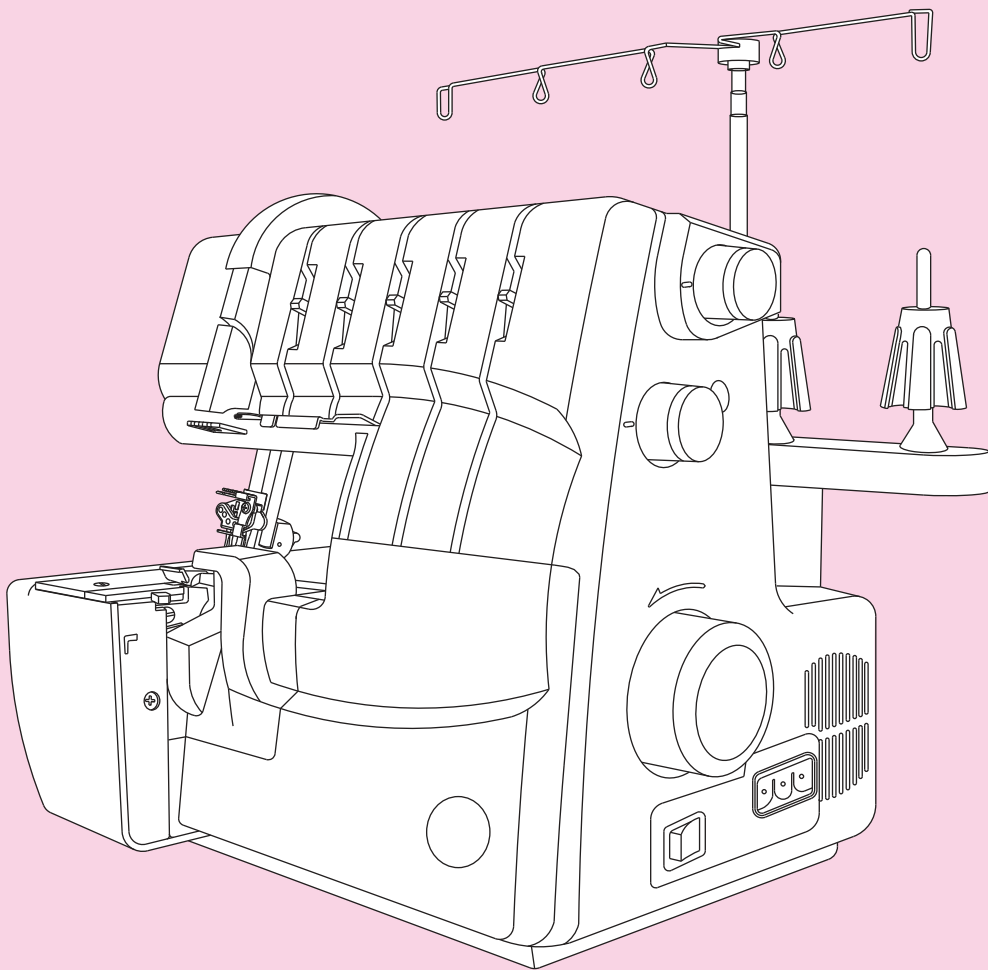


14T968DC

Instruction Book



SINGER[®]
AT HOME WORLDWIDE

14T968DC

PREFACE

Thank you for your purchase of this Combination Overlock, Chain Stitch and Cover Stitch Sewing Machine. This machine, that is intended for household use, will provide you with excellent performance in sewing from light to heavy material (lawn to denim).

Please refer to this Instruction Book for proper use and optimum service. To get the most out of your sewing machine, read the entire Instruction Book before attempting to operate the machine. Then familiarize yourself with the machine by following the Instruction Book page by page.

To ensure that you are always provided with the most modern sewing capabilities, the manufacturer reserves the right to change the appearance, design or accessories of this sewing machine when considered necessary without notification or obligation.

This SINGER sewing machine, model 14T968DC, has been tested by GS (Certification of Electro-technical Materials) according to European standards, and corresponds to the guidelines for electrical safety, radio interference and surge immunity. Conformity is documented by the GS symbol and the CE identification.



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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 -To reduce the risk of electric shock:

- * The machine should never be left unattended when plugged in. Always unplug the machine from the electric outlet immediately after using and before cleaning.
- * Always unplug before re-lamping. Replace bulb with the same type rated 15 watts. Be sure to replace the face plate which covers the light bulb before operating the machine.



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

- * Be sure that the electrical voltage of the electric outlet (wall receptacle) is the same as the rated voltage of the motor.
- * Use this machine only for its intended use as described in this Instruction Book. Use only attachments recommended by the manufacturer as contained in the Instruction Book.
- * To disconnect, turn all controls to the off ("0") position, then remove plug from outlet.
- * Disconnect the power line plug from the socket outlet or switch the machine off when making any adjustments in the needle area, such as threading needle and loopers, changing needle, changing throat plate or changing presser foot, etc.
- * Always unplug the machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the Instruction Book.
- * Do not attempt to adjust the motor belt. Contact your nearest Service Center should any adjustment be required.
- * Handle the foot controller with care and avoid dropping it on the floor. Be sure not to place anything on top of the controller.
- * Always use the proper needle plate. The wrong plate can cause the needle to break.
- * Do not use bent needles.
- * When sewing, keep fingers away from all moving parts. Special care is required around the sewing machine needle.
- * Do not pull or push fabric while stitching. It may deflect the needles causing them to break.
- * For double insulated machines, when servicing, use only identical replacement parts. See instructions for Servicing of Double-Insulated Appliances.
- * Never operate the machine if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into the water. Return the machine to the nearest authorized dealer or Service Center for examination, repair, electrical, or mechanical adjustment.
- * Never operate the machine with any air openings blocked. Keep ventilation openings of the machine and foot controller free from the accumulation of lint, dust and loose cloth.
- * Never drop or insert any object into any opening.

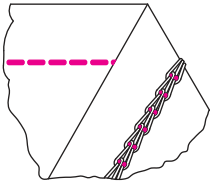
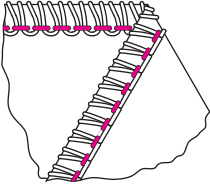
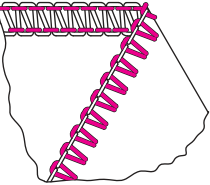
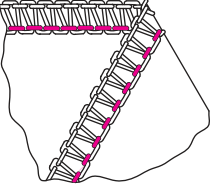
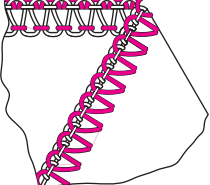
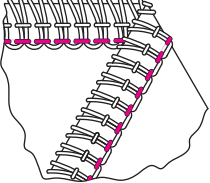
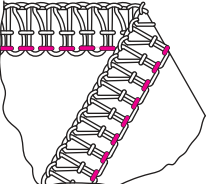
- * Do not use outdoors.
- * Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
- * Do not allow to be used as a toy. Close attention is necessary when the machine is used by or near children.
- * Do not expose the machine or machine plastic case to sunlight directly. Also, do not keep it in a very warm or damp place.
- * Do not touch the machine, foot controller and power line cord with wet hand, wet cloth or with anything wet.
- * Do not connect power line cord to one of the many cords connected to one power outlet with adapters.
- * Use machine on flat and stable table.
- * Be sure to close the looper cover before operating the machine.
- * Keep presser foot and needles away from children's reach.
- * Be sure the light bulb has cooled off before changing with a new one.
- * Do not dismantle or modify the machine yourself.
- * Be sure to turn off the power switch and disconnect the power line plug before caring for your machine as instructed in the Instruction Book.
- * 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.
- * Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- * **SERVICING OF DOUBLE-INSULATED PRODUCTS.** In a double-insulated product, two systems of insulation is provided instead of grounding. No grounding means is provided on a double-insulated product, nor should a means for grounding be added to the product. Servicing of a double-insulated product requires, extreme care and knowledge of the system, and should be done only by qualified service personnel. Replacement parts for a double-insulated product must be identical to those parts in the product. A double-Insulated product is marked with the word "DOUBLE-INSULATION" or "DOUBLE-INSULATED".

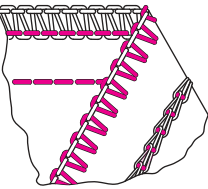
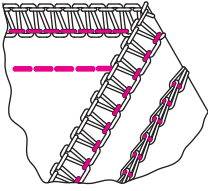
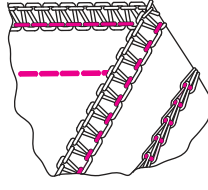
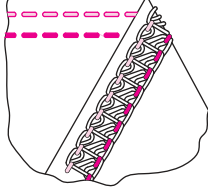
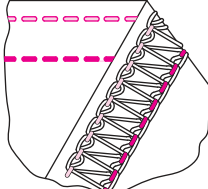
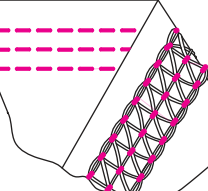
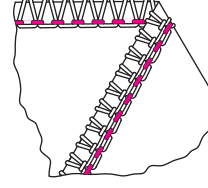
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1. SELECTION OF STITCHES & AUTO TENSION

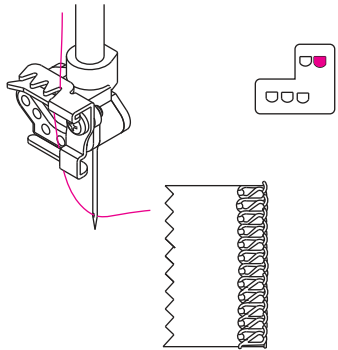
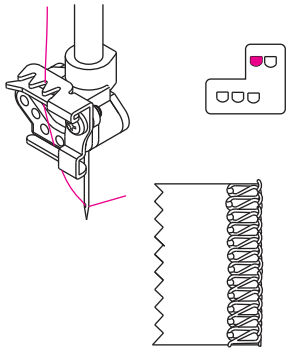
This machine is capable of producing various types of stitches according to the combination of Auto Tension Selected, needle positions, threading methods, and the use of convertible right looper/spreader.

Stitch Type	ATD : Auto Tension Dial Selected	Reference Page
1. Double Chain Stitch ATD: D		A 1-needle 2-thread straight stitch is used for construction or decorative stitching. Seams also can be sewn at desired distance from edge of fabric by disengaging the right looper and movable knife. 39
2. Two-thread Wrapped Edge Overlock ATD: D ATD: G		1-needle 2-thread stitch is used for seaming lightweight or stretch fabrics. It is also ideal for rolled and blind hemming. A 4 mm and 6 mm overlock seam width can be obtained by changing the needle position. 41
3. Two-thread Overedge ATD: E		1-needle 2-thread stitch is used for overedging common fabrics. It is also ideal for flatlock (butted or lapped) seams and blind hemming. A 4 mm and 6 mm overedge seam width can be obtained by changing the needle position. 42
4. Three-thread Overlock ATD: A ATD: B		1-needle 3-thread stitch is used for overedging and seaming on common fabrics. A 4mm and 6 mm overlock seam width can be obtained by changing the needle position. 43
5. Three-thread Flatlock ATD: F		1-needle 3-thread stitch is used for butted or lapped seams and ornamental stitching with decorative thread. Also, a 4 mm and 6 mm flatlock width can be obtained by changing the needle position. 44
6. Three-thread Ultra-Stretch Mock Safety Stitch ATD: G		2-needle 3-thread stitch that is ideal for lightweight, extremely stretchy fabrics such as tricot and spandex. 45
7. Four-thread Ultra-Stretch Mock Safety Stitch ATD: A		2-needle 4-thread stitch that is ideal for medium to heavyweight stretchy fabrics such as double knits and swim Wear. 46




















Stitch Type	ATD : Auto Tension Dial Selected	Reference Page
8. Four-thread Safety Stitch ATD: I		The 4-thread stitch is a safety stitch made up of combined 2-thread overedge and double chainstitch. 47
9. Five-thread Safety Stitch Wide ATD: B		The 5-thread stitch is a safety stitch made up of combined 3-thread overlock and double chainstitch. A wide seam is formed by using left needle. Overedge and seaming can be done in one operation on non-stretch fabrics. 48
10. Five-thread Safety Stitch Narrow ATD: A		The 5-thread stitch is a safety stitch made up of combined 3-thread overlock and double chainstitch. A narrow seam is formed by using right Needle. Overedge and seaming can be done in one operation on non-stretch fabrics. 48
11. Cover Stitch Narrow (2.8mm) ATD: K		2-needle, 3-thread cover stitch is suitable for stretchy fabrics such as knits, etc. A narrow seam is formed by using left and middle needles. 51
12. Cover Stitch Wide (5.6mm) ATD: H		2-needle 3-thread cover stitch is suitable for stretchy fabrics such as knits, etc. A wide seam is formed by using left and right needles. 51
13. Triple Cover Stitch (5.6mm) ATD: J		3-needle 4-thread cover stitch is suitable for stretchy fabrics such as knits, etc. A triple seam is formed by using left, middle, and right needles. 52
14. Three-thread Rolled Hem ATD: C		1-needle 3-thread stitch is used for sewing narrow rolled hems. 55

* Depending on the needle positions used, this machine can sew 2-thread and 3-thread standard width 4 mm overedge and a 6 mm wide overedge seams.

Also, for overedging heavyweight fabrics, the seam width can be increased still more by turning the overedge seam width adjustment knob. (See page 31)

Overedge width	4.0 mm	6.0 mm
Needle used	Overedge right needle	Overedge left needle
Needle thread tension fine tuning	Blue	Orange
		

2. HANDY REFERENCE CHART

	Stitch Type	ATD	SL	DF	L / C	Needle Position 	Correct Threading / Tension Path: When using the Auto Tension Dial (ATD), the correct tension is set automatically.					Page
							Orange	Blue	Green	Red	Brown	
1	Double Chain Stitch	D	N	N	C			●			●	39
2	Two - Thread Wrapped Edge Overlock	D	2	N	L	4.0mm 		●			●	41
		G	2	N	L	6.0mm 	●				●	41
3	Two - Thread Overedge	E	2	N	L	4.0mm 		●			●	42
		E	2	N	L	6.0mm 	●				●	42
4	Three - Thread Overlock	A	N	N	L	4.0mm 		●	●	●		43
		B	N	N	L	6.0mm 	●		●	●		43
5	Three - Thread Flatlock	F	2	N	L	4.0mm 		●	●	●		44
		F	2	N	L	6.0mm 	●		●	●		44
6	Three - Thread Ultra - Stretch mock Safety Stitch	G	2	N	L		●	●		●		45
7	four - Thread Ultra - Stretch mock Safety Stitch	A	N	N	L		●	●	●	●		46
8	Four - Thread Safety Stitch	I	N	N	L		●	●		●	●	47
9	Five - Thread Safety Stitch Wide	B	N	N	L		●	●	●	●	●	48
10	Five - Thread Safety Stitch Narrow	A	N	N	L		●	●	●	●	●	48
11	Cover stitch Narrow	K	N	N	C	2.8mm 	●	●			●	51
12	Cover stitch Wide	H	N	N	C	5.6mm 	●		●		●	51
13	Triple Cover stitch	J	N	N	C	5.6mm 	●	●	●		●	52
14	Three - Thread Rolled Hem	C	1	N	L	4.0mm 		●	●	●		55

ATD: Auto Tension Dial Selection

SL: Stitch Length

DF: Differential Feed

L / C: Upper Loper driving clutch position

*When option 2, 3, 6, 8 selected, use spreader.

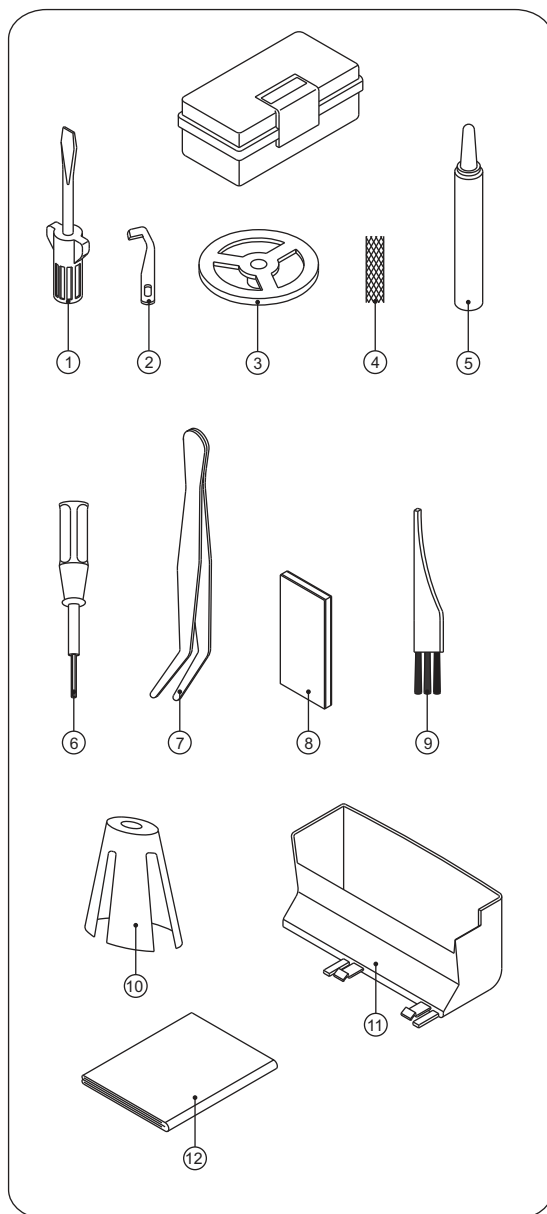
*When option 1, 11, 12, 13 selected, turn upper knife down, move seam width finger knob to setting R, and change looper cover attached cover (A) into (B).

*Auto tension settings are based on medium weight fabric and standard # 60 polyester spun thread. It can satisfy most requirements for sewing. If using a different thread weight or fabric and the result is not as you expected, please adjust tension in small increments.

3. ACCESSORIES

Accessories are contained in the accessory case

- | | |
|-------------------------------|----------------|
| 1. Screw driver (large size) | 1 |
| 2. Knife (stationary) | 1 |
| 3. Thread Unwinder spool cap | 5 |
| 4. Anti-spill net | 5 |
| 5. Oiler | 1 |
| 6. Allen Screw driver (small) | 1 |
| 7. Tweezers | 1 |
| 8. Needle set | 1 |
| 9. Brush | 1 |
| 10. Cone Adapters | 5 (on machine) |
| 11. Waste tray | 1 in carton |
| 12. Machine cover | 1 in carton |



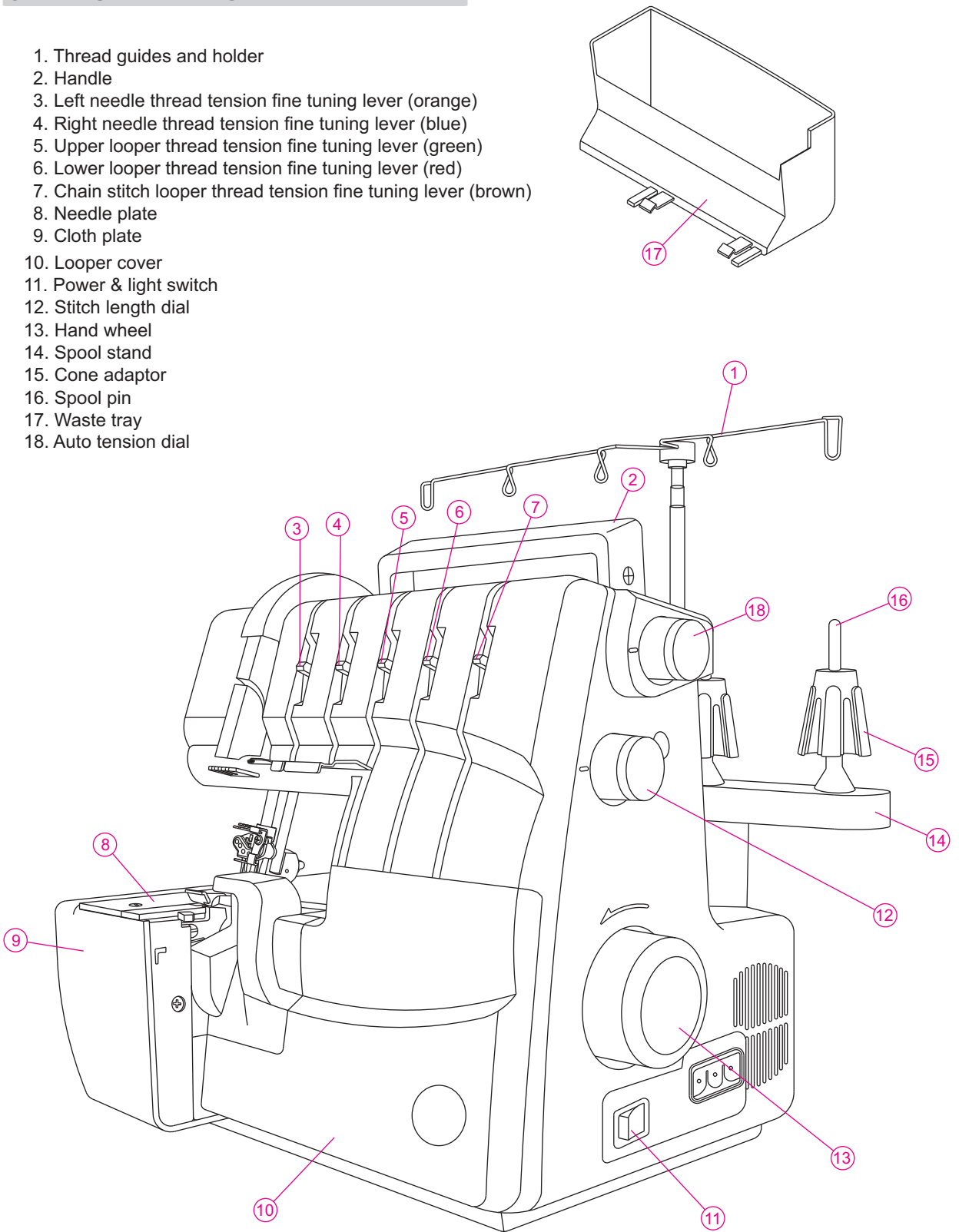
4. NEEDLE INFORMATION

- This overlock uses a flat shank industrial needle that eliminates the possibility of inserting the needle backwards.
- Do not attempt to use a standard household sewing machine needle of any size or type in this overlock.
- Singer needle #2022 size 14/90 is furnished with the machine.
- Only use Needle #2022 size 14/90 and 11/80 as supplied in the accessory case.

#2022
Overlock needle

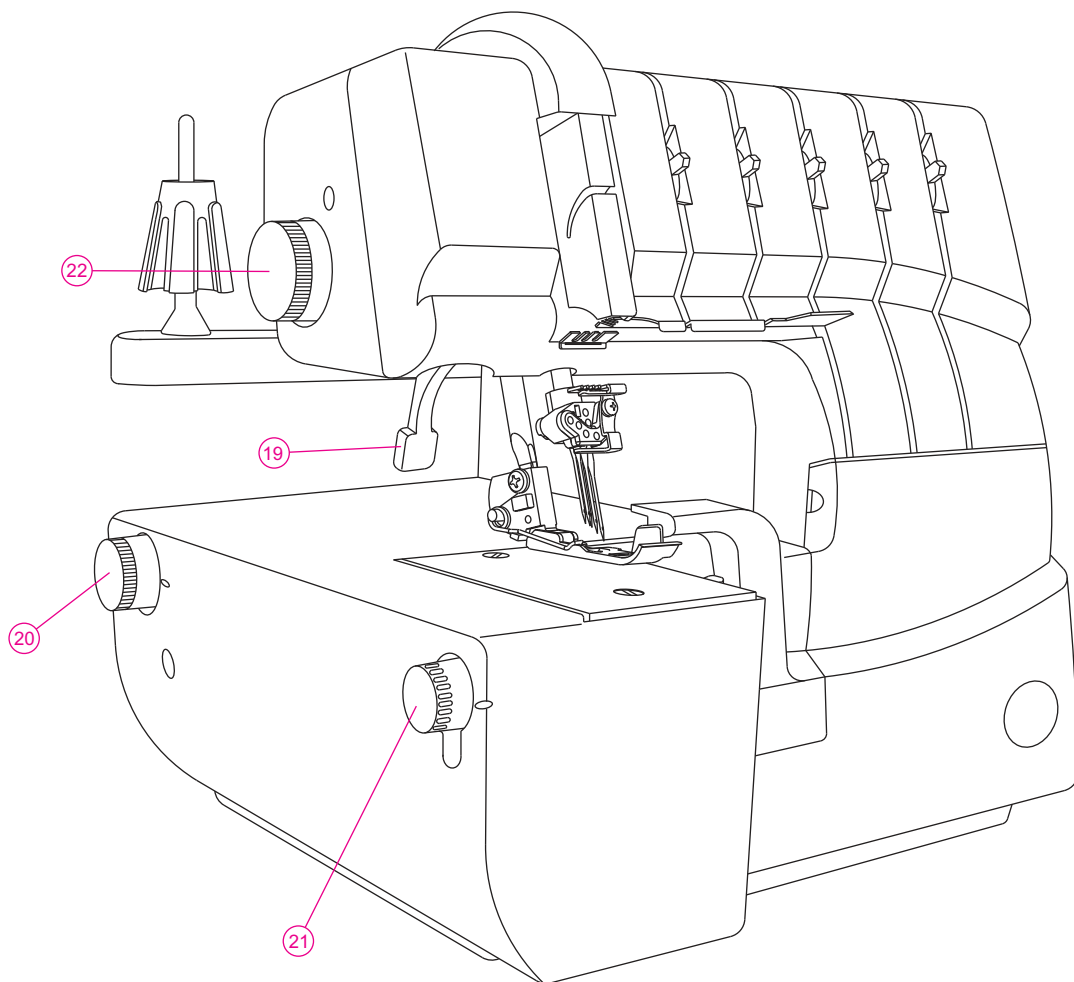
5. PRINCIPAL PARTS

1. Thread guides and holder
2. Handle
3. Left needle thread tension fine tuning lever (orange)
4. Right needle thread tension fine tuning lever (blue)
5. Upper looper thread tension fine tuning lever (green)
6. Lower looper thread tension fine tuning lever (red)
7. Chain stitch looper thread tension fine tuning lever (brown)
8. Needle plate
9. Cloth plate
10. Looper cover
11. Power & light switch
12. Stitch length dial
13. Hand wheel
14. Spool stand
15. Cone adaptor
16. Spool pin
17. Waste tray
18. Auto tension dial



PRINCIPAL PARTS

- 19. Presser bar lifter and tension release
- 20. Differential feed adjusting dial
- 21. Cutting width dial
- 22. Presser foot pressure adjusting dial



6. HOW TO OPEN LOOPER COVER



Caution:

Be sure to turn off power switch.

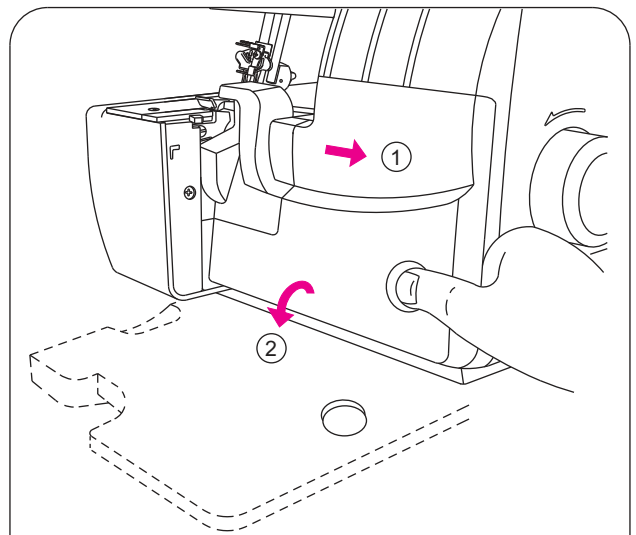
- Push the cover to the right as far as it will go.
- Pull cover down toward you.



Caution:

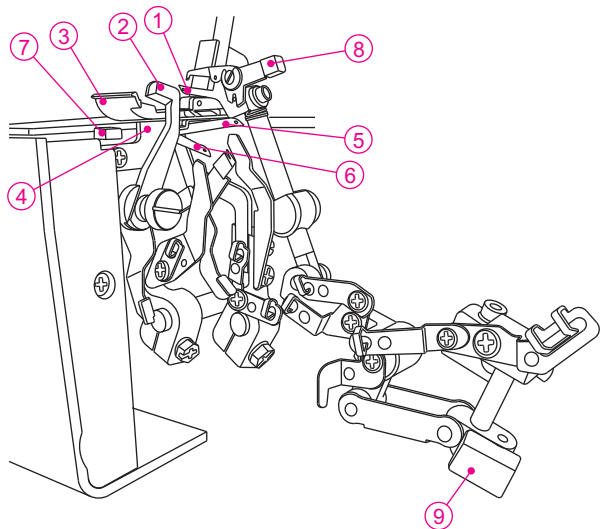
Be sure looper cover is closed when sewing.

Note: Machine will not operate when Looper Cover is open.



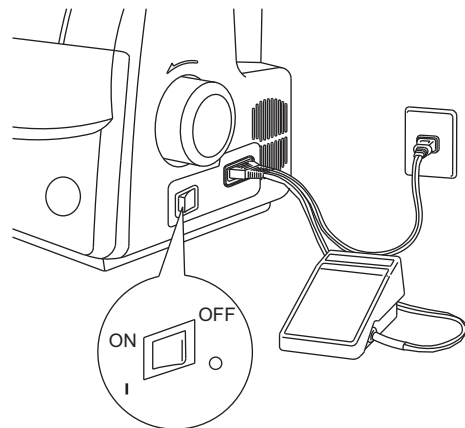
7. PRINCIPAL PARTS BEHIND THE LOOPER COVER

1. Upper looper
2. Moveable Upper knife
3. Presser foot
4. Fixed position lower knife
5. Lower looper
6. Chain/Cover looper
7. Rolled Hem lever
8. Spreader
9. Upper looper clutch



8. PREPARATION PRIOR TO SEWING

- Connect the controller/electric plug to the machine receptacle.
- Plug power line into electric outlet.
- Power Switch: Push "I" mark side to turn "ON"
Push "O" mark side to turn "OFF"
- To run the machine and control the speed, press the controller.
- The harder you press, the faster the machine will sew.
- To stop the machine from sewing, remove your foot from the controller.



WARNING:

Use only foot controller provided with this machine.
(Type 4C-316B for U.S.A. & CANADA only)
Be sure to make reference to "Warning" on following Page.

POLARIZED PLUG INFORMATION (FOR U.S.A. & CANADA ONLY)

This appliance has 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 way. 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 any way.



Warning:

- * Be sure that the electrical voltage of the electric outlet (wall receptacle) is the same as the rated voltage of the motor.
- * Handle the foot controller with care and avoid dropping it on the floor. Be sure not to place anything on top of it when not in use.
- * Disconnect the power line plug from the electric outlet when changing needles, presser feet or when leaving the machine unattended. This eliminates the possibility of starting the machine by accidentally pressing the controller.

9. REMOVAL AND REPLACEMENT OF WASTE TRAY

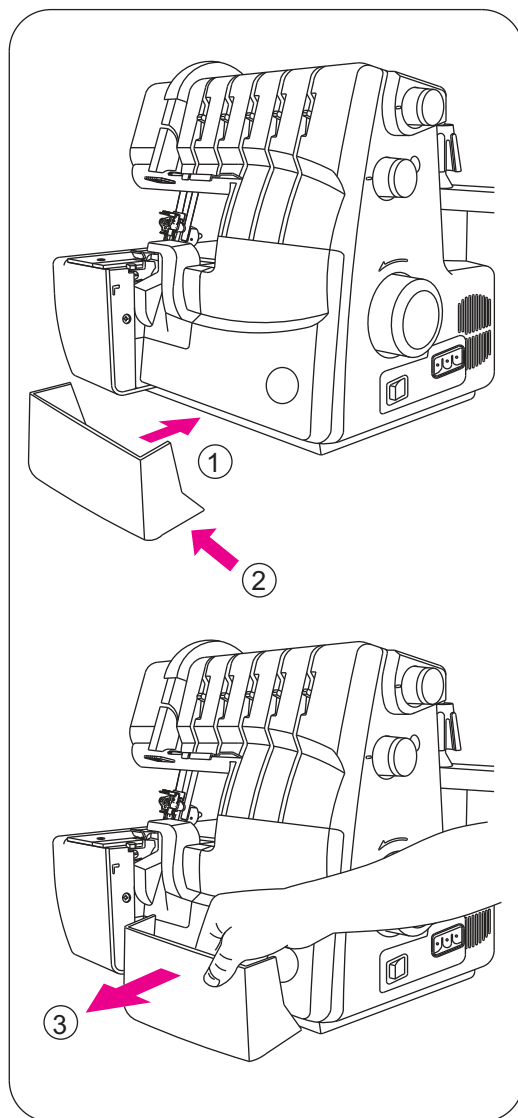
Replacement

- Insert the waste tray under the looper cover.

Be sure the left side of waste tray is mounted near the cutter where the scraps drop.

Removal

- To remove, hold the waste tray as shown and pull it outward.



10. PREPARATION FOR THREADING

Setting Up the Thread Guide Holder

- Take out the thread guide from the top of Styrofoam, and insert it as shown on illustration.
- This machine is shipped with the thread guide holder in the lowered position.
- Fully extend the thread guide holder.
- The two joints on the telescope will click into place when they are correctly positioned.
- Center the thread guides above the spool pins.
- Place thread over the cone adapters on the spool pins.

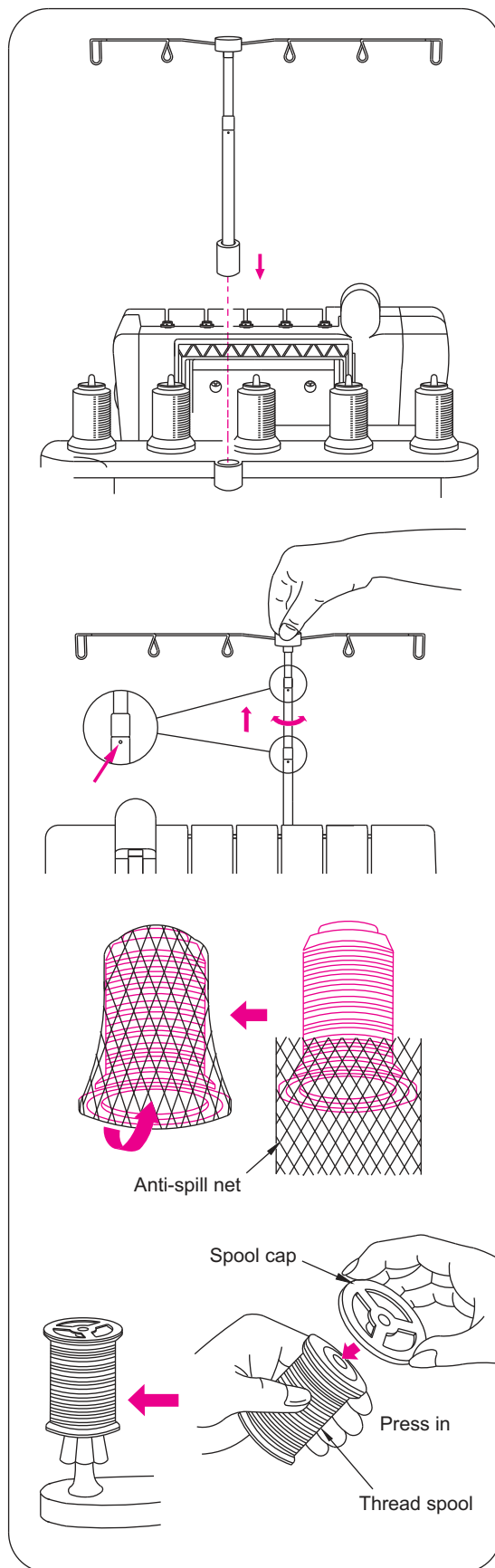
Note: Your new machine is threaded to sew Triple Cover Stitch. Refer to Page 30 for instructions on tying on to the threads.

Anti-spill Net

- When using synthetic threads that easily spill off the cone, slip the anti-spill net furnished with the machine over the thread from the bottom of the cone leaving the thread end hanging free at the top of the anti-spill net as shown on illustration.

Spool Cap

- When using a regular thread spool, fit the spool cap supplied with the machine onto the thread spool as shown on illustration.



11. HOW TO REMOVE AND INSERT NEEDLES

Needle Position

- With this machine, five needles can be inserted into the needle clamp as shown in the drawing but only one or two or three needles are to be used for sewing. Do not attempt to use four or five needles.
- The Instruction Book refers to different needle positions by illustrating the needle clamp at right.

Note: When both the left and right overedge needles are inserted, the left needle will be slightly higher than the right.

When all cover stitch needles are inserted, the center needle will be slightly higher than the right needle and the left needle slightly higher than the center needle.

To Remove Needle (s)



Caution:

Be sure to disconnect the machine from the electric outlet before removing needle(s).

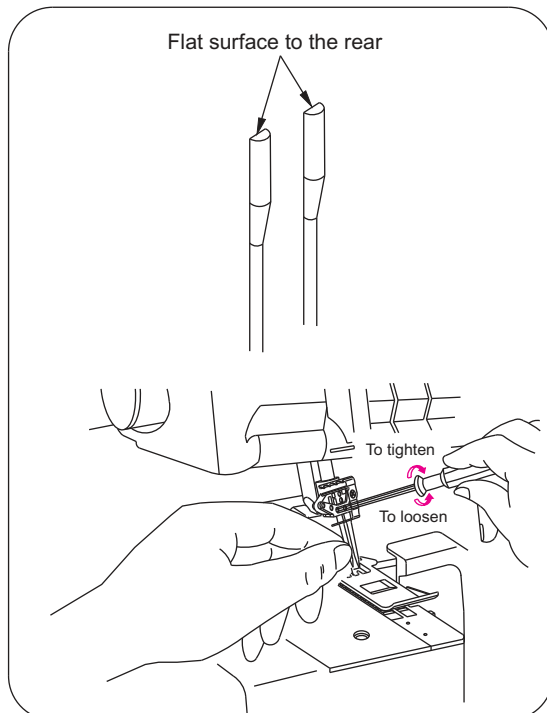
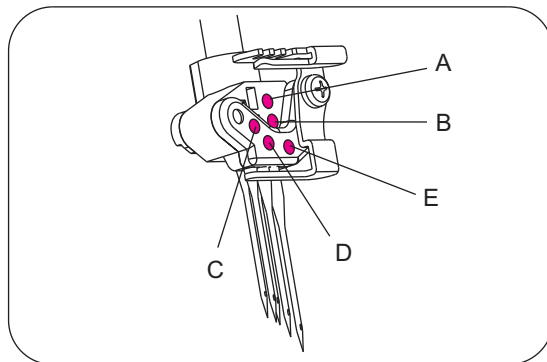
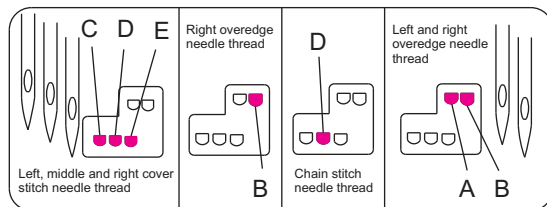
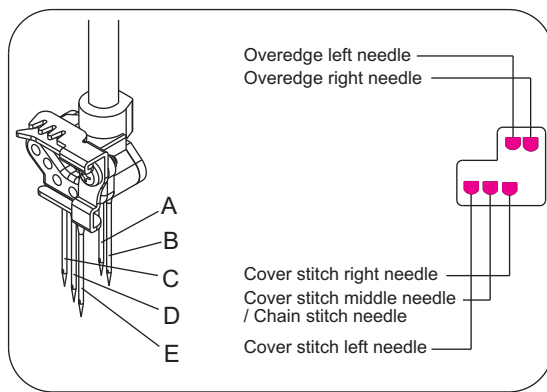
- Turn the hand wheel toward you until the needles are at their highest position.
- Place a thick piece of fabric [such as felt] under the presser foot. Lower the needles halfway into the fabric.
- Loosen, but do not remove the needle set screws with the small allen screwdriver. Hold the needles with your fingers and raise the needle bar. The needles will remain in the fabric.
 - A. Overedge left needle
 - B. Overedge right needle
 - C. Cover stitch left needle
 - D. Cover stitch middle needle
 - E. Cover stitch right needle

To Insert Needles (s)

- Hold the needle with the flat surface to the back.
- Insert the needle into the needle socket as far as it will go.
- When inserting a needle, if you first lower it down into the hole in the needle plate it will line up with the needle socket. Then direct it upwards

Note: When inserting needles into the A or B sockets it is necessary to loosen both A & B Allen Screws. After inserting the needles equally tighten both screws.

This machine uses Singer #2022 needles. Do not use Standard Household Needles.



12. THREADING THE MACHINE

Threading Diagram: **Overlock and Safety Stitches**

- A color coded threading diagram is located inside the looper cover for quick reference.
- Thread the machine in the order 1 to 5 as shown.

Note: Threads go through the take-up lever cover for Overlock and Chain stitching as shown.

Tension Color Code: **Overlock and Safety Stitch**

1. Upper looper thread..... Green
2. Lower looper thread..... Red
3. Chain stitch looper thread..... Brown
4. Right needle thread..... Blue
5. Chain stitch needle thread..... Orange

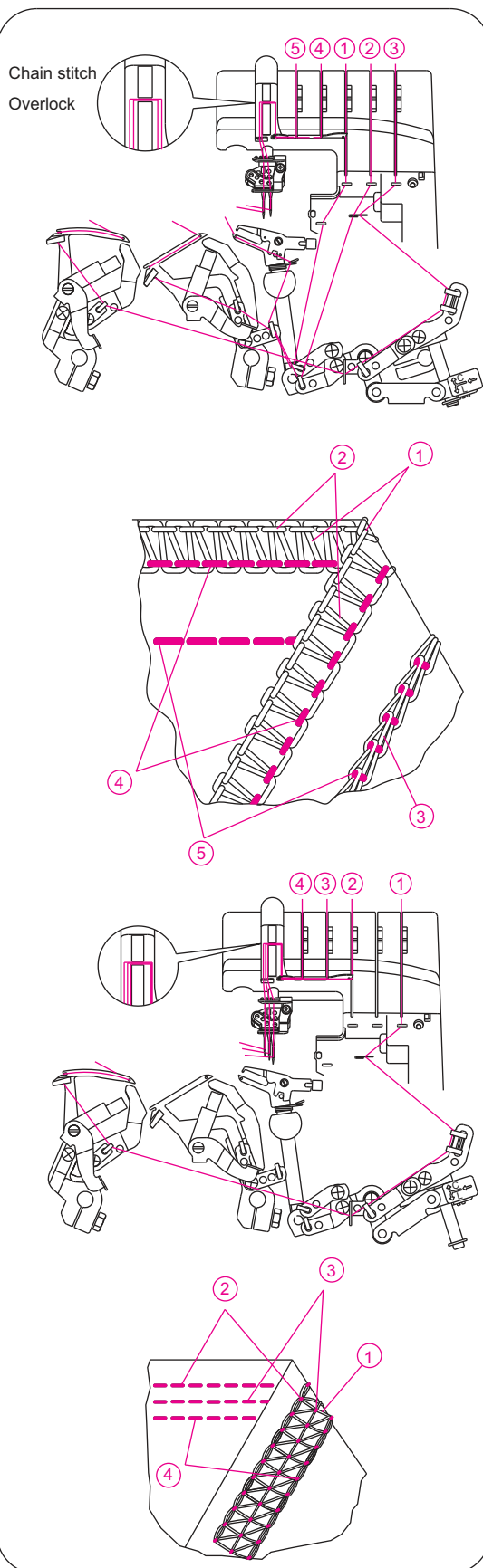
Threading Diagram: **Cover Stitch**

- A color coded threading diagram is located inside the looper cover for quick reference.
- Thread the machine in the order 1 to 4 as shown.

Note: Threads go through take-up lever cover for Cover stitch as shown.

Tension Color Code: **Cover Stitch**

1. Cover stitch looper thread..... Brown
2. Right needle thread..... Green
3. Middle needle thread..... Blue
4. Left needle thread..... Orange



To Thread The Machine Correctly



Caution:

Be sure to turn off power switch.

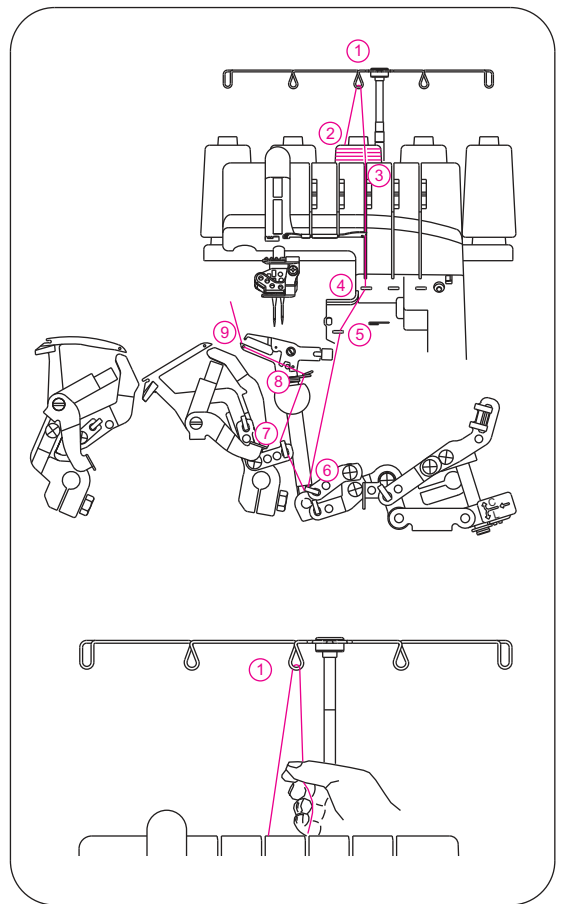
Note: The instructions on this page and the following pages will guide you through the proper threading for each color coded threading path. Before threading, refer to the Handy Reference Chart for information on Stitch Types, Settings, Needle Sockets and Color Coded Threading Paths.

1) Threading the Upper Looper (Green)

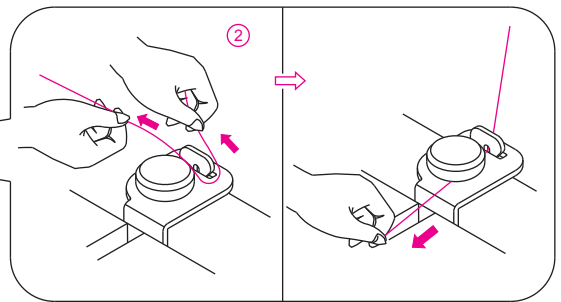
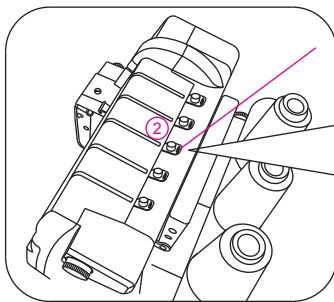
- Thread the upper looper as indicated 1~9.
- Raise Presser foot to release tension discs.

Note: The presser foot is raised by lowering the Presser bar lifter. The motion allows a clear path for the fabric when sewing.

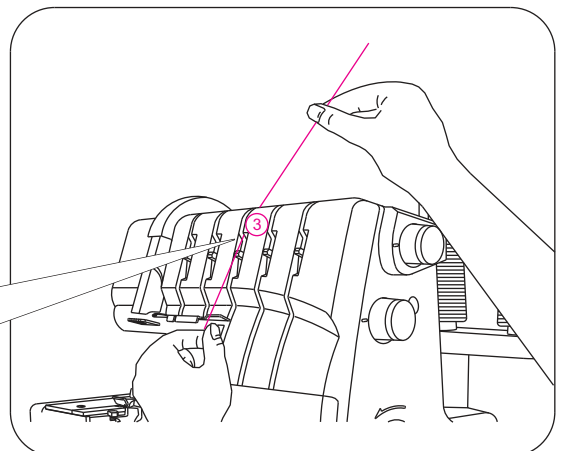
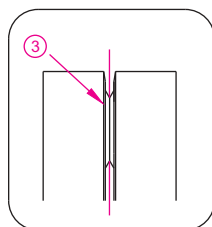
- Pass thread from back to the front through the thread guide 1.



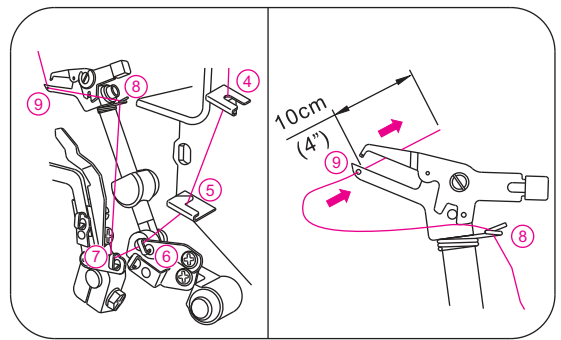
- Thread the top cover thread guide by pulling the thread towards the left until it slips under guide. Then pull thread along the right side of button as illustrated.



- While holding thread with fingers, pass it between the tension discs and pull thread down to make certain it is properly located in between the tension discs 3.

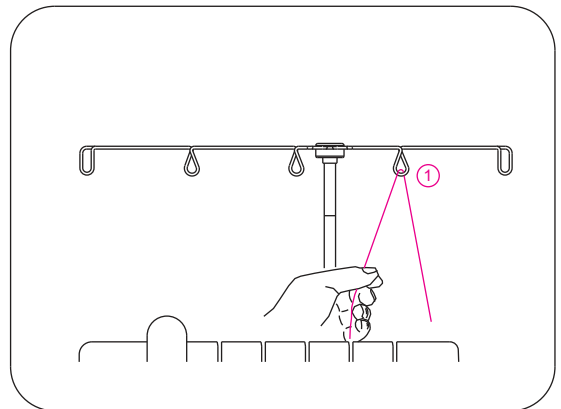
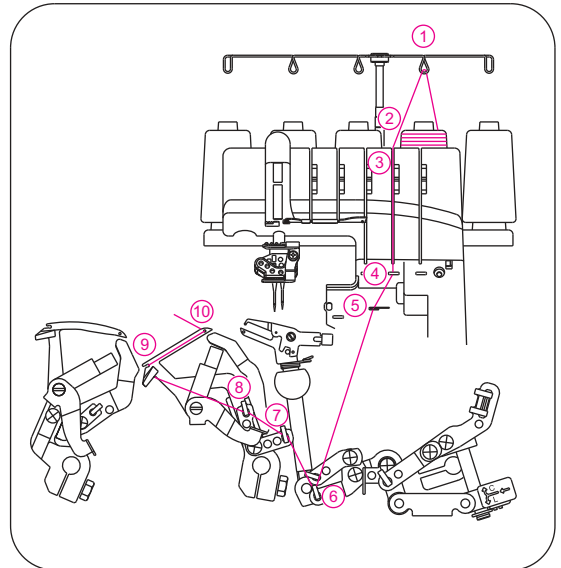


- Thread the looper area of the machine following the green color coded thread guides (4-9).
 - Thread the hole in the upper looper from front to back 9. Note: Make sure thread passes behind lower looper.
- Note: Use tweezers provided in the accessory case to aid in threading the looper.
- Pull about 10cm(4 inches) of thread through the looper and place to the back of the needle plate.

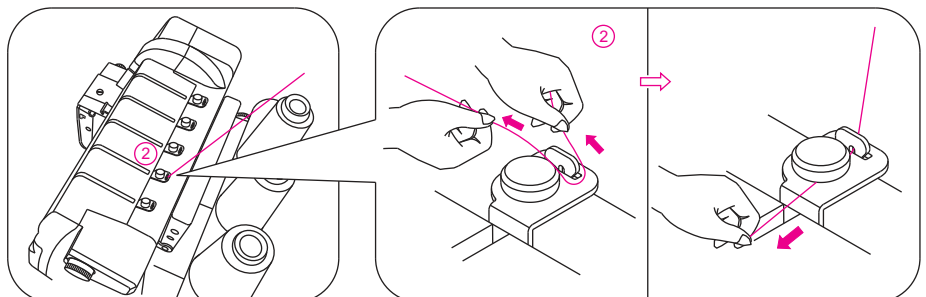


2) Threading the Lower Looper (Red)

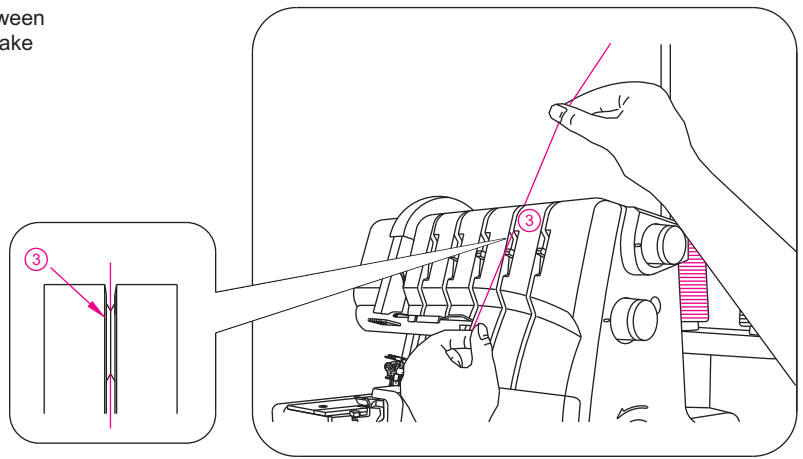
- Thread the lower looper as indicated 1-10.
- Raise Presser foot by lowering presser bar lifter to release Tension discs.
- Pass thread from back to the front through the thread guide 1.



- Thread the top cover thread guide by pulling the thread towards the left until it slips under guide. Then pull thread along the right side of button as illustrated.

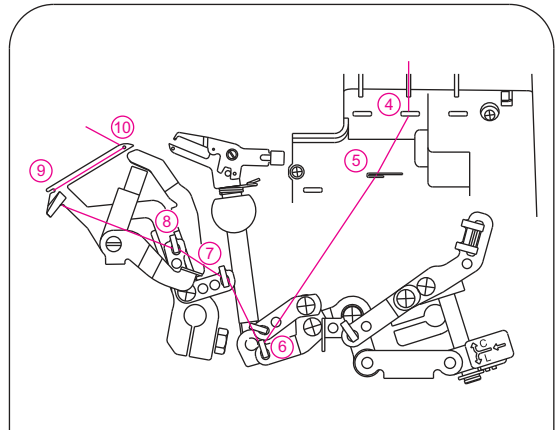


- While holding thread with finger, pass it between the tension discs and pull thread down to make certain it is properly located in between the tension discs 3.

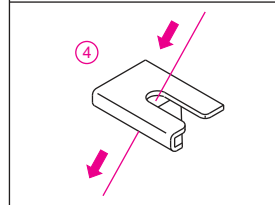


- Turn the hand wheel toward you until the lower looper extends out 5~10mm from the needle plate edge.
- Thread the looper area of the machine following the red color coded thread guides 4~10.

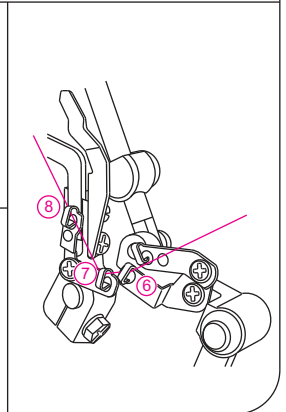
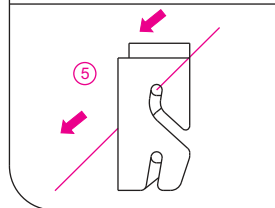
Note: Use tweezers provided in the accessory case to aid in threading the looper.



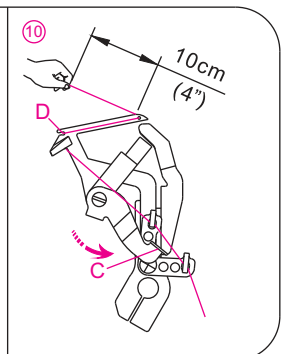
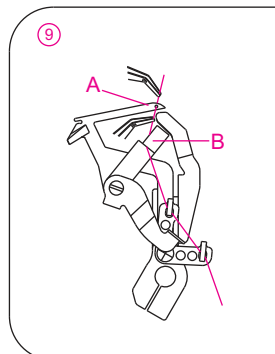
- Place the thread with the point of the tweezers slightly from left and to the right of threading guide 4.



- Place the thread with the point of the tweezers slightly from front and to the back of threading guide 5.



- Thread the looper eye (A) from front to back. Pull about 10cm (4 inches) of thread. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull Threader lever (C) up into place (D).

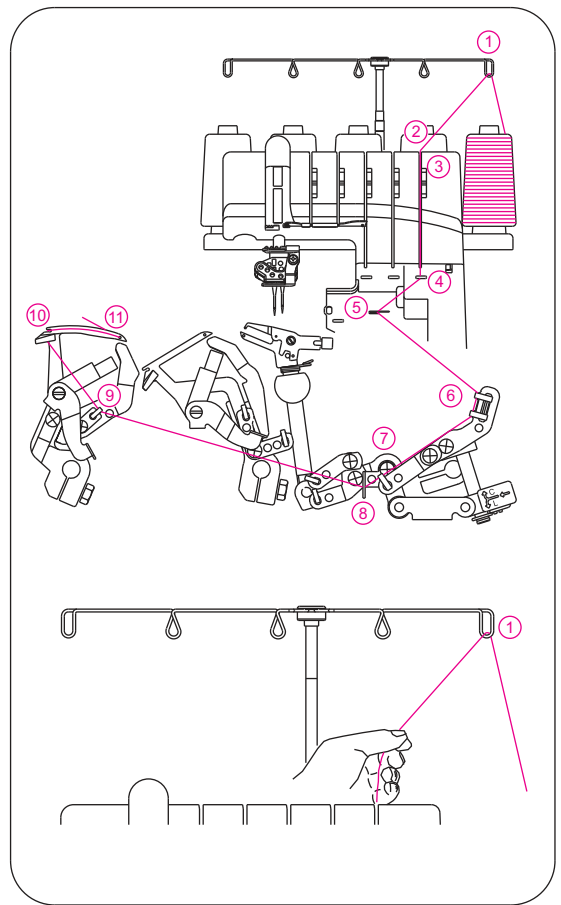


3) Threading the Chain Stitch/Cover stitch Looper (Brown)

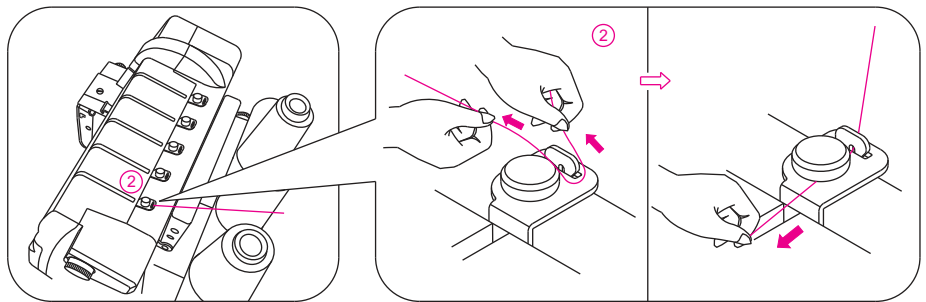
- Thread the chain stitch/cover stitch looper as indicated 1~11.

- Raise Presser foot by lowering presser bar lifter to release Tension discs.

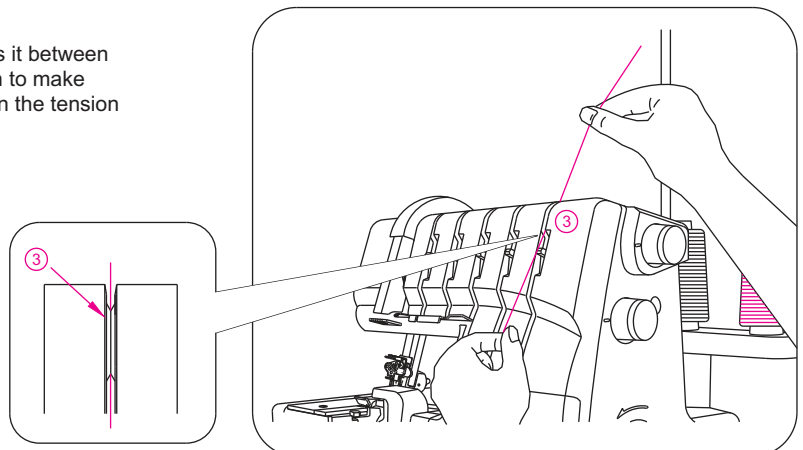
- Pass thread from back to the front through the thread guide 1.



- Thread the top cover thread guide by pulling the thread towards the left until it slips under guide. Then pull thread along the right side of button as illustrated.

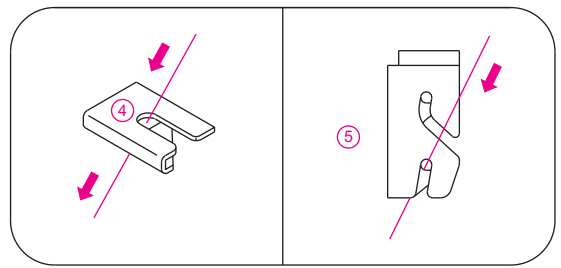


- While holding thread with fingers, pass it between the tension discs and pull thread down to make certain it is properly located in between the tension discs 3.

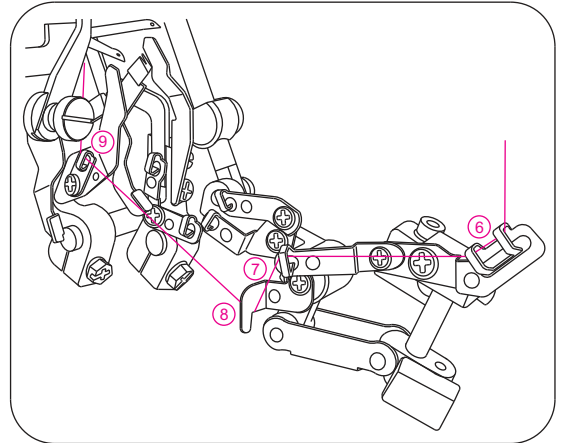


- Turn the hand wheel toward you until the chain stitch looper extends out 10mm from the needle plate edge.
- Thread the looper area of the machine following the brown color-coded thread guides 4~11.

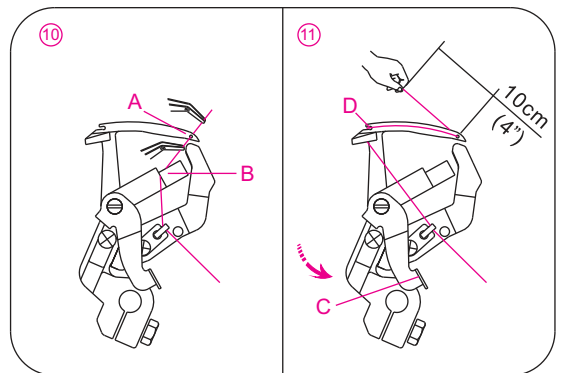
Note: Use the tweezers provided in the accessory case to aid in threading the looper.



- Place the thread with the point of the tweezers through threading guide 4.
- Place the thread with the point of the tweezers through the front slot of threading guide 5.

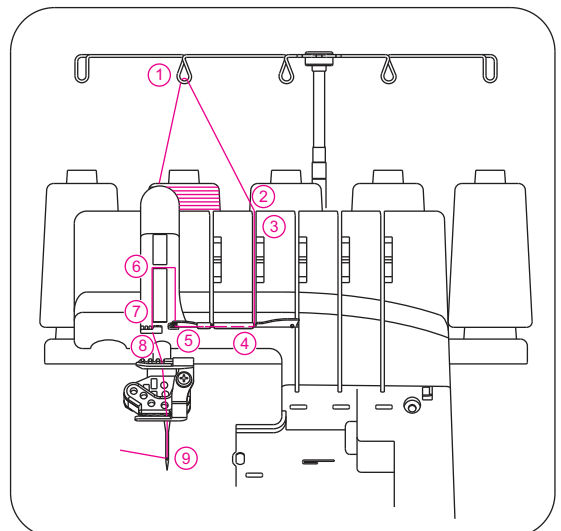


- Thread the looper eye (A) from front to back. Pull about 10cm (4 inches) of thread through the looper. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull threader lever (C) up into place (D).

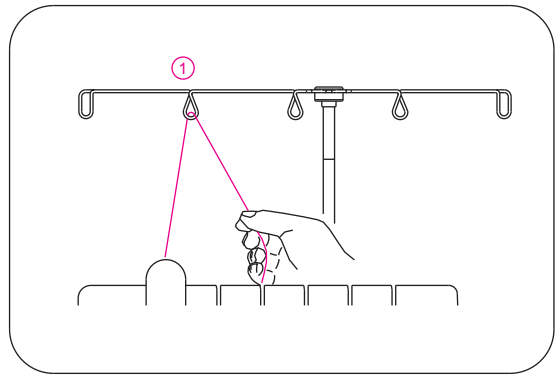


4) Threading the **Overedge Right Needle (Blue)** (B on needle clamp)

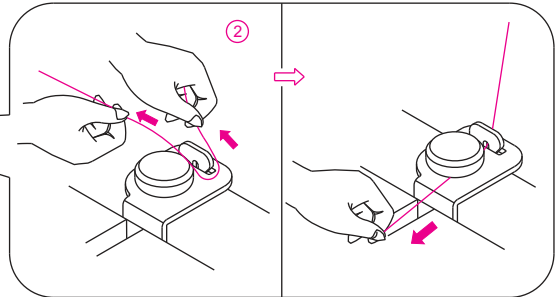
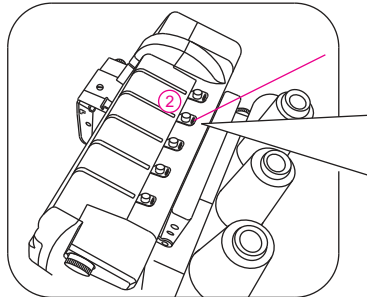
- Thread the right needle as indicated 1~9.
- Raise Presser foot by lowering presser bar lifter to release Tension discs.



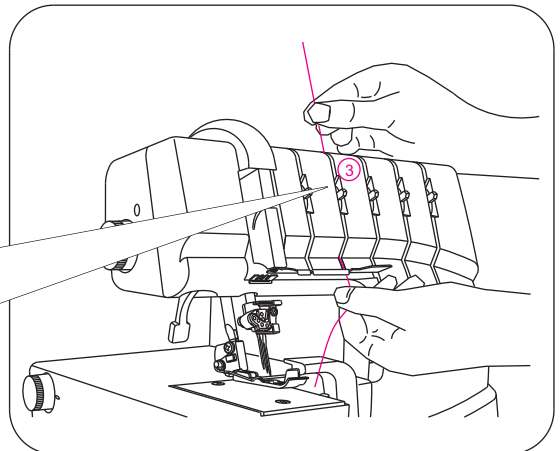
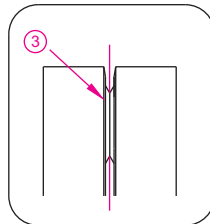
- Pass thread from back to the front through the thread guide 1.



- Thread the top cover thread guide by pulling the thread towards the left until it slips under guide. Then pull thread along the right side of button as illustrated.

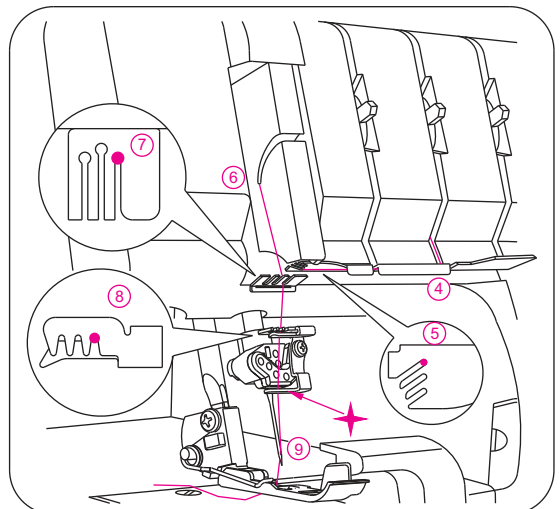


- While holding thread with finger, pass it between the tension discs and pull thread down to make certain it is properly located in between the tension discs 3.



- Continue to thread points 4~8.

Note: Slip thread into the rear slot on the thread guide 5 and the slot of take-up lever cover 6. Then slip thread into the right slot on the thread guide 7, and into the right slot on the thread guide 8.

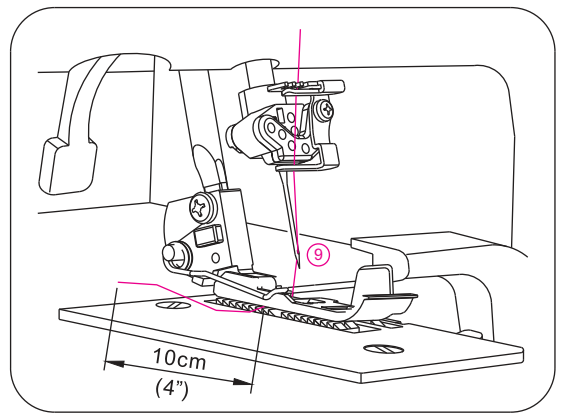


- ✦ Before threading eye of needle, slip thread behind thread guide located on the bottom of the needle clamp.

- Thread the eye of the right needle 9.

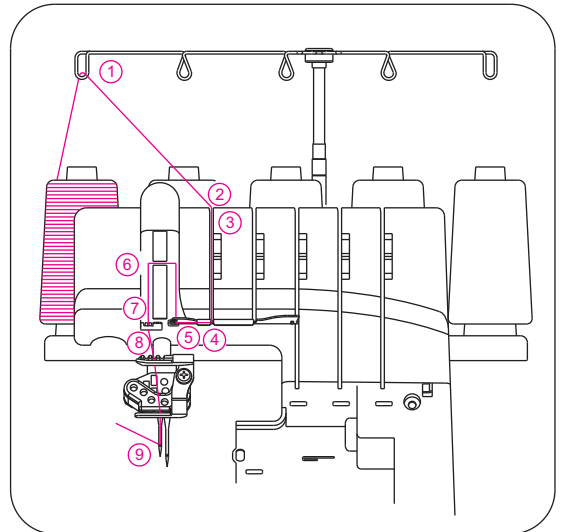
Note: Use of tweezers in the accessory case will make needle eye threading easy.

- The position of the thread must be behind the thread guide.
- Draw about 10cm(4 inches) of thread through needle eye towards the rear of machine.
- Place the thread to the back, under the presser foot.

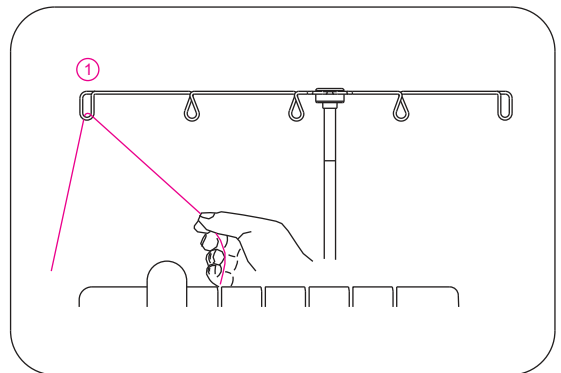


5) Threading the Chain Stitch Needle (Orange) (D on needle clamp)

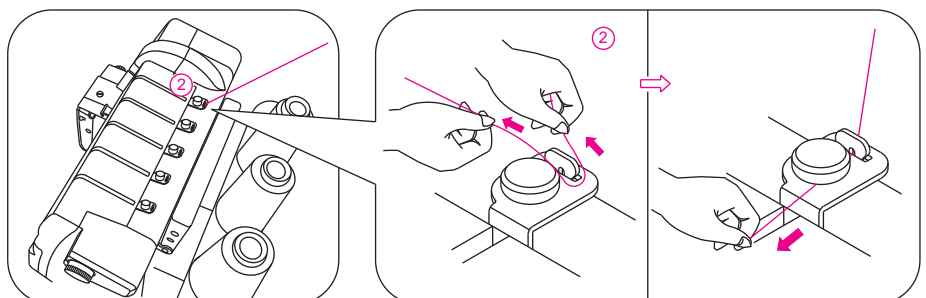
- Thread the left needle as indicated 1-9.
- Raise Presser foot by lowering presser bar lifter to release Tension discs.



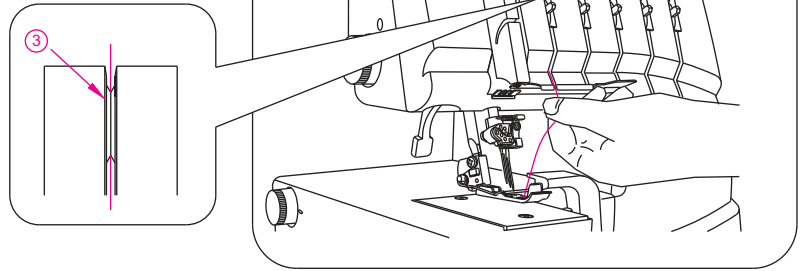
- Pass thread from back to the front through the thread guide 1.



- Thread the top cover Thread guide by pulling the thread towards the left until it slips under guide. Then pull thread along the right side of button as illustrated.



- While holding thread with fingers, pass it between the tension discs and pull thread down to make certain it is properly located in between the tension discs 3.



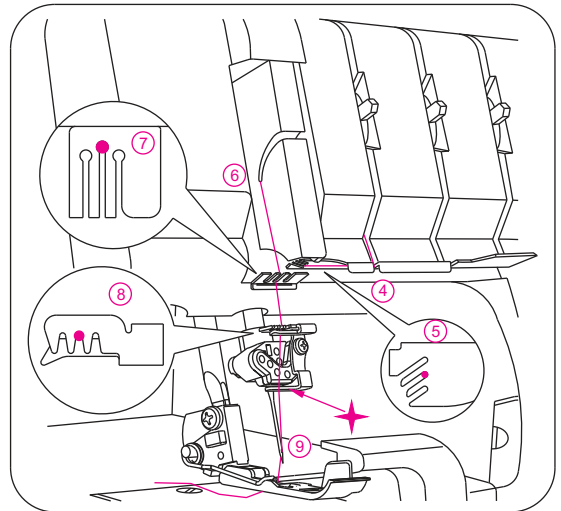
- Continue to thread points 4-8.

Note: Slip thread into the middle slot of the thread guide 5 and into the slot of take-up lever cover 6. Then continue by slipping thread into the middle slot of the thread guides 7 and 8.

Note: For 4 thread overlock left needle: Use needle A.

Before threading eye of needle, slip thread behind thread guide located on the bottom of the needle clamp.

Note: For chain stitch :Use needle D.

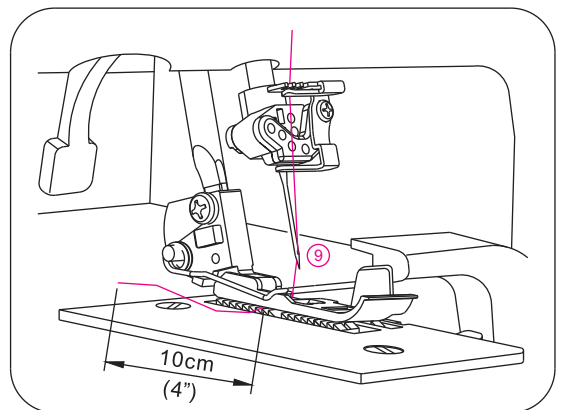


✦ Before threading eye of needle, make sure thread is **in front of thread guide** located on the bottom of the needle clamp.

- Thread the eye of the left needle 9.

Note: Use of tweezers in the accessory case will make needle eye threading easy.

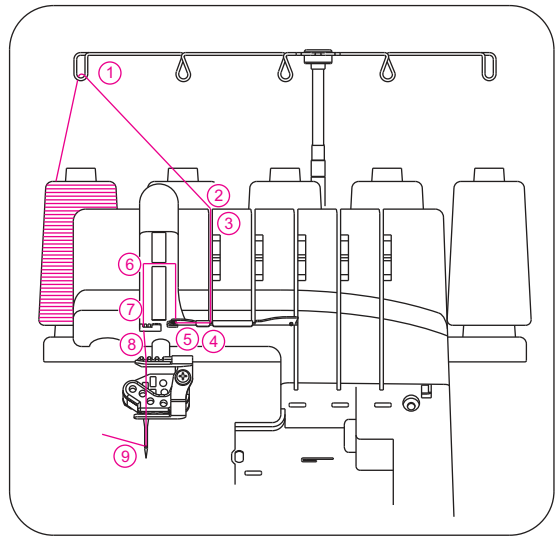
- The position of the thread must be behind the the thread guide.
- Draw about 10cm (4 inches) of thread through needle eye to hang free.
- Place the thread to the back, under the presser foot.



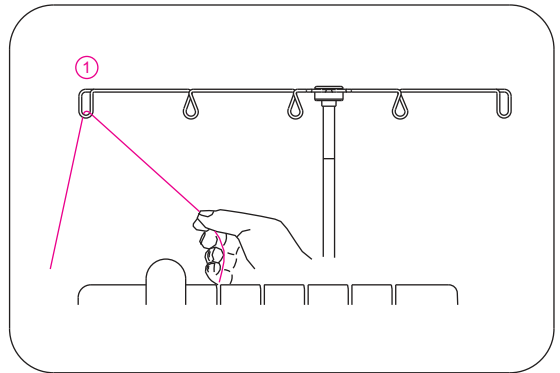
6) Threading the Cover Stitch Needles

(1) Threading the Cover Stitch Left Needle (Orange) (C on needle clamp)

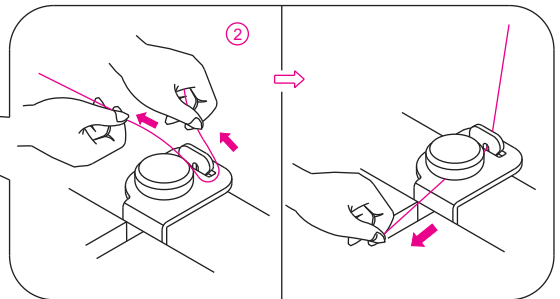
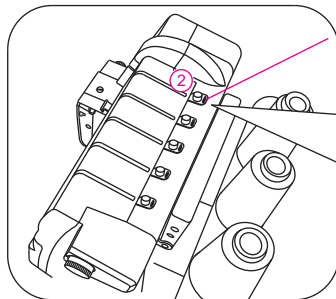
- Thread the cover stitch left / chain stitch needle as indicated 1-9.
- Raise Presser foot by lowering presser bar lifter to release Tension discs.



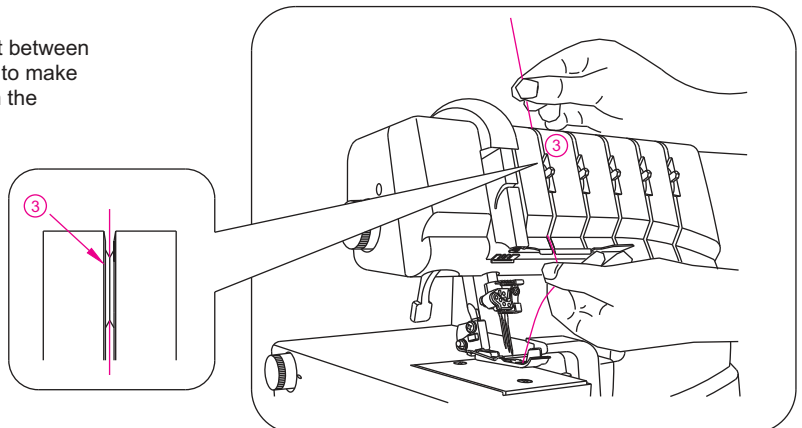
- Pass thread from back to the front through the thread guide 1.



- Thread the top cover thread guide by pulling the thread towards the left until it slips under guide. Then pull thread along the right side of button as illustrated.

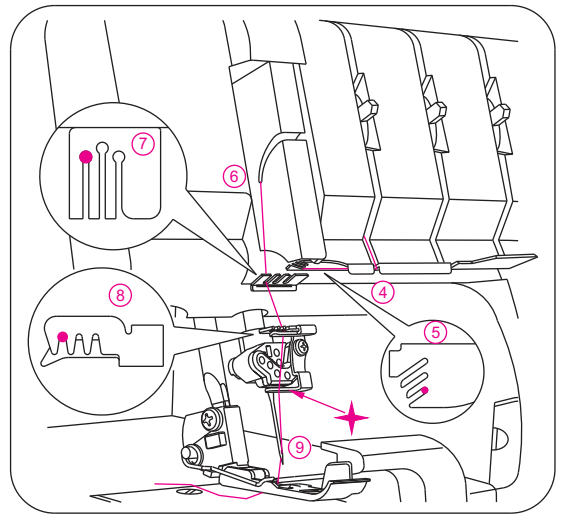


- While holding thread with finger, pass it between the tension discs and pull thread down to make certain it is properly located in between the tension discs 3.



- Continue to thread points 4~8.

Note: Slide thread into front slot on thread guide 5 and slot of take-up lever cover 6. Then slip thread into left slots of thread guides 7 and 8.

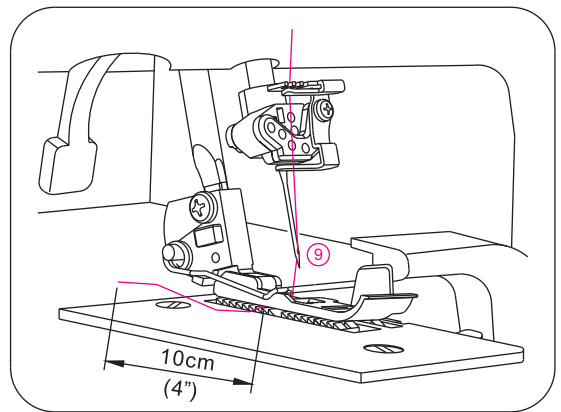


- ✦ Before threading eye of needle, make sure thread is **in front of thread guide** located on the bottom of the needle clamp.

- Thread the eye of the left needle 9.

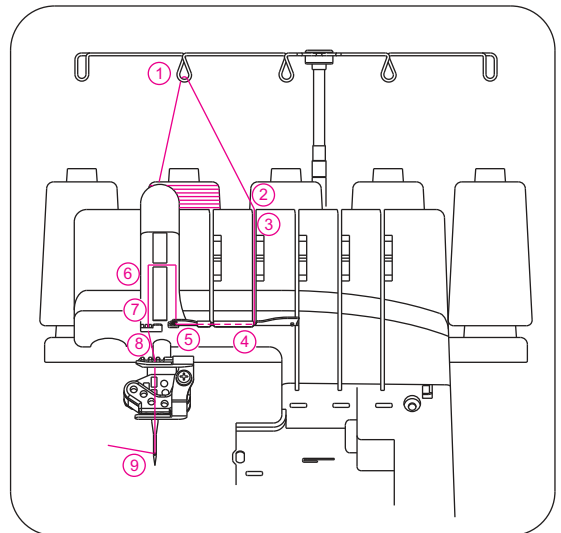
Note: Use of tweezers in the accessory case will make needle eye threading easy.

- Draw about 10cm (4 inches) of thread through needle eye to hang free.
- Place the thread to the back, under the presser foot.

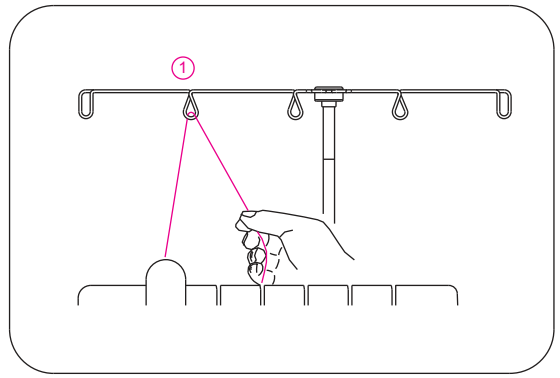


(2) Threading the **Cover Stitch Middle / Chain Stitch Needle**(Blue) (D on needle clamp)

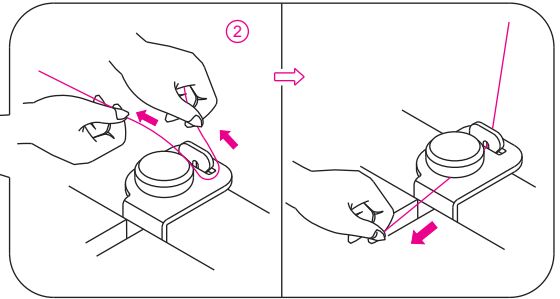
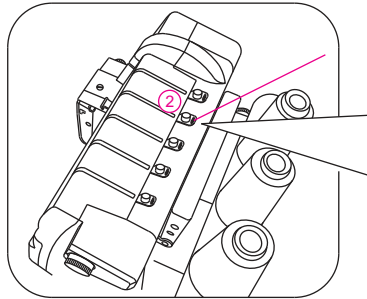
- Thread the cover stitch middle / chain stitch needle as indicated 1~9.
- Raise the Presser foot by lowering presser bar lifter to release Tension discs.



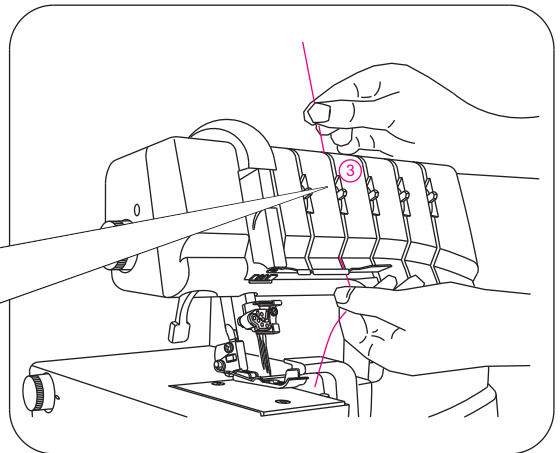
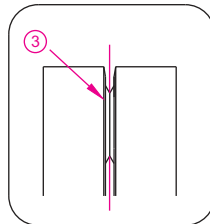
- Pass thread from back to the front through the thread guide 1.



- Thread the top cover thread guide by pulling the thread towards the left until it slips under guide. Then pull thread along the right side of button as illustrated.



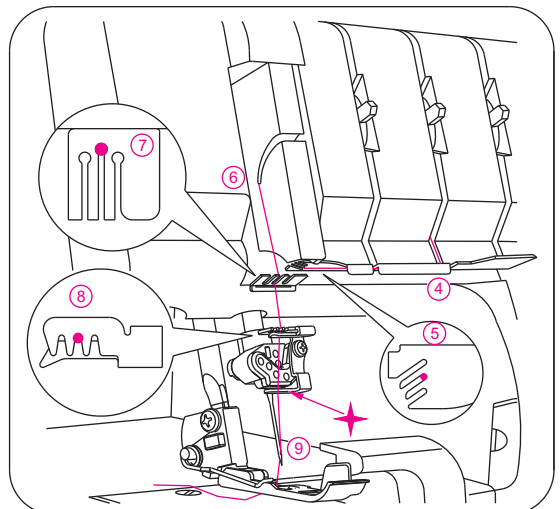
- While holding thread with fingers, pass it between the tension discs and pull thread down to make certain it is properly located in between the tension discs 3.



- Continue to thread points 4-8.

Note: Slip thread into the middle slot of the thread guide 5 and into the slot of take-up lever cover 6.

Then continue by slipping thread into the middle slot of the thread guides 7 and 8.

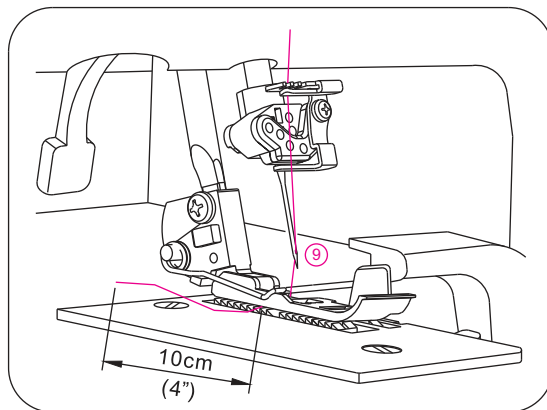


- ✦ Before threading eye of needle, make sure thread is **in front of thread guide** located on the bottom of the needle clamp for Cover stitch and for Chain stitch.

- Thread the eye of the middle needle 9.

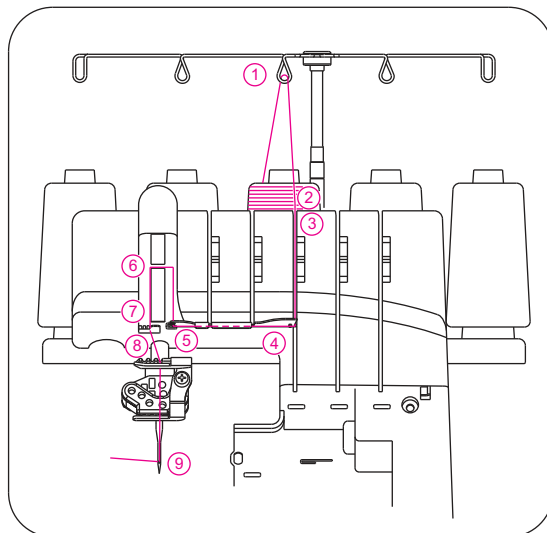
Note: Use of tweezers in the accessory case will make needle eye threading easy.

- Draw about 10cm (4 inches) of thread through needle eye towards the back of the machine.
- Place the thread to the back, under the presser foot.

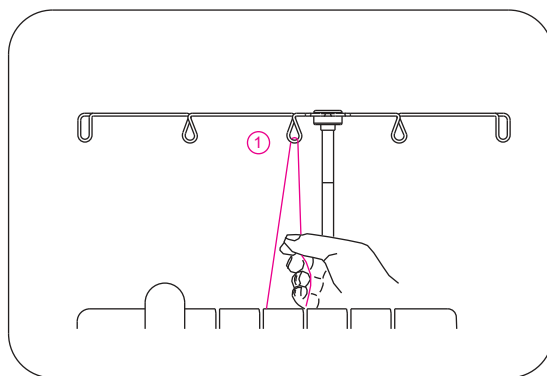


(3) Threading the Cover Stitch Right Needle (Green) (E on needle clamp)

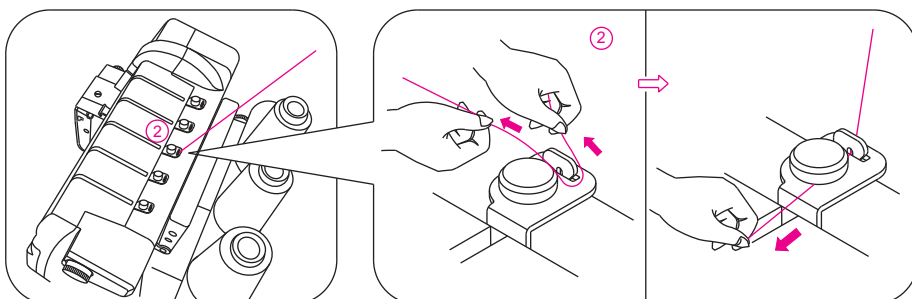
- Thread the cover stitch right needle as indicated 1-9.
- Raise Presser foot by lowering presser bar lifter to release Tension discs.



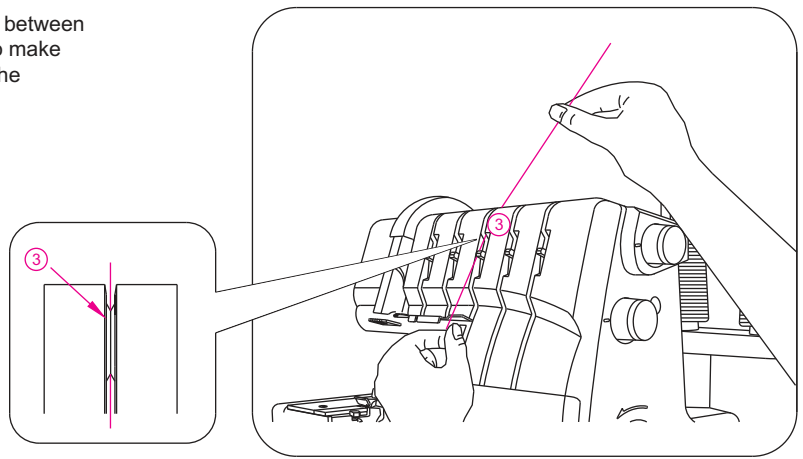
- Pass thread from back to the front through the thread guide 1.



- Thread the top cover thread guide by pulling the thread towards the left until it slips under guide. Then pull thread along the right side of button as illustrated.



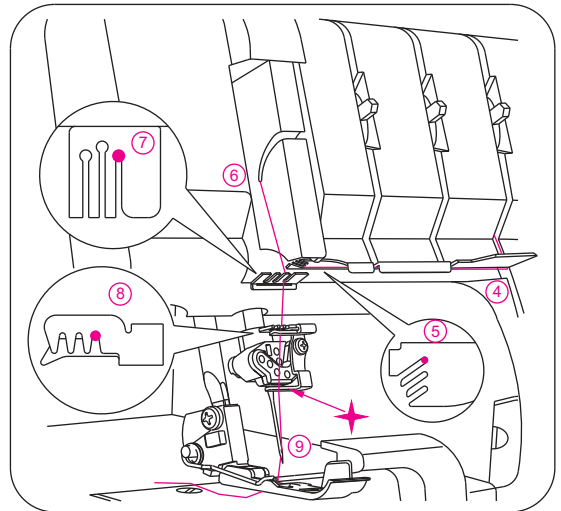
- While holding thread with fingers, pass it between the tension discs and pull thread down to make certain it is properly located in between the tension discs 3.



- Continue to thread points 4~8.

Note: Slip thread into the rear slot on thread guides 5. Slip the thread into the slot of the Take-up Lever Cover 6. Slip the thread into the right slots for thread guides 7 and 8.

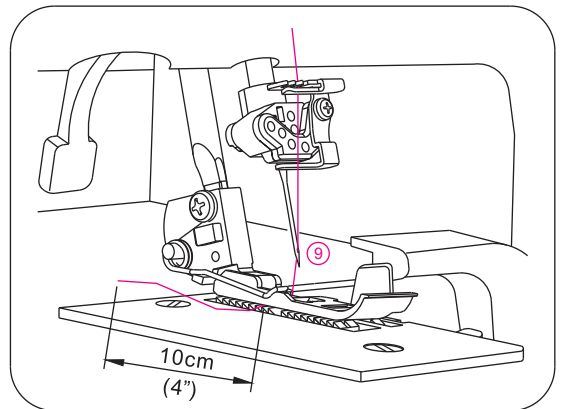
- ✦ Before threading eye of needle 9, make sure thread is in front of thread guide located on the bottom of the needle clamp for Cover stitch.



- Thread the eye of the right needle 9.

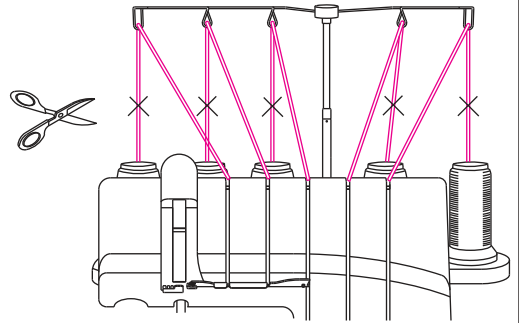
Note: Use of tweezers in the accessory case will make needle eye threading easy.

- Draw about 10cm (4 inches) of thread through needle eye towards the rear of the machine.
- Place the thread to the back under the presser foot.

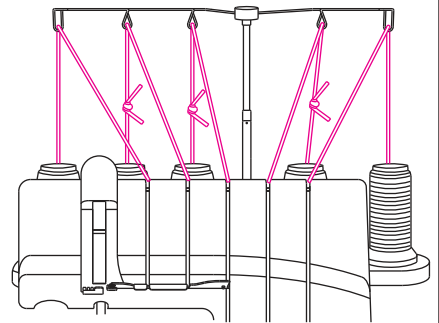


13. HOW TO CHANGE THREADS: TIE ON METHOD

- To change thread type or color, clip thread near the spool.

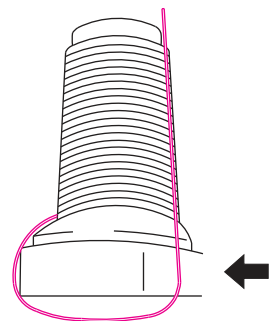


- Place new thread on stand.
- Tie new thread and old thread ends together with a square knot. Clip thread tails to 2~3cm (1 inch) length. If clipped too short, threads may come untied.
- Firmly pull both thread to test knot security.



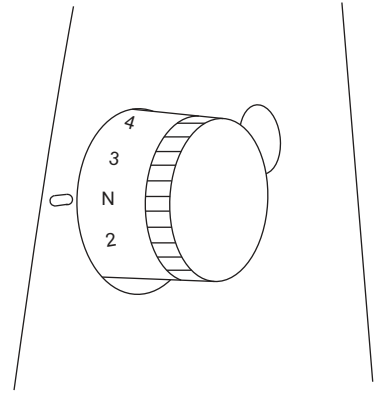
- Raise Presser foot by lowering presser bar lifter to release Tension discs.

- Pull the threads through the machine one at a time.
- If threads do not pull easily, check for tangles on thread guides or looping under thread stand.
- When pulling thread through the needles, **STOP** when the knot is in front of the needle.
- Cut the thread, and insert it through the needle.



14. HOW TO ADJUST THE STITCH LENGTH

- The stitch length dial should be set on the N setting for most sewing conditions.
- Adjust the stitch length to N~ 4 when sewing heavy weight fabrics.
- Adjust the stitch length to 2~N when sewing lightweight fabrics to obtain excellent seams without puckering.

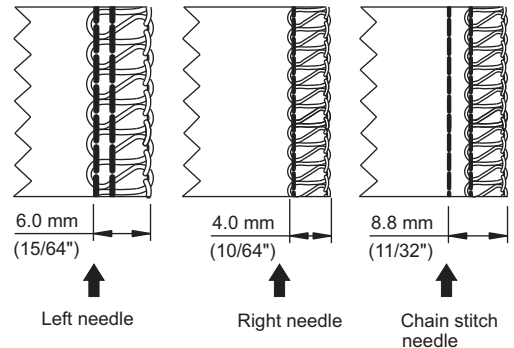


15. HOW TO ADJUST THE SEAM WIDTH

- Overedge seam width can be achieved by repositioning the needle position and also with the width adjustment knob.

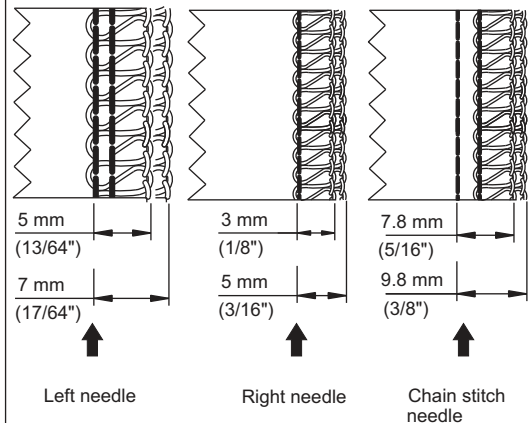
Width Adjustment by Changing Needle Position

- Overedge seam width can be adjusted by changing the needle position.
- When using left needle.....6 mm
(15/64 inch)
 - When only right needle is used.....4 mm
(10/64 inch)
 - When using chain stitch needle.....8.8 mm
(11/32 inch)



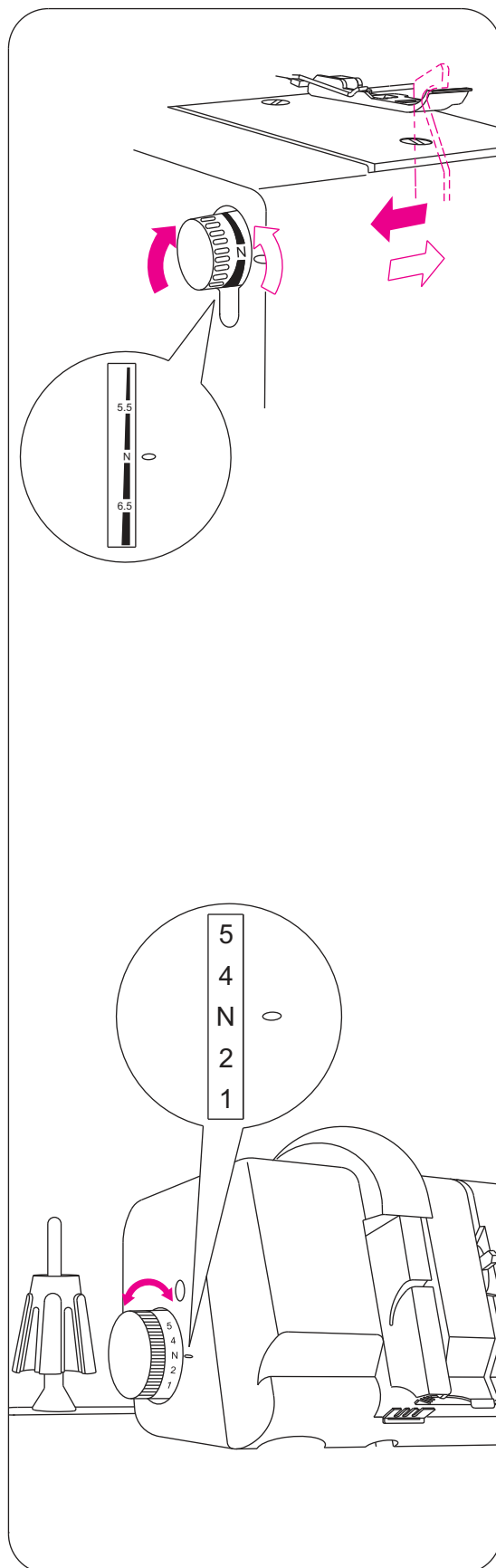
Width Adjustment with Adjustment Knob

- Use of width adjustment knob will permit further adjustment within the width range shown below.
- When using left needle.....5 ~ 7 mm
(13/64 ~ 17/64 inch)
 - When only right needle is used.....3.0 ~ 5.0 mm
(1/8 ~ 3/16 inch)
 - When using chain stitch needle.....7.8 ~ 9.8 mm
(5/16 ~ 3/8 inch)



Width adjustment knob

As shown on the illustration, turn the dial counter clockwise to increase width of cutting, and clockwise to decrease width of cutting.



16. HOW TO ADJUST THE PRESSER FOOT PRESSURE

- The presser foot pressure of this machine is pre-adjusted at the factory to suit the sewing of medium weight fabrics.
- Most of the materials do not require adjustment of presser foot pressure. However, there are some instances where adjustment is necessary, such as when sewing lightweight and heavyweight fabrics.
- In such case, N for normal, 1 for the lightest pressure, and 5 for the heaviest.
- For lightweight fabric...Decrease the pressure
- For heavyweight fabric...Increase the pressure

17. DIFFERENTIAL FEED

- Differential feed is a system which "stretches" or "gathers" the fabric, when the amount of feed of front feed dogs in relation to the rear feed dogs is changed.
- The differential feed ratio ranges from 1:0.6~1:2.0. Adjustment is made by means of the differential feed adjusting dial pictured at right.
- Use of differential feed is very effective in overedging stretch fabrics and fabrics cut on the bias.
- Setting "N" is differential feed adjusting dial setting for ratio 1:1.

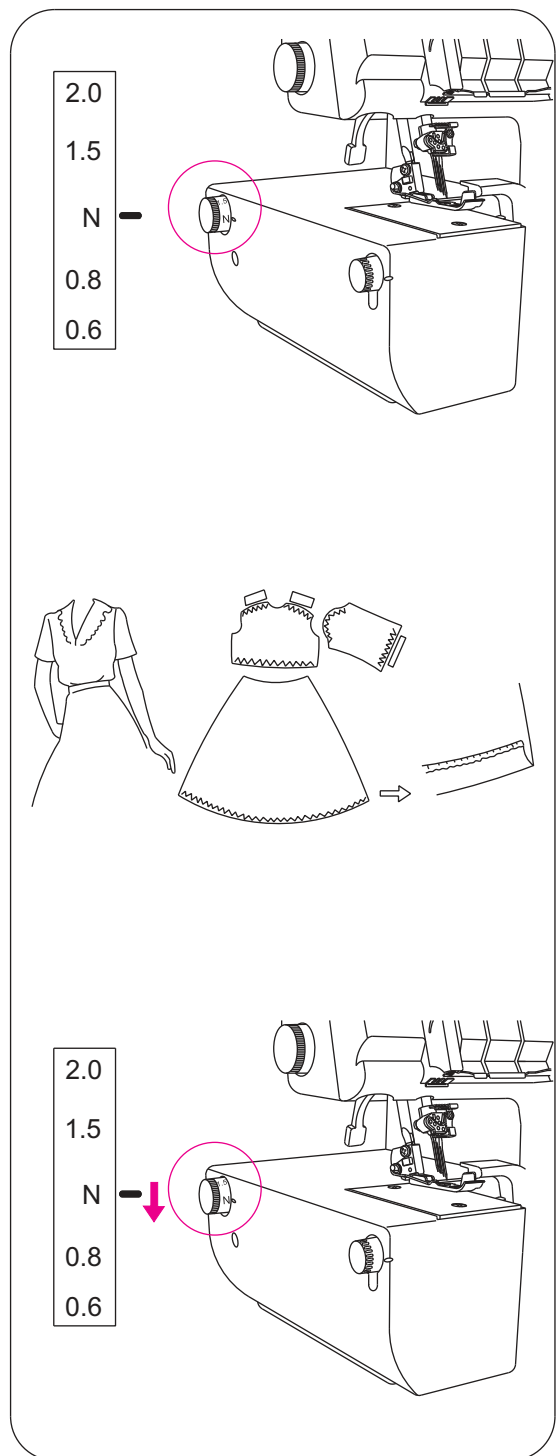
Gathered Overedge

- Gathered overedge is most suited for shirring sleeves, yokes, front and back bodices, skirt hems, etc. in stretch fabrics such as knits and jersey before assembling into garment.

To set the differential feed adjusting dial for gathering

- Set differential feed adjusting dial below setting "N". Setting of adjusting dial depends on material being sewn as well as the amount of desired gather. Therefore, set dial to suit the fabric and test sew before sewing your garment.

Note: For normal overedge stitching, set differential feed adjusting dial to graduation "N".



Stretch Overedge

- Stretch overedge is ideal for sewing decorative collars, sleeves, skirt hems, etc. on loosely knit and woven fabrics.

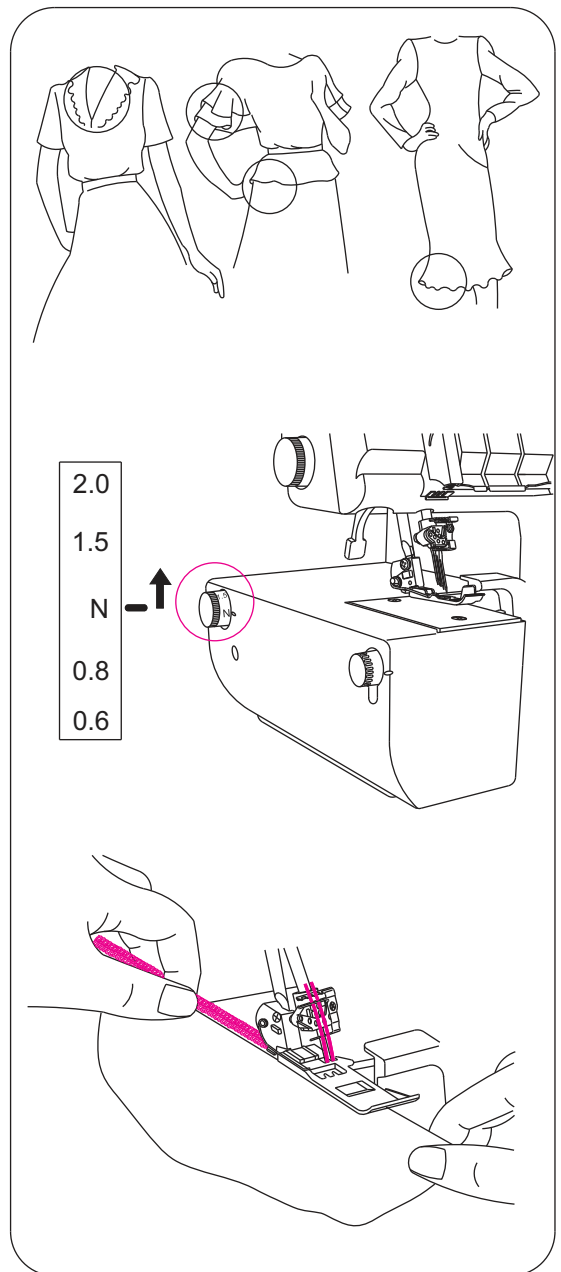
To set the differential feed adjusting dial for stretch

- Set differential feed adjusting lever knob above setting "N".

- To sew a seam, apply gentle tension to the fabric by holding the seam lightly in front and back of the presser foot.

Note: *if amount of "stretch" is not correctly set in relation to the fabric being sewn, the fabric is apt to shift away from the needle resulting in improperly sewn overedge seam. In such case, reset differential feed adjusting dial closer to the center mark.

*Be sure to reset the differential feed adjusting dial to graduation "N" for normal overedge stitching.



18. HOW TO DISENGAGE MOVABLE UPPER KNIFE

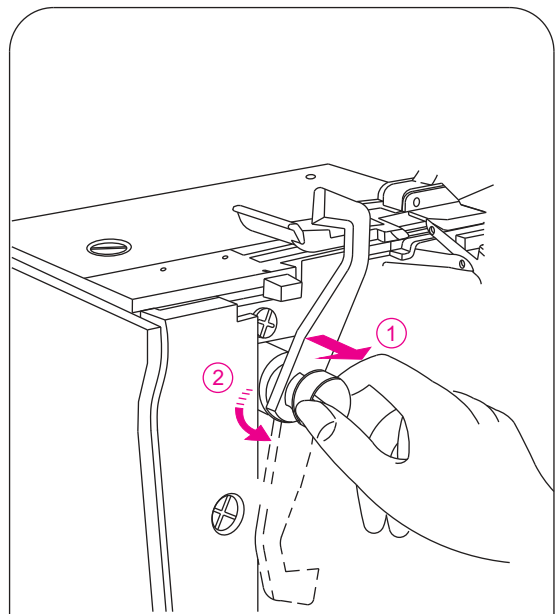


Caution:

Be sure to turn off power switch.

To place movable knife in nonworking position

- Open looper cover (page 12).
- Pull the movable knife holder to the right as far as it will go.
- Turn the holder toward counter clockwise until the knife clicks into a lock position.



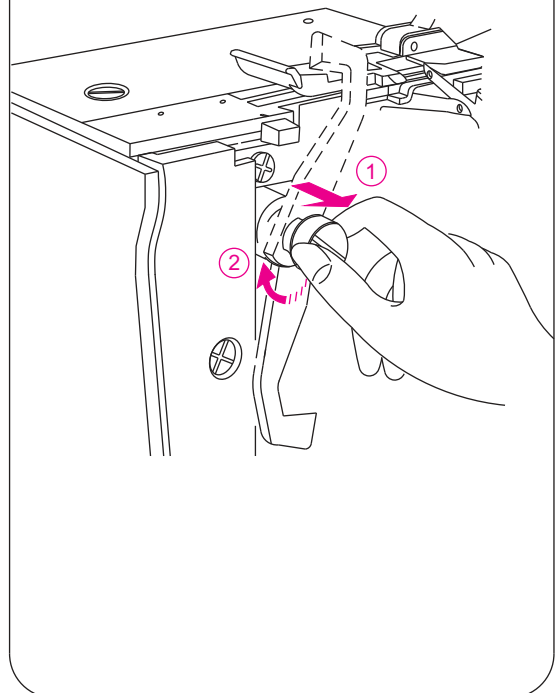
To place movable knife in working position

- Open looper cover.
- Pull the movable knife holder to the right as far as it will go.
- Turn the holder clockwise until the knife clicks into the working position.



Caution:

Always close looper cover before operating machine.



19. TO CONVERT UPPER LOOPER TO SPREADER



Caution:

Be sure to turn off power switch.

When not threading the upper looper, the spreader must be engaged into the upper looper eye.

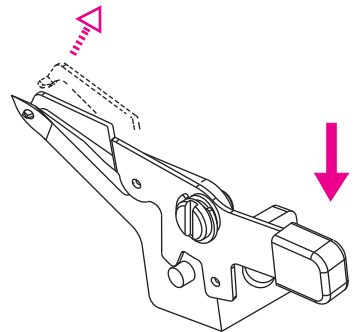
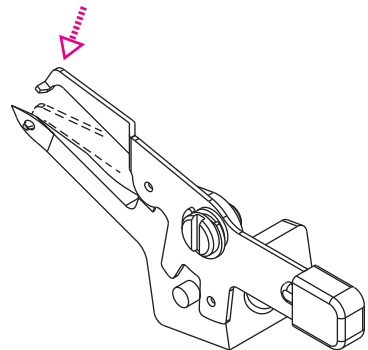
To Use the Spreader

- To engage the spreader, raise the white handle on the spreader to insert the tip into the eye of upper looper.

- When using the upper looper, the spreader must be disengaged.

To Disengage to Upper Looper

- To disengage the spreader, lower the white handle on the spreader.

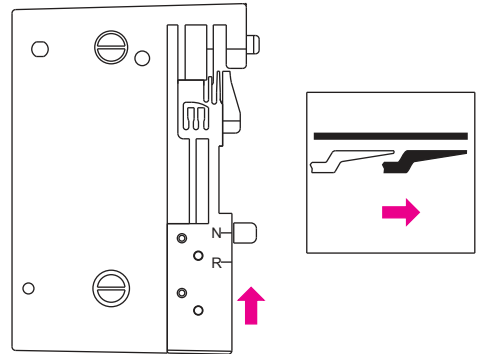


20. STANDARD OVEREDGE AND ROLLED HEM STITCHING

To Sew Standard Overedge

- Set seam width finger knob to N to move seam width finger to standard overedge sewing position.

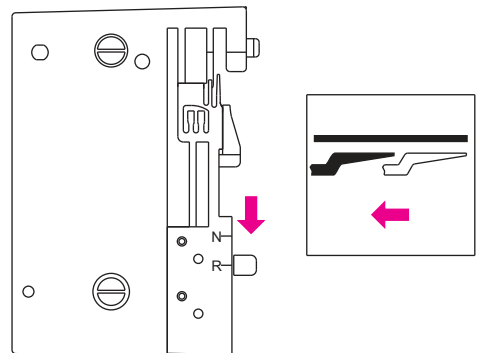
Note: Be sure to push seam width finger knob as far as it will go in the direction of setting N.



To Sew Rolled Hem

- Set seam width finger knob to R to retract the seam width finger and set it for rolled hem.

Note: Be sure to push seam width finger knob as far as it will go in the direction of setting R.



21. CHAINING OFF AND TEST SEWING

Note: The following instructions do not apply to cover stitch. For instructions on cover stitch, see page 49 "How to Sew a Cover Stitch."

- When the machine is completely threaded, bring all of the threads across the needle plate and slightly to the left under the presser foot.
- Hold the threads and apply a slight tension.
- Turn the hand wheel toward you 2 or 3 complete turns to start the thread chain.
- Lower presser foot by lowering presser bar lifter.
- Continue holding the chain and press on the foot controller until the chain is 5~7.5 cm (2~3 inches) in length.
- Place fabric under the front of the presser foot and sew a test sample.

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

- At the end of the sample, continue to run the machine with the presser foot down until the chain reaches 15 ~20 cm (6~8 inches) in length.

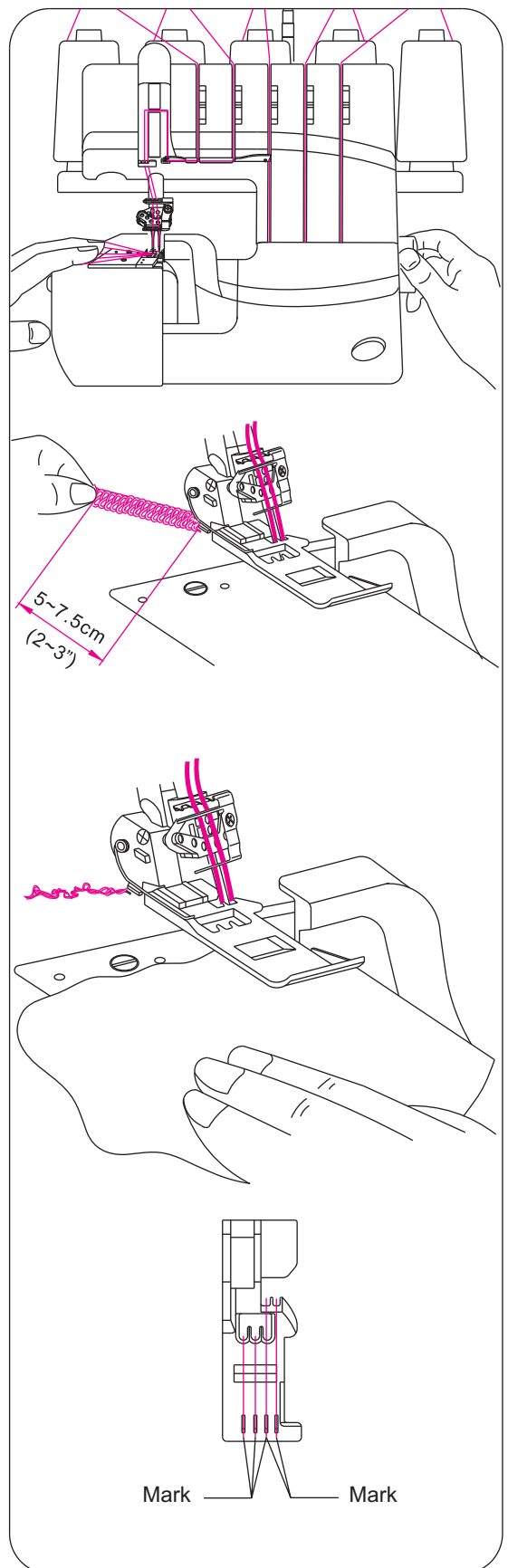
Note: In case it is difficult to chain off when chain stitching, pull the fabric lightly backward.

- Cut thread.

Note: Anytime you have rethreaded the machine always chain off and sew a text sample to test tensions and make adjustments as necessary.

Information

- A mark to indicate the needle location is provided on the presser foot fitted on this machine. Use this mark as a guide when sewing.



22. SETTINGS AND SEWING

1) Double Chain stitch

Tension is automatically set when selecting the desired stitch type with the Auto Tension Dial (ATD). Tension may be fine tuned with the Fine Tuning Levers according to the following variables:

- 1) Type and thickness of fabric
- 2) Needle size
- 3) Size, type and fibre content of thread

* Stitch length for double chain stitch should be set at over 2mm.


Correct Balance

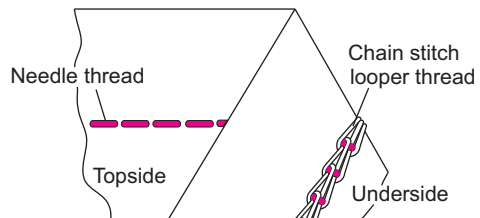
- Set auto tension dial to D as shown on illustration and test sew on a sample of your fabric.

How to Balance

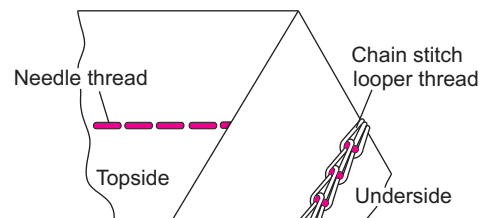
- When the chain stitch needle thread tension is too loose;
 - Move the needle thread tension fine tuning lever (blue) toward a higher position.
 - Or, move the chain stitch looper thread tension fine tuning lever (brown) toward a lower position.

ATD:D

NEEDLE POSITION	
SEAM WIDTH FINGER KNOB	R
STITCH LENGTH	2 ~ 4
DRIVING CULTCH POSITION	C



Fabric	Tension Dial				
	Orange	Blue	Green	Red	Brown
Medium weight		●			●



How to Sew

The double chain stitch is sewn with 2 threads, one needle and one looper. Normally, the machine trims the fabric edge while the seam is being sewn. However, a chain stitch seam can be placed at a desired distance from edge of fabric by putting the knife in a nonworking position, disengaging the upper looper and installing the chain stitch seam guide plate



Caution:

Be sure to turn off the power switch.

a) Move knife into nonworking position

- See page 35 for instructions on placing upper knife in nonworking position.

b) Disengage upper looper

- Turn handwheel till driving shaft is at its most right position, otherwise danger may occur.
- Push clutch button to the left and up for cover stitch / chain stitch or to the left and down for overlock.

c) To re-engage upper looper

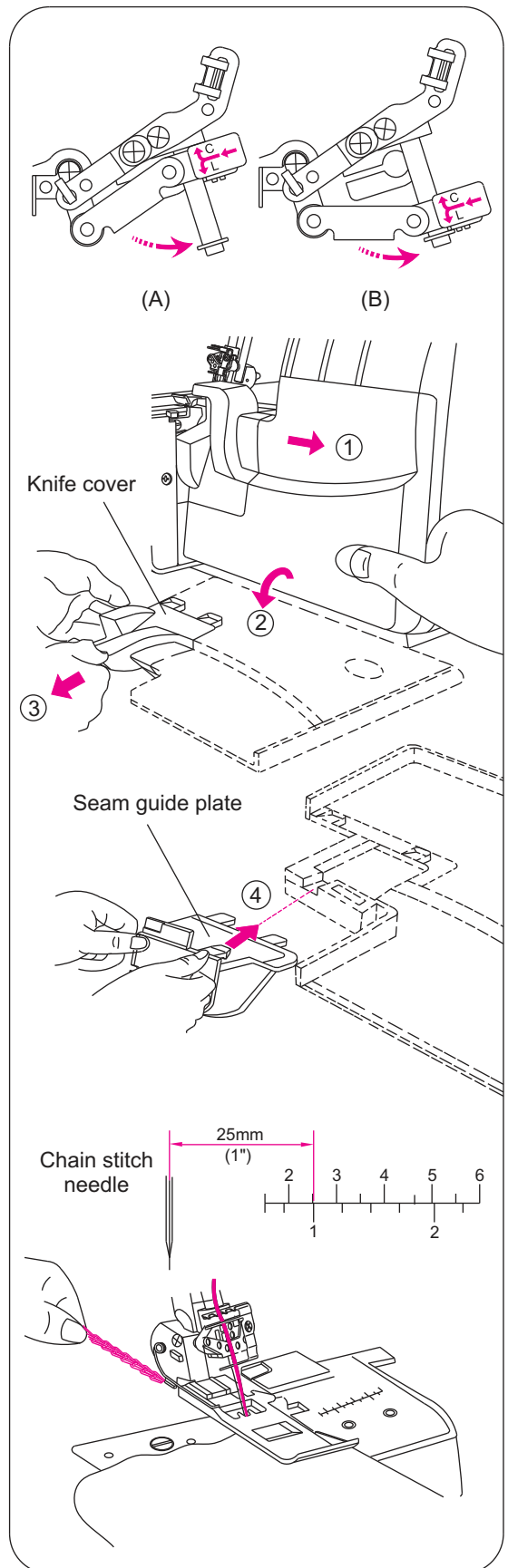
- Turn handwheel till driving shaft is at its most right position, otherwise danger may occur.
- Push clutch button to the left and up for cover stitch / chain stitch or to the left and down for overlock.

d) To install the seam guide plate

- Open the looper cover
- Remove knife cover and install seam guide plate.
- The graduations on seam guide plate indicate the distance from chain stitch needle. Use this as a guide when checking the distance between cover stitch left needle and fabric edge.

e) Start and end of sewing

- When starting to sew, pull the thread chain lightly to the rear of machine until the needle penetrates the fabric.
- When starting to sew after threading the machine, sew 2 ~ 3 cm on a scrap fabric and chain-off to make a chain.
- At end of sewing, pull the fabric lightly to the rear of machine and chain-off.



2) 2-thread Wrapped Edge Overlock

Tension is automatically set when selecting the desired stitch type with the Auto Tension Dial (ATD). Tension may be fine tuned with the Fine Tuning Levers according to the following variables:

- 1) Type and thickness of fabric
- 2) Needle size
- 3) Size, type and fibre content of thread

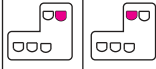
Correct Balance

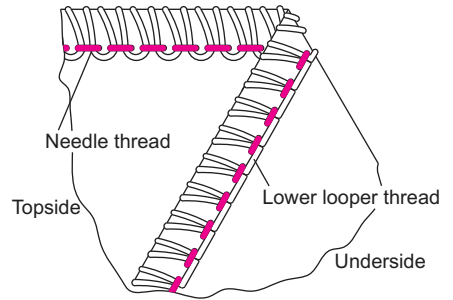
- Set auto tension dial to D or G as shown on illustration and test sew on a sample of your fabric.

How to Balance

- When the lower looper thread tension is too tight or needle thread tension is too loose;
 - Move the lower looper thread tension fine tuning lever (red) toward a lower position.
 - Or, move the needle thread tension fine tuning lever (orange or blue) toward a higher position.

- When the lower looper thread tension is too loose;
 - Move the lower looper thread tension fine tuning lever (red) toward a higher position.

NEEDLE POSITION	
SEAM WIDTH FINGER KNOB	N
STITCH LENGTH	2 ~ 4
SPREADER	USE

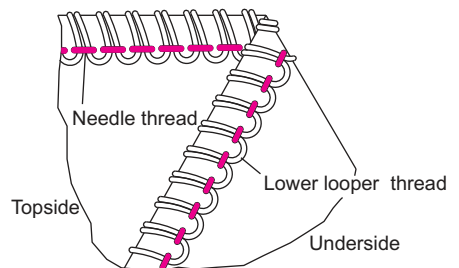
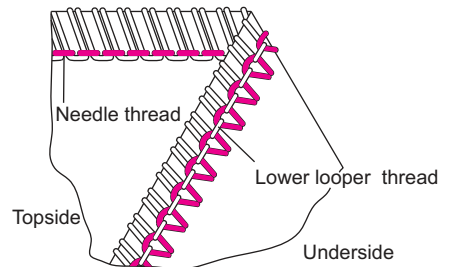


ATD:D

Fabric	Tension Dial				
	Orange	Blue	Green	Red	Brown
Medium weight		●	Spreader	●	

ATD:G

Fabric	Tension Dial				
	Orange	Blue	Green	Red	Brown
Medium weight	●		Spreader	●	



3) 2-thread Overedge

Tension is automatically set when selecting the desired stitch type with the Auto Tension Dial (ATD). Tension may be fine tuned with the Fine Tuning Levers according to the following variables:

- 1) Type and thickness of fabric
- 2) Needle size
- 3) Size, type and fibre content of thread

* See page 36 for instructions on converting upper looper to spreader.

Correct Balance

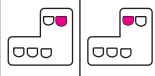
- Set auto tension dial to E as shown on illustration and test sew on a sample of your fabric.

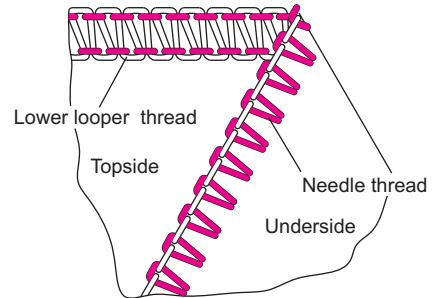
How to Balance

- When the lower looper thread lies on the underside of the fabric;
 - Move the lower looper thread tension fine tuning lever (red) toward a higher position.
 - Or, move the needle thread tension fine tuning lever (orange or blue) toward a lower position.

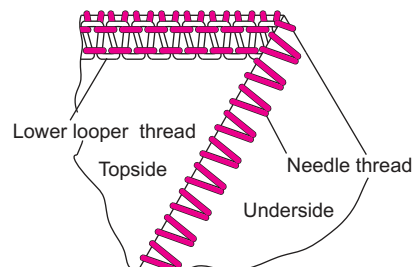
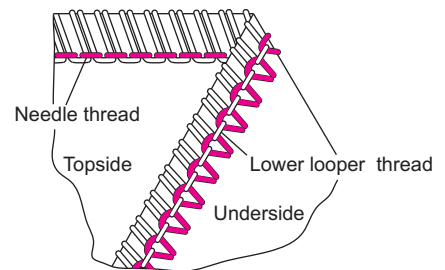
- When the needle thread tension is too loose;
 - Move the needle thread tension fine tuning lever (orange or blue) toward a higher position.
 - Or, move the lower looper thread tension fine tuning lever (red) toward a lower position.

ATD:E

NEEDLE POSITION	
SEAM WIDTH FINGER KNOB	N
STITCH LENGTH	2~4
SPREADER	USE



Fabric	Tension Dial				
	Orange	Blue	Green	Red	Brown
Medium weight		•	Spreader	•	



4) 3-thread Overlock

Tension is automatically set when selecting the desired stitch type with the Auto Tension Dial (ATD). Tension may be fine tuned with the Fine Tuning Levers according to the following variables:


- 1) Type and thickness of fabric
- 2) Needle size
- 3) Size, type and fibre content of thread

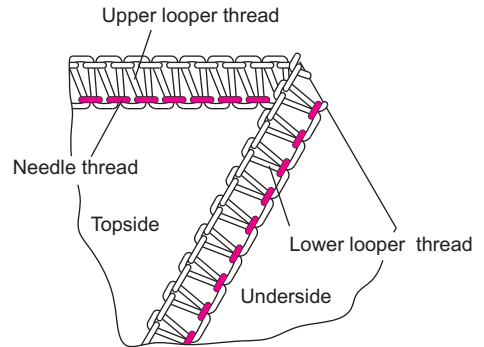
Correct Balance

- Set auto tension dial to A or B as shown on illustration and test sew on a sample of your fabric.

How to Balance

- When the upper looper thread lies on the underside of the fabric;
 - Move the upper looper thread tension fine tuning lever (green) to a higher position.
 - Or, move the lower looper thread tension fine tuning lever (red) to a lower position.
- When the lower looper thread appears on the top of the fabric;
 - Move the lower looper thread tension fine tuning lever (red) toward a higher position.
 - Or, move the upper looper thread tension fine tuning lever (green) to a lower position.
- When the needle thread is too loose, move the needle tension fine tuning lever (orange or blue) to a higher position.

NEEDLE POSITION	
SEAM WIDTH FINGER KNOB	N
STITCH LENGTH	2~4
SPREADER	N/A

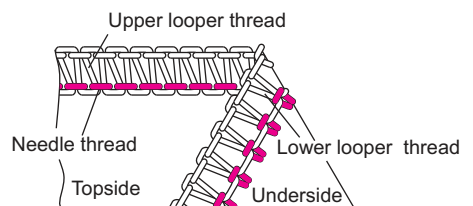
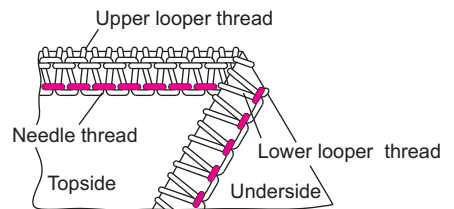
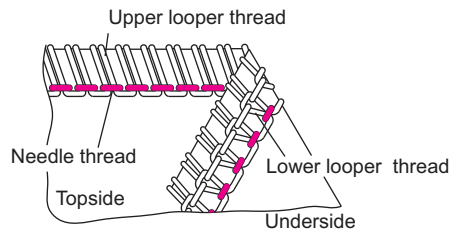


ATD:A

Fabric	Tension Dial				
	Orange	Blue	Green	Red	Brown
Medium weight		●	●	●	

ATD:B

Fabric	Tension Dial				
	Orange	Blue	Green	Red	Brown
Medium weight	●		●	●	



5) 3-thread Flatlock

Tension is automatically set when selecting the desired stitch type with the Auto Tension Dial (ATD). Tension may be fine tuned with the Fine Tuning Levers according to the following variables:

- 1) Type and thickness of fabric
- 2) Needle size
- 3) Size, type and fibre content of thread

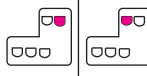
Correct Balance

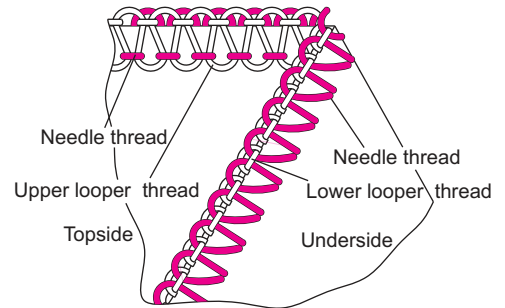
- Set auto tension dial to F as shown on illustration and test sew on a sample of your fabric.

How to Balance

- When the lower looper thread tension is too loose;
 - Move the lower looper thread tension fine tuning lever (red) toward a higher position.
 - Or, move the needle thread tension fine tuning lever (orange or blue) toward a lower position.
- When the upper looper thread tension is too loose;
 - Move the upper looper thread tension fine tuning lever (green) toward a higher position.
 - Or, move the needle thread tension fine tuning lever (orange or blue) toward a lower position.
- When the needle thread tension is too loose;
 - Move the needle thread tension fine tuning lever (orange or blue) toward a higher position.
 - Or, move the upper looper thread tension fine tuning lever (green) toward a lower position.

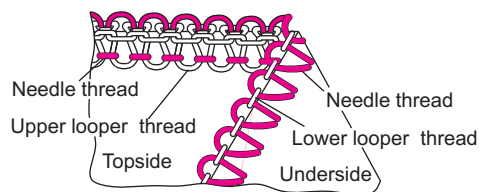
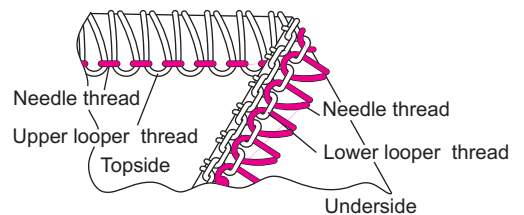
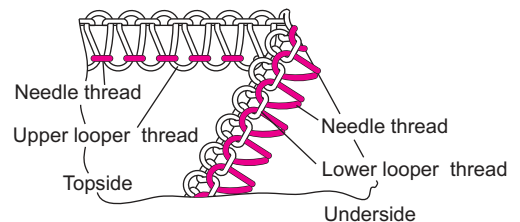
ATD:F

NEEDLE POSITION	
SEAM WIDTH FINGER KNOB	N
STITCH LENGTH	2~4
SPREADER	N/A



Fabric	Tension Dial				
	Orange	Blue	Green	Red	Brown
Medium weight		●	●	●	

Fabric	Tension Dial				
	Orange	Blue	Green	Red	Brown
Medium weight	●		●	●	



6) 3-thread Ultra Stretch Mock Safety Stitch

Tension is automatically set when selecting the desired stitch type with the Auto Tension Dial (ATD). Tension may be fine tuned with the Fine Tuning Levers according to the following variables:

- 1) Type and thickness of fabric
- 2) Needle size
- 3) Size, type and fibre content of thread

Correct Balance

- Set auto tension dial to G as shown on illustration and test sew on a sample of your fabric.

How to Balance

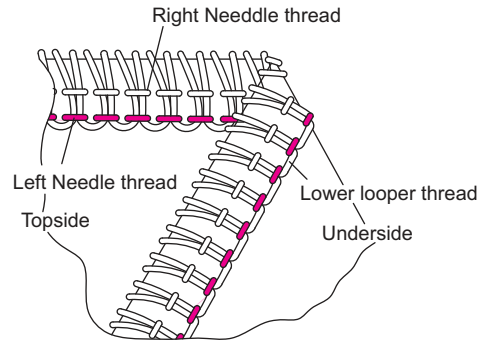
- When the lower looper thread tension is too loose;
 - Move the lower looper thread tension fine tuning lever (red) toward a higher position.

- When the left needle thread tension is too loose;
 - Move the left needle thread tension fine tuning lever (orange) toward a higher position.

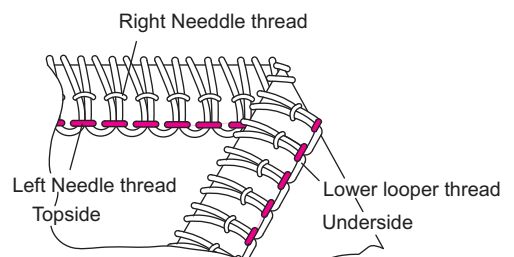
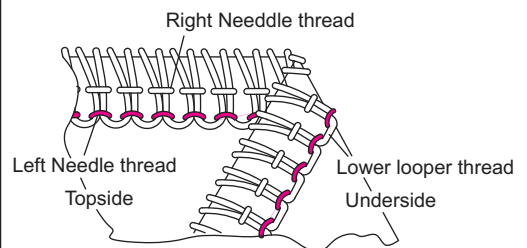
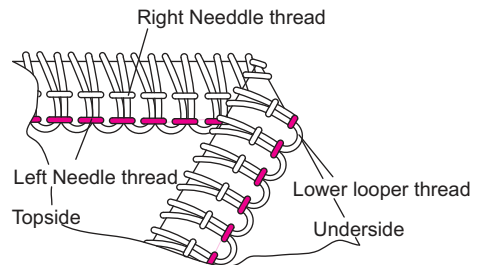
- When the right needle thread tension is too loose;
 - Move the needle thread tension fine tuning lever (blue) toward a higher position.

ATD:G

NEEDLE POSITION	
SEAM WIDTH FINGER KNOB	N
STITCH LENGTH	2~4
SPREADER	USE



Fabric	Tension Dial				
	Orange	Blue	Green	Red	Brown
Medium weight	●	●	Spreader	●	



7) 4-thread Ultra Stretch Mock Safety Stitch

Tension is automatically set when selecting the desired stitch type with the Auto Tension Dial (ATD). Tension may be fine tuned with the Fine Tuning Levers according to the following variables:

- 1) Type and thickness of fabric
- 2) Needle size
- 3) Size, type and fibre content of thread

Correct Balance

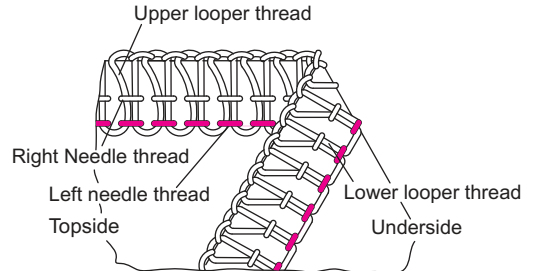
- Set auto tension dial to A as shown on illustration and test sew on a sample of your fabric.

How to Balance

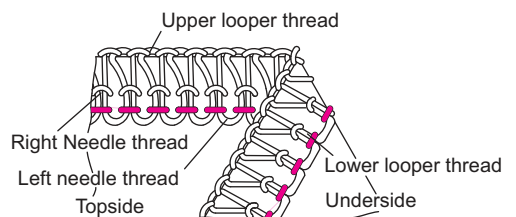
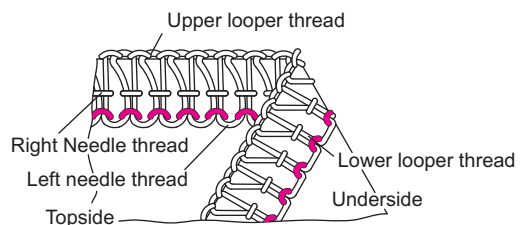
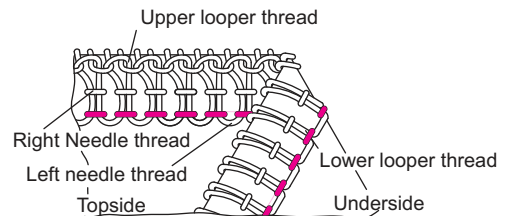
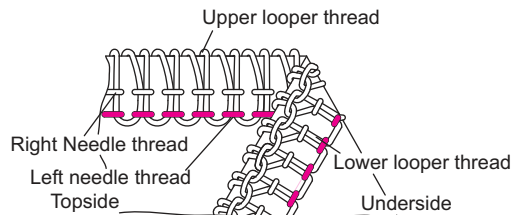
- When the upper looper thread lies on the underside of the fabric;
 - Move the upper looper thread tension fine tuning lever (green) toward a higher position.
 - Or, move lower looper thread tension fine tuning lever (red) to a lower position.
- When the lower looper thread appears on the top of the fabric;
 - Move the lower looper thread tension fine tuning lever (red) toward a higher position.
 - Or, move the upper looper thread tension fine tuning lever (green) toward a lower position.
- When the left needle thread tension is too loose;
 - Move the needle thread tension fine tuning lever (orange) toward a higher position.
- When the right needle thread tension is too loose;
 - Move the right needle thread tension fine tuning lever (blue) toward a higher position.

ATD:A

NEEDLE POSITION	
SEAM WIDTH FINGER KNOB	N
STITCH LENGTH	2~4
SPREADER	N/A



Fabric	Tension Dial				
	Orange	Blue	Green	Red	Brown
Medium weight	●	●	●	●	



8) 4-thread Safety Stitch

Tension is automatically set when selecting the desired stitch type with the Auto Tension Dial (ATD). Tension may be fine tuned with the Fine Tuning Levers according to the following variables:

- 1) Type and thickness of fabric
- 2) Needle size
- 3) Size, type and fibre content of thread


Correct Balance

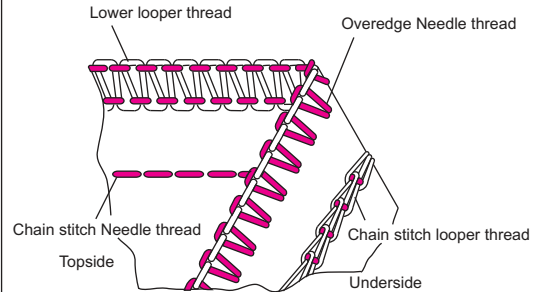
- Set auto tension dial to I as shown on illustration and test sew on a sample of your fabric.

How to Balance

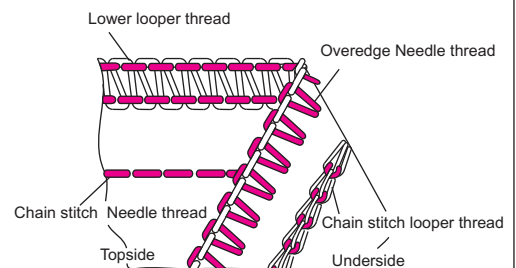
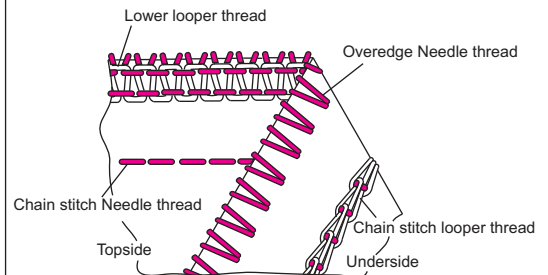
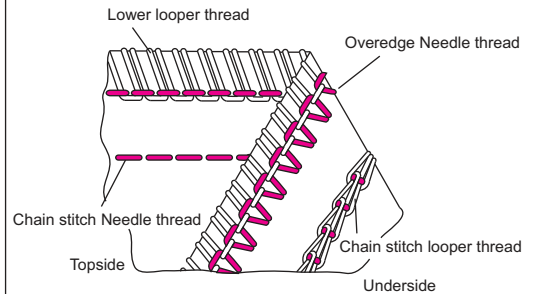
- When the lower looper thread appears on the top of the fabric;
 - Move the lower looper thread tension fine tuning lever (red) to a higher position.
 - Or, move the upper looper thread tension fine tuning lever (green) toward a lower position.
- When the right needle thread is too loose;
 - Move the right needle thread tension fine tuning lever (blue) toward a higher position.
- When the chain stitch needle thread tension is too loose;
 - Move the chain stitch needle thread tension fine tuning lever (orange) toward a higher position.
 - Or, move the chain stitch looper thread tension fine tuning lever (brown) toward a lower position.

ATD:I

NEEDLE POSITION	
SEAM WIDTH FINGER KNOB	N
STITCH LENGTH	2~4
SPREADER	USE



Fabric	Tension Dial				
	Orange	Blue	Green	Red	Brown
Medium weight	●	●	Spreader	●	●



9) 5-thread Safety Stitch

Tension is automatically set when selecting the desired stitch type with the Auto Tension Dial (ATD). Tension may be fine tuned with the Fine Tuning Levers according to the following variables:

- 1) Type and thickness of fabric
- 2) Needle size
- 3) Size, type and fibre content of thread

Correct Balance

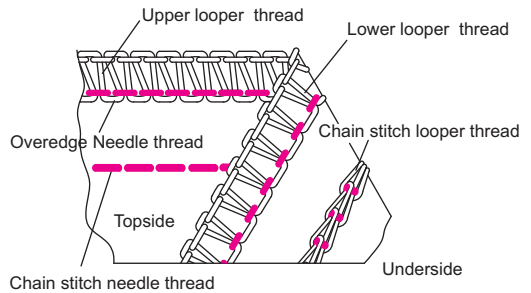
- Set auto tension dial to B as shown on illustration and test sew on a sample of your fabric.

How to Balance

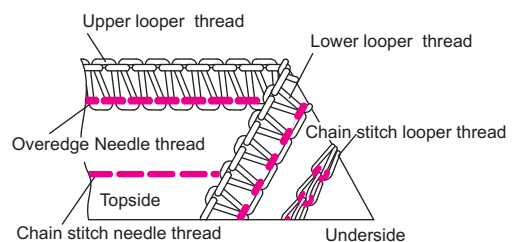
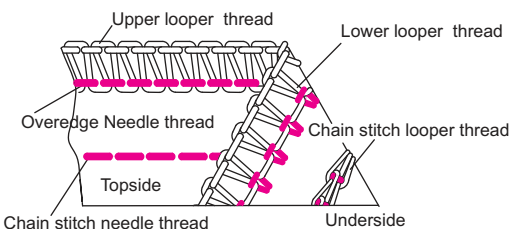
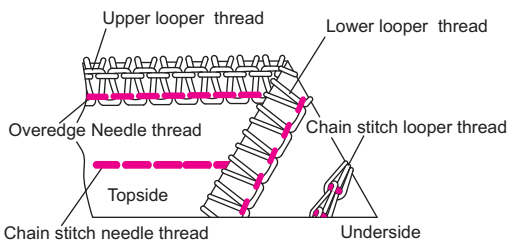
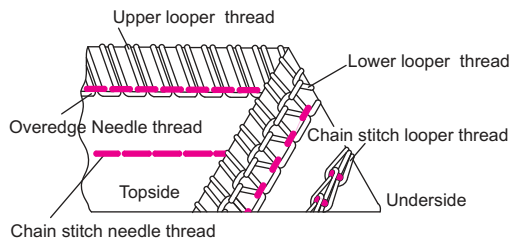
- When the upper looper thread lies on the underside of the fabric;
 - Move the upper looper thread tension fine tuning lever (green) to a higher position.
 - Or, move lower looper thread tension fine tuning lever (red) to a lower position.
- When the lower looper thread appears on the top of the fabric;
 - Move the lower looper thread tension fine tuning lever (red) toward a higher position.
 - Or, move the upper looper thread tension fine tuning lever (green) toward a lower position.
- When the left needle thread tension is too loose;
 - Move the left needle thread tension fine tuning lever (blue) toward a higher position.
- When the chain stitch needle thread tension is too loose;
 - Move the chain stitch needle thread tension fine tuning lever (orange) toward a higher position.
 - Or, move the chain stitch looper thread tension fine tuning lever (brown) toward a lower position.

ATD:B

NEEDLE POSITION	
SEAM WIDTH FINGER KNOB	N
STITCH LENGTH	2 ~ 4
SPREADER	N/A



Fabric	Tension Dial				
	Orange	Blue	Green	Red	Brown
Medium weight	●	●	●	●	●



23. HOW TO SEW A COVER STITCH

- This machine can produce a 3-thread 5.6 mm wide bottom cover stitch.
- The cover stitch can be used for covering, binding or top-stitching necklines and for hemming the bottom, of T-shirts and sweat suits, etc. in addition to flat joining seams (plain seaming).
- The cover stitch is most suitable for stretchy fabrics such as knit.
- It also can be used in woven fabrics such as denim, but careful attention must be paid to the tension settings or there is the possibility of thread breakage and or skipping.
- If you experience skipping or thread breakage sewing denim change needles first and then adjust the tensions little by little (1/4 number at a time).

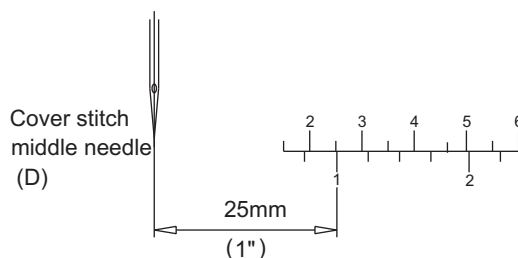
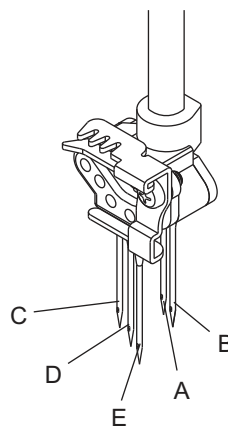
Machine Set up



Caution:

Be sure to turn off the power switch.

- Open looper cover. (See page 12)
- Disengage upper looper. (See page 40)
- Place the movable upper knife in the non working position. (See page 35)
- Set seam width finger knob on "R" side. (See page 37)
Set C/L clutch (see page 40).
- Remove overedge right needle (B) and overedge left needle (A).
- For Triple 5.6mm cover stitch, install cover stitch right needle (E), cover stitch middle needle (D) and cover stitch left needle (C). (See pages 25 ~ 29)
- Pass thread through needles (E), (D) and (C) and thread cover stitch looper [brown] (See pages 20 ~ 21)
- Install seam guide plate. (See page 40)
- The graduations on seam guide plate indicate the distance from cover stitch middle needle. Use it as a guide when positioning fabric edge.
- Close looper cover.



Additional Information About Cover Stitch

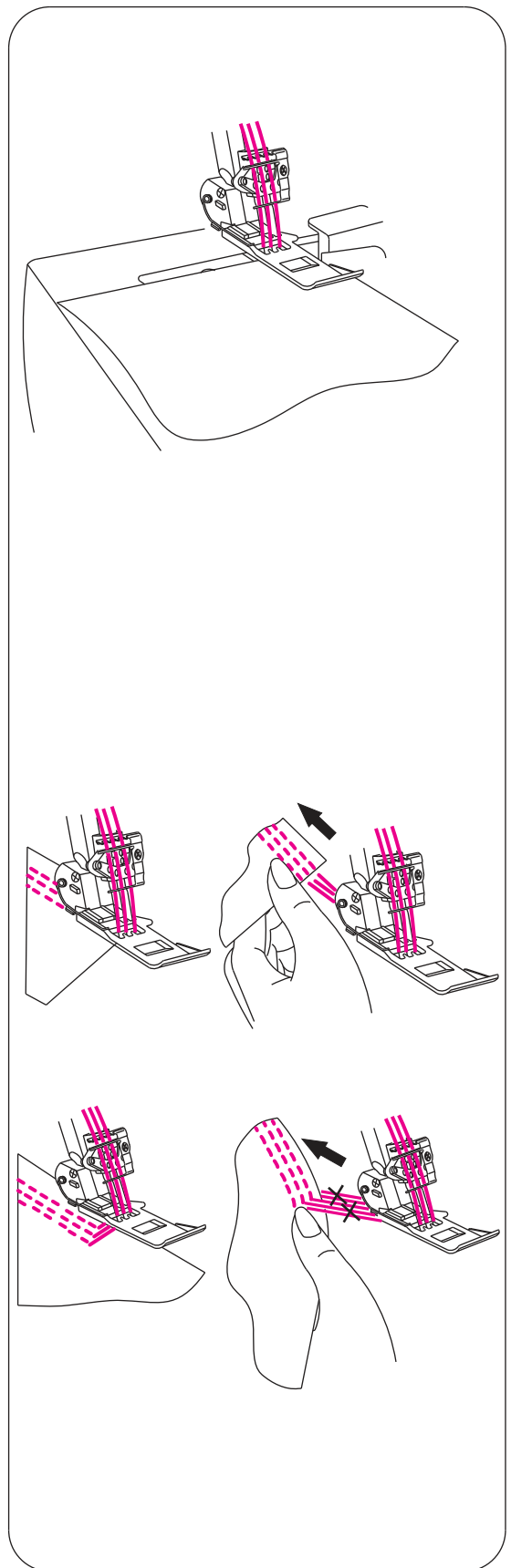
Start and end of sewing

Note: Follow the instructions given below when sewing cover stitches because chaining-off at the end of sewing is not possible.

At start of sewing

- Raise presser foot by lowering the presser bar lifter.
- Place material under presser foot behind the needle.
- Lower presser foot by raising the presser bar lifter.

Note: When you start to sew from the middle of the fabric, place the fabric at the desired starting point of sewing.



2-Thread Cover Stitch Suggested Tension Settings

Tension is automatically set when selecting the desired stitch type with the Auto Tension Dial (ATD). Tension may be fine tuned with the Fine Tuning Levers according to the following variables:

- 1) Type and thickness of fabric
- 2) Needle size
- 3) Size, type and fibre content of thread

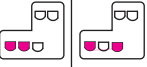
* Stitch length for cover stitch should be set at over N (2.5 mm).

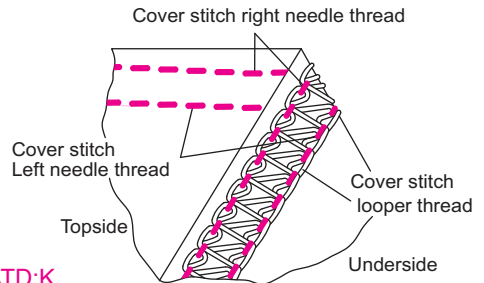
Correct Balance

- Set auto tension dial to K or H as shown on illustration and test sew on a sample of your fabric.

How to Balance

- When the cover stitch looper thread is too loose;
 - Move the cover stitch looper thread tension fine tuning lever (brown) toward a higher position.
- When the cover stitch left needle thread tension is too loose;
 - Move the cover stitch left needle thread tension fine tuning lever (orange) toward a higher position.
 - Or, move cover stitch looper thread tension fine tuning lever (brown) toward a lower position.
- When the cover stitch right needle thread tension is too loose;
 - Move the cover stitch right needle thread tension fine tuning lever (blue) or (orange) toward a higher position.
 - Or, move the cover stitch looper thread tension fine tuning lever (brown) toward a lower position.
- When the top surface of fabric bulges between needle threads and the seams on the underside of the fabric becomes tight;
 - move the cover stitch looper thread tension fine tuning lever (brown) toward a lower position.

NEEDLE POSITION	
SEAM WIDTH FINGER KNOB	R
STITCH LENGTH	N~4
DRIVING CLUTCH POSITION	C

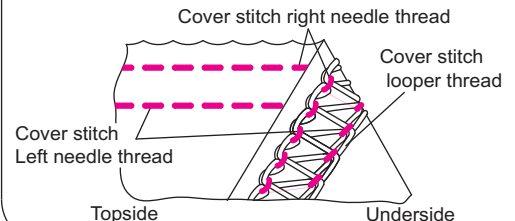
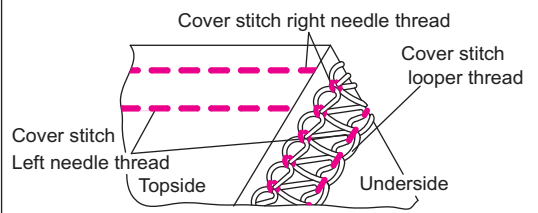
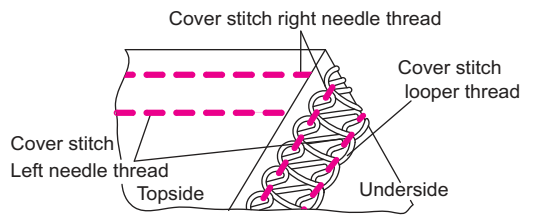
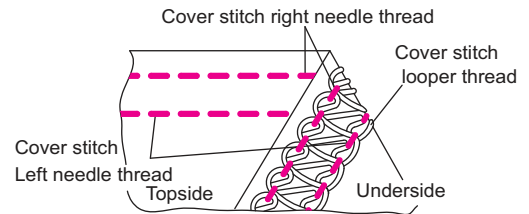


ATD:K

Cover stitch looper Thread	Tension Dial				
	Orange	Blue	Green	Red	Brown
Polyester	●	●			●
Woolly nylon	●	●			●

ATD:H

Cover stitch looper Thread	Tension Dial				
	Orange	Blue	Green	Red	Brown
Polyester	●		●		●
Woolly nylon	●		●		●



3-Thread Cover Stitch Suggested Tension Settings

Tension is automatically set when selecting the desired stitch type with the Auto Tension Dial (ATD). Tension may be fine tuned with the Fine Tuning Levers according to the following variables:

- 1) Type and thickness of fabric
- 2) Needle size
- 3) Size, type and fibre content of thread

* Stitch length for cover stitch should be set at over N (2.5 mm).


Correct Balance

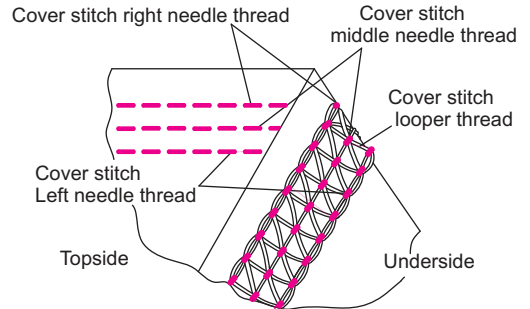
- Set auto tension dial to J as shown on illustration and test sew on a sample of your fabric.

How to Balance

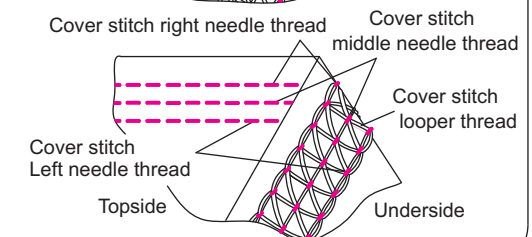
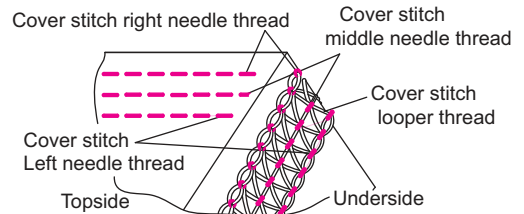
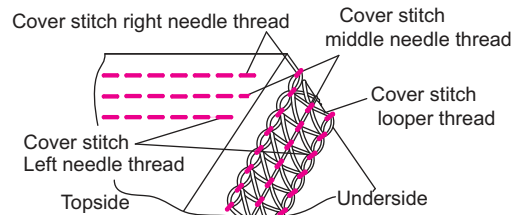
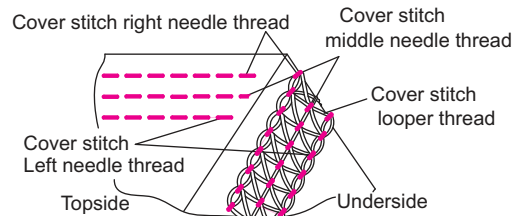
- When the cover stitch looper thread is too loose;
 - Move the cover stitch looper thread tension fine tuning lever (brown) toward a higher position.
- When the cover stitch left needle thread tension is too loose;
 - Move the cover stitch left needle thread tension fine tuning lever (orange) toward a higher position.
 - Or, move cover stitch looper thread tension fine tuning lever (brown) toward a lower position.
- When the cover stitch middle needle thread tension is too loose;
 - Move the cover stitch middle needle thread tension fine tuning lever (blue) toward a higher position.
 - Or, move cover stitch looper thread tension fine tuning lever (brown) toward a lower position.
- When the cover stitch right needle thread tension is too loose;
 - Move the cover stitch right needle thread tension fine tuning lever (green) toward a higher position.
 - Or, move the cover stitch looper thread tension fine tuning lever (brown) toward a lower position.
- When the top surface of fabric bulges between needle threads and the seams on the underside of the fabric becomes tight;
 - move the cover stitch looper thread tension fine tuning lever (brown) toward a lower position.

ATD:J

NEEDLE POSITION	
SEAM WIDTH FINGER KNOB	R
STITCH LENGTH	N~4
DRIVING CLUTCH POSITION	C



Cover stitch looper Thread	Tension Dial				
	Orange	Blue	Green	Red	Brown
Polyester	●	●	●		●
Woolly nylon	●	●	●		●



Securing the seam end

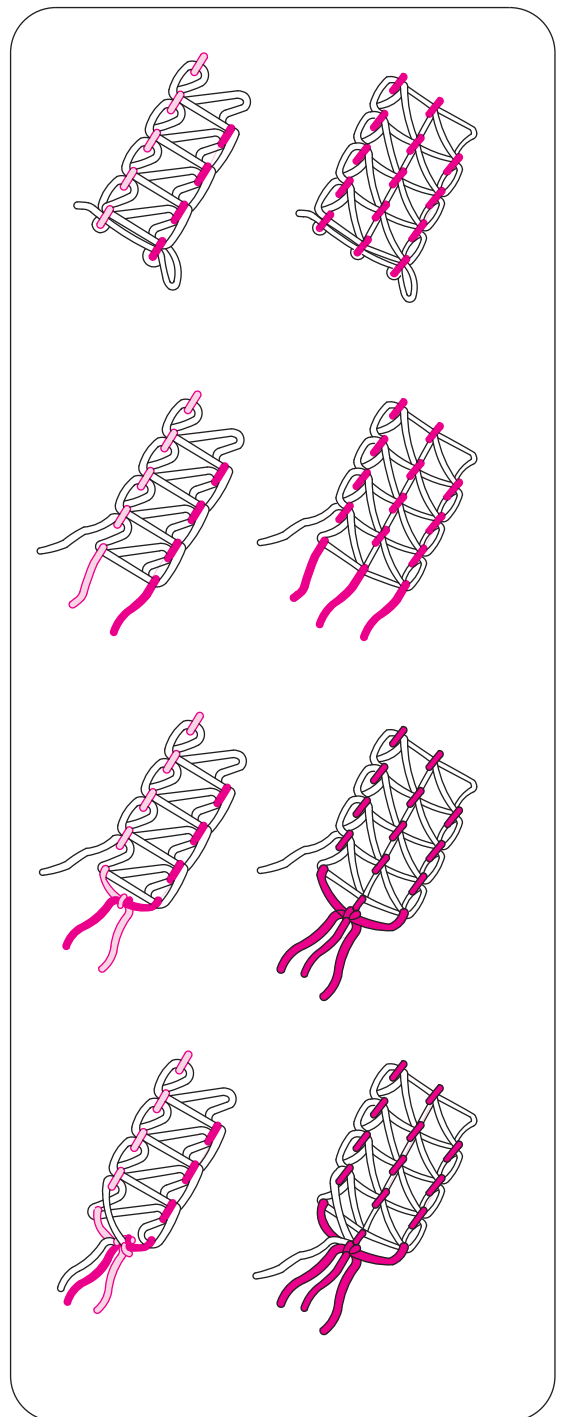
Since the seams formed by cover stitch unravel when the looper thread is pulled out at the end of sewing, secure the seam end in the following manner.

- When sewing through to the edge of fabric, among the threads coming out of the fabric edge, knot the needle threads (2 or 3 threads) together first, as shown on the illustration. Then, tie these threads with the looper threads.

- When sewing is stopped halfway, pull out the needle threads (2 or 3 threads) on the underside of the fabric and knot the threads in the same manner as described above.

- Cut extra threads.

Note: Normally, the seams at the start of sewing do not unravel, but it is safe to secure the seam end following the same steps as described when sewing through to the edge of fabric.



24. HOW TO SEW A ROLLED HEM

- This machine can sew four types of rolled hems.
- Rolled hemming is done by rolling and overedging the fabric edge.
- Light weight fabrics such as lawn, voile, organdy, crepe, etc. perform the best.
- Rolled hemming is not suited for heavy or stiff fabrics.

NOTE: Rolled hemming can only be performed with the overedge right needle.

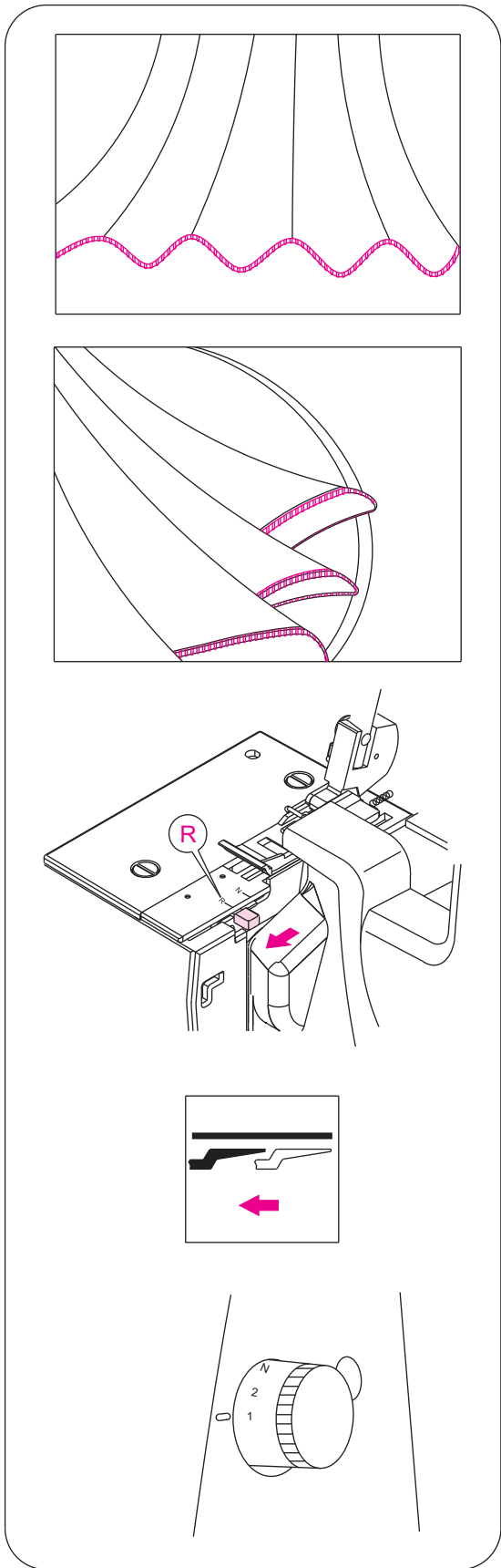
Machine Set up



Caution:

Be sure to turn off power switch.

- Remove the overedge left needle, chain stitch needle and cover stitch needle(s).
- Move seam width finger knob to setting R.
- Align left face of seam width finger support plate with R mark on needle plate by turning seam width adjustment knob, as required.
- Set stitch length dial to "1~2" and a fine seam will be sewn.
- Needle: Singer Cat. No. 2022 #14/90 or 2022 #11/80
- Thread: A variety of thread combinations can be used for rolled hemming.




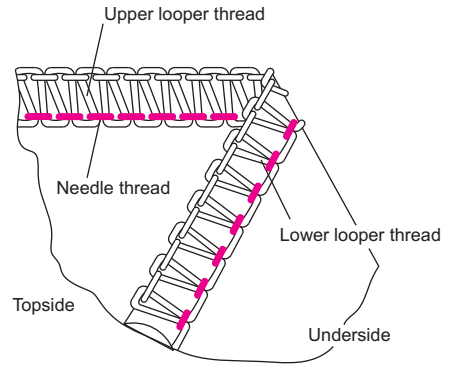
Note: For a beautiful rolled hem thread the upper looper with wooly nylon and the needle and lower looper with lightweight regular thread.

1) 3-thread Standard Rolled Hem Stitching

Correct Balance

- Set auto tension dial to A as shown on illustration and test sew on a sample of your fabric.

NEEDLE POSITION	
SEAM WIDTH FINGER KNOB	R
STITCH LENGTH	1~2
DRIVING CLUTCH POSITION	L



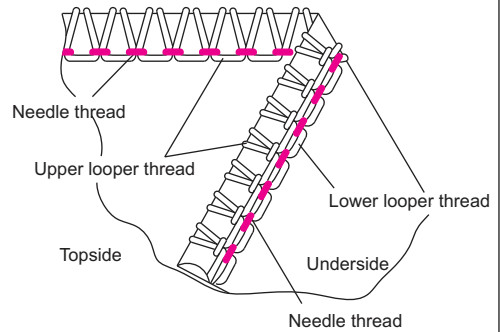
ATD:A

Light Weight fabric	Tension Dial				
	Orange	Blue	Green	Red	Brown
Polyester		•	•	•	
Woolly nylon		•	•	•	

2) 3-thread Upper Looper Thread Wrapped Rolled Hem Stitching

Correct Balance

- Set auto tension dial to C as shown on illustration and test sew on a sample of your fabric.



ATD:C

Light Weight fabric	Tension Dial				
	Orange	Blue	Green	Red	Brown
Polyester		•	•	•	
Woolly nylon		•	•	•	


Note: For a beautiful rolled hem thread the lower looper with wooly nylon and the needle with lightweight regular thread.

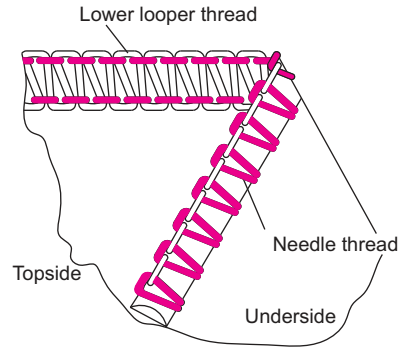
- Convert upper looper to spreader. (See page 36)

3) 2-thread Standard Rolled Hem Stitching

Correct Balance

- Set auto tension dial to E as shown on illustration and test sew on a sample of your fabric.

NEEDLE POSITION	
SEAM WIDTH FINGER KNOB	R
STITCH LENGTH	1~2
SPREADER	USE



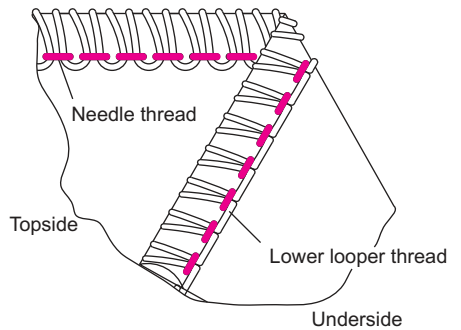
ATD:E

Light Weight fabric	Tension Dial				
	Orange	Blue	Green	Red	Brown
Woolly nylon		●	Spreader	●	

4) 2-thread Lower Thread Wrapped Rolled Hem Stitching

Correct Balance

- Set auto tension dial to D as shown on illustration and test sew on a sample of your fabric.

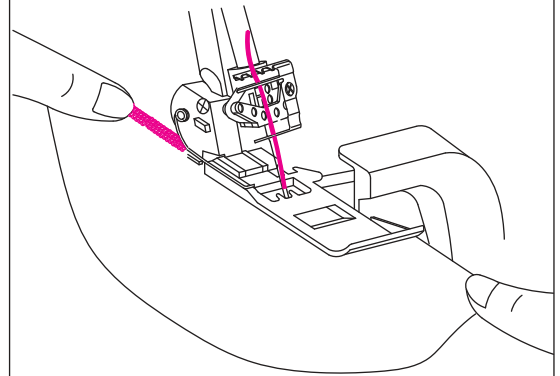
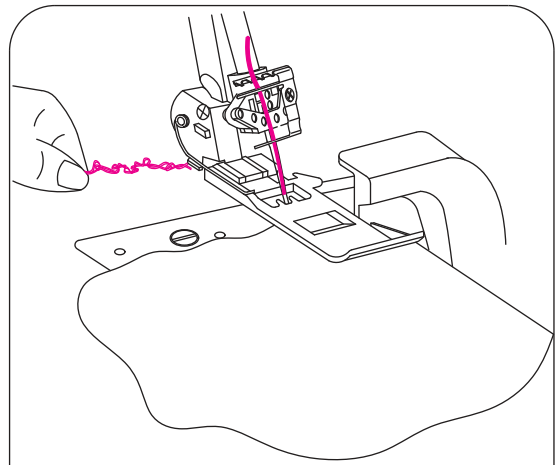


ATD:D

Light Weight fabric	Tension Dial				
	Orange	Blue	Green	Red	Brown
Polyester		●	Spreader	●	
Woolly nylon		●	Spreader	●	

Additional Information About Rolled Hemming

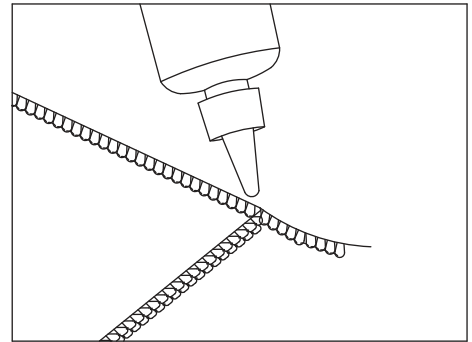
- Hold the thread chain when you begin sewing to keep it from curling into the seam.
- Place a slight tension on the material in the sewing direction and a finer seam finish can be obtained.
- The minimum overedge stitch width that can be obtained for rolled hemming is approximately 1.5 mm (1/16 inch) since the cutting width cannot be set below 3.5 mm (9/64 inch).



To Secure the Rolled Hem Thread Chain

- Apply a small drop of liquid seam sealant to the end of the seam. Allow to dry, then cut the chain close to the stitches.

Note: Test the liquid seam sealant for color fastness before use.



25. STITCH VARIATIONS AND SEWING TECHNIQUES

How to Sew a Flatlock Decorative Seam

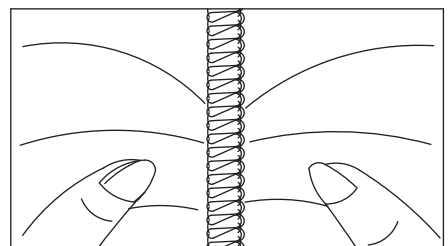
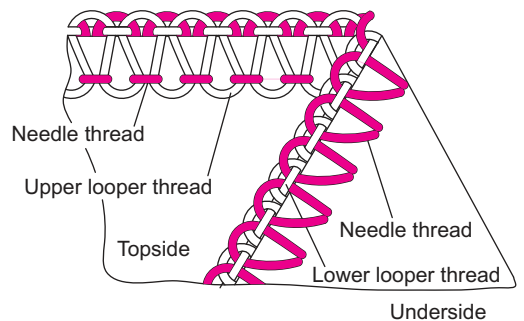
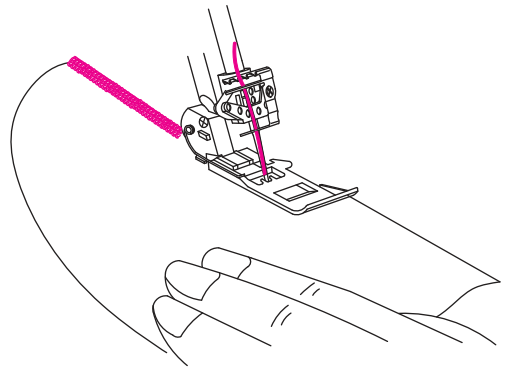
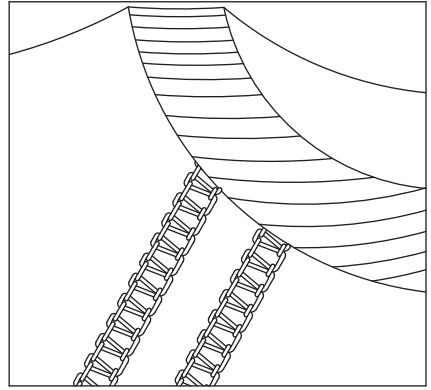
- A flatlock stitch is achieved by adjusting the tension of the 2-thread or 3-thread overlock stitch, sewing the seam, and then pulling the fabric apart to flatten the seam.
- The flatlock stitch can be used as a construction and decorative stitch or for ornamentation only.

1) Machine Set Up

- Use either overedge right needle or overedge left needle.
- Begin with the machine threaded and tension ATD-E balanced for the 2-thread overedge (page 42) or 3-thread flatlock stitch ATD-F (page 44).

2) Flatlocking a Seam

- Place the fabric wrong sides together to sew a decorative stitch on the right side of the garment.
- Sew the seam, trimming the excess fabric.
- The needle thread (orange or blue) will form a V on the underside of the fabric.
- The lower looper thread will pull into a straight line at the fabric edge.
- Pull on opposite sides of the seam to pull the stitches flat.



(3) Decorative Flatlocking

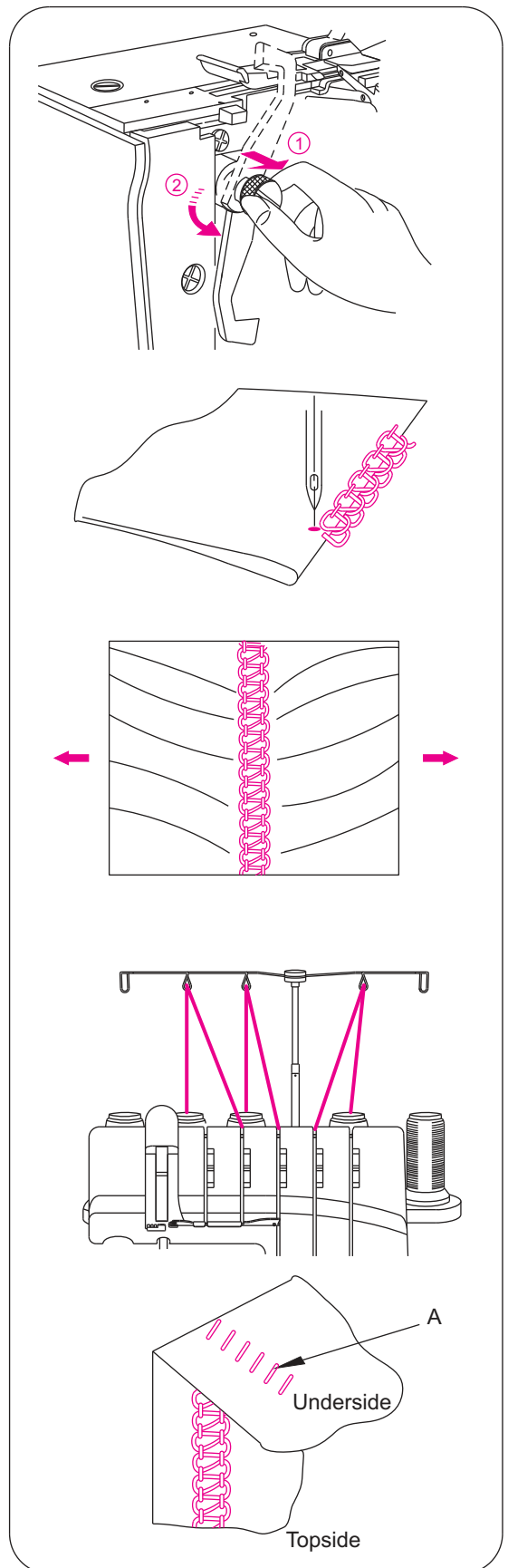
- Place the movable upper knife in the nonworking position (page 35). The fabric is not trimmed on this stitch.

- Fold fabric wrong sides together.
- Position the fabric so the seam is sewn with part of the stitch extending off the fabric.

- Pull on opposite sides of the stitch to flatten.

(4) Additional Information About Flatlocking

- The tensions must be correctly fine tuned for the fabric to pull flat.
- The upper looper thread is the prominent thread in the flatlock stitch. Place a decorative thread in the upper looper and inconspicuous threads in the lower looper and needle.
- For a ladder stitch, sew seam with right sides together. The needle thread will be the prominent thread that creates the ladder (A).



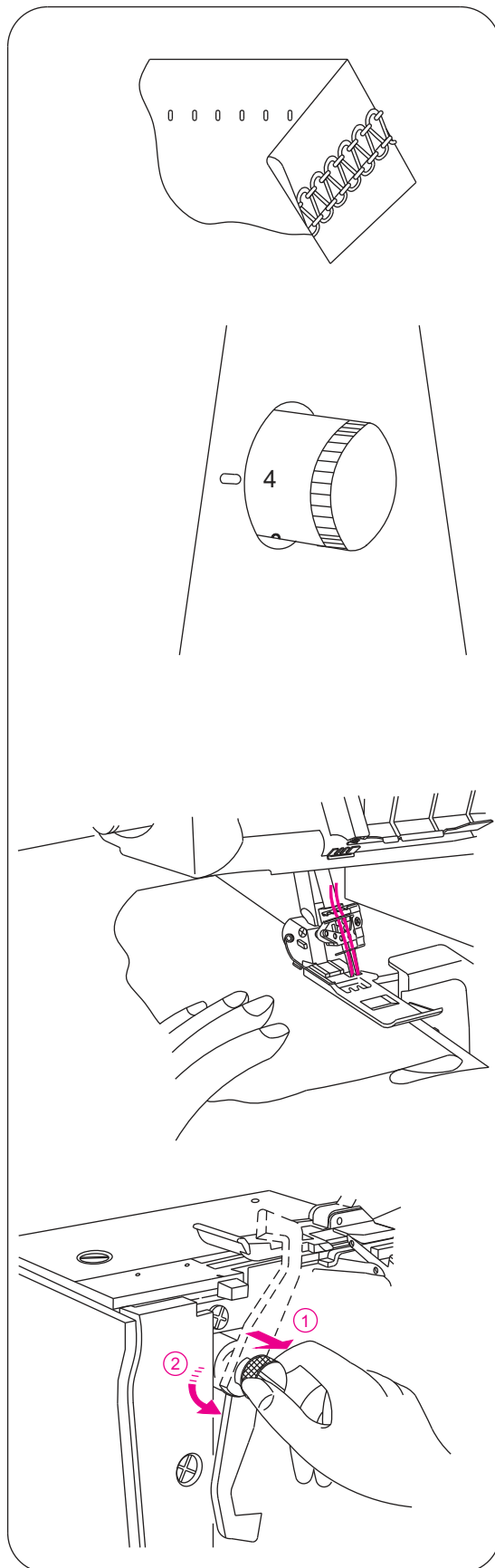
How to Sew an Overlock Blind Hem

- The excess fabric is trimmed and the hem is sewn and the raw edges are overlocked in one operation.
- The overlock blind hem is best suited for sewing knit wear. It provides a durable finish that is almost invisible.
- Use overedge right needle and adjust machine for a narrow 3-thread overlock stitch. (See page 43)

Note: The three-thread flatlock stitch can also be used.
(See page 44)

- Set the stitch length dial at 4
- Fold the hem to the wrong side of the fabric, then back to the right side with 6 mm (1/4 inch) beyond the fold.
- Stitch on the extended hem edge, allowing the machine needle to barely catch the edge of the fold.

Note: An optional blindstitch foot is available.
(See page 68)



How to Sew Pin Tucks

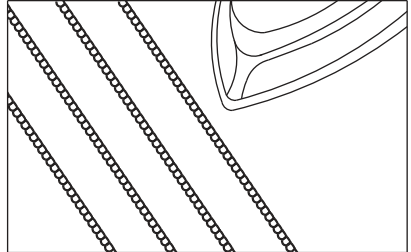
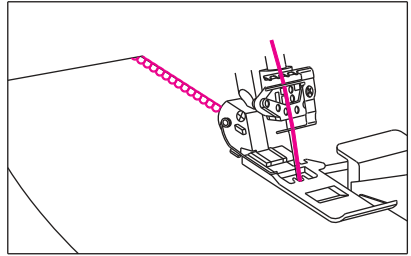
- Sew decorative pin tucks on the fabric before cutting out the garment.
- Use overedge right needle and adjust machine for a narrow 3-thread overlock stitch. (See page 43)

Note: The rolled hemstitch can also be used for this technique.

- Place the movable upper knife in the nonworking position. (See page 35)
- Mark the fabric with the desired number of pin tucks using a water-soluble fabric marker

- Fold the fabric with the wrong sides together and sew.

- Press the pin tucks in the same direction.



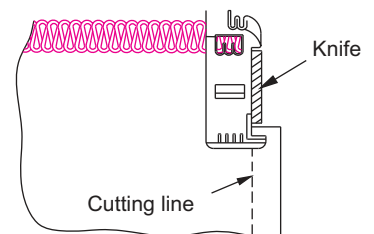
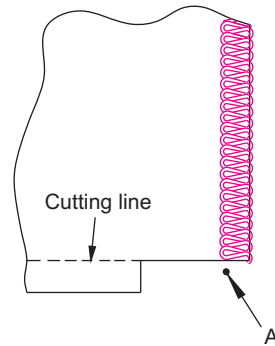
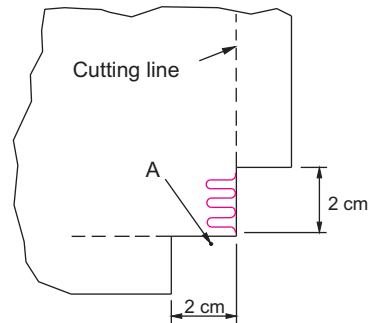
Turning Square Corners

(1) Outside Corner

- Cut out approximately 2cm (51/64 inch) from the corner, in line with the overedge seam edge.
- Sew one stitch beyond point (A) and stop.
- Raise needle and presser foot.
- Pull the fabric to the rear of the machine just enough to release the thread caught on the finger of the needle plate.

Note: Presser foot has been removed to show detail.

- Turn the fabric and lower the presser foot so that the knife is positioned in line with the cut edge.
- Pull slack threads up, then start to sew.



(2) Inside Corner

- Cut inside corner up to seam line as shown
- Sew along seam line.
- Sew up to end of fold. (Leave needle in fabric)
- Raise presser foot. (Leave needle in fabric)
- Spread fold and re-fold so that seam line is straight.

Pin Placement

- Insert pins to the left of the presser foot. The pins will be easy to remove and are away from the cutting action of the knives.

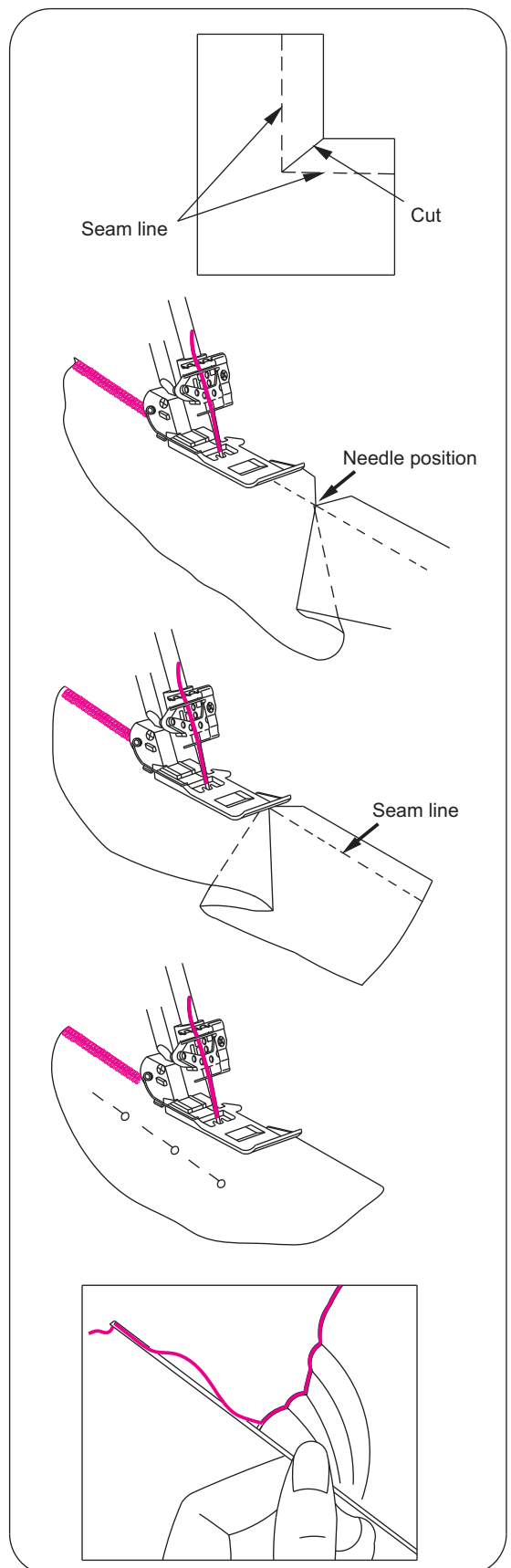


Caution:

Sewing over pins will damage and /or destroy the cutting edge of the knives.

Securing the Thread Chain

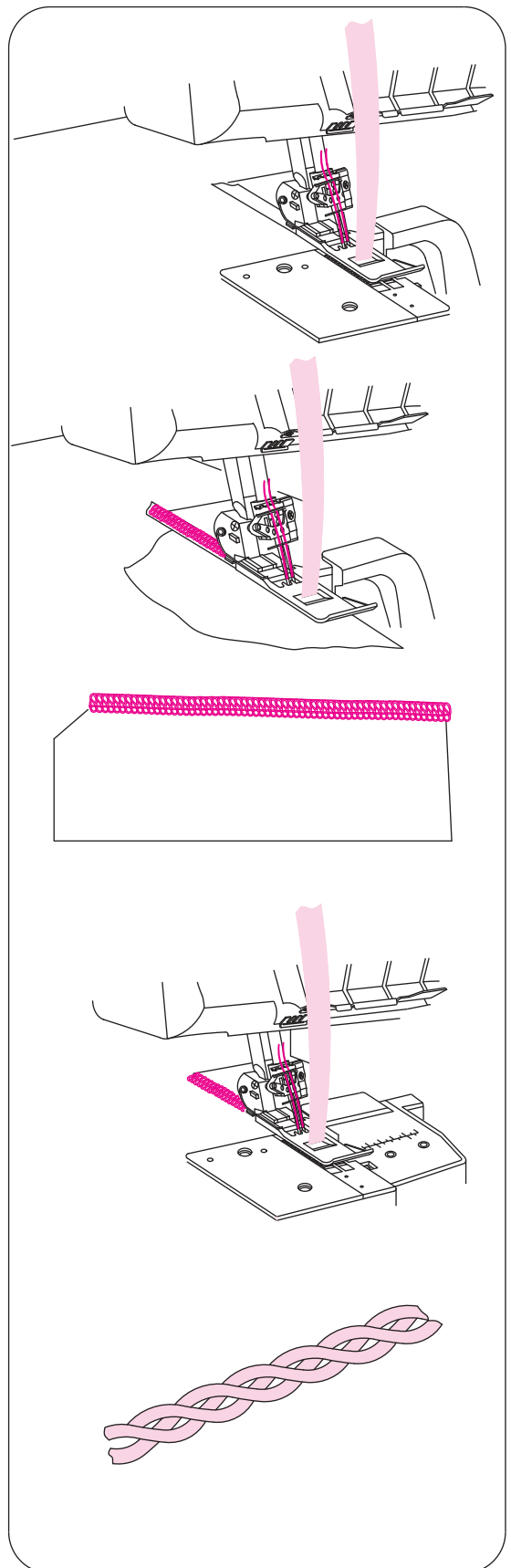
- Thread a large eye, hand sewing needle (such as a tapestry needle) with the thread chain.
- Insert the needle into the end of the seam to secure thread.
- Note: To secure a rolled hem thread chain, see page 57.



How to Reinforce a Seam

- Inserting twill tape while overedge sewing will stabilize the seam.
- Insert the tape through the hole in the front of the foot.
- Position the tape under the foot to the back of the machine and sew the garment seam.

- The tape is attached as the seam is sewn.



Braiding by Chaining off

- Place the movable upper knife in nonworking position.
- Insert filler cord such as yarn or twill type through the hole in the front of the foot.
- Position the filler cord under the foot and chain off the desired length.
- Chained off braids can be used individually or woven into 3 or 4 ply braids.

26. MACHINE MAINTENANCE

An overlock machine requires more maintenance than a conventional machine for two reasons:

- 1) A lot of lint is produced due to the cutting action of the knives.
- 2) An overlock runs at a very high speed and needs to be oiled frequently to lubricate the internal working parts.

Cleaning the Machine



Danger:

Before cleaning your machine, disconnect power line plug from the wall receptacle.

- Clean the lint from the looper and knife area often with a dry lint brush.

Oiling the Machine

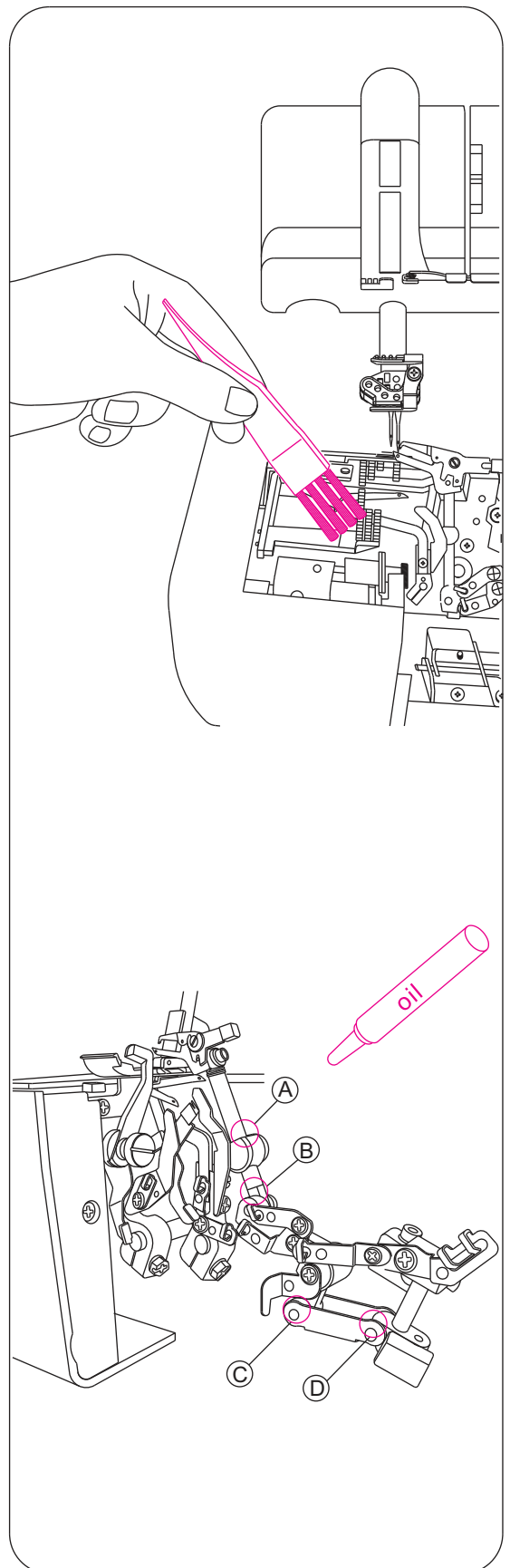


Danger:

Before lubricating your machine, disconnect power line plug from the wall receptacle.

- The oiling points shown in the diagram, should be oiled periodically.

Note: Use only sewing machine oil. Do not use any other oil or damage could result.



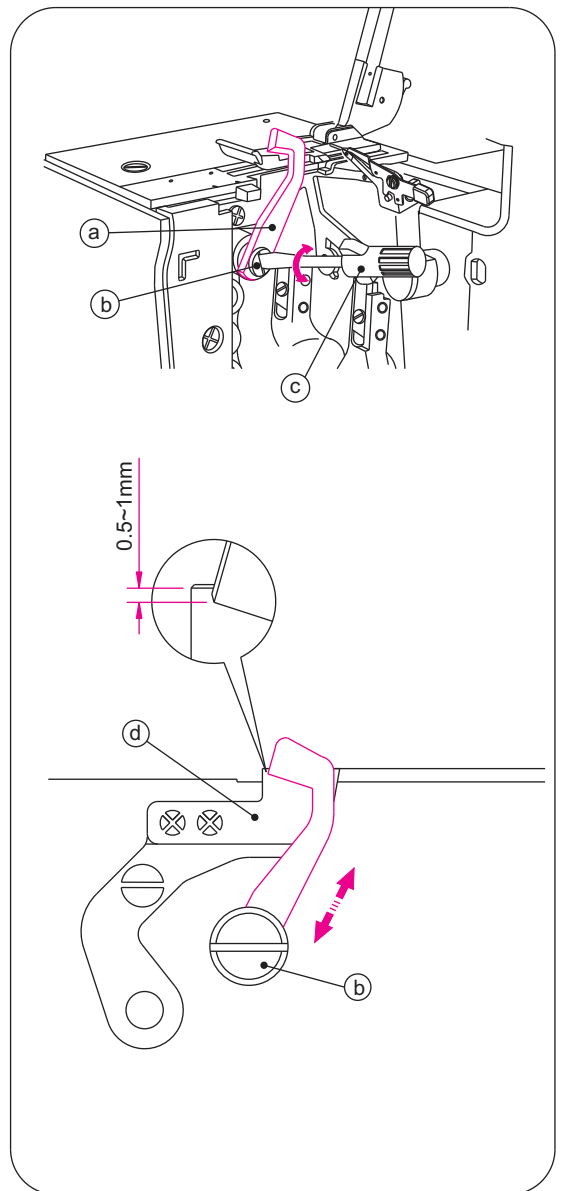
How to Replace the Moveable Upper Knife



Danger:

Before replacing the moveable upper knife, disconnect power line plug from the wall receptacle.

- The moveable upper knife should be changed when it becomes dull.
- The moveable upper knife can be replaced according to the directions provided, however if there are any difficulties experienced, consult your Singer representative to make the replacement.
- Be sure that the power line plug is disconnected from the electric source.
- Open the looper cover and set the moveable upper knife (a) in the working position.
- Loosen the moveable upper knife set screw (b) and remove the moveable upper knife (a).
- Turn the hand wheel to lower the moveable upper knife holder to its lowest position.
- In this position, put a new moveable upper knife in the groove of the moveable upper knife holder, making sure that the edge of the moveable upper knife is approximately 0.5 to 1.0 mm below the surface of the fixed cutting blade (d).
- Tighten moveable upper knife set screw (b).



How to Exchange Light Bulb



Danger:

Always unplug before re-lamping.

- Light bulb is available at your Singer shop. Take old bulb to the Singer shop and ask for the same bulb.
- If voltage indicated on the electrical rating plate of your machine is 120V, ask for light bulb conforming to following specification.
 - Bayonet type: 110~120V, 15W
 - Glass shape: T-20
 - Lamp cap: E12
 - Overall length: 48mm
- Remove light cover screw and while pushing the cover lightly to the rear, swing cover to the left and remove from machine as shown in the illustration. Turn bulb to the left to remove. To replace the bulb, push bulb into the socket and turn to the right.



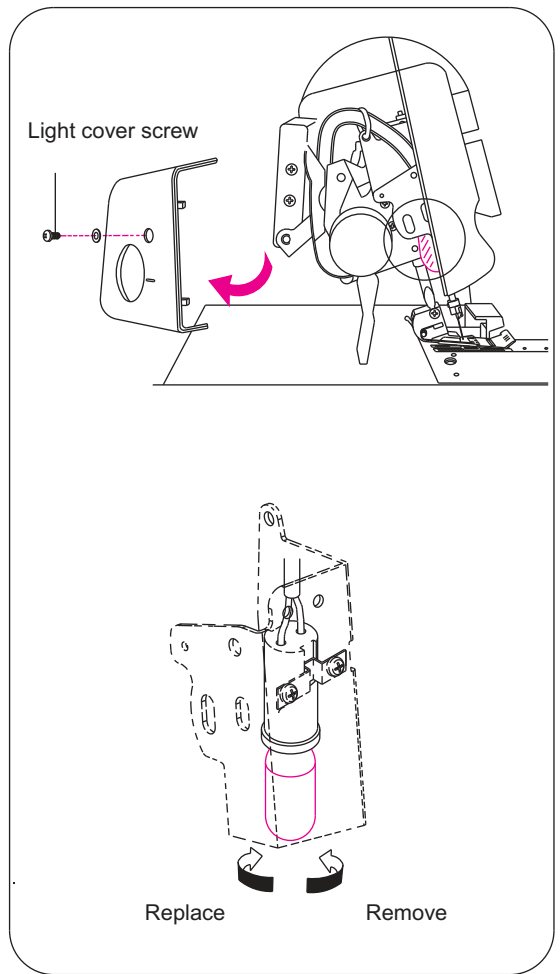
Caution:

Be sure the light bulb has cooled off before changing with a new one.



Warning:

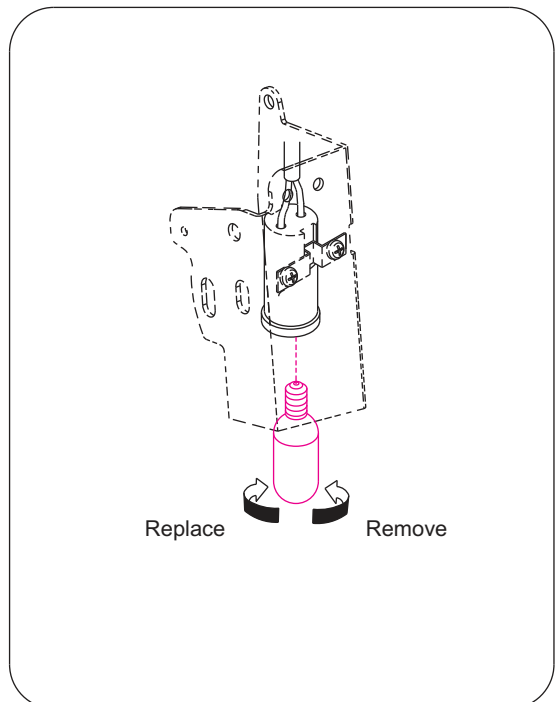
Replace the light cover first before connecting the power line plug.



- If voltage indicated on the electrical rating plate of your machine is 220-240V, ask for light bulb conforming to following specification.

-Edison type (screw type): 220 ~240V, 15W

- Glass shape: T-22
 - Lamp cap: E14
 - Overall length: 56mm
- Remove light cover screw and while pushing the cover lightly to the rear, swing cover to the left and remove from machine as shown in the illustration. Turn bulb to the left to remove. To replace the bulb, screw bulb into the socket and turn to the right.



27. OPTIONAL ACCESSORIES

- The following optional presser feet specially prepared for this machine are available at extra-charge.

Note: Do not use presser foot made for other machines. Use of such presser foot may result in interference with the needle and knife and can be hazardous.

- The snap-on type presser foot of this machine permits easy removal and replacement.



Caution:

Be sure to disconnect the power line plug or turn off the power switch when changing the presser foot.

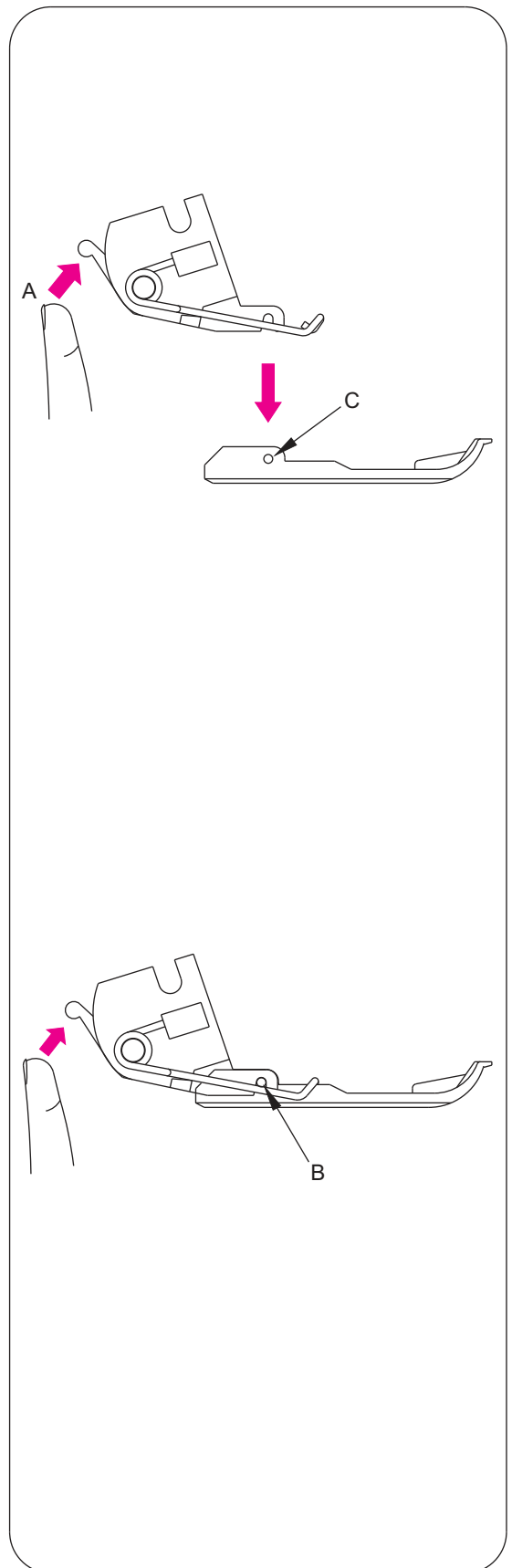
Snap-On Type Presser Foot

Removal

- Raise presser foot by lowering presser bar lifter and raise needle bar to its highest position.
- Press red colored lever (A) located on back of clamp under the presser foot shank, raise presser bar lifter to its High Lift position by pressing down on the presser bar lifter and while holding the presser bar lifter in this position, remove the presser foot plate.

Replacement

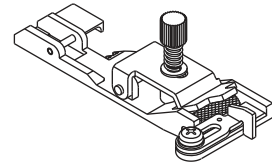
- Place presser foot on needle plate under presser foot shank so that hinge pin (C) will fit in slot (B) of the shank. Then lower presser foot by raising presser bar lifter.
- If presser foot can not be placed under presser foot shank easily, raise presser bar by pressing down on the presser bar lifter to its High Lift position and while holding it in this position, place presser foot plate under presser foot shank. Then lower presser by raising presser bar lifter.
- Raise presser bar lifter and make sure the presser foot is properly attached to the presser foot shank.



Optional Presser Feet

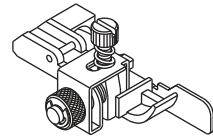
1) Elastic Foot

- This foot is used for attaching elastic tape to the garment and the amount of contraction of the elastic tape can be adjusted as required.



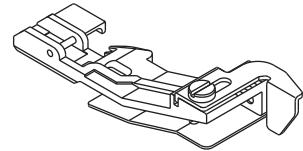
2) Blind Hem Foot

- This foot is for sewing cuffs on knit fabrics, skirt and trouser seams where seam should not be visible.



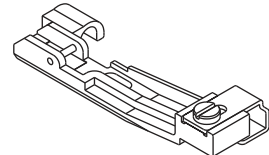
3) Shirring Foot

- This foot is most suited for gathering when sewing tiered skirts, yokes, cuffs and frills on skirts, etc.
- This foot is also suited for sewing two fabrics together and gathering the bottom fabric in one operation.



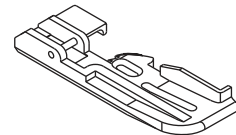
4) Pearl/Sequin Foot

- This foot is used for sewing on beads, etc.



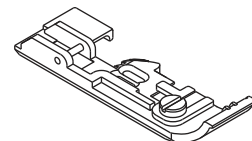
5) Piping/ Cording Foot

- This sewing foot is suited for sewing welting between two plies of fabric.



6) Taping Foot

- This sewing foot is suited for sewing on tapes, etc.



28. TROUBLESHOOTING CHART

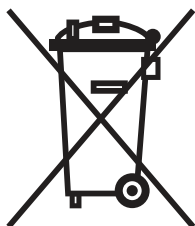
Problem	Solution	Page
Fabric does not feed well	- Lengthen stitch length.	31
	- Increase presser foot pressure for heavy weight fabric.	32
	- Decrease presser foot pressure for lightweight fabric.	32
Needle breaks	- Insert needle correctly.	15
	- Do not pull fabric while sewing.	38
	- Tighten needle set screw.	15
	- Use a larger needle on heavy fabrics.	15
Thread breaks	- Check threading.	16~29
	- Check for tangled or caught thread.	30
	- Insert needle correctly.	15
	- Insert new needle, current needle may be bent or have a blunt Point.	9
	- Use only high quality thread.	70
- Loosen thread tension.	34~49	
Stitch skip	- Insert new needles, current needles may be bent or have a blunt point. Use only Singer Branded Style 2022 Needles	9
	- Tighten needle set screw.	15
	- Insert needles correctly.	15
	- Change type or size of needles.	15
	- Check threading.	16~29
	- Increase presser foot pressure.	32
	- Use a high quality thread.	70
Irregular stitches	- Fine tune thread tension.	39~49
	- Check for tangled or caught thread.	30
	- Check threading.	16~29
Fabric puckers	- Loosen thread tension.	39~52
	- Check for tangled or caught thread.	30
	- Use high quality lightweight thread.	70
	- Shorten stitch length.	31
	- Decrease presser foot pressure for lightweight fabrics.	32
Irregular trimming	- Check alignment of knives.	65
	- Replace one or both knives.	65
Fabric jams	- Close looper cover before sewing.	12
	- Check for tangled or caught thread.	30
	- Compress thick layers of fabric with conventional machine before sewing with overlock.	
Machine does not operate	- Connect machine to power source.	12

29. RELATIONSHIP BETWEEN CLOTH, THREAD AND NEEDLE

Type of Fabric	Type of Thread	Needle Singer Cat. #2022
WOVEN		
Lightweight Lawn, Organdy, Voile, Crepe, etc.	Cotton: #100 Silk/ Rayon: #100 Spun: #80 ~ #90 Polyester: #80 ~ #100	#11/80
Medium Weight Muslin, Seersucker, Satin, Gabardine, Broadcloth, etc	Cotton: #60 ~ #80 Silk/ Rayon: #50 Spun: #60 ~ #80 Polyester: #60 ~ #80	#14/90, #11/80
Heavy Weight Oxford, Denim, Tweed, Serge, Corduroy	Cotton: #40 ~ #60 Silk/ Rayon: #40 ~ #60 Spun: #60 ~ #80 Polyester: #50 ~ #80	#14/90
KNIT		
Tricot	Spun: #80 ~ #90 Polyester: #60 ~ #80	#11/80
Jersey	Spun: #60 ~ #80 Polyester: #60 ~ #80 Cotton: #60 ~ #80	#14/90, #11/80
Wool (woven, knit)	Spun: #60 ~ #80 Polyester: #50 ~ #60 Woolly nylon Woolly Polyester	#14/90, #11/80

30. SPECIFICATION

Item	Specification
Sewing speed	1,300 spm maximum
Stitch length (feed amount)	1~4 mm (standard: rolled hemming 1-2, ordinary overedge N=2.5)
Differential feed ratio	1:0.6 ~ 1:2 (with differential feed machine)
Overedge stitch width	Rolled hemming 1.5 mm, ordinary overedge 3.0 ~ 9.8 mm (Standard 4 mm)
Cover stitch needle gauge	Two needles: 2.8 mm (narrow), 5.6 mm (wide) Triple needles: 5.6 mm
Needle bar stroke	27 mm
Pressure foot rise	4.5 mm
Needle	Singer #2022 (EL x 705) #14, #11
Number of threads	2~5
Machine dimensions (mm)	
Width	360
Depth	290
Height	300
Weight (kg)	9.0 kgs



Please note that on disposal, this product must be safely recycled in accordance with relevant National legislation relating to electrical / electronic products. If in doubt please contact your retailer for guidance.

SINGER®

**SINGER®
PROFESSIONAL 5™
Overlock Workbook**



SINGER®

Congratulations on the purchase of your new SINGER® PROFESSIONAL 5™ Overlock Machine! The SINGER PROFESSIONAL 5 (14T968DC) Overlock Machine is a time saving innovation that provides professional seams, seam finishes, and creative stitch capabilities. Sew one-of-kind projects with the special effects of decorative stitching, such as Flatlocking, Chainstitching and Rolled Hemming. The overlock works side by side with your conventional sewing machine and adds new creative possibilities to your sewing projects.



This workbook has been created as a tool for learning the various stitch types, which you can then apply to your projects. The workbook is divided into individual chapters, and each chapter focuses on a particular stitch type. Each chapter has comprehensive machine set-up and threading directions, photos and definitions on how and where the stitch can be used, and suggestions for successful stitch formation. It is a good starting point to fully understanding your SINGER PROFESSIONAL 5 Overlock Machine.



We are certain that your creativity will be inspired and that you will have many hours of sewing enjoyment with this easy-to-use, feature-packed machine!

Enjoy!
The Singer Sewing Company

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- Chapter 1 **Double Chain Stitch**
- Chapter 2 **Two-Thread Wrapped Edge Overlock
(narrow and wide)**
- Chapter 3 **Two-Thread Overedge (narrow and wide)**
- Chapter 4 **Three-Thread Overlock
(narrow, wide, and wide with decorative threads)**
- Chapter 5 **Three-Thread Flatlock (narrow and wide)**
- Chapter 6 **Three-Thread Ultra-Stretch Mock Safety Stitch**
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- Chapter 8 **Four-Thread Safety Stitch**
- Chapter 9 **Five-Thread Safety Stitch Wide**
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- Chapter 11 **Cover Hem (Cover Stitch) Narrow**
- Chapter 12 **Cover Hem (Cover Stitch) Wide**
- Chapter 13 **Triple Cover Hem Stitch**
- Chapter 14 **Three-Thread Rolled Hem**
- Chapter 15 **Additional Presser Feet**

SINGER®

Chapter 1: Double Chain Stitch



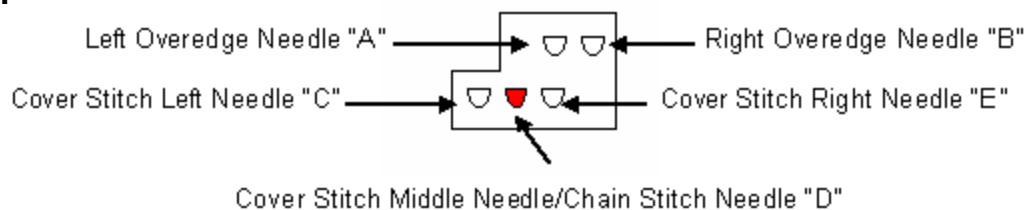
Double Chain Stitch

This stitch is suitable for straight seams. It also can be used for a decorative chainstitch topstitching effect. The Middle Cover needle and the Chainstitch Looper are used. Decorative thread can be placed in the Chainstitch Looper, the needle, or in both to create various effects.



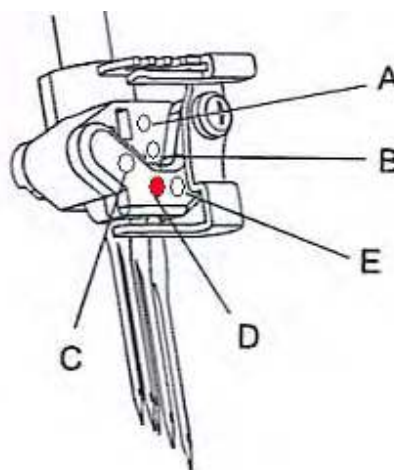
SET UP:

Needle:



Set at::

ATD: Auto Tension Dial	"D"
Left Cover Stitch Needle "C"	Unthreaded and Remove Needle
Middle Cover Stitch Needle "D" (Blue)	Threaded
Right Cover Stitch Needle "E"	Unthreaded and Remove Needle
Overedge Left Needle "A"	Unthreaded and Remove Needle
Overedge Right Needle "B"	Unthreaded and Remove Needle
Upper Looper	Looper Disengaged and Not Threaded
Spreader	Not Engaged
Lower Looper	Unthreaded
Chainstitch Looper (Brown)	Threaded
Upper Knife	Not Used
Seam Guide Plate	Installed
Seam Width Dial	"N"
Stitch Length Dial	"N"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"R"

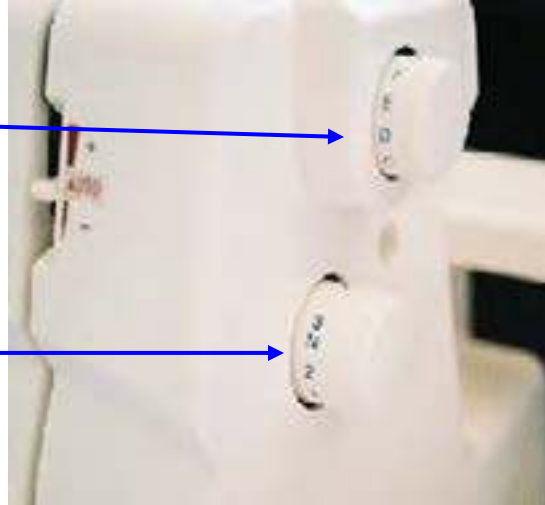


Double Chain Stitch

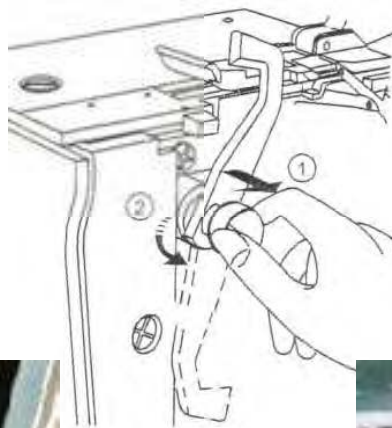
- ◆ Turn Auto Tension Dial to “D”.



- ◆ Turn Stitch Length Dial to “N”.



- ◆ Disengage Upper Knife. The knife will not trim the fabric when it is disengaged.
 1. Open Looper Cover.
 2. Pull the movable knife holder (silver screw) to the right as far as it will go.
 3. Turn the holder counter clockwise until the knife clicks into a lock position.



Upper Knife Engaged



Upper Knife Disengaged

- ◆ Turn Presser Foot Pressure Dial to “N”.



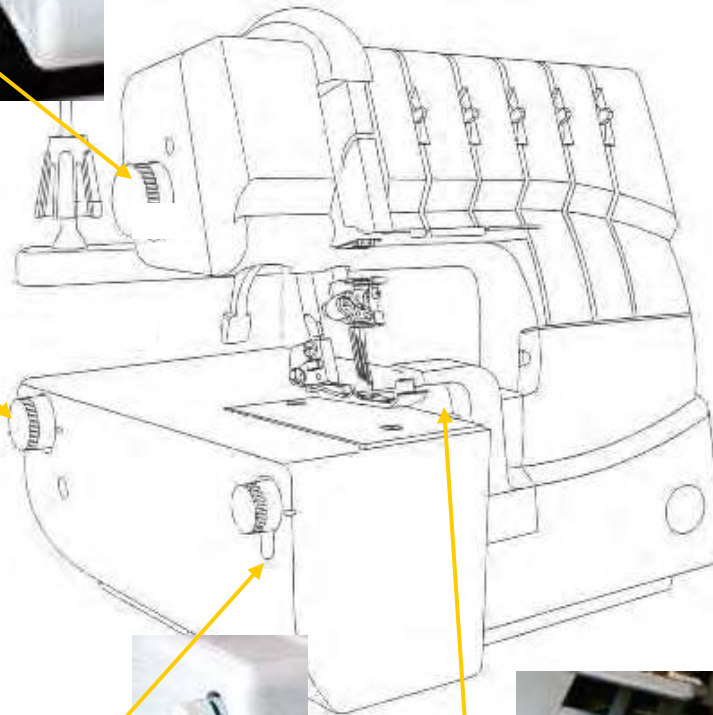
- ◆ Turn Differential Feed Dial “N”.



- ◆ Turn Seam Width Dial to “N”.



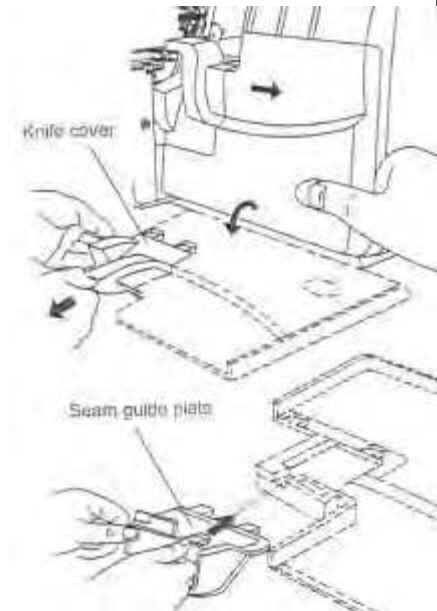
- ◆ Place Stitch Finger to “R”.



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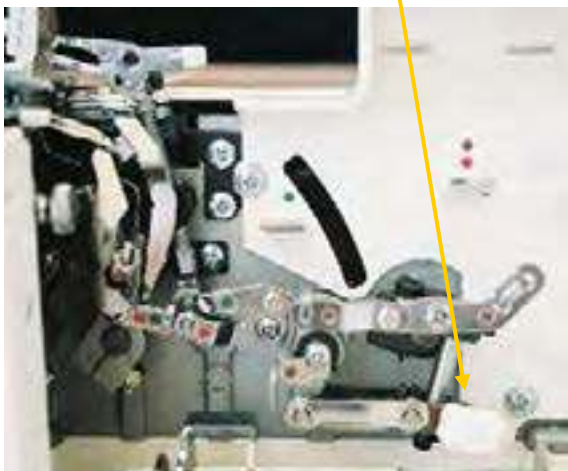
- ◆ Install the Seam Guide Plate. The Seam Guide Plate provides a flat surface for the fabric and seam guides. It can only be used when the knife and the lower looper are disengaged. The Seam Guide Plate is used when sewing the Chainstitch, Cover Stitch and the Triple Cover Stitch.

1. Open looper cover.
2. Remove Knife Cover by pulling it slightly towards you.
3. Slide the Seam Guide Plate into place.

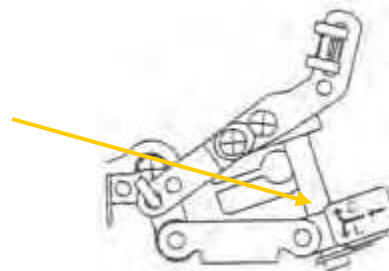


- ◆ Disengage Upper Looper. By disengaging the Upper Looper, the looper no longer moves when sewing. It is nonoperative. If the looper was still engaged, it would hit the Seam Guide Plate.

1. Turn handwheel until the Upper Looper is in the highest position.
2. Push the clutch button to the left and up to disengage.



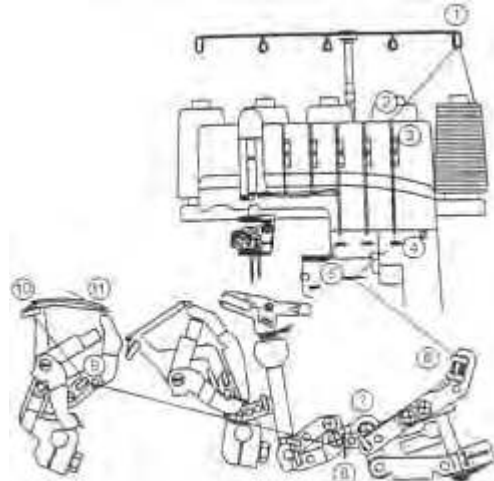
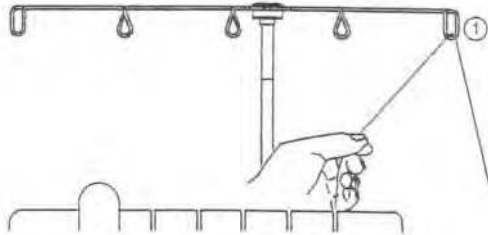
Upper Looper Engaged



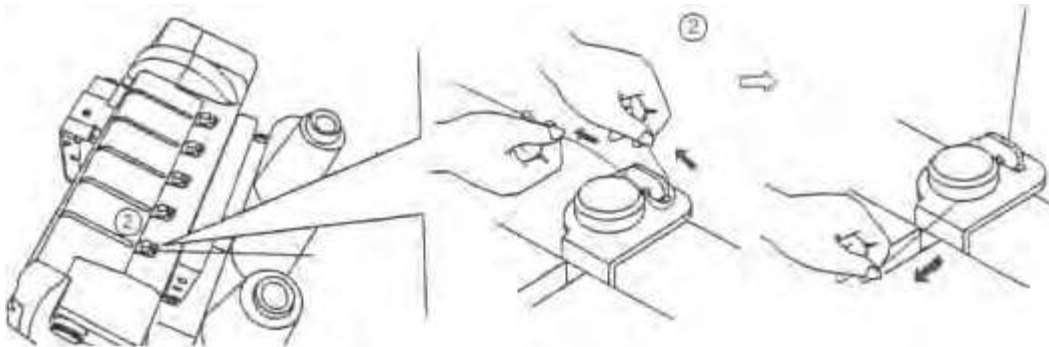
Upper Looper Disengaged

◆ Thread Chainstitch Looper with a decorative thread

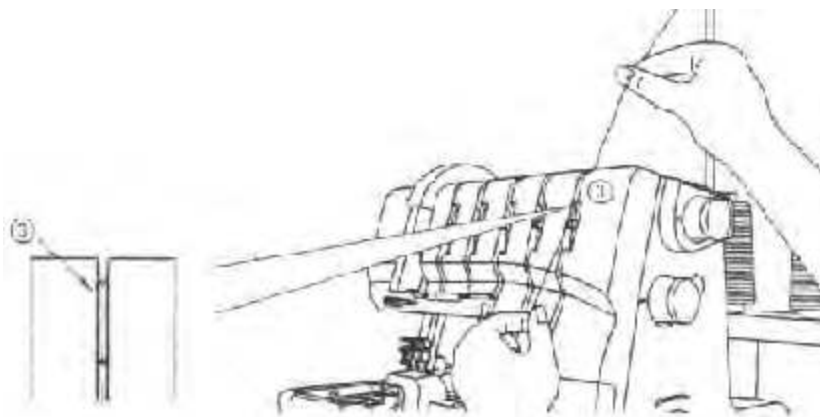
1. Raise the Presser foot to release the tension disks. Pass the thread from the back to the front through the thread guide ①.



2. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull thread along the right side of the button, as illustrated.



3. While holding the thread, firmly pull the thread between the tension disks.

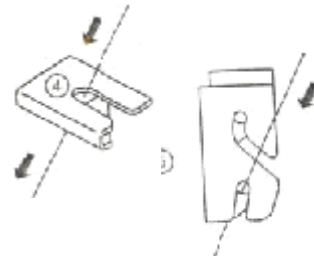


4. Turn the hand wheel toward you until the Chainstitch Looper extends out 10mm (approximately 1/2") from the needle plate edge.



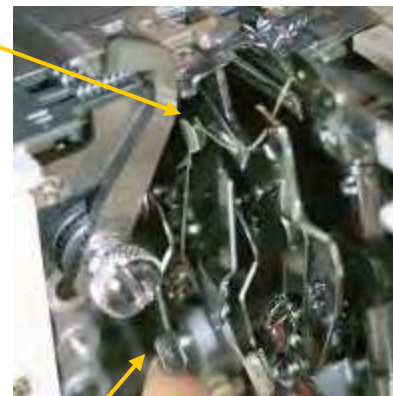
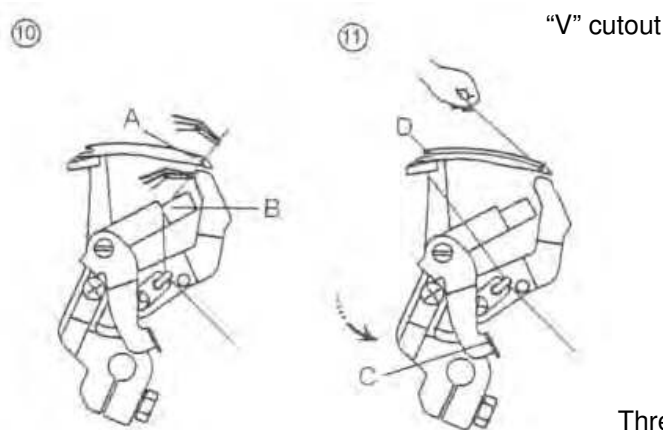
5. Thread the looper area of the machine following the brown color-coded thread guides 4-11. Use the tweezers provided in the accessory case to aid in threading the looper.

6. Place the thread through threading guide ④ and ⑤.



7. Continue threading guides ⑥, ⑦, ⑧ and ⑨.

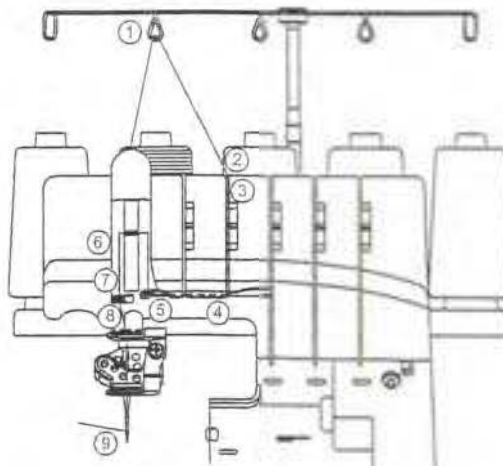
8. Thread the looper eye (A) from front to back. Pull about 4 inches of thread through the looper. Position the thread into the V cutout (B) on the threader. Firmly hold the thread tail with your left hand and pull threader lever (C) up into place (D). Gently pull 5-6" of thread to the back of the machine.



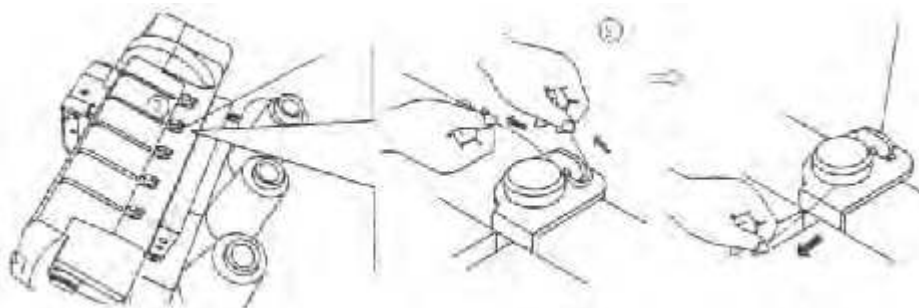
Threader lever

◆ Thread Middle Cover Stitch Needle with regular overlock thread.

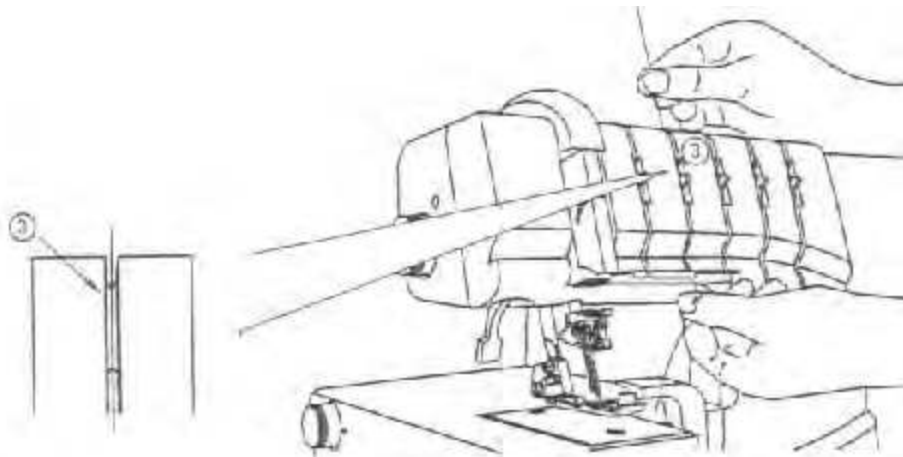
1. Raise the Presser Foot to release the tension disks. Thread the Cover Stitch Middle/Chain Stitch needle as illustrated 1-9.
2. Pass thread from back to the front through the thread guide ①.



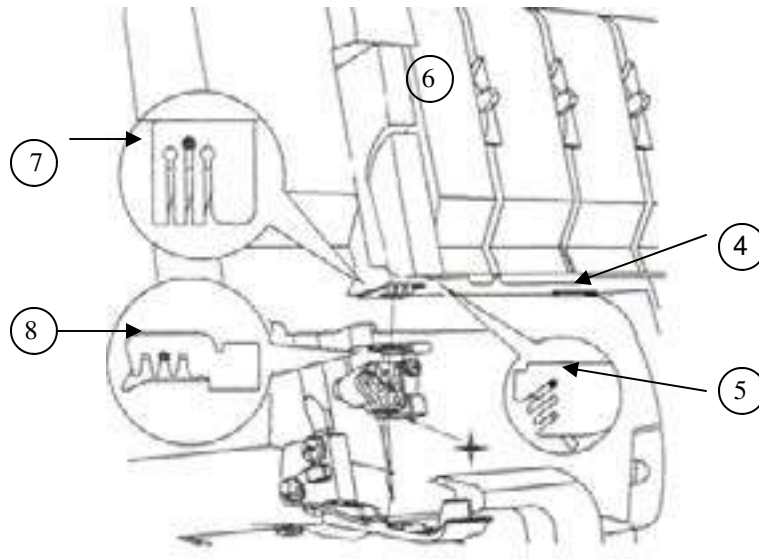
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



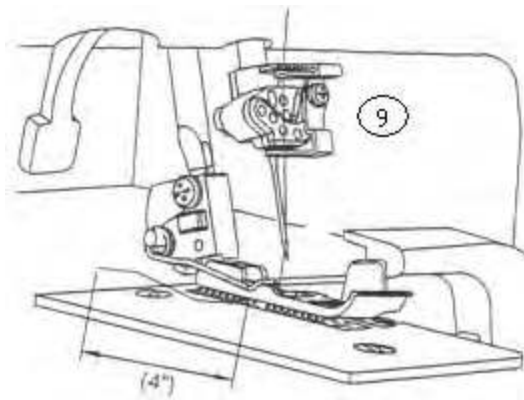
4. While holding the thread, firmly pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.
6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp for the Cover Stitch or Chainstitch.



7. Thread the eye of the Middle Cover Needle ⑨.



8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot. Lower foot and sew.

TRY IT:

- ◆ Fuse a layer of fabric to a lightweight batting.
- ◆ Fuse a fabric backing to the other side of the batting, to create a quilted piece of fabric.
- ◆ Using a rinse-away fabric marking pen draw a design lines on the wrong side of the fabric.

Make soft gentle turns; gradual curves work best. Avoid making sharp corners.

- ◆ Lift the Presser Foot to the highest position.
- ◆ Position the fabric right side down. Align the needle with one of the lines drawn.
- ◆ Lower the Presser Foot and sew.
- ◆ The decorative thread will be on the under side.



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- ◆ When sewing the Double Chainstitch, it is necessary to have fabric under the needle. Avoid sewing off the fabric.
- ◆ Continue sewing, following the drawn marking.
- ◆ To remove fabric, gently turn handwheel to loosen threads.
- ◆ Turn fabric over to see the decorative stitching.



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Chapter 2: Two-Thread Wrapped Edge Overlock (narrow and wide)

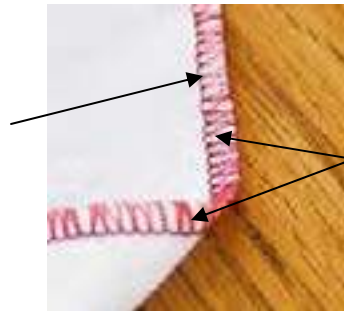


Two-Thread Wrapped Edge Overlock (narrow)

The Two-Thread Wrapped Edge Overlock provides an elegant fine finish to lightweight fabrics. When using clear threads in conjunction with the Two-Thread stitch, the fabric appears to have an invisible edge. This gives a couture effect and looks beautiful on finer fabrics. The Two-Thread Stitch requires the lower looper thread and one overlock needle thread. The lower looper thread wraps around the fabric's edge. There are 2 different ways to set up for a Two-Thread Wrapped Edge Overlock stitch. For a more narrow stitch (4.0) select the right overedge needle; for a wider stitch(6.0) the left overedge needle is used.



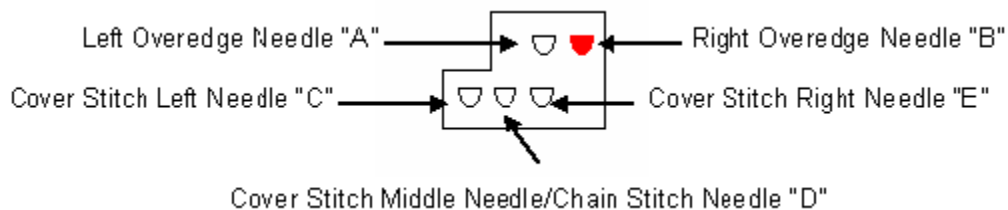
Right Overedge
Needle Thread



Lower Looper
Thread

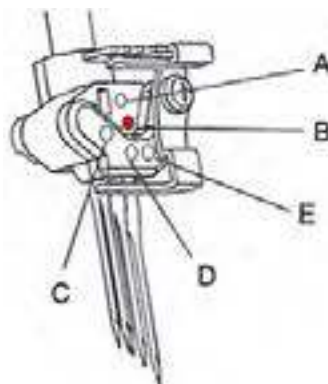
SET UP:

Needle:



Set at:

ATD: Auto Tension Dial	"D"
Left Cover Stitch Needle "C"	Unthreaded and Remove Needle
Middle Cover Stitch Needle "D"	Unthreaded and Remove Needle
Right Cover Stitch Needle "E"	Unthreaded and Remove Needle
Overedge Left Needle "A"	Unthreaded and Remove Needle
Overedge Right Needle (Blue) "B"	Threaded
Upper Looper	Looper Engaged and Not Threaded
Spreader	Engaged
Lower Looper (Red)	Threaded
Chain Stitch Looper (Brown)	Not Threaded
Upper Knife	Engaged
Seam Guide Plate	Not Installed Use Knife Cover
Seam Width Dial	"N"
Stitch Length Dial	"2"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"N"

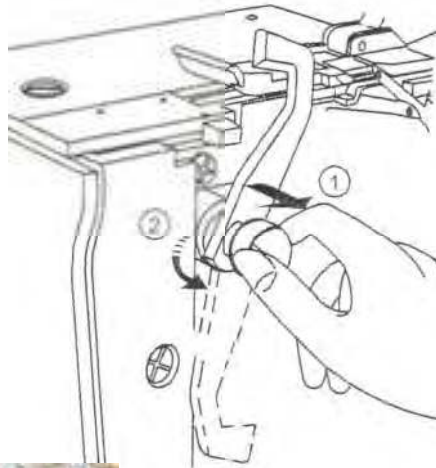


- ◆ Turn Auto Tension Dial to “D”.

- ◆ Turn Stitch Length Dial to “2”.



- ◆ Engage Upper Knife. The knife will not trim the fabric when it is disengaged.
 1. Open Looper Cover.
 2. Pull the movable knife holder (silver screw) to the right as far as it will go.
 3. Turn the holder toward clockwise until the knife clicks into a lock position.



Upper Knife Disengaged



Upper Knife Engaged

- ◆ Turn Presser Foot Pressure Dial to “N”.



- ◆ Turn Differential Feed Dial to “N”.

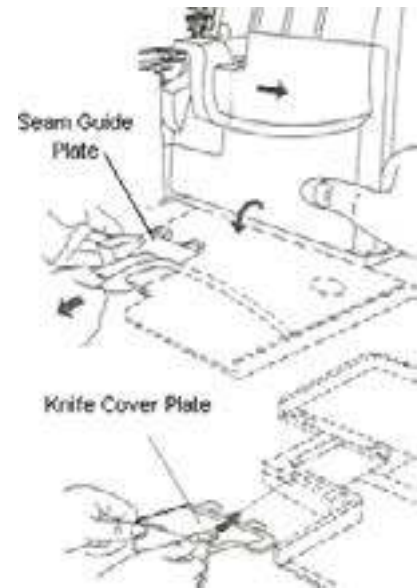


- ◆ Turn Seam Width Dial to “N”.



- ◆ Set Stitch Finger to “N”.

◆ Install the Knife Cover.

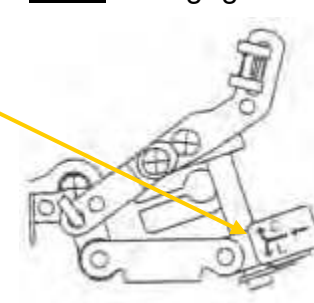


◆ Engage Upper Looper. Engaging the Upper Looper causes the looper to move when sewing. Even though the Upper Looper is not threaded, it needs to be engaged.

1. Push the clutch button to the left and down to engage.
2. Turn handwheel.



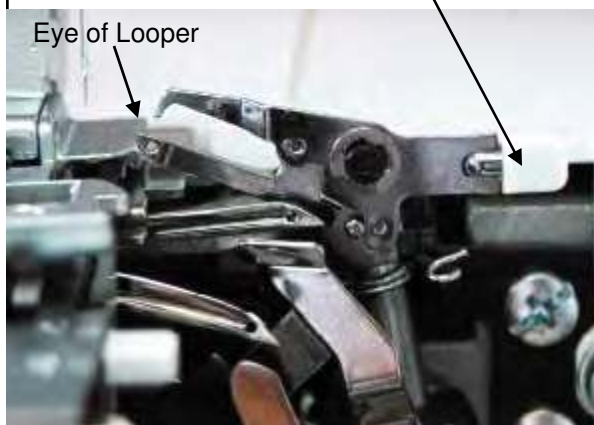
Upper Looper Disengaged



Upper Looper Engaged

- ◆ Engage Spreader. The Upper Loper has a hole for the thread on the top of the looper. If the stitch requires that the looper be engaged, but not threaded then the Spreader is used. The Spreader simply plugs-in (or closes) the looper's hole. The Spreader is disengaged when the Upper Loper is engaged/operative and threaded. The Spreader is used with a stitch that requires only one looper thread. With the help of the Spreader the single looper thread needs to wrap around the fabric's edge.

1. Raise the white handle on the Spreader to insert the tip into the eye of the Upper Loper.



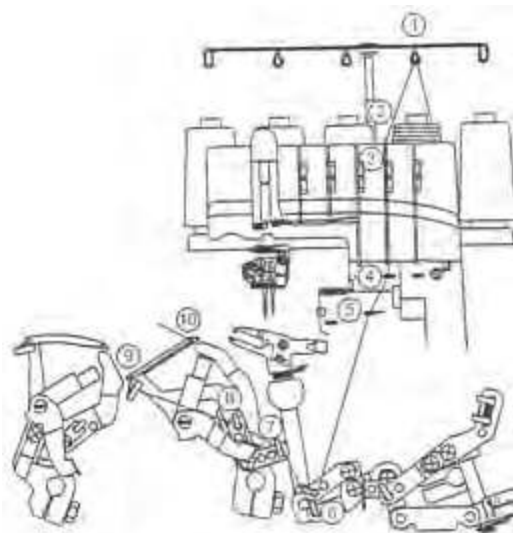
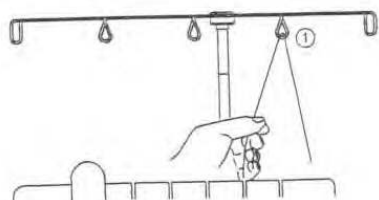
Spreader Disengaged



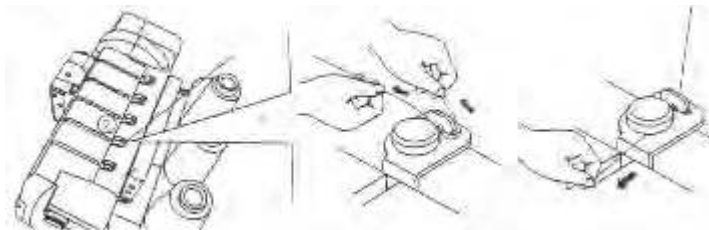
Spreader Engaged

- ◆ Thread Lower Loper with regular overlock thread.

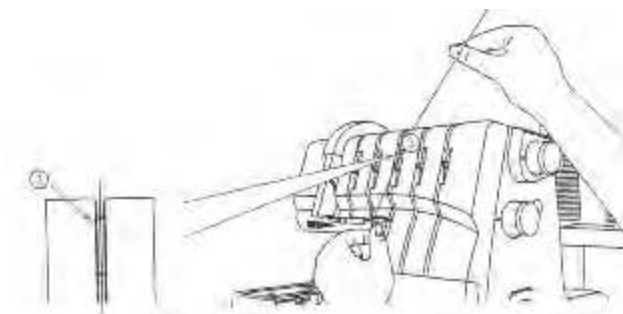
1. Raise the Presser Foot to release the Tension disks. Thread the Lower Loper as illustrated 1-10.
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



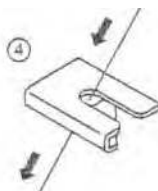
4. While holding the thread firmly, pull the thread between the tension disks.



5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately 1/2 inch) from the needle plate edge.

6. Thread the looper area of the machine following the red color coded thread guides 4-10.

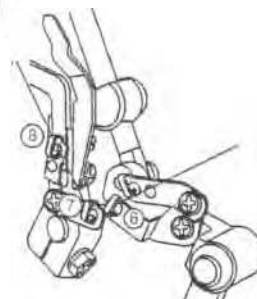
7. Place the thread slightly from left and to the right of threading guide ④.



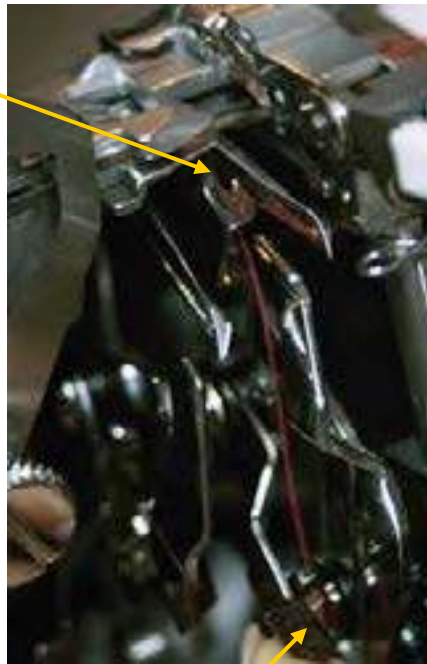
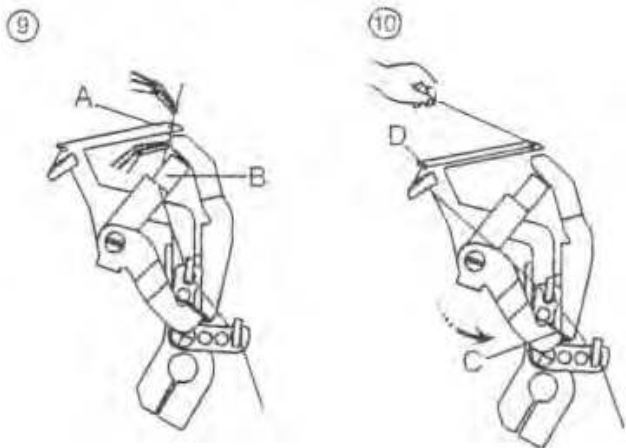
8. Place the thread slightly from the front and to the back of threading guide ⑤.



9. Place the thread through ⑥, ⑦, and ⑧.



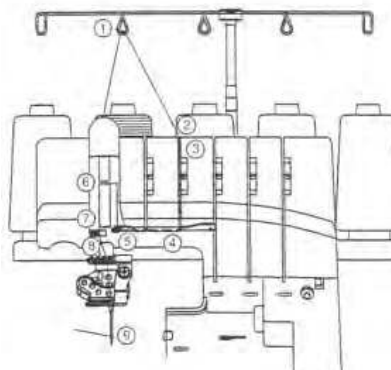
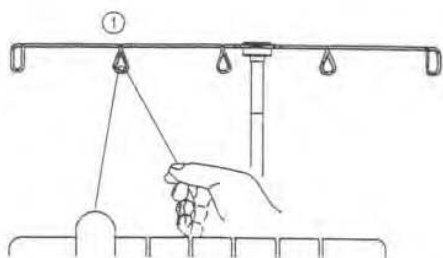
10. Thread the looper eye (A) from front to back. Pull about 4 inches of thread. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull Threader lever (C) up into place (D).



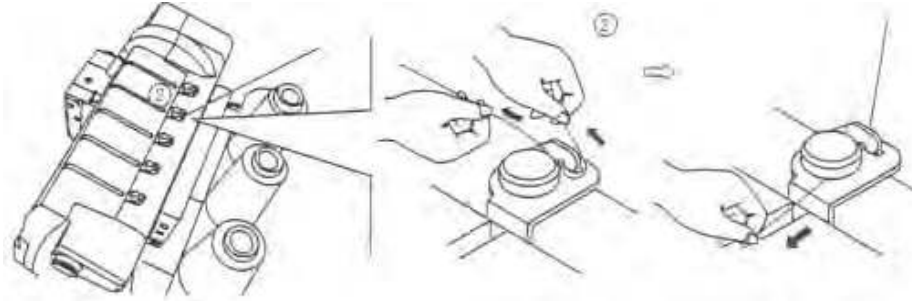
Threader Lever

◆ Thread Right Overedge needle with regular thread.

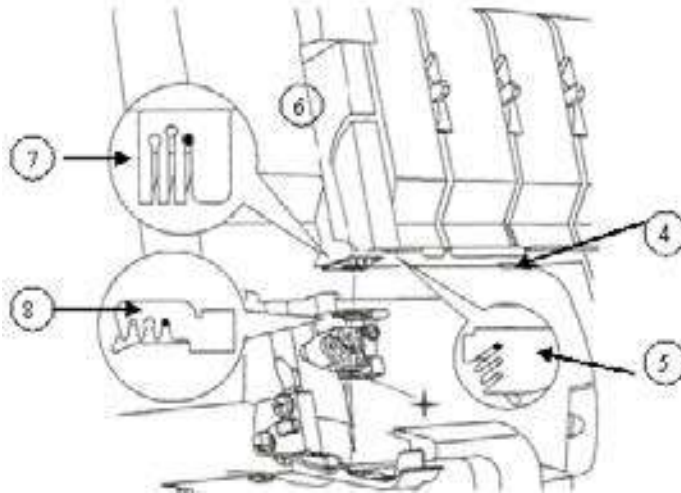
1. Raise the Presser Foot to release the tension discs. Thread the right needle as illustrated 1-9.
2. Pass thread from back to the front through the thread guide ①.



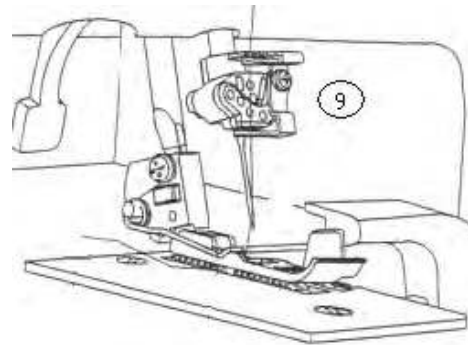
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



4. Continue to thread points 4-8. Slip the thread into the rear slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the right slot of the thread guides ⑦ and ⑧.



5. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.



6. Thread the eye of the Right Overedge Needle ⑨.

TRY IT:

- ◆ Align two pieces of lightweight fabric, right sides together so that the knife just slightly trims the fabric edge.
- ◆ Sew.
- ◆ Press seam to one side.

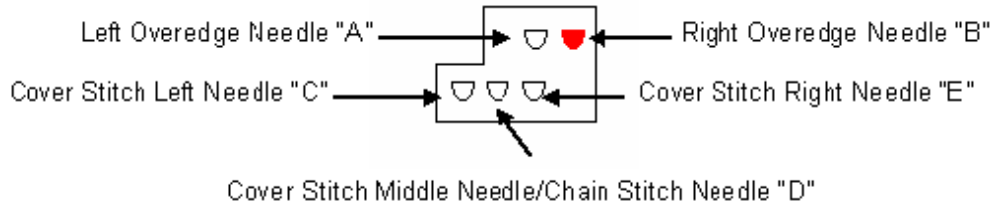


Two-Thread Wrapped Edge Overlock (wide)

The Two-Thread Wrapped Edge Overlock (wide) has the same set up as the Two-Thread Wrapped Edge Overlock (narrow) Stitch. The only exception is the Right Overedge Needle is now unthreaded and removed and the Left Overedge Needle is threaded. By using the left needle the stitch becomes wider.

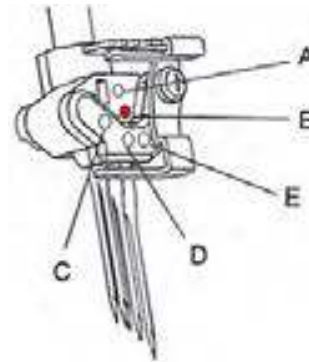
SET UP:

Needle:



Set at:

ATD: Auto Tension Dial	"D"
Left Cover Stitch Needle (Orange)	Unthreaded and Remove Needle
Middle Cover Stitch Needle (Blue)	Unthreaded and Remove Needle
Right Cover Stitch Needle (Green)	Unthreaded and Remove Needle
Overedge Left Needle (Orange)	Threaded
Overedge Right Needle (Blue)	Unthreaded and Remove Needle
Upper Looper (Green)	Looper Engaged and Not Threaded
Spreader	Engaged
Lower Looper (Red)	Threaded
Chain Stitch Looper (Brown)	Not Threaded
Upper Knife	Engaged
Seam Guide Plate	Not Installed Use Knife Cover
Seam Width Dial	"N"
Stitch Length Dial	"2"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"N"



Right Overedge Needle Thread

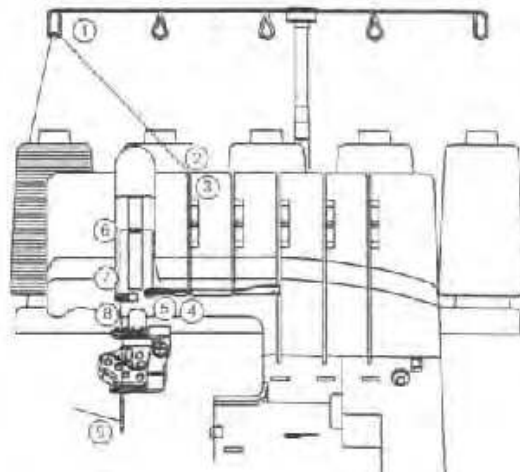
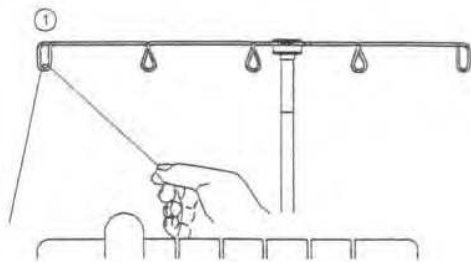


Left Overedge Needle Thread

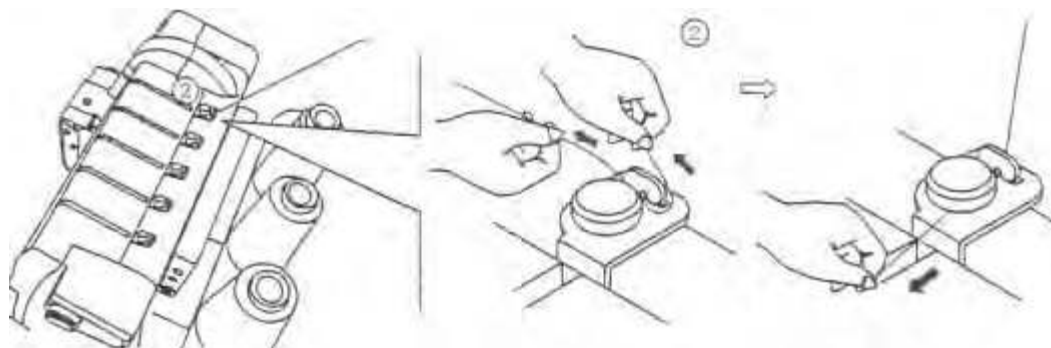
◆ Thread Left Overedge needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as indicated 1-9.

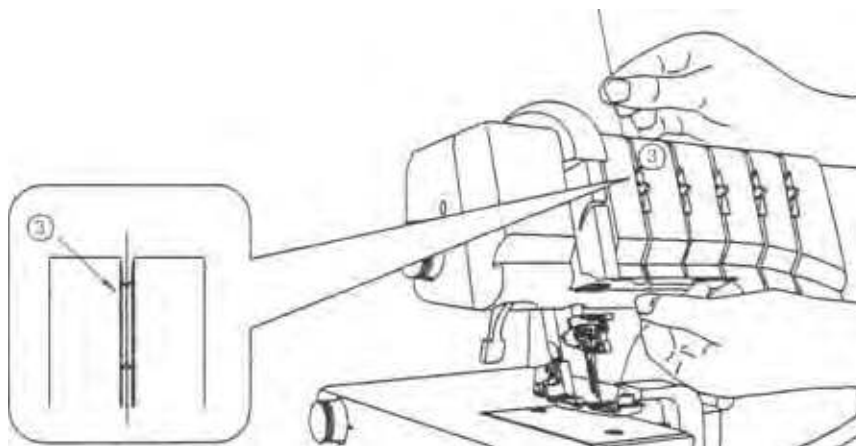
2. Pass thread from back to the front through the thread guide ①.



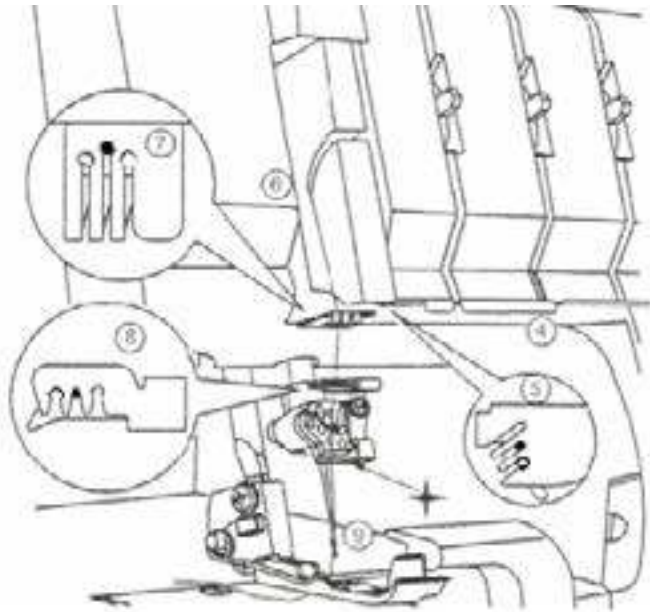
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



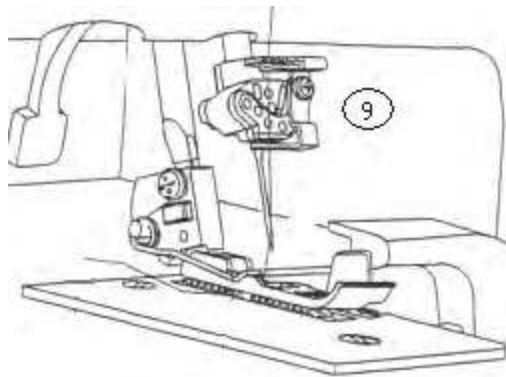
4. While holding the thread firmly, pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.
6. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.



7. Thread the eye of the Left Overedge needle ⑨.
8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot.



TRY IT:

- ◆ Align one piece of medium weight fabric so that the knife just slightly trims the fabric edge.
- ◆ Sew.



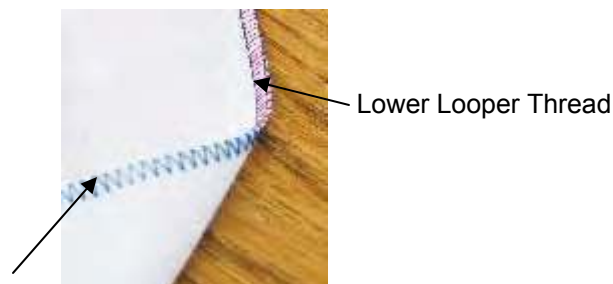
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Chapter 3: Two-Thread Overedge (narrow and wide)



Two-Thread Overedge (narrow)

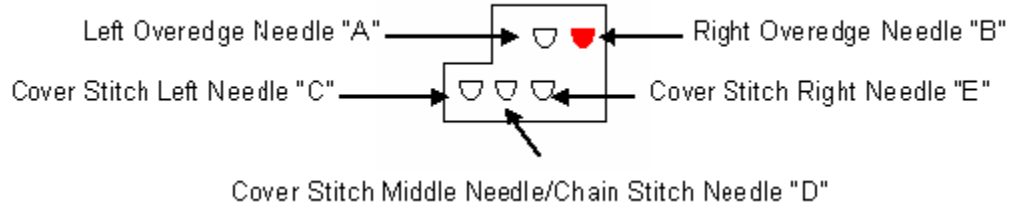
This stitch is used as a lightweight seam finish or a lightweight seam. When creating a seam finish, less thread is used and the thread does not imprint on the right side of the fabric when pressed. The stitch can also be used for seaming. The stitch creates less bulky seams, which is ideal for sheer or lace fabrics. The Two-Thread Overlock stitch requires the lower looper thread and one overlock needle thread. There are 2 different ways to set up for a Two-Thread Overlock stitch. For a more narrow stitch (4.0) select the right overedge needle and for a wider stitch (6.0) the left overedge needle is used.



Right Overedge Needle Thread

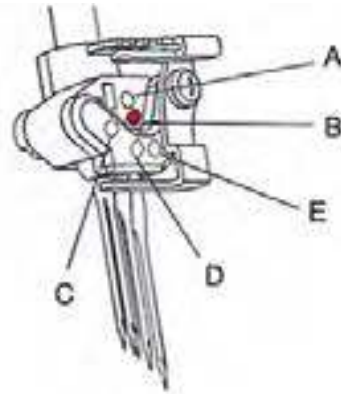
SET UP:

Needle:



Set at:

ATD: Auto Tension Dial	"E"
Left Cover Stitch Needle "C"	Unthreaded and Remove Needle
Middle Cover Stitch Needle "D"	Unthreaded and Remove Needle
Right Cover Stitch Needle "E"	Unthreaded and Remove Needle
Overedge Left Needle "A"	Unthreaded and Remove Needle
Overedge Right Needle "B" (Blue)	Threaded
Upper Looper	Looper Engaged and Not Threaded
Spreader	Engaged
Lower Looper (Red)	Threaded
Chain Stitch Looper (Brown)	Not Threaded
Upper Knife	Engaged
Seam Guide Plate	Not Installed Use Knife Cover
Seam Width Dial	"N"
Stitch Length Dial	"N"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"N"



- ◆ Turn Auto Tension Dial to “E”.

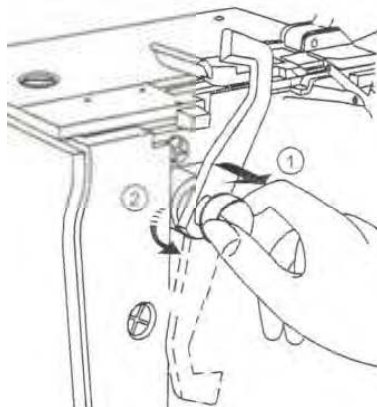


- ◆ Turn Stitch Length Dial to “2”.

- ◆ Engage Upper Knife.

The knife will not trim the fabric when it is disengaged.

1. Open Looper Cover.
2. Pull the movable knife holder (silver screw) to the right as far as it will go.
3. Turn the holder clockwise until the knife clicks into a lock position.



Upper Knife Disengaged



Upper Knife Engaged

- ◆ Turn Presser Foot Pressure Dial to “N”.



- ◆ Turn Differential Feed Dial to “N”.



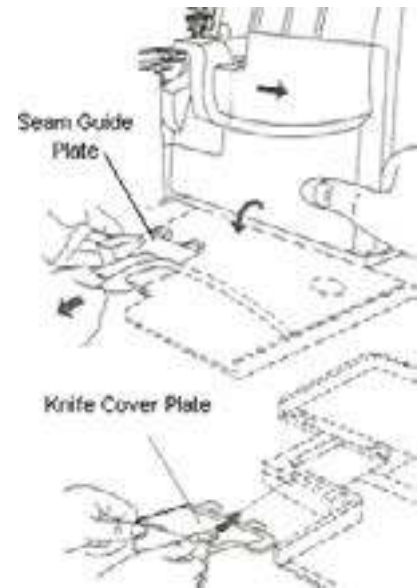
- ◆ Turn Seam Width Dial to “N”.



- ◆ Set Stitch Finger to “N”.

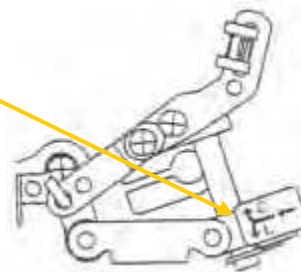


- ◆ Install the Knife Cover.



- ◆ Engage Upper Looper. Engaging the Upper Looper causes the looper to move when sewing. Even though the Upper Looper is not threaded, it needs to be engaged.

1. Push the clutch button to the left and down to engage.
2. Turn handwheel.



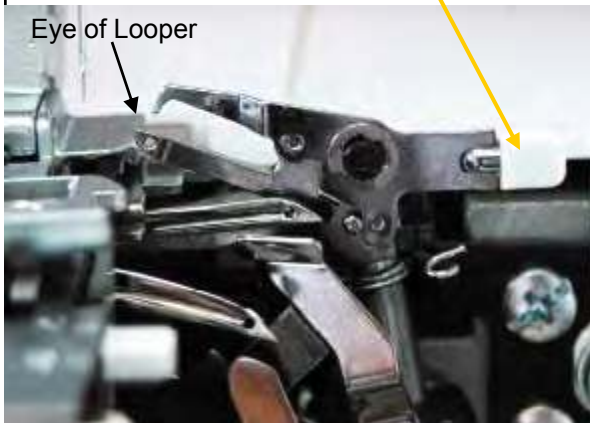
Upper Looper Disengaged



Upper Looper Engaged

- ◆ Engage Spreader. The Upper Looter has a hole for the thread on the top of the looper. If the stitch requires that the looper be engaged but not threaded, then the Spreader is used. The Spreader simply plugs-in (or closes) the looper's hole. The Spreader is disengaged when the Upper Looter is engaged/operative and threaded. The Spreader is used with a stitch that requires only one looper thread. With the help of the Spreader, the single looper thread wraps around the fabric's edge.

1. Raise the white handle on the spreader to insert the tip into the eye of the Upper Looter.



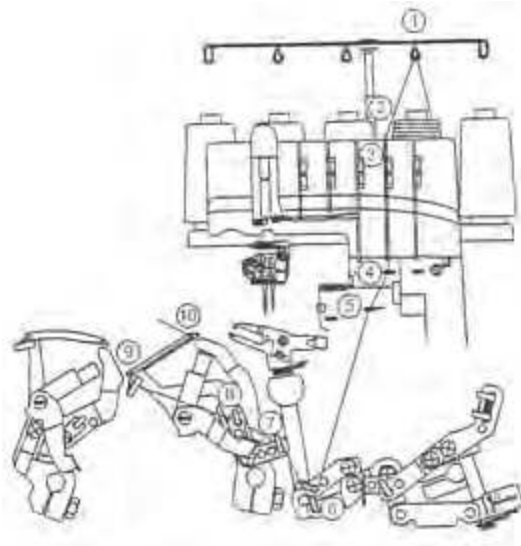
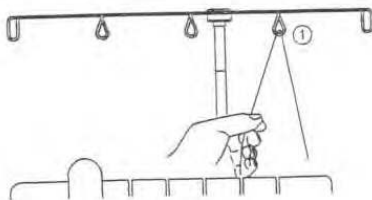
Spreader Disengaged



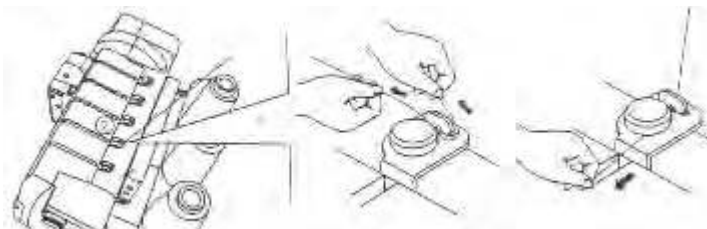
Spreader Engaged

- ◆ Thread Lower Looter with regular overlock thread.

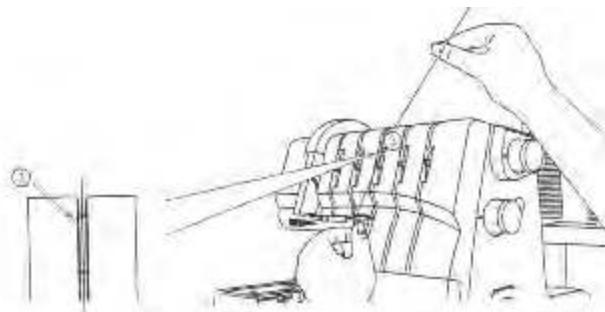
1. Raise the Presser Foot to release the tension disks. Thread the Lower Looter as illustrated 1-10.
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

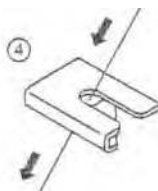


4. While holding the thread firmly, pull the thread between the tension disks.



5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately 1/2") from the needle plate edge.
6. Thread the looper area of the machine following the red color coded thread guides 4-10.

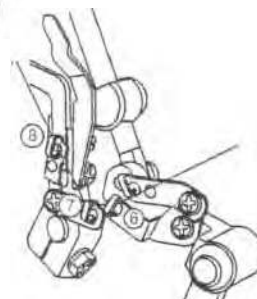
7. Place the thread slightly from left and to the right of threading guide ④.



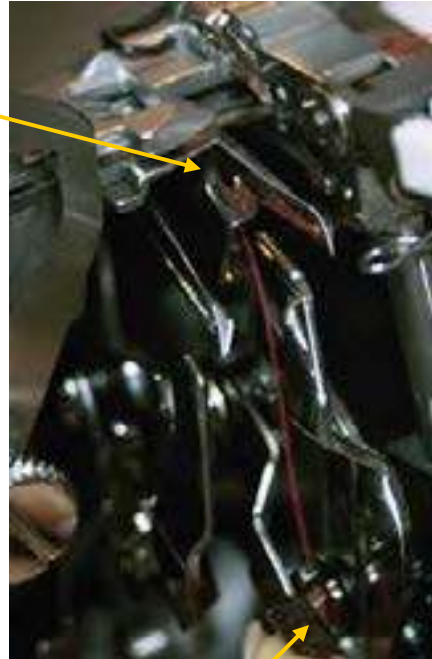
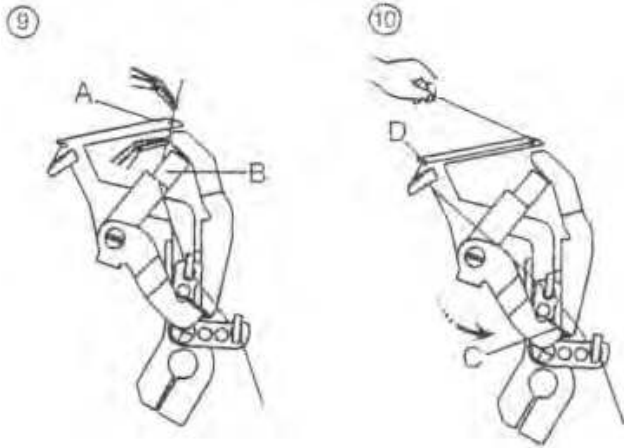
8. Place the thread slightly from the front and to the back of threading guide ⑤.



9. Place the thread through ⑥, ⑦, and ⑧.



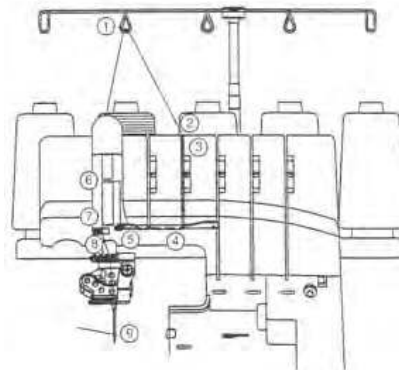
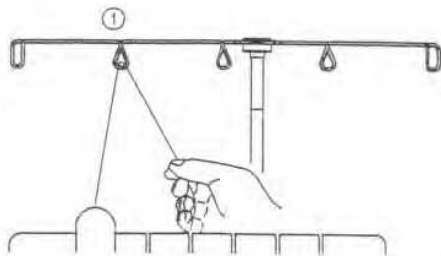
10. Thread the looper eye (A) from front to back. Pull about 4 inches of thread. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull Threader Lever (C) up into place (D).



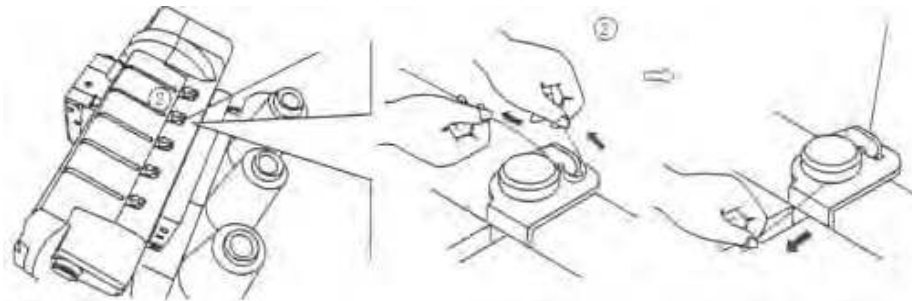
Threader Lever

◆ Thread Right Overedge needle with regular thread.

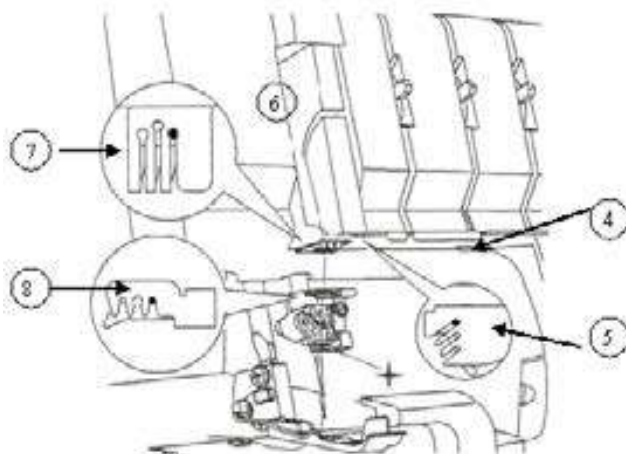
1. Raise the Presser Foot to release the tension disks. Thread the right needle as indicated 1-9.
2. Pass thread from back to the front through the thread guide ①.



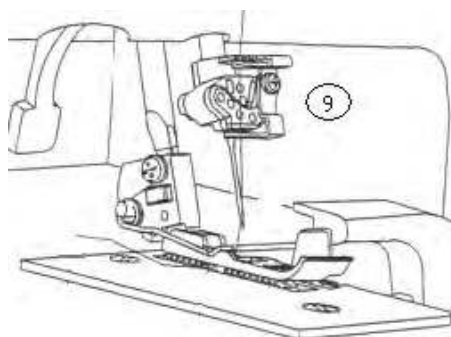
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



4. Continue to thread points 4-8. Slip the thread into the rear slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the right slot of the thread guides ⑦ and ⑧.



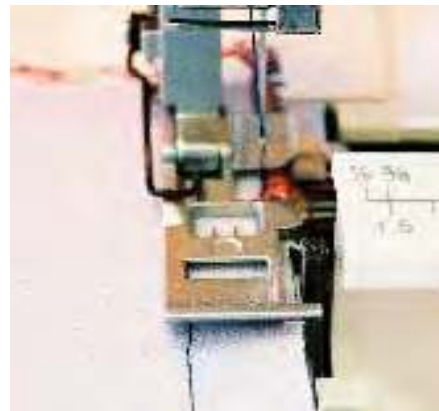
5. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.



6. Thread the eye of the Overedge Right Needle ⑨.

TRY IT:

- ◆ Join two pieces of medium weight fabric, right sides together with a conventional sewing machine straight stitch.
- ◆ Finish the edges of both fabric pieces by aligning the fabric edge so that the knife just slightly trims the fabric edge.
- ◆ Sew.
- ◆ Press seam allowance to one side.



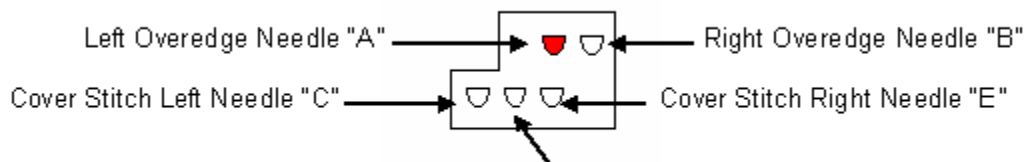
Two-Thread Overedge (wide)

The Two-Thread Overedge (wide) is a good choice when sewing linens and wools. The Two-Thread Overedge (wide) has the same set up as the Two-Thread Overedge (narrow) Stitch. The only exception is the Right Overedge Needle is now unthreaded and removed and the Left Overedge Needle is threaded. By using the left needle the stitch becomes wider.



SET UP:

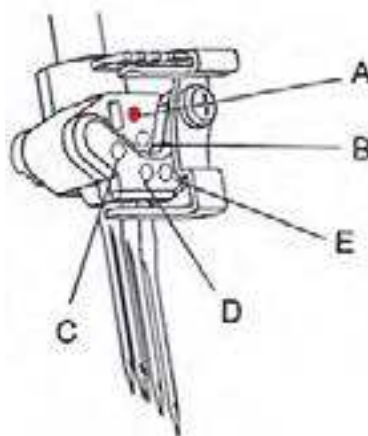
Needle:



Cover Stitch Middle Needle/Chain Stitch Needle "D"

Set at:

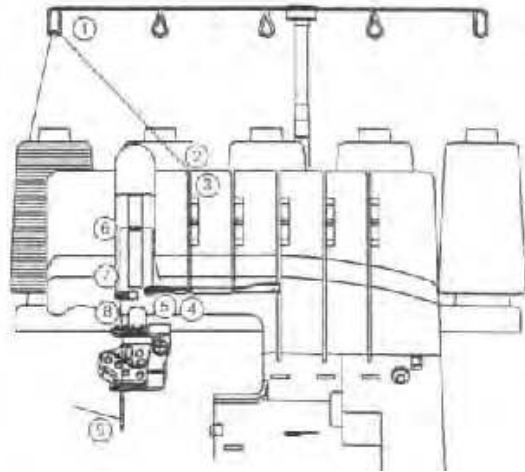
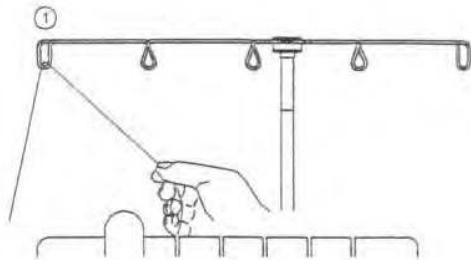
ATD: Auto Tension Dial	"E"
Left Cover Stitch Needle "C" (Orange)	Unthreaded and Remove Needle
Middle Cover Stitch Needle "D" (Blue)	Unthreaded and Remove Needle
Right Cover Stitch Needle "E" (Green)	Unthreaded and Remove Needle
Overedge Left Needle "A" (Orange)	Threaded
Overedge Right Needle "B" (Blue)	Unthreaded and Remove Needle
Upper Looper (Green)	Engage Looper and Not Threaded
Spreader	Engaged
Lower Looper (Red)	Threaded
Chain Stitch Looper (Brown)	Not Threaded
Upper Knife	Engaged
Seam Guide Plate	Not Installed
Seam Width Dial	"N"
Stitch Length Dial	"2"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"N"



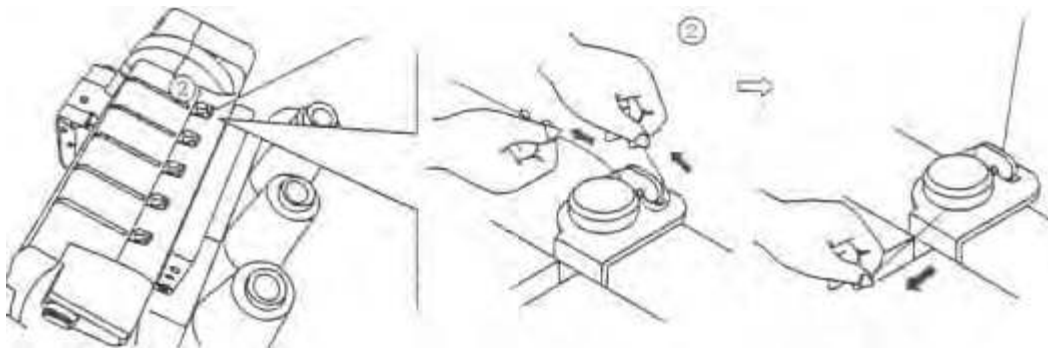
◆ Thread Left Overedge needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.

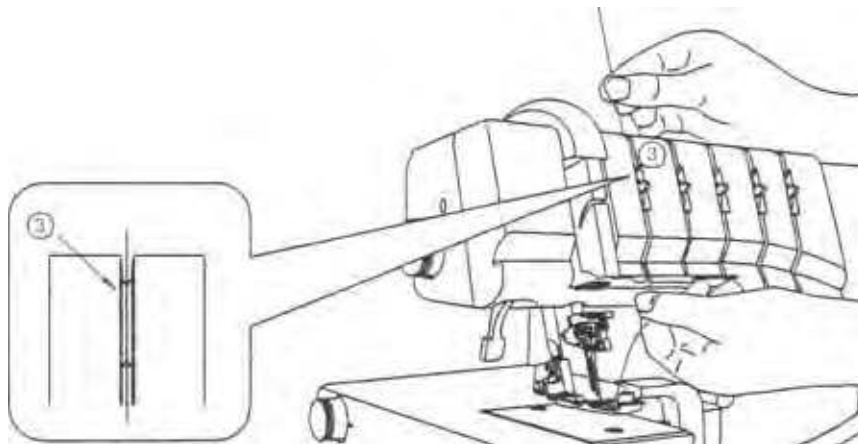
2. Pass thread from back to the front through the thread guide ①.



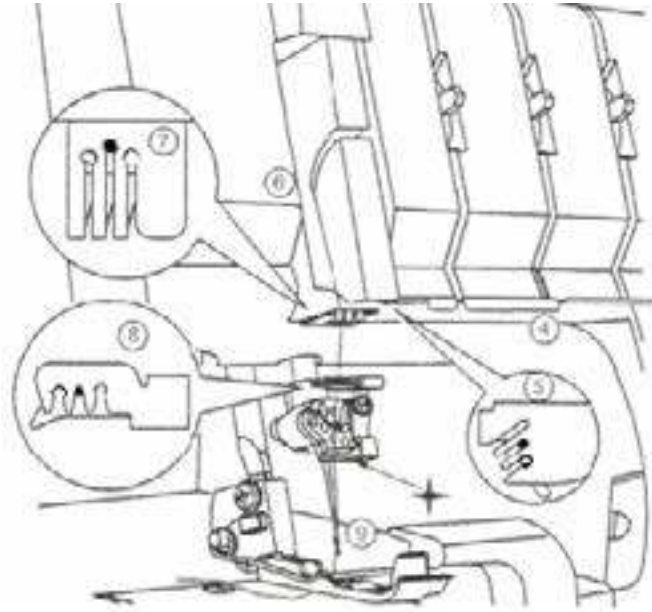
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



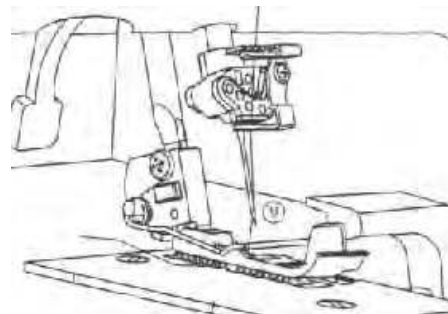
4. While holding the thread firmly, pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.
6. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.



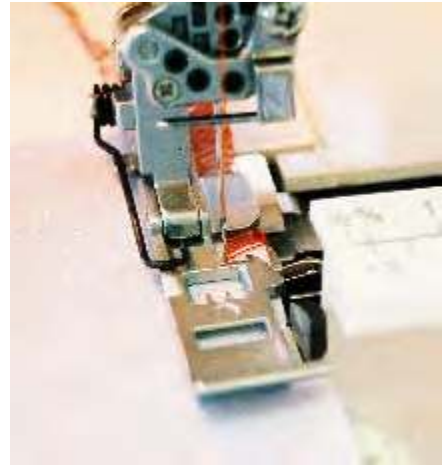
7. Thread the eye of the Left Overedge Needle ⑨.



8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot. Lower foot and sew.

TRY IT:

- ◆ Align one piece of medium weight fabric so that the knife just slightly trims the fabric edge.
- ◆ Sew.
- ◆ Align a second piece of medium weight fabric so that the knife just slightly trims the fabric edge.
- ◆ Sew.
- ◆ Place the two fabrics, right sides together.
- ◆ Using a conventional sewing machine, sew a straight stitch with a $\frac{5}{8}$ inch seam.
- ◆ Press the seam open.



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**Chapter 4:
Three-Thread Overlock
(narrow, wide, and wide with
decorative threads)**

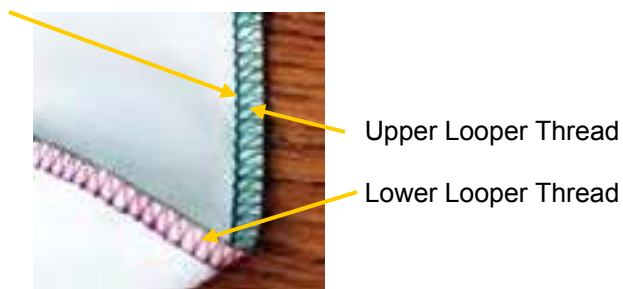


Three-Thread Overlock (narrow)

The Three-Thread Overlock Stitch is the most commonly used stitch because of its versatility. It provides a wonderful professional seam finish to woven fabrics. It is beneficial in preventing loosely woven fabrics from unraveling. In addition, the Three-Thread Overlock Stitch offers unlimited decorative capabilities. It is recommended for finishing seams but not reinforcing the seam. Use the conventional sewing machine's straight stitch to reinforce the seam. The stitch uses one overedge needles and both the upper looper and lower looper. There are 2 different ways to set up for a Three-Thread Overlock stitch. For a more narrow stitch (4.0) select the Right Overedge needle; for a wider stitch (6.0) the Left Overedge needle is used.

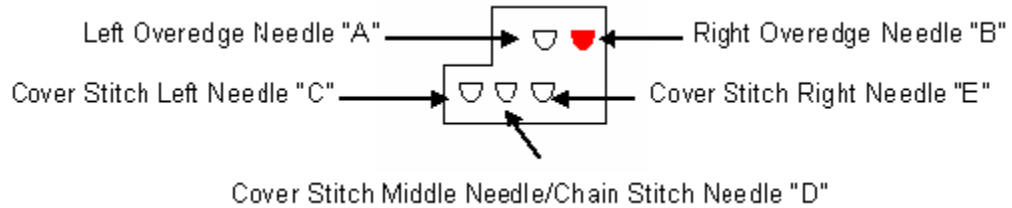


Right Overedge Needle Thread



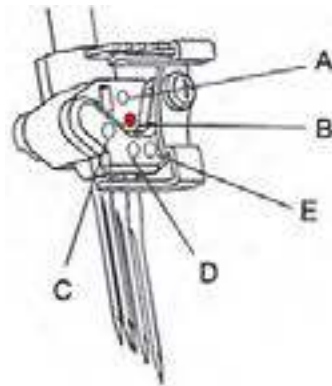
Set up:

Needle:



Set-up:

ATD:	
Auto Tension Dial	"A"
Left Cover Stitch Needle "C"	Unthreaded and Remove Needle
Middle Cover Stitch Needle "D"	Unthreaded and Remove Needle
Right Cover Stitch Needle "E"	Unthreaded and Remove Needle
Overedge Left Needle "A"	Unthreaded and Remove Needle
Overedge Right Needle "B" (Blue)	Threaded
Upper Looper (Green)	Looper Engaged and Threaded
Spreader	Not Used
Lower Looper (Red)	Threaded
Chain Stitch Looper (Brown)	Unthreaded
Upper Knife	Engaged
Seam Guide Plate	Not Installed, use Knife Cover Plate
Seam Width Dial	"N"
Stitch Length Dial	"2"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"N"



The Three-Thread Overlock makes a great edge finish to a garment's facing.

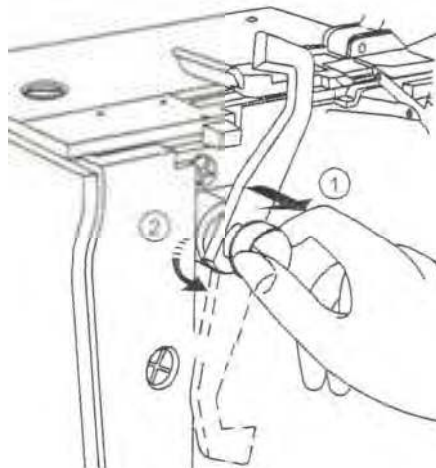


- ◆ Turn Auto Tension Dial to “A”.

- ◆ Turn Stitch Length Dial to “2”.



- ◆ Engage Upper Knife. The knife will not trim the fabric when it is disengaged.
 1. Open Looper Cover.
 2. Pull the movable knife holder (silver screw) to the right as far as it will go.
 3. Turn the holder clockwise until the knife clicks into a lock position.



Upper Knife Disengaged



Upper Knife Engaged

- ◆ Turn Presser Foot Pressure Dial to “N”.



- ◆ Turn Differential Feed Dial to “N”.



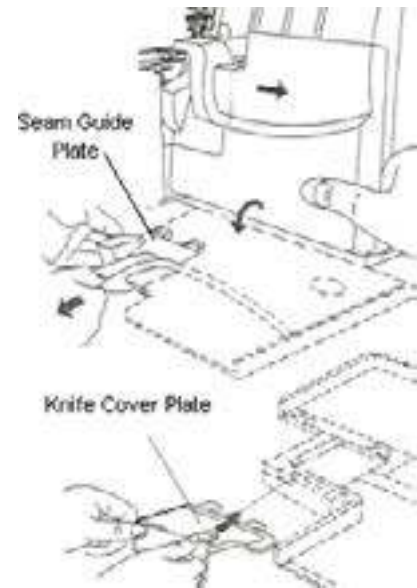
- ◆ Turn Seam Width Dial to “N”.



- ◆ Set Stitch Finger to “N”.

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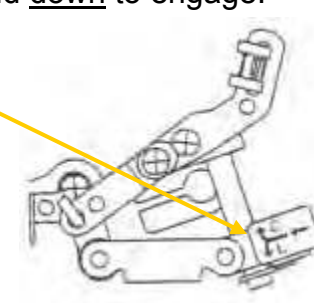
- ◆ Install the Knife Cover.



- ◆ Engage Upper Looper. Engaging the Upper Looper causes the looper move when sewing. Even though the Upper Looper is not threaded it needs to be engaged.
 1. Push the clutch button to the left and down to engage.
 2. Turn handwheel.



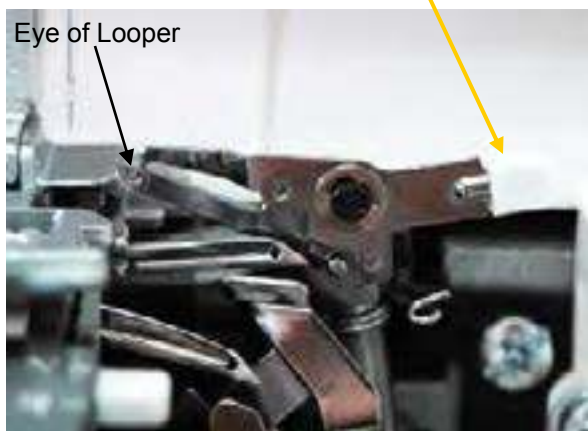
Upper Looper Disengaged



Upper Looper Engaged

- ◆ Disengage Spreader. The Upper Looter has a hole for the thread on the top of the looper. If the stitch requires that the looper be engaged but not threaded, then the Spreader is used. The Spreader simply plugs-in (or closes) the looper's hole. The Spreader is disengaged when the Upper Looter is engaged/operative and threaded. The Spreader is used with a stitch that requires only one looper thread. With the help of the Spreader, the single looper thread wraps around the fabric's edge.

1. Lower the white handle on the Spreader to open the eye of the Upper Looter.



Spreader Engaged

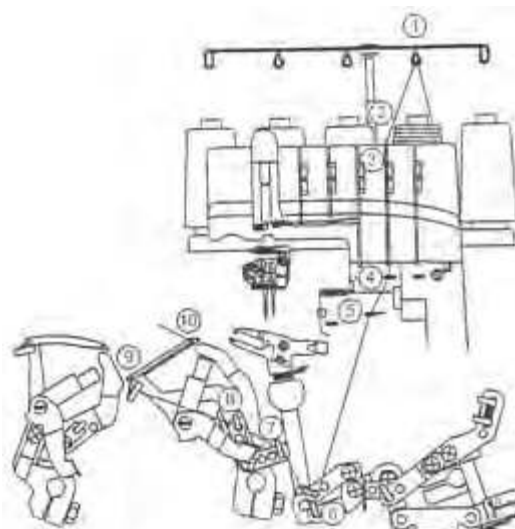
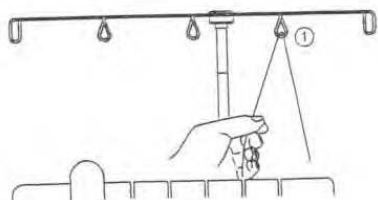


Spreader Disengaged

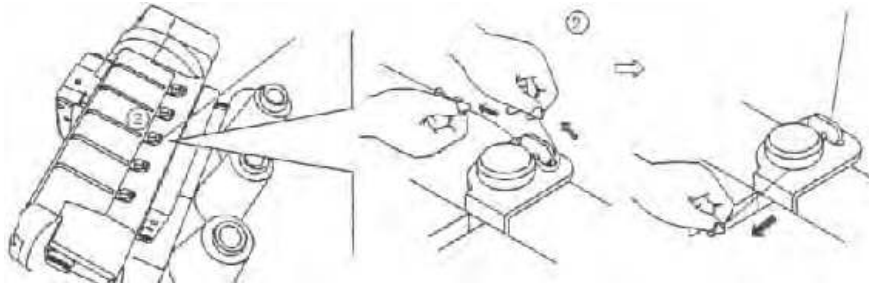
- ◆ Thread Upper Looter with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the Lower Looter as illustrated 1-9.

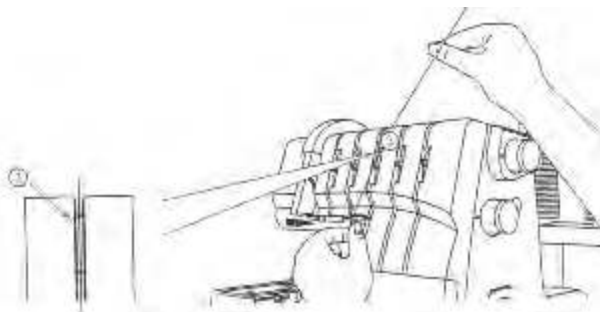
2. Pass thread from back to the front through the thread guide.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

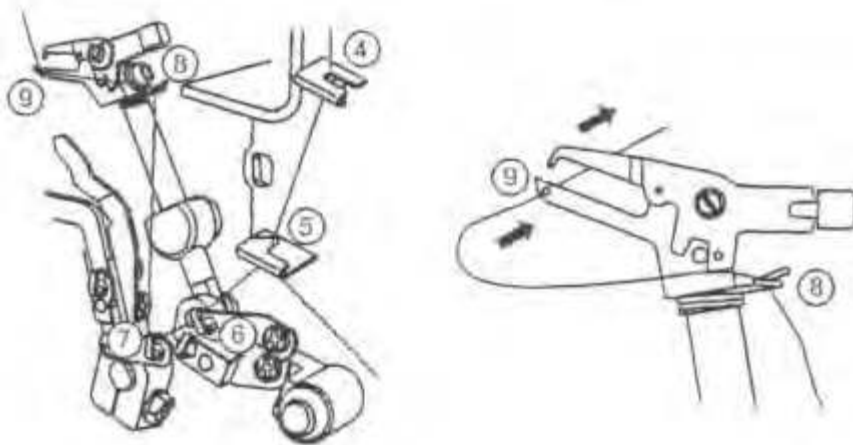


4. While holding the thread, firmly pull the thread between the tension disks.



5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately 1/2") from the needle plate edge.

6. Thread the looper area of the machine following the green color coded thread guides 4-9.

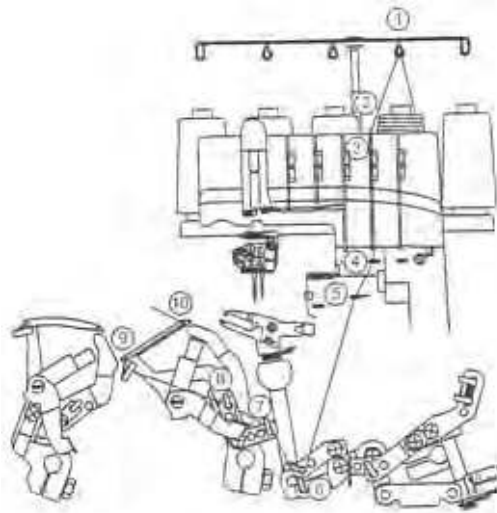
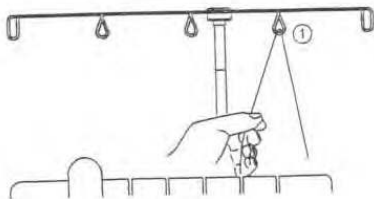


7. Thread the hole in the Upper Looter from front to back ⑨. Pull about 4 inches of thread through the looper and place to the back of the throat plate.

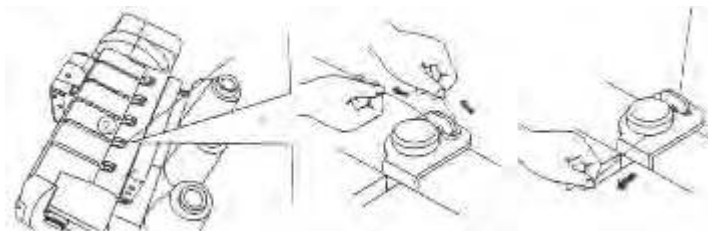


◆ Thread Lower Looter with regular overlock thread.

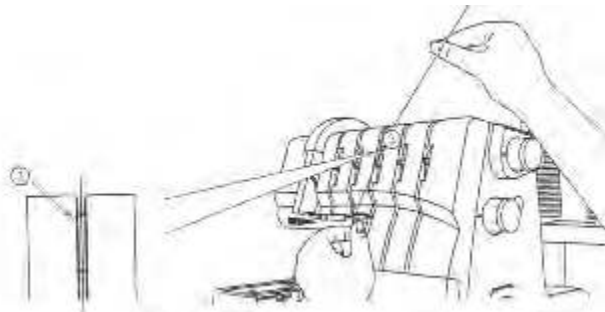
1. Raise the Presser Foot to release the tension disks. Thread the Lower Looter as indicated 1-10.
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

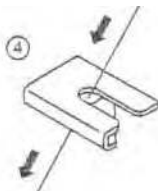


4. While holding the thread, firmly pull the thread between the tension disks.



5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately 1/2") from the needle plate edge.
6. Thread the looper area of the machine following the red color coded thread guides 4-10.

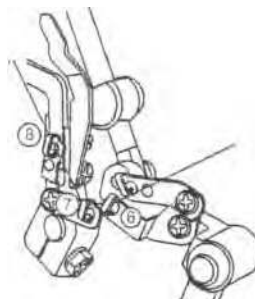
7. Place the thread slightly from left and to the right of threading guide ④.



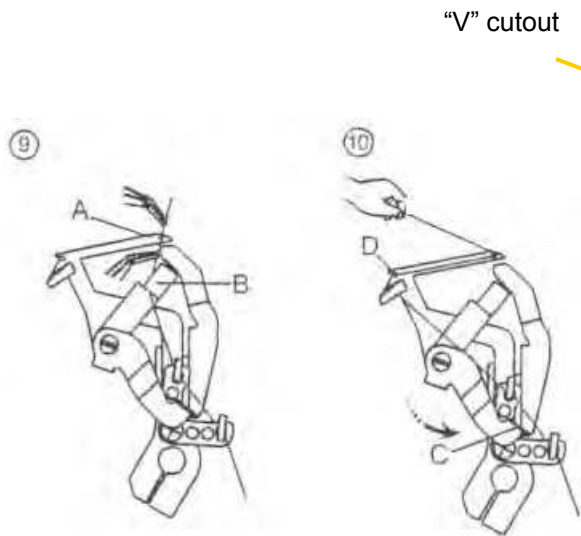
8. Place the thread slightly from the front and to the back of threading guide ⑤.



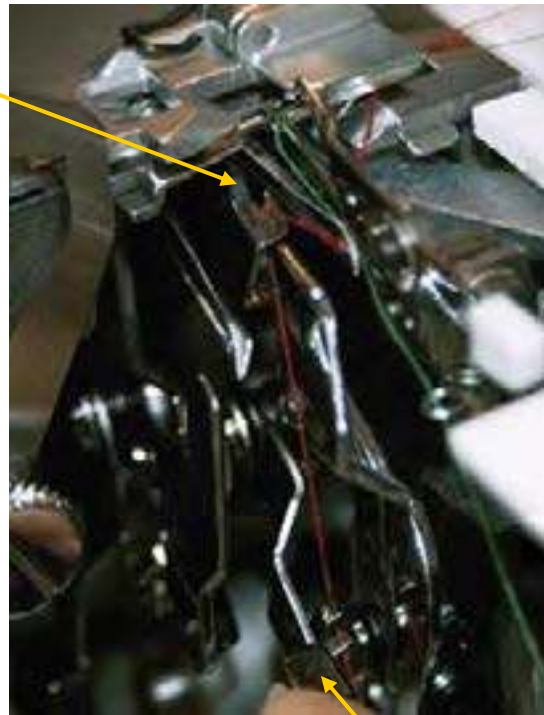
9. Place the thread through ⑥, ⑦ and ⑧.



10. Thread the looper eye (A) from front to back. Pull about 4 inches of thread. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull Threader Lever (C) up into place (D).



“V” cutout



Threader Lever

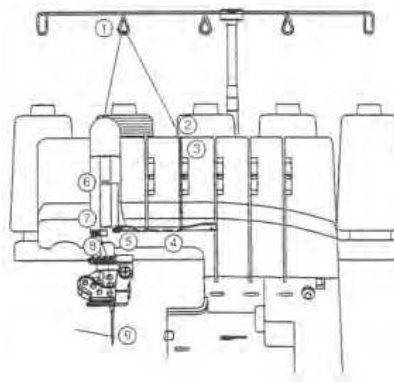
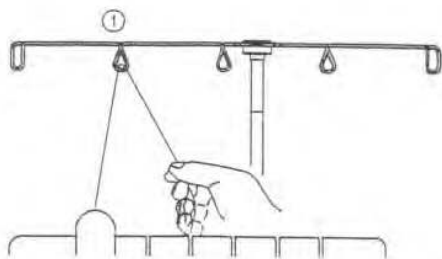


NOTE: Make sure the Upper Looper thread is behind the Lower Looper thread.

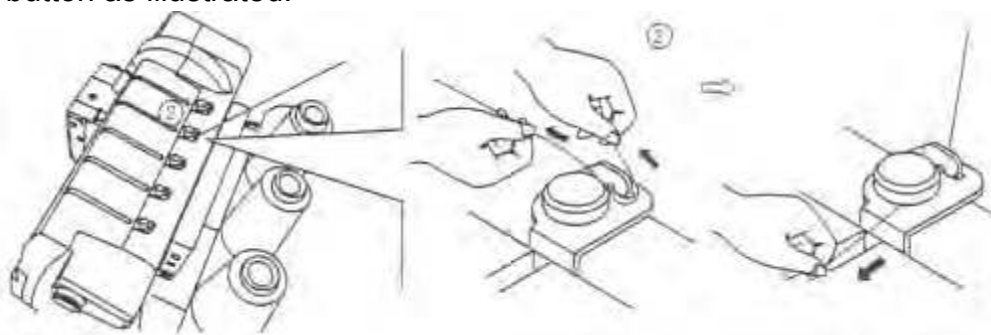
◆ Thread Right Overedge needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the right needle as indicated 1-9.

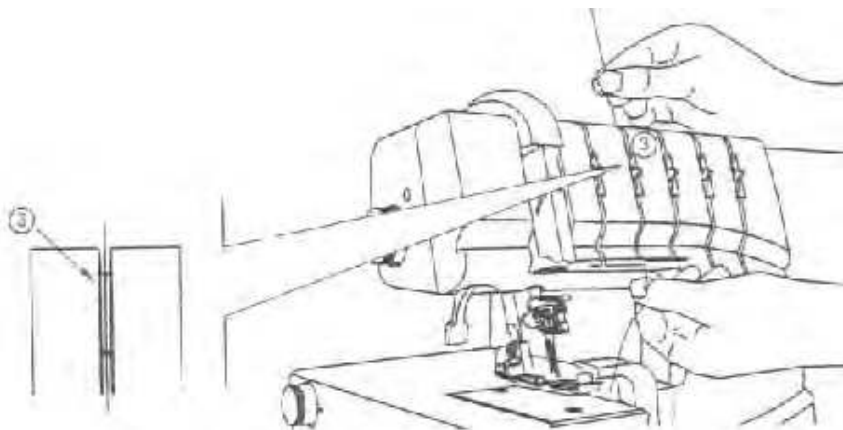
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

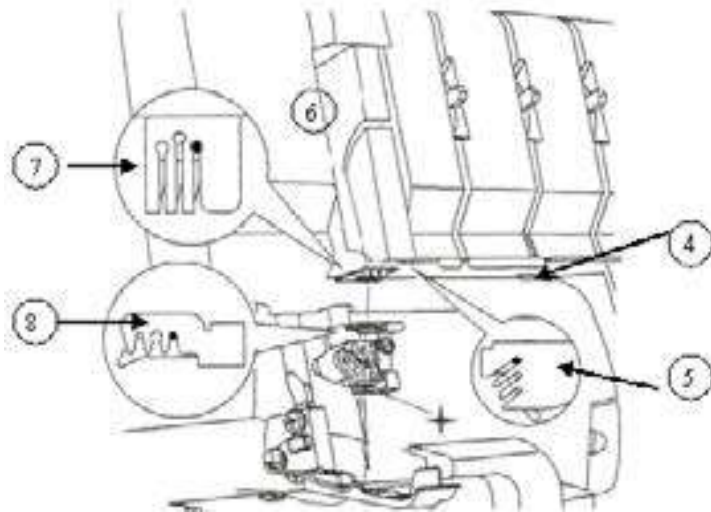


4. While holding the thread firmly, pull the thread between the tension disks.

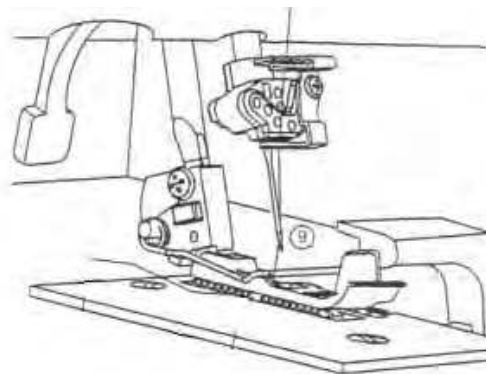


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5. Continue to thread points 4-8. Slip the thread into the rear slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the right slot of the thread guides ⑦ and ⑧.
8. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.



9. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
10. Place the thread to the back, under the Presser Foot.



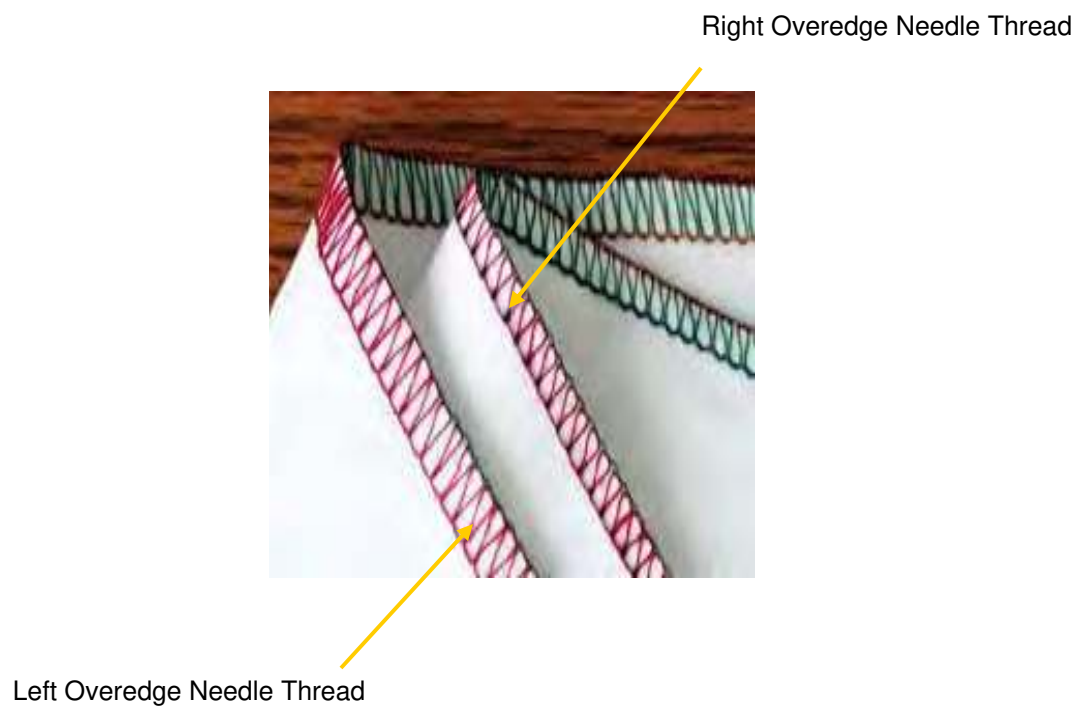
TRY IT:

- ◆ Align one piece of medium weight fabric so that the knife just slightly trims the fabric edge.
- ◆ Sew.
- ◆ Align a second piece of medium weight fabric so that the knife just slightly trims the fabric edge.
- ◆ Place the two fabrics, right sides together.
- ◆ Using a conventional sewing machine, sew a straight stitch with a $\frac{5}{8}$ inch seam.
- ◆ Press the seam open.



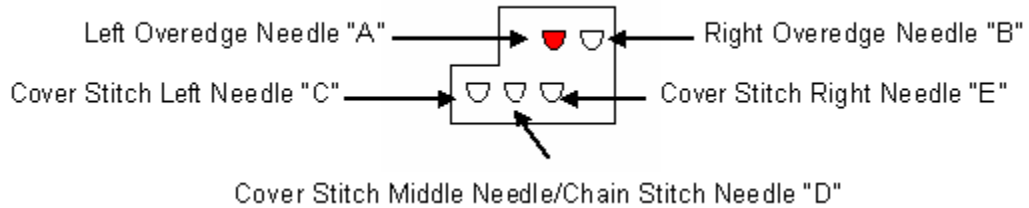
Three-Thread Overlock (wide)

The Three-Thread Overedge (wide) has the same set up as the Three-Thread Overedge (narrow) Stitch. The only exceptions are the Right Overedge Needle is now unthreaded and removed and the Left Overedge Needle is threaded. By using the left needle the stitch becomes wider. The other exception is the Auto Tension Dial is turned to "B".



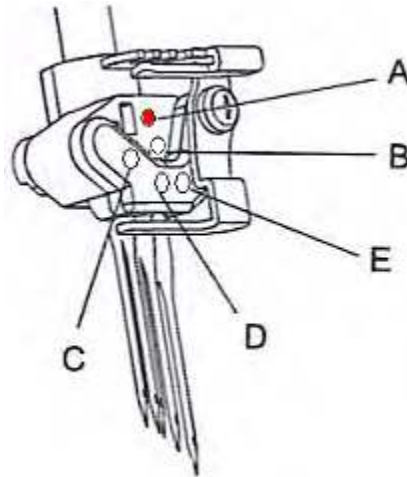
SET UP:

Needle:



Set-up:

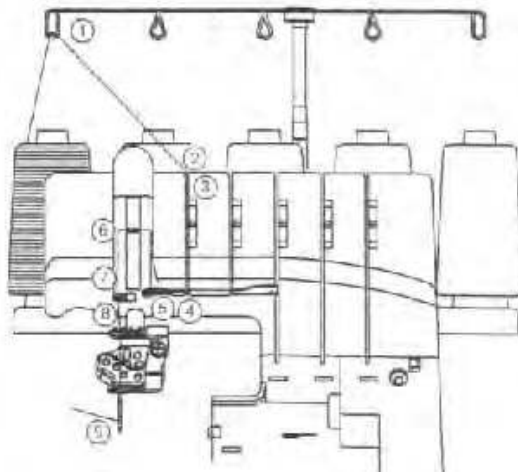
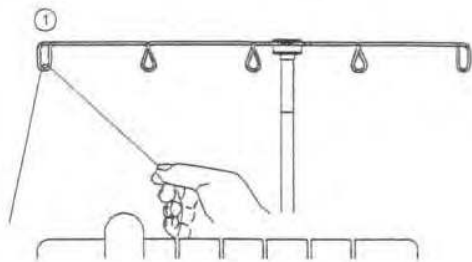
ATD: Auto Tension Dial	"B"
Left Cover Stitch Needle "C"	Unthreaded and Remove Needle
Middle Cover Stitch Needle "D"	Unthreaded and Remove Needle
Right Cover Stitch Needle "E"	Unthreaded and Remove Needle
Overedge Left Needle "A" (Orange)	Threaded
Overedge Right Needle "B"	Unthreaded and Remove Needle
Upper Looper (Green)	Looper Engaged and Threaded
Spreader	Disengaged
Lower Looper (Red)	Threaded
Chain Stitch Looper (Brown)	Unthreaded
Upper Knife	Engaged
Seam Guide Plate	Not Installed, use Knife Plate Cover
Seam Width Dial	"N"
Stitch Length Dial	"2"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"N"



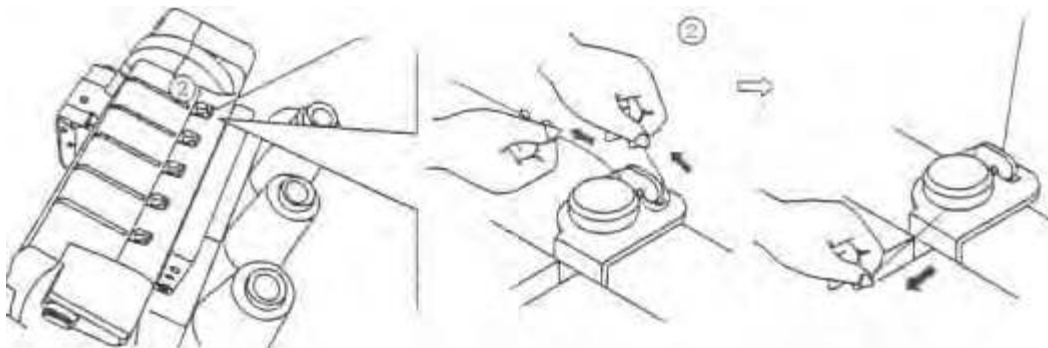
◆ Thread Left Overedge needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.

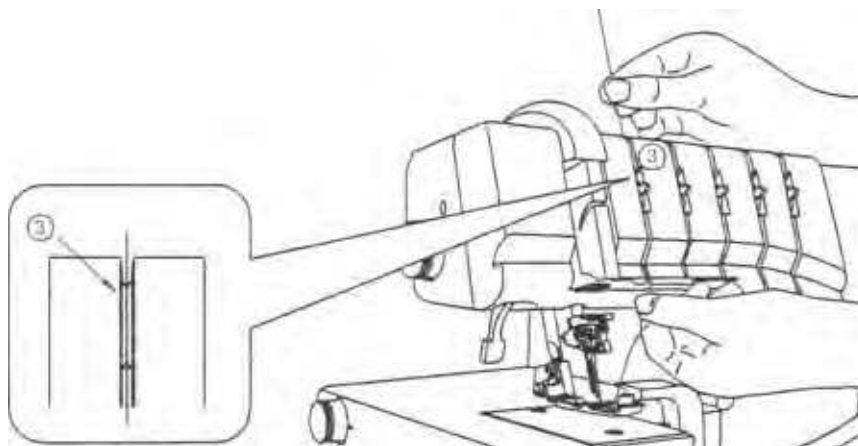
2. Pass thread from back to the front through the thread guide.



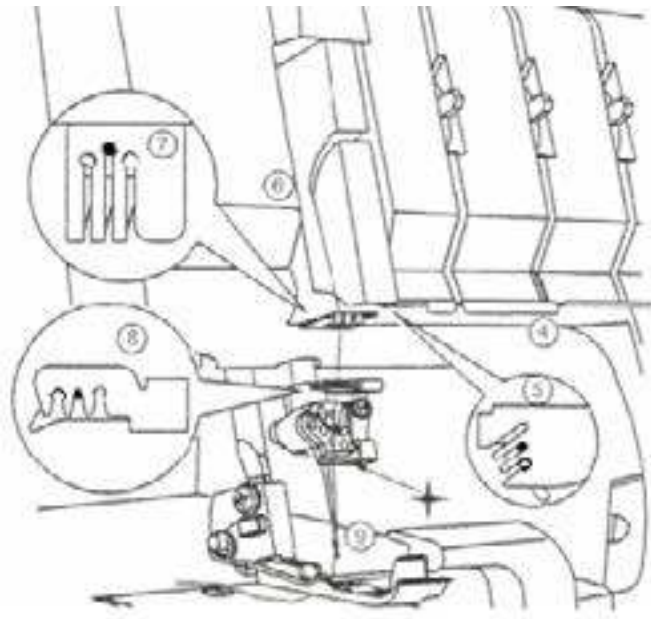
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



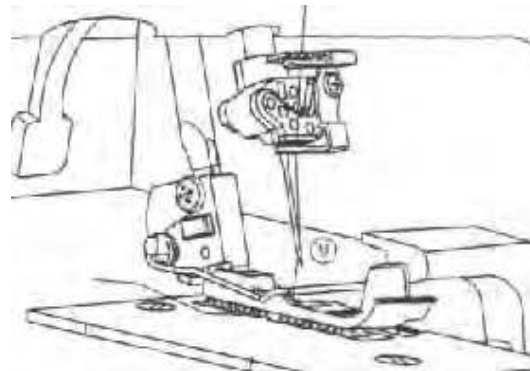
4. While holding the thread firmly, pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.
6. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.



7. Thread the eye of the left needle ⑨.



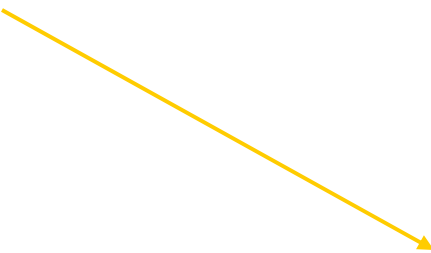
8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot.

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- ◆ Turn Auto Tension Dial to “B”.



- ◆ Turn Stitch Length Dial to “2”.



TRY IT:

- ◆ Align one piece of medium weight fabric so that the knife just slightly trims the fabric edge.
- ◆ Sew.



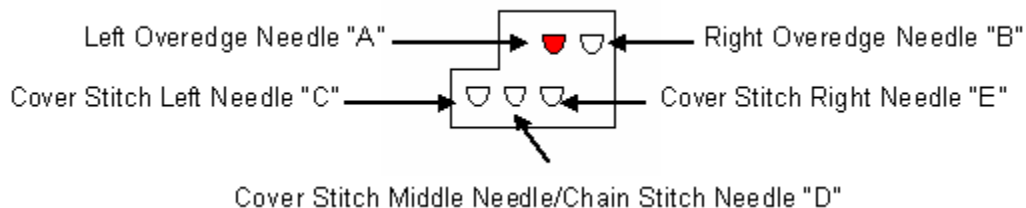
Three-Thread Overedge (wide with decorative thread)

Using decorative threads can duplicate the look of fine braids and bindings often found only in ready-to-wear. It is easy to embellish sewing projects with decorative thread. Threads such as texturized nylon thread, crochet thread, pearl cotton, yarn and more easily slide through the eye of the looper. Select soft, flexible threads for best results.



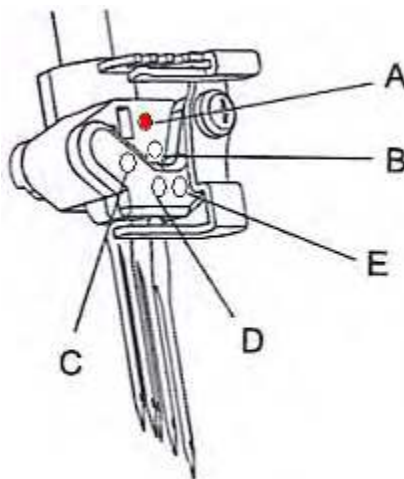
SET UP:

Needle:



Set-up:

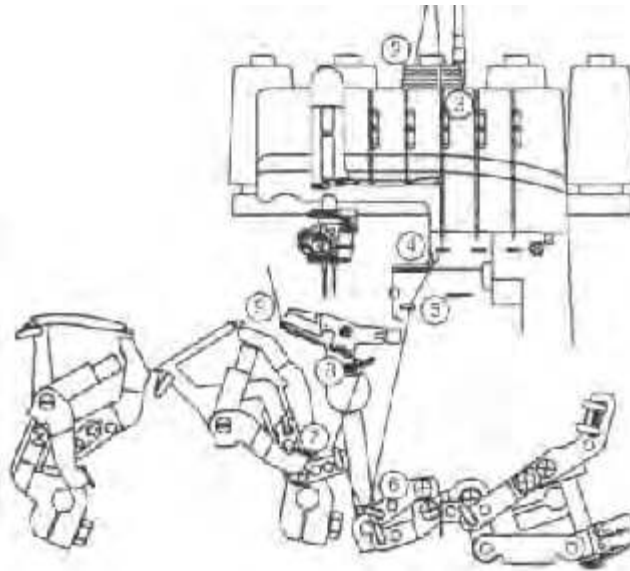
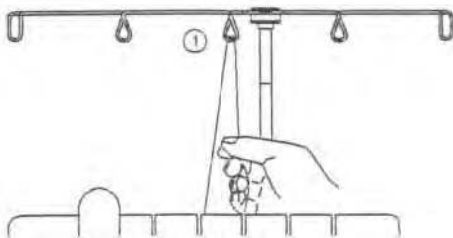
ATD: Auto Tension Dial	"B"
Left Cover Stitch Needle "C"	Unthreaded and Remove Needle
Middle Cover Stitch Needle "D"	Unthreaded and Remove Needle
Right Cover Stitch Needle "E"	Unthreaded and Remove Needle
Overedge Left Needle "A" (Orange)	Threaded
Overedge Right Needle "B"	Unthreaded and Remove Needle
Upper Looper (Green)	Looper Engaged and Threaded
Spreader	Disengaged
Lower Looper (Red)	Threaded
Chain Stitch Looper (Brown)	Unthreaded
Upper Knife	Engaged
Seam Guide Plate	Not Installed, use Knife Plate Cover
Seam Width Dial	"N"
Stitch Length Dial	"2"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"N"



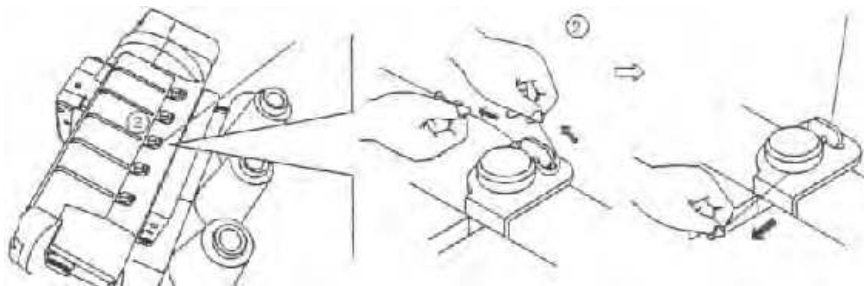
◆ Thread Upper Looper with decorative thread.

1. Raise the Presser Foot to release the tension disks. Thread the Lower Looper as illustrated 1-9.

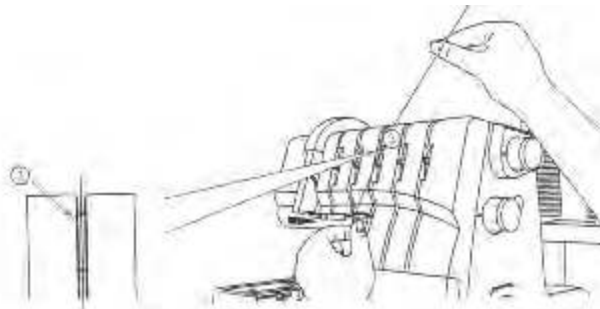
2. Pass thread from back to the front through the thread guide.



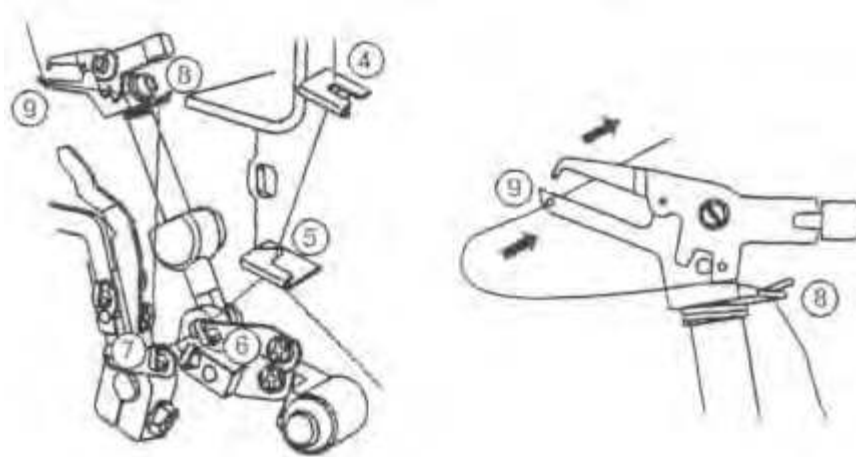
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



4. While holding the thread firmly, pull the thread between the tension disks.



5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately ½ inch) from the needle plate edge.
6. Thread the looper area of the machine following the green color coded thread guides 4-9.



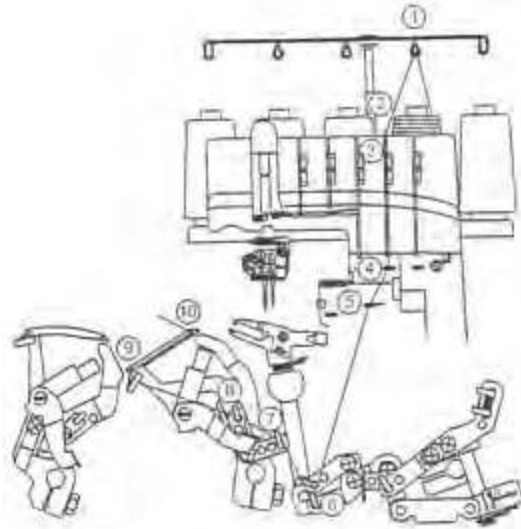
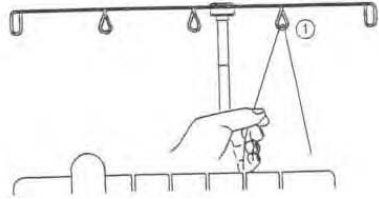
7. Thread the hole in the Upper Looper from front to back ⑨. Pull about 4 inches of thread through the looper and place to the back of the throat plate.



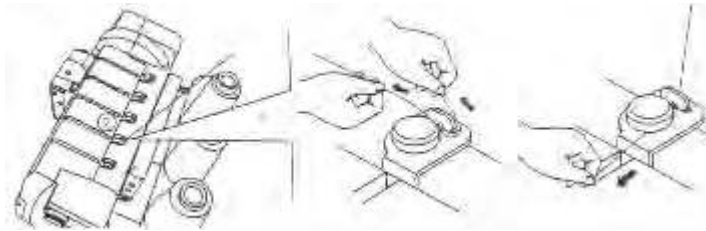
◆ Thread Lower Looper with decorative overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the Lower Looper as illustrated 1-10.

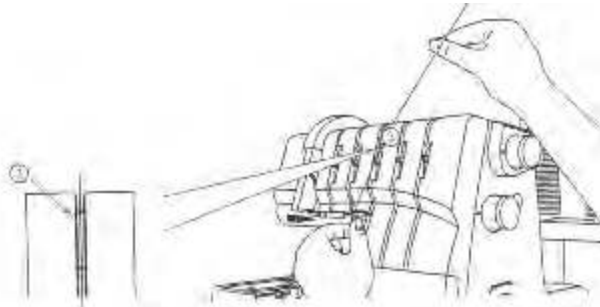
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



4. While holding the thread, firmly pull the thread between the tension disks.



5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately ½ inch) from the needle plate edge.

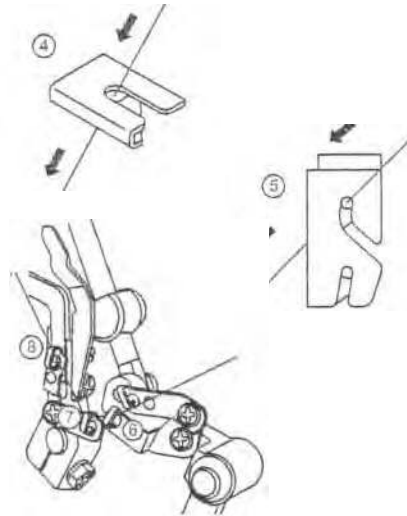
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6. Thread the looper area of the machine following the red color coded thread guides 4-10.

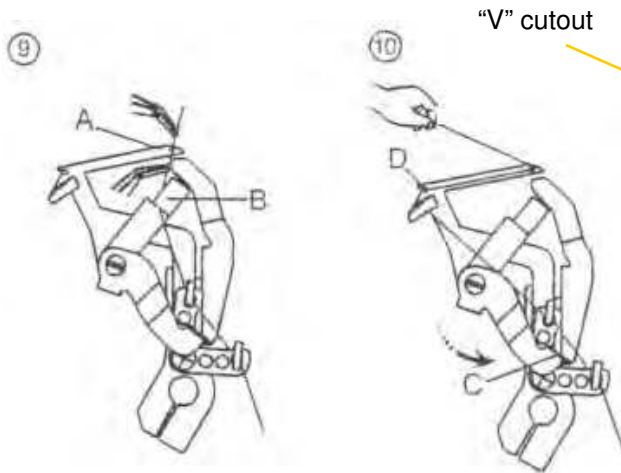
7. Place the thread slightly from left and to the right of threading guide ④.

8. Place the thread slightly from the front and to the back of threading guide ⑤.

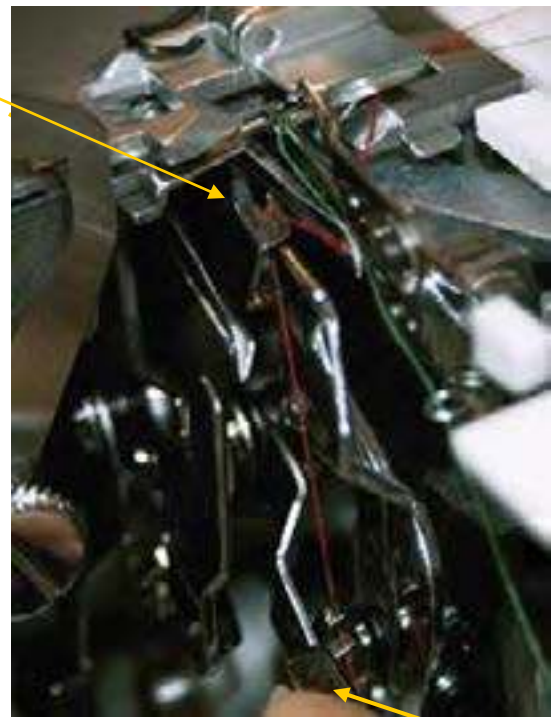
9. Place the thread through ⑥, ⑦, and ⑧.



10. Thread the looper eye (A) from front to back. Pull about 4 inches of thread. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull Threader lever (C) up into place (D).



11. Thread eye of looper.



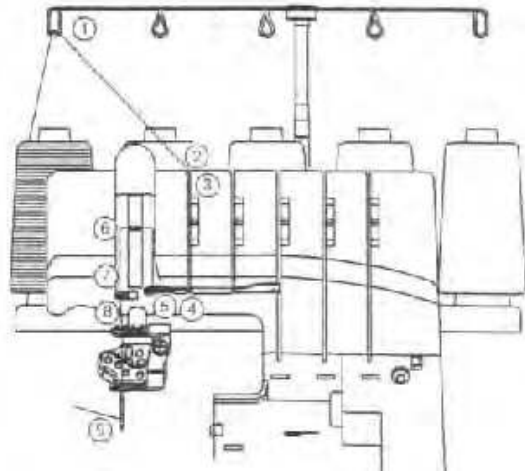
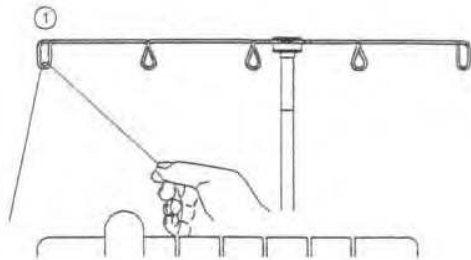
Threader Lever

NOTE: Make sure the Upper Looper thread is behind the Lower Looper thread.

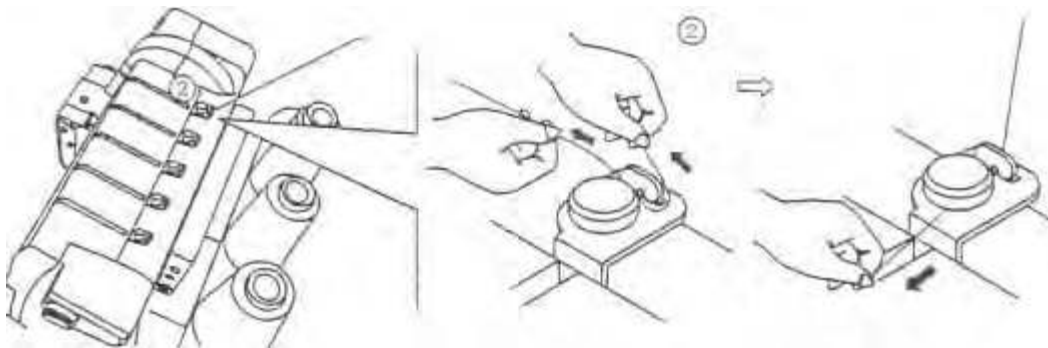
◆ Thread Overedge Left needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.

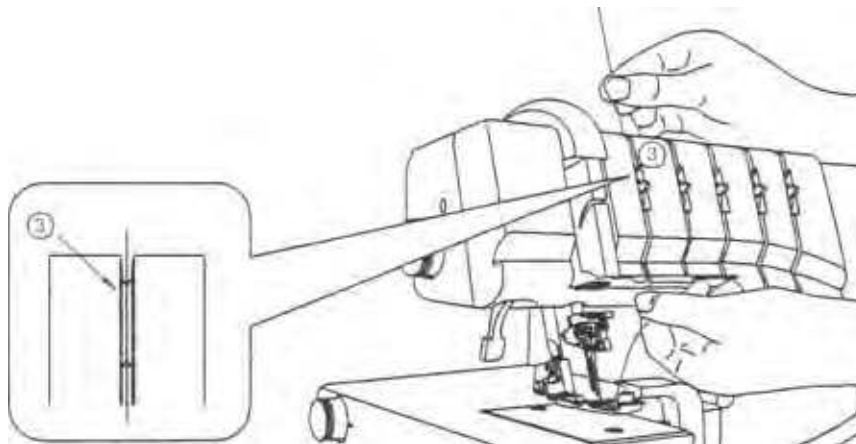
2. Pass thread from back to the front through the thread guide ①.



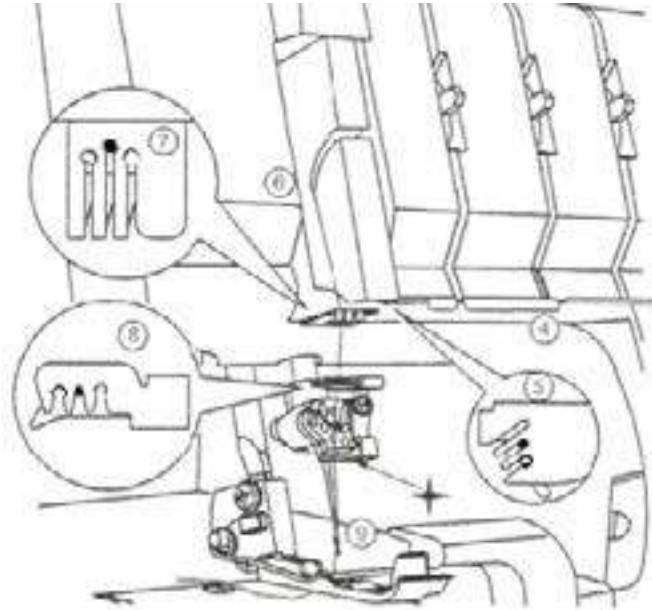
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



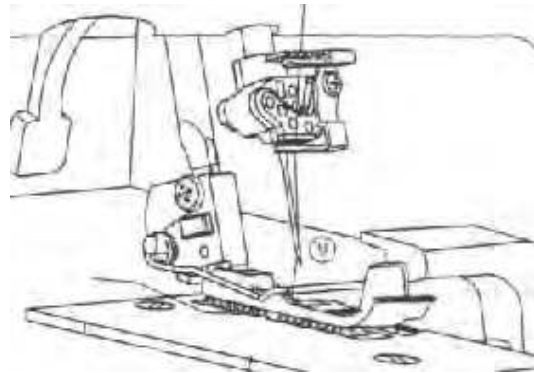
4. While holding the thread firmly, pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.
6. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.



7. Thread the eye of the Left Overedge Needle ⑨.



8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot. Lower foot and sew.

TRY IT:

- ◆ Align double-sided quilted fabric so that the knife just slightly trims the fabric edge.
- ◆ Sew.



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Chapter 5: Three-Thread Flatlock (narrow and wide)



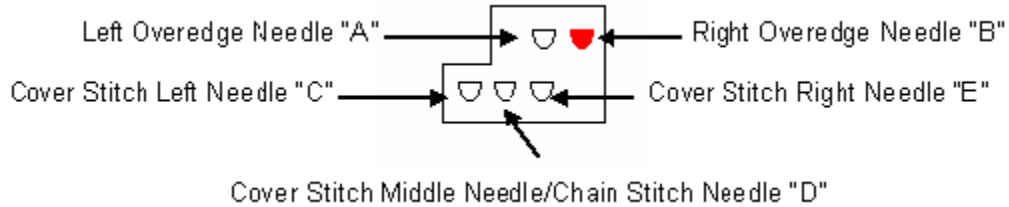
Three-Thread Flatlock Narrow

The Flatlock Stitch is used decoratively to achieve the look of applied trim on a garment, craft or home decorator projects. Special decorative threads are used for a textured and dramatic embellishment effect. The Flatlock Stitch can also be used to serge non-bulky seams. The Flatlock Stitch is sewn with one needle and the upper and lower loopers. Both sides of the Flatlocking Stitch are considered decorative. The decorative loop effect is achieved when the Flatlock seams are stitched with the fabrics wrong sides together. The ladder stitch is achieved when the Flatlock seams are stitch with the fabrics right sides together. There are 2 different ways to set up for a Three-Thread Flatlock stitch. For a more narrow stitch (4.0) select the right overedge needle; for a wider stitch (6.0) the left overedge needle is used.



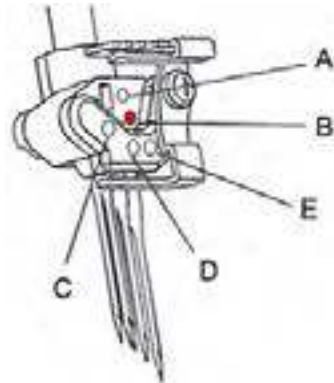
SET UP:

Needle:



Set Up:

ATD: Auto Tension Dial	"F"
Left Cover Stitch Needle "C"	Unthreaded and Remove Needle
Middle Cover Stitch Needle "D"	Unthreaded and Remove Needle
Right Cover Stitch Needle "E"	Unthreaded and Remove Needle
Overedge Left Needle "A"	Unthreaded and Remove Needle
Overedge Right Needle "B" (Blue)	Threaded
Upper Looper (Green)	Looper Engaged and Threaded
Spreader	Disengaged
Lower Looper (Red)	Threaded
Chain Stitch Looper (Brown)	Unthreaded
Upper Knife	Engaged
Seam Guide Plate	Not Installed, use Knife Cover Plate
Seam Width Dial	"N"
Stitch Length Dial	"2"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"N"





The Flatlock stitch, with fabric's right sides together, form a ladder stitch. A ribbon can then be woven by hand in and out of the stitches. The ladder stitch is ideal for joining laces together, as seen in heirloom sewing. Another idea for the ladder stitch is to use decorative thread through the needle to form a bold embellishment to projects.



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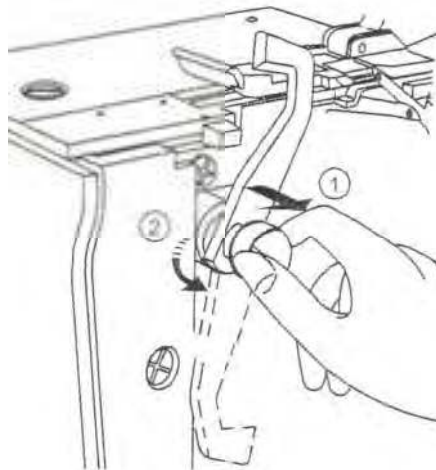


- ◆ Turn Auto Tension Dial to “F”.



- ◆ Turn Stitch Length Dial to “2”.

- ◆ Engage Upper Knife. The knife will not trim the fabric when it is disengaged.
 1. Open Looper Cover.
 2. Pull the movable knife holder (silver screw) to the right as far as it will go.
 3. Turn the holder clockwise until the knife clicks into a lock position.



Upper Knife Disengaged



Upper Knife Engaged

- ◆ Turn Presser Foot Pressure to “N”.



- ◆ Turn Differential Feed Dial to “N”.



- ◆ Turn Seam Width Dial to “N”.

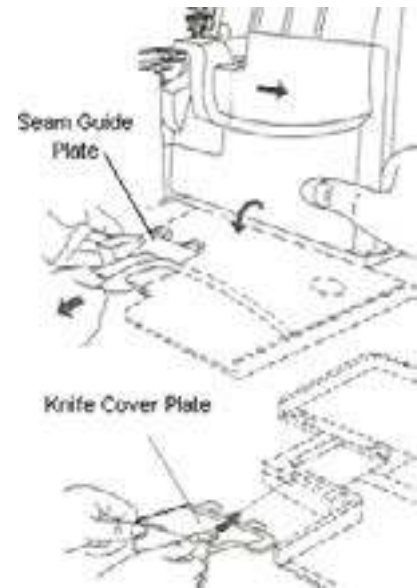


- ◆ Set Stitch Finger to “N”.



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- ◆ Install the Knife Cover.

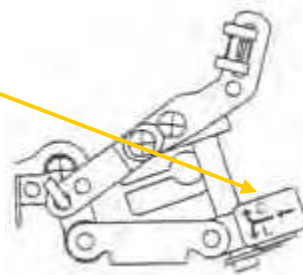


- ◆ Engage Upper Looper. Engaging the Upper Looper causes the looper to move when sewing. Even though the Upper Looper is not threaded it needs to be engaged.

1. Push the clutch button to the left and down to engage.
2. Turn handwheel.



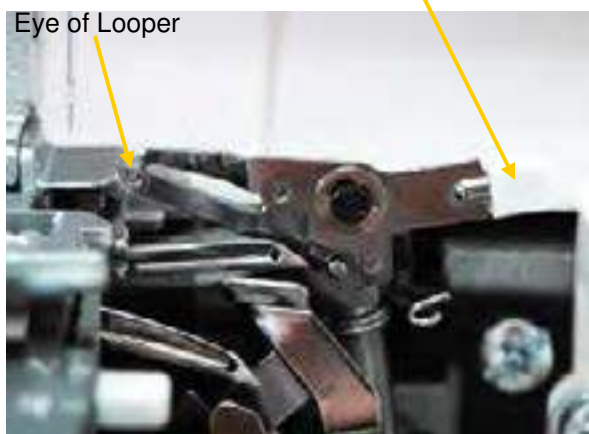
Upper Looper Disengaged



Upper Looper Engaged

- ◆ Disengage Spreader. The Upper Looter has a hole for the thread on the top of the looper. If the stitch requires that the looper be engaged but not threaded then the Spreader is used. The Spreader simply plugs-in (or closes) the looper's hole. The Spreader is disengaged when the Upper Looter is engaged/operative and threaded. The Spreader is used with a stitch that requires only one looper thread. With the help of the Spreader the single looper thread wraps around the fabric's edge.

1. Lower the white handle on the Spreader to open the eye of the Upper Looter.



Spreader Engaged

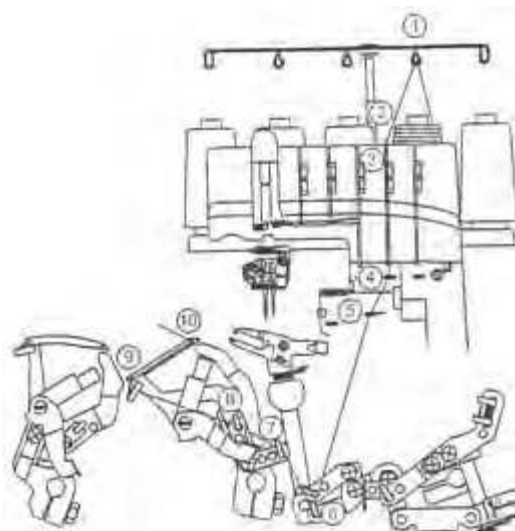
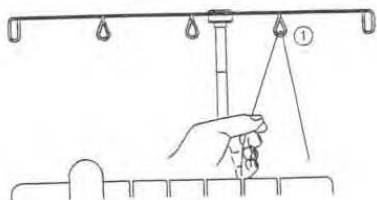


Spreader Disengaged

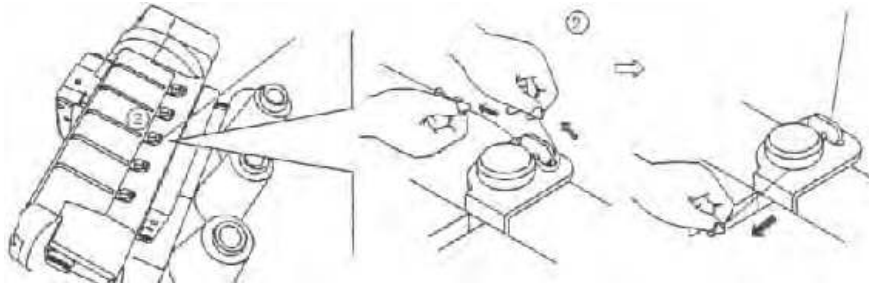
- ◆ Thread Upper Looter with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the Lower Looter as illustrated 1-9.

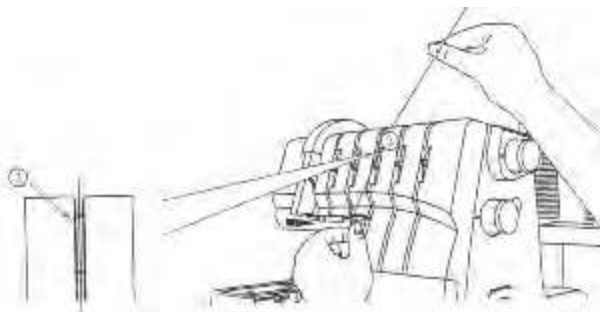
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

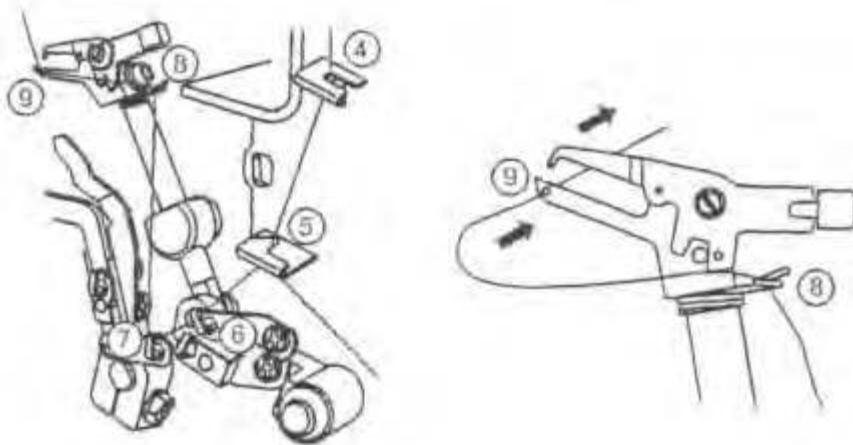


4. While holding the thread firmly, pull the thread between the tension disks.



5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately ½ inch) from the needle plate edge.

6. Thread the looper area of the machine following the green color coded thread guides 4-9.

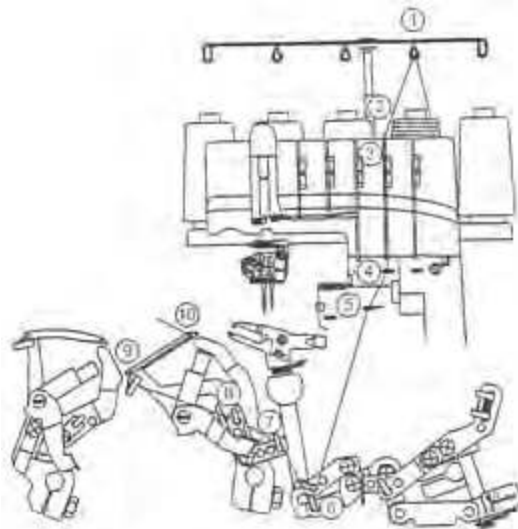
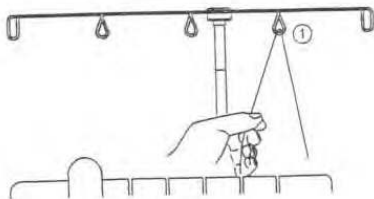


7. Thread the hole in the Upper Looter from front to back ⑨. Pull about 4 inches of thread through the looper and place to the back of the throat plate.

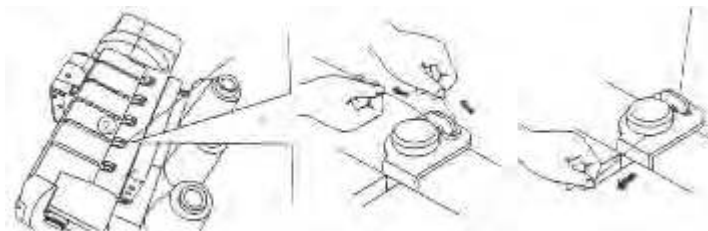


◆ Thread Lower Looter with regular overlock thread.

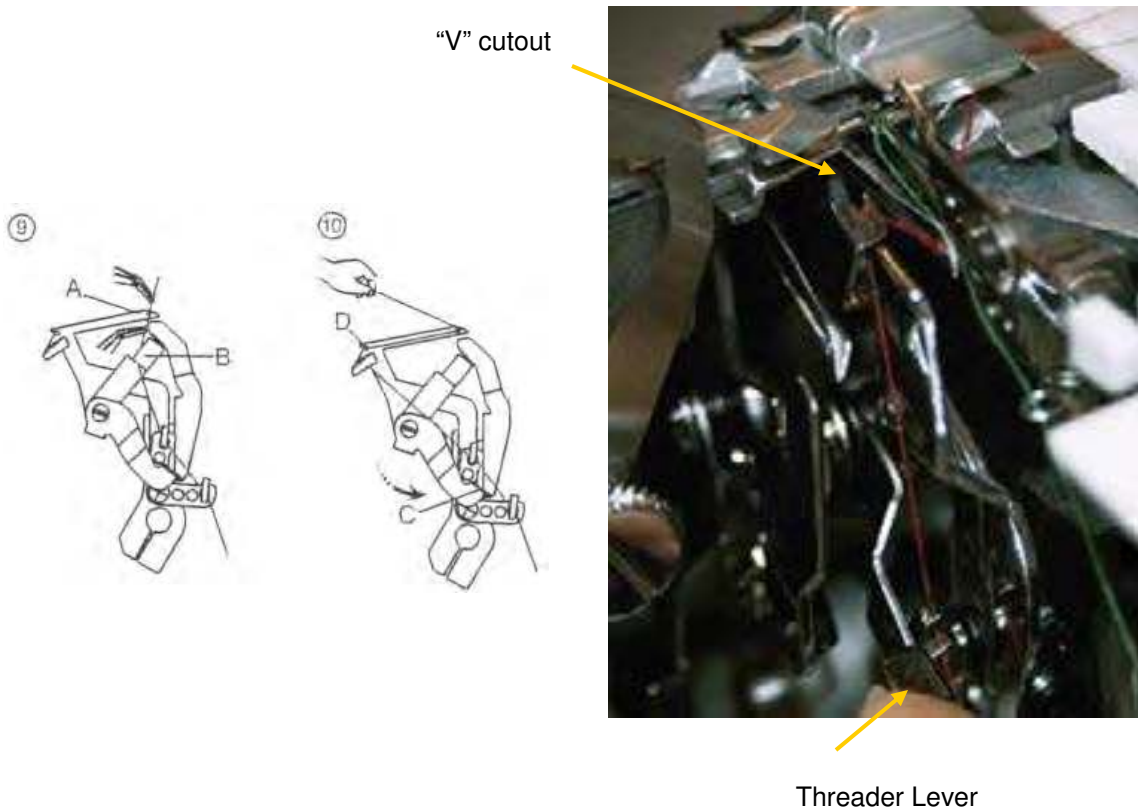
1. Raise the Presser foot to release the Tension disks. Thread the Lower Looter as illustrated 1-10.
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



10. Thread the looper eye (A) from front to back. Pull about 4 inches of thread. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull Threader lever (C) up into place (D).

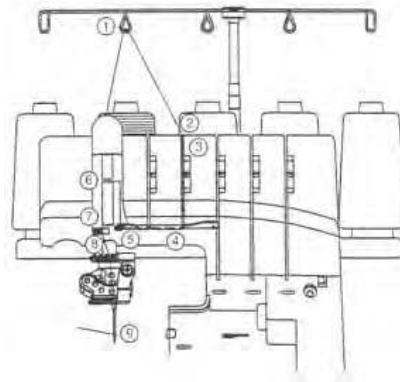
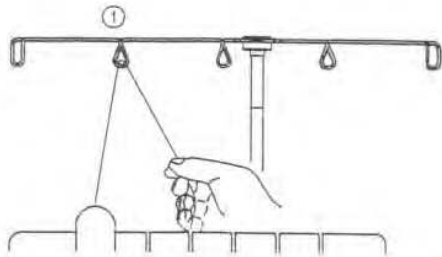


NOTE: Make sure the Upper Looper thread is behind the Lower Looper thread.

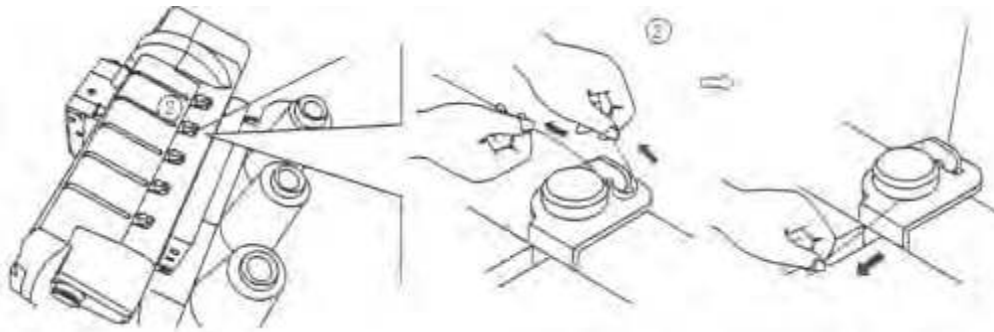
◆ Thread Right Overedge needle with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the right needle as illustrated 1-9.

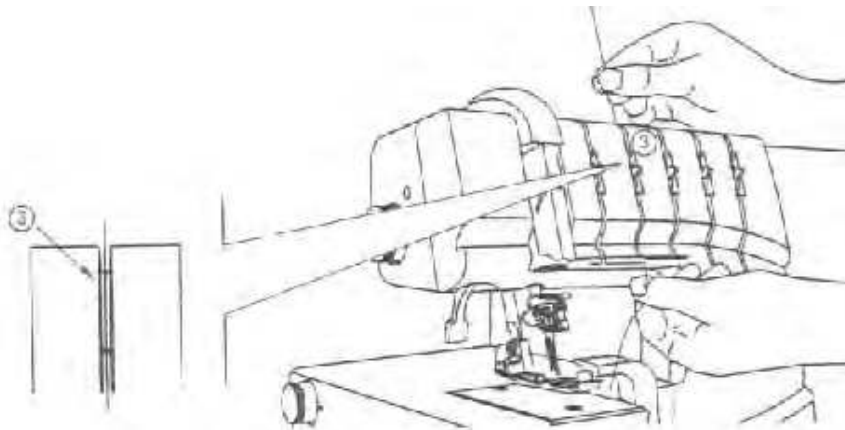
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

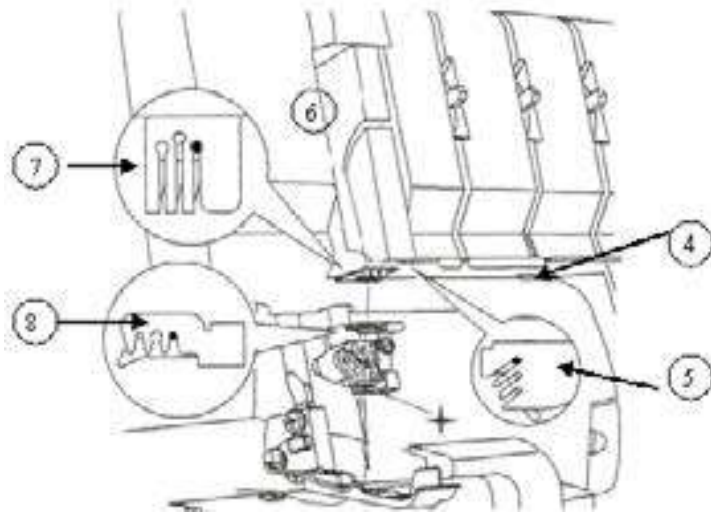


4. While holding the thread firmly, pull the thread between the tension disks.

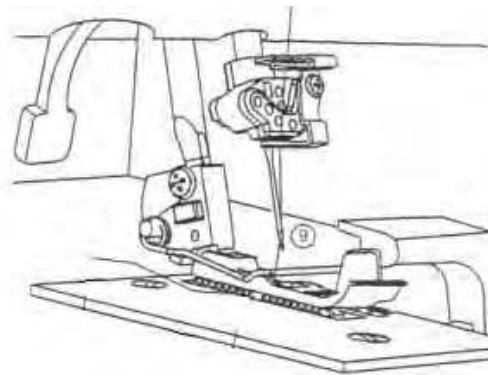


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5. Continue to thread points 4-8. Slip the thread into the rear slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the right slot of the thread guides ⑦ and ⑧.
8. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.



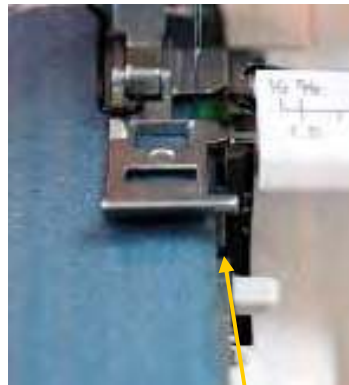
9. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
10. Place the thread to the back, under the Presser Foot.



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TRY IT:

- ◆ Fold T-shirt interlock fabric wrong sides together lengthwise.
- ◆ Align the fabric so that the fabric's fold is not being trimmed by the knife.
- ◆ Sew.
- ◆ Gently pull the fabric flat and press.



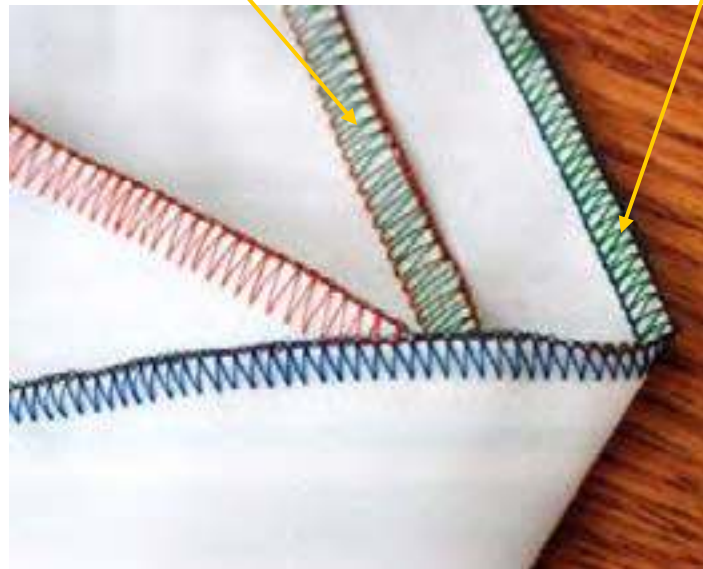
Hint:
If the fabric is not laying flat, align
the fabric farther to the left of the
knife.

Three-Thread Flatlock (wide)

The Three-Thread Flatlock (wide) has the same set up as the Three-Thread Flatlock (narrow) Stitch. The only exception is the Right Overedge Needle is now unthreaded and removed and the Left Overedge Needle is threaded. By using the left needle, the stitch becomes wider.

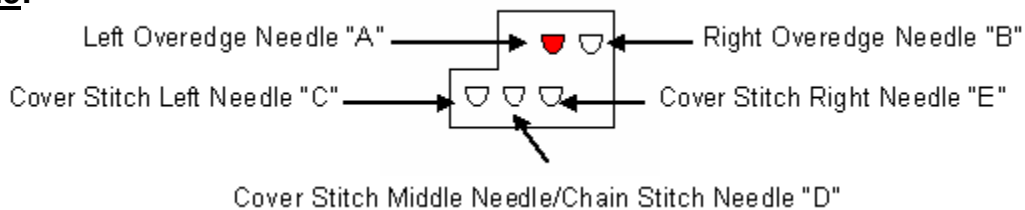
Left Overedge Needle Thread

Right Overedge Needle Thread



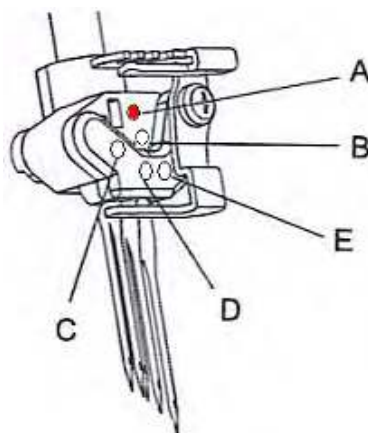
SET UP:

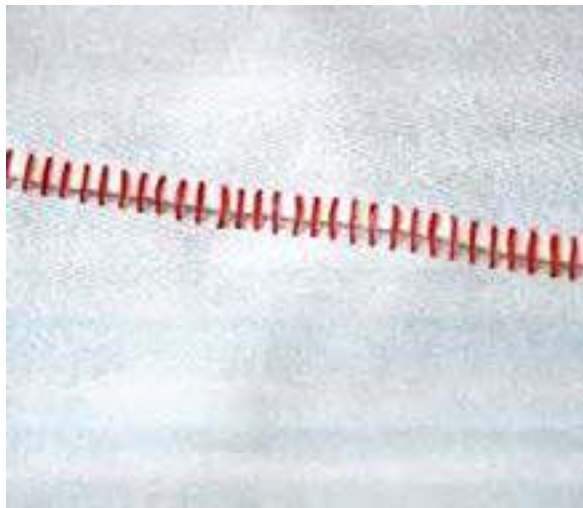
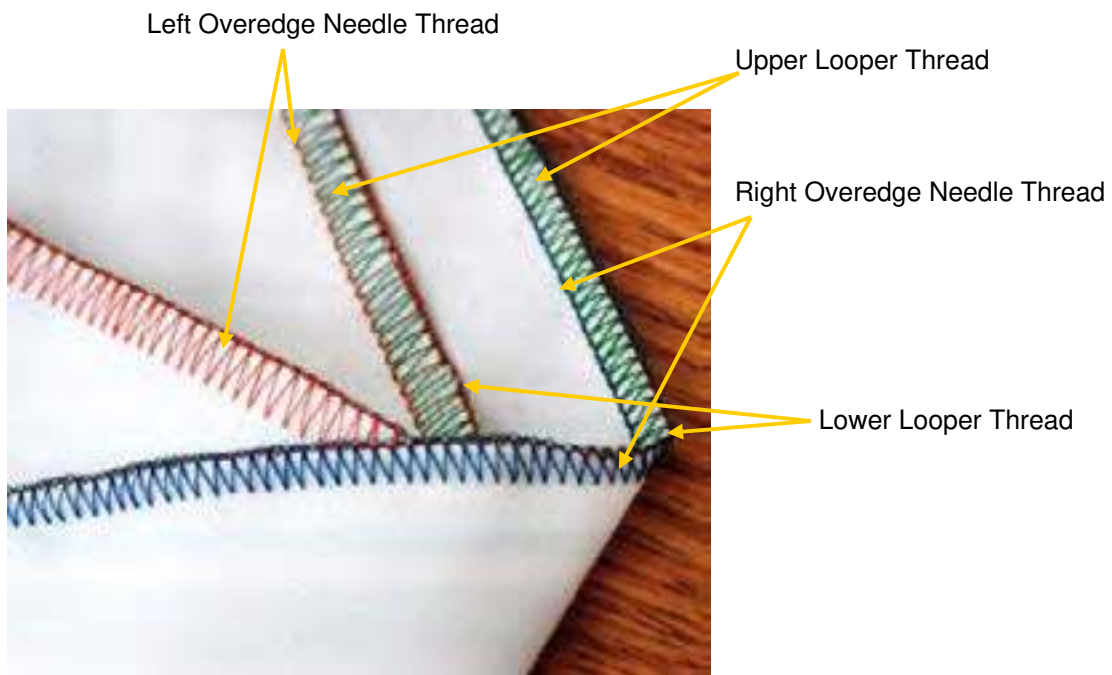
Needle:



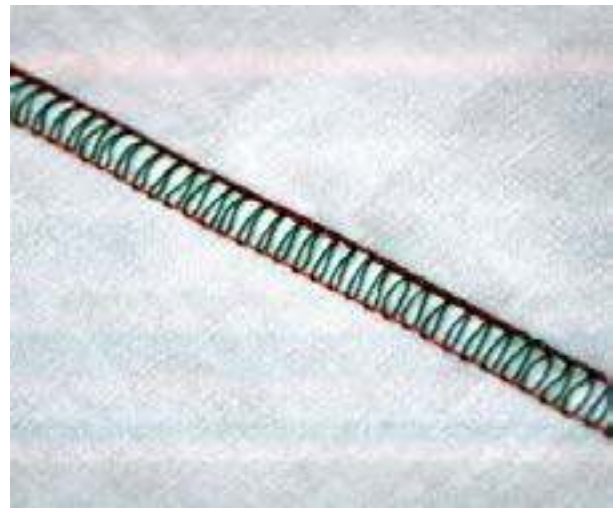
Set at:

ATD: Auto Tension Dial	"F"
Left Cover Stitch Needle "C"	Unthreaded and Remove Needle
Middle Cover Stitch Needle "D"	Unthreaded and Remove Needle
Right Cover Stitch Needle "E"	Unthreaded and Remove Needle
Overedge Left Needle "A" (Orange)	Threaded
Overedge Right Needle "B"	Unthreaded and Remove Needle
Upper Looper (Green)	Looper Engaged and Threaded
Spreader	Disengage
Lower Looper (Red)	Threaded
Chain Stitch Looper (Brown)	Unthreaded
Upper Knife	Engaged
Seam Guide Plate	Not Installed, use Knife Cover Plate
Seam Width Dial	"N"
Stitch Length Dial	"2"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"N"





Decorative Ladder Effect (wide)
Fabric Right Sides Together

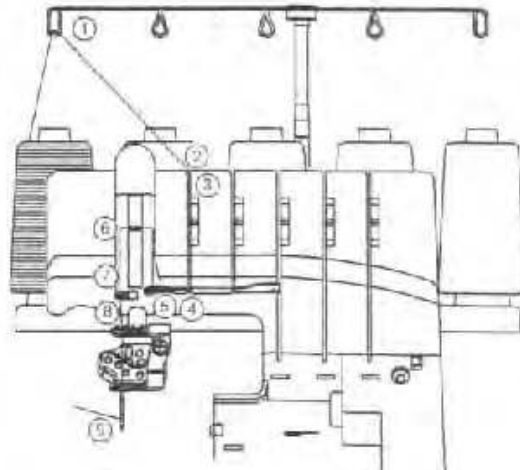
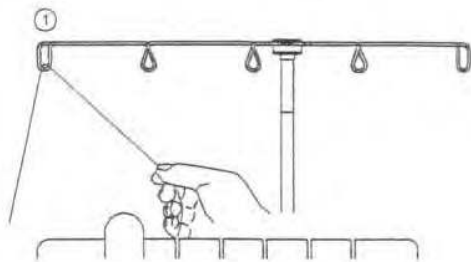


Decorative Loop Effect (wide)
Fabric Wrong Sides Together

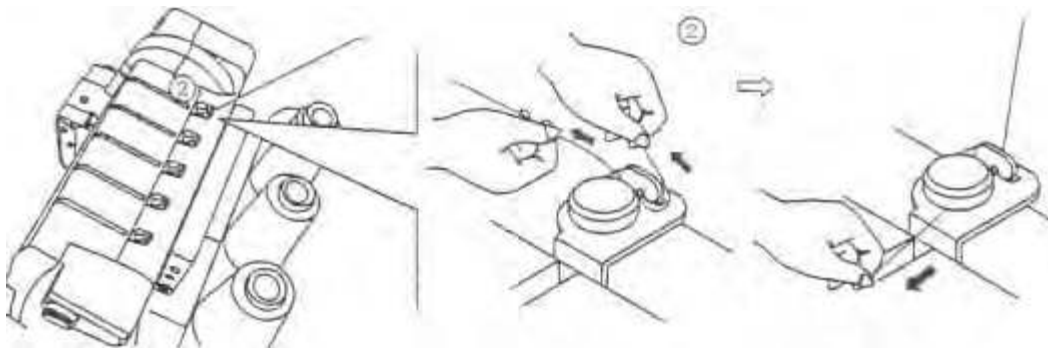
◆ Thread Left Overlock needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.

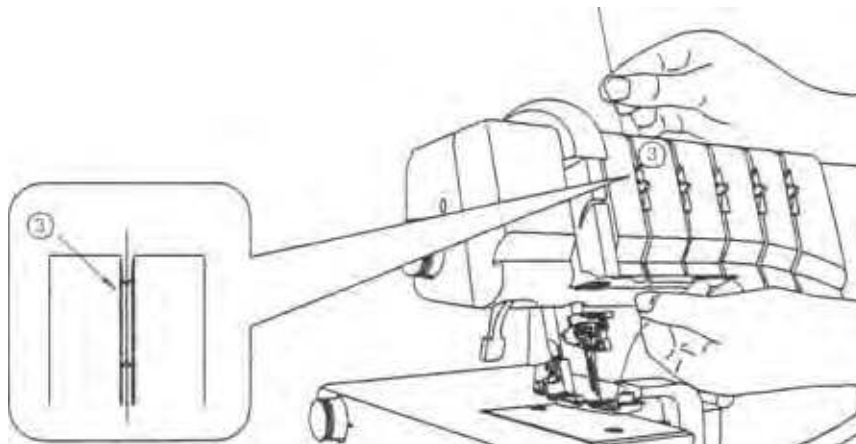
2. Pass thread from back to the front through the thread guide ①.



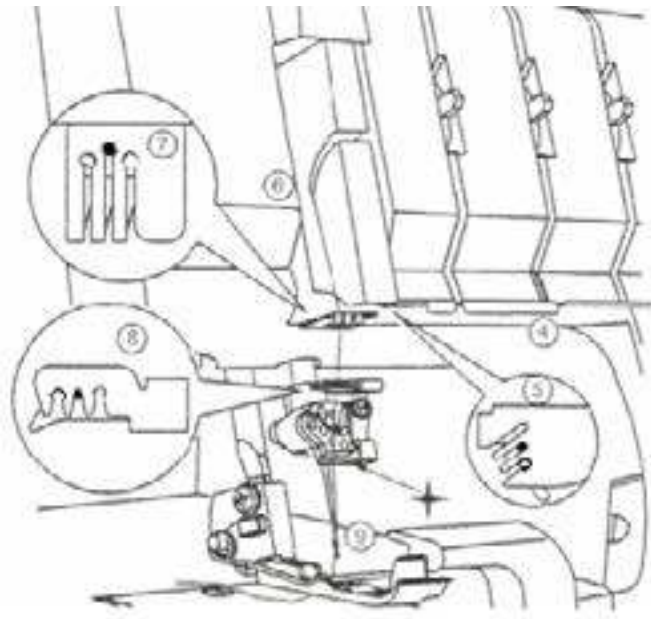
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



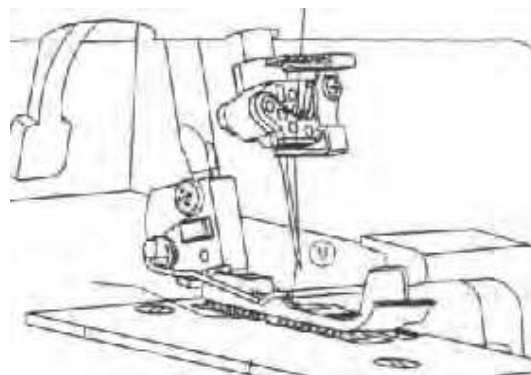
4. While holding the thread firmly, pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.
6. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.



7. Thread the eye of the left needle ⑨.



8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot. Lower foot and sew.

TRY IT:

- ◆ Fold sweatshirt fabric wrong sides together, lengthwise.
- ◆ Align the fabric so that the fabric's fold is not being trimmed by the knife.
- ◆ Sew.
- ◆ Gently pull the fabric flat and press.



Hint:
If the fabric is not laying flat, align
the fabric farther to the left of the
knife.

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Chapter 6: Three-Thread Ultra-Stretch Mock Safety Stitch



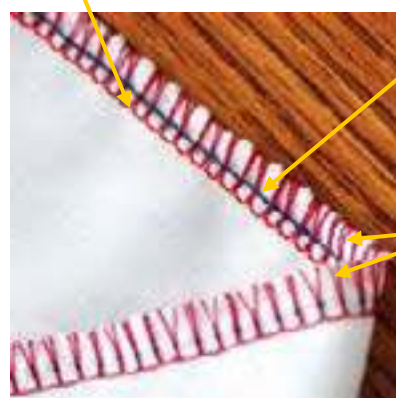
Three-Thread Ultra-Stretch Mock Safety Stitch

This stitch stretches with the fabric, the seam will not break when the fabric is stretched. It is ideal for super-stretch knits like those used on swimwear or athlete clothing. This stitch uses two needles and one looper.



Left Overedge Needle Thread

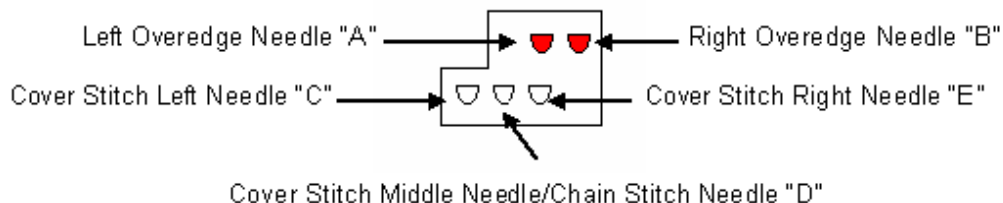
Right Overedge
Needle Thread



Lower Loper Thread

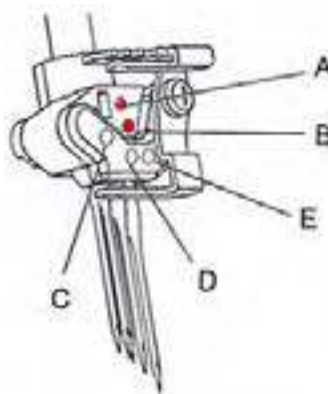
SET UP:

Needle:



Set at:

ATD: Auto Tension Dial	"G"
Left Cover Stitch Needle "C"	Not Threaded
Middle Cover Stitch Needle "D"	Not Threaded
Right Cover Stitch Needle "E"	Not Threaded
Overedge Left Needle "A" (Orange)	Threaded
Overedge Right Needle "B" (Blue)	Threaded
Upper Looper (Green)	Looper Engaged and Not Threaded
Spreader	Engaged
Lower Looper (Red)	Threaded
Chain Stitch Looper (Brown)	Not Threaded
Upper Looper Clutch	"L"
Upper Knife	Engaged
Seam Guide Plate	Not Installed Use Knife Guide
Seam Width Dial	"N"
Stitch Length Dial	"2"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"N"



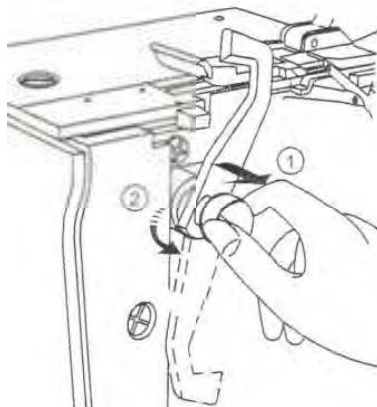
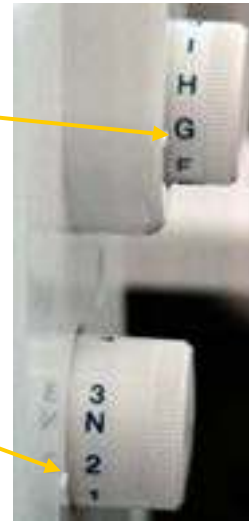
- ◆ Turn Auto Tension Dial to “G”.

- ◆ Turn Stitch Length Dial to “2”.

- ◆ Engage Upper Knife.

The knife will not trim the fabric when it is disengaged.

1. Open Looper Cover.
2. Pull the movable knife holder (silver screw) to the right as far as it will go.
3. Turn the holder clockwise until the knife clicks into a lock position.



Upper Knife Disengaged



Upper Knife Engaged

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- ◆ Turn Presser Foot Pressure Dial to “N”.



- ◆ Turn Differential Feed Dial to “N”.



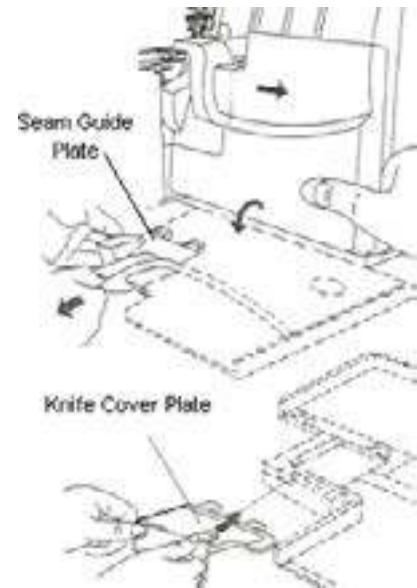
- ◆ Turn Seam Width Dial to “N”.



- ◆ Set Stitch Finger to “N”.

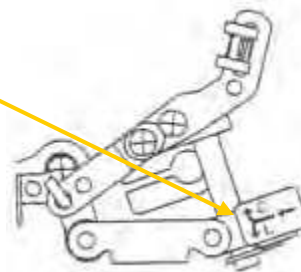


- ◆ Install the Knife Cover.



- ◆ Engage Upper Looper. Engaging the Upper Looper causes the looper to move when sewing. Even though the Upper Looper is not threaded it needs to be engaged.

1. Push the clutch button to the left and down to engage.
2. Turn handwheel.

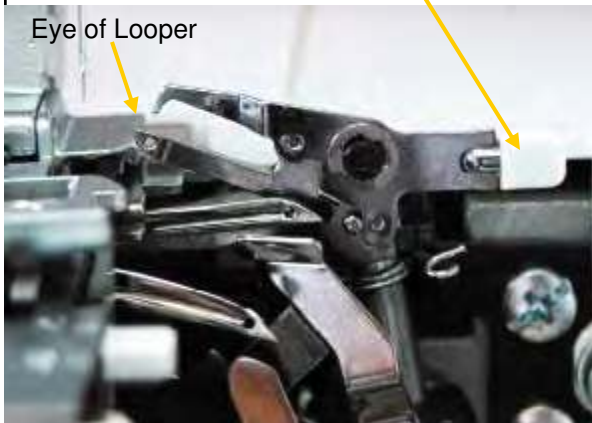


Upper Looper Disengaged



Upper Looper Engaged

- ◆ Engage Spreader. The Upper Looter has a hole for the thread on the top of the looper. If the stitch requires that the looper be engaged, but not threaded then the Spreader is used. The Spreader simply plugs-in (or closes) the looper's hole. The Spreader is disengaged when the Upper Looter is engaged/operative and threaded. The Spreader is used with a stitch that requires only one looper thread. With the help of the Spreader the single looper thread wraps around the fabric's edge.
 1. Raise the white handle on the Spreader to insert the tip into the eye of the Upper Looter.

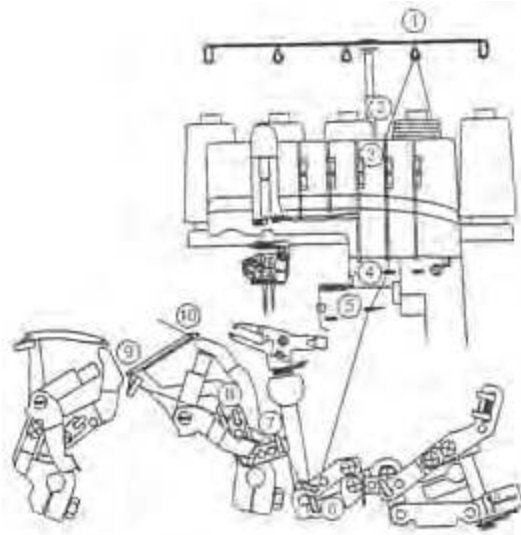
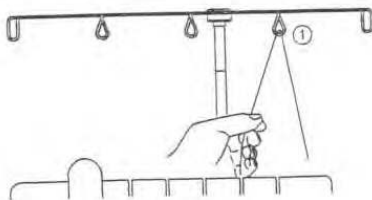


Spreader Disengaged

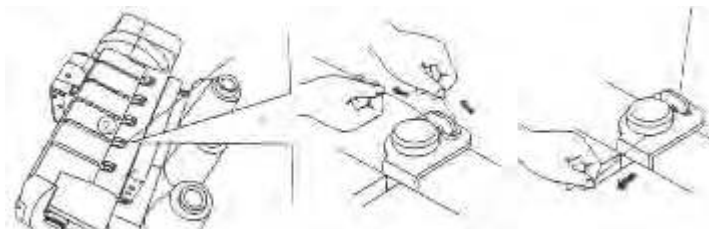


Spreader Engaged

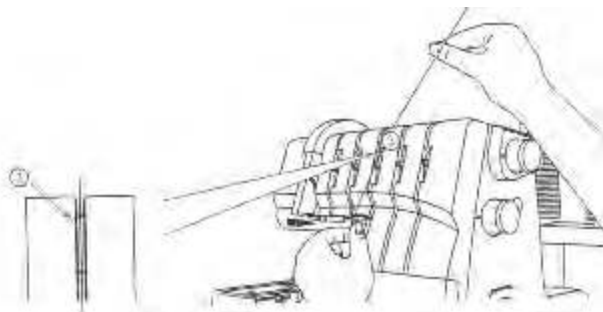
- ◆ Thread Lower Looter with regular overlock thread.
 1. Raise the Presser Foot to release the Tension disks. Thread the Lower Looter as illustrated 1-10.
 2. Pass thread from back to the front through the thread guide.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

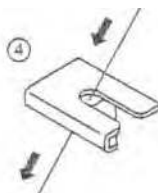


4. While holding the thread, firmly pull the thread between the tension disks.



5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately 1/2 inch) from the needle plate edge.
6. Thread the looper area of the machine following the red color coded thread guides 4-10.

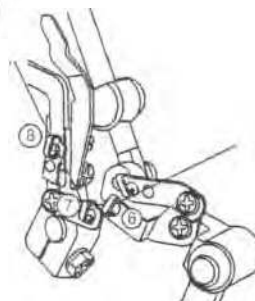
7. Place the thread slightly from left and to the right of threading guide ④.



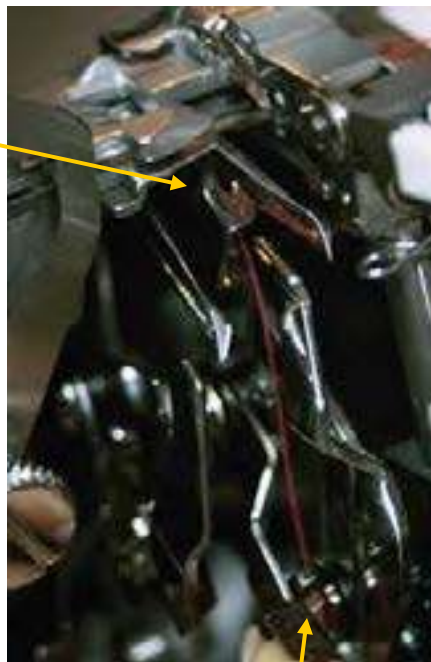
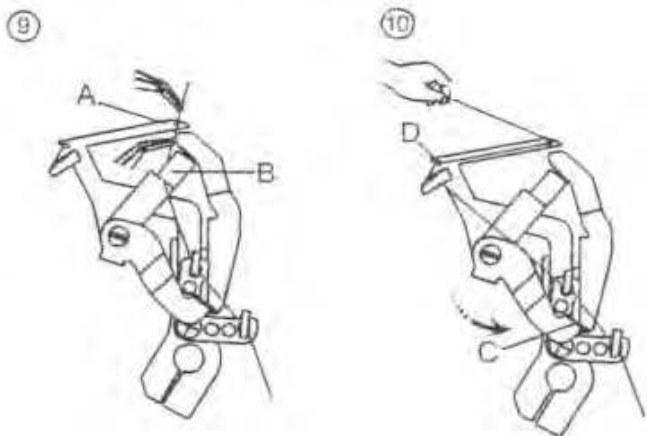
8. Place the thread slightly from the front and to the back of threading guide ⑤.



9. Place the thread through ⑥, ⑦, and ⑧.



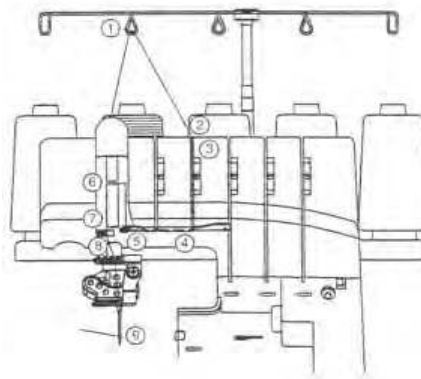
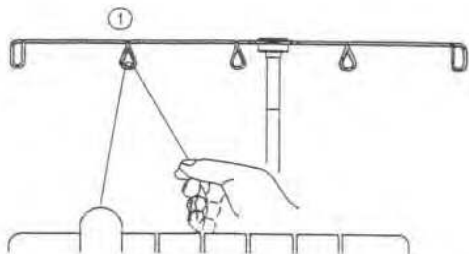
10. Thread the looper eye (A) from front to back. Pull about 4 inches of thread. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull Threader lever (C) up into place (D).



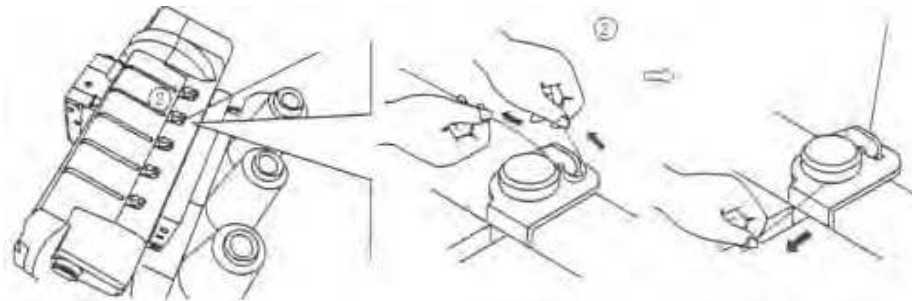
Threader Lever

◆ Thread Right Overedge needle with regular overlock thread.

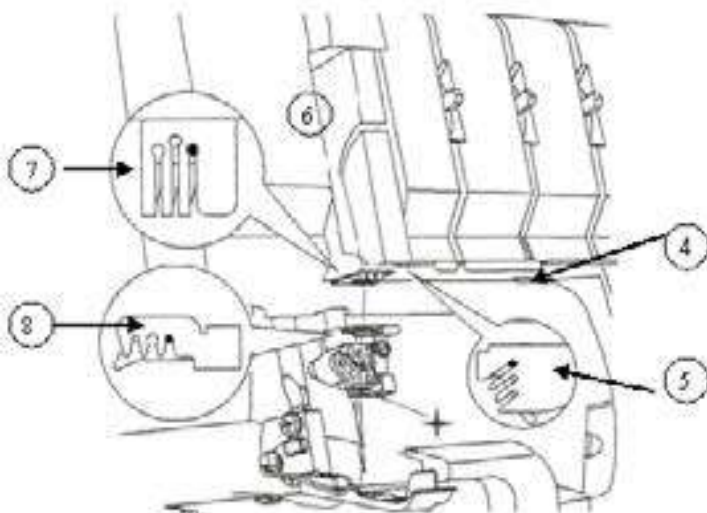
1. Raise the Presser Foot to release the tension disks. Thread the right needle as illustrated 1-9.
2. Pass thread from back to the front through the thread guide ①.



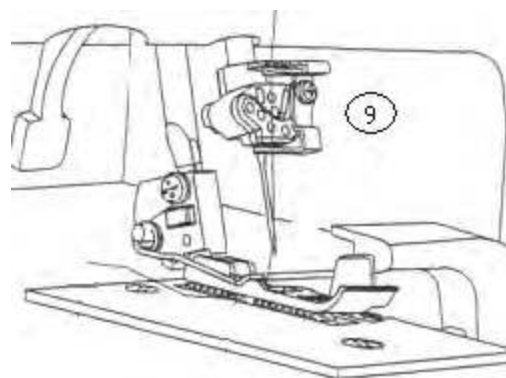
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



4. Continue to thread points 4-8. Slip the thread into the rear slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the right slot of the thread guides ⑦ and ⑧.



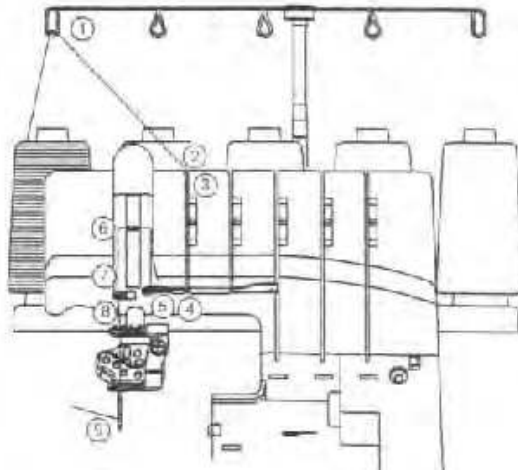
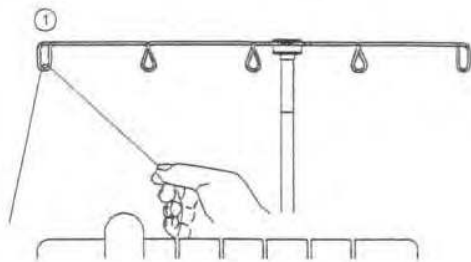
5. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.



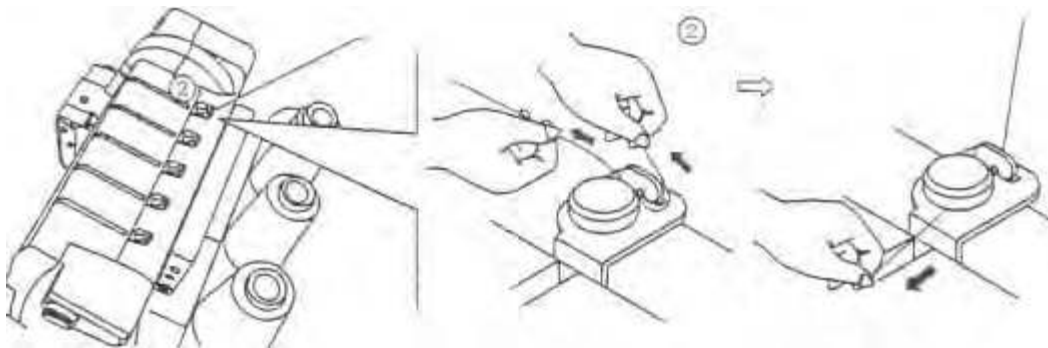
◆ Thread Left Overedge needle with regular thread.

1. Raise the Presser foot to release the tension disks. Thread the left needle as indicated 1-9.

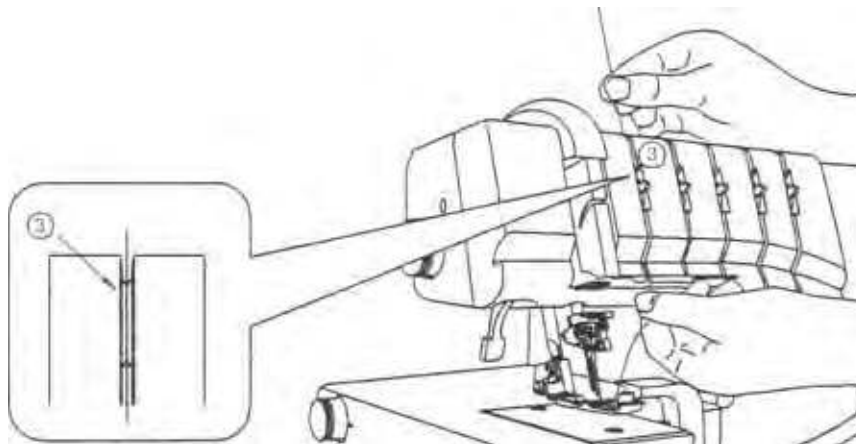
2. Pass thread from back to the front through the thread guide ①.



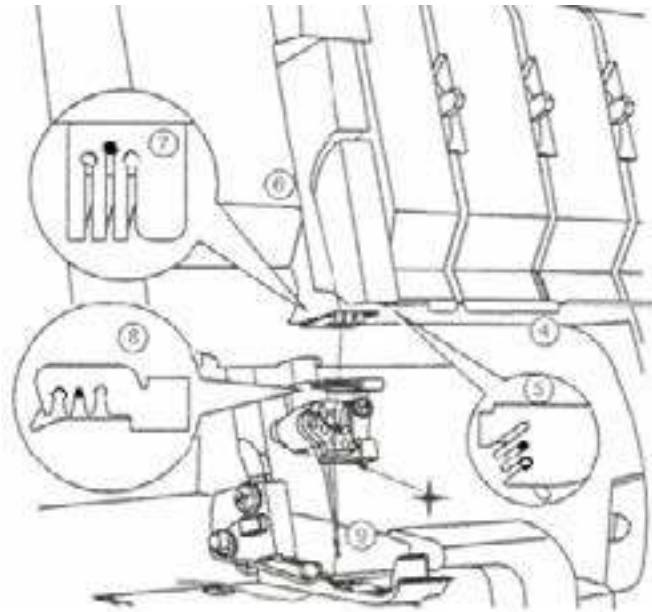
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



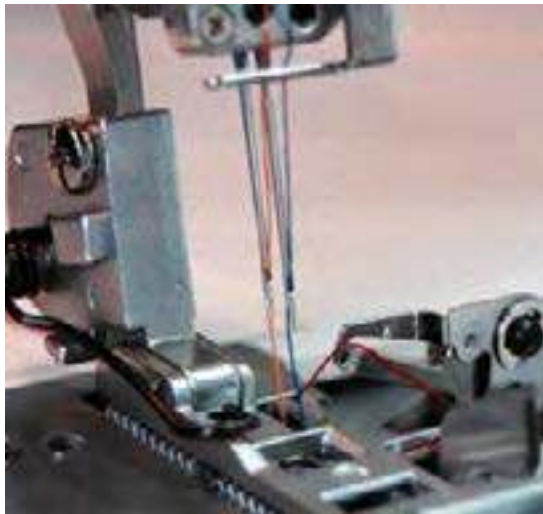
4. While holding the thread firmly, pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.
6. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.



7. Thread the eye of the Left Overedge Needle ⑨.



8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot. Lower foot and sew.

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TRY IT:

- ◆ Align two pieces of fabric, right sides together so that the knife just slightly trims the fabric's edges.
- ◆ Sew.



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Chapter 7: Four-Thread Ultra-Stretch Mock Safety Stitch



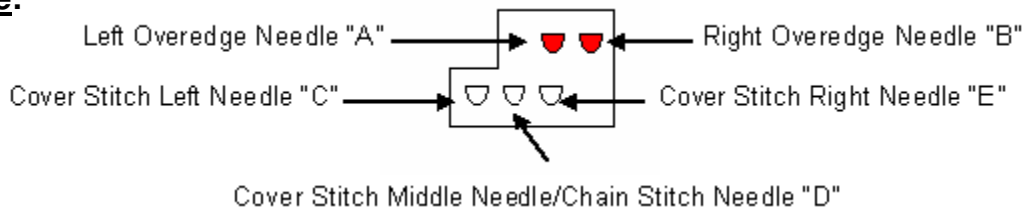
Four-Thread Ultra-Stretch Mock Safety Stitch

The Four-Thread Ultra-Stretch Mock Safety Stitch is stronger than the Three-Thread Ultra-Stretch Mock Safety Stitch. The additional thread provides added strength to the seam and is good choice for knits as well as wovens. This stitch works well when applying ribbing to a garment. Ribbing is often seen on cuffs, collars and waistbands of active wear. This stitch requires two needle threads and two looper threads.



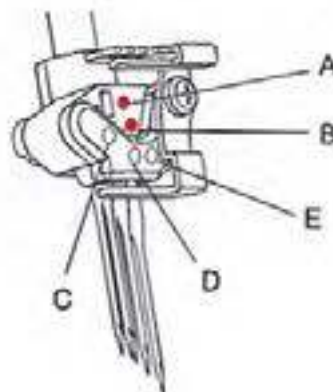
SET UP:

Needle:



Set at:

ATD: Auto Tension Dial	"A"
Left Cover Stitch Needle "C"	Not Threaded
Middle Cover Stitch Needle "D"	Not Threaded
Right Cover Stitch Needle "E"	Not Threaded
Overedge Left Needle "A" (Orange)	Threaded
Overedge Right Needle "B" (Blue)	Threaded
Upper Looper (Green)	Looper Engaged and Threaded
Spreader	Disengaged
Lower Looper (Red)	Threaded
Chain Stitch Looper (Brown)	Not Threaded
Upper Looper Clutch	"L"
Upper Knife	Engaged
Seam Guide Plate	Not Installed Use Knife Guide
Seam Width Dial	"N"
Stitch Length Dial	"N"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"N"



Sweatshirt sample



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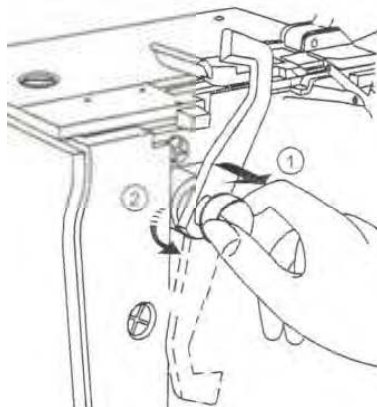
- ◆ Turn Auto Tension Dial to “A”.

- ◆ Turn Stitch Length Dial to “N”.

- ◆ Engage Upper Knife.

The knife will not trim the fabric when it is disengaged.

1. Open Looper Cover.
2. Pull the movable knife holder (silver screw) to the right as far as it will go.
3. Turn the holder clockwise until the knife clicks into a lock position.



Upper Knife Disengaged



Upper Knife Engaged

- ◆ Turn Presser Foot Pressure Dial to “N”.



- ◆ Turn Differential Feed Dial to “N”.



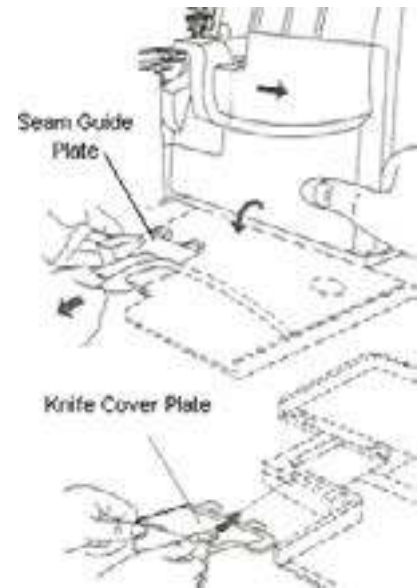
- ◆ Turn Seam Width Dial to “N”.



- ◆ Set Stitch Finger to “N”.

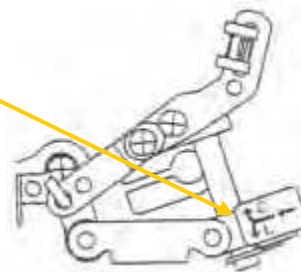


- ◆ Install the Knife Cover.



- ◆ Engage Upper Looper. Engaging the Upper Looper causes the looper to move when sewing. Even though the Upper Looper is not threaded, it needs to be engaged.

1. Push the clutch button to the left and down to engage.
2. Turn handwheel.

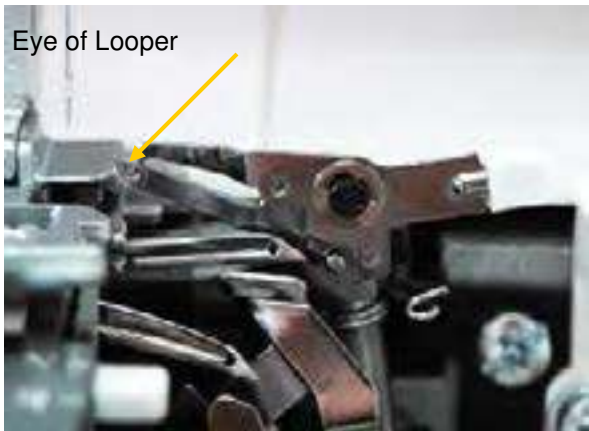


Upper Looper Disengaged



Upper Looper Engaged

- ◆ Disengage Spreader. The Upper Loper has a hole for the thread on the top of the looper. If the stitch requires that the looper be engaged but not threaded then the Spreader is used. The Spreader simply plugs-in (or closes) the looper's hole. The Spreader is disengaged when the Upper Loper is engaged/operative and threaded. The Spreader is used with a stitch that requires only one looper thread. With the help of the Spreader the single looper thread wraps around the fabric's edge.
 1. Lower the white handle on the Spreader to open the eye of the Upper Loper.



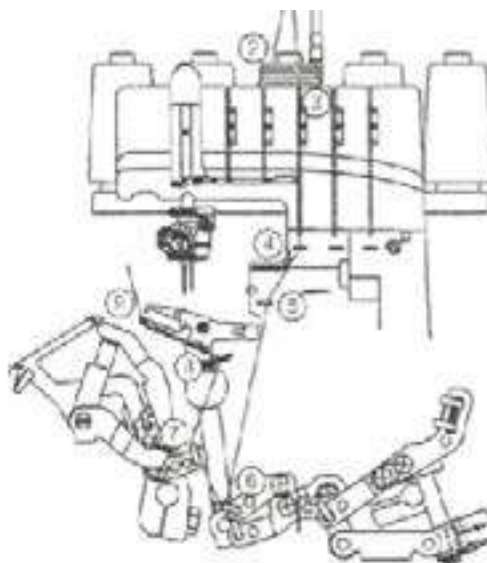
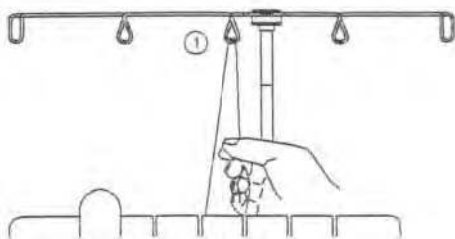
Spreader Engaged



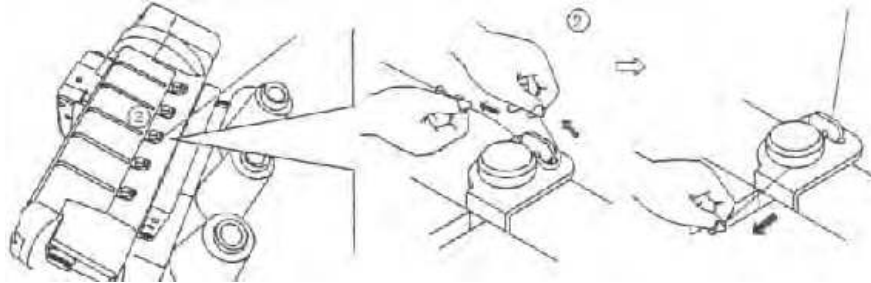
Spreader Disengaged

- ◆ Thread Upper Loper with regular overlock thread.
 1. Raise the Presser Foot to release the tension disks. Thread the Lower Loper as illustrated 1-9.

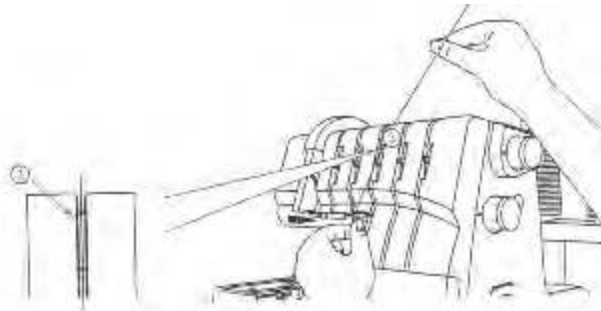
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

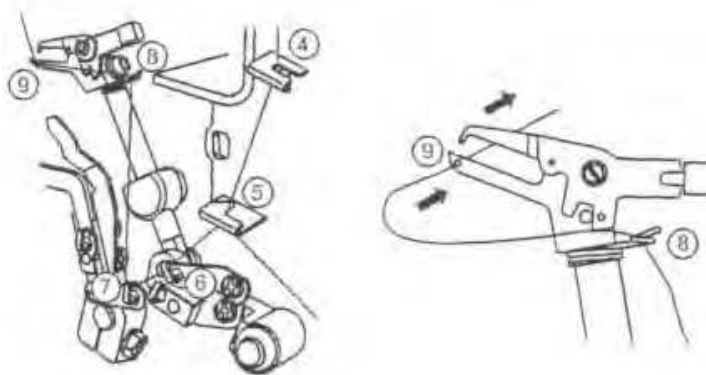


4. While holding the thread firmly, pull the thread between the tension disks.



5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately 1/2 inch) from the needle plate edge.

6. Thread the looper area of the machine following the green color coded thread guides 4-9.

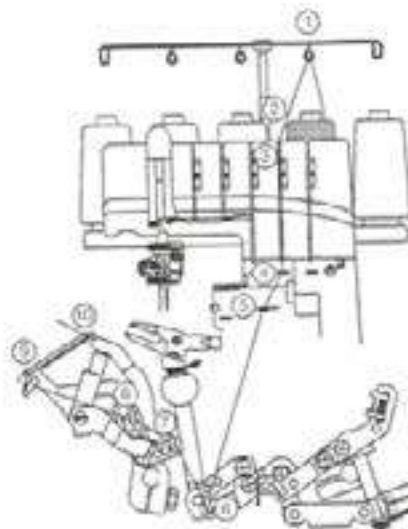
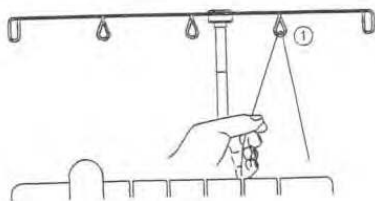


7. Thread the hole in the Upper Looter from front to back ⑨. Pull about 4 inches of thread through the looper and place to the back of the throat plate.

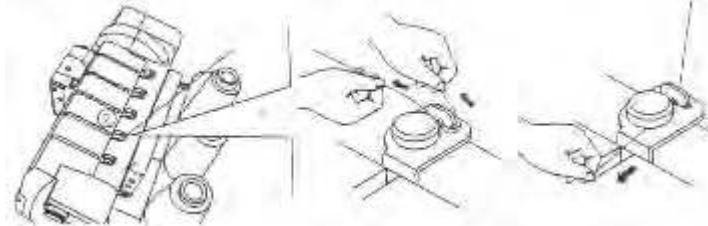


◆ Thread Lower Looter with regular overlock thread.

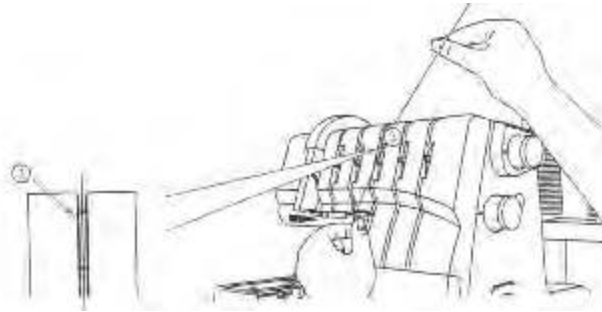
1. Raise the Presser Foot to release the Tension disks. Thread the Lower Looter as illustrated 1-10.
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

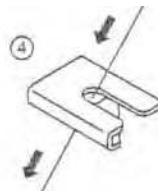


4. While holding the thread, firmly pull the thread between the tension disks.



5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately 1/2 inch) from the needle plate edge.
6. Thread the looper area of the machine following the red color coded thread guides 4-10.

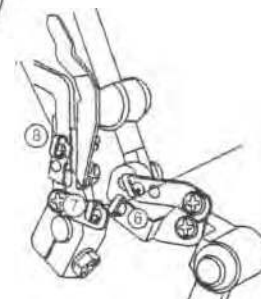
7. Place the thread slightly from left and to the right of threading guide ④.



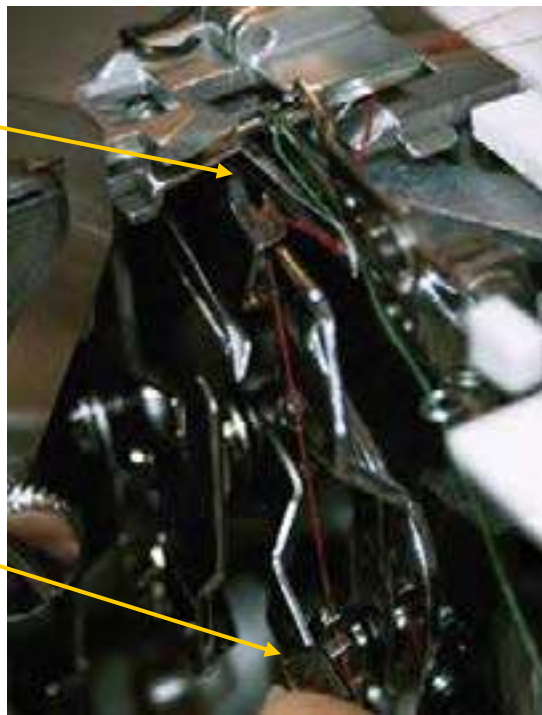
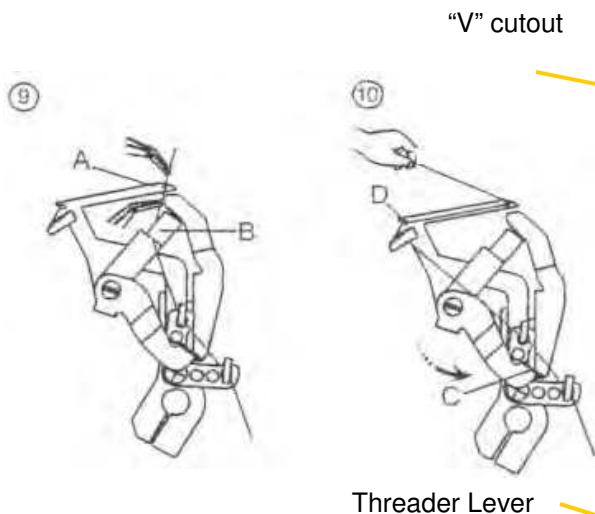
8. Place the thread slightly from the front and to the back of threading guide ⑤.



9. Place the thread through ⑥, ⑦, and ⑧.



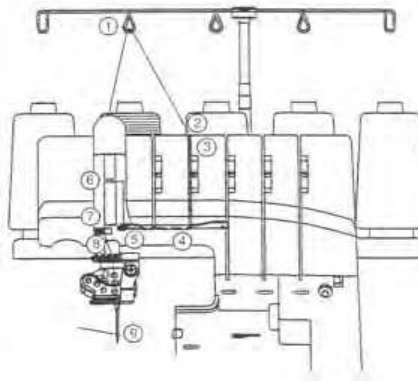
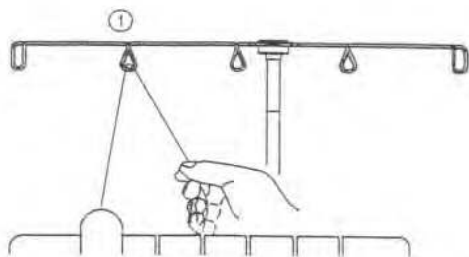
10. Thread the looper eye (A) from front to back. Pull about 4 inches of thread. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull Threader lever (C) up into place (D).



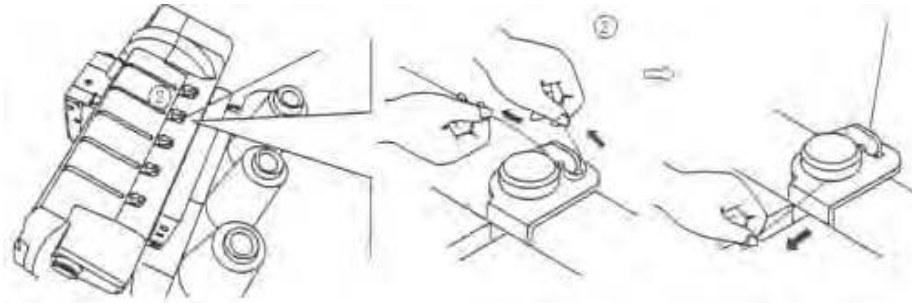
NOTE: Make sure the Upper Looper thread is behind the Lower Looper thread.

◆ Thread Right Overedge needle with regular overlock thread.

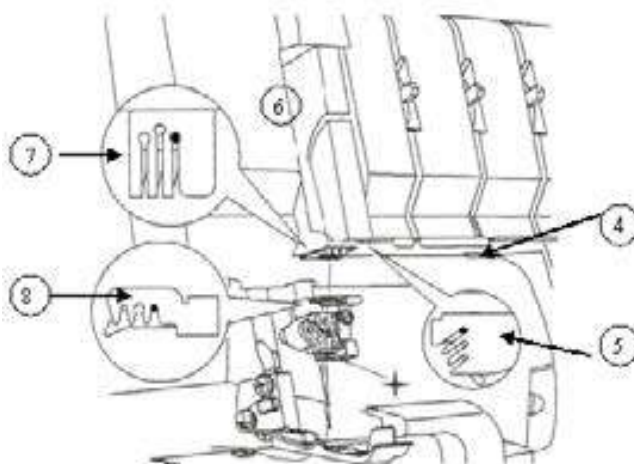
1. Raise the Presser Foot to release the tension disks. Thread the right needle as illustrated 1-9.
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

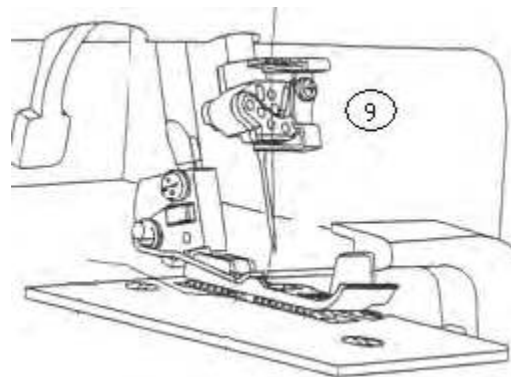


4. Continue to thread points 4-8. Slip the thread into the rear slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the right slot of the thread guides ⑦ and ⑧.



5. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.

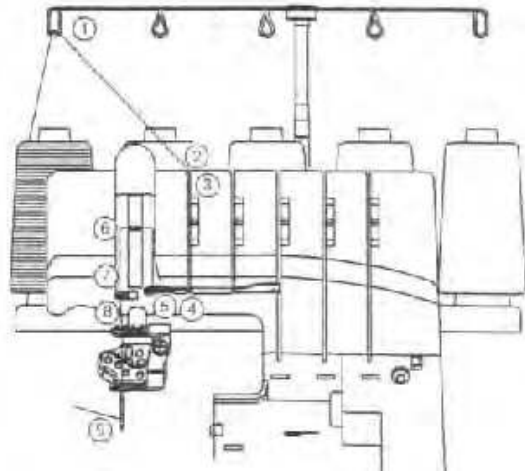
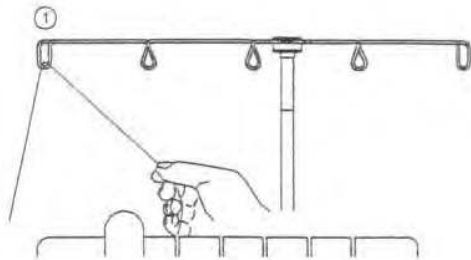
6. Thread the eye of the Overedge Right Needle ⑨.



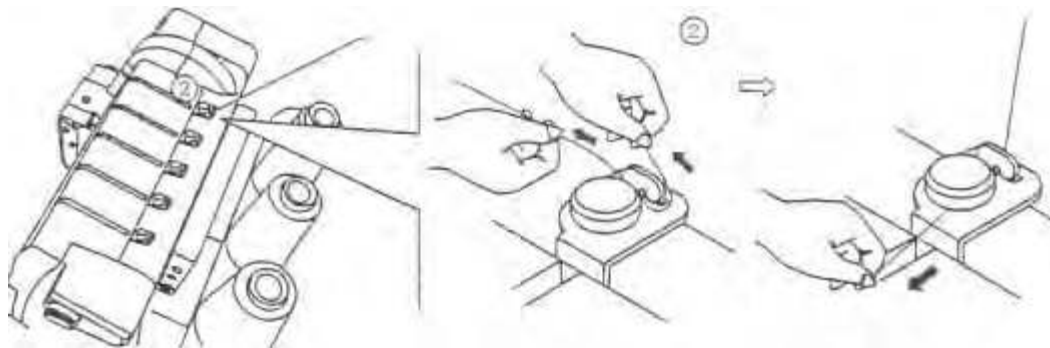
◆ Thread Left Overlock needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.

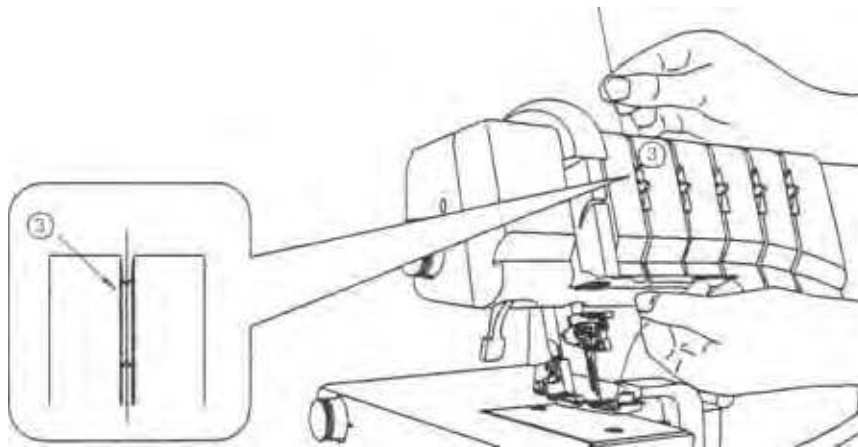
2. Pass thread from back to the front through the thread guide ①.



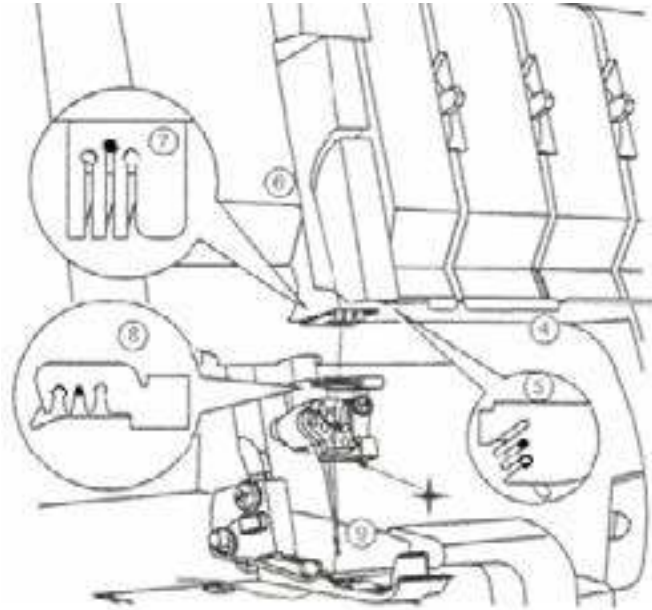
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread towards the right side of the button as illustrated.



4. While holding the thread firmly, pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.
6. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.



7. Thread the eye of the Left Overedge Needle ⑨.



8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot. Lower foot and sew.

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TRY IT:

- ◆ Fold ribbing lengthwise.
- ◆ Place ribbing on top of fleece.
- ◆ Align the fabric so that the knife just slightly trims both the ribbing and fleece fabric edges.
- ◆ Sew, stretching the ribbing as needed.



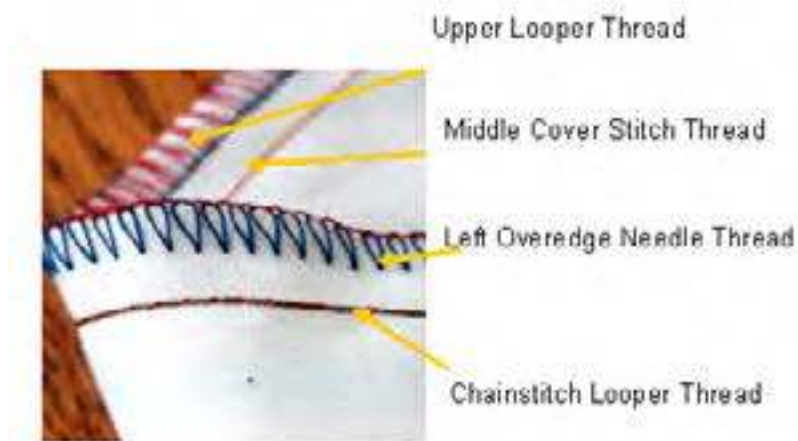
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Chapter 8: Four-Thread Safety Stitch



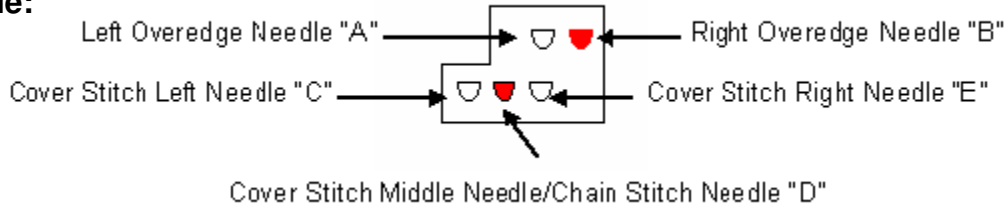
Four-Thread Safety Stitch

This stitch is an alternative to the Five-Thread Safety Stitch. It offers the same type of Two-Thread Chainstitch. However the Three-Thread Overlock is now replaced by a Two-Thread Overedge finish. The Four-Thread Safety Stitch is appropriately used when sewing a medium weight woven fabric. Because there is one less thread being used, the stitch is less bulky. However, it is still strong enough not to require straight stitch reinforcement from a conventional sewing machine. This stitch requires two needle threads and two looper threads.



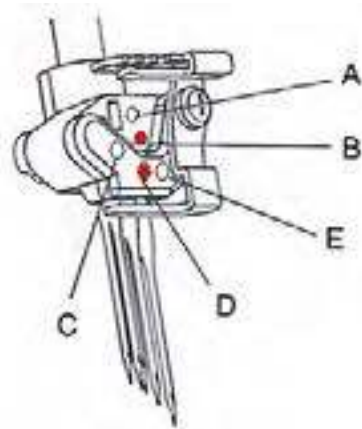
SET UP:

Needle:



Set at:

ATD: Auto Tension Dial	"I"
Left Cover Stitch Needle "C"	Not Threaded
Middle Cover Stitch Needle "D" (Orange)	Threaded
Right Cover Stitch Needle "E"	Not Threaded
Overedge Left Needle "A"	Not Threaded
Overedge Right Needle "B" (Blue)	Threaded
Upper Looper	Looper Engaged and Not Threaded
Spreader	Engaged
Lower Looper (Red)	Threaded
Chain Stitch Looper (Brown)	Threaded
Upper Looper Clutch	"L"
Upper Knife	Engaged
Seam Guide Plate	Not Installed
Seam Width Dial	"N"
Stitch Length Dial	"N"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"N"



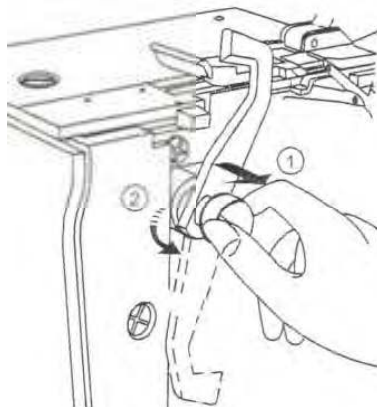
- ◆ Turn Auto Tension Dial to “I”.

- ◆ Turn Stitch Length Dial to “N”.

- ◆ Engage Upper Knife.

The knife will not trim the fabric when it is disengaged.

1. Open Looper Cover.
2. Pull the movable knife holder (silver screw) to the right as far as it will go.
3. Turn the holder clockwise until the knife clicks into a lock position.



Upper Knife Disengaged



Upper Knife Engaged

- ◆ Turn Presser Foot Pressure Dial to “N”.



- ◆ Turn Differential Feed Dial to “N”.



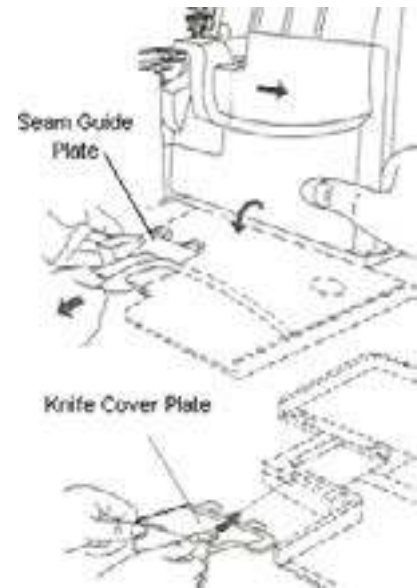
- ◆ Turn Seam Width Dial to “N”.



- ◆ Set Stitch Finger to “N”.

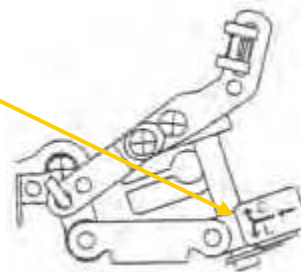


- ◆ Install the Knife Cover.



- ◆ Engage Upper Looper. Engaging the Upper Looper, causes the looper to move when sewing. Even though the Upper Looper is not threaded it needs to be engaged.

1. Push the clutch button to the left and down to engage.
2. Turn handwheel.

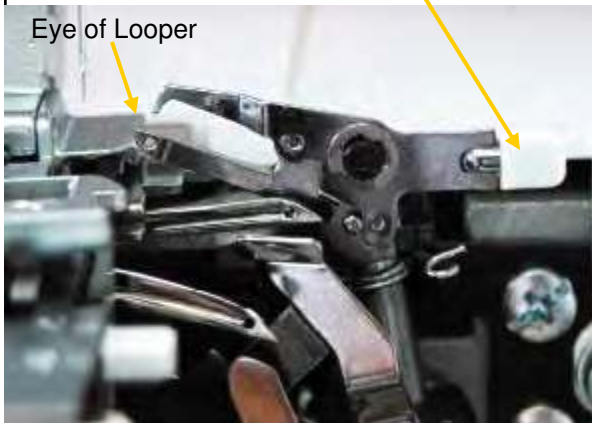


Upper Looper Disengaged



Upper Looper Engaged

- ◆ Engage Spreader. The Upper Loper has a hole for the thread on the top of the looper. If the stitch requires that the looper be engaged, but not threaded then the Spreader is used. The Spreader simply plugs-in (or closes) the looper's hole. The Spreader is disengaged when the Upper Loper is engaged/operative and threaded. The Spreader is used with a stitch that requires only one looper thread. With the help of the Spreader the single looper thread wraps around the fabric's edge.
 1. Raise the white handle on the Spreader to insert the tip into the eye of the Upper Loper.

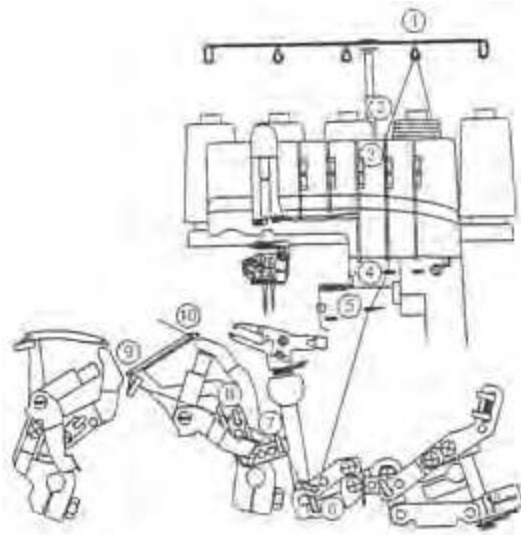
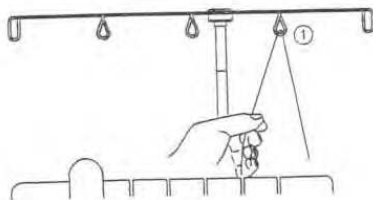


Spreader Disengaged

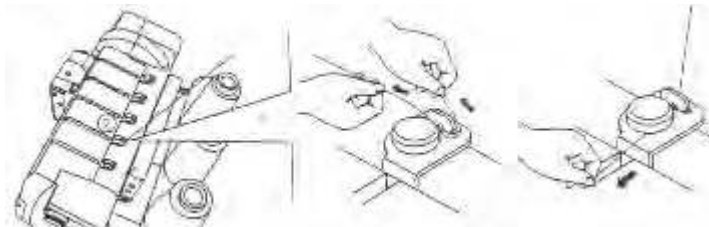


Spreader Engaged

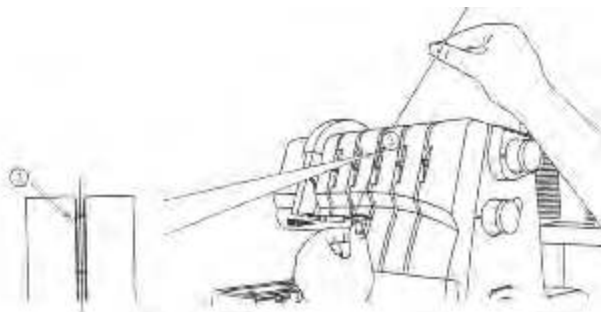
- ◆ Thread Lower Loper with regular overlock thread.
 1. Raise the Presser Foot to release the tension disks. Thread the Lower Loper as illustrated 1-10.
 2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

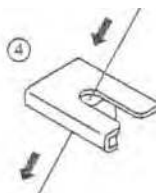


4. While holding the thread, firmly pull the thread between the tension disks.



5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately 1/2 inch) from the needle plate edge.
6. Thread the looper area of the machine following the red color coded thread guides 4-10.

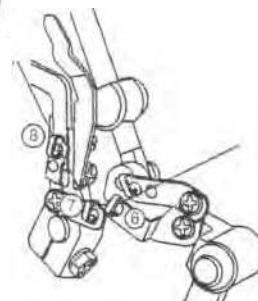
7. Place the thread slightly from left and to the right of threading guide ④.



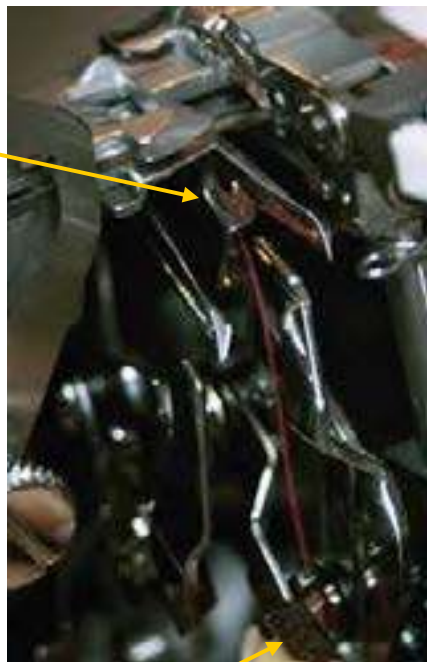
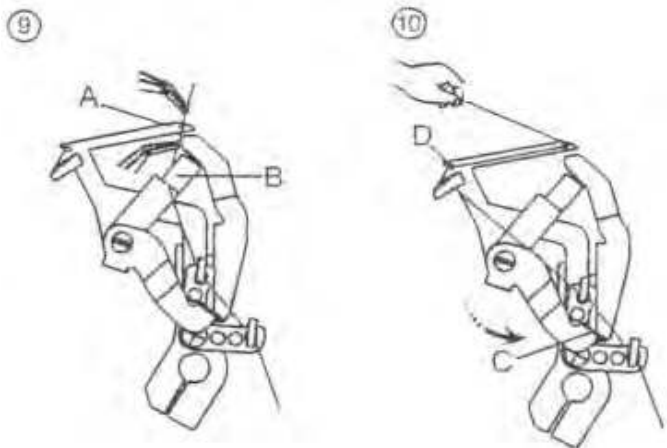
8. Place the thread slightly from the front and to the back of threading guide ⑤.



9. Place the thread through ⑥, ⑦, and ⑧.



10. Thread the looper eye (A) from front to back. Pull about 4 inches of thread. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull Threader lever (C) up into place (D).

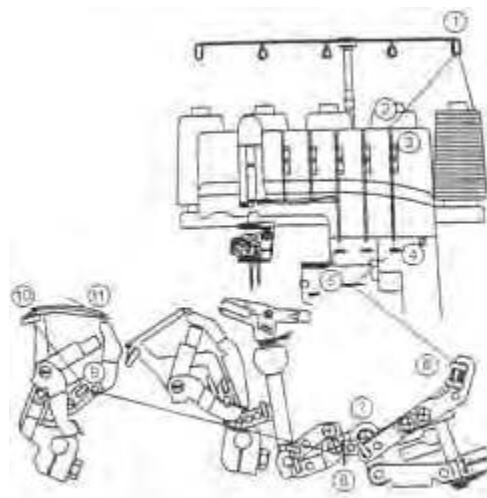
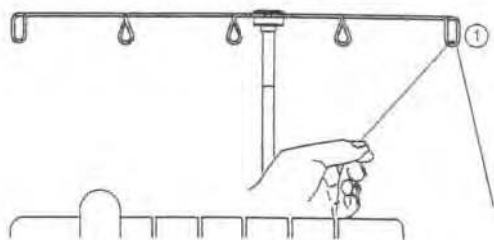


"V" cutout

Threader Lever

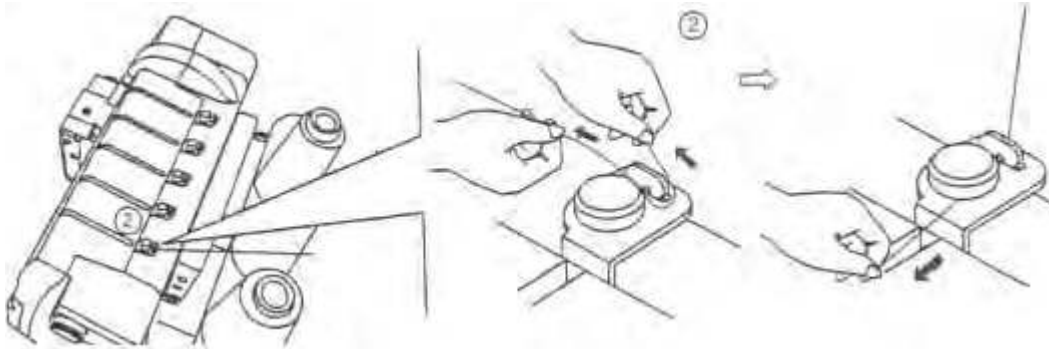
◆ Thread Chainstitch Looper with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Pass the thread from the back to the front through the thread guide ①.

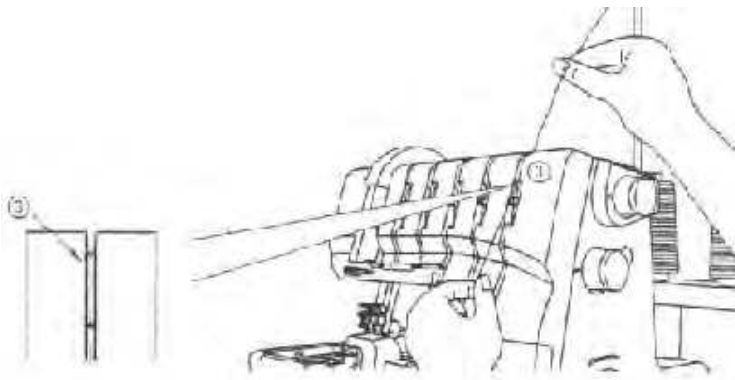


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2. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull thread along the right side of the button, as illustrated.



3. While holding the thread, firmly pull the thread between the tension disks.

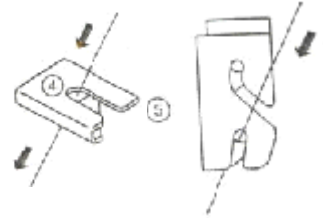


4. Turn the hand wheel toward you until the Chainstitch Looper extends out 10mm (approximately 1/2") from the needle plate edge.



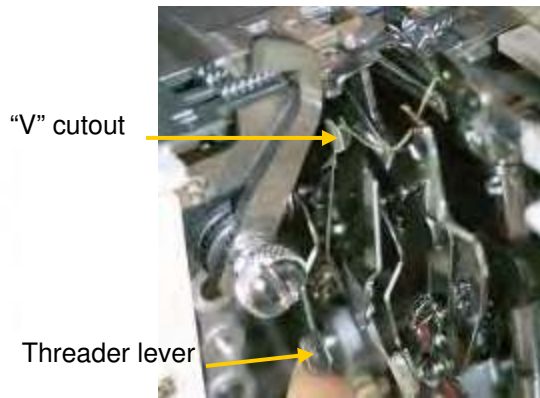
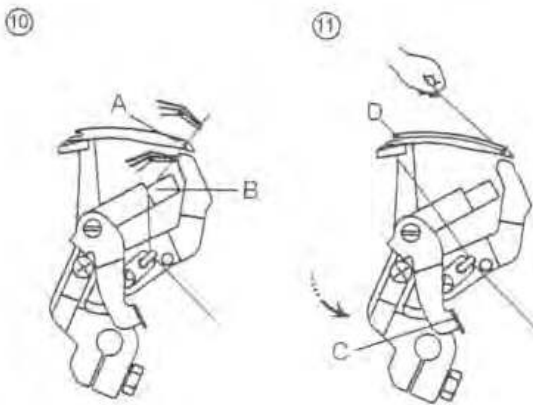
5. Thread the looper area of the machine following the brown color-coded thread guides 4-11. Use the tweezers provided in the accessory case to aid in threading the looper.

6. Place the thread through threading guide ④ and ⑤.



7. Continue threading guides ⑥, ⑦, ⑧ and ⑨.

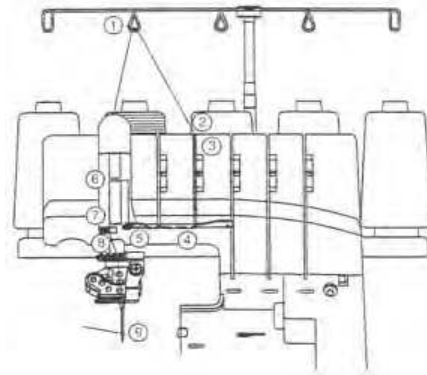
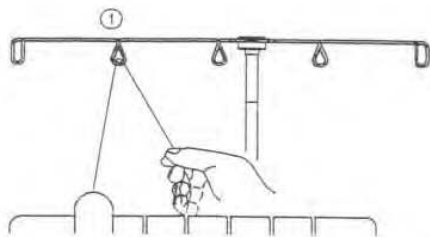
8. Thread the looper eye (A) from front to back. Pull about 4 inches of thread through the looper. Position the thread into the V cutout (B) on the threader. Firmly hold the thread tail with your left hand and pull threader lever (C) up into place (D). Gently pull 5-6" of thread to the back of the machine.



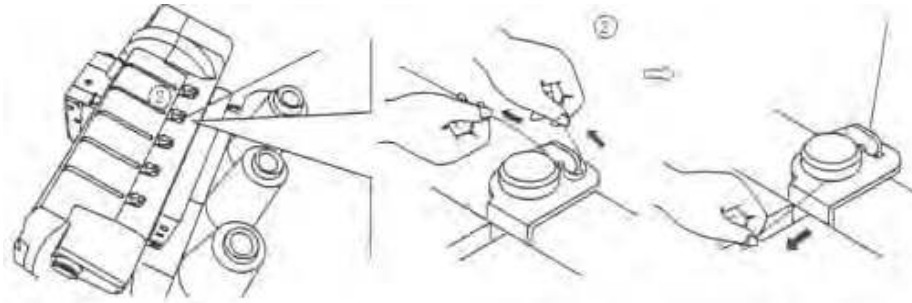
◆ Thread Right Overedge with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the right needle as illustrated 1-9.

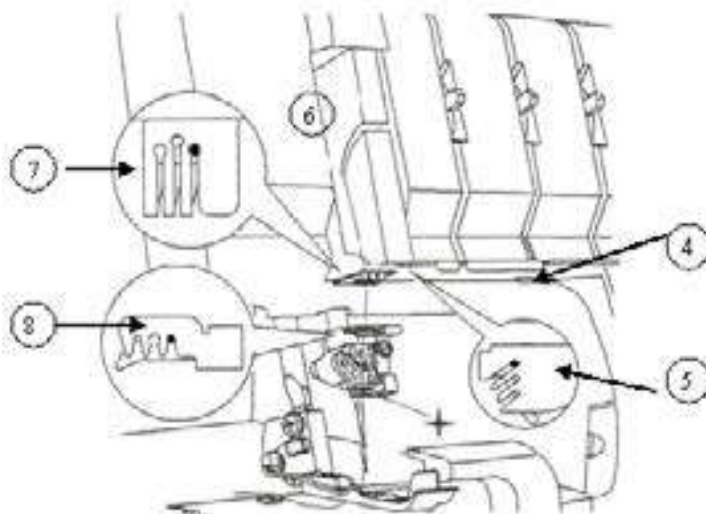
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

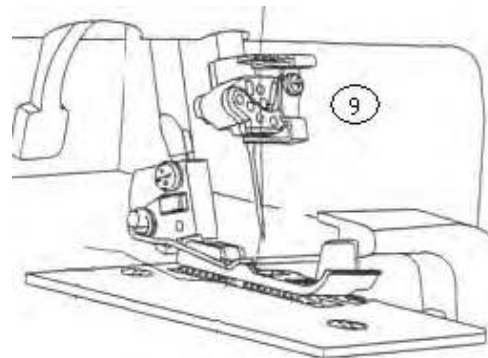


4. Continue to thread points 4-8. Slip the thread into the rear slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the right slot of the thread guides ⑦ and ⑧.



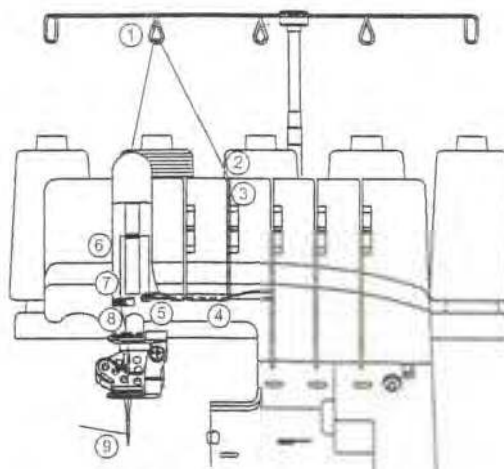
5. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.

6. Thread the eye of the Right Overedge Needle ⑨.

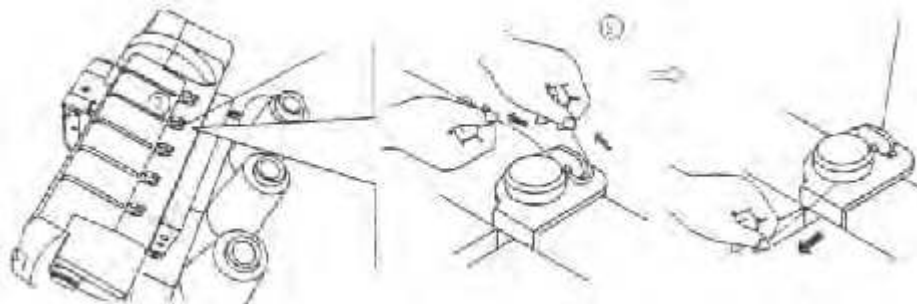


◆ Thread Middle Cover Stitch with regular overlock thread.

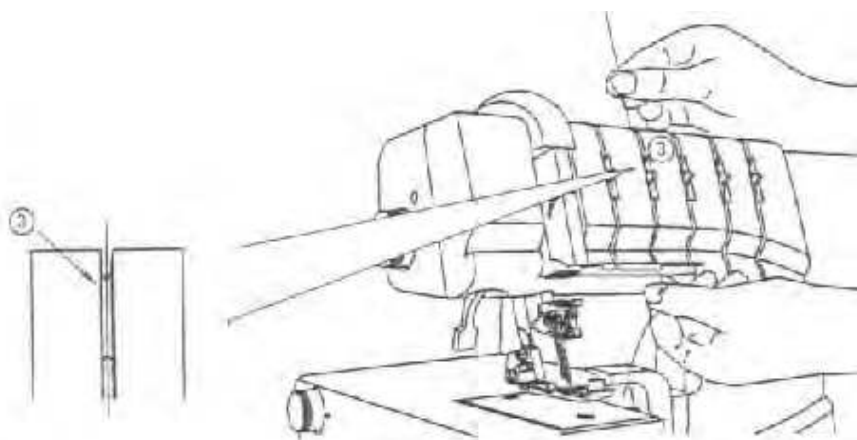
1. Raise the Presser Foot to release the tension disks. Thread the Cover Stitch Middle/Chain Stitch needle as illustrated 1-9.
2. Pass thread from back to the front through the thread guide ①.



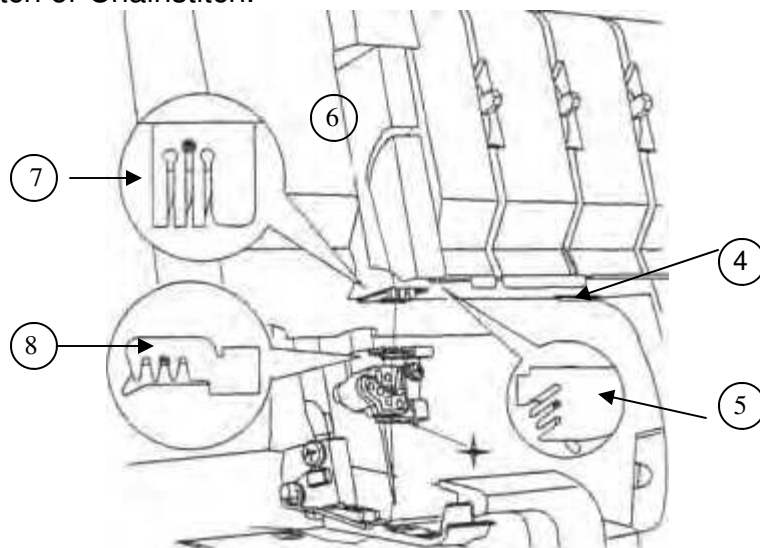
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



4. While holding the thread, firmly pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.
6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp for the Cover Stitch or Chainstitch.



7. Thread the eye of the middle needle ⑨.



8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot. Lower foot and sew.

TRY IT:

- ◆ Place two pieces of broadcloth right sides together.
- ◆ Align the fabric so that that the knife just slightly trims the fabric edge.
- ◆ Sew.



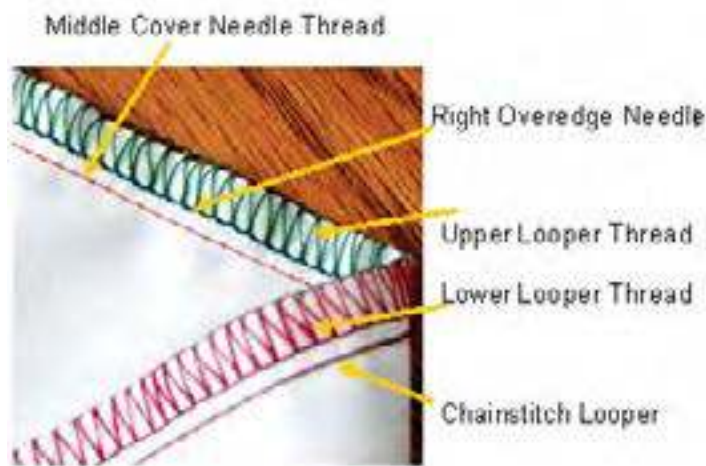
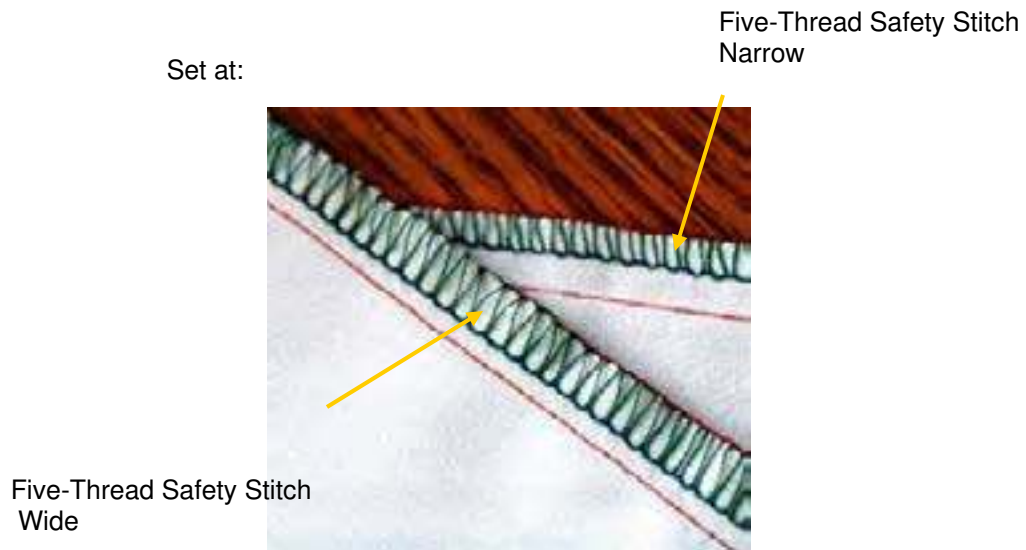
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Chapter 9: Five-Thread Safety Stitch Wide



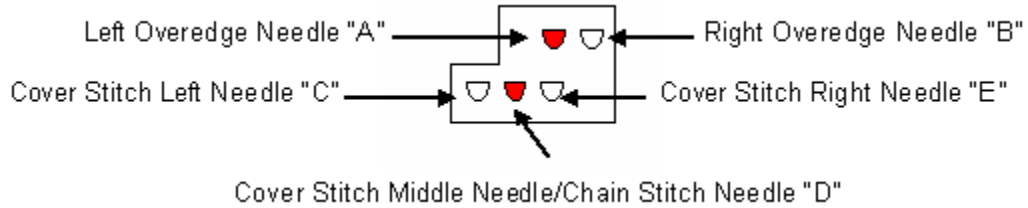
Five-Thread Safety Stitch Wide

This stitch is a combination of a Two-Thread Chainstitch and a Three-Thread Overlock Stitch. It is suitable for woven fabrics and provides a durable seam for heavy weight fabrics such as denim and terrycloth. Using this strong safety stitch eliminates the need to reinforce the seam with a conventional sewing machine straight stitch. The Presser Foot Pressure Adjusting Dial makes it simple to sew on all weights of fabrics. The Five-Thread Safety Stitch can have a width of 2.8mm or 5.6mm, depending on which overlock needle position is chosen.

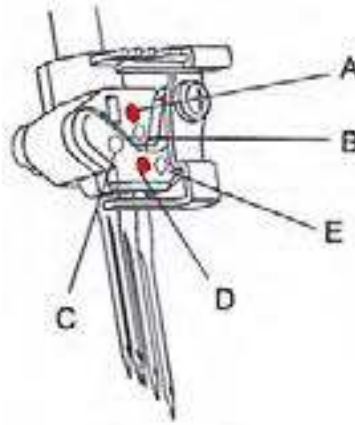


SET UP:

Needles:



ATD: Auto Tension Dial	"B"
Left Cover Stitch Needle "C"	Not Threaded
Middle Cover Stitch Needle "D" (Orange)	Threaded
Right Cover Stitch Needle "E"	Not Threaded
Overedge Left Needle "A" (Blue)	Threaded
Overedge Right Needle "B"	Not Threaded
Upper Looper (Green)	Looper Engaged and Threaded
Spreader	Not Used
Lower Looper (Red)	Threaded
Chain Stitch Looper (Brown)	Threaded
Upper Looper Clutch	"L"
Upper Knife	Engaged
Seam Guide Plate	Not Installed
Seam Width Dial	"N"
Stitch Length Dial	"N"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"N"



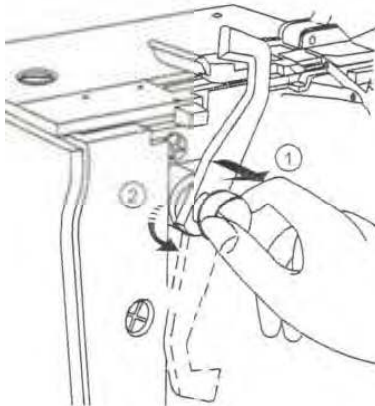
- ◆ Turn Auto Tension Dial to “B”.

- ◆ Turn Stitch Length Dial to “N”.

- ◆ Engage Upper Knife.

The knife will not trim the fabric when it is disengaged.

1. Open Looper Cover.
2. Pull the movable knife holder (silver screw) to the right as far as it will go.
3. Turn the holder clockwise until the knife clicks into a lock position.



Upper Knife Disengaged



Upper Knife Engaged

- ◆ Turn Presser Foot Pressure Dial to “N”.



- ◆ Turn Differential Feed Dial to “N”.



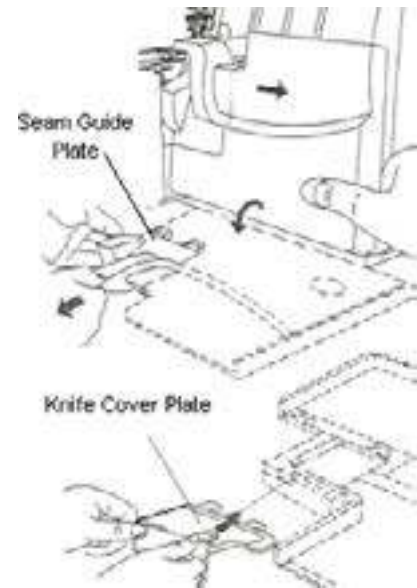
- ◆ Turn Seam Width Dial to “N”.



- ◆ Set Stitch Finger to “N”.

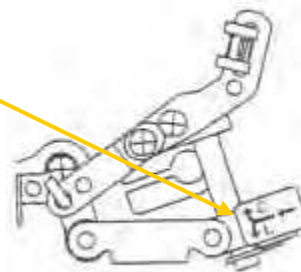


◆ Install the Knife Cover.



◆ Engage Upper Looper. Engaging the Upper Looper causes the looper to move when sewing. Even though the Upper Looper is not threaded, it needs to be engaged.

1. Push the clutch button to the left and down to engage.
2. Turn handwheel.



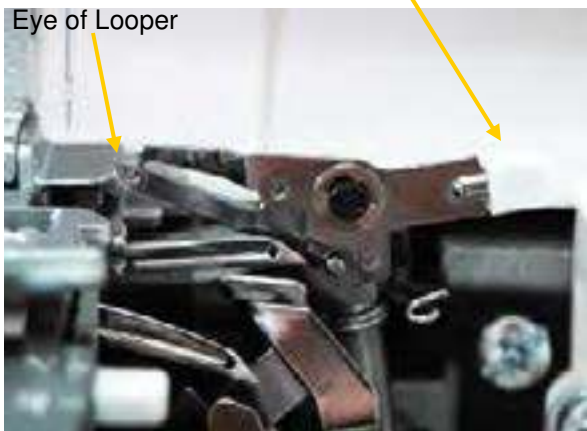
Upper Looper Disengaged



Upper Looper Engaged

- ◆ Disengage Spreader. The Upper Looter has a hole for the thread on the top of the looper. If the stitch requires that the looper be engaged but not threaded, then the Spreader is used. The Spreader simply plugs-in (or closes) the looper's hole. The Spreader is disengaged when the Upper Looter is engaged/operative and threaded. The Spreader is used with a stitch that requires only one looper thread. With the help of the Spreader the single looper thread wraps around the fabric's edge.

1. Lower the white handle on the Spreader to open the eye of the Upper Looter.



Spreader Engaged

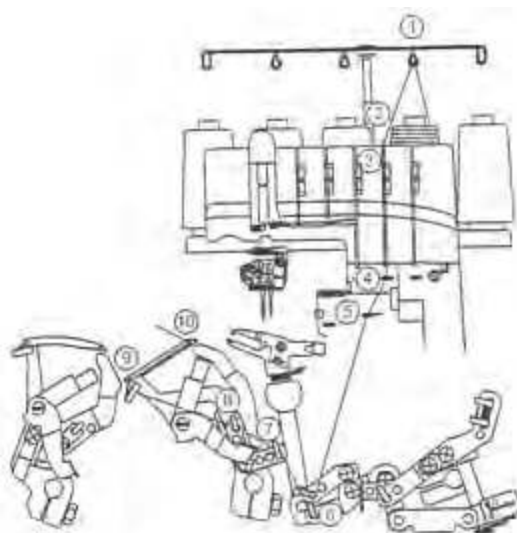
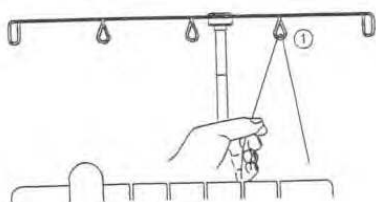


Spreader Disengaged

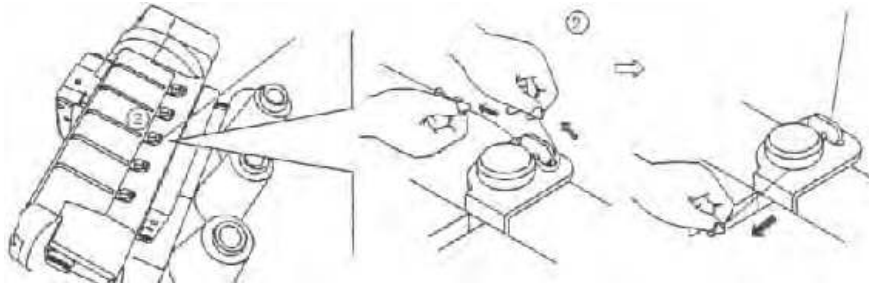
- ◆ Thread Upper Looter with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the Lower Looter as illustrated 1-9.

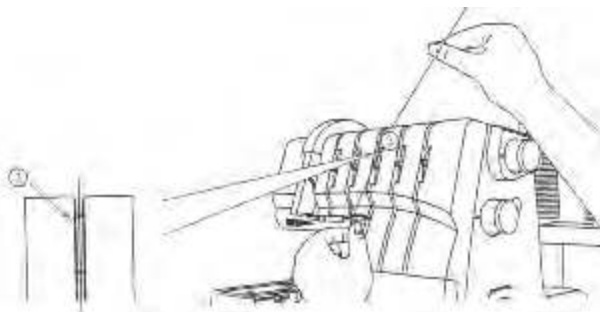
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

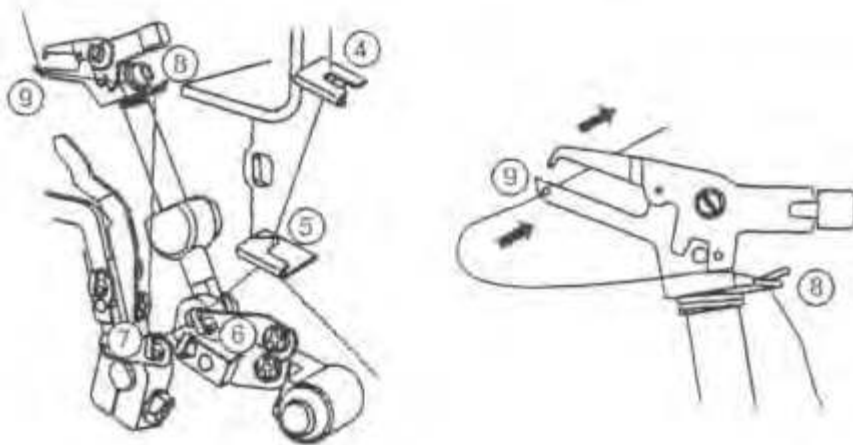


4. While holding the thread, firmly pull the thread between the tension disks.

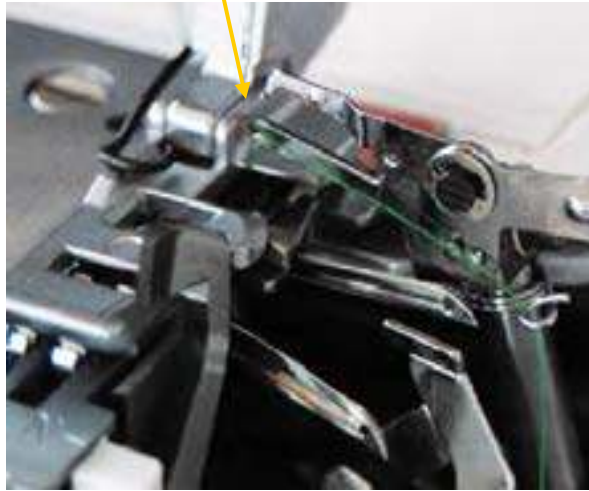


5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately 1/2 inch) from the needle plate edge.

6. Thread the looper area of the machine following the green color coded thread guides 4-9.

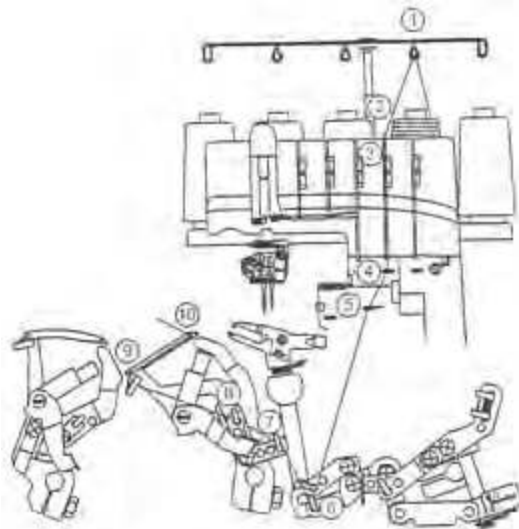
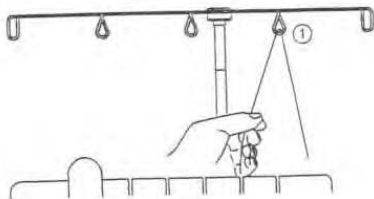


7. Thread the hole in the Upper Looper from front to back ⑨. Pull about 4 inches of thread through the looper and place to the back of the throat plate.

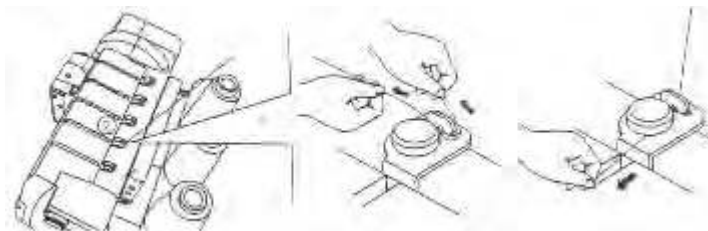


◆ Thread Lower Looper with regular overlock thread.

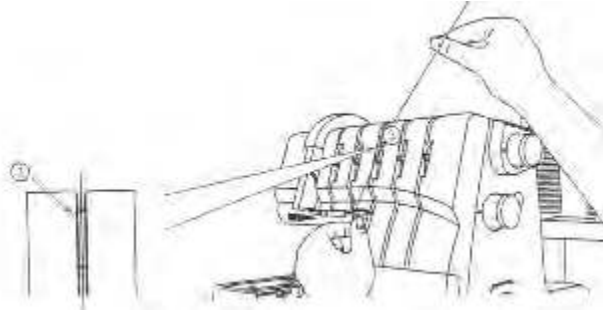
1. Raise the Presser Foot to release the tension disks. Thread the Lower Looper as illustrated 1-10.
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

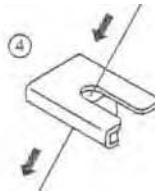


4. While holding the thread, firmly, pull the thread between the tension disks.



5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately 1/2 inch) from the needle plate edge.
6. Thread the looper area of the machine following the red color coded thread guides 4-10.

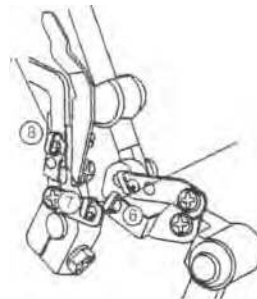
7. Place the thread slightly from left and to the right of threading guide ④.



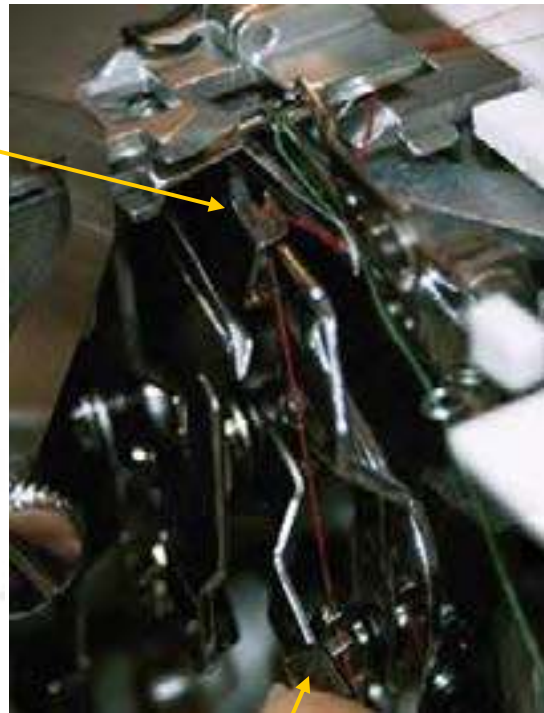
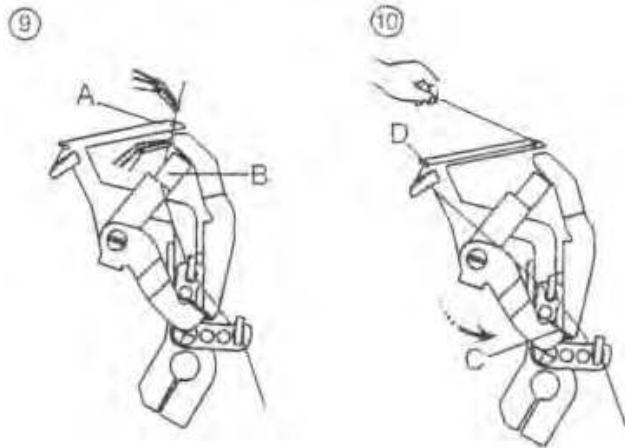
8. Place the thread slightly from the front and to the back of threading guide ⑤.



9. Place the thread through ⑥, ⑦ and ⑧.



10. Thread the looper eye (A) from front to back. Pull about 4 inches of thread. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull Threader lever (C) up into place (D).



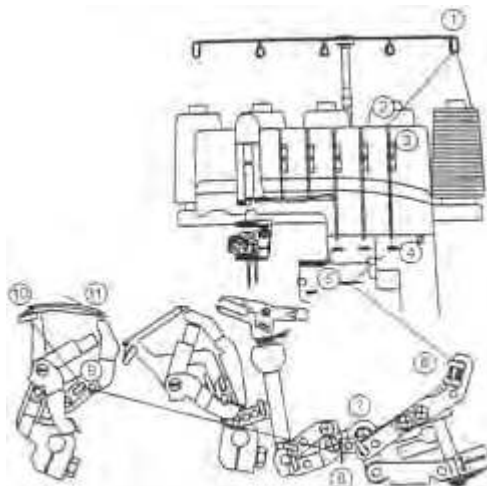
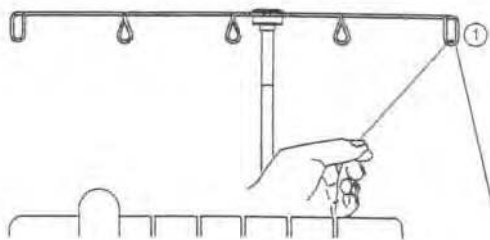
Threader Lever



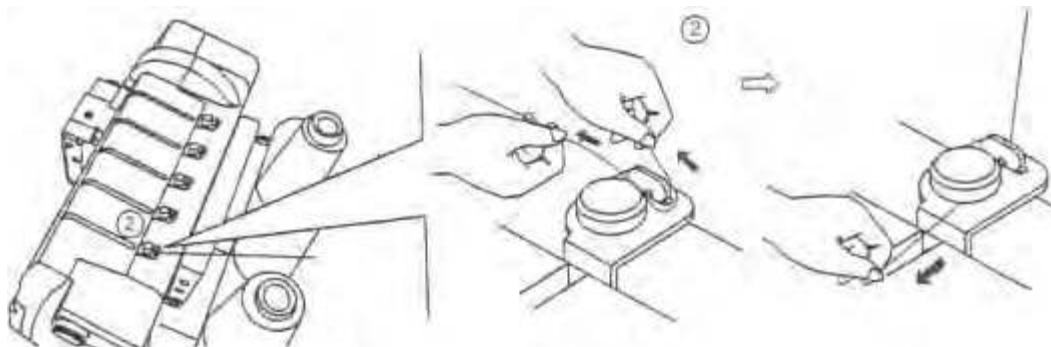
NOTE: Make sure the Upper Looper thread is behind the Lower Looper thread.

◆ Thread Chainstitch Looper with regular overlock thread.

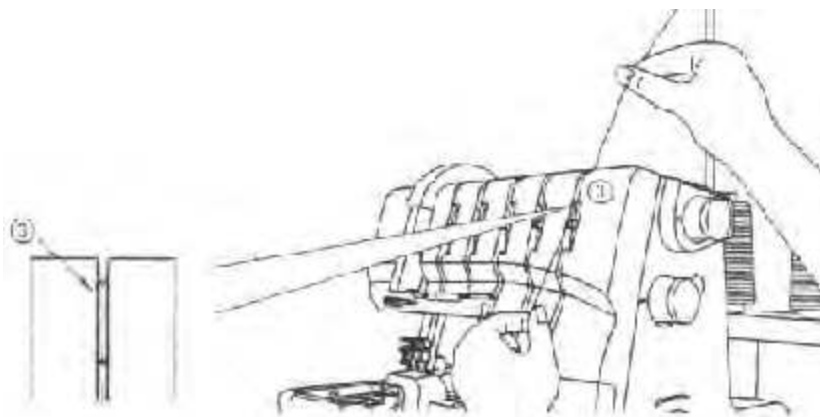
1. Raise the Presser Foot to release the tension disks. Pass the thread from the back to the front through the thread guide ①.



2. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull thread along the right side of the button as illustrated.



3. While holding the thread, firmly pull the thread between the tension disks.

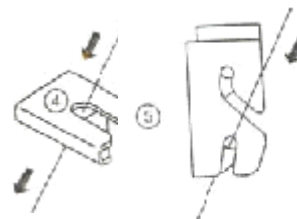


4. Turn the hand wheel toward you until the Chainstitch Looper extends out 10mm (approximately 1/2 inch) from the needle plate edge.



5. Thread the looper area of the machine following the brown color-coded thread guides 4-11. Use the tweezers provided in the accessory case to aid in threading the looper.

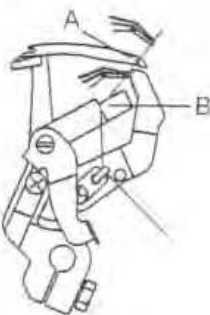
6. Place the thread through threading guides ④ and ⑤.



7. Continue threading guides ⑥, ⑦, ⑧ and ⑨.

8. Thread the looper eye (A) from front to back. Pull about 4 inches of thread through the looper. Position the thread into the V cutout (B) on the threader. Firmly hold the thread tail with left hand and pull threader lever (C) up into place (D). Gently pull 5-6" of thread to the back of the machine.

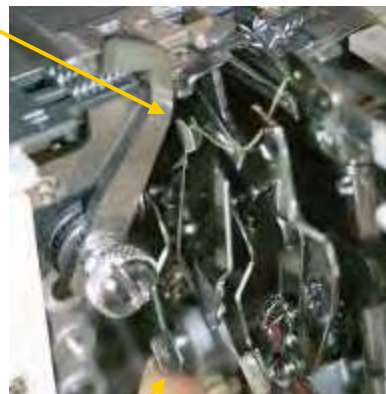
⑩



⑪



"V" cutout

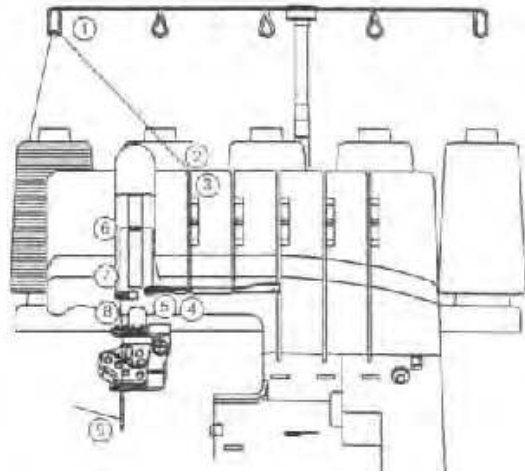
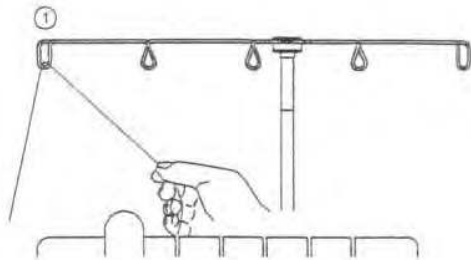


Threader Lever

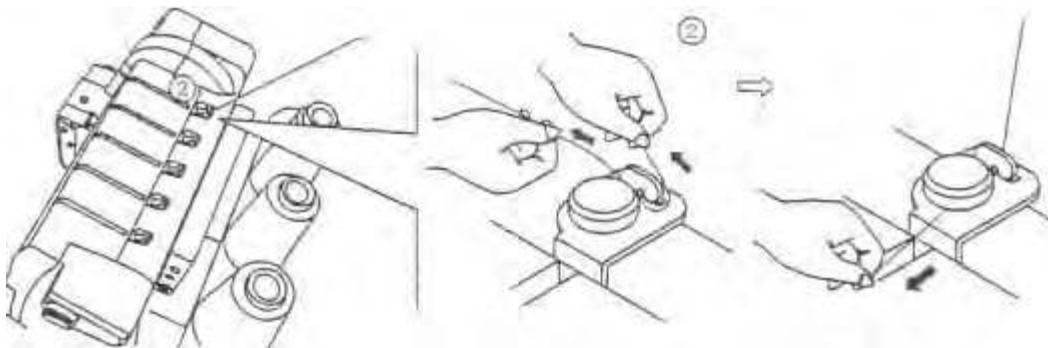
◆ Thread Left Overlock needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.

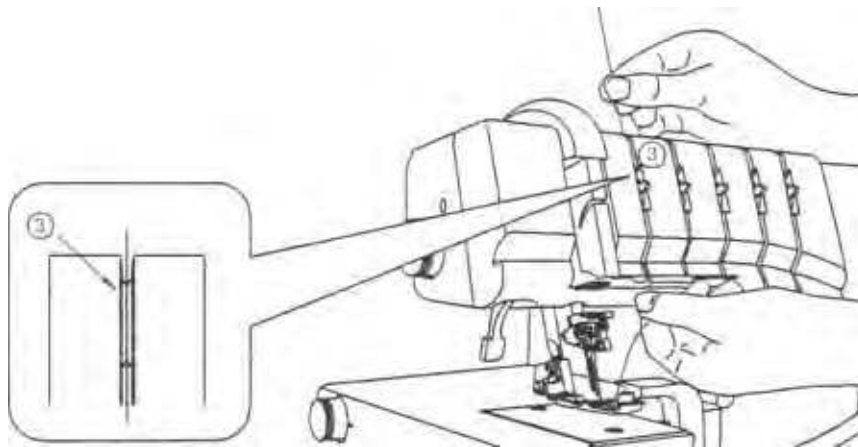
2. Pass thread from back to the front through the thread guide ①.



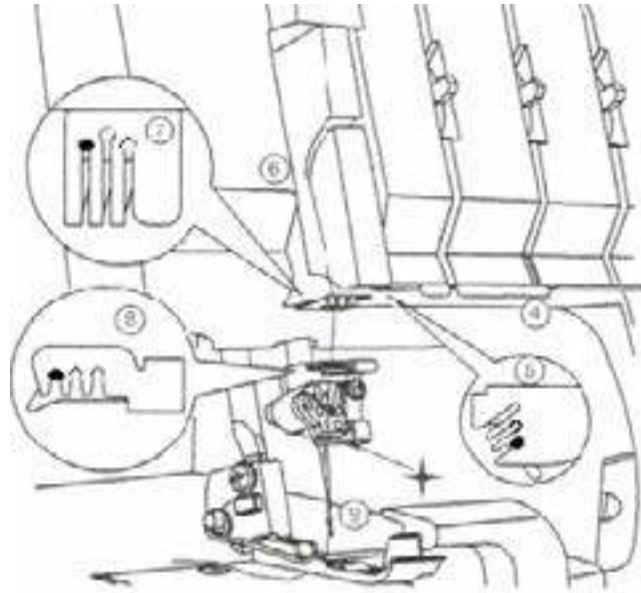
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



4. While holding the thread firmly, pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the forward slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the left slot of the thread guides ⑦ and ⑧.
6. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.



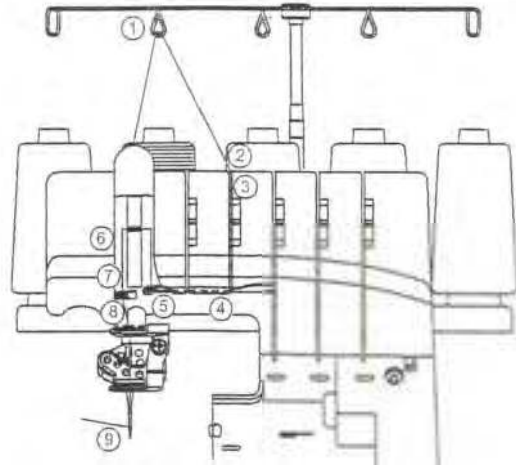
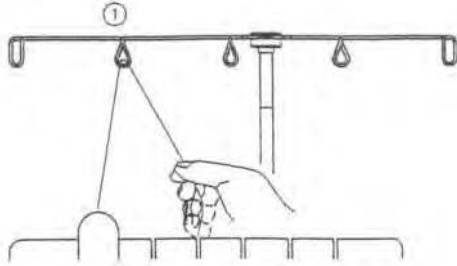
7. Thread the eye of the Left Overedge Needle ⑨.



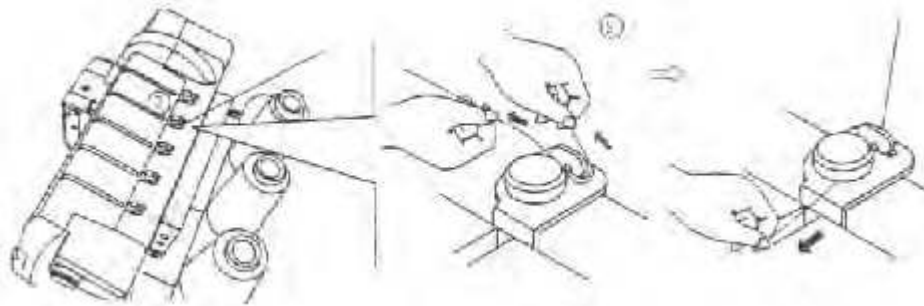
8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot. Lower foot and sew.

◆ Thread Middle Cover stitch needle with regular overlock thread.

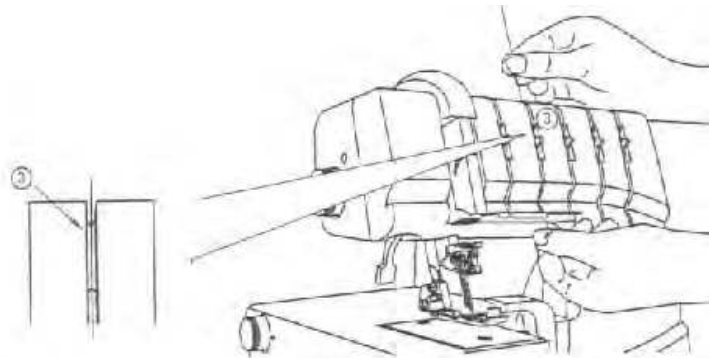
1. Raise the Presser Foot to release the tension disks. Thread the Cover Stitch Middle/Chain Stitch needle as illustrated 1-9.
2. Pass thread from back to the front through the thread guide ①.



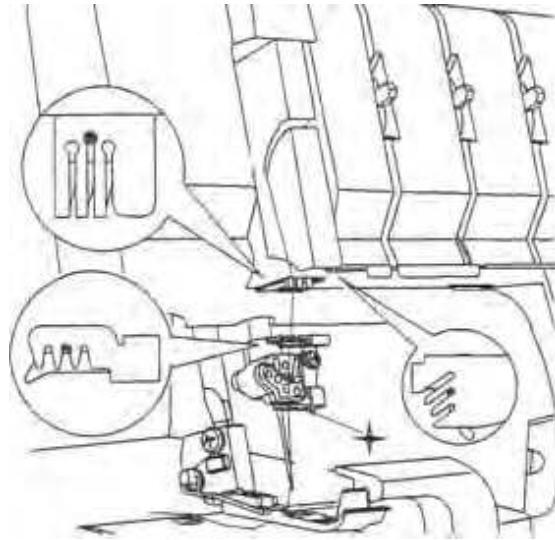
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



4. While holding the thread firmly, pull the thread between the tension disks.

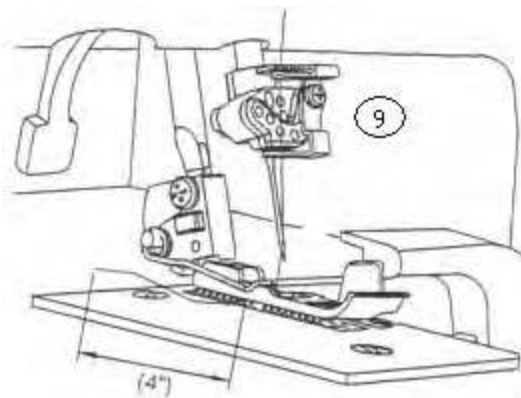


5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.



6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp for the Cover Stitch or Chainstitch.

7. Thread the eye of the middle needle ⑨.



8. Draw about 4 inches of the thread through the needle eye, under the Presser Foot and then towards the back of the machine.
9. Place the thread to the back, under the Presser Foot. Lower foot and sew.

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TRY IT:

- ◆ Place two pieces of home decorative fabric, right sides together.
- ◆ Align the fabric so that the knife just slightly trims the fabric edge.
- ◆ Sew.



SINGER®

Chapter 10: Five-Thread Safety Stitch Narrow

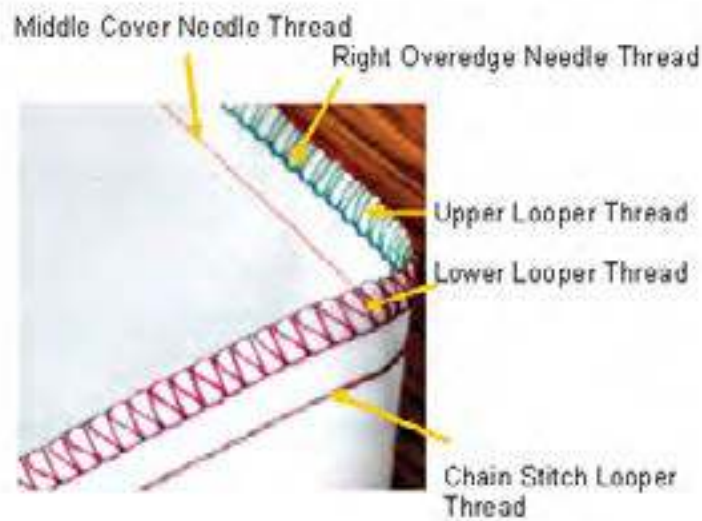


Five-Thread Safety Stitch Narrow

This stitch is a combination of a Two-Thread Chainstitch and a Three-Thread Overlock Stitch. It is suitable for woven fabrics and provides a durable seam for heavy weight fabrics such as denim and terrycloth. Using this strong and stable safety stitch eliminates the need to reinforce the seam with a conventional sewing machine straight stitch. The Pressure Adjusting Dial makes it simple to sew on all weights of fabrics. The Five-Thread Safety Stitch can have a width of 2.8mm or 5.6mm depending on which overlock needle position is chosen.

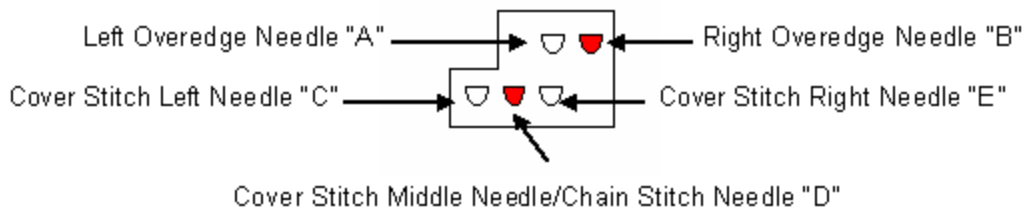


Hint: Try a wider stitch width (6.5) for thicker fabrics such as Terrycloth.



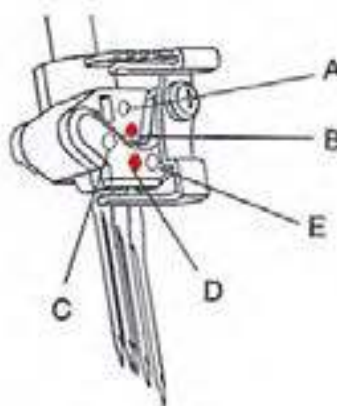
SET UP:

Needles:



Set at:

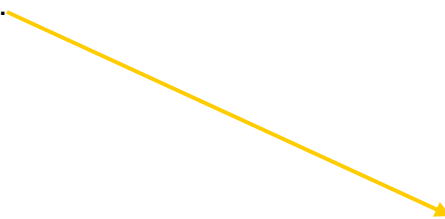
ATD: Auto Tension Dial	"A"
Left Cover Stitch Needle "C"	Not Threaded
Middle Cover Stitch Needle "D" (Orange)	Threaded
Right Cover Stitch Needle "E"	Not Threaded
Overedge Left Needle "A"	Not Threaded
Overedge Right Needle "B" (Blue)	Threaded
Upper Looper (Green)	Looper Engaged and Threaded
Spreader	Disengaged
Lower Looper (Red)	Threaded
Chain Stitch Looper (Brown)	Threaded
Upper Looper Clutch	"L"
Upper Knife	Engaged
Seam Guide Plate	Not Installed Use Knife Cover
Seam Width Dial	"N"
Stitch Length Dial	"N"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"N"



- ◆ Turn Auto Tension Dial to “A”.



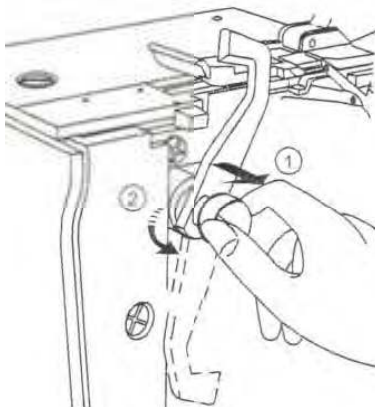
- ◆ Turn Stitch Length Dial to “N”.



- ◆ Engage Upper Knife.

The knife will not trim the fabric when it is disengaged.

1. Open Looper Cover.
2. Pull the movable knife holder (silver screw) to the right as far as it will go.
3. Turn the holder clockwise until the knife clicks into a lock position.



Upper Knife Disengaged



Upper Knife Engaged

- ◆ Turn Presser Foot Pressure dial to “N”.



- ◆ Turn Differential Feed Dial to “N”.



- ◆ Turn Seam Width Dial to “N”.

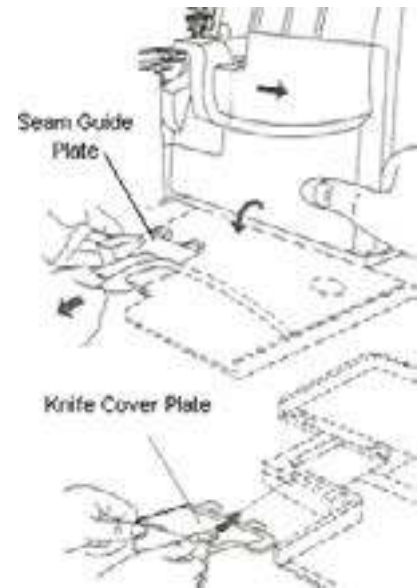


- ◆ Set Stitch Finger to “N”.



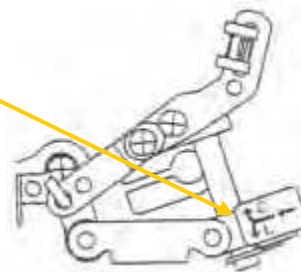
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- ◆ Install the Knife Cover.



- ◆ Engage Upper Looper. Engaging the Upper Looper causes the looper to move when sewing. Even though the Upper Looper is not threaded it needs to be engaged.

1. Push the clutch button to the left and down to engage.
2. Turn handwheel.



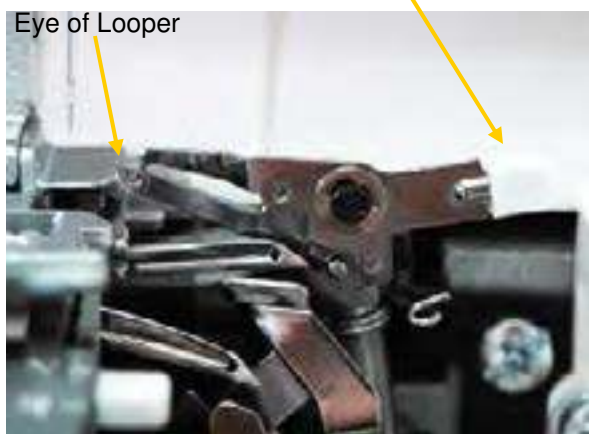
Upper Looper Disengaged



Upper Looper Engaged

- ◆ Disengage Spreader. The Upper Looter has a hole for the thread on the top of the looper. If the stitch requires that the looper be engaged, but not threaded then the Spreader is used. The Spreader simply plugs-in (or closes) the looper's hole. The Spreader is disengaged when the Upper Looter is engaged/operative and threaded. The Spreader is usually used with a stitch that requires only one looper thread. With the help of the Spreader the single looper thread wraps around the fabric's edge.

1. Lower the white handle on the Spreader to open the eye of the Upper Looter.



Spreader Engaged

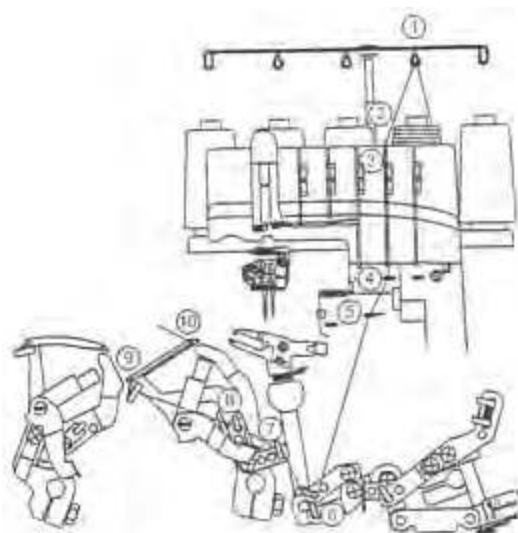
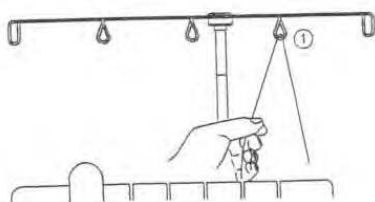


Spreader Disengaged

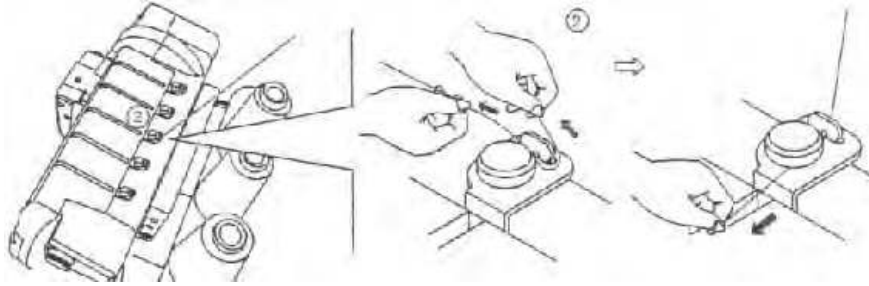
- ◆ Thread Upper Looter with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the Lower Looter as illustrated 1-9.

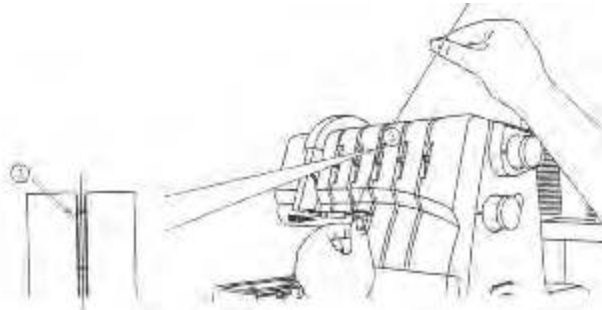
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

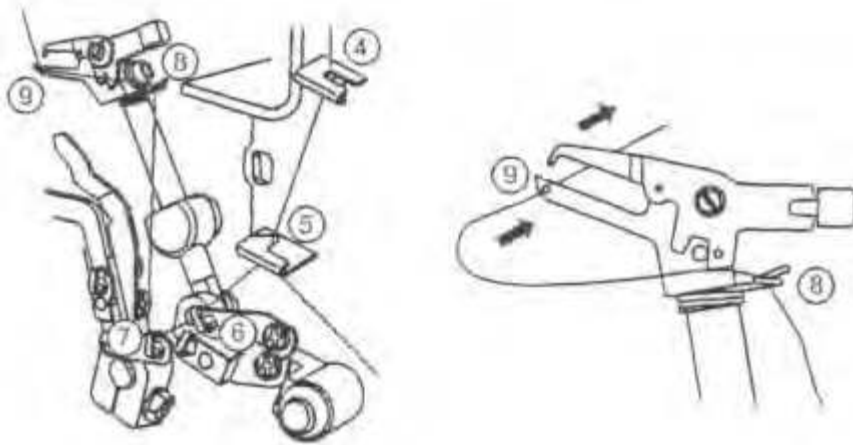


4. While holding the thread firmly, pull the thread between the tension disks.

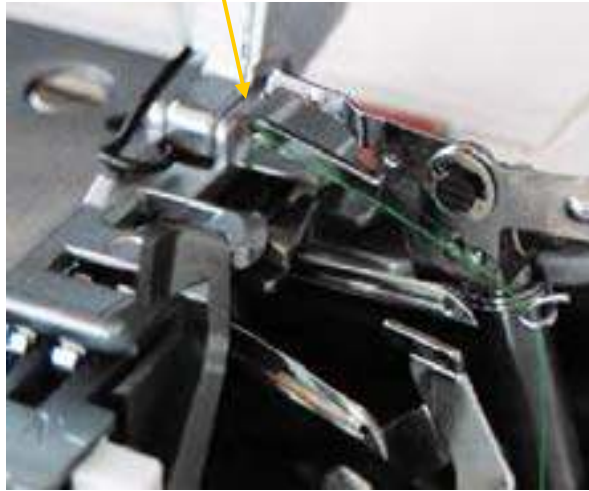


5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately 1/2 inch) from the needle plate edge.

6. Thread the looper area of the machine following the green color coded thread guides 4-9.

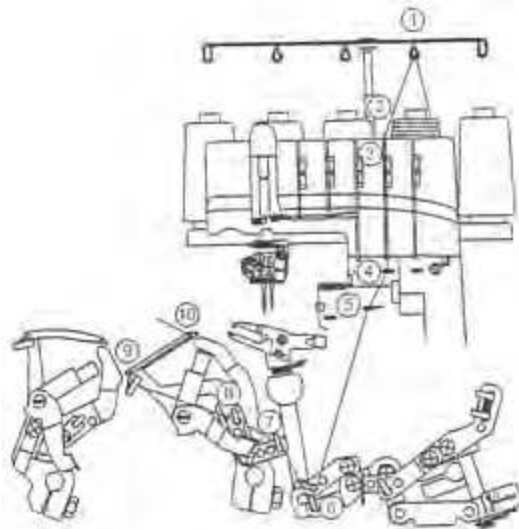
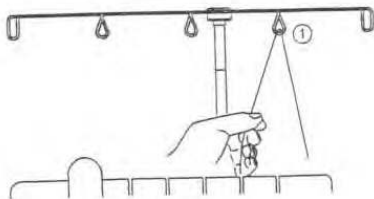


7. Thread the hole in the Upper Looter from front to back ⑨. Pull about 4 inches of thread through the looper and place to the back of the throat plate.

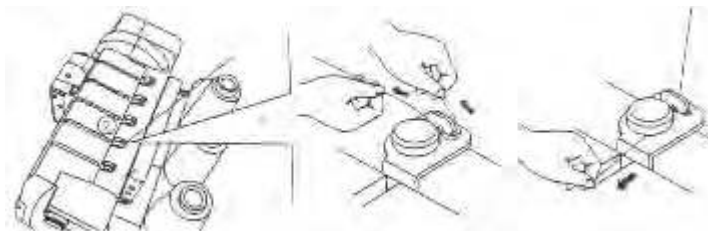


◆ Thread Lower Looter with regular overlock thread.

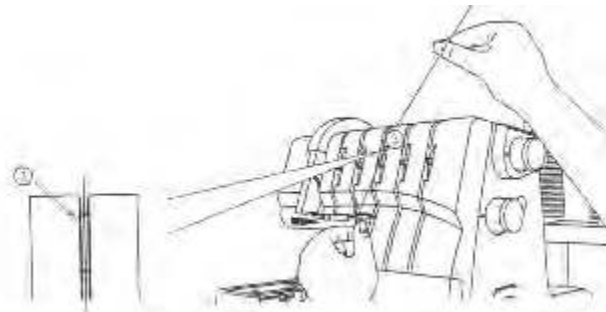
1. Raise the Presser Foot to release the Tension disks. Thread the Lower Looter as illustrated 1-10.
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

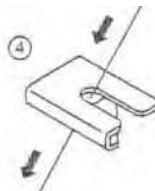


4. While holding the thread firmly, pull the thread between the tension disks.



5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately 1/2 inch) from the needle plate edge.
6. Thread the looper area of the machine following the red color coded thread guides 4-10.

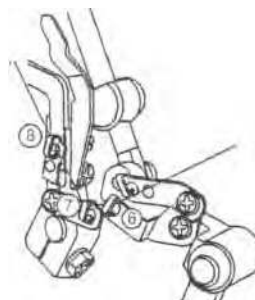
7. Place the thread slightly from left and to the right of threading guide ④.



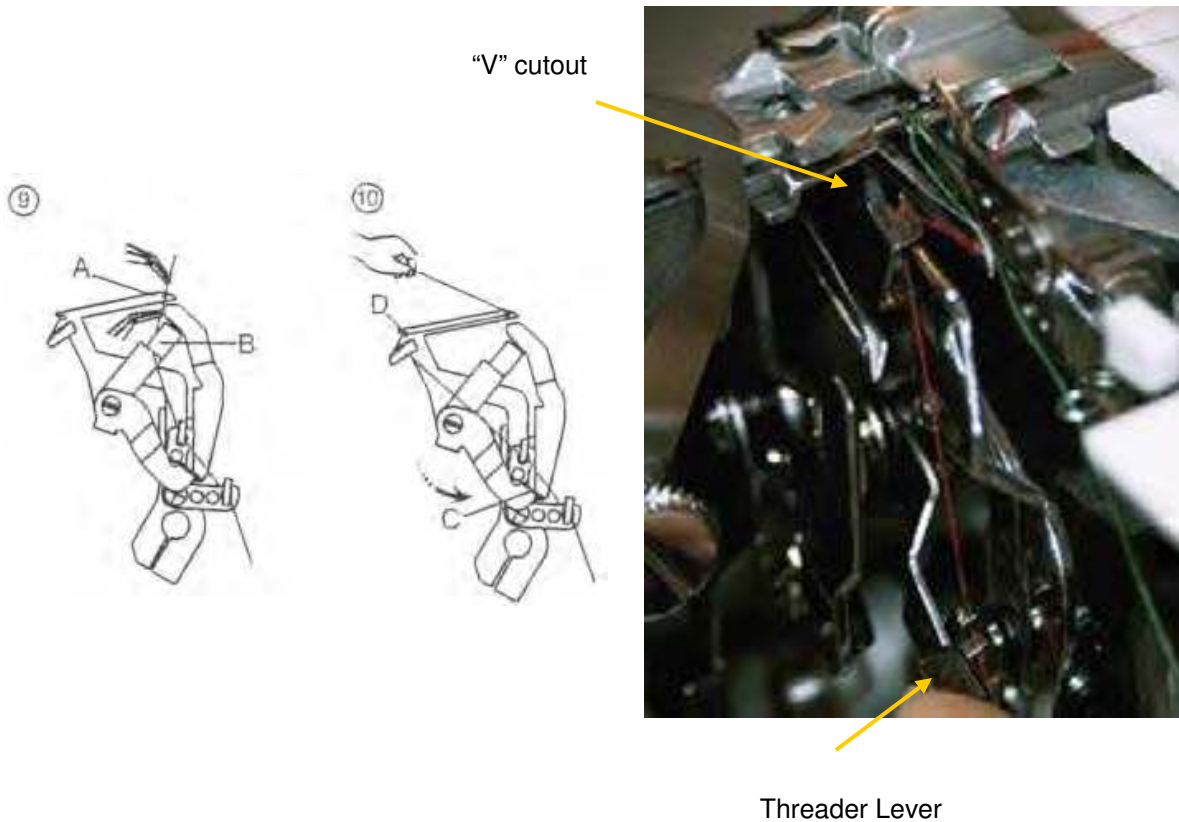
8. Place the thread slightly from the front and to the back of threading guide ⑤.



9. Place the thread through ⑥, ⑦ and ⑧.



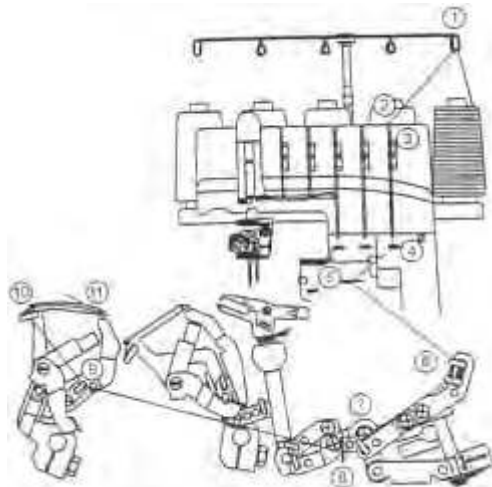
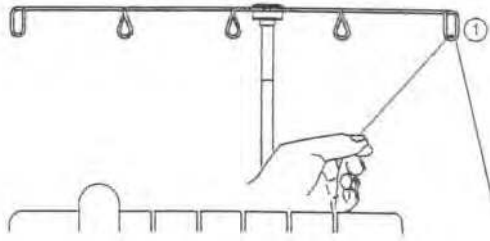
10. Thread the looper eye (A) from front to back. Pull about 4 inches of thread. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull Threader lever (C) up into place (D).



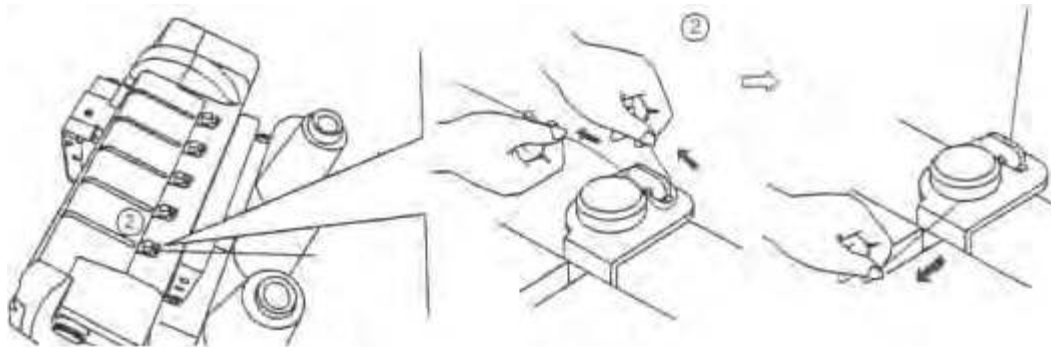
NOTE: Make sure the Upper Looper thread is behind the Lower Looper thread.

◆ Thread Chainstitch Looper with regular overlock thread.

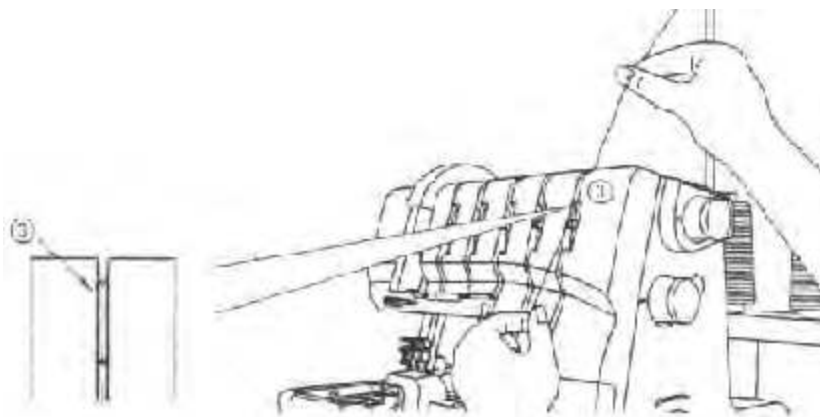
1. Raise the Presser Foot to release the tension disks. Pass the thread from the back to the front through the thread guide ①.



2. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull thread along the right side of the button as illustrated.



3. While holding the thread firmly, pull the thread between the tension disks.

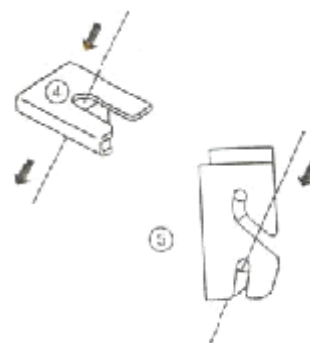


4. Turn the hand wheel toward you until the Chainstitch Looper extends out 10mm (approximately 1/2 inch) from the needle plate edge.



5. Thread the looper area of the machine following the brown color-coded thread guides 4-11. Use the tweezers provided in the accessory case to aid in threading the looper.

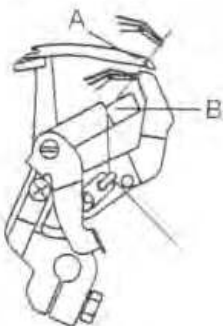
6. Place the thread through threading guide ④ and ⑤.



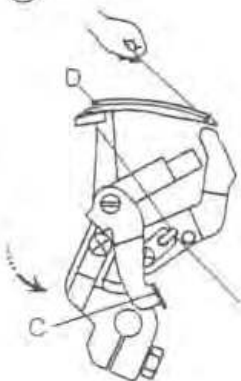
7. Continue threading guides ⑥, ⑦, ⑧ and ⑨.

8. Thread the looper eye (A) from front to back. Pull about 4 inches of thread through the looper. Position the thread into the V cutout (B) on the threader. Firmly hold the thread tail with your left hand and pull threader lever (C) up into place (D). Gently pull 5-6" of thread to the back of the machine.

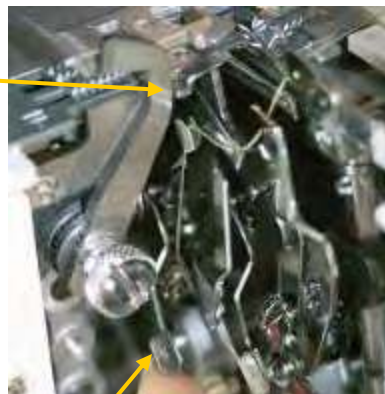
⑩



⑪



"V" cutout

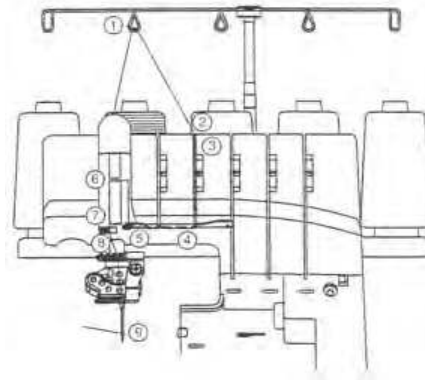


Threader lever

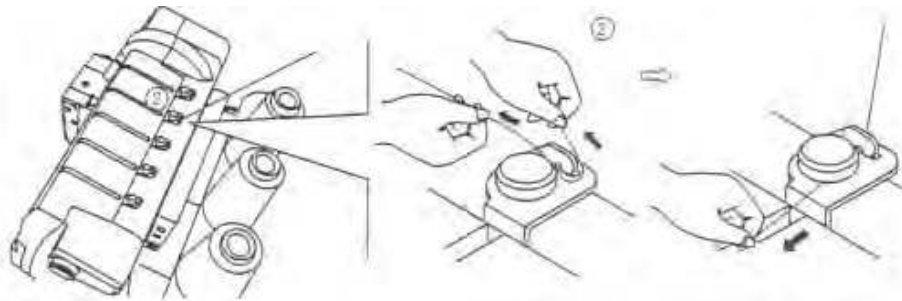
◆ Thread Right Overedge needle with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the right needle as illustrated 1-9.

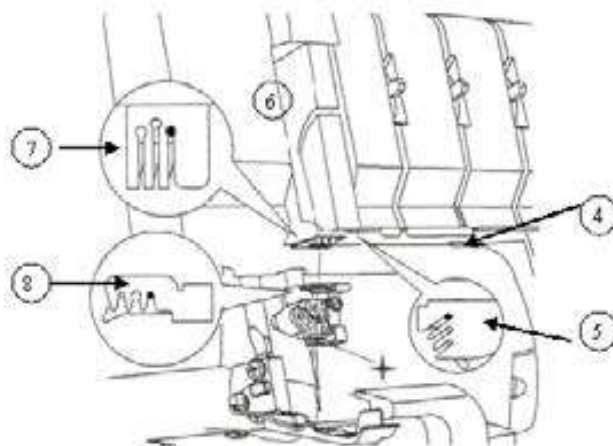
2. Pass thread from back to the front through the thread guide ①.



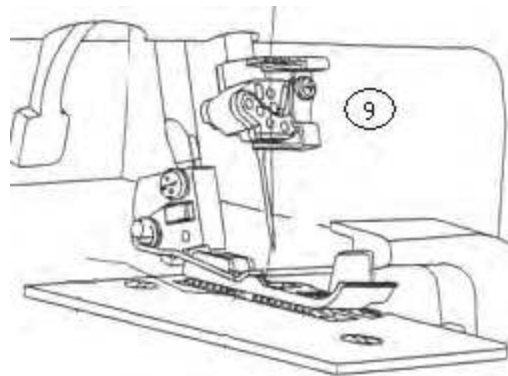
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



4. Continue to thread points 4-8. Slip the thread into the rear slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the right slot of the thread guides ⑦ and ⑧.



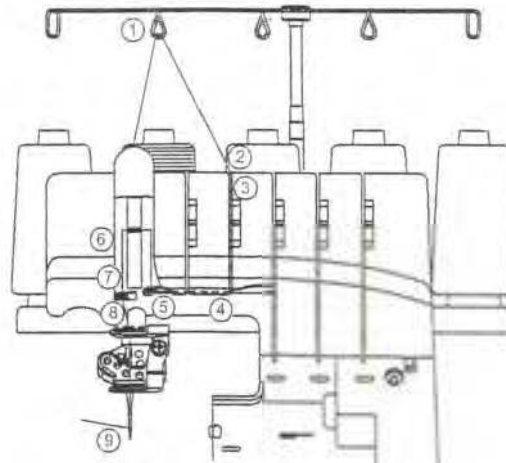
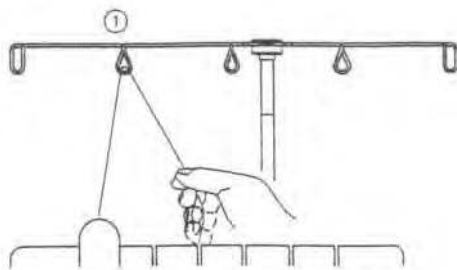
5. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.



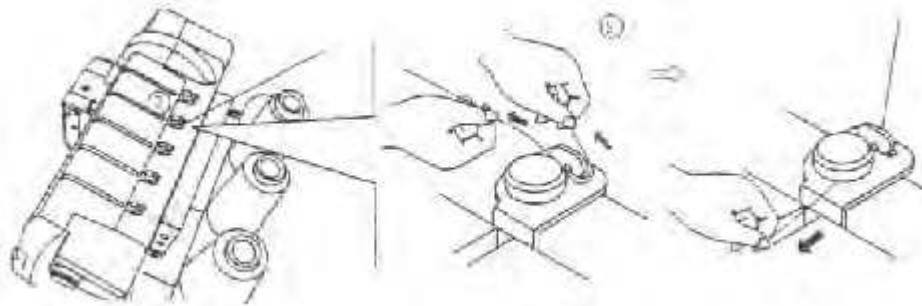
6. Thread the eye of the Right Overedge Needle ⑨.

◆ Thread Middle Cover stitch needle with regular overlock thread.

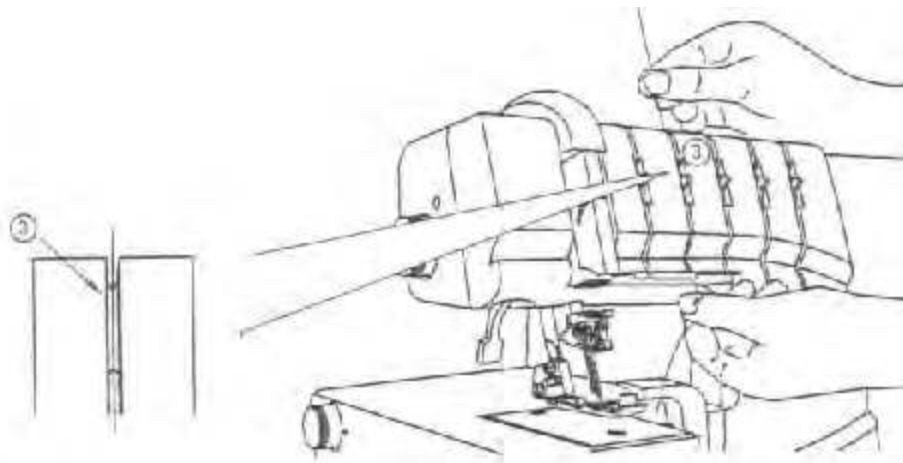
1. Raise the Presser Foot to release the tension disks. Thread the Cover Stitch Middle/Chain Stitch needle as illustrated 1-9.
2. Pass thread from back to the front through the thread guide ①.



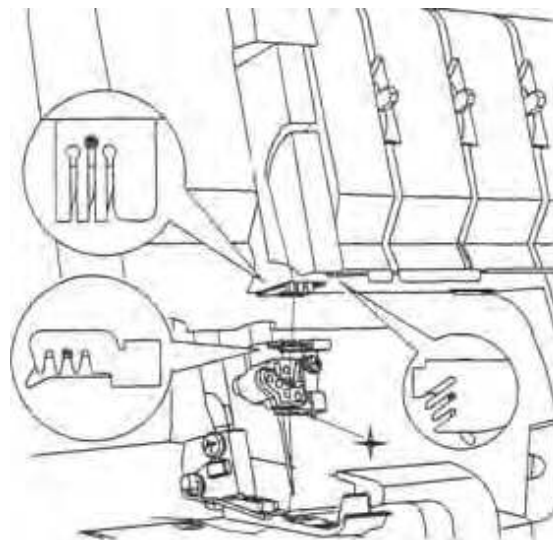
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



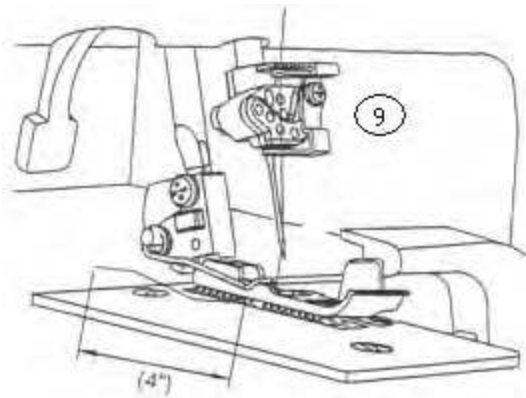
4. While holding the thread firmly, pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.



6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp for the Cover Stitch or Chainstitch.
7. Thread the eye of the middle needle ⑨.



8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot. Lower foot and sew.

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TRY IT:

- ◆ Place two pieces of terrycloth right sides together.
- ◆ Align the fabric so that that the knife just slightly trims the fabric edge.
- ◆ Sew.



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Chapter 11: Cover Hem (Cover Stitch) Narrow



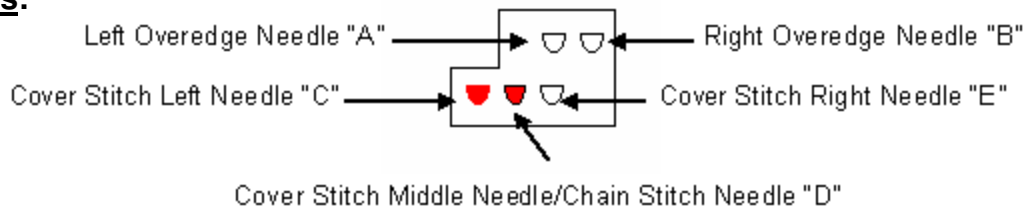
Cover Hem Narrow

This professional Cover Hem is a necessary requirement for today's sewing. The stitch is often seen in ready-to-wear garments. Two needles create parallel rows of topstitching and one looper sews an edge finish on the underneath side. Depending on which needle position is selected, the width can be 5.6mm wide or 2.8mm wide.



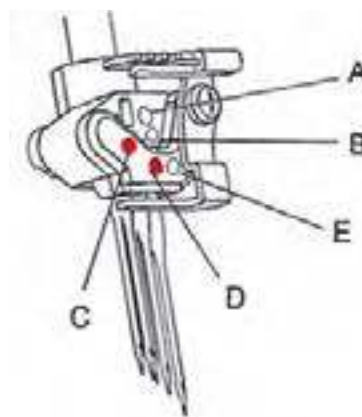
SET UP:

Needles:



Set-up:

ATD: Auto Tension Dial	"K"
Left Cover Stitch Needle "C" (Orange)	Threaded
Middle Cover Stitch Needle "D" (Blue)	Threaded
Right Cover Stitch "E" Needle	Not Threaded
Overedge Left "A" Needle	Not Threaded
Overedge Right "B" Needle	Not Threaded
Upper Looper (Green)	Looper Disengaged and Not Threaded
Spreader	Not Used
Lower Looper	Not Threaded
Chain Stitch Looper (Brown)	Threaded
Upper Looper Clutch	"C"
Upper Knife	Non-working Position
Seam Guide Plate	Installed
Seam Width Dial	"N"
Stitch Length Dial	"N"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"R"



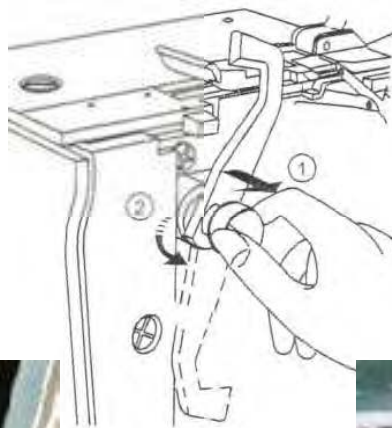
Cover Hem Narrow

- ◆ Turn Auto Tension Dial to “K”.

- ◆ Turn Stitch Length Dial to “2.5”.



- ◆ Disengage Upper Knife. The knife will not trim the fabric when it is disengaged.
 1. Open Looper Cover.
 2. Pull the movable knife holder (silver screw) to the right as far as it will go.
 3. Turn the holder counter clockwise until the knife clicks into a lock position.



Upper Knife Engaged



Upper Knife Disengaged

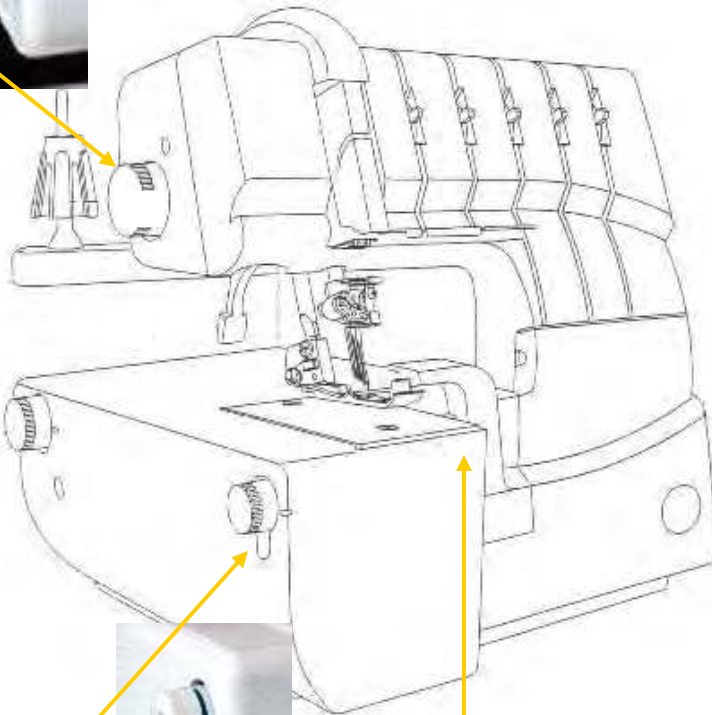
- ◆ Turn Presser Foot Pressure Dial to “N”.



- ◆ Turn Differential Feed Dial to “N”.



- ◆ Turn Seam Width Dial to “N”.

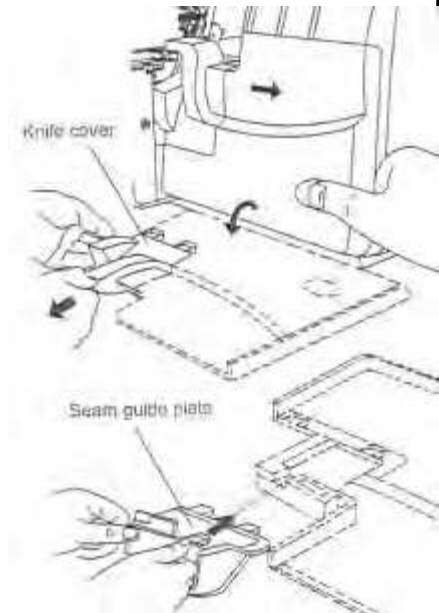


- ◆ Set Stitch Finger to “R”.

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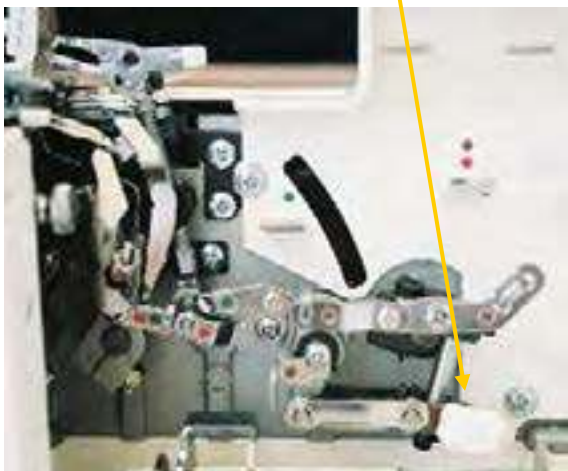
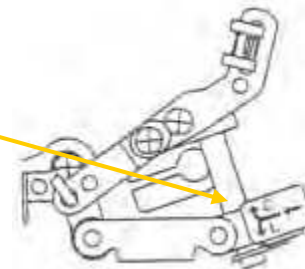
- ◆ Install the Seam Guide Plate. The Seam Guide Plate provides a flat surface for the fabric and seam guides. It can only be used when the knife and the lower looper are disengaged. The Seam Guide Plate is used when sewing the Chainstitch, Cover Stitch and the Triple Cover Stitch.

1. Open looper cover.
2. Remove Knife Cover by pulling it toward you.
3. Slide the Seam Guide Plate into place.



- ◆ Disengage Upper Looper. By disengaging the Upper Looper, the looper no longer moves when sewing. It is nonoperative. If the looper was still engaged it would hit the Seam Guide Plate.

1. Turn handwheel until the Upper Looper is in the highest position.
2. Push the clutch button to the left and up to disengage.



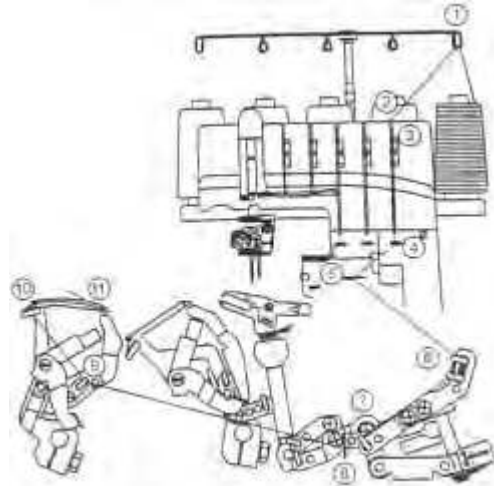
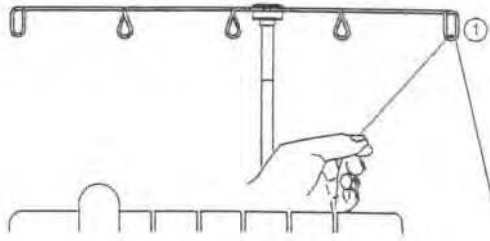
Upper Looper Engaged



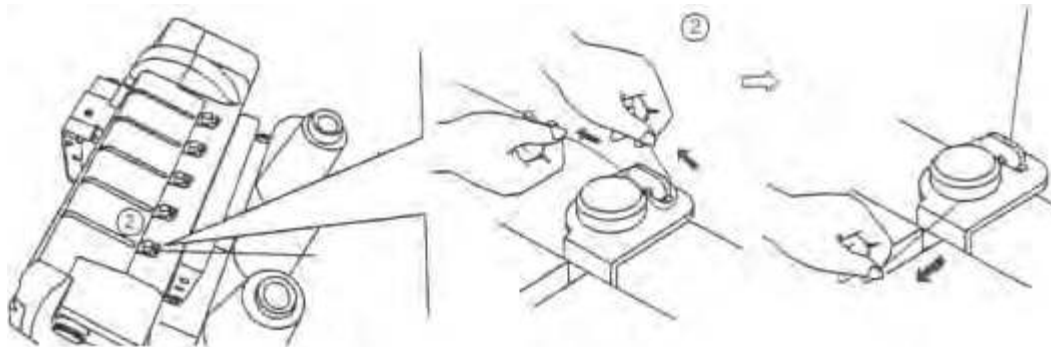
Upper Looper Disengaged

◆ Thread Chainstitch Looper with a regular overlock thread.

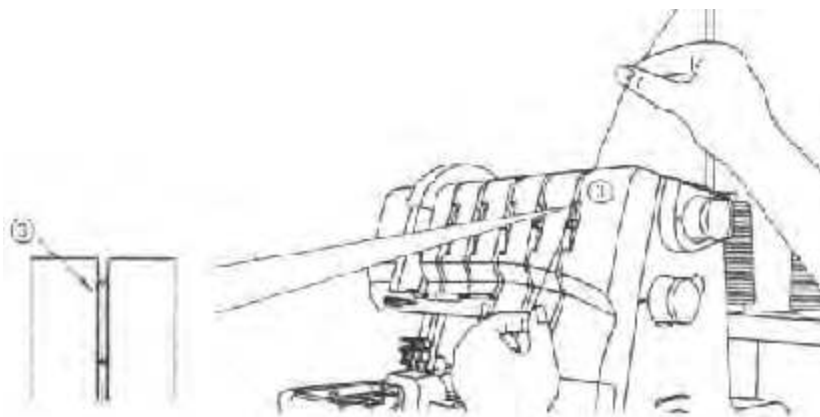
1. Raise the Presser Foot to release the tension disks. Pass the thread from the back to the front through the thread guide ①.



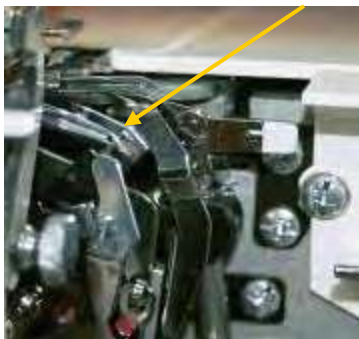
2. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull thread along the right side of the button as illustrated.



3. While holding the thread firmly, pull the thread between the tension disks.

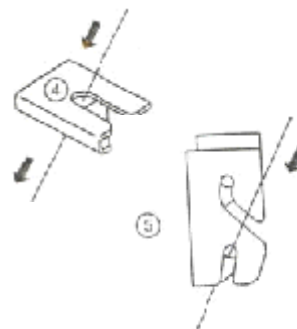


4. Turn the hand wheel toward you until the Chainstitch Looper extends out 10mm (approximately ½ inch) from the needle plate edge.

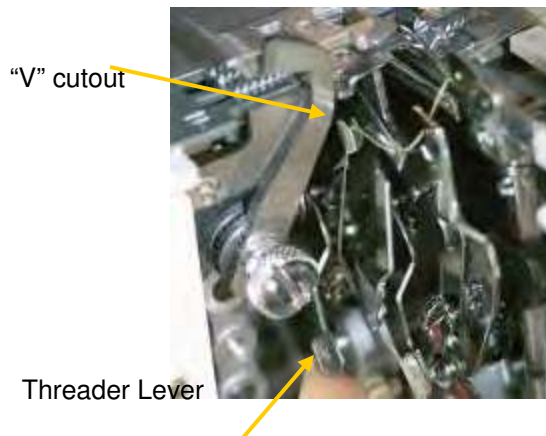
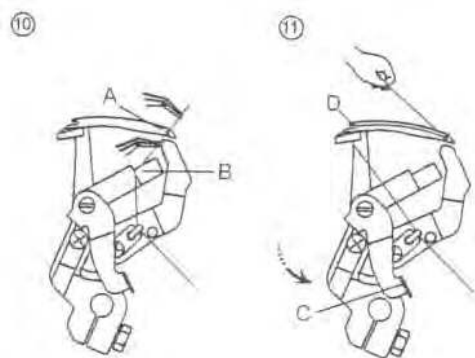


5. Thread the looper area of the machine following the brown color-coded thread guides 4-11. Use the tweezers provided in the accessory case to aid in threading the looper.

6. Place the thread through threading guides ④ and ⑤.
7. Continue threading guides ⑥, ⑦, ⑧ and ⑨.

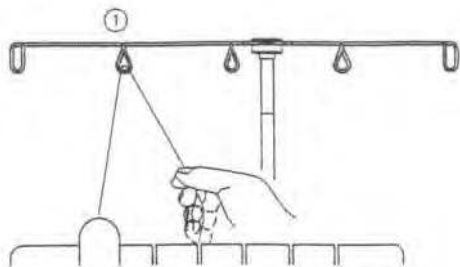
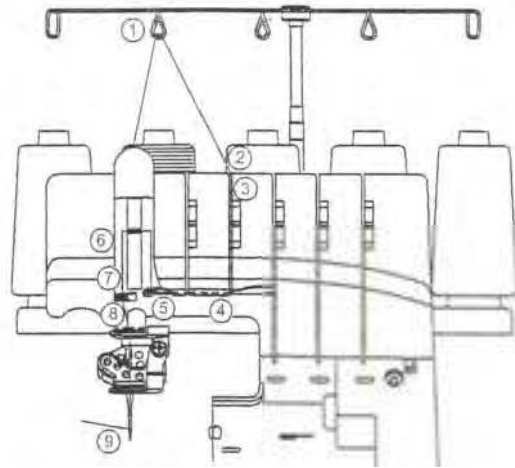


8. Thread the looper eye (A) from front to back. Pull about 4 inches of thread through the looper. Position the thread into the V cutout (B) on the threader. Firmly hold the thread tail with your left hand and pull threader lever (C) up into place (D). Gently pull 5-6" of thread to the back of the machine.

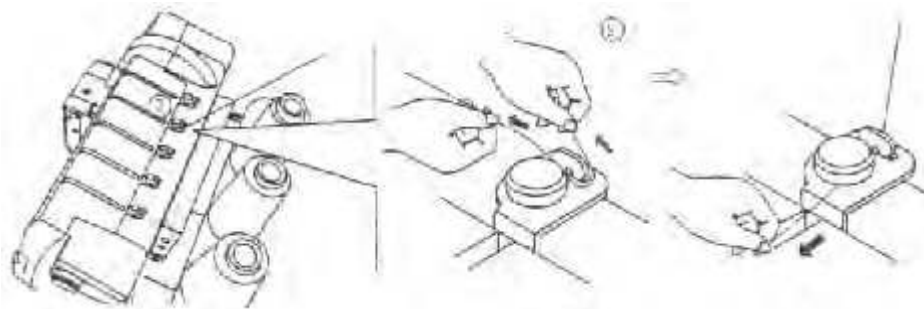


◆ Thread Middle Cover needle with regular overlock thread.

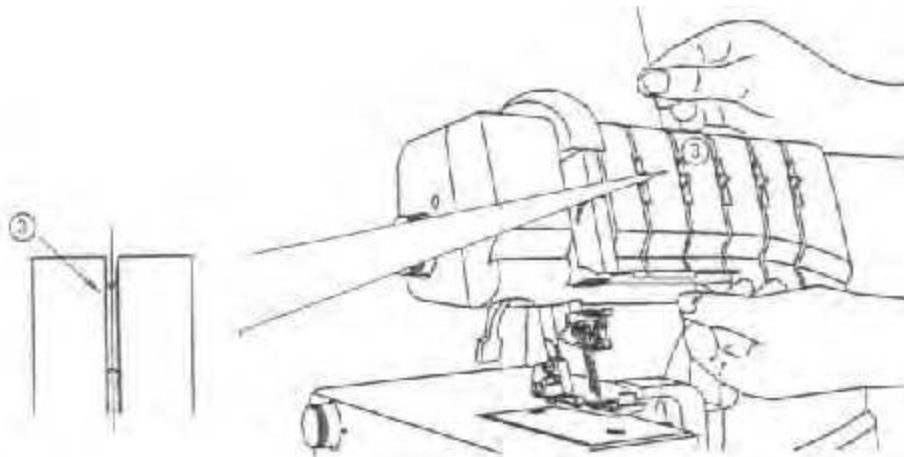
1. Raise the Presser Foot to release the tension disks. Thread the Cover Stitch Middle/Chain Stitch needle as illustrated 1-9.
2. Pass thread from back to the front through the thread guide ①.



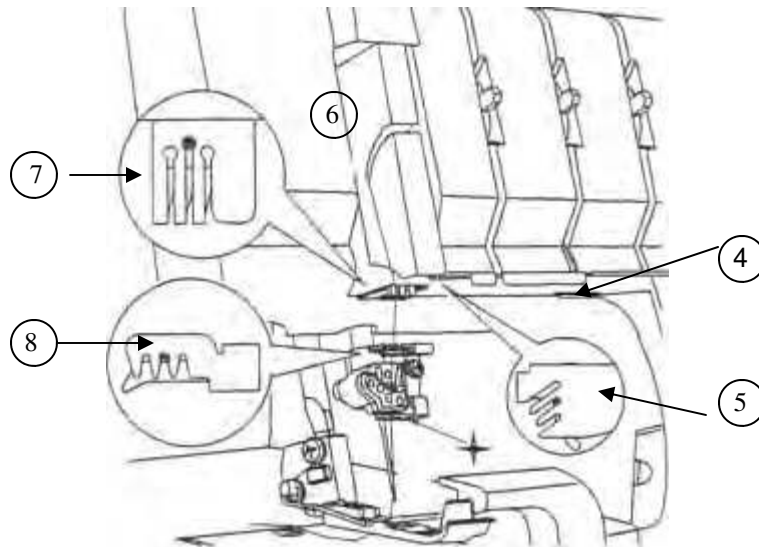
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



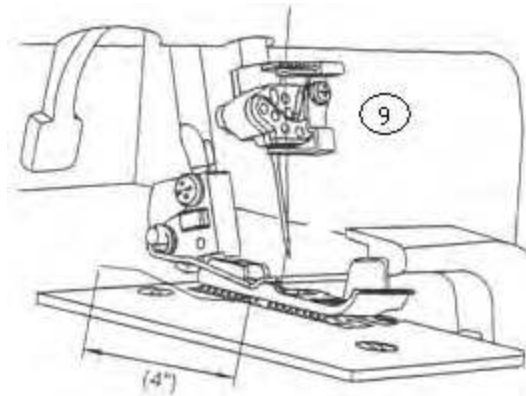
4. While holding the thread firmly, pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.
6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp for the Cover Stitch or Chainstitch.



7. Thread the eye of the middle needle ⑨.

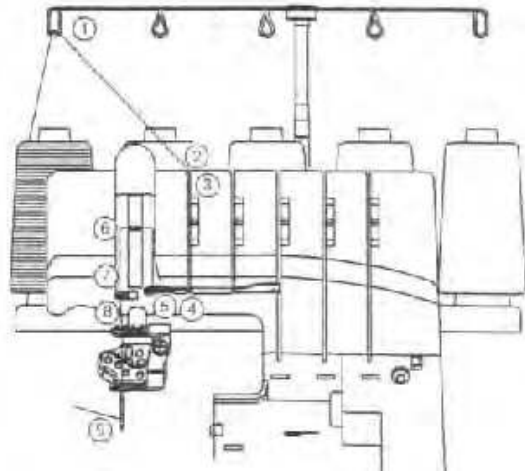
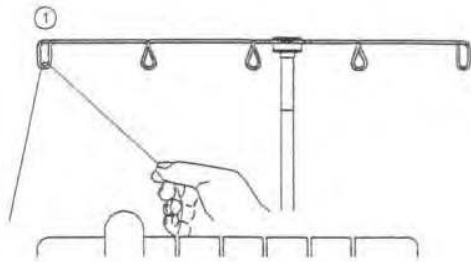


8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot. Lower foot and sew.

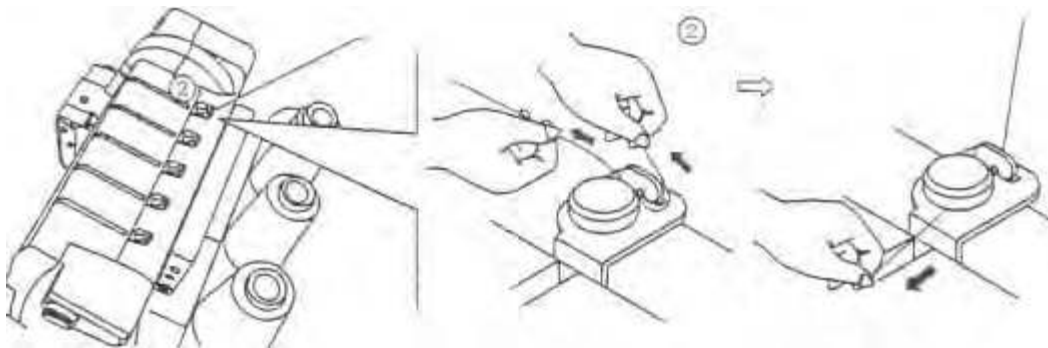
◆ Thread Left Cover Stitch needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.

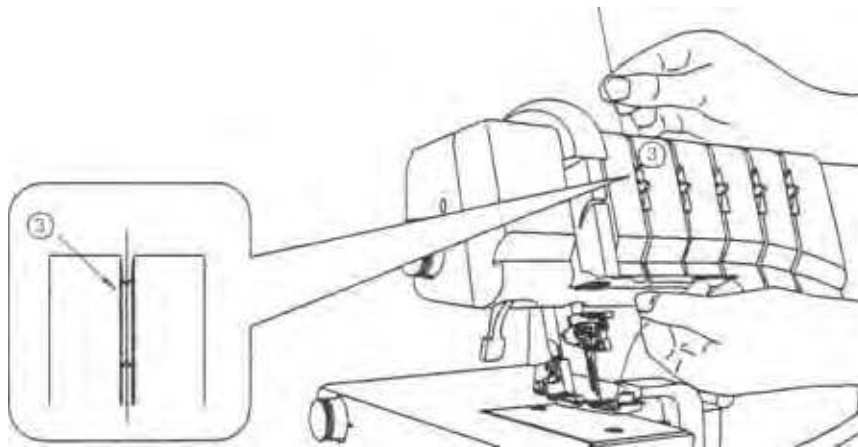
2. Pass thread from back to the front through the thread guide ①.



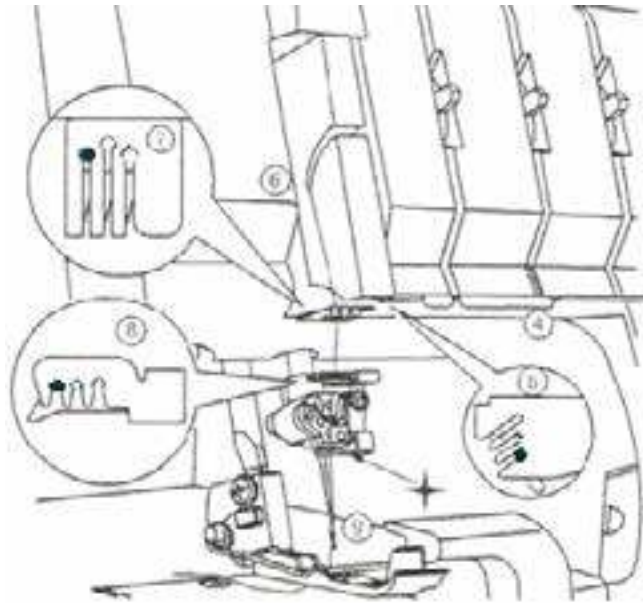
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



4. While holding the thread firmly, pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the forward slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the left slot of the thread guides ⑦ and ⑧.
6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp.



7. Thread the eye of the Left Cover Stitch Needle ⑨.



8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot. Lower foot and sew.

TRY IT:

- ◆ Press a 1" hem into a knit fabric.
- ◆ Lift the Presser Foot to the highest position.
- ◆ Position the fabric right side up and under the needles.
- ◆ Align the fabric so that the fabric fold is 1" to the right of the needles. Use markings on cover for positioning and guiding fabric.
- ◆ Lower the Presser Foot.
- ◆ Turn the handwheel to assist in the stitch forming on the fabric. When sewing the Cover Hem Stitch it is necessary to have fabric under the needles while sewing.
- ◆ Sew, using the seam guides for a straight hem and to ensure the fabric's raw edge is finished.
- ◆ As the machine sews it will finish the fabric's raw edge and sew two rows of topstitching.



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Chapter 12: Cover Hem (Cover Stitch) Wide



Cover Hem Wide

This professional Cover Hem stitch is a necessary requirement for today's sewing. The stitch is often seen in ready-to-wear garments. Two needles create parallel rows of top stitching and one looper sew an edge finish on the underneath side. Depending on which needle position is selected the width can be 5.6mm wide or 2.8 mm wide.



Left Cover Needle Thread Right Cover Needle Thread



Cover Stitch Looper Thread

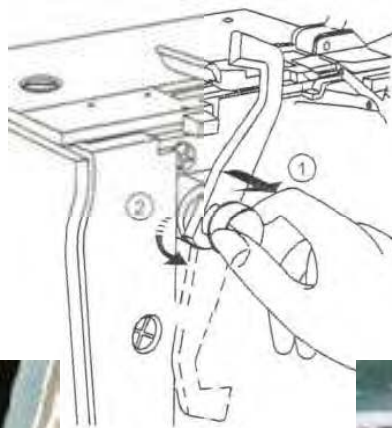
Double Chain Stitch

- ◆ Turn Auto Tension Dial to “H”.

- ◆ Turn Stitch Length Dial to “N”.



- ◆ Disengage Upper Knife. The knife will not trim the fabric when it is disengaged.
 1. Open Looper Cover.
 2. Pull the movable knife holder (silver screw) to the right as far as it will go.
 3. Turn the holder counter clockwise until the knife clicks into a lock position.



Upper Knife Engaged



Upper Knife Disengaged

- ◆ Turn Presser Foot Pressure Dial to “N”.



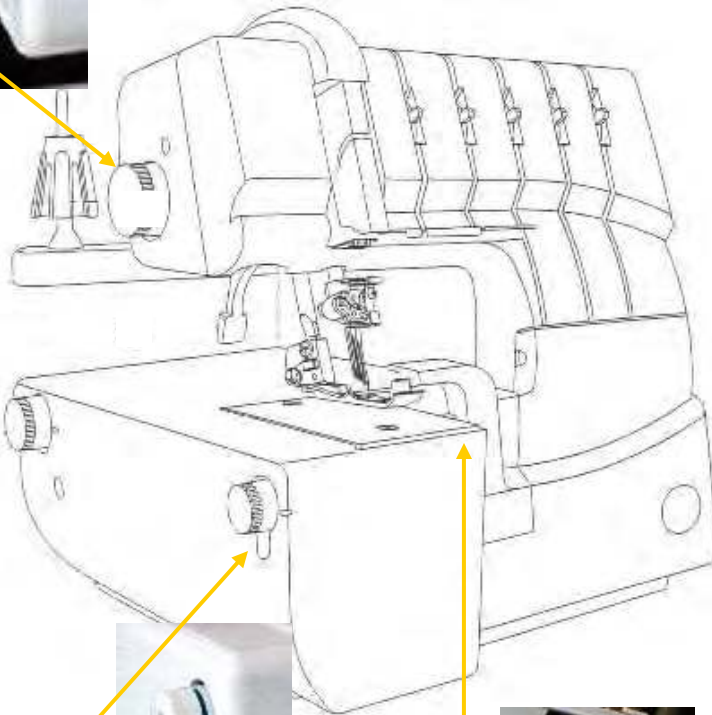
- ◆ Turn Differential Feed Dial to “N”.



- ◆ Turn Seam Width Dial to “N”.



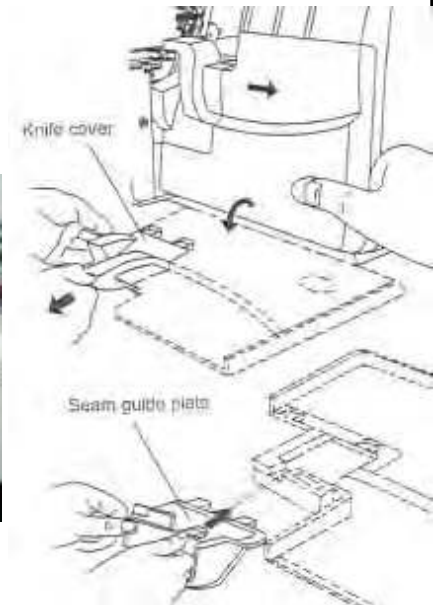
- ◆ Set Stitch Finger to “R”.



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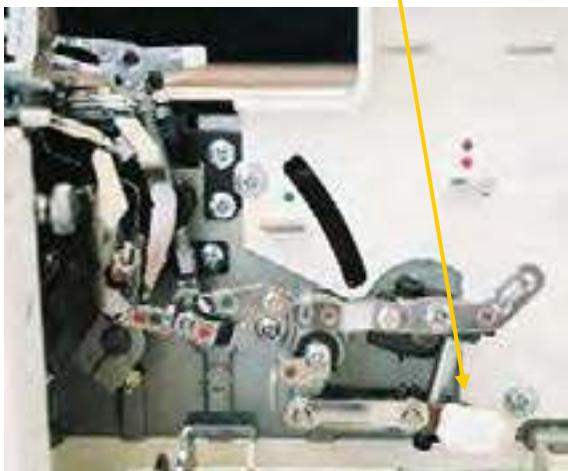
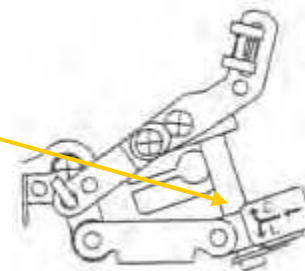
- ◆ Install the Seam Guide Plate. The Seam Guide Plate provides a flat surface for the fabric and seam guides. It can only be used when the knife and the lower looper are disengaged. The Seam Guide Plate is used when sewing the Chainstitch, Cover Stitch and the Triple Cover Stitch.

1. Open Looper Cover.
2. Remove Knife Cover by pulling it toward you.
3. Slide the Seam Guide Plate into place.



- ◆ Disengage Upper Looper. By disengaging the Upper Looper the looper no longer moves when sewing, it is nonoperative. If the looper was still engaged it would hit the Seam Guide Plate.

1. Turn handwheel until the Upper Looper is in the highest position.
2. Push the clutch button to the left and up to disengage.



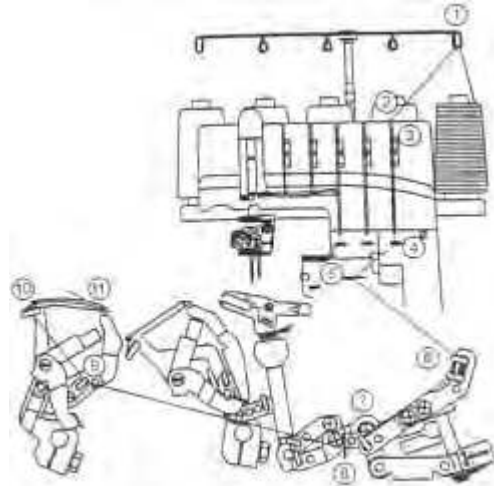
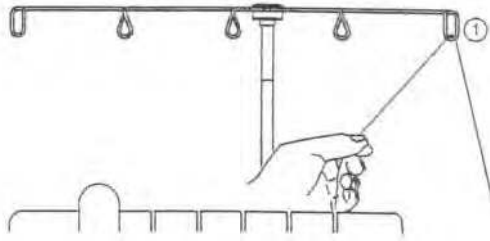
Upper Looper Engaged



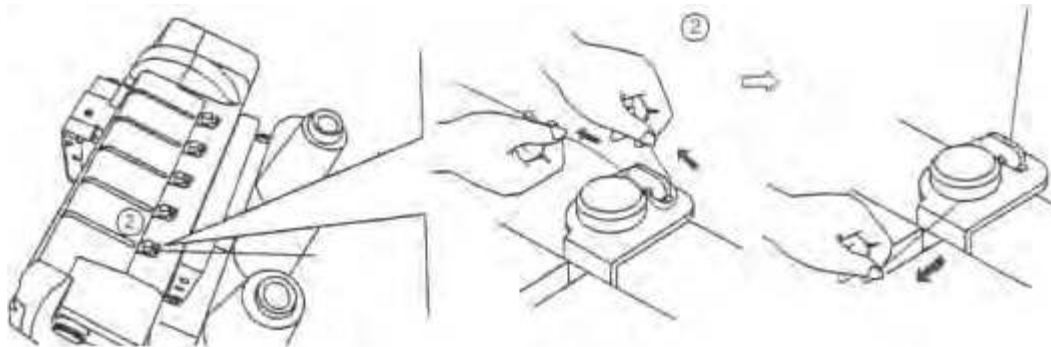
Upper Looper Disengaged

◆ Thread Chainstitch Looper with a regular overlock thread.

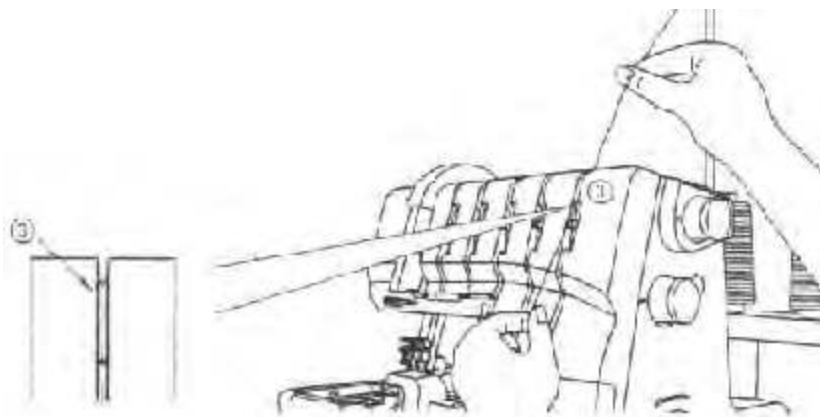
1. Raise the Presser Foot to release the tension disks. Pass the thread from the back to the front through the thread guide ①.



2. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull thread along the right side of the button as illustrated.



3. While holding the thread firmly, pull the thread between the tension disks.

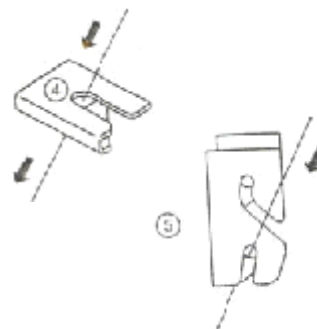


4. Turn the hand wheel toward you until the Chainstitch Looper extends out 10mm (approximately 1/2 inch) from the needle plate edge.



5. Thread the looper area of the machine following the brown color-coded thread guides 4-11. Use the tweezers provided in the accessory case to aid in threading the looper.

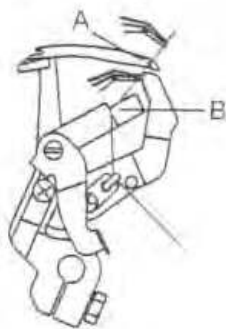
6. Place the thread through threading guide ④ and ⑤.



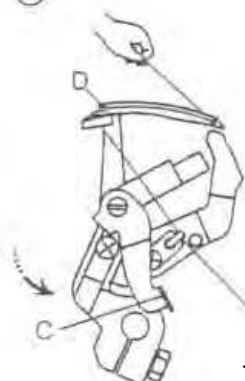
7. Continue threading guides ⑥, ⑦, ⑧ and ⑨.

8. Thread the looper eye (A) from front to back. Pull about 4 inches of thread through the looper. Position the thread into the V cutout (B) on the threader. Firmly hold the thread tail with your left hand and pull threader lever (C) up into place (D). Gently pull 5-6" of thread to the back of the machine.

⑩

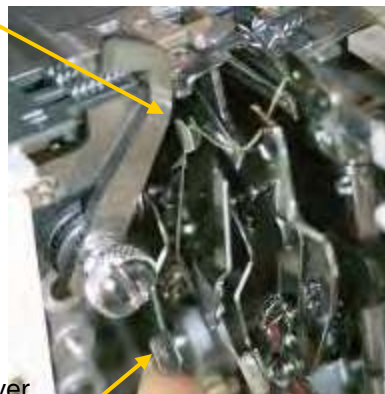


⑪



"V" cutout

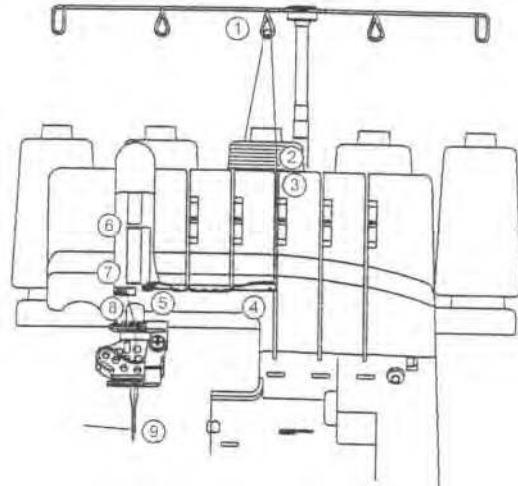
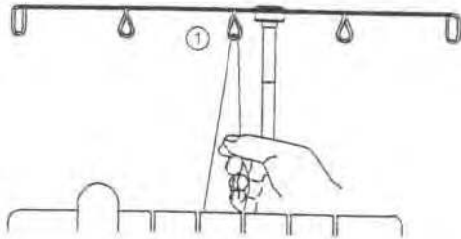
Threader Lever



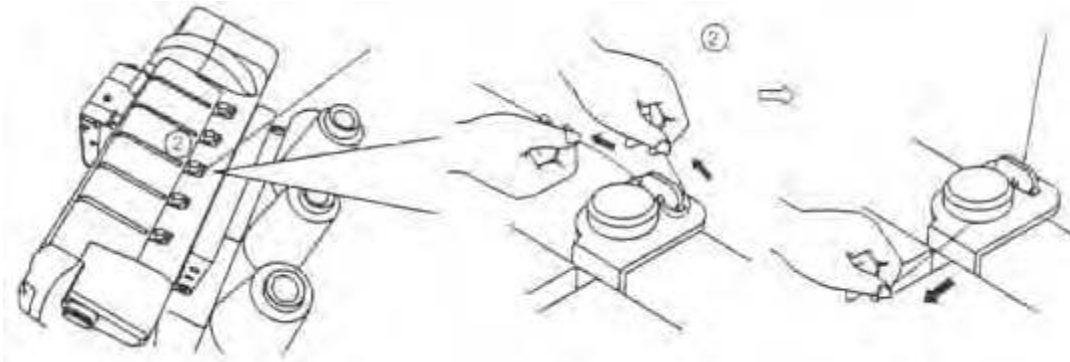
◆ Thread Right Cover Stitch needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.

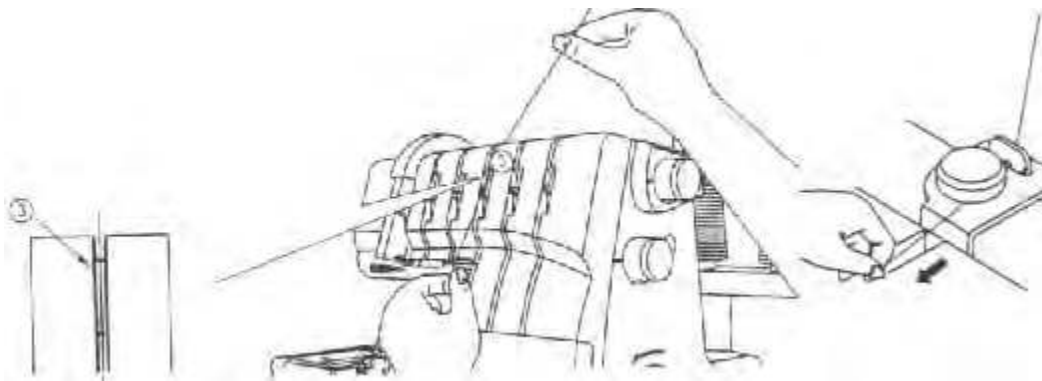
2. Pass thread from back to the front through the thread guide ①.



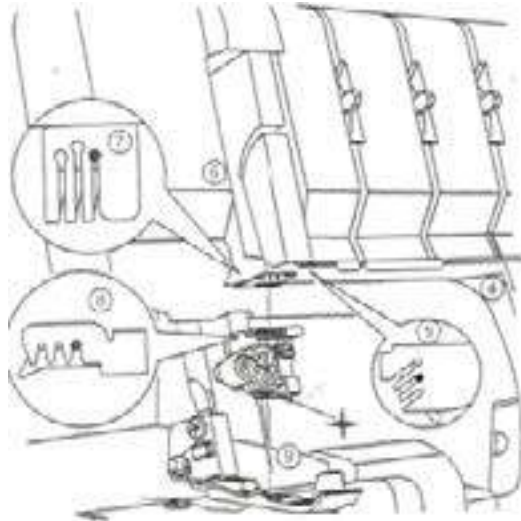
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



4. While holding the thread firmly, pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.
6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp.



7. Thread the eye of the Right Cover Stitch Needle ⑨.

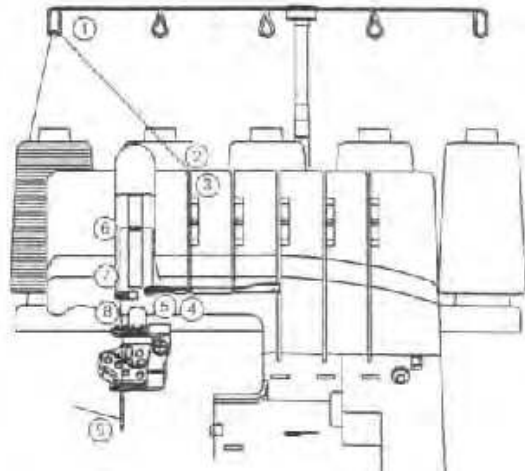
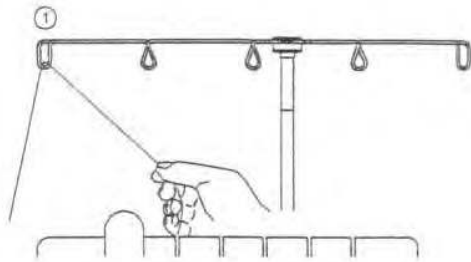


8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot. Lower foot and sew.

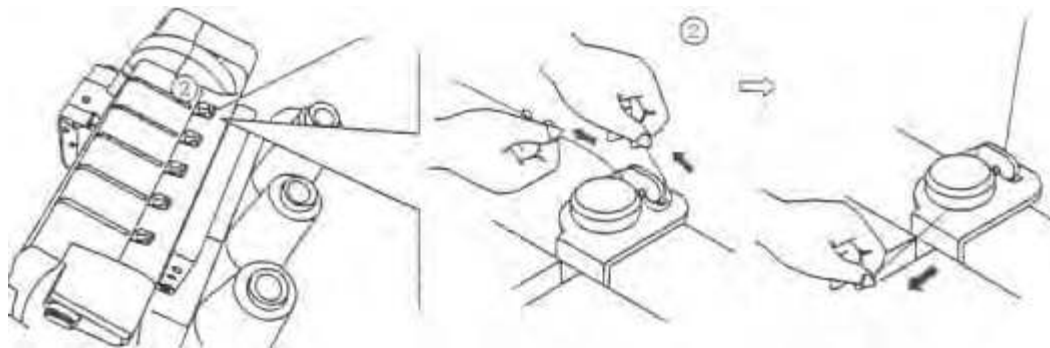
◆ Thread Left Cover Stitch needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.

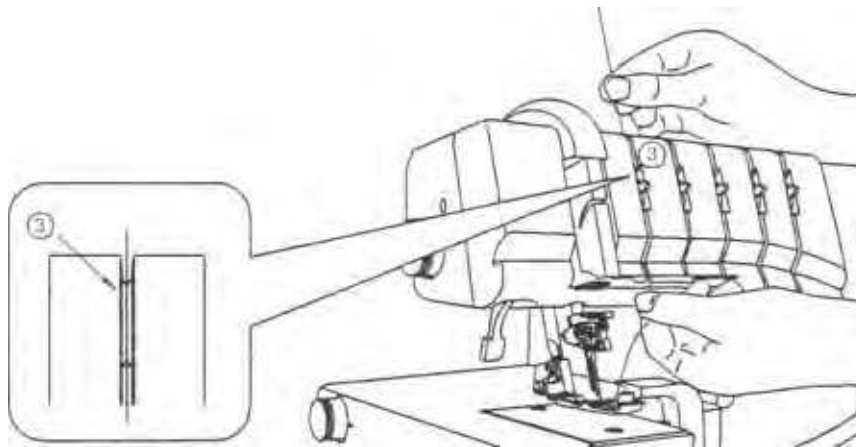
2. Pass thread from back to the front through the thread guide ①.



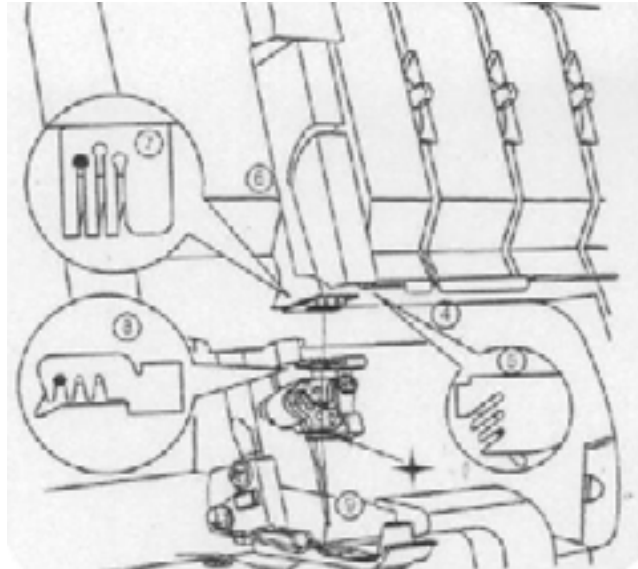
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



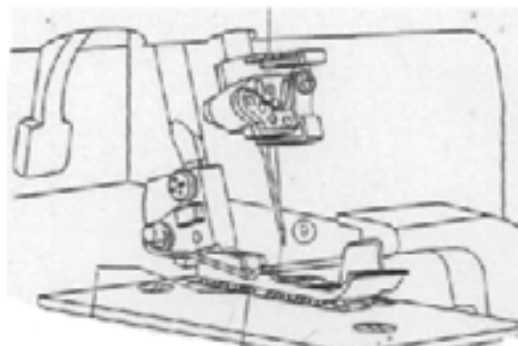
4. While holding the thread firmly, pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the front slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the left slots of the thread guides ⑦ and ⑧.
6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp.



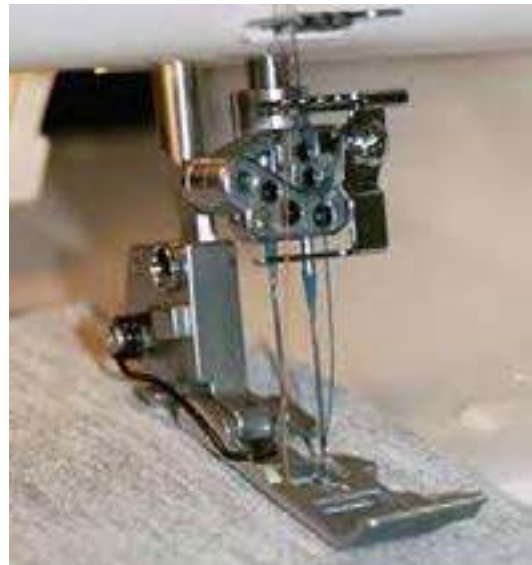
7. Thread the eye of the Left Cover Stitch Needle ⑨.



8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot. Lower foot and sew.

TRY IT:

- ◆ Press a 1" hem into a knit fabric.
- ◆ Lift the Presser Foot to the highest position.
- ◆ Position the fabric right side up and under the needles.
- ◆ Align the fabric so that the fabric fold is 1" to the right of the needles.
- ◆ Lower the Presser Foot.
- ◆ Turn the handwheel to assist in the stitch forming on the fabric. When sewing the Cover Hem Stitch it is necessary to have fabric under the needles while sewing. Sew off onto a scrap fabric.
- ◆ Sew using the seam guides for a straight hem and to ensure the fabric's raw edge is finished.
- ◆ As the machine sews it will finish the fabric's raw edge and sew three rows of topstitching.



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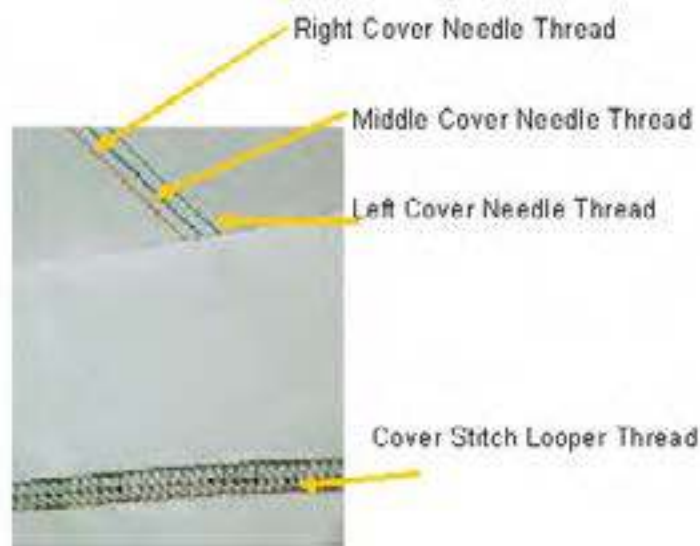
Chapter 13: Triple Cover Hem Stitch



Triple Cover Hem

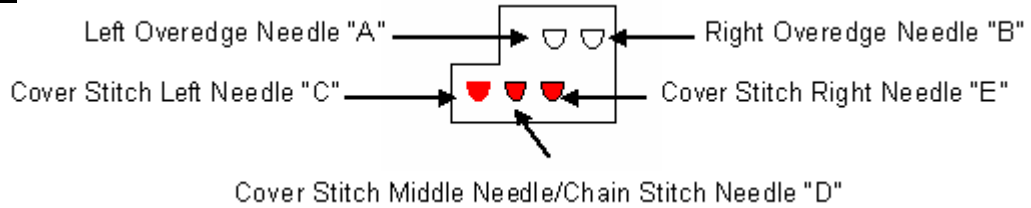
This innovative stitch provides a very wide 5.6 mm professional and creative triple topstitch to sewing projects. Three needles create parallel rows of topstitching and one looper sews an edge finish on the underneath side. This is ideal for heavier fabrics traditionally used in home decorating. It also adds a unique accent for garment construction. In addition to sewing on woven fabrics, the Triple Cover Hem makes a beautiful topstitch and a strong hem on stretch fabrics. This stitch emulates hem finishing as seen on ready-to-wear garments.

:



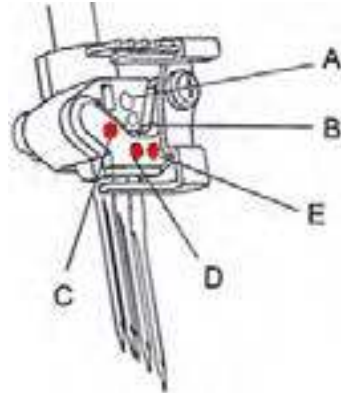
SET UP:

Needles:



Set at:

ATD: Auto Tension Dial	"J"
Left Cover Stitch Needle "C" (Orange)	Threaded
Middle Cover Stitch Needle "D" (Blue)	Threaded
Right Cover Stitch Needle "E" (Green)	Threaded
Upper Looper	Looper Disengaged and Not Threaded
Spreader	Not Used
Lower Looper	Not Threaded
Chain Stitch Looper (Brown)	Threaded
Upper Looper Clutch	"C"
Upper Knife	Non-working Position
Seam Guide Plate	Installed
Seam Width Dial	"N"
Stitch Length Dial	"N"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"R"

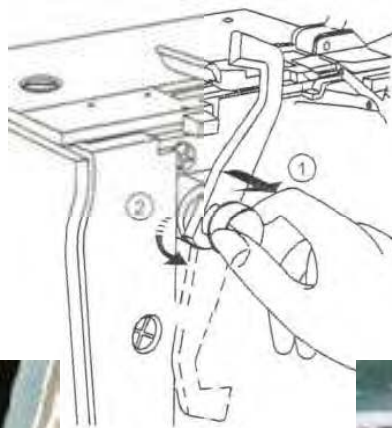


- ◆ Turn Auto Tension Dial to “J”.

- ◆ Turn Stitch Length Dial to “N”.



- ◆ Disengage Upper Knife. The knife will not trim the fabric when it is disengaged.
 1. Open Looper Cover.
 2. Pull the movable knife holder (silver screw) to the right as far as it will go.
 3. Turn the holder counter clockwise until the knife clicks into a lock position.



Upper Knife Engaged



Upper Knife Disengaged

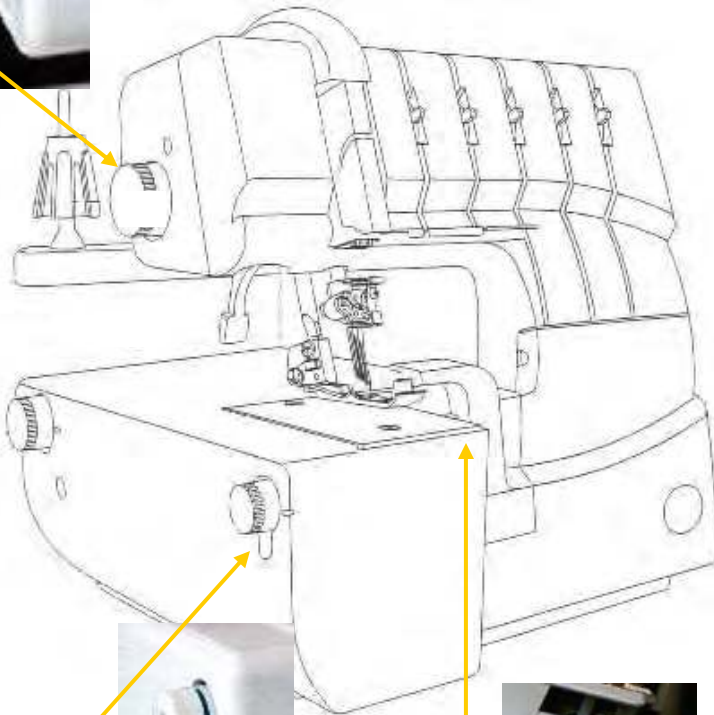
- ◆ Turn Presser Foot Pressure Dial to “N”.



- ◆ Turn Differential Feed Dial to “N”.



- ◆ Turn Seam Width Dial to “N”.

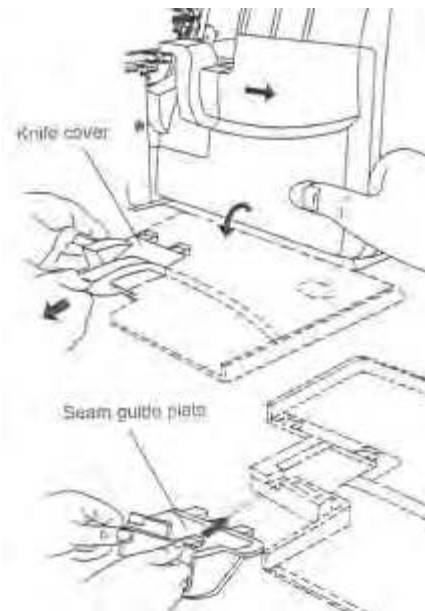


- ◆ Set Stitch Finger to “R”.

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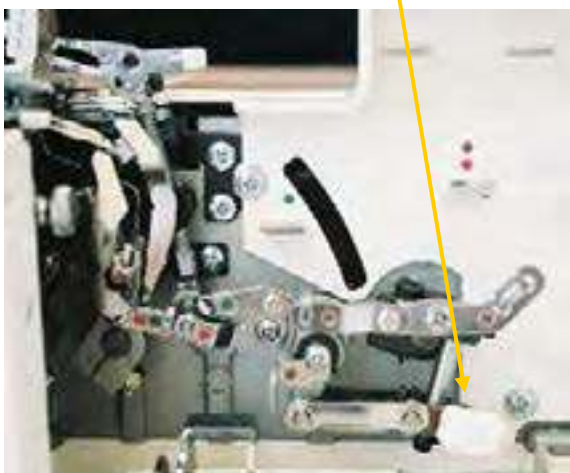
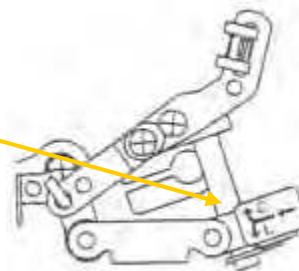
- ◆ Install the Seam Guide Plate. The Seam Guide Plate provides a flat surface for the fabric and seam guides. It can only be used when the knife and the lower looper are disengaged. The Seam Guide Plate is used when sewing the Chainstitch, Cover Stitch and the Triple Cover Stitch.

1. Open Looper Cover.
2. Remove Knife Cover by pulling it toward you.
3. Slide the Seam Guide Plate into place.



- ◆ Disengage Upper Looper. By disengaging the Upper Looper the looper no longer moves when sewing. It is nonoperative. If the looper was still engaged it would hit the Seam Guide Plate.

1. Turn handwheel until the Upper Looper is in the highest position.
2. Push the clutch button to the left and up to disengage.



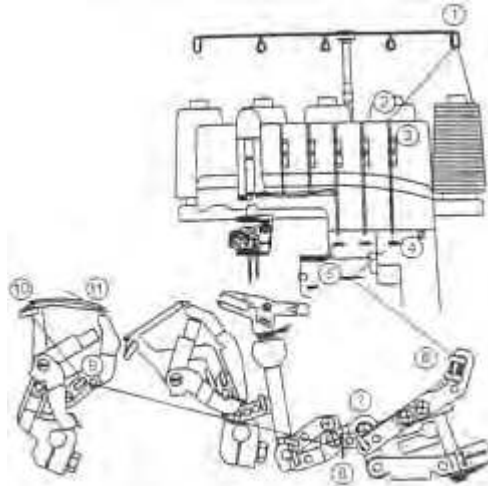
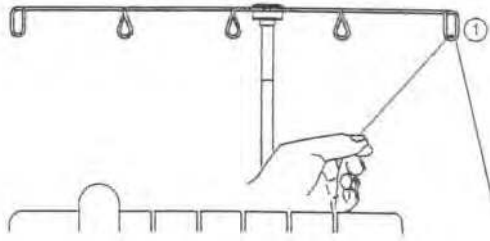
Upper Looper Engaged



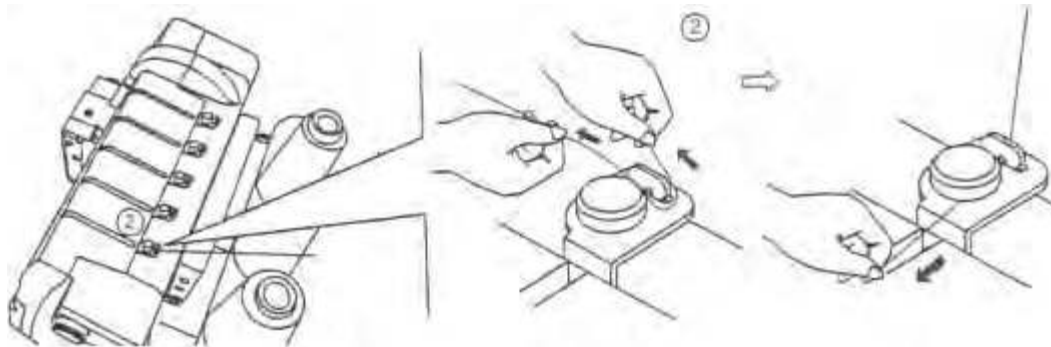
Upper Looper Disengaged

◆ Thread Chainstitch Looper with a regular overlock thread.

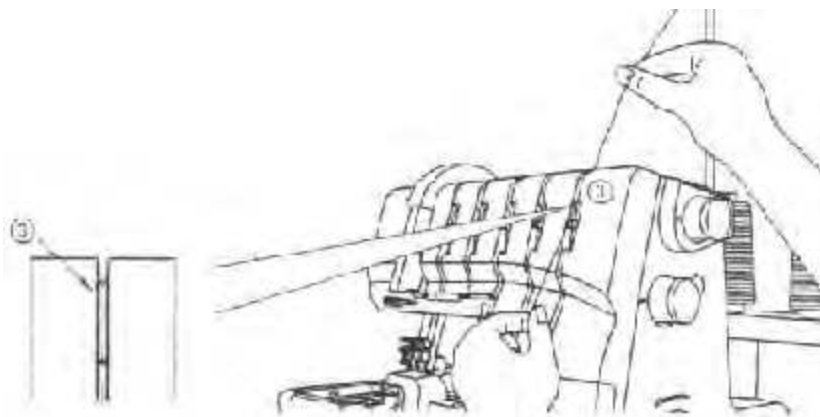
1. Raise the Presser Foot to release the tension disks. Pass the thread from the back to the front through the thread guide ①.



2. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull thread along the right side of the button as illustrated.



3. While holding the thread firmly, pull the thread between the tension disks.

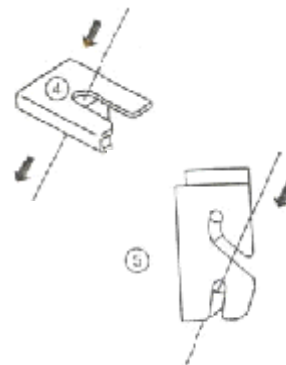


4. Turn the hand wheel toward you until the Chainstitch Looper extends out 10mm (approximately 1/2 inch) from the needle plate edge.



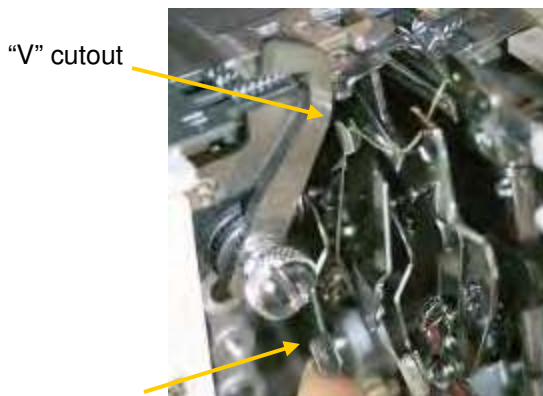
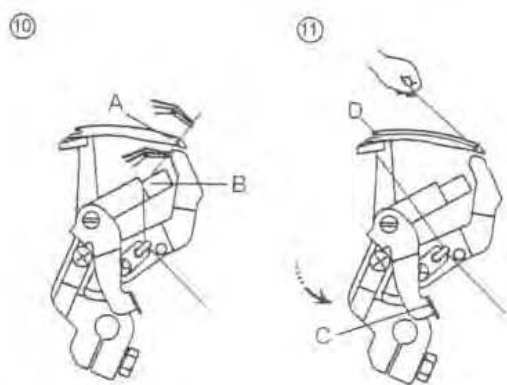
5. Thread the looper area of the machine following the brown color-coded thread guides 4-11. Use the tweezers provided in the accessory case to aid in threading the looper.

6. Place the thread through threading guides ④ and ⑤.



7. Continue threading guides ⑥, ⑦, ⑧ and ⑨.

8. Thread the looper eye (A) from front to back. Pull about 4 inches of thread through the looper. Position the thread into the V cutout (B) on the threader. Firmly hold the thread tail with your left hand and pull threader lever (C) up into place (D). Gently pull 5-6" of thread to the back of the machine.

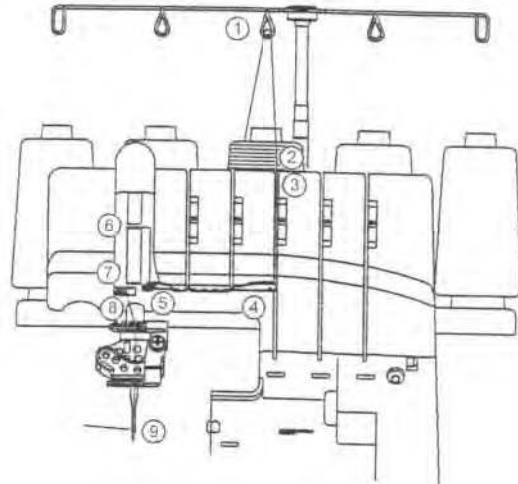
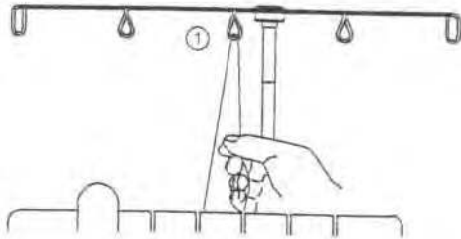


Threader Lever

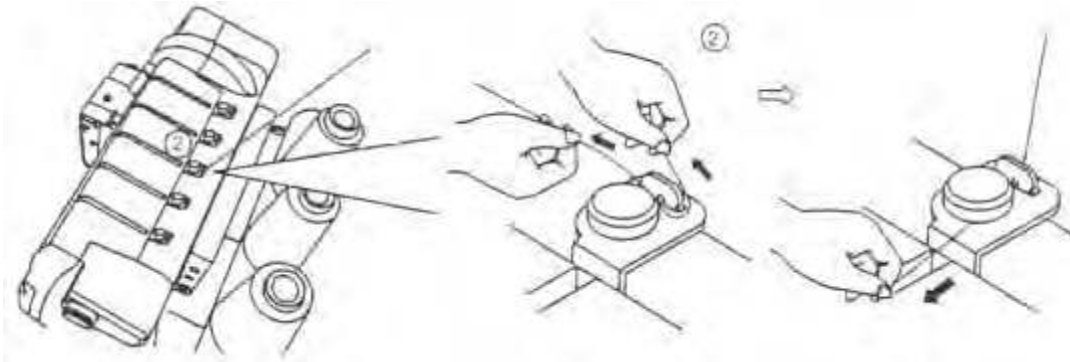
◆ Thread Right Cover Stitch needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.

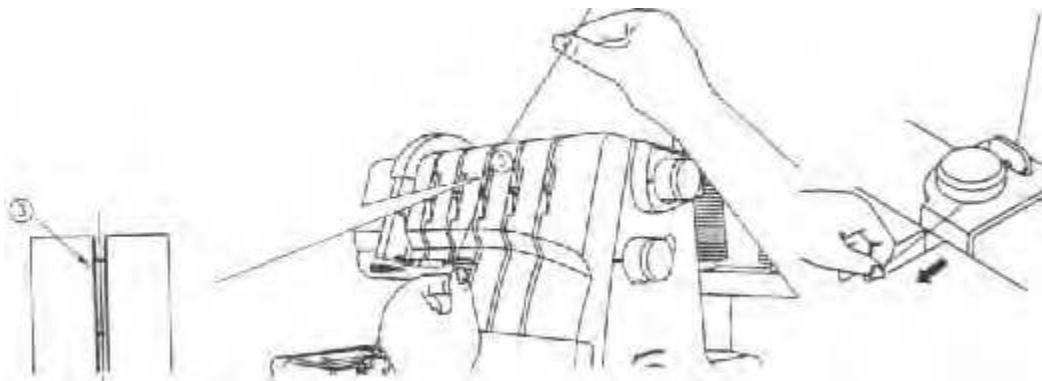
2. Pass thread from back to the front through the thread guide ①.



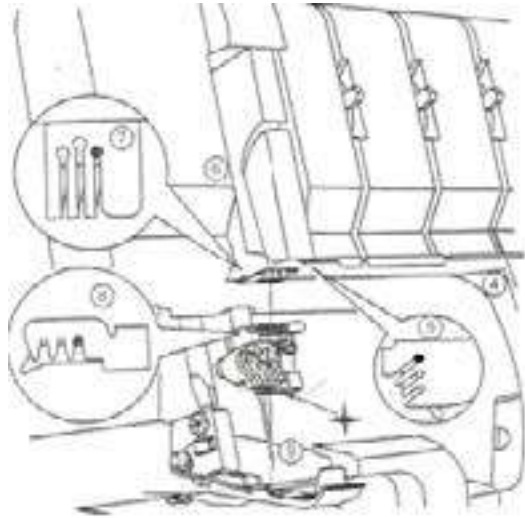
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



4. While holding the thread firmly, pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the rear slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the right slot of the thread guides ⑦ and ⑧.
6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp.



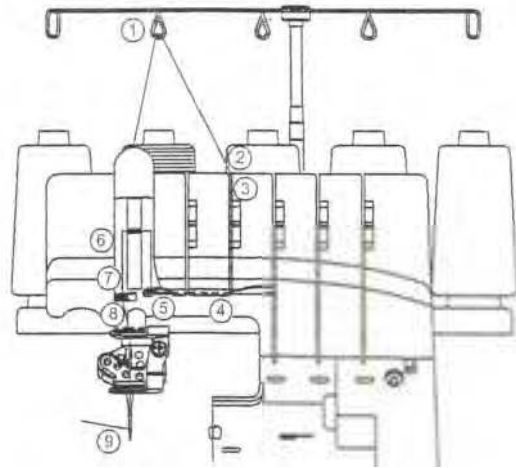
7. Thread the eye of the Right Cover Stitch Needle ⑨.



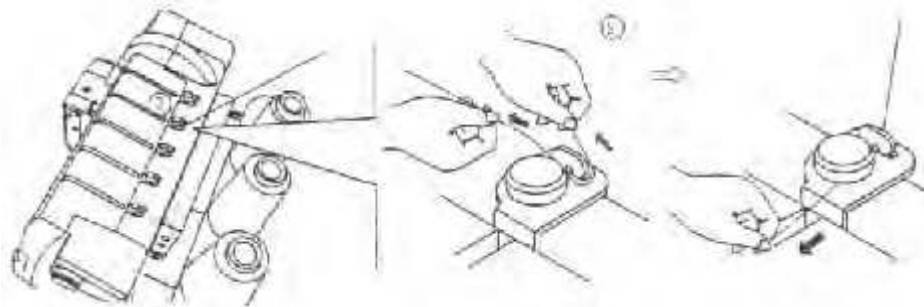
8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot. Lower foot and sew.

◆ Thread Middle Cover needle with regular overlock thread.

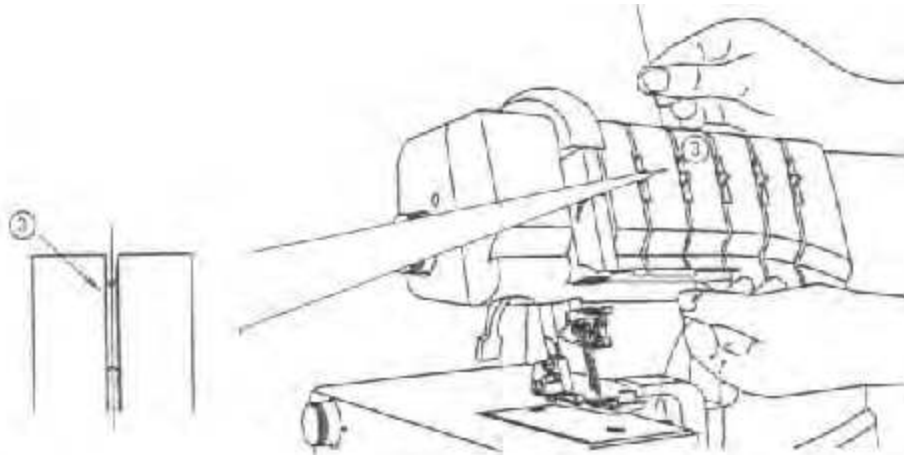
1. Raise the Presser Foot to release the tension disks. Thread the Cover Stitch Middle/Chain Stitch needle as illustrated 1-9.
2. Pass thread from back to the front through the thread guide ①.



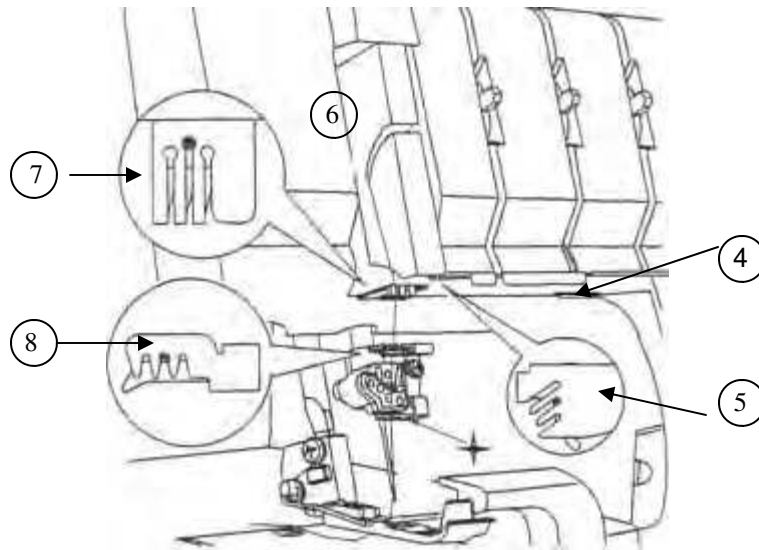
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



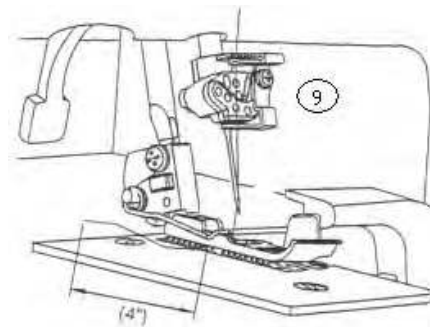
4. While holding the thread, firmly pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the middle slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the middle slot of the thread guides ⑦ and ⑧.
6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp for the Cover Stitch or Chainstitch.



7. Thread the eye of the middle needle ⑨.

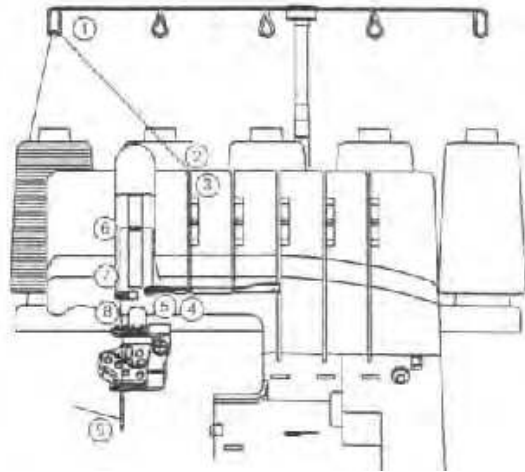
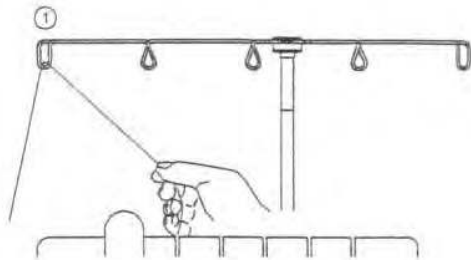


8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot. Lower foot and sew.

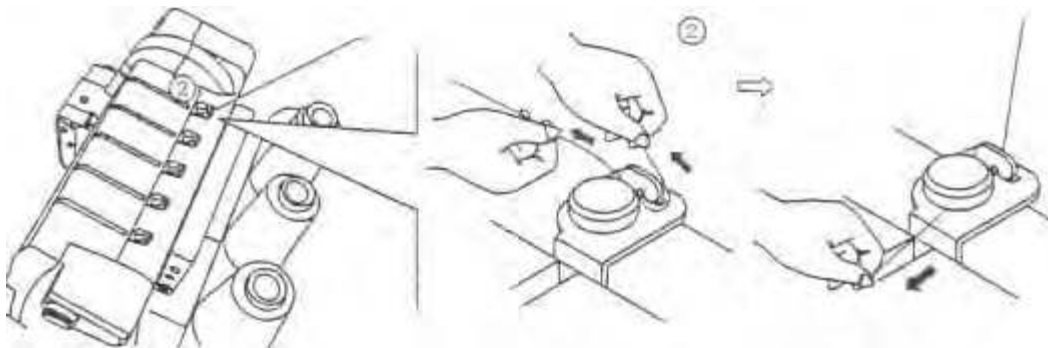
◆ Thread Left Cover Stitch needle with regular thread.

1. Raise the Presser Foot to release the tension disks. Thread the left needle as illustrated 1-9.

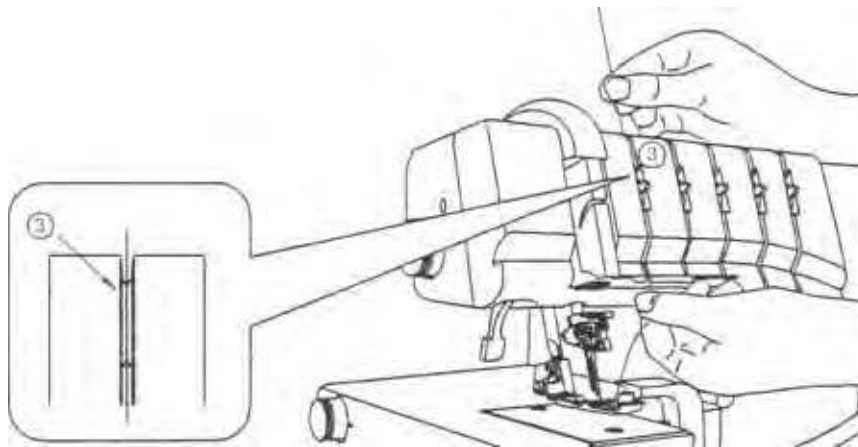
2. Pass thread from back to the front through the thread guide ①.



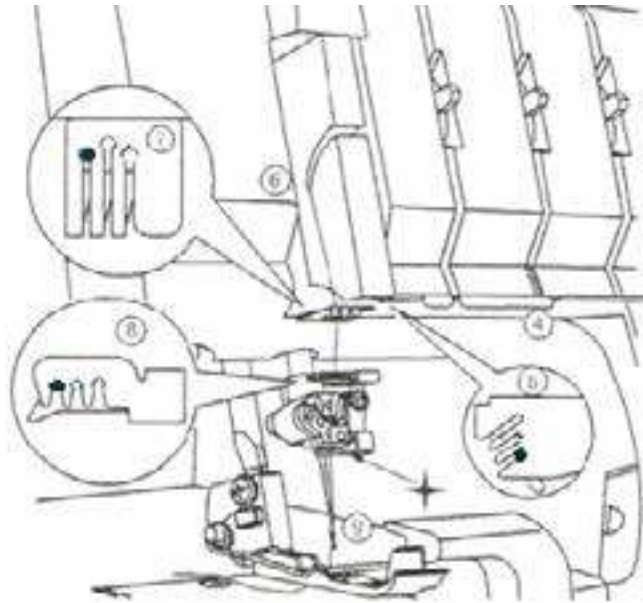
3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.



4. While holding the thread firmly, pull the thread between the tension disks.



5. Continue to thread points 4-8. Slip the thread into the forward slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the left slot of the thread guides ⑦ and ⑧.
6. Before threading the eye of the needle, make sure the thread is in front of the thread guide located on the bottom of the needle clamp.



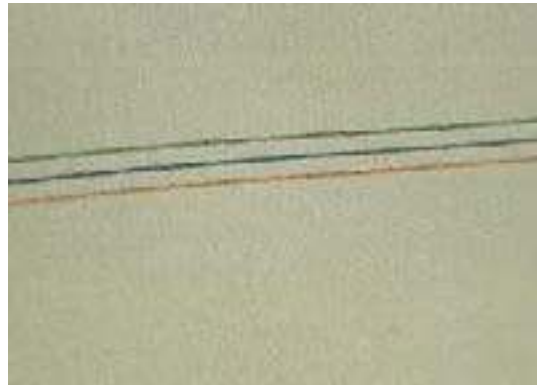
7. Thread the eye of the Left Cover Stitch Needle ⑨.



8. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
9. Place the thread to the back, under the Presser Foot. Lower foot and sew.

TRY IT:

- ◆ Press a 3" hem into a woven home decorator fabric.
- ◆ Lift the Presser Foot to the highest position.
- ◆ Position the fabric right side up and under the needles.
- ◆ Align the fabric so that the fabric fold is 1" to the right of the needles.
- ◆ Lower the Presser Foot.
- ◆ Turn the handwheel to assist in the stitch forming on the fabric. When sewing the Triple Hem Stitch it is necessary to have fabric under the needles while sewing.
- ◆ Sew using the seam guides for a straight hem and to ensure the fabric's raw edge is finished.
- ◆ As the machine sews it will finish the fabric's raw edge and sew three rows of topstitching.



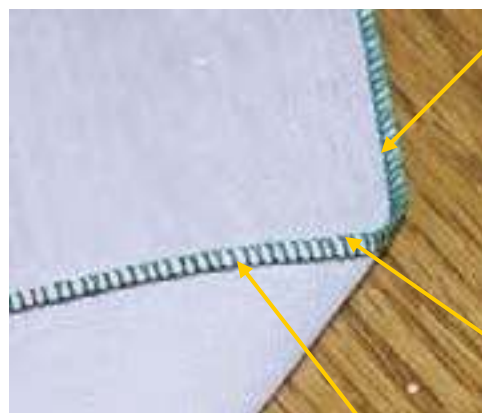
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Chapter 14: Three-Thread Rolled Hem



Three-Thread Rolled Hem

The Rolled Hem Stitch is used to finish edges of scarves, ruffles, table linens, and some garments. It is suitable for lightweight to medium weight fabrics, such as sheers, silkies and broadcloth. Beautiful pintucks can be achieved with the rolled hem. They can enhance a yoke, heirloom sewing, wearable art and even home decorating projects. Note: Rolled hemming can only be performed with the Right Overedge needle all other needles must be removed.



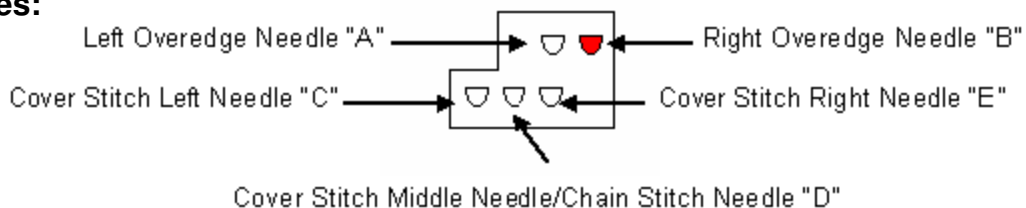
Right Overedge Needle Thread

Lower Loper Thread

Upper Loper Thread

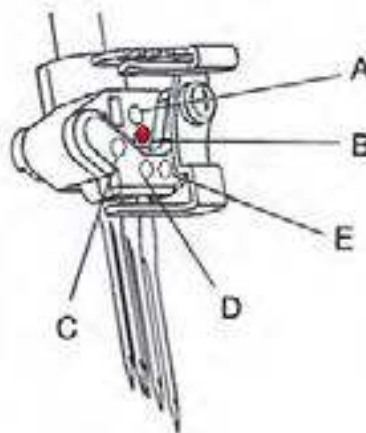
SET UP:

Needles:



Set at:

ATD: Auto Tension Dial	"C"
Left Cover Stitch Needle "C"	Not Threaded
Middle Cover Stitch Needle "D"	Not Threaded
Right Cover Stitch Needle "E"	Not Threaded
Overedge Left Needle "A"	Not Threaded
Overedge Right Needle "B" (Blue)	Threaded
Upper Looper (Green)	Looper Engaged and Threaded
Spreader	Not Used
Lower Looper (Red)	Threaded
Chain Stitch Looper (Brown)	Not Threaded
Upper Looper Clutch	"L"
Upper Knife	Engaged
Seam Guide Plate	Not Installed Use Knife Cover
Seam Width Dial	"N"
Stitch Length Dial	"1"
Presser Foot Pressure	"N"
Differential Feed Dial	"N"
Stitch Finger	"R"



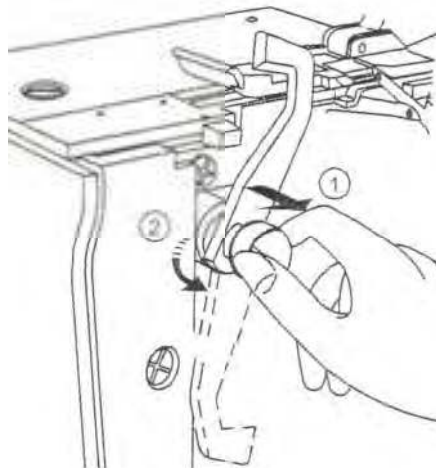
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- ◆ Turn Auto Tension Dial to “C”.



- ◆ Turn Stitch Length Dial to “1”.

- ◆ Engage Upper Knife. The knife will not trim the fabric when it is disengaged.
 1. Open Looper Cover.
 2. Pull the movable knife holder (silver screw) to the right as far as it will go.
 3. Turn the holder clockwise until the knife clicks into a lock position.



Upper Knife Disengaged



Upper Knife Engaged

- ◆ Turn Presser Foot Pressure Dial to “N”.



- ◆ Turn Differential Feed Dial to “N”.



- ◆ Turn Seam Width Dial to “N”.

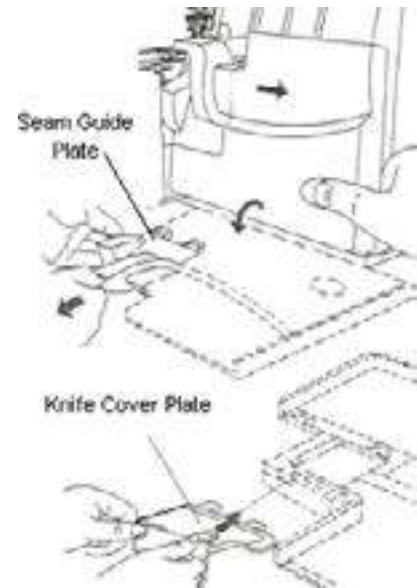


- ◆ Set Stitch Finger to “R”.



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- ◆ Install the Knife Cover.

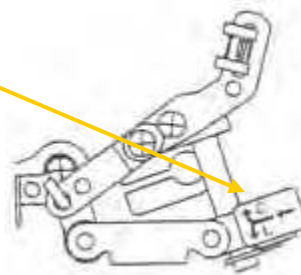


- ◆ Engage Upper Looper. Engaging the Upper Looper causes the looper to move when sewing. Even though the Upper Looper is not threaded it needs to be engaged.

1. Push the clutch button to the left and down to engage.
2. Turn handwheel.



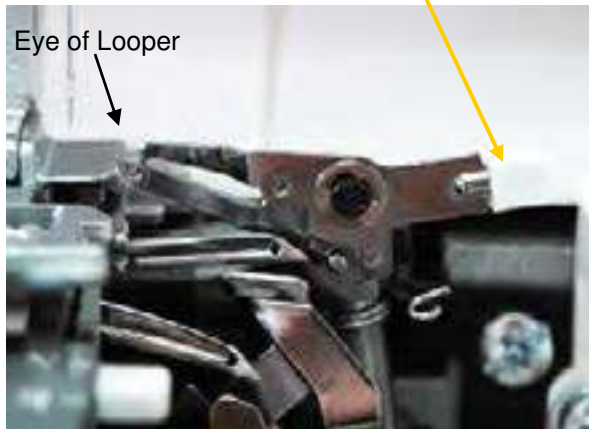
Upper Looper Disengaged



Upper Looper Engaged

- ◆ Disengage Spreader. The Upper Looter has a hole for the thread on the top of the looper. If the stitch requires that the looper be engaged, but not threaded then the Spreader is used. The Spreader simply plugs-in (or closes) the looper's hole. The Spreader is disengaged when the Upper Looter is engaged/operative and threaded. The Spreader is used with a stitch that requires only one looper thread. With the help of the Spreader the single looper thread wraps around the fabric's edge.

1. Lower the white handle on the Spreader to open the eye of the Upper Looter.



Spreader Engaged

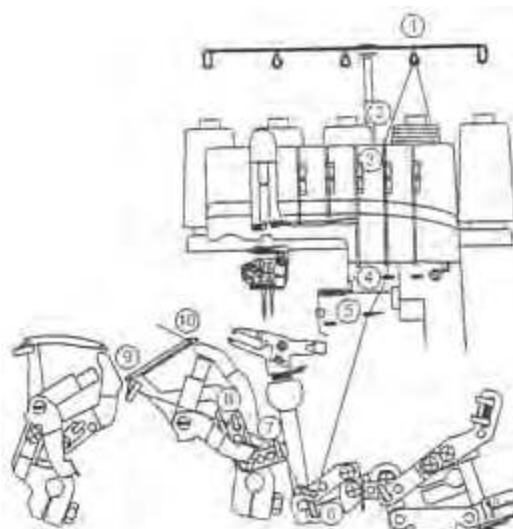
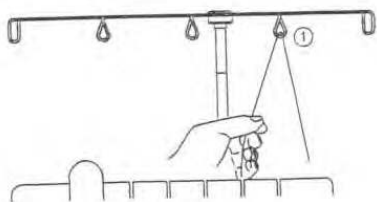


Spreader Disengaged

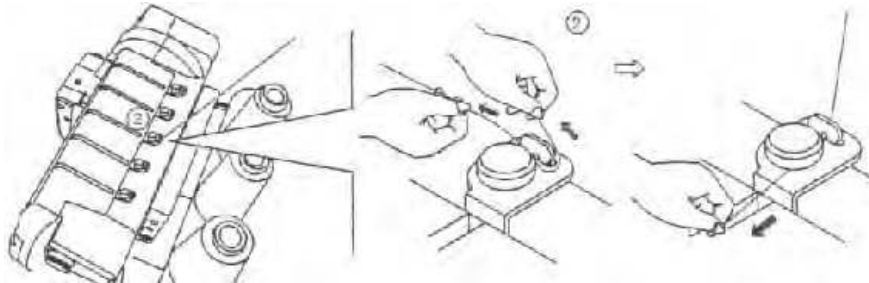
- ◆ Thread Upper Looter with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the Lower Looter as illustrated 1-9.

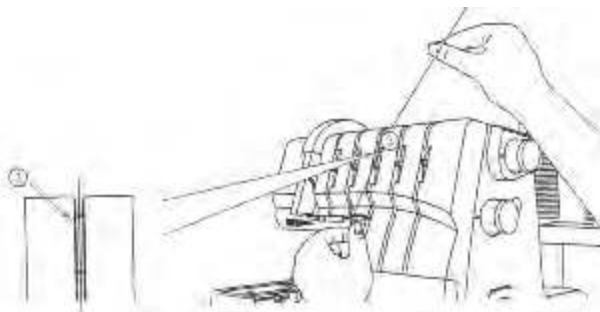
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

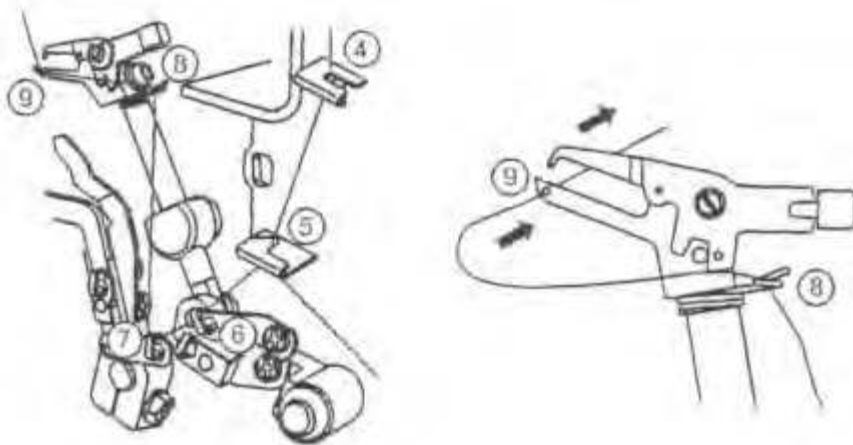


4. While holding the thread firmly, pull the thread between the tension disks.



5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately 1/2 inch) from the needle plate edge.

6. Thread the looper area of the machine following the green color coded thread guides 4-9.

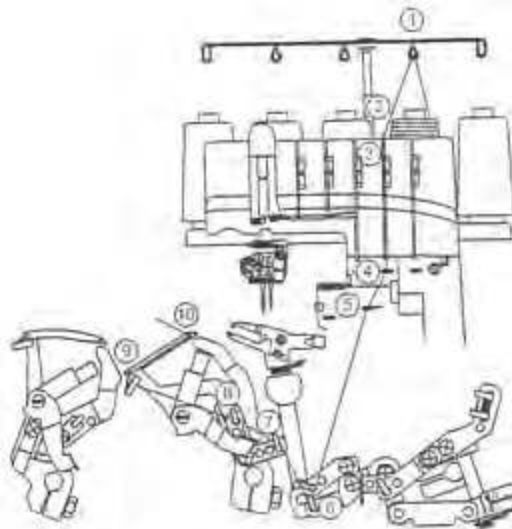
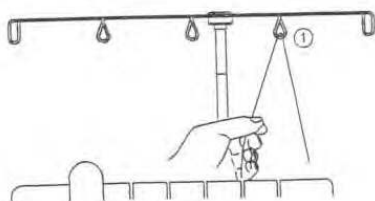


7. Thread the hole in the Upper Looper from front to back ⑨. Pull about 4 inches of thread through the looper and place to the back of the throat plate.

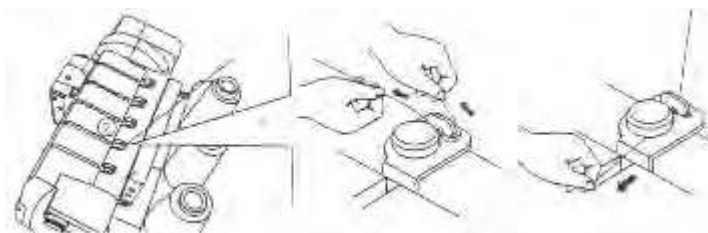


◆ Thread Lower Looper with regular overlock thread.

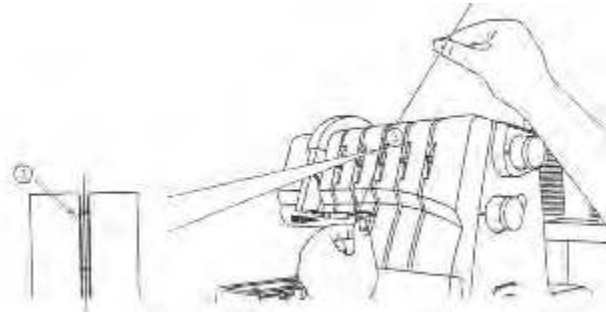
1. Raise the Presser Foot to release the tension disks. Thread the Lower Looper as illustrated 1-10.
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

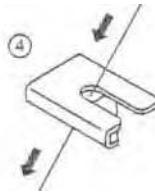


4. While holding the thread firmly, pull the thread between the tension disks.



5. Turn the handwheel toward you until the lower looper extends 5-10mm (approximately ½ inch) from the needle plate edge.
6. Thread the looper area of the machine following the red color coded thread guides 4-10.

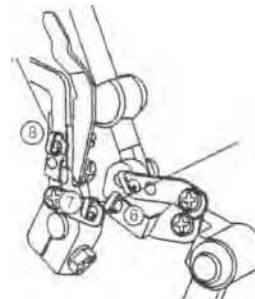
7. Place the thread slightly from left and to the right of threading guide ④.



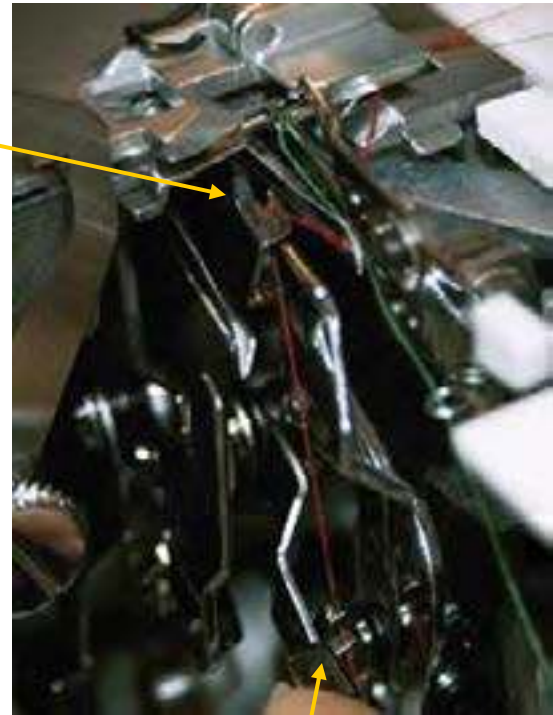
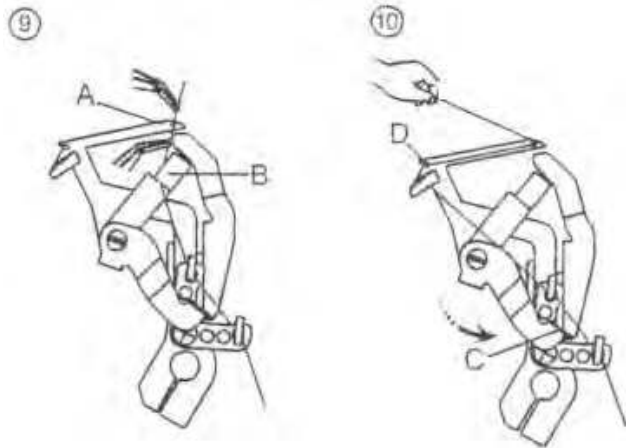
8. Place the thread slightly from the front and to the back of threading guide ⑤.



9. Place the thread through ⑥, ⑦ and ⑧.



10. Thread the looper eye (A) from front to back. Pull about 4 inches of thread. Position thread into V cutout (B) on threader. Firmly hold thread tail with left hand and pull Threader lever (C) up into place (D).



Threader Lever

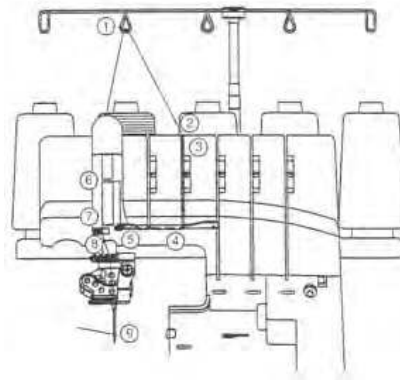
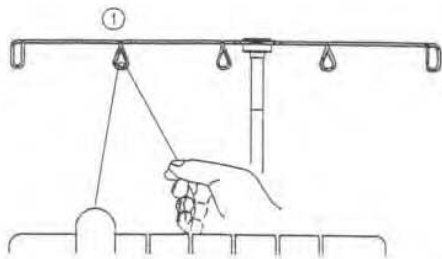


NOTE: Make sure the Upper Looper thread is behind the Lower Looper thread.

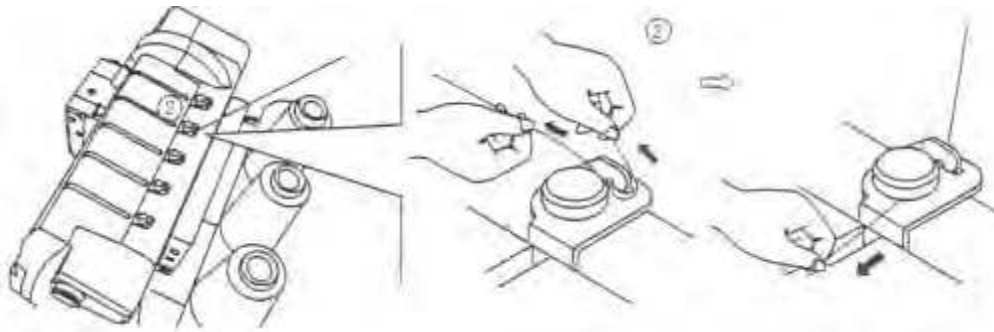
◆ Thread Right Overedge needle with regular overlock thread.

1. Raise the Presser Foot to release the tension disks. Thread the right needle as illustrated 1-9.

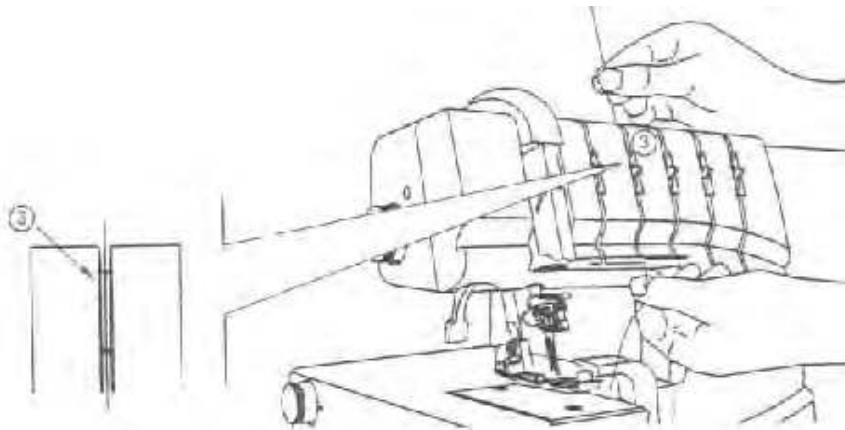
2. Pass thread from back to the front through the thread guide ①.



3. Thread the top cover thread guide by pulling the thread towards the left until it slips under the guide. Then pull the thread along the right side of the button as illustrated.

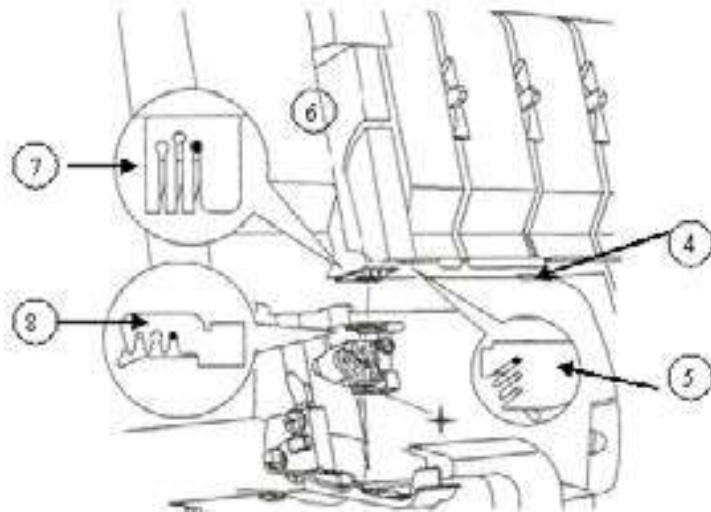


4. While holding the thread firmly, pull the thread between the tension disks.

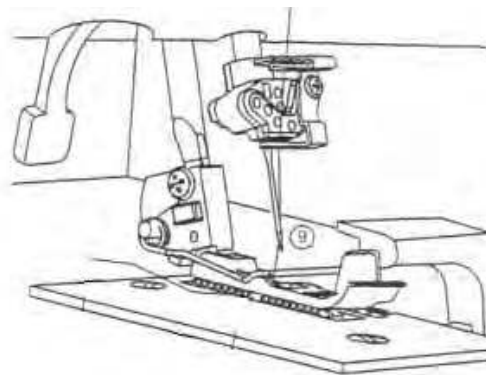


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5. Continue to thread points 4-8. Slip the thread into the rear slot of the thread guide ⑤. Go over the take up lever ⑥. Continue by slipping the thread into the right slots of the thread guides ⑦ and ⑧.
8. Before threading the eye of the needle, make sure the thread is behind the thread guide located on the bottom of the needle clamp.



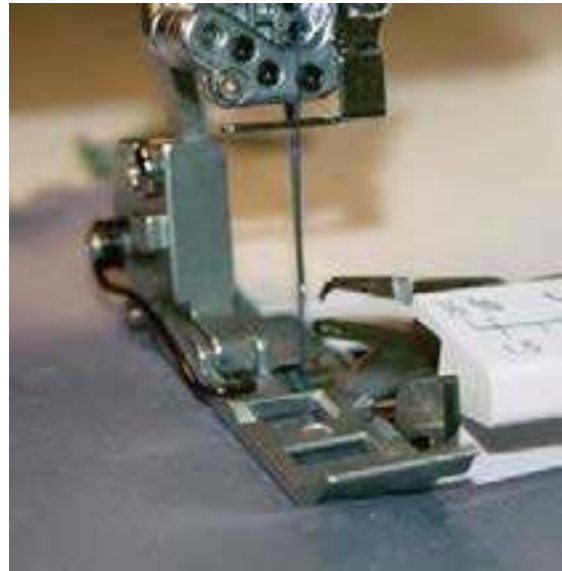
9. Draw about 4 inches of the thread through the needle eye towards the back of the machine.
10. Place the thread to the back, under the Presser Foot. Lower foot and sew.



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TRY IT:

- ◆ Align a piece of lightweight fabric so that the fabric's edge is being slightly trimmed by the knife.
- ◆ Sew.



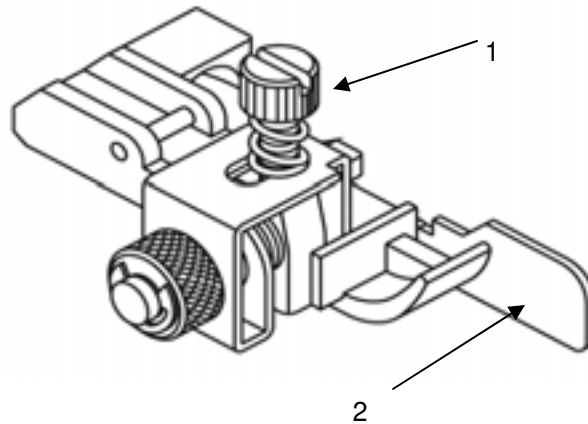
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Chapter 15: Additional Presser Feet



BLIND HEM FOOT

The Blind Hem Foot is used for hemming skirts, pants and other sewing projects in one easy operation. It is recommended for use on stretch or textured fabrics.



Machine Preparation

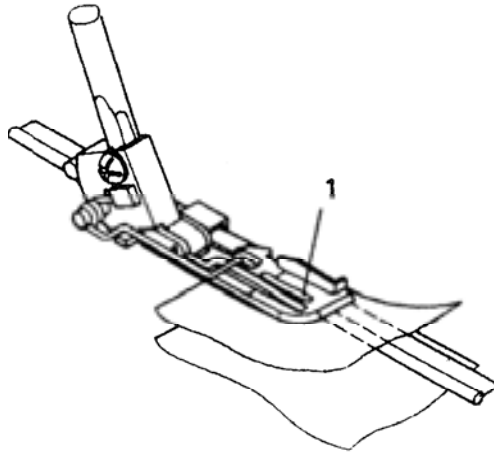
- Differential Feed: Set to "N"
- Needles: Use the right needle only
- Upper Knife: Engaged
- Stitch Length: Set to 3 or 4
- Foot: Attach (snap-on) Blind Hem Foot

Sewing Instructions

- Fold fabric as illustrated, and insert it under the presser foot
- Line up the edge of the fold with the guide plate (2)
- Adjust the positioning of the fold of the fabric with the adjustment screw (1)
- The fold of the fabric must always be in line with the left needle
- Begin to sew, keeping the fold of the fabric along guide plate (2)

CORDING FOOT

The Cording Foot is used for sewing piping (cording) between two layers of fabric in one easy operation.



Machine Preparation

- Differential Feed: Set to "N"
- Needles: You may use both the right and left needle, or left only
- Upper Knife: Engaged
- Stitch Length: Set to "N"
- Foot: Attach (snap-on) Cording Foot

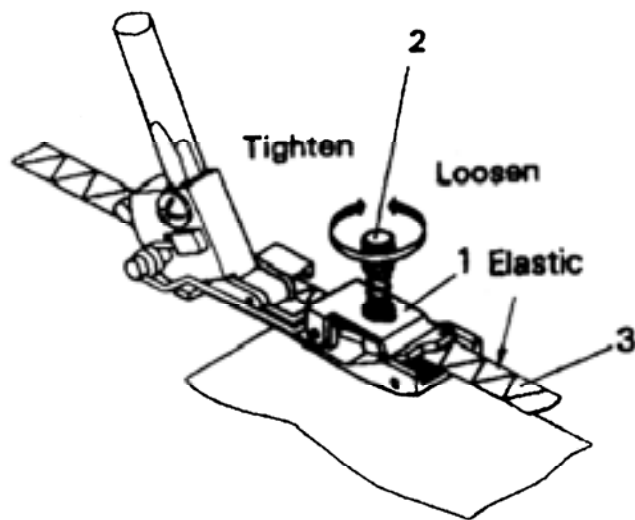
Sewing Instructions

- Raise the presser foot
- Set the needle(s) at the highest position
- Layer the piping between the two layers of fabric so that the piped edge lays towards the inside of the fabric
- Line up the edge of the fabric along the upper knife
- The piping (cording) must line up with the groove in the presser foot (guide 1)
- Lower the presser foot and begin to sew

Note: Make sure the piping follows the groove of the Cording Foot as you sew.

ELASTIC FOOT

The Elastic Foot is used for inserting elastic into a seam. It can be used for swimwear, lingerie and other sewing projects.



Machine Preparation

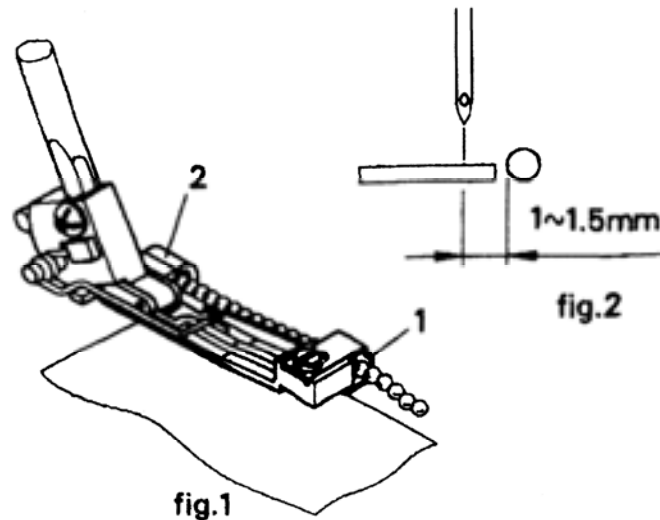
- Differential Feed: Set to "N"
- Needles: Use both the right & left needle for wider elastic, right needle for narrow elastic
- Upper Knife: Engaged
- Stitch Length: Set to 3 or 4
- Foot: Attach (snap-on) elastic foot

Sewing Instructions

- Set the needles at the highest position
- Raise the presser foot
- Loosen screw (2), which will allow the brake (1) to be raised
- Insert the elastic tape (3) into the foot under the brake and run it through to the back of the foot
- Tighten screw (2); the more you tighten, the more pressure will be added to the brake (1), causing the elastic to stretch even more
- Lay the seam under the presser foot, lining up the fabric to sew a 5/8" seam
- Lower the presser foot and begin to sew
- When seam is complete, continue to sew over the elastic for approximately 1 to 2 inches. Cut elastic and remove from machine.

BEADING FOOT

The Beading Foot is used for sewing on beads, sequins, pearls and thick cord.



Machine Preparation

- Differential Feed: Set to "N"
- Needles: Use left needle for large beads, or right needle for smaller beads
- Upper Knife: You may choose to work with or without the upper knife (If engaging the knife, be careful not to cut the beads as you sew)
- Stitch Length: Set to 3 or 4
- Foot: Attach (snap-on) Beading Foot

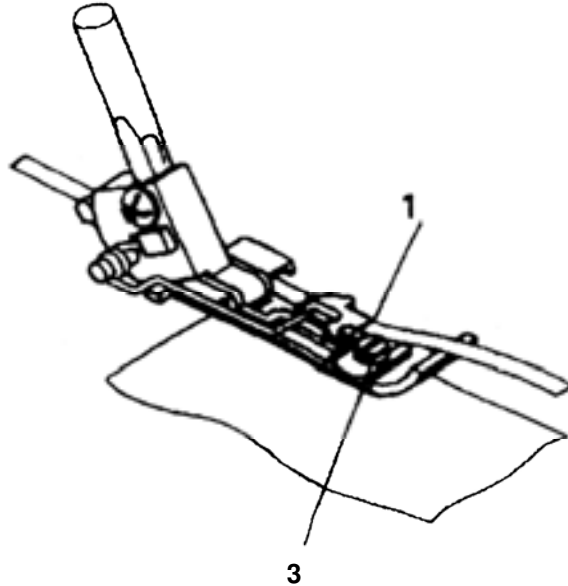
Sewing Instructions

- Pull the beads along guides 1 and 2 through the back of the foot
- Raise the presser foot and place fabric under the foot, with the edge of the fabric lined up with the edge of the Beading Foot
- Lower presser foot and begin sewing, slowly at first to make sure the beads are well positioned

Note: The needle should penetrate the fabric at 1.5mm away from the edge.

TAPING FOOT

The Taping Foot is used for inserting a tape into seams that will stretch easily. Inserting the tape will stabilize the seam.



Machine Preparation

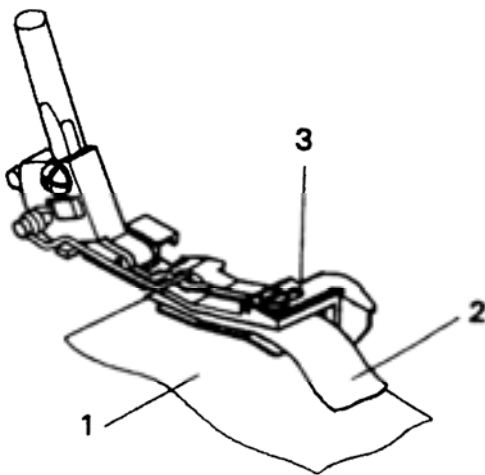
- Differential Feed: Set to "N"
- Needles: Use both the right and left needle
- Upper Knife: Engaged
- Stitch Length: Set to "N"
- Foot: Attach (snap-on) Taping Foot

Sewing Instructions

- Set the needles at the highest position
- Raise the presser foot
- Insert the tape into the guide (1), and pull it through to the back of the foot
- You may adjust the position of the tape in relationship to the needles by turning the adjusting screw (3)
- Lay the seam under the presser foot, lining up the fabric to sew a 5/8" seam
- Lower the presser foot and begin to sew

SHIRRING FOOT

The Shirring Foot is used for shirring or gathering. Use it on home decorating accessories or clothing. This foot provides best results when used with lightweight and sheer fabrics.



Machine Preparation

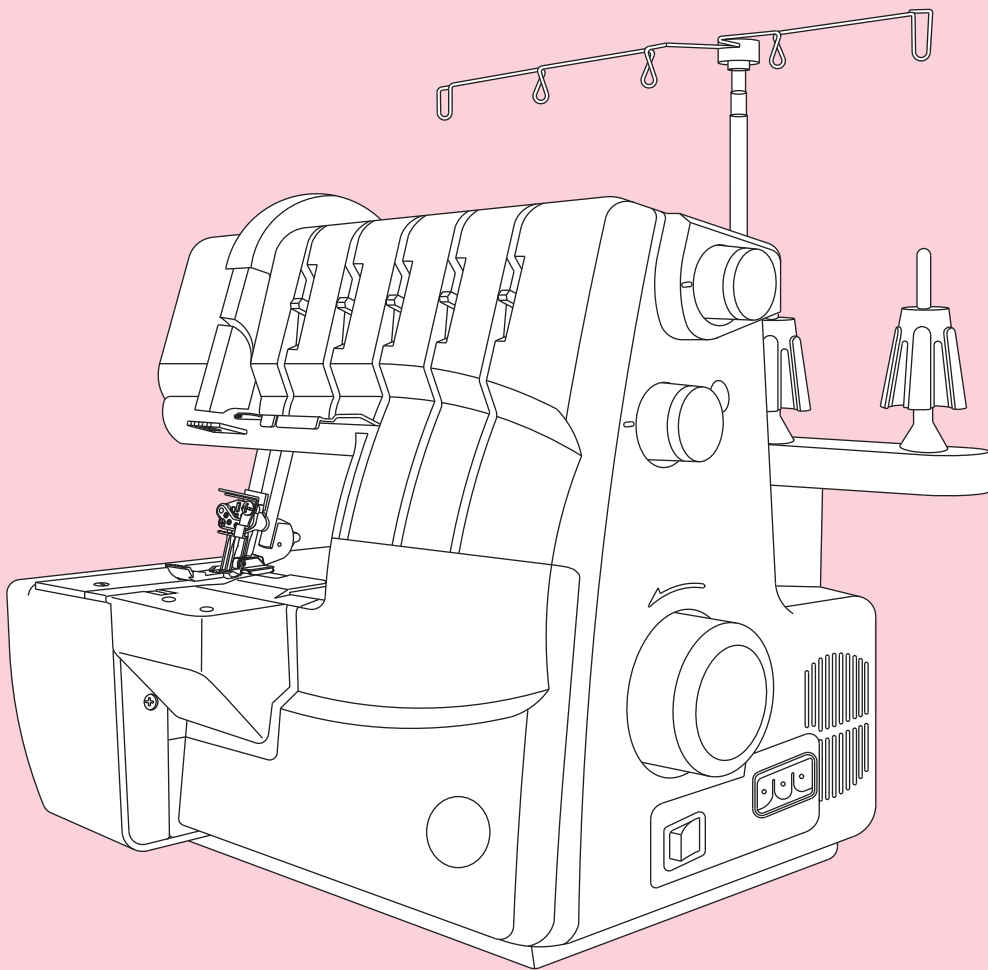
- Differential Feed: Set to the maximum (highest number) for gathering
- Needles: You may use either the left or right, or both needles
- Upper knife: Engaged
- Stitch Length: Set to 3 or 4
- Foot: Attach (snap-on) Shirring Foot

Sewing Instructions

- Raise the presser foot
- Set the needle(s) at the highest position
- Place bottom layer of fabric under the presser foot (1). This is the fabric that will be gathered.
- Place the top layer of fabric (2) into opening (3) located at the front of the Shirring Foot, making sure edges of both the top and bottom layer of fabrics line up
- Lower the presser foot and begin to sew

14T968DC

LIBRO DE INSTRUCCIONES



SINGER[®]
AT HOME WORLDWIDE

14T968DC

PREFACIO

Gracias por la compra de esta máquina Combinación de Remalladora, Chainstitch y Recubridora. Esta máquina, que ha sido creada para uso doméstico, le ofrecera un remallado excelente tanto en materiales ligeros como resistentes.

Por favor, diríjase al Libro de Instrucciones para un uso adecuado y un óptimo servicio. Para sacar el mayor rendimiento de su Remalladora, lea el Libro de Instrucciones por completo antes de intentar operar con la misma. Entonces, familiarícese con la máquina siguiendo el Libro de Instrucciones página por página.

Para asegurarse de que siempre estará provisto de las más modernas utilidades, el fabricante se reserva el derecho de cambiar la apariencia, diseño o los accesorios de esta máquina cuando lo considere necesario sin notificación alguna.

Esta máquina de coser SINGER, Modelo 14T968DC, ha sido probada por GS (Certificación de materiales Electro-técnicos) de acuerdo con los estándares Europeos, y correspondientes a las direcciones de seguridad eléctrica, interferencias e inmunidad. La Conformidad esta documentada por el simbolo GS y la certificación de la CE.



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INSTRUCCIONES DE SEGURIDAD

Cuando use esta máquina, se deberían seguir unas precauciones básicas de seguridad tales como las que se incluyen a continuación.

Lea todas las instrucciones antes de usar la máquina.



PELIGRO -Para reducir el riesgo de descarga eléctrica:

- * La máquina nunca debería quedar desatendida cuando este enchufada. Siempre desenchufar la máquina inmediatamente después de ser usada y antes de limpiarla.
- * Desenchufarla siempre antes de cambiar la bombilla. Reemplazar la bombilla siempre por otra de 15 vatios. Asegúrese de retirar la carcasa que cubre la bombilla antes de operar con la máquina.



ATENCION -Para reducir el riesgo de quemaduras, fuegos, descargas eléctricas o daños a personas:

- * Asegúrese que el voltaje del enchufe de la pared es el mismo que el voltaje del motor de la máquina.
- * Use esta máquina sólo para su finalidad, como se describe en este Libro de Instrucciones. Use sólo los accesorios recomendados por el fabricante como contiene el Libro de Instrucciones.
- * Para desconectar la máquina, apagar todos los controles y ponerlos en la posición "0", entonces desenchufar de la red.
- * Desconectar el enchufe de la máquina del enchufe de la pared o apagar el interruptor general de la máquina cuando se vayan a realizar ajustes en la zona de las agujas, tal y como enhebrar las agujas y los garfios,
- * Siempre desenchufar la máquina cuando se quiten las carcásas, se engrase, o cuando se realice cualquier otro tipo de ajuste mencionado en el Libro de Instrucciones.
- * No trate de ajustar la correa de motor. Contacte con su Servicio Técnico si la máquina necesitara cualquier ajuste.
- * Maneje el pedal con cuidado y evite dejarlo caer al suelo. Asegúrese de no dejar nada encima del pedal.
- * Siempre utilice la placa de aguja adecuada. La placa equivocada podría hacer que la aguja se rompa.
- * No utilice agujas torcidas.
- * Cuando esté remallando, mantenga los dedos alejados de las piezas en movimiento. Se requiere especial cuidado alrededor de las agujas.
- * No tire ni retenga la tela mientras está remallando. Esto podría hacer que la aguja se mueva y se rompa.
- * Sólo se pueden usar repuestos originales. Vea las instrucciones sobre Servicios Técnicos. Para máquinas con Doble Insulación, use sólo repuestos originales. Vea las instrucciones sobre Servicio Técnico y Accesorios para Máquinas con Doble Insulación
- * Nunca trabaje con la máquina si tiene dañado el cable o el enchufe, o si no trabaja adecuadamente o si se ha caído, averiado o caído dentro del agua. Lleve la máquina a su Distribuidor Oficial o al Servicio Técnico para que sea examinada, reparada, o ajustada electrónicamente o mecánicamente.
- * Nunca trabaje con la máquina delante de una corriente de aire. Mantenga las rejillas de ventilación de la máquina y el pedal limpios, sin polvo o pelusas.
- * Nunca deje caer o inserte algún objeto dentro de alguna ranura de la máquina.
- * No se use al aire libre.
- * No trabaje con la remalladora en sitios donde se hayan utilizado productos como aerosoles o donde se administre oxígeno.
- * No permita que se use como un juguete. Debe prestar atención cuando la máquina se emplee cerca de niños.

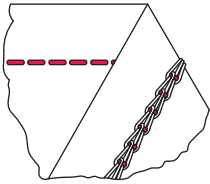
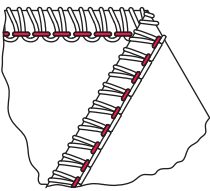
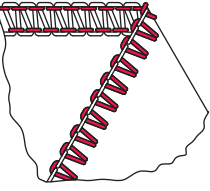
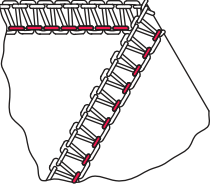
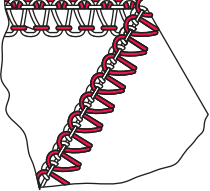
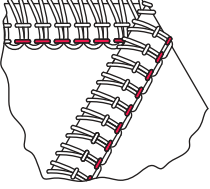
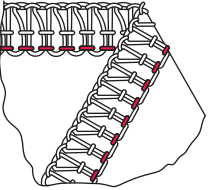
- * No exponga la remallora o su funda directamente a la luz solar. Tampoco deje la máquina en un sitio muy caliente o húmedo.
- * No toque la máquina, ni el pedal ni los cables con las manos mojadas, con un paño húmedo o cualquier otra cosa mojada.
- * No enchufe la máquina en donde ya hay muchas otras cosas conectadas.
- * Utilice la remalladora sobre una superficie plana y estable.
- * Asegúrese de cerrar la tapa que cubre los garfios antes de utilizar la máquina.
- * Mantenga el pedal y las agujas fuera del alcance de los niños.
- * Asegúrese de que la bombilla está fría antes de cambiarla.
- * No desarme ni manipule la máquina.
- * Asegúrese de apagar el interruptor general de la máquina y desconectar los cables antes de ocuparse de su máquina tal y como se indica en el Libro de Instrucciones.
- * MANTENIMIENTO DE PRODUCTOS CON DOBLE AISLAMIENTO. En un producto con doble aislamiento, hay dos sistemas de aislamiento en lugar de toma de tierra. En un producto con doble aislamiento no se debe conectar a una toma de tierra. El mantenimiento de este tipo de maquinas requiere una mayor precaución y conocimiento del sistema, y sólo debe ser reparada por personal cualificado. Los repuestos deben ser originales e idénticos a los del producto. Un producto con doble insulación viene indicado de la siguiente forma: "DOUBLE-INSULATION" o "DOUBLE-INSULATED".

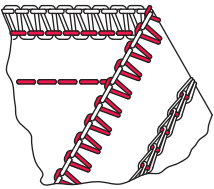
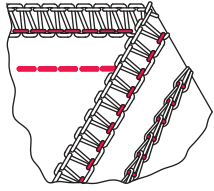
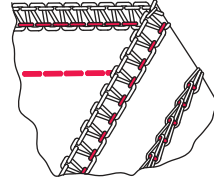
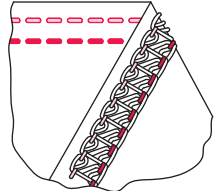
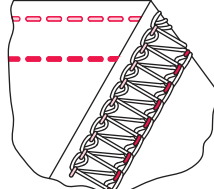
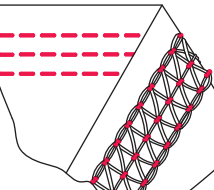
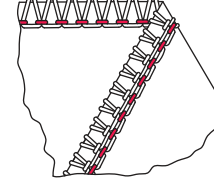
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1. SELECCIÓN DE PUNTADAS Y TENSION AUTOMÁTICA

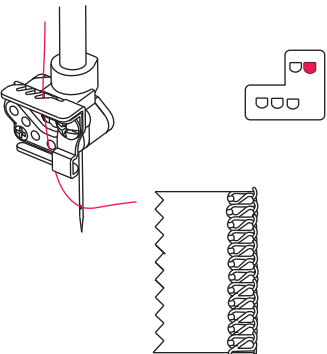
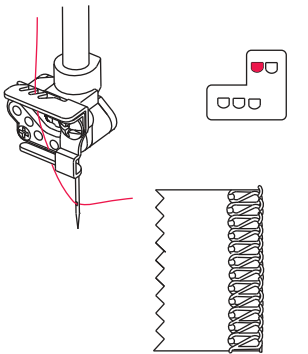
Esta máquina es capaz de producir varios tipos de puntadas, según la combinación seleccionada de tensión automática, posiciones de la aguja, métodos de enhebrado y el uso del garfio/convertidor.

Tipo de Puntada	ATD : seleccionado el ajuste de tensión automática	Página
<p>1. Punto Cadeneta Doble</p> <p>ATD: D</p>		<p>Costura con 1 aguja y 2 hilos para uniones y puntadas decorativas. Las costuras se pueden coser a la distancia deseada del borde de la tela desconectando el garfio de la derecha y la cuchilla movable.</p> <p>39</p>
<p>2. Doblado Replegado de 2 Hilos</p> <p>ATD: D</p> <p>ATD: G</p>		<p>Costura con 1 aguja y 2 hilos para tejidos ligeros o elásticos. Se usa también para dobladillos arrollados e invisibles. Se puede hacer un sobrehilado de 4 mm a 6 mm cambiando la posición de la aguja.</p> <p>41</p>
<p>3. Sobrehilado de 2 Hilos</p> <p>ATD: E</p>		<p>Sobrehilado con 1 aguja y 2 hilos para sobrehilado de tejidos normales. También es ideal para costuras Flatlock y para dobladillo invisible. Se puede hacer un sobrehilado de 4 mm a 6 mm de ancho cambiando la posición de la aguja.</p> <p>42</p>
<p>4. Sobrehilado de 3 Hilos</p> <p>ATD: A</p> <p>ATD: B</p>		<p>Costura con 1 aguja y 3 hilos para costura y sobrehilado de tejidos normales. Se puede hacer un sobrehilado de 4 mm a 6 mm de ancho cambiando la posición de la aguja.</p> <p>43</p>
<p>5. Costura Flatlock de 3 Hilos</p> <p>ATD: F</p>		<p>Costura Flatlock con 1 aguja y 3 hilos para realizar costuras de uniones y ornamentales con hilo de bordar. También, se puede realizar una costura Flatlock de 4 mm a 6 mm de ancho cambiando la posición de la aguja.</p> <p>44</p>
<p>6. Sobrehilado de 3 hilos con Falsa Puntada de Seguridad</p> <p>ATD: G</p>		<p>Costura con 2 agujas y 3 hilos ideal para materiales ligeros y muy elásticos, como el spandex o el tricot.</p> <p>45</p>
<p>7. Sobrehilado de 4 hilos con Falsa Puntada de Seguridad</p> <p>ATD: A</p>		<p>Sobrehilado con 2 agujas y 4 hilos ideal para materiales semipesados y consistentes como géneros de punto grueso y licra.</p> <p>46</p>

Tipo de Puntada	ATD : seleccionado el ajuste de tensión automática	Página
<p>8. Costura de Seguridad con 4 Hilos</p> <p>ATD: I</p>		<p>Costura de seguridad de 4 hilos combinación de sobrehilado de 2 hilos y punto de cadeneta doble.</p> <p>47</p>
<p>9. Costura de Seguridad con 5 Hilos Ancha</p> <p>ATD: B</p>		<p>Costura de seguridad de 5 hilos combinación de sobrehilado de 3 hilos y punto de cadeneta.</p> <p>Una costura ancha se puede conseguir usando la aguja de la izquierda.</p> <p>Costura y sobrehilado se realizan en una sóla operación en géneros no elásticos.</p> <p>48</p>
<p>10. Costura de Seguridad con 5 Hilos Estrecha</p> <p>ATD: A</p>		<p>Costura de seguridad de 5 hilos combinación de sobrehilado de 3 hilos y punto de cadeneta doble.</p> <p>Una costura estrecha se puede conseguir usando la aguja de la derecha.</p> <p>Costura y sobrehilado se realizan en una sola.</p> <p>48</p>
<p>11. Puntada Cover Estrecha (2,8 mm)</p> <p>ATD: K</p>		<p>operación en géneros no elásticos.</p> <p>Puntada Cover con 2 agujas y 3 hilos para géneros elásticos como el punto, etc.</p> <p>Una costura estrecha se consigue usando la aguja de la izquierda y la del centro.</p> <p>51</p>
<p>12. Puntada Cover Ancha (5,6 mm)</p> <p>ATD: H</p>		<p>Puntada Cover con 2 agujas y 3 hilos para géneros elásticos como el punto, etc.</p> <p>Una costura ancha se consigue usando la aguja de la izquierda y la de la derecha.</p> <p>51</p>
<p>13. Puntada Cover Triple (5,6 mm)</p> <p>ATD: J</p>		<p>Puntada Cover con 3 agujas y 4 hilos para géneros elásticos como el punto, etc.</p> <p>Una costura triple se consigue usando la aguja de la izquierda, la del medio y la de la derecha.</p> <p>52</p>
<p>14. Doblado Arrollado de 3 Hilos</p> <p>ATD: C</p>		<p>Doblado arrollado con 1 aguja y 3 hilos para realizar dobladillos arrollados estrechos.</p> <p>55</p>

* Dependiendo de la posición de la aguja, esta máquina puede realizar un sobrehilado estándar con 2 ó 3 hilos de 4 mm de ancho y a 6 mm de las costuras.

También, para sobrehilar géneros pesados, el ancho de la costura se puede incrementar girando el selector de ajuste del ancho de costura. (Véase pág. 31)

Ancho de sobrehilado	4.0 mm	6.0 mm
Aguja necesaria	Aguja de la derecha	Aguja de la izquierda
Selector de Tensión del hilo	Azul	Naranja
		

2. CUADRO DE REFERENCIAS

	Tipo de puntada	A T D	S L	D F	L / C	Posición de la aguja	Hilo / tensión correctos: cuando se usa el ajuste de tensión automático (ATD), se programa la tensión correcta automáticamente.					pag.
							Naranja	Azul	Verde	Rojo	Marrón	
1	Punto de cadeneta doble	D	N	N	C			●			●	39
2	Doblado replegado e 2 hilos	D	2	N	L	4.0mm		●		●		41
		G	2	N	L	6.0mm	●			●		41
3	Sobrehilado de 2 hilos	E	2	N	L	4.0mm		●		●		42
		E	2	N	L	6.0mm	●			●		42
4	Costura flatlock de 3 hilos	A	N	N	L	4.0mm		●	●	●		43
		B	N	N	L	6.0mm	●		●	●		43
5	Sobrehilado de 3 hilos	F	2	N	L	4.0mm		●	●	●		44
		F	2	N	L	6.0mm	●		●	●		44
6	Sobrehilado de 3 hilos on falsa puntada de eguridad	G	2	N	L		●	●		●		45
7	Sobrehilado de 4 hilos on falsa puntada de eguridad	A	N	N	L		●	●	●	●		46
8	Costura de seguridad on 4 hilos	I	N	N	L		●	●		●	●	47
9	Costura de seguridad on 5 hilos ancha	B	N	N	L		●	●	●	●	●	48
10	Costura de seguridad on 5 hilos estrecha	A	N	N	L		●	●	●	●	●	48
11	Puntada cover estrecha	K	N	N	C	2.8mm	●	●			●	51
12	Puntada cover ancha	H	N	N	C	5.6mm	●		●		●	51
13	Puntada cover triple	J	N	N	C	5.6mm	●	●	●		●	52
14	Doblado arrollado de 3 hilos	C	1	N	L	4.0mm		●	●	●		55

ATD: selección del ajuste de tensión automático

SL: longitud de puntada

DF: diferencial de alimentación

L / C: posición embrague del garfio superior

*Con las opciones 2, 3, 6, 8 seleccionadas, usar la lanzadera.

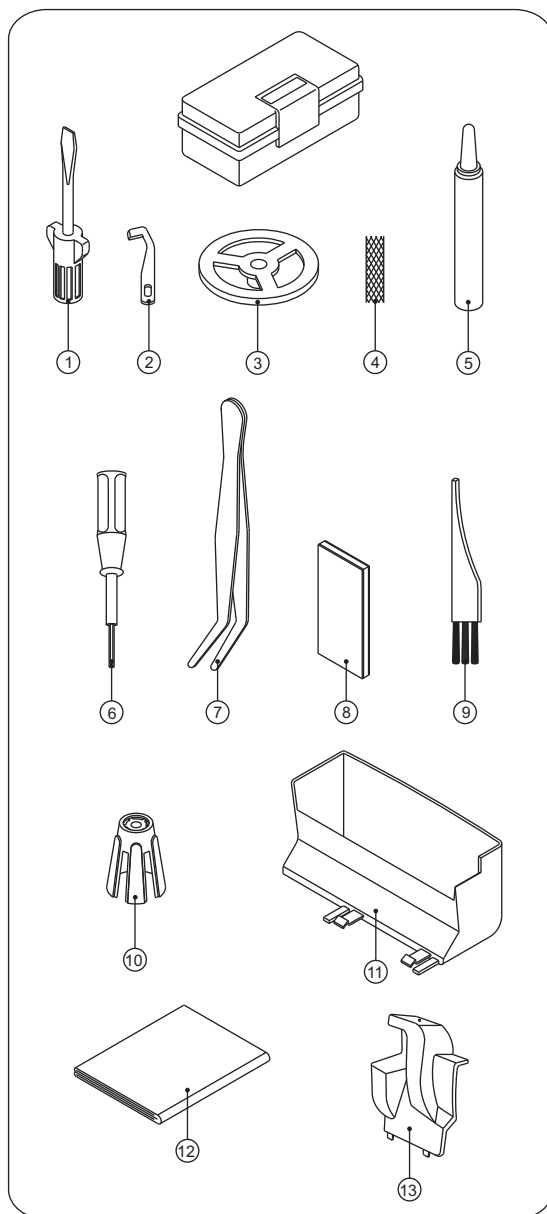
*Con las opciones 1, 11, 12, 13 seleccionadas, girar la cuchilla superior hacia abajo, mover el botón de ajuste de la anchura de costura a la posición R y cambiar la cubierta de la cuchilla a la placa guía de costura.

*El ajuste automático de la tensión está basado en un tejido de peso medio y un hilo estándar # 60 de poliéster. Puede ser adecuado para la mayoría de las necesidades de costura. Si se usa un gramaje diferente de hilo o tejido, y los resultados no son lo que ud. esperaba, proceda a ajustar la tensión con pequeños incrementos cada vez.

3. ACCESORIOS

Accesorios que contiene la caja de accesorios

- | | |
|--|-------------------|
| 1. Destornillador (grande) | 1 |
| 2. Cuchilla i (fija) | 1 |
| 3. Discos para los carretes | 5 |
| 4. Redes para los carretes | 5 |
| 5. Aceite | 1 |
| 6. Destornillador (pequeno) | 1 |
| 7. Pinzas | 1 |
| 8. Caja de agujas | 1 |
| 9. Brocha | 1 |
| 10. Pieza de centraje del portacarrete | 5 (en la máquina) |
| 11. Bandeja de recortes | 1 en el cartón |
| 12. Funda para tapar la máquina | 1 en el cartón |
| 13. Cubierta de la cuchilla | 1 |



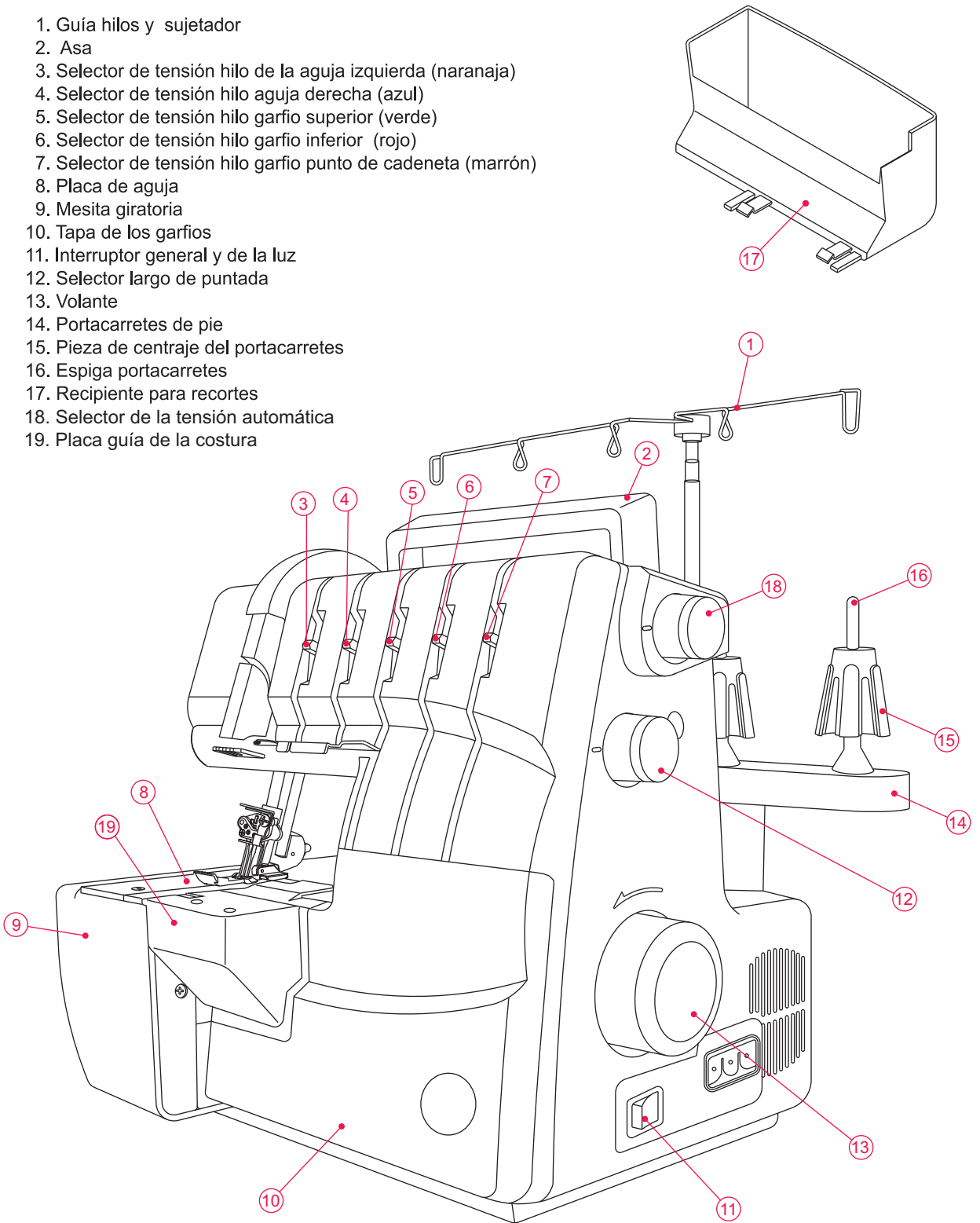
4. INFORMACIÓN SOBRE LAS AGUJAS

- Esta remalladora usa agujas industriales planas que eliminan la posibilidad de insertar la aguja al revés.
- No intente utilizar agujas estándar domésticas de ningún tipo o tamaño en esta remalladora.
- Con la máquina se incluyen agujas Singer #2022 tamaño 14/90.
- Sólo usar agujas #2022 size 14/90 and 11/80 como se incluyen en la caja de accesorios.

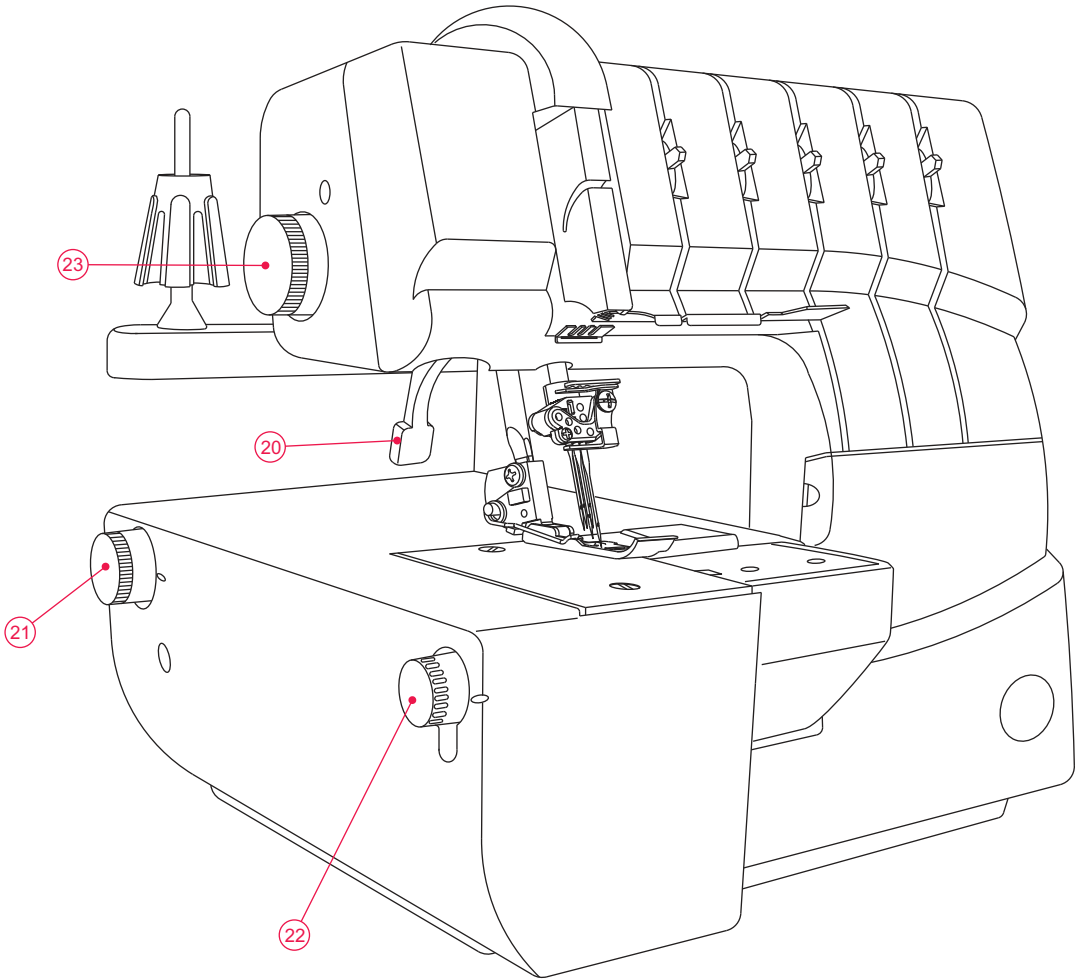
#2022
Aguja para remalladora

5. PARTES PRINCIPALES

1. Guía hilos y sujetador
2. Asa
3. Selector de tensión hilo de la aguja izquierda (naranja)
4. Selector de tensión hilo aguja derecha (azul)
5. Selector de tensión hilo garfio superior (verde)
6. Selector de tensión hilo garfio inferior (rojo)
7. Selector de tensión hilo garfio punto de cadeneta (marrón)
8. Placa de aguja
9. Mesita giratoria
10. Tapa de los garfios
11. Interruptor general y de la luz
12. Selector largo de puntada
13. Volante
14. Portacarretes de pie
15. Pieza de centraje del portacarretes
16. Espiga portacarretes
17. Recipiente para recortes
18. Selector de la tensión automática
19. Placa guía de la costura



- 20. Palanca alza prensatelas y destensador
- 21. Selector para el arrastre diferencial
- 22. Selector del ancho de costura
- 23. Selector de presión del prensatelas



6. ABRIR LA TAPA DE LOS GARFIOS



Precaución:

Asegúrese de desconectar el interruptor general.

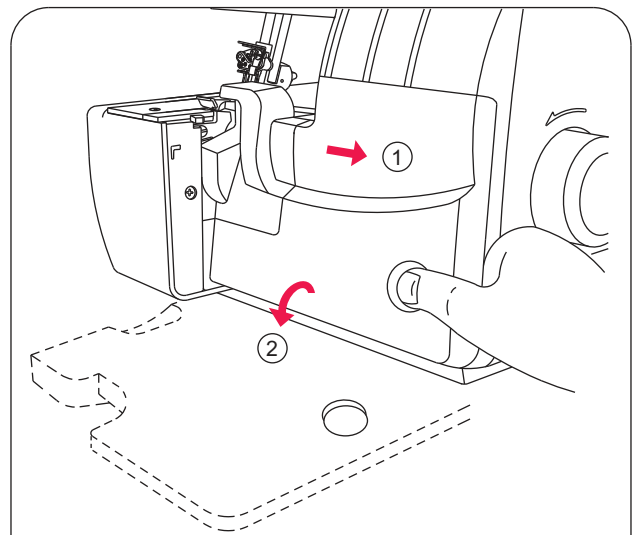
- * Empuje la tapa hacia la derecha tal y como se muestra.
- * Lleve la tapa hacia abajo.



Precaución:

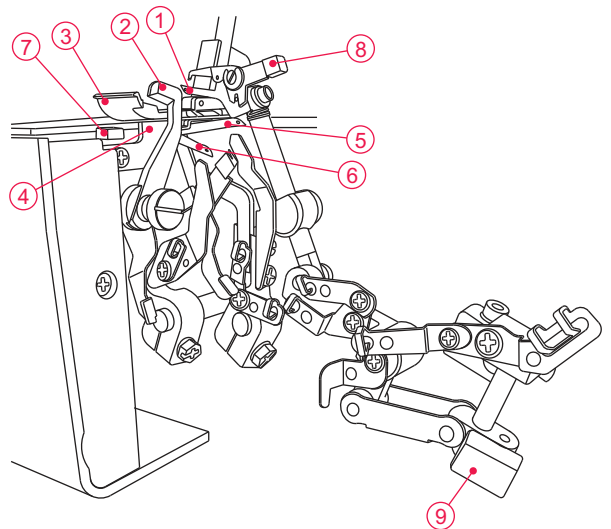
Asegúrese de que la tapa de los garfios está cerrada mientras remalla.

Nota: La cubierta de los garfios tiene un micro que impide operar con la remalladora mientras esté la tapa bajada.



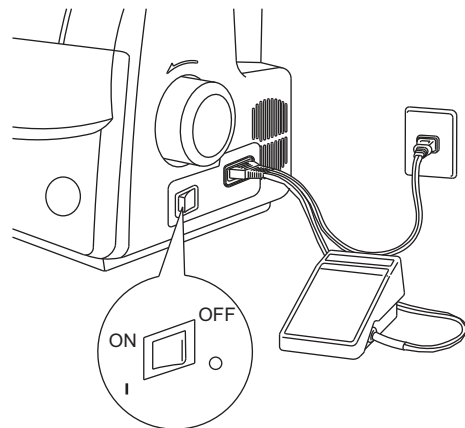
7. PARTES PRINCIPALES DENTRO DE LA MÁQUINA

1. Garfio superior
2. Cuchilla móvil superior
3. Prensateles
4. Cuchilla inferior fija
5. Garfio inferior
6. Enhebrador del garfio para punto de cadeneta doble y puntada cover
7. Palanca dobladillo arrollado
8. Convertidor
9. Embrague garfio superior



8. PREPARACION PARA REMALLAR

- Enchufar los cables del pedal a la máquina.
- Enchufar los cables a la red.
- Interruptor: Presionar "I" para encenderlo "ON". Presionar "O" para apagarlo "OFF".
- Para hacer que la máquina funcione y controlar la velocidad presione el pedal.
- Cuanto más presione el pedal, más rápido irá la máquina.
- Para dejar de remallar levante el pie del pedal.



ACHTUNG:

Utilice solo el pedal que viene con la máquina.
(Tipo 4c-316B for U.S.A. & CANADA only)
TENGA PRESENTE LA ADVERTENCIA DE LA PÁGINA SIGUIENTE.

INFORMACIÓN SOBRE ENCHUFES POLARIZADOS (SOLO PARA U.S.A Y CANADA)

Este electrodomestico tiene un enchufe polarizado (una clavija más ancha que la otra). Para reducir el riesgo de electrocución, este enchufe sólo puede encajar de una manera. Si el enchufe no encaja del todo, de la vuelta al enchufe. Si sigue sin encajar contacte con un técnico cualificado para instalar el enchufe de pared adecuado. No modifique la clavija de ninguna forma.



Advertencia:

- Asegúrese de que el voltaje del enchufe es el mismo que el voltaje del motor de la máquina.
- Maneje el pedal con cuidado y evite dejarlo caer al suelo. Asegúrese de no dejar nada encima del mismo.
- Desenchufe los cables de la red cuando tenga que cambiar las agujas, el prensatelas, o cuando deje la máquina desatendida. Esto elimina la posibilidad de que la máquina empiece a funcionar por accidente.

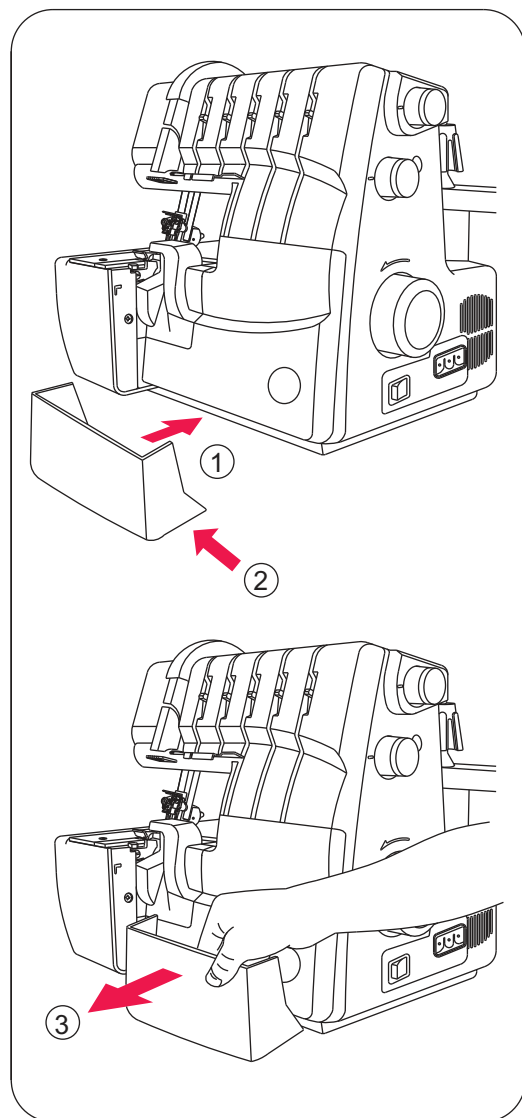
9. QUITAR Y PONER LA BANDEJA PARA RECORTES

Colocar:

- Inserte la bandeja debajo de la tapa de los garfios. Asegúrese de que la bandeja está colocada cerca de la cuchilla por donde caen los recortes.

Quitar:

- Para quitar, sujete la bandeja como se muestra y llevala hacia abajo.

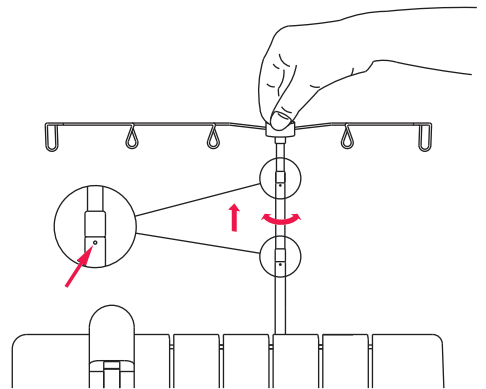
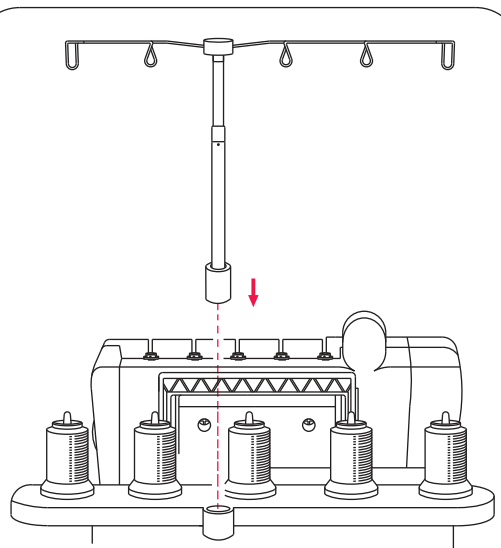


10. PREPARACION PARA ENHEBRAR

Levantarse el guiahilos

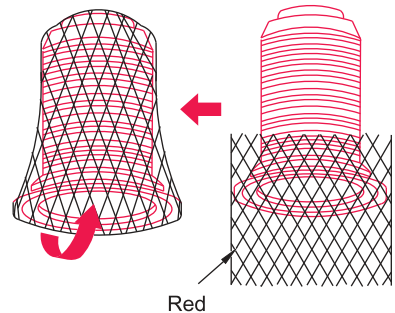
- Levantar el guiahilos, llevándolo hacia arriba, e insertarlo como viene en la ilustración de la derecha.
- Esta máquina viene con el guiahilos en su posición baja.
- Extender totalmente el guiahilos.
- Las dos juntas en el telescopio encajarán cuando estén correctamente colocadas.
- Centrar el guiahilos sobre la espiga portacarretes.
- Colocar el hilo sobre la pieza de centraje del portacarretes.

Nota: Su nueva máquina está enhebrada para remallar con Puntada Cover Triple. Vea las instrucciones en la página 30 para saber cómo enhebrar.



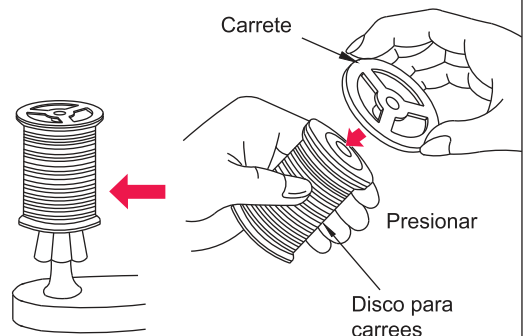
Red anti-deshilachado

- Cuando utilice hilos sintéticos que se deshilachan fácilmente, deslice la red anti-deshilachado sobre el hilo desde abajo dejando el final del hilo colgando libre en la parte de arriba de la red, como se muestra a la derecha.



Discos para los Carretes

- Cuando utilice una bobina de hilo normal, coloque el tope que se incluye con la máquina encima de la bobina, como se muestra en la derecha.



11. COMO QUITAR Y COLOCAR LAS AGUJAS

Posción de la aguja

- Con esta máquina, cinco agujas se pueden insertar dentro del sujetador de agujas, como se muestra en el dibujo, aunque sólo se puede remallar con una, dos o tres agujas. No intente remallar con cuatro o cinco agujas.
- El Libro de Instrucciones hace referencia a las distintas posiciones de las agujas, ilustrando el sujetador de agujas a la derecha.

Nota: Cuando se colocan tanto la aguja de la izquierda como la de la derecha, la aguja de la izquierda quedará ligeramente más alta que la de la derecha. Cuando se coloquen todas las agujas, la de la izquierda deberá quedar ligeramente más alta que las otras.

Para Quitar la(s) Aguja(s)

Precaución:



Asegúrese de desconectar el interruptor general de la máquina antes de cambiar las agujas.

- Gire el volante hacia Usted hasta que las agujas queden en su posición más alta.
- Coloque la parte más gruesa de la tela (tal y como cae) debajo del prensatelas. Baje las agujas hasta la mitad dentro de la tela.
- Afloje, pero no quite del todo los tornillos que sujetan las agujas con el destornillador pequeño. Sujete las agujas con los dedos y levante la barra de agujas. Las agujas se quedarán en la tela.

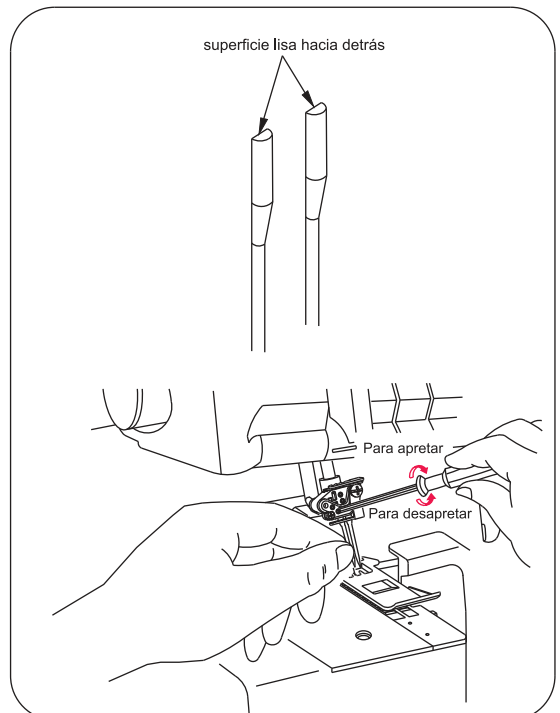
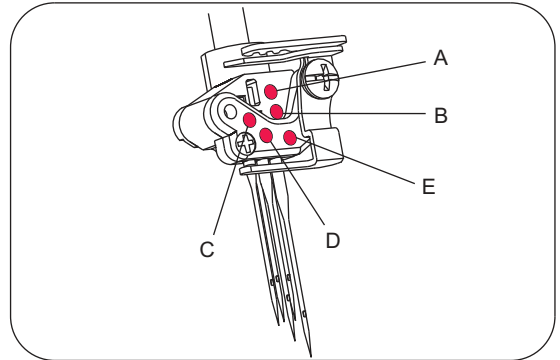
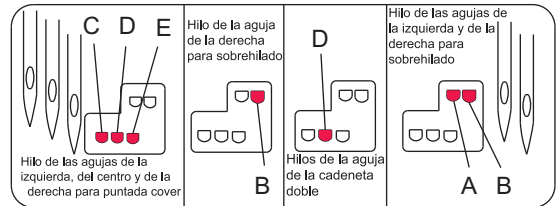
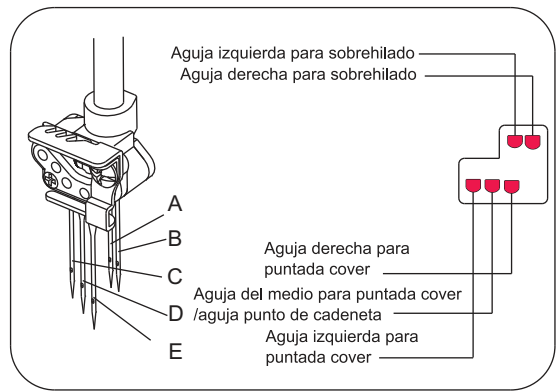
- A. Aguja derecha para sobrehilado
- B. Aguja izquierda para sobrehilado
- C. Aguja izquierda para puntada cover
- D. Aguja del medio para puntada cover
- E. Aguja de la derecha para puntada cover

Para Insertar la(s) Aguja(s)

- Sujete la aguja con la parte plana hacia atrás.
- Inserte la aguja dentro del orificio hasta el tope en el porteagujas.
- Cuando inserte la aguja, tiene que pasarla primero por la placa de agua hasta que quede en línea con el orificio sujetador. Después súbala a tope hacia arriba.

Nota: Cuando inserte agujas en los orificios A y B es necesario aflojar ambos tornillos A y B. Después de insertar las agujas se han de apretar igualmente ambos tornillos.

Esta máquina usa agujas #2022. No trate de usar Agujas Domésticas Estándar.



12. ENHEBRAR LA REMALLADORA

Diagrama de Enhebrado: **Sobrehilado y Puntada de Seguridad**

- Un diagrama de enhebrado en color se encuentra dentro, tras la tapa de los garfios como referencia.
- Enhebre los hilos por el orden del 1 a 5, como se muestra en el dibujo de la derecha.

Nota: Los hilos han de pasar por la palanca tirahilos para sobrehilado y punto de cadeneta, como se muestra.

Código en Color de la Tensión: **Sobrehilado y Puntada de Seguridad**

1. Hilo garfio superior.....Verde
2. Hilo garfio inferior.....Rojo
3. Hilo punto cadeneta.....Marrón
4. Hilo aguja derecha.....Azul
5. Enhebrar la aguja para punto de cadeneta.....Naranja

Diagrama Enhebrado: **Puntada Cover**

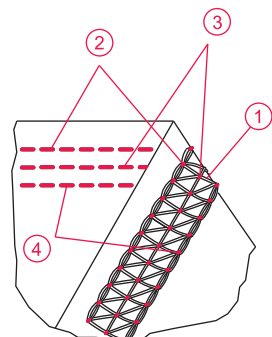
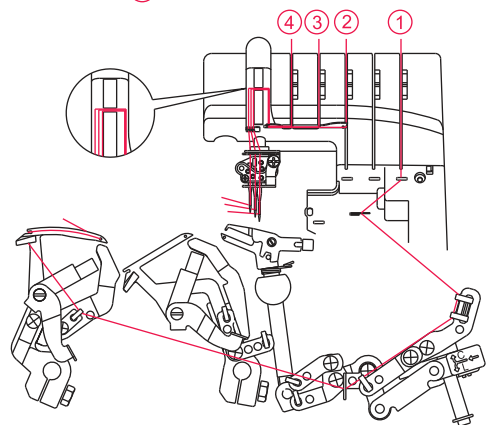
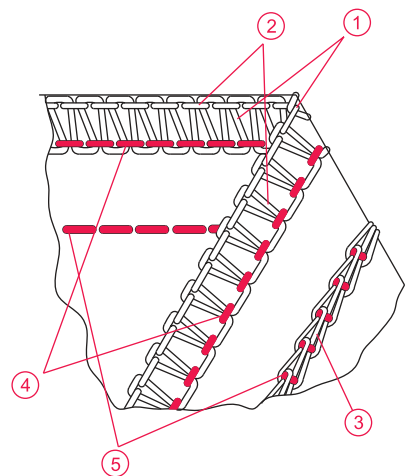
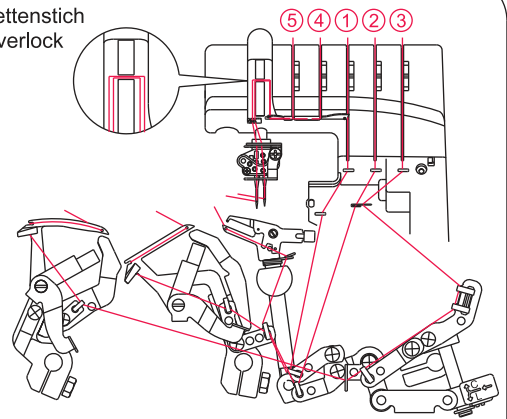
- Un diagrama coloreado de enhebrado se encuentra dentro, tras la tapa de los garfios como referencia.
- Enhebrar la máquina en el orden del 1 al 4 como se muestra a la derecha.

Nota: Los hilos han de pasar por parte superiorl de la palanca tirahilos para la puntada cover, como se muestra.

Tensión Código Color: **Puntada Cover**

1. Enhebrar garfio puntada Cover.....Marrón
2. Enhebrar la aguja derecha.....Verde
3. Enhebrar la aguja del centro.....Azul
4. Enhebrar la aguja izquierda.....Naranja

Kettenstich
Overlock



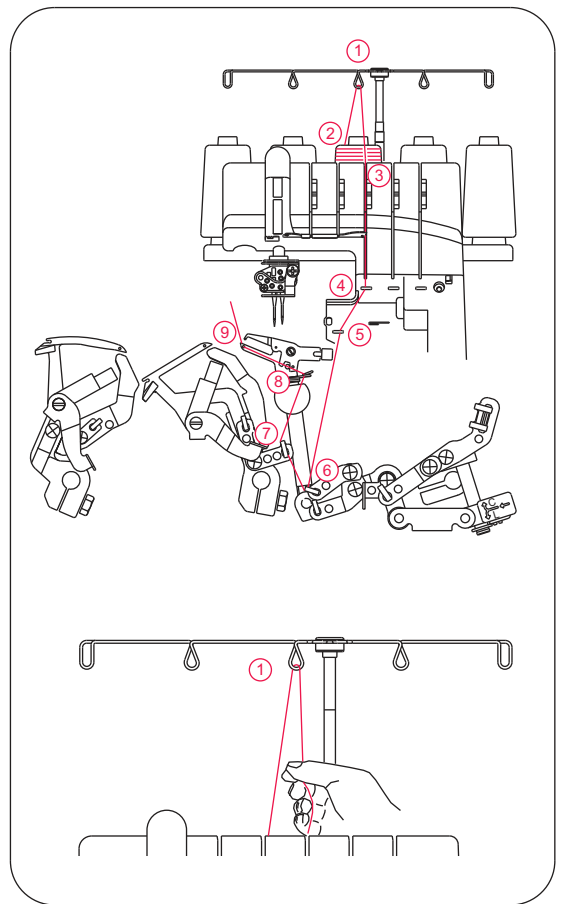
Enhebrar La Máquina Correctamente



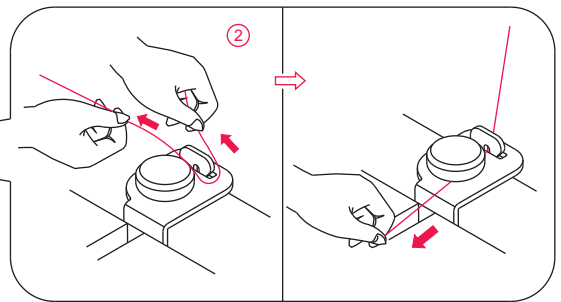
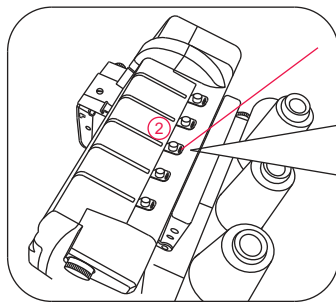
Precaución:
Asegúrese de apagar el interruptor general.

1) Enhebrar el Garfio Superior (Verde)

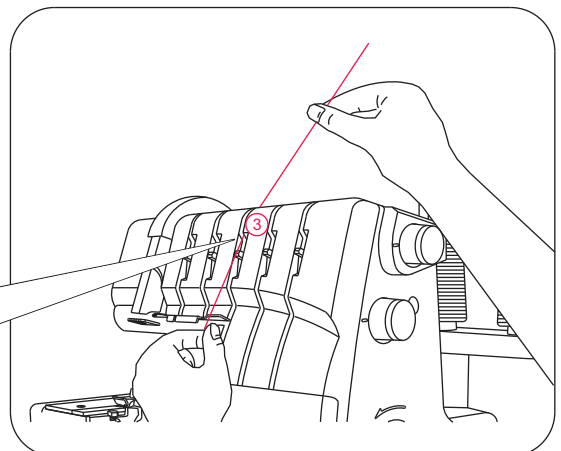
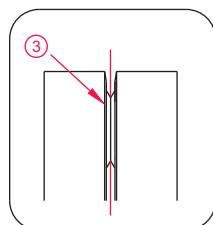
- Enhebrar el garfio superior como se indica 1~9.
- Levantar el alza prensatelas para quitar presión a los discos de la tensión.
- Pasar el hilo desde atrás hacia delante a través del guíahilos 1.



- Enhebrar la parte de arriba del guíahilos llevando el hilo hacia la izquierda, hasta que se deslice por debajo del guíahilos. Entonces lleve el hilo hacia la derecha del botón como se muestra en el dibujo.



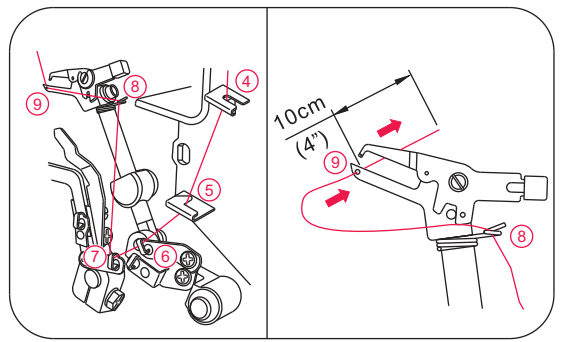
- Mientras sujeta el hilo con los dedos, páselo entre los discos de la tensión y lleve el hilo hacia abajo para asegurarse que entra bien entre los discos de la tensión.



- Enhebre el garfio de la máquina siguiendo el código coloreado en verde. Pasos 4~9.
- Enhebre el agujero del garfio superior de adelante hacia atrás 9. Nota: Asegúrese de que el hilo pasa detrás del garfio inferior.

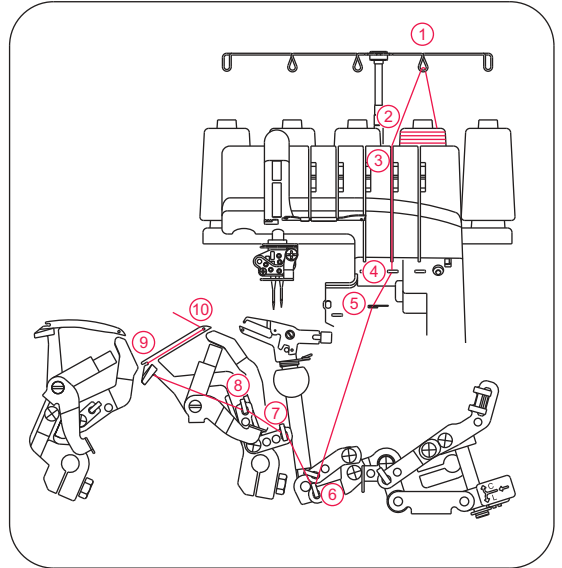
Nota: Utilice las pinzas que vienen en la caja de accesorios para ayudarse a enhebrar el garfio .

- Deje unos 10cm(4 inches) de hilo a través del garfio y póngalo detrás de la placa de aguja.

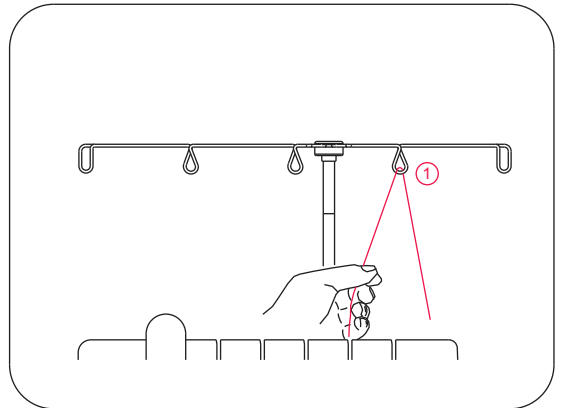


2) Enhebrar el Garfio Inferior (Rojo)

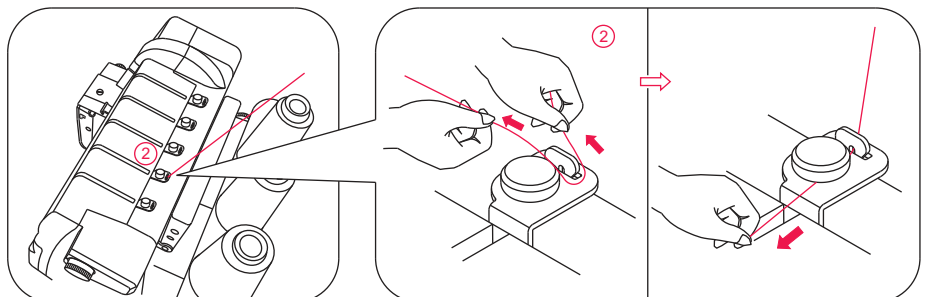
- Enhebrar el garfio inferior como se indica 1~10.
- Levante el alza prensatelas para quitar presión a los discos de la tensión.
- Levante el alza prensatelas para quitar presión a los discos de la tensión.



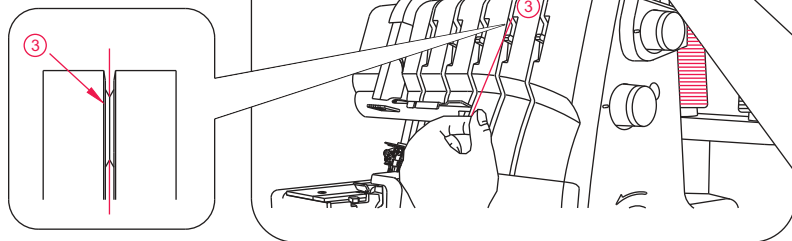
- Pase el hilo de atrás hacia delante a través del guíahilos 1.



- Enhebre la parte de arriba del guíahilos llevando el hilo hacia la izquierda hasta que se deslice debajo del guíahilos. Entonces lleve el hilo hacia la derecha del botón como se muestra en el dibujo.



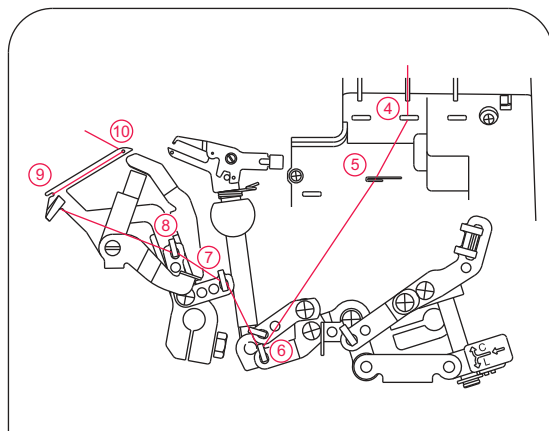
- Mientras sujeta el hilo con los dedos , páselo entre los discos de la tensión y llévelo hacia abajo asegurándose que entra bien entre los discos de la tensión.



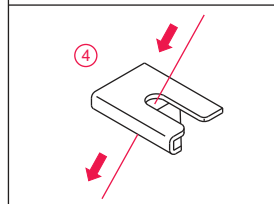
- Gire el volante hacia Usted hasta que el garfio inferior se extienda 5~10mm desde el borde de la placa de agujas.

- Enhebre el garfio de la máquina siguiendo el código coloreado en rojo. Pasos 4~10.

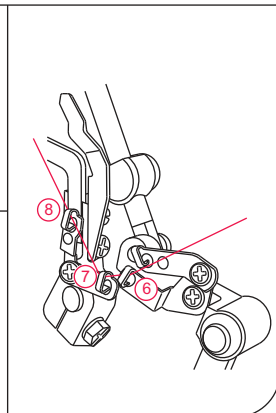
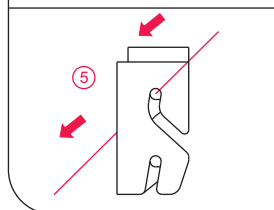
Nota: Use las pinzas que le vienen en la caja de accesorios para ayudarse a enhebrar el garfio .



- Pase el hilo con la punta de las pinzas ligeramente desde la izquierda hacia la derecha de la guía de enhebrado 4.

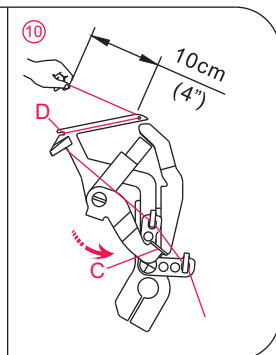
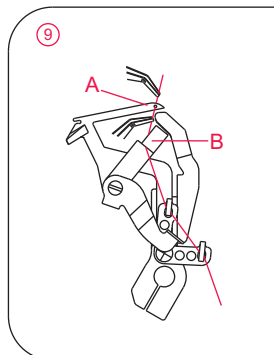


- Pase el hilo con la punta de las pinzas ligeramente desde la parte de delante hacia atrás de la guía de enhebrado 5.



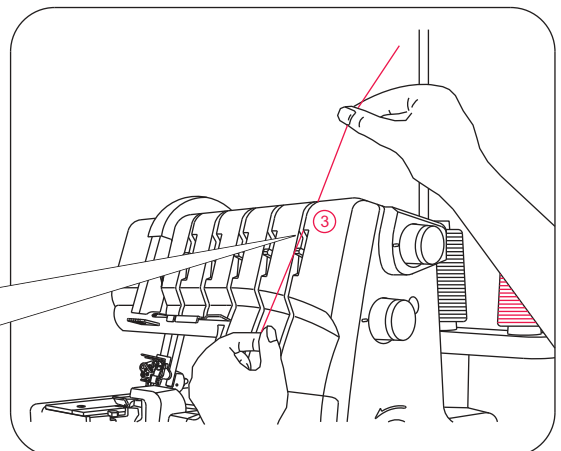
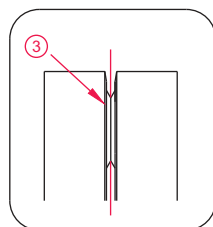
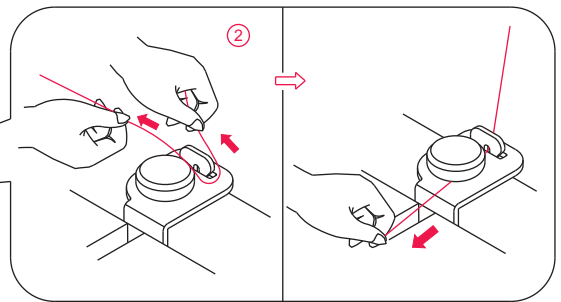
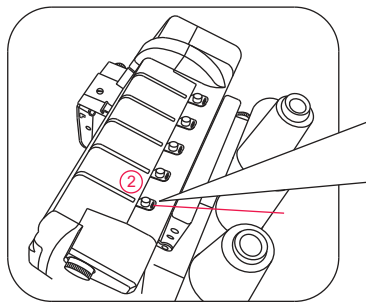
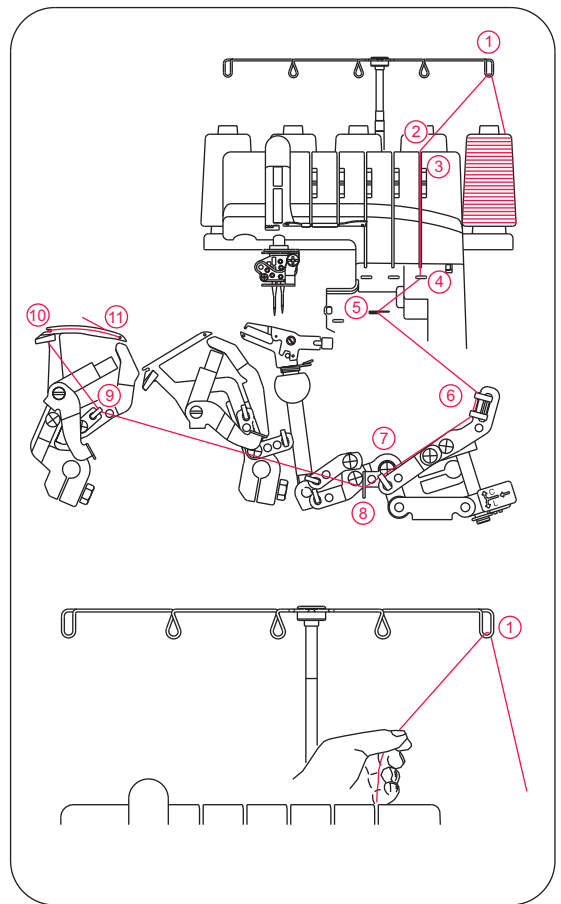
- Enhebre por delante el ojo del garfio (A). Deje un cabo de hilo de unos 10cm (4 inches). Pase el hilo por la muesca en forma de V (B) en el enhebrador.

Sujete firmemente el cabo con la mano izquierda y lleve el enhebrador (C) hacia la posición(D).



3) Enhebrar el garfio para Punto de Cadeneta Doble /Puntada Cover (Marrón)

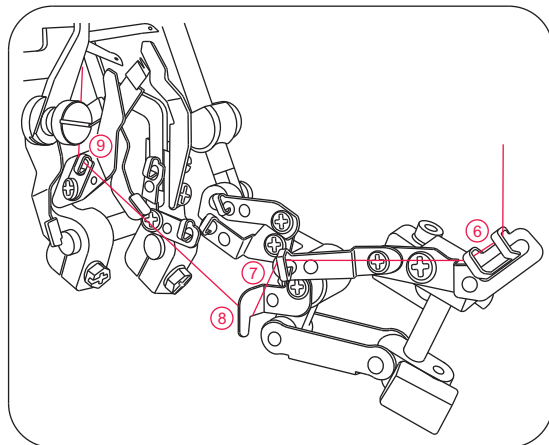
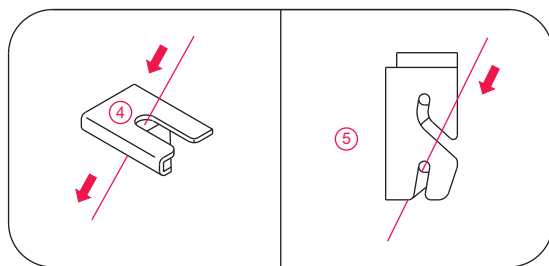
- Enhebrar el garfio para punto de cadeneta doble y para la puntada cover como se indica 1~11.
- Eleve la palanca alzaprensatejas para quitar presión en los discos de tensión.
- Pase el hilo desde atrás hacia adelante a través del guía hilos 1.
- Enhebre la parte de arriba del guía hilos llevando el hilo hacia la izquierda hasta que se deslice debajo del mismo. Entonces lleve el hilo hacia la derecha del botón como se muestra en el dibujo.
- Mientras sujeta el hilo con los dedos, páselo a través de los discos de tensión y lleve el hilo hacia abajo para asegurarse que entra bien entre los discos de la tensión 3.



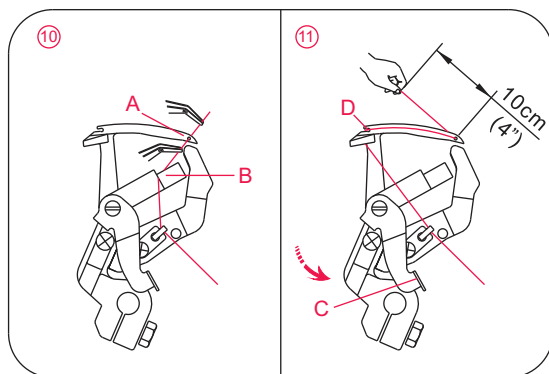
- Gire el volante hacia Usted hasta que el garfio para punto de cadeneta sobresalga unos 10 mm del borde de la placa de aguja.
- Enhebre el garfio de la máquina siguiendo el código coloreado en marrón según los pasos 4~11.

Nota: Use las pinzas que vienen en la caja de accesorios para simplificar el enhebrado.

- Pase el hilo con la punta de las pinzas a través del guíahilos 4.
- Pase el hilo con la punta de las pinzas a través de la ranura que se halla delante del guíahilos

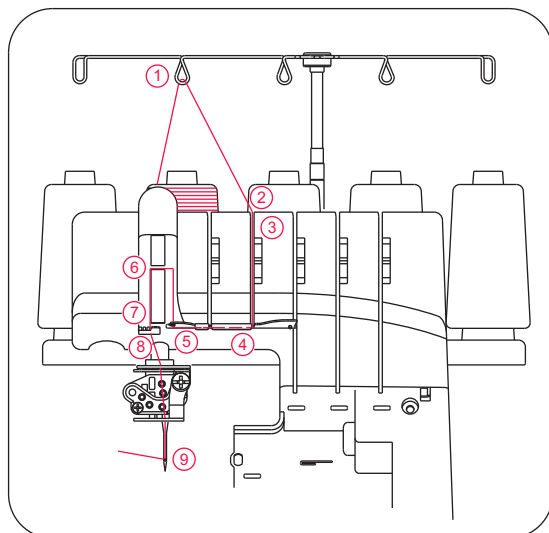


- Enhebre desde atrás por el ojo del garfio (A) . Deje un cabo de hilo de unos 10cm (4inches) desde el garfio. Coloque el hilo en la ranura V (B) en el enhebrador. Sujete firmemente el cabo con la mano izquierda y lleve la palanca de enhebrado (C) hacia la posición (D).

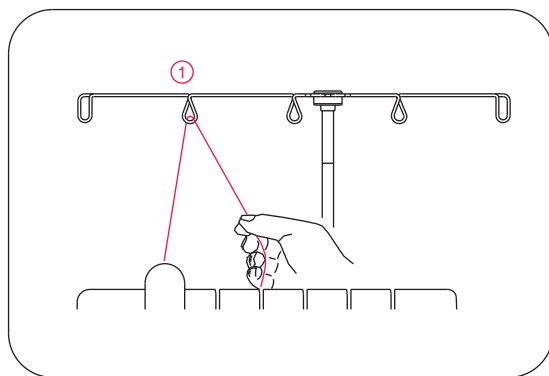


4) Enhebrar la Aguja Derecha de Sobrehilado (Azul) (B en el sujetador de aguja)

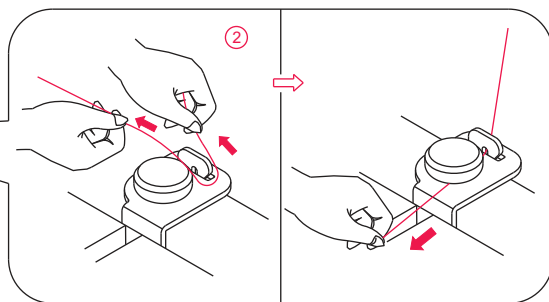
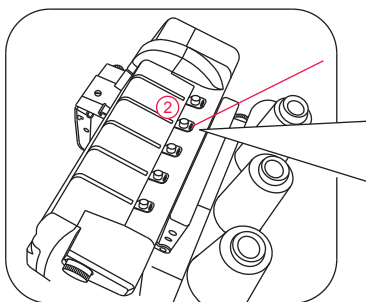
- Enhebrar la aguja de la derecha como se indica 1~9.
- Levante la palanca alzaprensateclas para quitar tensión en el tensahilos.



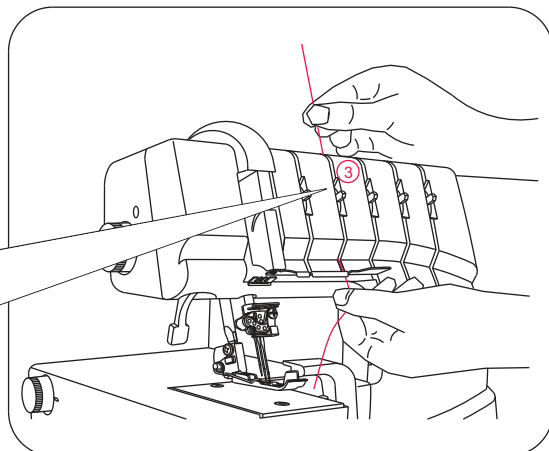
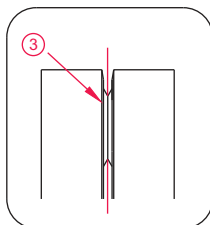
- Pase el hilo desde atrás hacia delante a través del guíahilos 1.



- Enhebre la parte de arriba del guíahilos llevando el hilo hacia la izquierda hasta que se deslice por debajo del guíahilos. Entonces pase el hilo por la derecha del botón como se muestra en el dibujo.



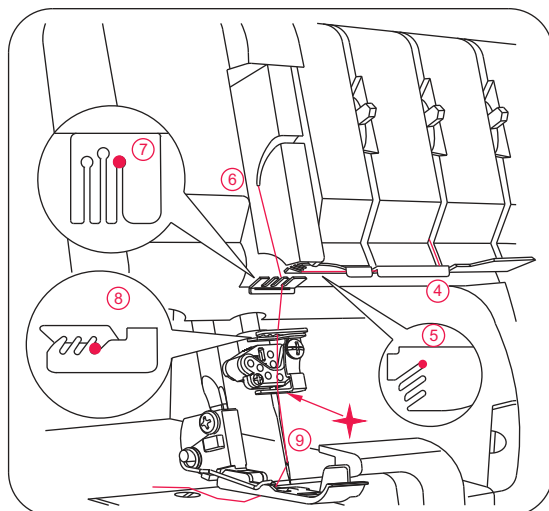
- Mientras sujeta el hilo con los dedos, páselo por los discos de la tensión y lleve el hilo hacia abajo para asegurarse que entra bien por los discos de la tensión 3.



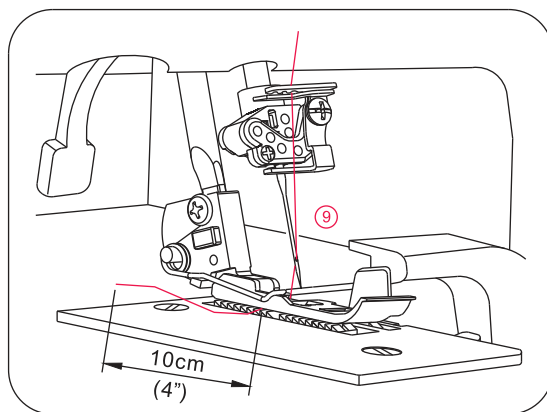
- Continúe enhebrando los puntos 4-8.

Nota: Deslice el hilo por la ranura de atrás del guíahilos 5 y por la ranura inferior de la palanca tirahilos 6. Entonces deslice el hilo por la ranura de la derecha del guíahilos 7, y por la ranura de la derecha del guíahilos 8.

- ✦ Antes de enhebrar la aguja, deslice el hilo por detrás del guíahilos localizado en la parte de debajo del sujetador de aguja.

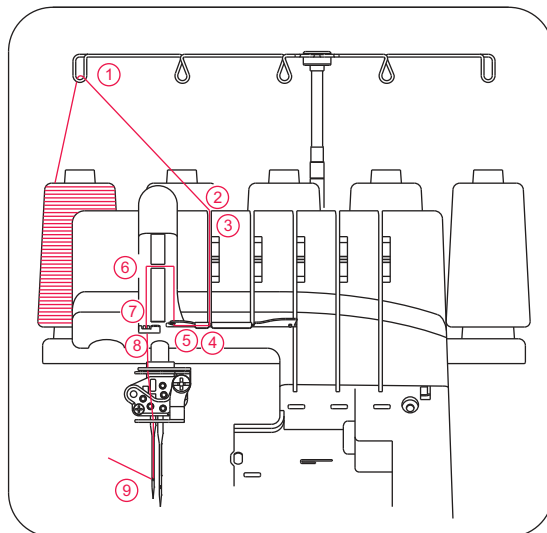


- Enhebre el ojo de la aguja 9.
- Nota: Para simplificar el enhebrado use las pinzas que vienen en la caja de accesorios.
- La posición del hilo debe de estar detrás del guíahilos.
- Deje un cabo de hilo de unos 10cm (4 inches).
- Ponga el hilo hacia atrás, debajo del prensatelas.

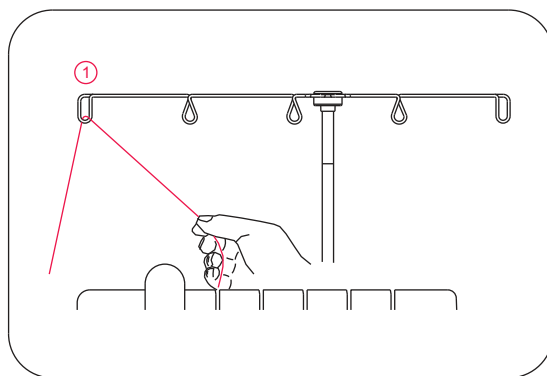


5) Enhebrar la Aguja Izquierda de Sobre hilar (Naranja) (A en el sujetador de aguja)

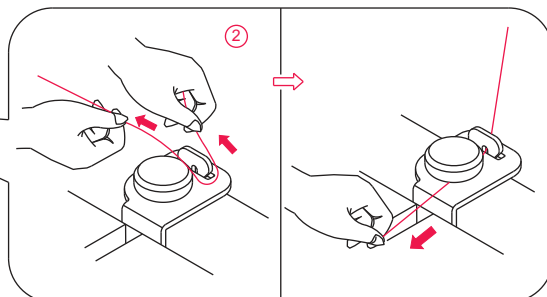
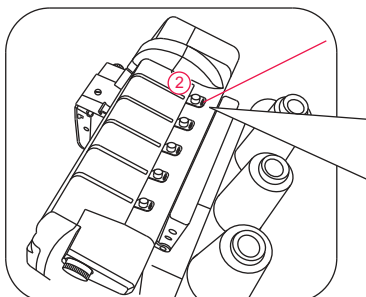
- Enhebrar la aguja de la izquierda como se indica 1~9.
- Levante la palanca alzaprensatelas para quitar tensión en el tensahilos.



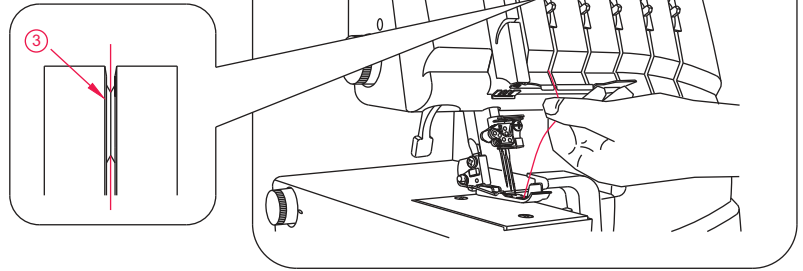
- Pase el hilo desde atrás hacia delante a través del guíahilos 1.



- Enhebre la parte de arriba del guíahilos llevando el hilo hacia la izquierda hasta que se deslice por debajo del guíahilos. Entonces lleve el hilo por la derecha del botón como se muestra en el dibujo.

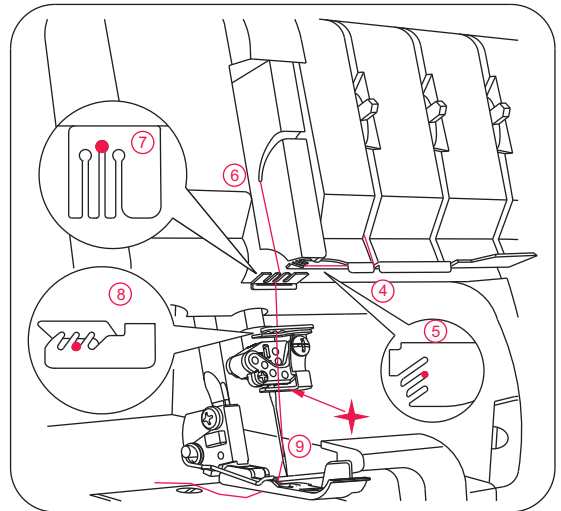


- Mientras sujeta el hilo co los dedos, páselo entre los discos de la tensión y lleve el hilo hacia abajo para asegurarse que entra correctamente entre los discos de la tensión 3.



- Continúe enhebrando los puntos 4~8.

Nota: Deslice el hilo por la ranura del medio del guíahilos 5 y por la ranura inferior de la palanca tirahilos 6. Continúe deslizando el hilo por la ranura del medio del guíahilos 7 y 8.

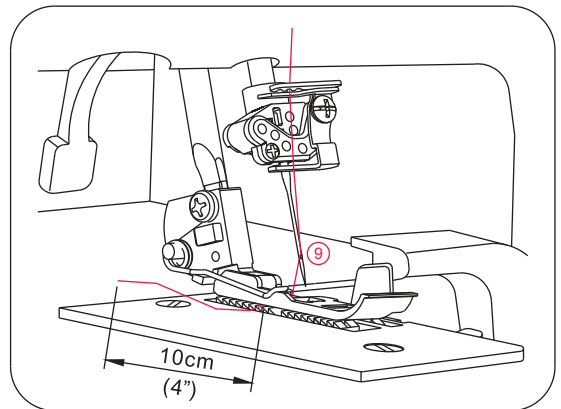


Nota:

(1) Para el sobrehilado de 4 hilos con la aguja izquierda: Usar la aguja izquiera.

(2) Antes de enhebrar la aguja, deslizar el hilo por detrás del guíahilos situado en la parte inferior del sujetador de agujas.

- ✦ Antes de enhebrar la aguja, deslice el hilo por detrás del guíahilos debajo del sujetador de aguja.



- Enhebre la aguja de la izquierda 9.

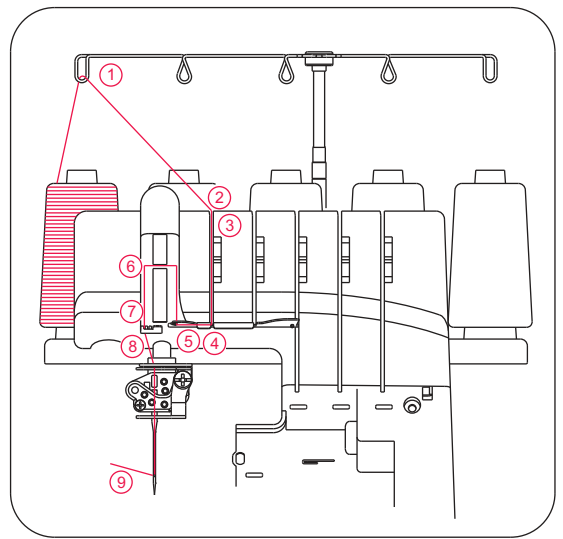
Nota: Para simplificar el enhebrado use las pinzas que vienen en la caja de accesorios.

- El hilo debe quedar detrás del guíahilos.
- Deje un cabo de unos 10 cm (4 inches).
- Ponga el hilo hacia detrás, debajo del prensatelas.

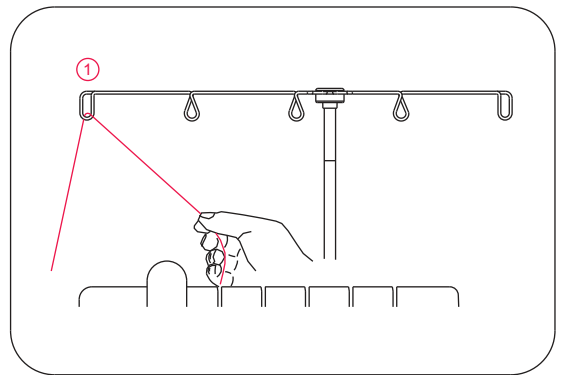
6) Enhebrar las agujas para la puntada cover

(1) Enhebrar la aguja de la izquierda para la puntada cover
(naranja) (C en el sujetador de agujas)

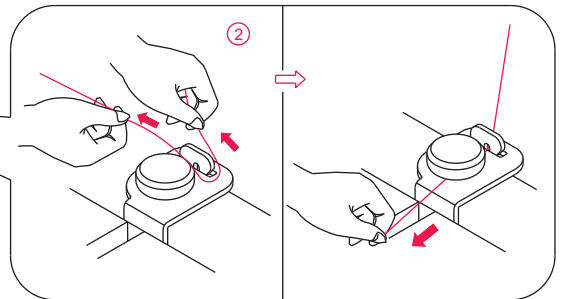
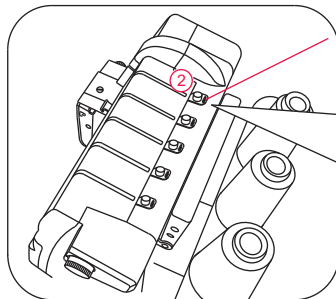
- Enhebrar la aguja izquierda para puntada cover y punto de cadeneta doble como se indica 1~9.
- Levante la palanca alzaprensatelas para quitar tensión en el tensahilos.



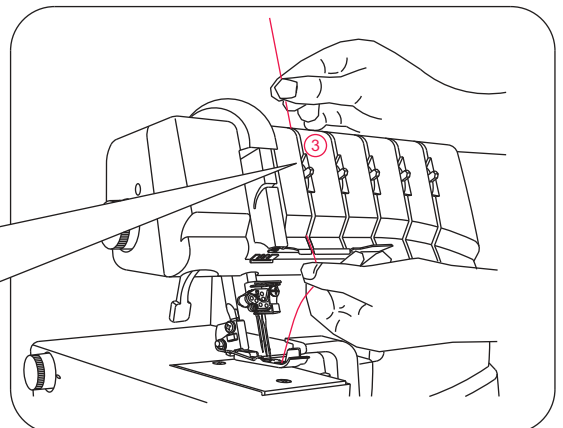
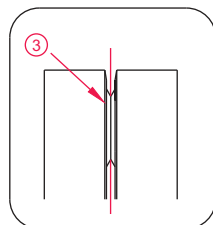
- Pase el hilo desde atrás hacia delante a través del guíahilos 1.



- Enhebre la parte de arriba del guíahilos llevando el hilo hacia la izquierda hasta que se deslice por debajo del guíahilos. Entonces pase el hilo por la derecha del botón como se muestra en el dibujo.

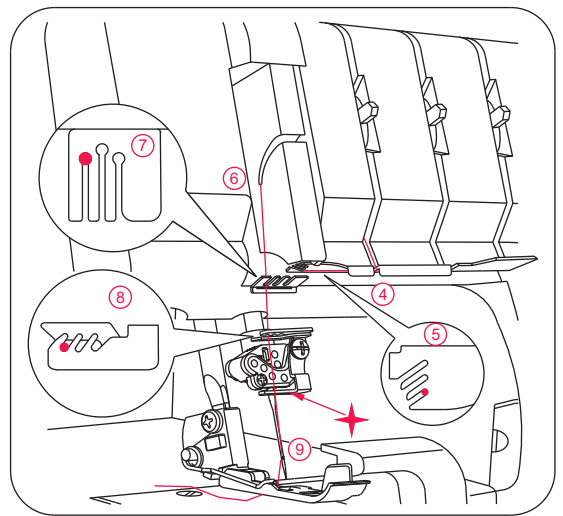


- Mientras sujeta el hilo con los dedos, páselo por entre los discos de tensión y llévelo hacia abajo para asegurarse que entra correctamente por el disco de tensión 3.



- Continúe enhebrando según los puntos 4~8.

Nota: Deslice el hilo por la ranura de enfrente del guíahilos 5 y por la ranura inferior de la palanca tirahilos 6b. Entonces deslice el hilo por la ranura de la izquierda del guíahilos 7 y 8.

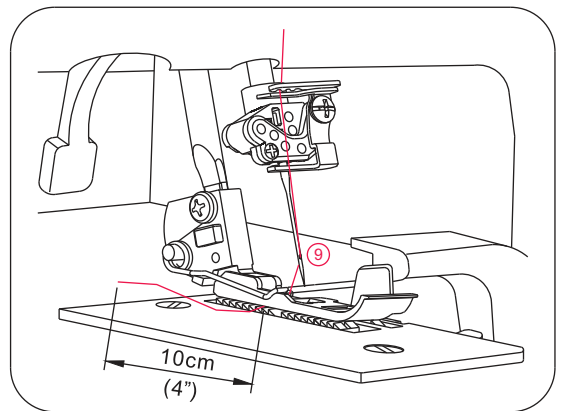


- ✦ Antes de enhebrar la aguja, asegúrese que el hilo pasa por delante del guíahilos localizado debajo del sujetador de aguja.

- Enhebre la aguja derecha 9.

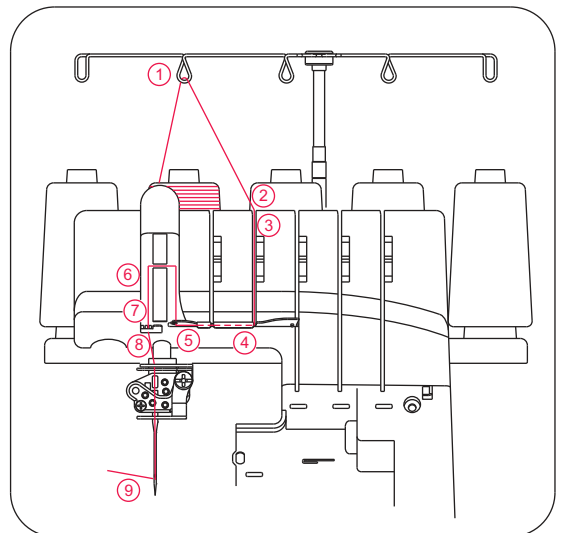
Nota: Para simplificar el enhebrado use las pinzas que vienen en la caja de accesorios.

- Deje un cabo de hilo de unos 10cm (4 inches).
- Ponga el hilo hacia atrás, debajo del prensatelas.

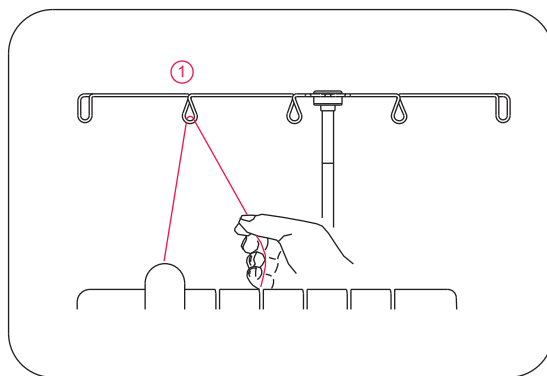


(2) Enhebrar la Aguja del Medio para Puntada Cover y Punto de Cadeneta (Azul) (D en sujetador de aguja)

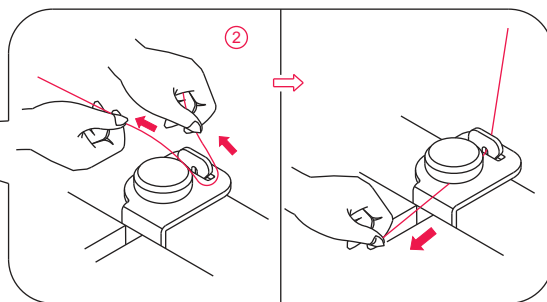
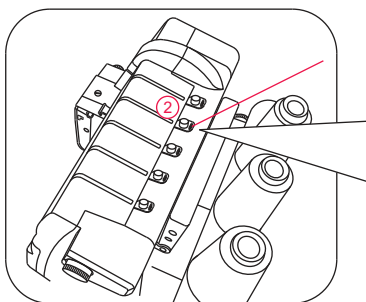
- Enhebre la aguja del medio para puntada cover y punto de cadeneta como se indica 1~9.
- Levante la palanca alzaprensatelas para quitar tensión en el tensahilos.



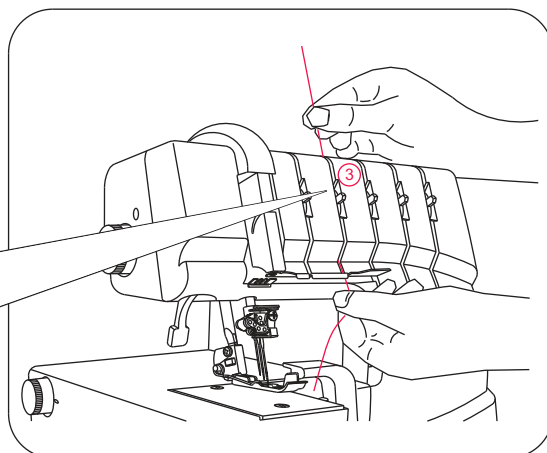
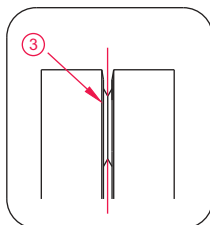
- Pase el hilo desde atrás hacia delante a través del guíahilos 1.



- Enhebre la parte de arriba del guíahilos llevando el hilo hacia la izquierda hasta que se deslice por debajo del guíahilos. Entonces pase el hilo por la derecha del botón como se muestra en el dibujo.

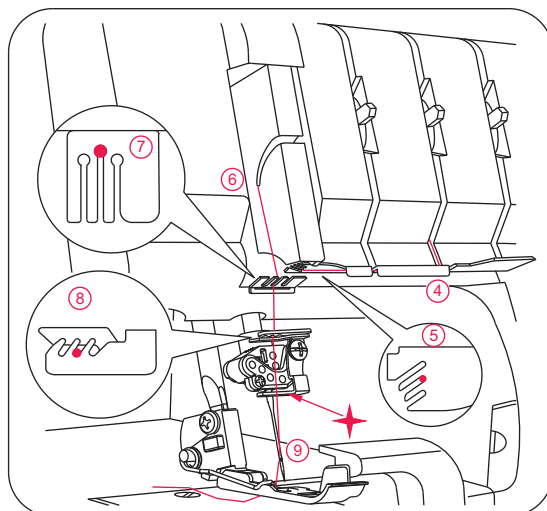


- Mientras sujeta el hilo con los dedos, páselo por entre los discos de la tensión y lleve hacia abajo para asegurarse que entra correctamente por el disco de tensión 3.



- Continúe enhebrando según los puntos 4~8.

- ✦ Antes de enhebrar la aguja, asegúrese que el hilo pasa por delante del guíahilos localizado debajo del sujetador de aguja para la puntada cover y por detrás del guíahilos para el punto.

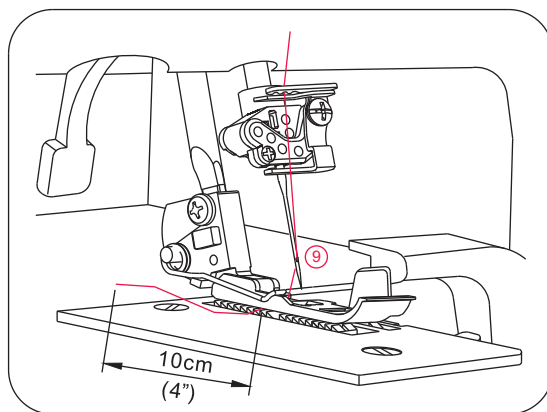


- Enhebre la aguja del medio 9.

Nota: Para simplificar el enhebrado use las pinzas que vienen en la caja de accesorios.

- Deje un cabo de hilo de unos 10cm (4inches).

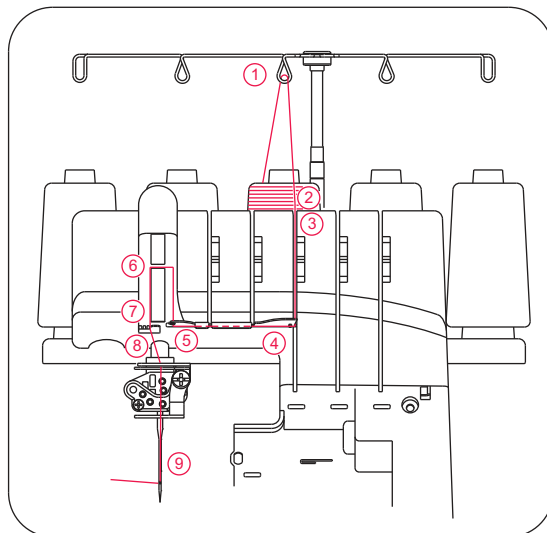
- Coloque el hilo hacia atrás, debajo del prensatelas.



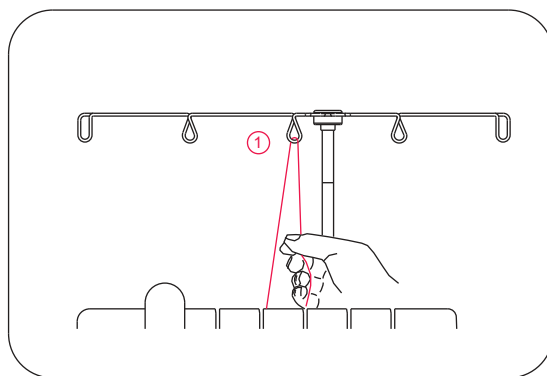
(3) Enhebrar la Aguja de la Derecha para Puntada Cover (Verde) (E en el sujetador de aguja)

- Enhebre la aguja de la derecha para puntada Cover como se indica 1-9.

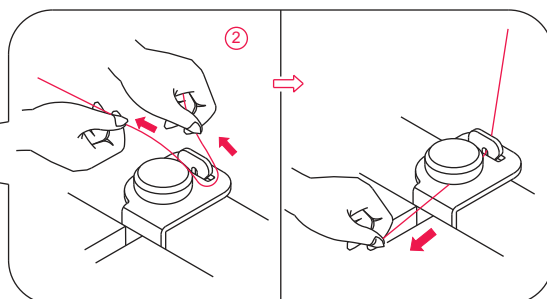
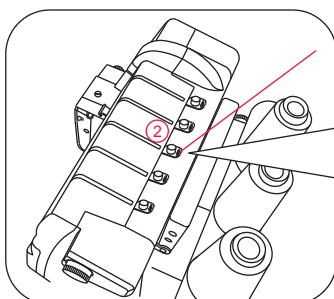
- Levante el alza prensatelas para quitar tensión en el tensahilos.



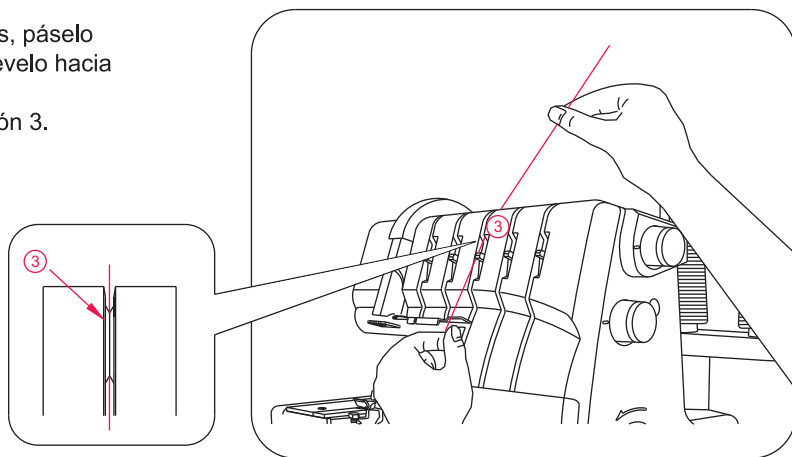
- Pase el hilo desde atras hacia delante a través del guíahilos 1.



- Enhebre la parte de arriba del guíahilos llevando el hilo hacia la izquierda hasta que se deslice por debajo del guíahilos. Entonces pase el hilo por la derecha del botón como se muestra en el dibujo.



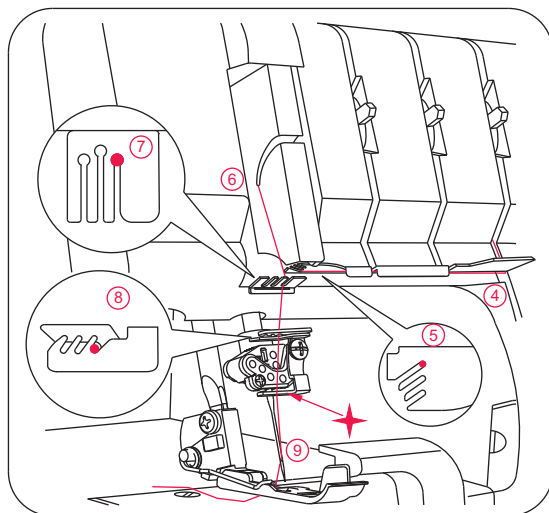
- Mientras sujeta el hilo con los dedos, páselo por entre los discos de tensión y llévelo hacia abajo para asegurarse que entra correctamente por el disco de tensión 3.



- Continúe enhebrando según los puntos 4~8.

Nota: Deslice el hilo por la ranura del guía hilos 5. Deslice el hilo por la ranura inferior de la palanca de agujas 6b. Deslice el hilo por la ranura del medio del guía hilos 7 y 8.

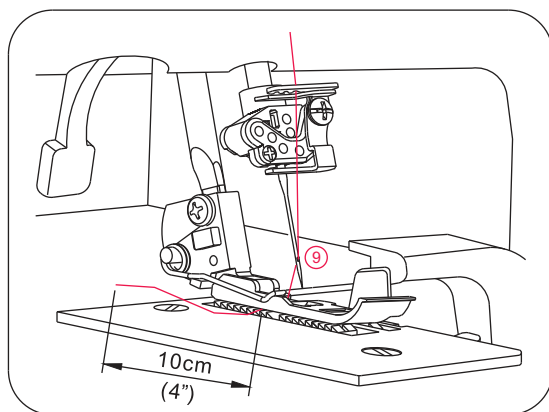
- ✦ Antes de enhebrar la aguja, asegúrese que el hilo pasa por delante del guía hilos localizado debajo del sujetador de agujas para la puntada cover.



- Enhebrar la aguja derecha 9.

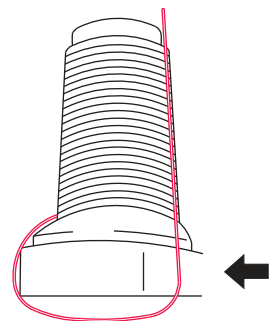
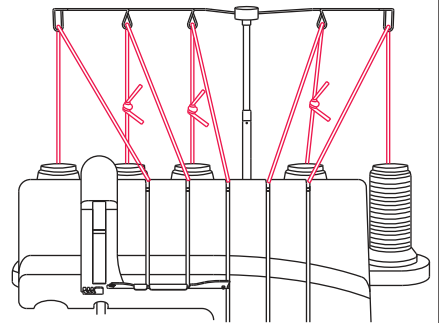
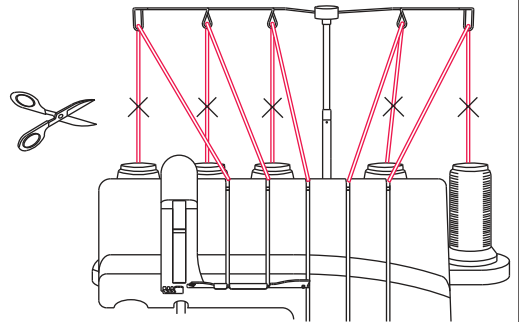
Nota: Para simplificar el enhebrado use las pinzas que vienen en la caja de accesorios.

- Deje un cabo de hilo de unos 10cm (4 inches).
- Coloque el hilo hacia atrás, debajo del prensatelas.



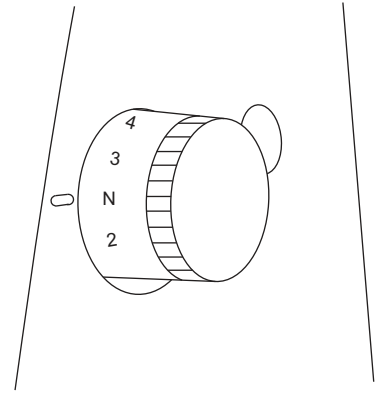
13. COMO CAMBIAR LOS HILOS: METODO DE EMPALME

- Para cambiar el tipo de hilo o el color, corte el hilo cerca del carrete o cono.
- Coloque el nuevo hilo en el portacarretes. Ate el hilo nuevo al extremo del viejo haciendo un nudo. Corte el hilo a 2~3cm (1 inch) de largo. Si lo deja demasiado corto, los hilos se pueden desatar.
- Asegúrese que el nudo está firmemente hecho.
- Levante la palanca alzaprensatejas para quitar presión en el tensahilos.
- Tire de los hilos de uno en uno.
- Si los hilos no pasan con facilidad, revise por si se hubieran enredado en el guía hilos o por debajo del portacarretes.
- Cuando pase el hilo por las agujas, **DETENGASE** cuando el nudo este delante de la aguja.
- Corte el hilo, y enhebre la aguja.



14. COMO AJUSTAR EL LARGO DE PUNTADA

- El selector de largo de puntada debería estar en la posición N para la mayoría de los remallados.
- Ajustar el largo de puntada N~ 4 cuando cosa telas gruesas.
- Ajustar el largo de puntada a 2~N cuando telas ligeras para conseguir una costura perfecta sin que se arrugue la tela.

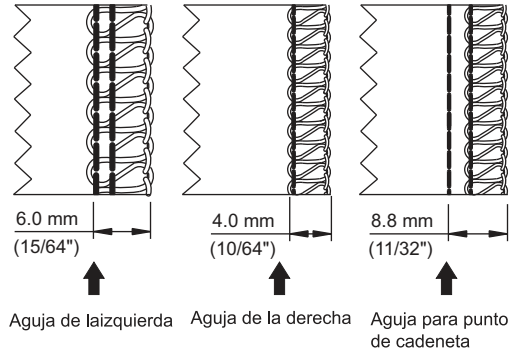


15. COMO AJUSTAR EI ANCHO DE COSTURA

- El ancho de costura se puede conseguir cambiando la posición de la aguja y también girando el selector de ancho de costura.

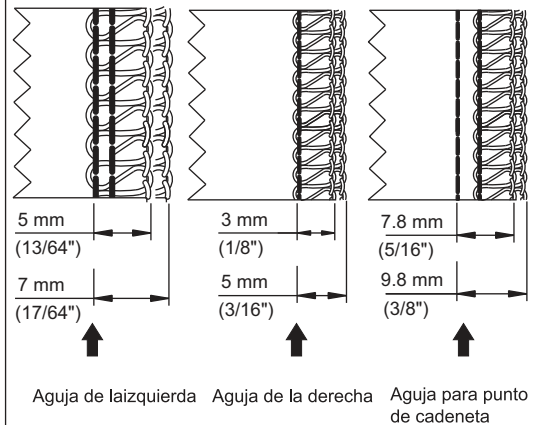
Ajustar el Ancho Cambiando la Posición de Aguja

- El ancho de costura se puede ajustar cambiando la posición de la aguja
 - a) Cuando use la aguja izquierda..... 6,0 mm
 - b) Cuando Sólo se usa la aguja derecha... 4,0 mm
 - c) Cuando use la aguja para punto de cadeneta..... 8,8 mm



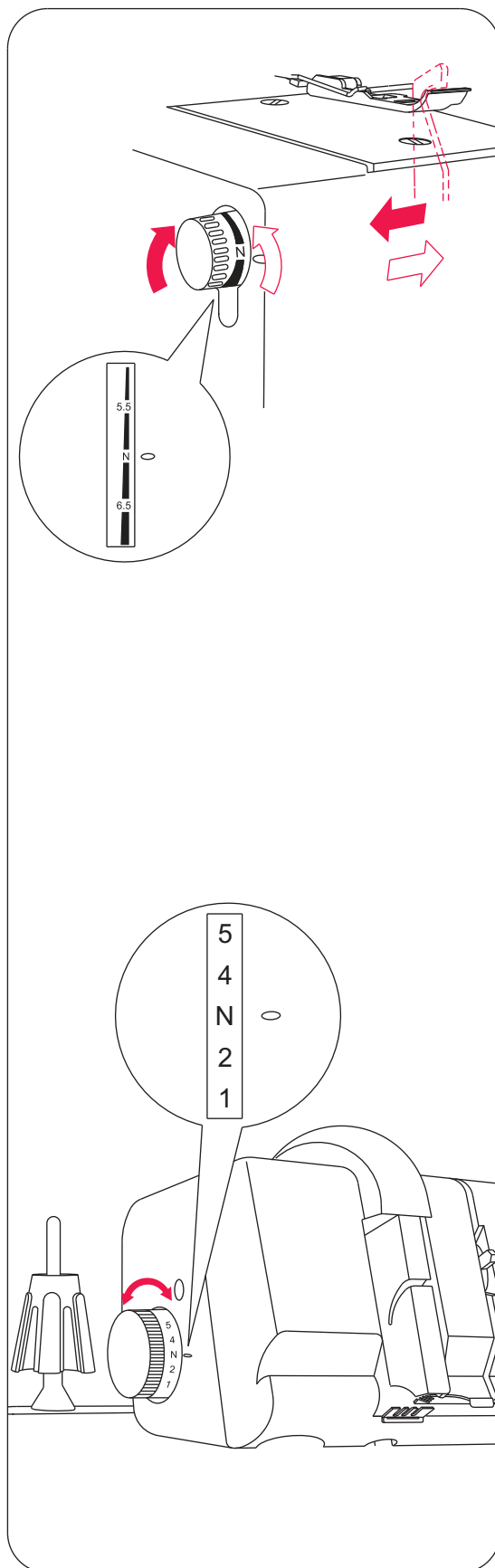
Ajustar el Ancho con el Selector de Ancho

- Este selector le permitirá ajustar el ancho como se indica en la tabla siguiente:
 - a) Cuando use la aguja izquierda..... 5,0 - 7,0 mm
 - b) Cuando sólo use la aguja derecha...3,0 - 5,0 mm
 - c) Cuando use la aguja para punto de cadeneta..... 7,8 - 9,8 mm



Selector Ancho de Costura

Como se muestra en el dibujo, gire el selector en el sentido de las agujas del reloj para disminuir el ancho de corte y en la dirección contraria para aumentar el ancho de corte.



16. COMO AJUSTAR LA PRESIÓN DEL PRENSATELAS.

- La presión del prensateclas de esta máquina viene ajustada de fábrica para remallar telas normales.
- No es necesario ajustar la presión del prensateclas para la mayoría de los telas. Sin embargo, en algunos casos es necesario ajustarla como cuando se remallan telas ligeras o cuando son pesadas o fuertes.
- En estos casos, N es para normal, 1 para menos presión y 5 para más presión.
- Para telas ligeras: Disminuir la presión
- Para telas fuertes: Aumentar la presión

17. ARRASTRE DIFERENCIAL

- El arrastre diferencial es un sistema que hace que la tela se estire o se encoja, cuando el movimiento de los dientes de delante varía en relación a los de detrás.
- El margen de ajuste del arrastre diferencial oscila entre 1:0.6~1:2.0. La forma de ajustar el arrastre es girando el selector que viene ilustrado a la derecha.
- El uso del arrastre diferencial es muy efectivo al remallar géneros elásticos y en géneros cortados al bias.
- La posición "N" del arrastre diferencial es la posición correlativa de 1:1.

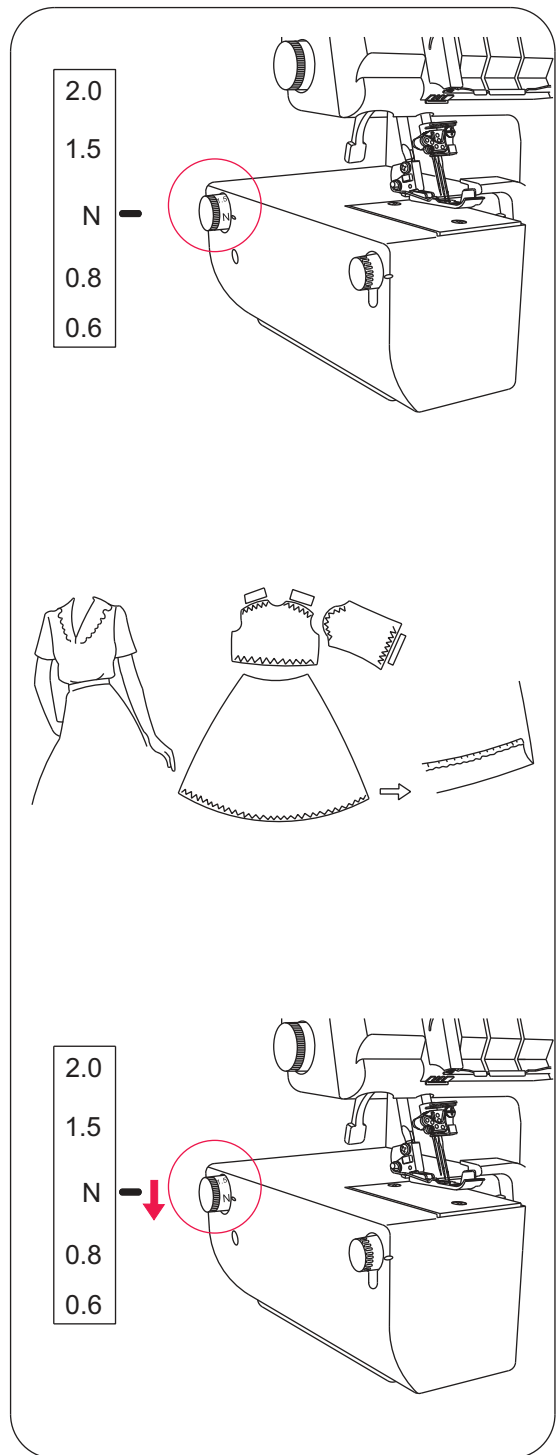
Remallado Fruncido

- El remallado fruncido es práctico para mangas, sisas, delanteros y espaldas, bajos de faldas, etc., en géneros elásticos para unir las distintas piezas.

Ajuste del Arrastre Diferencial para Fruncir

- Colocar el selector por debajo de la posición "N". Ajustar el arrastre diferencial depende del material que se vaya a remallar, así como de cuánto quiera que se frunza. Coloque el selector y realice una prueba antes de remallar definitivamente la prenda.

Nota: Para un remallado normal ajuste el selector en "N".



Remallado Elástico

- El remallado elástico es ideal para puntadas decorativas en cuellos, mangas, bajos de faldas, etc. en géneros de punto fino y en géneros de lana.

Ajustar el Arrastre Diferencial para Elástico

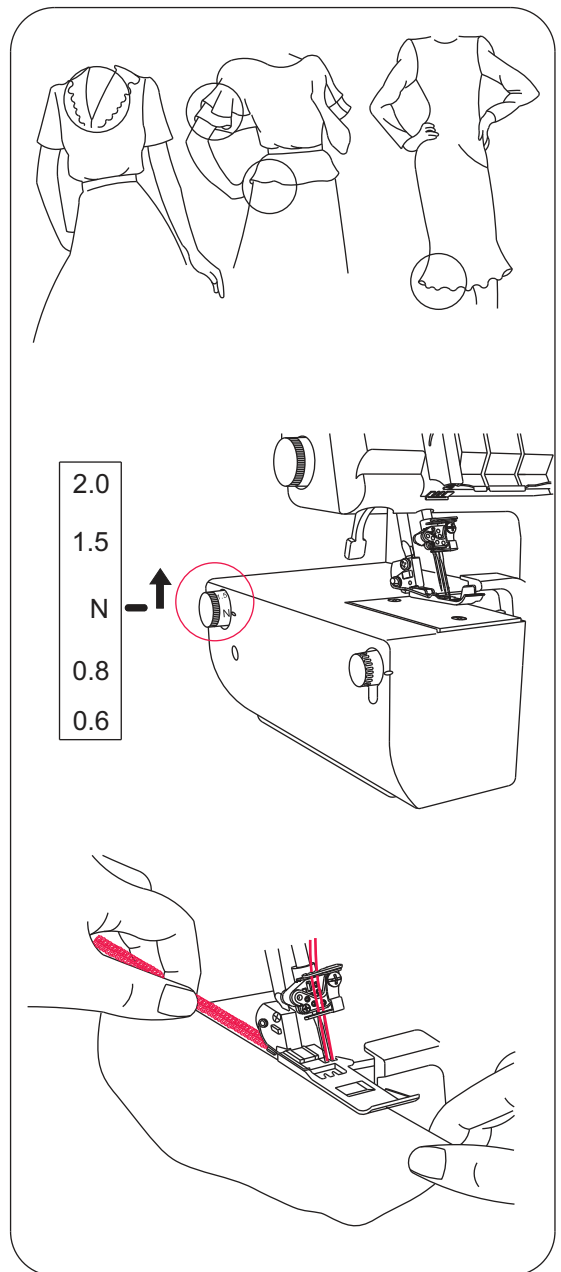
- Coloque el selector por encima de la posición "N".

- Para realizar una costura, aplicar una ligera tensión sobre la tela sujetando la costura ligeramente por delante y por detrás del prensatelas.

Nota:

*Si la cantidad de elasticidad no se ajusta adecuadamente en relación al género que se está remallando, la tela se podría escurrir o mover de la aguja lo que provocaría fallos en el remallado. En este caso, gire el selector del arrastre diferencial cerca de la marca N.

Asegúrese de volver a colocar el selector en la posición "N" para un remallado normal.



18. COMO DESCONECTAR LA CUCHILLA SUPERIOR MOVIBLE

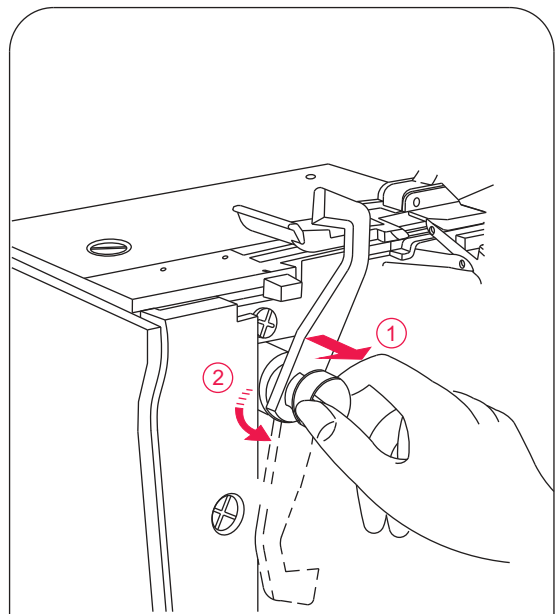


Precaución:

Asegúrese de desconectar el interruptor general de la máquina.

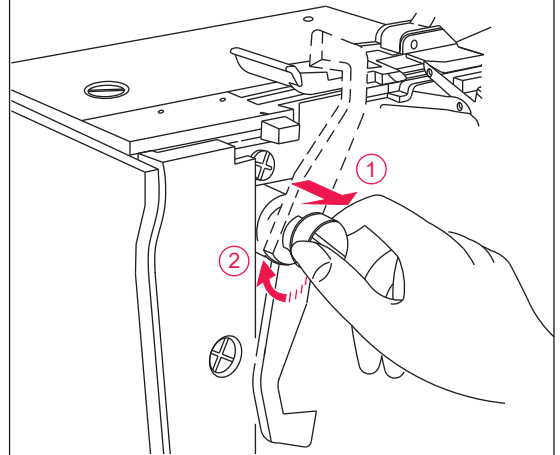
Desconexión de la Cuchilla Superior Movable

- Abra la tapa de los garfios (pag. 12).
- Tire a tope del sujetador de la cuchilla móvil hacia la derecha.
- Gire el sujetador en dirección contraria a las agujas del reloj hasta que la cuchilla encaje por debajo.



Conexión de la Cuchilla Superior Movable

- Abra la tapa de los garfios.
- Tire a tope del sujetador de la cuchilla hacia la derecha .
- Gire el sujetador en dirección de las agujas del reloj hasta que la cuchilla encaje en su posición de corte.



Precaución:

Cierre siempre la tapa de los garfios antes de poner en funcionamiento la máquina.

19. COLOCAR EL CONVERTIDOR



Precaución:

Asegúrese de desconectar el interruptor general de la máquina.

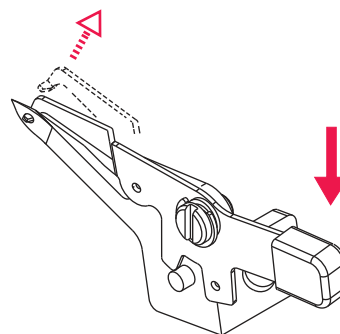
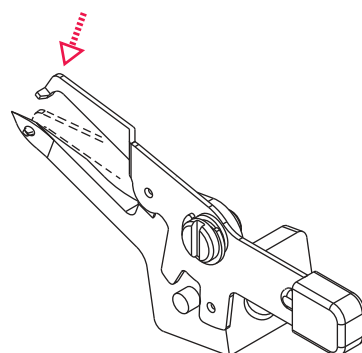
Cuando no enhebre el garfio superior, el convertidor debe ser conectado dentro del orificio del garfio superior.

Usar el Convertidor

- Para conectar el convertidor, levante el asa blanca del convertidor para insertar la punta blanca del convertidor en el ojo del garfio superior.
- Cuando utilice el garfio superior, debe desconectar el convertidor.

Desconexión del Convertidor

- Para desconectar el convertidor, baje el asa blanca del convertidor.



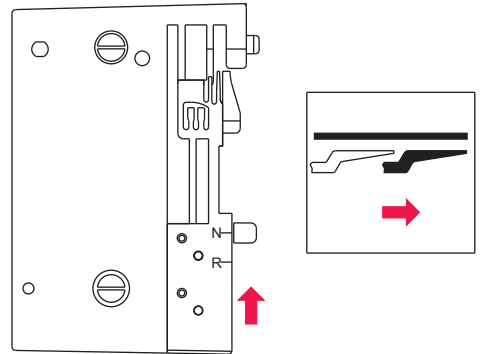
20. REMALLADO ESTANDAR Y DOBLADILLO ARROLLADO

Remallado Estándar

- Coloque el selector de ancho en N para remallado estándar.

Nota:

Asegúrese de llevar a tope el selector de ancho en dirección a la posición N.

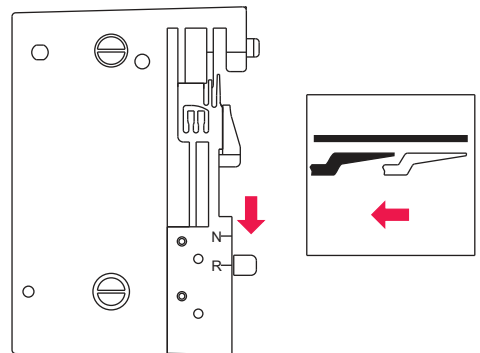


Dobladillo Arrollado

- Coloque el selector de ancho en la posición R para realizar el dobladillo arrollado.

Nota:

Asegúrese de llevar a tope el selector de ancho en dirección a la posición R.



21. COMIENZO DE COSTURA

Nota: Las siguientes instrucciones no se aplican a la puntada cover. Para la puntada cover ver la pág. 49 en "Cómo Realizar la Puntada Cover"

- Cuando la máquina está totalmente enhebrada, coloque todos los hilos encima de la placa de aguja y ligeramente a la izquierda por debajo del prensatelas.
- Sujete los hilos tensándolos ligeramente.
- Gire el volante hacia Usted 2 ó 3 vueltas completas para empezar la cadeneta.
- Baje la palanca alzaprensatelas.
- Siga sujetando la cadeneta y presione el pedal hasta que la cadeneta sea de unos 5 ó 7 cm (2~3 inches) de largo.
- Coloque la tela delante y debajo del prensatelas y realice una prueba.

Nota: No tire de la tela mientras está remallando ya que esto podría hacer que la aguja se doble y se rompa.

- Al final de la prueba, continúe remallando con el prensatelas bajo hasta que la cadeneta alcance unos 15 ó 20 cm (6-8 inches) de largo.

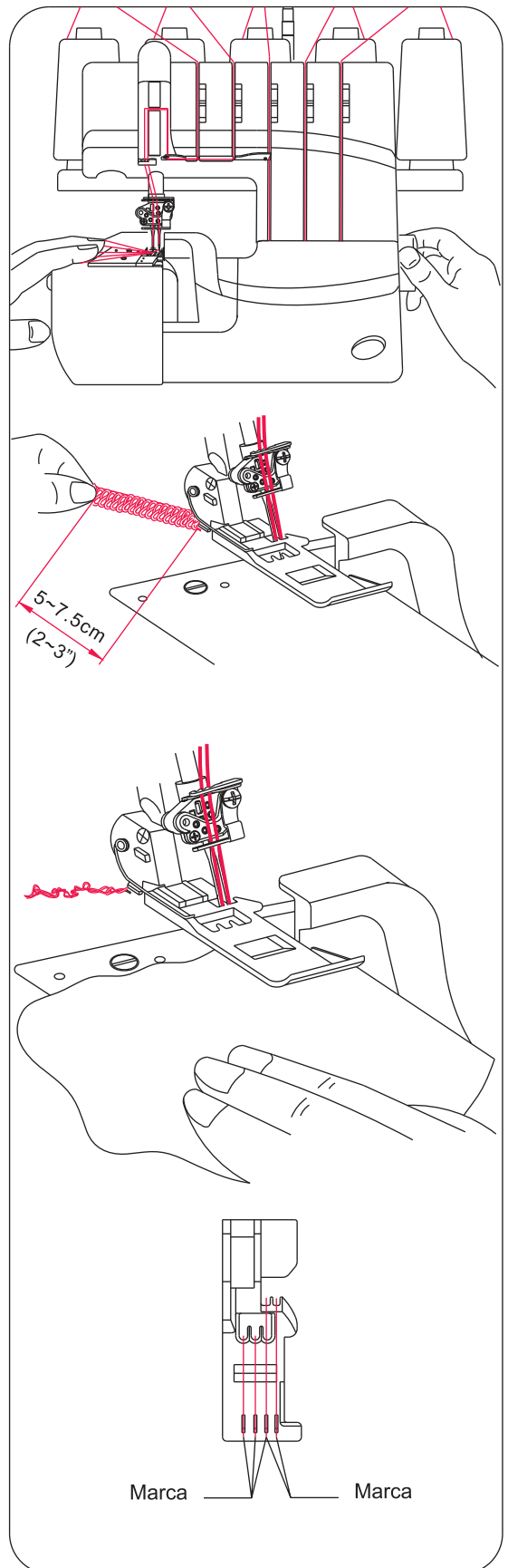
Nota: En caso de que al comenzar la costura le resulte difícil realizar la cadeneta, tire de la tela ligeramente hacia atrás.

- Corte el hilo.

Nota: Cada vez que tenga que reenhebrar la máquina realice un prueba para ver si las tensiones están bien y así realizar los ajustes que sean necesarios.

Información

- Hay una marca para indicar la posición de la aguja en el prensatelas. Use esta marca como guía cuando remalle.



22. AJUSTES Y COSTURA

1) Punto De Cadeneta Doble

La tensión se ajusta automáticamente al seleccionar el tipo de puntada deseado con el selector de tensión automático (ATD).

Se puede hacer un ajuste fino de la tensión por medio de las palancas de ajuste fino según las siguientes variables:

- 1) El tipo de tela y el grosor
- 2) El tamaño de la aguja
- 3) El tamaño, el tipo y el contenido de fibra del hilo

* El largo de puntada para el punto de cadeneta doble debe estar por encima de 2mm.


Corregir las Tensiones

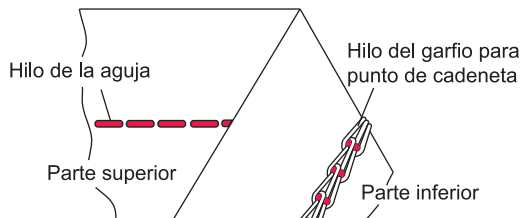
- Poner el selector de tensión automática en la pos. D como se muestra en la imagen y probar a coser con una muestra del tejido.

Cómo ajustar las tensiones

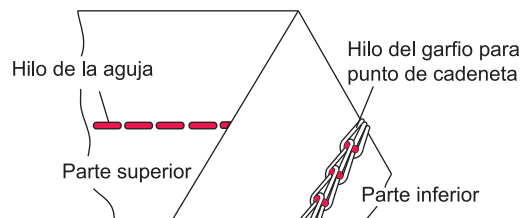
- Si la tensión del hilo de la aguja en el punto de cadeneta es demasiado baja:
 - Mover la palanca (azul) de ajuste fino de la tensión del hilo de la aguja a una posición más alta.
 - O bien mover la palanca (marrón) de ajuste fino de la tensión del hilo del garfio del punto de cadeneta a una posición más baja.

ATD:D

POSICION DE LA AGUJA	
SELECTOR MANUAL DEL ANCHO DE COSTURA	R
LARGO DE PUNTADA	2 ~ 4
POSICIÓN DEL EMBRAGUE	C



Géneros	Selector de tensión				
	Naranja	Azul	Verde	Rojo	Marrón
Peso medio		•			•



Cómo Remallar

El punto de cadeneta doble se realiza con 2 hios, una aguja y un garfio. Normalmente, la máquina corta la tela al borde mientras va remallando. Sin embargo, se puede realizar una costura de cadeneta a la distancia del borde deseada colocando la cuchilla en su posición de no funcionamiento, desconectando el garfio superior y colocando la mesita de costura.



Precaución:

Asegúrese de desconectar la máquina.

a) Anule la cuchilla

- Véase pág. 35 para saber cómo colocar la cuchilla en su posición de no funcionamiento o anular.

b) Desconectar garfio superior

- Gire el volante hasta que el eje esté totalmente a la derecha, de otra manera se podría dañar.
- Desplace la palanca de desembrague hacia la izquierda y hacia arriba para la puntada cover y para el punto de cadeneta o hacia la izquierda y hacia abajo para sobrehilado.

c) Reconectar el garfio superior

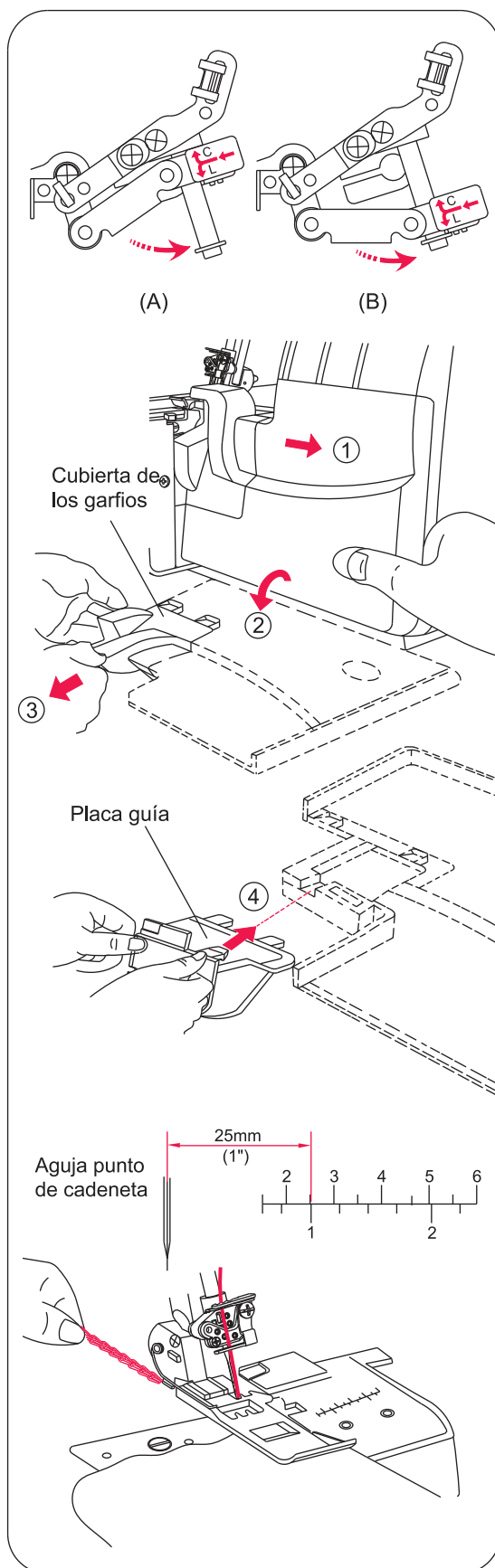
- Gire el volante hasta que el eje esté totalmente a la derecha, de otra manera se podría dañar.
- Desplace la palanca de desembrague hacia la izquierda y hacia arriba para la puntada cover y para el punto de cadeneta o hacia la izquierda y hacia abajo para remallar.

d) Colocar la Mesita de Costura

- Abra la tapa de los garfios.
- Quite la tapa de la cuchilla y coloque la mesita de costura.
- Las graduaciones en la mesita de costura indica la distancia desde la aguja izquierda de la puntada cover. Use esta mesita cuando compruebe la distancia entre la aguja izquierda y el borde de la tela.

e) Empezar y Terminar de Coser

- Cuando empiece a coser, tire de la cadeneta ligeramente hacia la parte de atrás de la máquina hasta que la aguja penetre en la tela.
- Cuando empiece a coser después de enhebrar la máquina, cosa 2 ó 3 cm en un trozo de tela y haga una cadeneta.
- Para terminar la costura, tire de la tela ligeramente hacia la parte de atrás de la máquina.



2) Doblado Arrollado con 2 Hilos

La tensión se ajusta automáticamente al seleccionar el tipo de puntada deseado con el selector de tensión automático (ATD).

Se puede hacer un ajuste fino de la tensión por medio de las palancas de ajuste fino según las siguientes variables:



- 1) El tipo de tela y el grosor
- 2) El tamaño de la aguja
- 3) El tamaño, el tipo y el contenido de fibra del hilo

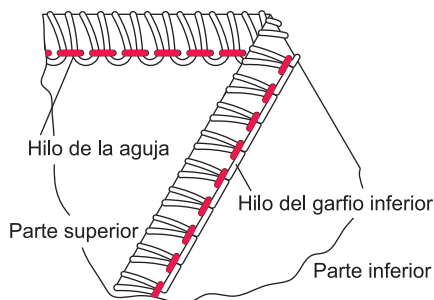
Ajustar las Tensiones

- Poner el selector de tensión automática en la pos. D o G como se muestra en la imagen y probar a coser con una muestra del tejido.

Cómo Ajustar las Tensiones

- Si la tensión del hilo del garfio inferior es demasiado alta o la del hilo de la aguja es demasiado baja:
 - Mover la palanca (roja) de ajuste fino de la tensión del garfio inferior a una posición más baja.
 - O bien mover la palanca (naranja o azul) de ajuste fino de la tensión del hilo de la aguja a una posición más alta.
- Si la tensión del hilo del garfio inferior es demasiado baja:
 - Mover la palanca (roja) de ajuste fino de la tensión del hilo del garfio inferior a una posición más alta.

POSICIÓN DE LA AGUJA		
SELECTOR MANUAL DEL ANCHO DE COSTURA	N	
LARGO DE PUNTADA	2 ~ 4	
CONVERTIDOR	USO	

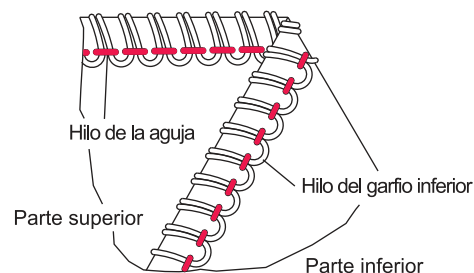
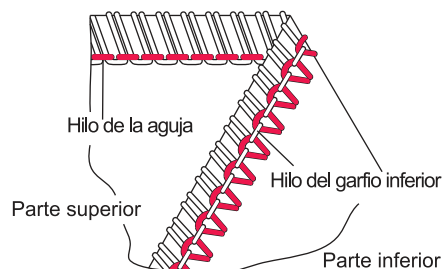


ATD:D

Géneros	Selector de tensión				
	Naranja	Azul	Verde	Rojo	Marrón
Peso medio		●	Convertidor	●	

ATD:G

Generos	Selector de tensión				
	Naranja	Azul	Verde	Rojo	Marrón
Peso medio	●		Convertidor	●	



3) Sobrehilado de 2 Hilos

La tensión se ajusta automáticamente al seleccionar el tipo de puntada deseado con el selector de tensión automático (ATD).

Se puede hacer un ajuste fino de la tensión por medio de las palancas de ajuste fino según las siguientes variables:

- 1) El tipo de tela y el grosor
- 2) El tamaño de la aguja
- 3) El tamaño, el tipo y el contenido de fibra del hilo

* Vease la pág. 36 para saber cómo colocar el convertidor.

Ajustar las Tensiones

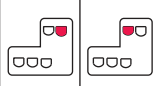
- Poner el selector de tensión automática en la pos. E como se muestra en la imagen y probar a coser con una muestra del tejido.

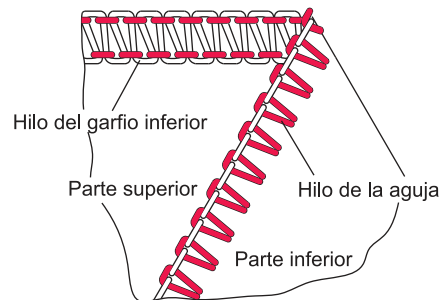
Cómo Corregir las Tensiones

- Si el hilo del garfio inferior está en la parte de abajo del tejido:
 - Mover la palanca (roja) de ajuste fino de la tensión del hilo garfio inferior a una posición más alta.
 - O bien mover la palanca (naranja o azul) de ajuste fino de la tensión del hilo de la aguja a una posición más baja.

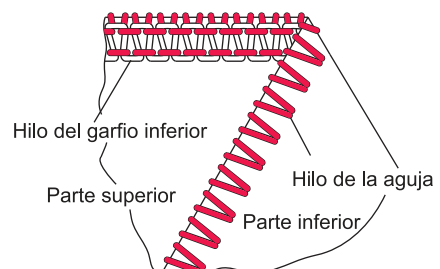
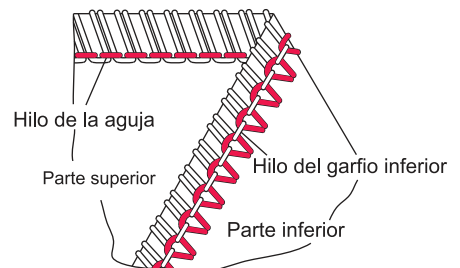
- Si la tensión del hilo de la aguja es demasiado baja:
 - Mover la palanca (naranja o azul) del ajuste fino de la tensión del hilo de la aguja a una posición más alta.
 - O bien mover la palanca (roja) de ajuste fino de la tensión del hilo de la aguja a una posición más baja.

ATD:E

POSICIÓN DE LA AGUJA	
SELECTOR MANUAL DEL ANCHO DE COSTURA	N
LARGO DE PUNTADA	2 ~ 4
CONVERTIDOR	USO



Géneros	Selector de tensión				
	Naranja	Azul	Verde	Rojo	Marrón
Peso medio		●	Convertidor	●	



4) Sobrehilado de 3 Hilos

La tensión se ajusta automáticamente al seleccionar el tipo de puntada deseado con el selector de tensión automático (ATD).

Se puede hacer un ajuste fino de la tensión por medio de las palancas de ajuste fino según las siguientes variables:



- 1) El tipo de tela y el grosor
- 2) El tamaño de la aguja
- 3) El tamaño, el tipo y el contenido de fibra del hilo

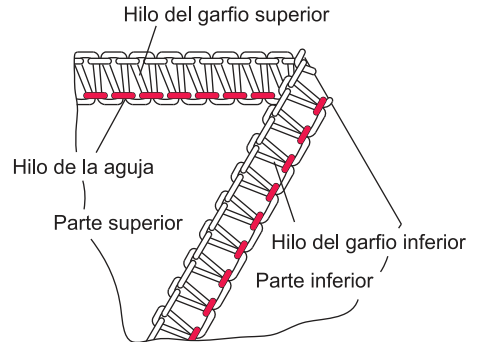
Ajustar las Tensiones

- Poner el selector de tensión automática en la pos. A o B como se muestra en la imagen y probar a coser con una muestra del tejido.

Como Corregir las Tensiones

- Si el hilo del garfio superior está en la parte de abajo del tejido;
 - Mover la palanca (verde) de ajuste fino de la tensión del garfio superior a una posición más alta.
 - O bien mover la palanca (roja) de ajuste fino de la tensión del garfio inferior a una posición más baja.
- Si el hilo del garfio inferior aparece en la parte de arriba del tejido:
 - Mover la palanca (roja) de ajuste fino de la tensión del garfio inferior a una posición más alta.
 - O bien mover la palanca (verde) de ajuste fino de la tensión del garfio superior a una posición más baja.
- Si el hilo de la aguja está demasiado flojo, mover la palanca (naranja o azul) de ajuste fino de la tensión del hilo de la aguja a una posición más alta.

POSICIÓN DE LA AGUJA	 
SELECTOR MANUAL DEL ANCHO DE COSTURA	N
LARGO DE PUNTADA	2~4
CONVERTIDOR	Sin aplicación

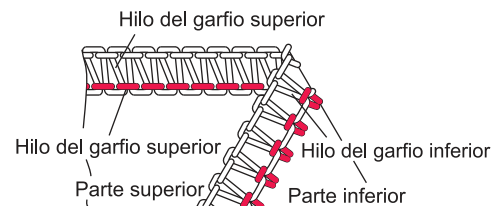
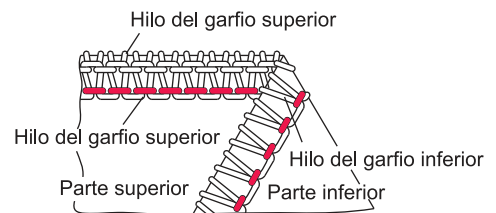
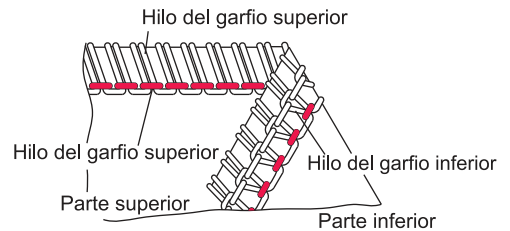


ATD:A

Géneros	Selector de tensión				
	Naranja	Azul	Verde	Rojo	Marrón
Peso medio		●	●	●	

ATD:B

Géneros	Selector de tensión				
	Naranja	Azul	Verde	Rojo	Marrón
Peso medio	●		●	●	



5) Costura Flatlock con 3 Hilos

La tensión se ajusta automáticamente al seleccionar el tipo de puntada deseado con el selector de tensión automático (ATD).

Se puede hacer un ajuste fino de la tensión por medio de las palancas de ajuste fino según las siguientes variables:

- 1) El tipo de tela y el grosor
- 2) El tamaño de la aguja
- 3) El tamaño, el tipo y el contenido de fibra del hilo

Ajustar las Tensiones

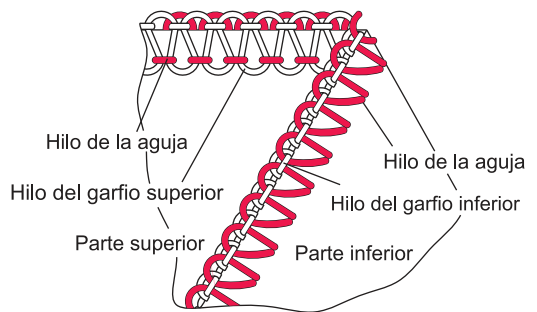
- Poner el selector de tensión automática en la pos. F como se muestra en la imagen y probar a coser con una muestra del tejido.

Cómo Corregir las Tensiones

- Si el hilo del garfio inferior está demasiado flojo:
 - Mover la palanca (roja) de ajuste fino de la tensión del garfio inferior a una posición más alta.
 - O bien mover la palanca (verde) de ajuste fino de la tensión del garfio superior a una posición más baja.
- Si el hilo del garfio superior está demasiado flojo:
 - mover la palanca (naranja o azul) de ajuste fino de la tensión del hilo de la aguja a una posición más baja.
 - O bien mover la palanca (naranja o azul) de ajuste fino de la tensión del hilo de la aguja a una posición más baja.
- Si el hilo de la aguja está demasiado flojo:
 - Mover la palanca (naranja o azul) de ajuste fino de la tensión del hilo de la aguja a una posición más alta.
 - O bien mover la palanca (verde) de ajuste fino de la tensión del hilo del garfio superior a una posición más baja.

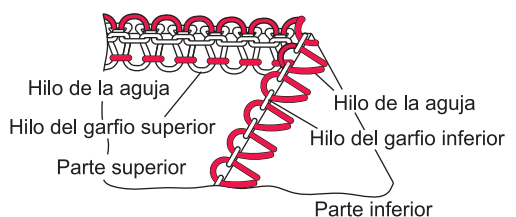
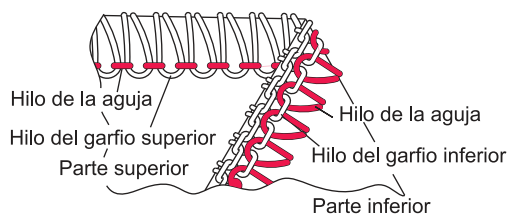
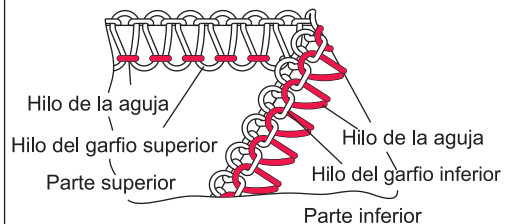
ATD:F

POSICIÓN DE LA AGUJA	
SELECTOR MANUAL DEL ANCHO DE COSTURA	N
LARGO DE PUNTADA	2~4
CONVERTIDOR	Sin aplicación



Géneros	Selector de tensión				
	Naranja	Azul	Verde	Rojo	Marrón
Peso medio		●	●	●	

Géneros	Selector de tensión				
	Naranja	Azul	Verde	Rojo	Marrón
Peso medio	●		●	●	



6) Sobrehilado de 3 Hilos con Falsa Puntada de Seguridad

Tension is automatically set when selecting the desired stitch type with the Auto Tension Dial (ATD). Tension may be fine tuned with the Fine Tuning Levers according to the following variables:

- 1) El tipo de tela y el grosor
- 2) El tamaño de la aguja
- 3) El tamaño, el tipo y el contenido de fibra del hilo

Ajustar las Tensiones

- Set auto tension dial to G as shown on illustration and test sew on a sample of your fabric.


Cómo Corregir las Tensiones

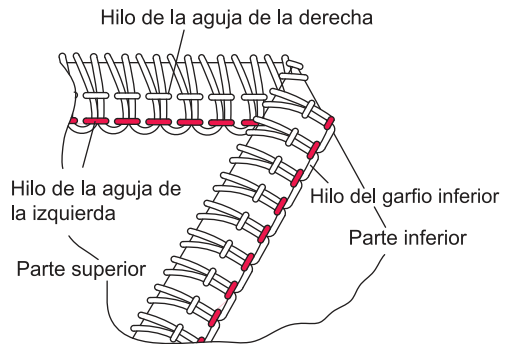
- When the lower looper thread tension is too loose;
 - Move the lower looper thread tension fine tuning lever (red) toward a higher position.

- When the left needle thread tension is too loose;
 - Move the left needle thread tension fine tuning lever (orange) toward a higher position.

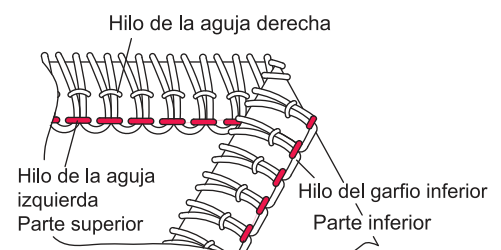
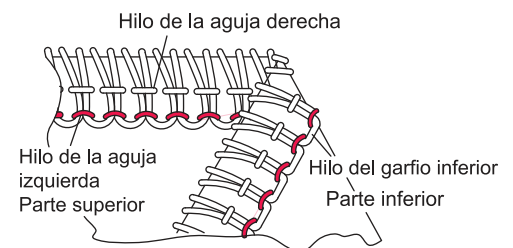
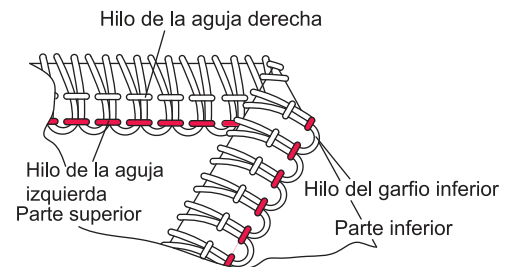
- When the right needle thread tension is too loose;
 - Move the needle thread tension fine tuning lever (blue) toward a higher position.

ATD:G

POSICIÓN DE LA AGUJA	
SELECTOR MANUAL DEL ANCHO DE COSTURA	N
LARGO DE PUNTADA	2~4
CONVERTIDOR	USO



Géneros	Selector de tensión				
	Naranja	Azul	Verde	Rojo	Marrón
Peso medio	●	●	Convertidor	●	



7) Sobrehilado de 4 Hilos con Falsa Puntada de Seguridad

La tensión se ajusta automáticamente al seleccionar el tipo de puntada deseado con el selector de tensión automático (ATD).

Se puede hacer un ajuste fino de la tensión por medio de las palancas de ajuste fino según las siguientes variables:

- 1) El tipo de tela y el grosor
- 2) El tamaño de la aguja
- 3) El tamaño, el tipo y el contenido de fibra del hilo


Ajustar las Tensiones

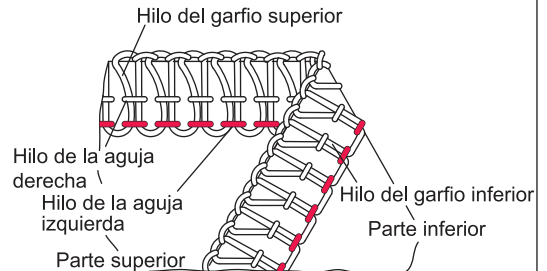
- Poner el selector de tensión automática en la pos. A como se muestra en la imagen y probar a coser con una muestra del tejido.

Cómo Corregir las Tensiones

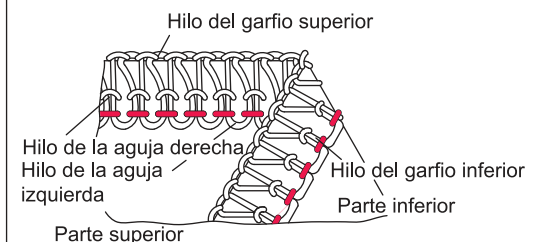
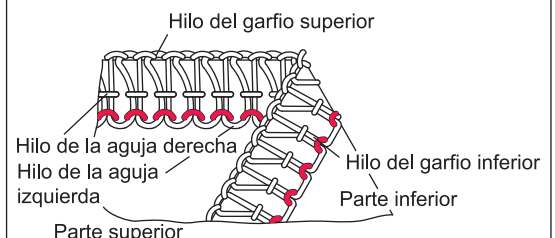
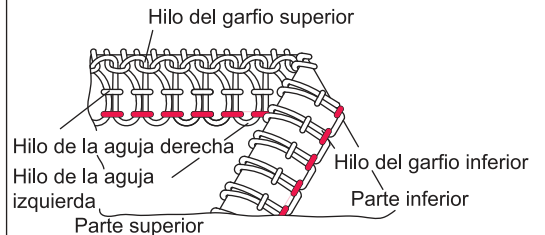
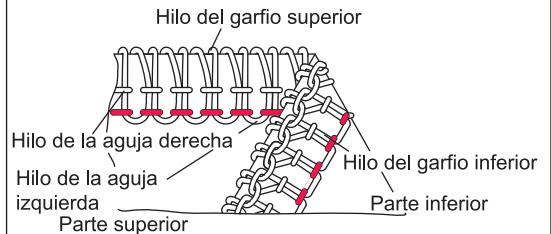
- Si el hilo del garfio superior está en la parte de abajo del tejido:
 - Mover la palanca (verde) de ajuste fino de la tensión del hilo del garfio superior a una posición más alta.
 - O bien mover la palanca (roja) de ajuste fino de la tensión del hilo del garfio inferior a una posición más baja.
- Si el hilo del garfio inferior está en la parte de arriba del tejido:
 - Mover la palanca (roja) de ajuste fino de la tensión del hilo del garfio inferior a una posición más alta.
 - O bien mover la palanca (verde) de ajuste fino de la tensión del hilo del garfio superior a una posición más baja.
- Si el hilo de la aguja izquierda está demasiado flojo:
 - Mover la palanca (naranja) de ajuste fino de la tensión del hilo de la aguja a una posición más alta.
- Si el hilo de la aguja derecha está demasiado flojo:
 - Mover la palanca (azul) de ajuste fino de la tensión del hilo de la aguja derecha a una posición más alta.

ATD:A

POSICIÓN DE LA AGUJA	
SELECTOR MANUAL DEL ANCHO DE COSTURA	N
LARGO DE PUNTADA	2~4
CONVERTIDOR	Sin aplicación



Géneros	Fadenspannungen				
	Naranja	Azul	Verde	Rojo	Marrón
Peso medio	●	●	●	●	



8) Costura de Seguridad con 4 Hilos

La tensión se ajusta automáticamente al seleccionar el tipo de puntada deseado con el selector de tensión automático (ATD).

Se puede hacer un ajuste fino de la tensión por medio de las palancas de ajuste fino según las siguientes variables:

- 1) El tipo de tela y el grosor
- 2) El tamaño de la aguja
- 3) El tamaño, el tipo y el contenido de fibra del hilo

Ajustar las Tensiones

- Poner el selector de tensión automática en la pos. I como se muestra en la imagen y probar a coser con una muestra del tejido.


Como Corregir las Tensiones

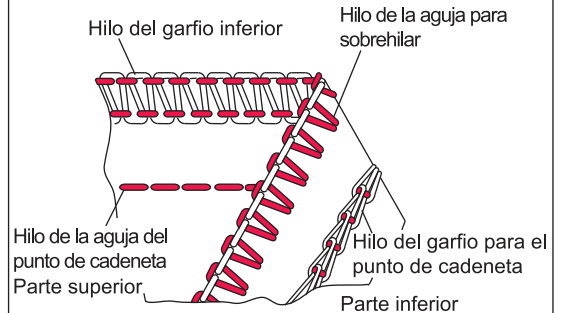
- Si el hilo del garfio inferior aparece en la parte de arriba del tejido:
 - Mover la palanca (roja) de ajuste fino de la tensión del garfio inferior a una posición más alta.
 - O bien mover la palanca (verde) de ajuste fino de la tensión del garfio superior a una posición más baja.

- Si el hilo de la aguja derecha está demasiado flojo: mover la palanca (azul) de ajuste fino de la tensión del hilo de la aguja derecha a una posición más alta.

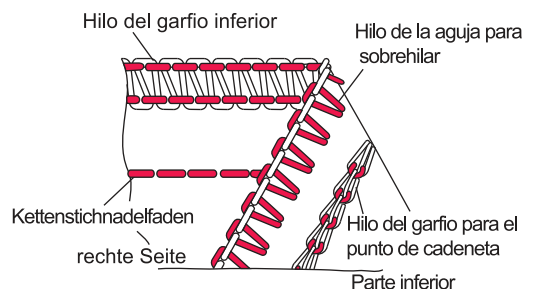
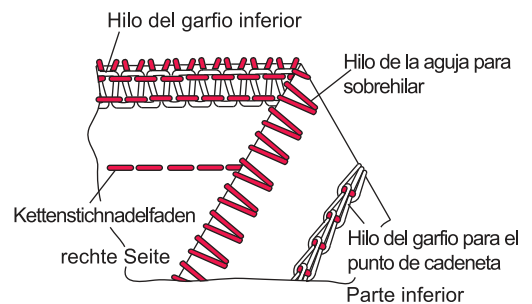
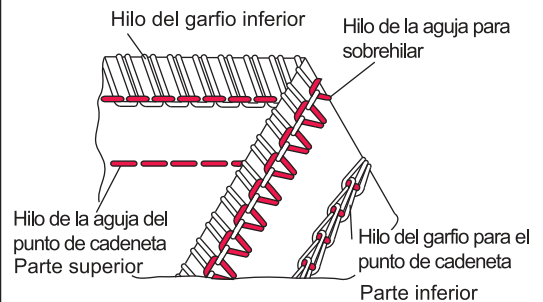
- Si el hilo de la aguja del punto de cadeneta está demasiado flojo:
 - Mover la palanca (naranja) de ajuste fino de la tensión del hilo de la aguja de punto de cadeneta a una posición más alta.
 - O bien mover la palanca (marrón) de ajuste fino de la tensión del hilo del garfio del punto de cadeneta a una posición más baja.

ATD:I

POSICIÓN DE LA AGUJA	
SELECTOR MANUAL DEL ANCHO DE COSTURA	N
LARGO DE PUNTADA	2~4
CONVERTIDOR	USO



Géneros	Selector de tensión				
	Naranja	Azul	Verde	Rot	Marrón
Peso medio	●	●	Convertidor	●	●



9) Costura de Seguridad con 5 Hilos

La tensión se ajusta automáticamente al seleccionar el tipo de puntada deseado con el selector de tensión automático (ATD).

Se puede hacer un ajuste fino de la tensión por medio de las palancas de ajuste fino según las siguientes variables:

- 1) El tipo de tela y el grosor
- 2) El tamaño de la aguja
- 3) El tamaño, el tipo y el contenido de fibra del hilo


Ajustar las Tensiones

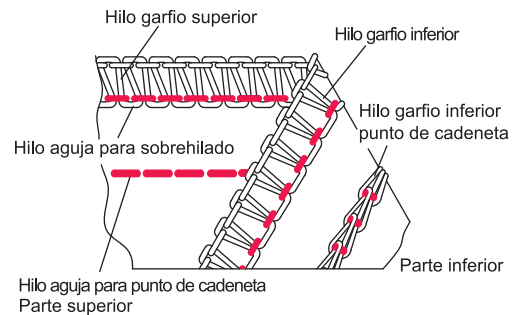
- Poner el selector de tensión automática en la pos. B como se muestra en la imagen y probar a coser con una muestra del tejido.

Cómo Corregir las Tensiones

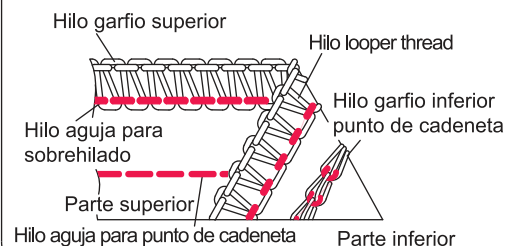
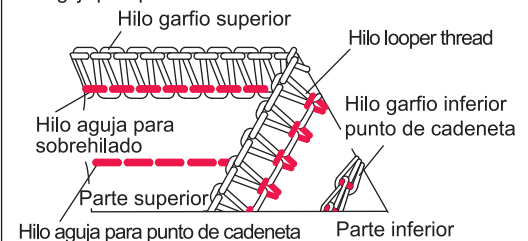
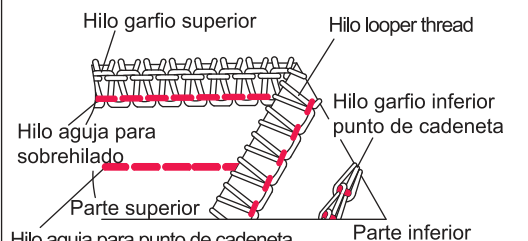
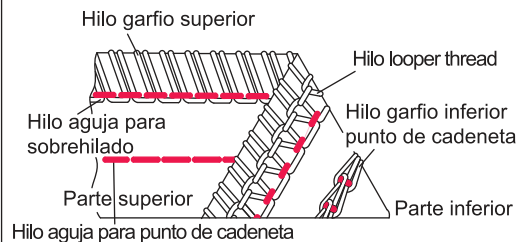
- Si el hilo del garfio superior aparece en la parte de abajo del tejido;
 - Mover la palanca (verde) de ajuste fino de la tensión del garfio superior a una posición más alta.
 - O bien la palanca (roja) de ajuste fino de la tensión del garfio inferior a una posición más baja.
- Si el hilo del garfio inferior aparece en la parte de arriba del tejido:
 - Mover la palanca (roja) de ajuste fino de la tensión del garfio inferior a una posición más alta.
 - O bien mover la palanca (verde) de ajuste fino de la tensión del garfio superior a una posición más baja.
- Si el hilo de la aguja izquierda está demasiado flojo:
 - Mover la palanca (azul) de ajuste fino de la tensión del hilo de la aguja a una posición más alta.
- Si la tensión del hilo de aguja del punto de cadeneta es demasiado baja:
 - Mover la palanca (naranja) de ajuste fino de la tensión del hilo de la aguja de punto de cadeneta a una posición más alta.
 - O bien mover la palanca (marrón) de ajuste fino de la tensión del hilo del garfio del punto de cadeneta a una posición más baja.

ATD:B

POSICIÓN DE LA AGUJA	
SELECTOR MANUAL DEL ANCHO DE COSTURA	N
LARGO DE PUNTADA	2 ~ 4
CONVERTIDOR	Sin aplicación



Géneros	Selector de tensión				
	Naranja	Azul	Verde	Rojo	Marrón
Peso medio	●	●	●	●	●



23. COMO HACER LA PUNTADA COVER

- Esta máquina puede realizar una puntada cover de 3 hilos con un ancho de 5.6 mm.
- La puntada cover se puede usar para recubrir, unir o coser cuellos, bajos de camisetas, sudaderas, etc.
- La puntada cover se recomienda para géneros elásticos como el punto.
- También se puede usar en géneros como los vaqueros, pero se debe prestar especial atención a las tensiones o de lo contrario el hilo podría romperse y/o que la puntada diera saltos. Si se produjera alguna de las dos cosas cambie las agujas primero y luego ajuste las tensiones.

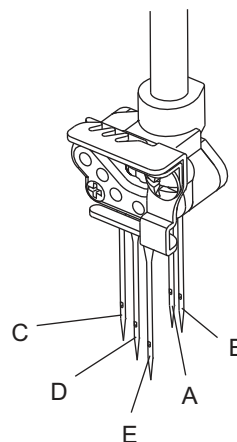
Preparar la Máquina



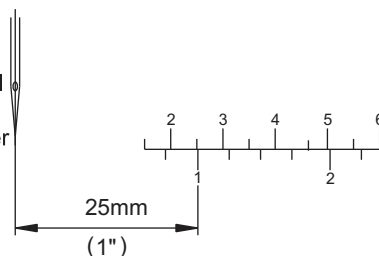
Precaución:

Asegúrese de desconectar el interruptor general de la máquina.

- Abra la tapa de los garfios. (Véase pág. 12)
- Desconecte el garfio superior. (Véase pág. 40)
- Coloque la cuchilla superior móvil en su posición de no funcionamiento. (Véase pág.35)
- Ajuste el ancho de puntada en "R". (Véase pág. 37)
- Coloque embrague C/L (Véase pág. 40).
- Quite la aguja de la derecha (B) y la de la izquierda (A).
- Para la Puntada Cover Triple de 5.6 mm, coloque la aguja de la derecha (E), la aguja del medio (D) y la aguja de la izquierda (C). (Véanse págs. 25 - 29)
- Pase el hilo a través de las agujas (E), (D) y (C) y enhebre el garfio para la puntada cover (marrón) (Véanse pág. 20 - 21)
- Coloque la mesita de costura. (Véase pág. 40)
- Las graduaciones de la mesita de costura indican la distancia desde la aguja izquierda para la puntada cover. Úsela como una guía cuando coloque el borde de la tela.
- Cierre la tapa de los garfios.



Hilo aguja del medio para puntada cover (D)



Información Adicional Sobre la Puntada Cover

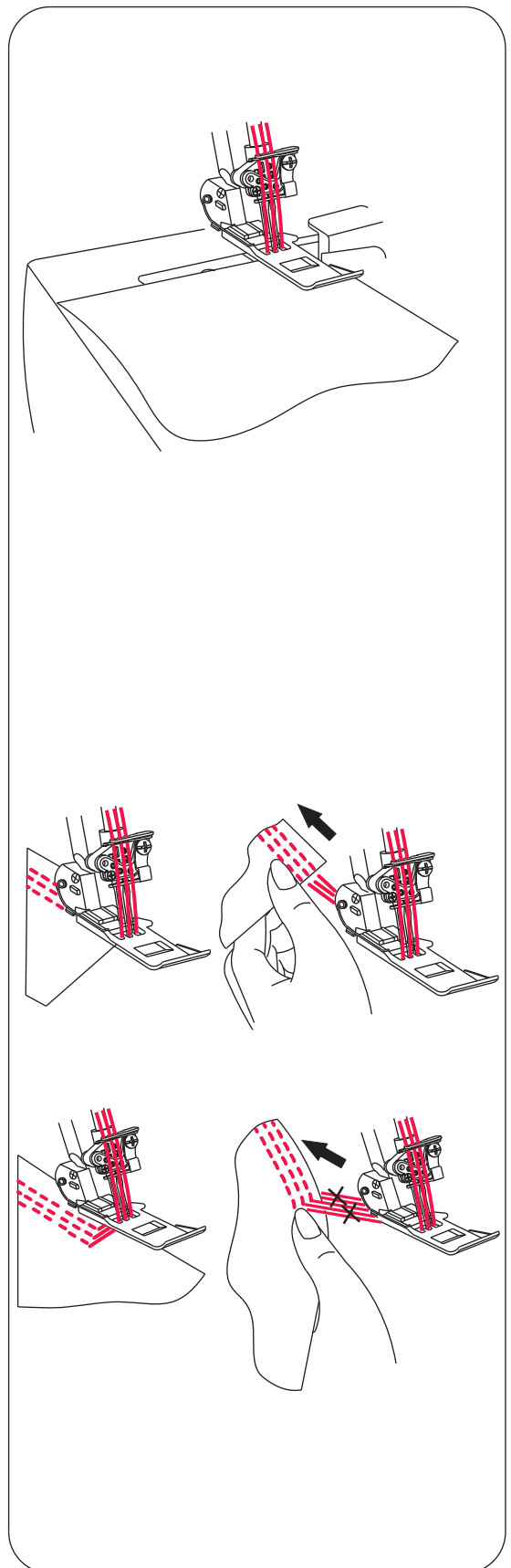
Empezar y Terminar de Coser

Nota: Siga las instrucciones que vienen abajo al hacer la puntada cover porque no es posible con este tipo de puntada dejar una cadeneta al terminar la costura.

Comenzar a Coser

- Levante la palanca alzaprensateles.
- Coloque el material debajo del prensateles detrás de la aguja.
- Baje la palanca alzaprensateles.

Nota: Cuando comience a coser por la mitad de la tela, coloque la tela donde desee comenzar a coser.



Tensiones Recomendadas para la Puntada Cover

La tensión se ajusta automáticamente al seleccionar el tipo de puntada deseado con el selector de tensión automático (ATD).

Se puede hacer un ajuste fino de la tensión por medio de las palancas de ajuste fino según las siguientes variables:



- 1) El tipo de tela y el grosor
 - 2) El tamaño de la aguja
 - 3) El tamaño, el tipo y el contenido de fibra del hilo
- * El largo de la puntada para la puntada cover debería estar por encima de N (2.5 mm).

Ajustar las Tensiones

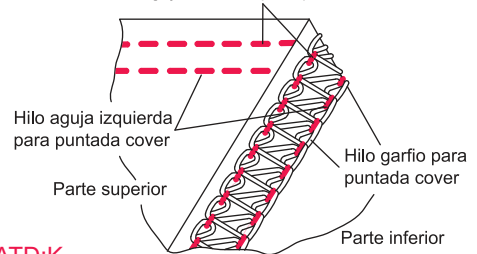
- Poner el selector de tensión automática en la pos. K o H como se muestra en la imagen y probar a coser con una muestra del tejido.

Como Ajustar las Tensiones

- Si el hilo del garfio de la puntada cover está demasiado flojo:
 - Mover la palanca (marrón) de ajuste fino de la tensión del hilo del garfio de la puntada cover a una posición más alta.
- Si la tensión del hilo de la aguja izquierda de la puntada cover es demasiado baja:
 - Mover la palanca (naranja) de ajuste fino de la tensión del hilo de la aguja izquierda de la puntada cover a una posición más alta.
 - O bien mover la palanca (marrón) de ajuste fino de la tensión del hilo del garfio de la puntada cover a una posición más baja.
- Si la tensión del hilo de la aguja derecha de la puntada cover es demasiado baja:
 - Mover la palanca (azul o naranja) de ajuste fino de la tensión del hilo de la aguja derecha de la puntada cover a una posición más alta.
 - O bien mover la palanca (marrón) de ajuste fino de la tensión del hilo del garfio de la puntada cover a una posición más baja.
- Si la superficie superior del tejido se abulta entre los hilos de las agujas y las costuras de la parte inferior del tejido se tensan mucho:
 - Mover la palanca (marrón) de ajuste fino de la tensión del hilo del garfio de la puntada cover a una posición más baja.

POSICIÓN DE LA AGUJA	 
SELECTOR MANUAL DEL ANCHO DE COSTURA	R
LARGO DE PUNTADA	N~4
POSICION DEL EMBRAGUE	C

Hilo aguja derecha para puntada cover



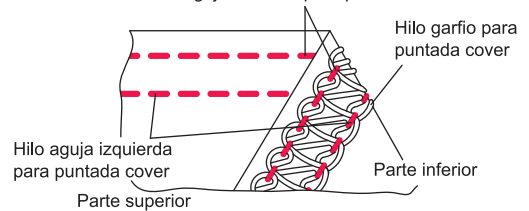
ATD:K

Hilo garfio para puntada cover	Selector de tensión				
	Naranja	Azul	Verde	Rojo	Marrón
Polyester	●	●			●
Texturado	●	●			●

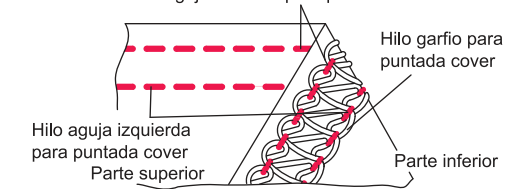
ATD:H

Hilo aguja para puntada cover	Selector de tensión				
	Naranja	Azul	Verde	Rojo	Marrón
Polyester	●		●		●
Texturado	●		●		●

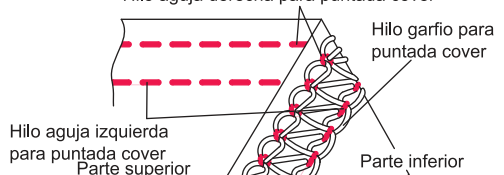
Hilo aguja derecha para puntada cover



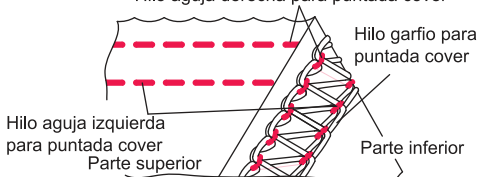
Hilo aguja derecha para puntada cover



Hilo aguja derecha para puntada cover



Hilo aguja derecha para puntada cover



Tensiones Recomendadas para la Puntada Cover Triple

La tensión se ajusta automáticamente al seleccionar el tipo de puntada deseado con el selector de tensión automático (ATD).

Se puede hacer un ajuste fino de la tensión por medio de las palancas de ajuste fino según las siguientes variables:

- 1) El tipo de tela y el grosor
- 2) El tamaño de la aguja
- 3) El tamaño, el tipo y el contenido de fibra del hilo

* El largo de la puntada para la puntada cover debería estar por encima de N (2.5 mm).


Ajustar las Tensiones

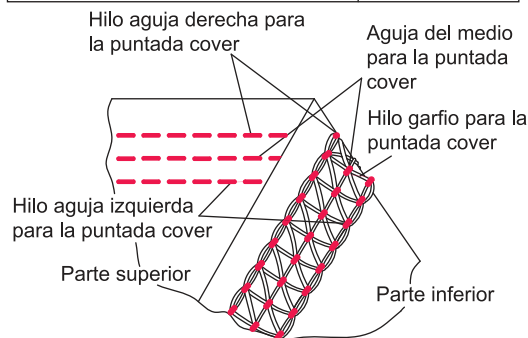
- Poner el selector de tensión automática en la pos. J como se muestra en la imagen y probar a coser con una muestra del tejido.

Cómo Ajustar las Tensiones

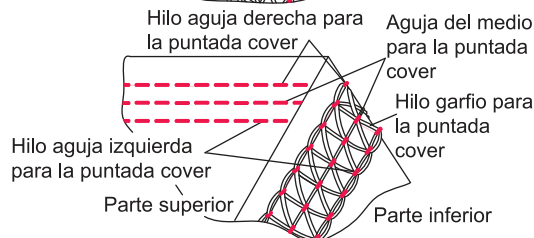
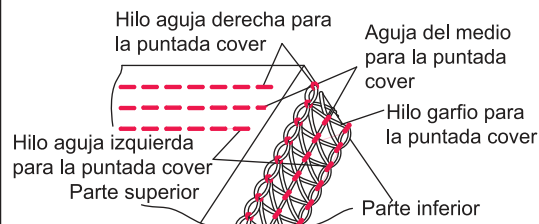
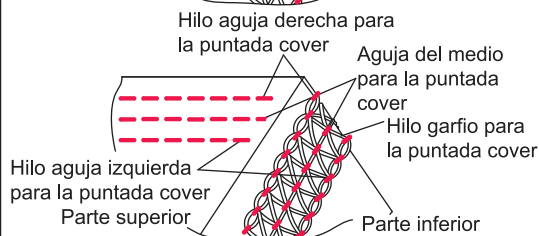
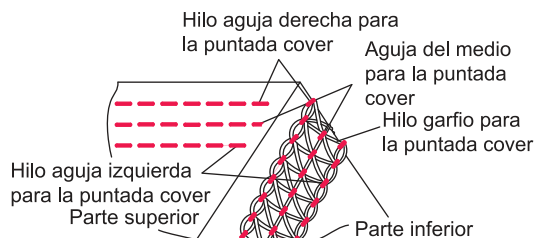
- Si el hilo del garfio de la puntada cover está demasiado flojo;
 - Mover la palanca (marrón) de ajuste fino de la tensión del hilo del garfio de la puntada cover a una posición más alta.
- Si la tensión del hilo de la aguja izquierda de la puntada cover es demasiado baja:
 - Mover la palanca (naranja) de ajuste fino de la tensión del hilo de la aguja izquierda de la puntada cover a una posición más alta.
 - O bien mover la palanca (marrón) de ajuste fino de la tensión del hilo del garfio de la puntada cover a una posición más baja.
- Si la tensión del hilo de la aguja central de la puntada cover es demasiado baja;
 - Mover la palanca (azul) de ajuste fino de la tensión del hilo de la aguja central de la puntada cover a una posición más alta.
 - O bien mover la palanca (marrón) de ajuste fino de la tensión del hilo del garfio de la puntada cover a una posición más baja.
- Si la tensión del hilo de la aguja derecha de la puntada cover es demasiado baja:
 - Mover la palanca (verde) de ajuste fino de la tensión del hilo de la aguja derecha de la puntada cover a una posición más alta.
 - O bien mover la palanca (marrón) de ajuste fino de la tensión del hilo del garfio de la puntada cover a una posición más baja.
- Si la superficie superior del tejido se abulta entre los hilos de las agujas y las costuras de la parte inferior del tejido se tensan mucho:
 - Mover la palanca (marrón) de ajuste fino de la tensión del hilo del garfio de la puntada cover a una posición más baja.

ATD:J

POSICIÓN DE LA AGUJA	
SELECTOR MANUAL DEL ANCHO DE COSTURA	R
LARGO DE PUNTADA	N~4
POSICION DEL EMBRAGUE	C



Hilo garfio para puntada cover	Selector de tensión				
	Naranja	Azul	Verde	Rojo	Marrón
Polyester	●	●	●		●
Texturado	●	●	●		●

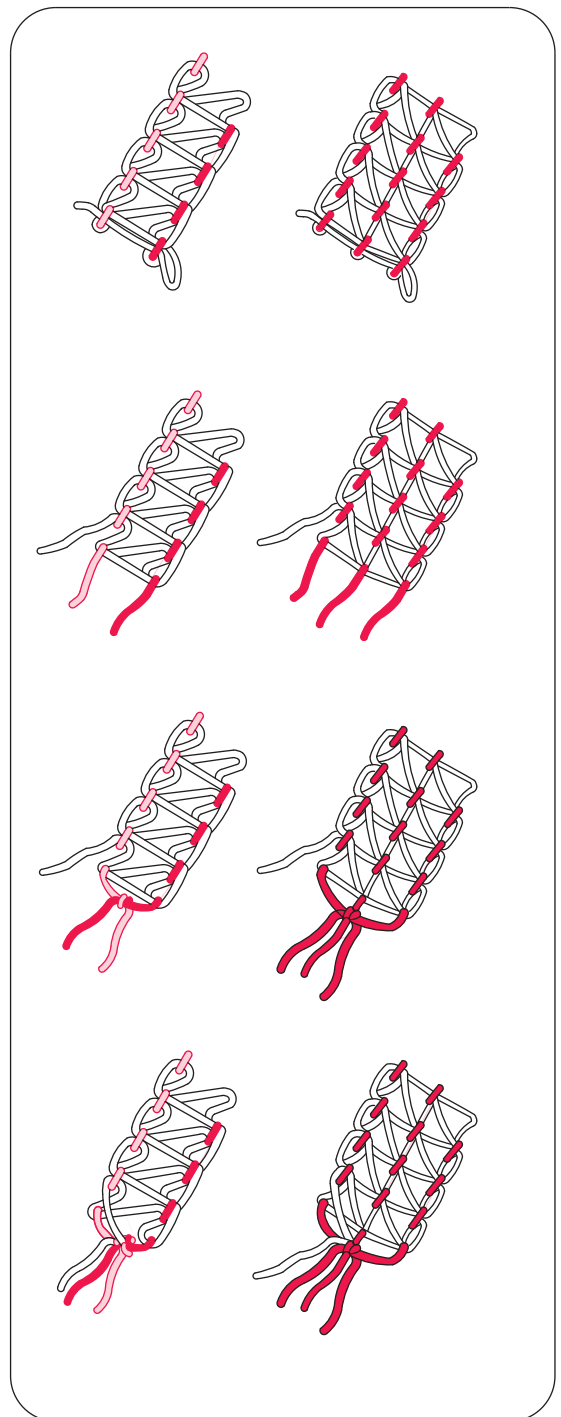


Rematar la Costura

Como las costuras hechas por la puntada cover se suelen deshacer al tirar del hilo del garfio al terminar de coser, hay que rematar la costura de la siguiente manera.

- Cuando termine de coser y llegue al final de la tela, entre los hilos que salen de la tela, hay que anudar los hilos de las agujas (2 ó 3 hilos) primero, como se muestra en el dibujo de la derecha. Luego anude estos hilos con los hilos del garfio.
- Cuando se queda en la mitad de la tela, saque los hilos (2 ó 3 hilos) de debajo de la tela y anúdelos como se indica arriba.
- Corte los hilos restantes.

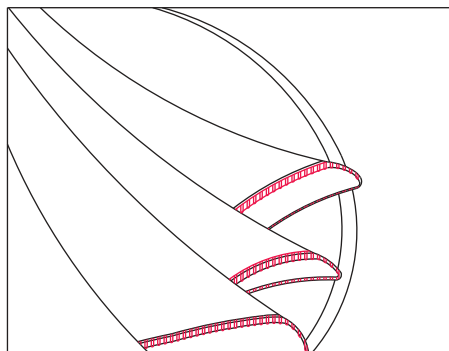
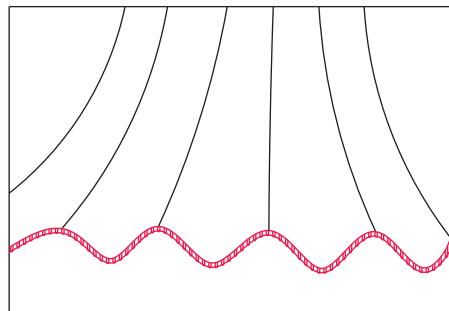
Nota:
normalmente, las costuras al principio no se deshacen, pero es mejor rematar la costura al final siguiendo los mismos pasos descritos arriba.



24. COMO HACER EL DOBLADILLO ARROLLADO

- Esta máquina puede realizar cuatro tipo de dobladillos arrollados.
- El dobladillo arrollado se hace arrollando y doblando el borde de la tela.
- Este tipo de remallado está indicado para telas ligeras como el lino, la gasa, el organdi, el crepe, etc.
- El dobladillo arrollado no es aconsejable para telas pesadas o gruesas.

NOTA: El dobladillo arrollado solo se puede realizar con la aguja de la derecha.



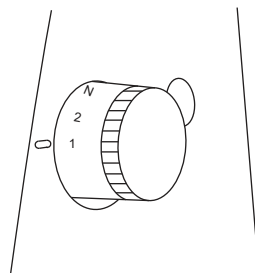
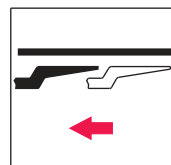
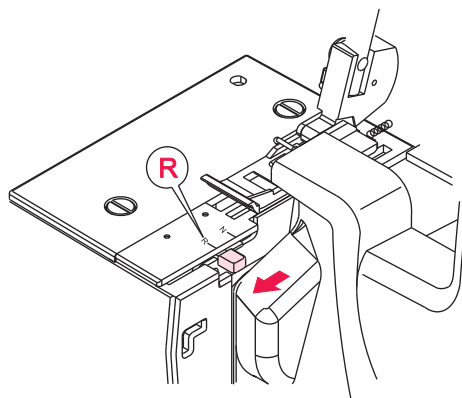
Preparar la Máquina



Precaución:

Asegúrese de desconectar el interruptor general de la máquina.

- Quite la aguja de la izquierda, la aguja para el punto de cadeneta y la(s) aguja(s) para puntada cover.
- Mueva el selector de ancho de puntada a la posición R. (Véase pág. 37)
- Ponga en línea la placa soporte del ancho de costura con la marca R de la placa de aguja girando el selector de ancho de puntada, como sea requerido. (Véase pág. 31)
- Coloque el selector de largo de puntada entre "1~2" y obtendrá una costura fina.
- Agujas: Singer Cat. No. 2022 #14/90 or 2022 #11/80.
- Hilos: Se puede usar una variedad de hilos para realizar el dobladillo arrollado.



Nota: Para un dobladillo arrollado bonito enhebre el garfio superior con hilo texturado y la aguja y el garfio inferior con un hilo fino normal.

1) Dobladillo Arrollado Estandar con 3 Hilos


Ajustar Tensiones

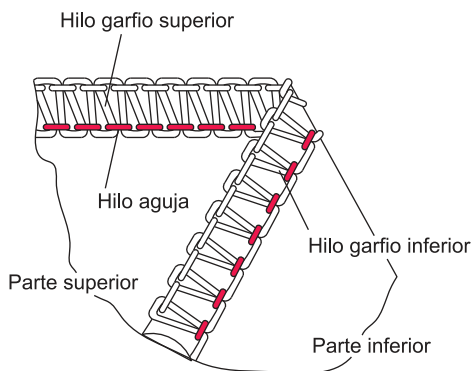
- Poner el selector de tensión automática en la pos. A como se muestra en la imagen y probar a coser con una muestra del tejido.

2) Dobladillo Arrollado Y Replegado de 3 Hilos Con El Garfio Superior

Ajustar Tensiones

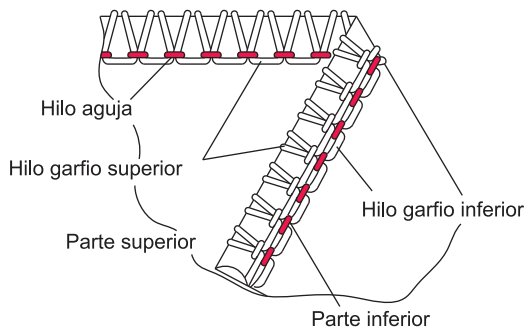
- Poner el selector de tensión automática en la pos. C como se muestra en la imagen y probar a coser con una muestra del tejido.

POSICIÓN DE LA AGUJA	
SELECTOR MANUAL DEL ANCHO DE COSTURA	R
LARGO DE PUNTADA	1~2
POSICION DEL EMBRAGUE	L



ATD:A

Hilo garfio para puntada cover	Selector de tensión				
	Naranja	Azul	Verde	Rojo	Marrón
Polyester		•	•	•	
Texturado		•	•	•	



ATD:C

Hilo garfio para puntada cover	Selector de tensión				
	Naranja	Azul	Verde	Rojo	Marrón
Polyester		•	•	•	
Texturado		•	•	•	


Nota: Para un dobladillo arrollado bonito enhebre el garfio inferior con hilo texturado y la aguja con hilo fino normal.

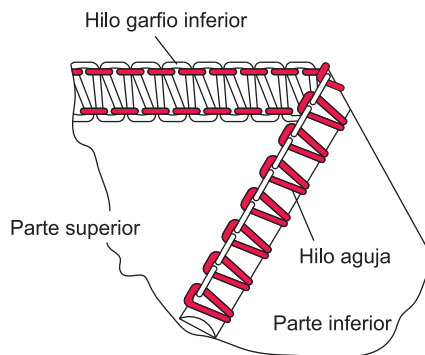
- Colocar el convertidor (Véase pág. 36).

3) Dobladillo Arrollado Estándar con 2 Hilos

Ajustar Tensiones

- Poner el selector de tensión automática en la pos. E como se muestra en la imagen y probar a coser con una muestra del tejido.

POSICIÓN DE LA AGUJA	
SELECTOR MANUAL DEL ANCHO DE COSTURA	R
LARGO DE PUNTADA	1~2
CONVERTIDOR	USO



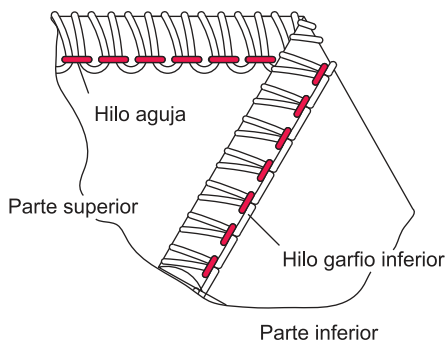
ATD:E

Peso ligero	Selector de tensión				
	Naranja	Azul	Verde	Rojo	Marrón
Texturado		●	Convertidor	●	

4) Dobladillo Arrollado y Replegado con 2 Hilos con el garfio Inferior

Ajustar Tensiones

- Poner el selector de tensión automática en la pos. D como se muestra en la imagen y probar a coser con una muestra del tejido.

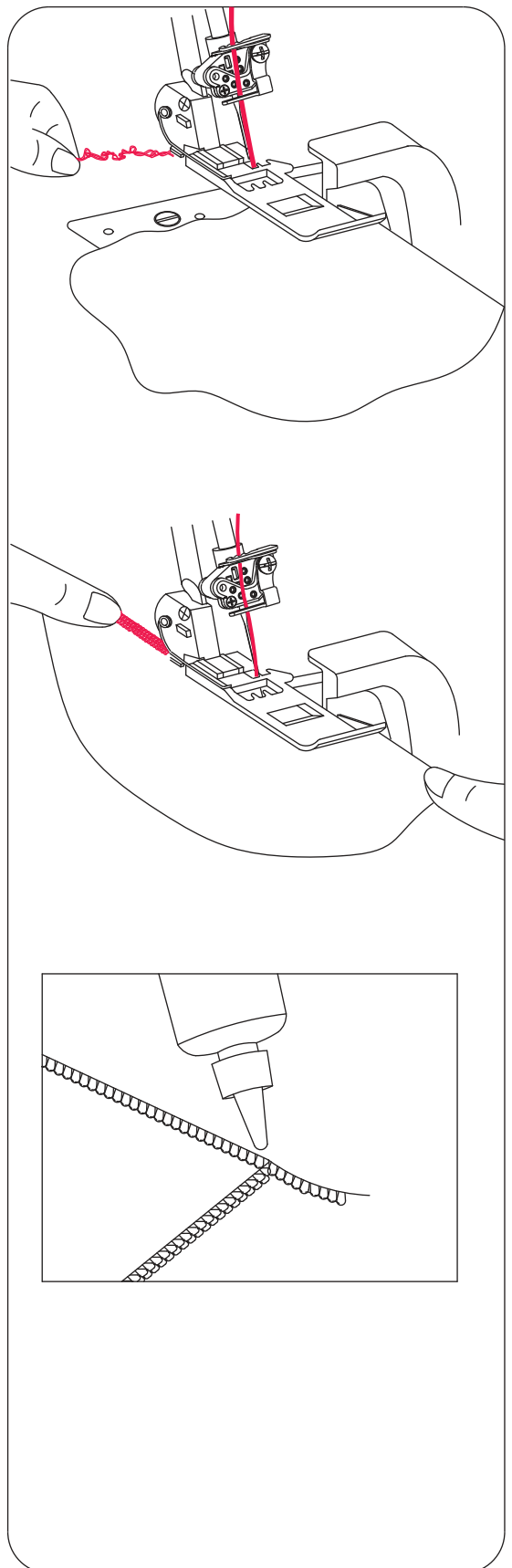


ATD:D

Peso ligero	Selector de tensión				
	Naranja	Azul	Verde	Rojo	Marrón
Polyester		●	Convertidor	●	
Texturado		●	Convertidor	●	

Información Adicional Sobre El Doblado Arrollado

- Sujete la cadeneta cuando empiece a coser para evitar que se meta en la costura.
- Retenga ligeramente el material y así obtendrá una costura más tupida.
- El ancho mínimo de costura que se puede conseguir para el dobladillo arrollado es de aproximadamente 1.5 mm (1/16 inch), ya que el ancho de corte no puede ser inferior a 3.5 mm (9/64 inch).



Asegurar La Cadeneta del Doblado Arrollado

- Aplique una pequeña gota de líquido para sellar al final de la costura. Deje que se seque, y entonces corte la cadeneta cerca de las puntadas.

Nota: Realice una prueba con el líquido para sellar para saber si mancha antes de usarlo.

25. TÉCNICAS DE COSTURA Y DISTINTAS PUNTADAS

Cómo Realizar Una Costura Flatlock Decorativa

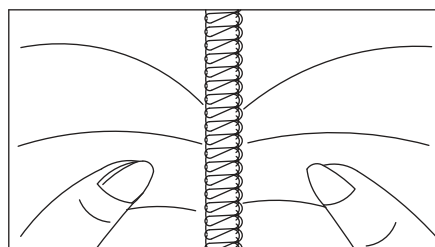
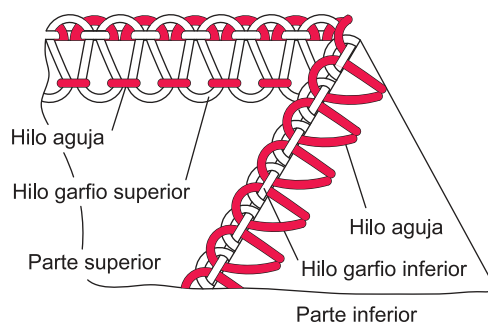
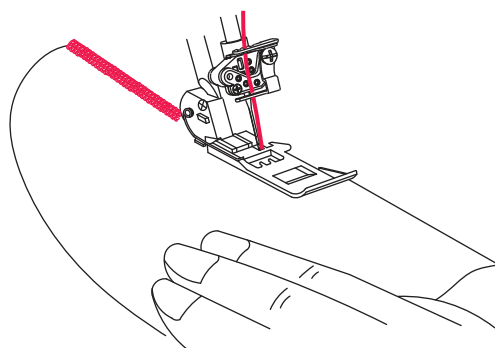
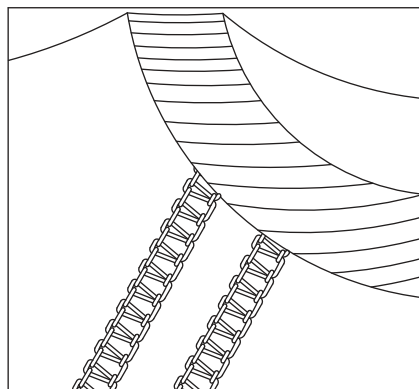
- Una costura flatlock se consigue ajustando la tensión de los 2 ó 3 hilos del sobrehilado, cosiendo la costura, y entonces tire de los dos lados de la tela para aplastar la costura.
- La costura flatlock se puede usar para unir y decorar a la vez o sólo para decorar.

1) Preparar La Máquina

- Usar las agujas de sobrehilado de la izquierda o de la derecha.
- Empiece enhebrando la máquina y ajustando las tensiones para el sobrehilado de 2 hilos (Véase pág. 42) o para la costura flatlock de 3 hilos (Véase pág. 44).

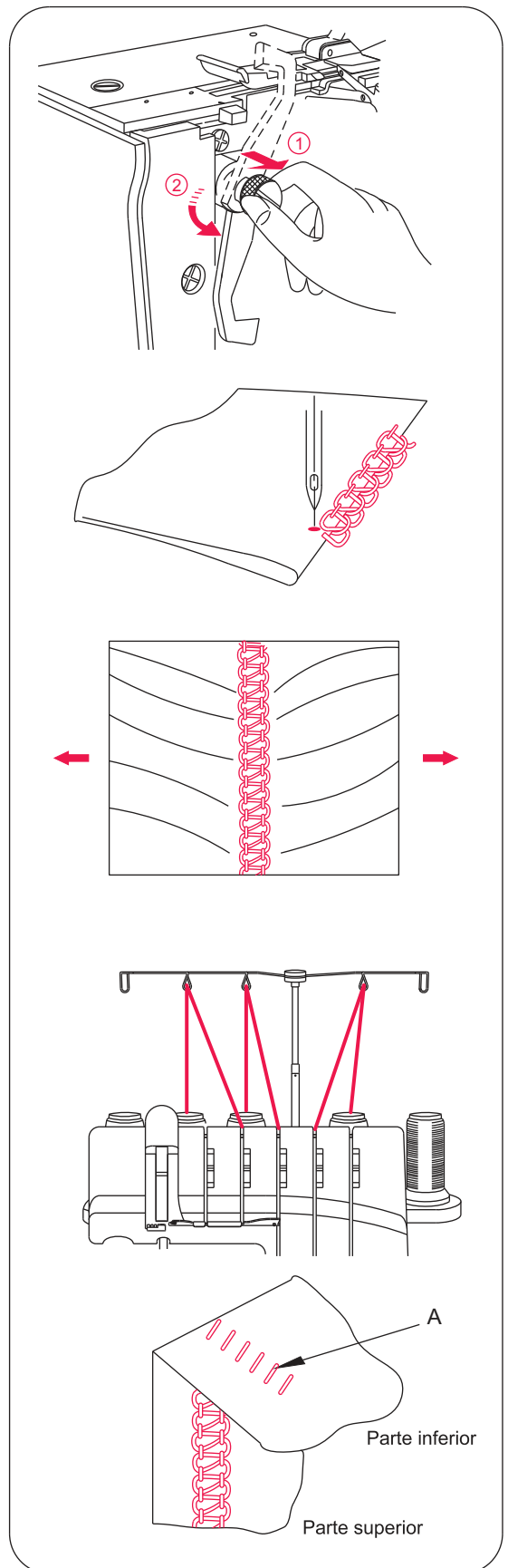
2) Realizar Una Costura Flatlock

- Coloque las telas del revés juntas para realizar una costura decorativa en el derecho de la prenda.
 - Cosa las costuras, y corte el exceso de tela.
 - El hilo de la aguja (naranja o azul) formará una V por debajo de la tela.
 - El hilo del garfio inferior formará una línea al borde de la tela.
-
- Tire de los dos lados de la costura para alisar las costuras.



3) Flatlocking Decorativo

- Coloque la cuchilla superior en la posición de no funcionamiento (pág. 35). La tela no se corta en este tipo de puntada.
- Doble la tela juntando los dos reverses.
- Coloque la tela de manera que la costura se vea saliendo parte de la puntada fuera de la tela.
- Tire de los dos lados de la tela para alisarla.



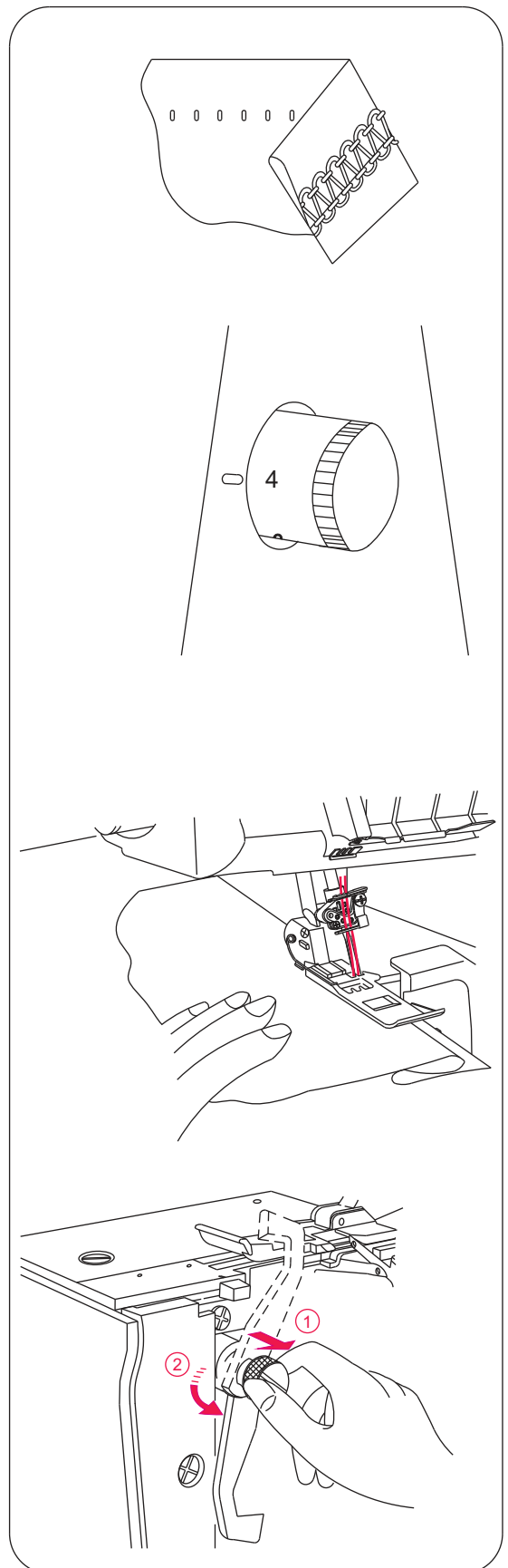
4) Información Adicional Sobre Flatlocking

- Las tensiones se deben ajustar correctamente para que la tela se alise.
- El hilo del garfio superior es el hilo que más se ve en la costura flatlock. Utilice un hilo decorativo en el garfio superior y un hilo poco visible tanto en el garfio inferior como en la aguja.
- Para una puntada de escalera, cosa las costuras juntando el derecho de las telas. El hilo de la aguja se verá más creando una puntada con apariencia de escalera (A).

Puntada Invisible

- Se corta el exceso de tela, el bajo se cose y los bordes de la tela quedan remallados, todo en una sola operación.
- El uso del de la puntada de bajo invisible se aconseja para géneros de punto.
- Use el sobrehilado con la aguja derecha y ajuste la máquina para un remallado estrecho de 3 hilos (Véase pag. 43).
Nota: También se puede usar la costura flatlock de 3 hilos (Véase pág. 44)
- Coloque el selector de largo de puntada a 4.
- Doble el bajo por el revés de la tela y luego hacia el derecho unos 6 mm (1/4 inch) mas allá del doblez.
- Cosa en el borde del dobladillo extendido, permitiendo que la aguja apenas coja tela en el borde del pliegue.

Nota: Existe un prensatelas para puntada invisible adicional. (Pág. 68).



Cómo Realizar Jaretas

- Haga jaretas en la tela antes de cortar la prenda.
- Use la aguja de la derecha de y ajuste la máquina para un remallado estrecho de 3 hilos. (Véase pág. 43)
Nota: También se puede usar para esta técnica el dobladillo arrollado.
- Coloque la cuchilla superior en la posición de no funcionamiento. (Véase pág. 35)
- Señale la tela con la cantidad de jaretas deseadas usando un lápiz de agua.

- Doble la tela por el revséy cosa.

- Planche las jaretas en la misma direccion.

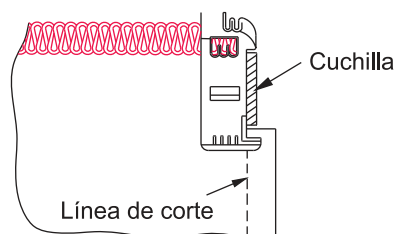
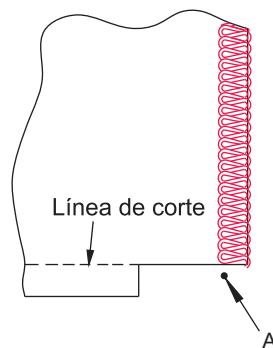
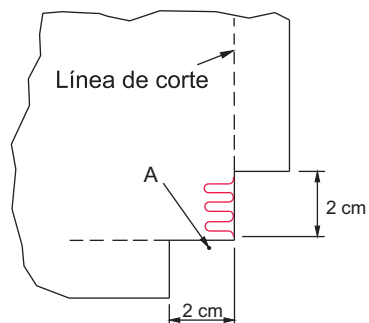
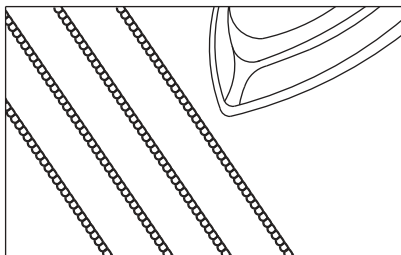
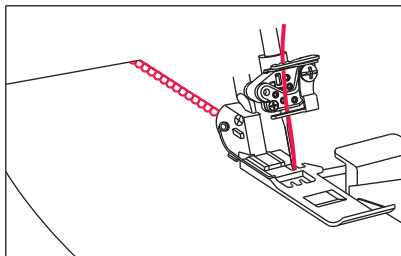
Hacer Esquinas

(1) Esquina de Afuera

- Corte aproximadamente 2 cm (51/64 inch) desde la esquina, en línea con el borde de la costura.
- Cosa una puntada más allá del punto (A) y pare.
- Levante la aguja y la palanca alzaprensateñas.
- Tire de la tela por detrás de la máquina lo suficiente para sacar el hilo de la placa de aguja.

Nota: El prensateñas se ha quitado para ver mejor los detalles.

- Gire la tela y baje la palanca alzaprensateñas, así la cuchilla quedará en línea con el borde de corte.
- Tire de los hilos sueltos, y empiece a coser.



(2) Esquina Interior

- Corte el interior de la esquina por la línea de cortenea de
- Cosa a lo largo de la línea de costura.
- Cosa hasta el final del dobléz (Deje la aguja clavada en la tela)
- Levante la palanca alzaprensatelas. (Deje la aguja clavada en la tela).
- Desdoble y vuelva a doblar, así la línea de costura quedará recta.

Colocar Alfileres

- Coloque los alfileres a la izquierda del prensatelas. Los alfileres se quitarán fácilmente de esta manera y además quedarán lejos de las cuchillas.



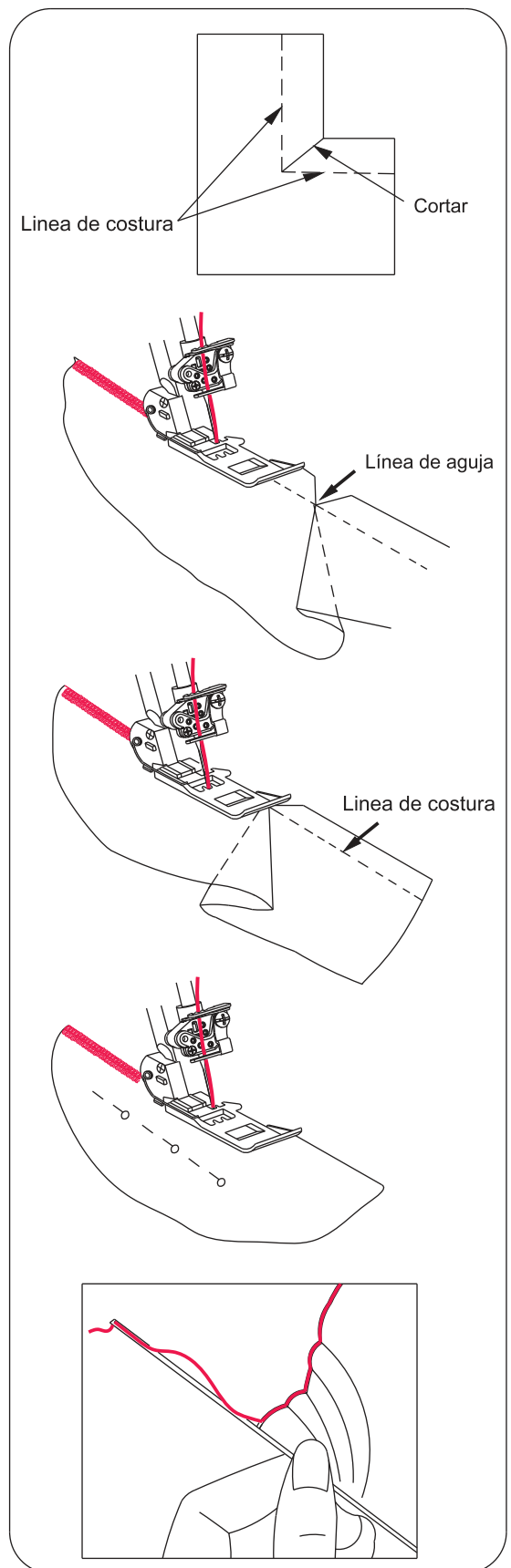
Precaución:

Coser sobre los alfileres dañará o destruirá el filo de corte de las cuchillas.

Asegurar la Cadeneta

- Enhebre una aguja de mano con una agujero grande (como una aguja para tapicería) con el hilo de cadeneta.
- Clave la aguja al final de la costura para asegurar el hilo.

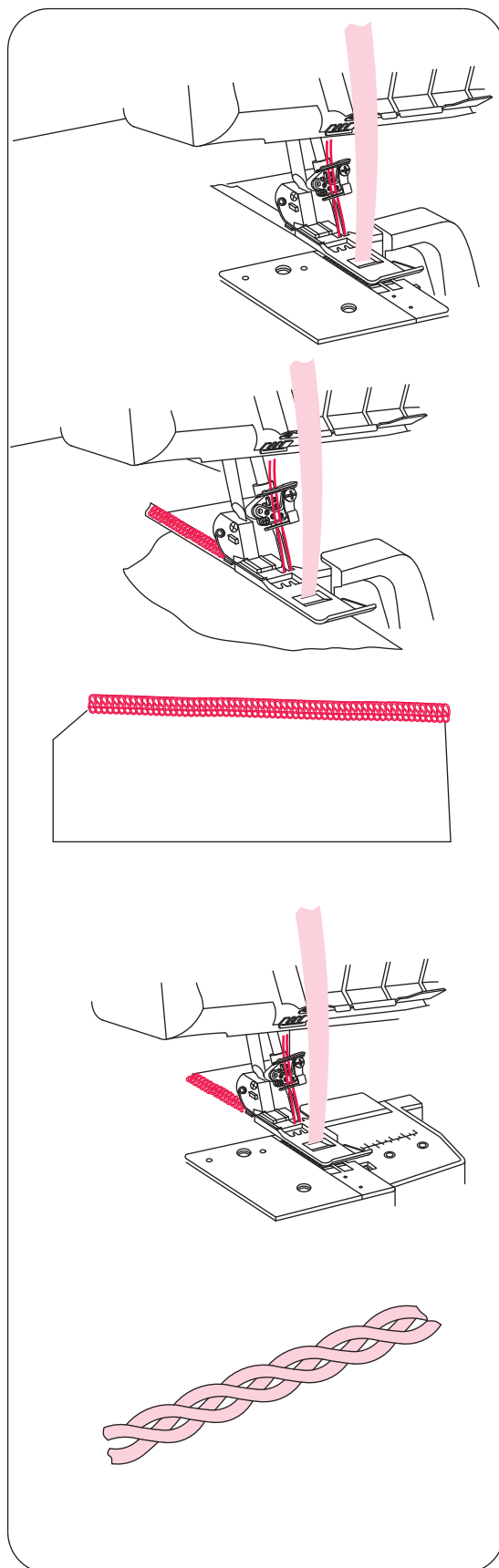
Nota: Para asegurar la cadeneta de un dobladillo arrollado, véa la página 57.



Cómo Reforzar Una Costura

- Inserte una talonera mientras sobrehila para estabilizar la costura.
- Inserte la talonera a través del agujero en frente del pie.
- Coloque la talonera debajo del pie hacia la parte de atrás de la máquina y cose la costura.

- La talonera queda cogida a la vez que se cose la costura.



Cómo Hacer Trenzas

- Coloque la cuchilla superior móvil en su posición de no funcionamiento.
- Ponga cordón de relleno o la talonera a través del agujero en frente del pie.
- Coloque el cordón de relleno debajo del pie y haga una cadeneta tan larga como quiera.
- Las cadenetas se pueden usar individualmente o tejidas entre 3 ó 4 trenzas.

26. MANTENIMIENTO DE LA MÁQUINA

Una máquina de remallar requiere una mantenimiento mayor que un maquina convencional por dos motivos:

- 1) Se produce una gran cantidad de pelusa debido a las cuchillas.
- 2) Una remalladora funciona a una gran velocidad y necesita ser engrasada frecuentemente para lubricar las piezas de dentro.

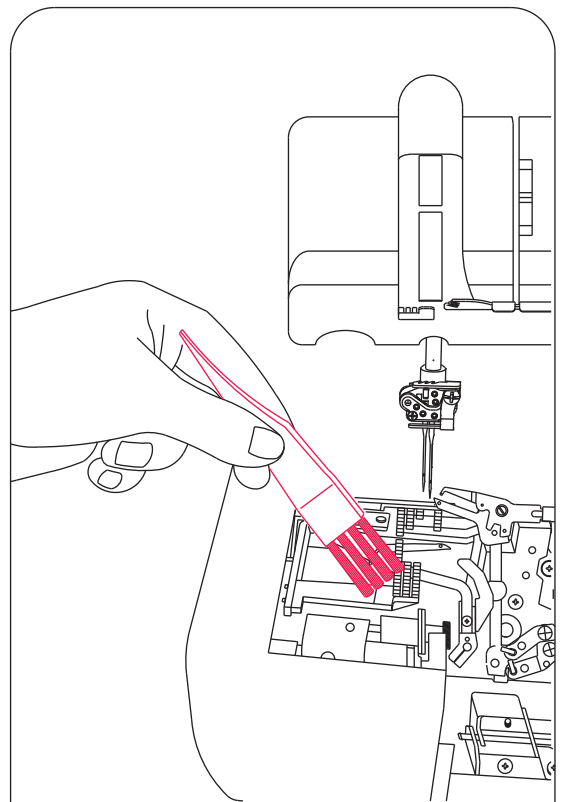
Limpieza de la Máquina



Peligro:

Antes de limpiar la máquina, desconecte el interruptor general .

- Limpie la pelusa acumulada en la zona del garfio y de la cuchilla frecuentemente con un cepillo seco.



Engrase de la Máquina

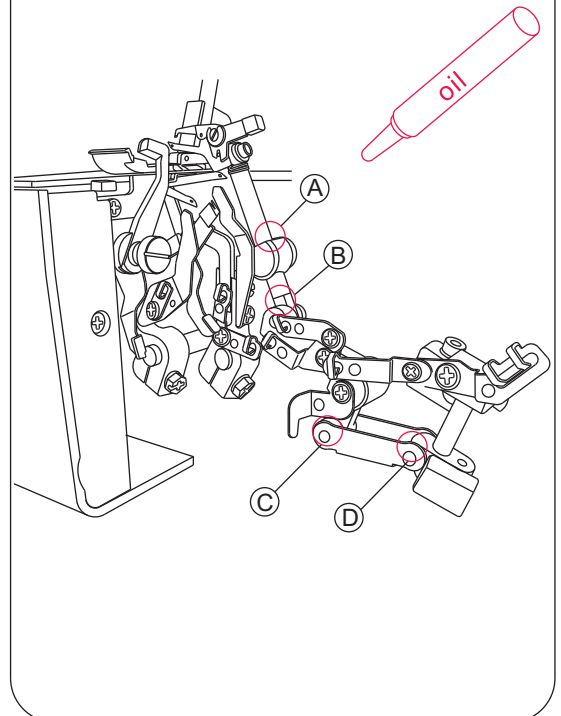


Peligro:

Antes de engrasar la máquina, desconecte el interruptor general.

- Los puntos de engrase que se muestran en el diagrama, se deben engrasar periódicamente.

Nota: Use sólo aceite de máquinas. No utilice ningún otro tipo de aceite o la máquina se podría dañar.



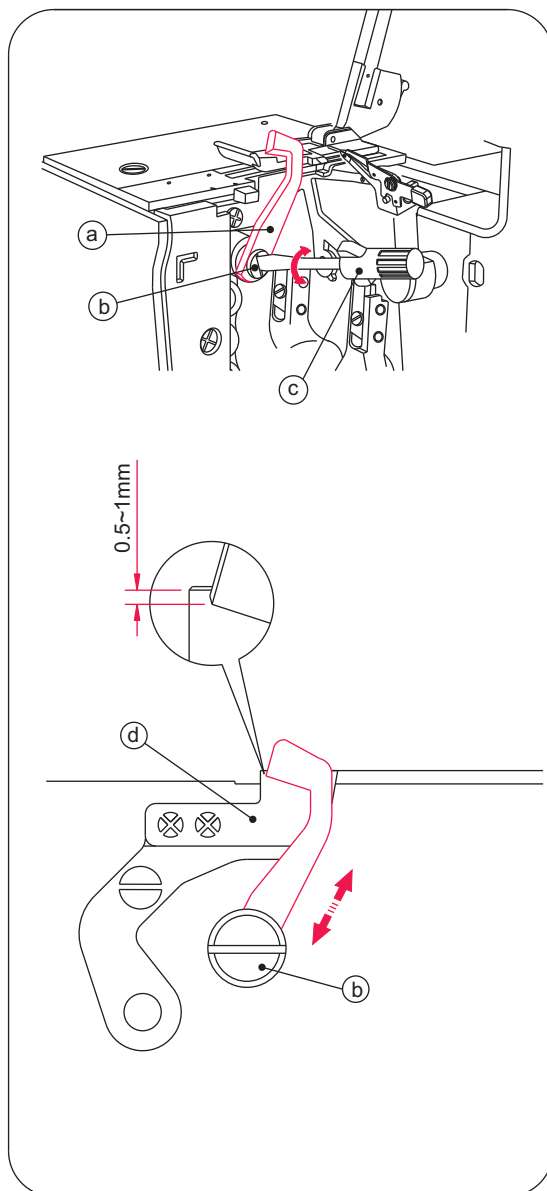
Cómo cambiar la cuchilla superior móvil



Peligro:

Antes de cambiar la cuchilla superior móvil, desconecte el interruptor general.

- La cuchilla superior móvil se debería cambiar cuando no corta.
- La cuchilla superior móvil se puede cambiar siguiendo las instrucciones, sin embargo si tiene alguna dificultad consulte con su Distribuidor Oficial de Singer para que la reemplacen.
- Asegúrese de que el cable de la máquina está desenchufado de la red.
- Abra la cubierta de los garfios y coloque la cuchilla superior móvil (a) en la posición de funcionamiento.
- Afloje el tornillo de la cuchilla fija (b) y retire la cuchilla.
- Gire el volante para bajar el sujetador de la cuchilla superior móvil a su posición más inferior.
- En esta posición, ponga la nueva cuchilla superior móvil en el hueco del sujetador, asegurándose que filo de la cuchilla superior móvil queda aproximadamente entre 0.5 y 1.0 mm por debajo de la superficie de la cuchilla de corte fija (d).
- Apriete el tornillo de sujeción de la cuchilla superior móvil (b).



Cómo Cambiar la Bombilla



Peligro:

Desconecte siempre la máquina antes de cambiar la bombilla.

- La bombilla la puede encontrar en su Distribuidor Oficial de Singer.
- Si el voltage indicado en su máquina es de 120 V, pida una bombilla conforme a la siguiente especificación.
 - Tipo Bayoneta: 110~120V, 15W
 - Forma del cristal: T-20
 - Cápsula: E12
 - Largo: 48mm
- Retire el tornillo de la cubierta de la lámpara y mientras presiona ligeramente la cubierta hacia atrás, lleve la cubierta hacia la izquierda y quítela como se muestra en el dibujo. Gire la bombilla hacia la izquierda para quitarla. Ponga la nueva.



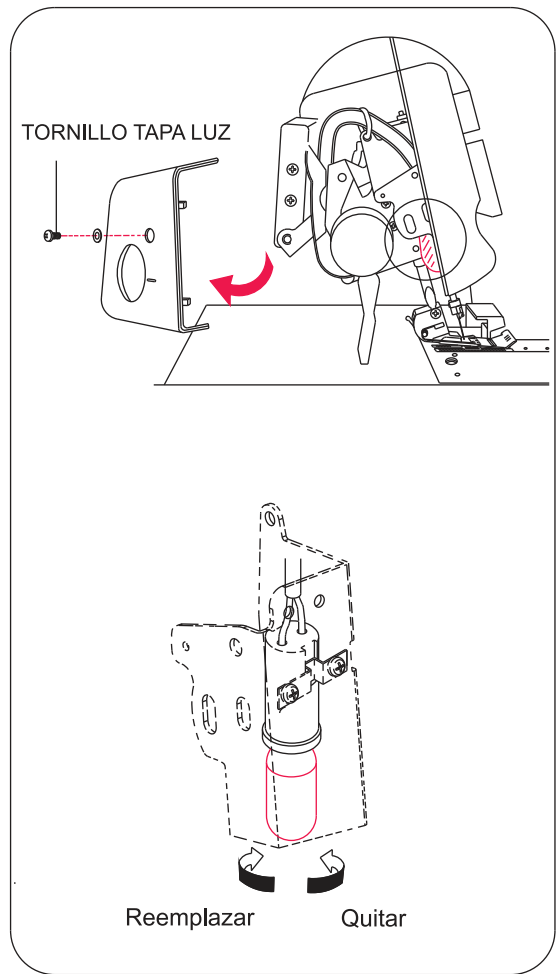
Precaución:

Asegúrese que la bombilla está fría antes de cambiarla.



Atención:

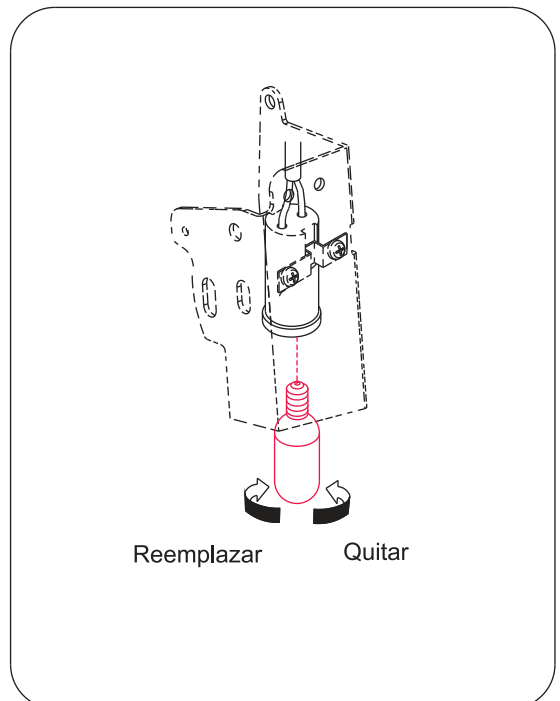
Coloque de nuevo la cubierta de la bombilla antes de conectar la máquina.



- Si el voltage indicado en la máquina es de 220-240 V, pida una bombilla conforme a las siguientes especificaciones.

-Tipo Edison (tipo rosca): 220 ~240V, 15W

- Forma del cristal: T-22
- Cápsula: E14
- Largo: 56mm
- Retire el tornillo de la cubierta de la lámpara y mientras presiona ligeramente la cubierta hacia atrás, lleve la cubierta hacia la izquierda y quítela como se muestra en el dibujo. Gire la bombilla hacia la izquierda para quitarla. Ponga la nueva en el portalámparas, y gírela hacia la derecha.



27. ACCESORIOS ADICIONALES

- Los siguientes prensatelas preparados especialmente para esta máquina no se incluyen con la máquina, son opcionales.

Nota: No utilice prensatelas de otras máquinas. El uso de estos prensatelas puede interferir en la aguja y en la cuchilla y puede ser muy peligroso.

- El sistema de encaje de estos prensatelas permiten un cambio sencillo.



Precaución:

Asegúrese de desconectar el interruptor general.

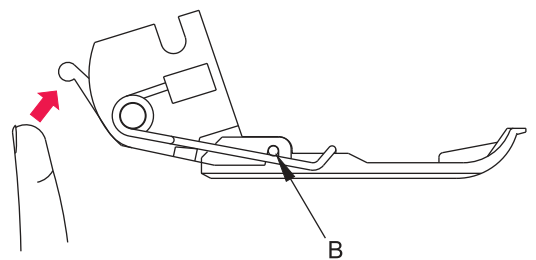
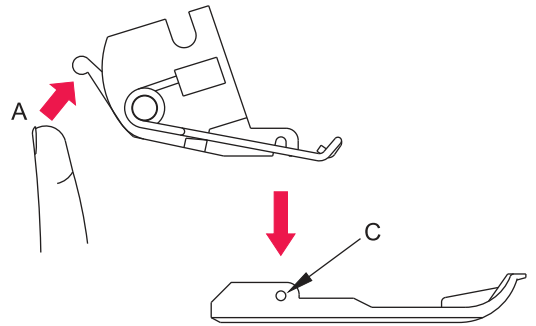
Sistema Snap-On del Prensatelas

Quitar el prensatelas

- Levante la palanca alzaprensatelas y lleve la barra de aguja a su posición más alta.
- Presione la palanca de color rojo (A) localizada en la parte de atrás del portaprensatelas, alce el prensatelas a tope y mientras sujeta el alzaprensatelas en esta posición, retire el prensatelas.

Colocar el prensatelas

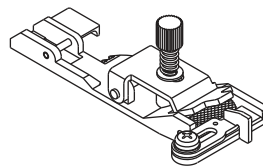
- Coloque el prensatelas sobre la placa de aguja debajo del portaprensatelas, de forma que al descender la palanca alzaprensatelas, la espiga del pie (C) encaje directamente por debajo del portaprensatelas (B). Baje la palanca alzaprensatelas y presione la palanca, de manera que el prensatelas se encaje nuevamente.
- Si el prensatelas no está bien colocado debajo del portaprensatelas, vuelva a repetir la operación anterior.
- Levante el alzaprensatelas y asegúrese que el prensatelas encaja correctamente en el portaprensatelas.



Prensateles Opcionales

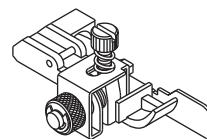
1) Pie para Elásticos

- Este pie se usa para coser cintas elásticas o gomas en una prenda y la cantidad de fruncido de la cinta elástica se puede ajustar en la medida que se requiera.



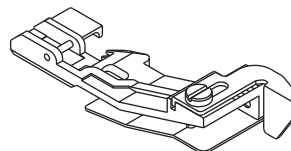
2) Pie para Puntada Invisible

- Este pie se usa para coser los puños en telas de punto, faldas y pantalones cuando no se quiere que se vea la costura.



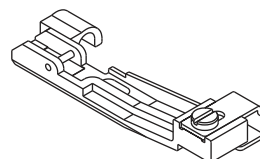
3) Pie para Fruncir

- Este pie se usa para fruncir faldas con varias capas, puños, volantes en faldas, etc.
- Este pie también se puede usar para coser dos telas juntas, quedando la de arriba lisa y la de abajo fruncida.



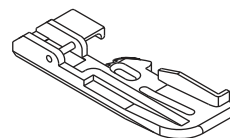
4) Pie para Coser Perlas y Lentejuelas

- Este pie se usa para coser perlas, etc.



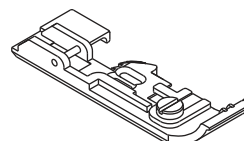
5) Pie para Cordones

- Este pie se usa para coser cordones entre dos telas.



6) Pie para Cintas

- Este tipo de pie se usa para colocar cintas, etc.



28. CUADRO DE POSIBLES FALLOS

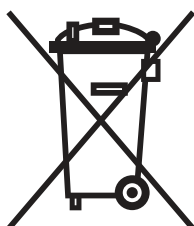
Fallo	Solución	Página
La tela no arrastra bien	- Aumente el largo de puntada.	31
	- Aumentar la presión del prensatelas para géneros pesados.	32
	- Disminuir la presión del prensatelas para géneros ligeros.	32
Las agujas se rompen	- La aguja no está bien colocada.	15
	- No tire de la tela mientras cose.	38
	- Apriete el tornillo de la aguja.	15
	- Use una aguja más grande para géneros pesados.	15
El hilo se rompe	- Compruebe el enhebrado.	16-29
	- El hilo se ha enganchado o enredado en algún sitio .	30
	- Coloque la aguja correctamente.	15
	- Coloque una aguja nueva, las agujas normales se pueden estar torcidas o despuntadas.	9
	- Use sólo hilos de gran calidad.	70
- Afloje la tensión del hilo.	34-49	
La puntada da saltos	- Ponga nuevas agujas, las agujas normales pueden estar torcidas o despuntadas. Use sólo Agujas Singer Tipo 2022.	9
	- Apriete el tornillo de la aguja.	15
	- Coloque la aguja correctamente.	15
	- Cambie el tipo o el tamaño de las agujas.	16-29
	- Compruebe el enhebrado.	32
	- Aumente la presión del prensatelas.	70
	- Use hilos de gran calidad.	
Puntadas irregulares	- Regule las tensiones del hilo.	39-49
	- Revise si el hilo se ha enredado o enganchado.	30
	- Revise el enhebrado.	16-29
La tela se frunce	- Afloje la tensión del hilo.	39-52
	- Revise si el hilo se ha enganchado o enredado.	30
	- Use hilos finos de gran calidad.	70
	- Disminuya el largo de puntada.	31
	- Reduzca la presión del prensatelas para géneros ligeros.	32
Corte irregular	- Revise la alineación de las cuchillas.	65
	- Cambien una o las dos cuchillas.	65
Fabric jams	- Cierre la tapa de los garfios antes de coser.	12
	- Revise si el hilo se ha enredado o enganchado.	30
	- Compress thick layers of fabric with conventional Machine before sewing with overlock.	
La máquina no funciona	- Conecte la máquina a la red.	12

29. RELACIÓN ENTRE LA TELA, EL HILO Y LA AGUJA

Tipo de Tela	Tipe de Hilo	Agujas Singer Cat. #2022
LANA		
Lígeras: Lino, Organdi, Gasa, Crepe, etc.	Algodón: #100 Seda/Rayón: #100 Spun: #80-#90 Polyester: #80-#100	#11/80
Semipesados: Muselina, Saten, Raso Gabardina, Estambre , etc.	Algodón: #60-#80 Seda/ Rayon: #50 Spun: #60-#80 Polyester: #60-#80	#14/90, #11/80
Pesadas: Oxford, Denim, Tweed, Pano, pesado, paña	Algodón: #40-60 Seda/ Rayon: #40-60 Spun: #60-80 Polyester: #50-80	#14/90
PUNTO		
Tricot	Spun: #80-#90 Polyester: #60-#80	#11/80
Jersey	Spun: #60-#80 Polyester: #60-#80 Algodón: #60-#80	#14/90, #11/80
Lana	Spun: #60-#80 Polyester #50-#60 Texturado Nylon Texturado Polyester	#14/90, #11/80

30. ESPECIFICACIONES

Datos Técnicos	Especificación
Velocidad máxima de costura Largo de puntada (feed amount)	- 1,300 ppm máximo - 1~4 mm (estándar : dobladillo arrollado 1-2, sobrehilado normal N=2.5)
Ratio del arrastre diferencial	- 1:0.6 ~ 1:2 (para máquinas con diferencial)
Ancho de costura	- Dobladillo arrollado 1.5 mm, sobrehilado normal 3.0 ~ 9.8 mm (estándar 4 mm)
Ancho puntada cover	- Dos agujas: 2.8 mm (estrecha), 5.6 mm (ancha). Tres agujas : 5.6 mm
Recorrido barra de aguja	- 27 mm
Altura del alzaprensatelas	- 4.5 mm
Sistema de agujas	- Singer #2022 (ELX705) #14, #11
Número de hilos	- 2~5
Medida de la máquina (mm)	
Ancho	- 360 mm
Profundidad	- 290 mm
Altura	- 300 mm
Peso (kg)	- 9.0 kgs



No utilice los dispositivos eléctricos como residuo municipal, use el servicio de reciclaje.

Contacte con su gobierno local para información sobre los sistemas de reciclaje disponibles.

Si los dispositivos eléctricos se tiran en vertederos, es posible que sustancias peligrosas se filtren en el agua subterránea y lleguen a la cadena alimenticia dañando la salud y el bienestar.

Cuando cambie viejos dispositivos por nuevos, el vendedor está obligado legalmente a quedarse su viejo dispositivo sin ningún cargo.

