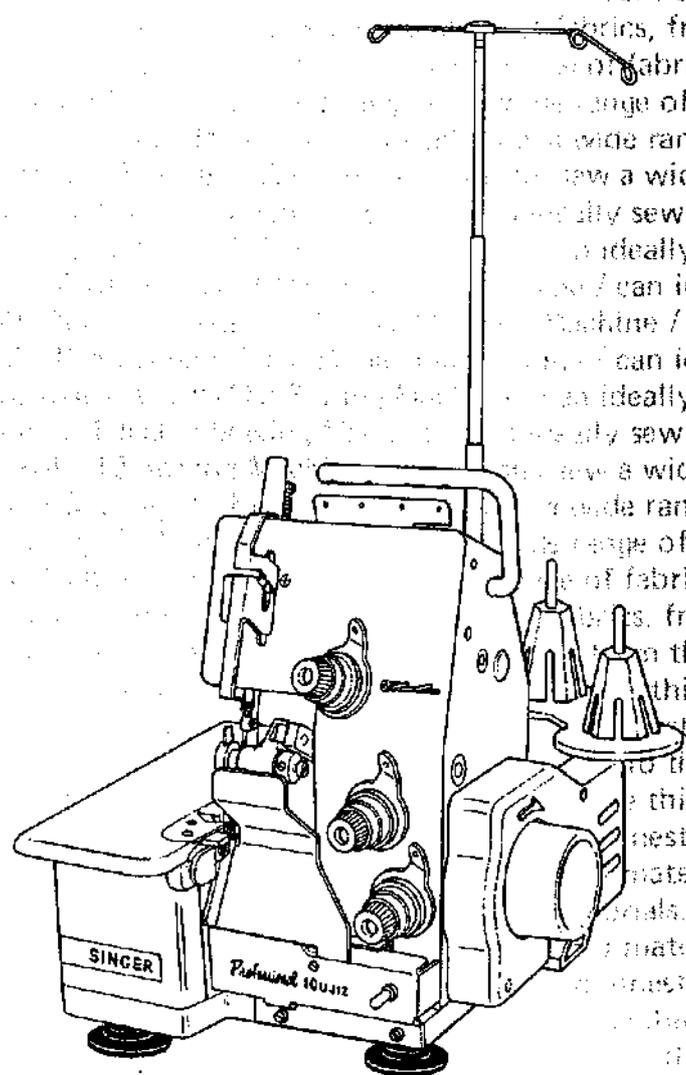
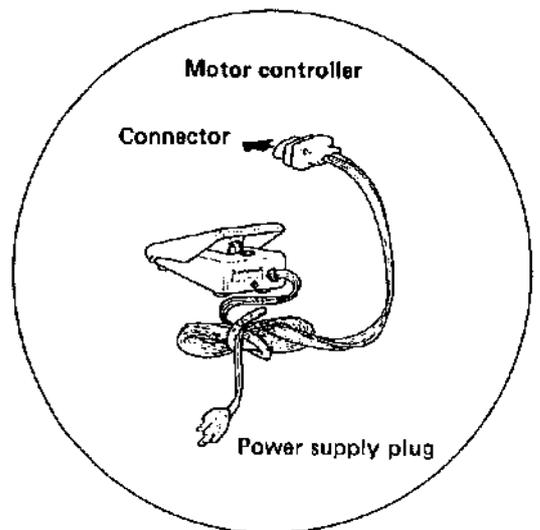
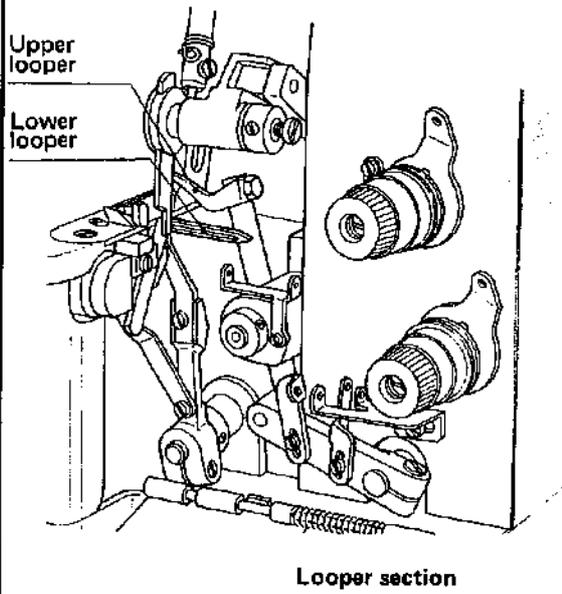
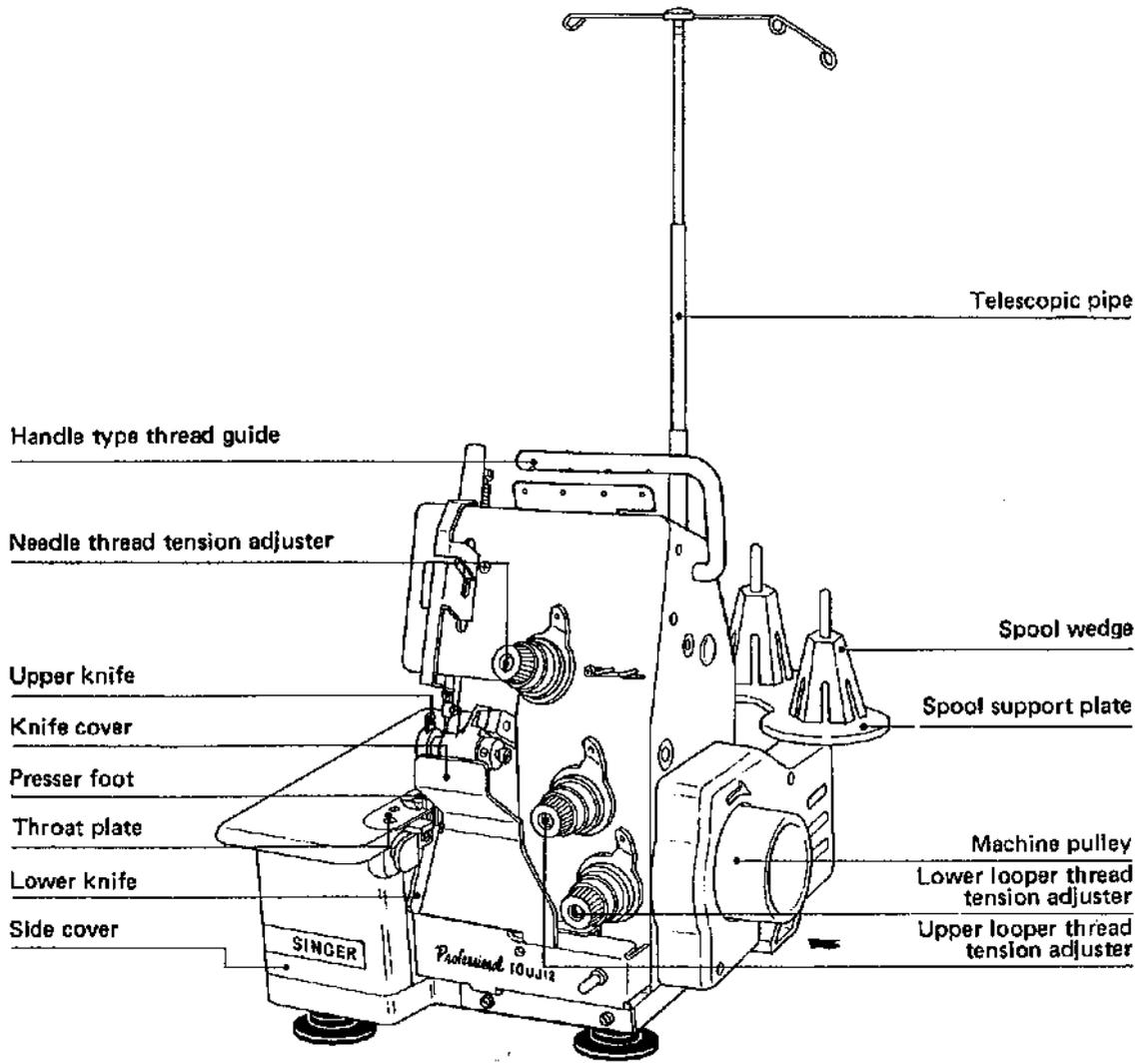


Professional 10UJ12



SINGER*



* Don't put anything on the controller. Keep plug off after using.

PREFACE

This machine can ideally sew a wide range of fabrics, from the thickest to the thinnest materials.

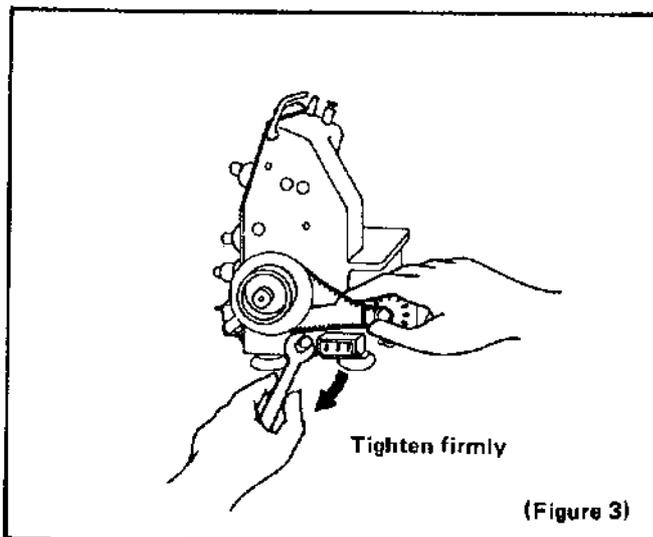
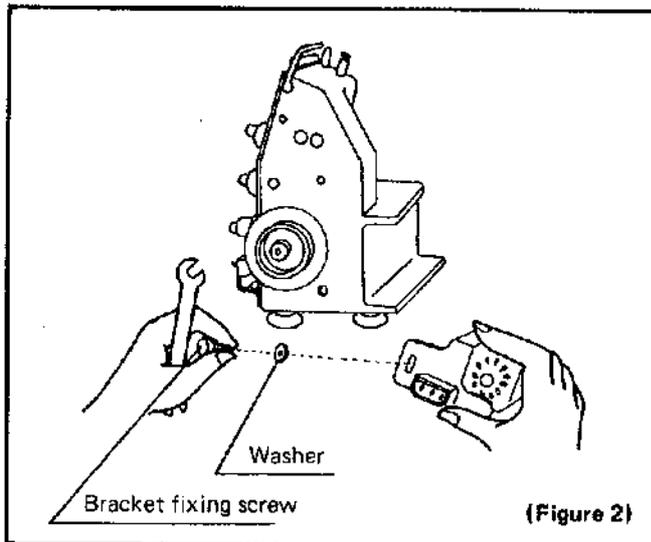
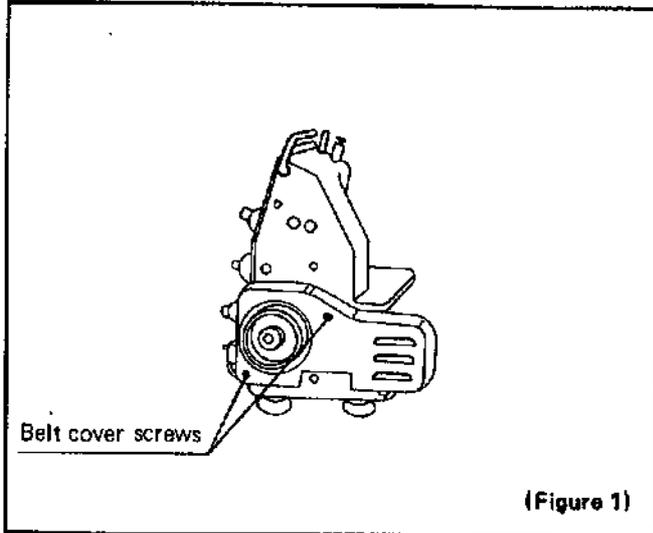
This instruction booklet will be your guide to correct operation of Professional 10UJ12. Read this booklet carefully and you will be the real master of your new machine.

CONTENTS

1. Preparation for sewing	1
1-1 Fitting of motor	1
1-2 Prior to threading	2
1-3 How to run thread	3
1-4 Checking blank starting stitches	5
1-5 How to use controller	5
1-6 Changing threads	6
2. Thread tension adjustment	7
3. Presser foot adjustment	8
4. How to replace needle	8
5. Stitch length adjustment	9
6. Bight width adjustment	10
7. Auxiliary presser foot adjustment	11
8. Replacing knives	12
8-1 How to replace the lower knife	12
8-2 How to replace the upper knife	12
9. Lubrication	13
10. For setting sewing machine light	13
11. Checking and adjustment	14
12. Replacing carbon brush of motor	14
13. Packing list	15
14. Specifications	15
15. Application reference for cloth, thread, and needles	16

1

PREPARATION FOR SEWING



Prior to using this sewing machine, set it correctly in the sequence listed below.

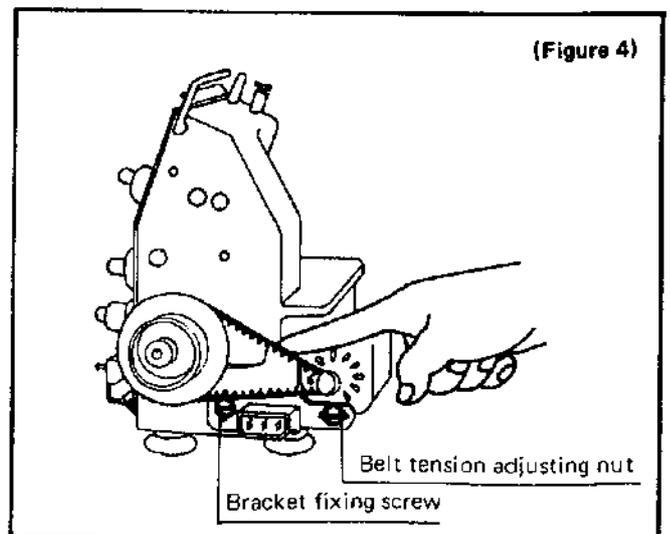
1-1 Fitting of motor

Mount the motor correctly onto the machine body as follows:

- Remove the belt cover by loosening both belt cover screws (Figure 1).
- Mount the motor onto the machine body by tightening the bracket fixing screw while setting the V-belt in place at the same time, as shown in Figure 3. (The bracket fixing screw, washer and V-belt are enclosed together in the carton).

Belt tension will be most suitable when the V-belt bends slightly under finger pressure (see Figure 4). Make belt tension adjustments by shifting the position of the belt tension adjusting nut accordingly (Figure 4).

- Re-attach the belt cover.



1-2 Prior to threading

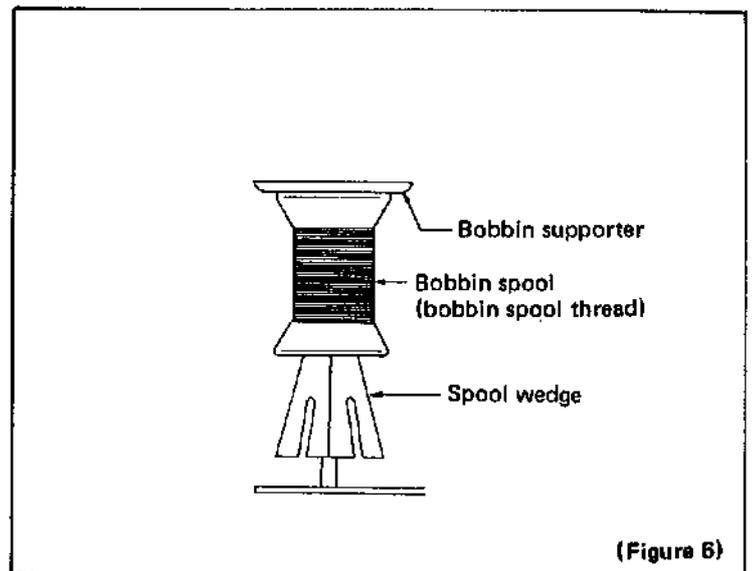
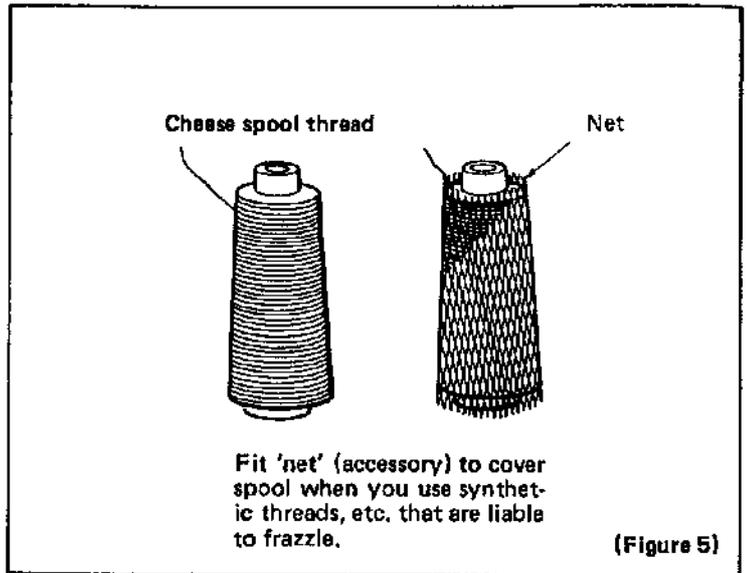
(1) Setting of telescopic pipe

Extend telescopic pipe to its uppermost position and set it by means of the positioning stopper located on the connection between its first and second nodes.

(2) Setting of spool

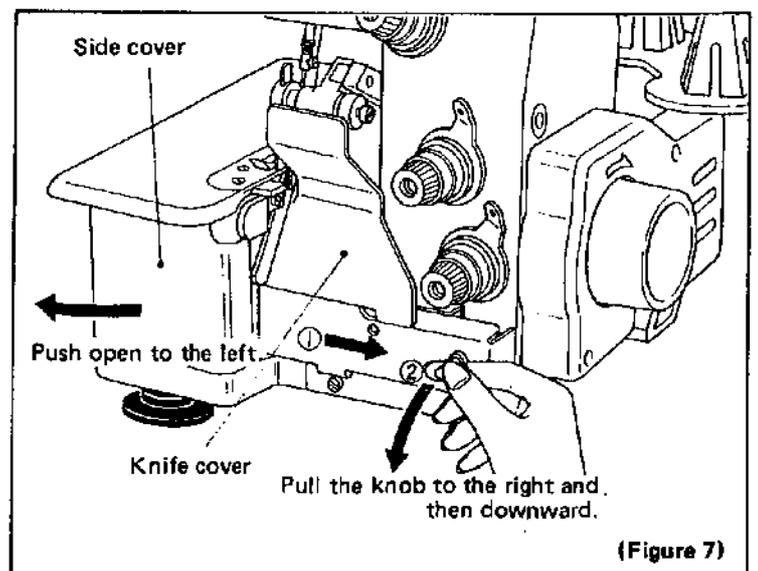
Firmly stand the spool on the spool wedge. Cheese (or cone) spool thread will be usually used for this machine. Bobbin spool thread is also available when held by the *bobbin supporter. At this time, insert the bobbin supporter in the bobbin spool hole so that it may rest on the spool wedge, as shown in Figure 6.

* available separately at order



(3) How to open knife cover and side cover

Pull the knife cover knob to the right and then downward. Push open the side cover to the left as shown in Figure 7.



1-3 How to run thread

If the thread is run wrong, correct sewing will be impossible. So run it right in the sequence listed below.

Open the side cover to the left, and you will find a thread guide chart. This will be helpful in running the thread through the machine parts.

• How to run looper thread

Run the looper thread rightly in the following sequence.

- (1) Open both knife cover and side cover (refer to Figure 7).
- (2) Run the upper looper threads through the numbered machine parts in numerical order. Pull out about 10 cm of the upper looper thread from under the presser foot (refer to Figures 8 and 9).

- (3) Run the lower looper thread through the machine parts, A, B, and C, in the alphabetical order illustrated.

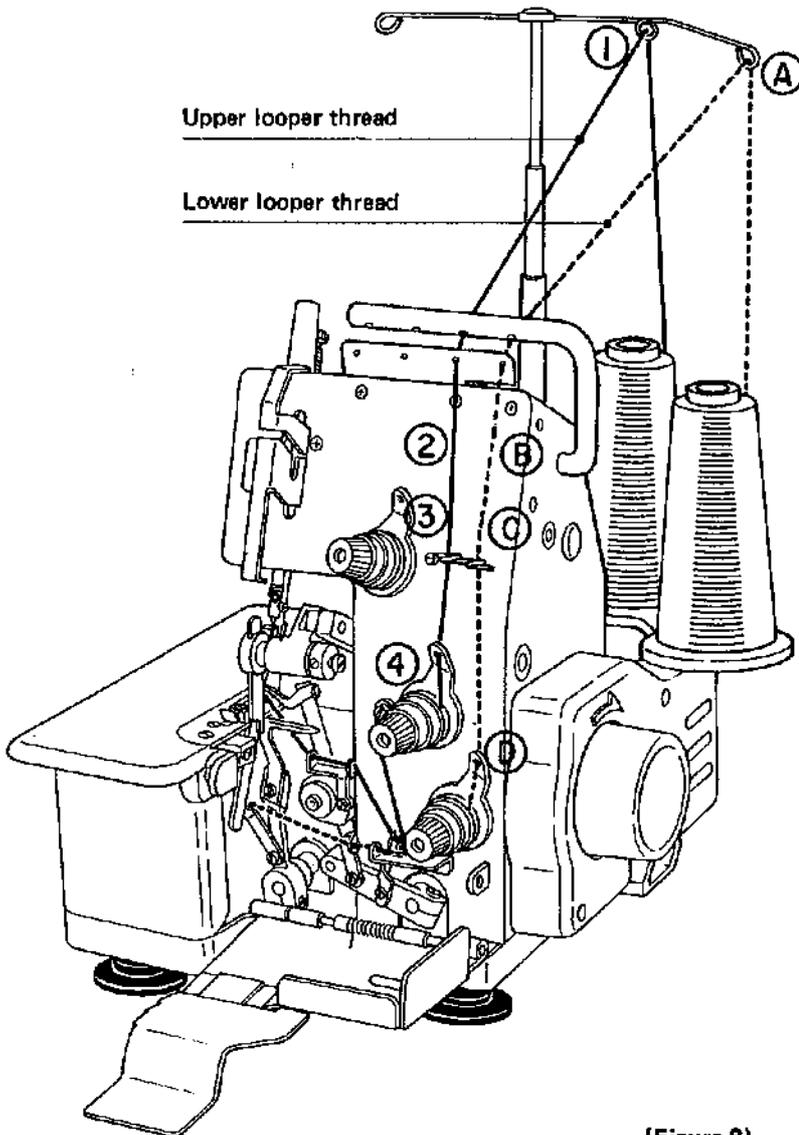
When running the thread through the lower looper, rotate the machine pulley in normal direction and place the lower looper at the extreme left position.

Run the thread through the lower looper thread guide (G) and the lower looper first hole (H).

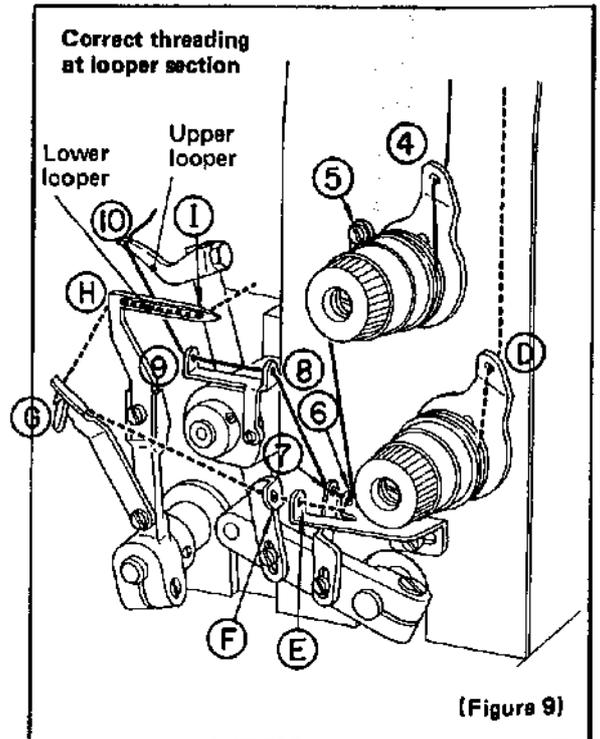
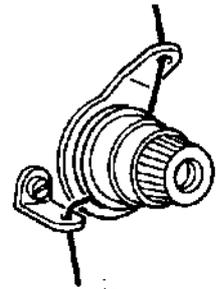
Then place the lower looper at the extreme right position and run the thread through the lower looper second hole (I).

Pull out about 10 cm of the lower looper thread from under the presser foot (refer to Figures 8 and 9).

- (4) Close both knife cover and side cover.



(Figure 8)

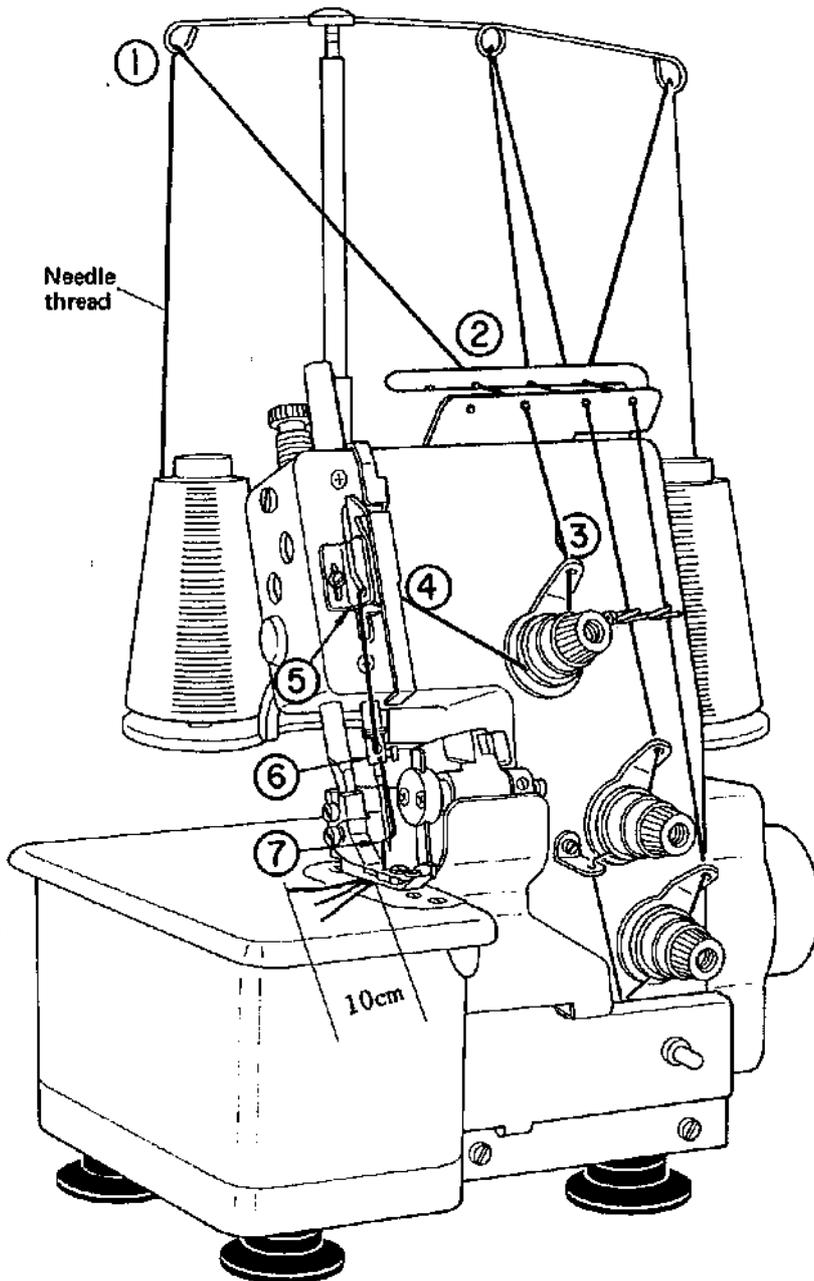
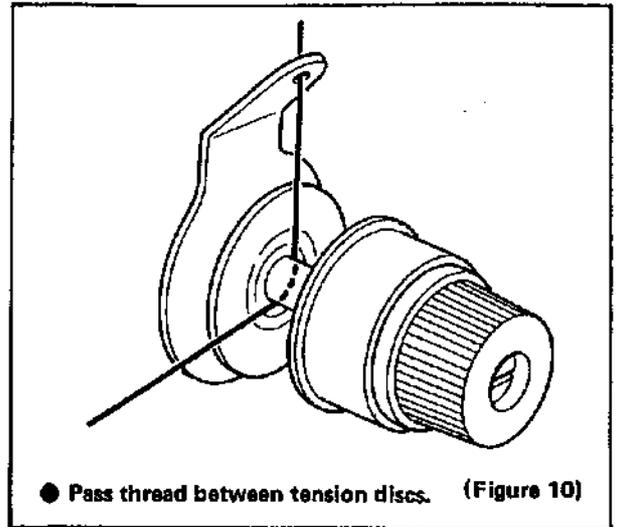


(Figure 9)

● **How to run needle thread**

Run the needle thread through the machine parts in the numerical order illustrated.

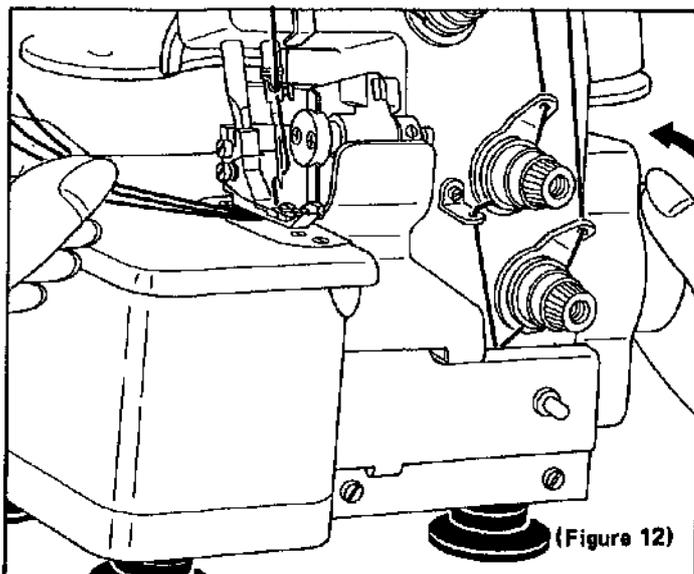
Run the needle thread through the needle eye from this side out into the other side (hollow part) and pull out about 10 cm of it from under the presser foot (refer to Figures 10 and 11).



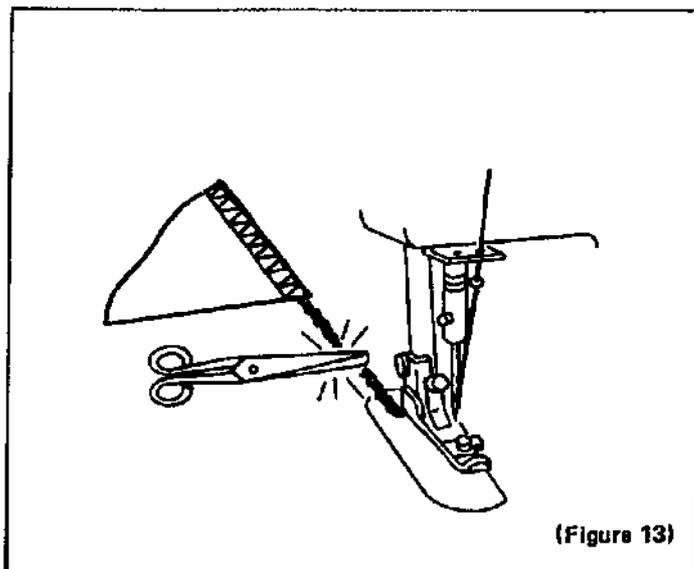
(Figure 11)

1-4 Checking blank starting stitches

- (1) Pick up the ends of the already set threads with the left hand fingers and strain them a little, as shown in Figure 12, and while turning the machine pulley in the normal direction by the right hand give a few blank stitches. Then, set the material to be worked on and start actual sewing.
- (2) Improper thread tension balance will sometimes cause puckering and/or skip stitches. For good thread tension balance refer to the chapter "Thread tension adjustment".
- (3) Cut the free end of the blank 'after-stitches' but leave 2 to 5 cm of them from the end of the actual stitches just completed, as shown in Figure 13.



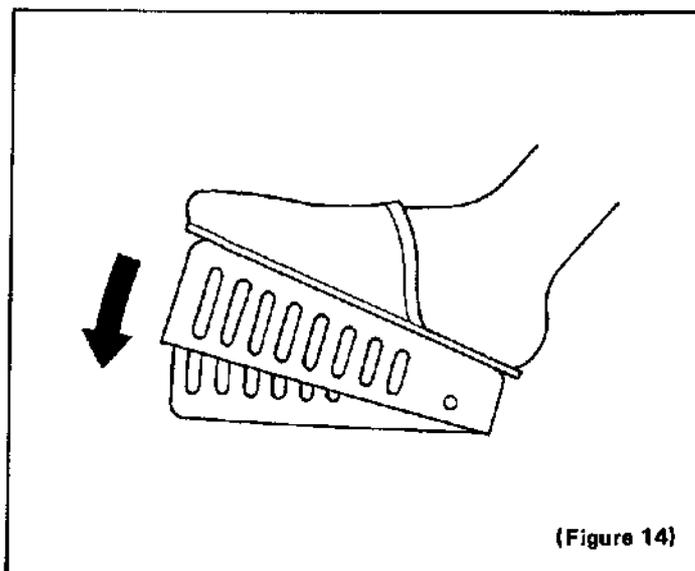
(Figure 12)



(Figure 13)

1-5 How to use controller

- (1) Insert the connector of the controller in the motor. Insert the power supply plug in the outlet.
 - (2) Place your foot on the controller, as shown in Figure 14. Tread on it strongly (deeply), and the machine rotation will be stepped up; tread on it weakly (shallowly), and the machine rotation will be stepped down. (Unlike the household sewing machine, this machine will rotate in the reverse direction.)
- * If this sewing machine is operated continuously, the controller will warm up. This will not, however, affect the performance of the controller, so you can continue employing it with assurance.
 - * After use, be sure to remove the power supply plug from the outlet. Also, do not place objects on the controller.



(Figure 14)

1-6 Changing threads

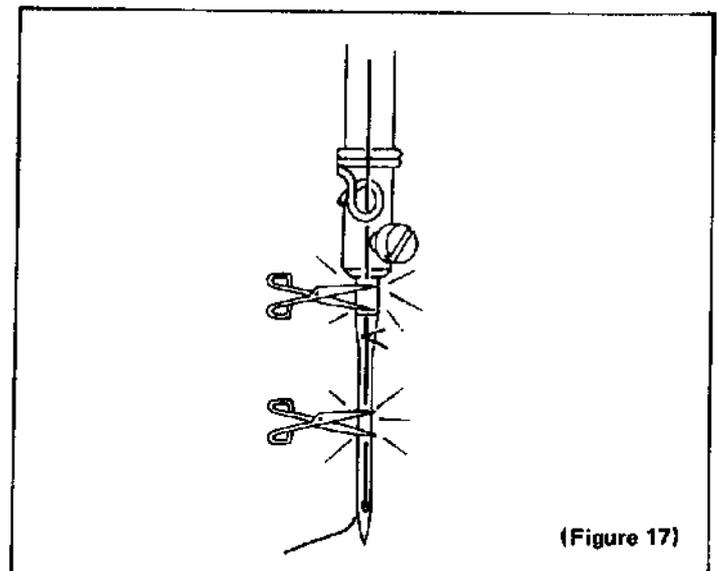
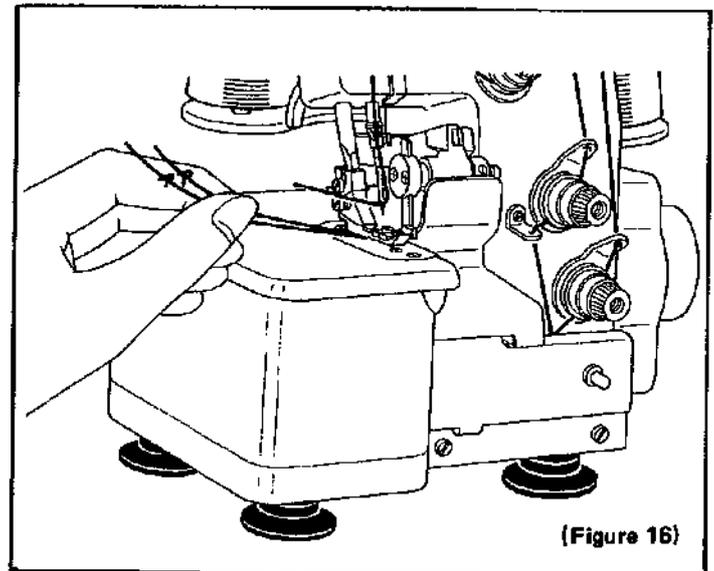
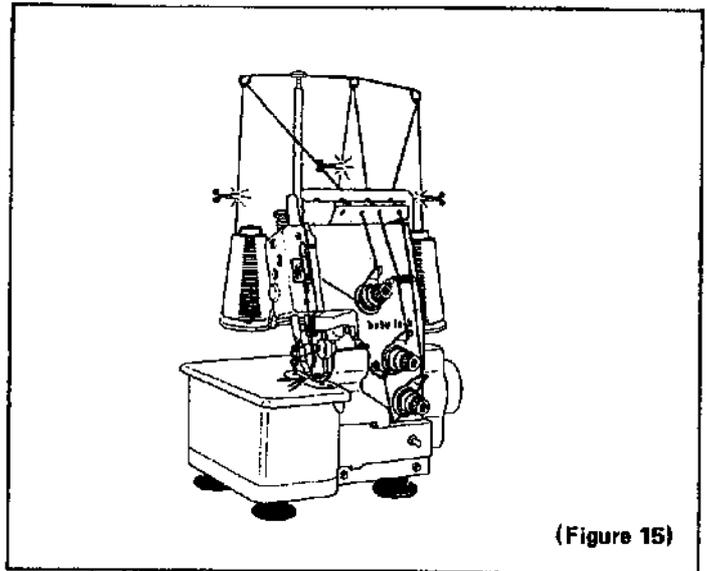
For conveniently changing the needle thread, upper looper thread, or lower looper thread, which is being employed, for a colored thread, proceed as follows:

(1) Cut the thread (to be changed) at its portion near the spool and tie a replacement thread to the remaining portion of the thread being used on the machine (refer to Figure 15).

(2) Lift up the presser foot.

(3) Release the thread tension adjuster and draw out the thread until the knot of the thread comes out about 10 cm from under the presser foot (refer to Figure 16).

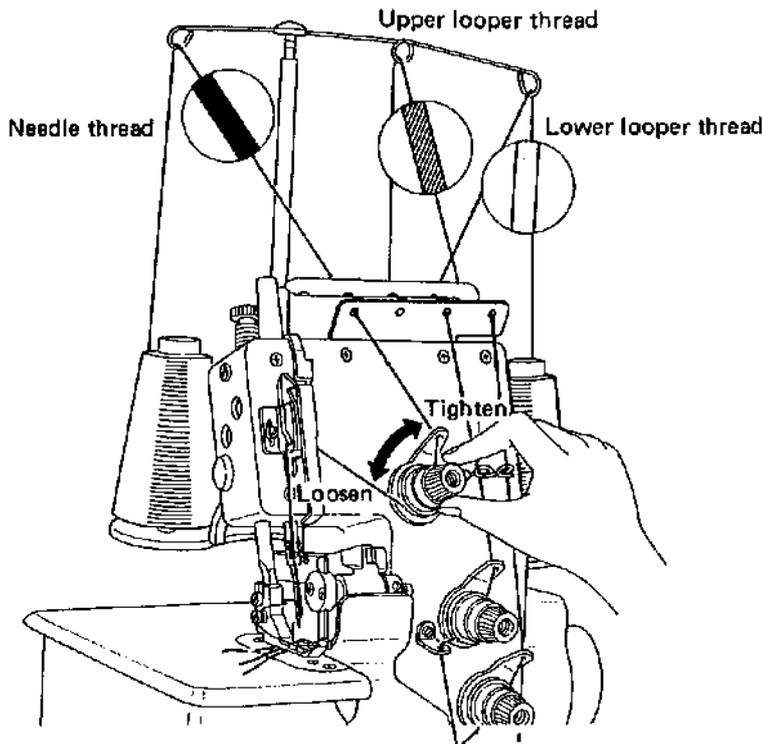
When pulling out the needle thread, however, halt the knot a little short of the needle eye and cut the thread for running it through the needle eye in order to prevent the needle from bending (refer to Figure 17).



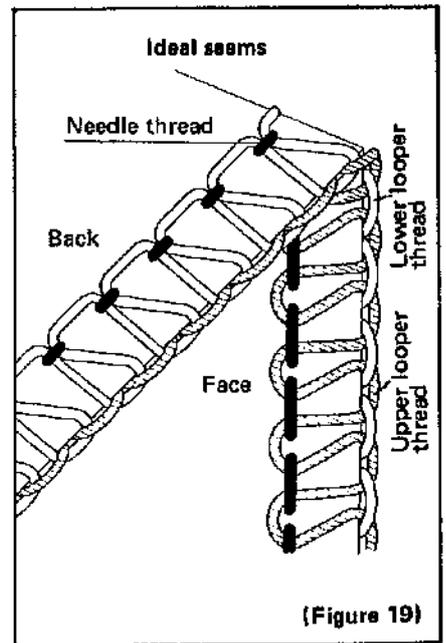
2

THREAD TENSION ADJUSTMENT

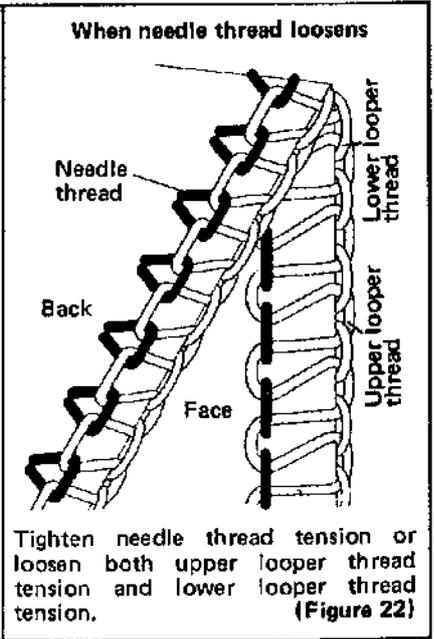
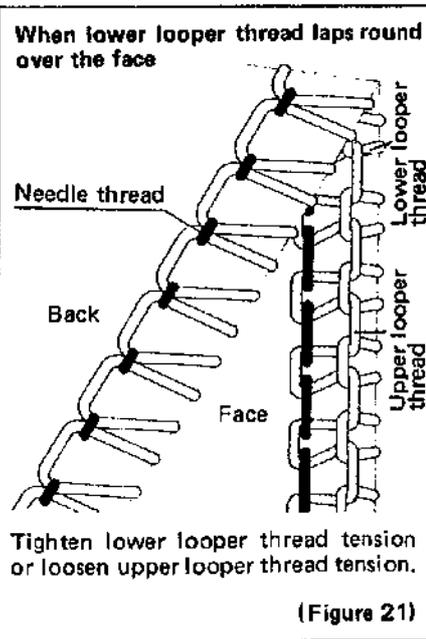
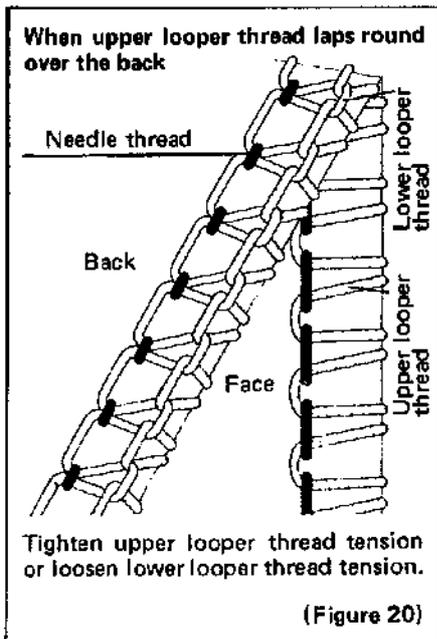
Since the adjustment of thread tension differs according to the kinds of cloth, thickness, and thread being used, make adjustments by using each thread tension adjuster while watching the seam resulting from each of the above factors.



(Figure 18)



(Figure 19)

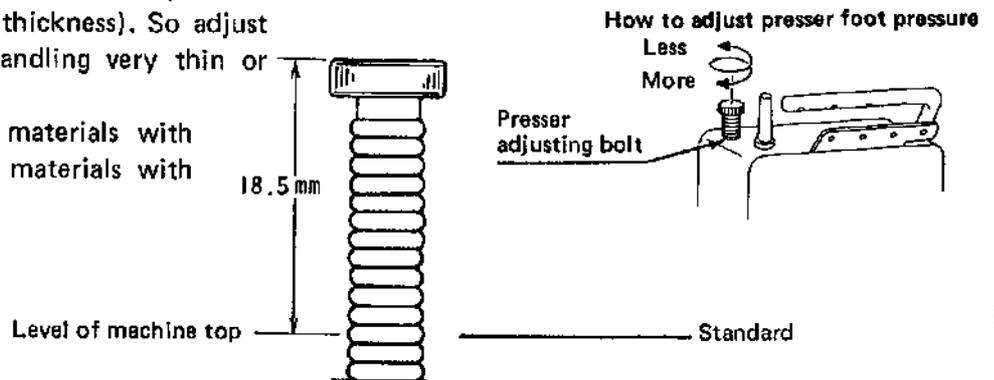


3

PRESSER FOOT ADJUSTMENT

The presser foot of this sewing machine has been factory-adjusted to the standard pressure for materials (of medium thickness). So adjust the pressure only when handling very thin or very thick materials.

Accordingly, sew thinner materials with less pressure, and thicker materials with more pressure.



(Figure 23)

4

HOW TO REPLACE NEEDLE

With regard to the needles for this sewing machine, SINGER needle Cat. No. 1225, 75/11 can be used.

Replace the needle by correctly following the procedures shown below.

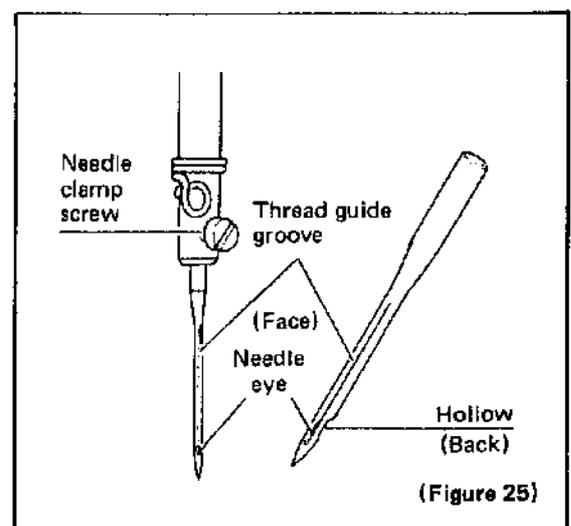
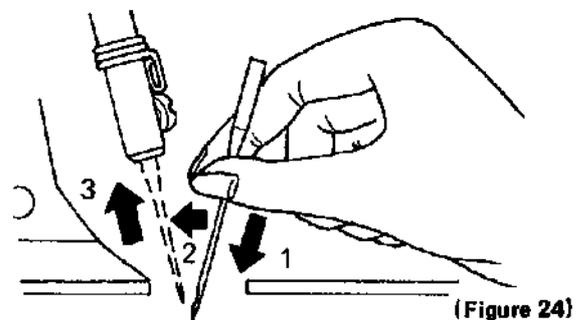
- (1) Turn the machine pulley in its normal direction to bring the needle bar to its uppermost position.
- (2) Loosen the needle clamp screw to remove the inserted needle.
- (3) Put the tip of the new needle into the hole of the throat plate and then the head of the needle into the needle bar hole, as shown in Figure 24.
(Be sure to put the needle all the way into the needle bar hole.)
- (4) Position the needle so that its hollow is placed on its back side when you straight face the machine.

(Figure 25)

(Since there is also a thread guide groove on the back side of the needle, be sure to pay attention not to mistake the front side and back side of needle.)

- (5) Securely tighten the needle clamp screw while holding needle with the fingers in order to maintain it in its correct direction.

- When the needle is replaced, be sure to make some blank stitches by using the newly inserted needle.

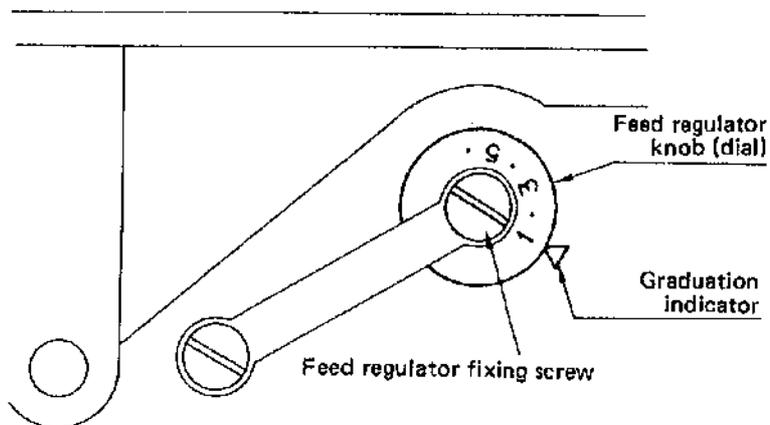
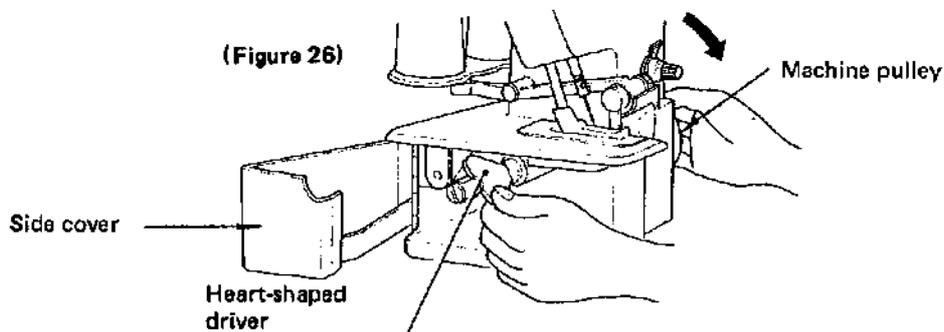


5

STITCH LENGTH ADJUSTMENT

Adjust the stitch length by opening the side cover.

- (1) Holding the machine pulley with the right hand while holding the special heart-shaped driver with the left hand, loosen the feed regulator fixing screw. When you turn the machine pulley in the arrow direction, the fixing screw will be loosened.
- (2) Turn the feed regulator knob (dial) to select the stitch length. The stitch length becomes larger as the number on the dial is increased; it becomes smaller as the number is decreased.
- (3) After completing adjustments, firmly tighten the feed regulator fixing screw.



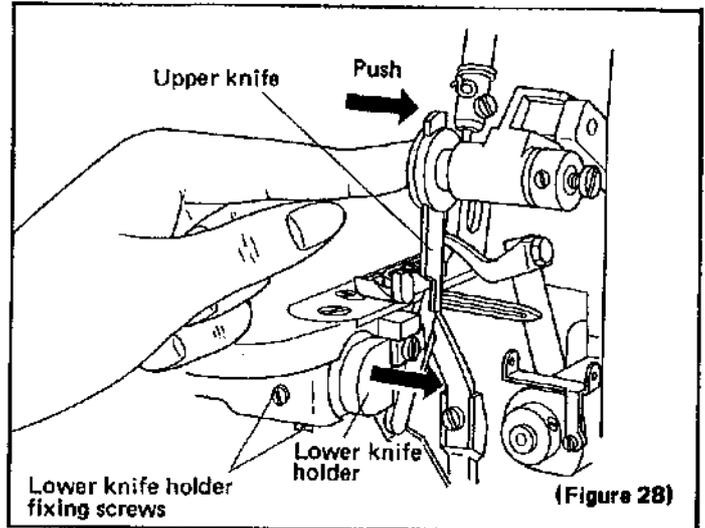
(Figure 27)

6

BIGHT WIDTH ADJUSTMENT

This machine has been pre-set to the overedge bight width of 3.5 mm, which is the standard. The bight can be varied easily from 2.5 to 5 mm, where necessary. When varying the bight width, adjust it by following the procedures below.

- (1) Turn the machine pulley in its normal direction to bring the needle to its uppermost position.
- (2) Open both the knife cover and side cover.
- (3) Loosen the lower knife holder fixing screw (in two places) and move the lower knife holder along with the upper knife to the extreme right position and keep them at this position (Figure 28).



(Figure 28)

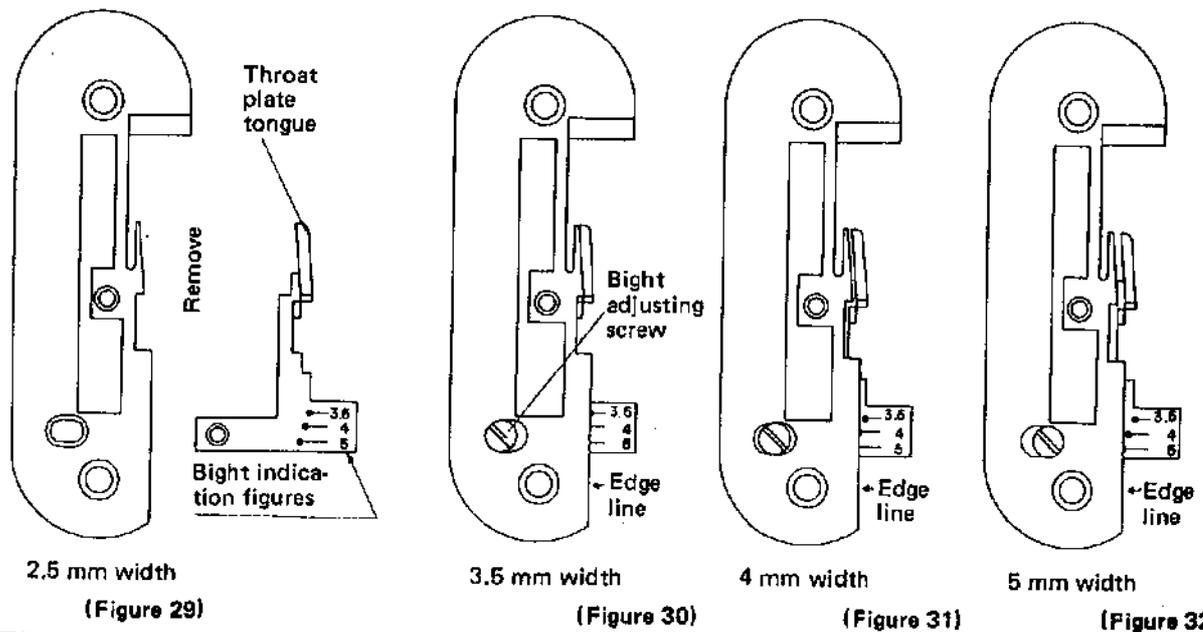
- (4) Loosen the bight adjusting screw (Figure 30) to re-set the throat plate tongue (Figure 29) to any desired bight width, while aligning the "point" by the side of the bight indication figures with the throat plate edge line.

When the bight width is 2.5 mm, remove the throat plate tongue (refer to Figures 29 through 32).

- (5) Loosen the lower knife holder fixing screw again, move the knife holder to the left, cause it to be in close contact with the throat plate, and tighten it, while making sure that the level of the lower knife tip is even with the surface level of the throat plate (refer to Figure 36).

- When the adjustment of the bight width has been completed, make sure, by turning the machine pulley slowly by hand, that the upper loopar will not hit against any other machine parts.
- When providing a bight width of over 4 mm, be sure to adjust the auxiliary presser foot. (refer to next page "Auxiliary presser foot adjustment")

Diagram of variation in bight width of throat plate



2.5 mm width
(Figure 29)

3.5 mm width
(Figure 30)

4 mm width
(Figure 31)

5 mm width
(Figure 32)

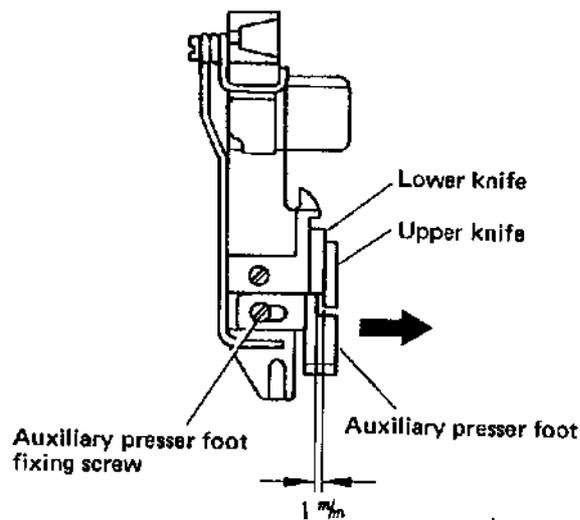
7

AUXILIARY PRESSER FOOT ADJUSTMENT

When the bight width is adjusted to over 4 mm, also adjust the auxiliary presser foot to increase the holding width. In this case perform the procedures as follows:

Loosening the auxiliary presser foot fixing screw to move the auxiliary presser foot toward the right, while leaving a gap of about 1 mm between the auxiliary presser foot and the upper knife (refer to Figure 33).

(When the bight width is smaller than 4 mm, you need not adjust the auxiliary presser foot.)



(Figure 33)

- * When taking a large bight width back to the original small one, never fail to restore the auxiliary presser foot to its original state.

8

REPLACING KNIVES

For safety, be sure to remove the power supply plug from the power supply socket before starting work.

In most cases, you only have to replace the lower knife when cutting becomes difficult.

8-1 How to replace the lower knife

Replace the lower knife when the upper knife is at its highest position.

- (1) Turn the lower knife auxiliary screw counter-clockwise by 45 degrees (1/8 turn) to release its pressure acting on the lower knife (Figure 35).
 - (2) Loosen the lower knife clamp screw to remove the old lower knife (Figure 35).
 - (3) Put the new knife in place from below so that it fits into the indented cut of the throat plate. Tighten the lower knife clamp screw so that the level of the lower knife tip is even with the surface level of the throat plate, as shown in Figure 36.
 - (4) Turn the lower knife auxiliary screw clockwise by 45 degrees (1/8 turn) to cause it to exert pressure on the lower knife (Figure 36).
- * Handle both the lower knife auxiliary screw and the lower knife clamp screw by using the attached screwdriver.

8-2 How to replace the upper knife

In most cases, you will not need to replace the upper knife, the cutting edge of which is made of a special kind of long-lasting metal.

- (1) Turn the machine pulley clockwise to bring the upper knife to the lowest position.
- (2) Loosen the upper knife clamp screw so that the old upper knife can be pulled upward (Figure 34).
- (3) Put the new knife in place from above so the front corner of the cutting edge sinks about 1 mm below the level of the lower knife cutting edge, as shown in Figure 37. Tighten the upper knife clamp screw.

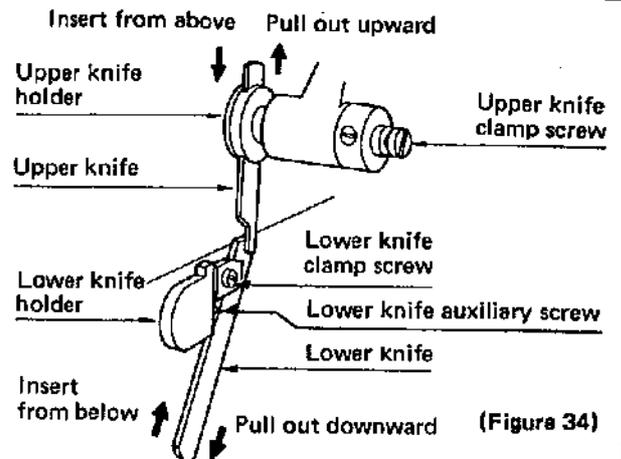


Figure showing lower knife removal.

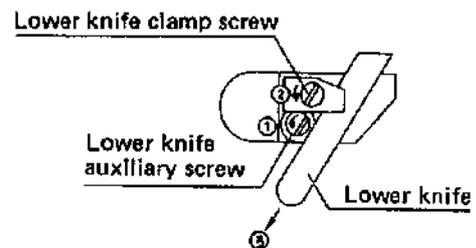


Figure showing lower knife mounted in position.

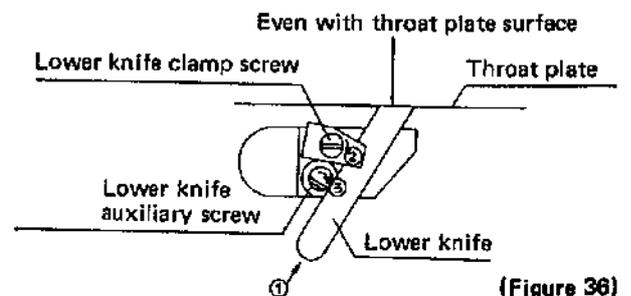
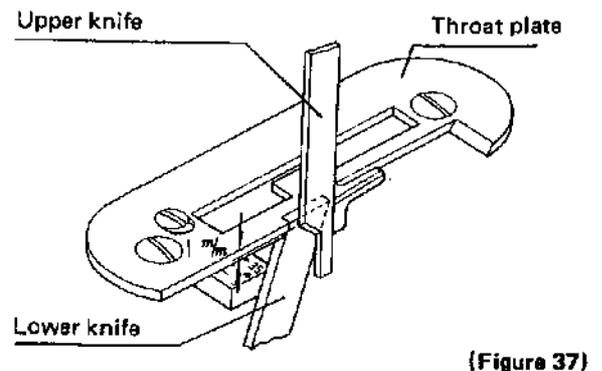
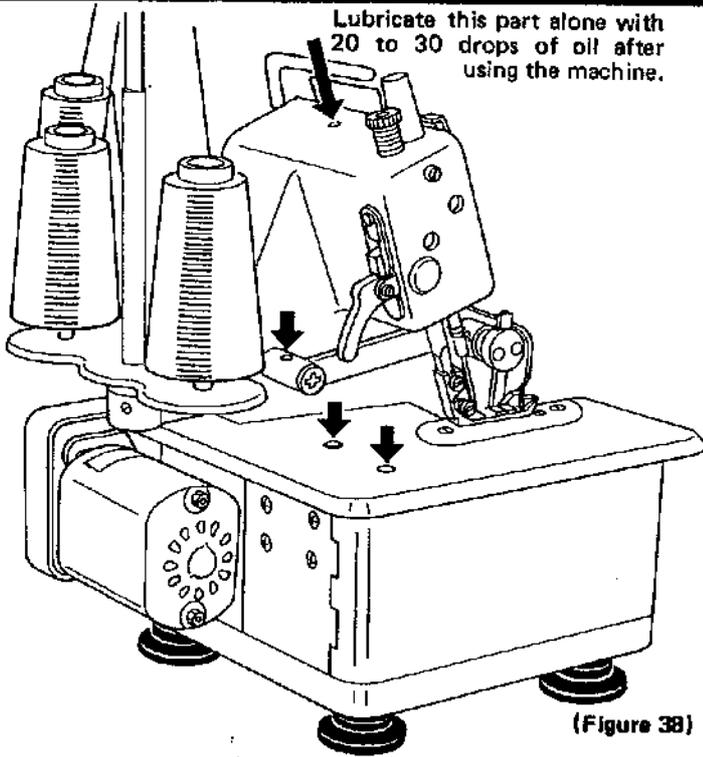


Figure showing upper knife at its lowest position.

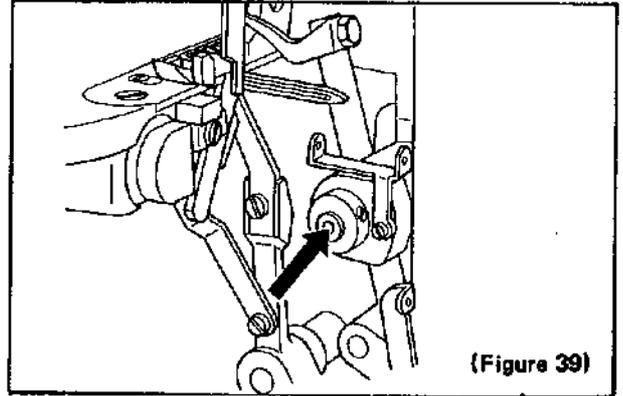


9

LUBRICATION



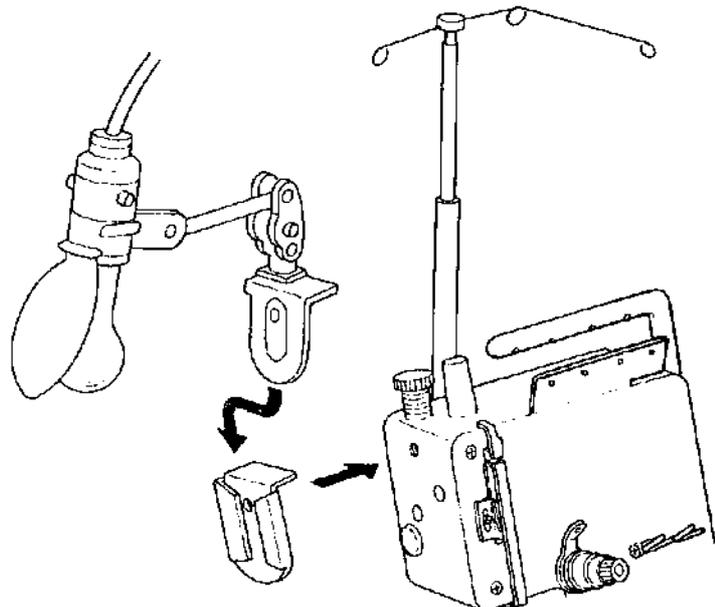
Generally, lubrication is not necessary for this machine since its important parts are all made of a special oil-impregnated sintered metal. However, periodically lubricate the parts shown in Figures 38 and 39 with just one or two drops of oil.



10

FOR SETTING SEWING MACHINE LIGHT

When using a sewing machine light, install a commercially available sewing machine light, as shown in Figure 40.



11

CHECKING AND ADJUSTMENT

Trouble	Cause	Remedy	Reference Page No.
When the machine does not run—	<ul style="list-style-type: none"> • Power supply plug is not connected to outlet. • Controller (connector) is not connected to motor. 	<ul style="list-style-type: none"> • Connect power supply plug to outlet. • Connect controller (connector) to motor. 	5 5
When threads break—	<ul style="list-style-type: none"> • Thread has been incorrectly passed. • Thread tension is too strong. • Needle is bent. • Needle is not correctly inserted. 	<ul style="list-style-type: none"> • Pass thread correctly. • Adjust thread tension adjuster. • Replace needle. • Insert needle correctly. 	3 7 8 8
When the needle breaks—	<ul style="list-style-type: none"> • Needle is bent. • Needle is not correctly inserted. 	<ul style="list-style-type: none"> • Replace needle. • Insert needle correctly. 	8 8
When skipping takes place—	<ul style="list-style-type: none"> • Needle is bent or its tip is worn away. • Needle is not correctly inserted. • Thread has been incorrectly passed. • Presser foot pressure is insufficient. 	<ul style="list-style-type: none"> • Replace needle. • Insert needle correctly. • Pass thread correctly. • Adjust presser foot pressure. 	8 8 3 8
When the seam is not in good condition—	<ul style="list-style-type: none"> • Adjustment of each thread tension is insufficient. • Thread has been incorrectly passed. 	<ul style="list-style-type: none"> • Adjust thread tension adjuster • Pass thread correctly. 	7 3

12

REPLACING CARBON BRUSH OF MOTOR

The motor of this sewing machine is provided with two carbon brushes (in two places respectively). Since they will wear out after long use, replace them by referring to Figure 41.

(1) When to replace

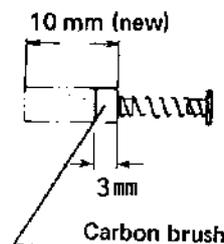
Replace the carbon brush when it has worn out to about 3 mm in length, as shown in Figure 41.

(2) How to replace

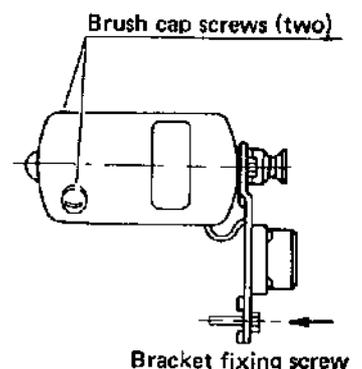
First remove the motor. Then remove each brush cap screw to replace the old brush with new one.

* Use of a worn-out brush may cause the motor to spark or may cause a variety of motor troubles. Be careful.

Figure of carbon brush



(Figure 41)



* Carbon brushes may be purchased from any sewing machine shop or electrical appliance shop.

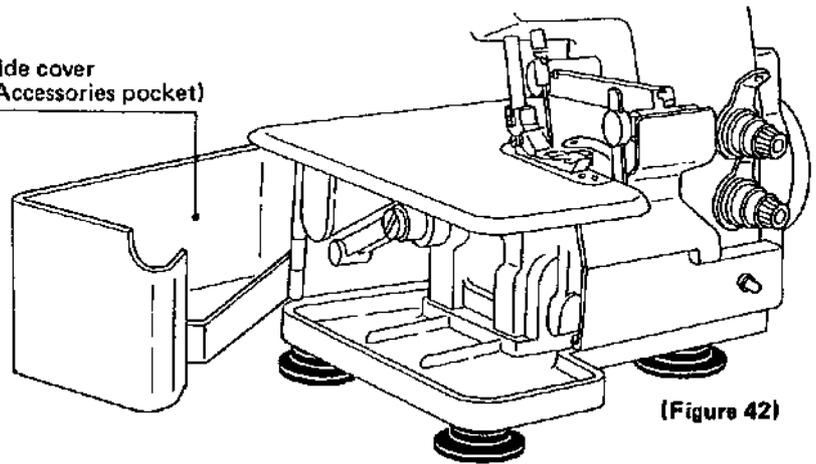
13 PACKING LIST

1. Machine body
2. Motor
3. Controller set
4. Machine cover
5. Accessory box

Screw driver
 Spanner (for motor bracket)
 Spanner (for upper looper)
 Needles
 Lower knife
 Tweezers
 Cleaning brush
 Oil
 Heart-shaped driver
 (for adjusting stitch length)
 Net

The accessories pocket hidden behind the side cover (see Figure 42) is a convenient spot for your accessory tools for the machine.

Side cover
 (Accessories pocket)



(Figure 42)

14 SPECIFICATIONS

Item	Specification
Bight	3.5 mm (2.5 ~ 5 mm)
Stitch length (feed pitch)	1 ~ 5 mm
Needle bar stroke	25 mm
Knife stroke	6.5 mm
Presser foot lift	4.2 mm
Feed dog height	0.7 mm (standard)
Needle	SINGER needle Cat. No. 1225, 75/11
Number of threads	3
Lubrication method	Semi-automatic oil wick lubrication
Machine dimensions	Length 250 mm x Breadth 250 mm x Height 280 mm
Machine weight	Approximately 8kg (with motor and controller)

15

APPLICATION REFERENCE FOR CLOTH, THREAD AND NEEDLES

	Type of cloth		Thread	Needle
Cotton Hemp	Thin	Voile, lawn, broadcloth, gingham, flax, etc.	Cotton #100 Spun #90 ~ 80	SINGER Cat. No. 1225, 58-60/7~75/11
	Thick	Oxford, denim, kilting, gaberdine, etc.	Cotton #80 ~ 60 Spun #80 ~ 60	SINGER Cat. No. 1225, 75/11 ~ 90/14
Silk		de Chine, cr�pe, organdy, satin, etc.	Silk #100 Tetron #80	SINGER Cat. No. 1225, 58-60/7~75/11
Wool	Thin	"Tropical" woolen cloth, "Poral" or "Fresco" (fabric with high air-permeability), woolen poplin, etc.	Spun #80 Cotton #80 Tetron #80 Silk #50	SINGER Cat. No. 1225, 75/11
	Ordinary	Serge, garberdine, flano, etc.	Spun #80 Tetron #80 ~ 60 Silk #50	SINGER Cat. No. 1225, 75/11 ~ 90/14
	Thick	Velour, camel, astrakhen, etc.	Spun #60 Cotton #60 ~ 50 Tetron #60 ~ 50 Silk #50	SINGER Cat. No. 1225, 90/14
Chemical, Synthetic or mixed Fiber	Thin	Georgette, voile, satin, etc.	Spun #90 ~ 80 Tetron #80 ~ 60	SINGER Cat. No. 1225, 75/11
	Thick	Taffeta, tweed, venetian, etc.	Spun #80 ~ 60 Tetron #60	SINGER Cat. No. 1225, 75/11 ~ 90/14
Knitted fabric		Tricot (chemical fiber, synthetic fiber)	Spun #90 ~ 80 Tetron #80 ~ 60	SINGER Cat. No. 1225, 65/9 ~ 75/11
		Jersey (chemical fiber, synthetic fiber)	Spun #80 ~ 60 Tetron #60 Wooly (nylon, tetron)	SINGER Cat. No. 1225, 75/11 ~ 90/14
		Woolen Yarn	Spun #80 ~ 60 Tetron #60 ~ 50 Wooly nylon Wooly tetron Andaria	SINGER Cat. No. 1225, 90/14