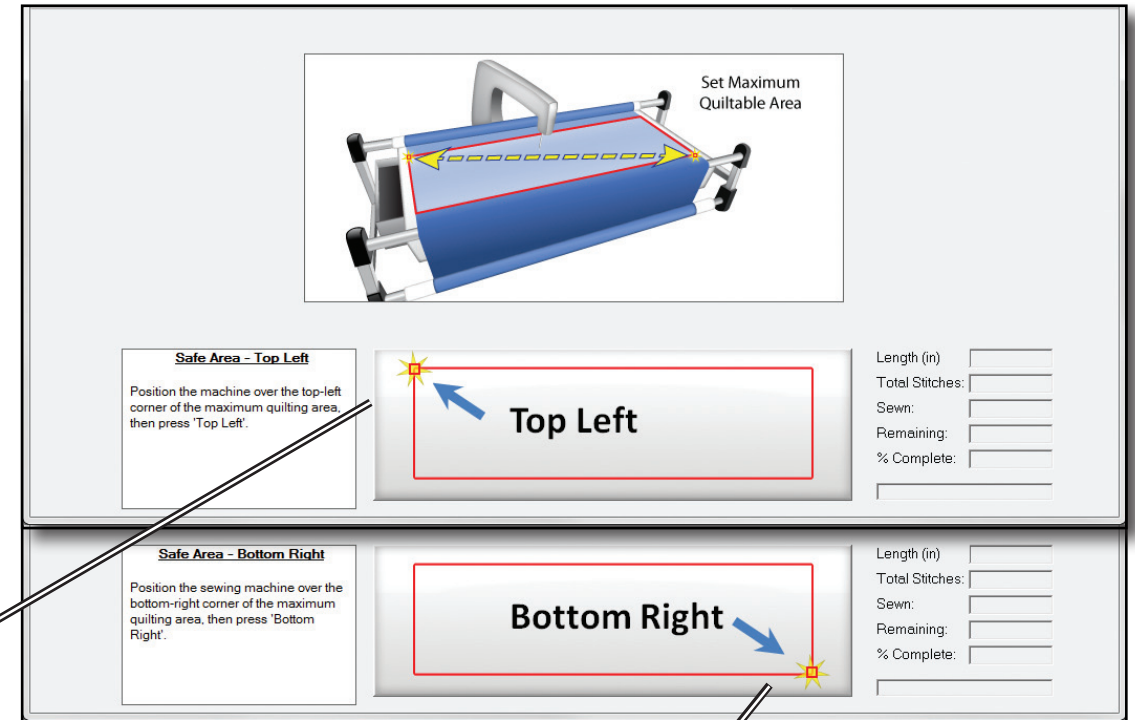# Sewing & Preparation Guide

This guide will cover different features that are commonly used in the software. We will go over how to set a safe area, how the placement screen works, sewing settings and the optimization tools.

Setting Safety Area

The Safety Area is the area you define that is an acceptable range of movement for the sewing machine on your frame. Before you can choose any placement or sewing options, your safety area must be set. If you choose to make a new pantograph, the size you set for the safety area will be the size of the entire pantograph layout the software will create. The pantograph size can be changed to the dimensions you prefer after the area is set.
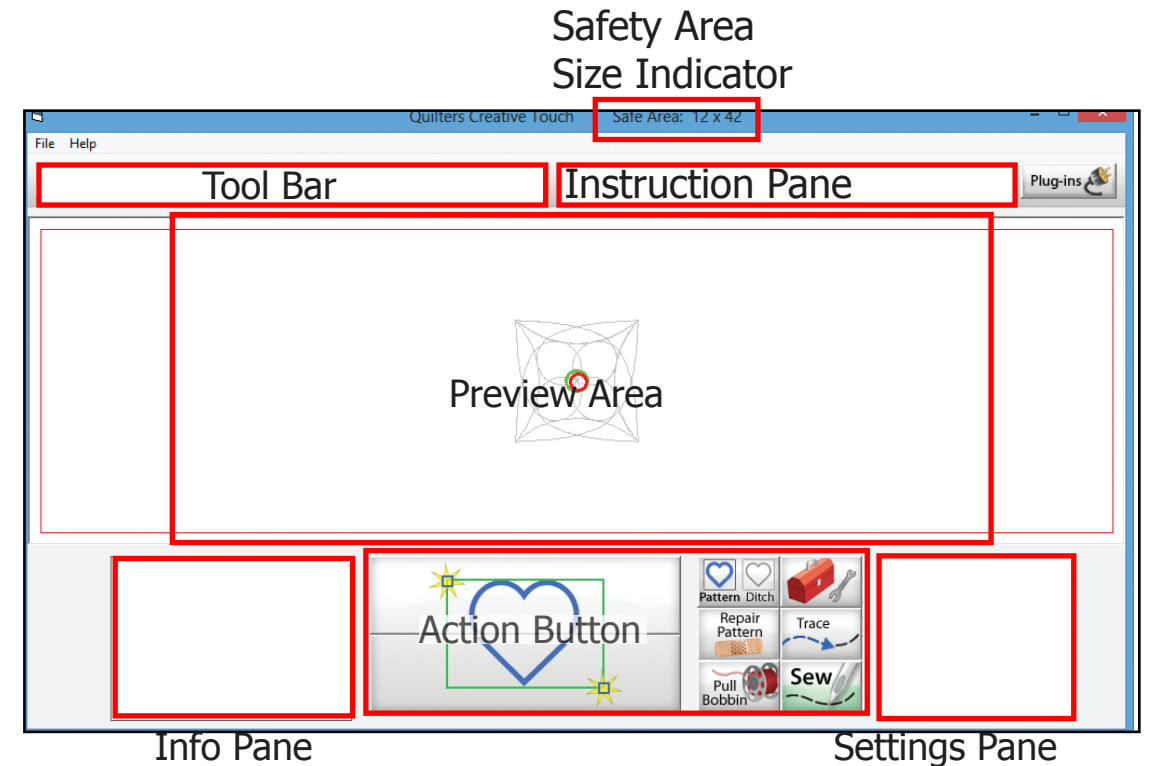

Please note, your safety area should be the entire quilting space you have available, not just the area of the quilt you will be placing the pattern.

Quilting Screen Overview

In this section we will cover the quilting options and settings. Options such as; setting your safety area, setting your quilting speed, tie-off count, and placement methods.

- **Tool Bar** — Allows you access select a pattern, settings, optimize, etc.
- **Instructions Pane —** Shows you what step should be performed next.
- **Preview Area** — This is a visual display of the pattern the software is currently setup for. It will show the safety area, your pattern, and the border for the pattern. This way you can see what it looks like before you begin to quilt.
- **Info Pane —** Will give you tips and information regarding your current placement method and action.
- **Action Button —** This is what you will use to interact with the application when setting the safety area and placing a pattern.
- **Settings Pane —** This will show your current placement method and quilting settings.

Safety Area Size Indicator

Tool Bar

Instruction Pane

Preview Area

Action Button

Info Pane

Settings Pane

Quilting Settings

Once the safety area is set we can now access the tools and placement methods. We can also change specific settings for the software or the sewing machine, such as stitches per inch, the tie off count, and the sewing speed.
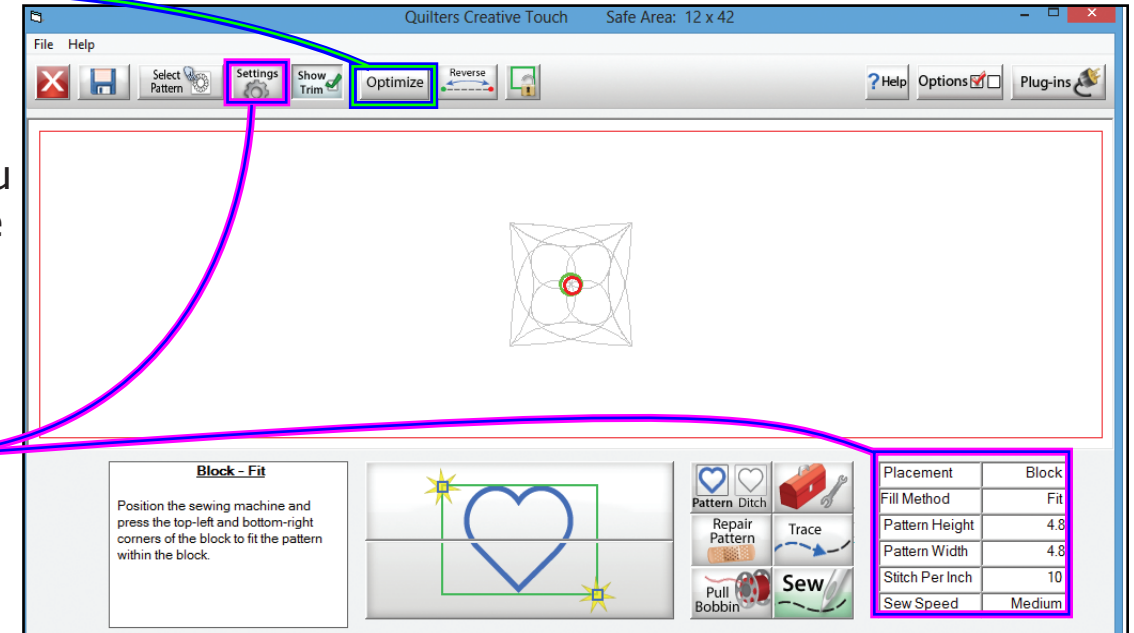
From here you can also access the Optimization screen. This screen allows you to change the order of the pattern, or pantograph that will be sewn. You can also remove trim lines and animate the stitching of your selection to see how it will be sewn onto your quilt.

Tap the Settings button or the settings pane on the bottom right change to these settings.

The settings screen is broken down into 5 categories:

- Sewing Settings
- Pattern Statistics
- Pattern Margin
- Ditch Margin
- Placement Methods

Reverse - You can quickly change the start and end points of the pattern by clicking this button.

Block Lock - To use this feature you would first need to place a pattern. Then you can click the Block Lock button, this will create a outline block in the shape that was used for placement. The Block will remain on the screen, but you can continue to place the pattern or switch to a different placement method and use the locked block as a template for placement.
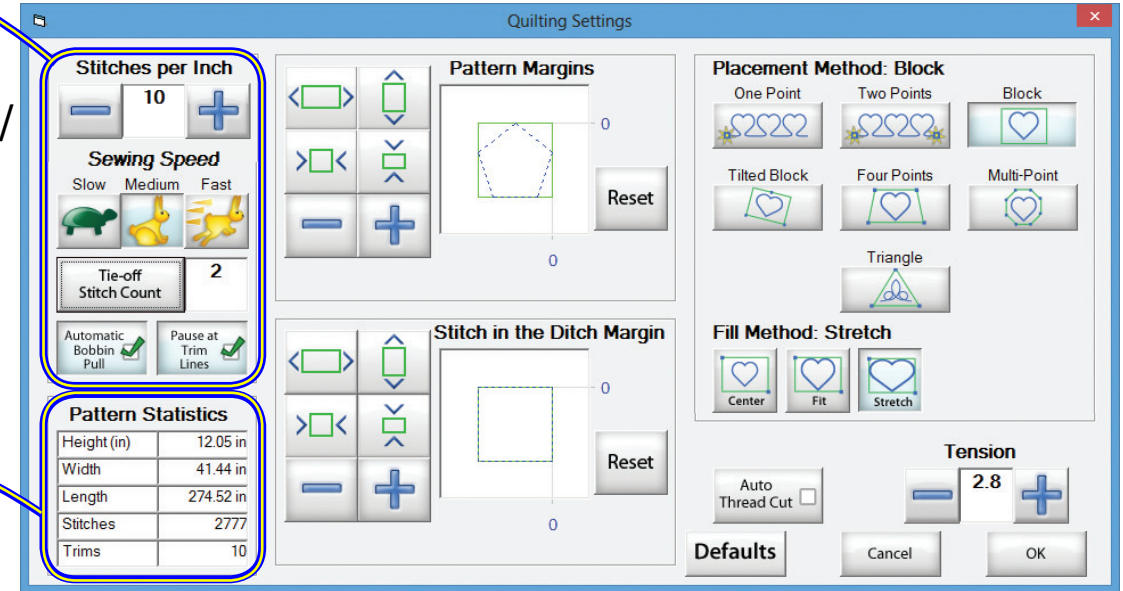To remove the Block Lock simply click the button once more.

Quilting Settings Continued

Sewing settings

- **Stitches Per Inch** — Minimum 6, Maximum 15.
- **Sewing Speed**— How fast the carriage will move on the frame.
- **Tie-Off Count** — Set Tie-off amount. 0 to 5

- **Automated Bobbin pull** — enables and disables the Assisted / Automated Bobbin pull feature.
- **Pause at Trim Lines** — When enabled Quilting will stop at trim lines so they can be cut.

Pattern statistics

- **Height** — Pattern as shown on screen.
- **Width** — Pattern as shown on screen.
- **Length** — Displays the pattern as if one straight line.

- **Stitches** — Total amount of stitches in the pattern.
- **Trim lines** — For patterns with more than one section.

Auto Thread Cut and the Tension settings are only available to sewing machines that supports these functions.
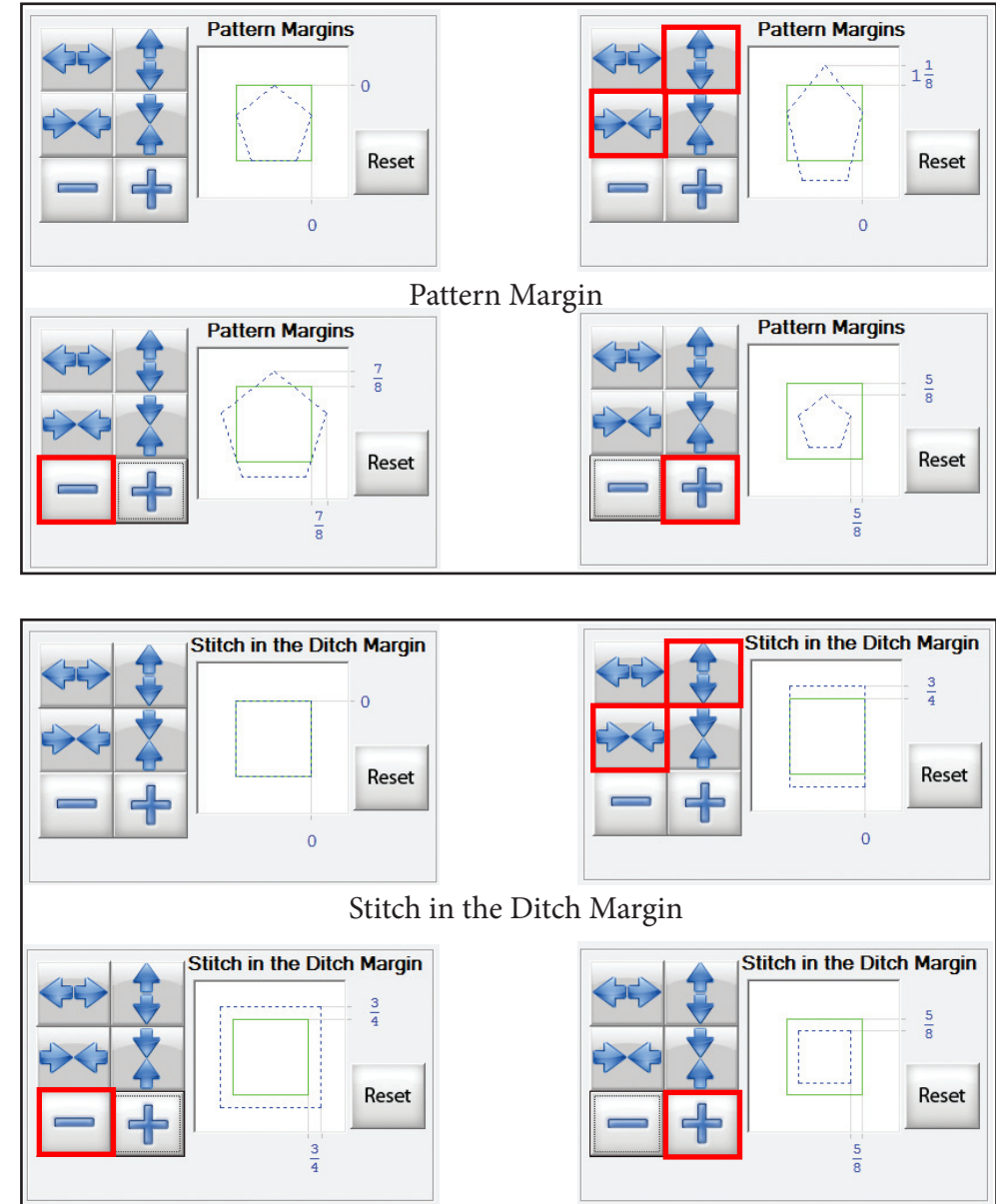
Quilting Settings: Margins

The Margin is an invisible border around the pattern or ditch. When the pattern margin is set to 0 the pattern will be placed into the box that you define, and it will fit to the block corners. But if you set a margin, this will override the placement and fill method and make the pattern go beyond the invisible box, or kept inside by the distance you set.

The increments you can change the margins to are;
1/8", 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 3/8", 1 1/2", 1 5/8", 1 3/4", 1 7/8", and 2".

To set the margin size you can use the arrow icons or the + and -. If you use the arrow you will adjust the margin height and width separately. By using the + and - symbols the margin will change to the same size for the height and width.

You can remove any margins by clicking the Reset button.

Pattern Margin
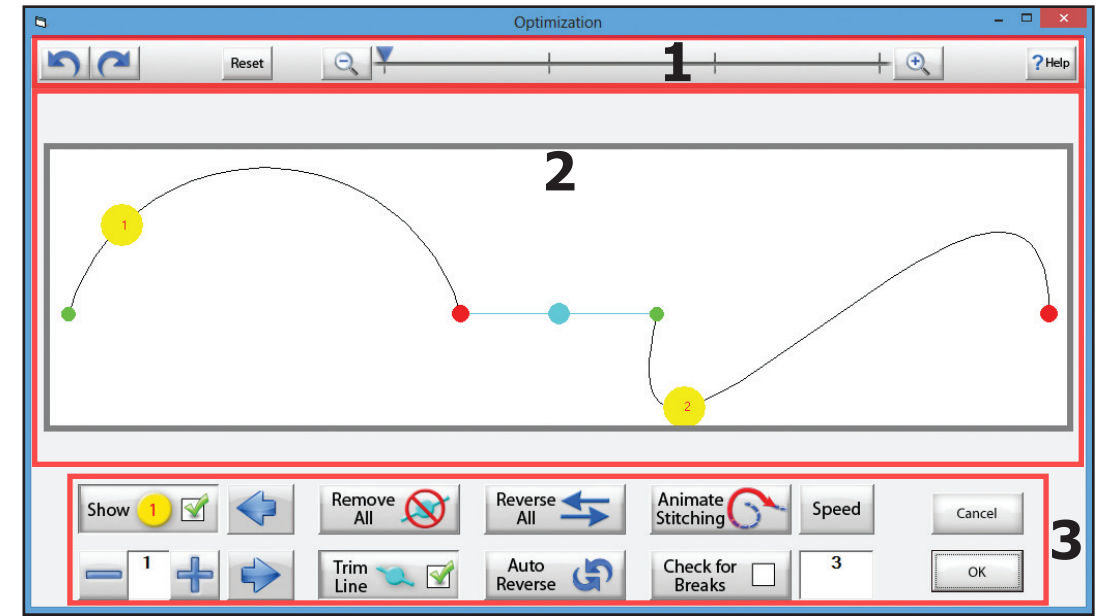

Stitch in the Ditch Margin

Optimization Screen

When creating a pattern, or pantograph, you want to make one that will quilt as efficiently as possible. By doing so, you will save time and be able to make more quilts! In order to accomplish this, lets go over the tools available in the optimization screen.

We will break down the optimization screen into three areas.

1. **Quick Tools** — Here you will find Undo, Re-do, Reset, Zoom, and Help.

2. **Pattern Preview Pane** — Here you can set the direction a pattern will sew and which section will sew first. It also displays the trim lines.

3. **Optimization Tools** — These tools allow you to show and hide trim lines and section numbers. You can also reverse the order of an entire pantograph. Lastly, it allows you to see how the pattern will stitch.

Quick Tools

1. **Undo** — Undoes last action.

2. **Redo** — Restores last action.

3. **Reset** — Resets pattern to its original state.

4. **Zoom out** — Zoom out on current view.

5. **Current Zoom Level** — Shows zoom level.

6. **Zoom Level** — The range you can zoom.
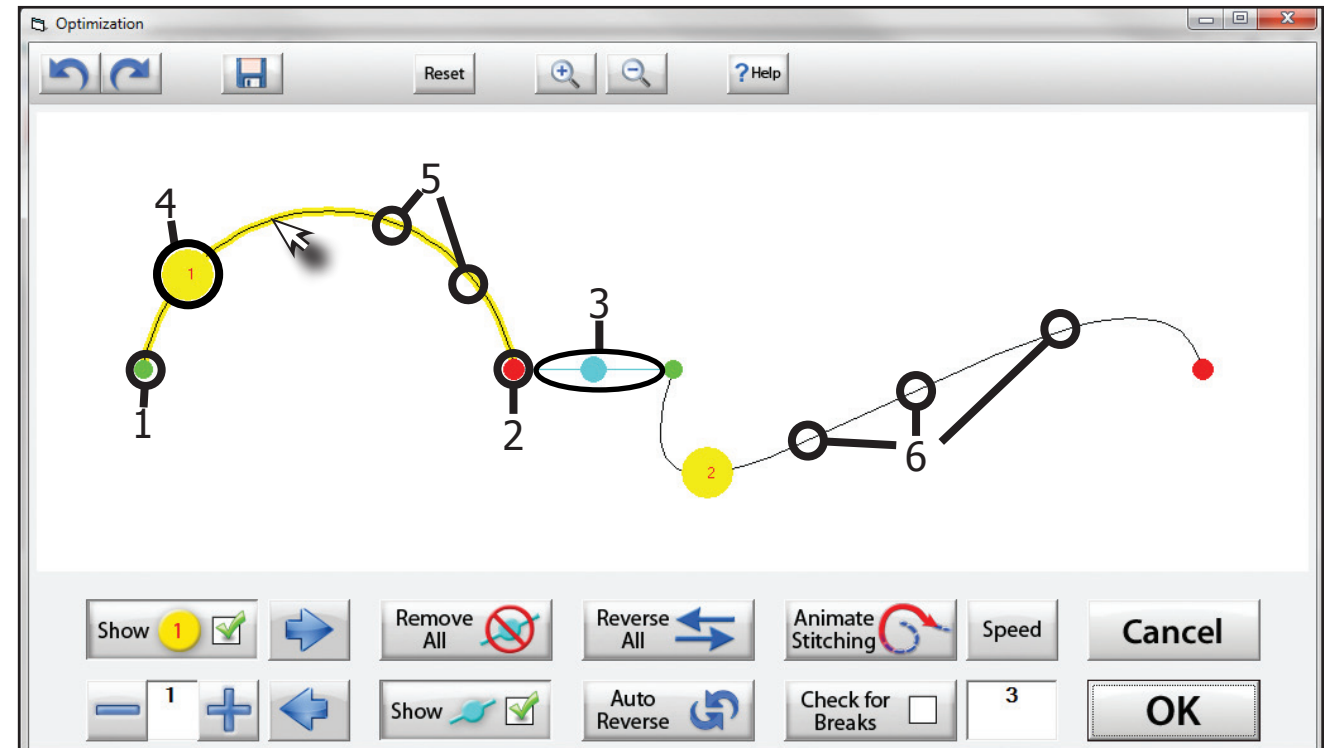
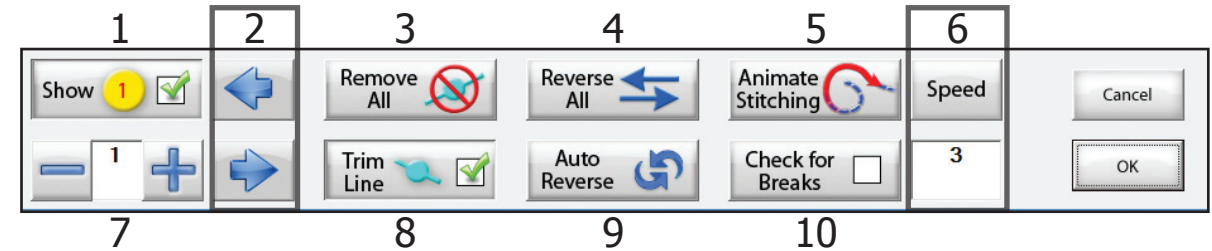7. **Zoom In** — Zoom in.

8. **Help** — Opens this help file.

Pattern Preview Pane

1. **Start Point** — This is where the pattern will begin sewing.
2. **End Point** — The stopping point of the pattern.
3. **Trim Line** — A section of thread that will need to be cut, and is not part of the pattern.
4. **Section Number** — These represent the order that the sections will be sewn in.
5. **Selected Section** — If you hover your mouse over a segment of a pattern you will see it highlighted in yellow. This will also show you what that section consists of. By tapping once it will swap the start and end points of the section, and you can reverse the order that section will sew.
6. **Unselected Line** — A normal line that represents the pattern.

Optimization Tools

1. **Show Section Numbers** — Enables and Disables showing section numbers.

2. **Move Section Numbers** — Moves the location of the section number on the pattern. It does not change the order of the pattern.

3. **Remove All Trim Lines** — Removes all trim lines from the pattern and places a line that will be sewn in its spot.

4. **Reverse All** — Reverse the sewing path of the entire selection.

5. **Animate Stitching** — Will show the pattern being traced in the order that it will sew on the quilt.

6. **Animation Speed** — Set the speed of the animate stitching.

7. **Section Number** — When you set this to a section number, then tap on a section it will change that number to the one you want. This allows you to manually change each section number.

8. **Show/Hide Trim Lines** — Enables and Disables trim lines from being shown.

9. **Auto Reverse** — Will optimize the pattern automatically, in the reverse direction it started at.

10. **Check for Breaks** — When enabled you will be prompted to remove trim lines during animate stitching.

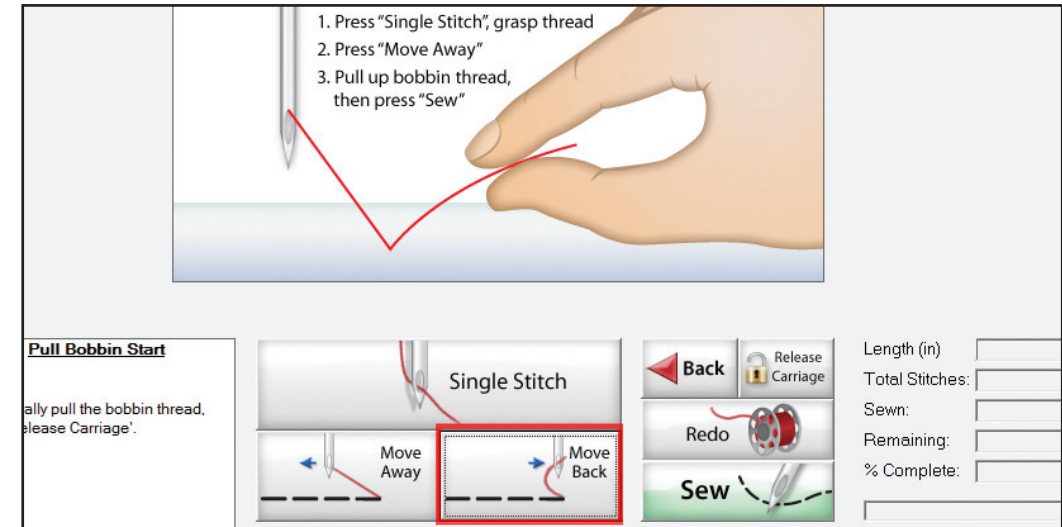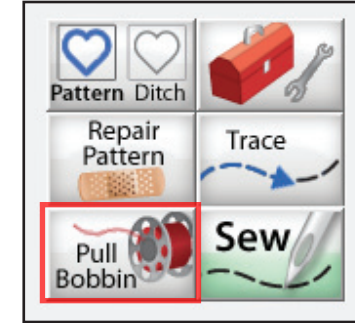Tap **OK** to accept your changes, or **Cancel** to discard them.

Automated Bobbin Pull Feature

Another feature of the software is the Automated Pull Bobbin feature. When enabled the robotics will assist you in pulling up the bobbin thread. Normally you would have to tap a button each time you wanted to proceed.

To Enable the assisted pull bobbin open the Settings Menu and make sure the Assist Pull Bobbin is checked.

1. With this feature enabled just tap the pull bobbin feature, the robotics will move to the start point of the pattern/pantograph and the machine will do one stitch, then move to the side.
2. You can then grab the bobbin and pull it through.
3. Now tap "Move Back" and the machine will move back to its starting location.
4. Press Sew, and the pattern/pantograph will sew.

This feature can save you a lot of time by not having to tap each step.

Repair a Pattern

Threads will break; bobbins will run out, but luckily we have created a way to easily recoup from these situations.

The Repair feature allows you to continue sewing from the last break without having to replace the pattern.
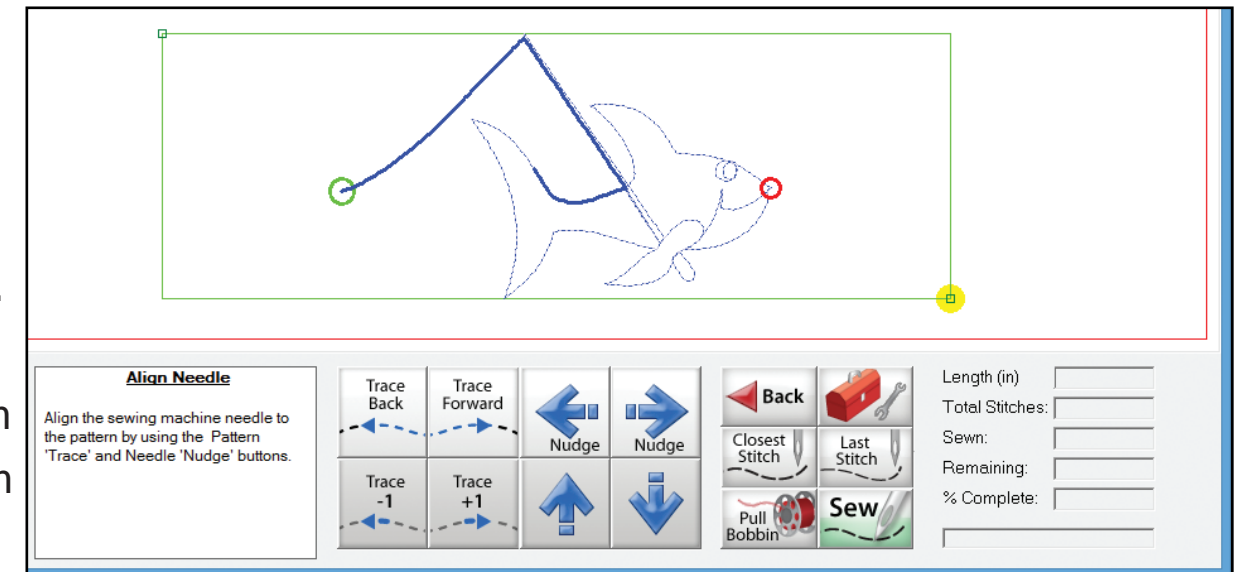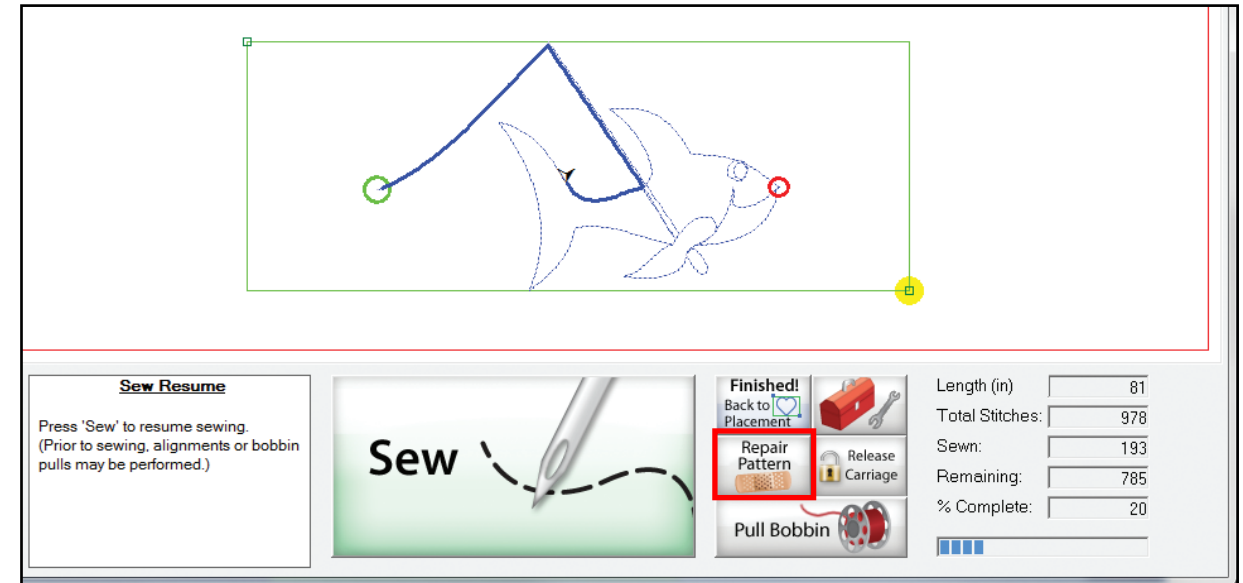
There are a couple ways you can fix the pattern; by tracing it to the break, or by using the closest stitch feature.

When you stop the software, or if it is notified of an error while sewing you will see the screen that allows you to continue sewing, go back, access the tools menu, align, release the carriage and pull bobbin. To repair the pattern you need to select Align, not Back.

> If you choose the back option the pattern placement will be set back to the original starting point, and any information as to where the last area of the pattern was sewn will be lost.

Once this is clicked you will now see the menu to repair your pattern.

Please note, if you need to replace a bobbin and the carriage is not in a convenient place, you can use the Release Carriage option and then re-align to continue where you left off.

Repair a Pattern Continued

Closest Stitch

1. Move the needle of the machine to the closest spot where the break occurred.
2. Click Closest Stitch. The machine will move to the closest stitch the needle is next to. If the stitches in the design are close you may need to do this more than once.
3. Click Trace Back or Trace Forward to make sure you are on the correct path.
4. Use the Nudge option if the pattern is slightly off.
5. Use the Trace -1 or +1 to set the new starting point, if needed.
6. Pull the Bobbin.
7. Click Sew. The system will continue sewing from this point.

If the pattern is not exactly aligned with what is being traced you can use the Nudge arrows in the direction you need to adjust the needle of the machine. Nudging moves the robotics the distance of a stitch, this causes the entire placement to shift allowing it to be laid on top of what currently exists.

Last Stitch

This function will take you to the last stitch that was performed. Please note, this means when the robotics has stopped not when the bobbin ran out.