

# Quantum<sup>TM</sup> décor<sup>TM</sup>

## Workbook



Also applies to the Quantum® 7312.

# SINGER





# **SINGER®**

## **Table of Contents**

### **Quantum® Décor and Quantum® 7312**

Straight Stitch, Reverse and Needle Positions

Straight Stitch

Create Quilted Fabric with the Seam/Quilt Guide

Create Piping with the Zipper Foot

Satin Stitch Appliqué with the Satin Foot

Button Sewing with the Button Sewing Foot

Bartack Buttonholes with the Buttonhole Foot

Blind Hem with the Blind Hem Foot

Narrow Hem with the Narrow Hem Foot\*

Gathering with the Cording Foot

Applying Trims, Cords & Braids with the Cording Foot

Attaching Beaded Trims

Couching a Strand of Pearls

Faux Tatted or Crocheted Edging

Crazy Quilting with Decorative Stitches

Sewing Multiple Layers with the Even Feed Foot\*

Sewing Plaid Fabrics with the Even Feed Foot\*

Sewing Pile Fabrics with the Even Feed Foot\*

Straight Stretch Stitch for Woven Fabrics\*\*

Straight Stretch Stitch for Stretch Fabrics\*\*

Ribbing Application\*\*

Overedge Stitching\*\*

Attaching Elastic

Sewing with a Wing Needle

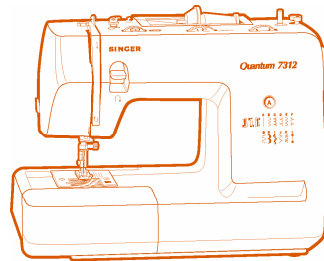
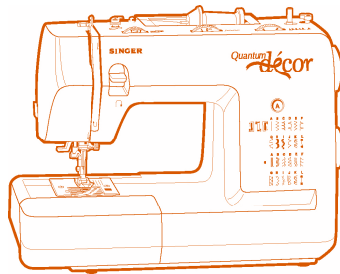
Sewing Leather

Decorative Bobbin Work

\*Indicates optional foot for Quantum 7312

\*\* Stitch found only on Quantum Décor

## Straight Stitching, Reverse and Needle Positions



### Machine Set-Up:

Stitch: "A", Straight Stitch  
Stitch Width: 0, Center Needle Position  
Stitch Length: 3  
Presser Foot: Standard Foot

### Materials:

(2) 5" X 5" pieces of medium weight cotton

### Procedures:

- ➡ Sew a straight stitch on the fabric.
- ➡ Change the stitch width to 3, notice the needle position changes.
- ➡ Sew another row of straight stitching.
- ➡ Change the stitch width to 7, notice the needle is in the far left position.
- ➡ Sew a straight stitch and compare the differences in needle position.
- ➡ Sew a straight seam and practice reinforcing the seam using the reverse knob.
- ➡ Change the stitch length dial to 1, begin to sew.
- ➡ Slowly move the stitch length dial to 7, notice how close or far apart the stitches look depending on the stitch length setting.

# Straight Stitching

## Machine Set-up:

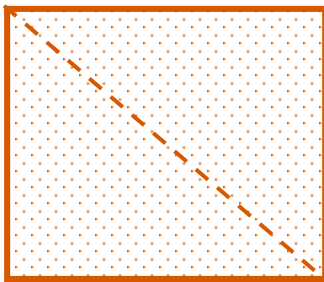
Stitch: "A", Straight Stitch  
Stitch Width: 0, Center Needle Position  
Stitch Length: 3  
Presser Foot: Standard Foot

## Materials:

(2) 5" X 5" pieces of cotton with a piece of batting between the two pieces, creating a quilt-type sample

## Procedure:

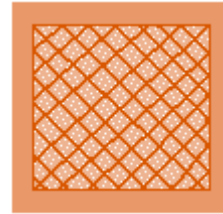
- ➡ Sew diagonally from the top left corner to the bottom right corner.
- ➡ Use the reverse lever to reinforce the seam.



# Create Quilted Fabric

## Machine Set-Up:

Stitch: "A", Straight Stitch  
Stitch Width: 0, Center Needle Position  
Stitch Length: 2.5  
Presser Foot: Standard Foot



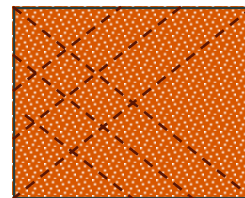
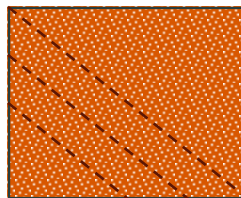
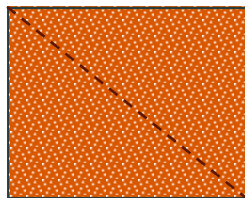
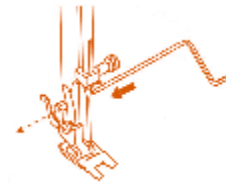
Quilt pillow tops for a designer look!

## Materials:

Quilt-type sample that was previously used on the Straight Stitch exercise

## Procedure:

- Attach the Seam/Quilt guide.
- Use the guide to ensure even spacing and straight lines, or when large (projects cover the machine's seam guides on throat plate)
- Position fabric approximately 1-2 inches from the right of the previously sewn straight stitch.
- Position the guide so that it rides on the previous row of stitching.
- Sew successive rows using the guide.
- Change the direction, sew diagonally from the top right corner to the bottom left corner of the fabric.
- Sew 3 or more rows, using the guide.



# Create Piping

## Machine Set-up:

Stitch: "A", Straight Stitch  
Stitch Width: 3  
Stitch Length: 3  
Presser Foot: Zipper Foot

## Materials:

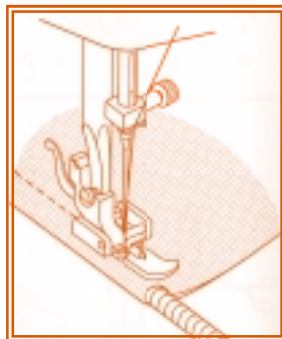
5" X 6" home décor fabric, cut on bias  
7" of purchased cording

## Procedure:

- Fold fabric wrong sides together.
- Place cording inside of the fold.
- On the right side of the fabric sew a straight stitch close to the piping.
- Adjust stitch width to move the needle closer to the piping
- **Note:** The Zipper Foot can be attached right or left, allowing for the cording to be inserted from either side.



Attach piping to pillows and furniture to add a bold finishing touch!



# Satin Stitch Appliqué

## Machine Set-up:

Stitch: "B", Zigzag Stitch  
Stitch Width: 3  
Stitch Length: -1  
Presser Foot: Satin Foot

A close zigzag is called a Satin Stitch.

## Materials:

A simple-shaped appliqué fused onto a cotton-type fabric (base fabric), with a medium weight tear-away stabilizer underneath. Fusing the appliqué into place will prevent the appliqué from shifting while stitching. The stabilizer underneath the fabric is used to support the fabric when using wide dense stitches.

## Procedure:

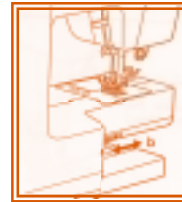
- Place the applique under the transparent foot, so that the left swing of the needle falls on the applique and the right swing of the needle falls on the base fabric.
- Stitch around the applique.
- Widen the stitch width to 4 and change the stitch length to below 1.
- Stitch around the applique again, covering the previously sewn stitching.
- Sewing over an applique twice is not always necessary, however, it does give a beautiful full-covered or raised effect.



# Button Sewing

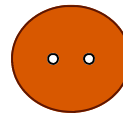
## Machine Set-Up:

Stitch: "B", Zigzag  
Stitch Width: Determined by button (usually 3mm)  
Stitch Length: (does not apply because feed dogs are lowered)  
Feed Dogs: Down Position  
Presser Foot: Button Sewing Foot



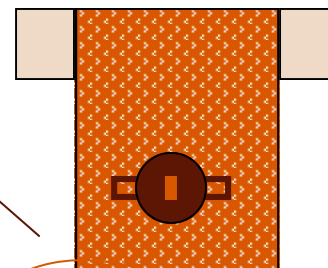
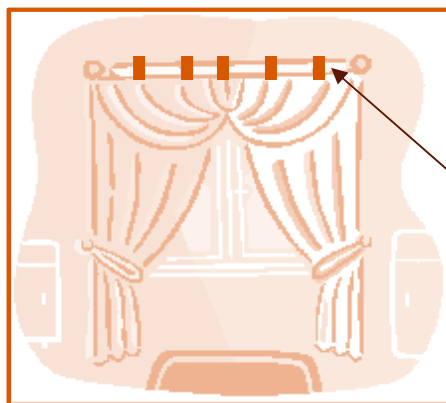
## Materials:

Home Décor fabric or shirting  
(1) two-hole button



## Procedure:

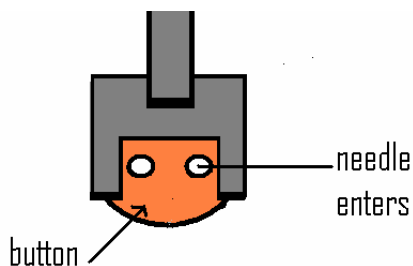
- Fold fabric in half and place under foot.
- Position the button on the fabric so that the holes in the button are between the toes of the foot.
- Lower the presser foot to hold the button in place.
- Turn the hand wheel forward, adjust so that the needle goes into either the right or left hole.
- Adjust the stitch width dial to fine tune the swing of the needle into the other hole.
- Recheck the swing of the needle into the other hole. Now use the foot control to stitch 6-8 stitches.



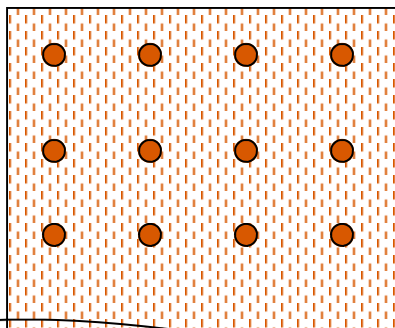
Use buttonholes and decorative buttons for versatile and stylish tabs on curtains.



- ➡ Before removing the button and fabric from the machine, set machine to straight stitch. Leave width at current setting and stitch in place for three stitches. This forms a tie-off on the back side to secure the button.
- ➡ Apply a liquid fray-preventer on the backside of fabric on the knots. Trim threads after they dry, being careful not to cut thread knots.
- ➡ **Note:** Remember to raise the feed dogs when finished.



For a thread shank, place a needle or toothpick on the button and stitch.



Use decorative buttons to tie-off a quilt or wall hanging!

# Bartack Buttonholes

## Machine Set-Up:

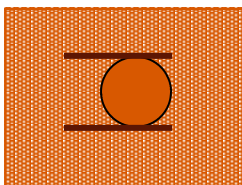
Stitch:	Step One of the Four-Step Buttonhole
Stitch Width:	5-7
Stitch Length:	Buttonhole symbol
Presser Foot:	Buttonhole Foot (after attaching, push the moveable white part to most rear position)

## Materials:

Home décor fabric with interfacing or tear-away stabilizer  
Disappearing marking pen or tailor chalk (for marking size of buttonhole)  
Button (to establish length of buttonhole)

## Procedure:

- ➡ Fold fabric in half crosswise, with interfacing or stabilizer between layers.
- ➡ Lay button on fabric and mark the top and bottom of the button.  
This will establish the starting and ending points of the buttonhole.



- ➡ Push the foot's white movable piece to the most forward red line on the foot.
- ➡ Place the fabric under the foot, matching the foot's red mark with the bottom mark on the fabric.
- ➡ Sew 5 to 6 stitches of Step One (which is the lower/bottom bartack)
- ➡ Cut open buttonhole and use a seam sealant to reinforce the buttonhole.

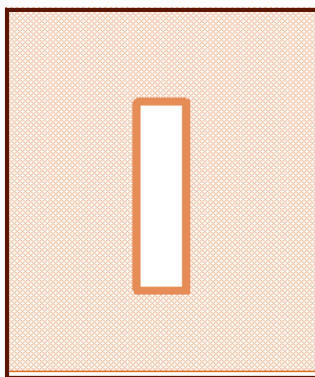
Note: To adjust the density or if the sides are uneven, refer to the manual for adjustment instructions.

➡ Turn Pattern Selection knob to Step Two of the Four-Step buttonhole.

➡ Sew, and the machine will stitch in reverse, making left side of the buttonhole.

➡ Stop sewing when the needle reaches the fabric mark indicating the top of the buttonhole.

➡ Turn Pattern Selection knob to Step Three, the upper/top bartack.



➡ Sew 5 to 6 stitches.

➡ Turn Pattern Selection knob to Step Four, to form the right side of the buttonhole.

➡ Sew, the machine will stitch forward, making the final side of the buttonhole.

➡ Stop sewing when the needle reaches the bottom of the buttonhole, indicated by the mark on the fabric.

➡ Cut open buttonhole and use a seam sealant to reinforce the buttonhole.



# Blind Hem

## Machine Set-Up:

Set-up for Step 1 (to finish raw edges)

Stitch: "E", Multi-Zigzag

Stitch Length: 1.0

Stitch Width: 5

Presser Foot: Standard Foot



Set-up for Step 2 (to baste the fold)

Stitch: "A", Straight Stitch

Stitch Length: 4

Stitch Width: 0

Tension Dial: 1

Presser Foot: Standard Foot

Use the Blind hem to finish the edges of tablecloths and drapes.

Set-up for Step 3 (to create the hem)

Stitch: "D", Blindhem

Stitch Length: 2.5-3.5

Stitch Width: 3-4

Tension Dial: 2

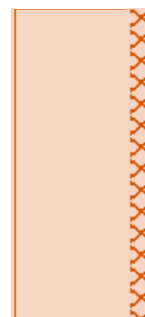
Presser Foot: "F", Blindhem Foot

## Materials:

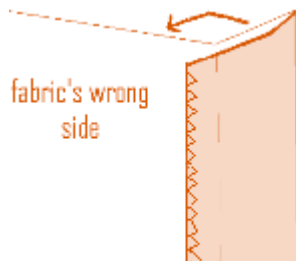
Medium weight woven fabric

## Procedure:

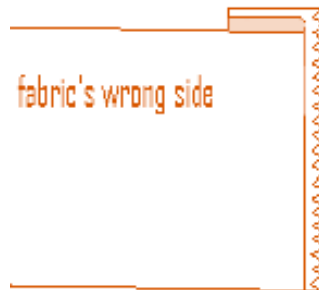
- ➦ Sew a Multi-Zigzag to finish one of the fabric's raw edges. Guide the fabric so the right swing of the needle is on the raw edge of the fabric.



➤ Fold under 1 " and baste in place.

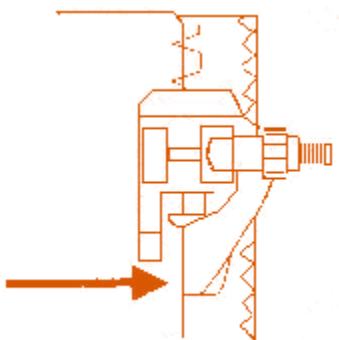


➤ Position sample with wrong side facing up, and turn the hem back to the right side, creating a soft fold at the top edge of the hem. The bulk of the fabric is to the left of the foot.



➤ Begin stitching, making sure the forward stitches fall near the finished edge, and the needle's left swing just bites into the fold, catching only 2 or 3 threads of the fabric.

➤ Note: Always use matching thread to help "hide" the stitches.

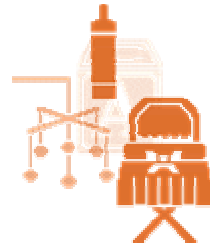


# Narrow Hem

(optional foot for Quantum 7312)

## Machine Set-Up:

Stitch: "A", Straight Stitch  
Stitch Width: 0, Center Needle Position  
Stitch Length: 2  
Presser Foot: Rolled or Narrow Hem Foot



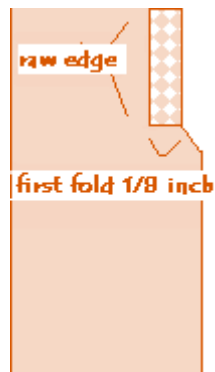
## Materials:

Medium to light weight cotton fabric

Use the Narrow Hem to create delicate edge finishes.

## Procedure:

- To start the hem at the very edge of the fabric:  
Fold over a 1/8" of the fabric's edge at the starting point for a distance of about an inch.
- Fold the fabric over another 1/8".
- Stitch the small hem into place with a Straight Stitch.
- Leave the needle in the fabric, but lift the presser foot.
- Guide the fabric into the scroll of the foot.
- Lower foot and continue to sew, holding the thread tails firmly behind the foot.
- Hold fabric taut and slightly up to help the fabric "roll" into the scroll.



The foot's scroll



# Gathering with the Cording Foot

## Machine Set-Up:

Stitch: "B", Zigzag  
Stitch Width: 3  
Stitch Length: 3  
Presser Foot: Cording Foot



## Materials:

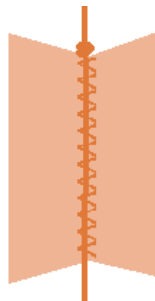
10" long cord of pearl cotton or string  
5" X 3" Home Décor fabric

## Procedure:

- Place a single cord in the center groove of the foot.
- Secure the cord by tying a knot at the back of the foot.
- Place the fabric under the foot.
- Sew a test to ensure that the Zigzag stitches are sewing over the cord, not into the cord. The Zigzag stitch makes a casing for the cord.
- After stitching is finished, pull the cord which will draw up or gather the fabric.
- Adjust the gathers evenly by sliding the fabric along the cord.
- Sew a straight stitch to secure the gathers into place.

## ➤ Note:

This technique is great for heavy fabrics such as home decorator or textured fabrics.



# Applying Trims, Cords or Braids

## Machine Set-Up:

Stitch: "I", Decorative Stitch  
Stitch Width: 5-7  
Stitch Length: 1  
Presser Foot: Cording Foot



## Materials:

Three strands of thin cording  
Home Décor fabric

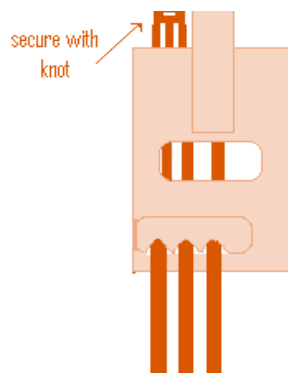
## Procedure:

- Thread one decorative cord through each of the foot's three grooves or slots.
- Secure the three cords at the back of the foot by tying a knot.
- Place the fabric under the foot and sew.
- The foot will hold all the cords in place as they are sewn to the fabric.

## ➤ Note:

There are several decorative cords available, each creating unique effects to projects.

😊 Experiment with different cords and various Zigzag-type stitches!



# Attaching Beaded Trims

## Machine Set-Up:

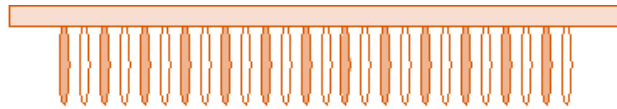
Stitch: "E", Multi-Mending  
Stitch Width: 5-7  
Stitch Length: 2  
Presser Foot: Standard Foot



Attach trim to add a special finishing touch!

## Materials:

Beaded trim  
Home Décor fabric

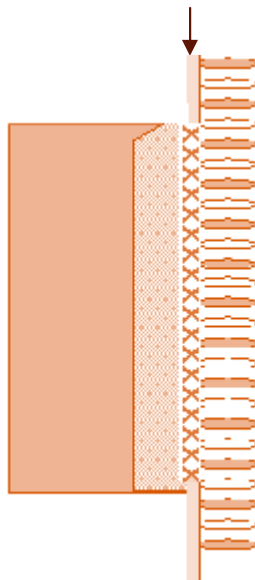


## Procedure:

- Press and stitch with a straight stitch a 1" hem into the fabric. Finish edges if needed.
- Place fabric on machine with wrong side facing up.
- Place trim header on fabric's edge, right side facing down.
- Sew on the the trim's header.

Stitch the trim to the fabric at the trim's header.

Fabric's wrong side





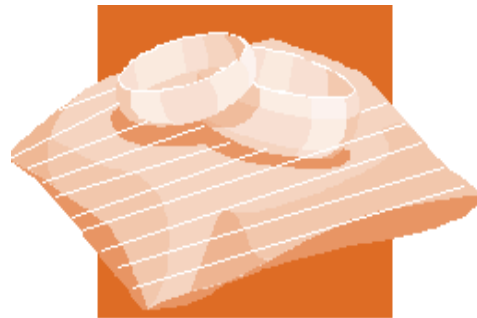
# Couching a Strand of Pearls

## Machine Set-Up:

Stitch: "B", Zigzag  
Stitch Width: Adjust according to size of pearls  
Stitch Length: 2-3  
Presser Foot: Standard Foot  
Tension: 2-3

## Materials:

Monofilament Thread  
String of Pearls, size 3mm  
Felt or Stabilized Woven Fabric



## Procedure:

- ➡ Lay pearls or other couching trim on top of fabric.
- ➡ Stitch, adjusting width to ensure the stitch slightly encases the trim.



# Faux Tatted or Crocheted Edging

## Machine Set-up:

Stitch: "K", Decorative Stitch  
Stitch Width: 7  
Stitch Length: 4  
Presser Foot: Standard Foot

## Note:

Use a size 90/14 or larger needle

## Materials:

Linen-like fabric, starched and one long edge hemmed  
25wt. cotton thread in both needle and bobbin  
Rinse-away stabilizer—folded to create double layer

## Procedure:

- Position stabilizer under the hemmed edge of the fabric, with the bulk of the fabric to the left of the presser foot.
- Stitch so that the left swing of the needle just penetrates the folded edge of the fabric, and the rest of the stitch penetrates the stabilizer.
- Secure thread tails on both ends by tying square knots before trimming them.
- A drop of liquid fray preventer will ensure that stitching will not come undone.



# Crazy Quilting

## Machine Set-Up:

Stitch: H, I, K, L  
Red stretch stitches: A, B, E, F, G, H, I, K, L\*  
Stitch Width: Adjust according to preference  
Stitch Length: Adjust according to preference  
Presser Foot: Satin Foot or Standard Foot  
\*The Red Stretch stitches are only found on the Quantum Decor.

## Materials:

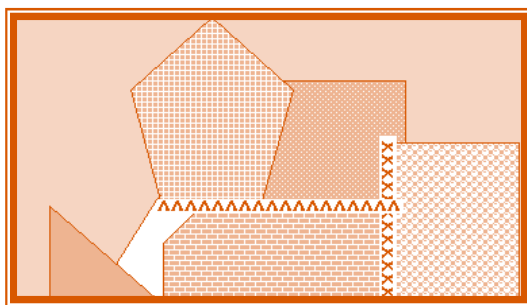
Assorted fabric scraps  
Foundation fabric or paper



Create Crazy Quilt bed covers  
with left over scraps!

## Procedure:

- Crazy-piece the scraps onto the foundation fabric or paper, starting from the center and working outward.
- Select desired decorative stitch and center the stitching over the seam lines.
- Use rayon, metallic or other decorative threads.
- **Note:** See the [Singer Quilting Bible](#) for more ideas on crazy quilting.



# Shirring with the Gathering Foot

## Machine Set-Up:

Stitch: "A", Straight Stitch  
Stitch Width: O, Centered Needle Position  
Stitch Length: 4  
Tension: Increase the tension to 9  
Presser Foot: Gathering Foot



Shirr a single row to gather for a ruffle or shirr several rows for a textured effect.

## Materials:

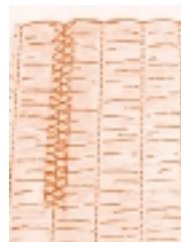
12" piece of organza (light weight fabrics recommended)

## Procedure:

- Pull one to two threads on the fabric's crosswise grain, to create a straight stitching line.
- Turn the handwheel to ensure the needle is correctly positioned. It should line up with the Gathering Foot's needle opening.
- Sew on the "pulled" line.
- Use the foot's edge as a guide to sew the next row of stitching. Rows will be 1/4" apart if the foot is used as a guide.
- Sew 3 or 4 more rows.

## Note:

After several rows of shirring have been sewn, use the Honeycomb stitch, Red Stretch "E" to tack the gathers into place, thus creating a beautiful smocking effect.



# Using the Even Feed Foot to Sew Multiple Fabric Layers

(optional for Quantum 7312)

## Machine Set-Up:

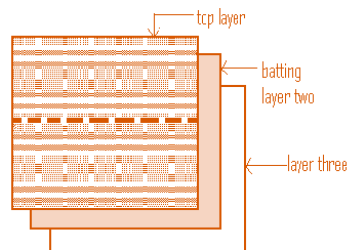
Stitch: "A", Straight Stitch  
Stitch Width: 0, Center Needle Position  
Stitch Length: 3  
Presser Foot: Even Feed Foot

## Materials:

(2) 5" X 5" pieces of cotton with a piece of batting between the two fabrics

## Procedure:

➡ Sew from one edge to the other down the center of the fabric.



The Even Feed Foot (also known as a Walking Foot) has its own set of feed dogs that work in conjunction with the machine's feeding system to improve the flow of the fabric. This is particularly important when sewing several layers of fabric, such as in quilting. The Even Feed Foot "pulls" the top layer or layers of fabric through at the same speed as the machine's feed dogs are pulling the bottom layer or layers of fabric- - - making for more even feeding!

# Using the Even Feed Foot to Sew Plaid Fabrics

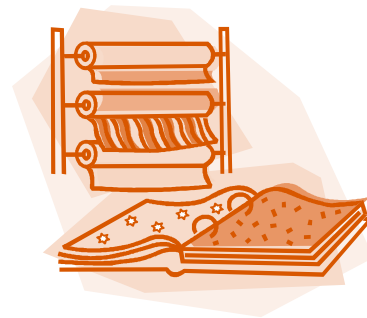
(optional for Quantum 7312)

## Machine Set-Up:

Stitch: "A", Straight Stitch  
Stitch Width: 0, Center Needle Position  
Stitch Length: 3  
Presser Foot: Even Feed Foot

## Materials:

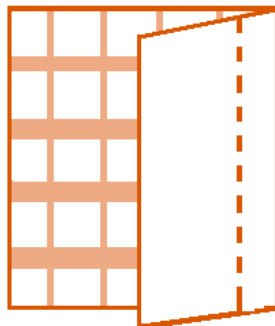
(2) 5" X 5" pieces of plaid or striped fabric



## Procedure:

- ➡ Match plaids, right sides together
- ➡ Sew the two pieces together using the built-in seam guide on the machine to maintain a consistent seam allowance.

Match plaids, stripes or border prints with ease!





# Using the Even Feed Foot to Sew Pile Fabrics

(optional for Quantum 7312)

## Machine Set-Up:

Stitch: "B", Zigzag  
Stitch Width: 2  
Stitch Length: 1.5  
Presser Foot: Even Feed Foot

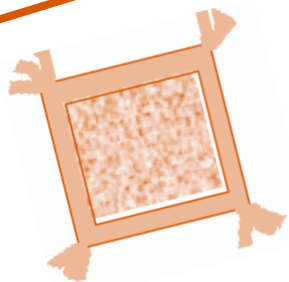
## Materials:

(2) 5" X 5" pieces of fake-fur

## Procedure:

➡ Sew the two pieces together using the built-in seam guide on the machine to maintain a consistent seam allowance.

The Even Feed Foot is great when making fake-fur pillows, blankets or stuffed animals!



# Straight Stretch Stitch for Woven Fabrics

(Quantum Décor model only)

## Machine Set-Up:

Stitch: Red Stretch "A", Triple Straight Stitch  
Stitch Width: 0, Center Needle Position  
Stitch Length: Red "S" setting  
Presser Foot: Standard Foot

## Materials:

Denim, folded in half

## Procedure:

➤ Stitch the two layers.



This stitch is wonderful for built-in strength! It is ideal when sewing heavy-weight fabrics or to create a bolder straight stitch. Try it as a top-stitch on jeans, or a home decorating project. The triple straight stitch provides excellent reinforcement for projects, such as stuffed animals or upholstery.

# Straight Stretch Stitch for Stretch Fabrics

(Quantum Décor model only)

## Machine Set-Up:

Stitch: Red Stretch "A", Triple Straight Stitch  
Stitch Width: O, no width  
Stitch Length: Red "S" setting  
Presser Foot: Standard Foot

## Materials:

Knit fabric, folded in half  
Yellow Band Needle

## Procedure:

- ➡ Stitch the two layers.
- ➡ After sewing, notice how the stitch stretches when the fabric is stretched.



Try the Straight Stretch Stitch for "no-pop" seams on dance wear, workout clothes and bathing suits.

# Ribbing Application

(Quantum Décor model only)

## Machine Set-Up:

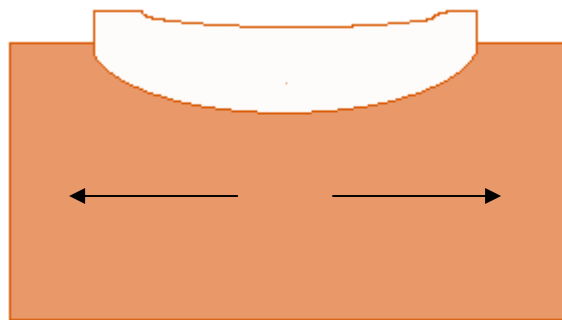
Stitch: Red Stretch "G", Overedge stitch  
Stitch Width: 7  
Stitch Length: Red "S"  
Presser Foot: Standard Foot

## Materials:

6" X 6" Medium to heavy weight knit fabric or polar fleece  
3" X 6" Ribbing

## Procedure:

- ✂️ Cut a curve in the knit fabric to resemble a neckline.
- ✂️ Fold ribbing in half lengthwise.
- ✂️ Starting at the left side of the knit curve, place ribbing on front side of curve.
- ✂️ Match all 3 cut edges and place under the foot.
- ✂️ Line up fabric edges with guide on foot and stitch the length of the seam.
- ✂️ Stretch ribbing slightly to fit the cut edge of the knit.
- ✂️ When finished, lift foot and pull threads and fabric straight back behind foot and trim.
- ✂️ **Note:** The Overedge Stretch Stitch makes sewing seams in knits look as though they were finished on a serger. This stitch is stronger and more durable than overlock/serger stitching.



# Overedge Stitching

(Quantum Décor model only)

## Machine Set-up:

Stitch: "G", Double Overedge  
Stitch Width: 5-7  
Stitch Length: 1.0  
Presser Foot: Standard Foot



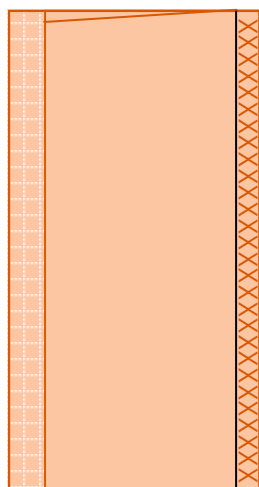
## Materials:

(2) pieces of woven fabric

Use the Overedge stitch to finish almost every seam...clean professional finish inside every sewing project !!!

## Procedure:

- ➡ Right sides together, place the fabric under the foot.
- ➡ Align the fabric's edges with the foot's edge.
- ➡ Sew, joining two pieces of fabric and finishing the edges in one operation.



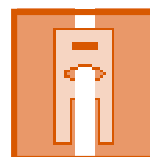
# Attaching Elastic

## Machine Set-Up:

Stitch: "E", Multi-Zigzag or Red Stretch "E", Honeycomb Stitch\*  
Stitch Width: 7  
Stitch Length: 3 for Multi-Zigzag or Red "S" for Honeycomb Stitch\*  
Presser Foot: Standard Foot

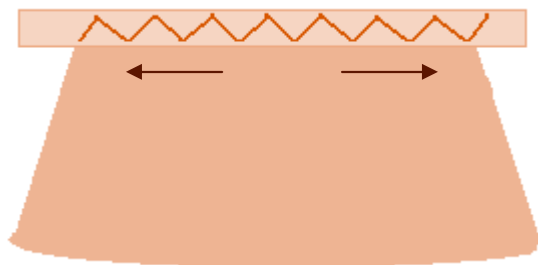
## Materials:

Nylon Tricot 4" X 8"  
3/8" wide elastic strip, 7" long



## Procedure:

- Thread elastic through the needle-opening hole in the foot.
- Pull 2-3" of elastic to the back of the foot, enough to firmly grasp.
- Position fabric under the foot.
- Sew, gently stretching the elastic while sewing.
- **Note:** The foot holds the elastic into place, making it easier to evenly stretch the elastic.



Apply elastic on fitted sheets or baby bumper covers!

\*Found only on the Quantum Décor.



# Sewing with a Wing Needle

## Machine Set-Up:

Stitch: "B", Zigzag Stitch  
Stitch Width: 1  
Stitch Length: 5  
Presser Foot: Transparent Satin Foot or Standard Foot  
Needle: Wing Needle

## Note:

- For best results use a stitch with forward-back movement, so that the needle penetrates the same hole more than once.\*
- For more pronounced holes stitch over previous stitching, making sure the needle goes into the same holes

## Materials:

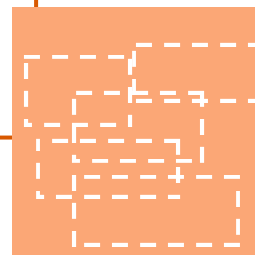
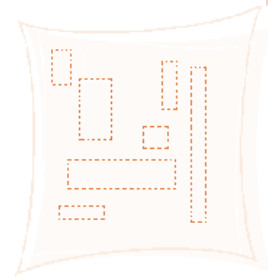
Linen or other natural fiber fabric— spray starch for added firmness  
60-80 weight white sewing thread  
60-80 weight white sewing thread in bobbin

## Procedure:

- Trace a design onto fabric using chalk, water-soluble or air-soluble marker. (use stencils, templates or create a design)
- Stitch along the drawn lines of the design.

Use a Wing needle to create a beautiful hem-stitching effect on pillowcases, napkins, or table runners.

\*Found only on the Quantum Décor.



# Sewing on Leather

## Machine Set-Up:

Stitch: "A", Straight Stitch  
Stitch Width: 0, Center Needle Position  
Stitch Length: 3-4  
Presser Foot: Transparent Satin Foot or Standard Foot  
Needle: Leather Needle (Wedge Needle)

## Materials:

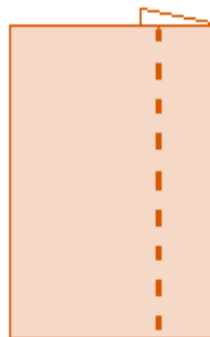
Fashion Leather

## Procedure:

- Finger press a 1-inch hem in the leather.
- Sew, using the seam guides to ensure a straight stitching.

## ➤ Note:

A Roller Foot or Even Feed Foot feeds the leather, vinyl or suede through the machine more easily.



# Decorative Bobbin Work

## Machine Set-Up:

Stitch: "G", "I" or "J", Decorative Stitch  
Stitch Width: 7  
Stitch Length: 3  
Presser Foot: Standard Foot  
Tension: 7-8

**Note:** Any open stitch that does not have too much forward/reverse or side-to-side movement works well.

## Materials:

Felt or Stabilized Fabric  
2mm Silk Ribbon or light-weight yarn

## Procedure:

- ➡ Hand-wind ribbon onto bobbin, insert bobbin into the machine.  
by pass the tension in the bobbin.
- ➡ Place matching colored standard thread in the needle.
- ➡ Slowly stitch, with wrong side of the fabric facing up.
- ➡ Use this technique to create textured effects on crazy quilts, pillows trims, and more.

