

Charming Station

Quilt Project

Machine Quilting 101



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Machine Quilting

Years ago, making a quilt top was only a small part of the quilt making process. The major part was in quilting the three layers together (the backing, the batting and the top). The only real choice was to sew thousands and thousands of little quilting stitches by hand over the entire surface of the quilt. This was often done by more than one person and was a major social event that became known as a "quilting bee".

Today, we have very little time to sit down and put that kind of work into a quilt - especially if it is going to be a gift that we give away. Fortunately, there are very acceptable alternatives to this old fashioned method.

Quilting a Quilt

There are basically three ways to quilt a quilt:

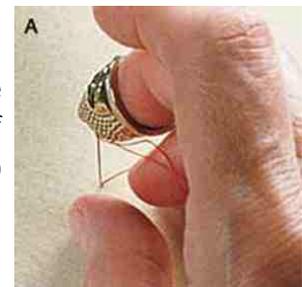
Tying

This is exactly what it sounds like. Using a very strong thread or yarn, knots were tied in even intervals all over the top of the quilt to hold the backing and batting in place. The knot technique is known as a "Surgeon's Knot" and should hold for several decades. This is the fastest way to finish a quilt but was usually only done for something that would be a utility quilt, not something that would be the top bed cover or given as a gift. The disadvantage is that the yarn or thread used would often break down after 30 years or so and wash out, leaving big holes.

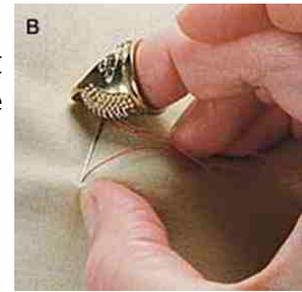
Hand Quilting

This is a skill that is learned over time. The object of hand quilting is to have perfectly even stitches across the top of the quilt. That means that the space between each stitch has to be the same size as the stitch itself.

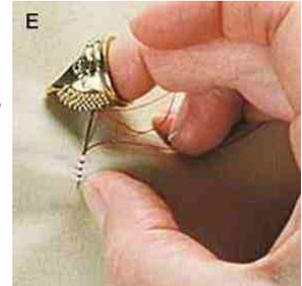
If you have ever sewn anything by hand using a running stitch, you'll notice that the spaces between the stitches on the top are either bigger or smaller than the stitch itself. That's the nature of a running stitch - your needle goes in at an angle and you try to cover the length you are sewing as quickly and easily as possible.



In hand quilting, the needle goes straight down with only the tiniest part of the tip going through all layers. It is then rocked so that the tip comes right back up creating the even space size.



Experienced hand quilters can rock the needle so that several stitches are piled on there at one time before pulling the needle through and out. Experienced hand quilters can develop their skills to get 10 to 12 stitches per inch.



This picture gives you an idea of how tedious this process would be, especially if you were making a full size bed quilt!

Machine Quilting

A lot of people think that machine quilting is a late 20th century innovation but they would be off by 100 years! There is a quilt in the museum of the Daughters of the Revolution that has been completed in 1893. This quilt was a sheet of vivid red fabric with white machine quilting all over the entire surface - all done on a machine. It had vines, scrolls, and an entire family tree spelled out in a very elaborate script.

Considering that this would have been done on a sewing machine that was powered by foot on a treadle sewing machine, this was an amazing accomplishment!

Imagine trying to maneuver a quilt around on the top of a machine like this, and keeping a steady rhythm going with your feet so that it would sew at an even pace.



Because of some recent innovations, machine quilting has gotten a lot easier to do and the results can be just as outstanding as a hand-quilted quilt.

Two Choices for this Project

For this first quilt project, we are suggesting that you try two practice methods for quilting. These will give completely different results and that becomes part of your decision.

- One style is relatively easy, sewing straight lines. This is called “Stitch in the Ditch”.
- The other style is a technique that you will need to practice a little bit before doing it on your quilt project, but once you get the hang of it, it’s fun and easy to do. This second style is called “Stippling”.

Each of these choices requires your machine to function a little differently. To figure out how each works, we will make several sample quilt sandwiches so that you can try out the techniques.

- Get out some scrap fabric - any old cottons will do. It doesn’t matter what the pattern or color is. It might help you to use plain old muslin so that you can clearly see the stitching you are about to do but if you already have scrap fabric, use that up.
- Cut 9 squares that are 6 inches square. Sew these together so that you have three rows and three columns. Use $\frac{1}{4}$ ” seams and press the seams to one side, just like you did for the quilt top.
- Do two “tops” like this.
- You will need some batting that fits the size of your squares sewn together and some scrap fabric for the back as well.
- Using your curved safety pins, create two quilt sandwiches with a backing, some batting and the pieced squares on the top just like you did for your actual quilt project.

In order to successfully quilt your quilt, you need to follow the instructions that come with your batting. If your batting says you must quilt it no more than 3 inches apart, that’s what you need to do. Many batts today say you can quilt it 8 to 10 inches apart. If you don’t follow the manufacturers instructions, when you wash your quilt, the batting could shift or bunch and that would ruin all of your hard work.

For our project, we are going to assume that you can quilt about 6 inches apart.

Quilting Thread

For machine quilting, you will want to get a spool of thread that is specifically for machine quilting. This is really important. Hand quilting thread sometimes has a coating on it to make it slide through the fabric and batting more easily but this coating is deadly to the tensions on your machine.

Like everything else about quilting, various quilters have their personal preferences. I like to use Mettler's Silk Finish Machine Quilting thread. The silk finish does not harm your machine. This is a 50 weight 3 ply quilting thread, made of 100% Egyptian long staple and mercerized cotton. The thread is color fast and fade resistant. The ads for this thread will say that it is suitable for hand or machine quilting. I have used it for both. Another good brand is YLI but I haven't used that one personally.



Description of Quilting Thread

Threads are described by a number that is designated according to size. The lightest weight thread has the highest number. The number on a spool that is 50/3 is telling you it is three-ply 50 weight thread. A 50/3 sewing thread is finer than a 40/3 quilting thread. Most of our embroidery thread is a 40 wt thread; some manufacturers make a 30 wt thread which is even thicker.

Since we are sewing by machine the weight is not as big an issue as it would be if we were sewing by hand. I would avoid 30 wt for this project but either 40 or 50 would be fine.

Color - Front

For new quilters, one of the first surprises is about the colors you choose. In most cases, you want the stitching to blend into the quilt and give it definition through texture rather than defining it with the quilt pattern itself. So if the background of your block is white, then select white thread. If the background of your block is something else, find something that matches or is just a shade or two lighter than an even match.

Color - Back

The second surprise is that you have to decide what color to use on the back of the quilt. It does NOT have to match what you are using on the front! Rather, you want to find a color that blends in with the predominant colors in the fabric on the back of your quilt. This way the stitches won't show as much.

Bobbin Thread

Your bobbin thread does not have to be a 40 or 50 wt quilting thread. Since quilting thread is more expensive than regular sewing thread this can be a consideration in making your choices. I like to use the Mettler 50 wt quilting thread on the top and regular sewing thread (Coats and Clarks dual duty) on the bottom. That usually gives me a pretty wide range of colors to choose from when matching the bottom thread to the primary color of the fabric.

- Once you decide on the color and thread to use in your bobbin, go ahead and fill about 3 bobbins with this thread. We'll use these on our practice samples.

Top Thread

- Once you have decided on the color and type of thread you plan to use on the top, go ahead and thread your machine with it.

Setting up your Work Space

The rule of thumb here is: the larger your quilt, the more space you need. In addition, you need to find the best ergonomic setup you can get. This is not the time to perch on a bar stool at the end of the kitchen table!

Chair

A good chair is a must but there is no one chair that is perfect for everyone. Just as we are all different sizes, there are chairs that work better for some and not others.

You should be able to sit back in your chair, not just on the front edge. Ideally, your chair should have a pneumatic lift that allows you to set the height exactly where you need it.

There are some choices in the kind of seat on the chair. An articulating seat has a mechanism that lets it sit level or tilt down in the front. A waterfall seat curves down at the front edge behind your knees reducing the pressure on the back of the leg. This is important to your circulation, especially if you sit for a long length of time.



Armrests are a personal choice. When quilting, I use a chair that does not have arm rests. I have found for my size and body type that the arm rests on a chair keep it too far from the machine and I have to sit forward on the chair to quilt. If you are doing this, you are putting extra pressure on your back. If you find a chair that is comfortable and that the arm rests are neither too close nor too far away, then it doesn't matter.

A good chair should also have lumbar support for your back. If this is adjustable that is even better.

When sitting, your knees should be slightly lower than your hips and hips should be fully "in" the chair with your back against the back of the chair. Position your legs out in front of you at a comfortable angle with your feet touching the floor. If your sewing table height is not adjustable and the chair is, you may need to raise the chair to fit the table and put a footrest under the chair to support your legs.



Sewing Surface & Sewing Table

There is a difference between the sewing surface (needle area) height and the sewing table height particularly with free-arm machines.

- If your machine is set into a table or a cabinet, the sewing surface and table height are one in the same.
- If your machine sits on top of a table, then the sewing table height is lower than the sewing surface (needle area) height.

We talked about this a bit in lesson 4 and this is a good time to review your options.

Free Arm, Regular or Extended Table

Depending on the brand of your sewing machine, you may have very little space around your throat plate.

If you have an attachment that you removed so that your machine sews as a "free arm", you want to put it back on the machine now.

The more space that you have that is level with the throat plate, the easier sewing for quilts will be for you.



Nice to have but a little expensive:

For most machines you can get a plexiglass table that can be set to the same height as the bed of your machine. This gives you a much greater “flush mounted” sewing space. The picture here shows one of these tables with some notions under it (since it is clear plexiglass you can see through it).

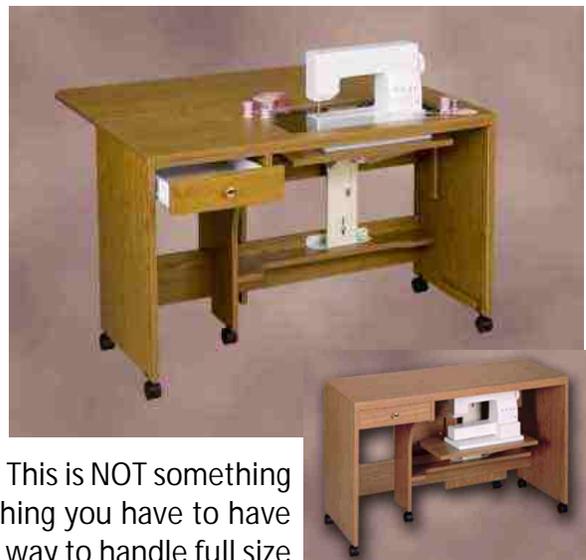


The advantage to a extended table like this is that you have a much larger, completely level sewing space in front and in back of the needle.

These tables are nice - but a little expensive since they have to be custom fit to every individual machine. You do NOT need to buy one for your first quilt. After you finish this first quilt, if you decide to continue quilting, you might want to consider one of these extended tables. These run around \$49.00 to \$79.00 depending on your machine, the size of the extension you order and the dealer you choose.

Nice to have but REALLY REALLY expensive:

There are all kinds of tables and cabinets available for quilters. One top of the line cabinet from Horn has an extension on the back (like a drop leaf on a dining table) that you can set up for the bulk of your quilt, a flush mounted plexiglass piece that fits around your machine and extra space on the front and left as well. This particular cabinet also has an “air lift” system that allows you to lower the machine down out of the way if it is not in a dedicated sewing room.



This is certainly nice to have but runs about \$1000. This is NOT something you buy for a first quilt and not necessarily something you have to have even if you continue quilting. It is, however, a nice way to handle full size bed quilts.

Build Your Own

There are other options of course. If you have someone around who is handy, they could build you a little platform from wood that will add table top space. Or you could check out a flea market, buy an old sewing machine in a cabinet, remove that old machine and put in your current one. Any option that gives you more space that is level with the throat plate is a good option. The key here is that the surface must be very smooth so that your fabric will glide across it with no snags.

Putting the Chair and Table Together

It is important to find the proper sewing surface height. Then you can raise or lower the table or cabinet so the needle area is at that height.

To find the proper sewing surface height, sit in your chair (away from any table), hold a magazine in front of you and read comfortably. Have someone measure from your elbow to the floor and add 5.5" to 7" to that amount (the additional height is the difference between where your elbow is and where your hands will fall when sewing).

Then adjust your chair or table (or both) to get the sewing surface to that height. When you are sewing, you want to be sitting up as straight as possible, and keep your hands straight at the wrist, rather than bent down.

To Tilt or Not to Tilt

Some quilters find it easier on their neck and shoulders if their machine is tilted toward them slightly. Although there are gizmos on the market that you can buy to do this, I recommend getting a couple of "super cheapie" door stops and placing them under the back of your machine. You can adjust the level of the tilt by how far under your machine you push them. This way, you can decide if you like having the machine tilted at all without spending a lot of money.



I prefer a level, flat surface so that I have a lot of room to maneuver the quilt around. Using any kind of tilt cuts into that surface area so I prefer not to tilt my machine.

Get out the Gloves

We mentioned in an email that you would want a pair of gardening gloves. These are absolutely imperative. There is an “official” pair of quilting gloves but if you look closely what you will see is that these are just a knit glove with little rubber dots on the palms and underside of the fingers. These are usually \$8 to \$10 per pair in a quilt store.



What works just as well are regular gardening gloves (and they are a lot prettier!). They come in all different patterns and colors and they have the same rubber dots on the palm and fingers.

As of this writing, (May, 2009) our local CVS Pharmacy has these gloves in their \$1.00 bin!



The reason for these gloves is that you are going to be guiding your quilt sandwich around and through your machine. If you have to grasp it with your hands, you will be putting unnecessary tension on your neck and shoulder muscles. You may not feel it at first but over time, this can become very unpleasant. When you wear these gloves, you can rest your hands lightly on top of the quilt and the rubber dots do all the work. It's also easier to reposition your hands when you are just resting your fingers on top rather than grabbing hold of the sides and that will speed things up for you as you get going.

Really Dorky Little Tip...

I found that I have to slip a glove off periodically while quilting in order to move a safety pin out of the way. To keep the gloves handy when I did that, I got a 4 foot length of rat tail (you could use regular yarn or ribbon) and pinned each end to the cuff of a glove. As I'm working I put that around the back of my neck (just like a 3 year old with her mittens strung through and hanging out of the sleeves of her coat!). When I slip off the glove, I know it isn't going anywhere - it just dangles on the end of that string until I put it back on.

Alternative

You can also use Rubber Finger Tips for the same effect. These cover only your finger tips but give you the same kind of easy grip. If you buy them at Joann's, they are in the quilters' notions. They are also super cheap at an office supply store (Staples, Office Max, etc.)

I started with these but could never keep track of where 8 or ten of them were at any moment, so using gloves is just simpler for me.



You can choose whatever is best for you. Some people find that anything on their hands or fingers is annoying especially when you have to take it off to undo safety pins.

Practice Square 1

The technique we are going to use on this practice square is simply called “Stitch in the Ditch”. The object here is to sew straight lines right at the seam line of the blocks. If you get it perfectly right, your stitches will sink in along that “ditch” and you won’t really see any stitches at all. It’s not quite as easy as it sounds though since you have to cross over a lot of seams in this process.

Setting up your Machine

At the end of the last lesson, we mentioned a Walking Foot. This device hooks to the part of your sewing machine that holds the needle and moves the presser foot up and down more than the regular presser foot. Each machine uses a different type. Some are built in and some are an add-on like the one shown here. This is the one I use with my Bernina sewing machine.



- If you have a walking foot, install it now. Refer to the instructions that came with your machine or with the foot for getting it installed correctly.
- If you don’t have a walking foot, check your machine’s manual and see if you can change the pressure on your presser foot. If you can, lighten it a bit so it doesn’t push down as hard as usual.
- Load the bobbin you intend to use.
- Thread your machine with the quilting thread you have chosen

Reasons for a Walking Foot

When you are sewing a seam for a garment, you have two layers of fabric pressed together and your sewing machine is calibrated to move those two layers through under the needle at an even pace. In a quilt, you have the added (puffy) layer of batting in the middle. The way your machine is setup, the feed dogs are going to push the bottom layer of fabric through while the presser foot but the regular presser foot is going to press down (too hard) on the top layer of fabric because of the batting. If you don’t make any adjustments, this will causing the backing to shift and pucker.

The walking foot actually lifts the presser foot for a split second as the needle goes up, releasing that extra pressure and allowing the three layers of the quilt to feed through much more evenly. The thicker your batting is, the more important this feature becomes.

Test Sewing

Position of your hands

Since you have your gloves on (or the rubber finger tips), as you do this machine quilting, rest your fingertips on the surface of the quilt. Do not grab the edges of the quilt. The tension in your arms when grabbing will quickly tighten up all the way to your neck and you will find that quite uncomfortable.

You should be able to guide the quilt through the machine with very little pressure using just your finger tips.

Position of your hands - part 2

It is very important that you keep your fingers away from the needle! As you are sliding the quilt around under the needle, there is nothing to keep you from getting too close. I have accidentally sewn my glove to a quilt top when not paying close attention.

Try to position your hands on both sides of the needle so that your fingers are about 3 or 4 inches from the needle at all times. You need to find a comfortable, safe position for your hands so that you can guide the quilt.

Try it out

If you can adjust your stitch length, make it just a little bit longer than a regular sewing seam - so that you get about 8 to 10 stitches per inch. This will make it a little easier to see what you are doing on your practice piece. I use about 8 stitches per inch on my baby quilts as well.

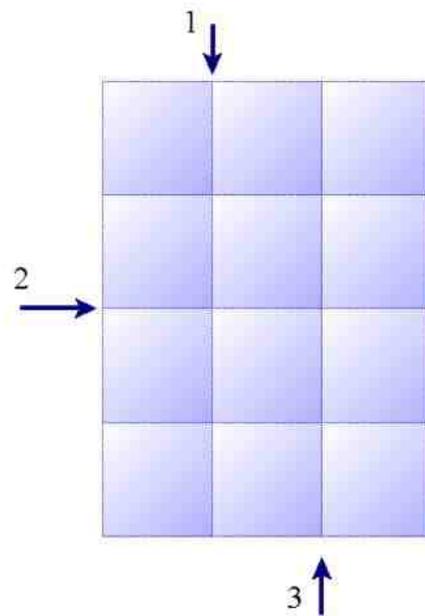
- Start at one edge of the practice squares and position it so that the seam is right where the needle will go in.
- You are going to *slowly* sew across the entire length of your practice piece along the seam line.
- Go slowly to start.
- Use your hands to spread the surface where you are sewing so that you can get to the seam line easily.
- Watch your needle and make sure it is going up and down in the seam line and not wandering away from it. Don't worry about where the foot is lined up - it doesn't matter. The important part is where the needle is going in.
- Sew across from edge to edge of the practice piece. Since this is only practice, we do not need to worry about back stitching to start and stop at the ends.

- Do not push the quilt sandwich through the machine - let your walking foot and feed dogs move it through. Use your hands only to guide it.
- Likewise, do not reach around behind the machine with your left hand to pull the quilt through either. Only guide it gently and let the feed dogs do the work.

Once you have sewn across the entire surface, remove your practice piece from the machine and take a look at your stitching. Were you able to stay "in the ditch" or did the seam wander a bit? Remember that like any new skill, it will take some practice to get it to really work easily and well.

Here are some general tips for stitching in the ditch:

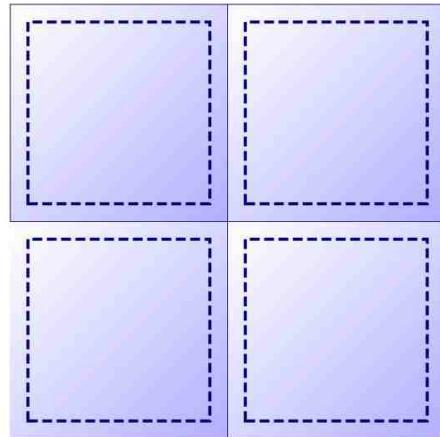
- Start on a seam that is lengthwise of your quilt top - this helps to anchor it so there won't be much stretching.
- Start your sewing on a center seam of the quilt.. That anchors the center of the quilt to the backing. In our case, we don't have a direct center seam so you can pick one on either side of the center of the quilt.
- The second sewing line should be across the middle of the quilt in the center. This anchors the quilt sandwich across the width.
- The third line show go up the next lengthwise seam in the opposite direction of the first one.
- These first few rows will help stabilize the quilt and make it easier for you to finish the remaining rows.
- Use your hands to "spread" the quilt out, exposing the seam a bit. This makes it a little easier to stay "in the ditch".



Slight Variation

Hand quilters usually want you to see the stitching so they would probably not sew directly into the seam line. They would sew 1/4" away from it to give a shadow effect all the way around the block. This is just a little bit trickier because it would mean sewing evenly around the block and tying off stitches within each block. The stitches do not connect from one block to the next in this style.

Even if you have already sewn the straight lines on your practice piece, you can try doing this in one or more of the squares.



- You might want to mark this line with tiny, easy to remove markings (an air erasable pen that you test before hand to be sure it will disappear or a special quilt marking pencil that has a special eraser)
- Position the practice piece under your needle where you want the stitching to begin. It's usually easier to start in the middle of a straight line than on a corner.
- Hold on to the tail of the thread coming out of your needle.
- Use the fly wheel on the end of your machine to lower the needle down into the fabric and to bring it back up again. This will engage the top thread with the bobbin thread.
- Pull gently on the tail of the top thread to pull the bobbin thread up to the top of the quilt.
- Hold both threads to the side. Doing this means that you won't get ugly threads all caught up in either the top or bottom stitches on your quilt.
- Stitch twice or three times in one spot to anchor the beginning stitch, then proceed around the perimeter of the block. You can also sew a stitch, backstitch for one stitch and then start sewing forward to knot the beginning of the stitching line.
- When you get to a corner, put the needle down in the fabric and lift the presser foot. Pivot the fabric to turn the corner and then put the presser foot down and continue sewing.
- When you get back to the starting point, sew one or two stitches in the same place to anchor the end of the stitching.

If this quilt were going to be entered in a show, the next step would be to hide the 4 ends of the thread (both the bobbin and the top threads from the beginning and the ending of the stitching). Master quilters thread each one through a needle's eye and use the needle to pass the thread ends to the inside of the quilt. Believe it or not, that is something that a quilt judge is looking for!

If this is not going to be judged in a show, you can trim the threads as close to the surface of the quilt as possible - be sure not to snip a hole in the quilt itself!

Move the Pins?

Yup - as you work your way around, you need to remove any safety pins that might be in your way. I keep a cup near my machine so that when I undo a pin, I can drop it into the cup.

If you have a switch or a button on your sewing machine that allows you to stop with the needle down in the fabric, turn it on. This is very helpful because when you take your hands off of the quilt to undo the safety pin, the quilt won't move at all. If you don't have this kind of feature, try to remember to put the needle down each time by turning the fly wheel.

Doing This on your Quilt Project

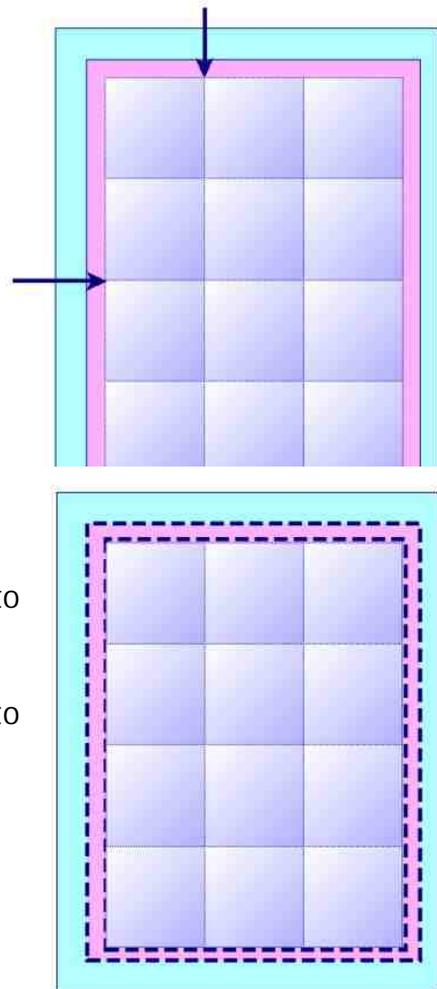
If you decide to use this technique on your actual quilt project, you will want to plot out your sewing lines. Since we didn't have any borders on the practice piece, we started right at the edge of top.

You would want to start and stop before crossing over your borders.

You also want to use the steps listed above to pull both threads to the top and hold them out of the way.

After sewing the crossed lines, you can sew all the way around the top next to each border. Remember, it's easier to start and end on a straight part than at a corner.

This type of quilting on a baby quilt is more than enough to keep everything in place.



Practice Square 2

Now we are going to get a little more fancy and show you something that can be used for just about any quilt - and it is especially fun on a baby quilt.

This second technique is called "Stippling" or "Random Motion" quilting. The object here is to cover the available surface with stitching that rambles around in a sort of circular pattern that resembles the shapes of puzzle pieces in a jig saw puzzle.



You don't need a pattern to do this, you just "wander" around. In general, you want curves rather than sharp angles or points. You also want to try to avoid crossing over any stitch.

This technique takes a little bit more practice but once you get the hang of it, you can completely quilt a baby quilt in less than a hour and it will look like you spent a lot more time than that!

Setting up Your Machine

Since this technique is little more complicated, it takes a little more set up before you start.

First, you must have a "darning" foot or its equivalent for your machine. This is special presser foot that has a large circle for the foot and usually has a spring or some other mechanism that allows it to ride over the surface of your fabric. This does NOT press your fabric down. You should have some clearance under the foot to freely slide your quilt around.

Second, you must be able to drop the feed dogs on your machine (or attach a cover that blocks them from feeding the fabric straight through the way it normally does). Most modern machines have a simple switch to do this - check your machine's manual or with your dealer if you haven't done this before.



Bobbins

Fill two or three bobbins before you start. This type of quilting seems to use a lot of thread both on the top and the bottom. Having a filled bobbin ready to go if you run out makes this a little easier.

Thread Tip

If you want to have a idea of when your bobbin thread will run out, you can fill a bobbin with the thread you are using on the *top* and then use that to sew from (put it on the spindle on the top instead of the spool of thread). When it runs low, your bobbin is running low too!

Basic Concept

We need to stop at this point and think about the basic concept of what we want to do. When you are sewing a seam in a garment, your sewing machine needle goes up and down in the same spot while your feed dogs push the fabric through under the presser foot. You can usually set the stitch length somewhere on your machine so that there are more or less stitches per inch.

When you are stippling, you turn off the feed dogs so your machine is not pushing the material anywhere. If you don't guide it, the needle will just go up and down in one spot repeatedly. Since the feed dogs are not pushing the fabric through under the needle, the size of the stitch you make with this technique will be controlled by how fast or slowly you guide the fabric through.

You will position your hands on the quilt top and slide it around so that the stitching "appears" to be meandering around the surface. This is something that really should be demonstrated but that's hard to do in a written format.

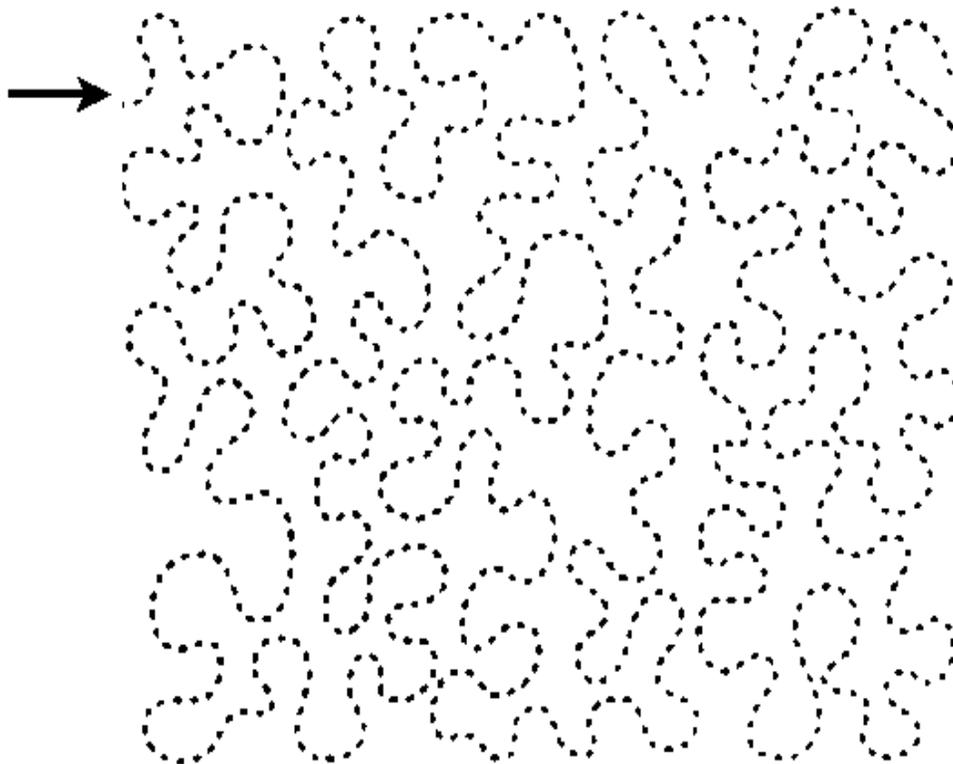
Please open your Internet browser and put this url in:

<http://www.charmingstation.com/quilt/video.html>

This is a 30 second video showing you exactly what we mean about stippling. The needle goes up and down in the same place - you slide the fabric around under the needle to create the pattern. Notice the position of her hands and how she gently slides the quilt around under the needle.

This is how you will move your practice square (and later your quilt project) around under the sewing machine needle.

You can make your “loopies” as big or as small as you like - you just want to be reasonably consistent in size. Some people find it handy to draw with a pencil on a piece of paper to get a feel for how to do this.



You can try this by putting the point of your pencil where the dotted line begins in the upper left corner here and let your pencil follow the path seen here.

Notice how the pattern just sort of wanders around with gentle little curves and bumps. No line crosses over another one. The design just sort of meanders from one side of the square to the other.

Now that you have seen the pattern, close your eyes for a minute and picture this. Instead of moving a pencil over a piece of paper to draw something like this, picture having the pencil stay in one place and you are moving the paper underneath to draw the pattern. It sounds a bit backward but this is what we are going to do. Once you try it, you'll see that it's not quite as complicated as it sounds.

Test Sewing #2

Position of your hands

Since you have your gloves on (or the rubber finger tips), as you do this machine quilting, rest your fingertips lightly on the surface of the quilt. Do not grab the edges of the quilt. The tension in your arms when grabbing will quickly tighten up all the way to your neck and you will find that quite uncomfortable.

You should be able to guide the quilt through the machine with very little pressure using just your finger tips. The larger your sewing surface is around the needle on your machine, the easier this is.

Position of your hands - part 2

It is very important that you keep your fingers away from the needle! Since you will be moving the quilt in all different directions to achieve the “loopies”, this is really super important now.

Try to position your hands on both sides of the needle so that your fingers are about 3 or 4 inches from the needle at all times. You need to find a comfortable, safe position for your hands so that you can guide the quilt.

Speed

Because the feed dogs are not pushing the fabric through the machine in this technique, the speed with which you move the fabric combined with how fast your needle goes up and down will determine the size of your stitches.

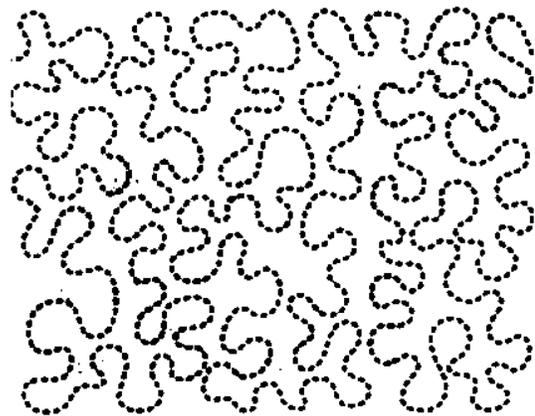
- The object here is to find a happy medium - step on the pedal just enough to get an even rhythm going while you move the fabric around.
- If your machine has a speed control (other than the foot pedal) you might want to try it on a slow speed first
- Whether you go slow or fast, you want to strive to make it even. You don't want to see 4 or 5 inches of stitches where the stitches are sewn 4 or 5 to an inch and then in another section see stitches that are 12 to an inch.

Try it out

- Start just inside one of the practice squares and hold onto the tail of the thread coming out of your needle.
- Use the fly wheel on your machine to lower the needle down and then back up.
- Tug gently on the thread you are holding to pull the bobbin thread up to the top
- Hold both of these threads off to the side so that they don't get tangled as you start sewing.

Think Circles and Loopies

- Position your fingers lightly on both sides of the needle, making sure your fingers are clear of the needle.
- Try to get a steady rhythm going with the needle
- Picture the loopies in your mind and, as you start the needle moving, slide your practice piece around in a small circle.
- Stop and look at your practice piece. How did you do? Does it look like a circle?
- Start up and try to make a couple of more circles. Check and see how you are doing.
- Start up again and try doing a couple of "loopies" - circles that connect to each other like our sample.
- Stop and look at your practice piece.
 - Remember that you want to try for smooth curves
 - Remember that you want to try to avoid crossing over any line
 - Remember that you want to try to get an even stitch length showing

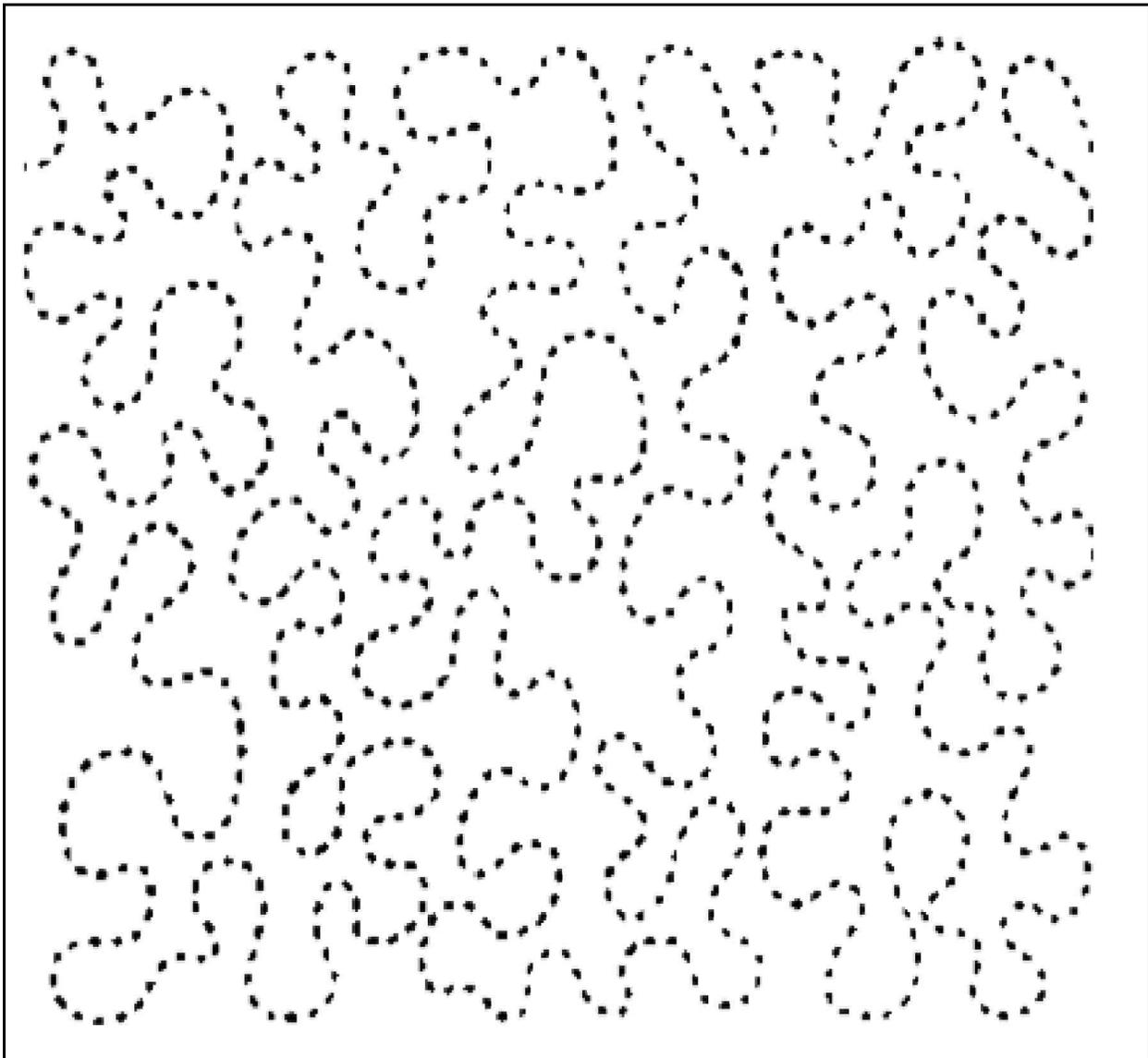


This really takes some practice because you are moving the fabric, not the needle.

Using a Pattern

If you are getting the “loopies” fairly well with the steps above, skip this step. If you are still having a little trouble, try this:

- Print out just this page and trim off the text.
- Place just the square on part of your practice piece.
- Start on the left and try following the lines as you sew.



If you do this a few times, you will get the feel for how to slide your fabric around. Then try it without the pattern moving the fabric the same way you did with the pattern.

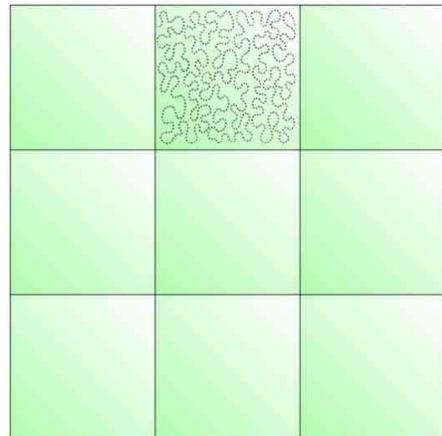
Helpful tip

Almost everyone will develop a preference when stippling. I find it easiest when I start on the right side of something and work my way toward the left or when I start at the top and work my way down. A lot of people find it easier to start on the left and work toward the right.

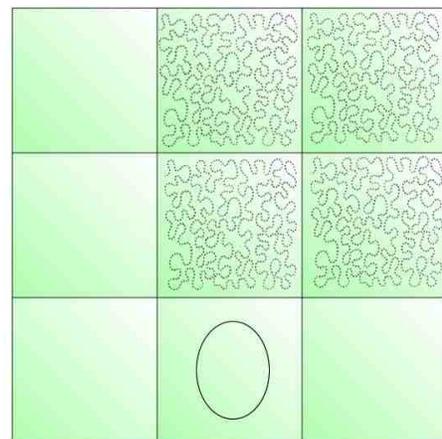
As you practice, ask yourself if one direction seems easier for you than another. If so, try to plan your quilting so that you will go in that direction most often. You will need to be able to maneuver the fabric in all directions but if one direction is easier for you, you will certainly want to use that one most often.

Test Sewing Again

- Move your practice piece so that you are in a block that doesn't have any sewing in it yet.
- Remember to pull the bobbin thread up to the top and hold it to the side.
- Start at one corner of the block and try the stippling stitch all over just that block. It doesn't matter if you start on one side and end of the other or if you end back where you started.
- See if you can fill the block in a pattern anything like what is shown here. Remember - this takes practice!
- Move to another block and try it again.



- Now take a pencil and make shape in the middle of a block (to simulate where your embroidered design is).
- Try stippling this block - but go around the circle you drew, not through it. This is essentially how you will do your actual quilt.
- Keep practicing until you feel comfortable with this technique.



Doing This on your Quilt Project

For our actual quilt project, you will want to stipple around the white space that makes up the block holding your embroidery. Since the stippling goes through all three layers, that will flatten the background and make the embroidery “pop” forward (remember, the embroidery is only on the top layer of fabric, not going through the batting and backing).



When using this type of quilting, you will start in the middle of the quilt and work your way toward the outside edges. This way, if there are any puckers anywhere, you are pushing them toward the outer edge rather than trapping them in the middle.

You will not sew across the embroidered parts.

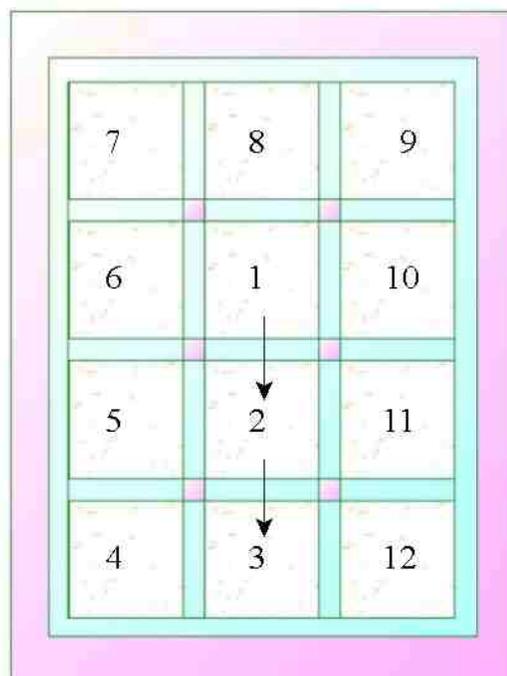
This may come out “flatter” than you thought - that’s okay! This is not a comforter and you wouldn’t want something that thick around a baby anyway!



Connecting the blocks

When working on a baby quilt like the one described in our project, I have a specific “traffic pattern” that I follow. I start in the middle block (or as close to the middle as possible). I move to the next “middle” block and do that one. Then I move to the blocks that make up the outer part of the top and go right around these in the order shown here.

This “pattern” lets you work in almost a continuous mode.



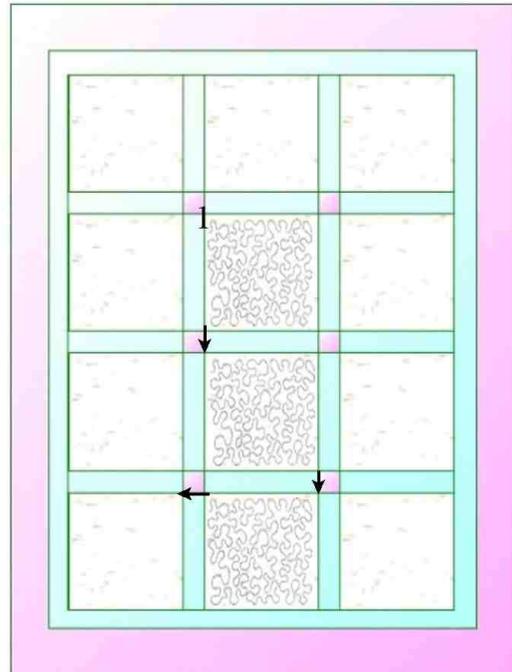
Short Cut

Another way to speed this up is to use the free motion quilting you are doing to get from one block to the next.

I start where the #1 is in this example. I stipple the entire block and try to end up right at the cornerstone where it connects to the sashing. I keep the quilt moving and use the free motion technique to sew that tiny space just like the "stitch in the ditch".

That puts me at the starting position for the next block so I can keep going.

I try to distribute those little connections between blocks so for the next one, I would move to the right side and stitch in the ditch to get to the next open block.



Move the Pins?

Yup - as you work your way around, you need to remove any safety pins that might be in your way. I keep a cup near my machine so that when I undo a pin, I can drop it into the cup.

If you have a switch or a button on your sewing machine that allows you to stop with the needle down in the fabric, turn it on. This is very helpful because when you take your hands off of the quilt to undo the safety pin, the quilt won't move at all. If you don't have this kind of feature, try to remember to put the needle down each time by turning the fly wheel.

Moving your Hands

Once you get the hang of this and get started, you will be tempted to just keep going and going. There is just one additional thing to keep in mind - if you let go of the quilt, you have no control over the size of the stitches or the direction in which they are going. That means that when you have covered an area that you are working on, you must stop before trying to move your hands! If you don't, the quilt may shift too much leaving what will look like a long jump stitch! Stop the machine first, reposition your hands and then start up again.

One Last Tip

No matter which style you choose for your quilt project, you will find the sometimes it is easy to maneuver the quilt around and at other times it will see like almost all of the quilt is squished in between the needle and the motor side of the machine.

The tip here is to roll the part of the quilt that is in the throat plate area. You can even put a pin or clip on that roll to hold it in place for you. On a baby quilt, you can even roll both sides leaving only the block or area that you need to work on.



It's Your Turn

Now that you have tried both of these techniques, you get to choose which one you want to use on your quilt project.

- Use whichever technique is most comfortable for you.
- Go ahead and quilt your project.
- If you choose the first technique, stitch in the ditch along all of the sashing strips and between the borders.
- If you choose the second technique, do the stippling in each of the embroidered blocks and then stitch in the ditch along all the sashing strips and between the borders

The Next Step

The next step will be to add binding to the edges of your quilt. This does not require any extra equipment.

We will be making our own bias binding. All you will need is about 3/4 of a yard of fabric, a long ruler and a marking pencil.