

# INSTRUCTION BOOK

**MY** **LOCK** 634D  
 *Electronic Controlled*

# “IMPORTANT SAFETY INSTRUCTIONS”

“Your sewing machine is designed and constructed only for HOUSEHOLD use.”

“Read all instruction before using this sewing machine.”

## “DANGER — To reduce the risk of electric shock:”

1. “An appliance should never be left unattended when plugged in. Always unplug this appliance from the electric outlet immediately after using and before cleaning.”
2. “Always unplug before relamping. Replace bulb with same type rated 15 Watts.”
3. “Do not reach for the appliance that has fallen into water. Unplug immediately.”
4. “Do not place or store appliance where it can fall or be pulled into a tub or sink. Do not place in or drop into water or other liquid.”

## “WARNING — To reduce the risk of burns, fire, electric shock, or injury to persons:”

1. “Do not allow to be used as a toy. Close attention is necessary when this appliance is used by or near children.”
2. “Use this appliance only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.”
3. “Never operate this appliance if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the appliance to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.”

4. “Never operate the appliance with any air opening blocked. Keep ventilation openings of the sewing machine and foot controller free from accumulation of lint, dust, and loose cloth.”
5. “Never drop or insert any object into any opening.”
6. “Do not use outdoors.”
7. “Do not operate where aerosol (spray) products are being used or where oxygen is being administered.”
8. “To disconnect, turn all controls to the off position, then remove plug from outlet.”
9. “Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.”
10. “Keep fingers away from all moving parts. Special care is required around the sewing machine needle and knives.”
11. “Always use the proper needle plate. The wrong plate can cause the needle to break.”
12. “Do not use bent needles.”
13. “Do not pull or push fabric while stitching. It may deflect the needle causing it to break.”
14. “Switch the sewing machine off when making any adjustment in the needle area, such as threading needle, changing needle, threading loopers, or changing presser foot, and the like.”
15. “Always unplug the sewing machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.”

## “SAVE THESE INSTRUCTIONS”

## **OPERATING INSTRUCTION:**

“For appliances with a polarized plug (one blade wider than the other).

To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only one way.

If the plug does not fit fully in the outlet, reverse the plug.

If it still does not fit, contact a qualified electrician to install the proper outlet.

Do not modify the plug in any way.”

“Foot Controller Model YC-530-1, or YC-482R for use with Sewing Machine Model 634D.”  
(For U. S. A. market only)

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### OPTIONAL PARTS .....

# PREPARATION

## Names of Parts

Lower looper thread tension dial

Upper looper thread tension dial

Right needle thread tension dial

Left needle thread tension dial

Presser foot

Needle plate

Side cover

Looper cover

Lower looper pre-tension setting slider

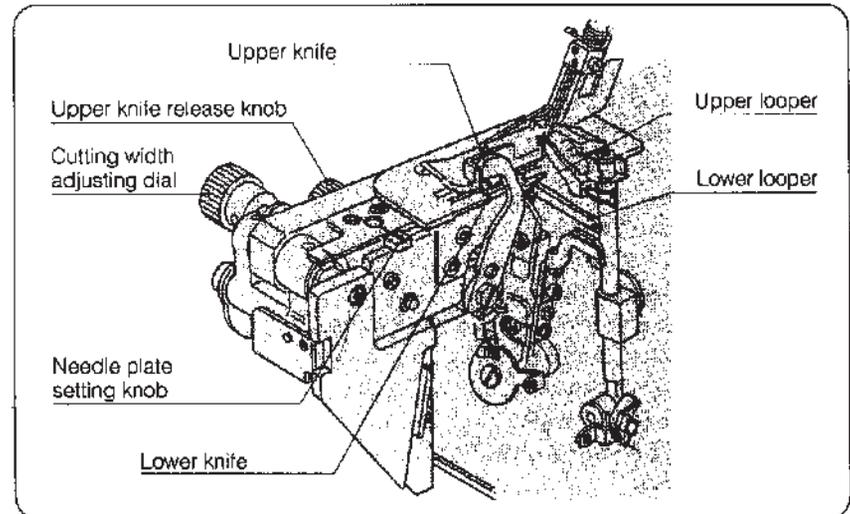
Balance wheel

Stitch length dial

Differential feed dial

Machine socket

Power switch



Upper knife

Upper knife release knob

Cutting width adjusting dial

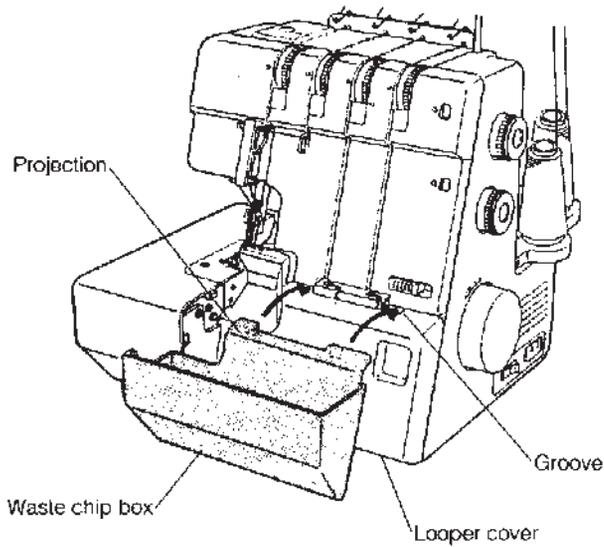
Needle plate setting knob

Lower knife

Upper looper

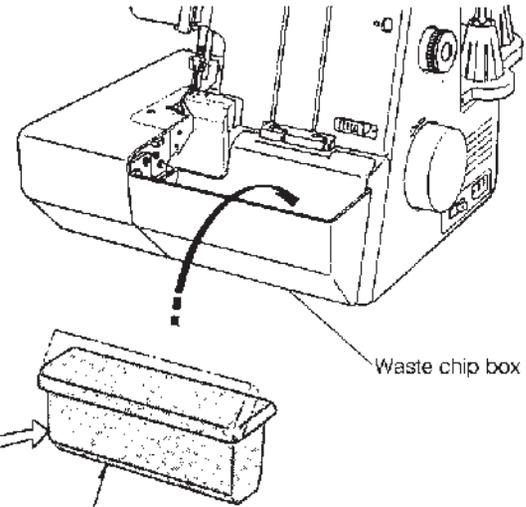
Lower looper

## Attaching the Waste Chip Box



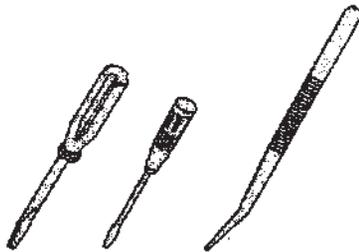
Insert the projection into groove on looper cover.

## Storing the Accessory Box



Insert the accessory box into the waste chip box.

## Standard Accessories



Screwdrivers

Tweezers



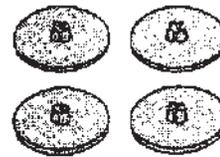
Spreader



Nets



Set of needles



Thread stripping discs



Spanner



Upper knife



Lint brush

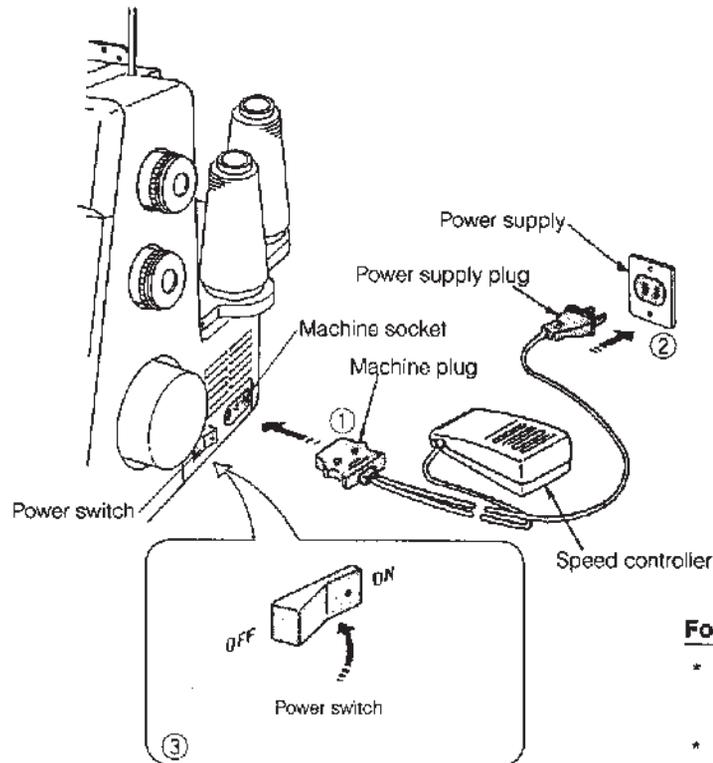


Oil

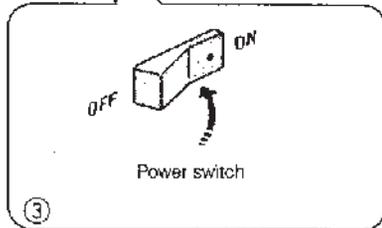


Needle threader

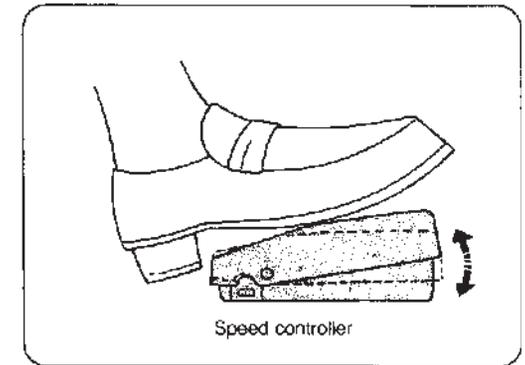
## Connecting the Machine to the Power Supply



- 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



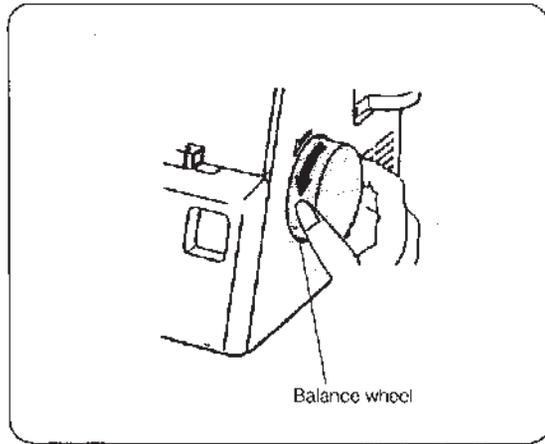
Sewing speed can be varied by the speed controller. The harder you press on the controller, the faster the machine runs.

Step on speed controller with presser foot lifter up, and practice controlling the speed.

### For Your Safety:

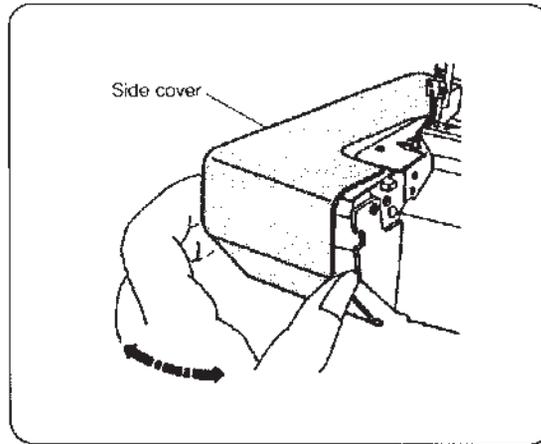
- \* While in operation, always keep your eye on the sewing area, and do not touch any moving parts such as the upper looper, balance wheel, needle or knives.
- \* Always disconnect the machine from the power supply:
  - When leaving the machine unattended.
  - When attaching or removing parts.
  - When 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).

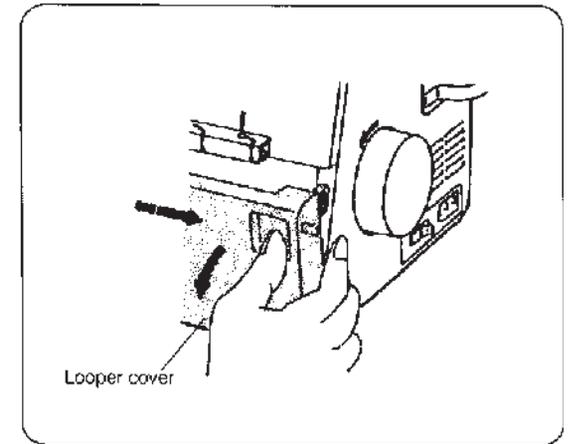
### Opening and Closing the Side Cover



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



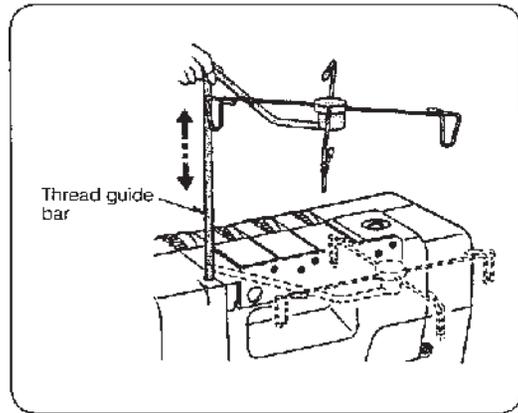
To open:  
While pushing with the thumb to the right as far as it will go, pull looper cover toward you.

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

### **For Your Safety:**

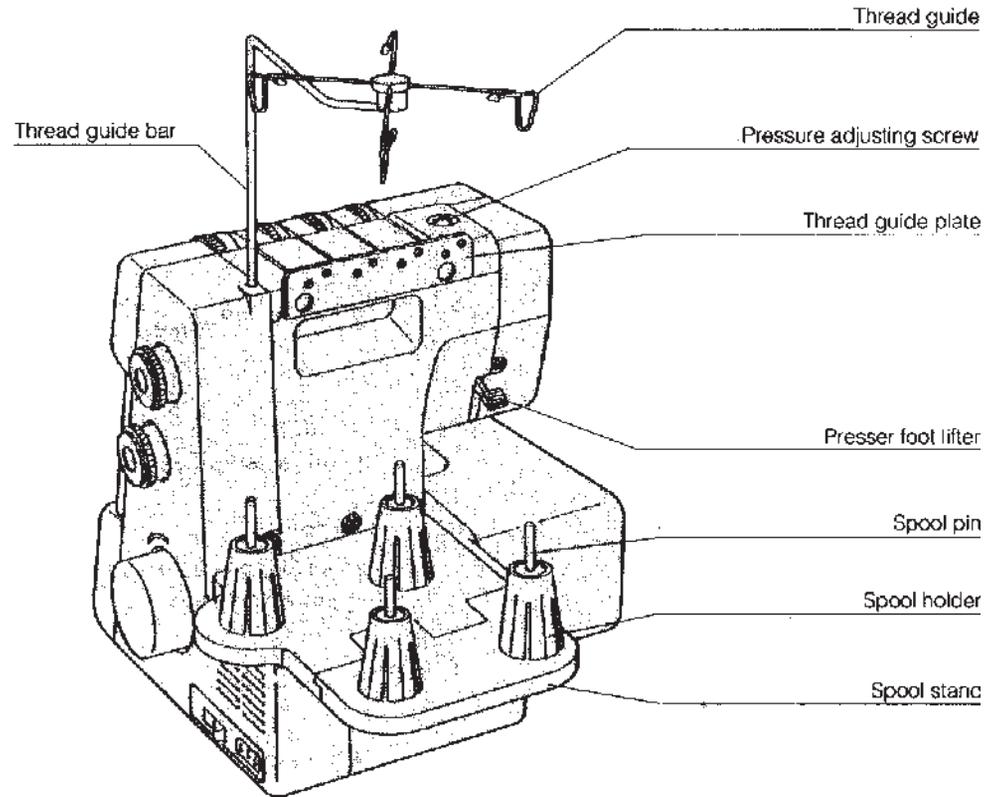
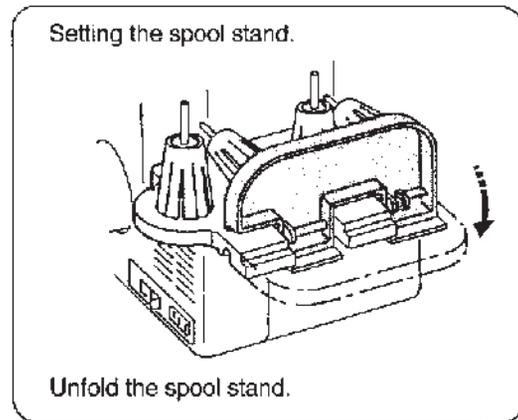
Always close the both side and looper covers when the machine is in use.

## The Position of Thread Guide Bar

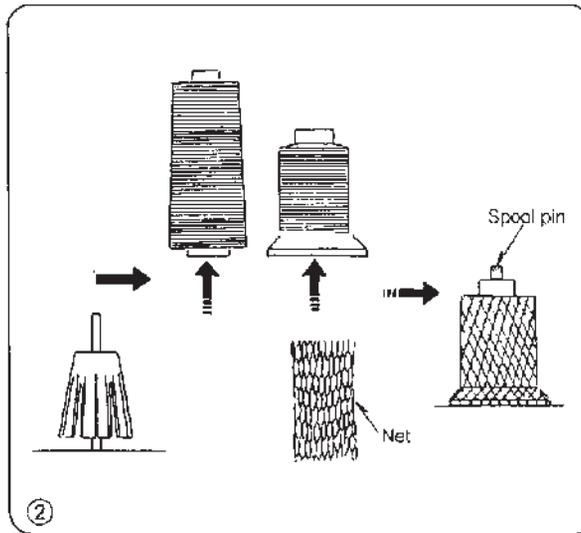
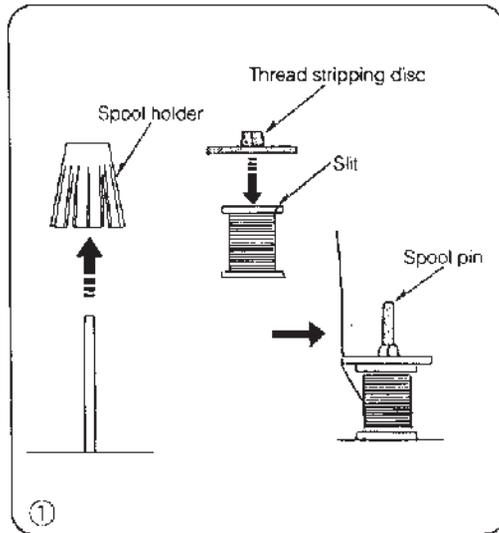


Hold thread guide bar as illustrated and pull it up as far as it will go.

## Setting of Spool Stand

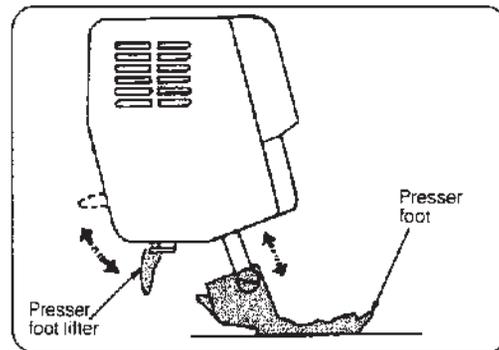


## Attaching the Thread Stripping Disc and Net



- 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

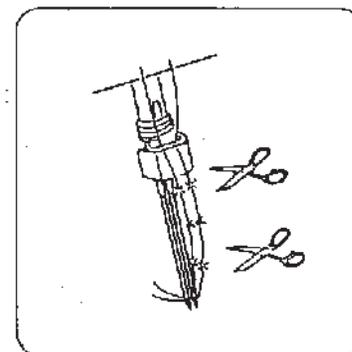
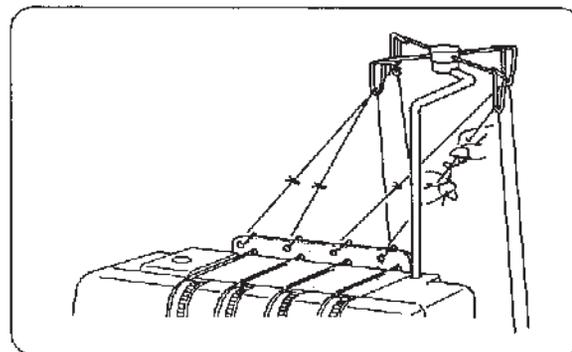
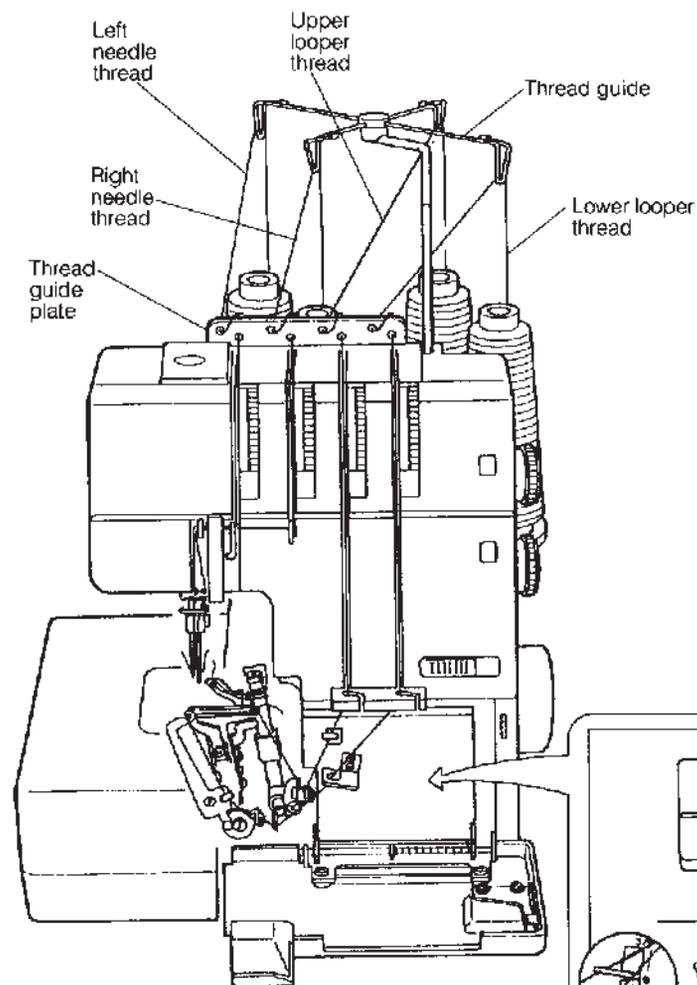


By raising or lowering the presser foot lifter, the presser foot goes up and down.

- \* While in operation, keep the presser foot lowered except for threading the machine or test-running without threads.

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

## Threading the Machine



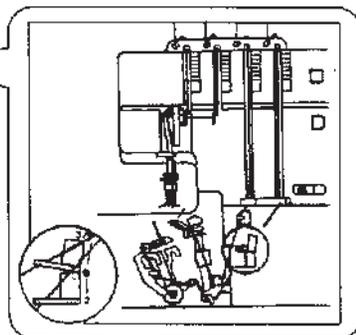
The machine has been threaded and ends of threads have been cut at the factory. To thread the machine knot one end of thread, then raise the presser foot and pull the other end of thread. For needle threads, pull the other ends of threads until the knots come to needle eyes, and cut the threads at the both sides of the knots. Then thread the needle eye with the needle threader. (Refer to page 13.)

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.

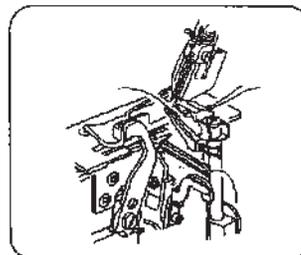
Incorrect threading will cause skipped stitches, broken thread or uneven thread tension.

Before starting to sew, make sure that your machine is threaded properly. Then move the needle bar to its highest position, and pull each thread toward the back of the needle plate being careful not to tangle the threads. (See the illustration.)

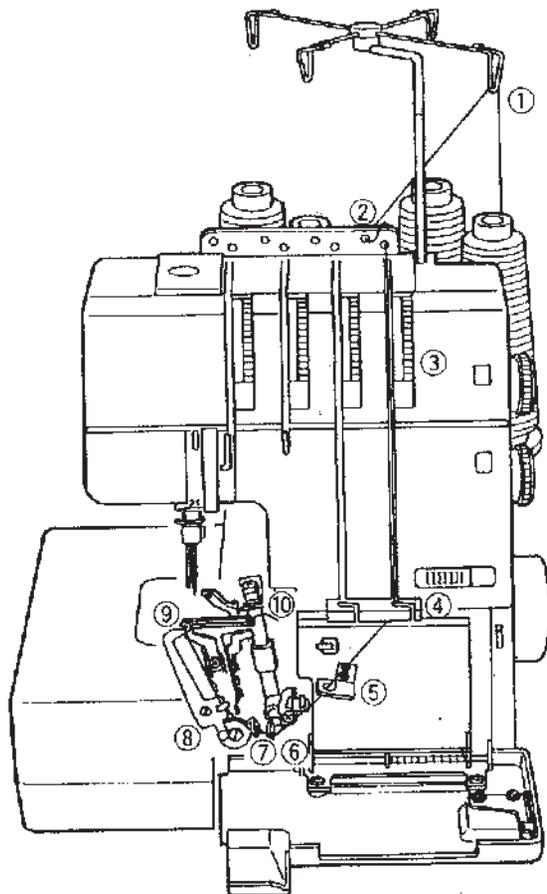


Threading Chart

- \* When you change the threads, cut the threads between the thread guide and the thread guide plate. Proceed the threading in the above mentioned method.
- \* When you thread the thread tension dials, raise the presser foot.



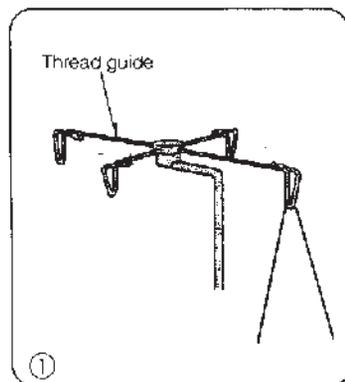
• **Threading the Lower Looper**



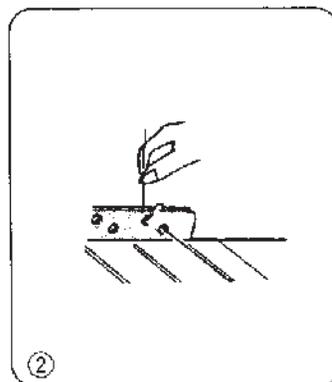
Open the looper and side covers.

Place the spool of thread on the front right spool pin.

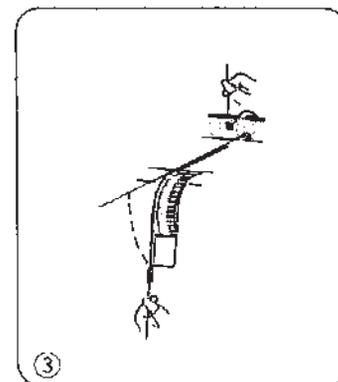
- \* The points to thread for lower looper are marked in green.
- \* A convenient threading chart is placed on the machine body inside the looper cover.



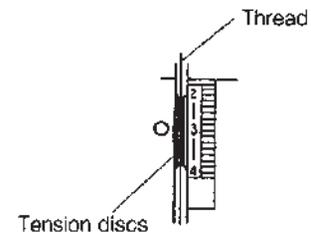
① Draw the thread through the front right thread guide from back to front.



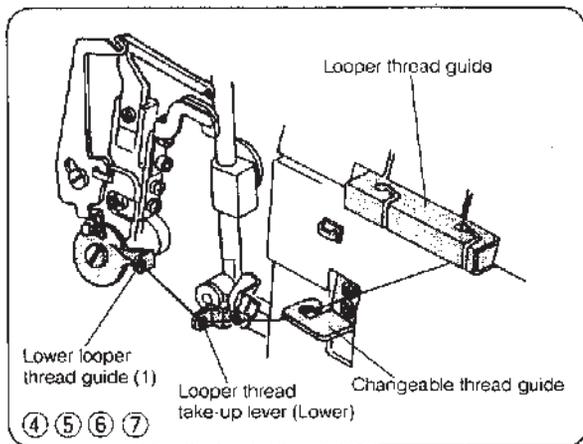
② Pass the thread through holes on the right side of thread guide plate as illustrated.



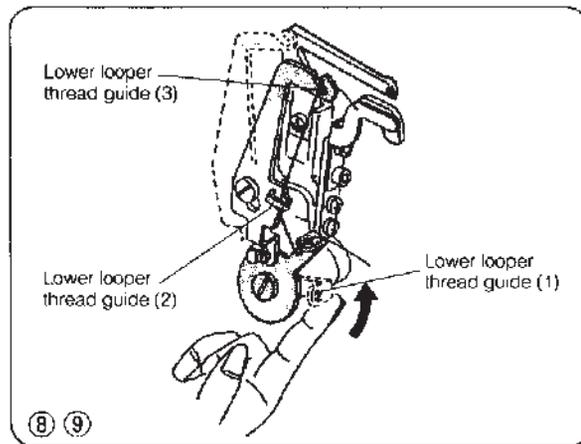
③ Hold the thread at both ends and tug gently to ensure the thread is correctly inserted between the tension discs. (If the presser foot lifter is raised, the thread easily inserts between the tension discs.)



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

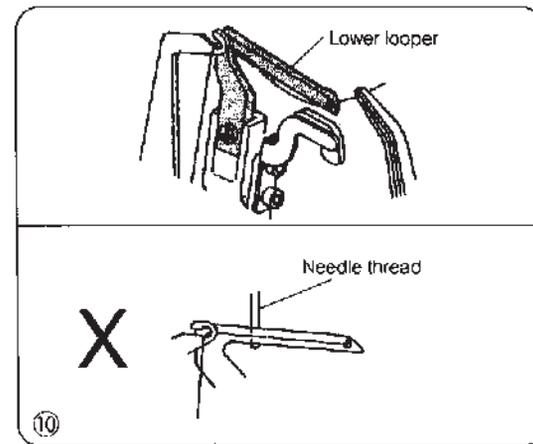


- ④ Pass the thread through the right side of the looper thread guide.
- ⑤ Pass the thread through the changeable thread guide.
- ⑥ Pass the thread through the looper thread take-up lever (Lower).
- ⑦ Pass the thread through the thread guide (1).

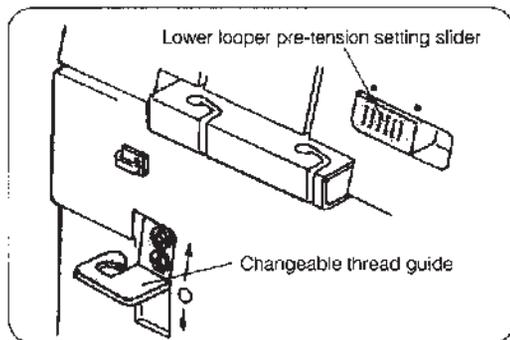


- First, bring the lower looper to its extreme right position by rotating the handwheel toward you. Then lift up the lower looper thread guide (1). When you do this, the other lower looper thread guides (2,3) will automatically move up to make it easier to reach them.
- ⑧ Pass the thread through the lower looper thread guide (2).
  - ⑨ Pass the thread through the lower looper thread guide (3).

Holding the tip of the thread, bring the needle bar to its lowest position by turning the balance wheel toward you. The lower looper thread guide (1) will return to its original position automatically.

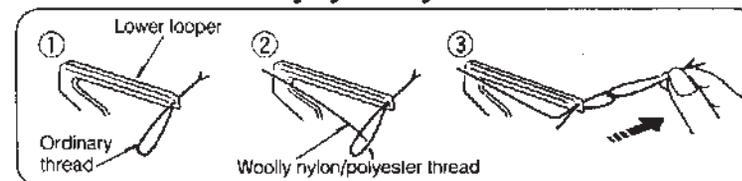


- ⑩ Move the lower looper to its rightmost position by turning the balance wheel, and draw the thread with a pair of tweezers through the hole on lower looper 10 cm (4") or more. Next, make sure that the needle threads are not tangled in the lower looper. Close the side cover.



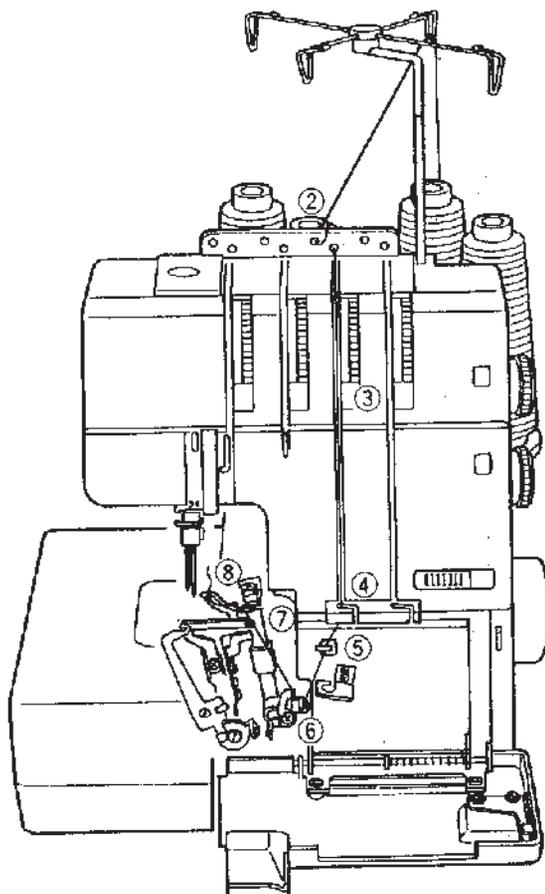
When threading, the lower looper pre-tension setting slider and the changeable thread guide must be set at the position as illustrated.

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



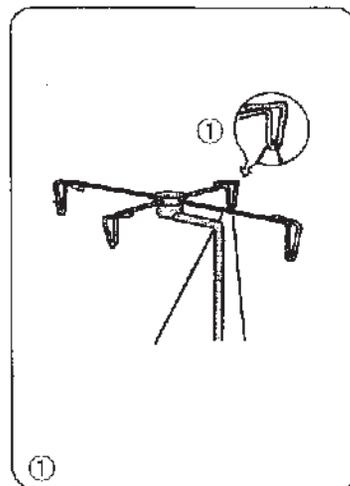
- \* To pass the woolly nylon/polyester thread shown above this is one of the easiest ways to do so.
- \* Apply the same method to the upper looper.

## • Threading the Upper Looper

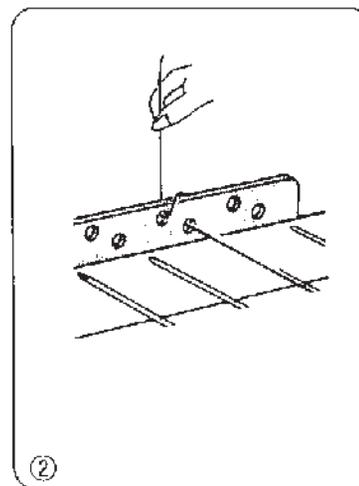


Place a spool of thread on the rear right spool pin.

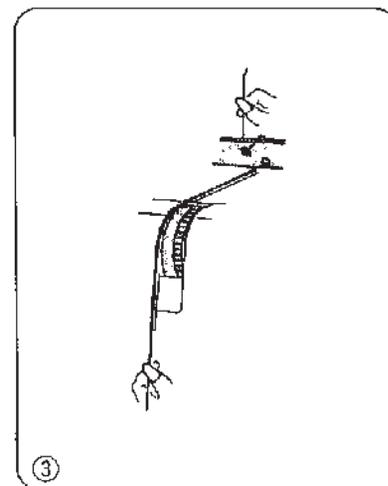
- \* The points to thread for upper looper are marked in red.
- \* A convenient threading chart is placed on the machine body inside the looper cover.



① Draw the thread through the thread guide of the right back from right to left.

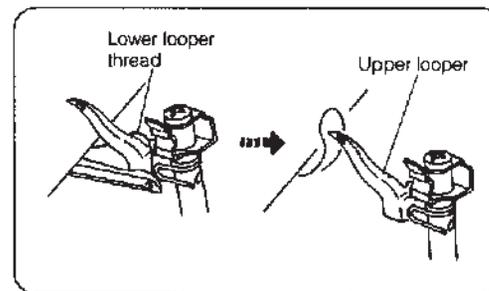


② Pass the thread through the holes in the second row from the right of thread guide plate as illustrated.



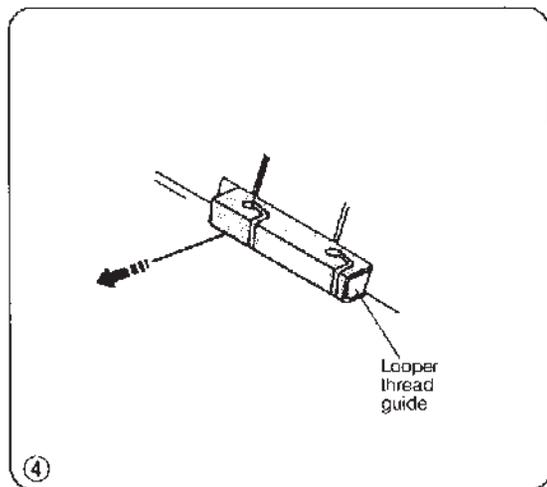
③ Hold the thread at both ends and tug gently to ensure the thread is correctly inserted between the tension discs.  
(If the presser foot lifter is raised, the thread easily inserts between the tension discs.)

### How to Thread the Upper Looper

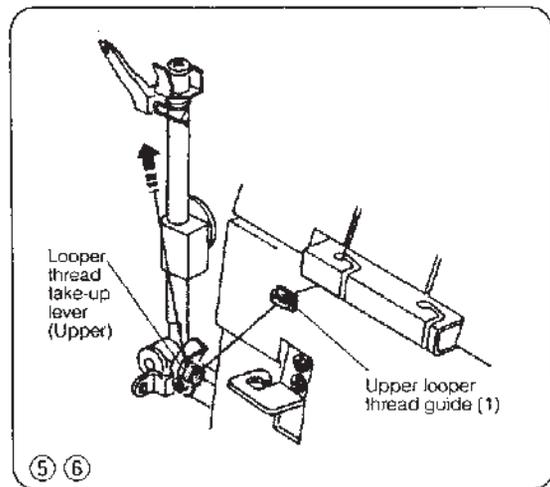


Turn the balance wheel toward you until the upper looper comes to the middle point of its travel, and unhook the thread of the lower looper from the upper looper.

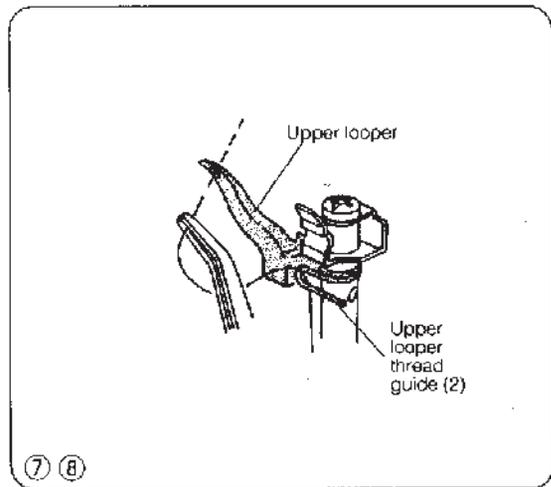
Thread the upper looper.



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

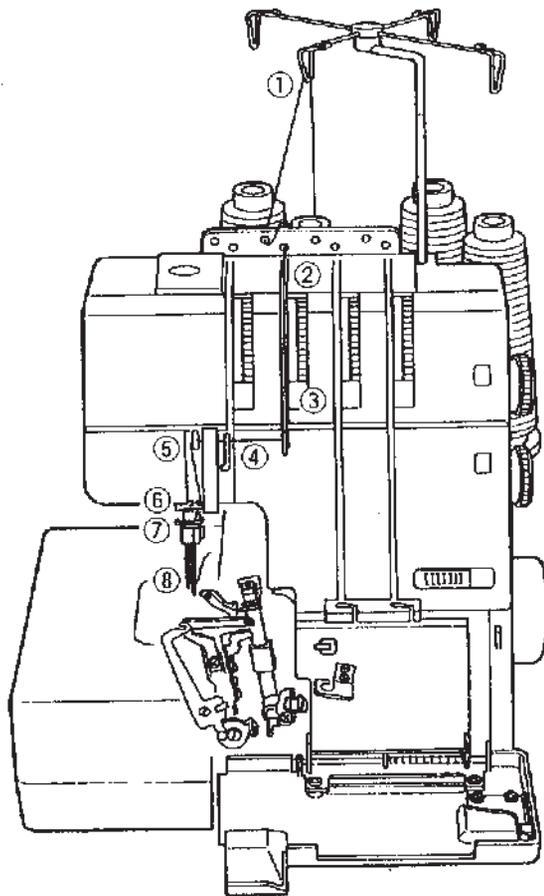


⑤ Pass the thread through upper looper thread guide (1).  
 ⑥ Pass the thread through the looper thread take-up lever (Upper).



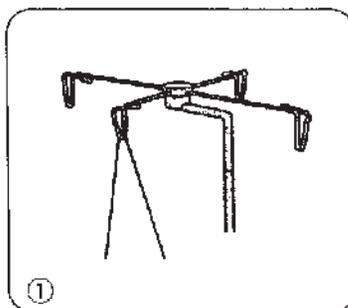
⑦ Pass the thread through upper looper thread guide (2).  
 ⑧ Holding the end of the thread with a pair of tweezers, pass it through the hole on the upper looper. Pull 10 cm (4") or more of thread through the hole.

• Threading the Needle on the Right

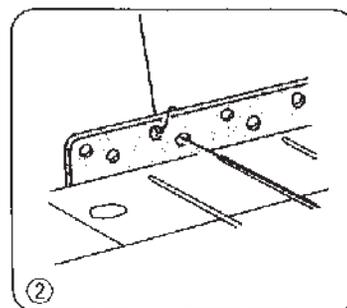


Place the spool of thread on the front left spool pin.

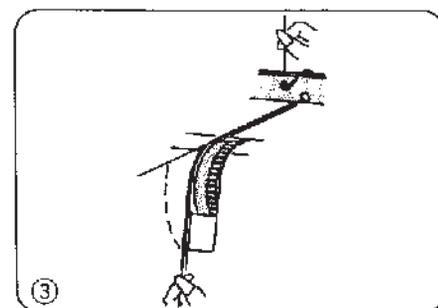
- \* The points to thread for needle on the right are marked in blue.
- \* A convenient threading chart is placed on the machine body inside the looper cover.



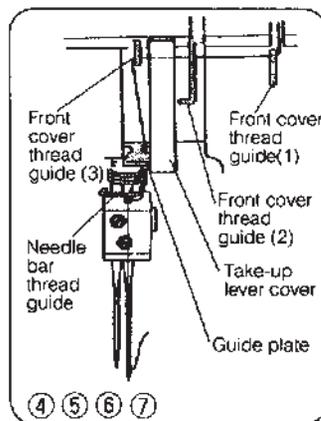
① Draw the thread through the front left thread guide from right to left.



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 presser foot lifter is raised, the thread easily inserts between the tension discs.)



④ After passing through the front cover thread guide (1), pass the thread from the bottom of the front cover thread guide (2) and the take-up lever cover from right to left.

⑤ Guide the thread over the front cover thread guide (3).

⑥ Insert the thread into the right slot of the guide plate.

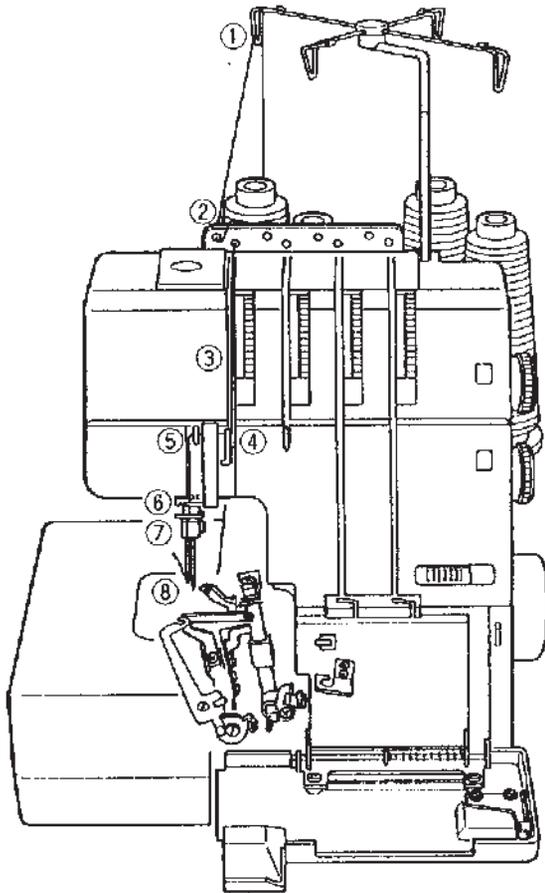
⑦ Raise the needle to its highest point and pass through needle bar thread guide from left to right.



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.

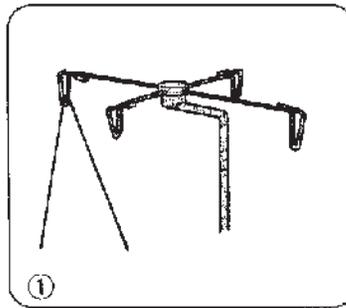
Note: When you pull the needle thread under the presser foot, be careful not to wind the thread around the upper looper.

• **Threading the Needle on the Left**

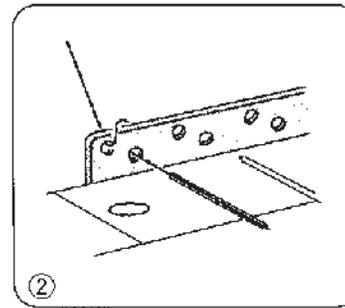


Place the spool of thread on the rear left spool pin.

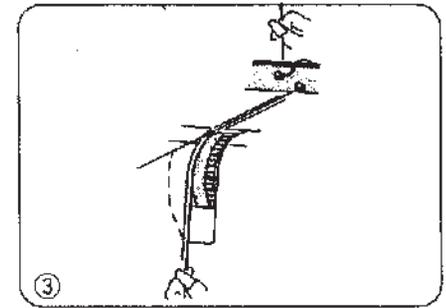
- \* The points to thread for needle on the left are marked in orange.
- \* A convenient threading chart is placed on the machine body inside the looper cover.



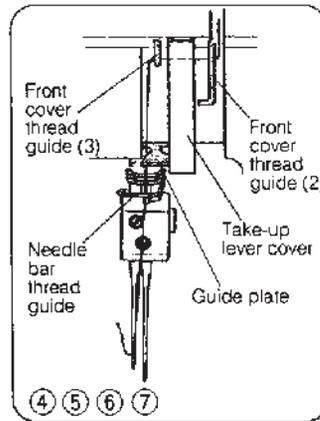
① Draw the thread through the back left thread guide from right to left.



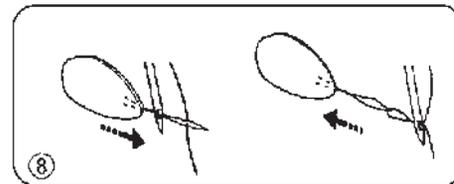
② Pass the thread through the holes on the left of thread guide plate as illustrated.



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



- ④ Slide the thread from the bottom of the front cover thread guide (2) and the take-up lever cover from right to left.
- ⑤ Guide the thread over the front cover thread guide (3).
- ⑥ Insert the thread into the left slot of the guide plate.
- ⑦ Raise the needle to its highest point and pass through needle bar thread guide from left to right.

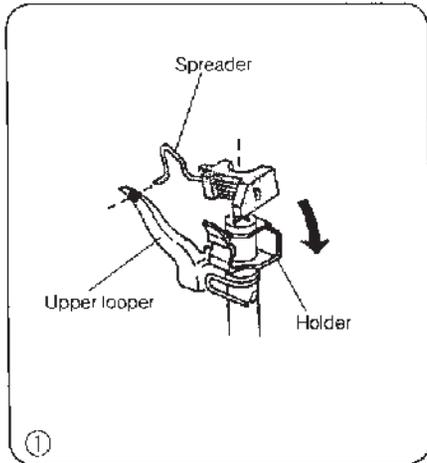


- ⑧ Pass the threader through the needle eye from back to front. Pass the end of thread through the loop of threader, then pull the threader to the back to pass the thread through needle eye. Draw the free end of thread 10 cm (4") or more. Close the looper covers.

**Note:** When you pull the needle thread under the presser foot, be careful not to wind the thread around the upper looper.

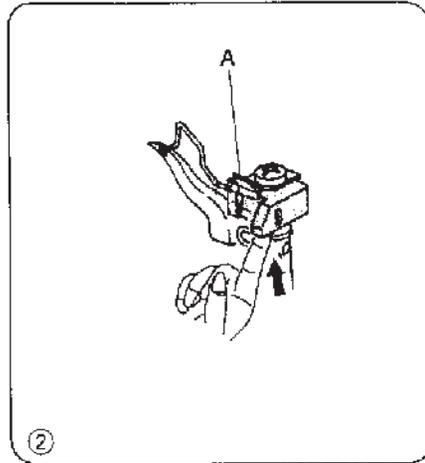
## Changing to two-thread serging

\* In case of two-thread serging, use one needle thread and the lower looper thread.



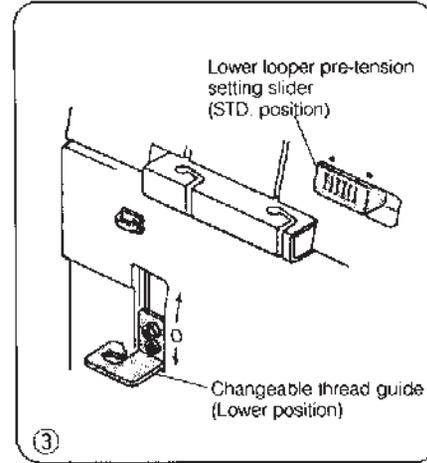
### ① To attach the spreader

Put the tip of the spreader into the hole on the upper looper, and slide the spreader down into the holder.

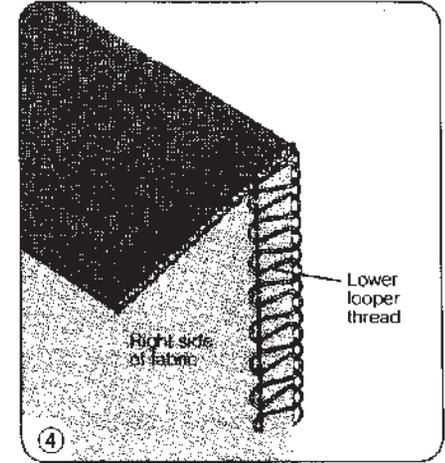


### ② To remove the spreader

Pull tab A on the holder toward you lightly. Push the bottom of the spreader up and pull it out.



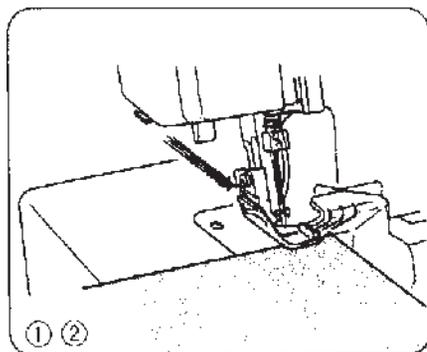
③ For standard two-thread serging, set the machine as above-illustrated.



④ Standard two-thread serging is as illustrated.

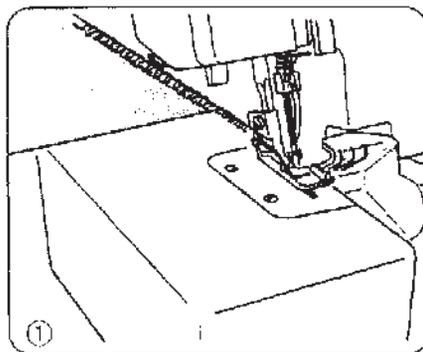
## TEST STITCHING

### Starting Sewing

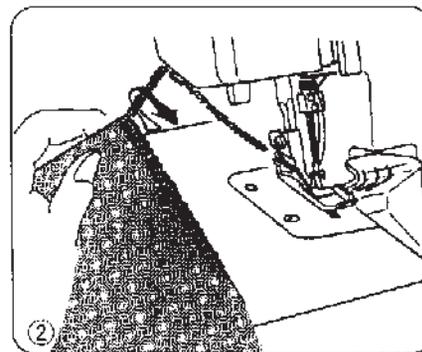


- ① Insert the fabric under the toe of the foot.  
(It is not necessary to raise the foot.)
- ② Turn the balance wheel gently toward you a couple of turns and check the thread chain. Then start sewing slowly. The fabric will be automatically fed. Guide the fabric in the direction desired.

### Finishing Sewing

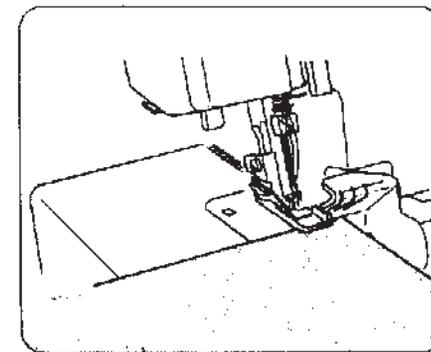


- ① When stitching is completed, continue to run the machine slowly to produce a thread chain for about 12 cm (5") while pulling the thread chain slightly to the back.



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

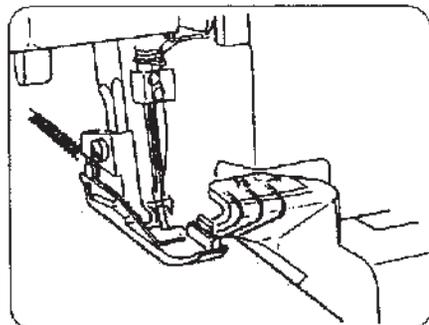
### Sewing Continuously



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.

### How to use Guide Lines



On the top of the looper cover are guide lines indicating the distance from the needle position. Please use as sewing guides.

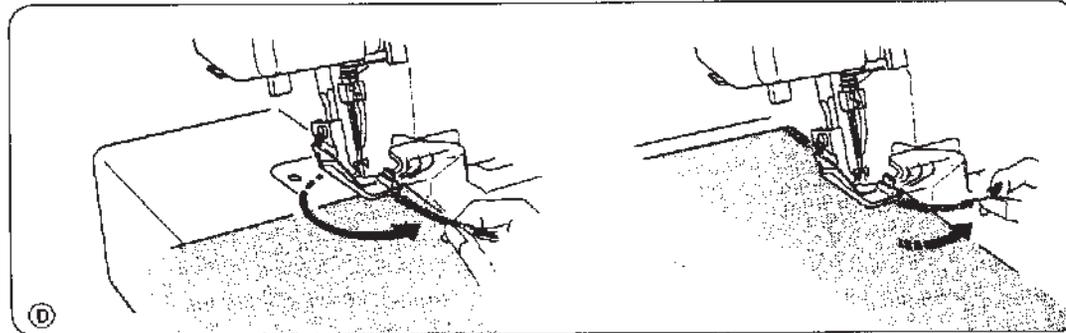
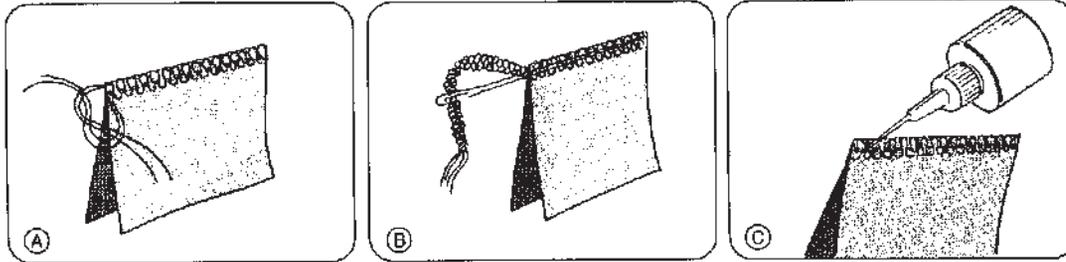
Mark L indicates the distance from left needle.

Mark R indicates the distance from right needle.

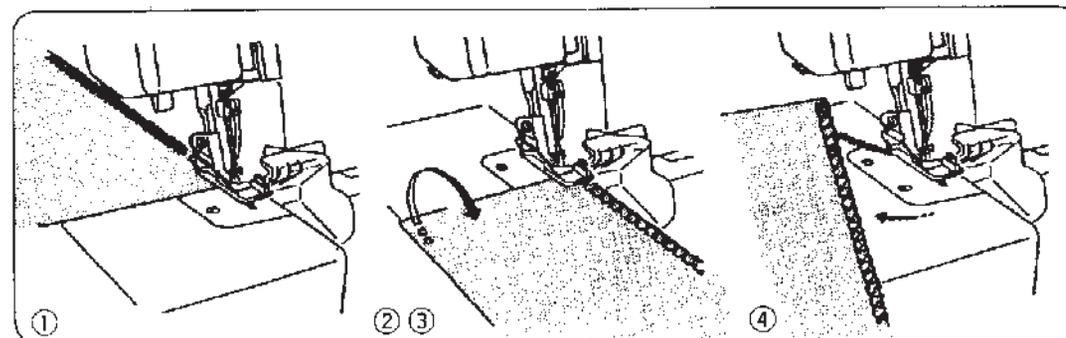
Distance between center of guide line and needle position is 5/8 inch.

## 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.



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



### 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™ or Fray-No-More™) 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.

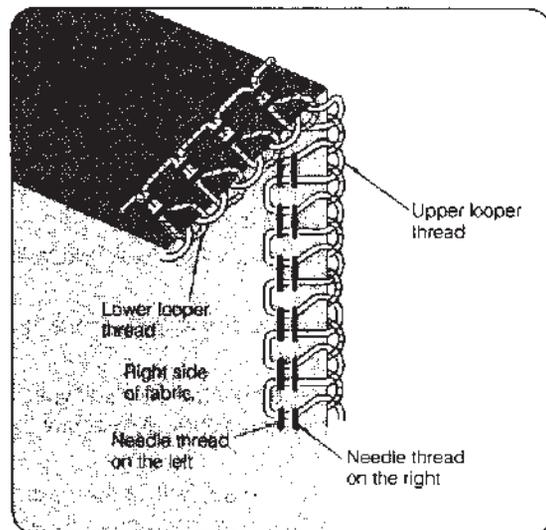
### At the End of Seam

- ① Serge one stitch off the end of seam.
- ② Raise the needle and presser foot, and gently pull the threads off the chancing finger.
- 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)

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

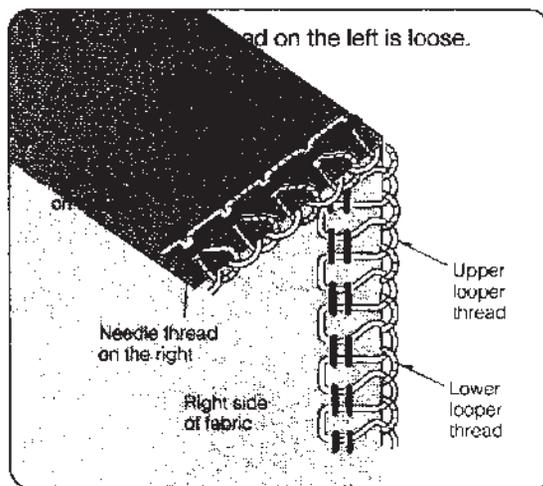
### Correct Tension



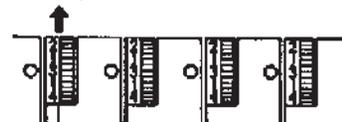
### Thread Tension Adjustment

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

### Wrong Tension

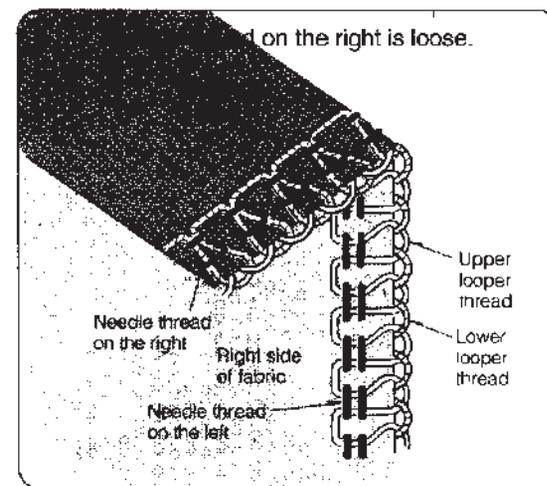


Tighten needle thread tension on the left.

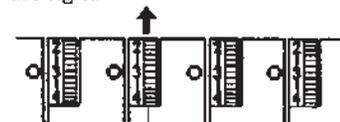


Needle thread tension (L)

### Wrong Tension

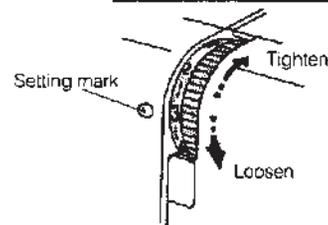


Tighten needle thread tension on the right.



Needle thread tension (R)

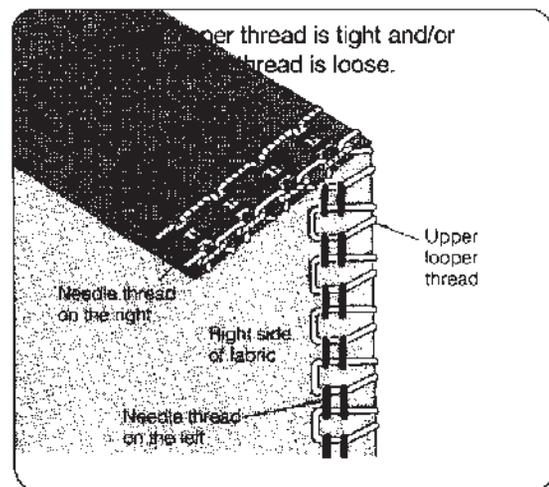
### Thread Tension Dial



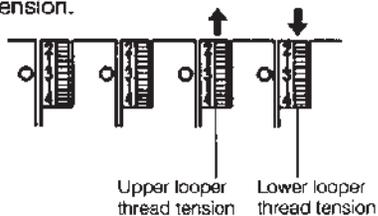
## Thread Tension Adjustment

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

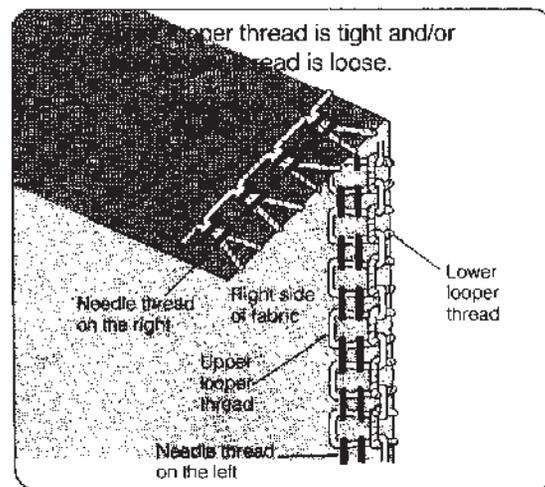
### Wrong Tension



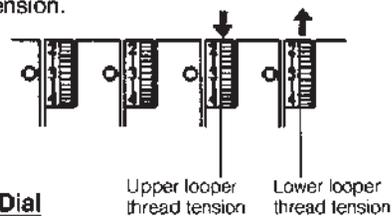
Loosen lower looper thread tension and/or tighten upper looper thread tension.



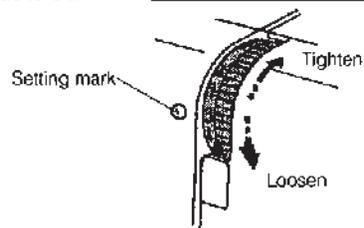
### Wrong Tension



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



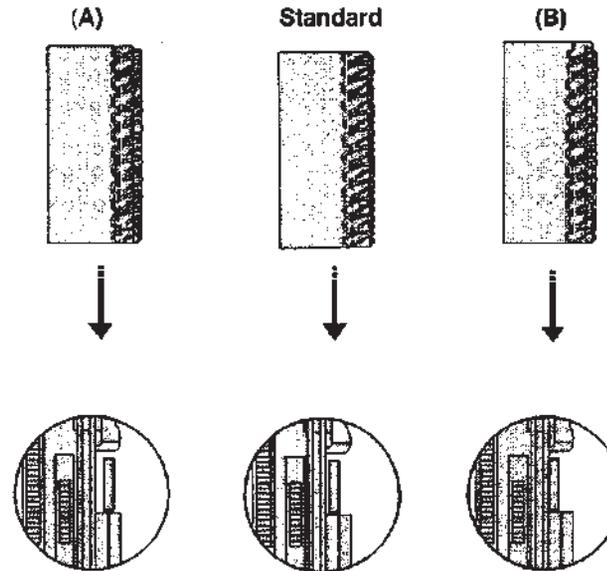
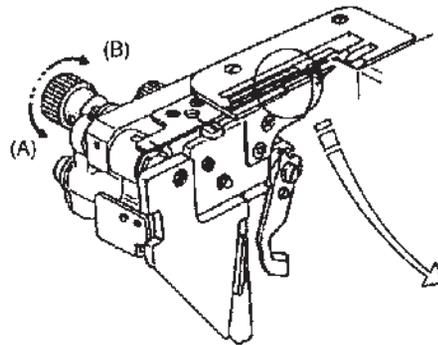
### Thread Tension Dial



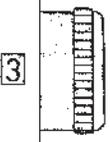
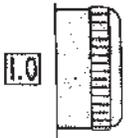
## Adjustment of Cutting Width

When cutting width is too narrow or too wide against seam width, adjust it as follows.

- ① Turn off the power switch and unplug the machine.
- ② Open the looper and side covers.
- ③ Set the upper knife to down position (refer to page 27).
- ④ Turn the cutting width adjusting dial to get desired position of lower knife.
  - (A) When cutting width is too narrow.  
Turn cutting width adjusting dial clockwise.  
Lower knife will move to right.
  - (B) When cutting width is too wide.  
Turn the cutting width adjusting dial counterclockwise.  
Lower knife will move to left.
- ⑤ Set the upper knife to up position.
- ⑥ Close the looper and side covers.



## Thread and Needle Chart

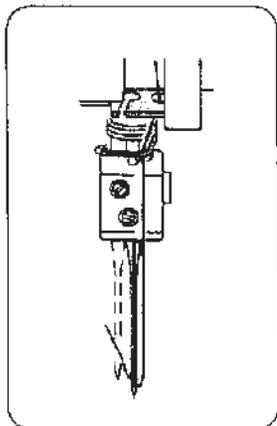
Type of Fabric		Type of Thread 	Needle 	Stitch Length 	Differential Feed Ratio 
Light weight	Organdy, Georgette, Lawn, Crepe de chine, Lining.	Cotton : No. 80 ~ 100 Silk : No. 80 ~ 100 Synthetic : No. 80 ~ 100	HA-1 SP No. 11	2.0 ~ 3.0 mm	0.5 ~ 1.0
Medium weight	Cotton, Linen, Satin, Ordinary fabric.	Cotton : No. 60 ~ 100 Silk : No. 50 ~ 100 Synthetic : No. 60 ~ 100	HA-1 SP No. 11 ~ 14	2.5 ~ 3.5 mm	1.0
Heavy weight	Tweed, Coating, Denim, Doeskin, Thick fabric.	Cotton : No. 50 ~ 60 Silk : No. 50 ~ 60 Synthetic : No. 50 ~ 60	HA-1 SP No. 14	3.0 ~ 5.0 mm	1.0
Knits	Knitted fabric	Cotton : No. 60 ~ 80 Synthetic : No. 60 ~ 90 Woolly nylon (For looper thread) Woolly polyester (For looper thread)	HA-1 SP No. 11 ~ 14	2.5 ~ 4.0 mm	1.0 ~ 2.25

\* Refer to page 25 for adjusting the stitch length and the differential feed ratio.

## Threading the Machine (3 threads and 2 threads)

### Using the Needle on the Right Only

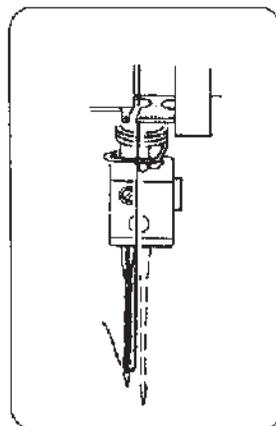
(for regular three-thread serging or for narrow two-thread serging)



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.

### Using the Needle on the Left Only

(for wide three-thread serging or for regular two-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.

### To change to the other needle in three/two-thread serging

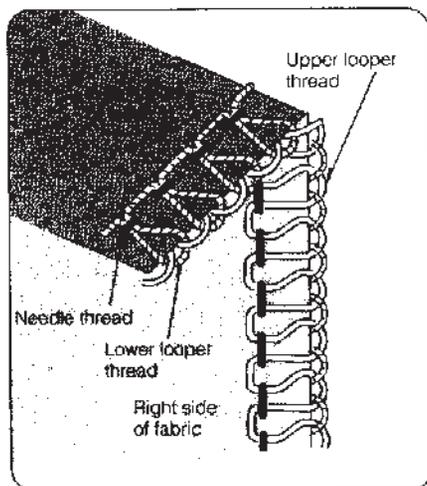
Loosen both needle clamp screws and remove the needle. Insert the needle and tighten the needle clamp screw for the needle to be used while pushing the needle up as far as it will go. Then tighten the needle clamp screw on the other side slightly to prevent the screw from dropping.

## Thread Tension (3 threads)

### Thread Tension Adjustment

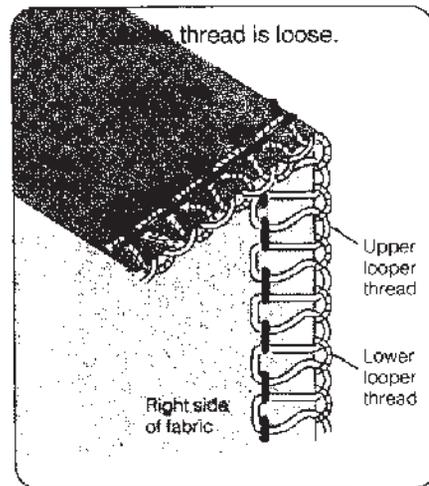
\* Set all three thread tension dials at "3". Then sew, and check the thread tensions.

#### Correct Tension



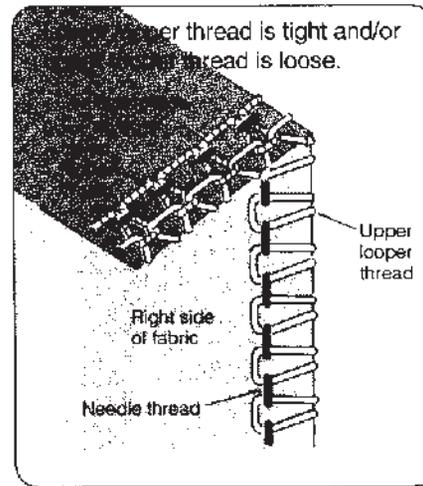
Adjusting the thread tension may be required depending on the type of fabric and thread being used.

#### Wrong Tension



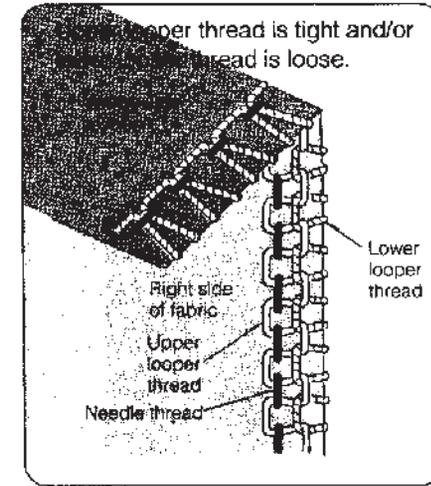
Tighten needle thread tension.

#### Wrong Tension



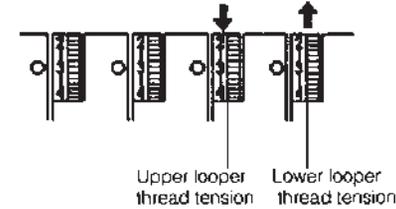
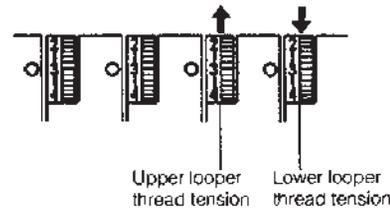
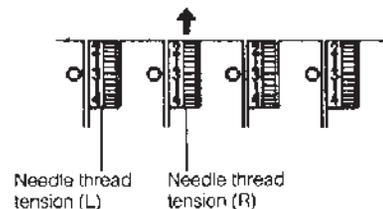
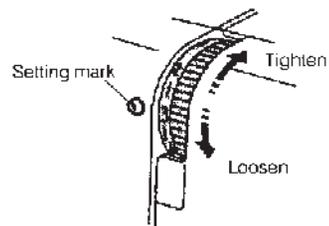
Loosen lower looper thread tension and/or tighten upper looper thread tension.

#### Wrong Tension



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

### Thread Tension Dial



## Thread Tension (2 threads)

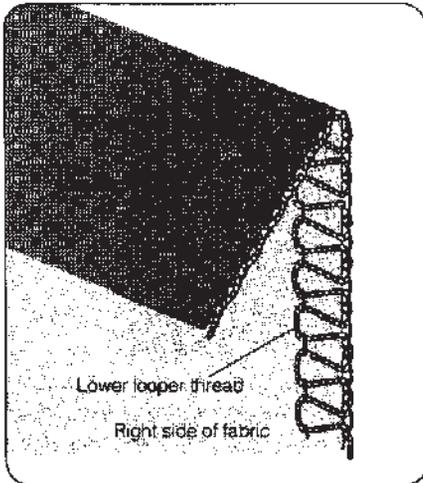
### Thread Tension Adjustment

\* Though you have to adjust the thread tension depending on the fabric and thread you use, standard thread tension settings are as follows:

1. Standard serging      Needle thread : 2                      Lower looper thread : 3 - 4 (Lower looper pre-tension setting slider : STD)
2. Rolled hemming      Needle thread : 3                      Lower looper thread : 3 (Lower looper pre-tension setting slider : R.H.)

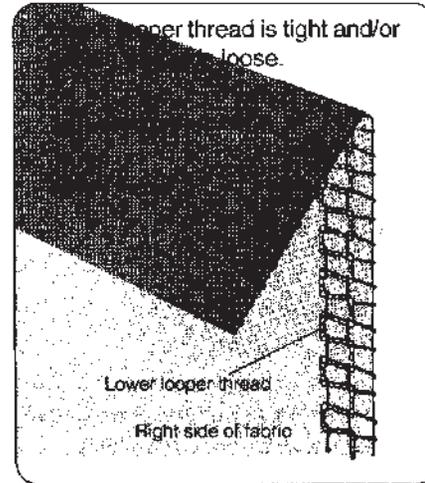
\* Refer to page 28 for adjustment of needle plate setting knob.

### Correct Tension



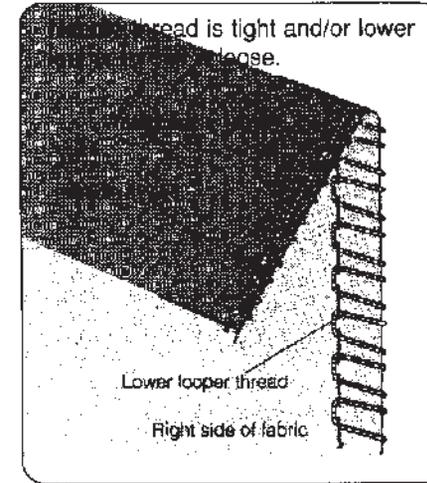
Adjusting the thread tension may be required depending on the type of fabric and thread being used.

### Wrong Tension

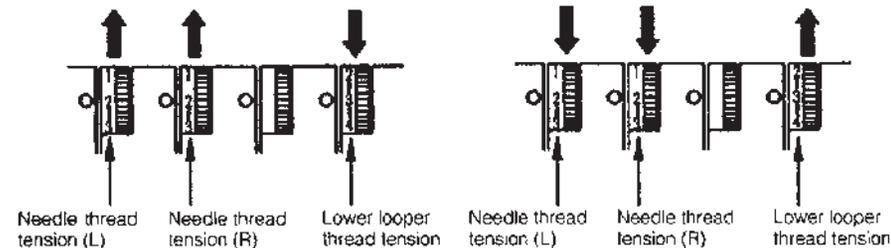
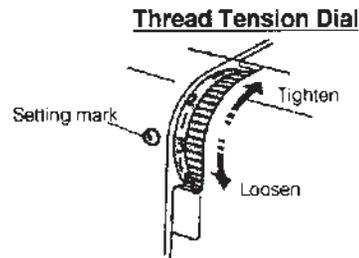


Loosen lower looper thread tension and/or tighten needle thread tension.

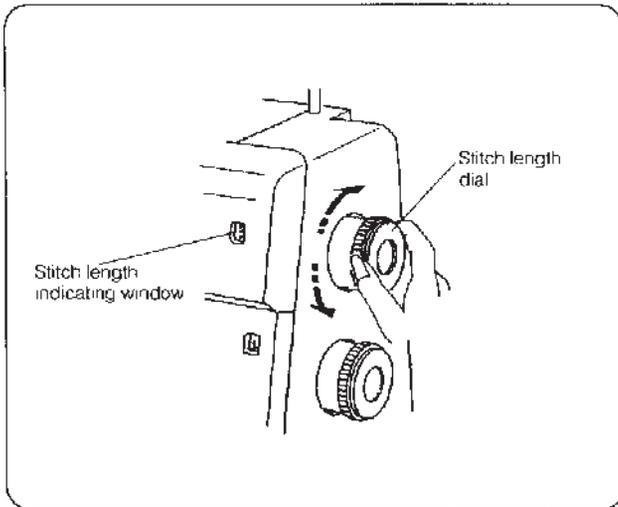
### Wrong Tension



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



## Adjustment of Stitch Length



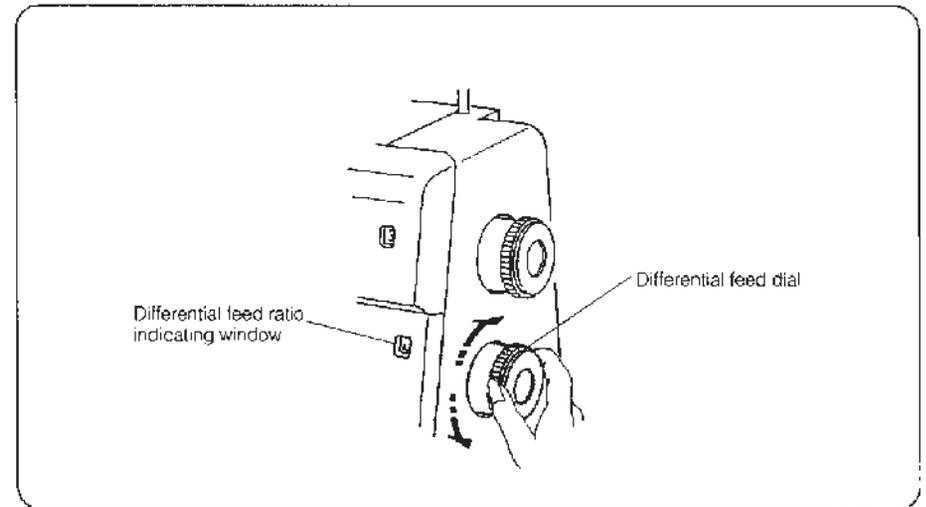
Turn the stitch length dial until the desired stitch length appears in the indicating window.

The larger the number, the longer the stitch.

The stitch length can be adjusted from 1 to 5 mm.

Position "R" is for rolled and narrow hemmings.

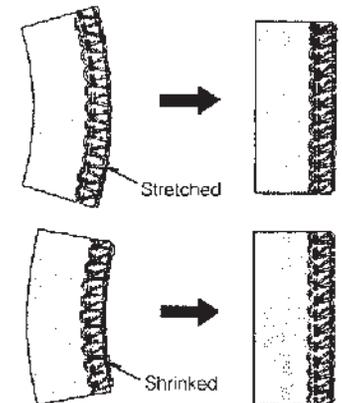
## Adjustment of Differential Feed Ratio



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.

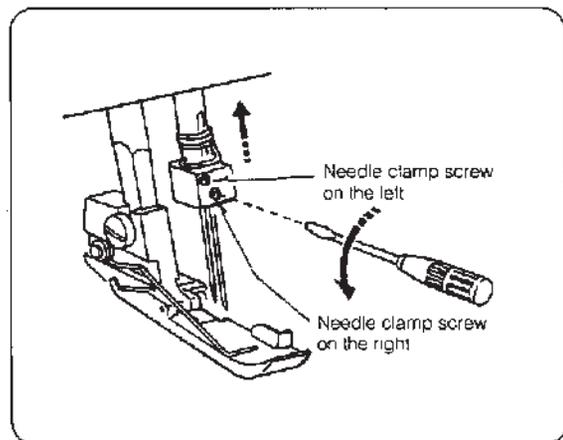
### How to Adjust

- If the sewn fabric is stretched, turn the dial counterclockwise (toward 2.0).
- If the sewn fabric is shrunk, turn the dial clockwise (toward 0.5).



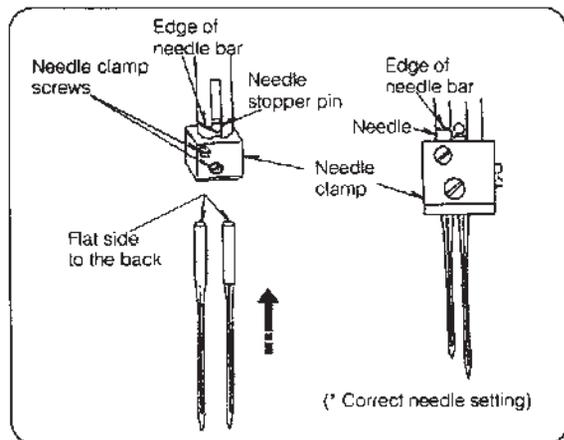
\* Maximum differential feed ratio, 2.25, is effective in the range of stitch length dial at 1 to 4.0. When the stitch length dial is set between 4.0 and 5, the maximum differential feed ratio will automatically be set between 2.25 and 1.8.

## 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.

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



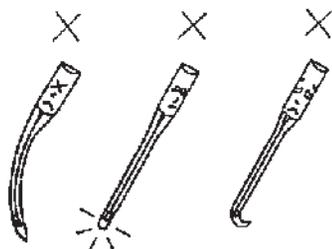
To Attach the needle on the right

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

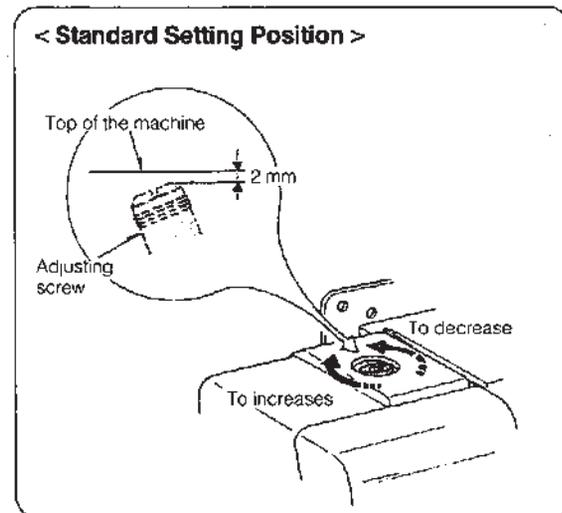
Insert new needle into the needle clamp with the flat side to the back until the top of needle touches the edge of needle bar, then tighten the needle clamp screw on the left.

\* 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.

## Adjustment of Foot Pressure



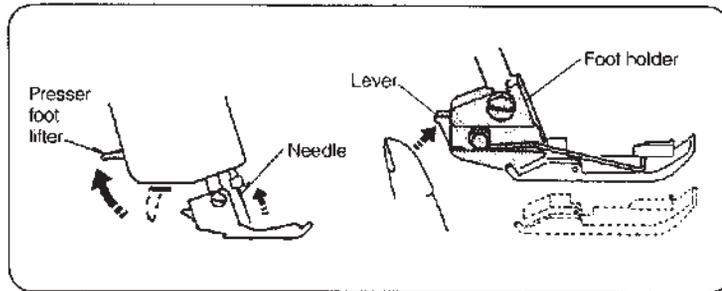
It is not necessary to adjust the pressure for normal sewing.

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

- clockwise for heavyweight fabric.
- counterclockwise for lightweight fabric.

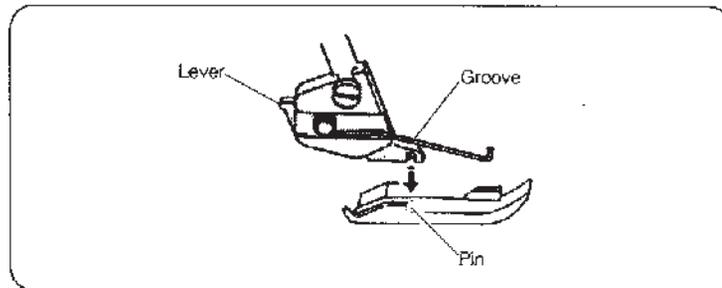
\* For normal sewing, set the adjusting screw so that it positions below the top of the machine by 2 mm. See the illustration.

## Removing the Presser Foot



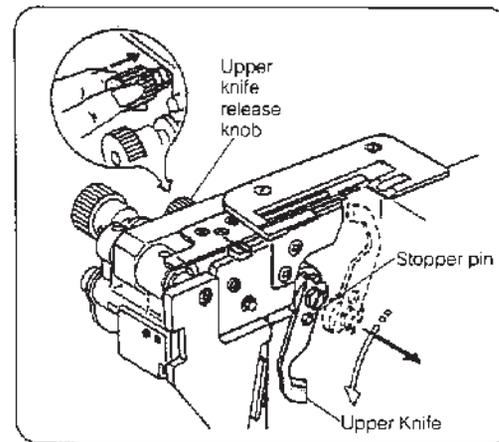
- ① Raise the needle and presser foot.
- ② Press the lever located on the back of the foot holder. The presser foot will drop off.

## Attaching the Presser Foot



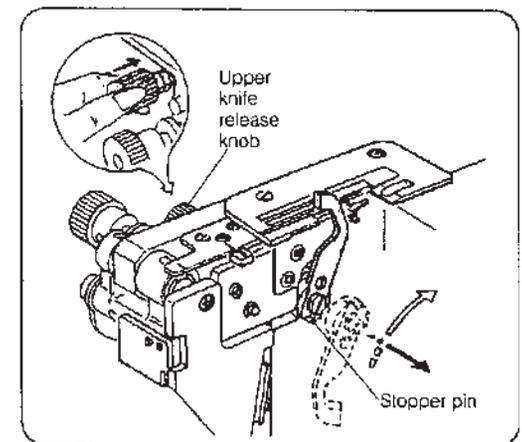
Place the presser foot so that the pin on the foot lies just under the groove of the foot holder. Lower the foot holder to lock the foot in place. Raise the presser foot lifter to check that the presser foot is secure.

## To Deactivate the Upper Knife



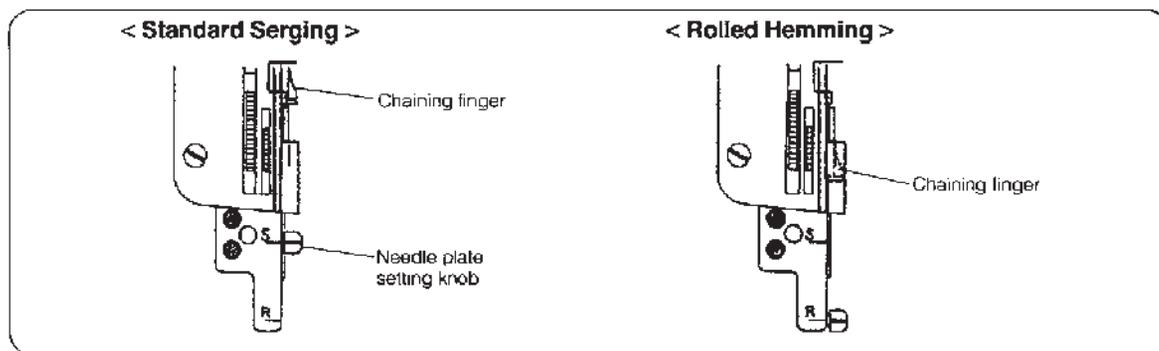
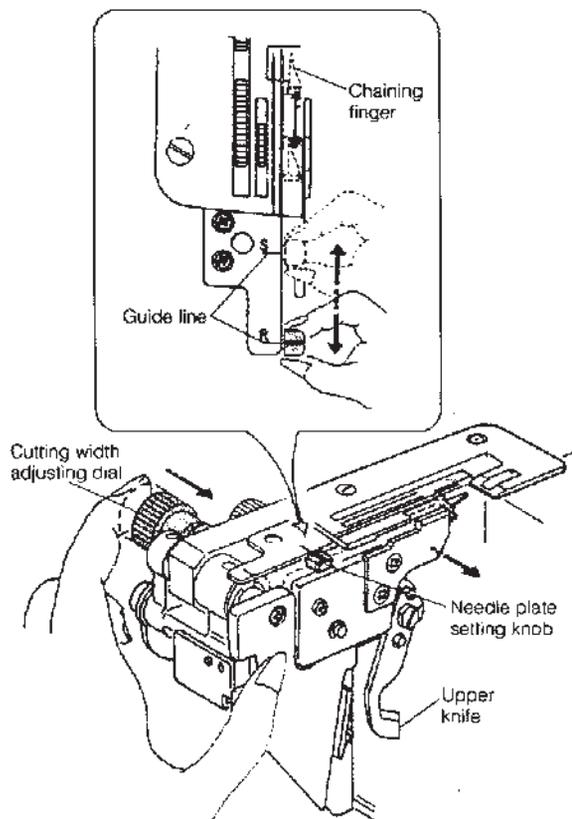
- ① Disconnect the machine from the power supply.
- ② Open the looper and side covers.
- ③ Turn the upper knife release knob toward you while pushing it to the right, then guide the hole on upper knife to the pin to lock the upper knife in down position.
- ④ Close the looper and side covers.

## 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 release knob away from you while pushing it to the right, then guide the groove on upper knife to the pin to lock the upper knife in up position.
- ④ Close the looper and side covers.

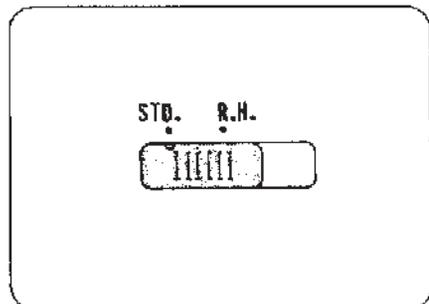
## Adjustment of Needle Plate Setting Knob (Changing to Standard Serging or Rolled Hemming)



- ① Turn off the power switch and unplug the machine.
- ② Open the looper and side covers.
- ③ Deactivate the upper knife. (Refer to page 27.)
- ④ Push the cutting width adjusting dial to the right as far as it will go, then, move the needle plate setting knob to the guide line of S (for Standard Serging) or R (for Rolled Hemming). Release the cutting width adjusting dial to the left gently.
- ⑤ Set the upper knife to up position.
- ⑥ Close the looper and side covers.

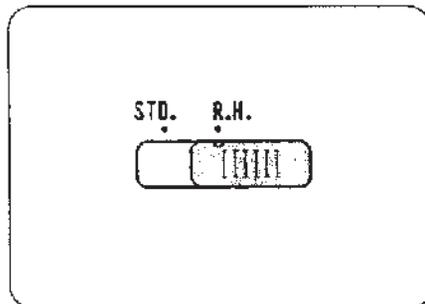
## Setting the lower looper pre-tension setting slider and changeable thread guide

### < Standard Serging >



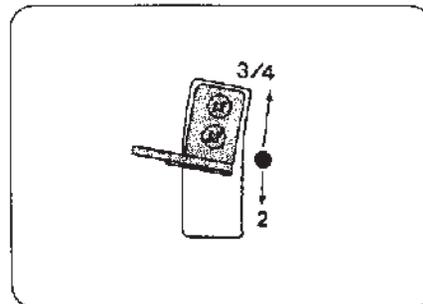
Standard serging with 2,3 or 4 threads

### < Rolled Hemming >



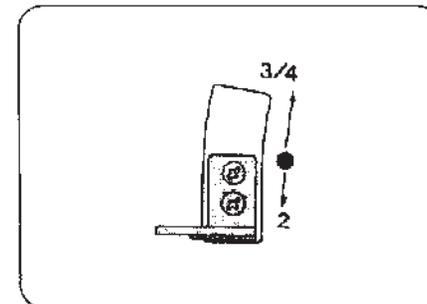
Rolled hemming with 2 or 3 threads

### < 3/4 thread Serging >



Serging with 3 or 4 threads

### < 2 thread Serging >



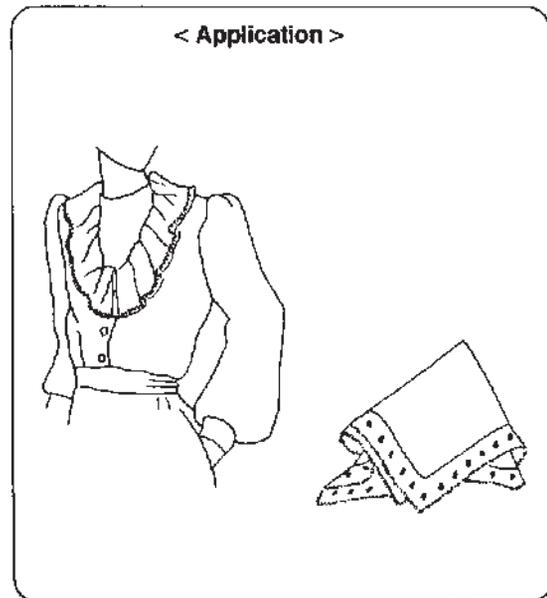
Serging with 2 threads

Change the setting depending on whether you're doing 3/4 thread serging or 2 thread serging.

## ROLLED HEMMING, PICOT EDGING AND NARROW HEMMING

### Machine Setting

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

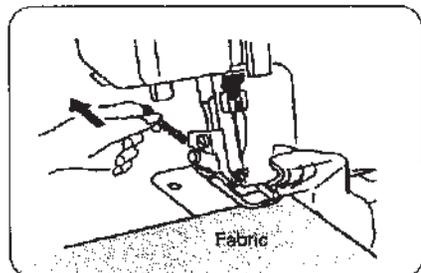


	Rolled Hemming	Picot Edging	Narrow Hemming
<b>Lower Loper Pre-tension Setting Slider</b>			
<b>Standard Setting of Tension Dials</b>			
<b>Stitch Length</b>			
<b>Differential Feed Ratio</b>			
<b>Needle Plate Setting Knob</b>			
<b>Needle</b>	Remove the left needle. <b>HA-1 SP No. 11</b>		
<b>Needle thread</b>	Long fiber polyester thread No. 80 ~ 100		
<b>Upper and Lower Loper Threads</b>	Woolly nylon, Woolly polyester	Synthetic : No. 60 ~ 100 Silk : No. 50 ~ 100	Woolly nylon, Woolly polyester
<b>Fabric</b>	Light weight fabric such as organdy, crepe de chine, lawn and georgette		

## Adjusting Thread Tension

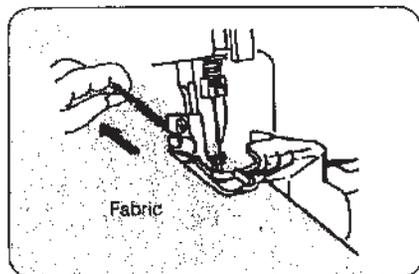
1. Set the tension dial as shown on page 30.
2. Sew and check the tensions.

— For better result —



### Rolled Hemming

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



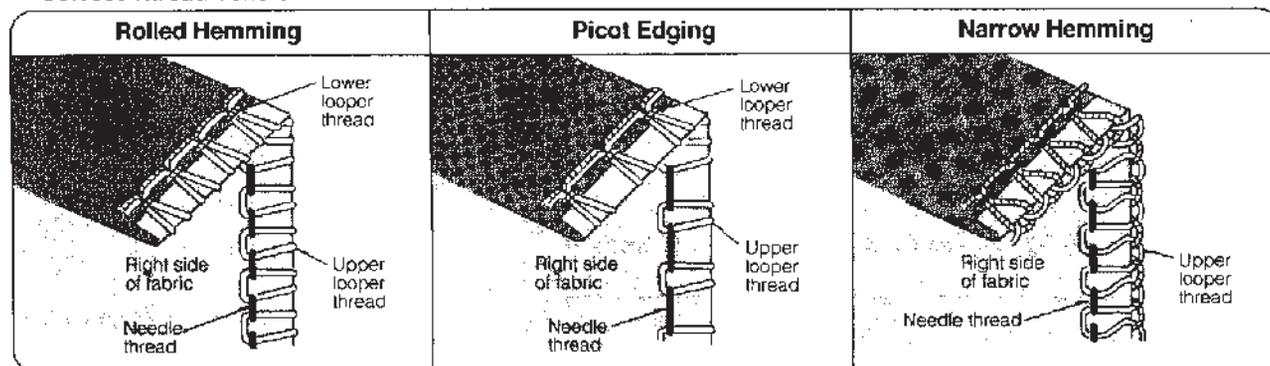
### Picot Edging

Pull the fabric lightly to the back while sewing.

### • For Narrow Hemming

Refer to page 23 for the adjustment.

## • Correct Thread Tension



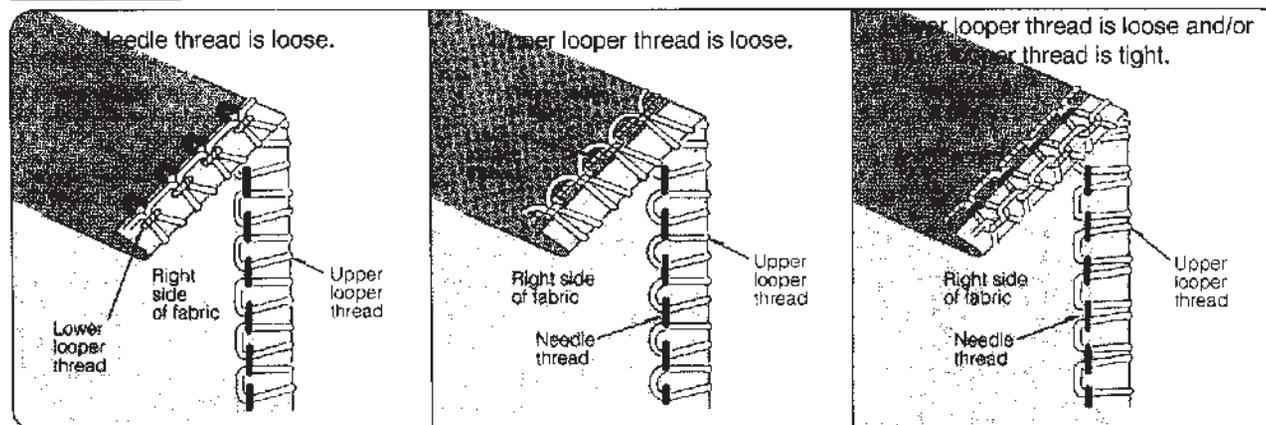
## How to Adjust the Thread Tension

## • For Rolled Hemming and Picot Edging

### Wrong Tension

### Wrong Tension

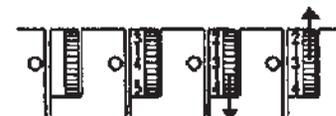
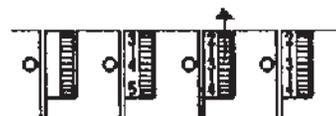
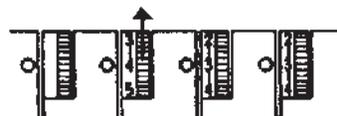
### Wrong Tension



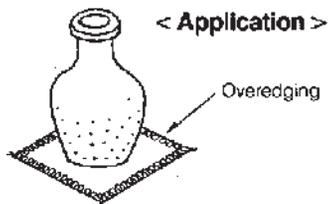
Tighten needle thread tension.

Tighten upper looper thread tension.

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



## DECORATIVE OVEREDGING



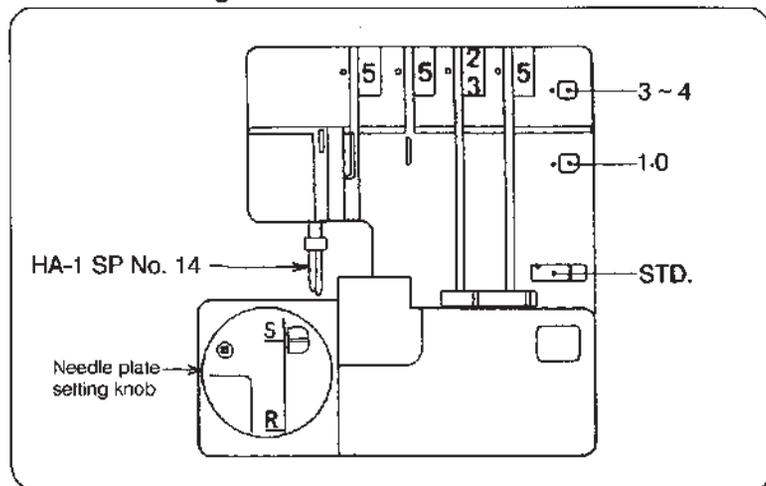
< Application >

- \* Refer to pages 18, 19, 23 for thread tension balance adjustment.
- \* For the best result, pull the thread chain to the back lightly at the beginning and end of sewing.

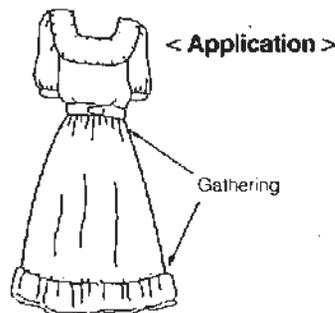
### Thread, Fabric, Range of the Tension and Machine Setting

Fabric	Thread	
Medium to Heavy Fabric	Needle threads	Synthetic : No. 60 ~ 80 Silk : No. 50 ~ 80
	Upper looper thread	Buttonhole twist Light weight wool yarn
	Lower looper thread	Synthetic : No. 60 ~ 80 Silk : No. 50 ~ 80

#### ★ Standard Setting



## GATHERING



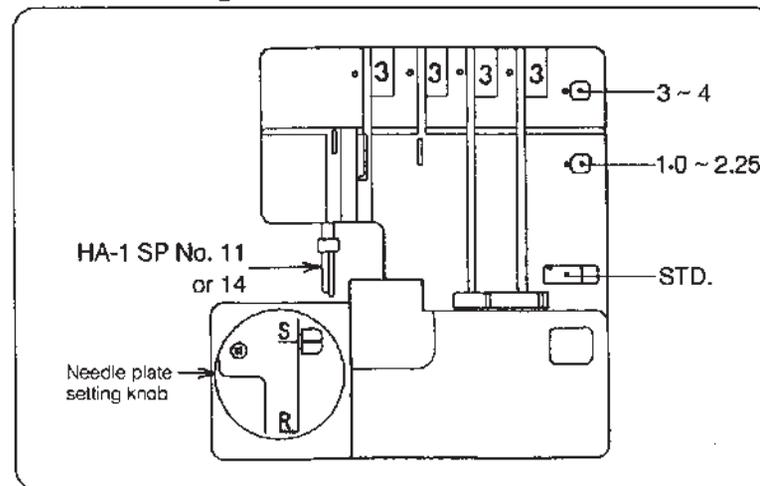
< Application >

- \* Refer to pages 18, 19, 23 for thread tension balance adjustment.

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

Fabric	Thread	
Light to Medium Woven Fabric	Needle threads	Synthetic : No. 60 ~ 80 Silk : No. 50 ~ 80
	Upper looper thread	Synthetic : No. 60 ~ 80
	Lower looper thread	Silk : No. 50 ~ 80

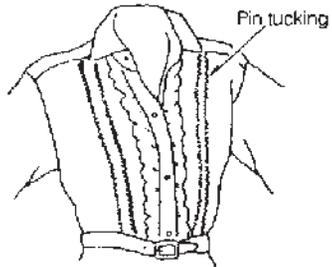
#### ★ Standard Setting



# PIN TUCKING

## Sewing

### < Application >

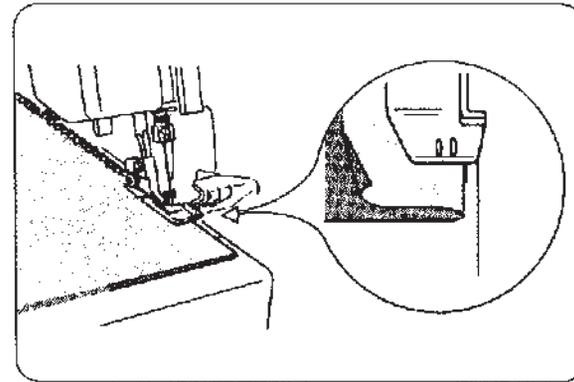
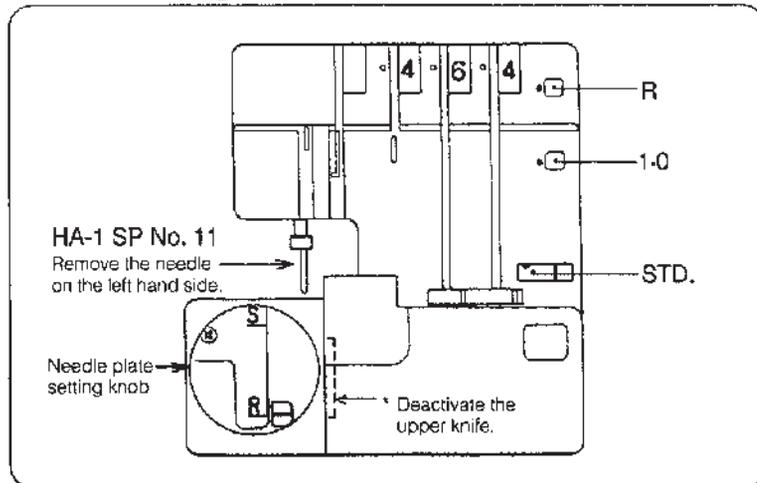


\* Refer to page 31.  
(Narrow Hemming) for thread tension balance adjustment.

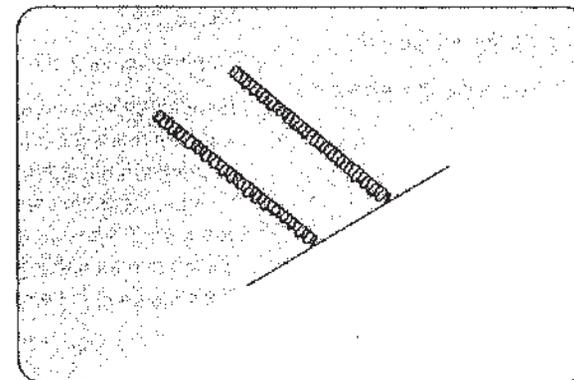
### Fabric, Thread and Machine Setting

Fabric	Thread	
Light to Medium Fabric	Needle thread on the right	Synthetic : No. 60 ~ 80 Silk : No. 50 ~ 80
	Upper and lower looper threads	Synthetic : No. 60 ~ 100 Silk : No. 50 ~ 100

### ★ Standard Setting



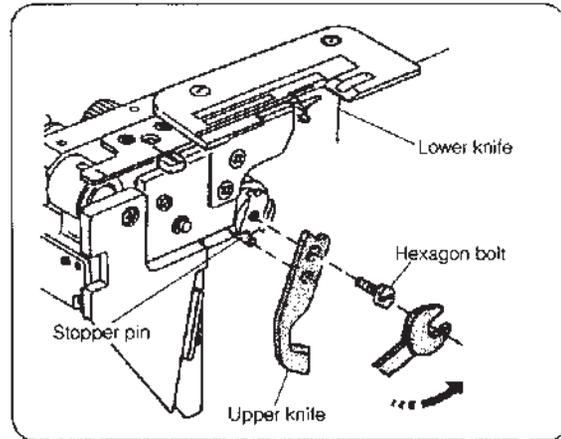
Remove the needle on the left hand side.  
Deactivate the upper knife. (Refer to page 27.)  
Sew the folded edge while guiding along the guide line.



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

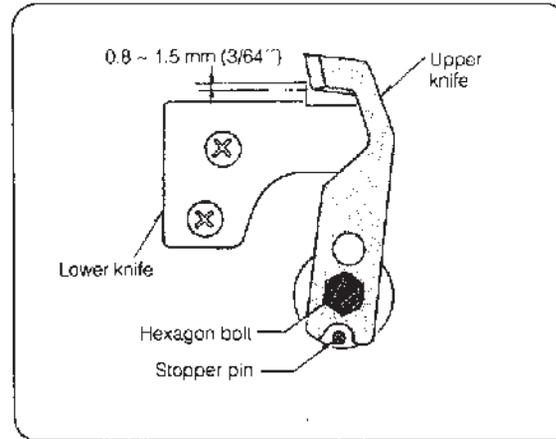
## CARE OF YOUR MACHINE

### Replacing the Upper Knife



#### To Remove:

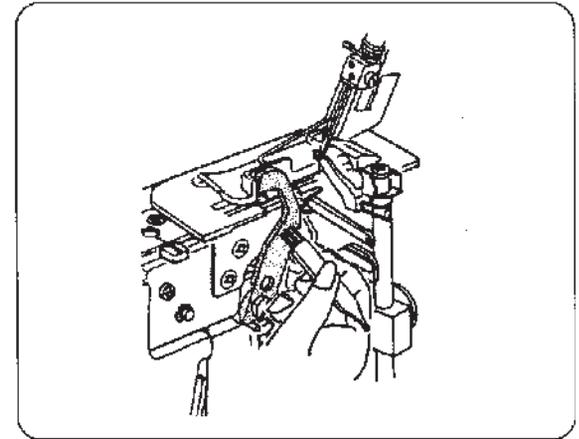
- ① Disconnect the machine from the power supply.
- ② Open the looper and side covers.
- ③ Deactivate the upper knife. (Refer to page 27.)
- ④ Remove the hexagon bolt, and remove the upper knife.



#### 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 0.8 to 1.5 mm (3/64 inch) from the edge of lower knife as shown above. Then tighten the hexagon bolt firmly.
- ④ Close the looper and side covers.

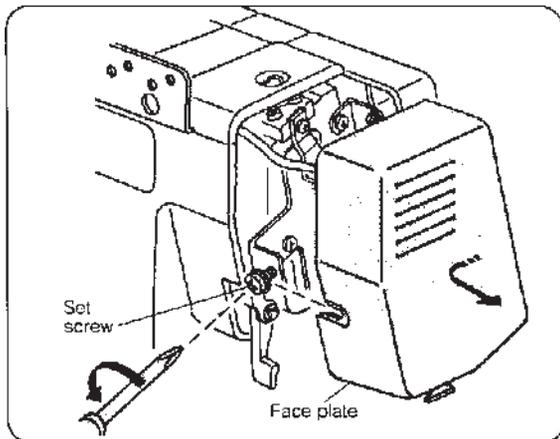
### Cleaning Upper Knife Area



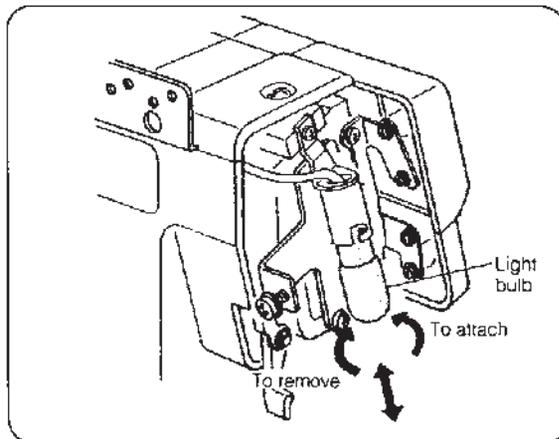
- ① Disconnect the machine from the power supply.
  - ② Open the looper cover. Remove the waste chips to the front with a lint brush.
- \* You may use vacuum cleaner to clean the upper knife area or feed dog.

\* 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.

## Replacing the Light Bulb



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

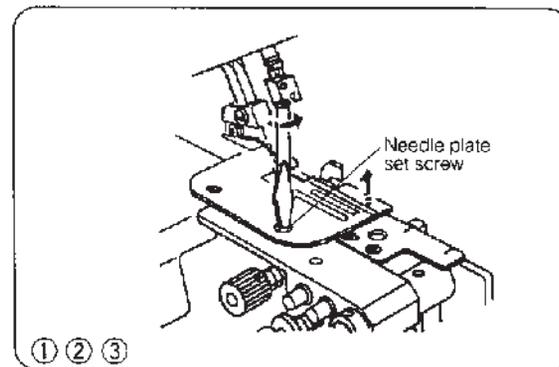


- ② **To Remove:**  
Push and twist to the left.
- To put on:**  
Push and twist to the right.
- ③ Attach the face plate, and tighten the face plate set screw.

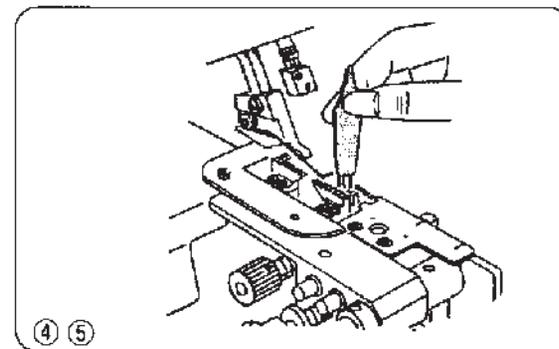
### For your safety:

- \* 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.

## Cleaning the Feed Dog

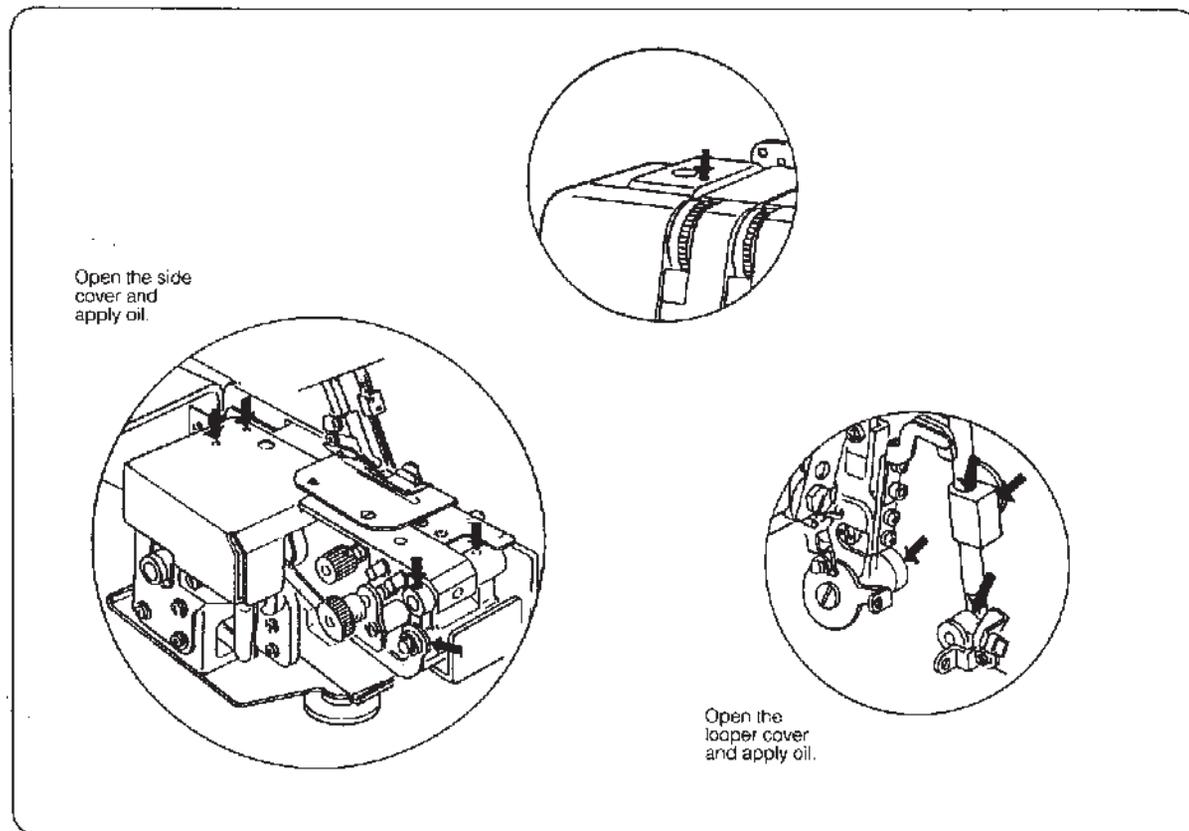


- ① Open the looper and side covers.
- ② Remove the needles and presser foot.
- ③ Remove the needle plate set screw, and remove the needle plate.



- ④ 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.

## 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
<b>The fabric is not being fed smoothly.</b>	<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 35. Lower the presser foot.</p>
<b>The needle breaks.</b>	<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 forcedly pulled.</li> </ol>	<p>See page 26. See page 26. Pull the fabric lightly.</p>
<b>The thread breaks.</b>	<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 8 ~ 14 and 22. See pages 18 ~ 19 and 23. See page 26. See page 26.</p>
<b>Skipped stitches</b>	<ol style="list-style-type: none"> <li>1. The needle is bent or blunt.</li> <li>2. The machine is not correctly threaded.</li> <li>3. The needle is incorrectly inserted.</li> </ol>	<p>See page 26. See pages 8 ~ 14 and 22. See page 26.</p>
<b>The seam is not sewn neatly.</b>	<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 18 ~ 19 and 23. See pages 8 ~ 14 and 22. See pages 21, 30, 32 and 33. See pages 9, 11, 13 and 14.</p>
<b>Seam puckering.</b>	<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 differential feed dial is not correctly adjusted.</li> </ol>	<p>See pages 18 ~ 19 and 23. See pages 8 ~ 14 and 22. See page 25.</p>
<b>The machine does not operate.</b>	<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. See page 4.</p>
<b>The fabric is not cut neatly.</b>	<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 34. Replace the upper knife. (See page 34.)</p>

## OPTIONAL PARTS

①	Blind stitch foot	Use to blind stitch a cuff or a skirt.
②	Taping foot with tape reel	Use for sewing tape on a shoulder or armpit line to protect from stretching or to decorate.
③		Works well with the taping foot or the cording foot.
④	Cording foot (1)	Use to sew decorative cording.
⑤	Cording foot (2)	Use to sew decorative cording.
⑥	Beading attachment	Use for decorating cloth, wide cord decoration, cording, etc.
⑦	Gathering attachment	Use when sewing sleeves, cuffs, collars, etc.
⑧	Elastic gathering attachment	Use for elastic taping, decorative taping, etc.
⑨	Cloth guide	Use to help you create a constant-width seam allowance and when doing flat-lock and pintuck sewing.
⑩	Piping foot	Use to pipe the edge of a sewing article to decorate or strengthen.

The dealers can give you additional ideas about specialty sewing. Please ask!

