Needles & Threads by Cindy Needham
Thread Education Articles by Superior Threads

Website: www.cindyneedham.com **Email:** linenqltr@comcast.net

Revised 2020

Table of Contents

2020: No new updates have been added to this book. The complete re-do of this handbook in 2018 still applies to all the information and instruction I am using today. Enjoy! Cindy

Cindy Needham
Email: linenqltr@comcast.net
Website: www.cindyneedham.com

Permission to Copy

I hereby grant permission for this handbook to be copied. This is provided to my students and contains all of their class information. They have purchased this information.

If you have further questions, you may contact me via email:

linenqltr@comcast.net

Cindy Needham
January 1, 2020

Introduction

When I started quilting 45+ years ago I started out as a hand quilter. I was taught to use only cotton thread. Way back then polyester was considered a "bad thread" as it was of poor quality and could potentially tear the fibers in your quilt. When I started machine quilting 30 years ago I never questioned what I was taught and continued to use the same inexpensive cotton thread I had been hand quilting with.

Since then I was fortunate enough to cross paths with Bob and Heather Purcell from Superior Threads. I learned that I COULD use polyester and decorative threads in my machine. Polyester has come a very long way in the past 15 –20 years and it is now considered a premium quilting thread. I have now switched and am using polyester and silk for ALL of my quilting and piecework.

I was a National Educator for Superior Threads for 12 years and taught for them on an international level. I not only love their products but I love the fact that they strongly believe in education and sharing their knowledge with everyone.

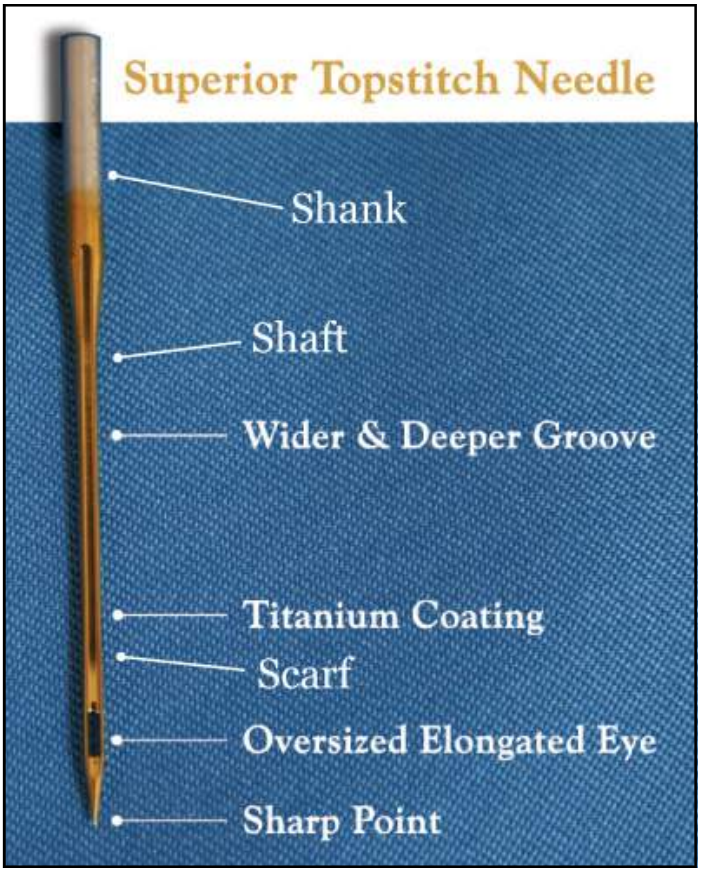
A Superior Threads logo will appear at the top of each article that has been copied from their website. A whole chapter at the end of this handbook has been devoted to many more articles. I strongly encourage you to visit their website at www.superiorthreads.com and check out their Education section. There is a vast array of information ready and waiting for you!

I am always here to help with questions or concerns. Please feel free to email me at any time. You must put "quilting" in the subject line or I will NOT open your email. If you don't hear from me in 24 hours please email me again...I either didn't receive it or you didn't put the magic words in the subject line!

All thread photos are courtesy of Superior Threads' website.

Needles

Anatomy



Needles and threads are one of the least understood parts of quilting and one of the most important choices you will make in ensuring a good quality stitch. They are also the least expensive part!

With every stage of creating a quilt, it is very important to choose good quality products. This applies to your fabric, batting, needles and threads. There are many good choices on the market so be sure to choose good products made by reputable companies. Having good quality needles and threads in your machine will solve at least 50% of the trouble you may be having.

There are hundreds of different needles on the market and each one is designed to perform differently. There are different points, eyes, grooves, thicknesses, etc. It is important to choose the correct needle for the project you are working on. First a lesson on what the different parts of the needle are:

Shank: The shank is the top portion of the needle that slides into your sewing machine. When you install a new needle always make sure that the needle is all the way in before securing it with the screw.

Groove: Every needle has some sort of a groove that runs down the front of the shaft to protect the thread while the stitch is being made. My preferred needle, the Topstitch, has a groove that runs from top to bottom that provides the most protection for the thread, especially the decorative threads.

Eye: The size and shape of the eye of the needle is critical. The thread moves through the eye of the needle multiple times for every stitch. If the eye is too small the thread will shred. I prefer the Topstitch needle that has a long rectangular eye. This allows the thread to move easily through the needle as the stitch is being made.

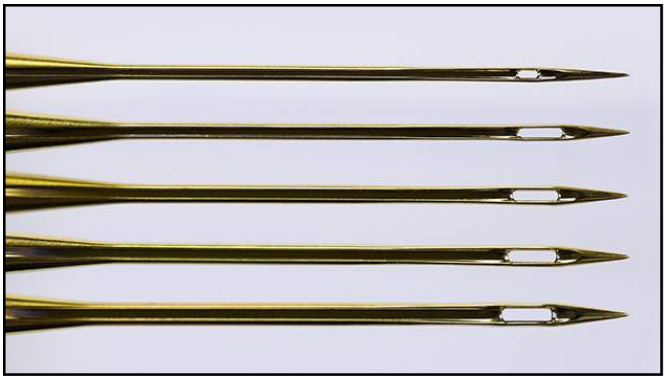
Scarf: The scarf is the scooped-out area on the back of the needle. This works with the hook in the bobbin case.

Point: The point is the very end of your needle and each type of needle has a different type of point. Different needles are made for different purposes so be sure to choose the correct "type" for the project you are working on. A slightly rounded ballpoint is used for knits; a sharp is perfect for piecing and quilting, etc.

Size

Be sure to choose the correct size needle for the thread you are using. You will see a set of numbers on the needle package that resembles a fraction such as 90/14. The first number is the metric measurement and the second is the United States measurement.

The smaller the number the smaller the needle...the larger the number the larger the needle. A larger needle will leave a larger hole in your fabric, a smaller needle will leave a smaller hole. A thicker thread does require a larger needle but the thread should fill the hole as the stitch is being made.



70/10 80/12 90/14

I use the Topstitch needle for most of my quilting needs. I use the 70/10 with the Bottom Line, MicroQuilter and Kimono silk; the 80/12 with So Fine #50 and medium 40 weight threads and the 90/14 with King Tut and my heavy decorative threads. I use the Microtex Sharp 60/8 with the Kimono Silk for my very fine, precise quilting. I find that I am using the 80/12 nearly all the time even when the thread guidelines suggest a 90/14. I start smaller and work my way up to a larger needle if needed.

Organ has produced high quality needles for years and they are a very respected name in the needle industry. They produce the Superior Threads' Topstitch needles and Microtex needles and they are titanium coated. The needle point will last 5-8 times longer with the coating but will break if it needs to. These are the only needles I am using and I love them!

It is very important to always have a good, fresh needle in your machine at all times. There are a variety of opinions on how often to change your needle. I used to change mine every 8-10 hours of sewing time but since I've switched to the new titanium coated needles I am going a couple weeks on one needle!

To be very honest I don't keep track of the number of hours I put on a needle and my actual quilting time varies with my schedule. I recommend that you listen to the sound of your machine as you are quilting. If you hear a popping or thud-type noise it's definitely time to change your needle; if the quality of your stitch is poor it may be time to change your needle.

If your thread is shredding take out that needle and put in a new one or a larger one. A small percentage of new needles already have a small burr in the eye that will shred the thread as it passes thru. A new needle is not a guarantee of a good needle.

THREAD LABELS

GASSED

Thread Labels: What They're Really Telling You

Walking down the aisles of a grocery store, I frequently find myself looking at the labels. Food labels contain so much information and I don't understand it all, but I do understand that the more sugar, salt, and ingredients which I can't pronounce that are in a particular food item, the more I should stay away from it (but in reality, it means that it probably tastes really good). Reading the labels helps me understand what specific nutrients, vitamins, and caloric value each product contains and how this will affect my overall diet. Reading the labels helps me choose what to buy and what to leave on the shelf. (Unless it's chocolate. Then I pretend I don't know how to read.)
Similarly, thread labels tell a lot about the quality and reliability of the product. Here are some things you might find on a thread label:

Thickness: In most cases, thread thickness is written as a # sign followed by a number. Sometimes the thickness is referred to as weight and can be written with two numbers and wt. We could write an entire article on how many different measurements there are to thread thickness but we are going to generalize here and stick with the # and wt. system. For quilting and embroidery thread, the smaller the number (weight and #), the thicker the thread. The larger the number, the thinner the thread. #30/30 wt.is much thicker than #60/60 wt.

Ply: Ply refers to the number of individual strands twisted together to make the finished thread. The number of plies contributes to the strength of a thread. Most of the threads used for quilting, embroidery, and sewing are either a 2 or 3-ply.

Mercerized: Today, nearly all cotton thread is mercerized. If a label has mercerized cotton written on it, it is probably because there Is nothing else to brag about. Since nearly all modern cotton sewing thread is mercerized, we don't print it on our labels. Mercerizing is a process of treating cotton thread with a solution, causing fibers to swell. This allows the dye to better penetrate fibers and increase the luster.

Glazed: Glazed thread is a type of thread which has been coated with either wax, starch, resin, or other chemicals. This results in a smooth, glossy thread with a hard finish. Glazed thread is quite a bit stiffer than unglazed thread and has a wire-like look and feel. Glazed cotton threads are recommended for hand quilting only. You do not want the wax coating of a glazed thread running through the tension discs of your sewing machine. Many glazed threads are not usually labeled as such. To check whether or not a cotton thread is glazed or not, unwind a two-three foot section from the spool and if the thread twists like a telephone cord, it's glazed.

Gassed: One step of the processing of high quality cotton threads is to pass the thread at high rate of speed, over a flame. This process burns the excess fuzz to create a higher sheen. Not all threads are gassed, and you can tell by the excessive amount of fuzz or hairs the thread has. Other terms used for gassed cotton are polished cotton and silk finish cotton.

Staple length: The individual fiber of a cotton boll. We commonly refer to staple in the sense of the length of the individual cotton fiber. The longer the staple, the stronger the thread. If there is no mention of the staple length, assume it is regular (or short) staple thread. Long staple is better than short/regular staple and extra-long staple is the best. If a cotton thread is extra-long staple, the label will proudly state that fact.

This is a whole lot of information to place on a small label! Not all information will be listed, but this will help you determine if you are getting all that you want, need, and hope for. Of course, there is a simpler way to know that you're getting the top-notch quality thread consistently; choose Superior!

My Favorite Superior Threads

MasterPiece

50/3 extra-long staple Egyptian grown cotton for piecing, detail quilting, bobbin and appliqué.

Very smooth with virtually no lint.

Use a Topstitch 80/12 needle. I recommend either MasterPiece, Bottom Line or MicroQuilter in the bobbin.

King Tut

40/3 extra-long staple Egyptian grown cotton for machine and hand quilting. Very low lint.

Use a Topstitch 90/14 needle. I recommend So Fine #50 in the bobbin.

Bottom Line/MicroQuilter

Bottom Line is a 60 wt. polyester. MicroQuilter is a 100 wt. polyester. These threads are very fine and can be used in the bobbin and/or the top. I like to use these for my stitching-in-the-ditch, fine microstippling, binding and appliqué.
Use a Topstitch 70/10 needle.

So Fine #50

50/3 polyester that looks exactly like a 50/3 cotton. I use this for piecing, sewing garments, quilting in both the bobbin and the top.

Use a Topstitch 80/12 needle. I recommend either Bottom Line, MicroQuilter or So Fine 50/3 in the bobbin.

Trilobal Polyester

40/3 high sheen polyester. I use this thread a LOT for my primary designs because of its elegant sheen. Look for these in Nature & Living Colors, Art Studio Colors and Fantastico.

Use a Topstitch 80/12 or 90/14 needle. I recommend Bottom Line, MicroQuilter, So Fine #50 or trilobal polyester in the bobbin.

Magnifico

40/3 high sheen polyester. This thread provides even more sheen and a slightly heavier stitch than the trilobal polyester. Wonderful to quilt with!

Use a Topstitch 80/12 or 90/14. I recommend Bottom Line, MicroQuilter, So Fine #50 or trilobal polyester in the bobbin.

Fantastico

40/3 trilobal polyester with a 1" color change. I love using this for primary quilting designs.

Use a Topstitch 80/12 or 90/14 needle. I recommend Bottom Line, Micro-Quilter, So Fine #50 or trilobal polyester in the bobbin.

Kimono Silk

#100 filament silk. I LOVE this thread and us a lot of it for my fine detail quilting. Great for appliqué too.

I use a Topstitch 70/10 or Microtex Sharp 60/8. I recommend Bottom Line, or MicroQuilter in the bobbin.

Tire Silk #50 and #30

I have been using a LOT of the Tire Silk in both the 50 and 30 weights. It has a beautiful luster and sheen and is a great choice for your primary quilting designs. I recommend Bottom Line or Micro-Quilter in the bobbin. I use a Topstitch 80/12 needle.

Superior Metallic

40 wt. spun metallic that is guaranteed to work! Ideal for embroidery, quilting and decorative stitching.

I use a Topstitch 80/12 or 90/14 needle. Be sure to lower your top tension. I recommend Bottom Line or Micro-Quilter in the bobbin.

Glitter

This is a flat hologram thread. This thread must be delivered from the side.

Use a Topstitch 90/14 or 80/12. Drop your top tension. I recommend Bottom Line or MicroQuilter in the bobbin.

Razzle Dazzle

8 wt. polyester thread for bobbin work, couching, reverse quilting and serger. Will not work in your needle! So Fine #50 has worked well in the bobbin for me.

Overview of Threads

MASTERPIECE: 50 wt. 3-ply extra-long staple Egyptian-grown cotton.
Needle: Preferred piecing needle or Topstitch 80/12
Top Tension: Normal top tension
Bobbin: Masterpiece
Perfect for precise piecing and appliqué. Recommended for home machines. Available in pre-wound bobbins.

KING TUT: 40 wt. 3-ply extra-long staple Egyptian-grown cotton.

Needle: Topstitch 90/14 Longarm: #18 - #19 (MR 4.0-4.5)
Top Tension: Normal top tension
Bobbin: So Fine or Masterpiece

Available in 1" color change, tone-on-tone and solids. Great for both machine and hand quilting. Make sure you see each color change on your fabric when auditioning.

BOTTOM LINE and MICROQUILTER: 60 wt. polyester & 100 wt. polyester

Needle: Topstitch 70/10 Longarm: #14 (MR 3.0)
Bobbin: Bottom Line or MicroQuilter
Tension: Normal top tension

Perfect for machine quilting top/bottom, appliqué, binding, stitch-in-the-ditch. Use in bobbin with all decorative threads. If you encounter shredding when using as a top thread, try dropping your top tension. Available in pre-wound bobbins.

SO FINE #50: 50 wt. 3-ply polyester.

Needle: Topstitch 80/12 Longarm: #16 (MR 3.5)
Bobbin: Bottom Line, MicroQuilter or So Fine
Tension: Normal top tension

Very clean thread, strong, runs beautifully through your machine both top and bottom. May be used for both quilting and piecing, great for garment sewing too. Also available in 40 wt. 1" variegated. Available in pre-wound bobbins.

SO FINE #30: 30 wt. 3-ply polyester. So Fine #50 on "steroids"!

Needle: Topstitch 90/14 Longarm: #19 or #21 (MR 4.5-5.0)
Top Tension: Try normal, may need to drop
Bobbin: So Fine 50 wt.
This thread will show! Fabulous for art quilts.

MAGNIFICO: High sheen 40 wt. trilobal filament polyester.

Needle: Topstitch 80/12 or 90/14 Longarm: #18 - #19 (MR 4.0-4.5)
Tension: Normal top tension
Bobbin: Bottom Line, MicroQuilter, So Fine #50.

Has an elegant sheen. Use for quilting and embroidery designs. I recommend delivering the spool from the side to eliminate untwisting.

FANTASTICO: High sheen premium 40 wt. trilobal polyester with 1" color change

Needle: Topstitch 80/12 or 90/14 Longarm: #18 - #19 (MR 4.0-4.5)
Tension: Normal top tension
Bobbin: Bottom Line, MicroQuilter, So Fine #50

Has an elegant sheen. Use for quilting and embroidery designs. Make sure you see each color change on your fabric when auditioning.

KIMONO SILK: #100 silk filament silk thread.

Needle: Topstitch 70/10 or 80/12 or Microtex Sharp 70/10 Longarm: #14 (MR 3.0)
Tension: Loosen top tension
Bobbin: Bottom Line or MicroQuilter

Excellent for fine detail quilting, adding a lustrous sheen. Ideal for hand appliqué and invisible machine appliqué.

SUPERIOR METALLIC: 40 wt. metallic

Needle: Topstitch 90/14 Longarm: #19 (MR 4.5)
Top Tension: Drop to 1 and work up from there.
Bobbin: Bottom Line or MicroQuilter

Ideal for embroidery, quilting

GLITTER: Flat hologram thread.

Needle: Topstitch 90/14 Longarm: #21 (MR 5.0)
Top Tension: Drop to 1 and work your way up from there.
Bobbin: Bottom Line or MicroQuilter
This thread adds sparkle and dimension to embroidery and quilting. Deliver this thread with spool vertical and pull the thread from the side horizontally.

RAZZLE DAZZLE: 8 wt. decorative thread

Use for couching or bobbin work only! If you are couching with this thread try using Rainbows, Metallic or Glitter over the top for a beautiful effect!

Be sure to leave a length of thread at the beginning and end of each quilting line to bury in your quilt sandwich later.

I recommend a longer stitch length to show off the thread.

My Favorite "Pantry Threads"

I'm always getting asked what my favorite threads and colors are and what I always keep on hand. There are some colors that just seem to go with everything so I've listed some of my favorites.

BOTTOM LINE #60 WT. POLY or MICROQUILTER (SAME COLORS BOTH)

#619
Tan

#620
Cream

#623
Silver

#624
Natural White

#625
Black

#650
Champagne

#651
Ivory

#652
Statue

#653
Beach

#654
Oatmeal

#655
Off White

#617
Taupe

#624
Natural White

SO FINE #50 POLY

#401
Snow

#402
Pearl

#403
Putty

#404
Mushroom

#408
Silver

#410
Charcoal

#504
Silver Screen

KIMONO SILK #100/2-PLY FILAMENT

#373
White Rice

#374
Mikimoto

#375
Zen Zen

#376
Ramen

#377
Ginza

#378
African Gray

#346
Sensei

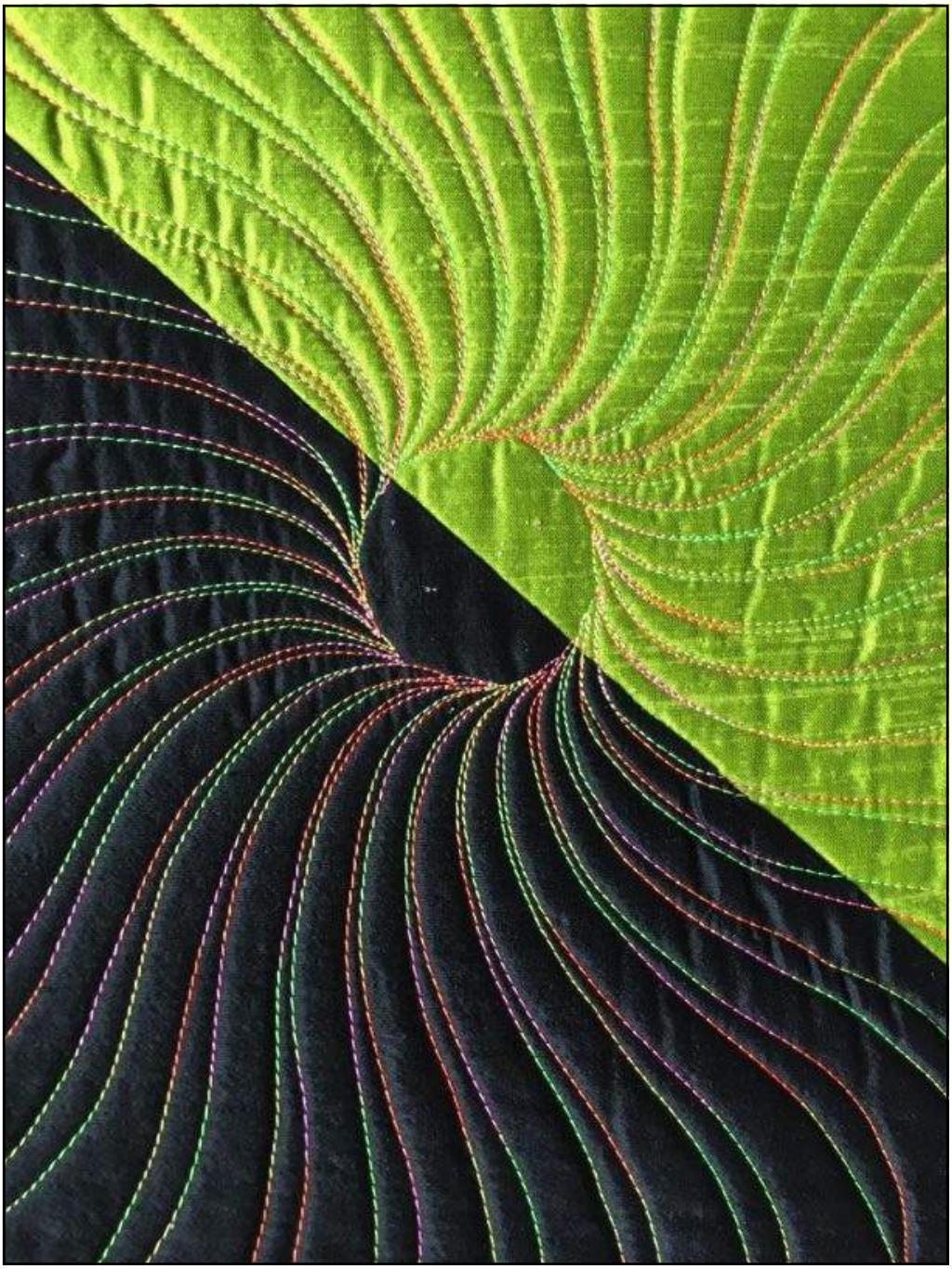
Auditioning Your Threads

Take the time to audition your threads BEFORE you start quilting. Your choice of threads is just as important as your choice of fabrics. You may have chosen the perfect fabric and design for your quilt top, but if you quilt with the wrong thread you could destroy an otherwise beautiful top. No pressure here!

When I choose my threads for quilting, I lay my quilt top out on a table and make sure I have sufficient natural lighting. I start with my stitch-in-the-ditch thread which is almost always Bottom Line or MicroQuilter. I take a single strand of thread at a time and lay it in the seam line and choose the color that blends the best. If I have a choice between a lighter or darker shade I always go with the slightly darker one...it will blend better. Your seam line is a thin shadow. A darker thread will blend better in a shadow than a lighter thread.

Then I go to my primary quilting designs such as my feathers, cables, flowers, etc. I like to use a slightly heavier thread for these designs. I have to make a choice if I want these designs to shine or not shine. If I want a slight luster or sheen I go with a trilobal polyester (Magnifico) or heavy weight silk (Tire Silk). If I don't want a sheen, then I go with So Fine or King Tut.

I also need to decide if I want a solid or variegated thread. Variegated threads are fun because they have the ability to pick up several colors in your fabric and carry your eye throughout your quilt. It is very important when choosing a variegated thread that you see each and every color. You don't want one or two colors to "drop out" or blend with the fabric...this will give you blotches of color instead. I prefer to use Superior Threads' Fantastico or King Tut which have a consistent 1" color change.



When choosing a variegated thread it is VERY important that you be able to see ALL of the colors in the thread.

This sample demonstrates a variegated thread that had some bright lime green as one of the colors. That part of the thread "drops out" on the green silk and you are only seeing blotches of the pink and orange. Notice how you see every single color in the black.

Front of block

Back of block

Most quilt have a balance of solid and print fabrics such as this sample block. It is important to remember that quilting will simply not show up on a busy print fabric. In the case of this sample you only see the quilting on the solid green. The quilting on the print nearly disappears. I went to a lot of work for something that won't show.

If I were to quilt this in the "real world" I would choose a design that completes itself in the green and choose something more simple for the busy print fabric.

Thread Delivery~ Cones vs. Spools

Now that you have all this beautiful thread to quilt with, how do you deliver it through your machine? Most quilters think the answer is simple...just put it on your spindle and thread your machine. Not so. The way you actually pull the thread off of your cone or spool makes a huge difference on how well the thread behaves during the quilting process. I'll give you some great hints that will hopefully save you much frustration.

Cones

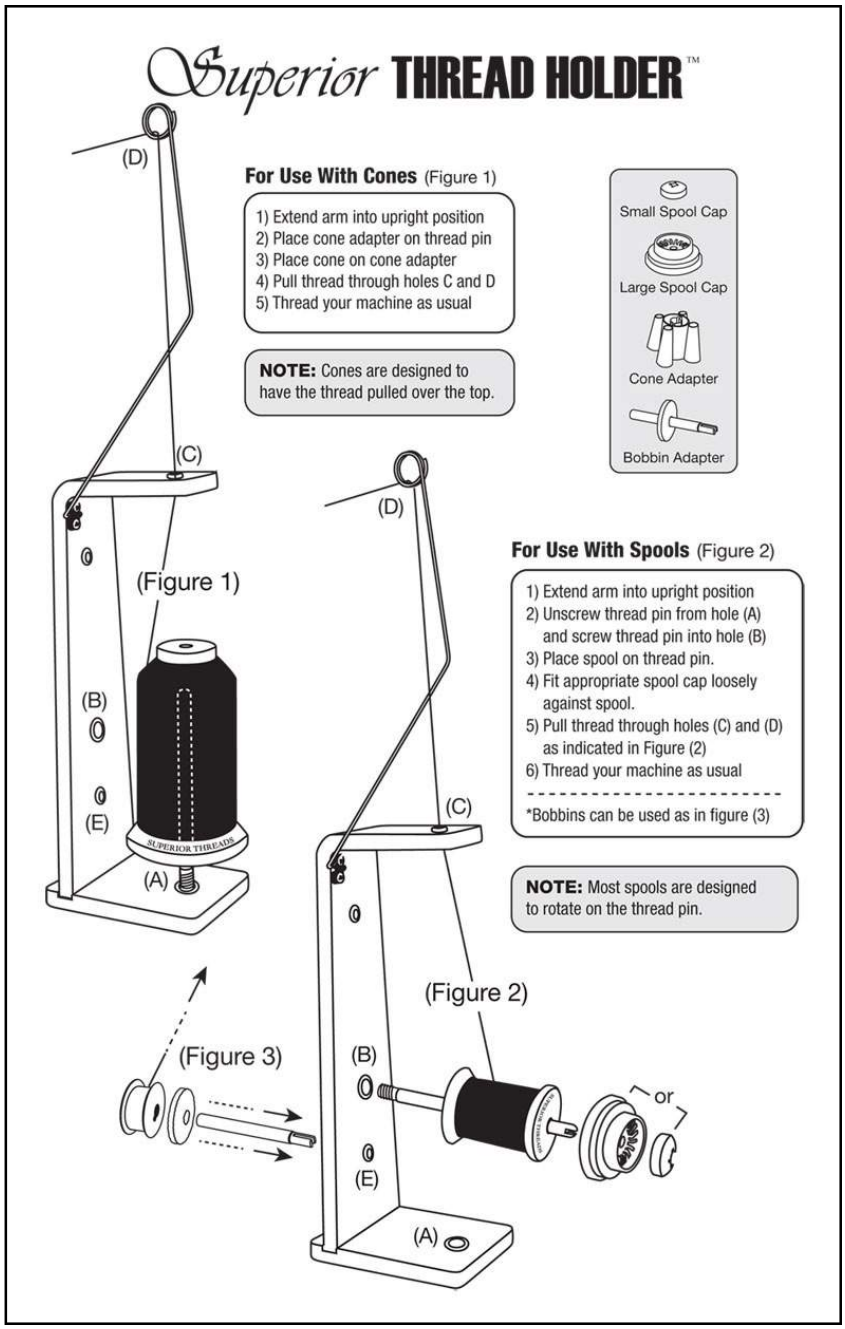
There is only one rule that applies to delivering a cone thread...<u>you must always deliver the thread by pulling it from the top</u>. Cones are cross-wound...there is a diamond shaped design the thread makes as it was wound on the cone. If you were to deliver the thread from the side of the cone your machine would have to work very hard to rotate the cone every time a stitch was made thus giving you a very poor stitch quality and poor tension. Not all machines are set up to deliver a cone thread. I have a couple suggestions for you.

You may purchase a cone holder like this one. Make sure the base is heavy or weighted so it doesn't jiggle all over your table and tip over.

Put the cone holder behind your machine. Place your cone on the base, pull the thread up and into the hook and thread your machine normally

Superior has a fabulous all-in-one thread holder that will accommodate thread delivery for both cones and straight stacked spools. I also like to use this when I want to use a thread for the top of my quilt from a partially filled bobbin.

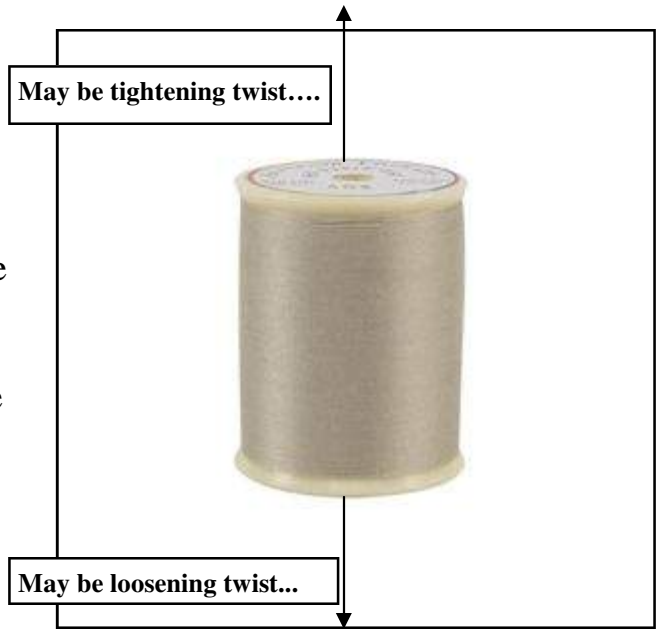
I thought it would be much easier to show how this works by including the photo below. LOVE this thread holder!



Delivering Straight Stacked Spools

Most quilters are familiar with thread that is straight wound or stacked on a spool. Believe it or not there are special delivery tips for this type of spool. It is recommended that a straight-stacked spool be delivered from the side, not the top.

When you pull the thread from one end you may be adding an additional twist which may make it misbehave by the time it gets to the needle. If you pull it from the other end you may be loosening the twist. This usually doesn't make a big difference with an easy-to-use thread but it makes a HUGE difference if it is a crabby decorative thread.



It also makes a difference if you pull the thread from the front of the spool vs. the back of the spool. Try it either way...if you are having trouble then flip the spool over and pull it from the other side.

In reality, I still deliver my straight-stacked spools from the top/bottom of the spool because that is how my machine delivers them. IF I start having trouble with a particular spool of thread then I start changing my delivery in order to make that particular thread work.

Using Decorative Threads

The previous instructions for delivering cone vs. spool threads still apply to decorative threads but I would like to add a few more hints.

Lots of quilters shudder at the thought of trying to deliver a metallic thread through their machine. They have nothing but trouble with shredding and breaking.

1. Always buy a good quality metallic thread.

2. Buy your metallic thread off of a normal sized spool or small cone. Metallic thread has a memory and when you wrap a memory thread on a very small spool you will get a tighter twist and it will be harder to deliver through your machine.

3. Drop your top tension down to "1" and then work your way up or down until you get a good balanced stitch. Any decorative thread requires a very loose top tension to eliminate undue stress.

4. Use a Topstitch 90/14 needle.

5. Use a smooth polyester thread in your bobbin. A cotton thread in your bobbin may snap a decorative thread in the top. My favorite choice for a bobbin thread is Bottom Line or MicroQuilter.

Hologram threads such as Glitter are considered a "flat" metallic. These threads are beautiful but can often cause you a few gray hairs trying to make them work in your machine.

<u>You must always deliver this thread with the spool standing straight up and down and then pull the thread from the side</u>. *If you are unable to deliver the thread in this fashion then I recommend the Superior thread stand.* Use the same 1-5 hints as above.

Working with your Top Tension

Quilters feel that machine tension is one of those sacred and revered areas that only the sewing machine repairman is allowed to venture into. In order to be a successful quilter you must take the initiative to learn how to change the tension in both the top and bottom of your machine. As long as you do it respectfully you shouldn't have trouble and you will have a whole new world opened up to you! You will learn how to achieve a perfectly balanced stitch and also be able to use any and all types of threads in your machine.

If you have a sewing machine that has a manual dial to control the tension you are able to change your top tension very easily without the aid of a computer.

If you have a computerized sewing machine, you may have been told that the sewing machine has already been calibrated for a perfect tension and you must NOT change the tension...period! It was more than likely set for a 50 wt. cotton thread.

If you leave your tension at the 50 wt. cotton setting you will never be able to successfully use specialty decorative threads or heavier threads in your machine. That tension setting is too strong and will shred or compromise those threads as they pass thru the tension disks. You must be able to drop your top tension to a lower setting.

Get out your sewing machine manual and learn how to override the automatic tension on your machine or you will forever be stuck on the 50 wt. cotton thread setting. There is no fear here! If you get into an area where you really shouldn't be, simply turn the machine off and back on and it will automatically recalibrate itself.

Sewing machines arrive from the factory preset to have the top and bottom thread form even stitches when sewing with a 50 or 60 wt. thread. If the top and bottom threads are identical in fiber and weight, adjustments may 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 fine thread underneath, it is necessary to adjust the tension settings. It is perfectly OK to use different thread types and weights on the top and bottom. Relying on a machine's automatic tension system is not enough.

Think of the top and bottom thread as having a tug of war. (see illustration on next page). 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 sometimes use decorative or sensitive threads on top. We also add stabilizer or batting. Sometimes we 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. These are some of things that affect stitch results:

1. **Batting.** This adds drag on top thread. Cotton batting tends to grab the thread more than poly batting, adding more friction on the thread.

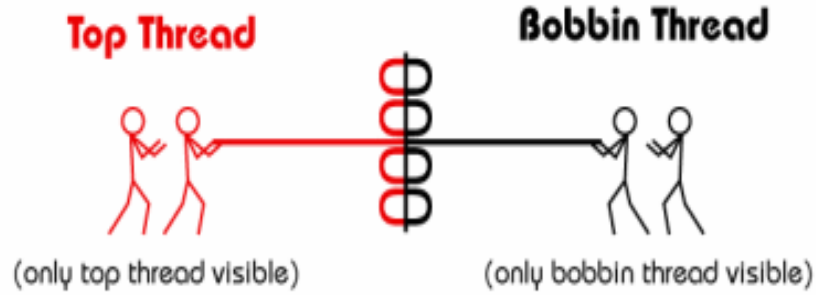
2. **Fabric type**. Dense fabric puts more stress on the thread.

3. **Top thread thickness and type**. Metallic is less flexible than cotton or poly. Poly is usually stronger than cotton or rayon.

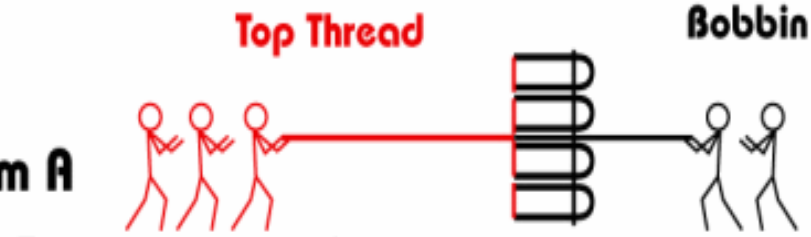
4. **Bobbin thread type.** Cotton bobbin thread tends to grab more than smooth filament polyester. Sometimes grabbing is preferred and sometimes it causes problems. A smooth filament poly thread (not spun poly) in the bobbin will work better with metallic and other sensitive threads because its smooth finish acts almost like a lubricant, sliding nicely with the thread.

With each of these factors it may become necessary to either tighten or loosen your top/bottom tension. I always fidget with my top tension first and my bobbin tension last. You may need to loosen the top tension a bit to eliminate the little dots of bobbin thread coming thru to the top...if that doesn't work you may need to go to the bobbin and tighten it just a bit. If you have the top thread being pulled thru to the back try tightening the top tension a little OR loosening the bottom tension a little. It's a 50/50 scenario and you may have to adjust top and/or bottom several times before obtaining a balanced stitch.

Correct

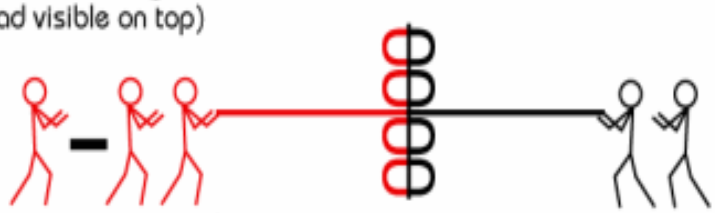


Problem A

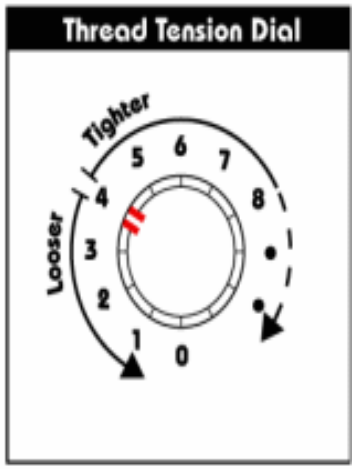


Top tension too tight
(bobbin thread visible on top)

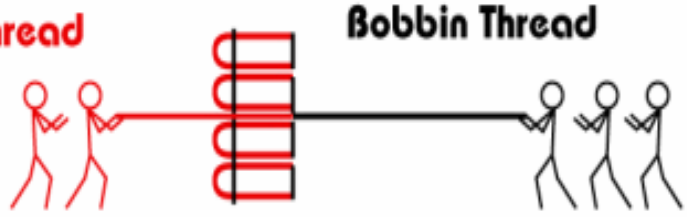
Solution A



Loosen top tension
(lower number)

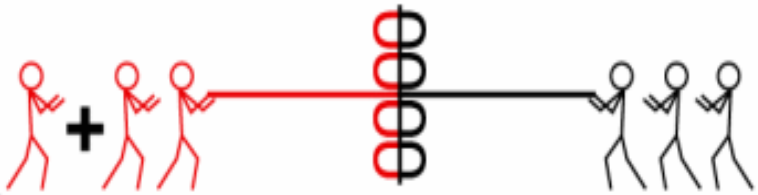


Problem B



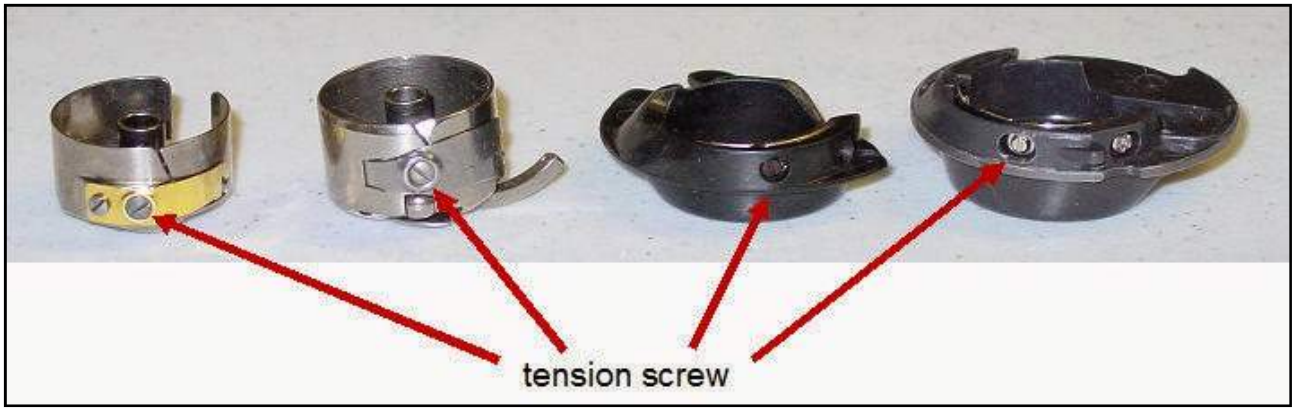
Top Tension too loose
(top thread visible on bottom)

Solution B



Tighten top tension
(increase number)

Working with your Bobbin Tension



This photo shows two standard bobbin cases on the left and two drop-in bobbin cases on the right. The arrows are pointing to the tension screws.

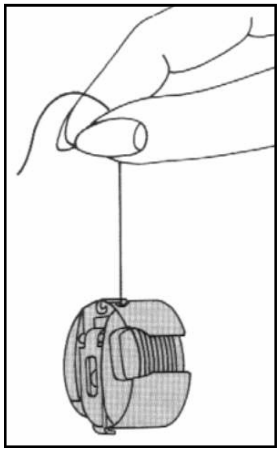
This bobbin case has only one screw. This is what you turn to tighten or loosen the bobbin tension.

This bobbin case has two screws. You would turn the larger screw to tighten or loosen the bobbin tension.

Do NOT touch the smaller screw! This is what holds your entire tension assembly together!

This is a drop in bobbin case. It also has two screws.

99% of the time the tension adjusting screw is on the LEFT. This is the one you touch to tighten or loosen the bobbin tension.



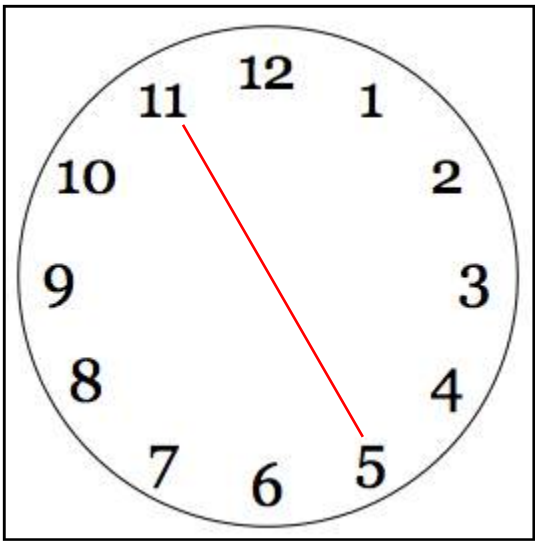
When I am having tension difficulties, i.e., bad stitches on the front and/or back of my quilt I will take out my bobbin case and do a “drop test”.

I lay the bobbin case in my open hand and pull on the bobbin thread. If the tension is good I should be able to pick the bobbin case out of my hand. It should hold it’s position and only drop down a bit if I drop my wrist.

If the tension is too TIGHT the bobbin case will not “drop and hold”.

If the tension is too LOOSE you won’t be able to pick the bobbin case out of your hand. You will just be pulling loose thread.

Now it’s time to change the tension screw! Take a deep breath!



Think of the tension screw on your bobbin case as the face of a clock.

I always read the right side of the line. This particular screw is pointing to 5 o’clock.

If the bobbin tension is too LOOSE, turn the screw to the RIGHT to 6 o’clock. *(righty tighty)*

If the bobbin tension is too TIGHT, turn the screw to the LEFT to 4 o’clock. *(lefty loosey)*

Never ever change it more than one hour at a time. Each time you loosen or tighten do a drop test. As soon as you notice a change put the bobbin case back in your machine and do a test drive. You may have to make multiple adjustments until you get the tension where you want it. If you are apprehensive about changing the bobbin tension, draw a picture of where your tension started. You can always go back!

Some bobbin cases come with this finger attachment or a small wire pigtail. This is just another tool to help you adjust your bobbin tension.

If you find you need to **tighten** your bobbin tension just a little, try threading your bobbin thread though the hole in the end of finger or pigtail before changing the tension screw. Many times it will provide just enough traction so that you don't need to do any further adjustments.

While we are talking about bobbin tension, there is one often overlooked point that is critical and that is how well your bobbin is wound. Always make sure that you have a good, solid straight stacked wind to your bobbin. If the thread stacks like a cone or is loose and spongy, this will greatly impact your bobbin tension and stitch quality.

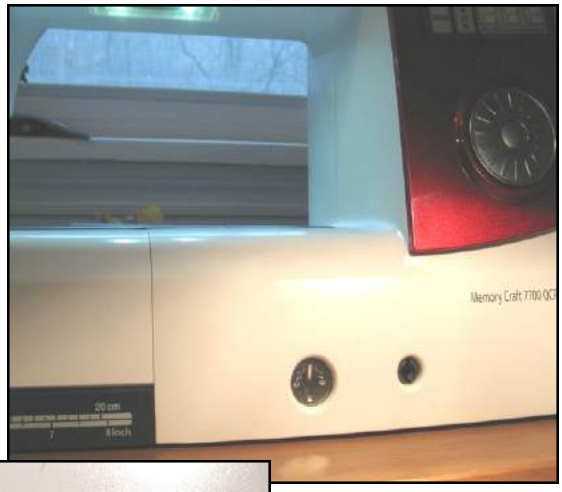
Be sure to check the bottom of your machine and make sure it is clean and free of dust, lint and stray threads. Check the inside of your bobbin case and make sure it is clean too. I always use a folded end of a pipe cleaner to remove the stray lint and fuzz out of my machine...it's a great, cheap and easy to use tool and works like a magnet pulling everything out. Never use canned air to clean your machine. This only blows everything back in and jams into your gears and electronics.

Balancing Your Decorative Stitches

When I am teaching my Open Thread Bar there is a lot of time spent working with machine tension...both top and bottom. Many of my students bring their computerized decorative stitch machines and spend the day playing with various threads using these stitches. Occasionally the stitches don't come out like the student expected. They are distorted, the shapes aren't as perfect as expected. **Anita Zobens** is the Superior Educator in Canada and she provided me with some great information she shares in her thread classes and I've included it here for you. You can visit her website at: www.cottonmillthreadworks.com. Thank you Anita!

When the stitches look totally distorted (student says "these don't look anything like the diagram!"), decorative stitches don't close at points (like that row of hearts for instance) - these are balance issues.

Most decorative stitch machines, but not all, have a largish circle on the body of the machine, either at the side or the front. Sometimes you need to remove the accessory box to access.



This circle has a slot in the middle for a screwdriver or a coin, and a "plus" sign and a "minus" sign. To resolve the appearance of the stitch you simply turn to + or -, test sew, and if not correct try the other setting.
When reverting back to another stitch change the setting back to midpoint.
(photo of Janome Horizon balance dial).

The Fabulous Four

When you are sewing and you run into difficulties with thread breakage, shredding or general overall trouble, there are four main points to check. If you do this quick check, in this order, 95% of the time your difficulties will

1. Thread delivery

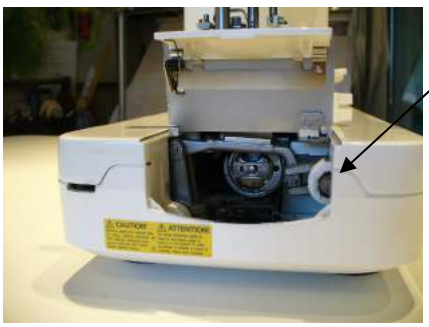
- ❑ Starting at your spool, follow the thread path through the entire machine. Is your machine threaded properly?
- ❑ Are you using a spool or cone? Cone threads should ALWAYS come off the top.
- ❑ Some straight wound spools may come off the side vs. pulled from the top. Try flipping the spool over so that it delivers from the opposite end OR from the front of the spool vs. the back of the spool.

2. Tension

- ❑ Follow the thread path down to the tension disk or check your computerized pre-set tension. Do you have the proper tension for the thread you are using? Remember that decorative threads require a very loose tension!.
- ❑ Remember to have your presser foot UP while threading the machine.

3. Needle

- ❑ Follow the thread path down to your needle. Do you have the correct needle for the type of thread you are using? Decorative threads usually perform best with a Topstitch or Metallic 90/14 needle.
- ❑ Do you have the correct needle for the type of fabric you are sewing on?
- ❑ Have you changed your needle recently? If not, do so.
- ❑ If you have changed the needle but the thread is shredding, change the needle again. You may have a burr in the eye of the needle.



4. **Bobbin/Cleaning**

- ❑ Pull out your bobbin and check to see if it is wound properly, i.e., a tight flat wind.
- ❑ If using a decorative thread on top, are you using a smooth polyester thread in the bobbin?
- ❑ Is the bobbin case area clean? If not, get rid of the dust bunnies, threads, and lint in and around the bobbin case.
- ❑ Last but not least, when was the last time you had your machine serviced? If it's been a while, make an appointment for its yearly check up.

The following pages include articles that have been taken from Superior Threads' website. They have a fabulous education section with hundreds of articles and I strongly encourage you to check it out for even more great information that I haven't included here.

Website: www.superiorthreads.com

This section is replacing the separate handbook entitled "Thread Education with Dr. Bob". I thought it would be more efficient to have both books combined together.

The articles are in no particular order. I have a separate Table of Contents following this page.

Table of Contents

LET'S TALK ABOUT THREAD

Thread Construction Methods

The higher the quality of the thread, the less special handling will be required. Poor quality thread has much lint and breaks easily and can take the joy out of any sewing project. Each type of thread has specific characteristics and will behave differently on sewing machines. Threads are either made of a natural fiber (cotton, wool, silk, linen) or synthetic fibers (rayon, polyester, nylon). While there are dozens of fiber types that could be twisted and spun into thread, there are a handful of common fibers that are used in sewing, quilting, serging, and embroidery.

Spun thread - Cotton or polyester staple fibers are spun into single yarns and then twisted together.
Corespun thread - Spun cotton or polyester staple fibers are wrapped around filament polyester fibers.
Textured thread - Polyester or nylon that has been mechanically textured to make the thread fuzzy and stretchy and woollie-like. Texturing is a procedure used to increase the volume and the elasticity of a filament yarn. The essential properties of textured yarns and the products made from them are softness, fullness, a high degree of elasticity, thermal insulation and moisture-transporting properties.

Thread Types

Cotton

Cotton threads are made from twisting the fine staples (fibers) from a cotton bowl to create a thread. There are many degrees of cotton quality. Superior's cotton threads are made from Egytpitan-grown extra-long-staple cotton fibers. The advantages of cotton threads are: its strength, medium sheen, and the natural fibers help grab the fabric to create a tight seam. The disadvantages of cotton threads are: difficult to tell low-quality from high-quality (purchasing thread from a reputable company helps alleviate this risk), low-to-high lint depending on the staple length and processing, and quality cotton threads can be more expensive.

Corespun Polyester (also called poly-wrapped poly core)

Corespun polyester threads have a filament polyester core that is wrapped with spun polyester. The advantages of corespun polyester threads are: its strength, reduced puckering, and excellent stitchability. The disadvantages of corespun polyester threads are: low-to-moderate lint.

Filament Polyester
Filament polyester threads are made from long, thin strands of polyester fibers that are twisted together. The advantages of filament polyester threads are: excellent elongation (the fibers can stretch and recover), smooth presence with no lint and can be finished as a thick or thin thread. The disadvantages of filament polyester threads are: not as strong as corespun (when comparing the same size of thread) and finer filament threads may require tension adjustments.

Monofilament Polyester
Monofilament polyester threads are a single strand of polyester fiber, similar to fishing line. The advantages of monofilament polyester threads are: it's usually a very fine thread that blends very well and can be ironed on medium heat. The disadvantages of monofilament polyester threads are: tension adjustments are usually required when quilting.

Spun Polyester
Spun polyester threads are made from the twisting of small polyester staple fibers together to create a long thread (very similar to how cotton threads are created from cotton staples). The advantages of spun polyester threads are: spun polyester threads are less expensive to produce and are usually priced lower than any other type of polyester thread. The disadvantages of spun polyester threads are: moderate-to-high levels of lint when sewing and not as strong as filament or corespun polyester threads.

Rayon
Rayon is created by pressing cellulose acetate (usually made from wood pulp) through small holes and solidifying it in the form of filaments (sound like fun!). The advantages of rayon threads are: its high-sheen colors, its soft touch, and it's an inexpensive thread. The disadvantages of rayon threads are: it's often not colorfast (the dye can bleed onto fabric when exposed to strong detergent, UV light, or bleach), it's not as strong as trilobal polyester, and the fiber itself is not as durable as polyester.

Nylon

Nylon threads are synthetic threads (polyester threads are synthetic as well) often used in the form of a monofilament clear thread or as a textured fuzzy (woollie-like) thread. The negatives far outweigh the positives of nylon. We do not recommend sewing or quilting with nylon threads, as there are better versions for the same application in polyester threads. The only type of Nylon thread we use and recommend is Bonded Nylon for upholstery and heavy-duty sewing. Bonded Nylon is made from a different type of material than nylon sewing thread. We don't use nylon for quilting or embroidery.

Metallic

Metallic threads are created from multiple layers of materials wrapped and twisted together. The quality of metallic threads range from very high to very low. A good metallic thread does not require a lubricant. Superior's metallic threads have a strong nylon core, a thin layer of rice paper and a special outer coating that keeps the silver foil from rubbing against the needle. The advantages of Superior's metallic thread is: beautiful sheen and excellent stitch quality when embroidered, quilted, or sewn. The disadvantages of metallic thread is: tension adjustments are required and stitching speed may need to be decreased.

Glitter or Mylar

Mylar threads are created by bonding thin layers of flat mylar material. The advantages of Glitter thread is: holographic effect and can be embroidered, quilted, or sewn. The disadvantages of Glitter thread is: tension adjustments are required and stitching speed may need to be decreased.

Thread Processing

All sewing and quilting thread undergo some of the same processing, such as twisting, lubricating, winding, etc. Cotton threads however, can have additional processing to enhance the stitching experience

Mercerized

Mercerization is the process of immersing the cotton fibers in a caustic solution which causes the fibers to swell. This allows the dye to better penetrate the fibers and increases the luster of the thread. Mercerizing also increases the strength of the cotton thread. Nearly all cotton threads made for sewing all mercerized, whether the label states *Mercerized* or not.

Gassed

Thread that has been gassed is smoother, has lower lint, and a brighter sheen. The thread is passed through a flame at high speed to burn off the longest pieces of lint, resulting in a less fuzzy thread. Gassing is also called silk finish or polished cotton. You can tell the difference between a gassed and ungassed thread if you compare the amount of fuzz (lint) between the two threads. Our King Tut and MasterPiece cotton threads are gassed and have very low lint.

Glazed or Coated

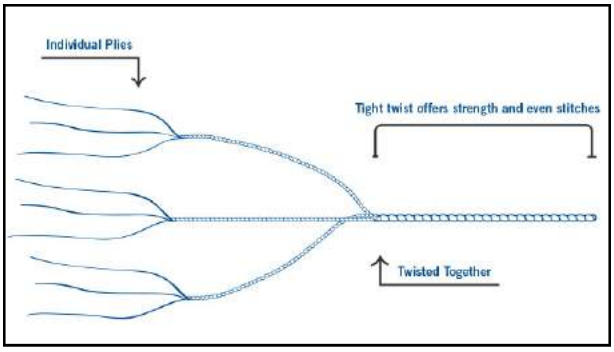
Glazed thread is treated with a coat of wax, resin, or starch and then polished to create a nice luster. The thread is very strong due to the glaze and is recommended for hand quilting. Glazed cotton threads are not recommended for machine sewing or machine quilting because the coating can rub off in the tension discs and contact points and collect lint, fuzz, dust, and cause a buildup to obstruct the thread path.

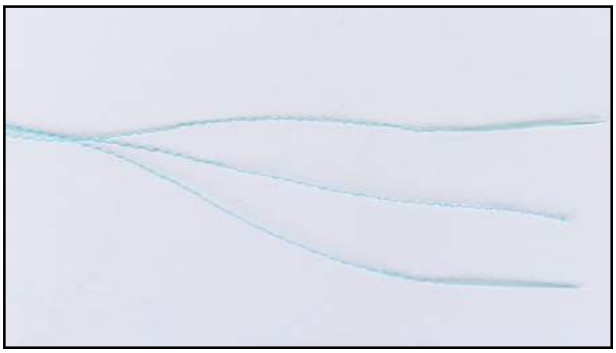
UNDERSTANDING THREAD WEIGHT

How is Thread Measured?

Standards for classifying the size of thread are confusing. It would help if the collective sewing and quilting industry would choose a single standard and apply it across the board, but that hasn't happened yet and most likely isn't going to happen in the future. The most commonly used classification in the U.S. is the weight standard. You will see threads labeled as variations of the following: 30 wt., 40 weight, or fifty wt. Outside the U.S., these standards aren't followed or understood. This method of classifying thread is the most popular and used for quilting and sewing, but it is not the most accurate. There is confusion surrounding what exactly makes a 50 wt. thread a 50 wt. thread. We'll do our best to define thread weight in this article.

Not too long ago, there were only three common sizes of thread in the U.S. Thin threads were labeled 50 wt., regular weight threads were labeled 40 wt., and heavy threads were labeled 30 wt. These numbers, 30, 40, and 50, were borrowed from another standard, known as the **Gunze Count standard**, established by thread factories in Japan. If a thread was labeled as #40 or 40/3 in Japan, it was labeled as a 40 wt. thread in the U.S. Likewise, if a thread was labeled #50 or 50/2 or 50/3 in Japan, it was defined as a 50 wt. thread in the U.S.





The problem with classifying all #50 threads as a 50 wt. thread is that a 50/2 thread and a 50/3 thread are different. The first number follows the Gunze Count standard and indicates the thread size. The larger the number, the finer the thread (a 50/2 will be thinner than a 30/2). The second number indicates the number of strands, or plies, twisted together. *It is obvious that a 50/3 is heavier than a 50/2 because it has three strands of a size 50 thread twisted together and the 50/2 has only two.* The misunderstanding in the U.S. weight system came about because importers started labeling #30 thread as 30 wt., #40 thread as 40 wt., and #50 thread as 50 wt., regardless of the number of plies comprising the thread. That means a 50/2 and a 50/3 thread were both labeled as 50 wt. thread even though one is 50% heavier than the other (a three ply thread is 50% thicker than a two ply thread). As a result, many products that use the weight classification have labels that are inaccurate.

We regularly field questions from customers trying to compare Thread Brand **A** to Thread Brand **B** using the weight system, which doesn't account for the number of plies. As a consumer seeing hundreds of competing products on the market, it is difficult to know which labels are accurate and what the numbers really mean. When we travel, we often visit local quilt shops because Mother Superior always like to search for more fabric (just in case she finds one that she doesn't already have) to add to her overflowing fabric stashes. My excitement is to wander over to the thread racks and read the labels. I can always find some threads that are labeled inaccurately. If you see a label with an odd wt. number such as 17 wt. or 19 wt., it is most likely accurate. However, if it is a commonly used weight such as 30, 40, or 50 wt., it may or may not be accurate. I'm not one to point out a problem without proposing a solution, so here is how to deal with inaccurate labels: Ignore the weight number on the label. Choose thread based on the type of fiber, look, feel, and thickness and not by the printed weight size. Trust your eyes and fingers more than the label. You'll get better results and be much happier with your selection. Choose fine threads to blend and medium and heavier threads to show.

SEWING MACHINE TENSION

BOBBIN THREAD

How does tension affect the outcome of a stitch?

Sewing machines are factory preset to have the top and bottom thread form even stitches when sewing with a 50 or 60 wt. thread. If the top and bottom threads are identical in fiber and weight, adjustments may not be necessary. However, if we use cotton thread on top and polyester thread underneath, or metallic thread on top and polyester thread underneath, or a heavy thread on top and a fine thread underneath, it is necessary to adjust the tension settings. It is perfectly OK to use different thread types and weights on the top and bottom. Relying on a machine's automatic tension system is not enough.

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 sometimes use decorative or sensitive 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

What most commonly affects stitch balance?

Batting

Batting adds drag on the top thread. Depending on the loft and density, batting can put more stress on the thread during stitch formation. This results in an increase of stress applied to the top thread. Cotton batting tends to grab the thread more than polyester batting, adding more friction on the thread.

Fabric

If you are sewing on a densely-woven fabric, such as batiks, duck cloth, or denim, the top thread will be exposed to a greater degree of friction. Fabrics that have a looser weave, such as quilting cotton and knits allow for the top thread to pass through the individual fibers in the fabric with less friction, and thus with less tension applied to the thread during stitch formation.

Top Thread

The thickness and material of the top thread can affect stitch quality and stitch balance. If the top thread is a thick, 30 wt. polyester thread and the bobbin thread is a fine, 60 wt. cotton thread, the top tension will most likely need to be adjusted (loosened) to accommodate an even stitch. It is not a problem to mix fiber types, cotton thread on top and polyester thread in the bobbin, or thickness, 40 wt. thread on top and a 50 wt. thread in the bobbin. Some threads require very loose tension in order to achieve balanced stitches. Metallic thread, for example, is a beautiful decorative thread. However, it is not as strong as a 40 wt. polyester quilting thread and will need the top tension reduced to 1.0 (very loose). When the appropriate tension adjustments are made, you can use a mixture of threads and obtain balanced stitches.

Bobbin Thread

Cotton threads tend to have more grab to them compared to a smooth, filament polyester thread. Sometimes, a thread with a little grab is preferred, such as when piecing a quilt together. This is why a low-lint cotton thread like MasterPiece is recommended for piecing and sewing quilts together. With sewing applications such as topstitching a quilt, a smooth bobbin thread may be preferred, especially when quilting with decorative threads like metallic.

ADJUSTING BOBBIN TENSION

When To Adjust The Bobbin Tension

We talk a lot about tension settings and tension adjustments on machines. 90% of the time, we adjust the top tension to achieve the perfect stitch. This time, we will discuss the other 10%, the bobbin tension. You may have been taught to never touch the bobbin tension. We're here to tell you that it is OK. It isn't as difficult as we have been led to believe. If you are one who has been told to never touch it, by the end of this page, hopefully you will realize that is perfectly safe and easy to adjust the tension on your bobbin case. An easy failsafe is to have a second bobbin case that is never adjusted to keep a baseline bobbin tension. However, why not save $30 to $40 instead of buying a new bobbin case and learn how easy it is to make simple adjustments? Over time, tensions can change with regular use. Even though you haven't physically changed the settings, they can work themselves either tighter or looser. Thread, lint, and even temperature can affect them.

When making changes to bobbin tension, increasing or decreasing, turn the large screw on the bobbin case in small increments. If you think of the large screw as a face of the clock, adjust the screw in 15-minute increments, test, and adjust again if necessary. We'd like to review three occasions when adjusting the bobbin tension might be necessary. The first two are obvious, but the third may be an "I never thought of that before" alternative.

1. When using a very smooth, fine bobbin thread the preset tension may not be tight enough to apply adequate pressure on the thread. You may have heard the term backlash before. Backlash occurs when the machine stops sewing, but the bobbin thread keeps unwinding. Tightening the bobbin tension will fix this.
2. When using a heavy or thick thread in the bobbin, the preset tension might be too tight. This may put too much pressure on the thread as it comes out of the bobbin case and can prevent the bobbin thread from unwinding freely. Loosening the bobbin tension will solve this.

A question that we often hear:**Q:** There are times when the bobbin adjustment is correct but no matter what I do to the top tension, I still can't get a perfect stitch or the thread continues to break. When I loosen the top tension adequately low, to run a sensitive or heavier thread, I get loops on the back. When I tighten the top tension to get rid of the looping, the thread breaks. How can I fix my tension?**A:** Looping on the underside, or back of the fabric, means the top tension is too loose compared to the bobbin tension, so the bobbin thread is pulling too much top thread underneath. By tightening the top tension, the loops will stop, but the added tension may cause breakage, especially with sensitive threads. In this case, it might be necessary to loosen both the bobbin tension **AND** the top tension. By loosening both the top and bobbin tensions, both sides of the tug-of-war become equal, allowing a good stitch without breaking or looping.

USING THE RIGHT NEEDLE

Understanding the Sewing Machine Needle

One of the most significant parts of today's home machines is often the least appreciated and most obscure - the needle. A sewing machine needle is a slender strand of metal, shaped to precision, which delivers thread to the machine to create a stitch. We spend thousands of dollars on the most advanced machines, acquire the best digitized designs, use the most lustrous thread, and the most beautiful fabric to produce our projects. But all too often this is all for naught because we either use an old, worn, damaged needle or we use the wrong needle for the fabric. Needles can be damaged by normal use. You don't have to hit a pin while sewing to damage your needle. They can become dull, bent, damaged or get misshapen eyes through normal sewing. All these contribute to frustrating thread breaks and a frayed look on your finished projects. The best advice we can give is this: When you start a new project, start with a new needle. It's the least expensive part of a superior finished project. Overall, a clean, well functioning needle will result in sharp, well-shaped stitches. Needles are inexpensive and easy to change. Keeping a good needle in your sewing machine is one of the easiest, least expensive ways to improve your embroidery and sewing projects.

Needle Points

Needles fall into three primary categories -- ball point, sharp, and rounded-sharp. It is important to use the correct needle. Ball point needles are designed to avoid making holes in knit or loosely woven materials. The cross fibers which constitute the knit or loosely woven materials are relatively far apart as compared to those in tightly woven materials. If a knit strand of thread is cut with a sharp needle, it produces a hole that will enlarge when the loose fibers pull back from the cut. To prevent this, the ball point needle is designed to push aside the individual strands of the knit. This assumes that the ball point needle point is in good condition. Sharp needles are designed for woven fabrics. Because of the tightness of the weave, individual cut fibers will not pull away and make holes. For this exact reason it is important not to use ball point needles on wovens. The blunt force of a ball point will tear through the fibers and actually pull them in the process, resulting in uneven, irregular embroidery and damage to the fabric. Sharp needles can be used on all wovens as well as dense fabrics such as leather, vinyl, canvas, etc.

QUILTING MYTHS

Busting Myths Left and Right

When it comes to thread, technique, sewing, and quilting, there's a lot of hearsay and myths which are passed to each other. Some are propagated purposely due to a financial motivation (such as mislabeling products), others by misinformed professionals including store sales staff and repair technicians, and most by innocent people just passing on what they have heard. Below are the top five myths that we've heard and the corresponding facts to prove their fallacy.

Polyester thread will tear my quilt fabric.
This is absolutely not true. Many years ago, when Hanes had a strong marketing budget for their cotton t-shirts, I called their customer service department and asked them what type of thread was used in their cotton shirts. I was passed around to a few different people and finally spoke with a department head. They were suspicious why I was asking such a strange question. I explained to them that I was a thread guy and had genuine interest in learning more about fibers. They told me that it was a polyester thread used to sew their 100% cotton shirts together. This is the case with most cotton clothing; polyester threads are used for sewing the materials together. Think of how much wear and tear your clothes go through and rarely, if ever, does the fabric degrade while leaving the polyester thread in the seams untouched.
If you have attended one of our Thread Therapy seminars, you have seen hands-on proof that this is a myth. Thread tearing into a fabric has nothing to do with the thread fiber type but with the strength of the fibers (both in the thread and in the fabric). Some cotton thread (such as glazed cotton) can be stronger and more abrasive than polyester thread.

My machine repair person said that I must use only ____ brand/type of thread.
Not true. Some have been told to use only cotton thread. Others have been told to use only polyester thread. I'm sure the person who says this means well. He/She probably just finished cleaning a machine full of horrible lint or other problems and intended to advise the owner to use a better thread. The advice may be spoken out of frustration or misinterpreted. Imagine a car company saying you must use only Shell brand gasoline because other brands will damage your car. It does not make sense. Quality is the key, not the type. Your machine is made to accommodate many types and sizes of threads. With the proper needle and tension adjustments, your machine should run any high quality thread. Don't be stuck on one channel with a single thread type.

Using prewound bobbins will void my warranty.
Not true. Similar reasons as the myths above. I personally checked with machine companies and using prewound bobbins will not void any warranty. Most machine companies sell prewound bobbins with their branding on the packaging. If a prewound bobbin actually voided warranties, it would be a poor business decision for machine manufacturers to also sell prewound bobbins. We LOVE sewing and quilting with prewound bobbins. It is the ultimate convenience and I find that I can get much more done without having to stop and wind my own bobbins. Prewounds also have 20-50% more thread content on them compared to a self wound bobbin. This is because of the high tech machines used in the winding process. Choose quality bobbin thread.

You must always use a 3-ply thread.
Not true. In most cases, a 3-ply thread is stronger than a 2-ply thread. However, if the 3-ply thread is a lower quality product, it is possible that a high quality 2-ply thread is stronger and preferred for specific uses. The number of plies is not the critical point. The quality of the raw material and the processing techniques together determine how good a thread is. For example, consider piecing thread. The goal when piecing is to make a smooth seam without any bulk. A thread with occasional slubs (clumps of excess thread or lint wound into the thread) will not create a smooth seam. A heavier-than-necessary thread will make a bulky seam. If you have a high quality smooth, slub-free, and adequately strong 2-ply cotton, the seams will lie flat, the points will meet, and there will be no bulkiness in the seams. The same is true if using a high quality 3-ply thread that has a tight twist, it can be the perfect thread for piecing. Quality is more important than the number of plies.

Titanium-coated needles are so strong, that instead of the needle breaking when under force, it will break your machine.
Not true. If using a Titanium-coated needle posed a risk to a sewing machine, the majority of sewing factories around the world which sew any garment, upholstery, quilt, or textile wouldn't use this modern marvel. Titanium needles are not made from Titanium, they are made from high-strength steel and coated with a thin layer of Titanium-nitride. This layer is almost like a ceramic substance and only 3-5 microns thick. It doesn't add any breaking/tensile strength, but does increase the life of the needle several times due to advanced abrasion resistance

Bad Habits Quilters Need to Quit

Have you heard the story about the woman that every time she makes a roast she cuts off the ends because that's the way she saw her mother cook it? The truth was the mother had too small of a cooking pan and cut the ends to accommodate. Sewing and quilting can be like this too. You're taught or observe someone doing something and figure that's the way to do it. But there are some sewing and quilting habits that could be hindering your sewing experience. Here are nine habits we recommend quitting:

Not organizing your fabric scraps
Will you ever use fabric scraps if you can't even tell what you have? Our favorite method is to organize scraps by colors. If you don't have them organized, you might as well throw them out because they won't be used and they're taking up precious space!

Too much criticism
Do you nit-pick and over-analyze your stitches and points? The best advice to receive when you find yourself doing this is to stop. Stop the criticism and the "if only". You should start by celebrating the fact that you actually made time to sew! Congratulate yourself for finishing a project and be happy that you created something that didn't exist before.

Cutting the same place on your mat
Want a quick way to wear out your cutting mat? Always cut at the same place. Mats need time to heal and cutting at the same position each time is a sure way to wear it out quickly. Move your cutting line regularly, so you are able to use the entire mat and get more life out of it.

Sewing over pins
Sewing over a pin can cause problems. Needles may bend, dull, or worse—break. If you have a habit of sewing over pins because you haven't experienced issues yet, I recommend you stop before you experience a problem.

Not maintaining your machine
This is the biggest no-no on the list. If you want your machine to stitch well, take care of it. Clean your machine regularly. Change the needle when you see stitch quality decrease or hear a gentle thud sound (that's a cue that your needle is becoming dull). Take your machine to the machine repairman for a service once in awhile. Be good to your machine and she'll be good to you.

Unthreading the machine incorrectly

We've all heard that you need to unthread your machine in the same direction as cutting it. The sentiment is that if you pull your thread against the flow, you could end up leaving grooves along the thread path. I haven't experienced this myself, however, I've heard from friends that swear their machine required maintenance after one-too-many times of unthreading the machine incorrectly. So I've decided to play it safe and unthread in the same direction as threading. I snip the thread coming right off the spool and pull from the needle.

Using dull cutting tools

This is a no brainer, but sometimes you just hope that the rotary cutter will make it a few more cuts or that the frayed fabric edges from your shears aren’t that bad. Sewing is much easier with crisp edges and choosing to use high-quality cutting tools can help alleviate a lot of frustration and save time. It's much cheaper to replace a rotary blade than spend the time required fixing a poor cut on your fabrics.

Using low-quality thread and fabrics

You knew this was coming! Low quality threads throw a lot of lint in your machine, break, skip stitches, and aren't much fun to stitch with. Similarly, fabric quality can affect how long your quilt will last and how well the stitches form. A low quality fabric has fewer warp and weft yarns, isn't as dense, and may not be colorfast. Our recommendation to everyone who sews is to buy the highest quality fabric, thread, and notions one can afford. Using high-quality products will make your sewing experience more enjoyable and mitigate problems which can be easily avoided.

SILK THREADS FAQ

APPLIQUE

Frequently asked questions about silk threads

Q. I was told that Silk is really strong, even the strongest thread that is made and it will tear my fabric. Is this true?
A. This is not true. I can only think of one scenario would these could be the outcome and it's not plausible. If you use a very heavy silk thread and a weak, flimsy fabric, the thread could cut through the fabric. But this wouldn't happen because you're using silk thread. It would happen because you have a very thick thread and a weak fabric.

Q. Do I have to match the fiber of my thread to the fiber of my fabric? For example, do I need to pair a silk thread with silk fabric and pair a cotton thread with cotton fabric?
A. You do not need to match fiber types with threads and fabrics. Keep in mind that using the proper needle size for the top thread (depending on thickness of the top thread) and minor adjustments to tension may be necessary to obtain a perfect stitch.

Q. Are Superior's Silk Threads machine washable?
A. Yes! Our Silk threads are colorfast. They will retain their color and not bleed when washed with proper care. Please keep silk threads out of direct sunlight, as U**Q.** What is the difference between filament silk and spun silk?
A. Filament silk thread is made from multiple twisted strands of silk. The silk cocoon is unwound to form one long continuous fiber and then tightly wound around itself to create a multi-filament silk thread. Spun silk thread consists of the tails, or sections of the silk fiber, which were broken from the single continuous filament fiber and then spun together. Filament silk is the premium silk and is generally stronger and has a better sheen. All of our silk threads are made from filament silk.

Q. Why would I use Superior's silk threads for my quilt over a fine polyester thread, like MicroQuilter or Bottom Line?
A. It's a personal choice to choose what type of fiber you want to use in a particular project. Silk has several properties that make it a popular choice for applique, binding, and quilting:

- Smooth finish and lint free
- Very strong, even for how fine silk thread can be
- Silk is colorfast
- Silk has a beautiful natural sheen and colors are vibrant

Q. Because your Kimono Silk 100 wt. thread is very fine, will it break in my sewing machine?
A. If you are using the proper needle (either a Topstitch #70/10 or Microtex #60/8 depending on the application) and have made any necessary adjustment to your machine's tension settings, our Kimono Silk will stitch like a dream. Despite being such a fine thread, Kimono Silk is a popular thread for longarm quilting.V exposure to thread can have a degrading effect over prolonged exposure.

ELIMINATING BIRD NESTS

What Causes Bird Nests?

Unlike the beautiful bird homes outdoors, experiencing bird nests while sewing is anything but cute! Bird nests occur when thread bunches up underneath the needle plate, causing broken threads, skipped stitches, and uneven tension. This is typically caused by the tension balance being out of whack or the top thread is not threaded correctly. Here are a few situations which can cause pesky bird nests:

If your bobbin tension is too loose, extra thread may unwind from the bobbin, which causes a buildup of thread underneath the needle plate. Try tightening the bobbin tension by turning the tension screw on the bobbin case a quarter turn clockwise.

The top thread isn't threaded correctly. Many times when I experience bird nests while sewing, it's because I've miss-threaded my top thread. The likely culprit: bypassing the thread take up lever. Simply try rethreading your machine (and make sure it's in the take up lever!).

Top tension is too loose. If your top tension is too loose the bobbin thread is winning the tug-of-war and you will see excess thread build up under the needle plate. To remedy, increase your top tension in small increments.

We recommend trying one of these solutions at a time. This way you can hopefully find the exact cause of your frustration.

SKIPPED STITCHES

STITCHING SPEED

What causes skipped stitches?

Skipped stitches are usually caused by an old or worn needle. With every stitch, there is friction placed on the point of the needle and with repeated action, the needle experiences abrasion. Over time, the needle becomes dull and doesn't perform well. This results in skipped stitches.

Needles are one of the least expensive tools in our sewing kits. If you experience skipped stitches or feel that your stitch quality is suffering even when your tension is set properly, try replacing your needle. Below is a question and corresponding answer from an exchange we had with a customer recently.

Another cause of skipped stitches can be speed. If you are moving the fabric too fast on a home machine or sit-down longarm machine, you may get skipped stitches. When quilting on a longarm, especially in circular or rounded motions, slow down when making these movements to reduce the chance of skipped stitches.

Q. I am free motion quilting and every once in awhile, my thread skips stitches. I can't find a consistent pattern to it and it is quite frustrating. I don't know how to fix this and am wondering if I am using bad thread? How do I know what the problem is and what do you recommend I do to fix it? I feel ready to give up on this quilt.

A. Skipped stitches are a frustrating problem to encounter. Most likely, your needle is causing the problem. The first step to resolving is to make sure you're using the correct needle size for your thread. If you are quilting with a 40 wt. thread you should be using a #90/14 needle on your home machine or a #18 (MR 4.0) on your longarm machine. We have thread reference guides for both home machines and longarm machines which recommend the proper needle size and tension settings for Superior's threads. This is a good place to start.

.

If you are quilting on your home machine, check the thread path and make sure the top thread is threaded properly and in the take up lever. If the tension appears to be even (top and bobbin), replace your existing needle. The needle will degrade with every stitch, albeit slowly. We use and recommend titanium-coated needlesbecause they last up to six times longer than regular nickel-plated needles.

If you are quilting on a longarm machine, make sure that the needle is inserted correctly. Unlike home machine needles which can only fit one way inside a home machine's needle bar, longarm needles have a round shank and must be facing the correct way. The groove running along the shaft should be facing you (toward the front face of the machine) with the scarf of the needle facing the back machine. If the needle isn't set correctly, you may experience skipped stitches. We recommend and use Groz-Beckert needles for longarm machines.

If you have the correct needle size and style, are slowing down movement, and still experiencing skipped stitches. The problem may be within your machine. Give it a thorough cleaning and add oil if necessary. Perhaps it is time to have a qualified technician look at it and make sure your machine is operating properly.

POLYESTER THREADS

Imagine a product so versatile that it is in water bottles, clothing, carpets, curtains, sheets, wall coverings, upholstery, hoses, power belts, ropes, threads, tire cord, sails, floppy disk liners, filling for pillows and furniture, and it is also used to replace or reinforce damaged body tissue. Such is the convenience of polyester.
Polyester can be in the form of plastics and fibers. Polyester materials are the polymers that make the shatterproof plastic bottles that hold bottled water and soft drinks. And you know those fancy balloons with the cute messages imprinted on them? They are also made of polyester, more specifically, a sandwich composed of Mylar and aluminum foil. *Our Glitter thread is made with a similar mylar/polyester blend.*

The most common type of polyester for fiber purposes is poly ethylene terephthalate, or simply PET. (This is also the same substance used for many soft drink bottles.) Polyester fibers are created by extrusion, a process of forcing a thick, sticky liquid (about the consistency of cold honey) through the tiny holes of a spinneret, a device that looks like a shower head, to form continuous filaments of semi-solid polymer. Depending on the number of holes, monofilaments (one hole) or multifilaments (several holes) are produced. These fibers can be extruded in different cross-sectional shapes (round, trilobal, pentagonal, octagonal, and others), resulting in different types of threads. Each shape results in a different sheen or texture.

Main types of polyester thread

Corespun polyester threads are a combination of a filament polyester core thread wrapped in spun polyester. It is also known as 'Poly-core spun-poly', "P/P", and "PC/SP" thread. The benefit of using a core spun polyester thread like OMNI or OMNI-V, is the added strength that the filament core adds. OMNI and OMNI-V are favorites for quilting with their matte finish and strong tensile strength.

Filament polyester is a continuous fiber thread. Some hear the word filament and incorrectly assume it is monofilament. Monofilament, which looks like fishing line, is just one type of filament thread. It is a single (mono) strand thread. MonoPoly is an example of a monofilament thread. Other filament threads are multiple filaments, which consist of two or three strands twisted together. This is the largest category of filament polyester. Multifilament strands are smooth and lint free but are not transparent. The advantage of a lint-free thread is a cleaner machine and less maintenance. The Bottom Line, and So Fine! #50 are examples of this filament polyester thread.

Trilobal polyester is a multiple filament, twisted, high-sheen continuous fiber thread. It has the bright appearance of rayon or silk, but the advantages of a polyester fiber. Triangular shaped fibers reflect more light and give an attractive sparkle to textiles.
Our Magnifico and Fantastico thread lines are both trilobal polyester threads.

Spun polyester threads are made by spinning or twisting together shorter lengths of polyester fibers. This is similar to the way cotton threads are made. These short fibers are then twisted together to produce a thread of the desired size. Spun polyester threads give the look of a cotton thread, but have more elasticity. Spun polyester is economical to produce and is usually a low-cost thread. We don't recommend spun polyester for quilting, as it is not as strong as corespun, filament, or trilobal polyester threads.

Bonded Polyester is a strong polyester thread used for upholstery applications. Since polyester has fantastic UV resistance, bonded polyester is commonly used for outdoor furnishings and automotive upholstery. A special resin coating adds strength and helps reduce friction when stitched at high speeds.

Polyester fibers recover quickly after extension (the term elongation describes the stretch and recovery) and absorb very little moisture. Polyester is heat resistant (dryer and iron safe), with a melting temperature of about 480º F (in comparison, nylon starts to yellow at 350º F and melts at about 415º F). Polyester fibers are colorfast, resistant to chemicals, and can be washed or dry-cleaned with most common cleaning solvents.

COTTON THREAD QUALITY

How can you tell the quality difference between cotton threads?

Q. How can I distinguish the quality of a cotton thread? I have been using a spool of cotton that was given to by a friend as a gift and it seems to be very hairy and leaves a lot of lint when I sew. I don't know if this happens with every cotton thread or if it's just this brand of cotton thread that I'm sewing with? I read online that Superior's cotton threads are supposed to be high quality and wonder if the brand of thread I'm using isn't high quality?

A. It sounds like the cotton thread you are sewing with is not made from the highest grade of cotton and perhaps has not undergone advanced processing to eliminate the extra lint associated with cotton fibers. There are three grades of cotton and the majority of cotton thread is made from the lowest and medium grades.

- Lowest grade = Regular staple (or short staple) cotton. Thread made from this grade is never marked as regular or short staple. It is labeled only as 100% cotton or mercerized cotton, because having a short stapled cotton thread is nothing to brag about Short staple cotton threads will have a lot of lint and are weaker than regular and extra-long staple cotton threads.
- Medium grade = Long staple cotton. Thread made from this grade of cotton will be labeled as long staple. Long staple cotton threads will have less lint than short staple cotton threads.
- High grade = Extra-long staple cotton. Thread made from this grade of cotton will be labeled as extra-long staple cotton. This is currently the highest quality cotton fiber available and is something that should be bragged about.
-

Why does knowing the staple length matter in terms of quality? A staple (an individual strand of cotton fiber) is the source of strength for cotton. The longer the staple, the fewer starts and stops the thread has, resulting in better stress management. There is a direct correlation between the strength of a cotton thread and the length of the staple. Another benefit of extra-long staples is the less lint that will be displaced when sewing. Chances are that the cotton thread you were gifted is a short staple cotton thread. Choose extra-long staple cotton threads for a Superior sewing and quilting experience.

SHELF LIFE OF THREAD

PROCESSING

How many years does thread last?

Q. I have inherited a rather significant thread stash from a friend. It's a grand selection with a wide range of cotton threads and some are even wound onto the old wooden spools that make me think of my grandmother's sewing area. I'm worried about using old thread and having trouble with it as it runs through my machine. How can I tell if the thread is still OK to use? Is there a shelf life or a recommended period of use for thread?

A. A good quality thread that is produced today will last much longer than thread which was produced 15 or 20 years ago. Even the best quality cotton thread of a generation ago did not have the advanced processing techniques available to us today and it would probably be best to not sew or quilt with old thread that exists today.

However, a high-quality cotton thread that is manufactured today, like MasterPiece and King Tut, will probably be fine to use in 40 or 50 years from now. Why will threads that are manufactured today last longer than threads manufactured 20 years ago? The difference is due to the advancements in spinning, dyeing, and twisting technology and the evolution of genetic engineering better cotton plants. Because cotton is a natural fiber, it will degrade over time. A good test to check whether or not the cotton threads you have been given are OK to use in your machine is to hold about a one foot section between both hands and pull apart. If the thread snaps *(you should feel a nice, crisp break)*, then it is OK to use. If the thread just separates and pulls apart easily (think of pulling a cotton ball apart), we don't recommend using it.

As for polyester thread, the color may fade over the years with exposure to sunlight, but there is no evidence that the thread deteriorates like cotton threads, so it's safe to say that synthetic fibers will last longer.

MATCHING BOBBIN THREAD

TENSION

Does my top thread need to match by bobbin thread?

Sewing machines are factory preset to have the top and bottom thread form even stitches. If the top and bottom threads are identical in fiber and weight, adjustments are most likely not necessary. However, if we use cotton thread on top and polyester thread on bottom, 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.
Here is the most important bit of information in this article: it is OK to use different weighted threads top and bottom. It is also OK to use different fibers top and bottom. Therefore, it is OK to use a polyester 40 wt. thread on top and a cotton 50 wt. on 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.

BOBBIN FAQS

BOBBIN TENSION

Frequently Asked Questions about Bobbins

Q. Why should I use prewound bobbins when I can wind my own?
A. Good prewound bobbins are wound by high-tech machines which provide a smooth, uniform wind. The result is much more thread on the bobbin than a self-wound bobbin. Whether you're in the middle of an embroidery design or a quilting or sewing project, having to stop to change the bobbin is always an inconvenience. Prewound bobbins are game changers for dedicated sewists and quilters. The convenience of popping in a new bobbin without spending time to wind it is worth every penny.

Q. What does Class 15, L-style and M-style mean?
A. These are the three most common sizes of prewound bobbins. Some longarm machines (A-1, Gammill, and Handi Quilter) take the M-style bobbin, which is larger in diameter than both L-style and Class bobbins. L-style bobbins and Class 15 bobbins are nearly identical in diameter (Class 15 bobbins are about 0.5 millimeters larger in diameter). L-style bobbins used to be the most popular bobbin style but with the abundance of rotary bobbin mechanisms and drop in bobbins, the Class 15 bobbin style is now the most popular bobbin style for home sewing machines.

Q. Why are there three popular sizes of bobbins plus many unique bobbin sizes for sewing machines? Why isn't there a single, universal bobbin style?
A. Machine manufacturers make what they believe is the best bobbin for their respective machines. Some are made to fit only their machine and are not interchangeable with other machines, while others use a common bobbin style which is interchangeable with other machines. If a bobbin style is exclusive to a specific machine (think of the new Bernina 7 and 8 series, Pfaff Creative series, and several Singer machines), generic bobbins generally do not exist. We don't recommend choosing a machine based solely on the bobbin style. Machines should be chosen on what is most important to you, whether it's technology, number of stitches or features, or footprint. However, if your sewing machine or longarm machine uses one of the three popular bobbin styles, you have an added bonus of being able to use prewound bobbins.

Q. My dealer told me not to use prewound bobbins. I've even heard they will void my warranty.
A. This is 100% untrue. It's a myth. Today, almost all major machine companies sell prewound bobbins.

Q. Is there a difference between plastic-sided and cardboard-sided prewound bobbins?
A. Either type is fine. Plastic bobbins are reusable; cardboard bobbins are disposable. Because the plastic-sided bobbins are so smooth, they may continue to spin even after your machine stops and cause backlash. There is talk of some people experiencing backlash with plastic-sided bobbins and complaints fro others that cardboard-sided bobbins don't work with bobbin sensors. Our recommendation is to try them both. Find what works well for you and your machine.

Q. Is there a top side and bottom side to a bobbin?
A. Yes, there is a top side to a bobbin depending on your machine. If your machine specifies that the thread needs to unwind with the bobbin rotating in a clockwise direction, hold a bobbin flat in your left hand and pull the end of the thread with your right hand, unwinding the bobbin. As you unwind the bobbin, the bobbin should rotate in a clockwise direction. If the bobbin is rotating counter-clockwise, turn it over and the direction will reverse. By properly placing the bobbin in the bobbin case, the bobbin system can work as designed. If you use machine-branded bobbins, the logo mark on the bobbin is usually the top side. In summary, both sides of the bobbin are equal, but thread is usually meant to unwind in one direction. Watch our video on how a bobbin works.

Q. Should I use a polyester thread or a cotton thread in the bobbin?
A. It's a matter of personal preference. Polyester threads usually have very little or no lint. Depending on the quality of the cotton thread, the thread may create very little lint or an abundance of lint. When piecing, we recommend cotton thread due to its high heat tolerance and how it tends to grab the fabric to keep a tight stitch. Our Super Bobs Cotton prewound bobbins are wound with MasterPiece Egyptian-grown extra-long staple cotton thread.

CAUSES OF THREAD SHREDDING

THREAD QUALITY

Matching Needle Size to Thread Weight

When sewing, using the correct needle type and needle size for the top thread thread is as important as having a perfectly balanced top and bottom tension. If too small a needle is used, the thread may fray, shred, or break. There's not too many things more frustrating than having the top thread constantly break while sewing or quilting.

With many different needle types and sizes available, how do you know which needle to use with a particular thread? We've made it easy for you to navigate the options with our Thread Reference Guides, available for both home machines and longarm machines. Within these Thread Reference Guides, you will find information on the proper needle size, recommended bobbin thread, and recommended tension settings for all our threads. Our favorite needle to use on a home sewing machine is our Superior Topstitch needle. The Topstitch needle style has a longer eye, deeper groove, and rounded sharp point. It's the go-to needle for the quilting pros and we understand why! The larger eye allows for greater tolerance of the top thread while a stitch is being formed and the deeper groove keeps the thread against the needle, avoiding excess friction as it rubs against the fabric.

When a thread is shredding or breaking on your machine, find the point of origin. It will probably be at the needle or just after the tension disc area. If the problem is at the needle, change the needle to the next size larger (if using a #80/12 needle, change to a #90/14 needle). The most common reason why thread shreds, frays, or breaks at the needle is because the eye is too small to accommodate the thread, causing stress and friction, which results in shredding or breaking the top thread.

COLORED NEUTRAL COLORS

BLENDING COLORS

Neutral colors compared to bold colors

Choosing thread colors is a complicated process. I love bold colors and my gut reaction is to choose colors that have a strong presence. My go-to colors for my favorite Hawaiian shirts are red, yellow, green, blue, purple, black, and white. I look at my closet and think that I've got all the colors in the spectrum and consider that I've got all the colors down pat. A few years ago, Heather, my wife, and I were working on color combinations for a new thread line. Heather created a variegated beige-colored combination which, upon seeing it, I commented, "That's nothing great. Who would want those colors? They're not bold enough." She occasionally reminds me of my comment because that particular color has always been one of our best selling King Tut colors, #920 Sands of Time. That's why we refer to her around the office as *Mother Superior*.

Neutral colors are subtle in both shade and tone, blend well, and do not compete against the surrounding fabric or other threads. They often have a chameleon-like quality which makes the thread appear as if it changes or blends with surrounding colors. Neutral colors put the focus on other colors, in the case of quilting, the focus is on the fabric. Although neutral colors are often described as blacks, whites, grays, and browns, this list is not complete. Neutral colors can exist in every color group including reds, yellows, greens, blues, and purples.

The Bottom Line polyester thread is an outstanding example of a thread line that contains excellent examples of neutral colors. It is an extra fine thread and is suitable for quilting, applique, binding, bobbin thread and detail quilting. In many of these applications, a blending or neutral color is preferred so the thread can play a supporting role in the quilt instead of being the central focus. If top and bobbin tension aren't perfectly set and the bobbin thread pulls through becomes visible on the top, a neutral colored bobbin thread will blend and will not be seen. If the desired quilting effect is to have the fabric, quilt blocks, or pattern be the central focus of the greater quilt and the thread should blend into the background to allow the stitching to accent the fabric, a neutral color will do this very well.

Bottom Line was designed with neutral colors in mind. For example, the red colors appears rather dark when looking at the spool or cone of thread by itself; however, when a single strand is laid on top of medium to dark red colored fabric, the thread almost disappears. One of our favorite neutral colors, #623 Silver, looks almost semi-transparent and blends beautifully when it is stitched into almost any color of fabric. The image above shows how Silver seems to absorb the color it is placed against. Our medium green/brown color of Bottom Line, Taupe, blends well for for medium-toned fabrics. If you have a deeper or darker-colored fabric, choose a darker color of Bottom Line to have it blend. The same is true for lighter-colored fabrics. Each color of Bottom Line, whether spool or cone, will blend will within their respective color groups.

We enlisted the help of famed quilter Libby Lehman as we created twenty five additional colors of Bottom Line several years ago. We have over fifty colors that are prime examples of neutral colors. As a smooth, 60 wt./2-ply polyester thread, Bottom Line sews like a dream. Perfect for the top thread, bobbin thread, or both. The next time you want a neutral color, try a blending color that matches the same color tones as your fabric. Venture out and try a colored neutral thread.