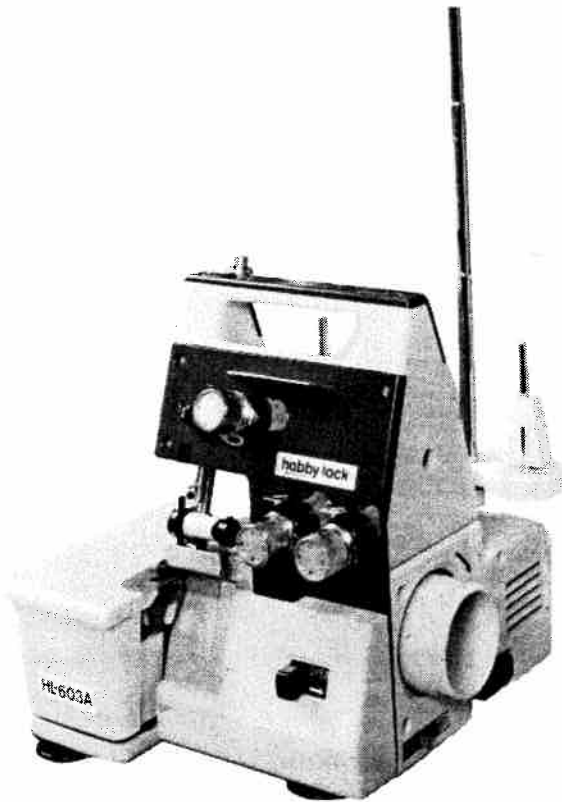


# hobby lock

MADE FOR PFAFF

## OPERATING INSTRUCTION

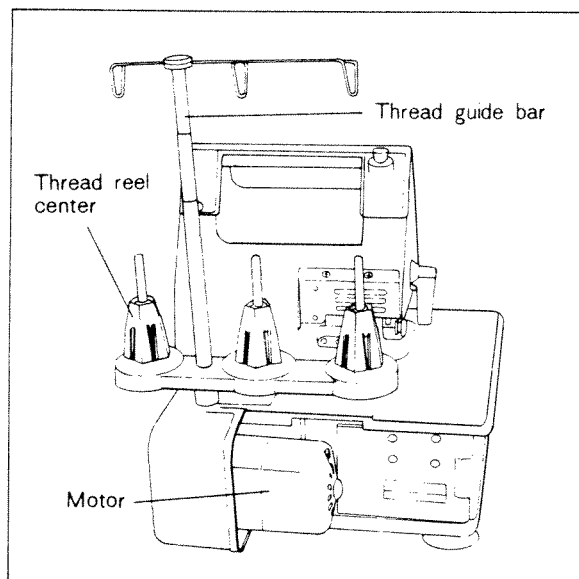
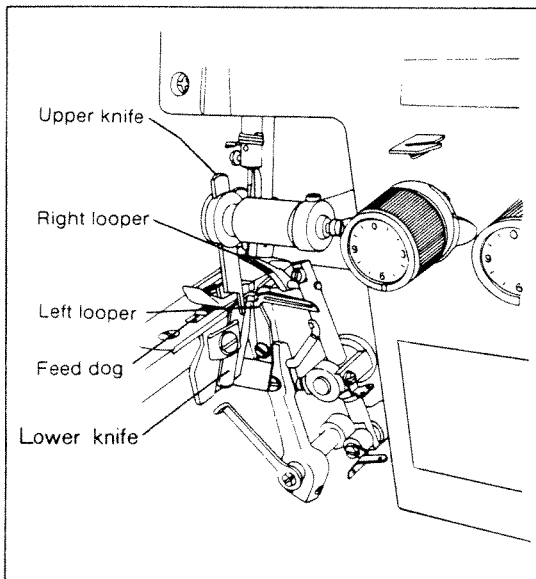
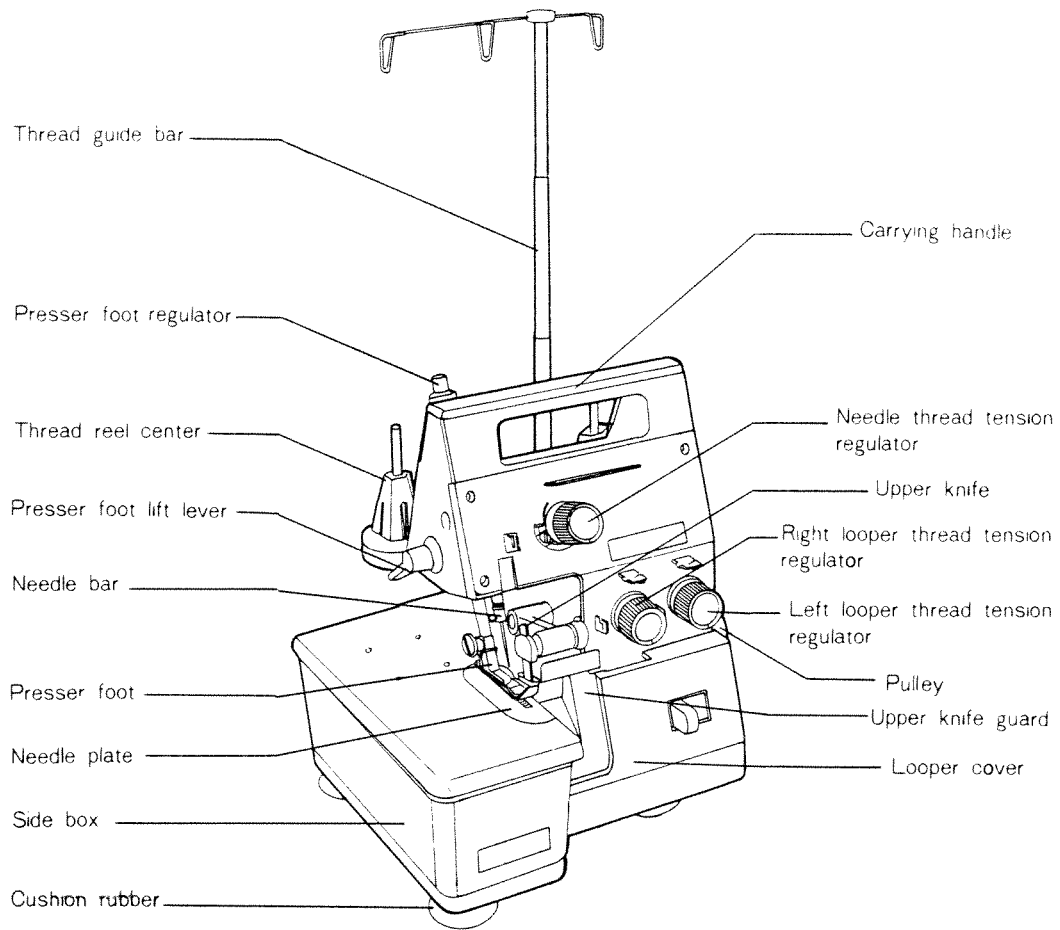


**HL-603A**

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# 1. Parts name



## 2. Preparation and running the machine

### 1. Preparation

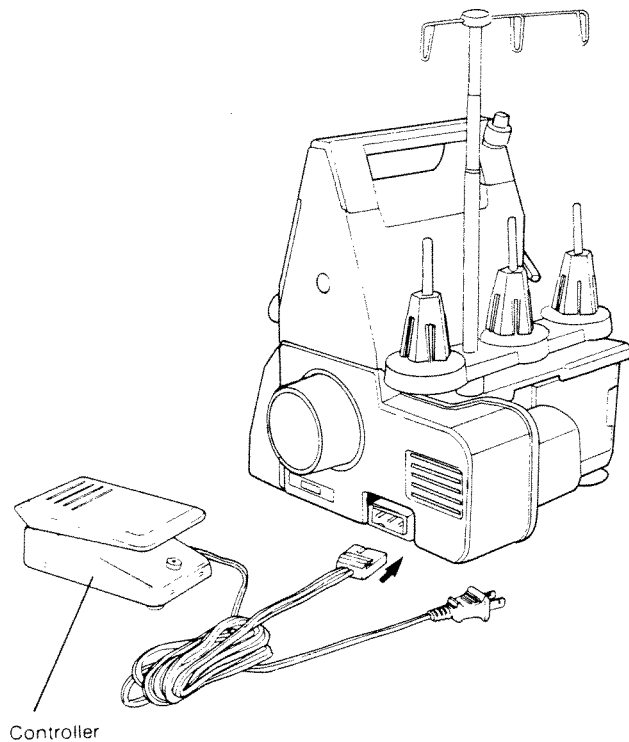
This machine must only be used on a perfectly flat and horizontal surface or purpose-built sewing machine table.

### 2. Fitting the motor controller

First, insert the controller connector into the connector socket on the side of the machine as shown in the illustration, then connect the plug to a power source.

Disconnect the machine from the power source when it is not in use.

Do not place objects on top of the controller pedal.



### 3. Running the machine

Place the tip of your foot lightly on the pedal. When you press down gently, the machine will begin to run at low speed. As you press more heavily the machine will run faster. To stop the machine, lift your foot from the pedal.

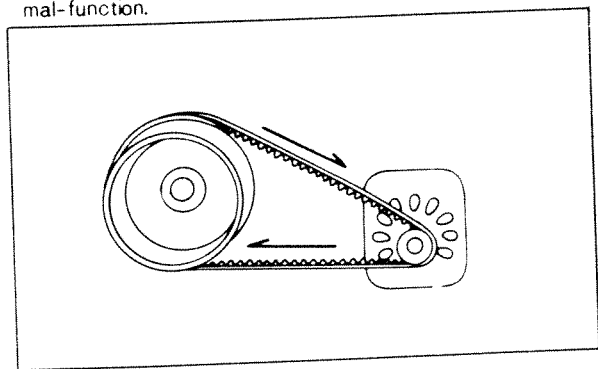
## 3. Notes on the motor

1. The normal running speed of the machine is 1300spm. The motor runs in the opposite direction to motors usually found on domestic sewing machines, so please take care. The direction of rotation seen from the pulley side of the machine is shown in the illustration.

2. If the machine is used continuously for long periods of time, the motor or controller may become slightly hot, however, this will not interfere with the machines performance at all.

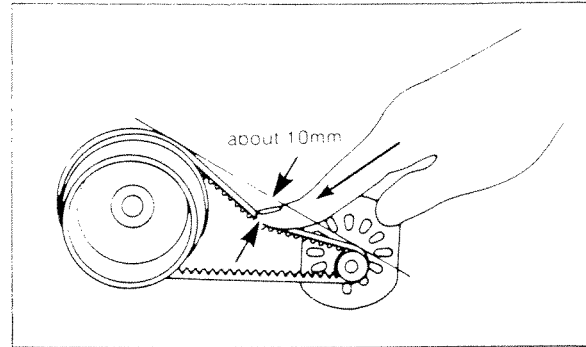
3. Small sparks are emitted from the motor housing during operation. This is normal and

is a result of the rectifying action of the motor. The sparks do not indicate a breakdown or mal-function.



## 4. Drive belt tension

Check that the belt tension is correct. The belt should be adjusted so that when the center is pressed with the forefinger, it flexes about 10mm.

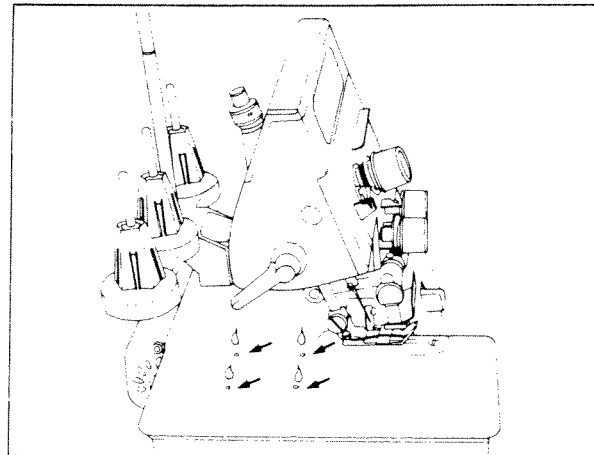
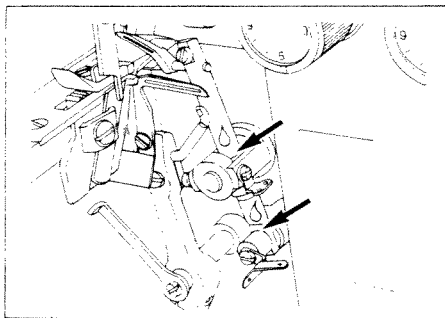


## 5. Lubrication

Get into the habit of always lightly oiling the points indicated before using the machine.

The bushings and other important moving parts contain special materials, so it is only necessary to oil these 1 - 2 times a month.

When oiling the machine apply only one or two drops of good quality sewing machine oil each time.



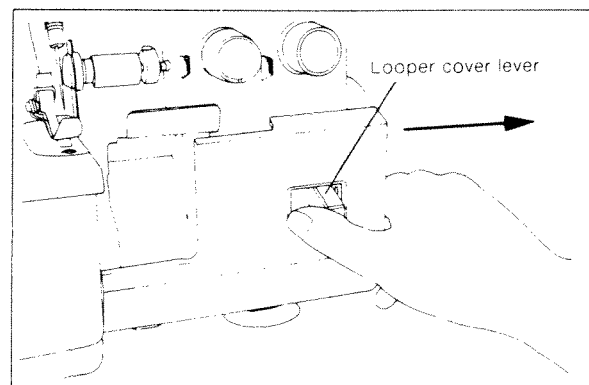
## 6. Opening and closing the looper cover

### To open

Slide the looper cover lever in the direction of the arrow and swing it out towards you.

### To close

Push the cover lightly towards the machine and it will snap shut.



## 7. Operating the machine

### I. Precautions When Threading

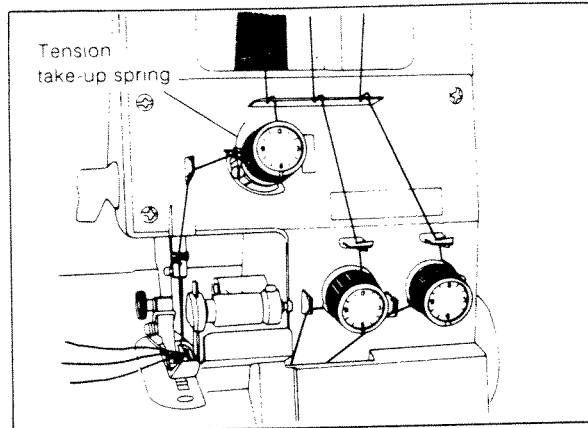
If the machine is mis-threaded it is impossible to obtain a well formed seam.

Refer to the threading diagram and thread the machine correctly.

Always thread the looper threads first.

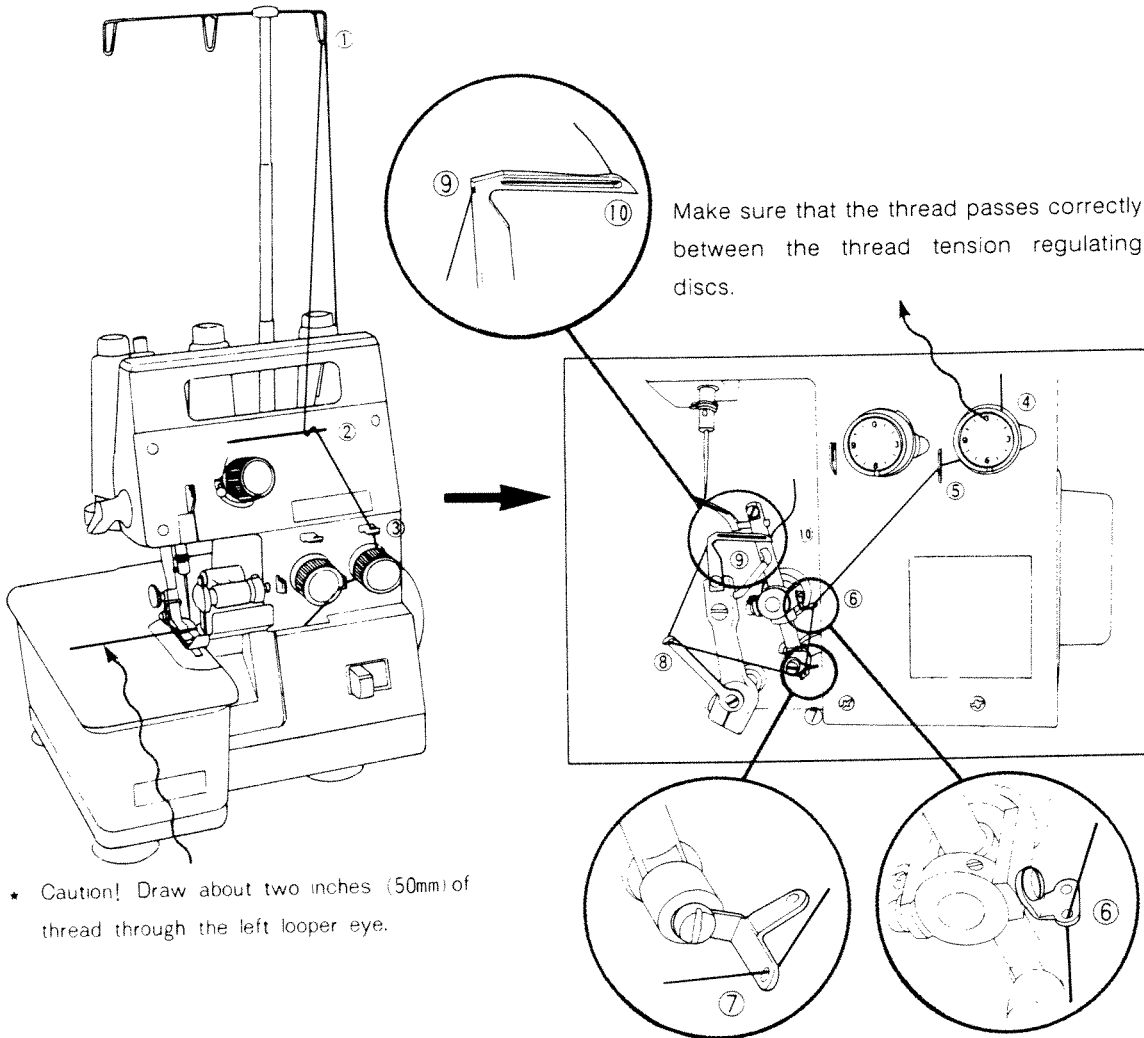
Make sure that the thread passes correctly between the thread tension regulating discs.

Use tweezers to make threading easier.

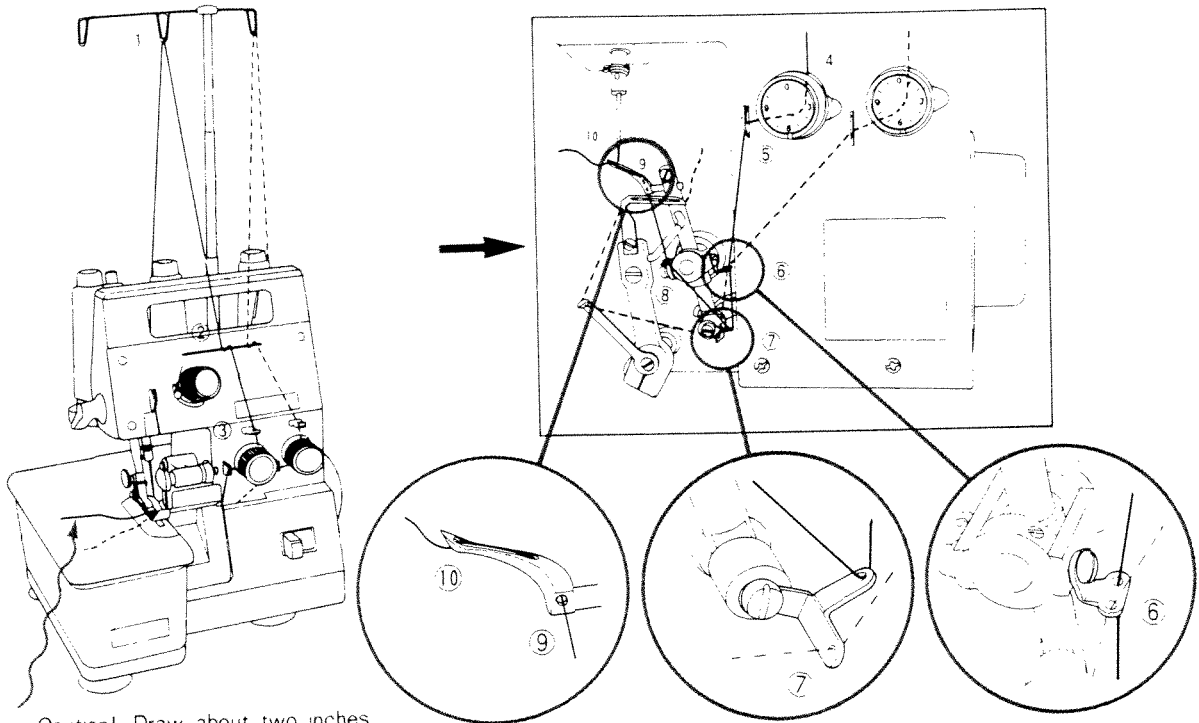


### Threading procedure

- 1 Thread left looper first.

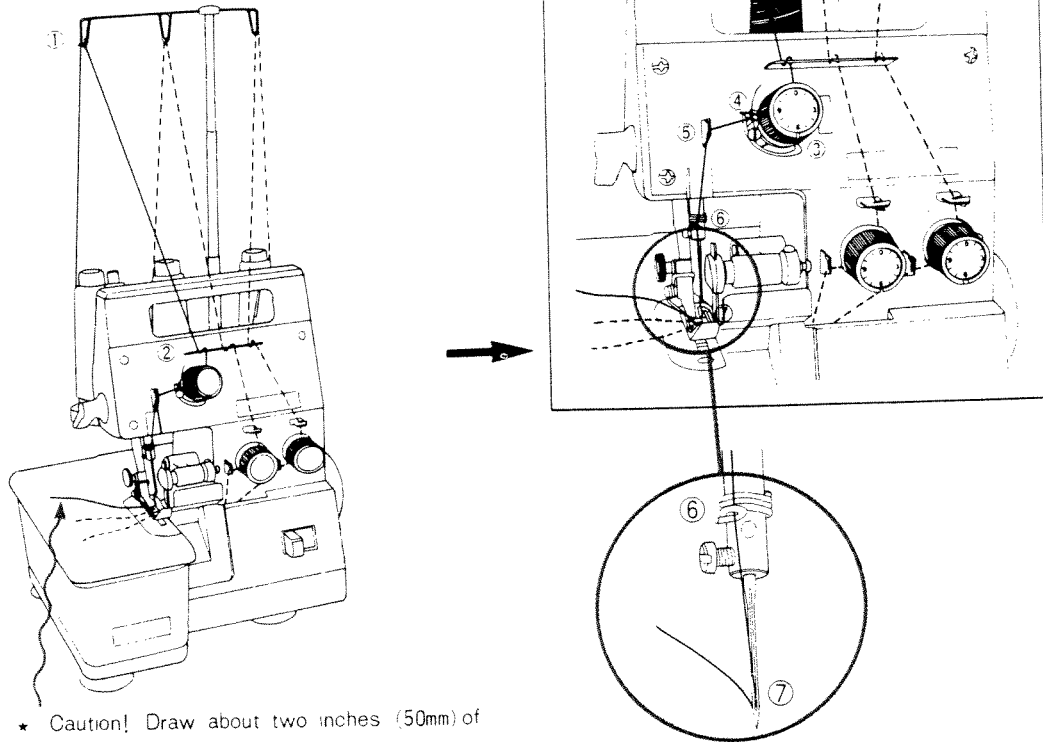


2 Thread right looper second.



★ Caution! Draw about two inches (50mm) of thread through the right looper eye.

3 Thread needle last.



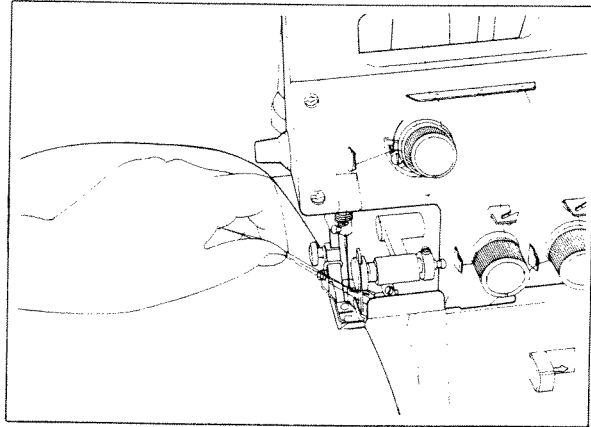
★ Caution! Draw about two inches (50mm) of thread through the needle eye.

## 8. Test sewing

After completing threading, be sure to make a sewing test before actual operation of the machine.

1. Insert the test material fully under the presser foot.
2. Hold the 3 threads in your left hand and with your right hand turn the pulley smoothly in the direction of the arrow (clockwise) for 2 or 3 turns.

Check that the threads have interlocked correctly and then start to sew slowly.



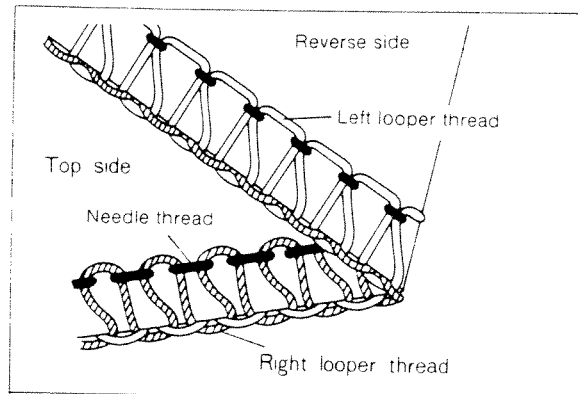
## 9. Regulating thread tension

The correct thread tension varies depending on the type of cloth and the type and thickness of thread. The correct setting should always be obtained by examining the seam and making the appropriate adjustments.

### 1. Correct thread tension

Sketch shows a proper stitch formation.

Proper stitch formation

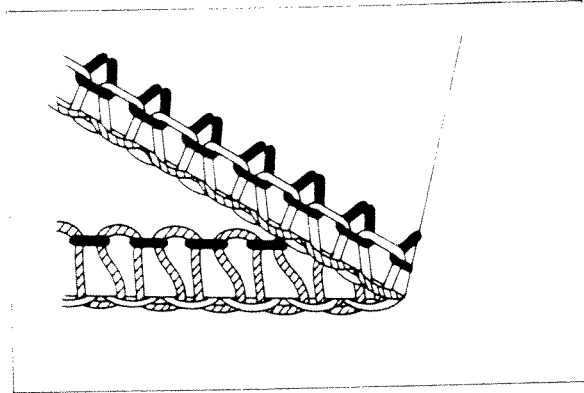




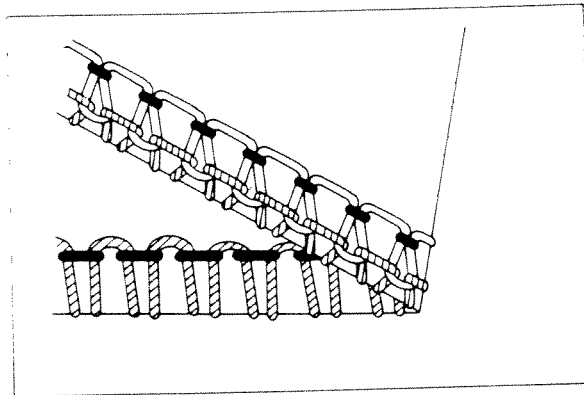
## 2. Adjusting thread tension

Thread tension is adjusted by means of the 3 thread tension regulators. Turning the thread tension regulator dials clockwise increases thread tension while turning them counterclockwise reduces the tension. The greater the figure shown on the front of the dial, the greater the thread tension.

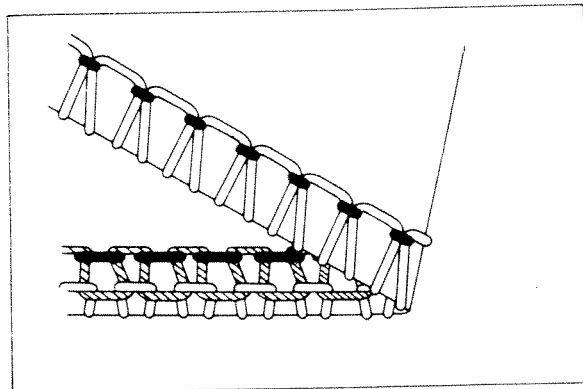
① The sketch shows the needle thread tension is too loose, or right and left looper thread tensions are too tight. Increase the needle thread tension, or decrease the right and left looper thread tensions.



② The sketch shows the right looper thread tension is too loose, or the left looper thread tension is too tight. Increase the right looper thread tension, or decrease the left looper thread tension.



③ The sketch shows the left looper thread tension is too loose, or the right looper thread tension is too tight. Increase the left looper thread tension, or decrease the right looper thread tension.

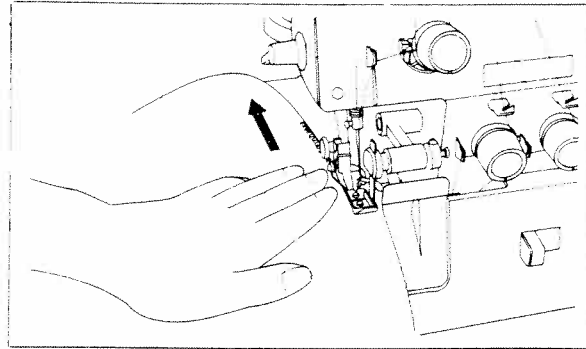


## 10. Main points when sewing

※ Always insert the cloth fully under the presser foot at the start of sewing. This applies both when the machine is first threaded and when it is re-threaded after thread breakages

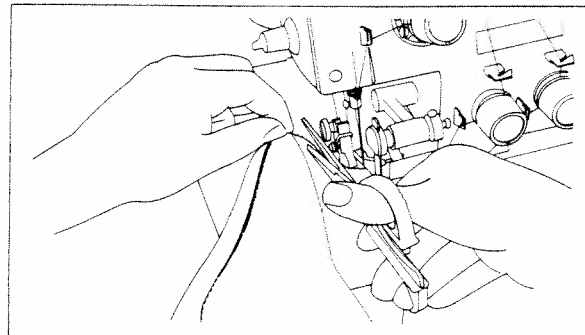
※ Run the machine slowly for the first few stitches.

※ Use your hand only to guide cloth. Do not pull it forwards or tug it. The cloth is fed automatically so this is not necessary.



### 1. Removing the sewn article

When you have sewn to the end of the seam run the machine slowly and sew off about 5cm of thread chain. Then cut the thread chain near the fabric so that there is about 3cm of thread chain is left.

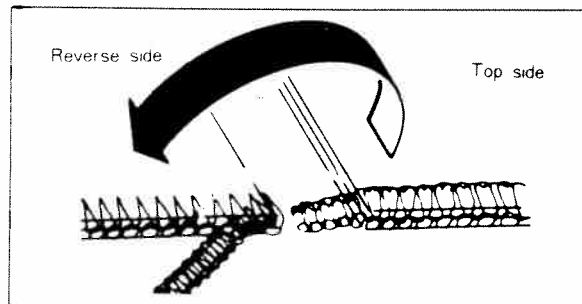


### 2. At the end of the seam

Tie the end of the thread chain. In the case of knit fabrics use a latch needle to pull the thread chain into the seam.

### 3. Prevention of seam unravelling

At the end of the seam run off a 5cm thread chain and then, without cutting the chain, turn the fabric over and sew back along the seam a little way. (see illustration)

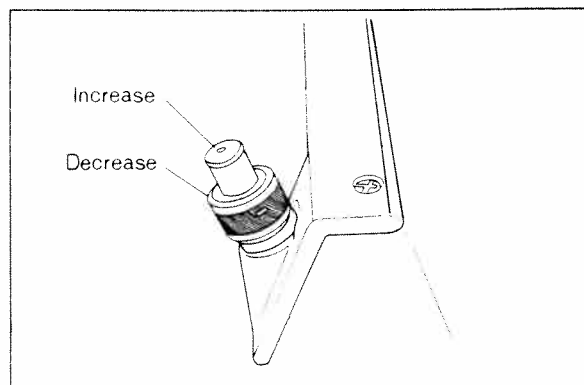


## 11. Regulating presser foot pressure

The presser foot pressure on this machine is set for medium weight fabrics. The presser foot pressure only needs to be adjusted when sewing extra light or extra heavy weight fabrics. Decrease the pressure for light weight fabrics and increase it for heavy weight fabrics.

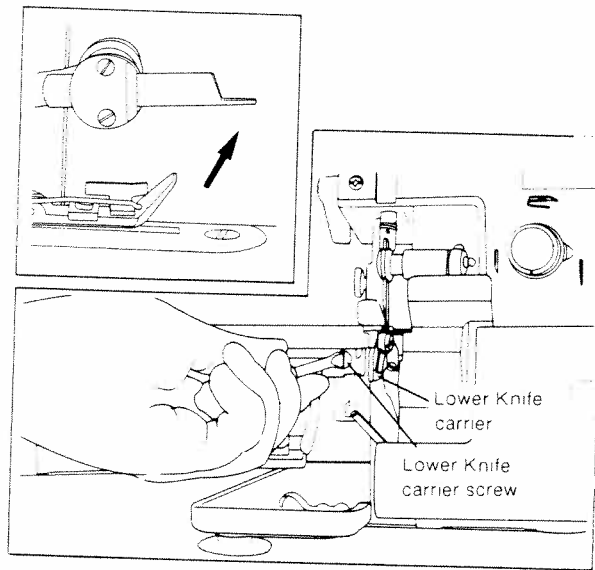
To increase the presser foot pressure, push the center button. Conversely, if you want to decrease pressure, press the outer rim.

The center button will automatically return to its original position and the presser foot pressure can be decreased.



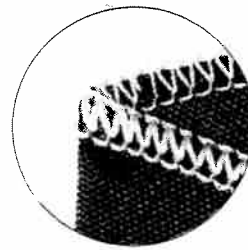
## 12. Adjusting the seam width

1. When the upper knife is at its highest position, push the upper knife carrier to the right and turn it counterclockwise as shown in the sketch.
2. Loosen the lower knife carrier set screw (as shown in the sketch) after opening the side box. Then, adjust the seam width by moving the lower knife carrier right or left.
3. To narrow the seam width, slide the lower knife carrier to the left, and to widen the seam width, slide it to the right.
4. Fasten the lower knife carrier set screw as shown in the sketch, and restore the upper knife to the normal position.



### For narrow (1.5mm) seams.

By changing needle plate (as shown on page 14) you can sew a narrow seam.



Narrow

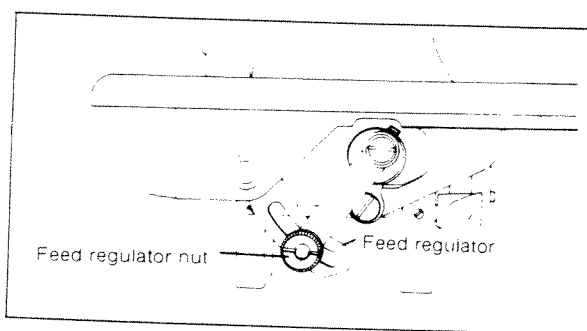
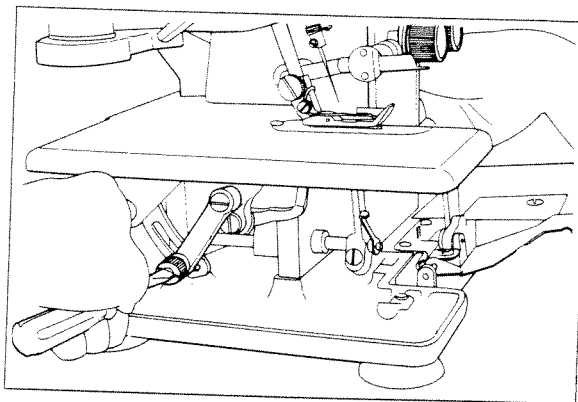
## 13. Adjusting stitch length

∴ To change the stitch length, open the side box and,

1. Hold the pulley firmly with your right hand to prevent it from moving and loosen the feed regulator nut with the screwdriver.

2. Align the feed regulator nut and the number on the feed regulator. To make the stitch length longer move the nut to a higher number. To make the stitch length shorter select a smaller number.

3. After making the adjustments, tighten the feed regulator nut and close the side box.



## 14. Replacing needle

∴DCX1 needles are recommended for this machine. These are suitable for most types of sewing.

∴Although the correct needle size depends on the type of fabric and thickness of thread which you are using, #11 (75) needles are the recommendable size.

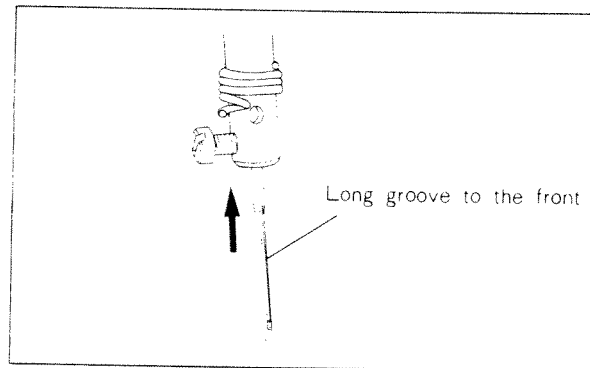
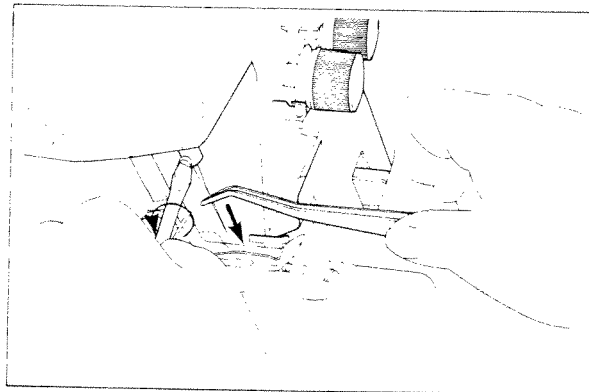
Depending on your sewing conditions, however, any of the needles #9 ~16 (65~100) may be used.

### 1. Removing needle

Turn the pulley clockwise (in the direction of the arrow) by hand and move the needle to its highest position. Using a screw driver, loosen the needle clamp screw and pull the needle out using tweezers.

### 2. Fitting needle

Turn the pulley and move the needle bar to its highest position. Push the shank of the needle fully into the needle holder, make sure that the long groove faces forwards, and then tighten the needle holder screw firmly.



## 15. Replacing the knives

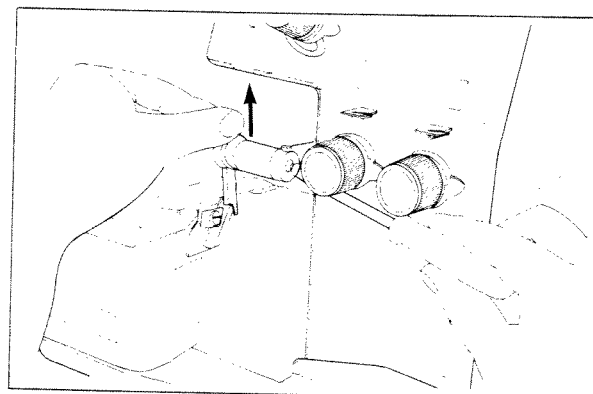
∴If the knives become blunt replace them as follows.

∴Always disconnect the machine from the power source before replacing the knives.

### 1. Replacing the upper knife

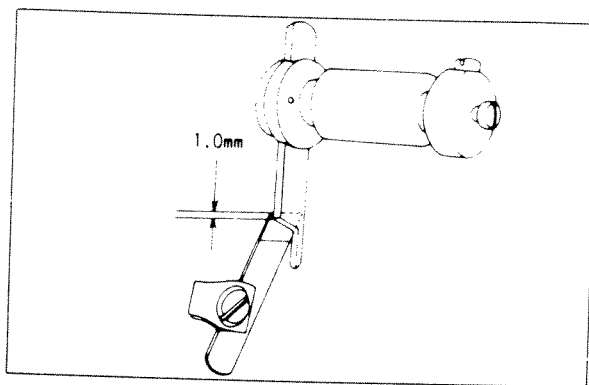
#### \*Removing knife

Loosen the upper knife guide screw and remove the knife upward.



**\*Replacing knife**

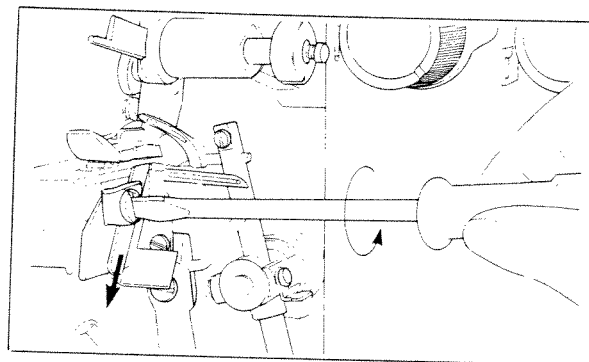
Push the upper knife holder to the right and insert the knife into it from above. Making sure that the cutting edge faces to the left, tighten it lightly. Next, turn the pulley, move the knife to its lowest position and adjust the upper knife so that the overlap between the front of the upper knife and the lower knife is 1.0 mm. Tighten the upper knife guide screw securely.



## 2. Replacing the lower knife

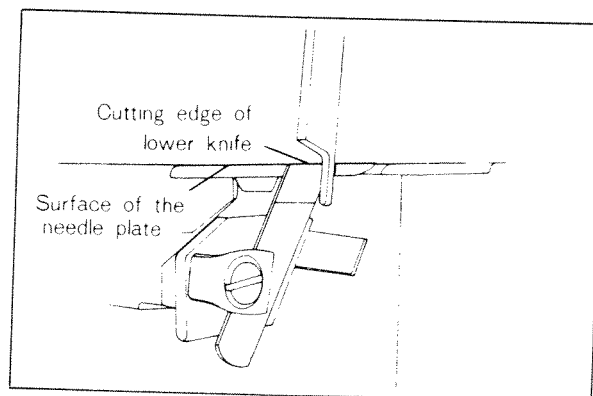
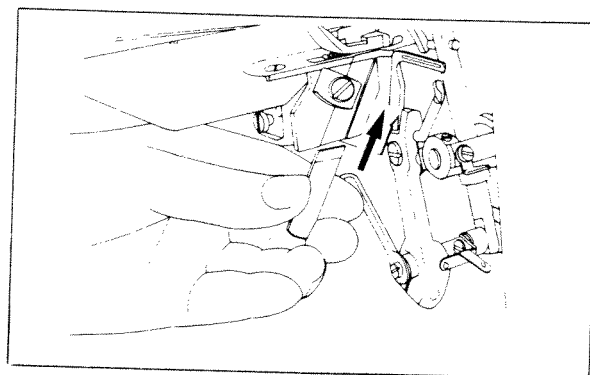
**\*Removing knife**

Loosen the lower knife clamp screw and remove the lower knife downward.



**\*Replacing knife**

1. Insert the lower knife into the holder from below with the cutting edge facing to the right.
2. Next, line up the blade of the lower knife with the surface of the needle plate and tighten the clamp screw securely so that the knife does not move.



## 16. Causes of poor sewing and their solutions

This machine has been designed to be as easy to use as possible. There is no need for difficult adjustments. Breakdowns similar to the ones below occur because of simple adjustment errors. They can be cured simply by making the correct adjustments as described below.

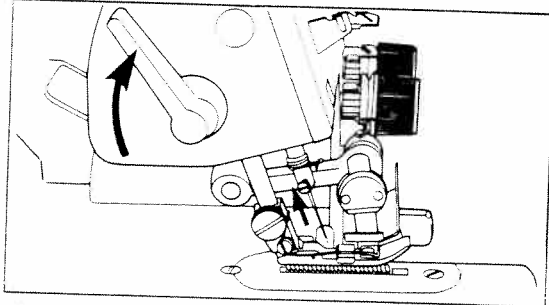
PROBLEM	CAUSE	ADJUSTMENT
Cloth does not feed	Presser foot pressure is too weak	Press in the control button in the center of the presser foot regulating button to increase the presser foot pressure(see p.8)
Needle breaks	The needle is bent or the needle point is damaged. Needle is fitted incorrectly Cloth has been pulled excessively	Replace needle for a new one (see p.11)  Fit needles correctly (see p.11) Avoid pushing or pulling the fabric excessively during sewing.
Thread breaks	The machine has been threaded incorrectly. Thread has become tangled or caught. Tension is too tight. Needles fitted incorrectly. Wrong needle has been used.	Re-thread correctly (see p.4)  Check that the thread has not become tangled on the thread stand. See p. 6 See p. 11. Always use DC x 1 needles.
Skip stitching occurs	The needle is bent or the needle point damaged. Needles are not fitted perfectly. The wrong needle is being used. Threading is incorrect. Presser foot pressure is too weak.  Incorrect threads are being used.	Replace needles (see p.11)  Re-fit needles correctly. (see p.11) Always use DC x 1 needles. Re-thread correctly. Push the center of the presser foot regulating button and increase the presser foot pressure.(see p.8) Use correct threads and needle size.
Poor seam formation	Thread tension incorrect.	See p. 6
Fabric puckering occurs	Thread tension is too strong.  Threading is incorrect. Thread has become tangled.	Reduce the thread tension as much as possible when sewing lightweight fabrics. Re-thread correctly. (see p.4)

## 17. Fold-over hemming

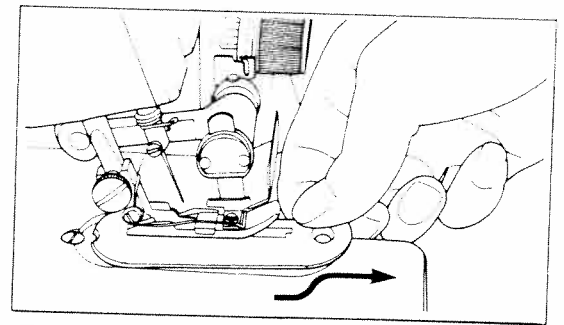
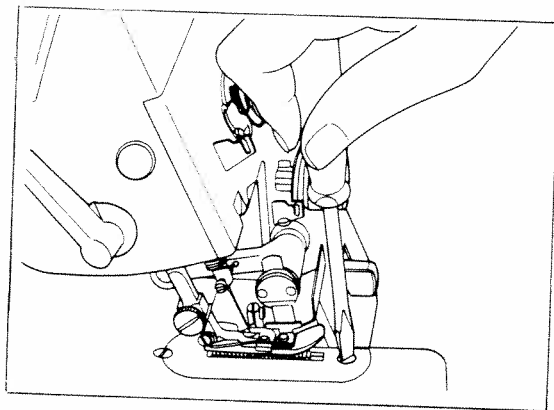
Fold-over hemming can be obtained on fine fabrics by exchanging the needle plate as shown.

1. Exchange the needle plate for (B).

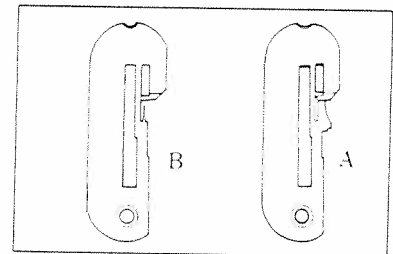
### Procedure



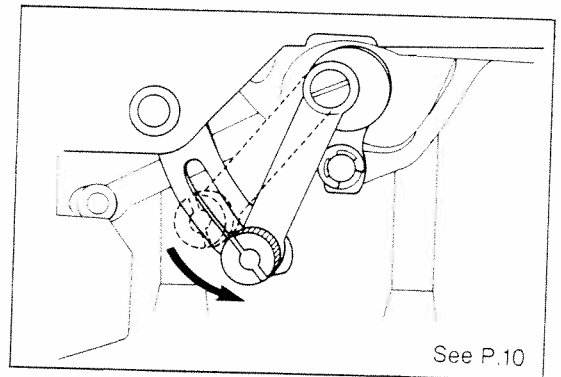
- 1 Lift the presser foot by the presser foot lift lever.
- 2 Turn the pulley to move the needle to its highest position.
- 3 Loosen the needle plate screw on this side with the screw driver.



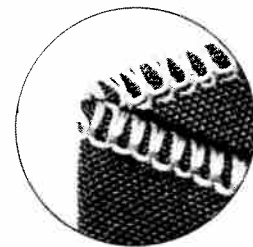
- 4 Lift the needle plate and pull it to forward.
  - 5 Fit the needle plate (B) for fold-over hemming and fasten its screw firmly.
- \* Normal sewing.....A
  - \* Fold-over hemming.....B (Included)



2. Set the feed regulator nut on the feed regulator to No.1.



See P.10

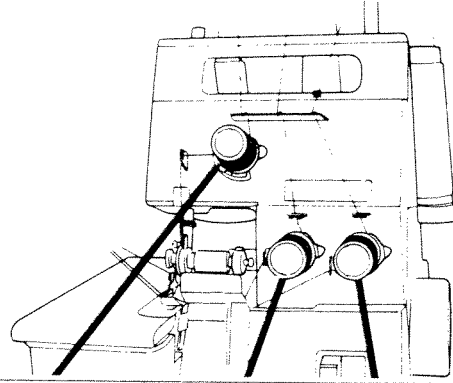


Fold-over hemming



# 18. How to match the thread tension regulator dials

\*Set the proper thread tensions with the aid of the following chart.



## 1. Normal sewing

Materials	Needle	Thread		Dial for Needle thread	Dial for right looper	Dial for left looper	Needle	Needle plate
		Right looper	Left looper					
Broad cloth (Poplin)	Cotton, Synthetic Polyester # 80	Cotton, Synthetic Polyester # 80	Cotton, Synthetic Polyester # 80				# 11 (75)	
Denim	Cotton, Synthetic Polyester # 80	Cotton, Synthetic Polyester # 80	Cotton, Synthetic Polyester # 80				# 14 (90)	A
Suit lining	Cotton, Synthetic Polyester # 80	Cotton, Synthetic Polyester # 80	Cotton, Synthetic Polyester # 80				# 11 (75)	

## 2. Narrow sewing

Georgette	Polyester # 80	Polyester # 80	Polyester # 80				# 9 (65)	B
Tricot	Polyester # 80	Polyester # 80	Polyester # 80				# 9 (65) # 11 (75)	

## 3. Fold-over hemming

Georgette	Polyester # 80	Wooly nylon	Wooly nylon				# 9 (65)	B
Suit lining	Polyester # 80	Wooly nylon	Wooly nylon				# 9 (65) # 11 (75)	

## 19. The relation chart of materials and threads

	Material	Thread	Stitch length	Needle
Normal sewing	<b>Light weight materials</b> Organdie, Fine tricots, taffeta, Silk, suit lining	Cotton # 80 - 100 Synthetic # 80 - 100 Silk # 80	3.0mm - 4.0mm	# 9 - 11 (65~75)
	<b>Medium weight materials</b> Cotton, Tricot, Linen, General dress materials	Cotton # 60 - 100 Synthetic # 60 - 80 Silk # 50 - 100	3.0mm - 4.0mm	# 11 (75)
	<b>Heavy weight materials</b> Tweed, Coat cloth, Denim, Heavy weight cloth	Cotton # 40 - 60 Silk # 40 - 60 Polyester # 30 - 60	3.0mm - 4.0mm	# 14 (90)
	<b>Knit fabrics</b> Knit fabrics	Polyester # 50 - 80 Synthetic # 60 - 80 Wooly nylon	2.0mm - 4.0mm	# 11-14 (75~90)
Fold-over hemming	Georgette Tricots Suit lining	Polyester # 80 - 100 Wooly nylon	1.0mm - 1.5mm	# 9 - 11 (65~75)

## 20. Specifications

Maximum speed	1300s.p.m.
Overlock seam width	3.5mm (standard), 1.5mm (Fold-over hemming)
Stitch length	1.0mm - 4.0mm
Presser foot	Hinged
Presser foot lift	Up to 4.0mm
Needle	Type DC x I, size # 11 (75) standard, # 9 (65) - # 16 (100) also available
Number of threads	3
Oiling	Manual
Dimensions	263mm x 263mm x 275mm
Net weight	8 kg (complete set with motor)

## 21. Packing details

1. Machine (with motor)	1 set
2. Controller	1 set
3. Operating instruction	1 pc.
4. Accessories	1 set

## 22. Accessories

needle

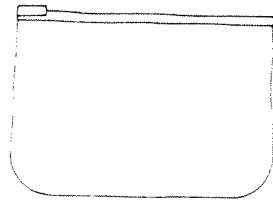
9-11  
~75)

#11  
75)

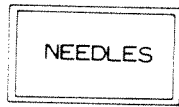
#14  
90)

1-14  
~90)

-11  
~75)



Accessories case

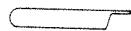


Needle Type DC - I.

size #11 (75) 3 p c s  
#14 (90) 2 p c s



Oiler (Contained with 50cc.)



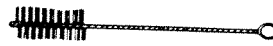
Upper knife



Screw driver



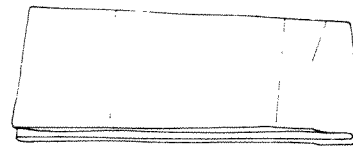
Tweezers



Brush for dusting



Needle plate (B)



Machine head cover