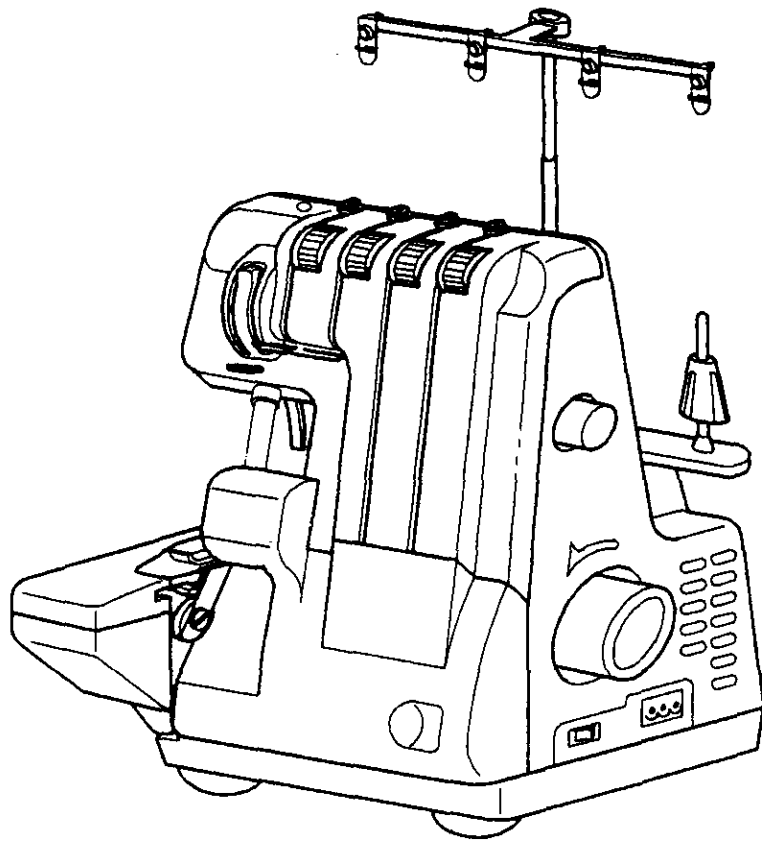


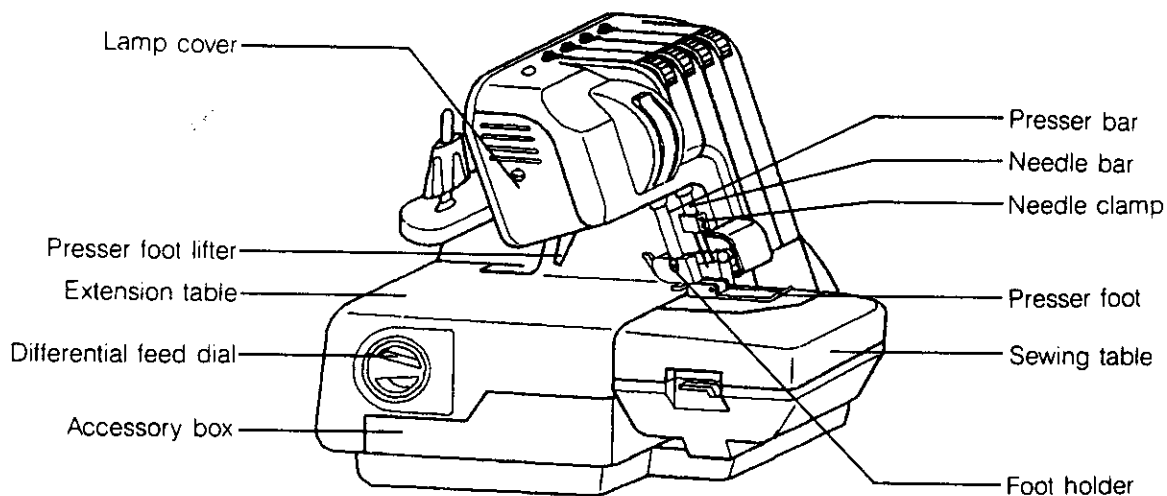
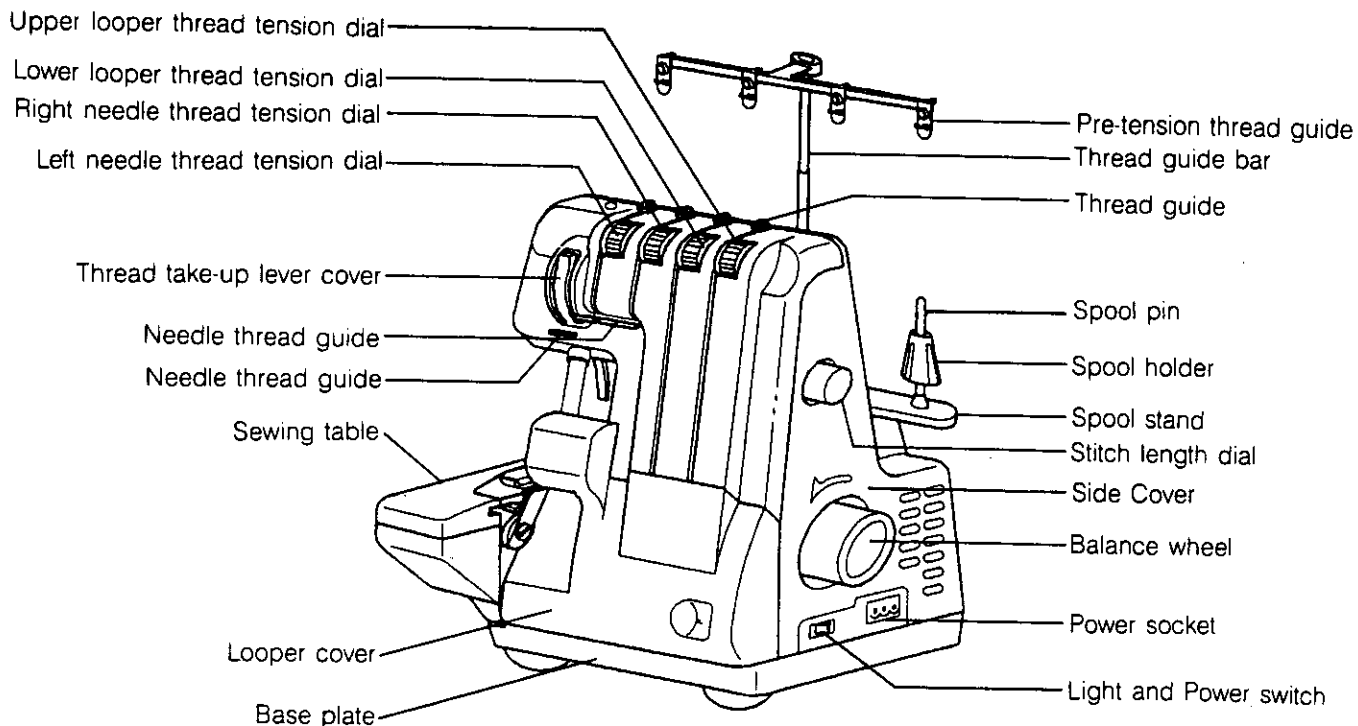
# Instruction Book



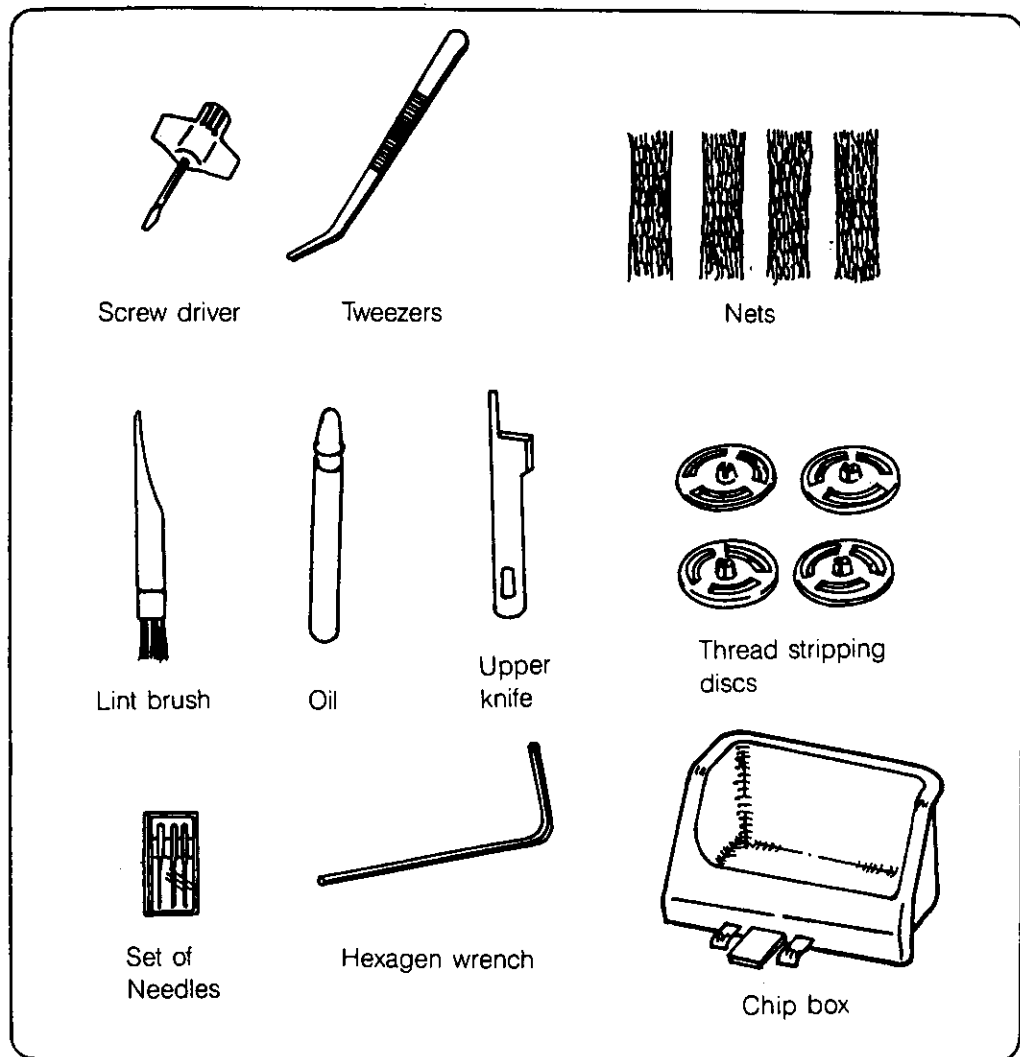
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# Parts Name

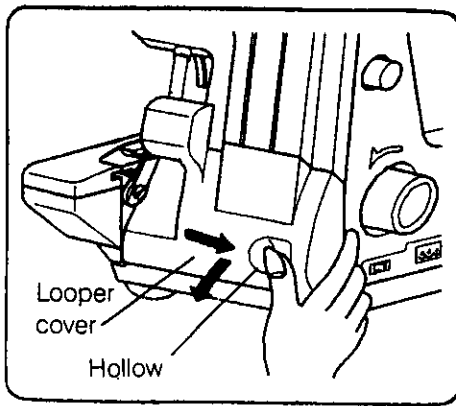


## Standard Accessories



## Specifications

Max. speed	Up to 1300 s.p.m.
Max. stitch length	1-4mm
Stitch width	5-7mm
Presser foot height	Max. 6mm
Differential feed (DF type only)	0.8-2.0
Needle	HAx1 No. 11 or 14
Dimention	292Wx295Dx290H mm
Net weight	7.5 KGS



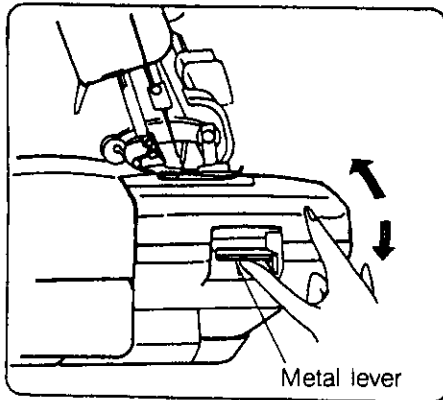
## Opening and Closing the Looper Cover

To open:

Hold the hollow to the right as far as it will go, then pull looper cover toward you.

To close:

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



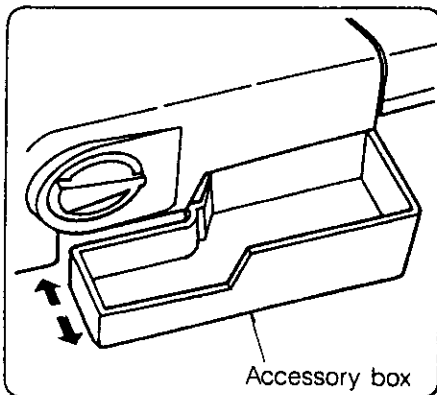
## Opening and Closing the Sewing Table

To open:

Lift the metal lever, then hold the sewing table going down.

To close:

Lift sewing table and push it back to the position.



## Opening and Closing the Accessory Box

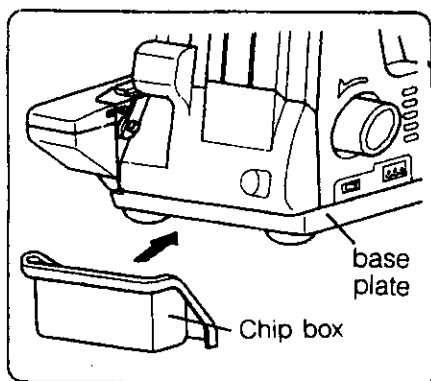
To open:

Draw out the box, it can store all standard accessories.

To close:

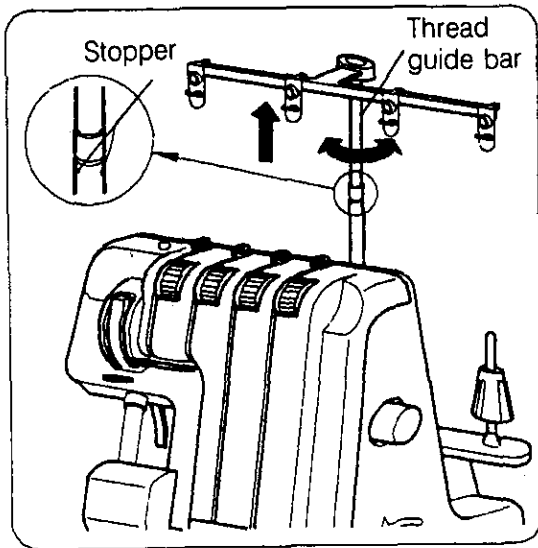
Push it back to the position.

\* For optional accessories, it can only be stored in the attached accessories bag.



## How to Use the Chip Box

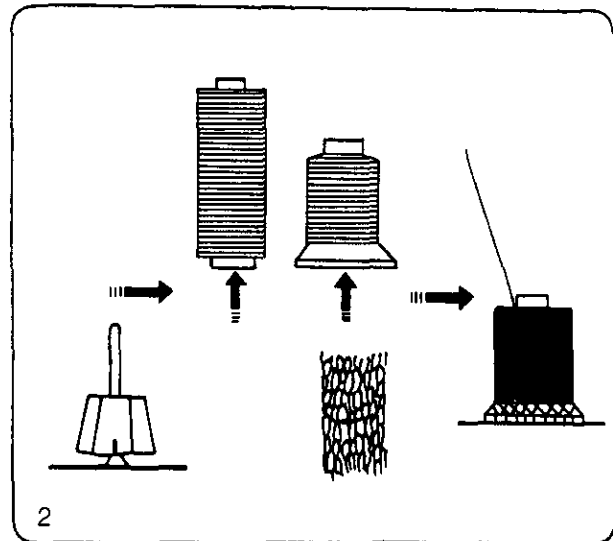
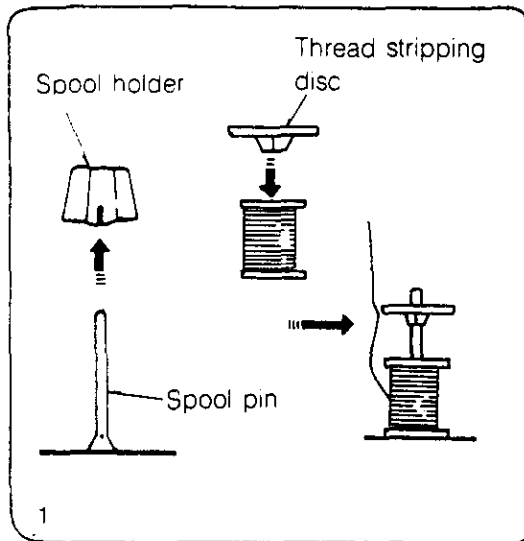
Fabric waste will be collected as you sew. Push the chip box under the base plate and slightly to the left towards the sewing table.



## Stretch up the Thread Guide Bar

1. Pull the thread guide bar up to the top.
2. Turn the thread guide bar to make it comes right above the spool pins and locked into the stopper.

## 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.

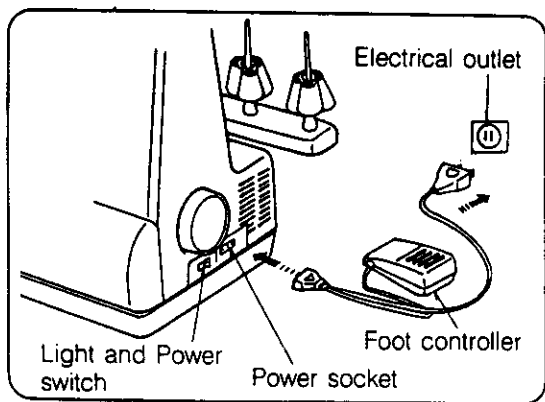
## Connecting the Machine to the Power Supply

1. Turn off the light and power switch.
2. Connect two plugs to power socket and electrical outlet.
3. Turn on the light and power switch.

-Caution-

Always disconnect the plug from electrical outlet:

- when machine is not in use.
- when attaching or removing parts.
- when threading or cleaning the machine.

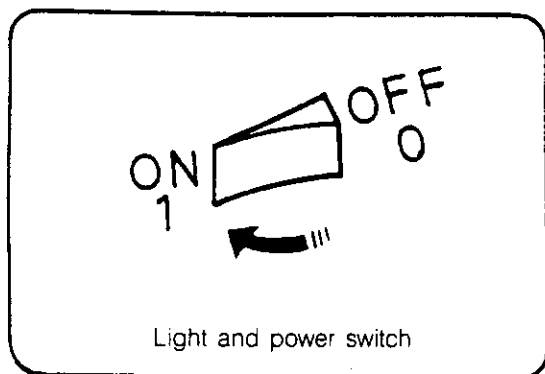


## Power/Light Switch

The power switch is conveniently placed on the balance wheel side of the machine.

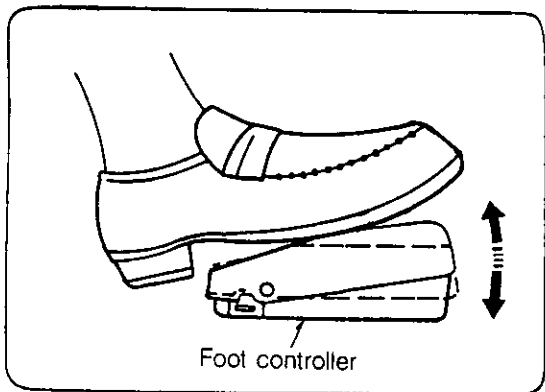
"1" ON

"0" OFF



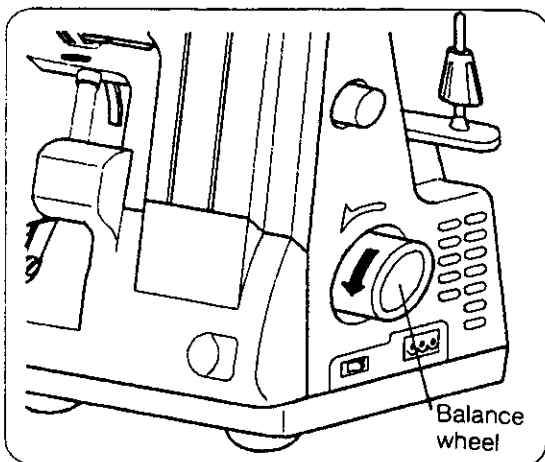
## How to Use the Foot Controller and Control the Sewing Speed

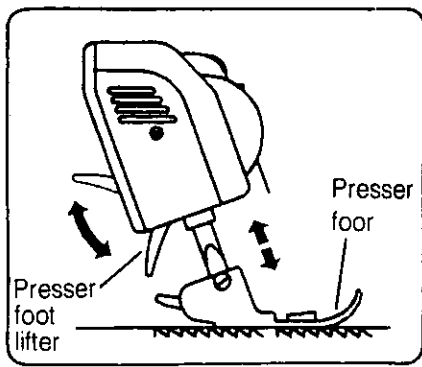
1. Tread your foot on the controller.
2. Press and release the controller to practice the sewing speed.
3. The harder you press on the controller, the faster the machine runs.



## How to Turn the Balance Wheel

Always turn the balance wheel toward you.

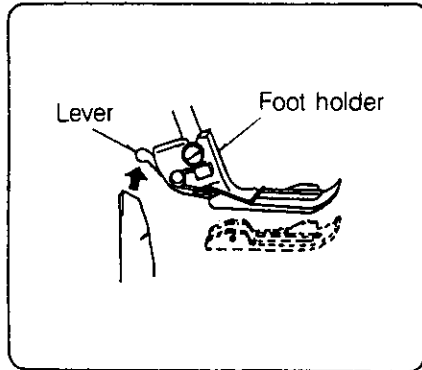




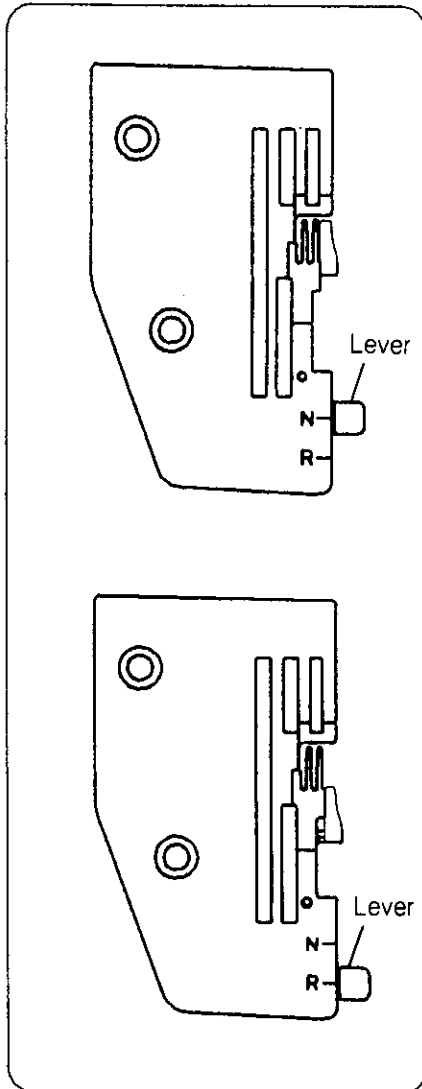
## Raising or Lowering the Presser Foot

1. Apply the presser foot lifter to raise or lower the presser foot.
2. Always keep the presser foot down when sewing.

## How to Change (Remove) the Presser Foot



1. Raise the presser foot lifter.
2. Turn the balance wheel to raise the needle.
3. Press the lever to drop off the presser foot.
4. Raise the Presser foot lifter again to remove the presser foot.
5. Raise the presser foot lifter, and apply the desired presser foot under the foot holder and make the pin on the foot lies under the groove of the foot holder.
6. Lower the foot holder and push the lever to lock the foot in place.
7. Raise the presser foot lifter and see the presser foot is in place.



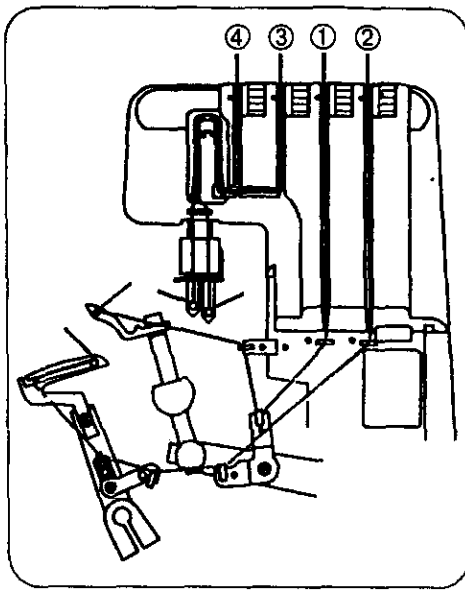
## How to Use the Needle Plate

Switch the lever to select the regular or rolled hem and narrow hem sewing.

"N" - For regular sewing

"R" - For rolled and narrow hem sewing

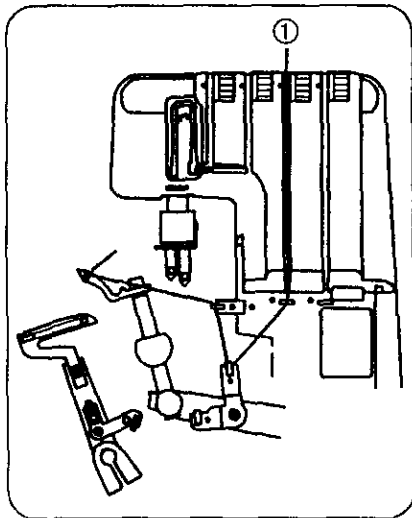




## How to Thread the Machine

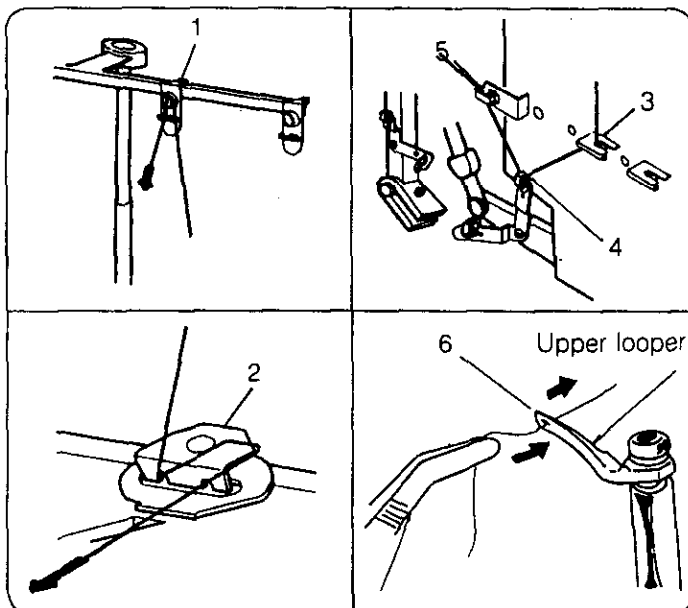
-NOTED-

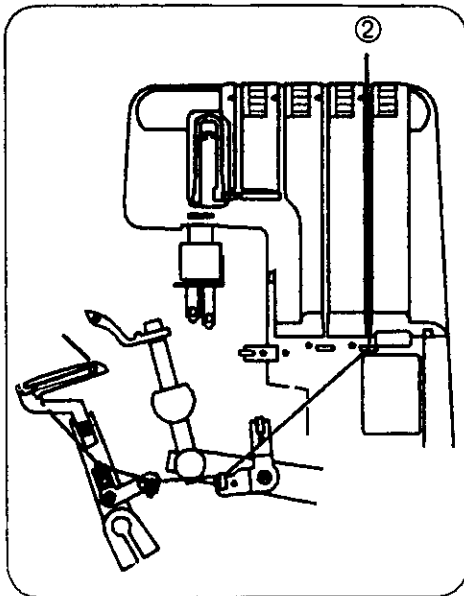
1. Always thread the upper looper first, then lower looper, needle on the right and needle on the left. A threading chart is placed on the machine body inside the looper cover.
2. Incorrect threading will cause of skipped stitch, broken thread or uneven thread tension. Before to sew, make sure that your machine is threaded properly.



## Threading the upper looper (green)

- Open the looper cover.
- Place the spool on the spool holder second from the right.
- Draw the thread through the pre-tension thread guide (1) from right to left.
- Thread from left to right around the Thread guide (2)
- Thread guides (3, 4, 5)
- Thurn the balance wheel toward you until the upper looper comes outside of the needle plate, and apply the tweezers to pass thread through looper eye (6)



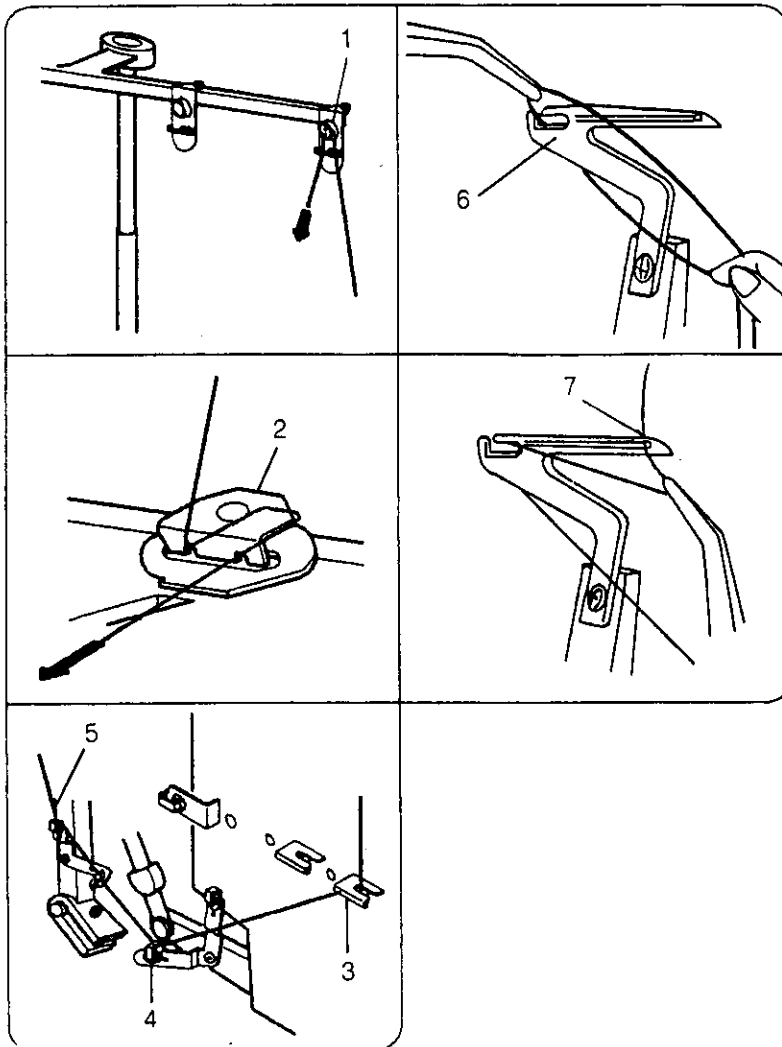


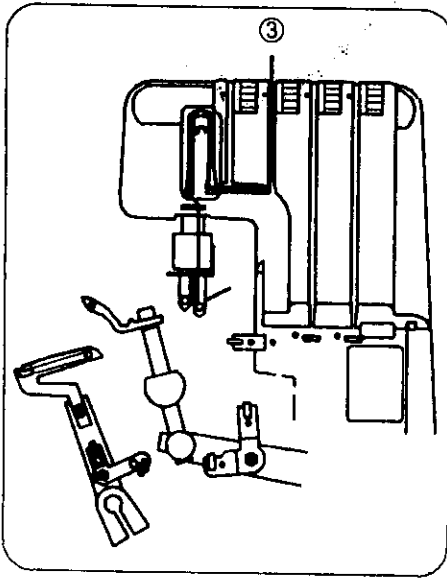
## Threading the lower looper (red)

- Open the looper cover and sewing table
- Place the spool on right spool holder.
- Draw the thread through the pre-tension thread guide (1) from right to left.
- Thread from left to right around the thread guide (2).
- Thread guides (3, 4, 5)

\* If machine attached with the Lower looper automatic threader, then please refer to page 12 continuously and disregard the following instruction.

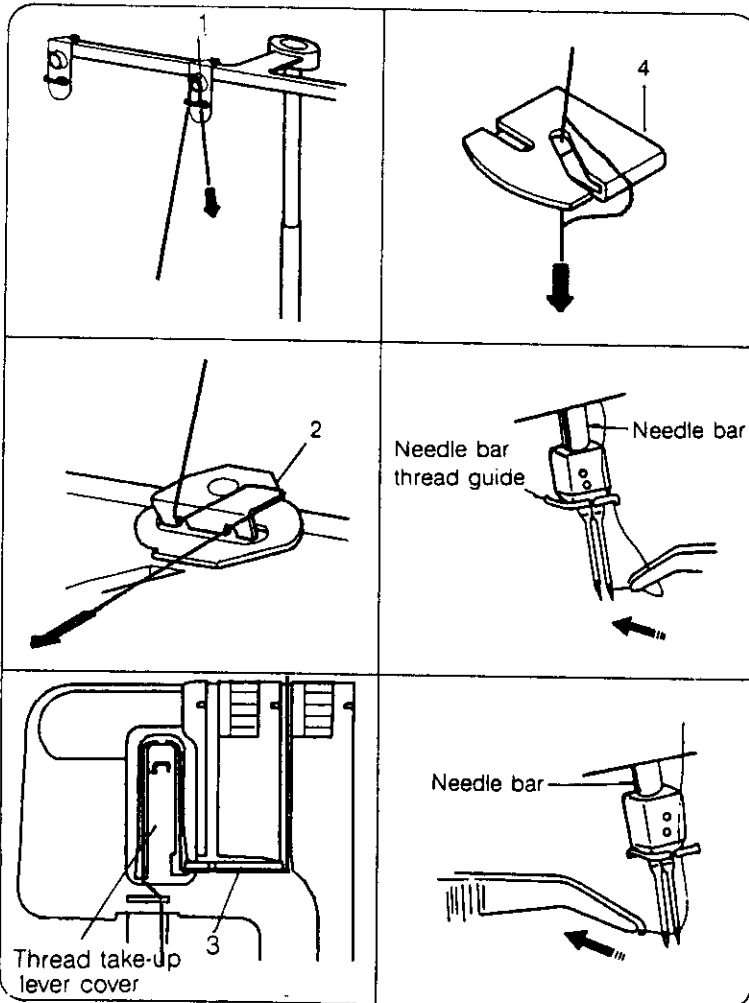
- Turn the balance wheel toward you until the lower looper comes to the most left, and apply the tweezers to pull the thread to pass the slot. (6).
- Turn the balance wheel until the lower looper comes to the most right position. Use the tweezers to pass the thread through looper eye (7).

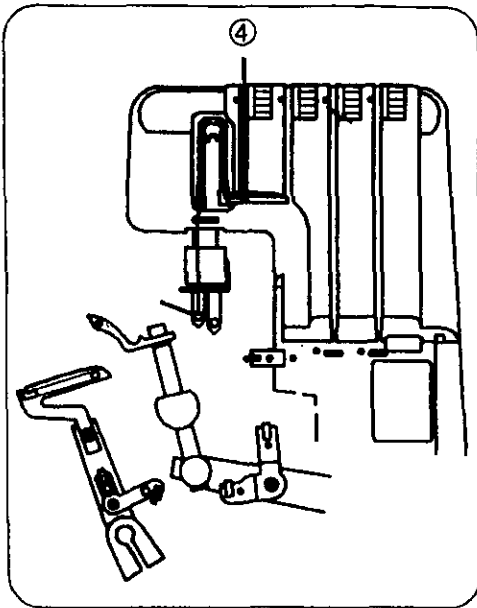




## Threading the needle on the right (blue)

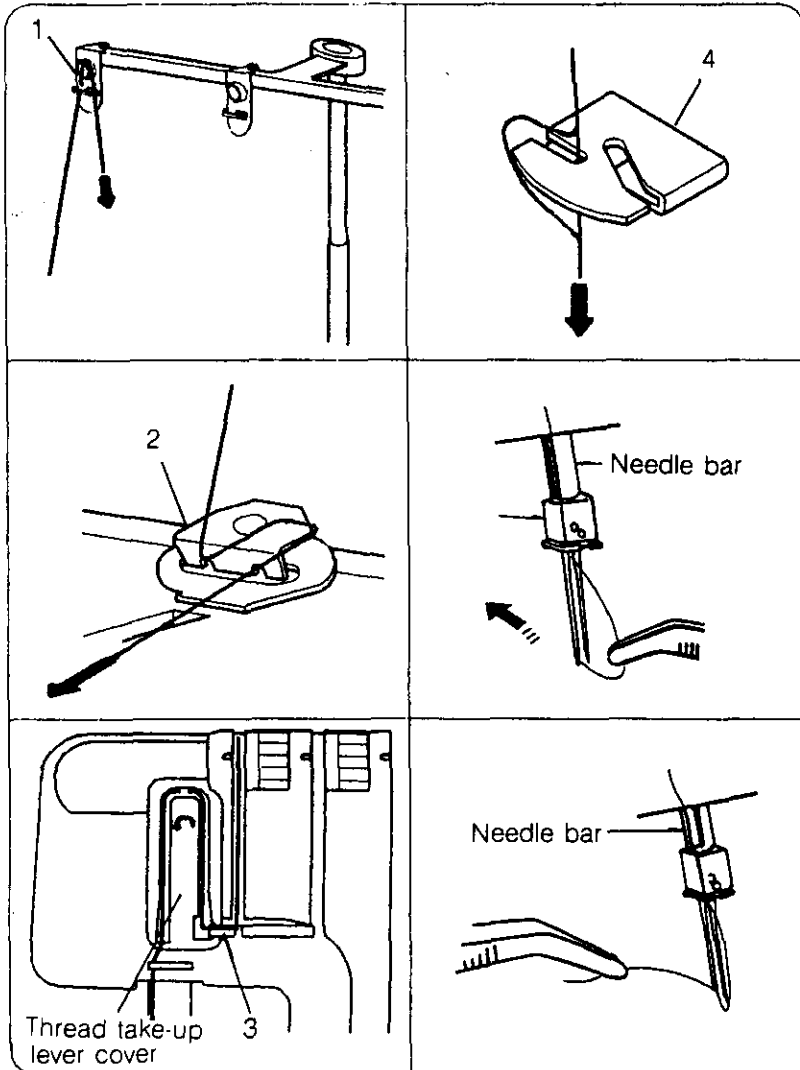
- Place the spool on the spool holder second from the left.
- Draw the thread through the pre-tension thread guide (1) from left to right.
- Thread guide (1) from left to right.
- Thread from left to right around the thread guide (2).
- Thread guide (3)
- Thread behind of the thread take-up lever cover.
- Thread guide (4)
- Turn the balance wheel toward you to bring needle bar at its highest position, then pass the thread through needle bar thread guide from left to right.
- Pass the thread through the needle eye on the right needle.





## Threading the needle on the left (orange)

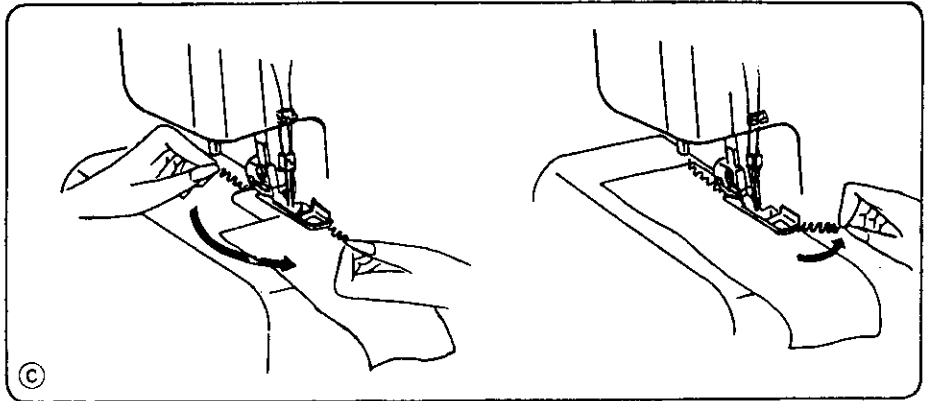
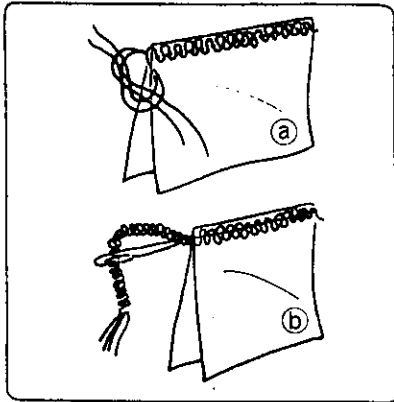
- Place the spool on left spool holder.
- Draw the thread through the pre-tension thread guide (1) from left to right.
- Thread from left to right around the thread guide (2).
- Thread guide (3)
- Thread behind of the thread take-up lever cover.
- Thread guide (4)
- Turn the balance wheel toward you to bring needle bar at its highest position, then pass the thread through needle bar thread guide from left to right.
- Pass the thread through the needle eye on the left needle.



## Securing Ends

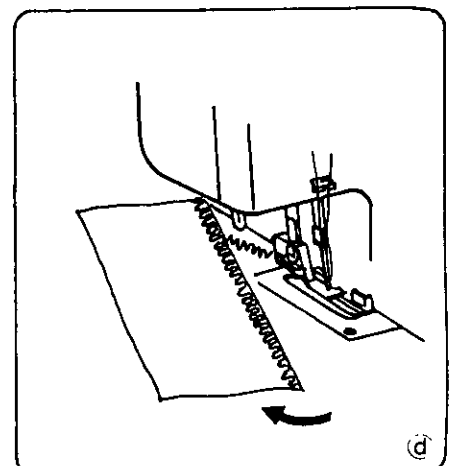
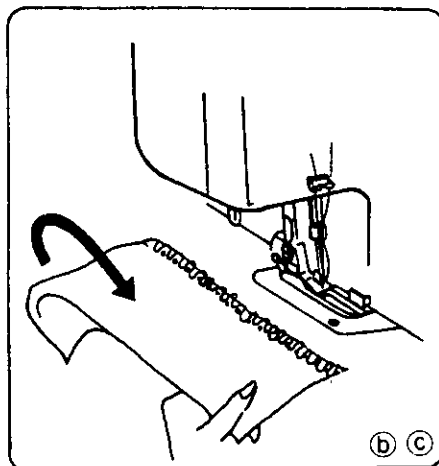
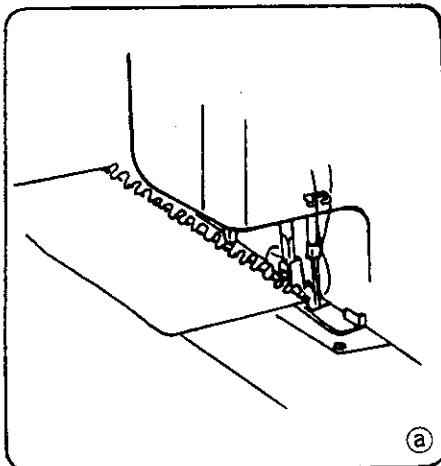
To avoid unravelling, it is necessary to leave a thread chain about 5 cm (2") long at the beginning and end of seam. To secure the beginning and end of a seam choose one of the following methods.

### At the beginning



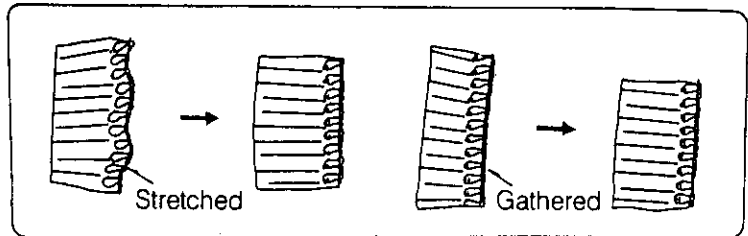
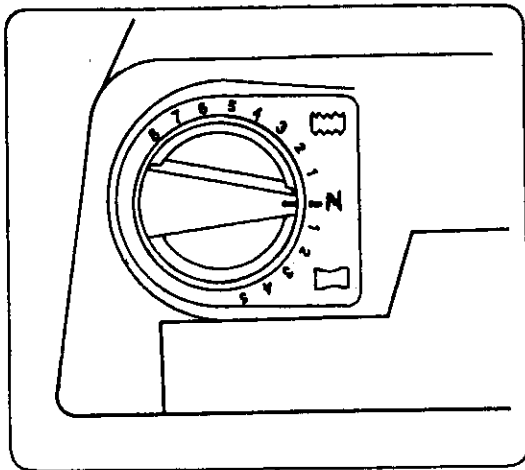
- (a) Separate the end of threads and knot.
- (b) Thread the chain through a large eyed needle, and weave that chain through the overlock stitches on the fabric.
- (c) Backstitching
  - ① Before putting your fabric in the machines, sew a thread chain about 5 cm (2") long behind the needle.
  - ② Put 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



- (a) Serge one stitch off the end of seam.
- (b) Raise the needle and presser foot, and gently pull the threads off the prong.
- (c) Turn the fabric over so the under side is up.
- (d) Serge about 2.5 cm (1") over stitching and angle off the fabric.

## Adjustment of Differential Feed (DF type only)



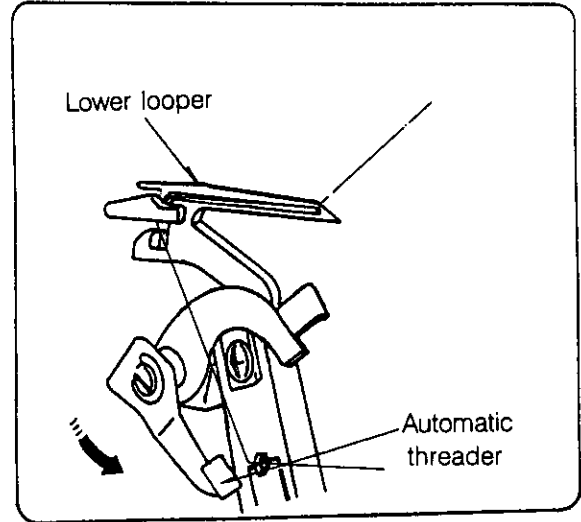
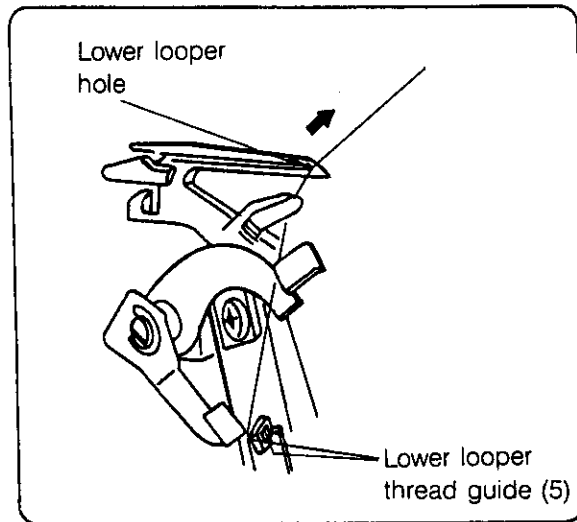
### How to adjust

If the sewn fabric is stretched, turn the dial between the "☄" section.

If the sewn fabric is gathered, turn the dial between the "☂" section.

\* When sewing without differential feed, the adjustment dial should be set on the "N" position.

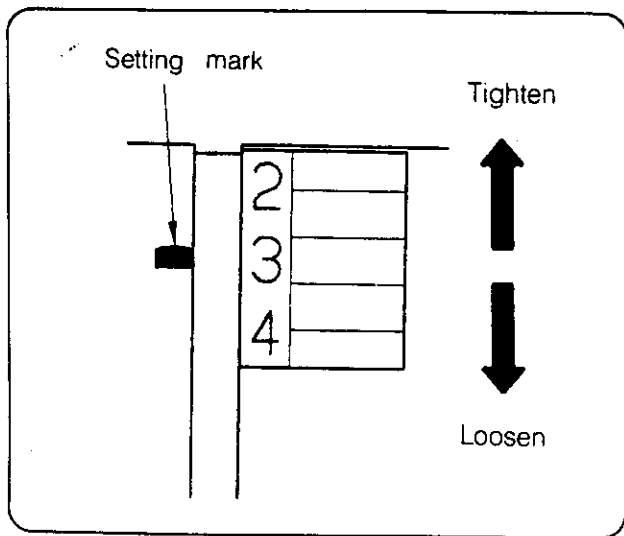
## How to use the Lower Loper Automatic Threader (For certain type only)



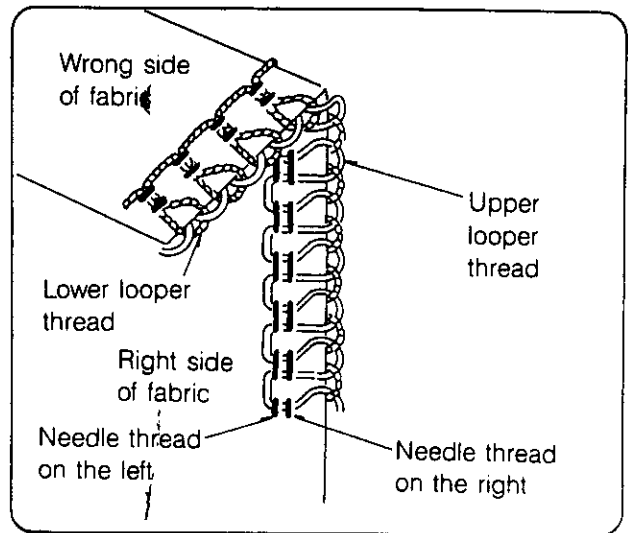
1. After passing the hole on lower looper thread guide (5).
2. Turn the balance wheel toward you until the lower looper extending out 5-10mm from the needle plate edge.
3. Pull the thread with tweezers to pass the lower looper hole.
4. Draw the thread with your left hand tightly.
5. Use your finger to push the automatic threader up to the topmost, and then thread goes through the lower looper automatically.

# Thread Tension

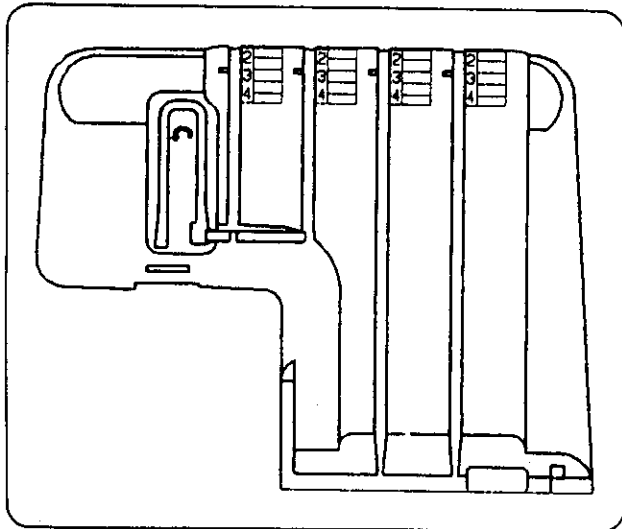
## Thread Tension Dial



## Correct Tension



## Thread Tension



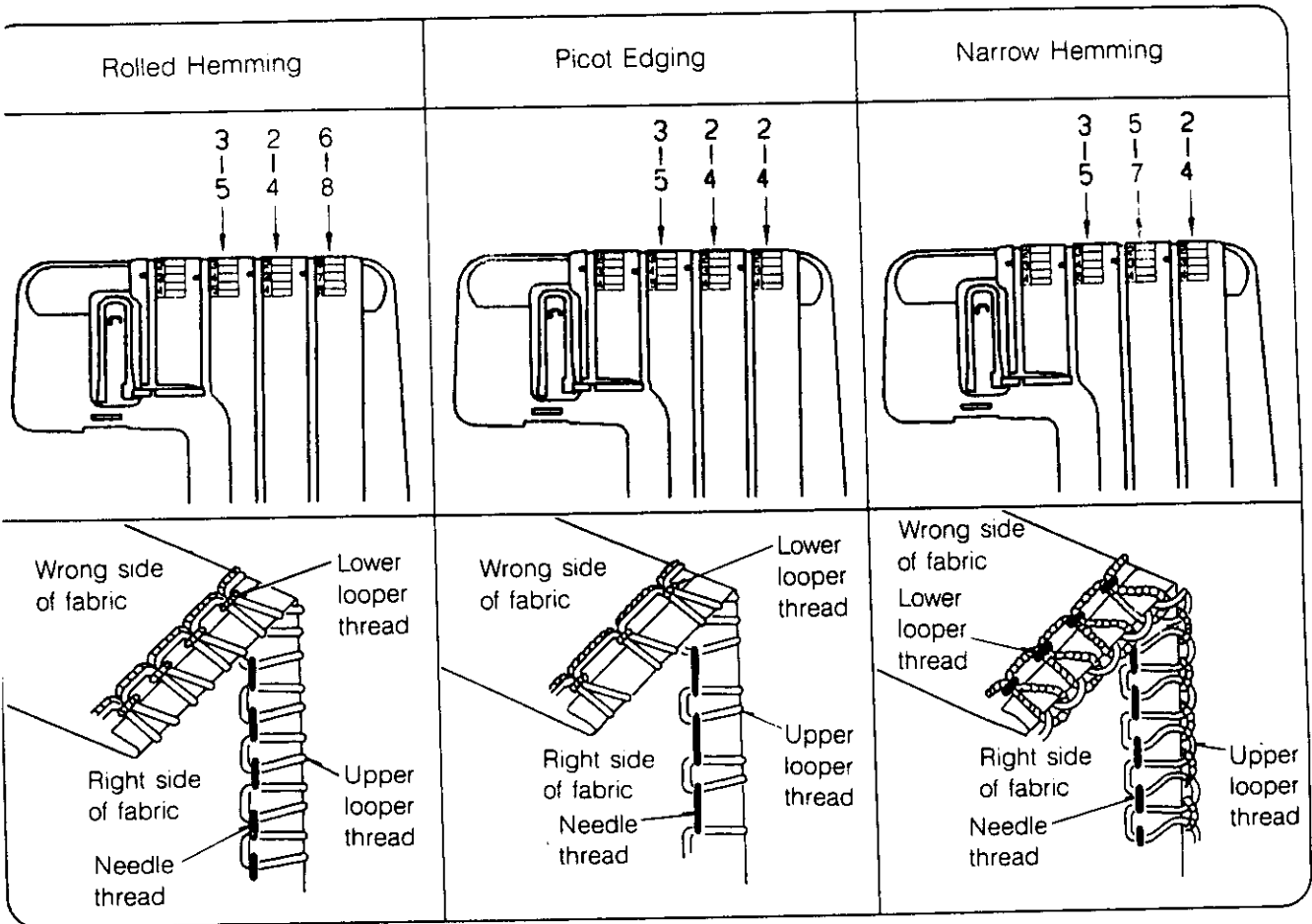
Adjusting the thread tension may be required depending on the type of fabric and thread being used.

**·Fabric, needle and threads–**

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

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

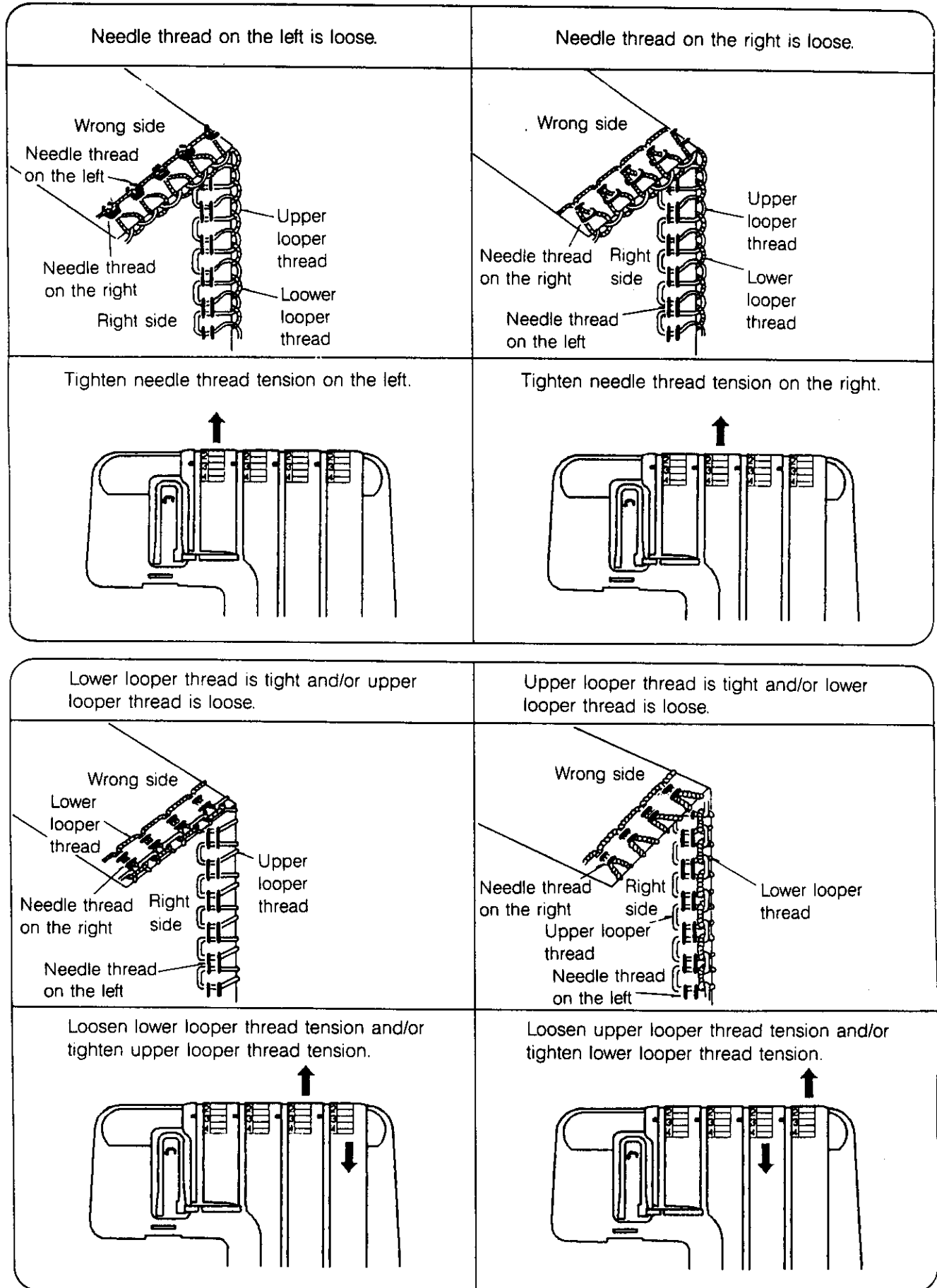
**Thread tension dials and Correct tension–**





# Thread Tension Adjustment (2-Needle 4-Thread)

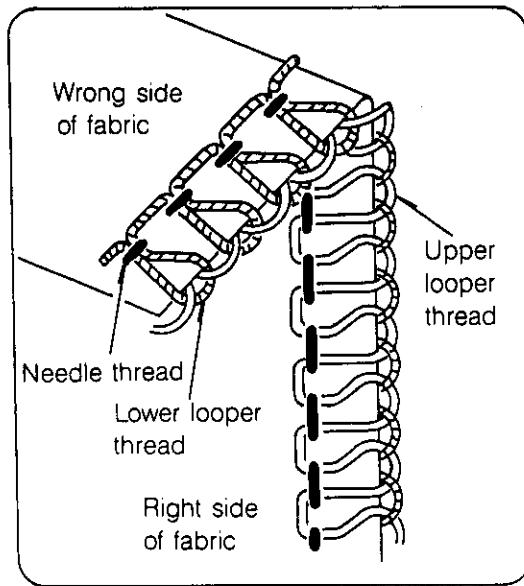
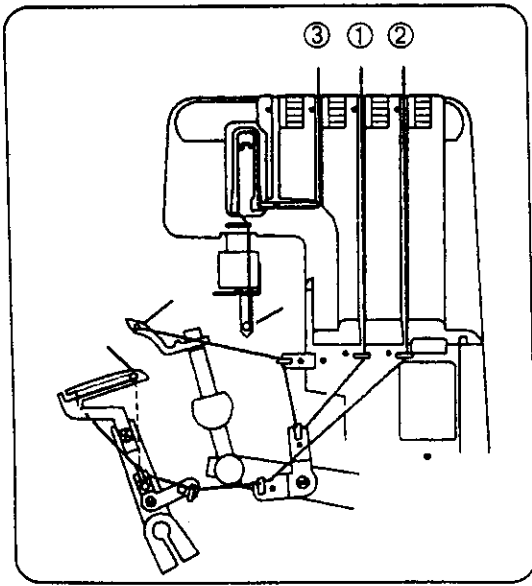
Set all four thread tension dials at "4". Then sew, and check the thread tensions.



# Overlock Sewing 1-Needle 3-Thread

This machine can also sew 1-needle 3-thread overlock stitches by removing the left needle.

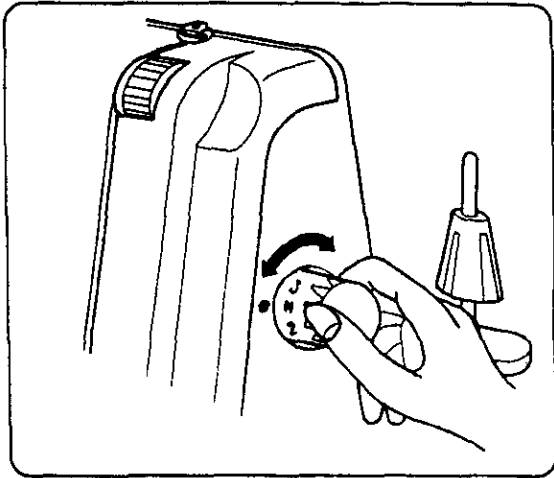
## Correct Tension



## Thread tension adjustment (1-Needle 3-Thread)

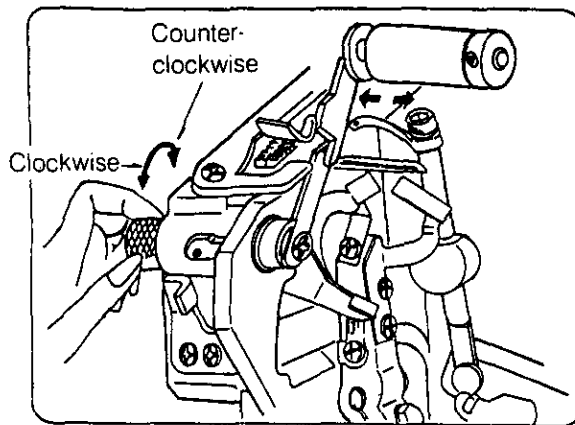
Set all thread tension dials at "4". Then sew, and check the thread tensions.

Needle thread on the right is loose.	Lower looper thread is tight and/or upper looper thread is loose.	Upper looper thread is tight and/or lower looper thread is loose.
<p>Tighten needle thread tension.</p>	<p>Loosen lower looper thread tension and/or tighten upper looper thread tension.</p>	<p>Loosen upper looper thread tension and/or tighten lower looper thread tension.</p>



## Adjustment of Stitch Length

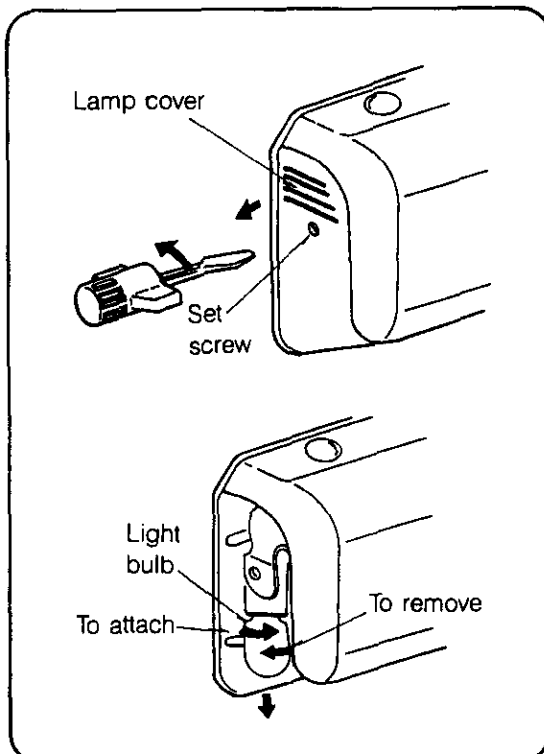
1. Larger the number, longer the stitch. Smaller the number, shorter the stitch.
2. The stitch length can be adjusted from 1 to 4mm (approx. 0.04" to 0.15")
3. The position "N" is for rolled and narrow hemmings.



## Adjustment of Cutting Width

The proper cutting width differs with the type of fabric. Check the seam each time, and adjust the cutting width as follows:

1. Open the sewing table.
2. Turn the cutting width dial
  - counter-clockwise to get the larger cutting width.
  - clockwise to get the smaller cutting width.

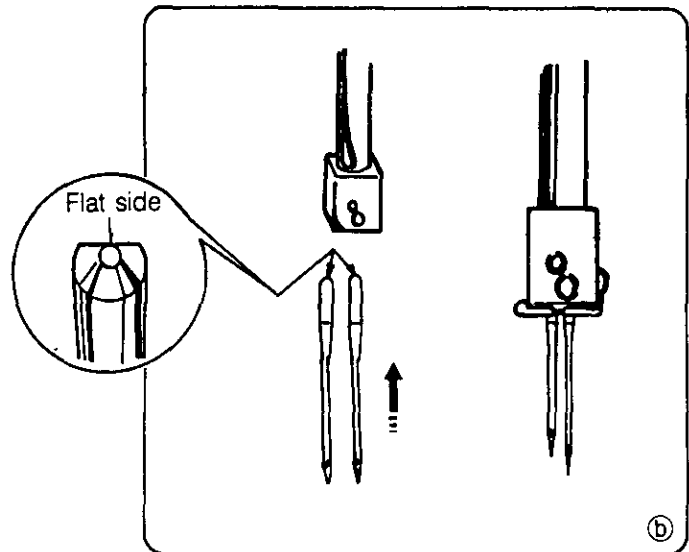
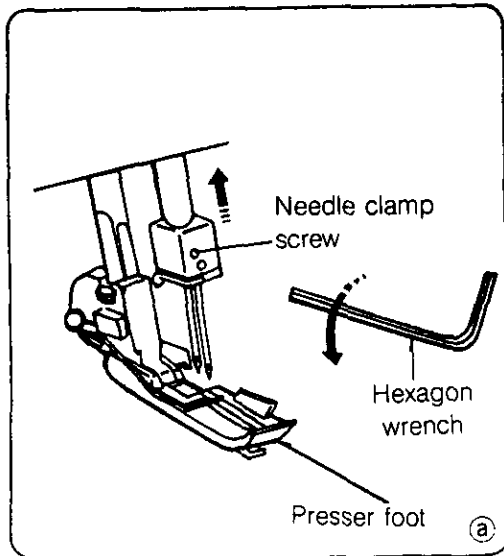


## Replacing the Light Bulb

1. Disconnect the machine from the power supply. Remove the lamp cover set screw, and remove the lamp cover.
2. To Remove: Turn to the left  
To Attach: Turn to the right
3. Attach the lamp cover, and tighten the lamp cover set screw.

For your safety:  
The machine is designed to use a 15 WATT MAXIMUM LIGHT BULB.

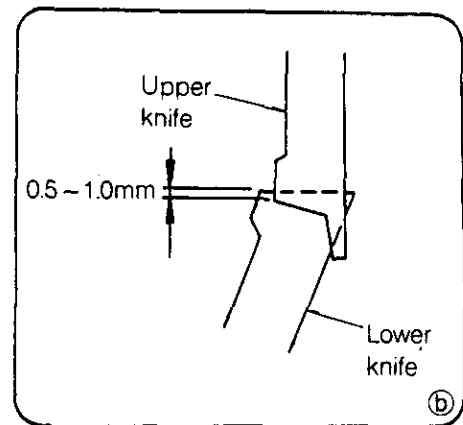
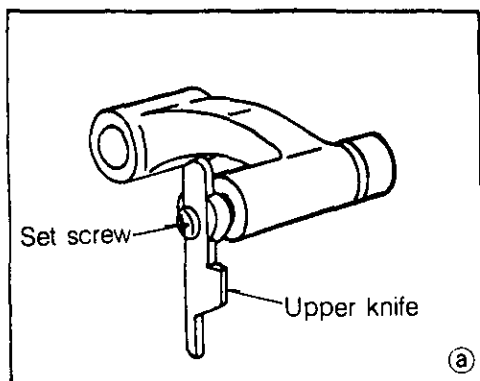
## How to Change the Needle



1. Disconnect the machine from the power supply.
2. Turn the balance wheel to raise the needle above the presser foot.  
Then apply the hexagon wrench (attached in the accessory box) to loose the needle clamp screw for the needle you are going to remove. (Figure (a))
3. Insert new needle into the needle clamp with its flat side to the back until the top of needle touches the stopper pin, then tighten the needle clamp screw. (Figure (b))
4. When the needles are set correctly, the left needle is higher than the right needle. (Figure (b)).

Noted: Never use the needle which is bent or blunt.

## How to Change the Upper Knife

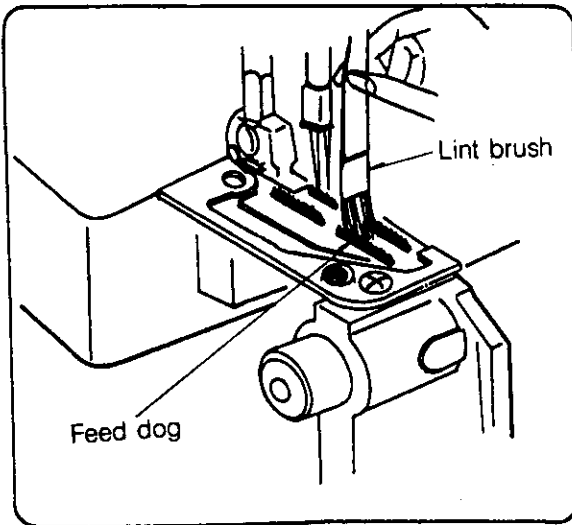


1. Disconnect the machine from power supply.
2. Open the sewing table and looper cover first.
3. Remove the presser foot.
4. Turn balance wheel toward you until the upper knife at its highest position.
5. Loosen the upper knife set screw and take off the upper knife. (Figure (a))
6. Replace the new upper knife and tighten the set screw.
7. Turn the balance wheel toward you to set the cutting edge of the upper knife to its lowest position with the lower knife to overlap between 0.5-1.0mm, and tighten the upper knife set screw securely (Figure (b))
8. Re-set the presser foot, and close the sewing table and looper cover.

\* The lower knife is made of special hard material and should not require replacement under normal use. If it is chipped, call your dealer for replacement.

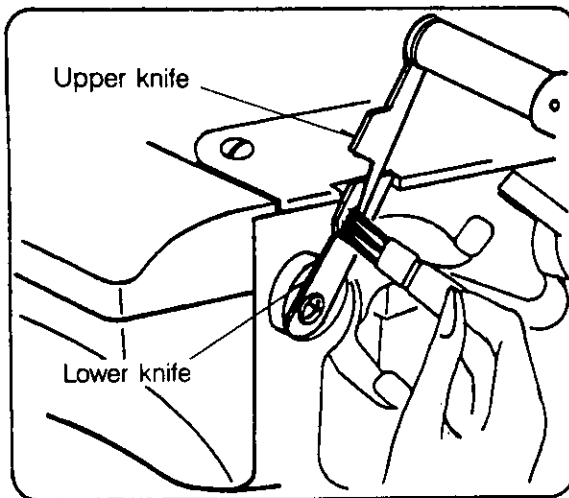
## Cleaning and Oiling

### -Cleaning the feed dog-



1. Open the sewing table and looper cover.
2. Turn the balance wheel toward you until the needle goes up to the highest position.
3. Remove the needle plate and presser foot.
4. Using a lint brush (attached in the accessory box) to brush around the feed dog.
5. Re-set needle plate and presser foot.

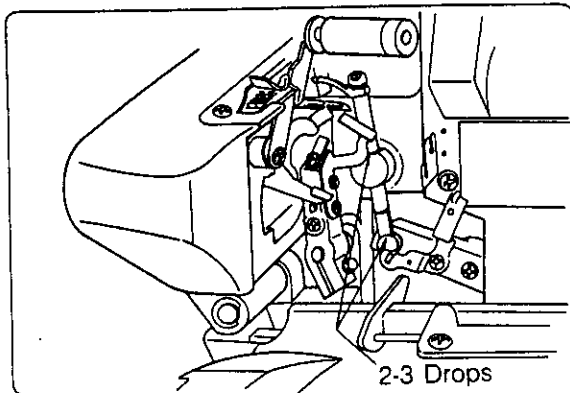
### -Cleaning upper knife area-



1. Open the looper cover.
2. Using a lint brush (attached in the accessory box) to brush the upper knife and lower knife area.

\* Disconnect the machine from the power supply before cleaning.

### -Oiling-



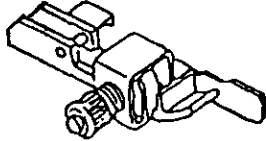
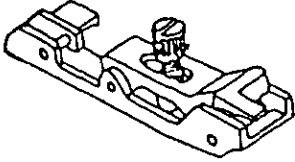
1. Open the looper cover.
2. Apply 2-3 drops of fine quality sewing machine oil to the parts as indicated.
3. It is recommended to apply oil once a week in normal use, once in ten hours in continuous use.

# Trouble Shooting

Before calling for service, check the information below.

Problem	Cause	Correction	Reference Page
Thread Breaks	1. Needle inserted incorrectly	-Reset needle	-18
	2. Used wrong needle	-Use correct needle	-18
	3. Needle is bent or blunt	-Insert new needle	-18
	4. Thread tensions are too tight	-Loosen thread tensions	-15
	5. Wrong threading	-Rethread	-7-10
Needle Breaks	1. Pulling fabric while sewing	-Do not pull fabric	--
	2. Needle inserted incorrectly	-Reset needle	-18
Machines Skips Stitches	1. Needle inserted incorrectly	-Reset needle	-18
	2. Needle is bent or blunt	-Insert new needle	-18
	3. Used wrong needle	-Use correct needle	-18
	4. Wrong threading	-Rethread	-7-13
Fabric Puckers	1. Stitch length not suitable for fabric	-Readjust stitch length	-17
	2. Thread tensions are too tight	-Loosen thread tensions	-15
	3. Seam width not suitable for fabric	-Readjust seam width	-17
Machine Runs Heavily	1. Dirt or lint in stitching mechanism	-Clean the machine	-19
Machine will Not Sew	1. Cord not plugged into electrical outlet	-Check plug	-5
	2. Light and power switch not on	-Turn on the switch	-5
Loose Stitches or Loops Formed	1. Tensions not adjusted properly	-Check thread tensions	-15

**Optional accessories**

	<p>Blind hem stitch foot</p>
	<p>Elasticator foot</p>

Optional accessories are available from your dealer.