

CARINA OverLock₁₃₀₀



DEAR CUSTOMER

We congratulate you on your purchase of your sewing machine. You have bought a quality product which has been made with great care and, if serviced right, will serve you well for many years. Before using it for the first time, we ask you to read the manual at hand carefully, paying special attention to the safety instructions. Persons who are not familiar with this manual must not use the appliance.

In this manual, you will find everything there is to know about possible applications of your sewing machine. Should any questions remain unanswered, we kindly ask you to turn to your dealer.

We wish you much pleasure and great sewing successes!
Questions concerning machine, service and customer care

Toll-free customer service number:

00800 333 00 777

service-en@carina-service.eu

Service address:

Crown Technics GmbH Service Center
c/o Sertronics GmbH
Ostring 60
DE-66740 Saarlouis
Germany

Explanation of the safety instructions

- **DANGER** indicates a hazardous situation which, if not avoided, will result in immediate death or serious injury.
- **WARNING** indicates a hazardous situation which, if not avoided, could result in death or serious injury.
- **ATTENTION** indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.
- **NOTE** indicates information that is important but not related to potentially dangerous situations.

Intended use

The sewing machine is **intended**:

- for use as a movable device.
- for sewing typical household textiles.
- only for private household use.

The sewing machine is **not intended**:

- to be installed at a fixed location
- for outdoors
- for commercial or industrial use.

IMPORTANT SAFETY INSTRUCTIONS

Read all the safety instructions and information before using the sewing machine.

- Failure to comply with the safety instructions and information may cause electric shock, fire and/or serious injury.
- Keep all safety instructions and information in a suitable place near the appliance for future reference.
- Also hand over the user manual when passing on the device to third parties.
- The term "device" used in the safety instructions refers to the sewing machine (with power cord and foot controller).

Safety at the workplace

- This sewing machine is intended for household use only.
- Be sure to use the sewing machine in the temperature range from 5°C to 40°C.
- If the temperature is excessively low, the sewing machine can fail to operate normally.
- Do not install the device at an altitude of more than 2000 meters above sea level.
- Do not use the device if it is wet or in humid environment. Always use the device only in dry rooms.
- Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
- Place the sewing machine on a stable, flat, dry and stable work surface.
- Keep your work area clean and well lit. Disorder or unlit work areas can lead to accidents.
- Install the power cord so that there is no tripping hazard.
- Keep children and other persons away while using the device. You may lose control of the device if distracted.

Electrical safety

- Only use the original power cord supplied with the sewing machine. Other power cords may damage the device. Do not use the supplied power cord with other devices.
- Make sure that the mains voltage corresponds to the voltage indicated on the labelling of the device (devices labelled 230V or 240V can also be operated with 220V).
- To disconnect, turn switch to the off ("O") position, then remove plug from outlet.
- The connection plug of the device must fit into the socket. The plug must not be modified in any way. Unmodified plugs and matching sockets reduce the risk of electric shock.
- Avoid body contact with grounded surfaces such as pipes, heaters, cookers and refrigerators. There is an increased risk of electric shock if your body is grounded.
- Keep the unit away from rain or wet conditions. The ingress of water into the device increases the risk of electric shock.
- Do not misuse the power cord to pull the plug out of the socket. When unplugging, grab the plug and not the power cord.
- Keep the power cord away from heat, oil, sharp edges or moving parts of the device. Damaged or tangled power cord increases the risk of electric shock.

Safety of persons

- Be careful, pay attention to what you are doing and use common sense when working with the device. Do not use the device when you are tired or under the influence of drugs, alcohol or medication. A moment of carelessness when using the device can lead to serious injury.
- Avoid unintentional starting up. Make sure the device is switched off before connecting it to the power supply, picking it up or carrying it. If you connect the device to the power supply when it is switched on, this can lead to accidents.
- Wear appropriate clothing. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothing, jewelry or long hair can be caught by moving parts.

Careful handling and use of the device

- Do not overload the device. Use the designated sewing machine for your sewing work. With a suitable sewing machine you will work better and safer in the specified power range.
- Do not use a device whose switch is defective. A device that can no longer be switched on or off is dangerous and must be repaired.
- Never place anything on the foot controller.
- Unplug the device from the wall socket before making any adjustments to the device, changing accessories or putting the device away. This precaution prevents the device from starting unintentionally.
- Keep the unused device out of the reach of children. Do not allow people who are not familiar with the device or have not read these instructions to use the device. Sewing machines are dangerous when used by inexperienced people.
- Maintain the device with care. Check whether moving parts of the device function properly and are not jammed, whether parts are broken or damaged in such a way that the function of the device is impaired. Have damaged parts repaired before using the device. Many accidents are caused by poorly maintained sewing machines.

DANGER! DANGER OF LIFE AND ACCIDENT FOR TODDLERS AND CHILDREN!

- Cleaning and user maintenance must not be carried out by children without supervision.
- Use the device, accessories or insertion tools (e.g. needles, bobbins, etc.) according to these instructions. Take into account the working conditions and the activity to be carried out. Use of the device for applications other than those for which it is intended may lead to dangerous situations.
- Never sew with a damaged needle plate as this can cause needle to break.

Safety instructions for service

- Have the device repaired only by qualified personnel and only with original spare parts. This ensures maintaining the safety of the unit.
- Always unplug before relamping. Replace bulb with same type rated 15 watts.
- The device may only be used with a specific foot controller and/or power cord in order to avoid hazards. If the foot controller and/or power cord is damaged or defective, it must be replaced by the manufacturer, its customer services or a similarly qualified person.
- Always unplug sewing machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.

Safety instructions for all applications

- This sewing machine is to be used for sewing household textiles. Observe all warnings, instructions, illustrations and data provided with the device. Failure to observe the following instructions may result in electric shock, fire and/or serious injury.
- This device is not intended for processing other materials (e.g. leather, canvas, sailcloth and similar heavy fabrics). Applications for which this device is not designed pose a risk; there is a danger of injury.
- Do not use any accessories that are not specifically intended and recommended for this device by the manufacturer. Just because you can attach the accessory to your device does not guarantee safe use.
- Keep other people at a safe distance from your work area.
- Keep the power cord away from moving accessories.

General

- This device can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the device in a safe way and understand the hazards involved. Children must not play with the device.

DANGER! DANGER OF LIFE AND ACCIDENTS FOR TODDLERS AND CHILDREN!

- Never leave children unattended with the packaging material. The packaging material poses a choking hazard. Children often underestimate the dangers. Always keep children away from the packaging material. This device is not a toy.
- Always disconnect the power plug before making any changes to the settings or changing accessories.

- 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 sewing machine to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
- Never operate the device if the ventilation openings are blocked. Keep the ventilation openings of the device and foot controller free of lint, dust and fabric waste.
- Never drop or insert any object into any opening.
- Always turn off the device when performing adjustments or work in the area of the needle, such as threading or changing needle, threading or changing bobbin, changing the presser foot and so on.

Accessories

- Crown Technics GmbH can only guarantee the proper functioning of the device if the appropriate accessories are used.
- Only use the original power cord supplied with the sewing machine. Other power cords may damage the device. Do not use the supplied power cord with other devices.

Before use

Obtaining practical information is recommended before using the device for the first time. If you are not familiar with the operation of sewing machines, we recommend that you attend an introductory course.

Always check that the mains voltage matches the voltage indicated on the labelling of the device.

During use

1. Check the power cord for damage before use. If the power cord is damaged, replace it with an original cord that is only available from the manufacturer or its customer services.
2. Never leave the device unattended when it is switched on. Unplug the device if you leave it unattended to avoid injury from accidental switch-on.
3. Keep body parts, hair, clothing and gloves away from moving parts. Make sure that you do not come into contact with the running needle.
4. Do not continue to use worn, damaged or bent needles.
5. Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
6. If the power cord is damaged or cut during work, do not touch the power cord but disconnect the power plug immediately.
7. Do not continue to use the device if the power cord is damaged; replace it with a new original power cord. Other power cords may damage the device.
8. In the event of an electrical or mechanical malfunction, switch off the device immediately and disconnect the power plug.

After use

When leaving the sewing machine, immediately disconnect the mains plug from the socket. Disconnect the mains plug from the socket before carrying out maintenance and cleaning work.

Selection of an installation site

Avoid exposing the device to extremely dusty, dirty or greasy areas such as kitchens, garages or boiler rooms. Dust and grease can affect the operation. Do not install in damp or wet rooms such as bathrooms. Always install the device in dry rooms only. Do not install in areas where the temperature is below 5°C or above 40°C.

CAUTION – Moving parts -To reduce risk of injury, switch off before servicing. Close cover before operating machine

TABLE OF CONTENTS

1. KNOWING YOUR MACHINE

Specification of the machine	2
Unboxing	2
Identification chart	3
Accessories	4
Setting up your machine	5
Preparation for threading	6-7
Lint tray, Cutting width gauge	8
Thread cutter, Changing presser feet	8
Changing needle, Needle thread and fabric chart	9

2. STARTING TO SEW

Threading your machine	10-12
Helpful hints	13
Cutting needle thread	13
Testing stitch overlock stitches	14
Setting chart	15
Three-thread overlock with one needle	16
Converting to two-thread use	16
Narrow and rolled hem, picot stitch	17
Adjusting thread tensions	18
Adjusting stitch length, Adjusting overedge cutting width, Stitch finger(B)	19
Differential feed	20-21
Foot pressure regulator	21
Sewing with extra heavyweight fabric or multiple layers of fabric	21
Basic techniques	
Turning outside corners without cutting threads	22
Turning curved edges, Removing stitches from sewn fabric	22
Corded overlock	23
Decorative effects	24
Differential feed applications	25

3. CARING FOR YOUR MACHINE

Replacing moving cutter, Disengaging moving cutter	26
Cleaning and oiling	27

4. CHECKING PERFORMANCE PROBLEMS

5. DISPOSAL / ENVIRONMENTAL PROTECTION

6. EXPLANATION OF THE SYMBOLS

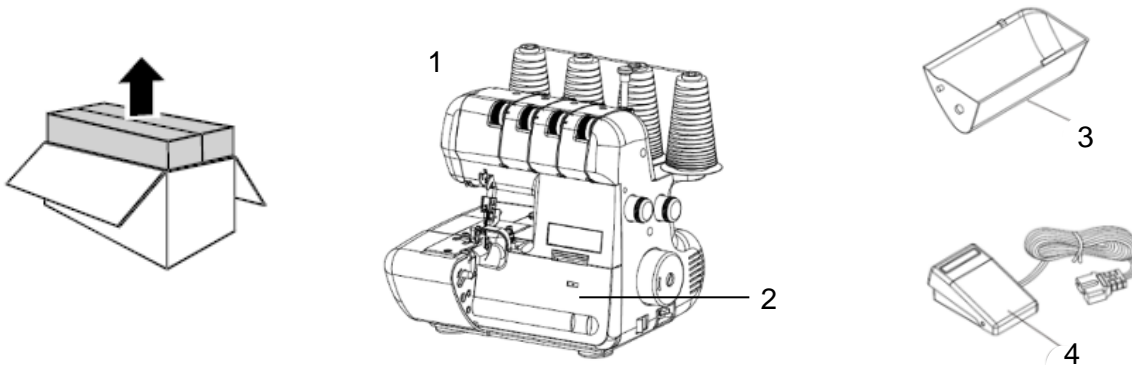
7. INDEX

1. KNOWING YOUR MACHINE

SPECIFICATION OF THE MACHINE

MODEL	CARINA OverLock1300
Number of threads	2, 3 or 4 threads
Overedge stitch width (Max.)	7mm (left needle) and 3.8mm (right needle)
Needle	HA1×SP, HA ×1(130/705H)
Stitch length	1-5mm
Stitching speed	Up to 1100 stitches per minute
Dimensions	340 mm(W) ×250mm(D)×315mm(H)
Weight	8.9kg

UNBOXING

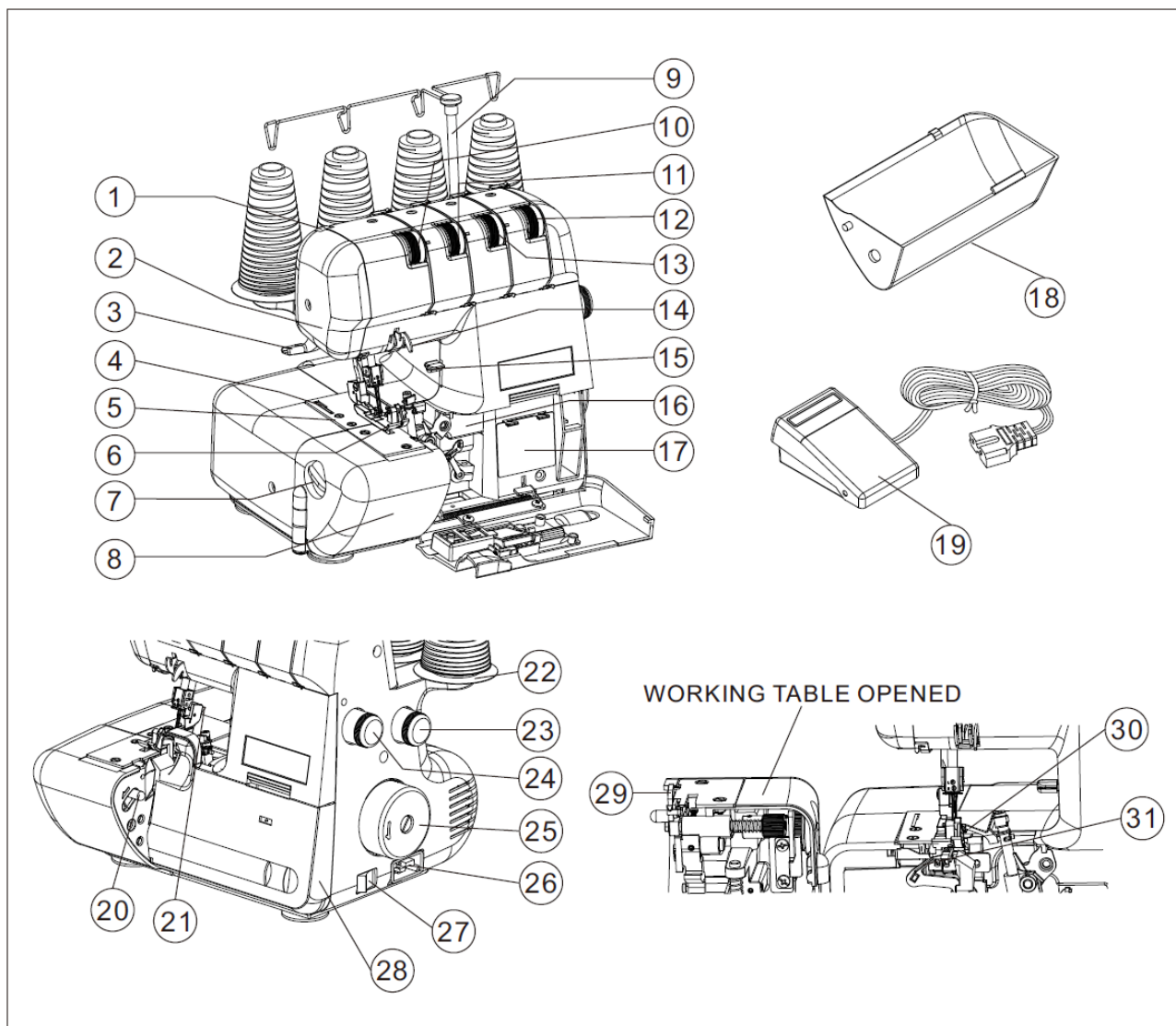


- Carefully remove the sewing machine from the packaging
- After unboxing, please check that the following parts are included::
 1. Overlock sewing machine with threads threaded
 2. Accessories
 3. Lint tray
 4. Foot control
- Check that the main voltage corresponds to the appliance voltage specified on the rating plate of the appliance.
Destroy all plastic bags, as these could become dangerous toys for children!

Tip:

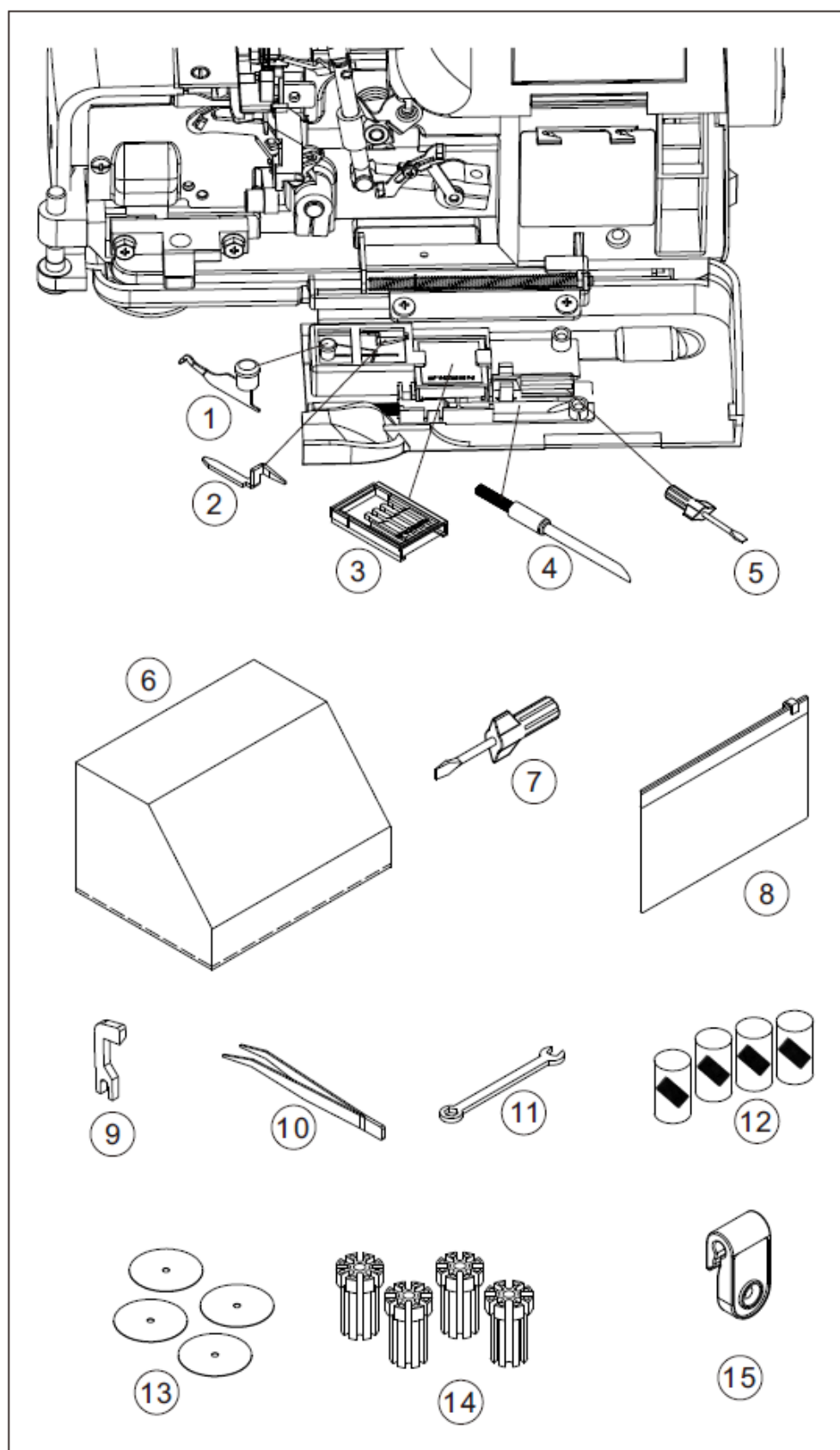
- Keep the packaging to store the appliance if you do not use it all year round or for later transportation (e.g. for removals, servicing, etc.).

IDENTIFICATION CHART



- | | |
|---|--------------------------------------|
| 1. Foot pressure regulator | 16. Two thread convertor instruction |
| 2. Sewing light | 17. Threading chart |
| 3. Presser foot lever | 18. Lint tray |
| 4. Thread cutter | 19. Foot control |
| 5. Needle plate | 20. Release lever |
| 6. Presser foot | 21. Foot release lever |
| 7. Overedge cutting width dial | 22. Spool disc |
| 8. Working table | 23. Differential feed control dial |
| 9. Thread guide pole | 24. Stitch length dial |
| 10. Left needle thread tension control | 25. Hand wheel |
| 11. Right needle thread tension control | 26. Plug connector socket |
| 12. Lower Looper thread tension control | 27. Light and power switch |
| 13. Upper looper thread tension control | 28. Front cover |
| 14. Needle thread guides | 29. Moving cutter |
| 15. Thread cutter lever | 30. Upper looper |
| | 31. Lower looper |

ACCESSORIES



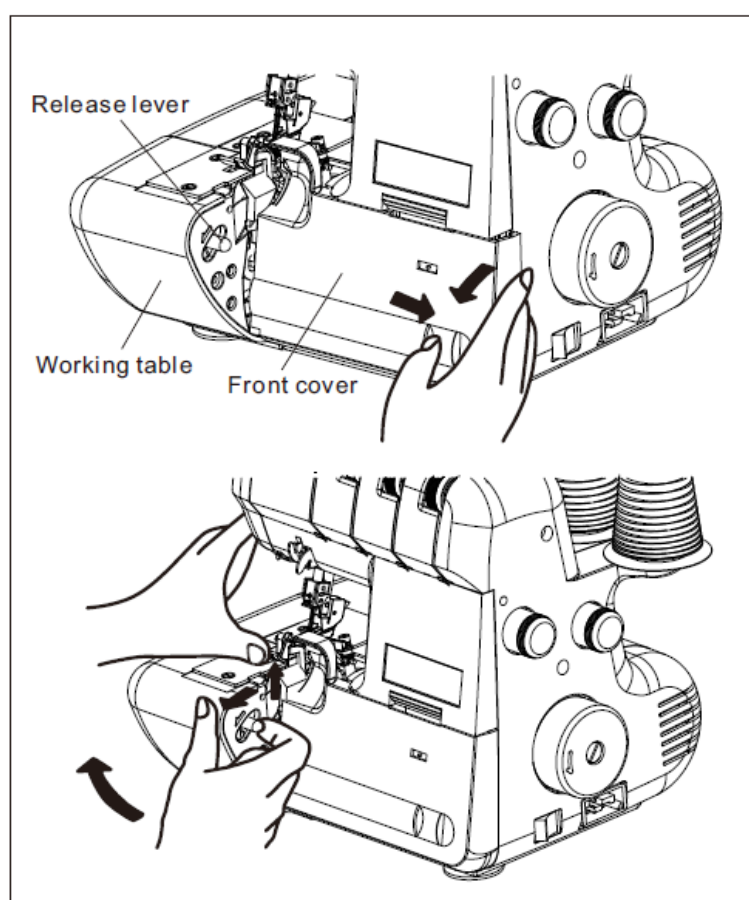
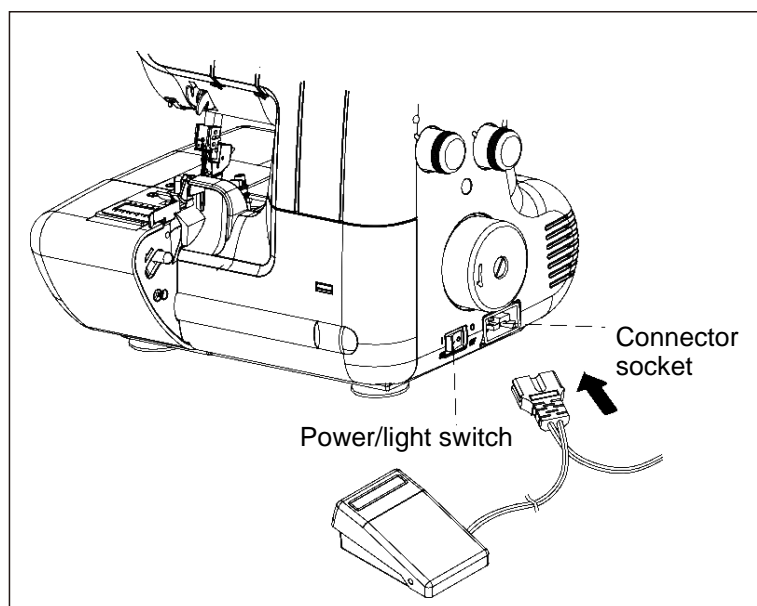
1. Two-thread convertor
2. Stitch finger (B)
3. Needle set (option)
4. Brush (option)
5. Screwdriver (small)
6. Machine cover
7. Screwdriver (large)
8. Accessory bag
9. Moving cutter
10. Tweezers
11. Spanner
12. Thread net
13. Spool disc
14. Spool holder
15. Cord guide

Optional

For optional accessories, please check our spare parts shop www.home-sewing.com

SETTING UP YOUR MACHINE

1. Wipe off excess oil in the needle plate and bed areas.
2. SELECTION OF AN INSTALLATION SITE
 - Avoid exposing the device to extremely dusty, dirty or greasy areas such as kitchens, garages or boiler rooms. Dust and grease can affect the operation.
 - Do not install in damp or wet rooms such as bathrooms. Always install the device in dry rooms only.
 - Do not install in areas where the temperature is below 5°C or above 40°C.
3. MAKE SURE THAT
 - the power cord is unplugged from the socket when the sewing machine is not in use.
 - you contact a qualified electrician if you have any doubts about connecting the sewing machine to the power supply.
 - the power plug is pulled out of the socket when you are not using the power supply.
 - the sewing machine is only used with the appropriate ELECTRONIC foot controller.
4. FOOT CONTROL
Push foot control plug into connector socket and connect the power line plug into power supply outlet.
5. 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.
6. OPENING FRONT COVER
To open front cover, pull it to the right and down towards you.
7. 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.

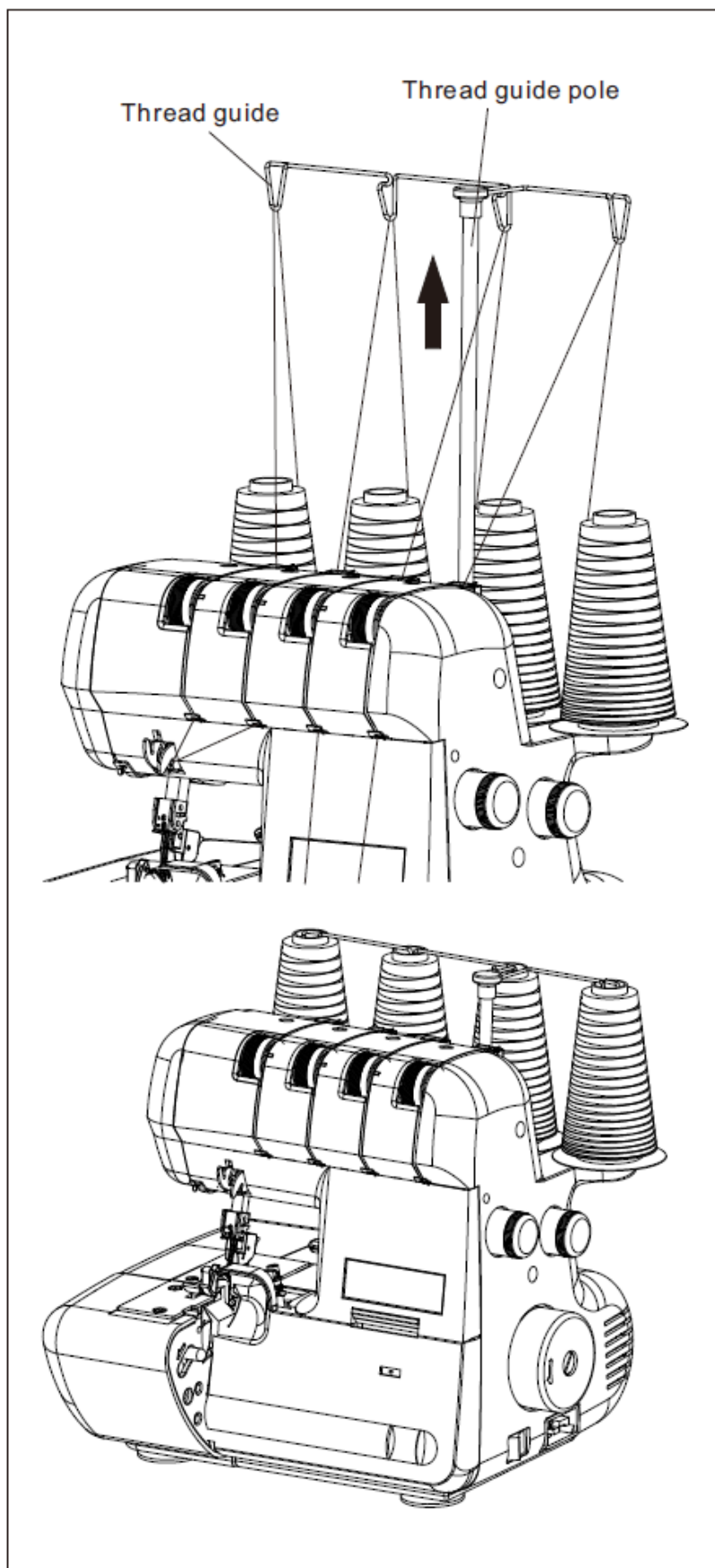


PREPARATION FOR THREADING

THREAD GUIDE POLE

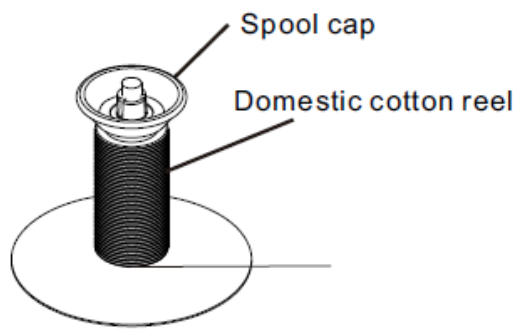
Pull up thread guide pole to the highest point until you hear it click.

Place thread spools on pins and draw thread through thread guides on the pole from rear to front.



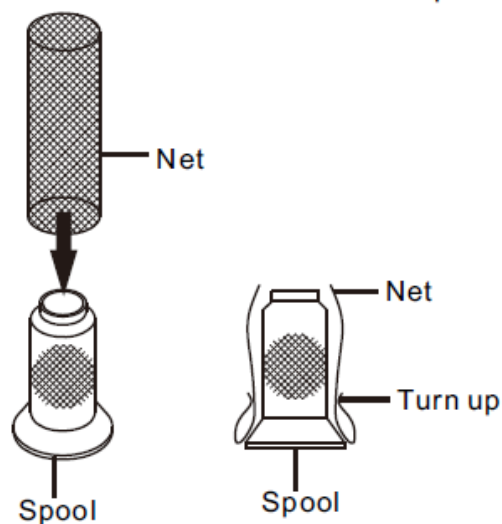
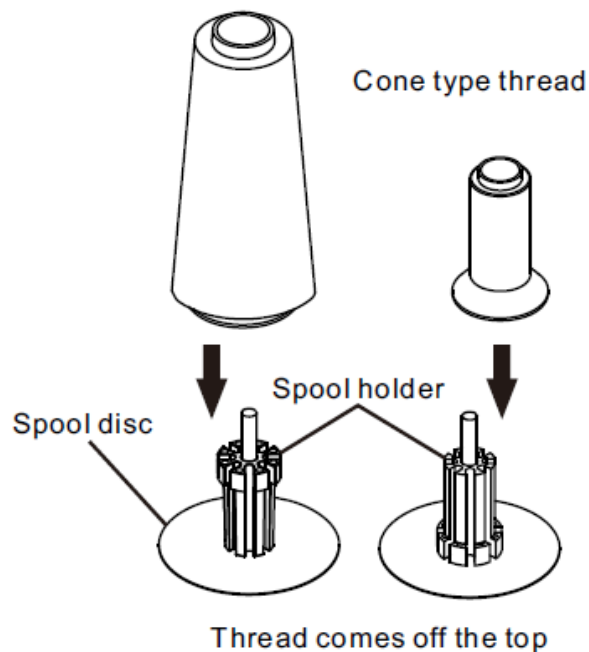
Thread guide of pole can hold thread spools on the spool stand by pulling down the pole as illustrated.

SPOOL CAPS FOR DOMESTIC TYPE SPOOLS



SPOOL DISC AND SPOOL HOLDERS FOR CONE SPOOLS

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

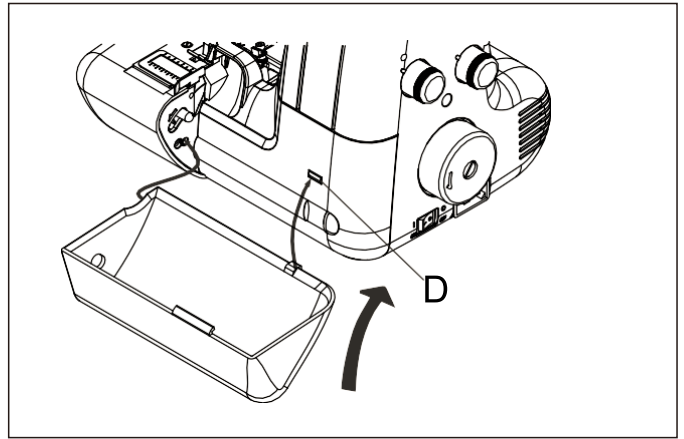


SPOOL NETS

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

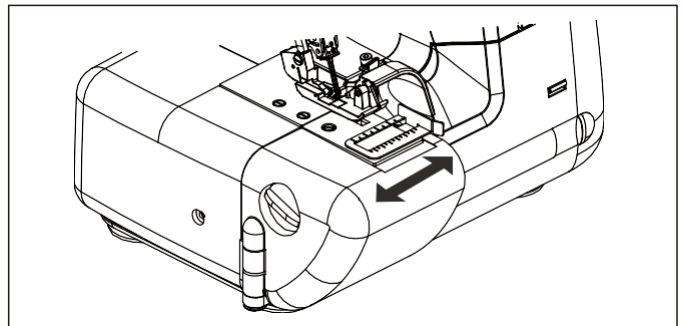
LINT TRAY

With the lint tray located in this position it will collect all your waste materials.
After completion of work, remove the lint tray.



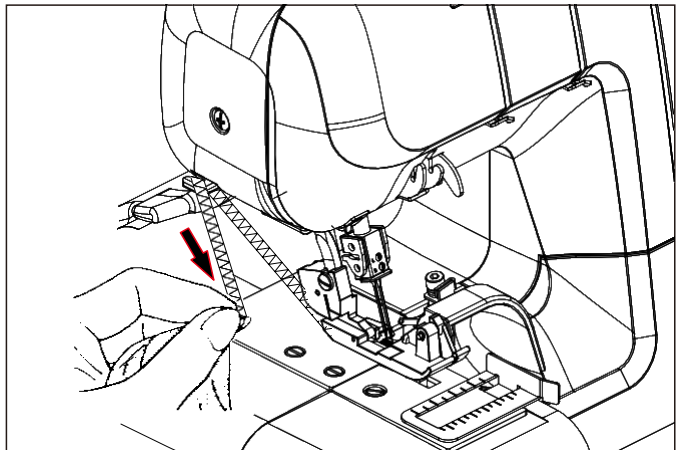
CUTTING WIDTH GAUGE

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 adjusted.



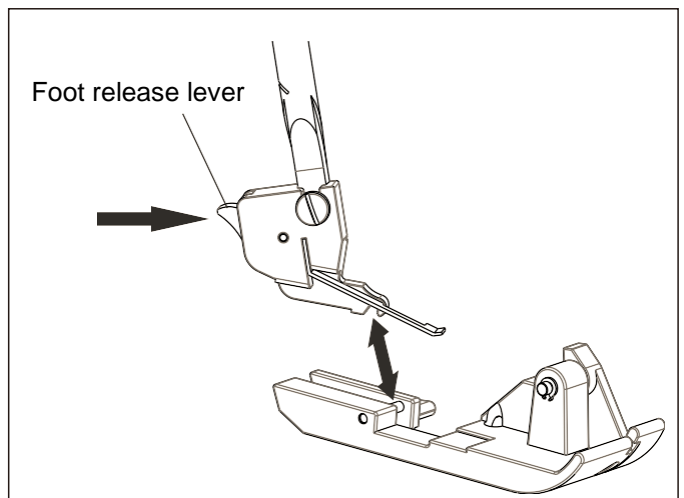
THREAD CUTTER

Thread cutter is built in face cover. Draw materials to the rear and cut off excess thread with the thread cutter located on the bottom of face cover as shown.



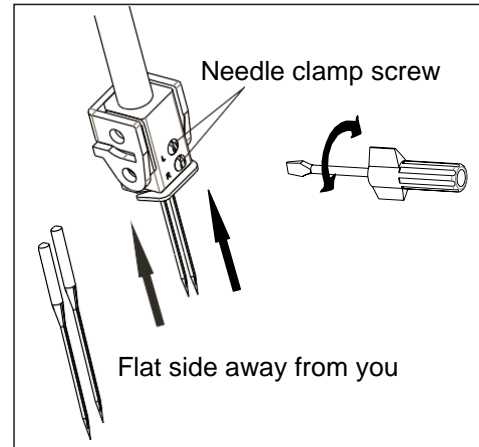
CHANGING PRESSER FEET

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.



NEEDLE, THREAD AND FABRIC CHART

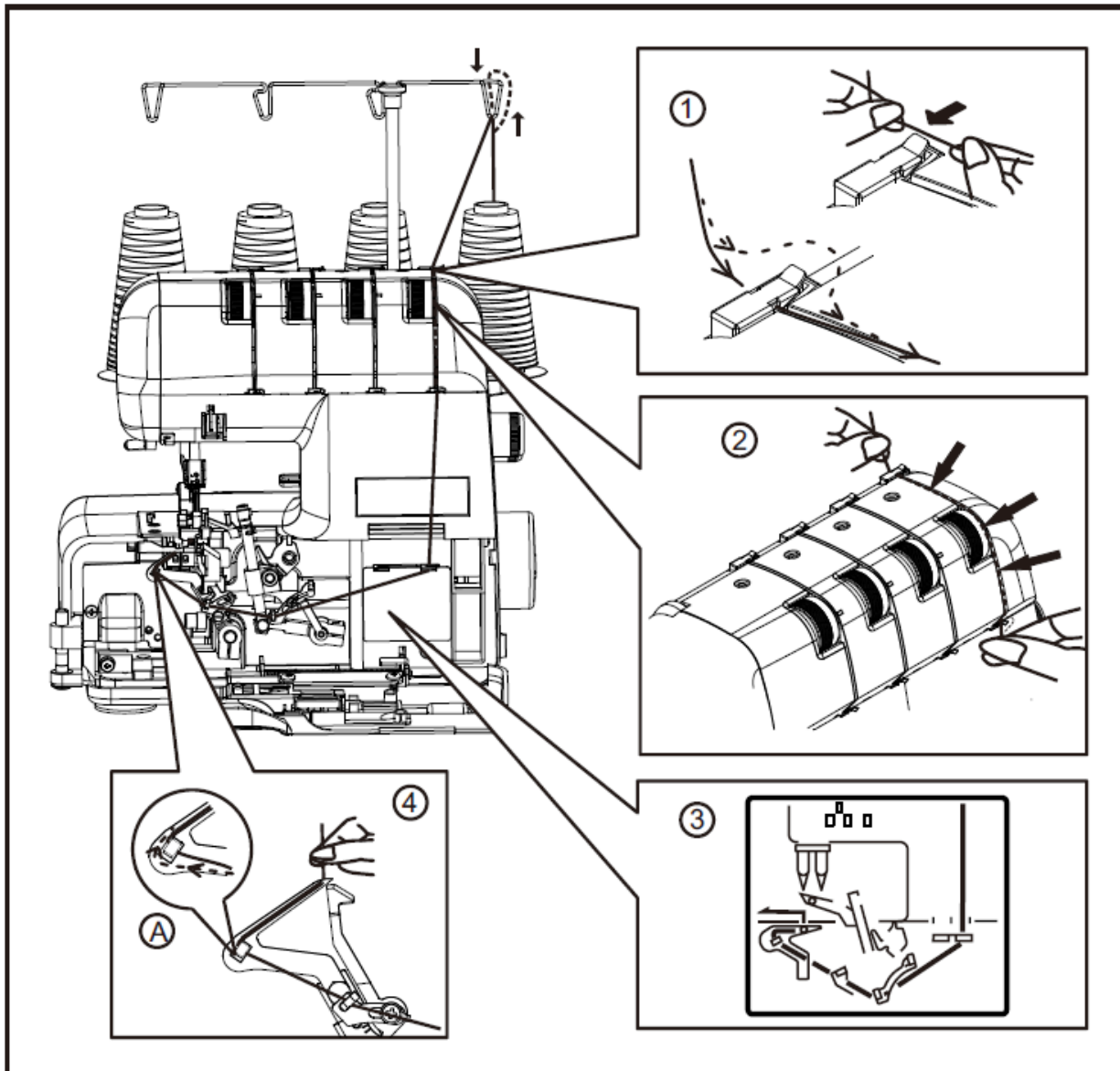
Use HA x1 SP, HA x1 (130/705H) Needles.

FABRIC		THREAD	NEEDLE
COTTON LINEN	Light weight: Organdy, Lawn, Gingham	Cotton No.100	90(14) for general sewing 75(11) for light weight fabrics
	Heavy weight: Oxford, Denim, Cotton Gabardine	Polyester No.60-50 Cotton No.60	
WOOL	Light weight: Tropical, Wool, Poplin	Polyester No.80 Cotton No.60	
	Serge, Gabardine, Flannel	Polyester No.80-60 Cotton No.60	
	Heavy weight: Velours, Camelhair, Astrakhan	Polyester No.60-50 Cotton No.60	
SYNTHETIC FIBRE	Light weight: Georgette Crape, Voile, Satin	Polyester No.100-80 Cotton No.120-80	
	Heavy weight: Taffeta, Twills, Denim	Polyester No.60 Cotton No.60	
KNIT	Tricot	Polyester No.80-60 CottonNo.80-60	
	Jersey	Polyester No.60-50 Cotton No.60	
	Wool	Polyester No.60-50 Bulk Nylon	

* 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.

STARTING TO SEW



THREADING YOUR MACHINE

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 the needle to its highest point by turning the hand wheel towards you and raise the presser foot.

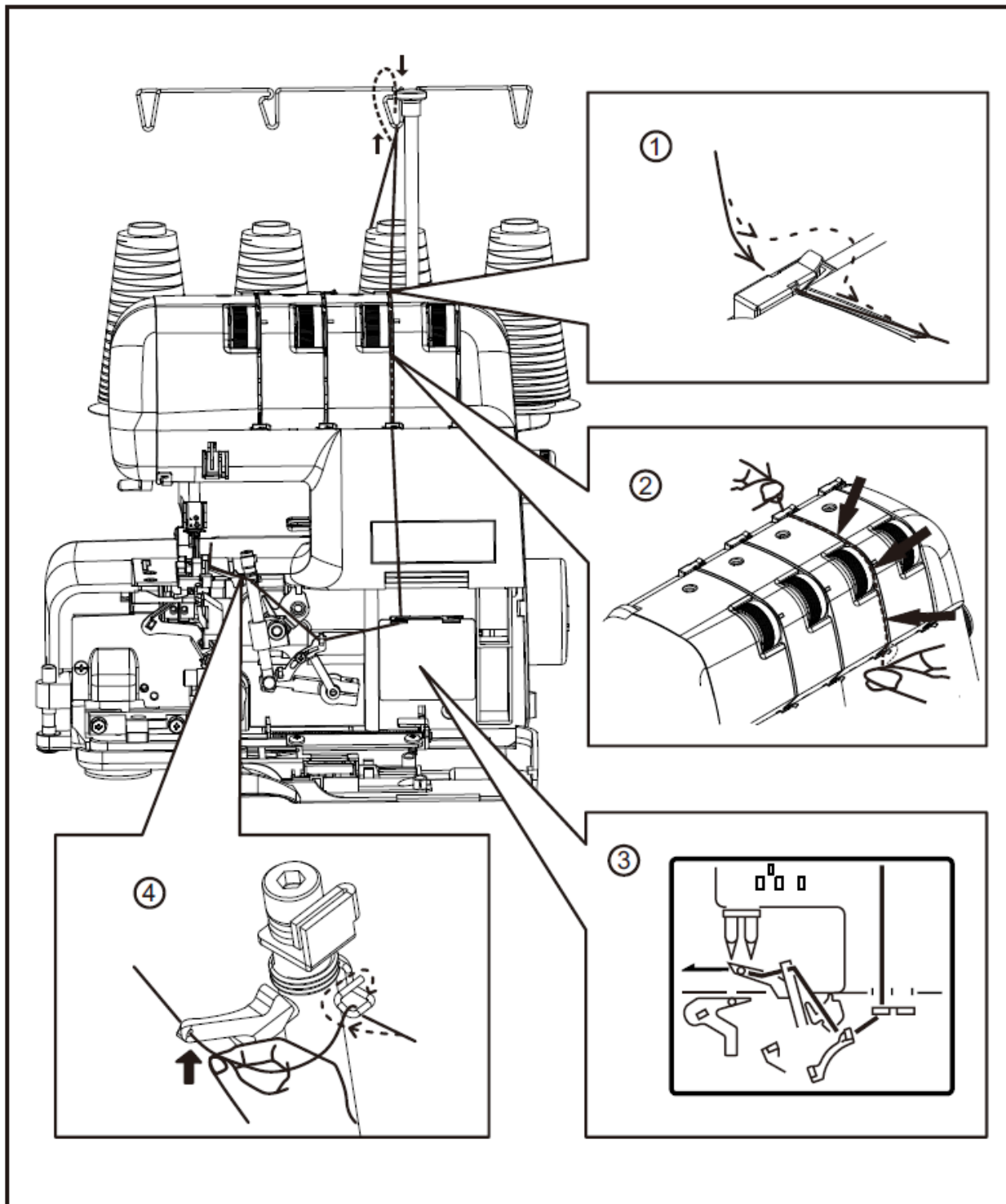
Before re-threading the lower looper, remove the thread from the needle eye first, then re-thread the lower looper. This will prevent tangling.

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

STEP 1

THREADING LOWER LOOPER

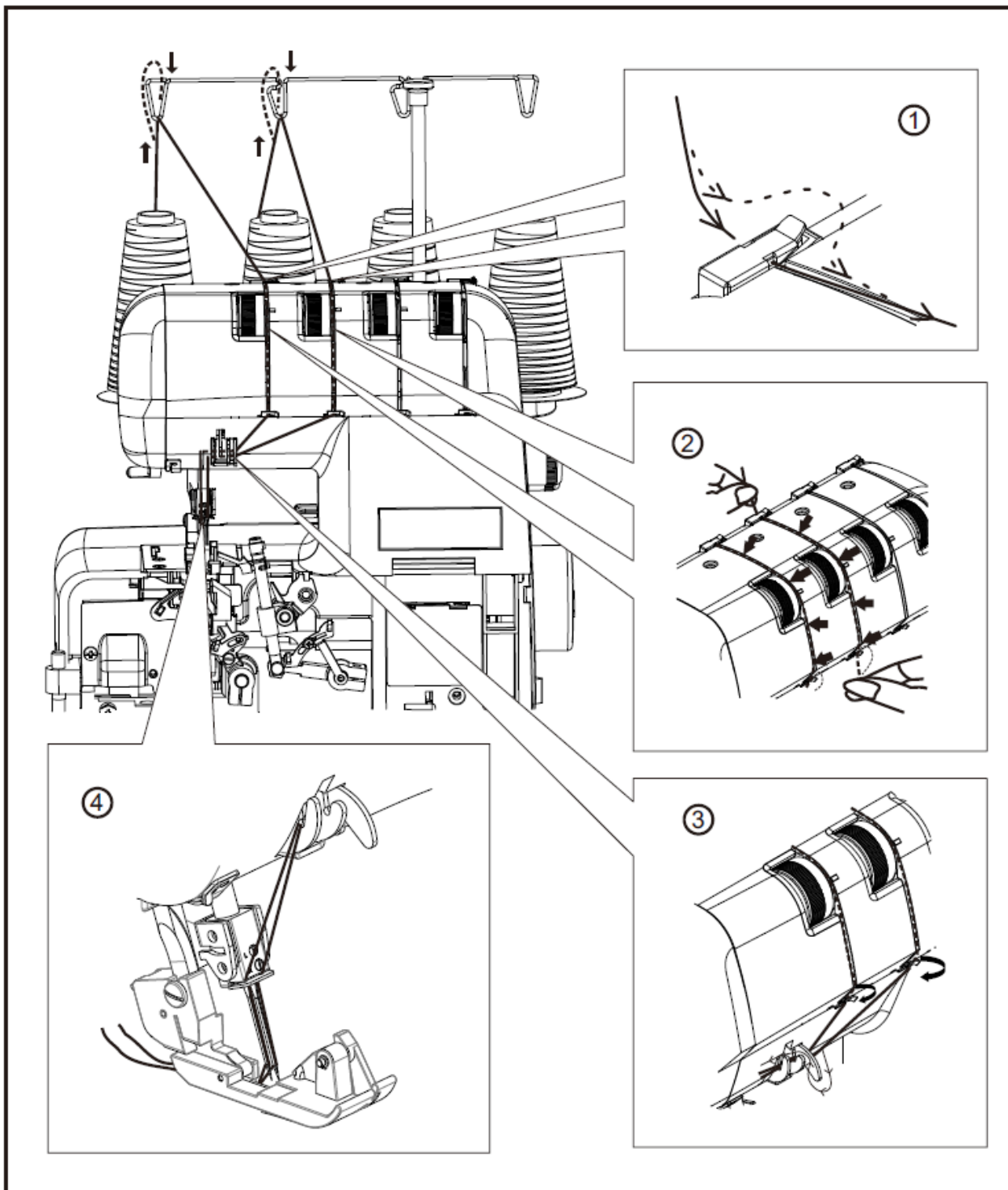
1. Feed the thread through the thread guide as illustrated.
2. Pull the lower thread through the tension slot. Holding the thread with your left hand, pull down with your right hand firmly.
3. Draw the thread through the thread guide as illustrated.
4. Pass the thread through the lower looper eye and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



STEP 2

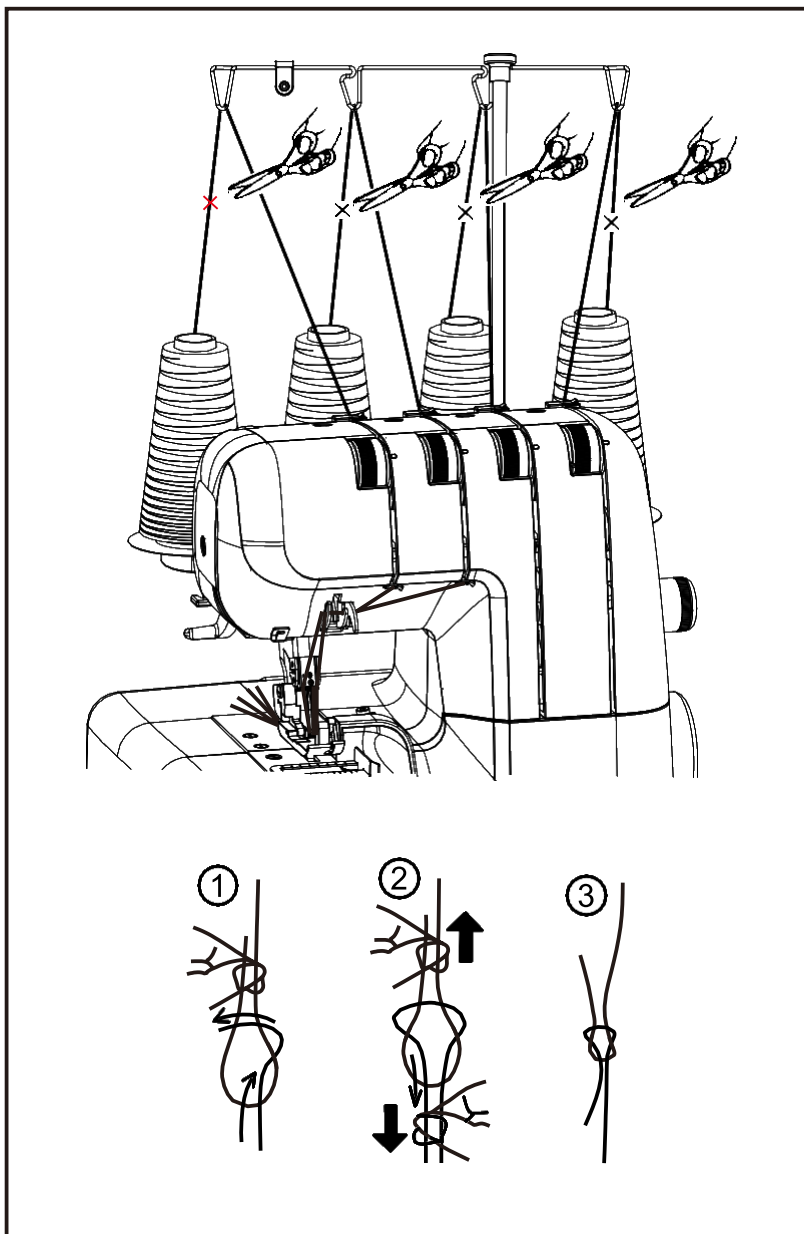
THREADING UPPER LOOPER

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.
3. Draw the thread through the thread guide as illustrated.
4. Pass the thread through wire thread guide and looper eye, leaving an excess length of about 4"(10 cm).



STEP 3 and 4 THREADING NEEDLES

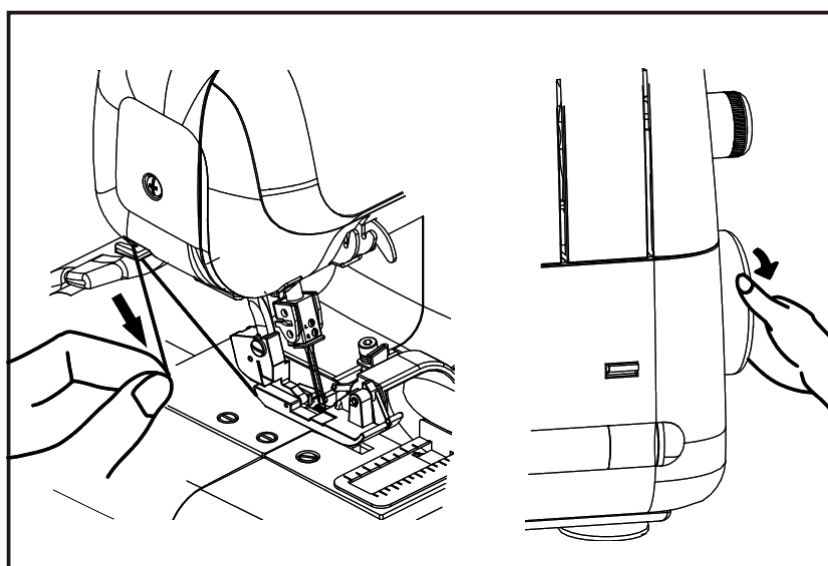
1. Feed the thread through the thread guide as illustrated.
2. Draw the needle threads through left-hand tension slot. Holding the thread with your left hand, pull down with right hand firmly.
3. Draw the thread through the thread guide as illustrated.
4. Thread the needles from front to back through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



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

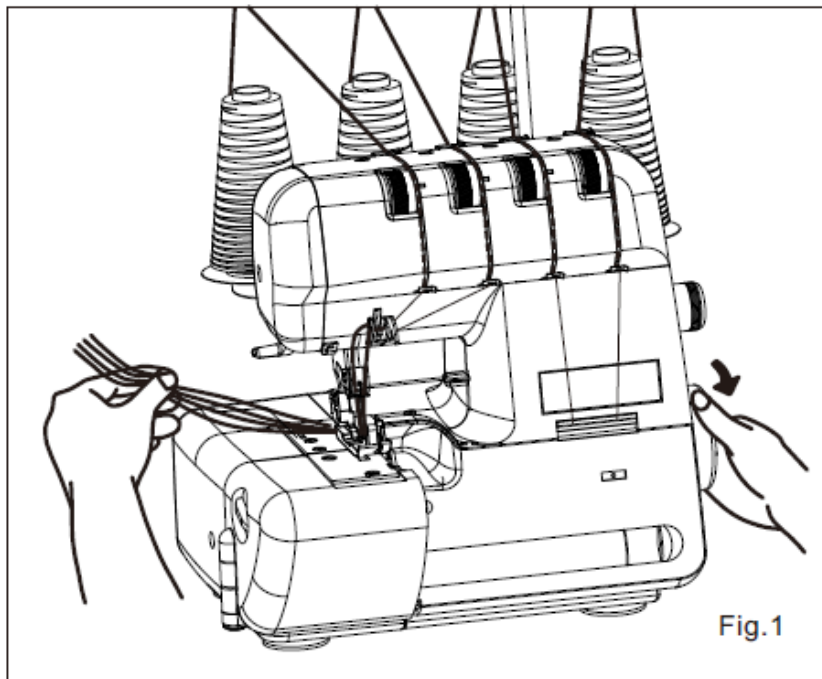
Frayed thread may make needle threading difficult.

Draw the thread passing under the thread cutter and turn hand wheel towards you to obtain clear cut end as illustrated.

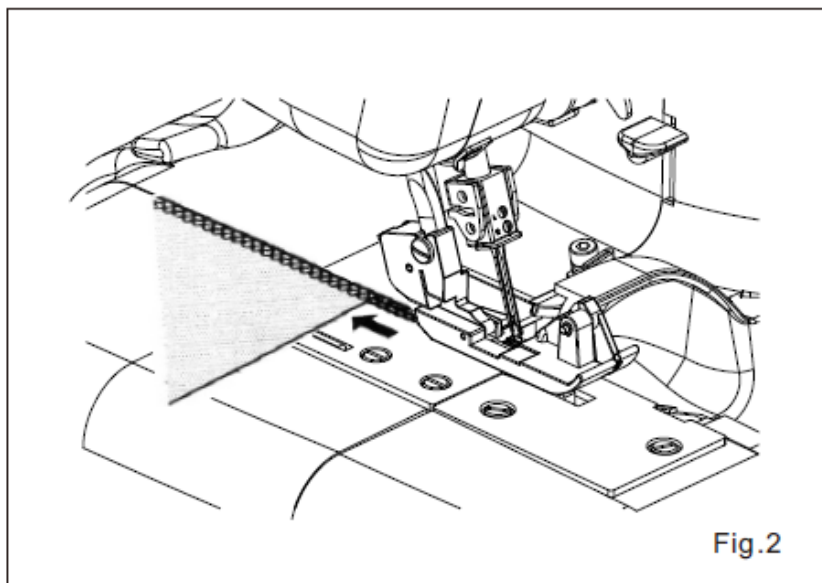
TESTING STITCH OVERLOCK STITCHES

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.



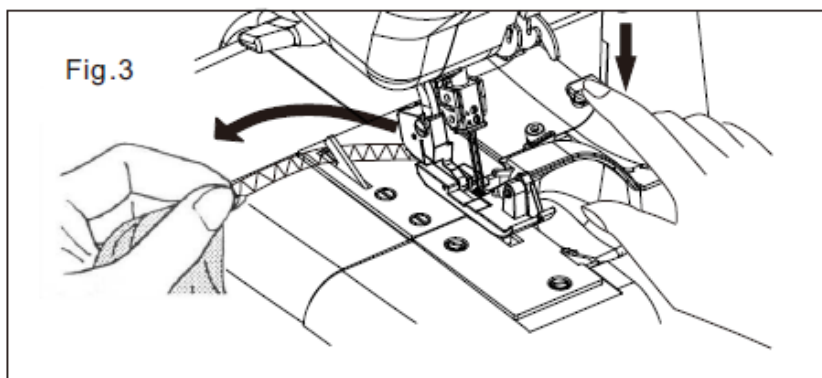
2. Start the machine at low speed and feed in test fabric under the presser foot by slightly pushing it forward. (This can be done with the presser foot down on most fabrics except bulky materials.) Guide the fabric gently as machine automatically feeds the material.



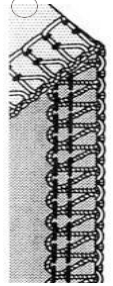
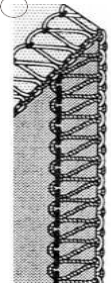
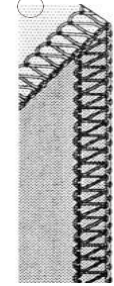
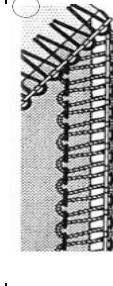
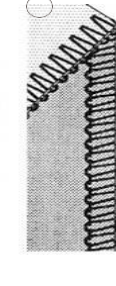
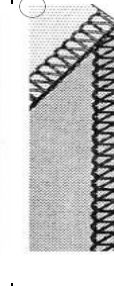
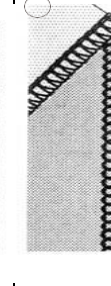
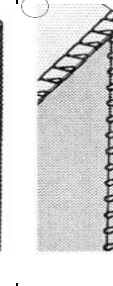


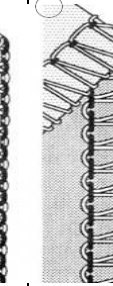
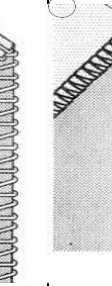
3. Check thread tensions by test sewing on spare fabric. (See page 17.)

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.

5. Cut thread by thread cutter in face cover, or with scissors.



SETTING CHART

Number of thread	4	3							3	2		
Overedge cutting width dial	-6-	6		4-	- 5-	4	4-6		6	-6-		4-6
Needle to use	Left&Right	Left	Right	Left	Right	Right			Left&Right	Left	Right	
Stitch finger	0	0	0	0	0				0	0	0	
Two thread convertor									0	0	0	0
Left needle thread	-4-	-4-		0-					-4-	0-	-4-	
Right needle thread	-4-		-4-		0-	-4-	-4-	-4-	-4-		-5	
Upper looper thread	-4-	-4-	-4-	-4	-4	-4-	-4-	-4-				
Lower looper thread	-4-	-4-	-4-	7-	7-	0-	-4-	-4-	0-	-4-	0-	1-
Stitch length control	2.5-3.5	2.5-3.5		3-5		2-2.5	*-R-	*-P-	2.5-3.5	2.5-3.5	2-3.5	1-2
Ref. NO.	1	2	3	4	5	6	7	8	9	10	11	12
												
	Flat seam			Narrow hem	Rolled hem	Picot stitch	Super stretch			Rolled hem		
Reference page	18			24		17			16	16, 18		16,17,24

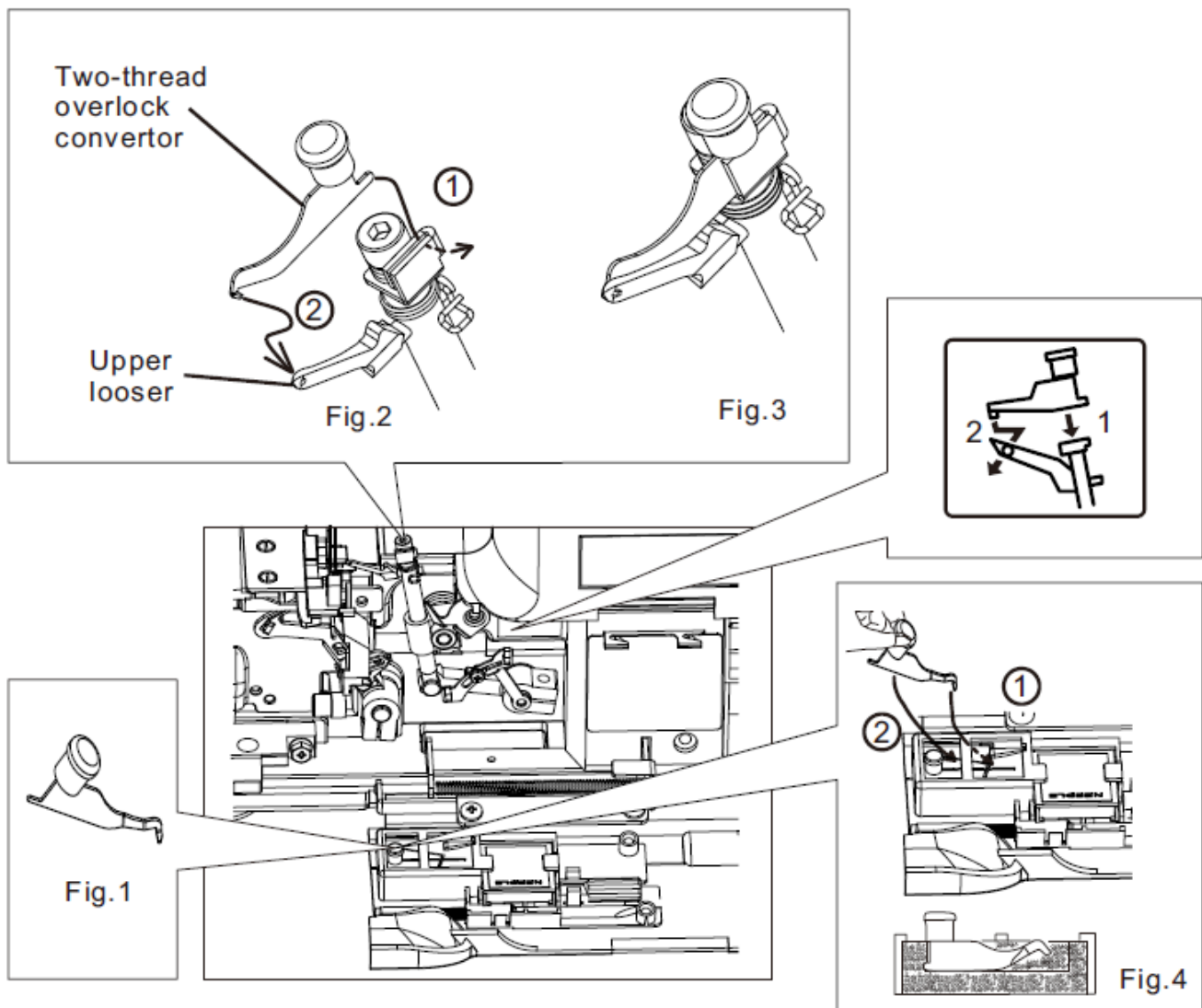
* If the stitch length control of your machine does not have R or P, please set the tension control of lower looper thread at 7-9 and stitch length dial at 1-2 (for roll hem) or 3-4 (for picot stitch).

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 19).
 2. Adjust needle tensions when you sew thin or thick material.
 3. Reduce the tension when you use thick thread.
 4. Incorrect tension setting causes stitch skipping. Adjust the tension setting.
 5. 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.

THREE-THREAD OVERLOCK WITH ONE NEEDLE

By threading the LEFT needle only, a width of 7 mm will be produced and by threading the RIGHT needle only a width of 3.8 mm will be produced.



CONVERTING TO TWO-THREAD USE

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 convertor as shown in Fig. 1.

Attach the two-thread convertor onto the upper looper as shown in Fig. 2, Fig. 3.

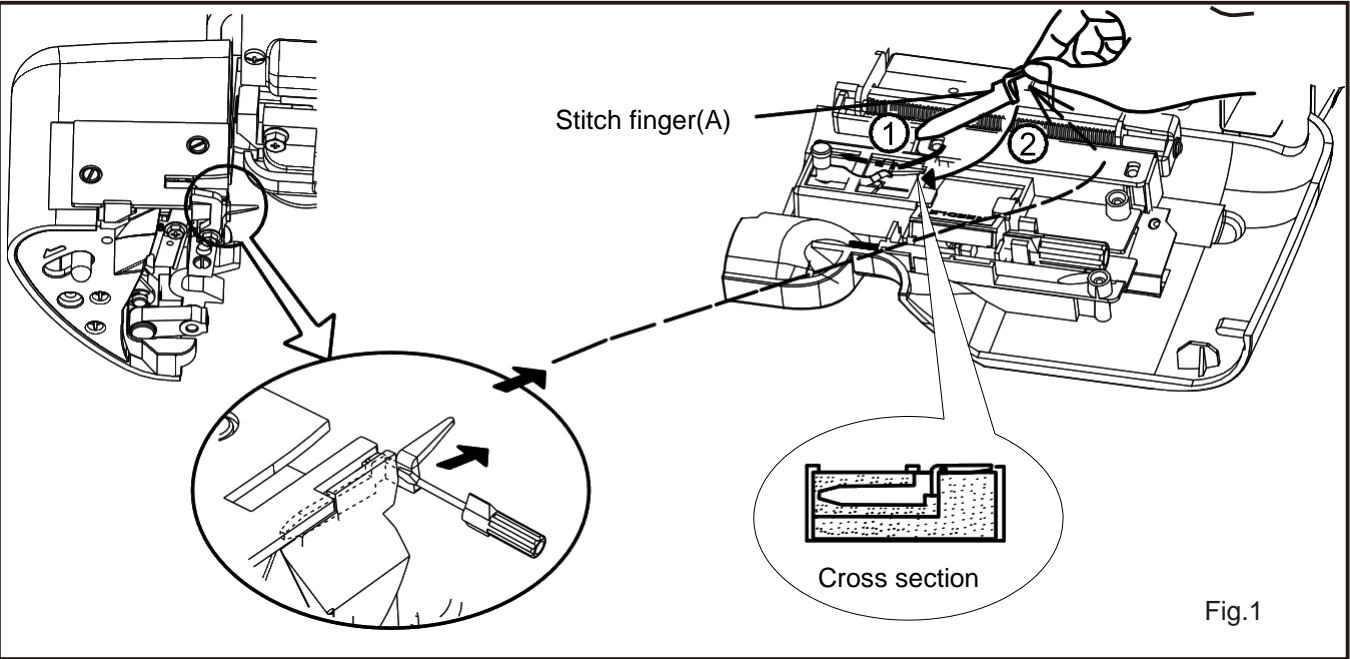
When not using convertor, insert it deep and keep as illustrated in Fig. 4.

NARROW AND ROLLED HEM, PICOT STITCH

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.

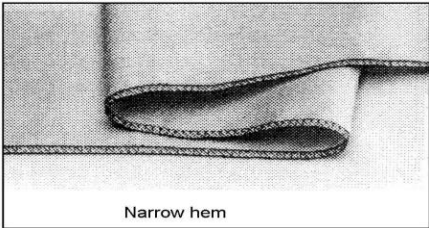
- 1. Raise the presser foot.
- 2. Open the front cover and workingtable.
- 3. Remove the stitch finger from the needle plate by screwdriver and keep it in the front cover as illustrated or in the accessory bag.
- 4. Set the machine according to page 15.

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

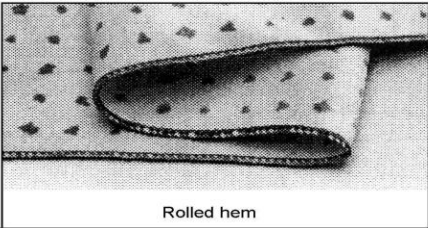


RECOMMENDED THREAD

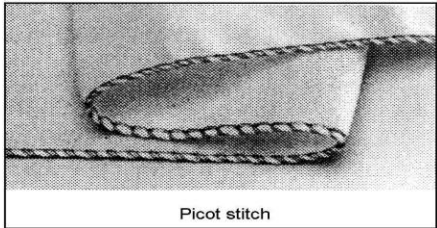
	Narrow overlock edge	Rolled edge	
	With Three Threads	With Three Threads	With Two Threads
Thread for needle	Polyester, Nylon, Silk No.50-100	Nylon No.100	
Upper looper	Polyester, Nylon, Silk No.50-100		-----
Lower looper	Bulk nylon (less stretchable)	Bulk nylon (less stretchable)	



Narrow hem



Rolled hem

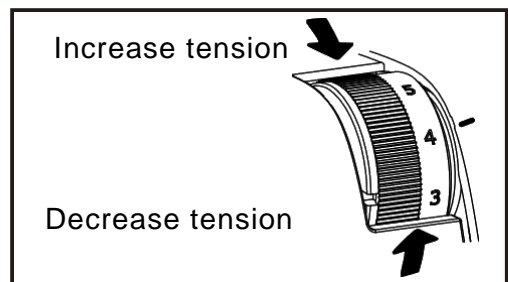


Picot stitch

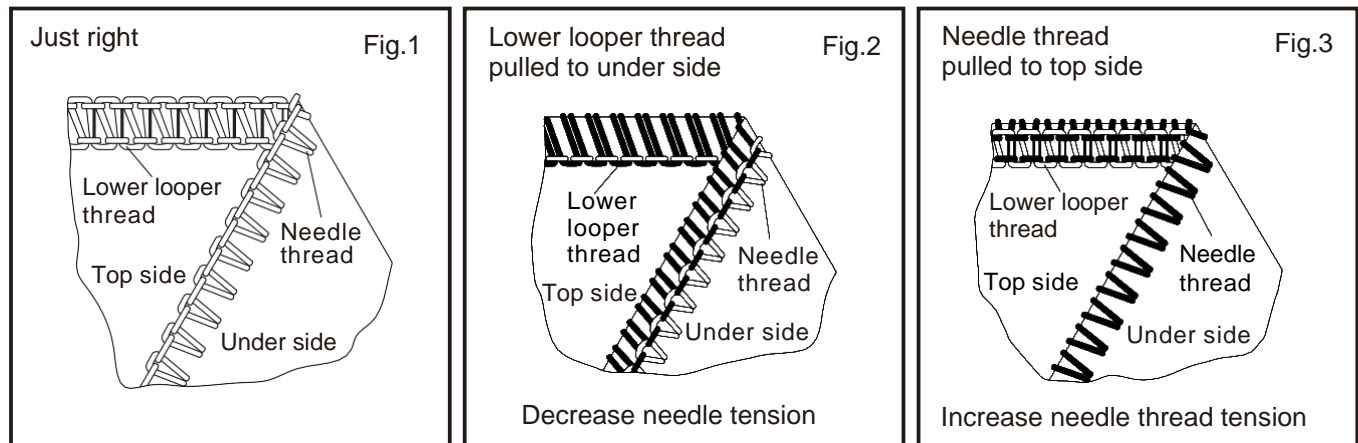
ADJUSTING THREAD TENSIONS

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.

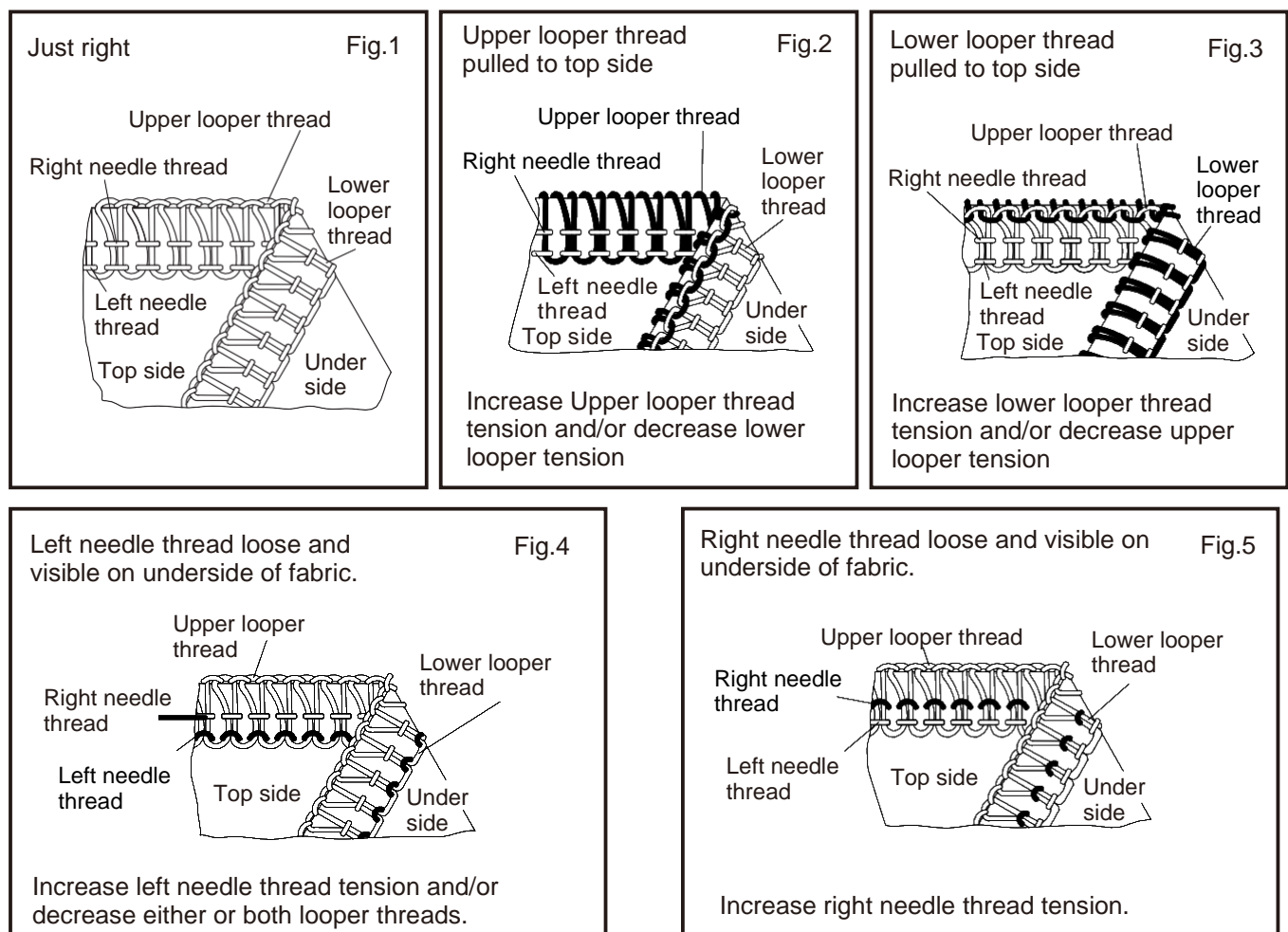
Test each thread tension on a scrap of the fabric you plan to use.



TWO-THREAD USE



FOUR-THREAD USE



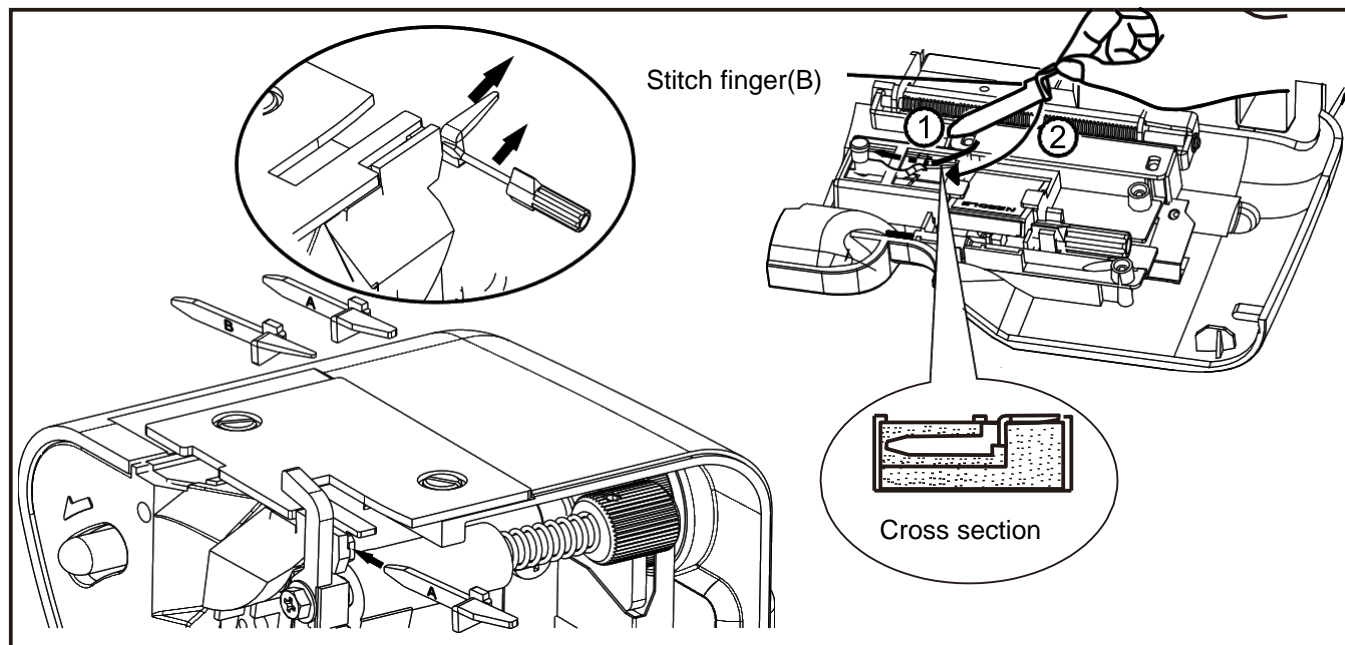
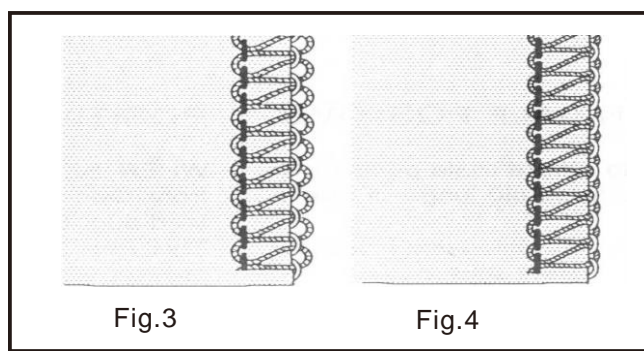
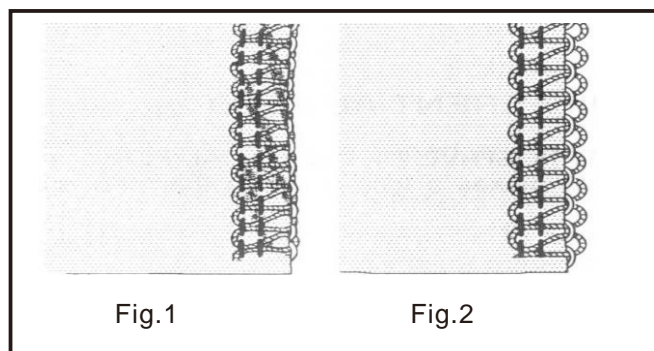
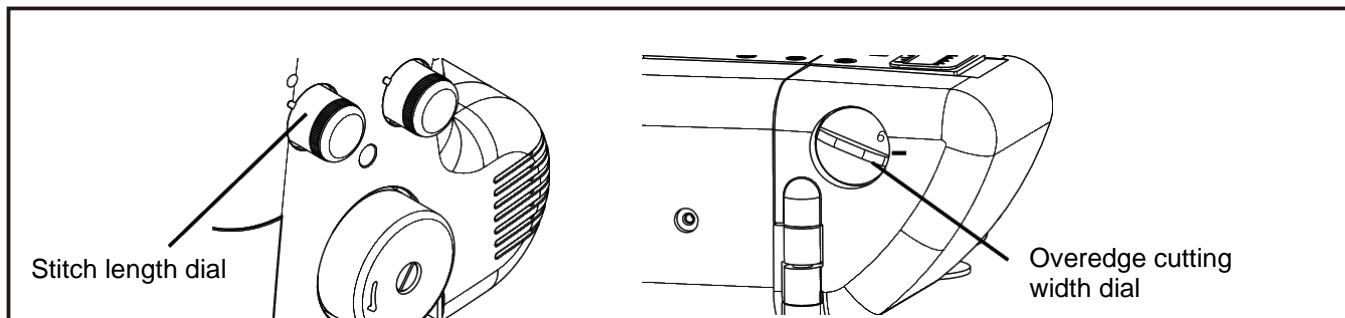
ADJUSTING STITCH LENGTH

Turn the stitch length dial until the required length is indicated.
The higher the number, the longer the stitch.
This dial can adjust the stitch length from 1 to 5 mm.

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 toward "7" if loops hang off the edge. (Fig.2)

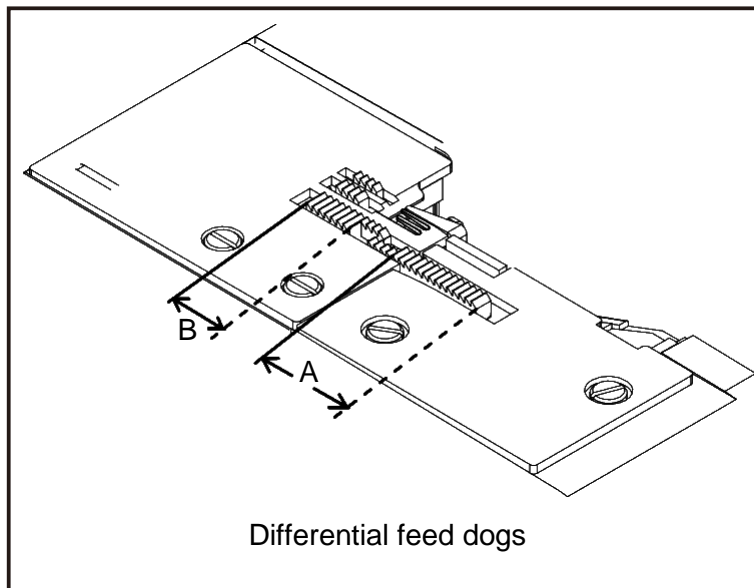


Stitch finger (B)

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)

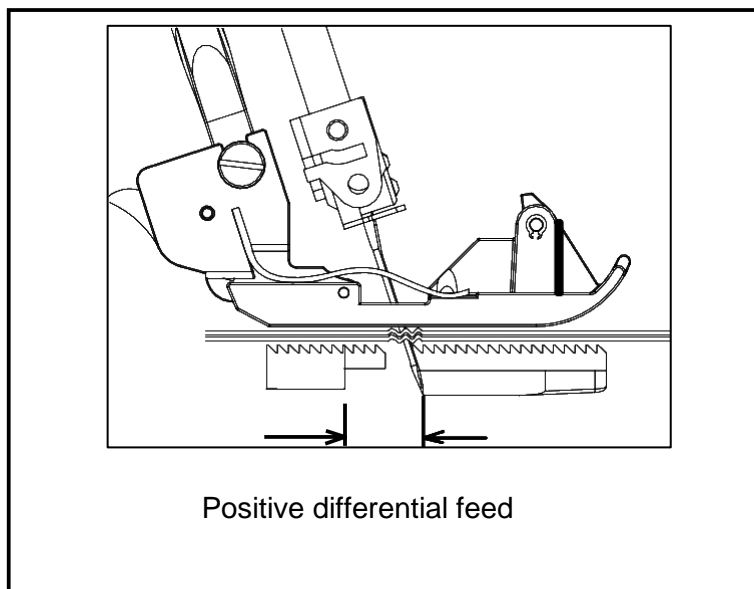
DIFFERENTIAL FEED

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.



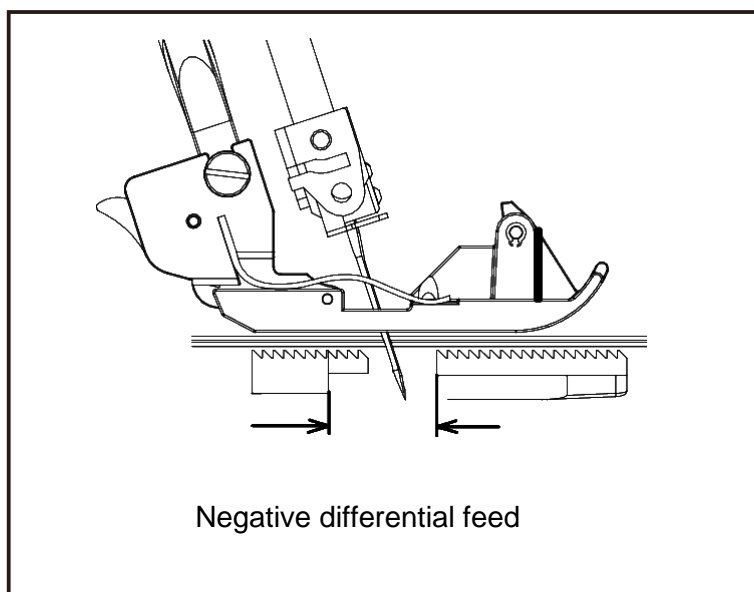
POSITIVE DIFFERENTIAL FEED

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.



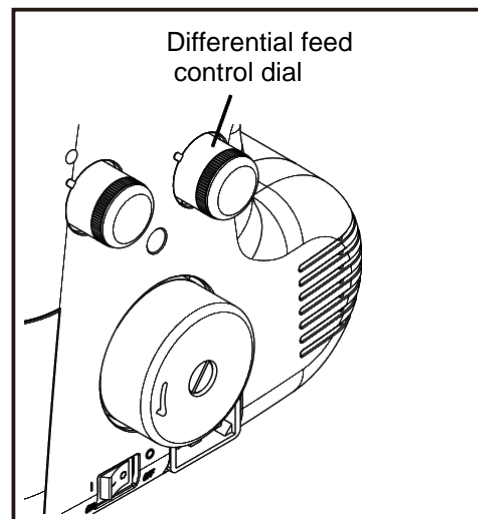
SETTING DIFFERENTIAL FEED

Set by simply turning the differential feed control dial 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 dial should be set at 1.

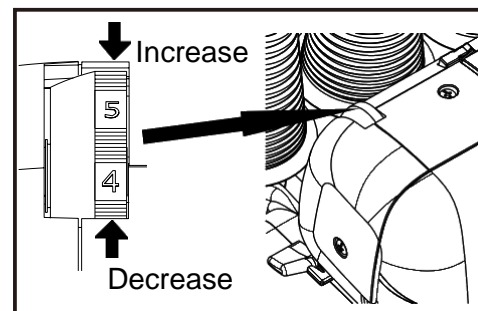
The dial can be reset even while sewing.

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	-----



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.

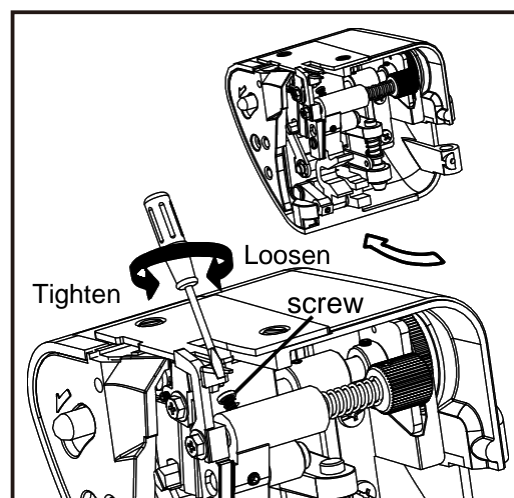


SEWING WITH EXTRA HEAVYWEIGHT FABRIC OR MULTIPLE LAYERS OF FABRIC

A wide range of fabric can be overlapped on this machine, but it is recommended to tighten screw as illustrated, when sewing with extra heavyweight fabrics or multiple 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.

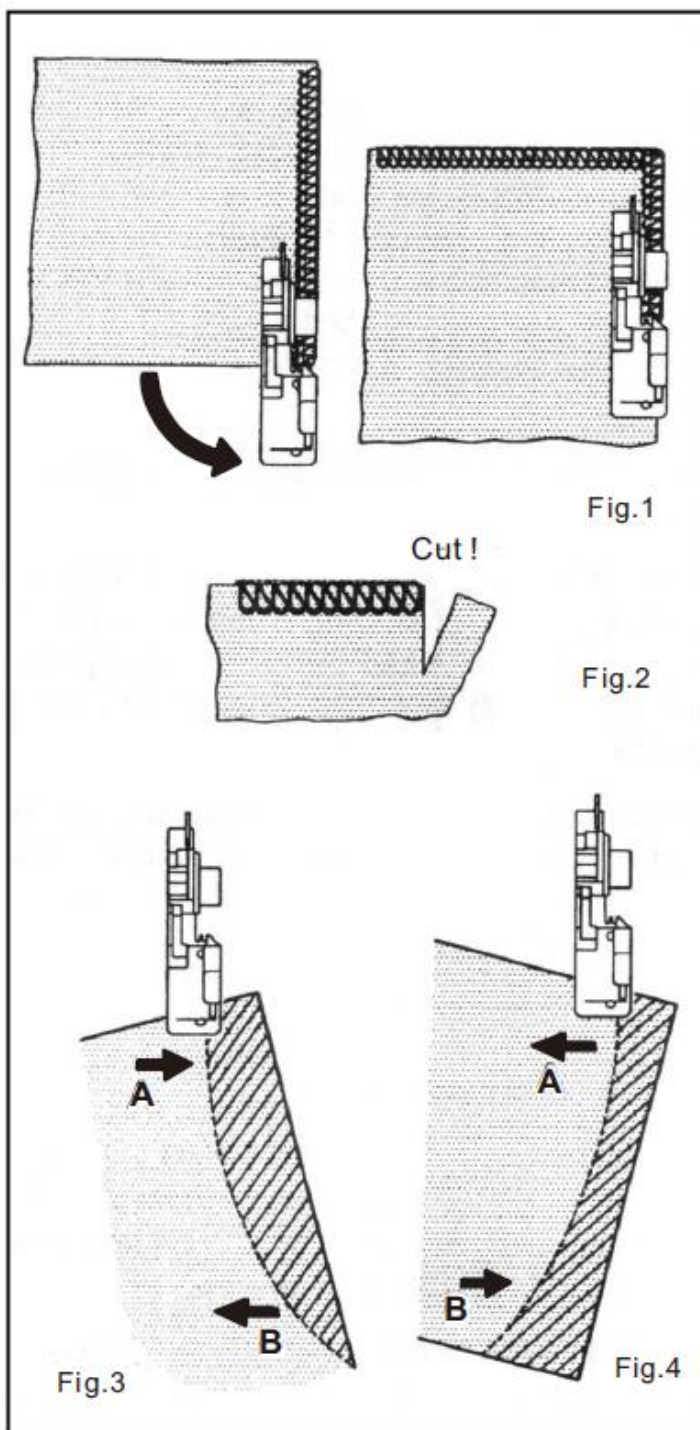


BASIC TECHNIQUES

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.



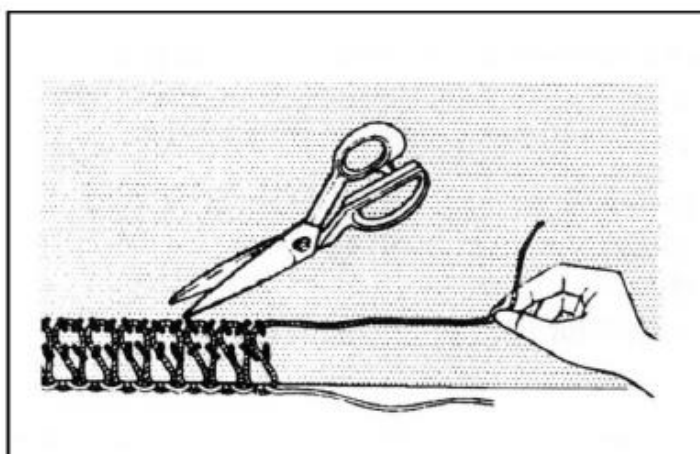
TURNING CURVED EDGES

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 threads.



CORDED OVERLOCK

Corded overlock can be used to strengthen shoulder, sleeve or side seams when joining or making up knitted garments. As a decorative feature you can use knitting yarn of contrasting colours to further enhance your garment. Your machine is equipped with a presser foot which has been designed to feed your cord or yarn to the left of the safety stitch or to the right. Follow instructions as follows:

1. Place a "filler" cord, such as a crochet cotton, gimp, wool, knitting yarn, or shirring elastic at the rear of the machine spool pin. Pass the cord through the cord guides (1) and (2) and then through the left needle threadguide (3). See Fig. 1.
2. Insert the cord through either the front or rear hole (according to the operation, see diagrams Figures 2 and 3), in the presser foot and pass it under and to the rear of the foot.
3. Place the material to be sewn as normal.
Start at slow speed observing if cord is feeding correctly and increase speed as needed.

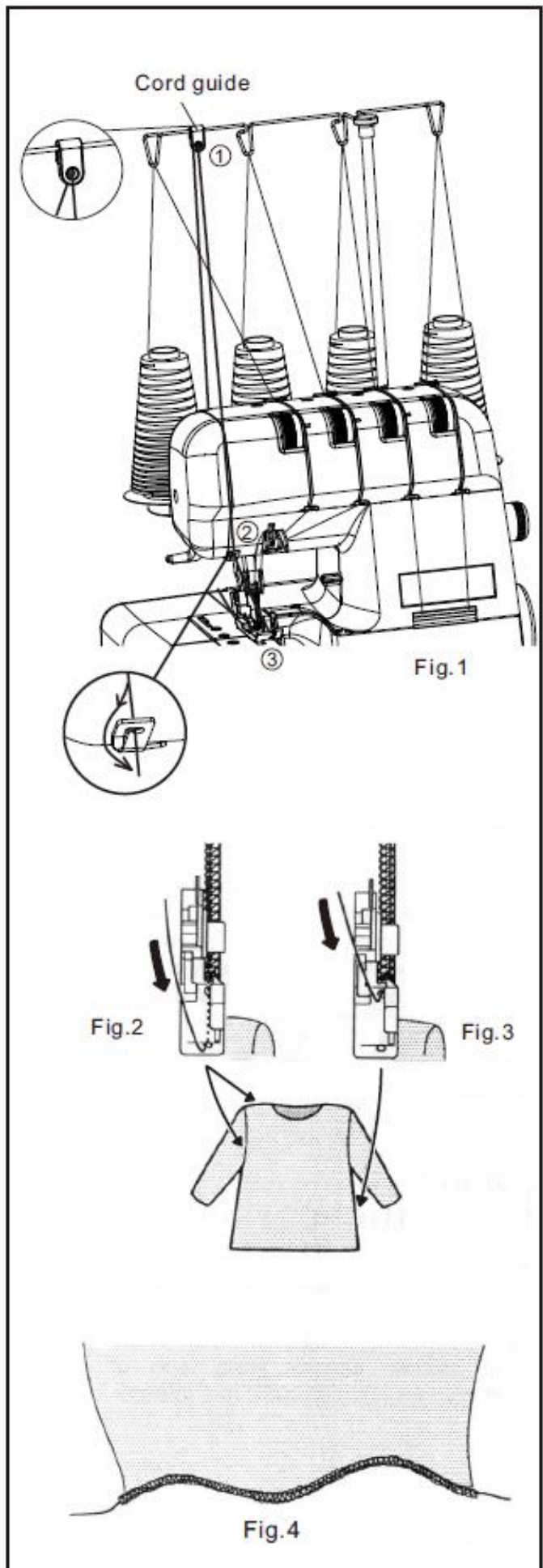
FOR JOINING SHOULDERS OR SLEEVES, pass the cord through the front hole, ensuring that it is fixed between the left and right needle threads as it is guided through the front hole. (Fig.2).

FOR JOINING SIDE SEAMS, pass the cord through the rear hole, ensuring it is positioned to the right needle thread. (Fig.3)

FOR DECORATIVE EFFECTS, you may pass contrasting colours either through the front or rear hole or if you desire, pass cord or yarn through each hole.

FOR MAKING WAVED HEM WITH GUT (Fig.4), pass the gut through the rear hole and start ROLLED HEM (See page 17).

This is used for the hem of skirt, etc.



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.

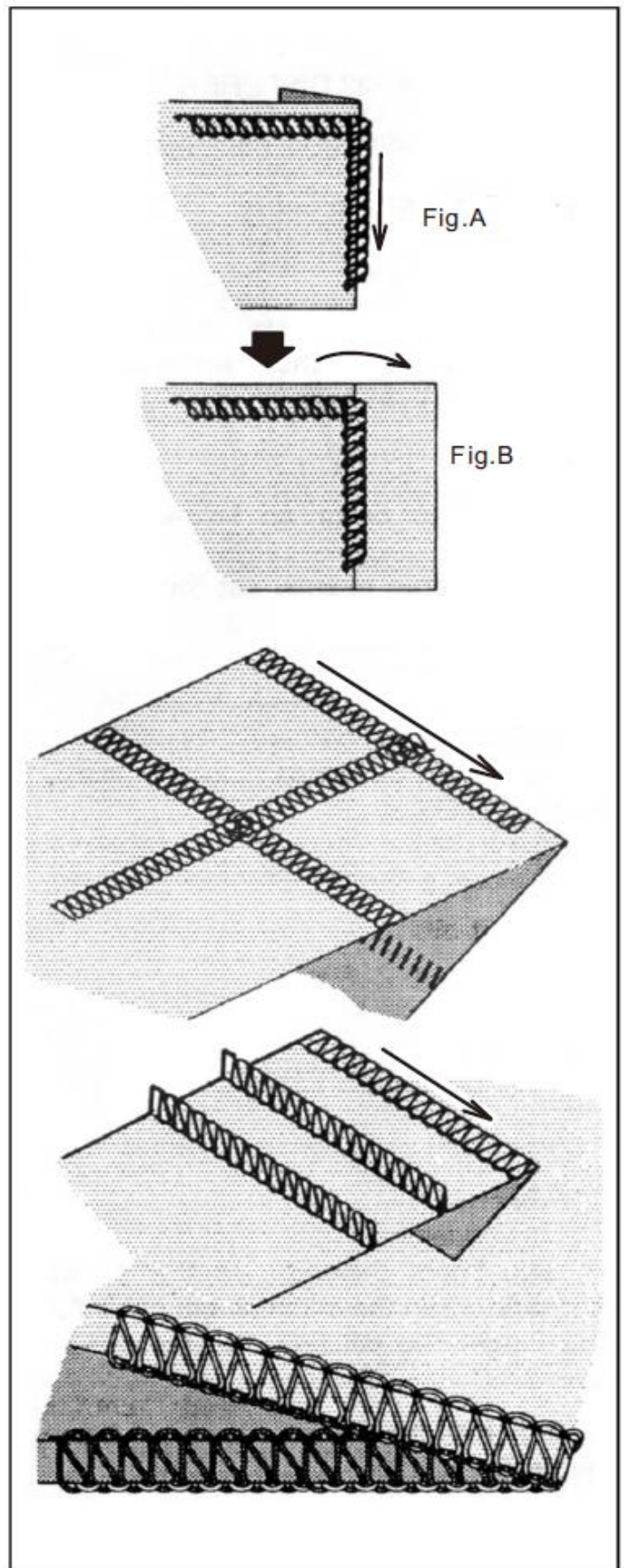
Pin-tucking-using three threads

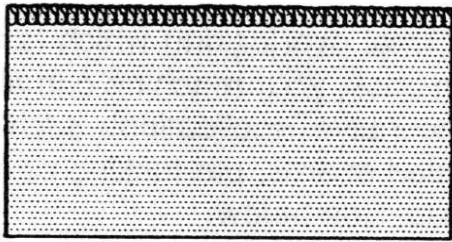
Fold fabric along a line to be pin-tucked and overlock sew along the folded edge, making sure not to cut into the folded edge of the fabric. (See page 26). Pull ends of threads to underside and press.

Making decorative braid-using three threads

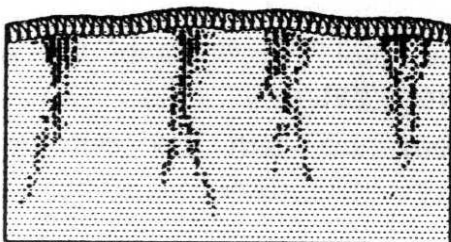
Overlock over a cord braid, holding it carefully with both hands, making sure not to cut the edge. (See page 26).

NOTE: *If you use blind hem foot(option), decorative stitch is made easily.
**Reduce the upper looper tension when you use thick thread.

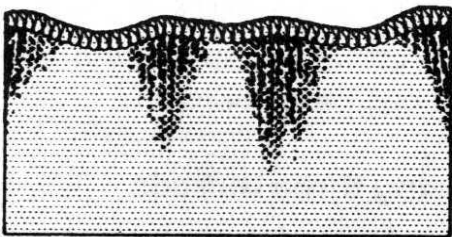




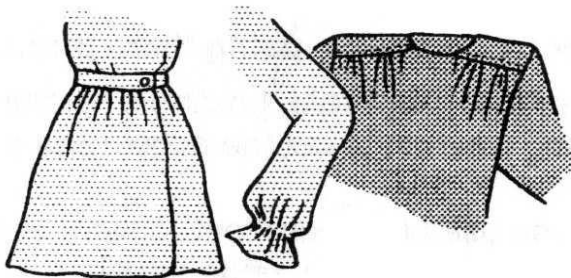
Pucker or waver-free seams



Puckering



Wavering



Gathering

DIFFERENTIAL FEED APPLICATIONS

Please refer to pages 20,21 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 waver-free 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.

IMPORTANT

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.

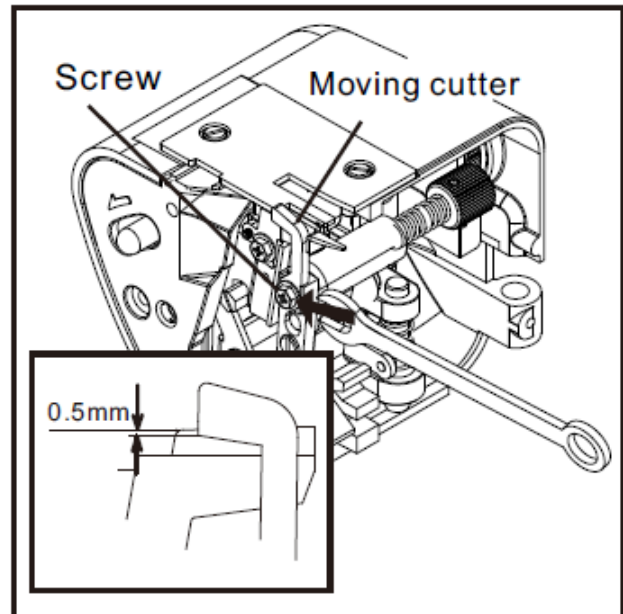
3. CARING FOR YOUR MACHINE

REPLACING 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 special hard alloy material. **FIRST REMOVE THE POWER PLUG FROM THE SUPPLY SOCKET-OUTLET.**

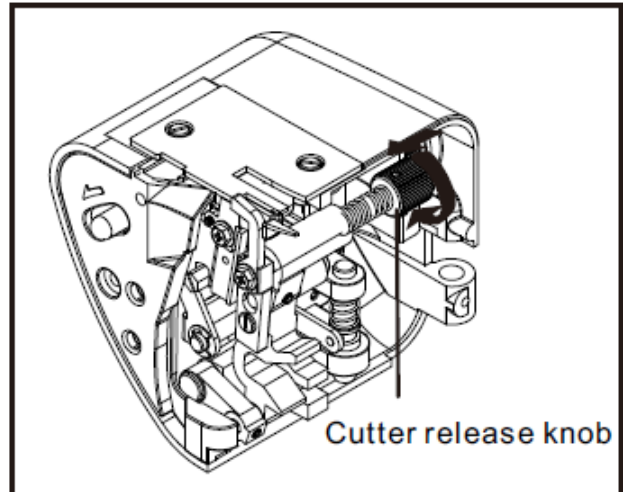
1. Loosen screw and take out movingcutter.
2. Close the working table. Lower cutter driving arm to its lowest position by turning the hand wheel towards you by hand. In this position, set replacement cutter in position and secure it with screw, **ENSURING THAT THE EDGE OF THE MOVING CUTTER IS APPROXIMATELY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



DISENGAGING MOVING 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.

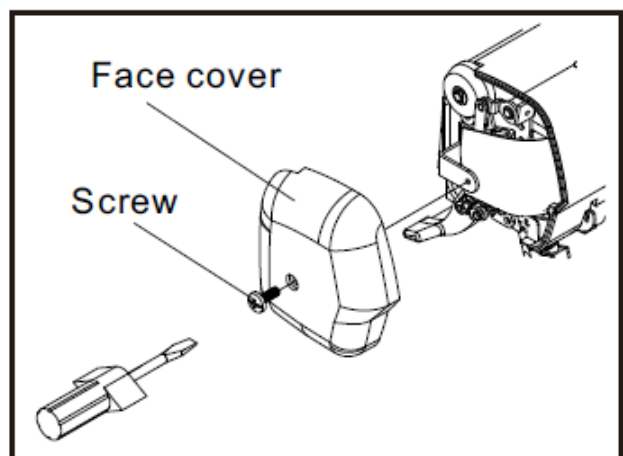
Ensure that fabric edge is not wider than overedge width selected or upper looper and needle can be damaged.



REMOVING FACE COVER

Disconnect from power supply before removing face cover.

Remove the screw and take off the face cover.

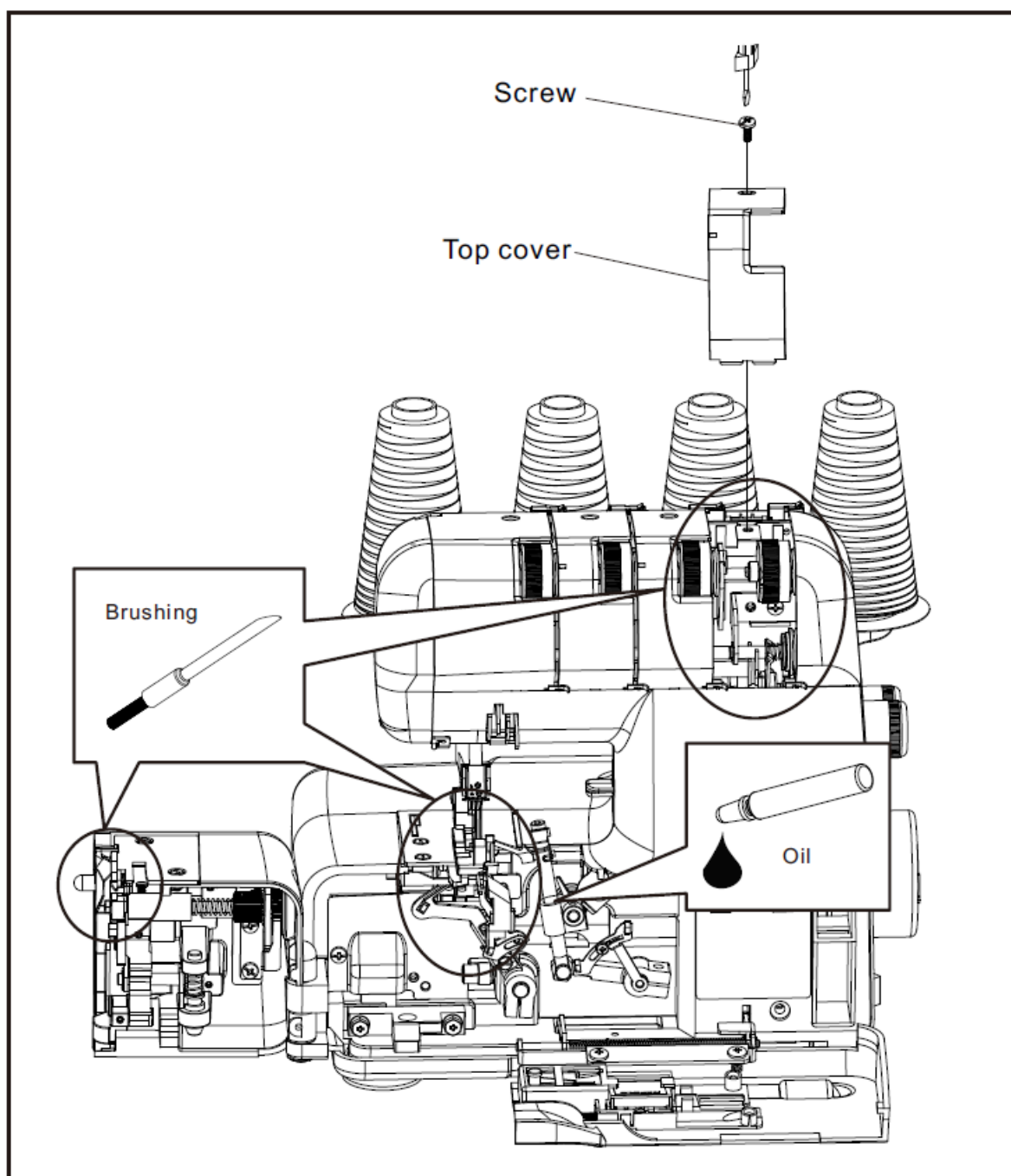


CLEANING AND OILING

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

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

1. Open the front cover 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 SEWING MACHINE OIL.



4. CHECKING PERFORMANCE PROBLEMS

PROBLEM	PROBABLE CAUSE	CORRECTION
Irregular Stitches	<ol style="list-style-type: none"> 1. Incorrect Thread Tension(s). 2. Incorrect size Needle. 3. Improper Threading. 4. Pulling fabric. 5. Loose Presser Foot. 	<ol style="list-style-type: none"> 1. Reset thread tension (s). 2. Choose correct size Needle for Thread and Fabric. 3. Re-thread machine. 4. Do not pull Fabric; guide it gently. 5. Reset Presser Foot.
Breaking Needle	<ol style="list-style-type: none"> 1. Pulling fabric. 2. Incorrect size Needle. 3. Incorrect setting of Needle. 4. Loose Presser Foot. 	<ol style="list-style-type: none"> 1. Do not pull Fabric; guide it gently. 2. Choose correct size Needle for Thread and Fabric. 3. Reset Needle. 4. Reset Presser Foot.
Puckering	<ol style="list-style-type: none"> 1. Incorrect Thread Tension (s). 2. Bent or blunt Needle. 3. Differential feed is set Incorrectly. 	<ol style="list-style-type: none"> 1. Reset Thread Tension (s). 2. Insert new Needle. 3. 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	<ol style="list-style-type: none"> 1. Improper Threading. 2. Incorrect size Needle. 3. Bent or blunt Needle. 4. Incorrect setting of Needle. 	<ol style="list-style-type: none"> 1. Reset thread machine. 2. Choose correct size Needle for Thread and Fabric. 3. Insert new Needle. 4. Reset Needle.
Breaking Threads	<ol style="list-style-type: none"> 1. Improper Threading. 2. Bent needle. 3. Thread Tension (s) too tight. 4. Incorrect setting of Needle. 5. Thread Spool tangled. 6. Thread Guide Pole not extended. 	<ol style="list-style-type: none"> 1. Re-thread machine. 2. Insert new Needle. 3. Reset thread tension (s). 4. Reset needle. 5. Reset spool properly. 6. Fully extend Guide Pole.

5. DISPOSAL / ENVIRONMENTAL PROTECTION

Disposal of electrical devices



- Dispose of devices with dangerous defects immediately and ensure that they can no longer be used.
- Do not dispose of the sewing machine in normal domestic waste.
- This product is subject to 2012/19/EU
- Dispose of the sewing machine at a registered waste disposal firm or through your local authority waste disposal facility.
- Observe the regulations currently in force. In case of doubt, consult your waste disposal facility.
- Please dispose of all packaging materials in an environmentally friendly manner.

Disposal of the packaging












Keep the sewing machine's transport packaging. On the one hand, it can be useful for storing the sewing machine - but especially if you want to send the sewing machine for repair. Most damage occurs during transport. The packaging is made of environmentally friendly materials that can be disposed of at your local recycling facilities. By disposing of the packaging and packaging waste correctly, you help to avoid potential hazards to the environment and health.

Separate the packaging, observe the packaging labels and recycle the packaging in accordance with local regulations.

Notes of conformity

This device complies with the requirements of the applicable European and national directives. Conformity has been demonstrated. Corresponding declarations and documents are available from the manufacturer.

6. EXPLANATION OF THE SYMBOLS

	Read the user manual before use.
	The device complies with the European safety requirements.
	Do not dispose of the device in household waste.
	Store and transport with this side up.
	This device is fragile. Handle with care.
	This recycling symbol marks, for example, an item or material parts as valuable for recycling. Observe the labelling of the packaging materials when separating waste. These are marked with abbreviations (a) and numbers (b) with the following meaning: 1-7 Plastics / 20-22: Paper and cardboard / 80-98: Composite materials. Recycling helps to reduce the consumption of raw materials and to protect the environment.
	This symbol reminds you to dispose of the packaging in an environmentally friendly way.
	The materials and components of this device can be recycled.
	Can be disposed of (completely empty) in the separate collection for packaging.
	Risk of suffocation
	To avoid the risk of suffocation, keep this plastic bag away from babies and young children. Do not use this bag in cots, beds, prams or playpens. The bag is not a toy.

7. INDEX

A			
Accessories	3	N	
Adjusting thread tension	17	Narrow and rolled hem	16
Adjusting stitch length	18	P	
Adjusting overedge cutting width	18	Preparation for threading	5
		Picot stitch	16
B		R	
Basic techniques	21	Removing stitches from sewn fabric	21
C		Replacing moving cutter	25
Changing presser feet	7	Replacing thread spools	13
Changing needle	8	S	
Checking performance problems	27	Setting up your machine	4
Cleaning and oiling	26	Setting chart	14
Converting to two-thread use	15	Starting to sew	9
Corded overlock	22	T	
Cutting needle thread	12	Testing stitch overlock stitches	13
D		Thread cutter	7
Decorative effects	23	Threading your machine	9
Differential feed	19	Three-thread overlock with one needle	15
Differential feed applications	24	Turning outside corners without cutting threads	21
Disengaging moving cutter	25	Turning curved edges	21
Disposal	28	U	
E		Unboxing	2
Explanation of the symbols	29		
F			
Foot pressure regulator	20		
H			
Helpful hints	12		
L			
Lint tray	7		

