

JUKI®

2-Needle, 3/4-Thread Overlock Sewing Machine

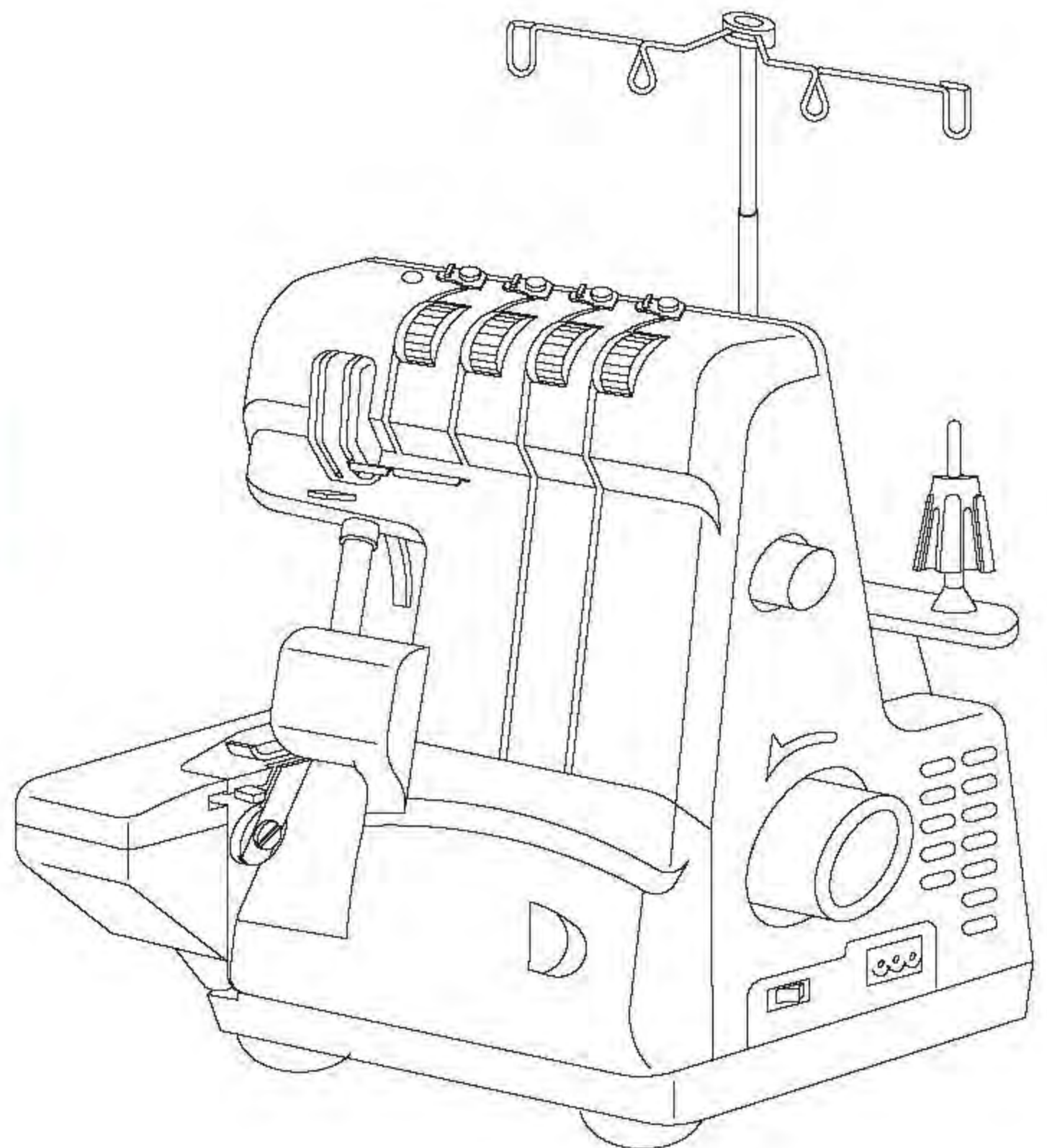
MO-50e/51e

Instruction Manual

IMPORTANT:

Read all safety regulations carefully and understand them before using your sewing machine.

Retain this instruction manual for future reference.



“IMPORTANT SAFETY INSTRUCTIONS”

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

“DANGER _____ To reduce the risk of electric shock:”


1. The appliance should never be left unattended when plugged in.
2. Always unplug this appliance from the electric outlet immediately after using and before cleaning.
3. Always unplug before re-lamping. Replace bulb with same type rated max. 12V / 5W for model MO-734DE.

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

1. Do not allow this appliance to be used as a toy. Close attention is necessary when this appliance is used by or near children and infirm persons.
2. Use this appliance only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
3. Never operate this appliance if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the appliance to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
4. Never operate the appliance with any air openings blocked. Keep ventilation openings of the sewing machine and foot control free from the accumulation of lint, dust, and loose cloth.
5. Keep fingers away from all moving parts. Special care is required around the sewing machine needle and knife.
6. Always use the proper stitch plate. The wrong plate can cause the needle to break.
7. Do not use bent needles.
8. Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
9. Switch the sewing machine off "O" when making any adjustments in the needle area, such as threading needle, changing needle, threading looper, or changing presser foot and the like.
10. Always unplug the machine from the electrical outlet when removing covers, when covers are opened to raise the knife or thread the loopers, when lubricating or when making any other user servicing adjustments mentioned in the instruction manual.
11. Never drop or insert any object into any opening.
12. Do not use outdoors.
13. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
14. To disconnect, turn all controls to the off "O" position, then remove plug from outlet.
15. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
16. Basically, the machine should be disconnected from the electricity supply when not in use.
17. If the power cord of this appliance is damaged, it must be replaced with a special cord by your nearest authorized dealer or service center.
18. This appliance is provided with double insulation. (except USA/CAN)
Use only identical replacement parts. See instructions for servicing double insulated appliances.
19. If oil gets in eyes, immediately, rinse the oil out with water. If you swallow oil by mistake, immediately consult a medical doctor.

“SERVICING DOUBLE-INSULATED PRODUCTS (USA and Canada version excepted)”

In a double-insulated product, two systems of insulation are provided instead of grounding. No grounding means is provided on a double-insulated product nor should a means for grounding be added to the product. Servicing a double-insulated product requires extreme care and knowledge of the system and should only be done by qualified service personnel. Replacement parts for a double-insulated product must be identical to those parts in the product. A double-insulated product is marked with the words DOUBLE INSULATION or DOUBLE INSULATED.

The symbol  may also be marked on the product.

“SAVE THESE INSTRUCTIONS”

"This overlock sewing machine is intended for household use only."

Replace bulb with same type rated 15Watts.

Use foot controller

- 4C-315A221 Foot controller (100v) Japan
- 4C-316B22 Foot controller (115v) U.S.A.
- 4C-326C22 Foot controller (220v) South Africa
- 4C-316C24 Foot controller (220v) Argentina
- 4C-316C26 Foot controller (220v) Korea
- 4C-316C28 Foot controller (220v) the Middle East
- 4C-326G22 Foot controller (230v) Europe
- 4C-326C25 Foot controller (240v) U.K.
- 4C-326C23 Foot controller (240v) Australia

- 1. Safety regulations
- 5. Contents
- 7. Details of the machine
 - 7. - Details of the machine
- 9. Preparing the machine
 - 9. - Accessories
 - 9. - Accessory Box
 - 9. - Looper cover
 - 9. - Waste collector
- 11. - Attaching the foot control
- 11. - Sewing speed
- 11. - Assembling the thread stand
- 11. - Thread cones
- 11. - Power/ light switch

- 13. Using the machine
 - 13. - Handwheel
 - 13. - Presser foot lifter
 - 13. - Changing the presser foot
- 15. - Inserting needles
- 15. - To lower the upper knife

- 17. Threading
 - 17. - Threading/ Preparation
 - 17. - Upper looper (Blue)
 - 19. - Lower looper (Red)
 - 21. - Right needle (Green)
 - 23. - Left needle (Yellow)
 - 23. - After threading
- 25. Trial sewing, thread tension
 - 25. - Sewing test
 - 25. - Check your trial run

- 27. Adjusting the thread tension
 - 27. - Adjusting the thread tension

- 29. Adjustments and settings
 - 29. - Stitch length
 - 29. - Cutting width

- 31. Differential feed*
 - 31. - Differential feed*
 - 31. - Gathering*

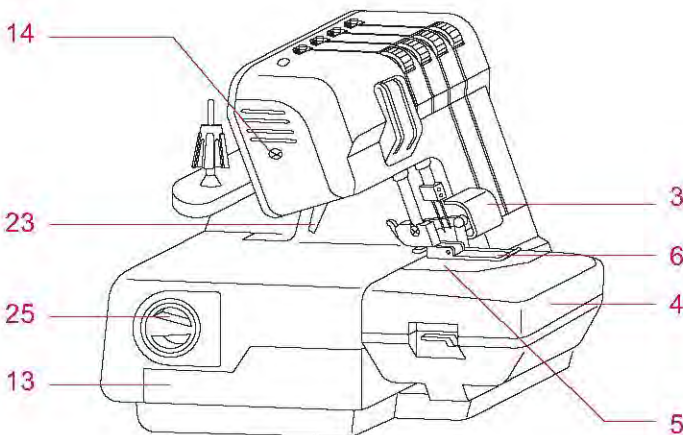
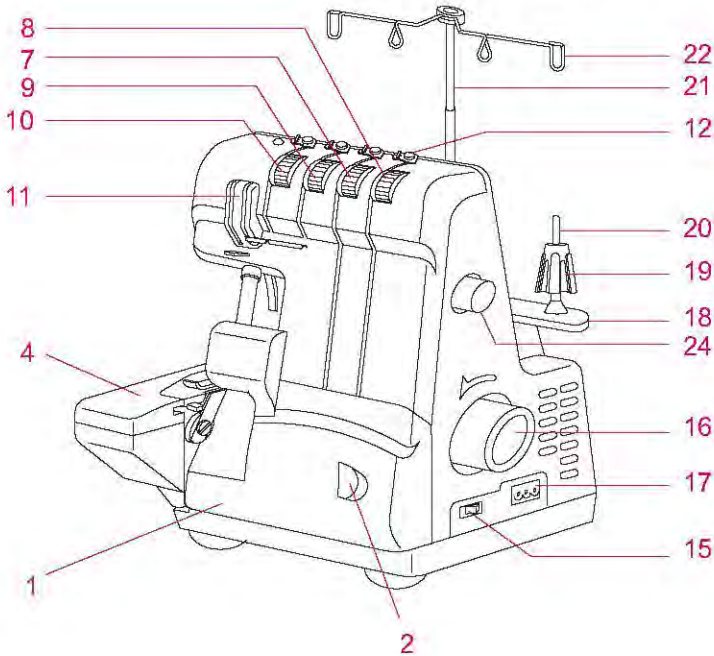
- 33. Practical sewing
 - 3 thread overlock
 - 3 thread rolled hem
 - Unpicking seams

- 35. Maintenance
 - Changing light bulb
 - Cleaing and lubricating

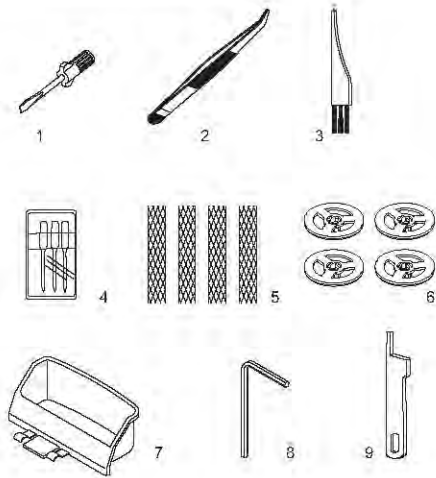
- 37. Trouble shooting guide
- 41. Technical data

Details of the machine

1. Looper cover
2. Looper cover opening indent
3. Knife guard
4. Cloth plate
5. Stitch plate
6. Presser foot
7. Upper looper tension dial
8. Lower looper tension dial
9. Right needle tension dial
10. Left needle tension dial
11. Thread take up cover
12. Thread guide plate
13. Accessory box
14. Bulb cover
15. Power / light switch
16. Handwheel
17. Machine socket
18. Thread stand
19. Anti-vibration cone
20. Spool holder pin
21. Retractable support rod
22. Open thread guide
23. Presser foot lifter
24. Stitch length dial
25. Differential feed dial



Preparing the machine



Accessories

1. Screwdriver
2. Tweezers
3. Cleaning brush
4. Set of needles ELx705
5. Net
6. Spool caps
7. Waste collector
8. Hexagon wrench
9. Upper knife
10. Oiler

Accessory Box

All standard accessories are stored in the box. Pull out to open. Push in to close.

Looper cover

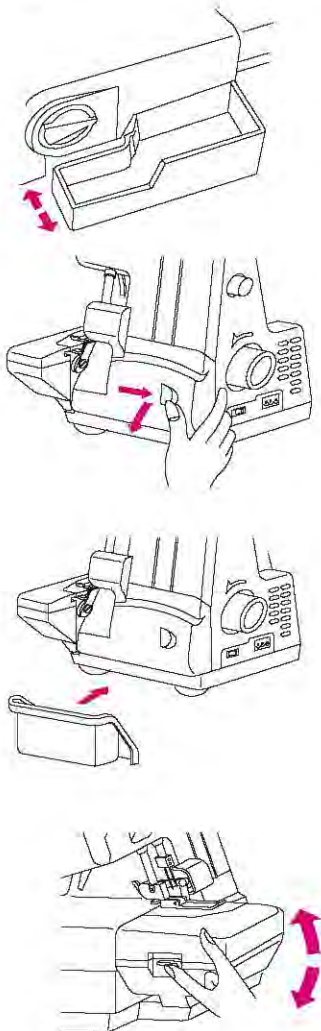
To open, push to the right with your thumb in the indent and tilt towards you. To close push it up and the cover engages automatically.

Waste collector

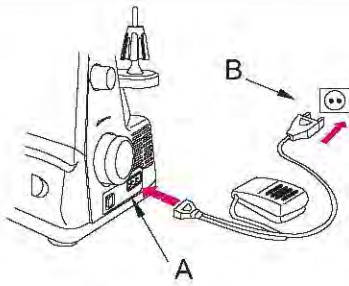
Fabric waste will be collected as you sew. Push the waste collector under the front of the machine and slightly to the left towards the cloth plate cover.

Cloth plate cover

To open push the lever up. To close push the cover up to the right, it snaps into position automatically.

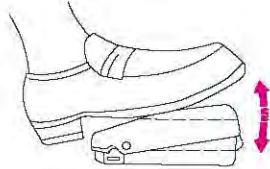


Preparing the machine



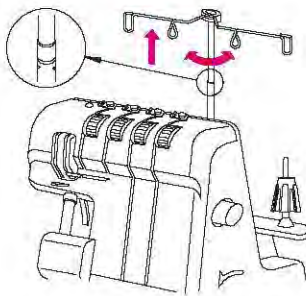
Attaching the foot control

Plug foot control into machine socket (A) and then into main socket (B).



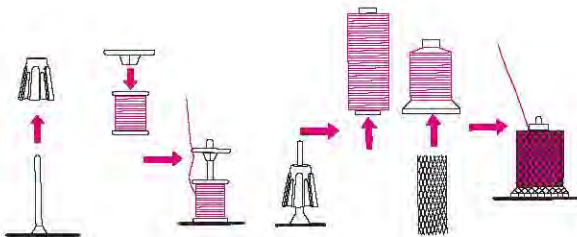
Sewing speed

The sewing speed can be adjusted by increasing or decreasing the pressure on the foot control (C).



Assembling the thread stand

Raise the support rod fully, turning slightly until the positioning catches engage.



Thread cones

The anti-vibration cone should be used with the wider edge to the bottom on the spool holder pin when sewing with cones. When using household spools remove the anti-vibration cones. Place spool on spool holder pins and push the spool caps on. If threads slip and get twisted, cover the spools with the nets supplied in the accessory box.

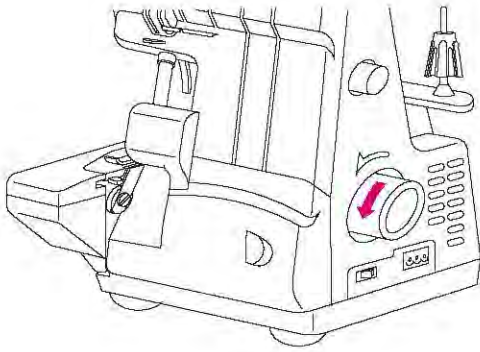


Power/light switch

The power switch is conveniently placed on the handwheel side of the machine.

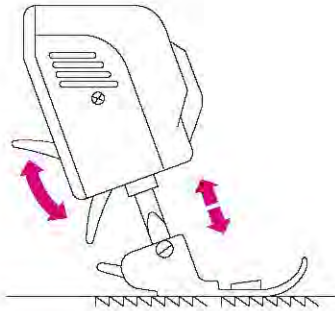
"I" - ON

"O" - OFF



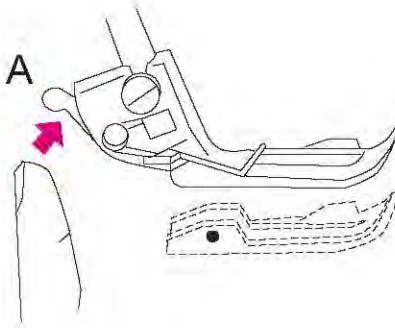
Handwheel

The handwheel turns counterclockwise.



Presser foot lifter

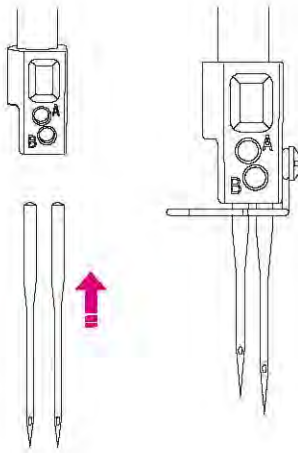
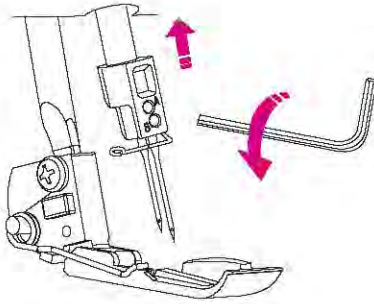
To raise the presser foot, raise the lever on the rear of the machine until it engages.



Changing the presser foot

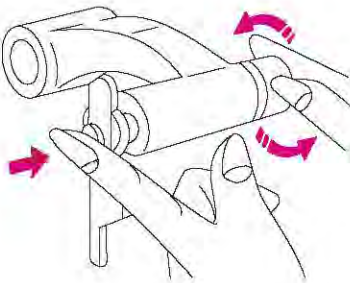
- Switch the machine off "O".
- Raise the presser foot.

Press the catch (A) to release the presser foot from the clamp. Raise the presser foot lifter to the highest position and remove the presser foot sole to the left. To attach the presser foot sole, place it under the shaft. The groove in the shaft should line up exactly with the presser foot pin. Lower the shank and the presser foot will engage automatically.



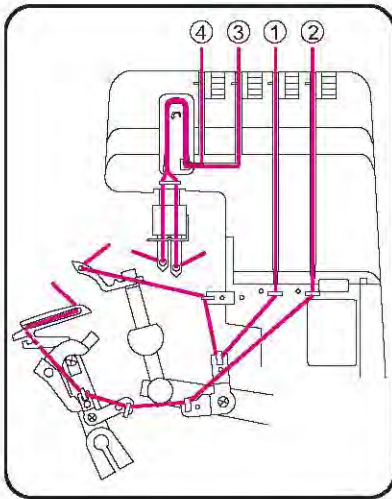
Inserting needles

- Switch the machine off " O ".
Disconnect machine from electricity supply.
- Turn the handwheel until needles are fully raised.
- Lower the presser foot.
- Use the hexagon wrench to loosen the needle setscrew.
Remove needle.
- Insert the needle flat side towards the back, as far as possible into the needle clamp.
Tighten the screw.
- The left needle is set higher than the right needle.



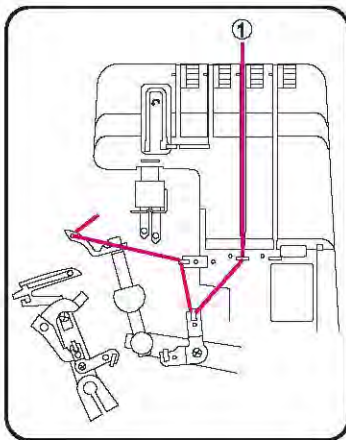
Raising the upper knife

- Turn the handwheel to raise the needles.
- Open the looper cover.
- Press the upper knife holder to the right. Turn the knob clockwise until the knife engages.
- Close the looper cover.



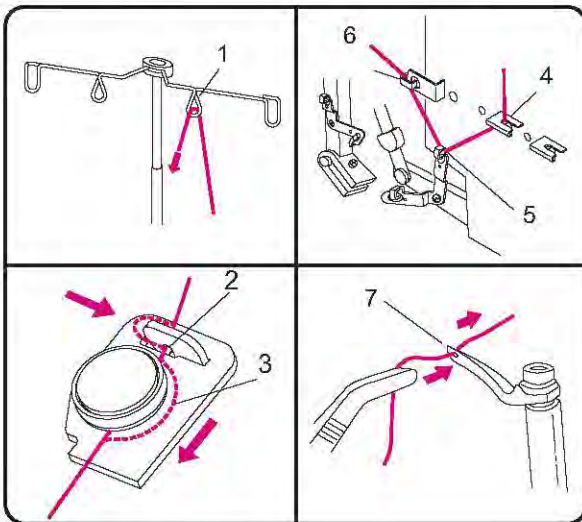
Threading / Preparation

- Disconnect machine from electricity supply.
- Support rod with thread guide must be fully raised.
- Open the looper cover and the colth plate cover.
- Turn the handwheel towards you until needles are fully raised.
- Thread the machine in the correct sequence.

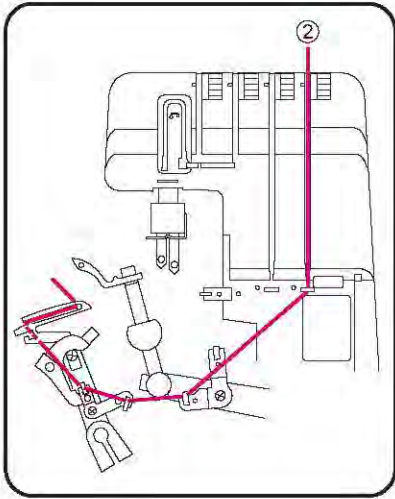


Upper looper (Green)

- Place the spool on the spool holder pin.
- Bring thread up from back to front through guide (1).
- Pull the thread under the guider (2) up to go around the pre-tension (3).
- Thread guide (4,5,6).
- Thread looper eye (7).

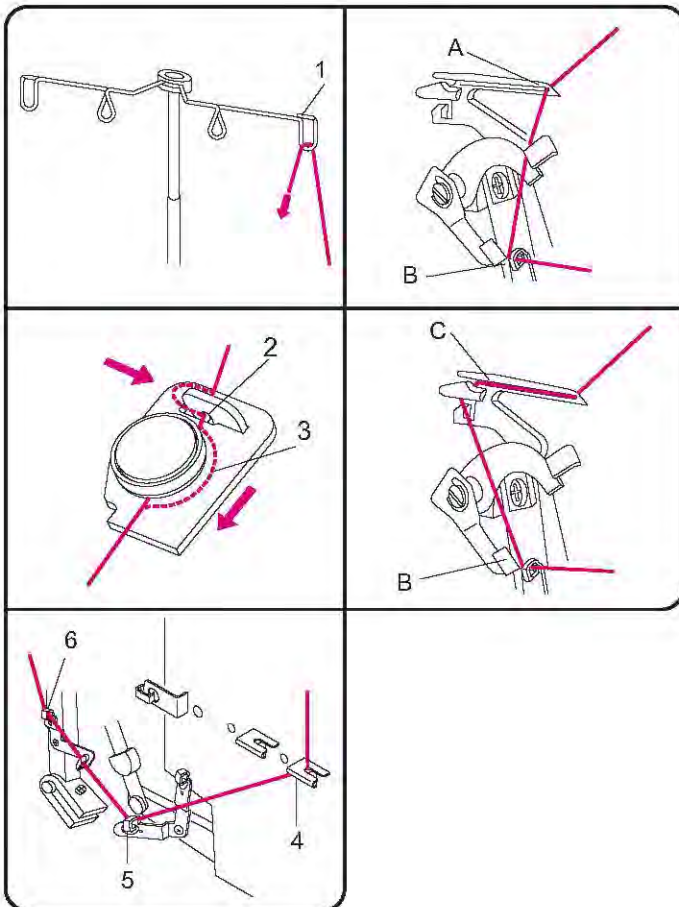


Threading

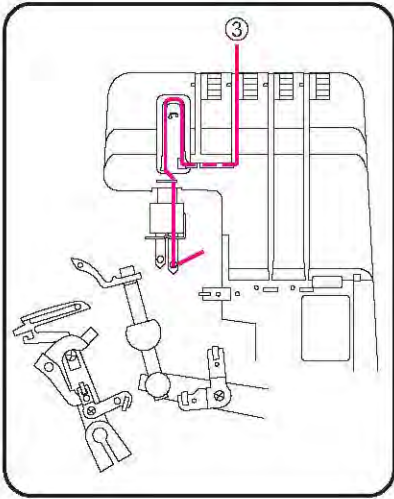


Lower looper (red)

- Place the spool on the spool holder pin.
- Bring thread up from back to front through guide (1).
- Pull the thread under the protector (2) and pass under the guider up to go around the pre-tension (3)
- Thread guide (4,5,6).
- Turn the balance wheel toward you until the lower looper extending out 5-10mm from the needle plate edge.
- Pull the thread with tweezers to pass the lower looper hole (A).
- Draw the thread with your left hand tightly.
- Use your finger to push the automatic threader (B) up to the topmost, and then thread goes through the lower looper (C) automatically.

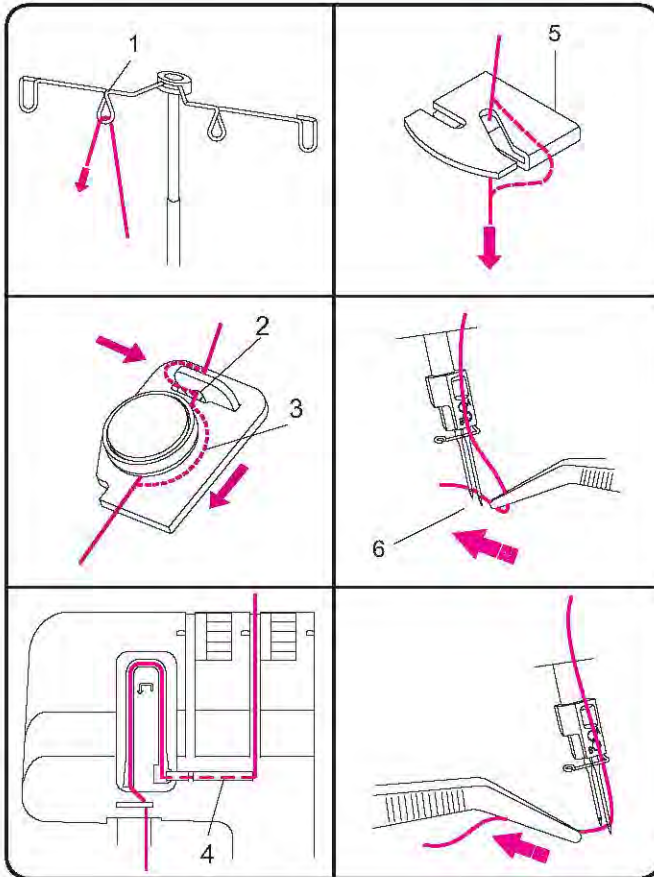


Threading

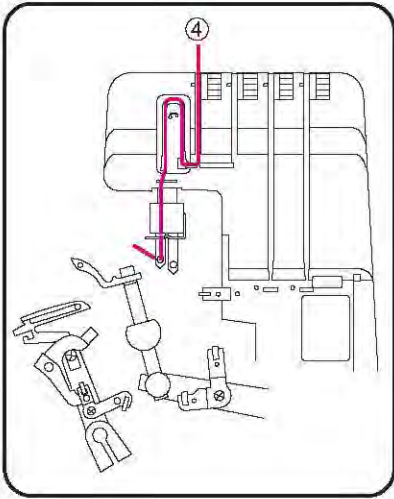


Right needle (Blue)

- Place the spool on the spool holder pin.
- Bring thread up through guide (1).
- Pull the thread under the protector (2) and pass under the guider up to go around the pre-tension (3)
- Thread guide (4,5).
- Thread right needle eye (6)
- Place thread under presser foot.



Threading



Left needle (Yellow)

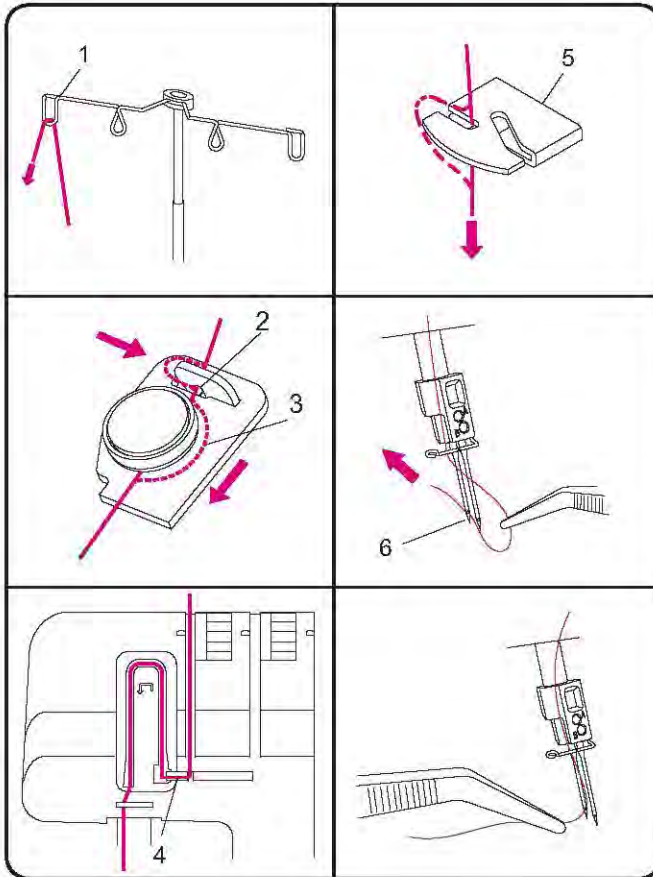
- Place the spool on the spool holder pin.
- Bring thread up through guide (1).
- Pull the thread under the protector (2) and pass under the guider up to go around the pre-tension (3).
- Thread guide (4,5).
- Thread left needle eye (6)
- Place thread under presser foot.

After threading

When threading is complete, lower the presser foot and close the looper cover and cloth plate.

Note:

If the lower looper has to be re-threaded, cut both needle threads off at the needle eye and remove surplus thread from below. Thread the looper and then re-thread the needles.



Trial sewing, thread tension

Sewing test

After threading make a trial run. Always use a double layer of fabric in order to be able to check the stitch formation and thread tension properly.

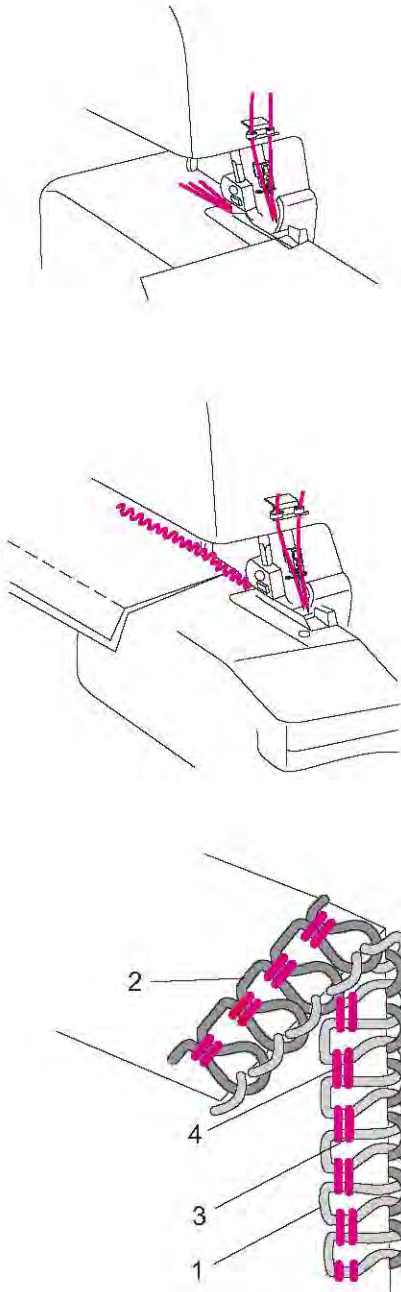
- Switch the machine on "I".
- Set all tension dials to 4.
- Raise the front of the presser foot slightly with your thumb and position the fabric under the foot just up to the knife.
- Sew.
- At the end of the seam continue sewing a 8cm (4") long thread chain.
- Cut the thread chain and remove work.

Check your trial run

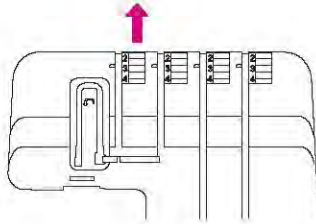
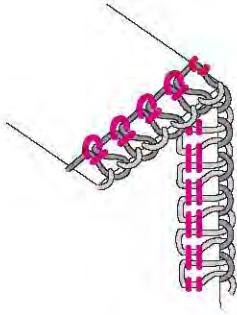
- 1 Upper looper thread (blue)
- 2 Lower looper thread (red)
- 3 Right needle thread (green)
- 4 Left needle thread (yellow)

Perfect stitch formation is when both looper threads meet at the fabric edge. The needle threads form straight stitches for a stretchy and durable seam.

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

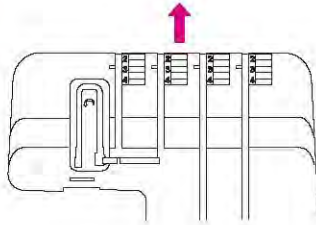
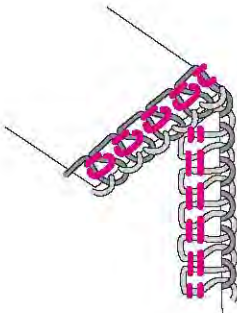


Adjusting the thread tension

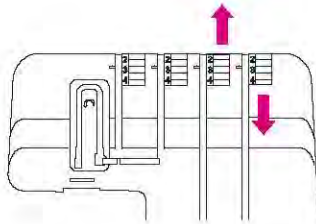
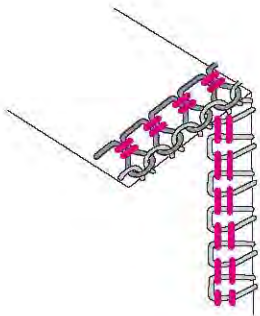


Adjusting the thread tension

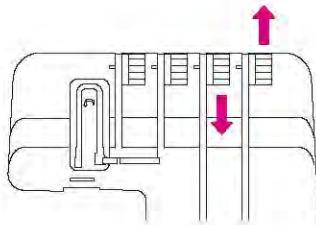
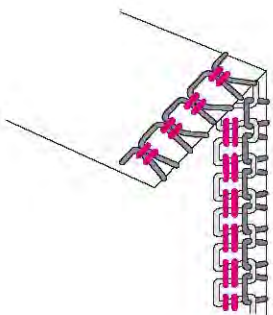
The left needle thread forms loops on the underside:
Tighten the left needle thread tension (yellow).



The right needle thread forms loops on the underside:
Tighten the right needle thread tension (green).

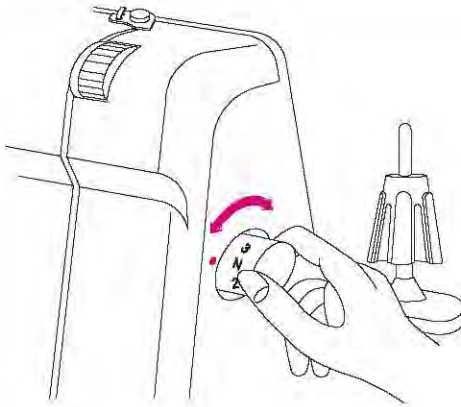


The looper loops are formed on the underside:
Tighten the upper looper tension (blue), or loosen the lower looper tension (red).



The looper loops are formed on the upper side:
Tighten the lower looper tension (red), or loosen the upper looper tension (blue).

Adjustments and settings

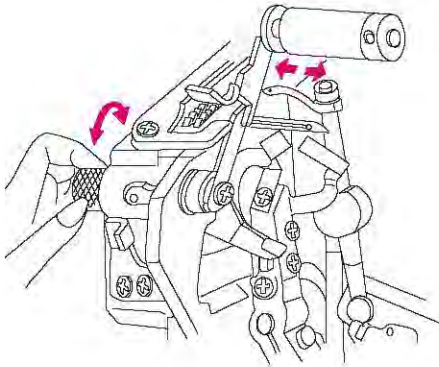


Stitch length

- The stitch length can be adjusted from 1 to 4 mm.
- Higher number = longer stitch, lower number = shorter stitch.
- Basic stitch length = N.

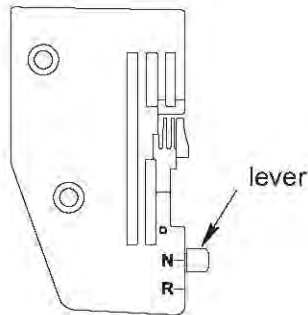
Cutting width

- The cutting width should be adjusted according to the type of fabric being sewn. Check the seam each time and adjust the cutting width accordingly.



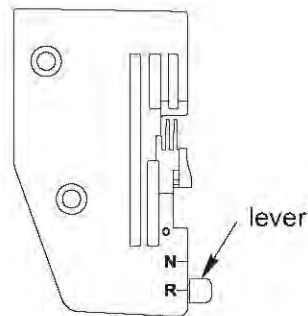
Adjusting the cutting width:

- Open cloth plate cover
- Turn cutting width dial:
- Clockwise to move knife to the left (for heavier fabrics).
- Counter-clockwise to move the knife to the right (for lighter fabrics).

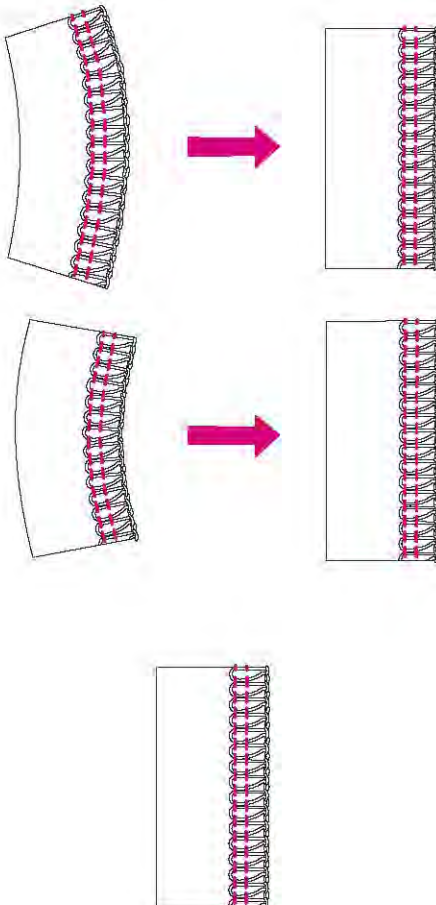
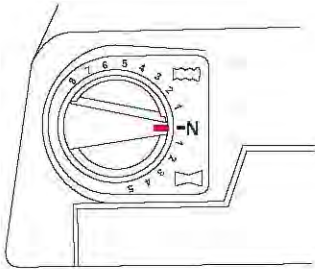


How to use the needle plate

Switch the lever to select the regular or rolled hem and narrow hem sewing. "N" for regular sewing. "R" for rolled and narrow hem sewing.




Differential feed*



Differential feed*


There are two feed dogs: one front and one rear. The two feed dogs move independently and the distance each feed dog travels during one complete movement can be adjusted.

Stretching effect

To stretch the fabric select a number from N to 5 in the section "  ".

This prevents fine nylon jerseys or closely woven fabrics from puckering.

Pushing effect

To prevent waving or to gather select a number from N to 8 in the section "  ".

This prevents waving or fluting in knits or puckers in fine woven fabrics. It also can be used to gather single layers of fine woven fabric.

Note:

When sewing without differential feed the dial should be on position N.

Gathering*

Use the differential feed to gather a single layer of fabric. For example sleeve heads, yokes, lace edging or frills.

Adjustment:

Stitch: 4-thread overlock

Differential

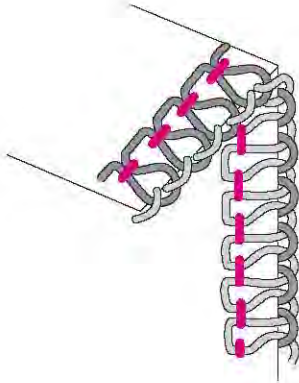
feed: 8

Stitch length: 3-4

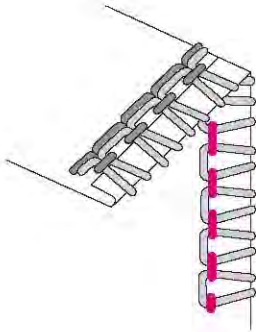
Thread tension: 3-5

3 thread overlock

For a 3-5 mm wide 3 thread overlock, remove the left needle. Thread both loopers and then the right needle.



For a 5-7 mm wide 3 thread overlock, remove the right needle. Thread both loopers and then the left needle.



3 thread roll hem

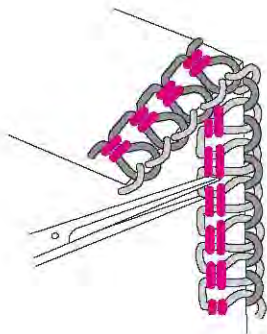
Switch the lever to "R". See page 29.

Note:

the tensions may need to be adjusted depending on the type of fabric or thread being used.

Setting:

Stitch:	3 thread overlock
Needle:	right
Tensions:	
Needle:	3-5
Upper looper	3-5
Lower looper	7-9
Stitch length	1.5-2
Differential feed	N (depending on fabric)

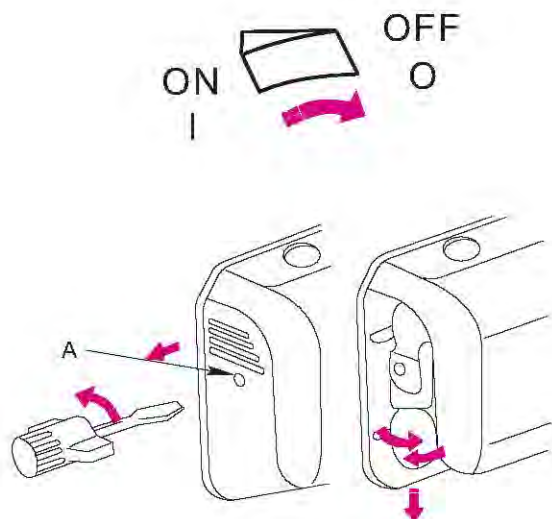


Unpicking seams

Cut the loops with sharp scissors.

Pull the needle thread and the stitches will come undone.

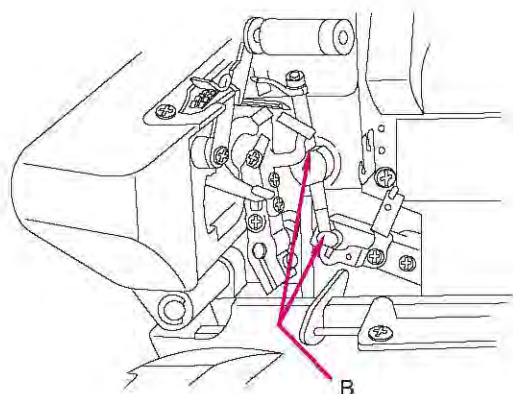
Maintenance



- If voltage indicated on the electrical rating plate of your machine is 220-240V, ask for light bulb conforming to following specification.
-Edison type (screw type):
220 ~240V, 15W
 - Glass shape: T-22
 - Lamp cap: E14
 - Overall length: 56mm

Note:

Always use 110V/230V/240V/15W bulbs. Bulbs are available from your local dealer.





Changing light bulb

- Switch the machine off "O" and disconnect it from electricity supply by removing the mains plug.
 - Loosen the bulb cover setscrew (A) and remove the bulb cover.
 - Unscrew the bulb and replace it with a new one.
 - Attach bulb cover and re-tighten the setscrew.
- If voltage indicated on the electrical rating plate of your machine is 100V, ask for light bulb conforming to following specification.
-Edison type (screw type):
100V, 12W
 - Glass shape: T-20
 - Lamp cap: E12
 - Overall length: 48mm
 - If voltage indicated on the electrical rating plate of your machine is 110-120V, ask for light bulb conforming to following specification.
-Edison type (screw type):
110 ~120V, 15W
 - Glass shape: T-20
 - Lamp cap: E12
 - Overall length: 48mm

Cleaning and lubricating

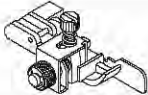
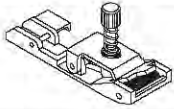
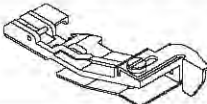
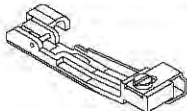
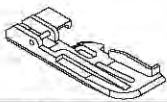
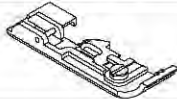
- Disconnect machine from electricity supply.
- During sewing dust and fluff collect in and on the machine. This should be removed regularly.
- Your overlocker requires very little lubrication but if used frequently, lubricate the points illustrated (B) with a drop of oil.

Trouble shooting guide

Thread breaks	Thread tension is too tight for thread used.	Reduce thread tension.	27
	The machine is not threaded correctly.	Check the threading.	17/19
	Needles are incorrectly inserted.	Insert needles fully into needle clamp with flat side to the back.	21/23 15
Needles break	Needles are bent, blunt or the points are damaged.	Replace the needles.	15
	Needles not inserted correctly.	Insert needles fully into needle clamp with flat side to the back.	15
	Fabric was pulled while sewing.	Guide fabric gently with both hands.	25
Skipped stitches	Needles are bent or blunt. Wrong needles used.	Replace the needles. Use system HAx1 (130/705H) needles.	15
Poor stitch formation	Thread is not wound correctly round tension dials.	Check threading.	17/19
			21/23
Seams flute or ware (knits)	Differential feed is set incorrectly. Fabric was pulled while sewing.	Adjust differential feed between N and 8 "  "	31
Seams pucker	Differential feed is set incorrectly.	Adjust differential feed between N and 5 "  "	31
Fabric edges curl	Too much fabric in the stitch formation.	Reduce cutting width, knife to the left.	29
Thread loops are loose	Too little fabric in the stitch formation.	Increase the cutting width, knife to the right.	29
Machine does not sew	Cord not plugged in correctly. Main switch not on.	Check plug. Switch machine on " 1 ".	11

<p>Stitch types: - 2 needles, 4 thread overlock with integrated safety seam - 1 needle. 3-thread overlock, 3 thread rollhem.</p> <p>Needle system: ELX705</p> <p>Seam width: 3-7 mm</p> <p>Stitch length: 1-4 mm</p> <p>Presser foot lift: Max. 6mm</p> <p>Handwheel: rotates counter-clockwise</p> <p>Sewing speed: up to 1300 s.p.m.</p> <p>Weight: 7.3 kg</p> <p>Dimensions: 340W x 370D x 350H mm</p>	<p>Points réalisables: - 2 aiguilles, surjet à 4 fils a avec point de sécurité intégré - 1 aiguille, surjet à 3 fils Ourlet roulé à 3 fils</p> <p>Système d'aiguille: ELX705</p> <p>Largeur de couture: 3-7mm</p> <p>Longueur de point: 1-4mm</p> <p>Elèveateur de pied-de biche: 6 mm au max.</p> <p>Rotation du volant: En sens inverse des aiguilles d'une montre</p> <p>Vitesse de travail: Jusqu'à 1300 points, omite/mi</p> <p>Poids: 7,3kg</p> <p>Dimensions: - 292 (L) x 295 (P) x 290 (H) mm.</p>
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<p>Standard accessory: Dust cover</p>	<p>Accessoires standard Housse de protection</p>
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	Special accessories	Accessoires spéciaux:
	Blind stitch foot	Pied pour points invisibels
	Elasticator foot	Pied pour poser des élastiques
	Gathering foot	Pied fronceur
	Beading foot	Pied pose perle
	Cording foot	Pied ganseur
	Taping foot	Pied pose ruban
	Special accessories are available from your dealer	Les accessoires ad speciaux sont disponibles auprès de l'agent.

English

The product in this manual fulfil the demands in below norms:

72/23 EEC
89/336 EEC
89/392 EEC

Please pay attention on the needle area: The needle area can not be completely protected, as a totally protection will spoil the fundamental function of the overlock machine.

Great caution should be shown when working in the needle area. It is recommended to disconnect the overlock machine by remove plug from outlet when changing needle, bulb or when other work in the needle area is required.

The right to change in specification and specification reserved.

Française

Ce produit satisfait aux normes européennes ci-dessous mentionnées:

72/23 EEC
89/336 EEC
89/392 EEC

Prenez grand soin de l'aiguille car celle-ci ne peut être entièrement protégée sous peine d'atténuer la fonction fondamentale de la machine à coudre.

Faites très attention lorsque vous travaillez avec ou aux alentours de l'aiguille. Si vous désirez changer l'aiguille, la lumière de travail ou effectuer toute autre manipulation dans cette partie de la machine, nous vous conseillons vivement d'éteindre la machine en débranchant la prise de courant.

Nous nous réservons le droit de modifier nos instructions ou la construction de la machine.

JUKI®

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