

Ruler Work at a Sit-down Machine



Sit-down Ruler Work

Domestic Machines and Table Longarm



BERNINA Adjustable Ruler Foot #72



Adjustable Ruler Foot #72

Compatible with 2, 3, 4, 5, 6, 7 & 8 Series machines
and the Q 20 Table Model

→ Ruler work

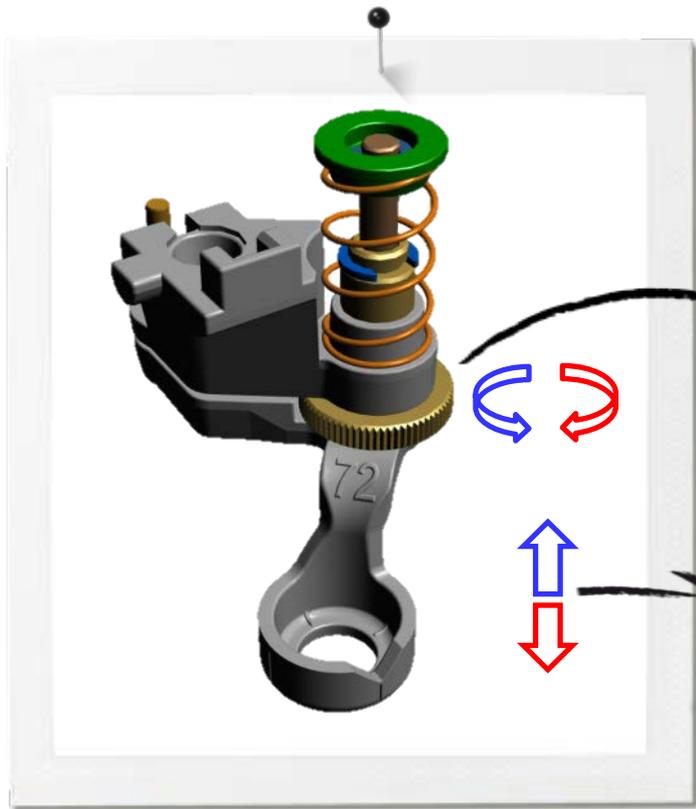


→ Free-motion quilting



Adjustable Ruler Foot #72

Key Feature— Height Adjustment Dial



Height adjustment dial

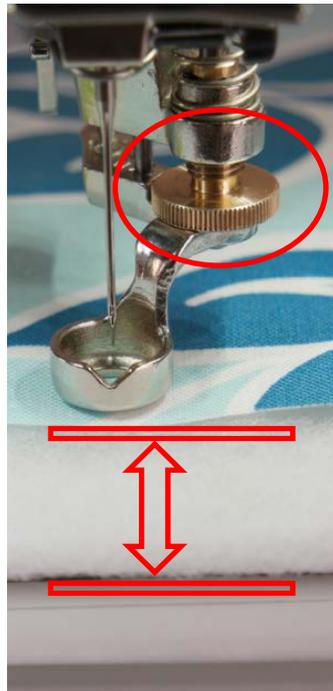
- Set sole height according to quilt/fabric thickness

Height range 4 mm (1/6 Inch)

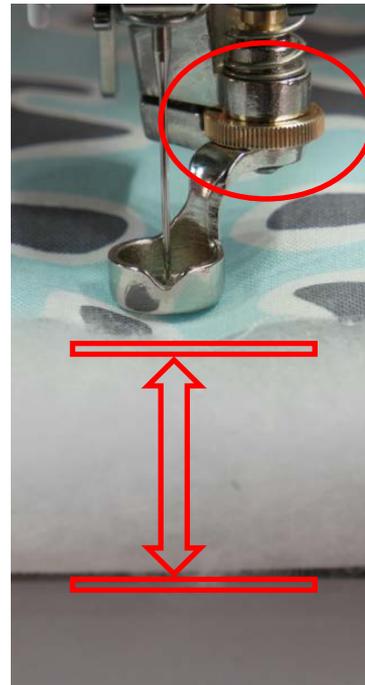
Adjustable Ruler Foot #72

Key Feature— Height Adjustment Dial

- Set the sole height according to the quilt/fabric thickness
- The sole should just touch the fabric and glide over the fabric and seams
- If height is too high, the result is thread loops or skipped stitches



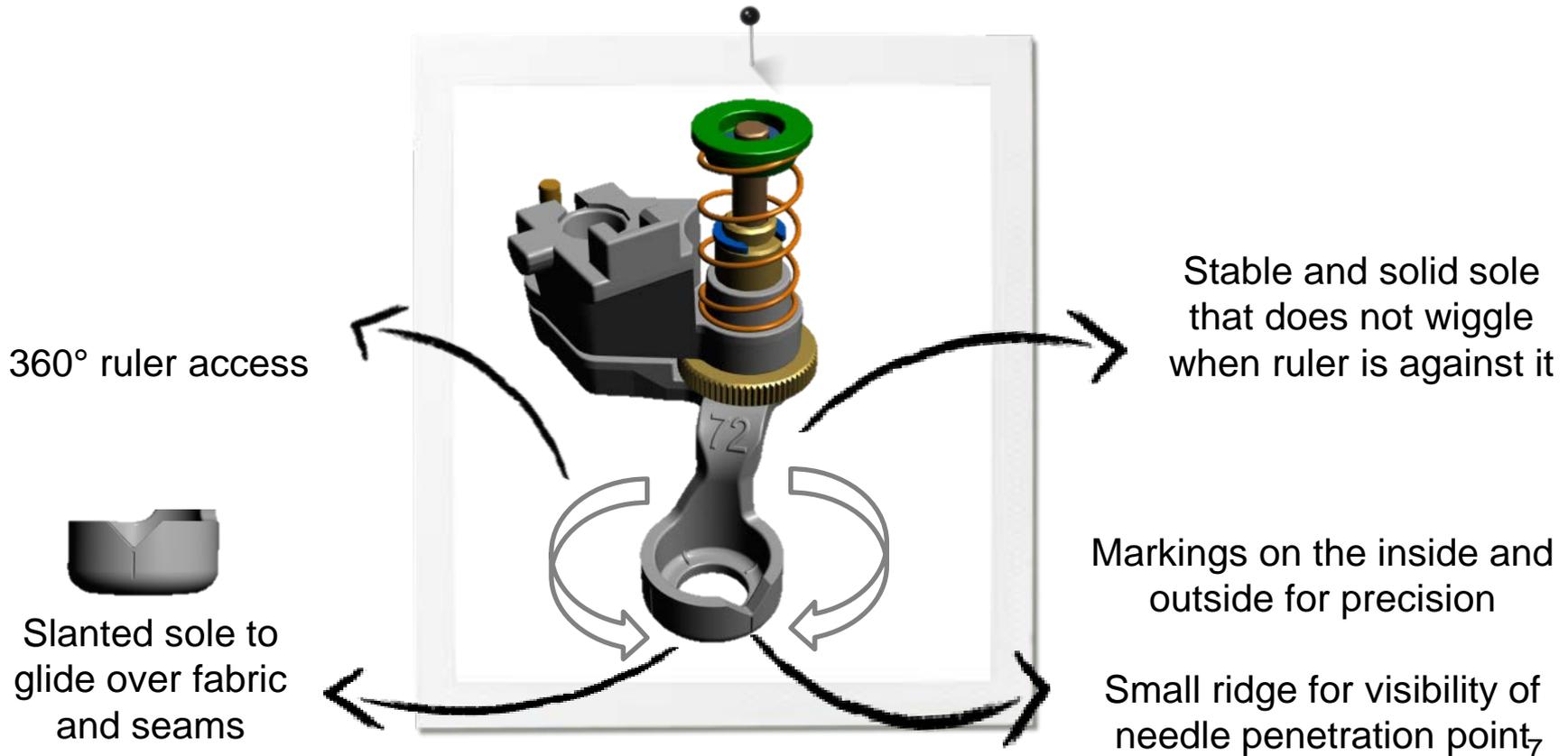
Low height for quilts with a thin batting



High height for quilts with a thick batting

Adjustable Ruler Foot #72

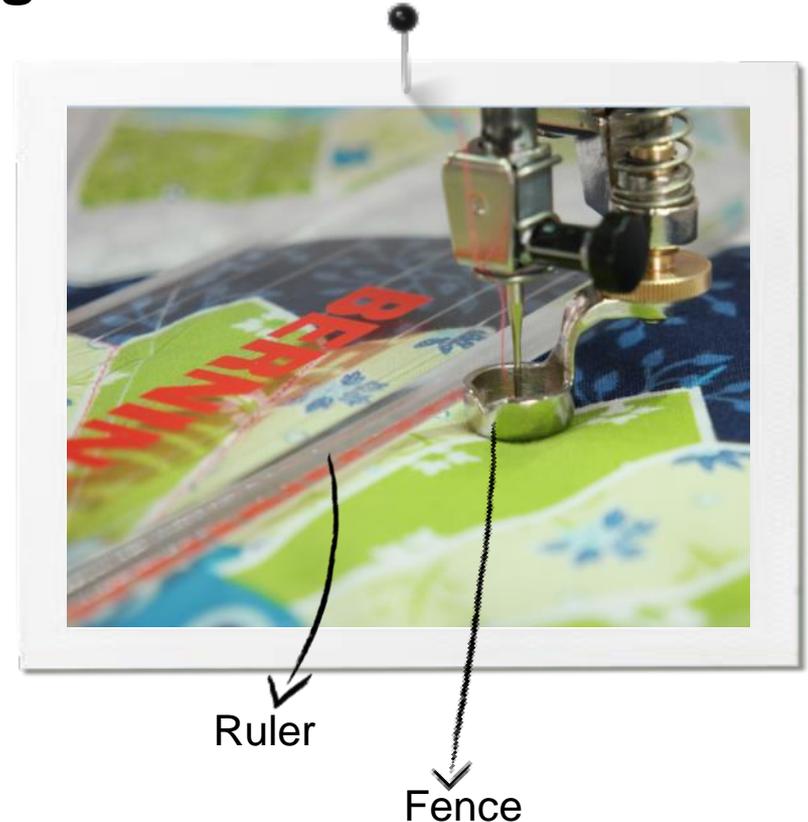
Key Feature— Precision Engineered Sole



Adjustable Ruler Foot #72

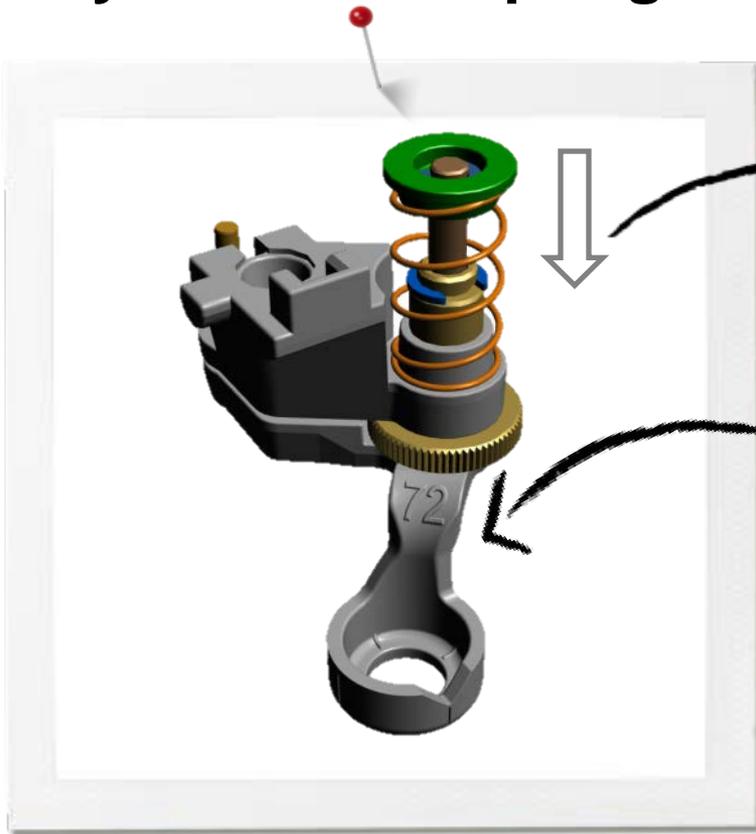
Key Feature— Precision Engineered Sole

- Fence on the sole prevents the ruler from coming in contact with the needle during ruler work
- 360° ruler access
 - Rulers can be used on any side of the fence



Adjustable Ruler Foot #72

Key Feature— Spring Mechanism

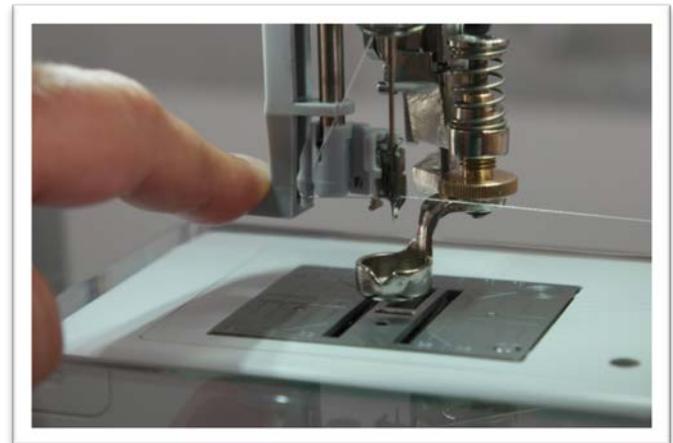


Contact with needle bar is buffered

Needle bar will not be damaged as a result of the needle being lowered when the foot is in a raised position

Spring mechanism buffers contact when foot is raised and needle lowered

Clearance for the needle threader



Adjustable Ruler Foot #72

Difference between a hopper foot and the Adjustable Ruler Foot #72



Embroidery foot #9 has a spring that enables the foot to hop while sewing.

Adjustable Ruler Foot #72 also has a spring, but works in the opposite direction. The foot is solid and does not lift up from the bottom to prevent rulers from slipping underneath the sole.

Adjustable Ruler Foot #72

Machine Compatibility

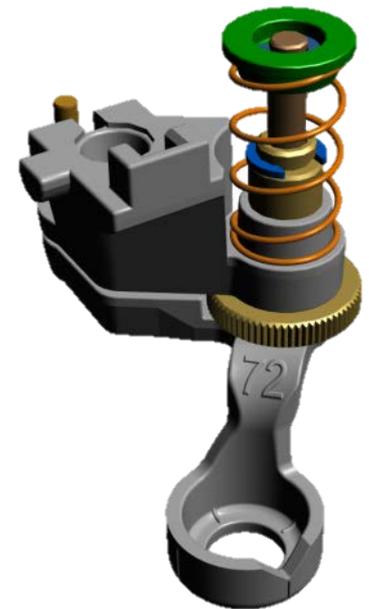
Function / Machine Series	2	3	5	7	8
Collision with needle bar	Yes	Yes	Yes	only hand wheel	only hand wheel
Adjustable foot pressure	No	No	Manual	Auto	Auto
Adjustable foot height	No	No	No	Auto	Auto
Automatic foot lowering	No	No	No	Yes	Yes
Auto. fabric thickness recognition	No	No	No	Yes, from B 780	Yes
Need for height adjustable foot	Yes	Yes	Yes	Yes	Yes
Firmware adaption	No	No	No	Yes, from B 780	Yes
Machine Compatibility					
For height adjustable foot #72	Compatible with BERNINA home machines				
For height fixed ruler foot #96	Compatible with Q Series machines				



Adjustable Ruler Foot #72

Machine Settings for 2, 3, 4, 5 and 6 Series machines

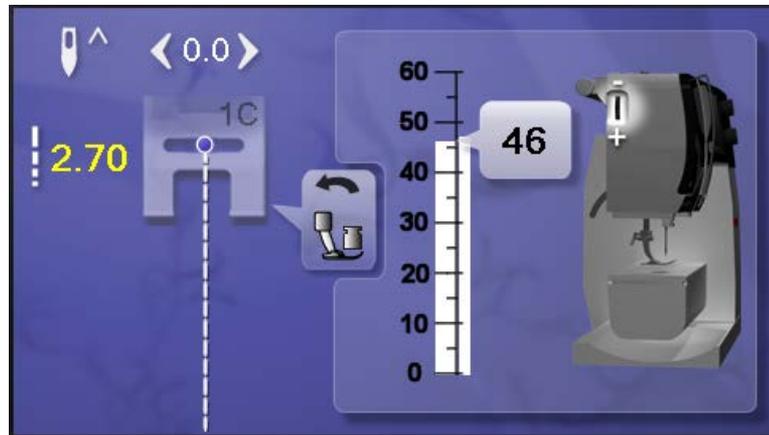
- Lower feed dog
- Attach straight stitch plate (recommended)
- Straight stitch No. 1 and stitch width = 0
- Attach Adjustable Ruler Foot #72
- Select needle down (optional)
- Turn height adjustment dial until the sole is in the lowest position
- Check height of foot in relation to the quilt/fabric
- 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 height accordingly using the height adjustment dial



Adjustable Ruler Foot #72

Machine Settings for 4, 5 and 6 Series machines

- Reduces the amount of pressure the foot places on the fabric
- For less pressure on the fabric, reduce the pressure to a lower number. The normal setting is 47.
- Adjusting the presser foot pressure does not lift the foot as it does with the 7 & 8 Series machines



Adjustable Ruler Foot #72

Machine Settings for 7 Series and 8 Series machines



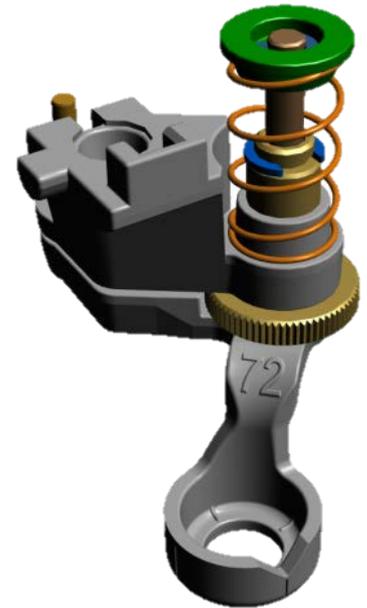
- Lower feed dog
- Attach straight stitch plate (recommended)
- Straight stitch No. 1 and stitch width = 0
- Attach Adjustable Ruler Foot #72
- Select Adjustable Ruler Foot #72
 - (after update available)
- Select needle down (optional)
- Turn off hover function (optional)



Adjustable Ruler Foot #72

Machine Settings for 7 Series and 8 Series machines

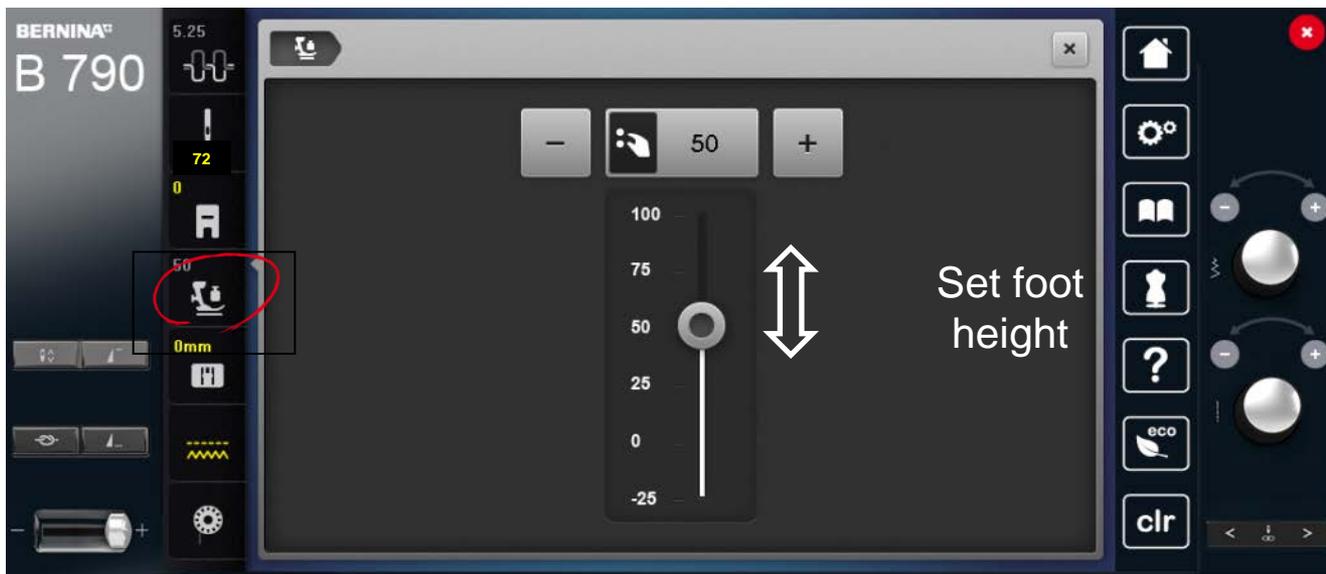
- Turn height adjustment dial until the sole is in the lowest position
- Check height of foot in relation to the quilt/fabric
- The sole should just touch the fabric and easily glide over the fabric and seams
- If height is too high, the result is thread loops or skipped stitches
- If sole needs to be raised, adjust height manually with the height adjustment dial on the foot or automatically in the presser foot pressure menu



Adjustable Ruler Foot #72

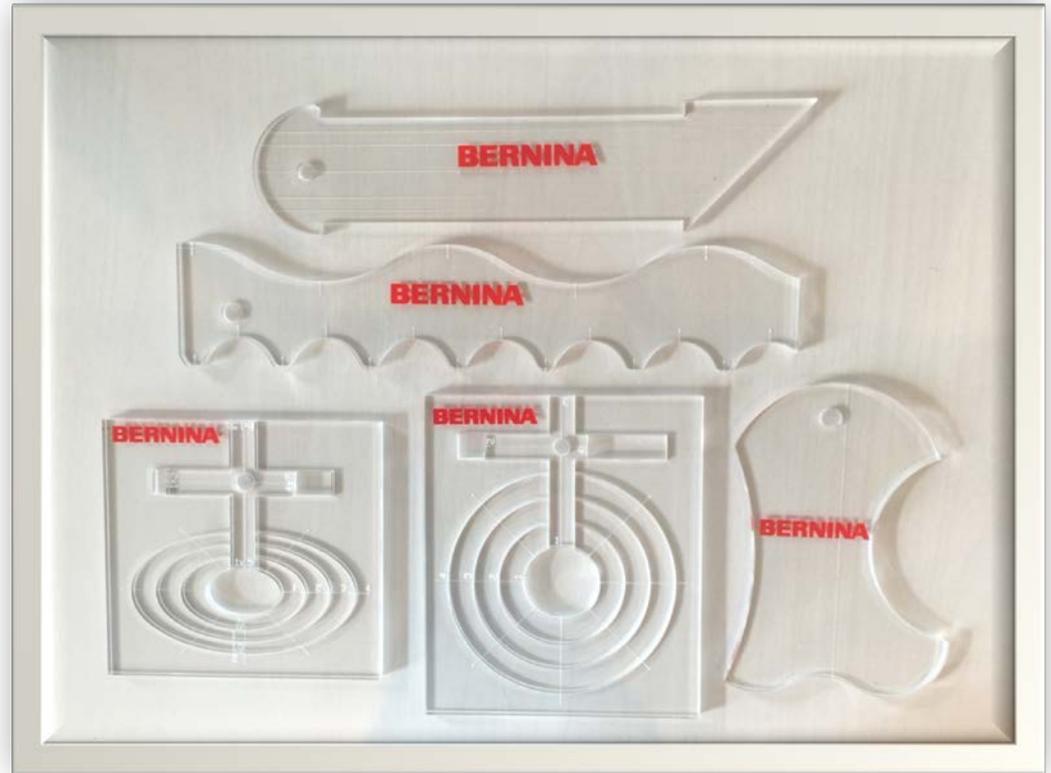
Machine Settings for 7 Series and 8 Series machines

- To adjust height in the presser foot pressure menu select on the touch screen
- Move from -3 to -25
- 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.



BERNINA Ruler Kit for Sit-down Model

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



Sit-down Ruler Work

Machine Set Up

→ Domestic Machine

- Straight Stitch
- Straight Stitch Throat Plate
- Adjustable Ruler Foot #72 Attached
- Needle Stop Down

→ Q 20 Longarm Table Model

- BSR 2
- Ruler Foot #96 Attached
- Needle Stop Down

Sit-down Ruler Work

Machine Set Up

→ Wind Bobbin

→ Insert Bobbin in Machine

→ Insert new Jeans Needle

→ Thread the machine

→ **THANK YOU** to Phil Newton for supplying the Mettler Thread

Sit-down Ruler Set

Preparing the Rulers

- Remove White Plastic from back of rulers.
- Hold Nested Rulers together with Painters Tape.
- Place a gripping surface on back of Rulers



Sit-down Ruler Set

Holding the Rulers

→ Proper Hand Placement

- Hold Ruler where you are stitching
- Walk hand on ruler to use additional length

→ Proper Pressure

- Enough pressure to gently guide along foot
- Enough pressure to move fabric with the ruler

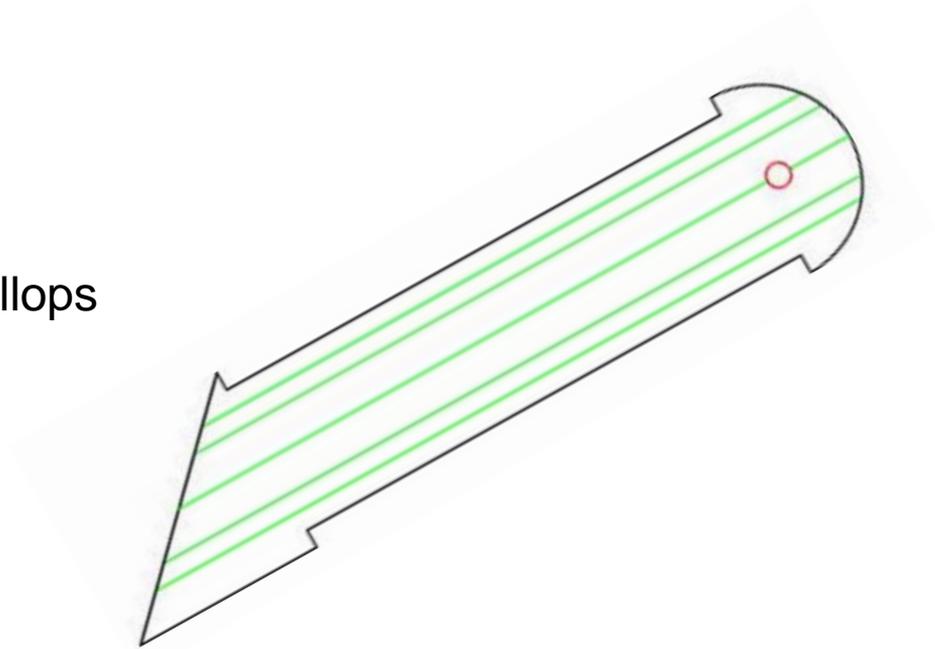
→ Moving the Ruler and Fabric at the same time

- A fine balance between the proper pressure and not too much pressure

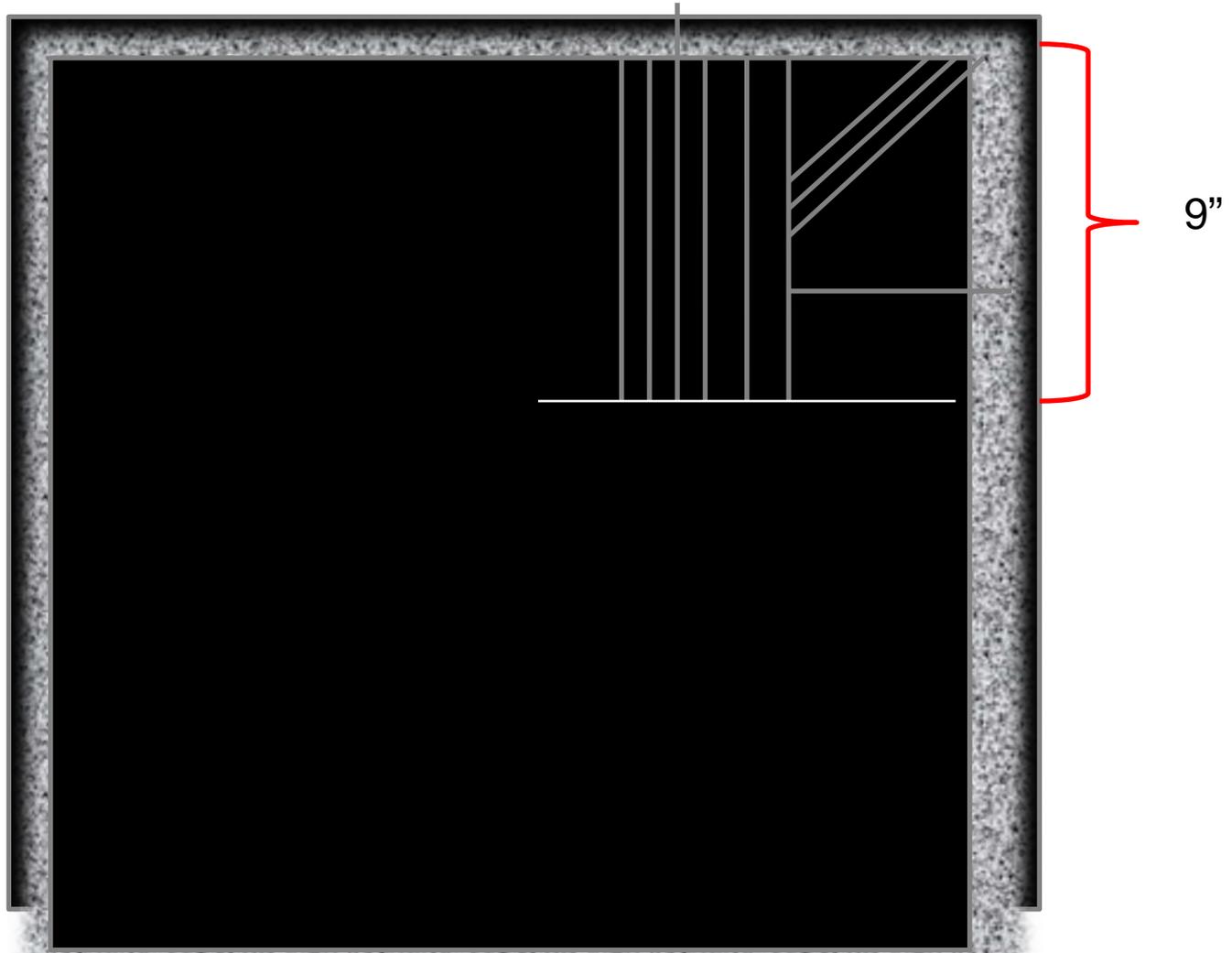
Sit-down Ruler Set

Mini Straight Line Tool

- Stitch in the Ditch
- Straight Lines
- Rounded end for scallops
- Right Angle

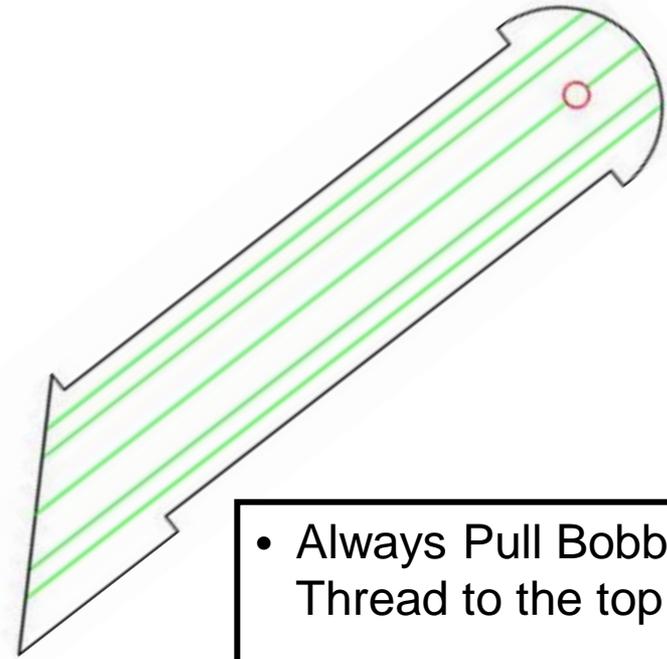
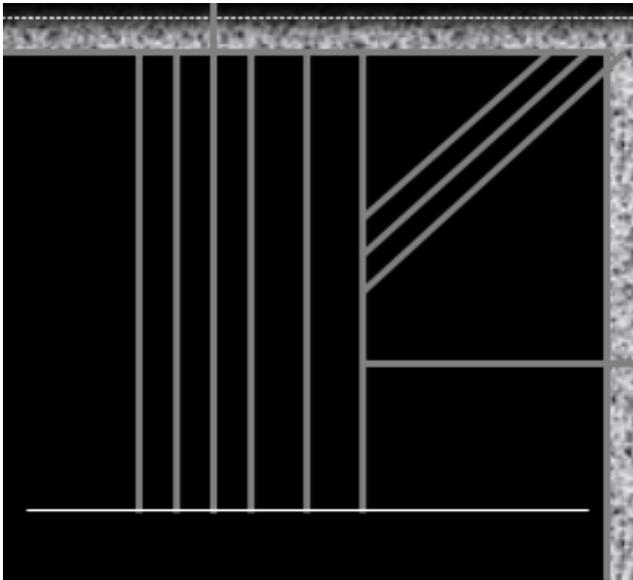


Sit-down Ruler Set



Sit-down Ruler Set

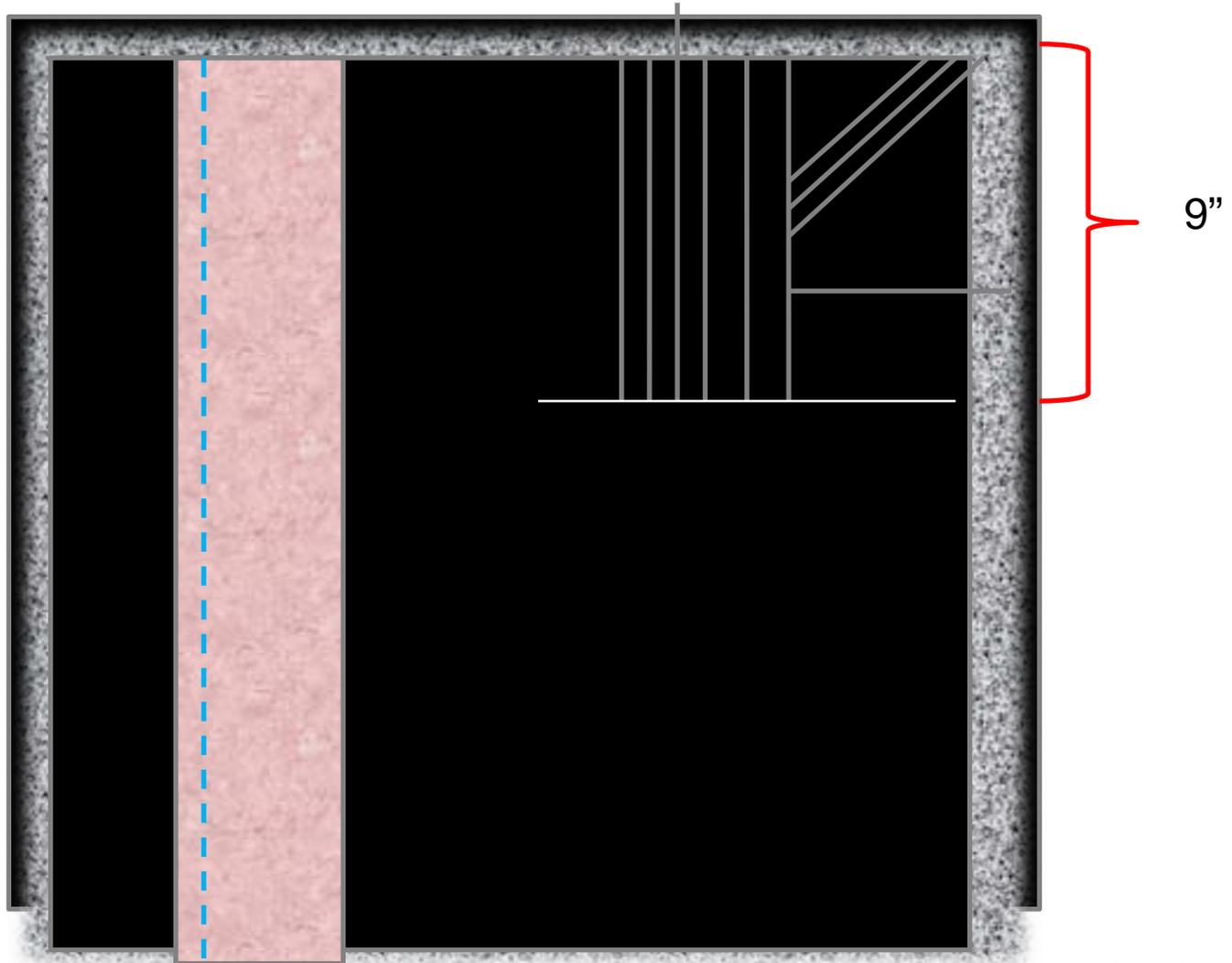
Mini Straight Line Tool



- Always Pull Bobbin Thread to the top
- Gently guide ruler along foot---Don't push too hard against foot

- Stitch a few Straight Lines
- Echo previous line at different increments
- Stitch a few angled Lines
- Stitch a Horizontal line

Sit-down Ruler Set



Sit-down Ruler Set

4-in-1 Tool

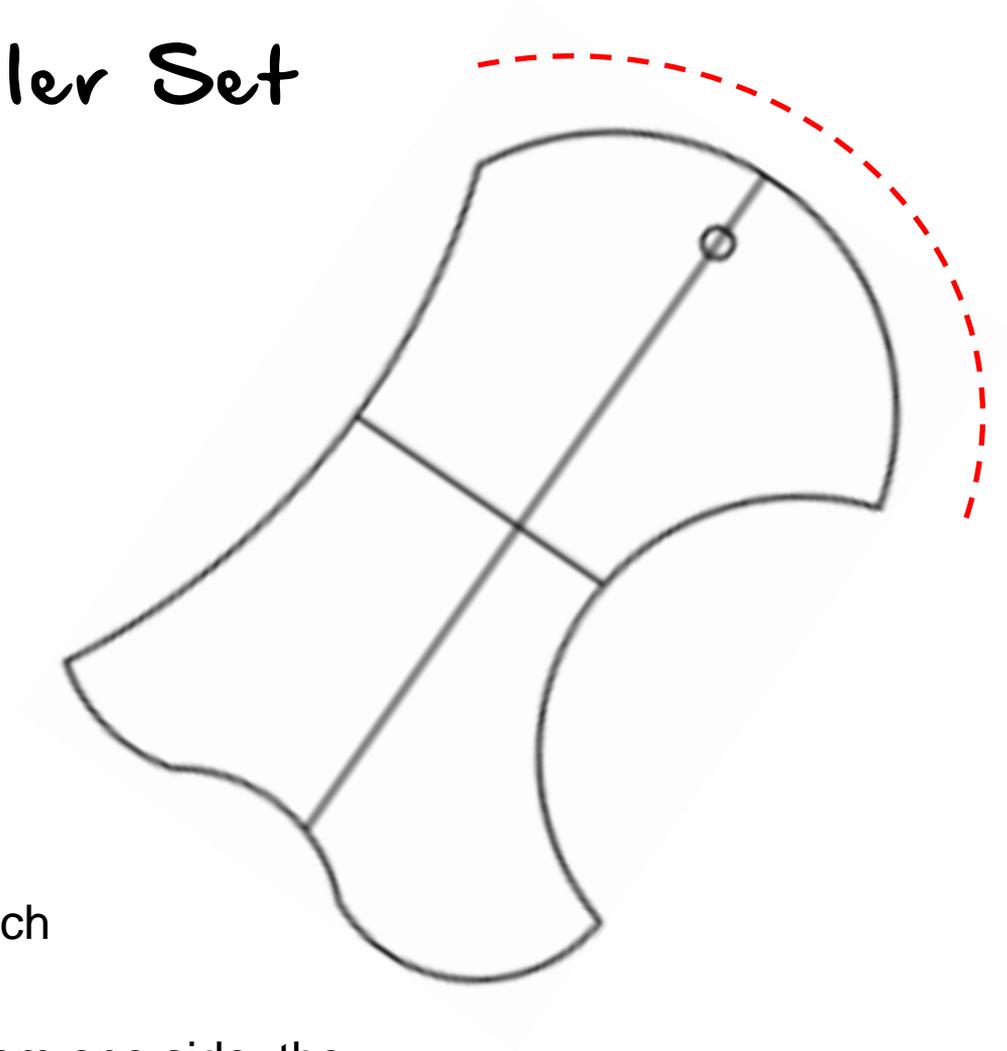
→ Scallop Border

→ Wave Border

→ Curves

→ Use 2nd Quilt Sandwich

→ Draw a line 1 ½" in from one side, the length of the fabric

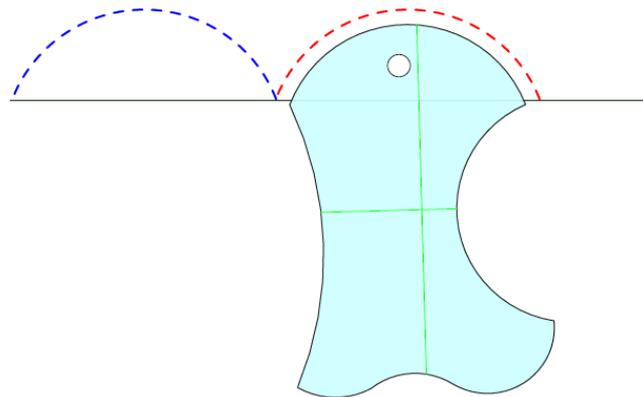
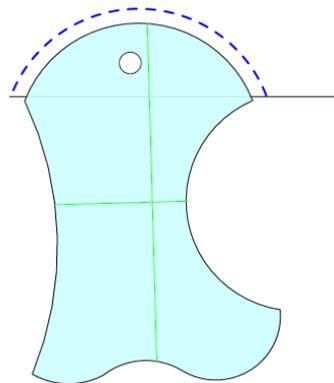


Sit-down Ruler Set

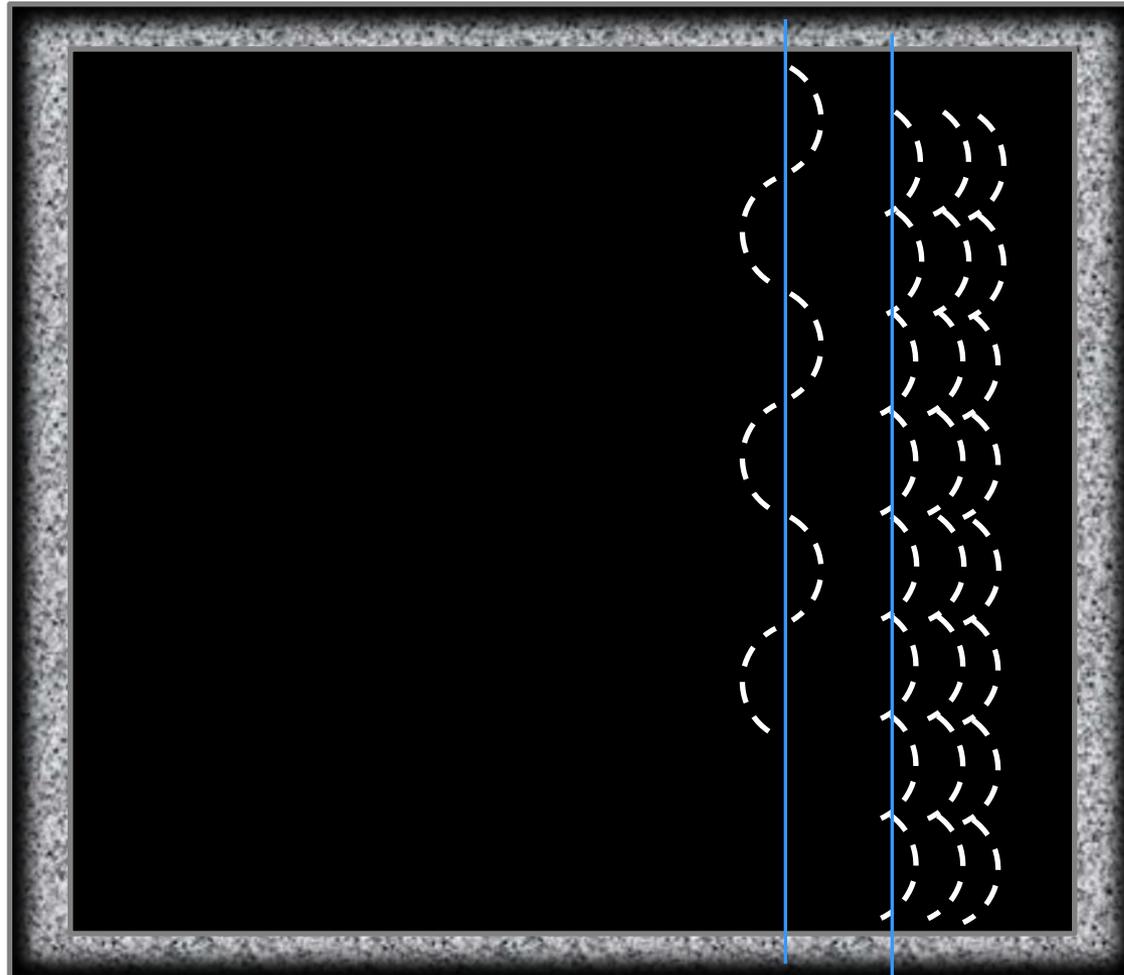
Scallop Border



- Position the template so the arc you desire is on the drawn line or seam of the quilt.
- Stitch from one side of the arc to the other.
- Slide the 4-in-1 template down the drawn line or seam.
- Starting where you stopped, stitch the arc.
- Repeat until desired length is achieved.

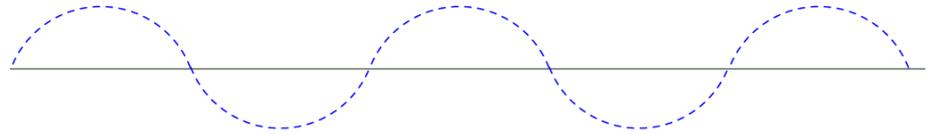


Sit-down Ruler Set

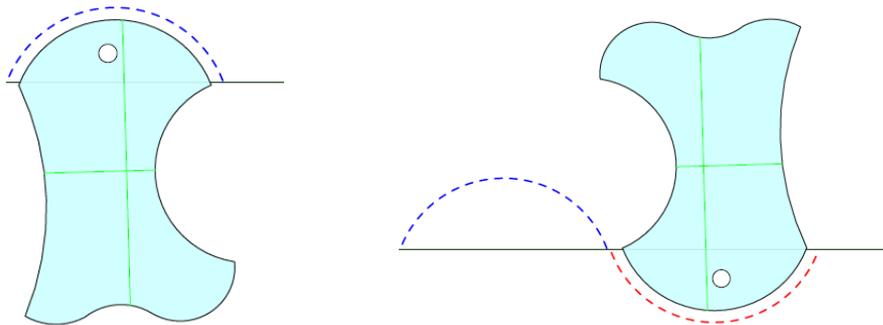


Sit-down Ruler Set

Wave Border



- Begin by selecting a 4-in-1 arc and following Step 1 and 2 of Scallop Border
- Upon completion of Step 2, you will have a single arc stitched.
- Flip the template to the opposite side of the drawn line or seam and then slide the template until it is positioned so you can stitch the desired arc on the other side of the drawn line or seam.
- Continue flipping and sliding until wave is desired length.

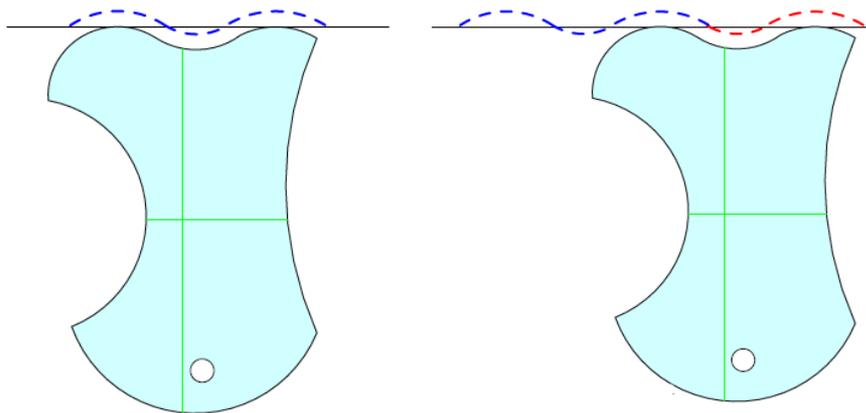


Sit-down Ruler Set

Slide Wave Border



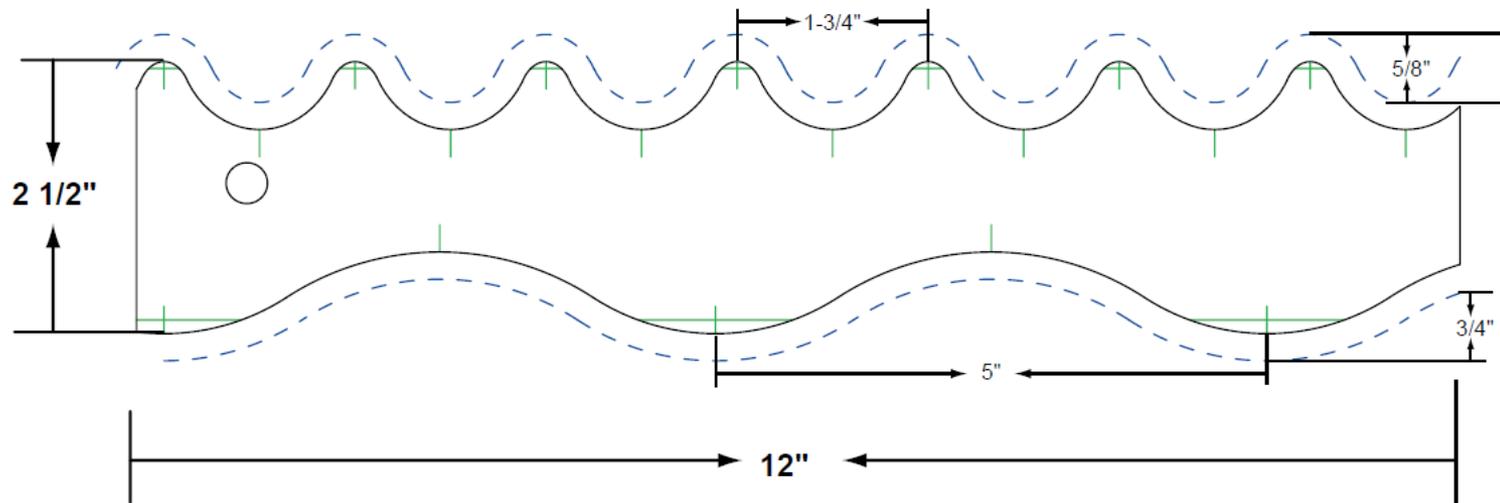
- Begin by selecting the multiple arc side of the 4-in-1 and stitch the arc.
- Slide the 4-in-1 template down the line until the first portion of the arc fits into the last of the stitched or drawn arc.
- Starting where you stopped, stitch the arc.
- Repeat until desired length is achieved.



Sit-down Ruler Set

Squiggle Template

- Waves
- Ribbon Effects
- Wavy Cross Hatching



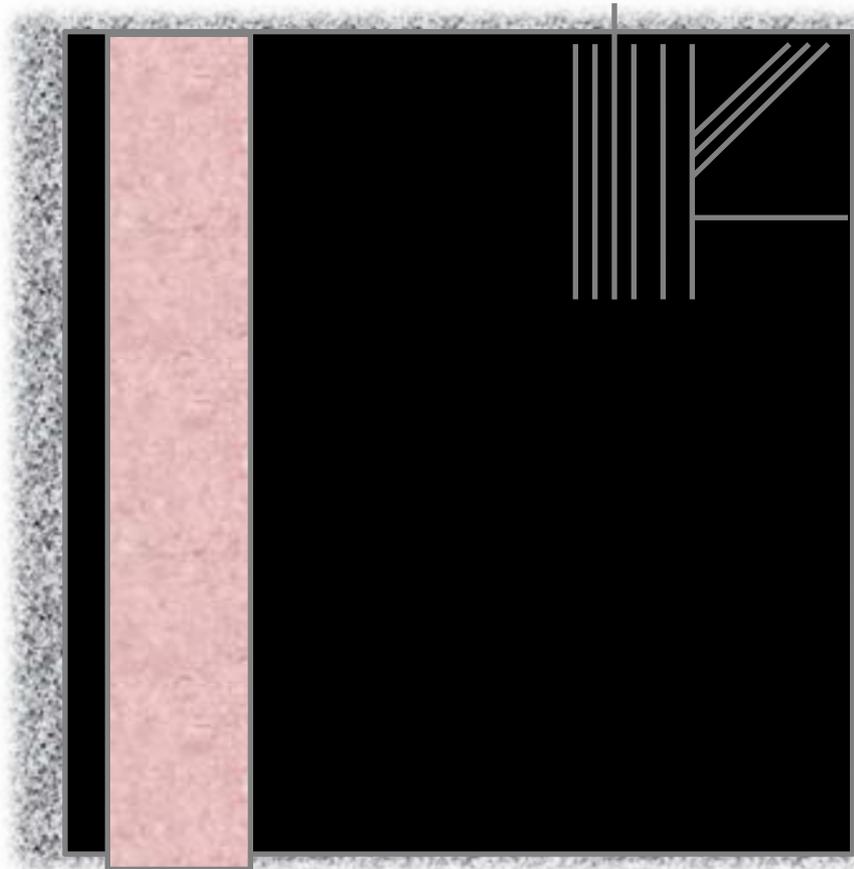
Sit-down Ruler Set

Squiggle Template

- The Squiggle Templates are specifically designed to cross a seam line with a simple, even wave.
- They were specifically designed to be easily managed tools which will quickly create a wide variety of designs.
- Place the Squiggle Template on the seam aligning the etched lines on the seam.
- Slide the Squiggle Template up keeping the etched lines aligned with the seam. Continue the wave.

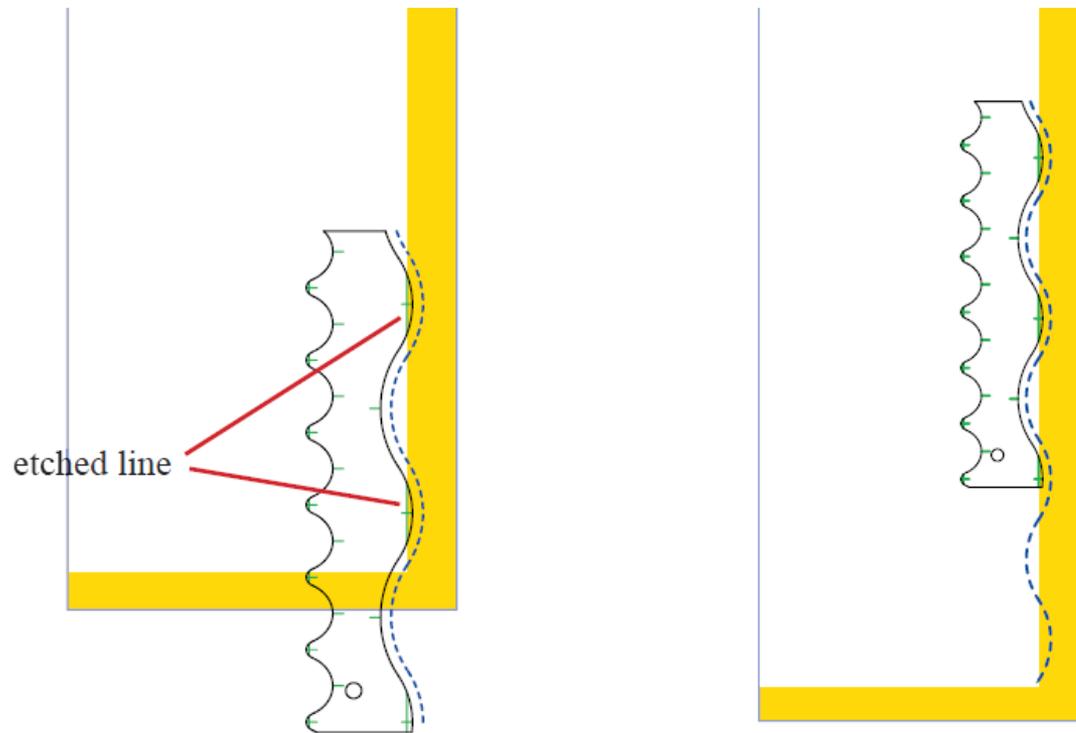
Sit-down Ruler Set

Preparation for Next Ruler



Sit-down Ruler Set

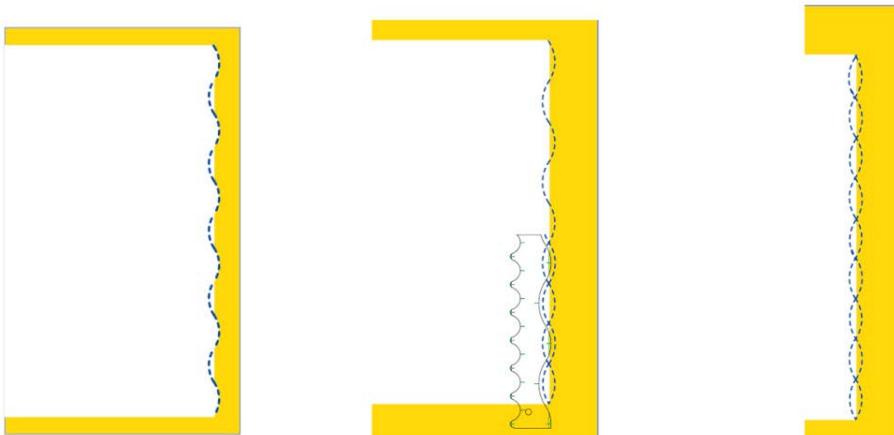
Squiggle Template



Sit-down Ruler Set

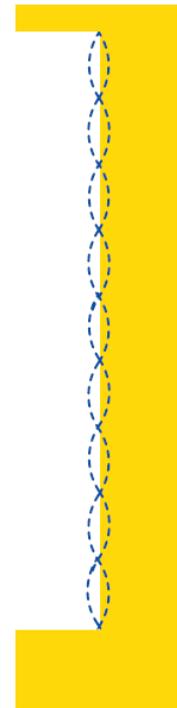
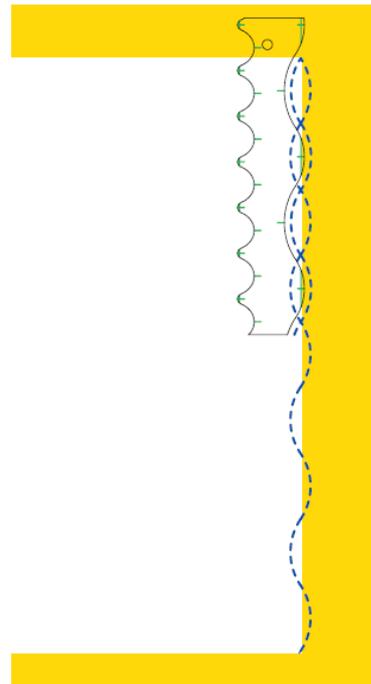
The Ribbon Effect

- By using the “flip” movement with the Squiggle Template, you can create some interesting ribbon effects.
- Align the etched lines with a seam. Stitch the wave the length you desire.
- Flip the Squiggle Template.
- Align the etched lines with the seams and make sure the hills are opposite the valleys and vice versa.



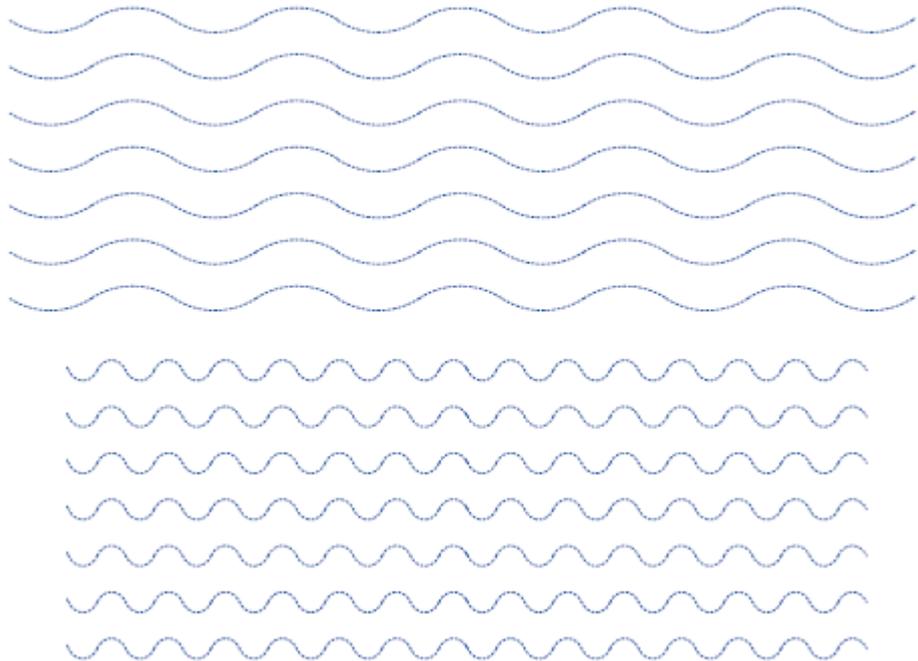
Sit-down Ruler Set

The Ribbon Effect



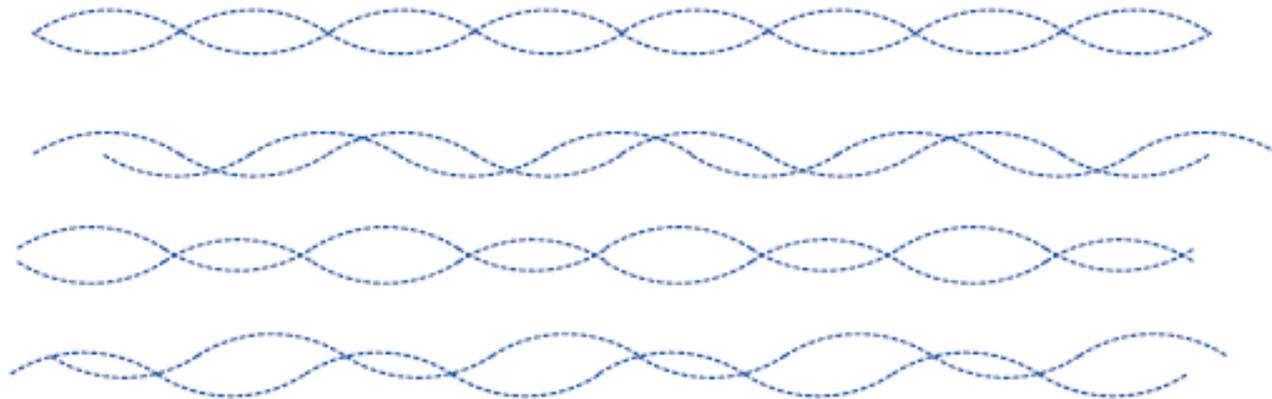
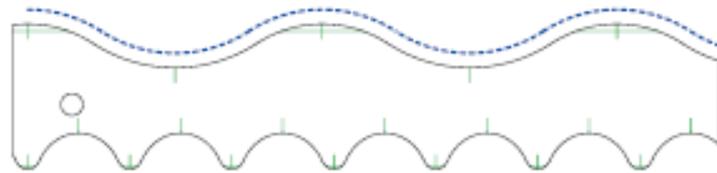
Sit-down Ruler Set

Cascading Waves



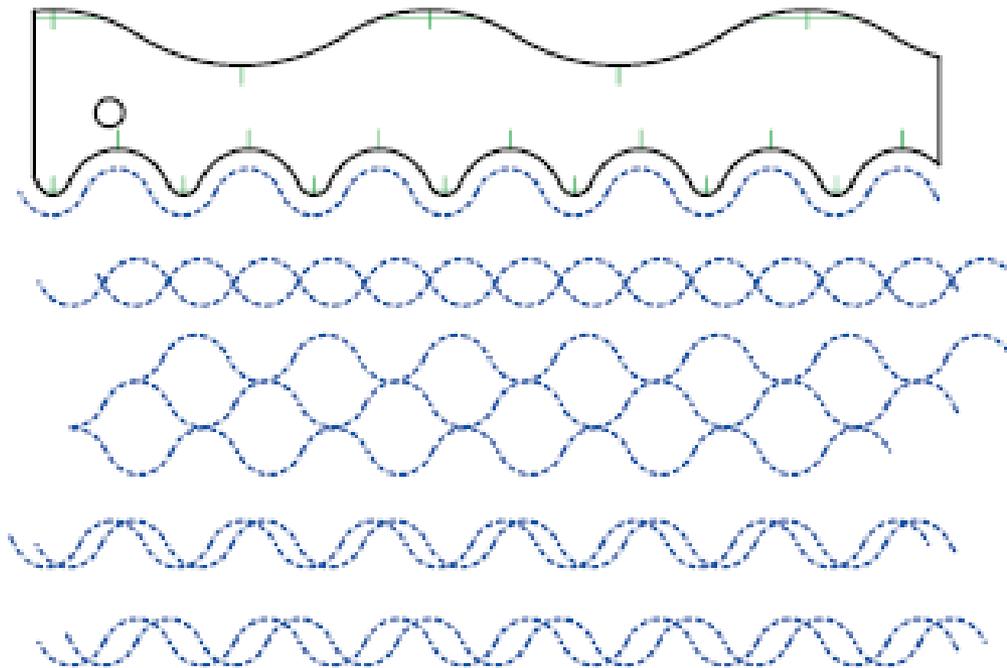
Sit-down Ruler Set

Ribbons



Sit-down Ruler Set

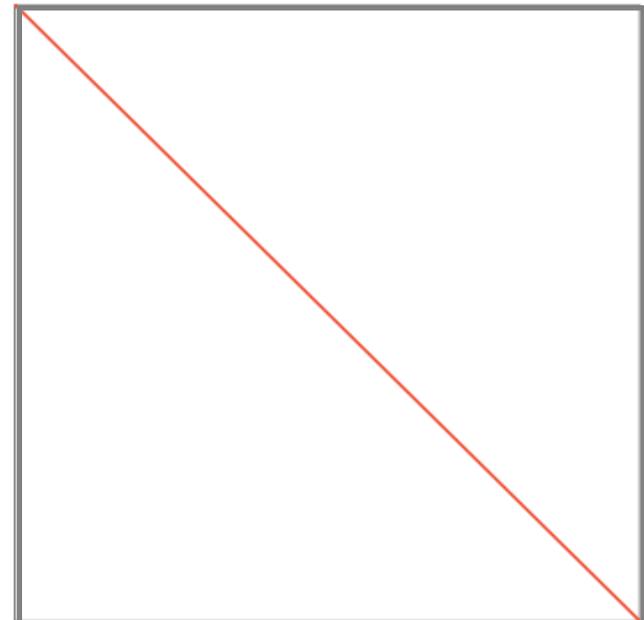
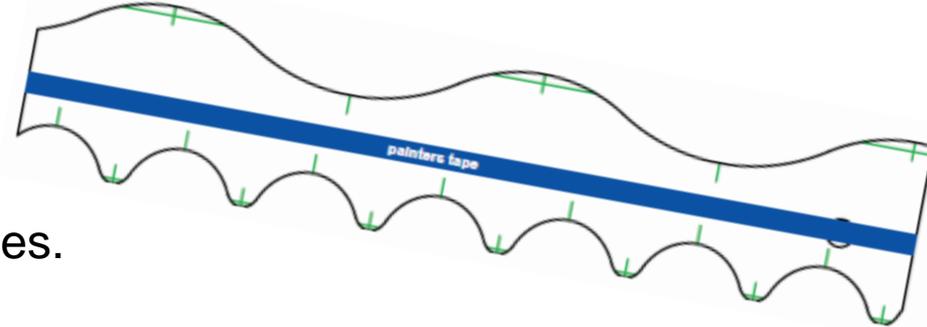
Ribbons



Sit-down Ruler Set

Crosshatching

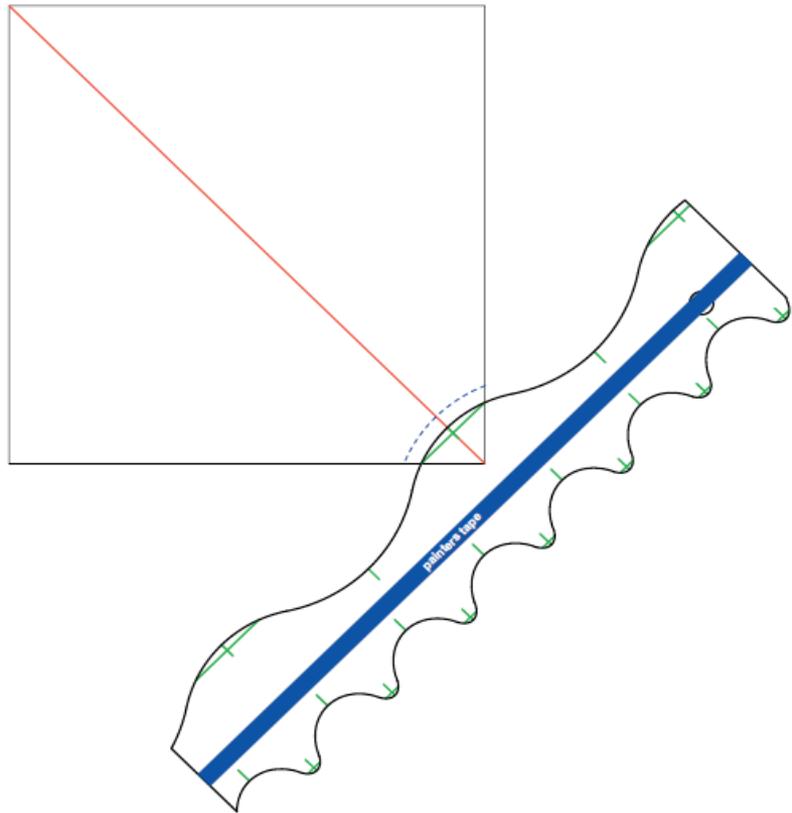
- Create a unique crosshatching effect using the Squiggle Templates.
- First, to ensure a consistent line, you may find it helpful to mark the square from corner to corner and to use blue painter's tape on the template to mark the distance apart you wish the crosshatching to be.



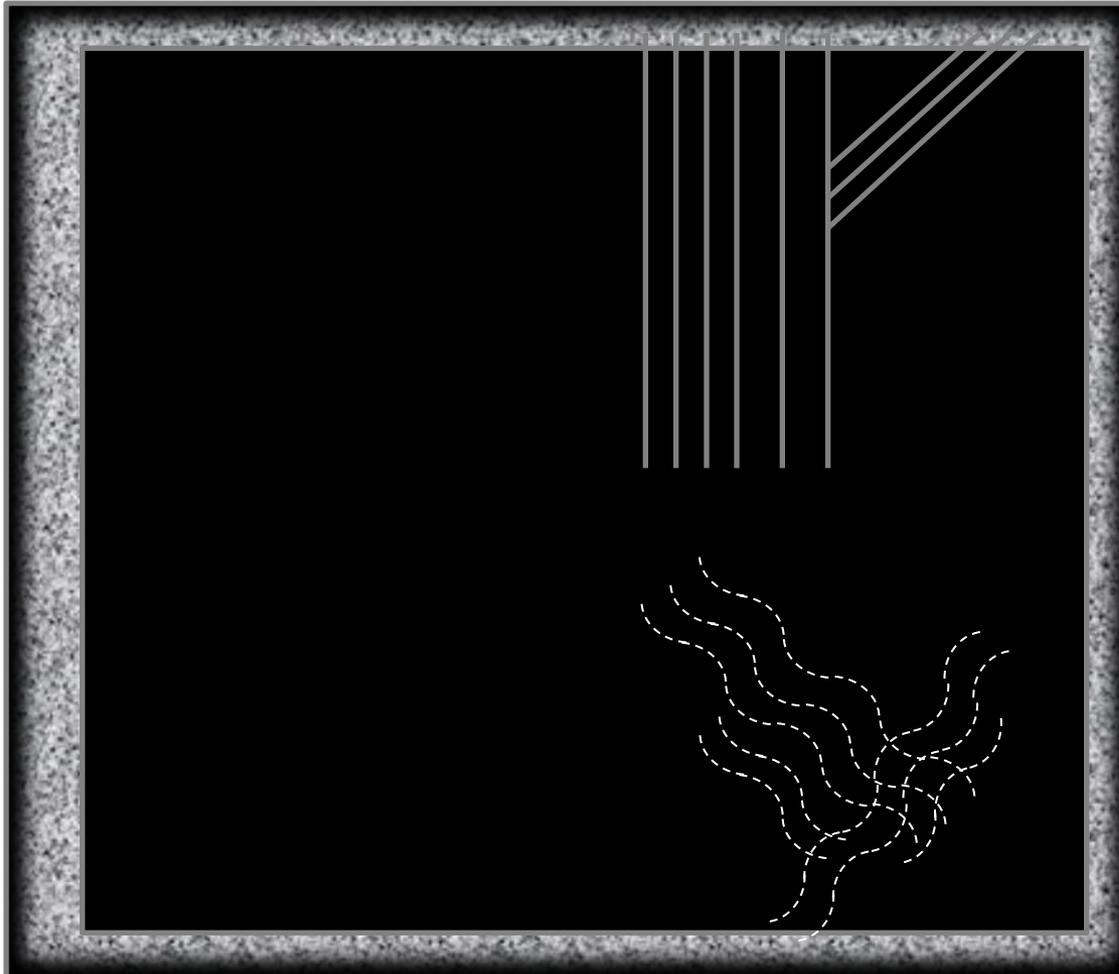
Sit-down Ruler Set

Crosshatching

- Place the Squiggle Template so you can align the etch line of the middle hill with the drawn line of the square.
- Stitch from seam to seam.



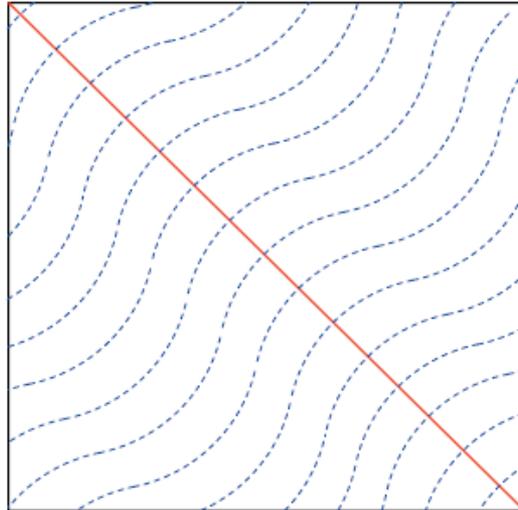
Sit-down Ruler Set



Sit-down Ruler Set

Crosshatching

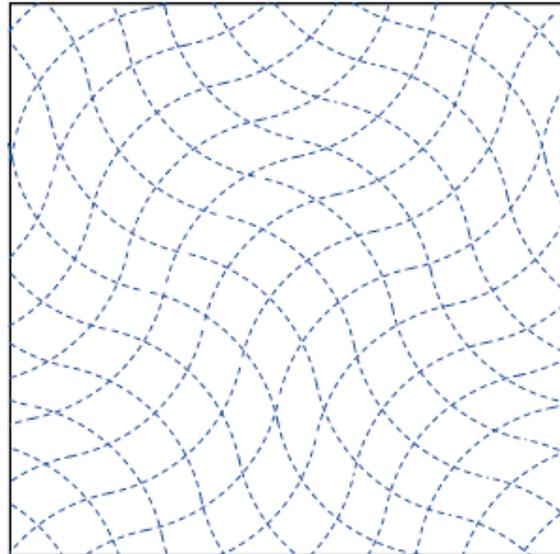
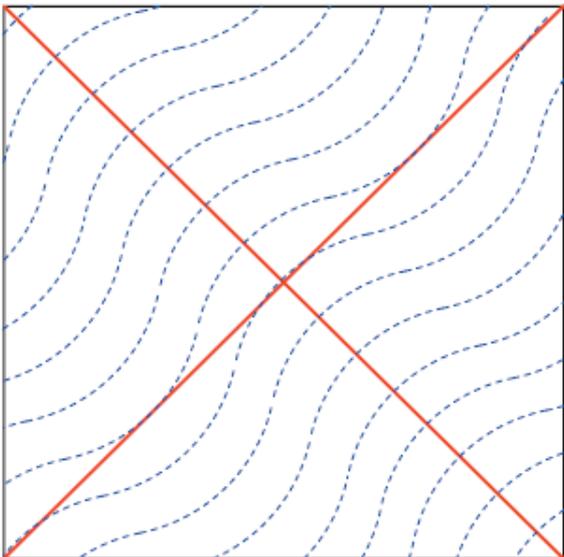
- Stitch along the seam line until you can position the Squiggle Template with the blue tape on the previous stitched line.
- Stitch from seam to seam.
- Be sure to note where on the waves you line up the tape. If you use a valley and then a hill, your spacing will be uneven.



Sit-down Ruler Set

Crosshatching

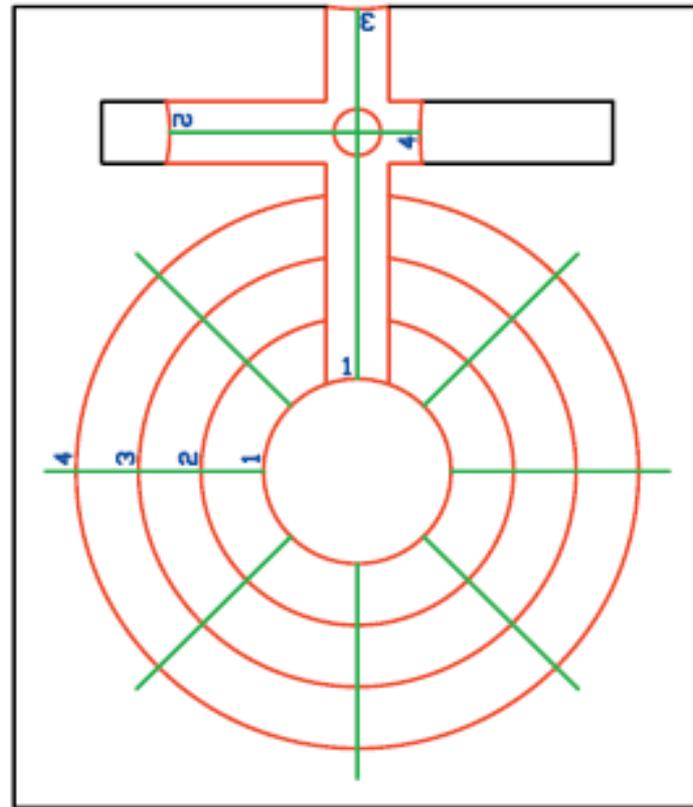
- You can only cross an 8" square if you wish the whole square to be crosshatched.
- To finish the crosshatching, switch to the other diagonal and repeat.
- Continue until square is completed.



Sit-down Ruler Set

Nested Mini Circles 1" to 4"

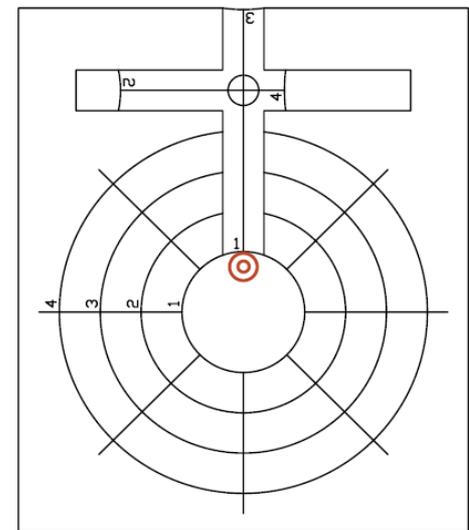
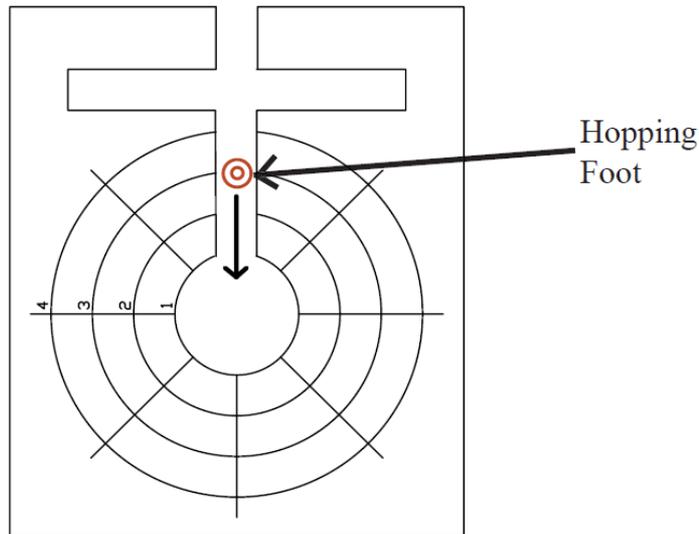
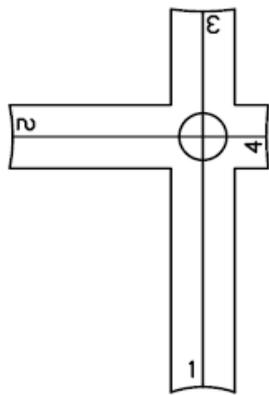
- Concentric Circles
- Connected Circles
- Spyrographing Circles



Sit-down Ruler Set

Nested Mini Circles 1" to 4"

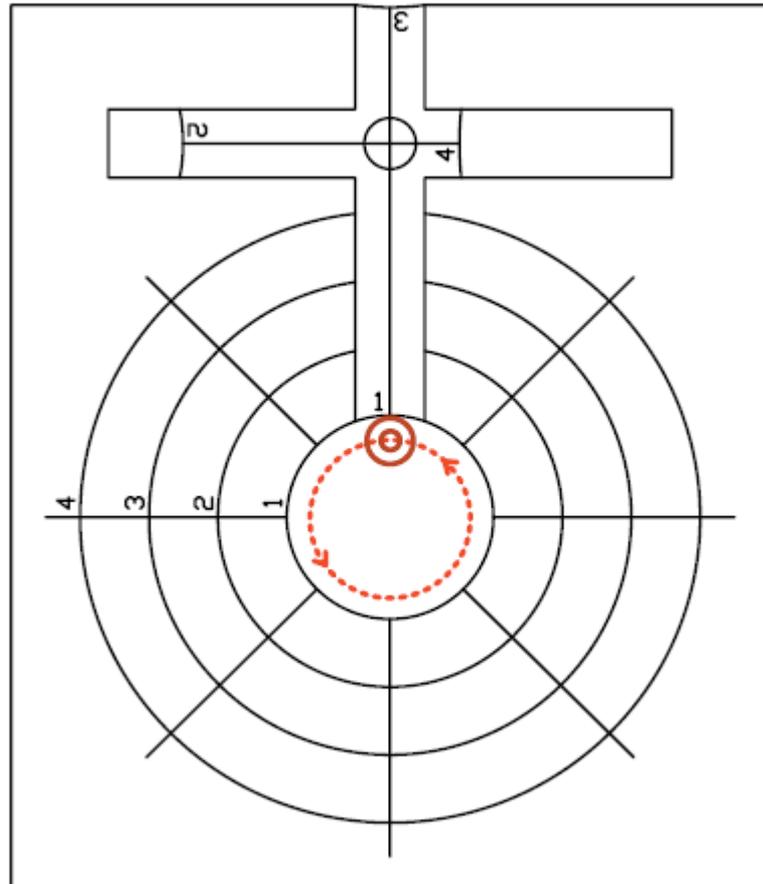
- Remove key from template in order to position foot on the inside of the Nested Mini Circles.
- Replace key being sure to match key to circle desired.



Sit-down Ruler Set

Concentric Circles

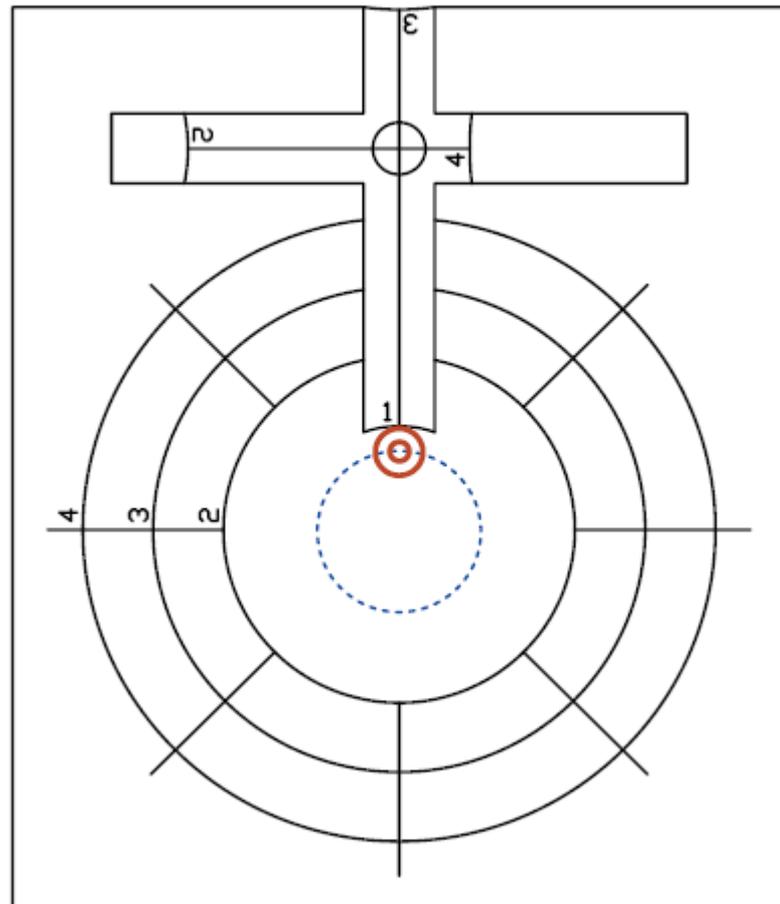
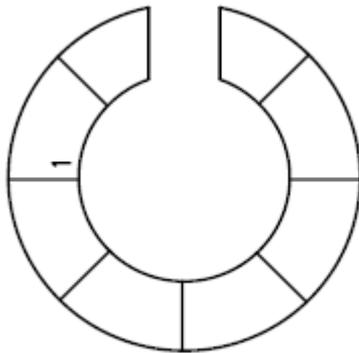
- Stitch a complete circle.
- Tie off thread.



Sit-down Ruler Set

Concentric Circles

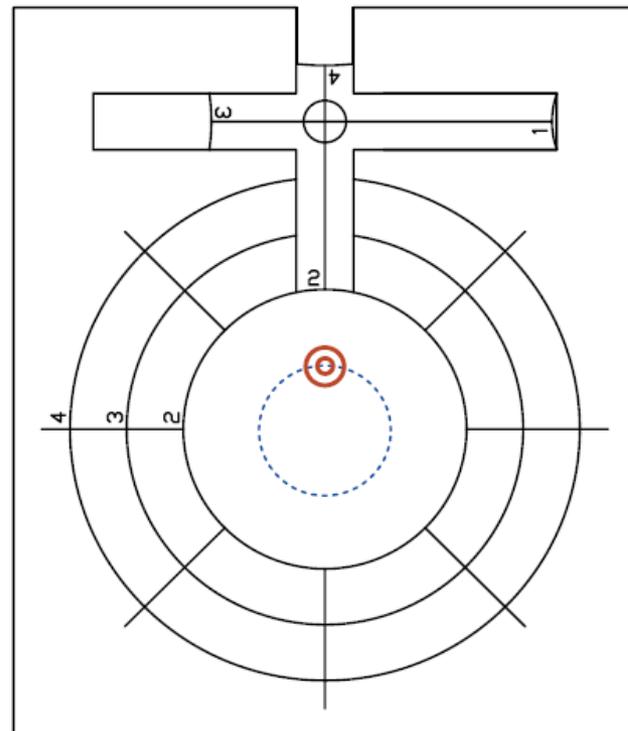
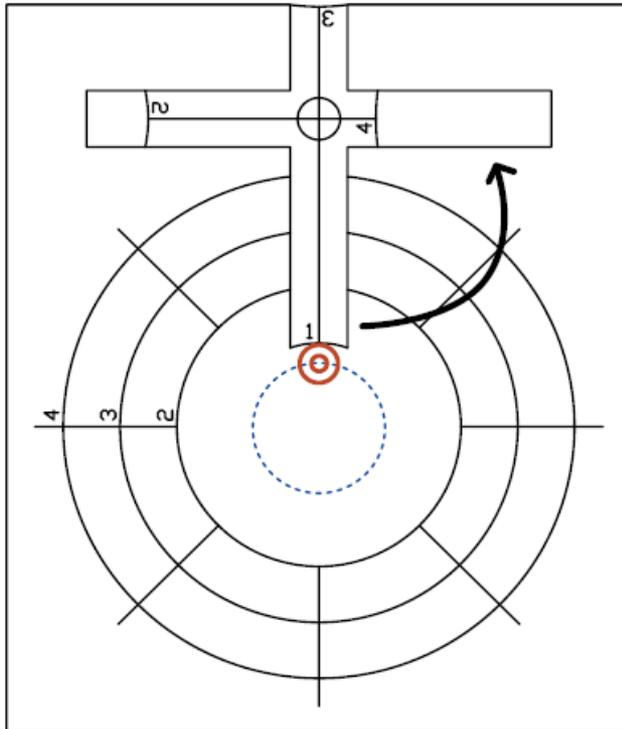
→ Remove first Ring.



Sit-down Ruler Set

Concentric Circles

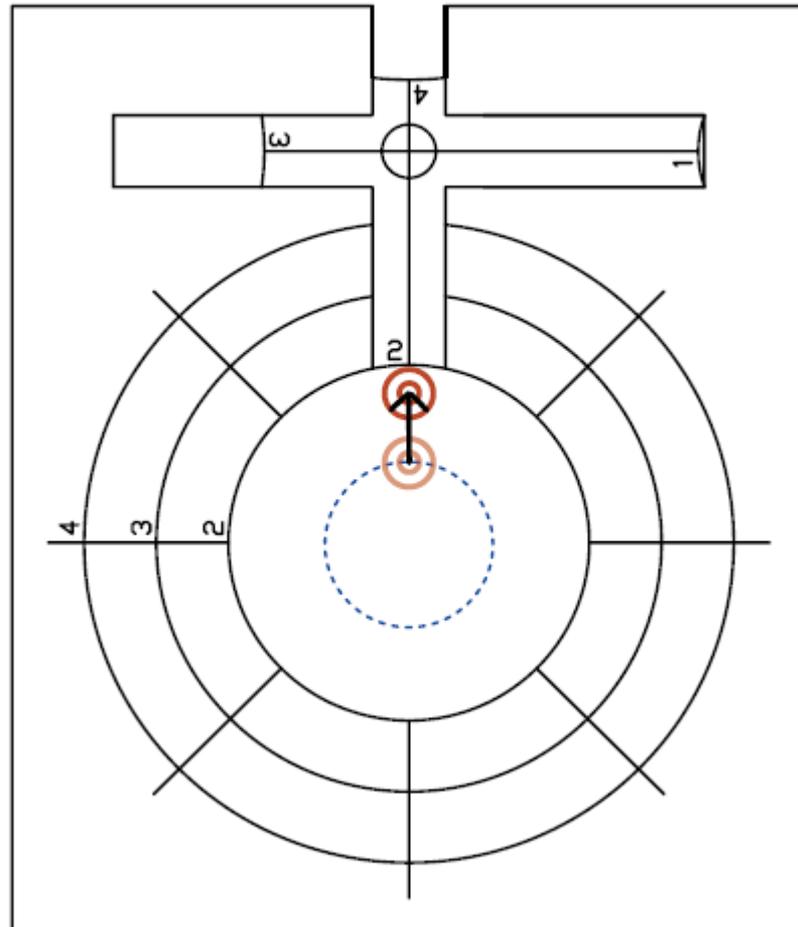
→ Turn key counterclockwise to match new circle size. (2")



Sit-down Ruler Set

Concentric Circles

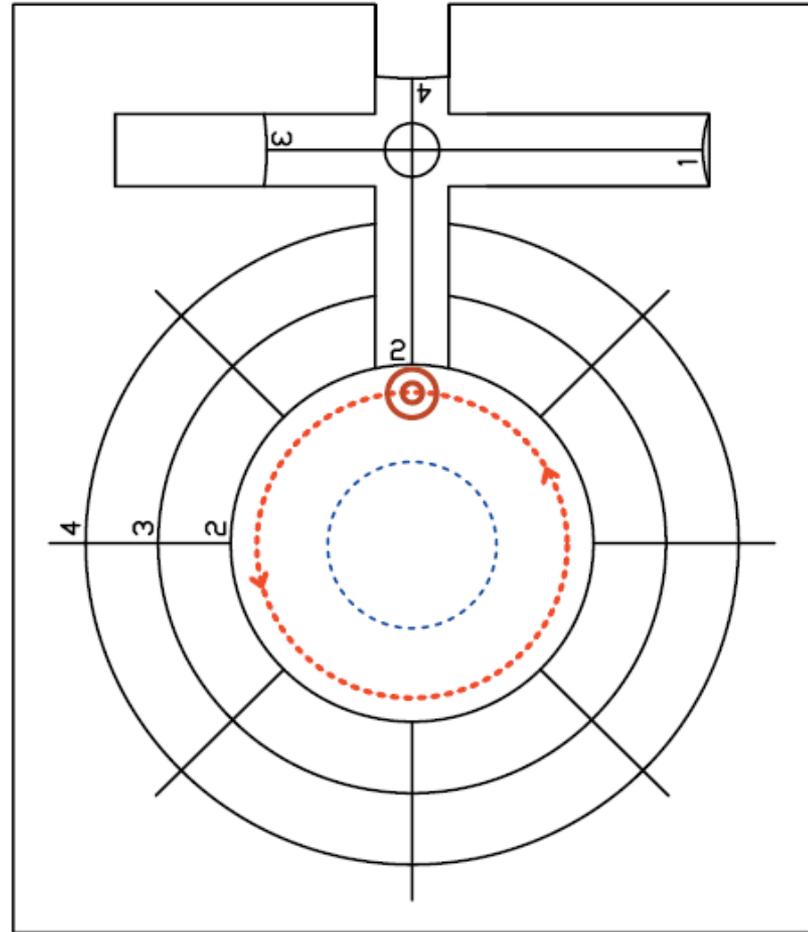
→ Move foot to edge of new circle.



Sit-down Ruler Set

Concentric Circles

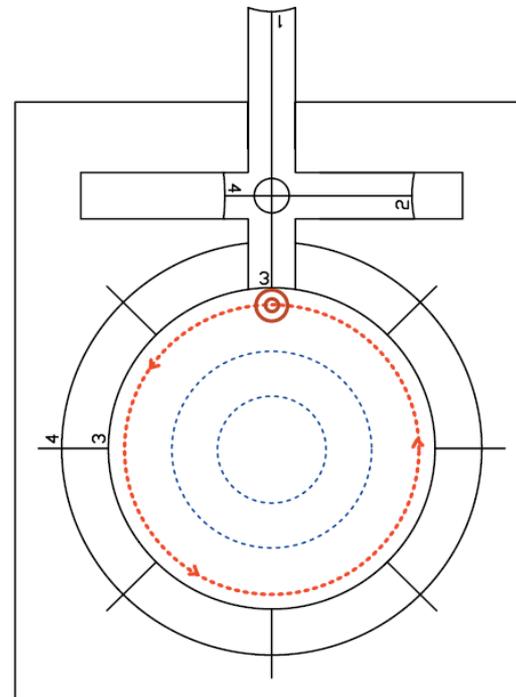
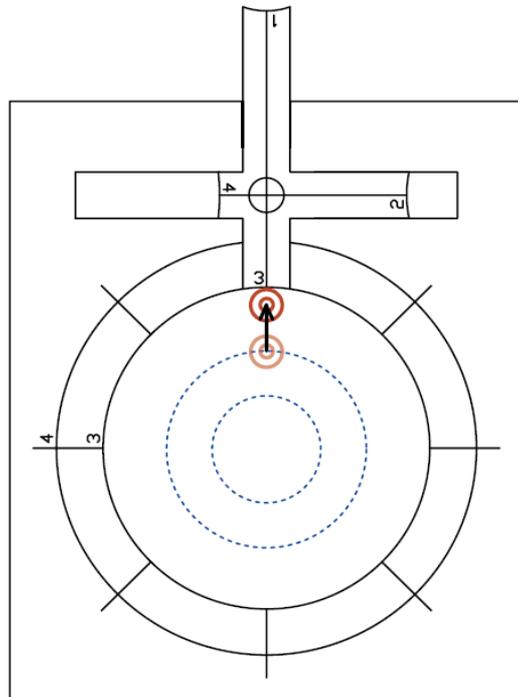
- Stitch a complete circle.
- Tie off thread.



Sit-down Ruler Set

Concentric Circles

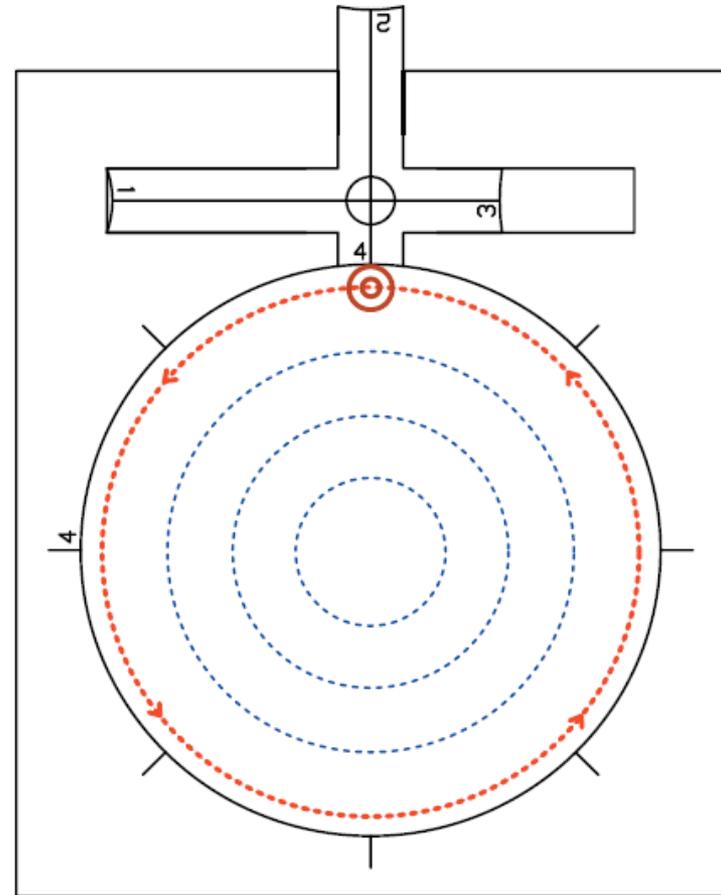
- Remove second ring and turn key to match new circle size.
- Move foot to edge of new circle and stitch a complete circle.



Sit-down Ruler Set

Concentric Circles

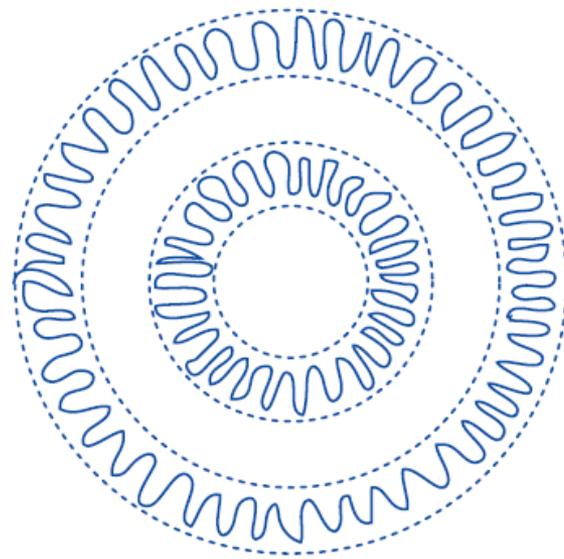
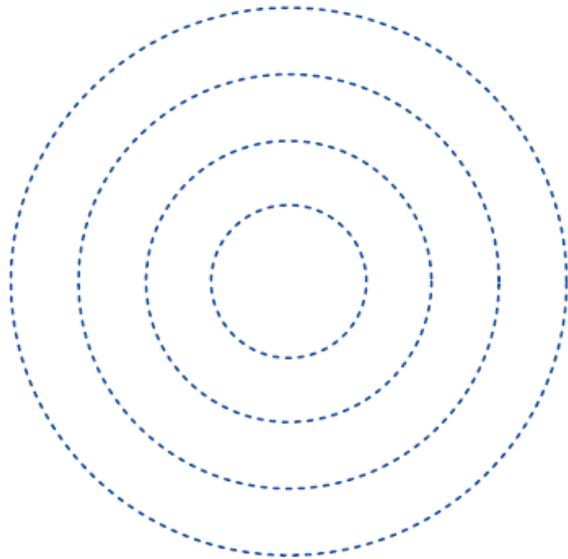
- Remove third ring.
- Turn key to match new circle size.
- Move foot to edge of new circle.
- Stitch complete circle.



Sit-down Ruler Set

Concentric Circles

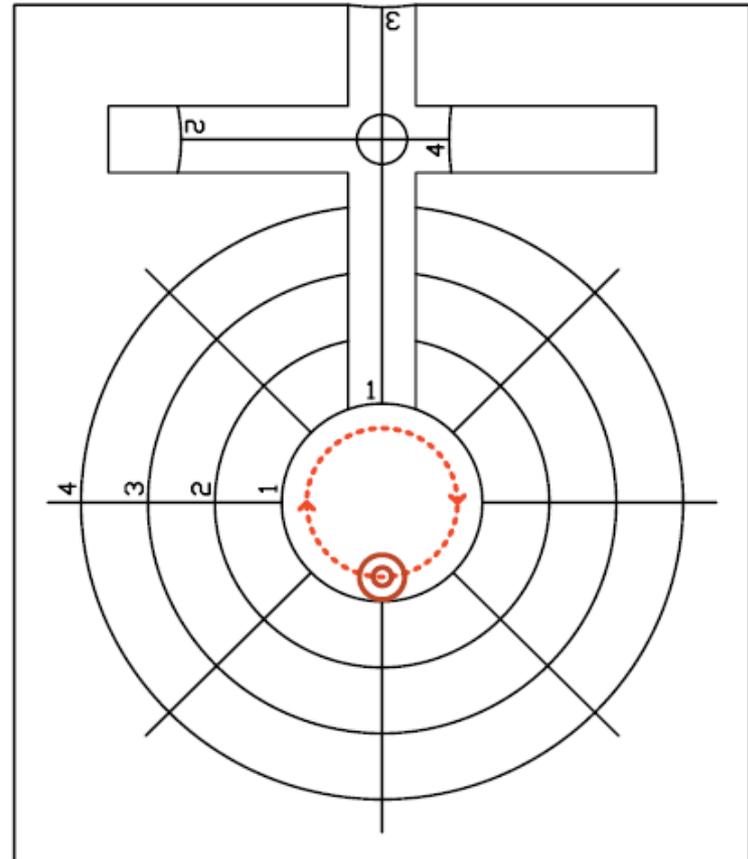
- Completed design of 4 concentric circles $\frac{1}{2}$ " apart.
- Fill any of the circles for a faux trapunto effect.



Sit-down Ruler Set

Connected (Psychedelic) Circles

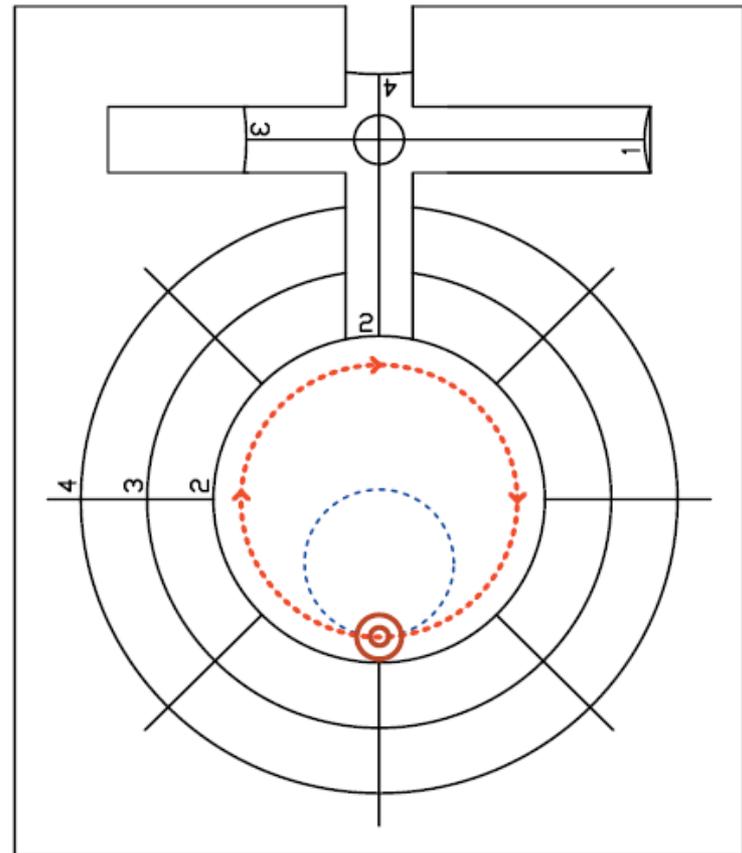
- Begin with Foot at Bottom of the Circle.
- Stitch complete circle, stopping with Needle Down.



Sit-down Ruler Set

Connected (Psychedelic) Circles

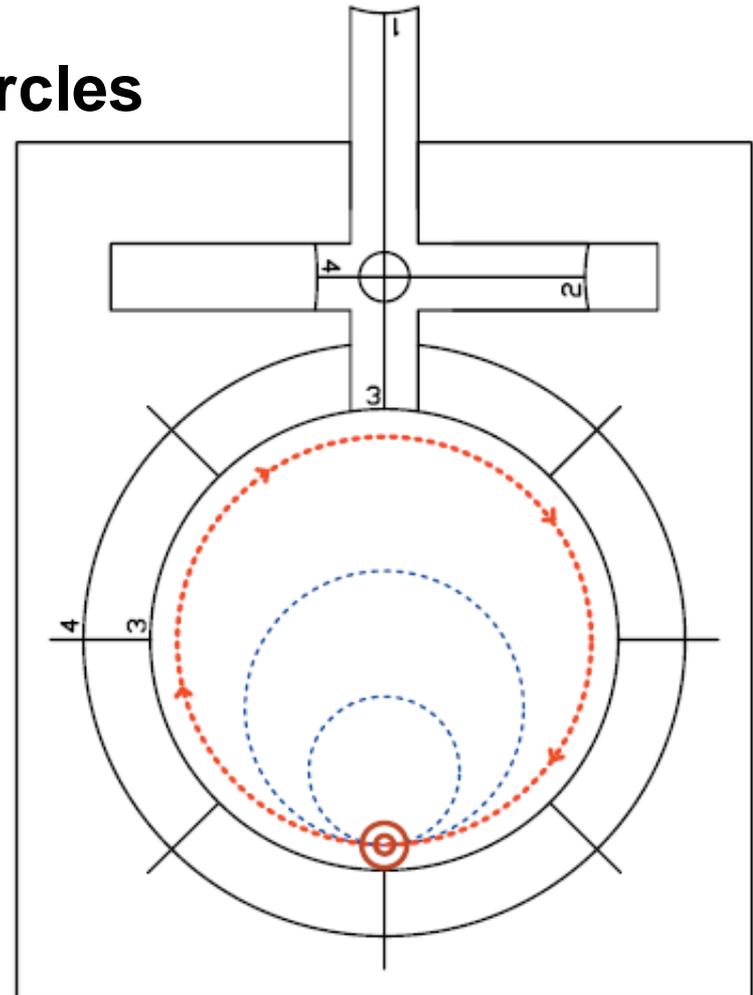
- Remove first ring.
- Turn key to match new circle size.
- Slide template to foot position.
- Stitch Complete Circle.
- Stop with Needle Down.



Sit-down Ruler Set

Connected (Psychedelic) Circles

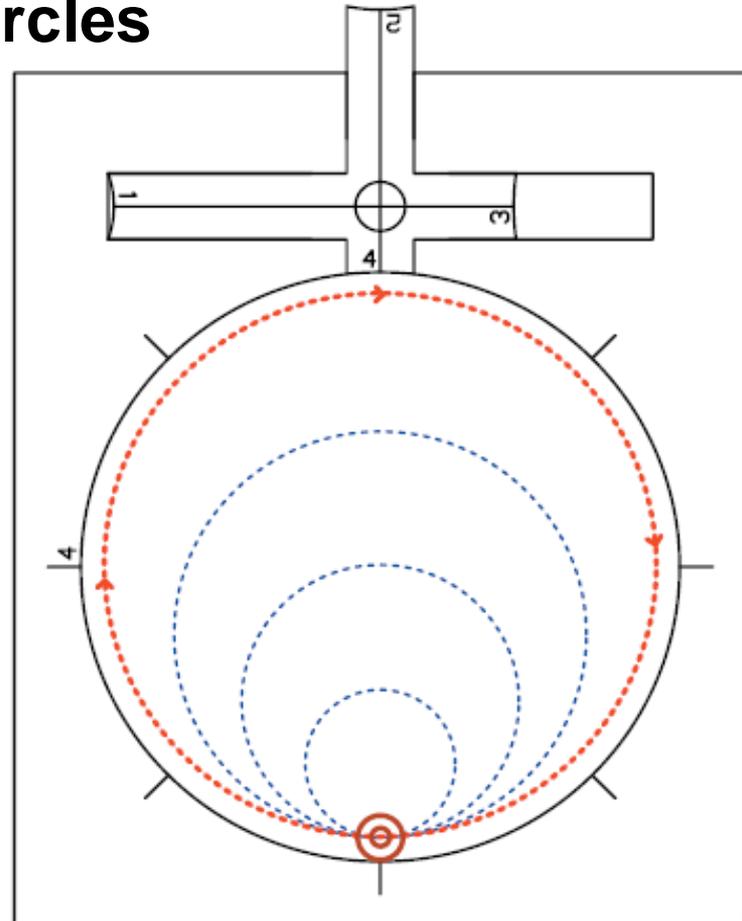
- Remove third ring.
- Turn key to match new circle size.
- Slide template to foot position.
- Stop needle down



Sit-down Ruler Set

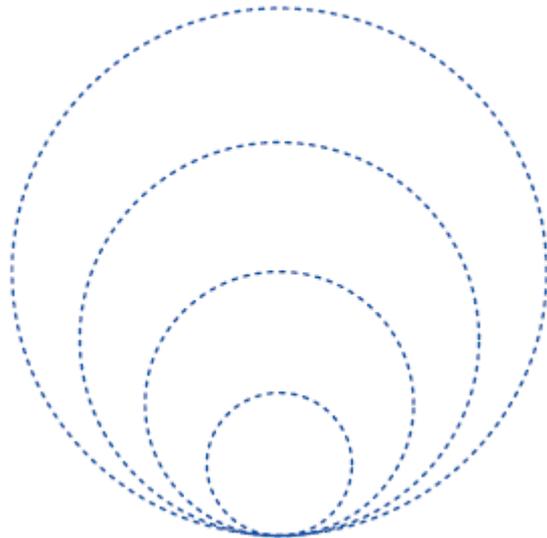
Connected (Psychedelic) Circles

- Remove third ring.
- Turn key to match new circle size.
- Slide template to foot position.
- Stitch complete circle.

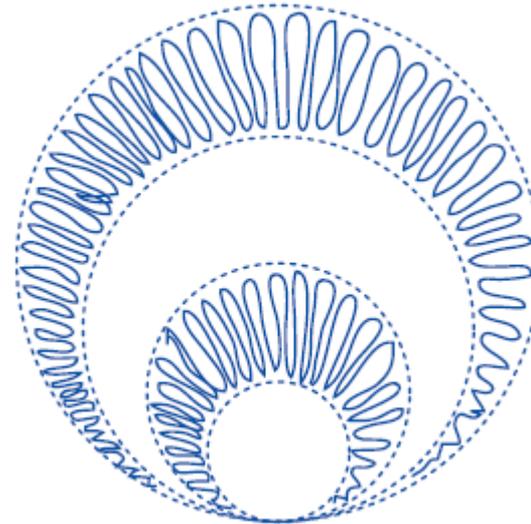


Sit-down Ruler Set

Connected (Psychedelic) Circles

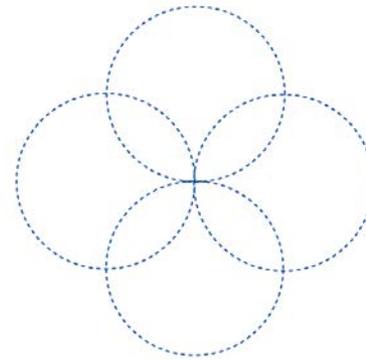


Completed Connected Circles



Fill any of the areas

Sit-down Ruler Set

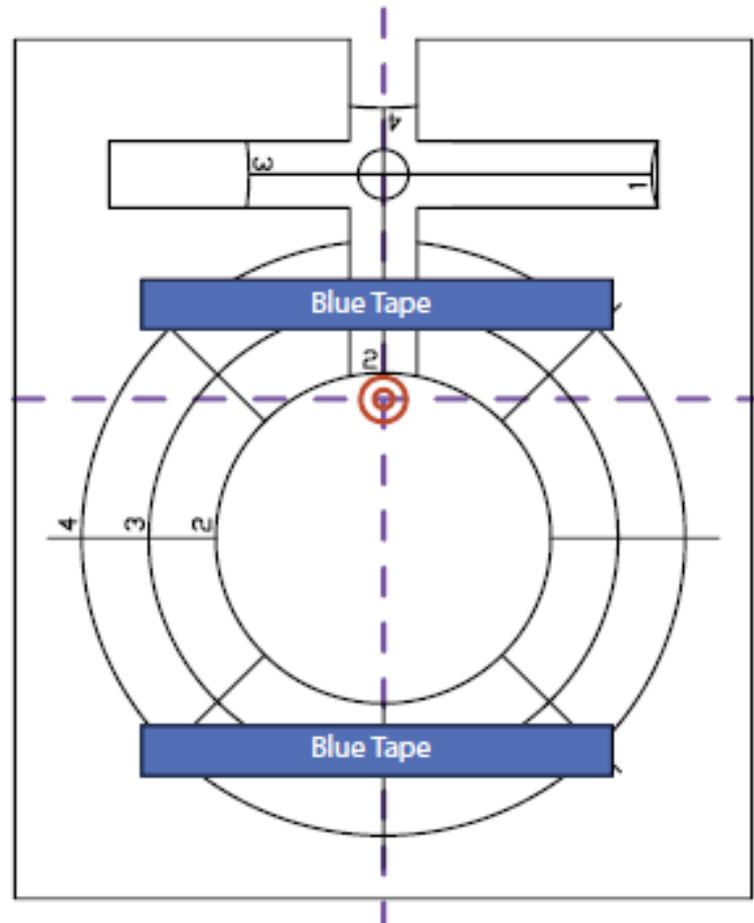


Spyrographing Circles

- You will be using the etched lines on the template to keep your design even and consistent.
- You will need to have lines or seams (shown in purple dashes) on the block where the design is to be stitched. (next slide)
- If there are no seams use a ruler to draw in a set of cross hairs on the block.
- Line template up with one edge of the circle on the center point of the block and the etched line running straight up the key on the vertical line of the crosshairs.
- The etched line opposite the key should be on the same vertical line.

Sit-down Ruler Set

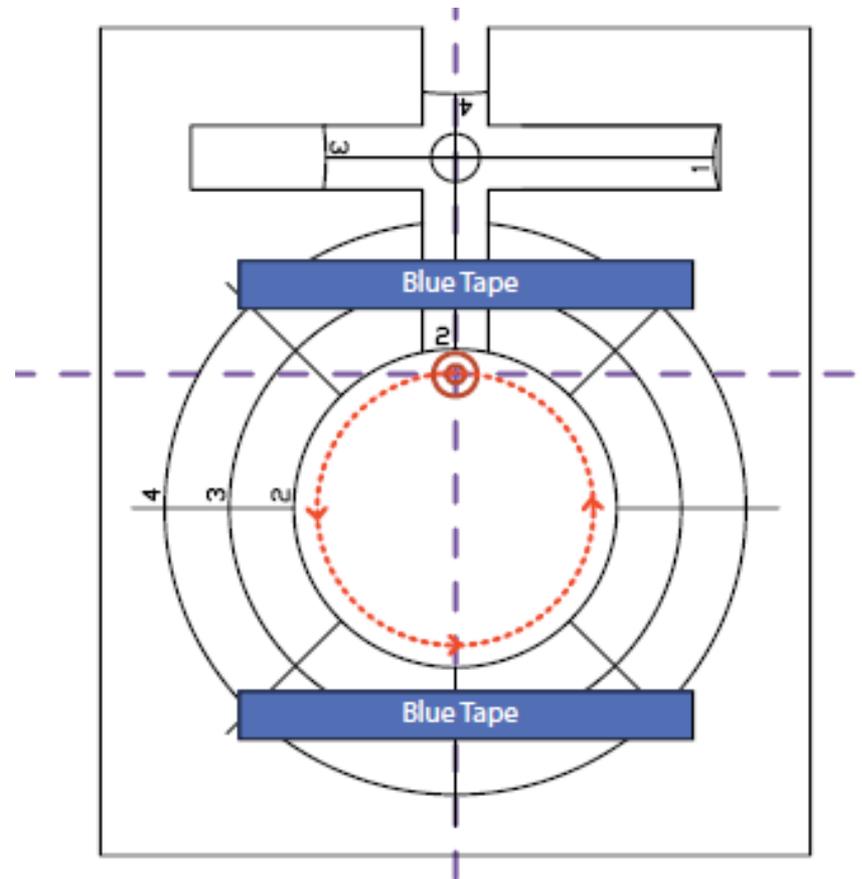
Spyrographing Circles



Sit-down Ruler Set

Spyrographing Circles

- Pick a circle size.
- Remove key from template in order to position foot on the inside of the Nested Mini Circles.
- Replace key being sure to match key to circle desired.
- Starting at the center of the block, stitch a complete circle.
- Needle down.

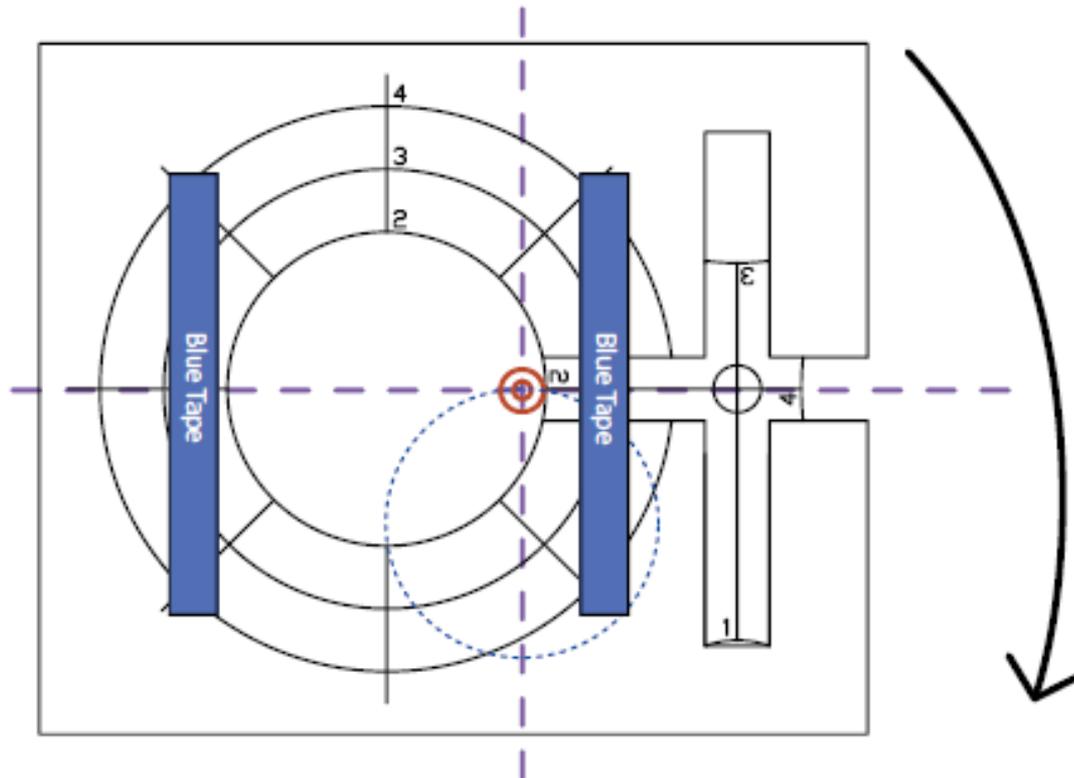


- **Tip: The first time you do this, it is easiest with the largest size. If you use one of the smaller sizes, you might find it helpful to use bluepainter's tape to help hold the pieces when moving the template.**

Sit-down Ruler Set

Spyrographing Circles

→ Rotate the template to the horizontal crosshair as shown.

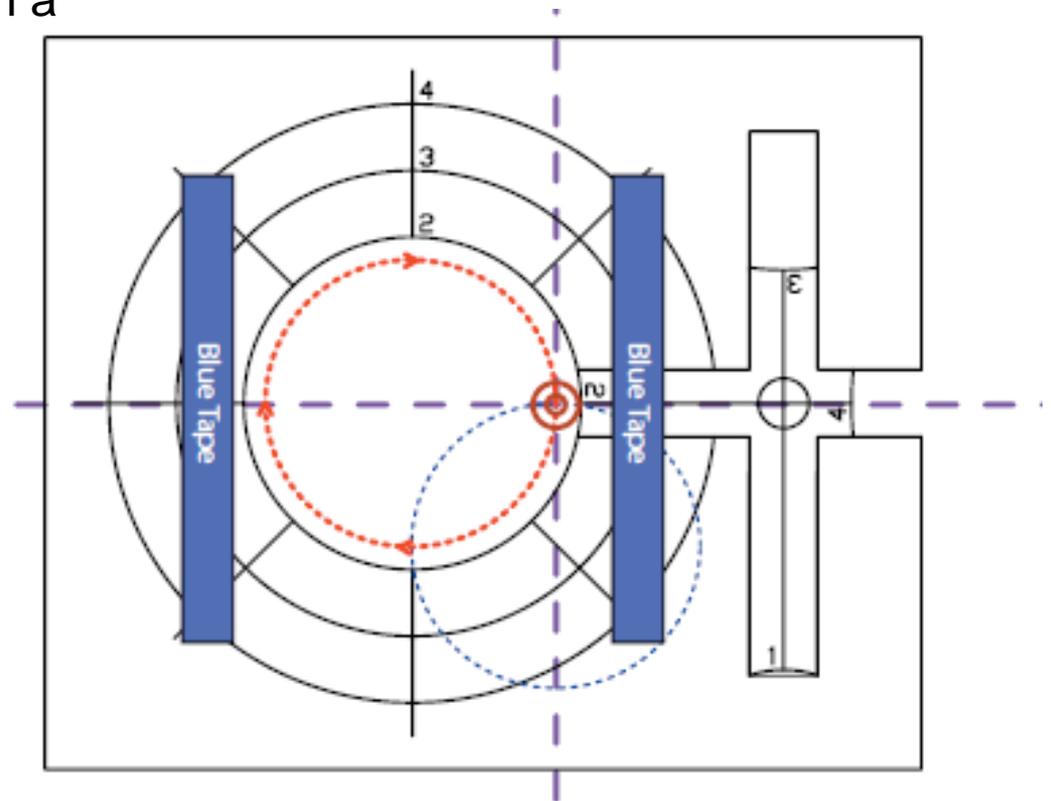


Sit-down Ruler Set

Spyrographing Circles

→ Starting at the center, stitch a complete circle.

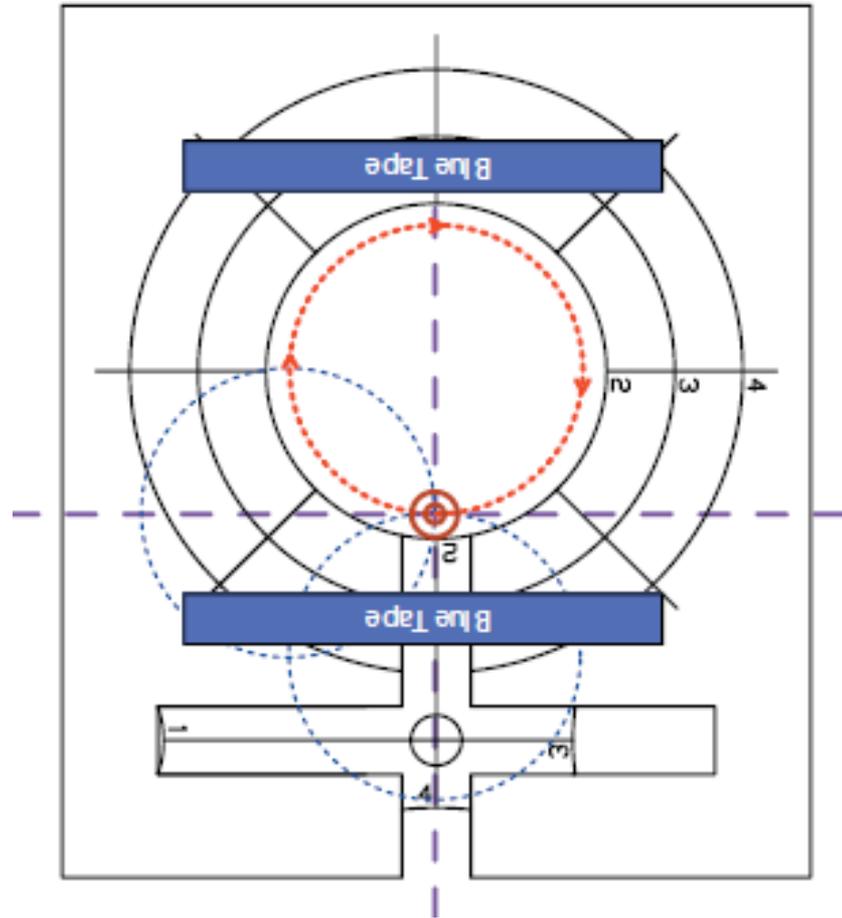
→ Needle down.



Sit-down Ruler Set

Spyrographing Circles

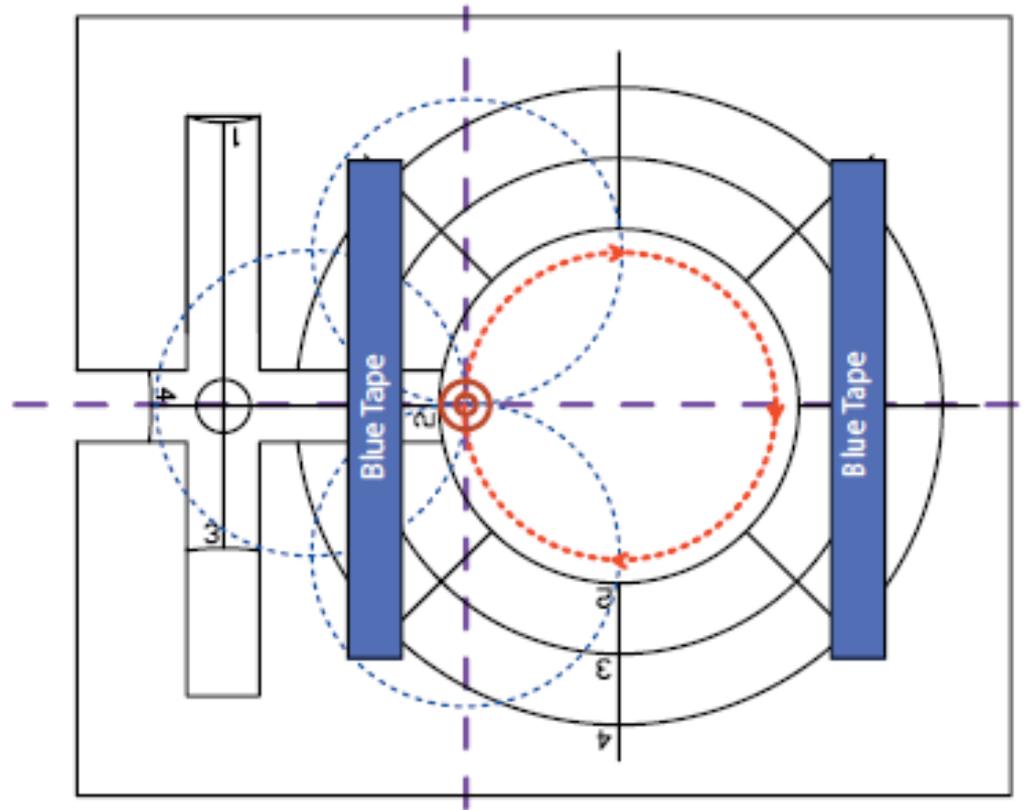
- Rotate the template to the vertical crosshairs as shown.
- Stitch a complete circle.
- Needle down.



Sit-down Ruler Set

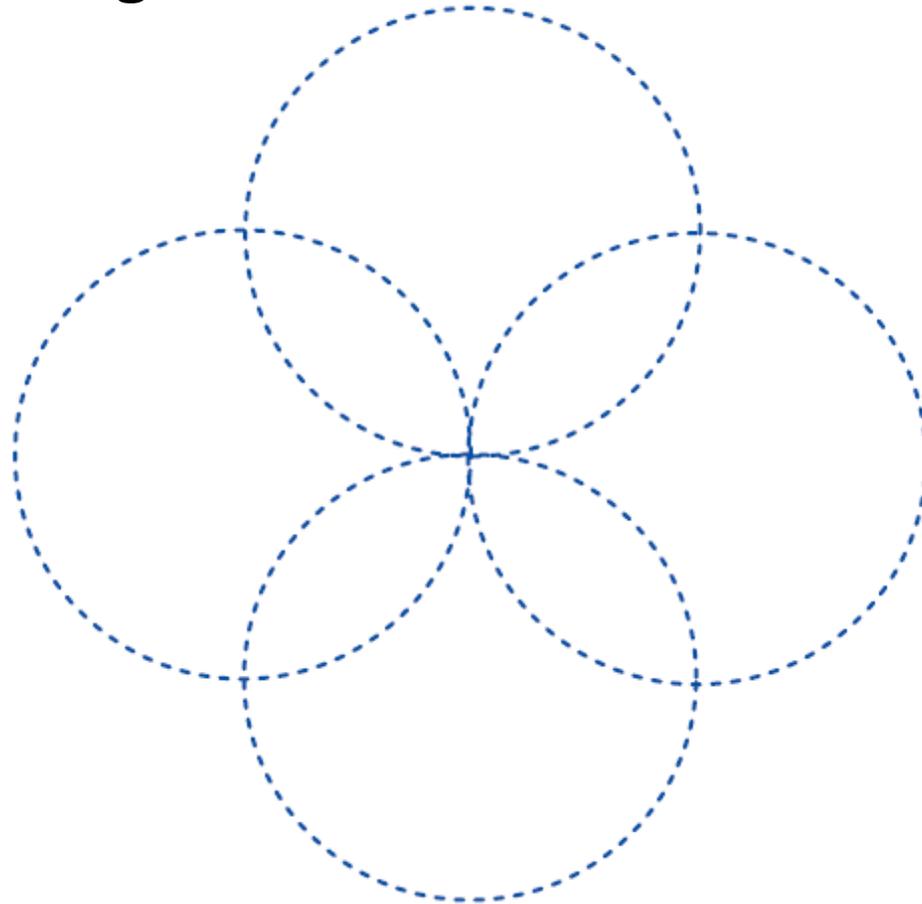
Spyrographing Circles

- Rotate the template to the horizontal crosshairs as shown.
- Stitch a complete circle.



Sit-down Ruler Set

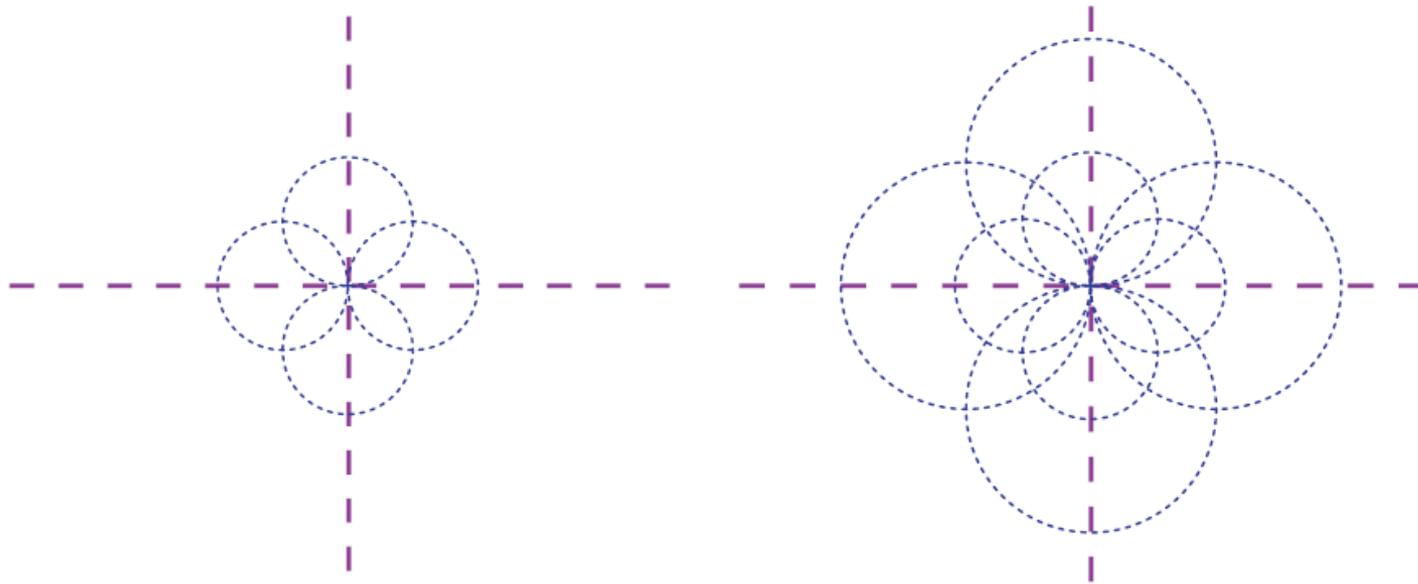
Spyrographing Circles



Sit-down Ruler Set

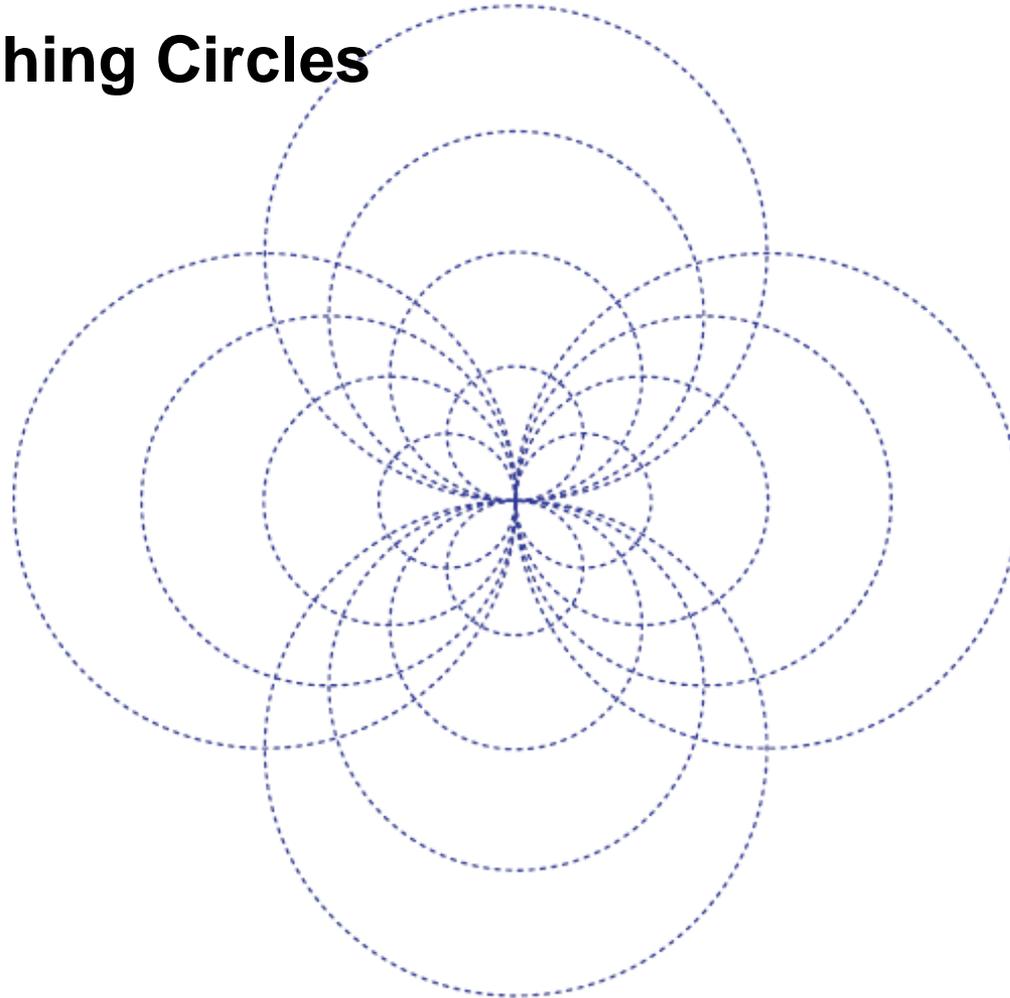
Spyrographing Circles

- **Variation:** Combine Psychedelic Circles and Spyrographing Circles for a really fun look. Start by spyrographing the smallest circle and then work your way up to the largest.



Sit-down Ruler Set

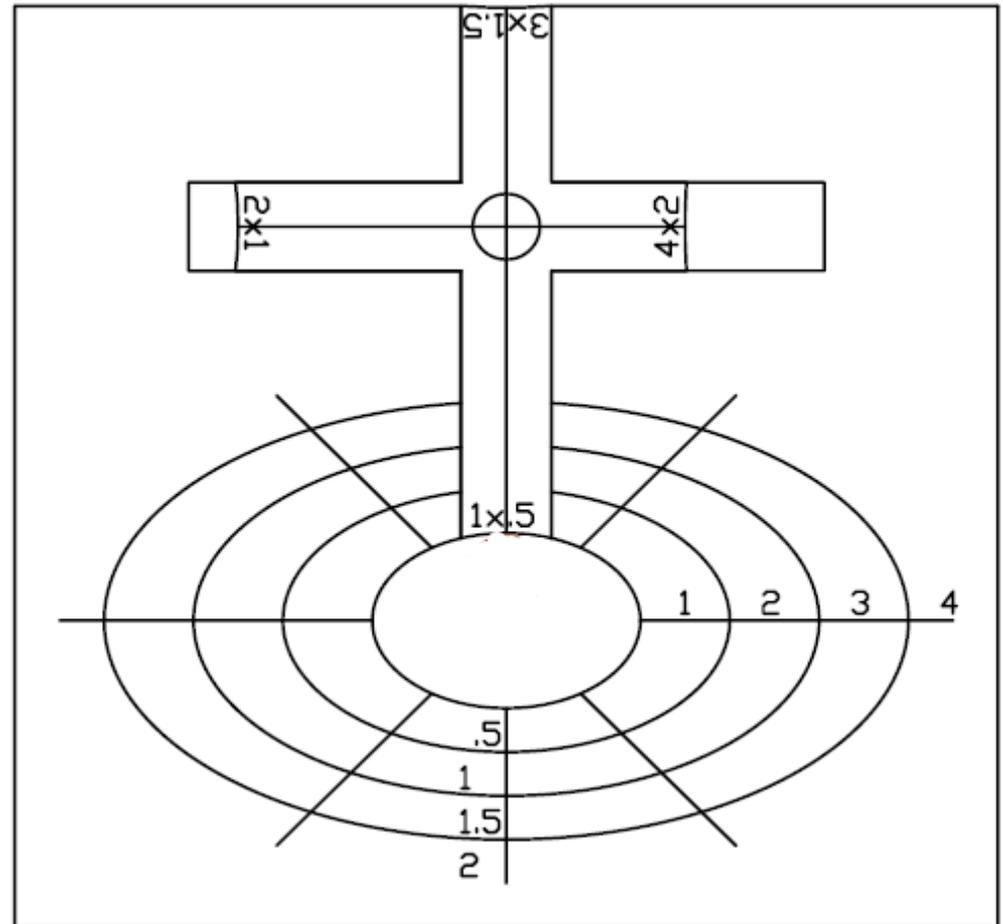
Spyrographing Circles



Sit-down Ruler Set

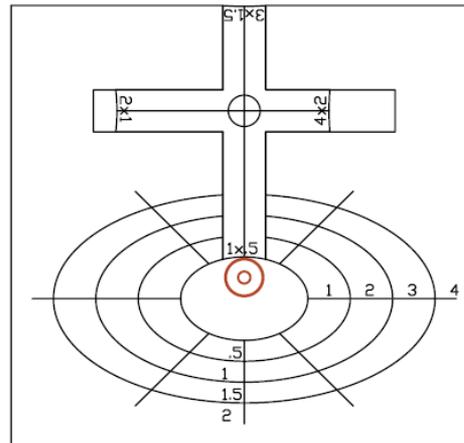
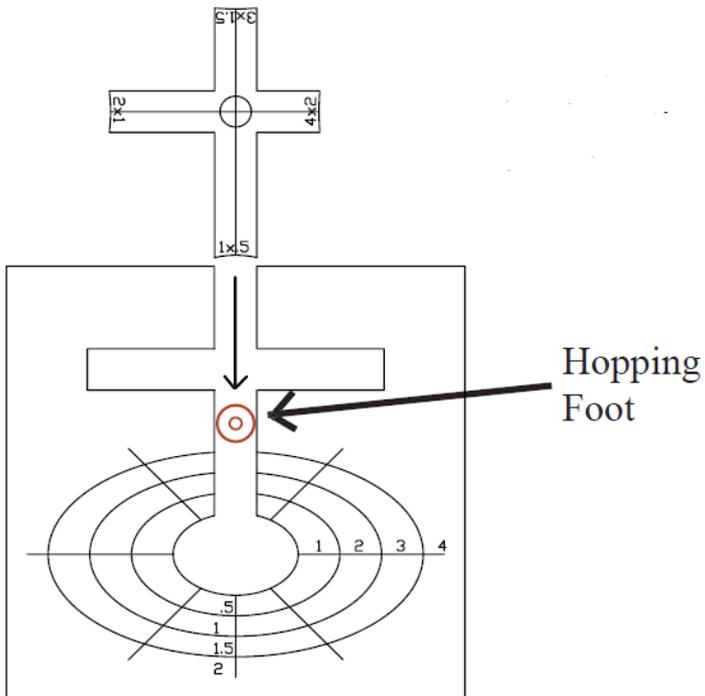
Nesting Ovals

- Remove key from template in order to position foot on the inside of the Nested Mini Ovals.
- Replace key being sure to match key to oval desired.

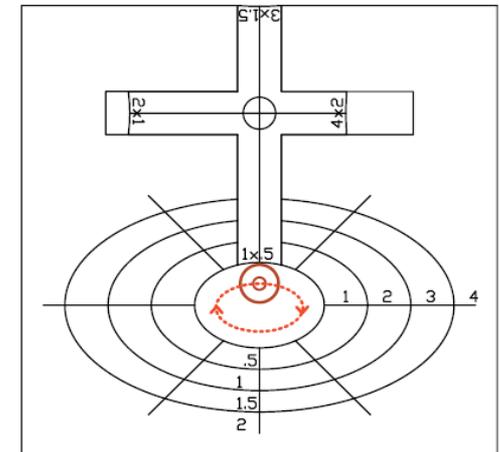


Sit-down Ruler Set

Concentric Ovals



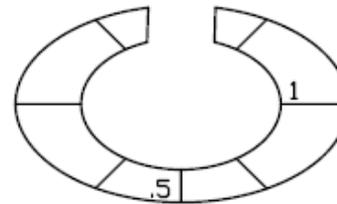
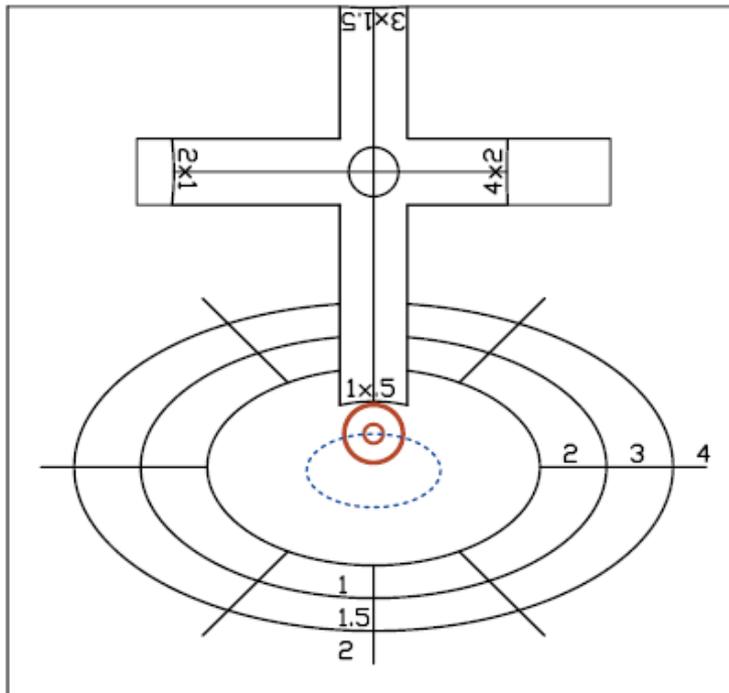
Stitch a complete oval. Tie off thread.



Sit-down Ruler Set

Concentric Ovals

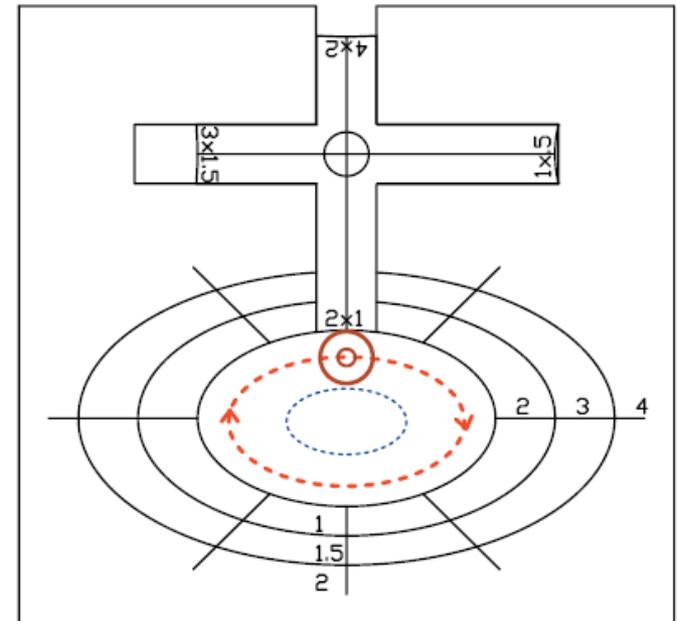
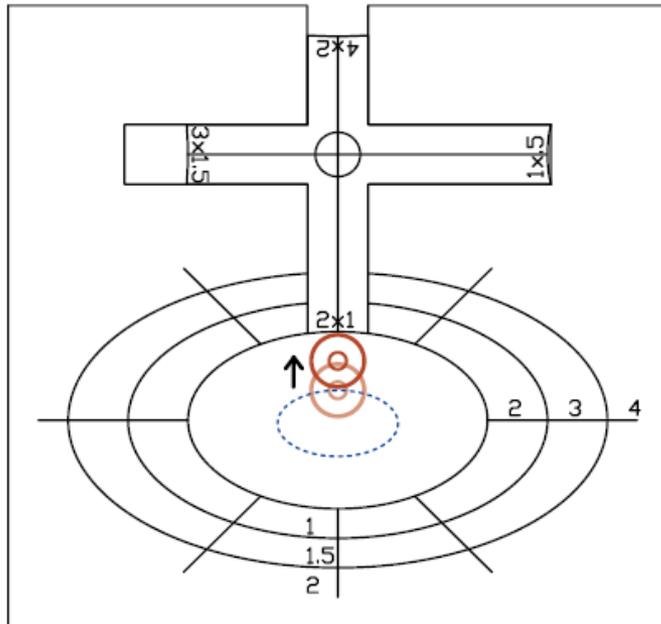
- Remove first Ring.
- Turn key to match new oval size.



Sit-down Ruler Set

Concentric Ovals

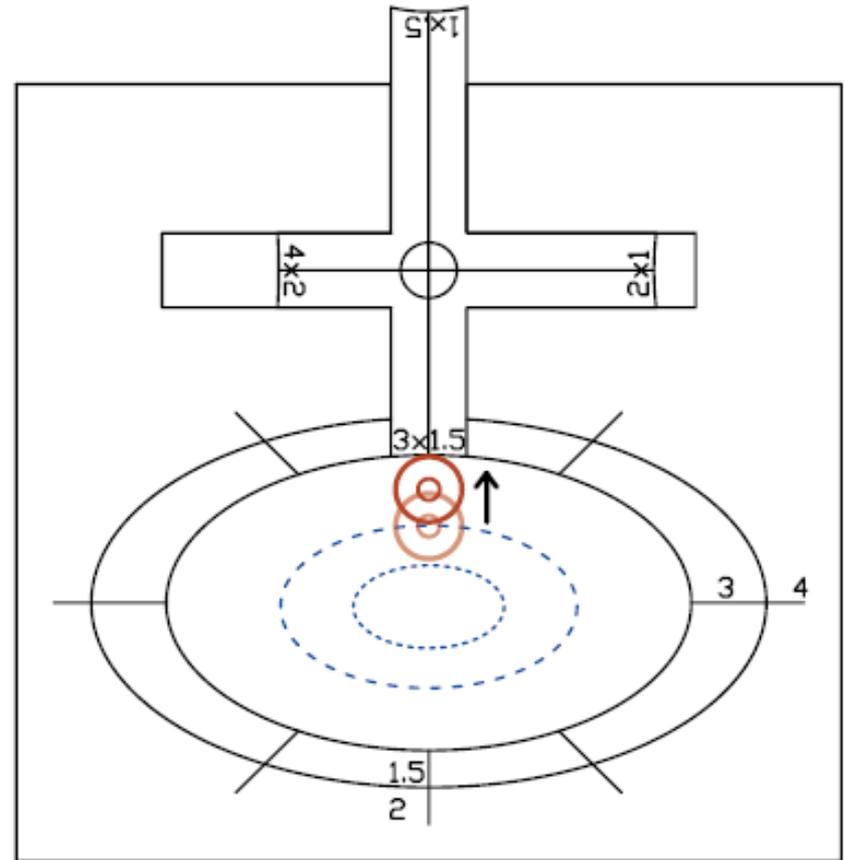
- Move foot to edge of new oval.
- Stitch a complete oval.
- Tie off thread.



Sit-down Ruler Set

Concentric Ovals

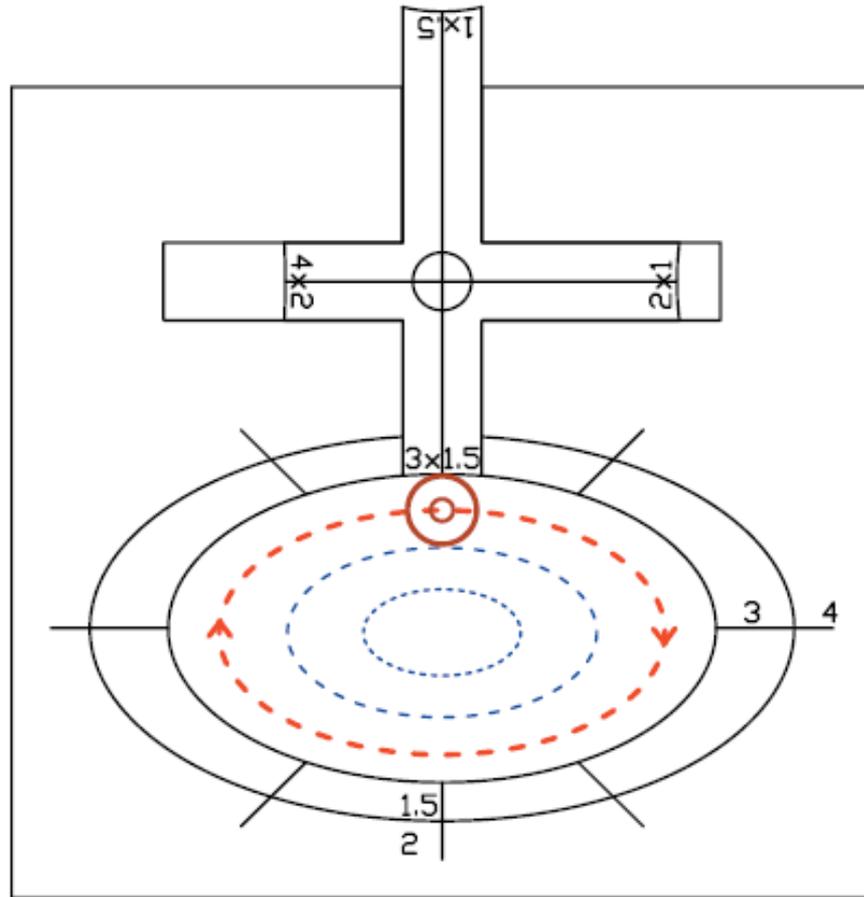
- Remove second ring.
- Turn key to match new oval size.
- Move foot to edge of new oval.



Sit-down Ruler Set

Concentric Ovals

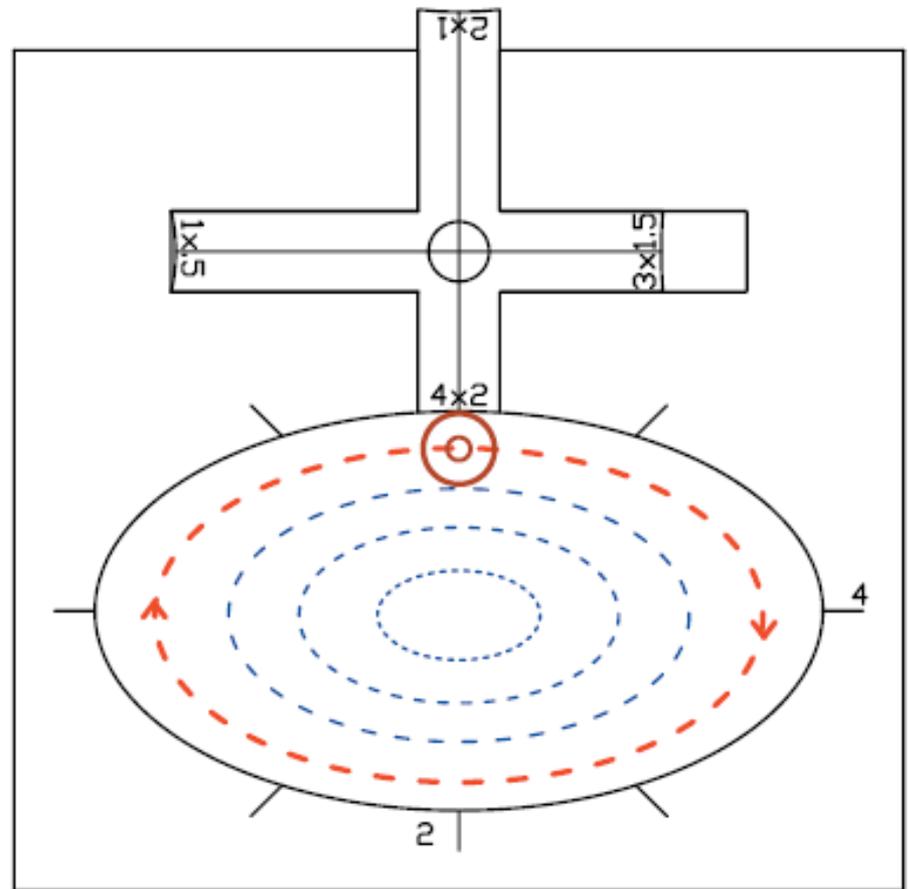
- Stitch a complete oval.
- Tie off thread.



Sit-down Ruler Set

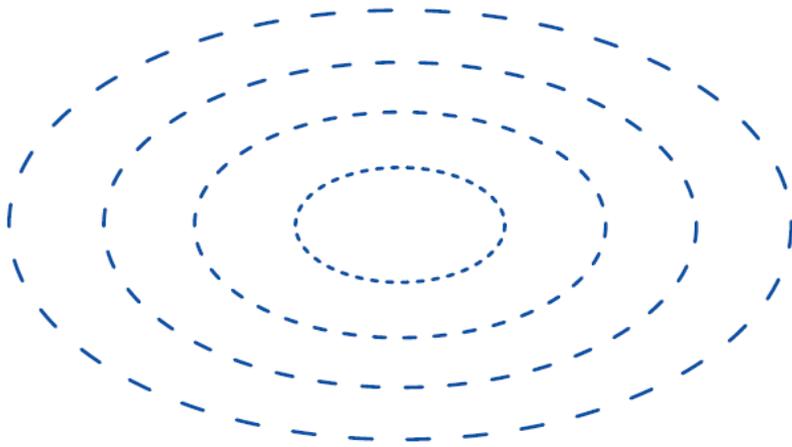
Concentric Ovals

- Remove third ring.
- Turn key to match new oval size.
- Move foot to edge of new oval.
- Stitch complete oval.
- Tie off thread.

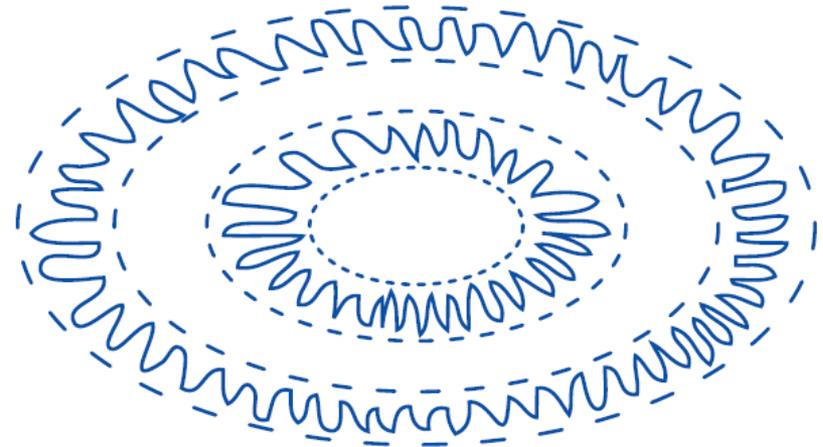


Sit-down Ruler Set

Concentric Ovals



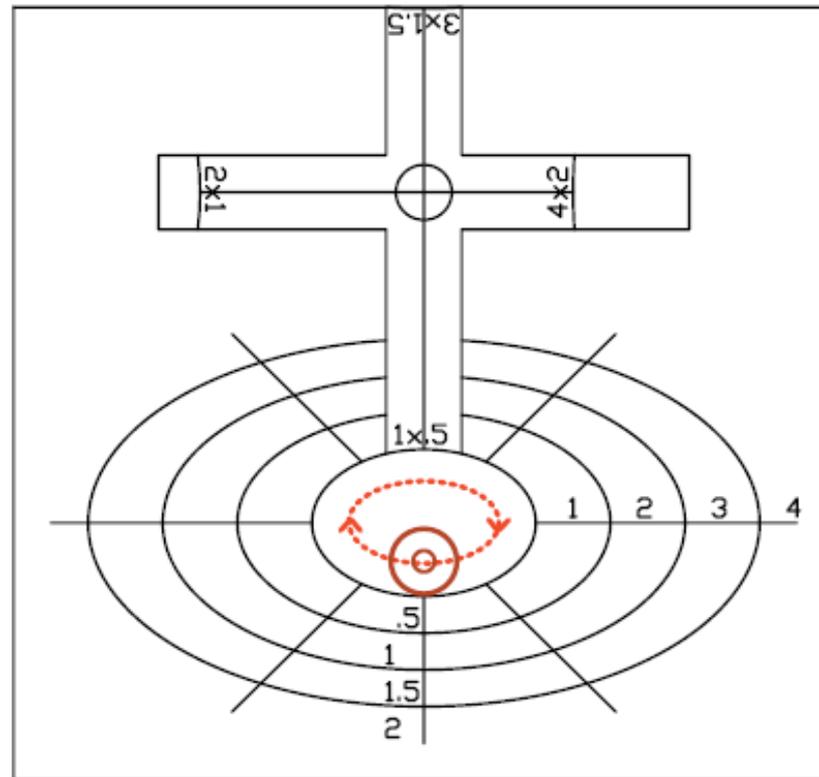
Four Concentric Ovals $\frac{1}{2}$ " apart.



Fill ovals as desired.

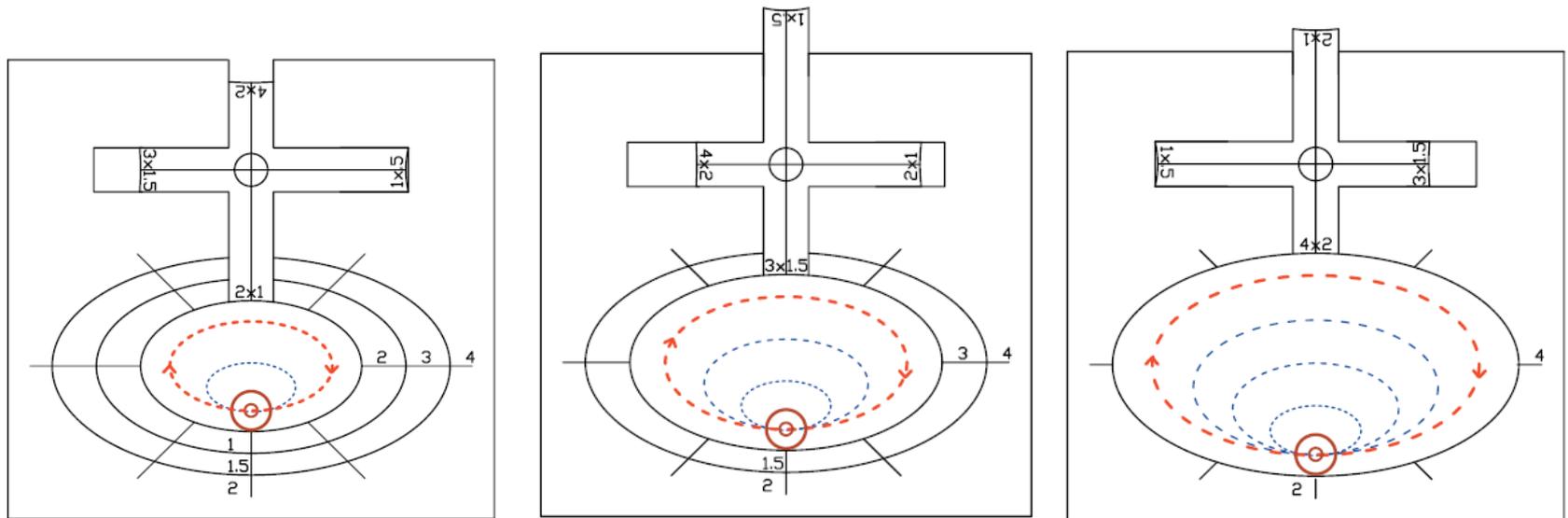
Sit-down Ruler Set

Connected (Psychedelic) Ovals



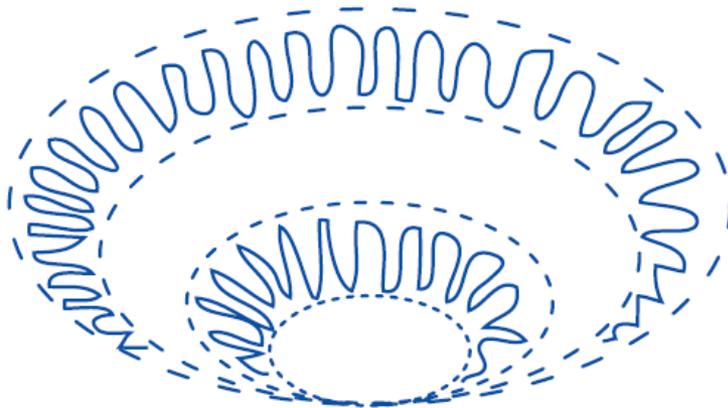
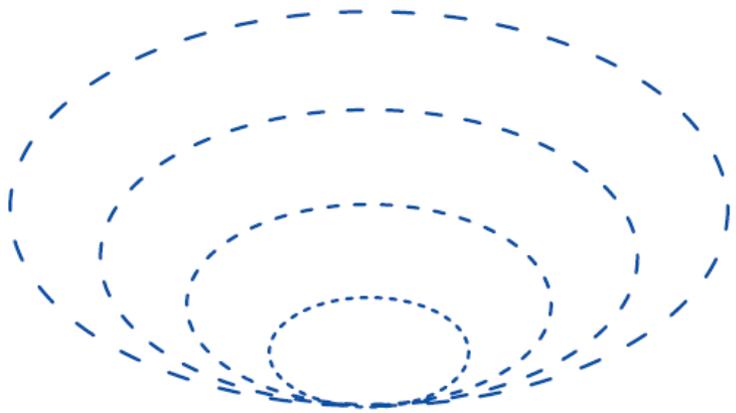
Sit-down Ruler Set

Concentric Ovals



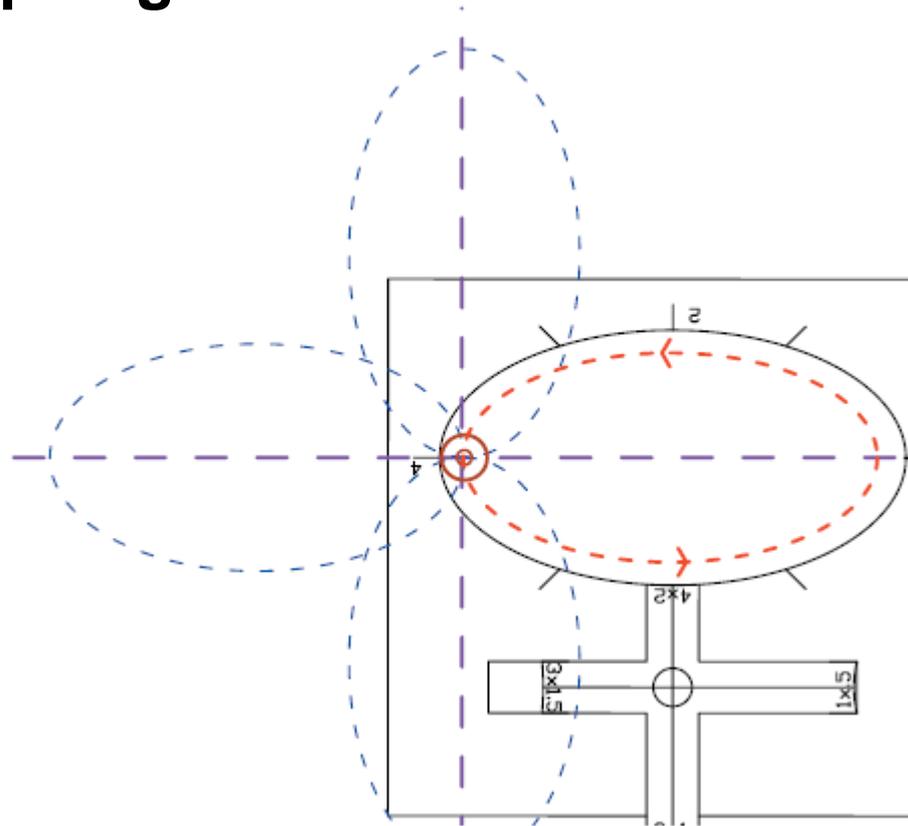
Sit-down Ruler Set

Concentric Ovals



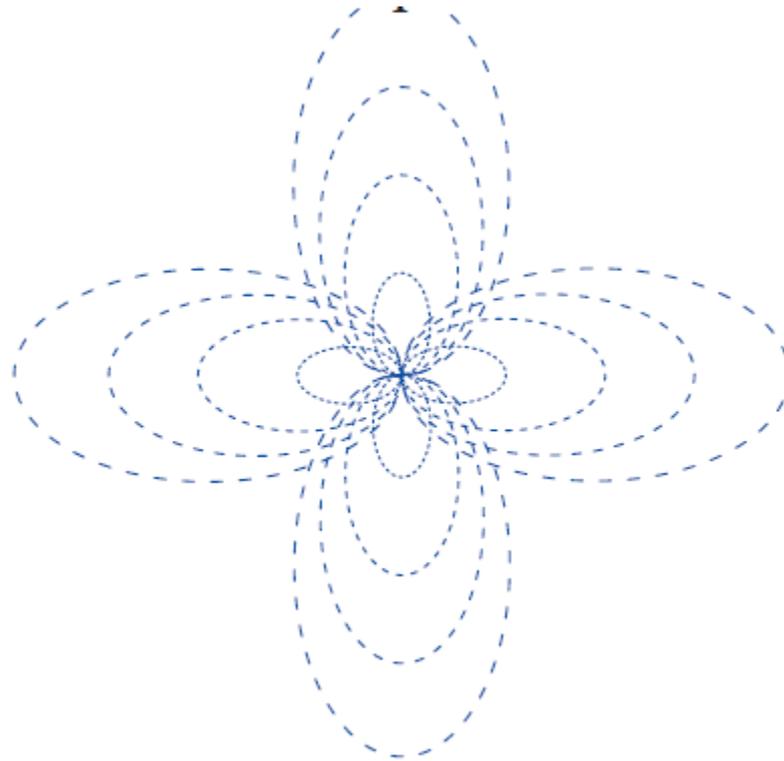
Sit-down Ruler Set

Spyrographing Ovals



Sit-down Ruler Set

Spyrographing Ovals



Sit-down Ruler Set

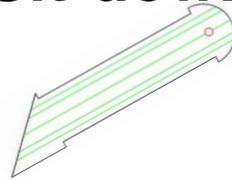
Adjustable Ruler Foot #72



Sit-down Ruler Set

BERNINA Ruler Kit for Sit-down Models

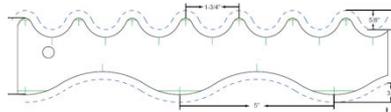
→ Mini Straight Line Tool



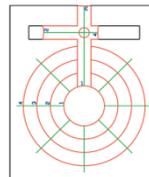
→ Mini 4-in-1 Tool



→ Squiggle Template



→ Nested Mini Circles 1" to 4"



→ Nesting Mini Ovals

