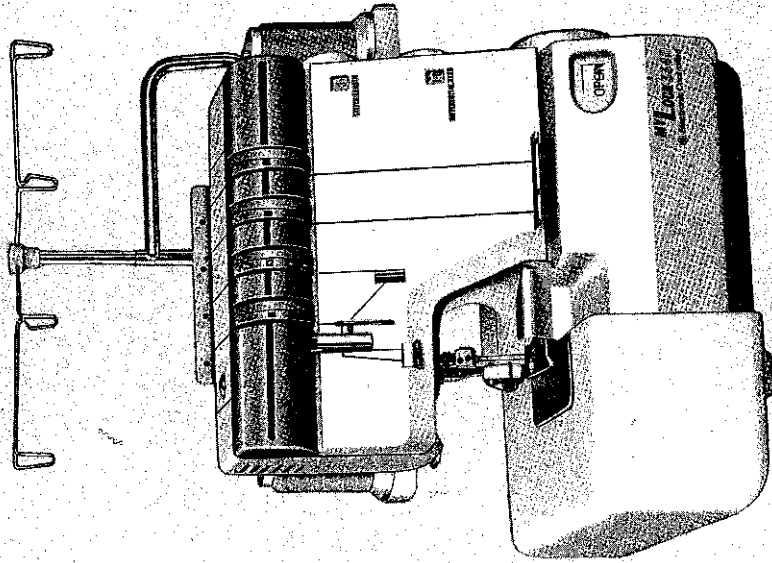


# INSTRUCTION BOOK



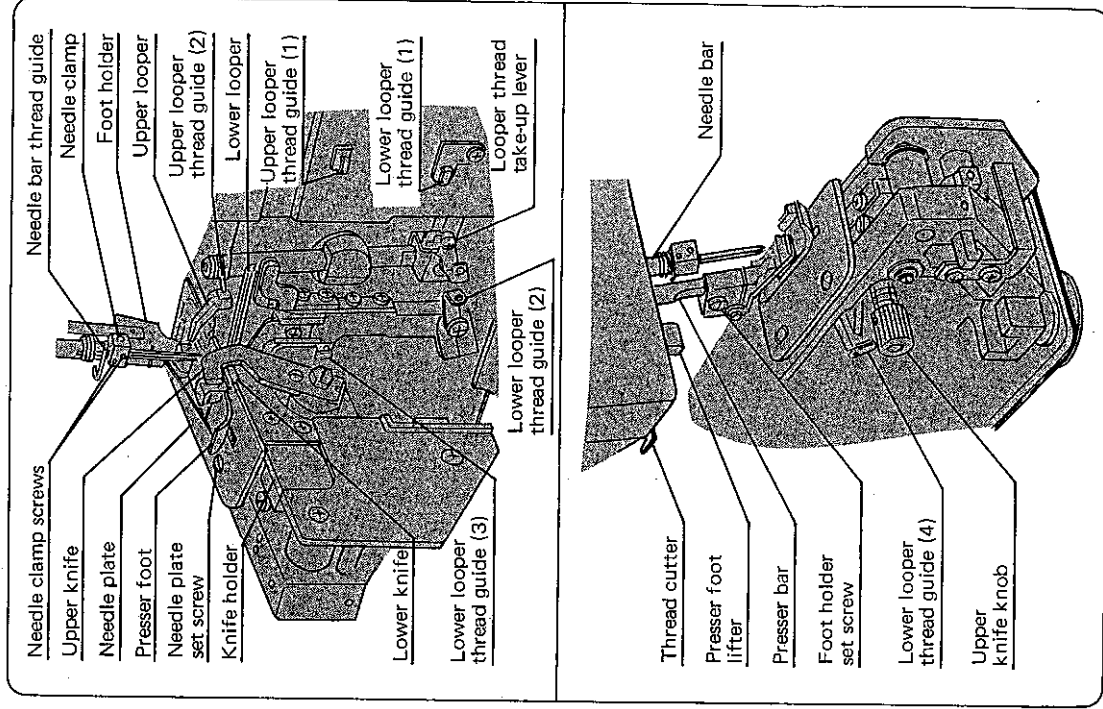
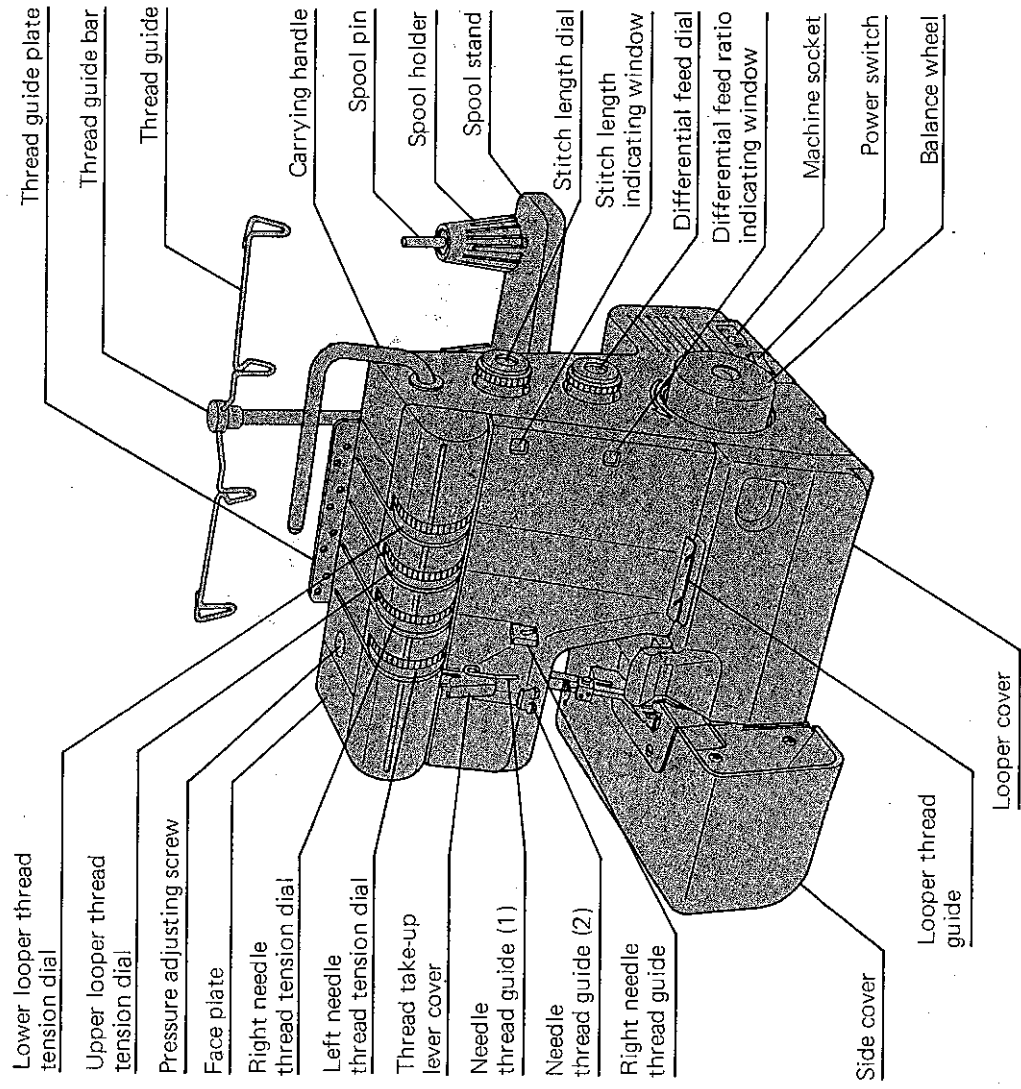
**MY** Lock 3340

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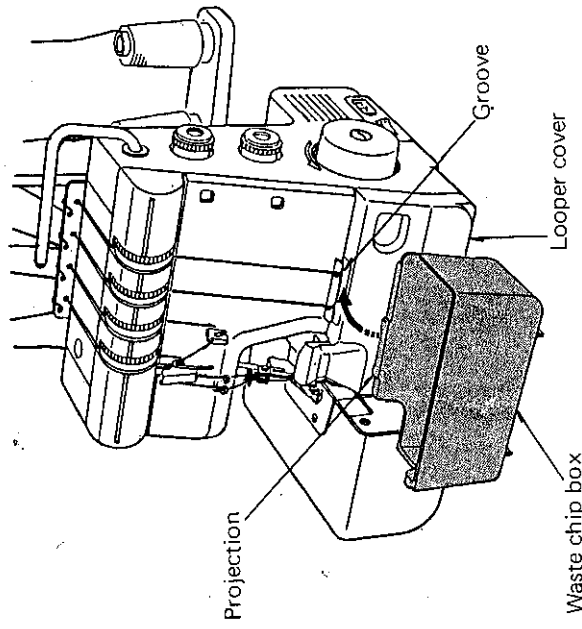
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# PREPARATION

## Names of Parts

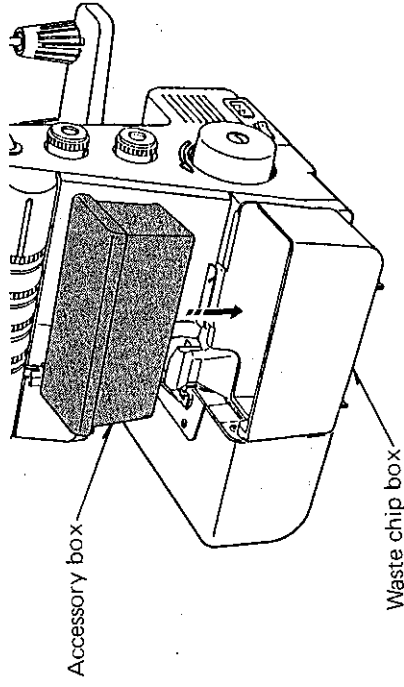


**Attaching the Waste Chip Box**



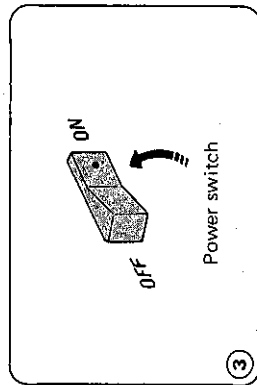
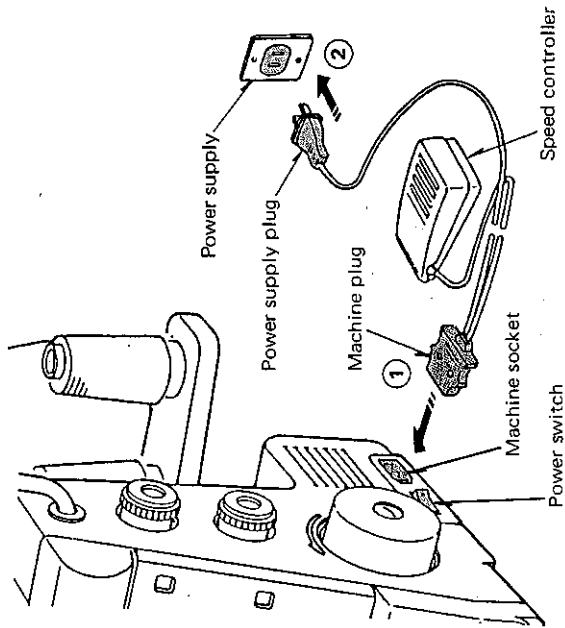
Insert the projection into groove on looper cover.

**Storing the Accessory Box**



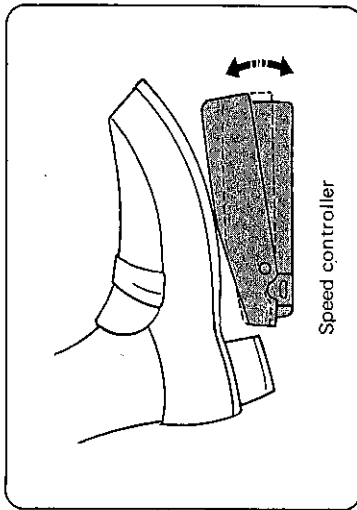
Insert the accessory box into the waste chip box.

## Connecting the Machine to the Power Supply



- 1 Turn off the power switch, and connect the machine plug to the machine socket.
- 2 Connect the power supply plug to your power supply.
- 3 Turn on the power switch.

## Controlling Sewing Speed

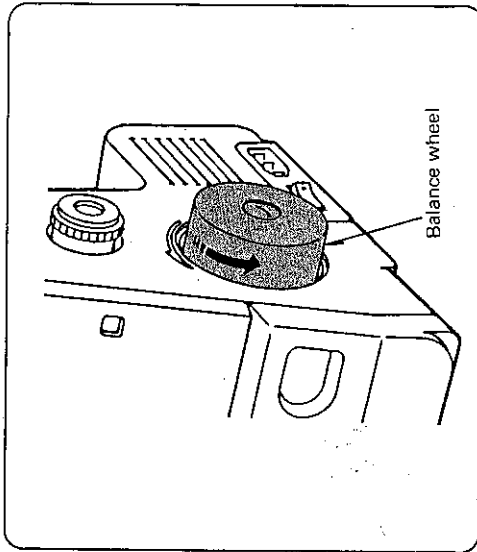


Sewing speed can be varied by the speed controller. The harder you press on the controller, the faster the machine runs. Step on speed controller with presser foot lifter up, and practice controlling the speed.

## For Your Safety:

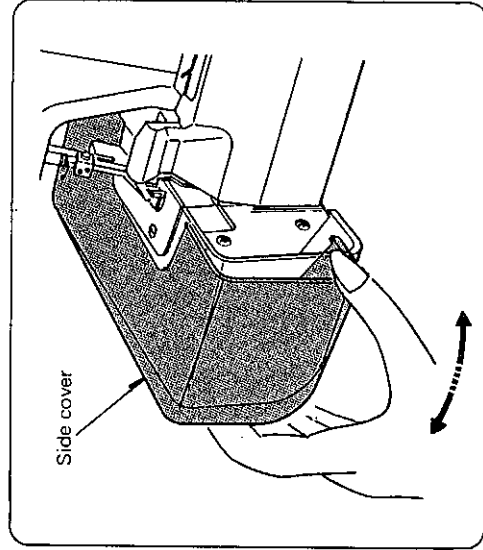
- \* While in operation, always keep your eye on the sewing area, and do not touch any moving parts such as the thread take-up lever, balance wheel, needle or knives.
- \* Always disconnect the machine from the power supply:
  - When leaving the machine unattended.
  - When attaching or removing parts.
  - When threading or cleaning the machine.
- \* Do not place anything on the speed controller, except in use.

### How to Turn Balance Wheel



Always turn balance wheel toward you (Counter-clockwise).

### Opening and Closing the Side Cover



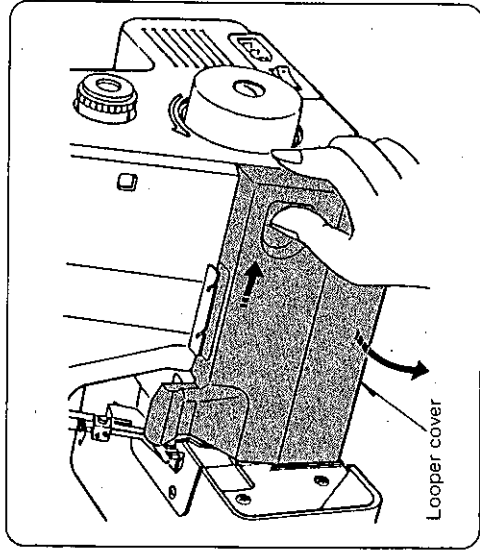
To open:

Push the side cover to the left.

To close:

Push the side cover to the right and slightly toward the machine body.

### Opening and Closing the Looper Cover



To open:

While pushing with the thumb to the right as far as it will go, pull looper cover toward you.

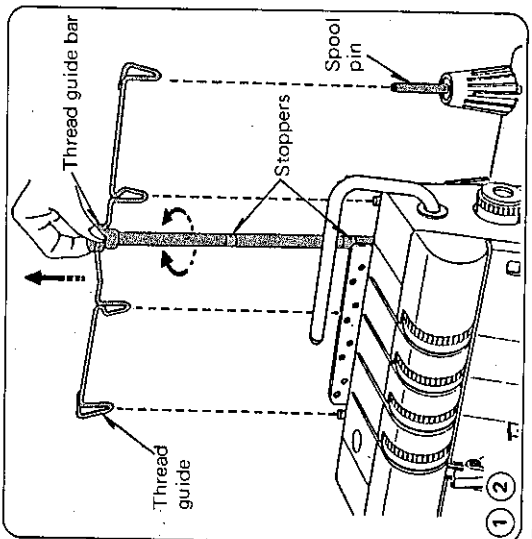
To close:

Lift looper cover and push against the machine. The looper cover snaps into the position automatically.

### For Your Safety:

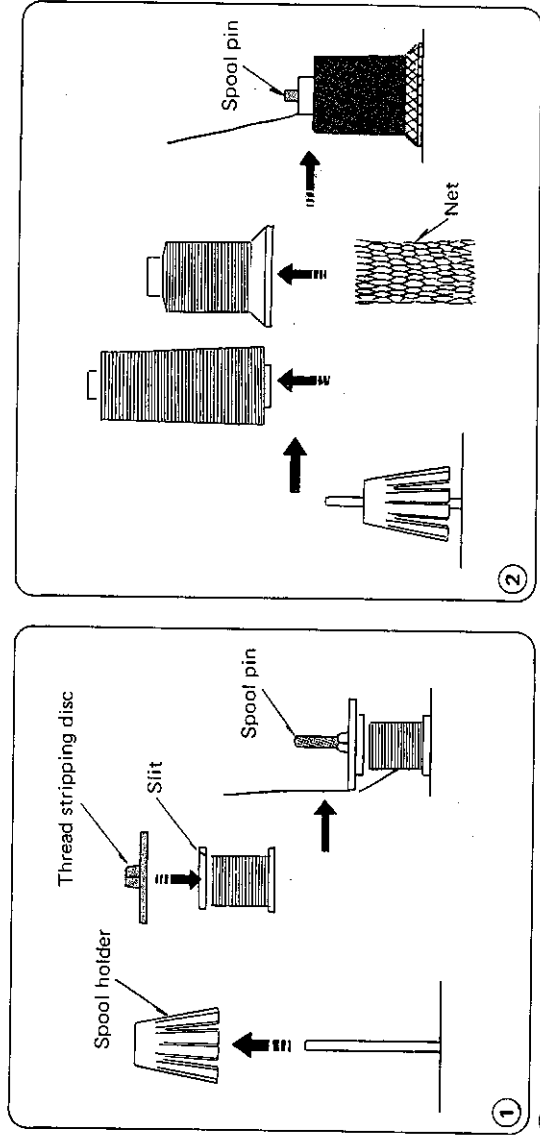
Always close the both side and looper covers when the machine is in use.

**The Position of Thread Guide Bar**



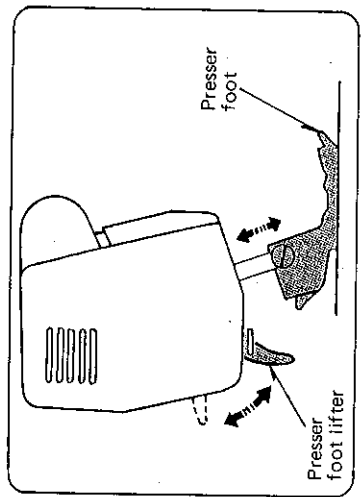
- 1 Pull the thread guide bar up as far as it will go.
- 2 Turn the thread guide bar so that the thread guides come right above the spool pins.

**Attaching the Thread Stripping Disc and Net**



- 1 When you use a small thread spool, pull out the spool holder from the spool pin. Then place the spool with its slit side up, and put the thread stripping disc on top.
- 2 If the thread would slip down from the spool during threading and/or sewing, put a net on the spool as illustrated for preventing jamming. The nets are supplied with the machine.

**Raising or Lowering the Presser Foot**



By raising or lowering the presser foot lifter, the presser foot goes up and down.

\* While in operation, keep the presser foot lowered except for testing stitches, threading the machine or sewing heavy weight fabrics.

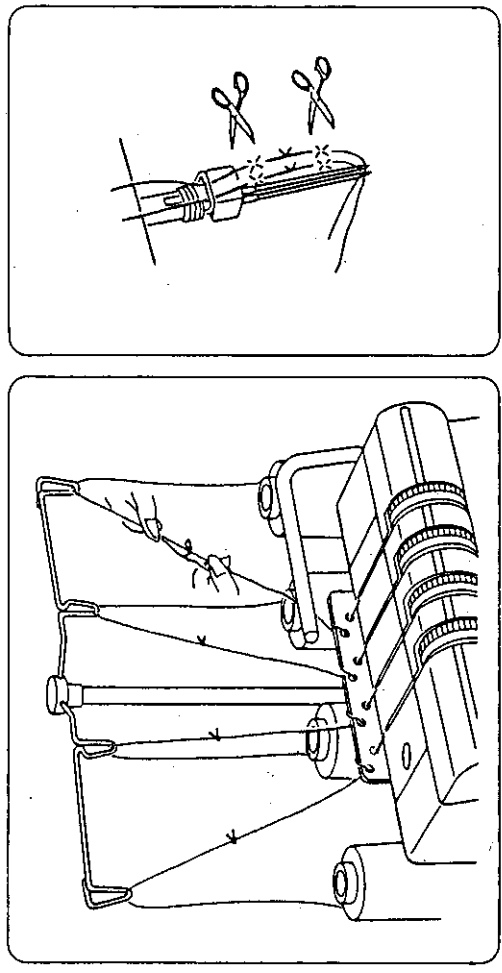
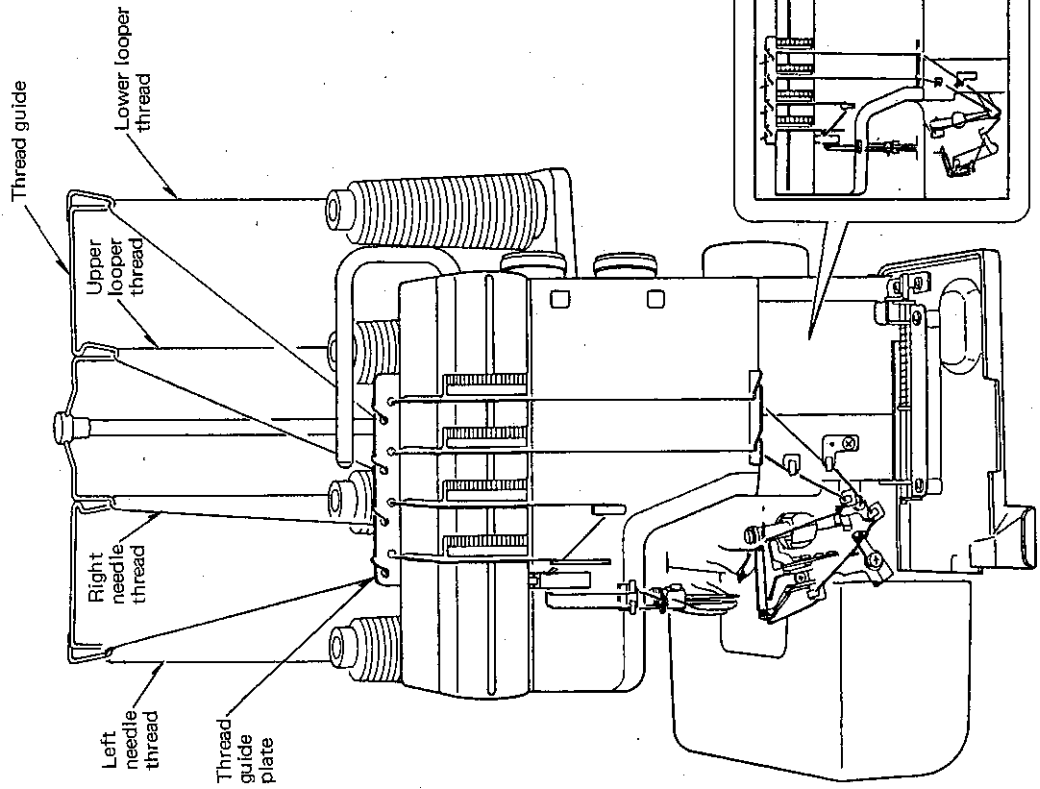
Thread tension will be released when the presser foot is raised.

Left  
needle  
thread

Thread  
quick  
plate

6

## Threading the Machine



The machine has been threaded and ends of threads have been cut at the factory. To thread the machine knot one end of thread, then raise the presser foot and pull the other end of thread. For needle threads, pull the other ends of threads until the knots come to needle eyes, and cut the threads at the both sides of the knots. Then thread the needle eye with the needle threader. (Refer to page 15.)  
 This way you can save time threading.

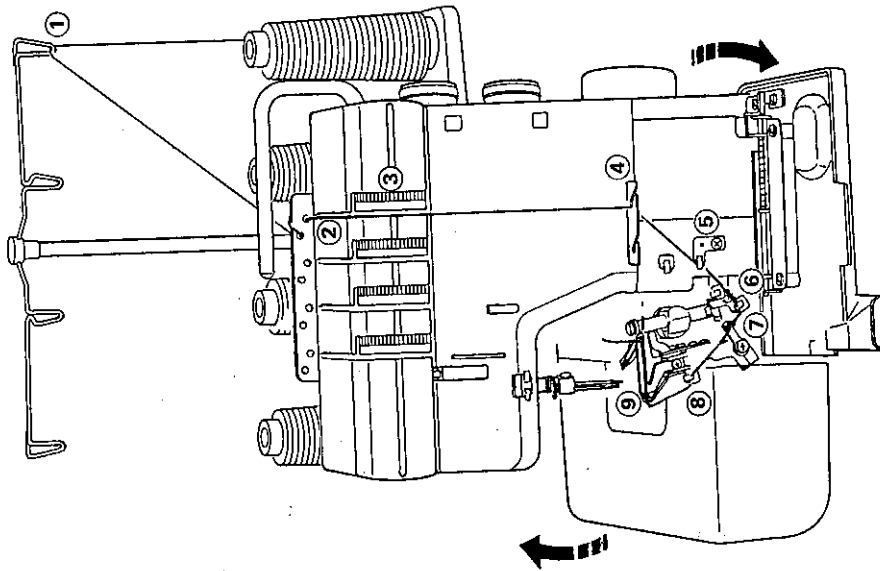
Thread lower looper first, then upper looper, needle on the right and needle on the left if the machine is unthreaded. A convenient threading chart is placed on the machine body inside the looper cover.

Incorrect threading will cause skipped stitches, broken thread or uneven thread tension. Before starting to sew, make sure that your machine is threaded properly.

- \* When you change the threads, cut the threads between the thread guide and the thread guide plate.
- \* When you thread the thread tension dials, raise the presser foot.

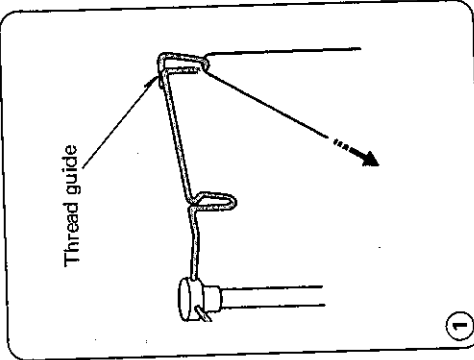


● **Threading the Lower Looper**



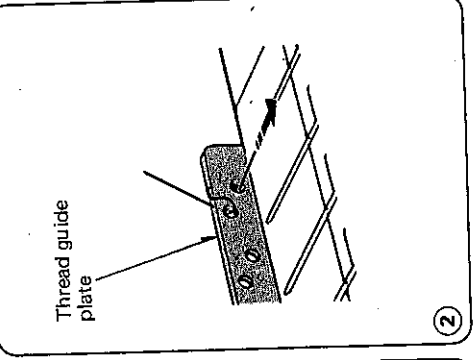
Open the looper and side covers.  
Place the spool of thread on the right side spool pin.

- \* The points to thread for lower looper are marked in green.
- \* A convenient threading chart is placed on the machine body inside the looper cover.



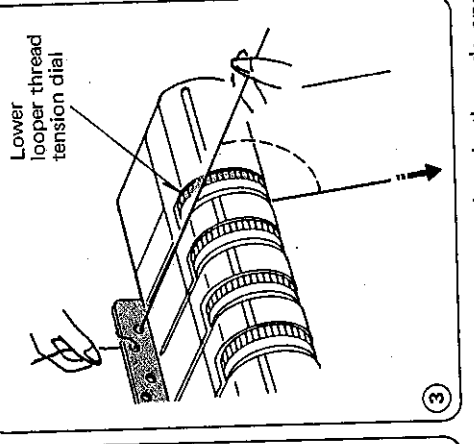
①

① Draw the thread through the right side thread guide from back to front.



②

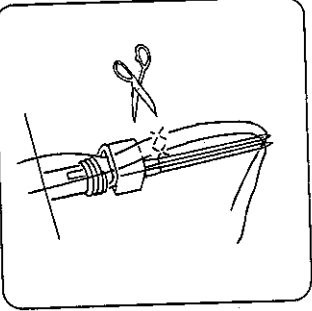
② Pass the thread through holes on the right side of thread guide plate as illustrated.



③

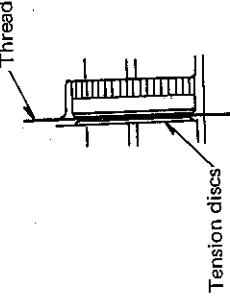
③ Hold the thread at both ends and tug gently to ensure the thread is correctly inserted between the tension discs.  
(If the foot is raised, the thread easily inserts between the tension discs.)

**How to Thread the Lower Looper**

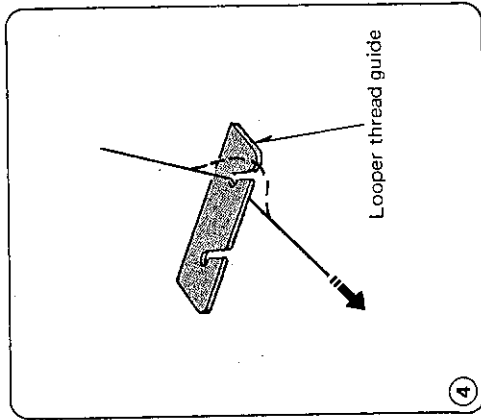


Cut the both needle threads as shown in the figure and remove them from the needles.

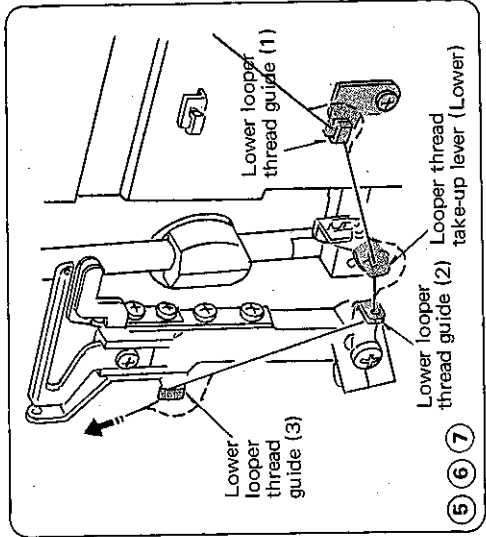
Thread the lower looper and then re-thread the needles.



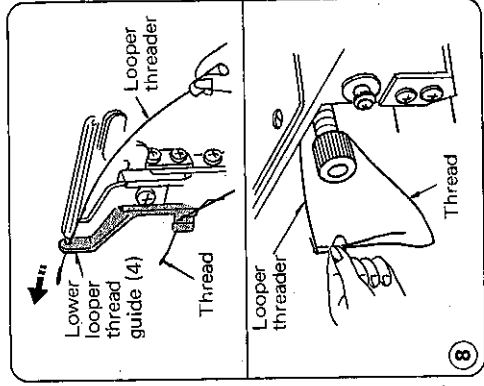
\* Make sure that the thread is between the tension discs.



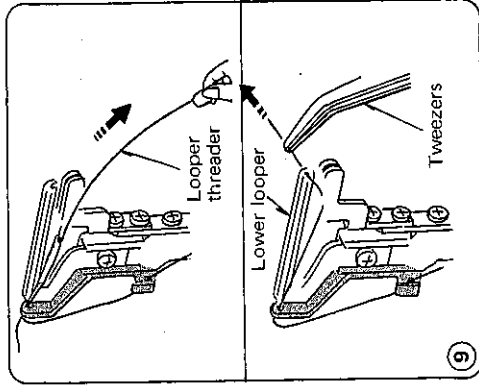
4 Pass the thread through the right side of the thread guide.



5 Pass the thread through the thread guide (1).  
 6 Pass the thread through the looper thread take-up lever (Lower).  
 7 Pass the thread through the thread guides (2) and (3).

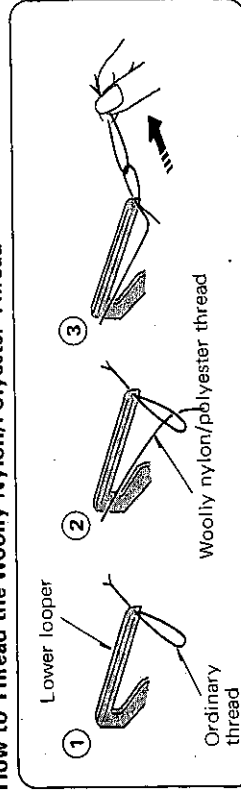


8 Turn the balance wheel toward you until the lower looper comes to the right, and pass the threader through hole on lower looper thread guide (4). Then hook the end of thread on the threader.



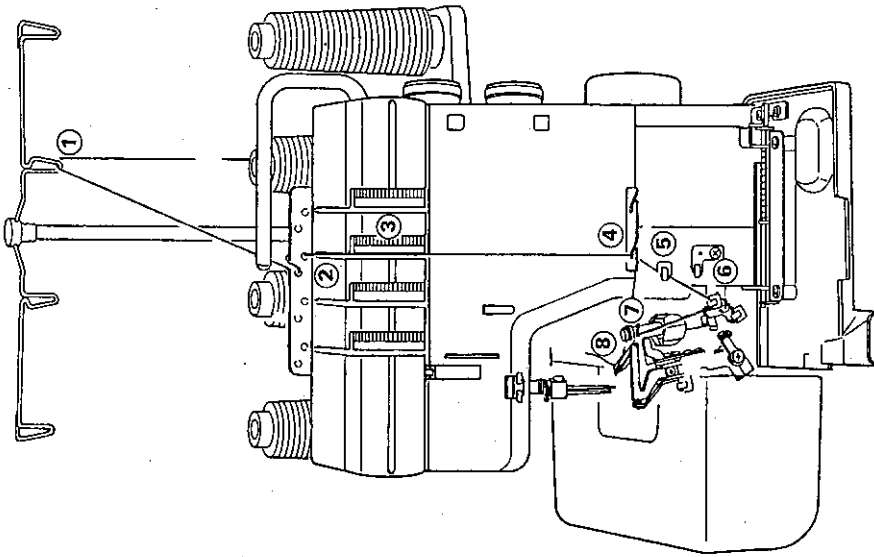
9 Pull the threader to pass the thread through the hole of lower looper thread guide (4). Remove the thread from the threader, and draw the thread with a pair of tweezers through the hole on lower looper (4'') or more. Close the side cover.

### How to Thread the Woolly Nylon/Polyester Thread



\* To pass the woolly nylon/polyester thread shown above this is one of the easiest ways to do so.  
 \* Apply the same method to the upper looper.

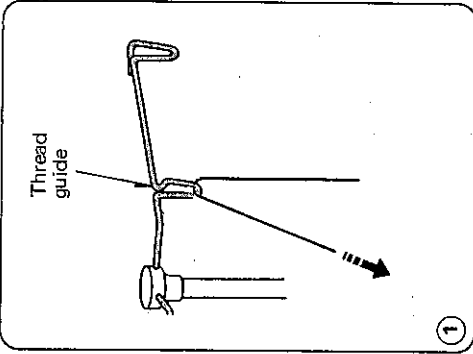
● **Threading the Upper Looper**



Place the spool of thread on the spool pin second from the right.

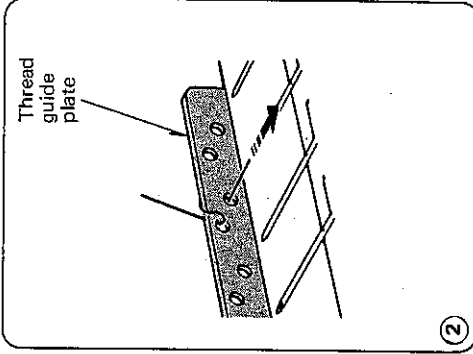
\* The points to thread for upper looper are marked in blue.

\* A convenient threading chart is placed on the machine body inside the looper cover.



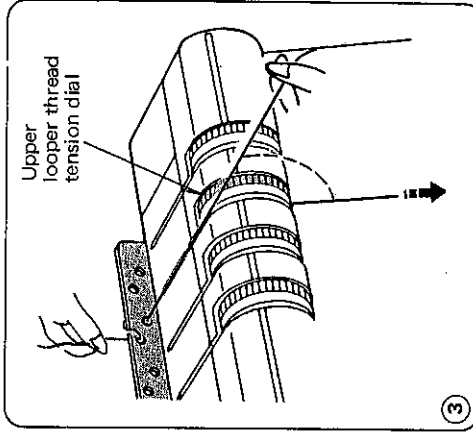
①

① Draw the thread through the thread guide second from the right from back to front.



②

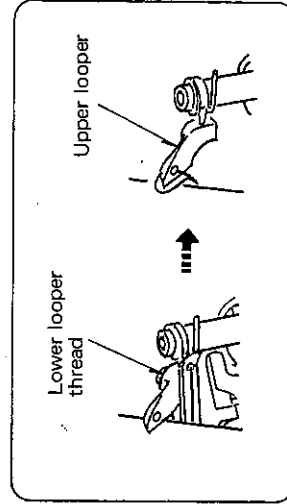
② Pass the thread through the holes in the second row from the right of thread guide plate as illustrated.



③

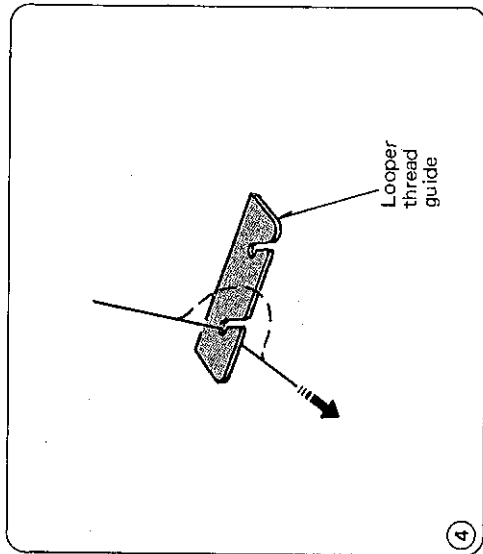
③ Hold the thread at both ends and tug gently to ensure the thread is correctly inserted between the tension discs.  
(If the foot is raised, the thread easily inserts between the tension discs.)

**How to Thread the Upper Looper**

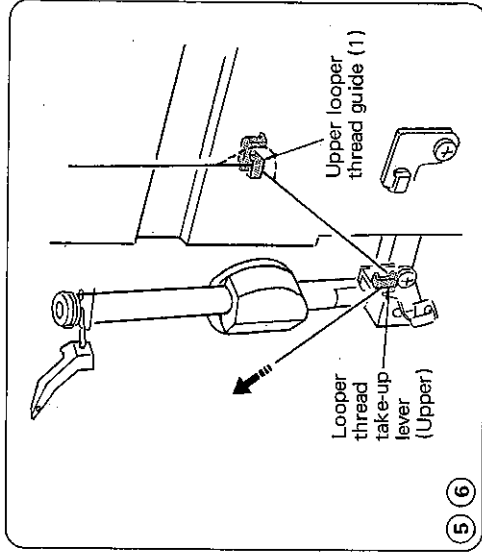


Turn the balance wheel toward you until the upper looper comes to the middle point of its travel, and unhook the thread of the lower looper from the upper looper.

Thread the upper looper.

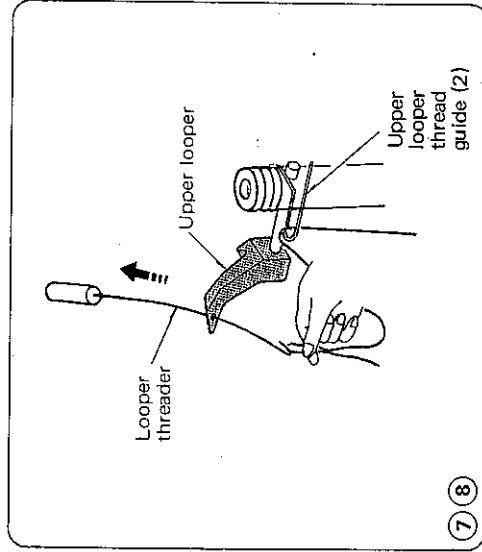


④ Pass the thread through the left side of thread guide.



⑤ Pass the thread through upper looper thread guide (1).

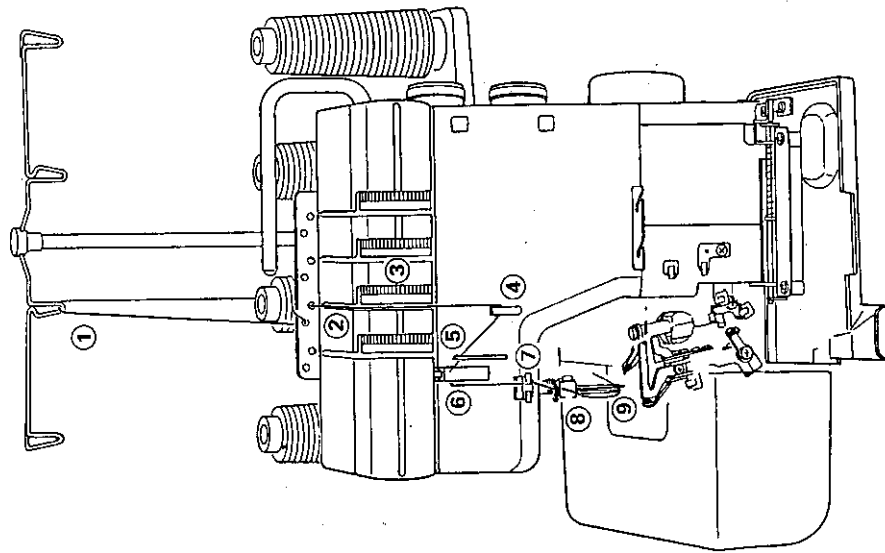
⑥ Pass the thread through the looper thread take-up lever (Upper).



⑦ Pass the thread through upper looper thread guide (2).

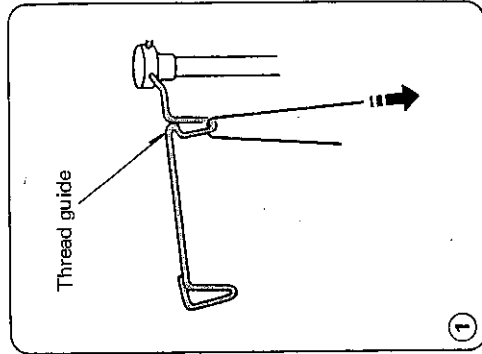
⑧ Pass the threader through the hole on the upper looper. Then hook the end of thread on the threader. Pull out the threader to pass the thread through the hole. Remove the thread from threader, and draw the free end of thread 10 cm (4") or more.

● **Threading the Needle on the Right**

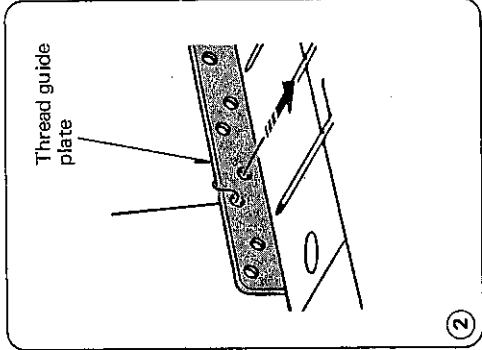


Place the spool of thread on the spool pin second from the left.

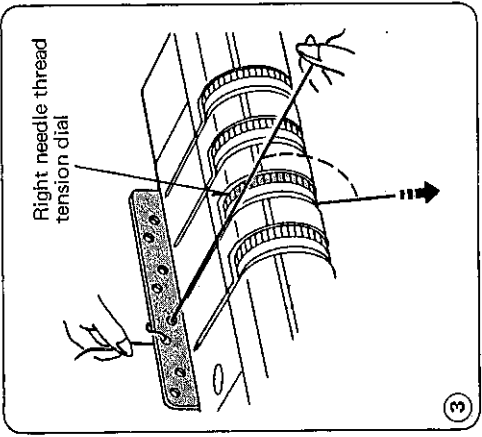
- \* The points to thread for needle on the right are marked in yellow.
- \* A convenient threading chart is placed on the machine body inside the looper cover.



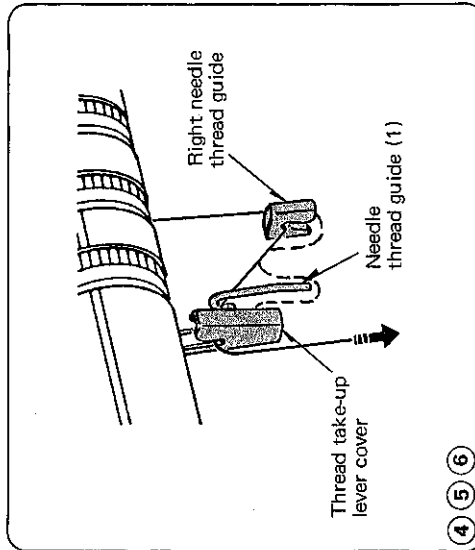
① Draw the thread through the thread guide second from the left from back to front.



② Pass the thread through the holes in the second row from the left of thread guide plate as illustrated.

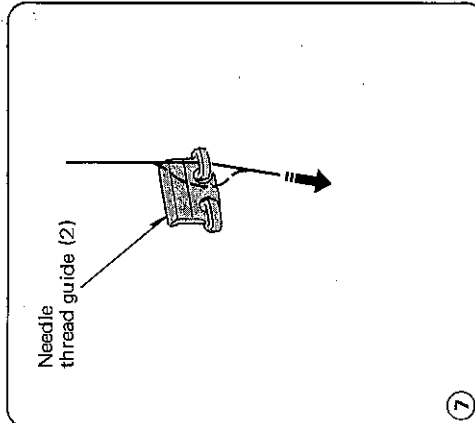


③ Hold the thread at both ends and tug gently to ensure the thread is correctly inserted between the tension discs.  
(If the foot is raised, the thread easily inserts between the tension discs.)



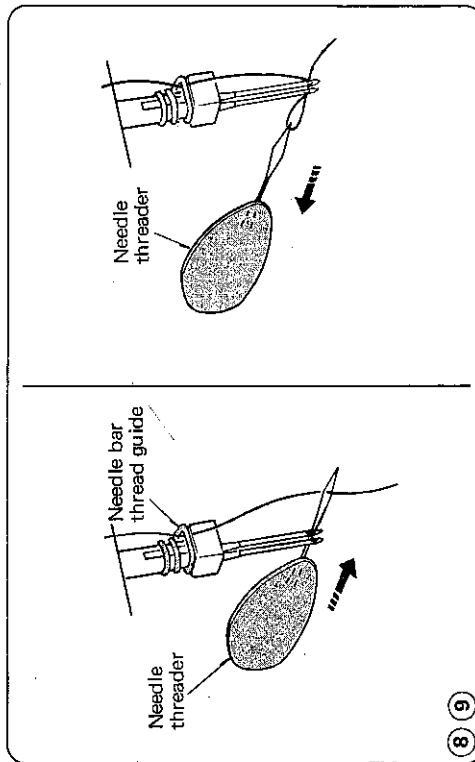
④ ⑤ ⑥

- ④ Pass the thread from the bottom of right needle thread guide.
- ⑤ Slide the thread from the bottom of needle thread guide (1).
- ⑥ Raise the needle to its highest point and guide the thread over take-up lever cover.



⑦

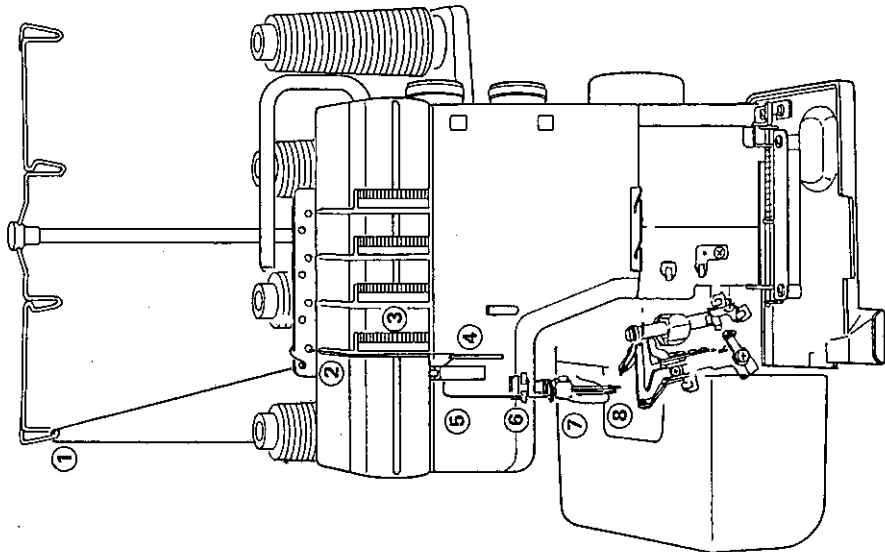
- ⑦ Pass the thread through the needle thread guide (2) sliding the thread from left to right.



⑧ ⑨

- ⑧ Pass through needle bar thread guide.
- ⑨ Pass the threader through the needle eye from back to front. Pass the end of thread through the loop of threader, then pull the threader to the back to pass the thread through needle eye. Draw the free end of thread 10 cm (4") or more.

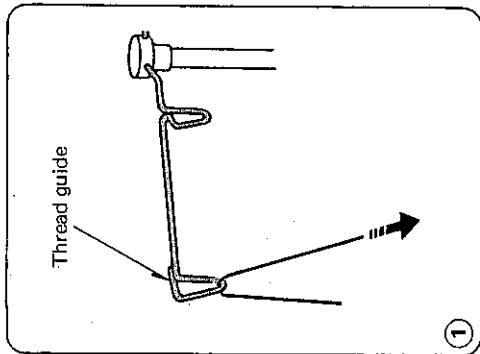
● **Threading the Needle on the Left**



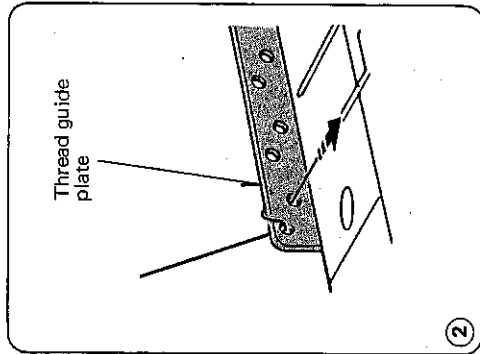
Place the spool of thread on the left side spool pin.

\* The points to thread for needle on the left are marked in red.

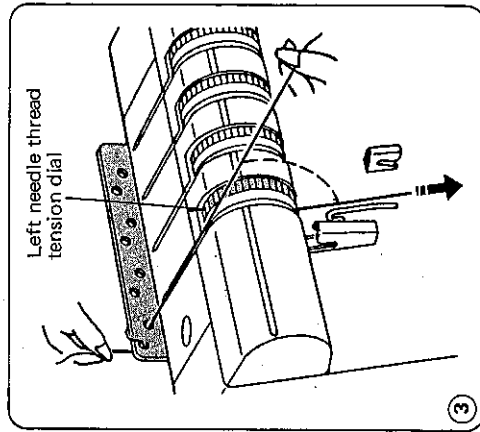
\* A convenient threading chart is placed on the machine body inside the looper cover.



① Draw the thread through the thread guide on the left from back to front.



② Pass the thread through the holes on the left of thread guide plate as illustrated.

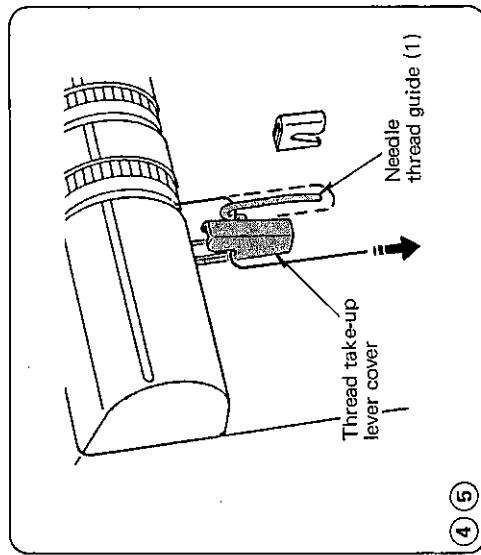


③ Hold the thread at both ends and tug gently to ensure the thread is correctly inserted between the tension discs. (If the foot is raised, the thread easily inserts between the tension discs.)

④

④

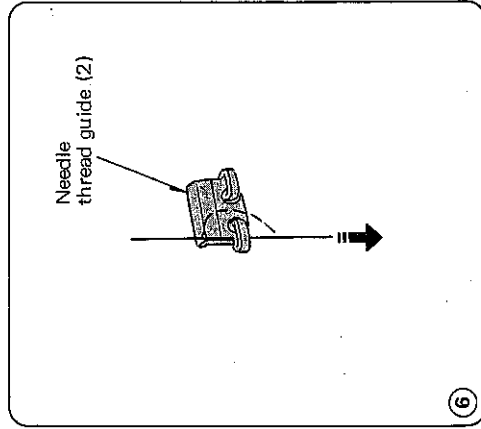
⑤



4 5

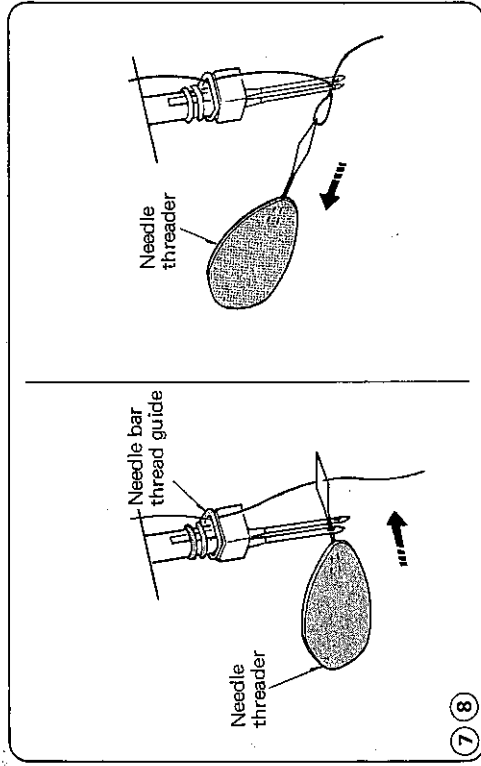
4 Slide the thread from the bottom of needle thread guide (1).

5 Raise the needle to its highest point and guide the thread over take-up lever cover.



6

6 Pass the thread through the needle thread guide (2) sliding the thread from right to left.



7 8

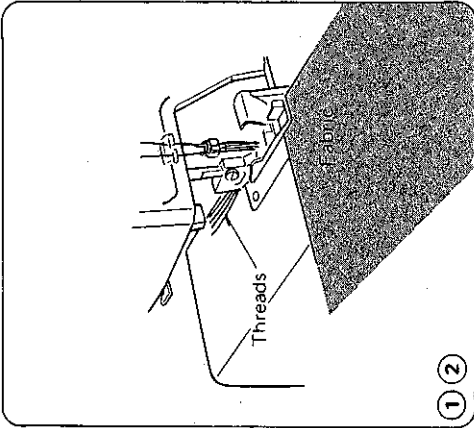
7 Pass through needle bar thread guide.

8 Pass the threader through the needle eye from back to front.  
Pass the end of thread through the loop of threader, then pull the threader to the back to pass the thread through needle eye. Draw the free end of thread 10 cm (4") or more.  
Close the looper covers.



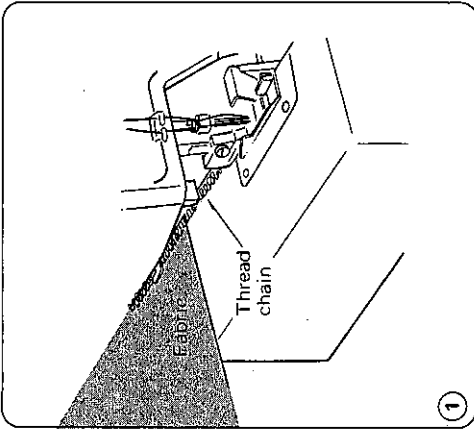
## TEST STITCHING

### Starting Sewing

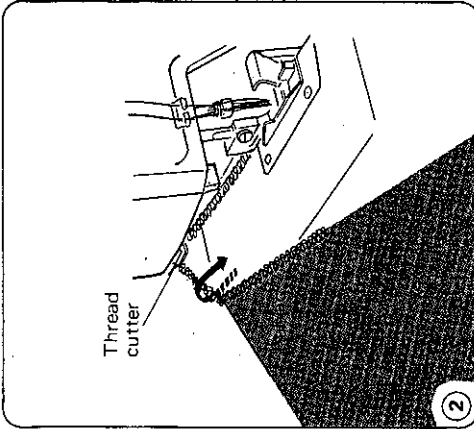


- ① Insert the fabric under the toe of the foot.  
(It is not necessary to raise the foot.)
- ② Turn the balance wheel gently toward you a couple of turns and check the thread chain. Then start sewing slowly. The fabric will be automatically fed. Guide the fabric in the direction desired.

### Finishing Sewing

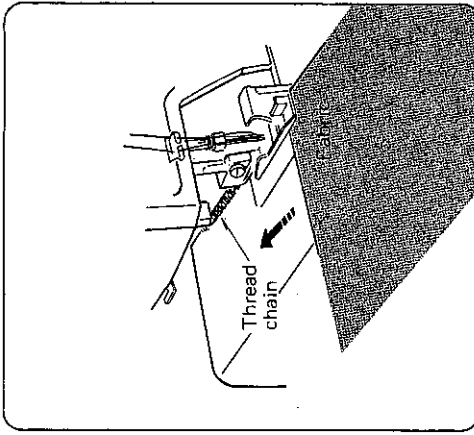


- ① When stitching is completed, continue to run the machine slowly to produce a thread chain for about 12 cm (5") while pulling the thread chain slightly to the back.



- ② Cut the threads with the thread cutter as illustrated, leaving about 5 cm (2") thread chain from the end of fabric.

### Sewing Continuously

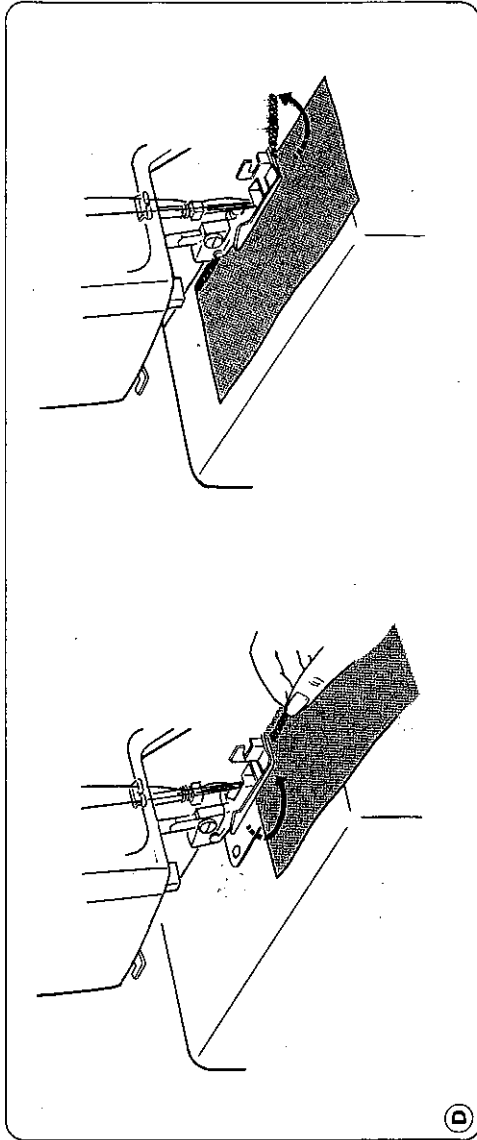
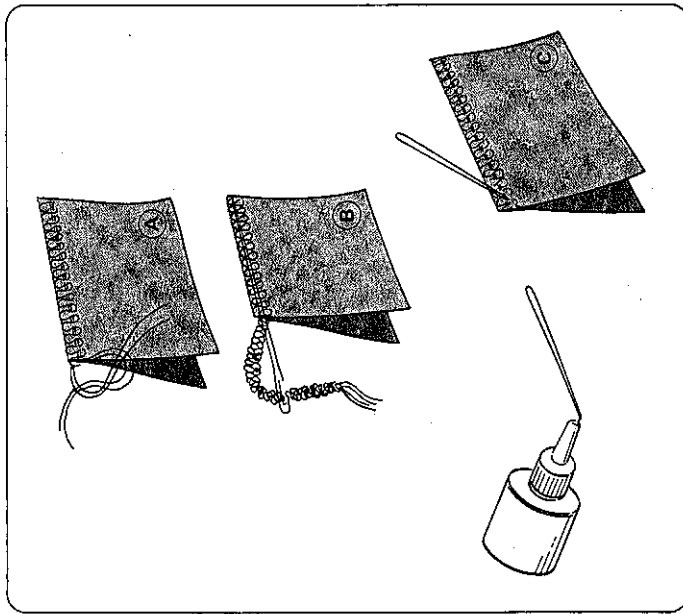


Insert next fabric under the toe of foot, then start sewing. It is not necessary to raise the presser foot for ordinary fabric.

- \* For heavy weight fabric, raise the presser foot and insert the fabric in front of the knife. Then lower the foot and sew.

## Securing Ends

To avoid unravelling, it is necessary to leave a thread chain about 5 cm (2") long at the beginning and end of seam. To secure the beginning and end of a seam choose one of the following methods.



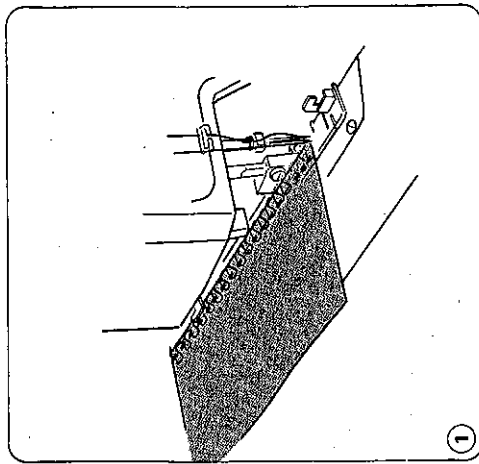
## At the Beginning

- A. Separate the end of threads and knot.
- B. Thread the chain through a large eyed needle, and weave that chain through the overlock stitches on the fabric.
- C. Cut the chain at the edge of fabric. Then apply a small amount of seam sealant (Fray Check TM or Fray-No-More TM) on the end of the threads.
- D. Backstitching
  1. Before putting your fabric in the machine, sew a thread chain about 5 cm (2") long behind the needle.
  2. Put your fabric in the machine. Then serge a few stitches and stop.
  3. Raise the presser foot and bring the thread chain to the left around and under the presser foot.
  4. Place the thread chain between the presser foot and upper knife, holding it in position as you lower the presser foot to sew.
  5. After sewing about 2.5 cm (1"), move the chain to the right and under the upper knife, cutting the chain as you sew.

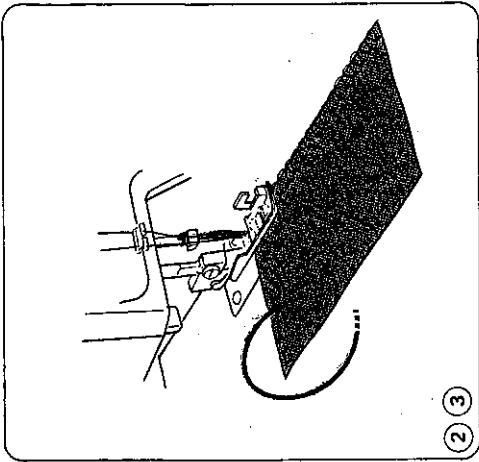
**Securing Ends (continued)**

**At the End**

You can use the same methods as at the beginning to secure the end of seam except "Backstitching", or the methods shown below.

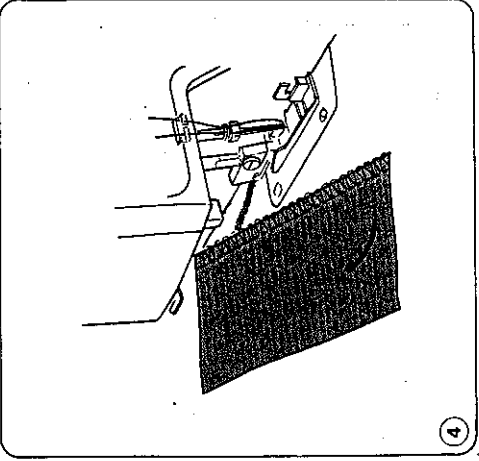


① Serge one stitch off the end of seam.



② Raise the needle and presser foot, and gently pull the threads off the prong.

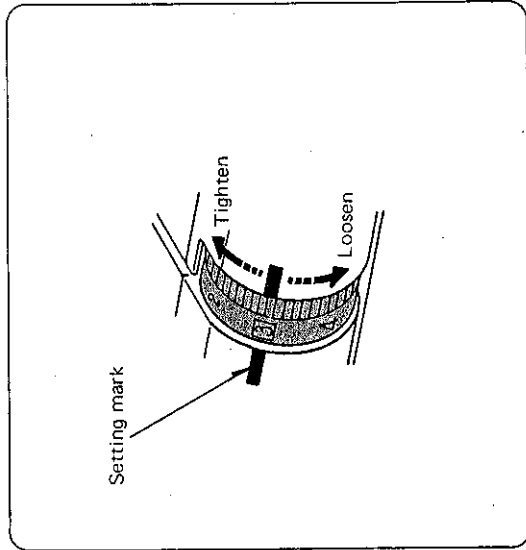
③ Turn the fabric over so that the under side is up.



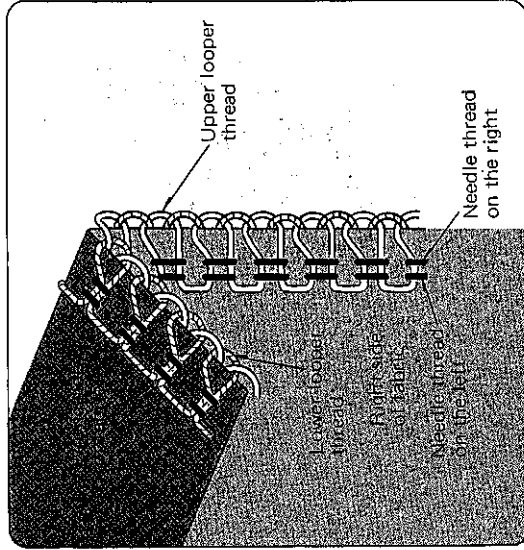
④ Serge about 2.5 cm (1") over stitching and angle off the fabric.

**Thread Tension (4 threads)**

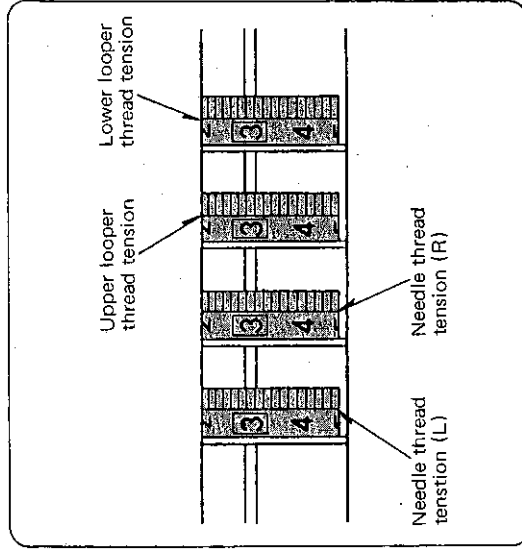
**Thread Tension Dial**



**Correct Tension**



**Thread Tension**



Adjusting the thread tension may be required depending on the type of fabric and thread being used.

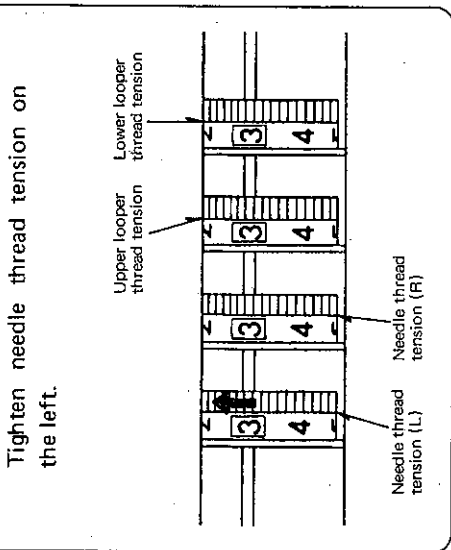
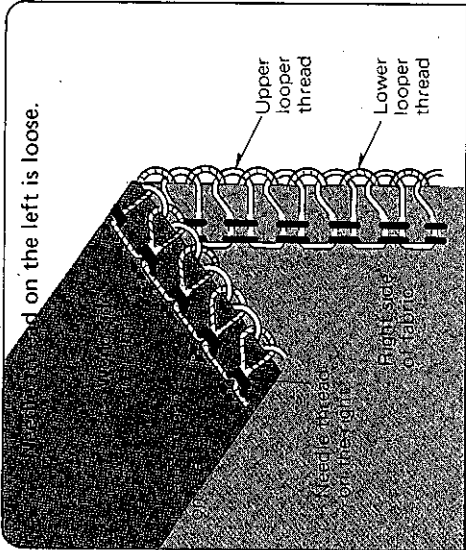
Refer to pages 20 and 21 for the adjustment.

**Thread Tension (4 threads) (continued)**

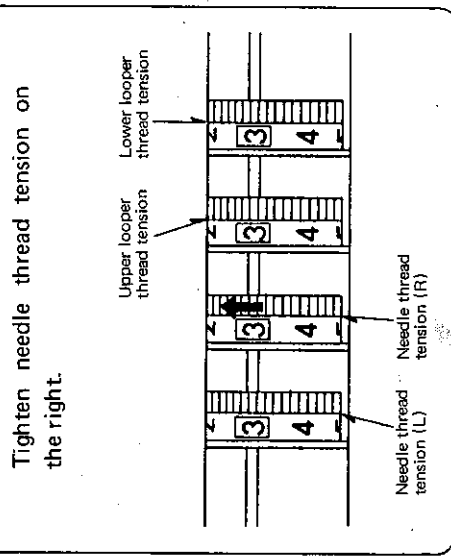
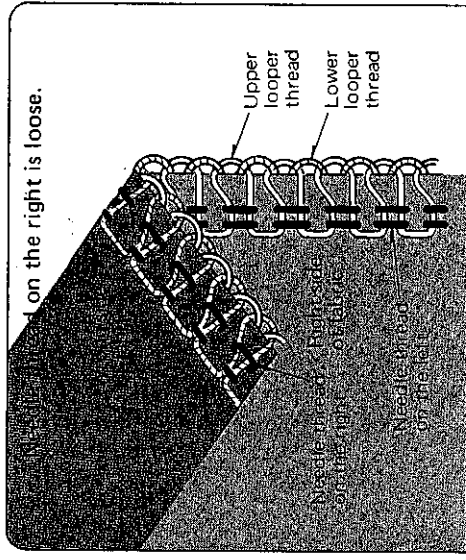
**Thread Tension Adjustment**

\* Set all four thread tension dials at "3". Then sew, and check the thread tensions.

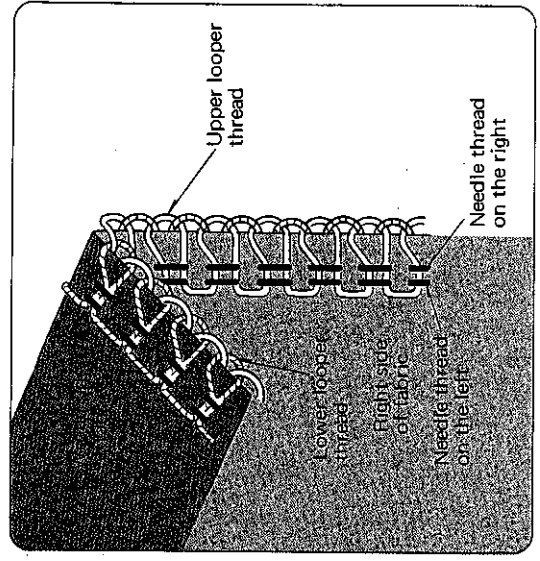
**Wrong Tension**



**Wrong Tension**

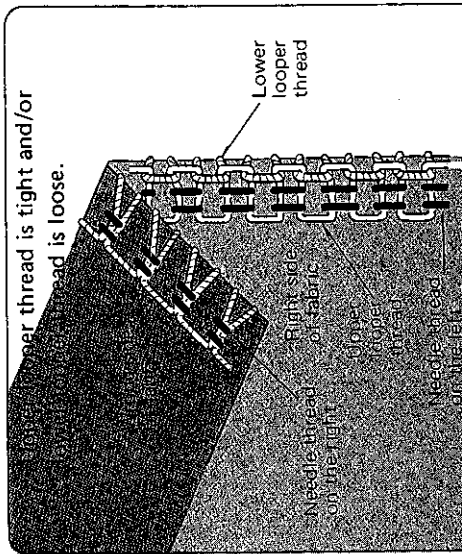


**Correct Tension**

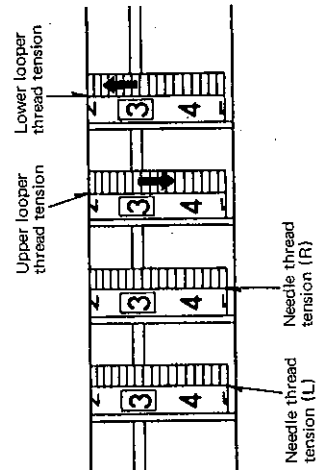


\* It is easier to adjust by using 4 different colors of thread.

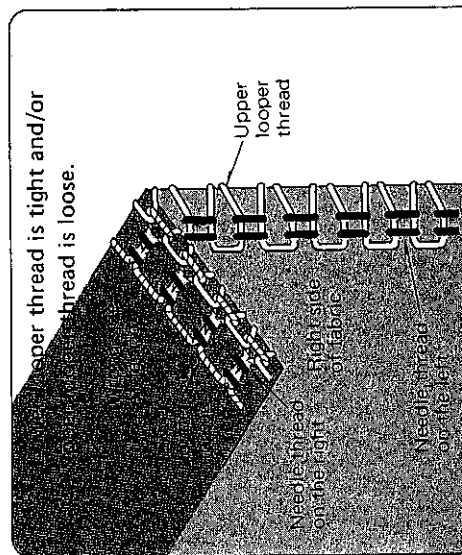
**Wrong Tension**



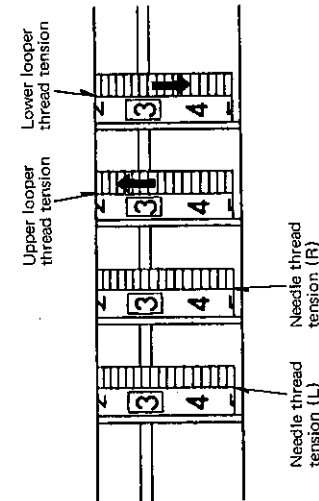
Loosen upper loop thread tension and/or tighten lower loop thread tension.



**Wrong Tension**

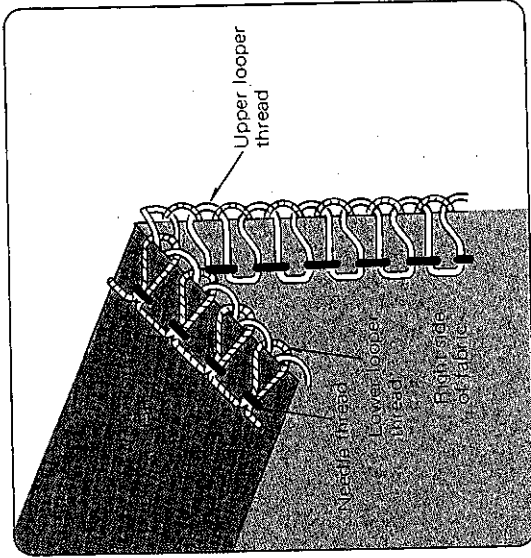


Loosen lower loop thread tension and/or tighten upper loop thread tension.



**Thread Tension (3 threads)**

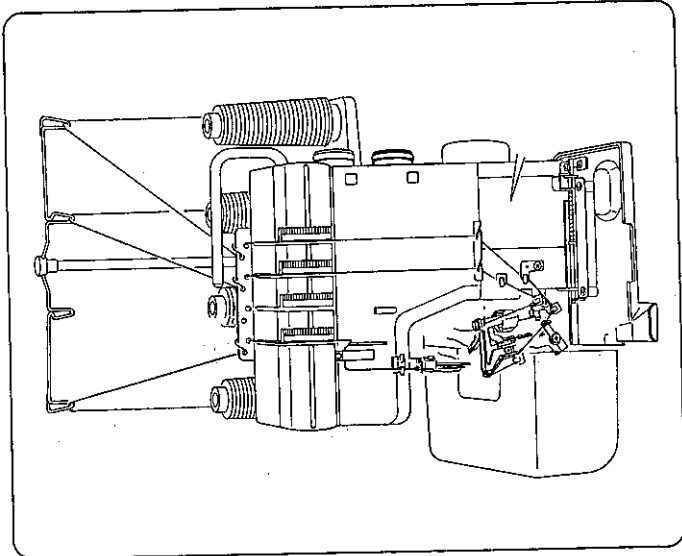
**Correct Tension**



Adjusting the thread tension may be required depending on the type of fabric and thread being used.

Refer to page 23 for the adjustment.

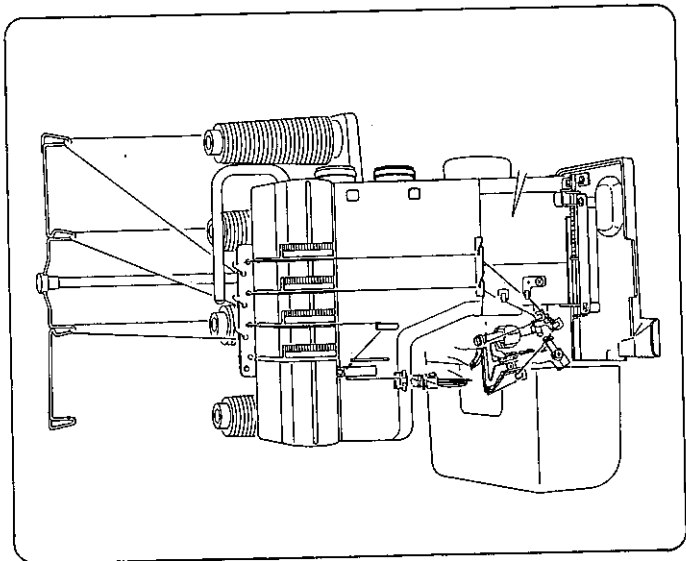
**Using the Needle on the Left Only  
(for wide three-thread serging)**



Remove the needle and the thread on the right. Then tighten the needle clamp screw on the right slightly to avoid losing the screw.

**Threading the Machine (3 threads)**

**Using the Needle on the Right Only  
(for regular three-thread serging)**



Disconnect the machine from the power supply. Remove the needle and the thread on the left. Then tighten the needle clamp screw on the left slightly to avoid losing the screw.

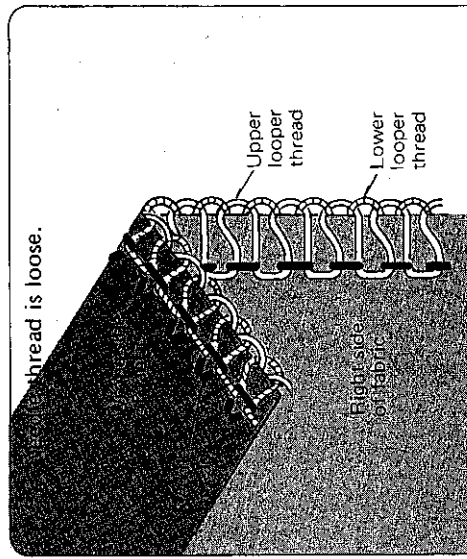
To change to the other needle in three-thread serging

Loosen both needle clamp screws and remove the needle. Insert the needle and tighten the needle clamp screw for the needle to be used while pushing the needle up as far as it will go. Then tighten the needle clamp screw on the other side slightly to prevent the screw from dropping.

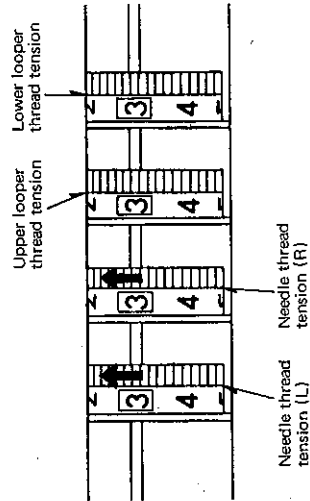
**Thread Tension Adjustment**

\* Set all three thread tension dials at "3". Then sew, and check the thread tensions.

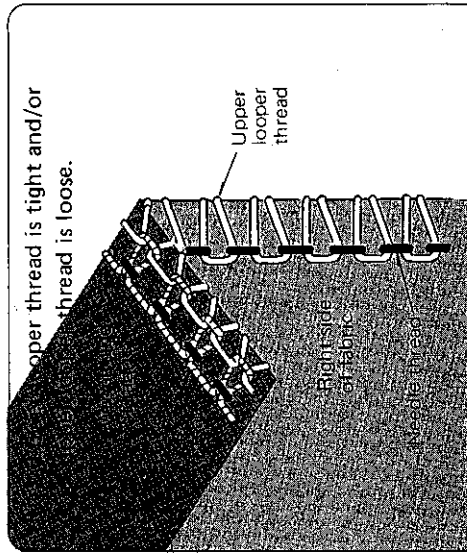
**Wrong Tension**



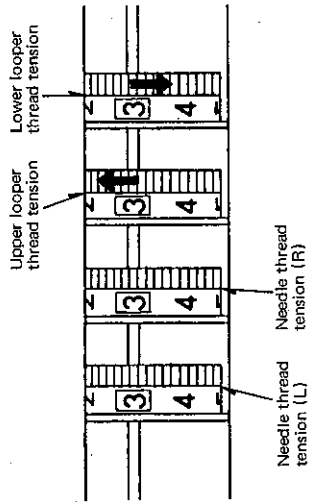
Tighten needle thread tension.



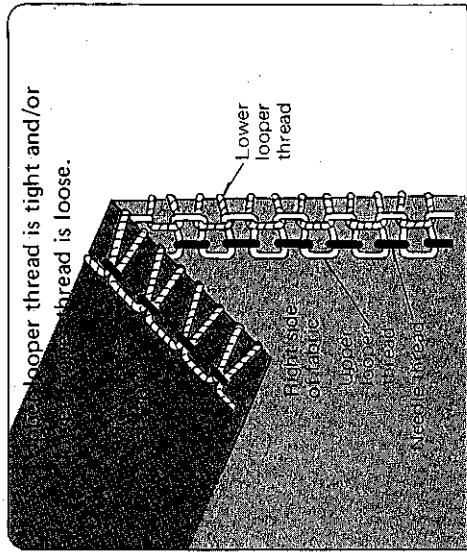
**Wrong Tension**



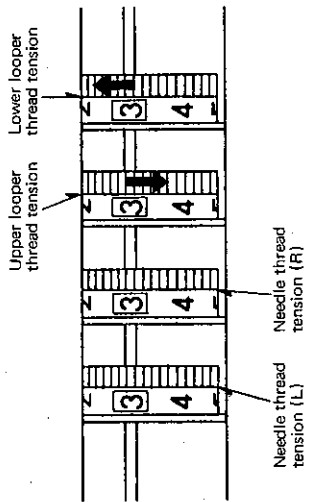
Loosen lower looper thread tension and/or tighten upper looper thread tension.



**Wrong Tension**



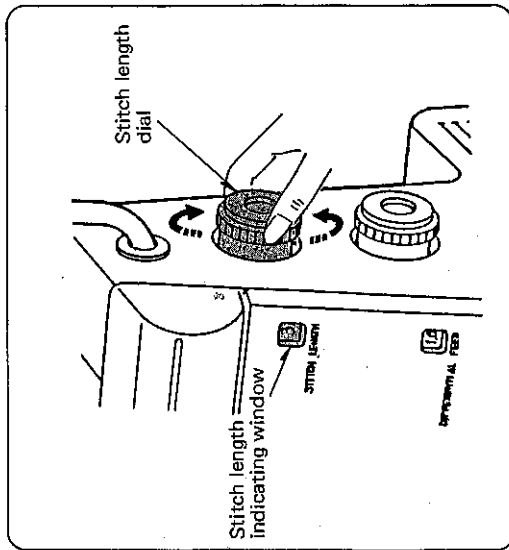
Loosen upper looper thread tension and/or tighten lower looper thread tension.



\* It is easier to adjust by using 3 different colors of thread.



## Adjustment of Stitch Length



Turn the stitch length dial until the desired stitch length appears in the indicating window.

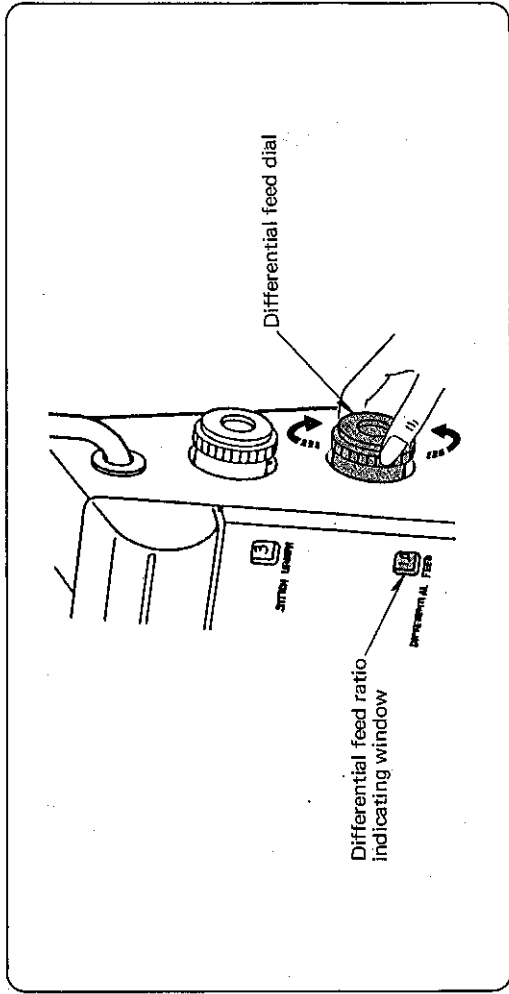
The larger the number, the longer the stitch.

The stitch length can be adjusted from 1 to 4 mm (approx. 5/128" to 5/32").

Position "R" is for rolled and narrow hemmings.

\* Maximum differential feed ratio, 2.0, is effective in the range of stitch length dial at 1 to 3.3. When the stitch length dial is set between 3.3 and 4, the maximum differential feed ratio will automatically be set between 2.0 and 1.7.

## Adjustment of Differential Feed Ratio



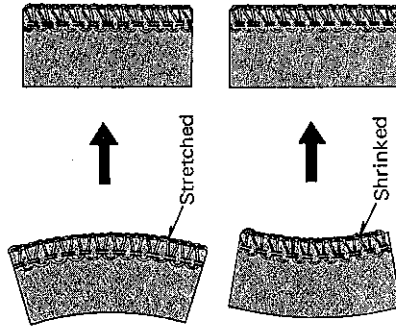
The differential feed ratio can be altered by turning the dial.

The number in the window indicates the ratio between the main and the sub feed motion.

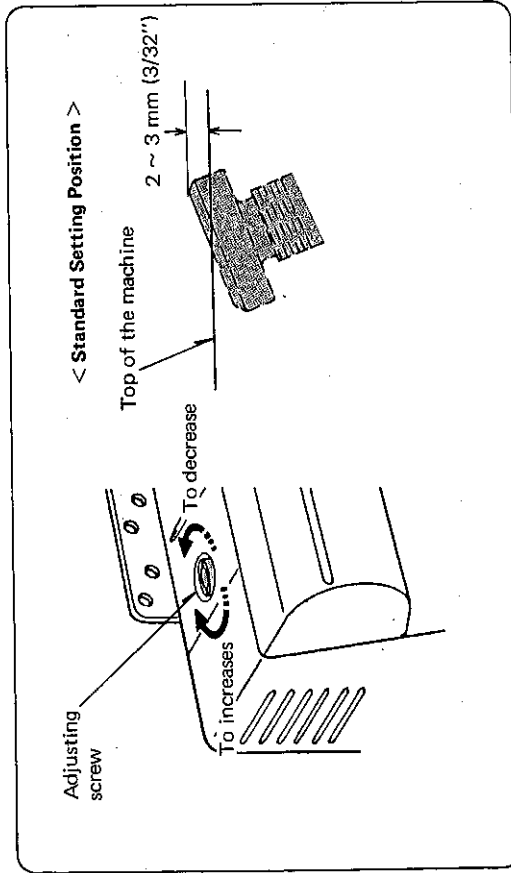
**1.0** indicates the neutral position.

### How to Adjust

- If the sewn fabric is stretched, turn the dial counter-clockwise (toward 2.0).
- If the sewn fabric is shrunk, turn the dial clockwise (toward 0.7).



### Adjustment of Foot Pressure



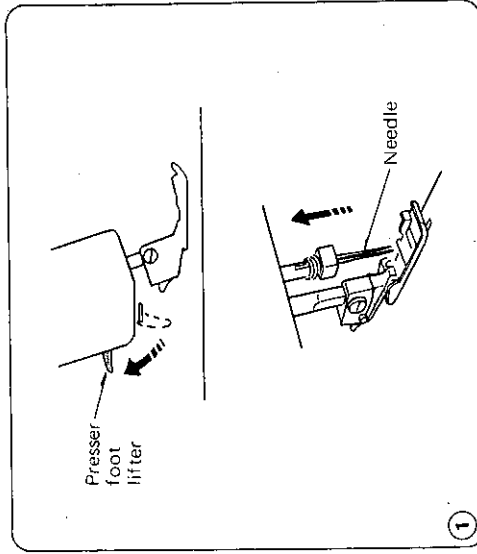
It is not necessary to adjust the pressure for normal sewing.

When you sew heavy or lightweight fabrics, turn the adjusting screw to:

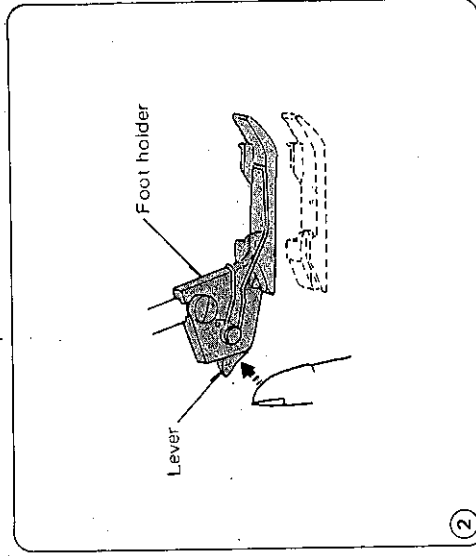
- clockwise for heavyweight fabric.
- counter-clockwise for lightweight fabric.

\* For normal sewing, set the adjusting screw so that it sticks above the top of the machine by 2 ~ 3 mm (3/32"). See illustration.

### Removing the Presser Foot

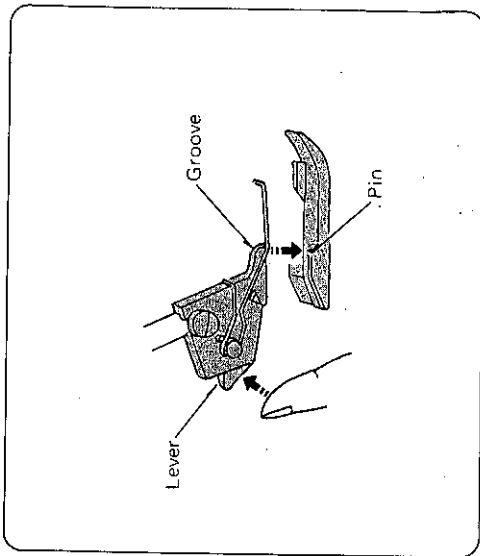


① Raise the needle and presser foot.



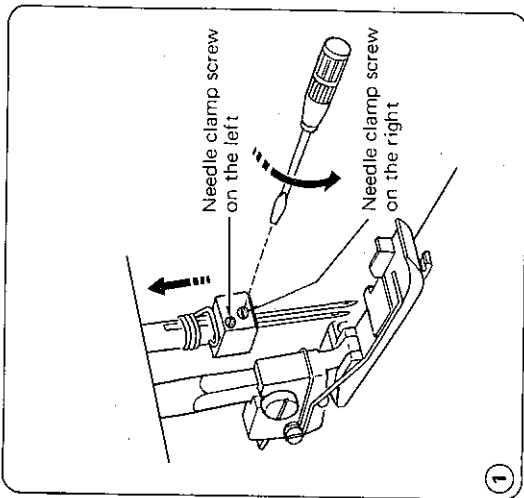
② Press the lever located on the back of the foot holder. The presser foot will drop off.

### Attaching the Presser Foot

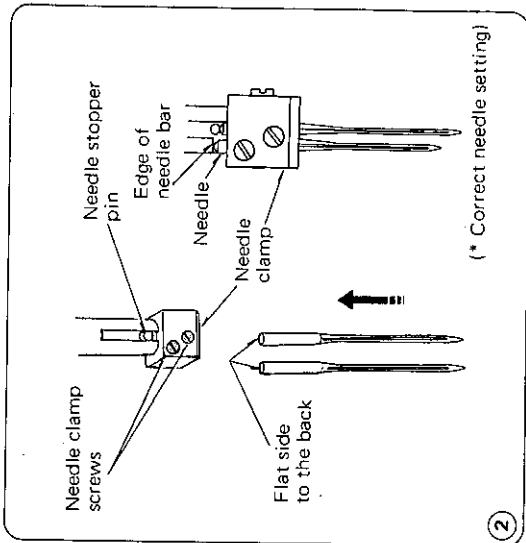


Place the presser foot so that the pin on the foot lies just under the groove of the foot holder. Lower the foot holder and push the lever to lock the foot in place. Raise the presser foot lifter to check that the presser foot is secure.

### Changing Needle



1 Disconnect the machine from the power supply. Raise the needle to its highest position. Then loosen the needle clamp screw for the needle you are going to remove.



To Attach the needle on the right

Insert new needle into the needle clamp with the flat side to the back until the top of needle touches the stopper pin, then tighten the needle clamp screw on the right.

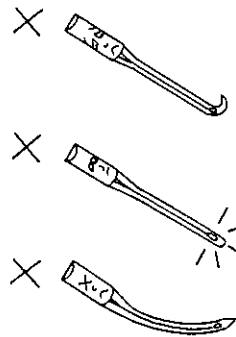
To attach the needle on the left

Insert new needle into the needle clamp with the flat side to the back until the top of needle touches the edge of needle bar, then tighten the needle clamp screw on the left.

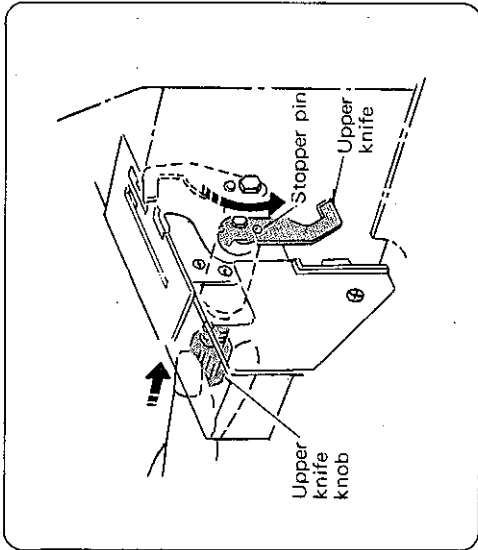
\* When the needles are set correctly, the left needle is higher than the right one.

\* Do not use any needle which is bent or blunt.

Refer to page 22 for changing the needle for three-thread serging.

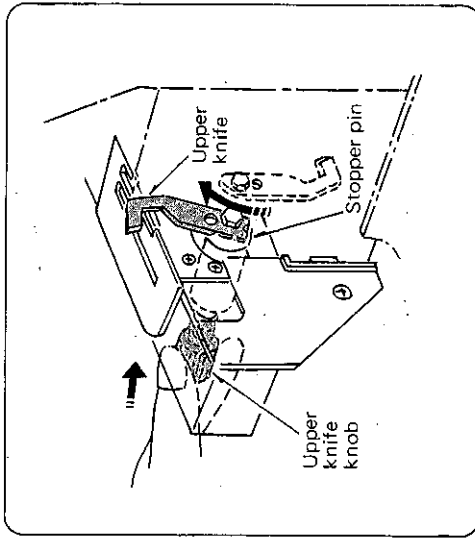


**To Deactivate the Upper Knife**



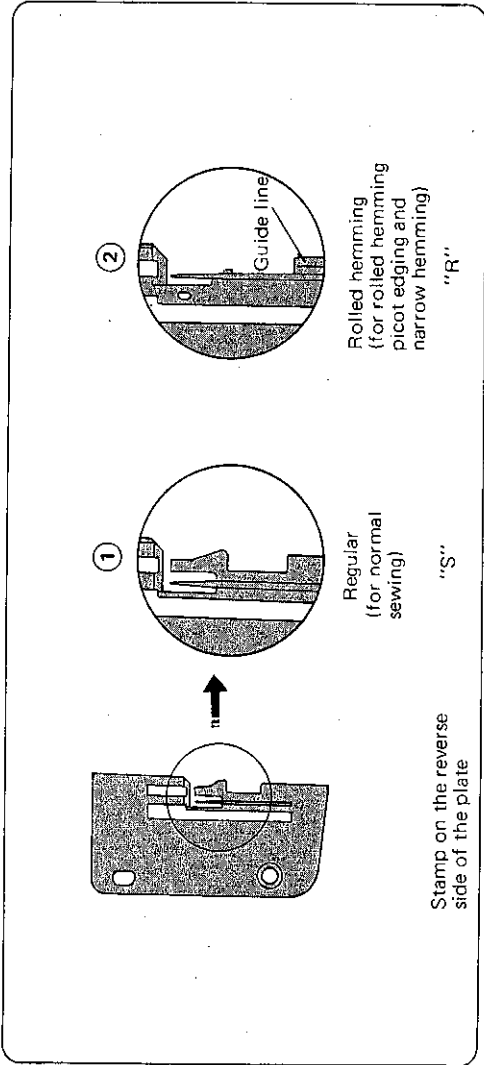
- 1 Disconnect the machine from the power supply.
- 2 Open the looper and side covers.
- 3 Turn the upper knife knob toward you while pushing it to the right, then guide the hole on upper knife to the pin to lock the upper knife in down position.
- 4 Close the looper and side covers.

**To Activate the Upper Knife**



- 1 Disconnect the machine from the power supply.
- 2 Open the looper and side covers.
- 3 Turn the upper knife knob away from you while pushing it to the right, then guide the groove on upper knife to the pin to lock upper knife in the up position.
- 4 Close the looper and side covers.

### Types of Needle Plates

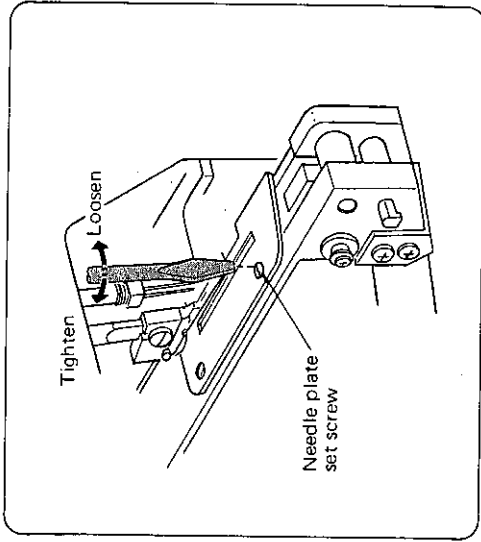


- \* Select the needle plate for your sewing need.
- \* Your overlock is shipped with the regular needle plate in place.

### For your Safety:

When you change the needle plate or adjust the seam width, make sure that the machine is disconnected from the power supply.

### Changing the Needle Plate



- 1 Turn the balance wheel toward you until the needle comes above the needle plate. Then remove the presser foot.
- 2 Open the side and looper covers. (Refer to page 5.)
- 3 Set the upper knife to down position. (Refer to page 27.)
- 4 Remove the needle plate set screw, and lift the needle plate.
- 5 Attach the needle plate you require with the needle plate set screw.
- 6 Bring the upper knife to up position. (Refer to page 27.)
- 7 Close the looper and side covers.
- 8 Attach the presser foot.

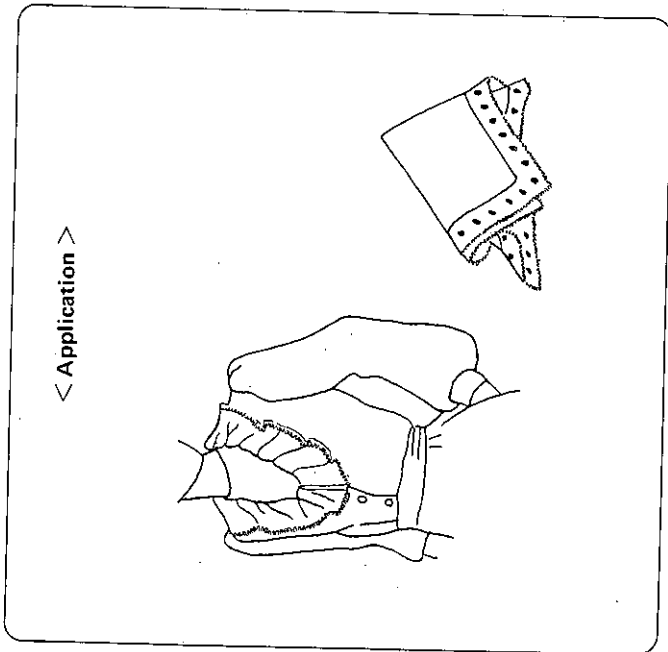
**Thread and Needle Chart**


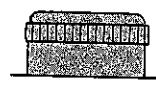




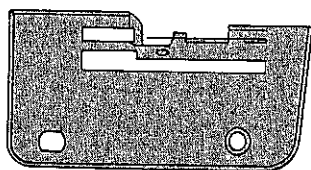
| Type of Fabric |   | Type of Thread  | Needle                 | Stitch Length | Differential Feed Ratio |
|----------------|---|---|------------------------|---------------|-------------------------|
| Light weight   | Organdy, Georgette, Lawn, Crepe de chine, Lining. | Cotton : No. 80 ~ 100<br>Silk : No. 80 ~ 100<br>Synthetic : No. 80 ~ 100  | HA-1 SP<br>No. 11      | 2.0 ~ 3.0 mm  | 0.7 ~ 1.0               |
| Medium weight  | Cotton, Linen, Satin, Ordinary fabric.            | Cotton : No. 60 ~ 100<br>Silk : No. 50 ~ 100<br>Synthetic : No. 60 ~ 100  | HA-1 SP<br>No. 11 ~ 14 | 2.5 ~ 3.5 mm  | 1.0                     |
| Heavy weight   | Tweed, Coating, Denim, Doeskin, Thick fabric.     | Cotton : No. 50 ~ 60<br>Silk : No. 50 ~ 60<br>Synthetic : No. 50 ~ 60   | HA-1 SP<br>No. 14      | 3.0 ~ 4.0 mm  | 1.0                     |
| Knits          | Knitted fabric                                    | Cotton : No. 60 ~ 80<br>Synthetic : No. 60 ~ 90<br>Woolly nylon<br>(For looper thread)<br>Woolly polyester<br>(For looper thread) | HA-1 SP<br>No. 11 ~ 14 | 2.5 ~ 3.5 mm  | 1.0 ~ 2.0               |

\* Refer to page 24 for adjusting the stitch length and the differential feed ratio.

# ROLLED HEMMING, PICOT EDGING AND NARROW HEMMING

## Machine Setting

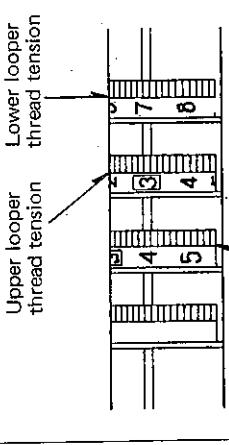
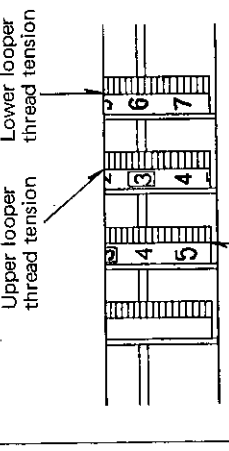
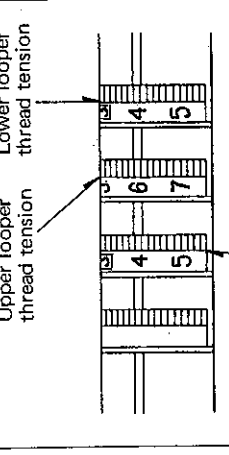
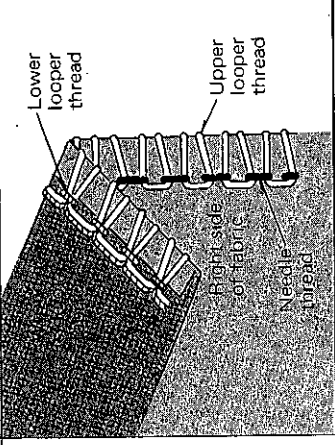
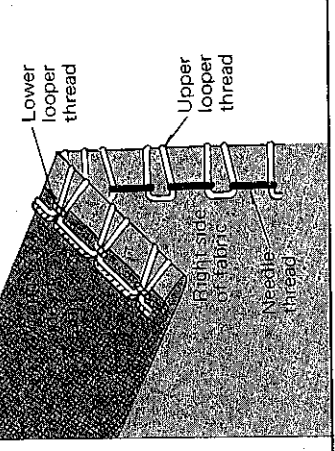
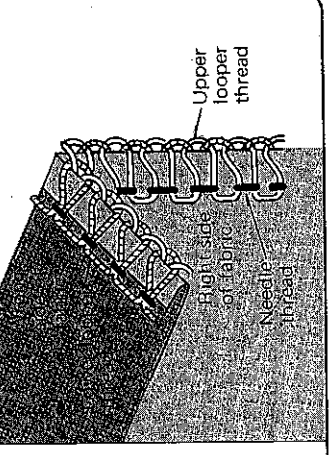


|                         | Rolled Hemming  | Picot Edging  | Narrow Hemming  |
|-------------------------|---|---|---|
| Stitch Length           |  (R)   |  (3 ~ 4) |  (R) |
| Differential Feed Ratio |  1.0   |  1.0     |  1.0 |
| Needle                  | Remove the left needle.   |   |   |
| Needle Plate            | <br>Rolled hemming needle plate.<br>(Marked R on reverse side.) |   |   |

\* Refer to page 28 for changing the needle plate.

**Thread, Fabric and Range of the Tension Dial (3 Threads)**

The setting of tension dials may vary depending on the type and thickness of fabric and thread being sewn.

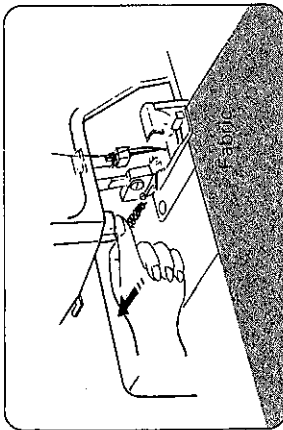
| Fabric   | Needle thread                     | Rolled Hemming  | Picot Edging   | Narrow Hemming  |
|--|-----------------------------------|---|--|---|
|  | Needle thread                     |   | Long fiber polyester thread No. 80 ~ 100   |   |
|  | Upper and lower looper threads    | Woolly nylon, Woolly polyester  | Synthetic : 60 ~ 100, Silk : No. 50 ~ 100  | Woolly nylon, Woolly polyester  |
|  | Needle                            |   | HA-1 SP No. 11   |   |
| Lightweight fabric such as organdy, crepe de chine, lawn and georgette | Standard setting of tension dials |    |    |    |
|  | Correct thread tension            |  |  |  |



### Adjusting Thread Tension

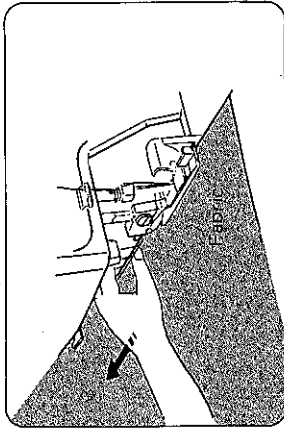
1. Set the tension dials as shown on page 31.
2. Sew and check the tensions.

— For better result —



### Roll Hemming

Pull the end of thread chain to the back lightly in the beginning and end of sewing.



### Picot Edging

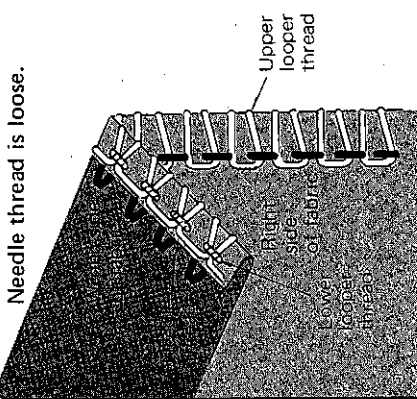
Pull the fabric lightly to the back while sewing.

### How to Adjust the Thread Tension

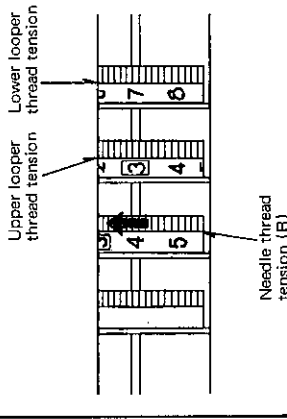
- For Rolled Hemming and Picot Edging

#### Wrong Tension

Needle thread is loose.

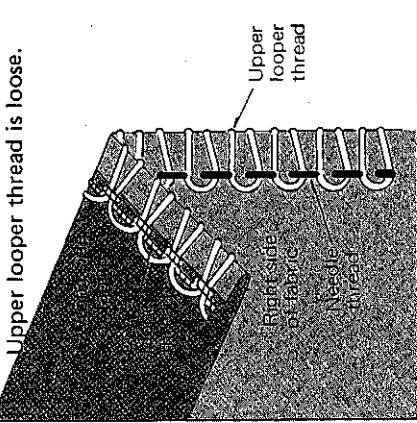


Tighten needle thread tension.

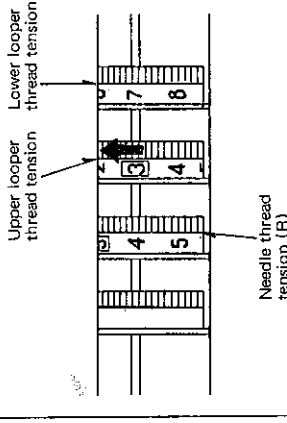


#### Wrong Tension

Upper looper thread is loose.

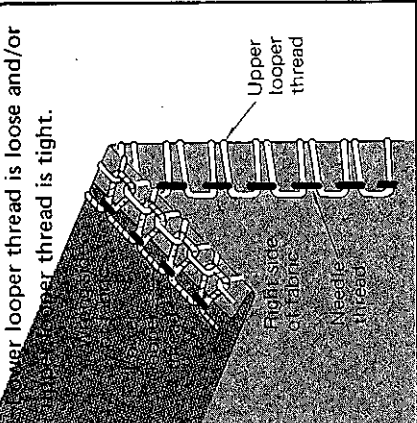


Tighten upper looper thread tension.

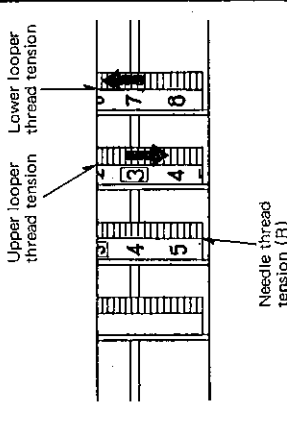


#### Wrong Tension

Upper looper thread is loose and/or lower looper thread is tight.



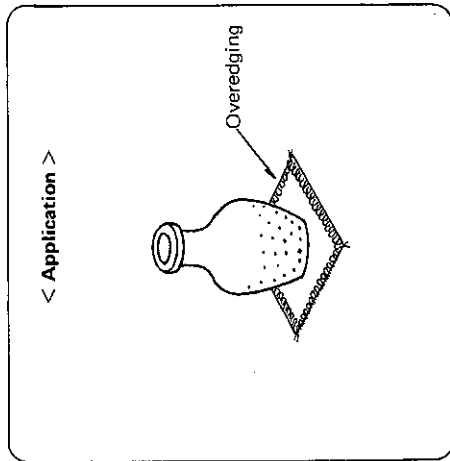
Tighten lower looper thread tension and/or loosen upper looper thread tension.



- For Narrow Hemming  
Refer to pages 22 to 23 for the adjustment.

# DECORATIVE OVEREDGING

## Thread, Fabric, Range of the Tension and Machine Setting



| Fabric                 | Thread              |   | Standard Setting |
|------------------------|---------------------|---|------------------|
| Medium to Heavy Fabric | Needle thread       | Synthetic : No. 60 ~ 80<br>Silk : No. 50 ~ 80 |                  |
|                        | Upper looper thread | Buttonhole twist<br>Light weight wool yarn    |                  |
|                        | Lower looper thread | Synthetic : No. 60 ~ 80<br>Silk : No. 50 ~ 80 |                  |

|                 |                         |   |
|-----------------|-------------------------|---|
| Machine Setting | Stitch length           | 3 ~ 4 mm  |
|                 | Differential feed ratio | 1.0   |
|                 | Needle plate            | Regular needle plate.<br>(Marked S on reverse side) |
|                 | Needle                  | HA-1 SP No. 14                                      |

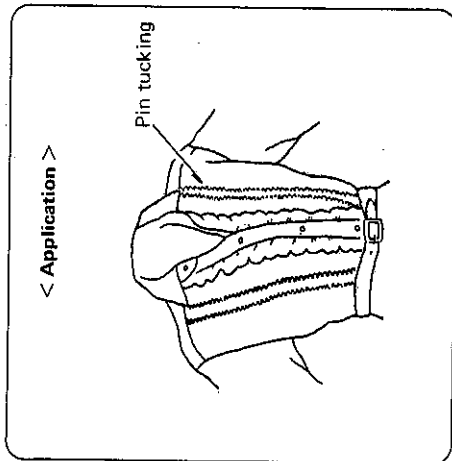
- \* Refer to page 19 for the correct tension.
- \* To adjust the thread tension balance, set the tension dials as shown above first, then refer to pages 20 to 21.
- \* For the best result, pull the thread chain to the back lightly at the beginning and end of sewing.
- \* Remove the needle on either side for three thread decorative overedging.

# PIN TUCKING

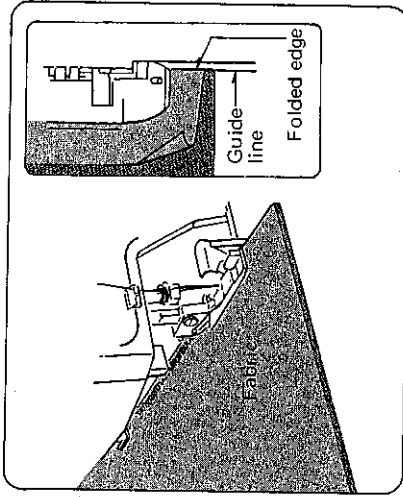
## Fabric, Thread and Machine Setting

| Fabric                 | Thread                         |   |
|------------------------|--------------------------------|---|
| Light to Medium Fabric | Needle thread on the right     | Synthetic : No. 60 ~ 80<br>Silk : No. 50 ~ 80               |
|                        | Upper and lower looper threads | Synthetic : No. 60 ~ 100<br>Silk : No. 50 ~ 100             |
| Machine Setting        | Stitch length                  | R   |
|                        | Differential feed ratio        | 1.0   |
|                        | Needle plate                   | Rolled hemming needle plate.<br>(Marked R on reverse side.) |
|                        | Needle                         | HA-1 SP No. 11  |

\* Refer to pages 22 ~ 23, 31 (Narrow Hemming) for thread tension balance adjustment.

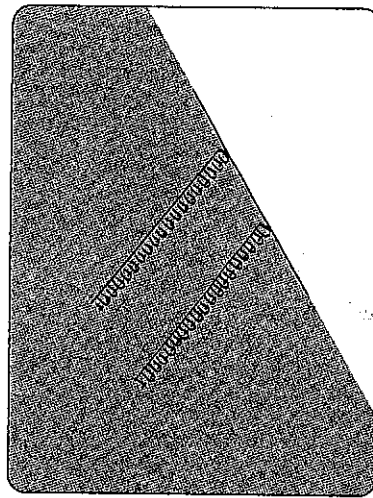


## Sewing



Remove the needle on the left hand side.  
Deactivate the upper knife. (Refer to page 27.)

Sew the folded edge while guiding along the guide line.

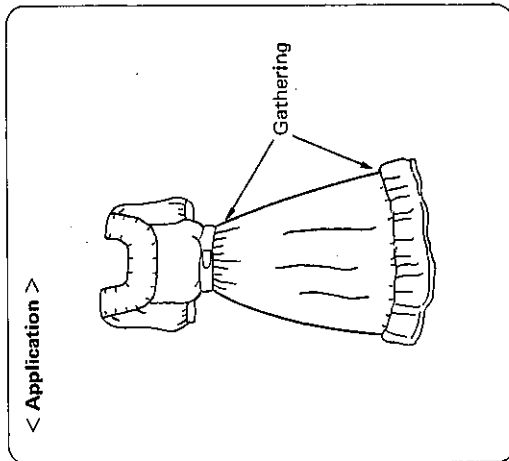


Press the pin tucks to one side.  
\* Activate the upper knife. (Refer to page 27.)

## GATHERING

### Fabric, Thread and Machine Setting

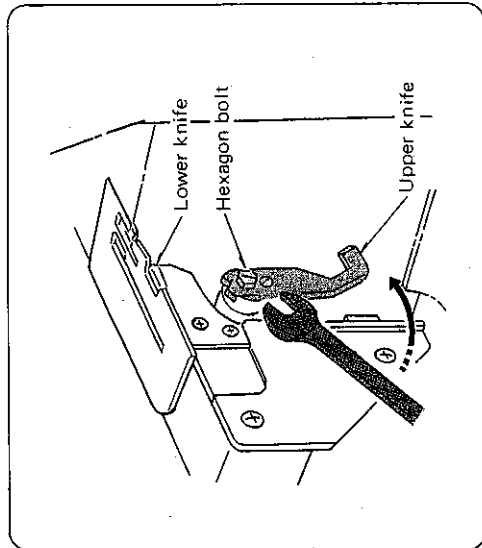
| Fabric                       | Needle threads                 | Thread  |
|------------------------------|--------------------------------|---|
| Light to Medium Woven Fabric | Upper and lower looper threads | Synthetic : No. 60 ~ 80<br>Silk : No. 50 ~ 80       |
|                              | Upper and lower looper threads | Synthetic : No. 60 ~ 80<br>Silk : No. 50 ~ 80       |
| Machine Setting              | Stitch length                  | 3.3 ~ 4.  |
|                              | Differential feed ratio        | 1.0 ~ 2.0   |
|                              | Needle plate                   | Regular needle plate.<br>(Marked S on reverse side) |
|                              | Needle                         | HA-1 SP No. 11 or 14                                |



\* Refer to pages 22 and 23 for thread tension balance adjustment.

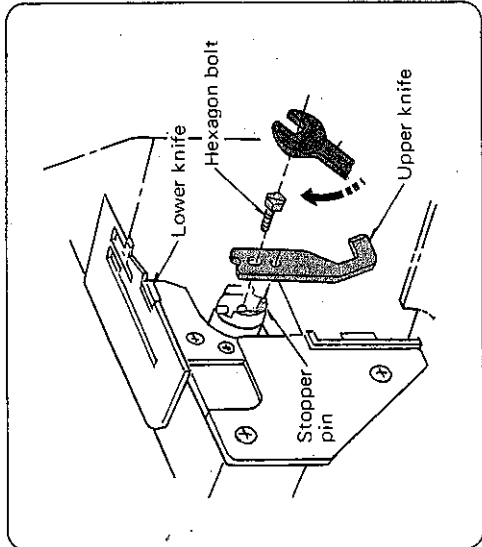
## CARE OF YOUR MACHINE

### Replacing the Upper Knife



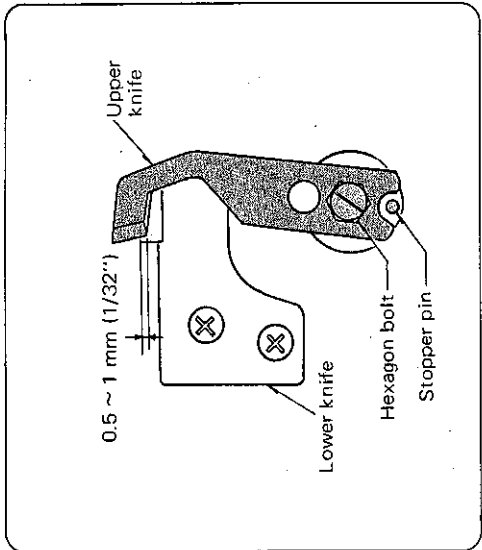
#### To Remove:

- ① Disconnect the machine from the power supply.
- ② Open the looper and side covers.
- ③ Deactivate the upper knife. (Refer to page 27.)
- ④ Remove the hexagon bolt, and remove the upper knife.



#### To Attach:

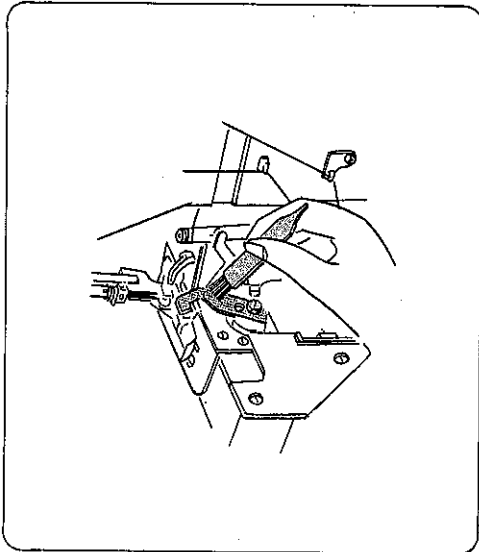
- ① Insert new upper knife into the groove of knife holder and stopper pin, then tighten the hexagon bolt slightly.



- ② Turn the upper knife holder to cutting position.
- ③ Turn the balance wheel toward you until the upper knife comes to its lowest position. Loosen the hexagon bolt, and adjust the position of upper knife so that the edge of the upper knife overlaps 0.5 to 1 mm (1/32'') from the edge of lower knife as shown above. Then tighten the hexagon bolt firmly.
- ④ Close the looper and side covers.

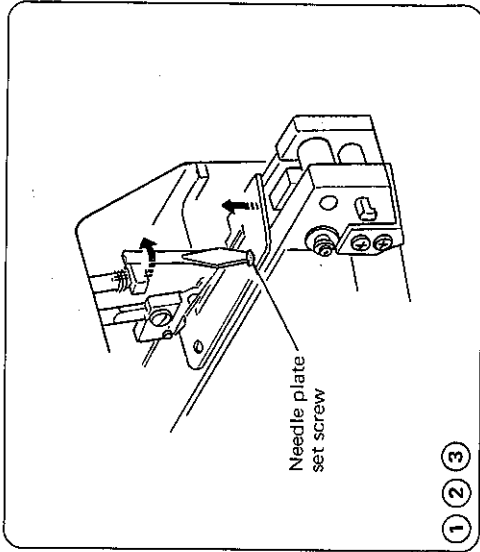
\* The lower knife will last over one year in normal use. However, if you run over a pin or a hard object, it may be required to replace both upper and lower knives at the same time.

### Cleaning Upper Knife Area



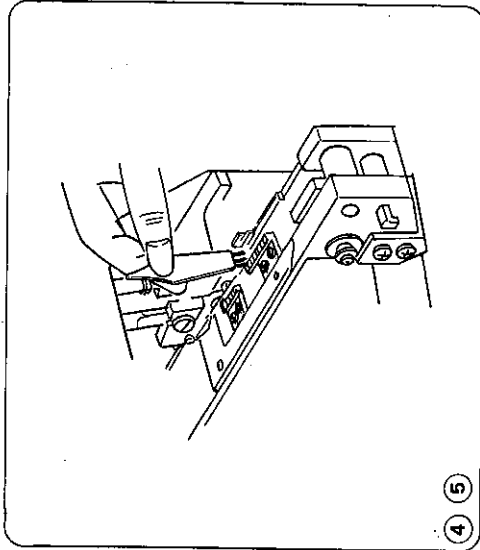
Open the looper cover.  
Remove the waste chips to the front with a lint brush.

### Cleaning the Feed Dog



① ② ③

- ① Open the looper and side covers.
- ② Remove the needles and presser foot.
- ③ Remove the needle plate set screw, and remove the needle plate.



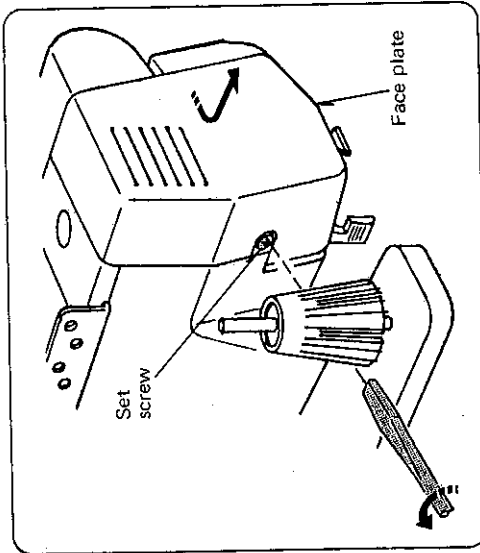
④ ⑤

- ④ Push the lint around the feed dogs to the front by using a lint brush.
- ⑤ Attach needle plate, presser foot and needles. Close the looper and side covers.

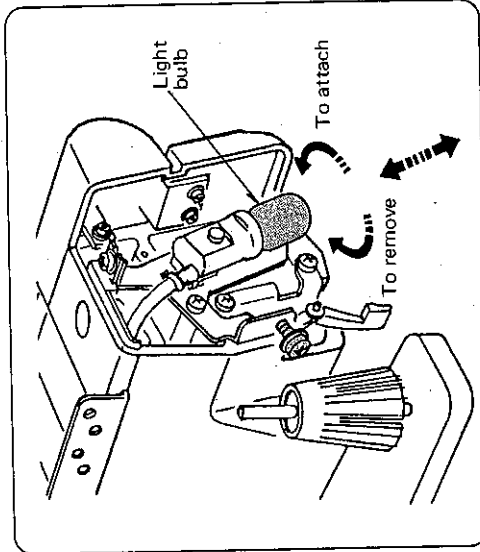
\* Disconnect the machine from the power supply.

\* You may use vacuum cleaner to clean the upper knife area or feed dog.

## Replacing the Light Bulb



- ① Disconnect the machine from the power supply.  
Loosen the face plate set screw, and remove the face plate.

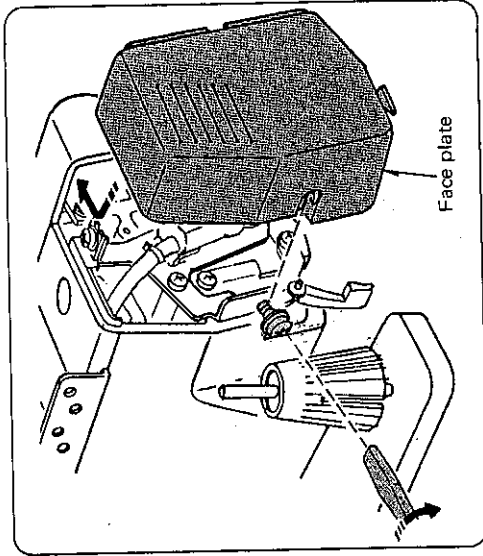


② To Remove:

- Screw-on type . . . . . Turn to the left.  
Bayonet type . . . . . Push and twist to the left.

To put on:

- Screw-on type . . . . . Turn to the right.  
Bayonet type . . . . . Push and twist to the right.

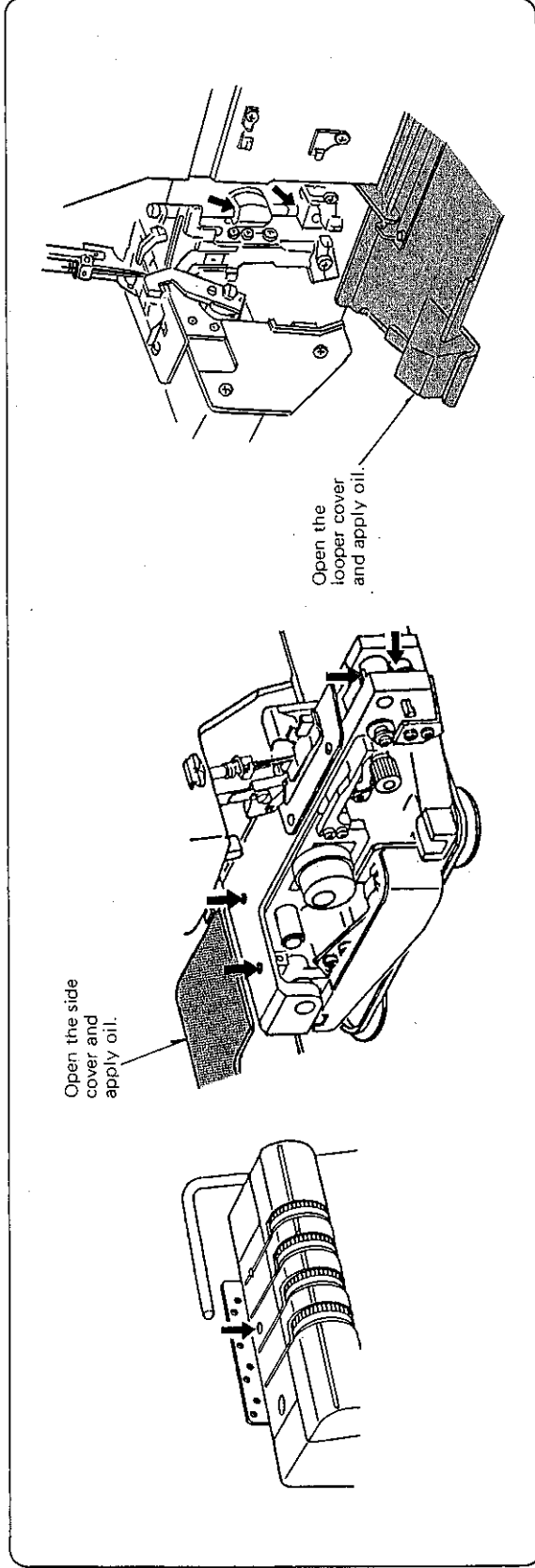


- ③ Attach the face plate, and tighten the face plate set screw.

For your safety:

- \* The machine is designed to use a 15 WATT MAXIMUM LIGHT BULB.
- \* The light bulb will be HOT. Protect your fingers when you handle it.

Oiling the Machine



Apply a few drops of fine quality sewing machine oil to the parts indicated with arrows.

It is recommended to apply oil once a week in normal use, once in ten hours in continuous use.



## Trouble Shooting

| Condition                             | Cause  | Reference   |
|---------------------------------------|--|---|
| The fabric is not being fed smoothly. | <ol style="list-style-type: none"> <li>1. The feed dog is packed with lint.</li> <li>2. The presser foot has been raised.</li> </ol>   | <p>See page 37.<br/>Lower the presser foot.</p>   |
| The needle breaks.                    | <ol style="list-style-type: none"> <li>1. The needle is incorrectly inserted.</li> <li>2. The needle is bent or blunt.</li> <li>3. The fabric is forcibly pulled.</li> </ol>   | <p>See page 26.<br/>See page 26.<br/>Pull the fabric lightly.</p>   |
| The thread breaks.                    | <ol style="list-style-type: none"> <li>1. The machine is not correctly threaded.</li> <li>2. The needle or looper thread tension is too tight.</li> <li>3. The needle is incorrectly inserted.</li> <li>4. The needle is bent or blunt.</li> </ol>   | <p>See pages 7 ~ 15 and 22.<br/>See pages 19 ~ 23 and 31 ~ 33.<br/>See page 26.<br/>See page 26.</p>                                    |
| Skipped stitches                      | <ol style="list-style-type: none"> <li>1. The needle is bent or blunt.</li> <li>2. The machine is not correctly threaded.</li> </ol>   | <p>See page 26.<br/>See pages 7 ~ 15 and 22.</p>  |
| The seam is not sewn neatly.          | <ol style="list-style-type: none"> <li>1. The needle and/or looper thread tensions are not correctly adjusted.</li> <li>2. The machine is not correctly threaded.</li> <li>3. The needle and/or the thread are not suitable for the fabric being sewn.</li> <li>4. The thread is not between the tension discs.</li> </ol> | <p>See pages 19 ~ 23 and 31 ~ 33.<br/>See pages 7 ~ 15 and 22.<br/>See pages 29, 31, 33, 34 and 35.<br/>See pages 8, 10, 12 and 14.</p> |
| Seam puckering.                       | <ol style="list-style-type: none"> <li>1. The needle or looper thread tension is too tight.</li> <li>2. The machine is not correctly threaded.</li> <li>3. The needle plate is not suitable for the use.</li> </ol>  | <p>See pages 19 ~ 23, 31 ~ 33.<br/>See pages 7 ~ 15 and 22.<br/>See page 28.</p>  |
| The machine does not operate.         | <ol style="list-style-type: none"> <li>1. The machine has not been plugged in firmly.</li> <li>2. The power switch is turned off.</li> </ol>   | <p>See page 4.<br/>See page 4.</p>  |
| The fabric is not cut neatly.         | <ol style="list-style-type: none"> <li>1. The position of the upper knife is not adjusted properly.</li> <li>2. The upper knife is dull.</li> </ol>  | <p>See page 36.<br/>Replace the upper knife.<br/>(See page 36.)</p>   |

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