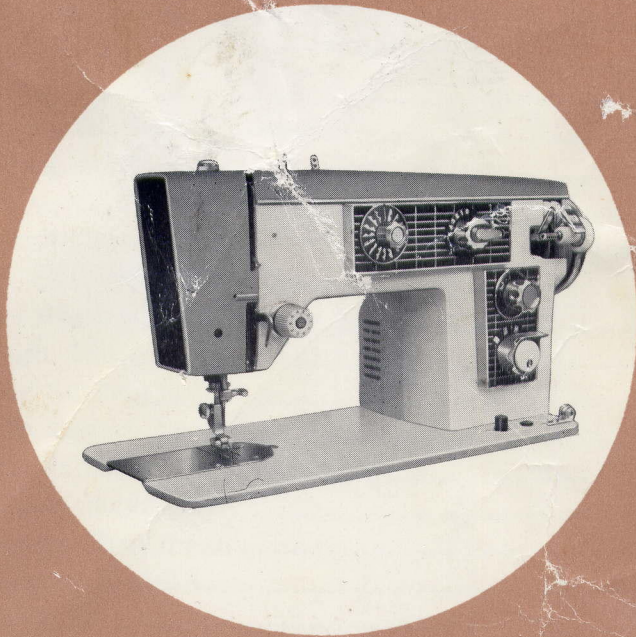


Nancy Randall

INSTRUCTIONS



MODEL 4500
DELUXE AUTOMATIC ZIGZAG

Thanks for downloading the user manual for the Imperial Deluxe Automatic ZigZag sewing machine Model 4500.

This manual was graciously donated to me by "RR", who wanted it to be available to the world in order to help others. This manual should not be sold in any form and should be given away and distributed free of charge. If you have paid ANY money for this manual then you should request a refund.

Happy Sewing

Don Tai <http://www.dontai.com/wp/>

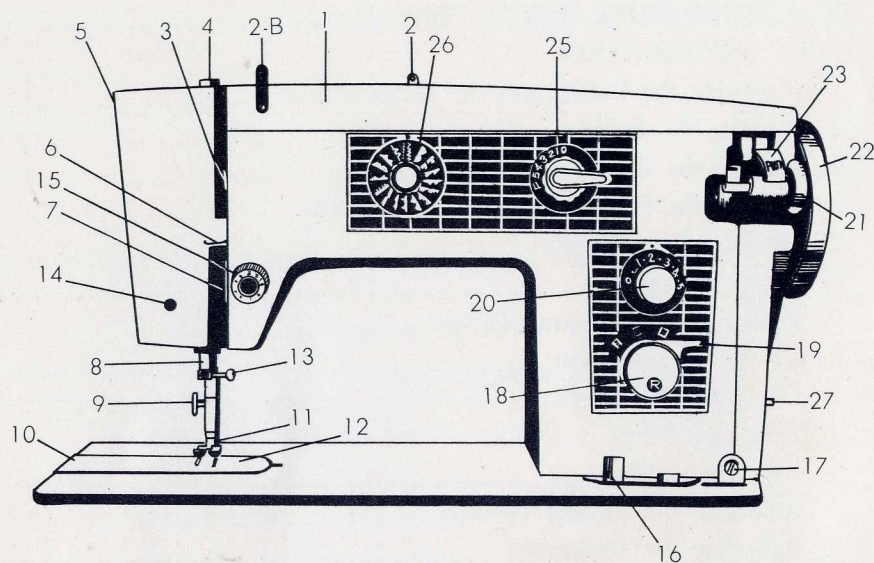
April 2015

Machine was probably made by "WHITE"
and sold as a "DRESSMAKER" ~~to~~ model in the
1960's

This model Imperial 4500 measures as
a "LONG SHANK" machine if you need to buy
Accessories. It measures 1" from power foot down on machine
to Holding Screw.

INDEX

NAME OF EACH PART	2
SELECTING NEEDLE AND THREAD	3
BASIC INFORMATION	
1. Removing the Bobbin and the Bobbin-Case.....	4
2. Winding the Bobbin	5
3. Placing the Bobbin in the Bobbin-Case	6
4. Placing the Bobbin-Case into the Shuttle	7
5. Inserting New Needle	8
6. Upper Threading.....	9
7. Drawing up the Lower Thread	10
8. Electrical Equipment.....	11
9. Oiling and Cleaning.....	12
ACTUAL SEWING	
1. Starting to Sew.....	13
2. Adjusting the Thread Tension.....	14
3. Adjusting the Pressure.....	16
4. Changing the Presser-Foot.....	17
5. Three Positions of Drop-Feed.....	18
ACTUAL SEWING WORK	
1. Stitch Regulating and Reverse Stitch	19
2. Straight Stitching	20
3. Zigzag Stitching.....	21
4. Needle Position Lever	22
5. Automatic Design Selecting.....	23
6. Automatic Buttonholer	24
7. Automatic Blind Stitch	27
8. Sewing on Buttons.....	28
9. Cloth Guide	29
10. Quilting Guide	30
11. Cording Foot	31
12. Hemmer.....	32
13. Binder	33
14. Adjustable Zipper and Cording Foot.....	35
Helpful Hints	36



NAME OF EACH PART

- | | |
|----------------------------|--------------------------------|
| 1. Arm Cover | 14. Pilot Lamp |
| 2. Thread Guide | 15. Dial Tension Assembly |
| 2-B. Thread Guide B | 16. Drop Feed Push Button |
| 3. Thread Take Up Lever | 17. Bobbin Winder Thread Guide |
| 4. Patcho-Matic Darner | 18. Reverse Stitch Push Button |
| 5. Face Plate | 19. Button Hole Dial |
| 6. Thread Guide | 20. Stitch Regulator Dial |
| 7. Thread Retainer Bar | 21. Bobbin Winder Ring |
| 8. Needle Bar Thread Guide | 22. Hand Wheel |
| 9. Needle | 23. Automatic Bobbin Winder |
| 10. Throat Plate | 25. Zig Zag Width Control Dial |
| 11. Presser Foot | 26. Pattern Selector Dial |
| 12. Needle Plate | 27. Sewlight switch. |
| 13. Needle Clamp | |

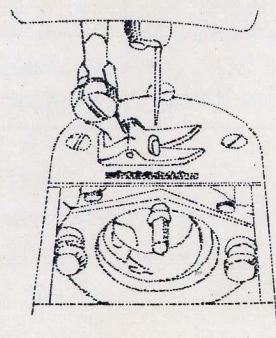
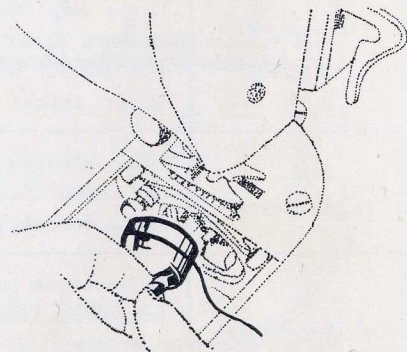
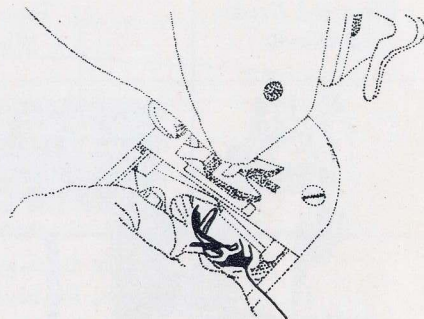
SELECTING NEEDLE AND THREAD

Sizes and Grades of Needle	Type of Fabric and Work to be Done	Size of Thread		
		Cotton	Silk	Linen
9 (Fine)	Delicate fabrics like georgette, chiffon, batiste, fine lace, linen and other sheer fabrics. For fine lingerie, infants' clothes and fine lace work.	100 to 150	00 and 000 Twist	
11 (Medium-Fine)	Medium light-weight and summer-time fabrics, for house dresses, washable cotton dresses, aprons, curtains, children's dresses.	80 to 150	0 Twist	
14 (Medium)	Dress silks and cottons, light weight woolens, draperies, fabric furnishings. For general household sewing, men's fine shirts, smocks and fabric decoration.	60 to 80	A and B Twist	
16 (Light-Heavy)	Heavy cretonne, madras, muslin, brocades, and quilts. For men's work shirts, and fabric furnishings.	40 to 50	C Twist	
18 (Medium-Heavy)	Heavy woven coating, light weight canvas, bed ticking, upholstery and awning material, slip covers.	30 to 40	D Twist	
19 (Heavy)	Heavy woven suiting, coating, duck ticking, drilling, canvas ticking.	24 to 30	E Twist	60 to 80
21 (Extra-Heavy)	For bags, canvas, coarse clothes and heavy goods.	Very Coarse		40 to 60

BASIC INFORMATION

1. REMOVING THE BOBBIN AND THE BOBBIN-CASE.

- Slide the Throat-Plate (10) to the left.
- Move the Needle to its highest point by turning the Hand-Wheel toward you.
- Lift the latch of Bobbin-Case with your left hand and remove the Bobbin-Case by pulling it toward the left and out of the machine.
- The Bobbin will drop out when the open end of the Bobbin-Case is held downward and the latch is permitted to snap back into place.



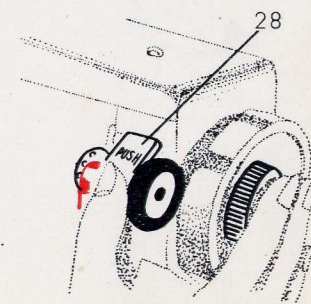
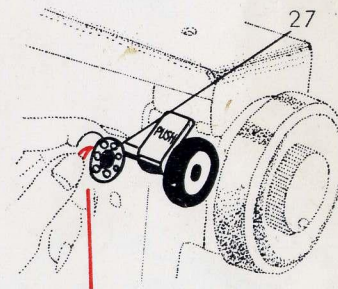
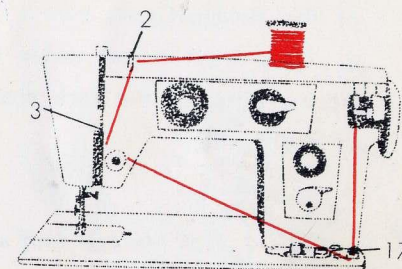
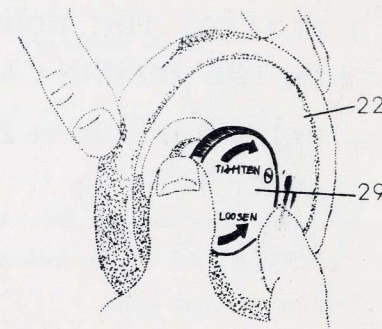
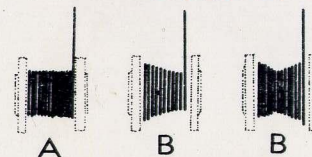
2. WINDING THE BOBBIN

- Hold the Hand-Wheel (22) with left hand, and disconnect the Hand-Wheel from sewing mechanism by turning the Stop-Motion-Knob (29) toward you with right hand.
- Place a spool of thread on the Spool-Pin.
- Pass the thread through Thread Guides (2. 3.17) and lead between the Tension Discs of the Bobbin-Winder-Thread-Guide (17).
- Wind end of thread by hand around an empty bobbin seven or eight turns.
- Then set the Bobbin on Bobbin-Winder-Shaft (27). Be sure the notch in Bobbin fits over small pin on Shaft.
- Push Bobbin-Winder-Latch (28).
- Run the machine until the Bobbin stops winding thread automatically.
- Break off thread and remove the Bobbin from the shaft.
- Holding the Hand-Wheel firmly with your left hand tighten the Stop-Motion-Knob (29) with your right hand, by turning the Knob away from you.

NOTE

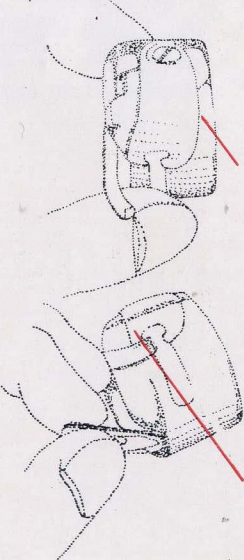
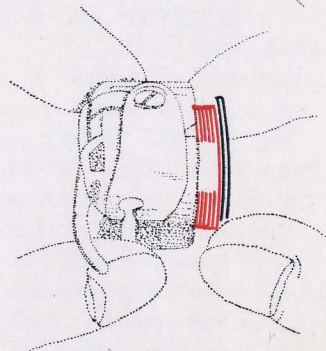
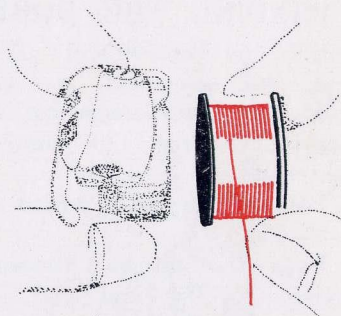
Only an evenly wound bobbin will allow the machine to sew properly. The bobbin having thread piled up on one side as pictured in Fig. 'B', should, therefore, be avoided. To correct a poor and uneven winding such as pictured in Fig. 'B', loosen the set screw of thread guide (17) and move it slightly to the left or right, then tighten the set screw.

Fig. 'A' shows a perfectly wound bobbin.



3. PLACING THE BOBBIN IN THE BOBBIN-CASE.

- Hold the Bobbin and the Bobbin-Case as shown.
- Insert the Bobbin into the Bobbin-Case, with 5 or 6 inches of thread trailing in your palm.
- Pull the trailing thread into the slot of the Bobbin-Case.
- Then draw thread under the Tension Spring between the fork shaped opening of the spring.

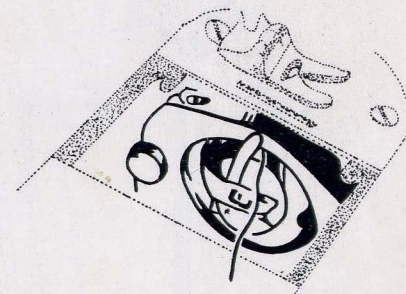
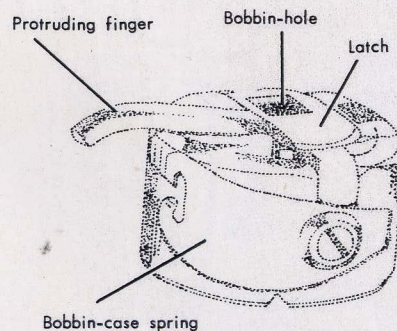
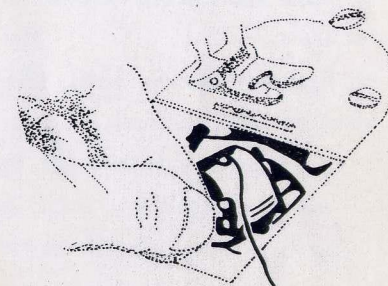
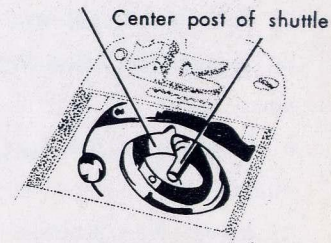


* BOBBIN SHOULD TURN CCW
WHEN THREAD IS PULLED

4. PLACING THE BOBBIN-CASE. INTO THE SHUTTLE.

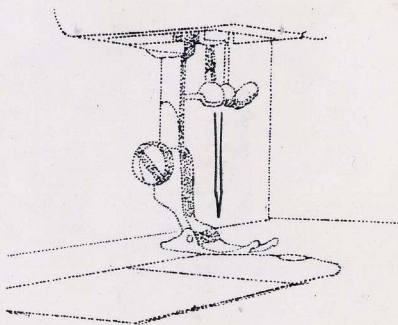
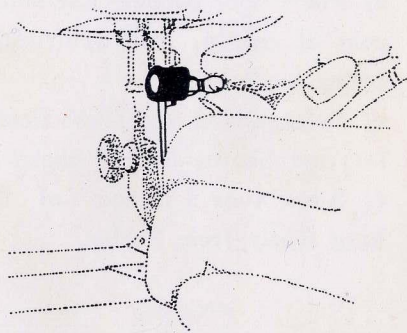
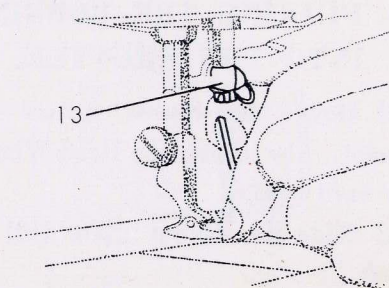
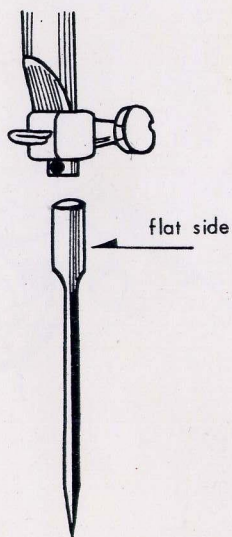
- Move the Needle to its highest point, by turning the Hand-Wheel (22) toward you.
- Slide the Throat Plate (10) to the left.
- Hold the Bobbin-Case-Latch between thumb and forefinger of your left hand.
- Place the Bobbin-Case into center post of shuttle, with protruding finger fitting into slot.
- Release latch and press Bobbin-Case into the Shuttle until it clicks in.
- Allow 4 or 5 inches of thread to hang freely from Bobbin.

The slot of shuttle



5. INSERTING NEW NEEDLE.

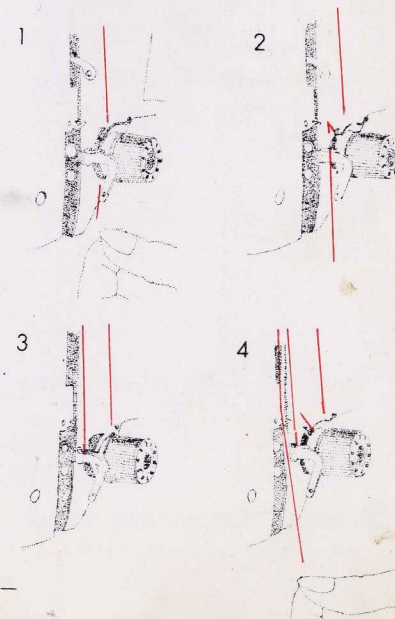
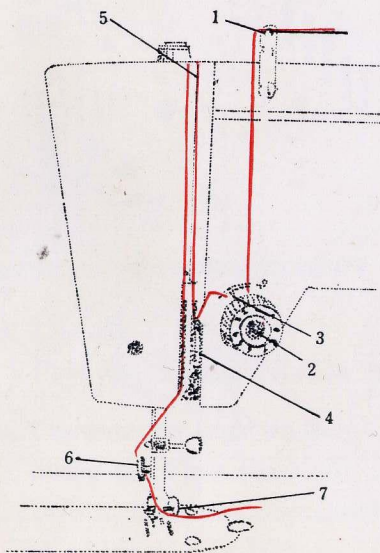
- Move the Needle to its highest point by turning the Hand-Wheel (22) toward you.
- Loosen the Needle-Clamp-Screw (13) slightly, and remove present needle.
- Insert New Needle (flat side of the Needle facing to the right) into the Needle Clamp as far up as it will go.
- Then tighten the Needle-Clamp-Screw securely.
- Standard Needle 15X1 (705) is to be used on this machine.



6. UPPER THREADING

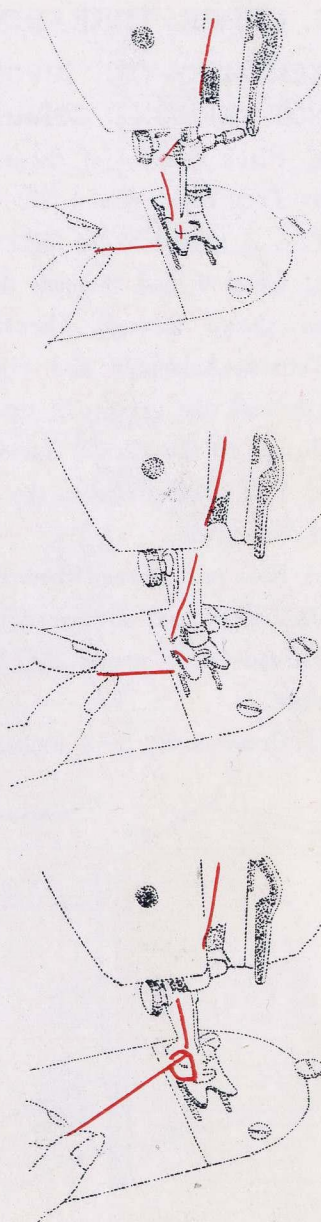
REMEMBER ONE IMPORTANT FACT———IF MACHINE IS NOT THREADED CORRECTLY, IT WILL NOT SEW PROPERLY.

- Place a spool of thread on the Spool Pin.
- Turn Hand-Wheel (22) toward you until the Thread-Take-Up-Lever (3) is raised to its highest point.
- Lead thread through the threading points in numerical sequence as shown through Thread Guides, then downward to the Thread-Tension-Assembly and right to left between the two Tension discs (through the groove of tension assembly). Then pull upward and hook thread to the Check Spring from right to left.
- Pull thread under the Thread-Retainer-Bar and upward through thread guide.
- Now pass thread from right to left through the eye of Thread-Take Up-Lever, and downward through the Thread Guide and Needle-Clamp-Thread-Guide above the Needle. Then thread Needle from left to right.
- Draw about 3—4 inches of thread past the eye of Needle.



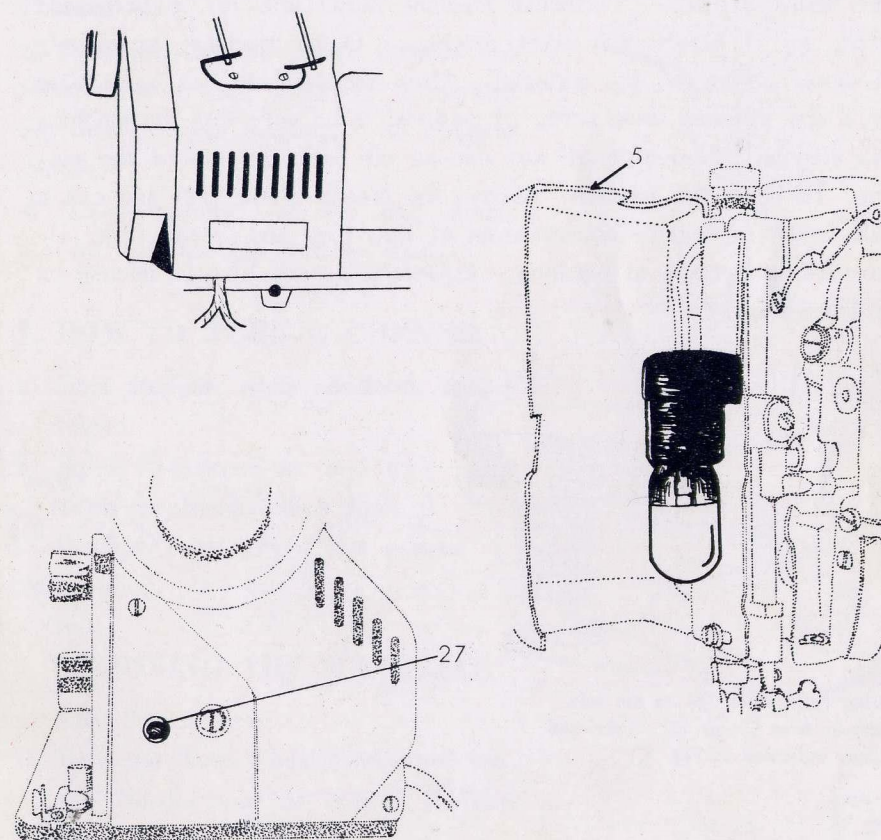
7. DRAWING UP THE LOWER THREAD.

- a) Hold the end of upper thread loosely with your left hand, so that thread remains slack.
- b) Turn Hand-Wheel (22) slowly toward you until Needle goes down and comes up again to its highest position. In so doing, the upper thread (needle thread) will catch the lower thread (bobbin thread).
- c) Then pull up needle thread, and at the same time the lower thread will be pulled up through stitch hole in Needle Plate.
- d) Both ends of thread must be drawn under and to the rear of Presser-Foot (11).



8. ELECTRICAL EQUIPMENT

- a. The machine motor is 110 Volts A. C. Current 50 Cycles.
- b. Plug extension cord into your wall outlet.



- c. Lighting
Push the Sewlight Switch (27) to switch on or off.
- d. Changing the Light Bulb.
Swing the Face Plate (5) to the left.
Bulb is now easily accessible and can be removed just as you would on ordinary light bulb.

9. OILING AND CLEANING

The Machine will always work best if properly oiled and cleaned at regular intervals. The illustrations in Figs. "B" and "C" indicate those places on machine which require one or two drops of a good grade of sewing machine oil once every working day or after about eight hours of use. Should machine stand idle for a prolonged period, oil it before you start sewing. Oiling machine excessively will cause soiling of the material. After the machine has been oiled, sew a few stitches on a scrap of material to be sure that the machine sews cleanly. Also wipe off any excess oil from the top of the machine. To clean the machine, remove the Needle-Plate (12) and use a small brush to remove accumulation of lint, fuzz and thread. (Fig. D) Also clean underside of machine, especially around Shuttle mechanism and Feed-Dog.

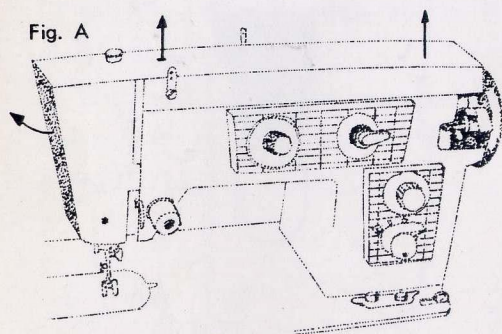


Fig. A
Swing Face Plate (5) to the left.
Remove Arm Cover (1). Lubricate
places indicated in Fig. C.

Fig. B

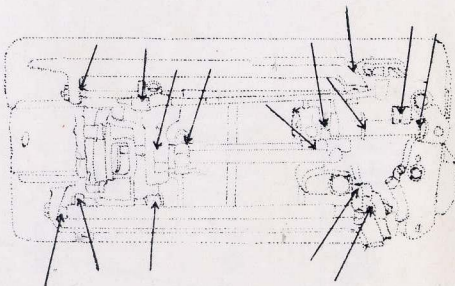


Fig. D

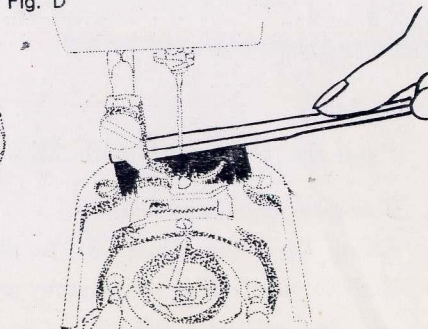
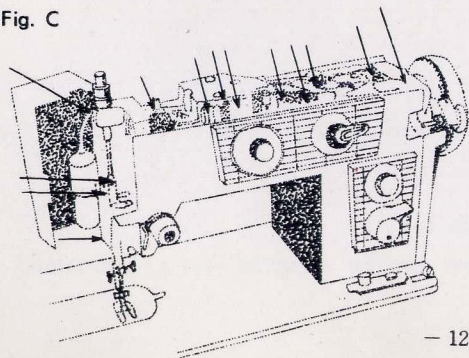


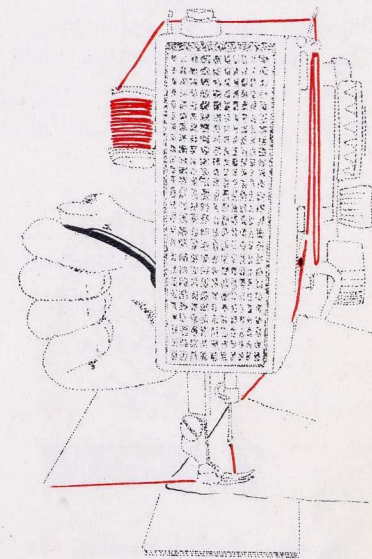
Fig. C



ACTUAL SEWING

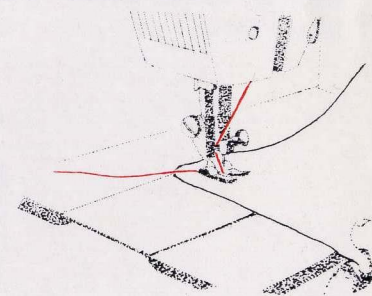
1. STARTING TO SEW

- Place fabric between Presser-Foot (11) and Needle-Plate (12)
- Lower needle into fabric and lower Presser-Foot.
- Hold the end of both threads for about three or four stitches, to prevent the threads from tangling, or clogging shuttle.
- Start machine, do not pull fabric but let the machine feed by itself.



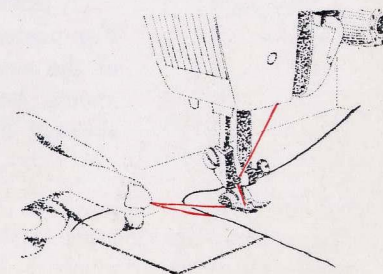
2. HOW TO TURN A CORNER

- Stop machine while needle is still in fabric.
- Raise Presser-Foot and turn fabric using the Needle as a pivot.
- Lower Presser-Foot and resume stitching.



3. REMOVING THE MATERIAL

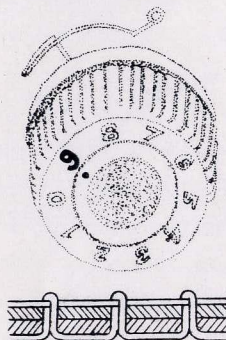
- Stop the machine.
- Turn the Hand-Wheel (22) toward you until Needle is at its highest position.
- Raise Presser Foot.
- Draw fabric directly back from the Needle (away from you).
- Pull out about 4 or 5 inches and snip thread close to fabric.



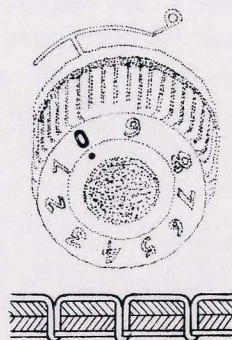
2. ADJUSTING THE THREAD TENSION.

To form a perfect stitch, both (needle thread and bobbin thread) tensions must be balanced.

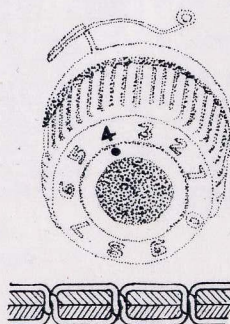
The numbered calibrated scale of the Upper-Thread-Tension-Assembly (15), makes a very fine adjustment of the thread tension possible. "0" is the loosest tension and "9" is the tightest tension.



Needle thread tension is too tight or bobbin thread tension is too loose.



Needle thread tension is too loose or bobbin thread tension is too tight.



For normal sewing the tension of the needle and bobbin threads should be equal to lock both threads in the center of fabric.

NOTE:

For sewing heavier materials with heavier threads, loosen the tension by turning it to lower numbers. For fine fabrics and fine threads, tighten tension by turning the numbered calibrated scale to higher for general sewing.

The lower (bobbin) thread tension should not be changed unless absolutely necessary, as this adjustment is very delicate.

Should it be necessary to adjust the lower tension, remove Bobbin-Case from the machine. Turn small screw in Bobbin-Case tension spring to the right to tighten tension; to the left to loosen.

Here is a simple test to help you determine the proper bobbin tension for normal stitching:

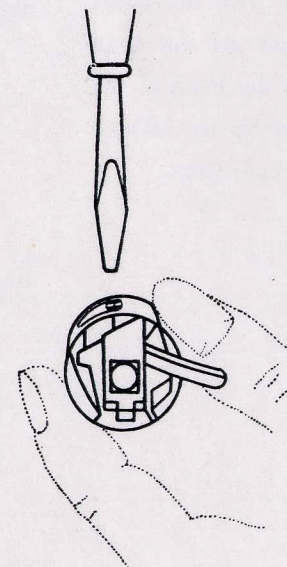
Lift the filled Bobbin in the Bobbin-Case by the thread hanging from it.

The tension should be just tight enough to hold its weight.

NOTE:

Do not turn screw in either direction more than about ONE QUARTER TURN at a time.

Then sew and check results.

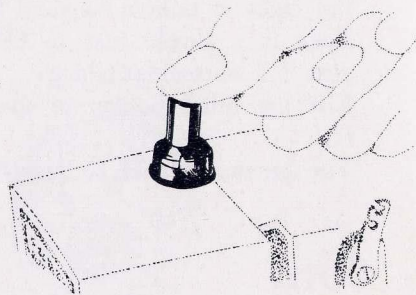


3. ADJUSTING THE PRESSURE.

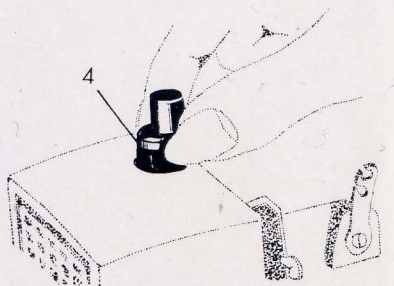
To permit the machine to stitch properly and to feed the fabric past the needle, the Presser-Foot must bear down on the fabric. The Presser-Bar-Lifter controls the raising and lowering of the Presser-Foot.

Depending on the weight of the fabric, particularly when sheer or light weight fabrics are sewn, change in the pressure of the Presser-Foot may be needed.

To reduce the pressure, place index finger of your left hand on the round base of the Darner in order to control its rise. At the same time, with the index finger of your right hand on the head of the Darner, (4) permit the head of the Darner to rise either partly or fully, depending on fabric and operation.



To increase pressure, push the top of darner.

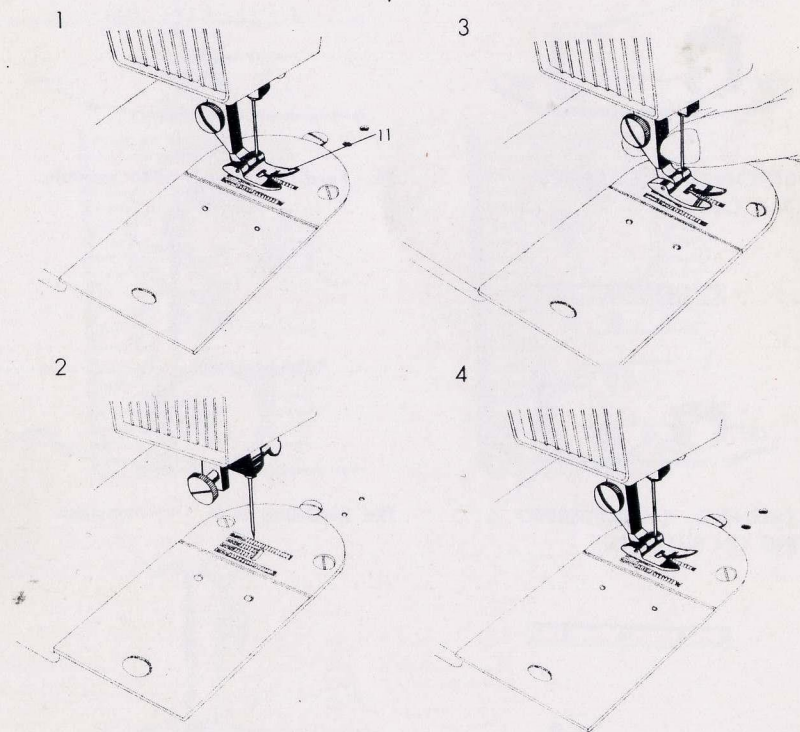


To decrease pressure, push the round base.

4. CHANGING THE PRESSER-FOOT.

Many of the machine operations require the use of the special Presser-Foot included in the accessory box.

- Raise the Presser-Bar-Lifter and turn the Hand-Wheel toward you to bring the needle to its highest position.
- Loosen the Screw about three turns.
- Remove the Presser-Foot. (11)
- Replace the Foot, following the above operations in reverse order.



5. THREE POSITIONS OF DROP FEED.

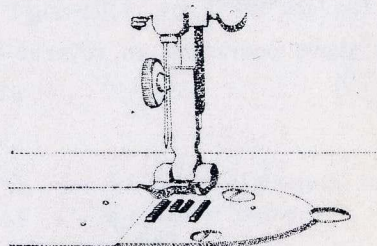
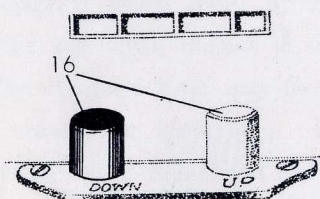
The machine is equipped with the Drop-Feed on bed plate.

When sewing different fabrics, sewing on buttons or sewing free hand embroidery, it is best to have the proper feed adjustment.

The Drop Feed Push Button (16) lowers the Teeth of Feed-Dog so that the fabric does not move.

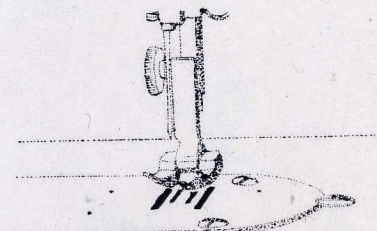
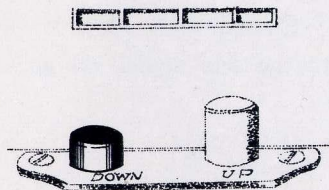
FOR STITCHING ORDINARY FABRICS.

The Feed-Dog is in **Up** Position.



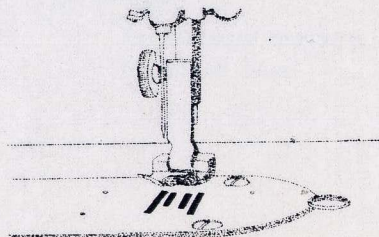
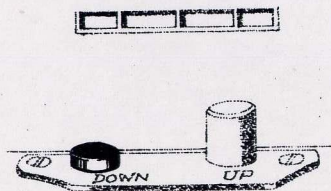
FOR STITCHING FINE FABRICS.
LIKE SILK CHIFFON.

The Feed-Dog is in **Middle** position.



FOR DARNING, EMBROIDERING
SEWING ON BUTTONS.

The Feed-Dog is in **Down** position.



ACTUAL SEWING WORK

1. STITCH REGULATING AND REVERSE STITCH.

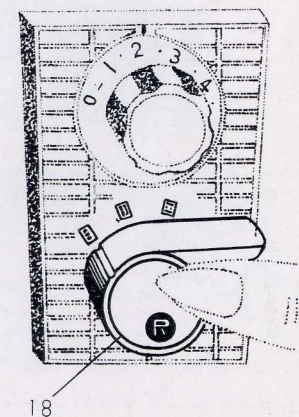
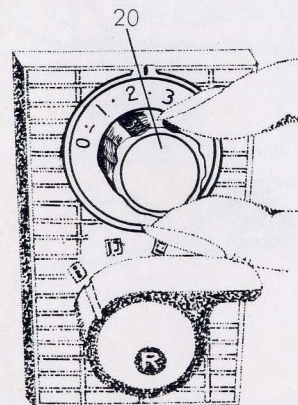
The length of stitch is regulated by the Stitch Regulator Dial (20).

Naturally, length of the stitch increases from the 0 (minimum) to 5 (maximum).

The Red Mark between 0 and 1 of the dial indicates the normal stitch length for satin stitch and automatic buttonholing.

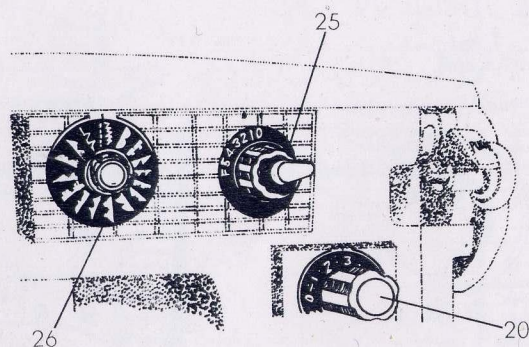
To stitch in reverse, push the Reverse Stitch Push Button (18), in the center of the Button-hole Dial Knob.

#3 seems to work good



2. STRAIGHT STITCHING

- Set the Zigzag Width Dial (25) at '0' position.
- Set the Pattern Selector Dial (26) at  position.
- Set the Stitch Regulator Dial (20) at desired stitch length.
- Start sewing.

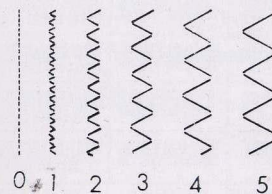
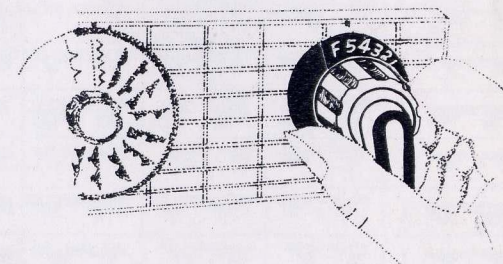
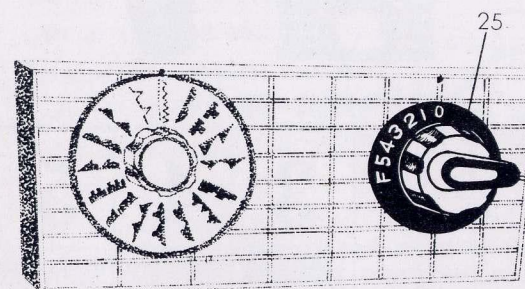


NOTE:

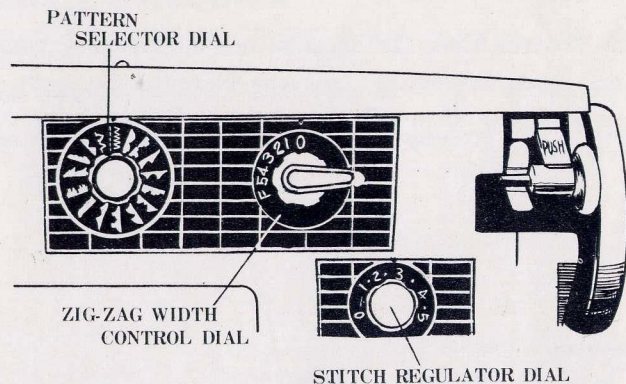
Regular Straight Stitch sewing can be done with the Zigzag Needle-Plate and Zigzag Presser-Foot, which are installed on machine.

3. ZIGZAG STITCHING

Zigzag Width Control Dial (25) regulates the width of zigzag stitch. By turning the Dial clockwise, you can increase the width of stitch from 1 to 5 millimeters (0 is only for straight stitch).



4. ZIG-ZAG PATTERNS



Z. ZW	0	1	2	3	4	5
PATTERN						

5. AUTOMATIC DESIGN SELECTING

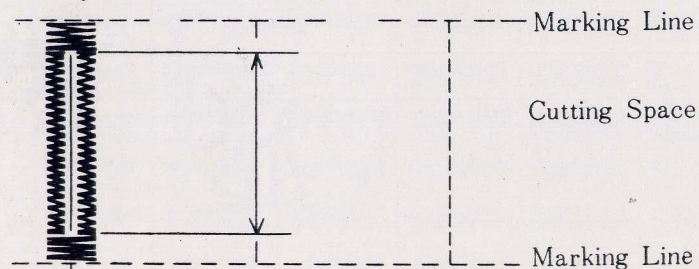
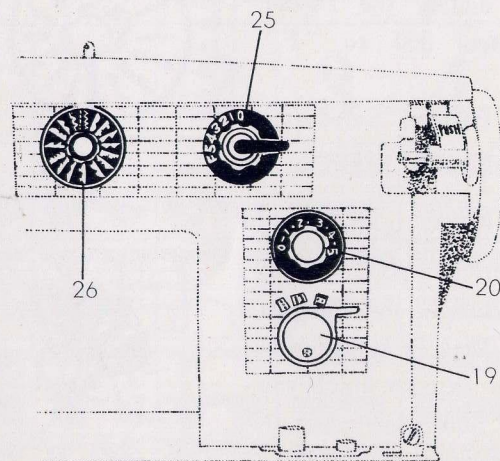
Just set the desired pattern by dialing the Pattern Selector Dial (26) and your machine will sew the pattern shown on dial plate automatically.

- Set the Stitch-Regulator Dial (20) at the Red Mark.
- Release the automatic mechanism by dialing the zigzag width control dial to "F" position.
- Dial the Pattern Selector Dial (26) to your desired pattern.
- Turn the Zig Zag width control dial to "O" position and check to see if the Pattern Selector Dial is locked into the proper pattern which you selected, otherwise reset it.
- Start stitching, your machine will stitch the pattern automatically.

6. AUTOMATIC BUTTONHOLER

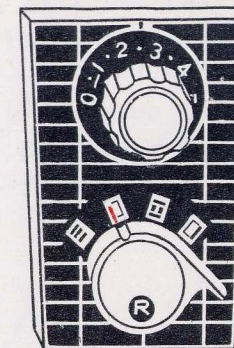
Buttonholes can be made fully automatic, by turning the Buttonhole Dial (19).

- Change the Regular-Presser-Foot to the Buttonhole Foot.
- Set the Stitch Regulator-Dial (20) at Red Mark in the middle of '0' and '1'.
- Set the Zigzag-Width-Control-Dial (25) at '0'.
- Set the Pattern-Selector-Dial (26) at  position.
- Set the Needle Position Lever in the Left Position.



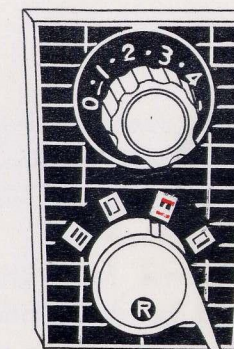
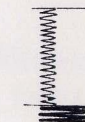
Left Side Stitching.

- Turn (Button Hole) Dial (19) as shown.
- Stitch from beginning of marking line to bottom marking line. Stop machine when the needle is out of the fabric.



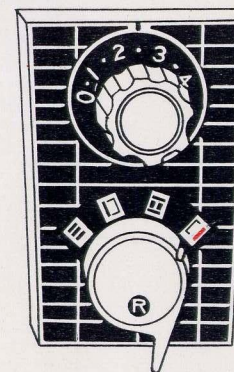
Bar Tack

- Turn Button Hole Dial as shown, and stitch 4 or 5 stitches.
- Your machine will stitch back bar tack automatically.
- Stop machine when the needle is out of fabric.



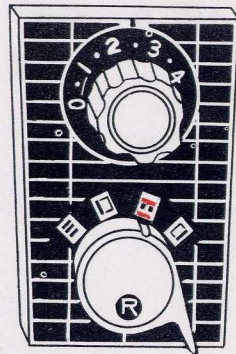
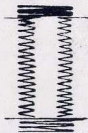
Right Side Stitching.

- Turn Button Hole Dial as shown, and start stitching.
- Your machine will stitch in reverse automatically.
- Stitch up to the end of cutting space, and stop the machine when the needle is out of the fabric.

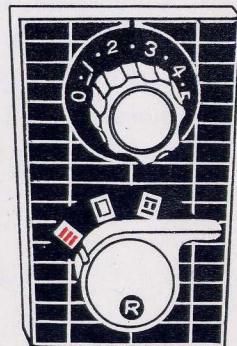
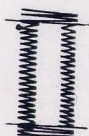


Crossing Bar Tack

- Turn Button Hole Dial as shown, and stitch 4 or 5 stitches.
- Your machine will stitch back bar tack automatically.

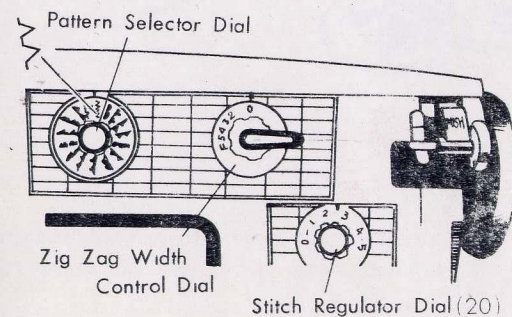
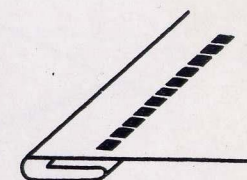
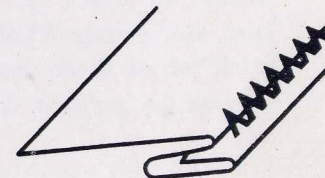
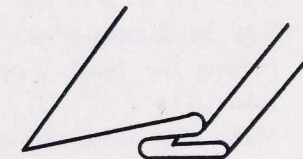
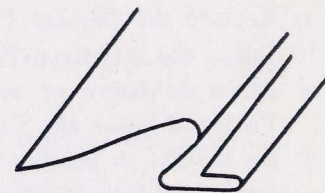


- Stop machine and turn Dial back to original position.
- Stitch two or four stitches for reinforcement.
- Remove fabric from the machine and cut opening with seam ripper or sharp embroidery scissors.



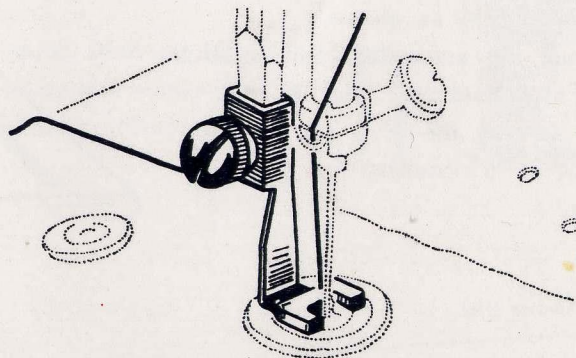
7. AUTOMATIC BLIND STITCH

- Turn the Zig-Zag Width Control Dial to "F" Position.
- Turn the Pattern Selector Dial to Position.
- Reset the Zig-Zag Dial Knob to "O" Position.
- Set the Stitch Regulator Dial at 0 to 1.
- Fold the fabric as shown.
- The lower fold should overlap the upper fold by approximately 1/16 of an inch.
- Place the fabric under the Presser Foot, and start sewing on lower fold. Machine will sew the upper fold automatically as shown.
- Remove fabric from machine and fold back the upper fold as shown.
- For releasing the automatic blind stitch, reset the Patter Selector Dial to position by turning the Zig Zag Width Control Dial to "5" position and then to "0" position.



8. SEWING ON BUTTONS

- a) Replace the Regular-Presser-Foot with the Sew-on Button-Foot.
- b) Press the left Drop-Feed-Push Button (16) completely down.
- c) Place the fabric or garment and the button under Sew-on Button-Foot and lower the Foot to hold the fabric and button securely.
- d) Be careful to position the button so needle will enter left hole and then right hole, according to the next operation. Be sure that the holes line up with the oblong hole in the Sew-on Button-Foot.
- e) Set the Zigzag-Width-Control Dial (25) by dialing clockwise while turning the Hand-Wheel, so the Needle enters the right hole in the button.
- f) Make one stitch in each hole in button, just to be certain that the needle will not hit the solid portions. Then sew five or six stitches to attach the button.
- g) Turn the Zigzag-Width-Control Dial (25) back to point "O", and stitch two or three times through the same hole for reinforcement.
- h) Remove the garment from machine and snip the thread.



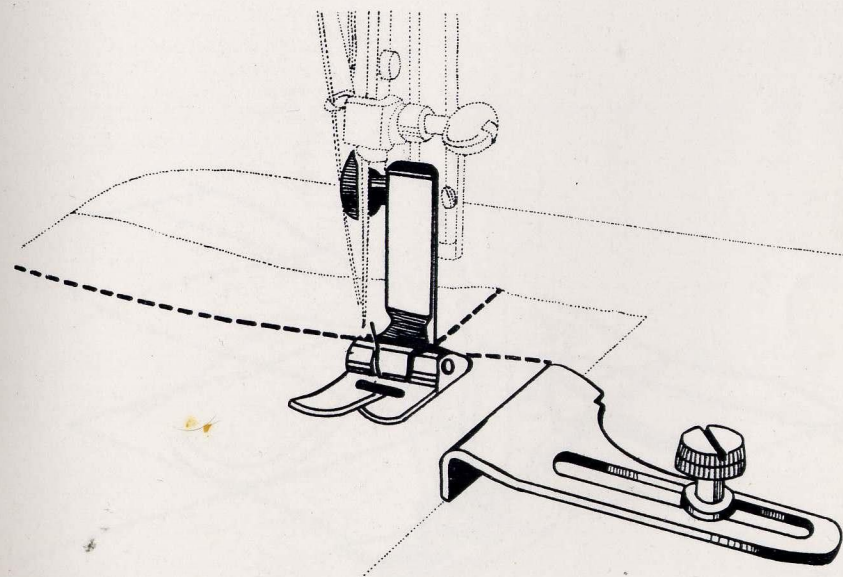
NOTE:

When attaching four-hole buttons, first sew one set of two holes, then stitch into second set of two holes and stitch two or three times in the last hole, same as described above.

9. CLOTH GUIDE OPERATION

This attachment will help you guide the material accurately, while sewing close to the edge of the fabric.

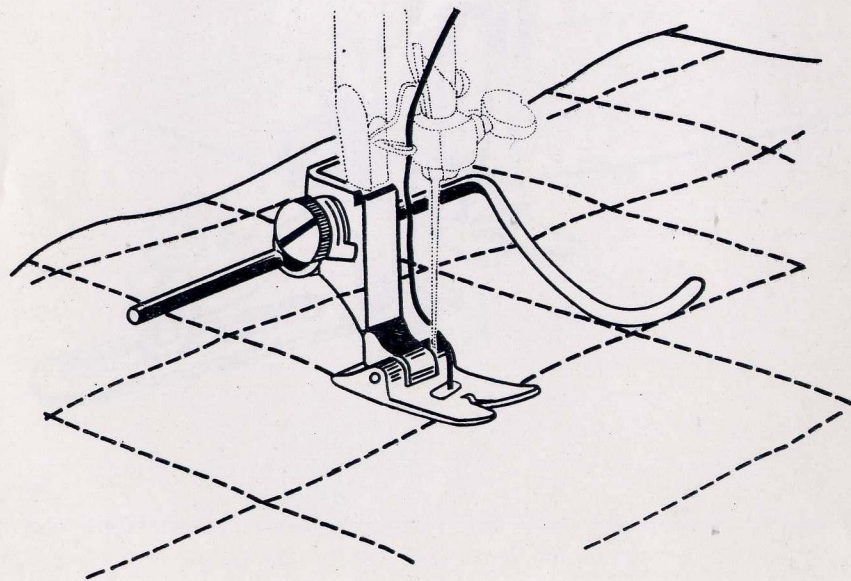
- a) Fasten the Cloth-Guide to the bed of the machine by means of the Thumb-Screw, inserting the Thumb Screw into either one of the two screw holes in the bed of the machine.
- b) Adjust the Guide to required distance from the needle and tighten Thumb Screw.



10. QUILTING GUIDE

The Quilting Guide will enable you to stitch rows automatically at the desired distance on padded fabrics. No marking is necessary.

- a) Loosen the Thumb Screw and insert the Prongs of the Guide between the Thumb Screw and the Presser Foot.
- b) Tighten the Thumb screw securely.
- c) Slide the Guide at the distance you wish to maintain your rows of stitching.
- d) Stitch first row.
- e) Place the Guide on the first row of stitching so that the second row will have the desired distance from the first.
- f) Continue stitching rows in same manner.

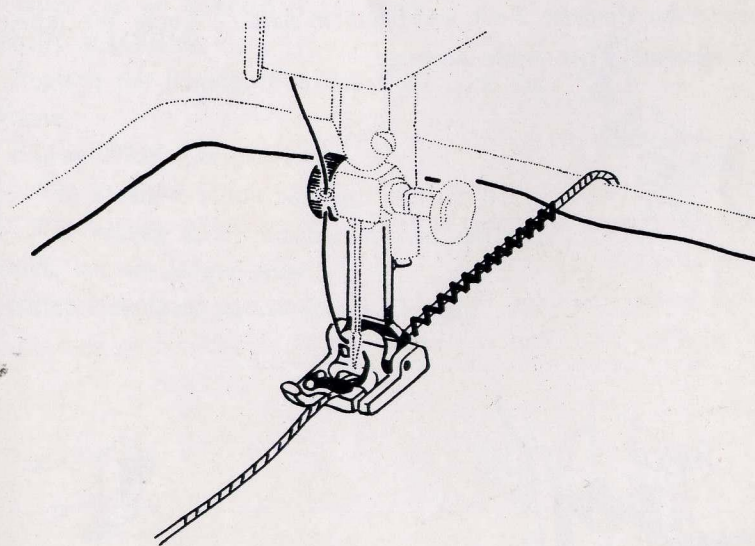


11. CORDING FOOT

- a) Replace the Regular Presser Foot with the Cording Foot.
- b) Set the Pattern-Selector-Dial (26) at  position and the Needle-Position-Lever (24) in the center position.
- c) Pass the braid (cord or gimp) under the spring on front of the foot.
- d) Adjust the Zigzag-Width-Control Dial (25) and the Stitch-Regulator-Dial (20) to obtain the desired width and length of stitch to cover the braid.
- e) Start slowly, using extreme care in following design until you have become accustomed to guiding the fabric.

NOTE:

Using needle thread of a contrasting color will enhance the beauty of your braiding.



12. HEMMER

If you use this Hemmer Foot carefully, hemming becomes simple and easy.

The spiral formed tongue or scroll of the foot turns in the edge of the fabric and forms the hem.

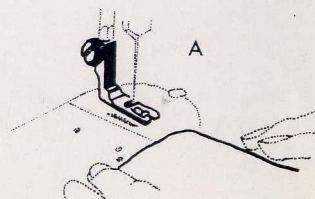
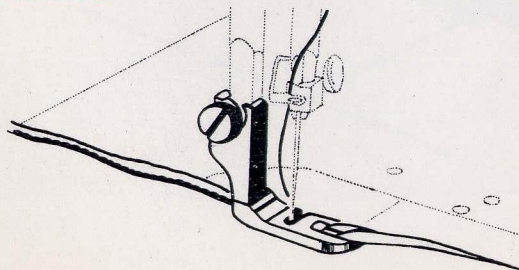
- a) Replace the Regular Presser Foot with Hemmer Foot.
- b) Set the Pattern Selector Dial (26) at  position.
- c) Fold the edge of the fabric over approximately 1/8 of an inch, then fold it over again in the same way for a length of about 2 inches.
- d) Place the needle and bobbin threads under the hemmer foot.
- e) Insert the fold into the spiral formed opening (scroll) of the Hemmer Foot. Move the fabric slightly back and forth until the fold forms scrolled shape.
- f) Draw the fabric toward you until the start of the hem edge is just below the needle.
- g) Lower the Hemmer Foot and begin to sew. Guide the fabric into the Hemmer Foot while sewing.

NOTE:

Don't push or pull the fabric. Even feeding is essential for good hemming.

The fabric must be kept at the same width in the scroll of the Hemmer Foot at all times.

Prior to folding the edge of the fabric, cut the edge of the fabric as shown in Fig. A. You can easily insert the fabric to the scroll of hemmer.



13. BINDER

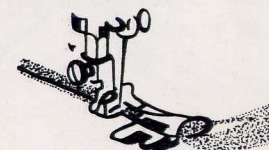
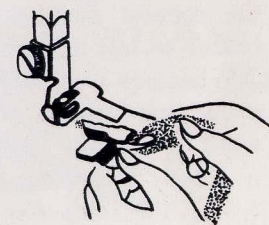
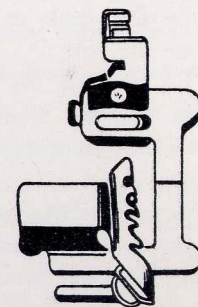
When you are making a dress, you will often want to finish an edge with a bias binding, and sometimes you will want a curve edge binding or a french fold along the curve. The Binder allows you to do this type of work very easily. Also if you wish, you can make your own bias binding with the Binder.

You can use either ready made bias binding or binding which you make yourself as described later.

You will notice there is a cone shaped scroll on the Binder into which the material and bias tape are placed in the correct position for binding. The material is inserted into the material slot from the left side. The tape is inserted into the tape slot from the right side. Opposite the material slot, there are five slots which are side tape slots into which tapes can be inserted if required.

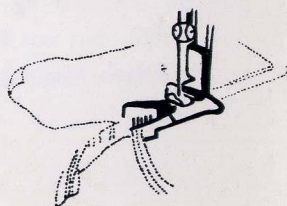
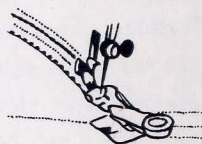
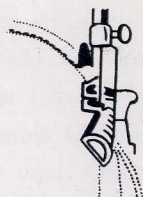
PREPARE MACHINE

- a) Replace the Regular Presser Foot with the Binder.
- b) Zigzag Width Control Dial;
 - I. For straight stitch binding, dial at '0'.
 - II. For zigzag stitch binding, dial at desired width, but not larger than 2.
- c) Stitch Regulator set at desired length.



PROCEDURE

- a) Before you insert the material into the scroll, cut the end to a long thin point, so it can be drawn easily through the correct slot.
- b) After inserting the point of the material in the tape slot, pull it through with a pin. When the binding emerges from the scroll, it will be folded the same as commercial binding.
- c) You can now bind your cloth with the tape slot while the cloth is inserted into the material slot from the left.
- d) To prevent the cloth from slipping out of the tape, use the forefinger of your left hand to hold the cloth on the square fitted by the side of the slot.
- e) More practice will be required to bind a curve. If you pull the binding, the bias material is easily stretched and would then be too narrow when it reaches the needle or the cloth will slip out of the tape. You must turn the cloth naturally along the curve being careful to see that the needle is in the correct position, adjusting it by moving the binder to left or right, if necessary.
- f) When you bind such fine fabrics as nylon, cotton crepe and batiste, it is advisable to sew them along the curves by hand before binding. To make a french fold, place the cloth under the binder foot in the same way as if you were doing normal sewing with the normal presser foot.
- g) You can also bind the edge of your material with two different colored tapes. The cloth to be bound is inserted into the material slot from the left side. The two tapes are inserted into the side tape slots individually. Cut the end of these tapes to a point.



14. ADJUSTABLE ZIPPER AND CORDING FOOT.

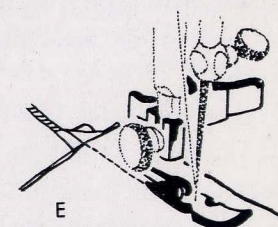
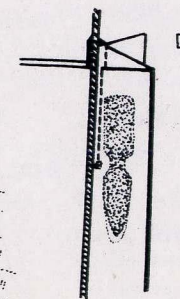
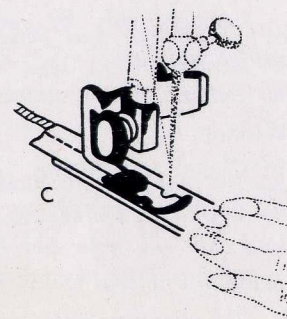
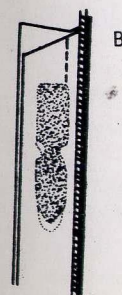
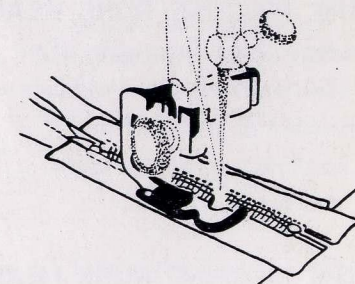
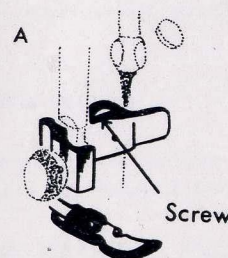
This foot allows you to insert a zipper or cover a cord with ease. Because it is adjustable you can stitch to the left or to the right of the zipper or cord.

In order to move the foot from right to left, loosen the screw (A) at the back of the foot.

Slide the foot into position so that needle can enter the notch on either side of the foot, allowing you to stitch close to the teeth of the zipper.

To insert the zipper, follow instructions that come with the zipper.

In order to make cording for slipcovers, etc. cover the cord with bias strip of fabric, wide enough to cover the cord and allow for a seam. Adjust the foot to the left of the needle, as seen in Fig. B. In order to stitch a little away from the cord, set the foot as close to the needle as possible. Guide the work by placing the middle finger of the left hand close to the foot and the cord (see Fig. C). To attach the covered cord to the material, adjust the foot to the right of the needle close to the cord (see Fig. D). This will keep the bulk of the fabric to the left of the machine (see Fig. E).



HELPFUL HINTS

REASONS

CORRECTIONS

WHEN THE SHUTTLE-HOOK BECOMES JAMMED.

It occasionally happens that loose threads become entangled and impede the free movement of the Shuttle-Race.

- a) Remove the Bobbin-Case.
- b) Push the Pins sideways.
- c) Remove the Shuttle-Race-Cap from the Shuttle.
- d) Remove the Shuttle-Hook, and brush off all thread, lint, etc.,
- e) Insert the Shuttle-Hook, and the Shuttle Race-Cap which is inserted in its slot to pin of Shuttle.
- f) Push the Pins back to their original position.

WHEN THE MACHINE RUNS HEAVILY

If the machine runs sluggishly after standing idle for some time, apply a drop of benzine in place of oil. Run the machine rapidly to clean. Then oil the machine.

WHEN THE MACHINE RUNS HEAVILY FOR OTHER REASONS.

The motor belt is too tight, or has jumped off the Pulley or Hand-Wheel.

- a) Bobbin-Winder is not released.
- b) Thread is caught in the Shuttle-Race.
- c) Machine is lubricated with unsuitable gummy oil.

Loosen belt by adjusting the motor bracket.

- a) Pull up release latch of Bobbin-Winder.
- b) Clean the Shuttle.
- c) (1) Place a few drops of kerosene into each oil hole and run the machine for a few minutes.
(2) Lubricate with proper sewing machine oil.

REASONS

CORRECTIONS

MAKES LOOSE STITCHES AND LOOPS ON UNDERSIDE OF FABRIC.

- | | |
|---|--|
| a) Threading is incorrect | a) Correctly thread machine. (See Chap 6 of Basic Information). |
| b) Presser-Foot is not completely lowered. | b) Check whether Presser-Foot is down. If not, adjust the presser bar guide bracket, also check position of Darnier. |
| c) Insufficient tension of needle thread. | c) Adjust thread tension. (See Chap. 2 of Actual Sewing.) |
| d) Thread take up spring is bent or broken. | d) Change the spring. |
| e) Poor stitches and bad seams for following reasons: | e) |
| 1. The bobbin is wound unevenly. | 1. Adjust the tension guide. (See Chap. 2 of Basic Information.) |
| 2. Upper thread tension is too tight or too loose. | 2. Adjust the upper thread tension. (See Chap. 2 of Actual Sewing.) |
| 3. Bobbin thread is too coarse for material. | 3. Use thread of same size as the needle thread. |
| 4. The needle is not suited for material. | 4. Use finer needle and thread which is suitable for the fabric. |
| 5. Needle damaged. | 5. Change the needle. (See Chap. 5 of Basic Information.) |
| 6. Uneven thread tension likely to be caused by thread of poor quality. | 6. Change the thread. |

IF THE MATERIAL PUCKERS

- | | |
|---|--|
| a) The needle thread tension is too tight. | a) Loosen the tension. (See Chap. 2 of Actual Sewing.) |
| b) The needle and the bobbin thread are too tight for the fabric. | b) Loosen both tensions. (See Chap. 2 of Actual Sewing.) |
| c) Too much pressure applied to the presser foot. | c) Release the pressure of presser foot and adjust. |

IF THE MACHINE JAMS OR CLOGS.

- | | |
|---|---|
| a) The machine is not properly threaded. | a) Correct the threading as in Chap. 6 of Basic Information. |
| b) Running machine without fabric. | b) Do not operate the machine without fabric. Clean the shuttle race. See "When the shuttle hook becomes jammed" under "Helpful Hints". |
| c) Sewing with the stitch regulator dial at 'O' | c) Do not run the machine in position 'O'. |

REASONS

CORRECTIONS

IF THE MACHINE DOES NOT FEED PROPERLY.

- | | |
|--|---|
| a) The stitch regulator dial is at 'O'. | a) Do not set the dial at 'O' position. |
| b) The feed dog is dropped. | b) Raise the feed mechanism by pushing the right hand button of Drop Feed completely. |
| c) Insufficient pressure is applied to the presser foot. | c) Increase the pressure by pushing the head of the darning. |

IF THE BOBBIN DOES NOT WIND PROPERLY.

- | | |
|--|--|
| a) The machine is not threaded correctly. | a) Correct the threading as in Chap. 2 of Basic Information. |
| b) The thread is out of the tension discs. | b) Check thread to the tension discs. |

IF THE NEEDLE THREAD BREAKS.

- | | |
|---|--|
| a) The needle is inserted incorrectly. | a) Correct the insertion of needle as in Chap. 5 of Basic Information. |
| b) The needle is not threaded correctly. | b) The needle must be threaded from left to right through needle hole. |
| c) The upper tension is too tight. | c) Loosen the tension as in Chap. 2 of Actual Sewing. |
| d) Knots in thread. | d) Use better quality thread. |
| e) The needle is too fine for thread. | e) Change to larger size needle. |
| f) The needle is bent or its point is broken. | f) Change needle. |
| g) The stitch hole in the needle plate is rough or sharp. | g) Polish stitch hole or replace needle plate. |
| h) Poor quality thread. | h) Change thread. |

REASONS

CORRECTIONS

IF THE MACHINE STOPS WHILE SEWING.

The stop motion knob has not been tightened sufficiently.

IF THE MACHINE SKIPS STITCHES.

- | | |
|--|--|
| a) The needle is inserted incorrectly. | a) Correct the insertion of needle as in Chap. 5 of Basic Information. |
| b) The needle is bent or blunt. | b) Change needle. |
| c) The needle is threaded improperly. | c) It must be threaded as in Chap. 6 of Basic Information. |
| d) Wrong size of needle is used. | d) Change size of needle. |
| e) Thread is too heavy for needle. | e) Change needle to a heavier one. |
| f) The pressure of presser foot is insufficient especially when sewing heavy material. | f) Check pressure. |

IF THE NEEDLE BREAKS

- | | |
|---|--|
| a) The needle is bent. | a) Change to new needle. |
| b) The fabric is pulled from behind while sewing. | b) <u>Do not interfere with feeding action of machine.</u> |

NOTE:

To avoid breaking of needle, tighten thumb screw of needle clamp. Do not sew heavy seams or very thick fabric with fine needle. Heavy needle and thread should be used on heavy fabric. Refer to the list of needle and thread sizes.

MEMO

Grandmother Locke's Sewing machine
is a "PAVEWAY", made by NATIONAL probably
dated about 1929,

Grandmother Rondelli's Sewing Machine is a "SINGER"

"SEWING MACHINE MOTOR" Brand "INFANT"
quality motor

YDK model LR21940 YM-40

Poles - 2 Volts $11\frac{5}{8}$ cycles $5\frac{5}{60}$

Amps - 0.75 input - 80w

Number on Sewing Machine Belt - MB-340

model

with many
from those
All of the
hine of this
w machine.
INSTRUC-
u will find
ou will be
amed pos-
OW YOUR
K.

MODEL NO. 4500