

MODEL 4612TM

OPERATING INSTRUCTION:

The symbol "0" of a switch indicates the "off" position of a switch.

"For appliances with 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."

"Foot controller Model TJC 150, YC-482J or YC-482R for use with Sewing Machine Model 108, 109, 110, 344, L-372, L-392, L-393 and 4612."

(For U.S.A. market only)

IMPORTANT SAFETY INSTRUCTIONS

Your sewing machine is designed and constructed only for HOUSEHOLD use. Read all instructions before using this sewing machine.

DANGER

To reduce the risk of electric shock:

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

WARNING

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

1. Do not allow to be used as a toy. Close attention is necessary when this appliance is used by or near children.
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 opening blocked. Keep ventilation openings of the sewing machine and foot controller free from accumulation of lint, dust, and loose cloth.
5. Never drop or insert any object into any opening.
6. Do not use outdoors.
7. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
8. To disconnect, turn all controls to the off ("0") position, then remove plug from outlet.
9. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
10. Keep fingers away from all moving parts. Special care is required around sewing machine needle.
11. Always use the proper needle plate. The wrong plate can cause the needle to break.
12. Do not use bent needles.
13. Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
14. Switch the sewing machine off ("0") when making any adjustment in the needle area, such as threading needle, changing needle, threading bobbin, or changing presser foot, and the like.
15. Always unplug the sewing machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.

SAVE THESE INSTRUCTIONS

IMPORTANT

Be sure to keep machine away from static electricity, heat sources, humidity, and direct sunlight. When using your sewing machine for the first few times, place a waste fabric under the presser foot and run the machine without thread for a few minutes. Wipe away any oil which may have appeared.

Do's and Don'ts

1. Always be aware of the up-and-down movement of the needle and do not turn your attention from the machine while it is running.
2. When leaving the sewing machine unattended, the main switch of the machine must be switched off or the plug must be removed from the socket-outlet.
3. When servicing the sewing machine, or when removing covers or changing lamps, the machine must be disconnected from the supply by removing the plug from the socket-outlet.
4. Do not place anything on the foot control, otherwise the machine will start inadvertently, or the control or motor may burn out.
5. The maximum permissible power for the sewing lamp bulb is 15 watts.
6. When using your sewing machine for the first time, place a piece of waste fabric under the presser foot and run the machine without thread for a few minutes. Wipe away any oil which may have appeared.

Designs and specifications are subject to change without prior notice.

TABLE OF CONTENTS

SECTION I ESSENTIAL PARTS

Names of Parts

4-5

SECTION II GETTING READY TO SEW

Connecting the Machine to the Power Supply

Foot Control

Sewing Light

Extension Table (Accessory Box)

Dropping the Feed Dogs

To Snap On and Snap Off the Presser Foot

Changing Needles

Thread and Needle Chart

Removing or Inserting the Bobbin Case

Winding the Bobbin

Threading Bobbin Case

Threading the Machine

Drawing Up Bobbin Thread

Balancing Needle Thread Tension

Pattern Selector Dial

Stitch Length Dial

Reverse Stitch Lever

SECTION III BASIC SEWING

Straight Stitch Sewing

Changing the Sewing Directions

Zigzag Stitching

20

21

21

SECTION IV UTILITY STITCHING

Overcasting

Overedge Stitch

Tricot Stitch

Triple Strength Stitch

Buttonhole Stitching

Sewing Buttons

Zipper Application

Blind Stitch Hemming

Rolled Hem

22

22

23

23

24-25

26

27

28

29-30

SECTION V DECORATIVE STITCHING

Feather Stitch

Shell Tuck

Stretch Stitch Patterns

31

32

32

SECTION VI CARE OF YOUR MACHINE

Dismantling and Assembling Hook Race

Cleaning the Feed Dogs

Oiling the Machine

Trouble Shooting

33

34

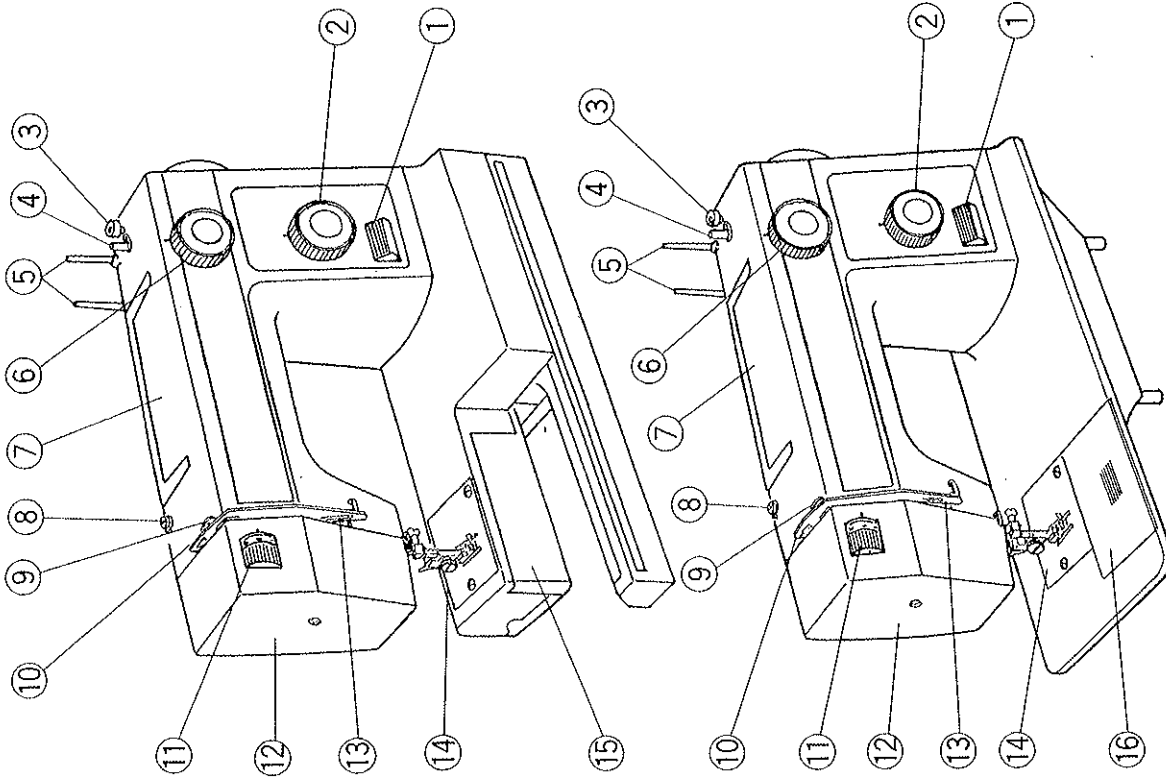
35

36-37

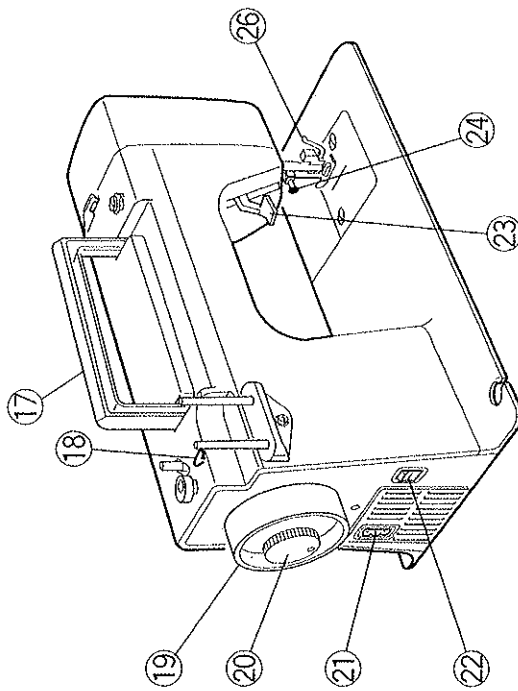
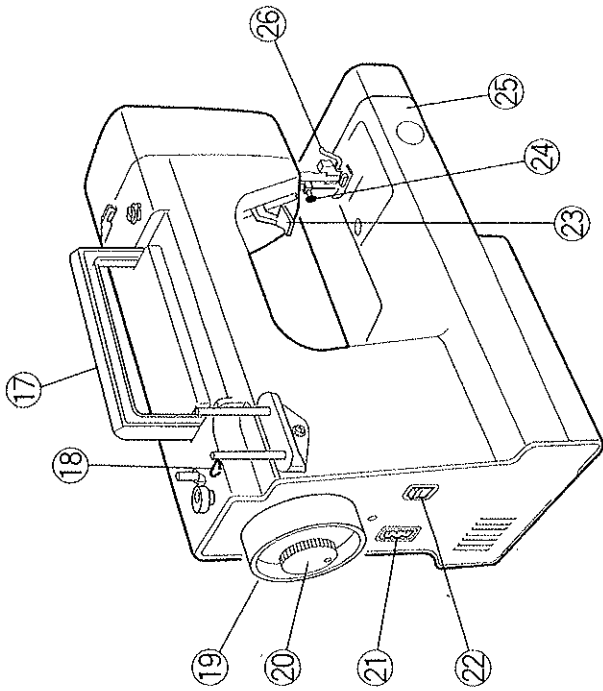
SECTION I ESSENTIAL PARTS

Names of Parts

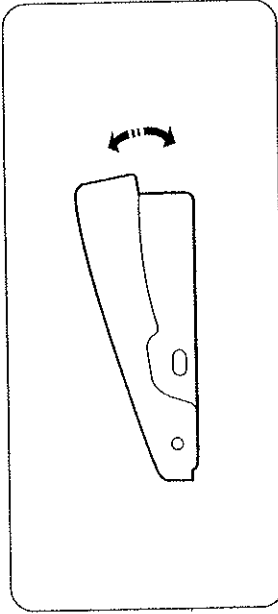
- ① Reverse stitch lever
- ② Stitch length dial
- ③ Bobbin winder stopper
- ④ Bobbin winder spindle
- ⑤ Spool pins
- ⑥ Pattern selector dial
- ⑦ Top cover
- ⑧ Bobbin winder thread guide
- ⑨ Thread take-up lever
- ⑩ Thread guide
- ⑪ Thread tension dial
- ⑫ Face plate
- ⑬ Check spring holder
- ⑭ Needle plate
- ⑮ Hook cover
- ⑯ Slide plate



- ⑰ Carrying handle
- ⑱ Thread guide
- ⑲ Handwheel
- ⑳ Stop motion knob
- ㉑ Machine socket
- ㉒ Power switch
- ㉓ Presser foot lifter
- ㉔ Needle clamp screw
- ㉕ Free arm
- ㉖ Presser foot

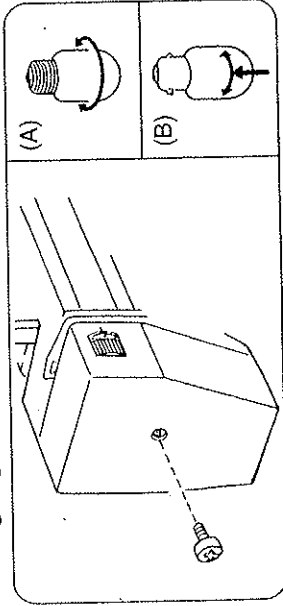


Foot Control



Sewing speed can be varied by the foot control. The harder you press on the control, the faster the machine runs.

Sewing Light

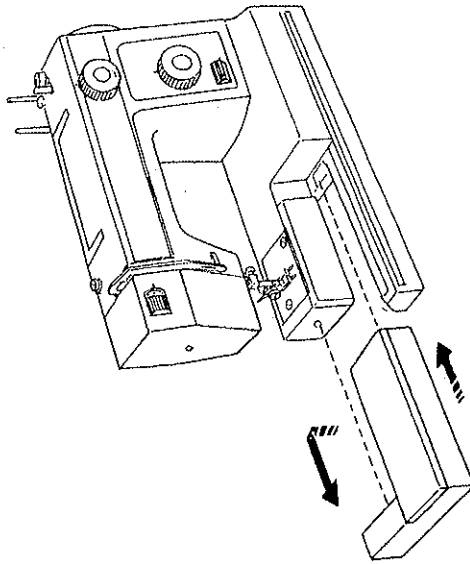


The sewing light is located behind the face plate. Turn the screw to the left and remove the face plate.

- (A) • To remove..... Turn to the left.
- To replace..... Turn to the right.
- (B) • To remove..... Push and twist to the left.
- To replace..... Push and twist to the right.

Extension Table (Accessory Box)

The extension table provides added sewing surface and can be easily removed for free arm sewing.



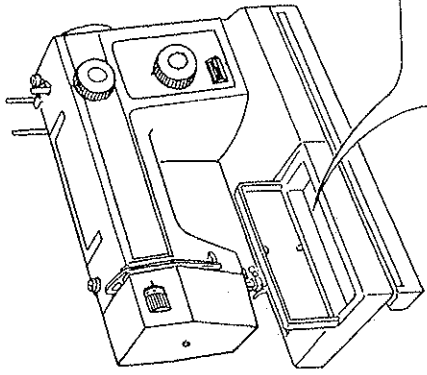
For free arm sewing

Pull the end of the extension table away from the machine, as illustrated.

For attaching the table

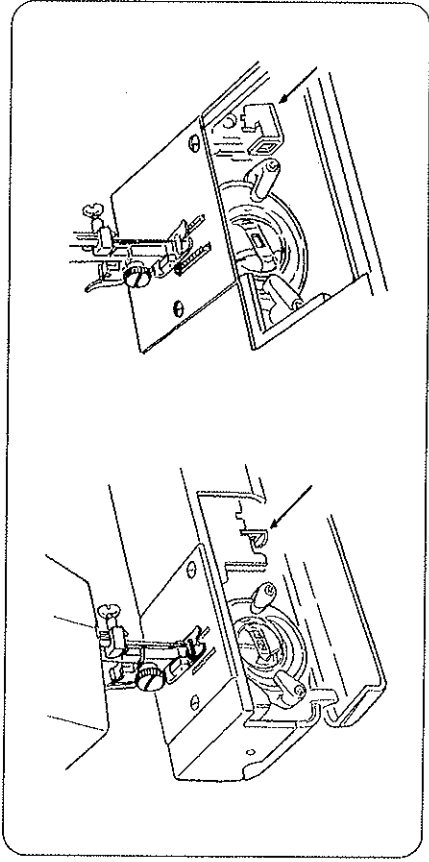
Push the extension table until its lugs fit into the machine.

Accessory Storage Box

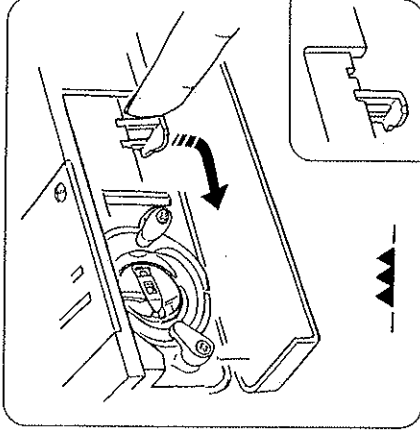


- Sewing accessories are conveniently located under the extension table.

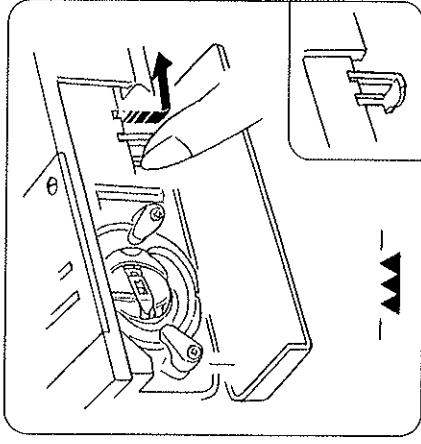
Dropping the Feed Dogs



The drop feed lever is located in the hook area.



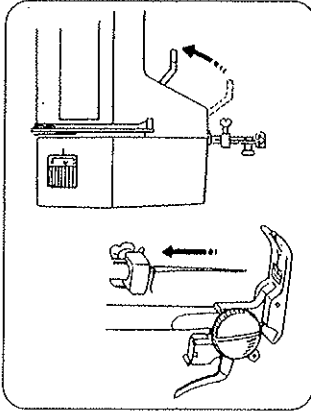
To raise the feed dogs, press down the lever and move it to the direction of arrow as illustrated.



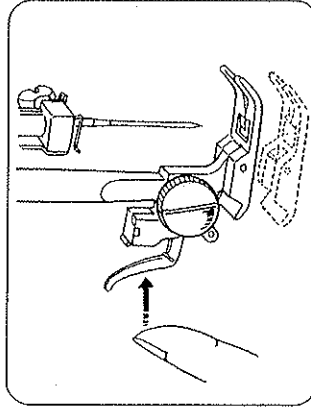
For dropping the feed dogs, press down the lever and move it to the direction of arrow as illustrated.

To Snap On and Snap Off the Presser Foot

To snap off

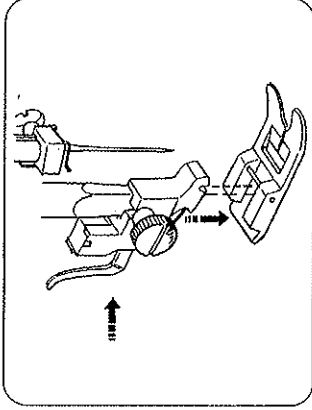


Turn the handwheel toward you to raise the needle to its highest position.
Raise the presser foot.



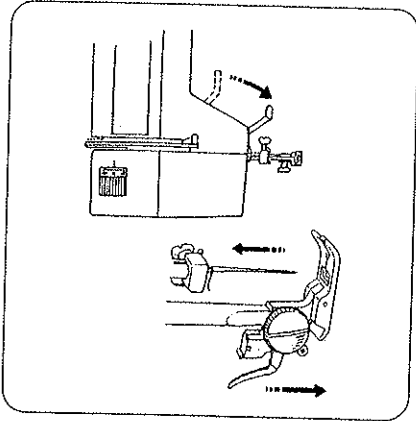
Press the lever on the back of the foot holder.
The presser foot will drop off.

To snap on

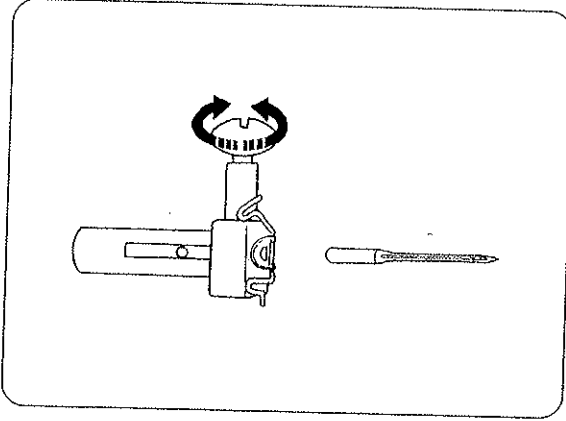


Place the presser foot so the pin on the foot lies just under the groove of the foot holder. Lower the foot holder to lock the foot in place.

Changing Needles



Raise the needle by turning the handwheel toward you and lower the presser foot.



Loosen the needle clamp screw by turning it toward you.

Remove the needle from the clamp.

Insert the new needle into the needle clamp with the flat side away from you.

When inserting the needle into the clamp, push it up as far as it will go and tighten the clamp screw firmly with the screwdriver.

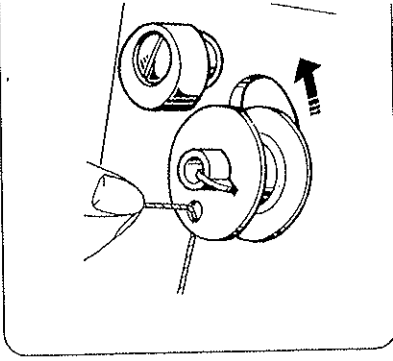
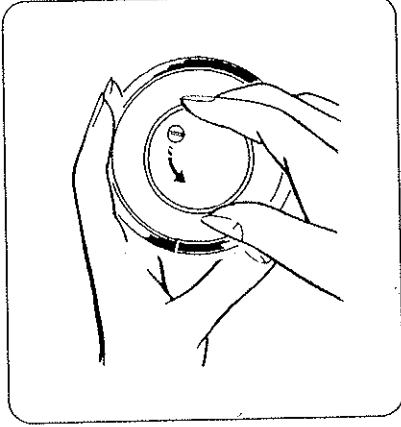
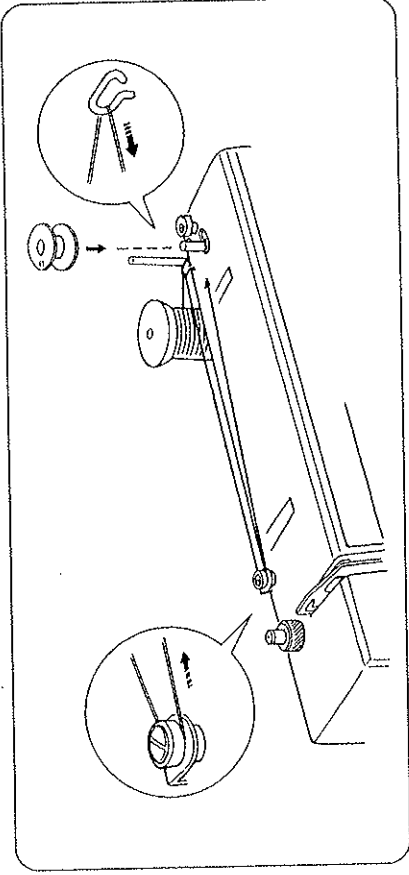
* Check your needles frequently for barbed or blunted points. Snags and runs in knits, fine silks and silk-like fabrics are permanent and are almost always caused by a damaged needle.

Thread and Needle Chart

	Fabrics	Threads	Needle Size
Light weight	Crepe de Chine, Voile Lawn, Organdy, Georgette, Tricot	Fine Silk Fine Cotton Fine Synthetic Fine Cotton Covered Polyester	9 or 11
Medium weight	Linens, Cotton, Pique, Serge, Double Knits, Percalé	50 silk 50 to 80 Cotton 50 to 60 Synthetic Cotton Covered Polyester	11 or 14
Heavy weight	Denim, Tweed, Gabardine, Coating, Drapery and Upholstery Fabric	50 silk 40 to 50 Cotton 40 to 50 Synthetic Cotton Covered Polyester	14 or 16

- In general, fine thread and needles are used for sewing thin fabrics, and thicker threads and needles are used for sewing heavy fabrics. Always test thread and needle size on a small piece of fabric which will be used for actual sewing.
- Use the same thread for needle and bobbin.
- When sewing stretch, very fine fabrics and synthetics, use a BLUE TIPPED needle. The blue tipped needle effectively prevents skipped stitches.
- When sewing very fine fabrics, sew over a piece of paper to prevent yarn distortion.

Winding the Bobbin



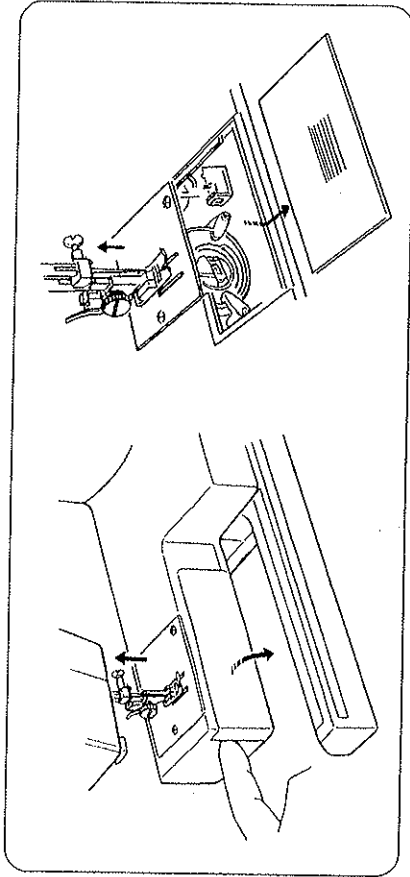
Draw thread from spool. Pass the thread through the top cover thread guide. Guide the thread around the bobbin winder thread guide. Insert the thread through the hole in the bobbin, threading from the inside to the outside. Put the bobbin on the bobbin winder spindle, and push it to the right.

While holding the handwheel with your left hand, turn the stop motion knob toward you with the right hand.

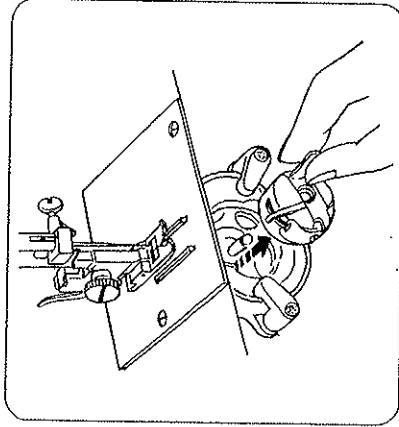
With the free end of the thread held in your hand, depress the foot control. Stop the machine when it has made a few turns, and cut the thread close to the bobbin. Depress the foot control again. When the bobbin is fully wound, it will stop automatically.

Return the bobbin winder to its original position by moving the spindle to the left, and cut the thread. Tighten the stop motion knob to engage clutch.

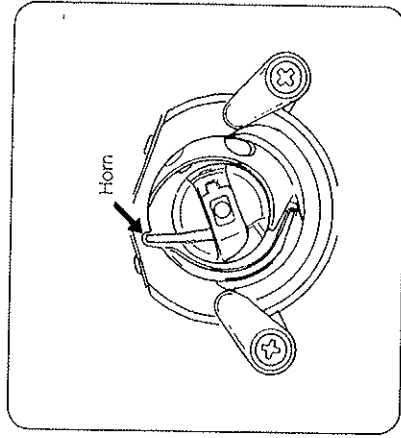
Removing or Inserting the Bobbin Case



Open the hook cover or the slide plate.

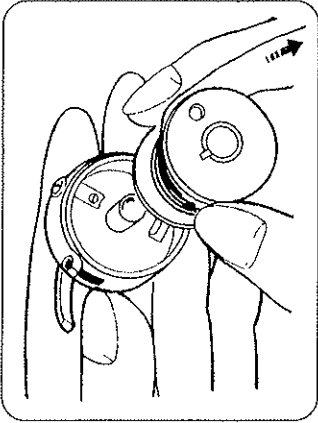


Raise the needle by turning the handwheel toward you. Take out the bobbin case by holding the latch.

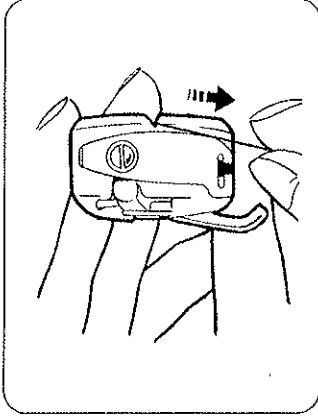


When inserting the bobbin case, place the horn into the recess of the hook face.

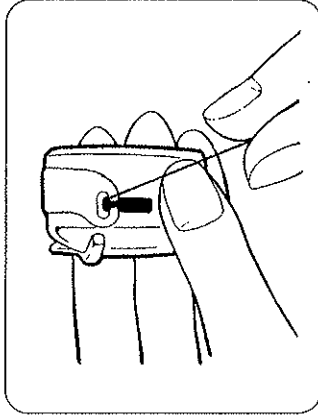
Threading Bobbin Case



Place the bobbin into the bobbin case.
Make sure the thread unwinds in the
direction of arrow.



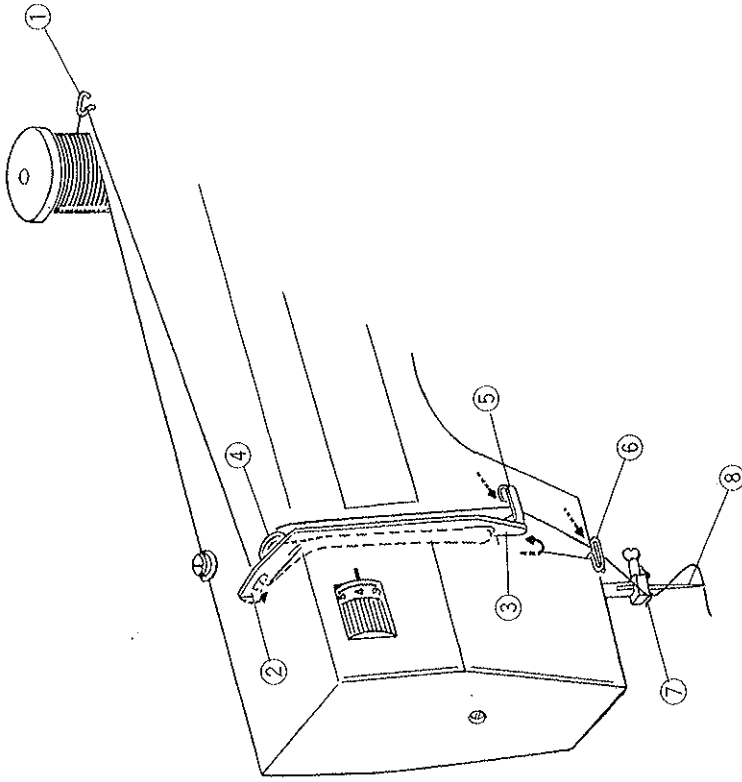
Pull the thread into the bobbin case
slot.



Draw the thread under the tension
spring and
into the delivery eye.

* Leave about 10 cm (4 inches) of
free thread.

Threading the Machine

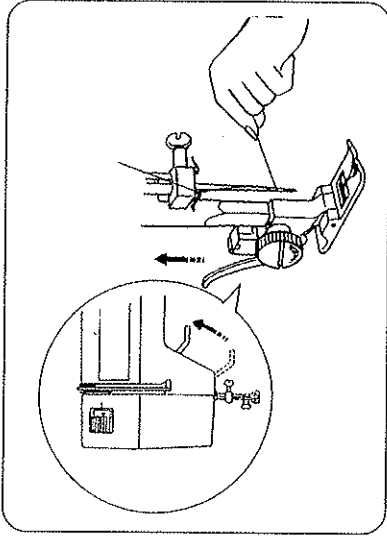


Raise the thread take-up lever to the highest point by turning the handwheel towards you.

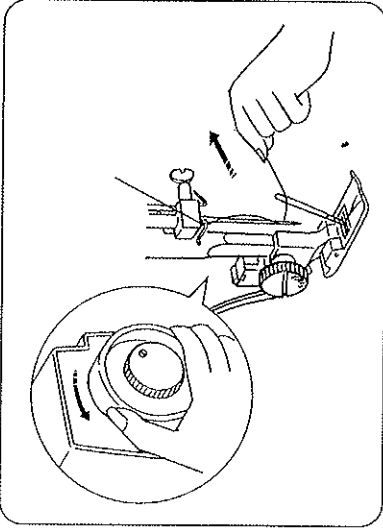
Raise presser foot with presser foot lifter and pass the thread in the order from ① to ⑧.

- ① Pass the thread through the top cover thread guide.
- ② Draw the thread around the thread guide and down into the tension.
- ③ Then down around the check spring holder.
- ④ Firmly draw the thread from left to right over the take-up lever and down into the take-up lever eye.
- ⑤⑥ Then down through the lower thread guides.
- ⑦ Slide the thread behind the needle bar thread guide on the left.
- ⑧ Thread the needle from front to back.

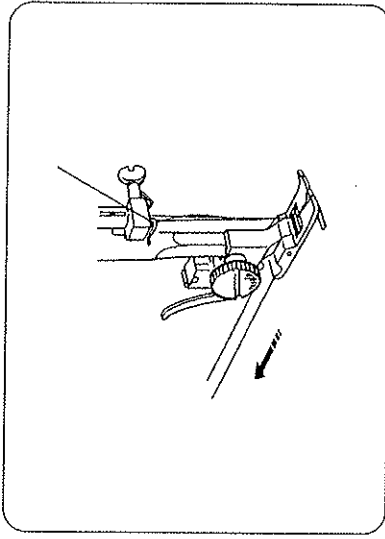
Drawing up Bobbin Thread



Raise the presser foot and hold the needle thread lightly with your left hand.

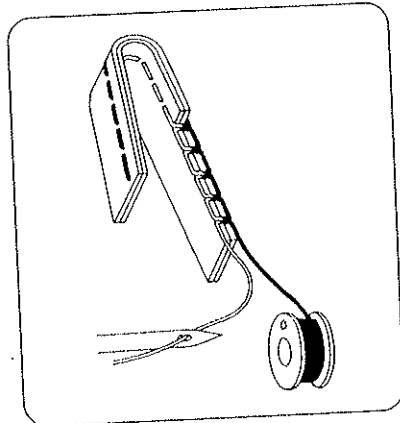


Turn the handwheel slowly towards you with your right hand until the needle goes down and continue turning handwheel until the take-up lever is at its highest position. Lightly draw up the needle thread forming a loop of the bobbin thread.

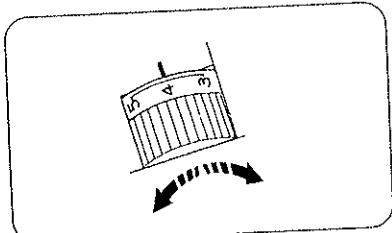


Pull 15 cm (6") of both threads back and under the presser foot.

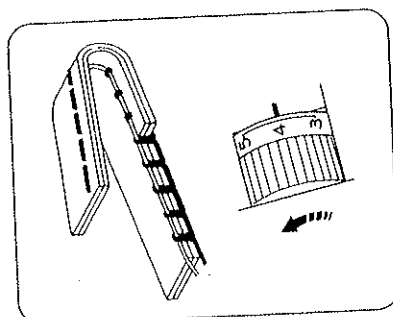
Balancing Needle Thread Tension



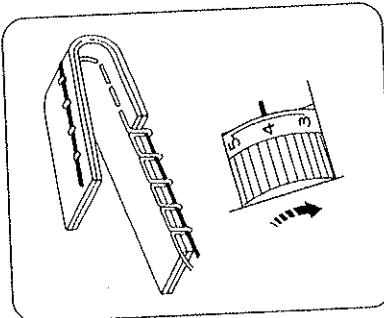
The needle thread and the bobbin thread should interlock in the center of two layers of fabric in straight seams.



Set the desired number of the thread tension dial at setting mark.

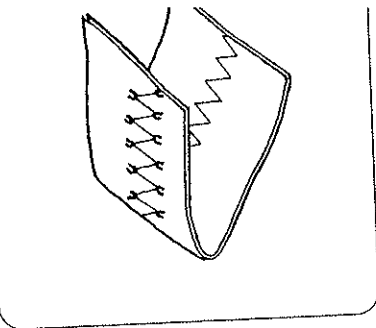


Loosen the needle thread tension by moving the dial to a lower number.



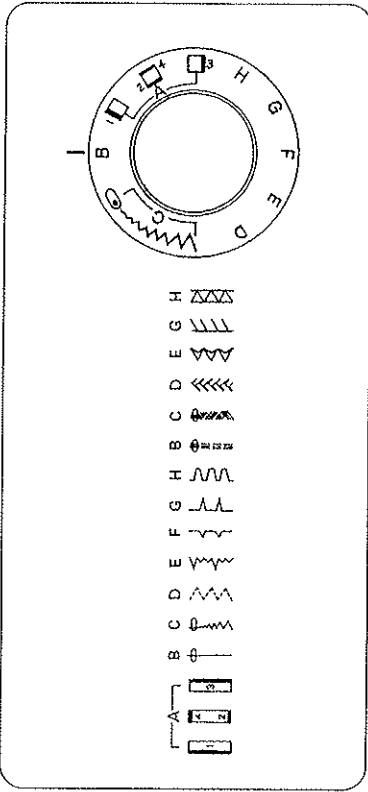
Tighten the needle thread tension by moving the dial to a higher number.

Thread Tension for Zigzag



To obtain better zigzag stitches, upper thread should be slightly weaker than in the case of straight sewing. The upper thread should appear slightly on the wrong side of the fabric.

Pattern Selector Dial



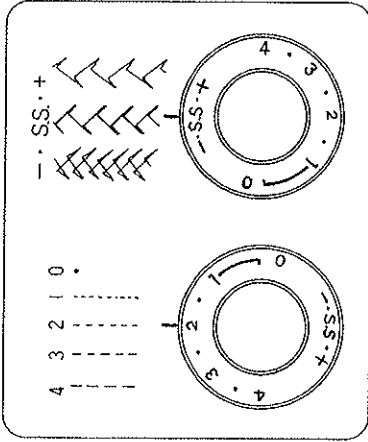
Raise the needle above the fabrics and select the desired pattern at the setting mark by turning the pattern selector dial. Each colour of pattern selector corresponds to each one of stitch length control.

Selecting Stretch Stitch Patterns (Blue Zone)

When sewing stretch stitch, set the stitch length dial at "S.S.". When forward and reverse feeds become unbalanced depending upon the type of fabric, correct the balance as follows:

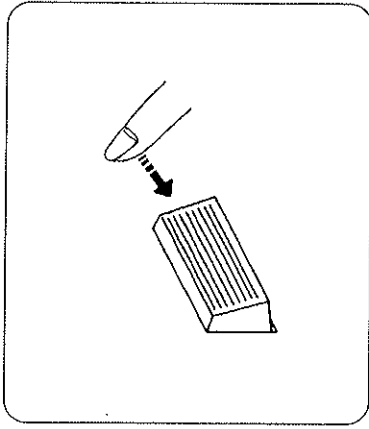
When patterns are compressed, correct it by turning the dial toward "+".
When patterns are drawn out, correct it by turning the dial toward "-".

Stitch Length Dial



The higher the number, the longer the stitch length. You can select the suitable stitch length for most fabrics.

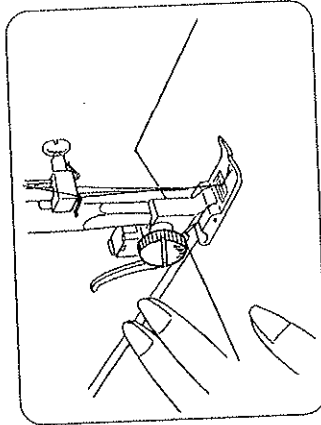
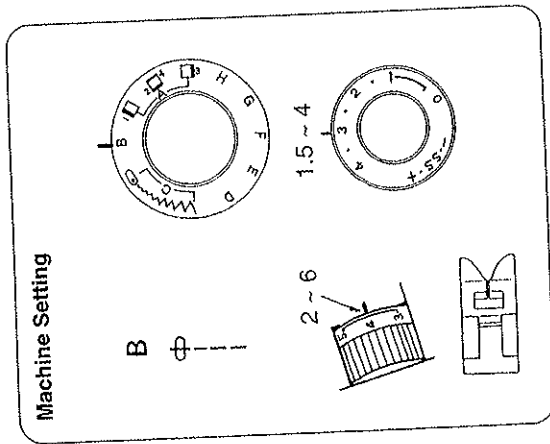
Reverse Stitch Lever



As long as you keep the reverse stitch lever depressed, the machine sews backwards.

SECTION III BASIC SEWING

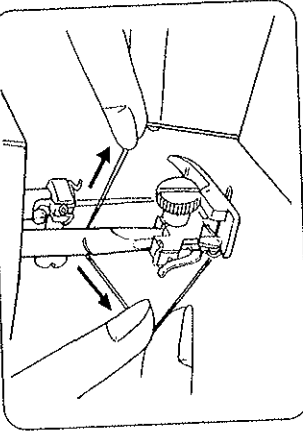
Straight Stitch Sewing



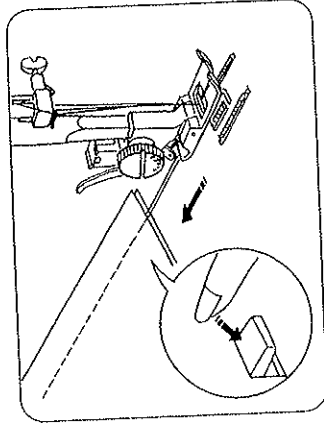
Raise the presser foot and position the fabric next to a stitching guide line on the needle plate.
Lower the needle into the fabric.

Lower the presser foot and smooth the threads toward the back. Depress the foot control.

Gently guide the fabric along the guide line letting the fabric feed naturally.



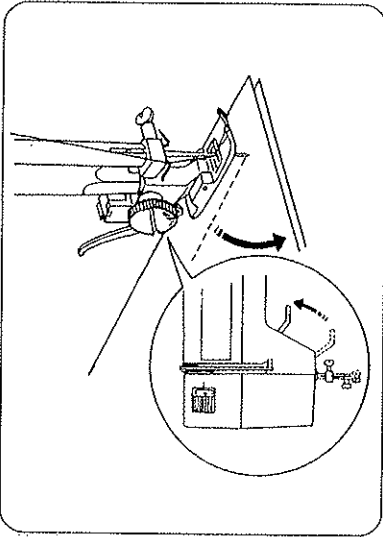
The threads are cut the proper length for starting the next seam.



For fastening the ends of seams, press the reverse lever and sew several reverse stitches.

Raise the presser foot and remove the fabric, drawing the threads to the back.

Changing the Sewing Directions



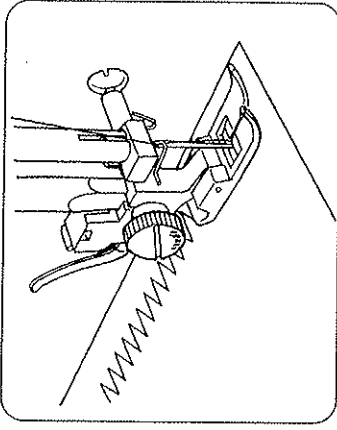
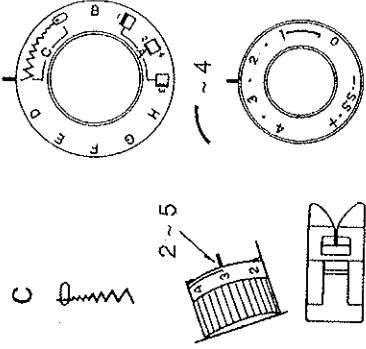
Stop the machine and turn the handwheel toward you to bring the needle down into the fabrics.

Raise the presser foot.

Pivot the fabric around the needle to change sewing direction as desired. Lower the presser foot.

Zigzag Stitching

Machine Setting



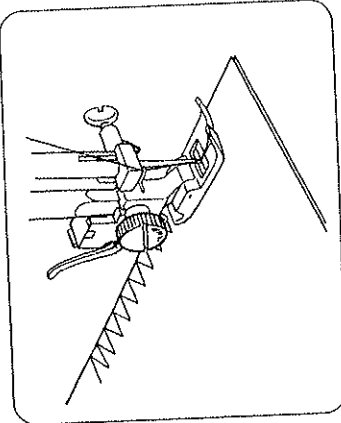
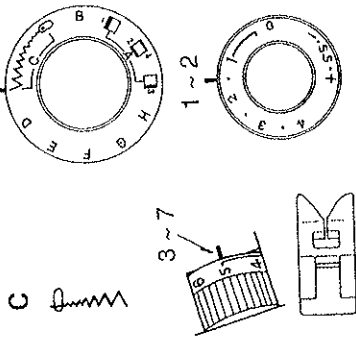
Simple zigzag stitching is widely used for overcasting, sewing on buttons etc.

SECTION IV UTILITY STITCHING

Overedge Stitch

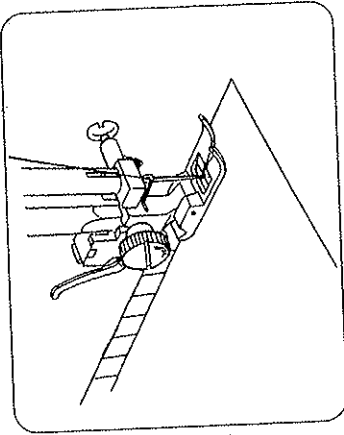
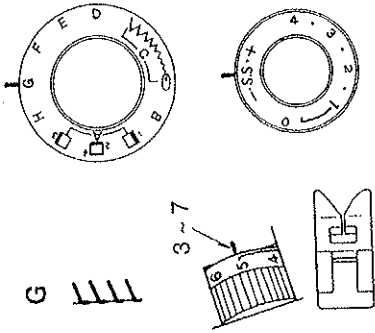
Overcasting

Machine Setting



This type of stitch is used on the seam allowance to prevent fabrics from fraying at raw edges. It can be used to finish a hem edge.

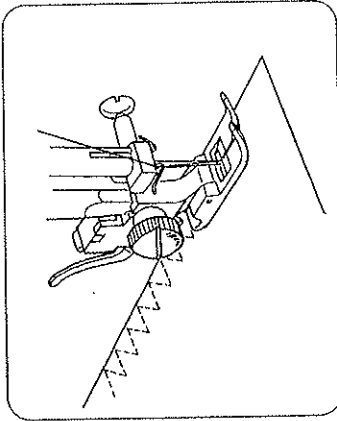
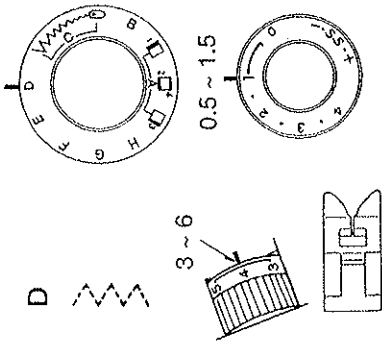
Machine Setting



Overedge stitch will be done most successfully when the right side stitches of zigzag fall slightly off the edge of the cloth.

Tricot Stitch

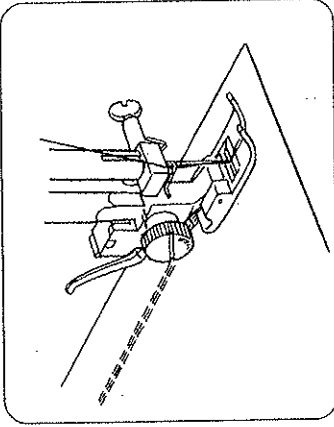
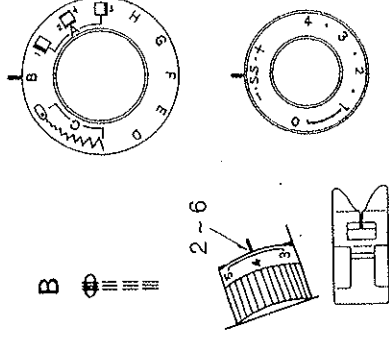
Machine Setting



Place the fabric under the presser foot so that the edge will be slightly inside the right hand side of the presser foot. Guide the work so the right hand stitches fall at the edge of the fabric.

Triple Strength Stitch

Machine Setting



The stitch is sewn with two stitches forward and one stitch backward forming a seam that does not rip easily.

Garments should be basted for fitting before seaming.

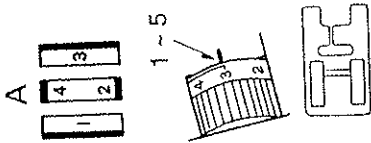
This strong, durable stitch is recommended where both elasticity and strength are needed to insure comfort and durability.

Use it to reinforce areas such as crotch and armhole seams.

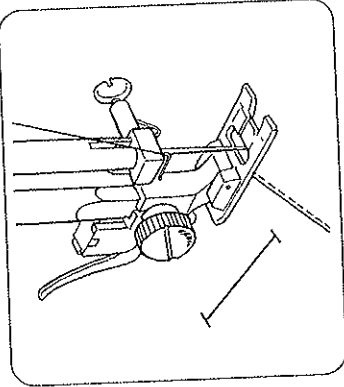
Also use when constructing items such as backpacks for extra strength.

Buttonhole Stitching

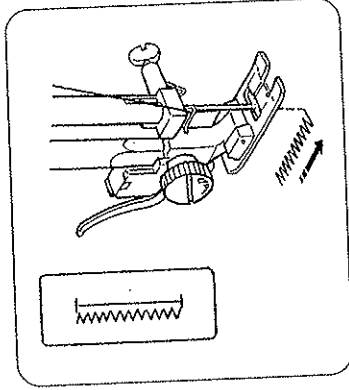
Machine Setting



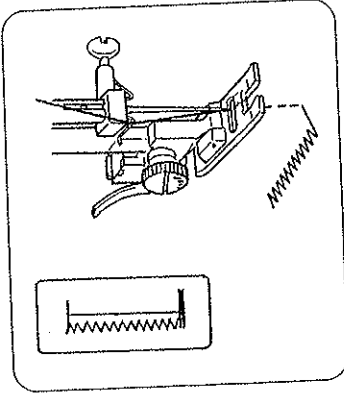
Make a test buttonhole and a sample duplicating the fabric, interfacing and seams of the actual garment. Place the button on the fabric sample and mark the top and bottom to determine the buttonhole length.



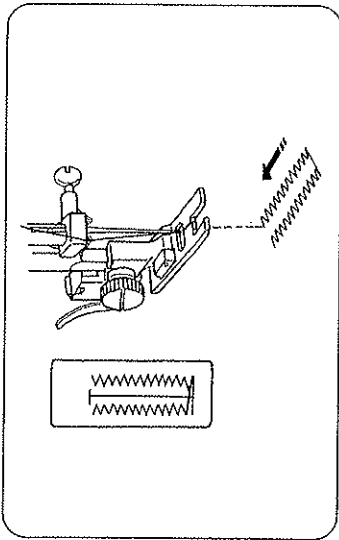
Set the pattern selector dial at "1". Slide both threads to the left. Lower the needle into the garment where the buttonhole is to start, and lower the foot.



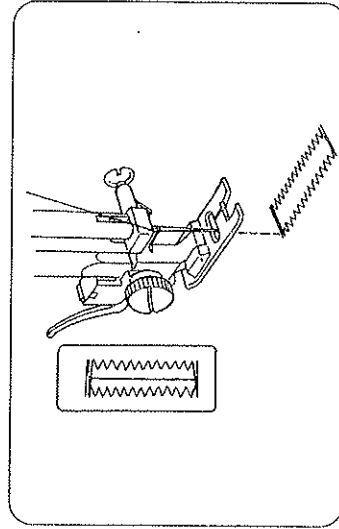
Sew down the left side stopping at the bottom mark. Raise the needle.



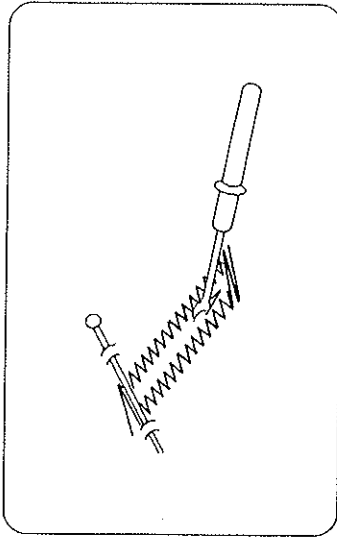
Set the pattern selector dial at "2", sew 5 stitches of bartack and raise the needle from the fabric.



Set the pattern selector dial at "1".
 Sew up the right side of the buttonhole. Stop the machine when you are directly opposite the first stitch on the left hand side and raise the needle.



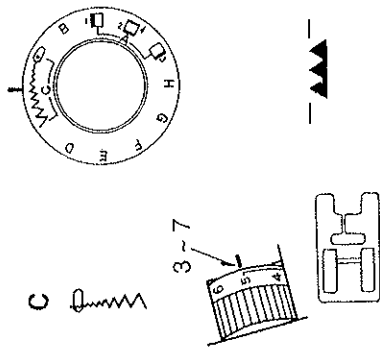
Set the pattern selector dial at "2".
 Sew a few bartacks and raise the needle from the fabric.
 Set the stitch length dial to "0" and the pattern selector dial at straight stitch sewing. Sew a few locking stitches.



Remove the fabric from the machine and cut the sewing threads.
 Insert a pin inside the bartack.
 Then cut the opening with a seam ripper.
 Take care not to cut the stitches.

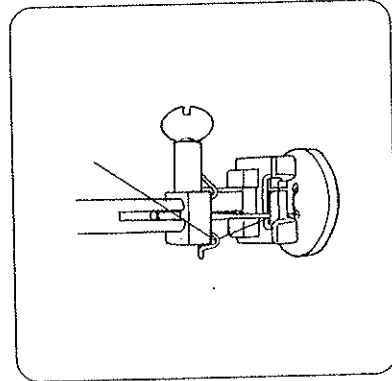
Sewing Buttons

Machine Setting

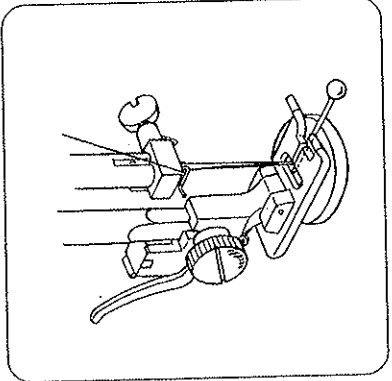


Tape the button over the placement mark.
A pin can be placed on top of the foot to form a shank.

Press down the drop feed lever and move it to the right for dropping the feed dogs.

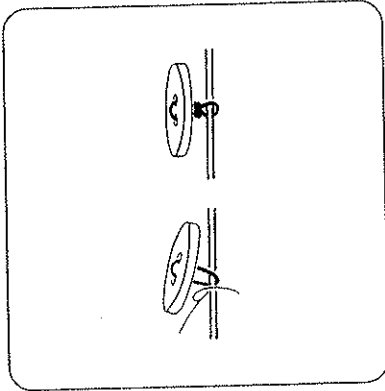


Set the pattern selector at "0". Align the both holes of the button with the slot of the foot and place the left hole of the button just below the needle point. Lower the foot and turn the pattern selector until the needle point comes just above the right hole of the button. Sew about five stitches and raise needle. Set the pattern selector at "0" again and sew a few stitches to lock thread.



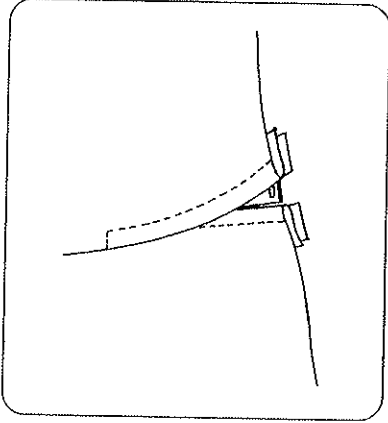
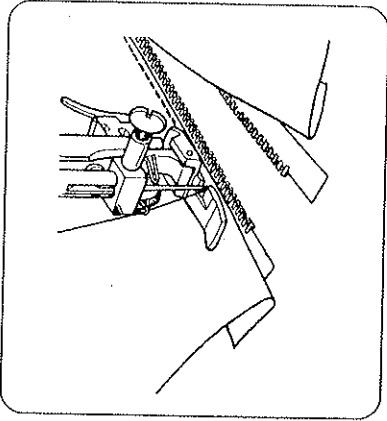
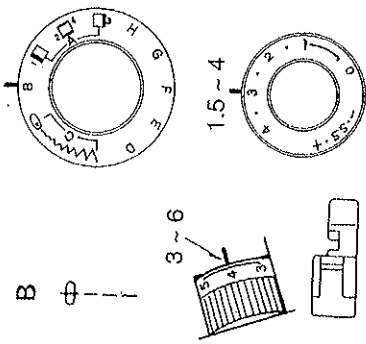
To strengthen the shank, cut the threads leaving a 20 cm (8") tail. Bring the needle thread down through the hole in the button and wind it around the shank.

Draw the thread to the wrong side of fabric and knot.



Zipper Application

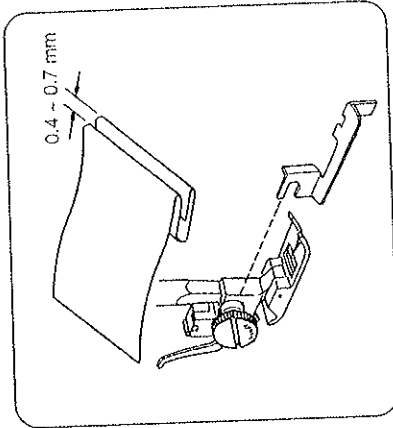
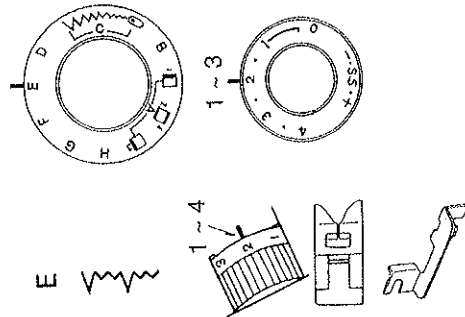
Machine Setting



Pin or baste zipper tape to fabric and place it under the foot. Smooth the threads toward the back and lower the foot. To sew left side of the zipper, guide the edge of the zipper along the zipper teeth and stitch through garment and zipper tape. Turn the fabric and sew the other side of the zipper in the same way as you did on the left side of the zipper.

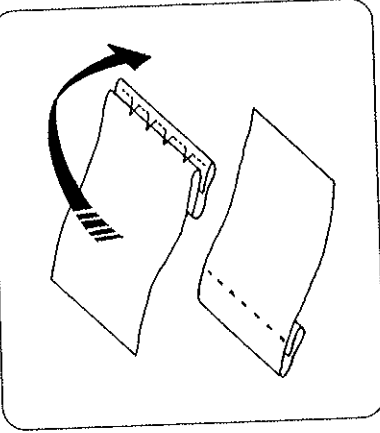
Blind Stitch Hemming

Machine Setting

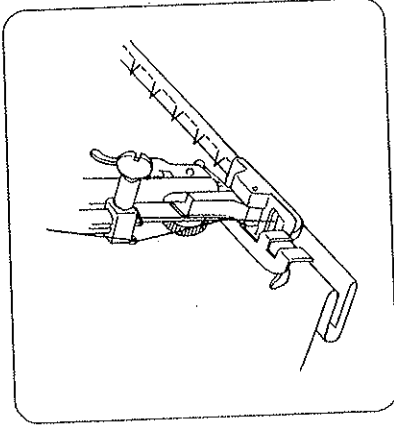


Fold up the desired amount and pin in place. Then fold the hem under the fabric as illustrated.

Lower the presser foot, then loosen the foot holder screw to place the hem guide between the screw and the shank of foot holder. Tighten the screw making sure the wall of hem guide is placed in the middle of the toes of the presser foot.



Spread the fabric flat with the right side facing up.

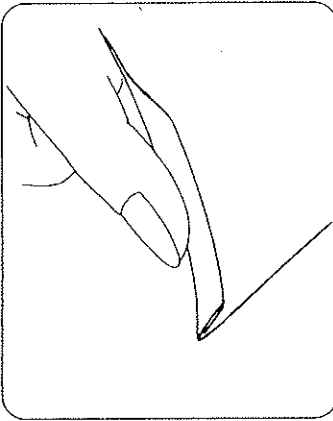
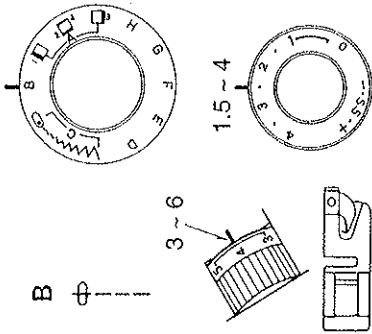


Raise the presser foot and place the fabric under the foot so that the soft fold rests against the wall of hem guide.

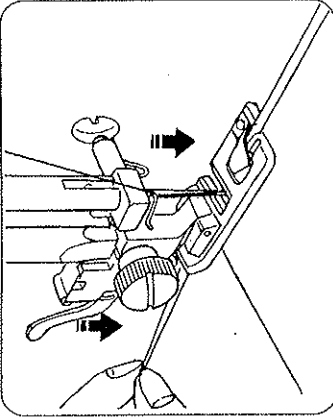
Lower the foot, then stitch slowly for better control so that the zigzag stitches fall on the hem allowance and pierce the soft fold. While sewing, make sure the soft fold runs along the wall of hem guide.

Rolled Hem

Machine Setting

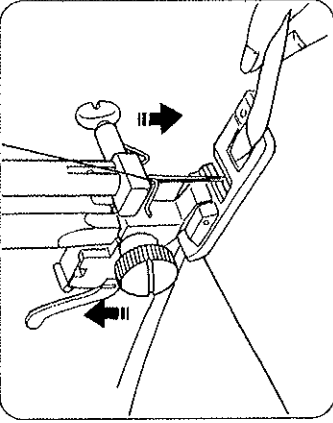


Make a double 0.25 cm (1/8") fold approximately 8 cm (3") in length.

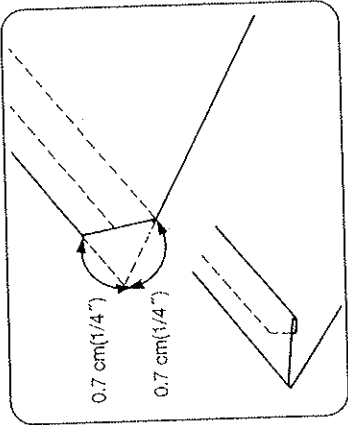


Lower the needle into the fabric at the point where sewing is to begin, then lower the hemmer foot.

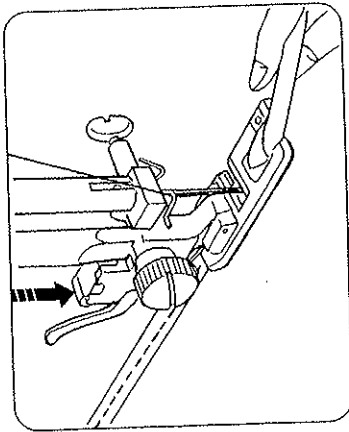
Sew 3 or 4 stitches while holding the needle and bobbin threads.



Lower the needle into the fabric and lift the hemmer foot. Insert the folded portion of the fabric into the curl of the hemmer foot.



Trim about 0.7 cm (1/4") from corners as illustrated, to reduce bulk.

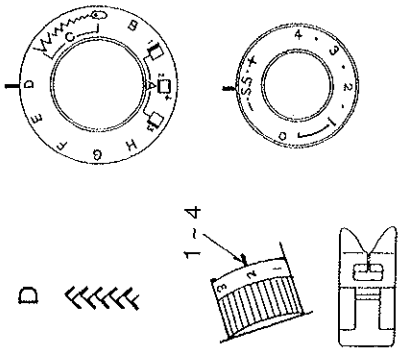


Lower the hemmer foot, then sew by lifting up the edge of the fabric to keep it feeding smoothly and evenly.

SECTION V DECORATIVE STITCHING

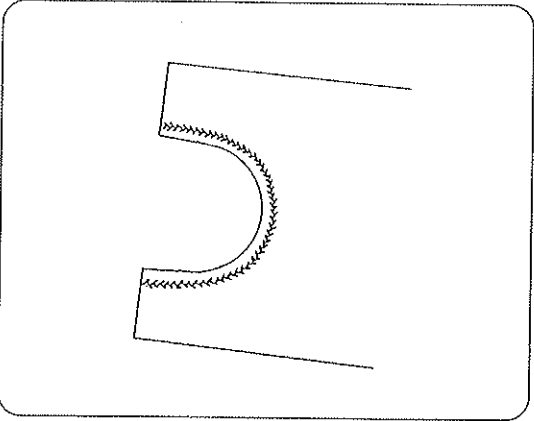
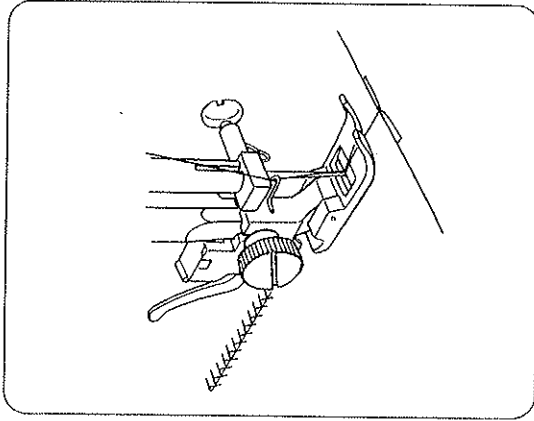
Feather Stitch

Machine Setting



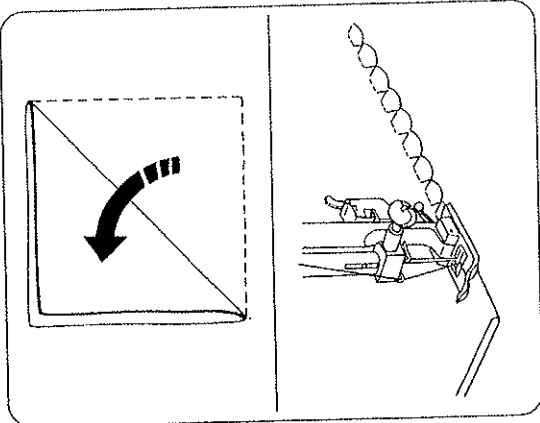
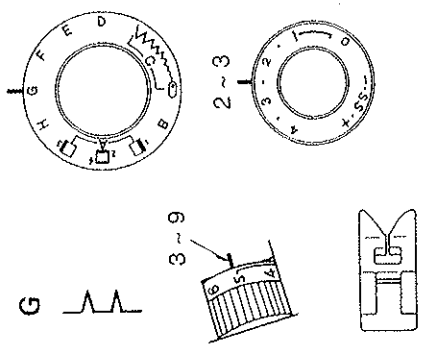
When sewn over a seam the feather stitch reinforces stretch and woven fabrics with a strong decorative stitch. It can be used to sew spandex undergarments or decoratively hem elastic fabric. Another common use for the feather stitch is patchwork quilting.

When you work with the feather stitch, you can sew the pattern on a seam that is already joined and pressed flat, or you can butt two edges and use just the feather stitch to join them.



Shell Tuck

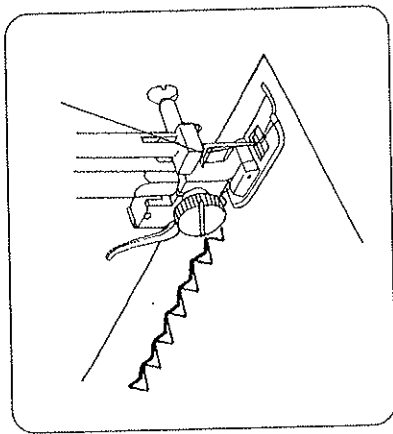
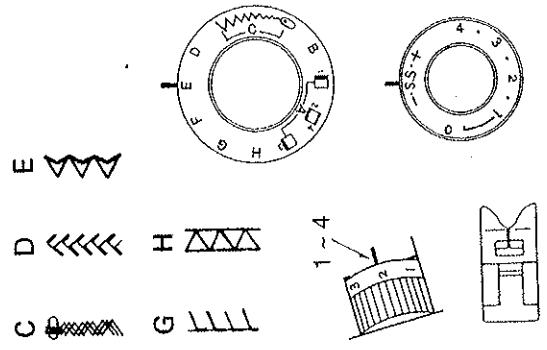
Machine Setting



Place the folded edge along the slot of foot. The needle should fall off the edge of the fabric on the right forming a tuck.

Stretch Stitch Patterns

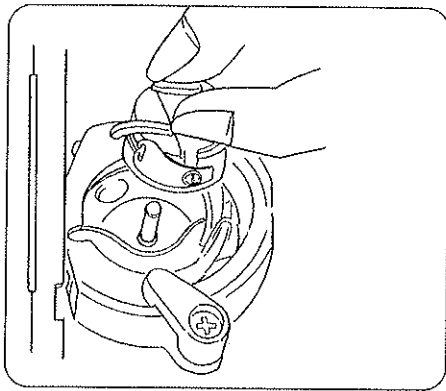
Machine Setting



When forward and reverse feeds become unbalanced depending upon the type of fabric, correct the balance by turning the stitch length dial as follows:
 When patterns are compressed, correct it by turning the dial toward " + ".
 When patterns are drawn out, correct it by turning the dial toward " - ".

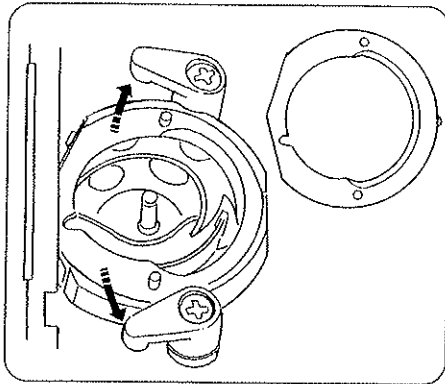
SECTION VI CARE OF YOUR MACHINE

Dismantling and Assembling Hook Race

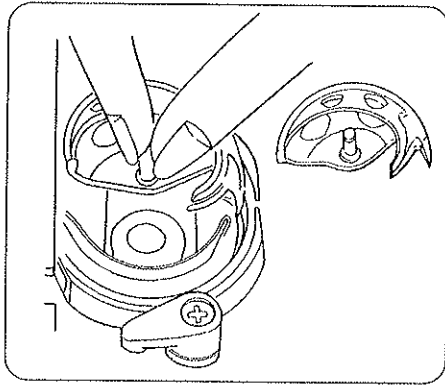


To dismantle hook race:

Raise the needle to its highest position and open the hook cover or the slide plate. Open the hinged latch of bobbin case and take it out of the machine.

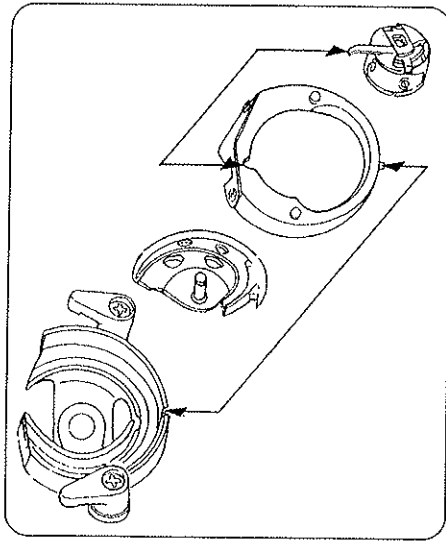


Open the hook race ring holders outside and remove the hook race ring.



Remove the hook.

* Clean the hook race with a brush and a soft dry cloth.



To assemble hook race:

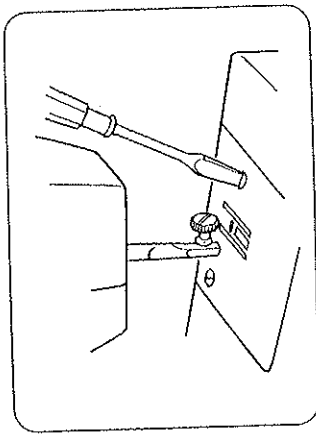
Hold the hook by the center pin and fit carefully back into the hook race, forming perfect circle with the driver.

Replace the hook race ring with the bottom pin fits into the notch.

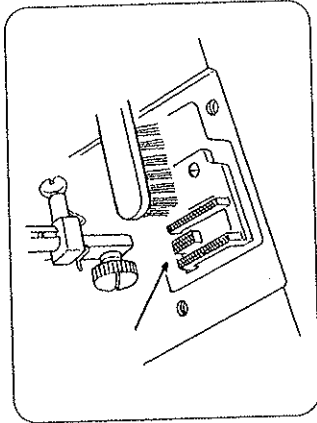
Lock the hook race ring by turning the holders back into position.

Replace the bobbin case.

Cleaning the Feed Dogs



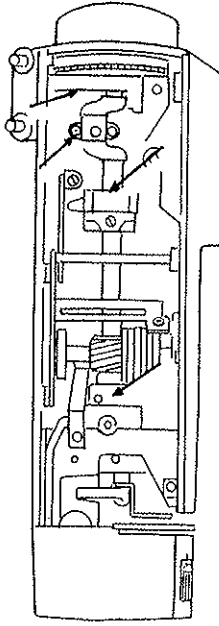
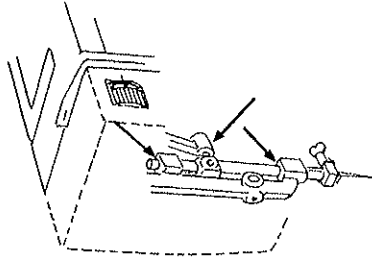
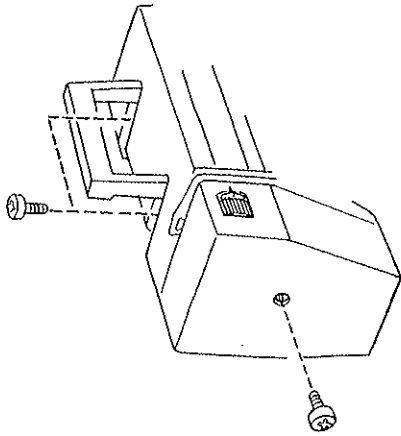
Remove the needle and the presser foot.
Remove the needle plate set screws with a driver to take off the needle plate from the machine bed.



With a brush, clean out dust and lint clogged on the feed dog teeth.
Reset the needle plate.

NOTE: After cleaning feed dog, apply a few drops of sewing machine oil without fail to the point as shown in the illustration.

Oiling the Machine



Turn the screw to the left and remove the face plate.
Lift the carrying handle.

Remove the two screws and take off the top cover.

Apply a few drops of fine quality sewing machine oil to the points indicated by the arrows in the figures.
For a machine in constant use, oil two or three times a year.

In case the machine does not work smoothly due to standing idle for some time, apply a few drops of kerosene at the oiling points, and run the machine rapidly for a minute.

Before oiling, wipe off the oiling points.

Trouble Shooting

Condition	Cause	Reference
<p>The machine does not run smoothly and is noisy.</p>	<ol style="list-style-type: none"> 1. Threads have been caught in hook mechanism. 2. The feed dog is packed with lint. 	<p>See Page 33 See Page 34</p>
<p>The needle thread breaks.</p>	<ol style="list-style-type: none"> 1. The needle thread is not threaded properly. 2. The needle thread tension is too tight. 3. The needle is bent or blunt. 4. The needle is incorrectly inserted. 5. The fabric is not being drawn to the back when sewing is finished. 6. The thread is either too heavy or too fine for the needle. 	<p>See Page 16 See Page 18 See Page 11 See Page 11 See Page 20 See Page 12</p>
<p>The bobbin thread breaks.</p>	<ol style="list-style-type: none"> 1. The bobbin thread is not threaded properly in the bobbin case. 2. Lint has collected in the bobbin case. 3. The bobbin is damaged and doesn't turn smoothly. 	<p>See Page 15 Clean the bobbin case. Exchange bobbin.</p>
<p>The needle breaks.</p>	<ol style="list-style-type: none"> 1. The needle is incorrectly inserted. 2. The needle is bent or blunt. 3. The needle clamp screw is loose. 4. The tension of the needle thread is too tight. 5. The fabric is not drawn to the back when sewing is finished. 6. The needle is too fine for the fabric being sewn. 7. The pattern selector dial has been turned while the needle was in the material. 	<p>See Page 11 See Page 11 See Page 11 See Page 18 See Page 20 See Page 12 See Page 19</p>
<p>Skipped stitches</p>	<ol style="list-style-type: none"> 1. The needle is incorrectly inserted. 2. The needle is bent or blunt. 3. The needle and/or threads are not suitable for the work being sewn. 4. A BLUE TIPPED needle is not being used for sewing stretch, very fine fabrics and synthetics. 5. The needle thread is not threaded properly. 	<p>See Page 11 See Page 11 See Page 12 See Page 12 See Page 16</p>

Condition	Cause	Reference
<p>Seam puckering.</p>	<ol style="list-style-type: none"> 1. The needle thread tension is too tight. 2. The machine is not threaded correctly. 3. The needle is too heavy for the cloth being sewn. 4. The stitches are too coarse for the fabric being sewn. <p>* When sewing extremely light weight materials, place a sheet of paper underneath the fabric.</p>	<p>See Page 18 See Page 16 See Page 12 Make the stitches denser.</p>
<p>Stitches form loops below the work.</p>	<ol style="list-style-type: none"> 1. The needle thread tension is too loose. 2. The needle is either too heavy or too fine for the thread. 	<p>See Page 18 See Page 12</p>
<p>The cloth is not feeding smoothly.</p>	<ol style="list-style-type: none"> 1. The feed dog is packed with lint. 2. The stitches are too fine 3. The feed dog is not raised after "Drop feed" has been used. 	<p>See Page 34 Make the stitches coarser. See Page 9</p>
<p>The machine does not work.</p>	<ol style="list-style-type: none"> 1. The machine is not plugged in. 2. A thread is caught in the hook race. 3. Stop motion knob is disengaged for the bobbin winding. 	<p>See Page 6 See Page 33 See Page 14</p>
<p>The buttonhole stitches are not balanced.</p>	<ol style="list-style-type: none"> 1. The stitch length is not suitable for the fabric being sewn. 2. The work is being pulled or held back. 	<p>See Page 19 Do not force the fabric for guiding.</p>