

# JUST QUILT IT!

# **Ruler Work for Quilters**

for both Longarm and Domestic Machines

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Terminology • Ruler Work Accessories • Machine Setup

Ruler Preparation • Bonus Project



## **TERMINOLOGY**

#### **RULER WORK**

The use of specialized quilting rulers to create accurate, repeatable designs. Create straight lines, curved lines, scallops, waves, and specific designs while free-motion quilting with the use of these rulers. While rulerwork is traditionally done on a Longarm machine, it can now be done on domestic machines as well.

#### **RULER FOOT**

A free-motion foot, where all edges of the foot are 1/4" from the needle. The thick outside edge of the foot, called the 'fence' keeps the ruler from sliding under or over the foot. The BERNINA Ruler Foot #96 is available for BERNINA Q Series and the BERNINA Adjustable Ruler Foot #72 is available for BERNINA domestic sewing machines.

### **OUILTING RULERS**

Acrylic templates that are 3/8 to 1/4 inch thick meant to hold against a ruler foot to create a specific shape. BERNINA has two sets of 1/4 inch rulers available. One set is designed for the sit-down guilter and the other set for the frame guilter. Either set can be used in either guilting situation.

## RULER WORK ACCESSORIES.

# BERNINA RULER KIT FOR SIT DOWN **MACHINES**

- Mini Straight Line Tool
- Squiggle Template
- Nested Mini Ovals
- Nested Mini Circles
- Mini 4-in-1

#### RULER KIT FOR FRAME MODELS

- Nested Ovals
- **Nested Circles**
- Mini 4-in-1
- S Shape
- Starter Tool



If using a BERNINA Q 24 or Q 20 on the Frame you will need a Ruler Base to steady the ruler when doing ruler work. The Ruler Base, the Ruler Foot #96 along with a Mini Straight Line Tool are available in the BERNINA Ruler

Work Kit for the Q Series. If using a Q 20 Sit-down Model you will only need the Ruler Foot #96.

Adjustable Ruler Foot #72 is available for BERNINA Domestic Sewing Machines. The height of the foot is adjustable so it may be used on most models of BERNINA sewing machines.

When doing ruler work on a domestic sewing machine, you will need to have a level surface around the machine. It is best to have the machine in a table. However a large acrylic table may also be used.



## SETTING UP THE MACHINE FOR RULERWORK

## Q SERIES LONGARM

- Attach Ruler Foot #96
- Select Needle Stop Down
- Select BSR 2
- If at a frame model, move the adjustable handles for maneuverability of the rulers

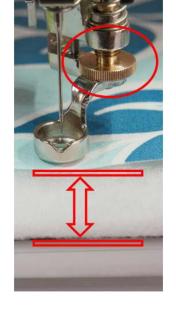
## **DOMESTIC MACHINES**

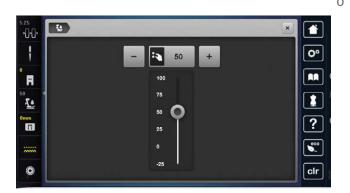
- Select the Straight Stitch
- Lower Feed Dogs (some models do this automatically)
- Attach the Straight Stitch Throat Plate
- Select Needle Stop Down (optional)
- Turn off Hover Function if Applicable (optional)
- Attach Ruler Foot #72 to the machine
- Adjust the Height of the Sole
  - o Turn height adjustment dial until the sole is in the lowest position.
  - Set sole height according to the thickness of the quilt/batting.
  - o The range is 4mm (1/6").
  - o Check height of foot in relation to the quilt/fabric.
  - o The sole should just touch the fabric and easily glide over the fabric and seams
  - If height is too high, the result is thread loops or skipped stitches
- Adjust Presser Foot Pressure (optional)
  - o If sole needs to be raised further, adjust in the presser foot pressure menu
  - o On BERNINA 4, 5, and 6 Series machines lower the pressure to lessen the pressure on the quilt layers if necessary, foot height will not change.





- o To adjust height in the presser foot pressure menu select on the touch screen
- o Move from -3 to -25
- o The foot lifts higher as you move the pressure closer to -25
- Also, by moving the pressure from -3 to -25 the hopping height reduces. If no "hopping" of the foot is preferred, this is a great option.







## PREPARE RULERS



#### TIP!

- Hold Nested Rulers together with Painters Tape.
- Place a gripping surface on back of Rulers.

#### **GETTING STARTED**

- Place fabric under the foot and lower the foot.
- Lower needle into the fabric where stitching is going to start.
- Pull up bobbin thread and secure with desired method.
- Slide the edge of ruler up to the foot.
- Use the edge of the ruler as a guide for the foot.
- Hold ruler with your fingertips.
- Place fingertips a comfortable distance apart in the area where you will be stitching.
- Walk hand on ruler to use additional length.
- Place enough pressure on the ruler to gently guide foot along the edge without the ruler moving.



- You will be holding the ruler in place and guiding the edge of the foot alongside it as you move the machine.
- Move one handle on the machine out of the way for better access to the ruler.
- Program the usable handle with the functions desired.



#### AT A SIT-DOWN MODEL

- Place enough pressure on the ruler to move the fabric and ruler at the same time.
- There is a fine balance between the proper pressure and too much pressure.



## BONUS PROJECT

Practice your rulerwork skills with this simple project.

#### **SUPPLIES**

- 1/8 yard of 3 different fabrics for 9-patch
- 1/4 yard of background fabric for 9-patch
- 1/3 yard fabric for solid blocks
- 1/4 yard for first border and corner stones
- 1/4 yard for second border
- 1/2 yard fabric for outer border
- 1/3 yard fabric for straight cut binding or 1/2 yard for bias cut binding
- 1 ½ yard polyester needle punched fleece
- 1 ½ yard backing
- Patchwork Foot #37, #57 or #97
- Ruler Work Foot #96 for Longarm machines or Adjustable RulerWork Foot #72 for Domestic Machines
- BERNINA Sit-down Ruler Kit
- Thread for Construction
- Thread for Quilting

#### **CUTTING**

#### **NINE PATCH**

- For each of the 3 fabrics
  - o Cut 3 ½" wide strips of the 3 different fabrics / sub cut into 5-3 1/2" squares
- Background fabric
  - o Cut 3 ½" strips/sub cut into 12-3 ½" squares

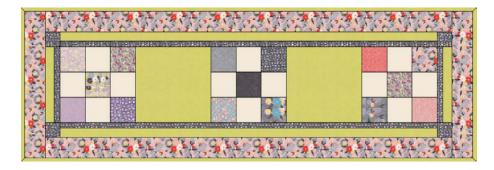
## **ALTERNATING SQUARES**

Cut 2-9 ½" squares



#### **BORDERS**

- 1st Border
  - o Cut 3 strips the WOF X 1" wide
  - o Cut 4 Squares 1 3/4"
- 2nd Border
  - o Cut 3 strips the WOF X 1 1/4" wide
- 3rd Border
  - o Cut 4 strips the WOF X 3 1/2" wide



## CONSTRUCTION

### **BLOCKS**



- Piece 5 colored squares and 4 background squares to make a nine patch
- Make 3 nine patch blocks



Piece together the 3 nine patch block and the 2 solid blocks.

#### **BORDERS**

• Join the 3 strips cut for the 1st and 2nd borders with mitered seams.



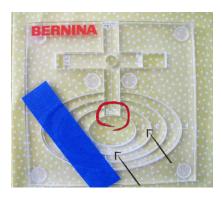
- Seam these two long strips together lengthwise.
- Cut 2 strips 45 1/2" and 2 strips 9 1/2".
- Attach the 2 long strips to the long edges of the runner. Seam the cornerstone squares to each end of the short strips. Attach strips to the ends of the runner.
- Join the 4 strips cut for the outside border with mitered seams.
- Cut 2 strips 48" and 2 Strips 18 1/2"
- Attach the sides and then ends

# **OUILTING THE RUNNER**

Mark the solid blocks with vertical, horizontal and diagonal lines.

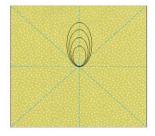
#### SPIROGRAPH IN SOLID BLOCKS

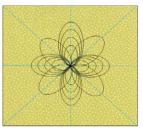
 Use the nesting ovals to stitch a spirograph design. No need to break thread between oval sizes. Stop stitching at the bottom of oval where you began, needle down. Remove key in the nested ovals and turn counter clockwise and replace for the next size oval. Remove the small oval. Continue stitching.



- The "key" has the size of the oval etched on the bottom edge as seen in the red oval. These numbers match the numbers on each side of the oval as seen at the arrows. As you move to a larger oval move the "key" counter clockwise and notice that the numbers match.
- Begin by stitching all 4 sizes of the ovals on one line. Begin stitching at the bottom center.
- Repeat nested ovals on the horizontal and vertical lines. Add a large single oval on each diagonal line.



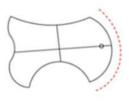




# **CONTINUOUS LINE CURVES** ON THE 9-PATCH.



This technique can be done with any ruler that gives you the curve you desire. The Mini 4-in-1 tool is an excellent choice.





Remember to lower the needle into the fabric where you want to begin, as you will be stitching 1/4" from the ruler. Position the ruler against the foot and angle it accordingly on the fabric. A piece of tape across the ruler to line up on the seam helps with quickly placing the ruler always keeping it at the same angle.



## **OUILTING THE BORDERS**

The borders were done with the Squiggle Template.



The small scallop side was used on the inside borders, over the seam. The wavy side was used in the outer border. There are two rows of stitching that are echoed; an easy technique with rulers. Because this is a longer ruler you will want to position your hand on the ruler at a comfortable hand span.





- When you have stitched the length of the span, stop with the needle down and walk your hand down or reposition ruler.
- Finish the table runner with binding.