

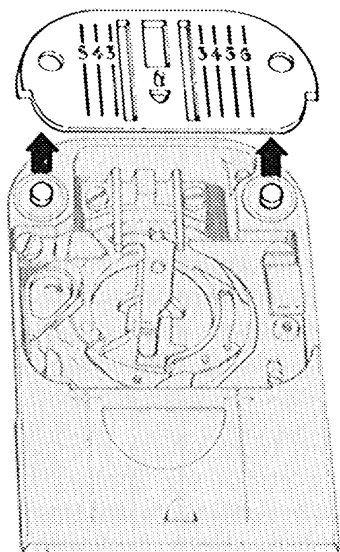
REMOVING STITCHING FROM FABRIC

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 of the fabric.
3. Pull the free thread end, removing entire line of stitching.

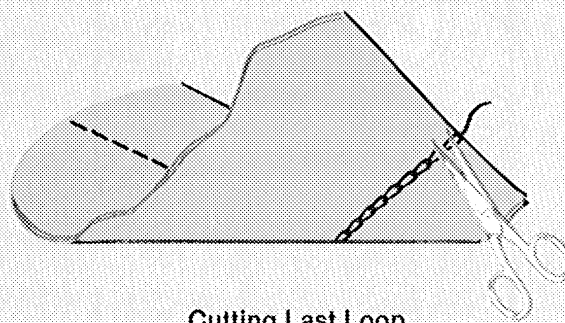
REMOVING THE CHAINSTITCH ACCESSORIES

1. Raise take-up lever to its highest position and raise presser foot.
2. Open slide plate and remove the chainstitch plate.
3. Move bobbin latch to left and lift out the bobbin-case insert.
4. Replace bobbin and zig-zag or straight-stitch plate (see page 5). Close side plate.
5. Unthread chainstitch eyelet in take-up lever and rethread for regular sewing.

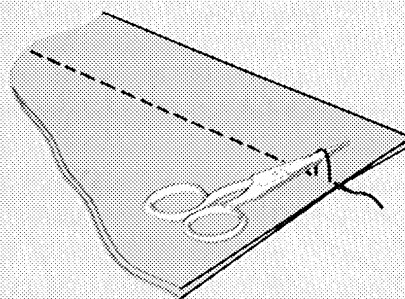


Removing Chainstitch Plate

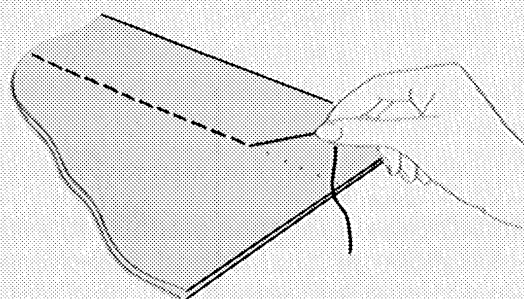
Removing the Stitching



Cutting Last Loop





Picking Up Free Thread End



Removing Line of Stitching

7. BUTTONS AND BUTTONHOLES

buttons

- Stitch: Plain Zig-Zag 
- Stitch Width: 0 and 4
- Needle Position: 
- Cover Plate (See page 5 for attaching)
- Button Foot

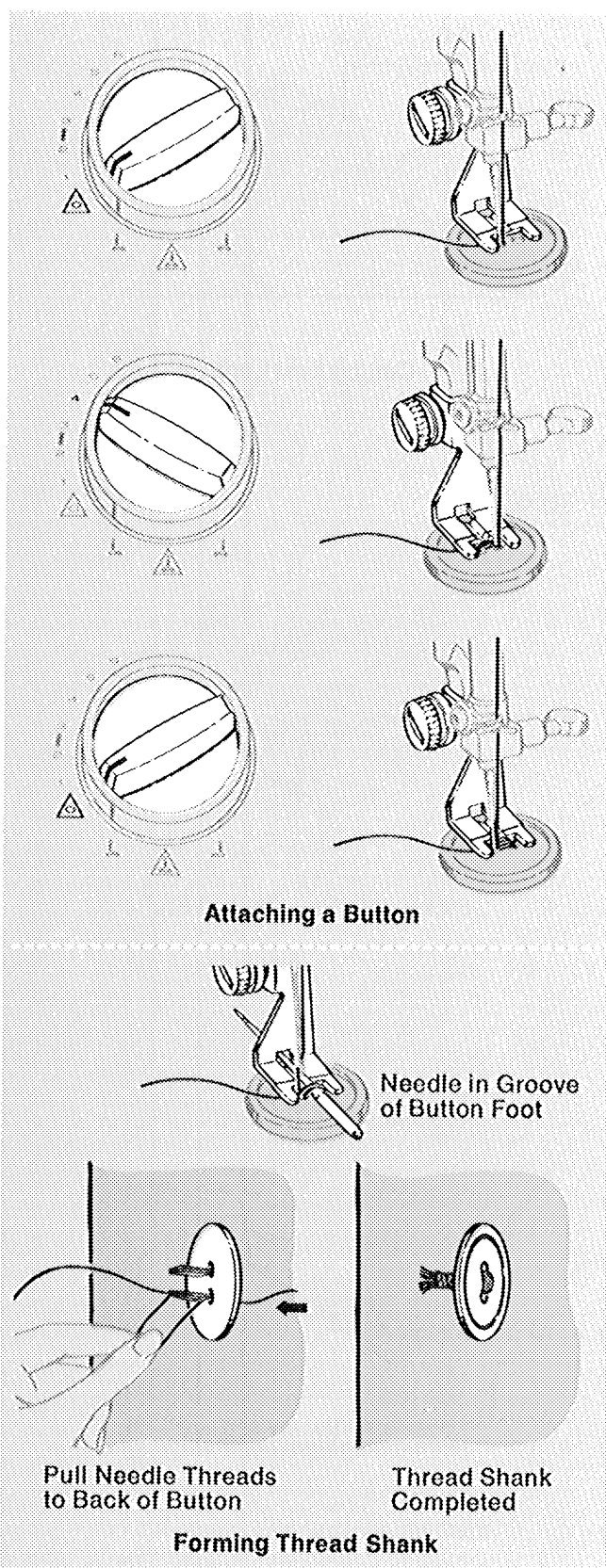
The space between the holes in the button determines stitch-width settings. The 0 setting must always be used to position the button and to fasten stitching. For buttons with standard hole spacing, settings 0 and 4 are usually satisfactory. For buttons with unusual hole spacing, use setting 0 and increase 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 0 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.



buttonholes

The built-in buttonhole system of your machine lets you choose between two buttonhole-stitching methods:

- **One-step Method** for flat buttons up to 1½ inches in diameter.
- **Two-step Method** for buttons larger than 1½ inches across or for buttons of unusual shape or thickness.

BUTTONHOLE LENGTH

A buttonhole should be just long enough to allow the button to slip through the opening without stretching it.

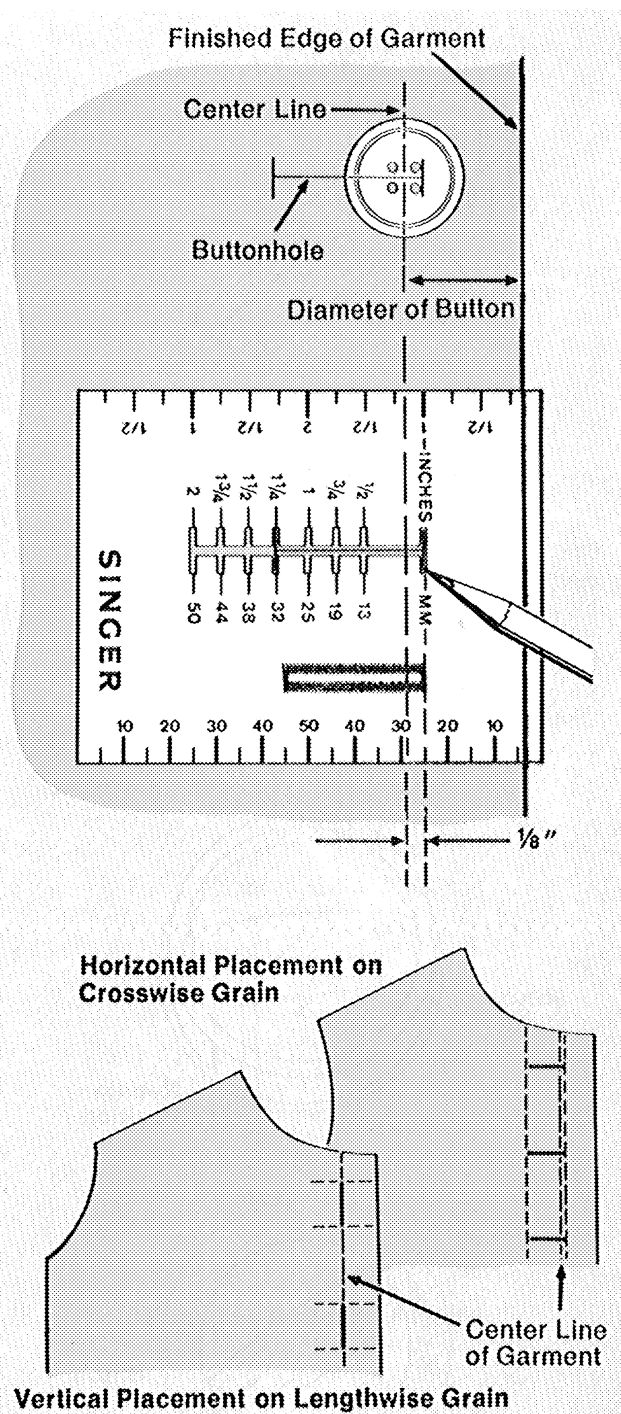
When you use the one-step method of stitching buttonholes, the buttonhole foot will gauge the buttonhole length for you.

Otherwise, estimate buttonhole length by measuring the width plus the thickness of the button. To make sure the measurement is correct, and for buttons of irregular shape, cut a slit in a scrap of fabric approximately the width of the button you intend to use and increase length of opening until button slips through easily.

BUTTONHOLE POSITION

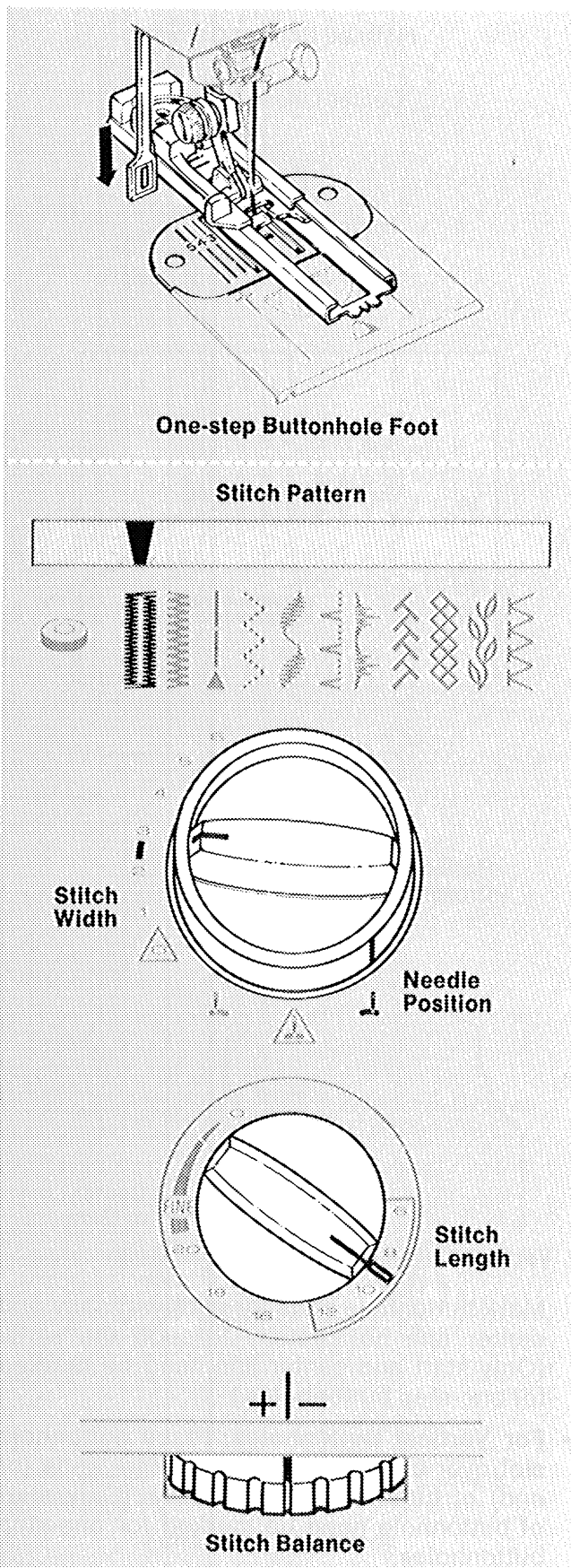
Accurate guidelines are essential to keep buttonholes at a uniform distance from the edge of the garment, evenly spaced, and on the grain of the material. For center closures, place guidelines as follows:

1. Mark center line of garment as indicated on your pattern. This guideline can be made by hand basting or machine speed basting and should follow a lengthwise fabric thread.
 2. Mark a guideline for each buttonhole, using the buttonhole gauge in your accessories. Smooth fabrics may be marked lightly with a sharp pencil. Where pencil marking is unsuitable (textured fabrics, for example), pins or hand-sewing needles may be inserted through the gauge slots as markers for basting.
- **For Horizontal Buttonholes:** Place gauge so that the buttonhole slot extends ⅛ inch beyond center line of the garment, as illustrated.



Mark buttonhole ends (or end) vertically and center line horizontally through the slots. (Only start and center line need be marked for one-step buttonholes.)

- **For Vertical Buttonholes:** Place buttonhole slot over center-line basting. Mark ends (or end) of buttonhole horizontally. (Only start of buttonhole need be marked for one-step buttonholes.)



ONE-STEP BUTTONHOLES

For flat buttons up to 1½ inches across or for buttons of any type that require a buttonhole less than 1¼ inches long, follow the one-step method of stitching.

NOTE: See page 40 in reference to stitching complete buttonholes.

Red symbols indicate buttonhole settings



- Stitch: Buttonhole
- Stitch Width: Red (between 2 and 3)
- Needle Position:
- Stitch Length: Buttonhole
- Stitch Balance: Neutral
- Speed: Uniform; in **SLOW** range
- Zig-Zag Plate
- One-step Buttonhole Foot

Preparation

Make a test buttonhole in a sample of your fabric using the above settings. Be sure to duplicate the thickness of your garment and include an interfacing. It is possible that the fabric you are using will require different settings from those suggested. If so, turn to page 40 for information.

1. Fill bobbin with enough thread to complete buttonholes. (The bobbin cannot be conveniently filled after the buttonhole foot is attached.)
2. Attach the one-step buttonhole foot.
3. Pull down buttonhole lever.
4. Set all dials on red symbols as illustrated. Set the stitch-length dial in the middle of the buttonhole symbol. Use this setting for your test buttonhole and then increase it or decrease it as necessary. See page 40.
5. Set stitch-balance dial in neutral position. Adjust if necessary to balance stitch density on right and left sides of the buttonhole. See page 40.

Procedure

- Place the button you intend to use on the button carrier of the one-step buttonhole foot and slide clamp toward back to secure button. For use without a button, set the clamp with the gauge lines on the carrier. See page 41.
- Draw needle and bobbin threads under foot to back of machine.
- Place garment under foot so that buttonhole guidelines are aligned with red guidelines on foot. Lower foot.
- Press buttonhole lever *toward you*.
- Start machine and let it stitch the entire buttonhole. Maintain an even sewing speed (and use the same rate of speed for each buttonhole you sew).
- Stop machine when stitching starts to overlap the starting bar tack. Move stitch-width dial to  setting and take one or two fastening stitches.†
- Remove work from machine, clip thread ends, and cut button opening. If necessary, reset stitch-width dial on red  for next buttonhole.

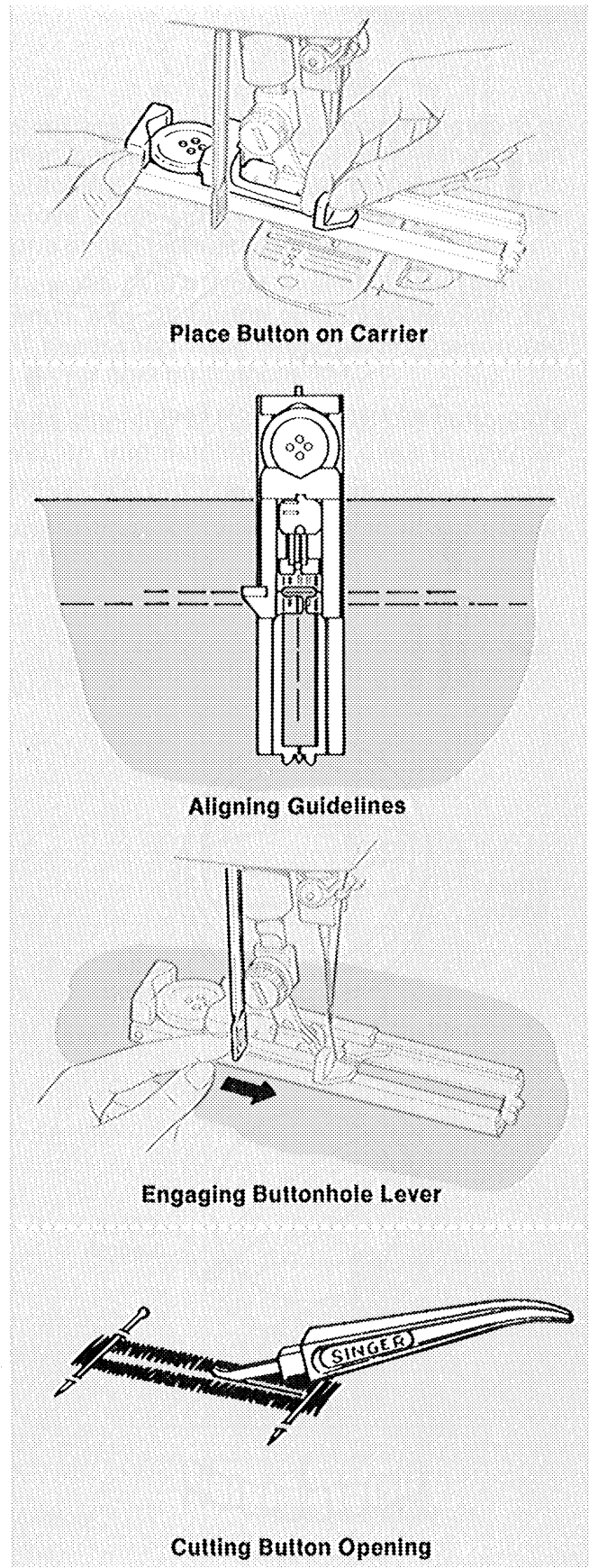
When buttonholes are completed, push buttonhole lever up into machine and reset dials for regular sewing. *To remove buttonhole foot, draw it back gently until metal and transparent edges are even, then lift at rear and snap down.*

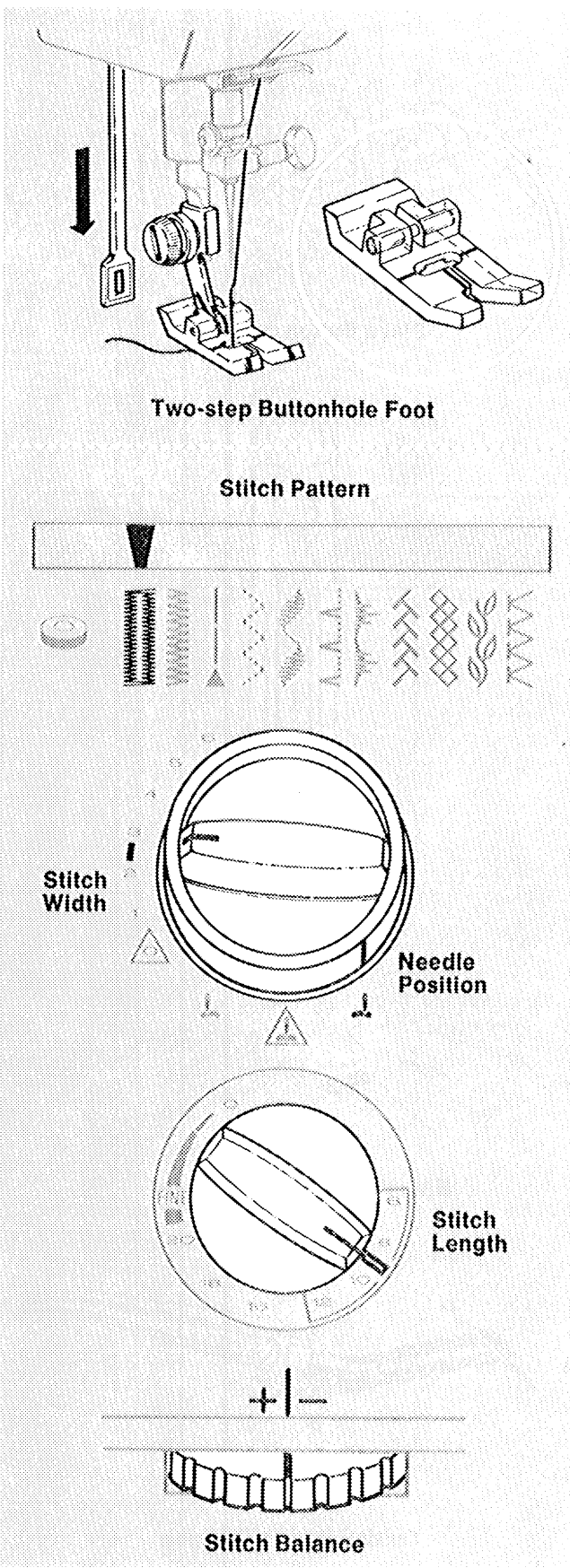
Turn to page 40 for information about adjusting test buttonhole.

CUTTING BUTTON OPENING

Before cutting button opening, place a pin across the cutting space at each end of the buttonhole to protect the stitching. Using the seam ripper in your accessory box or a pair of small scissors, insert blade in center of cutting space and cut from this point in either direction. **Slip button through opening of test buttonhole to check length.**

†Optional





TWO-STEP BUTTONHOLES

For buttons larger than 1 1/8 inches across or for buttons of unusual shape or thickness, follow the two-step method of stitching buttonholes. Use it, too, for buttonholes of any size that must be placed close to a fabric edge.

NOTE: See page 40 in reference to stitching complete buttonholes.

- Stitch: Buttonhole
- Stitch Width: Red (between 2 and 3)
- Needle Position:
- Stitch Length: Buttonhole
- Stitch Balance: Neutral
- Speed: Uniform; in **SLOW** range
- Zig-Zag Plate
- Two-step Buttonhole Foot



Preparation

Make a test buttonhole in a sample of your fabric, using the above settings. Be sure to duplicate the thickness of your garment and include an interfacing. It is possible that the fabric you are using will require different settings from those suggested. If so, turn to page 40 for information on adjustments.

1. Mark buttonhole guidelines on fabric as shown on page 35.
2. Attach the two-step buttonhole foot.
3. Pull down buttonhole lever.
4. Set all dials on red symbols as illustrated. Set the stitch-length dial in the middle of the buttonhole symbol. Use this setting for your test buttonhole and then increase it or decrease it as necessary. See page 40.
5. Set stitch-balance dial in neutral position. Adjust if necessary to balance stitch density on right and left sides of buttonhole. See page 40.

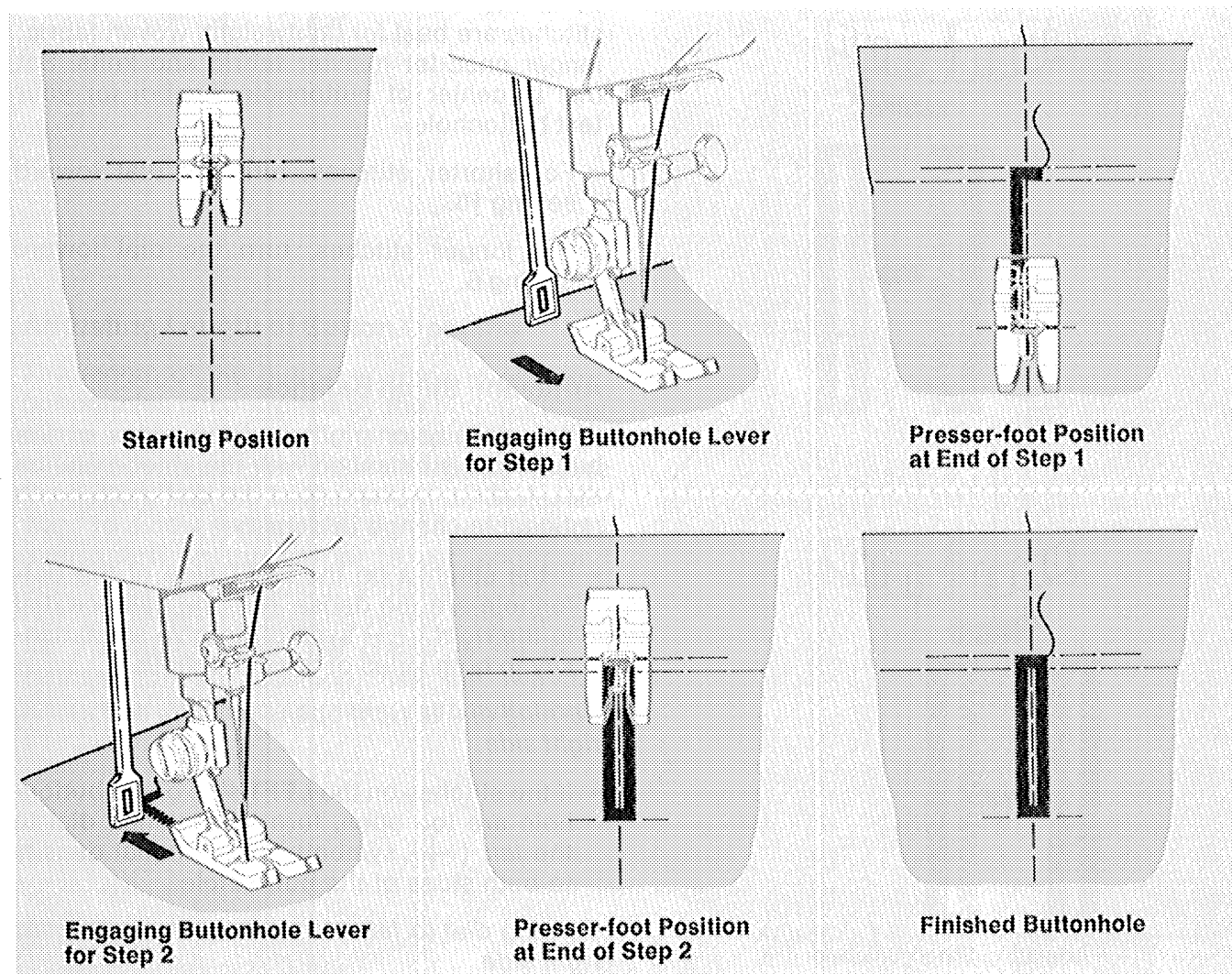
Procedure

- Draw needle and bobbin threads under foot to back of machine.
- Place garment under foot so that buttonhole guidelines are aligned with red guidelines on foot. Lower foot.
- Press buttonhole lever *toward you*.
- Start machine and let it complete step 1 of the buttonhole cycle. Stop machine *just before* guideline on buttonhole foot reaches end of buttonhole guideline on garment.
- Press buttonhole lever *away from you*.

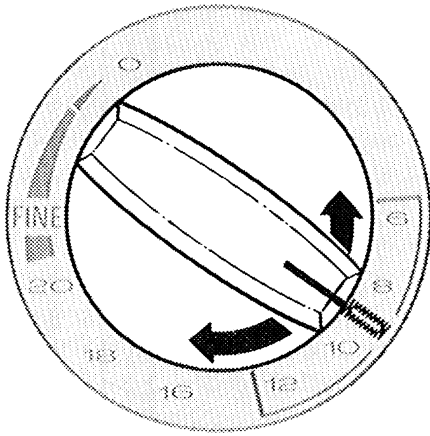
- Start machine and let it complete step 2 of the buttonhole cycle. Stop sewing when stitching starts to overlap starting bar tack. Move stitch-width dial to  setting and take one or two fastening stitches.†
- Remove work from machine, clip thread ends, and cut button opening (see page 37). If necessary, reset stitch-width dial on red  for next buttonhole.

When stitching is completed, push buttonhole lever up into machine, reset dials for regular sewing, and remove buttonhole foot.

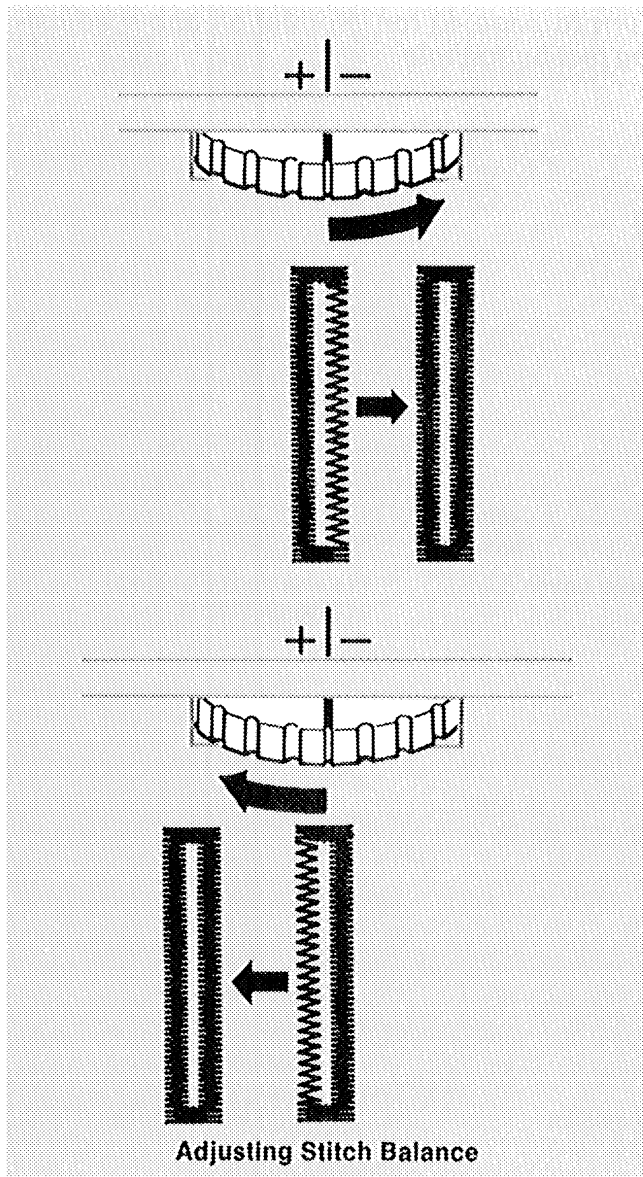
Turn to page 40 for information about adjusting test buttonhole.



†Optional



Adjusting Stitch Length



Adjusting Stitch Balance

Stitching Complete Buttonholes

Whenever you make a buttonhole, be sure to stitch it *all the way around* (to complete stitching cycle) before re-setting the buttonhole lever for a new start.

If you make a false start when sewing a buttonhole in your garment, simply remove the work and complete the buttonhole stitching on scrap fabric.

BUTTONHOLE ADJUSTMENTS

Adjusting Stitch Length

Buttonhole stitch length is regulated by the stitch-length dial. Set it to suit your fabric within the red bracketed area. Generally, short stitches are best for lightweight, woven fabric; longer ones for heavier fabric and knits. Set dial in center of buttonhole symbol for your test buttonhole.

- For shorter stitches, turn the dial toward setting 16.
- For longer stitches, turn the dial toward setting 6.

Adjusting Stitch Balance

Stitch density on right and left sides of the buttonhole is balanced with the stitch-balance dial. A slight movement of the dial produces a noticeable change in density.

- If the stitches on the **LEFT** side of the buttonhole are too dense, turn the balance dial to the *right* (— symbol) to give equal density to both sides of the buttonhole.

Turning dial to right opens left side and closes right side.

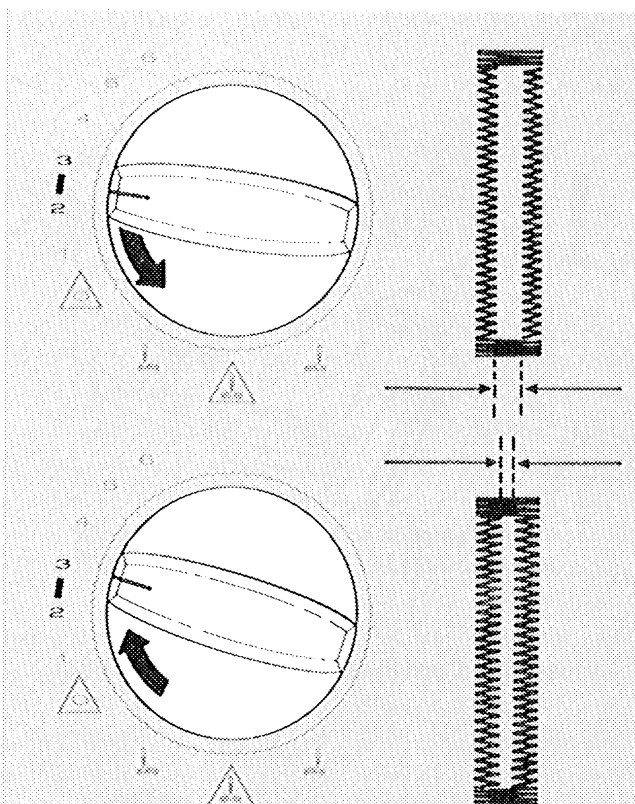
- If the stitches on the **LEFT** side of the buttonhole are too open, turn the balance dial to the *left* (+ symbol) to give equal density to both sides of the buttonhole.

Turning dial to left closes left side and opens right side.

Adjusting Width of Button Opening

The width of the button opening is regulated by the stitch-width dial.

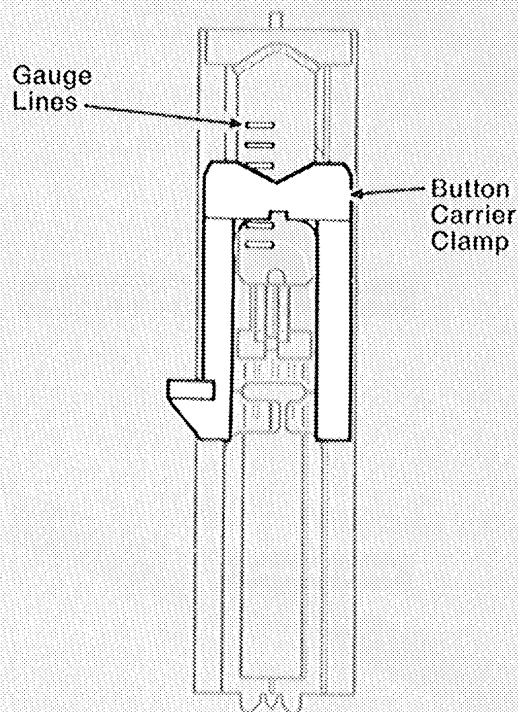
- To make button opening wider, turn dial very slightly toward the 2 setting.
- To make button opening narrower, turn dial very slightly toward the 3 setting.



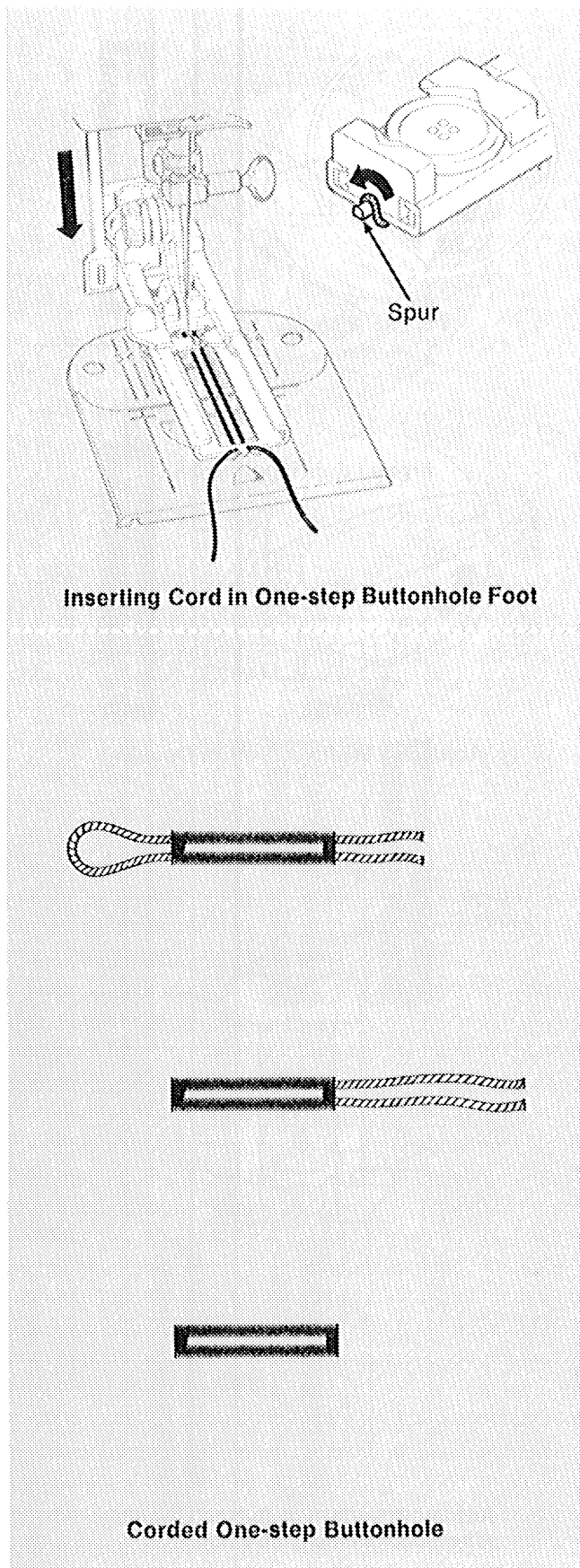
Adjusting Width of Button Opening

Adjusting Length of Button Opening

The length of the button opening in one-step buttonholes is controlled by the button-carrier clamp. If the button will not pass through the button opening of your test buttonhole, remove the button from the carrier and slide clamp forward to a new setting. Use the gauge lines ($\frac{1}{8}$ inch apart) on the carrier to set length and stitch buttonhole without a button in the carrier. If the button opening is not long enough for the button when the clamp is set in its farthest forward position, use the two-step method of stitching to make your buttonhole. See page 38.



Adjusting Length of Button Opening When Using One-step Foot



CORDED ONE-STEP BUTTONHOLES

Corded or raised buttonholes are made by stitching over a filler cord. Embroidery or crochet threads make good filler cords, but double strands of sewing thread or a sew-off chain of needle and bobbin threads may also be used.

Inserting Cord in One-step Buttonhole Foot

- With foot up, insert one end of the filler cord in the left notch in front of foot. Lead cord back under foot and loop it up and over the cord spur.
- Bring cord forward under foot and secure end in right notch.

Procedure



- Insert cord in buttonhole foot as shown and sew buttonhole in the usual way. (See page 37 for instructions.)
- When stitching is completed, release cord from foot and remove work by drawing it to the back of the machine.
- Draw the loop of filler cord into the buttonhole stitching by holding fabric at the starting end of the buttonhole with one hand and pulling ends of filler cord firmly with the other.
- Trim ends of filler cord. Cut button opening.

8. SEWING THE PROFESSIONAL WAY

construction details

ZIPPERS

At the notions counter in your Singer Sewing Center, 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.

-
- Stitch: Straight !
 - Stitch Width: 
 - Needle Position: 
 - Stitch Length: 10 to 15
 - Straight-stitch Plate
 - Zipper Foot
-

Attaching the Zipper Foot

When the zipper is to the right of the needle:

- Attach right side of zipper foot to shank (needle will enter right notch in foot).

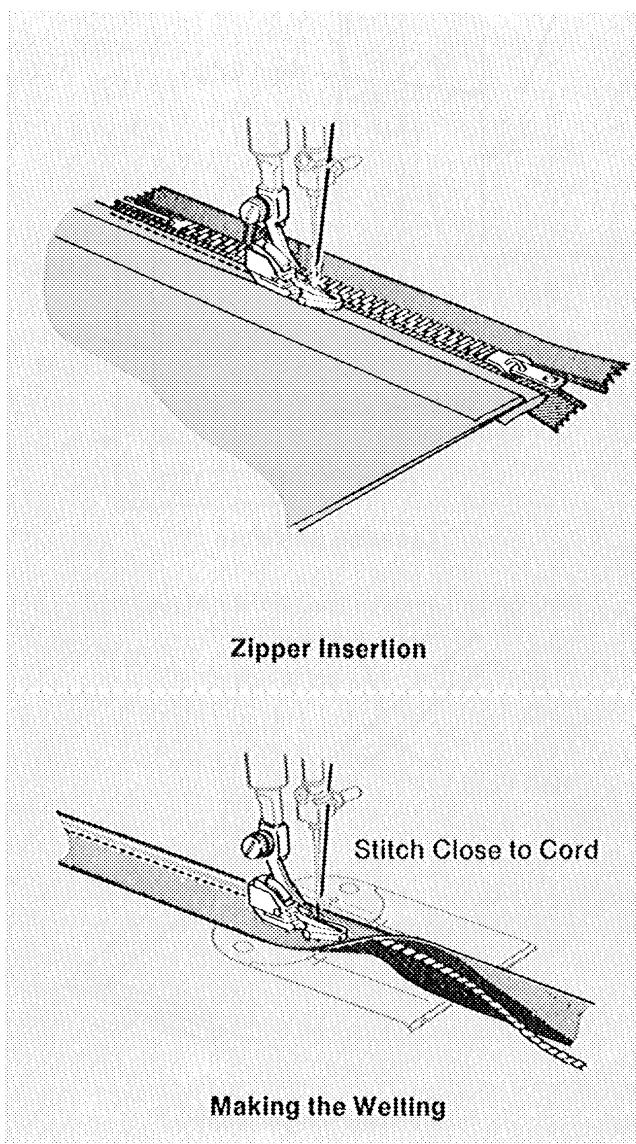
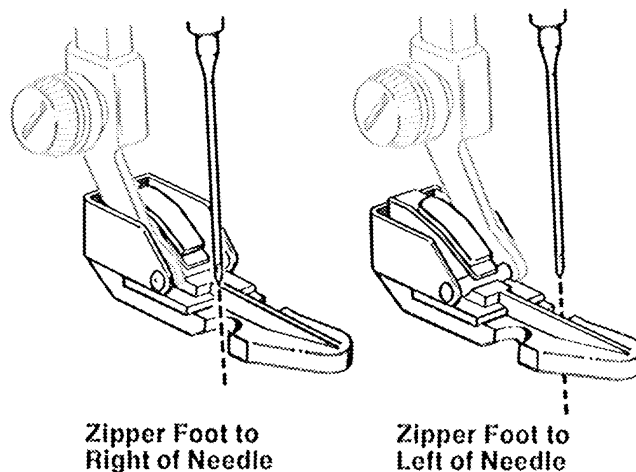
When the zipper is to the left of the needle:

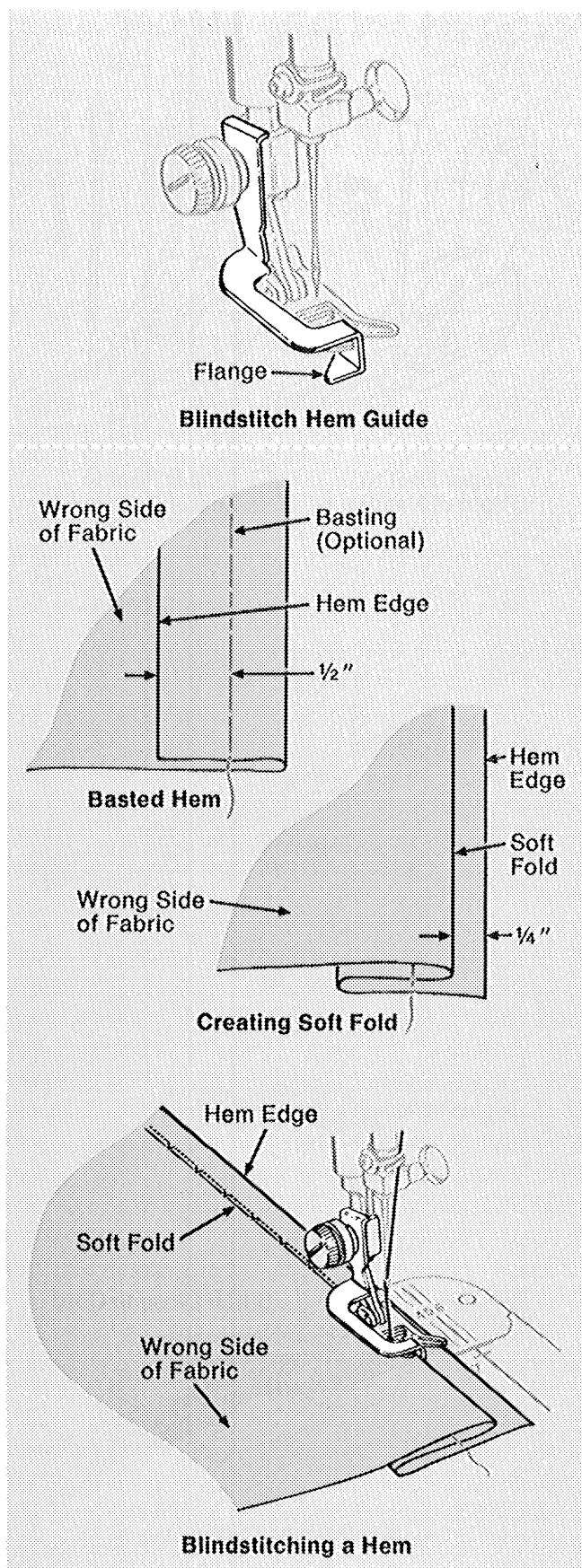
- Attach left side of zipper foot to shank (needle will enter left notch in foot).

Snap the zipper foot onto the shank as instructed on page 4.



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. For both steps, use the zipper foot to place the stitching close to the cord.





BLINDSTITCH HEMS

- Stitch: Blindstitch
- Stitch Width: 2 to 6
- Needle Position:  or 
- Stitch Length: 6 to 12
- Zig-Zag Plate
- Zig-Zag Foot
- Blindstitch Hem Guide

Blindstitching takes a little practice, so make a test sample first.

Raise take-up lever to its highest position.

1. Raise presser foot, loosen presser-foot screw, and slip blindstitch hem guide between screw and shank of zig-zag foot. Make sure underside of guide clears slide plate and front of foot. Tighten presser-foot screw.
2. Turn up hem in width desired. Apply appropriate finish to hem edge and press. (You may want to baste the turned hem to hold it in place. If so, be sure to place basting at least $\frac{1}{2}$ inch *below* top edge of hem.)
3. Fold the hem back against right side of garment, creating a soft fold about $\frac{1}{4}$ inch from top edge of hem on wrong side of work. Press lightly.
4. Position hem under foot with soft fold resting against wall of guide. Make sure flange of guide is between the soft fold and top of hem.
5. Lower the foot and stitch so that the straight stitches fall on the hem edge and sideward stitches pierce the soft fold. While stitching, guide hem edge in a straight line and feed soft fold evenly against wall of hem guide.
6. Raise take-up lever to its highest position. Raise presser foot and remove work (by drawing it to the back).



NOTE: For an extended blindstitch, set the machine for speed basting *but use a stitch width setting of 4* (instead of 6). The reduced number of crossover stitches in the blindstitching produced in this way makes the stitch particularly appropriate for hemming knit and stretch fabrics.

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

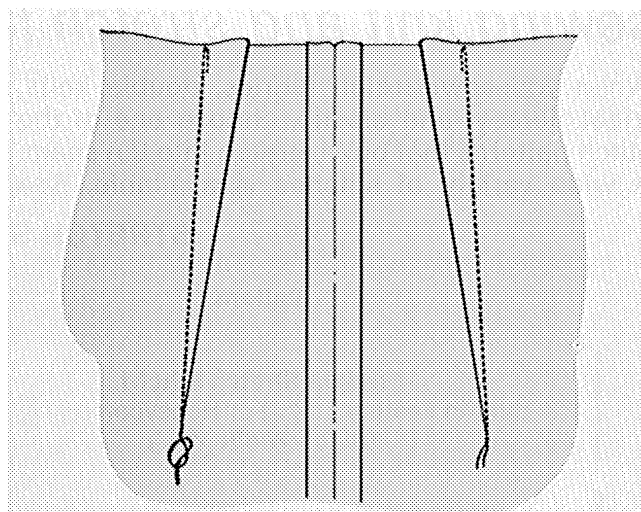
- Stitch: Straight ↓
- Stitch Width: 
- Needle Position: 
- Stitch Length: About 12 or to suit fabric
- Straight-stitch Plate
- Straight-stitch Foot

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.
3. Clip thread ends about 2 inches from dart point and tie the ends into a single knot close to the stitching.

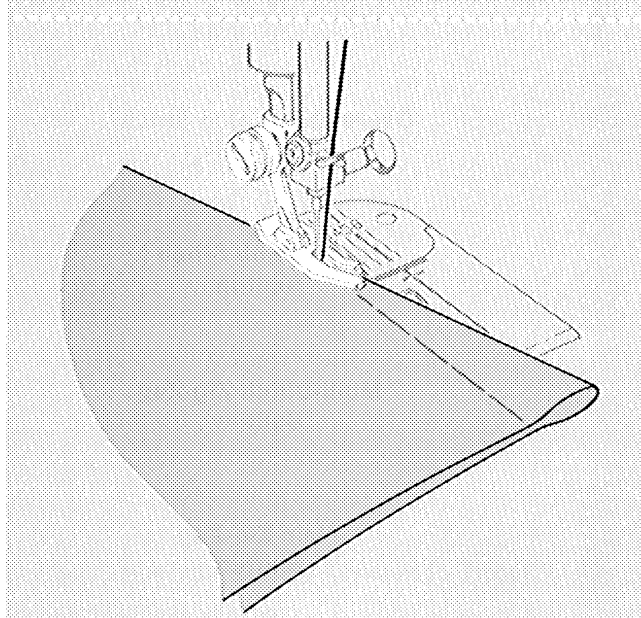
Continuous-thread Darts

1. Set the machine as for regular darts.
2. Wind an empty bobbin with a small amount of thread to make a single dart. (To hasten separation of starting thread end from the winding bobbin, pull thread end gently after winding has started.)
3. Close slide plate, and position the needle in the very edge of the fold, at the point of basted or pinned dart. Lower presser foot.
4. Stitch carefully from the point to the wide end of the dart at the seam edge.

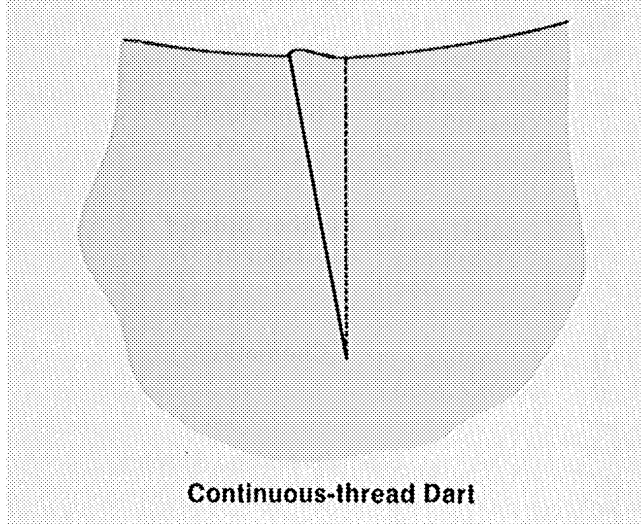
Remove excess thread from bobbin and re-wind for each dart.



Regular Darts



Starting to Stitch Continuous-thread Dart



Continuous-thread Dart















sewing knit and stretch fabric

When you sew stretch fabrics, double knits, tricot, jersey, and elastic, choose one of the stitch patterns that build stretch into the seam. A wide variety of stitches is available. See

table below.

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

STRETCH STITCH CHART

	Pattern	Where to Use
	Straight Stretch Stitch† Built-in Feather () or Honeycomb () (Stitch Width )	Plain seams that s-t-r-e-t-c-h — Sleeve and gusset insertion — Swimsuit construction — Crotch seams — Repairing and reinforcing seams.
	Maxi-Stretch Stitch†† Disc 69 (Stitch Width 6 only)	Plain seams that s-t-r-e-t-c-h — Ski-suit and snow-suit construction — Dungaree seams — Crotch seams.
	Overedge Stretch Stitch†	Overedge seams that stretch — Crotch seams — Waistband and seam finishes in shorts and slacks — Ski-suit, snow-suit, and swimsuit construction.
	Honeycomb Stitch † Built-in	Attaching elastic and stretch lace — Lingerie and girdle repair — Swimsuit construction — Edge finishes for seams, hems, and facings.
	Multi-Stitch Zig-Zag Built-in	Attaching elastic and stretch lace — Lingerie and swimsuit construction — Girdle seams — Seam finishes — Casings and waistband finishes.
	Plain Zig-Zag Built-in	General-purpose stretch sewing — Lingerie seams — Attaching stay tape — Seam finishing — Edge finishing — Attaching stretch lace.
	Ric-Rac Stitch † Disc 73	Heavy-duty, general-purpose stretch sewing — Reversible topstitching.
	Blindstitch Built-in	Flexible blindstitch hemming — Overcast seam finishing — Shell hems in lingerie.
	Feather Stitch † Built-in	Swimsuit seams — Attaching stretch lace — Lingerie and girdle seams.
	Chainstitch	Flexible basting — Hem-tape application. Double-stitched seams in delicate knits.
	Slant Overedge Stitch † Disc 76	Sweater and swimsuit construction — Overcast seams in bulky knits and stretch terry cloth — Attaching elastic and stretch lace — Edge finishes for seams, hems, and facings.

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

††This stitch cannot be used with the Even Feed Foot.

STARTING TO SEW USING A FLEXI-STITCH PATTERN

When using a *Flexi-Stitch* pattern, the forward-reverse stitching direction is controlled by the pattern disc. For this reason, *Flexi-Stitch* patterns cannot be reversed (back-tacked).

To start sewing with a *Flexi-Stitch* pattern, draw needle and bobbin threads under foot to back of machine. Hold thread ends and position needle in fabric with a light touch on the speed controller. Lower presser foot and hold thread ends at back of foot as you start to stitch. This will prevent the threads being drawn down into the needle hole. The *Flexi-Stitch* pattern itself will reinforce the ends of your seam.

GUIDING AND SUPPORTING FABRIC

Most stretch and knit fabrics 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 stitches that give *s-t-r-e-t-c-h* to seams.

Some fabrics, however, require support while being stitched.

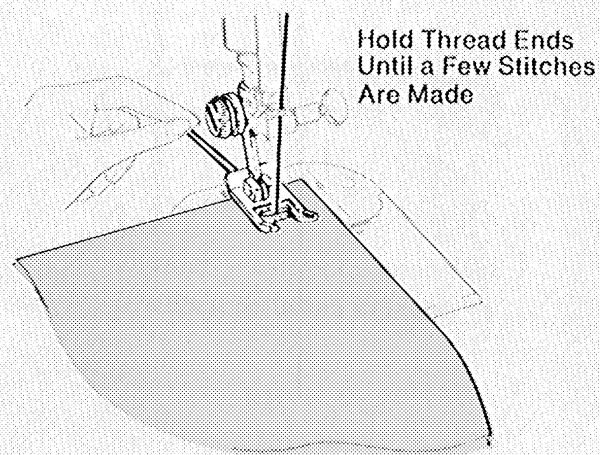
- For nylon tricot and similar synthetic knits, apply *gentle* tension by holding seam in front and back of the presser foot as you sew.

ADJUSTING PRESSURE WHEN SEWING KNIT AND STRETCH FABRIC

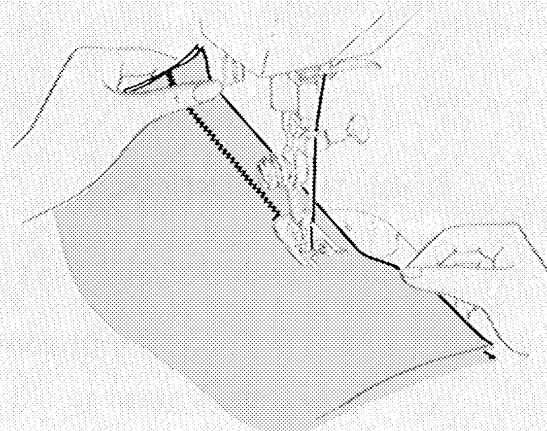
Some knit and stretch fabrics, because of their structure, require either more or less than normal (**NORM**) presser-bar pressure to feed smoothly and evenly.

- For thick, soft or very stretchy knits, decrease pressure by turning dial from **NORM** (normal) toward **DARN**.
- For nylon tricot, ciré and similar hard surface synthetic knits, increase pressure by turning dial from **NORM** (normal) toward **MAX** (maximum).

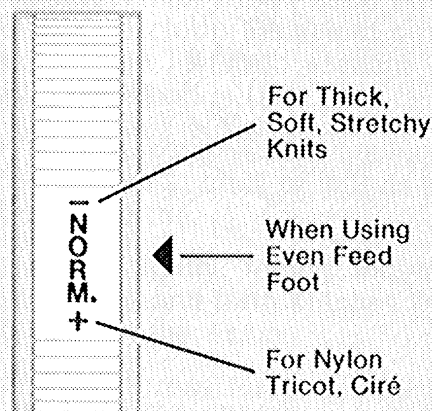
A **NORM** (normal) pressure setting is usually best for all types (and weights) of knit fabrics when the Even Feed Foot is used.



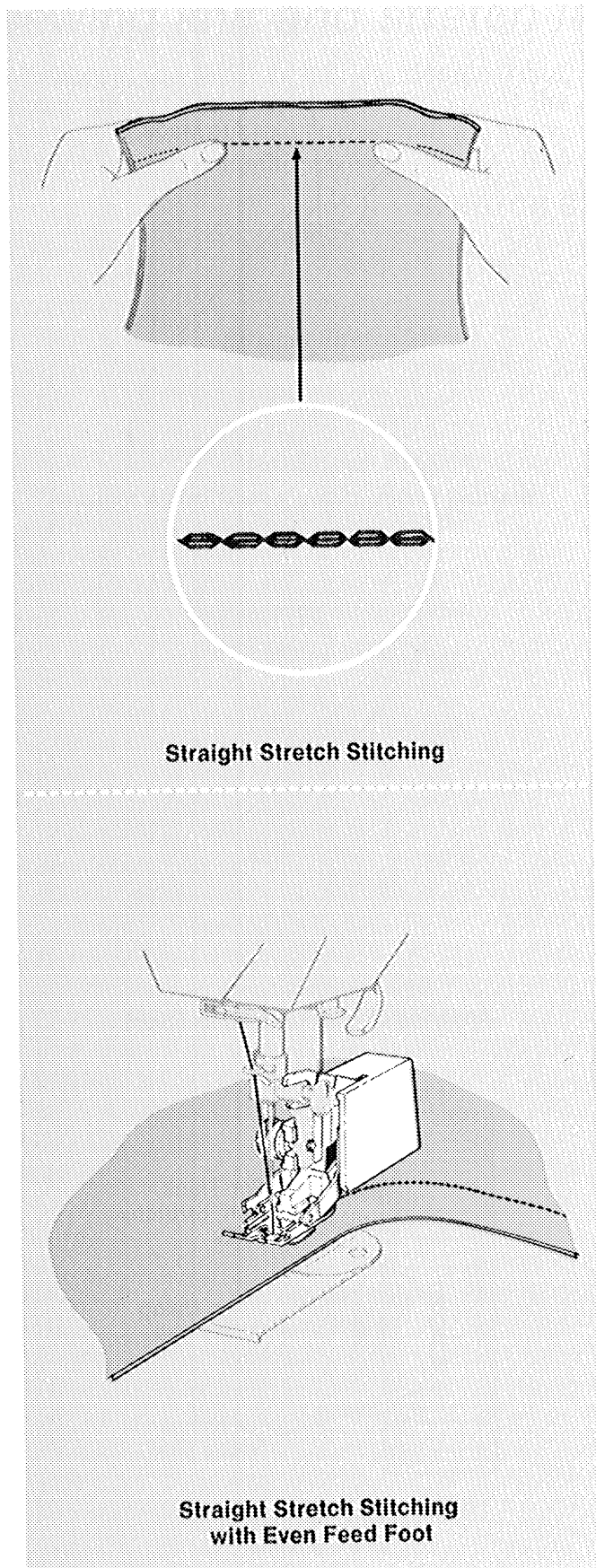
Starting to Sew Using a Flexi-Stitch Pattern



Applying Gentle Tension to Tricot






Pressure Settings for
Sewing Knits







PLAIN STRETCH SEAMS

For plain seams that s-t-r-e-t-c-h, you have a choice of two straight stretch stitches and two sewing methods.

Method #1 — Straight Stretch Stitch Seam

When you use the straight stretch stitch (produced with either Feather () or Honeycomb () pattern at  stitch width) 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 pressed-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. For example: crotch seaming, seam insertion, and construction seams in sportswear and swimsuits.

-
- Stitch: Feather  or Honeycomb 
 - Stitch Width: 
 - Needle Position: 
 - Stitch Length: 6 to 8 (in yellow band)
 - Stitch Balance: Equalized
 - Speed: In **SLOW** range
 - Zig-Zag Plate
 - Zig-Zag Foot or Even Feed Foot
-

Preparation



Make a test sample to determine thread tension and adjust stitch balance. (See page 23.) Be sure to insert a ball-point (yellow band) needle in machine if you are stitching a knit stretch or elastic fabric.

Procedure

1. Draw needle and bobbin threads under foot to back of machine. Hold thread ends and position needle in fabric with a light touch on the speed controller.
2. Lower the presser foot and start machine, holding the thread ends as the first few stitches are made.
3. Guide fabric lightly as you sew, letting the machine make the back-and-forth stitches that give s-t-r-e-t-c-h to the seam.
4. Press seam after stitching as when using the regular straight stitch.

Method #2 — Maxi-Stretch Stitch Seam

When you use the maxi-stretch stitch produced with *Flexi-Stitch* Disc 69, you can adjust the length of the stitch to suit the weight and elasticity of your fabric. Because it can be made in long lengths, the maxi-stretch stitch is particularly useful for seaming extra-heavy and extra-bulky fabric and is easier to rip out than most stretch stitches.

-
- Stitch: Maxi-Stretch  Disc 69
 - Stitch Width: **6 only**
 - Needle Position: 
 - Stitch Length: **6 to 12**
 - Stitch Balance: Equalized
 - Speed: In **SLOW** range
 - Zig-Zag Plate **only**
 - Zig-Zag Foot **only**
- NOTE: Do **not** use the Even Feed Foot
-

Preparation

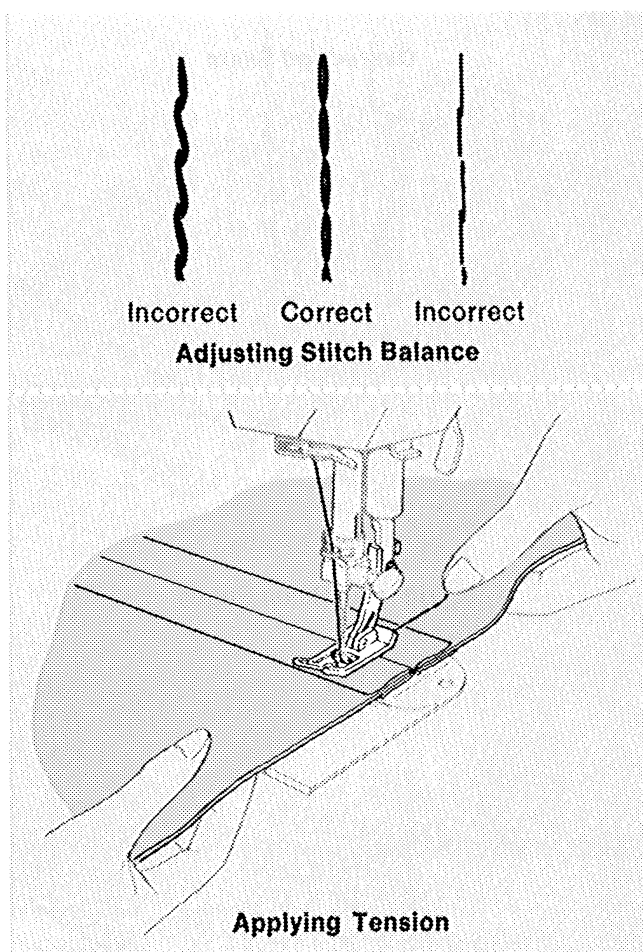
Make a test sample first to determine the best stitch length, stitch balance and tension settings for your fabric. Be sure to use a ball-point (yellow band) needle if you are stitching a knit or stretch fabric and adjust pressure as instructed on page 47.

Adjusting Stitch Length

Maxi-stretch stitch length is adjusted in the same way as regular straight stitch length. See page 15. Stitch lengths from 6 to 12 are recommended. Use longer stitches (6 to 8) in firm woven and bonded fabrics, heavy double knits and sweater knits; shorter stitches (8 to 12) in medium-weight knits and woven stretch fabric. For maximum stretch with strength, use the shortest stitch compatible with fabric weight.

Adjusting Stitch Balance

The balance of the maxi-stretch stitch is adjusted in the same way as other *Flexi-Stitch* patterns. See page 23. For maximum seam strength and good appearance, forward and reverse stitches should be of equal length.

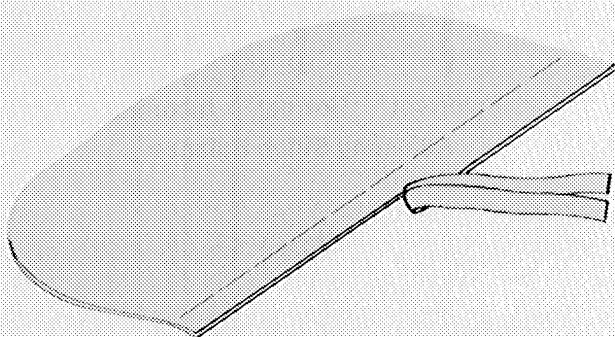


Procedure

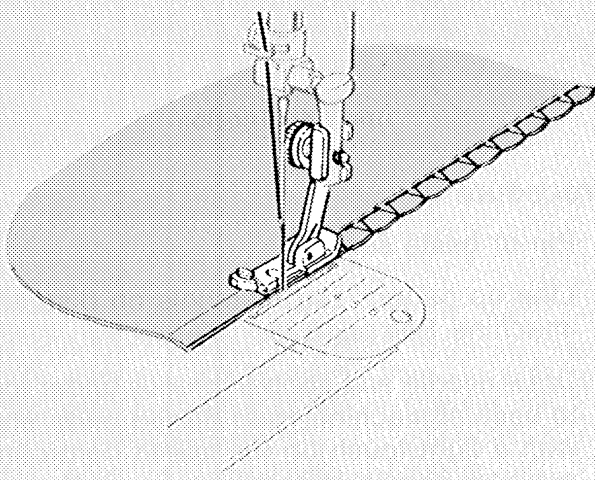
1. Pin or baste seam.
2. Line up pattern start symbols on disc and machine. See page 25.
3. Draw needle and bobbin threads under foot to back of machine. Hold thread ends and, with a light touch on the speed controller, position needle in fabric a scant $\frac{1}{4}$ inch in from starting edge.
4. Lower presser foot and start machine, holding thread ends at back of foot as first few stitches are made.
5. Guide fabric lightly, letting the machine make the back-and-forth stitches that give s-t-r-e-t-c-h to the seam.

When stitching across folds and seam joinings, apply tension by holding seam in front and back of the presser foot, as shown, to assist feeding. This type of support is essential for heavy or dense fabrics.

Overedged Seam



Trimming Seam Edges



Stitching Seam

OVEREDGED SEAMS

- Stitch: Overedge Stretch 
- Stitch Width: 5
- Needle Position: 
- Stitch Length: 6 to 8
- Stitch Balance: Equalized
- Speed: In **SLOW** range
- Zig-Zag Plate
- Overedge Foot

Seams in knit and stretch fabrics can be joined and finished in one operation when you use the overedge stretch stitch.

Procedure

1. Make a test sample before beginning garment construction to test machine settings. (See page 23 for adjusting stitch balance.) Be sure to duplicate the cut of the garment seam in your test, and use a ball-point (yellow band) needle if you are sewing a synthetic knit fabric.
2. Cut and fit the garment in the regular way, using a $\frac{5}{8}$ -inch seam allowance. Baste seam line.
3. Trim seam edge evenly to a scant $\frac{1}{4}$ inch from seam-line basting.
4. Place trimmed seam under the foot so that the straight stitches fall on the basted seam line and zig-zag stitches fall over the seam edge.

MOCK OVEREDGING

- Stitch: Slant Overedge  Disc 76
- Stitch Width: 5-6
- Needle Position: 
- Stitch Length: 6
- Stitch Balance: Equalized
- Speed: In **SLOW** range
- Zig-Zag Plate
- Zig-Zag Foot or Even Feed Foot

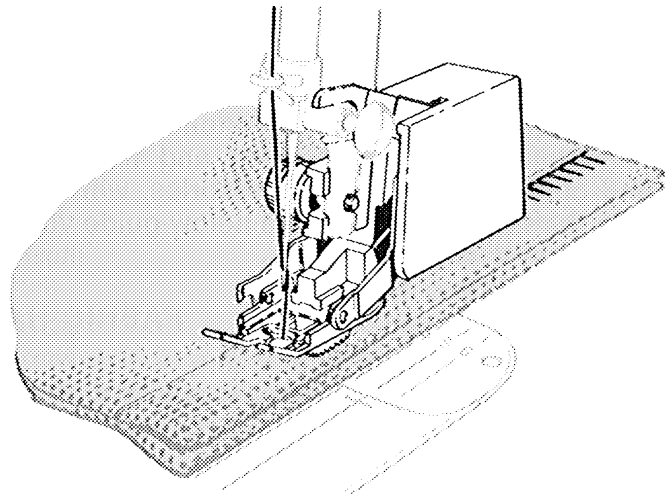
When it is not practical to overedge a seam because of fabric construction, a mock over-edge finish can be applied. This finish is appropriate for bulky knits, stretchy sweater knits, fine tricot, and fabrics that curl or fray.

Procedure:

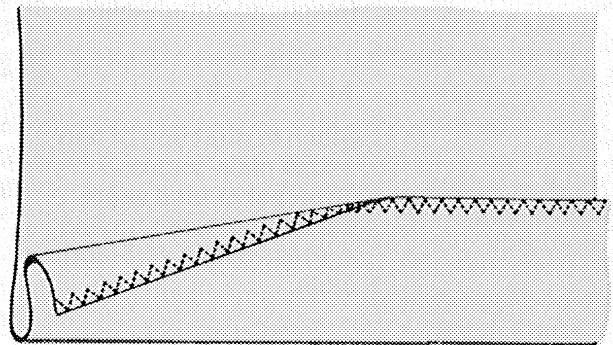
1. Make a test sample to check machine adjustments, including pressure setting, before beginning garment construction.
2. Cut and fit the garment, allowing for a $\frac{5}{8}$ -inch seam allowance. Baste seam line.
3. Place seam under the presser foot so that the stitches on the left side of the pattern penetrate the basted seam line.
4. Press after stitching and trim away fabric to produce a narrow seam. When the seam supports the garment, omit the trimming step.

FINISHES FOR HEMS AND FACINGS

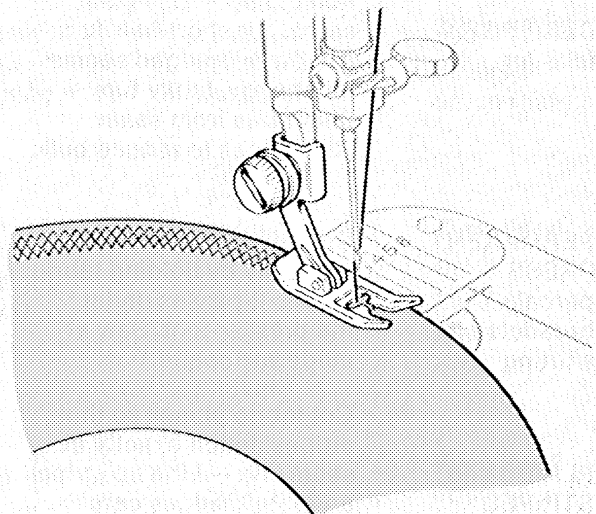
Hems and facing edges in knit and stretch fabrics will be less apt to press through and mark when given a flat edge finish. Edge finishing with the multi-stitch zig-zag stitch, honeycomb stitch or slant overedge stitch (disc 76) eliminates the bulk of turned-in fabric edges and retains fabric flexibility. Make a test sample to determine the best stitch for your fabric. Place stitching about $\frac{1}{8}$ inch from hem or facing edge. Press after stitching and trim away excess fabric close to the stitching line.



Mock Overedging



Finished Hem Edge











Applying Facing Finish

handling special fabrics




Many fabrics, because of their construction or finish, demand special attention in sewing. Techniques used in stitching and handling, and choice of machine accessories, will vary with the fabric. Let the table below guide your

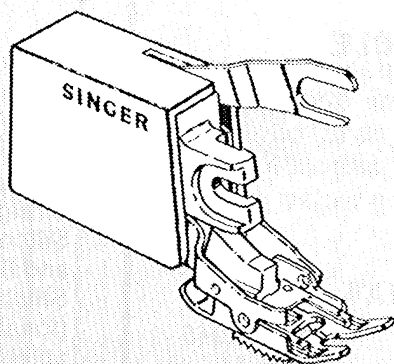
selection. Refer to page 54 for specific instructions on how to use the Even Feed foot and page 46 for instructions on sewing knit and stretch fabrics. Thread usage information is tabulated on pages 8 and 9.

FABRIC-HANDLING TABLE

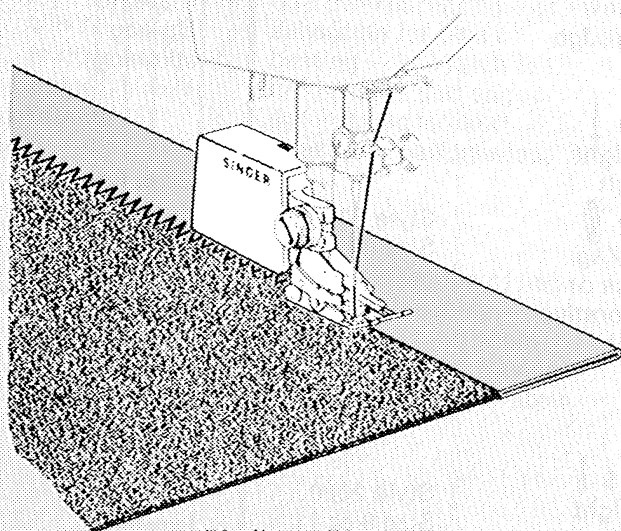
FABRIC	SPECIAL HANDLING	STITCH Length-Type	NEEDLE Style-Size	MACHINE ACCESSORIES
VINYL — leather-look patent, suede, reptile	Use transparent tape as a substitute for pins or basting — Topstitch to hold seams and edges flat — Avoid worked (machine) buttonholes.	6-8  Straight Stitch	Style 2020 Size 14 for woven backing Style 2045 Size 14 for knit backing	Even Feed Foot Zig-Zag Plate
PILE — velvet, velveteen, corduroy	Stitch in direction of nap — Use plain seams — Overcast or bind seam edges to prevent fraying — Press over a self-fabric cloth.	10-15  Straight Stitch for seams 12-15  Zig-Zag or Honeycomb Stitch  for over- casting	Style 2020 Size 11 or 14 Style 2045 for panne velvet	Even Feed Foot Zig-Zag Plate
DEEP PILE — fake fur	Pin rather than baste seams — Stitch in direction of nap — Use plain seams for short-hair furs; narrow overedged seams for shaggy, bulky furs — Shear pile from seam allowances to reduce bulk.	6-10  Straight Stitch for plain seams 12-20  Zig-Zag Stitch or Disc 76  for over- edged seams	Style 2020 Size 14 or 16	Even Feed Foot Zig-Zag Plate
PERMANENT PRESS — percale, broadcloth, shirting	Control seam tension manually by holding fabric taut as it passes under the presser foot. Sew at moderate speed.	10-15  Straight Stitch	Style 2020 Size 11 or 14	Straight- Stitch Foot Straight- Stitch Plate
PLAIDS and STRIPES	Cut fabric pieces so that stripes match exactly at seam line — Line up stripes and fabric edges carefully at seam start — Pin or baste long seams.	To suit fabric	To suit fabric See chart, page 8.	Even Feed Foot Zig-Zag Plate

FABRIC-HANDLING TABLE

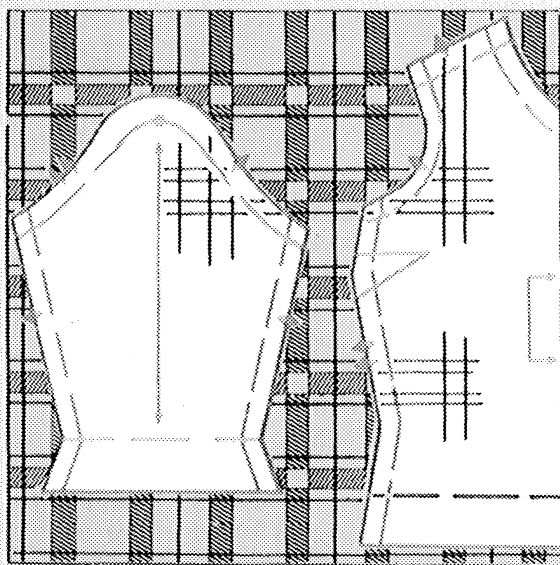
FABRIC	SPECIAL HANDLING	STITCH Length-Type	NEEDLE Style-Size	MACHINE ACCESSORIES
FINE KNITS — tricot, jersey	Use narrow overedged, double stitched, or French whipped seams — Hold thread ends securely for a few stitches at start of seam — Support seams while stitching. See page 47. — Increase presser-foot pressure.	8-12 ↓ Straight Stitch 12-15  Narrow Zig-Zag or Disc 76  Narrow Overedge	Style 2045 Size 14 only	Straight- Stitch Foot and Straight- Stitch Plate (for straight stitching) Zig-Zag Foot and Zig-Zag Plate (for zig-zag stitching)
BLANKET BINDING — satin face	Hand-baste binding to blanket (pin marks show) — Miter corners.	6-10 ↓ Straight Stitch 6-12  Zig-Zag Stitch or Decorative Stitch	Style 2020 Size 11 or 14	Even Feed Foot Zig-Zag Plate
SOFT SHEER — chiffon, voile, China silk	Use French seams, double stitched, or French whipped seams — Hold ends of needle and bobbin thread when you begin to stitch — Support fabric while stitching. See page 47.	12-15 ↓ Straight Stitch	Style 2020 Size 9 or 11	Straight- Stitch Foot Straight- Stitch Plate
BEADED and SEQUINED FABRIC	Remove beads from seam allowance — Baste seam line — Stitch with zipper foot to right of needle.	To suit fabric backing	To suit fabric backing	Zipper Foot Straight- Stitch Plate
BONDED OR LAMINATED FABRIC —	Use welt, flat-felled, or double-topstitched seams — Slash darts, grade seams, and reinforce button and buttonhole areas.	6-8 ↓ Straight Stitch	Style 2020 Size 14 for foam backing Style 2045 Size 14 for knit backing	Even Feed Foot Zig-Zag Plate
NAPPED FABRIC — cashmere, mohair, camel hair	Cut with nap running down — Sew in direction of nap — Topstitch to hold seams and edges flat.	6-12 ↓ Straight Stitch	Style 2020 Size 14-16	Even Feed Foot Zig-Zag Plate



Even Feed Foot



Binding a Blanket



Matching Plaids and Stripes

THE EVEN FEED FOOT

The Even Feed foot improves the feeding of fabrics that tend to stick, stretch, or slip while being sewn. The foot feeds top and bottom fabric layers together so that seams start even, feed evenly, and end even. At the same time, its hold-and-lift action makes it ideal for stay stitching and for topstitching.

Use It When Stitching:

- Knits, stretch fabrics, synthetics
- Shiny fabrics — vinyls, patents, satins
- Plaids, stripes, patterns
- Bonded fabrics
- Pile fabrics — velvets, fake furs, brushed fabrics
- Leather and leather-look fabrics
- Dungaree seams, welt and slot seams
- Belts, waistbands, and patch pockets
- Blanket binding and pleats

Do Not Use It When:



- Speed Basting
- Stitching with maxi-stretch stitch, disc 69

Preparing Fabric

The Even Feed foot will not correct inaccuracies in weaving and cutting, so make sure the grain (of woven fabric) or rib (of knits) is true when you cut your garment. If you are sewing a stripe, plaid, or print, cut fabric pieces to match exactly *at the seam line*. Line up fabric edges (and first stripe) carefully at seam starts and secure with a pin placed at right angle to the seam line.

Most short seams need not be basted. But for seams in plaids and for long or shaped seams, basting or pinning is advisable.

Sewing a Seam

- Stitch: Straight  or Plain Zig-Zag preferred (Do not use Speed Basting or Maxi-Stretch Stitch, Disc 69)
- Stitch Width: As needed
- Needle Position: 
- Stitch Length: To suit application (see pages 52-53)
- Speed: In **SLOW** range
- Zig-Zag Plate (Only)
- Even Feed Foot

Procedure:

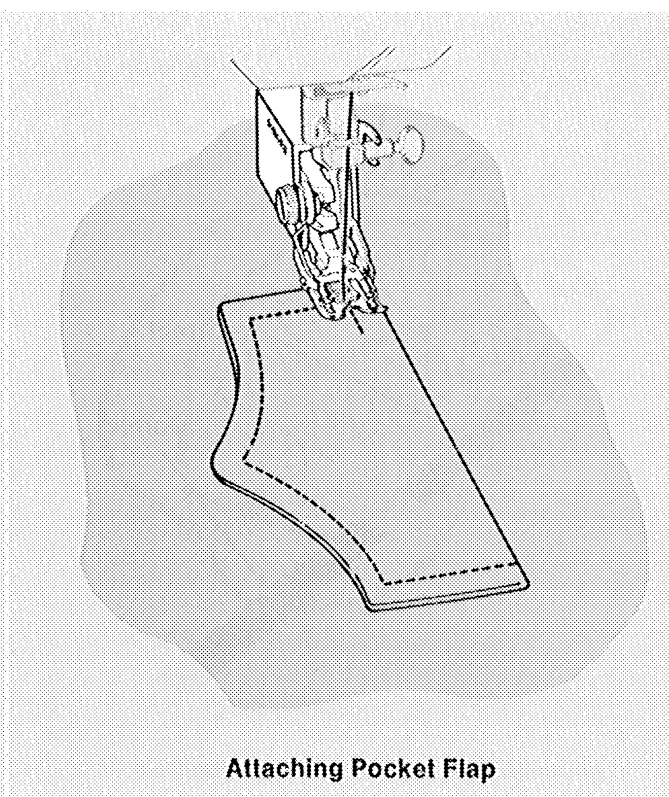
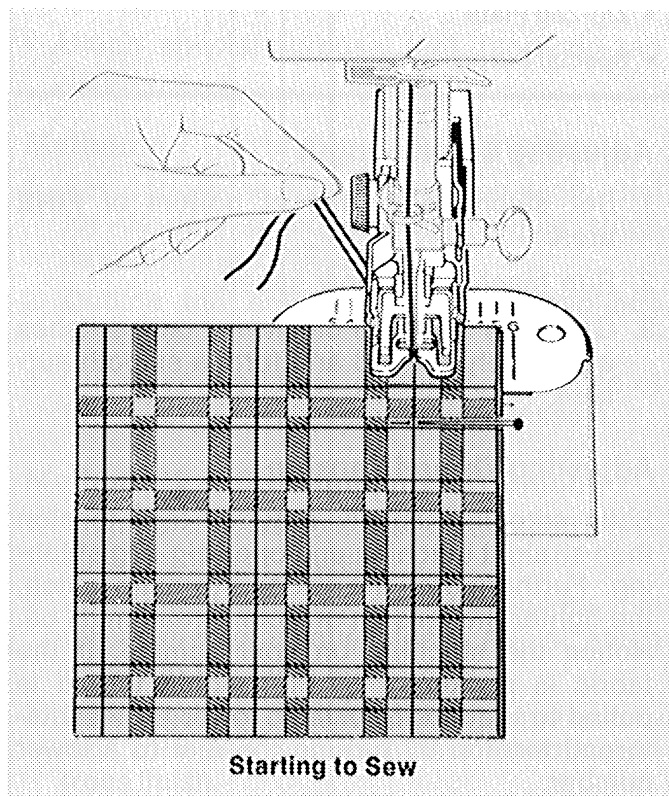
- Attach the Even Feed foot (see page 5) and set machine for stitch desired.
 - Line up fabric edges carefully at seam start and secure with a pin.
 - Draw needle and bobbin threads under foot to back of machine.
 - Raise presser-foot lifter to its high position and place work so that needle hole in foot is about $\frac{1}{4}$ inch in from starting edge of fabric.
- Position needle in fabric with a light touch on the speed controller.
 - Lower foot firmly.
 - Hold ends of needle and bobbin thread at back of foot when you start to stitch.
 - After just a few stitches, release thread ends and remove pin used to secure fabric. Guide fabric lightly under foot. *Do not over-handle.*

For a reinforced sewing start, place work so that needle hole in foot is approximately $\frac{1}{2}$ inch in from starting edge of fabric; hold thread ends, stitch in reverse to edge of fabric. Then stitch forward,

Where pattern matching has to be perfect, use a slightly *shorter* stitch length than usual for the fabric.

Topstitching

When topstitching smooth, shiny fabrics such as vinyl patent, or textured fabrics such as imitation reptile, suede or leather, use a slightly *longer* stitch length than usual.



decorative touches

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 appliqué when closed up to form a satin stitch. Other built-in and interchangeable *Fashion* Stitch patterns (as illustrated on pages 20 and 24) can be sewn at satin-stitch length.

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 fabric 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.

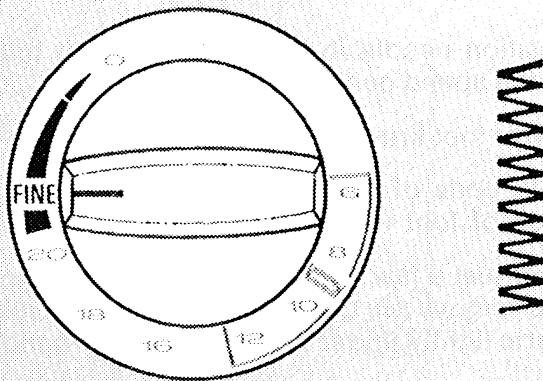
- Stitch: Desired *Fashion* Stitch
- Stitch Width: 2 through 6
- Needle Position: 
- Stitch Length: **FINE** area
- Zig-Zag Plate
- Special Purpose Foot

Adjusting Stitch Length

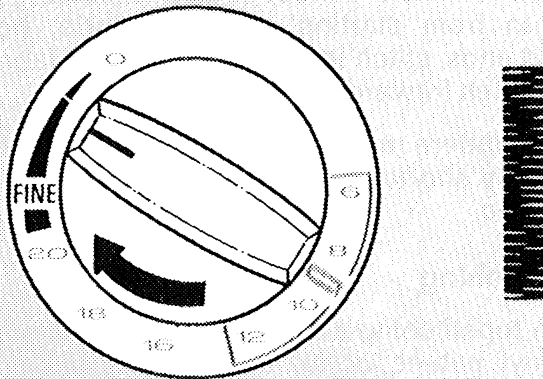
1. Set stitch-length dial at bottom of **FINE** area.
2. Run machine at slow speed.
3. Gradually turn dial clockwise until stitches are closely spaced and form a smooth surface.

Adjusting Thread Tension

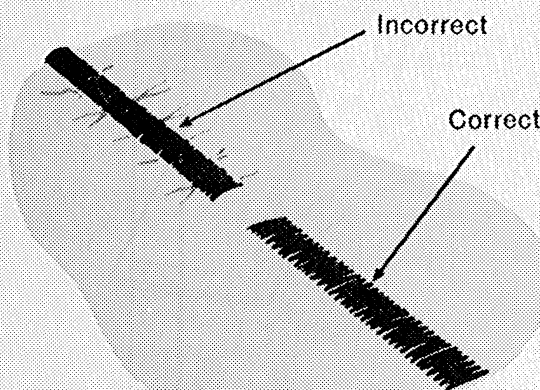
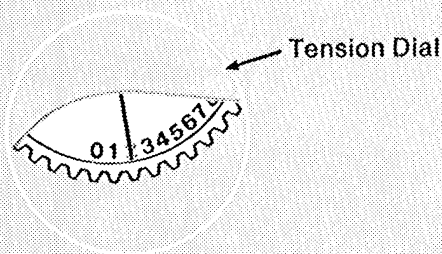
Satin stitching usually requires less tension than straight stitching and open zig-zag stitching. Furthermore, the wider the satin stitch, the lighter the tension on your thread must be. Notice the stitching on your sample. If the fabric is puckered, or the bobbin thread is pulled to the fabric surface,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



Stitch Length in FINE Area



As Dial Is Turned, Stitches Close Up



Adjusting Thread Tension

APPLIQUE

Appliqué 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 appliqué work, but decorative stitch patterns 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 appliquéing, make a test sample to help you decide which of the following two methods is more appropriate for your fabric and design.

Preparation

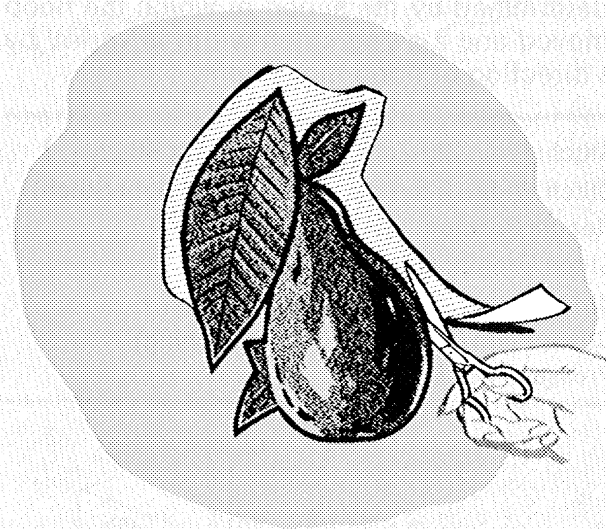
- Baste appliqué to fabric.
- Outline appliqué with straight stitching (use a short stitch).
- Remove basting and press.
- Attach special-purpose foot (and zig-zag plate).

Method #1 — Trimming after Stitching

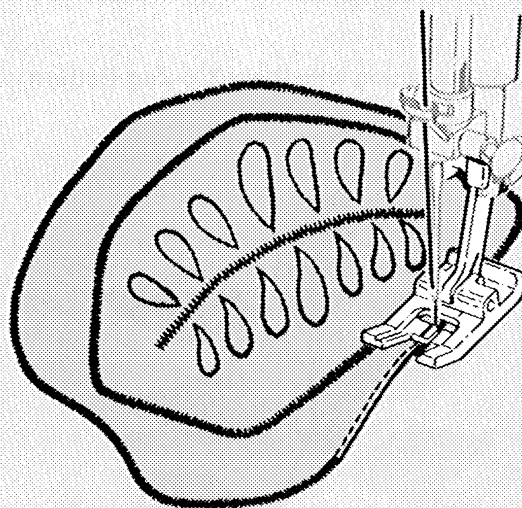
1. Set pattern selector and stitch-width dial for desired appliqué stitch. Adjust stitch length in the **FINE** area.
2. Outline the entire design with appliqué stitching.
3. Cut away the fabric on the outer edges of the stitching with embroidery scissors.

Method #2 — Stitching after Trimming

1. Trim outside fabric edges close to straight-stitch outline of design.
2. Set pattern selector and stitch-width dial for desired appliqué stitch. Adjust stitch length in the **FINE** area.
3. Overedge the design with appliqué stitching. This step will produce a smooth, lustrous finish.







Method #1 — Trimming after Stitching

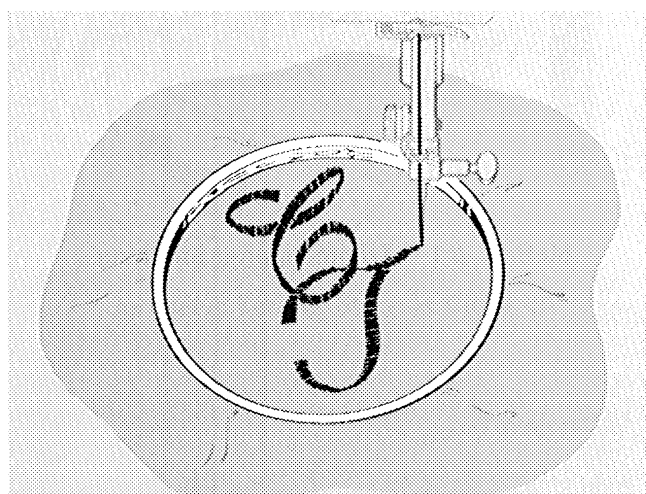


Method #2 — Stitching after Trimming

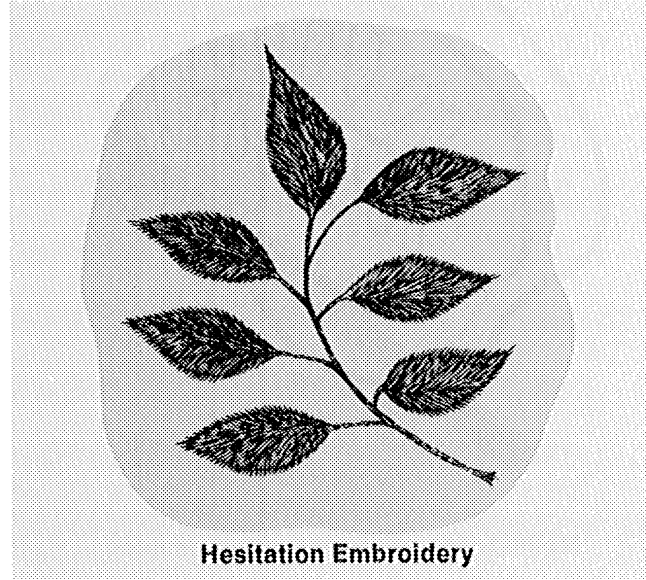
FREE-MOTION EMBROIDERY

In free-motion embroidery, you control the direction and speed of fabric movement by means of an embroidery hoop. Stitch length is determined by the speed at which the hoop is moved and zig-zag stitch width is varied by the direction of hoop movement.

- Stitch: Plain Zig-Zag  (or Straight Stitch )
- Stitch Width: 2 through 6 (or  Straight Stitch)
- Needle Position: 
- Stitch Length: Optional 6 — FINE
- Speed Range: **SLOW**
- Cover Plate (See page 5 for attaching)
- Presser Foot Removed





Monogramming with Plain Zig-Zag Pattern



Hesitation Embroidery

1. Attach cover plate (see page 5).
2. Trace or transfer design outline to right side of fabric and center in embroidery hoop. Make sure fabric is taut.
3. Raise presser-foot lifter to its high position, place hoop under needle and lower presser bar to engage thread tension.
4. Hold needle thread loosely with left hand, turn hand wheel over, and draw bobbin thread up through fabric.
5. Lower needle into fabric, hold thread ends and start stitching. After two or three stitches, cut thread ends.
6. Run machine at an even rate of speed, following or filling in design outline as appropriate. Move hoop rapidly to increase stitch length and change the direction of hoop movement to shade zig-zag stitch width from wide to narrow.

HESITATION EMBROIDERY

- Stitch: Straight 
- Stitch Width: 6 only
- Needle Position: 
- Stitch Length: 0
- Speed Range: **SLOW**
- Cover Plate (See page 5 for attaching)
- Presser Foot Removed

Hesitation embroidery is free-motion embroidery done at machine settings used for speed basting (except stitch length). The time lapse that occurs between needle penetrations permits unhurried hoop movement (appreciated by the beginner). It also permits unusually long stitches, as well as short ones for unique decorative effects.

1. Attach cover plate, as *instructed on page 5*, and set machine for speed basting. See page 28.
2. Trace or transfer design outline to fabric and center in embroidery hoop. Designs and motifs with shaggy outlines and textured surfaces are usually best.
3. Position hoop under needle, lower presser bar, and raise bobbin thread.
4. Move hoop back and forth, filling design with long and short stitches as in regular free-motion embroidery.

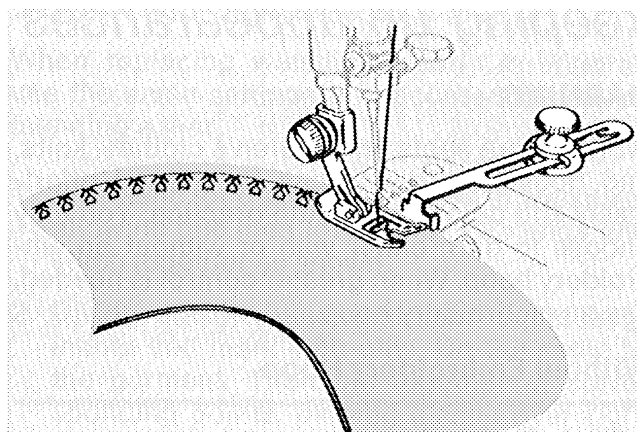
TOPSTITCHING

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, hems, pockets, seams, etc. For a tailored look, use lines of regular straight stitching; sew them with buttonhole twist (or double strands of regular thread) for added emphasis. For decorative interest, use a zig-zag stitch. The Even Feed foot will help you place stitching evenly and accurately. To keep stitching at an even distance from the fabric edge, use the seam guide.

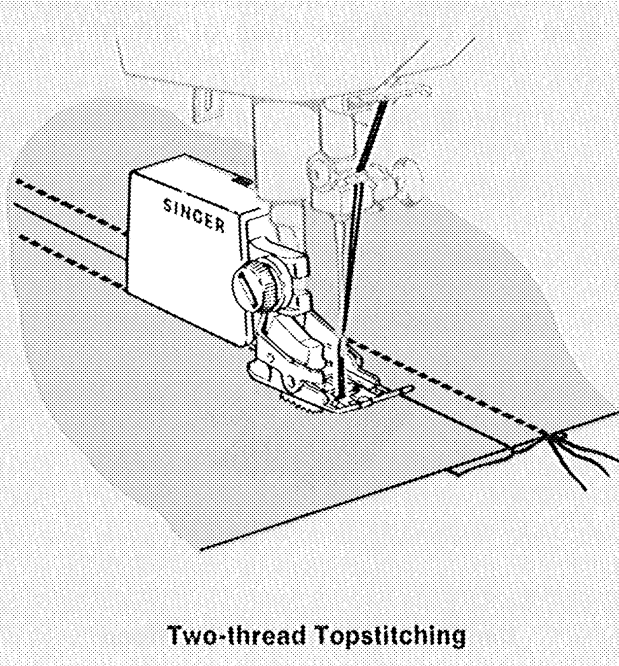
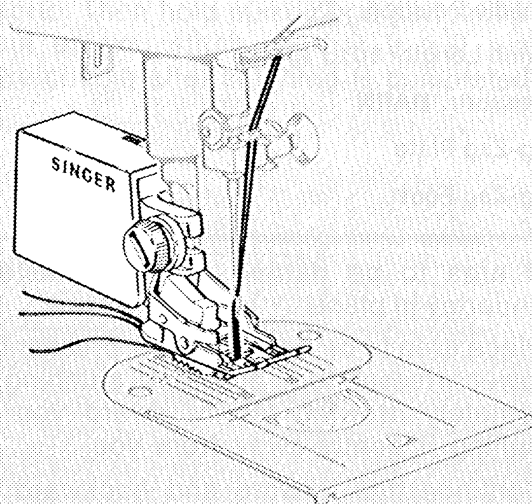
Two-thread Topstitching

Bold, well-defined topstitching is produced by using two strands of regular thread in the needle instead of a single strand. Ideal for summer knits, linens, cottons, denims, and vinyls, two thread topstitching is economical and particularly appropriate for use when a non-lustrous, washable finish is required.

- Select a size 16, Style 2020 needle for woven fabric and use a size 14, Style 2045 (yellow band) needle for knits.
- Set the machine for straight stitching.
- Thread the machine above the tension discs as for twin-needle sewing. See page 26.
- Pass threads together into tension discs and threading points above the needle.
- Cut thread ends diagonally and draw both through the eye of the needle.
- Make a stitching test to determine the best stitch length and needle-thread tension. A long stitch, 6 to 10 per inch, is usually best.
- Sew at moderate speed.



Topstitching with Tulip Stitch



Two-thread Topstitching

keeping up appearances

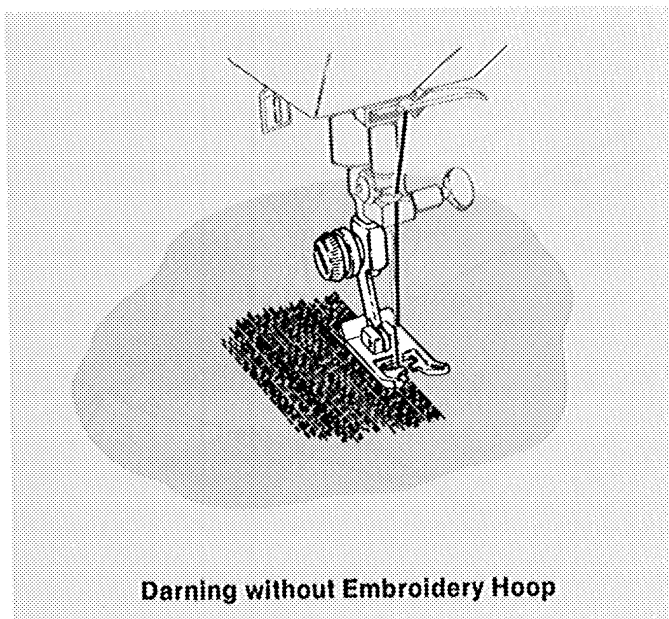
DARNING

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, use an embroidery hoop.

Without Embroidery Hoop




- Stitch: Straight 
- Stitch Width: 
- Needle Position: 
- Stitch Length: 10 to 15
- Pressure: **DARN**
- Zig-Zag Plate
- Zig-Zag 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.

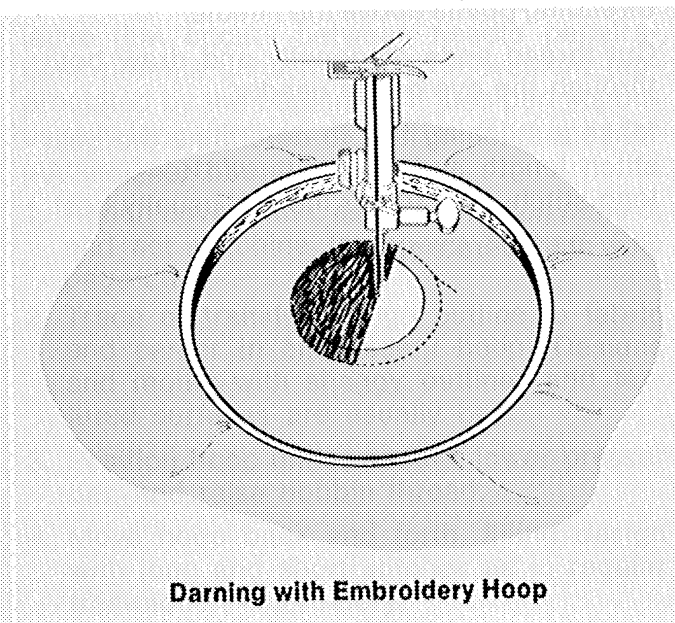


Darning without Embroidery Hoop

With Embroidery Hoop

- Stitch: Straight 
- Stitch Width: 
- Needle Position: 
- Stitch Length: In **FINE** area
- Cover Plate (See page 5 for attaching)
- Presser Foot Removed

1. Attach cover plate (see page 5).
2. Trim ragged edges from area to be darned and center worn section in embroidery hoop.
3. Position work under needle and lower the 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 back and forth under needle. Keep lines of stitching closely spaced and even in length.
7. When opening is filled, cover area with crosswise lines of stitching.







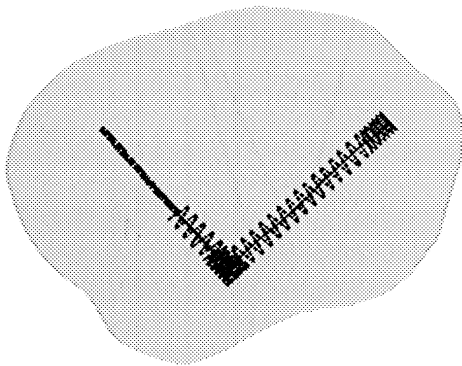
Darning with Embroidery Hoop

MENDING

Many stitch patterns are just as useful for mending as they are for creative sewing. The plain zig-zag, multi-stitch zig-zag, and the honeycomb stitch each form a firm, flexible bond that is ideal for repairing tears and replacing elastic. The straight stretch stitch provides for the repair and reinforcement of pressed-open seams. Bar tacks to reinforce points of strain are made with the plain zig-zag stitch or the arrowhead stitch.

Mending a Tear

- Stitch: Multi-Stitch Zig-Zag , Plain Zig-Zag  or Honeycomb 
- Stitch Width: 3 to 6
- Needle Position: 
- Stitch Length: 20 for Multi-Stitch
6 for Honeycomb
- Stitch Balance: Equalized (for Honeycomb)
- Zig-Zag Plate
- Zig-Zag Foot



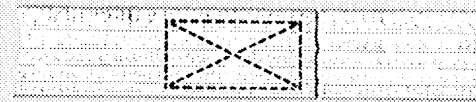
Tear Mended with Multi-Stitch Zig-Zag

1. Trim ragged edges.
2. Place underlay on the wrong side of torn area for reinforcement. (It is best not to baste or pin the underlay since you will be bringing the edges of the 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.

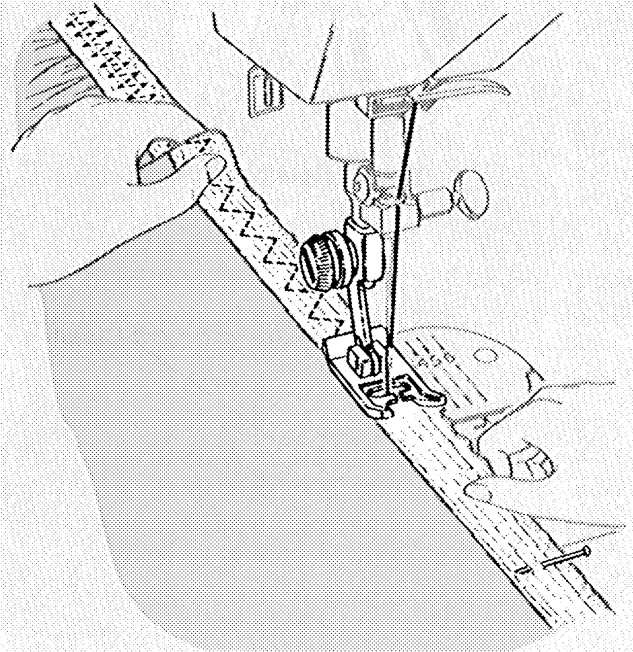
REPLACING LINGERIE ELASTIC

When replacing waistline elastic in lingerie, use the same settings and accessories as for mending a tear.

1. Fit elastic for desired snugness at waistline, allowing one inch for joining. Lap ends and stitch together as shown.
2. Divide elastic band into four equal segments and mark with pins. Do the same to the garment. Then pin together at corresponding points, pinning elastic over right side of fabric, top edges even.
3. Take a few stitches to anchor elastic to fabric. Then hold elastic and garment edge taut as you stitch so that it will remain stretchable after stitching is completed.



Joining Elastic



Replacing Lingerie Elastic

9. CARING FOR YOUR SEWING MACHINE

cleaning the machine

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

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

Remove lint or fluff from exposed parts.

With a soft cloth or lint brush, clean:

- Tension discs, presser bar, and needle bar
- Take-up lever and thread guides
- Machine surface. (If necessary, dampen the cloth and use a mild soap.)

With a fine cord or multiple strands of thread, clean:

- Thread-retainer spring

Open slide plate, remove bobbin, and remove plate as instructed on page 5.

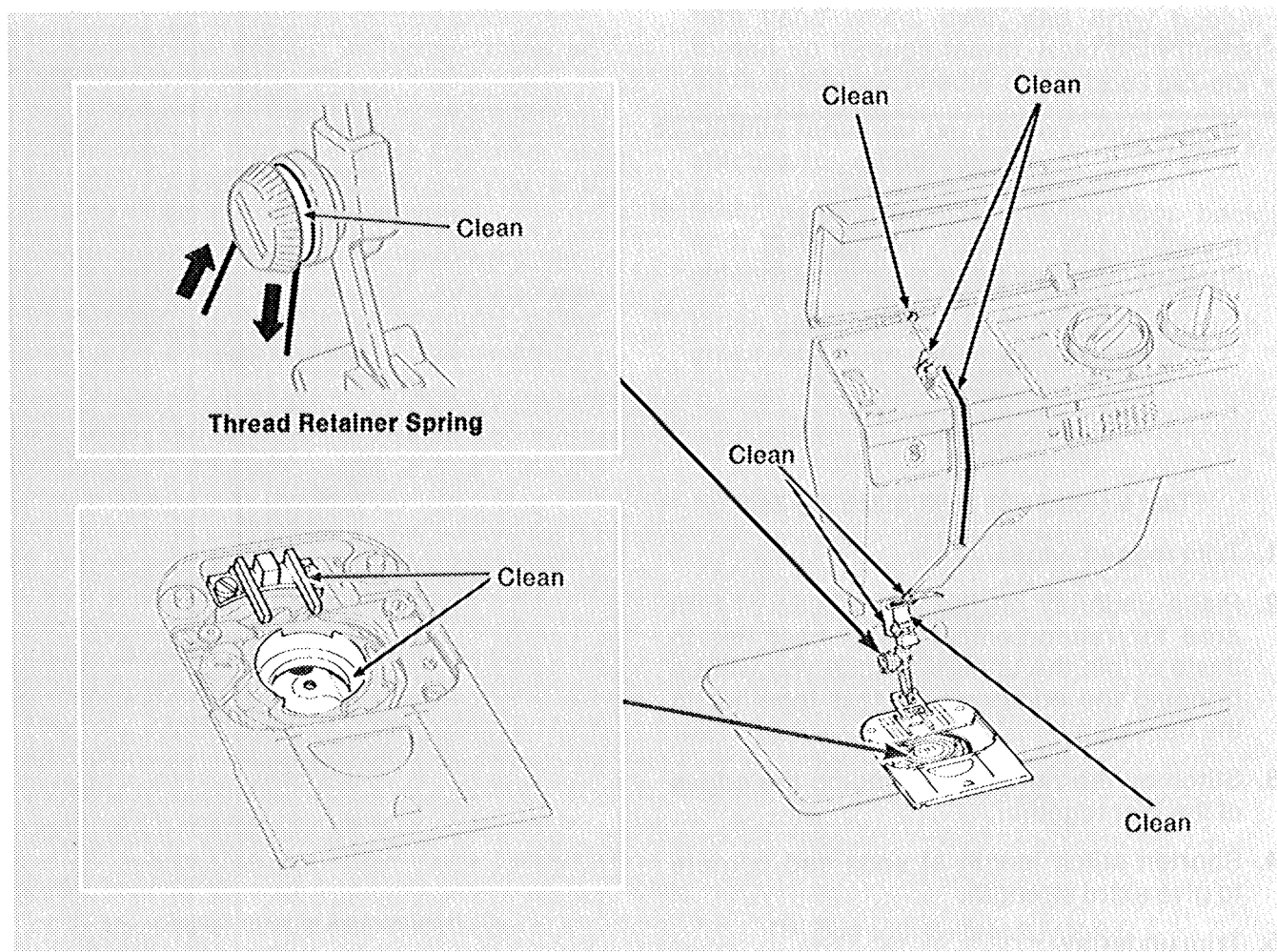
With the lint brush, clean:

- Area around feed
- Area in and around the bobbin case

With the lint brush or soft cloth, clean:

- Bobbin window (If necessary, tilt machine back slightly to clean underside of window.)

Your machine requires **no oiling** under normal conditions. Your SINGER representative, or Approved Dealer, will examine the permanently lubricated parts whenever your sewing machine requires servicing.



changing the light bulb

This machine is designed to use a 15-watt bulb.

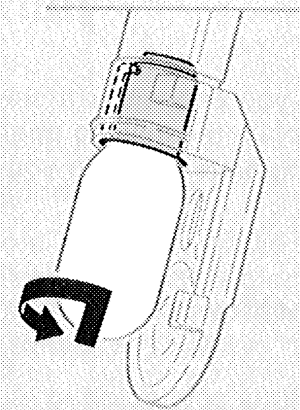
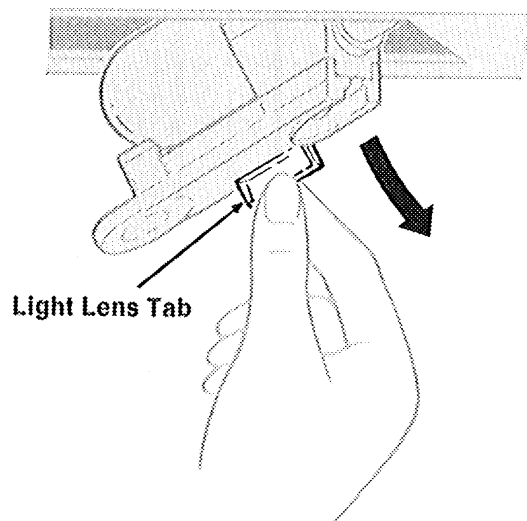
CAUTION: Before changing light bulb, make sure you have disconnected power-line plug from electrical outlet.

REMOVING BULB

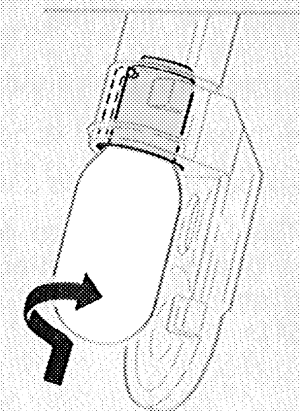
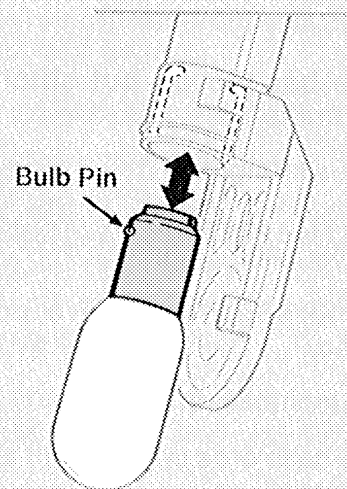
Using thumb and forefinger of right hand, pull down on tab located under light lens to lower the light bracket. Do not attempt to unscrew the bulb. Press bulb up into the socket and at the same time turn it over in the direction shown to unlock bulb pin.

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.



Unlocking Bulb



Locking Bulb

performance checklist

Should you encounter a sewing problem, review the sections of this instruction book that explain the sewing operation you are performing. If the problem persists, the following hints will help you correct it.

If the machine does not start, make sure . . .

- Machine is connected to electrical supply.
- Power and light switch is on.
- Bobbin has not been wound too full. (Do not wind beyond outer ring on bobbin.)

If needle bar moves but stitch is not formed, make sure . . .

- Needle is straight.
- Needle size and style are correct for the thread you are using.
- Machine and needle are correctly threaded.
- Bobbin contains thread.
- Bobbin-case area is free of lint and loose thread ends.
- If you are sewing a knit or stretch fabric, Style 2045 ball-point (yellow band) needle is in the machine.

If fabric puckers, make sure . . .

- Needle-thread tension is not too tight.
- Presser-foot pressure is correctly set.
- Even Feed foot is used for matching stripes, plaids, and patterns; also for sewing all "hard-to-feed" fabrics (see page 54).

If stitching is irregular, or needle thread breaks, make sure . . .


- Machine is correctly threaded.
- Thread is even and free of knots.
- Needle is straight and correct size for thread and fabric.
- Spool holder is pressed firmly against thread spool and thread unwinds smoothly from spool.
- Needle-thread tension is not too tight.
- Presser foot is raised for bobbin winding.
- Bobbin case is correctly threaded (when inserting a previously wound bobbin).
- Threads are correctly placed under presser foot when you start to sew. (When using zig-zag accessories, thread should be held at back of presser foot for first two or three stitches.)
- Bobbin-case area is free of lint and loose thread ends.
- Bobbin is not damaged.
- Stitch-pattern disc is seated properly on disc holder.
- Stitch-length dial is set at 6 to 8 when you are using *Flexi-Stitch* patterns. (*Flexi-Stitch* patterns and chainstitching cannot be reversed.)

performance checklist

If fabric does not move, make sure . . .

- Presser foot is down and pressure dial is adjusted for the weight and texture of your fabric.
- Stitch-length dial is correctly set.
- You have not inadvertently left the cover plate on the machine.
- All lint is removed from around the feed.
- Presser foot or accessory is correctly attached.

If needle breaks, make sure . . .

- Needle is not bent or burred, is the correct style for your machine model, and is the proper size for the thread you are using.
- Needle is fully inserted in needle clamp.
- Machine is set for straight stitching at center () needle position when you are using straight-stitch plate and foot.
- Twin needle does not strike plate during stitching. (Stitch width should not exceed 3.)
- Presser-foot shank is securely fastened to presser bar.
- Fabric being guided or supported behind the needle is not being pulled too hard.

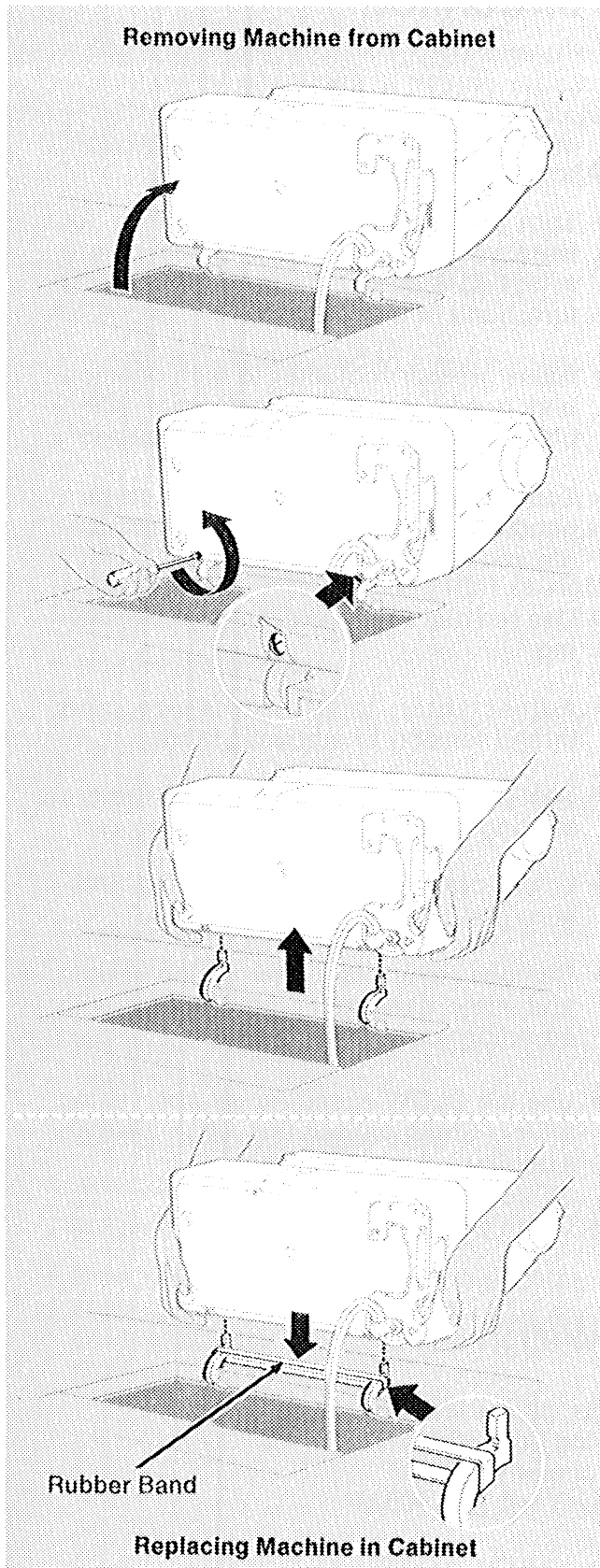
Also, remember to . . .

- Turn pattern-selector release lever toward you until it locks in place before selecting a stitch. If lever fails to lock, turn hand wheel slightly.
- Raise presser-foot lifter to high position and needle to its highest point when placing bulky fabric under presser foot.
- Touch speed controller lightly or turn hand wheel toward you to position needle and take-up lever.
- Use red dial settings for buttonhole sewing.
- Adjust stitch length, pressure, and thread tension to suit your fabric.
- Test-stitch on a fabric sample before starting a sewing job.
- Lower presser foot before setting pressure dial.
- Remove cover plate after button sewing and after darning or embroidery with an embroidery hoop.
- Use the **SLOW** speed range when using a *Flexi-Stitch* pattern and when winding a bobbin.
- Clean your machine periodically.

enjoy sewing!

If you have any questions, please write to:
Department of Sewing Education
The Singer Company
30 Rockefeller Plaza, New York, N.Y. 10020

removing machine from cabinet



IMPORTANT:

- Do not attempt to remove hinges from cabinet as this may result in damage to the wood.
 - Pull cabinet away from wall to avoid damage to wall or machine.
 - Remove machine power-line plug from electrical outlet.
1. Tilt machine back until it rests on hinges.
 2. Remove speed controller from its holder in the cabinet.
 3. Loosen screws that hold machine on hinge pins by turning them counterclockwise.
 4. Lift machine (with controller attached) straight up and off pins. For ease of removal, stand behind cabinet when lifting machine.

REPLACING MACHINE IN CABINET

Reverse the procedure used for removing the machine.

- Be sure screws in machine are unscrewed far enough to clear the openings for the hinge pins.
- To keep hinge pins pointing up while replacing the machine, slip a rubber band around both pins, making sure the rubber band is over the shoulder of each pin as illustrated.
- Be sure screws are firmly tightened against hinge pins before lowering the machine into sewing position or into storage position.

10. 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 Sewing Center.

Deluxe Monogrammer

No. 171276

With the deluxe monogrammer you will have the pleasure of stitching initials 1½ inches high to create monograms that are ideal for adding a personal touch to table and bed linens, towels, and wearing apparel. An attractive flower motif is included.

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.

Edge Stitcher

No. 160625

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

Finger Guard

No. 161681

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

Ruffler

No. 161561

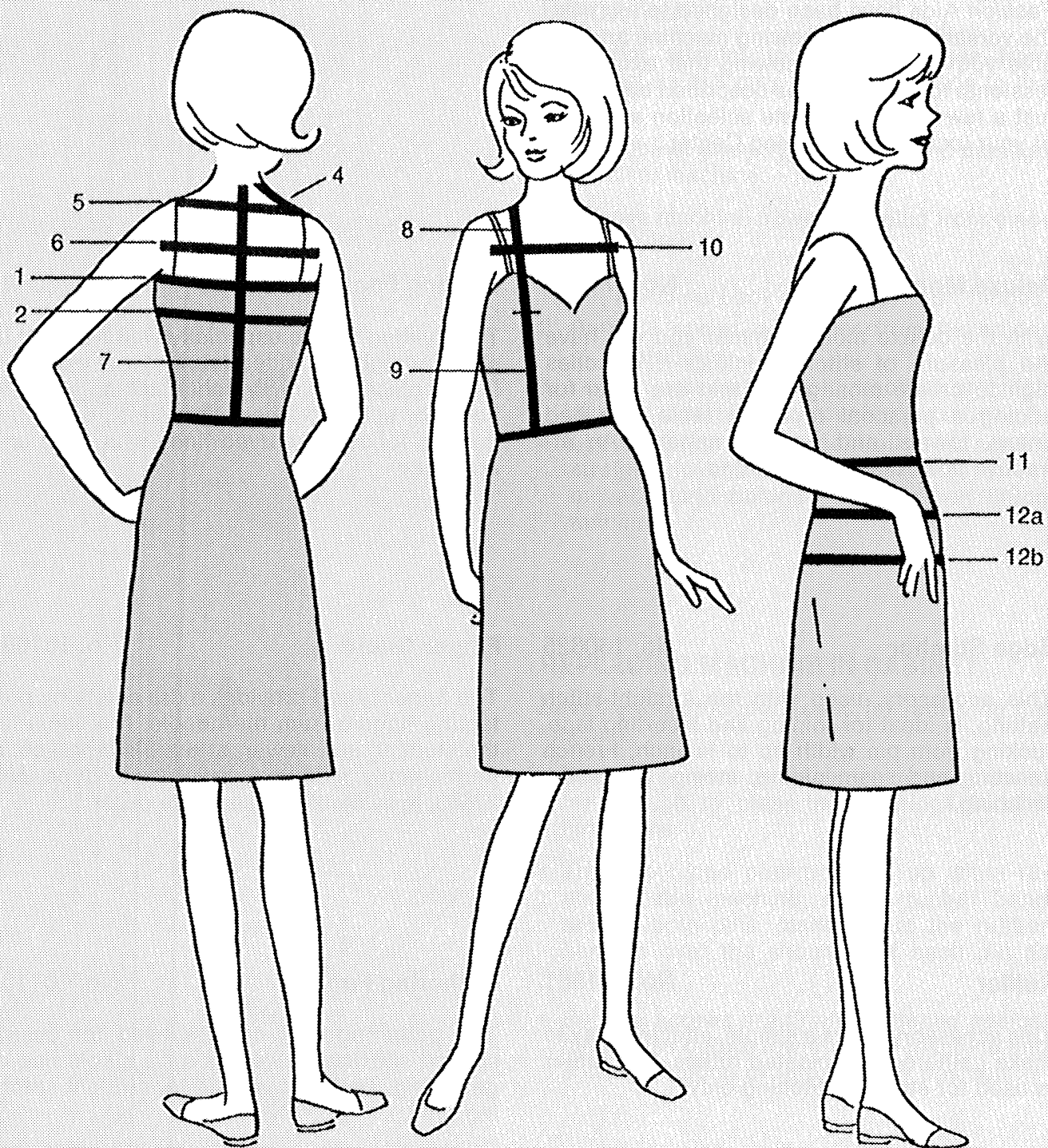
This accessory offers a simple, effective way to make gathered and pleated ruffles. The ruffler is used for straight stitching only.

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.

your personal measurements



For perfect accuracy, ask a friend to take your measurements.

	Your measurements (actual body)	Minimum ease allowances	Total (your measurements plus ease)	Actual pattern measurements (at same point as body)	You may need (to add [+] or subtract [—])	Sequence for measuring pattern
BACK VIEW	To measure #1-7, stand at back facing mirror.					
	1. Chest, entire (Take above bust and straight across back)					
	2. Bust (Take over fullest part of bustline and straight across back)	3"		X2		8
	3. Bra cup A, B, C, D, DD (Circle the letter that applies)					
	4. Shoulder length (right)	NONE				4
	5. Shoulder to shoulder (back) (Take from armhole to armhole at shoulder seam)	¼"		X2		6
	6. Back width (Take 3" to 4" below shoulder seam at back armhole)	¼"		X2		5
FRONT VIEW	7. Backwaist length (Take from neckline to waistline, center)	¼"				7
	To measure #8-10, stand in front facing mirror.					
	8. Shoulder to bust, apex	NONE				1
	9. Shoulder to waist, over apex	¼"				2
SIDE VIEW	10. Front chest (Take 3" down from shoulder at armhole, and from armhole to armhole)	¼"		X2		3
	To measure #11 and 12, stand at side facing mirror.					
	11. Waistline, a. entire	½"		X2		
	Waistline, b. side to side, back	¼"		X2		9
	Waistline, c. side to side, front	¼"		X2		
	12. Hipline, a. entire, 7" from waistline	2"		X2		
	Hipline, b. entire, 9" from waistline	2"		X2		10
	Hipline, c. side to side, back, —"	1"		X2		
	Hipline, d. side to side, front, —"	1"		X2		

INDEX

Accessories	2	Performance Checklist	64
Adjusting Machine to Fabric	14	Plain Stretch Seams	48
Applique	57	Plates	1, 2, 3, 5
Basting	16, 28	Chainstitch Plate	3
Pin	16	Changing Plates	5
Speed Basting by Machine	28	Cover Plate	3
Blindstitch Hem Guide	3	Straight-stitch Plate	2
Blindstitch Hems	44	Zig-Zag Plate	1, 2
Bobbin	1, 2, 11, 12, 13	Slide Plate	1
Raising Bobbin Thread	13	Power and Light Switch	1, 6
Removing Bobbin	12	Presser Feet	1, 2, 3, 4, 43, 54
Removing Thread	12	Button Foot	3
Replacing an Empty Bobbin	12	Buttonhole Feet	2
Replacing a Wound Bobbin	13	Changing Presser Feet	4
Winding	11	Even Feed Foot	2, 54
Built-in Discs	20	Special Purpose Foot	2
Buttonholes	35	Straight-stitch Foot	2
One-step Buttonholes	36	Zig-Zag Foot	2
Two-step Buttonholes	38	Zipper Foot	3, 43
Corded One-step Buttonholes	42	Pressure Adjustments	1, 14, 47
Buttons	34	Principal Parts	1
Cabinet, Removing Machine from	66	Removing Machine from Cabinet	66
Caring for your Machine	62	Replacing Elastic	61
Chaining Off	31	Reverse Stitching	1, 19
Chainstitching	30	Satin Stitching	56
Checklist, Performance	64	Seam Guide	2
Choosing Needle and Thread	8	Seams	16, 19, 31, 43, 50
Corded Seams	43	Chainstitch	31
Darning	60	Corded	43
Darts	45	Curved	19
Decorative Touches	56	Overedged	50
Discs	3, 25	Plain Stretch	48
Fashion Stitch Discs	3	Straight	16
Flexi-Stitch Discs	3	Sewing Knit and Stretch Fabric	46
Changing	25	Slide Plate	1
Elastic, Replacing	61	Speed Controller	1, 6
Electrical Connections	6	Spool Holder	1, 7
Embroidery	58	Starting to Sew	17, 23, 31, 47
Even Feed Foot	2, 54	Stitch Balance	23
Fabric-handling Chart	52	Stitch Length Adjustments	1, 15, 22
Fabric, Thread and Needle Table	8, 9	Stitch Placement	21
Fashion Aids	67	Stitch-width Dial	1, 22
Fashion Stitch Discs	3	Straight Stitching	16, 18, 19
Finishes for Hems and Facings	51	Curved Seams	19
Flexi-Stitch Discs	3	Reinforcing End of Seam	19
Free-motion Embroidery	58	Straight Seams	16
Guiding and Supporting Fabric	47	Turning Square Corners	18
Interchangeable Discs	24	Temporary Stitching	28
Length of Stitch	22	Chainstitching	30
Light Bulb	63	Speed Basting	28
Mending	61	Tension Adjustments	1, 15, 22
Mock Overedging	51	Topstitching	59
Needle	2, 7, 10, 13, 21, 26	Twin-needle Stitching	26
Changing	7	Chart	27
Lifter	1, 13	Threading the Needle	26
Position Ring	1, 21	Width of Stitch	22
Threading	10, 26	Your Personal Measurements	68
Overedged Seams	50	Zig-Zag Stitching	20
Pattern Unit, Starting Point	23, 25	Zippers	43
Pattern Selector	21		

SINGER

GUARANTEE

WE GUARANTEE that each SINGER* sewing machine has been carefully manufactured and is in perfect operating condition on delivery. When subject to normal family use and care, any parts requiring replacement at any time owing to defects in material or workmanship will be replaced without charge.

THIS GUARANTEE does not apply to parts requiring replacement owing to natural wear or to abuse or negligence of the user or in the event the machine is serviced by other than a SINGER representative or Approved Dealer or with parts other than those supplied by The Singer Company.

IN ADDITION to the above guarantee of parts, each machine will be inspected and adjusted whenever necessary without charge for labor for a period of one year from date of purchase.

THIS GUARANTEE is effective only with respect to the person making the purchase from The Singer Company or one of its Approved Dealers. The original Sales Agreement, or Cash Receipt, must be presented to obtain the benefits of the guarantee.

AGREEMENTS inconsistent with the foregoing shall be void and of no effect.

THE SINGER COMPANY

Remember, you are entitled to instructions on the use and care of your new FUTURA sewing machine at no charge. To arrange an appointment to obtain these instructions, call or visit the Singer Sewing Center or the Authorized Singer Dealer from whom you purchased your machine.

Be sure to ask about other sewing courses based on SINGER instructional materials. Moderately priced, these courses offer practical experience as well as lecture/demonstrations. You make a garment as you take each course. Whether you are a beginner or an expert, or somewhere in between, you will find a sewing course that is just right for you.*

SINGER* sewing cabinets are designed with your needs in mind. Elegant design plus ample work space adds up to your sewing pleasure. Here are a few of the many traditional and contemporary styles available in a variety of rich wood tones.



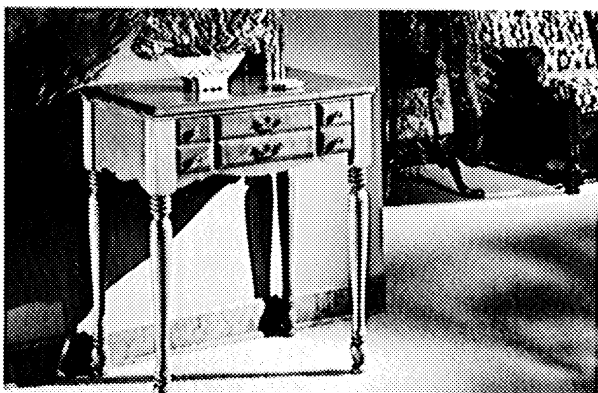
The St. Regis, Contemporary desk



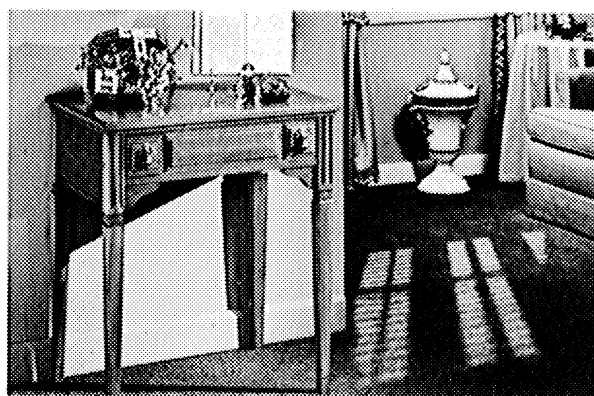
The Bakersfield, Contemporary desk



The Montpelier, Early American desk



The Saratoga, Early American console



The Malaga, Mediterranean console

Chairs in coordinated wood tones are also available.

SINGER