

VIKING

OWNER'S HANDBOOK

for use with sewing instruction for the
6000 Series

Viking Husqvarna Sewing Machine



Education Department

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OPERATING PRELIMINARIES

"WE'VE GOT A WINNER!"

The following features, in combination, make Viking a widely accepted sewing machine. It is important to understand how these features work:

NON-OILING

The Viking never needs oiling because it lubricates itself as it is being used. The bearings inside of the machine are made of Swedish iron powder granules which have been fused into porous but extremely strong parts. Self-lubrication occurs because these porous bearings are filled with oil.

100% JAM FREE

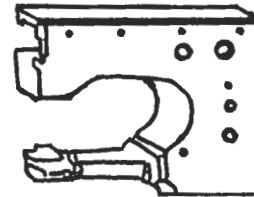
Threads will never jam a Viking. The machine is designed with a bobbin case that "floats" when placed inside the shuttle. Because there are no tight places, any threads which may wind around the bobbin case will automatically surface to the top — never jamming!

REDUCTION GEAR

An exclusive Viking feature is the reduction gear, which gives the machine five times more needle piercing power. Not only does it slow the machine down for stitch-by-stitch control, but the reduction gear also enables one to sew through heavy layers of denim, thick leathers, canvas, upholstery things that normally must be sewn on an industrial machine.

ONE-PIECE STEEL CASTING

The Viking is made of Swedish steel, which has been cast into one solid piece. This continuous casting gives the machine much more strength, enabling it to endure wear and tear without affecting the working parts.



25 - YEAR WARRANTY

Sewing machine warranties are not all the same. Viking believes in the complete satisfaction of its sewing machine owners; thus, Viking is very proud to warrant their sewing machine parts for 25 years against workmanship and materials with exception of the electric motor and foot control which are warranted for 5 years.

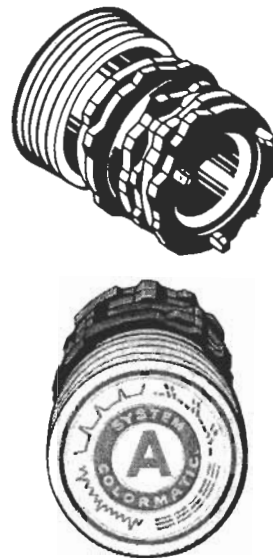
EASE OF OPERATION

Considering the extensive capabilities of the Viking, it is a very easy machine to operate. Straight stitch, zig zag, three-step zig zag and buttonholes are built into the machine, and coded with pictures. The 32 additional stitches are obtained by the use of color coding. To save time and eliminate steps, the presser feet snap on and off, and the throat plate releases at the touch of a button. One-motion threading and automatic bobbin thread pick-up are additional features that make the Viking simple to operate. Graduated tension and pressure controls, along with the ability to drop feed dogs, make this machine ideal for every seamstress.

UPDATABLE SEWING MACHINE

To program the Viking for functional and decorative stitches, it uses the exclusive feature called a "stitch programmer". Each stitch programmer is designed to program four different stitches. Select a color coded stitch, insert the corresponding stitch programmer, dial the colors, and the Viking is ready to stitch!

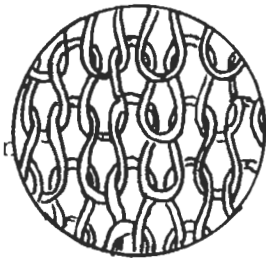
This means that new stitches can be added to the machine — now and in the future — just by obtaining additional stitch programmers. As new fabrics and sewing techniques are designed in the future, the Viking can be updated to handle them all!



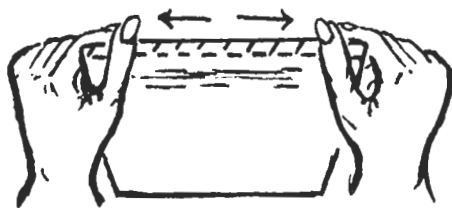
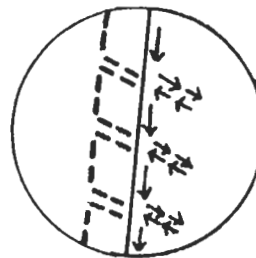
TRIMOTION STITCHES

Why do knit fabrics need Viking's trimotion stitches? Knit fabrics are constructed with the yarns continually moving in backward, forward and sideways directions. (ill. 1) This is why knit fabric goes back to shape after being stretched. Knit fabric should be sewn with the same "multi-directional" stitching. Viking's trimotion stitches have this same backward, forward and sideways movement. (ill. 2) Using these stitches to construct a garment will allow the seams to behave exactly as the fabric — returning to the original shape after being stretched. (ill. 3)

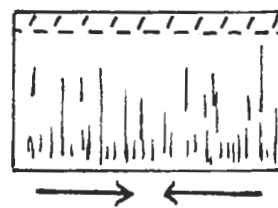
1. Knit
Fabric
Construction



2. Trimotion
stitch



3.



THREAD AND NEEDLE SELECTION

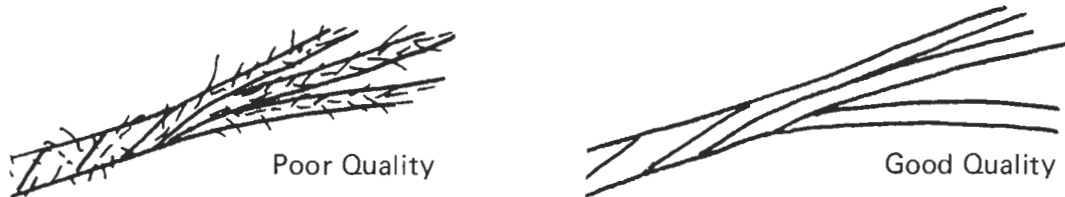
— elements for successful stitching

An understanding of the following variables will aid the seamstress in correctly setting up the machine before actual garment construction is begun. The most important thing being stressed here, is that if the seamstress is not sure about something, the safest, least frustrating thing to do is to test the compatibility of the thread, fabric, needle pressure and tension.

THREAD SELECTION

When selecting the proper thread, choose one that is compatible with the fashion fabric. Generally, finer fabrics require a lighter weight thread, and heavier fabrics require a coarser thread. Polyester threads (or polyester based) are most commonly used for general sewing purposes. Threads of different fibers (cotton, rayon, silk, etc.) are available for special sewing.

Quality is a very important consideration when selecting a thread. A thread of poor quality will result in operating and stitching problems on any type of sewing machine. Synthetic threads are made by twisting together filaments. Filaments are formed when the liquid synthetic is forced, under high pressure, through a series of pin sized holes, and cooled. Lower quality synthetic threads are made by twisting short, leftover filaments of polyester together. The result is a "hairy" appearance, and a weaker thread. Better quality threads are made by twisting long continuous filaments together. This thread is stronger and smoother, thus fewer operating problems will occur. Brand name and price do not necessarily represent quality in a thread. The only true test of thread quality is close examination.



NEEDLE SELECTION

All Viking needles are prefixed 705H and are the type that should be used with the machine. The most basic needle is identified as 705H, and is a universal ballpoint needle — one which is designed to work on the majority of fabrics. When selecting the needle size, remember that generally, lighter weight fabrics require a lower number needle, and heavier weight fabrics require a higher number needle. Viking needles follow a European numbering system, where a size 80 needle is similar to the American size 12 needle. Sizes 80 and 90 are the average sizes for general sewing on medium weight fabrics. Also available are sizes 60, 65, 70, 100, 110 and 120.



Due to the increased use of synthetic fibers in today's fabrics, it is necessary to change needles more often than in the past. Because these fibers dull the needles, they should be replaced approximately every two garments.

For specialty sewing, other types of Viking needles are available. They are classified according to the shape of the piercing point.

MEDIUM BALLPOINT 705H SUK

Sizes 80 & 90

This needle has a point that is rounded in shape. It should be used on bulky knit fabrics and fabrics containing spandex. The purpose of this needle is to prevent the yarns of the fabric from being penetrated and broken. The rounded point pushes the yarns aside rather than stitching through them.



ACUTE ROUND POINT 705H J

Sizes 90 & 100

This needle is designed for sewing on tightly woven materials. Densely woven fabrics such as denim and other twill weaves will cause a regular needle to deflect - resulting in a slight zig-zagging of a straight stitch. This J needle will pierce the yarns because of its sharper point.



CUTTING POINT 705H LL

Sizes 80, 90 and 100

When sewing on leather or vinyl, often a regular needle will "punch" rather than pierce the material. If there are signs of stress around the needle hole, an HLL needle should be used. The wedge-shaped cutting point actually cuts through the material leaving a clean indistinguishable hole.



SLOTTED NEEDLE 705H HANDICAP

Sizes 80 & 90

For people with impaired vision, a slotted needle is available. This needle is easy to thread, but should only be used when necessary.



Needle Sizes

European	60	65	70	80	90	100	110	120
U.S.	7	9	10	12	14	16	18	19

Stitch Length Equivalents
 1 mm sl = 24 sts per inch
 2 " " = 13 " " "
 3 " " = 9 " " "
 4 " " = 5 " " "

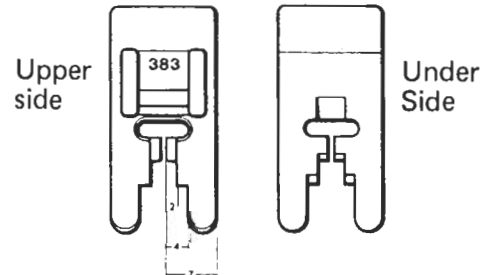
FOOT SELECTION

To ensure quality stitching, Viking has made available four basic presser feet for normal sewing. The proper foot is chosen with regard to the type of fabric being sewn, and the particular stitch being used. The differences can be determined by examining the shape and underside of each foot. The four basic feet are:

1. REGULAR PRESSER FOOT 41-11-383-01
2. TRANSPARENT PATTERN PRESSER FOOT 41-14-512-01
3. PRESSER FOOT FOR NYLON 41-12-988-01
4. ROLLER PRESSER FOOT 41-13-901-01

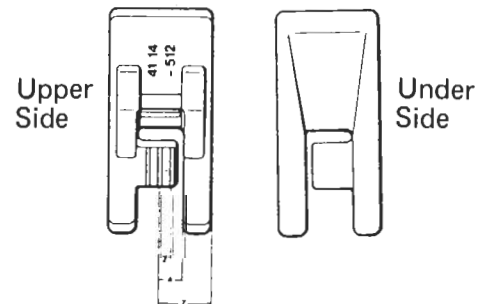
1. REGULAR PRESSER FOOT 41-11-383-01

This foot is used for normal straight stitching, zig-zag stitching, and other utility stitches. It is generally suited for average types and weights of fabric. Behind the needle opening on the underside, a wedged-out section allows the foot to ride smoothly over stitched threads. Note the spaced notches on the top of the foot. These 2, 4 and 7 mm markings serve as stitching and spacing guides.



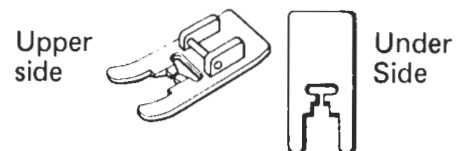
2. TRANSPARENT PATTERN PRESSER FOOT 41-14-512-01

For increased visibility, this foot is transparent, and is designed in such a way that it is suitable for use with a wide variety of fabrics. On the underside, this foot has a recessed wedge which allows it to ride over heavy threads and dense satin-like stitches. Note the 2, 4 and 7 mm markings to be used as stitching guides. These guides make this foot an excellent choice for use in topstitching; especially edge-stitching.



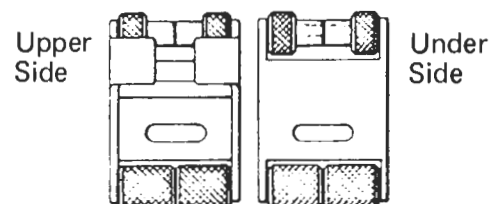
3. PRESSER FOOT FOR NYLON 41-12-988-01

This foot is specially designed to reduce puckering of seams when sewing fine fabrics. The underside of this foot is completely smooth and flat. This helps keep even fabric tension under the presser foot which in turn prevents the fabric from puckering and prevents skipped stitches. (For some models, this foot is an extra accessory.) A transparent foot of similar design is also available, number 41-14-531.



4. ROLLER PRESSER FOOT 41-13-901-01

The roller presser foot is suitable for coarse-knitted material, looped or napped fabric, leather imitations, and plastic materials. The grooved rollers ride over these types of fabrics with ease. It may be necessary to adjust the pressure to obtain desired results.



THREAD TENSION ADJUSTMENTS

Every sewing machine is adjusted with the top and bottom thread tensions being synchronized. Therefore, it is strongly recommended that home adjustments be made by means of the top tension dial alone. The red dot on this tension dial marks the standard sewing tension. Very seldom will the dial be moved from this position.

In general, there are only two cases where the top thread tension needs to be changed. Adjustments are often made for specialty sewing and decorative work.

Some specialty sewing will require an upper tension adjustment. Since the machine is initially sew-tested with an average weight sewing thread, a heavier or lighter weight thread may need an adjustment to accommodate for the difference in thickness. There is no general rule pertaining to this. The best method is to make a test sample. Adjust the top tension until the thread locks correctly (as illustrated in manual).

The stitches in decorative work will have a smoother appearance if the top tension is loosened by turning the dial to a lower number (buttonhole symbol is usually sufficient.) This causes the thread lock to lay on the back side of the fabric. Decorative work includes: buttonholes, any decorative stitch, top stitching, monogramming, applique and machine embroidery.

If it is felt that the thread tensions are incorrectly synchronized, it is recommended that corrections be made by an authorized Viking dealer.

PRESSURE ADJUSTMENT

The presser foot pressure is a necessary adjustment on any machine. Incorrect pressure will often cause problems such as shifting and "creeping" of layers, puckering and irregular stitches.

It is impossible to state a general rule for changing pressure. Many variables influence this control: fabric weight, body, construction, fiber content, finish, yarn direction, etc. The best way to make a correct change is to test.

Normal sewing pressure is marked by the red dot on the pressure dial located on the top left side of the machine. This setting is for an average-weight woven fabric. To get the "feel" of this pressure, use a folded piece of medium-weight woven fabric and try the following test. Drop the feed dogs, lower the presser foot, and pull the fabric backward and forward under the foot. This is the "feel" of correct pressure. Now, using a folded sample of the fabric to be sewn, make this same test adjusting the pressure knob until this same "feel" is obtained. This gives a basis for pressure adjustments. After sewing a test sample with the proper stitch, it may be necessary to make additional adjustment. See illustration for pressure changes.



Note: Always test the control fabric (medium-weight woven) with the standard presser foot. Test the fabric in question with the correct foot for that fabric. Example: Test and sew velour with the roller foot.

By completely releasing the pressure (window pane symbol), it is possible to gain complete control of the fabric under the needle. This enables the operator to do such things as darning, embroidery, freehand quilting and monogramming.

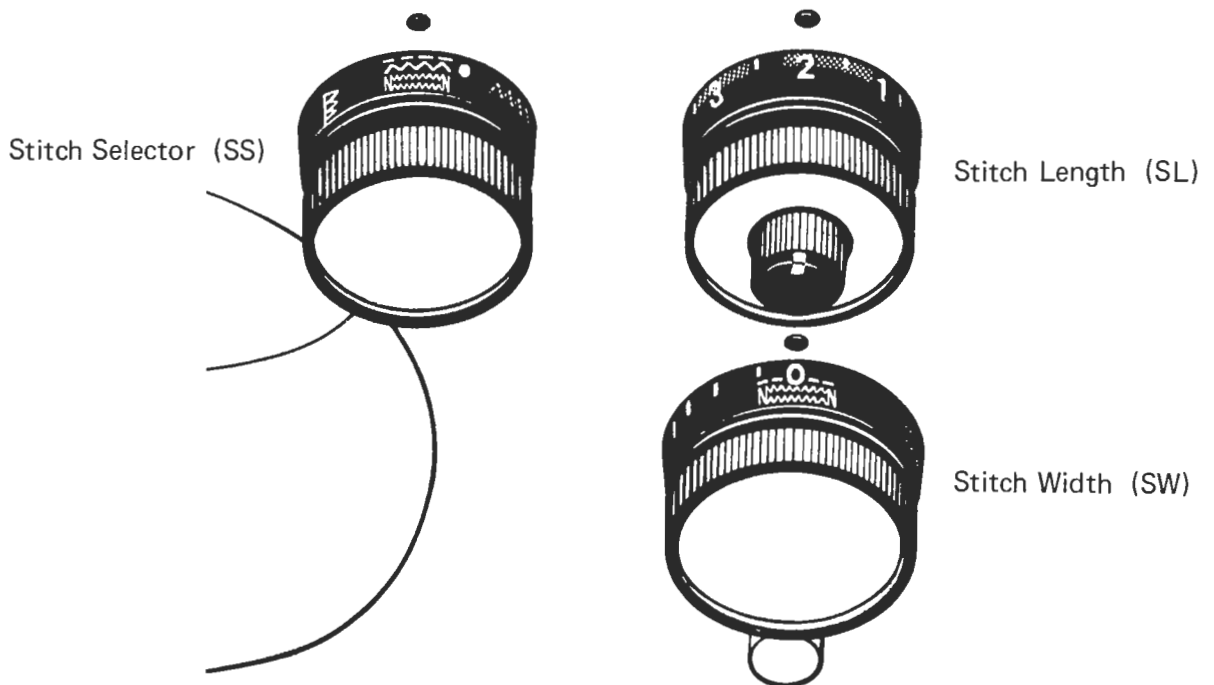
BUILT-IN STITCHES

FUNCTION OF DIALS

1. The top left dial is the stitch selector (SS). The function of this dial is to program the machine for each different stitch. Built-in stitches are pictured in white on this dial. All others are color coded.
2. The top right dial determines stitch length (SL). At zero, the machine will stitch in place. At 6, the stitch length will be 6 mm - nearly ¼" long. The reverse button is in the center of this dial.
3. The dial on the bottom right regulates stitch width (SW). At zero a stitch will have no width. At 4, a stitch will be 4 mm wide.

The dials of the sewing machine may be compared to the dials of a television. The stitch selector dial (SS) of the sewing machine is the most important dial - similar in function to the channel selector of television. This dial is used to turn from one stitch (channel) to another. Similar to a TV, the "channel" selector on a Viking even clicks from stitch-to-stitch, or station-to-station.

The stitch length and stitch width dials on a Viking are comparable to the vertical and horizontal adjustments on a television. These two dials are used to "fine tune" the selected stitch for a particular sewing need.



STRAIGHT STITCH

1. BASIC STRAIGHT AND REVERSE STITCHING

This stitch is good to use on tailored garments, to apply zippers, and for professional top stitching.

- A. MACHINE SETTING:
SS-Basic stitch symbol
SL-Varies
SW-0
Foot-Regular Zig-zag presser foot 41-11-383-01
Tension-Normal
Pressure-Normal
- B. PRACTICE SAMPLE:
6"x 6" denim
- C. PROCEDURE:
 - 1. Fold Fabric sample in half crosswise.
 - 2. Straight stitch down center, varying stitch length from 0-6.
 - 3. Stitch a second row with the SL dial set in the purple area. The purple range indicates average stitch length.
 - 4. Push in reverse button to back tack several stitches.
 - 5. Set SS dial dot-to-dot, and stitch a third row in reverse.

2. TENSION BASTING

This stitch is good to use for a temporary seam, easy gathering and easing.

- A. MACHINE SETTING:
SS-Basic stitch symbol
SL-4-6
SW-0
Foot-Regular zig-zag presser foot 41-11-383-01
Tension-2
Pressure-Normal
- B. PRACTICE SAMPLE:
Same sample as used in exercise 1.
- C. PROCEDURE:
 - 1. Stitch one row on fabric sample.
 - 2. Pull bottom thread to remove basting stitch.
 - 3. Stitch a second row and leave as a reference sample.

3. SPEED BASTING

This is good for quick, temporary seaming

A. MACHINE SETTING:

SS-Basic stitch symbol

Drop feed dogs

SW-0

Foot-Regular zig-zag presser foot 41-11-383-01

Tension-Normal

Pressure-Decrease 3 notches or more (test)

Reduction gear engaged

B. PRACTICE SAMPLE:

Same sample as used in exercises 1. and 2.

C. PROCEDURE:

1. Pull fabric through manually. Do not pull when needle is in fabric. Stitch length is regulated by the amount of pull in between each stitch.

ZIG ZAG

1. OVERCASTING

This is a common edge finish on seams, facings and hems.

A. MACHINE SETTING:

SS-Basic stitch symbol

SL-2

SW-2

Foot-Regular zig zag presser foot 41-11-383-01

Tension-Normal

Pressure-Normal

B. PRACTICE SAMPLE:

6"x 6" denim

C. PROCEDURE:

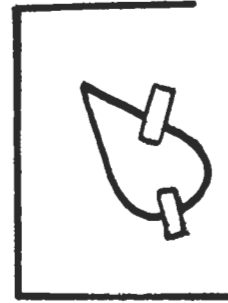
1. Overcast 3 edges of fabric sample with zig zag stitch.

Tension: Buttonhole
SS - Zigzag 4
S.L. - 0.8
Tatting Stitch
S.W - 3.0
1 stitch 5/8 Seam R.S.L

2. SATIN STITCH (APPLIQUE)

This is an easy technique to decorate or outline garments and crafts

- A. MACHINE SETTING:
SS-Basic stitch symbol
SL-Red and Green range
SW-3
Foot-Transparent pattern presser foot
41-14-512-01
Tension-buttonhole symbol
Pressure-decrease 3 notches



- B. PRACTICE SAMPLE:
Same sample as used in exercise 1.
2"x2" square of contrasting fabric

- C. PROCEDURE:
1. Cut leaf design from contrasting fabric.
 2. Secure contrasting fabric to square by basting or using fabric glue, or secure with tape.
 3. Applique leaf to fabric by lining up stitch-half on contrasting fabric and half on heavy woven fabric. Stitch around all sides. Satin stitch is made denser by turning SL dial closer to 0.
 4. Remove tape by firmly pulling it toward stitching.

*D. Optional: go over edge with A Cam
Blind hem*

3. MARROWED EDGE

This makes a professional finish on scarves, napkins, placemats, table linens, hems on children's clothes, ruffles or flounces.

- A. MACHINE SETTING:
SS-Basic stitch symbol
SL-0.2
SW-4
Foot-Buttonhole foot (41-11-650-01)
Tension-Normal
Pressure-Normal
- B. PRACTICE SAMPLE:
3"x 5" lightweight woven fabric
- C. PROCEDURE:
1. Sew on a smooth cut edge of the fabric. The edge of the fabric will be lined up with the groove on the right side of the buttonhole foot. When the needle swings left it will penetrate the fabric and when it swings right it will be off the edge of the fabric. The tension on the thread will cause the fabric to roll leaving an even, sturdy, satin edge.

Note: If a heavier effect is desired go over stitching again.

GATHERING OVER THE TOP AND BOBBIN THREAD

MACHINE SETTING

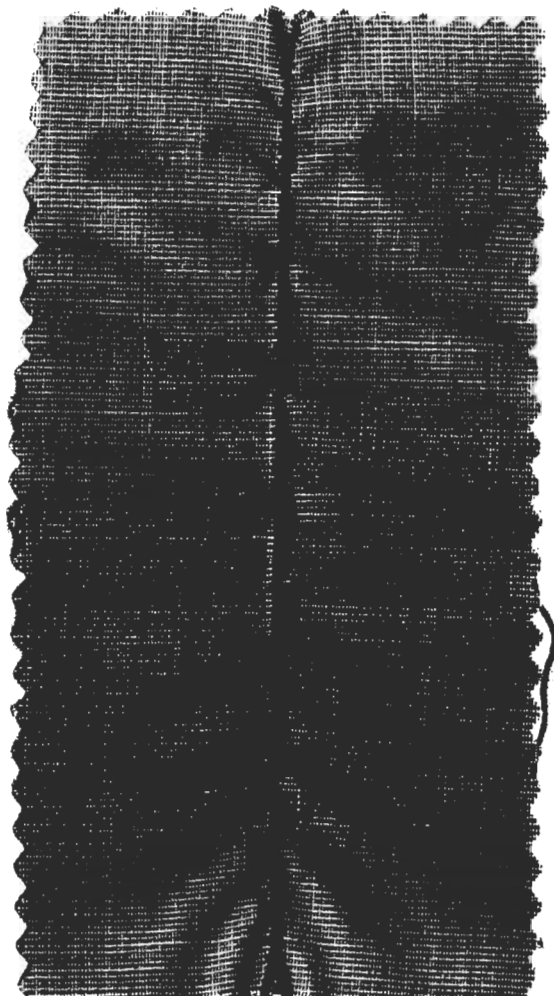
SS - Zigzag, 4
SL - 1.5 mm
SW - Standard Setting 2 mm
FOOT - Standard Foot A

PRACTICE SAMPLE

6" x 6" medium-weight woven, cut in half (save unused portion)

PROCEDURE

- Take one stitch and draw up the bobbin thread. Pull top and bottom thread to be longer than finished gathered length.
- Sew a couple of stitches with the feed dog down to position the thread.
- Guide the threads on top of the presser foot while stitching over the threads.
- A gentle pull on the threads will make the fabric gather as you sew.
- Gathers can then be adjusted after the threads have been sewn in place.



Gimp:

S.S. Zig-Zag

S.L. 0

S.W. 4

Buttonhole foot

Double thread and loop around toe on rear of foot. Zig Zag over 4 threads.

Belt Carriers:

Raised Seam Foot

Gimp Plate

Holding prepared gimp taut, pull toward you.

Monogramming:

Darning Foot

Pressure: Darn

St. Width: As desired

Feed: up

Knaps: not required

Use fast, steady speed. Do not turn work

Letter Edging

#1. A. Pattern Selector: 1.5

B. Stitch Width: 1.5

C. Turn under $\frac{1}{4}$ " on fabric edge. Stretch fabric to maximum. Stitch.

D. If desired restitch several times, increasing S.W. slightly each time. Creates a corded effect.

#2 A. Settings as for #1 except use SW4

B. Turn under and stitch without stretch. Stretch after stitching

Shell Edging

1. Pattern Selector at zig zag. Stitch length $2\frac{1}{2}$.
Stitch Width: $2\frac{1}{2}$. Tension: 7

2. Turn under $\frac{1}{2}$ ", stitch, allowing right hand side to fall off fabric.

4. BAR TACKING

This is good for tacking down facings, and belt loops, pleating drapes and quilting.

- A. MACHINE SETTING:
SS-Basic stitch symbol
SL-0 or drop feed dogs
SW-4
Foot-Regular zig-zag presser foot
Tension- Normal
Pressure-Normal
- B. PRACTICE SAMPLE:
Same sample as used in exercise 1.
- C. PROCEDURE:
 - 1. Fold over corner of sample and bar tack in place by taking 4 or 5 stitches.
 - 2. "Zero off" by turning SW to 0. This secures bar tack and prevents it from eventually pulling out.

* * * * *

THREE STEP ZIG-ZAG

1. OVERCASTING

This is a good seam finish on woven fabrics because it prevents the middle pucker which often occurs with a regular zig-zag. This is also a flat finish on facings and hems.

- A. MACHINE SETTING:
SS-3 step zig-zag
SL-1
SW-4
Foot-Regular zig-zag presser foot
Tension-Normal
Pressure-Normal
- B. PRACTICE SAMPLE:
6"x 6" denim
- C. PROCEDURE:
 - 1. Use 3 step zig-zag to overcast all four raw edges.

2. MENDING

This is a good stitch to invisibly mend cuts and tears.
It is a sturdy stitch for sewing on patches.

A. MACHINE SETTING:

SS-3 step zig-zag

SL-.5

SW-4

Foot-Regular zig-zag presser foot 41-11-383-01

Tension-Normal

Pressure-Normal

B. PRACTICE SAMPLE:

Same sample as used in exercise 1.

C. PROCEDURE:

1. Cut a 2½" slit from outer edge toward center.
2. Starting at inner edge of slit, stitch directly over the cut opening. Continually reverse and forward stitch until sides of slit are completely mended together. Notice how stitches emulate weave of fabric.

3. Patching:

A. Left Side: 3 Step Zig-Zag, S.L. 1½, S.W. 4. P. at corner. Continue across bottom.

B. Right Side: S.S. A Cam Blue. S.L.O. S.W. 4. Machine will reverse

4. STRONG BAR TACKS

This is an invisible way to secure facings at shoulder seams, under arm seams, etc. and for cuffs. It is a strong method of securing elastic ends and tacking the pleats of draperies and tacking belt loops.

A. MACHINE SETTING:

SS-3 step zig zag

SL-0

SW-4

Foot-Regular zig zag presser foot 41-11-383-01

Tension-Normal

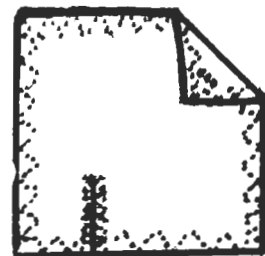
Pressure-Normal

B. PRACTICE SAMPLE:

Same sample as used in exercise 1 and 2.

C. PROCEDURE:

1. Fold over corner edge of sample (as illustrated). Bar tack by stitching back and forth 4 or 5 times. "Zero off" by turning SW dial to zero and stitching 2 or 3 times.



5. Understitching facings etc. on knits
S.L. 1½
S.W. 3 (test)

6. Sewing on elastic:
S.L. 1
S.W. 4

BUTTONHOLES

1. BASIC BUTTONHOLE

This is a basic buttonhole to use on fabrics with little or no stretch.

A. MACHINE SETTING:

SS-Buttonhole Symbol
SL-Buttonhole Symbol
SW-Buttonhole Symbol (Pull out knob)
Foot-Buttonhole Foot 41-11-650
Tension-Buttonhole Symbol
Pressure-Normal

B. PRACTICE SAMPLE:

6"x 6" double knit, folded in half

C. PROCEDURE:

1. Measuring: Place button on foot and note which foot marking is closest to the button's edge. These markings indicate 3/8, 1/2, and 5/8 inch sizes. The end of the foot measures 3/4". To account for the thickness of the button, go one mark farther.
2. Marking: Use transparent tape to mark the edge placement of each buttonhole. The lines on the buttonhole foot can be used to measure distance from the edge also.
3. Making the buttonhole:
 - a. Turn the stitch width dial to 1. Stitch the left side of the buttonhole (fabric will feed forward). When first stitch reaches determined marking on foot, stop.
 - b. Turn SW dial to 2 and bar tack. When bar tacking, it is necessary to keep fabric in place, either manually or by dropping feed dogs (press in white button below SW dial). Only 3 or 4 stitches are necessary for bar tack.
 - c. With needle out of fabric, turn SW dial to 3 and stitch right side of buttonhole. Stop when right and left sides are equal in length.
 - d. With needle out of fabric, turn SW dial to 4 and bar tack as before.
 - e. Turn SW dial to zero, make 2 or 3 stitches to lock-off buttonhole.

2. REINFORCED BUTTONHOLE

This is a stronger buttonhole for use on childrens clothes, menswear, or for loosely woven fabrics. It is also good when a contrasting buttonhole is desired.

A. MACHINE SETTING:

Same as used in exercise 1.

B. PRACTICE SAMPLE:

Same as used in exercise 1.

C. PROCEDURE:

1. Measuring: same as for Basic Buttonhole
2. Marking: same as for Basic Buttonhole
3. Making the Buttonhole:
 - a. Set stitch length slightly longer than for Basic Buttonhole.
 - b. Do steps a and c, as in the Basic Buttonhole.
 - c. Repeat stitching around the buttonhole, in the 4-step manner.

3. CORDED BUTTONHOLE

This buttonhole helps stabilize stretchy fabrics. It is also professional looking for tailored garments.

A. MACHINE SETTING:

Same as used in exercise 1. and 2.

B. PRACTICE SAMPLE:

Same as used in exercise 1. and 2.

Also needed is a 6" length of perle cotton, topstitching thread or twisted cord (see following instructions.)

C. PROCEDURE:

1. Measuring: same as for Basic Buttonhole
2. Marking: same as for Basic Buttonhole
3. Making the Buttonhole:
 - a. Loop cording around back projection of buttonhole foot so that two parallel strands lie in grooves under foot.
 - b. Make 3 sides of buttonhole as described in Basic Buttonhole (steps a, b, and c), without holding or guiding cord.
 - c. Put needle down into center of buttonhole and lift presser foot.
 - d. Pull right side of cording to remove loop in back of buttonhole.
 - e. Tie ends of cording in front of needle. Lower presser foot.
 - f. Remove needle from fabric, and complete buttonhole as described in Basic Buttonhole, steps d and e.
 - g. Clip off ends of cording next to bar tack.

4. TWISTED CORD

This can be used to make cording for corded buttonholes, belts, loops, or decorative trims and edgings.

A. MATERIALS:

Four 1-yard lengths of thread, one empty bobbin.

B. PROCEDURE:

1. Put 1" of thread ends through the large center hole of empty bobbin.
2. Snap bobbin onto bobbin winder, pinching short ends of thread between bobbin and machine.
3. Hold the other end of threads straight out with right hand, and depress foot pedal — threads will twist.
4. Continue twisting threads until a definite "pull" is felt.
5. Pinch threads in center of length with left hand. Fold cord in half by bringing thread ends in right hand to the bobbin.
6. Release cord from left hand allowing the two sides to twist together.
7. Smooth out by ruffing fingers over length of cord.

Note: Heavier threads, cords, and yarns can be twisted together in this same manner to create thicker cording. Always begin with 2½ times the desired finished cord length.

WHAT IS A STITCH PROGRAMMER?

A Viking stitch programmer is a stack of individually designed discs which, when inserted, program the mechanical parts of the machine to form a specific stitch. When a programmer is placed into the machine, the four stitches pictured on the programmer, plus the built-in stitches are all available for use. NOTE: All built-in stitches can be obtained with or without a stitch programmer in place.

To program a utility stitch, follow this procedure:

1. Select a stitch from those pictured on the colored strip across the top of the machine.
2. Insert the corresponding lettered stitch programmer by:
 - a. Turning the stitch selector dial (top left) to the dot.
 - b. If necessary, removing a programmer that may already be in place by pulling straight out.
 - c. Placing the programmer into the back of the machine. Push programmer straight in and turn until it clicks.
3. Turn the three dials on the front of the machine to the color of the desired stitch.

The exercises in this book are designed to explain and demonstrate the use of the Viking Sewing Machine. The following abbreviations are used to designate the function of the dials.

SS-Stitch Selector
SL-Stitch Length
SW-Stitch Width

Refer to page 7 for a diagram of dial location.

STITCH SELECTION

In days past, the only construction stitch available on a sewing machine was a straight-stitch, and later a zig-zag stitch. Today, however, the seamstress has a wide variety of stitches to choose from when constructing a garment. With the development of these stitches, new sewing techniques have replaced the traditional ones. No longer must a garment be sewn together with simple straight stitch - a weak method of seam construction unsuitable for many of today's fabrics. In addition, the raw edge of the fabric needs special attention when a straight stitch is used. For stronger, less time-consuming methods of seam construction and finishing, the Viking sewing machine has available a selection of functional utility stitches.

Viking's utility stitches are similar to those used in the garment industry. These stitches are designed to make sewing faster and easier. Garments will not only look more professional, but will also have stronger, longer wearing seams and finishes.

When deciding which stitch to use for the construction of a garment, it is important to consider the type, weight and body of the fabric.

Garment seams are commonly sewn with one of the following five utility stitches. If used properly, each stitch will have a smooth, flat appearance from the right side of the garment.

1. SEW OVERLOCK STITCH
2. ELASTIC STRAIGHT STITCH
3. DOUBLE OVERLOCK STITCH
4. DOUBLE ACTION STITCH
5. OVERCAST STITCH

1. SEW OVERLOCK STITCH A-BLUE



Sews an elastic seam and finishes edges in one operation. Ideal for fabrics with a high percentage of stretch; sweater knits, rib knits, stretch terry, swimwear, etc. Also eliminates extra finishing steps when attaching neckbands, collars, cuffs, etc.

2. ELASTIC STRAIGHT STITCH A-YELLOW



A triple straight stitch with a tremendous amount of elasticity. Used in garment areas where both stretch and strength are necessary for the sake of comfort and durability; sleeve seams, pant seams, etc. Best results obtained if used on medium to heavy weight fabrics.

3. DOUBLE OVERLOCK STITCH B-BLUE



Stitches and finishes seam in one operation. Suitable for use on fabrics with little or no stretch - particularly medium to heavy weight woven fabrics that ravel. Ideal for curved areas where strength is needed. Easy to rip out in the event of an error.

4. DOUBLE ACTION STITCH B-RED



Ideal for stitching a finished inside seam on sheer or lightweight wovens and knits. Also used to stitch overlapped seams on synthetic suedes and leathers.

5. OVERCAST STITCH C-GREEN



For simultaneous seaming and overcasting on medium to lightweight knits and wovens. Perfect for use on tailored garments where seams must be graded, clipped and/or notched. Also used to stitch a shelled edge - a simple, clean finishing technique.

"A" STITCH PROGRAMMER

SEAMING AND OVERCASTING

This stitch seams and overcasts in one operation, eliminating extra finishing steps. It is good to use in attaching neckbands, collars and cuffs. Good to use on swim wear or other fabrics with 75% stretch or more.

A. MACHINE SETTING: Sew Overlock Stitch

SS—Blue

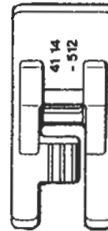
SL—Blue

SW—Blue

Foot—Zig-zag presser foot 41-14-512-01

Tension—normal

Pressure—normal



B. PRACTICE SAMPLE:

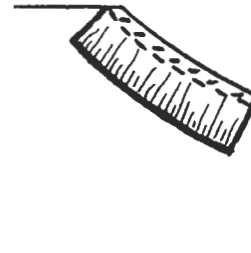
5"x 5" square double knit

4"x 2" wide ribbing

C. PROCEDURE:

1. Cut curve from corner of double knit square.
2. Fold ribbing in half crosswise.
3. Stretch ribbing to fit raw edge of curve and stitch with a $\frac{1}{4}$ " seam.

Note: To remove stitch in event of error, trim $\frac{1}{8}$ " of stitch, cutting in between the two diagonal stitches.



STRETCH SEAMS

This is an excellent seam to use in stress areas like the crotch and arm hole seams. It is also good to use where seams are trimmed closely:

A. MACHINE SETTING: Elastic Straight Stitch

SS—Yellow

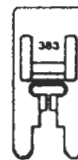
SL—Yellow

SW—Yellow

Foot—Zig-zag presser foot 41-11-383-01

Tension—normal

Pressure—normal



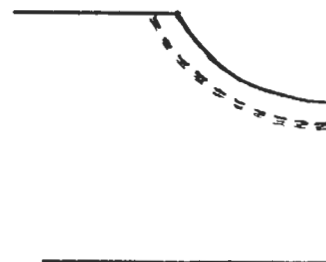
B. PRACTICE SAMPLE:

One 5x5 square of double knit

(attach to square from previous sample)

C. PROCEDURE:

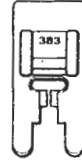
1. Place squares right sides together and cut curve from one corner of both layers.
2. Stitch curve leaving a $\frac{5}{8}$ " (1.5cm) seam allowance.



TOP STITCHING

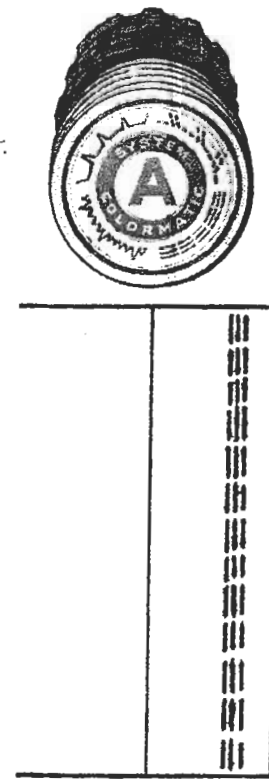
This is a prominent topstitching that is done with only one thread. This looks best on medium to heavy weight knits and wovens.

- A. MACHINE SETTING: Elastic Straight Stitch
SS-Yellow
SL-Yellow
SW-Yellow
Foot-Zig-zag presser foot 41-11-383-01
Tension-Normal
Pressure-Normal



- B. PRACTICE SAMPLE:
Same sample used in previous sample.

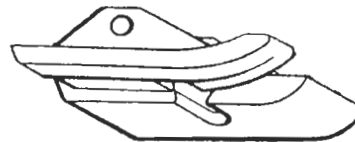
- C. PROCEDURE:
1. Fold over one edge of single layer of fabric 1".
2. With elastic straight stitch, top stitch $\frac{1}{4}$ " from edge.



STRETCH BLIND HEMS

This stitch is excellent for putting hems in stretch fabrics and to sew casings in pillows, drawstring bags, etc.

- A. MACHINE SETTING: Elastic Blindstitch
SS-Orange
SL-Orange
SW-Orange
Foot-Blindstitch Foot 41-14-228
Tension-Normal
Pressure-Normal

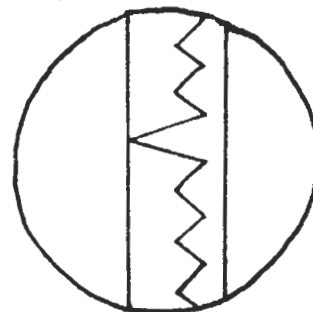
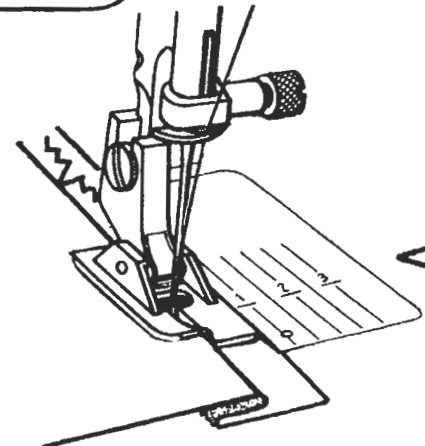


- B. PRACTICE SAMPLE:
5"x 5" square double knit

- C. PROCEDURE:
1. Measure, fold and press up 2" hem allowance.
2. Fold hem under so that right side of hem is touching throat plate of machine. Position foot on top of fold leaving $\frac{1}{4}$ " of fabric extending under right side of foot (as illustrated).
3. Make hem invisible on any type of knit fabric by following these steps:

- Put machine in low gear, begin stitching.
- Just before widest zig zag stitch bites fold of fabric - STOP
- Check bite by adjusting SW dial so that needle catches a single thread of folded edge (as illustrated.)

4. Stitch remaining hem in regular gear.



BLINDSTITCHING

For quick and easy hemming of woven fabrics. The stitches are practically invisible from the right side.

A. MACHINE SETTING: Blind Hem Stitch

SS-Purple

SL-Purple

SW-(2½ - 3½ mm) test

Foot-Blindstitching Foot 41-14-228-01

Tension-Normal

Pressure-Normal

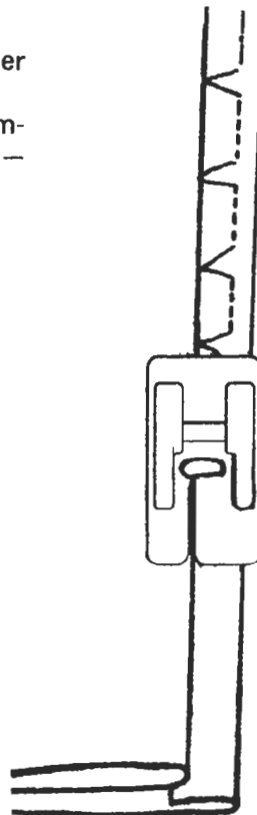


B. PRACTICE SAMPLE:

5"x 5" square of medium weight woven fabric

C. PROCEDURE:

1. Prepare hem in normal manner. Press under raw edge ½".
2. Follow steps 2 and 3 of Elastic Blind Hemstitching for sewing perfect blind hem — finished in one operation!



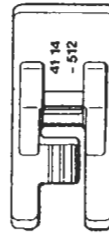
"B" STITCH PROGRAMMER

FINISHED SEAM

Sews and finishes seams in one operation. Suitable for fabrics with a moderate amount of stretch as well as for non-stretch materials. The overlock stitch locks the yarns of the fabric which makes it ideal for overcasting coarse rough textured materials and fabrics that tend to fray.



- A. MACHINE SETTING: Double Overlock Stitch
SS-Blue
SL-Blue
SW-Blue
Foot-Transparent Presser Foot 41-14-512-01
Tension-Normal
Pressure-Normal

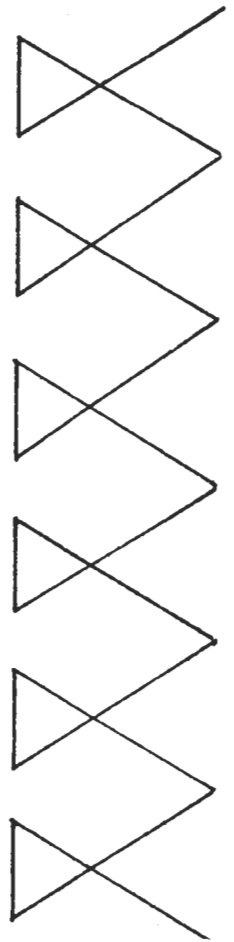
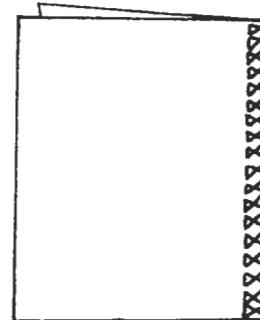


- B. PRACTICE SAMPLE:
Two 5"x 5" denim

C. PROCEDURE:

1. Sew regular seam allowance, right sides together.
2. Trim seam allowance close to stitching.

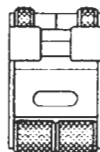
Note: To remove stitching, insert buttonhole knife under "x" part of stitching and cut. Cut threads only.



RIC RAC FOR LAPPED SEAMS

A prominent topstitch with built-in stretch for making lapped seams on leather and leather-like fabrics.

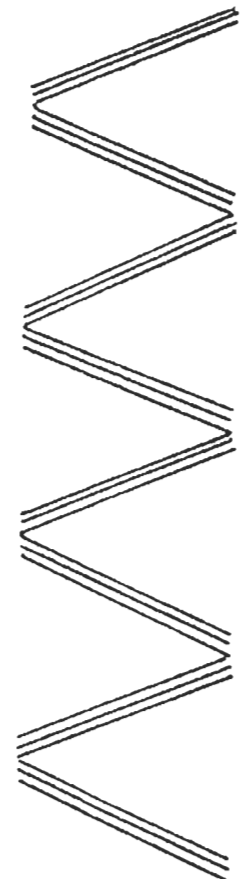
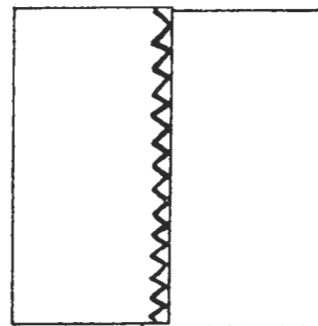
- A. MACHINE SETTING: Ric Rac Stitch
SS-Yellow
SL-Yellow
SW-Yellow
Foot-Roller foot 41-13-901-01
Tension-Normal
Pressure-Normal



- B. PRACTICE SAMPLE:
3"x 6" suede cloth

C. PROCEDURE:

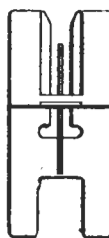
1. Cut sample in half for seam.
2. Overlap 1/4" seam allowance.
3. Stitch to make lapped seam.



LADDER SEAM

When pulled open, makes see-through decorative seams. Used for swimwear and decorative seams in garments.

- A. MACHINE SETTING: Ric Rac Stitch
SS-Yellow
SL-Yellow
SW-3 mm (test)
Foot-Special Marker Foot 41-13-931-01
Tension-Normal - Buttonhole Symbol (test)
Pressure-Normal



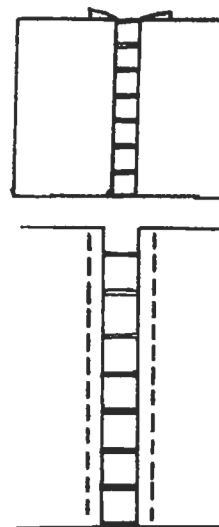
- B. PRACTICE SAMPLE:
One 5"x 5" denim cut in half

C. PROCEDURE:

1. Right sides together, stitch with a 5/8" seam allowance. Marking foot leaves thread loops on fabric.
2. "Pull" seam open so loops go into seam; fabric pieces will stand apart.

Note: By narrowing SW and loosening tension, seam opens up for see-through effect.

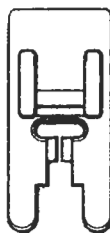
Note: For professional topstitching turn SW to 0, use the transparent foot and sew the seam allowance flat (as illustrated).



FINISHED SEAM

This makes a rolled, finished seam on soft fabrics.

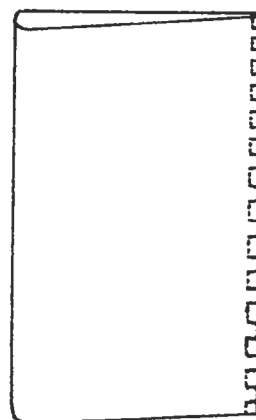
- A. MACHINE SETTING: Double-action Stitch
SS-Red
SL-Red
SW-Red
Foot-zig zag presser foot 41-11-383-01
Tension-Normal (test)
Pressure-Normal (test)



- B. PRACTICE SAMPLE:
5"x 5" sheer tricot folded in half.

C. PROCEDURE:

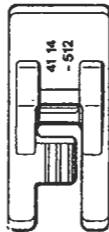
Right sides together, stitch seam close to raw edge so that right side of stitch overcasts edge.



APPLYING WAISTBAND ELASTIC

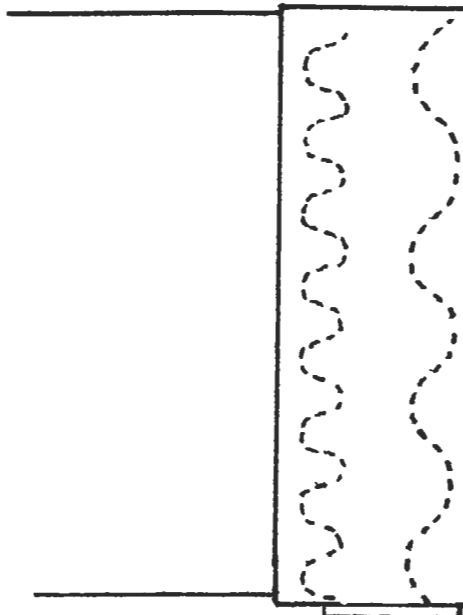
This is a good stitch for sewing through elastic because it has no points to cause stress and tearing of the fibers.

- A. MACHINE SETTING: Serpentine Stitch
SS-Green
SL-3
SW-Green
Foot-Transparent presser Foot 41 14-512-01
Tension-Normal
Pressure-Normal



- B. PRACTICE SAMPLE:
6"x 6" double knit
5" $\frac{3}{4}$ " elastic

- C. PROCEDURE:
1. Place elastic $\frac{1}{4}$ " from edge on wrong side of fabric.
 2. Stretch to fit, and stitch.
 3. Fold over elastic and fabric to enclose elastic and form casing.
 4. Turn SL back to green.
 5. Stitch through $\frac{1}{4}$ " extension and body of fabric to secure.



"C" STITCH PROGRAMMER

ELASTIC SHIRRING

A functional stitch, plus a decorative touch for elastic shirring.

A. MACHINE SETTING: Shirring Stitch

SS-Blue

SL-Blue

SW-Blue

Pressure and Tension: Normal

Foot-buttonhole foot 41-11-650-01

B. PRACTICE SAMPLE:

5"x 5" lightweight woven

½ yard elastic thread

C. PROCEDURE:

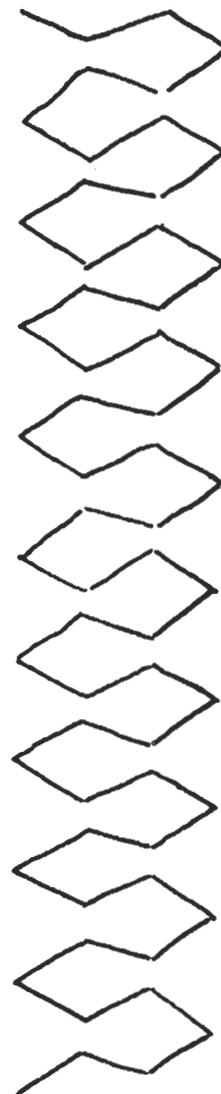
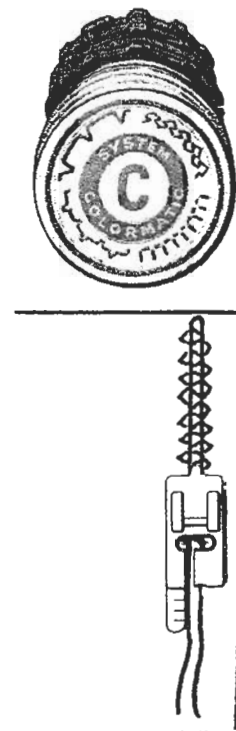
1. Fold elastic thread in half. Place thread around the heel projection of buttonhole foot. Fit strands of elastic in grooves on underside of foot.

2. On wrong side of fabric sew shirring stitch; do not stretch elastic as you sew.

Note: Stitching will sew over two lengths of elastic simultaneously.

3. Draw up elastic to desired finished length.

Note: Make sure needle does not puncture elastic. Begin stitching in low gear. Hold elastic threads up while stitching.



POINT de PARIS APPLIQUE

Great for appliques, even leather.

A. MACHINE SETTING: Point de Paris Stitch

SS-Yellow

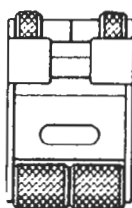
SL-Yellow — 6mm

SW-Yellow

Foot-Roller foot 41-13-901-01

Tension-Normal

Pressure-Release slightly (test)



B. PRACTICE SAMPLE:

6"x 6" heavy woven

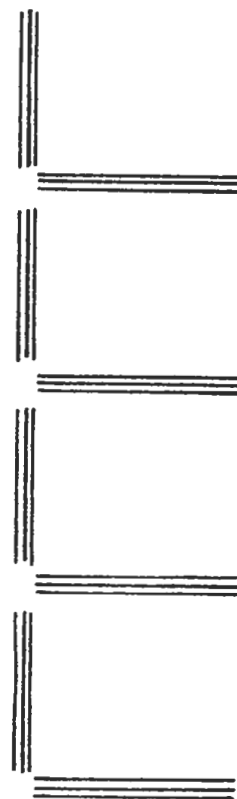
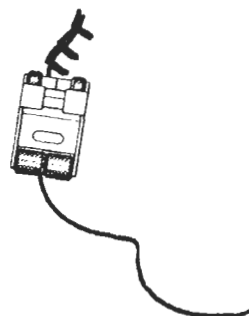
2"x 3" vinyl

C. PROCEDURE:

1. Cut applique from vinyl.

2. Start on LEFT side of applique and stitch so that the straight row of stitching drops off side of vinyl and cross-stitch bar catches into the applique.

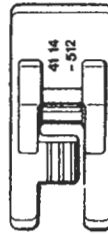
Note: Use roller presser foot for better feeding. Use low gear for control.



ROLLED FINISH

This makes a narrow, slightly scalloped hem, which is especially suited as an edge finish for soft knits.

- A. MACHINE SETTING: Double-action Stitch
SS-Red
SL-1 - 1½ mm (test)
SW-2 -4 mm (test)
Foot-Transparent presser foot 41-14-512-01
Tension-Normal
Pressure-Normal

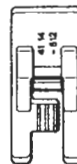


- B. PRACTICE SAMPLE:
Cut fold on sample from previous exercise.
Use raw edge.
- C. PROCEDURE:
Hold fabric taut and allow fabric to curl to right side. Stitch edge with stitches running off edge on right side. Result: tiny rolled finish.

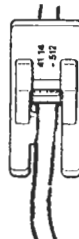
CASING ELASTIC

This is great for sewing 1/8" elastic on children's clothes and adult garments. Good to use in waist of soft dresses or vests. Rows and rows can be used in elastic shirring for sun dresses.

- A. MACHINE SETTING: Double-action Stitch
SS-Red
SL-Red
SW-Red
Foot-Transparent Presser Foot 41-14-512-01
Tension-Normal
Pressure-Normal

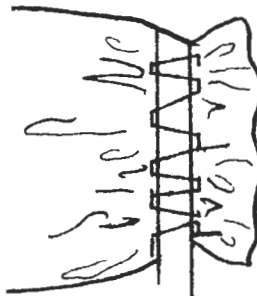
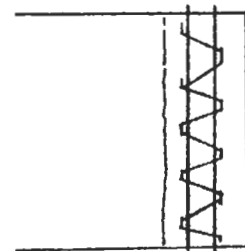


- B. PRACTICE SAMPLE:
5"x 5" single lightweight woven
¼ yard 1/8" flat elastic



- C. PROCEDURE:
1. Thread elastic into foot as illustrated.
 2. Do not stretch elastic; elastic guides automatically through foot.
 3. Stitch 1½" from edge.
 4. Draw elastic to fit after stitching is completed.

Note: To make a casing in a sleeve, lengthen sleeve pattern before cutting out. Fold up the hem and sew elastic right over the raw edge.



JOINING STITCH

For joining two pieces of fabric with folded edges, leaving a flat seam without pressing. Excellent for inserting lace, and strong enough for sewing and mending on girdle and swimsuit fabric. Easy way to attach pieces for patchwork.

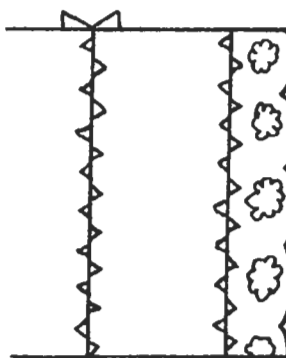
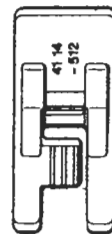
- A. MACHINE SETTING: Bridging Stitch**
 SS-Red
 SL-Red
 SW-Red
 Pressure and tension-Normal
 Foot-Transparent presser Foot 41-14-512-01

Note: For thinner fabrics, use the zig zag presser foot 41-11-383.

- B. PRACTICE SAMPLE:**
 Two 5"x 5" pieces of spandex
 6" lingerie lace

C. PROCEDURE:

1. **Attach lace:** Lay lace over raw edge of right side of fabric. Sew with one side of stitch catching lace carefully, opposite side catching the fabric.
2. **Joining Seams:** Cut sample in half. Fold seam allowances back on each piece of fabric to wrong side. Butt up folded edges and stitch down center (see illustration). Stitch pulls two pieces together, building in stretch and strength.



SEAMING

For simultaneous seaming and overcasting on lingerie and other sheer fabrics.

- A. MACHINE SETTING: Overcast Stitch**
 SS-Green
 SL-Green
 SW-Green
 Pressure-test for fabric
 Tension-Normal (test)
 Foot-Zig-zag presser foot 41-11-383-01
or lingerie foot

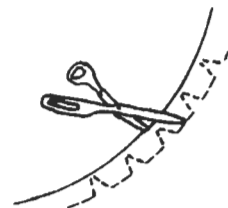
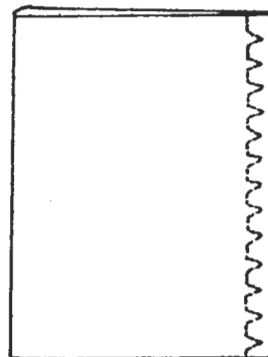
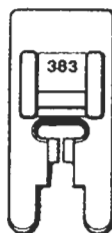
- B. PRACTICE SAMPLE:**
 5"x 5" Nylon Knit

C. PROCEDURE:

1. Fold fabric in half.
2. Stitch
3. Trim close to stitching.

Note: For puckering or skipped stitches, No. 988 lingerie foot may be used.

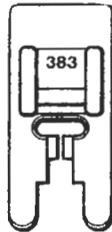
Note: May be used on curved seams and notched or clipped between points but do not clip stitches.



SHELL EDGE

Excellent for hemming fine knit fabrics, creating a decorative edge.

- A. MACHINE SETTING: Overcast Stitch
SS-Green
SL-1 (test)
SW-Green
Pressure and Tension-Normal
Foot-Zig-zag presser foot 41-11-383-01



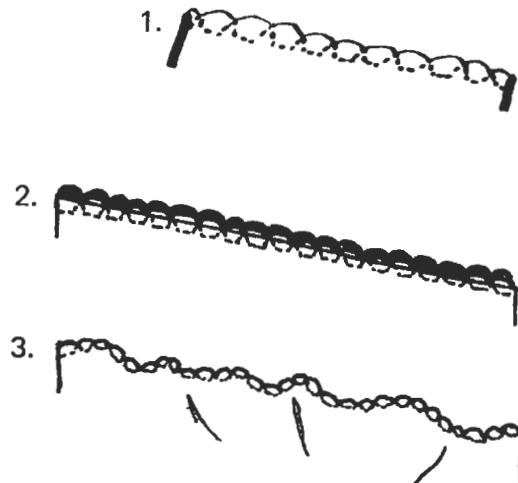
- B. PRACTICE SAMPLE:
Use raw edge of previous sample by cutting open folded side.

C. PROCEDURE:

1. Fold edge of fabric back $\frac{1}{4}$ ".
2. Sew overcast stitch along edge, running point of stitch off of fabric and holding fabric taut front and back. (illus. 1)

Note: Perle cotton/yarn can be stitched in along folded edge at the same time. (illus. 2)
Buttonhole foot aids procedure.

Note: The cross-grain of fabric can also be stretched to create a "fluted" appearance. (illus. 3)



STITCH IN THE DITCH

This is used to sew down waistbands, Chanel trim and tack down facing in seam lines.

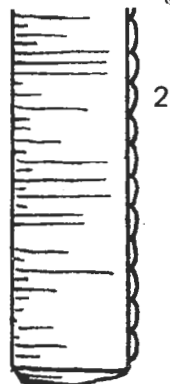
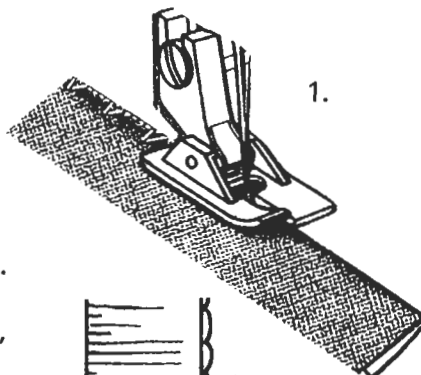
- A. MACHINE SETTING:
SS-Left needle position
SL-3
SW-0
Foot-Buttonhole No. 41-11-650
Tension-Normal
Pressure-increase 2 notches
- B. PRACTICE SAMPLE:
5"x 5" double knit
2"x 5" double knit
- C. PROCEDURE:
1. Right sides together, stitch smaller piece to larger with $\frac{1}{2}$ " seam allowance. Press seam allowance toward smaller piece.
 2. Fold the trim around the seam allowance, enclosing the raw edge. Do not turn under raw edge of trim.
 3. With the trim to the right, projection of buttonhole foot should lie just to the left of the ditch, and will serve as a guide. Stitch.



CROCHETED EDGE ("A" Stitch programmer)

For decorative crocheted-type edge.

- A. MACHINE SETTING:
SS-Purple
SL-2.5-3
SW-4
Foot-Blindstitching foot 41-14-228-01
Tension-Normal
Pressure-Normal
- B. PRACTICE SAMPLE:
2"x 6" piece of ribbing
folded in half lengthwise
- C. PROCEDURE:
1. Place fold to right under blind hem foot. (illustration 1)
 2. Holding fabric from front and back, stretch taut.
 3. Sew along folded edge of fabric. Zig zag stitch will bite fabric and straight stitch will sew off the edge (see illustration).
 4. When fabric is relaxed, stitching will curl away from the edge. (illustration 2)

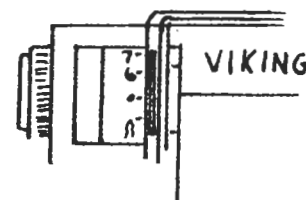


DOUBLE NEEDLE 130/705H

These consist of two needles mounted by a bridge to a single shank. These needles are ideal for raised seams, decorative stitching and straight top stitching. The size designation is determined by the distance between the needle points.

Caution: care should be taken when setting zig zag width. Too wide a zig zag will result in broken needles.

Size Designation	Zig Zag Width Setting
1.8 mm	0-2.5
2.0 mm	0-2.0
2.5 mm	0-2.0
3.0 mm	0-1.5
4.0 mm	0



MACHINE THREADING

1. Position spools of thread so that threads reel off in opposite directions.
2. Thread 2 strands in one operation, keeping strands separate.
3. Place one thread on each side of tension disc.
4. Continue threading as one through to take-up lever.
5. Separate threads — one through pigtail; one through black thread guide.
6. Thread through eyes of needles as shown in diagram.

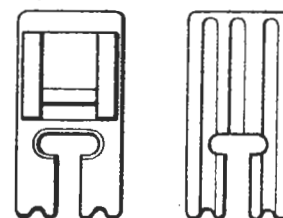
RAISED SEAM PRESSER FOOT 41-11-389-01

For twin needlework, raised seams, window pane designs and pin tucks.

- A. MACHINE SETTING:
 SS-Basic Stitch Symbol
 SL-2-3
 SW-0
 Pressure-normal
 Tension-normal



Upper side Under side



Raised seam presser foot 41 11 389-01



Raised seam attachment 40 15 427-01

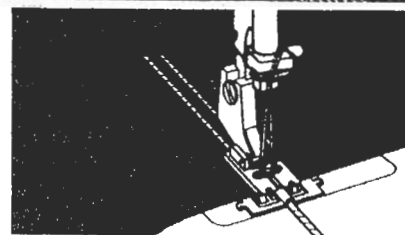
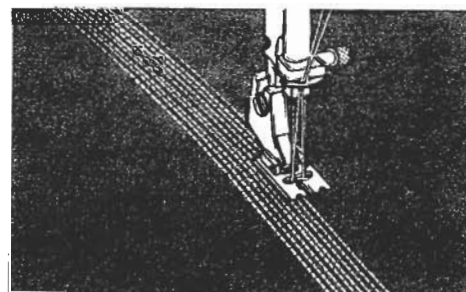
- B. PRACTICE SAMPLE:
 5"x 5" medium weight woven

C. PROCEDURE:

1. Sew raised seam as design of garment.
2. To sew several parallel seams, use the grooves on the bottom of the presser foot as guides. Place the previously sewn seam to the left or right of the first row and let the presser foot guide the work.

Note: For a stiff raised seam effect, enclose a gimp cord in seam.

- a. Lay gimp cord under raised seam attachment and snap onto throat plate with its straight edge facing forward.
- b. Before stitching, pull cord behind presser foot, attachment will guide cord into position as it sews. See diagram.



ARCH STITCH

- H Green

Pin tucks, scallops and decorative edge finish can be done with this stitch.

EDGE FINISH

MACHINE SETTING

SS - Arch Stitch, 13

FOOT - Standard Foot A

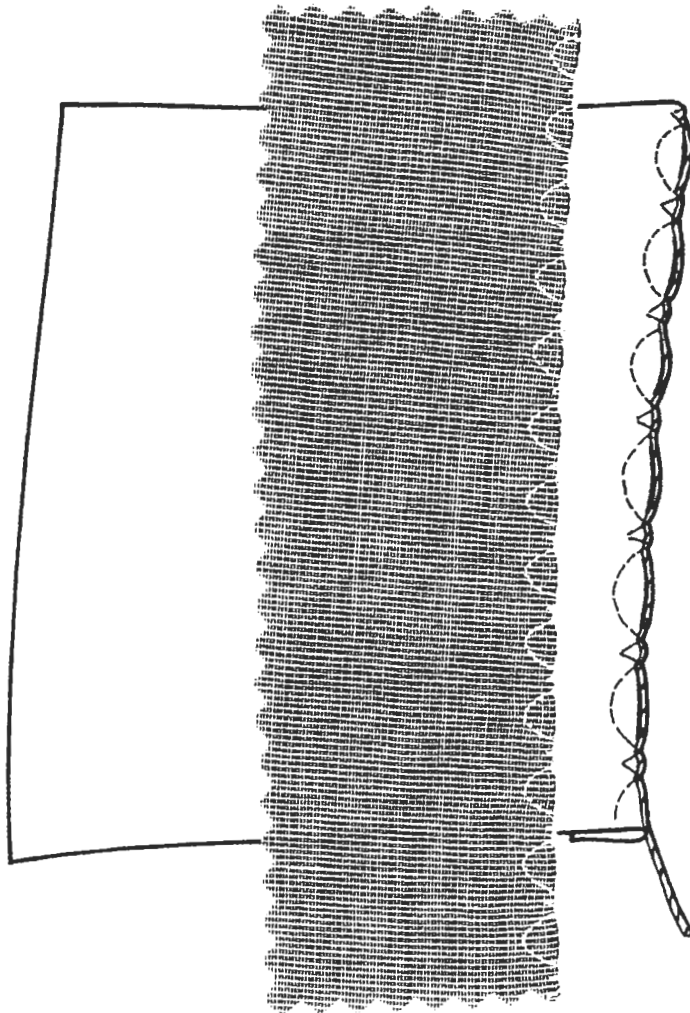
PRACTICE SAMPLE

6" x 6" medium-weight woven

6" perle cotton

PROCEDURE

- Fold edge back $\frac{1}{2}$ ".
- Lay perle cotton along the folded edge of fabric.
- Position the presser foot so that the stitch will catch the perle cotton and hold it in place.
- Stitch the perle cotton in place.



ADVANCED TECHNIQUES

PARALLEL TOPSTITCHING

Fast, easy and perfect parallel rows of topstitching for welt seams, collars, lapels and cuffs.

A. MACHINE SETTING: (First Row)

SS-left needle position

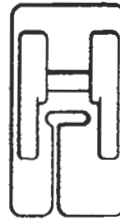
SL-3

SW-0

Foot-Blindstitching foot 41-14-228-01

Tension-Normal

Pressure-Normal



B. PRACTICE SAMPLE:

4"x 4" piece of gabardine folded in half lengthwise.

C. PROCEDURE:

1. Place sample to left of needle with folded edge under shallow (left) side of foot.
2. Stitch on folded edge allowing machine to guide fabric.

D. MACHINE SETTING: (second row)

SS-straight stitch (regular needle position)

SL-3

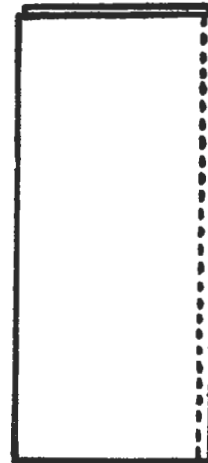
SW-0

Foot-Blindstitching foot 41-14-228-01

Attach edge guide (see instruction book)

Tension-Normal

Pressure-Normal



E. PROCEDURE:

1. Line up edge guide so it touches right side of blindstitching foot.
2. Place fabric under foot so that folded edge lies directly under right edge of blindstitching foot.
3. LOWER EDGE GUIDE SO THAT IT RIDES LOWER THAN FOOT. Tighten attachment screw.
4. Stitch second row, allowing edge guide to guide fabric.

EMBROIDERY

I. General Information for Pattern Stitching

A. Rules

1. Use transparent, raised seam, or embroidery foot
2. Adding machine paper under work enhances pattern and creates smoother stitches.
3. ALWAYS test pattern on fabric to be used and record settings.
4. Watch work thru slot in foot.
5. When possible, embroider prior to cutting out garment or at least before construction.
6. Try to begin about 1/16" from edge. BETTER: Attach strong double thread by hand and use it to hold fabric taut for first several sts.
7. EXPERIMENT!!! with SL and SW. Try twin needles (doubles pattern. Watch SW on this!) Be sure to try heavy thread or yarn on bobbin and work from wrong side of fabric. Use paper.

B. Symmetrical Borders

1. Begin with center row and then alternate left and right
2. If an asymmetrical stitch is used, the work must be turned for second row (row 1 sewn top to bottom and row 2 bottom to top).
3. To begin rows at same point of pattern: Stitch Row 1. Remove work. Use a scrap and stitch until desired motif is reached. (USE GEAR) Re-insert work and continue.

C. Squaring Corners

1. Method #1

- a. Complete pattern on a separate band.
- b. Fold band RST. Mark and stitch a 45° angle from one corner. Trim and press open. Applique band in place.

2. Method #2

- a. Mark 3 parallel lines diagonally into corner. Machine baste these
- b. Beginning at corner, pattern stitch out from outer diagonal lines
- c. Remove 1 pattern and stitch down center diagonal line

3. Method #3

- a. Counting number of sts in pattern, stitch 6 motifs on scrap
- b. Lay embroider scrap on fabric with sixth motif at corner. Use pins to mark off pattern.
- c. Begin stitching at a pin and check. Use gear.
- d. Raise presser bar with needle down. Pivot counter clockwise EXACTLY at end of motif. Lower presser foot and continue

4. Method #4

- a. Test motif for desirability in an angle.
- b. Stop one motif from end. Remove work carefully.
- c. Turn work and begin motif in same hole.

D. Flowers and Stars

1. Good Pattern Choices D,E, and F Red
2. Test motif, counting sts to locate center of motif. Record information
3. Draw pencil series of intersecting lines.
4. Always begin in CENTER of intersecting lines and work outwards. Use gear. Stitch one motif out. Needle down. Raise PF. Pivot and complete

WEAVERS REED

YARN EMBROIDERY

Weaversreed: (for fringe or gus; shag type design)

wrap entire reed with yarn beginning at "open" end--
do not wrap too tight.

Use rug foot and stitch in opening with straight stitch.

Sew directly to the fabric. Cut edges or leave in loops.

Can also stitch down opening of reed over only the yarn;
remove reed and use decorative stitch over previous
row and use for decorative fringe.

Yarn embroidery:

Use darning foot--drop feed--fabric in hoop
Match yarn and thread

Lay yarn down center and straight stitch over to the other
end. Anchor and straight stitch to other side, anchor,
down about 1/8" on outer edge of design; straight stitch
to other side. Use to fill in leaves and petals.



OUTLINE with yarn:

Use regular blind hem stitch with regular sewing foot.
Feed yarn through hole in foot.

CHENILLE Embroidery:

Darning foot; matching thread and yarn--feed down--hoop
Work with yarn horizontally on the design. Start with two
strands of yarn over design at right end. Tack to fabric
with straight stitch. (A to B; B to A & A to C) Lay
knitting needle under both strands and pull up to form
loops and sew forward and backward over from line D to
E, and E to D then left on line F about 1/8"

Continue making loops sewing and adding and then decreasing
yarn as design widens and narrows. When all of the design
is covered with loops, cut ends of loops so all is fluffy.
Cut yarn shorter on edges and gradually longer toward center
so surface is rounded and even.

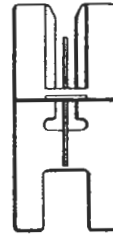


SPECIAL MARKER FOOT 41-13-931

An extra accessory on some models, this foot gives a loopy decorative stitch, old fashioned hemstitching or tailor tacks.

TAILOR TACKING

This method can be used to mark patterns.

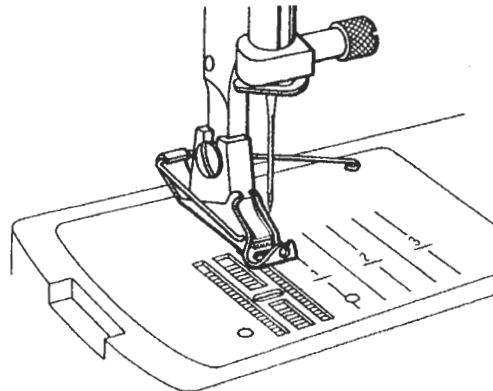


- A. MACHINE SETTING:
SS-Zig-zag
SL-0 or Drop feed dogs
SW-3
Foot-Special Marker Foot
Tension-Normal
Pressure-Normal
- B. PRACTICE SAMPLE:
5"x 5" medium weight woven
- C. PROCEDURE:
 - 1. Sew three or four stitches in each place to be marked.
 - 2. Separate the pieces of fabric and cut the tailor tack. The threads left will mark the spot.

DARNING FOOT 41-12-897-01

MONOGRAMING

- A. MACHINE SETTING:
SS-Basic stitch symbol
SL-0
SW-3 - 4
Foot-Darning foot 41-12-897-01
Tension-Buttonhole Symbol
Pressure-Released, feed dogs: down
- B. PRACTICE SAMPLE:
6"x 6" denim
- C. PROCEDURE:
 - 1. Draw the design or letter on tissue paper, pin it to the fabric and sew the outline with straight stitch.
 - 2. Remove the paper.
 - 3. Sew once with a narrower stitch width (2) and rather high speed on the machine.
 - 4. Sew once again at high speed, this time with a slightly wider stitch which covers the first stitching completely. Move the work somewhat slower this time so stitches will be closer together. Use control in both movement and speed.



MACHINE ACCESSORIES

SEWING ON BUTTONS

Buttons may be quickly and easily sewn on by machine.

- A. **MACHINE SETTING:**
SS-Left Needle Position
SL-0 or drop feed dogs
SW-About 3 (test)
- B. **PRACTICE SAMPLE:**
5"x 5" square of double knit, folded in half
2 buttons
- C. **PROCEDURE:**
 - 1. Lower the feed dog so fabric will not move and button remains stationary.
 - 2. Remove the presser foot, put the button in place and lower the needle into left hole of button. Lower presser bar to hold button in place.
 - 3. Adjust the stitch width dial to a suitable setting — about 3; turn the handwheel toward you and test carefully that the needle goes through the right hole of button. If needle is going to strike button, re-adjust SW!
 - 4. Hold both thread ends behind and sew 5 - 6 times.

Note: Sewing 4-hole buttons, move to the other holes and repeat the process.

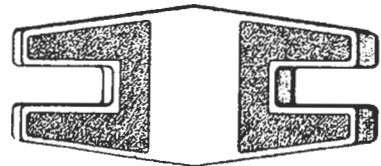
- 5. Set the stitch width dial to 0 and lock the thread.



BUTTON REED

Due to the extra thickness of fabric that must fit behind the button on suits and coats, a shank is often desired. The button reed is designed to make two size shanks. Use the thin end when sewing buttons on thin fabrics, the thick end for heavier fabrics.

- 1. Affix the button with a stitch. Raise the presser bar and place the button reed between the button and the fabric. Lower the presser bar and sew on the button.
- 2. Remove the button reed.



EDGE GUIDE 40-15-420

Uses:

- Sewing with wide seam allowances.
- Parallel rows of decorative stitching & shirring.
- Evenly spaced rows of stitches when quilting.
- Topstitching pockets.
- To aid in stitching straight when applying a zipper.

A. MACHINE SETTING:

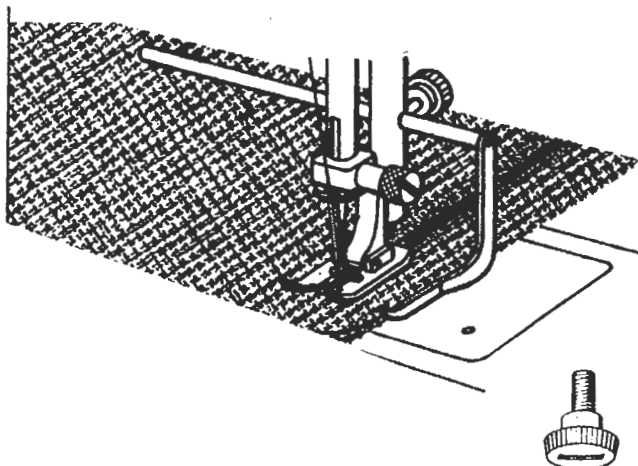
SS-Straight stitch, zig zag or any decorative stitch
SL-According to desired stitch
SW-According to desired stitch
Pressure-Normal
Tension-Normal

B. PRACTICE SAMPLE:

5"x 5" medium weight woven fabric

C. PROCEDURE:

1. Insert edge guide through the hole in the presser bar above the ankle.
2. Set desired width and secure with attachment screw (see illustration).
3. Make several rows of stitching, using previous row as guide.



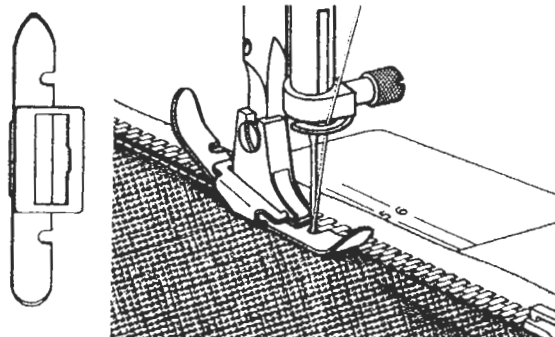
41 11 399-01
Attachment screw

ZIPPER FOOT 41-12-989

A. MACHINE SETTING:

SS-Straight stitch
SL-2½
SW-0
Tension-Normal
Pressure-Normal

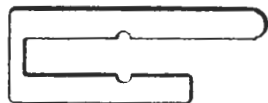
The zipper foot snaps on so that it is situated either to the right or to the left of the needle. This makes it possible to sew on both sides of the zipper without turning the work.



GLIDE PLATE

The glide plate can be used when sewing on foam, plastic, plastic-coated fabric and leather imitations. It minimizes friction. An extra accessory on some models.

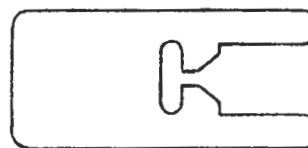
Peel off the protective paper and adhere to underside of presser foot. (see illustration). Guide plates are also designed for buttonhole foot and zipper foot.



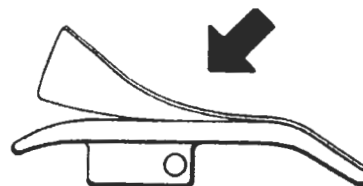
41 14 244-01 Glide plate
for 41 11 650-01
Buttonhole foot



41 14 243-01 Glide plate
for 41 12 989-01
Zipper foot



Glide plate 41 11 866-01



EDGE FINISH ("A" Stitch programmer)

This technique makes a finished edge for scarves or napkins that won't ravel or wash out.

A. MACHINE SETTING

SS-Orange/Red

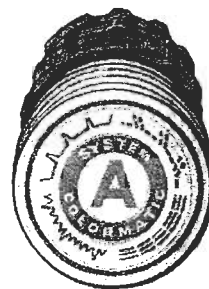
SL-Red

SW-Red

Foot-Buttonhole foot 41-11-650-01

Tension-Normal

Pressure-Normal

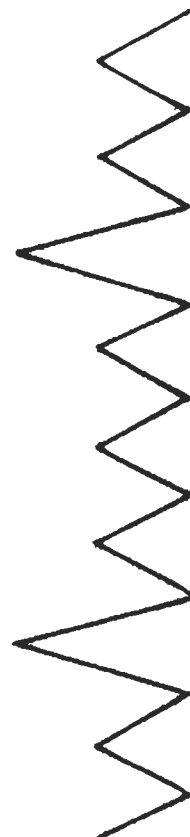
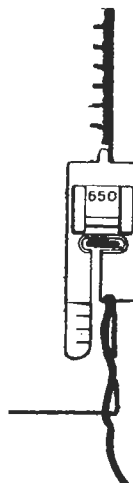


B. PRACTICE SAMPLE:

5"x 5" square medium weight woven, 12" perle cotton or twisted cord

C. PROCEDURE:

1. Lay perle cotton on top of raw edge of fabric.
2. Position sample under foot so that right groove of foot lies on top of cord. Stitch with tissue paper under sample. Narrow zig zag should cover cord (if not, make stitches closer together by turning SL closer to 0.)



PULLED THREAD TECHNIQUE ("C" Stitch programmer)

Good technique to use on napkins or a yoke-effect with pulled threads.

A. MACHINE SETTING:

SS-Yellow

SL-Yellow

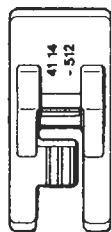
SW-3

Foot-Transparent Presser foot 41-14-512-01

Tension-Normal

Pressure-Normal

*Wing Needle: Extra Accessories Page 53



B. PRACTICE SAMPLE:

5"x 5" Hopsacking

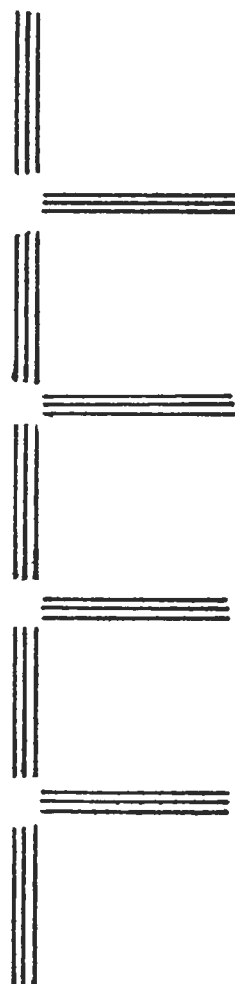
C. PROCEDURE:

1. Pull threads to fringe edge.

Note: Use black markings on transparent foot as guide.

2. Position stitch so that straight side will pull together strands and bar section of stitch will lock into woven area.

Note: Machine embroidery thread is effective with this stitch.



NARROW HEMMER 411 85 17 01 FOR 5 mm HEM

MACHINE SETTING

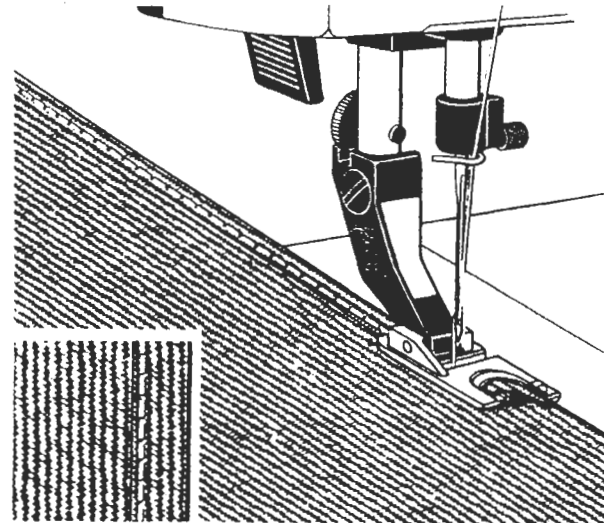
SS - Straight Stitch or
Decorative Stitch

PRACTICE SAMPLE

Use sample from previous exercise.

PROCEDURE

- Position fabric in scroll.
- Stitch hem.



HEMMER 411 85 20 01 FOR 3 mm SCALLOPED HEM

MACHINE SETTING

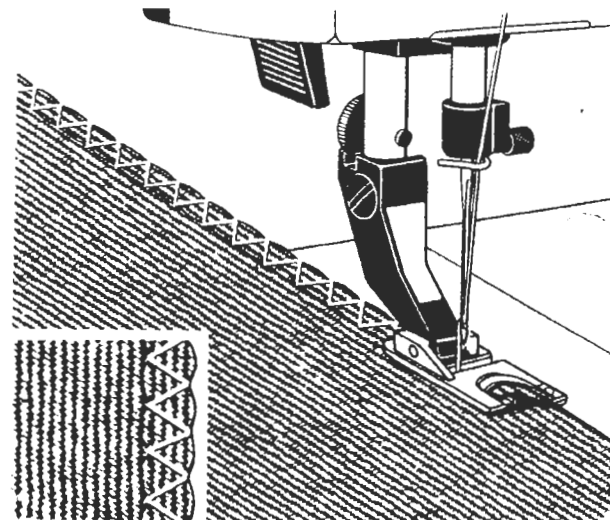
TENSION - 7
SS - Zigzag, 4
SL - 4.0-4.5 mm
SW - 4.0 mm

PRACTICE SAMPLE

6" x 6" lightweight knit

PROCEDURE

- Position fabric in scroll.
- Stitch hem.



HEMMER 411 85 24 01 FOR 2 mm ROLLED HEM

MACHINE SETTING

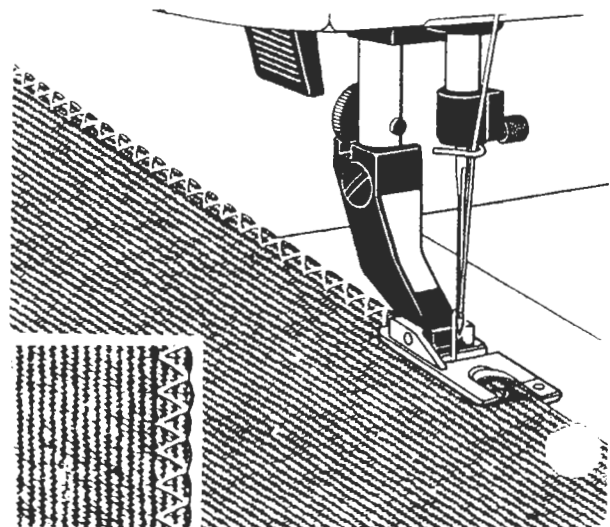
SS - Zigzag, 4
SL - 2.0-3.0 mm
SW - 3.0 mm

PRACTICE SAMPLE

Use sample from previous
exercise.

PROCEDURE

- Position fabric in scroll.
- Stitch hem.



NARROW HEMMERS

The Narrow Hemmers are used on lightweight fabrics to make small hems which are suitable for scarves, tablecloths, napkins, shirt hems, curtains, ruffles and flounces.

PROCEDURE FOR POSITIONING FABRIC IN HEMMER - FOLDED METHOD

- Fold beginning of fabric edge to look like finished hem.
- Sew a few stitches along inside folded edge.
- With needle down and presser foot up, pull edge of fabric into foot. Lower presser foot.
- Continue sewing. To guide hem into foot easily, put left index finger in hem and use right hand to hold edge of fabric at an angle.

STITCHING TECHNIQUE

- Sew 4 short stitches diagonally into the corner of the fabric at the place you wish to begin the hem. Leave the thread tails long.
- Holding the thread tails in your left hand and fabric in the right, lift the threads into the scroll and pull through until the fabric is under the needle. Lower the presser foot.
- As you begin to sew, hold up the fabric with your left hand and feed it into the scroll for more even feeding.

CORNERS - Trim off corner 1/8" outside hem lines. Proceed with hemming each side, holding thread tails taut when starting to sew.

NARROW HEMMER 411 85 22 01 FOR 2 mm HEM

MACHINE SETTING

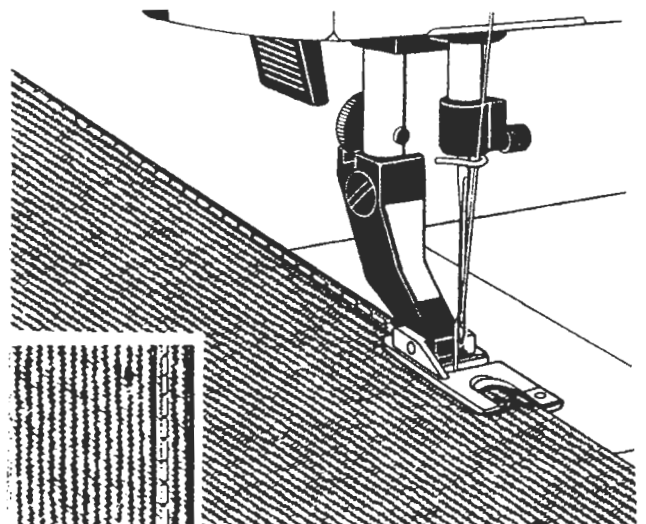
- SS - Straight Stitch, 3
- SL - 3.0 mm

PRACTICE SAMPLE

6" x 6" lightweight woven

PROCEDURE

- Position fabric in scroll.
- Stitch hem.



EXTRA ACCESSORIES

TRIPLE NEEDLE 130/705H

Triple needles are constructed with the same bridge as the double needles. These needles are commonly used for multi-colored decorative seams. Here again, zig zag width should be reduced to eliminate breaking.

No. 80 Needle Types Needle Distance

10-0003 2 mm

Maximum Stitch Width

1.5



A. MACHINE THREADING: (Refer to Double Needle Threading)

1. Use a bobbin as third spool, under right thread spool, or use a plastic straw on right thread spindle as extension for third spool.
2. Run two threads on right side of tension disc.
3. Run right thread through pigtail, left through black thread guide, and middle thread bypass both guides.

B. PRACTICE SAMPLE:

Creatively experiment with all decorative stitches. Use 6"x 6" denim.

WING NEEDLE 10-00-006

Used as a hem-stitched effect on napkins, table runners, organdy.

A. MACHINE SETTING: Point de Paris Stitch ("C" Stitch Programmer)

SS: Yellow

SL: Yellow

SW: 2½

Pressure: Normal

Tension: Buttonhole symbol, test-sew for effect,
& transparent pressure foot

B. PRACTICE SAMPLE I:

5"x 5" organdy or crisp sheer

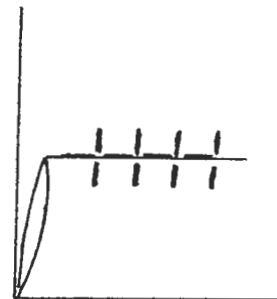
Any lightweight thread or machine embroidery thread

1 piece waxed tissue paper

C. PROCEDURE:

1. Turn up desired hem. On a sheer, a double hem looks better.
2. Stitch along top edge of hem with waxed tissue paper underneath.
3. At end of row, leave needle in fabric and pivot fabric 180 degrees. Use reduction gear, and stitch again along previous line of stitching, piercing same center holes.

Note: Let machine feed fabric — do not inhibit feeding!



Fringe

Use Clear foot

14 or 16 needle

2 threads through one needle

Loosen tension slightly

Stitch Length: satin stitch (test)

Stitch Width: 4

1. Stitch desired length

2. Remove one spool of thread

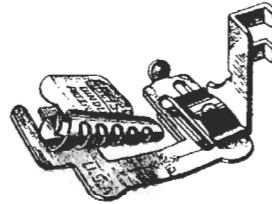
3. Set S.W. at 1.5. Stitch along one side of first stitching

4. Using seam ripper, cut original stitches from under side. Brush & top side & trim evenly.

For edge binding on children's clothes, canvas bags, appliance covers, placemats, etc.

A. MACHINE SETTING:

SS-3 step zig-zag
SL-1
SW-4
Tension-Normal
Pressure-Normal



B. PRACTICE SAMPLE:

5"x 5" medium weight woven
Two 5" pieces of double fold bias tape



C. PROCEDURE:

1. Cut end of bias tape to a point as illustrated.
2. Open fold and bar tack (by dropping feed dogs) over crease. Check first to make sure needle will clear sides of attachment. Leave thread ends 6" long.
3. With fold to the right, hold bias tape in right hand. Hold threads in left hand. Position threads (only) in between lips of funnel, and pull until bias tape is inside of funnel (bias should be open, and resting against back side of lips.)
4. Position fabric in between lips of funnel so that the raw edge is encased by the bias tape.
5. Stitch, guiding fabric and bias tape carefully.
6. Follow steps 1-5 for a second sample, this time using a decorative stitch to sew on the bias tape.

EYELET PLATE 41-15-855-01 (4 mm)

Eyelets for laced blouses and shirts, belts, utility uses.

A. MACHINE SETTING:

SS-Left needle position
SL-0
SW-2.5
Feed dogs down
Tension-buttonhole symbol
Pressure:Normal

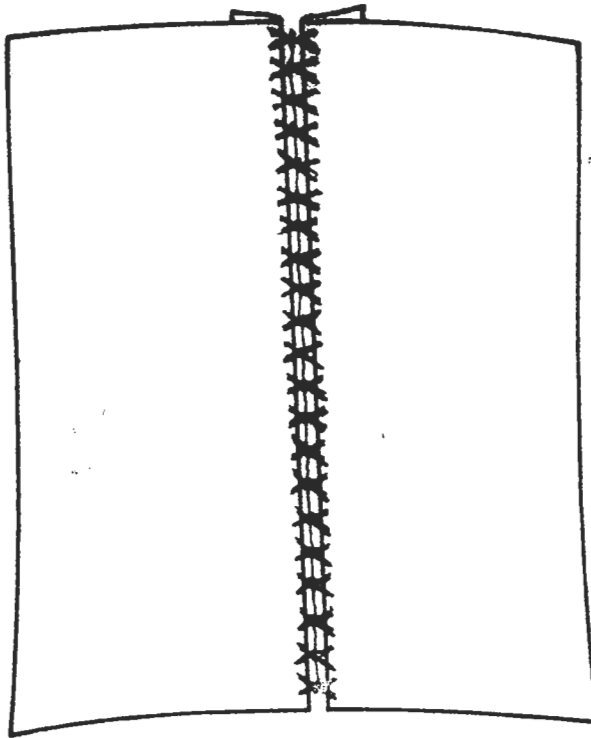


B. PRACTICE SAMPLE:

10"x 10" square medium weight woven

C. PROCEDURE:

1. Stretch fabric into embroidery hoop.
2. Remove presser foot and presser foot ankle.
3. Snap eyelet plate over feed dogs (projection should be to the left of stitch opening.)
4. Make a small hole in fabric using an awl or the buttonhole knife.
5. Position fabric under needle so that hole fits over projection on the eyelet maker.
6. Using top thread, pull up bobbin thread. Lower needle, and wrap threads around projection on eyelet maker twice. (Check to see that presser bar is down.)
7. Stitch around hole and over threads by quickly turning the hoop in a 360 degree circle.
8. Increase SW to 3 and stitch around hole a second time, this time moving hoop slower so that stitches will be more dense.



TATTING STITCH

This decorative seam is excellent for side seams, princess-line seams and decorating blouses.

MACHINE SETTING

TENSION - Buttonhole Symbol

SS - Zigzag, 4

SL - 0.8 mm

SW - 3.0 mm

PRACTICE SAMPLE

6" x 6" medium-weight woven, cut in half

PROCEDURE

- Stitch a 5/8" seam allowance with right sides together. Press open.
- Select 7, SW - 0, set Tension at normal and attach Utility Foot B.
- Stitch down the center of the opened seam allowance.

SHIRRING FOOT 41-14-381

For gathering and attaching dust ruffles and flounces.

- A. MACHINE SETTING:
- SS-Left needle position
 - SL-3
 - SW-0
 - Tension-6
 - Pressure-Normal

- B. PRACTICE SAMPLE:
- 3"x 12" and 3"x 6" lightweight woven

C. PROCEDURE:

1. Insert shortest of two strips into slot in foot.
2. Place second strip under foot. Note: Right sides should be facing each other.
3. Take several stitches in place to secure threads, then hold threads behind needle with right hand. Begin to stitch - feed dogs will not move upper layer of fabric, so it must be moved manually at a slow and steady pace. Guide right hand edges of fabric with left hand so that they line up.

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ROLLED HEM FOOT 41-11-385-01

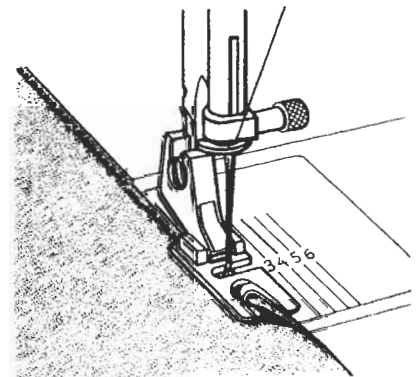
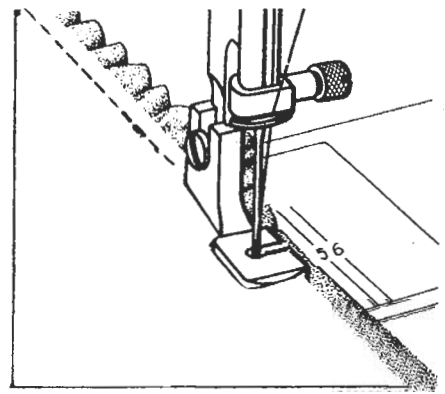
Suitable for edge finishes on scarves, table cloths, napkins, hems on shirts, curtains, ruffles and flounces.

- A. MACHINE SETTING:
- SS-Zig Zag
 - SL-will vary for steps
 - SW-will vary for steps
 - Tension-Normal
 - Pressure-Normal

- B. PRACTICE SAMPLE:
- 6"x 6" lightweight woven

C. PROCEDURE:

1. Zig zag (SL-05, SW 1.5) ¼" in from long edge of fabric leaving 6" of thread at beginning and end of stitching.
2. Trim the ¼" of fabric away, cutting close to stitching line.
3. Lower presser bar, release pressure.
4. Hold sample in left hand with zig-zag stitching to the right. With right hand, insert rear threads into rolled portion of foot and pull so that fabric follows.
5. Return pressure to normal
6. Machine setting:
 - SS-Straight stitch
 - SL-2½
 - SW: 0
7. Begin stitching. Guide fabric into rolled portion of foot with left hand by holding fabric at an angle.



No. 41-11-384 gives a 5/64" width and No. 41-11-385 gives a 3/16" width. This attachment is also available in various sizes; No. 41-11-386 will create a 1/8" scalloped hem by increasing tension to 7 and using SW 4 and SL4; and No. 41-11-387 for a narrow rolled edge using tension at 7, SL 2 and SW 3.

7-HOLE CORD OR BRAID FOOT 411 85 11 01

Up to 7 strands of perle cotton, embroidery floss or buttonhole thread can be applied with a decorative stitch. By varying colors of thread, numbers of strands of thread, and decorative stitches, many looks can be achieved. The technique can be used to decorate garments or crafts.

MACHINE SETTING

TENSION - Buttonhole Symbol

SS - Decorative Stitch or 3-Step Zigzag

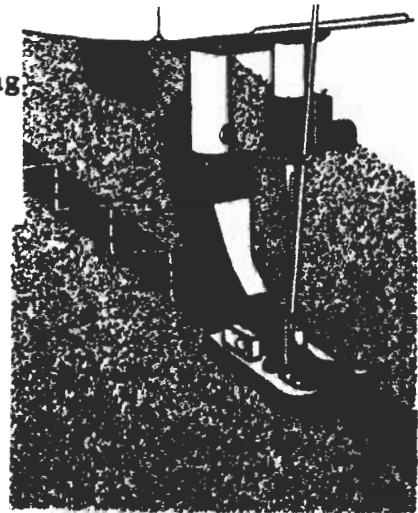
PRACTICE SAMPLE

3" x 6" denim from earlier exercise

2 yards perle cotton

PROCEDURE

- Cut perle cotton into 7 lengths.
Thread one length through each hole in the foot, from top of foot, underneath and toward the back.
- Snap on foot.
- Use decorative stitch to sew cords in place.



NOTE: To turn corners, leave needle in fabric at outside of the turn, pivot and continue stitching.

Seven strands of perle cotton may be sewn together to produce a narrow belt.

A design to follow may be drawn on the right side of a firm, tightly woven fabric.

PULLED THREAD TECHNIQUE

Used in making fringed edges on napkins, scarves and coarsely woven fabrics.

MACHINE SETTING

SS - Reinforced Straight Stitch, 7

SL - 3.0 mm

FOOT - Utility Foot B

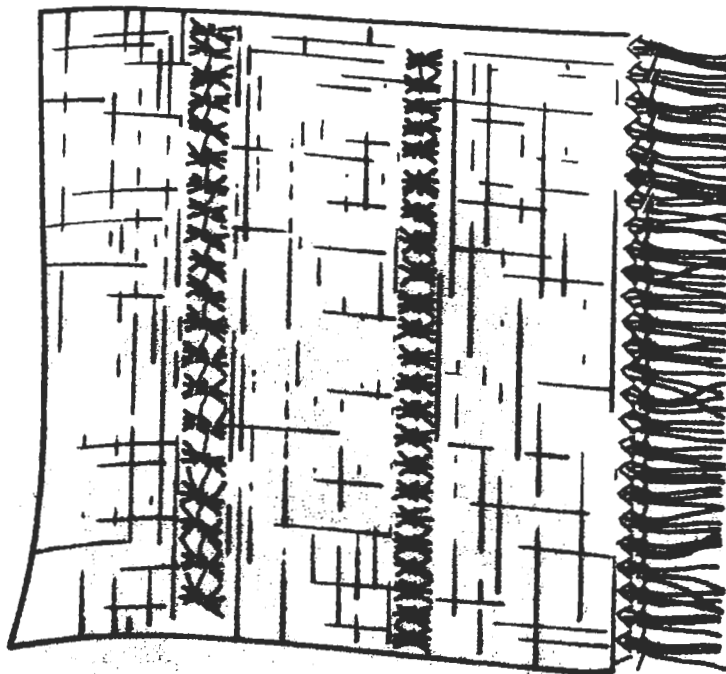
PRACTICE SAMPLE

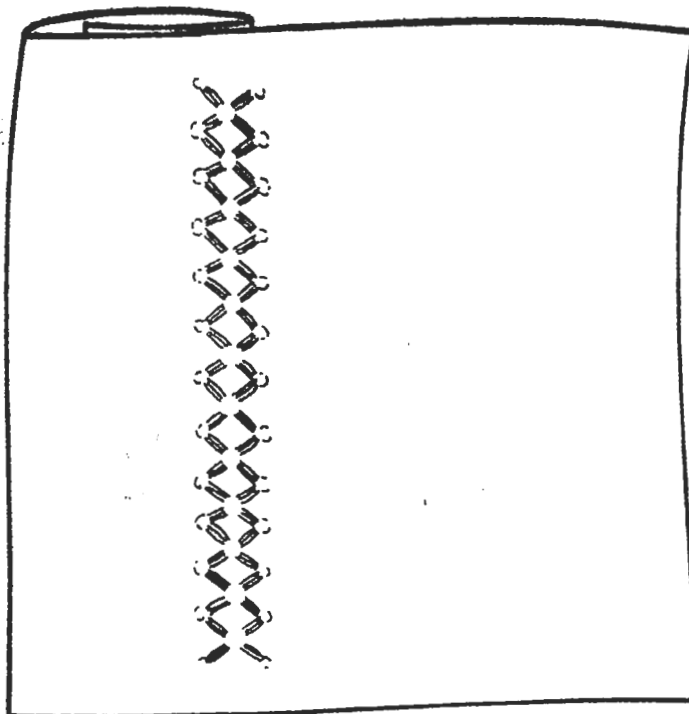
6" x 6" hopsacking

1 piece waxed tissue paper or stabilizer

PROCEDURE

- Pull thread where fringe would end to mark stitching line. Threads may also be pulled from inside edge of fabric.
- Position foot so the stitching line is under center line of foot and fringe to right of needle.
- Place paper or stabilizer underneath. Stitch. The stitches will pull the fringe together.
- Optional: use a narrow zigzag or decorative stitch to the left of previous stitching to stabilize base of fringe.
- Tear away backing and pull threads to fringe.





WING NEEDLE 411 26 84-01

Use of the Wing Needle creates an attractive hem stitch effect. Also with the use of the Wing Needle and the Ric Rac Stitch, a pulled-thread technique can be used as an edge finish. Both techniques are ideal for placemats, tablecloths, napkins, curtains and clothing.

HEMSTITCHING

MACHINE SETTING

TENSION - Buttonhole Symbol (test sew for effect)
 SS - Ric Rac Stitch, 7
 SW - 3.0 mm
 FOOT - Utility Foot B

PRACTICE SAMPLE

6" x 6" organdy or crisp sheer
 Any lightweight thread or machine embroidery thread
 1 piece waxed tissue paper or stabilizer

PROCEDURE

- Turn up desired hem. On sheer fabric, a double hem looks better.
- Stitch along top edge of hem with waxed tissue paper or stabilizer.
- At end of row, leave needle in fabric and pivot fabric 180 degrees. Stitch again slowly along previous line of stitching, piercing same center holes.

NOTE: Let machine feed fabric. Do not inhibit feeding!



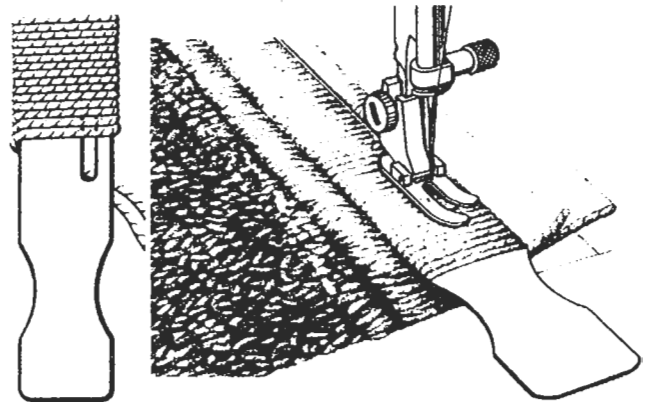
WEAVER'S REED 41-13-458-01

Weaver's Reed is a tool that can be used to stitch yarn onto cloth in loops, giving a fringed effect to be used as trim or repeated in rows to create a rya rug. It is available in two widths.

- A. MACHINE SETTING:
SS-straight stitch
SL-2½
SW-0
Pressure, tension-normal
Rug foot 41-12-964-01

- B. PRACTICE SAMPLE:
6"x 6" denim
2 yards rug yarn

- C. PROCEDURE:
1. Snap on rug foot
 2. Wrap yarn around reed laying yarns side by side.
 3. Stitch down the length of reed in the groove.
 4. When completed one length, raise presser foot, pull reed forward, wrap more yarn, lower presser foot, and continue stitching. Colors may be changed mid-row by cutting old color and wrapping with new.



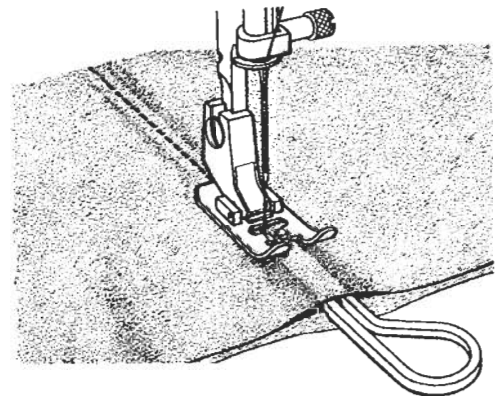
HEM STITCH FORK 40-15-367-01

This attachment is used to join two pieces of fabric together producing a decorative open effect. It can be used for open work seams in garments and for decorative touches on napkins.

- A. MACHINE SETTING:
SW-O
SL-2-4
Tension-buttonhole setting or less
Pressure-normal
Rug Foot or Regular Zig-zag Presser Foot

- B. PRACTICE SAMPLE:
2 - 3"x 6" lightweight woven

- C. PROCEDURE:
1. Place fabrics right sides together and insert hemstitcher between.
 2. Stitch between legs of hemstitcher. When reaching loop handle, raise presser foot, pull hemstitcher forward, lower presser foot and continue stitching.
 3. Pull cloth apart to expose hemstitching. A decorative stitch may be applied on each side of open work.



5-HOLE CORD FOOT 41-14-538

This foot allows up to 5 strands of perle embroidery or buttonhole thread to be applied with a decorative stitch. By varying colors of thread, numbers of strands of thread, and decorative stitches, many looks can be achieved. The technique can be used to embellish cuffs, yokes, collars or to outline decorative motifs.

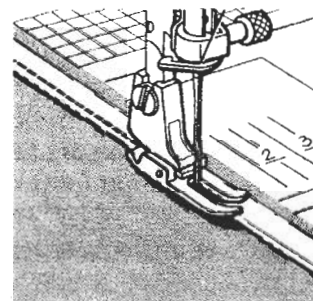


- A. **MACHINE SETTING:**
SS: any decorative stitch
SL, SW: any combination wide enough to stitch across the strands of cord or twist
Pressure: Normal
Tension: Buttonhole symbol
- B. **PRACTICE SAMPLE:**
6"x 6" denim
2 yds. perle cotton thread
- C. **PROCEDURE:**
 1. Cut perle cotton into 5 lengths. Thread one length through each hole in the foot, from top of foot, underneath and toward the back. Snap on foot.
 2. Use decorative stitch pattern (C yellow or D blue work well) to stitch cords in place.

* * * * *

PIPING FOOT 41-12-745

This foot allows cording to be covered easily and quickly because the stitching can be close to the edge of the cording. The groove on the bottom of the foot will also make it easy to stitch finished piping between two layers of fabric.



- A. **MACHINE SETTING:**
SS-straight stitch
SL-2½
SW-0
Pressure, tension: Normal
- B. **PRACTICE SAMPLE:**
5"x 2" denim
- C. **PROCEDURE:**
 1. Attach foot
 2. Place cording in center of bias tape, fold strip around cording.
 3. Place bias tape and cording under foot with fold of bias tape to the left. The cording will ride in the groove of the foot.
 4. Straight stitch, securing cord between fabric.
 5. Now that the piping is made, sew piping to right side, stitching line along seam line, sew piping down. Turn fabric over, put right sides together and use previous stitching line as a guide to sew piping between the layers of fabric.

BRAIDING FOOT 40-93-005-01

This foot holds braid or soutache trim in place while stitching. It can be adjusted to accommodate varying widths of trim.

A. MACHINE SETTING:

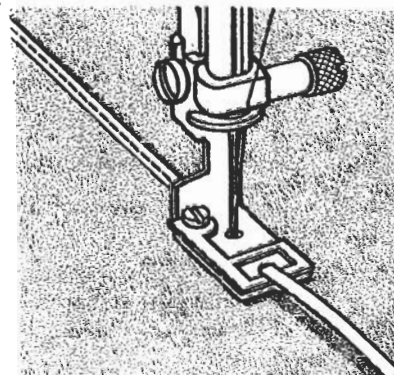
SS-Straight Stitch
SL-2½
SW-0
Pressure and Tension-normal

B. PRACTICE SAMPLE:

6"x 6" denim
6" soutache braid

C. PROCEDURE:

1. Attach foot.
2. Thread braid into front opening from top of foot.
3. Lower foot, while holding braid in place. Stitch through braid, guiding fabric to create desired effect.



CIRCULAR SEWING ATTACHMENT 40-15-813-01

This attachment enables stitching in a complete circle. Overlapping or singular circles can be sewn to decorate crafts or clothing. Adjusting the attachment provides for various sized circles.

A. MACHINE SETTING:

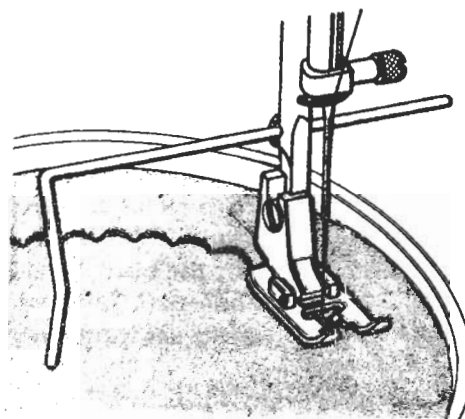
SL, SS-Any decorative stitch
Pressure-normal
Tension-normal
Foot-Regular presser foot 41-11-383-01

B. PRACTICE SAMPLE:

Same sample as Eyelet Plate.

C. PROCEDURE:

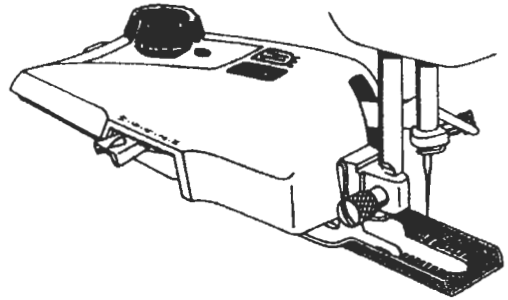
1. Place fabric securely in embroidery hoop.
2. Position thumb tack in center of hoop, pointed side up.
3. Slide attachment into presser bar. Place hoop under ankle so tack will fit into leg of attachment.
4. Tighten screw.
5. Snap on foot, lower presser bar and stitch.



THE BUTTONHOLE ATTACHMENT 49-13-000

This attachment is especially good for keyhole buttonholes on tailored garments, menswear, or for use with a large shanked button.

- A. **MACHINE SETTING:**
Refer to instructions included with buttonhole attachment
- B. **PRACTICE SAMPLE:**
6"x 6" double knit
- C. **PROCEDURE:**
 1. Select template according to size of button being used.
 2. Insert template and mount attachment according to buttonholer instructions.
 3. For sample, try several buttonholes with various sized templates.



THE WALKING FOOT (also called Dual Feeder) 41-14-294

This foot moves back and forth so that the top layer of fabric will feed evenly with the bottom layer of fabric. It is excellent to use on plaids or stripes, spongy or slippery fabrics, or for quilting.

- A. **MACHINE SETTING:**

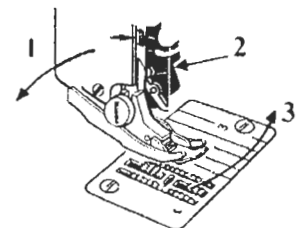
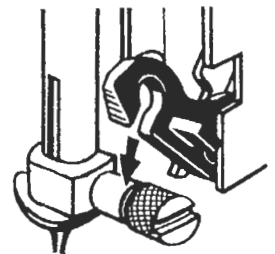
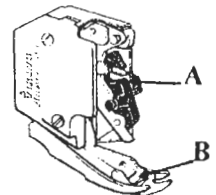
Make sure that the black lever (A) is pushed in. Bring the machine needle to its upper position and remove the presser foot from the "ankle" bracket. Tilt the dual feeder rearwards and insert it under the presser bar. The transverse pin (B) should then be snapped onto the "ankle" bracket the same as when fitting ordinary snap-on presser foot in place.

Snap the black lever onto the horizontal projection of the needle clamp.

Push the top rear of the DUAL FEEDER forward so that it snaps onto the vertical presser bar.

How to remove:

 1. To remove the dual feeder, press the top downwards and to the rear.
 2. Lift the black lever from the needle clamp projection.
 3. Then pull the Dual feeder presser foot downward and forward to unsnap it from the "ankle" bracket.
- B. **PRACTICE SAMPLE:**
Two 5"x 5" gingham
- C. **PROCEDURE:**
 1. Attach foot according to included instructions.
 2. Sew two pieces of plaid fabric with a straight stitch.
 3. Sew 1 more row on the plaid fabric, using an overcast stitch.



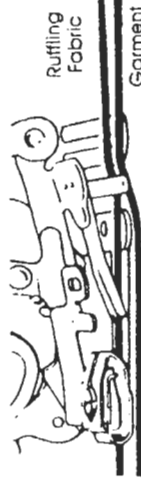
Pleating



Correct Position for Fabric to be Ruffled

1. Move adjusting lever to slot 6 or 12.
2. Set stitch length. A short stitch places pleats close together.
3. For deep pleats, turn adjusting indicator clockwise and test on scrap of fabric.
4. Insert fabric to be pleated between ruffling blade and separator blades and under first separator guide.
5. Lower presser bar and stitch.

Making and Sewing a Ruffle in One Operation.



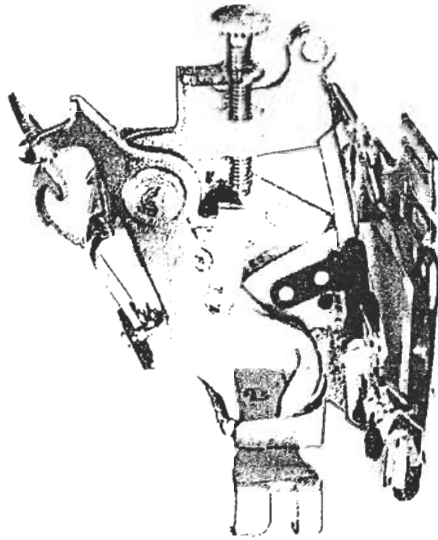
Correct Position for Fabric to be Ruffled

1. Place ruffle strip between ruffling blade and separator blades and under first separator guide.
2. Place material to which ruffle is to be attached under the ruffling blade (between separator blade and feed of the machine) and under first separator guide.
3. Proceed as for gathered or pleated ruffles.

Right sides of fabric are placed together when the seam is to fall to the inside.

Oiling the Ruffler

The ruffler requires an occasional oiling of all working parts to keep them from sticking. A single drop of sewing machine oil at each point illustrated below is sufficient. After oiling, remove any excess oil by stitching with the ruffler on a scrap of fabric.

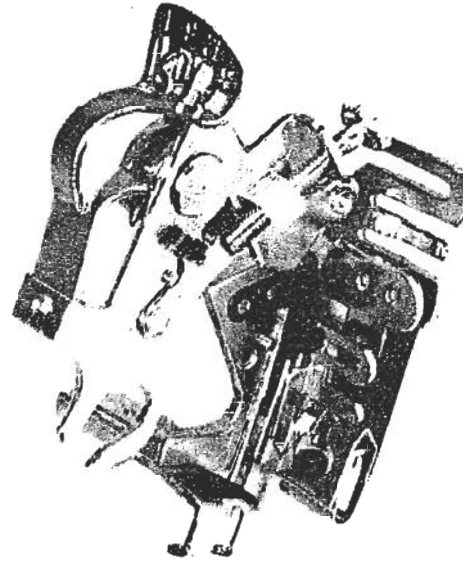


IBR

Dealer Imprint:



Ruffles are easy to make with the ruffler. Use them as a fashion accent on blouses and dresses, as a border for sheer curtains, or as a flounce for bedspreads or slipcovers. With the ruffler, you can make pleated or gathered ruffles, and you can even make and apply them at the same time if you wish.



Available for vertical and slant-needle machines

About Fabrics and Ruffling

The texture of the fabric affects the fullness of a ruffle. Soft fabrics are excellent for gathered ruffles and crisp fabrics for pleated ruffles.

If you are ruffling organdy or chintz, moisten the fabric along the seam line and then ruffle while damp.

Chintz and other glazed fabrics handle the best if the glazed side is downward and the soft backing is next to the ruffler blade.

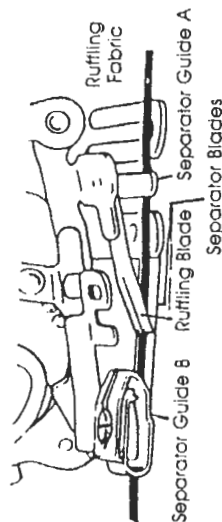
Ruffles are easier to make on the crosswise grain of the fabric, although they can be made on the lengthwise grain. Whichever grain you sew on, make sure you finish the outer edge of the fabric before ruffling.

Always test and adjust the ruffler settings on a swatch of the fabric to be ruffled to ensure exact fullness.

Basic Procedure

1. Set machine for straight stitching.
2. Raise take-up lever to its highest point
3. Attach ruffler, fitting fork arm over needle clamp hub. Make sure that both presser bar and needle clamp screws are secure.
4. Check to see that needle clears the needle hole in ruffler.
5. Draw needle thread into needle hole after lowering needle slightly. Place both needle and bobbin threads diagonally across feed.

Gathering



Correct Position for Fabric to be Ruffled

1. Raise adjusting lever and move it so projection enters slot 1.
2. Insert fabric to be ruffled under separator guide A, separator blades and under first separator guide B.
3. Draw fabric slightly to the back of needle.
4. Position needle, lower presser bar, and start stitching.
5. Turn adjusting indicator screw clockwise for more fullness or counter clockwise for less fullness.

The stitch length setting can also affect the ruffler fullness since a given setting puts an equal amount of fullness into each stitch regardless of its length. Shortening the stitch makes the ruffle fuller; lengthening the stitch makes it less full.

NOTE: For maximum fullness, set the adjusting indicator screw completely in (clockwise) and disengage the depth adjuster.

Parts of Ruffler

Fork Arm straddles needle clamp.

Projection engages slots in adjusting lever.

Adjusting Lever sets the ruffler for gathers or pleats. Slot 1 setting is for gathers. Slots 6 and 12 are setting for pleats, spacing them either 6 or 12 stitches apart. The star, for straight stitching, is for grouping gathers or pleats.

Adjusting Indicator regulates the fullness of the gathers or pleats. Turn clockwise for the deepest pleats; turn counter clockwise to give only a hint of gathered fullness. Test on scrap fabric until desired fullness is achieved.

Ruffling Blade forms the gathers or pleats by carrying the fabric to the needle.

Separator Blade prevents teeth of ruffling blade from coming into contact with feed of the machine or material to which ruffle or pleating is to be attached.

Separator Guide slotted to guide seam edges evenly, separates the ruffle strip from the material to which the ruffle is attached.

Depth Adjuster helps to form depth of pleats and gathers. When the adjuster is disengaged, this allows the adjusting indicator to form a deeper pleat.