

KENNMORE

INSTRUCTIONS

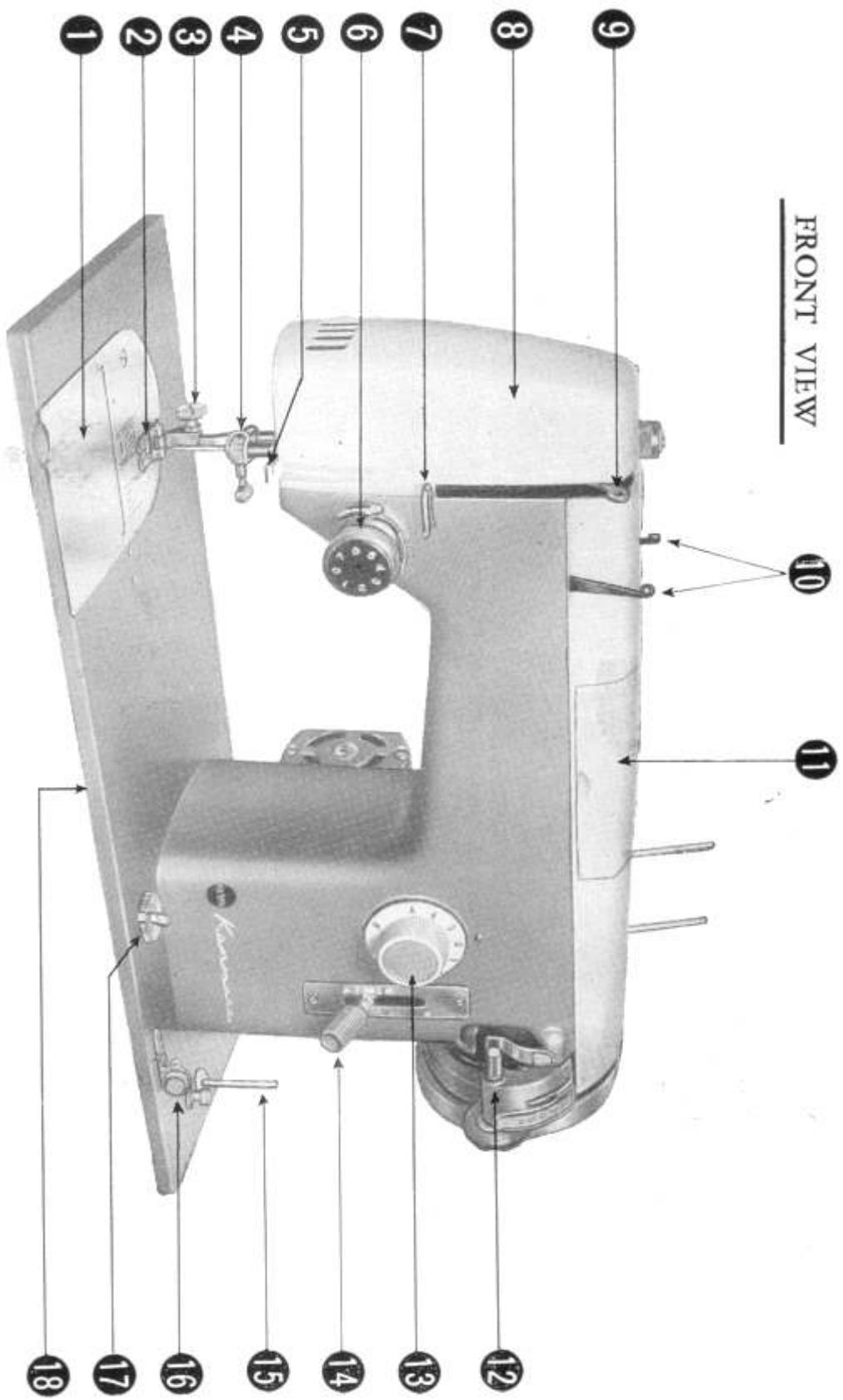


AUTOMATIC ZIG-ZAG SEWING MACHINE

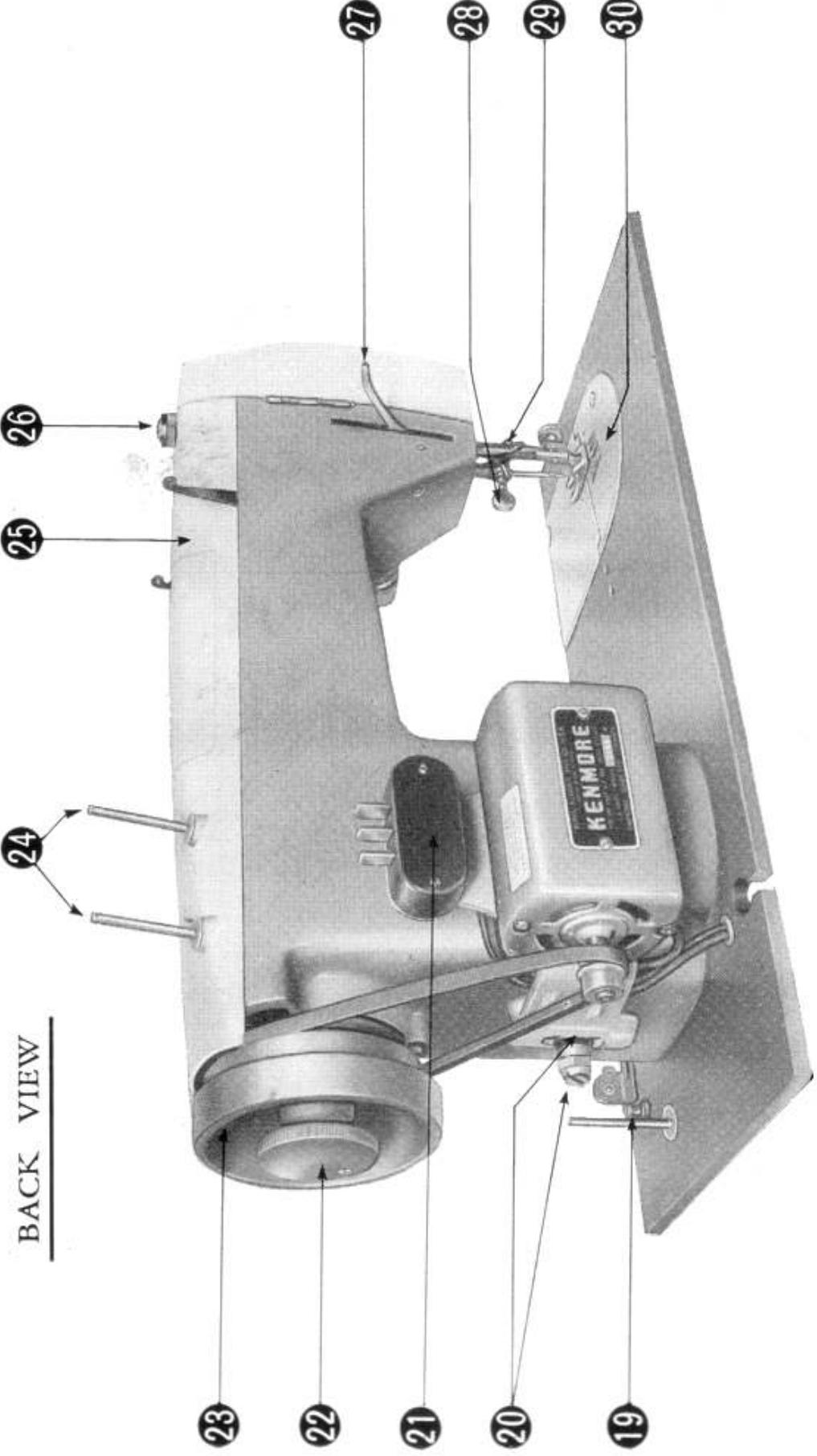
**TABLE OF  
CONTENTS**

|  |       |                                |        |
|--|-------|--------------------------------|--------|
| Applique .....                           | 20    | Needle :                       |        |
| Adjusting for Good Stitches .....        | 32    | Needle & Thread Chart .....    | 5      |
| Blind Stitching .....                    | 17    | Placement .....                | 5      |
|  |       | Oversasting .....              | 21     |
| Bobbin :                                 |       | Parts - list .....             | 33     |
| Inserting & Threading .....              | 8     | Presser Foot, changing .....   | 15     |
| Picking up Bobbin Thread .....           | 10    | Sewing Light .....             | 4      |
| Removing .....                           | 6     | Stitch Length .....            | 11     |
| Winding .....                            | 7     | Stitch Width .....             | 24     |
| Buttonholes .....                        | 18-19 | Stitching :                    |        |
| Buttons .....                            | 17    | Decorative, Automatic .....    | 25     |
| Cleaning & Oiling .....                  | 27-29 | Reverse .....                  | 11     |
| Connecting Machine .....                 | 4     | Straight .....                 | 11, 14 |
| Corner, turning .....                    | 15    | Zigzag .....                   | 24     |
| Darning .....                            | 16    | Synthetics .....               | 26     |
| Double Needle .....                      | 22-23 | Tensions :                     |        |
| Feed Dog Control .....                   | 15    | Upper Thread .....             | 12     |
| Fastening a Seam .....                   | 11    | Lower Thread .....             | 13     |
| Foot Pressure, adjusting .....           | 10    | Threading :                    |        |
| Identification, Head Parts .....         | 2-3   | Bobbin Case .....              | 8      |
| Inserting Disc .....                     | 24    | Upper Thread .....             | 9      |
| Installing Machine Head in Cabinet ..... | 4     | Thread Selection .....         | 5      |
| Inserting and Removing Material .....    | 14    | What To Do .....               | 30-31  |
| Lace, Sewing On .....                    | 20    | Writing and Monogramming ..... | 21     |

FRONT VIEW



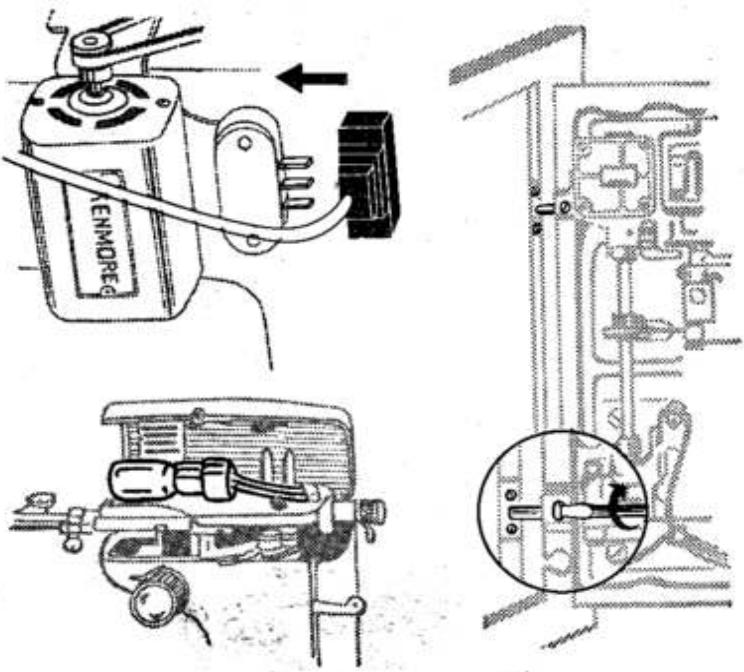
- |                             |  |
|-----------------------------|--|
| 1. Hand Hole Cover Plate    | 8. Face Cover Plate                    |
| 2. Presser Foot             | 9. Thread Take-up                      |
| 3. Presser Foot Thumb Screw | 10. Upper Thread Guides                |
| 4. Thread Guide             | 11. Cover to Automatic Decorating      |
| 5. Thread Guide             | Stitch Mechanism                       |
| 6. Thread Tension Assembly  | 12. Bobbin Winder Mechanism            |
| 7. Thread Guide             | 13. Stitch Width Control Knob          |
|                             | 14. Stitch Length Control Lever        |
|                             | 15. Thread Spool Pin for Bobbin Winder |
|                             | 16. Bobbin Winder Tension Disc         |
|                             | 17. Feed Dog Control Knob              |
|                             | 18. Nomenclature Plate                 |



19. Light Switch  
20. Motor Mounting Bracket  
and Screw  
21. Three Prong Connector  
22. Clutch Knob
23. Hand Wheel  
24. Upper Thread Spool Pins  
25. Top Cover Plate  
26. Presser Foot Knob
27. Presser Foot Lever  
28. Needle Clamp Screw  
29. Thread Cutter  
30. Needle Plate

## INSTALLING MACHINE HEAD IN PORTABLE AND CABINET

- 1 Loosen the two hinge screws under holes in the rear edge of the machine bed (1).
  - 2 Raise hinge pins in the cutout (2).
  - 3 Slip machine head onto the pins and tighten hinge screws securely (3).
- Lower machine head to front flap.



## SEWING LIGHT

The sewing light is placed inside the face cover plate as shown. It may be turned on or off by turning light switch clockwise.

To change bulb, open the face cover plate by swinging it open, twist old bulb away from you and remove. Then insert new bulb.

## CONNECTING MACHINE

Push the plug onto three prong connector over the machine motor.

Plug machine cord into any 110-120V wall outlet. When installed in cabinet, insert grommet with cord in hole in bedplate.

## NEEDLE AND THREAD TABLE

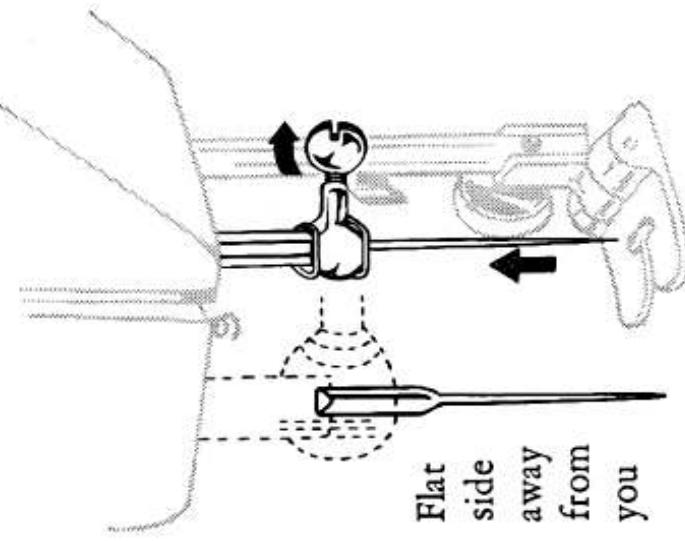
| THREAD SIZE  | NEEDLE SIZE | FABRIC   |
|--|-------------|--|
| Cotton 80-100<br>Synthetic<br>Silk A<br>Machine embroidery                 | 11          | Sheer cottons, silks, and nylons<br>Fine laces   |
| Cotton 60-80<br>Mercerized 50<br>Synthetic<br>Silk A<br>Machine embroidery | 14          | Medium weight cottons<br>Medium weight silks<br>Medium weight nylons<br>Light weight woolens |
| Cotton 40-60<br>Mercerized 50<br>Mercerized heavy duty                     | 16          | Heavy weight cottons<br>Medium to heavy weight woolens<br>Heavy drapery fabrics              |
| Cotton 30-50<br>Mercerized heavy duty                                      | 18          | Heaviest cottons as for men's work clothes<br>Heaviest woolen coating                        |

## NEEDLE SIZE

Use KENMORE 6021 needles. The size of the needle should conform to the size of the thread and both should be suitable to the material. The same size thread should be used in the bobbin as on the upper part of the machine for ordinary sewing. Never use a bent needle nor one with a blunt point.

## PLACEMENT OF NEEDLE

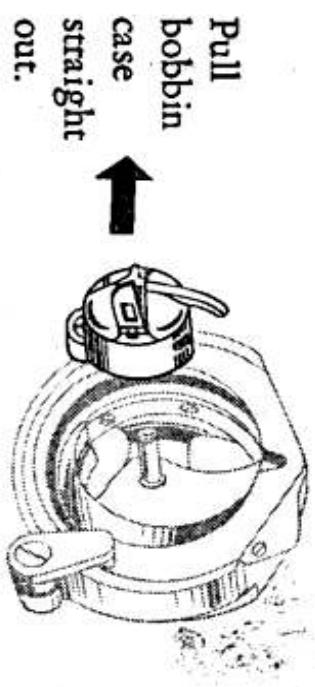
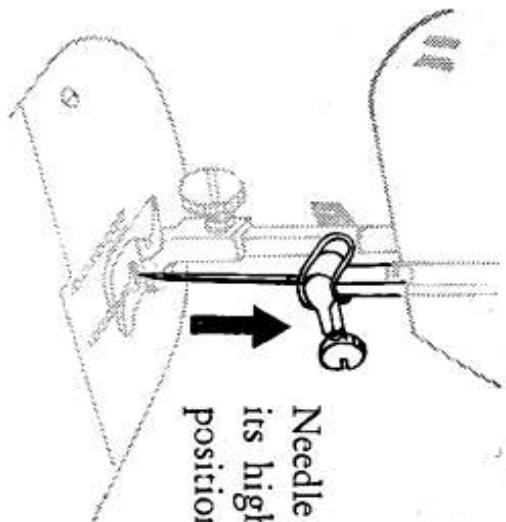
Raise needle bar to its highest position by turning hand wheel toward you. Loosen needle clamp screw. Hold the needle with flat side away from you. Slip the needle as far as it will go into the needle clamp, and tighten the thumb screw.



Flat side  
away  
from  
you

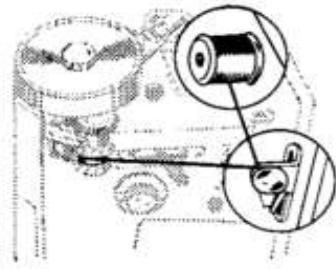
## REMOVING BOBBIN CASE FROM SHUTTLE

Needle at  
its highest  
position:

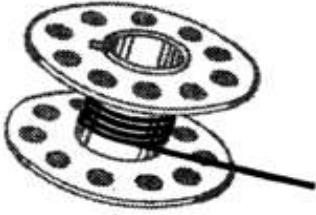


## WINDING THE BOBBIN

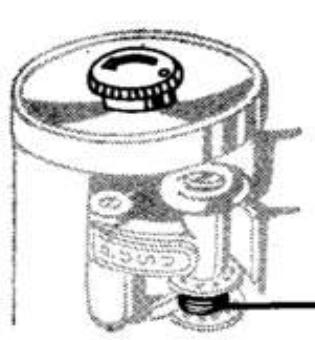
- 1** Place thread on spool post.  
Draw thread as shown.



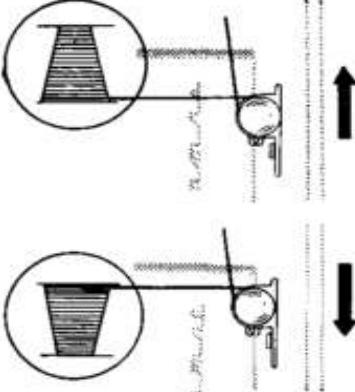
- 2** Wind thread around bobbin a few times. Place bobbin onto bobbin winder shaft.



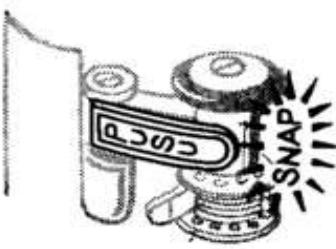
- 4** Release clutch by turning clutch knob toward you. Start machine. When bobbin is full, winding mechanism stops automatically.



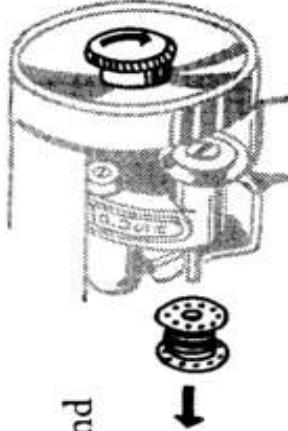
- 5** Bobbin winder thread guide is adjustable. If bobbin winds as illustrated, slightly move thread guide to an arrow direction to correct this situation.



- 3** Press bobbin winder lever down.



- 6** Tighten clutch knob and remove bobbin.

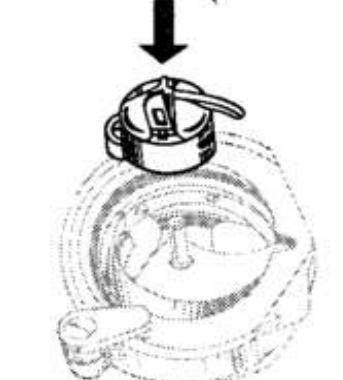


## **INSERTING BOBBIN INTO BOBBIN CASE ..... CASE INTO SHUTTLE**

- 1**  

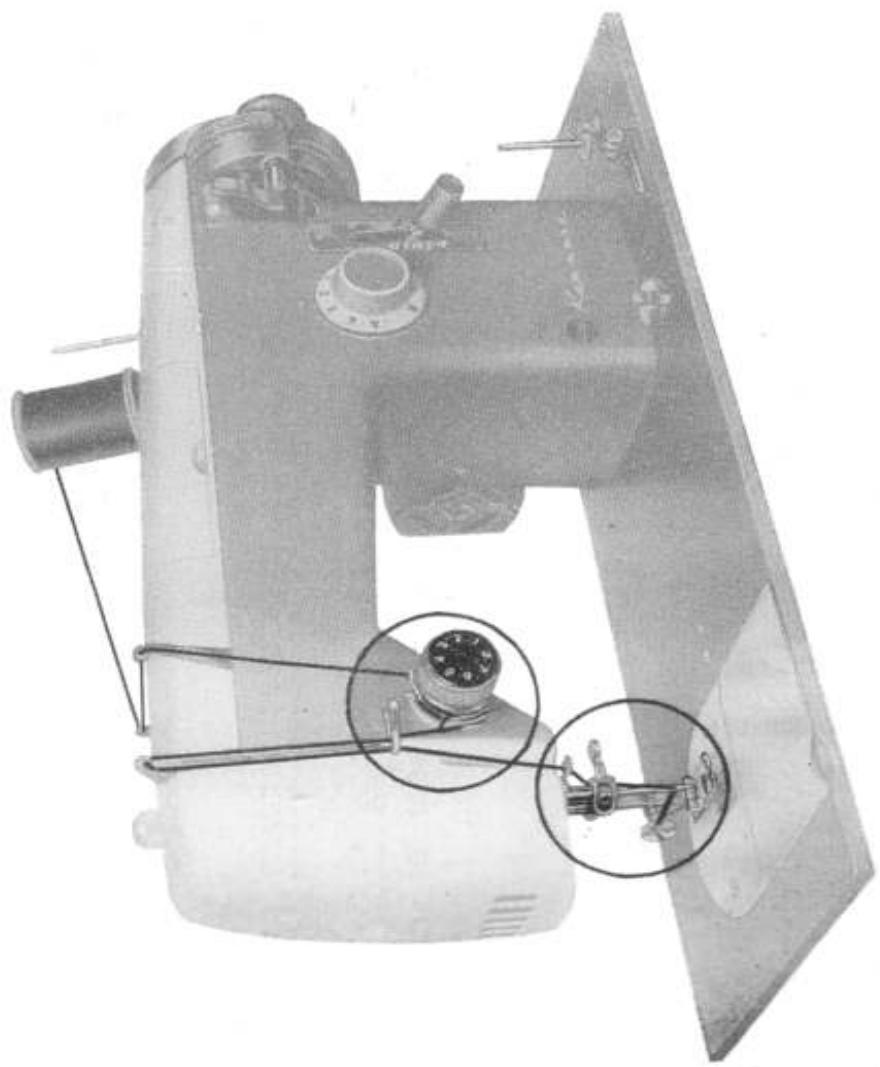
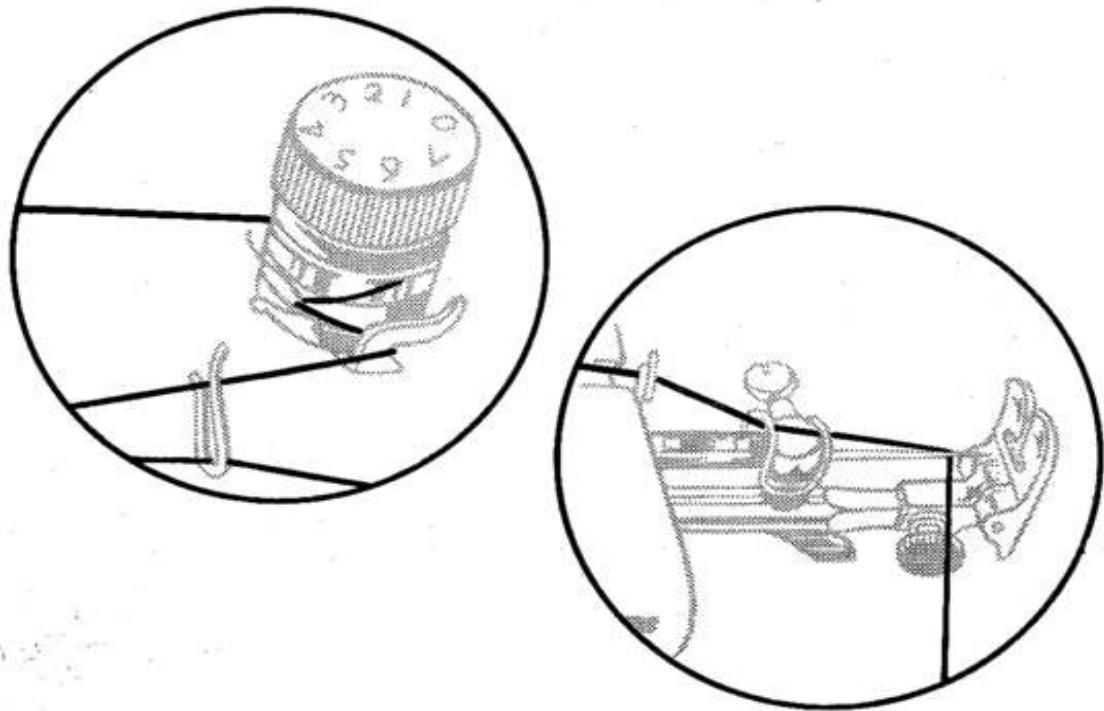

Guide bobbin onto center pin of bobbin case.
- 2**  


Pull thread through slot.
- 3**  


Pull thread under tension spring.
- 4**  


Holding latch, position case into shuttle, release latch.

## THREADING UPPER MACHINE



## PICKING UP BOBBIN THREAD

Raise presser foot lever.

Hold needle thread loosely in left hand and rotate hand wheel toward you one complete turn.

Bring bobbin thread up by pulling upper thread. (See illustration).

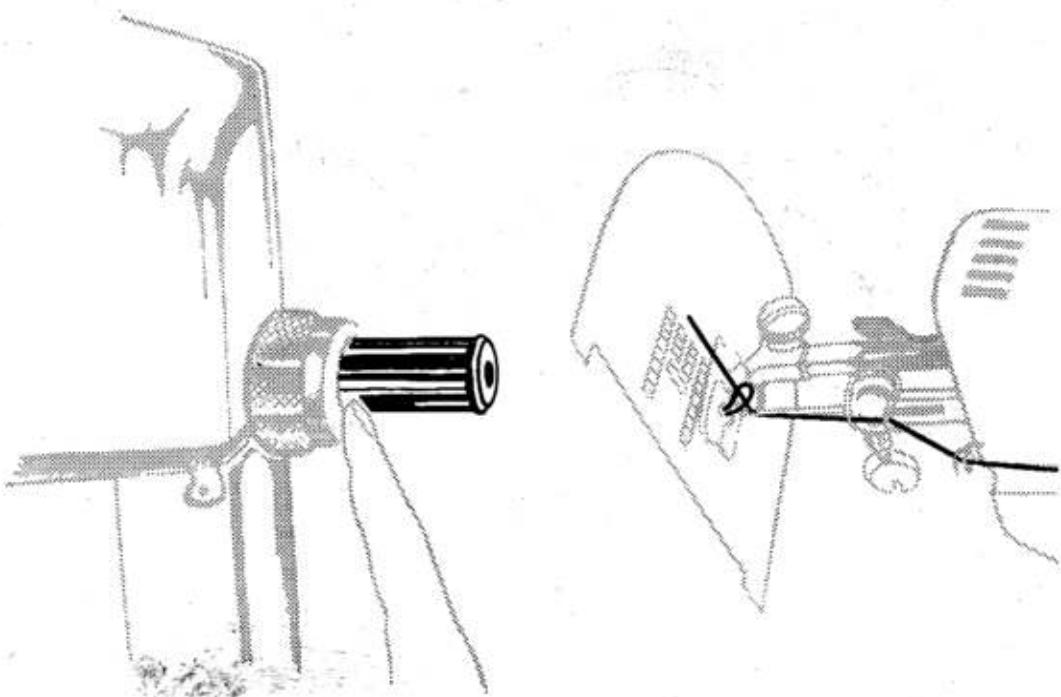
Place threads back under presser foot.

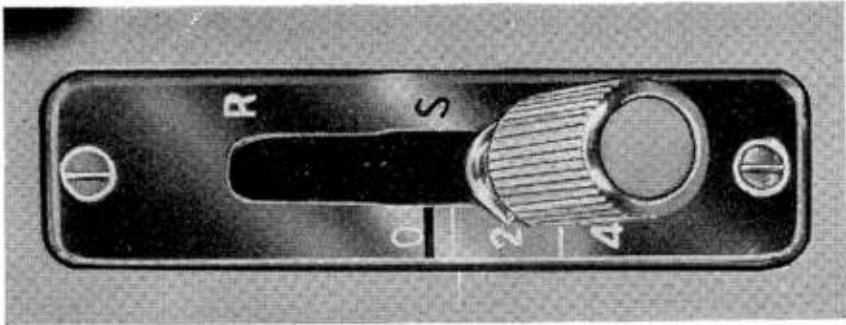
## ADJUSTING THE PRESSURE OF THE PRESSER FOOT

Push down outer ring of presser foot knob (See illustration). This will release pressure of presser foot. To increase pressure, push down inner pin until suitable pressure is obtained.

For ordinary sewing, the inner pin should be about half way down. When sewing multiple thickness or heavy material, reduce the pressure. Increase it when sewing sheer fabrics.

Insufficient pressure may cause skipped stitches or difficulty in guiding the fabric. If feed dog or presser foot marks appear on the fabric, reduce the pressure.





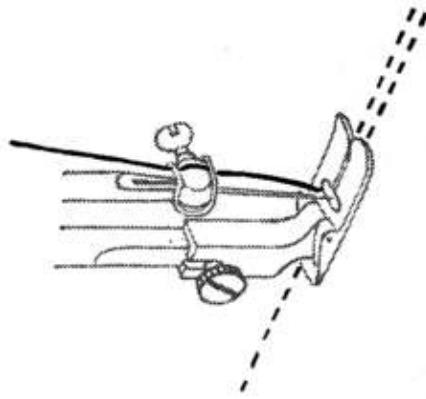
The stitch regulator lever controls the stitch length. Set lever to any desired stitch length position between 0 and 4, and set by turning knob clockwise until it stops. The red mark opposite S indicates the setting for a satin stitch. This will vary slightly depending upon the type of material to be sewn. At No. 4 the longest stitch is obtained. The size of stitch you select will depend on fabric you are sewing. To lengthen stitch, turn the knob counter clockwise until the lever can be lowered to the position desired.

### **REVERSE STITCHING**

Raise lever for reverse stitching. Lower lever for forward stitching.  
**REVERSE  
STITCHING**

It is best to begin and end most seams with reverse stitching often called back tacking.

Be sure both threads are drawn back under the presser foot. Lower needle into fabric about  $\frac{1}{2}$  inch from beginning of seam. Push stitch length control lever up for reverse stitching. Stitch in reverse until needle reaches beginning of seam.  
**FASTENING  
A  
SEAM**



## ADJUSTING TENSIONS

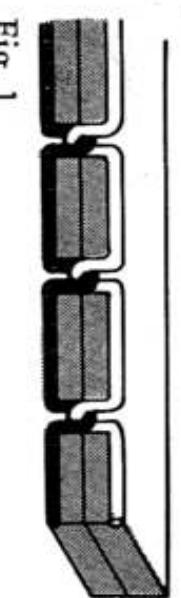


Fig. 1

1

Upper thread too tight

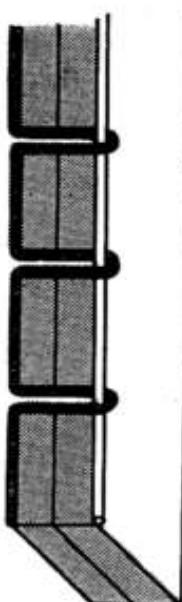


Fig. 2

2

Upper thread too loose

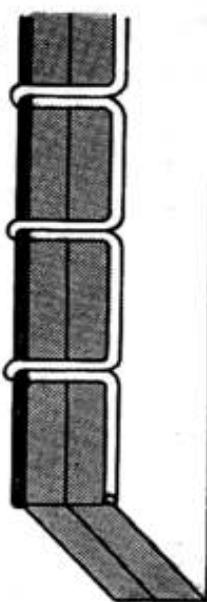


Fig. 3

3

### PROBLEM

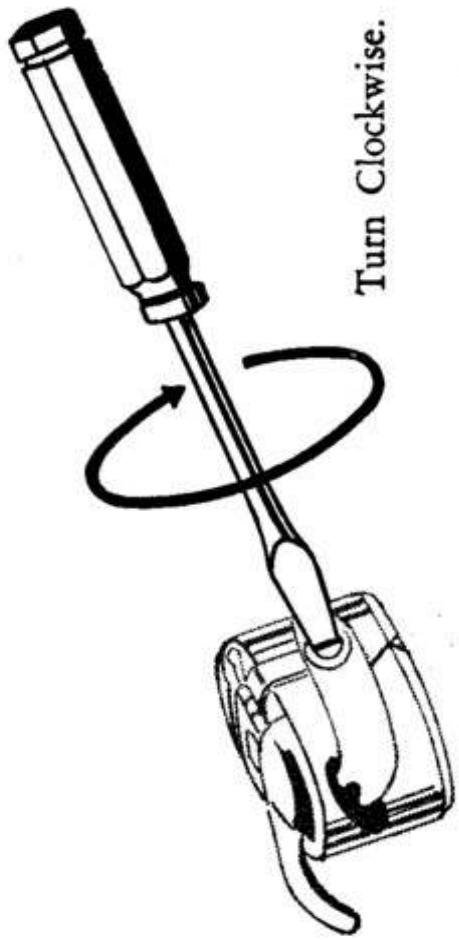
### REMEDY

A perfect stitch will have threads locked between the two layers of fabric with no loops on top or bottom.  
(Refer to page 32)



## **INCREASE TENSION**

When stitching is unsatisfactory as in figures 2 and 3, adjust the upper thread tension. Lower thread tension requires adjustment less frequently than the upper thread tension.

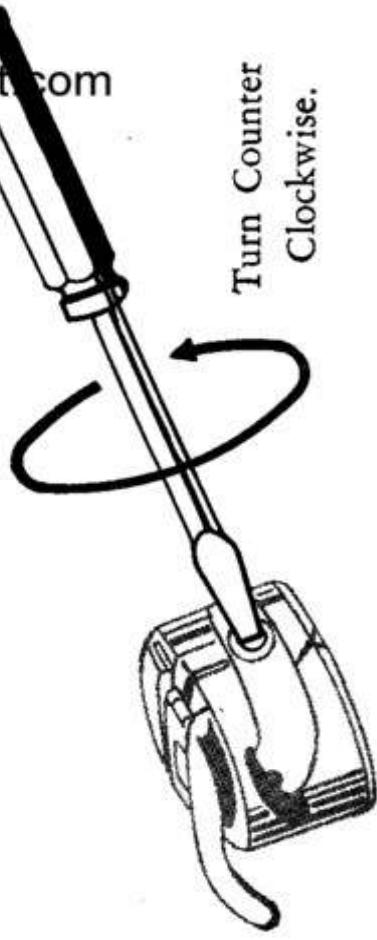


Turn Clockwise.

[www.Ucanprint.com](http://www.Ucanprint.com)

## **DECREASE TENSION**

When stitch is satisfactory, as in figure 1 and seam is "badly puckered," the cause may be tight tensions and both upper and lower may be adjusted. (See page 32)



Turn Counter  
Clockwise.

## **INSERTING AND REMOVING THE MATERIAL**

For all kinds of sewing, consult chart page 5.

Before placing the material on the machine see that:

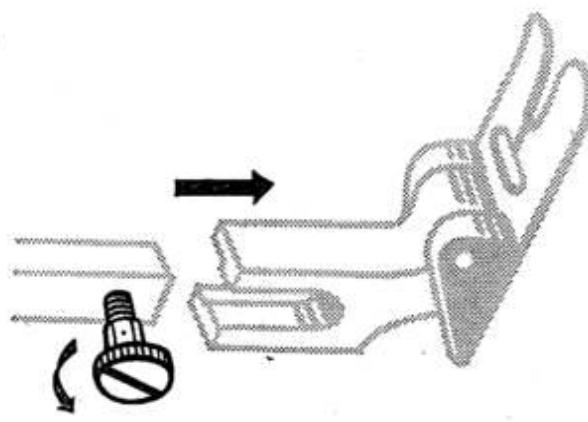
- \* The presser foot and needle clamp screws are both tight.
- \* The sizes of the needle and thread suit the kind of work to be done.
- \* The needle is at its highest position.
- \* The ends of the threads have been drawn about 4 inches to the rear of the machine.
- \* The feed dogs are up.

**IMPORTANT:** Always turn the hand wheel toward you ! When machine is not being used, place a piece of material over the feed dog and lower the presser foot. Always have fabric under the presser foot when operating the machine. Operating threaded machine without fabric will cause it to jam by forcing lint into the shuttle. See pages 28 & 29.

## CHANGING THE PRESSER FOOT

The various attachment feet available for certain kinds of work are to be fastened to the presser bar.

To attach the foot, raise the presser bar to its highest position by raising the presser foot lever. Loosen the presser foot thumb screw, choose the proper foot, insert from the front. Tighten the screw using the large screw driver and make sure that the foot is secure.

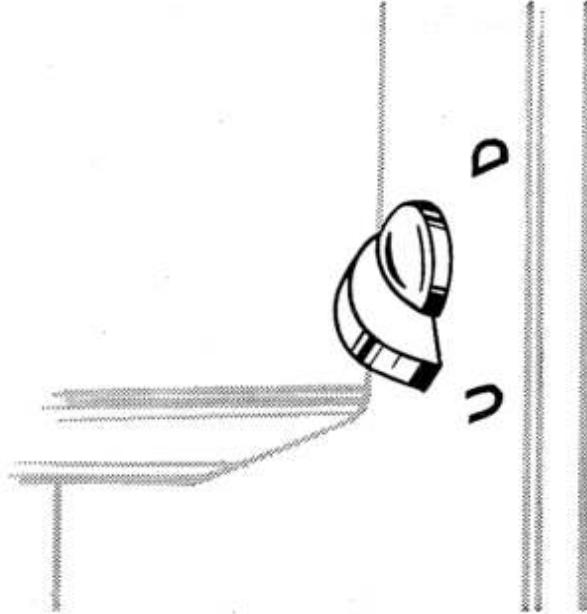


## TURNING A CORNER

Stop sewing machine with needle in fabric. Raise presser foot. Turn fabric. Lower presser foot and continue stitching.

## FEED DOG CONTROL

The drop feed control knob is situated on the right front of machine bedplate. When knob is turned to the right, feed dog drops and does not pull material. This allows the operator freedom of movement of material, as for darning. For regular sewing, turn knob to the left.



# DARNING

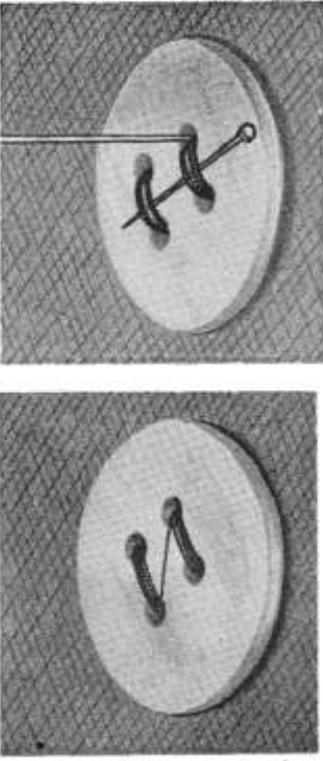
## WITH PRESSER FOOT:

1. Turn feed dog control to right.
2. Press down outer ring of presser foot knob, see page 10. With presser foot knob in this position, mending, darning, monogram work, etc. may be done.
3. Stretch fabric tightly between two spring embroidery hoops and place under needle.
4. Lower presser bar so thread will have some tension. When you start to darn, move fabric back and forth to cover darning area. Then turn fabric and continue sewing at right angles to the previous stitching. Use medium machine speed. You can make any length stitches desired. Slow movement of fabric will make short darning stitches. Fast movement will make long stitches.
5. When you finish darning, raise presser foot and remove fabric. Increase pressure for general sewing by pressing down inner pin of the presser foot knob. Turn feed dog control to left.

## WITHOUT PRESSER FOOT:

1. Turn feed dog control to right.
  2. Remove presser foot.
- Proceed as directed under steps 3 and 4 above.
5. When you finish darning, raise the presser foot lever and remove fabric. Replace presser foot, and increase pressure for general sewing. Turn feed dog control to left.

## **SEWING ON BUTTONS**



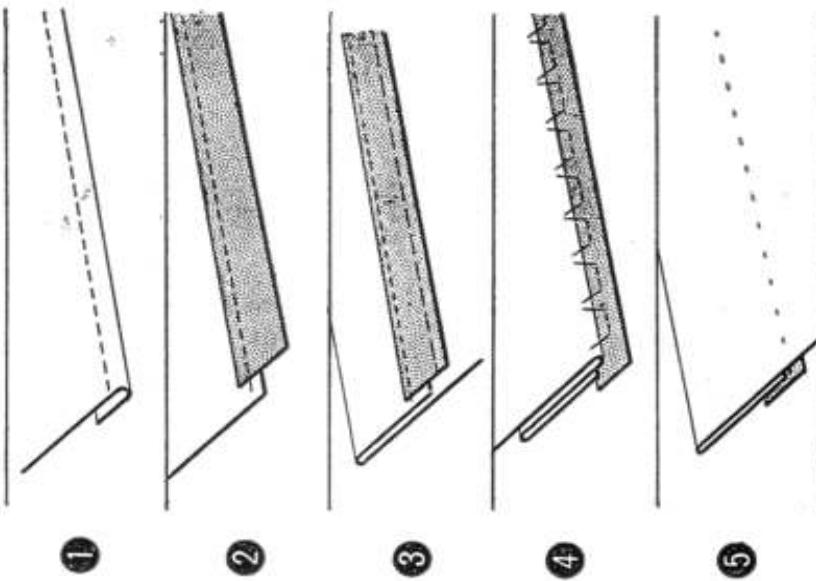
Use disc #1A

Center holes in button in slit in presser foot. Lower presser foot to hold securely. Drop feed dogs. Turn handwheel by hand until needle goes into hole in button. Adjust stitch width so that needle goes into second hole. Stitch a number of times to hold securely.

NOTE: To make a small thread shank when sewing on a flat button, place a straight pin or needle between the holes of the button.

## **BLIND STITCHING**

Disc #1B  
Stitch width 4  
Stitch length 2-4



1. Prepare the hem with a turned and edgestitched finish or;
2. Apply seam tape along the raw edge with either straight or zigzag stitching.
3. Turn hem and baste  $1/8$  inch from the edge of the seam tape using longest stitch on the sewing machine.
4. Fold garment back along basting line and stitch along garment fold using disc #1B.
5. Remove basting and press hem. The basting step may be eliminated in a straight hem.

## BUTTONHOLES

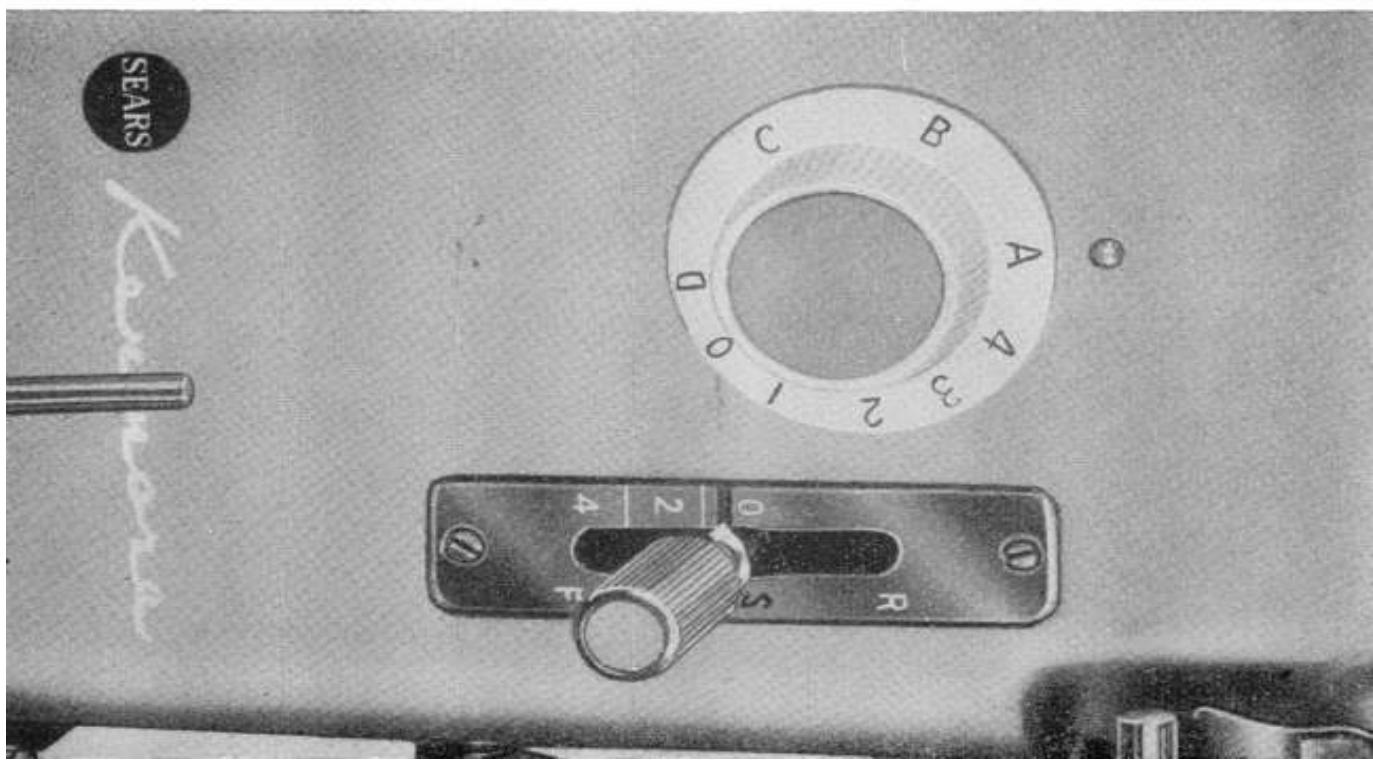
Use disc #1A

Following the instructions below, make a practice buttonhole using the fabric to be used in the garment. Determine the length of the buttonhole and mark it with tailor's chalk. Loosely woven fabrics and fabrics that stretch easily, such as Jersey, should have an interfacing of a firm fabric. Use cambric or taffeta between woolens and rayons - organdy or lawn between lightweight and sheer fabrics.

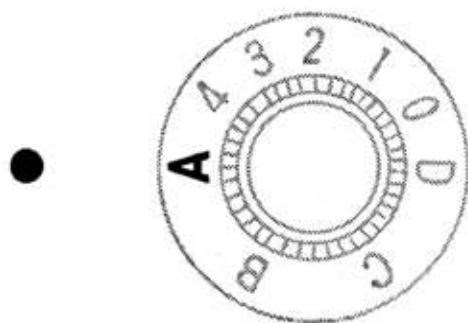
Be certain the needle is out of the fabric when knob positions are changed.

- A. Set the stitch length regulator at the red mark opposite S. This will vary slightly depending upon the type of material to be sewn. With the stitch regulator set on A - take a few stitches to make a bartack.
- B. Set the regulator on B and stitch length of buttonhole.
- C. Set the regulator on C and bartack the other end.
- D. Set the regulator on D and the other side of the buttonhole will be formed. To secure stitching, set regulator on 0 position and take a few stitches. Remove work, draw thread to wrong side and fasten.

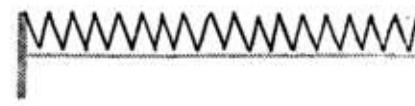
It is recommended that feed dogs be dropped at A and C steps for a firm backtacking.



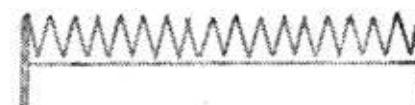
STEP A



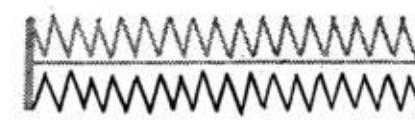
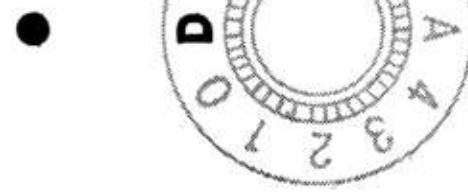
STEP B



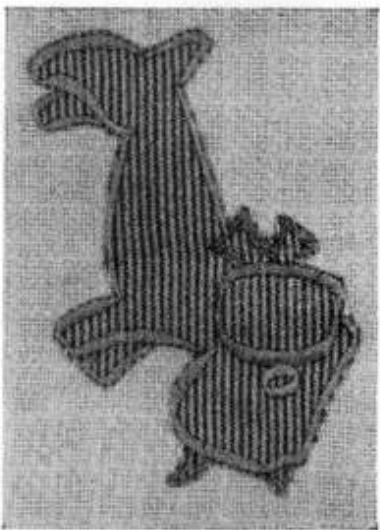
STEP C



STEP D



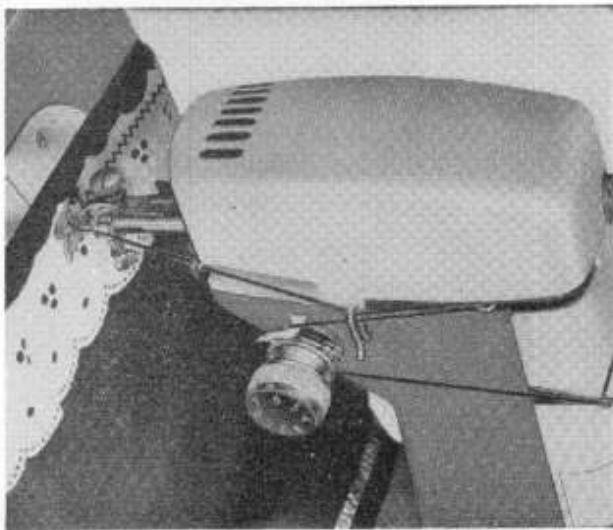
## **APPLIQUE** Use disc #1A



Baste cutout applique to fabric. Set stitch width 2 to 4. Set stitch length at the red mark opposite S. Zig zag stitch around applique completely covering the raw edge.

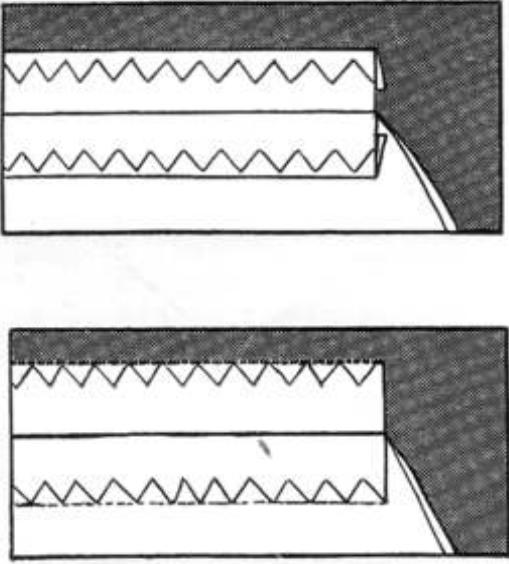
## **SEWING ON LACE** Use disc #1A

Set stitch width to 1. Set stitch length to 1 or 2. Place fabric under the presser foot and place lace on top of fabric overlapping edge by  $\frac{1}{4}$  inch. Start sewing with needle at the left stitch. Position fabric and lace so that needle goes into left edge of lace. To sew two pieces together to make a continuous pattern, use the same method.



## **OVERCASTING** Use disc #1A

Set stitch width to 4. Set stitch length to about 3. Zig zag stitch around raw edge of fabric to completely cover the edge.



## **WRITING AND MONOGRAMMING** Use disc #1A

|              |        |
|--------------|--------|
| Free hand    | 0 to 4 |
| Stitch width | Right  |
| Feed dog     |        |

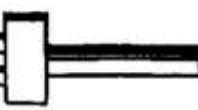
Draw initials or words to be sewn on fabric and fit fabric into embroidery hoops. Writing is done with either zig zag or straight stitching. Remove presser foot. Set stitch width for straight or zig zag stitches as desired. Slip hoop and fabric under the needle, lower presser bar and take one stitch to raise bobbin thread through fabric. Using a medium speed, stitch along marked outline, guiding fabric carefully by hands.



## **DOUBLE NEEDLE**

### **SETTING THE DOUBLE NEEDLE**

Raise the needle bar to its highest position and loosen needle clamp screw. Hold double needle assembly with flat side away from you. Slip the needle as far as it will go into needle clamp, and tighten the thumb screw.



### **THREADING THE DOUBLE NEEDLE**

Place a spool of thread on each spool pin. Draw each thread through upper thread guides. Continue threading the machine as you would for single needle sewing. Draw one thread through each needle from front to back and pull several inches of thread through. Thread bobbin and pick up bobbin thread as for single needle sewing.

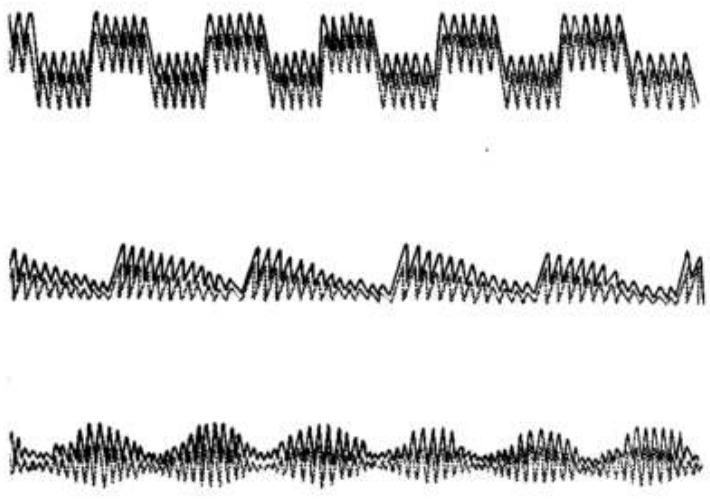
### **THREAD SELECTION**

Use only mercerized machine embroidery thread or mercerized sewing thread size 50 and finer. Machine embroidery thread is recommended for both upper and lower threading.

## **DOUBLE NEEDLE**

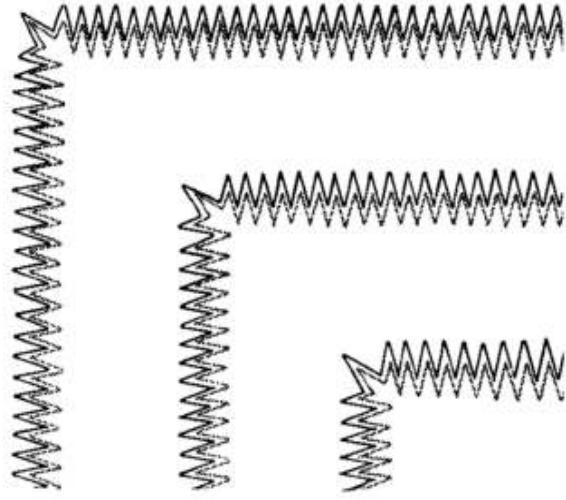
### **STITCHING**

All decorative patterns are possible with double needle. Before starting any stitching operation, check needle drop by turning the handwheel manually. Needle should enter fabric without touching presser foot and needle plate. The stitch width control should not be advanced beyond 3 setting.



### **TURNING A CORNER**

To turn a square corner in double needle stitching, stop stitching with the needle tips just piercing the fabric. Raise the presser foot, shift fabric half the turn, lower presser foot and take one stitch. Raise the presser foot again, complete the turn, and begin stitching in the new direction.



## ZIGZAG CONTROL

### SETTING STITCH WIDTH

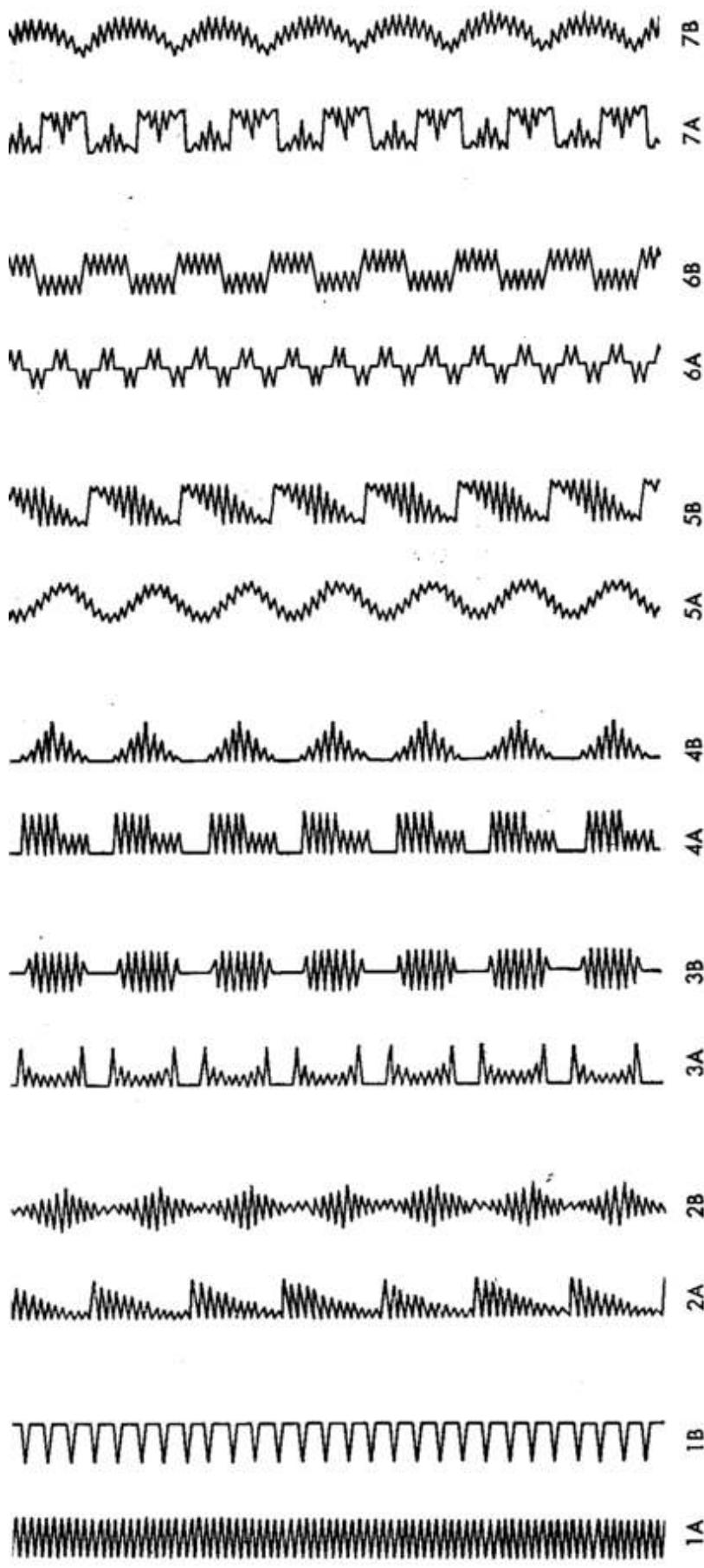
Insert disc #1A. Turn the stitch width knob to the desired setting between 0 and 4 on the knob. Zigzag stitch width increases from 0 to 4. Straight stitching is possible only with control on 0 setting.

### INSERTING PATTERN DISC

1. Pull automatic stitch mechanism cover open.
2. Push cam follower release lever to the right and keep it there during insertion.
3. Grasp pattern disc and slip disc onto the shaft. Make sure the retaining pin enters hole in disc.
4. To remove pattern disc, reverse the above procedure.

There are two different patterns on each disc. A picture of each pattern is on the disc surface. Position disc into machine with desired pattern facing up.





### AUTOMATIC DECORATIVE STITCHING

This machine enables you to sew beautiful decorative and embroidery stitches by means of various discs supplied with your machine. The movements of the needle are automatically controlled by the disc. Basic decorative stitches are made with stitch width at 4 and stitch length at the red mark opposite S. The latter will vary slightly depending upon the type of material to be sewn. Pattern will be changed if using any other length or width. All patterns also can be made with double needle. See page 23.

## SYNTHETICS

Your KENMORE will sew all the new fabrics of synthetic fiber, such as nylon, \*Orlon, \*\*Dacron, rayon, acetate, blends of these, and combinations of synthetic and natural fibers. When stitching a fabric of blended or combined fibers, handle it as you would a material of the fiber present in the largest percentage. For example, a fabric woven of 60% Orlon and 40% silk should be handled as one made entirely of Orlon.

When stitching a fabric that is over 50% synthetic fiber, remember:

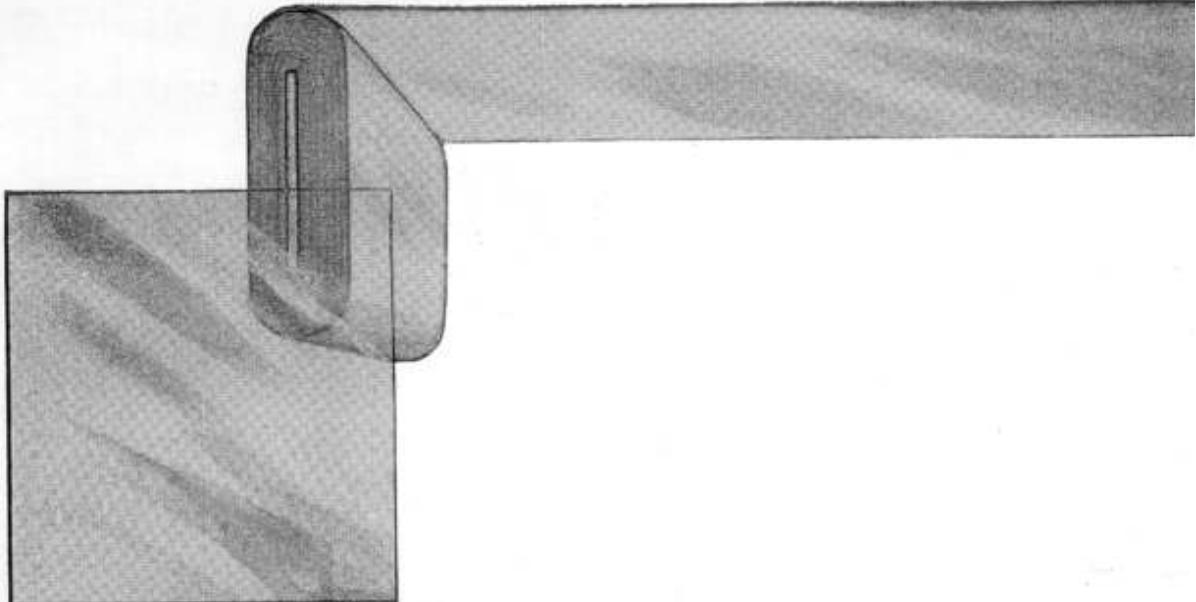
- a. Select patterns of the loose fitting type with cap or kimono sleeves, because most synthetic fiber fabrics cannot be eased with steam pressing, and are not absorbent.

- b. Use a synthetic thread.
- c. Use a fine needle as recommended in chart on page 5.
- d. Wind the bobbin in the usual way, but do not pass thread between tension discs. Guide thread by hand for a smoothly wound bobbin.
- e. Choose the stitch length that gives the most satisfactory seam.
- f. Check thread tensions by sewing on a double thickness of the fabric to be used. Usually the upper thread tension must be loosened. Sometimes both bobbin and upper thread tensions must be loosened (page 12, 13).

## SEWING ON PLASTIC FILMS

Set the machine with normal thread tensions and a large size stitch. Use a fine needle and mercerized thread. Hold plastic pieces together with cellophane tape or paper clips rather than pins. Sew corners slightly rounded rather than square.

\*Trademark for Dupont's Acrylic fiber.    \*\*Trademark for Dupont's Polyester fiber.



## CLEANING AND OILING.....

Keep the moving parts free from dust and threads for quiet and efficient operation. Cleaning should be done with a small brush.

When machine runs hard or makes excessive noise, place a drop of KENMORE sewing machine oil at the points indicated in figs. A, B, & C.

Swing hinged face cover plate open to oil points indicated at end of machine head.

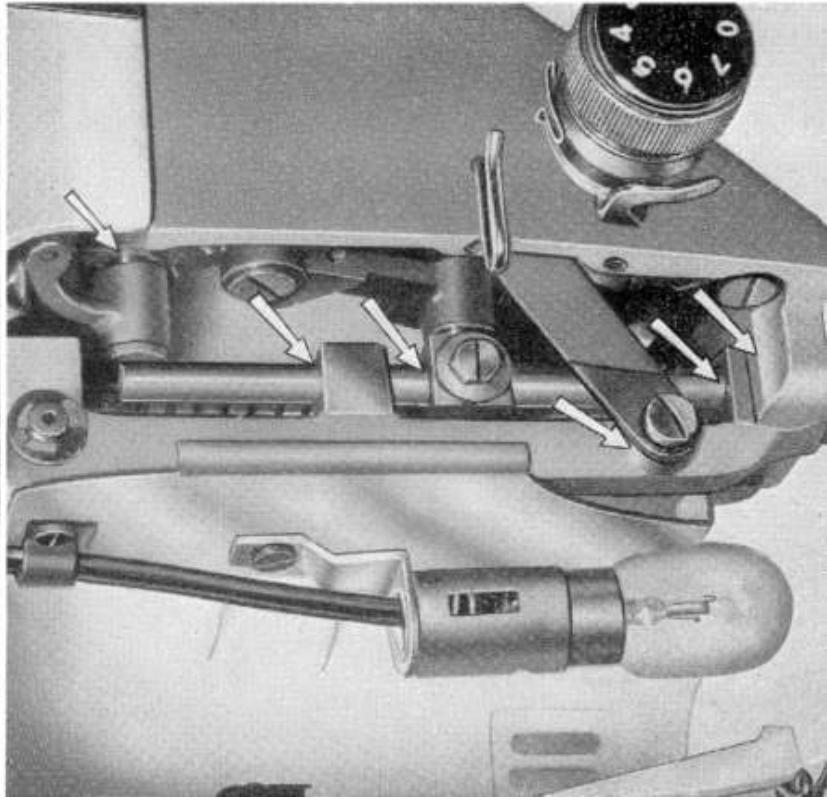
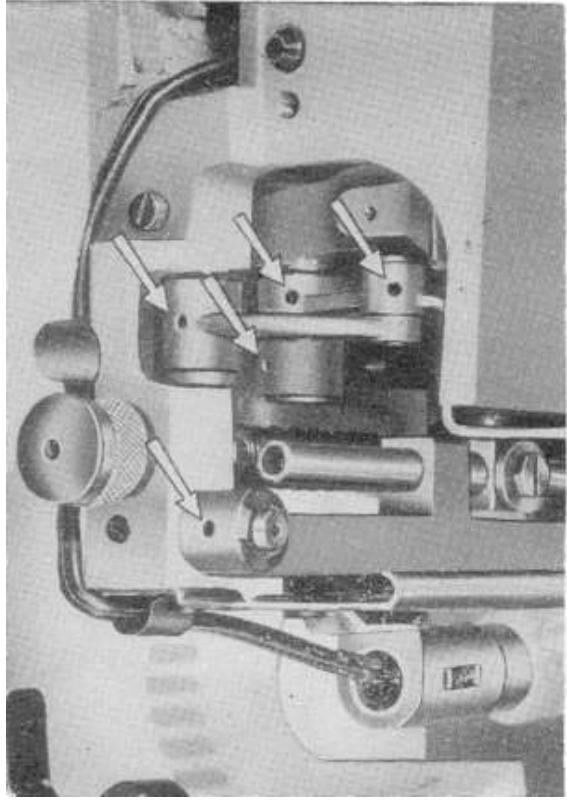
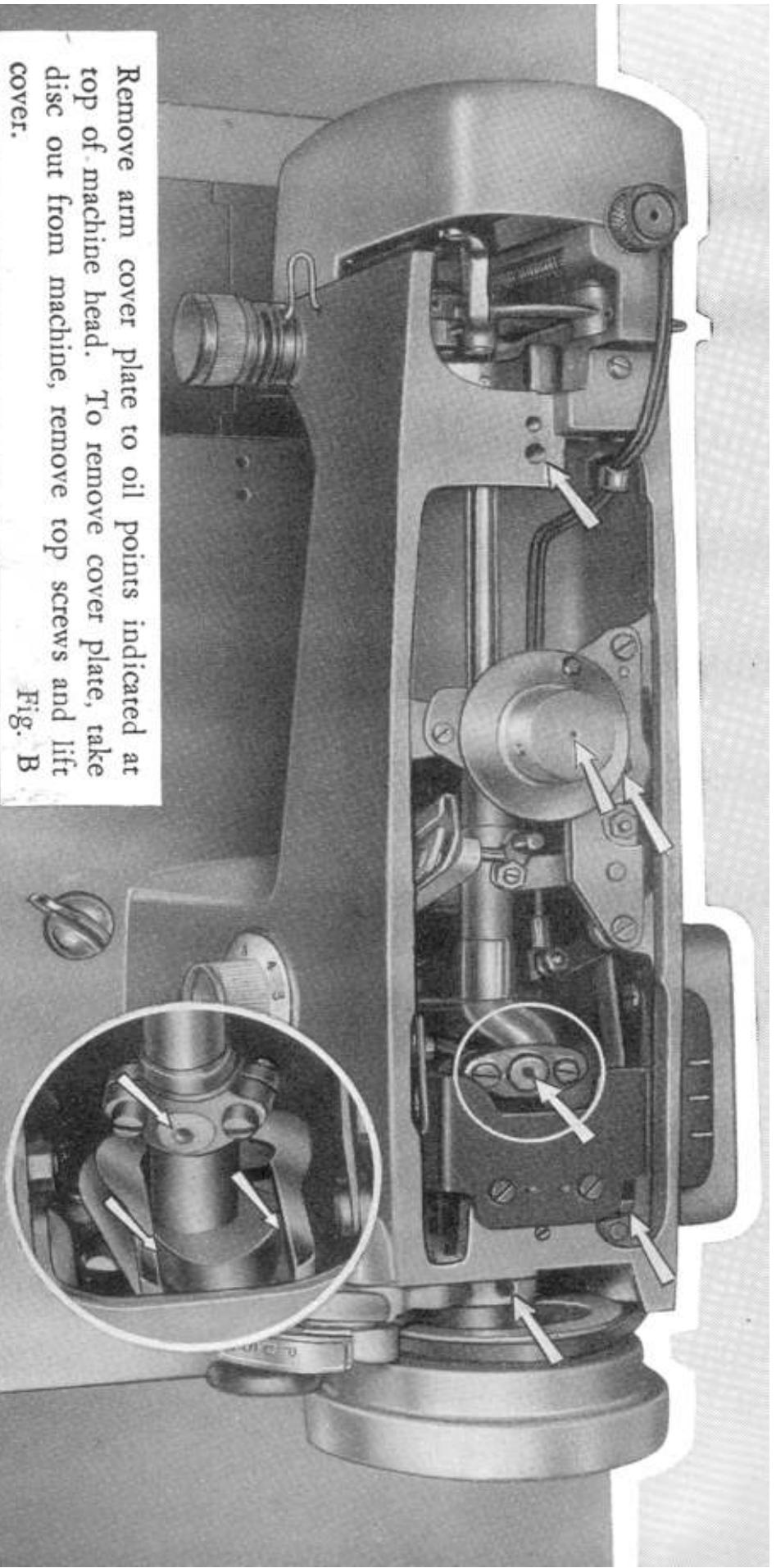


Fig. A

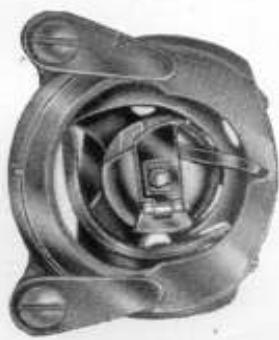
Remove arm cover plate to oil points indicated at top of machine head. To remove cover plate, take disc out from machine, remove top screws and lift cover.

Fig. B

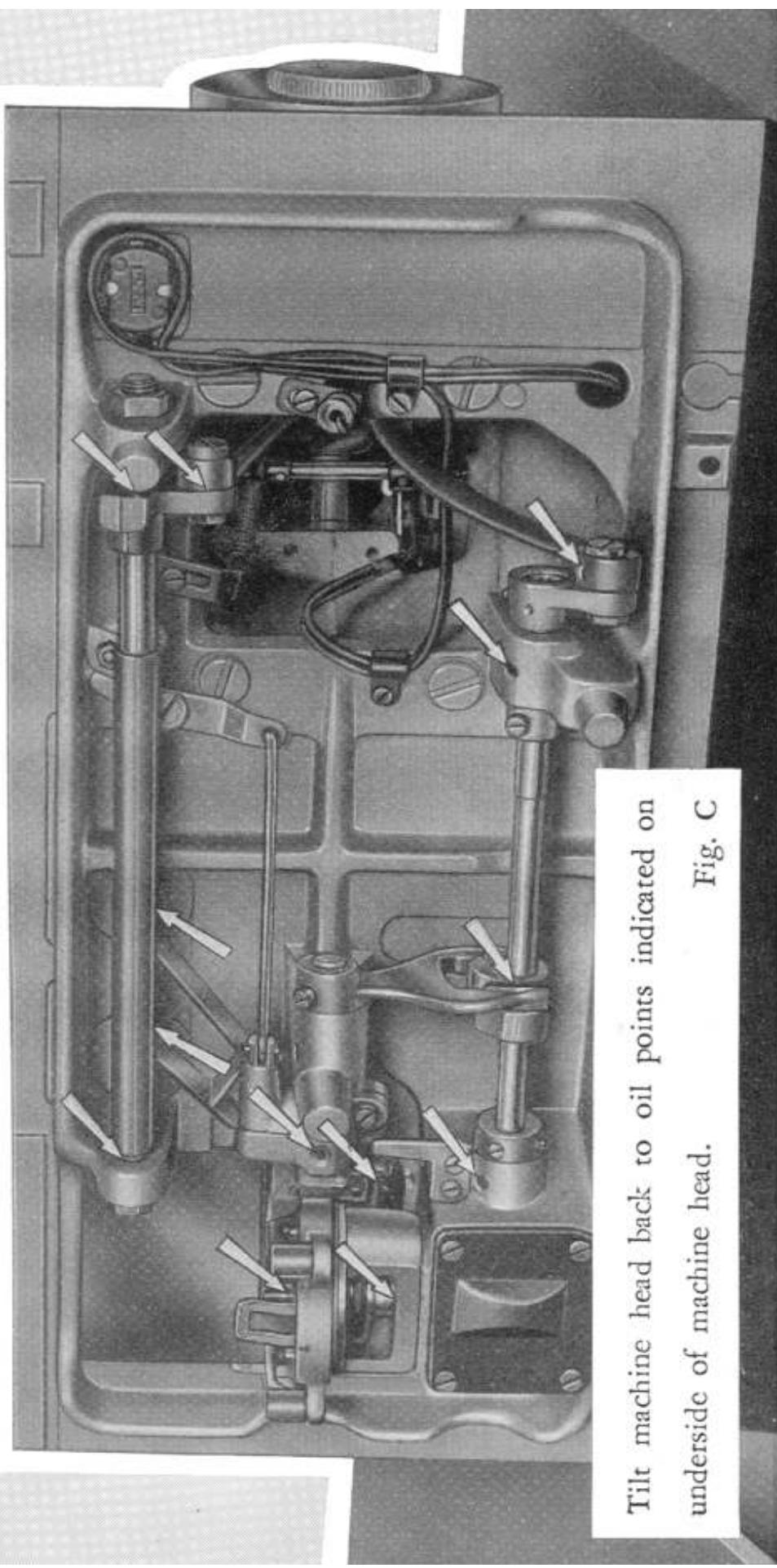


It may be necessary to clean the shuttle area occasionally.

1. Raise the needle bar to its highest point and remove bobbin case.
2. Push levers sideways of the shuttle assembly and lift hook and hook ring out by the center pin.
3. Clean the shuttle race of any lint or small particles of thread with a small brush.
4. Put a drop of oil on the center pin and on race in back of the hook.



Shuttle Assembly



Tilt machine head back to oil points indicated on underside of machine head.  
Fig. C



To reassemble, hold hook by center pin and fit carefully into assembly opposite the hook driver. Slip hook ring into place. Snap the lever into position. Occasionally, remove the needle plate and clean feed dog with a soft brush.

# WHAT TO DO

| PROBLEM                   | PROBABLE CAUSE  | CORRECTION   |
|---------------------------|---|--|
| <b>Irregular Stitches</b> | Incorrect size needle.<br>Improper threading.<br>Loose upper thread tension.<br>Pulling fabric.<br>Light pressure on presser foot.<br>Loose presser foot.<br>Unevenly wound bobbin.               | Choose correct size needle for thread and fabric (page 5).<br>Retread machine (page 9).<br>Tighten upper thread tension (page 12).<br>Do not pull fabric; guide it gently.<br>Increase pressure on presser foot (page 10).<br>Reset presser foot (page 15).<br>Rewind bobbin (page 7). |
| <b>Breaking Needles</b>   | Pulling fabric.<br>Incorrect size needle.<br>Incorrect setting of needle.<br>Loose presser foot.  | Do not pull fabric; guide it gently.<br>Choose correct size needle for thread and fabric (page 5).<br>Reset needle (page 5).<br>Reset presser foot (page 15).  |
| <b>Bunching of Thread</b> | Upper and lower threads not drawn back under presser foot.<br>Feed dog down.  | Draw both threads back under presser foot (page 10).<br>Raise feed dog.  |
| <b>Puckering</b>          | Incorrect thread tension(s).<br>Light pressure on presser foot.<br>Using two different sizes or kinds of thread.<br>Bent or blunt needle.<br>Loose presser foot.<br>Fabric too sheer or too soft. | Reset thread tension(s) (page 12, 13).<br>Increase pressure on presser foot (page 10).<br>Upper thread and bobbin thread should be same size and kind.<br>Insert new needle (page 5).<br>Reset presser foot (page 15).<br>Use underlay of tissue paper or tarleton when stitching.     |

# WHAT TO DO

| PROBLEM                                     | PROBABLE CAUSE  | CORRECTION  |
|---|---|---|
| <b>Skipping Stitches</b>                    | Incorrect size needle.<br>Bent or blunt needle.<br>Incorrect setting of needle.<br>Tight upper thread tension.<br>Light pressure on presser foot. | Choose correct size needle for thread and fabric (page 5).<br>Insert new needle (page 5).<br>Reset needle (page 5).<br>Loosen upper thread tension (page 12).<br>Increase pressure on presser foot (page 10). |
| <b>Breaking Upper Thread</b>                | Starting to stitch too fast.<br>Improper threading.<br>Tight upper thread tension.<br>Incorrect size needle.<br>Sharp eye in needle.              | Start to stitch at a medium speed.<br>Rethread machine (page 9).<br>Loosen upper thread tension (page 12).<br>Choose correct size needle for thread and fabric (page 5).<br>Insert new needle (page 5).       |
| <b>Breaking Bobbin Thread</b>               | Improper bobbin case threading.<br>Tight bobbin thread tension.<br>Lint in bobbin case or shuttle.  | Check bobbin case threading (page 8).<br>Loosen bobbin thread tension (page 13).<br>Clean bobbin case and shuttle (page 28, 29).  |
| <b>Fabric not Moving</b>                    | Feed dog down.<br>Light pressure on presser foot.<br>Threads knotted under fabric.  | Raise feed dog (page 15).<br>Increase pressure on presser foot (page 10).<br>Place both threads back under presser foot before beginning to stitch.   |
| <b>Machine Jamming<br/>(Knocking Noise)</b> | Thread caught in shuttle.   | Disassemble and clean shuttle (page 28, 29).  |

## **ADJUSTING YOUR SEWING MACHINE FOR GOOD STITCHES**

When your sewing machine does not sew a properly locked stitch, check the following:

1. Insert a new needle of the correct size for the thread and fabric you are using. Consult chart on page 5 for needle size.
2. The upper and bobbin thread should be matched in size and type.
3. Check threading carefully. See page 9.
4. Check thread the tension balance. Use #50 mercerized thread, size 14 needle, and a firm cotton fabric.

Begin with a full bobbin, properly threaded into the case. Set the stitch length at about 12 stitches per inch. Make a row of bias stitching on a double thickness of your fabric.

- a. If seam is puckered - both tensions are too tight.
- b. If bottom thread is looped - tighten upper thread tension.
- c. If top thread lays on top of fabric - loosen upper thread tension.

Then grasp a good bias seam and pull evenly and firmly until one or both threads break.

- a. If both threads break - tensions are balanced.
- b. If neither thread breaks - both tensions are too loose. "
- c. If upper thread breaks - loosen upper tension.
- d. If lower thread breaks - tighten upper tension.

Bobbin tension may also be reset by this procedure. Start with a loose bobbin thread tension. Tighten the spring screw gradually until bobbin case and full bobbin can be gently lifted from your hand by the end of the bobbin thread.

## PARTS LIST

All parts listed here may be ordered through your nearest Sears or Simpsons - Sears' retail store, catalog sales office or mail order house.

When ordering these parts, please be sure to mention the following references:

1. Model & serial numbers of machine shown on the nomenclature plate. See page 2.
2. Parts number(s) and description(s) here.

When ordering by mail, prices will be furnished on request, or parts will be shipped at prevailing prices and you will be billed accordingly.

| <u>Ref. #</u> | <u>Parts #</u> | <u>Description</u>                            |
|---------------|----------------|---|
| 1             | 51             | Shuttle hook                                  |
| 2             | 8524           | Needle clamp                                  |
| 3             | 60502          | Bobbin  |
|               | 60860          | Plastic bobbin box with<br>10 bobbins (60502) |
|               |                | Bobbin case                                   |
|               |                | Light bulb                                    |
|               |                | Needle  |
|               |                | Double needle                                 |
|               |                | Bobbin winder rubber ring                     |
|               |                | Nylon disc                                    |
| 4             | 8541           | Thread spool pin                              |
| 5             | 3815           | Pattern disc #1A & B                          |
| 6             | 6021           | Pattern disc #2A & B                          |
| 7             | 6026           | Pattern disc #3A & B                          |
| 8             | 1939           | Pattern disc #4A & B                          |
| 9             | 2273           | Pattern disc #5A & B                          |
| 10            | 8286           | Pattern disc #6A & B                          |
| 11            | 1114           | Pattern disc #7A & B                          |
| 12            | 1944           | Bobbin winder thread guide                    |
| 13            | 8522           | Presser foot                                  |
| 14            | 135            | Presser foot thumb screw                      |
| 15            | 60902          | Motor rubber belt                             |
| 16            | 9184           | Needle threader                               |

