



Rulerwork:

A Step-by-Step Journey into Guided-Motion Quilting

by Kate Quinn



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Although Kate was already an experienced quilter when she was introduced to rulerwork quilting in 2015, it quickly became her passion. Kate loves sharing the skills and knowledge that she has gained over the years to help students improve their quilting and realize the benefits of this of this wonderful technique.

Tools and Supplies for Rulerwork

Essential Tools

- ¼" Rulerfoot to fit your machine (high or low shank)
- At least one quilting template or ruler along with Stable taper ruler grips.
- 40-wt polyester thread with matching top and bobbin for beginners.
- Extension Table
- Janome Purple Needle or Size 90 Topstitch Needles
- Comfortable Chair and or cushion – correct height is very important for success.
- Quilt-safe Marking Tools

Optional Tools

- Westalee Spacing Gauge
- A Freemotion Glider
- Machine with a Needle Down and Lowered Feed dog Option
- Machine with Speed Control
- Knee Lift
- Quilting Gloves

Which Janome Ruler Foot do I need?

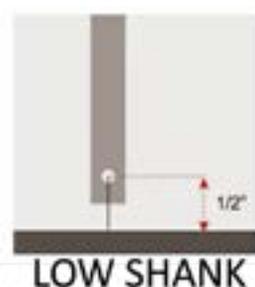
Domestic Machines

Most domestic machines are classified as either LOW SHANK or HIGH SHANK. To determine your shank size, lower your machine foot bar (without foot) and measure the distance from the center of the screw hole on the bar to the needle plate. Machines that measure ½" are considered low shank and high shank machines measure about 1". An exception to this classification is Janome straight stitch machines which required a special rulerfoot for straight stitch only machines.

Longarm Machines

If you are working on a Janome Longarm, the Janome EZ Rulerfoot is recommended for template work along with a ruler base.

For more information on a selecting a rulerfoot or other supporting tools, check your manual or look up your machine on the Janome website: [Janome Machines - Search for your Machine.](#) Rulerfeet may be listed under standard or optional accessories depending on your machine. Your local dealer can also be a great source of information.





Other ruler feet brands may work on Janome machines, but Janome feet offer easy adjustment of the foot height without tools. Janome feet can be adjusted manually or electronically. It is essential that the foot “kiss” the fabric sandwich when doing rulerwork, so this is a convenient feature of Janome rulerfeet.

Template Knowledge by Machine Shank Style

Always attach Stable Tape or other suitable ruler grip tape to the back of your template when doing rulerwork. It helps the template and fabric move together. Determine the best hand position first and then position the tape under your fingertips for best results.

1. Low Shank Machines:

- a. Low Shank Templates are 3mm in thickness.
- b. Low Shank machines have very low clearance between the rulerfoot and the bed of the machine. This lack of space is especially noticeable at the rear of the ruler foot. This is the reason for “Low Shank” Templates. A thinner template fits this narrow Low Shank space more easily, so it works better on a low shank machine.
- c. When using the Janome Convertible Freemotion foot, a high shank template will fit behind the Janome Low Shank rulerfoot, but other brand rulerfeet usually do not have enough room for a High Shank template, so Low Shank templates are the best option for Low Shank machines.

2. High Shank Machines:

- a. High Shank Templates are 4.5mm in thickness.
- b. A High Shank rulerfoot does have great clearance at the rear of the rulerfoot than a Low Shank rulerfoot. Both Low Shank templates and High Shank templates can typically be used on a High Shank machine without any problem.

- c. When using High Shank Janome Rulerfeet, (either the convertible free motion rulerfoot or the rulerfoot designed for electronic height adjustment), Janome rulerfeet can usually accommodate even the thickness of a longarm ruler. If you have a longarm, this make is convenient to use the same rulers on both your High Shank machine and a longarm machine.

3. Longarm Machines

- a. Longarms templates are 6mm or ¼” thick.
- b. The longarm hopping foot actually does hop when stitching. The 6mm thick template is thicker than the hop to prevent the ruler from going under the foot, therefore **only Longarm templates should be used on a longarm.**
- c. Additionally, a longarmer must also always use a ruler base when working with templates for safety. This keeps the template supported and flat.



In general, purchase templates based on the machine shank you will be using for best results. EX., Use Low Shank template with a Low Shank machine. This guide is intended to help those with multiple machines to be able to mix and match their tools safely and successfully.

Machine Set-Up for Rulerwork

1. Attach Ruler Foot using the foot screw that came with the machine. Secure with a screwdriver.
2. Lower feed dogs.
3. Attach and level Extension Table.
4. Put in new purple needle or Topstitch needle that matches your thread size.
5. Put in a full bobbin and thread the machine. Matching thread is more forgiving for new rulerwork users and help make the stitch appearance look better.
6. If your machine has a straight stitch plate, install it on your machine. It works very well for this application.
7. Position Glider on the machine extension table if using.

8. Position quilt sandwich under the foot and set the foot height. Adjust the dial if using the convertible freemotion rulerfoot or use the machine's electronic adjustment if using the Janome High Shank rulerfoot. (Many machines using the electronic adjustable foot will have a rulerwork feature with height adjustment located in that application. Follow the video instruction on setting the correct height.
 9. Make sure to test that the setup stitches well. Stitches should appear nice on the back and front and you should have no trouble moving your quilt sandwich.
 10. Adjust tension if necessary.
 11. Select NEEDLE DOWN position when starting to hold the quilt steady.
 12. Adjust SPEED CONTROL to Medium and begin quilting with your templates.
2. **Tension Settings:**
 - a. If the bobbin thread can be seen on the quilt top sandwich, the top tension is too high.
 - b. If the top thread can be seen on the bottom of the quilt sandwich, the top tension is too low.
 - c. When the tension is correct, your stitch forms so that the top thread and the bobbin thread knot will rest in the middle of the quilt sandwich
 3. **Marking:** Chalk and air erase markers are great for dark and light fabric respectively. There are many marking pens available. Please always test marking tools before using.
 4. **Basting:** Good basting is essential for smooth rulerwork. Take time to complete this step well to make your quilting process easier.
 - a. There are several ways to baste your quilt
 - Long basting stitch
 - Pin basting
 - Spray basting
 - Having a long arm quilter baste your quilt
 - Spray baste
 - b. Whichever method you choose, remember that basting should be no more than 4" apart
 5. **Gliders:** Rulerwork is a freemotion technique. Freemotion requires you glide the quilt smoothly to get an even stitch, so a Freemotion Glider is well worth having. For rulerwork, it is even more important because the quilt and the ruler need to move together, and the glider helps do that.
 6. **Starting and Ending:** It is important to secure your thread when quilting. Here is a quick video showing 2 methods for tying off your thread tails.



Additional Safety Information:

- When using a rulerfoot, always lower the foot and then the needle when starting to sew. When finishing a line of stitching, always raise the needle then the foot. This helps prevent the needle bar from hitting the foot.
- Please do not use the Acufeed system when doing rulerwork.
- Make sure that the Pivot feature is off if your machine has this feature so the foot will not lift up when you pause in sewing. The foot should stay in the down position for safe rulerwork operation.

General Tips and Tricks for Rulerwork

1. **Hand Position when holding templates:**
 - a. Make sure to have pressure on the template on two sides of the rulerfoot to prevent the template from pivoting.
 - b. Hold close to the rulerfoot edge. Holding far away can cause the template to pop up, making the rulerfoot slide under the template.
 - c. Make sure to push the template rather than spinning the quilt, when sewing along curves.
 - d. Do not sew to the very end of a template. Use a 2-finger width safety rule as a guide for when to reposition the template.



Video Link:

[2 Methods to Secure and Tie off Quilt Tails](#)