INSTRUCTION BOOK

CompuLock

IMPORTANT SAFETY INSTRUCTIONS

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

DANGER – To reduce the risk of electric shock:

- 1. An appliance should never be left unattended when plugged in. Always unplug this appliance from the electrical outlet immediately after using and before cleaning.
- 2. Always unplug before relamping. Replace bulb with same type rated 13.5 Vac, 3 Watts.
- 3. Do not reach for the appliance that has fallen into water. Unplug immediately.
- 4. Do not place or store appliance where it can fall or be pulled into a tub or sink. Do not place in or drop into water or other liquid.

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

- 1. Do not allow to be used as a toy. Close attention is necessary when this appliance is used by or near children.
- 2. Use this appliance only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
- 3. Never operate this appliance if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the appliance to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
- 4. Never operate the appliance with any air opening blocked. Keep ventilation openings of the sewing machine and foot controller free from accumulation of lint, dust and loose cloth.
- 5. Never drop or insert any object into any opening.
- 6. Do not use outdoors.
- 7. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
- 8. To disconnect, turn all controls to the off position, then remove plug outlet.
- 9. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- 10. Keep fingers away from all moving parts. Special care is required around the sewing machine needle and knives.
- 11. Always use the proper needle plate. The wrong plate can cause the needle to break.
- 12. Do not use bent needles.
- 13. Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
- 14. Switch the sewing machine off when making any adjustment in the needle area, such as threading needle, changing needle, threading loopers, or changing presser foot, and the like.
- 15. Always unplug the sewing machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.

SAVE THESE INSTRUCTIONS

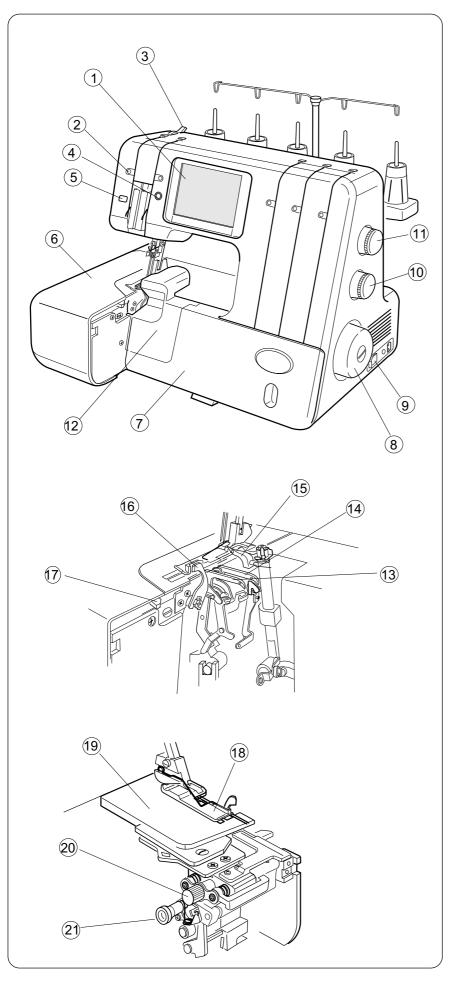
When using your overlock machine for the first few times, place some waste fabric under the presser foot and run the machine without thread for a few minutes. Wipe away any oil which may have appeared.

IMPORTANT SAFETY INSTRUCTIONS

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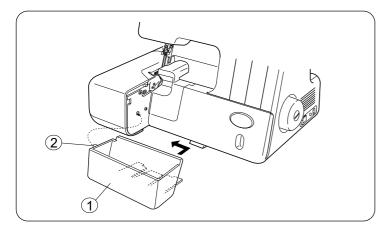
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SECTION 1 PREPARATION



Names of Parts

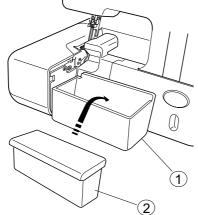
- 1) Visual touch screen
- 2)Thread guide indication
- (3) Pressure adjusting dial
- 4)Screen sharpness adjusting knob
- (5) Up/Down needle position key
- 6 Side cover
- 7 Looper cover
- (8) Handwheel
- 9 Power switch
- 10 Differential feed dial
- 11)Stitch length dial
- 12)Extension table (A)
- 13 Double chain looper
- 14 Lower looper
- (15) Upper looper
- 16) Upper knife
- (17) Chaining finger setting knob
- 18 Presser foot
- 19 Needle plate
- 20 Cutting width adjusting dial
- (21) Upper knife release knob



Attaching the Waste Chip Box

Press the waste chip box against the looper cover and slide it to the left until the pin on the waste chip box slides into the hole on the side plate, as illustrated.

- (1) Waste chip box
- 2 Pin



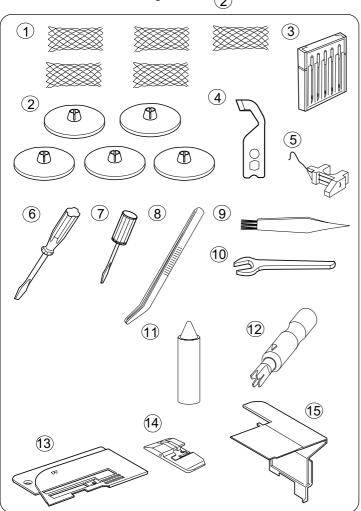
Storing the Accessory Box

Insert the accessory box into the waste chip box.

- 1) Waste chip box
- 2 Accessory box



- 1 Nets
- 2 Spool caps
- 3 Set of needles
- 4 Upper knife
- (5) Spreader
- 6 Screwdriver (large)
- (7) Screwdriver (small)
- (8) Tweezers
- 9 Lint brush
- (10) Spanner/wrench
- (11) Oil
- 12 Needle threader
- (13) Needle plate (B) for Cover Stitch
- 14 Presser foot (B) for Cover Stitch
- 15 Extension table (B)



SECTION 2 OPERATING INSTRUCTIONS

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

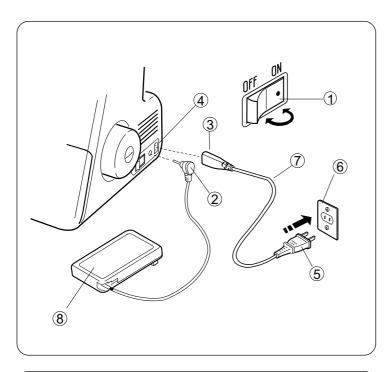
To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only oneway.

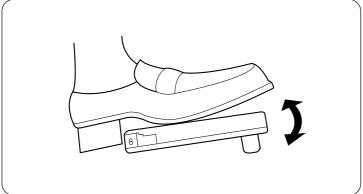
If the plug does not fit fully in the outlet, reverse the plug.

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

Do not modify the plug in anyway."

 Foot control Model 21371 for use with Sewing Machine Model 888(Compulock)
 (For U.S.A. market only.)





Plug in the Machine and Switch on Power

Before connecting the power supplycord, make sure the voltage and frequency shown on the machine conform to your electrical power.

For Your Safety

- * While in operation, always keep your eye on the sewing area,and do not touch any moving parts such as the upper looper, handwheel, needle or knives.
- * Always disconnect the machine from the power supply:

When leaving the machine unattended. When attaching or removing parts.

When threading or cleaning the machine.

* Do not place anything on the foot control, except when in use.

To Sew Using Foot Control

- 1 Turn off the power switch. Connect the foot control plug and the machine plug into to the machine socket.
- 2 Connect the power supply plug to your power supply.
 - 1 Power switch
- 2 Foot control plug
- 3 Machine plug
- 4 Machine socket
- 5 Power supply plug
- (6) Power supply
- 7 Power supply cord
- (8) Foot control

Controlling Sewing Speed

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

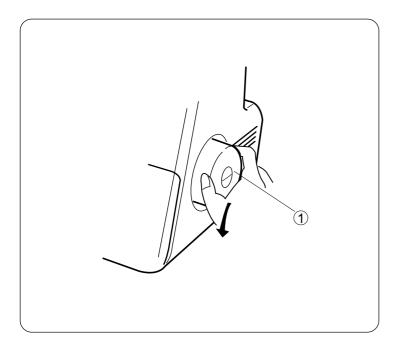
Note:

* The **Compulock** is equipped with a protective circuit to prevent overheating.

The machine will stop automatically if it is running overloaded for a long time. In such a case, follow the message that appears on the visual touch screen.

There are five motors for thread tension adjustment inside the machine which make a bit of noise intializing when first turned on.

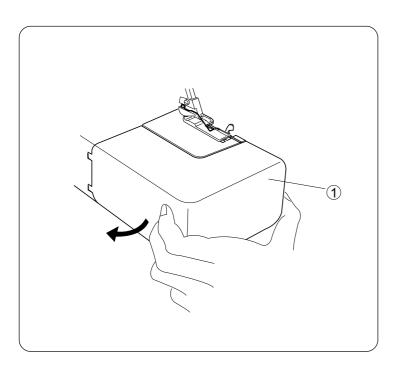
This sound is perfectly normal and does not indicate a malfunction.



How to Turn Handwheel

Always turn the handwheel toward you (counterclockwise).

1 Handwheel



Opening and Closing the Side Cover

To open:

Push the side cover to the left.

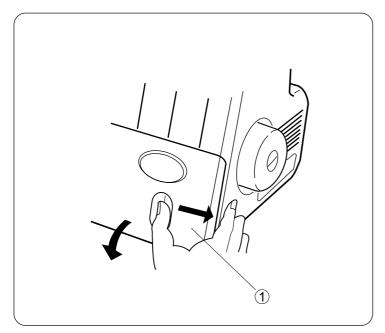
To close:

Push the side cover to the right and slightly toward the machine body.

(1) Side cover

For Your Safety:

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



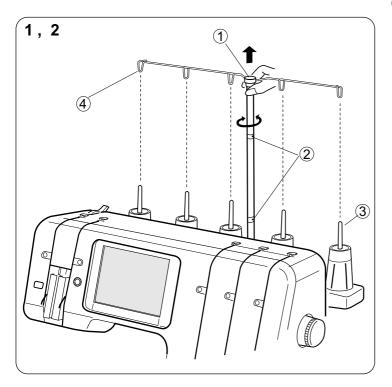
Opening and Closing the Looper Cover

To open:

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

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

1 Looper cover

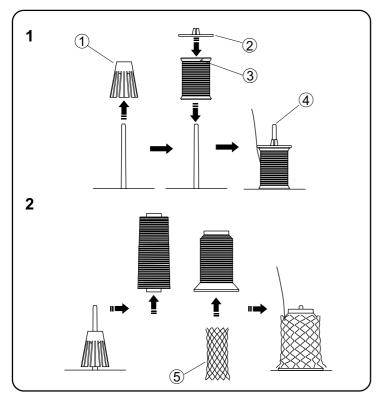


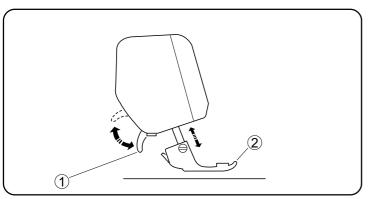
The Position of Telescoping Thread Guide Bar

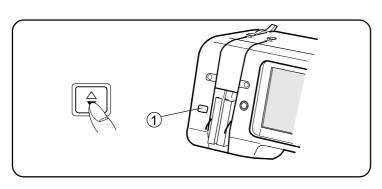
- 1 Pull the telescoping thread guide bar up as far as it will go.
- 2 Turn the thread guide bar until it clicks into position.

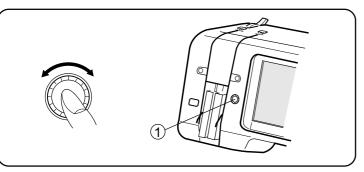
Thread guides should stop directly above the spool pins.

- 1 Telescoping thread guide bar
- 2 Stoppers
- 3 Spool pin
- 4 Thread guide









Attaching the Spool Cap and Net

- 1 When you use a small thread spool, remove the spool holder from the spool pin.Then place the spool with its slit side up, and put a spool cap on top.
- 2 If the thread slips down from the spool while threading or sewing, put a net on the spool, as illustrated, to prevent jamming. The nets are supplied with the machine.
 - 1 Spool holder
 - 2 Spool cap
 - ③ Slit
 - 4 Spool pin
 - 5 Net

Raising or Lowering the Presser Foot

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

* While in operation, keep the presser foot lowered except for when threading the machine.

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

- 1 Presser foot lifter
- 2 Presser foot

Up/Down Needle Position Key

Press the Up/Down needle position key to bring the needle to its lowest position.

When pressed again, the needle goes up and stops in the highest position.

1 Up/down needle position key

Screen Sharpness Adjusting Knob

The brightness of the screen can be changed by turning the sharpness adjusting knob.

① Screen sharpness adjusting knob

How to Set the Needles

- * Please use a size 11 or 14 needle.
- * There are 4 holes for inserting needles, depending on the desired stitch selection.

 Make sure all 4 screws are tightened even if no needle is inserted in the clamp.
 - 1 Needle
 - (2) Flat side

(9)

(11)

(5)

(7)

10

12

(6)

(8)

(a)

- 3 Needle clamp screw (4 screws)
- (4) Screwdriver
- (5) RB (Right Back)
- 6 LB (Left Back)
- 7 RF (Right Front)
- (8) LF (Left Front)
- 9 Needle clamp screw for RB
- 10 Needle clamp screw for LB
- 11) Needle clamp screw for RF
- (12) Needle clamp screw for LF

To remove a needle

Disconnect the machine from the power supply. Raise the needle to its highest position.

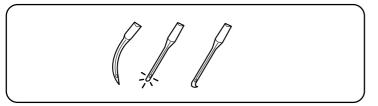
Then loosen the needle clamp screw to remove the needle.

To replace a needle

To attach the needle, insert it into the needle clamp, flat side to the back.

Slide it all the way up until it stops, then tighten the needle clamp screw.

- (a) 4 threads or wrapped overlock 3
- **b** 2 or 3 threads
- © Cover stitch
- (d) 5 threads
- (e) Double chain



* Do not use any needle which is bent or blunt.

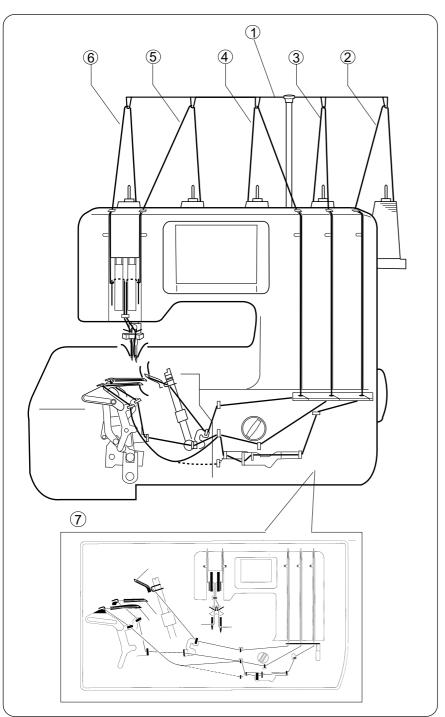
Safety System

You can operate the machine easily and safely because of the following major safety functions.

The machine does not run when you pressed the foot control because...

- 1 The looper cover or side cover is opened when you start sewing.
- 2 Presser foot lifter is raised.
- 3 The needle plate is not appropriate for the chosen stitch pattern.
- 4 The upper looper setting dial is in the incorrect position for the chosen stitch pattern.
- 5 The upper knife is in the incorrect position for the chosen stitch pattern.
 The above error messages will appear on the visual touch screen when you press the foot control.

However, you can press OK key to ignore the warning and accept the upper knife position (activated or deactivated). This may be appropriate for certain special stitches/operations.



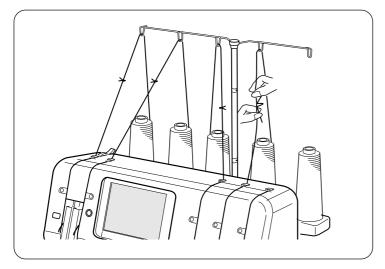
Threading the Machine

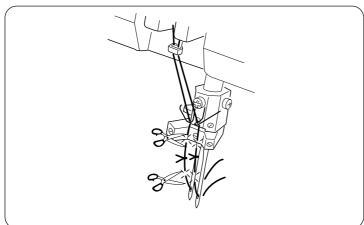
- 1 Thread guide
- 2 Double chain looper thread
- 3 Lower looper thread
- (4) Upper looper thread
- 5 Right needle thread
- 6 Left needle thread

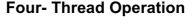
A convenient threading chart is placed the machine body inside the looper cover.

7 Threading chart

*The machine has been threaded with 4 threads (Overlock 4) at the factory for popular sewing.







Turn off the power switch before threading the machine.

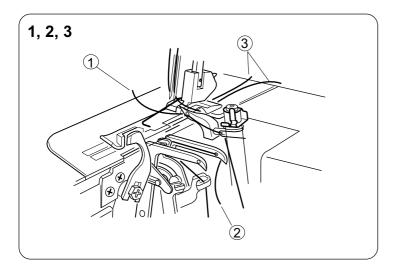
The machine has been threaded at the factory with short length of thread.

To thread the machine with your own thread, tie it firmly to the upper end of the thread in the machine, then raise the presser foot and pull the other end.

For the needle threads, pull the bottom end of thread until the knot comes to the needle eye, and cut on both sides of the knot.

If the machine becomes unthreaded, thread the lower looper first, then the upper looper, needle on the right and needle on the left.

* A convenient threading chart is placed the machine body inside the looper cover.



When first threading the machine, or rethreading after a break, please do the following:

- 1 Turn the handwheel toward you until the needles are in the full up position, and pull out about 10 cm (4") of thread from the tip of the upper looper.
- 2 Pull out 10 cm (4") of thread from the tip of the lower looper.
- 3 Pull out 10 cm (4") of needle thread and draw it toward the back of the machine under the presser foot.

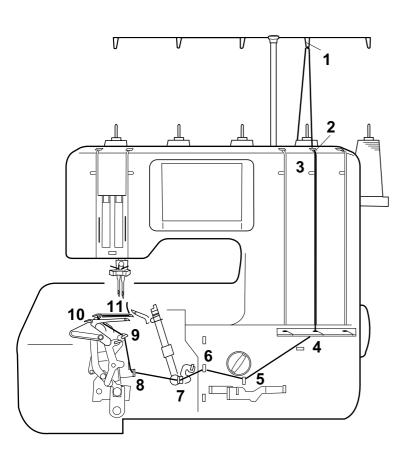
Now, lower the presser foot and sew.

- 1 Upper looper thread
- (2) Lower looper thread
- (3) Needle threads

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

Before starting to sew, make sure that your machine is threaded properly.

Threading the Lower Looper

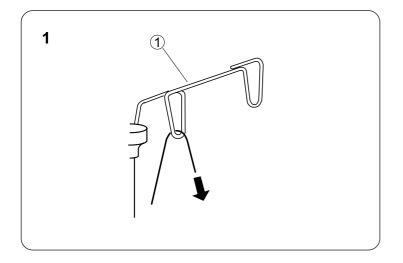


Open the looper cover.

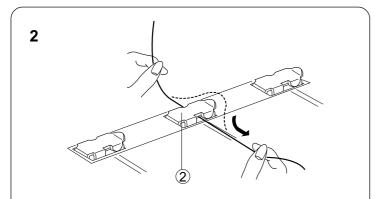
Raise the presser foot lifter.

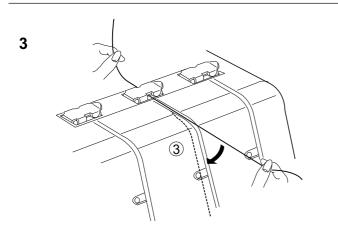
Place a spool of thread on the spool pin second from the right.

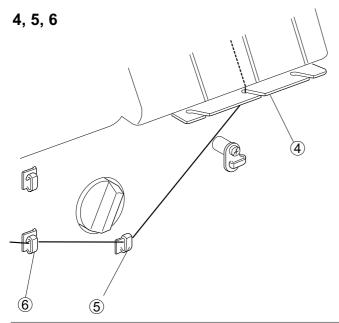
- * The points to thread for lower looper are marked in light green.
- * A convenient threading chart is placed on the machine body inside the looper cover.

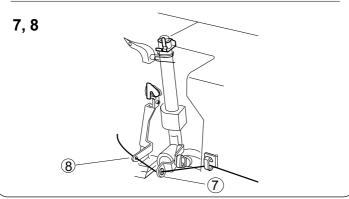


- 1 Draw the thread through the thread guide second from the right from back to front.
 - 1 Thread guide







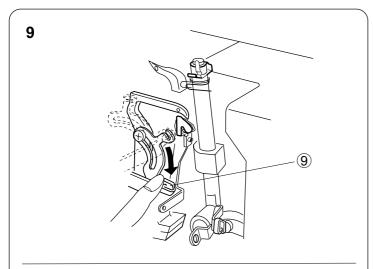


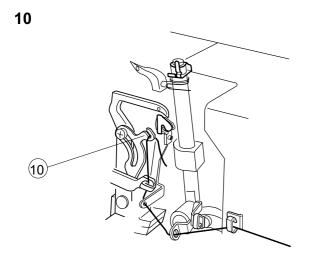
- 2 Slide the thread under the top cover thread guide second from the right side, as illustrated.
 - 2 Top cover thread guide
- 3 Hold the thread at both ends and tug gently to ensure the thread is correctly inserted in the thread tension unit.
 - (3) Thread tension unit

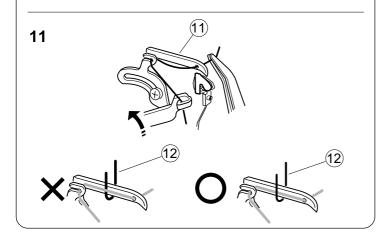
- 4 Pass the thread through the center of the looper thread guide, as illustrated.
 - (4) Looper thread guide
- 5, 6

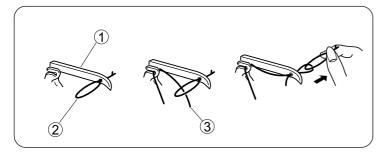
Pass the thread through the two lower looper thread guides, as shown.

- 5 Lower looper thread guide (1)
- 6 Lower looper thread guide (2)
- 7 Pass the thread through the looper thread take-up lever (lower).
- 8 Pass the thread through the lower looper thread guide (3), as illustrated.
 - 7 Looper thread take-up lever (lower)
 - 8 Lower looper thread guide (3)









- 9 Turn the handwheel toward you to move the lower looper to the right side. Then, push down the lower looper thread guide (4) with your finger, as illustrated. In this way, the lower looper thread guide (4) and (5) are moved to the right for easy threading.
- 10 Pass the thread through lower looper thread guides (4) and (5), as illustrated.
 - 9 Lower looper thread guide (4)
 - 10 Lower looper thread guide (5)

Holding the end of the thread, push the lower looper thread guide (4) up with your other hand to return it to its original position, as illustrated.

Lower looper thread guides (4) and (5) will return to their original position automatically when you turn the handwheel toward you.

- 11 Move the lower looper to its rightmost position by turning the handwheel, and pass the thread through the hole in the lower looper with the tweezers 10 cm (4") or more. Make sure the needle threads are not tangled in the lower looper and close the looper cover.
 - (11) Lower looper
 - 12 Needle thread

X= incorrect

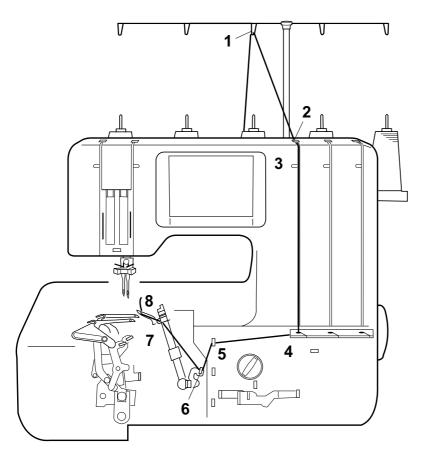
O = correct

How to Thread Woolly Nylon or Polyester Thread

- * The illustration to the left demonstrates a convenient way to thread the lower looper with woolly nylon or polyester thread.

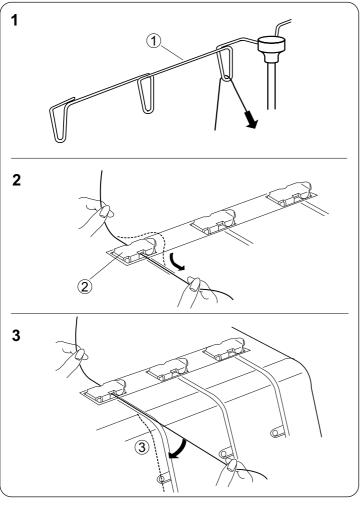
 Use the same method with the upper looper.
 - (1) Lower looper
 - ② Ordinary thread
 - 3 Woolly nylon or polyester thread

Threading the Upper Looper

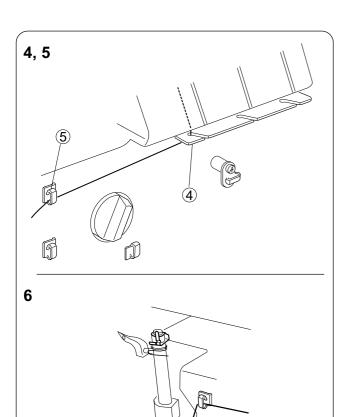


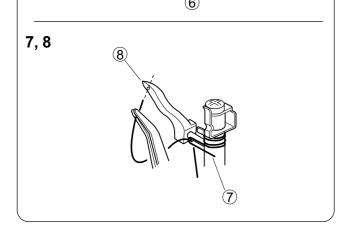
Open the looper cover. Raise the presser foot lifter.

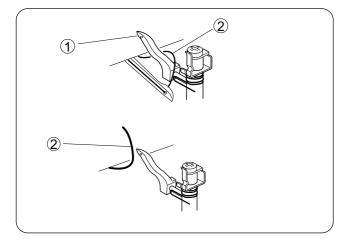
- * Place a spool of thread on the center spool pin.
- * The points to thread for the upper looper are marked in red.
- * A convenient threading chart is placed on the machine body inside the looper cover.



- 1 Draw the thread through the center guide from back to front.
 - 1 Thread guide
- 2 Slide the thread under the top cover thread guide third from the right, as illustrated.
 - 2 Top cover thread guide
- 3 Hold the thread at both ends and tug gently to ensure the thread is correctly inserted in the thread tension unit.
 - 3 Thread tension unit







- 4 Pass the thread through left side of the looper thread guide.
- 5 Pass the thread through the upper looper thread guide (1).
 - 4 Looper thread guide
 - 5 Upper looper thread guide (1)
- 6 Pass the thread through the looper thread take-up lever (upper).
 - 6 Looper thread take-up lever (upper)
- 7 Pass the thread through the upper looper thread guide (2).
- 8 Holding the end of the thread with a pair of tweezers, pass it through the hole in the upper looper.

Pull 10 cm (4") or more of thread through the hole.

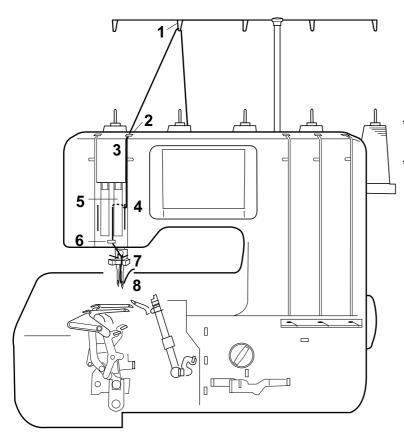
- 7 Upper looper thread guide (2).
- 8 Upper looper

How to Thread the Upper Looper

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

- 1 Upper looper
- (2) Lower looper thread

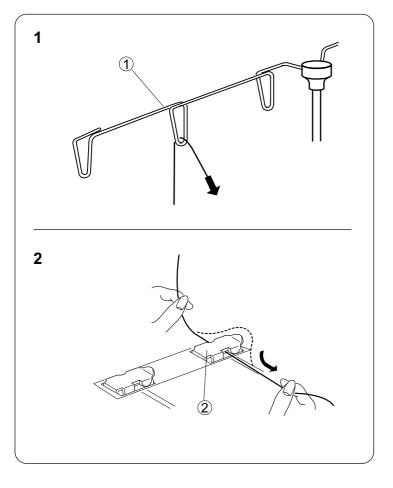
Threading the Right Needle



Raise the presser foot lifter.

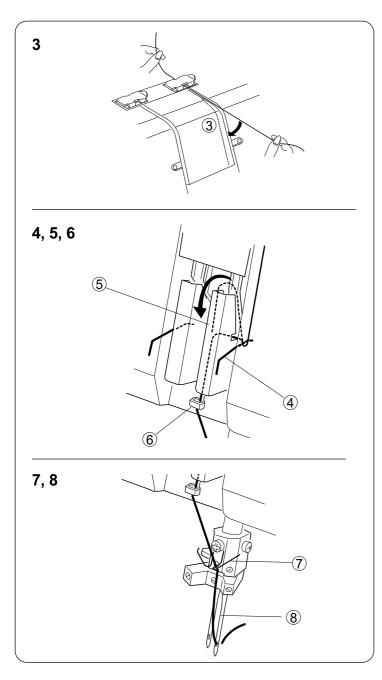
Place a spool of thread on the spool pin second from the left.

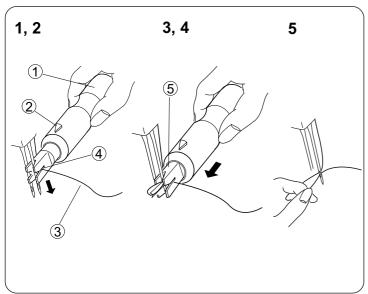
- * The points to thread for the right needle are marked in green.
- * A convenient threading chart is placed on the machine body inside the looper cover.



- 1 Draw the thread through the thread guide (second from the left) from back to front.
 - 1 Thread guide

- 2 Slide the thread under the top cover thread guide (second from left) from the right side.
 - 2 Top cover thread guide





- 3 Hold the thread at both ends and tug gently to ensure the thread is correctly inserted in the thread tension unit.
 - 3 Thread tension unit
- 4, 5

Pass the thread under the right needle thread guide, then, pull it up and over the right takeup lever cover.

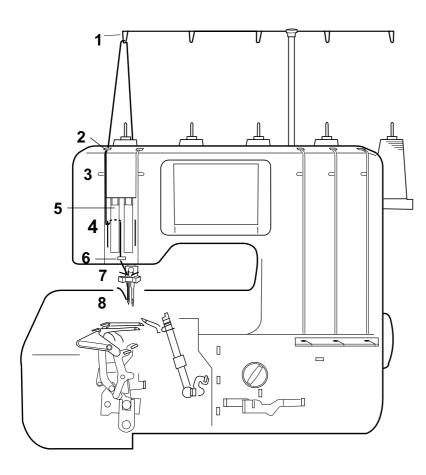
- 6 Pass the thread through the needle thread guide.
 - 4 Right needle thread guide
 - 5 Right take-up lever cover
 - 6 Needle thread guide
- 7 Raise the needle bar to its highest point by turning the handwheel toward you then thread the needle bar thread guide.
- 8 Pull out the thread 10 cm (4") after threading the right needle.
 - 7 Needle bar thread guide
 - (8) Right needle

How to Use Needle Threader

Turn off the power switch before using the needle threader.

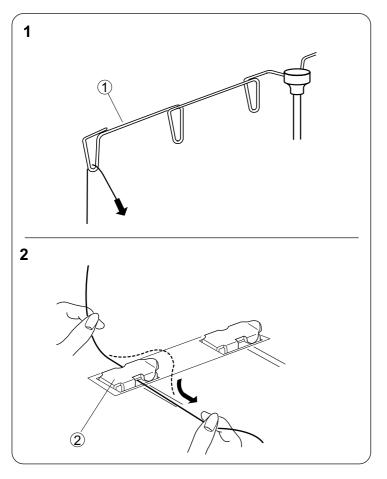
- 1 Hold the threader in your right hand with the "V" groove and arrow facing toward you.
- With the thread in your left hand place the thread in the "Y" groove and turn needle threader once clockwise to place the "V" groove and arrow facing up.
- 3 Holding the thread in your left hand, gently slide the needle threader down the needle while at the same time placing enough pressure on the threader to ensure the inside pin meets the eye of the needle.
- 4 Push the pin through the needle eye forming a thread loop.
- 5 Remove the threader and draw the loop towards the back of the needle.
 - 1 Holder 2 Arrow 3 Needle thread
 - ④ "Y" Groove ⑤ "V" Groove

Threading the Left Needle



Raise the presser foot lifter.
Place a spool of thread on the far left spool pin.

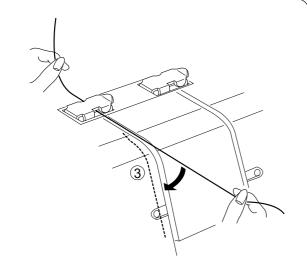
- * The points to thread for the left needle are marked in yellow.
- * A convenient threading chart is placed on the machine body inside the looper cover.



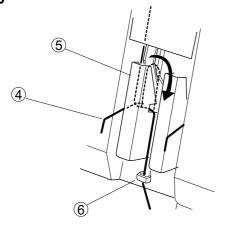
- 1 Draw the thread through the leftmost thread guide from back to front.
 - 1 Thread guide

- 2 Slide the thread under the leftmost top cover thread guide from the right.
 - 2 Top cover thread guide

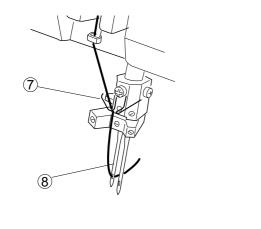
3



4, 5, 6



7, 8



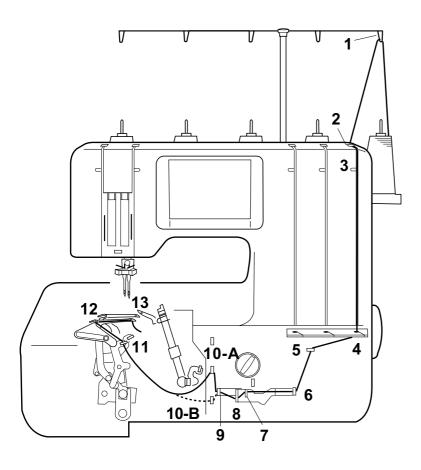
- 3 Hold the thread at both ends and tug gently to ensure the thread is correctly inserted the thread tension unit.
 - (3) Thread tension unit

4, 5

Pass the thread below the left needle thread guide then pull it up and over the left take-up lever cover.

- 6 Pass the thread through the needle thread guide.
 - 4 Left needle thread guide
 - 5 Left take-up lever cover
 - 6 Needle thread guide
- 7 Raise the needle bar to its highest point by turning the handwheel toward you, then go over the needle bar thread guide.
- 8 Pull out the thread 10 cm (4") after threading the left needle.
 - 7 Needle bar thread guide
 - (8) Left needle

Threading the Double Chain Looper

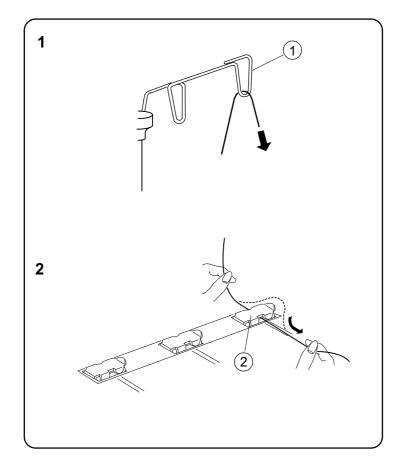


Open the looper cover.

Raise the presser foot lifter.

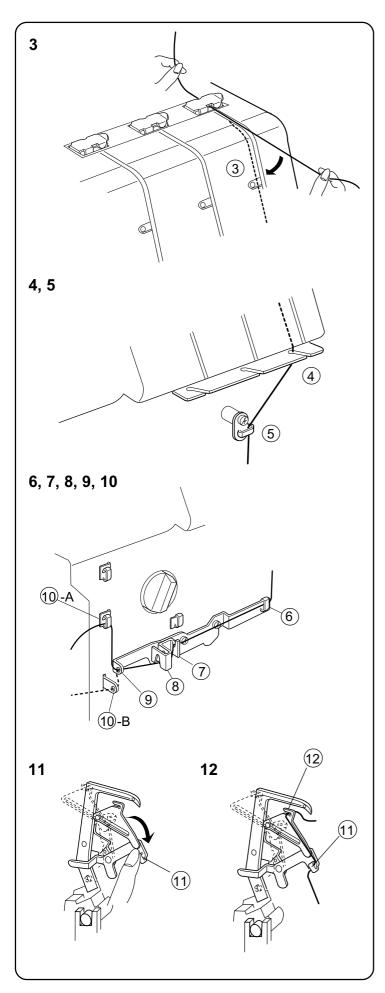
Place the spool of thread on the right side spool pin.

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



- 1 Draw the thread through the rightmost thread guide from back to front.
 - 1 Thread guide

- 2 Pass the thread through the rightmost top cover thread guide from the right, as illustrated.
 - 2 Top cover thread guide



- 3 Hold the thread at both ends and tug gently to ensure the thread is correctly inserted in the thread tension unit.
 - (3) Thread tension unit
- 4 Pass the thread through the right side of the looper thread guide.
 - (4) Looper thread guide
- 5 Pass the thread through the double chain looper thread guide (1).
 - 5 Double chain looper thread guide (1)

6-9

Pass the thread through points 6 though 9, as illustrated.

- 10 Pass the thread through the lower looper thread guide (10-A) or double chain looper thread guide (10-B).
 Use lower looper thread guide (10-A) for overlock 5 and double chain.
 Use double chain looper thread guide (10-B) for cover stitch.
- 11 Turn the handwheel toward you to move the double chain looper to about mid stroke from left to right.

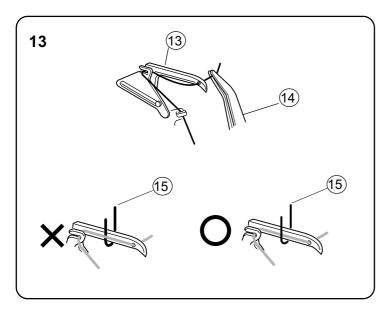
Then, push down the double chain looper thread guide with your finger, as illustrated, so that the double chain looper thread guides moves to the right for easy threading.

- 1 Double chain looper thread guide (3)
- 12 Pass the thread through the looper thread guides, as shown.

Holding the tip of the thread, push the double chain looper thread guide up by right hand to return it to the original position, as illustrated.

Double chain looper thread guides will return to their original position automatically when you turn the handwheel toward you.

12 Double chain looper thread guide (4)

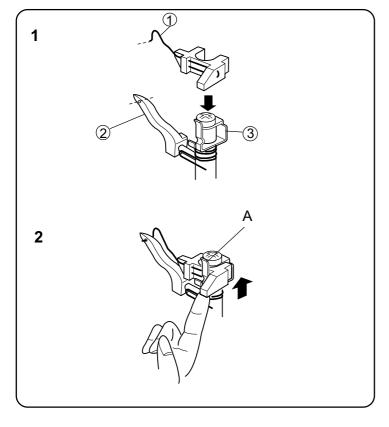


13 Draw the thread with a pair of tweezers through the hole in the double chain looper 10 cm (4") or more. Next, make sure that the needle thread is not tangled in the double chain looper. Close the looper cover.

X = incorrect

O = correct

- 13 Double chain looper
- (14) Tweezers
- (15) Needle thread



Changing to Two or Three Thread Serging with Spreader

If you want to do two or three thread serging with the spreader, use one or two needle threads and the lower looper thread.

1 To attach the spreader

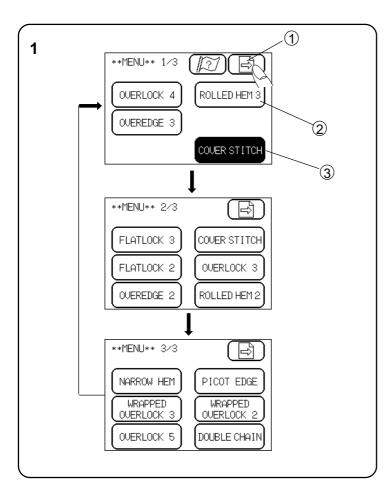
Slide the spreader down into the holder and put the tip of the spreader into the hole in the upper looper.

- (1) Spreader
- 2 Upper looper
- (3) Holder

2 To remove the spreader

Pull tab A on the holder toward you lightly.

Push the bottom of the spreader up and pull it out.

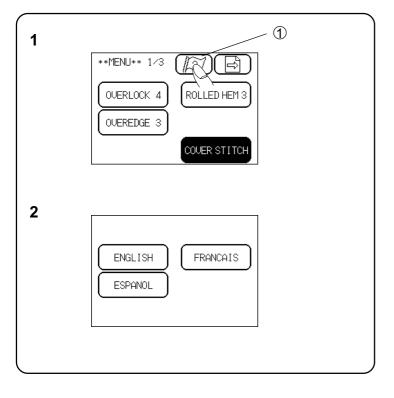


Visual Touch Screen Operations

- 1 Turn on the power switch.
 The menu screen appears on the visual touch screen.
- 2 Each time you press Page key, the visual touch screen changes, as illustrated.

You can select the desired stitch by pressing one of the stitch pattern keys on the three "pages."

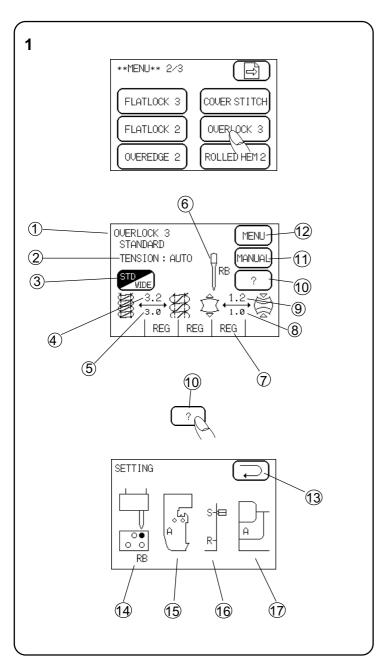
- 1 Page key
- 2 Stitch pattern key
- 3 Revert key
- * Revert key indicates the current machine setting.



To Change Screen Language

- 1 To select the desired language, press the flag key on the first screen.
 - 1 Flag key
- 2 Press the desired language key and all screens will now appear in that language.

Automatic Thread Tension Display Screen



1 When you select the desired stitch from stitch pattern keys, the thread tensions will be automatically set.

Settings such as the stitch length and differential feed ratio will be indicated on the visual display screen as well.

Now simply begin sewing.

The following three pages show all the machine settings related to each stitch type.

- 1 Stitch pattern
- (2) Tension setting (automatic setting)
- (3) Stitch width key (STD/WIDE)
- (4) Current stitch length setting (Manual setting)
- (5) Recommended stitch length (Standard)
- (6) Needle setting position
- Recommended thread type (Standard)
- Recommended differential feed ratio (Standard)
- 9 Current differential feed ratio (Manual setting)
- (Press to display recommended needle position, presser foot, chaining finger setting knob and extension table.)
- Manual key (Manual setting for thread tension.)
- (12) Menu key
- (13) Return key
- (14) Needle setting position
- 15) Presser foot A or B
- (6) Chaining finger setting knob (S) or (R)
- 17 Extension table (A) or (B)

SETTING:

Indicates the required machine settings for the selected stitch.

Choose the Needle and Thread

The choice of needle and the thread depends on the fabric you are sewing. In your needle case, you will find the following needles:

#11 Needle....for lightweight fabrics.

#14 Needle....for medium or medium -heavy weight fabrics.

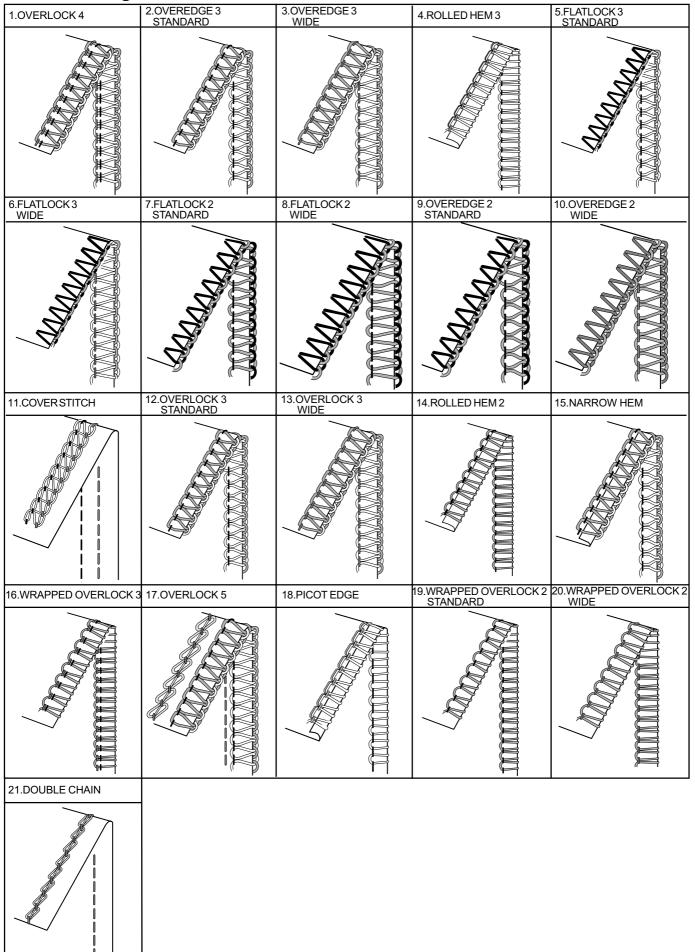
Note: These needles are found in the accessory box (see page 4).

Check the Needle

- 1. Look for barbed or blunt point.
- 2. A damaged needle can cause permanent snags or runs in knits, fine and silk-like fabrics.

Always buy a good quality thread. It should resist tangling and be strong, smooth and consistent in thickness.

Stitch Package



Standard Machine Settings for Automatic Thread Tension

* The automatic thread tension setting on the visual touch screen is adjusted according to the following table such as the stitch type, fabric, layers, etc.

* Type of thread:

REG: Polyester thread #60 FINE: Polyester thread #90 WOOLLY: Woolly nylon thread DECO: Decorative thread

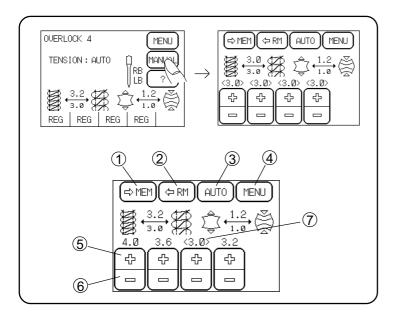
		Type of thread								
	Stitch	LEFT NEEDLE	RIGHT NEEDLE	UPPER LOOPER	LOWER LOOPER	DOUBLE CHAIN LOOPER	Fabric	Lay- ers	Stitch Length	Differential Feed Ratio
		T								
1	OVERLOCK 4	REG	REG	REG	REG		WOVEN (MEDIUM)	2	3.0	1.0
2	OVEREDGE 3		FINE	FINE	FINE		WOVEN (MEDIUM)	1	3.0	1.0
	STANDARD									
3	OVEREDGE 3	REG		REG	REG		WOVEN (MEDIUM)	1	3.0	1.0
	WIDE									
4	ROLLED HEM 3		FINE	WOOLLY	WOOLLY		WOVEN (LIGHT)	1	1.5	1.0
5	FLATLOCK3		FINE	DECO	FINE		WOVEN (MEDIUM)	1	3.4	1.0
	STANDARD									
6	FLATLOCK 3	FINE		DECO	FINE		WOVEN (MEDIUM)	1	3.4	1.0
	WIDE									
7	FLATLOCK 2		FINE		DECO		WOVEN (MEDIUM)	1	3.4	1.0
	STANDARD			用用						
8	FLATLOCK 2	FINE			DECO		WOVEN (MEDIUM)	1	3.4	1.0
	WIDE			用						
9	OVEREDGE 2		FINE		FINE		WOVEN (MEDIUM)	1	3.0	1.0
	STANDARD									
10	OVEREDGE 2	REG		M-	REG		WOVEN (MEDIUM)	1	3.0	1.0
	WIDE			月十						
11	COVERSTITCH	REG	REG			REG	WOVEN (MEDIUM)	2	3.0	1.0
12	OVERLOCK 3		REG	REG	REG		WOVEN (MEDIUM)	2	3.0	1.0
	STANDARD						,			
13	OVERLOCK 3	REG		REG	REG		WOVEN (MEDIUM)	2	3.0	1.0
	WIDE						,			
14	ROLLED HEM 2		FINE		WOOLLY		WOVEN (LIGHT)	1	1.5	1.0
15	NARROW HEM		FINE	WOOLLY	WOOLLY		WOVEN (LIGHT)	1	1.5	1.0
16	WRAPPED OVERLOCK 3	REG	REG	M	REG		WOVEN (MEDIUM)		3.0	1.0
	With 125 over 125 one			用			West Lit (III 2516111)	<u>-</u>	0.0	
17	OVERLOCK 5	REG	REG	REG	REG	REG	WOVEN (MEDIUM)	2	3.0	1.0
18	PICOTEDGE		FINE	REG	REG		WOVEN (LIGHT)	1	3.4	1.0
19	WRAPPED OVERLOCK 2 STANDARD		REG		DECO		WOVEN (MEDIUM)	2	3.0	1.0
20	WRAPPED OVERLOCK 2	REG		M.	DECO		WOVEN (HEAVY)	2	3.0	1.0
20	WRAPPED OVERLOCK 2	NEG			DECO		INVOVEIN (MEAVY)	_	3.0	1.0
21	DOUBLE CHAIN	REG				REG	WOVEN (MEDIUM)	2	3.0	1.0

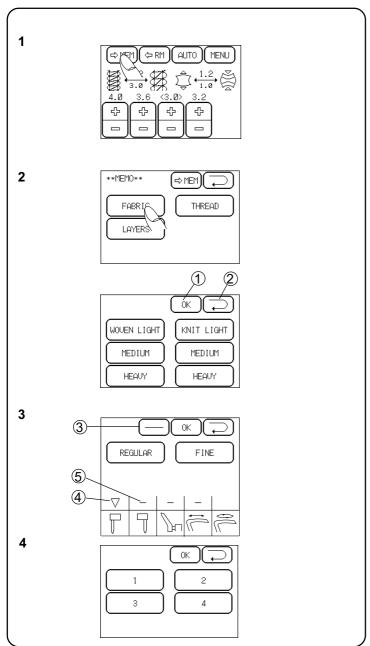
.......This illustration shows the upper looper with the spreader attachment.

Stitch Pattern with Machine Setting

The machine setting (needle setting positions, type of presser foot, chaining finger position and type of extension table) is indicated on the visual touch screen when you select the automatic thread tension or press the Information key.

	STITCH PATTERN	NEEDLE PLATE	PRESSER FOOT	CHAINING FINGER	EXTENSION TABLE	SPREADER	UPPER KNIFE POSITION	UPPER LOOPER POSITION
1	OVERLOCK 4	LB, RB	А	S	А		UP	UP
2	OVEREDGE 3 STANDARD	RB	А	S	А		UP	UP
3	OVEREDGE 3 WIDE	LB	А	S	А		UP	UP
4	ROLLED HEM 3	RB	А	R	А		UP	UP
5	FLATLOCK 3 STANDARD	RB	А	S	А		DOWN	UP
6	FLATLOCK 3 WIDE	LB	А	S	А		DOWN	UP
7	FLATLOCK 2 STANDARD	RB	А	S	А	YES	DOWN	UP
8	FLATLOCK 2 WIDE	LB	А	S	А	YES	DOWN	UP
9	OVEREDGE 2 STANDARD	RB	А	S	А	YES	UP	UP
10	OVEREDGE 2 WIDE	LB	А	S	А	YES	UP	UP
11	COVER STITCH	LF, RF	В	R	В		DOWN	DOWN
12	OVERLOCK 3 STANDARD	RB	А	S	А		UP	UP
13	OVERLOCK 3 WIDE	LB	А	S	А		UP	UP
14	ROLLED HEM 2	RB	А	R	А	YES	UP	UP
15	NARROW HEM	RB	А	R	А	-1	UP	UP
16	WRAPPED OVERLOCK 3	RB, LB	А	S	А	YES	UP	UP
17	OVERLOCK 5	RB, LF	А	S	А		UP	UP
18	PICOT EDGE	RB	А	R	А		UP	UP
19	WRAPPED OVERLOCK 2 STANDARD	RB	А	S	А	YES	UP	UP
20	WRAPPED OVERLOCK 2 WIDE	LB	А	S	А	YES	UP	UP
21	DOUBLE CHAIN	LF	В	R	В		DOWN	DOWN





Manual Adjustment of Thread Tension

You can adjust the thread tension by pressing the +or- key to get the desired tension setting. The actual thread tensions for each thread are shown above the + / key on the screen.

- ① Memory Key: Memorize the manually set thread tensions.
- ② Recall Memory Key: Recall the memorized manual setting data.
- 3 Auto Key: Return to automatic thread tension display screen.
- (4) Menu Key: Return to MENU screen.
- 5 Thread Tension Key: Increase thread tension.
- **(6)** Thread Tension Key: Decrease thread tension.
- (7) < > Indicates the automatic thread tension setting.

Manual Setting, Memory and View for Thread Tension

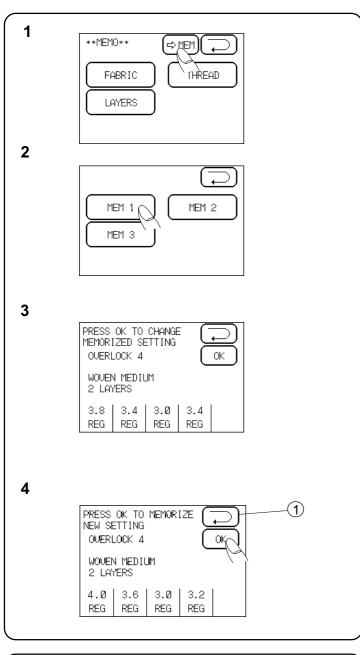
Machine setting

You can memorize the number of layers, type of fabric and type of threads depending on your needs when setting thread tension manually.

- 1 Press the Memory key.
- 2 Press FABRIC key to advance to this screen, then choose the type of fabric you're using. Press OK key to memorize or press Return key to return to previous screen and cancel any changes.
- ① OK Key: Memorize the settings and re-

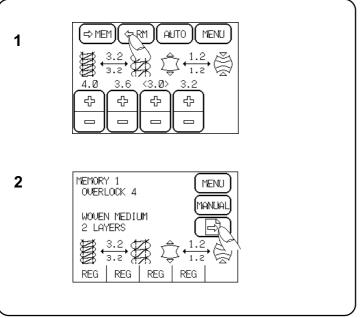
turn to **MEMO** screen.

- 2 Return Key: Return to previous screen and cancel any changes.
- 3 Press THREAD key to enter settings for each thread.
- ③ Cursor Advance Key: Press to move cursor.
- 4 Cursor: Current setting position.
- ⑤ Non-cursor position: Represents another.
- 4 Press LAYERS key to register how many layers of fabric you're sewing.





- 1 After entering your fabric, thread and layers settings, press the MEM key to save them.
- 2 There are three memory locations. Choose MEM 1, MEM 2 or MEM 3.(The number of memory locations changes depending on the type of stitch.)
- 3 The formerly memorized settings will be displayed.
- 4 Press OK key to replace the previous settings with the new ones, or press the Return key to cancel.
 - (1) Return key

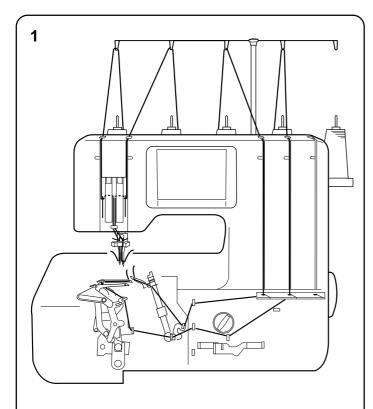


(To view Memorized Settings)

1 Press Recall Memory key to view the curently memorized settings.

2 If more than one memory location is being used, press Page key to advance to them.

Stitch Pattern and Threading



Depending on which stitch you have selected, the LED lights on the front of the machine will turn on to show you which threads should be used. Also, the visual touch screen will indicate the correct needle setting.

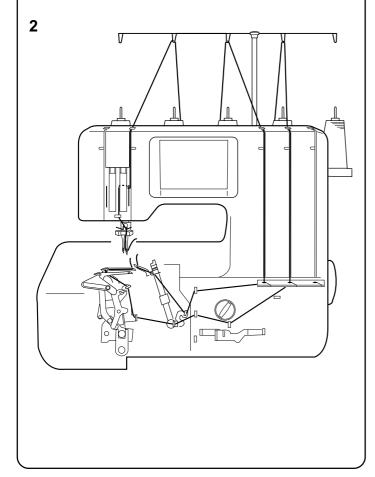
Press information key to confirm the machine setting.

The sewing pattern and threading is illustrated, as follows:

1. OVERLOCK 4

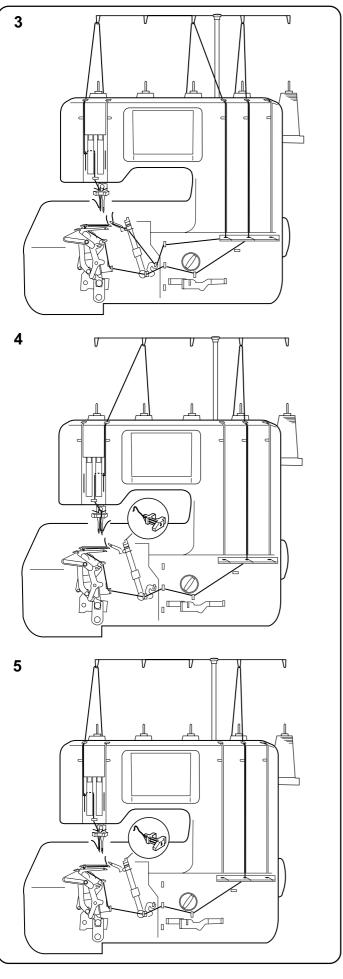
Needle setting position: LB (left back)

RB (right back)



2. OVERLOCK 3 (STANDARD), OVEREDGE 3 (STANDARD) ROLLED HEM 3, FLATLOCK 3 (STANDARD), NARROW HEM, PICOT EDGE,

Needle setting position: RB (right back)



3. OVERLOCK 3 (WIDE), OVEREDGE 3 (WIDE), FLATLOCK 3 (WIDE),

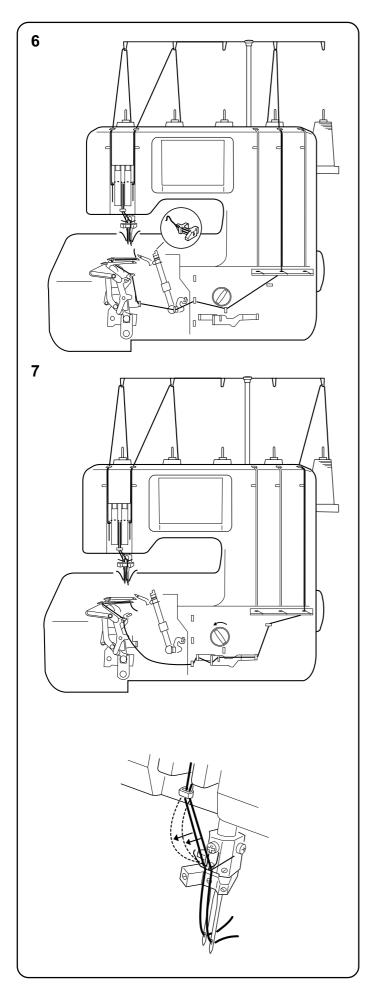
Needle setting position: LB (left back)

4. OVEREDGE 2 (STANDARD), ROLLED HEM 2 FLATLOCK 2 (STANDARD), WRAPPED OVERLOCK2 (STANDARD)

Needle setting position: RB (right back)

5. OVEREDGE 2 (WIDE), FLATLOCK 2 (WIDE), WRAPPED OVERLOCK 2(WIDE),

Needle setting position: LB (left back)



6. WRAPPED OVERLOCK 3

Needle setting position: LB (left back)

RB (right back)

7. COVER STITCH

Needle setting position: LF (left front)

RF (right front)

* The threading procedure that you can choose the needle thread first or the double chain looper thread.

The end of thread after threading the double chain looper should be pulled out 5 cm (2") from the double chain looper downward for ready to sew.

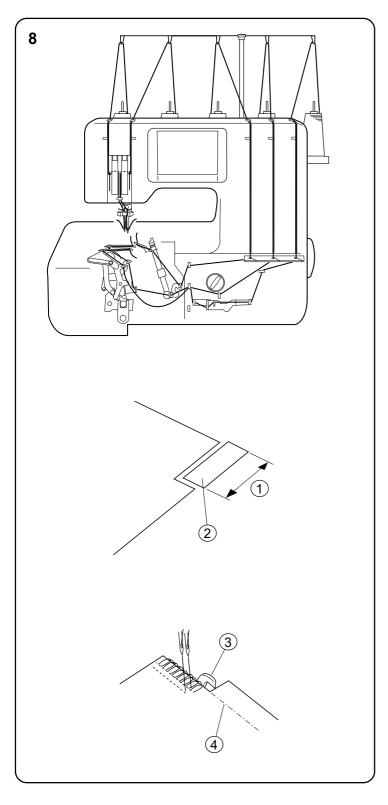
Place the needle thread under the presser foot.

- To begin with, raise the presser foot and place the fabirc at the desired start position.
 Lower the presser foot and start to sew.
- * To finish sewing, stop the machine at the desired position on the fabric and raise the needle bar to its highest position. Raise the presser foot so that the thread tension unit will release.

Loosen the needle thread tension so that you can pull the fabric easily.

Hold the edge of fabric and pull out 5 cm (2") from machine and cut both needle threads close to the fabric.

Next, pull the fabric to the back and cut off the looper thread.



8. OVERLOCK 5

Needle setting position: LF (left front)

RB (right back)

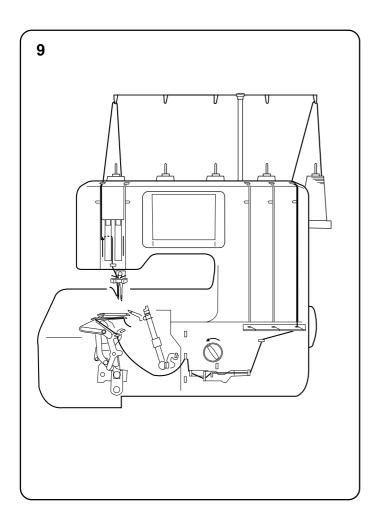
The threading procedure is as follows:

- 1 Lower looper thread
- 2 Upper looper thread
- 3 Double chain looper thread
- 4 Left needle thread (LF)
- 5 Place a sewing test piece under the needle and lower the presser foot.
- 6 Turn the handweel toward you and sew 2 to 3 stitches and pull the sewing test piece so that the double chain looper thread comes out of the needle plate hole.
- 7 Thread the right needle thread, then place it under the presser foot together with the right needle thread and double chain looper threads.
- * Make it easier to begin sewing...

Cut the fabric as shown so that the presser foot can be placed beside the fabric, then sew 2-3 stitches by turning the handwheel.

When you start sewing the next piece of fabric, the thread chain is already made so that you don't need to cut the corner of fabric.

- 1 3 cm (1.2")
- 2 Cut off
- 3 Upper knife
- 4 Cutting line



9. DOUBLE CHAIN

Needle setting position: LF (left front)

Threading procedure;

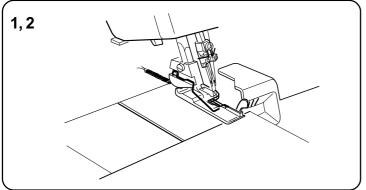
- 1 Double chain looper thread
- 2 Left needle thread

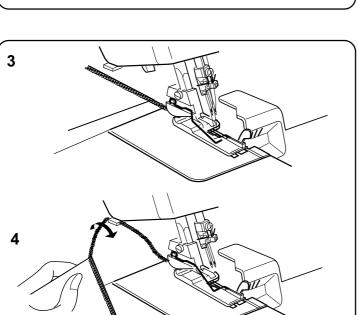
Bring the left needle thread under the presser foot, put a sewing test piece on the needle plate and lower the presser foot.

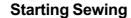
Turn the handwheel toward you to sew 2 to 3 stitches and pull the sewing test piece so that the double chain looper thread comes through the needle plate hole.

Draw out threads about 10 cm (4") under the presser foot.

SECTION3TESTSTITCHING







1 Insert the fabric under the toe of the presser foot.

(It is not necessary to raise the presser foot except when performing cover stitch or overlock 5.)

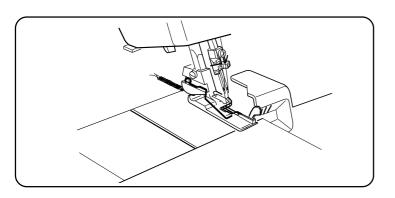
2 Turn the handwheel gently toward you a couple of turns and check the thread chain. Then start sewing slowly. The fabric will be automatically fed.

Guide the fabric in the desired direction.

Finishing Sewing

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

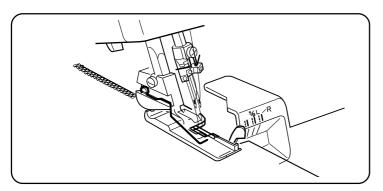
4 Cut the threads with the thread cutter as illustrated, leaving about a 5 cm (2") thread chain hanging from the end of the fabric.



Sewing Continuously

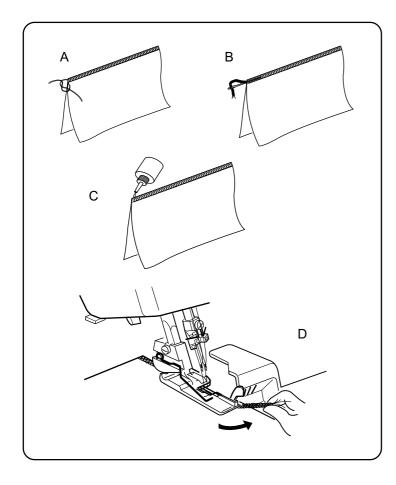
Insert the next fabric under the toe of the presser foot, then start sewing.
(It is not necessary to raise the presser foot for ordinary fabric.)

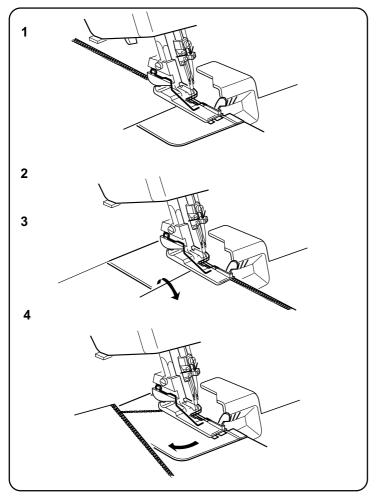
* For heavy weight fabric, raise the presser foot and insert the fabric in front of the knife. Then lower the foot and sew.



How to Use the Guide Lines

On the top of the looper cover are guide lines indicating the distance from the needle position. The distance from both the left (L) and right (R) needle are shown.





Securing Ends

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

At the Beginning

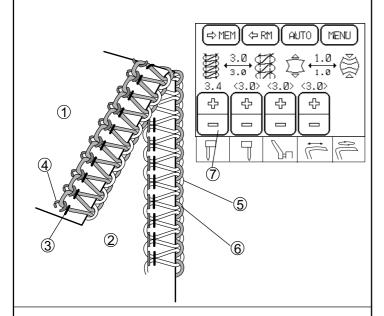
- A. Separate the end of the threads and knot.
- B. Thread the chain through a large eyed needle, and weave that chain through the overlock stitches on the fabric.
- C. Cut the chain at the edge of the fabric.

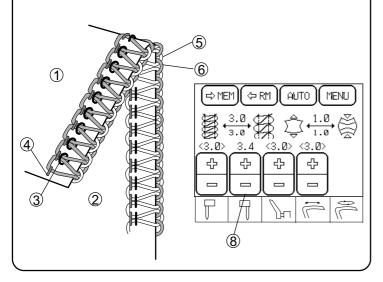
 Then apply a small amount of seam sealant (Fray Check TM or Fray-No-More TM) on the end of the threads.
- D. Backstitching
- 1 Before putting your fabric in the machine, sew a thread chain about 5 cm (2") long behind the needle.
- 2 Put your fabric in the machine. Then serge a few stitches and stop.
- 3 Raise the presser foot and bring the thread chain to the left around and under the presser foot.
- 4 Place the thread chain between the presser foot and upper knife, holding it in position as you lower the presser foot to sew.
- 5 After sewing about 2.5 cm (1"), move the chain to the right and under the upper knife, cutting the chain as you sew.

At the End of Seam

You can use the same methods as above to secure the end of the seam (except "Backstitching"), or the following methods:

- 1 Serge one stitch off the end of seam.
- 2 Raise the needle and presser foot, and gently pull the threads off the chaining finger.
- 3 Turn the fabric over.
- 4 Serge about 2.5 cm (1") over the stitching and angle off the fabric.





Thread Tension Adjustment

Thread Tension (4 threads)

Correct tension

The illustration at left shows sewing results with correct tension settings. However, adjusting the thread tension may be required depending on the type of fabric and thread being used.

To begin with, select the stitch pattern key and sew a test piece.

If the tension balance on the test piece is not satisfactory, you can adjust the thread tension manually, as follows:

- 1 Press Manual key to select the manual thread tension display screen.
- 2 Press Thread tension keys to adjust the [+/-] thread tensions manually.
 - ① Wrong side of fabric
 - 2 Right side of fabric
 - 3 Right needle thread
 - 4 Left needle thread
 - 5 Upper looper thread
 - 6 Lower looper thread
 - Left needle thread tension

Wrong tension

The illustration shows sewing results when the left needle thread tension is too loose.

Remedy:

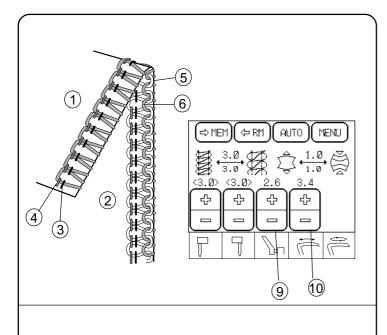
Tighten left needle thread tension.

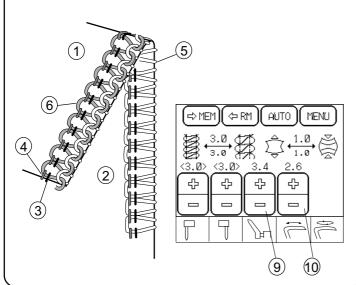
Wrong tension

The illustration shows sewing results when the right needle thread tension is too loose.

Remedy: Tighten right needle thread tension.

8 Right needle thread tension





Wrong tension

The illustration shows sewing results when the upper looper thread tension is too tight and/ or lower looper thread tension is too loose.

Remedy:

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

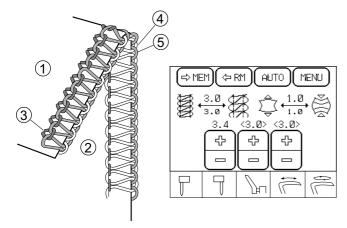
- 1 Wrong side of fabric
- 2 Right side of fabric
- 3 Right needle thread
- 4 Left needle thread
- (5) Upper looper thread
- 6 Lower looper thread
- 9 Upper looper thread tension
- 10 Lower looper thread tension

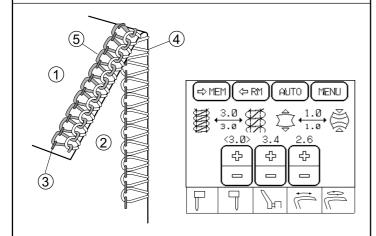
Wrong tension

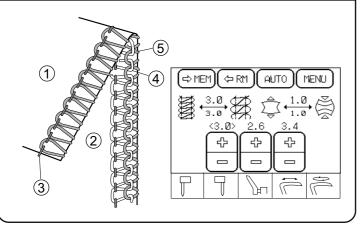
The illustration shows sewing results when the lower looper thread tension is too tight and/ or upper looper thread tension is too loose.

Remedy:

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







Thread Tension (3 threads)

(Standard stitch width)

Correct tension

The illustration at left shows sewing results with correct tension settings. However, adjusting the thread tension may be required depending on the type of fabric and thread being used.

To begin with, select the stitch pattern and sew a test piece.

If the tension balance on the test piece is not satisfactory, you can adjust the thread tension manually, as follows.

- ① Wrong side of fabric
- ② Right side of fabric
- 3 Right needle thread
- 4 Upper looper thread
- 5 Lower looper thread
- 6 Right Needle thread tension
- ① Upper looper thread tension
- 8 Lower looper thread tension

Wrong tension

The illustration shows sewing results when the needle thread tension is too loose.

Remedy:

Tighten needle thread tension.

Wrong tension

The illustration shows sewing results when the lower looper thread tension is too tight and/or upper looper thread tension is too loose.

Remedy:

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

Wrong tension

The illustration shows sewing results when the upper looper thread tension is too tight and/or lower looper thread tension is too loose.

Remedy:

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

Rolled Hem 3, Narrow Hem and Picot Edge

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

To begin with, select the automatic thread tension display screen of the each stitch patern to sew a test piece.

If the tension balance on the test piece is not satisfactory, you can adjust the thread tension manually, as follows:

Rolled Hem 3

Correct Tension

The illustration at left shows sewing results with correct tension settings.

Wrong tension

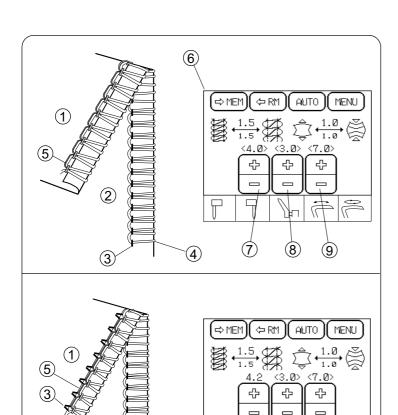
The illustration shows the sewing results when the right needle thread tension is too loose.

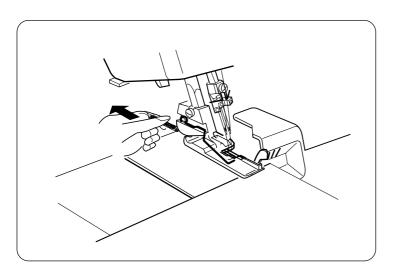
Remedy:

Tighten the right needle thread tension.

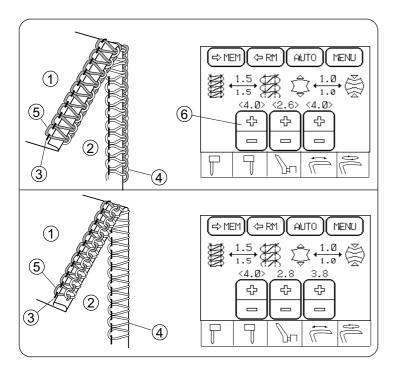
- 1 Wrong side of fabric
- 2 Right side of fabric
- 3 Right needle thread
- 4 Upper looper thread
- **5** Lower looper thread
- 6 Manual thread tension display screen
- Right needle thread tension
- 8 Upper looper thread tension
- 9 Lower looper thread tension
- For better results -

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





(4)



Narrow Hem

Correct Tension

The illustration at left shows sewing results with correct tension settings.

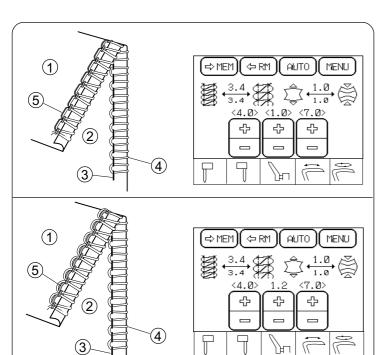
- 1) Wrong side of fabric
- 2 Right side of fabric
- 3 Right needle thread
- 4 Upper looper thread
- (5) Lower looper thread
- 6 Right needle thread tension

Wrong tension

The illustration shows the sewing results when theupper looper thread tension is too loose and/ or lower looper thread tension is too tight.

Remedy:

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



Picot Edge

Correct Tension

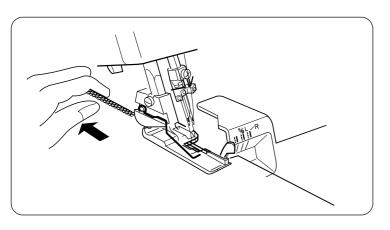
The illustration at left shows sewing results with correct tension settings.

Wrong tension

The illustration shows the sewing results when the upper looper thread tension is too loose.

Remedy:

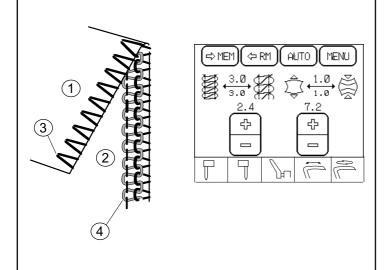
Tighten the upper looper thread tension.

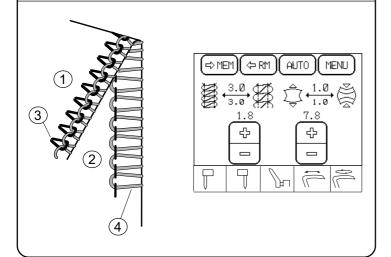


- For better results -

Pull the fabric lightly to the back while sewing.

1 3.0 MEM (\$\frac{1.0}{1.0}) MENU 3.0 \$\frac{1.0}{1.0} \$\frac{1.0}{1.0} \$\frac{1.0}{1.0}\$ (2.0) (7.6) \$\frac{1}{1.0}\$ (2.0) (7.6) \$\frac{1}{1.0}\$ (3.0) \$\frac{1.0}{1.0}\$ (4.0) \$\frac{1.0}{1.0}\$ (5.0) \$\frac{1.0}{1.0}\$ (6.0) \$\frac{1.0}{1.0}\$ (7.6) \$\frac{1.0}{1.0}\$ (8.0) \$\frac{1.0}{1.0}\$ (9.0) \$\frac{1.0}{1.0}\$ (9.0) \$\frac{1.0}{1.0}\$ (9.0) \$\frac{1.0}{1.0}\$ (1.0) \$\frac{1.0}{1.0}\$ (2.0) \$\frac{1.0}{1.0}\$ (7.6) \$\frac{1.0}{1.0





Thread Tension (2 threads)

(Standard stitch width)

Correct tension

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

To begin with, select the stitch pattern key and sew a test piece.

If the tension balance on the test piece is not satisfactory, you can adjust the thread tension manually, as follows;

Wrong tension

The illustration shows sewing results when the lower looper thread tension is too tight and/ or needle thread tension is too loose.

Remedy:

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

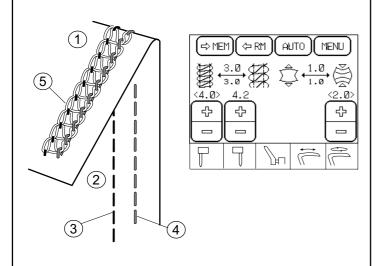
- 1 Wrong side of fabric
- ② Right side of fabric
- 3 Right needle thread
- 4 Lower looper thread
- (5) Right needle thread tension
- 6 Lower looper thread tension

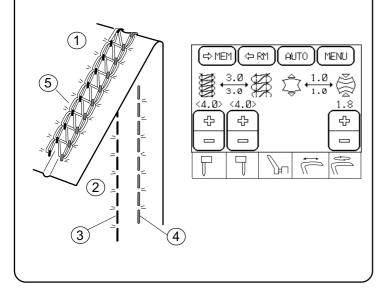
Wrong tension

The illustration shows sewing results when the needle thread tension is too tight and/or lower looper thread tension is too loose.

Remedy:

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





Thread Tension (Cover Stitch)

Correct tension

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

To begin with, select the stitch pattern key and sew a test piece.

If the tension balance on the test piece is not satisfactory, you can adjust the thread tension manually, as follows.

Wrong tension

The illustration shows sewing results when the right needle thread tension is too loose.

Remedy:

Tighten right needle thread tension.

- 1 Wrong side of fabric
- (2) Right side of fabric
- 3 Left needle thread
- 4 Right needle thread
- 5 Double chain looper thread
- 6 Left needle thread tension
- Right needle thread tension
- 8 Double chain looper thread tension

Wrong tension

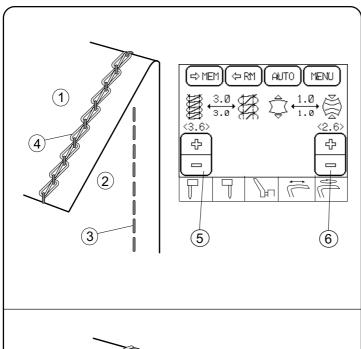
The illustration shows sewing results when the double chain looper thread tension is too tight.

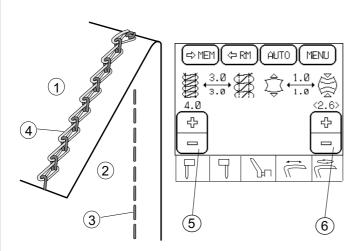
Remedy:

Loosen double chain looper thread tension.

Note:

If the double chain looper thread tension is loosened too much, it may cause missing stitches.





Thread Tension (Double Chain)

Correct tension

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

To begin with, select the stitch pattern key and sew a test piece.

If the tension balance on the test piece is not satisfactory, you can adjust the thread tension manually, as follows;

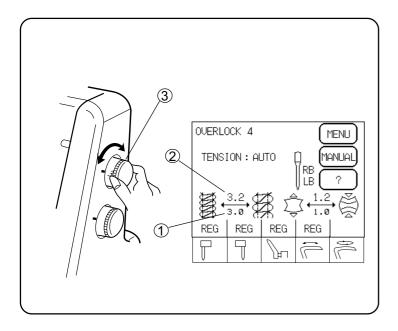
Wrong tension

The illustration shows sewing results when the left needle thread tension is too loose.

Remedy:

Tighten left needle thread tension.

- ① Wrong side of fabric
- ② Right side of fabric
- 3 Left needle thread
- 4 Double chain looper thread
- ⑤ Left needle thread tension
- 6 Double chain looper thread tension



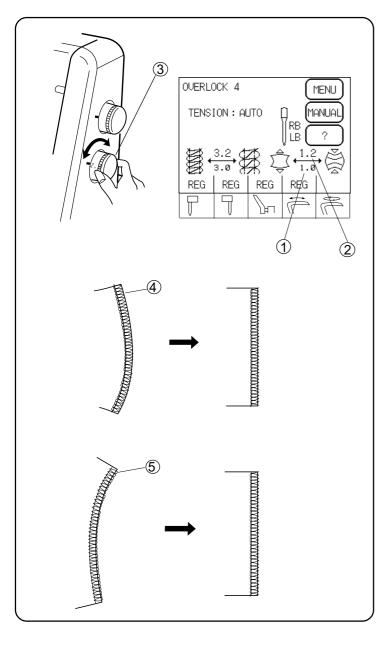
To Adjust Stitch Length

Turn the stitch length dial until the desired stitch length appears on the screen.

The larger the number, the longer the stitch. The stitch length can be adjusted from 1 to 5 mm.

The amount of stitch length is indicated on the automatic thread tension and manual thread tension screen.

- 1 Recommended stitch length (standard)
- (2) Current stitch length (manual setting)
- 3 Stitch length dial



To Adjust Differential Feed Ratio

Turn the differential feed dial to adjust the feed ratio.

The number on the screen indicates the ratio between the main and the sub feed motion. The differential feed ratio (1.0) indicates the neutral position.

The differential feed ratio is displayed on both the automatic thread tension and manual thread tension screen.

- Recommended differential feed ratio (standard)
- Current setting of the differential feed ratio (manual setting)
- (3) Differential feed dial

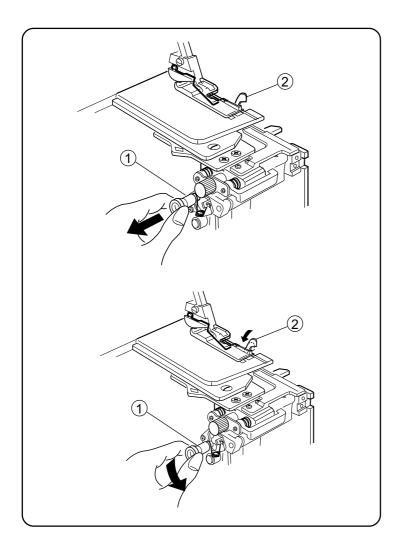
How to Adjust

If the fabric becomes stretched when sewn, turn the dial counterclockwise (toward 2.2).

(4) Stretched

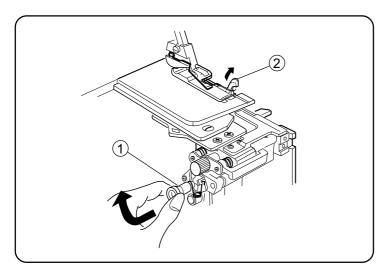
If the fabric becomes compressed when sewn, turn the dial clockwise (toward 0.5)

5 Compressed



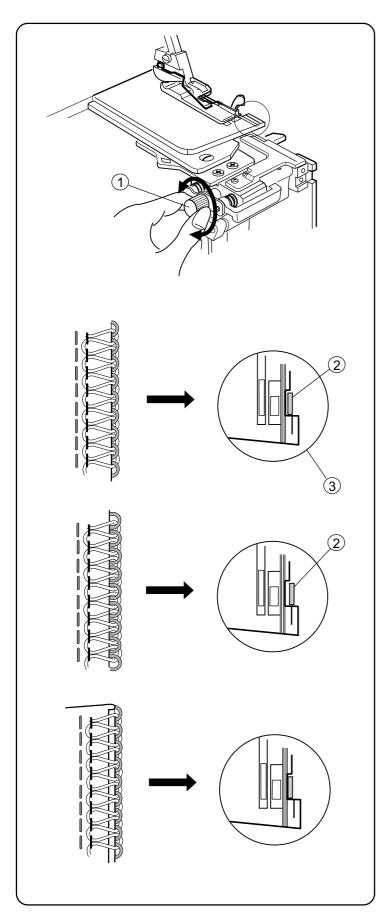
To Deactivate the Upper Knife

- 1 Turn off the power switch and unplug the machine.
- 2 Open the looper and side covers.
- 3 Pull out the upper knife release knob and slide it down along the guide until it comes to its lowest position.
- 4 Close the looper and side covers.
 - 1 Upper knife release knob
 - 2 Upper knife



To Activate the Upper Knife

- 1 Turn off the power switch and unplug the machine.
- 2 Open the looper and side covers.
- 3 Pull out the upper knife release knob and slide it up along the guide until it comes to its highest position.
- 4 Close the looper and side covers.



Adjustment of Cutting Width

When the cutting width is too narrow or too wide in relation to the seam width, adjust it as follows:

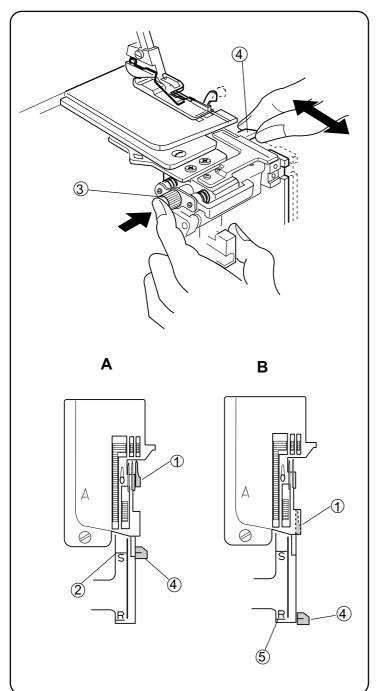
- 1 Turn off the power switch and unplug the machine.
- 2 Open the looper and side covers.
- 3 Turn the cutting width adjusting dial to move the cutting blades to the desired position.
 - ① Cutting width adjusting dial
 - 2 Lower knife
 - 3 Standard setting

If the cutting width is too narrow, turn the cutting width adjusting dial clockwise.

The lower knife will move right.

If the cutting width is too wide, turn the cutting width adjusting dial counterclockwise. The lower knife will move left.

4 Close the looper and side covers.



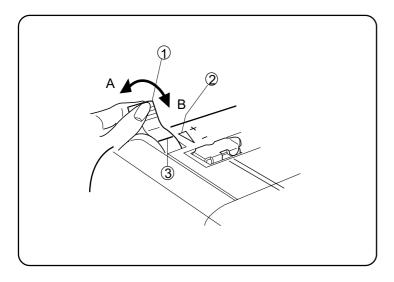
Adjustment of Chaining Finger Setting Knob

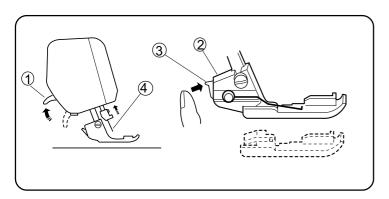
(Changing between Standard Serging or Rolled Hem)

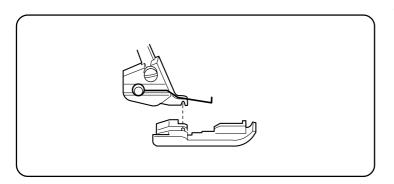
- 1 Turn off the power switch and unplug the machine.
- 2 Open the looper and side covers.
- 3 Push the cutting width adjusting dial to the right as far as it will go, then move the chaining finger setting knob to the guide line "S"(for Standard serging) or "R" (for Rolled hem).

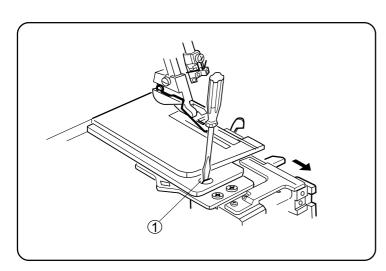
Release the cutting width adjusting dial to the left gently.

- 4 Close the looper and side covers.
 - 1 Chaining finger
 - ② Guide line (S)
 - 3 Cutting width adjusting dial
 - 4 Chaining finger setting knob
 - ⑤ Guide line (R)









Adjusting of Foot Pressure

Depending on the type of fabric, the foot pressure may have to be decreased or increased.

A : To increase B : To decrease

- 1 Pressure adjusting dial
- (2) Standard setting position
- 3 Setting mark

Note: The standard setting of presser dial is that the standard setting position meets the setting mark,as illustrated.

Removing the Presser Foot

- 1 Raise the needle and presser foot.
- 2 Press the lever on the back of the foot holder. The presser foot will drop off.
 - (1) Presser foot lifter
 - 2 Foot holder
 - 3 Lever
 - 4 Needle

Attaching the Presser Foot

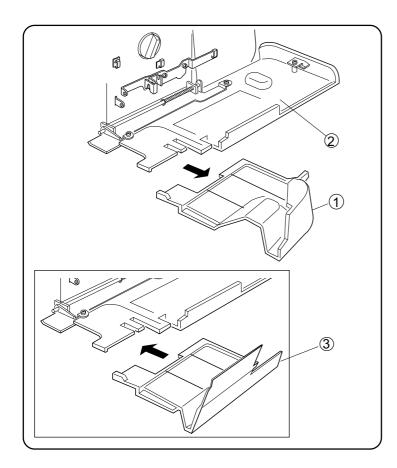
Place the presser foot so that the pin on the foot lies just under the groove of the foot holder.

Lower the foot holder to lock the foot in place. Raise the presser foot lifter to check that the presser foot is secure.

* The visual touch screen will indicate which presser foot (A or B) should be used, based on the sewing conditions.

How to Replace the Needle Plate

- 1 Open the looper and side covers.
- 2 Remove the needles and presser foot. Return the chaining finger to the "R" position.
- 3 Remove the needle plate set screw and the needle plate.
- Attach the needle plate (A) or (B) depending on the visual touch screen indication.
 - 1 Needle plate set screw

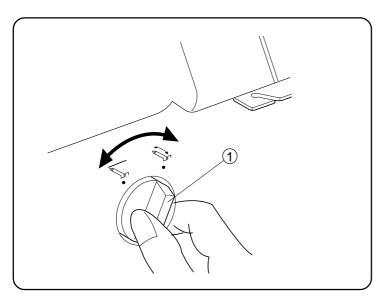


How to Replace the Extension Table

The visual touch screen will indicate when you should replace the extension table.

Open the looper cover and pull off the extension table (A). Snap the extension table (B) onto the looper cover .

- 1 Extension table (A)
- 2 Looper cover
- 3 Extension table (B)
- * Make sure both the upper looper and the upper knife have been dropped to their lowest positions (deactivated), replace the needle plate, pressure foot and move the chaining finger to "R" position before attaching the extension table (B).
- * Replacement of the extension table is required for the cover stitch and double chain stitch sewing.



How to Change the Upper Looper Position

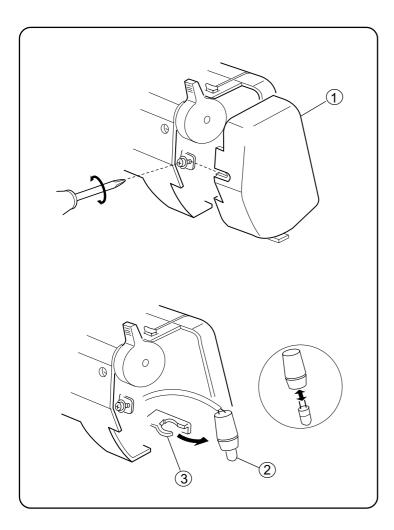
The visual touch screen will indicate when it is necessary to activate or deactivate the upper looper.

Turn the upper looper release dial to the right to activate.

Turn the upper looper release dial to the left to deactivate (lowest position).

① Upper looper release dial

SECTION 4 MAINTENANCE



Replacing the Light Bulb

1 Turn of the power switch and unplug the machine.

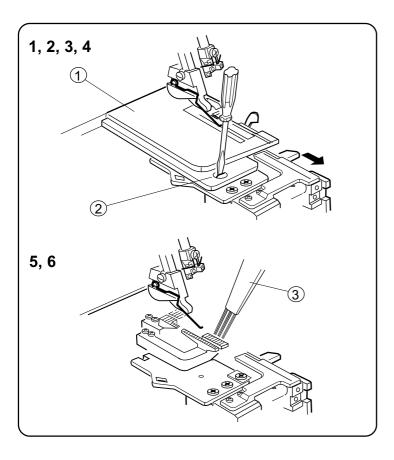
Loosen the face plate set screw, and remove the face plate.

To remove:

2 Pull out the lamp socket from the holder and remove the light bulb from the lamp socket.

To replace:

- 3 Put a new bulb in the lamp socket.
- 4 Attach the face plate and tighten the set screw.
 - 1) Face plate
 - 2 Light bulb
 - (3) Holder

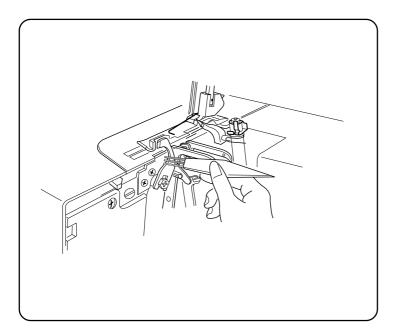


Cleaning the Feed Dog

- 1 Open the looper and side covers.
- 2 Remove the needles and presser foot.
- 3 Move the chaining finger setting knob to "R" position.
- 4 Remove the needle plate set screw and the needle plate.
- 5 Remove the lint around the feed dogs with the lint brush.
- 6 Replace the needle plate, presser foot and needles.

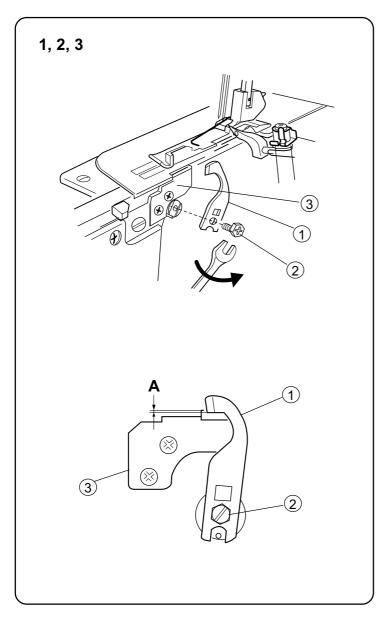
Close the looper and side covers.

- 1 Needle plate
- 2 Needle plate set screw
- 3 Lint brush



Cleaning the Upper Knife Area

- 1 Turn off the power switch and unplug the machine.
- 2 Open the looper cover.
 Brush the waste chips to the front with a lint brush.
- * You may also use a vacuum cleaner to clean the upper knife area or feed dog.



Replacing the Upper Knife

To Remove:

- 1 Turn off the power switch and unplug the machine.
- 2 Open the looper cover.
- 3 Turn the handwheel toward you until the upper knife reaches its highest position.
- 4 Remove the hexagon bolt and the upper knife.

To attach:

1 Insert a new upper knife into the groove of the knife holder.

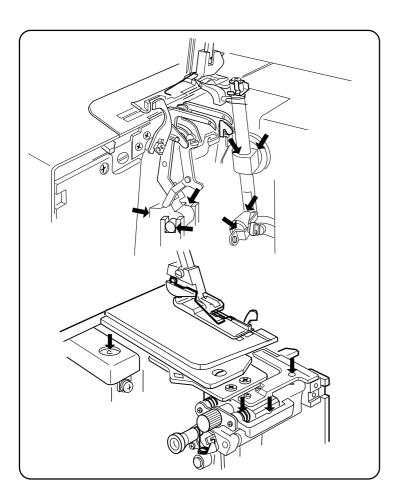
Then tighten the hexagon bolt slightly.

2 Turn the handwheel toward you until the upper knife reaches its lowest position.
Loosen the hexagon bolt, and adjust the

position of the upper knife so that its blade overlaps the edge of lower knife 0.8 mm to 1.5 mm (3/64"), as shown.

Then, tighten the hexagon bolt firmly.

- 3 Close the looper and side covers.
 - (1) Upper knife
 - 2 Hexagon bolt
 - (3) Lower knife
 - (A) 0.8 to 1.5 mm (3/64")



Oiling the Machine

Open looper cover and side covers.

It is recommended to apply oil once a week in normal use, once in ten hours in continuous use.

Apply a few drops of fine quality sewing machine oil to the parts indicated with arrows.

Troubleshooting

Condition	Cause	Reference
The fabric is not being fed smoothly.	The feed dog is packed with lint. The presser foot has been raised.	See page 52. Lower the presser foot.
The needle breaks.	 The needle is incorrectly inserted. The needle is bent or blunt. The fabric is being pulled too strongly. 	See page 9. See page 9. Pull the fabric lightly.
The thread breaks.	The machine is not correctly threaded. The needle or looper thread tension is too tight. The needle is incorrectly inserted.	See pages 10–23 and 31–35. See pages 38–45. See page 9.
Skipped stitches.	The needle is bent or blunt. The machine is not correctly threaded.	See page 9. See page 10–23 and 31–35.
The seam is not sewn neatly.	 The needle and/or looper thread tensions are not correctly adjusted. The machine is not correctly threaded. The needle and/or the thread are not suitable for the fabric being sewn. The thread is not correctly inserted in the tension unit. 	See pages 38–45. See pages 10–23 and 31–35. See pages 25,27. See pages 13,15,18,20 and 22.
Seam puckering.	The needle or looper thread tension is too tight. The machine is not correctly threaded. The differential feed dial is not correctly adjusted.	See pages 38–45. See pages 10–23 and 31–35. See page 46.
The machine does not operate.	The machine has not been plugged in firmly. The power switch is turned off.	See page 5. See page 5.
The fabric is not cut neatly.	The position of the upper knife is not adjusted properly. The upper knife is dull.	See page 53. Replace the upper knife.
Touch screen is not clear.	The screen brightness is not adjusted properly.	Turn the knob to correct. (See page 8.)