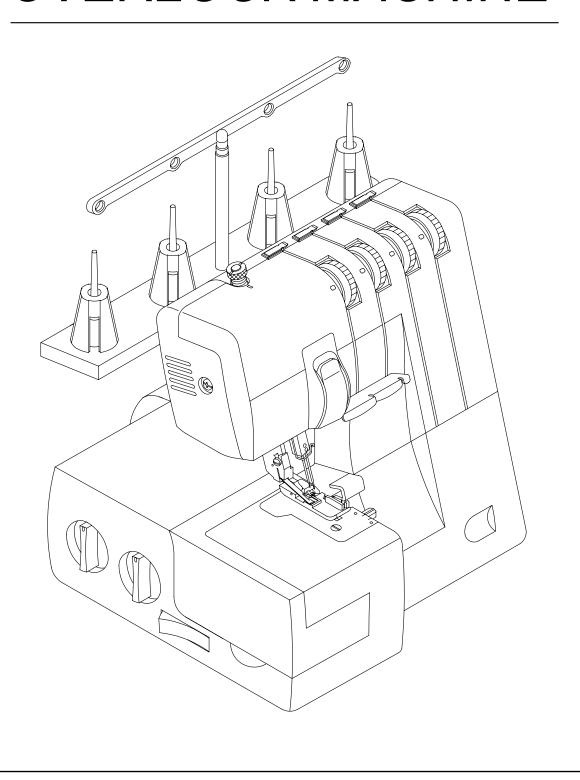
HANDBOOK FOR OVERLOCK MACHINE



IMPORTANT SAFETY INSTRUCTIONS

When using this machine, basic safety precautions should always be followed including the following. Read all instructions before using the machine.

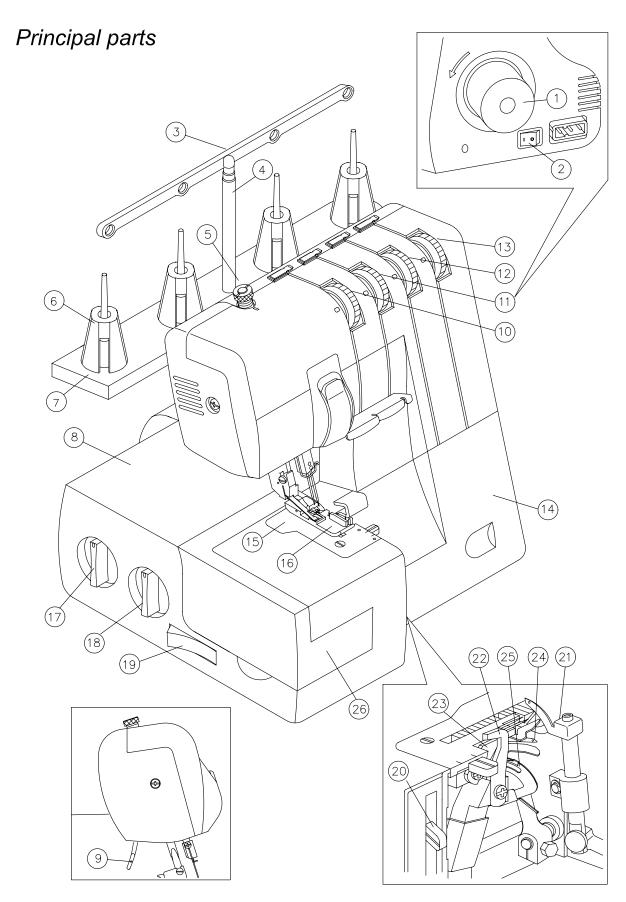
DANGER

* The machine should never be left unattended when plugged in . Always unplug the machine from the electric outlet immediately after using and before cleaning.

Warnings:

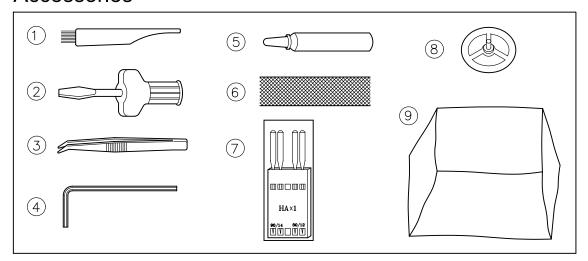
- * Be sure that the electrical voltage of the electric outlet is the same as the rated voltage of thr motor.
- * Switch off or unplug the machine when leaving unattended.
- * Unplu the appliance before carrying out maintenance or replacing lamps.
- * The appliance is not intended for use by young children or infirm persons without supervision.
- * Young children should be supervised to ensure that they do not play with the appliance.
- * If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.
- * Do not attempt to adjust the motor belt.
- * Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
- * Never drop or insert any object into any opening.

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- 1 Hand wheel
- 2 Main power switch and light switch
- 3 Thread tree
- 4 Spool stand shaft
- 5 Presser foot pressure adjustment screw
- 6 Spool cushion
- 7 Spool stand base
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- 9 Presser foot lever
- 10 Left needle thread tension dial
- 11 Right needle thread tension dial
- 12 Upper looper thread tension dial
- 13 Lower looper thread tension dial
- 14 Front cover
- 15 Needle plate
- 16 Presser foot
- 17 Differential feed ratio adjustment lever
- 18 Stitch length adjustment dial
- 19 Upper knife adjustment button
- 20 Stitch width lever
- 21 Upper looper
- 22 Upper knife
- 23 Lower knife
- 24 Lower looper
- 25 Lower looper threading guide assembly
- 26 Sub table assembly

Accessories



The number represents the parts code

- 1 Cleaning brush
- 2 Screw driver
- 3 Tweezers
- 4 Hexagonal (Allen) wrench
- 5 Machine oil
- 6 Thread net x4
 One-needle models x3
- 7 Needle set: HAx1 80 / 12 : 2 pcs 90 / 14 : 2 pcs
- 8 Thread spool cap x4 One-needle models x3
- 9 Soft cover

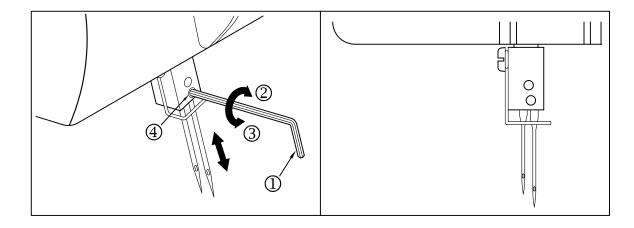
Needle

This sewing machine uses a family size standard needle.

The specification of the needle is HAx1 (130 / 705H).

Replace Needle

- (1) Turn the hand wheel to raise the needle to the highest position.
- (2) Use the enclosed allen key to loosen the needle set screw.
- (3) Insert the needle shank (flat side to back) into the needle clamp the needle clamp until fully inserted.
- (4) Tighten the needle set screw again.
- ① Allen key
- ② Tighten
- 3 Loosen
- 4 Needle set screw



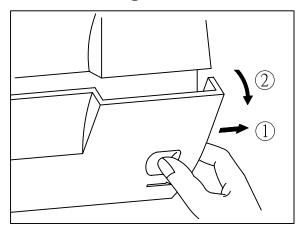
How to open front cover

Push the cover to the right as far as it will go. ①

Pull cover down toward you. 2

CAUTION:

Be sure front cover is closed when sewing.



How to start the sewing machine

Plug in the sewing machine. Press the power switch to position "1", and the indicator will light. Press the power switch to position "0", the indicator will be extinguished, and the power will be off.

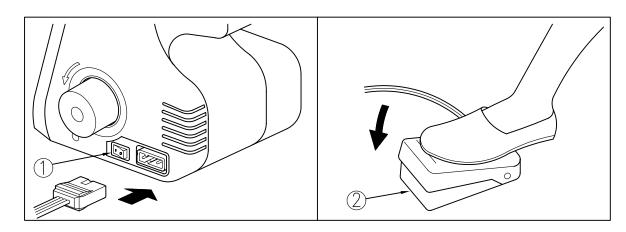
When the front cover is opened, the motor will be switched off immediately although the power switch is at position "1".

If you press the foot controller, the sewing machine is still on a POWER OFF status.

Foot Controller

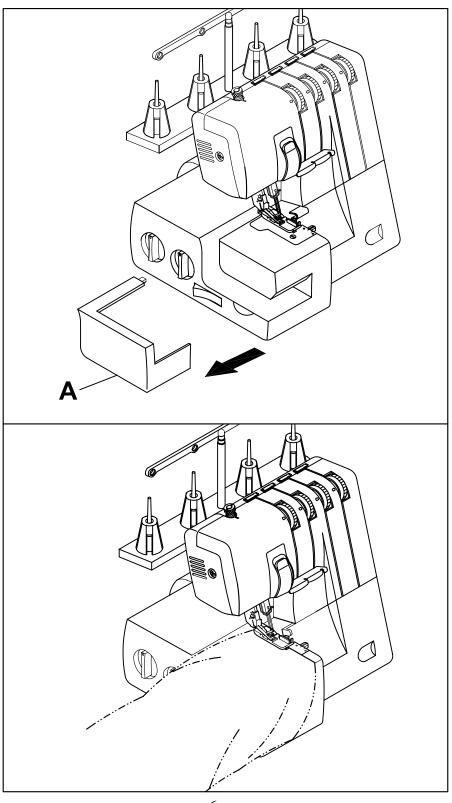
Press the foot controller to control the sewing speed.

- ① Main Power and Sewing Light Switch
- 2 Foot Controller



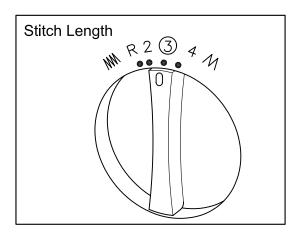
How to use the free arm

- 1 Pull piece A to the left.
- 2 Put sleeve or cuff on the Arm cover start the sewing.



How to adjust the Stitch Length

- (1) The stitch length lever should be set on the 3 mm (7 / 64 inch) setting for most sewing conditions.
- (2) Adjust the stitch length to 4 mm (5 / 32 inch) when sewing heavy weight fabrics.



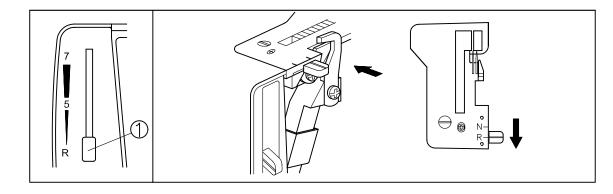
How to adjust the stitch width

Two-needle models

- (1) Move the stitch width lever located next to the sub table assembly up to reduce the stitch width or down to increase the stitch width.
 - Adjust the stitch width from (R) 2.3 mm (3 / 32 inch) to 7 mm (9 / 32 inch).

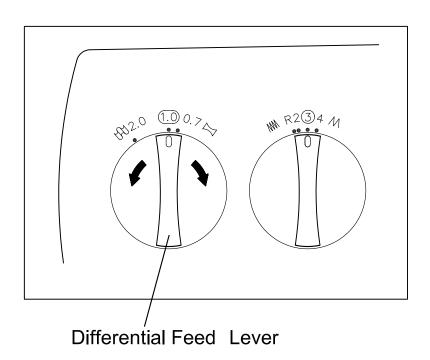
The normal stitch width setting for regular overlock stitch is 5 mm (13 / 64 inch).

① Stitch width lever



Differential Feed

Move the differential feed runner as the figure shown to get your desired cloth feeding rate. The differential feed ratio is from 0.7 to 2.0. Normally we use a ratio of 1.0.



Effect and application	Type of feeding	Main feed (rear)	Differential feed (front)	Setting
Waver-free seams, Gathering	Positive differential feed	- Inn		1.0-2.0
No differential feed.	Neutral feed	mm —	mm	1.0
Pucker-free seams	Negative differential feed		05	0.7-1.0

Differential feed

Please refer to pages 8 Differential feed.

Differential feed is designed to minimize puckering and wavering. It is also very effective for gathering.

1. Puckering

Puckering tends to occur on woven or sheer fabrics.

To obtain picker-free seams, set the differential feed control lever at less than 1.

2. Wavering

Wavering tends to occur on knitted or stretchable fabrics.

To obtain waver-free seams, set the differential feed control lever at less than 1.

3. Gathering

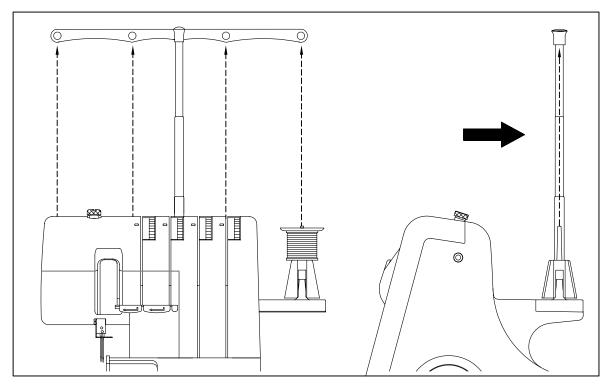
Differential feed makes gathering easier on lightweight fabric. Use it on waistlines, sleeve heabs, sleeve bottoms and ruffled, etc.

Set the differential feed control dial between 1.5 and 2 to obtain the best gathering effect for your use.

Pucker or waver-free seams Coutures sans undulations / plissements	Puckering Plissements (ou fronces)
Wavering Undulations (ou embu)	Gathering Assemblage

Setting up the thread guide holder

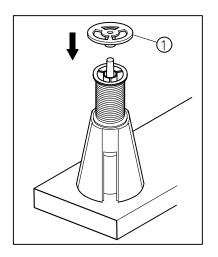
This machine is shipped with the thread guide holder in the lowered position. Raise the thread tree to the highest position. Then adjuse it to the correct position.



Spool caps

Adapts a regular thread spool for use on the overlock machine.

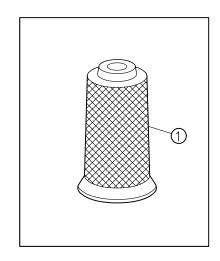
① Spool cap



Spool nets

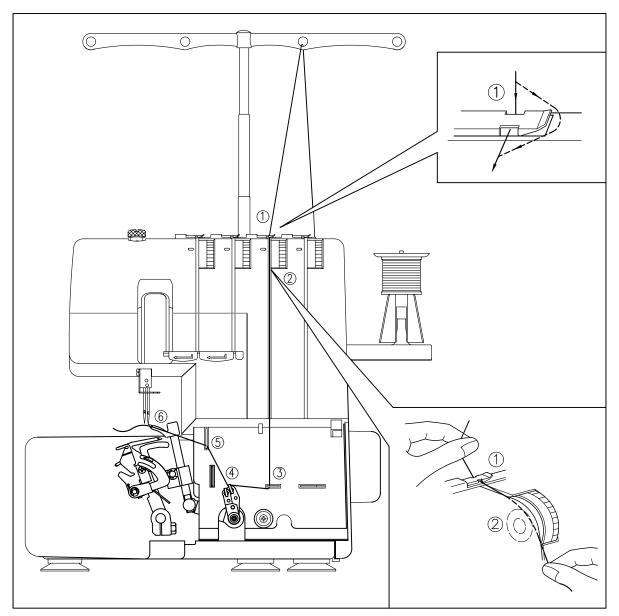
Polyester or bulky nylon threads become loose while unwinding. To keep consistent feeding of such threads. utilize spool net sleeving over the spool.

① Net



How to thread the upper looper (Two-needle models)

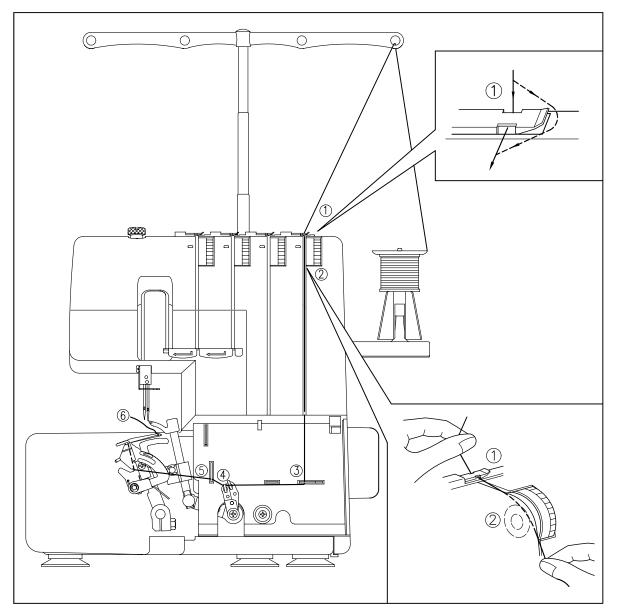
See the figure, and thread the upper looper as indicated $\bigcirc \sim \bigcirc$.



- 1 Pull out the thread from the thread spool. Thread the guide hole of the thread tree from back to front.
- 2 Correctly thread the Thread Guide ①.
- 3 Lead the thread into the groove, and let the thread pass the tension disc of the tension adjustment dial ②.
- 4 Thread the looper area of the machine following the blue color coded thread guides ③~⑤.
- 5 Thread the hole in the upper looper from front to back **6**.

How to thread the lower looper

See the figure, and thread the lower looper as indicated $\mathbb{O}\sim\mathbb{G}$.

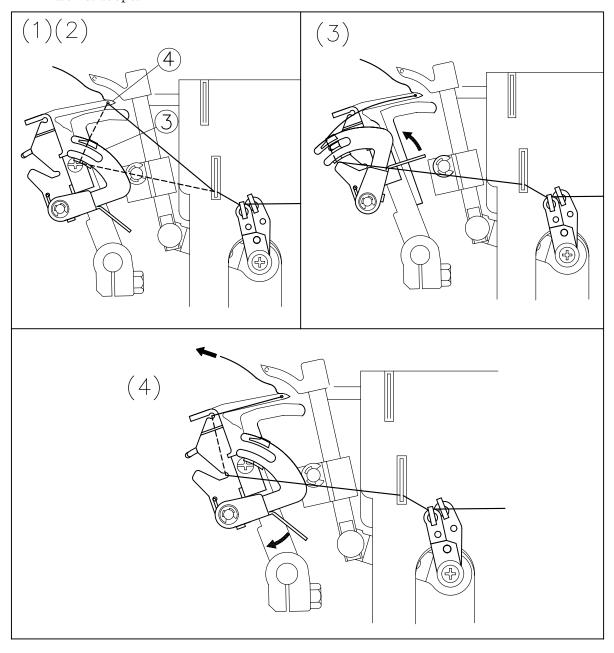


- 1 Pull out the thread from the thread spool. Thread the guide hole of the thread tree from back to front.
- 2 Correctly thread the Thread Guide ①.
- 3 Lead the thread into the groove, and let the thread pass the tension disc of the tension adjustment dial ②.
- 4 Thread the looper area of the machine following the yellow color coded thread guides ③~⑥.

How to use the thread automatic lower looper threader

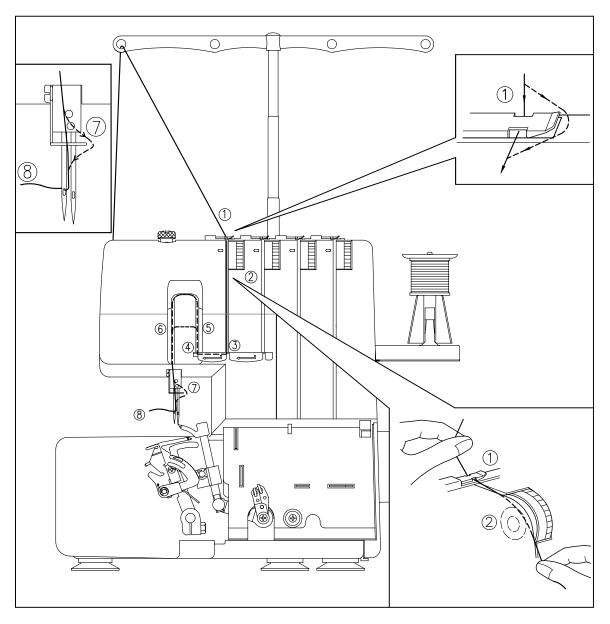
- 1. Draw the thread through the lower looper ④.
- 2. Slide thread behind finger of thread guide slide ③.
- 3. Push up the thread guide slide 3 to the highest position.
- 4. Release the thread guide slide ③ and then draw the thread out from back of the foot. Do not allow threads to cross.

 Take lower looper thread under that of upper looper.
- 3 Thread guide slide
- 4 Lower looper



How to thread the left needle

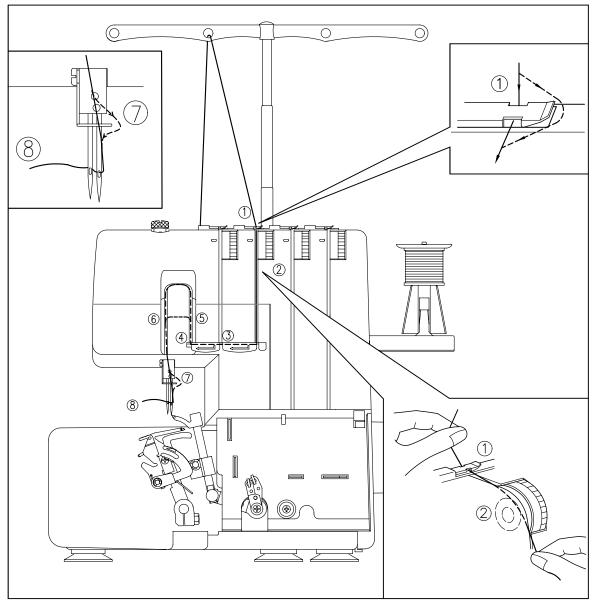
See the figure, Thread the left needle as indicated $\mathbb{O} \sim \mathbb{S}$.



- 1 Pull out the thread from the thread spool. Thread the guide hole of the thread tree from the back to front.
- 2 Correctly thread the Thread Guide ①.
- 3 Lead the thread into the groove, and let the thread pass the tension disc of the tension adjustment dial ②.
- 4 Continue to thread points ③~⑤.
- 5 When the thread goes through No. 6, lead the thread down so as to pass the Thread Guide 7. Then, thread the left needle 8.

How to thread the right needle

See the figure, Thread the right needle as indicated $\mathbb{Q} \sim \mathbb{S}$.



- 1 Pull out the thread from the thread spool. Thread the guide hole of the thread tree from the back to front.
- 2 Correctly thread the Thread Guide ①.
- 3 Lead the thread into the groove, and let the thread pass the tension disc of the tension adjustment dial ②.
- 4 Continue to thread points ③~⑤.
- 5 When the thread goes through No. 6, lead the thread down so as to pass the Thread Guide 7. Then, thread the right needle 8.
- * Take all thread ends under the presser foot and lower presser foot to secure threads.

Comparison Chart of Sewing Materials, Threads and Needles

Ma	ıterial	Stitch	Stitch Length (mm)	Thread	Needle
Light materials	Crepe de chine Georgette Lino Organdy Tricot	Overlock stitch	2.0 ~ 3.0	Spun: #80 Cotton: #80.100 Silk: #80.100	HAx1 #70 #80
Light materials	Crepe de chine Georgette Lawn Organdy	Narrow / rolled Hem stitch	Smaller than 2.0	Needle thread Polyester: #80 Nylon: #80 Looper thread Polyester: #80 Nylon: #80 Woolly nylon thread	HAx1 #70 #80
Medium materials	Poplin Gingham Seersucker Gabardine Serge Knitted	Overlock stitch	2.5 ~ 3.5	Spun: #60.80 Cotton: #60.80 Silk: #50.80 Nylon: #50.80 Polyester: #50.80	HAx1 #80 #90
Heavy materials	Cashmere Tweed Denim Jersey	Overlock stitch	3.0 ~ 4.0	Cotton: #40.60 Silk: #40.60 Nylon: #30.60 Polyester: #30.60	HAx1 #90

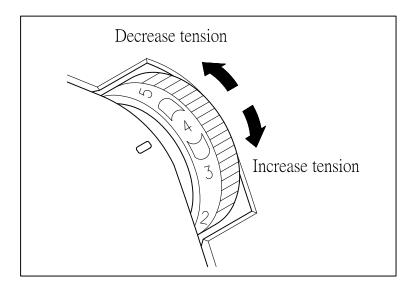
NOTE:

Decorative thread will work best in the upper looper for fashion sewing.

Adjusting the thread tension

Turning tension dial to a higher number gives a tighter thread tension. Turning tension dial to a lower number gives a looser thread tension. The higher the number, the tighter the tension.

Test each thread tension on a scrap of the fabric you plan to use.



Tension control

Sewing is possible at position "4" for most circumstances.

- (1) To select the correct tension, refer to the illustration on the previous page.
- (2) If you cannot find the correct tension, refer to the illustrations "In this case" on following pages.

Chart of Tension Adjustment

- A Reverse
- B Surface
- C Left needle thread
- D Right needle thread
- E Upper looper thread
- F Lower looper thread

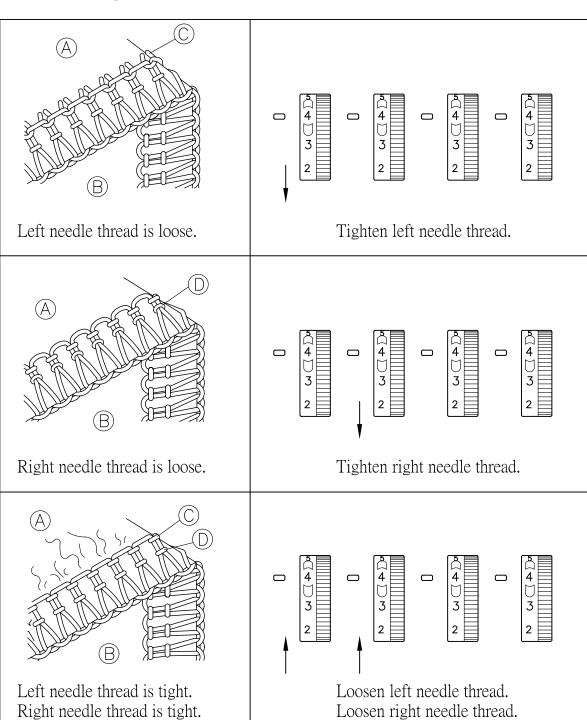
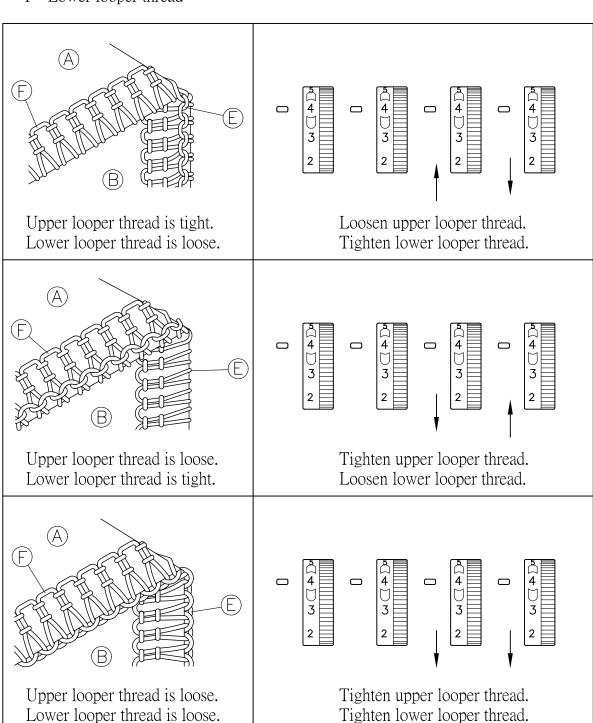


Chart of Tension Adjustment

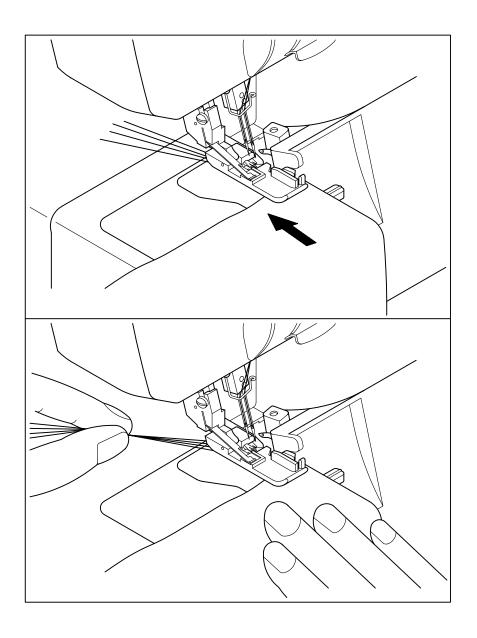
- A Reverse
- B Surface
- C Left needle thread
- D Right needle thread
- E Upper looper thread
- F Lower looper thread



Sewing test

Start the sewing test after the threading is completed.

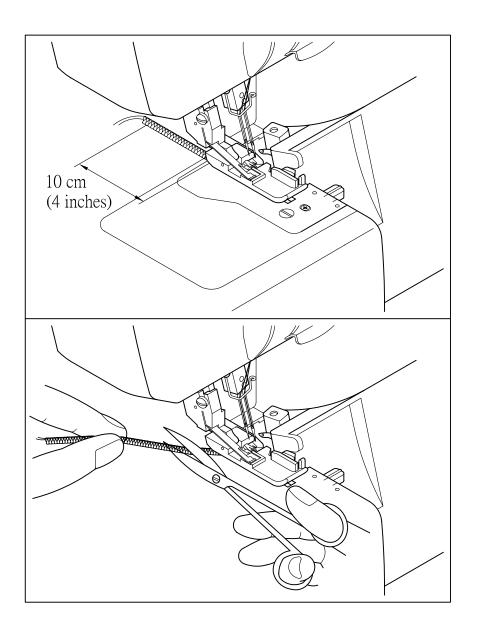
- (1) Raise the presser foot. Place a piece of waste cloth under the presser foot. Lower the presser foot. Start to sew. While the machine is sewing, do not raise the presser foot, or the sewing will be uneven.
- (2) Before you operate the foot controller, use your left hand to hold the thread gently, and use your right hand to turn the hand wheel counter clockwise. At the same time, check the sewing status.
- (3) Operate the foot controller gently.



How to sew a chain pattern

After the sewing test is completed, keep on pressing on the foot controller gently until the chain is 10 cm (4 inches) approx. Then, the thread will become a chain pattern automatically.

* If the tension is uneven, the chain pattern will not be even. If such event happens, please hold the thread gently, and verify the threading order, and also adjust the thread tension. Then, the chain pattern will be even.

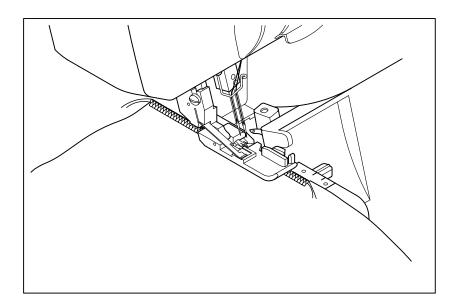


If threads break during sewing

* If the thread breaks during the sewing, please remove the cloth. Thread the needle in the correct threading order. Thread the upper looper, lower looper and the left needle. Then, thread the right needle. Place the cloth to a position where is 3-5 cm in front from the thread broken place. Proceed with the sewing.

NOTE:

Do not pull on the fabric while sewing as this may deflect the needle, causing it to break.

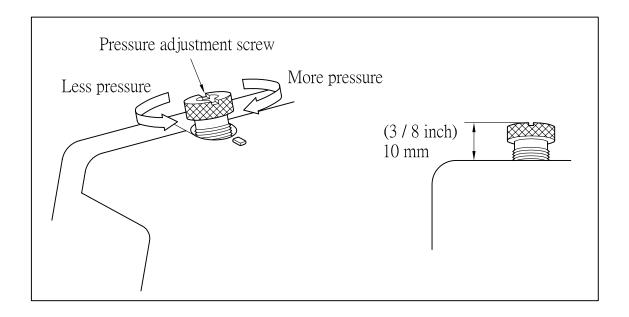


How to adjust the presser foot pressure

- * The pressure foot pressure of the machine is readjusted for sewing medium weight fabrics.
- * It may be necessary to adjust the pressure to sew different weights of fabrics by turning the pressure regulating screw.

For light weight fabric-decrease pressure.

For heavy weight fabric-increase pressure.



Elementary troubleshooting

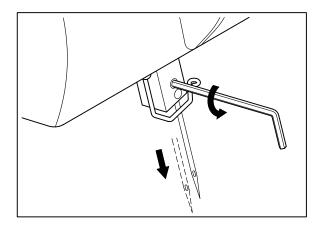
Trouble	Cause	Remedy
Unable to feed cloth	The presser foot has An insufficient pressure.	Turn the pressure knurl clockwise to increase pressure.
The needle breaks.	 The needle is bent, or The needle point Becomes dull. The needle is installed Incorrectly. Pull the cloth Incorrectly. 	 Replace the needle for a new one. Re-install the needle correctly. Hold down the cloth gently.
The thread breaks.	 Thread the needle Incorrectly. The thread tangles. The thread tension is too tight. The needle is installed Incorrectly. Use an unsuitable needle 	 Re-thread the needle correctly. Check the thread spool post, thread tree and others, and remove the tangled threads. Adjust thread tension. Re-install the needle correctly. Use a suitable needle.
Skipped stitches	 The needle is bent, or the needle point becomes dull. The needle is installed incorrectly. Use an unsuitable needle. Thread the needle incorrectly. The presser foot has an insufficient pressure. 	 Replace the needle for a new one. Re-install the needle correctly. Use a suitable needle. Re-thread the needle correctly. Turn the pressure knurl clockwise to increase the pressure.
Bad stitches	The thread tension is not adjusted.	Adjust the thread tension.
The cloth wrinkles.	 The thread tension is too tight. Thread the needle incorrectly, or the thread tangles. 	 Reduce the thread tension when you sew light or thin cloth. Remove all the tangled threads, and re-thread the needle correctly.

Narrow and Rolled hem

Narrow and rolled edge is ideal for use on thin materials such as georgette crepe, crepe de chine, silk etc.

- (1) Raise the presser foot.
- (2) Remove the left needle (on Two-needle models)

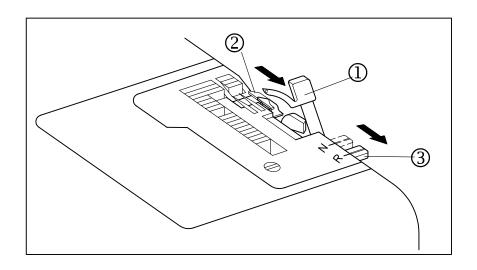
 Thread the machine for a three thread overlock, using the right needle.
- (3) Remove the stitch finger lever to the position of "R".



NOTE:

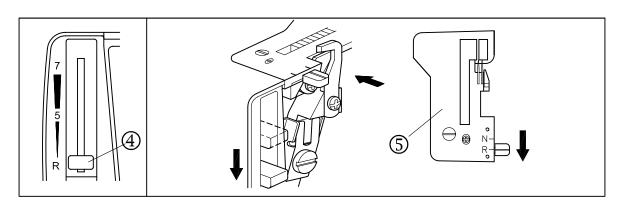
Make sure to install stitch finger when sewing regular overlock stitches.

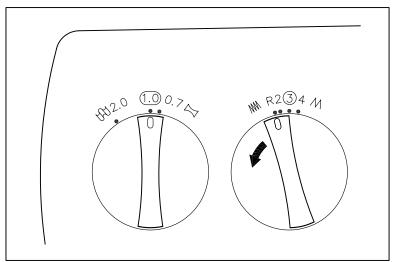
- ① Upper looper
- ② Stitch finger
- 3 Stitch finger lever



- (4) Adjust the stitch width for rolled hemming.

 Move the stitch width lever located next to the front cover all the way up to the "R" position.
- 4 Stitch width lever 5 Needle plate with stitch finger removed





(5) Set the stitch length adjustment lever to "R" position as shown in the illustration.

Rolled edge stitch

Adjust your machine to these recommended thread tension settings:

- * Right needle thread tension at 3-5
- * Upper looper thread tension at 4-6
- * Lower looper thread tension at 5-7

Tension may vary slightly according to the fabric and thread used.

Narrow overlock edge

Adjust your machine to these recommended thread tension settings:

- * Right needle thread tension at 5-7
- * Upper looper thread tension at 5-7
- * Lower looper thread tension at 3-5

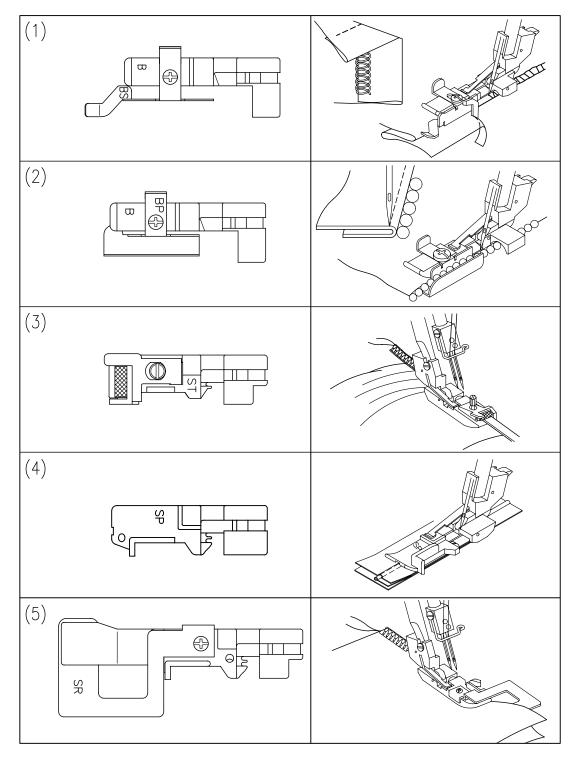
Tension may vary slightly according to the fabric and thread used.

Chart of Narrow Rolled hem

	Rolled edge stitch	Narrow overlock stitch
Stitch Style	Underside of material	Underside of material
	Top of material	
Fabrics	Light material Crepe de chine Georgette Lawn Organdie	Light material Crepe de chine Georgette Lawn Organdie
Needle thread	Nylon thread #80 Polyester thread #80	Nylon thread #80 Polyester thread #80
Upper looper thread	Wooly nylon thread Decorative thread	Wooly nylon thread Nylon thread #80 Polyester thread #80
Lower looper thread	Nylon thread #80 Polyester thread #80	Nylon thread #80 Polyester thread #80
Stitch Length	R	R
Stitch Width	R.5 (Two-needle models)	R.5 (Two-needle models)
Stitch Finger	Removed	Removed
Thread Tension Needle Thread Upper looper Thread Lower looper Thread	4 (3-5) 4 (4-6) 6 (5-7)	6 (5-7) 6 (5-7) 4 (3-5)

Other special purpose presser feet that are available

- (1) Blind / Flatlock foot
- (2) Bead / Sequin foot
- (3) Elasticator foot
- (4) Piping presser foot
- (5) Shirring foot



How to replace the knife

The stationary knife should be changed when it becomes dull.

Danger: Before replacing the knife, disconnect power line plug from the wall receptacle.

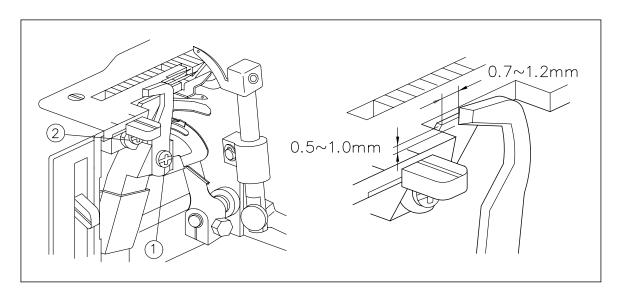
Replacing the upper knife

- * Open the front cover and set the upper knife in the highest position.
- * Loose the upper knife set screw and pull up the upper knife.
- * Insert the new knife into the upper knife holder.
- * Tighten the upper knife set screw.

ENSURING THAT THE EDGE OF THE UPPER KNIFE IS APPROXIMATELY 0.5~1.0 MM BELOW THE SURFACE OF THE LOWER KNIFE.

Replacing the lower knife

- * Loose the lower knife set screw and pull down the lower knife.
- * Insert the new knife into the lower knife holder.
- * Position the lower kinfe so that its edge is flush with the needle plate.
- * Tighten the lower knife set screw.
- ① Upper knife set screw ② Lower knife set screw



Cleaning and oiling

To keep the machine running smoothly, keep it clean and lubricated at all times.

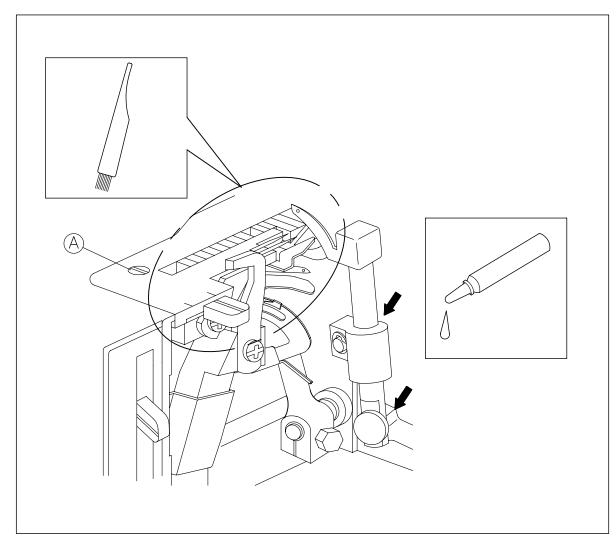
FIRST DISCONNECT MACHINE FROM POWER SUPPLY BY REMOVING PLUG FROM SOCKET-OUTLET.

- 1. Open the front cover.
- 2. Apply a few drops of oil to the points indicated by arrows.

ALWAYS USE A GOOD QUALITY SEWING MACHINE OIL. IF THE MACHINE IS USED MORE OFTEN, OIL IT ONCE A WEEK.

CLEAN

- 1 The interior of needle plate should be cleaned by brush.
- 2 Loose the screw of A . Then take off the needle plate.

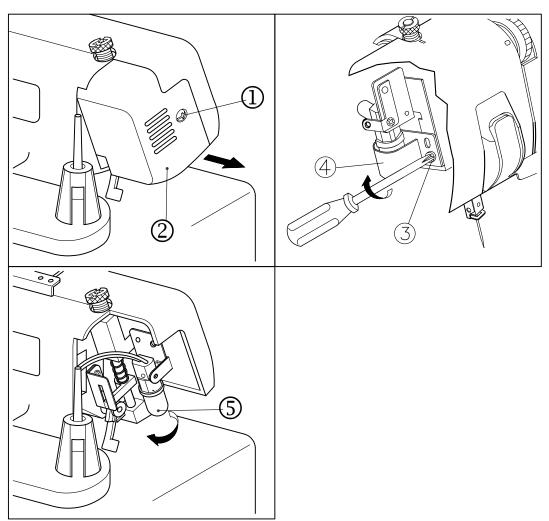


Replacing light bulb

Disconnect from power supply befor removing lamp cover.

Changing the light bulb.

- * Loosen the lamp cover set screw ① remove the lamp cover ② as shown in the illustration.
- * Loosen the light bulb cover set screw 3 pull up the light bulb cover 4 and remove it.
- * Take out the light bulb ⑤ and replace it with a new one.
 - ① Screw
 - ② Lamp cover
 - 3 Screw
 - 4 Light bulb cover
 - ⑤ Light bulb



Machine Specifications

Use

Light-to heavy-weight materials

Sewing speed 1,200 stitches per minute

Stitch length (pitch) 1.1 mm to 4 mm

Stitch width 2.3 mm to 7.0 mm

Presser foot Free presser type

Presser foot lift 5 mm to 6 mm (3 / 16 to 15 / 64 inch)

Needle bar stroke 25 mm (1 inch)

Needle HAx1 (130 / 705H)

No. of needles and threads Three / Four threads convertible Two needles or single needle

Machine net weight 7.0 kgs.

Needle set HAx1 #80 (2) #90 (2)