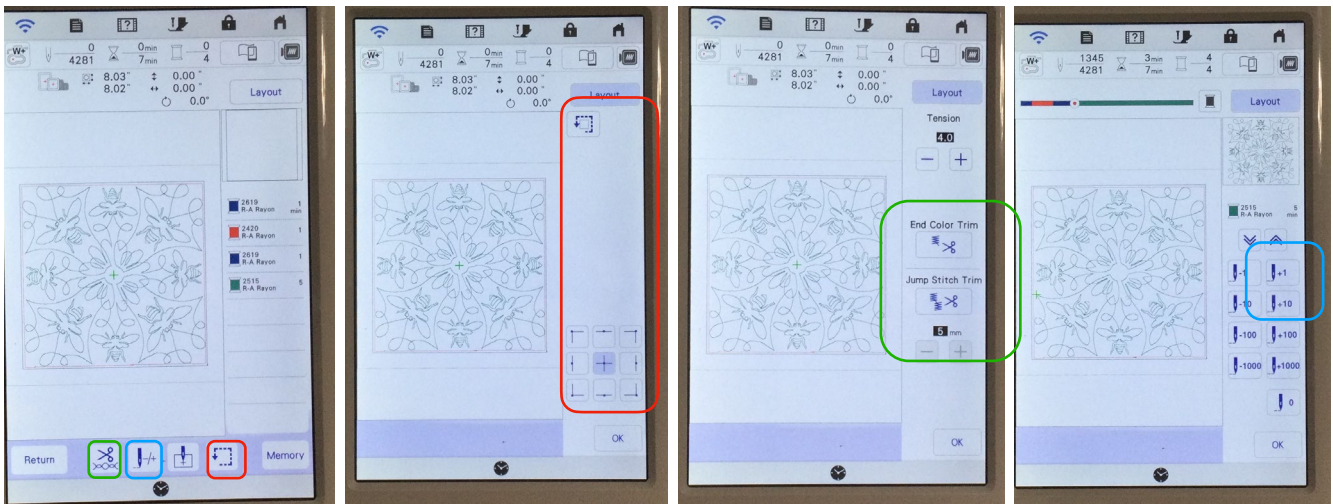
- Select a design that mimics hand guided stitching as much as possible.
- Look for a design without fill stitching, fancy decorative stitching and outline stitching.
- Look for a design that stitches with a single pass.
- Avoid thread trims by choosing a design that stitches continuously. Many designs and design collections are created specifically for this purpose.
- If you are unsure about the design, stitch out a sample to see if it will work for your project.
- Choose a design size and hoop combination that allows the design to be rotated and moved to position within the embroidery field of the hoop. In other words, do not try to put a 9" by 9" design into a 9 1/2" by 9 1/2" hoop and be able to adjust it to fit perfectly. There just is not enough room.

Quilt using thread that you would use for traditional machine quilting, although other threads can be used. Embroidery threads will work well. If a project will be laundered multiple times such as for a child's quilt, use a polyester embroidery thread instead of rayon. Rayon will bleach and lose color with multiple machine washings because it is made from wood byproducts.

Position the three layers of the quilt in the hoop and tighten the frame well. Loosen the outer ring of the hoop before hooping to accommodate the bulk. Tighten the hoop so the quilt will not come loose as the machine moves around the design. Do not over tighten and damage the hoop but do lift the quilt and make sure the hoop is very secure. The bulk of the project is sometimes the biggest challenge for quilting with an embroidery machine. Support the bulk and weight of the quilt by using additional surface area around the machine to keep the project level with the bed of the machine. Gravity is your enemy! Scrunch up the excess bulk in the harp of the machine. Quilting in the hoop is not "set it up and go away while the machine stitches", so monitor the machine as it moves.

After placing the hoop on the machine, double check that the embroidery arm can move freely by using the Trial feature (red boxes) to move the frame to all four corners of the design. Use the W+ LED light feature on the Altair to visualize the needle position when using the Trial feature.





To avoid the inevitable thread trim buildup when re-hooping, turn off the trim and scissor function of the machine. Leave a long thread tail (green boxes) by selecting that option on the Embroidery screen. At the beginning of a design, pull up the thread tail by advancing to the first stitch and pressing the needle down/up to draw the thread up from the bobbin area (blue boxes). Bury the threads with a hand sewing needle and trim the threads after securing them.

### *But it's such a big Quilt*

If the quilt is too bulky, consider modifying the quilt to remove the bulk with any of the following techniques:

- Quilt as you go involves quilting in sections and then joining the sections. Many design collections to create a quilt are designed for this method. Each design collection will include instructions on how to join the individual hoopings. You can create your own sections by not joining the entire quilt top and connecting the sections as you go. The main goal is to keep as much bulk as possible from the harp of the machine to the right of the needle.
- Use a partial batting by layering the complete quilt top and backing with only 2/3 of the batting. When quilting the center by using this method only the fabric and not the batting need to fit to the right of the needle.
- Add borders around the quilt with a flip and sew method. Complete the center of the quilt and then add on by sewing additional borders. To the complete center, sandwich a top border and backing border fabric on the outside edge. Sew through all layers and then press the fabrics out. Insert a batting strip between the layers. Keep the batting from the bulk of the seam to avoid a bulge. This method keeps the bulk of the quilt around the machine, but the borders may be difficult to hoop because one edge is not secure in the hoop. Consider making the backing layer wider than necessary and then trimming after embroidery. Use the trimmed section for the next section or cut up for binding. This method can create a two-sided quilt and is much simpler with a fusible batting for the batting border strips.

## *Add the Backing Later*

The back of embroidery is sometimes not very pretty, especially with a lot of thread trims. Avoid a “bad back” by quilting through the top and batting only. After quilting with embroidery add the backing and quilt traditionally. Only minimal quilting is needed to hold the backing on. The batting is secure to the top layer and the thread trims are hidden. This method reduces some bulk without using the backing. Some definition or “quilt dimple” is lost without the backing, but additional depth can be recovered by adding dense background quilting.

This method works very well for quilts that feature embroidered quilt blocks. For additional information on adding background quilting with IQ Designer, look for another Sewing Tech Talk handout *“Background Quilting on an Embroidered Quilt Block”*.