

# Free-Motion Machine Quilting

## Try It Again

by J. Renée Howell

*Have you tried machine quilting but were frustrated with needles that broke or threads that shredded? You know you don't have enough time to hand quilt all the tops stacked in your closet—so it's time to give free-motion machine quilting another try.*

### Getting Started

Clean and oil your machine and insert a new machine-quilting needle. Schmetz and Klasse both manufacture quilting needles; their jean stitch and universal 80/12 needles work well too.

### Test Sample

Make a sample quilt sandwich from the same fabric and batting as the actual quilt. Attach a darning or free-motion quilting foot to your machine. Drop the feed dogs or cover them with an index card cut to size and taped down. Sew about 12", moving the sandwich in different directions as you stitch.

### Stitch Quality

In a perfect stitch, the thread indents the fabric slightly and the top and bobbin thread lock together inside the quilt sandwich. The bobbin thread should not be visible on the quilt top and the top thread should not be visible on the backing. If stitches on your sample are not perfect, tension adjustments should help; remember that many small adjustments solve the problem better than one big adjustment. If the bobbin thread is visible on the quilt top, first loosen the top tension; if this doesn't solve the problem, then slightly tighten the bobbin tension. If the top thread is visible on the batting, first tighten the top tension; if needed, also loosen the bobbin tension.

Until your stitch quality meets your expectations, you can camouflage your work by using the same color thread in the top and bobbin and using a print fabric for the backing.

### Broken Needles

Needles break under pressure. If a needle breaks, insert a new one and then turn the flywheel by hand and watch the needle enter the hole in the throat plate. If it hits the side, check the needle and throat plate alignment; adjust the needle position if possible. If the needle is hitting the bobbin case below, remove the case, reinsert it and try again. If these measures don't solve the mechanical problem, your machine may need professional servicing.

Rethread the top and bobbin threads. Lift the presser foot; pull on the threads to check for resistance or binding. If the top thread seems too tight, check the threading. If the spool is damaged or cracked, replace it. Look for and remove any lint or stray threads. If the bobbin binds, clean both the bobbin casing and the area directly under the throat plate. If the bobbin thread is too tight, loosen the tension.

Pulling the quilt sandwich too quickly or forcefully while quilting can bend and break the needle. Move the quilt more slowly. Use rubber filing fingers or cotton gloves with gripper dots to move the sandwich smoothly under the needle. Set up tables around your sewing machine to support the quilt's weight and avoid strain on the needle.

### Broken or Snagging Thread

Thread comes in different weights; the higher the number, the finer the thread. 50-weight thread is the perfect selection for a beginning or intermediate machine quilter. Always use high-quality thread when quilting; avoid the 10-spools-for-\$1 bargain bins.

Invisible nylon thread is another option for machine quilting. Use a .004 nylon thread in the top and a 50-weight cotton thread in the bobbin. Loosen the top tension slightly for nylon thread.

Thread breaks for a number of reasons. A needle eye with a rough spot (burr) can break or snag thread just as a rough fingernail snags panty hose. Run your fingers gently over the eye of the needle; replace it if you feel a burr. A dull needle can break thread or, worse yet, snag your fabric.

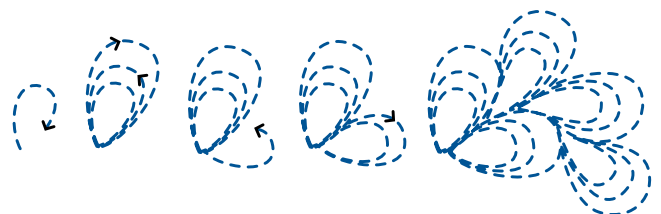
Thread becomes brittle with age or prolonged exposure to sunlight or heat. If cotton thread is old, spritz the spool of thread with water, seal it in an airtight plastic bag and put in the freezer overnight. This process can revive old thread.

### Quilting Designs

And now for the fun part. If you want something other than meander or stipple quilting, try the following wonderful no-mark designs. With a little practice, you will transform the stack of tops in your closet to cozy quilts.

### Teardrop Meander

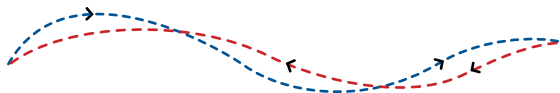
The teardrop meander is an elegant design used in borders or as a fill—and it looks wonderful stitched in variegated threads. Begin in an inconspicuous spot, anchor your thread with several tiny stitches, and then make a simple teardrop shape. Stitch the teardrop two more times, each one slightly larger. Add and arrange more teardrops to fit your spaces.



## Ribbon Meander

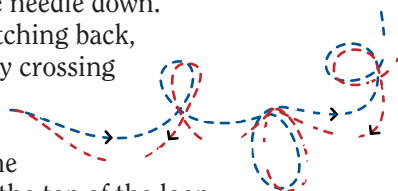
A ribbon design, playful or elegant, creates visual interest where the stitching lines cross. Ribbon meander works well in sashing or as an all-over pattern.

Stitch several gentle S curves as a base line (blue line in the diagram). Stop with the needle down. Create the ribbon by stitching back, slightly off the base line and crossing over in random places (red line in the diagram). Keep the wider parts of the ribbon similar widths.



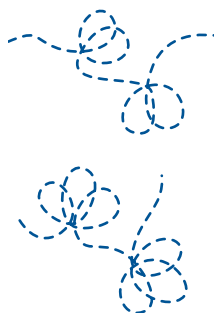
## Looping Ribbon Meander

Stitch a base line with gentle curves and loops. Stop with the needle down. Create the ribbon by stitching back, slightly off and randomly crossing over the base line. As you reach a loop, cross over it at the X where the loop begins. Cross near the top of the loop and then back to the base. Continue stitching with offset loops and gentle curves that randomly cross the base line.



## Heart-to-Heart Meander

This light-hearted meander suggests a heart shape. Anchor the thread in a seam and stitch a gentle wavy line. Create two loops with the pointed bottoms overlapping and the curved, upper portions slightly apart. Continue with more curves and double loops.



## Firefly Meander

Add a third loop to the previous two. The Firefly Meander works well for bug quilts!

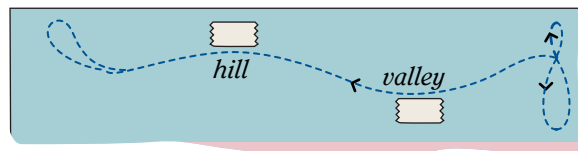
## Freehand Feather and Teardrop Border

This technique easily adapts to any width and length of border motif that you need.

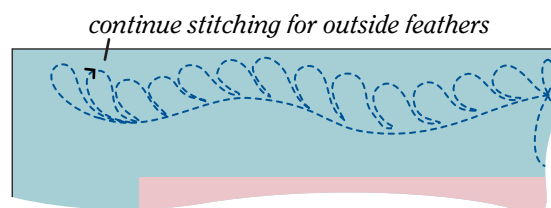
Freehand feathers are as individual as fingerprints, so each border has its own personality. A freehand feather has three parts: the spine with its hills and valleys, the feather or half-heart, and the teardrop at the corners and center of each border.

Start in the border's center. Decide where to place the hills (closer to the edge of the quilt) and valleys (closer to the center of the quilt). Plan for a partial hill at the corner and then a teardrop slightly larger than the feathers. Working from the center of a border toward the corner, mark the placement of hills and valleys with short pieces of tape.

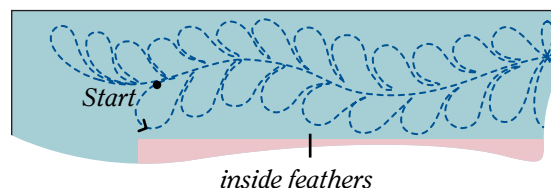
At the center of the border, stitch two teardrops to form a figure 8, one larger than the other. Then, in stitching the spine, aim toward the pieces of tape while sewing a gentle curve. Do *not* stitch through the tape. At the corner, stitch a large teardrop, beginning and ending on the spine. Stop with the needle down.



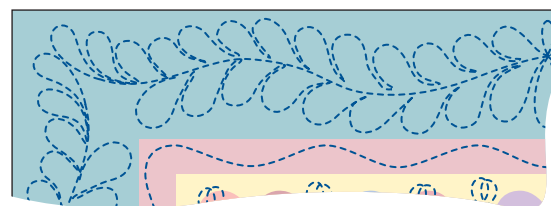
Now create the outside feathers; stitch half-heart shapes in a continuous line with the bottom point of each half-heart beginning the next half-heart. As you come close to the center of the border, stitch a final half-heart at the outside center teardrop.



For the inside feathers, note that the feathers here do not extend to the corner teardrop. Beginning on the spine at a corner valley, stitch a series of inside feathers back to the center teardrop.



Then quilt the spine, teardrop and feathers to the opposite corner and repeat on the remaining three sides.



## Practice, Practice, Practice

Learning to machine quilt is a skill acquired only through hands-on practice. If you get frustrated, take a break and begin again the next day. You will be a better machine quilter in the morning. Happy stitching!

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