



Important safety instructions

For the United States only

This sewing machine is designed and manufactured for HOUSEHOLD use only. When you use an electric appliance, the following basic safety precautions should always be adhered to: Read all instructions before using this sewing machine.

DANGER To reduce the risk of electric shock:

1. The sewing machine should never be left unattended when plugged in. Always unplug this appliance from the electric outlet immediately after using and before cleaning.
2. Always unplug before relamping. Replace bulb with same type rated 15 Watts.
3. Do not reach for a sewing machine that has fallen into water. Unplug immediately.
4. Do not place or store a sewing machine where it can fall or be pulled into a tub or sink. Do not place in or drop into water or other liquid.

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

1. Do not allow to be used as a toy. Great care is necessary when this sewing machine is used by or near children.
 2. Only use this sewing machine for its intended purpose as described in this manual. Only use attachments recommended by the manufacturer as contained in this manual.
 3. Never operate this sewing 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 water. Return the appliance to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
 4. Never operate the sewing machine with any air openings blocked. Keep ventilation openings of the sewing machine and foot control free from the accumulation of lint, dust and loose cloth.
 5. Never drop or insert anything into any opening.
 6. Do not use out of doors.
 7. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
 8. To disconnect, turn all controls to off ("0") position, then remove plug from socket.
 9. Never operate on a soft surface such as a bed or couch where the air openings may be blocked.
 10. Do not unplug by pulling on cord. To unplug, hold the plug, not the cord.
 11. Keep fingers away from all moving parts. Special care is required around the sewing machine needle.
 12. Always use the proper needle plate. The wrong plate can cause the needle to break.
 13. Do not use bent or blunt needles. Only use needles recommended by the manufacturer.
 14. Do not pull or push fabric while stitching. It may deflect the needle, causing it to break.
 15. Switch the sewing machine off ("0") when making any adjustments in the needle area, such as threading needle, changing needle, threading bobbin, or changing presser foot, etc.
 16. Always unplug sewing machine from the electric outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.
 17. Hold plug when rewinding into cord reel. Do not allow plug to whip when rewinding.
- Please also observe the general safety notes on Page2.

KEEP THESE INSTRUCTIONS IN A SAFE PLACE



Notes on safety

1. The user must exercise adequate caution with regard to the up and down movement of the needle and keep the sewing area under constant observation while working.
2. **When leaving the machine, during maintenance work or when changing mechanical parts or accessories, always disconnect the machine from the electric power by pulling out the plug.**
3. The maximum permissible wattage for the sewing lamp is 15 Watts.
4. The tension of the drive belt should only be adjusted by a mechanic.
5. The machine should be put into operation **as indicated on the specification plate.**
6. Do not place any objects in openings on the machine.
7. **Do not use** the sewing machine if:
 - there is visible damage,
 - its function is defective,
 - it is wet, e.g. with condensation which can occur when a cold machine is brought into a warm room.
8. **Do not** pull the mains plug out of the socket by its cord.
9. If this appliance is used for another purpose than that intended or if it is wrongly operated, we **cannot** accept any **liability** for any damage caused.
10. To avoid the risk of electric shock, do not open the machine. There are no parts inside the machine which the user can repair. **This the exclusive responsibility of our qualified service staff.**
11. **Be sure to use only original parts.**
12. The machine is designated for an electrical supply with a nominal voltage of $\pm 10\%$ and a rated frequency of $\pm 4\%$.
13. When used properly, the temperature of the outer components of a non-electronically controlled foot control can reach up to 85°C . Constant use at a low speed is therefore not permitted in order to avoid damage.

Environment

The recommended environment is:

Ambient temperature 10°C to 40°C

Humidity 20% to 80%

Storage temperature -25°C to $+60^{\circ}\text{C}$

The machine is suppressed and immune to interference according to international regulations; however it should not be operated near electronic devices such as radios, TVs, PCs, broadcasting transmitters etc.

This sewing machine is a high-quality electro-mechanical appliance; it is a machine for supervised use in the home. It should be operated in such a way that it is not exposed to: **dust, severe dampness, direct sunlight, static electricity, heat-producing objects, corrosive chemicals or liquids.**

To permit adequate ventilation the machine must be kept unblocked and used on a firm and even surface.

Treatment

Always make sure not to damage your machine by **knocking or dropping it**.

Cleaning

Housing and display:

To clean the housing, use a dry, clean and soft cloth that is free of fluff. To remove any stubborn dirt, use a soft cloth with alcohol or paraffin.

please Note!

Never use **insecticides or chemical products** such as petrol (gas) or thin chemicals to clean the housing.

Simple, up-to-date sewing

Congratulations! You have bought a high-quality product that provides unique advantages. Your new **857** can take any material in its stride and will sew for you through thick and thin.

Your coverlock features the very latest in design and technology, and it is just as easy to use as this instruction manual is to follow.

If you now take a bit of time to study the instruction manual nothing can go amiss.

It is certainly time well spent, since it is the only way to find out just what your machine can do and put it to full use.

If you have any further questions, just ask your dealer. They are happy to be of service with any help or advice.

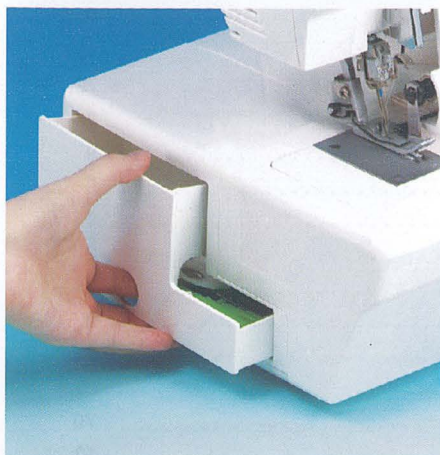
So now let's get started! We wish you many enjoyable hours creating your very own fashion ideas.

Contents

Page

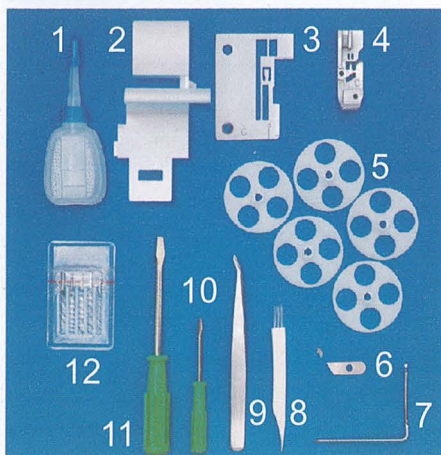
Accessories	6
Accessories, special	59 – 69
Accessory box	6
Adjusting the machine to cover stitch and 2-thread chainstitch	30 – 33
Bed slide for stitch width latch, setting	25
Blade guard	32
Changing a spool on a threaded machine	20
Chainstitch looper (violet), threading	16, 17
Converter, attaching	24
Cover stitch, important notes on sewing	34, 35
Cover stitch and 2-thread chainstitch, setting the machine	30 – 33
Differential feed	28, 29
Edge guide	35
Foot control, connecting	7
Free arm	27
Light bulb (sewing lamp), changing	58
Looper cover	8
Lower blade, changing	57
Lower overedge looper (yellow), threading	14, 15
Lubricating the machine	56
Machine cover	6
Maintenance	56–58
Master switch	7
Needle changing aid	11
Needle holder	11
Needle plate, changing	30
Needle position	10, 11
Needle(s), threading	18, 19
Needle, changing	11
Power table	32, 34
Presser foot	22
Presser foot lifter	21
presser foot pressure	21
Presser foot, changing	22
Program overview	36 – 41
Rubber feet, cleaning	56
Safety instructions	1, 2, 7
Seam width, setting	26

Serging problems and their solutions	72, 73
Specifications	74
Spool centering piece	9
Spool holder	9
Spool net	9
Stitch length, setting	27
Stitch width latch, setting	25
Telescopic thread guide	9
Thread chain trimmer	22
Thread changing on a threaded machine	20
Thread chart	70
Thread guides, threading	12
Thread tensions, setting	42 – 55
Thread unreeling disc	10
Threading, important note	20
Trimming waste container	8
Trouble shooting	72, 73
Two-thread chainstitch looper (violet), threading	16, 17
Upper blade, disengaging/engaging	23
Upper overedge looper (pink), threading	13



Accessory box

pull the accessory box (13) to the left and remove the accessories.



Accessories

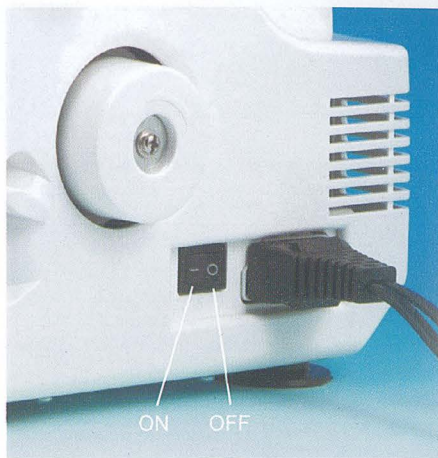
The following accessories are included with the machine:

- 1 Machine oil
- 2 Power table
- 3 Cover-stitch needle plate C
- 4 Cover-stitch presser foot C
- 5 Thread unreeling discs (5 each)
- 6 Lower blade
- 7 Edge guide
- 8 Cleaning brush
- 9 Pair of tweezers
- 10 Screwdriver (large)
- 11 Screwdriver (small)
- 12 Overlock needle system EL705 cat. No. 2020



Machine Cover

The machine cover protects the machine against dust and dirt. After each use push in telescopic thread guide (26). Thread spool stand (28) must be pushed against the machine, with or without thread spools, as far as it will go. The machine cover can now be placed in position.



OPERATING INSTRUCTIONS

Connecting the foot control

Plug the foot control plug into the connecting bush (31) of the machine and the plug socket. The sewing speed is regulated by activating the foot control. You may also regulate the sewing speed by adjusting the slide on the front of the foot control.

Setting ► = reduced final speed

Setting ◄◄ = full final speed

Master switch

When you turn on the master switch (32) the sewing lamp is illuminated
The machine is now operational.

" O " = OFF

" I " = ON

Notes on safety

This appliance has a polarized plug (one blade wider than the other).

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

USA and Canada: For control sewing machine, foot controller type AE 033 has to be used.

Australia: For control sewing machine, foot controller type AE 034 has to be used.



Trimming waste container

Insert the upper latches of the trimming waste container (38) into the upper slot of the hook cover (8).

Apply pressure to the lower part of the container until the lower latches click into place in the lower slots of the looper cover.

To remove the trimming waste container, repeat this procedure in the reverse order.

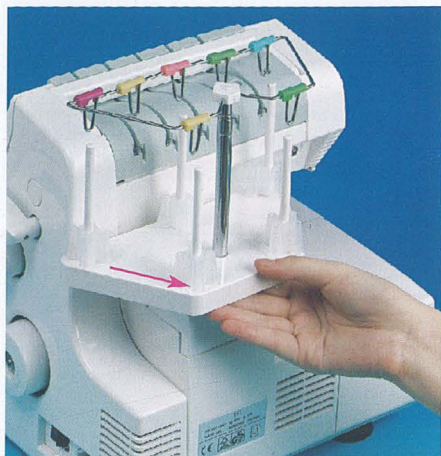


Looper cover

Push the looper cover (8) fully to the right and then swivel it down. Each threading path and the mounting procedure for the converter are portrayed in color on the **inside of the machine**. The threading method for the lower overedge looper (17) and the most common stitch types are shown symbolically on the inside of the looper cover.

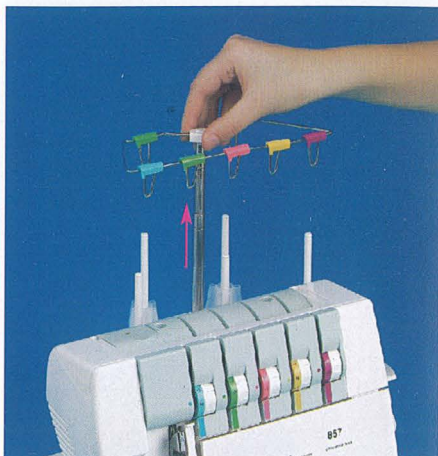
Note

The **electricity supply** of the machine is cut off as soon as the **looper cover is opened** for **safety reasons**, i.e. sewing with the machine is no longer possible.



Spool holder

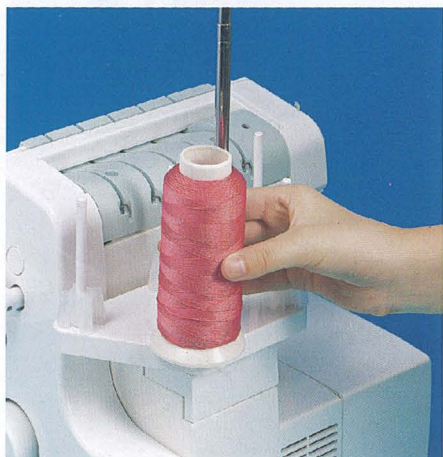
Before mounting spools you must pull the spool holder (28) back fully.



Telescopic thread guide

Pull the telescopic thread guide (26) upwards.

To ensure optimum thread feed, turn the telescopic parts slowly until you hear the locking balls then click into place.



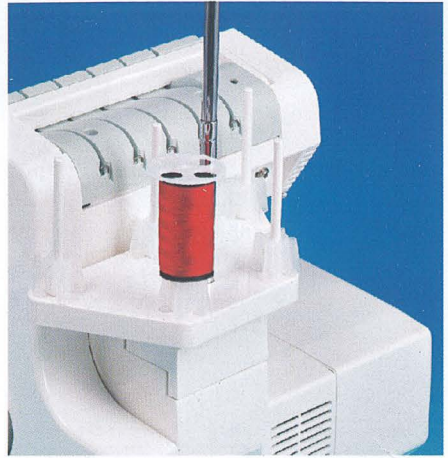
Spool centering piece

Use the spool centering piece (30) when sewing with large spools (5,000 – 10,000 m), as shown in the illustration above.

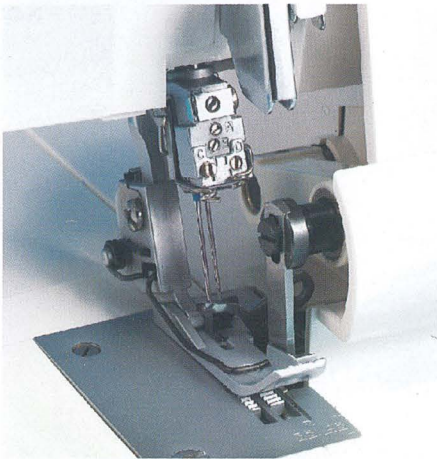


Thread unreeling disc

The thread unreeling disc (in the accessory box) is used for small spools. Place the unreeling disc onto the spool.



Place the two onto the spool centering piece (30) of the thread spool pin (29).

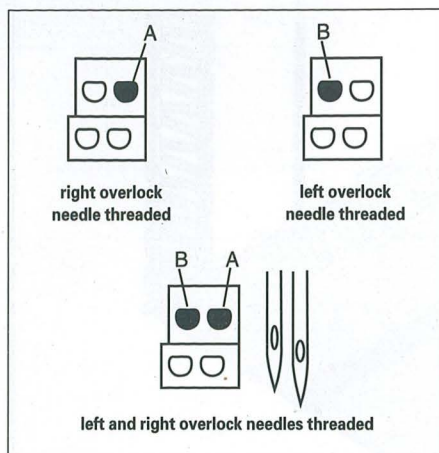


Needle position

This machine has four different needle positions and can sew with a maximum of two needles at any one time. Retaining screw A belongs to the right overedge needle, retaining screw B to the left overedge needle.

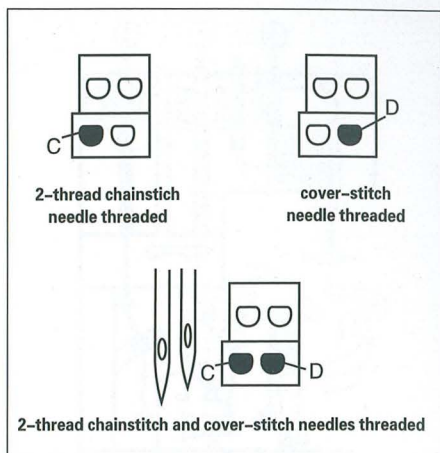


Retaining screw C belongs to the 2-thread chainstitch needle and retaining screw D belongs to the cover-stitch needle.

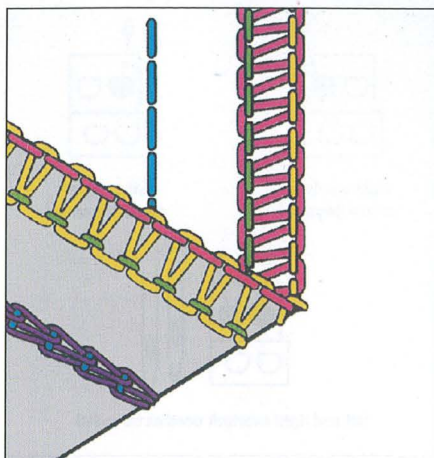
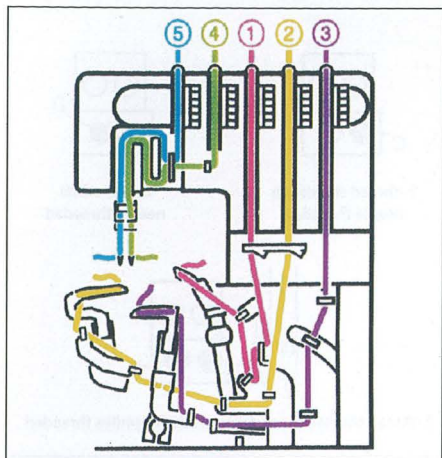


In this instruction manual the various needle positions are shown in a schematic drawing of the needle holder. See the examples above.

Note: If both the left and right overedge needles have been inserted, the left needle will be somewhat higher than the right needle.



Note: If both the 2-thread chainstitch needle and the cover-stitch needle are threaded, the left needle will be somewhat higher than the right needle.



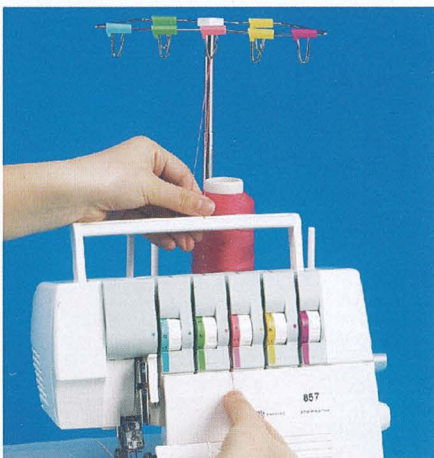
Threading

A color-coded threading diagram for quick reference is to be found behind the looper cover, i.e. inside the machine.

Thread the individual threads — as shown— following steps 1 to 5.

The color markings are applicable as follows.

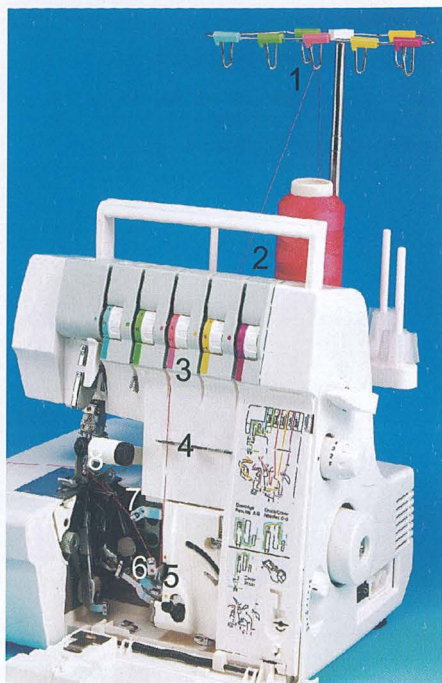
1. 2-thread chainstitch looper=violet
2. Lower overedge looper=yellow
3. Upper overedge looper=pink
4. Right overlock needle=green
5. 2-thread chainstitch needle=blue



Threading/Thread guides

Place the spools on the spool stands (29). Notes on the spool net, thread unreeling disc and spool centering piece are to be found on pages 9 and 10. Insert the threads through the thread guides (24) from back to front according to the color coding.

Lift carrying handle (3). Insert the threads beneath the handle and through rear thread guides (37) by pulling down with both hands until the thread slips under the thread guide. Pull the thread between the tension discs and press it down until it is lodged between the tension discs. Return the carrying handle to its closed position.

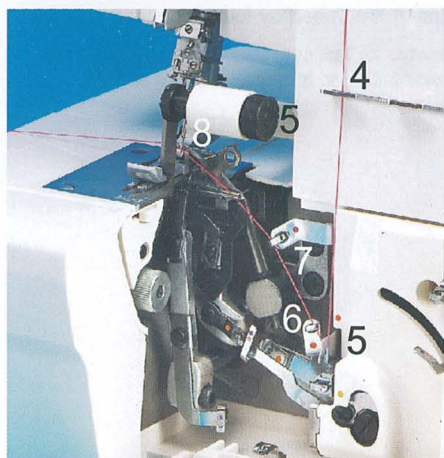


Threading

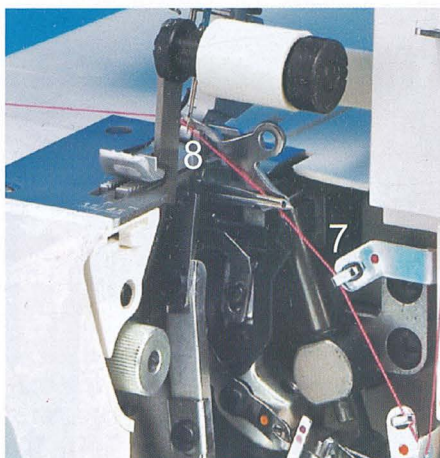
Upper overedge looper (pink)

Thread by following the steps 1 to 8.

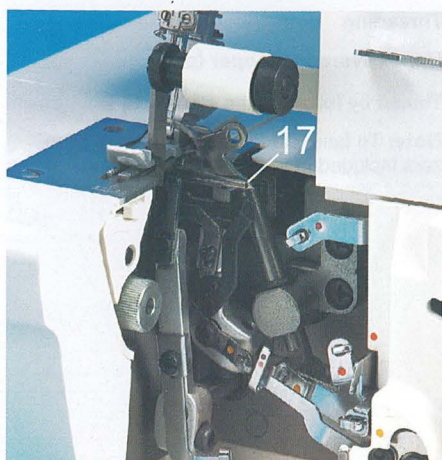
Note: To facilitate threading, use the tweezers included in the accessory box.



Insert the thread along the path marked in pink through guides 4 to 7.



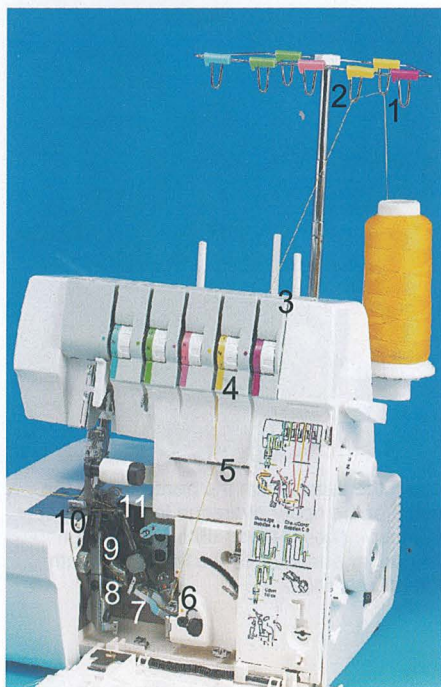
Insert the thread from the front through the eye 8 of the upper overedge looper. Pull about four inches (10 cm) of thread through the looper and lay it to the left underneath the presser foot.



Threading

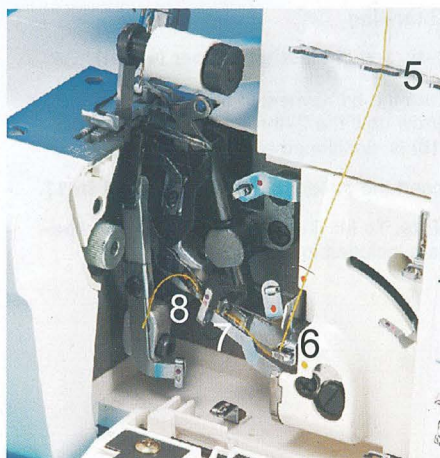
Lower overedge looper (yellow)

Turn the handwheel in the direction of the arrow until the lower overedge looper (17) is positioned at the extreme right.



Insert the thread by following steps 1 to 11.

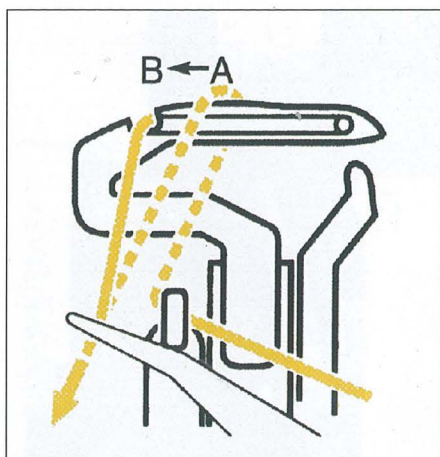
Note: To facilitate threading, use the tweezers included in the accessory box.



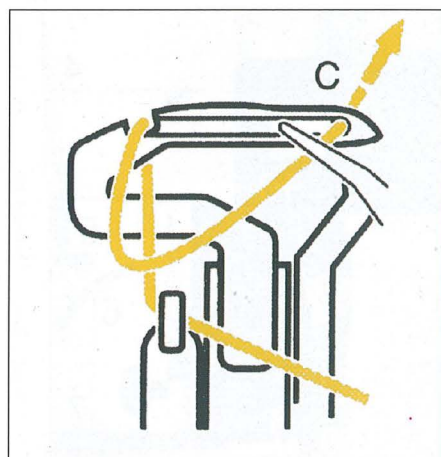
Insert the thread along the path marked in **yellow** through thread guides **5** to **8**.



Place the thread, using the tip of the tweezers, into thread guide **(9)**.

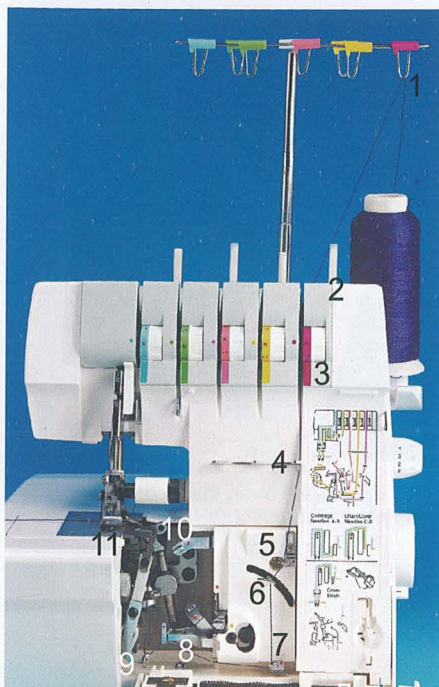


Lay the thread from back to front over the right-hand side of the looper. Carefully pull the thread to the left and slightly down until it slips into notch **B** (= threading point **10**) of the looper.



Insert the thread from the front through the eye of lower overedge looper **C** (= threading point **11**). The thread must run along the groove in the looper.

Pull about four inches (10 cm) of thread through the looper and lay it to the left underneath the presser foot.



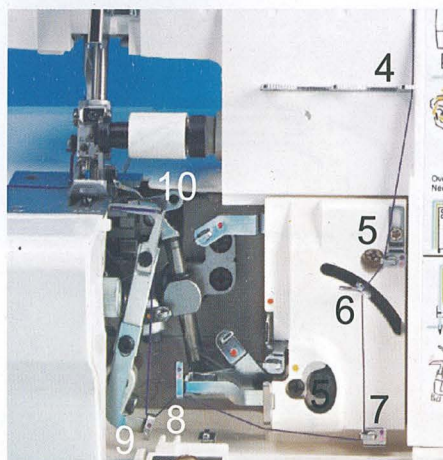
Threading

2-thread chainstitch looper (violet)

Turn the handwheel in the direction of the arrow until the 2-thread chainstitch looper (18) is positioned at the extreme right.

Insert the thread by following steps 1 to 11.

Note: To facilitate threading, use the tweezers included in the accessory box.

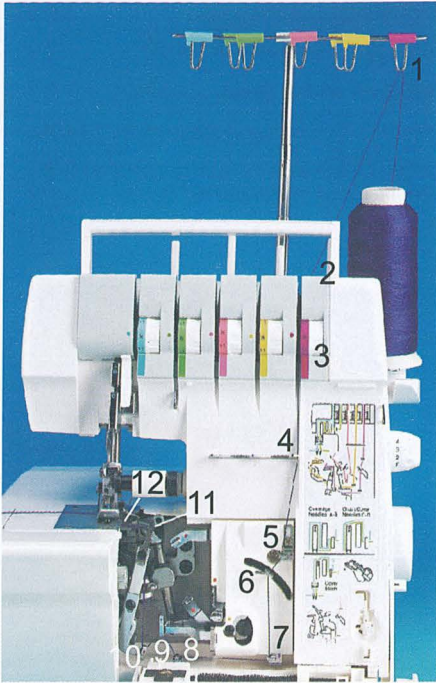


Insert the thread along the path marked in violet through thread guides 4 to 10.



Insert the thread from the front through the eye 11 of 2-thread chainstitch looper.

Pull about four inches (10 cm) of thread through the looper and lay it to the left underneath the presser foot.



Exception:

Threading the 2-thread chainstitch looper for cover stitch (violet and pink)

Turn the handwheel in the direction of the arrow until the 2-thread chainstitch looper (18) is positioned at the extreme right.

Insert the thread by following steps 1 to 12.

Note: To facilitate threading, use the tweezers included in the accessory box.

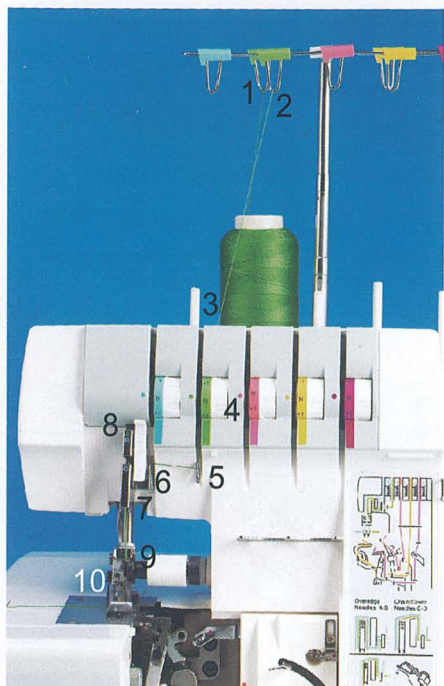


Insert the thread along the path marked in pink through thread guides 4 to 12.

Pull about four inches (10 cm) of thread through the looper and lay it to the left underneath the presser foot.



The thread guide 8 may only be used, when sewing the cover stitch.



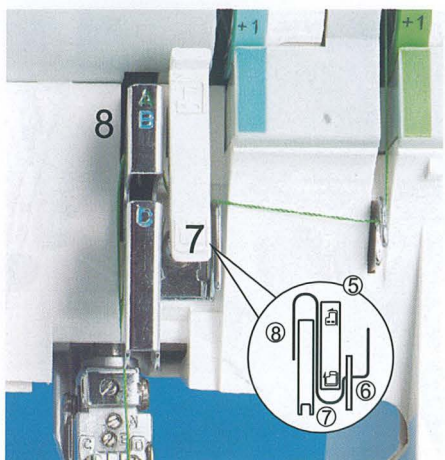
Threading

Right and left overlock needle,

Needle A and B (green and blue)

Insert the thread by following steps 1 to 10.

Note: To facilitate threading, use the tweezers included in the accessory box.



Note: The thread must run below the thread guide 7 and above the thread guide 8.



Pull about four inches (10 cm) of thread through the eye of the needle and lay it to the left underneath the presser foot.



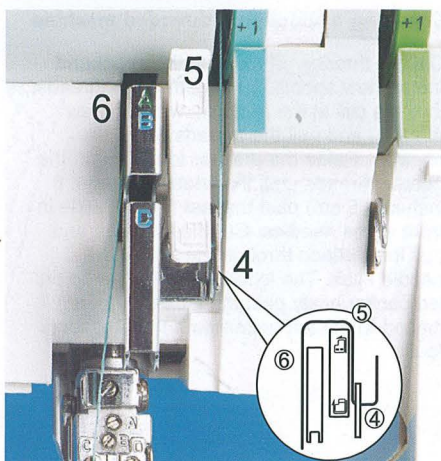
Threading

2-thread chainstitch needle and cover-stitch needle

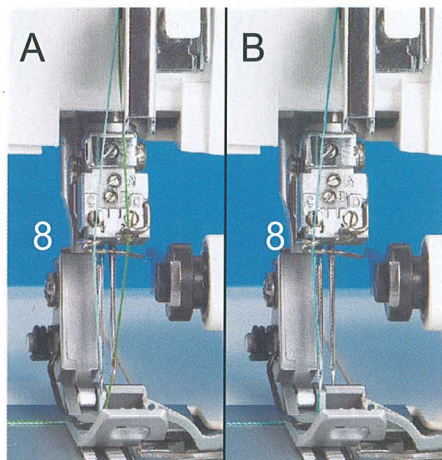
Needles C and D (blue and green)

Insert the thread following steps 1 to 8.

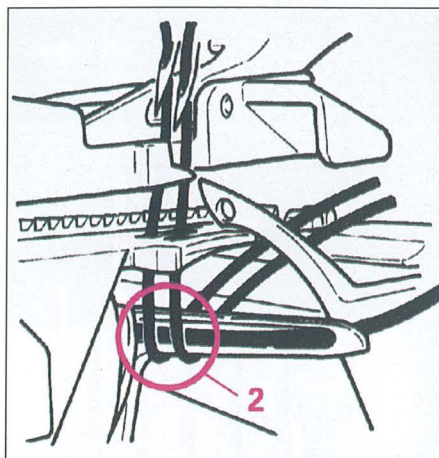
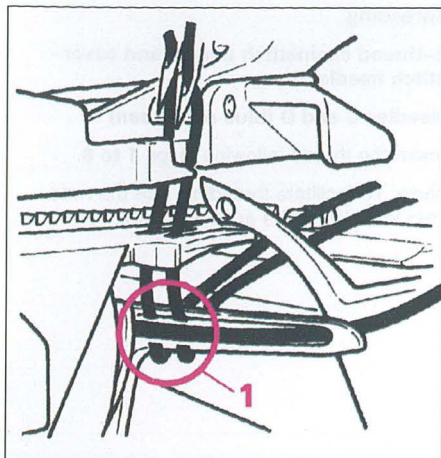
Note: To facilitate threading, use the tweezers included in the accessory box.



Note: The thread must run above thread guides 5 and 6.



To sew the cover stitch, thread, as shown in illustration A, into thread guide 8. To sew the 2-thread chainstitch, the 5-thread safety-stitch seam and the 4-thread safety stitch seam, thread into thread guides 7 and 8, as shown in illustration B. Pull about four inches (10 cm) of thread through the eye of the needle and lay it to the left underneath the presser foot.



Important note on threading

The needles must always be threaded last so that the needle threads do not run under the looper thread as seen in **drawing 1**, but instead over the looper thread as depicted in **drawing 2**. Should this sequence not be followed, thread breakage or missed stitches will occur.

If the looper threads break, you must pull the needle threads out of the needle, rethread the looper threads and then rethread the needle threads.



Changing a spool on a threaded machine

Cut the threads off close to the spool and mount new spools. Tie together the threads, that are still in the machine with the new threads, and pull the threads out of the needles. Raise the presser foot. Pull on the needle threads until the knots are about 6 inches (15 cm) past the last thread guide in front of the needles. Cut the knots off and pull the threads through the respective needle eyes. The looper threads can be pulled continuously past the looper eye and placed to the left underneath the presser foot.



Presser foot lifter

The presser foot can be raised and lowered with presser foot lifter (36). The maximum vertical clearance of 1/4 inch (6.0 mm) for the presser foot for particularly thick fabrics can be achieved by also depressing the presser foot lifter towards the back.



Once a thread chain has been created, the presser foot lifter no longer needs to be raised if you continue working with the same thread and presser foot. It is sufficient to gently lift the presser foot using your thumb. Now slide the fabric under the raised part of the presser foot. The fabric is automatically taken up and fed into the machine when you activate the foot control.



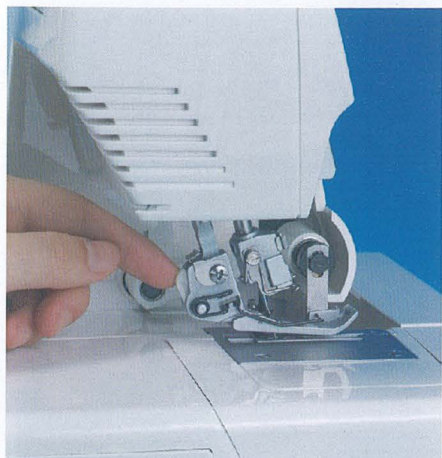
Presser foot pressure

The pre-set presser foot pressure on the machine is suitable for medium-heavy materials.

The presser foot pressure does not need to be changed for most materials. If you are working with lighter or heavy materials then you may however need to reset the pressure.

In this event, insert the small screwdriver from the accessory box into regulator screw for the presser foot pressure (25). The pressure is adjusted by turning the screw to the left or right. For heavyweight fabrics: increase pressure by turning the regulator screw to the right.

Note: Turn the regulator screw to the right until it strikes against the top lid. Then turn the screw back to the left, rotating it 6 times. Now the standard presser foot pressure is set.



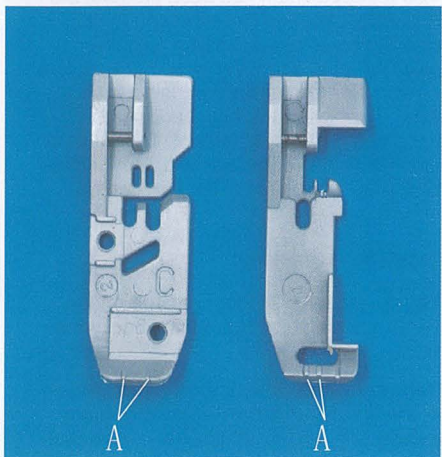
Changing the presser foot

Switch off the electrical power

To remove: Raise the needle(s) to the highest position and lift the presser foot. Press the white lever at the rear of the presser foot holder. The sewing foot will be released automatically from the holder and can be removed to the left. To do this, lift the spring slightly.

To insert: Lift the spring slightly and insert the sewing foot under the holder so that when the presser foot lever is lowered, the pin of the foot locks into the presser foot holder.

Check: Please lift the presser foot lever to ensure that the presser foot is properly locked into place.



Presser foot

Use cover-stitch presser foot **C** from the accessory box when sewing cover stitch.

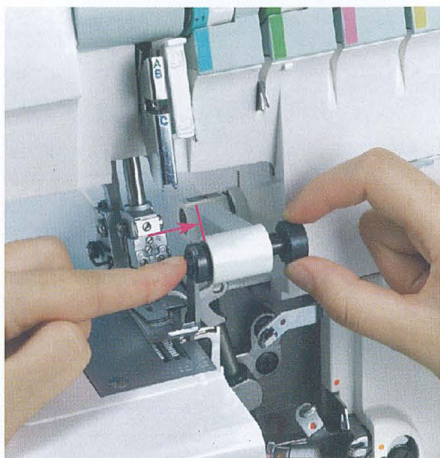
Use the standard presser foot (**10**) for all further programs (see page 36–41).

On the presser feet, there are markings **A**, the extension of which is where the needle(s) is to be positioned. These markings can be used as an aid when sewing.



Thread chain trimmer

After finishing the seam, sew an approx. 6 to 8 inch (15–20 cm) long thread chain. Pull the thread chain from the back to the front over the thread chain trimmer (**27**). This will cut off the thread chain.



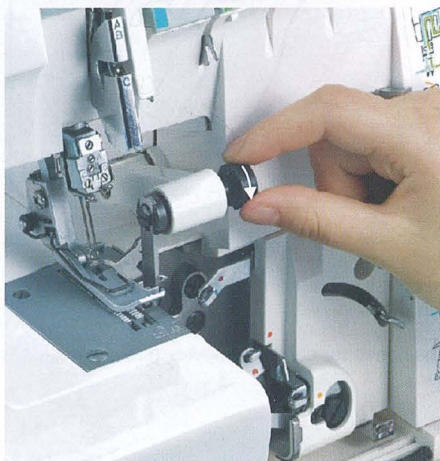
Disengaging the upper blade

Switch off the electrical power

Raise upper blade (23) to its uppermost position by rotating the handwheel. Detach the trimming waste container and open the looper cover. Now slide the holder of the movable upper blade fully towards the right.



Turn the head of the upper blade away from you until the upper blade locks into a horizontal position.



Engaging the upper blade

Slide the holder of the movable upper blade towards the right and swing the blade back until it locks into its working position. Close the looper cover and re-attach the trimming waste container.



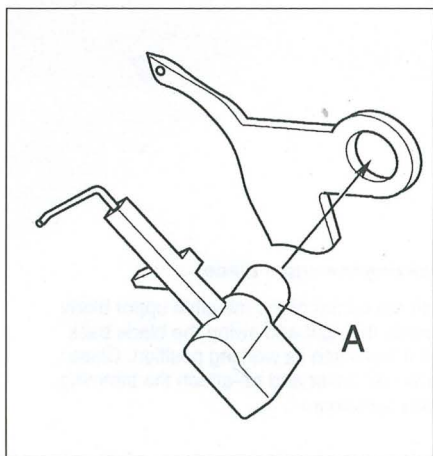
Fitting the converter

Switch off the electrical power

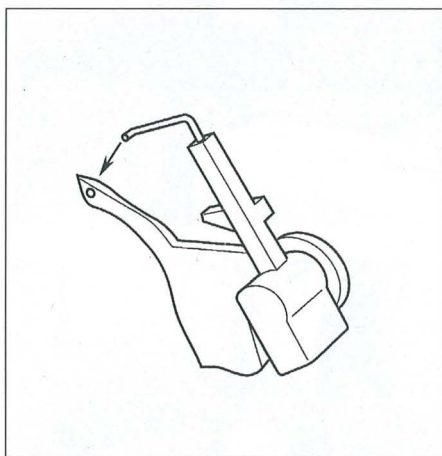
The converter must be fitted for all 2-thread seams, for the 2-needle, 3-thread overedge closing seam and for the 4-thread safety-stitch seam. Detach the trimming waste container and open the looper cover. Converter (7) is located in the front of the machine housing. Pull it out.



Rotate the handwheel in the direction of the arrow until the upper overedge looper (16) is positioned to the right of the movable upper blade.



Insert hub A of the converter into the aperture of the upper overedge looper.



Rotate the converter towards the left and press the upper part slightly to the rear so that the tip of the converter locks into the eye of the looper.

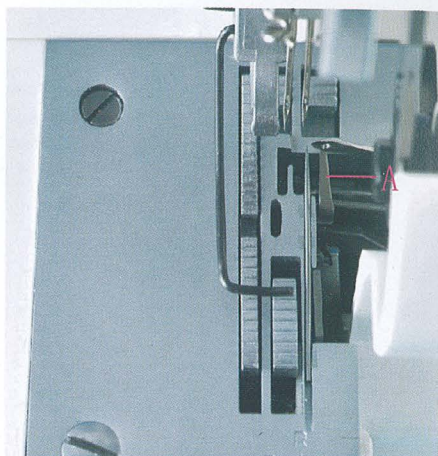
The converter can be removed in reverse order.



Setting the bed slide for the stitch width latch

For standard overlock seams:

Set the bed slide for stitch width latch (21) to position **S**.

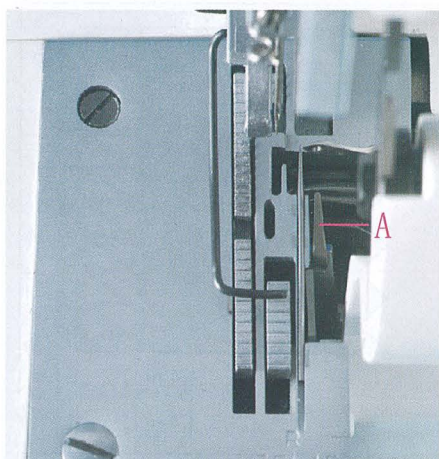


Stitch width latch **A** will be pushed forward. All standard overlock seams can be sewn with this setting.



For rolled hems and the cover stitch

Set the bed slide for stitch width latch (21) to position **R**.

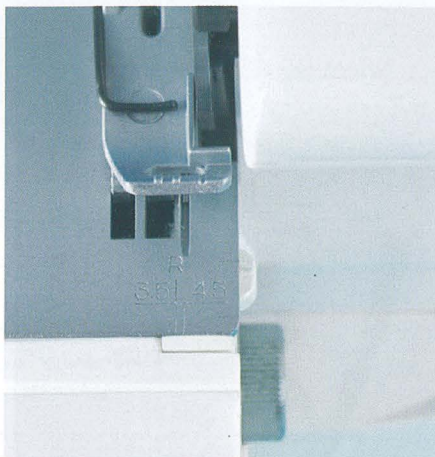


Stitch width latch **A** will be pushed backward. All rolled hems and the cover stitch can be sewn with this setting.



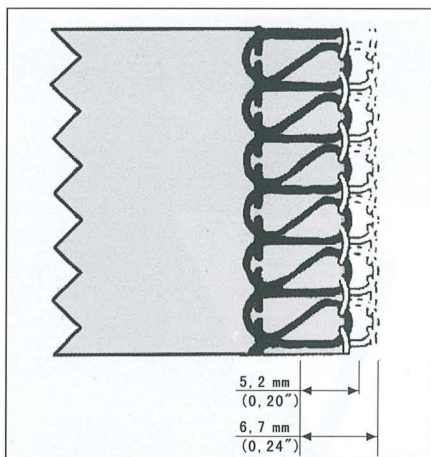
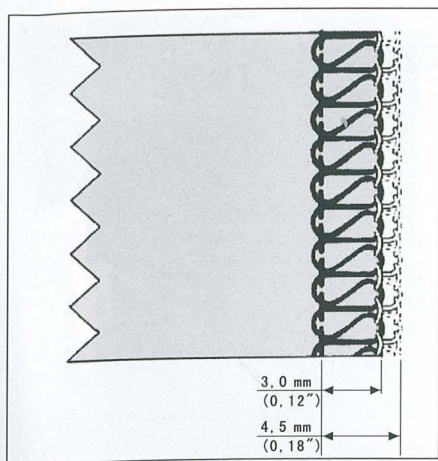
Setting seam width

Remove trimming waste container. The seam width can be continuously adjusted as desired from 1/8 to 3/16 inch (3.0 mm to 4.5 mm) by turning the seam width adjustment knob (20). The 2-thread chainstitch is sewn with an interval from 1/8 to 3/16 inch (3.0 mm to 4.5mm).



The settings are marked on the needle plate. **R** is the seam width adjustment for rolled seams.

Note: The seam width can be more easily adjusted if the looper cover is open.



Note: The seam width adjustments between 1/8 to 3/16 inch (3.0 mm to 4.5 mm) apply to the right needle only. For the left needle, the set value is increased by 2.2mm, i.e. the seam width can be continuously adjusted from a scant quarter inch to a generous 1/4 inch (5.2 mm to 6.7 mm).



Setting the stitch length

The stitch length can be set as desired from F (Δ 1 mm) to 4 mm by turning stitch length adjustment knob (35).

For most sewing work, the stitch length adjustment knob should be set at 3mm. When working with close-knit fabrics set the adjustment knob to 4 mm.



Sewing with the free arm

Detach the work support

Pull the detachable work support (12) forward slightly, and remove this to the left.

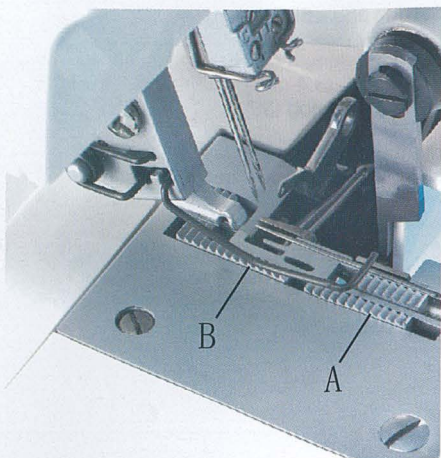
Note: If you detach the trimming waste container beforehand, it is easier to remove the detachable work support.



The free arm is particularly useful for sewing tubular items such as trouser legs and sleeves. Insert the article over the free arm.

Reattaching the work support

Position the detachable work support so that it is level with the machine cover, then slide it to the right until it locks into position.

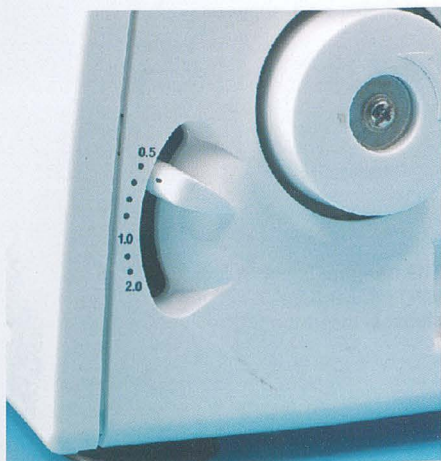


Differential feed

The differential feed consists of two feed dogs (**A+B**), arranged one behind the other, which move the fabric. Adjustment lever (**34**) regulates the movement of the front feed dog (**A**), and thus the amount of fabric to be fed through. It can be adjusted within the range 0.5 and 2.0.

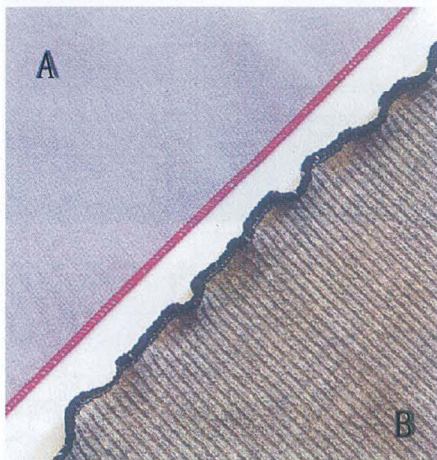
The standard setting is 1.0, by which the front feed dog (**A**) moves synchronously with the rear feed dog (**B**), i.e. the front and rear feed dogs both move the same amount of fabric.

Note: The effectiveness of the differential feed also depends on the stitch length selected and the type of fabric used.



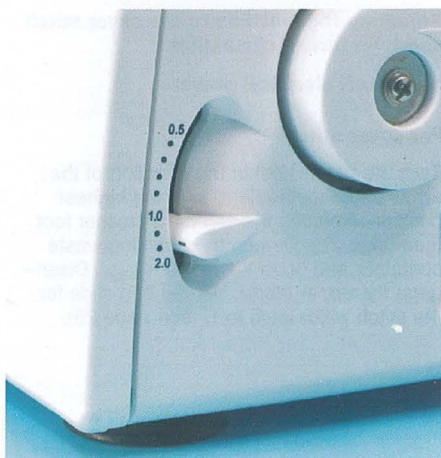
If differential feed adjustment lever (**34**) is set to 0.5, the front feed dog moves half as fast as the rear feed dog, i.e. the front feed dog feeds through only half as much fabric as the rear feed dog.

As a result, the fabric is **stretched**.



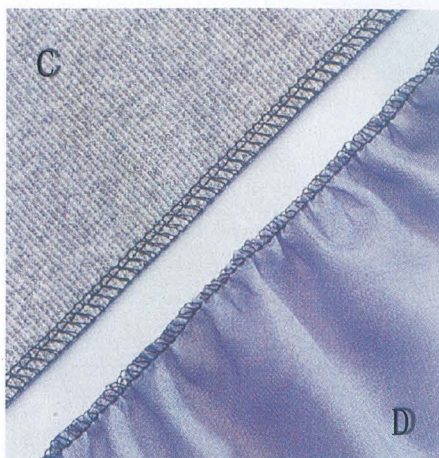
This prevents the seam from becoming gathered when sewing very delicate fabrics such as silk and taffeta. The result is a smooth seam (**A**).

Fashionable touches can also be introduced in this way, such as the wave effect when using rib knit (**B**).



Set differential feed adjustment lever (34) to 2.0 so that the front feed dog moves twice as fast as the rear feed dog, i.e. the front feed dog feeds through twice as much fabric as the rear feed dog.

As a result, the fabric is **gathered**.

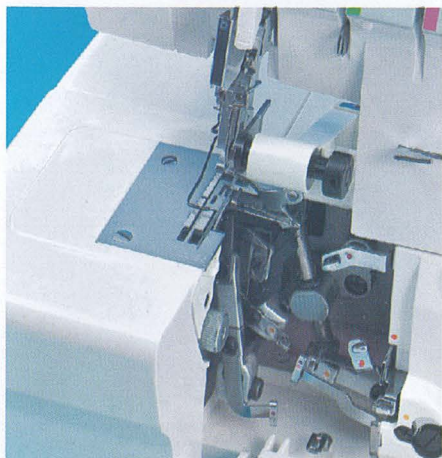


This prevents the seam from becoming stretched when sewing knitted fabrics such as Jersey and rib stitch goods. The result is a smooth seam (C).

Fashionable touches can also be introduced in this way, such as the gather effect when using very delicate fabrics (D).

The following table contains information on the differential feed settings. However, you should always test your setting first on a piece of scrap fabric.

Type of fabric/effect	Differential-feed setting		
	gather <2.0>	normal <1.0>	stretch <0.5>
Very light fabrics: silk, satin, poplin, taffeta, linings.		●	●
Normal fabrics: light and medium-heavy cottons, fine cords, thermal-wear.		●	
Light kniwear: jerseys, polo fabrics, cut-pile pullovers, tricot, fine kniwear and gathered materials.	●	●	
Heavy kniwear: sweatshirt fleece, heavy gathered materials, heavy kniwear.	●		
Stretch – wavelike effect: medium and light kniwear, ruffled sleeve and collar edges, skirt hems, dense stitch lengths.			●
Gathering: ruffling light materials and lace, seam allowances for curves, arches on blouses, shirts, skirts, round pockets, flaps, stretching or gentle ruffling of arched sleeves (shoulders), sleeve widths for cuffs or gathered fabrics.	●		

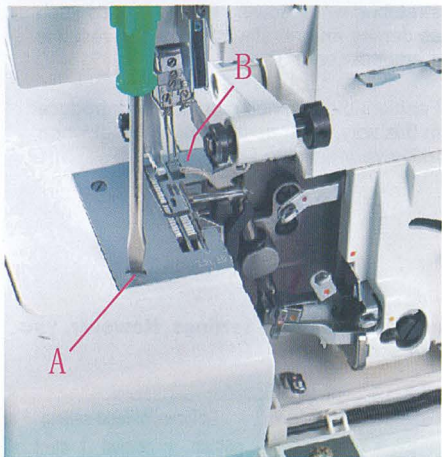


Adjusting the machine to the cover stitch and two-thread chainstitch.

Switch off electrical power

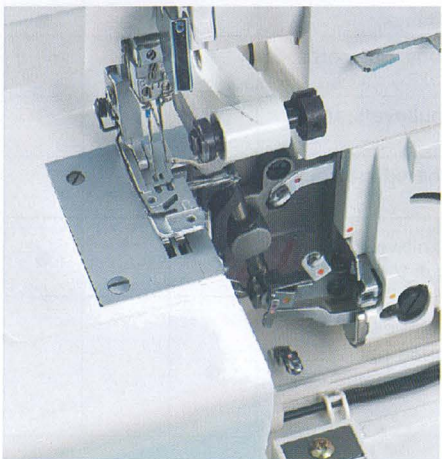
For cover stitch:

Turn the handwheel in the direction of the arrow until the needle(s) is in the highest position. Remove the standard presser foot (see page 22). Detach the trimming waste container and open the looper cover. Disengage the upper blade. Set the bed slide for the stitch width latch to **R** (see page 25).



For cover stitch:

Remove the standard needle plate by unscrewing screw **A** using the large screwdriver from the accessory box. Press on area **B** of the needle plate. This raises the needle plate slightly. Then remove it to the left.



For cover stitch:

Raise the finger protection slightly and insert cover stitch needle plate (marked with "C") from the accessory box.

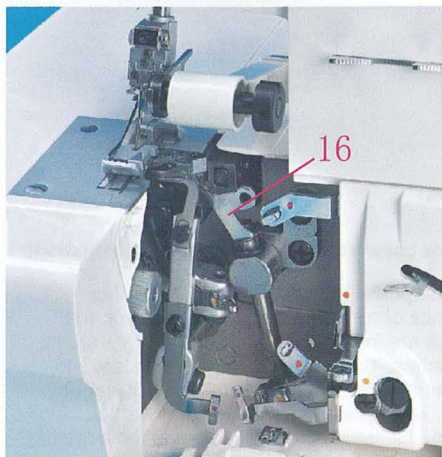
Re-tighten the screw. Insert cover-stitch needle **D** and two-thread chainstitch needle **C** (see page 11). Attach cover-stitch presser foot (marked with "C") from the accessory box (see page 22).



For two-thread chainstitch:

Turn the handwheel in the direction of the arrow until the needle(s) are in the highest position. Insert two-thread chainstitch needle **C** (see page 11).

Remove the trimming waste container and open the looper cover (the bed slide for the stitch width latch is set at **S**). Disengage the upper blade.



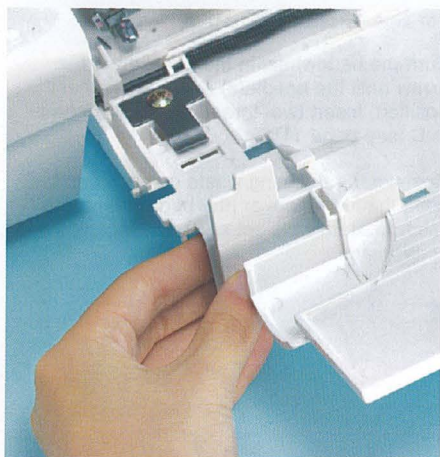
For cover stitch and two-thread chainstitch:

Disengage upper overedge looper (**16**). Move upper overedge looper (**16**) into its lowest position by turning the handwheel in the direction of the arrow.



For cover stitch and two-thread chainstitch:

Turn the retaining screw of the upper overedge looper (**19**) anti-clockwise, until it comes out of the looper's drive lever. Ensure that the upper blade and the upper overedge looper are disengaged by turning the handwheel in the direction of the arrow. Thread the two-thread chainstitch looper (see pages 16 and 17) and then the needle(s) (see page 19).



For cover stitch and two-thread chainstitch:

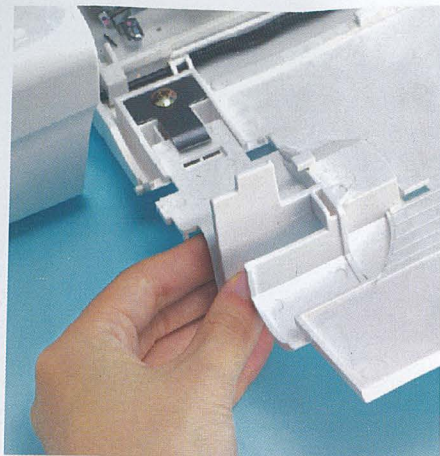
Remove blade guard (9) upward. Push the power table, from the accessory box, from above into the slot of the looper cover. Screw the edge guide tight onto the power table beforehand. Close looper cover.

Note: It is absolute necessary to disengage the upper overedge looper, when attaching the power table.



For cover stitch and two-thread chainstitch:

The power table is marked with various units of measurement. The figures on the left are in mm, and those on the right are in inches. These values show the distance to the needle, when the stitch width is set at 3.5mm. This is an aid to determine the interval between the needle and the edge of the fabric. Adjust the edge guide accordingly.



For cover stitch and two-thread chainstitch:

On completing cover stitch or chainstitch, set the machine in the basic position as follows:

Open the looper cover and remove the power table upward.



For cover stitch and two-thread chainstitch:

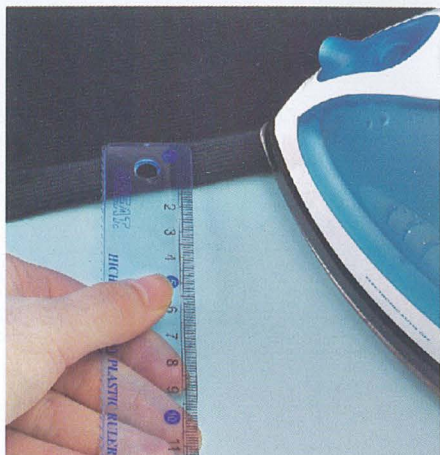
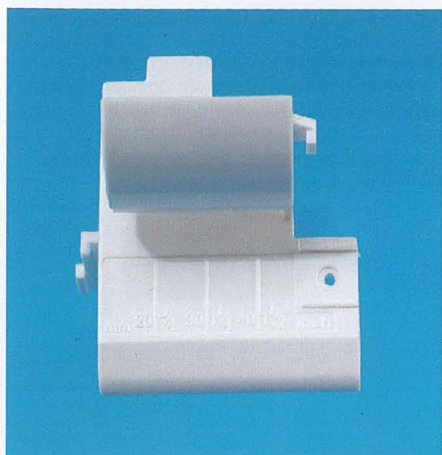
Turn the handwheel in the direction of the arrow, until retaining screw A of the upper overedge looper is in its highest position.

Tighten the screw. Engage the upper blade (9) and push the blade guard from above into the looper cover.

For cover stitch:

Set the bed slide for the stitch width latch to **S** (see page 25). Bring the needles into the highest position and raise the presser foot.

Remove the cover-stitch presser foot and the cover-stitch needle plate. Attach the standard needle foot and standard presser foot. Close the looper cover. Remove the needle.



Important notes on sewing with the cover stitch

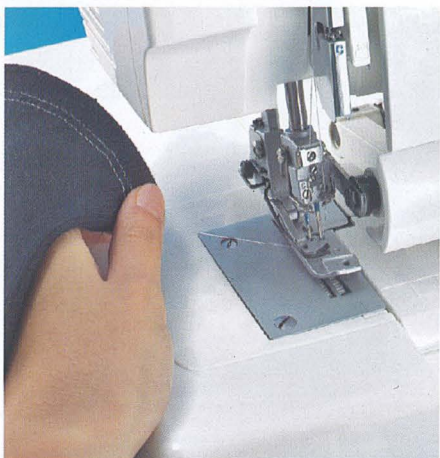
The power table is marked with various units of measurement. The figures on the left are in mm and those on the right are in inches.

These values show the distance to the needle, when the stitch width is set at 3.5 mm.

Preparing the fabric:

It is useful to press under the fabric before hemming it. Depending on as to how wide the seam must be stitched down, you must press under 1/4 inch (0.5 cm) wider.

Note: The cover-stitch guide set is obtainable as special accessory. You can hem your fabric with it at ease, without having to press under the fabric beforehand.



To start sewing:

Raise the presser foot and place the fabric under the presser foot so the needles pierce the fabric for the first stitch. Place the fabric onto the power table according to the width of the seam. When starting to sew, pull the fabric taut towards the rear and sew slowly, because the machine, when you start to sew, feeds the fabric slowly.

Finishing sewing

1. When sewing to the edge of the fabric:

Hold the threads at the end of the seam tightly and sew slowly off the fabric during which the thread should be pulled lightly towards the rear.

Note: In most cases the differential feed has to be adjusted. Sew a trial seam first.

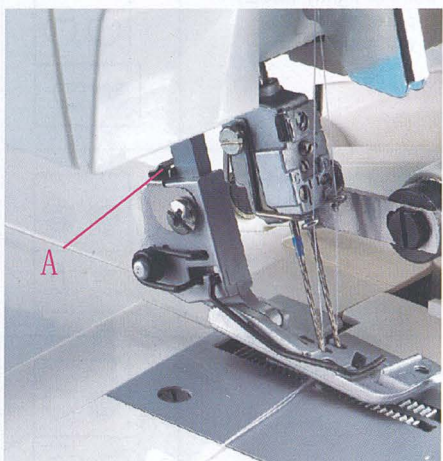


2. If you are not to sew to the edge of the fabric, i.e. by tubular fabrics:

Sew 4–5 stitches on top of each other. During the last stitch, turn the handwheel to –wards you until the needles pierce the fabric and you have heard each needle "click" (just before the needles are in the lowest position).



After the second "click" turn the handwheel back, until the needles are in the highest position. Raise the presser foot. Cut the threads. Pull the needle threads to the back and knot them. Hold the threads at the end of the fabric tightly and remove the fabric.


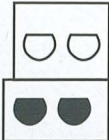
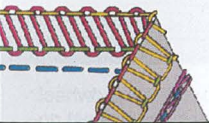
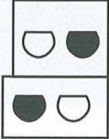
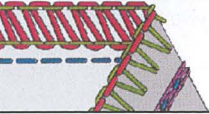
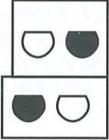
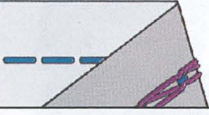

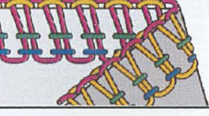
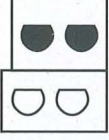
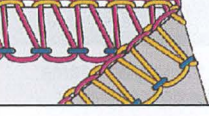
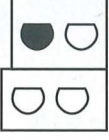
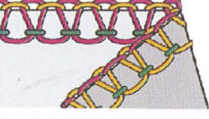
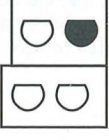


Edge guide

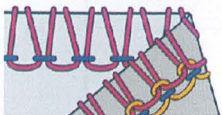
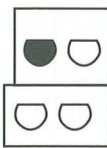

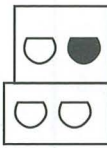



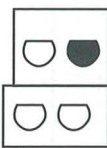

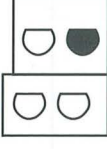
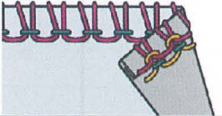
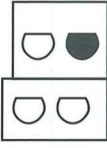

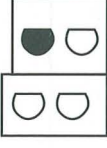
Push the edge guide, from the accessory box, into the guide holder A. The edge guide can be set as required by moving it to the left or right.




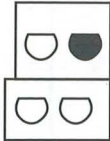
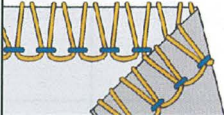
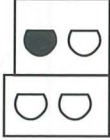
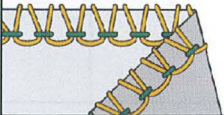
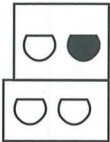

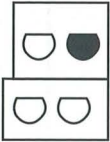
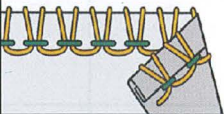
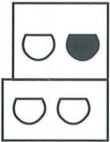
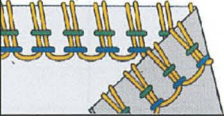
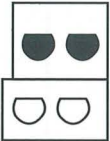
The edge guide is useful for serging seams at regular intervals with the cover stitch or two–thread chainstitch.

Program summary Programs	Application	Needle position
Cover-stitch seam 	Sewing hems and ornamental stitches	
5-thread safety-stitch seam 	Joining and serging of tightly woven fabrics simultaneously	
4-thread safety-stitch seam 	Joining and serging of tightly woven fabrics simultaneously	
2-thread chainstitch seam 	Joining pieces of tightly woven fabrics for upholstery covers and denim, without serging	
4-thread overedge seam 	Joining pieces of fabric and serging all fabrics simultaneously, in particular elastic fabrics	
3-thread overedge seam (wide) 	Serging easily frayed fabrics	
3-thread overedge seam (narrow) 	Serging easily frayed fabrics	

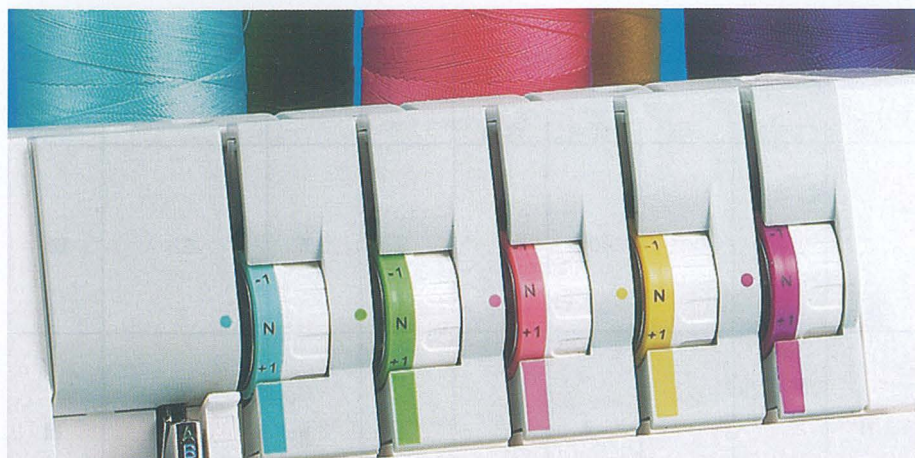
Thread tension The values refer to medium-heavy fabrics and normal polyester thread					Stitch- length	Stitch- width	Position of bed slide for stitch width latch	Converter ■ =with □ =with- out
blue	green	pink	yellow	violet				
- 1.5	- 1.5			- 1.5	3 - 4	4.5	R	□
- 1.5	- 1.5	- 3	- 3	+ 3	3	3.5	S	□
- 1.5	- 4		- 1	+ 3	3	3.5	S	■
- 1.5				+ 3	3-4		S	□
N	- 2	- 2	- 2		3	3.5	S	□
N		- 3	- 1.5		3	3.5	S	□
	N	- 1.5	- 1.5		3	3.5	S	□

Program summary		
Programs	Application	Needle position
3-thread serging seam (wide) 	Serging non-fraying materials.	
3-thread serging seam (narrow) 	Serging non-fraying materials.	
3-thread decorative serging seam (wide) FLATLOCK 	Serging medium-heavy fabrics. As flatlock seam for sewing together stretch fabrics and as a decorative finished edge.	
3-thread decorative serging seam (narrow) FLATLOCK 	Serging medium-heavy fabrics. As flatlock seam for sewing together stretch fabrics and as a decorative finished edge.	
3-thread rolled hem 	Serging lightweight to medium fabrics. Decorative finished edges.	
Folded 3-thread rolled hem 	Serging lightweight to medium fabrics. Decorative finished edges.	
2-thread overedge seam (wide) FLATLOCK 	For serging medium-heavy fabrics. As flatlock seam for sewing stretch fabrics together.	

Thread tension The values refer to medium-heavy fabrics and normal polyester thread					Stitch- length	Stitch- width	Position of bed slide for stitch width latch	Converter ■ =with □ =with- out
blue	green	pink	yellow	violet				
N		- 5	+ 4		3	3.5	S	□
	N	- 5	+ 4		3	3.5	S	□
- 4.5		- 1	+ 3		3	3.5	S	□
	- 4.5	N	+ 2		3	3.5	S	□
	- 1	+ 1.5	- 0.5		F	R	R	□
	- 1	- 1	+ 3.5		F	R	R	□
- 4			- 1.5		3	3.5	S	■

Program summary Programs	Application	Needle position
2-thread overedge seam (narrow) FLATLOCK 	Serging lightweight fabrics. As flatlock seam for sewing stretch fabrics together.	
2-thread serging seam (wide) 	Serging lightweight fabrics.	
2-thread serging seam (narrow) 	Serging lightweight fabrics.	
2-thread rolled hem 	Serging delicate fabric. Decorative finished edges.	
Folded 2-thread rolled hem 	Serging delicate fabric. Decorative finished edges.	
2-needle, 3-thread overedge closing seam 	Sewing together and simultaneous serging of lightweight, highstretch fabrics.	

Thread tension The values refer to medium-heavy fabrics and normal polyester thread					Stitch- length	Stitch- width	Position of bed slide for stitch width latch	Converter ■ =with □ =with- out
blue	green	pink	yellow	violet				
	- 4		-0.5		3	3.5	S	■
N			- 4		3	3.5	S	■
	N		- 3.5		3	3.5	S	■
	- 3.5		- 1		F	R	R	■
	- 1		- 1.5		F	R	R	■
-1	-2		- 4		3	3.5	S	■

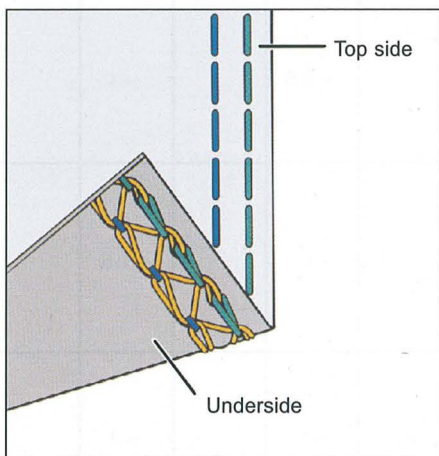
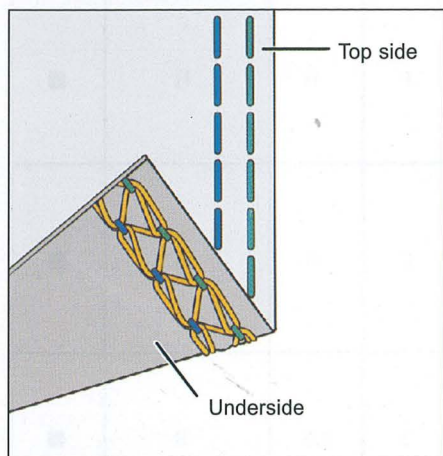


Adjusting the thread tension

The following pages contain directions for setting thread tensions for all programs. Adjust the tension by turning the tensioning wheel until the dot marker is at the desired setting.

The settings for adjusting thread tension are recommendations. Fabric type, yarn quality and needle gauge will influence seam results. For this reason it is always best to sew a test seam to check the interlocking of threads. It may be necessary to correct the thread tension settings.

Note: All further settings required for individual programs are to be found in the program summary on pages 36 to 41.

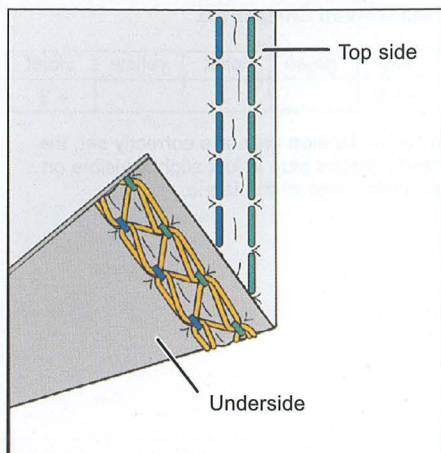


Cover Stitch

blue	green	pink	yellow	violet
- 1.5	- 1.5			- 1.5

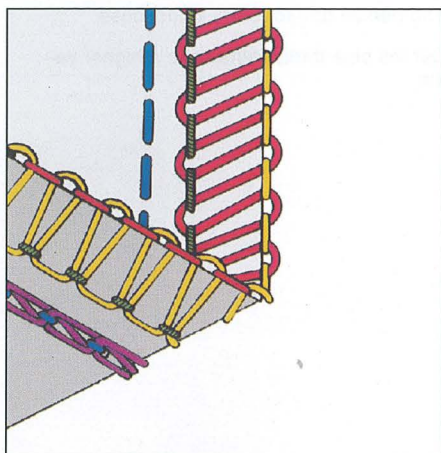
The **right needle thread** (green) is too loose. Set the green thread tension to a higher value.

If all tensions are optimally set, the needle threads (green and blue) are just slightly visible on the underside of the fabric. The looper thread (yellow) is situated loosely in between.



The **needle threads** (green and blue) are too tight and the material puckers.

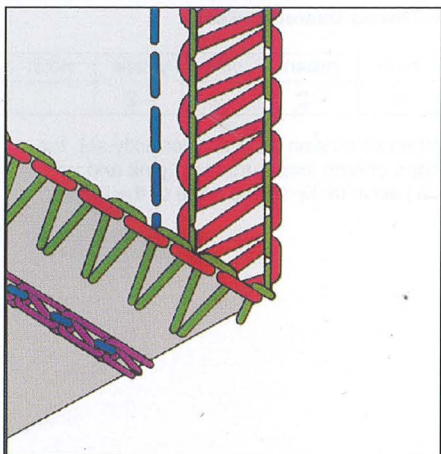
Set the green and blue thread tension to a lower value.



5-Thread Safety-Stitch Seam

blue	green	pink	yellow	violet
-1.5	-1.5	-3	-3	+3

Since the 5-thread safety-stitch seam consists of the **2-thread chainstitch** and the **3-thread overedge seam**, you can refer to the correction possibilities of these seams on pages 44 and 46.

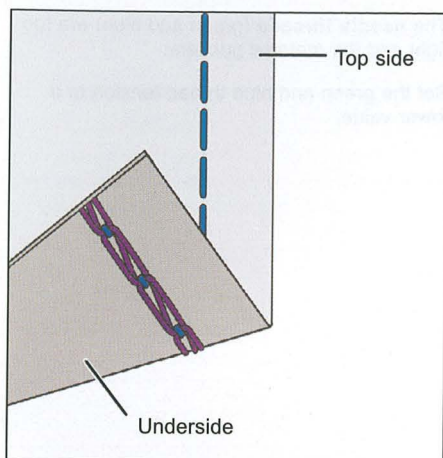


4-Thread Safety-Stitch Seam

blue	green	pink	yellow	violet
-1.5	-4		-1	+3

Since the 4-thread safety-stitch seam consists of the **2-thread chainstitch** and the **2-thread overedge stitch**, you can refer to the correction possibilities of these seams on pages 44 and 51.

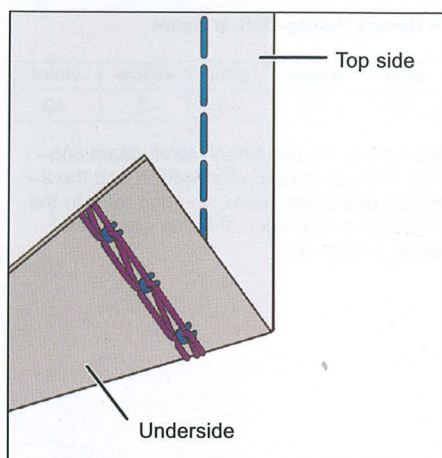
Note: Attach the converter (see page 24), when sewing 4-thread safety-stitch seam.



Two-Thread Chainstitch

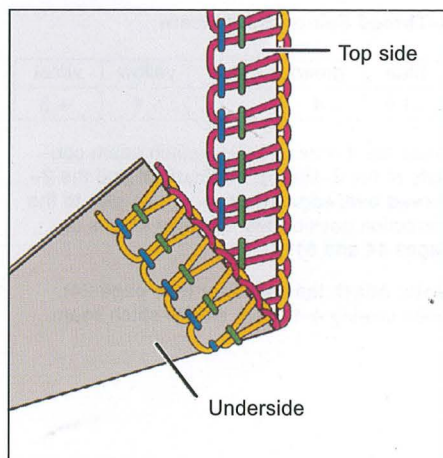
blue	green	pink	yellow	violet
-1.5				+ 3

When all tension units are correctly set, the needle thread blue is just slightly visible on the lower edge of the fabric.



The needle thread (blue) is too loose.

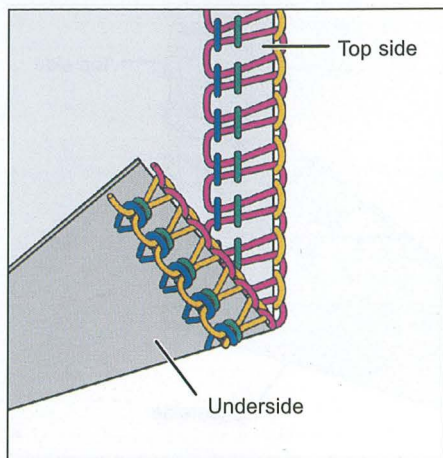
Set the blue thread tension to a higher value.



4-Thread Overedge Seam

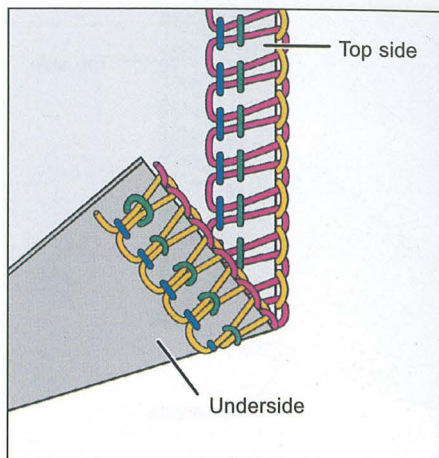
blue	green	pink	yellow	violet
N	- 2	- 2	- 2	

When all tension units are correctly set, the loops of both looper threads (pink and yellow) are directly on the edge of the fabric.



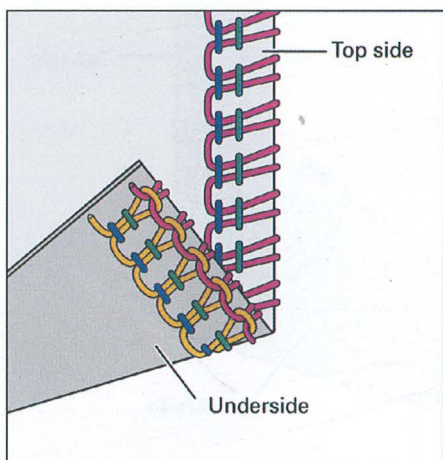
The **left needle thread** (blue) is too loose.

Set the blue thread tension to a higher value.



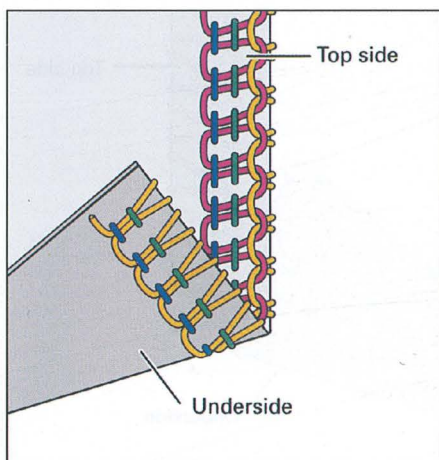
The **right needle thread** (green) is too loose.

Set the green thread tension to a higher value.



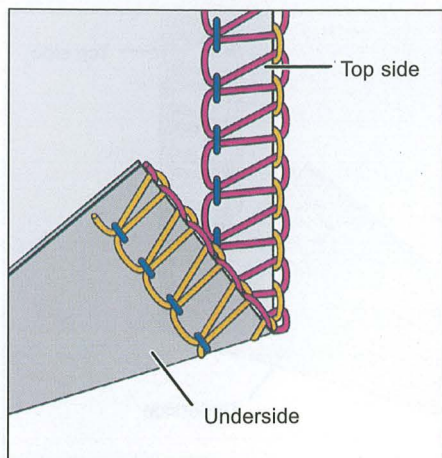
The **upper looper thread** (pink) appears on the underside of the material.

Set the pink thread tension to a higher value and/or the yellow thread tension to a lower value.



The **lower looper thread** (yellow) appears on the top side of the material.

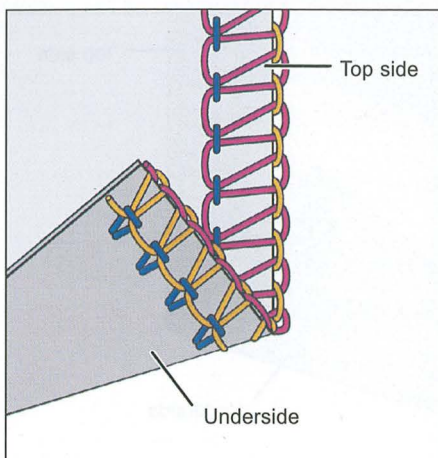
Set the yellow thread tension to a higher value and/or the pink thread tension to a lower value.



3-Thread Overedge Seam

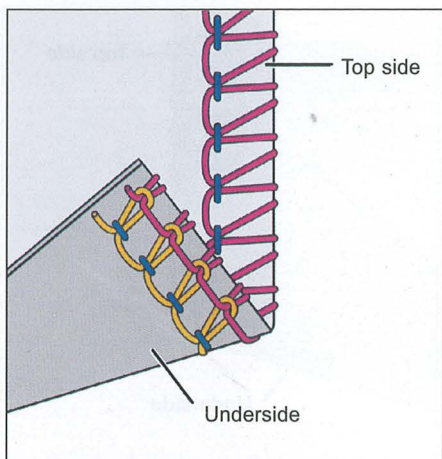
	blue	green	pink	yellow	violet
wide	N		- 3	- 1.5	

	blue	green	pink	yellow	violet
narrow		N	- 1.5	- 1.5	



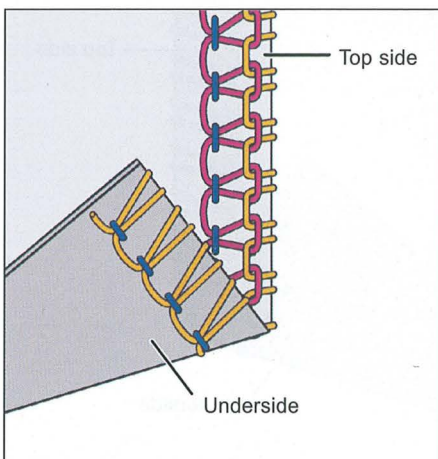
The **needle thread** is too loose.

Set the relevant needle thread tension to a higher value.



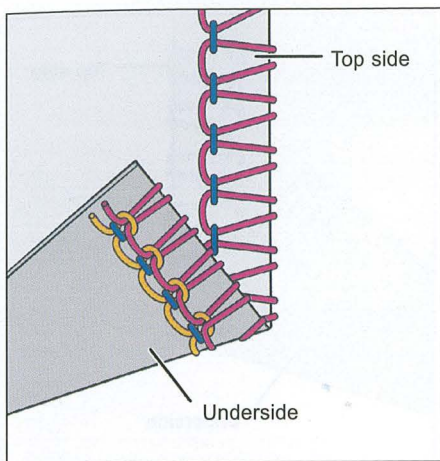
The **upper looper thread** (pink) appears on the underside of the fabric.

Set the pink thread tension to higher value and/or the yellow thread tension to a lower value.



The **lower looper thread** (yellow) appears on the top side of the fabric.

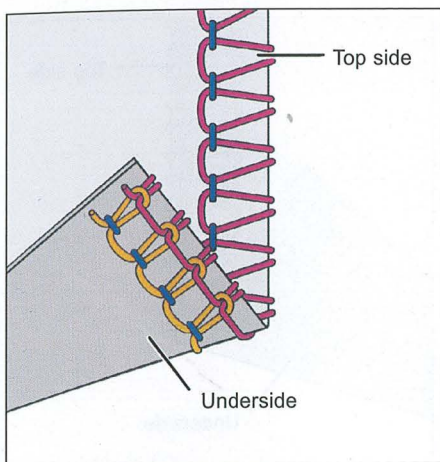
Set the yellow thread tension to a higher value and/or the pink thread tension to a lower value.



3-Thread serging Seam

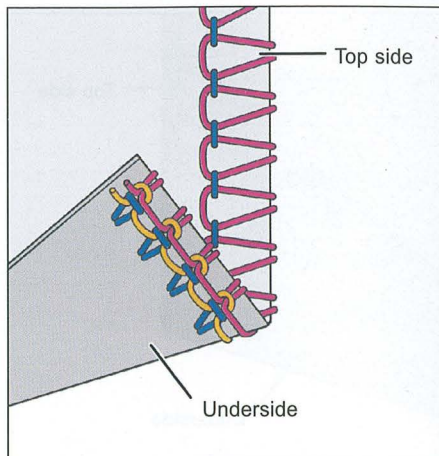
	blue	green	pink	yellow	violet
wide	N		- 5	+ 4	

	blue	green	pink	yellow	violet
narrow		N	- 5	+ 4	



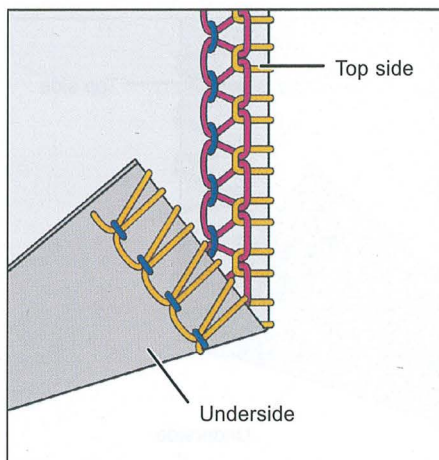
The **upper looper thread** (pink) is only partly looped around the edge of the fabric.

Set the pink thread tension to a lower value and/or the yellow thread tension to a higher value.



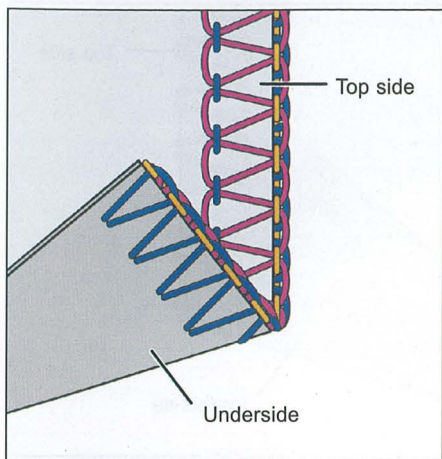
The **needle thread** is too loose.

Increase the tension of the respective needle thread.



The **lower looper thread** (yellow) is visible on the face side of the fabric.

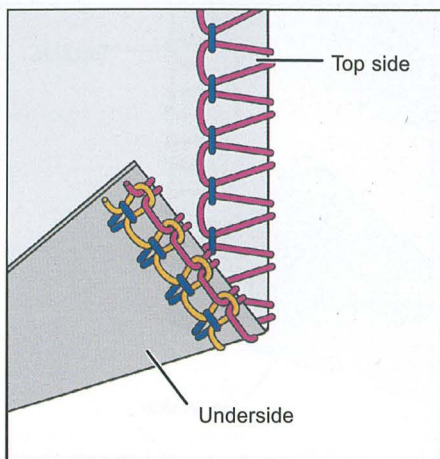
Set the yellow thread tension to a higher value and/or the pink thread tension to a lower value.



3-Thread Decorative Serging Seam FLATLOCK

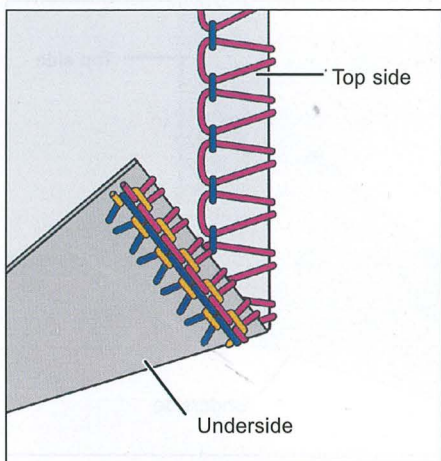
	blue	green	pink	yellow	violet
wide	- 4.5		- 1	+ 3	

	blue	green	pink	yellow	violet
narrow		- 4.5	N	+ 2	



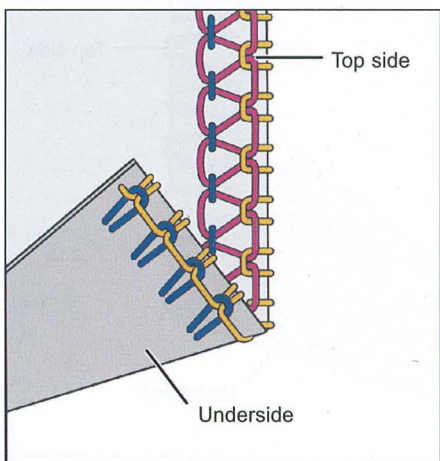
The **needle thread** is too loose.

Set the respective needle thread tension to a lower value.



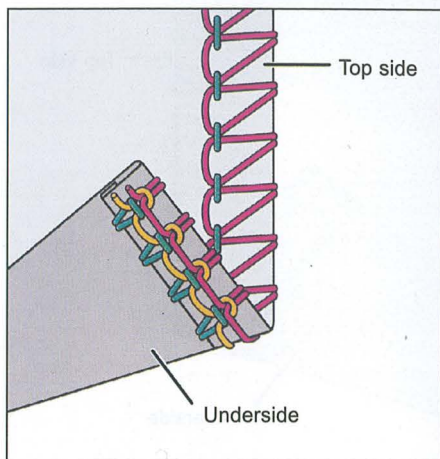
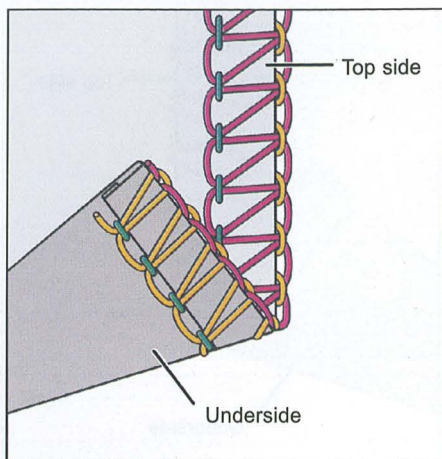
The **upper looper thread** (pink) is visible on the underside of the fabric.

Set the pink thread tension to a higher value.



The **lower looper thread** (yellow) is too loose.

Set the yellow thread tension to a higher value.

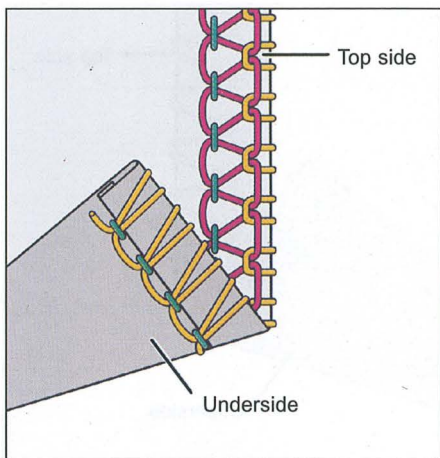
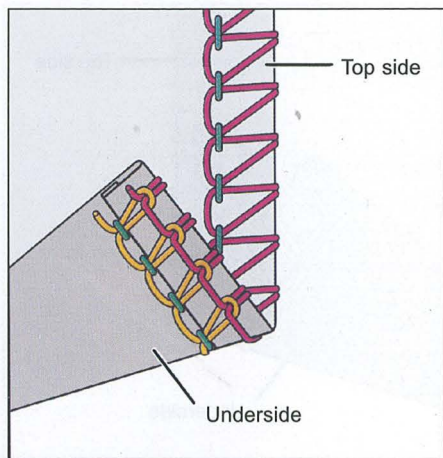


3-Thread Rolled Hem

blue	green	pink	yellow	violet
	- 1	+ 1.5	- 0.5	

The **right needle thread** (green) is too loose.

Set the green thread tension to a higher value.

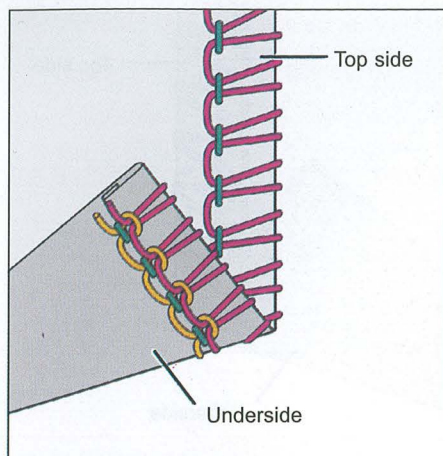


The **upper looper thread** (pink) is visible on the underside of the fabric.

Set the pink thread tension to a higher value and/or the yellow thread tension to a lower value.

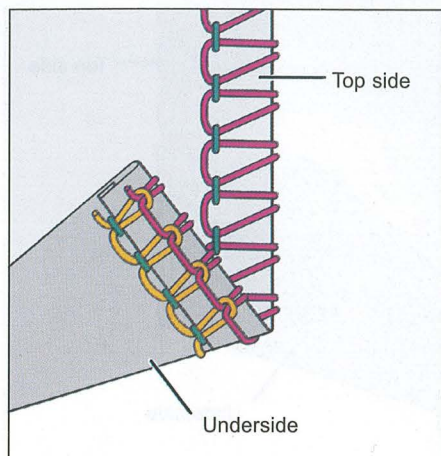
The **lower looper thread** (yellow) is visible on the top side of the fabric.

Set the yellow thread tension to a higher value and/or the pink thread tension to a lower value.



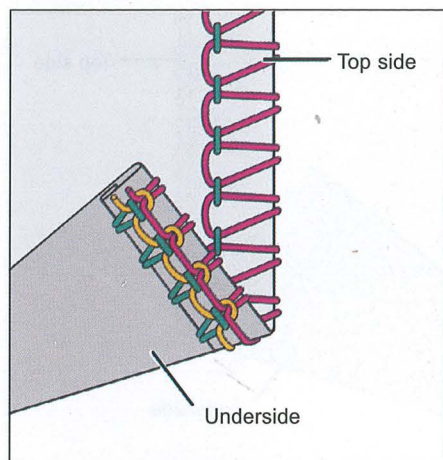
Folded 3-Thread Rolled Hem

blue	green	pink	yellow	violet
	- 1	- 1	+ 3.5	



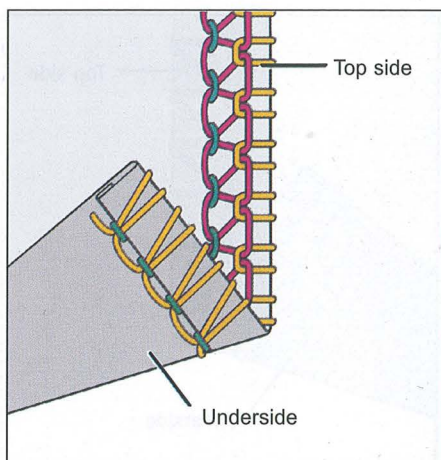
The **right needle thread** (green) is too loose.

Set the green thread tension to a higher value.



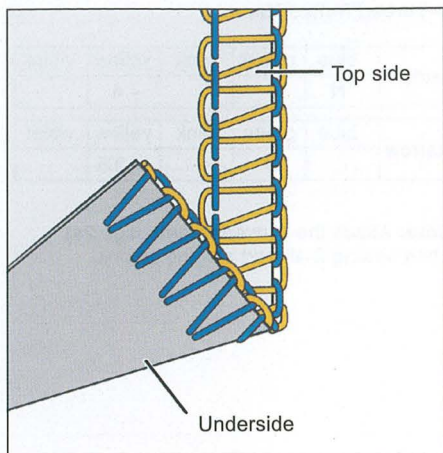
The **upper looper thread** (pink) only partly loops around the edge of the fabric

Set the pink thread tension to a lower value and/or the yellow thread tension to a higher value.



The **lower looper thread** (yellow) is visible on the top side of the fabric.

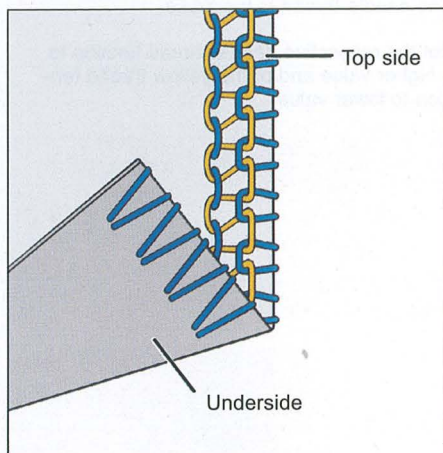
Set the yellow thread tension to a higher value and/or the pink thread tension to a lower value.



2-Thread Overedge Seam, FLATLOCK

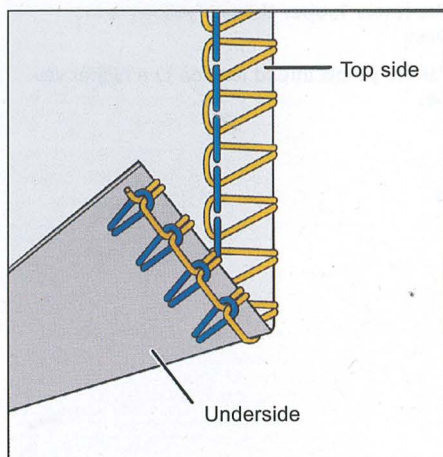
wide	blue	green	pink	yellow	violet
	-4			-1.5	
narrow	blue	green	pink	yellow	violet
		- 4		- 0.5	

Note: Attach the converter (see page 24), when sewing the 2-thread overedge seam (FLATLOCK).



The needle thread is too loose or the lower looper thread (yellow) is too tight.

Set the respective needle thread tension to a higher value and/or the yellow thread tension to a lower value.



The **lower looper thread** (yellow) is too loose or the needle thread is too tight.

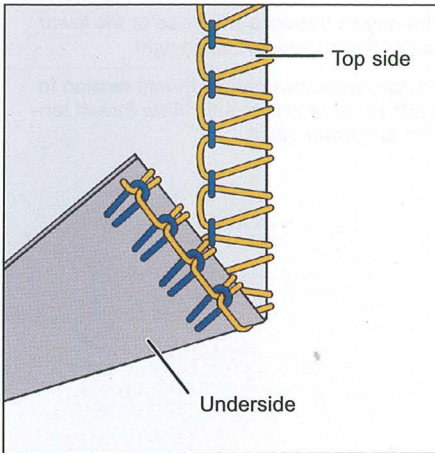
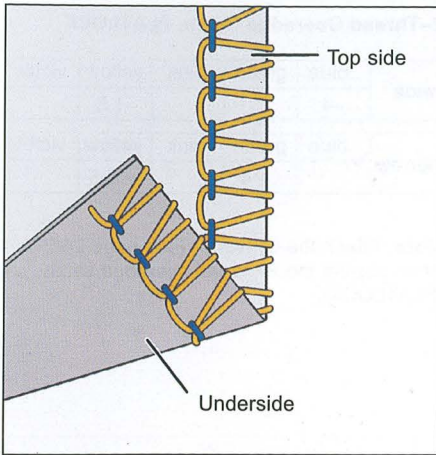
Set the yellow thread tension to a higher value and/or the respective needle thread tension to a lower value.

2-Thread Rolled Hem

	blue	green	pink	yellow	violet
wide	N			- 4	

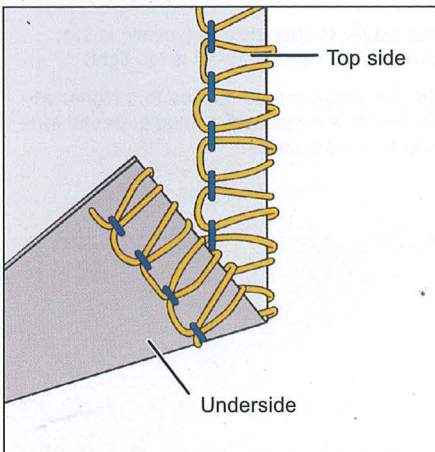
	blue	green	pink	yellow	violet
narrow		N		- 3.5	

Note: Attach the converter (see page 24) when sewing 2-thread serging seams.



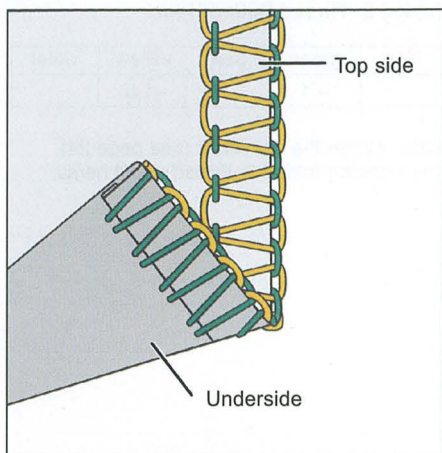
The needle thread is too loose.

Set the respective needle thread tension to a higher value and/or the yellow thread tension to lower value.



The **lower looper thread** (yellow) is too loose.

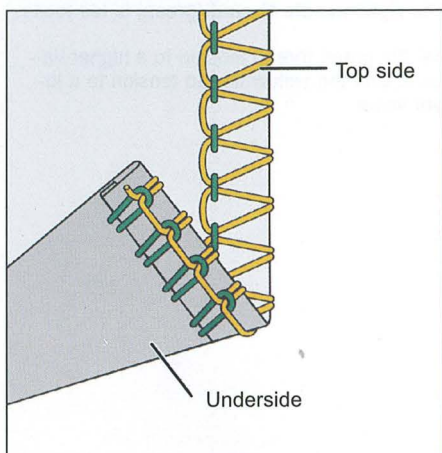
Set the yellow thread tension to a higher value.



2-Thread Rolled Hem

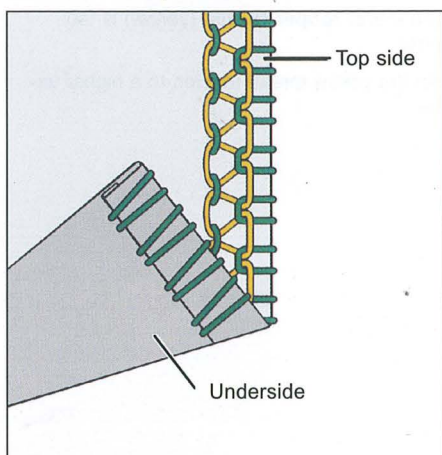
blue	green	pink	yellow	violet
	- 3.5		-1	

Note: Attach the converter (see page 24) when sewing 2-thread rolled hems.



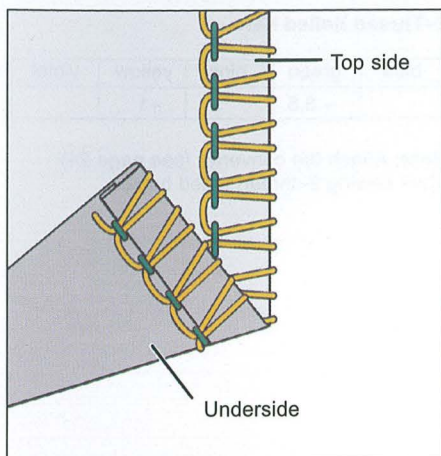
The **right needle thread** (green) is too tight.

Set the green thread tension to a lower value and/or the yellow thread tension to a higher value.



The **lower looper thread** (yellow) is too tight.

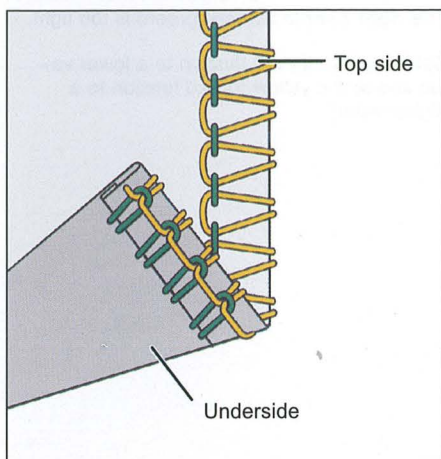
Set the yellow thread tension to a lower value and/or the green thread tension to a higher value.



Folded 2-Thread Rolled Hem

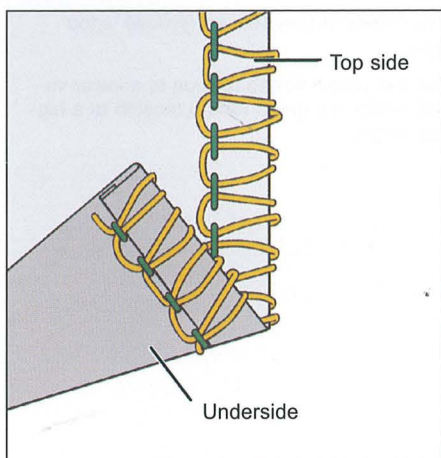
blue	green	pink	yellow	violet
	- 1		-1.5	

Note: Attach the converter (see page 24) when sewing folded 2-thread rolled hems.



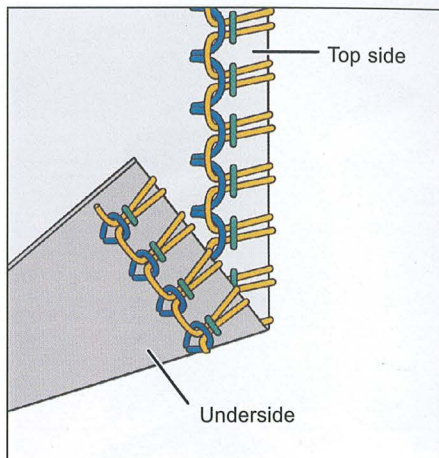
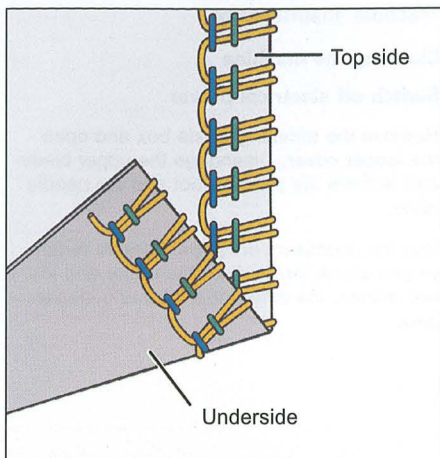
The **right needle thread** (green) is too loose.

Set the green thread tension to a higher value and/or the yellow thread tension to a lower value.



The **lower looper thread** (yellow) is too loose.

Set the yellow thread tension to a higher value.



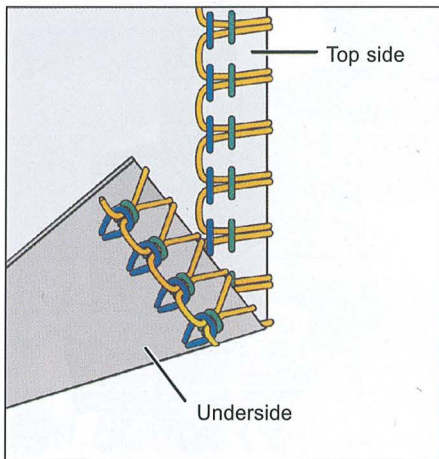
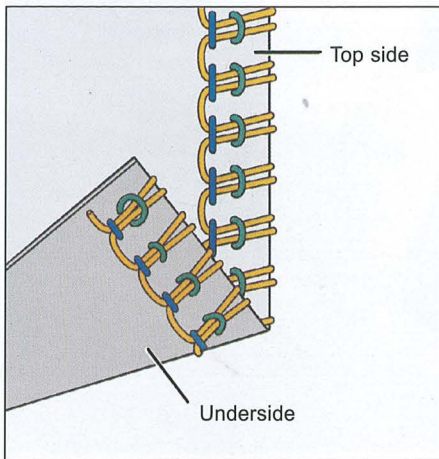
2-Needle, 3-Thread Overedge Closing Seam

The **left needle thread** (blue) is too loose.

Set the blue thread tension to a higher value.

blue	green	pink	yellow	violet
- 1	- 2		- 4	

Note: Attach the converter (see page 24), when sewing the 2-needle, 3-thread overedge closing seam.



The **right needle thread** (green) is too loose.

Set the green thread tension to a higher value.

The **lower looper thread** (yellow) is too tight.

Set the yellow thread tension to a lower value.



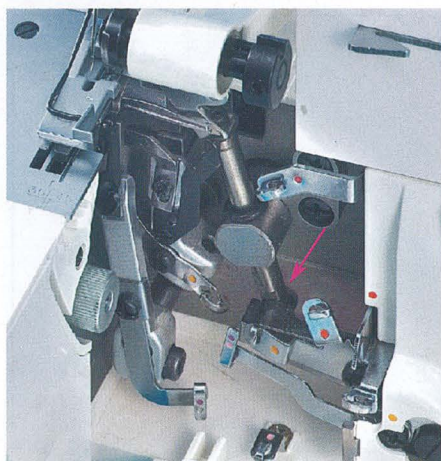
Machine maintenance

Cleaning the machine

Switch off electrical power

Remove the trimming waste box and open the looper cover. Disengage the upper blade and remove the presser foot and the needle plate.

Use the accessory brush provided to remove any waste thread from the upper and lower blades, the differential feed and looper area.



Lubricating the machine

Switch off the electrical power

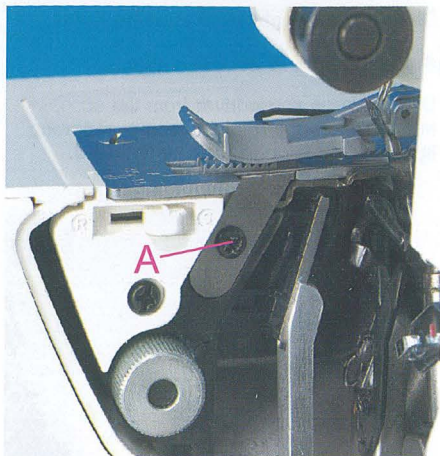
Move the upper overedge looper into its highest position. Lubricate the point shown above with the oil provided in the accessory box every time you clean the machine. One or two drops of sewing machine oil are sufficient. All other parts are manufactured from special materials and do not require any lubrication.

56



Cleaning the rubber feet

Clean the rubber feet from time to time with alcohol. This ensures good stability.



Clanging the lower blade

Switch off the electrical power

To remove: Detach the trimming waste box and open the looper cover. Disengage the upper blade and move the needle(s) to the highest position. Use the large screwdriver from the accessories to loosen lower blade retaining screw **A**. Remove the screw and the lower blade.



To insert: Insert a new lower blade into the recess provided and tighten the retaining screw. Engage the upper blade and close the looper cover.



Changing the light bulb (sewing light)

Switch off the electrical power

Use the large screwdriver from the accessories to loosen the retaining screw of sewing light cover (15) until it can be removed.



Push the light bulb fully into its socket. Rotate anti-clockwise through half a turn and remove.



Guide the new light bulb (max.15 W) into the socket and twist until both pins on the bulb slide into the grooves.

Press the bulb right into the socket, twisting it clockwise until it is securely fixed.

Mount the sewing light cover and tighten the retaining screw.

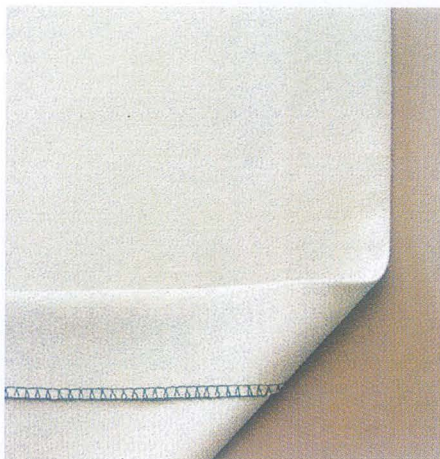


Special accessories

On the following pages you will find descriptions of all sewing feet available as special accessories to help you to get the best from your **857**. By using these presser feet, you can perform various steps in one, thus saving time and ensuring perfect serging results.

The special accessories can be purchased from your dealer.

Special accessory	Order No
Blindstitch foot	93-415 506-23/000
Cover-stitch guide set	93-415 560-84/000
Gimp thread foot	93-415 507-70/000
Elastic tape foot	93-415 506-21/000
Shirring foot	93-415 506-20/000
Cording foot	93-415 506-22/000
Beading foot	93-415 506-24/000
Lace foot	93-415 507-69/000



Blindstitch foot

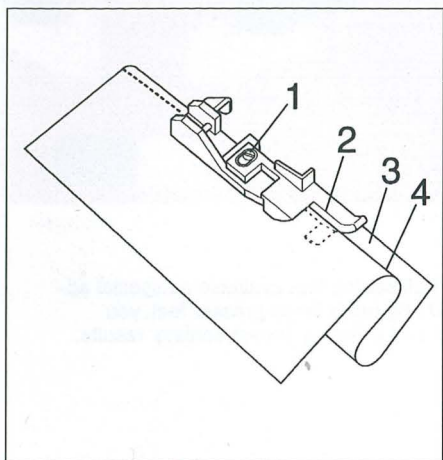
The blindstitch foot is ideal for professional sewing of invisible seams on medium-heavy and thick fabrics. The seam is trimmed, serged and "blind" stitched in a single operation.

Setting the machine

Remove the left needle. Set your machine to 3-thread overedge seam (narrow) and select stitch length 4.

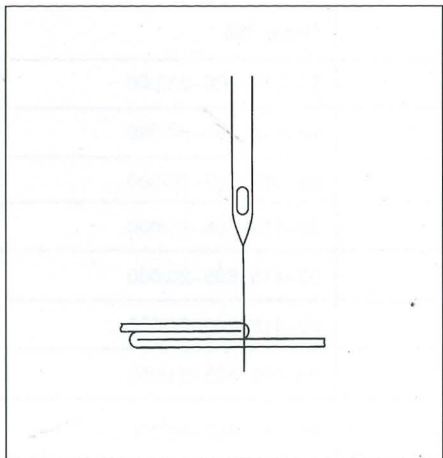
Working:

Raise the needle to its uppermost position and insert the blindstitch foot. Fold the seam inwards. Now fold the seam once again outwards so that the edge protrudes approx. 1 cm. Position the seam under the sewing foot so that the folded seam under the sewing foot so that the folded **seam part 3** lies beneath **edge guide 2**. **Crease 4** must thereby run along the **edge 2** of the guide.



Loosen **retaining screw 1** and adjust **edge guide 2** so that upon penetration the needle catches only one thread of the upper fabric.

Sew a test seam.





Cover-stitch guide set

You can hem T-shirts, sweatshirts etc. with this accessory set.

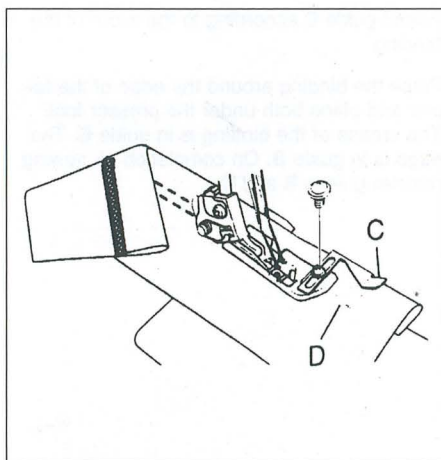
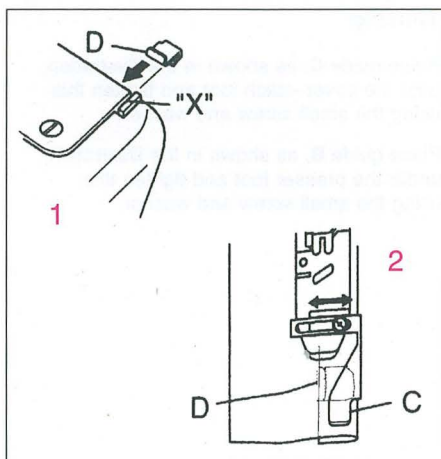
Setting the machine

Set the machine to the cover stitch (see page 30–33).

Note: Use guide **C** and **D**.

Working:

Loosen the needle plate screw by half a turn and open the looper cover. Push guide **D**, as shown in illustration 1, along position "x" fully under the needle plate. The lower edge of the guide and the edge of the needle plate should flush. Fully tighten the screw and close looper cover. Place guide **C**, as shown in illustration 2, onto the cover-stitch foot and fasten both using the small screw and the washer. Turn up the seam and adjust guide **C** according to the width of the seam.



Place the fabric with the top side up under the presser foot. The hemmed seam is in guide **D**, the crease is in guide **C**. Sew the seam and on completion remove guides **C** and **D**.



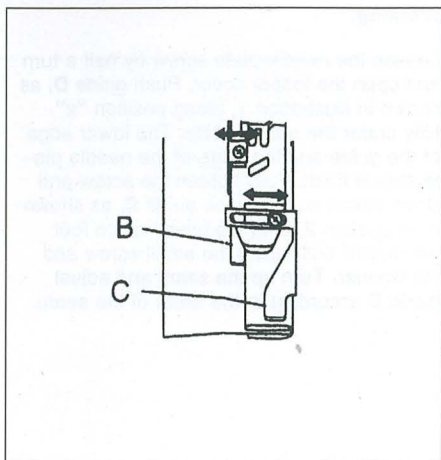
Cover-stitch guide set

Open-edged seams on T-shirts, sweatshirts, etc., can be bound with bias tape or band.

Setting the machine

Set the machine to the cover stitch (see page 30-33).

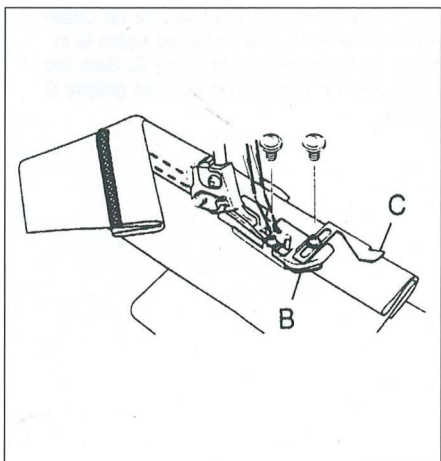
Note: Use guides **B** and **C**.



Working:

Place guide **C**, as shown in the illustration, onto the cover-stitch foot and tighten this using the small screw and washer.

Place guide **B**, as shown in the illustration, under the presser foot and tighten this using the small screw and washer.



Adjust guide **C** according to the width of the binding.

Place the binding around the edge of the fabric and place both under the presser foot. The crease of the binding is in guide **C**. The edge is in guide **B**. On completion of sewing remove guides **B** and **C**.



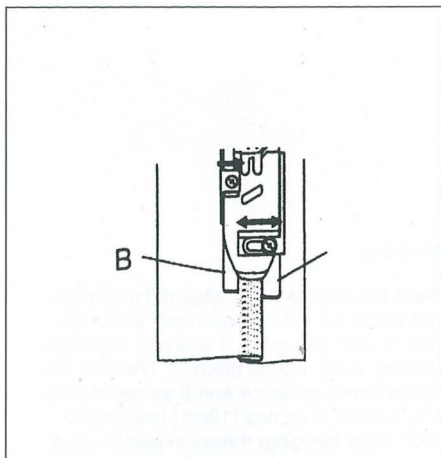
Cover-stitch guide set

Seams can be top-stitched with this special accessory.

Setting the machine

Set the machine to the cover stitch (see page 30–33).

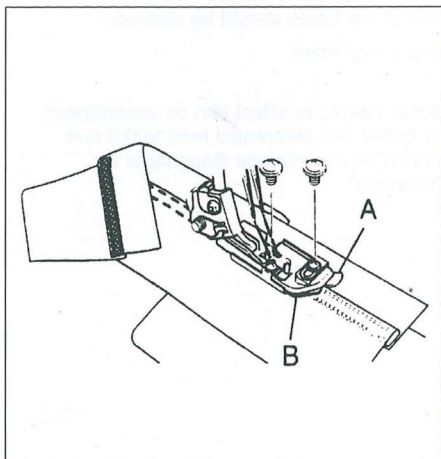
Note: Use guides A and B.



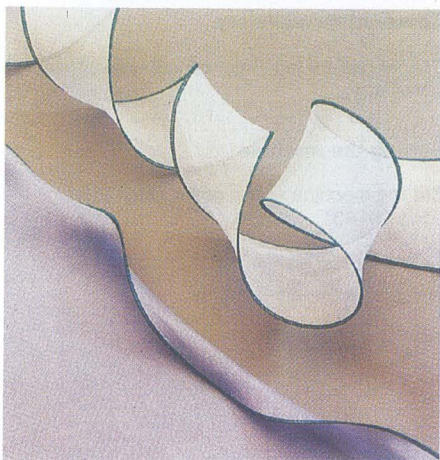
Working:

Serge the seams and underpress them on one side. Push guide **B** left under the presser foot, as shown in the illustration, and tighten this using the small screw and washer.

Push guide **A** from the right under the presser foot, as shown in the illustration, and tighten this using the small screw and washer.



Place the fabric, top side up, under the presser foot, so that the seam on the underside faces the left. The crease of the seam should lie in the inner edge of guide **A**, adjust guide **A** as required. On completion of sewing remove guides **A** and **B**.

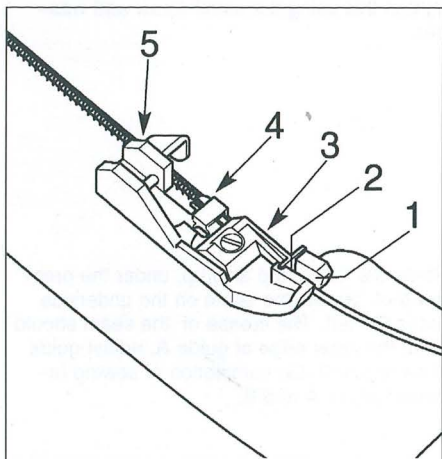


Gimp thread foot

This presser foot is used for sewing in gimp threads (cords, synthetic threads) up to a thickness of 1.0 mm. It creates a wavelike hem finish in delicate fabrics e.g. for evening dresses and bridal gowns or curtains.

Setting the machine

Set your machine to the folded 3-thread rolled hem.

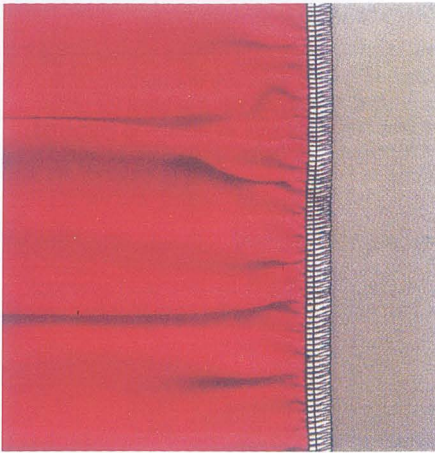


Working:

Raise the needle to its uppermost position and insert the gimp thread foot. Insert the gimp thread into guide 1 and pull it through opening 2 into lateral guide 3. Then lay the thread under guides 4 and 5 so that it projects approx. 4 inches (10cm) towards the back. Hold the gimp thread in place with a few stitches, then lay the fabric under the presser foot and continue sewing (the face side of the fabric should be upwards).

Sew a test seam

Note: The wave effect can be accentuated by setting the differential feed to 0.5 and cutting your workpiece diagonal to the threadline.

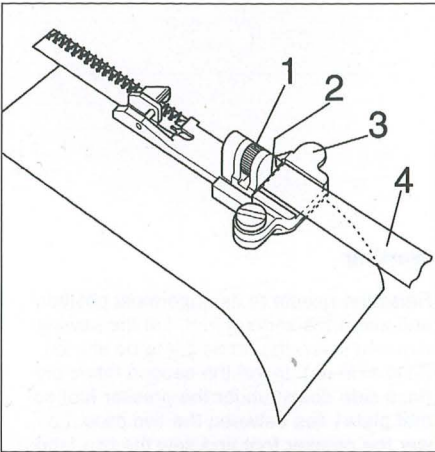


Elastic tape foot

This presser foot is used for sewing on elastic tape. In the same operation, the fabric is trimmed and serged, and also gathered by the contracting elastic tape.

Setting the machine

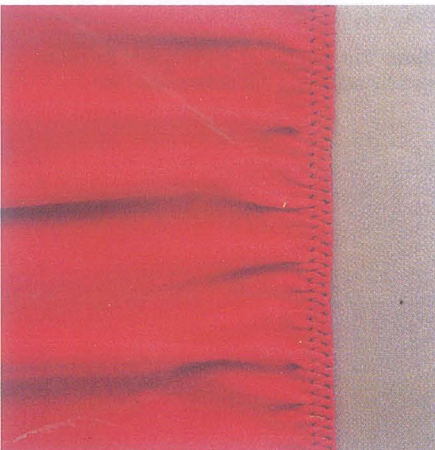
Set your machine to the 4-thread overedge seam. The seam width is determined by the width of the elastic tape.



Working:

Raise the needle to its uppermost position and insert the elastic tape sewing foot. Loosen screw 1 so that brake 3 at opening 2 is opened by approx. 2 mm. Insert elastic tape 4 into opening 2 and pull it beneath the sewing foot so that it protrudes approx. 4 inches (10cm) behind the latter. Re-tighten screw 1. The more the screw is tightened, the greater the pressure brake 3 exerts on the elastic tape and thus the greater the gather effect.

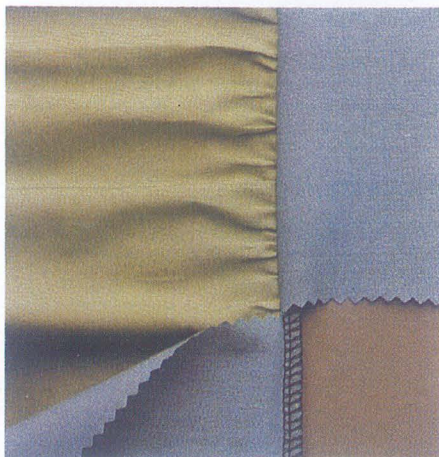
Sew a test seam.



The next step is normally to stitch the elastic tape towards the left with one of your machine's elastic (expandable) stitches (see illustration).

Sewing on a non-elastic tape prevents stretching of the seams (e.g. shoulder seams) in stretch fabrics.

Loosen **screw 1** until the non-elastic tape can pass through **opening 2** without hindrance.

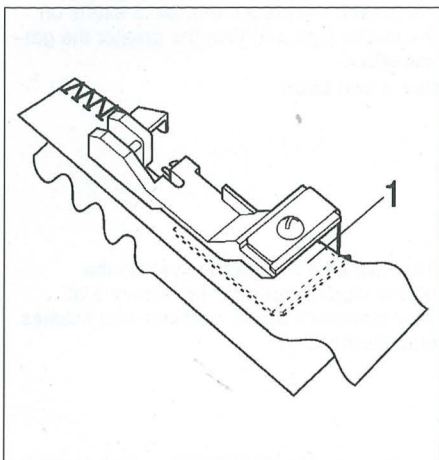


Shirring foot

The shirring foot enables two fabrics to be sewn together, whereby the bottom ply is automatically gathered. It is ideal for children's wear, as well as attaching gathered valances for curtains, table linen or tiered skirts.

Setting the machine

Set your machine to the 4-thread overedge seam and the differential feed to 2.0.



Working:

Raise the needle to its uppermost position and insert the shirring foot. Lift the sewing foot and insert the fabric ply to be shirred (face side up). Insert the second fabric ply (face side down) under the presser foot so that plate 1 lies between the two plies. Lower the presser foot and sew the two fabric plies together.

Sew a test seam.

Note: The degree of shirring can be changed by adjusting the differential feed.

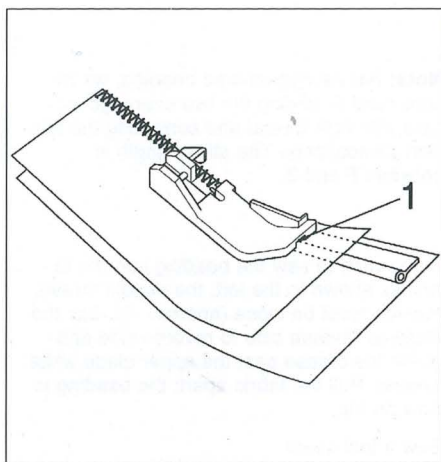


Cording foot

This sewing foot allows you to sew together two fabric plies with a cording tape between them, in one operation. Ideal for casual wear, sports bags and upholstery covers.

Setting the machine

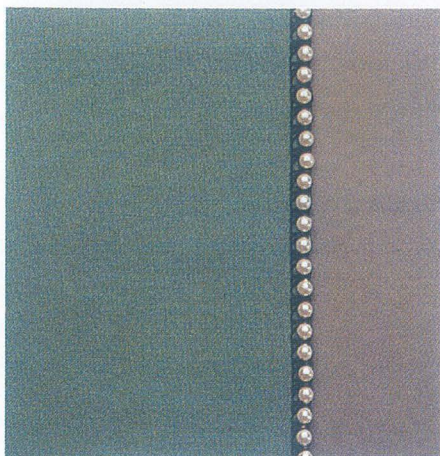
Set your machine to the 4-thread overedge seam and seam width 4.5 mm.



Working:

Raise the needle to its uppermost position and insert the cording foot. Place the two fabric plies on top of one another (face side to face side) and insert the cording tape between the two plies. Position the workpiece beneath the cording foot ensuring that the cording (piping) runs through **groove 1** in the foot.

Sew a test seam.

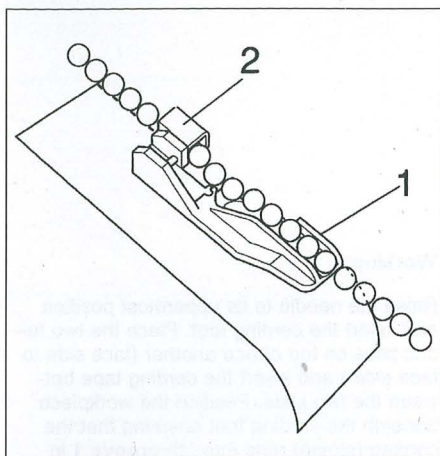


Beading foot

This presser foot is used for sewing on beading, sequins and strass bands as well as lead and ordinary cords.

Setting the machine

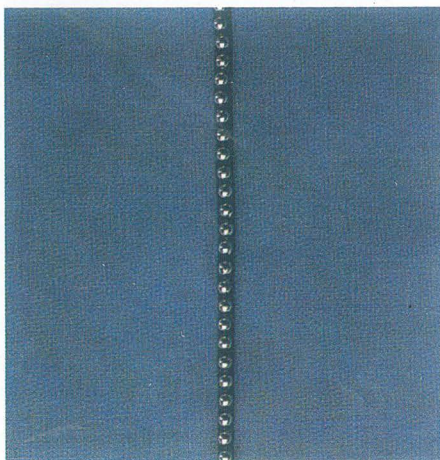
Set your machine to the 3-thread overedge seam (narrow or wide depending on bead size). Stitch length should be between 3 and 4.



Working:

Raise the needle to its uppermost position and insert the beading foot. Insert the string of beads into **guide 1** and beneath **guide 2** approx. 2 inches (5 cm) behind the sewing foot. Hold the beads in place with a few stitches, then lay the fabric face up under the sewing foot and sew the beads onto the sel-
vage.

Note: For sewing on lead beading, we recommend threading the two overedge loops with bulk thread and correcting the tension if necessary. The stitch length is between F and 2.



If you wish to sew the beading into the fabric as shown to the left, the needle thread tension must be loose (approx. -5). Lay the material reverse side to reverse side and guide the crease past the upper blade while sewing. Pull the fabric apart; the beading is now on top.

Sew a test seam.



Lace foot

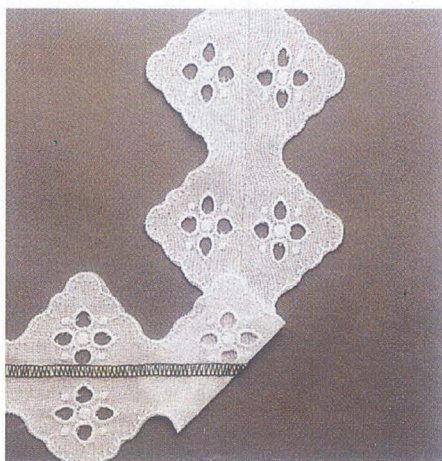
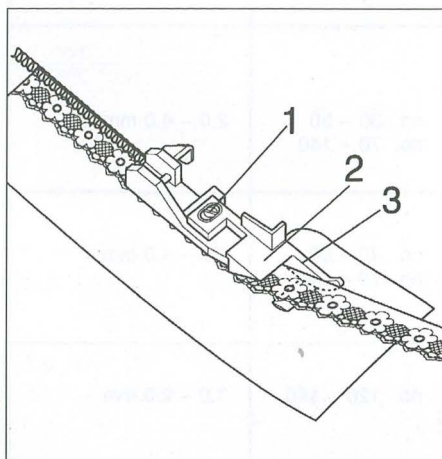
The lace foot enables you to sew lace and wide bands together or onto another work-piece.

Setting the machine

Set your machine to 3-thread overedge seam (narrow) and select a stitch length between **F** and **2**.

Working:

Raise the needle to its uppermost position and insert the lace sewing foot. Use the large screwdriver from the accessories to loosen **screw 1** and adjust **guide 2** so that the needle penetrates the lace as close to the edge as possible. Tighten **screw 1**, lay the lace onto the fabric, face side to face side, at a distance of 1.5 to 2.0 cm (depending on seam allowance) away from the selvage and sew it on.



When sewing two lace workpieces together, the two halves must be guided flush along **edge guide 3**.

Thread chart for 2-, 3- and 4-thread overedge seams

Fabric	Thread	Stitch length
Light fabrics: organdy, fine knitwear, taffeta, silk, lining fabrics	Cotton no. 50 – 70 Synthetic thread no. 70 – 140	2.0 – 4.0 mm
Medium-heavy fabrics: coton, tricot linen, dess materials	Cotton no. 40 – 60 Synthetic thread no. 70 – 140	2.0 – 4.0 mm
Heavy fabrics: tweed, suit materials, denim, heavy cloth	Cotton no. 30 – 50 Synthetic thread no. 70 – 140	2.0 – 4.0 mm
Knitwear:	Cotton no. 40 – 60 Synthetic thread no. 70 – 140	2.0 – 4.0 mm
2 or 3-thread rolled hems	Polyester thread no. 120 – 140 Mercerized thread (bulk thread)	1.0 – 2.0 mm



Sewing problems and their solutions

These machines have been developed with ease of operation in mind. No difficult or tricky settings need to be made. Sewing problems of the kind described below may occur as a result of minor adjustment and operating errors. They can be easily adjusted by following the instructions.

Problem	Cause	Solution
Needle breakage	The needle was bent or the point damaged. The needle was not fully inserted. The fabric was pulled too firmly.	Insert new needle (see page 11). Insert needle fully (see page 11). Do not pull on the fabric when sewing.
Thread beaks	Incorrectly threaded. Thread has caught. Thread tension is too tight. Needle not fully inserted. Incorrect needle used.	Thread properly (see page 12–20) Check if the thread is caught on the spool stand etc. Correct the tension (see page 42–55) . Insert needle correctly (see page 11). Use needle system EL X 705.
Skipping stitches	Needle bent or point damaged. Needle not fully inserted. Incorrect needle used. Incorrectly threaded.	Insert new needle (see page 11). Insert needle correctly (see page 11). Use needle system EL X705. Thread correctly (see page 12–20)
Stitch formation faulty	Incorrect setting of thread tensions	Re-set thread tensions (see page 42–55).
3 or 4 thread over-edge seam has an irregular appearance and the upper looper thread has not interlocked in the seam.	The converter is attached.	The converter must be removed.

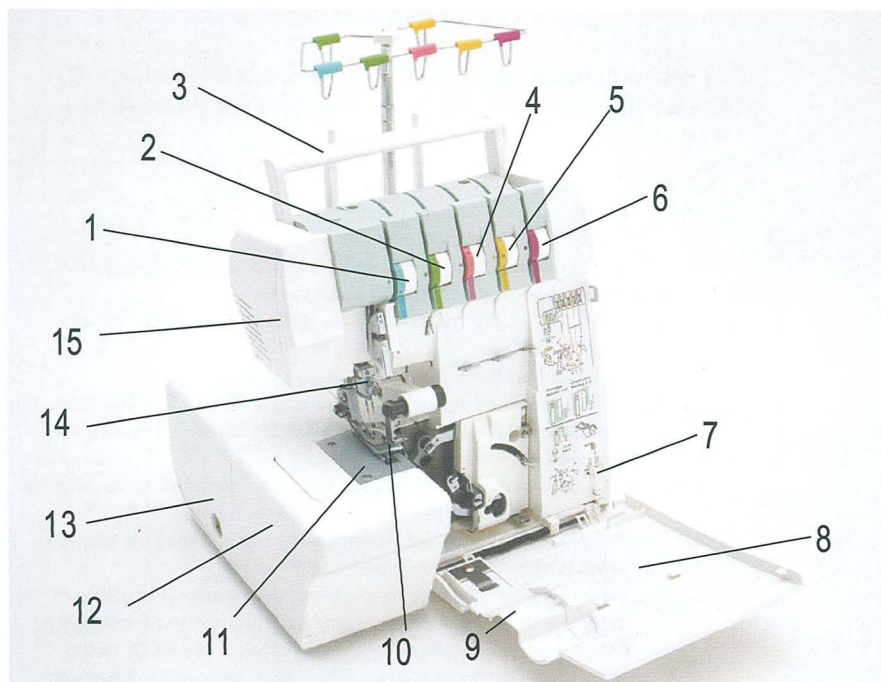
Problem	Cause	Solution
Machine will not operate although master switch is on	Power supply interrupted.	Close looper cover (see page 8).
Fabric not neatly trimmed.	Waste thread between upper and lower blade. Lower blade is blunt.	Clean blades. Replace lower blade (see page 57).
Puckered seams.	Thread tension too tight. Incorrect setting of differential feed. Thread has caught due to incorrect threading.	Reduce thread tension. Re-adjust differential feed (see pages 28, 29). Thread correctly (see pages 12–20).
Fabric not fed through evenly.	Stitches too short. Sewing foot pressure too low for heavy fabrics. Sewing foot pressure too high for lightweight fabrics.	Increase stitch length (see page 27). Increase presser foot pressure (see page 21). Reduce presser foot pressure (see page 21).

Specifications:

Maximum sewing speed	1200 stitches/min.
Seam width	3 – 7.7 mm
Stitch length	F (= 1mm) –4 mm
Presser foot	exchangeable
Lubrication	manual
Presser foot height	4.5 mm
Overedge stroke	1.5 mm
Needle system	ELX705, cat. no. 2020
Needle size	80/11, 90/14
Number of threads	2, 3, 4, 5
Dimensions (width x height x depth)	395 x 360 x 375mm
Weight	6.5kg

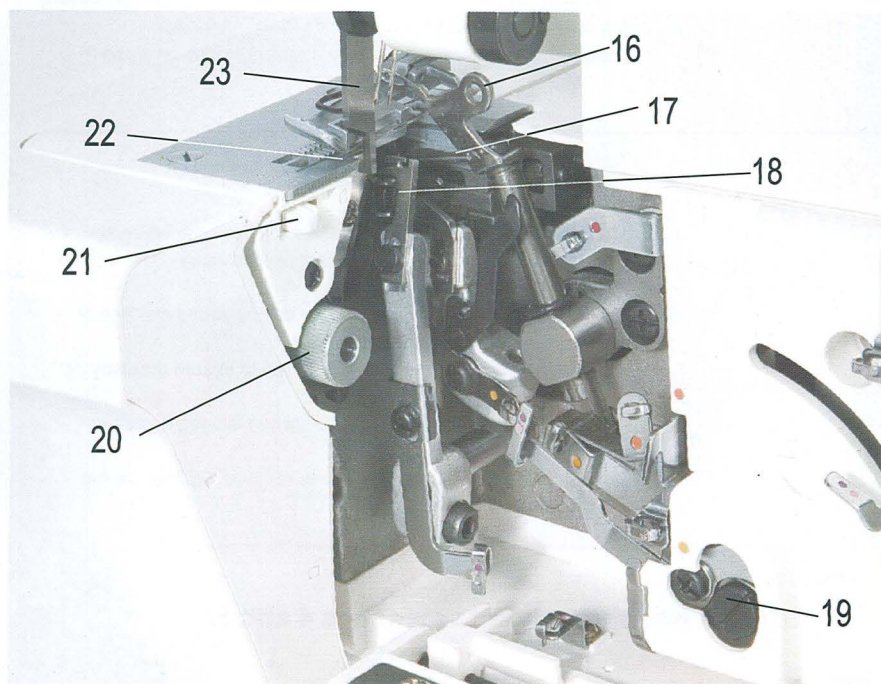
Packing contents

- 1 machine
- 1 foot control
- 1 instruction manual/guarantee card
- 1 trimming waste box
- 1 machine cover



Parts

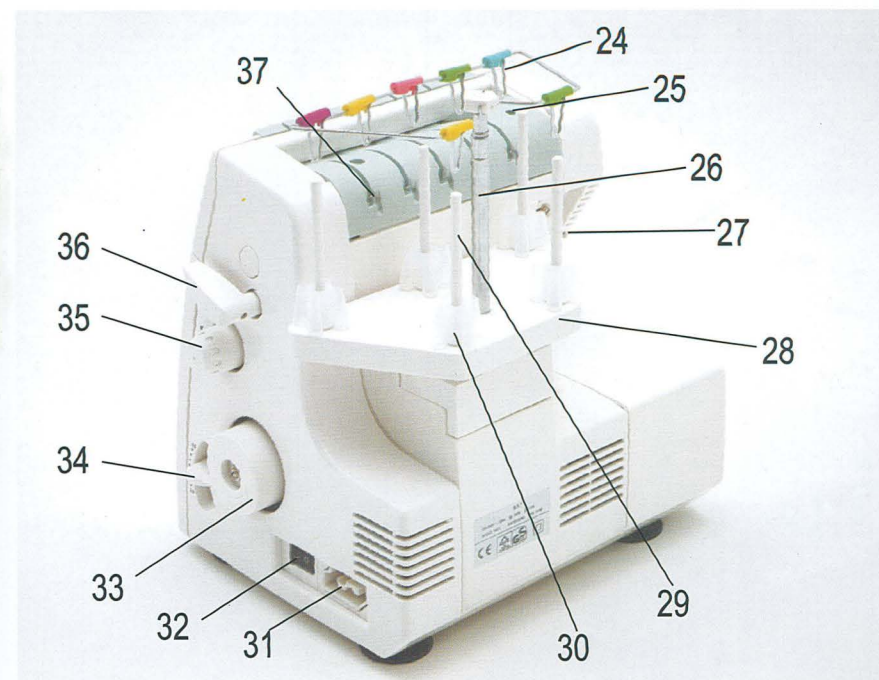
- (1) Upper thread tension
- (2) Upper thread tension
- (3) Carrying handle
- (4) Thread tension/upper looper thread
- (5) Thread tension/lower looper thread
- (6) Thread tension/Two -thread chainstitch looper
- (7) Converter
- (8) Looper cover
- (9) Blade guard
- (10) Standard presser foot
- (11) Standard needle plate
- (12) Detachable work support
- (13) Accessory box
- (14) Needle holder
- (15) Sewing light cover



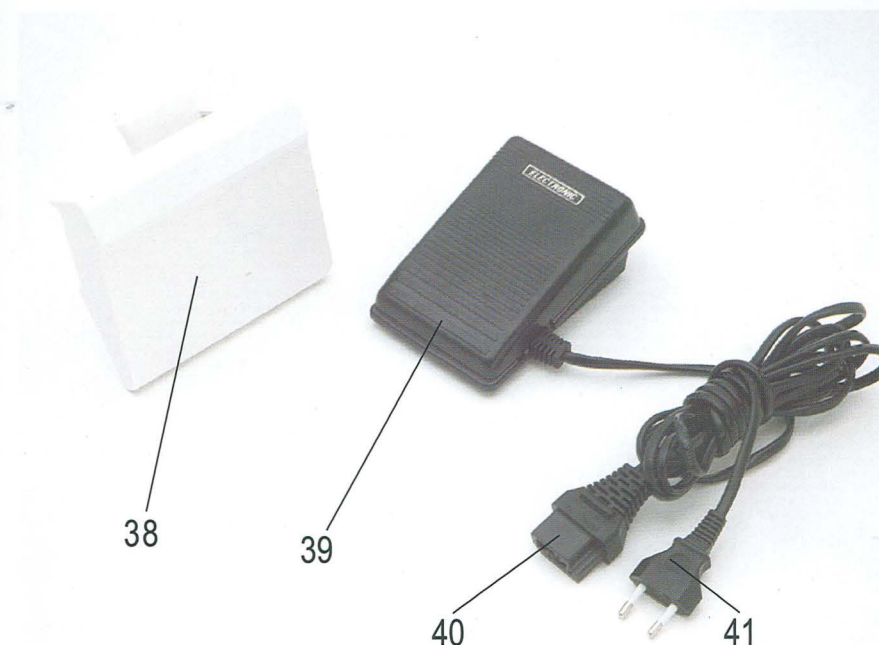
- (16) Upper overedge looper
- (17) Lower overedge looper
- (18) Two-thread chainstitch looper
- (19) Retaining screw for upper overedge looper
- (20) Adjusting knob for seam width
- (21) Bed slide for stitch width latch
- (22) Fixed lower blade
- (23) Movable upper blade

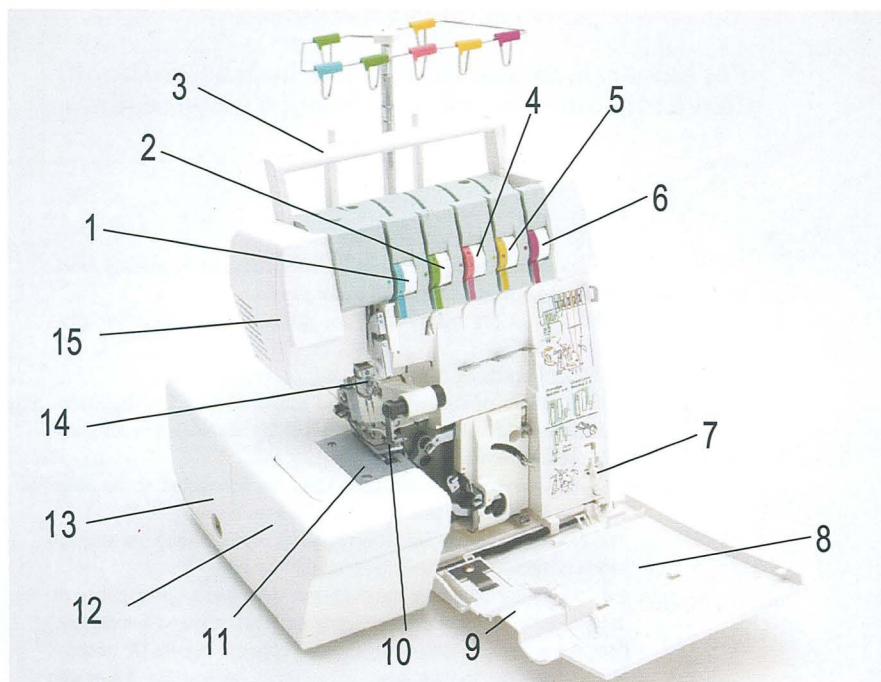
Parts

- (24) Thread guides with color coding
- (25) Regulator screw for presser foot pressure
- (26) Telescopic thread guide
- (27) Thread chain cutter
- (28) Thread spool stand
- (29) Thread spool pins
- (30) Thread spool centering pieces
- (31) Machine socket, foot control with power cord
- (32) Electrical power master switch
- (33) Handwheel
- (34) Regulator lever for differential feed
- (35) Stitch length adjustment knob
- (36) Presser foot lifter
- (37) Rear thread guides



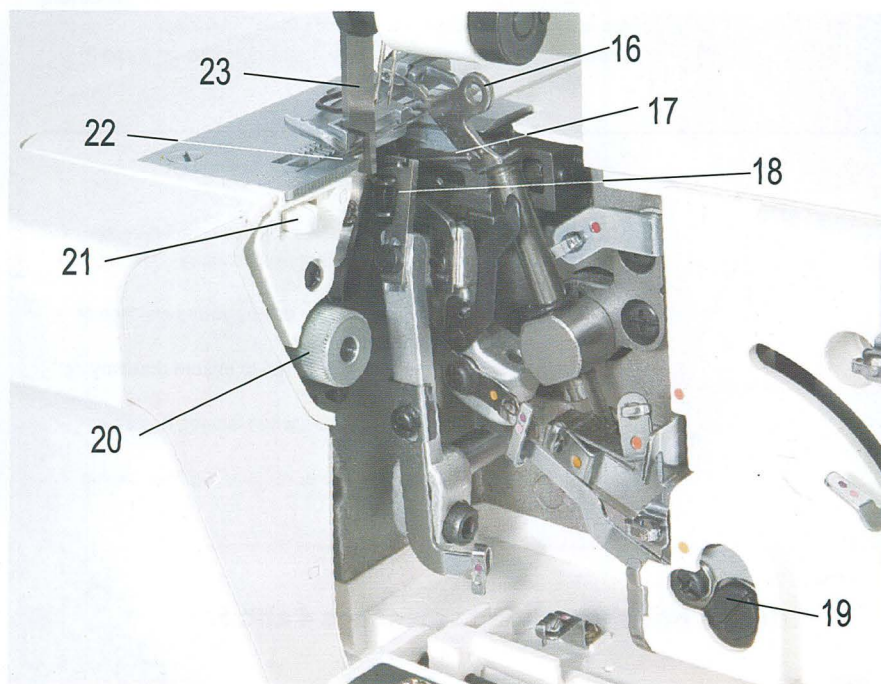
- (38) Trimming waste box
- (39) Foot control
- (40) Foot control plug for machine
- (41) Power plug





Parts

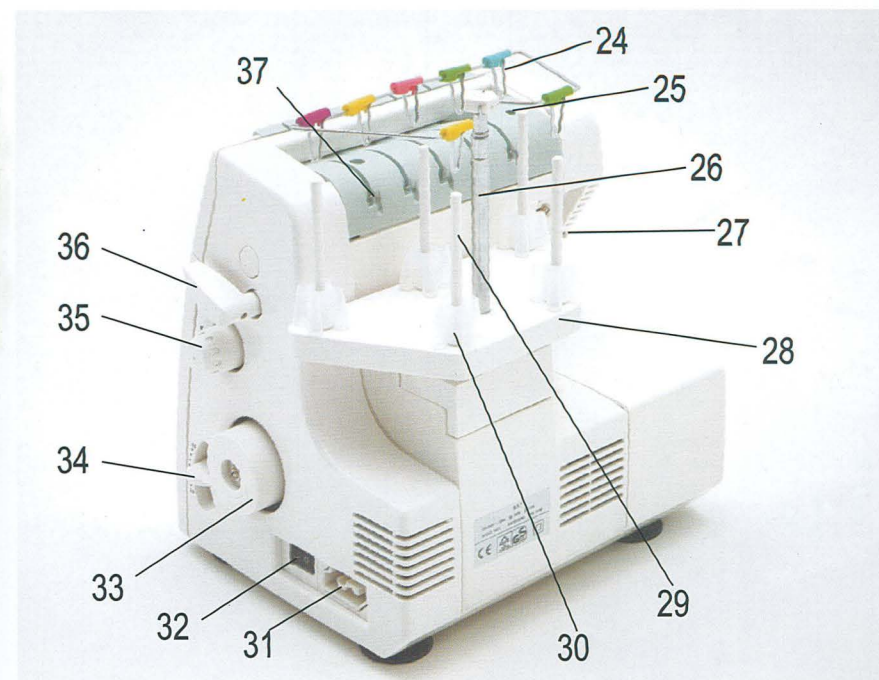
- (1) Upper thread tension
- (2) Upper thread tension
- (3) Carrying handle
- (4) Thread tension/upper looper thread
- (5) Thread tension/lower looper thread
- (6) Thread tension/Two -thread chainstitch looper
- (7) Converter
- (8) Looper cover
- (9) Blade guard
- (10) Standard presser foot
- (11) Standard needle plate
- (12) Detachable work support
- (13) Accessory box
- (14) Needle holder
- (15) Sewing light cover



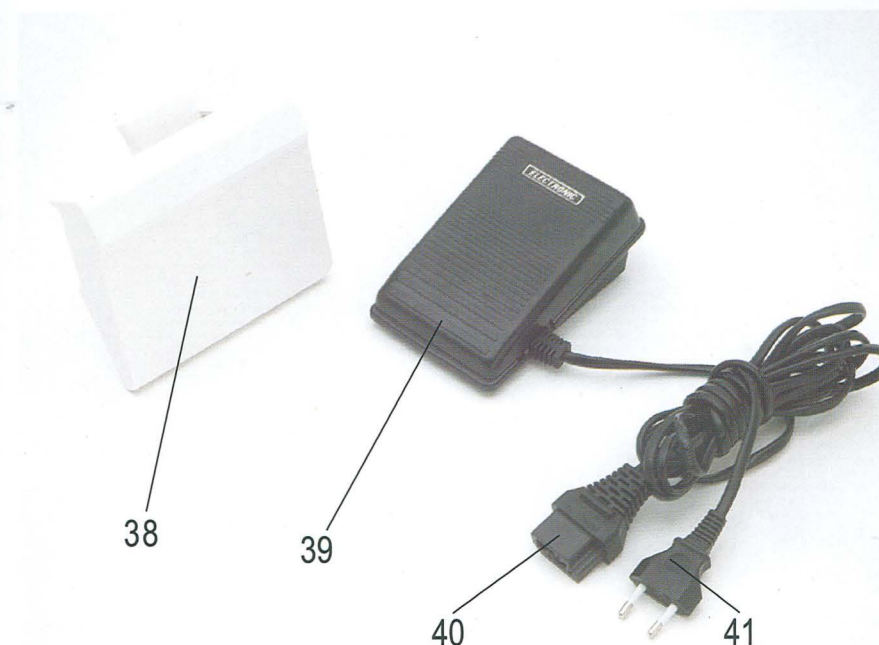
- (16) Upper overedge looper
- (17) Lower overedge looper
- (18) Two-thread chainstitch looper
- (19) Retaining screw for upper overedge looper
- (20) Adjusting knob for seam width
- (21) Bed slide for stitch width latch
- (22) Fixed lower blade
- (23) Movable upper blade

Parts

- (24) Thread guides with color coding
- (25) Regulator screw for presser foot pressure
- (26) Telescopic thread guide
- (27) Thread chain cutter
- (28) Thread spool stand
- (29) Thread spool pins
- (30) Thread spool centering pieces
- (31) Machine socket, foot control with power cord
- (32) Electrical power master switch
- (33) Handwheel
- (34) Regulator lever for differential feed
- (35) Stitch length adjustment knob
- (36) Presser foot lifter
- (37) Rear thread guides



- (38) Trimming waste box
- (39) Foot control
- (40) Foot control plug for machine
- (41) Power plug



ADJUSTING CONSEW 12TU2345 FROM COVER STITCH

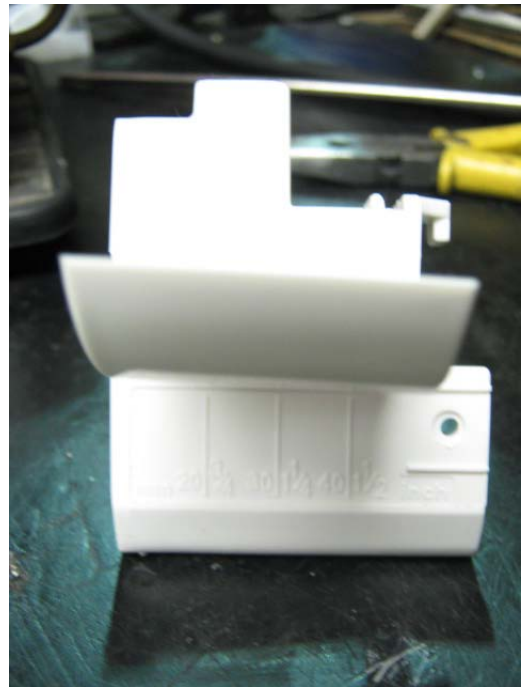
TO OVERLOCK MODE.

- 1)Remove the waste container. - See Picture #1
- 2) Open the front cover.
- 3) Remove the plastic edge guide. – See Picture #2
- 4)Remove the presser foot. (Slides off)
- 5) Unscrew and remove the cover stitch needle plate – See Picture #3
- 6) In cover stitch mode, the needles run parallel to each other. For overlock mode, adjust the needles to positions A and C, as shown on page 11 of the instruction manual. – See Picture #4
- 7) Replace the cover stitch needle plate with the overlock needle plate found in the accessories box. – See Picture #5
- 8) Change the foot with the overlock presser foot found in the accessories box. – See Picture #6
- 9) Re-engage the looper. Manually raise the upper looper until it is at its highest position; then, firmly tighten the looper lock screw. – See Pictures #7, #8, #9
- 10)Rotate the knife until it is engaged. - See Picture #10
- 11) Thread machine using the instructions found on the right side of the inside cover.
- 12) When closing the front cover, replace the plastic edge guide with the plastic chip guard that comes packed in the Styrofoam with the machine. – See Picture #11
- 13) Replace the waste container.

Waste Container



Picture #1



Picture #2 – Edge Guide



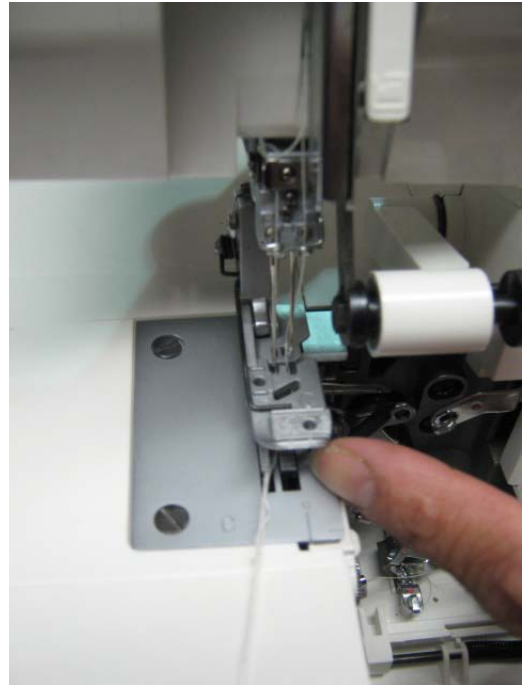
Picture #3 – Cover Stitch
Needle Plate



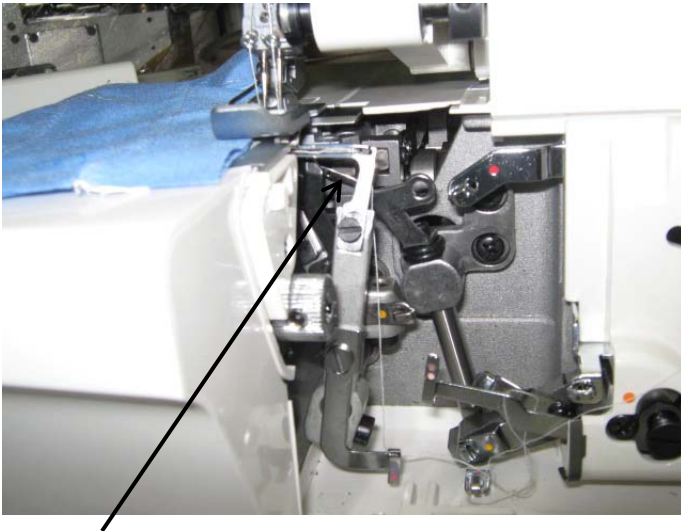
Picture #4 – Needles in
Cover Stitch Mode



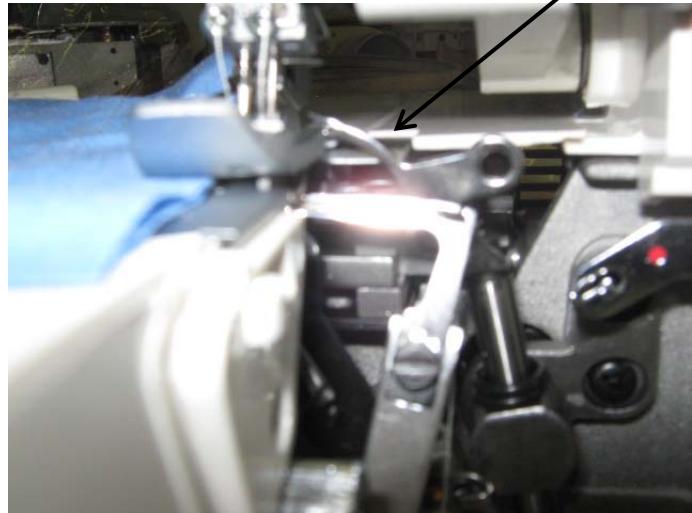
Picture #5 Overlock Needle Plate



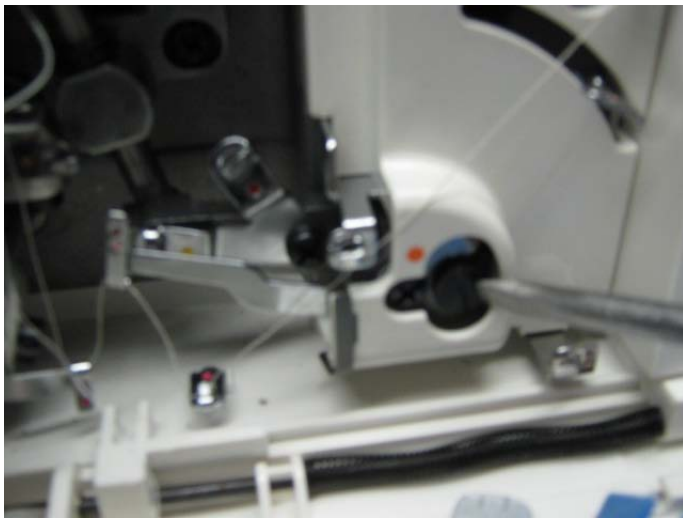
Picture #6 Overlock Presser Foot



Picture #7 Looper in Lowest Position.



Picture #8 Looper in Highest Position



Picture #9 Tighten This Screw



Picture #10 Rotate The Knife



Picture #11 Plastic Chip Guard

Congratulations, Your Machine is adjusted for Overlock Mode.