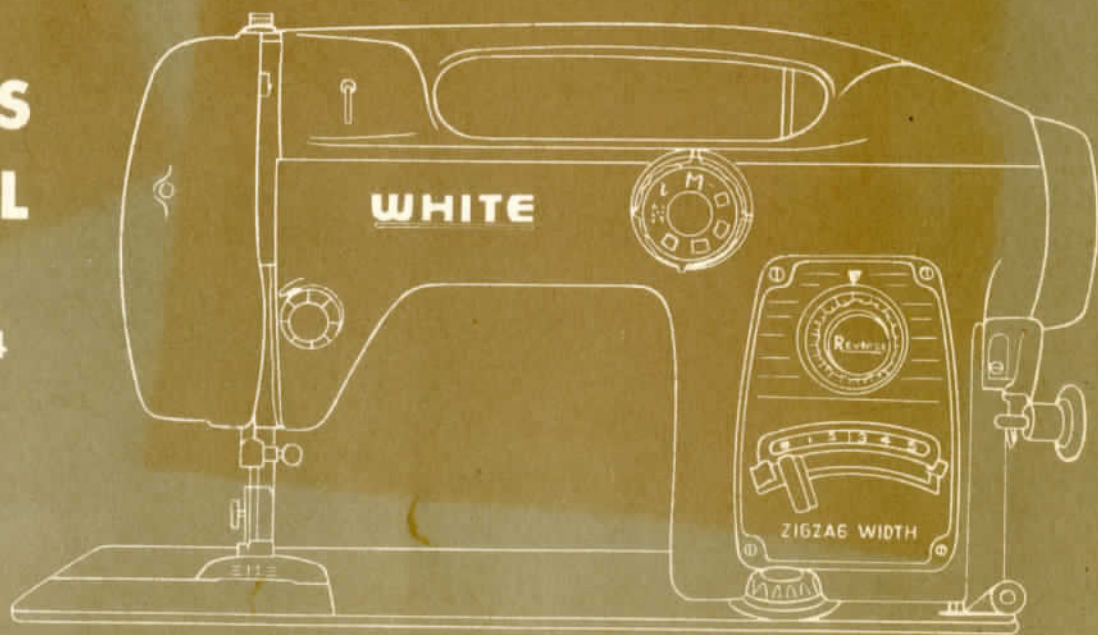


WHITE SEWING MACHINE

OWNER'S MANUAL

MODEL 764



SELECTED BY THE HOUSE OF GOOD TASTE
NEW YORK WORLD FAIR

You are now the owner of a new WHITE zigzag sewing machine, acclaimed for its superiority in design and sewing performance.

Its exclusive built-in features, such as automatic blind hemming, scallop stitch design for trimming cuffs and collars, buttonholes produced by just turning a dial, and twin needle sewing, will inspire you to do creative work.

To aid you in obtaining the greatest performance from your new WHITE this book on its care and use has been written for you. Read these instructions carefully, as a thorough understanding of your machine will reward you with many hours of trouble-free creative sewing.

Time-saving attachments, such as rufflers, binders, edgestitchers, cording feet, and others to complement the accessories furnished with your WHITE are available from the store where you purchased your machine.

WHITE SEWING MACHINES

CLEVELAND 11, OHIO

White Sewing Machines

Toronto 16, Ontario, Canada

I N D E X

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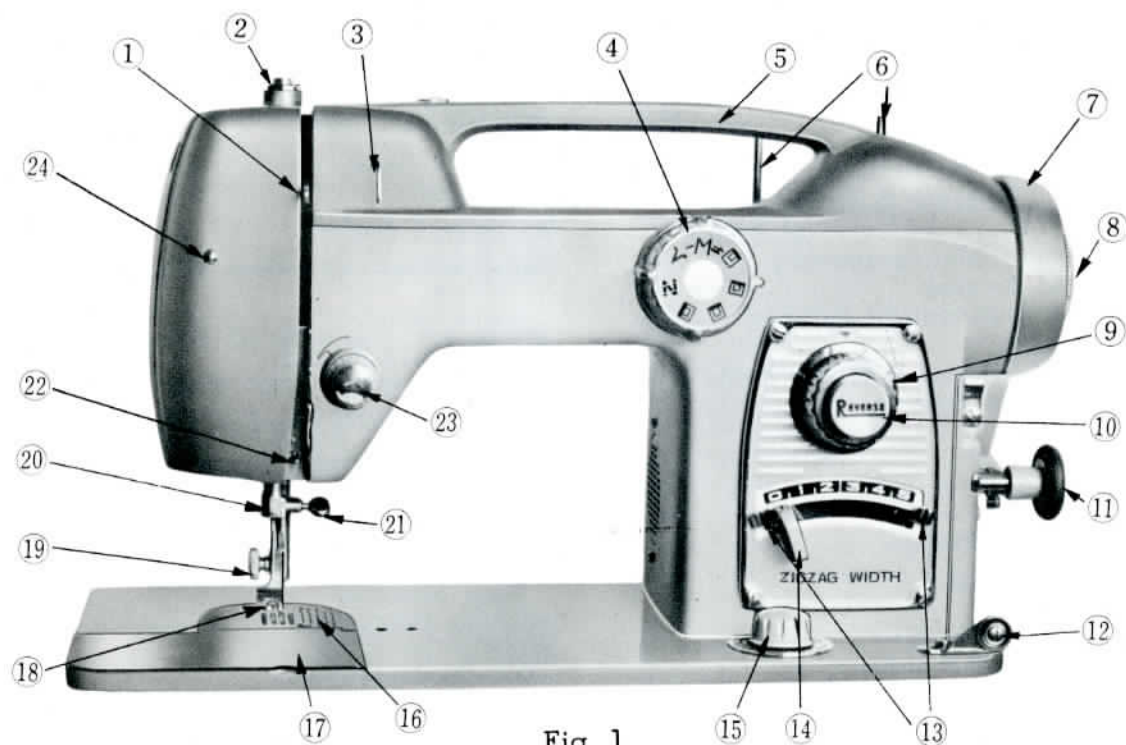


Fig. 1

FEATURES AND PARTS

(Front View)

- | | |
|--------------------------------|---------------------------------|
| 1. Thread Take Up Lever | 13. Zigzag Stitch Width Stops |
| 2. Pressure Release (Darning) | 14. Zigzag Stitch width Control |
| 3. Arm Thread Guide | 15. Drop Feed Knob |
| 4. Pattern Selector | 16. Needle Plate |
| 5. Built-In Handle | 17. Cover Plate |
| 6. Spool Pin | 18. Presser Foot |
| 7. Hand Wheel | 19. Presser Foot Clamp Screw |
| 8. Clutch | 20. Needle Clamp Thread Guide |
| 9. Stitch Length Control Knob | 21. Needle Clamp Screw |
| 10. Reverse Feed Button | 22. Face Plate Thread Guides |
| 11. Bobbin Winder | 23. Tension |
| 12. Bobbin Winder Thread Guide | 24. Sew Light Switch |

FEATURES AND PARTS (Back View)

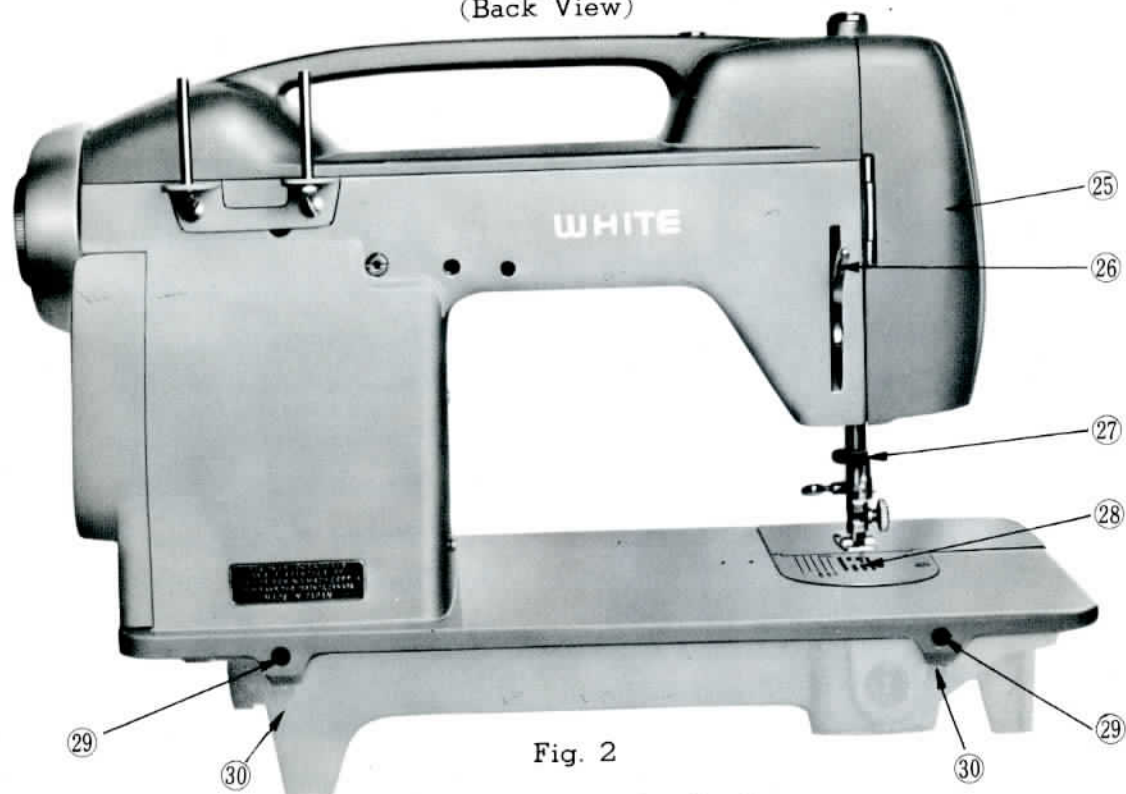


Fig. 2

- 25. Face Cover
- 26. Presser Bar Lifter
- 27. Thread Cutter

- 28. Feed
- 29. Hinge Holes
(For Cabinet or Portable Case)
- 30. Hinge Clamp Screws

NEEDLE - THREAD - FABRIC - STITCHING GUIDE

Fabric	Needle No.	Machine Stitches Per Inch	Cotton Thread	Mercerized Thread	Silk or Nylon
Extremely heavy tarpaulin, sacking, canvas, duck, etc. <i>S</i>	<i>19</i> 4	6 to 8	10 to 30 <i>24</i>	Heavy Duty	
Heavy upholstery fabric, ticking, denim, leatherette <i>18</i>	3	8 to 10	30 to 40	Heavy Duty	
Medium heavy drapery fabric, velveteen, suiting, felt, terry, etc. <i>16</i>	2	10 to 12	40 to 60	Heavy Duty	
Medium broadcloth, percale, gingham, linen, chintz, taffeta, sheer wool, shantung, etc. <i>14</i>	1	12 to 14	60 to 80	50	A
Sheer voile, lawn, dimity, crepe, handkerchief linen, plastic film, etc. <i>11</i>	0	14 to 16 (Plastic film) 8 to 10	80 to 100	50	A
Very sheer chiffon, batiste, lace, organdy, ninon, net, marquisett, etc. <i>9</i>	00	16 to 20	100 to 150	50	A

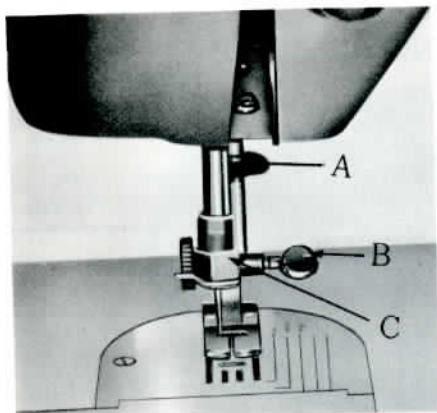


Fig. 3

SETTING THE NEEDLE

See Fig. 3. Raise the needle bar A to its highest point, turning wheel toward you by hand.

Then loosen the needle clamp screw B and the needle can be inserted into clamp C. Place needle (flat side to back) in the needle clamp and push it upward as far as it will go into the needle clamp hole, tightening the needle clamp screw securely with a screw driver.

After Changing the needle make one complete revolution of balance wheel by hand to be sure the needle is in the correct position.

FLAT
SIDE OF
NEEDLE

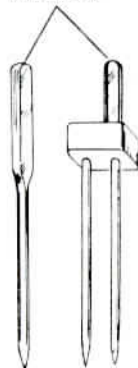


Fig. 5

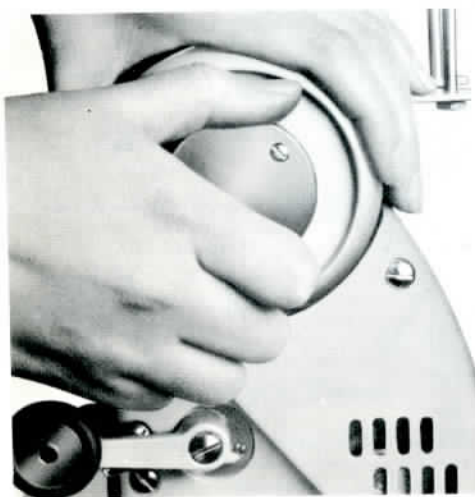


Fig. 4

WINDING THE BOBBIN

Disengage the hand wheel (Fig. 4) from the stitching mechanism by turning the clutch toward you or counter-clockwise. Place a spool of thread on one of the spool pins, lead thread under the handle and through the upper thread guide on the arm, and down through the tension disc (11, Fig. 6) at the base of the machine. Run end of thread through a hole in the bobbin edge and place bobbin on spindle B of winder 4, fitting the notch in bobbin over small pin on spindle. Push bobbin winder pulley against hand wheel.

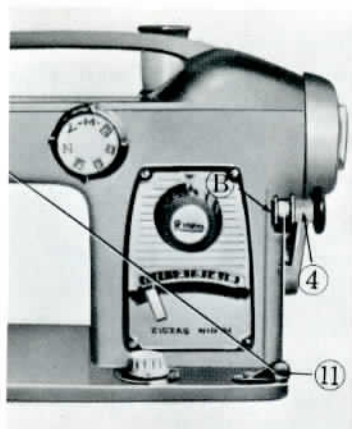


Fig. 6

Hold thread end loosely and start machine slowly. Bobbin will be released automatically when it is filled. Break off loose thread end used to start the winding.

Turn clutch away from you until sewing mechanism is again engaged so that needle moves when you turn the hand wheel.

If the bobbin winds unevenly, adjust bobbin winding tension disc (11, Fig. 6) to the right or left by loosening the screw. When disc is in proper position, tighten screw.

THREADING THE BOBBIN CASE

Refer to Figs. 7, 8 and 9 to familiarize yourself with the procedure. Hold the bobbin case

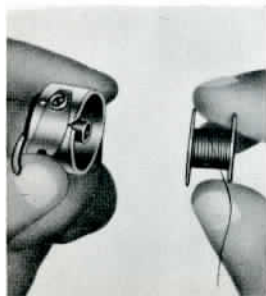


Fig. 7



Fig. 8



Fig. 9

in your left hand. Let about two inches of thread hang free from the bobbin, and insert bobbin into case so that thread will be rotating counterclockwise. Guide the thread end through the slot on the side of the case and under the tension spring until it enters the small notch on the edge of the spring.

PLACING BOBBIN CASE IN SHUTTLE

Open hinged cover plate in front of the needle. (See 17 Fig. 1). Hold the bobbin case latch, (D), Fig. 10, between the thumb and forefinger of the left hand, with at least three inches of thread running from the top of the bobbin case to the right. Insert and center the bobbin case on the stud of the shuttle body, (C). Be sure the bobbin case finger, (E), is opposite shuttle race notch, (A). Press the bobbin case into the shuttle as far as possible until latch catches on the center post of shuttle. THEN release the bobbin case latch, (D). Press bobbin case again after latch has been released to make sure the bobbin case is locked securely in place. Close the cover plate.

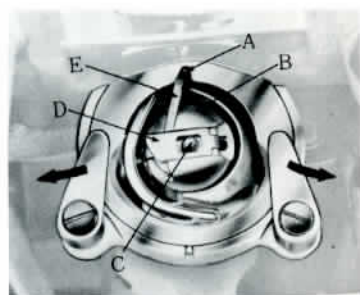


Fig. 10

UPPER THREADING SINGLE NEEDLE

1. Turn hand wheel toward you to raise take-up lever to highest position.
2. Place a spool of thread on spool pin A. (Fig. 12)
3. Lead thread under handle and through thread guide B on arm.
4. Down and around one set of tension discs C from right to left.
5. Up into check spring D.
6. Down and under thread bar E.

7. Up and through take-up from right to left.
8. Down into thread guide G.
9. Into needle bar thread guide H and through needle eye from front to back, pulling three to four inches of thread through needle.

(See Fig. 12)

Mold the end of the upper thread loosely and turn hand wheel toward you until the needle goes all the way down and comes back up. A loop (Fig. 11) will be formed over the upper thread which then can be pulled out straight. Place both thread ends under the slot of the presser foot and draw toward the back of the machine, leaving both threads three to four inches long.



Fig. 11

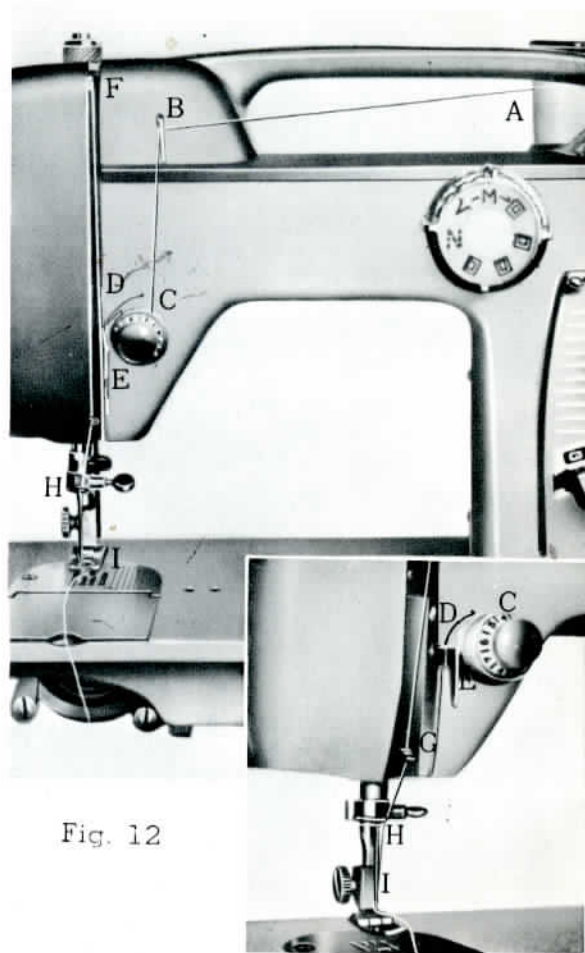


Fig. 12

STRAIGHT STITCHING

For straight sewing on fine fabric or very soft material, it is advisable to use the straight stitch presser foot and the straight stitch needle plate which are included in your accessory box. Both have narrow needle slots.

Changing the Foot and Plate. To change presser foot (19, Fig. 1) loosen thumb screw and remove zigzag foot. Replace with hinged straight foot and tighten screw securely. Fig. 14

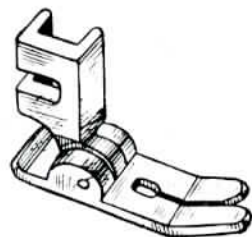


Fig. 14

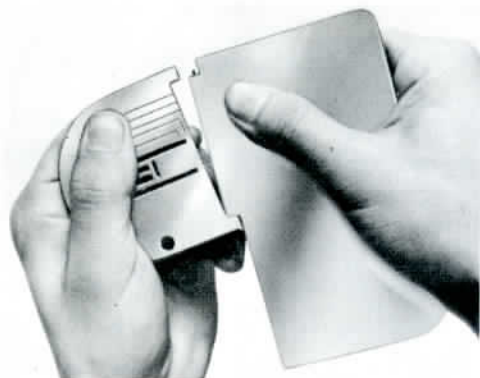


Fig. 13

To change needle plate (16, Fig. 1) remove screw and lift off with cover plate attached. Hold needle plate with left hand and cover plate with the right. (Fig. 13)

Press upper corner of cover plate (right side up) down slightly and slip pin from groove in needle plate. Avoid using too much pressure. When the pin is released the two plates will separate.

Attach cover plate to straight stitch plate by reversing the above procedure.

Slip pin on lower side of cover plate into groove on needle plate. Insert tongue into square opening and slide upper pin into position. Put plates on machine and fasten securely with needle plate screw.

Be sure to set the stitch width at 0, or the needle will break in striking the foot or plate.

1. Set left hand stitch width lock 13 as far left as possible.
2. Move right hand stitch width lock 13 as far left as possible to lock zigzag stitch width control lever 14 in straight stitch position. (To move locks push in slightly.)
3. Put drop feed knob 15 at high setting
4. Set decorative stitch dial 4 at M position.
5. Set stitch length control beyond Number 1 (adjust stitch length to suit material being sewn.)

SETTING THE STITCH LENGTH

The length of the stitch is regulated by the knob 9 shown in Fig. 15. Near 0 is the shortest and 6 the longest. Turn the knob to the left to lengthen and to the right to shorten the stitch.

STITCH LENGTH CHART (Approximate)

Figures on dial	0	1	2	3	4	5	6
Number of stitches per inch	No Feeding	36	20	12	9	7	6

SEWING IN REVERSE

When you wish to sew in reverse to tie the threads at the beginning or the end of a seam, press in the reverse button 10 as far as it will go. The machine will sew backward as long as the button is held in.

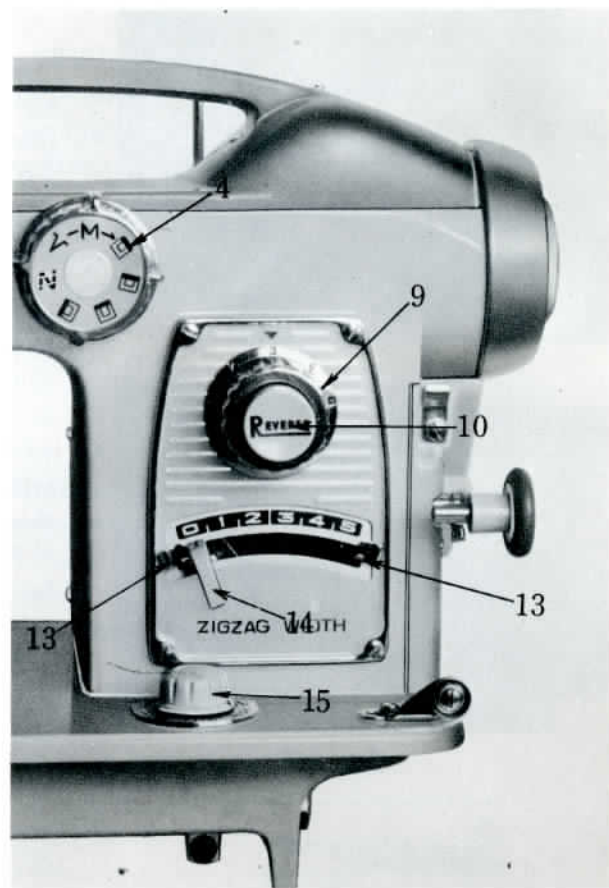


Fig. 15

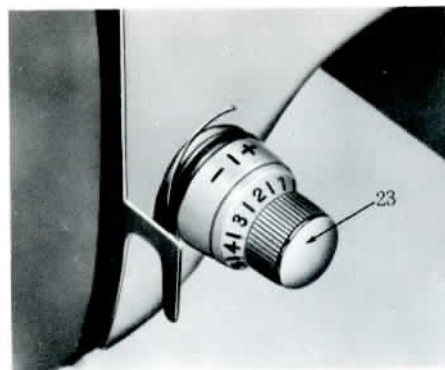


Fig. 16

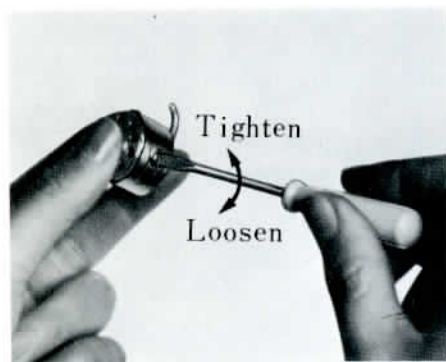


Fig. 17

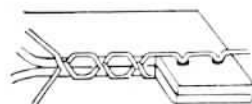


Fig. 18



Fig. 19



Fig. 20

ADJUSTING THE TENSIONS

Always adjust the upper thread tension with the presser foot down, as the tension is automatically released when it is raised. To increase the tension, turn Dial 23 (Fig. 16) to the right, or clockwise. To decrease, turn to the left. The higher the number on the dial, the tighter the tension.

Before adjusting lower tension, be sure the machine is threaded correctly. When it is necessary to change the bobbin tension, turn small screw (Fig. 17) on side of the bobbin case clockwise to tighten, counterclockwise to loosen.

When the tensions are properly balanced, a perfect stitch will be formed with both threads interlocking in the center of the fabric. Fig. 18

When the upper tension is too tight, the lower thread is pulled up over the upper thread which is lying flat on the top of the fabric. Fig. 19

When the upper tension is too loose, the upper thread forms loops over the lower thread which is lying flat under the fabric. Fig. 20

ADJUSTING PRESSURE AND FEEDING OF FABRIC

General Sewing - Usually, for straight sewing, zigzag stitching, and manual embroidery, the pressure bar cap or darning release B (Fig. 21) is at its lowest position and the feed is at its highest level with the drop feed knob C (Fig. 22) turned to High.

Sewing Thin or Lightweight Fabrics - When lighter pressure is required to sew satisfactorily on thin silk or filmy material, the pressure cap should be about halfway down. Release all the way by pressing the snap lock A (Fig. 21), then press cap B down again to halfway spot. Lower the feed slightly by turning the drop feed C (Fig. 22) to Low.

Darning and Monogramming In order to move the fabric freely in any direction for darning, mending, and certain kinds of free-hand embroidery, release the pressure cap B completely by pressing down on the snap lock A (Fig. 21). Turn the drop feed knob to Down position which drops the feed well below the needle plate. To return feed to normal, turn knob to High.

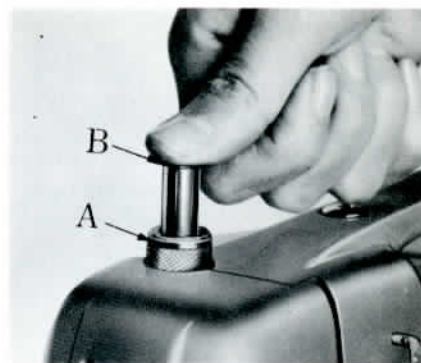


Fig. 21



Fig. 22

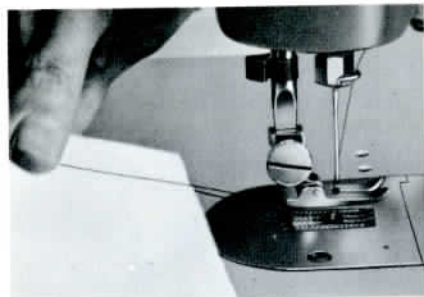


Fig. 23

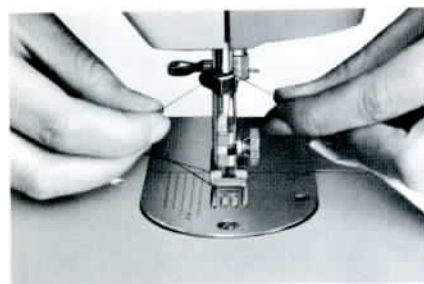


Fig. 24

PREPARING TO SEW

Have take up lever at highest point before starting to sew. Do not try to help the feeding by pulling the material as this may deflect the needle and cause it to break.

NEVER run machine without material between presser foot and feed. Place material and threads in position under the presser foot and lower the presser foot. Turn the hand wheel toward you until the needle is at its highest point. You are now ready to begin sewing. By having the needle at its highest point, it is not necessary to touch the hand wheel to start the machine, you merely press the control. The speed of the machine is regulated by increasing or decreasing the amount of pressure exerted on the control.

REMOVING THE WORK

Be sure to stop the machine when the thread take-up lever and needle bar are located at the highest position. Now raise the presser foot and draw the fabric back and to the left, Figs. 23 and 24, and pass the threads over the thread cutter. Pull down slightly, holding thread in both hands, so as not to bend the needle. Leave the ends of thread under the presser foot.

ZIGZAG STITCHING

Be sure zigzag needle plate and presser foot are in place.

1. Set decorative stitch dial 4 (Fig. 25) at M position.
2. Moving lever 14 gradually to the right will produce zigzag stitches of ever increasing width. To maintain selected widths of zigzag stitches employ lock 13 (Fig. 25).
3. Left lock determines the minimum width stitch, while right lock controls the maximum. Locks can be set by pressing in slightly and moved to the desired position.

CREATIVE EMBROIDERY

The satin stitch (Fig. 26), which is really just a very short zigzag stitch, and is the basis for most embroidery, is obtained by setting the stitch length as near 0 as possible without stopping the feeding action.

The width may be set anywhere from 0 to 5 for single needle work.

EMBROIDERY PATTERNS

With the machine set for a short stitch length, different designs can be made by swinging the stitch width lever 14 back and forth between 0 and 5 or any combination of widths. Try setting the locks at 1 and 5, 2 and 5, etc. Set a rhythm for yourself and then proceed. After a while you will become quite skillful, varying your designs by the speed of the machine, stitch length and width and the manipulation of lever 14. Always run the machine at a uniform speed whether fast or slow.

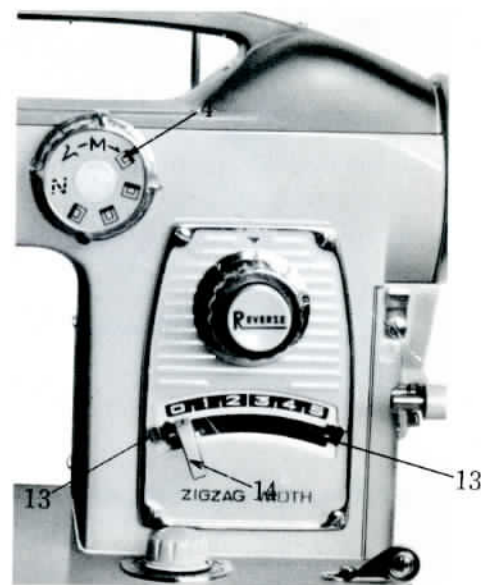


Fig. 25



Fig. 26

SAMPLE EMBROIDERY PATTERNS

The following patterns will be altered by the machine speed. At slow speed the patterns will be shorter than at moderate or fast speed.



A - Sew a few stitches at 4 width, then quickly move lever back to 0 for a short period. Count, if necessary, to establish a rhythm.



B - Set width locks at $2\frac{1}{2}$ and 5 then move lever slowly between setting, operating machine rather fast.



C - Set width locks at 1 and 5 gradually move lever from 1 to 5, then snap it back quickly to 1.



D - Set width lock at 1 and $4\frac{1}{2}$, operate machine at moderate speed. Stitch at 1 while you count "1,2,3". Then stitch at $2\frac{1}{2}$ and $4\frac{1}{2}$ for the same count. Return to $2\frac{1}{2}$ and 1, repeat.



Fig. 27

E - Drop feed, lock stitch width at 5, take 3 or 4 stitches, leave needle in fabric left side of stitches. Pivot fabric on needle to make next daisy petal. Continue until flower design is complete. Lock threads by setting stitch width at 0 and taking 3 or 4 stitches in center of design.

TWIN NEEDLES - UPPER THREADING AND SEWING

1. Be sure zigzag needle plate and presser foot are in place.
2. Use only left needle position. Use needles White Part #80999 (see page 29).
3. Follow threading instructions for single needle with these exceptions:
 - A - Place thread, matching or contrasting in color, on both spool pins.
 - B - Pass threads under handle and through arm thread guide 3 (Fig.1) one thread per hole.
 - C - Down around tension discs with one thread passing between the back discs and the other between the front discs.
 - D - Now treat both threads as one, until you reach the needle eye.
 - E - Pass one thread through each needle eye.
4. Set right hand zigzag width stop at start of red area (left hand side). Zigzag lever in red area will break needle.
5. Straight stitching and decorative stitch designs can be produced in the same manner as followed for single threading.



Fig. 28

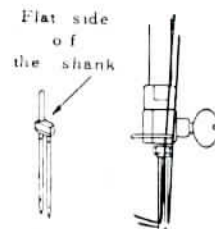


Fig. 29

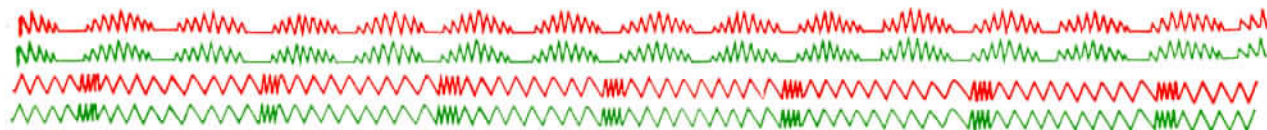


Fig. 30

BUTTONHOLES

Buttonholes of various widths and lengths can be made automatically by just turning the decorative stitch dial 4 (Fig. 31).

To establish the correct length buttonhole required, add $\frac{1}{8}$ inch to the cutting space for bar tacks.

To obtain the length of the cutting space, the opening through which the button passes is measured by adding the width (A) and thickness (B) of the button. (Fig. 33)

The width of the buttonhole sides are governed by the thickness of the material used. Set zigzag stitch width lever 14 (Fig. 1) on number 5 for thick material and a lower number for thin material.

Mark the beginning and end of the buttonhole on fabric with a basting line or tailor's chalk. Make a buttonhole on scrap fabric, following directions below to be sure machine adjustments are correct.

- (1) Replace presser foot with special purpose buttonhole foot, it provides maximum visibility and allows closely spaced stitches to feed evenly. (Fig. 32)
- (2) Set stitch length knob 9 (Fig. 1) as near 0 as possible without stopping the feeding action.
- (3) Position zigzag stitch width control lever 14 by left hand lock 13 (Fig. 1) to suit material being sewn or width of buttonhole desired. (Number 5 for the widest buttonhole)



Fig. 31

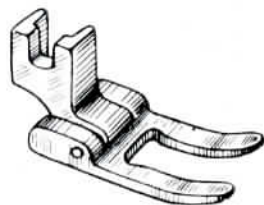


Fig. 32

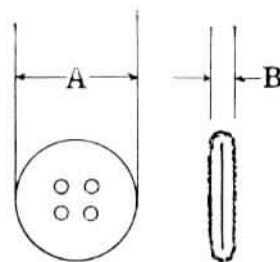


Fig. 33

- (4) Set decorative stitch dial 4 (Fig. 31) at first buttonhole setting. This will automatically set the width of the buttonhole sides.
- (5) Lower needle carefully into the mark on the fabric, indicating the start of the buttonhole. Lower presser foot and sew full length of right-hand side of buttonhole. Fig. 35 STEP 1
- (6) Set decorative stitch dial 4 at bar tack setting STEP 2. Sew four or five stitches.
- (7) Set decorative stitch dial 4 for left-hand side of buttonhole. This will automatically set the machine to sew in reverse. Sew left-hand side of buttonhole. STEP 3
- (8) Set decorative stitch dial 4 at bar tack setting STEP 4. Sew four or five stitches.
- (9) Return stitch width lever 14 to 0 and take two or three stitches to fasten bar tack threads and prevent ravelling.
- (10) Cut the buttonhole opening with seam ripper, being careful not to cut the stitching.

Although buttonholes can be made with most any thread, size 50 mercerized is recommended for best results.

If you plan to make buttonholes on sheer or soft material, place tarlatan or paper under fabric which can be torn away after stitching.

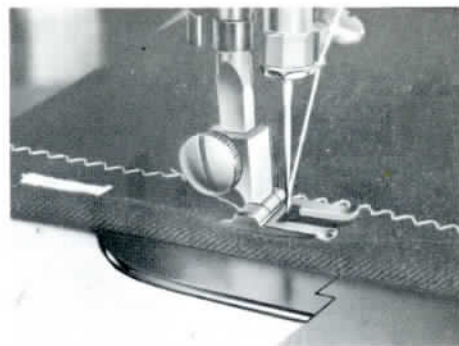


Fig. 34

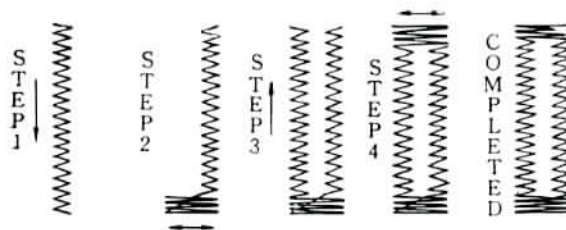


Fig. 35

SEWING ON BUTTONS

1. Remove hinged presser foot and attach button sewing foot. (Fig. 36)
2. Turn drop feed knob to Down position. (Fig. 40).
3. Set zigzag stitch width lever at 0. Place the button so its left-hand hole comes directly under the needle, then gently lower the presser foot. (Fig. 37)
4. Move zigzag stitch width lever to the right until the needle comes down exactly over the right-hand hole in the button. (Fig. 38)
5. Move left-hand zigzag stitch width lever stop to hold lever in place. Turn the hand wheel slowly by hand to be sure the needle enters both holes in button without deflecting needle. Correct width if necessary.
6. When needle goes into the center of each hole, run the machine at medium speed, making six or eight stitches, stopping with the needle in the left hole.
7. To lock the zigzag stitch and prevent ravelling, set the stitch width at 0, and take a few stitches in the same hole. If you wish, you may place a rounded toothpick over the button, between the two holes, and sew button to fabric in regular way. Remove the toothpick and wind thread under the button, forming a shank, fasten.

Apply the above method to sew on buttons with four holes, hooks and snaps, etc. If a four hole button is to be sewn, follow the same procedure above for the two hole button. Now lift presser foot slightly and move fabric to permit stitching the remaining two holes.



Fig. 36



Fig. 37



Fig. 38

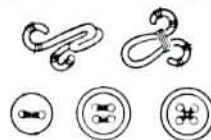


Fig. 39



Fig. 40

BLIND STITCH HEM

Use standard zigzag foot. (Fig. 41)

Set stitch length control at Number three or four. (2)

Set decorative stitch dial at blind hem position

Set zigzag stitch width lever to suit material being sewn and hold in place with left lock. The lower the number, the smaller the sidewise stitch. (1/4)

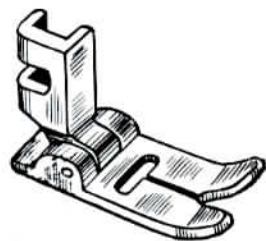


Fig. 41

Number 1



Number 5

Blind stitch hems provide a durable hem finish that is almost invisible and comparable to hand sewing.

Prepare the garment in the same manner as for hand hemming.



Fig. 42

Step 1. If hem with folded edge is used, make first fold $\frac{3}{8}$ " deep.

Step 2. Turn hem the depth desired and baste $\frac{1}{4}$ " from upper edge. Press into place.

Step 3. Fold hem back toward right side of garment leaving $\frac{1}{4}$ " extended.

Step 4. Place garment under presser foot and sew blind hem automatically.

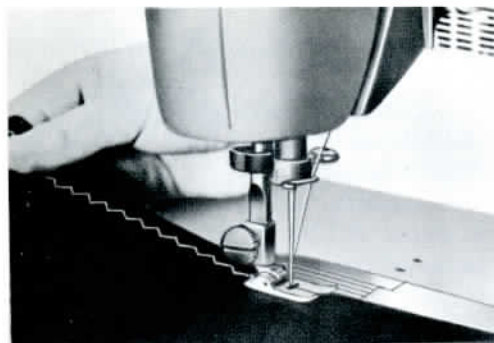


Fig. 43

ELASTIC ZIGZAG STITCH

Use the elastic zigzag stitch when applying elastic waist bands to skirts and dresses. Be sure to stretch the elastic as it is applied, to insure fullness, or when sewing on jersey or any material that has a tendency to stretch (Fig. 43).

EMBROIDERING WITH A HOOP

It is easy to follow a stamped design or to work free hand when embroidering or monogramming. (See Fig. 44) Release the pressure from the foot by pressing down the snap lock on the automatic darning. Turn the drop feed knob to "DOWN" position. Stretch the fabric in an embroidery hoop and place under the needle after removing the presser foot. Set the stitch width at the size you prefer and lower the presser bar lifter. Then operate machine at a rather high speed while moving the hoop slowly with both hands. Work carefully and be sure to keep fingers out of the path of the needle.



Fig. 44

HOW TO USE ACCESSORIES

QUILTING GUIDE

Use this guide for making parallel rows of straight or decorative stitching. Attach standard presser foot. Slip U shaped holder on guide under presser foot thumb screw from the back and tighten screw (Fig. 45). Adjust the curved bar for the distance desired between rows of stitches and set so it presses slightly on the fabric. By letting the guide ride on the previous stitching line, successive rows will be an equal distance apart. Fig. 48

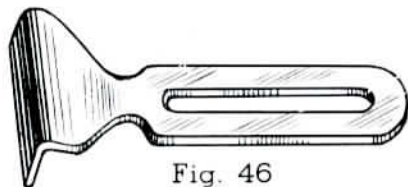


Fig. 46



Fig. 47



Fig. 49

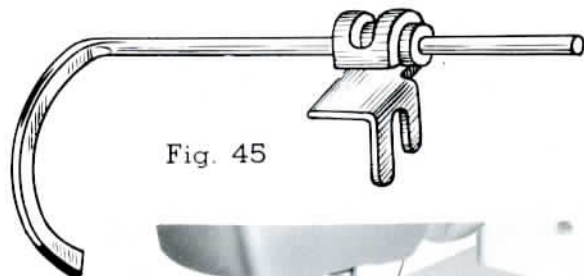


Fig. 45

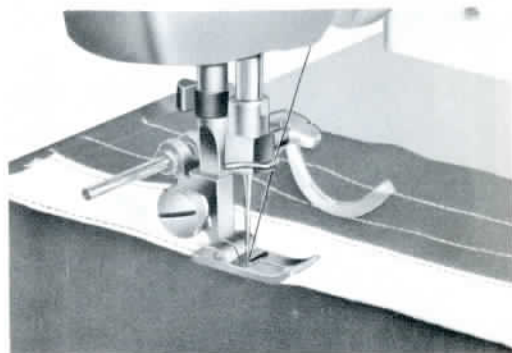


Fig. 48

SEAM GAUGE OR CLOTH GUIDE

Use the seam gauge as a guide for straight seams and even rows of top stitching along edge of fabric. (Fig. 49)

Fasten Gauge (Fig. 46) with accompanying screw (Fig. 47) in threaded hole in bed of machine. Adjust to desired width.

NARROW HEMMER

Narrow Hemmer: With needle at its highest position replace regular presser foot with narrow hemmer (Fig. 50) being sure to tighten it securely in place. Set decorative stitch dial at manual position, zigzag stitch width lever at 0 for straight stitched hem or at number 3 for zigzag stitched hem. Set stitch length control to suit.



Fig. 50

For a plain narrow hem make a $1/8$ inch double fold for about two inches along edge of fabric. Hold each end of the two inch fold, slip underneath hemmer. Bring fold up into the scroll of hemmer, draw fabric forward to end and fasten with point of needle. Lower presser bar lifter. Gently pull end of thread as you start stitching. (Fig. 51 for straight stitched hem-Fig. 52 for zigzag stitched hem.)

Guide material slightly to left and it will automatically take a double turn through scroll.

The narrow hem provides an excellent finish for edges of ruffles or any other dainty work.

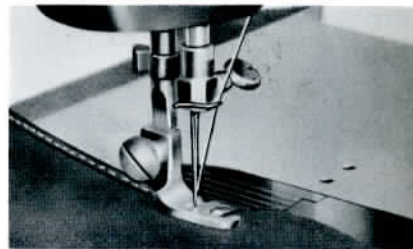


Fig. 51



Fig. 52

LACE TRIMMED HEM

To sew a narrow hem and attach lace in one stitching, insert lace in the slot next to needle (Fig. 53) sew hem as above guiding lace under needle and hem into scroll. Rick-rack may be used in the same way.

LACE EDGE WITH INVISIBLE STITCHING

Hold lace 1/8 inch from raw edge on right hand side of fabric insert both in scroll as for plain narrow hem (Fig. 54) let hem roll over and sew in lace. When the stitching is completed the hem is pressed to the wrong side.

FRENCH SEAM

Place material with right sides facing each other and the top piece of material 1/8 inch from right hand edge of lower piece. Insert in hemmer scroll allowing hem to roll over and sew in top fabric making French seam. For cording effect, use zigzag stitch wide enough to catch both edges of the narrow rolled hem and sew with satin stitch. This can be used for covering chairs and so forth. Fig. 55

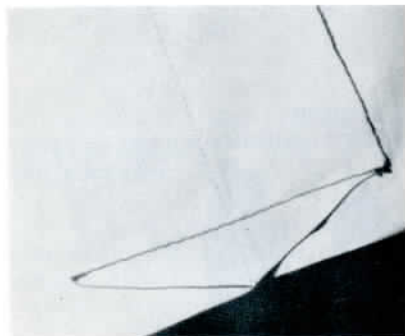


Fig. 56

HEMMING ACROSS A SEAM

To hem across a seam, cut the seam folds at an angle so they will lead into the hemmer gradually. Press seam open. Stitch across the seam at the extreme edge to hold it together and for added firmness. It may be necessary to pull the material slightly when hemming over the seam. (Fig. 56)



Fig. 53



Fig. 54



Fig. 55

CARE AND MAINTENANCE OF YOUR MACHINE

CLEANING AND OILING THE SHUTTLE

The stitch forming mechanism occasionally becomes clogged with loose threads and lint. This will interfere with the efficient operation of the machine. Cleaning should be done with a small brush, never with a sharp or pointed tool. To remove the stitch forming mechanism, proceed as follows:

1. Turn hand wheel until the needle reaches its highest position. The mechanism will assume the position illustrated in Fig. 57. Tilt head back on its hinges.
2. Remove bobbin case E.
3. Turn the two shuttle race cover clamps C outward and remove the shuttle race cover B and shuttle A.
4. Clean the shuttle race, shuttle and shuttle race cover by removing all threads, lint, etc.
5. Apply a drop of oil with finger tip to outer edge of shuttle.

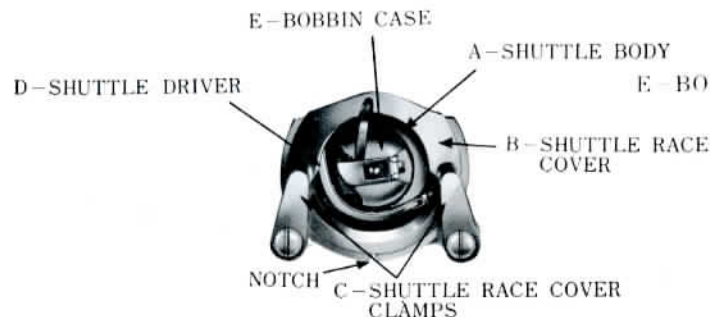


Fig. 57

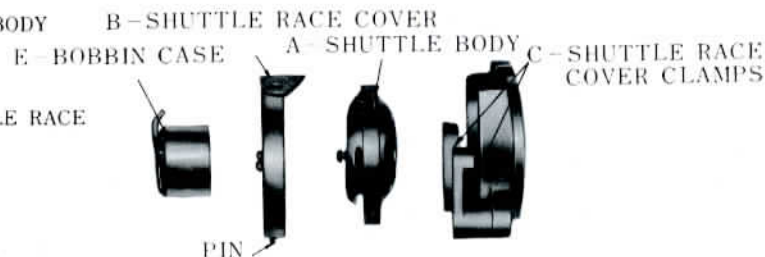


Fig. 58

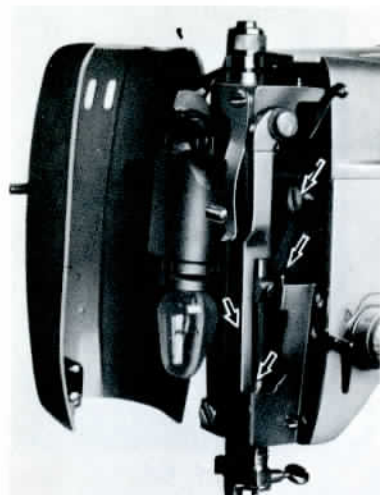


Fig. 59

HOW TO OIL YOUR MACHINE

Your machine should be oiled occasionally to keep it operating smoothly - how often depends on the amount of sewing you do. Oil the upper part of the sewing unit at points indicated by arrows in Fig. 60

Avoid over-oiling, only a drop is needed at each point.

Occasionally remove the top cover by removing screws and oil moving parts not accessible through oil holes. (Fig. 61)

To oil moving parts inside the face plate, which only rarely require oiling, OPEN plate. Oil at spots indicated in Fig. 59

Use gear lubricant on gears indicated by white arrows in Figs. 62. Lubricate only when machine seems to sew more slowly than usual.

HOW TO REPLACE THE LIGHT BULB

Open Face Fig. 59 unscrew bulb and insert new one. For long life and correct size, be sure it is a genuine White part. NUMBER 6999



Fig. 60

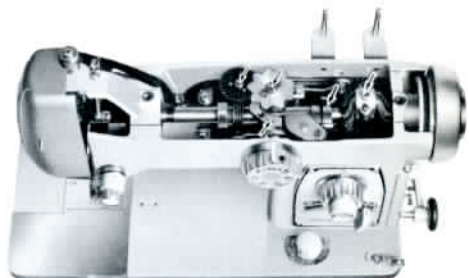


Fig. 61

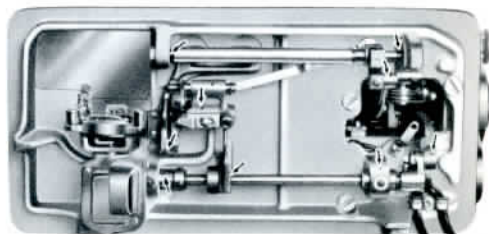


Fig. 62

HOW TO CHANGE THE BELT

If it should ever become necessary to replace the belt on your machine, proceed as follows:

- (1) Remove screws A (Fig. 63).
- (2) Remove rear cover.
- (3) Remove clutch nut B in center of hand wheel (Fig. 63) by taking out small screw C. Turn nut counter-clockwise by holding the take-up lever until it can be lifted off.
- (4) Before moving hand wheel, note position of lips on washer D (Fig. 64) as it will fall off when changing the belt.
- (5) Slide old belt over motor pulley E (Fig. 64).
- (6) Pull hand wheel away from machine just far enough to allow the belt to slip over wheel.
- (7) Put new belt in grooved section of hand wheel and then over motor pulley.
- (8) Replace washer D in original position.
- (9) Replace clutch nut and screw C. After doing this, turn clutch toward you to disengage sewing mechanism. If the needle still moves up and down as you turn the hand wheel, again remove the clutch nut, give washer D a half turn and replace the nut.
- (10) Replace rear cover.

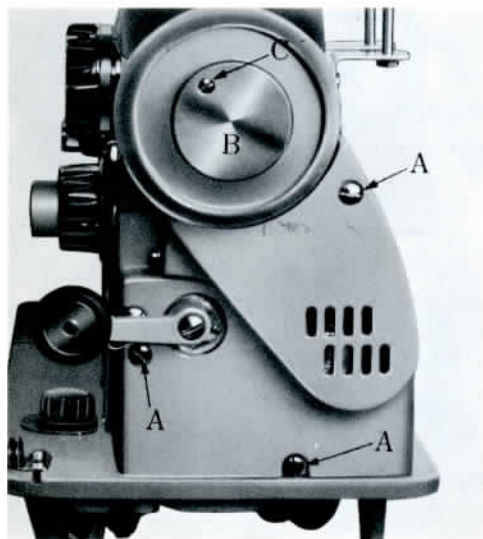


Fig. 63

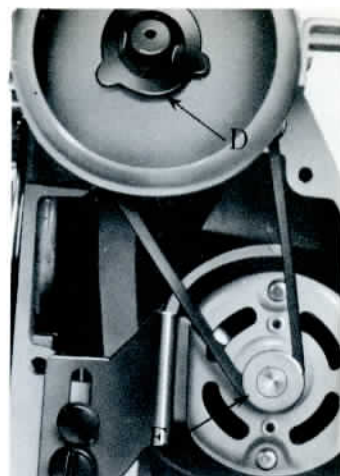


Fig. 64

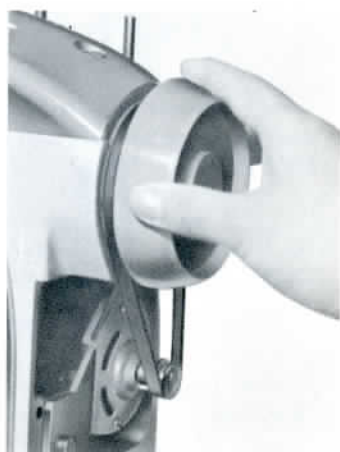


Fig. 65

ACCESSORIES

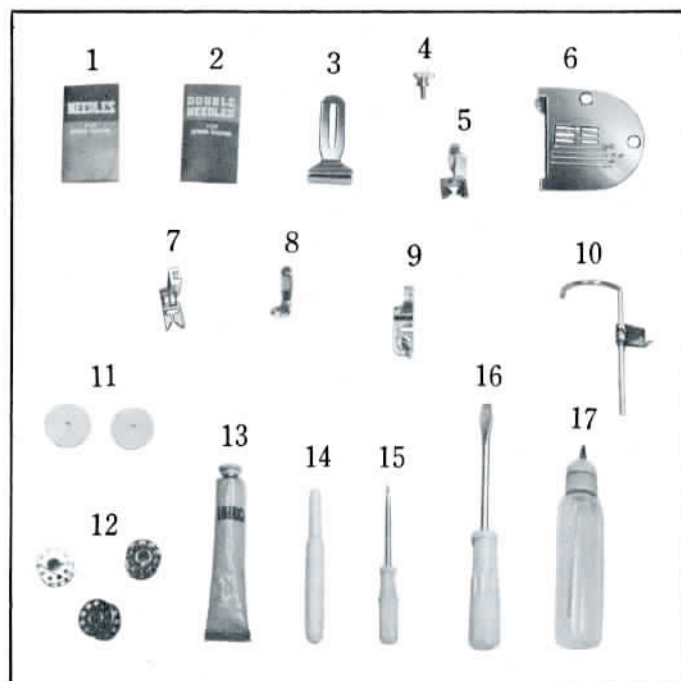
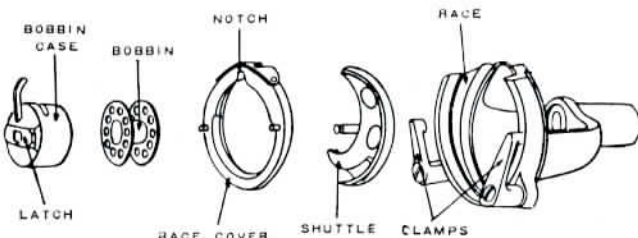


Fig. 66

1. Package of Needles
2. Package of Twin Needles
3. Cloth Guide Fig. 46
4. Thumb Screw Fig. 47
5. Button Hole Foot Fig. 32
6. Needle Plate for Straight Sewing
7. Presser Foot for Straight Sewing
8. Button Sewing Foot Fig. 34
9. Small Hemmer Foot Fig. 50
10. Quilter Guide Fig. 45
11. Felt Washers (for spool pins)
12. Bobbins
13. Gear Lubricant
14. Button Hole Cutter
15. Small Screw Driver
16. Large Screw Driver
17. Plastic Oiler

TROUBLE CHART

Trouble	Probable Cause	Correction
If machines binds	Thread or lint in race way	<p>1.- With take-up lever in highest position, tilt head back on hinges and remove bobbin case.</p>  <p>2.- Turn clamps outward and remove race cover.</p> <p>3.- Remove hook.</p> <p>4.- Clean thread and lint from all parts, including race.</p> <p>5.- Run a drop of oil along rim of hook.</p> <p>6.- Replace hook, then race cover. Snap clamps into place.</p> <p>7.- Grasp threaded bobbin case by latch and replace, fitting tongue into notch of race cover.</p>

Trouble	Probable Cause	Correction
Skipping stitches	Bent needle	Discard and replace.
	Needle placed incorrectly in clamp	See instruction page No. 6.
	Too fine a needle for thread being used	See needle and thread chart, page No. 5.
Irregular stitches	Upper thread tension too loose	Tighten upper tension.
	Improper threading	See threading instruction, page No. 8. and 9.
	Bobbin not wound even	Rewind bobbin.
Uneven stitches	Pulling or holding material	Avoid pulling or holding material, just guide it.
	Not enough tension on upper thread	Increase tension.
	Poor quality thread	Try different thread.
	Needle too fine for thread being used	See needle and thread chart, page No. 5.

Trouble	Probable Cause	Correction
Upper thread breaking	Improperly threaded	Refer to threading instructions see page No. 8. 9. and rethread machine.
	Too much tension	Loosen tension on upper thread by turning thread tension knob to lower number.
	Starting with take up in incorrect position	Always start sewing with take up lever in highest position.
	Improper setting of needle	Refer to needle setting instructions see page No. 6.
	Eye of needle too sharp	Try a new needle.
	Bent or blunt needle	Discard all blunt or bent needles and replace with new.
Material puckering	Tensions too tight	See tensions adjustment page No. 12.
	Dull needle	Change needle.
	Stitch length too long	Reduce stitch length.

Your sewing machine comes equipped with the basic set of accessories described earlier in this book.

The following pages illustrate additional time saving attachments that have been designed specifically for your machine. They are available at modest cost from your dealer. If your dealer cannot supply you with these items, ask him to order them for you by part number. Then you will be assured of receiving the genuine part designed for best performance with your machine.

If a sewing machine dealer is not available, mail your inquiry directly to:

WHITE SEWING MACHINES
SERVICE DIVISION
ELM AND WASHINGTON STREETS
CLEVELAND 13, OHIO

In Canada :

WHITE SEWING MACHINES
111 BERMONDSEY ROAD
TORONTO 16, ONTARIO, CANADA

SOME OF THE ATTACHMENTS AVAILABLE FOR YOUR MACHINE



PART #1403
Ruffler



PART #4990
Darning Spring



PART #1873
Cording & Zipper Foot



PART #82528
Attachment Foot



PART #74159
Binder



PART #76554
Edgestitcher



PART #76553
 $\frac{7}{8}$



PART #76552
 $\frac{5}{8}$

Hemmers



PART #76551
 $\frac{3}{8}$



PART #76550
 $\frac{1}{4}$

Fig. 67



Fig. 68

ATTACHMENT FOOT

In order to attach the binder, edgestitcher and the hemmers, it is necessary to remove the presser foot and replace it with the attachment foot. Fig 68

Mount binder, edgestitcher or hemmers, sliding the attachment to the left as far as possible and tighten screw.

The mounting slot enables you to sew as close to or as far away from the edge as desired. Just move the attachment to the correct position before tightening the mounting screw.

EDGESEITCHER

The edgestitcher is used in making dainty lace insertions, edgings and piping.

The slots in the edgestitcher serve as guides in sewing together various pieces of material. If you want to sew lace, lace and embroidery, or lace and tucked strips together, place the piece of material that will be on top in slot 1 (Fig. 69) and the lower fabric in slot 4. For instance, if you are sewing lace edging to a finished edge of fabric place the fabric in slot 1 and the lace in slot 4 Fig. 70

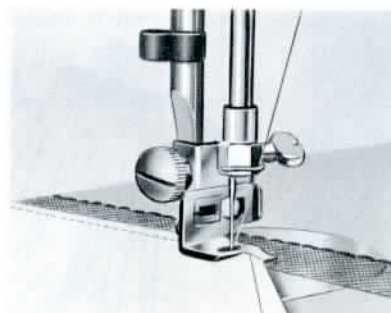


Fig. 69

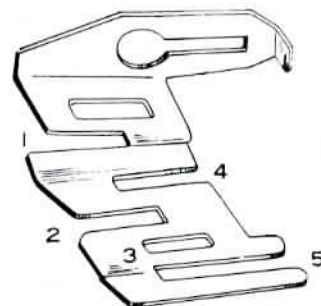


Fig. 70

Be sure to draw the lace and material under the needle and back of the edgestitcher so that the feed will carry it backward as you stitch. Hold the fabric in the left hand the lace in the right, being sure the fabric overlaps the lace slightly.

Rick Rack can be sewn to the edge of the material in the same manner.

To trim with wide piping, place the fabric in slot 4, and the fold of the piping to the left in slot 3, for a narrow piping place fabric in slot 2 and the folded edge of the piping to the right in slot 3.

Slot 5 may be used as a guide in stitching a French seam.

See Fig. 71, 72, 73 and 74 for suggestions on how to use the edgestitcher. There are hundreds of other uses.

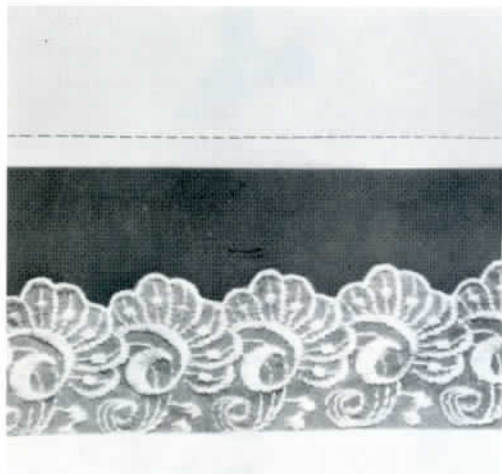


Fig. 71



Fig. 72



Fig. 73

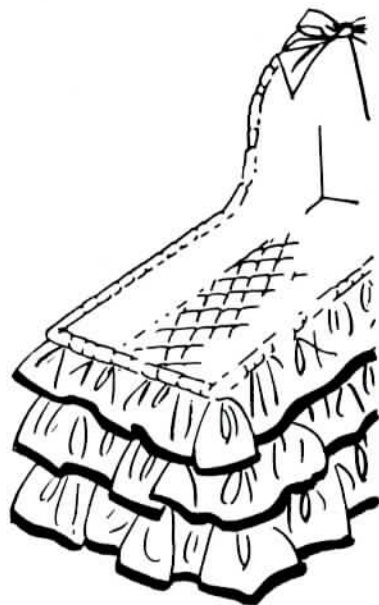


Fig. 74

B I N D E R

This attachment folds bias binding, applies it to the edge of material in one operation. Slots on scroll of the binder are for corresponding widths of commercial folded bias binding.

The open mouth of binder scroll is used for unfolded bias strips cut 15/16 inch wide.

FOLDED BINDING (Fig. 77)

Cut a point on folded binding, insert in appropriate slot. Draw through slot and under binder with strong pin. Test stitching to be sure it is on the edge. Adjust by sliding binder to right or left.

TWO-TONE BINDING (Fig. 78)

Two bindings can be sewn on fabric edge also in one operation. When two are used, always skip one size between widths, inserting each in correct size slot.

HAND-CUT BIAS BINDING (Fig. 77)

Cut 15/16 inch bias binding fold in half for a couple of inches. Cut binding diagonally toward end, almost to fold. Slip fold into center of binder. Draw back until cut opens and binding encircles open end of scroll. Test stitching to be sure it is on the edge adjust if necessary.

See Fig. 75 and 76 for suggestions on how to use the binder. There are hundreds of other uses.



Fig. 75



Fig. 76



Fig. 77



Fig. 78

THE SET OF HEMMERS

Before attaching any of the hemmers. Be sure bobbin thread is pulled up. Then, with hemmer in place, hold top thread loosely and turn handwheel one full turn toward you, making a loop under hemmer. Grasp bobbin thread with both hands and slip horizontally under hemmer toward back. Bobbin thread will catch loop and carry upper thread to back of hemmer.

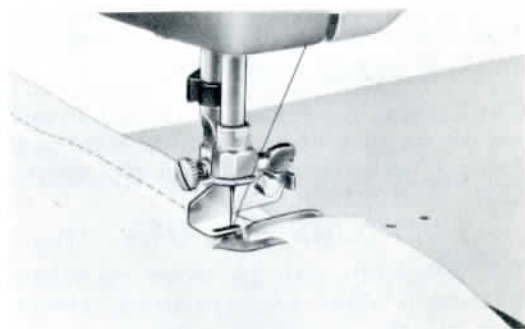


Fig. 79

Fold material to suit for two inches along edge, hold at each end of fold. Slip fold into guide and up over spoon (Fig. 79). Fold hem in material back of hemmer. Draw forward to end of hem and fasten with point of needle. Pull on threads gently as you start stitching.

H E M M E R S E T

You can make a hem $1/4''$, $3/8''$, $5/8''$, or $7/8''$ in width, depending upon which hemmer you use. For a few of the many uses see Fig. 80, 81, 82, 83, 84 and 85.

H E M M E R S E T

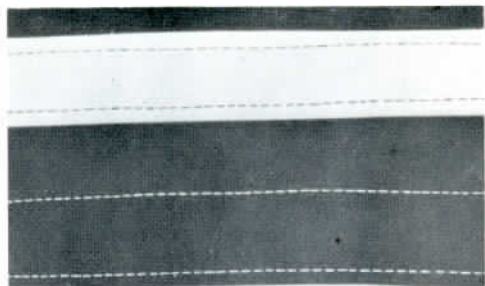


Fig. 80

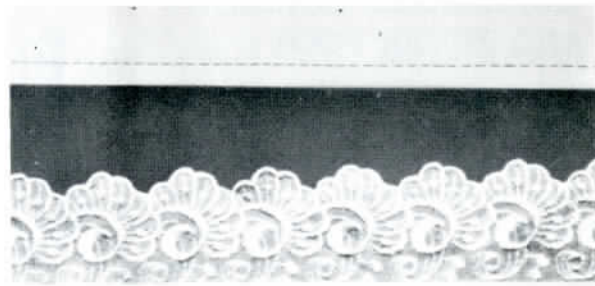


Fig. 81

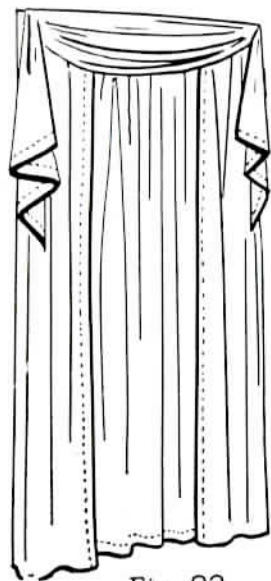


Fig. 82

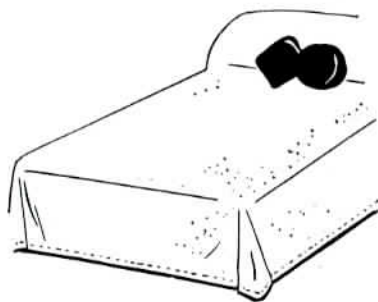


Fig. 83

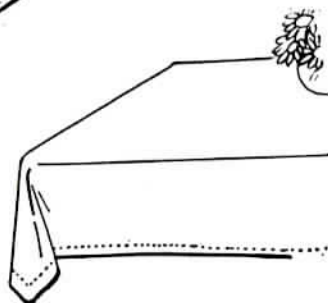


Fig. 84



Fig. 85

THE ADJUSTABLE CORDING AND ZIPPER FOOT

This attachment is used to make and insert covered cording, and to sew in zippers. Loosen thumb screw to slide foot to either right or left of needle.

CORDING. Fold bias strip of fabric over cord. Loosen thumb screw and set foot so needle is centered in needle hole. Machine baste cord in place (Fig. 86~87).

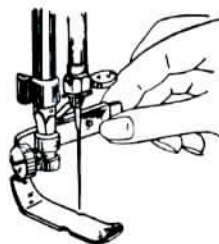


Fig. 86

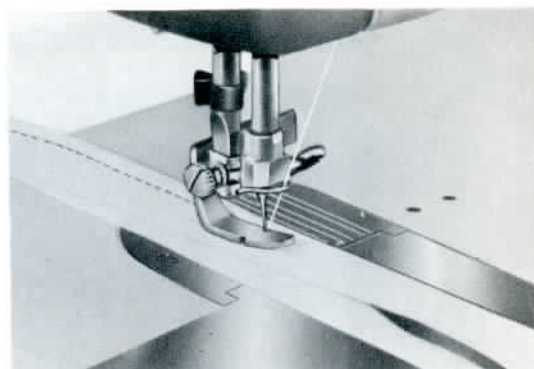


Fig. 87

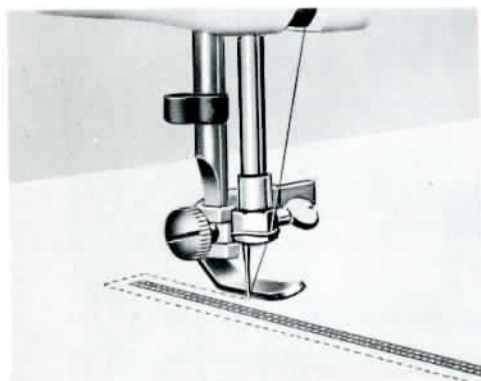


Fig. 88

To sew covered cord to material, reset adjustable foot so needle stitches closer to cord, and on edge of base fabric.

SEWING IN ZIPPER

Loosen thumb screw and slide foot so needle enters center of needle hole. Guide metal of zipper along edge of foot (Fig. 88). Stitching should be close to zipper to allow easy opening and closing. Adjust to sew from either right or left side, whichever is more convenient.

ADJUSTABLE CORDING AND ZIPPER FOOT

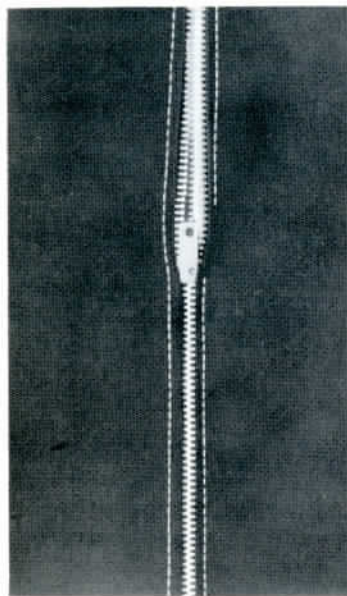


Fig. 89

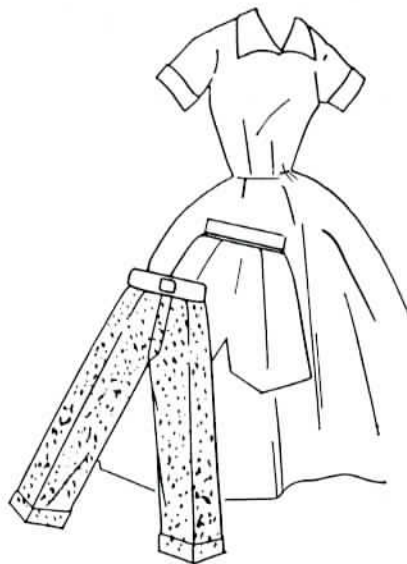


Fig. 90

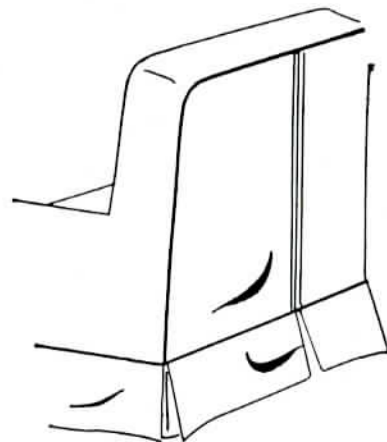


Fig. 91

R U F F L E R

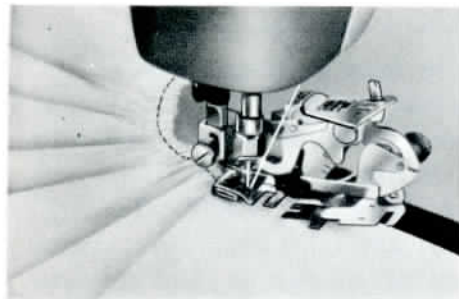


Fig. 92

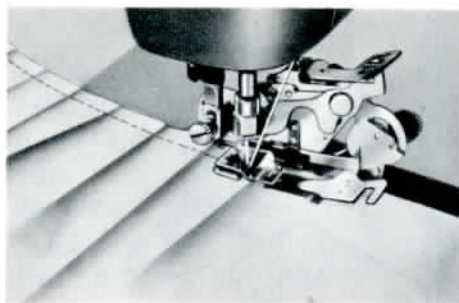


Fig. 93

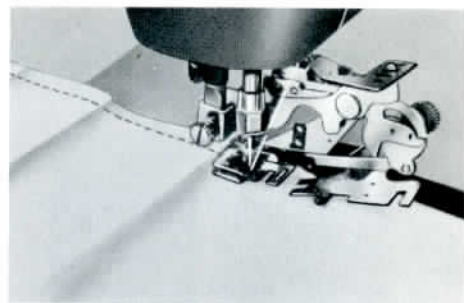


Fig. 94

The ruffler will produce yards of delicate ruffling or precision pleating. Ruffling can also be done and sewn to another piece of fabric at the same time. This highly versatile attachment despite its wide range of use, is simple to use. Use the ruffler for making aprons, curtains, pleating a skirt, adding fullness to the bodice of a dress and etc.



Fig. 92-A

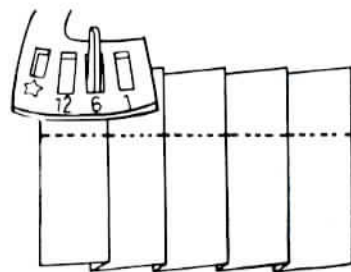


Fig. 93-A

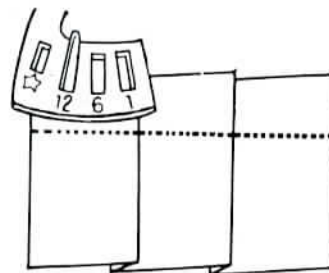


Fig. 94-A

RUFFLER

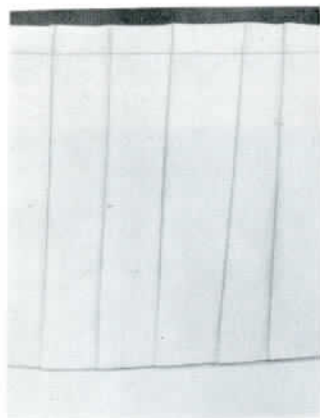


Fig. 95

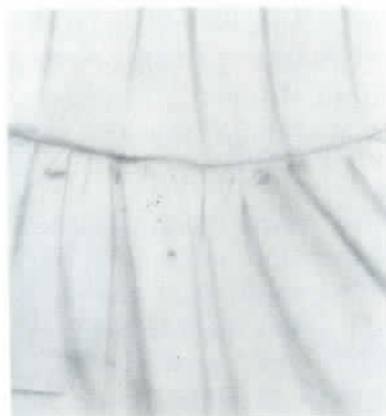


Fig. 96



Fig. 97



Fig. 98

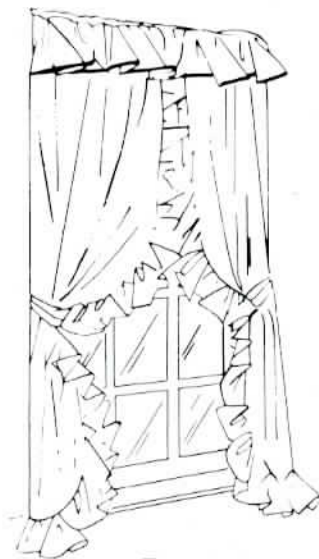


Fig. 99

SEWING TIPS

When a dainty hair-line finish is particularly desirable for the inside seams of sheer collars, facings, and yokes, seam allowance that would ordinarily show through is eliminated by following the seam outline with a narrow zigzag stitch.

Trim seam allowance close to line of stitching. Turn and press.

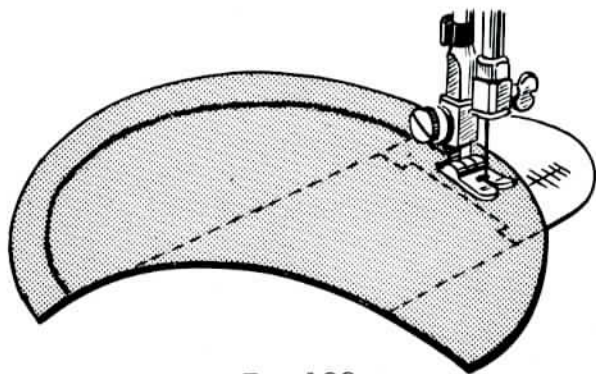


Fig. 100

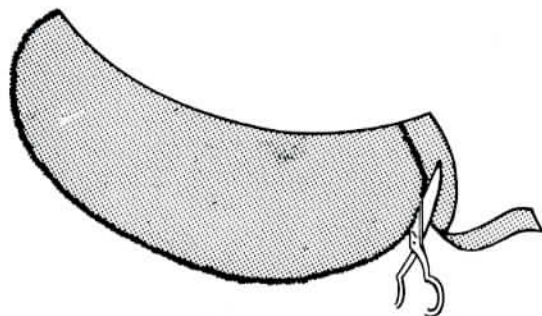


Fig. 101

EVENLY SPACED BUTTONHOLES

To make a row of buttonholes evenly spaced and accurately stitched, draw the outlines for the buttonholes on one long strip of tissue paper. Pin this pattern to position on the garment with fabric strips under each marking. Stitch around the outlines then tear paper away. Finish buttonholes as explained for plain bound buttonholes.

OVERCASTING WORN EDGES

Zigzag stitch along the worn edges, catching the fabric as the needle swings to the left, and allowing the needle to just pass over the edge of the fabric on the right. Fig. 102

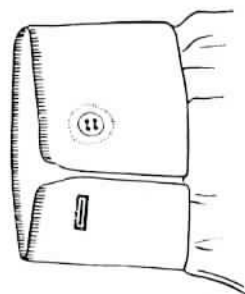


Fig. 102

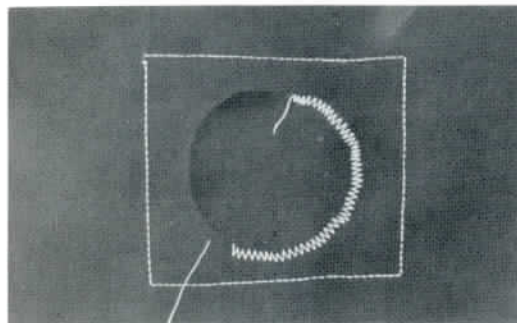


Fig. 103

PATCHING

Machine baste patch into place under hole or worn area which has been cut away. Then zigzag stitch the patch into place by overcasting around edge of hole. Fig. 103

STRAIGHT OR THREE CORNERED TEAR

Zigzag stitch along a straight tear catching fabric on left and right side of tear by swing of needle. Be sure your tensions are not too tight or puckering will be encountered.

In mending a three cornered tear, zigzag stitch from each end to center. Fig. 104

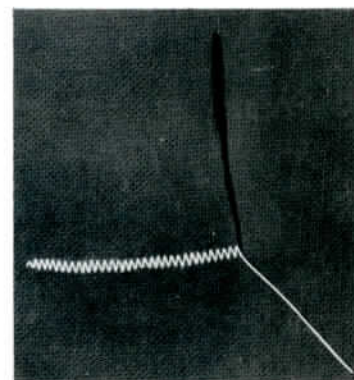


Fig. 104

BLIND STITCHED ZIPPER INSERTION

Blind stitching the final step of a zipper 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 zipper 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 zipper foot to the right side of the needle.

Turn garment inside out. Place zipper 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 zipper tape, and the sideward stitch pierces a few threads of the fold. Lower presser bar and stitch slowly. Remove bastings. Press.

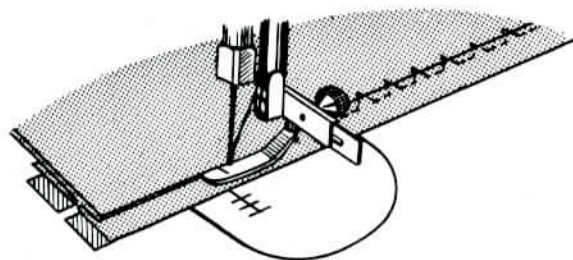


Fig. 105

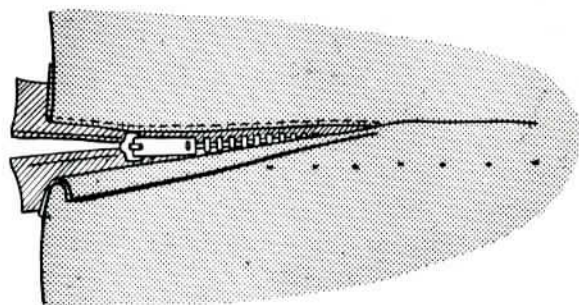


Fig. 106

SHAPING DARTS IN INTERFACINGS

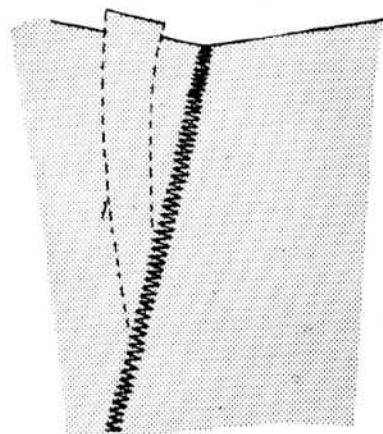


Fig. 107

3
1/2
Center



Cut interfacing down center between dart lines. Overlap cut edges, matching dart lines. Zigzag stitch along marking line from point to wide end of dart. Trim both raw edges close to stitching.

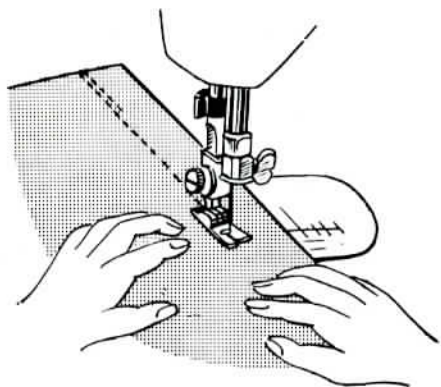


Fig. 108

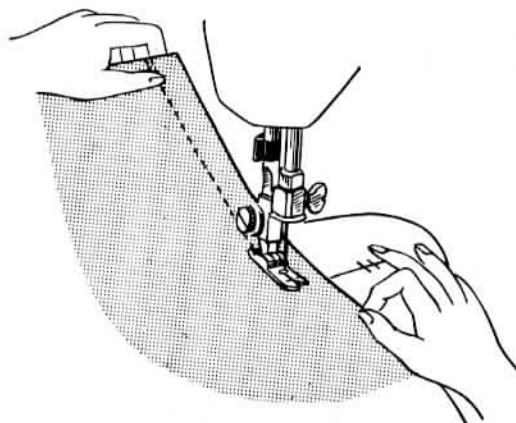


Fig. 109

SEWING ON SHEER MATERIALS

Most fabrics need to be guided only in front of the presser foot as shown at left. Many filmy sheers, crepes, knits, tricots, etc., require support while being stitched. For such fabric use the straight stitch needle plate and presser foot and apply gentle tension by holding seam in front and back of the presser foot as shown at right.

PLAIN BOUND BUTTONHOLE

Cut straight or bias strips of fabric 2" wide and 1" longer than the desired buttonholes. Place right sides together over positions for buttonholes. Mark exact length of each buttonhole in center of each strip; place a pin through center of the marking. Begin to stitch at the pin; marking an oblong box $\frac{1}{8}$ " above and below the line; $\frac{1}{4}$ " across each end. Run a few stitches beyond starting point to reinforce, View 1.

Slash through the center line of the box to within $\frac{1}{4}$ " of each end, then diagonally into each corner, View 2. Turn the strip through the opening, press seams flat across the ends so the facing will not be visible from the right side. Fold the strip to meet in the center of the opening. Baste the folds together across the opening, View 3.

Turn garment back at each end and stitch across the strip, securing the triangular slashed section to the pleated strip and press, View 4. Bring facing of garment to position and baste around each buttonhole. Insert the point of a pin through each corner and slash through the center and into each corner pin. Turn under the raw edges and slipstitch the facing to the underside of the buttonhole, View 5. Press the finished buttonhole, View 6.

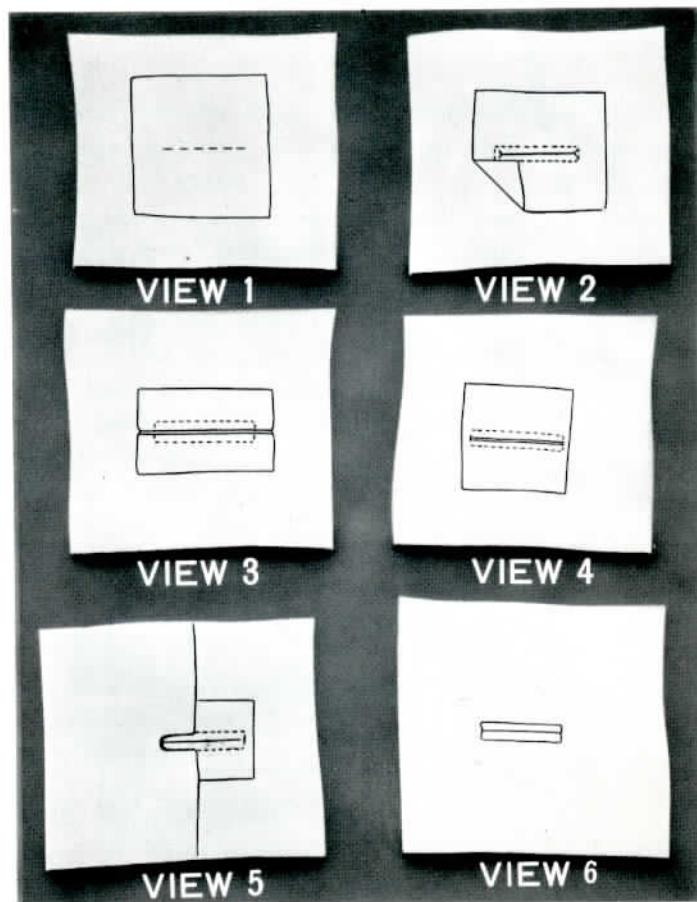
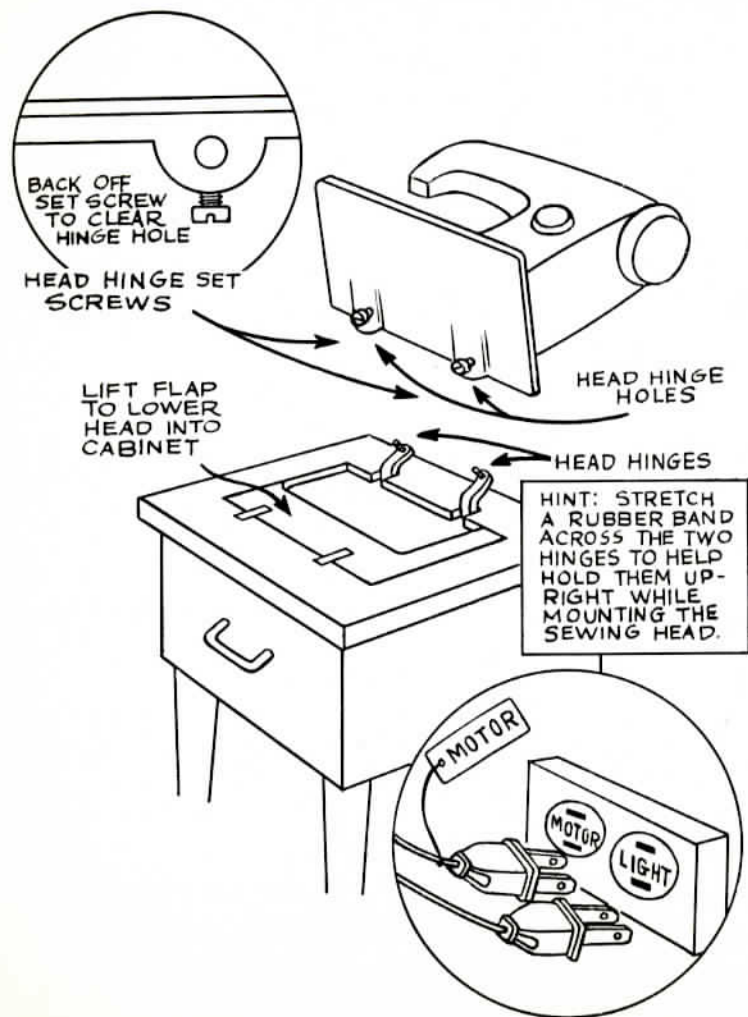


Fig. 110

INSTALLING SEWING HEAD IN CABINET



1. Back off both head hinge set screws until head hinge hole is clear.
2. Tilt head hinge tongues up and back as far as they will go.
3. Carefully slip head onto head hinges -- making sure tongues are inserted as far as they can go into head hinge holes.
4. Allow the head to rest in its tilted-back position.
5. Tighten both set screws securely with screw driver.
6. Plug electrical leads into sockets located inside cabinet. Cord identified with "motor" tag must be plugged into socket marked "motor". Untagged cord goes to "light" socket.

FOR PORTABLE INSTALLATION

Please read these important instructions which were written to aid you in placing your new sewing machine on its portable base.

First, remove the nail which holds the foot control inside the base to avoid damage in shipping. If a small plastic clamp is fastened to the back and not to the top of the partition at one end of the base, remove it, too.

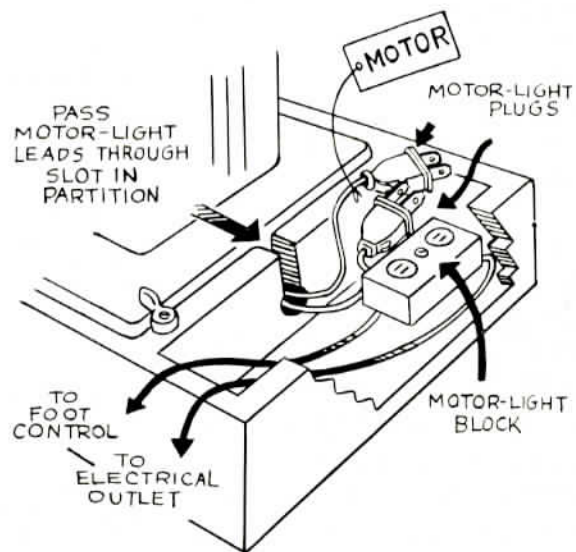
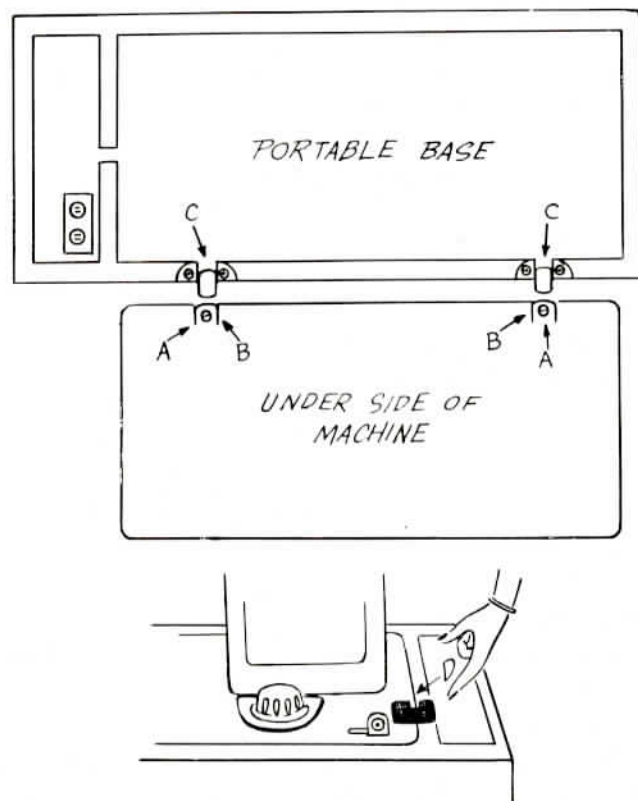
After unpacking the sewing machine unit, being certain to take out the instruction book, guarantee and accessory box, lay the unit face down on a table. You will see two clamping screws A entering head hinge holes B on the underside of the back.

On the base you will find two head hinges C which will fit into holes B. Lower the base onto the sewing machine fitting hinges C into holes B. Tighten screws A securely with a screw driver.

With machine in sewing position attach plastic clamp D to top of partition with screw provided so that it may be turned across the bed of the machine, to hold it down. (On some bases the clamp may be positioned in the proper spot).

To make the electrical connection draw the two wires through the slot in the partition of the base. Plug the cord labeled "Motor" into the receptacle marked "Motor" on the block attached to the outer section of the base. Then insert the other cord into the "Light" receptacle.

Place the foot control on the floor, insert plug into a wall outlet (110-115 volts) and you are ready to sew. But first read the instruction book to become familiar with the threading of the machine, tension adjustments and all the other features designed to make sewing a pleasure.



M E M O

Mrs Clifton Mines Pine Lake Parchment
664-4768 FI-42605

PART #88871

S. J. H. 264



TO OBTAIN THE BEST PERFORMANCE FROM
YOUR MACHINE BE SURE THE CABINET,
CARRYING CASE OR ITEMS USED WITH
YOUR MACHINE ARE GENUINE WHITE
PRODUCTS.