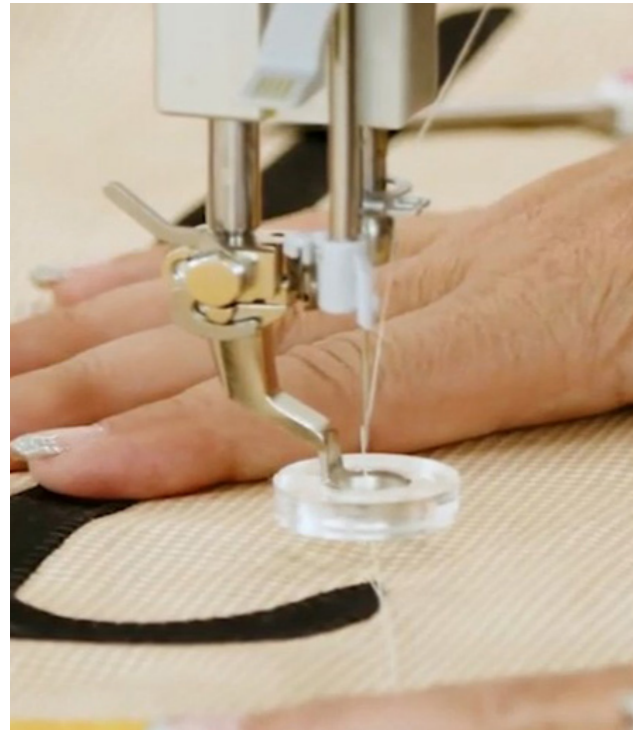


# BERNINA Q Series

Accessories Workbook



**BERNINA**  
*made to create*



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# INTRODUCTION

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Welcome!

The BERNINA Q Series Longarm quilting machines offer beautiful stitch-regulated quilting, a tremendous advantage in finishing your quilted items. BERNINA also offers a wealth of longarm accessories, enabling you to enjoy a truly personal, customized quilting experience.

Whether quilting on the frame or table, understanding how these accessories work with your machine will expand your creative journey and allow you to enhance or change your quilting style with each project. This workbook is designed for you to experience the accessory features through a series of introductory exercises. Once completed, the workbook can serve as a technique reference guide.

[BERNINA of America](#) strives to provide quality quilting, sewing, and embroidery machines while offering the best educational experience available. Your BERNINA dealer may offer additional educational programs and is a great resource for support.

[BERNINA Skill Hub](#), the [BERNINA International YouTube](#) channel, the [WeAllSew blog](#), and in-person retreats at the BERNINA Creative Center are excellent resources to enhance your learning experience. You will also find inspiring sewing projects and eBooks on the BERNINA website at [bernina.com](#) in the Learn & Create section. Visit the BERNINA website at [bernina.com](#) to keep abreast of the new accessories available for your BERNINA Longarm machine.



# MACHINE ACCESSORIES

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BERNINA Q Series Longarm quilting machines are designed with many features that enhance the quilting experience, including, but not limited to, the unique forward-facing thread path, electronic upper thread tension control, built-in bobbin winder, and the intuitive user interface. To further customize your quilting experience, BERNINA offers a variety of accessories that work with the Sewhead to enhance the creativity of your quilting.

## PRESSER FEET

BERNINA offers free-motion feet for various quilting techniques. Free-motion presser feet designed for BERNINA machines can sew free-motion couching, rulerwork, and various quilting types. All the feet, except Ruler Foot #96, are compatible with BERNINA domestic machines.

Free-motion presser feet are recognized by the vertical spring on the shaft of the foot. Free-motion feet, unlike most presser feet, do not contact the feed dog. They are positioned above the fabric, allowing movement in any direction. As the quilter moves the fabric or the machine along the desired path, the vertical spring action holds the fabric down as the needle pulls away, eliminating “flagging” or lifting of the fabric with the needle.

### Darning Foot #9



BERNINA Q Series machines come with one presser foot: Darning Foot #9. This foot works well for most free-motion techniques. The sole of the foot has a round opening, large enough to accommodate a double needle up to 4 mm in size.

### Embroidery Foot #15



Designed as a machine embroidery presser foot, the “hoop” portion is longer front to back, with a slightly upward tilt to navigate dense stitches, bulky seams, and textured surfaces. This foot can accommodate a double needle up to 4 mm.

### Free-motion Embroidery Foot #24



Similar in design to Darning Foot #9, this foot has an opening in the sole’s front for better visibility of the needle and stitching area. This makes it easy to see and follow marked designs for free-motion quilting. The open-toe design facilitates perfect placement of your quilting stitches.

### Drop-shaped Embroidery Foot #26



The base of this foot is flat, and the drop-shaped needle opening is small, which provides even pressure around the entire stitching area. This helps to prevent flagging and ensures stitches interlock inside the batting, between the two fabric layers.

### Quilting Foot #29



The clear sole provides excellent visibility of the stitching area for precise placement of stitches and lets you easily follow a marked quilting design. When used on quilts with thick quilt batting, the expanded surface area helps control the quilt sandwich.

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## Free-motion Couching Foot #43



This foot is specifically designed for stitching decorative cords to the surface of fabric, a technique known as couching. It easily accommodates smooth, flexible cords approximately 2 mm in diameter. The base is larger than most free-motion feet and has a clear cupped sole, which allows the foot to slide easily over the uneven surface created by couched fibers.

## Echo Quilting and CutWork Foot #44C



Though the longarm cannot perform CutWork, the CutWork Foot can prove helpful if used on the longarm. The large clear sole compresses a wide area around the needle, increasing visibility as it moves easily over raised areas and making it easy to stitch over thick battings. Crosshairs and concentric circle markings on the sole assist in accurate stitch placement, especially when echo quilting.

## Adjustable Presser Feet

Four of the BERNINA presser feet have a height adjustment dial on the side, so the height of the foot may be adjusted to accommodate the quilt thickness. The foot should sit just above the surface of the top fabric, leaving enough room to easily glide over fabric and seams. These adjustable feet are great for working on the longarm, but are also suitable for your domestic home machines.

## Adjustable Ruler Foot #72 / Adjustable Ruler Foot with Slit #72S



Adjustable Ruler Foot #72 / Adjustable Ruler Foot with Slit #72S are identical except the #72S foot has a slit in the sole so thread tails can be pulled to the back. Both feet have ¼" thick soles, making them perfect to pair with ¼" thick acrylic rulers for rulerwork.



## Adjustable Stippling Foot #73



Adjustable Stippling Foot #73 features a wide opening on the sole that makes it easy to place stitches exactly where you want, and the rounded edges help the foot glide over the fabric. The foot is engineered for stitching on uneven surfaces. To make it easier on the eyes, the sole is matte gray instead of a shiny, silver finish for greater comfort while executing close work.

## Adjustable Gliding Cup Foot #74



Adjustable Gliding Cup Foot #74 is perfect for art quilts and mixed media. The cup-shaped sole glides easily over and around dimensional elements on a quilt. The transparent sole gives you a clear view of the fabric and crosshair markings help with stitch placement.

---

## Ruler Feet



There are three feet designed for rulerwork on the Q Series machines: Adjustable Ruler Foot #72, Adjustable Ruler Foot with Slit #72S, and Ruler Foot #96.

Each foot measures  $\frac{1}{2}$ " wide, meaning the outer edge of the foot is  $\frac{1}{4}$ " from the needle on all sides. The design of BERNINA ruler feet allows you to position traditional  $\frac{1}{4}$ " thick rulers 360-degrees around the foot with consistent stitching  $\frac{1}{4}$ " away from the ruler.

All three feet have a V-shaped notch on the front of the foot that lines up with the needle. The adjustable ruler feet also have markings inside the foot on the sides and back that line up with needle and assist with orientation and placement.

Note that **Ruler Foot #96** was designed solely for the longarm machine which does not have a feed dog, therefore you should never use this foot on your domestic sewing machines.

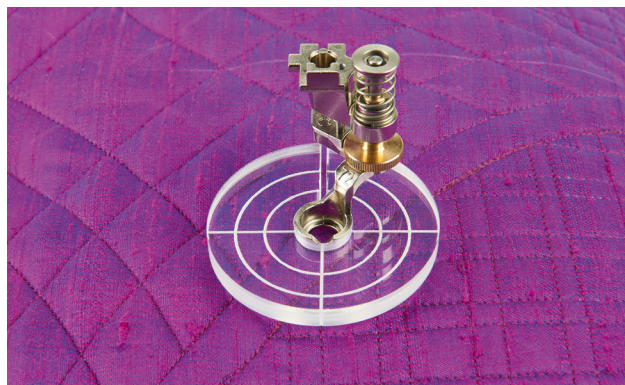
To increase their usage, additional accessories for the ruler feet include:

- Echo-Quilting Clips, which fit all three ruler feet
- The Cup Clip is available for Ruler Foot #96 only
- Couching Inserts that are available for both #72 and #72S only

## ECHO-QUILTING CLIPS



The BERNINA Echo-Quilting Clips serve as an extension to the sole of the presser foot, letting you adapt the foot for various widths between the stitched echoes.



*Fig. 1*

There are three Echo-Quilting Clips in a set that allows for  $\frac{1}{2}$ ",  $\frac{3}{4}$ " or 1" echoing from your ruler or guideline.

To quilt with Echo-Quilting Clips:

1. Select the desired Echo-Quilting Clip and slide it onto the sole of Ruler Foot (removing it from the machine first). The clip should fit onto the sole snugly (Fig. 1).
2. The slit on the ring goes to the back of the foot. The quadrant lines on the clips match the lines of the #72 / #72S foot and the front quadrant line should line up with the "V" cut out on the #96 foot.

3. The bottom of the clip has etched lines and a ridge. The clip should be put on the foot, so the foot sits on this ridge and the etched lines are on the bottom.
4. Push the foot down into the clip. Make sure the clip is firmly attached. Attach the foot to the machine.
5. Keep your desired ruler in the same place as the last row of echoing and align the edge of the Echo-Quilting Clip with the edge of the ruler (Fig. 2) and sew.
6. Continue with the same clip for the same echo spacing or repeat with the remaining two clips.
7. To remove the clip, remove the presser foot from the machine. Gently wiggle the clip to free it from the foot. If it is very tight, use a small flathead screwdriver to assist. Place it in the slit and gently twist as you wiggle the clip off.

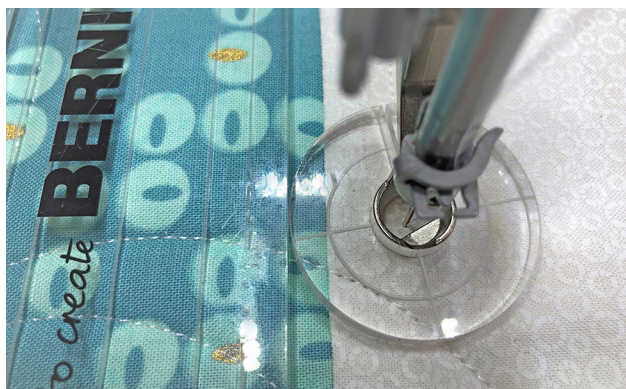


Fig. 2

## CUP CLIP



The Cup Clip on Ruler Foot #96 is great for stitching over basted quilt edges with pantograph designs, either freehand or automated with Q-matic. It is large enough not to catch under the edge of the fabric, bulky seams, or folded fabric edges such as prairie points. The Cup Clip glides smoothly over thick and uneven surfaces for perfect stitching.

To attach the Cup Clip, place the clip on a flat surface and push the foot down into the clip. The clip should be flush with the sole of the foot and the slot on the clip should be covered by the foot (Fig. 3).

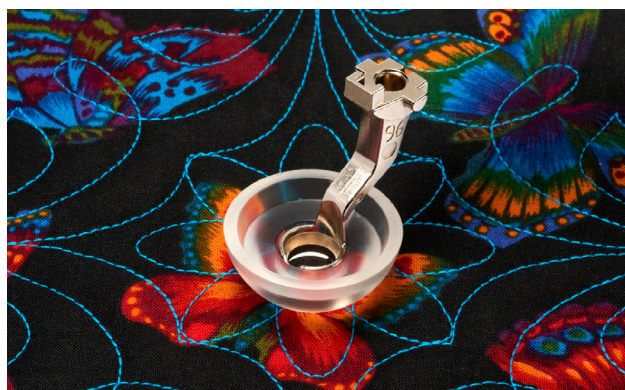


Fig. 3

## COUCHING INSERTS



Couching Inserts attach to the Adjustable Ruler Foot #72/#72S, providing precise guidance for yarns, cords, and fibers of various thicknesses during the couching process. For more detailed instructions on utilizing Couching Inserts, please refer to Exercise 1: Couching on page 8.

## NEEDLE POINT LASER



The BERNINA Needle Point Laser shows the exact place where the needle is going to stitch. No more guessing or turning the handwheel to lower the needle for placement or positioning. Use it to ensure stitching accuracy on start points, when doing rulerwork, or when marking points in Q-matic.

### Activating the Needle Point Laser

Installation on your machine is easy when following the instructions included. After installation, activate the laser in Settings (Fig. 4):

**Home » Settings » Needle Point Laser**

Toggle the grey button to activate.

In the same menu, you can also increase or decrease the intensity of the laser light to make it easier to see on busy fabrics or to make the light more precise.

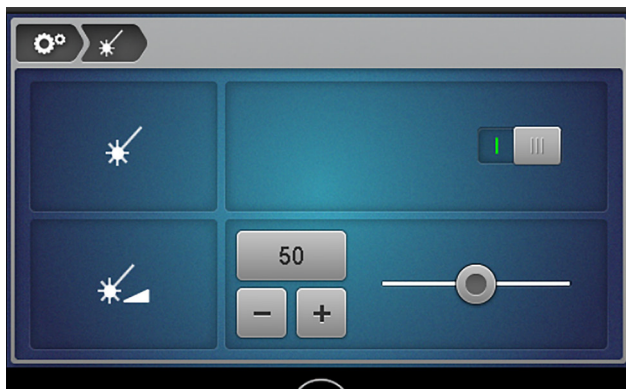


Fig. 4

### Aligning the Laser

For best success when quilting, make sure you have aligned the laser before you start a project. To do this:

1. Cut the foam found in the laser light's container lid in half so it is about the same size as the stitch plate. Place a piece of tape horizontally across the foam so the needle will make a hole in it.
2. Turn the handwheel or use the Securing Stitch function with an un-threaded needle to make a hole in the tape.
3. Loosen thumb screw on the back of the Needle Point Laser so you can move the laser up and down. Match the height of the red dot with the hole in the foam, then tighten screw firmly.
4. Loosen thumb screw on the side of the Needle Point Laser (Fig. 5) and move the laser right and left. Match the red dot with hole in the foam exactly, then tighten the screw firmly.



Fig. 5

5. Recheck the alignment as needed. Quilting may loosen the thumb screws and cause the laser to shift.

## Needle Point Laser Settings on the Sewhead Touch Screen

There are three settings for the Needle Point Laser displayed on the Sewhead Touch Screen with the icon (Fig. 6). If the laser is not installed and activated in Settings, the icon will not appear on the Sewhead Touch Screen.

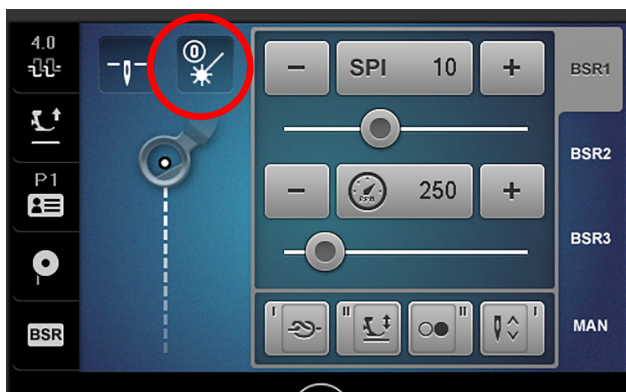


Fig. 6

- “0” is OFF, for times when the laser is not needed.
- “1” is ON and the laser is always on. This is good for seeing where the needle will touch the project or when placing designs with Boundary or Markers in Q-matic.
- “A” is AUTOMATIC. The laser turns itself off during stitching but turns itself on when the machine stops. This is good when placing a design every time you stop.

## SPOOL HOLDERS

### Vertical Spool Holder



The BERNINA Q Series Longarm comes standard with one vertical spool holder that will accommodate two large cones of quilting thread. An additional vertical spool holder is available that doubles the Sewhead thread capacity to four cones.

### Horizontal Spool Holder




The Horizontal Spool Holder holds one spool of thread on the left side of the machine. This holder is perfect for small spools of thread, including specialty threads that are stack-wound. Two spool caps secure the perfect position of the spool on the holder for optimum thread unwinding.


## Exercise 1


# COUCHING

### Materials

 Backing, batting and quilt top loaded on Studio or PRO Frames or a quilt sandwich with layers basted together for the Hoop Frame or Table Models

 **Needle:** 90/14 Jeans

 **Presser Foot:** Free-motion Couching Foot #43 or Adjustable Ruler Foot #72 / #72S with Couching Inserts

 **Notions:** Cord or yarn, thread to match the cord

Couching is an easy way to add color and texture to a variety of projects, whether working on the table, frame, freehand, or with Q-matic.

Two presser foot options available for couching on the Q Series machines are Free-motion Couching Foot #43, which accommodates cords approximately 2 mm in diameter, and Adjustable Ruler Foot #72 / #72S with one of three inserts to couch fibers (1.4 mm, 1.8 mm, or 2.2 mm in diameter). Couching inserts (Fig. 7) are sold as a set of three. For both options, use cords or yarns that are flexible and fill the chosen couching foot.



Fig. 7

### MACHINE SETUP

#### Cord Placement for Larger Spools

1. Thread the Q Series through the normal path.
2. Place the cording spool on the right spool pin on the top of the machine (Fig. 8).
3. Run the cording through the thread guide above the cord. Pull the cord across to the front guide on the thread stand. The cord will share the guide with the needle thread.
4. Let the cording lay along the left side of the machine.



Fig. 8

---

## Cord Placement for Small Spools

5. Thread the Q Series through the normal path.
6. Place the cord on the Horizontal Spool Holder (Fig. 9).
7. If the spool has a large opening, insert two medium spool caps, one at each end.
8. Let thread fall from the spool to the foot.

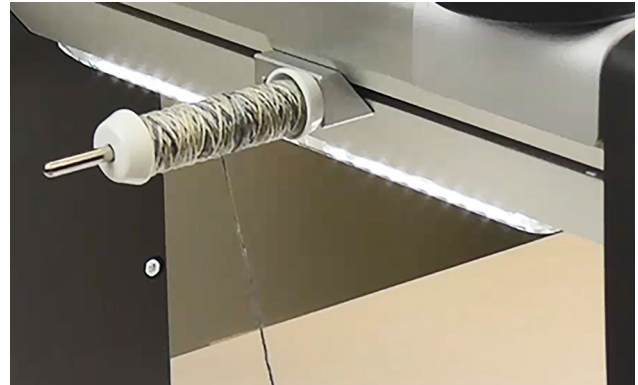


Fig. 9

## Free-motion Couching Foot #43

9. Thread the cord through the presser foot using the wire threading aid included with the foot (Fig. 10).
  - The cord enters the foot from the side and then down through the center hole.
  - The cord should fill the hole and flow through the foot smoothly.
10. Place the foot on the machine.



Fig. 10

## Adjustable Ruler Foot #72 / #72S

11. Use the dial to raise the sole of Adjustable Ruler Foot #72 / #72S to the highest position.
12. Choose the insert that best matches the cord you are using, (1.4 mm, 1.8 mm, or 2.2 mm) and place it in the center of the foot. Press down until it snaps into place.
13. Thread the cord through the center of the insert.
14. Place the foot on the machine. Lower the presser foot.
15. Using the dial on the foot, lower the sole of the foot so that it is just above the fabric and the fabric moves freely under the foot.

---

## COUCHING

1. Pull up the bobbin thread and secure.
2. Hold the cord tail and thread tails when starting to quilt. After stitching a few stitches, cut the thread tails. The excess cord tail may be cut to the fabric or threaded through a large eye needle and run into the layers of the quilt.
3. Begin couching the design (Fig. 11). Start with a meandering or stippling pattern and then try other designs. The Adjustable Ruler Foot #72 / #72S with Couching Inserts may also be used with quilting rulers while couching.
4. On the Q Series machines, the couching is stitch regulated because of the built-in BERNINA Stitch Regulators.
  - If on the frame, move the Sewhead in a steady motion.
  - If on the table, move the fabric in a steady motion.
5. Pull excess cord off the spool to maintain slack for easier stitching.
6. When using Q-matic, all you need to do is watch the cord, guiding it if necessary.
7. When stitching is finished, secure the sewing threads and trim. Thread the cord tail through a large-eyed needle and run the tail into the layers of the quilt.








*Fig. 11*

## Exercise 2

# TWIN NEEDLE QUILTING

### Materials

-  Backing, batting and quilt top loaded on Studio or PRO Frames or a quilt sandwich with layers basted together for the Hoop Frame or Table Models
-  **Stitch Plate:** Twin Needle Stitch Plate
-  **Needle:** Twin (maximum size 4.0 mm)
-  **Presser Foot:** Free-motion Embroidery Foot #24 or a foot that can accommodate wide needles
-  **Notions:** Hand needle threader (included accessory), coordinating thread

Twin needle stitching is a unique way to show off quilting designs with two lines of stitching that creates a ribbon-like effect. When stitching side to side, the needles stitch a single straight line as the needles are in alignment with each other. When stitching up and down, there will be two parallel lines of stitching. All other stitching takes on a ribbon-like look. Twin needle stitching works well on both Table and Frame Model Q Series machines, as well as with Q-matic designs.

A Twin Needle Stitch Plate is needed for twin needle quilting (Fig. 12). The needle opening of this stitch plate accommodates up to a 4 mm double needle and the cutouts on the plate allow the functionality of the BERNINA Stitch Regulator sensors. The plate is a clip-on style that is easy to install with no extra tools.

### MACHINE SETUP

1. Remove the standard Stitch Plate (Fig. 13) and attach the Twin Needle Stitch Plate.
2. Insert the twin needle (no larger than 4.0 mm).

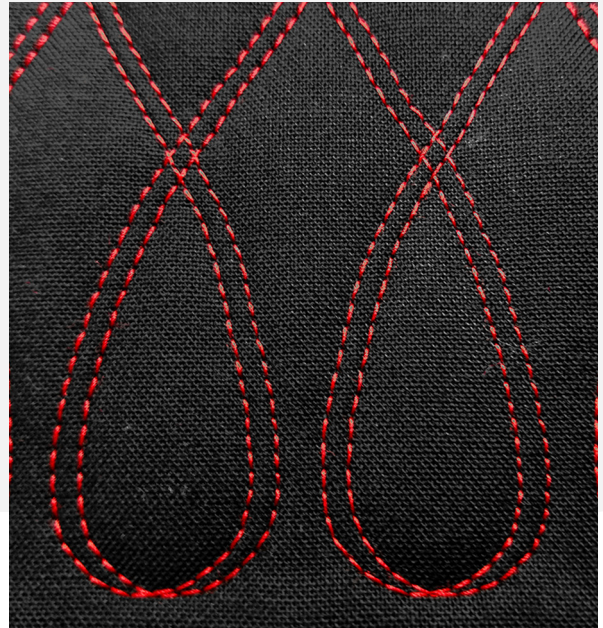


Fig. 12

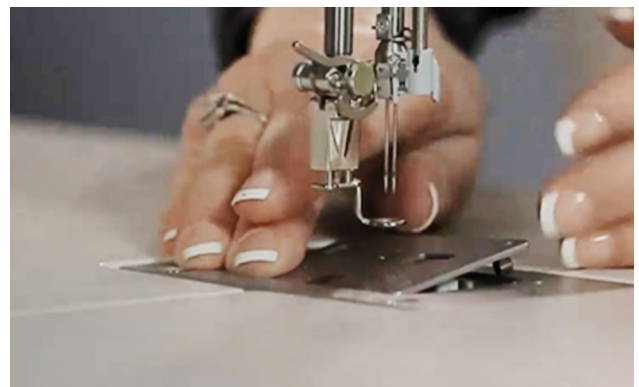


Fig. 13

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3. Attach the presser foot.
  4. Using the handwheel on the side of the Sewhead, manually lower the needle into the presser foot to make sure it clears the foot opening easily.

### Threading: Right Thread

5. Place a spool of thread on the right spool holder.
6. Bring the thread straight up to the guide on the thread stand. Bring across to the front guide on the left.
7. On the left side of the machine, slide the thread into the upper front thread guide and under the second guide.
8. Bring thread across the machine into the back side of the tension disc, down under the check spring and through the eye of the take-up lever back to front.
9. Bring the thread straight down. When you get to the first thread guide above the needle, thread it through the hole on the right. Go behind the C Clamp and through the guide above the needles and thread the right needle using the manual threader (Fig. 14).



Fig. 14

#### **Tip:**

One of the most important things when using double needles is to slow down. A slow, steady pace is better than faster or erratic with a lot of stopping and starting. If using Q-matic, slow the machine down by using the slide in the Control Area on the computer screen. If using BSR1, slow the idle speed of the needle.

### Threading: Left Thread

10. Place a spool of thread on the left spool holder.
11. Pull the thread straight up through the guide on the thread stand and through the front guide on the thread stand.
12. On the left side of the machine, slide the thread into the upper back thread guide and under the second guide.
13. Bring thread across the machine into the front side of the tension disc.
14. The rest of the threading is the same as usual, except when you get to the first guide above the needle; place the thread through the left hole. Thread behind the C clamp, thorough the guide above the needles and thread the left needle with the manual threader.

---

## STITCHING

1. Pull up the bobbin thread and secure.
2. Stitch at a slow, steady pace. If stitching in Q-matic, slow the machine down using the Slide / Speed Control. The upper tension may need to be set a little lower.
3. Stitch out a motif. Pull up bobbin thread and secure.

### **Tip:**

When quilting with twin needles, you will always have zigzag like stitching on the back of your quilt. Match the bobbin thread to the backing to minimize the double thread look on the back of the quilt.

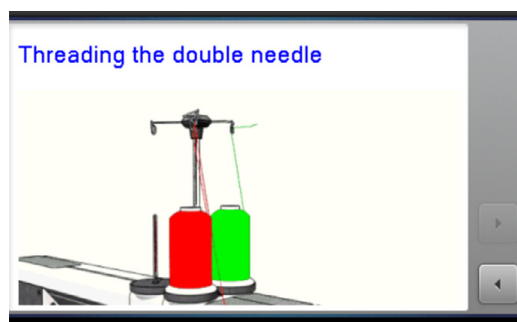
## FEATURE FOCUS

### Built-in Threading Tutorial

There is a built-in tutorial on the Q Series machines for threading the twin needle. To access it, select:

**Home » Tutorials »  
Threading » Threading the Twin Needle**

You can watch the video while threading.



# TABLE ACCESSORIES

Quilting with a BERNINA Q Series Longarm on a table is a great way to complete your quilting projects. With the expanded throat and table space, rulerwork is a popular technique. Accessories such as Gripper Rings and a Machine Cover enhance your experience when using a Q Series longarm on a table.



Fig. 15

## GRIPPER RINGS



Gripper Rings keep the desired area of the quilt completely flat and taut when quilting with a table-model longarm. With the assistance of the ring, you

can focus on the quilting, rather than how firmly to hold your fabric. The set includes one 8" ring and one 11" ring.

The Gripper Ring holds the stitching area around the needle flat with a rubber grip on the bottom. Knobs (Fig. 15), on each side offer an easy way to handle the ring as you move your fabric. The opening on one side allows you to place or remove the ring without raising the needle or presser foot.

## Using a Gripper Ring

1. Select your BSR Mode and set the needle to Stop Down position.
2. Position the Gripper Ring around the presser foot and on the area to be quilted. Smooth the quilt before final placement of the ring, making sure there are no tucks and the quilt is flat.
3. Position your hands over the knobs.
4. With a light touch, move the fabric as you quilt.
5. Once the area inside of the ring is quilted as desired, stop and reposition the ring.
6. Begin quilting again in your open work area.

### Tip:

The 8" ring is ideal for small areas or when working on a smaller domestic machine.

The 11" ring offers the largest quilting area and is helpful when quilting larger motifs including all-over designs.

## MACHINE COVER



BERNINA's Machine Covers protect your Q Series sit-down machine from dust when not in use and provide an attractive look

to your sewing studio. They are sized to fit the Q 16, Q 16 PLUS, and Q 20 Sewheads. It is easy to place with a side zipper and a dedicated opening that fits over the spool holders.

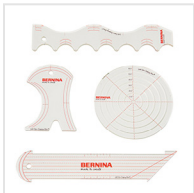
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## RULER KITS



BERNINA has three sets of ¼-inch thick acrylic rulers available for use with your Table Model. Each ruler features fabric-gripping surface on the back to help keep them in place while you stitch. Marked guidelines make it easy to align your ruler for repeated motifs.

### Essentials Ruler Kit



The Essential Ruler Kit consists of four rulers perfect for straight line ruler work, squiggly designs, waves, and nested circles. This kit includes the Squiggle Template, Mini Straight-Line Tool, Multi Curve Guide, and the Nested Circle Template.

### Curves and Clams Ruler Kit



The Curves and Clams Ruler Kit has four rulers perfect for quilting squiggly designs, clamshells, curves, and nested mini ovals. The kit includes the Nested Mini Ovals,

Squiggle, S-Curve and the Clamshell ruler with four different size options.

### Border Ruler Kit

The Border Ruler Kit contains four rulers ideal for quilting interlocking waves, cable, heart, and pointed leaf designs. The kit includes a multiple-sized Pointed Leaf / Oval ruler, a Cable Tool for 3" cable, Loop-to-Loop for both 3" and 4" interlocking designs, and a Heart Tool (Fig. 16) in 1", 2", 3" and 4" sizes.

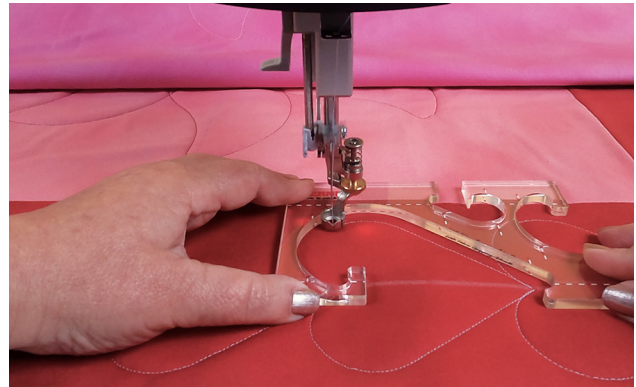



Fig. 16

## Exercise 3

# RULERWORK ON THE TABLE

### Materials

-  Quilt sandwich with layers basted together
-  **Needle:** Size 90/14
-  **Presser Foot:** Ruler Foot #96, Adjustable Ruler Foot #72, or Adjustable Ruler Foot with Slit #72S
-  **Notions:** Desired ruler, Needle Point Laser, thread for the top and bobbin

Rulerwork is a popular quilting technique for Table Models. You can create straight lines, curved lines, scallops, and waves with precision!

### TABLE SETUP FOR RULERWORK

1. Attach Ruler Foot #96 or Adjustable Ruler Foot #72 or #72S. If using Adjustable Ruler Foot #72 or #72S, adjust the sole so that it skims across the quilt top without any resistance.
2. Set the needle to Stop Down position.
3. Select BSR Mode 2. This stitch-regulated mode is recommended for rulerwork because the needle stops when the fabric is not being moved.
4. Activate the Needle Point Laser to help align your needle position. The Needle Point Laser can be turned on or off as needed.



#### Tip:

If using a ruler that does not have fabric-gripping surface on the back, there are various options you can apply to keep the ruler from slipping, from rubberized strips to sandpaper like strips.

### RULERWORK TECHNIQUE FOR THE TABLE

1. Determine the starting point and drop the needle and the foot.
2. Bring up the bobbin thread and secure the stitches.
3. Set the presser foot in the down position *before* placing the ruler against the foot.
4. Guide the fabric and the ruler against the foot, applying light pressure.
5. Stop with needle down. Tie off the threads or continue by repositioning the ruler for more quilting.

*For specific techniques for quilting straight lines, inside and outside curves, see the exercise on page 22.*

# FRAME ACCESSORIES

There are many optional accessories designed for use on the various BERNINA frame models. Options like casters, handles, and zippered leaders can make your time quilting easier and more enjoyable. Remember to confirm whether the accessories are suitable for the frame you are using.

## HYDRAULICS



The hydraulic lift system for the BERNINA Large and Classic PRO Frames allows simple height adjustments of the frame with the touch of a button. The hydraulic lift system is not available for the Small PRO, Studio, or Hoop Frames. Adjust the frame height for comfort or as a preference for certain quilt techniques.

- After installing the hydraulic lift on each of the six legs (Fig. 17) according to the manual, you can raise and lower the frame with the touch of the button. The switch to raise and lower the frame is installed on the front bar for easy access.
- To find the optimal working height, place your arms at your sides and bend them at the elbow. The bottom of the elbow should be even with the stitch plate or the top of the backing rail. Some users prefer the frame to be a little lower when doing rulerwork, and a little higher when doing micro work, while others prefer the opposite. Experiment with raising and lowering the frame for various techniques to find your optimum height for each technique.



Fig. 17

- As you quilt for extended periods of time, you may find it comfortable to adjust the height of the frame to prevent fatigue and maintain good posture.

## CASTERS



Fit your hoop, studio, or PRO frame with locking casters for easy movement. The casters are sold in a set of six, one for each leg of the frame. Depending on the Frame Model, you may only need four casters.

- To secure the frame in place, lock each caster.
- If there is a need to move the frame, be sure to re-level it. A level frame is always easier to work with and makes the quilting look great.



Fig. 18



Fig. 19

## PALM PRECISION HANDLES



The Palm Precision Handles (Fig. 18), available for all Q Series machines, allow for ergonomic and controlled handling of the machine, even when quilting for hours. They are perfectly suited for micro work, filling small areas, doing detailed work, or quilting a Trapunto effect. Follow the Installation guide that comes with the handles.

### Installation

The Palm Precision Handles are mounted directly on the longarm machine's head and replace the standard handles.

1. Turn off the machine.
2. Unplug the left standard hand and plug in the Palm Precision Handle marked left. Repeat for the right handles.
3. Turn on the machine.
4. Program the functions for the handles in the same manner as the standard handles.
5. Adjust the handles so are positioned just above the quilt top.



Fig. 20

### Use Palm Precision Handles

- The hands should rest comfortably on the handle controls with the thumb above the safety knob on the inner side of the handle. (Fig. 19).
- The fingers may overlap the control buttons until a comfortable position is found. In some cases, a sitting position may work best, with your forearm resting on the backing rail.
- The control buttons "I" and "II" remain in the same settings as programmed before the handle change.
- When using any function that moves the needle, the safety knob will need to be pressed.

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to prevent an uncontrolled sewing start (Fig. 20).

- Press the safety knob and hold and press the function needed. Release both. To stop stitching, press the button that is programmed for Start / Stop.

## ZIPPERED LEADERS



The standard leaders are fabric panels attached directly to the rails of the longarm quilting frame. Once attached, they are stationary, and the quilt fabric is pinned to

these leaders and unpinned for removal. The BERNINA Zippered Leaders have zippers near the pinned edges, which allows the quilt to be removed and reattached to the frame without unpinning (Fig. 21).



Fig. 21

The BERNINA Zippered Leaders have many benefits for the quilter, especially when working on more than one quilting project at a time. Instead of pinning the backing and lower edge of the quilt top directly to the leaders on the frame, the fabric is pinned or machine basted to the respective small, zippered

parts of the leaders and then zippered onto the main leader. The quilting project, although unfinished, can be changed with ease by zipping off one and zipping on another. The partially finished project will remain square and can easily be put on the frame again in just a few steps.

With each set of Zippered Leaders, you will receive two extra zip-on parts for each leader. They are easy to attach following the enclosed instructions or using the same method as the standard leaders were installed.

The option to purchase extra zip-on parts of all three leaders is available. Zippered Leaders are available for all three sizes of the PRO frames only.

## RULERWORK KIT



BERNINA's Rulerwork Kit gives you everything you need to work with rulers on your Frame Model. It includes Ruler Foot #96, a multi-purpose straight-line ruler, and an extension table or base for a wider workspace.

- The base snaps around the stitch plate of the Sewhead to provide support for the ruler.
- To remove the base, pull out the latches on the back of the table, lift the base, turn and slide it off the machine.
- Removing the presser foot and the needle gives you more space when attaching and removing the ruler base.

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## RULER KITS

BERNINA's three Ruler Kits pair perfectly with the Rulerwork Base and presser foot, enabling you to achieve accurate, repeatable designs. See page 15 for more details on the Essentials Ruler Kit, Curves and Clams Ruler Kit, and Borders Ruler Kit.

## PRECISION RULER GUIDE PRO

The Precision Ruler Guide PRO is a Q Series PRO Frame ruler system (Fig. 22) that allows quilters to quilt long continuous lines in all directions and angles without worrying about the ruler shifting.



Fig. 22

- The extension bar clamps to the idle bar, and you can easily move it to achieve your desired angle or ruler placement (Fig. 23).
- The 18" and 28" straight line rulers can clamp onto either the extension bar or the idle bar.
- Each ruler features angle and alignment markings to assist in placement.



Fig. 23

## MECHANICAL CHANNEL LOCKS



Mechanical channel locks make it easier to sew in perfectly straight lines. The pair of channel locks are mounted directly onto the rear profile and carriage. They inhibit the movement of the carriage in one direction so that it glides easily in the other, thus creating perfectly straight lines either vertically or horizontally.

Use the channel locks to baste batting and quilt tops in place, as well as to baste along the quilt sides.

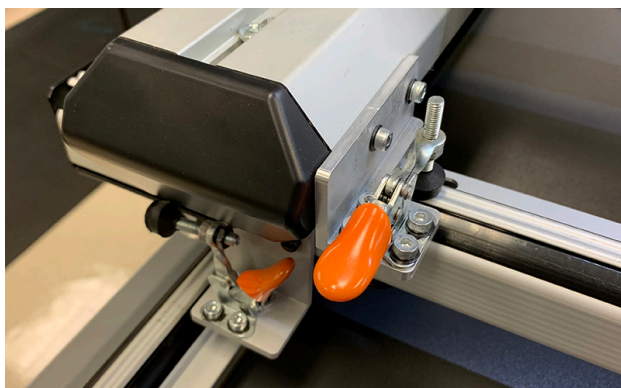


Fig. 24

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## Create Straight-Line Quilting with Channel Locks

1. Lock the Channel Lock and stop the machine from moving from front to back by pushing down on the orange lever (Fig. 24).
2. Stitch your first line by gently guiding the machine straight across the frame.
3. Determine the spacing for your stitching lines and place a mark to indicate the next line.
4. Unlock the Channel Lock by lifting the orange lever.
5. Move the machine the determined distance and then lock the Channel Lock again in its new position.
6. Stitch Row 2, moving the machine back across the frame.
7. Repeat Steps 4-6 until you have stitched all the needed rows.

### **Tip:**

Lock the opposite Channel Lock to the direction you would like to sew. For example, lock the vertical Channel Lock if you want horizontal lines. Both channel locks can be locked at the same time so the machine does not move when cleaning and oiling.

## BATTING RAIL

The Batting Rail conveniently holds a roll of batting under the frame for easy, out-of-the-way storage. It is available on the 10' Studio Frame (Fig. 25) and the Classic and Large PRO frames. You may also load batting from the bar into the quilt when loading on the frame.



Fig. 25

## ADDITIONAL SHELVING FOR STORAGE

Add additional shelving underneath the rear of the frame (Fig. 26) for extra storage of your quilting supplies. This sturdy shelf is available for Classic and Large PRO frames only.





Fig. 26


## Exercise 4


# RULERWORK ON A FRAME

### Materials

 Backing, batting and quilt top loaded on Studio or PRO Frames or a quilt sandwich with layers basted together for the Hoop Frame

 **Needle:** Size 90/14

 **Presser Foot:** Ruler Foot #96, Adjustable Ruler Foot #72, or Adjustable Ruler Foot with Slit #72S

 **Notions:** Needle Point Laser (optional accessory), Rulerwork Kit, desired ruler(s), painter's tape, thread for the top and bobbin



### RULERWORK KIT SETUP

The Rulerwork Kit must be used with your BERNINA Q Series quilt frame when doing rulerwork.

1. Snap the base around the stitch plate with the presser foot and the needle removed. The base provides a flat surface to support the ruler (Fig. 27).
2. Attach Ruler Foot #96 or Adjustable Ruler Foot #72 or #72S and insert the needle.
3. Set the Needle Stop Down.
4. Select BSR Mode 2 (recommended for rulerwork because the needle stops when the machine is not moving).
5. Activate the Needle Point Laser.
6. Decide the starting point and drop the needle and the foot. Be certain that the ruler is not near the presser foot yet.
7. Bring up the bobbin thread and secure the stitches.
8. Place the ruler up against the foot.
9. Guide the Sewhead so the foot is moved against the ruler, applying light pressure, and begin quilting. Stop with needle down and tie off the threads or continue by repositioning the ruler for more quilting.



Fig. 27

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- To remove the base from the Sewhead, pull out on one of the latches on the back of the base. Lift the base to disengage it. Turn the base and slide it off the machine.

## RULERWORK TECHNIQUES

### Straight Lines

Whether echoing a seam line, stitching in the ditch, or working in an open area, stitch a straight line using a straight-edge ruler as a guide.

- Guide the Sewhead so the foot is moved against the ruler, applying light pressure, and begin quilting (Fig. 28).
- Hold your hands on the ruler where the stitching is happening. Do not stretch your hand too far. It is better to stop and move your hand when needed.
- Determine the distance between the straight lines. Remember to include the  $\frac{1}{4}$ " from the needle to the edge of the presser foot in your measurements. Standard spacing might be  $\frac{1}{4}$ " or  $\frac{1}{2}$ ".
  - For  $\frac{1}{4}$ " spacing, stitch  $\frac{1}{4}$ " away from the first stitching line. Reposition the edge of the ruler on the stitched line, ensuring the edge of the ruler foot is against the ruler. Repeat until the area is filled with lines  $\frac{1}{4}$ " apart.
  - Similarly, for  $\frac{1}{2}$ " spacing, stitch  $\frac{1}{2}$ " away from the first stitching line. Lay the first etched line of the ruler on top of the stitching line. Place the edge of the ruler against the foot and stitch.



Fig. 28

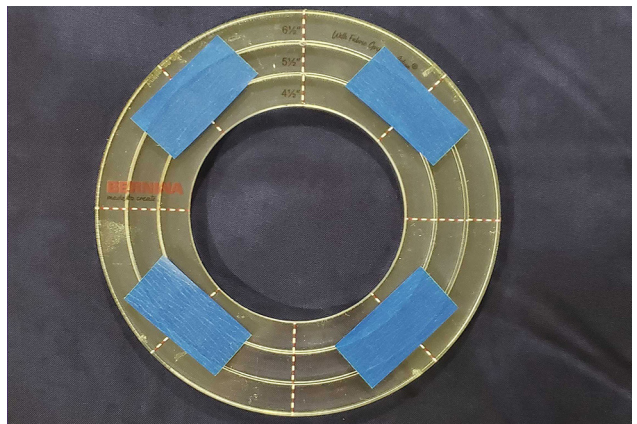


Fig. 29

### Curves Inside the Ruler

- Begin by marking horizontal and vertical centering lines on the fabric.
- Use the Nested Circles from the Essentials Ruler Kit and remove the three inner circles, leaving the three outer rings. Using painters' tape, secure the outer three rings together so you can still see the horizontal and vertical orientation lines on the ruler (Fig. 29).
- Slide the ruler so that the presser foot is in the center of the circle but nowhere near the inner edge of the ruler.

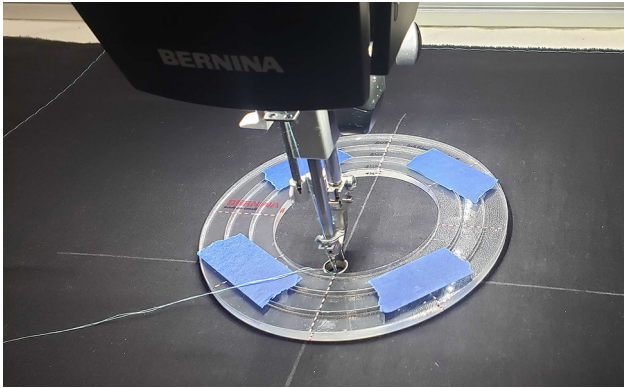


Fig. 30

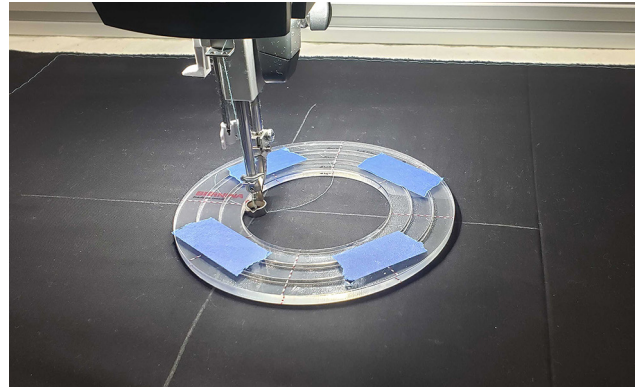


Fig. 31

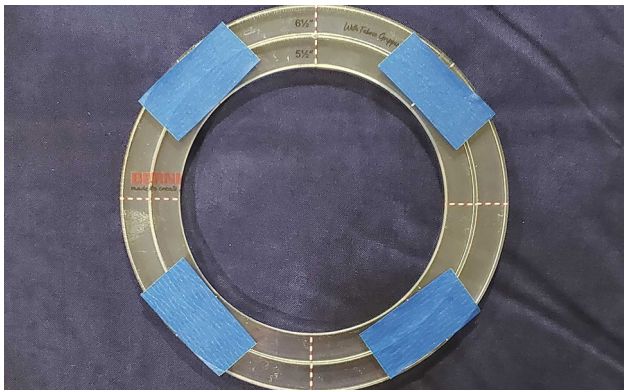


Fig. 32

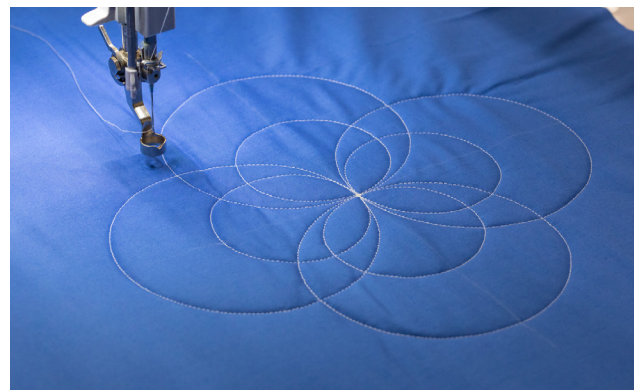


Fig. 33

4. Pull up the bobbin thread at the intersection of the two centering lines (Fig. 30). Secure.
5. Lower the presser foot and the needle.
6. Place the bottom of the inner circle against the front of the ruler foot. Align the vertical orientation line on the ruler with the drawn vertical line.
7. Stitch around the complete circle, beginning and ending at the intersection of the two lines. Do not cut the thread.
8. Reposition the ruler to the right and place the left inside edge of the ruler against the left side of the ruler foot (Fig. 31).
9. Stitch another circle.
10. Repeat the process until you have four circles, one on each line.
11. Remove the inner circle, so you only have two rings left. Re-tape as needed to secure (Fig. 32).
12. Repeat the process to stitch another set of circles (Fig. 33).

## Curves Outside the Ruler

1. Draw a 6" square on the fabric and divide it into quarters, so you have four (4) 3" squares.
2. Use the rounded end of the BERNINA Mini Straight Line Tool.
3. Lower the needle into the upper left-hand corner of the 6" square. Pull up the bobbin thread and secure.
4. Lower the needle and the presser foot.
5. Lay the rounded end of the ruler against the foot so that the notches of the ruler are on the outside line of the square and the other side of the half circle is  $\frac{1}{4}$ " from the center horizontal line (Fig. 34).
6. Stitch around the outside curve, hugging the ruler as you go (Fig. 35).
7. Stitch this curve on every line of the four 3" squares, always orienting it to the inside (Fig. 36). Your goal is to stitch all in one motion, without having to pull the bobbin thread and start again.

### Tip:

When using curved rulers, it may be more stable to make shorter movements along the ruler than trying to create the whole arc in one pass. Anytime that you don't feel like you have control of the ruler, stop the machine and reposition your hands before continuing.



Fig. 34

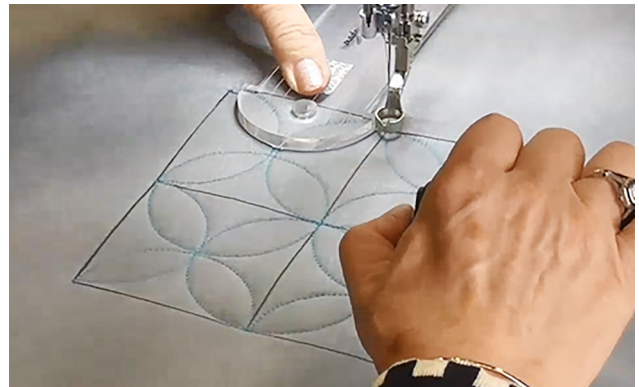


Fig. 35

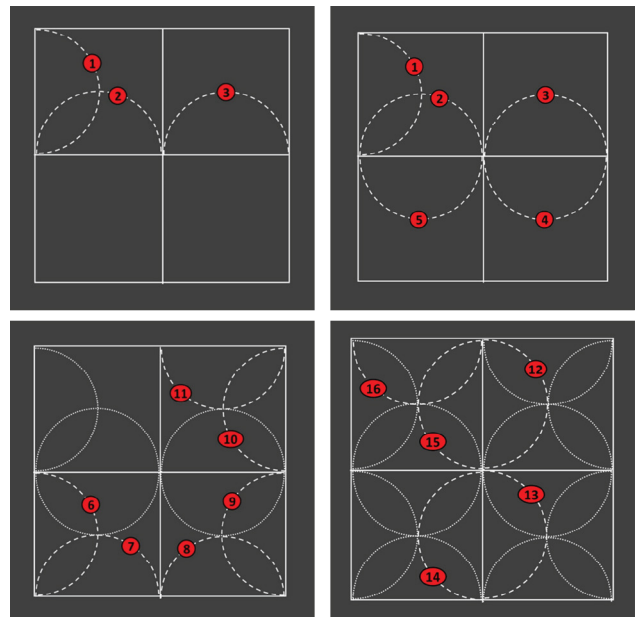


Fig. 36

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