

INSTRUCTIONS

Touch & Sew 

Deluxe Zig-Zag Sewing Machine / Model 756

SINGER



The *Touch & Sew*

Deluxe Zig-Zag Sewing Machine by SINGER

Congratulations . . .

You are about to discover the wonderful pleasure of sewing with your new *Touch & Sew* sewing machine. You will enjoy —

- the *simplicity* of dial controls. Now, you can simply dial a stitch length, a stitch width, and a stitch pattern; pressure and tension settings; even buttonhole stitching
- the *versatility* of sewing capacity that produces stitches that stretch, and stitches that *don't* stretch . . . permanent stitches that are firmly locked in, and temporary stitches that pull out easily . . . stitches that decorate, embroider, mend, baste
- and, of course, the ease of the push-button bobbin, the built-in needle threader, and much, much more!

Among the many Singer engineering and design features that ensure these sewing pleasures are —

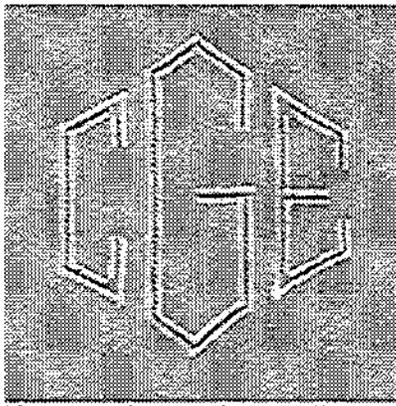
- Built-in stitch patterns, which let you produce a wide variety of practical and decorative stitches by simply turning a dial
- *Flexi-Stitch** patterns that produce stretchable stitches for knits and other stretch fabrics as well as intricate stitch designs
- Soft-touch fabric feed that protects even the most delicate fabrics
- One-way needle clamp that makes it impossible to put the needle in backwards
- Snap-on presser feet that are quickly removed and easily replaced
- Easy-to-change throat plates secured by magnets

As you go through this book, you will discover how these and many other features give you the ultimate in simplicity of operation and beautiful results.

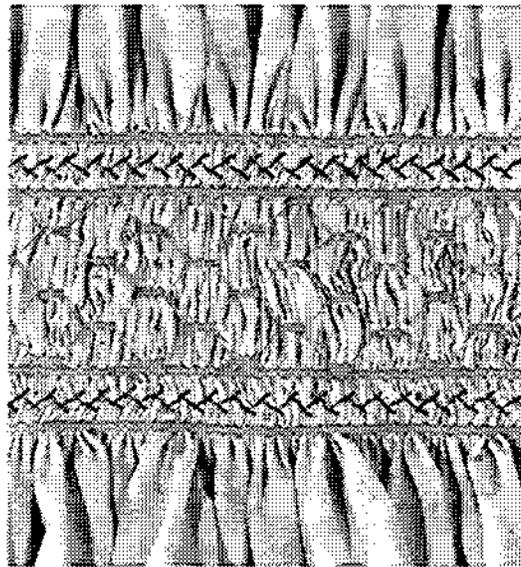
Enjoy sewing!

CONTENTS

1. Getting to Know Your SINGER Sewing Machine	1
Principal Parts and What They Do	1
Accessories	2
2. Getting Ready to Sew	4
Preliminary Steps	4
Threading the Machine	5
Threading the Needle • Winding the Bobbin	
How to Start Sewing	8
Changing the Bobbin	9
3. Adjusting Machine to Your Fabric	11
Choosing Needle and Thread	11
Choosing Accessories	12
Adjusting Dials	16
4. Tips on Straight Stitching	18
Sewing a Seam	18
Pin Basting • Placing Fabric • Keeping Seams Straight • Turning Square Corners • Curved Seams • Reinforcing End of Seam	
5. All About Zig-Zag Stitching	21
Two Kinds of Zig-Zag Stitches	21
Adjusting Dials	22
Setting Pattern Dial • Adjusting Stitch Placement • Adjusting Width of Design • Adjust- ing Needle-Thread Tension • Adjusting Stitch Length	
Satin Stitching	24
6. Twin-Needle Stitching	25
Preparation	25
Threading the Needle	25
Dial Settings	26
Decorative Twin-Needle Stitching	26
Turning a Square Corner	27
7. Temporary Stitching	28
Speed Basting	28
Chainstitching	30
8. Buttons and Buttonholes	35
Buttons	35
Buttonholes	36
Round-End Buttonholes	38
Bar-Tack Buttonholes	40
9. Free-Motion Stitching	41
Flower Embroidery	41
10. Sewing the Professional Way	42
Construction Details	42
Zippers • Darts • Inside Seams of Sheer Collars, etc. • Blindstitch Hems • Corded Seams • Seams in Fabrics that Ravel	
Sewing Knit and Stretch Fabric	48
Stretch Stitch Chart • Guiding and Supporting Fabric • Finishes for Hems and Facings • Plain Stretch Seams • Lingerie Seams • Overedged Seams	
Decorative Touches	52
Top Stitching • Shell Edging • Applique • Monograms and Motifs • Fagoting • Patch- work Quilting • Drawn-Thread Work • Smocking	
Keeping Up Appearances	58
Mending • Darning • Blanket Binding • Growth and Shrinkage Tucks • Belt Carriers and Stay Chains	
11. Caring for Your Sewing Machine	62
Cleaning the Machine	62
Removing Covers, Bobbin Case, and Bulb	63
Performance Check List	66
12. Fashion* Aids	67
Index	70



Monogram for a pocket or collar



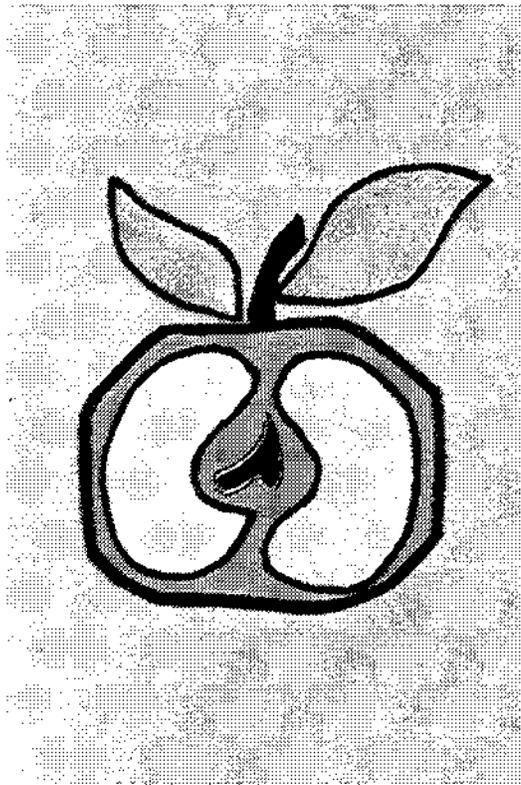
Smocking for a dress or blouse

Beauty and individuality

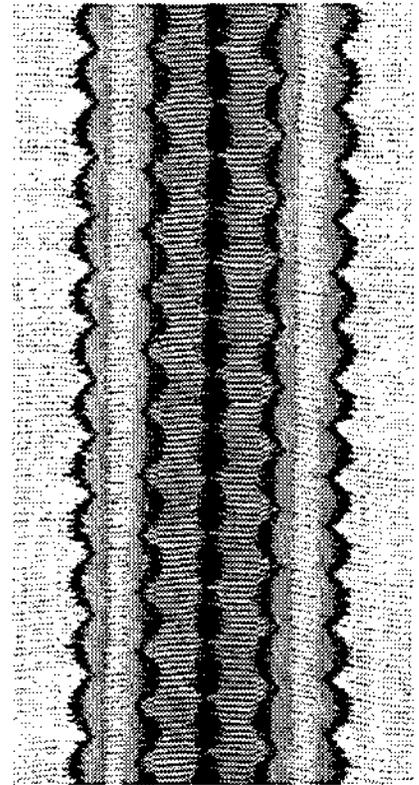
In fashions and home decorations are yours with your *Touch & Sew* sewing machine. Shown here are just a few ideas for creative, decorative stitching. You will think of many more as you become familiar with the versatile capability of your new machine.



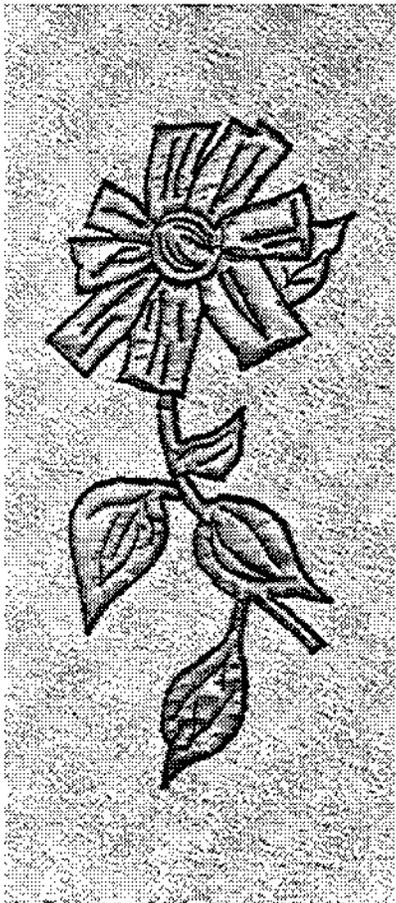
Flower motif for a placemat



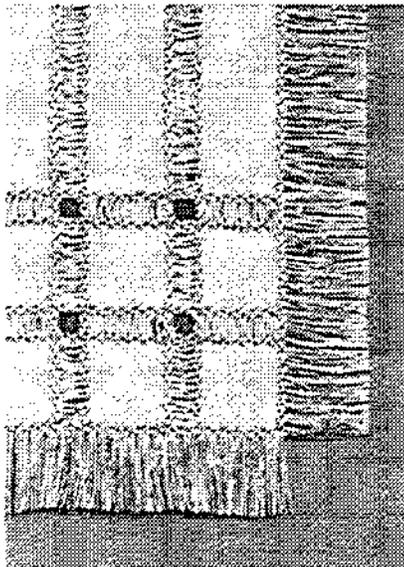
Appliqué for child's dress, pillow or placemat



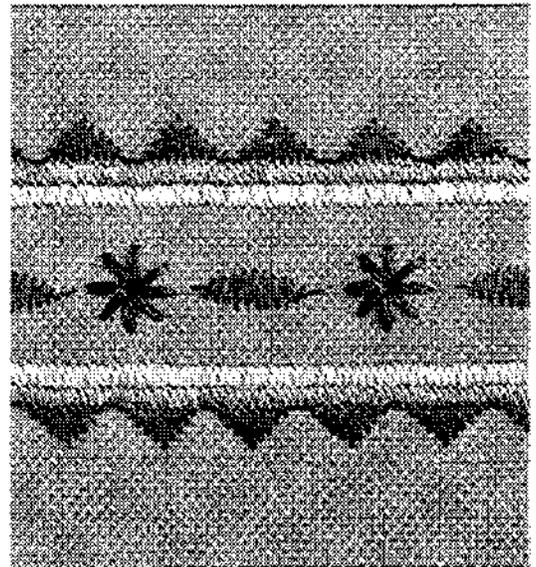
Border for blouse, dress or placemat



Flower motif for towel

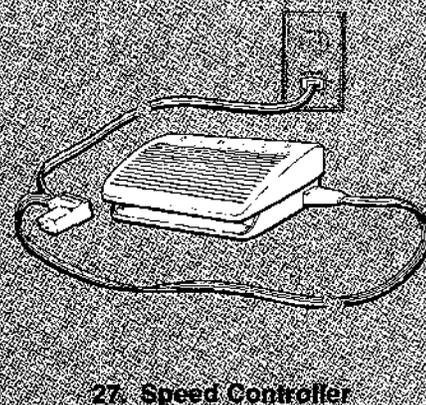
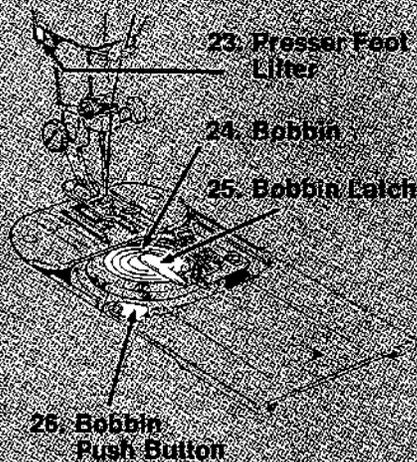
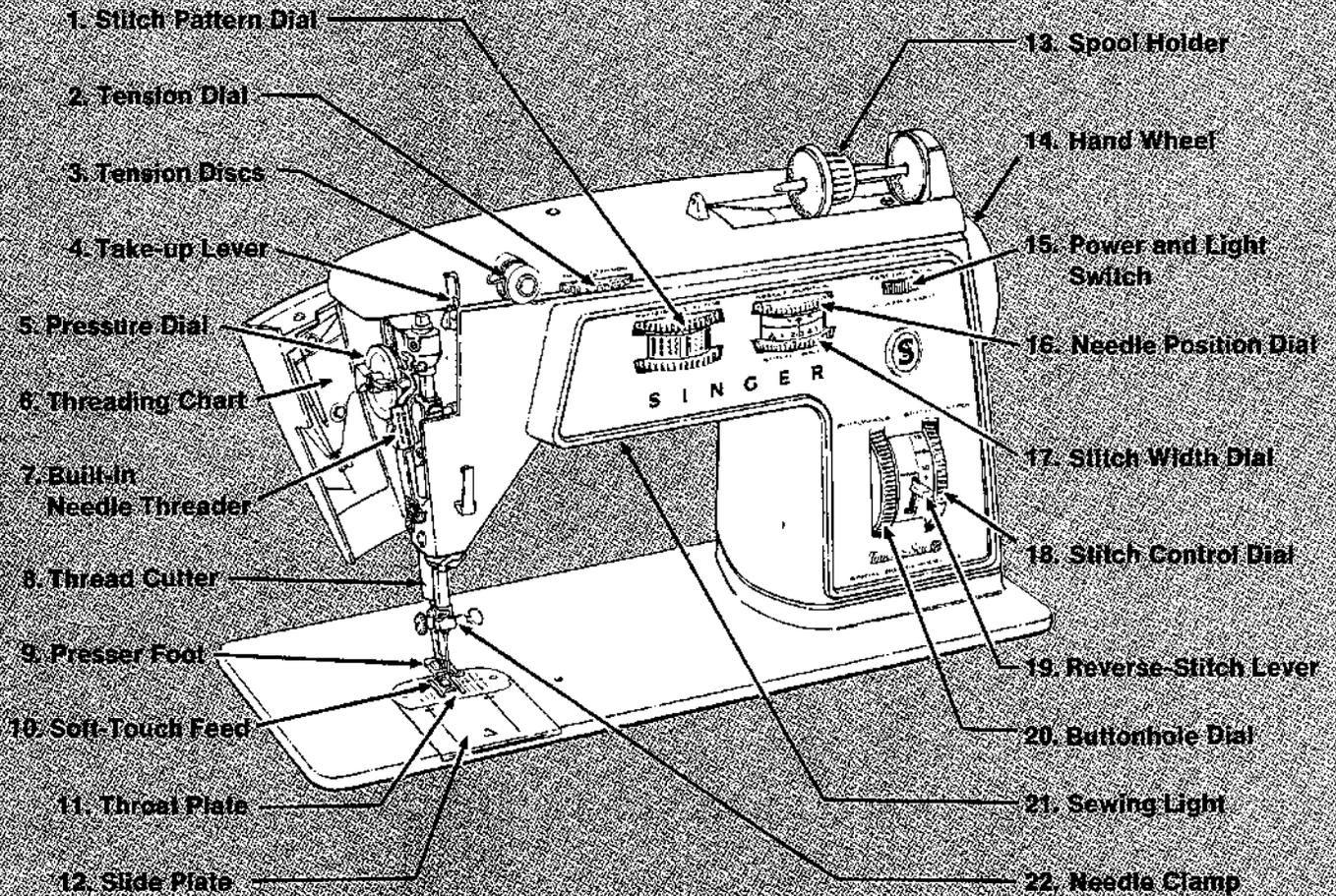


Draw-thread work for table linen



Border design for clothing or table linen

1. GETTING TO KNOW YOUR MACHINE



principal parts and what they do

- 1. Stitch Pattern Dial** can be set to produce either a smooth straight stitch, a decorative or practical zig-zag stitch, or speed basting.
 - **To select a pattern**, push in dial and turn it to bring setting desired between red lines.
- 2. Tension Dial** lets you select just the right tension for your stitch, thread and fabric. The MWWWWWWW and ----- symbols indicate approximate ranges for zig-zag and straight stitching. The numbers eliminate guesswork in duplicating settings.
 - **To increase tension**, turn dial to bring higher number under ▼ .
 - **To decrease tension**, turn dial to bring lower number under ▼ .
- 3. Tension Discs**, controlled by the tension dial, regulate the amount of tension on your needle thread.
- 4. Take-up Lever** controls flow of needle thread. Self-threading eyelet simplifies and speeds threading of machine.
- 5. Pressure Dial** regulates presser-foot pressure on fabric. It has an all-purpose sewing setting (**NORM**) plus settings for extra-light (**DARN**) and extra-heavy (**MAX**) pressure. Intermediate notched settings are also provided.
 - **To increase pressure**, lower presser foot and turn dial from **NORM** toward **MAX**.
 - **To decrease pressure**, lower presser foot and turn dial from **NORM** toward **DARN**.
 - **For darning**, lower presser foot and set dial on **DARN**.
- 6. Threading Chart** on swing-open face plate is convenient, easy to read.
- 7. Built-in Needle Threader** allows you to thread the needle easily and conveniently.
- 8. Thread Cutter** is built into presser bar for safety and convenience.
- 9. Presser Foot** holds fabric against feed. The most commonly used feet snap off for quick removal.
- 10. Soft-Touch Feed** moves fabric under presser foot. Soft surface does not injure fabric, even the most delicate.
- 11. Throat Plate**, secured by magnets, lifts out for removal. Numbered guidelines on right and left sides of plate help you keep seams straight.
- 12. Slide Plate** opens easily, lets you see bobbin. Releases bobbin push button from winding to sewing position when closed. Seam guidelines (extended from throat plate) have cross lines to help you turn square corners.
- 13. Friction-Free Spool Holder** with horizontal pin holds spools of various sizes; holder lets thread unwind without tug or drag. The spool does *not* turn.
- 14. Hand Wheel** controls movement of take-up lever and needle. Always turn it *toward you*.

- 15. Power and Light Switch** turns on machine and sewing light simultaneously. **FAST** and **SLOW** speed range settings let you choose the best sewing speed for your work.
- 16. Needle Position Dial** places needle in either **L** (left), **▲** (center) or **R** (right) stitching position.
- **To set needle position**, turn dial to bring setting desired under red line.
- 17. Stitch Width Dial** controls the width of zig-zag stitching and positions the needle for bobbin winding and straight stitching.
- **To set stitch width**, turn dial to bring setting desired under red line. Use setting **▲** for straight stitching and bobbin winding.
- 18. Stitch Control Dial** allows for a variety of stitch lengths, including **FINE** for zig-zag satin stitching. Has special settings for buttonholing and *Flexi-Stitch* patterns.
- **To set**, turn dial until setting desired is under red line.
- 19. Reverse-Stitch Lever** instantly reverses the stitching direction at the touch of your finger.
- **To reverse stitching**, press lever all the way down and hold in place. Release lever for forward stitching.
- 20. Buttonhole Dial**, with two simple settings, controls steps in sewing round-end buttonholes. *Dial must be in OFF position when not in use.*
- **To set**, turn dial *downward* until buttonhole symbol for Step 1 or Step 2 is under the red line.
- 21. Built-in Sewing Light** illuminates sewing area. Pull-down bracket makes it easy to replace bulb.
- 22. Needle Clamp** holds single and twin needles. It is designed to make needles self-setting and eliminates the possibility of inserting needle backwards.
- 23. Presser Foot Lifter**, at back of machine, allows you to raise and lower presser foot. Extra-high lift position permits easy placement of bulky fabrics.
- 24. Transparent Bobbin** shows thread supply. Two halves can be unscrewed to remove unwanted thread.
- 25. Bobbin Latch** holds bobbin in place. Flips up at the touch of your finger for easy bobbin removal.
- 26. Bobbin Push Button** allows you to switch from sewing to bobbin winding without removing bobbin.
- 27. Electrical Connections and Speed Controller** are designed for your convenience and safety.
- **To run the machine and control speed**, press the speed controller. The harder you press, the faster the machine will sew within the speed range you select.
 - **To stop the machine from sewing**, remove pressure from speed controller.

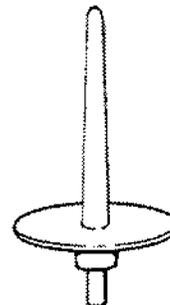
accessories

The accessories that come with your *Touch & Sew* sewing machine are designed to help you do many kinds of sewing easily and perfectly.

To increase the versatility of your machine, additional accessories can be purchased at your Singer store. See pages 67 to 69.



Transparent Bobbin



Vertical Spool Pin



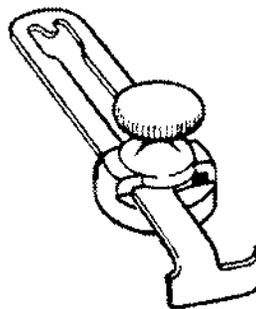
Regular Needle



**Ball Point
(Yellow Band) Needle**



Twin Needle



**Seam and Blindstitch
Hem Guide**



Lint Brush

1. BOBBINS

- One transparent drop-in bobbin in machine.
- Three extra transparent drop-in bobbins.

2. NEEDLES

- Catalog 2020 (15x1) needle in your machine.
- Catalog 2020 (15x1) needles, for all-purpose sewing.
- Catalog 2045 ball-point (yellow band) needles, for sewing synthetic knits and stretch fabrics.
- Catalog 2028 needle, for twin-needle decorative stitching.

3. VERTICAL SPOOL PIN

- One vertical spool pin for decorative twin-needle stitching.

4. SEAM AND BLINDSTITCH HEM GUIDE

- One guide to help you stitch seams and blindstitch hems of uniform width.

5. LINT BRUSH

- One lint brush for cleaning your sewing machine.

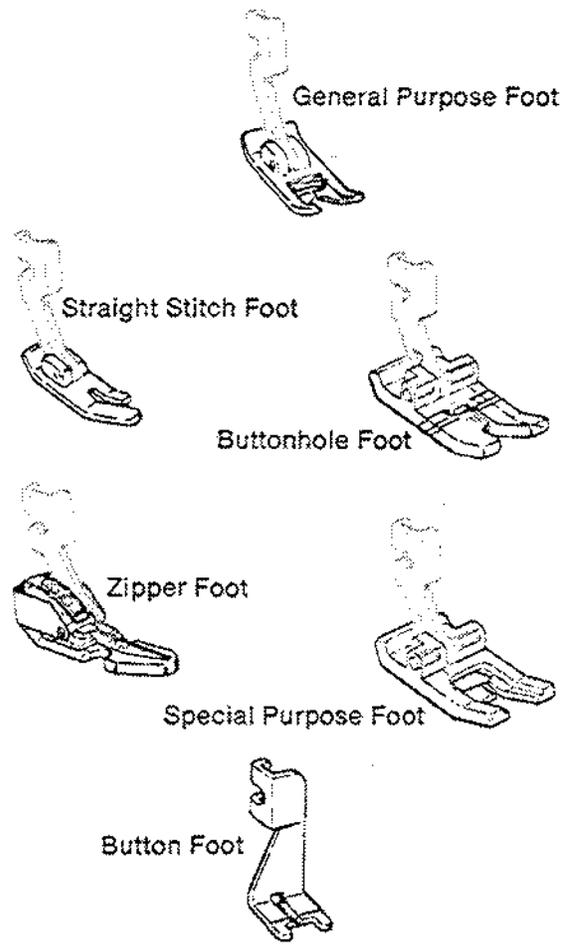
6. PRESSER FEET

- The general purpose foot on your machine.
- Additional interchangeable snap-on presser feet:

Straight stitch foot for close fabric control
 Zipper foot for inserting zippers and stitching corded seams
 Special purpose foot for all kinds of decorative zig-zag stitching
 Buttonhole foot to make round-end buttonholes

- A one-piece button foot to hold buttons securely for stitching

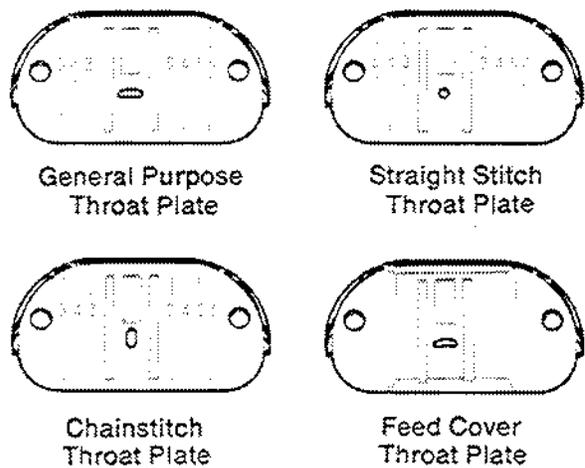
Presser Feet



7. THROAT PLATES

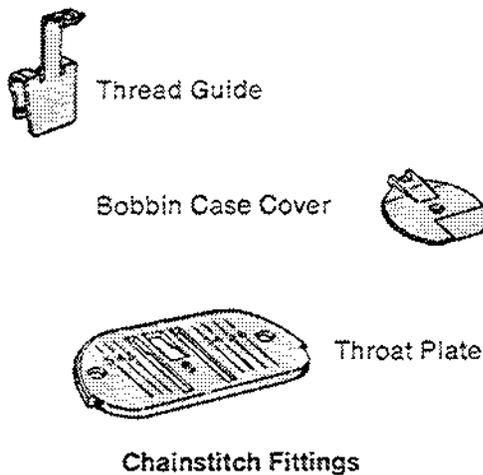
- The general purpose throat plate in place on machine.
- The straight-stitch throat plate for use with the straight stitch foot.
- The chainstitch throat plate for single-thread chainstitching.
- The feed cover throat plate for button sewing and free-motion work.

Throat Plates

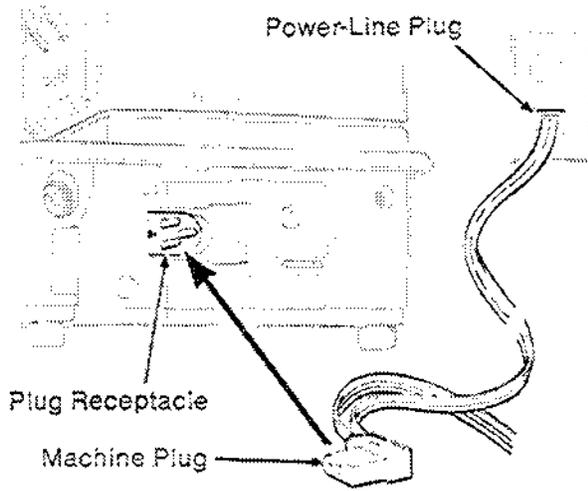


8. CHAINSTITCH FITTINGS

- One set of three fittings:
 Bobbin case cover
 Throat plate (listed above)
 Thread guide



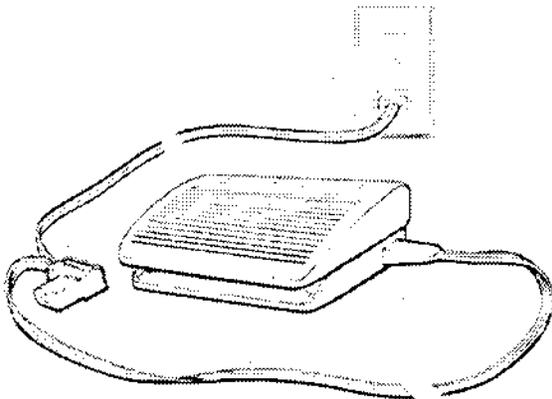
GETTING READY TO SEW



Electrical Connections



Power and Light Switch



Speed Controller

preliminary steps

1. CONNECTING MACHINE

Before plugging in your machine, be sure that the voltage and number of cycles indicated at the right end of the machine conform to your electrical power supply.

Push the machine plug into the machine receptacle. Then connect the power-line plug to your electrical outlet.

2. OPERATING MACHINE AND CONTROLLER

To turn on both the machine and sewing light and set speed range, slide the power and light switch to the selected range.

- The **FAST** setting allows for full speed capacity of the machine. It is best for long, straight seams, easy-to-handle fabrics, and general sewing where a variety of speeds are needed.
- The **SLOW** setting allows for maximum control at lower sewing speeds. Use this setting for special jobs such as button sewing, buttonhole making, and where intricate construction details require close control.

CAUTION: We recommend that you turn off the power and light switch before changing needles, presser feet or throat plates and when leaving the machine unattended. This eliminates the possibility of starting the machine by accidentally pressing the speed controller.

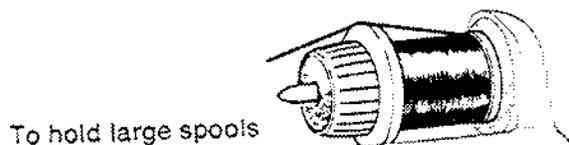
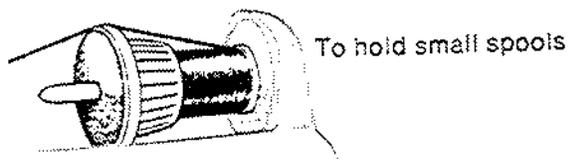
To run the machine, press the speed controller (or knee lever). The harder you press, the faster the machine will sew within the selected speed range.

threading the machine

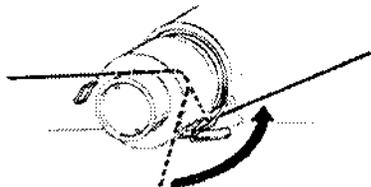
Spools of various sizes are held firmly on the horizontal spool pin with the spool holder. Slip spool of thread onto spool pin and press holder firmly against spool so that thread unwinds from a stationary spool.

To hold small spools — press *small* end of holder against spool.

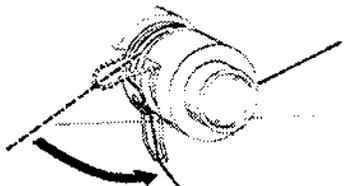
To hold large spools — press *wide* end of holder against spool.



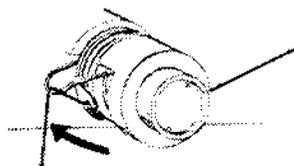
With two hands, slip thread horizontally *between* tension discs from the top.



With right hand, lead thread *under* thread guide on right side . . .

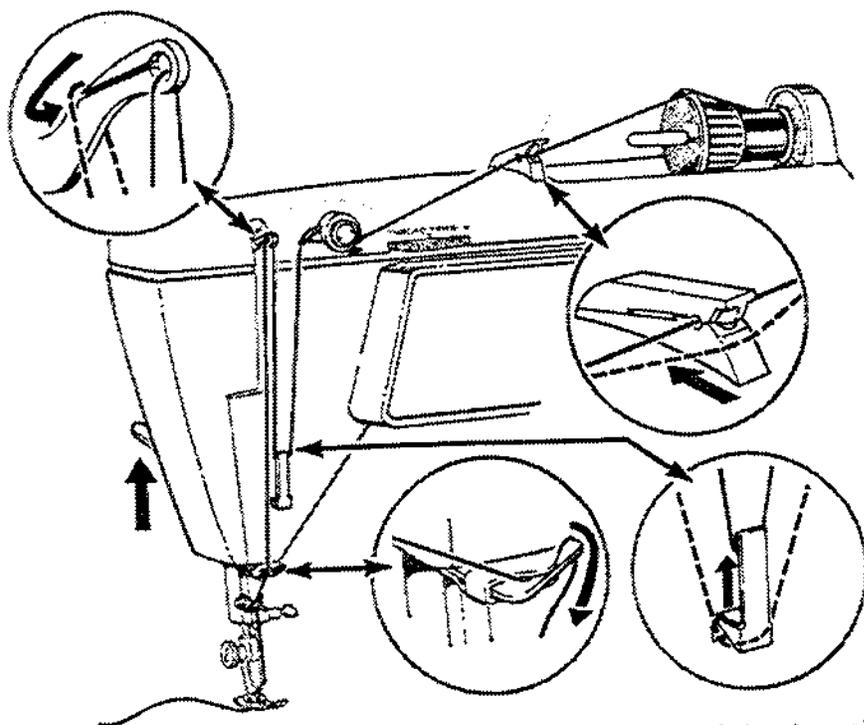


. . . and, with left hand, lead thread over spring and *under* guide on left side.

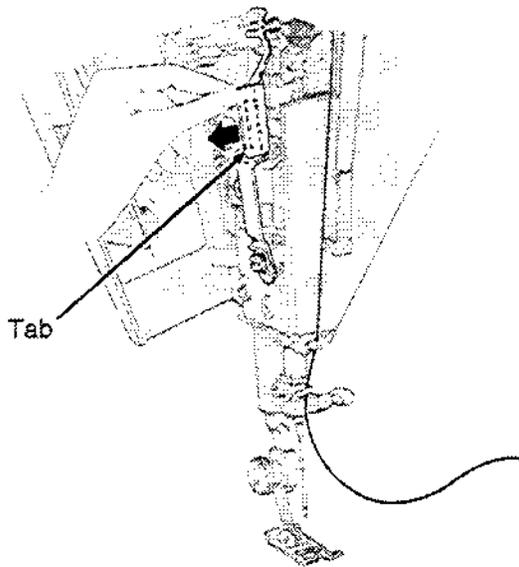


Allow spring to return to its normal up position and continue threading the machine.

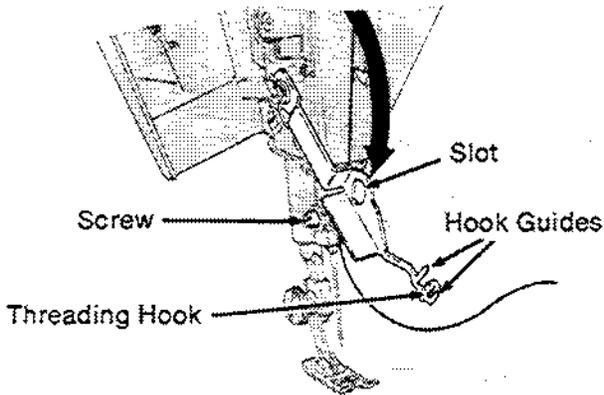
THREADING THE NEEDLE



1. Turn hand wheel to raise take-up lever to its highest position, and *raise presser foot to release the tension discs.*
2. Lead thread through all points as shown, making sure to:
 - Use both hands and snap thread horizontally into thread guide-post, making sure it enters eyelet. *Fine thread should be doubled for added strength.*
 - Thread tension discs as illustrated.
 - Thread take-up lever from *back* to *front*, guiding thread down over top of lever and then up into eyelet.
 - Thread needle from *front* to *back*, drawing about four inches of thread through eye of needle.



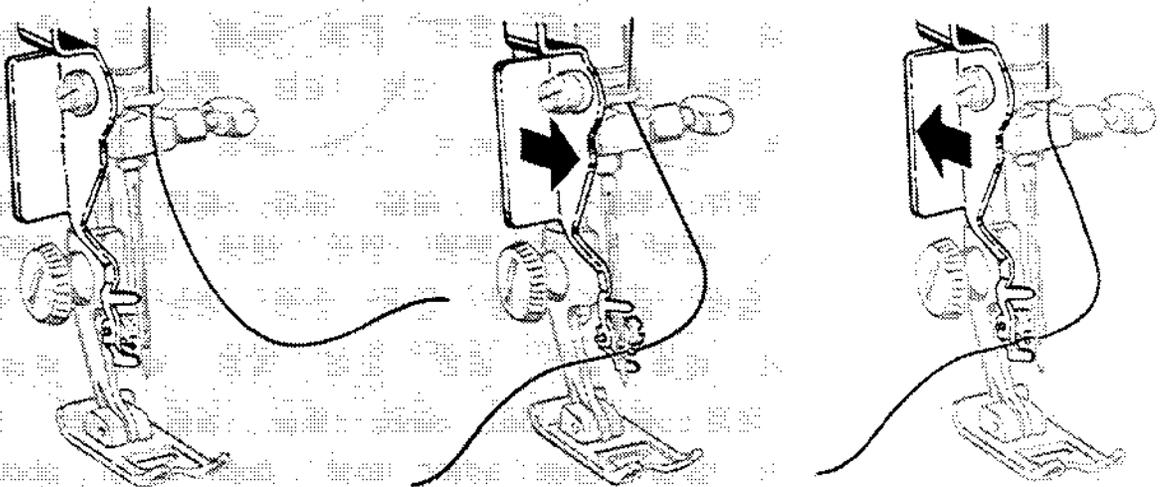
Needle Threader in Storage Position



Lowering Needle Threader

Threading Needle with Built-in Threader

1. Draw approximately five inches of thread through threading points of machine. Be sure to thread the guide above the needle. Then lower the presser bar and raise the needle to its highest position.
2. Open face plate and lower the threader from its storage position by gently pulling the arm out to the left and swinging it down in line with the needle.
3. Position slot in threader arm over screw on needle clamp, bringing threader hook and guides behind the needle.
4. Pull tab toward you so that the upper and lower hook guides straddle the needle (one on either side) and the threading hook comes through the eye of the needle.
5. Place thread across the threading hook, keeping two or three inches of slack thread to the right of the hook and one to two inches to the left. Withdraw hook from needle eye by pushing threader arm gently back and to the left.
6. Release thread from hook *carefully* and return threader to its storage position. Close face plate and raise presser foot.



Drawing Thread Through Needle Eye

WINDING THE BOBBIN

The push-button bobbin will make your sewing go faster than ever before — whether you are using a lot of one kind of thread or small quantities of different threads, as you are likely to do when mending or darning.

You will find a bobbin in place under the slide plate of your machine. (To open slide plate, simply slide it gently toward you.) If the bobbin runs out of thread while you are sewing, you can rewind it without removing it from the machine.

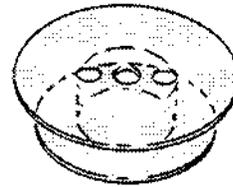
Preparation Steps

Make sure buttonhole dial is in **OFF** position.

1. Use general purpose, special purpose, or straight stitch presser foot.
2. Raise presser foot to release tension on thread, and raise the needle to its highest position. (Make sure your needle is larger than a size 9. See footnote on page 11.)
3. Open slide plate and make sure bobbin is empty. For removal of bobbin and thread, see page 9.
4. Set needle position and stitch width dials at straight stitch setting indicated by ▲ symbols.

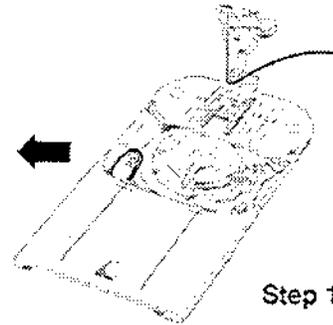
Winding Steps

1. Press bobbin push button to the left to engage it in winding position.
2. Wrap thread around presser foot screw, and hold end of thread firmly.
3. Start the machine.
 - Run the machine at a moderate speed.
 - Pull thread end away after a few coils have been wound.
 - Keep your eye on the bobbin as it fills. *Do not allow thread to wind beyond the outside FULL ring.*
4. Close slide plate to release push button to sewing position. Turn to the next page for instructions on starting to sew.

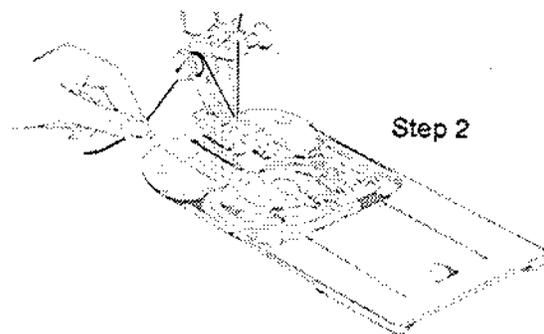


Bobbin

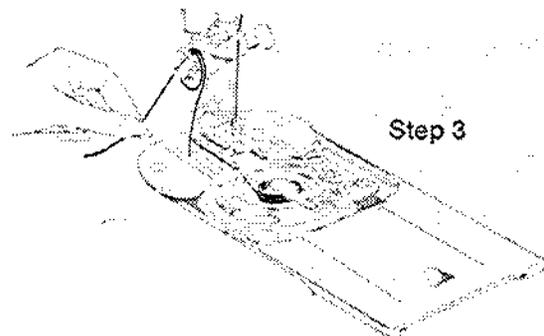
Winding Steps



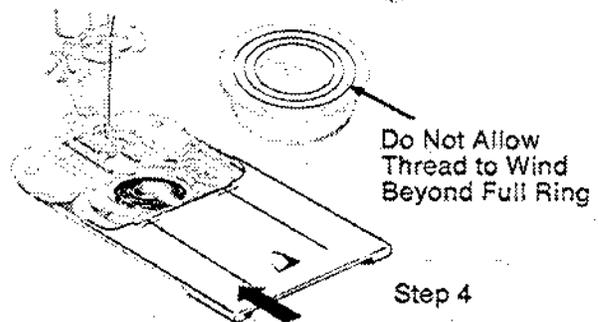
Step 1



Step 2



Step 3



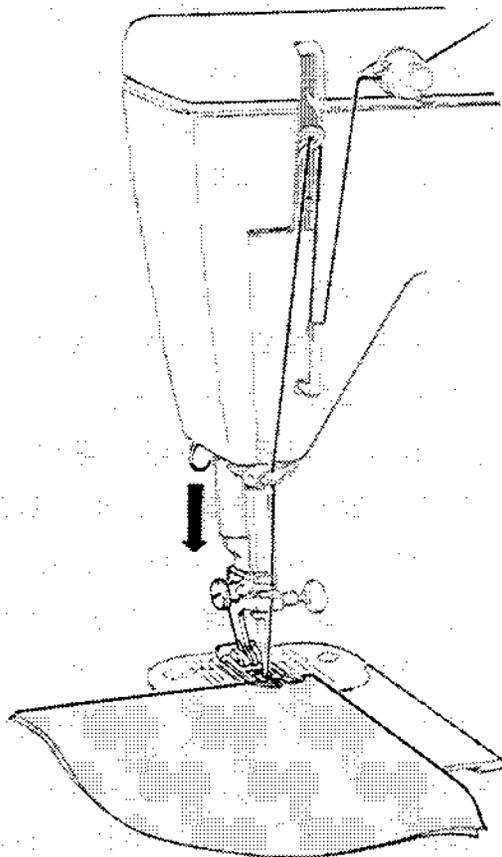
Step 4

how to start sewing

How you begin to sew after winding a bobbin depends on whether your stitching is to start *at* or *away* from the edge of the fabric.

TO START AT FABRIC EDGE

- Position needle in very edge of fabric by turning the hand wheel toward you.
- Lower the presser foot and stitch. The continuous thread, leading from the needle to the bobbin, will "lock" over the fabric edge.

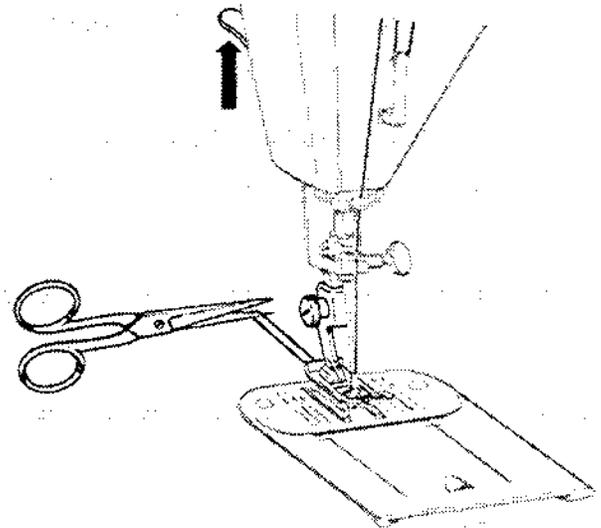


**Starting at Fabric Edge
with a Continuous Thread**

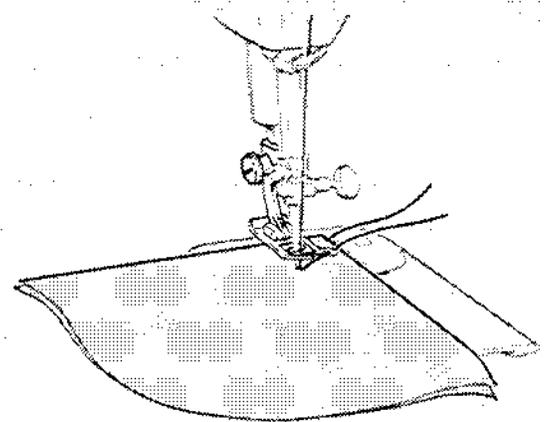
TO START AWAY FROM FABRIC EDGE

- Pull thread back under presser foot and cut.
- Position needle in fabric where desired and stitch.

NOTE: Should the bobbin run out of thread after you have begun a line of stitching, remove the fabric, rewind the bobbin, and follow the two immediately preceding steps.



Cutting Continuous Thread



Starting Away from Fabric Edge

changing the bobbin

REMOVING THE BOBBIN

Raise needle to its highest position.

1. Open slide plate; leave bobbin push button in sewing position.
2. Raise bobbin latch by inserting fingernail under end of latch at center of bobbin.
3. Insert fingernail under rim of bobbin immediately to right of latch and remove the bobbin.

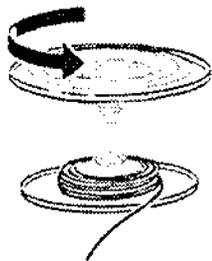
REPLACING AN EMPTY BOBBIN

1. Make sure bobbin halves are securely tightened.
2. With latch raised, slip bobbin (wide side up) into bobbin case. Then snap latch down to secure bobbin.
3. Leave the slide plate open until you have finished winding.

REMOVING THREAD FROM BOBBIN

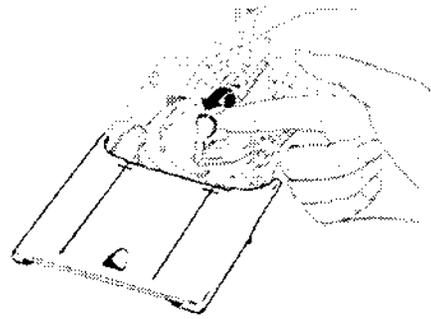
If there is not much thread left on the bobbin, you do not need to remove bobbin from machine — simply pull the thread end through the throat plate.

If there is a lot of thread left and you do not wish to reserve it by setting aside the bobbin for future use, remove the bobbin, unscrew the two halves, and remove all the thread at once.

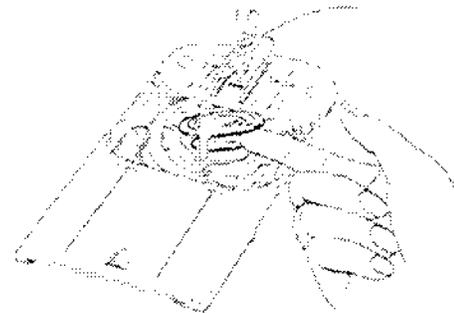


Removing Thread from Bobbin

Removing Bobbin

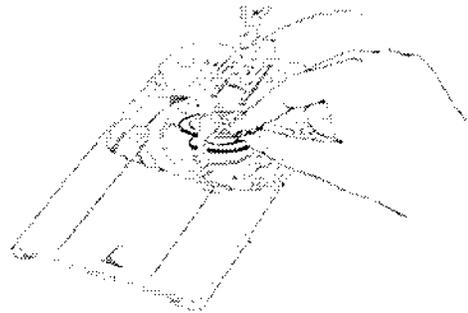


Open Slide Plate and Raise Latch

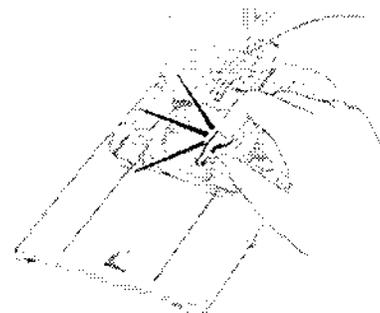


Lift Out Bobbin

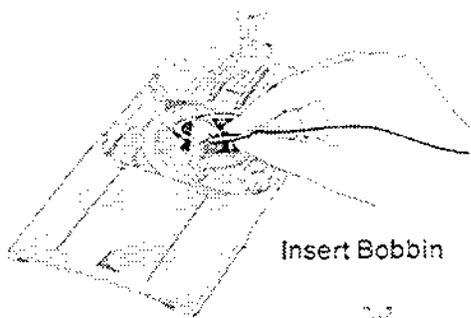
Replacing Empty Bobbin



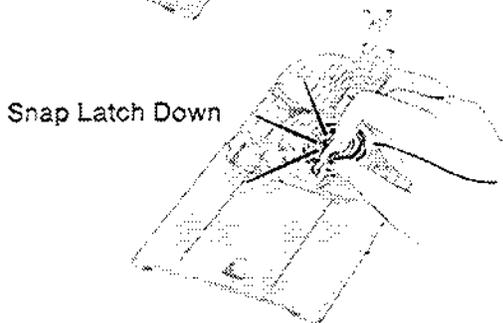
Slip Bobbin into Case



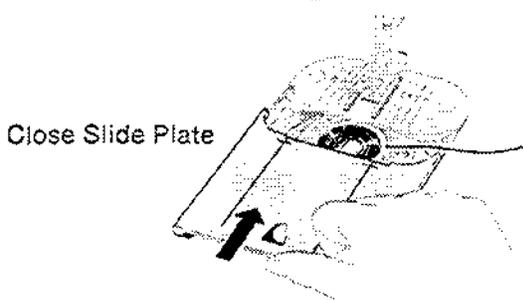
Snap Latch Down



Insert Bobbin



Snap Latch Down



Close Slide Plate

Replacing a Wound Bobbin

REPLACING A WOUND BOBBIN

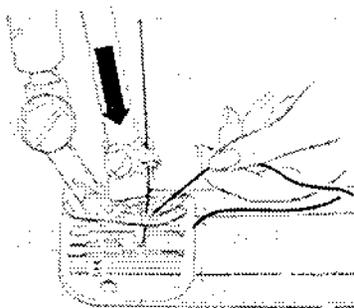
Raise needle to its highest position.

1. Open slide plate; leave bobbin push button in sewing position.
2. Draw three or four inches of thread from bobbin and place bobbin in case with thread leading off to right side of latch. Snap latch down to secure bobbin.
3. Close slide plate, allowing the thread to enter the slot in the slide plate. Then raise the bobbin thread.

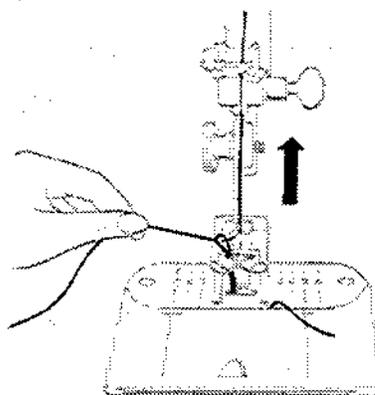
RAISING THE BOBBIN THREAD

1. Hold needle thread lightly with left hand and turn hand wheel slowly toward you so that needle enters throat plate.
2. Continue turning hand wheel until needle rises and brings up bobbin thread in a loop.
3. Undo the loop and place both threads under the presser foot, laying them diagonally to the right. Position needle in fabric where desired, lower the presser foot and stitch.

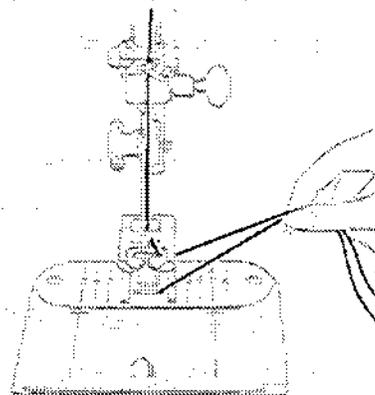
Raising the Bobbin Thread



Step 1



Step 2



Step 3

3. ADJUSTING MACHINE TO YOUR FABRIC

choosing needle and thread

The needle and thread you choose will depend upon the fabric being stitched. The table below is a practical guide to needle and thread

selection. Refer to it before starting a sewing project. Be sure to use the same size and type of thread in both needle and bobbin.

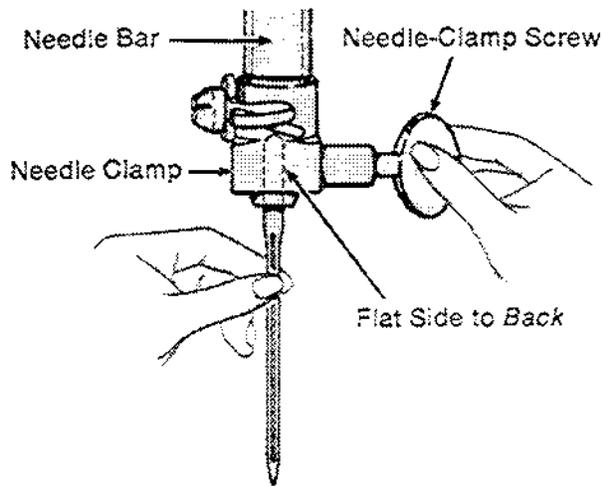
FABRIC, THREAD AND NEEDLE TABLE†

FABRIC	THREAD	NEEDLES	
		TYPE	SIZE
DELICATE — tulle, chiffon, fine lace, organza	Fine mercerized cotton Fine synthetic thread	CATALOG 2020 (15x1)	9††
LIGHTWEIGHT — batiste, organdy, jersey, voile, taffeta, crepe, chiffon velvet, plastic film	50 mercerized cotton "A" silk Synthetic thread Polyester core/cotton	CATALOG 2020 (15x1)	11
MEDIUM WEIGHT — gingham, percale, pique, linen, chintz, faille, satin, fine corduroy, velvet, suitings, knits, deep pile fabrics, vinyl	50 mercerized cotton 60 cotton "A" silk Synthetic thread Polyester core/cotton	CATALOG 2020 (15x1)	14
MEDIUM HEAVY — gabardine, tweed, sailcloth, denim, coatings, drapery fabrics, vinyl, deep pile fabrics	Heavy-duty mercerized cotton 40 to 60 cotton Synthetic thread	CATALOG 2020 (15x1)	16
HEAVY — overcoatings, dungaree, upholstery fabrics, canvas	Heavy-duty mercerized cotton 24 to 40 cotton Synthetic thread	CATALOG 2020 (15x1)	18
ALL WEIGHTS — decorative top stitching	"D" silk††† (Buttonhole twist)	CATALOG 2020 (15x1)	18
SYNTHETIC KNITS AND STRETCH FABRICS — polyester double knit, nylon tricot, jersey, spandex, cire tricot, panne velvet	"A" nylon 50 mercerized cotton "A" silk Polyester core/cotton	CATALOG 2045 Ball Point (Yellow Band)	14
LEATHER — suede, kidskin, capeskin, lambskin, lined leathers	50 mercerized cotton Synthetic thread "A" silk Polyester core/cotton	CATALOG 2032 (15x2)	11 14 16
LIGHT AND MEDIUM WEIGHTS — decorative twin-needle stitching	50 mercerized cotton	CATALOG 2028 (twin)	14

†Does not apply to chainstitching.

††Size 9 needle recommended for sewing only. For bobbin winding use larger size needle.

†††Use with 50 mercerized cotton or "A" silk in bobbin.



Changing the Needle

NEEDLES

The needle you use should be straight to ensure perfect stitch formation and needle penetration through the fabric. The needle should also be fine enough to prevent the fabric from being marred with large punctures, yet heavy enough to pierce the fabric without being bent or deflected. Remember, too, that the eye of the needle must be large enough for the thread to pass through freely; too fine a needle will cause the thread to fray.

Changing the Needle

1. Raise needle bar to its highest point, loosen needle-clamp screw, and remove needle.
2. Insert new needle in clamp, *with the flat side of the needle to the back*; push it up as far as it will go.
3. Tighten needle-clamp screw.

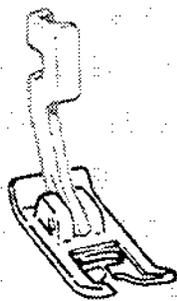
choosing accessories

The type of sewing you plan to do will determine which presser foot and throat plate you should use.

PRESSER FEET

Three Most Used Presser Feet

General purpose foot is used with the general purpose throat plate for all utility sewing and some decorative zig-zag stitching. These general purpose accessories *must* be used together when alternating between straight and zig-zag stitching.



General Purpose Foot

Straight stitch foot is used with the straight stitch throat plate when your fabric or sewing procedure requires close control. Use for:

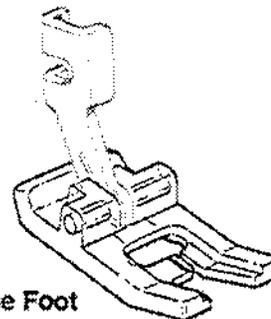
- Precision stitching of curved edges, top stitching, edge stitching, etc.
- Stitching delicate or spongy fabrics.

Special purpose foot is used with the general purpose throat plate for all kinds of decorative zig-zag stitching. The raised center section of the foot allows closely spaced zig-zag stitching to feed freely while the toe holds fabric firmly for straight line feeding. Use for:

- Ornamental stitching, bar-tack buttonholes, applique, satin stitching.



Straight Stitch Foot



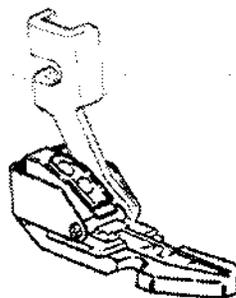
Special Purpose Foot

Presser Feet for Special Sewing Needs

Zipper foot is used to place stitching close to a raised edge. Thus, it is useful for corded seams (page 46) as well as zipper insertion (page 42). It can be fitted to the presser foot shank for use on either the right or left side of the needle.

Button foot holds any two-hole or four-hole button securely for stitching. The groove in the foot can be used to hold a needle, over which a thread shank can be formed. For instructions, see page 35.

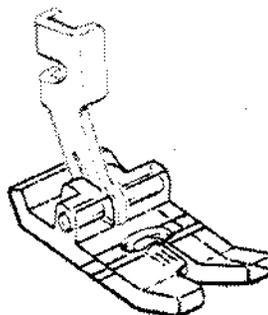
Buttonhole foot, a snap-on transparent foot, is used to make two-step, round-end buttonholes in fabrics of light to medium weight. The guidelines on the sole plate simplify buttonhole placement and make it easy to gauge buttonhole length. For instructions, see page 38.



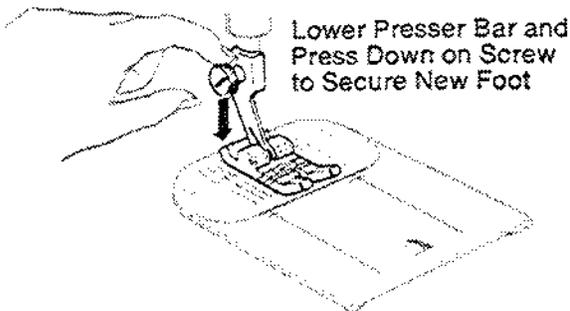
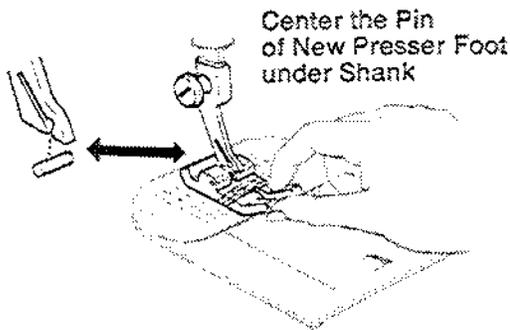
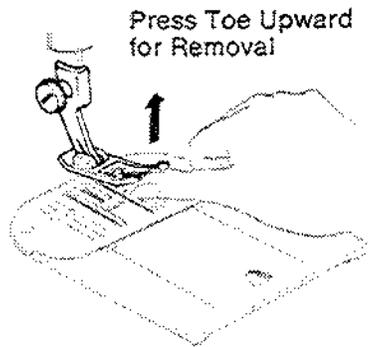
Zipper Foot



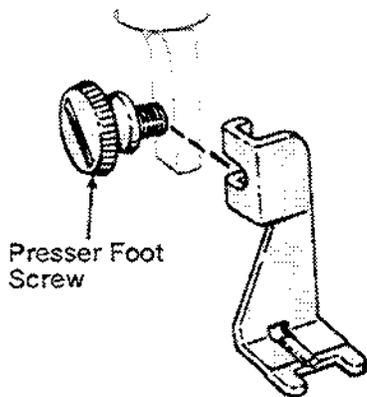
Button Foot



Buttonhole Foot



Changing Snap-on Presser Feet



Changing One-Piece Presser Foot

CHANGING PRESSER FEET

Snap-on Presser Feet

These presser feet snap on and off a common shank.

1. Raise needle to its highest position and raise the presser foot.
2. Press toe of presser foot upward (as far as it will go) and then snap down to remove.
3. Center the new presser foot under the shank and lower the presser bar so that the shank fits over the presser foot pin.
4. Press down on presser foot screw until foot snaps into place.

To remove and replace shank of snap-on presser feet, follow instructions below for one-piece presser feet.

One-Piece Presser Feet

1. Raise needle to its highest position and raise the presser foot.
2. Loosen presser foot screw and remove the foot.
3. Hook new foot around the presser bar and tighten presser foot screw.

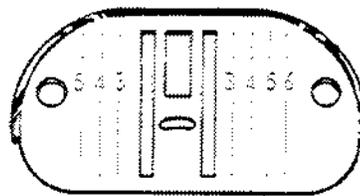
THROAT PLATES

General purpose throat plate, in place in your machine, can be used with all presser feet.

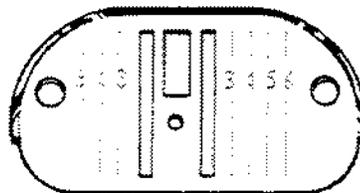
Straight stitch throat plate for use with the straight stitch presser foot.

Chainstitch throat plate is one of three chainstitch fittings that must be used together. For instructions, refer to "Chainstitching" beginning on page 30.

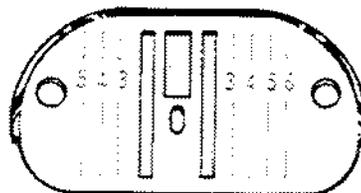
Feed cover plate for use when fabric feeding is not desired.



General Purpose Throat Plate



Straight Stitch Throat Plate

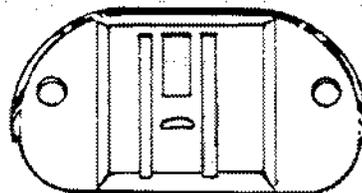


Chainstitch Throat Plate

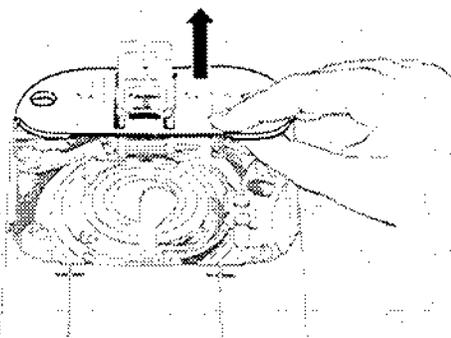
CHANGING THROAT PLATE

(NOTE: Remove bobbin if it contains thread in order to prevent thread being caught when throat plate is replaced.)

1. Raise needle to its highest point and raise presser foot.
2. Open slide plate. Remove throat plate by placing thumb under plate and lifting it up and out.
3. Position new throat plate over the two pins and release. (Throat plate is drawn into position by magnets.)
4. Close slide plate.

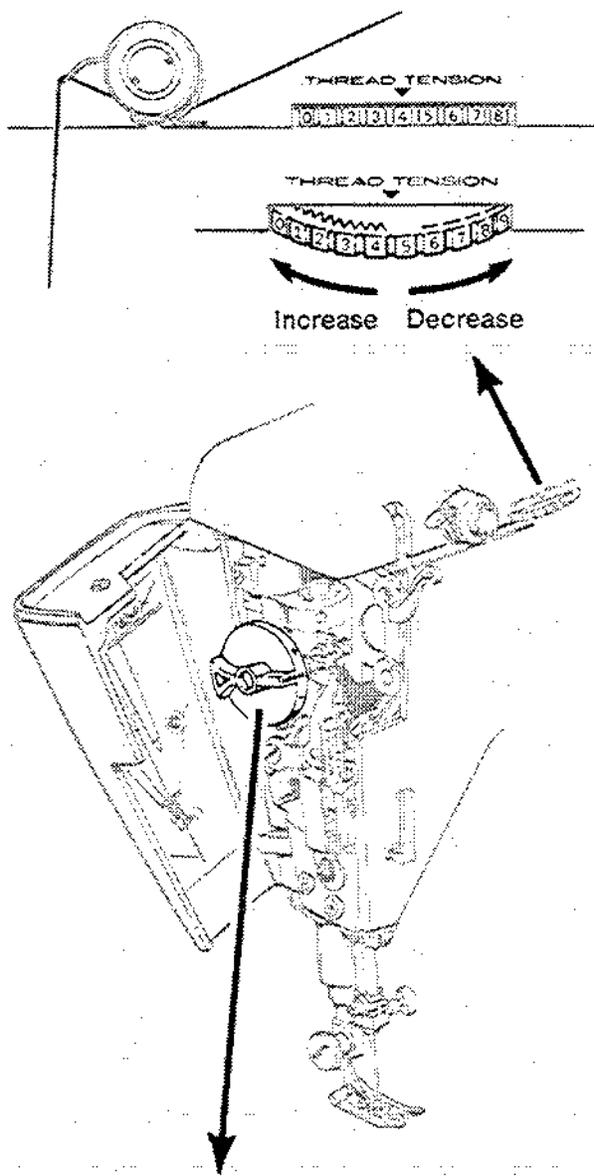


Feed Cover Plate

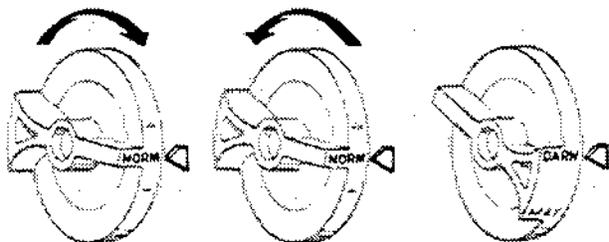


Changing Throat Plate

Needle-Thread Tension



Pressure Dial



Increase

Decrease

Darning

adjusting dials

REGULATING NEEDLE-THREAD TENSION

The tension dial regulates the degree of tension on your needle thread and lets you select just the right setting for your stitch, thread, and fabric. The and symbols indicate approximate tension ranges for zig-zag and straight stitching. The numbers eliminate guesswork in duplicating settings.

Correct tension is important because too much or too little will weaken your seams or mar the appearance of decorative work. To obtain the correct tension setting, make a test on a sample of your fabric. If the fabric puckers, decrease tension. If the stitches look loose, increase tension.

- To increase tension, turn dial to a higher number.
- To decrease tension, turn dial to a lower number.

NOTE: The tension dial controls needle-thread tension only. Bobbin-thread tension has been correctly set at the factory, and you do not need to adjust it.

REGULATING PRESSURE

The pressure dial regulates the pressure that the presser foot exerts on the fabric. Correct pressure is important because it means fabric feeds smoothly and evenly. The **NORM** (normal) setting is an all-purpose setting that can be used for sewing a wide variety of fabrics of different weights and textures. Intermediate notched settings, above and below **NORM** (normal), are also provided. When you need extra control to sew very heavy fabric, use the **MAX** (maximum) setting.

Lower the presser foot before setting pressure.

- To increase pressure, turn dial from **NORM** toward **MAX**.
- To decrease pressure, turn dial from **NORM** toward **DARN**.
- For darning, set dial on **DARN**.

SETTING STITCH LENGTH

The stitch control dial regulates the length of both straight and zig-zag stitches. The numbers 6 to 20 represent the number of straight stitches per inch: *the higher the number, the shorter the stitch*. Generally, shorter stitches are best for lightweight fabric; longer ones for heavy fabric. Curved seams, bias cut seams, and scallops require short straight stitches (15 to 20) for elasticity and smooth contours. Bound buttonholes should be sewn with a short stitch for durability and strength.

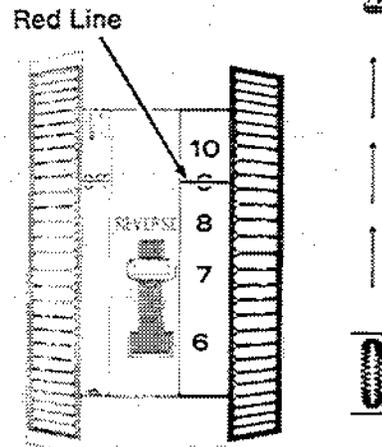
The **FINE** area, above 20, is used for the adjustment of zig-zag satin stitching (page 24) and speed basting (page 28).

When you are using a *Flexi-Stitch* pattern (refer to stitch pattern chart on page 21), the ☺ setting controls stitch length: once set, no further adjustment is necessary.

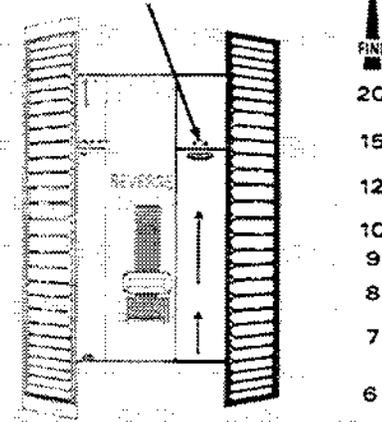
- **To set stitch control**, turn dial until setting desired is under the red line.

For reverse stitching, simply press reverse-stitch lever all the way down and hold in place. (Lever can be moved while machine is sewing.) Release lever for forward stitching.

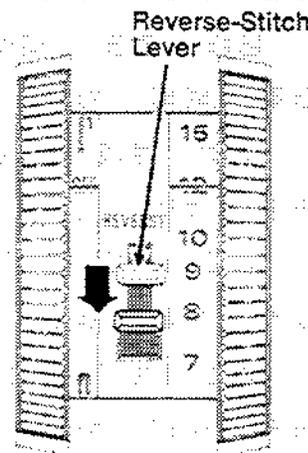
Stitching cannot be reversed when stitch control dial is set on ☺.



Setting for *Flexi-Stitch* Patterns

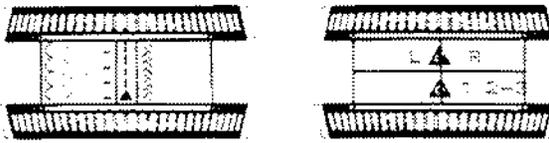


Stitch Control Dial



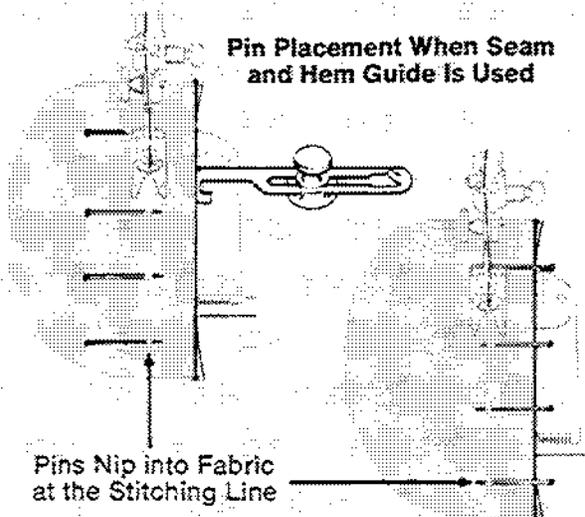
4 TYPES ON STRAIGHT STITCHING

To sew a straight stitch, set dials on black ▲ symbols.



- Set the stitch-control dial on a black number.
- Choose presser foot and throat plate to suit fabric and sewing procedure.

For information on straight stretch stitching, see pages 48 and 50.



sewing a seam

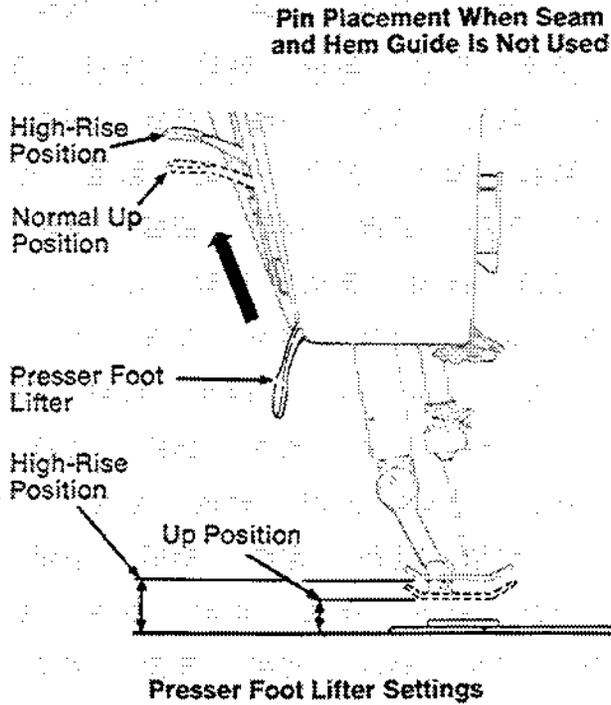
PIN BASTING

Pin basting is a time saver and can be used in place of hand or machine basting when you are straight stitching seams in easy-to-handle fabric.

Use fine pins and place them so that:

- They are at right angles to the presser foot and just nip into the fabric at the stitching line.
- They do not extend under both sides of the presser foot. *Never place pins on the underside of the fabric in contact with the feed.*

For information on speed basting by machine, turn to page 28.



PLACING FABRIC

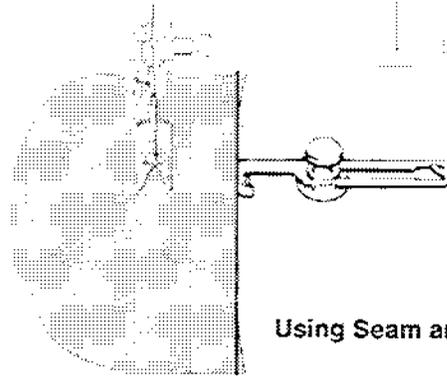
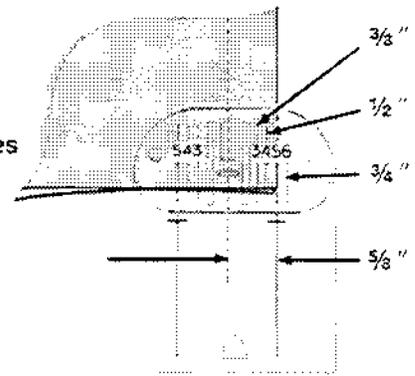
Most fabric can be placed under the presser foot by raising the presser foot lifter to its normal up position. When placing bulky fabrics, such as coating, knit or terry cloth, or multiple fabric layers, you will find it convenient to raise the presser foot lifter to the high-rise position. Hold lifter in position (since it does not lock) while placing fabric under the presser foot. Make sure the lifter is all the way down before starting to sew.

KEEPING SEAMS STRAIGHT

To keep the seam straight, use one of the numbered guidelines on the throat plate. The numbers indicate distance, in eighths of an inch, from the needle. If you want a $\frac{5}{8}$ -inch seam, for example, line up your fabric with the number 5 guideline. Note that both number 5 guidelines (the most commonly used) are extended on the slide plate for your convenience: the crosslines serve as cornering guides when stitching a square corner.

For extra help in keeping the seam straight, you may wish to use the seam and hem guide. Because it allows you to guide stitches between $\frac{1}{8}$ inch and $1\frac{1}{4}$ inches from the fabric edge, it is particularly useful for very narrow or unusually wide seams.

Using Guidelines



Using Seam and Hem Guide

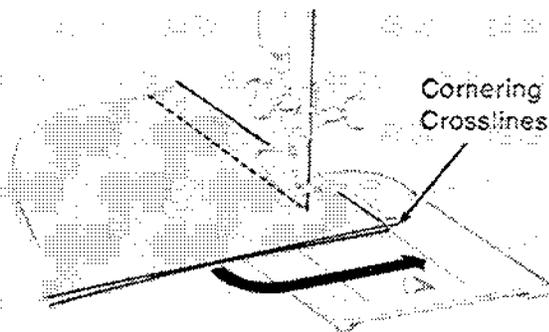
TURNING SQUARE CORNERS

To turn a square corner $\frac{5}{8}$ inch from the fabric edge, you need not measure or mark the seam. Simply use the crosslines on the slide plate.

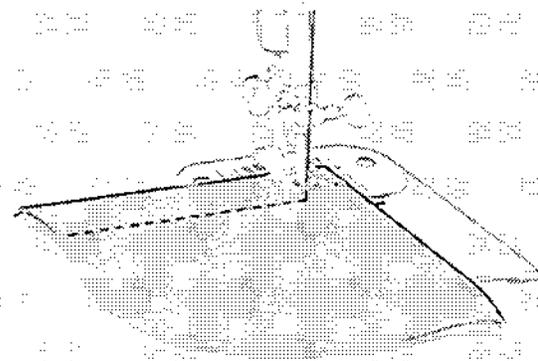
- Line up your fabric with right or left guideline 5 on the throat plate. Stitch seam, slowing speed as you approach corner.

- Stop stitching, *with the needle down*, when the bottom edge of the fabric reaches the cornering crosslines on the slide plate.
- Raise presser foot and turn fabric on needle, bringing bottom edge of fabric in line with guideline 5.
- Lower the presser foot and stitch in new direction.

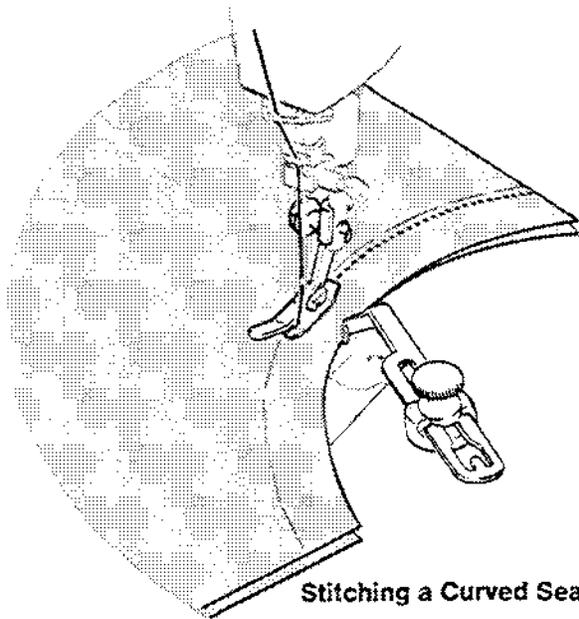
Pivoting at Corner



Fabric at Crosslines



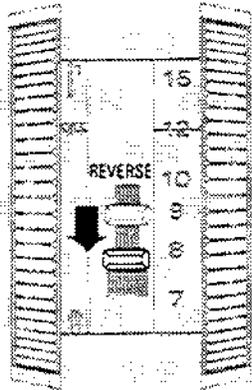
Fabric after Turning



Stitching a Curved Seam

CURVED SEAMS

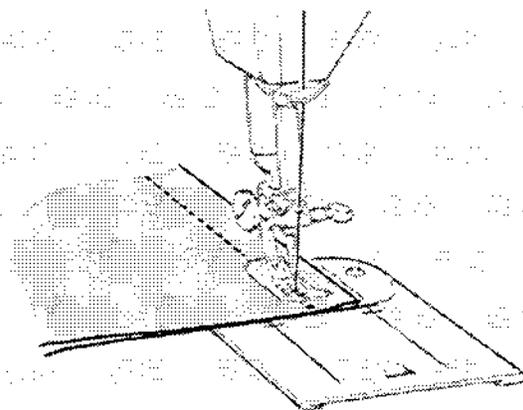
1. Use a short stitch for elasticity and strength. For example, if you use 12 stitches to the inch for straight seams, select 15 to 20 per inch to stitch curved seams in the same fabric.
2. Use the straight stitch foot for greatest accuracy.
3. If you use the seam and hem guide to guide stitching, attach it at an angle so that the edge that is closer to the needle acts as a guide.



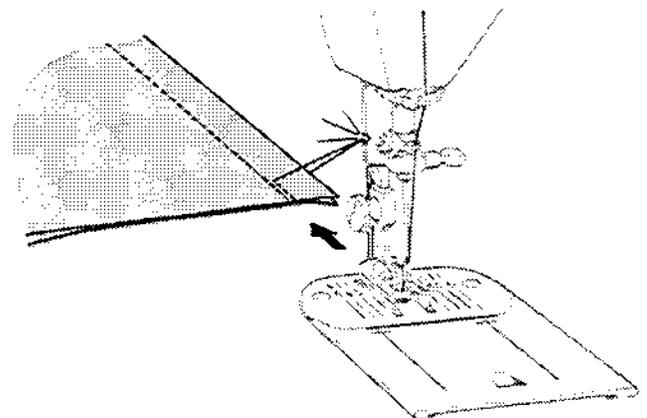
Reverse-Stitch Lever

REINFORCING END OF SEAM

1. Stitch to the edge of the fabric.
2. Press reverse-stitch lever all the way down and hold in place. Backstitch approximately $\frac{1}{2}$ inch to reinforce end of seam. Release lever.
3. Raise needle to its highest position, raise the presser foot, and remove the fabric by drawing it to the back and left.
4. Cut threads on thread cutter at rear of presser bar.



Ending a Seam



Cutting Threads

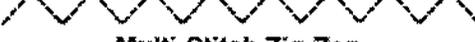
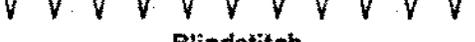
3. ALL ABOUT ZIG-ZAG STITCHING

two kinds of zig-zag stitches

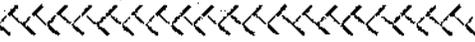
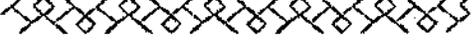
The zig-zag stitches built into your machine include basic zig-zag stitches and *Flexi-Stitch* patterns. In addition to the obviously decorative uses of these stitches, some also serve practical purposes. Under the section called "Sewing the Professional Way" beginning on

page 42, you will find instructions for both decorative and practical uses of these stitches. All of the basic zig-zag stitches and some of the *Flexi-Stitch* patterns are charted below. (When sewing *Flexi-Stitch* patterns, set speed range at **SLOW**.)

BASIC ZIG-ZAG STITCHES AND THEIR DIAL SETTINGS

Stitch Pattern	Pattern Dial	Stitch Width Dial	Needle Position Dial	Stitch Control
 Plain Zig-Zag Stitch		1-5	L  R	6 thru FINE
 Ball Stitch		1-5	L  R	6 thru FINE
 Solid Pyramid Stitch		1-5	L  R	6 thru FINE
 Crescent Stitch		1-5	L  R	6 thru FINE
 Multi-Stitch Zig-Zag		1-5	L  R	6-20
 Blindstitch		1-5	L  R	6-20

FLEXI-STITCH PATTERNS AND THEIR DIAL SETTINGS

Stitch Pattern	Pattern Dial	Stitch Width Dial	Needle Position Dial	Stitch Control
 Feather Stitch †		2-5	L  R	
 Semaphore Stitch		2-5	L  R	
 Ric-Rac Stitch †		2-5	L  R	
 Slant Overedge Stretch Stitch †		2-5	L  R	

†This stitch is designed for strength and permanence and cannot be readily ripped out without risk of fabric damage.

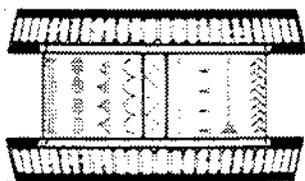
adjusting dials

SETTING PATTERN DIAL

Before moving the dial, make sure buttonhole dial is in **OFF** position and needle is above fabric.

Push the pattern dial in and turn it until desired zig-zag stitch pattern is between the red lines.

To produce a *Flexi-Stitch* pattern, the stitch control dial must be turned to the  setting.



- Push In
- Rotate
- Release

ADJUSTING STITCH PLACEMENT

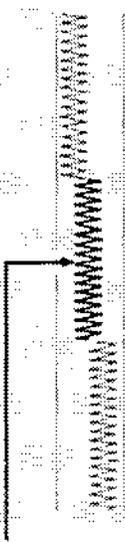
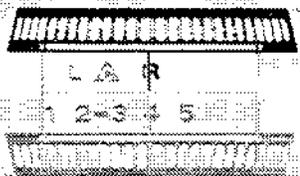
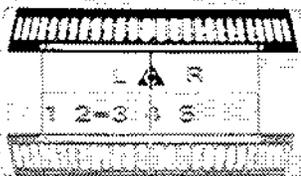
Before moving needle position dial, move stitch width dial to **5**, and make sure buttonhole dial is in **OFF** position and needle is above fabric.

Needle position setting  places the needle in center stitching position. Settings **L** and **R** place the needle in left and right stitching positions at stitch widths less than **5**.

Setting  is used most often. Settings **L** and **R** are for special placement of stitching. For example, an **R** setting is required for two-step buttonholing and an **L** setting for button sewing and twin-needle work. An **L** or **R** setting can be used to place narrow zig-zag stitching to the left or right of center in decorative work.

To adjust stitch placement, turn needle position dial until desired setting is aligned with red line.

Adjusting Stitch Placement



Left Needle Position

Center Needle Position

Right Needle Position

ADJUSTING WIDTH OF DESIGN

Before moving dial, make sure buttonhole dial is in OFF position and needle is above fabric.

To produce a zig-zag stitch, turn the stitch width dial to any setting between 1 and 5. The higher the number, the wider your stitch will be. A stitch width setting of 2 or more is recommended for *Flexi-Stitch* patterns.

ADJUSTING NEEDLE-THREAD TENSION

Zig-zag stitching usually requires less needle-thread tension than straight stitching. The  symbol on the tension dial indicates the approximate range of tension settings recommended for zig-zag stitching. Make a test sample with the fabric and thread you plan to use so that you can adjust tension to suit the stitch pattern you have chosen. The stitches should lie flat against the fabric without causing the fabric to pucker.

If the stitches are not flat and the fabric is puckered, lower the needle-thread tension by turning the dial to a lower number.

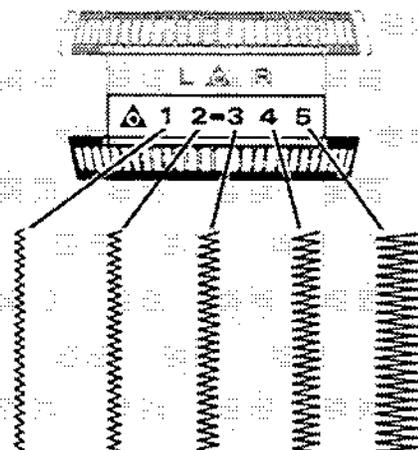
ADJUSTING STITCH LENGTH

Any stitch length setting from 6 to 20 will give you an open zig-zag stitch of the pattern you select *except Flexi-Stitch* patterns. The lower the number, the more open, or farther apart, your stitches will be. The symbol on the dial above 20 designates the **FINE** stitch area and is used for the adjustment of zig-zag satin stitching (see page 24 for specific instructions).

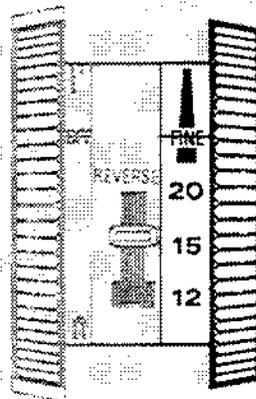
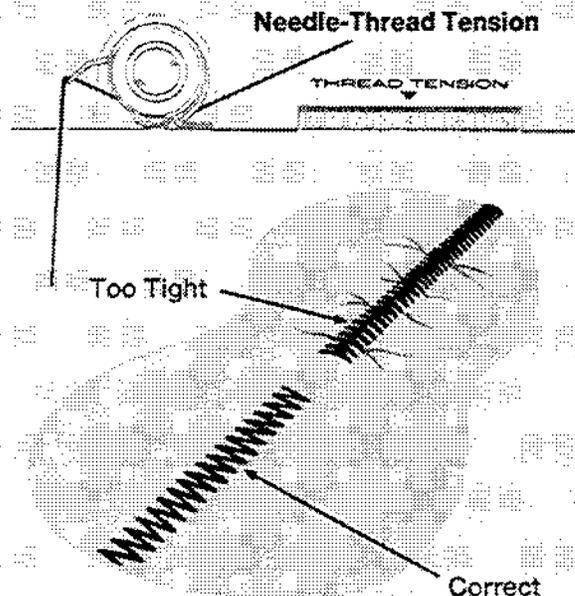
To produce the feather stitch or any other *Flexi-Stitch* pattern (refer to stitch pattern chart), the stitch control dial must be set on the  symbol. Simply turn dial downward until the  symbol (above the arrows ) is centered under the red line. No further adjustment is necessary.

When using the  setting of the stitch control, you cannot backstitch the stitch pattern.

Adjusting Width of Design



Needle-Thread Tension

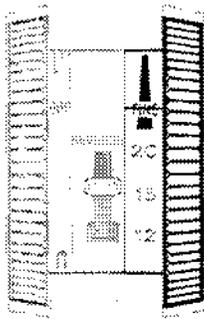


Stitch Control Dial

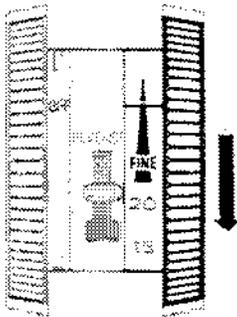
satin stitching

Satin stitching, a series of closely spaced zig-zag stitches that form a smooth, satin-like surface, is useful for both practical and decorative work. The plain zig-zag stitch, for example, is suitable for bar tacks and applique when closed up to form a satin stitch. Other basic zig-zag stitch patterns that can be sewn at satin stitch length are the ball, solid pyramid and crescent. *Flexi-Stitch* patterns have a single stitch length setting  and cannot be satin stitched.

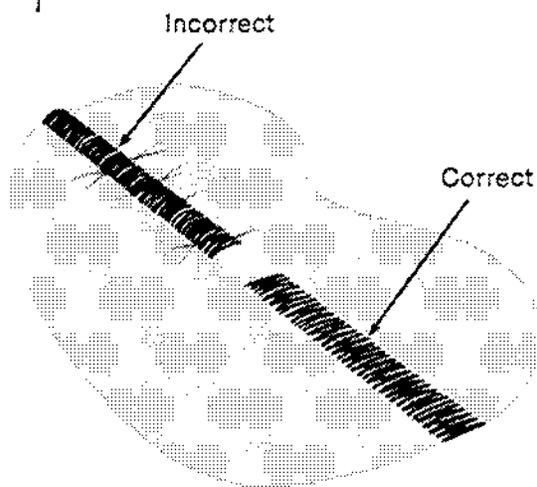
When you wish to produce a satin stitch, make a test sample first so that you can adjust the stitch length and thread tension properly. Soft fabrics may require a backing to ensure firm satin stitching. Crisp lawn or organdy is suitable for this purpose. For best results use the special purpose foot.



Stitch Control in FINE Area



As the Dial Is Rotated, Stitches Close Up



Adjusting Thread Tension

DIAL SETTINGS

- Pattern: Desired zig-zag stitch (see above)
- Stitch Width: 2 through 5
- Needle Position: 
- Stitch Control: In **FINE** area
- General Purpose Throat Plate
- Special Purpose Foot

Adjusting Stitch Length

1. Set stitch control dial at bottom of **FINE** area.
2. Run machine at slow speed.
3. Gradually turn dial downward until stitches are closely spaced and form a smooth surface.

Adjusting Thread Tension

Satin stitching requires less tension than straight stitching or open zig-zag stitching. Furthermore, the wider the satin stitch, the lighter the tension on the thread must be. Notice the stitching on your sample. If the fabric is puckered, lower the needle-thread tension by turning the tension dial to a lower number.

6. TWIN-NEEDLE STITCHING

By using a twin needle, you can produce two parallel, closely spaced lines of decorative stitching simultaneously. You can choose either a straight stitch setting or one of the zig-zag patterns.

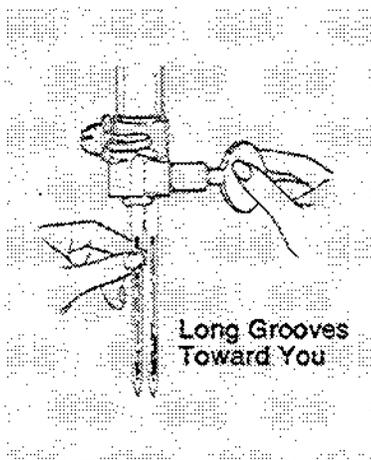
preparation

1. Fill bobbin with enough thread to complete stitching. (Since a bobbin cannot be filled after a twin needle is inserted, it is wise to keep an extra wound bobbin at hand for replacement.)
2. Close slide plate, and pull out a loop of thread between the needle and bobbin.
3. Cut thread about four inches from needle hole, and unthread the machine.
4. Remove the single needle and insert the twin needle.

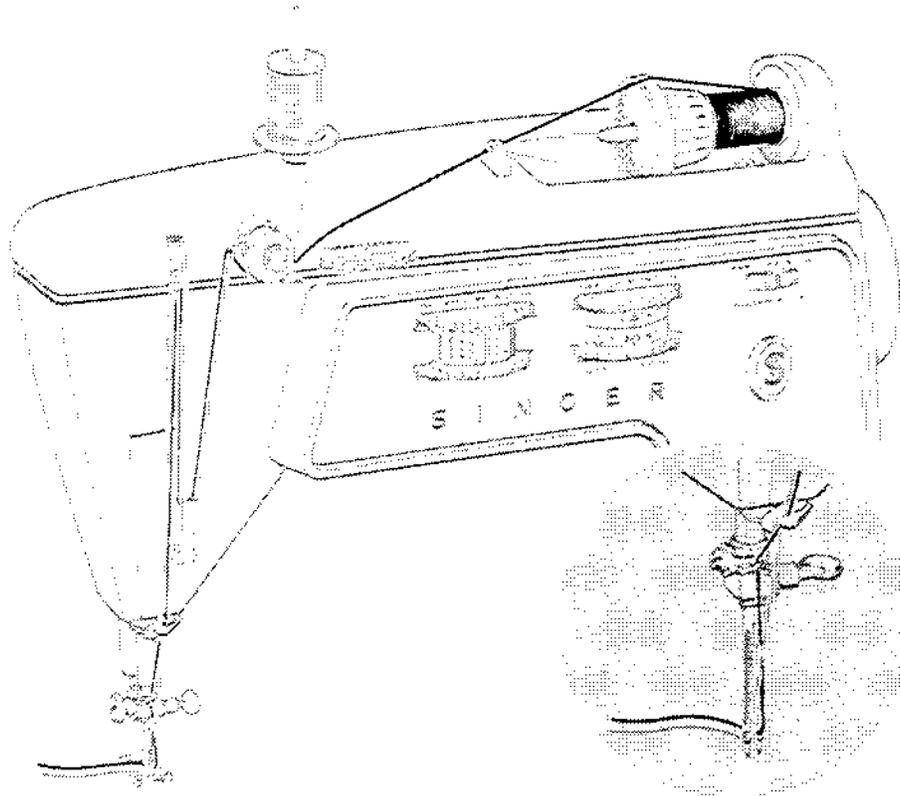
NOTE: When inserting a previously wound bobbin, follow the instructions on page 10.

threading the needle

1. Thread as for one-needle stitching except:
 - Pass thread between *center* and *back* tension discs, through the thread guide above the needle, and through *right* eye of needle.
2. Insert detachable vertical spool pin into hole provided for it in top cover of machine.
3. Place spool of thread on detachable spool pin and thread as for one-needle stitching except:
 - Do not attempt to pass thread through guide on top of stitch chart cover.
 - Pass thread between *center* and *front* tension discs and through *left* eye of needle, *omitting the thread guide above the needle*.



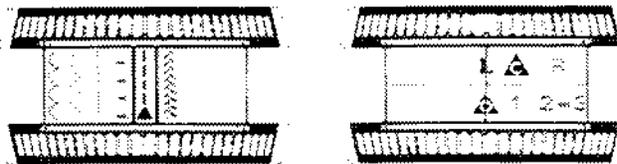
Best twin-needle stitching results are obtained with No. 50 mercerized cotton thread



dial settings

STRAIGHT STITCHING WITH A TWIN NEEDLE

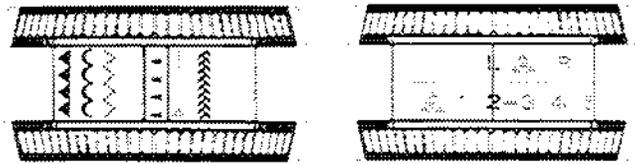
- Pattern: Straight Stitch 
- Stitch Width: 
- Needle Position: L or  only
- Stitch Control: 6 to 20
- General Purpose Throat Plate
- General Purpose Foot



Straight Stitch Settings

ZIG-ZAG STITCHING WITH A TWIN NEEDLE

- Pattern: Desired zig-zag stitch
- Stitch Width: 2
- Needle Position: L only
- Stitch Control: 6 through FINE and 
- General Purpose Throat Plate
- General Purpose Foot (for open stitching)
- Special Purpose Foot (for satin stitching and Flexi-Stitch Patterns)



Zig-Zag Stitch Settings

decorative twin-needle stitching STITCH PATTERNS AND THEIR DIAL SETTINGS

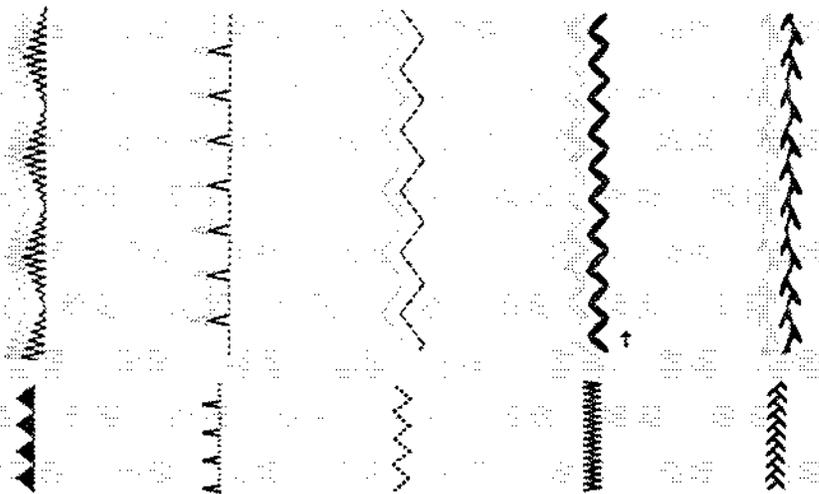
To produce patterns at right, use settings shown below

Pattern Dial

Stitch Width Dial

Needle Position Dial

Stitch Control



2

2

2

2

2

L

L

L

L

L

6
thru
FINE

6 - 20

6 - 20

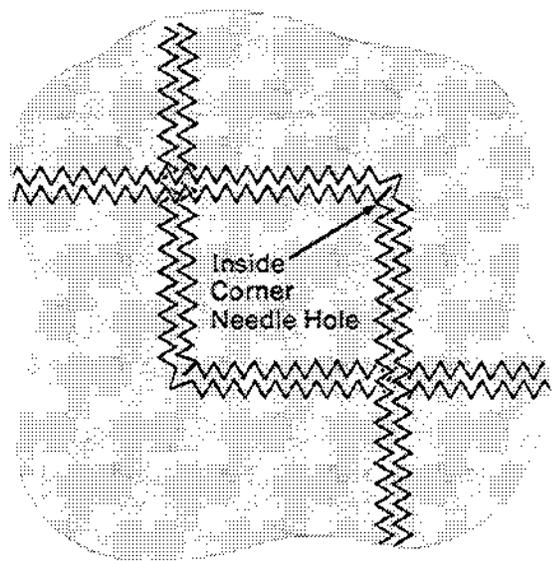


†This stitch is designed for strength and permanence and cannot be readily ripped out without risk of fabric damage.

turning a square corner

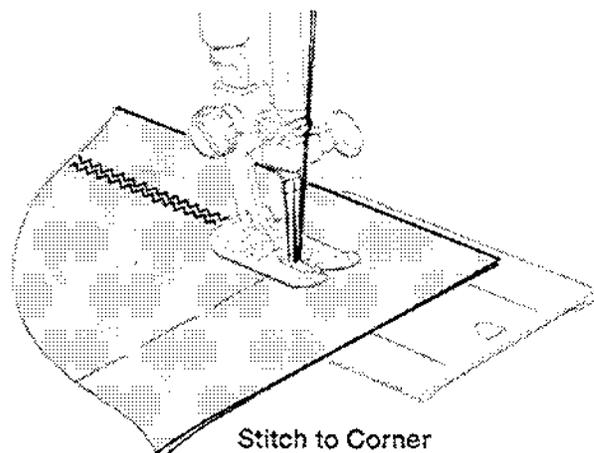
Geometric twin-needle designs are easy to accomplish with the plain zig-zag stitch and the special purpose foot when you know how to turn a square corner. Be sure to practice turning in right and left directions.

- Mark or baste a stitching guideline on the fabric.
- Stitch to the corner and stop with the needle *in the fabric* on the *inside* of the corner.
- Raise the presser foot and turn the fabric halfway around the corner (needle in fabric). Lower the foot and take *one* stitch by turning the hand wheel. Continue to turn the hand wheel until needle is *about to enter* fabric on the *inside* of the corner.
- Raise the foot again and complete the fabric turn, positioning the work under the foot so that the needle will enter the *inside* corner needle hole a *second time*.
- Lower the foot and continue stitching in the new direction.

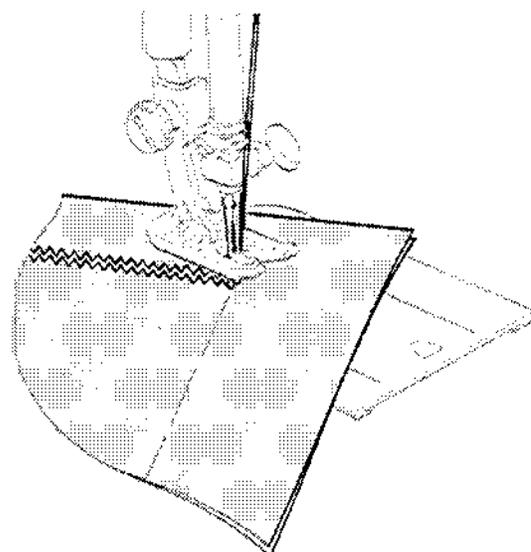


Corner Detail

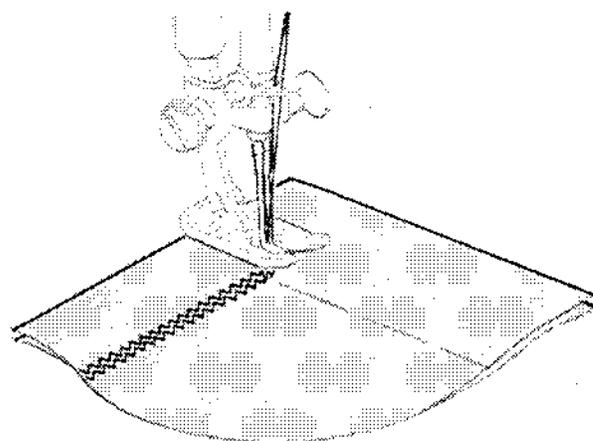
Turning a Corner with a Twin-Needle



Stitch to Corner



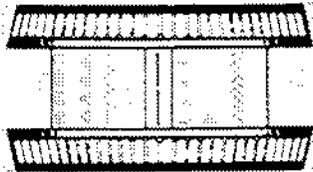
Turn Fabric Halfway Around Corner



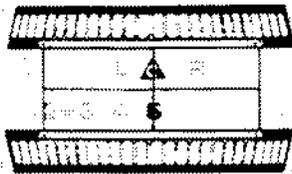
Complete Fabric Turn

7. TEMPORARY STITCHING

PATTERN SELECTOR



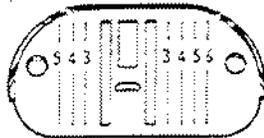
NEEDLE POSITION



STITCH WIDTH



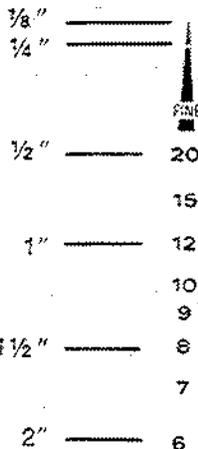
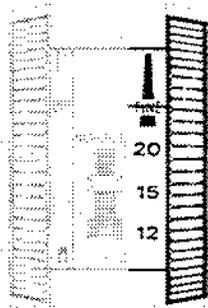
General Purpose Foot



General Purpose Throat Plate

Dial Settings

STITCH CONTROL



speed basting

With the basting stitch that is built into your sewing machine, you can produce basting stitches of any length up to two inches. Thus, you can choose just the right length for your sewing job, considering the weight of your fabric and how securely the pieces need to be held together. A few of the many sewing jobs for which you will find speed basting particularly useful are:

- Joining seams for trial fittings
- Marking construction guidelines
- Basting pleats, hems and seams

DIAL SETTINGS AND ACCESSORIES

- Pattern: Basting Stitch
- Stitch Width: 5 only
- Needle Position: only
- Stitch Control: 6 through FINE
- Speed: In SLOW range
- General Purpose Throat Plate
- General Purpose Foot

Stitch Length

The stitch-control dial regulates the length of basting stitches, but because the basting disc changes the interval at which the needle enters the fabric, the numbers on the dial no longer represent stitches per inch.

The settings of the control dial and the approximate length of the basting stitches they produce are illustrated. The very short stitches produced in the triangle at the top of the FINE area are used to secure the beginning and ending of a line of basting.

Thread Tension

Machine basting requires a light needle-thread tension. Use settings in the **WWWWW** range on the tension dial. *The longer the stitch, the lighter the tension needs to be.* When tension is correctly adjusted, stitches up to ½ inch long should lie flat in firm fabrics. If stitches are more than ½ inch long, place tension *on the fabric* by holding it in front and back of the presser foot, as you sew, to prevent pucker.

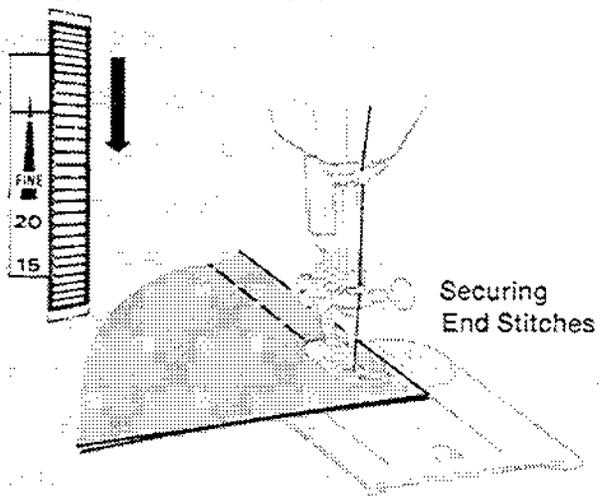
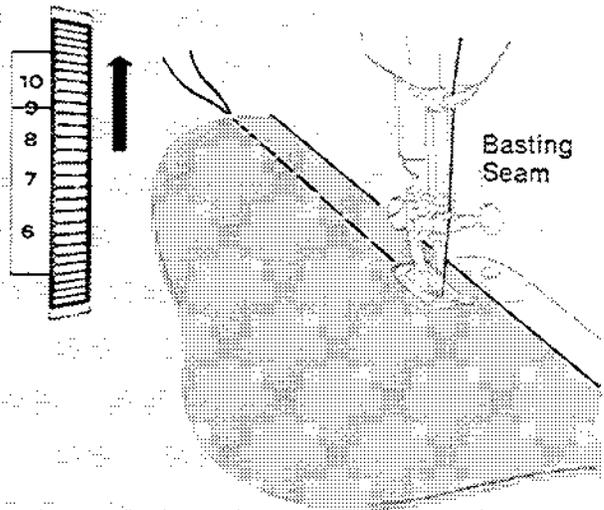
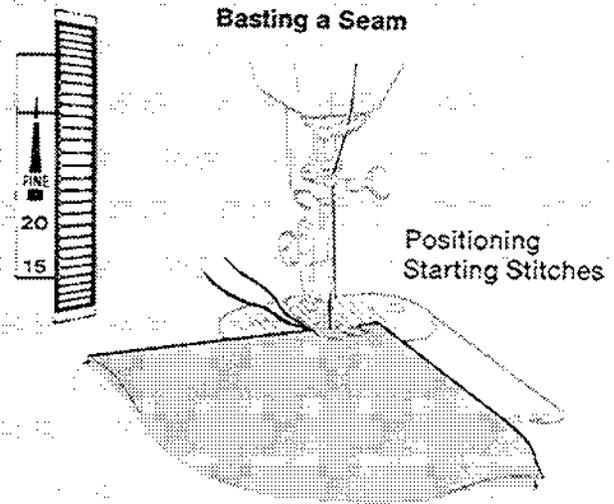
PREPARATION

Thread the machine and fill the bobbin in the usual way. Select needle and thread according to your fabric: mercerized cotton threads are particularly recommended. Choose a thread color to contrast with your fabric so that it can be seen easily. *Make sure the general purpose foot and general purpose throat plate are on the machine and the needle is in its highest position.*

PROCEDURE

1. Set stitch control for a short stitch in the triangle at the top of the **FINE** area on the dial. Place work under the needle, lower the presser foot, and take a few stitches to position and secure basting start.
2. Re-set stitch control dial for the length of basting stitch desired (stitches less than 1 inch long are recommended for seam basting) and proceed as for regular sewing. Stitch slowly, supporting the fabric in front and back of the presser foot if stitches are more than ½ inch long.
3. To secure the end of basting, turn dial downward for a short stitch in the **FINE** area and take a few stitches.

To avoid pressing marks, remove basting stitches as soon as they have served their purpose.

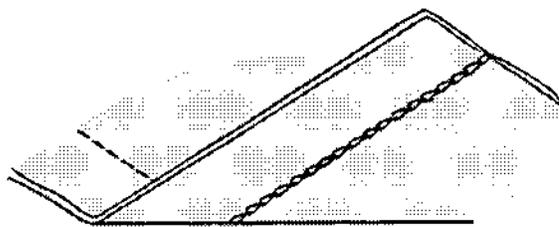


chainstitching

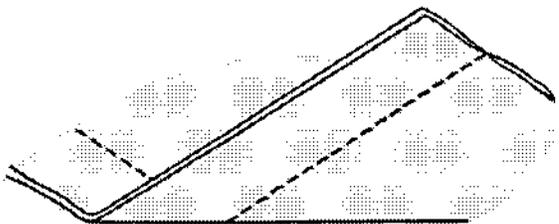
Single-thread chainstitching looks like regular straight stitching on top but is a series of interlocking loops on the underside of the fabric. The stitches are produced by the needle thread alone so you do not need a bobbin thread or a bobbin. Because the stitches are formed by a single thread, the interlocked loops unravel easily, allowing the entire line of stitching to be removed with just a pull on the thread end. Also, the loop formation of the stitches makes them less taut than regular straight stitches. That's what makes chainstitching flexible.

Here are a few of the many sewing jobs for which you will find chainstitching useful. (For further information on some of these chainstitching applications, see page 61.)

- Sewing temporary hems and tucks to extend the life of —
 - Children's clothes
 - Curtains and linings that might shrink
- Hemming curtains and draperies that may need to be altered.
- Attaching woven and stretch hem tape.
- Making stay chains (French tacks) to anchor linings or belt carriers to hold belts in place.
- Fastening removable trimming —
 - Fur collars
 - White collars and cuffs
- Basting for trial fittings.



Chainstitch



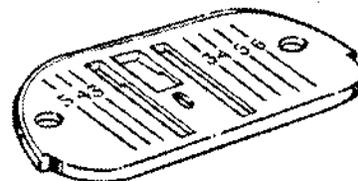
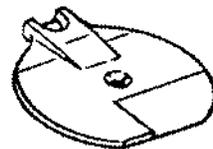
Regular Straight Stitch

Chainstitch Fittings



Thread Guide

Bobbin Case Cover



Chainstitch Throat Plate

PREPARATION

Make sure needle is at its highest point.

1. Raise presser foot, open slide plate, and remove bobbin.
2. Remove throat plate and position chainstitch throat plate over pins from *front*.
3. Insert bobbin case cover in bobbin case with flat edge toward the front as illustrated. Snap latch down and close slide plate.
4. Open face plate and slip chainstitch thread guide into place. Close face plate.
5. Thread your machine in the usual way *except* pass thread from take-up lever through self-threading eyelet in the chainstitch thread guide.

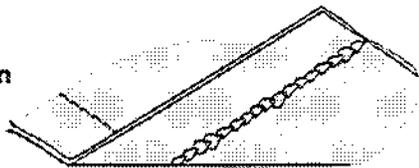
Soft, pliable threads of light and medium weight are most suitable for chainstitching. No. 50 mercerized cotton and "A" silk used in a size 14 needle are recommended.

6. Adjust thread tension. Chainstitching requires approximately the same needle-thread tension as regular straight stitching, provided the same kind of thread is used. When the tension is correctly adjusted, the chain will be flat and smooth. Puckers in the fabric and pinched loops indicate too much tension; turn tension dial to a lower number. Large, irregular loops indicate too little tension; turn tension dial to a higher number.

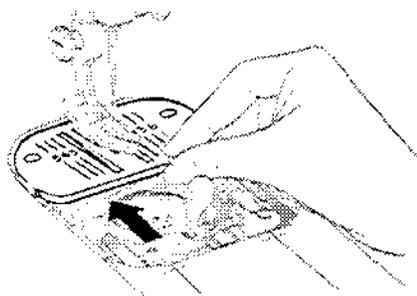


Too Much Tension

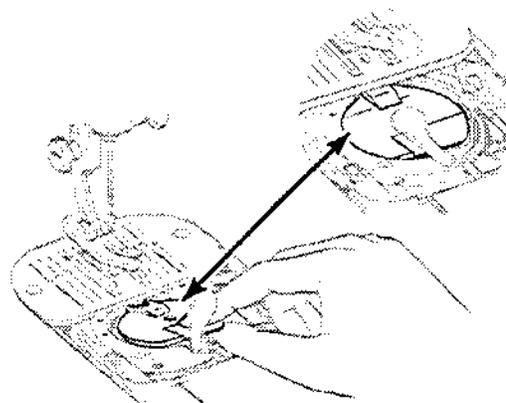
Too Little Tension



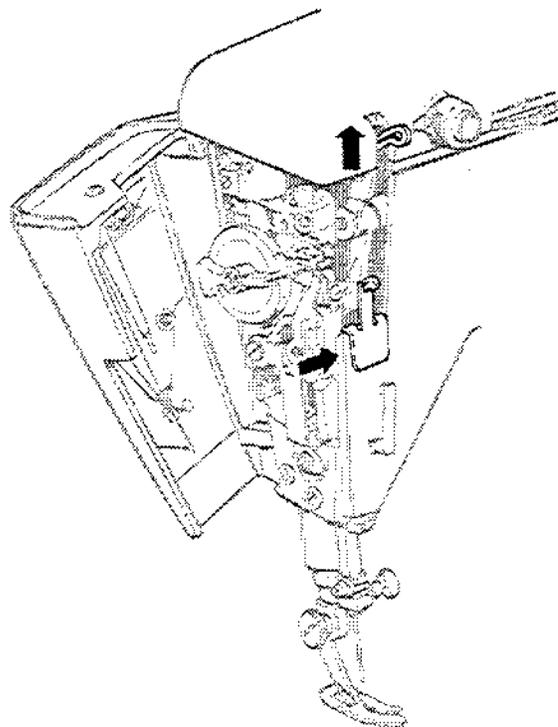
Correct Tension



Insert Throat Plate

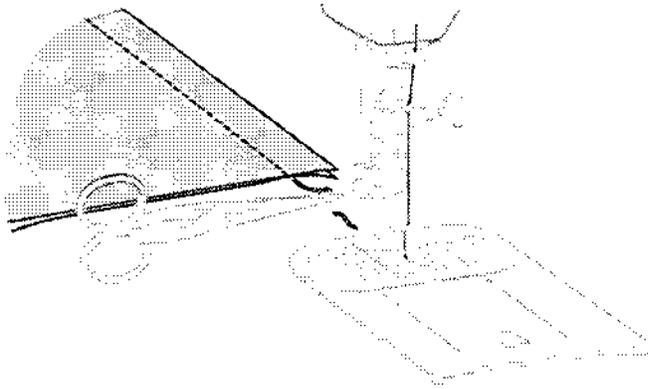


Position the Bobbin Case Cover

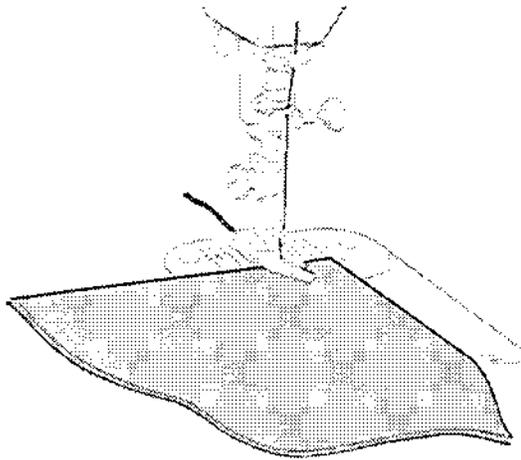


Attach the Thread Guide

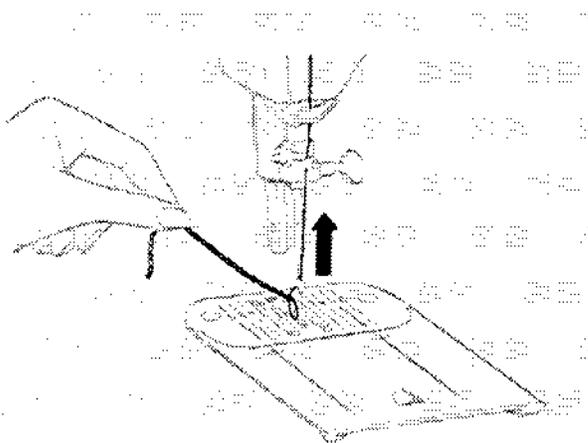
SEWING A CHAINSTITCH SEAM



Chaining Off



Stitch Starting Point after Chaining Off



Releasing Chain from Machine

- Pattern: Straight Stitch
- Stitch Width: 
- Needle Position: 
- Stitch Control: 10 to 12 only
- Chainstitch Throat Plate
- Straight Stitch Foot, General Purpose Foot, or Zipper Foot
- Chainstitch Thread Guide
- Bobbin Case Cover

Starting and Chaining Off

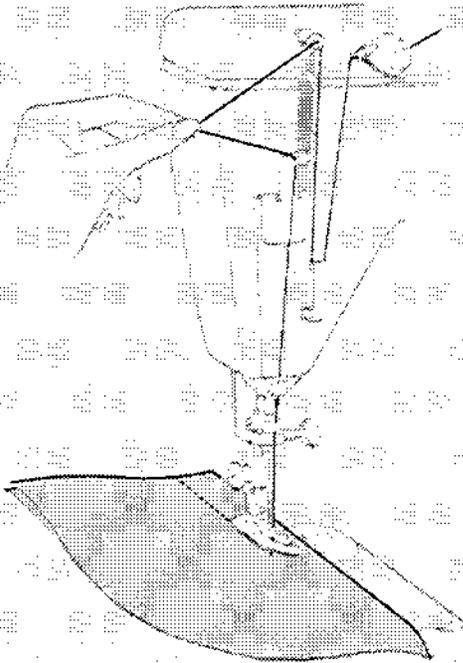
1. Turn hand wheel toward you to position needle in very edge of fabric. Lower the presser foot.
2. Start the machine and stitch to end of seam. Continue stitching beyond edge of fabric, making a chain from one to two inches long. *Do not attempt to stitch in reverse.* Chainstitching can be sewn in a forward direction only.
3. Cut chain between fabric and presser foot.
4. After chaining off, start a new line of stitching by raising the presser foot slightly and positioning the fabric in front of the needle. Lower the presser foot and stitch to end of seam.

Releasing the Chain from the Machine

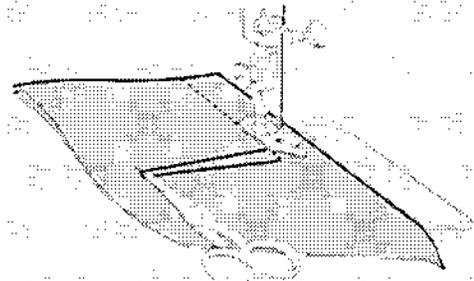
When you finish chainstitching, the chain can easily be removed from the machine.

1. Raise presser foot.
2. Hold end of chain with your left hand.
3. Turn hand wheel slowly *toward* you with your right hand until needle is all the way down in the needle hole.
4. Then turn hand wheel slowly *away* from you, pulling gently on chain, which will unravel as needle rises.

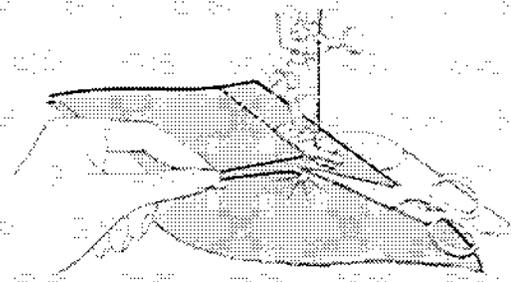
Ending Stitching in Fabric



Forming a Loop



Draw Loop Down to Left of Foot

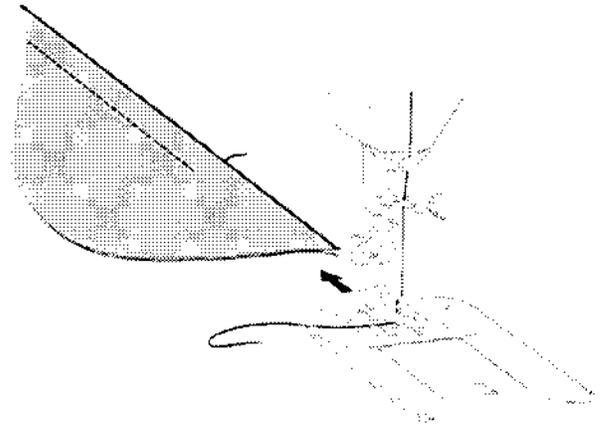


Cut Close to End of Stitching

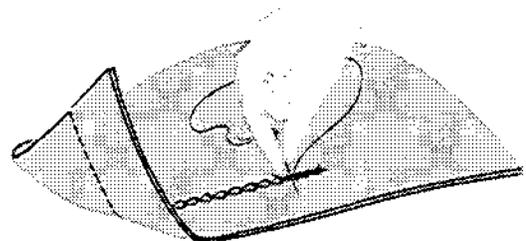
Ending the Stitching in the Fabric

Occasionally, you may need to end your stitching in the fabric. Temporary hems and tucks, for example, can be completed in this way:

- Stop stitching at desired point. Make sure take-up lever is in its highest position.
 - Raise presser foot.
1. Pull the thread through the take-up lever, forming a loop between the take-up lever and chainstitch thread guide.
 2. Pass scissors under the presser foot so as to pull the slack thread down and out to form a loop at left of foot.
 3. Hold the loop and cut the thread close to the end of the stitching.
 4. Remove fabric from machine by pulling it straight back, away from you. The thread end will pull through the fabric to the underside and form a temporary lock.
- If you wish to secure this temporary lock, fold the thread end back over the chain and fasten with hand stitching.

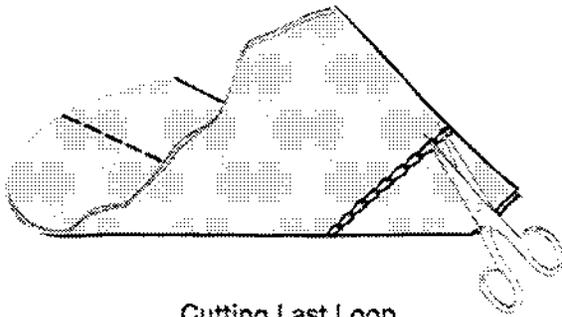


Removing Fabric



Securing Temporary Lock

Removing the Stitching

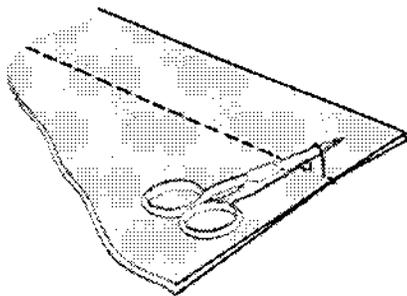


Cutting Last Loop

REMOVING THE STITCHING

Chainstitching can be removed smoothly and cleanly in seconds by freeing the last stitch formed in the fabric.

1. Simply cut the last loop formed on the underside of the fabric.
2. Pick up the free thread end from the top surface of the fabric.
3. Pull the free thread end, removing entire line of stitching.

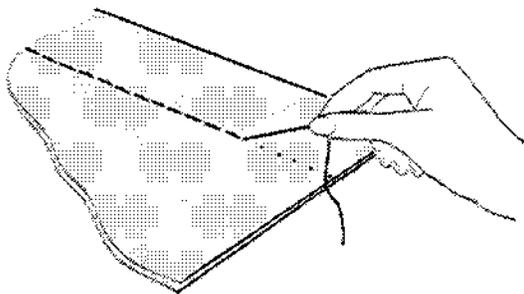


Picking Up Free Thread End

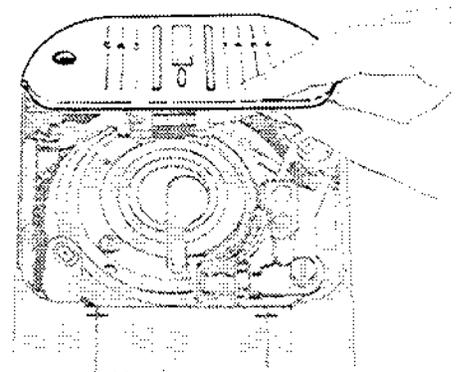
REMOVING THE CHAINSTITCH ACCESSORIES

Release thread chain from machine and *make sure needle is at its highest point.*

1. Open slide plate and remove bobbin case cover.
2. Replace bobbin and snap down latch.
3. Remove throat plate by pressing up and lifting it out toward you.
4. Replace general purpose or straight stitch throat plate.
5. Open face plate and remove chainstitch thread guide. Close face plate.



Removing Line of Stitching



Removing Throat Plate

buttons

- Pattern: Plain Zig-Zag
- Stitch Width: Δ and 4
- Needle Position: L
- Feed Cover Throat Plate
- Button Foot

The space between the holes in the button determines stitch width settings. The Δ setting must always be used to position the button and to fasten stitching. For buttons with standard hole spacing, settings Δ and 4 are usually satisfactory. For buttons with unusual hole spacing, use setting Δ and increase or decrease the width setting (4) as necessary.

1. Position button under button foot and lower the needle into center of left hole. Lower the foot. Turn hand wheel toward you until the needle rises out of the button and is just above the foot.
2. Set stitch width at 4. Then, when you begin to stitch, the needle should enter the

right hole of button. Take six or more zig-zag stitches at this setting. End on left side.

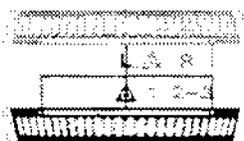
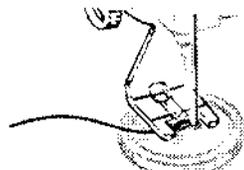
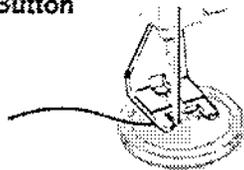
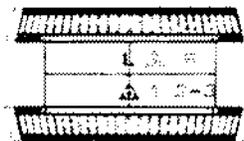
3. To fasten stitching, return to stitch width setting Δ and take about three stitches.

FORMING A THREAD SHANK

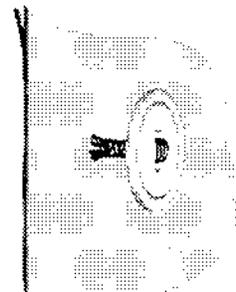
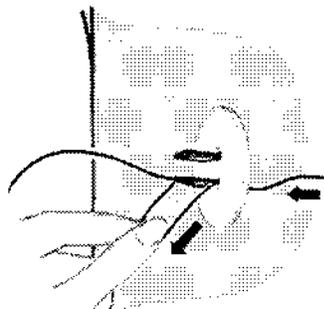
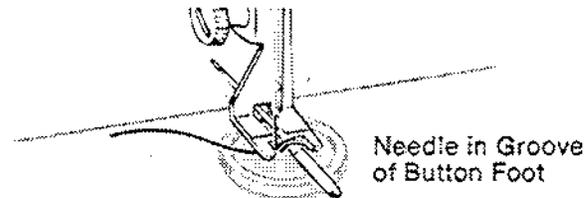
Buttons sewn on coats and jackets should have a thread shank to make them stand away from the fabric. To form a thread shank, sew over the blade of a regular machine needle.

- Position button and lower button foot. Place needle in groove of foot so that point enters the hole in the foot. *The farther in you push the needle, the longer the shank will be.*
- After stitching, remove needle from groove. Remove work from under presser foot, cutting threads about six inches from fabric. Pull needle-thread ends to back of button and form a firm shank between button and fabric by winding threads tightly around attaching stitches. Tie thread ends securely.

Attaching a Button



Forming Thread Shank



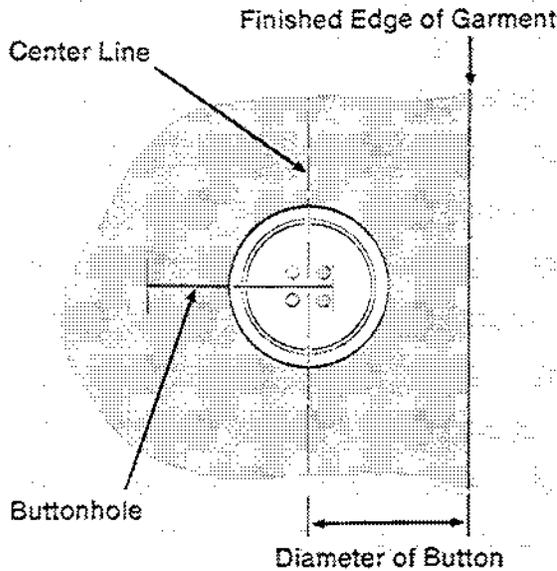
buttonholes



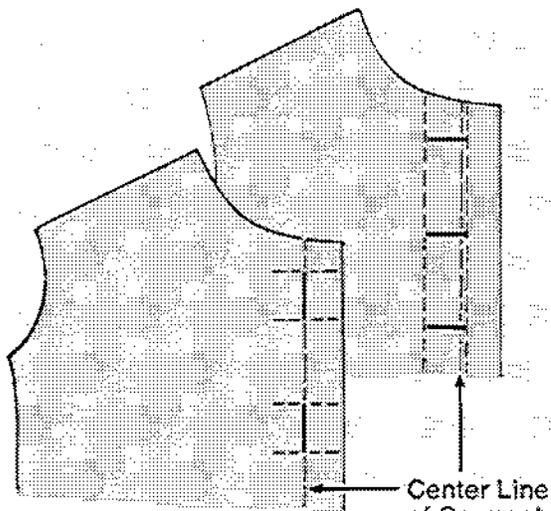
Round-End Buttonhole



Bar-Tack Buttonhole



Horizontal Placement on Crosswise Grain



Vertical Placement on Lengthwise Grain

You have a choice between two buttonhole styles and two buttonhole-making methods: round-end buttonholes made with the built-in buttonhole system of your machine and bar-tack buttonholes with square-ends made manually in four steps. Round-end buttonholes can be made in light- and medium-weight fabric; bar-tack buttonholes are best in lightweight fabric.

BUTTONHOLE POSITION

Accurate guidelines are essential to keep buttonholes at a uniform distance from the edge of the garment, evenly spaced, and on the grain of the material.

1. For center closures, mark the center line of the garment as indicated on your pattern. This guideline can be made by hand basting or machine speed basting. The space from the center line to the finished edge of the garment must be at least equal to three-quarters the diameter of the button. With this spacing, the button will not extend beyond the edge when the garment is buttoned. Make sure that the center line marking follows a lengthwise fabric thread.
2. Mark a position guideline for each buttonhole.
 - **Horizontal** buttonholes are placed to extend $\frac{1}{8}$ inch beyond the center line of the garment, as illustrated, so that the buttons will be in the center of the figure when the garment is fastened. Horizontal buttonhole guidelines should follow a crosswise fabric thread and be longer than the finished length of the buttonhole. Mark ends of each buttonhole vertically.
 - **Vertical** buttonholes are placed so that the center line of the garment is in the center of the buttonhole, as illustrated. Mark the ends of each buttonhole horizontally across the center line basting and use the center line marking as the buttonhole guide when stitching.

BUTTONHOLE LENGTH

A buttonhole length should be just long enough to allow the button to slip through the opening without stretching it. You can estimate the proper buttonhole length by measuring the width plus the thickness of the button. To make sure the measurement is correct, cut a slit in a scrap of fabric the diameter of the button you intend to use. Increase length of opening until button slips through easily. This test is particularly advisable for buttons of unusual shape or thickness.

BUTTONHOLE INTERFACING

It is almost always wise to use an interfacing in the buttonhole area. An interfacing holds the fabric firmly so that a neat buttonhole may be stitched and keeps the finished buttonhole in shape. Interfacing is essential when the fabric is loosely woven or is a crepe or knit that stretches easily.

When planning your garment, remember that both round-end and bar-tack buttonholes are stitched through three thicknesses of fabric

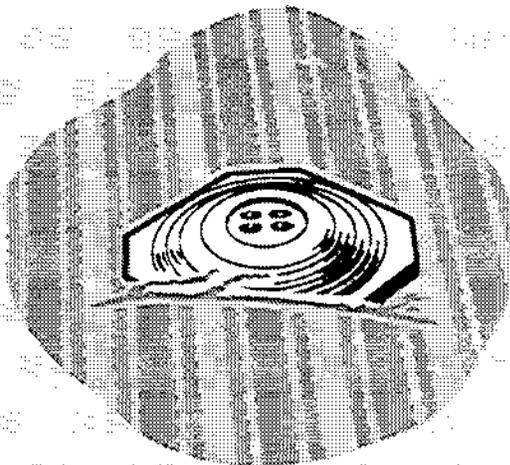
(garment, interfacing and facing) after the facing has been attached.

TEST SAMPLE

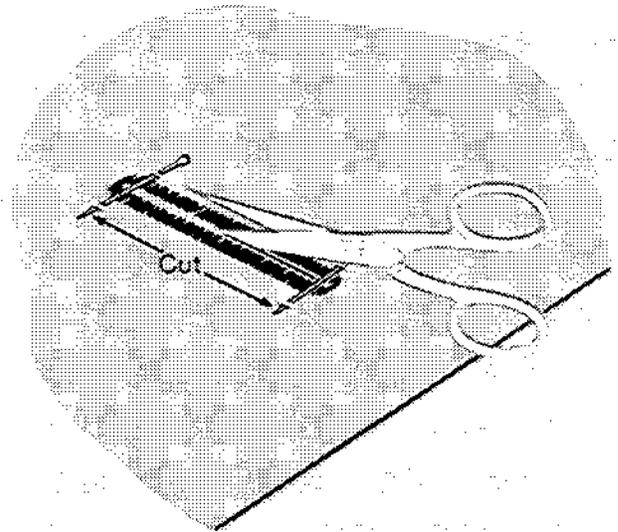
Always make a test buttonhole in a sample of your fabric to determine suitability of buttonhole style, buttonholing method, and machine settings. Be sure to duplicate the number of fabric layers in the garment and include interfacing if appropriate. Remember, too, that loosely woven and medium-weight fabrics require buttonholes with wider side stitching than firmly woven or lightweight fabrics. Finally, check to see that the opening for the button can be cut without damaging buttonhole stitching.

CUTTING BUTTON OPENING

Use a pair of small, sharp scissors to cut the button opening. Insert blade in center of buttonhole cutting space and cut from this point in either direction. Place a pin across the cutting space at each end of the buttonhole to protect end stitching.



Testing Buttonhole Length

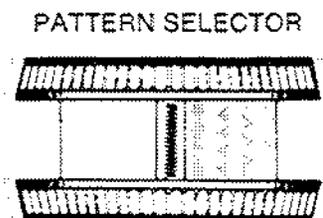


Cutting Button Opening

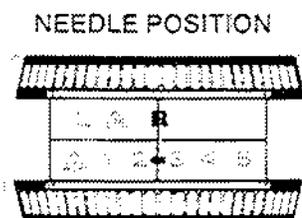
ROUND-END BUTTONHOLES

To stitch a buttonhole, set all dials on red symbols.

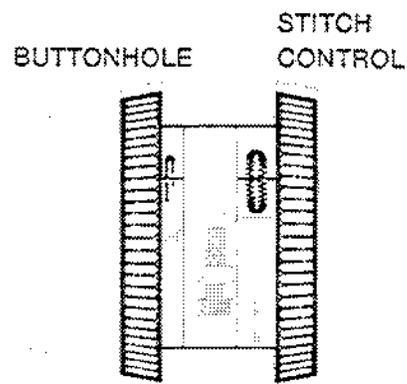
- Attach buttonhole foot
- Use general purpose throat plate



PATTERN SELECTOR



NEEDLE POSITION

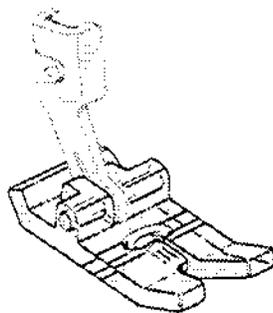


BUTTONHOLE

STITCH CONTROL

STITCH WIDTH

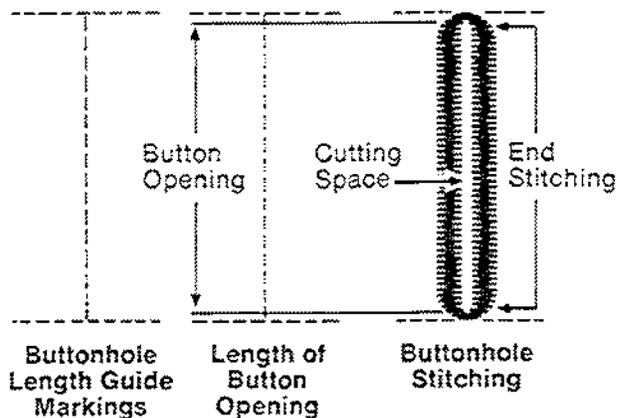
Make sure buttonhole dial is in **OFF** position when you set or reset stitch control dial on 



Buttonhole Foot

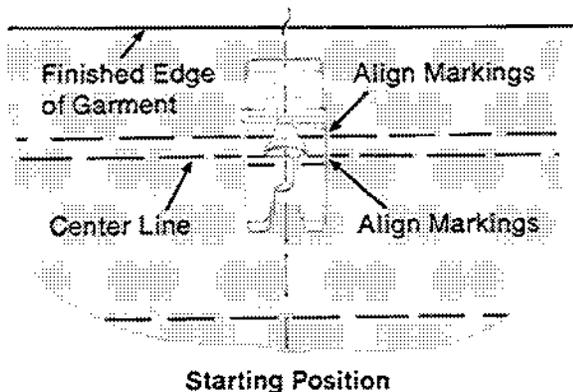
Buttonhole Length

First, decide how long the button opening must be. This will depend on the diameter and thickness of the button as explained on page 37. Then add $\frac{1}{8}$ inch for end stitching ($\frac{1}{16}$ inch for each end of buttonhole). This end-stitching allowance is approximate and should be increased slightly if the buttonhole is to be stitched twice. Fabric thickness and thread diameter will also vary end-stitching depths, so be sure to check measurements by making a test buttonhole. Mark buttonhole position and length on fabric. See page 36 for placement information.



Buttonhole Stitch Width

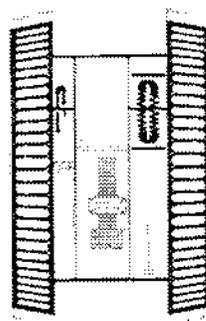
The stitch width setting, designated by red symbol, is an approximate setting; use it to make your test buttonhole. You may need to increase or decrease stitch width slightly to suit your fabric, to arrive at more pleasing buttonhole proportions, or to change the width of the buttonhole cutting space. When making stitch width adjustments, remember that as stitch width is increased, the cutting space in the center of the buttonhole is decreased.



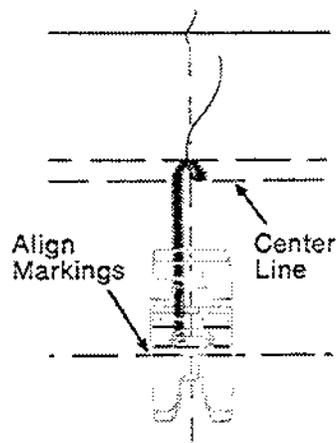
Procedure

- Place garment under buttonhole foot so that buttonhole position marking is centered.
- Align center gauge line of buttonhole foot with center line of garment.
- Lower the presser foot, and rotate buttonhole dial downward until symbol for step 1 is centered under red line (click indicates engagement).
- Start machine and let it complete step 1 of the buttonholing cycle; that is, stitching across the end and down the left side of buttonhole. *Stop machine when front gauge line on buttonhole foot reaches end-of-buttonhole guideline on garment.*
- Rotate buttonhole dial downward until symbol for step 2 is centered under red line.
- Start machine and let it complete step 2 of the buttonholing cycle; that is, stitching across the end and up the right side of buttonhole. *Stop machine when back gauge line on buttonhole foot is in line with the end-of-buttonhole guideline on garment.* Take one or two stitches if necessary to overlap stitching at starting point. For a smooth, satiny appearance and greater durability, stitch around the buttonhole a second time by repeating the two-step dial sequence.
- Remove work from machine, clip thread ends and cut button opening with sharp scissors.

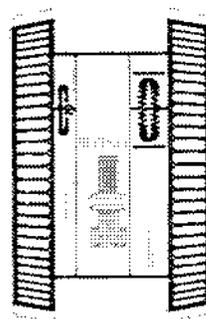
When buttonholes are completed, re-set dials for regular sewing. Make sure buttonhole dial is in **OFF** position.



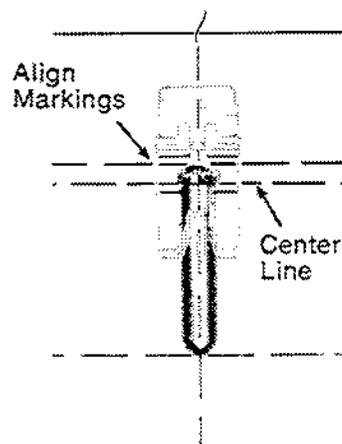
Step 1 Dial Setting



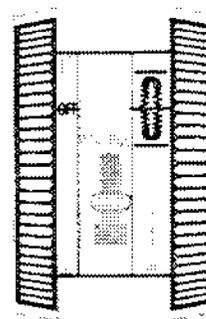
Presser Foot Position at End of Step 1



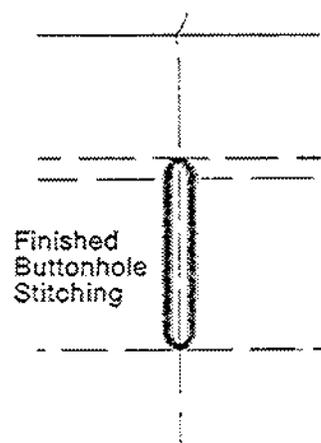
Step 2 Dial Setting



Presser Foot Position at End of Step 2



OFF Dial Position at End of Step 2



Finished Buttonhole Stitching

BAR-TACK BUTTONHOLES

- Pattern: Plain Zig-Zag 
- Stitch Width: 2½ and 5 or to suit fabric
- Needle Position: L
- Stitch Control: In FINE area
- Buttonhole Dial: OFF
- General Purpose Throat Plate
- Special Purpose Foot

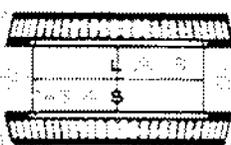
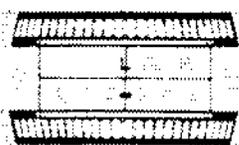
Bar-tack buttonholes are made in four steps by setting the stitch width dial manually for each buttonhole. *You will not be using the built-in buttonholer, so be sure the buttonhole dial is set on OFF before you start to sew.*

Procedure

Side stitching: Place work under needle, aligning center of buttonhole marking with center notch in special purpose foot. Set stitch width for side stitching (2½) and position needle in fabric at point A. Lower foot and stitch to end of marking. Leave needle in fabric at point B. Raise foot and pivot work on needle. Lower foot. Take one stitch without changing width setting, bringing needle to point C.

Bar tack: Set stitch width dial for bar tacks (5) and take at least six stitches. Stop at point D.

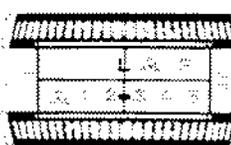
Side stitching: Reset stitch width dial for side stitching (2½). Complete work to point E.



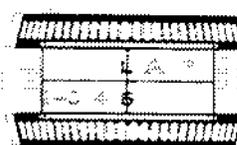
Side Stitching



Bar Tack



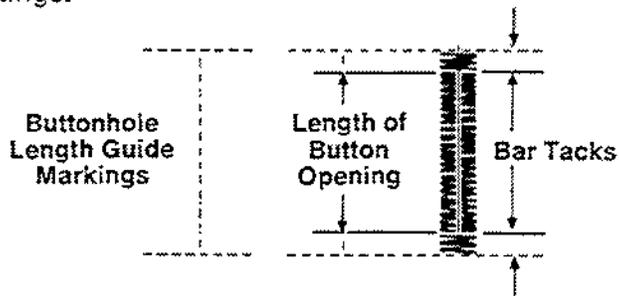
Side Stitching



Final Bar Tack

Preparation

First, decide how long the button opening must be and add 1/16 inch for each bar tack (the closing at each end of the buttonhole). Mark fabric. Next, make a test buttonhole to determine exact stitch length and stitch width settings.



Final bar tack: Set stitch width dial for bar tacks (5), and take at least six stitches *in reverse*, ending at point F.

Fastening stitch: To secure stitching, move stitch width dial to Δ and take three stitches. Remove work, draw threads to underside, fasten and trim. Cut opening with sharp scissors.

Corded Bar-Tack Buttonholes

Corded bar-tack buttonholes are made by stitching over a cord of embroidery or crochet thread. Place cord under the special purpose foot and draw it to back of foot. Proceed as for plain bar-tack buttonholes except, before making the final bar tack, cut cord close to stitching.

9. FREE-MOTION STITCHING

In free-motion stitching, you sew without a presser foot and control fabric movement by means of an embroidery hoop. Either a straight or a plain zig-zag stitch can be used. Because you can move the hoop in any direction — forward or backward, from side to side, or even diagonally—free-motion stitching is extremely useful for embroidery designs. On the other hand, it is equally useful for darning.

If you are **embroidering**, you can vary the length of stitches simply by moving the hoop faster or slower under the needle. The faster you move the hoop, the longer the stitches will be. You can also vary the width of zig-zag stitches from wide to narrow by controlling the angle at which the hoop is placed and moved under the needle.

For **darning**, the embroidery hoop used in free-motion stitching enables you to hold the fabric taut — a real advantage when your fabric is lightweight or soft and thus likely to pucker. See page 60 for directions.

flower embroidery

- Pattern: Plain Zig-Zag
- Stitch Width: 2 to 5
- Needle Position: 
- Feed Cover Throat Plate
- No Presser Foot

PREPARATION

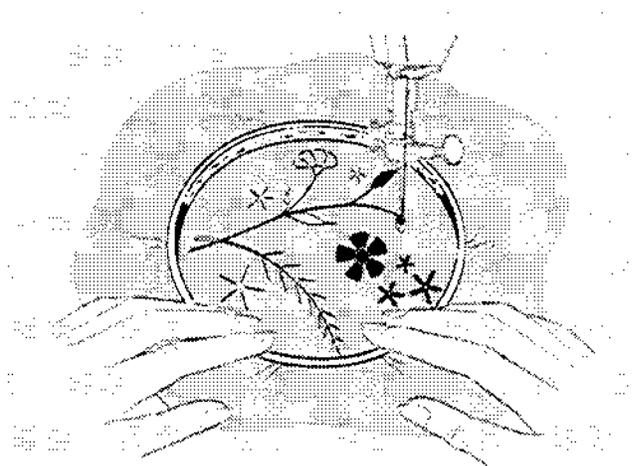
Trace design on right side of fabric. (If you have designing skill, you will enjoy creating your own patterns; otherwise, you can buy attractive transfer designs.) Place work in an embroidery hoop large enough to encompass the entire design. Be sure fabric is held taut and add an underlay if fabric is soft. Remove presser foot and replace regular throat plate with the feed cover plate.

PROCEDURE

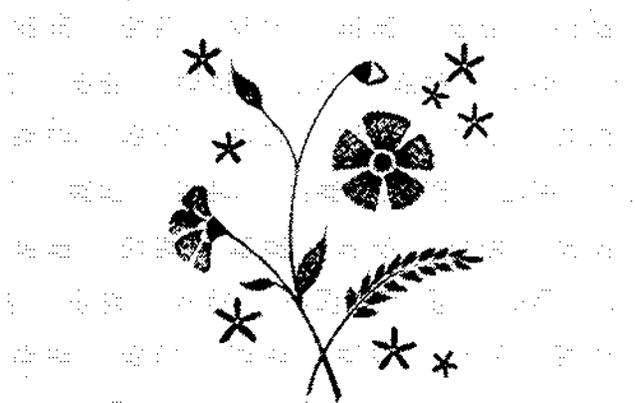
1. Position work under needle and lower presser bar to engage tension.

2. Hold needle thread loosely and turn hand wheel toward you to bring bobbin thread up through fabric. Hold both thread ends and lower needle into fabric.
3. Stitch, outlining or filling in design with zig-zag stitches. For a smooth, satiny surface, place parallel stitches close together, moving hoop slowly and steadily. For an irregular texture, move the hoop more rapidly, allowing some stitches to overlap.

A series of bar-tacks can be used to form spray-like leaves or flowers. This technique adds variety and lightness to many designs. Leaves and petals formed in this way may carry the thread from one bar tack to the next. This carrying thread eliminates tying of the thread ends.



Stitching Flower Design



Completed Flower Design

construction details

ZIPPERS

At the notions counter in your Singer store, you will find many different kinds of zippers, one of which will be just right for whatever you wish to sew. How the zipper is inserted will depend on the type of garment and the location of the zipper. The zipper package will contain easy-to-follow instructions. And, if you use the zipper foot, you will find it easy to form an even line of stitching close to the zipper.

-
- Pattern: Straight Stitch ▲
 - Stitch Width: ▲
 - Needle Position: ▲
 - Stitch Control: 10 to 15
 - General Purpose or Straight Stitch Throat Plate
 - Zipper Foot
-

Attaching the Zipper Foot

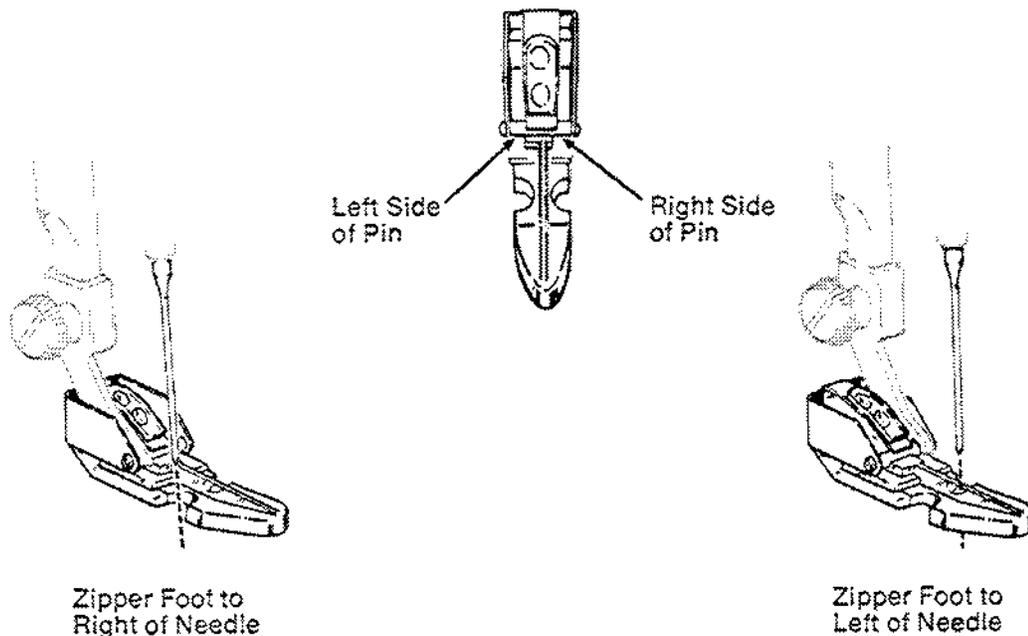
When the zipper is to the *right* of the needle:

- Place the zipper foot under the presser foot shank and lower the presser bar to allow the shank to fit over the pin on the *right* side of the zipper foot, so that the needle will enter the *right* notch in the foot. Press down on presser foot screw until foot snaps into place.

When the zipper is to the *left* of the needle:

- Place the zipper foot under the presser foot shank and lower the presser bar to allow the shank to fit over the pin on the *left* side of the zipper foot, so that the needle will enter the *left* notch in the foot. Press down on presser foot screw until foot snaps into place.

Attaching the Zipper Foot



DARTS

Darts can be made in the usual way on your sewing machine. That is, you begin stitching at the wide end of the dart, stitch to the point, and then fasten the two thread ends.

However, thanks to the push-button bobbin, you can avoid the problem of fastening the thread ends by making a "continuous-thread" dart and stitching in the opposite direction. This method is particularly useful for darts in sheer fabrics, where transparency requires a neat, clean finish. It is also useful for darts made on the right side of a garment as a style detail.

Regular Darts

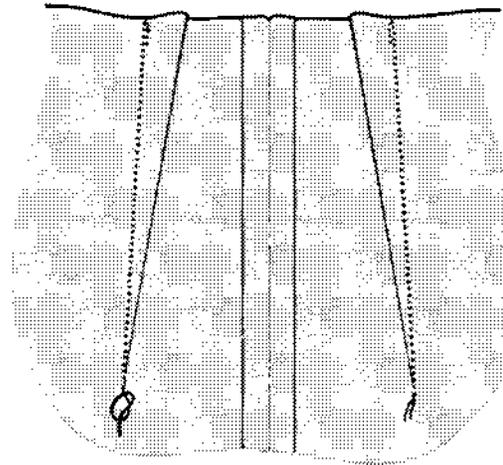
-
- Pattern: Straight Stitch 
 - Stitch Width: 
 - Needle Position: 
 - Stitch Control: About 12 or to suit fabric
 - General Purpose Throat Plate
 - General Purpose or Straight Stitch Foot
-

1. Stitch from the seam edge, tapering gradually to the point.
2. Stitch beyond the fabric to form a thread chain $\frac{1}{2}$ to $\frac{3}{4}$ inch long. Clip thread ends about two inches from dart point.
3. Tie the thread ends into a single knot close to the stitching.

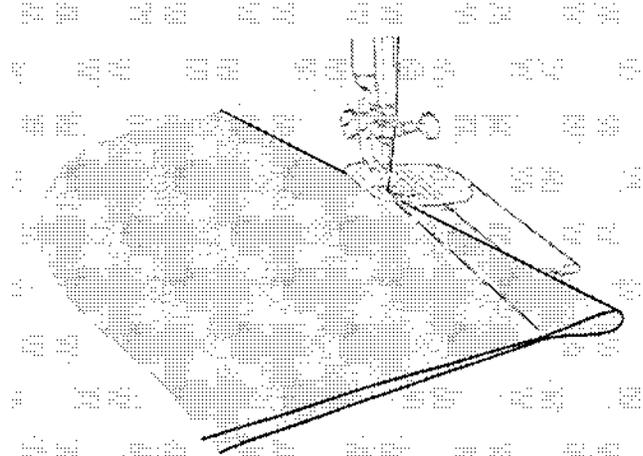
Continuous-Thread Darts

1. Set the machine as for regular darts.
2. Wind an empty bobbin with enough thread to make a single dart (usually less than one yard).
3. Close slide plate, and position the needle in the very edge of the fold, at the point of the basted or pinned dart.
4. Lower the presser foot.
5. Stitch carefully from the point to the wide end of the dart at the seam edge.

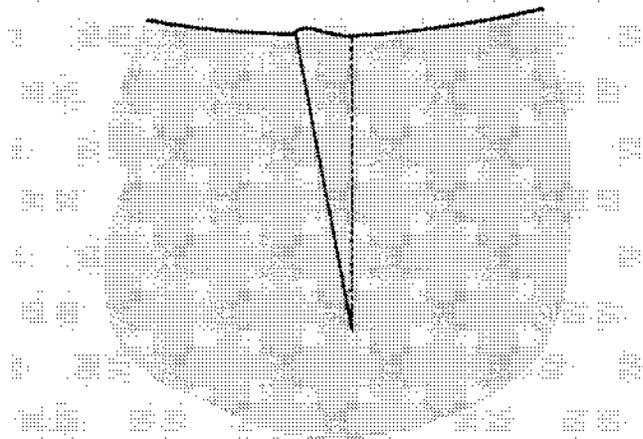
Remember to remove excess thread from bobbin before rewinding.



Regular Darts

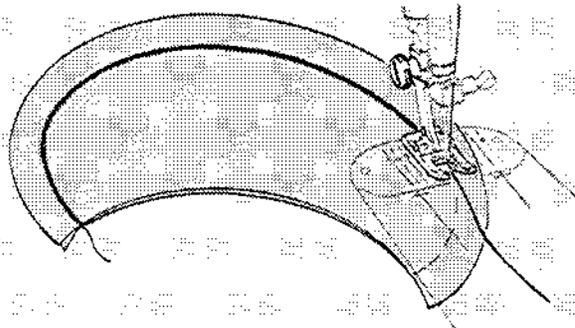
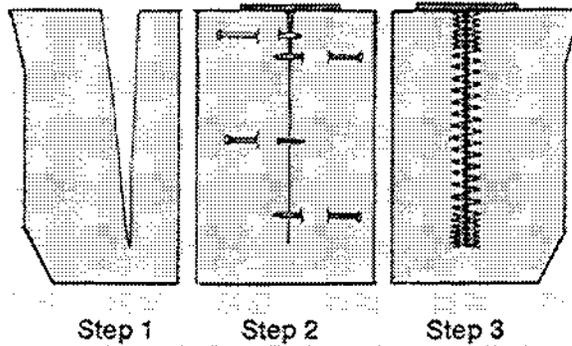


Starting to Stitch Continuous-Thread Dart

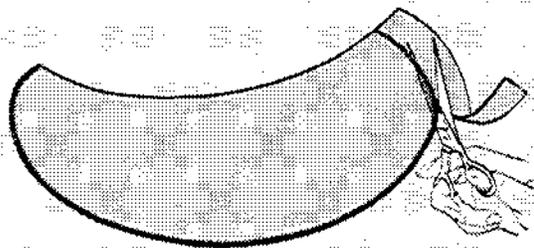


Continuous-Thread Dart

Darts in Interfacing



Stitching an Inside Seam



Cutting Seam Allowance

Darts in Interfacing

-
- Pattern: Zig-Zag  or Multi-Stitch Zig-Zag 
 - Stitch Width: 5
 - Needle Position: 
 - Stitch Control: About 20 or to suit fabric
 - General Purpose Throat Plate
 - General Purpose Foot
-

With zig-zag stitching, darts in interfacings can be shaped without bulk.

1. Cut out the dart allowance on the stitching line.
2. Bring raw edges together and pin or baste in position over a muslin stay.
3. Stitch, backstitching at both ends of dart for reinforcement.

INSIDE SEAMS OF SHEER COLLARS, FACINGS, AND CUFFS

-
- Pattern: Plain Zig-Zag 
 - Stitch Width: 1 or 2
 - Needle Position: 
 - Stitch Control: In **FINE** area
 - General Purpose Throat Plate
 - Special Purpose Foot
-

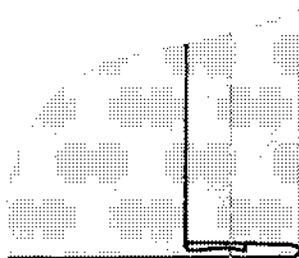
With a delicate hairline finish, seam allowances that ordinarily show through can be eliminated. You may wish to use a filler cord to give body to the seam. For easy handling of the cord, place spool on the table, floor, or in your lap. Unwind a sufficient amount to avoid tension or strain on the cord. Place cord on the seam line so that it is centered under the presser foot. Stitch along seam, covering the cord. Cut seam allowance away close to the line of stitching, turn to right side, and with thumb and forefinger, roll out curved edges. Press flat.

BLINDSTITCH HEMS

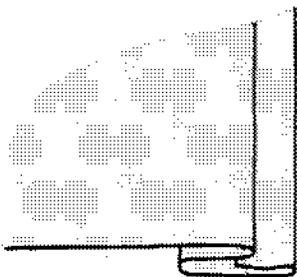
- Pattern: Blindstitch
- Stitch Width: 2 to 5
- Needle Position: 
- Stitch Control: 10 to 20
- General Purpose Throat Plate
- General Purpose Foot
- Seam and Blindstitch Hem Guide

Blindstitching provides a durable hem finish that is almost invisible. It is best suited to straight or slightly curved hems. Taped, bound, turned, or unfinished hem edges can be blindstitched with equal ease. Blindstitching takes a little practice, however, so make a test sample first.

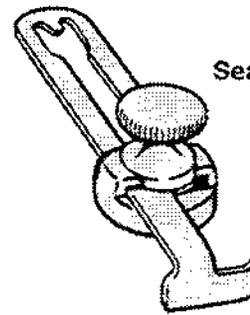
1. Mark, turn, and press hem in the usual way.
2. Baste a guideline $\frac{1}{4}$ inch from top of hem edge.
3. With the work wrong side up, turn the hem under, creating a soft fold about $\frac{1}{4}$ inch from top of hem.



Basted Guideline



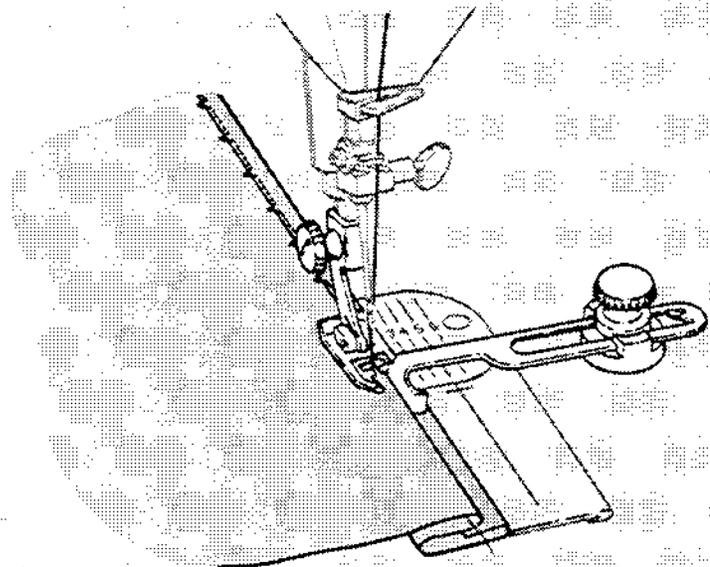
Soft Fold



Seam and Blindstitch Hem Guide

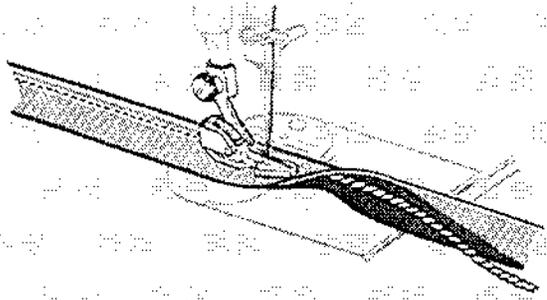
4. Place hem edge over feed of machine with bulk of fabric to the left.
5. Screw seam and hem guide into hole at right of slide plate and adjust it over the right toe of the presser foot so that it rests next to the soft fold.
6. Stitch so that straight stitches fall on hem edge and sideward stitches pierce the soft fold. While stitching, guide the fold evenly against edge of hem guide.
7. When stitching is completed, swing guide out of position before raising presser foot. Remove basting stitch.

Blindstitch Hem



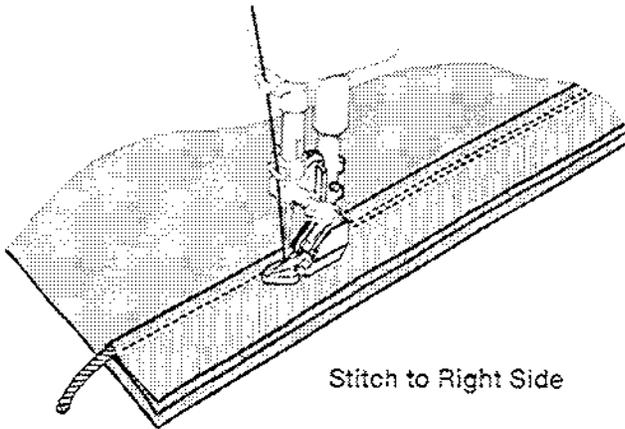
Blindstitching a Hem

Making the Welting

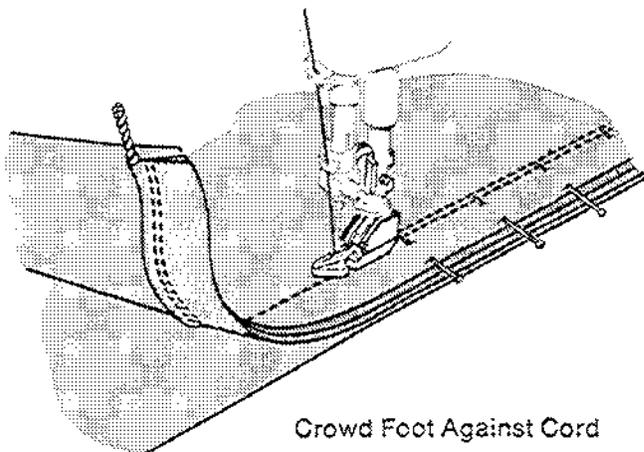


Stitch Close to Cord

Making a Corded Seam



Stitch to Right Side



Crowd Foot Against Cord

CORDED SEAMS

The corded seam is a professional treatment for slipcovers, children's clothes, blouses, and lingerie. To make a corded seam, make the welting first (or buy it ready-made at a notions counter), then stitch it into the seam.

-
- Pattern: Straight Stitch
 - Stitch Width: Δ
 - Needle Position: Δ
 - Stitch Control: Slightly longer than for regular seaming
 - General Purpose or Straight Stitch Throat Plate
 - Zipper Foot
-

Making the Welting

1. Buy cable cord of desired size.
2. Cut bias strips of fabric to cover cord (width: three times the diameter of the cord plus $1\frac{1}{4}$ inches). If it is necessary to sew strips together to obtain desired length, join on lengthwise fabric grain.
3. Fold bias fabric strip over cord, raw edges even.
4. Attach zipper foot for use on *left* side of needle.
5. Lower the presser foot.
6. Stitch close to the cord (do not crowd stitching against cord), pulling gently on the strip, both in front and in back of the zipper foot.

Stitching Welting into Seam

1. Attach zipper foot for use on *right* side of the needle so that the bulk of the fabric will fall to left.
2. Stitch welting to the right side of a single seam edge; guide the edge of the foot next to the cord but do not crowd.
3. Place the attached welting over the second seam edge, and pin or baste together.
4. Place work under needle, with the first stitching on top so that you can use it as a guide. Stitch, crowding foot against cord.

SEAMS IN FABRICS THAT RAVEL

Seam edges support the garment and should be given a durable finish if the fabric is likely to ravel. There are two ways of finishing seams in such fabrics: trimming seam edge or overedging. Make a test sample first to determine whether method #1 or method #2 best suits your fabric.

Method #1 — Trimmed Finish

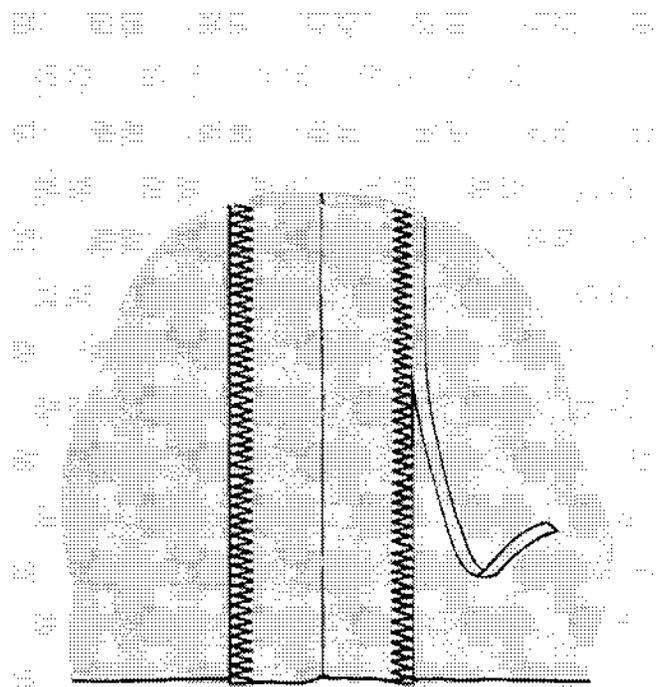
-
- Pattern: Feather Stitch , Plain Zig-Zag , or Multi-Stitch Zig-Zag 
 - Stitch Width: 4 or 5
 - Needle Position: 
 - Stitch Control:  for Feather Stitch or 8 to 20, depending on stitch and fabric
 - General Purpose Throat Plate
 - General Purpose Foot
-

1. Select the stitch pattern that best suits your fabric.
2. Adjust stitch width (and stitch length if you are using multi-stitch zig-zag or plain zig-zag stitches) to give the most "open" stitch that will secure the fabric edge; avoid harsh over stitching.
3. Place stitching near the edge of the seam allowance.
4. Trim seam edges evenly, as shown, after stitching is completed.

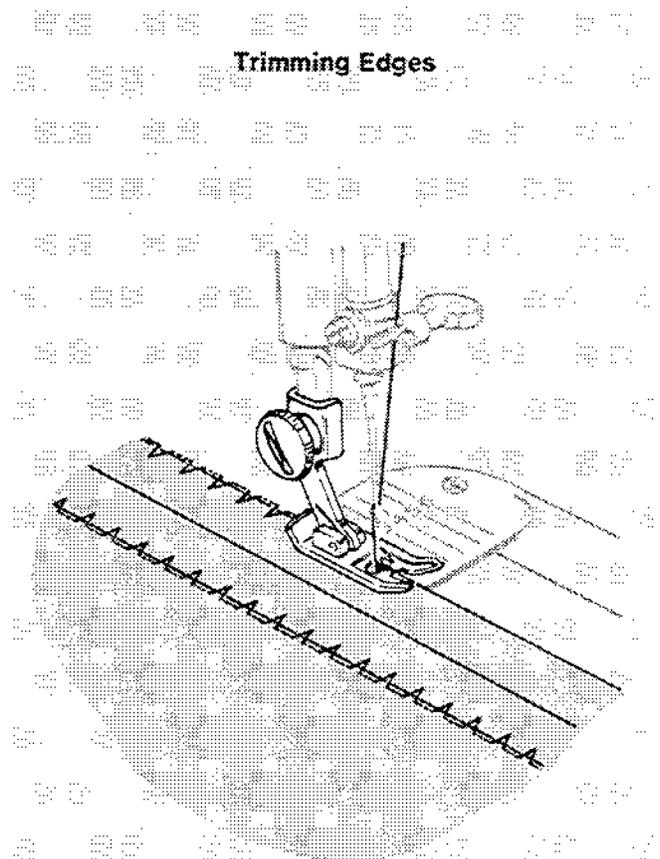
Method #2 — Overedged Finish

-
- Pattern: Plain Zig-Zag , Blindstitch , or Multi-Stitch Zig Zag 
 - Stitch Width: 4 or 5
 - Needle Position: 
 - Stitch Control: 8 to 20, depending on stitch and fabric.
 - General Purpose Throat Plate
 - General Purpose Foot
-

1. Adjust stitch width and stitch length to give the most "open" stitch that will secure the fabric edge; avoid harsh over stitching.
2. Trim seam edges evenly and place stitching over the trimmed edge of the seam allowance.



Trimming Edges



Overedged Finish

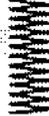
sewing knit and stretch fabric

When you sew stretch fabrics, doubleknit, tricot and jersey, choose one of the stitch patterns that build stretch into the seam. A wide variety of different stitches are available (including a flexible basting stitch) so you can choose just the right one for your fabric and

sewing job. The table below will help you make the right selection.

Remember to use a ball point (yellow band) needle in the machine when you attach elastic or sew a synthetic knit or stretch fabric.

STRETCH STITCH CHART

Stitch	Where to Use
 <p>Straight Stretch† Feather Stitch — Stitch Width Δ</p>	<p>Plain seams that s-t-r-e-t-c-h (press-open or closed construction) — Crotch seaming — Sleeve and gusset insertion — Flexible top stitching — Swim and ski suit construction — Attaching patch pockets — Repairing and reinforcing seams.</p>
 <p>Multi-Stitch Zig-Zag</p>	<p>Attaching elastic and stretch face — Lingerie and swim suit construction — Girdle seams — Seam finishes — Casings and waistband finishes.</p>
 <p>Plain Zig-Zag</p>	<p>All-purpose stretch sewing—Lingerie seams — Attaching stay tapes—Seam finishing — Edge finishing — Attaching stretch lace.</p>
 <p>Ric-Rac Stitch† (See Stitch Pattern Chart on Page 21)</p>	<p>Heavy-duty, all-purpose stretch sewing — Reversible top-stitch applications.</p>
 <p>Blindstitch</p>	<p>Flexible blindstitch hemming — Overcast seam finishing — Shell hems in lingerie.</p>
 <p>Feather Stitch†</p>	<p>Swim suit seams — Attaching stretch lace — Lingerie and girdle seams.</p>
 <p>Chainstitch</p>	<p>Flexible basting — Easy-off hem tape application.</p>
 <p>Slant Overedge Stretch Stitch† (See Stitch Pattern Chart on Page 21)</p>	<p>Overedged seams that stretch in sports wear, knitwear, slacks, and bathing suits.</p>

†This stitch is designed for strength and permanence and cannot be readily ripped out without risk of fabric damage.

GUIDING AND SUPPORTING FABRIC

Most fabrics of stretch or knit construction need only to be guided in front of the presser foot when you use one of the stretch stitches. Simply let the machine move the fabric to make the stitches that give *s-t-r-e-t-c-h* to the seam.

Some fabrics — nylon tricot and elasticized fabrics, for example — do require support while being stitched.

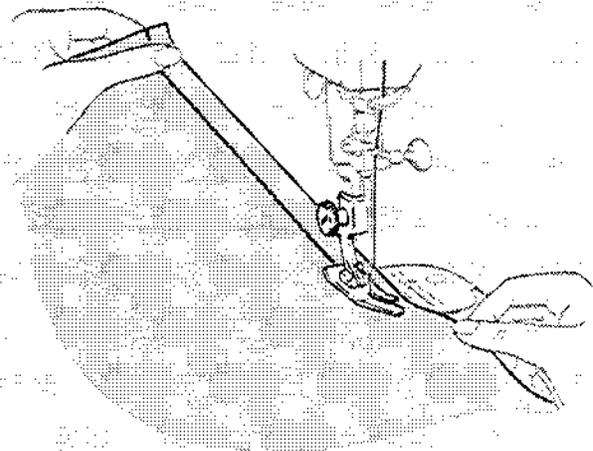
- For nylon tricot and similar synthetic knits, apply *gentle* tension by holding the seam in front and back of the presser foot as you sew.
- For elasticized fabric, stretch lace, and knits with an unusual amount of elasticity, apply *firm* tension in front and back of the presser foot to stretch the seam as the stitches are being placed.

FINISHES FOR HEMS AND FACINGS

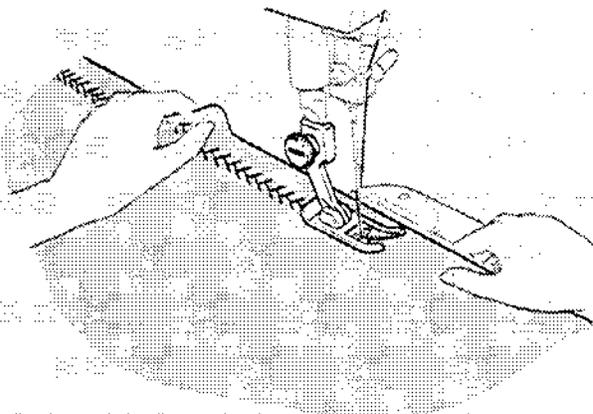
- Pattern: Feather Stitch  or Multi-Stitch Zig-Zag 
- Stitch Width: 5
- Needle Position: 
- Stitch Control:  for Feather Stitch, or 8 to 20, depending on stitch and fabric
- General Purpose Throat Plate
- General Purpose Foot

Hem and facing edges in knit and stretch fabrics will be less apt to press through and mark when given a flat edge-finish. Edge finishing with the feather stitch or multi-stitch zig-zag eliminates the bulk of turned-in edges and retains fabric flexibility.

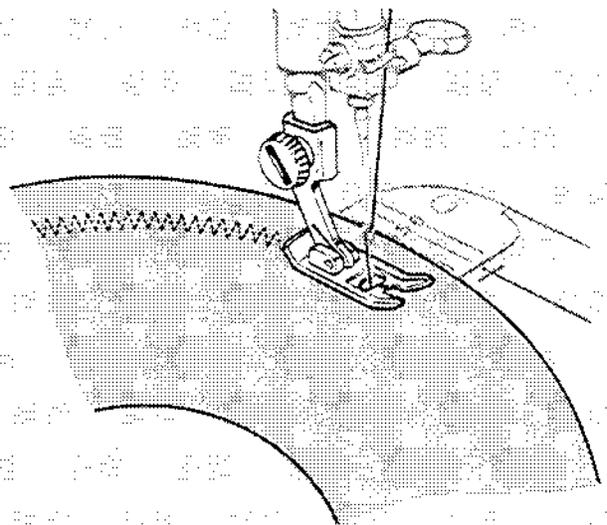
1. Make a test sample to check thread tension and stitch length if you are using the multi-stitch zig-zag.
2. Place stitching about 1/2 inch from hem or facing edge.
3. Press after stitching and trim away excess fabric close to the stitching line.



Applying Gentle Tension



Applying Firm Tension



Applying Facing Finish

PLAIN STRETCH SEAMS

- Pattern: Feather Stitch 
- Stitch Width: 
- Needle Position: 
- Stitch Control: 
- General Purpose Throat Plate
- General Purpose Foot

When you use the straight stretch stitch (feather stitch at  stitch width setting) to seam knit, stretch, and elasticized fabric, *s-t-r-e-t-c-h* and strength are built in as the seam is being sewn. Because it is equally useful for closed or press-open seam construction and will not break thread under stress, the straight stretch stitch is also good for seams that receive an unusual amount of strain when worn. For example: crotch seaming, sleeve insertion, and construction seams in sportswear and bathing suits.

Procedure

1. Make a test sample to determine the correct thread tension. Be sure to insert a yellow-band needle in the machine if you are stitching a synthetic knit fabric.
2. Stitch and guide fabric as you do for plain seams stitched with the regular straight stitch, letting the machine make the back-and-forth stitches that give *s-t-r-e-t-c-h* to the seam. If fabric has an unusual amount

of elasticity, it should be stitched under tension as instructed on page 49 (Guiding and Supporting Fabric).

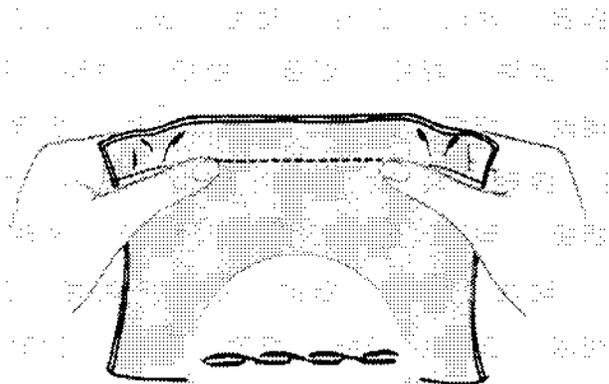
3. Press seam as when using the regular straight stitch.

LINGERIE SEAMS

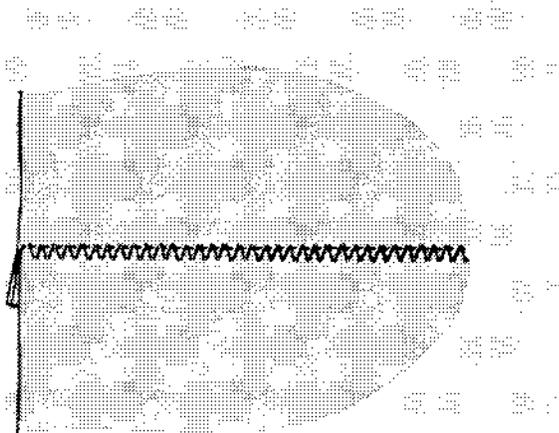
- Pattern: Plain Zig-Zag 
- Stitch Width: 1 to 2½
- Needle Position: 
- Stitch Control: 12 to 20
- General Purpose Throat Plate
- General Purpose Foot

To make a lingerie seam durable and flexible, use the plain zig-zag stitch at a narrow width setting. This seam treatment is particularly suitable for bias seams. When seaming nylon tricot, insert a yellow-band needle in the machine before you begin to sew.

- Straight-stitch the seam (dials set on black  symbols) on wrong side of fabric.
- Press both seam allowances in the same direction.
- From the right side, top-stitch with narrow zig-zag stitching, letting the needle alternately enter the seam line and the seam thickness.



Straight Stretch Stitching



Lingerie Seam

OVEREDGED SEAMS

Seams in knit and stretch fabric can be joined and finished in one operation with the slant overedge stretch stitch. Two methods may be used. Method #1 (overedging) is recommended for firm fabrics where a ¼-inch seam allowance is adequate. Method #2 (mock overedging) is appropriate for bulky knits and fabrics that have a tendency to curl or fray and where a wider seam allowance is needed. Make a test sample, duplicating the cut of the garment seam, to help you decide which method is best for your fabric. Be sure to use a ball-point (yellow band) needle if you are sewing a synthetic knit.

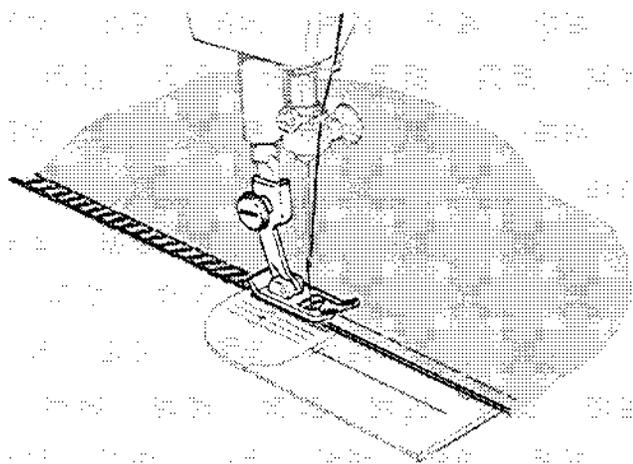
-
- Pattern: Blindstitch
 - Stitch Width: 5
 - Needle Position: A
 - Stitch Control: ☺
 - Speed: In **SLOW** range
 - General Purpose Throat Plate
 - General Purpose Foot
-

Method #1 — Overedging

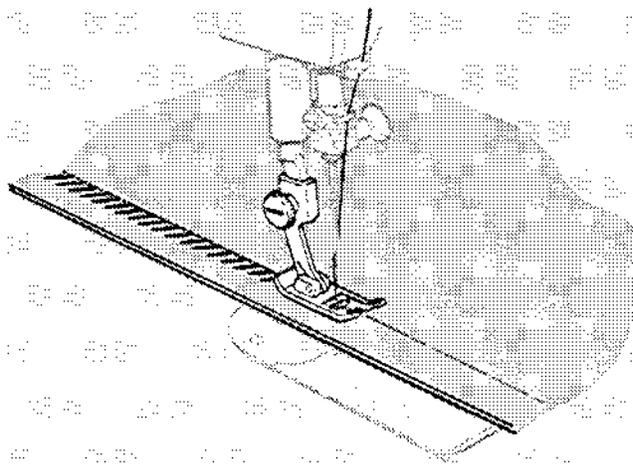
1. Cut and fit the garment allowing for a 5/8-inch seam allowance. Baste seam line.
2. Trim seam edges evenly to a scant ¼-inch from seam-line basting.
3. Place trimmed seam under the presser foot with bulk of fabric to the right so that the straight stitches fall on the basted seam line and the zig-zag stitches fall over the seam edge.

Method #2 — Mock Overedging

1. Use the same machine settings and accessories as for "Method #1 — Overedging."
2. Cut and fit the garment allowing for a 5/8-inch seam allowance. Baste seam line.
3. Place seam under the presser foot with the bulk of fabric to the right so that the straight stitches fall on the seam-line basting.
4. Press after stitching and trim away excess fabric to produce a narrow seam edge. When the seam supports the garment, omit the trimming step.



Method #1 — Overedging

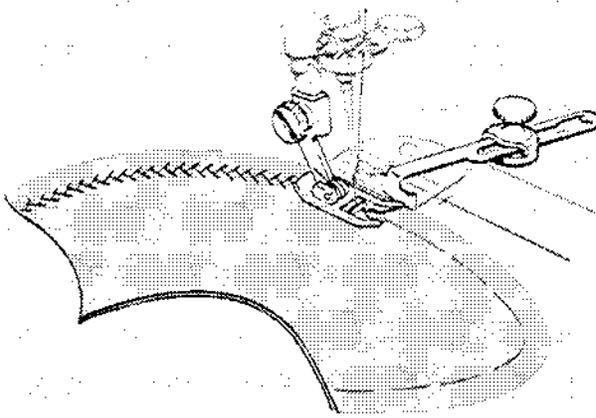


Method #2 — Mock Overedging

decorative touches

TOP STITCHING

A practical, simple way to accent the lines of a dress or coat is to place one or more rows of stitching along collars, lapels, facing edges, pockets, seams, etc. For a tailored look, use lines of regular straight stitching; sew them with buttonhole twist for added emphasis. For decorative interest, use a stitch pattern. To add firmness to hems and seams in knit and stretch garments, top-stitch with the straight stretch stitch (feather stitch at \triangle stitch width). The seam and hem guide will help you place the rows of stitching accurately.

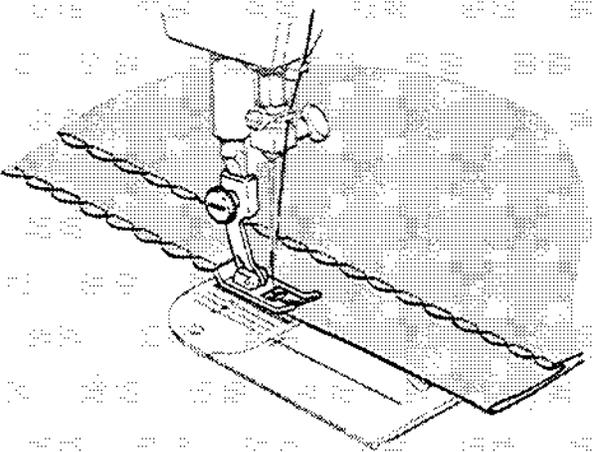


Top Stitching with Feather Stitch

SHELL EDGING

-
- Pattern: Blindstitch
 - Stitch Width: 3 to 5
 - Needle Position: \triangle
 - Stitch Control: 12 to 20
 - General Purpose Throat Plate
 - General Purpose Foot
-

1. Make a test on a sample of your fabric to find the right thread tension, stitch length, and stitch width.
2. Place folded hem or bias fold (basted, if necessary) under presser foot with hem or fold toward the left.
3. Stitch slowly, guiding fabric so that the sideward stitches do not pierce the folded edge.



Shell Edging with the Blindstitch

APPLIQUE

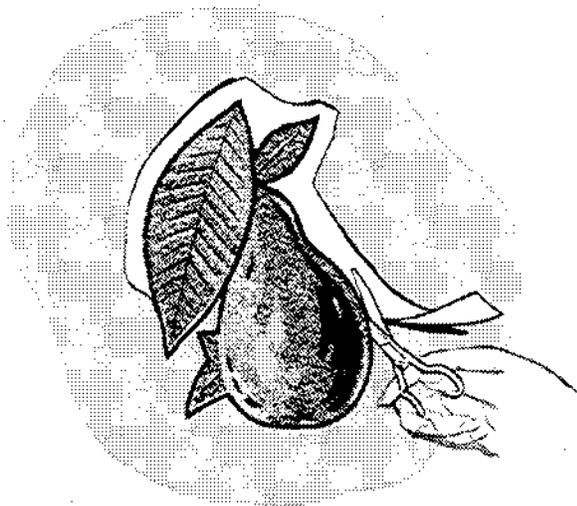
Applique adds beauty and interest to clothing and household linens. You can create your own design, trace a simple outline from a coloring book, or use a motif cut from a printed fabric. Fabrics of like or different texture combine equally well.

A closely spaced zig-zag stitch is most commonly used in applique work, but basic decorative stitch patterns (see page 21) may also be used effectively. Although you may vary stitch width to accommodate fabric weave or texture, never allow the stitch to be too wide.

When appliqueing, make a test sample to help you decide which of the following methods is most appropriate for your fabric and design.

Preparation

- Baste applique design to fabric.
- Outline design with straight stitching (use a short stitch).
- Remove basting and press.
- Attach special purpose foot (and general purpose throat plate).



Method #1—Trimming after Stitching

Method #1 — Trimming after Stitching

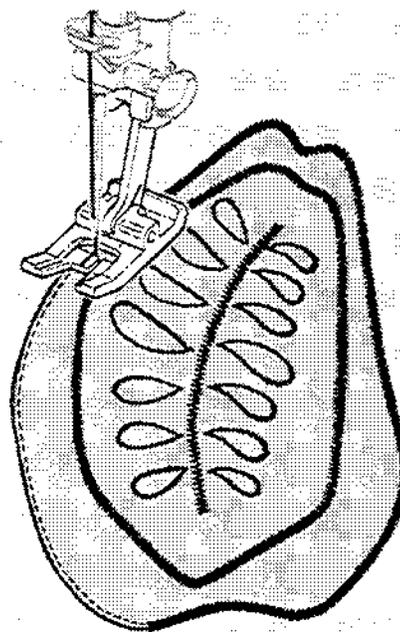
1. Set pattern dial and stitch width dial for desired applique stitch. Adjust stitch length in the **FINE** area of the stitch control.
2. Outline the entire design with applique stitching.
3. Cut away the fabric on the outer edges of the stitching with embroidery scissors.

Method #2 — Stitching after Trimming

1. Trim outside fabric edges close to straight stitch outline of design.
2. Set pattern and stitch width dials for desired applique stitch. Adjust stitch length in **FINE** area of the stitch control.
3. Overedge the design with applique stitching. This step will produce a smooth, lustrous finish that requires no additional trimming.

Corded Applique

For a raised, three-dimensional effect, form applique stitches over a filler cord. Buttonhole twist or crochet thread make excellent filler cords. Place them under the special purpose foot as instructed under "Inside Seams."



Method #2—Stitching after Trimming

MONOGRAMS AND MOTIFS

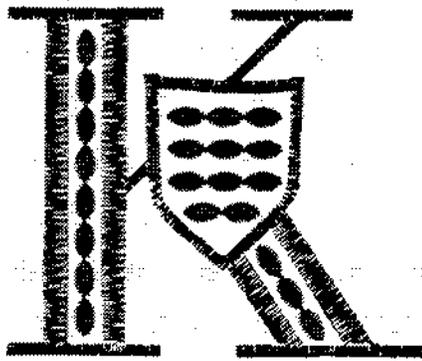
Many decorative stitch patterns can be used for monograms and motifs—to add a personal touch to a blouse collar, for example, or for initialing household linens. You can buy designs or create them yourself to suit the stitch pattern you wish to use.

Very simple straight-line monograms can be made with the straight stretch stitch (feather stitch at Δ stitch width) or you can create a motif by arranging individual pattern units to form a design. (Detailed information on zig-zag stitch patterns and dial settings begins on page 21.)

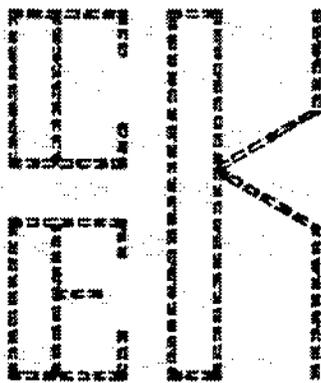
When you use a decorative stitch pattern to form a motif, you will want to start at the beginning of the pyramid, ball, or whatever pattern you have selected.

Finding Beginning of Pattern Unit

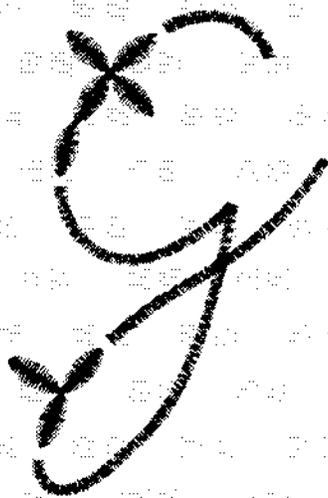
1. On a scrap of material, stitch until you come to the end of a complete pattern unit. Now you are ready to start stitching at the beginning of the next unit.
2. Raise presser foot and remove scrap.
3. Position motif under needle, lower the presser foot, and stitch.



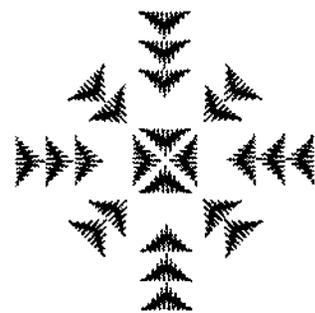
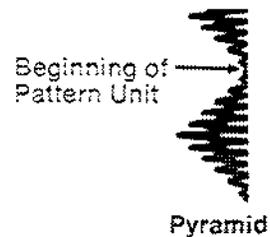
Monogram in Plain Zig-Zag and Ball Stitch



Line Monogram in Straight Stretch Stitch



Initial in Plain Zig-Zag and Ball Stitch



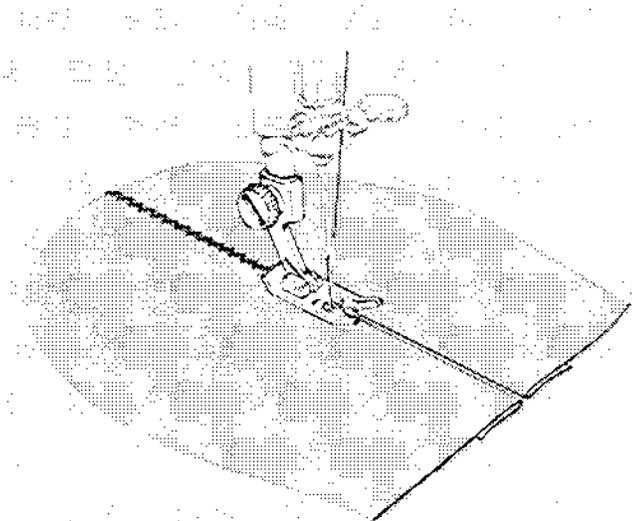
Pyramid Pattern Used in Motif

FAGOTING

-
- Pattern: Feather Stitch 
 - Stitch Width: 5
 - Needle Position: 
 - Stitch Control: 
 - Speed: In **SLOW** range
 - General Purpose Throat Plate
 - General Purpose Foot
-

The art of joining two pieces of fabric with an open, lacy decorative stitch is called fagoting. You can create this attractive trimming with the feather stitch. Use it for decorative stretch seams in bathing suits or for joining together narrow strips of fabric to make an entire garment section.

- Turn under (and hem by slipstitching) the raw edges of the fabric strips or seams to be joined. Press flat.
- Stitch, guiding the two fabric edges under the center of the presser foot a scant $\frac{1}{8}$ inch apart (abut edges for bathing suit seams). Allow the needle to alternately make a stitch in each fabric strip and two stitches in the center of the opening.



Fagoting a Seam

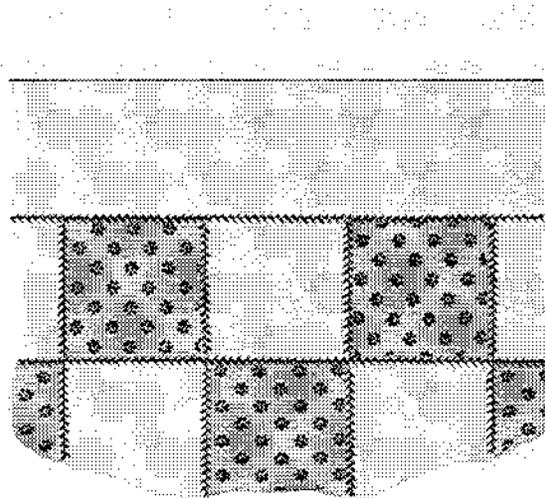
PATCHWORK QUILTING

-
- Pattern: Feather Stitch 
 - Stitch Width: 5
 - Needle Position: 
 - Stitch Control: 
 - Pressure: Light
 - Speed: In **SLOW** range
 - General Purpose Throat Plate
 - General Purpose Foot
-

Patchwork for quilts and wearing apparel, formerly put together with hand stitching, can be quickly "pieced" and decorated at the same time by using the feather stitch. Joinings are both flexible and durable when this method is used.

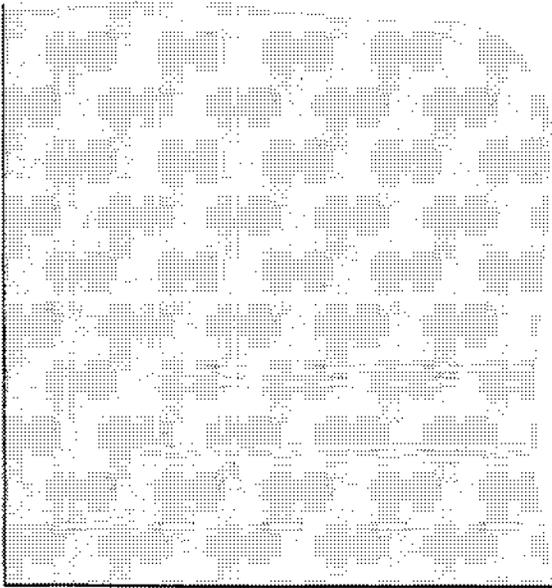
Procedure:

1. Cut a fabric underlay to size. (Baste a light layer of padding to underlay if a quilted effect is desired.)
2. Prepare patches, turning under $\frac{1}{4}$ -inch seam allowance.
3. Baste patches to underlay in arrangement desired, butting all edges.
4. Stitch in lengthwise and crosswise rows, allowing stitches to straddle patches.

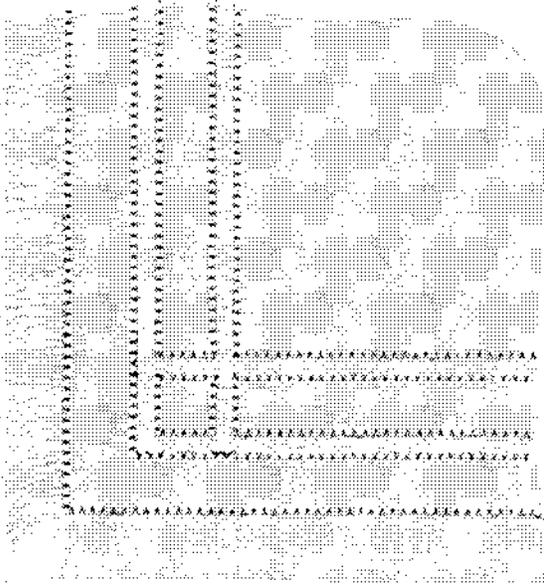


Patchwork Quilting

Drawn-Thread Work



Drawn-Thread Channels



Drawn-Work Detail with Fringed Edge

DRAWN-THREAD WORK

-
- Pattern: Blindstitch
 - Stitch Width: 2 to 3
 - Needle Position: 
 - Stitch Control: 15 to 20
 - General Purpose Throat Plate
 - General Purpose or Special Purpose Foot
-

Drawn-thread work is a simple decorative treatment that can be used to add interest to table linens, dresses, and blouses. It is accomplished by drawing threads from plain-weave fabrics to form open-work bands and accenting the band edges with blindstitching.

Choose a linen or linen-like fabric from which threads can be easily withdrawn.

Procedure:

1. Draw one (or more) threads from the fabric to mark edges of open-work bands.
2. Stitch, in drawn-thread channels, placing the fabric so that the straight stitches of the blindstitch pattern are made *in* the thread channel and the sideward stitches (or points) in the solid body of the fabric. If the fabric is soft, stitch through an underlay of tissue paper.
3. After stitching is completed, draw remaining threads from the fabric to form the open work between rows of stitching. Whenever stitching crosses threads that are to be drawn, cut threads close to stitching before drawing them out.

To form a fringe, draw a thread to mark fringe depth. Stitch in drawn-thread channel (with fabric edge to the right). Ravel threads between stitching and fabric edge.

SMOCKING

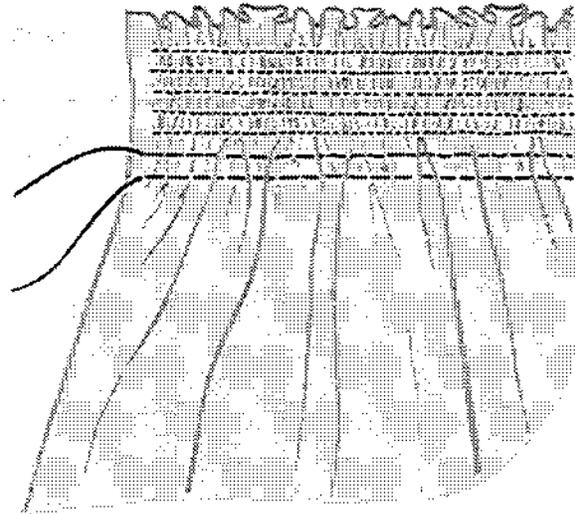
Smocking is a youthful decorative detail that is particularly charming when used for a yoke, insert or band on baby clothes, little girls' dresses, or lingerie.

When worked by hand, smocking is a time-consuming process. However, the heavy-stitched look, typical of hand work, can be stitched quickly and easily with your machine when you use *Flexi-Stitch* patterns.

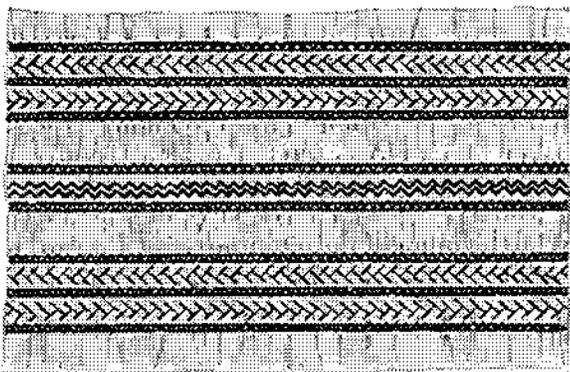
Procedure:

1. Space rows of straight stitching, $\frac{1}{4}$ inch apart, on the crosswise fabric grain.
2. Pull up evenly for the amount of fullness desired.
3. Baste to underlay.
4. Stitch over and between rows of shirring with decorative stitching. Create your own design or adapt the one illustrated. Use thread that contrasts with or matches your fabric, depending on the effect desired.

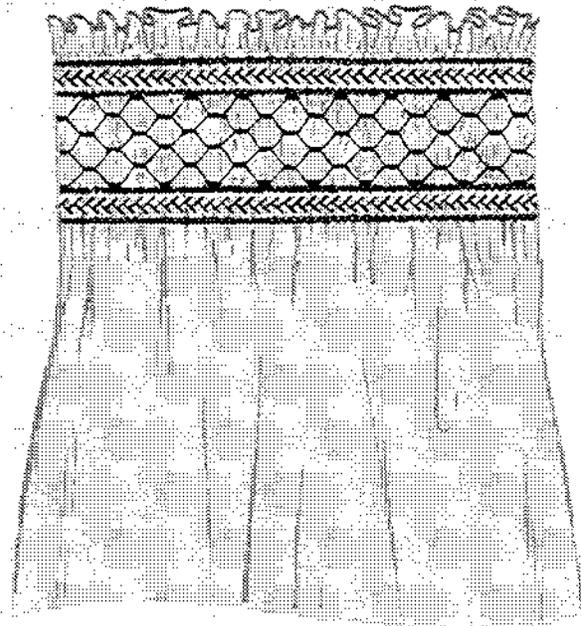
A test sample is always advisable to check stitch settings. Be sure to use the same fabric and degree of fullness you plan for your garment.



Gathering Stitches for Smocked Band



Smocked Band Accented with Cording



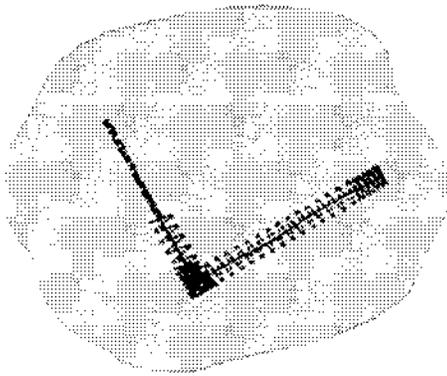
Smocked Band Completed

keeping up appearances

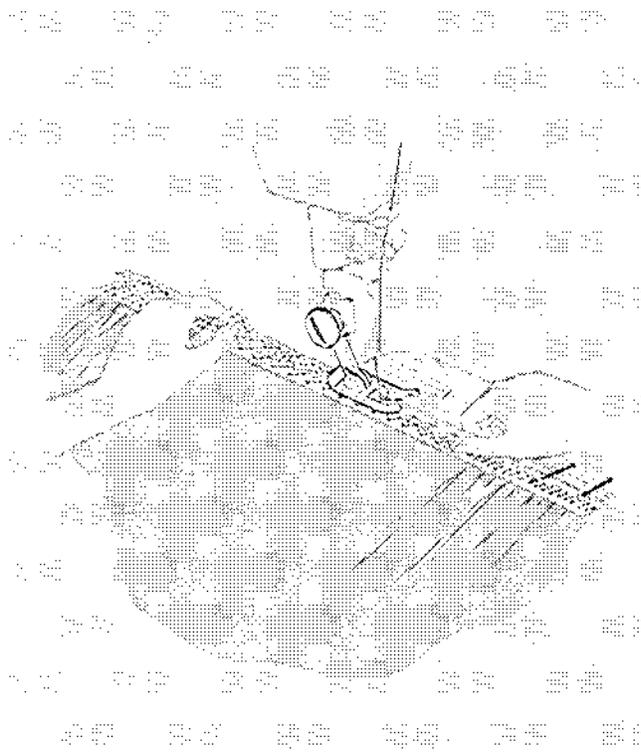
MENDING

Many zig-zag stitch patterns are just as useful for mending as they are for creative sewing. The multi-stitch zig-zag forms a firm, flexible bond that is ideal for repairing tears and replacing elastic. Stretchable straight stitches

for the repair and reinforcement of press-open seams are produced when the feather stitch is used at  stitch width setting. Bar-tacks to reinforce points of strain are made with the plain zig-zag stitch at satin stitch length.



Tear Mended with Multi-Stitch Zig-Zag



Replacing Elastic

Mending a Tear

-
- Pattern: Multi-Stitch Zig-Zag 
 - Stitch Width: 2 to 5
 - Needle Position: 
 - Stitch Control: 20 or to suit fabric
 - General Purpose Throat Plate
 - General Purpose Foot
-

1. Trim ragged edges.
2. Place underlay on the wrong side of tear for reinforcement. (It is best not to baste or pin the underlay since you will be bringing the edges of tear together in the next step.)
3. Stitch on the right side, bringing the edges of the tear together.
4. Shorten stitch length at ends and corners to give extra strength.
5. Trim underlay.

Replacing Elastic

When replacing waistline elastic, use settings and accessories as for "Mending a Tear."

1. Fit elastic for desired snugness at waistline, allowing one inch for joining. Lap the ends and join with multi-stitch zig-zag.
2. Divide elastic band and garment waistline into quarters. Lap elastic over fabric and pin the two together at these intervals. Place pins at right angles to stitching line.
3. Take a few stitches to anchor elastic to fabric, then hold the elastic taut as you stitch so that it will remain stretchable after stitching is completed.

Repairing Seams

Breaks in press-open garment seams can be repaired quickly and easily when you use the feather stitch. The reinforced straight stitch produced by this pattern at  stitch width setting is both strong and flexible. It is ideal for knit and stretch fabrics and particularly useful for repairing or strengthening curved seams or seams that will receive strain when worn.

1. Make a test sample to check dial settings.
2. Remove loose thread along the break and press the seam edges together.
3. Re-stitch along original seam line, guiding seam under presser foot without stretching fabric, letting the machine move the fabric to make the back-and-forth stitches that give *s-t-r-e-t-c-h* to the seam. Overlap stitching one inch at each end. Press seam open.

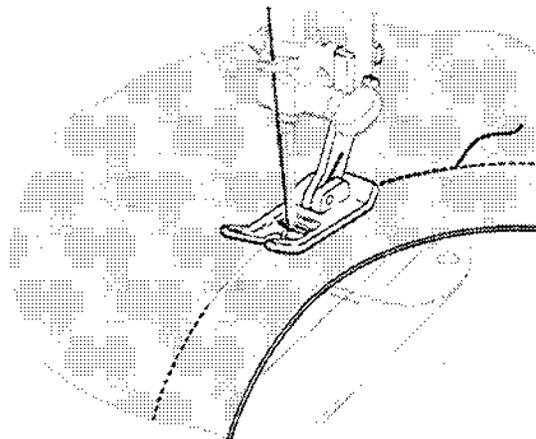
Repairing Stretch Garments

-
- Pattern: Feather Stitch 
 - Stitch Width: 3 to 5
 - Needle Position: 
 - Stitch Control: 
 - General Purpose Throat Plate
 - General Purpose Foot
-

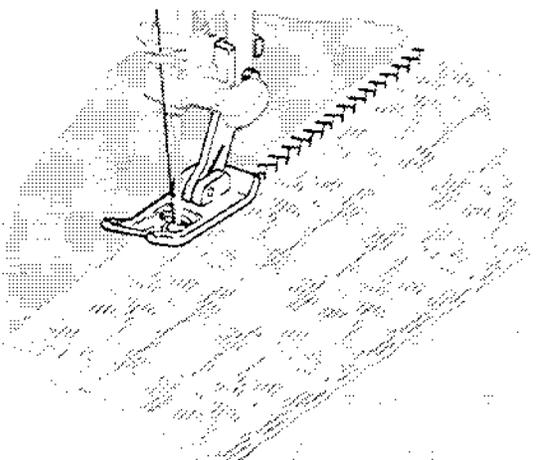
Seams and hems in stretch and elasticized garments retain their elasticity when stitched with the feather stitch. This stitch pattern builds *s-t-r-e-t-c-h* into the line of stitching as the fabric is being sewn and is particularly effective when used in top-stitch applications (as shown) or for fagoted seams described on page 55. Make a test sample to check dial settings.

Bar Tacks

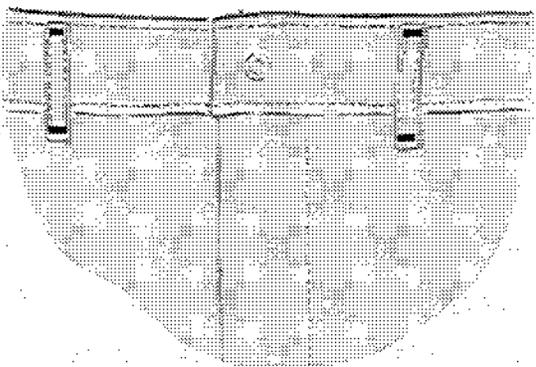
Bar tacks, to reinforce points of strain, are made with the plain zig-zag stitch at satin stitch length. Use them at pocket corners, to attach garters, secure shoulder straps, belt loops and zipper openings.



Seam Repair



Stretch Garment Repair



Bar-Tacked Belt Loops

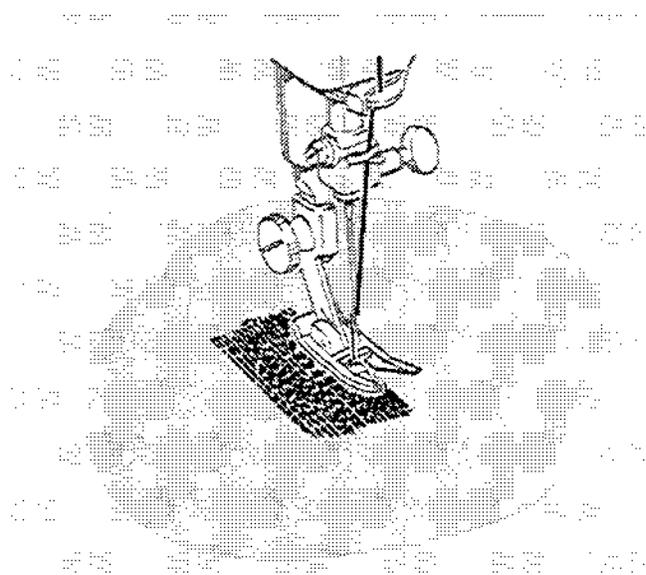
DARNING

Worn or torn spots on children's clothes, knits, and household linens can be darned effortlessly and quickly with little practice. You may choose to darn either with or without an embroidery hoop. When greater control is needed, an embroidery hoop is usually best.

Without Embroidery Hoop

- Pattern: Straight Stitch
- Stitch Width: Δ
- Needle Position: Δ
- Stitch Control: 10 to 15
- Pressure: **DARN**
- General Purpose Throat Plate
- General Purpose Foot

1. If area to be darned is open, baste an underlay in place.
2. Place area to be darned under presser foot; lower presser foot and start stitching, alternately drawing fabric toward you and pulling it *gently* away from you.
3. Continue this forward and backward motion as you fill the area with parallel lines of stitching. For additional strength, cover area with crosswise lines of stitching.

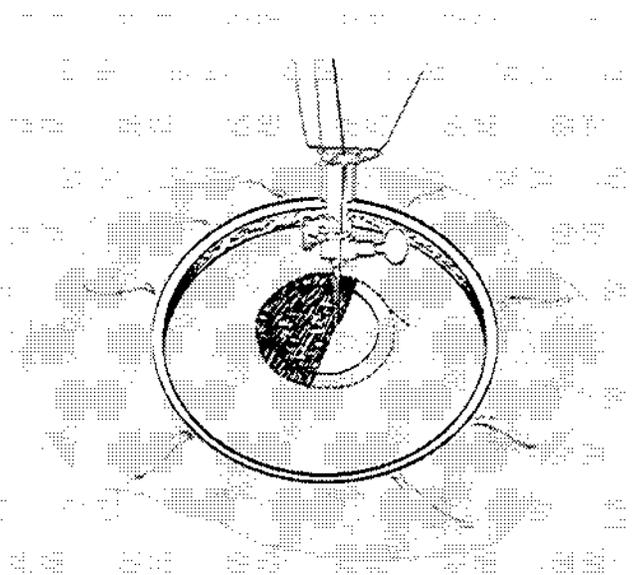


Darning without Embroidery Hoop

With Embroidery Hoop

- Pattern: Straight Stitch
- Stitch Width: Δ
- Needle Position: Δ
- Stitch Control: In **FINE** area
- Feed Cover Throat Plate
- No presser foot

1. Trim ragged edges from area to be darned.
2. Center worn section in embroidery hoop.
3. Position work under needle over feed cover plate; lower presser bar to engage tension.
4. Hold needle thread loosely with left hand, turn hand wheel over and draw bobbin thread up through fabric. Hold both thread ends and lower needle into fabric.
5. Outline area to be darned with running stitches for reinforcement.
6. Stitch across opening, moving hoop under needle at a slight angle from lower left to upper right. Keep lines of stitching closely spaced and even in length.
7. When opening is filled, cover area with crosswise lines of stitching.



Darning with Embroidery Hoop

BLANKET BINDING

Often you can make an old blanket look almost new by replacing the binding. A zig-zag stitch pattern such as the plain zig-zag or multi-stitch zig-zag may be used. The feather and semaphore *Flexi-Stitch* patterns are particularly suitable because they are both decorative and practical.

-
- Pattern: Desired zig-zag stitch (see above)
 - Stitch Width: 5
 - Needle Position: 
 - Stitch Control:  for *Flexi-Stitch* patterns, or 15 to 20, depending on stitch and fabric
 - Pressure: **NORM** or less
 - General Purpose Throat Plate
 - General Purpose Foot
-

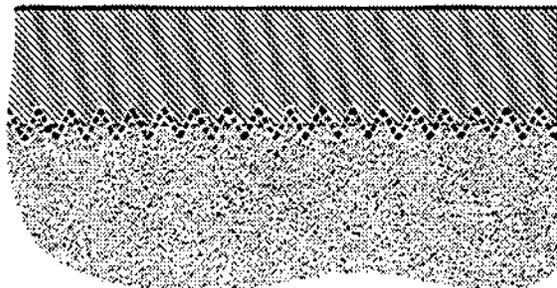
1. Make a sample to determine correct dial settings. Reduce pressure on fabric and increase stitch length, if necessary, so that blanket feeds freely.
2. Remove worn binding and baste new binding securely in place.
3. Stitch, and remove basting.

GROWTH AND SHRINKAGE TUCKS

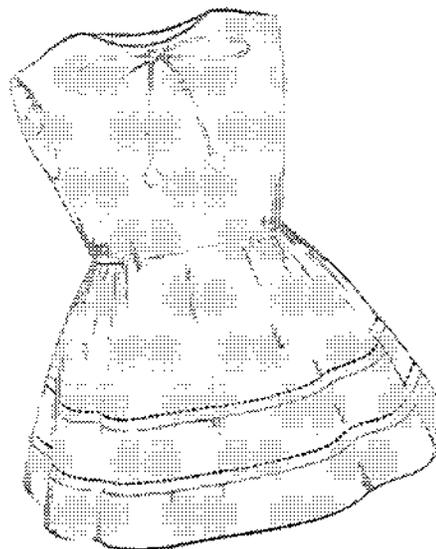
Tucks are frequently put into curtains, linings, and children's clothes to allow for the child's growth or fabric shrinkage. "Letting down" is no longer a chore when tucks are chain-stitched. Simply unlock the last loop of the chain formed on the underside of the tuck and pull out the stitching. Instructions on how to set your machine for chainstitching begin on page 30.

BELT CARRIERS AND STAY CHAINS

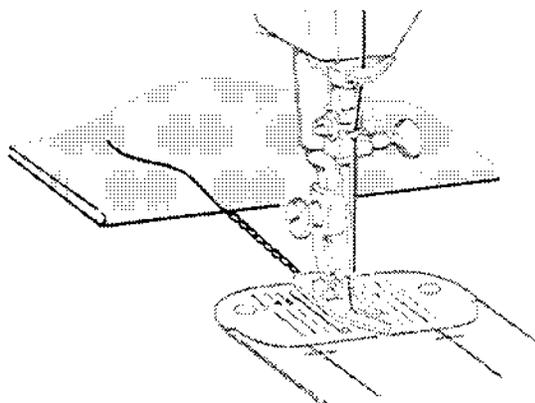
Stay chains (sometimes called French tacks) and belt loops can be quickly chainstitched. To produce a chain, place the first stitch in the fabric. Stitch off fabric and continue stitching until a sufficient length of chain is produced. Remove chain from machine and tack end to garment or lining with a hand sewing needle. A stitch length setting of 12 is recommended. For more information on chainstitching, turn to page 30.



Blanket Binding



Growth Tucks



Stitching a Stay Chain

cleaning the machine

Your machine will serve you perfectly for many years if you take a few moments of your time to keep it clean. How often you will need to clean the machine will depend on how often you use it.

CAUTION: Before cleaning your machine, disconnect power-line plug from electrical supply.

Remove lint or fluff from exposed parts. With a soft cloth, clean:

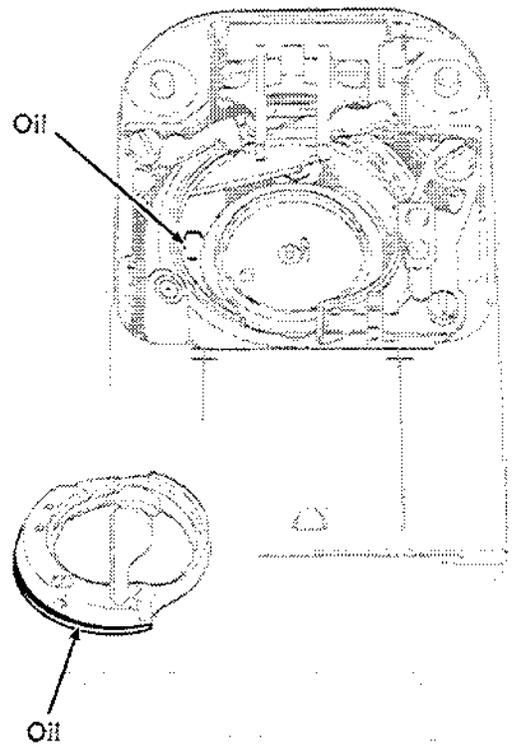
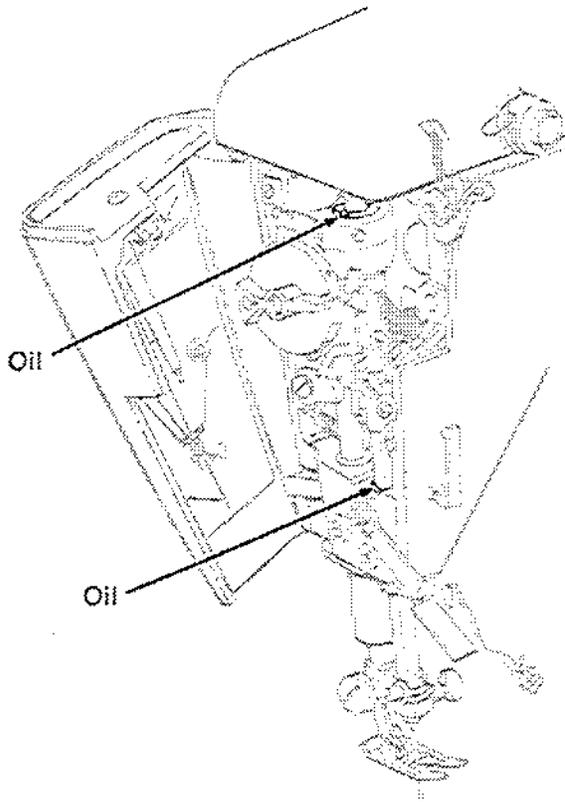
- Tension discs, presser bar, and needle bar
- Take-up lever and thread guides
- Bobbin case (If there is a lot of lint in the area, remove bobbin case for cleaning. See page 64 for instructions.)
- Machine surface (If necessary, dampen the cloth and use a mild soap.)

Open face plate and, with the lint brush, clean area behind face plate.

Remove throat plate as instructed on page 15. Using lint brush, clean the rotating hook area under the throat plate and slide plate.

After cleaning, apply only SINGER* oil at points indicated below. SINGER oil is specially prepared and does not contain harmful deposits that can interfere with the smooth action of precision parts.

Approximately once every year, remove top and bottom covers as instructed on page 63, and clean and lubricate all moving or rotating machine connections to ensure freedom of movement and to protect metal parts from excessive wear. To determine which connections are moving or rotating, turn hand wheel slowly (by hand) while covers are removed.

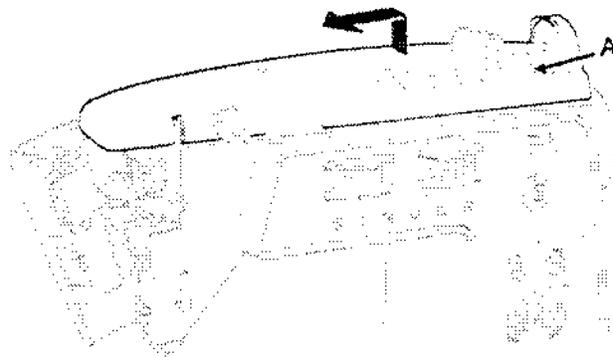


removing covers, bobbin case, and bulb

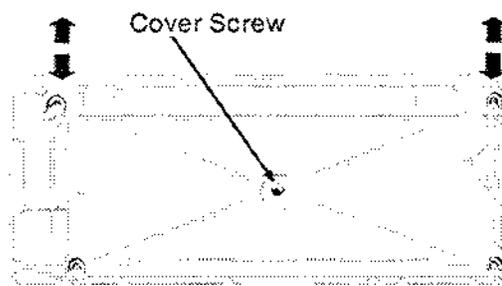
REMOVING AND REPLACING TOP COVER

Move take-up lever to a low point and lower the presser foot.

1. Disconnect machine from electrical supply and open the face plate. Loosen screw **A**, lift up right end of top cover, and slide cover toward left and off machine. Remove screw **A**.
2. Replace cover by positioning it on top of arm with a slight overhang on left side; slide cover to the right until it locks in place.
3. Replace and tighten screw **A**.



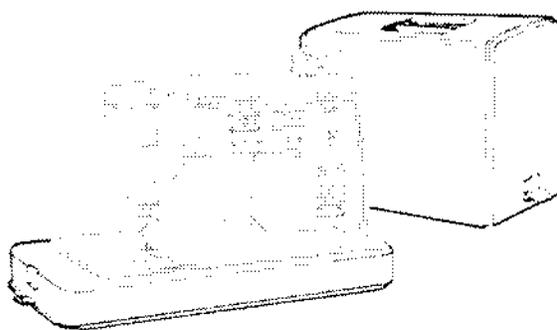
Removing and Replacing Top Cover



Removing and Replacing Bottom Cover

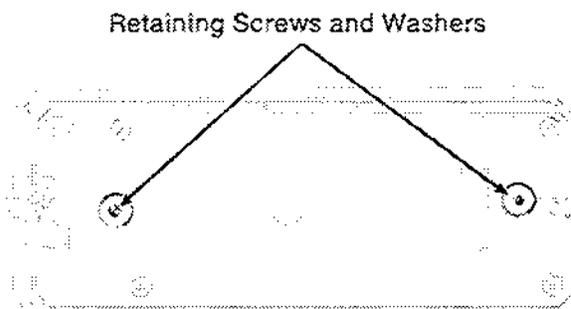
REMOVING AND REPLACING BOTTOM COVER

1. Disconnect machine plug from electrical receptacle at right end of machine. If your machine is a portable, remove the carrying case base (as instructed below).
2. Tilt machine back and remove screw in center of bottom cover. Pull cover straight up (parallel to machine bed) to remove.
3. Replace bottom cover by positioning slots in cover over the bed cushion pins at four corners of machine. Push down on cover to snap it into place. Replace and tighten retaining screw.

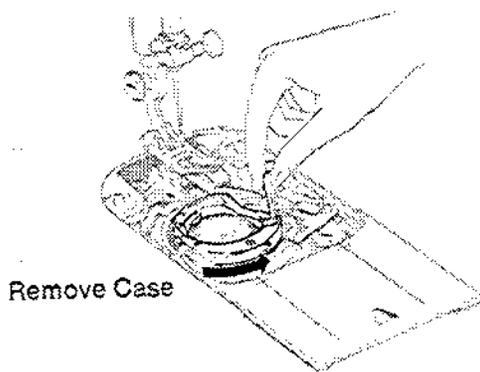
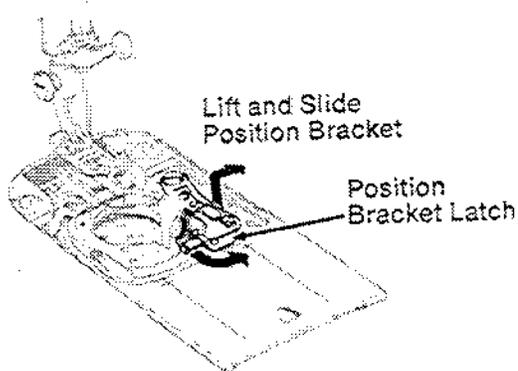


REMOVING AND REPLACING CARRYING CASE BASE

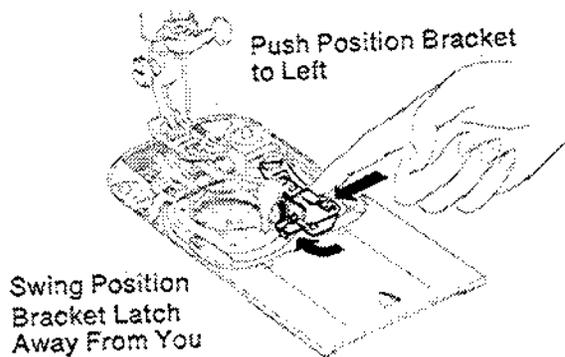
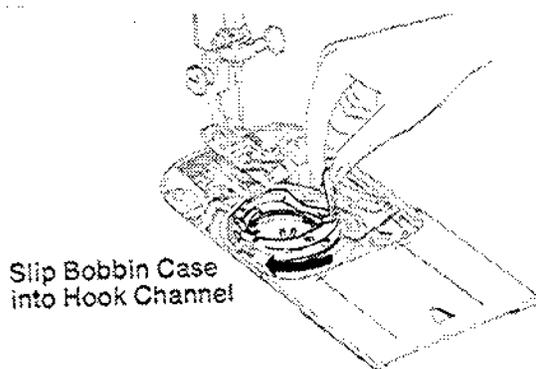
1. Disconnect machine plug from electrical receptacle at right end of machine.
2. Turn machine over on its back and remove screws and washers from each end of base. Set machine and base upright, and lift machine up and out of base.
3. Replace machine in base after bottom cover has been attached. Turn machine and base over together to replace washers and screws on underside. Tighten screws.



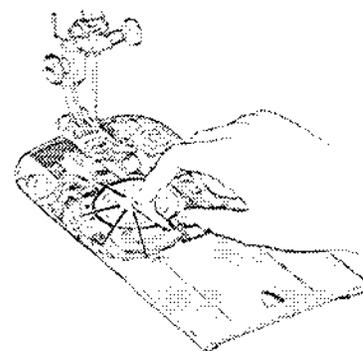
Carrying Case Base



Removing Bobbin Case



Replacing Bobbin Case



Replace Bobbin and Snap Latch Down

REMOVING THE BOBBIN CASE

Make sure needle is at its highest position.

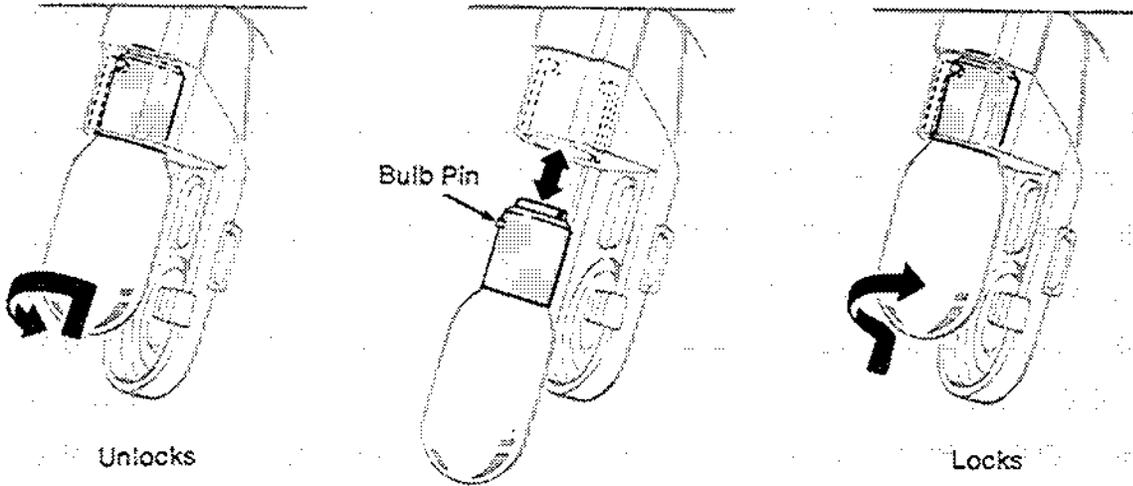
1. Open slide plate and remove throat plate (see page 15 for instructions).
2. Remove bobbin. Keep bobbin push button in sewing position.
3. Swing position bracket latch toward you. Lift bracket and slide it to the right.
4. To remove bobbin case, twist case as shown, and lift out.

REPLACING THE BOBBIN CASE

Make sure needle is at its highest position.

1. Keep bobbin push button in sewing position. Hold bobbin case by latch and, with latch to right of needle, slip case in position so that the groove engages hook channel.
2. Twist bobbin case as shown, until latch is in center.
3. Push position bracket to left until it snaps down, locking bobbin case in place.
4. Swing position bracket latch away from you to lock bracket in place.
5. Replace bobbin and snap latch down.
6. Replace throat plate and close slide plate.

CHANGING THE LIGHT BULB



Make sure you have disconnected power-line plug from electrical outlet.

Removing Bulb. With thumb of right hand, push in and down on tab of light lens and lower the light bracket. *Do not attempt to unscrew the bulb.* Press it up into the

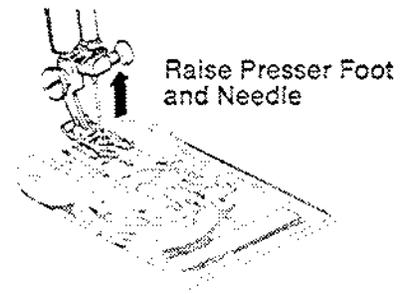
socket and at the same time turn bulb over in direction shown to unlock bulb pin.

Replacing Bulb. Press new bulb into socket, with bulb pin entering slot of socket, and turn it over in direction shown to lock bulb in position. Push entire assembly up until it snaps in position.

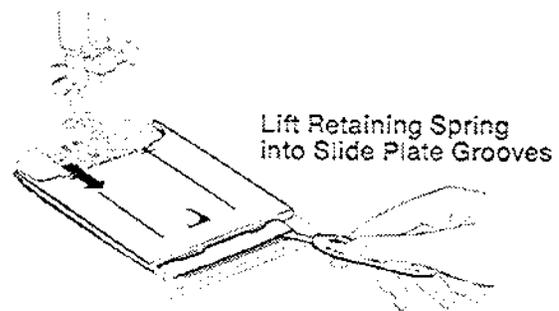
REPLACING THE SLIDE PLATE

You will not have any occasion to remove the slide plate. However, if it should accidentally become disengaged from the machine, it is easily replaced.

- Raise the presser foot and make sure needle is in its highest position.
- Place slide plate in slide way with the front edge close to, but not covering, the retaining spring (as shown).
- With a small screwdriver, lift each end of the spring into each of the side grooves on the underside of the plate.
- Draw the plate gently toward you and fully engage the spring.
- Close slide plate.



Raise Presser Foot and Needle



Lift Retaining Spring into Slide Plate Grooves

Replacing the Slide Plate

performance check list

REMEMBER TO

- Turn on power and light switch.
- Turn buttonhole dial to **OFF** position before setting pattern dial, needle position dial, or stitch width dial for any purpose.
- Remove all thread from bobbin before rewinding.
- Fill empty bobbin
 - ... in center needle position 
 - ... before attaching accessories.
 - ... before inserting twin needle.
- Close slide plate after winding bobbin.
- Make sure the needle is out of the fabric or above the throat plate before turning dials.
- Make sure stitch width does not exceed the number 2 setting when a twin needle is used.
- Use a yellow-band needle to sew nylon tricot and synthetic doubleknits.
- Use high-lift presser bar setting to place heavy fabric under presser foot.

IF THREAD BREAKS

- Is the machine properly threaded?
- Is spool holder pressed firmly against thread spool?
- Is the needle securely tightened in the needle clamp?
- Is the needle straight and sharp?
- Is the thread suitable for the size of needle and free of knots and slubs?
- Is the thread unwinding freely from the spool?
- Is the needle-thread tension too tight?
- Is presser foot raised for bobbin winding?
- Is a moderate speed used for bobbin winding?
- Are the bobbin halves evenly and securely screwed together?
- Is the bobbin properly seated and secured by the latch in the bobbin case?
- Is the bobbin-case area free of lint and loose thread ends?

Entry Sewing!

If you have any questions, please write to:

Department of Sewing Education

The Singer Company

30 Rockefeller Plaza, New York, N.Y. 10020

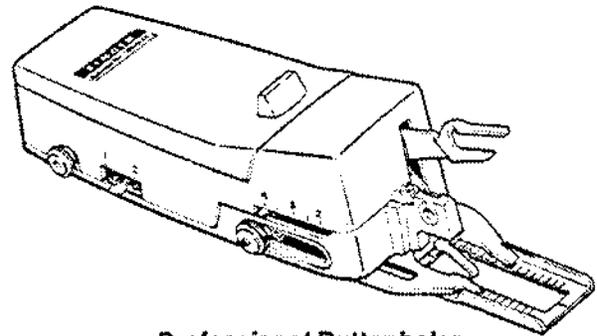
12. FASHION AIDS

special accessories for special jobs

Fashion Aids have been designed to increase the versatility of your sewing machine and enable you to give your sewing that extra professional touch. The ones described below are just a few of the complete selection available at your local Singer store.

Professional* Buttonholer No. 102991

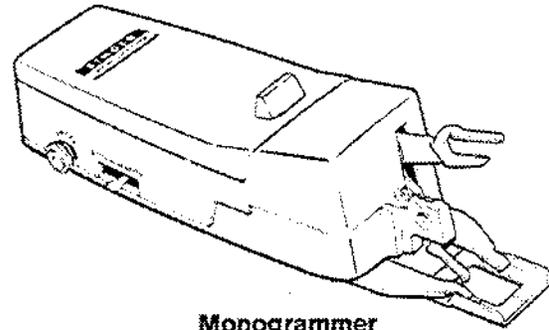
The *Professional* Buttonholer sews six kinds of buttonholes, plus eyelets, in a wide variety of fabrics. You choose the style and length and make perfect buttonholes every time.



Professional Buttonholer

Monogrammer No. 171256

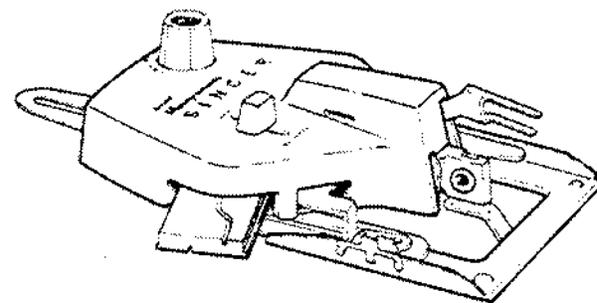
With the monogrammer, you can stitch $\frac{3}{8}$ -inch-high initials to form monograms or names that add a charming individual touch to handkerchiefs, blouse collars, ties, etc.



Monogrammer

Deluxe Monogrammer No. 171276

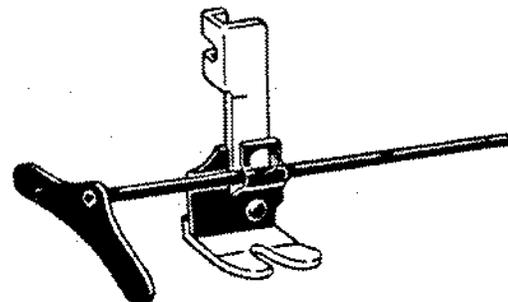
With the deluxe monogrammer you will have the pleasure of stitching initials $1\frac{1}{2}$ inches high to create monograms that are ideal for adding a personal touch to table linens, towels, and wearing apparel. An attractive flower motif can also be made.



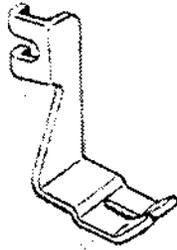
Deluxe Monogrammer

Quilting Foot No. 160691

The quilting foot is especially well adapted to stitching lightly padded fabrics. It is excellent for the placement of straight stitching in block, floral, or scroll designs. This short, open foot permits following curved lines with ease and accuracy.



Quilting Foot

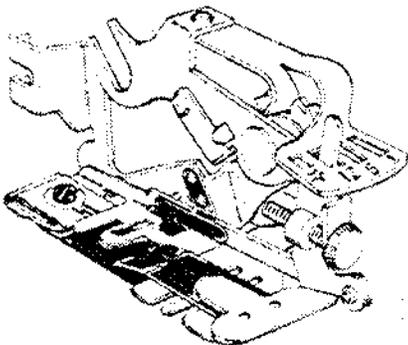


Gathering Foot

Gathering Foot

No. 161169

The gathering foot can be used for evenly spaced shirring as well as for a single line of gathering. This foot is used for straight stitching only.

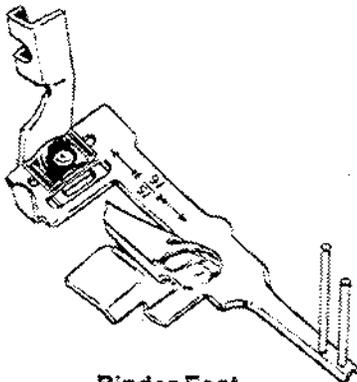


Ruffler

Ruffler

No. 161561

This accessory offers a simple, effective way to make gathered and pleated ruffles. The ruffler is used for straight stitching only.

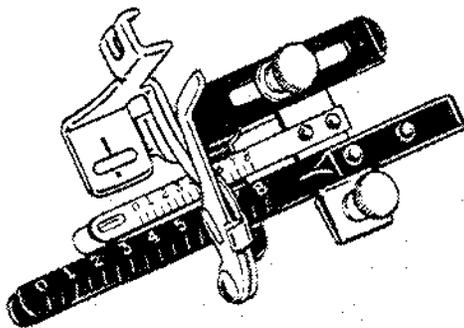


Binder Foot

Binder Foot

No. 81200

The binder foot is used to apply ready-made bias tape or unfolded bias binding to an unfinished edge. It can also be useful for binding seam edges that might ravel.



Tucker

Tucker

No. 161226

Tucks up to one inch can be stitched and marked in one operation by using the tucker. Two adjustable scales are provided to gauge tuck width and spacing.

Darning and Embroidery Foot No. 161875

This foot is recommended for all types of free-motion work. It is ideal for embroidery, monogramming, and decorative designs because the transparent toe fully reveals the line of the design to be followed.

Finger Guard

No. 161681

The finger guard provides extra safety by protecting fingers from the needle. It is ideal for the student, beginner, or the blind person. A permanently mounted, swing-away type, No. 22563, is available on special order.

Hemmer Foot

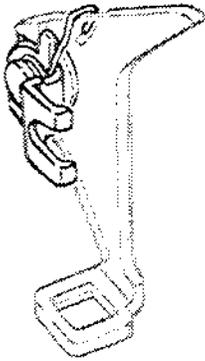
No. 161195

Narrow hems can be turned and stitched in a single operation if you use the hemmer foot. Thus, you can eliminate basting or pinning whenever you are making ruffie edges, lingerie finishes, and the like.

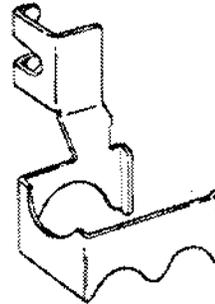
Edge Stitcher

No. 160625

This accessory, used with the straight stitch setting, is ideal for the joining and inserting of lace, tucking from pin width up to ¼ inch, French seaming and seam piping, facing, and seam finishing.



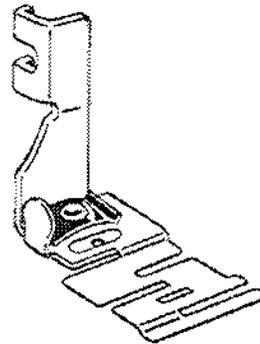
Darning and Embroidery Foot



Finger Guard



Hemmer Foot



Edge Stitcher

INDEX

Accessories	2	Presser Feet	3, 12
Adjusting Machine to Fabric	11	Button Foot	3, 13, 35
Applique	53	Buttonhole Foot	3, 13, 38
Basic Zig-Zag Stitches	21	Changing Presser Feet	14
Basting	18, 28	General Purpose Foot	3, 12
Pin	18	Special Purpose Foot	3, 13
Speed Basting by Machine	28	Straight Stitch Foot	3, 13
Belt Carriers and Stay Chains	61	Zipper Foot	3, 13
Blanket Binding	61	Presser Foot Lifter	18
Blindstitch Hems	45	Pressure Adjustment	1, 16
Bobbin	7	Principal Parts	1
Raising Bobbin Thread	10	Reverse Stitching	1
Removing Bobbin	9	Satin Stitching	24
Removing Thread	9	Seam and Hem Guide	2, 19
Replacing an Empty Bobbin	9	Seams	18
Replacing a Wound Bobbin	10	Chainstitch	30
Winding	7	Corded	46
Bobbin Case	64	Curved	20
Removal and Replacement	64	Inside	44
Buttonhole Dial	1, 38	In Fabrics that Ravel	47
Buttonholes	36	Lingerie	50
Bar-Tack	40	Overedged	51
Corded	40	Straight	19
Round-End	38	Stretch	50
Buttons	35	Sewing Knit and Stretch Fabric	48
Caring for Your Sewing Machine	62	Shell Edging	52
Chainstitching	30	Slide Plate	65
Choosing Accessories	12	Smocking	57
Choosing Needle and Thread	11	Stitch Control Dial	1, 17, 23, 28
Cleaning the Machine	62	Stitch Pattern Dial	1, 22
Darning	60	Stitch Width Dial	1, 23
Darts	43	Straight Stitching	18
Drawn-Thread Work	56	Curved Seams	20
Fabric, Thread, and Needle Table	11	Straight Seams	19
Fagoting	55	Turning a Square Corner	19
<i>Fashion Aids</i>	67	With Twin Needles	26
Finishes for Hems and Facings	49	Temporary Stitching	28
<i>Flexi-Stitches</i>	21	Chainstitching	28
Floral Designs	41	Speed Basting	30
Free-Motion Stitching	41	Tension Adjustment	1, 16, 23, 24
Growth and Shrinkage Tucks	61	Thread Shank	35
Guiding and Supporting Fabric	49	Throat Plates	3, 15
How to Start Sewing	8	Chainstitch	3, 15, 31
At Fabric Edge	8	Changing Throat Plates	15
Away from Fabric Edge	8	Feed Cover Throat Plate	3, 15, 35, 41
Light Bulb	65	General Purpose	3, 15
Mending	58	Straight Stitch	3, 15
Monograms and Motifs	54	Top Stitching	52
Needle	2, 12	Twin-Needle Stitching	25
Position	1, 22	Decorative Stitching	26
Replacement	12	Straight Stitching	26
Threader	6	Threading the Needle	25
Threading	5	Turning a Square Corner	27
Patchwork Quilting	55	Zig-Zag Stitching	26
Performance Check List	66	Zig-Zag Stitching	21
Power and Light Switch	4	Zipper Insertion	42

SINGER

SEWING MACHINE GUARANTEE

If you bring this SINGER* Sewing Machine to any Singer Sewing Center in the United States or Canada, at any time after you purchase it from us, we guarantee to repair or replace it free of any charge if there is a manufacturing defect in any part except those specified below.

Should there be a defect in the electrical parts (motor, switch, wiring, or controls), we will repair or replace the machine at no charge within 2 years of the date you purchased it from us.

We will provide required adjustments of the machine and replace any defective belt, bobbin, needle, and light bulb, at no charge, for a period of 90 days from the date you purchased the machine from us.

Please note that this guarantee applies to SINGER sewing machines in family use, not to machines used commercially.

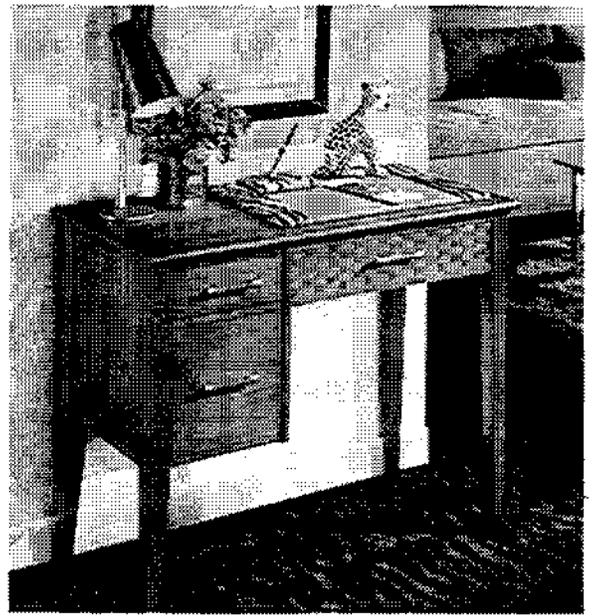
THE SINGER COMPANY
Thirty Rockefeller Plaza
New York, New York 10020

SINGER* Service is always close at hand. If your machine should need servicing, call your local Singer store to be sure of warranted SINGER Parts and Service. You will find the address under THE SINGER COMPANY in the telephone directory.

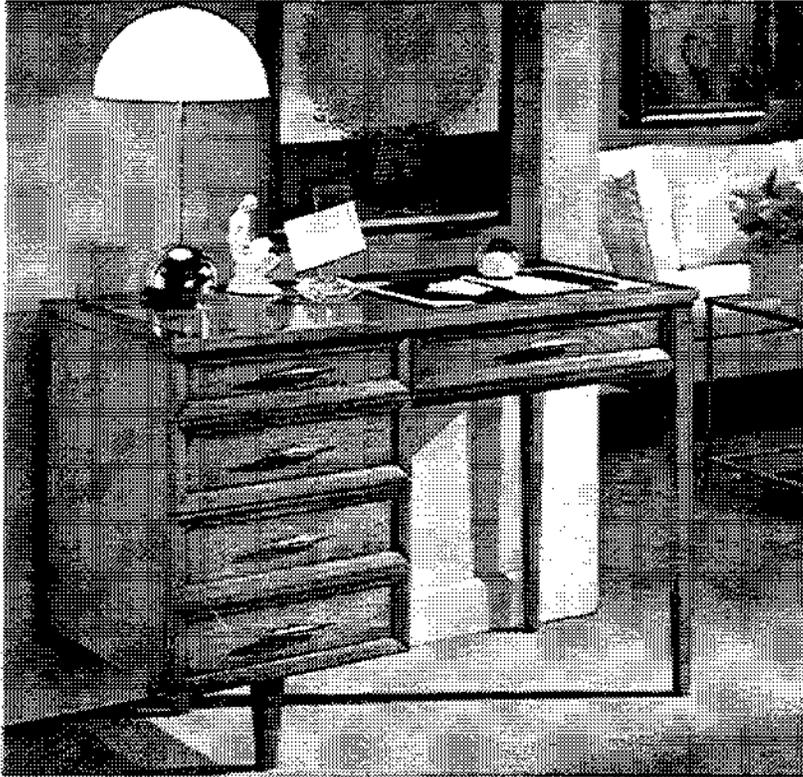
SINGER

Sewing Machine Cabinets

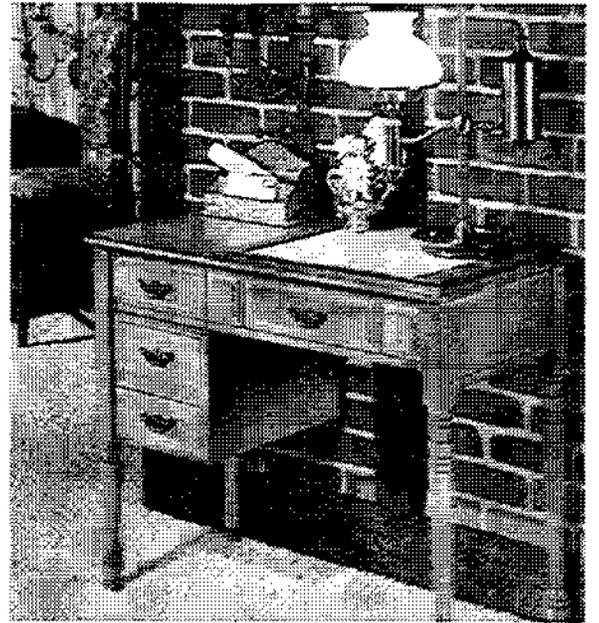
With the sewer's needs in mind, Singer combines expert craftsmanship with imaginative design in sewing cabinets that provide both comfortable and ample work space. Available in contemporary and traditional styles, constructed of fine hardwoods, finished in walnut, fruitwood, and maple tones. And at surprisingly low prices.



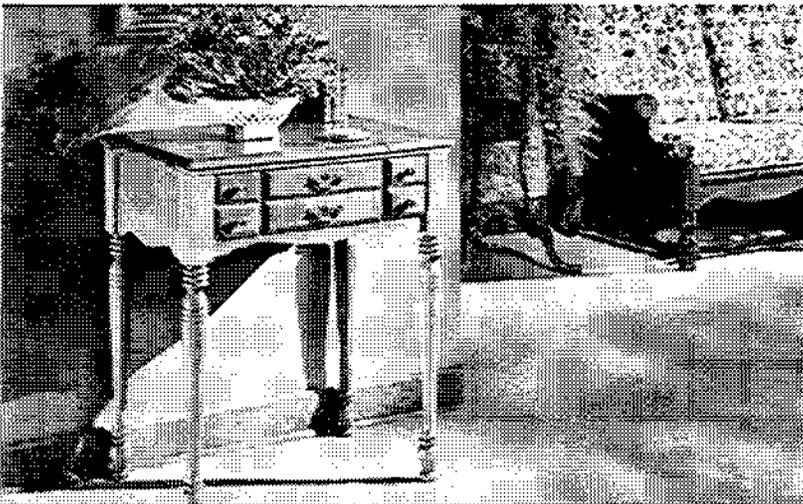
The Summit, sleek Contemporary desk



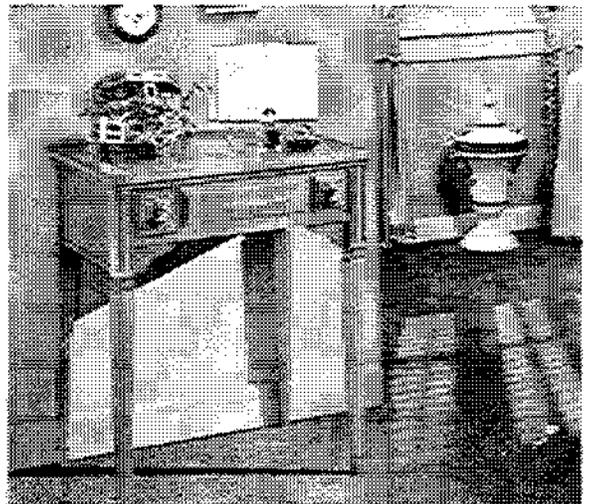
The Bakersfield, capacious Contemporary desk



The Montpelier, Early American desk



The Saratoga, Early American console



The Malaga, graceful Mediterranean console

What's new for tomorrow is at SINGER today!