



Colors of the Season by Rebecca Barker

Tension

Adjusting the tension can present issues for everyone especially if you use specialty threads. The following article should shed some light on the "thread tug of war". In addition, we have several articles on our web page that will further help you to adjust the tension on your longarm quilting system.

Thread Tug of War

Sewing machines are factory preset (Gammill uses PermaCore) to have the top and bottom thread form even stitches. If the top and bottom threads are identical in fiber and weight, adjustments should not be necessary. However, if we use cotton on top and poly underneath, or metallic on top and poly underneath, or a heavy thread on top and a thin thread underneath, it is necessary to adjust the tension settings. It is fine to use different thread types and weights on the top and bottom.

Think of the top and bottom thread as having a tug of war. If the threads are identical and you are sewing on a single layer of fabric, both sides have equal strength and the result will be a draw. The sewing should therefore produce perfectly even stitches with no top thread showing underneath and no bobbin thread showing on top.

However, in the real world, the teams are rarely equal. One team will be stronger or bigger or faster than the other. We use decorative threads on top. We often use different fibers for the top and bottom threads. We also add stabilizer or batting. Sometimes we might use a cotton bobbin thread and other times we use a polyester bobbin thread. All these factors make it necessary to adjust the tension for each project. By adjusting the top tension either up or down, we are able to add or take away strength on the top thread team to equalize the tug of war battle.

Following is a list of things that affect stitch results:

- Batting - This adds drag on top thread. Cotton batting tends to grab the thread more than poly batting, adding more friction on the thread.
- Fabric type - Dense fabric puts more stress on the thread. Top thread thickness and type - Metallic is less flexible than cotton or poly. Poly is stronger than either cotton or rayon.

- Bobbin thread type - Cotton bobbin thread tends to grab more than a silk-like filament poly. Sometimes grabbing is preferred and sometimes it causes problems. A silk-like filament poly thread (not spun poly) in the bobbin will work better with metallic or a heavier cotton and spun poly thread because its silk-like finish acts almost like a lubricant, sliding nicely with the thread.

Balancing your Top and Bottom Thread Tension

Getting the perfect stitch is the goal of all sewing.

It is fine to use different threads in the top and the bottom, whether they be different fiber types (for example, cotton and polyester) or different thicknesses. Adjustments for these differences are made with the tension settings, usually to the top tension, but occasionally to the bobbin. Machines differ in tension settings from brand to brand. Some machines seem very eager to please and they love everything we do. Other machines require lots of attention and extra training. Most machines are somewhere in the middle. Even within brands, there is some variance from machine to machine. Just like a dog, if we learn how to train or adjust the machine, it will serve us well and bring much happiness. An untrained machine (and dog) can cause more frustration than joy.

If adjusting your top tension doesn't work, you may need to loosen your bobbin tension.

If you have experienced problems running decorative threads and have adjusted the top tension every possible way and still cannot get good results, the solution might lie in the bobbin tension setting. For example, if the top thread is breaking because the top tension is too tight, it is necessary to loosen it. If you loosen it to the point where the thread does not break, but the top thread then loops on the back, the top tension is now too loose.

This is a common problem with some longarm machines. Neither of these solutions work and adjusting the tension settings in between these two extremes doesn't work so what can we do? The problem is that the top tension and bottom tension are too far out of sync so no matter what we do to the top tension, it will not solve the problem. In order to fix this, we must loosen the bobbin tension. Many of us were taught to NEVER touch the bobbin tension. That was when thread choices were very limited and decorative threads hadn't yet been invented or used on high speed and longarm machines. Times have changed.

How to change your bobbin tension.

If you can thread a sewing machine, you can adjust the bobbin tension. There is no need to spend money on a second bobbin case. With a permanent marker, put a dot where the tension screw is now pointing to so you can always return to the original setting. Then, with a

Pat's Calico Cottage Newsletter

March 2009

screwdriver and thinking of a clock, make adjustments by turning the screw equivalent to what a 10-15 minute movement would be. Counterclockwise loosens the tension (the most commonly required adjustment) and clockwise tightens the tension. Remember, lefty loosey, righty tightly. For longarm machines, the bobbin tension should be loose enough that if you hold the bobbin case in your left hand and pull the thread up with your right hand, the bobbin case should not lift off your left hand. The old "4 inch drop test" is gone.

Now, after having loosened the bobbin tension, any adjustments you make to the top tension will be more effective because the top and bottom tensions are more in sync. You should be able to pull the thread through the needle fairly easily without feeling much tension. This information is supplied by Superior Threads.

Just Arrived!

Magic Bobbin Washers

These slick space age washers eliminate the backlash in the bobbin when changing directions at high speed. Backlash creates "birds' nests" in free-motion quilting and embroidery. Remove the backlash spring and Just drop a Little Genie in the bobbin case And replace bobbin. Fits longarm machines. Designed by author, teacher and award winning quilter Sharon Schamber.



Upcoming Quilt Shows

Tennessee Quilts "Quiltfest" Jonesborough, TN July 16-18, 2009

This will be the largest quilting event in the region, drawing quilters not only from Tennessee, North Carolina and Virginia, but from throughout the United States. Pat's Calico Cottage will be there with the Gammill Longarm Quilting systems. You are welcome to come by and have a FREE Hands-On-Demonstration. Registration for the classes will be available at www.tennesseequilts.com or by calling toll-free 877-385-0934 beginning March 1, 2009. Classes are held at the Centre at Millennium Park (across from the ETSU Mini-Dome and behind the Carnegie Hotel). Our other events will be in Jonesborough.

American Quilters Society Quilt Expo Knoxville, TN July 22-25, 2009

For more information go to www.americanquilter.com.

Upcoming Classes for 2009 - 2010

Linda McCuen: Check website for classes to be scheduled for September 2009 by internationally known quilter and \$100,000 quilt winner. Also, National Sales Representative for Gammill Longarm Quilting Systems and Statler Stitcher.

Tammy Finkler

Quilt designer and award winning quilter and National Sales Representative for Gammill Longarm Quilting Systems and Statler Stitcher.

Freehand Culiques, Feathers, and Fines Hands on class. Everyone will complete a small quilt while learning techniques to speed up your custom as well as allover quilting jobs. These designs can be used in borders, sashing, blocks, triangles, allovers, backgrounds, etc. 5 class samples shown below as well as a few customer quilts using the techniques taught in the class. **Class Fee: \$240**

Background Quilting Techniques Hands on class.

Everyone will complete a small quilt while learning several background quilting techniques to make your quilting designs spring to life. "Faux trapunto" tips will also be covered. These techniques are useful for whole-cloth and appliqué quilts as well as pieced quilts. **Class Fee: \$240**

Wholecloth Techniques for the Statler Stitcher using Creative Studio

This class is geared towards someone who is interested in utilizing patterns that you already own or can purchase to create a whole-cloth quilt with your Statler Stitcher. This is the method used to make "Something in Red". The class will start with a trunk show and photos of whole-cloth quilts and samples to give you some ideas. We will talk about materials, batting, thread and supplies as well as choosing patterns and designing a layout for your whole-cloth quilt. We will then go through the process of preparing the top, which involves a small amount of marking. A demo top will be shown during the class, where we will touch on tips for borders, corners, blocks, etc in Creative Studio. We will also go over different background quilting options such as diagonals and grids with the channel lock or record sew path and freehand designs with the belts disconnected. You will go home with a marked top to stitch on your own machine. **Class Fee \$240**

Class Schedule

Thursday, 2-25-2010 Freehand Culiques, Feathers, & Vines
Friday, 2-26-2010 Background Quilting Techniques
Saturday, 2-27-2010- Statler Stitcher Wholecloth Quilting
Sunday, 2-28-2010 Statler Stitcher Wholecloth Quilting