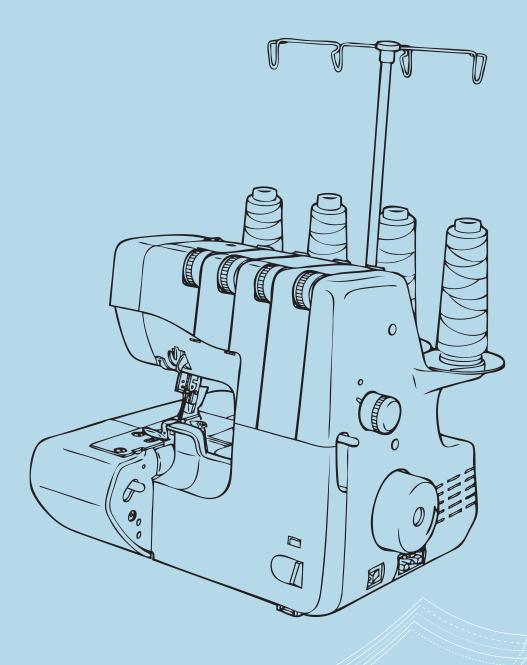
bernette 610D



IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic safety precautions should always be followed, including the following:

Read all instructions before using this sewing computer.

When the sewing computer is not in use, it should be disconnected from the electricity supply by removing the plug from the outlet.

DANGER!

To reduce the risk of electrical shock:

- 1. The sewing computer should never be left unattended when plugged in.
- 2. Always unplug the sewing computer from the electrical outlet immediately after using and before cleaning.
- **3.** Always unplug before replacing light bulb. Replace bulb with same type rated 15 watts.

WARNING!

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

- 1. Use the sewing computer only for purposes as described in this manual. Use only attachments/accessory recommended by the manufacturer as contained in this manual.
- 2. Do not allow the sewing computer to be used as a toy. Close attention is necessary when this sewing computer is used by or near children and infirm persons. This sewing computer is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the sewing computer by a person responsible for their safety. Children must be kept under supervision to ensure that they do not play with the sewing computer.
- 3. Never operate this sewing computer if:
 - it has a damaged cord or plug
 - it is not working properly
 - it has been dropped or damaged
 - it has fallen into water

Take the sewing computer to the nearest authorized dealer for examination, repair, electrical or mechanical adjustment.

- **4.** Never operate the sewing computer with any air vents blocked. Keep ventilation openings of the sewing computer free from lint, dust and/or fabric bits.
- 5. Keep fingers away from all moving parts. Special care is required in the needle area of the sewing computer.
- 6. Never drop or insert any objects into any opening on the sewing computer.
- 7. Do not use the sewing computer outdoors.
- 8. Do not operate the sewing computer where aerosol products (spray) or oxygen is being administered.
- **9.** Do not pull or push the fabric while stitching. This may deflect the needle, causing it to break.
- 10. Do not use bent needles.
- **11.** Always use the original stitch plate. The wrong stitch plate can cause needle breakage.
- **12.** To disconnect, turn power switch to «0» (off), then remove the plug from the outlet. Do not unplug by pulling the cord, instead grasp the plug to pull it from the outlet.

- **13.** Turn power switch to «0» (off) when making any adjustments in the needle area, such as changing the needle or the presser foot, etc.
- **14.** Always unplug the sewing computer from the electrical outlet when carrying out cleaning or maintenance work or any other user servicing adjustments mentioned in this manual.
- **15.** This sewing computer is provided with double insulation (except USA and Canada). Use only genuine replacement parts. Please note the advice on the servicing of double-insulated products

DISCLAIMER

No liability will be assumed for any possible damage which arises from misuse of this overlock machine.

This overlock machine is intended for household use only.

FOOT CONTROL

(USA & CANADA ONLY)

Use Matsushita Electric, Model YC-482E with this overlock machine.

POLARIZED PLUGS CAUTION (USA & CANADA ONLY)

This appliance has a polarized plug (one blade wider than the other). To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only 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.

SAVE THESE INSTRUCTIONS!

This appliance complies with EEC Directive 2004/108/EC covering the electromagnetic compatibility.



Environmental Protection

This equipment is marked with the recycling symbol. It means that at the end of the life of the equipment you must dispose of it separately at an appropriate collection point and not place it in the normal domestic unsorted waste stream. This will benefit the environment for all. (European Union only)

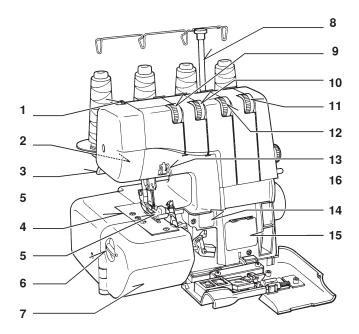
| MACHINE OVERVIE | W AND INSTALLATION | | 4-8 |
|---|--|----------|-------|
| Details of the MachineMachine Setup | 4-5 6-8 | | |
| OPERATING INSTRU | ICTIONS | | 9-13 |
| Basic Operating ProceduresAdjustments and Settings | 9Needle and Thread9-11Needle - Thread Selection Table | 12 13 | |
| SERGER / OVERLOO | K STITCH FORMATIONS | | 14-21 |
| Threading your MachineHelpful Hints | 14-16Trial Sewing - Serger / Overlock17-20 | 21 | |
| PRACTICAL SEWING | â | | 22-24 |
| Basic TechniquesDecorative effects | 22 Differential feed applications23 | 24 | |
| MAINTENANCE | | | 25-27 |
| MaintenanceCleaning and Lubricating | 25 Troubleshooting Guide26 | 27 | |
| OPTIONAL ACCESS | ORIES | | 28-31 |

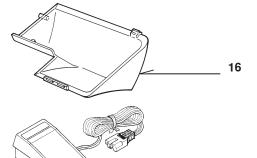
SPECIFICATION OF MACHINE

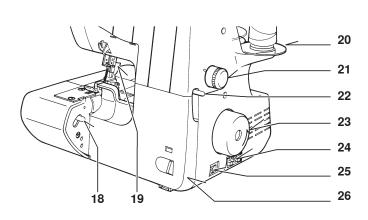
| Number of threads: | 2, 3 or 4 threads |
|------------------------|--|
| Overedge stitch width: | 6 mm (left needle) and 3.8 mm (right needle) |
| Needle: | HA×1SP, HA×1 (130/705 H) |
| Stitch length: | <u>1 - 5 mm</u> |
| Stitching speed: | Up to 1300 stitches per minute |
| Dimensions: | 337 mm (W) × 249 mm (D) × 315 mm (H) |
| Weight: | <u>8.9 Kgs (17.6 lbs)</u> |
| | |

MACHINE OVERVIEW AND INSTALLATION

DETAILS OF THE MACHINE

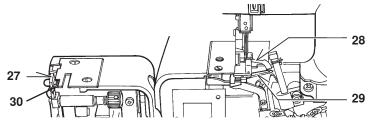






17

WORKING TABLE OPENED

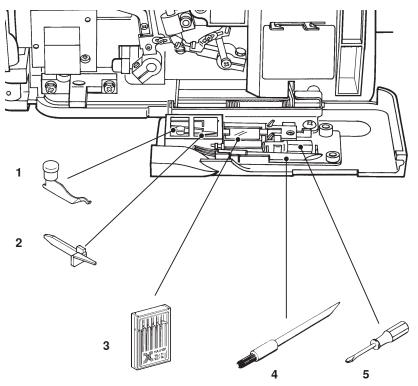


- 1. Foot pressure regulator
- 2. Sewing light
- 3. Presser foot lever
- 4. Needle plate
- 5. Presser foot
- 6. Overedge cutting width dial
- 7. Working table
- 8. Thread guide pole
- 9. Left needle thread tension control
- 10. Right needle thread tension control
- 11. Lower looper thread tension control
- 12. Upper looper thread tension control
- 13. Needle thread guides
- 14. Two thread convertor instruction
- 15. Threading chart
- 16. Lint tray
- 17. Foot control
- 18. Release lever
- 19. Foot release lever
- 20. Spool disc
- 21. Stitch length dial
- 22. Differential feed control lever
- 23. Hand wheel
- 24. Plug connector socket
- 25. Light and power switch
- 26. Front cover
- 27. Moving cutter
- 28. Upper looper
- 29. Lower looper
- 30. Stitch finger (A) (See page 10)

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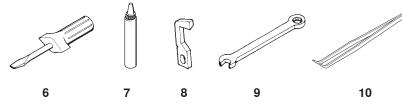
For technical and product improvement reasons, the sewing computer's features, parts and accessory are subject to unannounced changes and alterations at any time. The accessory included can differ from country to country.

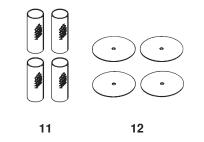
ACCESSORIES



- 1. Two-thread convertor
- 2. Stitch finger (B) (See page 10)
- 3. Needle set
- 4. Brush
- Screw driver (small) 5.
- 6. Screw driver (large)
- 7. Oiler
- Moving cutter
 Spanner

- 10. Tweezers 11. Thread net
- 12. Spool disc
- 13. Spool holder
- 14. Spool cap
- 15. Accessory bag
- 16. Machine cover





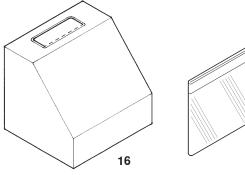


9

9

14

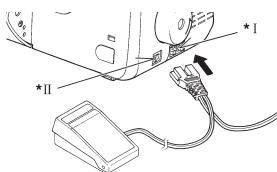
P

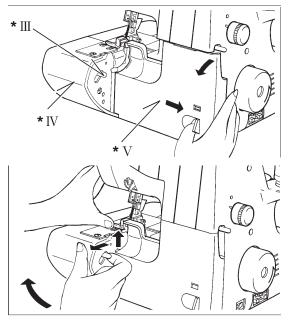




13

MACHINE SETUP





SETTING UP YOUR MACHINE

1. Wipe off excess oil in the needle plate and bed areas.

2. Foot Control

Push foot control plug into connector socket, and connect the power line plug into power supply outlet.

3. Power / Light Switch

Your machine will not operate unless the power/ light switch is turned on. This same switch controls both machine power and sewing light. When leaving the machine unattended, or servicing the machine, remove the power line plug from supply outlet.

4. Opening Front Cover

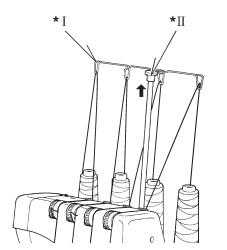
To open front cover, pull it to the right and down towards you.

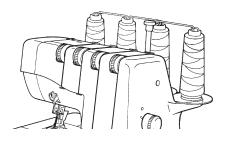
5. Opening Working Table

To open working table, pull the release lever towards you with your right hand, and lift the front of presser foot up with your left hand.

Illustration

- I. Connector socket
- II. Power/light switch
- III. Release lever
- IV. Working table
- V. Front cover





PREPARATION FOR THREADING

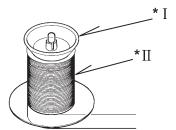
Thread Guide Pole

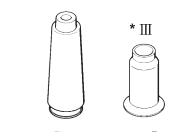
pole to the highest point until you hear it click. Place thread spools on pins and draw thread through thread guides on the pole from rear to front.

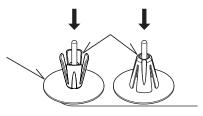
Thread guide of pole can hold thread spools on the spool stand by pulling down the pole as illustrated.

- I. Thread guide
- II. Thread guide pole

MACHINE OVERVIEW AND INSTALLATION 7









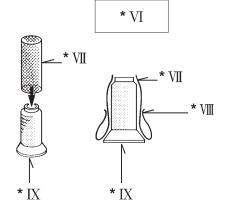
SPOOL DISC AND SPOOL HOLDERS FOR CONE SPOOLS

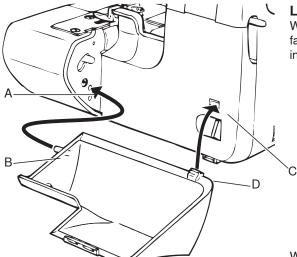
For large cone spools use the spool holders with the wide end at the top, and for small ones, use the same spool holders but with the narrow end at the top.

SPOOL NETS

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

- Spool cap I.
- Domestic cotton reel II.
- Cone type thread III.
- Spool holder Spool disc IV.
- ۷.
- VI. Thread comes off the top
- VII. Net
- VIII. Turn up
- IX. Spool





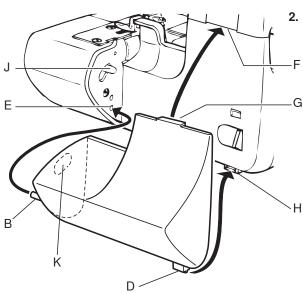
LINT TRAY

When attaching the lint tray onto the position where it may collect scraps of fabric, insert the projection (B) into the upper hole (A) and the projection (D) into the hole (C) at the same time.

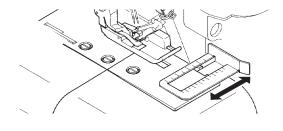
When storing the lint tray onto the machine after completion of work,

1. Insert the projection (B) into the lower hole (E) and release lever (J) into the hole (K) at the same time,

2. Insert the projection (D) into the hole (H) and the projection (G) into the hole (F).



OPERATING INSTRUCTION BASIC OPERATING PROCEDURES



CUTTING WIDTH GAUGE

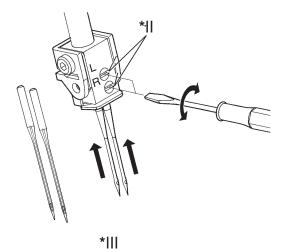
When using cutting width gauge, the fabric is cut down and sewn at same distance from the edge of fabric within the distance of the width adjuster.

1

CHANGING PRESSER FEET

Be sure needle is in the up position. Raise presser foot lever.

- 1. Push foot release lever to remove the foot.
- 2. Place the desired foot on the needle plate aligning needle holes.
- **3.** Lower the presser foot lever and push foot release lever so that the foot holder snaps on the foot.



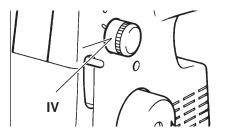
CHANGING NEEDLE

Raise needle bar to its highest point by turning hand wheel towards you, but leave presser foot down. Loosen needle clamp screw to remove the needle, and place new needle with Flat Side Away From You, into the needle bar as far as it will go, and tighten screw.

Illustration

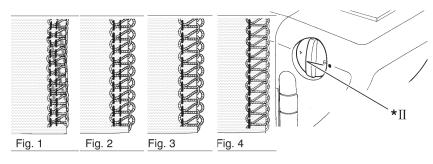
- I. Foot release lever
- II. Needle clamp screw
- III. Flat side away from you.
- IV. Stitch length dial

ADJUSTMENTS AND SETTINGS



STITCH LENGTH

Turn the stitch length dial until the required length is obtained. The higher the number, the longer the stitch. This dial can adjust the stitch length from 1 to 5 mm all so on Position P and R.



ADJUSTING OVEREDGE CUTTING WIDTH

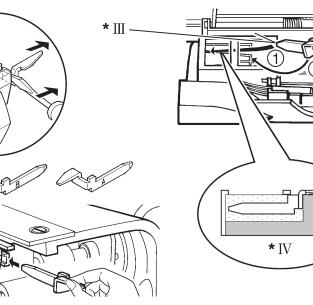
Overedge cutting width can be adjusted from 4 to 7 mm by simply turning overedge cutting width dial according to the kind of fabric.

It is set at standard width of 6 mm when delivered from the factory.

Turn it towards "5" if fabric edge curls while sewing. (Fig. 1)

Turn it towards "7 " if loops hang off the edge. (Fig. 2)

STITCH FINGER (B)

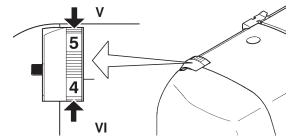


Loops may hang off the edge, when you sew with lightweight fabric using 3 threads (right needle only), and setting cutting width dial at 4 - 5 (Fig. 3). In such a case change the stitch finger (A) to (B) to get neat stitching (Fig. 4).

Illustration

- II. Overedge cutting width dial
- III. Stitch finger (B)
- IV. Cross section

FOOT PRESSURE REGULATOR



Presser foot pressure has been correctly set at the factory, so you do not need to adjust it for most of ordinary sewing. If adjustment is necessary, turn the foot pressure regulator to higher number to increase or to lower number to decrease pressure.

SEWING WITH EXTRA HEAVYWEIGHT FABRIC OR MULTIPLE LAYERS OF FABRIC

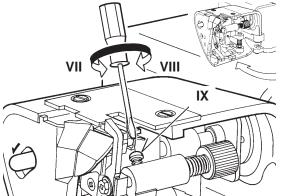
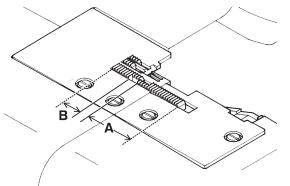


Illustration V. Increase VI. Decrease VII. Tighten VIII. Loosen IX. Screw A wide range of fabric can be overlocked on this machine, but it is recommended to tighten screw as illustrated, when sewing with extra heavyweight fabrics or mulitiple layers of fabric. Open working table for adjustment.

Loosen the screw when sewing with light to normal weight fabric or turning overedge cutting width dial, or otherwise fabric may not be well cut. The machine is set for normal weight fabrics from the factory.

OPERATING INSTRUCTION 11

DIFFERENTIAL FEED



***** I

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The differential feed has two independent feed dogs, one front (A) and one rear (B).

Each feed dog has an individual feed mechanism which enables the feeding of material at a different ratio.

POSITIVE DIFFERENTIAL FEED

WHEN SET FOR POSITIVE DIFFERENTIAL FEED, the front feed dog (A) makes a longer stroke than the rear feed dog (B).

This has the effect of accumulating material under the presser foot to offset the wavering on the fabric.

NEGATIVE DIFFERENTIAL FEED

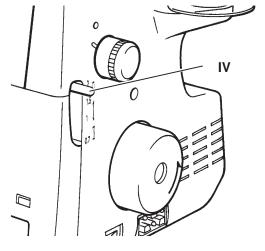
WHEN SET FOR NEGATIVE DIFFERENTIAL FEED, the front feed dog (A) makes a shorter stroke than the rear feed dog (B).

This has the effect of stretching material under the presser foot to offset the puckering on the fabric.

Illustration

- I. Differential feed dogs
- II. Positive differential feed
- III. Negative differential feed
- IV. Differential feed control lever





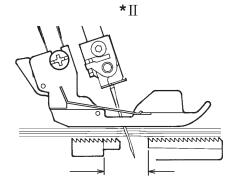
SETTING DIFFERENTIAL FEED

Set by simply moving the differential feed control lever in the direction desired referring to the chart below.

The adjustment can be made between 0.7 (negative effect) and 2 (Positive effect). These settings give the best ratio of feeding. For normal sewing, the lever should be set at 1.

The lever can be reset even while sewing.

| EFFECT AND APPLICATION | TYPE OF FEEDING | SETTING | FEED RATIO REAR/FRONT |
|--------------------------------|----------------------------|---------|--------------------------|
| Waver-free seams, Gathering | Positive differential feed | 1-2 | |
| No differential feed | Neutral feed | 1 | |
| Pucker-free seams | Negative differential feed | 0.7-1 | |



* Ⅲ

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NEEDLE AND THREAD NEEDLE AND THREAD MATCHING

| | Fabric | Thread | Needle |
|----------------|--|--|-----------------------------------|
| | Light weight: Organdy, Lawn, Gingham | Cotton No. 100 | |
| Cotton Linen | Heavy weight: Oxford, Denim, Cotton Gaberdine | Polyester No. 60 - 50 Cotton No. 60 | _ |
| | Light weight: Tropical, Wool, Poplin | Polyester No. 80 Cotton No. 60 | _ |
| Wool | Serge, Gaberdine, Flannel | Polyester No. 80 - 60 Cotton No. 60 | No. 90 (14) |
| | Heavy weight: Velours, Camelhair, Astrakhan | Polyester No. 60 - 50 Cotton No. 60 | for general sewing No. 75 (11) |
| Syntetic Fibre | Light weight: Georgette Crepe, Voile, Satin | Polyester No. 100 - 80 Cotton No.120-80 | for light weight fabrics |
| | Heavy weight: Taffeta, Twills, Denim | Polyester No. 60 Cotton No. 60 | |
| | Tricot | Polyester No. 80 - 60 Cotton No. 80-60 | |
| Knit | Jersey | Polyester No. 60 - 50 Cotton No. 60 | |
| | Wool | Polyester No. 60 - 50 Bulk Nylon | |

Use HA \times 1SP, HA \times 1(130/ 705H) Needles.

Synthetic threads are recommended for ordinary overlocking. Polyester thread, for example, is very useful for different types of fabric.

NOTE :

Keep in mind that the lower and upper loopers will use about twice the amount of thread as the needles. When purchasing thread for sewing, therefore, especially if it is an unusual colour, you should buy sufficient for your requirements.

NEEDLE - THREAD SELECTION TABLE

| N | Number of threads | 4 | | | | e | | | | e | | 5 | |
|----------------|-----------------------------|----------------------|------------------------|-------------------|----------|-----------------|--|------------|--------|-------------------|----------------------------|----------------|--------------|
| Overedge | Overedge cutting width dial | φ | 9 | | 4- | -2- | 4 | 4–6 | 9 | 9 | 9 | -9- | 4–6 |
| Needle to use | nse | Left and Right | Left | Right | Left | Right | | Right | | Left and Right | Γ€ | Left | Right |
| Stitch finger | ler | • | • | • | • | • | | | | • | • | • | |
| Two thread | Two thread convertor | | | | | | | | | • | • | • | • |
| | Left needle thread | 4- | -4- | I | 0 | 1 | I | ı | 1 | -4- | -0 | -4- | ı |
| Tension | Right needle thread | -4- | I | -4- | I | -0 | -4- | -4- | -4- | -4- | I | I | -5 |
| control | Upper looper thread | -4- | -4- | -4- | 4- | 4- | -4- | -4- | -4- | I | I | I | I |
| | Lower looper thread | -4- | -4- | -4- | 7- | 7- | -0 | -4- | -4- | -0 | -4- | -0 | , |
| Stitch len | Stitch length control | 2.5–3.5 | 2.5-3.5 | 3.5 | 3-5 | Ś | 2-2.5 | -R- | -Р- | 2.5–3.5 | 2.5-3.5 | 2–3.5 | 1-2 |
| | Ref. No. | 4-Thread Overlovk | 2 3-Thread Overlock | Overlock WWWWWWWW | 3-Thread | Thread Flatlock | Narrow Ministration of the second sec | Rolled hem | stitch | Stretch | ¹⁰ Particock | 11 2-Thread | Polled hem |
| Reference page | e page | 20 | 18 | 8 | 23 | 6 | | 19 | | 18 | 18, 20 | 23 | 18, 19 |
| | | | | | | | | | | | | | |

NOTE:

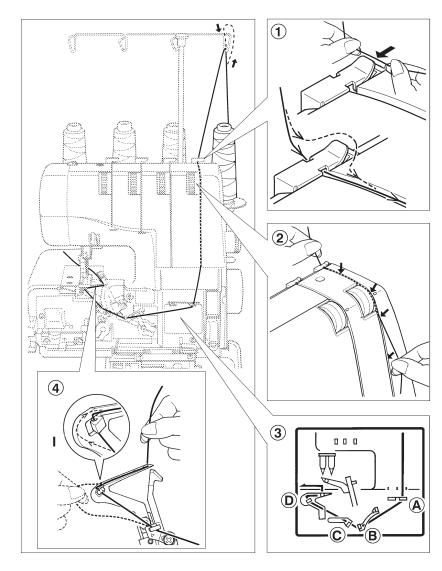
The above settings of tension and overedge cutting width dial are for general guidance. A little fine tuning will improve your stitching in many cases. Following advice helps you. 1. Turn overedge cutting width dial. (See page 10) 2. Adjust needle tensions when you sew thin or thick material. 3. Reduce the tension when you use thick thread.

Incorrect tension setting causes stitch skipping. Adjust the tension setting.
 Tension setting will have problem when needle setting is incorrect.

Try test-sewing with a piece of fabric you are going to use and find the best settings.

13

SERGER / OVERLOCK STITCH FORMATIONS THREADING



Wrong threading may cause skipped stitches, breaking threads, or other problems.

Try to master the correct threading before moving on to test sewing. Threading must be carried out in the sequence of Lower Looper-Upper Looper-Needle.

Open the front cover and the working table. Raise needle to its highest point by turning hand wheel towards you, and raise the presser foot.

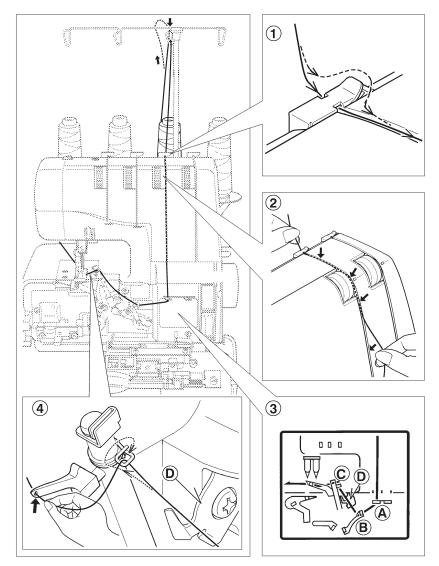
Before re-threading lower looper, remove thread from needle eye first, then re-thread the lower looper. This will prevent tangling.

NOTE:

Thread tension is released when the presser foot is lifted up.

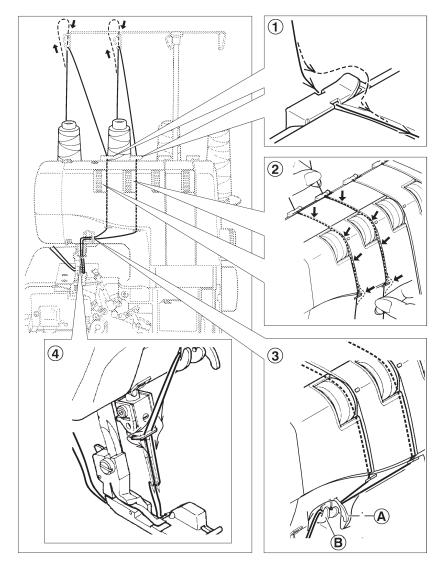
THREADING LOWER LOOPER

- 1. Feed the thread through the thread guide as illustrated
- 2. Pull the lower thread through tension slot. Holding the thread with your left hand, pull down with right hand firmly.
- **3.** Draw the thread through thread guide as illustrated.
- Pass the thread through lower looper eye, and hook it around part (I) as indicated by the arrow. Leave about 4" (10 cm) extra thread.



THREADING UPPER LOOPER

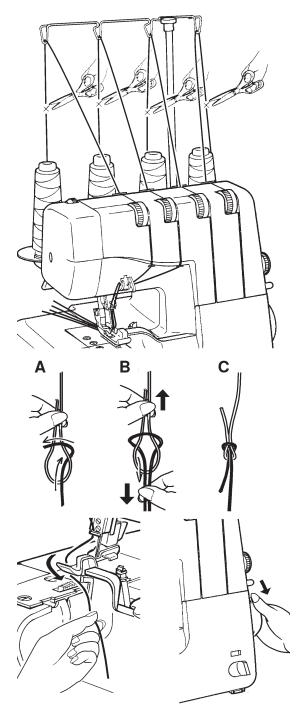
- **1.** Feed the thread through the thread guide as illustrated.
- **2.** Pull the upper thread through the slot. Holding the thread with your left hand, pull down with right hand firmly.
- **3.** Draw the thread through the thread guide as illustrated. When threading according to the instruction, upper looper thread pass the thread guide (A) automatically after rotating hand wheel.
- Pass the thread through wire thread guide and looper eye, leaving an excess length of about 4" (10 cm).



THREADING NEEDLES

- **1.** Feed the thread through the thread guide as illustrated.
- **2.** Draw the needle threads through tension slot. Holding the thread with your left hand, pull down with right hand firmly.
- **3.** Draw the thread through the thread guide as illustrated.
- 4. Thread the needles from front to back through needle eye and pull the threads towards the back passing along the right side of presser foot, leaving an extra length of about 4" (10 cm).

HELPFUL HINTS



REPLACING THREAD SPOOLS

When replacing thread spools, the following steps may be helpful for quick changeover.

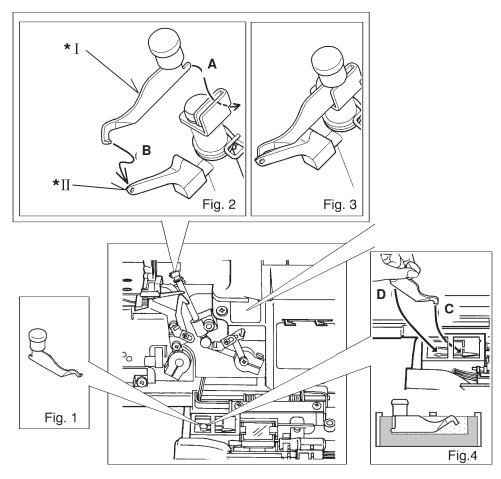
- 1. Cut off existing threads near the spools. Tie the cut ends thread from new spools as illustrated (seamen's knot).
- 2. Raise presser foot
- **3.** Lower needle bar to its lowest position by turning hand wheel AWAY FROM YOU. Carefully pull the existing threads until the connecting knots pass through needle eye and looper eyes.

CUTTING NEEDLE THREAD

Frayed thread may make needle threading difficult. Draw the thread near the thread cutter on the needle plate and push the thread cutter lever or draw the thread passing under the moving cutter and turn hand wheel towards you to obtain clear cut end as illustrated.

THREE-THREAD OVERLOCK WITH ONE NEEDLE

CONVERTING TO TWO-THREAD USE



By threading the LEFT needle only a width of 6 mm will be produced and by threading the RIGHT needle only a width of 3.8 mm will be produced.

Please keep the unused needle on the needle pad as illustrated.

To convert to two thread use, first open the front cover and working table and raise needle to its highest point by turning hand wheel towards you. Remove the right needle and use the left needle.

Please keep the unused needle on the needle pad.

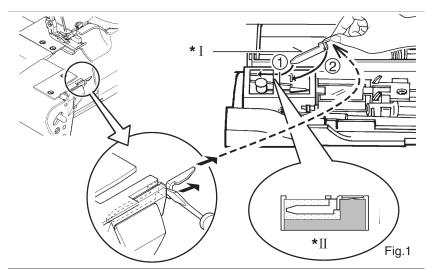
Pull out the converter as shown in Fig. 1.

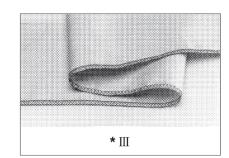
Attach the two-thread converter onto the upper looper as shown in Fig. 2, Fig. 3, making sure that you slide tail end in first (A) then locate hook end into looper hole (B).

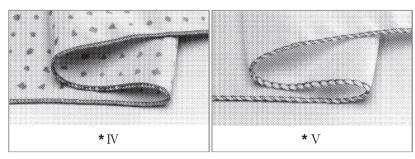
When not using converter, insert it deep and keep as illustrated in Fig. 4.

- I. Two-thread overlock convertor
- II. Upper looper

NARROW, ROLLED HEM AND PICOT STITCH







RECOMMENDED THREAD

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

Also, picot stitch can be produced particularly when sewing on fine 'scarflike' materials. In view of the nature of these hems, they are unsuitable for use on 'hard' or 'heavy' materials.

- 1. Raise the presser foot.
- 2. Open the front cover and working table.
- **3.** Remove the stitch finger from the needle plate by screw driver and keep it in the front cover as illustrated or in the accessory bag.
- 4. Set the machine according to page 21.

NOTE:

- 1. Please use following recommended thread for making ideal seams.
- 2. After finishing, re-set the stitch finger in its place. Please ensure inserting it deep as illustrated in Fig 1.

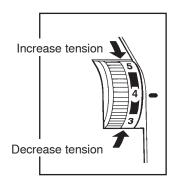
- I. Stitch finger (A)
- II. Cross section
- III. Narrow hem IV. Rolled hem
- V. Picot stitch
- V. PICOL SUICH

| | Narrow overlock edge | Rolled | l edge |
|-------------------|-----------------------------------|--------------------|------------------|
| | with Three Threads | with Three Threads | with Two Threads |
| Thread for needle | Polyester, Nylon, Silk No. 50-100 | Nylon I | No. 100 |
| Upper looper | Polyester, Nylon, Silk No. 50-100 | | |
| Lower looper | Bulk nylon (less stretchable) | Bulk nylon (les | ss stretchable) |

ADJUSTING THREAD TENSIONS

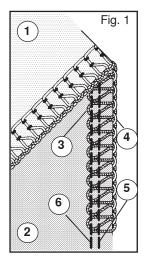
Turning tension dial to a higher number gives a tighter thread tension. Turning tension dial to a lower number gives a looser thread tension. The higher the number, the tighter the tension.

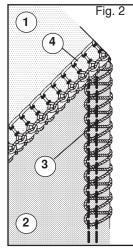
Test thread tensions on a scrap you plan to use.



FOUR-THREAD USE

Just right.

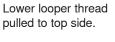


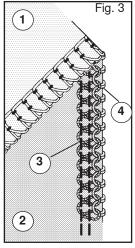


Upper looper thread

pulled to under side.

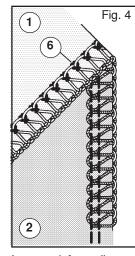
Increase upper looper thread tension and/ or decrease lower looper tension.





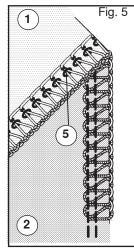
Increase lower looper thread tension and/or decrease upper looper tension.

Left needle thread loose and visible on under side of fabric.



Increase left needle thread tension and/or decrease either or both looper threads.

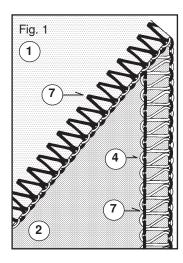
Right needle thread loose and visible on under side of fabric.



Increase right needle thread tension.

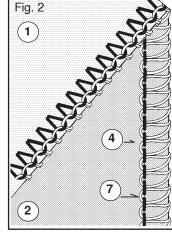
TWO-THREAD USE

Just right.



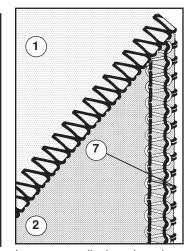
under side. Fig. 2

Lower looper thread pulled to



Decrease needle tension.

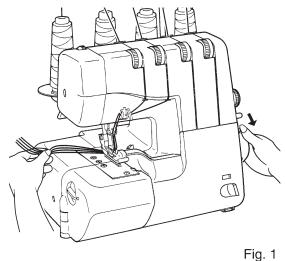
Needle thread pulled to top side.



Increase needle thread tension.

- Under side 1
- Top side 2
- Upper looper thread 3
- Lower looper thread 4
- Right needle thread 5
- Left needle thread 6
- Needle thread 7

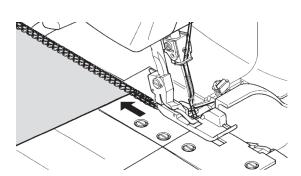
TRIAL SEWING - SERGER / OVERLOCK



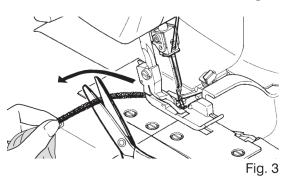
After threading is completed, use a scrap of fabric that you plan to sew and test to sew in the following order.

- 1. Gently pulling all the threads to the left, lower the presser foot. Rotate the hand wheel towards you a few times to see if the lock stitches are properly formed.
- **2.** Start the machine at low speed and feed in test fabric under the presser foot by slightly pushing it forward. (This can be done with the presser foot down on most fabrics except bulky materials).
 - Guide the fabric gently as machine automatically feeds the material.
- **3.** Check thread tensions by test sewing on spare fabric. (See page 13)
- **4.** At fabric end, carry on running machine at low speed, gently pulling the fabric towards the back, until about 5 to 6 cm of extra lock stitches are produced without fabric.

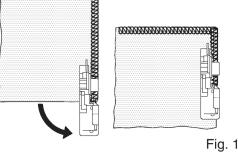
Cut thread by with scissors.







PRACTICAL SEWING BASIC TECHNIQUES



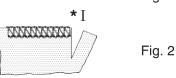


Fig. 3

TURNING OUTSIDE CORNERS WITHOUT CUTTING THREADS

- **1.** When you reach the fabric edge, stop stitching with the needle above the fabric.
- **2.** Raise the presser foot and gently pull on the thread chain just enough to clear the stitch finger.
- **3.** Turn the fabric, lower the presser foot and begin stitching in the new direction. Fig. 1.

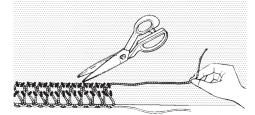
NOTE:

When overlocking and trimming at the same time, cut the fabric along the new stitching line for about 3 cm, before turning the fabric. Fig. 2.

TURNING CURVED EDGES

For inside curves, guide fabric gently with trimming line of the fabric under the right front of the presser foot (or a little to the left), applying pressure at point A in the direction of the arrow with your left hand, and at the same time applying a little opposite pressure at point B with your right hand. Fig. 3.

For outside curves place under the presser foot in a similar manner but applying the pressure in the opposite directions. Fig. 4.



REMOVING STITCHES FROM SEWN FABRIC

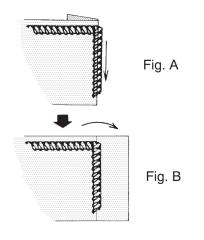
To remove stitches already sewn, snip off needle thread(s) at intervals and pull out looper thread(s).

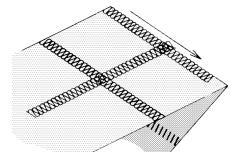
Illustration I. Cut!

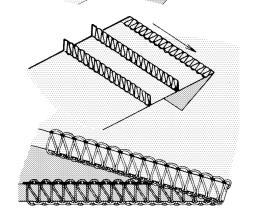
Fig. 4

PRACTICAL SEWING 23

DECORATIVE EFFECTS







In addition to normal overlocking which is fully described in this instruction book, your machine can also be used for a number of decorative applications such as decorative top-stitching, butted seams, pin-tucking or making lengths of decorative braid. See below.

Decorative top-stitching – using only two threads or using three threads (flat seam)

Fold fabric along the line to be top-stitched and sew over the folded edge, making sure not to cut into the fold. Fig. A.

Unfold the fabric, pull the ends of the threads to the underside and press flat.

The final appearance can be enhanced by using buttonhole twist or embroidery thread on the lower looper.

Butted seams – using only two threads or using three threads (flat seam) Place two pieces of fabric wrong sides together and overlock along the edge. Unfold and press.

By using different coloured fabrics and thread a pleasing 'patchwork' effect can be achieved.

Pin-tucking – using three threads

Fold fabric along a line to be pin-tucked and overlock sew along the folded edge, making sure not to cut into the folded edge of the fabric. (See page 25). Pull ends of threads to the underside and press.

Making decorative braid – using three threads

Overlock over a cord or braid, holding it carefully with both hands, making sure not to cut the edge. (See page 25).

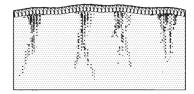
NOTE :

- ^{*} If you use blind hem foot (See page 28), decorative stitch is made easily.
- ** Reduce the upper looper tension when you use thick thread.

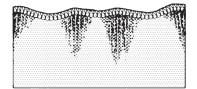
DIFFERENTIAL FEED APPLICATIONS



***** I













Please refer to page 11 DIFFERENTIAL FEED.

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

1. Puckering

Puckering tends to occur on woven or sheer fabrics. To obtain pucker-free seams, set the differential feed control dial at less than 1.

2. Wavering

Wavering tends to occur on knitted or stretchable fabrics. To obtain waverfree seams, set the differential feed control dial at more than 1.

3. Gathering

Differential feed makes gathering easier on lightweight fabric. Use it on waistlines, sleeve heads, sleeve bottoms and ruffles, etc. Set the differential feed control dial between 1.5 and 2 to obtain the best gathering effect for your use.

NOTE

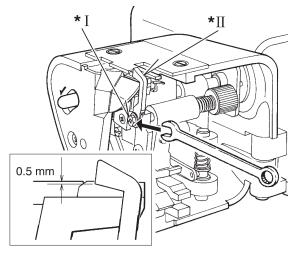
The exact adjustment depends on the thickness and elasticity of fabric. Even the stitch length can influence the setting. The longer the stitches, the more the fabric is contracted.

Always do a test run with a piece of actual fabrics you use and find the best settings.

- I. Pucker or waver-free seams
- II. Puckering
- III. Wavering
- IV. Gathering

MAINTENANCE

REPLACING MOVING CUTTER



DISENGAGING MOVING CUTTER

Replace a moving cutter if it becomes blunt as follows. A spare cutter will be found in your accessories.

NOTE:

You should not need to replace fixed cutter, which is made of a special hard alloy material.

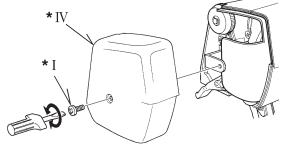
FIRST REMOVE THE POWER PLUG FROM THE SUPPLY SOCKET-OUTLET.

- 1. Loosen screw and take out moving cutter.
- 2. <u>Close the working table.</u> Lower cutter driving arm to its lowest position by turning the hand wheel towards you by hand. <u>In this position</u>, set replacement cutter in position and secure it with screw, ENSURING THAT THE EDGE OF THE MOVING CUTTER IS APPROXIMATELY 0.5 MM BELOW THE SURFACE OF THE FIXED CUTTER.

If you want to sew without cutting, open the working table and disengage the moving cutter by pushing the cutter release knob to the left and turning it towards you as illustrated.

Ensure that fabric edge is not wider than overedge width selected or upper looper and needle can be damaged.

REPLACING THE SEWING-LIGHT BULB

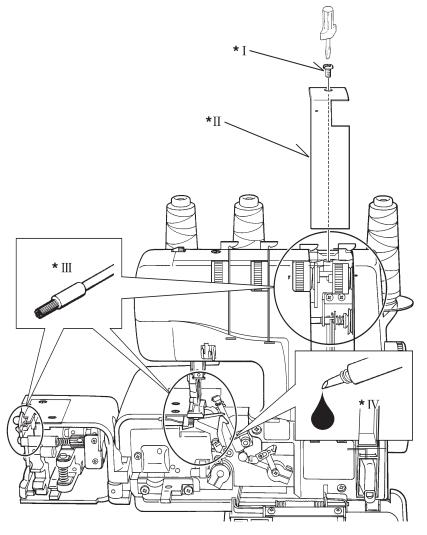


Switch machine off before removing the face cover.

Remove screws and face cover as illustrated. Push thermal screen aside to access the bulb. Unscrew and remove defective bulb. After replacing the bulb, push thermal screen back into its basic position. Refit face cover and retighten screws.

- I. Screw
- II. Moving cutter
- III. Cutter release knob
- IV. Face cover

CLEANING AND LUBRICATING



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

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

- 1. Open the front cover and working table. Using the brush provided, remove dust and lint that have accumulated.
- **2.** Apply a few drops of oil to the points indicated by arrows.

ALWAYS USE A GOOD QUALITY Overlock machine OIL.

3. Remove front cover with screw driver and remove dust and lint of inside with the brush.

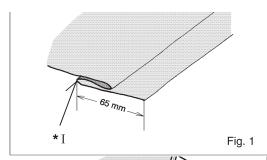
- I. Screw
- II. Front cover III. Brushing
- IV. Oil

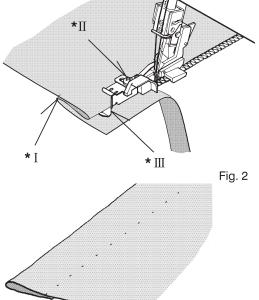
TROUBLESHOOTING GUIDE

| PROBLEM | PROBABLE CAUSE | CORRECTION |
|--------------------|---|---|
| Irregular Stitches | Incorrect Thread Tension(s). Incorrect size Needle. Improper Threading. Pulling Fabric. Loose Presser Foot. | Reset Thread Tension(s). Choose correct size Needle for Thread and Fabric. Re-thread Machine. Do not pull Fabric; guide it gently. Reset Presser Foot. |
| Breaking Needle | Pulling fabric. Incorrect size Needle. Incorrect setting of Needle. Loose Presser Foot. | Do not pull Fabric; guide it gently. Choose correct size Needle for Thread and Fabric. Reset Needle. Reset Presser Foot. |
| Puckering | Incorrect Thread Tension(s). Bent or blunt Needle. Differential feed is set incorrectly. | Reset Thread Tension(s). Insert new Needle. Set it at less than 1. |
| Wavering | Differential feed is set incorrectly. | Set it at 1 or at more than 1. for knitted fabrics. |
| Skipping Stitches | Incorrect size Needle. Improper Threading. Bent or blunt Needle. Incorrect setting of Needle. | Re-thread Machine. Choose correct size Needle for Thread and Fabric. Insert new Needle. Reset Needle. |
| Breaking Threads | Improper Threading. Bent needle. Thread Tension(s) too tight. Incorrect setting of Needle. Thread Spool tangled. Thread Guide Pole not extended. | Re-thread Machine. Insert new Needle. Reset Thread Tension(s). Reset Needle. Reset Spool properly. Fully extend Guide Pole. |

OPTIONAL ACCESSORIES

BLIND HEM FOOT





Blind hem feet are obtainable as an optional extra and are available in two sizes. 0.5 for fine/medium fabrics and 1.0 for medium/heavy fabrics.

Fit the appropriate foot. Set the stitch length 4 - 5.

Now proceed as follows:

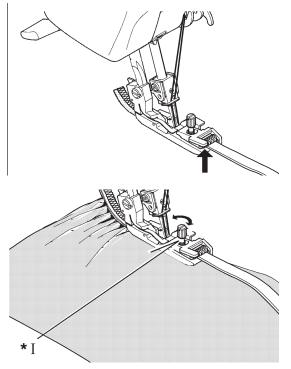
- 1. Turn up the hem to the required depth and press. Fold the hem back against the 'right' side of the garment, creating a 'soft' fold on the 'wrong' side of the fabric see Fig. 1.
- 2. Place fabric under the presser foot with the 'wrong' side up. Feed the folded edge through the guide in the front of the foot and lower the presser foot lever. Try a stitch (or several stitches) on a spare piece of the actual fabric, and adjust the guide so that the needle just catches the fold. Adjust the guide by means of the small screw on the top of the foot see Fig. 2.
- 3. When correctly set, sew the hem. The outside edge will be cut away by the machine see also Fig. 2. After completion, open out and press again. The stitches should be almost invisible on the 'right' of the fabric see Fig. 3.

- I. Final hem length
- II. Screw
- III. Guide

Fig. 3

OPTIONAL ACCESSORIES 29

ELASTICATOR



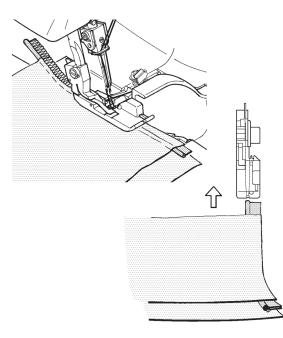
An elastic foot is available as an optional extra. This foot will guide your elastic and at the same time apply pressure to the lastic with our specially designed tension controlled roller, llowing you to control the elasticity while sewing.

- 1. Replace regular foot with elasticator.
- 2. Set stitch length at about 4.
- **3.** Slightly raise the roller portion of the foot and insert elastic tape between the roller and the lower support bar as illustrated, until the edge of elastic reaches the feed dog teeth.
- **4.** Sew the elastic for about one inch (3 cm) or more to confirm if the tape is properly sewn.
- 5. Insert the fabric under the foot and sew together with the elastic.
- 6. Check the stitches to make sure they are correct and adjust tension (tighter) if necessary.
- 7. Adjust the tension control of the roller so that the desired finish can be obtained.
 - Tighter tension of the roller gives more elasticity of the fabric after it is sewn.
 - Weaker tension of the roller gives less elasticity of the fabric.
- 8. When the right side of elastic is not even with right side of fabric, remove the stitch finger (A) or change it to stitch finger (B). Decrease the number of overedge cutting width dial. Three threads overlock with right needle or left needle is recommendable in accordance with the size of elastic.

Illustration

I. Tension control of roller

PIPING FOOT

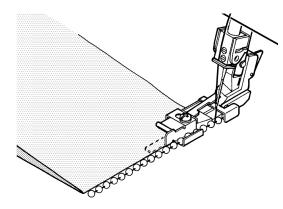


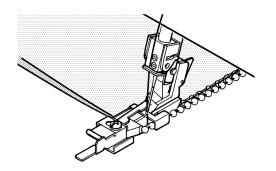
Prepare a piece of ready-made piping (corded bias fold tape). Place folded piping between seam edges with fold extending beyond seam line toward garment. Pin or baste, and stitch the seam.

Braid or ribbon may also be used, either flat or folded braid can be used in straight seams.

Use for decorating edges of collars, cuffs, pockets, etc.

PEARL FOOT





1. PEARLS ALONG AN EDGE:

- Set for left needle (remove right needle) 3-thread overlock.
- Set tensions as follows:
 - Left needle:
 - Upper looper: 1 - 2
 - Lower looper: 7 - 8

SEW:

- Remove regular foot; replace with pearl foot.
- Remove stitch finger as you did for a rolled edge.

4

- Swing cutter away (p. 27) to lowest position, close front covers.
- Raise the needle to it's highest position.
- Place pearls in the channel on the right side of the foot with 2" of pearls extending behind foot.
- Take one stitch with the hand wheel to secure the pearls.
- Follow edge of fabric along fabric guide.
- Sew pearls on edge of fabric.
- Return cutter to original position when finished.

2. PEARLS SEWN WITH A FLAT LOCK STITCH:

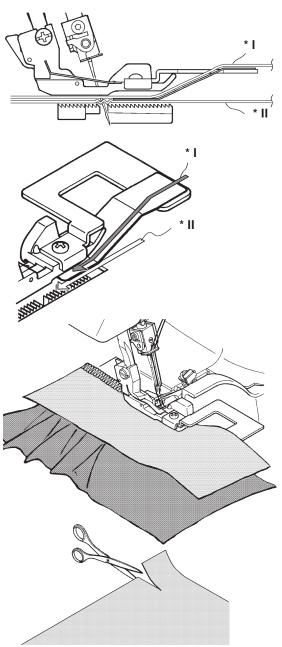
FABRIC:

- Medium weight woven 2 or 4 mm pearls
- Set for a 3-thread flat lock, left needle only. See pg. 13

SEW:

- Remove regular foot; replace with pearl foot.
- Insert small stitch finger.
- Swing cutter (p. 27) away to lowest position.
- Raise needle to it's highest position.
- Place pearls in channel on right side of the foot with 2"of pearls extending behind foot.
- Take one stitch with the hand wheel to secure the pearls.
- Sew pearls on with the left needle just catching the fold of the fabric.
- Pull flat lock open.

GATHERING/SHIRRING FOOT



1. Tension settings for gathering:

4

- Left needle
- Right needle 4 4
- Upper looper Lower looper
- 4
- Differential feed 2.0 4
- Stitch length
- 2. Replace regular presser foot with gathering foot. Clip both fabric layers approximately 5/8"(1.5 cm.) inside and 1 1/2"(4 cm.) down. Lift front of presser foot to place fabric.
- 3. Place fabric to be gathered underneath the presser foot. Place fabric which will remain straight between presser foot and lower metal piece. Push clipped portion through slot in foot. Lower presser foot.
- 4. Turn handwheel to make 4 5 stitches in the fabric, making sure to catch both upper and lower layers.
- 5. Serge. Use both hands to guide fabric, one on the under layer of fabric. Keep in mind that the lower piece of fabric will move faster as it is gathering than the top piece.

- Fabric to be straight Ι.
- Fabric to be gathered П.

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