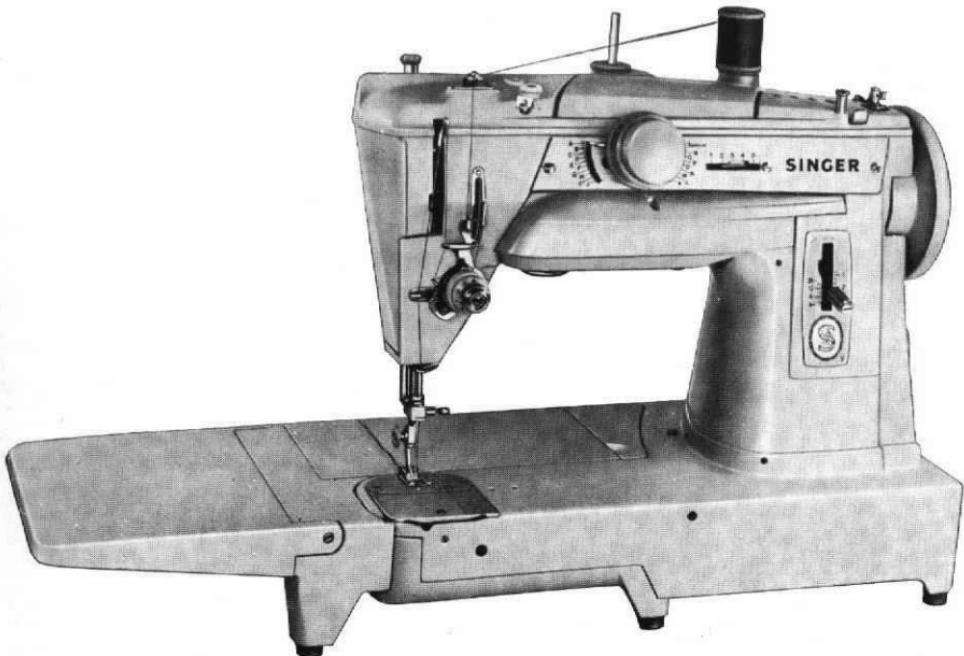


SINGER



431 Convertible

431*



SLANT-O-MATIC
Convertible

...the most versatile sewing machine ever built!

Instructions for using **SINGER**^{*}

THE CONVERTIBLE 431

. . . represents the ultimate in sewing machine performance. With the purchase of the new SLANT-O-MATIC, you can take pride in owning the finest sewing machine ever built. You'll marvel at its almost unbelievable ease of operation . . . the remarkable services it performs. You'll delight in its perfect, beautiful stitching.

- World's first convertible with double-easy threading. Has built-in threading chart, handy "drop-in" bobbin in front of needle!
- World's first convertible with slant needle and gear drive. Seeing is easier, sewing smoothest ever. No slipping or stalling.
- World's first convertible with built-in eye-level stitch chart . . . lets you "tune" the knob for whatever fancy stitch you want.



Add to these major developments in sewing machine design the following ADVANCED features, and you have a machine far ahead in design, unequalled in performance.

OTHER OUTSTANDING FEATURES ARE:

- **CYLINDER BED** simplifies sewing of articles of a curved or cylindrical nature — converts to flat bed with the push of a button.
- **PERFECT STITCHING . . .** straight and zigzag.
- **NEEDLE CLAMP** holds one or two regular needles — same or different sizes for exciting two needle stitching.
- **AUTOMATIC THREAD CONTROL** ensures a smooth flow of thread from spool to needle for uniform stitch setting.
- **CLIP-ON TYPE** calibrated throat plate . . . easy to remove and replace.
- **SUPERFINE CONTROL** of stitch length ensures perfect satin stitching.
- **HINGED FACE PLATE**, houses threading chart and swings open for easy access to oiling points.
- **BUILT-IN MOTOR** with worm wheel drive, no belts required, excellent penetrating power when sewing heaviest materials without manual assistance.
- **BUILT-IN LIGHT** focused on sewing area.
- **ALL MECHANISM** completely enclosed.
- **SPECIAL PURPOSE FOOT.**
- **FLEXIBLE SEAM GUIDE.**
- **HINGED BED EXTENSION** for increased work area.
- **COMPARTMENT** for attachments and accessories built into detachable cloth plate.

SINGER SERVICE

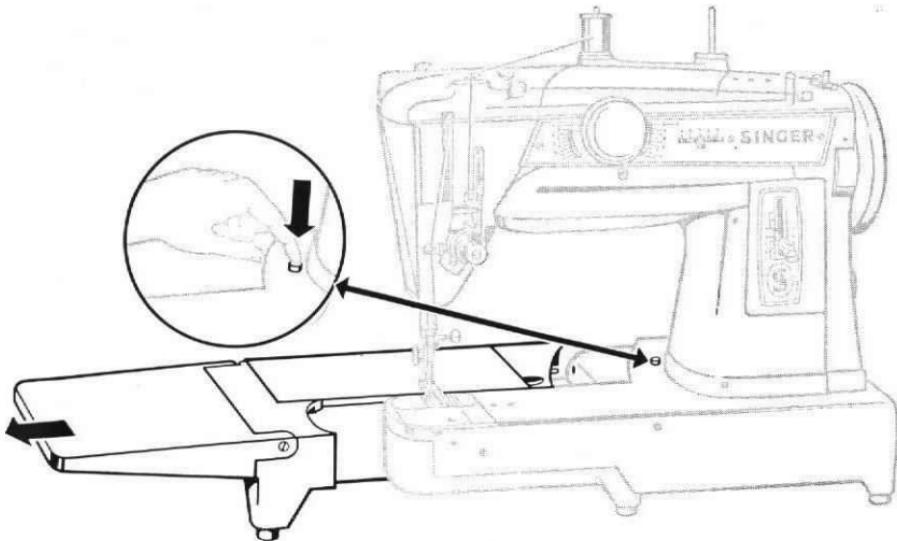
Wherever you go you will find expert, dependable SINGER* Service close at hand. SINGER is interested in helping you keep your SINGER Sewing Machine in top running condition. That is why you should always call your SINGER SEWING CENTRE if your machine ever requires adjustment or repair. Only from your SINGER SEWING CENTRE can you obtain the services of a trained SINGER repair man and warranted SINGER* parts.



EVERYTHING FOR THE WOMAN WHO SEWS

The answer to your sewing needs is at your SINGER SEWING CENTRE. There you will find a wide choice of sewing aids, notions, sewing information and services. Look for the famous red "S" and SINGER trademarks on your SINGER SEWING CENTRE and the ever ready SINGER van. See phone book under SINGER SEWING MACHINE CO. for address nearest you.

TO REMOVE AND REPLACE DETACHABLE CLOTH PLATE



To detach cloth plate from machine, press button on machine bed and withdraw plate.

Replace cloth plate in same manner, locating two pins in plate with corresponding holes in machine bed. Push cloth plate to right until it snaps in locked position.

See **pages 81 to 86** for applications of cylinder bed feature.

NEEDLE AND THREAD SELECTION

The selection of thread should be based on the fabric to be stitched. The thread should blend with the fabric in colour, fibre and size.

Silk and wool fabrics should be stitched with silk thread; cotton fabrics should be stitched with cotton or cotton mercerised thread, etc. The thread must be of a size that will imbed itself into the texture of the fabric. Thread that is too heavy for the fabric will remain on the surface and become weakened by friction and abrasion.

The selection of the needle should be based on both the fabric and thread being used. The eye of the needle must be large enough for the thread to pass freely through it. The blade of the needle must be fine enough not to mar the fabric with too large a puncture, yet heavy enough to pierce the fabric without binding or deflecting.

You will obtain best stitching results from your Sewing Machine if it is fitted with a SINGER* Needle.

NEEDLES AND THREAD

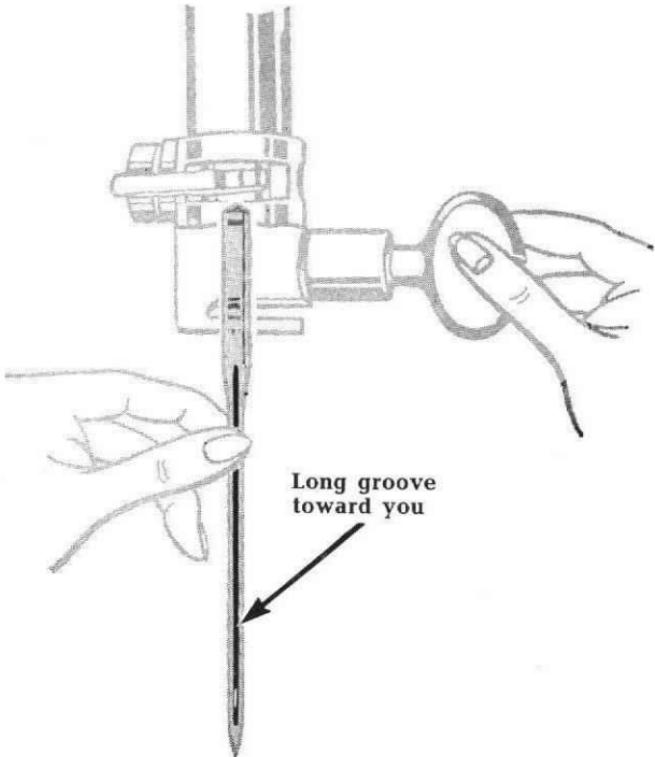
This machine uses needles
Catalogue 2020 (15×1).
Sizes 9, 11, 14, 16 and 18.

For perfect stitching, select correct needle and thread to correspond with fabric (see **page 6**).

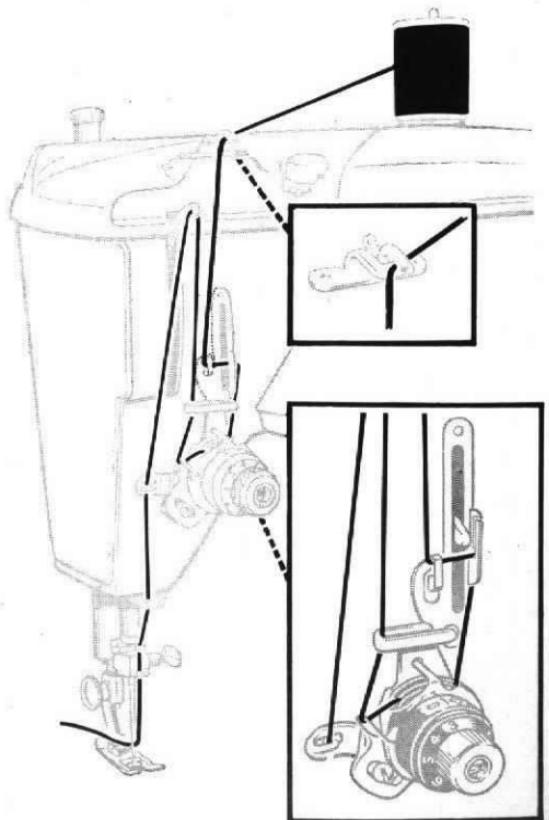
Be sure to use similar threads for both needle and bobbin.

NEEDLE INSERTION

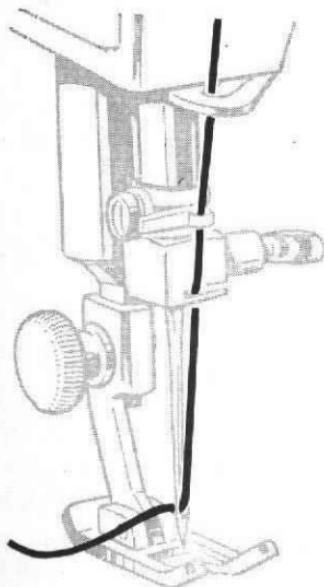
Raise the needle bar to highest point by turning the hand wheel toward you. Loosen the needle clamp screw. Insert needle upward into clamp as far as it will go, with the flat side of the needle to the back and the **long groove toward you**. Tighten needle clamp screw.



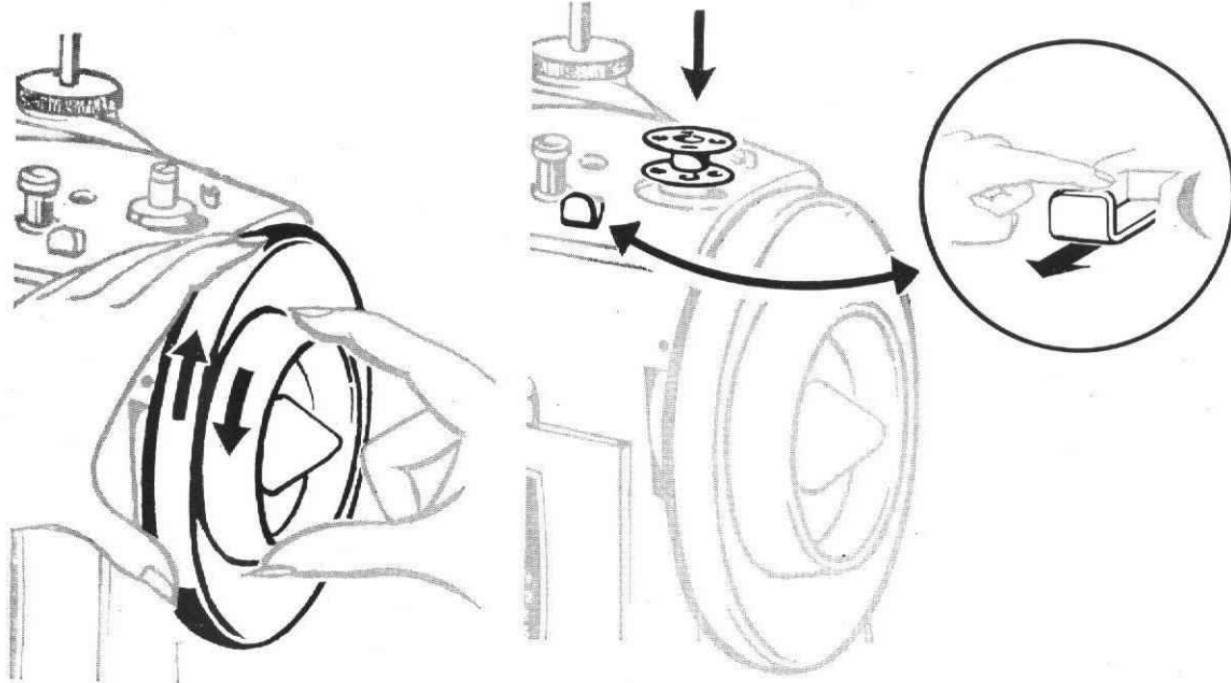
UPPER THREADING-SINGLE NEEDLE



Raise take-up lever to highest point. Place thread on spool pin and lead through threading points shown. Thread needle from front to back. Draw sufficient thread through eye of needle with which to start sewing.

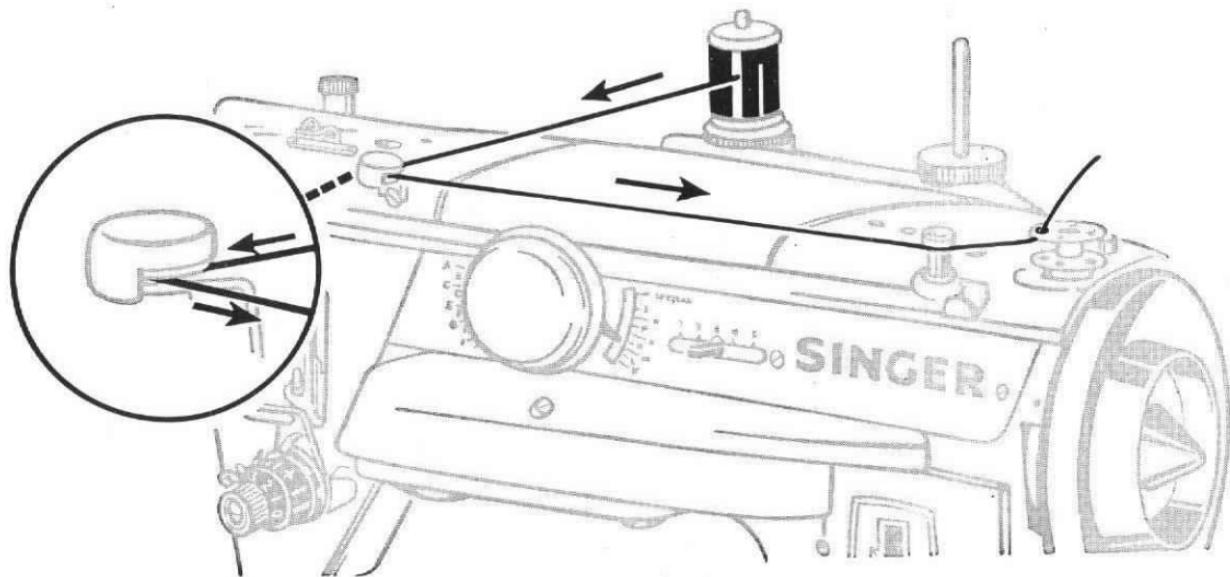


WIND THE BOBBIN



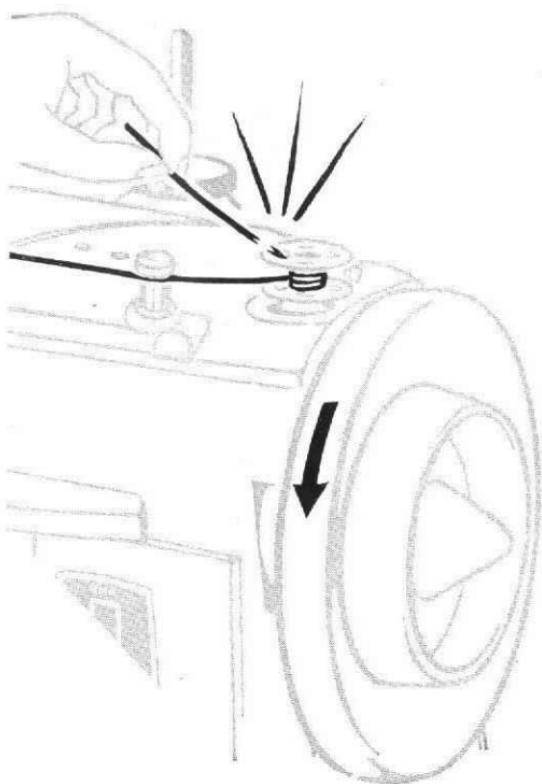
Loosen stop motion wheel with right hand. Place bobbin on spindle. Pull out bobbin winder engaging slide.

WIND THE BOBBIN (Cont'd.)

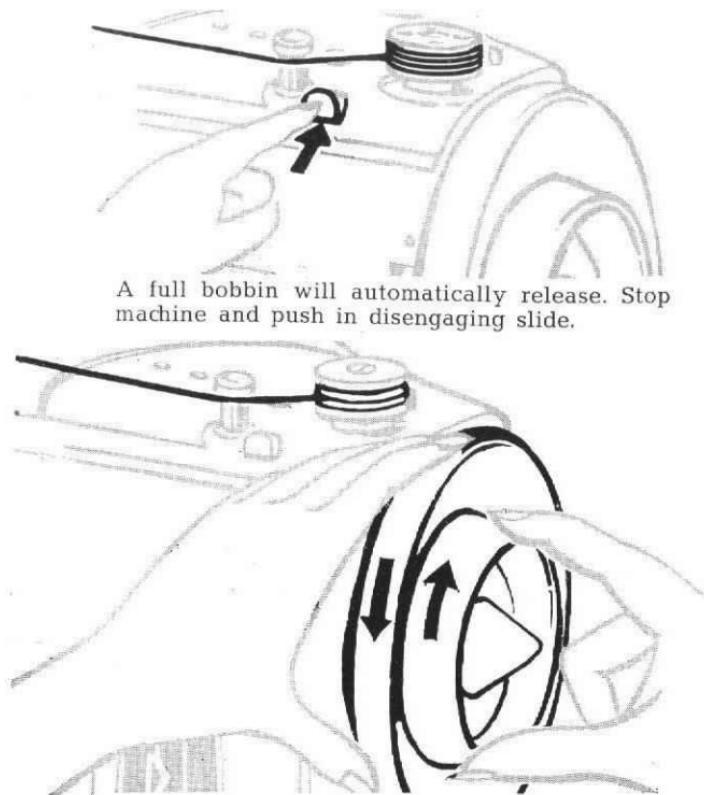


Thread the machine as shown.

WIND THE BOBBIN (Cont'd.)



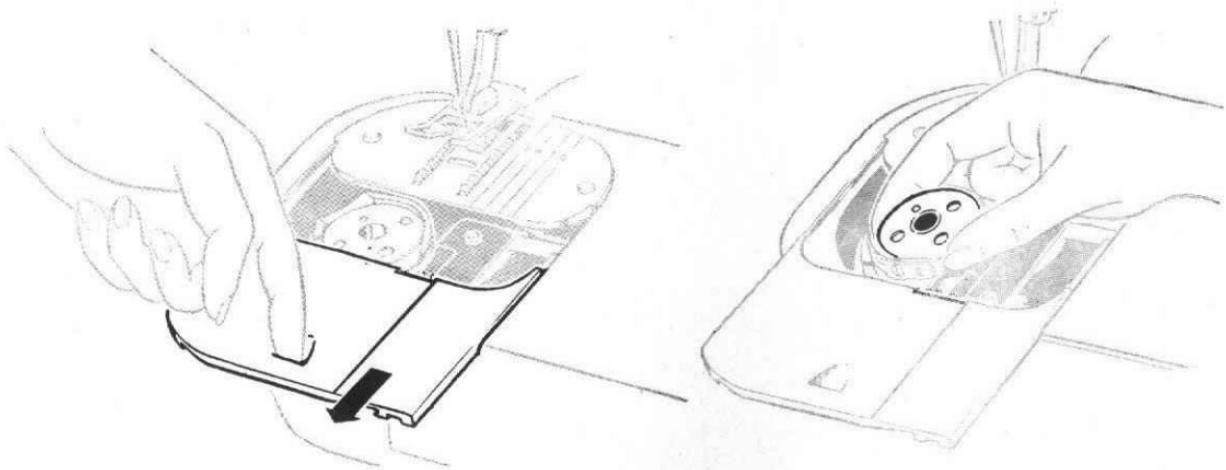
Hold end of thread and start machine.



A full bobbin will automatically release. Stop machine and push in disengaging slide.

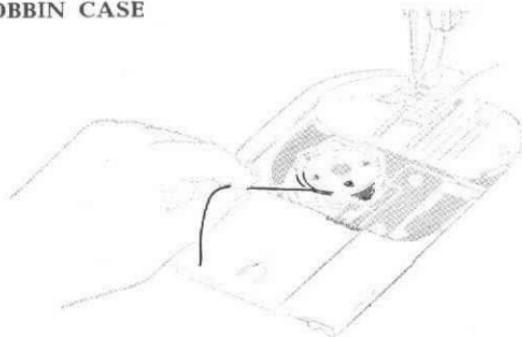
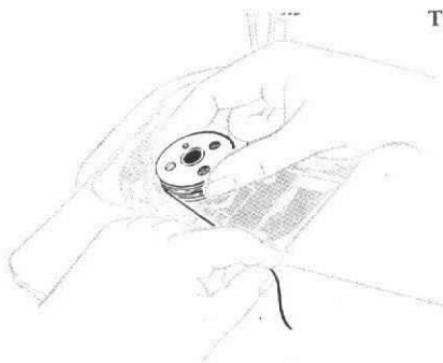
Tighten stop motion wheel.

REMOVE THE BOBBIN

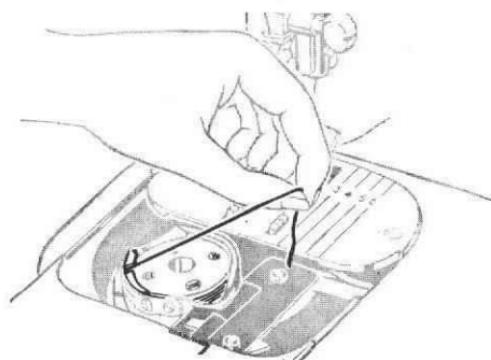


Open slide plate and remove bobbin.

THREADING THE BOBBIN CASE

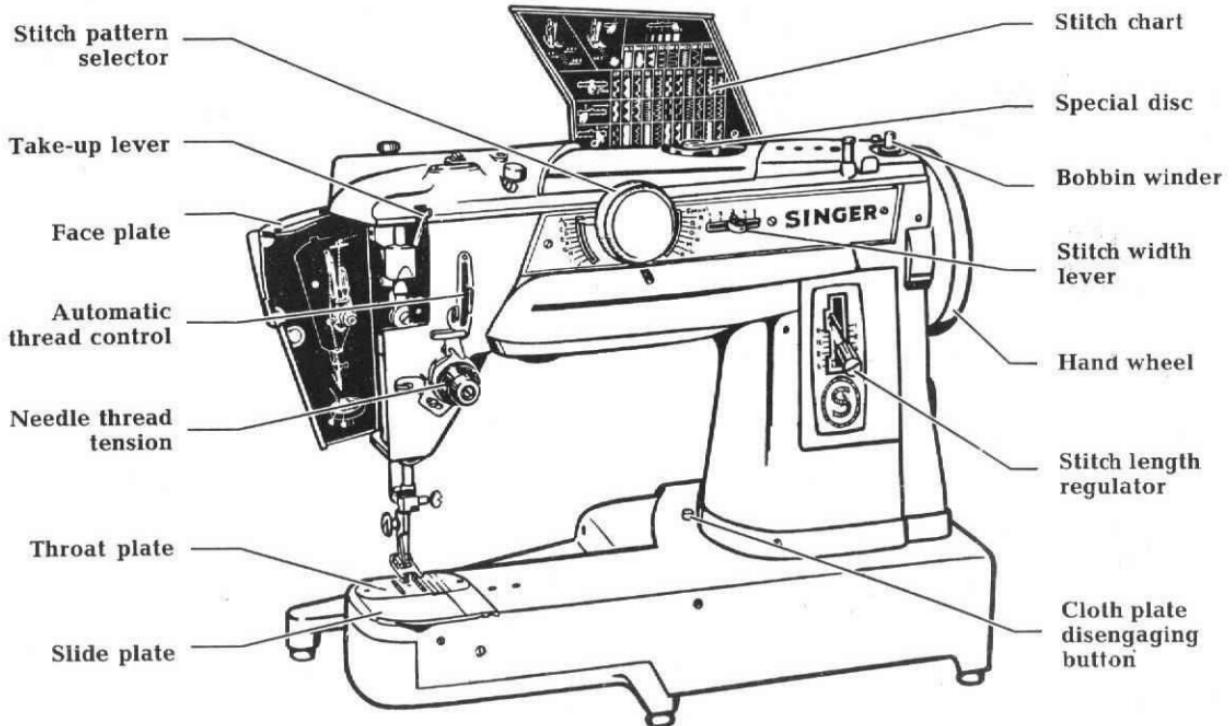


Hold bobbin so that thread leads off in direction shown. Place bobbin in case. Guide thread into slot and under spring.

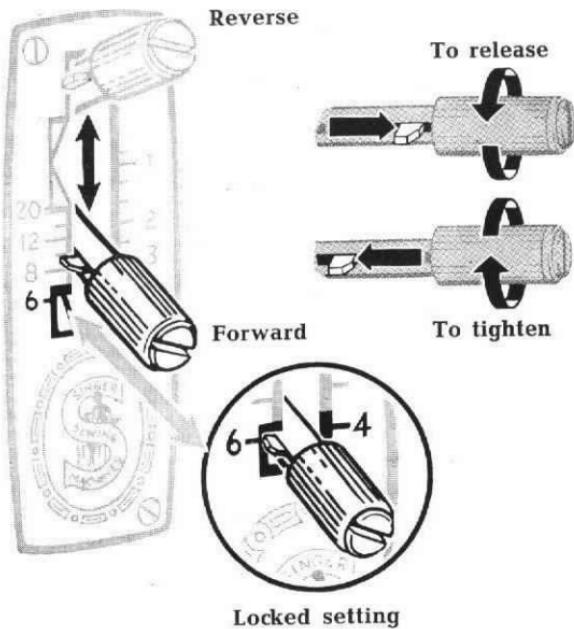


Draw thread into notch at end of spring, pulling off about 3 inches of thread across the bobbin.
Close slide plate allowing thread to enter notch.

PRINCIPAL PARTS OF MACHINE 431



STITCH LENGTH REGULATOR



Numerals on left side of indicator represent number of stitches per inch.

Numerals on right side represent stitch length in millimeters.

The upper indented area of the indicator represents stitch lengths above 20.

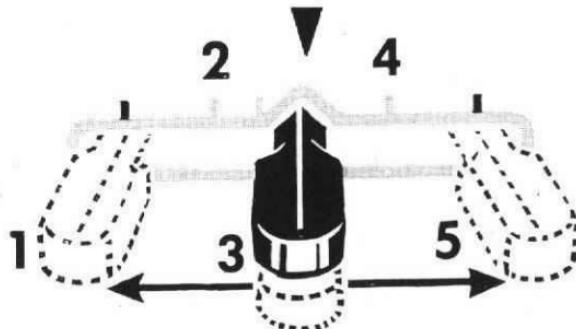
The lower indented area of the indicator allows the No. 6 stitch length setting to be "locked" in place when stitching folds, pleats or multiple layers of heavy fabric.

To set stitch length

- Release pointer by turning thumb nut to the left.
- Position lever for desired stitch length.
- Tighten pointer against plate by turning thumb nut to the right.

Once the pointer has been positioned, reverse stitching is accomplished by raising the lever to its highest position. The No. 6 "locked" position must be unlocked for reverse stitching.

STITCH WIDTH AND NEEDLE POSITION SELECTOR



A Stitch width or needle position setting is necessary for both straight and zigzag stitching.

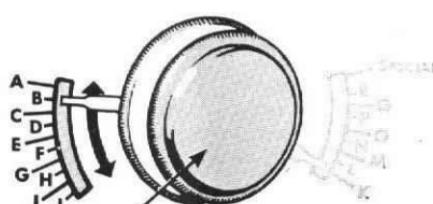
When used with a straight stitch setting, the lever places stitching in left, centre or right needle position (see **pages 19 and 20**).

When used with a decorative stitch setting, the lever controls width of primary patterns and produces variations of combination patterns (see **pages 34 and 36**).

To position, depress lever and slide it left or right to desired setting. Numerals indicate five positions but intermediate settings may also be used.

STITCH PATTERN SELECTOR

(Set Stitch Width Lever at 3.)



Push and select

All settings on the left of the plate are controlled by the outer knob.

Push (using right hand) —
select desired setting and release.

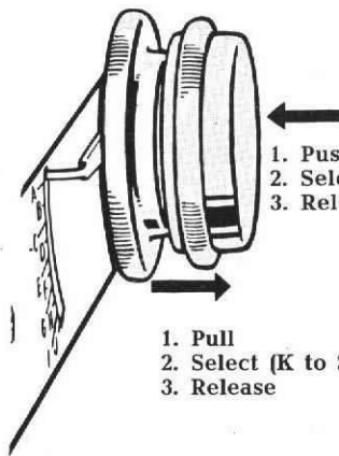


Pull and select



All settings on the right of the plate are controlled by the inner knob.

Pull (using left hand) —
select desired setting and release.



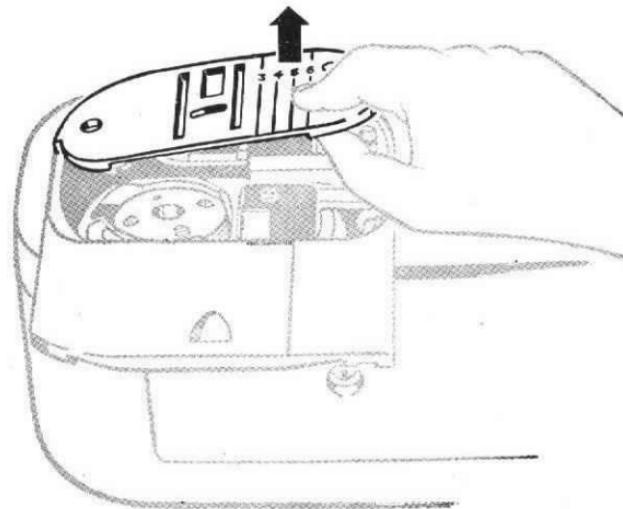
1. Push
2. Select (A to J)
3. Release

1. Pull
2. Select (K to S)
3. Release

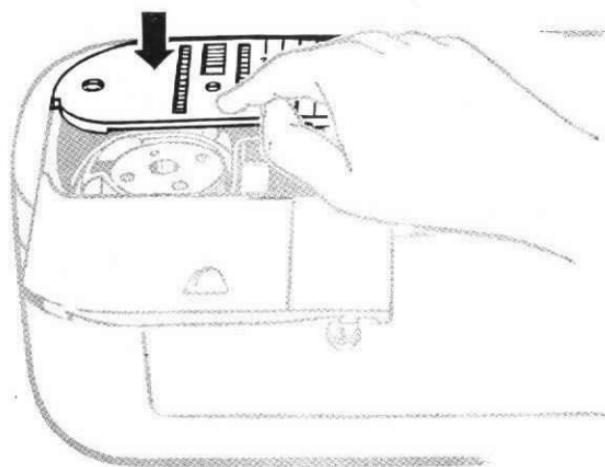
Do not make selector adjustments while the needle is in the fabric.

**THROAT PLATE
REMOVAL AND REPLACEMENT**

To remove the throat plate



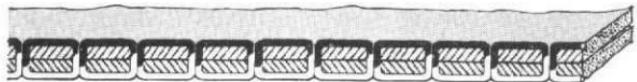
To replace the throat plate



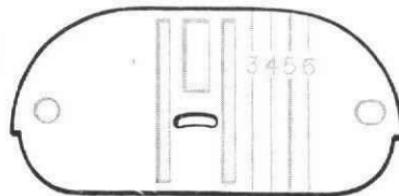
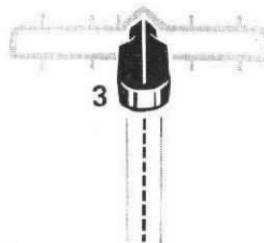
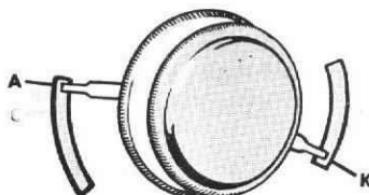
Raise presser bar. Turn hand wheel until needle bar is at its highest point. Open slide plate. Place thumb under front end of throat plate and lift plate from machine.

Place throat plate in position over two clamping pins and press plate down until it snaps in locked position. Then close slide plate.

LOCK STITCH



STRAIGHT STITCHING CENTRE NEEDLE POSITION AK 3



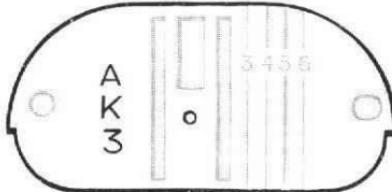
Set Selector at AK.
Needle Position Lever at 3 (Centre Position).
General Purpose Throat Plate and Presser Foot.

Use general purpose throat plate and presser foot for all utility sewing, long straight seams, etc., and where there is occasion to alternate between straight and zigzag stitching.

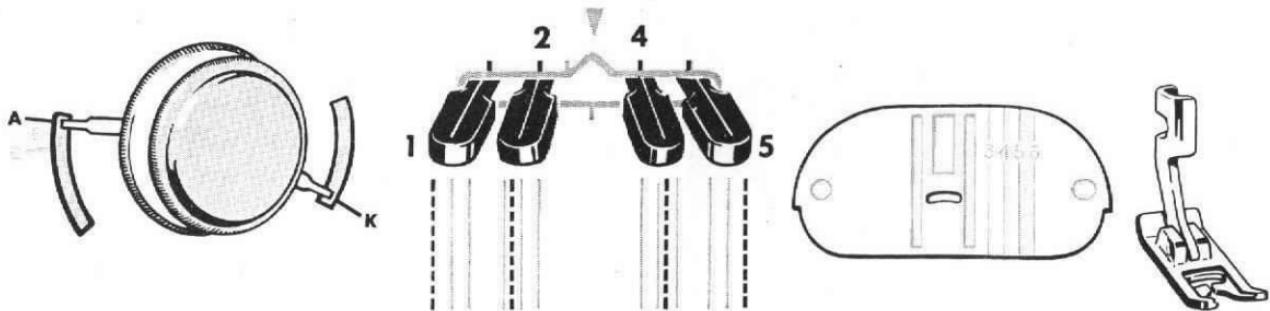
STRAIGHT STITCH THROAT PLATE AND PRESSER FOOT

Use the straight stitch throat plate and presser foot where fabric and sewing procedure require close control . . . for precision stitching of curved and scalloped edges, top stitching, edge stitching, etc.

For best results, this equipment should be used when stitching sheer and filmy fabrics, knits and tricots (particularly synthetics) and all soft spongy materials.



STRAIGHT STITCHING SECONDARY POSITIONS



Set Selector at AK.

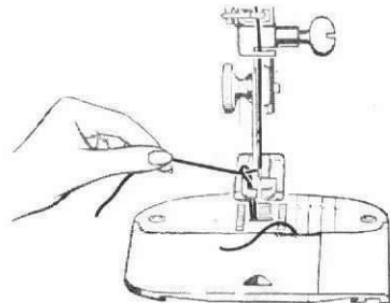
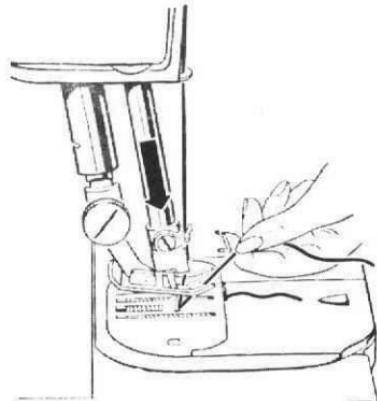
Needle Position Lever at 1, 2, 4 or 5.

General Purpose Throat Plate and Presser Foot.

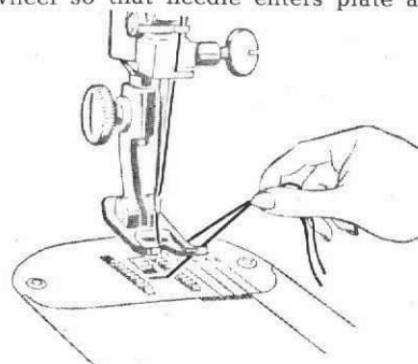
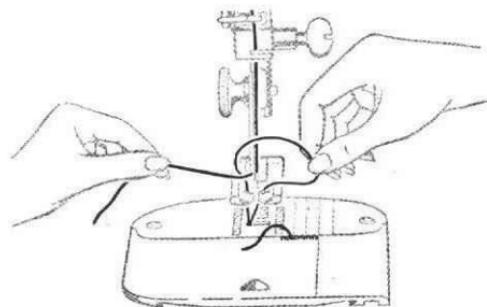
To meet special requirements a line of stitching may be placed to the left or to the right of centre. Lever setting 1 locates stitching to the extreme left; lever setting 5 locates it to the extreme right. Intermediate left and right positions result when settings 2 and 4 are used.

The general purpose throat plate and presser foot **must** be used with left and right needle positions. Do not make any lever adjustments while the needle is in the fabric.

PREPARE TO SEW

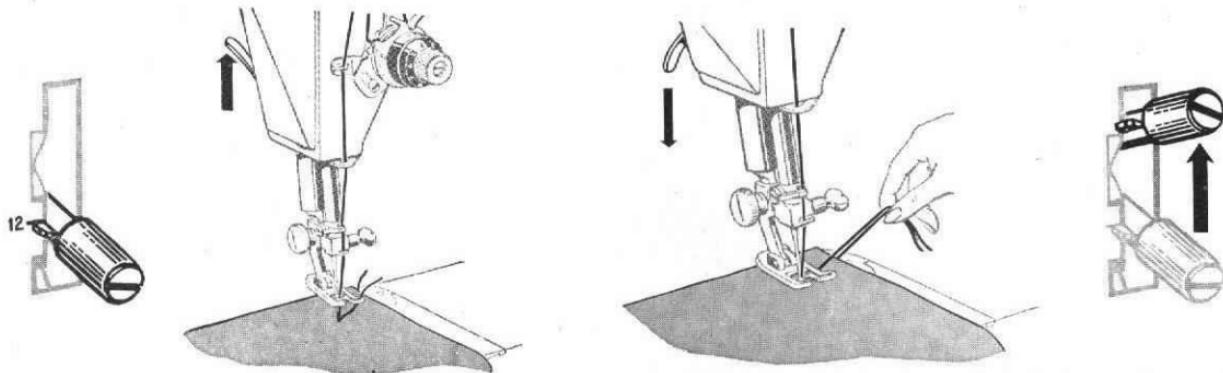


Hold needle thread lightly with left hand. Turn hand wheel so that needle enters plate and brings up bobbin thread.

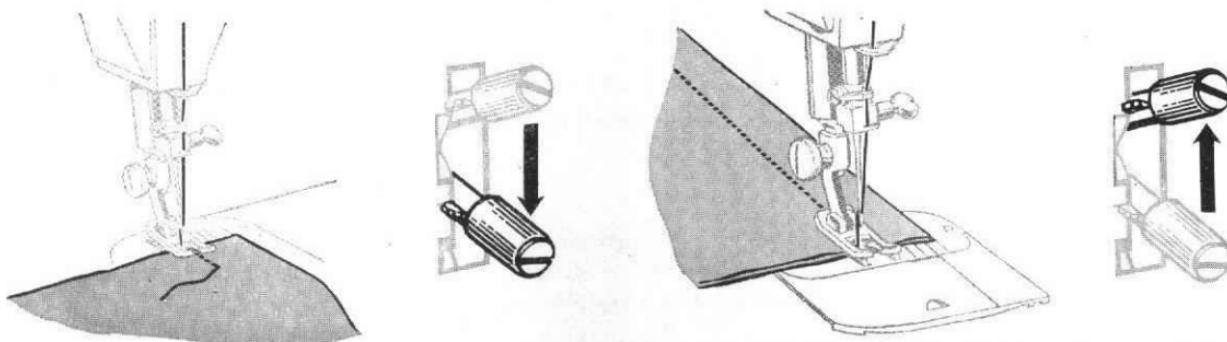


Pull end of bobbin thread through plate and place both needle and bobbin threads diagonally under presser foot.

SEWING A SEAM

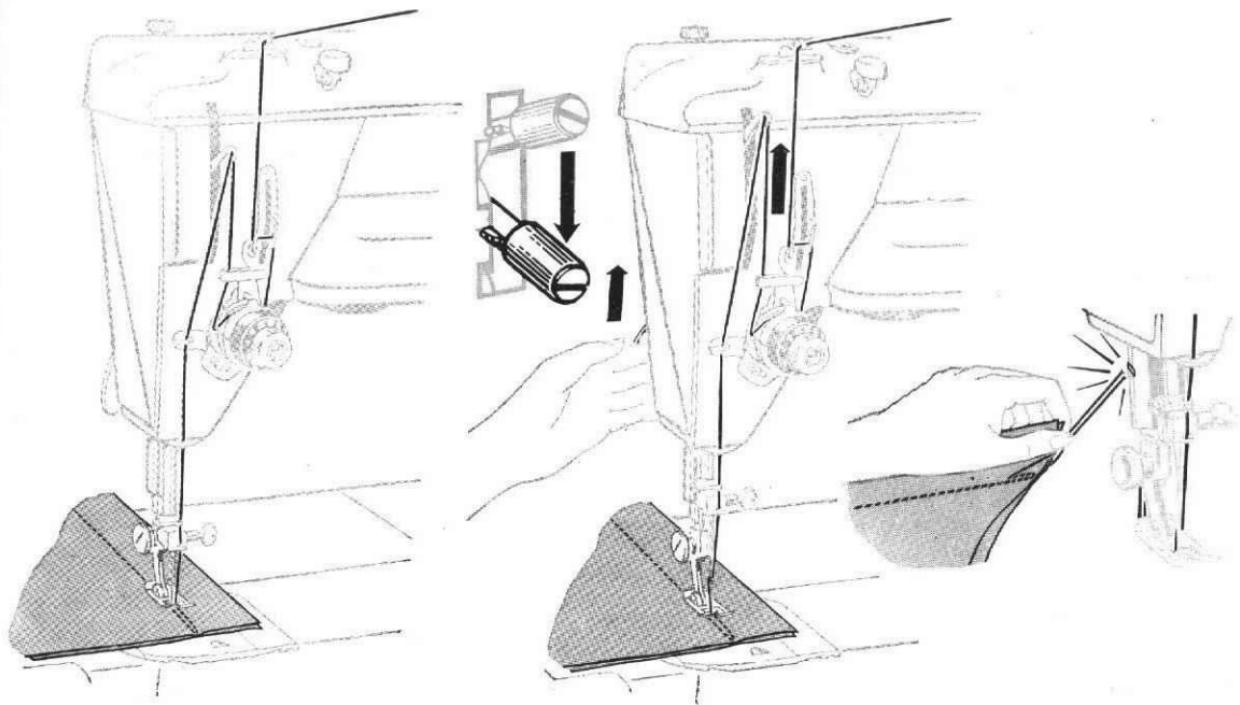


Set stitch regulator for stitch length desired. Position needle into fabric about $\frac{1}{2}$ inch from edge and lower presser foot. Raise stitch regulator to reverse.



Back stitch to edge of fabric for reinforcement. Lower regulator for forward stitching of seam. Raise stitch regulator.

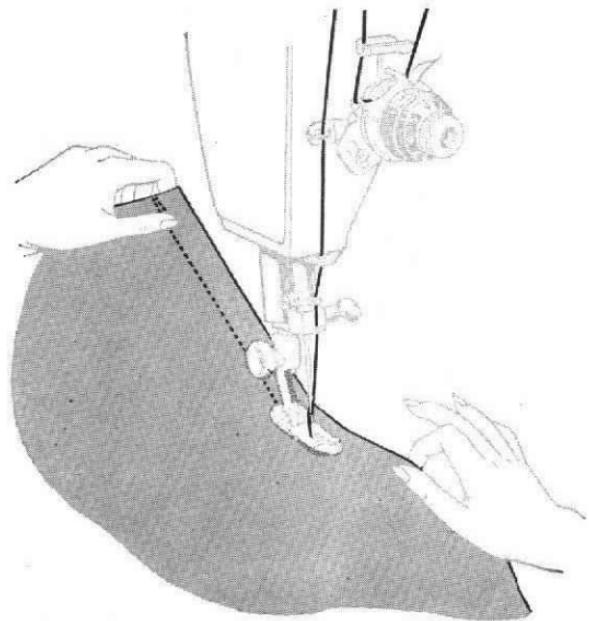
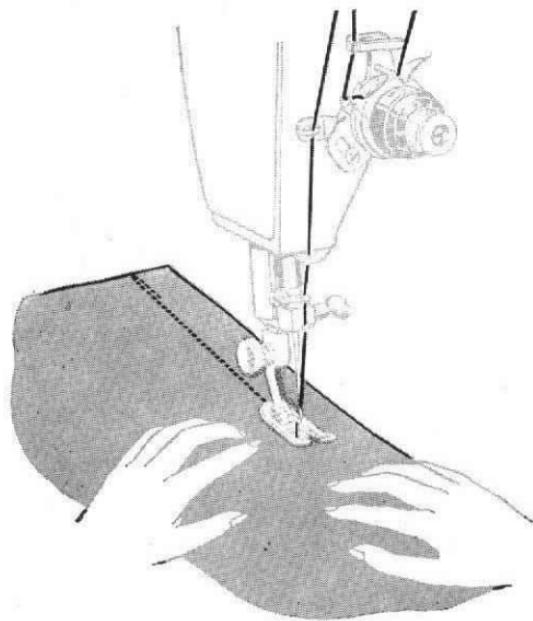
SEWING A SEAM (Cont'd.)



Back stitch to reinforce end of seam, and lower regulator to forward stitching position.

With take-up lever at highest point, raise presser foot and remove fabric.

GUIDING AND SUPPORTING FABRIC

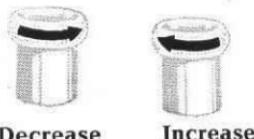
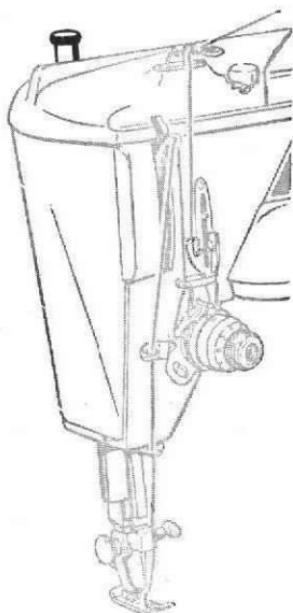


Most fabrics need only to be guided in front of the presser foot.

Fabrics of unusual texture and weave, filmy sheers, crepes, tricots, etc., require support while being stitched.

For such fabrics, use the straight stitch throat plate and presser foot, and apply gentle tension to the seam by holding the fabric in front and at the back of the presser foot as illustrated.

PRESSURE ADJUSTMENTS



To decrease pressure, turn thumb screw upward.

To increase pressure, turn screw downward.

Pressure is the force the presser foot exerts on fabric while it is being stitched.

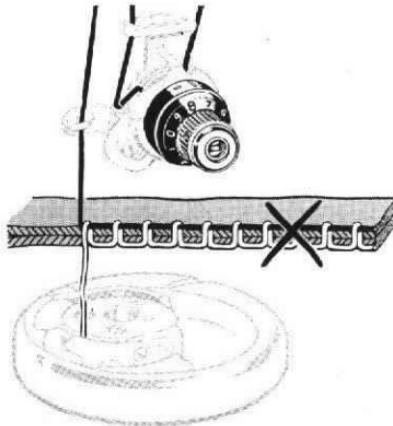
Smooth, even handling of several thicknesses of fabric results when pressure is correctly regulated.

Too light a pressure will result in irregular feeding which affects both quality of stitch and evenness of seams.

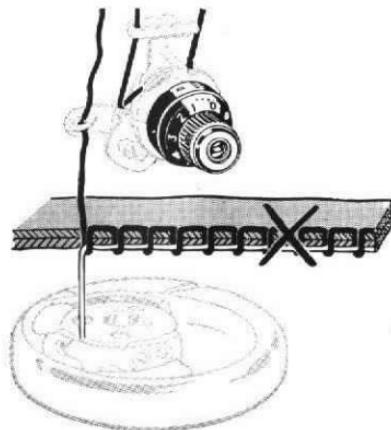
Too heavy a pressure not only affects stitch and seam quality but will mar smooth surfaces and pile fabrics.

Surface finish, as well as the weight and texture of the fabric, must be considered in determining the amount of pressure needed.

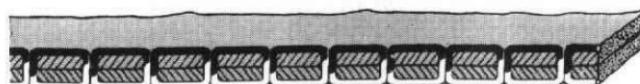
NEEDLE THREAD TENSION
STRAIGHT STITCHING



Needle thread tension too tight —
correct by setting dial to lower number.

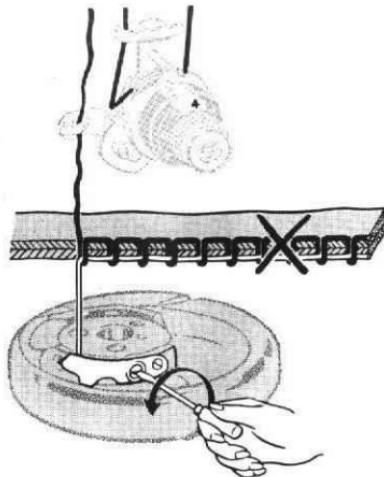


Needle thread tension too loose —
correct by setting dial to higher number.

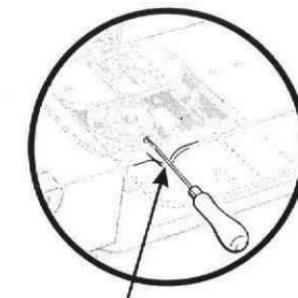


A perfectly locked stitch results with the upper and lower tensions balanced so that needle and bobbin threads are drawn equally into fabric.

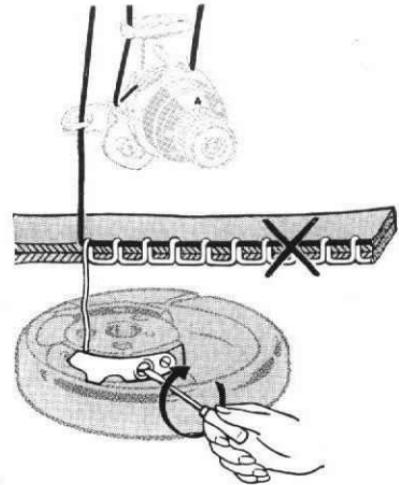
**BOBBIN THREAD TENSION
STRAIGHT STITCHING**



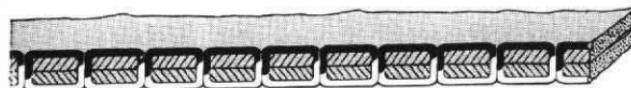
Bobbin thread tension too tight
— correct by turning screw in
direction indicated.



Insert for tension screwdriver



Bobbin thread tension too loose
— correct by turning screw in
direction indicated.

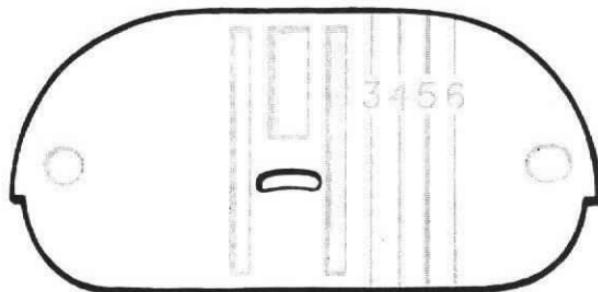


A perfectly locked stitch results with the upper and lower tensions balanced so that needle and bobbin threads are drawn equally into fabric.

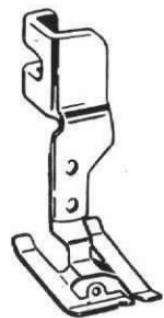
ZIGZAG STITCHING EQUIPMENT



General purpose presser foot.

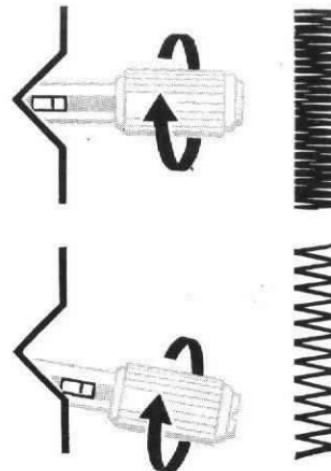
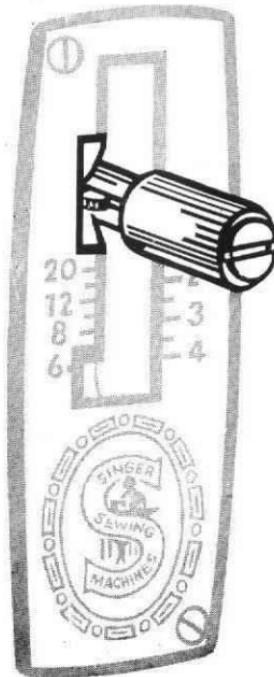


General purpose throat plate.



Special purpose presser foot.

STITCH LENGTH ADJUSTMENT FOR SATIN STITCHING



The upper indented area of the stitch indicator provides a means of gradually shortening the stitch length.

As the regulator knob is turned, the pointer rides deeper into this indentation until a closed satin stitch is obtained.

The exact stitch setting will vary with the texture of the fabric. It is advisable to make a test on a scrap of self fabric, using the Special Purpose Foot, before proceeding with the actual work.

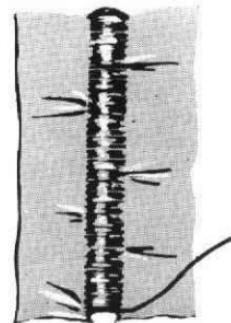
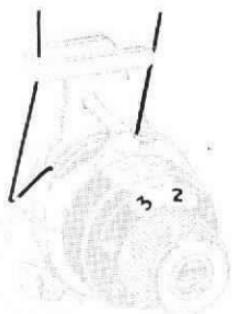
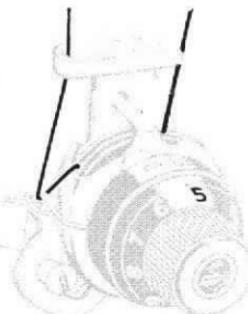
SATIN STITCH TENSION ADJUSTMENT

Satin stitching requires a lighter needle thread tension than straight stitching or open designs. The wider the satin stitching the lighter the tension required.

Wide satin stitching, Stitch Width at 5, requires the least amount of tension. For narrower satin stitching slightly more tension should be used.

To determine correct tension setting, a test sample should be made on self fabric using the Special Purpose Foot. A properly balanced satin stitch should lie flat across the material. Any tautness or puckering indicates too high a needle thread tension.

Some soft fabrics may require the addition of a backing to ensure good stitching results. Crisp organdie and lawn are suitable for this purpose.



Tight needle thread tension



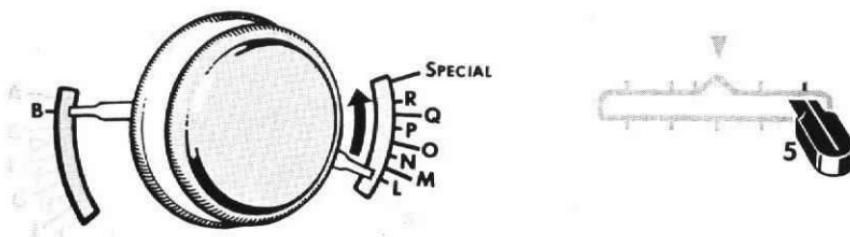
Correct needle thread tension

PRIMARY PATTERNS

Selector settings "L" to "Special" control primary patterns.

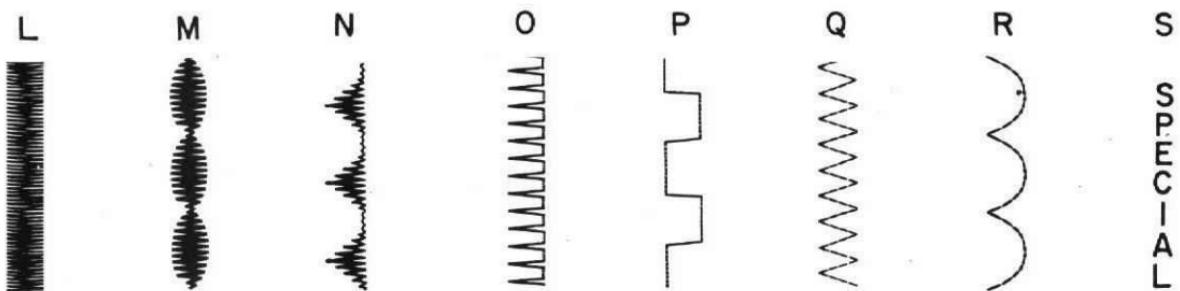
Selector setting "B" places stitching in central needle position.

Stitch width lever controls width of primary patterns.

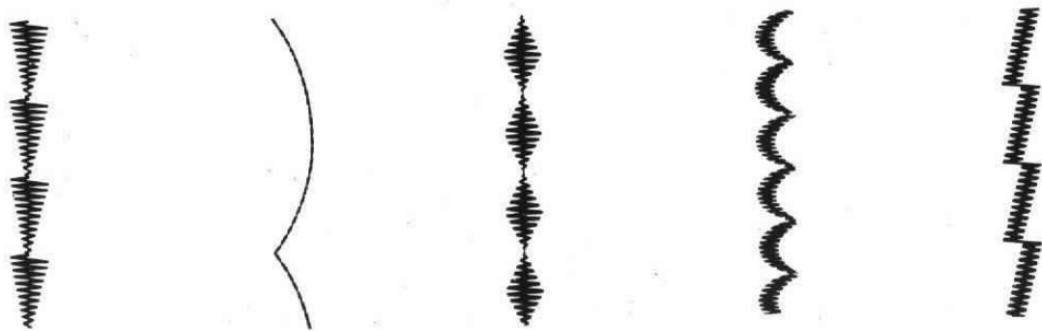


See pages 16 and 17 for operation of Stitch Width and Stitch Pattern Selectors.

Do not make any adjustments while the needle is in the fabric.



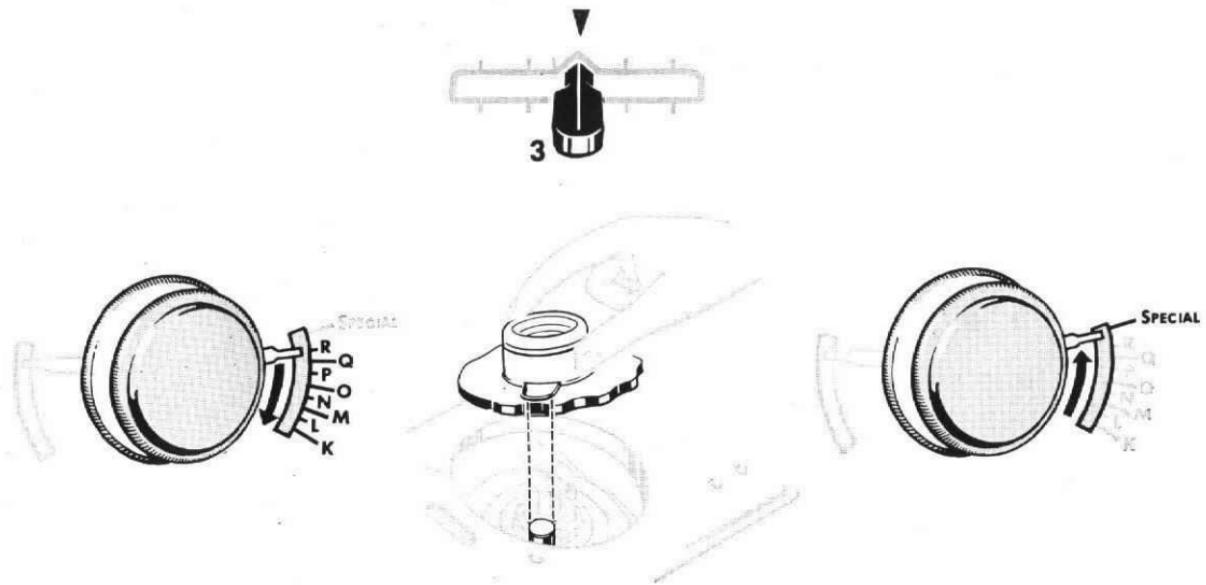
PRIMARY PATTERNS
SPECIAL DISCS



These five interchangeable **SPECIAL** Discs, classified as Primary Patterns, are included with the machine. Each produces an individual design.

Circled numbers (for example ②) in this book indicate **SPECIAL** Disc numbers.

PRIMARY PATTERNS
REPLACEMENT OF SPECIAL DISCS

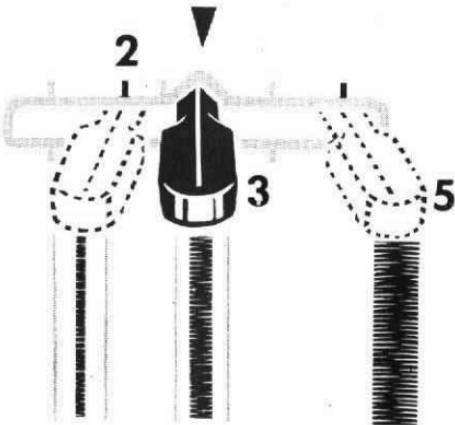
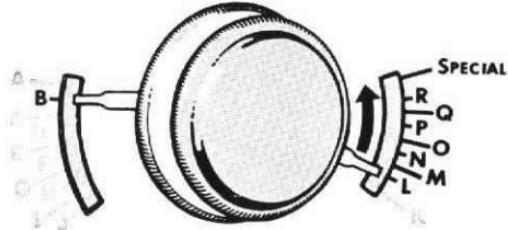


To replace any of these discs, move right hand pointer of Selector off **SPECIAL**.

Raise the stitch chart at top of the machine. Remove disc and place another disc onto spindle, pushing downward until disc snaps in place.

Set right hand pointer on **SPECIAL** to engage the disc.

PRIMARY PATTERNS
CONTROL OF WIDTH

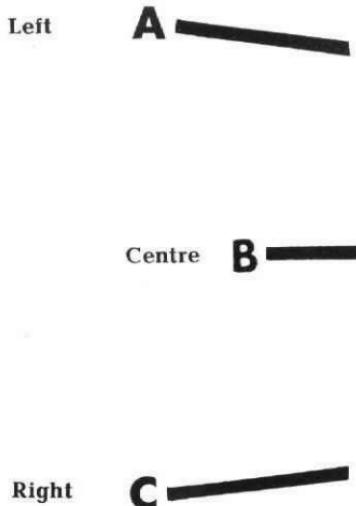


Width of Primary Patterns is controlled by the Stitch Width Selector. As the selector lever is moved to the right, the width of the stitch pattern is increased. Settings range from a minimum of 2 to a maximum of 5. Intermediate settings may also be used.

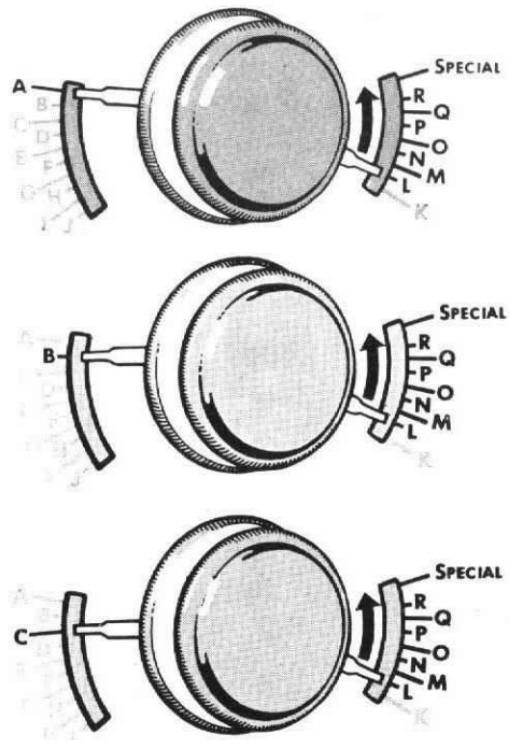
To avoid damage to needle and fabric, do not make any selector adjustments while the needle is in the fabric.

PRIMARY PATTERNS NEEDLE POSITIONS

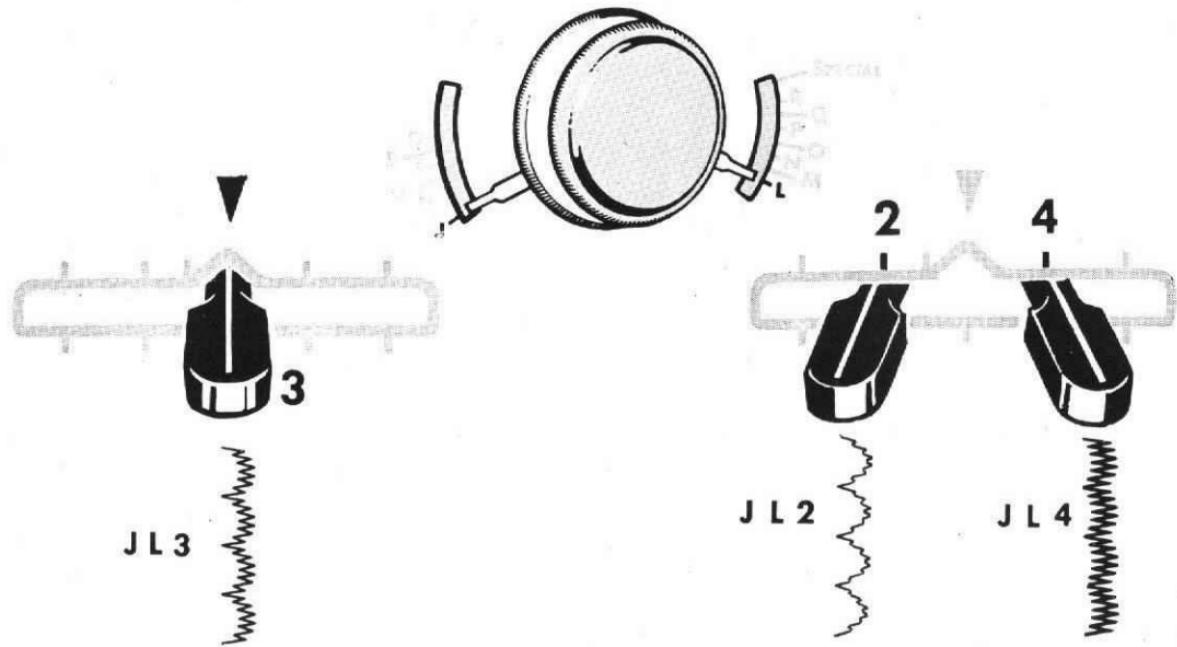
Selector setting of **B** places stitching in central needle position. Selector settings **A** and **C** place the stitching in left and right needle positions at widths less than 5.



Selector setting **B** is preferred. Settings **A** and **C** are only used when special placement of stitching is desired. For example: buttonholes, button sewing.



COMBINATION PATTERNS AND VARIATIONS

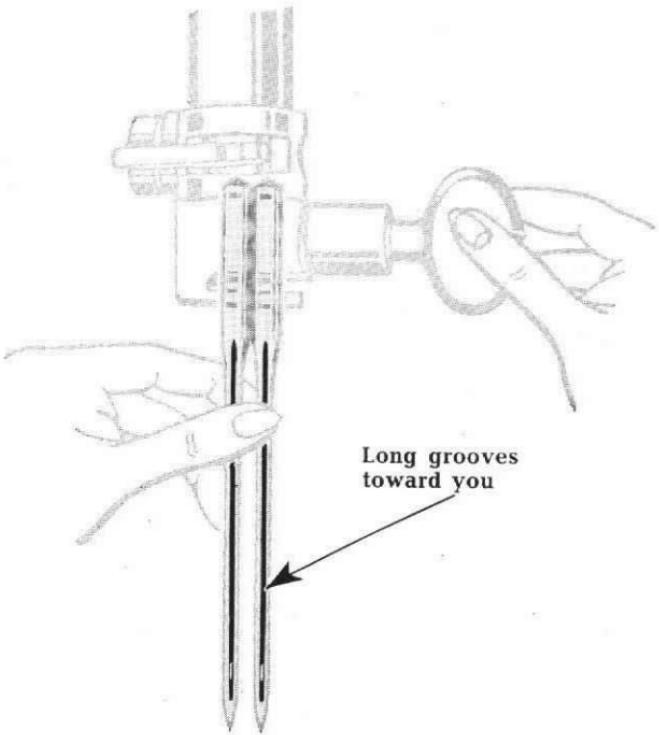


A great variety of additional stitch patterns can be created by combining any left hand Selector setting from **D** to **J** with any right hand Selector setting from **L** to **SPECIAL**.

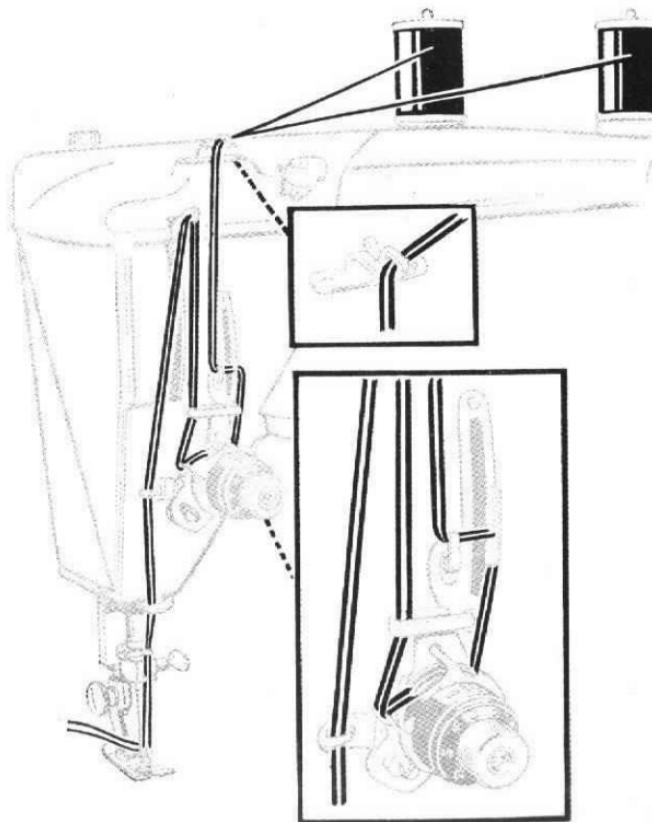
A Lever setting of 3 results in a Combination Pattern. Settings of 2 and 4 produce Variations.

TWO NEEDLES

The needle clamp accommodates two Catalogue 2020 (15×1) needles, generally of the same size. However, where special effects are desired, needles of different sizes may be used together, with corresponding threads. Loosen the thumb screw and insert the additional needle from the right. (See **page 7** for procedure.)



TWO NEEDLES UPPER THREADING

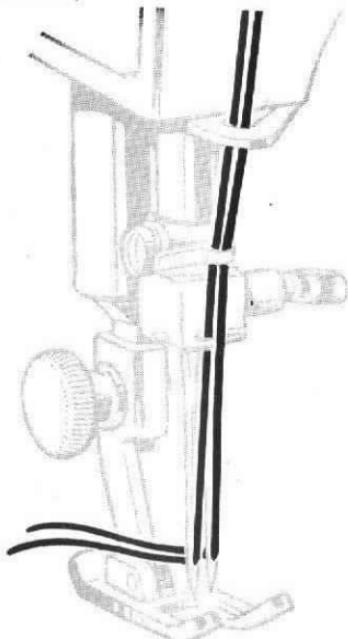


Use size 50 mercerised thread.

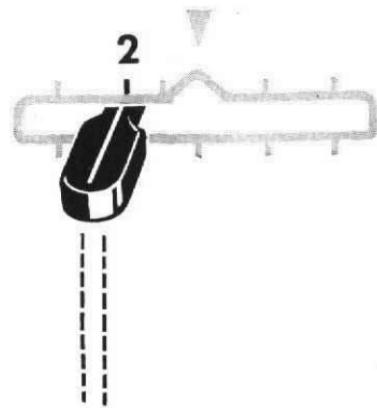
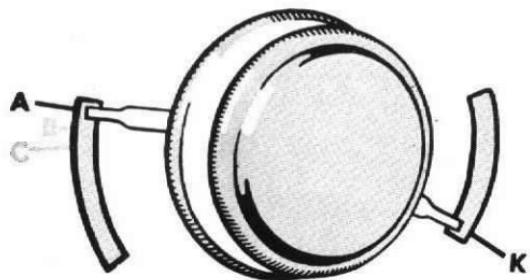
Thread as for single needle (see **page 8**).

Make certain that both threads are separated by the centre guide post of the thread control and by the centre tension disc.

Carry only one thread through the last guide before the needle, as shown below.



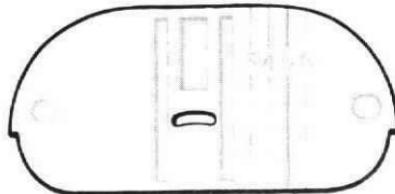
TWO NEEDLES
STRAIGHT STITCHING AK 2



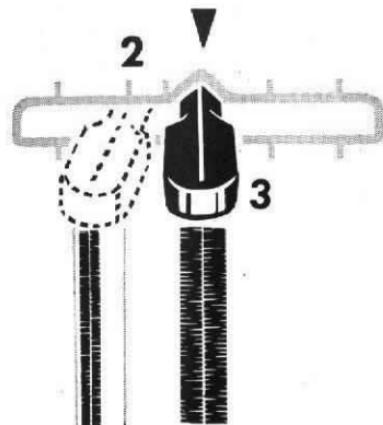
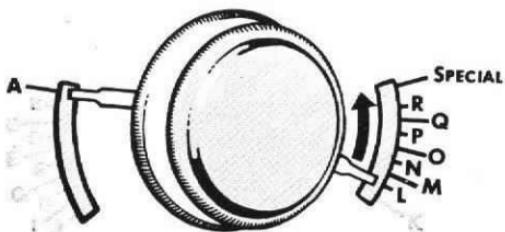
Selector setting: AK

Lever: 2 only

General purpose throat plate and presser foot.



TWO NEEDLES
PRIMARY PATTERNS

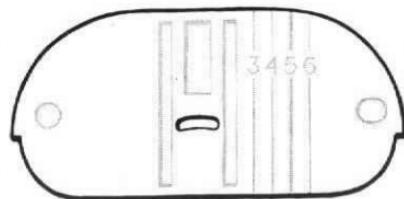


Selector setting: "A" — "L" to "SPECIAL"

Stitch width: 2 or 3 maximum

General purpose throat plate

General purpose foot or special purpose foot



Instructions for using ATTACHMENTS...



NOTE: The attachments which are not regularly furnished with your machine are available for separate purchase at your local SINGER SEWING CENTRE.

SPECIAL PURPOSE FOOT



This light, flexible foot is designed for satin stitching. It provides maximum visibility and maneuverability while allowing closely spaced zigzag stitches to feed freely.

It is ideal for accurate placement of satin stitching in buttonholes, monograms, motifs and applique work.

The eyelet on the left side of the foot accommodates a filler cord.

APPLICATIONS

Buttonholes
Applique
Monograms

Decorative Stitching
Couching
Motifs

BUTTONHOLES

Selector: AL

Stitch Width: See Below

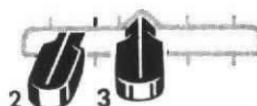
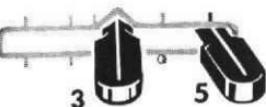
Throat plate: General purpose

Special purpose foot

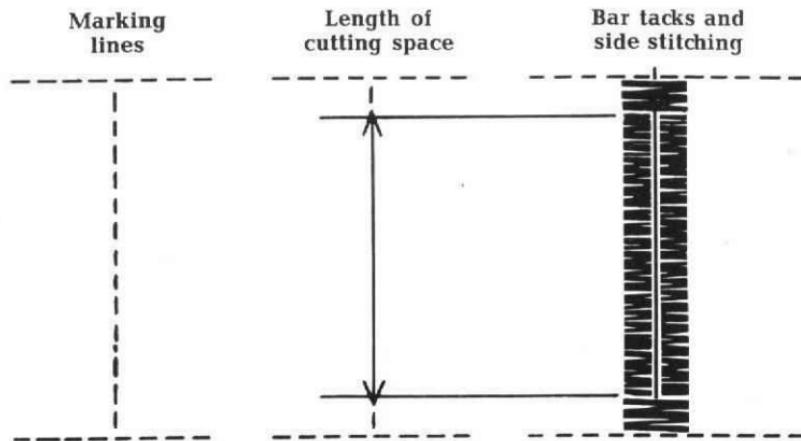
Stitch length: Fine

To establish the correct stitch setting and length of buttonhole, a sample must first be made.

Three Stitch Width settings are available. Fabric weight and buttonhole size will determine the selection.



BUTTONHOLES



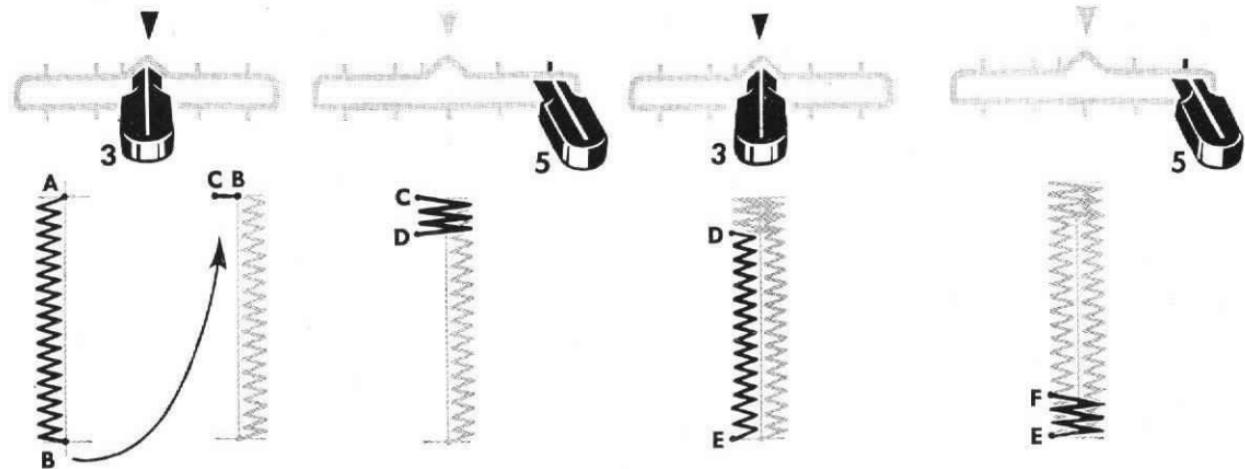
The length of cutting space, the opening through which the button passes, is measured by the width and thickness of the button.

The length of the finished buttonhole will be the cutting space plus $\frac{1}{8}$ inch for bar tacks.

Work a sample buttonhole in the same fabric as the garment. Use a double fold, duplicating a facing and include interfacing if this has been used.

BUTTONHOLES (Cont'd.)

Procedure. Set Selector (AL) and Width Lever (see page 42). Place work under needle, aligning centre marking of buttonhole with centre score line of Special Purpose Foot.



Side Stitching. 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 work to point C.

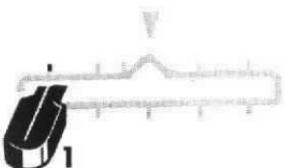
Bar Tack. Adjust Stitch Width for bar tacks and take no less than six stitches. Stop at point D.

Side Stitching. Readjust Stitch Width for side stitching. Complete work to point E. Leave needle in fabric.

Final Bar Tack. Adjust Stitch Width for bar tacks, and take no less than six stitches in reverse, ending at point F.

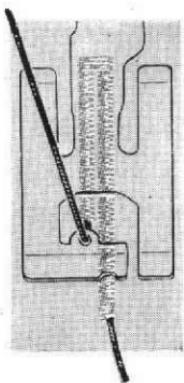
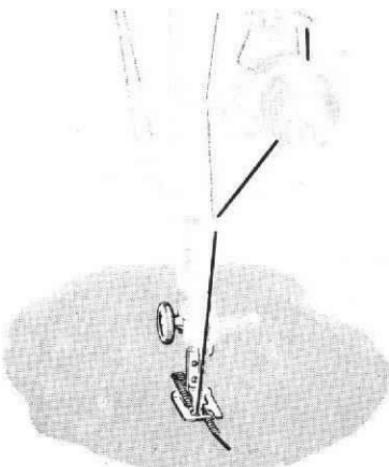
BUTTONHOLES (Cont'd.)

Raised or Corded Buttonholes. Either strands of stitching thread or buttonhole twist make suitable filler cords for raised buttonholes.



Fastening Stitch. To secure stitching, move Stitch Width Lever to 1 setting and take three stitches.

Remove work, draw threads to underside, fasten and trim. Cut opening for button with sharp embroidery scissors or buttonhole scissors.



APPLIQUE

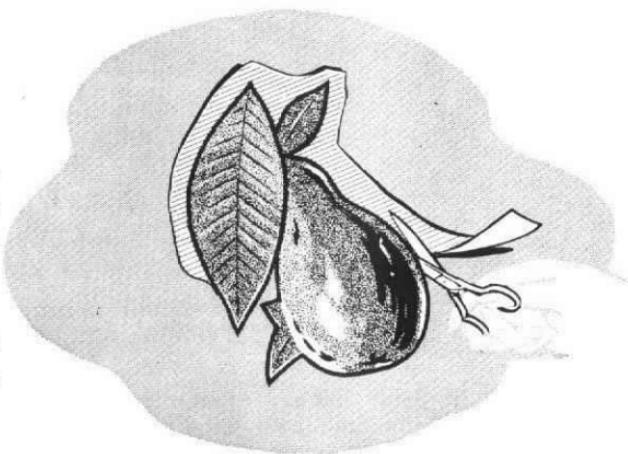
Appliquéd adds beauty and interest to wearing apparel, linens and fabric furnishings.

Either contrasting or self fabric may be used effectively. The most versatile stitch for appliqué is a closely set zigzag stitch (Primary Pattern BL). The width of this stitch may be varied to accommodate weaves and textures of fabrics. Combination Patterns and Variations present many interesting ways to appliquéd with decorative stitching.

Preparation. There are two methods by which appliquéd work may be done. The appropriate method is determined by the fabric being used, and a test sample is advisable.

Position the design properly and baste it to the fabric. Attach the Special Purpose Foot to the presser bar.

Method No. 1. Set Selector and Lever for the desired stitch pattern. Following the shape of the design, outline it entirely with appliquéd stitching. Any excess fabric on the outer edges is trimmed away after the stitching has been completed.



APPLIQUE

Method No. 2. Set Selector and Lever to AK 3 for straight stitching. Outline the entire design with a short stitch. Trim the raw edges down to the stitching.

Set Selector and Lever to the stitch pattern desired, and overedge the design with this stitching. A smooth, lustrous finish results, which requires no additional trimming.

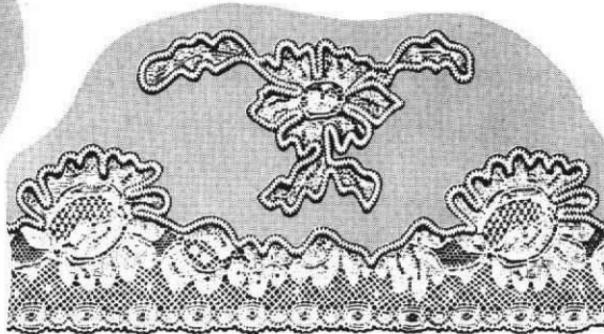


Corded Appliqué. The Special Purpose Foot, which provides for a filler cord, is perfect for corded appliqué work. Gimp, crochet thread or buttonhole twist are generally used.

See page 45 for threading.

Either method of appliqué may be used when cording is desired. The only change in procedure is the introduction of the cord, over which the appliqué stitching is formed.

This stitching technique results in a raised, dimensional effect, and is an ideal finish for lace appliqué.



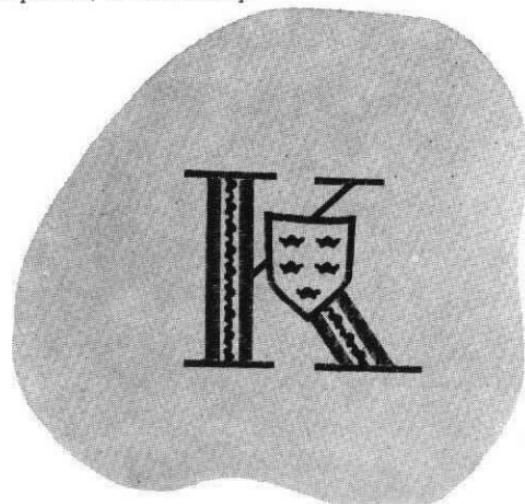
MONOGRAMS AND MOTIFS

Any of the many stitch patterns are perfect for monograms and motifs.

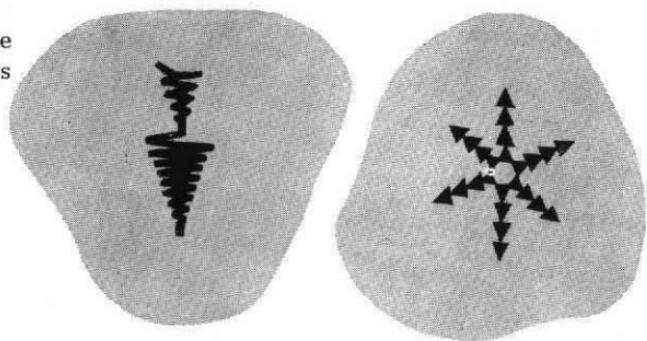
Select a design from the many transfer patterns available or sketch one to suit your purpose.

Some fabrics may require a backing of lawn or organdie.

Position the design on the right side of the material. Trim backing away when stitching is completed, if necessary.



To reproduce a specific portion of a stitch pattern, first stitch on a scrap of material until the desired point in the design is reached.



Remove the material from under the presser foot. Now position motif or monogram under the needle. Lower presser foot and stitch.

This procedure is recommended for all precise design placement. Leaves, and flower petals, for example are created in this way.

SEAMING SHEERS

Selector: BL

Stitch Width: 2

Throat plate: General Purpose

Special purpose foot

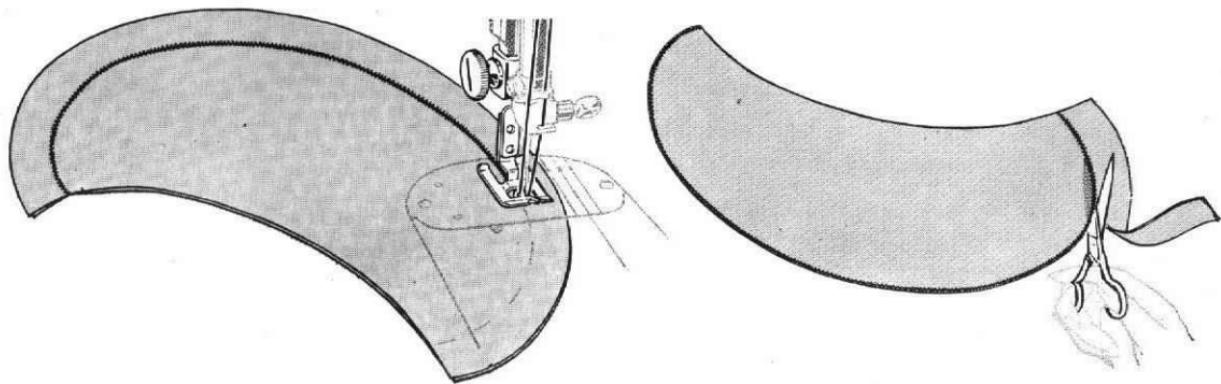
Stitch length: Fine (above 20)

A dainty hair-line finish is particularly desirable for the inside seams of sheer collars, facings and yokes. Seam allowances that ordinarily show through are eliminated.

Both heavy duty thread and tatting thread make suitable filler cords (see **page 45** for threading).

Follow the seam outline covering the cord. Cut away seam allowance close to line of stitching.

Turn and press.

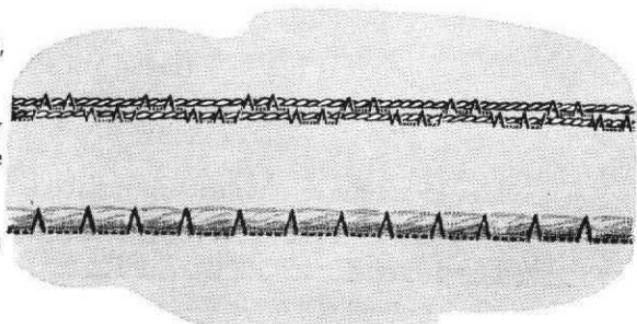


COUCHING

Novel effects are obtained by couching gimp, yarn or braid with stitch patterns.

Spaced patterns are the most appropriate as they allow the decorative cords to show as part of the design.

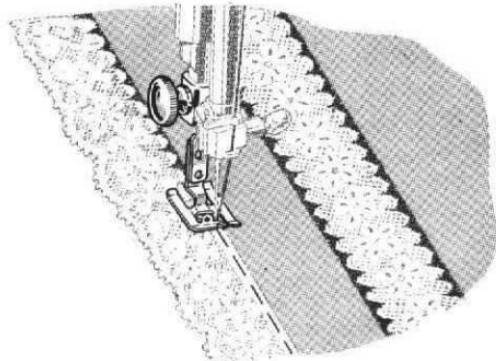
The Special Purpose Foot is ideally suited to this work (see **page 45** for threading).



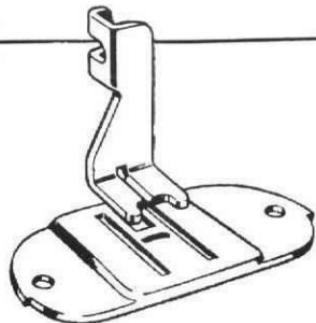
LACE EDGING AND INSERTION

Delicate, yet durable zigzag stitching is especially appropriate for the application of lace edgings and insertions.

Many decorative stitch patterns can be used effectively serving as both finish and trim.



BUTTON SEWING FOOT



This short, open foot accommodates any size sew-through button, and holds it securely for stitching. The groove in the foot allows for insertion of a machine needle, over which a thread shank may be formed.

The foot is used in connection with the General Purpose Feed Cover Plate.

Selector setting: AL

Stitch Width: 1 and 4

General Purpose Feed Cover Plate

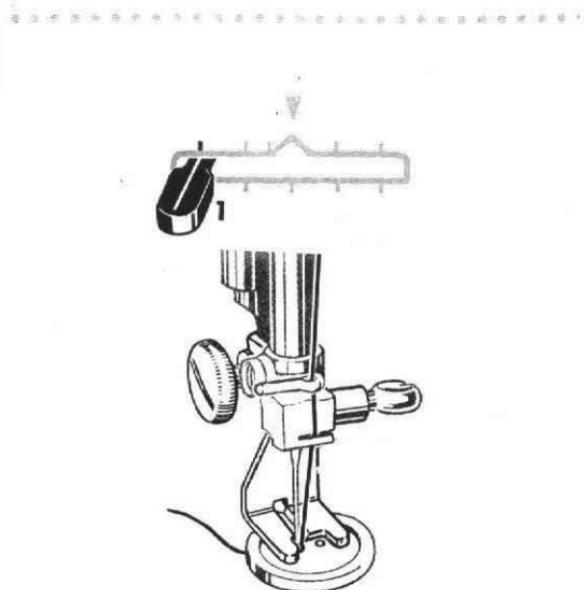
Button sewing foot

Stitch length: above 20

Space between holes in button determines Stitch Width settings. Numbers 1 and 4 generally apply to standard buttons. Number 1 setting is constant, but 4 can be increased or decreased to accommodate buttons with unusual spacing.

Set Selector at **AL** and Stitch Width at **1**. Attach general purpose feed cover plate to machine in place of regular throat plate in same manner as instructed on **page 18**.

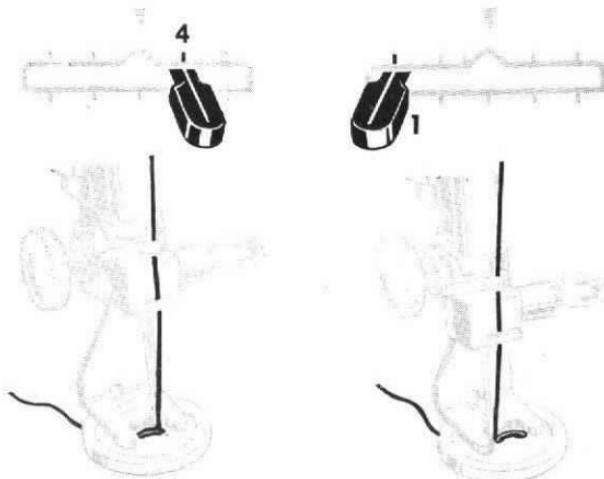
Position button under foot so that needle will enter into left hole. Lower foot. Turn hand wheel toward you until needle rises out of fabric and is just above foot.



BUTTON SEWING FOOT

Set Lever at **4**. The needle should then enter into the right hole of the button. Take approximately six zigzag stitches in this position. End at the left side.

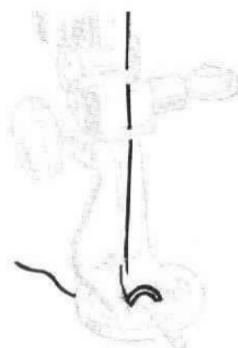
To fasten stitching, adjust to number **1** Stitch Width setting and take approximately three stitches.



THREAD SHANK

In order to form a shank, stitching is worked over a regular machine needle. Position button and lower button foot. Place needle in the groove of the foot so the point enters the hole.

A larger shank results when the heavy end of the needle is utilized.



GENERAL PURPOSE FOOT



Used with the general purpose throat plate this foot provides a wide needle slot which accommodates all stitch settings and can be used for most sewing operations.

APPLICATIONS

Seams and Darts

Mending and Maintenance

Automatic Scalloping

Seam Finishes

SEAMS

LINGERIE SEAMS

Dainty lingerie seams are made durable and rip-proof with zigzag stitching (**BL 2½**). After straight stitching the fitted seam on the wrong side, press both seam allowances in the same direction. From the right side, top stitch with a fine zigzag setting, letting the needle enter the seam line and then the seam thickness. Particularly good where flat bias seams are desired.



SEAMS

FLAT FELLED SEAMS

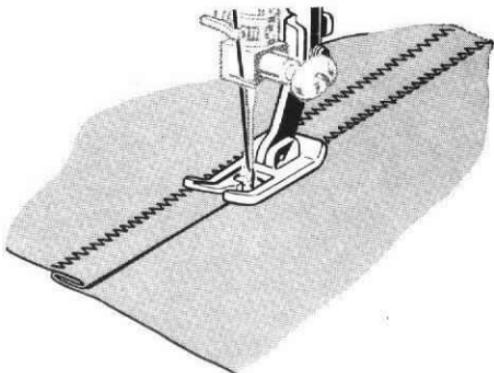
Zigzag stitching gives strength and durability to flat felled seams.

Form the seam to the right side of the fabric, taking full seam allowance, using a zigzag stitch (**BL 3**).

Press the seam open, then fold and press the two edges together, keeping the right side of the zigzag stitch uppermost.

Trim away half the under seam edge.

Fold the upper seam edge evenly over the trimmed seam, and top stitch.

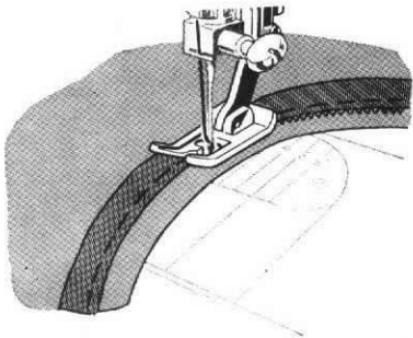


KNIT FABRIC SEAMS

A fine zigzag stitch (**BL 1½**) is ideal for seaming knit fabrics. Particularly desirable for underarm seams, or other seams where elasticity and give are needed.

For neckline and waistline seams, where a stay is needed to prevent undue stretching, this same stitch can be used to apply seam tape. To ensure a flat, smooth finish, position the seam tape with the edge exactly on the seam line. If seam is curved, pre-shape tape to fit by steaming, and baste in place.

Stitch, allowing the needle alternately to enter the seam tape and seam line.



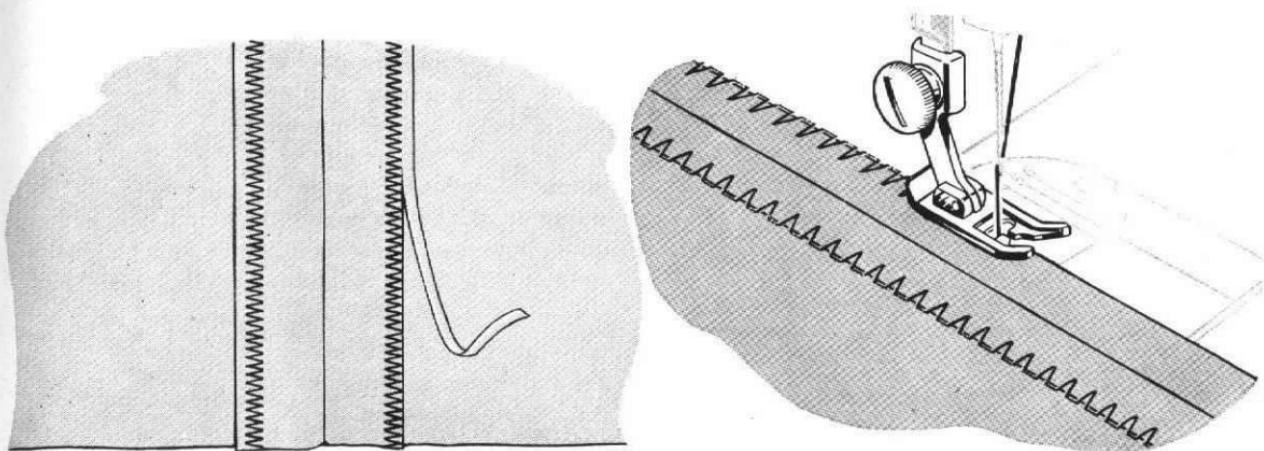
SEAM FINISHES

Seam edges support the garment and should be given a durable finish where fabrics have a tendency to fray.

The zigzag stitch **BL** is ideal for such finishing. Place the stitching near the edge of the seam allowance, and then trim away excess fabric.

For an overedged seam, the blind stitch **BO** makes a durable bulkless finish. Good for straight grain, lengthwise seams.

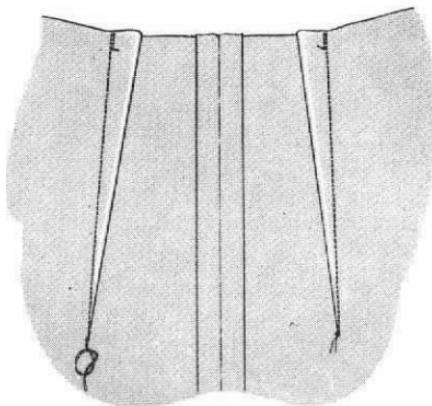
Seam edges should be trimmed evenly, and the stitch then formed over the raw edge.



DARTS

Darts provide fit and contour in a garment and should be accurately stitched.

A straight stitch dart (**AK 3**) is usually formed by stitching from the seam edge, tapering gradually to the point, where the last 3 or 4 stitches parallel the fold. Stitch beyond the fabric to form a thread chain $\frac{1}{2}$ to $\frac{3}{4}$ inch in length. Tie the thread ends into a single knot close to the stitching.

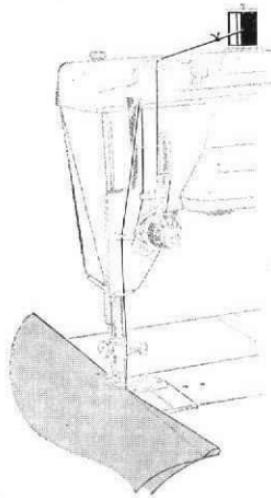


SINGLE THREAD DARTS

Darts add styling and interest when stitched with the fold to the outside of garment. Thread ends at the point of the dart are eliminated when the single thread principle is employed.

Unthread the needle. Use the thread leading off the bobbin and rethread the needle from back to front. Tie bobbin and upper threads together. Draw bobbin thread up through threading points, winding enough on the spool to complete a single dart. Lower the needle into the very edge of the fold at the point of the dart. Take any slack out of the thread by turning the spool. Lower the presser foot and stitch carefully toward the seam edge.

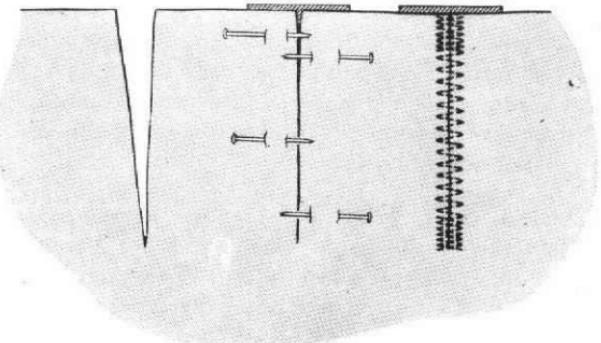
This method is also ideal for inside darts in sheer fabrics as thread ends are eliminated at the point of the dart.



DARTS IN INTERFACING

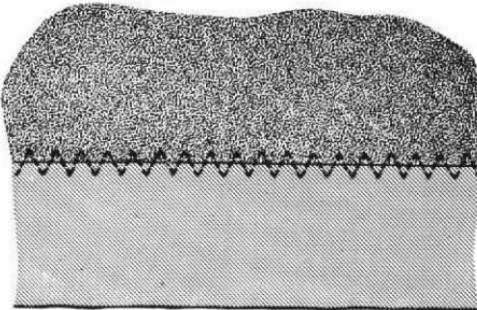
Non-woven interfacings can be shaped without bulk with zigzag stitching. Selector setting **BL** or **BQ** may be used.

Cut out the dart allowance on the stitching line and bring the raw edges together. Pin, over a muslin stay, and stitch. Back stitch at both ends.



BLANKET BINDING

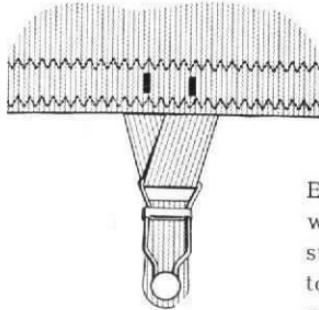
The multiple stitch zigzag (**BQ**) is an excellent stitch for applying blanket bindings and affords both a decorative and durable finish. Remove worn binding. Baste new binding securely in place and stitch. Adjust pressure if necessary, to accommodate the thickness of the blanket.



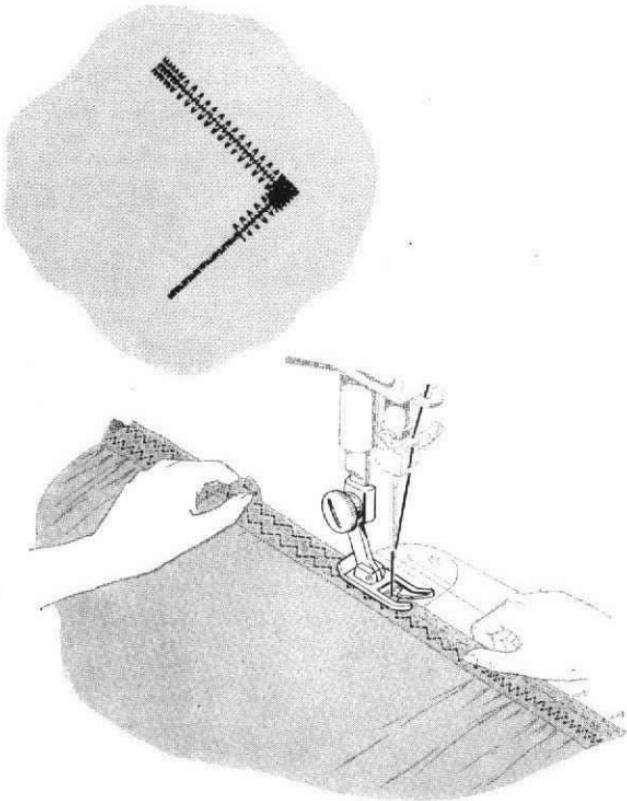
MENDING

Zigzag stitching is well suited for all types of household mending. Selector setting **BQ** provides a firm, flexible bond for the repair of rents and tears, and is ideal for the reinforcement and application of elastic. Stitch length and width are regulated according to need.

Rent or Tear. Trim away ragged edges. Place an underlay to the wrong side of the tear for reinforcement. Using the multiple stitch zigzag (**BQ**) follow the line of the tear bringing the edges together. Shorten the stitch length at ends and corners to give extra strength.



Application of Elastic. Elastic, such as used in waist bands, must be stretched as it is applied, to ensure fullness required in the garment.



SCALLOPING

Dainty scalloped edges are used extensively as self trimming on blouses, dresses, lingerie and children's wear.

Perfectly formed and evenly spaced scallops are produced automatically at Selector Settings **BR** and **BS ②**.

BR results in a 12-stitch scallop.

BS ②, a 24-stitch scallop.

Stitch regulator and Lever settings vary the length and depth of the scallop.

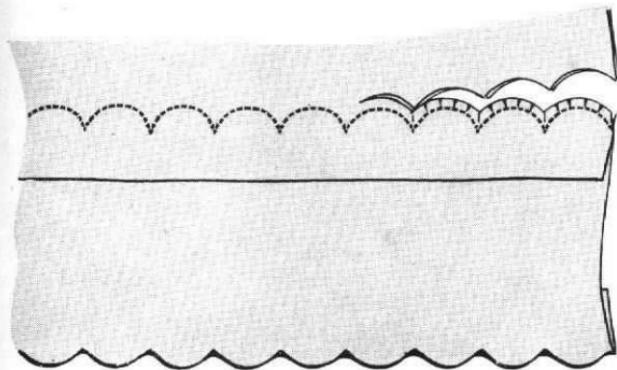
After stitching, trim seam allowance to less than $\frac{1}{8}$ " and clip into the points between scallops.

Some fabrics may also need notching, for a smooth, evenly turned edge.

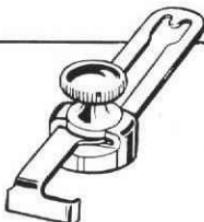
Turn, gently roll out scallops between the fingers and press.

When scalloping a shaped or bias edge it is best to use an interfacing.

When forming scalloped tucks, add an extra $\frac{1}{4}$ " to tuck allowance for seaming.



THE SEAM GUIDE



The seam guide aids in attaining uniformity of seam width. It provides for stitching to be spaced at any distance between $\frac{1}{8}$ " to $1\frac{1}{4}$ " from the edge of the fabric.

APPLICATIONS

Seams

Blind Stitching

Top Stitching

Decorative Stitching

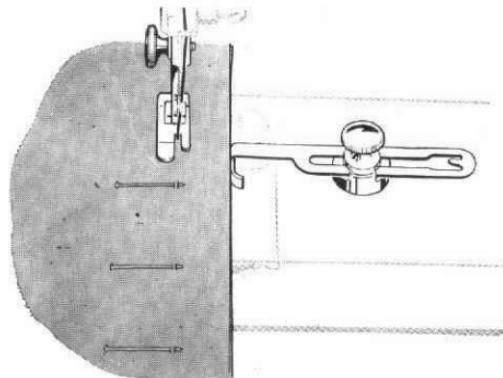
The attachment is used in connection with a presser foot.

It is secured to the bed of the machine in either of the threaded holes to the right of the needle.

SEAMS

To guide seam stitching straight and parallel to the edge of the fabric, adjust the attachment for proper seam width. Align the guide with the presser foot. (Set Selector at AK, Lever at 3.)

Pin seam edges and baste if necessary. Hand basting can be eliminated on easy-to-handle fabrics. Place pins with the points toward the seam edge so they nip into the fabric at the stitching line. The hinged presser foot will ride freely over the points. Guide the fabric edges lightly against the guide while stitching.



SEAMS (Cont'd.)

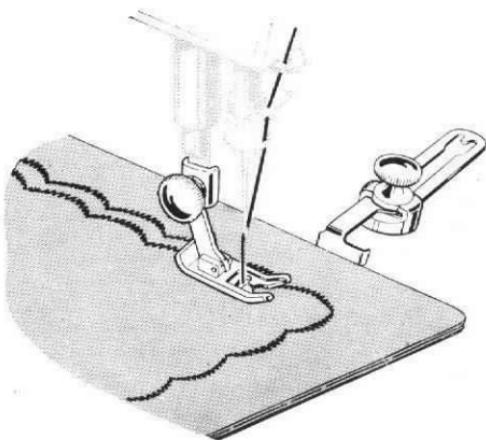
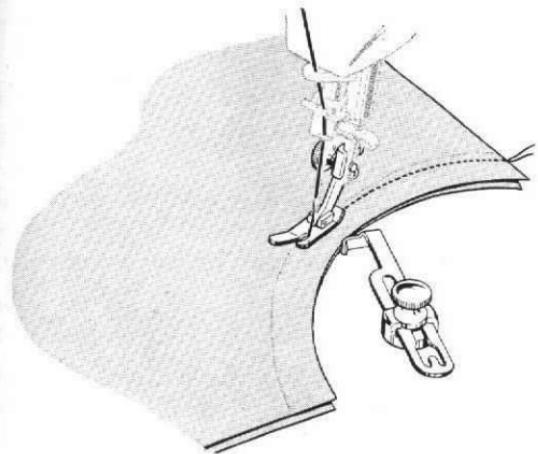
Curved seams require additional treatment in handling. A shorter stitch will provide greater elasticity and strength. Set the attachment at an angle so that the end closest to the needle acts as a guide.

TOP STITCHING

A simple and practical way to accent the lines of a garment and at the same time give additional firmness.

Either single or multiple rows of stitching can be expertly placed along lapels and facing edges, round collars and pockets and as a hem finish.

A subtle effect may be achieved by using straight stitching, or a decorative touch may be added by using any of the attractive stitch patterns accomplished with this machine.



BLIND STITCHED HEMS

Selector setting: BO

Stitch Width: 2 — 5

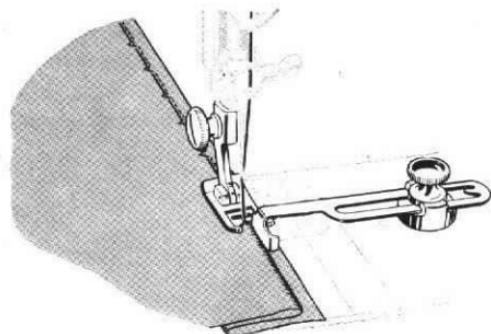
Stitch length: 10 — 20

Presser foot: General purpose

Throat plate: General purpose seam guide

Blind stitching provides a durable hem finish that is almost invisible and comparable to hand sewing.

Mark, turn and press hem in the usual way. Baste a guide line $\frac{1}{4}$ " from the top of the hem edge.



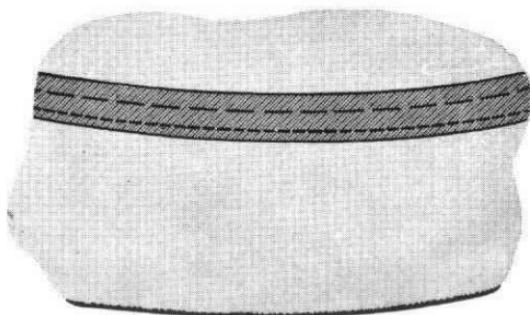
Place the hem edge over the feed of the machine, turn back the bulk of the fabric to the line of basting, thereby creating a soft fold.

Position the work so that straight stitches are made on the hem edge and sideways stitches pierce the fold.

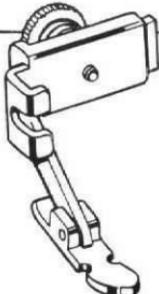
Adjust the seam guide over the right toe of the presser foot until it rests next to the soft fold. While stitching, feed the fold against the flat of the guide.

When stitching is completed, swing the seam guide out of position before raising presser foot.

A test sample should be made to determine stitch width and stitch length for weight and texture of fabric used.



THE CORDING FOOT



This foot is designed to facilitate the placing of stitching close to a raised edge. The hinged feature of this foot ensures even feeding over pins, heavy layers of fabric or cross seams. It is attached to the machine in place of the regular presser foot, and may be adjusted to either the right or left side of the needle. Straight stitch or zigzag settings may be used.

APPLICATIONS

Zip Fastener Insertions

Tubular Cording

Corded Seams

Slip Cover Piping

Preparation. Secure the cording foot to the presser bar as you would the regular presser foot. Set Selector and Lever Adjustment to the right or left of the needle is made by loosening the thumb screw

at the back. Check the position of the foot by lowering the needle into the side notch, making sure it clears the foot. Lock it into position by tightening the thumb screw.

ZIP FASTENER INSERTION

Straight stitch setting: AK 3

Throat plate: General purpose

Cording foot

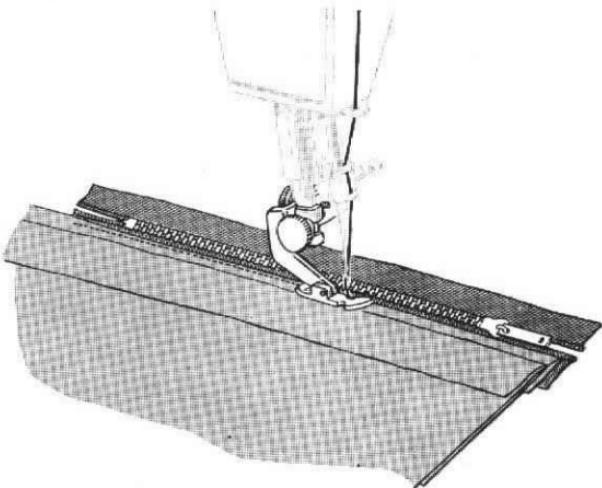
Many different types of zips are available for everything you sew. There are several satisfactory methods for insertion. Detailed sewing instructions are included in zip packet. For any method used, the Cording Foot enables you to form an even line of stitching close to the zip.

When the zip is to the right of the needle —

- Adjust the Cording Foot to the left of the needle.

When the zip is to the left of the needle —

- Adjust the Cording Foot to the right of the needle.



BLIND STITCHED ZIP FASTENER INSERTION

Selector setting: BO

Stitch Width: 2½ or 3

Throat plate: General purpose

Stitch length: 12

Cording foot

Blind stitching the final step of a zip insertion results in a fine finish that is almost invisible and comparable to hand sewing. Particularly suitable for chiffons, sheers, velvets and all delicate fabrics where top stitching would be too harsh.

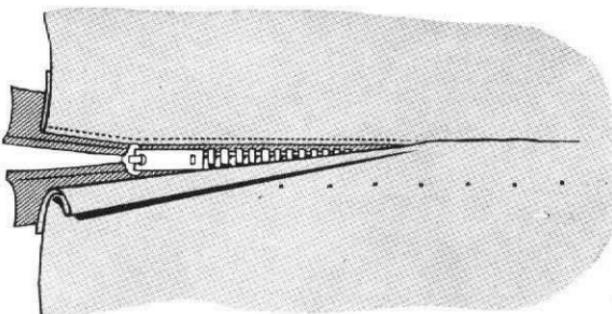
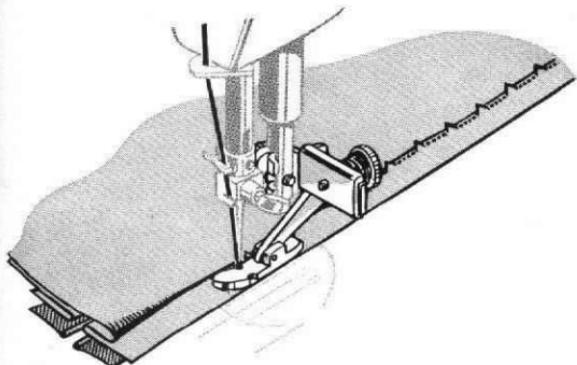
Allow a $\frac{7}{8}$ " seam allowance. Start the insertion in the regular way but omit final step.

Work from the right side of the garment and pin the front of the zip tape into position.

Roll the work over finger to ease fabric and pin through all thicknesses. Baste about $\frac{3}{8}$ " from seam line to provide guide for blind stitching. Remove pins.

Set stitch and adjust cording foot to the right side of the needle.

Turn garment inside out. Place zip tape over feed of machine and turn back the front section of garment to line of basting, creating a soft fold. Position work so that the straight line of stitching is made through front seam allowance and zip tape, and the sideways stitch pierces a few threads of the fold. Lower presser bar and stitch slowly. Remove bastings. Press.



CORDED PIPING

Straight stitch setting: AK 3

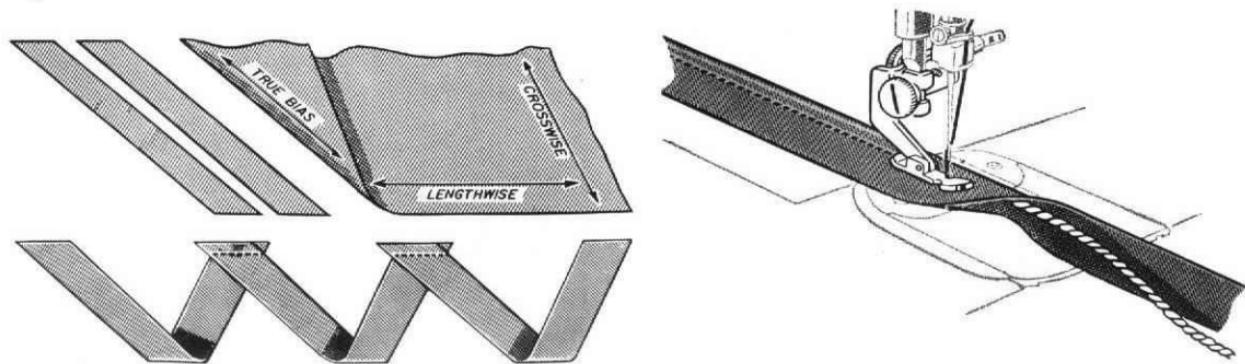
Throat plate: General purpose or straight stitch

Cording foot

Piping cord comes in a variety of sizes and, when covered with a firmly woven fabric, makes a piping that is an excellent seam finish.

This piping is prepared in advance and then stitched into the seam. Cut a true bias strip $1\frac{1}{4}$ inches wide, plus three times the width of the cord, of either self or contrasting fabric. Sew strips together on the lengthwise grain to obtain desired length.

Adjust cording foot to the left side of the needle. Encase the cord in the bias strip, raw edges even. Lower presser bar. Stitch close to the cord, applying gentle tension to bias strip in front and back of the cording foot. Use a stitch length slightly longer than for regular seaming. Do not crowd the stitching against the cord.



CORDED SEAMS

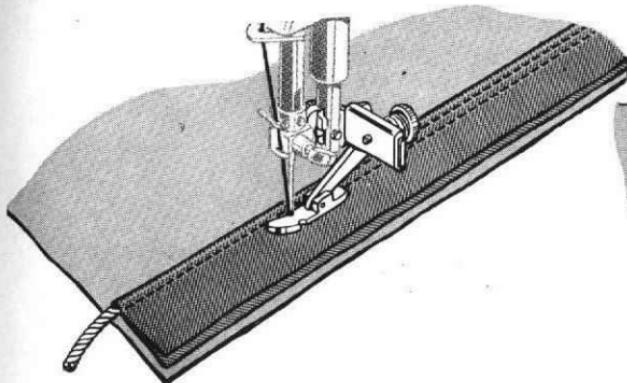
Straight stitch setting: AK 3

Throat plate: General purpose or straight stitch

Cording foot

The cored seam is a professional treatment for slip covers, children's clothes, blouses and lingerie. When cording a seam the cording foot is usually adjusted to the right of the needle so that the bulk of the work will fall to the left.

Attach the piping to the right side of a single seam edge, with the same stitch length used to make the piping (page 66). Guide the edge of the foot next to the cord, but do not crowd.

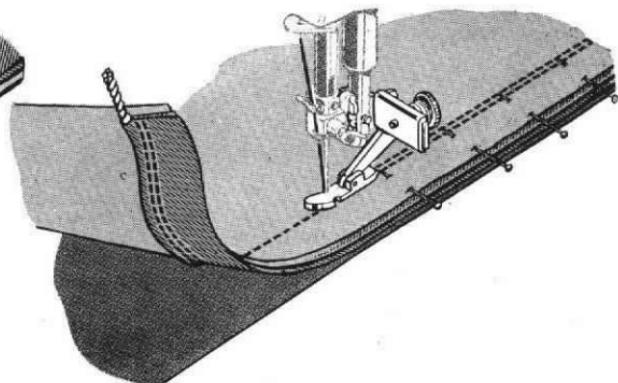


Place the attached piping over the second seam edge, and pin or baste together.

Keep the first stitching uppermost as a guide and position the seam under needle. Stitch, this time crowding the foot against the cord.

This method produces evenly joined seam edges and tightly set welting.

Curved seams are cored as easily as straight seams, except that a shorter stitch length is used. Since the seam allowance of the welting is bias, it is not difficult to shape it to the seam.



THE NARROW HEMMER



The narrow hemmer forms and stitches a perfectly turned hem without basting or pressing. It is attached to the machine in place of the regular presser foot.

APPLICATIONS

Fine hems

Edging ruffles

Hemmed seams

Hemming with lace

Lingerie finishes

Straight stitch setting: AK 3
Throat plate: Straight stitch
Narrow hemmer

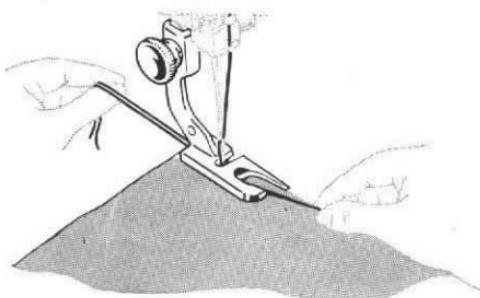
HEMMING

Crease a double $\frac{1}{8}$ " fold for about 2 inches along the edge of the fabric to be hemmed. Draw the bobbin and needle threads under the hemmer. Place

the fabric under the foot and stitch the creased fold for several stitches. Hold the thread ends in the left hand and guide the raw edge in front of the hemmer evenly into the scroll. Sew slowly, still holding thread ends until the hem is well started.

Soft fabrics will enter the scroll best with the foot down; firm, crisp materials with the foot raised.

Even feeding is essential to good hemming. The same width of fabric must be kept in the scroll of the hemmer at all times. A little practice will result in perfectly formed hems.



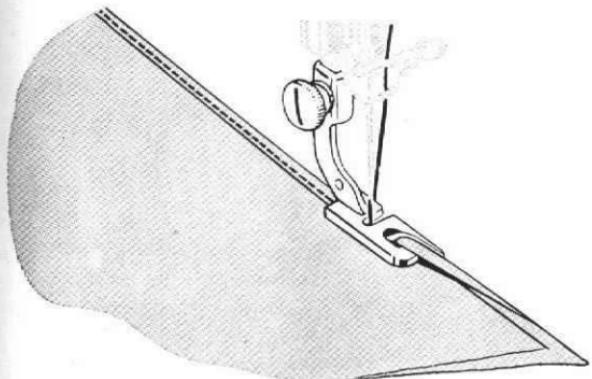
HEMMED SEAMS

Straight stitch setting: AK 3

Throat plate: Straight stitch

Narrow hemmer

A hemmed seam is applied where a fine narrow seam is appropriate. Allow a scant $\frac{1}{4}$ " seam allowance. With both sides of fabric together, place upper layer $\frac{1}{8}$ " to left of lower layer. Insert two fabric edges into hemmer and proceed as for plain hem.



DECORATIVE HEMS

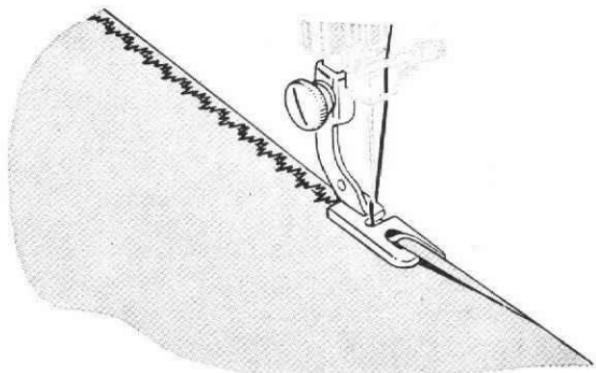
Selector: All settings

Stitch Width: 2 to 4

Throat plate: General purpose

Narrow hemmer

Narrow hem edges can be turned and decorated in one operation using the narrow hemmer and a stitch pattern. This time-saving finish is especially suited to ruffle edges and aprons.



HEMMING WITH LACE

Selector setting: BL

Stitch Width: 3

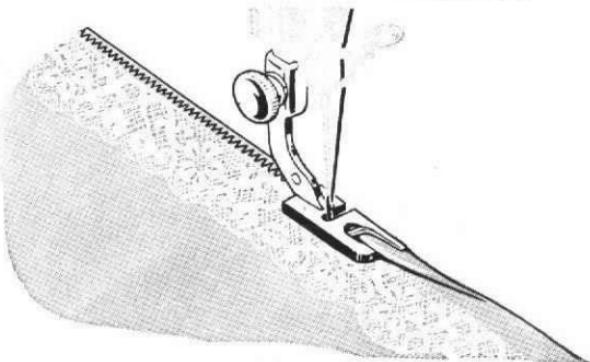
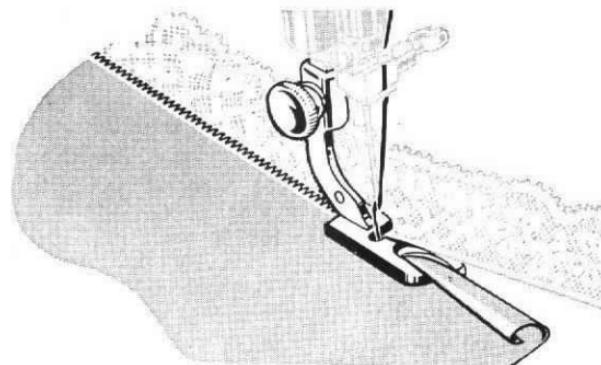
Throat plate: General purpose

Narrow hemmer

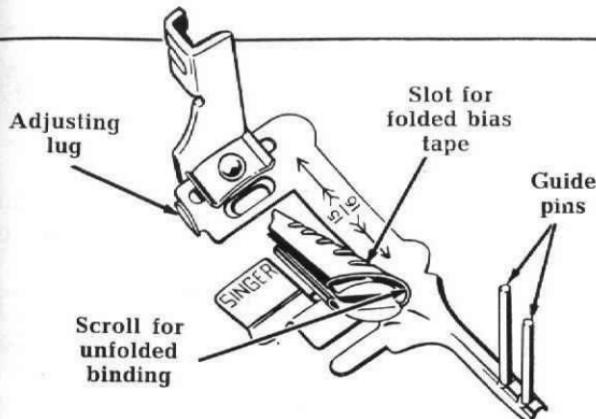
Lace edgings can be applied with the Narrow Hemmer to trim lingerie hems, children's clothes, etc.

Lace Applied Over Hem. Fold and start the hem in the usual way. Starting about 1" down from the end of the lace, place the selvage under the needle and lower needle to hold lace firmly. Raise the foot slightly and slip the lace under the back portion of the foot, without disturbing the position of the fabric. Stitch slowly, guiding the fabric with the right hand, the lace with the left. Take care not to stretch the lace.

Lace Applied Under Hem. When using lace underneath the fold of a hem, the procedure is the same as when making a hemmed seam. Slip the lace in from the left as you would the second piece of fabric. This method is used where a neat finish is desired on both sides of the material.



MULTI-SLOTTED BINDER



Selector settings: All

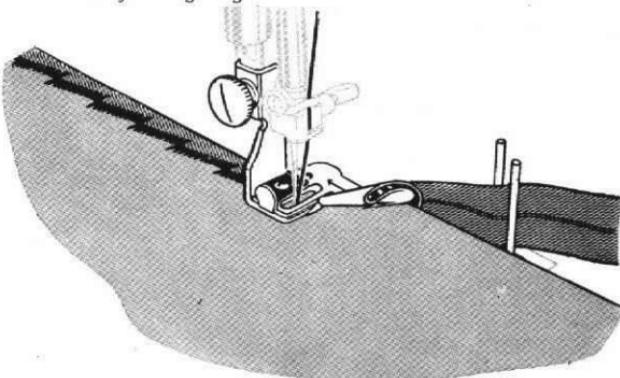
Throat plate: General purpose

The multi-slotted binder is used to apply commercial binding as well as self-fabric bias to an unfinished edge. This colourful trimming is attractive when applied to children's wear, aprons and household linens. It is a practical finish for seam edges that fray and for making bound seams.

Commercial single fold bias tape is inserted from the right into the slot at the wide end of the scroll. Unfolded bias $15/16"$ wide is inserted into the opening at the end of the scroll.

Cut binding diagonally and pull through the scroll until evenly folded edges are under the needle. Free length of binding is held between the guide pins.

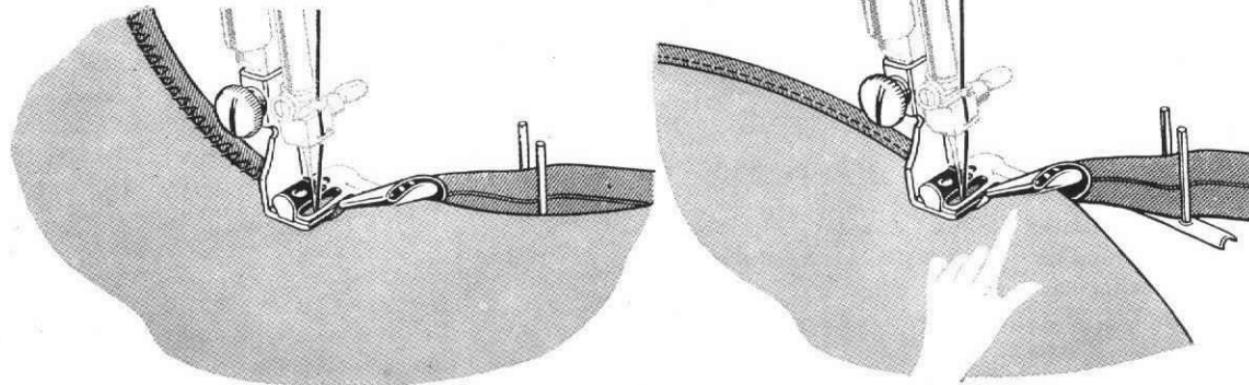
Insert the edge to be bound into the centre of the scroll. Position stitching by moving the scroll portion of the binder to the right or left by means of the adjusting lug.



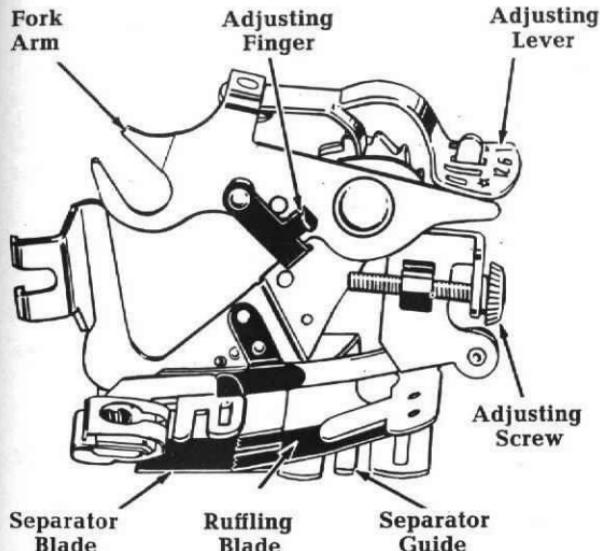
MULTI-SLOTTED BINDER (Cont'd.)

Curved edges require slightly different fabric handling from straight edges. Inside curves are straightened as they are fed into the binder. If fabric is soft and has a tendency to stretch, reinforce the edge with a single row of stitching before binding.

Outside curves tend to lead away from the centre slot of the scroll and should be guided so that a full seam width is taken at the needle point. Do not attempt to pull or straighten fabric into the full length of the scroll.



THE RUFFLER



This attachment offers a simple and effective way to make gathered and pleated ruffles. Ruffles may be made separately or made and applied at the same time. The ruffler is attached to the machine in place of the regular presser foot and is used with a straight stitch setting only.

Straight stitch setting: AK 3

Throat plate: Straight stitch

Ruffler

Adjusting Points

The adjusting lever sets the ruffler for gathers or pleats. The number 1 space setting is for gathers and places fullness at every stitch. Numbers 6 and 12 are space settings for pleats, spacing them 6 or 12 stitches apart. The star is for straight stitching and is used when grouping gathers or pleats.

The adjusting finger is used only for pleating and affects the width of the pleat. It is thrown out of action by bringing it out of contact with the adjusting screw.

The adjusting screw regulates the fullness of gathers or pleats. When turned inward to its limit with the adjusting finger in place, the attachment is set for its deepest pleat. When turned outward to its limit, with the adjusting finger out of action, the ruffler gives only a hint of fullness.

Activating Parts

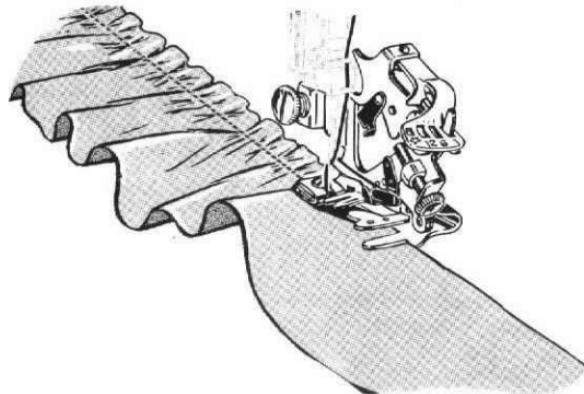
The ruffling blade and the separator blade are of blue steel and hold the material to be gathered between them. The ruffling blade forms the gathers or pleats by carrying the fabric to the needle according to the spacing and fullness to which the ruffler is adjusted. The separator guide is slotted to guide seam edges evenly and to separate the ruffle strip from the material to which the ruffle is attached.

Preparation

- Raise needle to its highest point.
- Locate ruffler on presser bar with fork arm over needle clamp screw. Securely tighten both presser bar and needle clamp screws.

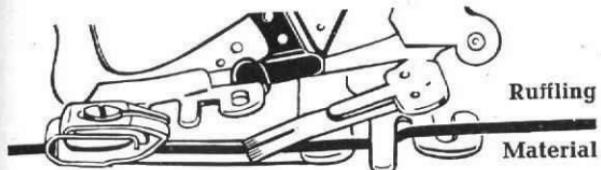
Gathering

- Set adjusting lever on Number 1 setting and throw adjusting finger out of action.
- Turn adjusting screw for amount of fullness desired and set stitch length to space fullness. Turn screw in for more fullness; turn out for less fullness.



THE RUFFLER (Cont'd.)

Length of sewing machine stitch also affects ruffle fullness. Since a given attachment setting puts an equal amount of fullness into each stitch regardless of its length, shortening the stitch (more stitches to the inch) makes ruffle fuller; lengthening the stitch (fewer stitches to the inch) makes it less full. For fine, closely spaced gathering, use a short stitch and an outward adjustment of adjusting screw. For deeper, less closely spaced gathering, turn adjusting screw inward and use a medium stitch length.



- Insert material to be gathered between blue blades and through first separator guide.
- Draw material to back of needle.
- Lower presser bar and stitch.

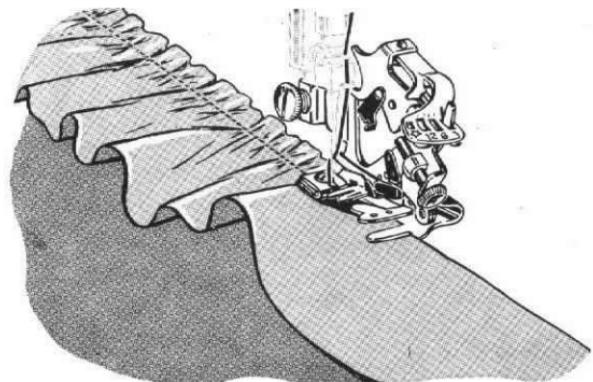
Fabric texture influences performance of ruffler as well as results. Soft fabrics, cut on crosswise grain, are best adapted for gathered fulls. Always test stitch length and ruffler setting on a scrap of self-fabric before proceeding with the actual work.

Attaching Fulls



- Place strip to be gathered between two blue blades and through first separator guide.
- Place material to which full is to be attached between separator blade and feed of machine.
- Proceed as for plain gathering.

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



THE RUFFLER (Cont'd.)

Pleating

- Move adjusting lever to desired space setting for pleats either 6 or 12 stitches apart.
- Set stitch length.

For deepest pleat, set adjusting finger and turn adjusting screw inward to its maximum setting. For smaller pleats, turn adjusting screw outward.

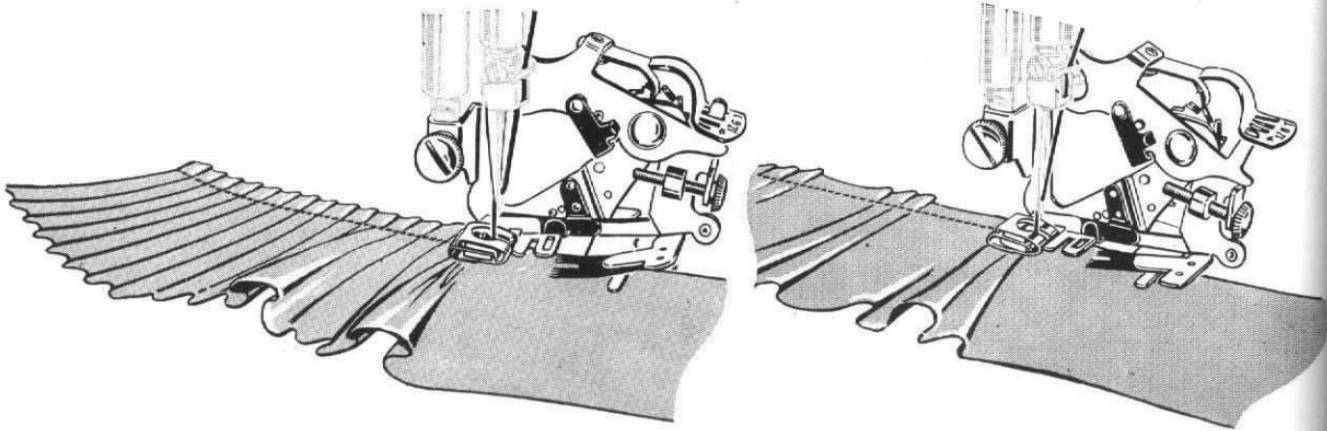
A short stitch places pleats more closely together; a long stitch separates the pleats for a greater distance.

- Insert fabric to be pleated between blue blades and into first separator guide.
- Lower presser bar and stitch.

Crisp fabrics cut on the crosswise grain form the sharpest pleats. Glazed fabrics handle best if the glazed side is downward and the soft backing is next to the ruffler blade.

Group pleating

By using the star setting (straight stitching) alternately with 6 or 12 space setting, pleats are formed in groups. Even spacing between groups is accomplished by counting the number of stitches.



DARNING AND EMBROIDERY FOOT



This attachment is an aid to all who desire perfection in free motion darning and embroidery work.

The foot firmly holds the fabric as the needle enters and rises from the work, while fully revealing the line of design to be followed.

Free motion work darning

Straight stitch setting: AK 3

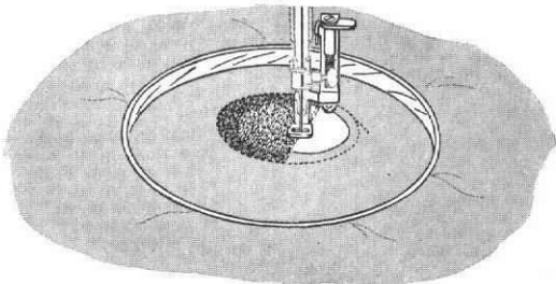
Feed cover plate

Darning and embroidery foot

Stitch length: Above 20

- Trim ragged edges from area to be darned. Centre worn section in embroidery hoops.
- Attach feed cover plate to machine bed in place of regular throat plate.
- Locate darning and embroidery foot on presser bar with lifting finger over needle clamp screw.

A series of small, faint, repeating symbols or marks are located along the top edge of the page, likely part of a decorative border or header.



- Position work under needle and lower presser bar. 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.
- Outline opening with running stitches $\frac{1}{4}$ " from edge for reinforcement.
- Stitch across opening, moving hoops under needle at a slight angle, from lower left to upper right. Keep lines of stitching closely and evenly spaced.
- When opening is filled, turn work 90° and continue stitching until darn is completed.
- Run machine at moderate speed and control hoops with a steady continuous movement. Slow movement of hoops will produce a short stitch; more rapid movement lengthens the stitch.

Fairly long stitches are best for knit and tricot fabrics; short stitches are best for cottons and linens as they approximate weave of fabric.

FREE MOTION WORK
MONOGRAMS — EMBROIDERY

Selector setting: BL

Stitch Width: 2—5

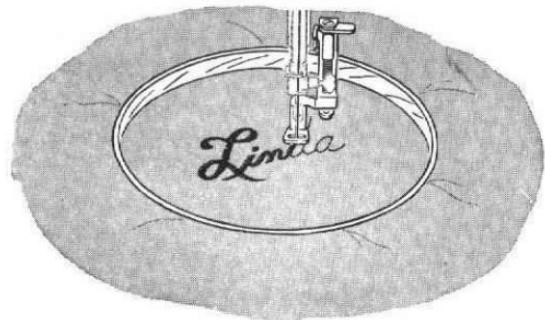
Feed cover plate

Darning and embroidery foot

Stitch length: Above 20

Script monograms and embroidery can be effectively accomplished with the zigzag stitch when the free motion principle is employed.

- Trace or mark design on right side of fabric.
- Place work in embroidery hoops large enough to encompass entire design. Be sure fabric is held taut.
- Attach feed cover plate to machine bed in place of regular throat plate.
- Locate darning and embroidery foot on presser bar with lifting finger over needle clamp screw.
- Position work under needle and lower presser bar. Bring bobbin thread up through fabric at start of design. Hold both thread ends to start stitching.



- Move hoops slowly, following outline of design. Maintain an even rate of speed so that stitches are uniformly placed.

Slow movement of hoops produces a close satin stitch; more rapid movement lengthens the stitch and results in an open effect.

Shading stitches from wide to narrow is controlled by the angle at which work is placed and moved under needle.

A test sample should always be made before proceeding with the actual work to determine stitch setting and spacing. Some fabrics may require addition of un underlay of crisp lawn or organdie.

DECORATIVE STITCH PATTERNS
Examples of Stitch Patterns and their Selector Settings



DP4



DS ② 2



DS ② 3



EP2



FO2

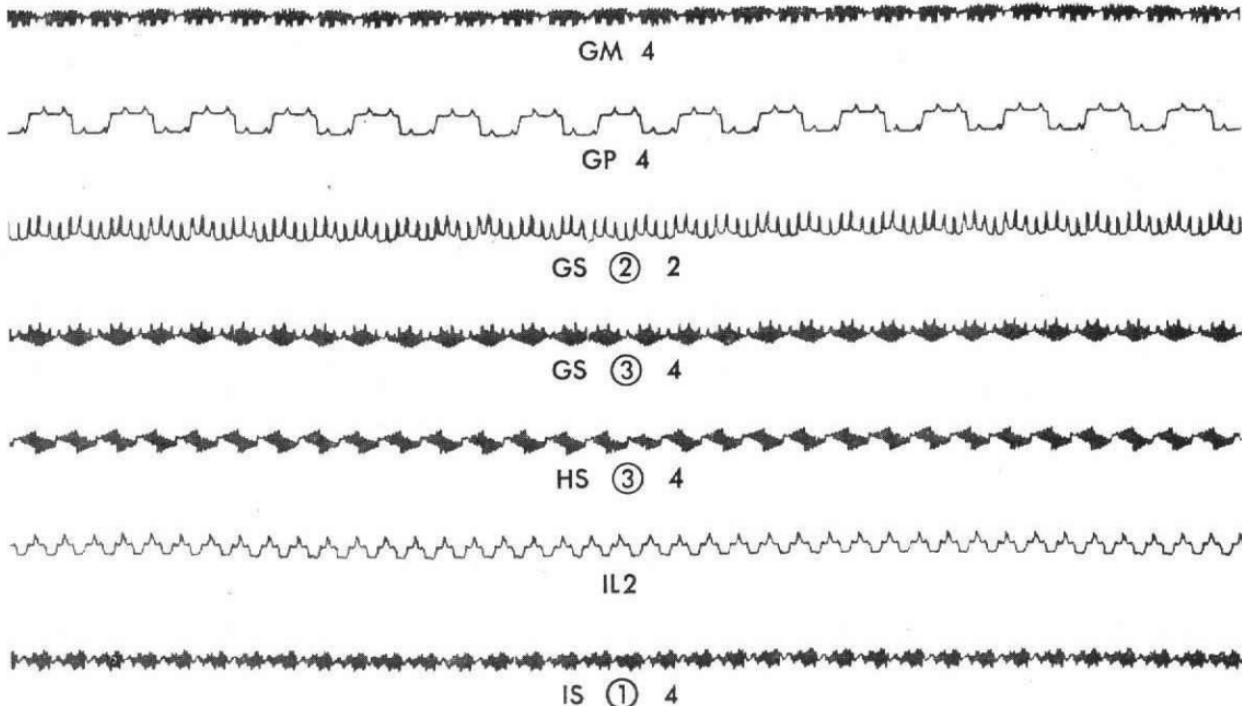


FR2

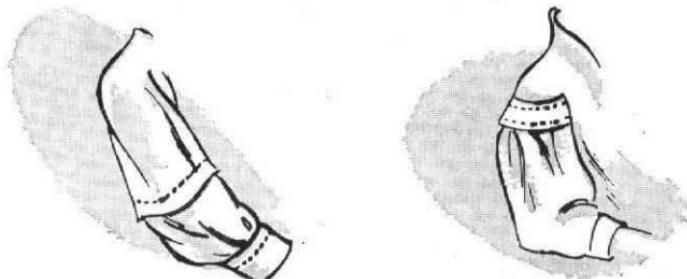
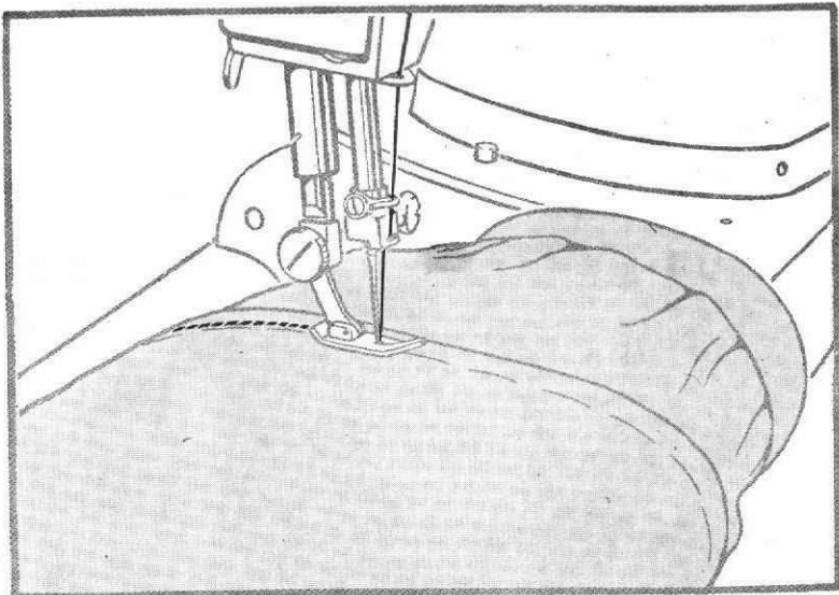


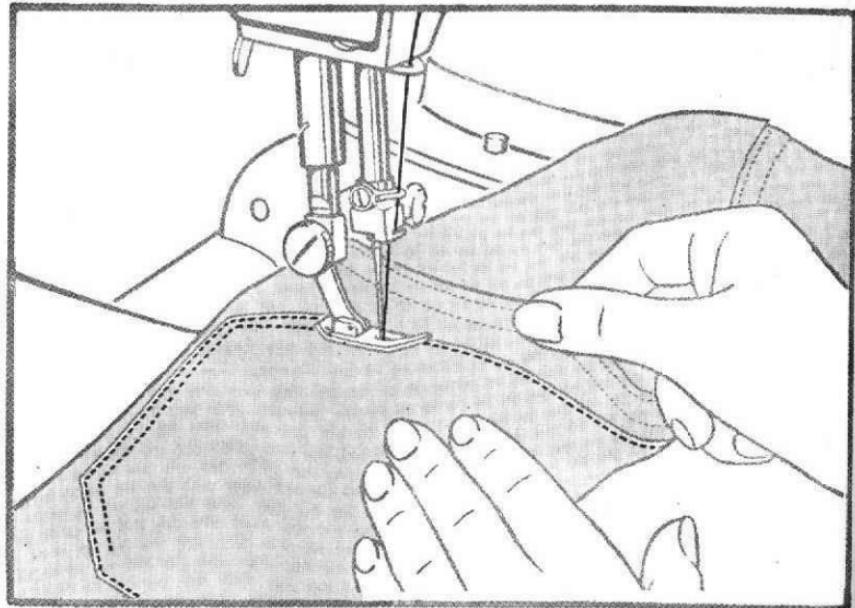
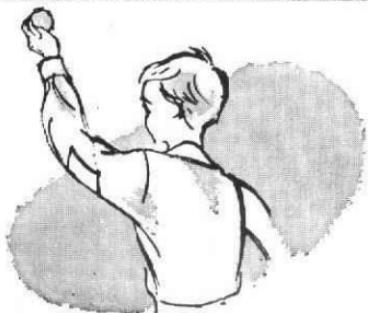
FS ① 3

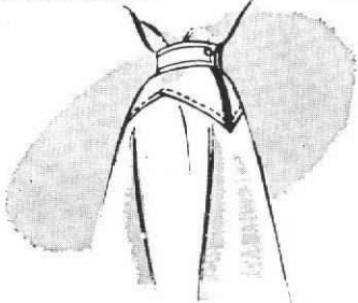
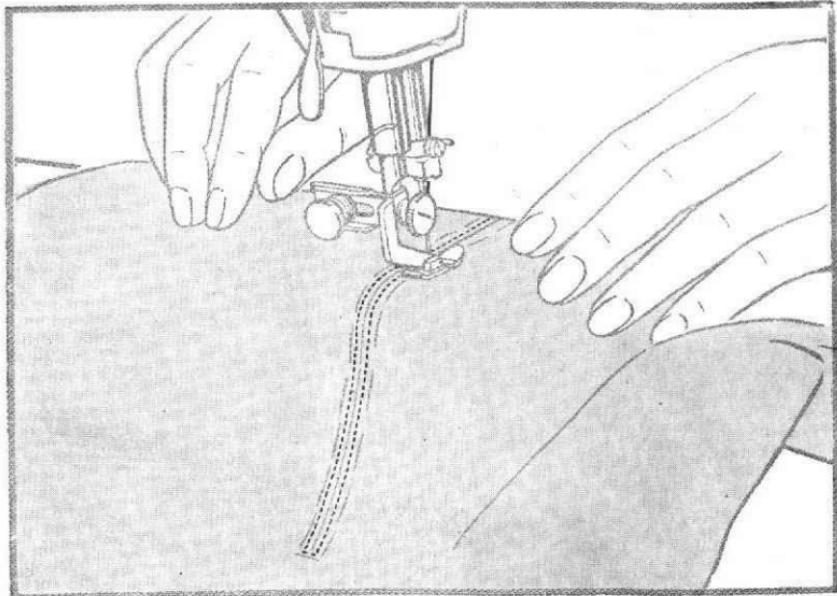
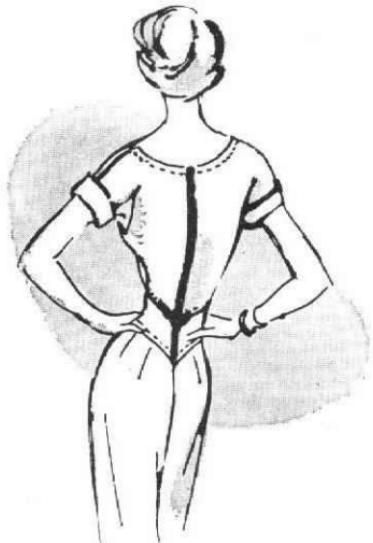
DECORATIVE STITCH PATTERNS
Examples of Stitch Patterns and their Selector Settings

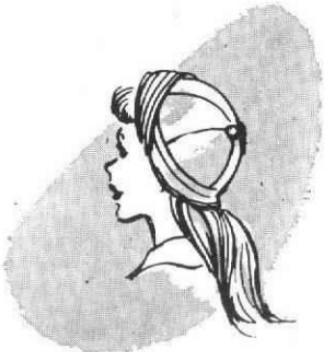
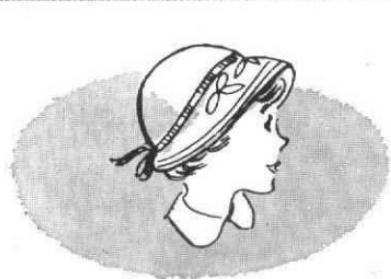
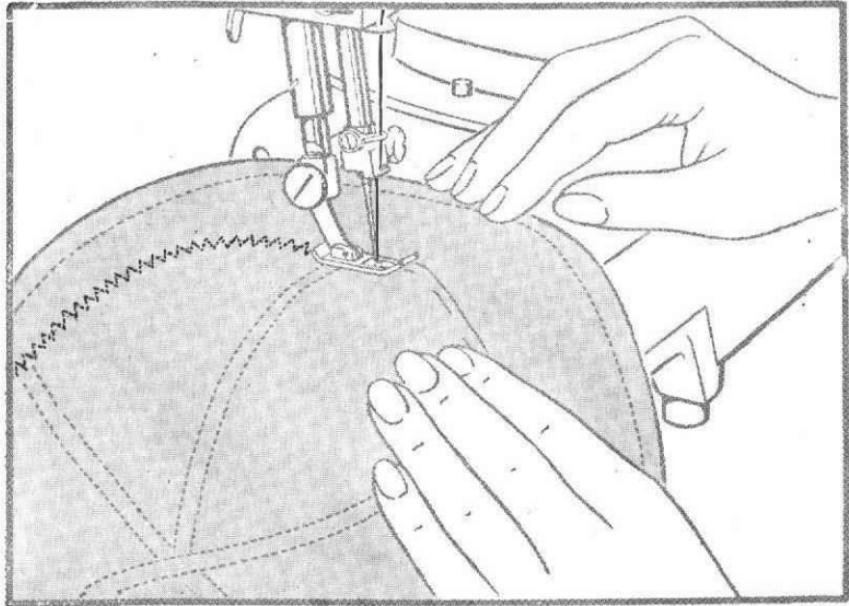


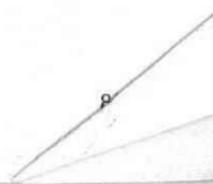
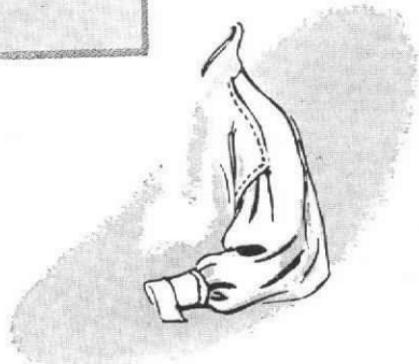
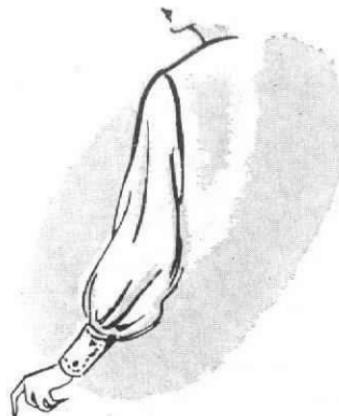
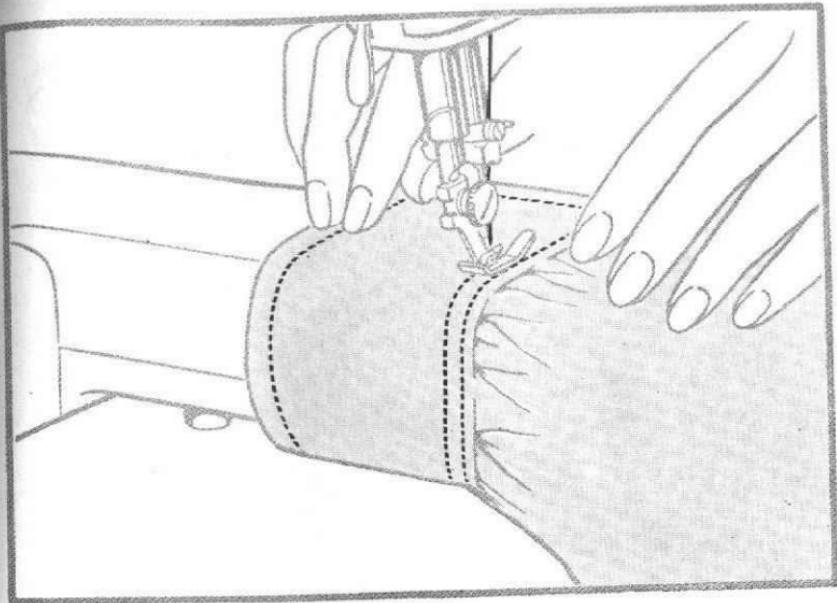
APPLICATIONS
OF THE
CYLINDER BED
FEATURE

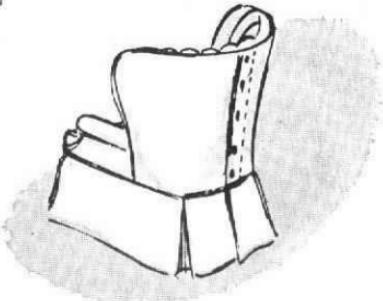
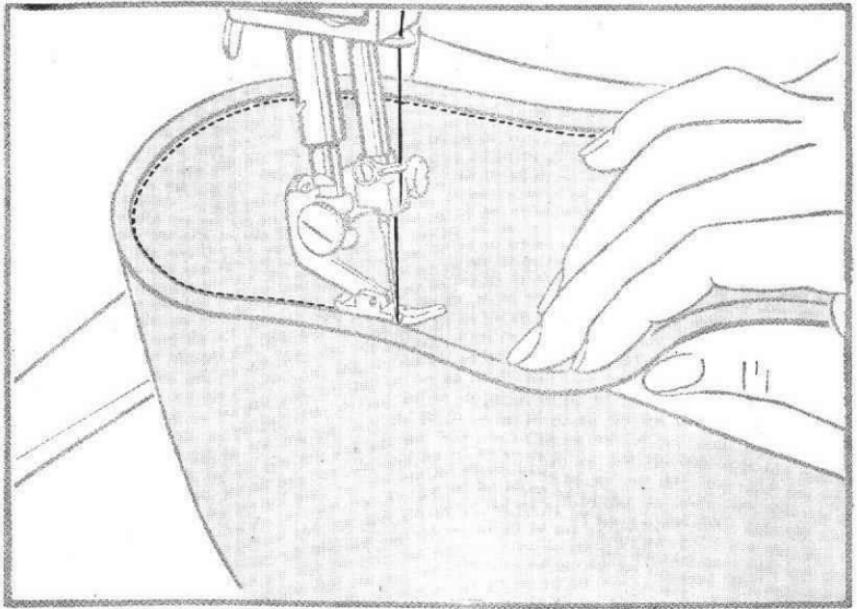




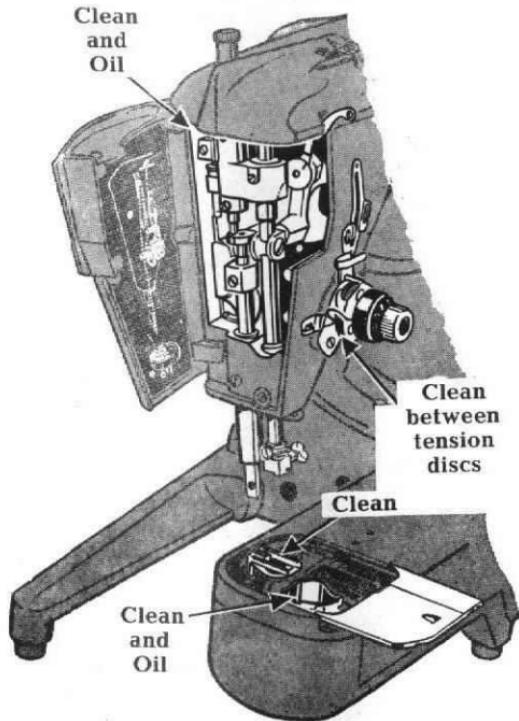








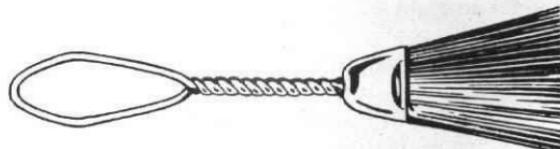
TO CLEAN THE MACHINE



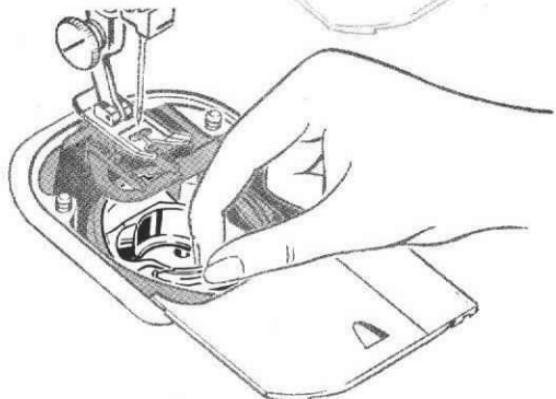
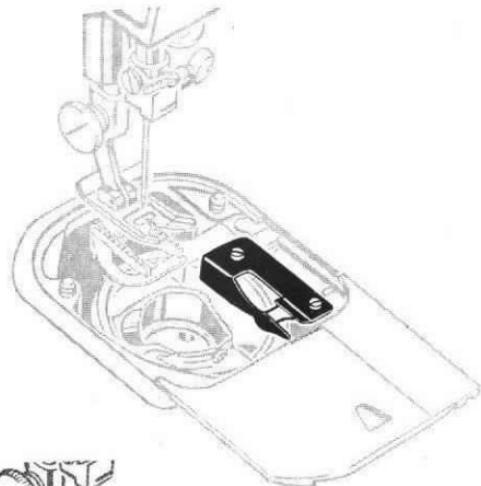
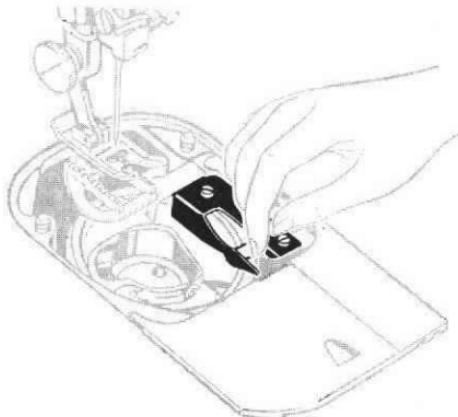
Your sewing machine was built to exacting standards of precision and workmanship. Its performance depends on the care and treatment it receives when in use and before storing it away.

When in regular use, the machine should be cleaned periodically to remove the lint and fluff which may have accumulated round the working parts. To clean the bobbin case area, see instructions for removing and replacing bobbin case on **pages 88 and 89**. Oil the machine after each cleaning as instructed on **pages 90, 91 and 92**.

If the machine is to be stored away for an indefinite period of time, a thorough brush-cleaning to remove all traces of lint and fluff, followed by swabbing of all exposed parts with a lint-free brush saturated with SINGER* Oil, is necessary to protect the machine against rust damage. The areas that should be cleaned and covered with a protective coat of oil are shown in the illustration at the left.



TO REMOVE THE BOBBIN CASE

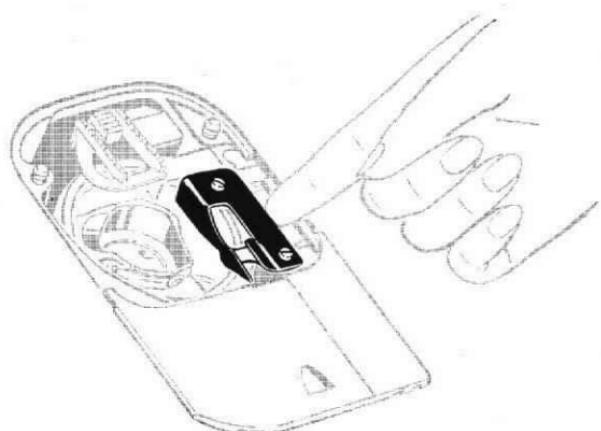
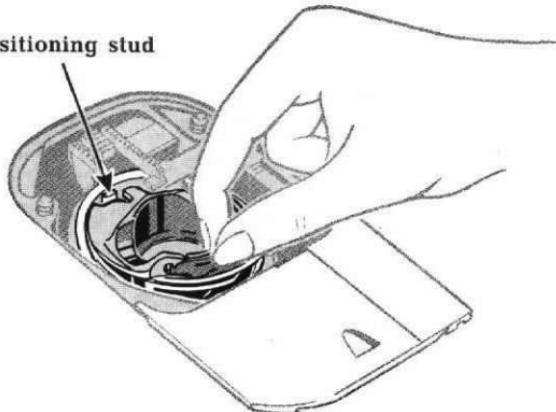


To clean hook raceway, remove bobbin case as follows:

1. Remove throat plate (see **page 18**) and open slide plate (see **page 12**).
2. Unlock bobbin case by lifting and pulling holder to right as shown.
3. Remove bobbin case from machine.
4. Remove all lint, fluff, loose thread ends or any other foreign matter which might clog the machine.

TO REPLACE THE BOBBIN CASE

Positioning stud

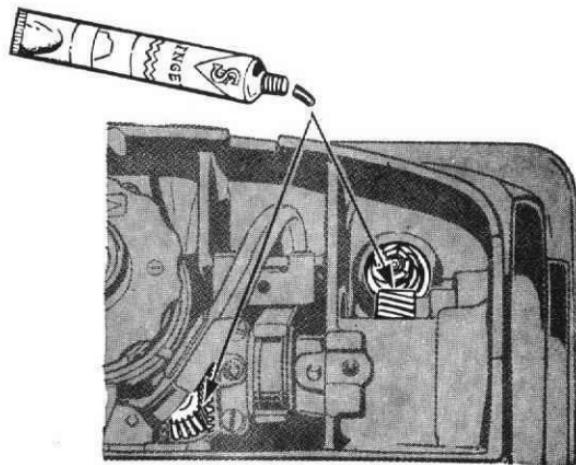
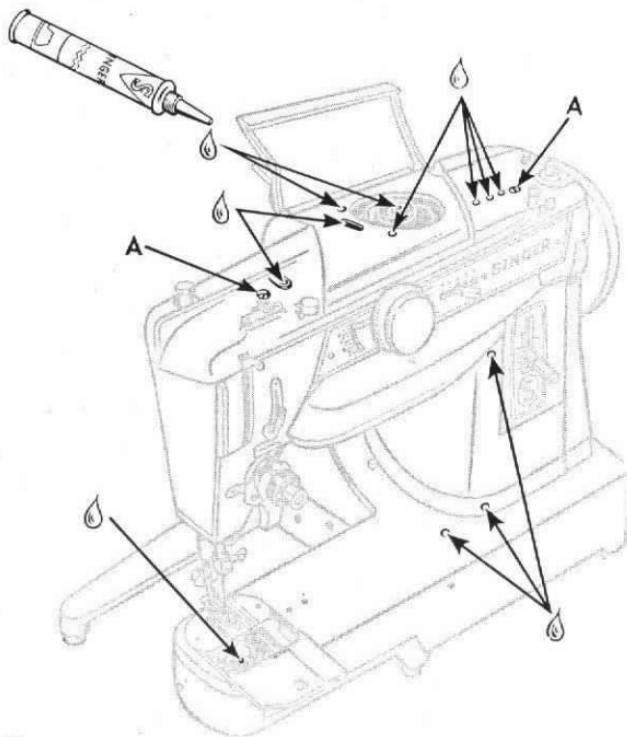


5. Replace bobbin case so that groove under tension spring fits on hook raceway and fork of case straddles positioning stud.
6. Push bobbin case holder to left as shown until it snaps down into lock position.
7. Close bed slide and replace throat plate.

TO LUBRICATE THE MACHINE

Use SINGER Oil and SINGER Lubricant!

Both are extra quality products especially prepared for sewing machines, and should always be used in the care of your 431.



Clean the machine periodically as instructed on page 87.

Apply a drop of oil to each place indicated.

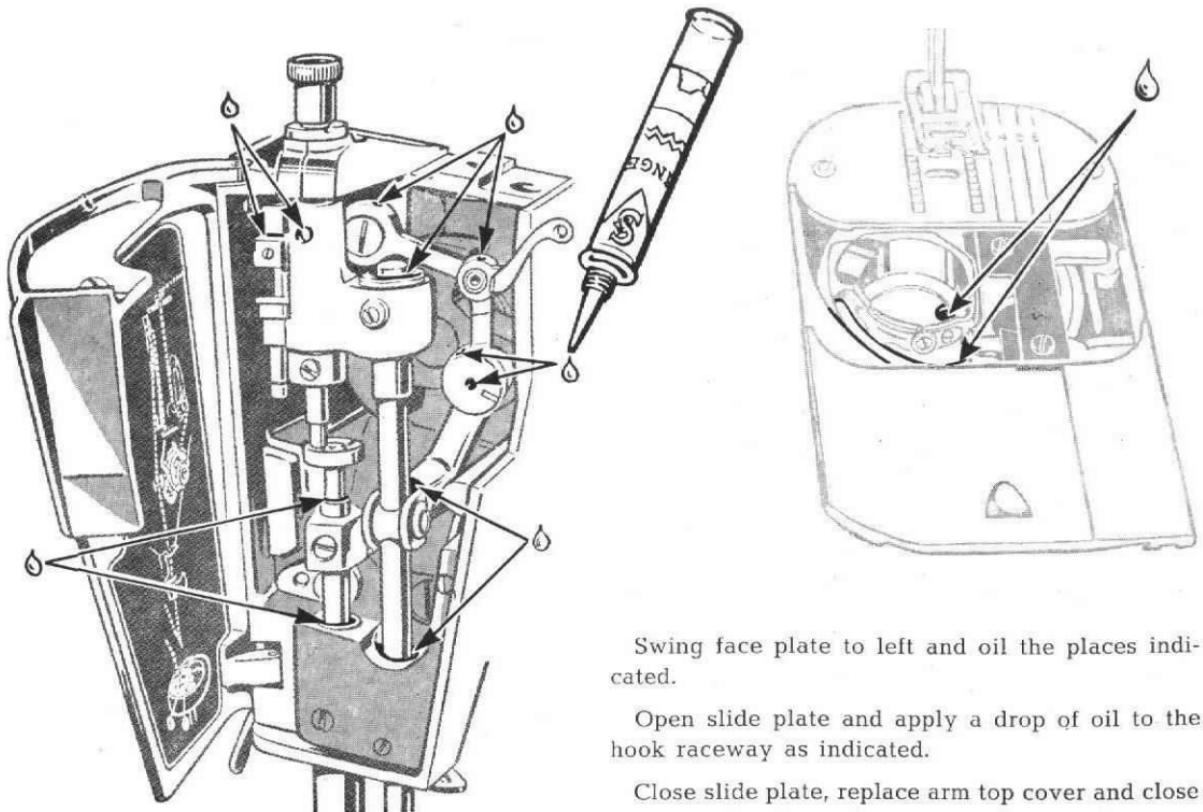
Remove screws **A** and lift off arm top cover.

Apply a small amount of lubricant to the gears as shown.

A tube of this lubricant can be purchased at your Singer Sewing Centre.

Never apply Oil to these gears.

TO LUBRICATE THE MACHINE (Cont'd.)

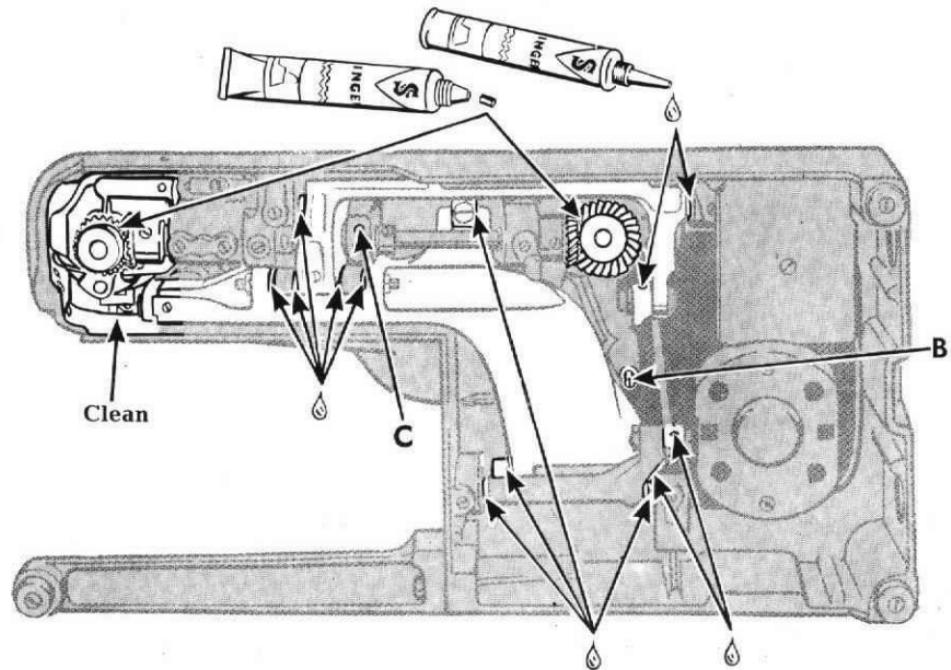


Swing face plate to left and oil the places indicated.

Open slide plate and apply a drop of oil to the hook raceway as indicated.

Close slide plate, replace arm top cover and close face plate.

TO LUBRICATE THE MACHINE (Cont'd.)



Tilt machine back and remove thumb nut from screw **B**, being careful not to lose felt washer, and remove cover from underside of machine.

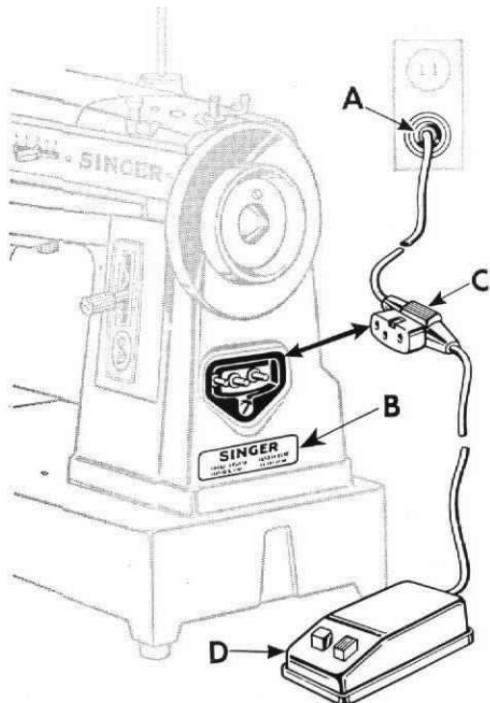
Remove screw **C** and remove cylinder cover.

Clean hook and gear area, oil each of the places indicated, and occasionally apply a small quantity of lubricant to teeth of gears as shown.

Replace bottom cover and cylinder cover.

The motor requires no lubrication.

ELECTRICAL INFORMATION



The SINGER* Electric Motor in the electric machine is furnished for operation on an alternating or direct current. Orders must state the catalogue number of the motor, or the voltage, and in the case of alternating current, the number of cycles.

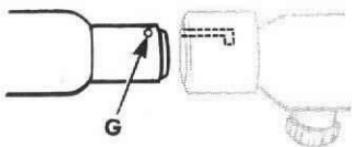
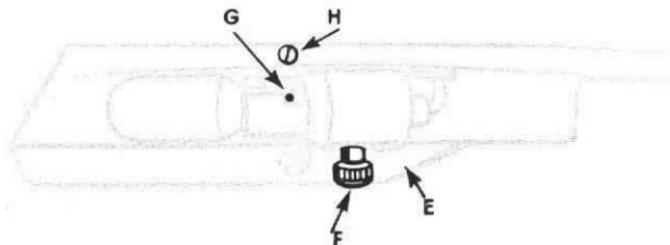
Before Inserting Electric Plug A, be sure that voltage and cycles stamped on electrical nameplate B are within range marked on your electric meter installed by your power company.

Electrical Connections for Machine. Push 3-pin terminal plug C on 3-pin terminal block at right of machine and connect plug A at other end of cord to electric outlet.

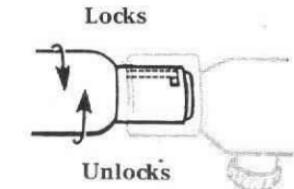
Speed Controller. The speed of machine is regulated by amount of pressure on the pedal of the foot controller D or the knee lever.

LIGHT

The light is turned "on" or "off" by the switch F.



Bulb pin



To Remove Bulb. Remove screw H and lamp cover E. Do not attempt to unscrew bulb. Press it into socket and at same time turn bulb over in direction shown to unlock bulb pin G, then withdraw bulb.

To Replace Bulb. Press new bulb into socket with bulb pin G entering slot of socket and turn it over in direction shown to lock bulb pin G in position. Replace lamp cover E and securely fasten it in position with screw H.

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To all whom it may concern:

The improper placing or renewal of the trademark **SINGER** or any other of the trademarks of The Singer Company (all of which are duly Registered Trademarks) on any machine that has been repaired, rebuilt, reconditioned, or altered in any way whatsoever outside a SINGER factory or an authorized SINGER agency is forbidden.

For your protection

SINGER Sewing Machines are sold and serviced wherever you see the famous SINGER and Red "S" Trademarks. When your machine needs servicing call your SINGER SEWING CENTRE to be sure of warranted SINGER parts and service. See address in the telephone directory.