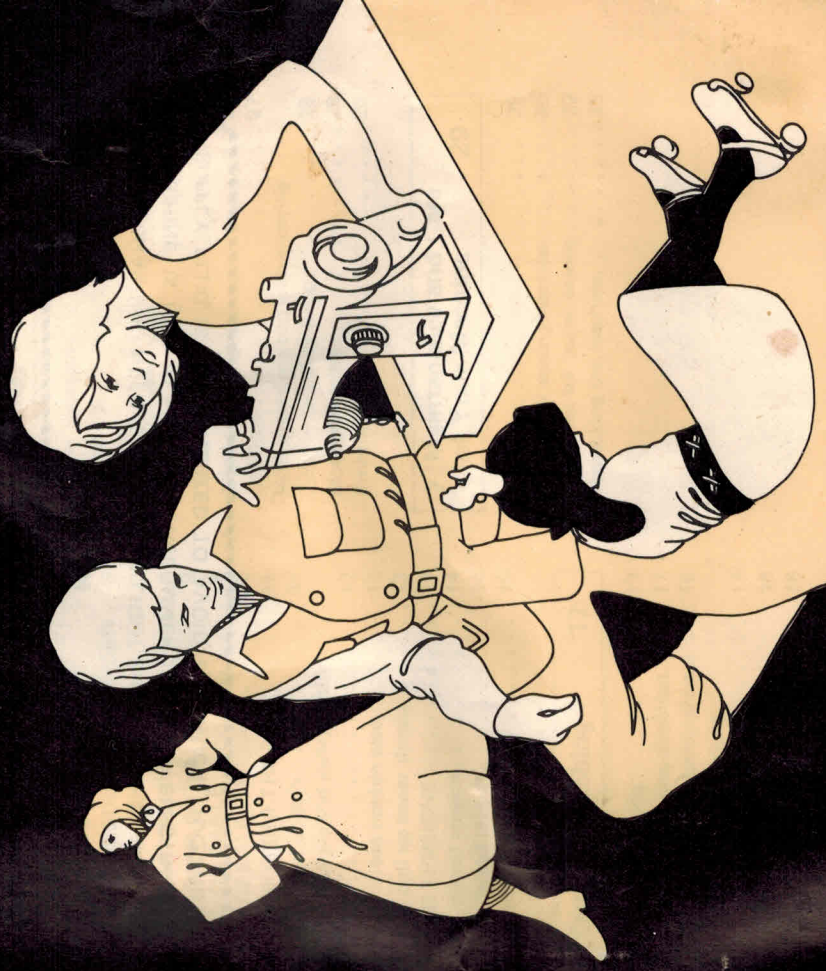


how to use  
and enjoy your  
sewing  
machine



MODEL VX710  
ENGLISH

191571-0-11

PRINTED IN TAIWAN



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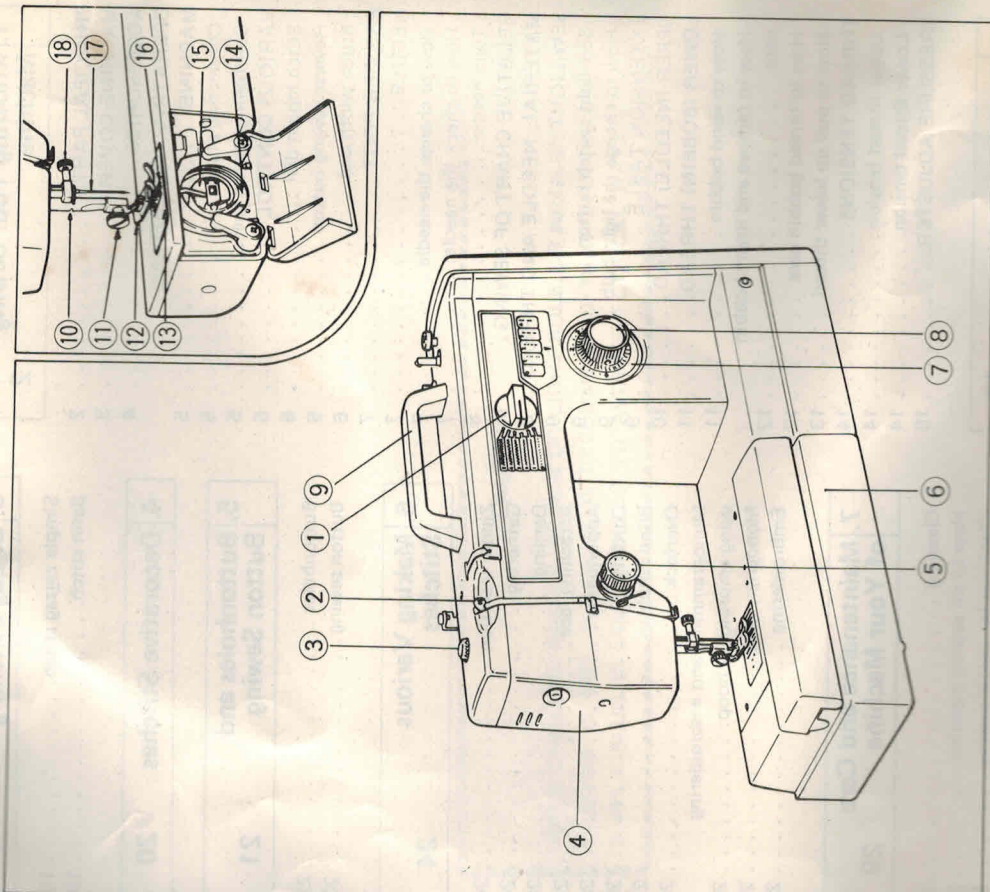
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**CAUTION**

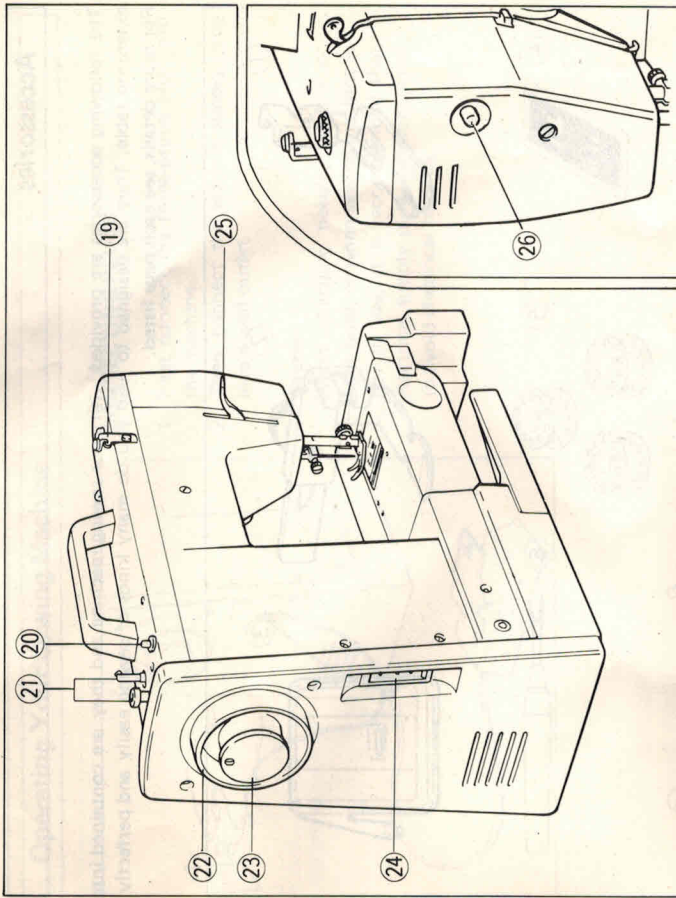
WHEN CHANGING NEEDLE, BOBBIN OR LIGHT BULB, OR WHEN SEWING MACHINE IS NOT IN USE, IT IS RECOMMENDED THAT ELECTRICAL SUPPLY PLUG IS DISCONNECTED TO AVOID ELECTRICAL HAZARDS.

# 1 Knowing Your Sewing Machine

## Principal Parts

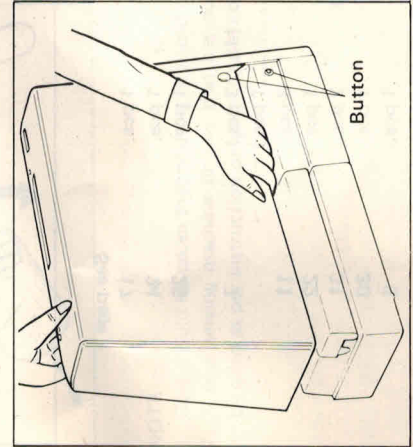


1. Thread Width Dial
2. Thread Take-up Lever
3. Pressure Adjuster
4. Face Plate
5. Upper Thread Tension Dial
6. Extension Table
7. Stitch Length Dial
8. Reverse Sewing Button
9. Carrying Handle
10. Thread Cutter
11. Presser Foot Screw
12. Presser Foot (Zigzag)
13. Needle Plate (Zigzag)
14. Shuttle Hook
15. Bobbin Case
16. Feed Dog
17. Needle
18. Needle Clamp Screw



19. Thread Guide and Bobbin Winder Disc
20. Spool Pin
21. Bobbin Winder Device
22. Balance Wheel
23. Stop Motion Knob
24. 3-prong Socket
25. Presser Foot Lifter
26. Sew-light Switch

## Machine Cover



### TO REMOVE THE MACHINE COVER FROM SEWING MACHINE

1. Undo buttons on the front and rear of machine cover.
2. Lift the machine cover gently by hands.

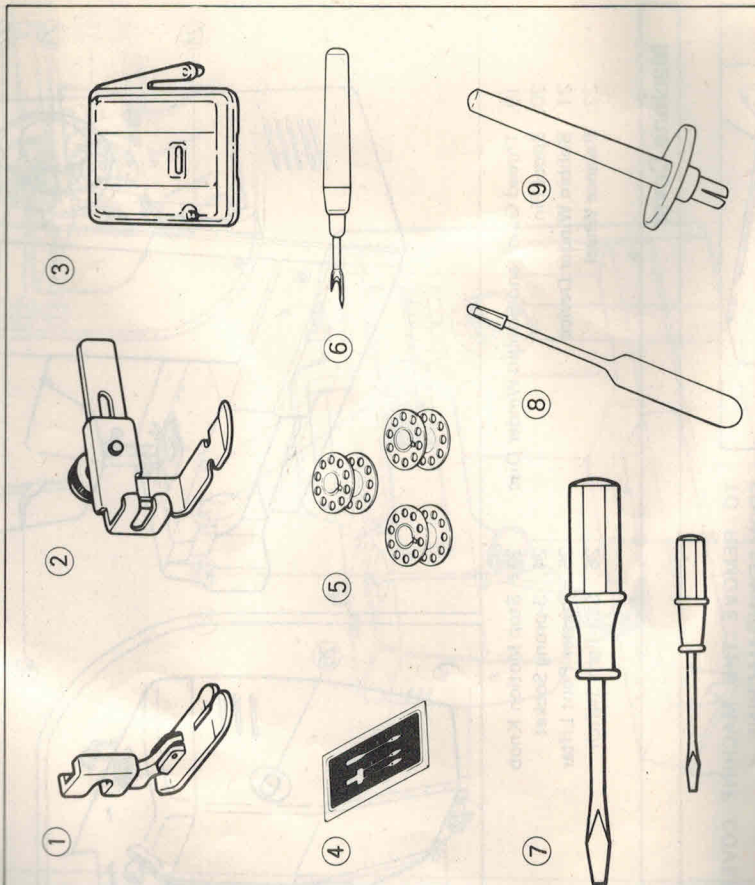
### TO REPLACE THE MACHINE COVER

1. Lower the presser foot.
2. Press the spool pin into the machine bed.
3. Place the foot controller on the machine bed.
4. Push the machine cover down gently.
5. Button up the machine cover.



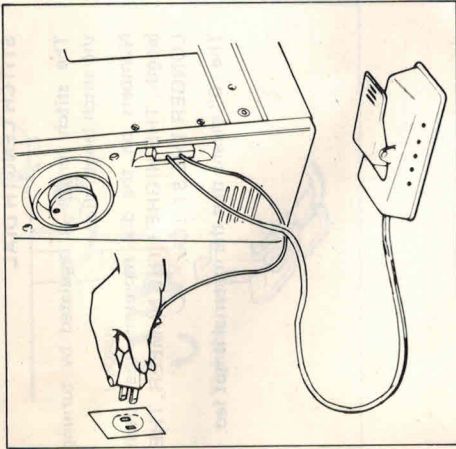
## Accessories

The following accessories are provided with your sewing machine and they are contained into extension table. They are designed to help you do many kinds of sewing easily and perfectly. For more details, see each page listed.



	See page
1. Straight Stitch Foot	17
2. Zipper Foot	24
3. Darning Plate	25
4. Needle Pack (Regular Single Needle No. 14 ..... 3 pcs.) (Twin Needle ..... 1 pcs.)	7
5. Bobbins	11
6. Seam Ripper	22
7. Screw Driver (Large & Small)	31
8. Oiler	30
9. Extra Spool Pin	8

## Operating Your Sewing Machine

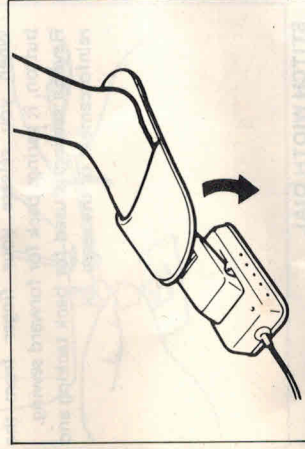


### CONNECTING PLUGS

1. First connect the three-prong plug into the machine.
2. Then connect the electric supply plug into a wall outlet.

### Caution

When changing needle, bobbin or light bulb, or when sewing machine is not in use, it is recommended that electrical supply plug is disconnected to avoid electrical hazards.



### CONTROLLING SEWING SPEED

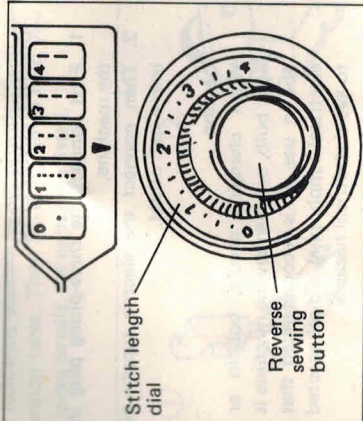
Place foot on foot control as shown in illustration.  
When foot control is pushed down lightly, machine will run at a low speed.  
When pressure on foot control is increased, machine will pick up speed.  
When foot control is released, machine will stop.

### NOTE:

1. Care should be taken that nothing is placed on foot controller when machine is not in use.
2. A new sewing machine or one that has not been in use for a long period of time should be oiled as per instruction on page 30 & 31. After oiling be sure to wipe up any excess oil.



## Various Controls

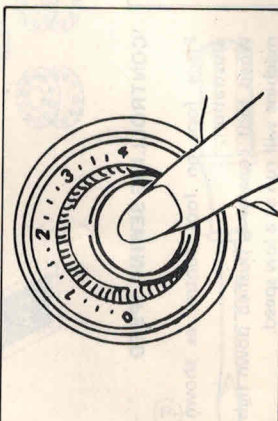


### STITCH LENGTH DIAL

The stitch length is regulated by turning the stitch length dial.

Numbers on the dial represent the stitch length, **THE HIGHER THE NUMBER, THE LONGER THE STITCH.**

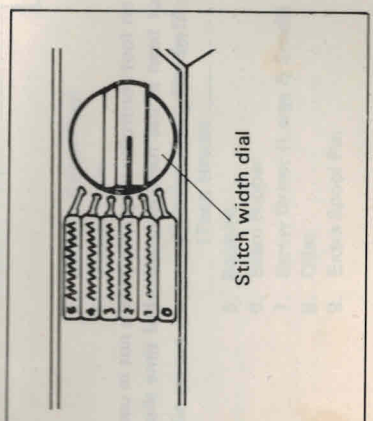
The "0" means that the material is not fed.



### REVERSE SEWING BUTTON

To sew reverse, push reverse sewing button as far as it will go and keep it in this position until you wish to sew forward.

When you release your finger from the button, it springs back for forward sewing. Reverse sewing is used for back tacking and reinforcement of the seam.



### STITCH WIDTH DIAL

The zigzag width is regulated by operating the stitch dial.

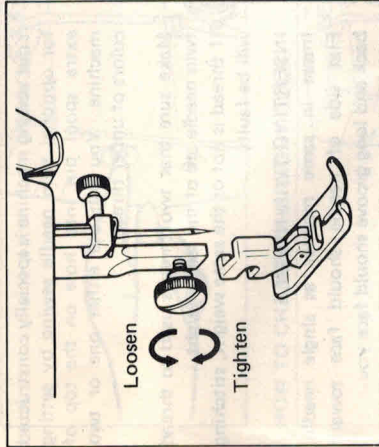
Numbers beside the dial represent the width of stitch, **THE HIGHER THE NUMBER, THE WIDER THE STITCH.**

The "0" means straight stitch only.

**NOTE:** 1. Do not move the dial while the needle is in the material.

2. When using twin needle, dial should always be set at under "3".

## Presser Foot

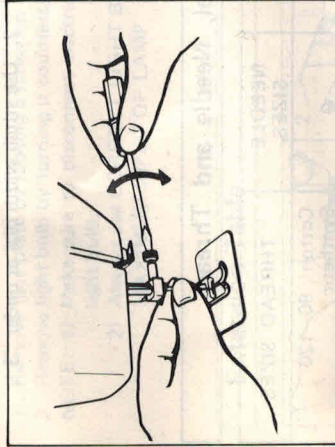


You will find various kinds of presser foot for special use in the extension table. According to your sewing needs, it may be necessary to change presser foot.

### CHANGING THE PRESSER FOOT

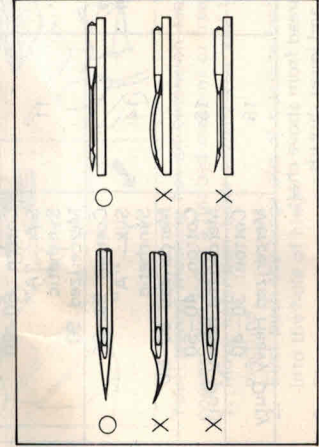
1. Raise needle to its highest position and raise presser foot lifter.
2. Loosen presser foot thumb screw and remove presser foot.
3. Place grooved side of the new presser foot against the flat of the presser bar.
4. Tighten thumb screw securely.

## Needle



### HOW TO CHANGE THE NEEDLE

1. Raise needle bar to its highest position.
2. Loosen needle clamp screw and remove old needle.
3. Insert new needle into needle clamp hole as far as it will go against the needle stop. Make sure the flat side of the needle faces toward the back and the long groove toward you.
4. Tighten needle clamp screw securely.

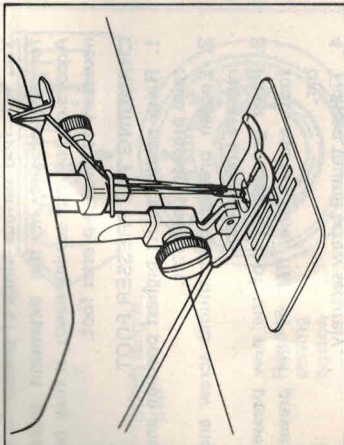


### HOW TO CHECK THE NEEDLE

1. The sewing needle must always be straight and sharp for smooth sewing.
2. To check if needle is bent, place flat side of needle down as shown in illustration at left.



### Twin Needle



Your sewing machine is specially constructed for optional twin needle sewing by setting extra spool pin into hole on the top of machine. You can use either one or two colors of upper thread.

Make sure that two threads used to thread twin needle are of the same weight. If thread is not of the same weight, stitching will be faulty.

#### INSERTING TWIN NEEDLE

Insert in same manner as single needle. Flat side of needle should face toward back and long groove should face you.

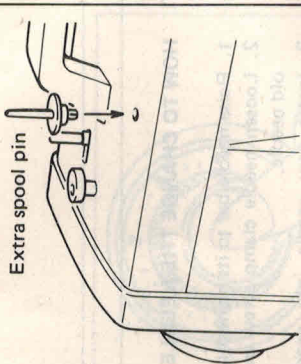
#### THREADING TWIN NEEDLE

Follow instructions for single needle threading (see page 10), but thread each needle separately. The groove should face you.

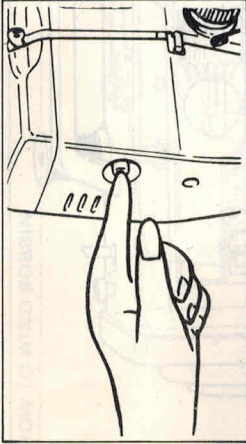
#### NOTE FOR TWIN NEEDLE SEWING

1. Use ZIGZAG PRESSER FOOT.
2. Use stitch width dial at under "3".

Extra spool pin



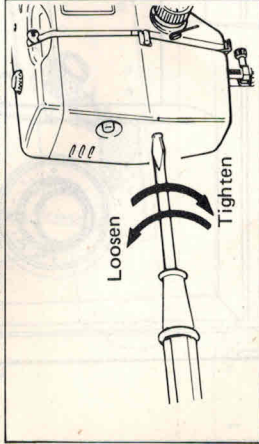
### Sew-light



### SEW LIGHT SWITCH BUTTON

To switch the light on or off, push the sew-light stitch button.

### HOW TO CHANGE THE LIGHT BULB



1. Remove face plate by loosening a screw on face plate. 3. Replace light bulb and fix face plate.
2. Remove light bulb by turning it counterclockwise.

NOTE: 1) Make sure to disconnect electric supply plug from wall outlet before changing light bulb.

2) Always use CORRECT LIGHT BULB.

MAXIMUM INPUT OF LAMP

12W. . . . .110/115V AREA

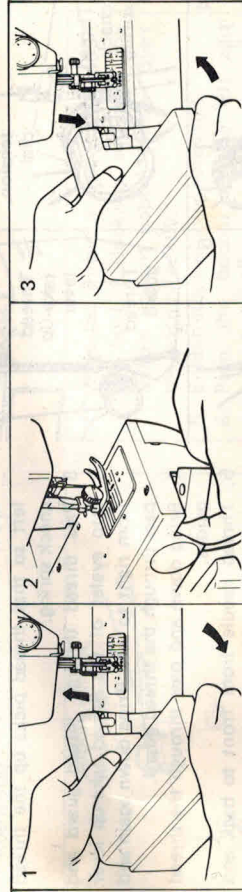
15W. . . . .220/240V AREA

### Relative Chart of Sewing Material, Needle and Thread

SEWING MATERIALS	NEEDLE SIZES	THREAD SIZES
VERY THIN Fine tricot, Fine lace, Thin linen, Silk, Tulle, Chiffon	9	Cotton: 80-120 Synthetic Fine Mercerized Cotton
LIGHTWEIGHT Organdy, Jersey, Voile, Taffeta, Synthetics, Silk, Batiste	11	Cotton: 60-80 Synthetic Mercerized 50
MEDIUM Cotton, Gingham, Poplin, Percalé, Pique, Satin, Vel- vet, Lightweight wool, Fine corduroy, Suitings	14	Cotton: 50-60 Synthetic Mercerized 50-60
HEAVY Denim, Gabardine, Tweed, Corduroy	16	Cotton: 40-50 Mercerized Heavy Duty
VERY HEAVY Canvas, Overcoating, Upholstery	18	Cotton: 30-40 Mercerized Heavy Duty

- NOTE: 1. Select correct size of needle and thread from above chart.  
2. Use the same size thread for upper and lower threads.

### Extension Table

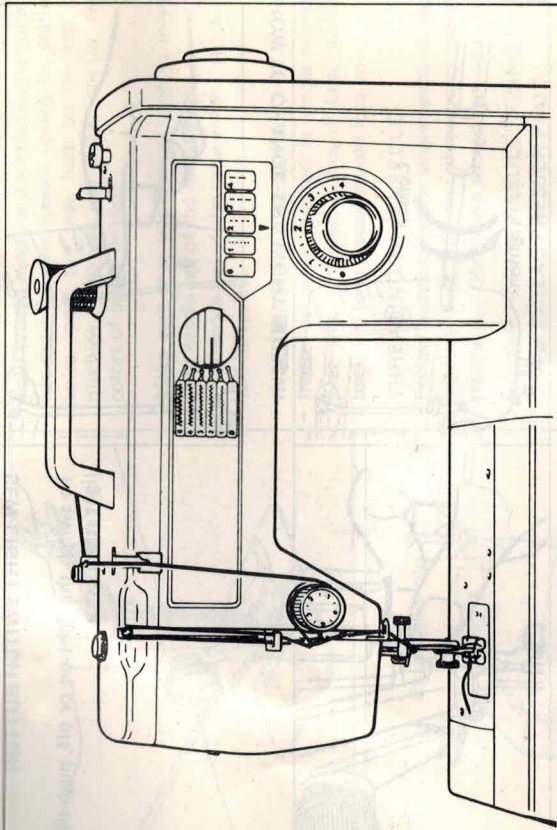


Your sewing machine has an extension table and by moving it, your sewing machine can convert into either a flat bed machine or freearm machine.

1. Move extension table toward you and lift it. Your sewing machine becomes a freearm machine.
2. First push the hinge out of machine bed by finger and insert the shaft of extension table into the hole of hinge.
3. Then move it toward freearm bed. Your sewing machine becomes a flat bed machine.



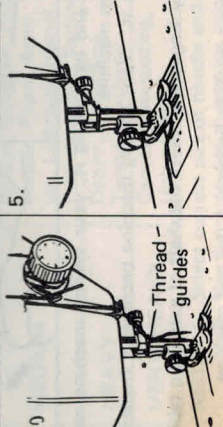
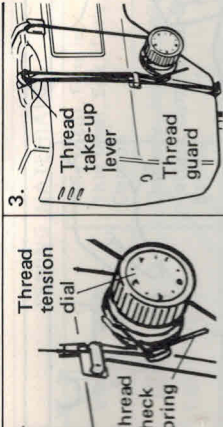
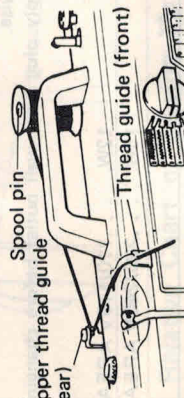
## Upper (Needle) Thread



Before threading, raise presser foot and turn balance wheel toward you to raise thread take-up lever to its highest position.

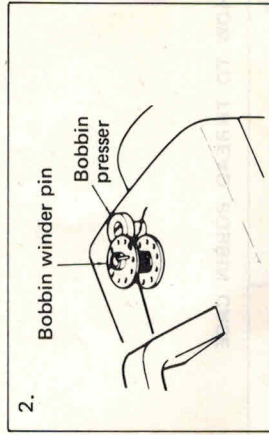
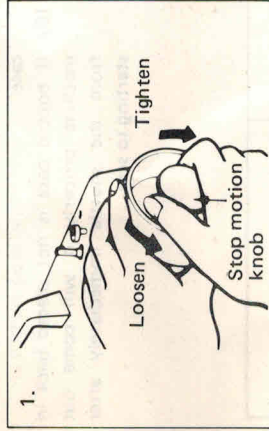
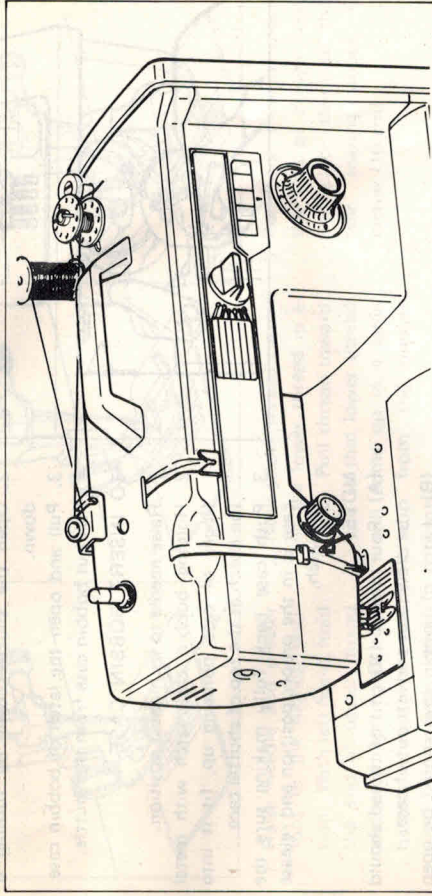
1. Then raise spool pin and place thread spool on the pin.
1. Pass thread through the both of thread guides from rear to front.
2. Bring thread down and up through upper thread tension dial from right to left so that thread picks up the thread check spring.
3. Pass thread through thread guard and into eyelet of the thread take-up lever from right to left. Bring down again and pass through the thread guard.
4. Bring down and pass through the thread guides.
5. Thread needle from front to back and draw the thread out about 2 inches (5 cm).

**NOTE:**  
IF THE THREADING ORDER IS NOT CORRECT, THREAD BREAKAGE, STITCH SKIPPING AND WRINKLING OF FABRIC WILL OCCUR.

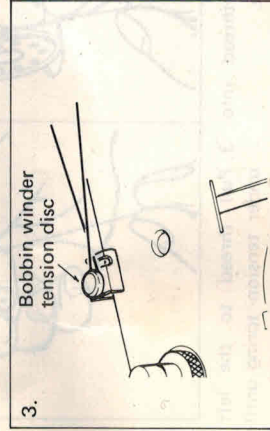


## Lower (Bobbin) Thread

### HOW TO WIND BOBBIN



1. Loosen stop motion knob by turning it toward you.
2. Place an empty bobbin on the bobbin winder pin.

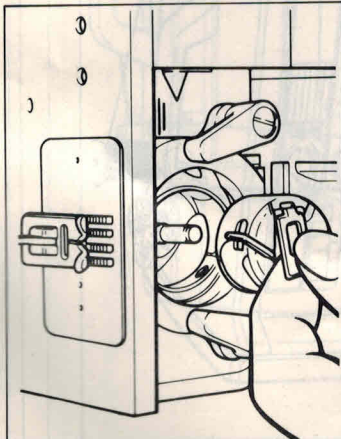


4. Wind the thread a few times around the bobbin clockwise and push the bobbin toward bobbin presser. Start the machine gently.
5. Bobbin stops winding when full.
6. Push the bobbin to the left and remove it. Tighten stop motion knob securely.

3. Place thread spool on the spool pin and take thread through bobbin winder tension disc.



### HOW TO REMOVE AND INSERT BOBBIN CASE



#### TO REMOVE BOBBIN CASE

1. Raise needle to its highest position.
2. Open the shuttle cover by turning it down.
3. Pull and open the latch of bobbin case.
4. Pull out bobbin case from the shuttle.

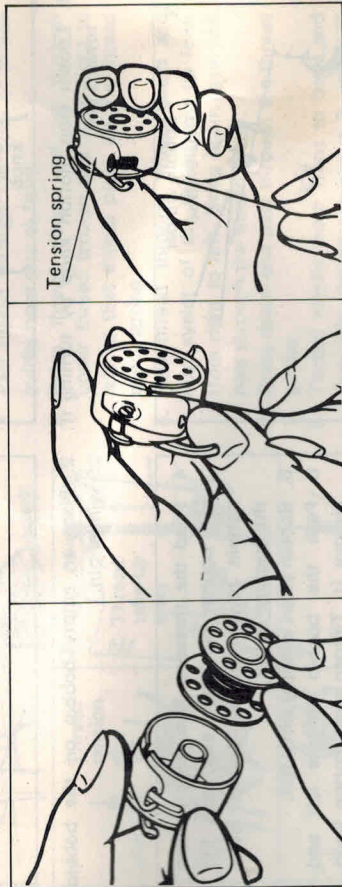
#### TO INSERT BOBBIN CASE

1. Raise needle to its highest position.
2. Holding bobbin case latch with metal finger of case pointing up, fit it into the notch at the top of shuttle race.
3. Push case back fully making sure the case is in the proper position and release the latch.

#### NOTE:

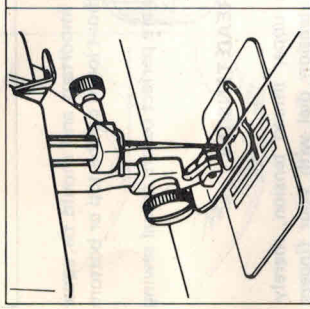
- (A) Four inches (10 cm) of thread should be drawn out and left out of case.
- (B) Latch of bobbin case should be open fully to prevent bobbin coming out of case.
- (C) If bobbin case is not placed back in machine properly it will come out from the shuttle immediately after starting to sew.

### HOW TO THREAD BOBBIN CASE

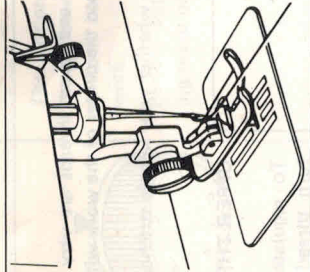


1. Unwind about 4 inches (10 cm) of thread from the bobbin. Insert wound bobbin into bobbin case.
2. Pull trailing thread into the slot of case.
3. Pull thread to the left under tension spring until thread enters into delivery eye.

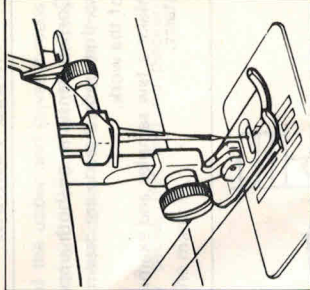
### HOW TO PULL UP LOWER THREAD



1. Raise needle and presser foot to the highest position. With left hand, hold the end of upper thread and with right hand, turn and balance wheel toward you until the needle moves down and up again to its highest position.



2. Now upper thread catches the lower thread in a loop. Pull thread toward you so that lower thread will come up in a large loop from the presser foot.

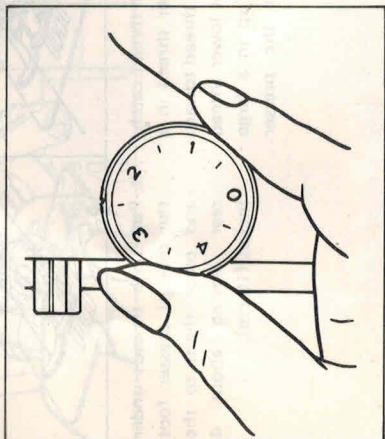


3. Pull both threads under the toes of presser foot and place them to the rear leaving about 4 inches (10 cm).



## Thread Tensions

Correct tensions on both upper and lower threads are very important and should be equal so that both threads are drawn into the center of the work without loops on the top or bottom of the work. Take a few samples and examine whether your sample stitches are perfect before actual sewing starts.



### UPPER THREAD TENSION

To regulate upper thread tension, merely turn thread tension dial with your fingers after lowering the presser foot.

**THE HIGHER THE NUMBER, THE TIGHTER THE TENSION.**

To increase tension: Turn dial to right to larger number.

To decrease tension: Turn dial to left to smaller number.

**NOTE:** When sewing the zigzag stitch, it requires less upper tension than straight stitch.

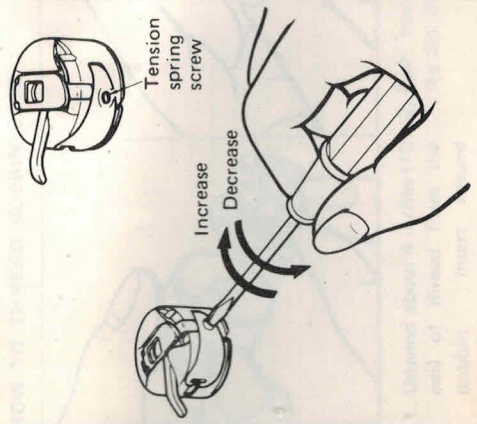
### LOWER THREAD TENSION

Lower thread tension has been already adjusted for general use at the factory before shipment but when sewing extremely thin or heavy material, it requires to adjust the lower thread tension also.

To regulate the lower thread tension, turn small screw on the tension spring of the bobbin case with the small screw driver.

To increase tension: Turn the small screw clockwise very slightly.

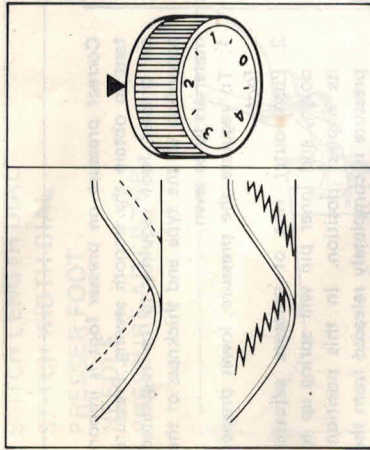
To decrease tension: Turn the screw counter-clockwise very slightly.



## PERFECT STITCHING

The tension of the upper and lower threads should be equal and just sufficiently strong to lock both threads in the center of the work.

Perfect stitch shows flat and no puckering result on the material.



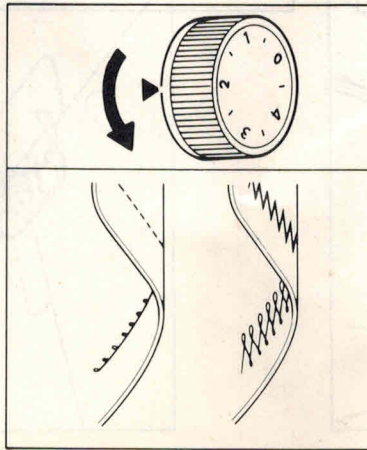
## INCORRECT STITCH (A)

The upper thread lies on the surface of the material by pulling the lower thread up as shown.

This is caused by tight tension on the upper thread or loose tension on the lower thread.

To correct this, turn the upper thread tension dial to a lower number.

When perfect stitch cannot be obtained by only upper thread tension dial, adjust the bobbin tension accordingly.



## INCORRECT STITCH (B)

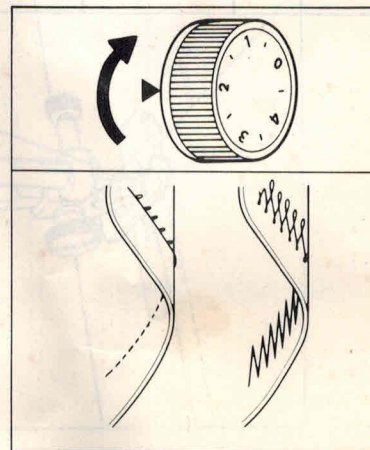
The lower thread lies on the under surface of the material by pulling upper thread down as shown.

This is caused by loose tension on the upper thread or tight tension on the lower thread.

To correct this, turn the upper thread tension dial to a higher number.

When perfect stitch cannot be obtained by only upper thread tension dial, adjust bobbin tension accordingly.

**NOTE:** We recommend you to make test samples before actual sewing work.





# 2 Straight Stitching

- STITCH LENGTH DIAL : 1 ~ 4
- STITCH WIDTH DIAL : 0
- PRESSER FOOT : Straight or Zigzag
- NEEDLE : Single
- PRESSURE ADJUSTER : According to the material

## HOW TO START SEWING

1. Raise needle to its highest position and lift presser foot.
2. Place material under presser foot and position needle 3/8 inch (1 cm) from material edge.
3. Lower presser foot.
4. Pull up lower thread by turning the balance wheel toward you and place both upper and lower thread to the left.
5. For reverse sewing, push Reverse Sewing Button as far as it will allow. Reverse sewing is used where reinforcement is needed.
6. Release Reverse Sewing Button and start sewing in forward direction.

NOTE: Use straight stitch foot when sewing light or elastic type materials with straight stitch.

## HOW TO CHANGE SEWING DIRECTION

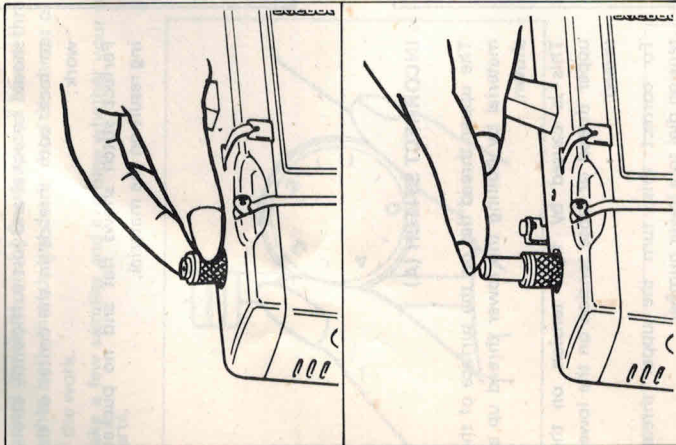
1. Stop machine at the turning point while the needle is in the material.
2. Raise the presser foot and turn the material to the new direction while the needle acts as the axis.
3. Lower the presser foot and start sewing in new direction.

NOTE: In case of twin needle sewing, raise the needle at the turning point.

Correct pressure on presser foot is important to obtain the smooth sewing. Pressure on presser foot requires to be regulated according to the type and thickness of the materials to be sewn.

1. To regulate the pressure, lower presser foot.
2. Push outer ring of pressure adjuster down, and inner pin will spring up to its highest position. In this position, pressure is completely released from the presser foot.
3. To increase pressure, push inner pin down with your finger.

### Pressure Adjuster



Pressure Adjuster	Sewing Purpose
UP	Darning Embroidering Monogramming
MIDDLE	Mending Normal use and lighter material such as silk and nylon
DOWN	Thick and heavier materials

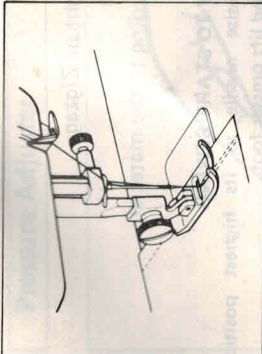


# 3 Zigzag Stitching

## HOW TO FINISH YOUR SEWING PROJECT (REVERSE STITCHING)

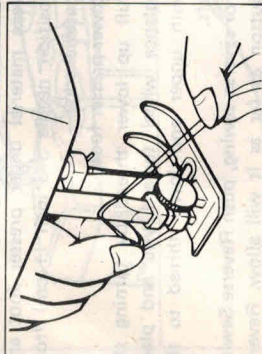
Reverse stitching is used to reinforce stitches near the edge of material or wherever reinforcement is needed.

1. This is done by stitching to the edge of material ... then stopping.
2. Push Reverse Button and stitch backwards for 3/8 inch (1 cm) from material edge.



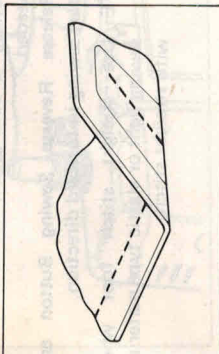
## HOW TO REMOVE FINAL SEWING FROM MACHINE

1. Stop the machine.
2. Raise needle to its highest position and make sure that the thread take-up lever is also to its highest position.
3. Lift presser foot and pull out the material gently to the left side diagonally.
4. Cut both threads on the thread cutter.
5. Leave about 4 inches (10 cm) of threads between toes of the presser foot to the rear while the thread take-up lever is at the highest position, and you are ready to sew again without any chance of thread pulling out of the needle.



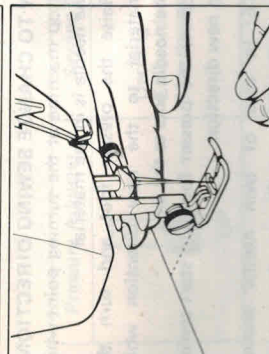
## HOW TO SEW VERY THIN MATERIAL

An underlay of thin paper will help to eliminate skipped stitches and puckering on very thin material.



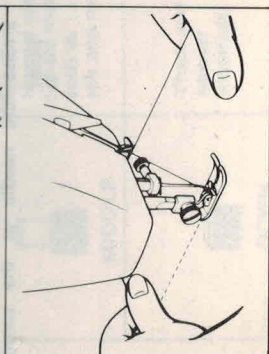
## HOW TO GUIDE YOUR MATERIAL

Do not pull the material. Let the machine do the work. Merely guide the material with your fingers in front of the presser foot as shown in the illustration.



If you pull the material, your needle might either bend or break.

However, in the case of special materials, such as tricot, crepes, knites, etc., we recommend that you support the material both in front and back of the presser foot with gentle tension as shown in the lower illustration.



STITCH LENGTH DIAL :

1 ~ 4 (For SATIN STITCH is set to between 0 ~ 1)

STITCH WIDTH DIAL :

1 ~ 5 (Twin needle sewing, always set at 3)

PRESSER FOOT :

Zigzag

NEEDLE :

Single or Twin Needle

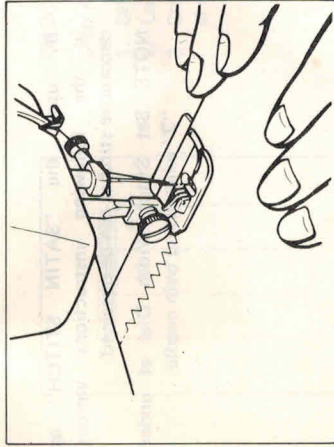
PRESSURE ADJUSTER :

According to the material

## SIMPLE ZIGZAG STITCH

Set Stitch Length Dial between 1-4 for simple zigzag stitch.

1. With Stitch Length Dial to between 0-1 sew 5-6 straight stitches for reinforcement.
2. Set Stitch Width Dial to your desired width and commence sewing.
3. Reset Stitch Width Dial to "0" and set Stitch Length Dial to between 0-1 to again reinforce stitches before removing work from machine.

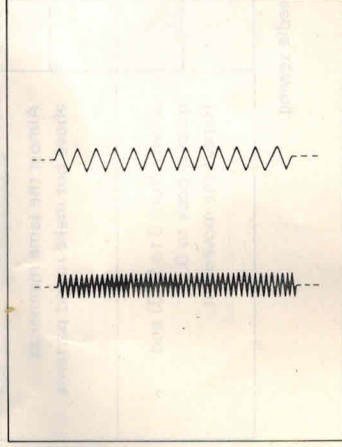
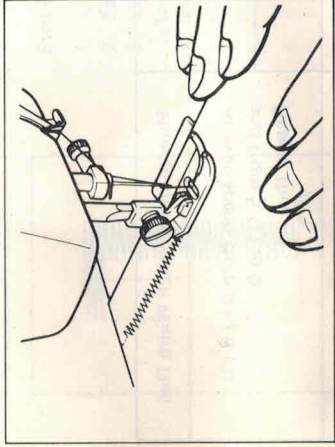


NOTE: Zigzag stitching requires less upper thread tension than straight stitching.

## SATIN STITCH

When Stitch Length Dial is set between 0-1 produces the "SATIN STITCH" which is used for making fine buttonholes or decorative stitches.

NOTE: It is recommended that a test sample be made before starting to sew.

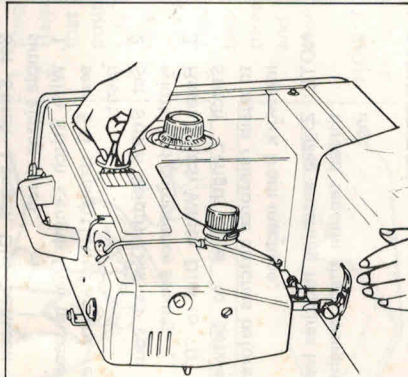




# Decorative Stitches

## Decorative Stitches

- STITCH LENGTH DIAL : For SATIN STITCH set dial to between 0 ~ 1
- STITCH WIDTH DIAL : See Instruction Below
- PRESSER FOOT : Zigzag
- NEEDLE : Single or Twin Needle
- PRESSURE ADJUSTER : According to the material



By using the "SATIN STITCH" as in the following instructions various decorative stitches can be obtained.

NOTE: Set Stitch Width Dial at under "3" when using twin needle.

Needle	Patterns to be sewn	How to move Stitch Width Dial
Single needle		At even speed from 0 to 5 (3) and from 5 (3) to 0. Repeat this.
Twin needle		
Single needle		Almost the same manner as above but make round patterns.
Twin needle		
Single needle		Slowly from 0 to 5 (3) and quickly back to 0. Repeat the movement.
Twin needle		

NOTE: Number in brackets represents twin needle sewing.

# 5 Buttonholes and Button Sewing

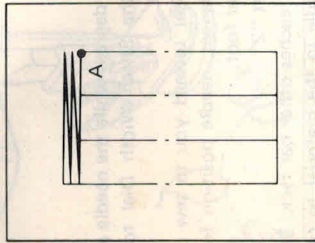
## Buttonholes

- STITCH LENGTH DIAL : For SATIN STITCH set dial to between 0 ~ 1
- STITCH WIDTH DIAL : See Instruction Below
- PRESSER FOOT : Zigzag
- NEEDLE : Single
- PRESSURE ADJUSTER : According to the material

### PROCEDURE FOR MAKING BUTTONHOLE

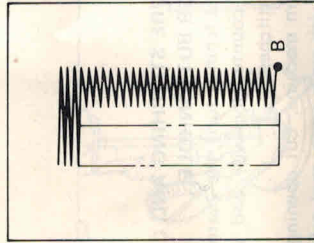
#### Step A: Bar Tack

1. Set Stitch Width Dial at "5".
2. Lower presser foot and sew 2 to 3 stitches.
3. Stop the machine when the needle is in the material at the right side of stitches. (Position A)



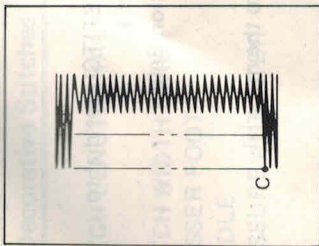
#### Step B: Right Row

1. Lift presser foot.
2. Set Stitch Width Dial at "2".
3. Lower the presser foot and sew predetermined length.
4. Stop the machine when the needle is in the material at the right side of stitches. (Position B)

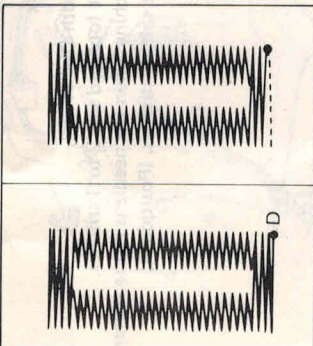




### Step C: Final Bar Tack



1. Lift presser foot.
2. Set Stitch Width Dial at "5".
3. Lower the presser foot and sew 2 to 3 stitches.
4. Stop the machine when the needle is in the material at the left side of stitches. (Position C)

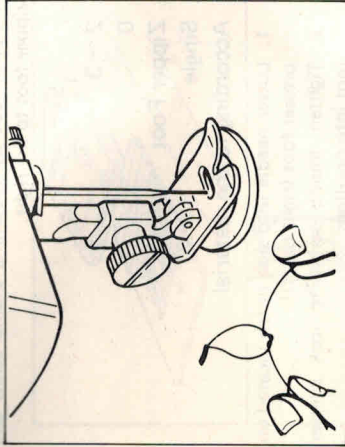


### Step D: Left Row

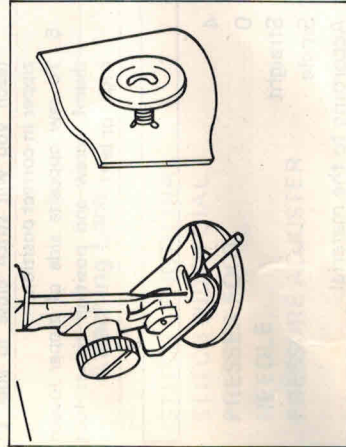
1. Lift presser foot.
2. Turn the material 180 degrees while the needle acts as the axis and set the Stitch Width Dial to 0. Lower the presser foot.
3. Turn the balance wheel toward you to sew one stitch. This action changes, needle position from left to right. Lift presser foot.
4. Set Stitch Width Dial at "2".
5. Sew row until needle reaches other bar tack. Stop the machine with needle in the material to right of stitches.

## Button Sewing

STITCH LENGTH DIAL : 0  
STITCH WIDTH DIAL : According to the distance of holes  
PRESSER FOOT : Zigzag  
NEEDLE : Single  
PRESSURE ADJUSTER : Up



1. Place button between the presser foot and material.
2. Control zigzag width to suit the distance of the holes of button.
3. Lower the presser foot and examine that the needle enters into both holes of button without any obstruction.
4. Slowly sew about 10 stitches.
5. Stop machine and raise needle from the material.
6. Remove from machine. Cut upper and lower threads and with normal sewing needle sew threads through to back of button and tie.



## BUTTON FITTING WITH THREAD SHANK

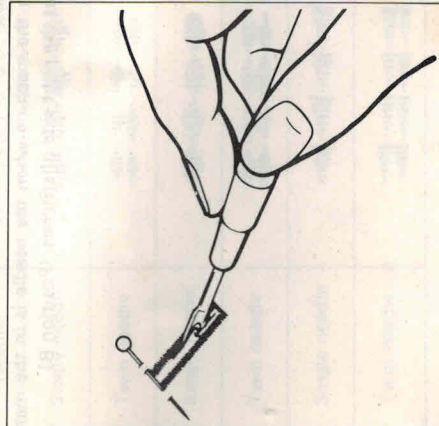
You will often need the thread shank of button for heavier materials.

1. Place a needle on the button as illustrated and sew as regular method of button fitting.
2. After about 10 stitches, remove the fabric from the machine, leaving upper thread little longer in order to form a thread shank.
3. Pull upper thread between the button and the material through the hole of button and upper thread tightly around the stitches.
4. Fasten the thread ends.

## HOW TO SECURE STITCHING AND CUT MATERIAL FOR BUTTONHOLE.

1. To secure stitching, turn the material 90 degrees counter-clockwise and sew 5-6 straight stitches.
2. Remove from machine. Cut opening in buttonhole with seam ripper tool, taking care not to cut through any stitching.
3. It is recommended that pins are placed across both ends of buttonhole as protection against cutting bar tack stitching.

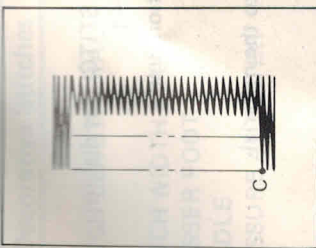
NOTE: 1. It is recommended that a test sample of buttonhole is made.  
2. Use of tailors' chalk to mark length of buttonhole on material is recommended.





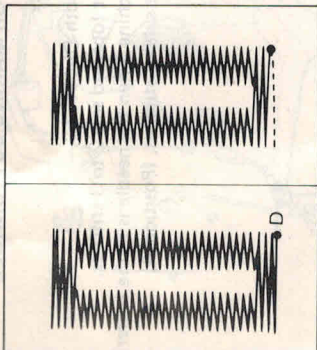
### Step C: Final Bar Tack

1. Lift presser foot.
2. Set Stitch Width Dial at "5".
3. Lower the presser foot and sew 2 to 3 stitches.
4. Stop the machine when the needle is in the material at the left side of stitches. (Position C)



### Step D: Left Row

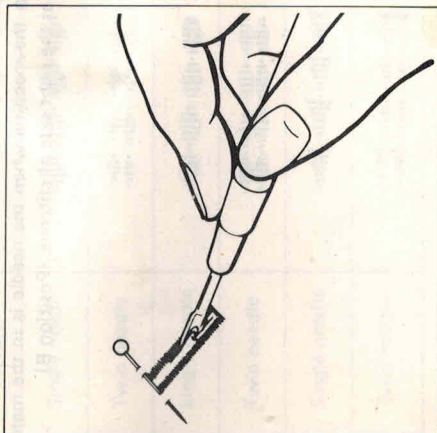
1. Lift presser foot.
2. Turn the material 180 degrees while the needle acts as the axis and set the Stitch Width Dial to 0. Lower the presser foot.
3. Turn the balance wheel toward you to sew one stitch. This action changes, needle position from left to right. Lift presser foot.
4. Set Stitch Width Dial at "2".
5. Sew row until needle reaches other bar tack. Stop the machine with needle in the material to right of stitches.



### HOW TO SECURE STITCHING AND CUT MATERIAL FOR BUTTONHOLE.

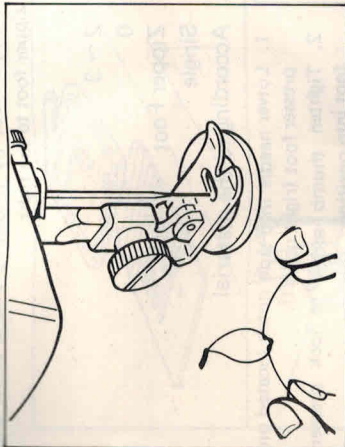
1. To secure stitching, turn the material 90 degrees counter-clockwise and sew 5-6 straight stitches.
2. Remove from machine. Cut opening in buttonhole with seam ripper tool, taking care not to cut through any stitching.
3. It is recommended that pins are placed across both ends of buttonhole as protection against cutting bar tack stitching.

NOTE: 1. It is recommended that a test sample of buttonhole is made.  
2. Use of tailors' chalk to mark length of buttonhole on material is recommended.



### Button Sewing

STITCH LENGTH DIAL : 0  
STITCH WIDTH DIAL : According to the distance of holes  
PRESSER FOOT : Zigzag  
NEEDLE : Single  
PRESSURE ADJUSTER : Up

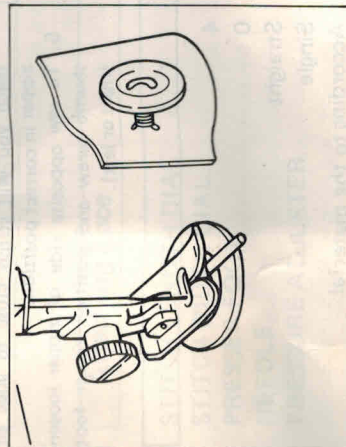


1. Place button between the presser foot and material.
2. Control zigzag width to suit the distance of the holes of button.
3. Lower the presser foot and examine that the needle enters into both holes of button without any obstruction.
4. Slowly sew about 10 stitches.
5. Stop machine and raise the material.
6. Remove from machine. Cut upper and lower threads and with normal sewing needle sew threads through to back of button and tie.

### BUTTON FITTING WITH THREAD SHANK

You will often need the thread shank of button for heavier materials.

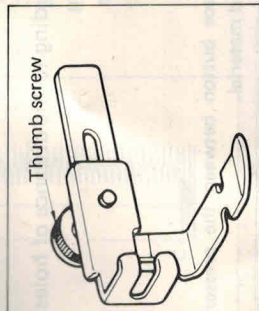
1. Place a needle on the button as illustrated and sew as regular method of button fitting.
2. After about 10 stitches, remove the fabric from the machine, leaving upper thread little longer in order to form a thread shank.
3. Pull upper thread between the button and the material through the hole of button and upper thread tightly around the stitches.
4. Fasten the thread ends.





# Making Various Stitches

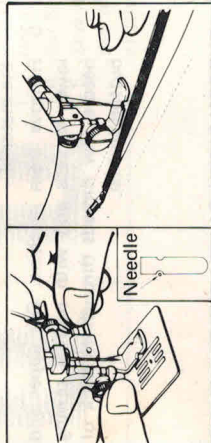
## Zipper Insertion



Zipper foot is used to sew various types of zippers and can easily be positioned to right or left side of needle. When zipper is being sewn at right side of needle, position zipper foot by loosening thumb screw and sliding zipper foot to the left.

When zipper is being sewn at left side of needle, position zipper foot by loosening thumb screw and sliding zipper foot to the right.

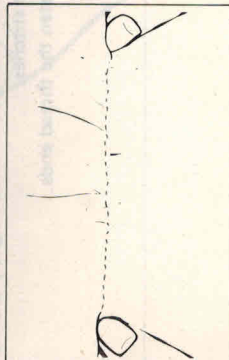
STITCH LENGTH DIAL : 2 ~ 3  
 STITCH WIDTH DIAL : 0  
 PRESSER FOOT : Zipper Foot  
 NEEDLE : Single  
 PRESSURE ADJUSTER : According to the material



1. Lower needle into side notch located on presser foot (right or left).
2. Tighten thumb screw to lock presser foot into position.
3. Fold edge of material 3/4 inch (2 cm) and place zipper under folded portion.
4. By guiding zipper foot along the zipper teeth you will stitch close to edge of zipper in correct position.
5. To sew opposite side of zipper loosen thumb screw and position zipper foot (right or left).

## Gathering

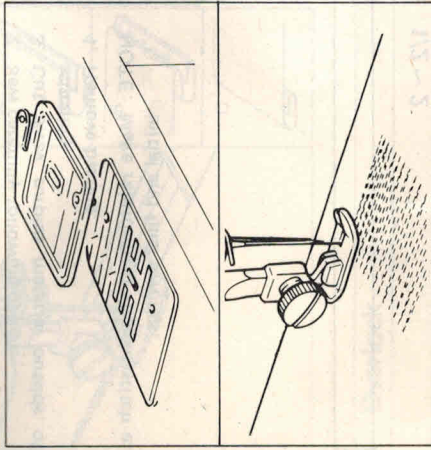
STITCH LENGTH DIAL : 4  
 STITCH WIDTH DIAL : 0  
 PRESSER FOOT : Straight  
 NEEDLE : Single  
 PRESSURE ADJUSTER : According to the material



1. Loosen upper thread tension (set dial at about '2') so that lower thread lies on the under side of material.
2. Sew a single row or multiple rows of straight stitching.
3. Pull lower thread(s) to gather up material.

## Darning

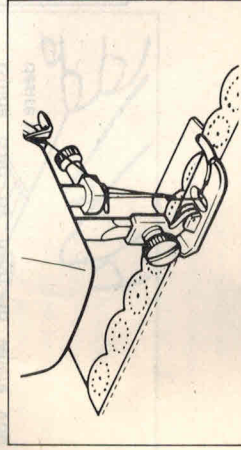
STITCH LENGTH DIAL : Set any position  
 STITCH WIDTH DIAL : 0  
 PRESSER FOOT : Straight  
 NEEDLE : Single  
 PRESSURE ADJUSTER : Up  
 OTHERS : Darning Plate



1. Set Darning Plate on the needle plate as illustrated.
2. Place portion to be darned under the presser foot together with underlay.
3. Lower presser foot.
4. Sew alternately drawing the work gently away from you and pulling it toward you.
5. Repeat this motion until the portion to be darned is filled with parallel lines of stitching.

## Attaching Lace

STITCH LENGTH DIAL : 2 ~ 4  
 STITCH WIDTH DIAL : 0  
 PRESSER FOOT : Zigzag  
 NEEDLE : Single  
 PRESSURE ADJUSTER : According to the material

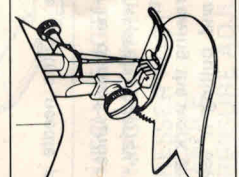
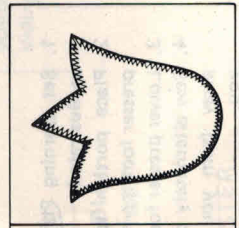


1. Place lace under material letting it overlap edge 1/4 inch (5 mm).
  2. Place under presser foot and sew.
- NOTE: If satin stitch or decorative stitch is used to sew lace, it will be most decorative.



**Appliqueing**

STITCH LENGTH DIAL : 1/2 ~ 2  
 STITCH WIDTH DIAL : 1 ~ 3  
 PRESSER FOOT : Zigzag  
 NEEDLE : Single  
 PRESSURE ADJUSTER : According to the material

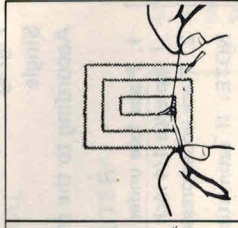


1. Baste cut design to the material.
2. Sew carefully following design.
3. Cut away surplus material outside of stitching.
4. Remove basting.

NOTE: Make reinforcement straight stitch at initial and final sewings.

**Cording**

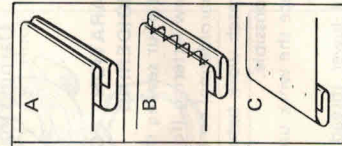
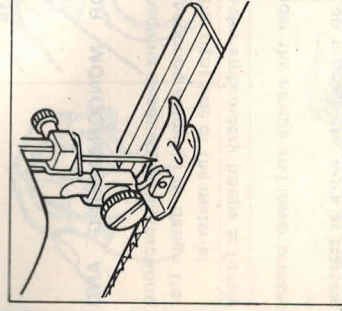
STITCH LENGTH DIAL : 1/2 ~ 2  
 STITCH WIDTH DIAL : In accordance with thickness of cord being used, set stitch width.  
 PRESSER FOOT : Zigzag  
 NEEDLE : Single  
 PRESSURE ADJUSTER : According to the material



1. Set Stitch Width Dial.
2. Place cord on fabric to be sewn.
3. Lower presser foot making sure cord is centered and sew using zigzag stitch. Guide cord by hand to where you desire it.

**Blind Stitch**

STITCH LENGTH DIAL : 2 ~ 3  
 STITCH WIDTH DIAL : 3 ~ 5  
 PRESSER FOOT : Zigzag  
 NEEDLE : Single  
 PRESSURE ADJUSTER : According to the material

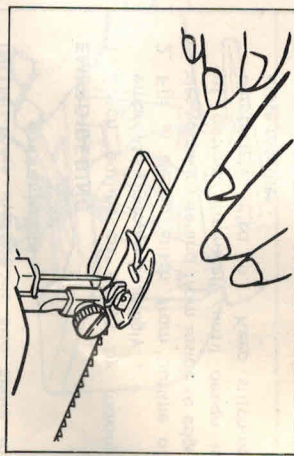


1. Fold the material into the size of the hem desired and fold back as shown in Fig. A with (5 mm 1/5 inch) overlapping on the bottom fold of the edge.
2. Start to sew on the fold, making the needle slightly to touch the folded top. (Fig. B)
3. After finish, unfold the material and you will have a blind stitch hem. (Fig. C)

NOTE: Use the same color threads as the material.

**Overlock**

STITCH LENGTH DIAL : 3 ~ 4  
 STITCH WIDTH DIAL : 5  
 PRESSER FOOT : Zigzag  
 NEEDLE : Single  
 PRESSURE ADJUSTER : According to the material



The overlock stitch is used to avoid the fraying the edge of material.  
 1. Place edge of the material under presser foot so that the needle sews material with its left side of zigzag stitch and just misses the edge of material with its right side of zigzag.

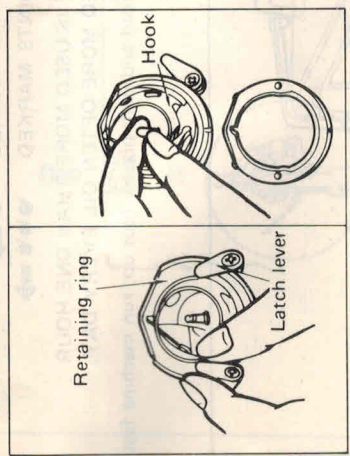


## Cleaning

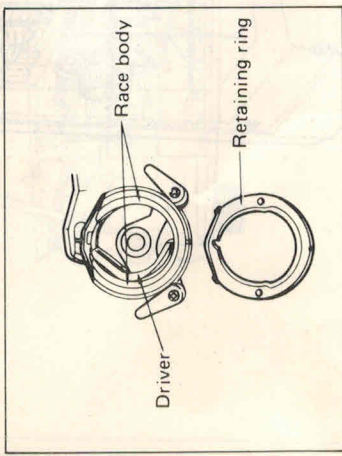
The sliding parts of the shuttle race should be cleaned regularly so that lint does not accumulate.

- HOW TO REMOVE THE SHUTTLE HOOK**
1. Raise needle to its highest position.
  2. Open shuttle cover.
  3. Take out bobbin case.
  4. Push latch levers outside and remove retaining ring.
  5. Remove hook by grasping center post of hook.

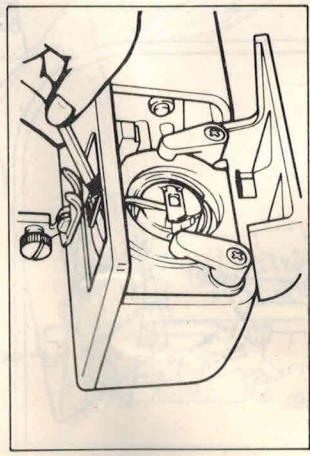
**NOTE:** When needle is lowered shuttle hook cannot be removed.



- CLEANING SHUTTLE RACE**
1. Remove accumulated lint and thread from the retaining ring, hook, driver and race body with brush.
  2. A cloth dampened with machine oil should be used to wipe shuttle race clean.
  3. Clean shuttle hook in same manner as above.
  4. Reassemble.



- CLEANING FEED DOG**
1. Take out needle plate.
  2. Clean upper part of feed dog and shuttle race body with brush.

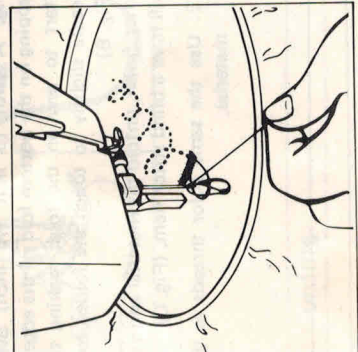


## Monogramming and Embroidering, Using Embroidery Hoop

- STITCH LENGTH DIAL : Set at any position
- STITCH WIDTH DIAL : 0 ~ 5
- PRESSER FOOT : Removed
- NEEDLE : Single
- PRESSURE ADJUSTER : Up
- OTHERS : Darning Plate

### PREPARATION FOR MONOGRAMMING AND EMBROIDERING

1. Set your sewing machine as per above instructions.
2. Draw lettering (for monogramming) or design (for embroidering) on the right side of the material.
3. Stretch work between embroidery hoops as firmly as possible.
4. Place the work under the needle and lower presser bar.
5. Pull lower thread up through the work at starting position by turning balance wheel and make a few holding stitches.
6. Hold the hoop with thumb and forefingers of both hands while pressing the material with middle and third fingers and supporting the outside of hoop with smaller finger.



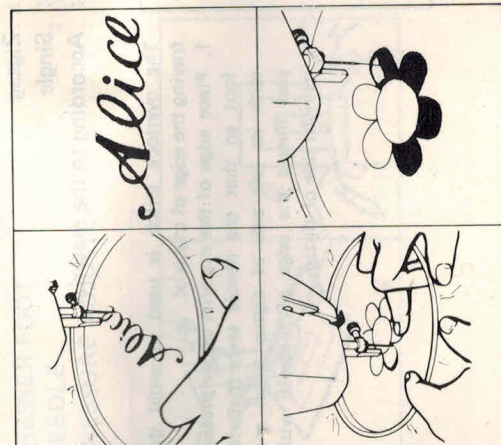
### MONOGRAMMING

1. Sew, moving hoop slowly along the lettering at an even rate of speed.
  2. Secure with a few straight stitches.
- (NOTE: These instructions also apply to embroidering)

### EMBROIDERING

1. Stitch outline of design by moving embroidery hoop accordingly.
2. Fill in design stitch from outline of design to inside and from inside to edge of outline alternately until design is completely filled in. Keep stitching close together.

**NOTE:** A long stitch is made by moving embroidery hoop rapidly and a short stitch is made by moving it slowly.





## How to Oil Sewing Machine

For smooth and silent operation the moving parts of the machine should be oiled periodically. (See diagram below.)



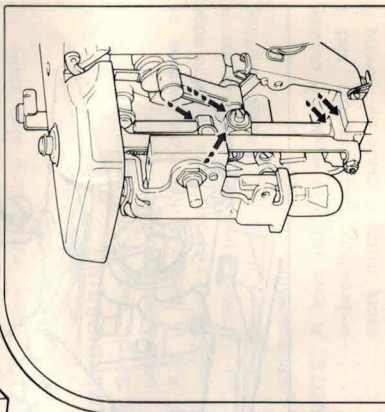
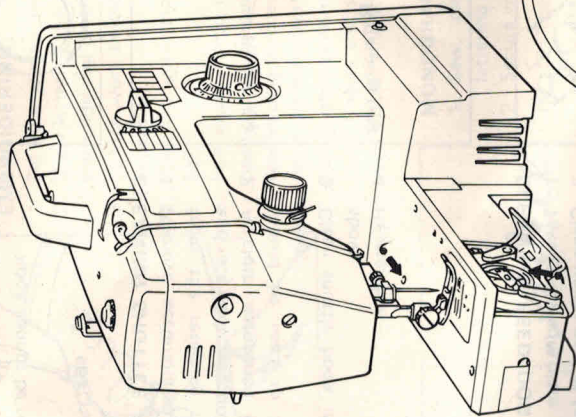
OIL 1 TO 2 DROPS TO THE POINTS MARKED



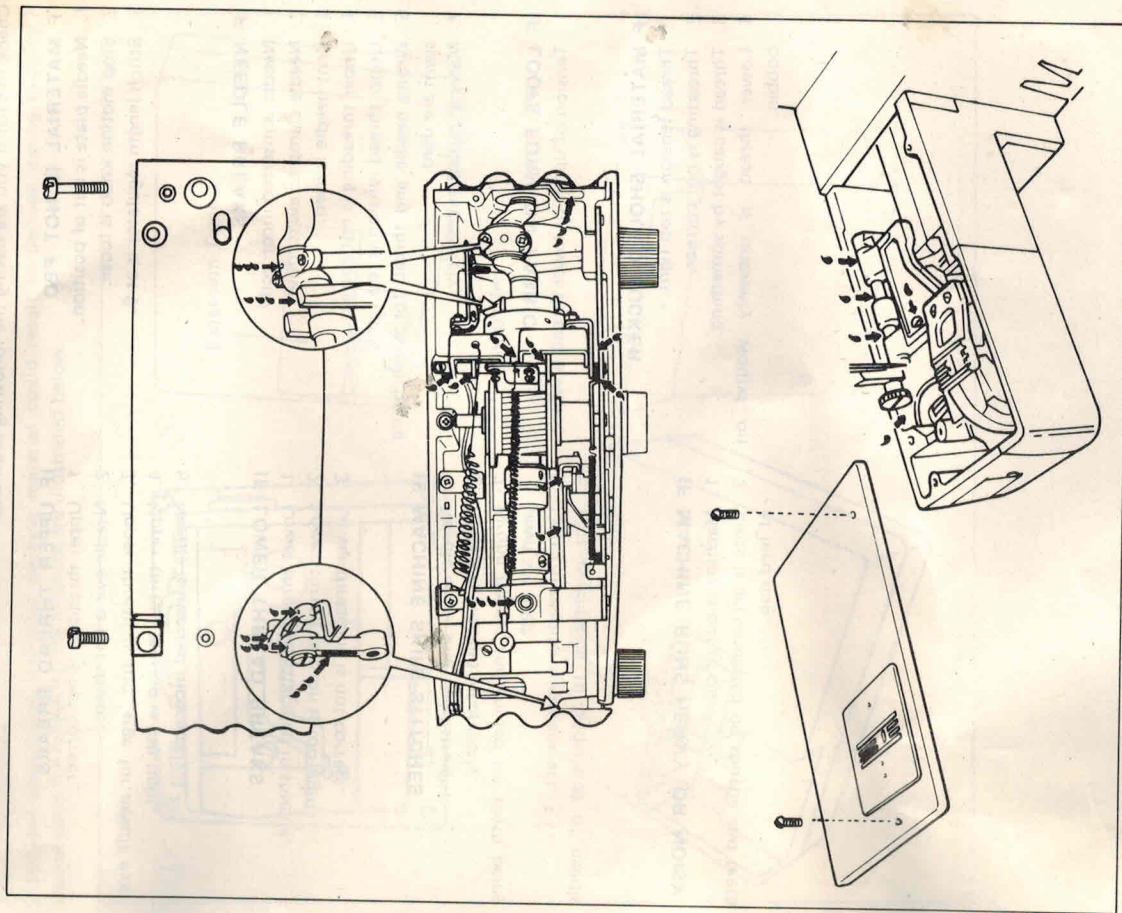
OIL 3 TO 4 DROPS TO THE POINTS MARKED

OIL ONCE A WEEK IF MACHINE IS USED MORE THAN ONE HOUR PER DAY. IF MACHINE IS USED MORE OFTEN OIL EVERY DAY.

After the machine has been oiled, remove thread and with presser foot up, run machine fast. Then wipe up any excess oil.



Occasionally, remove the top cover by loosening two screws on it and apply machine oil to oiling points as illustrated. Also, apply machine oil to inner parts of free-arm as illustrated by loosening two screws.



NOTE: If machine has not been used for a long period of time, oil tends to coagulate and operation of machine will not be smooth. Apply a few drops of oil to oiling points, and with presser foot up run machine for a few minutes. Then wipe up any excess oil.



## Check List for Better Sewing

Check this list if you are having the following problems:

### **MATERIAL IS NOT FED**

Needle plate is out of position.  
Stop motion knob is loose.  
Stitch length regulator is at 0.

### **NEEDLE BREAKS**

Needle is inserted incorrectly.  
Needle clamp screw is loose.  
Bent needle is used.  
Upper threading is not correct.  
Upper thread tension is too tight.  
Wrong needle and thread for cloth being sewn are used.  
Material pulled excessively.

### **LOOPS FORM ON FABRIC**

Tension of upper or lower thread is wrong.

### **MATERIAL SHOULD PUCKER**

Thread tension is too tight.  
Threading is not correct.  
Thread is caught by something.  
Lower thread is unevenly wound on bobbin.

### **IF UPPER THREAD BREAKS**

1. Upper threading is not correct.
2. Needle eye is not sharp.
3. Upper thread is too large for needle eye.
4. Upper thread tension is too tight.
5. Needle is inserted incorrectly.

### **IF LOWER THREAD BREAKS**

1. Lower thread is entangled in shuttle.
2. Lower thread tension is too tight.
3. Lower threading is not correct.

### **IF MACHINE SKIPS STITCHES**

1. Needle is not sharp and straight.
2. Needle is inserted incorrectly.
3. Wrong needle and thread for cloth being sewn are used.
4. Upper threading is not correct.
5. Lint is clinging to under-side of needle plate.

### **IF MACHINE RUNS HEAVY OR NOISY**

1. Machine is out of oil.
2. Lints is accumulated on shuttle and teeth of feed dog.

## Repacking the Machine

Keep this carton and packing material for future use in the event it becomes necessary to reship the sewing machine.

(Improper packing or improper packing material could result in damage during shipping.) Instructions for repacking the machine are illustrated below.

