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#### WHITE SEWING MACHINE

Record in space provided below the Serial No. and Model No. of this appliance.

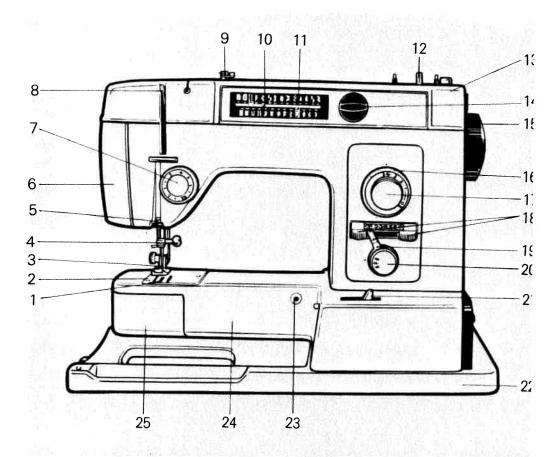
The Serial No. is located Rear of arm.

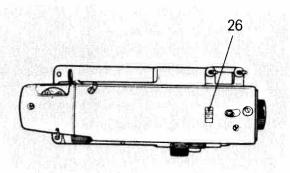
The Model No. is located Rear of arm.

Serial No.

Model No. 8000

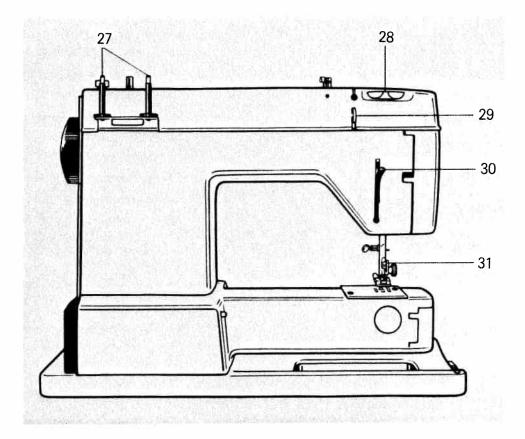
Retain these numbers for future reference.

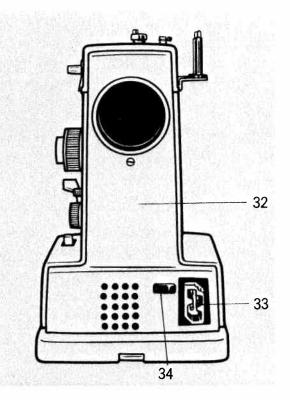




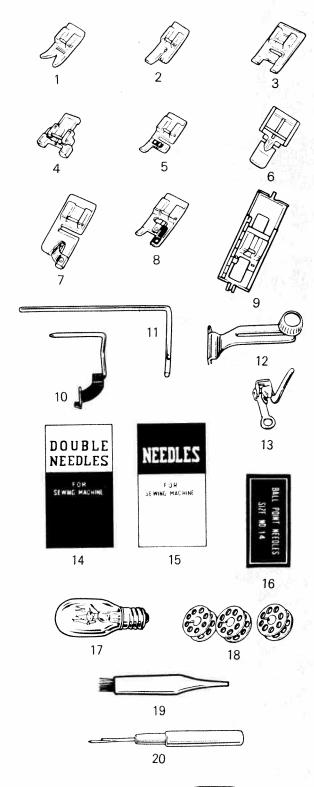
- 1. Feed Dog
- 2. Needle Plate
- 3. Presser Foot
- 4. Needle Clamp Screw
- 5. Thread Guide
- 6. Cover Plate
- 7. Upper Thread Tension Dial
- 8. Take-up Lever
- 9. Thread Guide for Bobbin Winding
- 10. Pattern Selection Index
- 11. Pattern Selection Panel

- 12. Bobbin Winding Spindle
- 13. Top Cover
- 14. Pattern Selection Dial
- 15. Hand Wheel
- 16. Stitch Length Dial
- 17. Reverse Sewing Button
- 18. Zigzag Width Limiter
- 19. Zigzag Width Control
- 20. Needle Position Control
- 21. Drop Feed Lever





- 22. Base Plate
- 23. Extension Table Support Bush
- 24. Free Arm
- 25. Shuttle Cover
- 26. Reverse Stitch Control
- 27. Spool Pins
- 28. Foot Pressure Regulator
- 29. Thread Guide
- 30. Presser Foot Lifter
- 31. Foot Holder
- 32. Motor Cover
- 33. Socket
- 34. Power Supply Switch





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# 2. ACCESSORIES

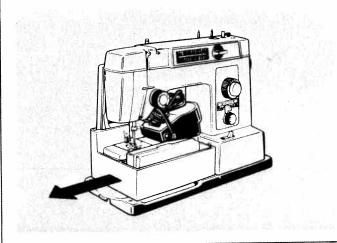
The following accessorie: come with the machine.

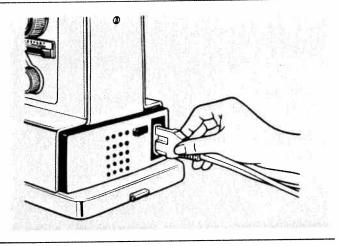
- 1. General purpose foot
- 2. Straight Stitch foot
- 3. Special foot
- 4. Button sewing foot
- 5. Cording foot
- 6. Zipper foot
- 7. Roll hemming foot
- 8. Overcasting foot
- 9. Buttonhole foot
- 10. Blind hem stitch guide
- 11. Spacing guide
- 12. Cloth guide
- 13. Darning foot
- 14. Twin needles (Double nee Size 14/90 (2)
- 15. Needles
  - Size 11/75 (2)
    - 14/90 (2)
    - 16/100 (1)
    - 9/65 (1)
- 16. Ball point needles Size 14/90 (2)
- 17. Bulb
- 18. Bobbins(3)
- 19. Cleaning brush
- 20. Buttonhole cutter
- 21. Screwdriver small (1) large (1)

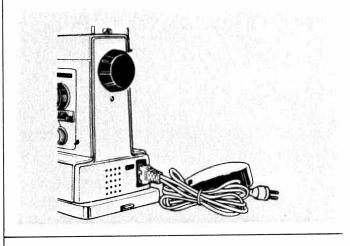
22. Oil

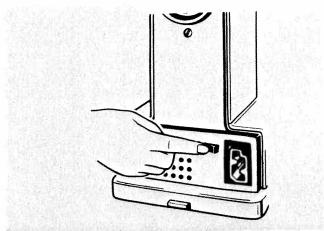
#### 3. PRIMARY PREPARA-TION

**Unpacking the Machine** Place the machine on the table and remove the compartment by drawing it out in the direction of the arrow.







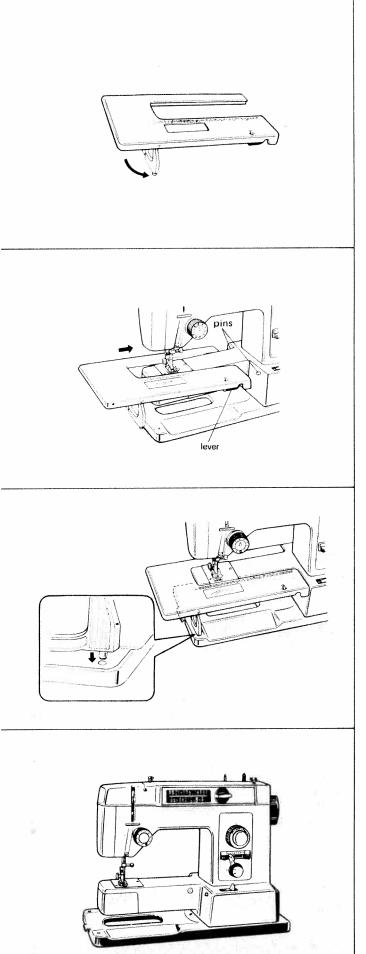


# Connecting the Foot Controller and Power Cord

Before plugging in your machine, be sure that the voltage is the same as that of your machine. The machine's voltage is written on a plate at the lower right of the machine. Take out the foot controller and push the plug into the socket at the right end of the machine.

Then connect the machine to the house power supply.

Power and light can be put "on" and "off" by pressing the switch at the lower right of the machine.



#### Attaching the Extension Table

Push down the extension sup port leg and stand it up.

Pull out the lever and slide in the extension table in th direction of the arrow until i is supported by the two pin in front and at the back of tharm.

Fit the two pins of the leinto the holes on the lower lef of the base plate.

For ordinary sewing, the extersion table will make your wor easier.

Detaching the Extension Tabl Pull out the lever and slide th table to the left.

Without an extension table the machine can be used as free-arm model for the cor venient sewing of trousers sleeves, cuffs and the like.

#### Changing the Light Bulb

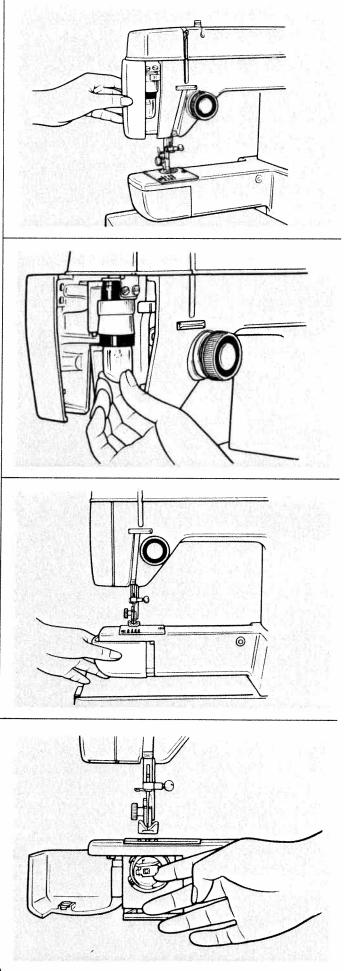
Unplug the machine. Open the face plate as shown opposite.

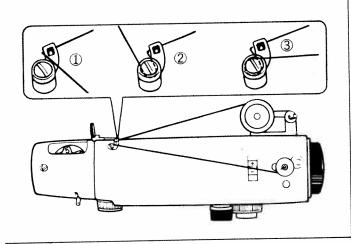
Remove the bulb by unscrewing it counter-clockwise. Install a new bulb by screwing it in clockwise. Plug in the machine.

#### Removing the Bobbin Case

Open the shuttle cover towards you and set the needle in its highest position.

Open the hinged latch at the front of the bobbin case and withdraw the bobbin case from the holder post.



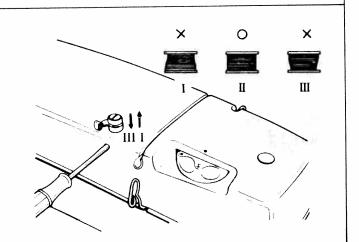


Place an empty bobbin on the winding spindle. Put a spoo on the spool pin. Draw the thread from the spool pir through the guide and the pre-tension device, following numbers (1) (2) and (3), to the bobbin.

Wind the thread clockwise around the bobbin several times. Push the bobbin towards the

hand wheel and press down the foot controller.

The machine stops automatically when winding is finished. Return the spindle to its former position and tighten the stop motion knob.



If you notice that the bobbin is wound unevenly, as in Fig I and III, loosen the set-screw of the pre-tension device with the small screwdriver, and adjust by letting the pretension device up or down until the winding become: even. Fig. II shows a correctly wound bobbin.

#### Inserting the Bobbin

When the bobbin is wound, place it inside its case. Make sure that the thread runs in the direction of the arrow.

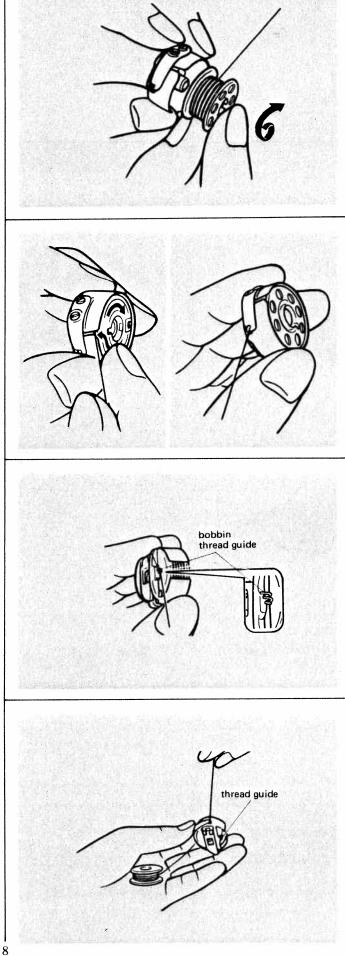
#### of the bobbin case. Pulling the thread to the left, pass the thread under the tension spring.

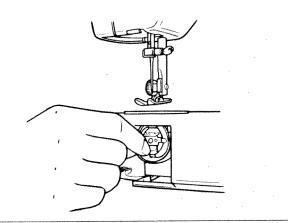
Threading the Lower Thread Slide the thread into the slot

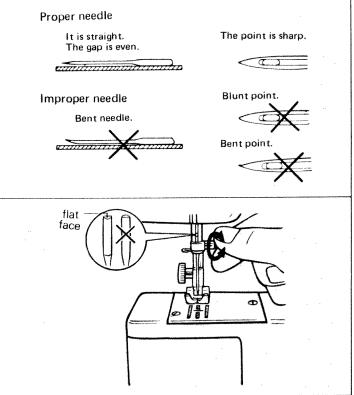
Pass the thread through the bobbin thread guide.

#### Checking the Tension

Complete the threading of the lower thread. Take out the end of the thread from the bobbin thread guide. Place the bobbin and the bobbin case on your palm. Pick it up by the end of the thread and shake it gently. At the proper tension, the bobbin case will gradually drop a small amount.







#### Fabric, Thread and Needle Table

#### Inserting the Bobbin Case

Be sure the needle is above the needle plate.

Push the bobbin case into the rotary hook, holding the latch of the bobbin case with your thumb and index finger. When the bobbin case is inserted, close the latch.

#### Checking the Needle

Always use a straight needle with a sharp point. If the needle is bent or has a blunt point, change the needle.Using defective or worn needles not only causes stitch skipping, breakage of needles, or snapping of thread; it alsc can damage the rotary hook and the needle plate.

#### Changing the Needle

With the needle bar in the highest position, loosen the needle clamp screw. Take out the needle to be changed Insert a new needle as far as it will go, with the flat face away from you. Tighten the needle clamp screw firmly.

#### **Needles for Stretch Fabrics**

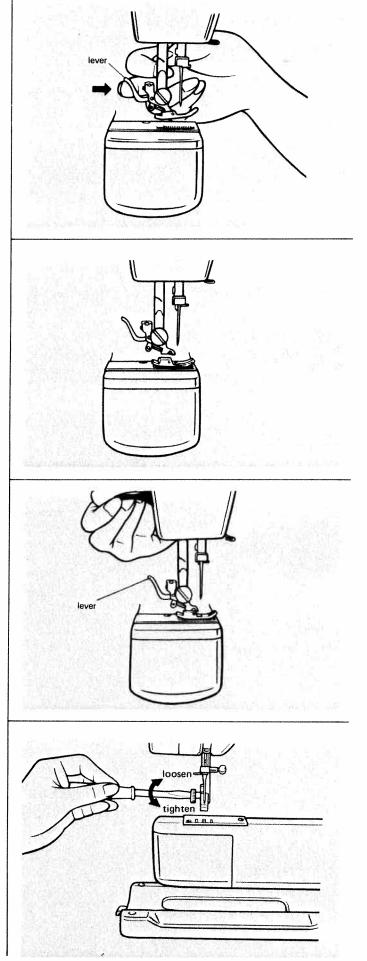
When sewing stretch or knitted fabrics use a ball point needle to ensure good results.

		NEEDLE SIZE		
FABRIC	THREAD SIZE	ENGLISH AND AMERICAN	EUROPEAN	
DELICATE – tulle, chiffon, fine lace, silk, organdy	Fine mercerized cot- ton, fine synthetic thread	9	65,70	
LIGHTWEIGHT – basiste, or- gandy, jersey, voile, taffeta, silk, crepe, chiffon, velvet, plastic film	50 mercerized cotton, ''A'' silk, synthetic thread	11	75,80	
MEDIUM WEIGHT-gingham, percale, pique, linen, chintz, faille, satin, fine corduroy, velvet, suitings, stretch fabrics, knits	50 mercerized cotton, 60 cotton, "A" silk,	14	90	
MEDIUM HEAVY — gabardine, tweed, sailcloth, denim, coat- ings, drapery fabrics	Heavy-duty mercerized cotton, 40 to 60 cot- ton, synthetic thread	16	100	

#### Always use Type 705 (Needle

#### Changing the Foot

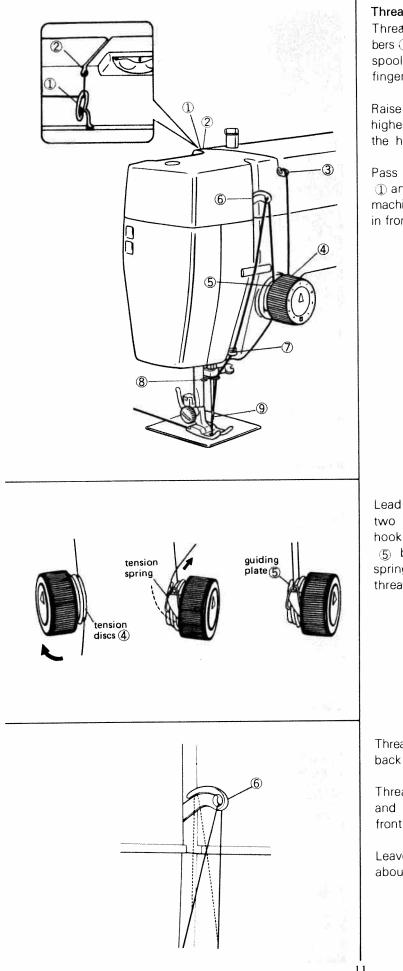
Raise the presser foot lifter and set the needle in the highest position. Push the lever of the holder toward you to remove the foot.



Centre the new presser foot under the shank.

Lower the presser foot lifter so that the groove of the holder fits over the pin of the presser foot. If you fail to catch the foot, press the lever slightly.

The foot holder is removed and attached by loosening or tightening the screw with a screwdriver.



Threading the Upper Thread Thread by following the nurr bers (1)-19 while pressing th spool lightly with your inde finger.

Raise the take-up lever to th highest position by turnine the hand wheel towards you

Pass the thread to the guide ① and ② on the back of th machine, then to the guide 3 in front.

Lead the thread between th two tension discs ④, the hook it to the guiding plat (5) by pulling the tensio spring to the right with th thread.

Thread take-up lever (6) fror back to front.

Thread the guides 7 and § and the needle eye (9) fror front to back.

Leave an end of thread ( about 15cm(6").

#### Drawing up the Lower Thread

Hold the end of the upper thread with your left hand. Turn the hand wheel slowly towards you until the take-up lever reaches the highest position.

Pull the upper thread slowly so that the lower thread will be brought up in a loop. You should never pull the upper thread too hard as this may bend the needle.

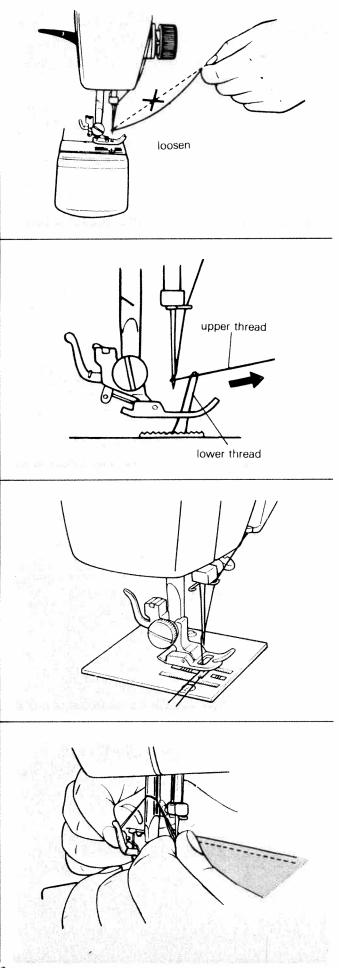
Pull out both upper and lower threads to about 15cm(6") and place them either to the left or right of the presser foot as shown.

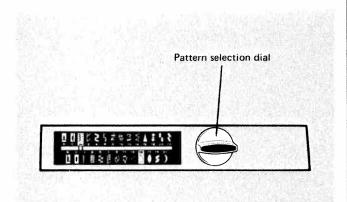
Be careful not to place them behind the presser foot as this may cause jamming problems.

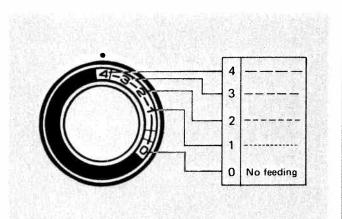
#### **Thread Cutter**

On the back of the presser bar you will find the thread cutter.

This cutter makes it easy to cut off the thread at the end of a seam.







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# 4. FUNCTION OF DEVICES

#### Pattern Selection Dial

Turn this dial to choose the pattern. The dial can be turned either to the right or to the left except in the case of patterns "A" and "22". Do not forcibily turn it to the left at "A", nor to the right at "22".

Always make sure the needle is in the highest position when operating the dial.

- A-D Buttonhole
- M Straight & Zigzag Stitch
- 1-4 Reverse (Super automatic) Stitches (practical)
- 5-12 Reverse (Super automatic) Stitches (decorative)
- 13 Multiple Zigzag
- 14 Blind Hem Stitch
- 15 Scallop Design
- 16-22 Decorative Stitches (automatic)

# Stitch Length Dial

This dial is used to adjust the length of the stitch. To obtain the right stitch length for each pattern, set the dial within the colour band corresponding to the pattern selected. For a longer stitch, turn it clockwise. For a shorter stitch, turn it counter-clockwise.

# Zigzag Width Control

Push and slide the left limiter until the zigzag width control is at the required number. Set the control within the colour band corresponding to the pattern selected. For a wider stitch, turn it towards 7. For a narrower stitch, turn it towards 0. Set the control at 0 for straight sewing.

#### **Reverse Sewing Button**

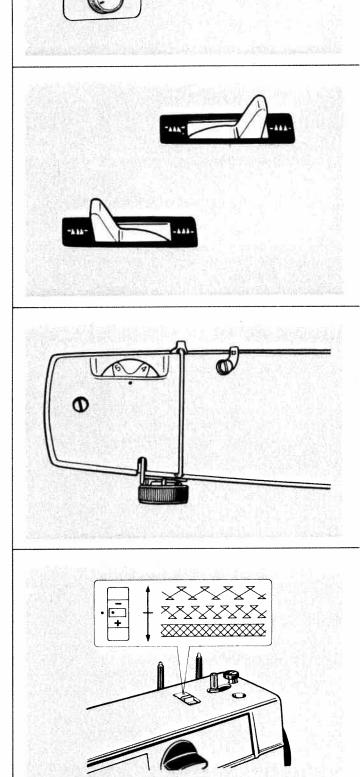
For sewing in reverse, push in the reverse sewing button as far as it will go. The machine will sew backwards for as long as the button stays in.

#### **Drop Feed Lever**

Move the lever to the left at **w** position to lower the feed dog.

This position is for button sewing, darning and embroidery.

For normal sewing, move the lever to right at A position.



#### Foot Pressure Regulator

Foot pressure can be adjusted with the dial on the top of the machine at the left.

Set the dial at 5 to sew normal materials. To sew thin or elastic materials it may be set at 3 to 4.

#### **Reverse Stitch Control**

Patterns 1-12 can be extended or shortened with the reverse stitch control. Set the knob at the dot in the middle to get the normal figure. Move the knob towards minus to extend the pattern. To shorten the pattern, move it towards plus.

# Chart of Stitch Application



1

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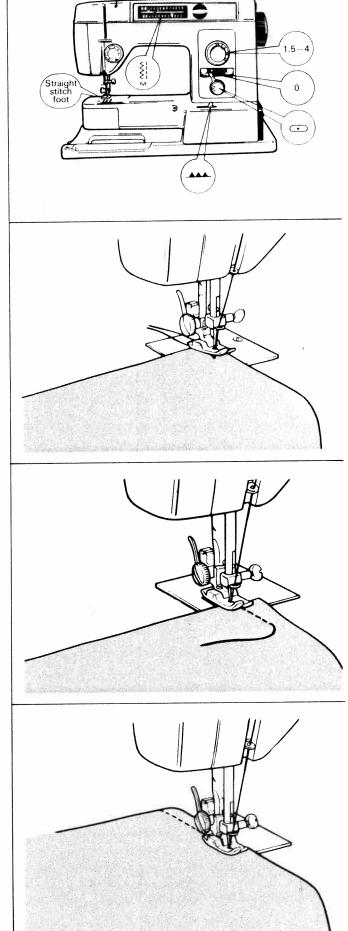
The following chart is to help yc understand what the different types stitches are used for.

Patterns		Stitch Length	Stitch Width	Colour Zone	Stitch Application
		0.4-0.5	2.5-7	Orange	Buttonholing (P.30-33)
A M		0 - 4	0 – 7	Silver	Straight Sewing (16) Zigzag Sewing (19) Pin Trinking (21) Bott Heriming (21) Overcasting (25) Zipper Silving (29) Sewing or Buttons (33) Cording (34) Ourling (35) Embroidery (36) Applique (38)
1		4 4	0 3.5-7	Yellow	Elastic Stitch (28)
2		11			Overlocking (26) Reinforce seams
3			11		Overlocking (26)
4	3.54	11	11		Stretch Stitch
5	28	11	11		Fagoting (28)
6	25	11	11		Embroidery and Reverse Stitch
7		11	11		н п п
8	-	11	11	N	11 II I(
9		,,	11	ji -	
10		11	11	,	
11	4				0 0 U
12		;;	11		
13	M	0.5-1	11	Blue	Overcasting (25) Patching (27) Elastic Stitch (28) Attaching Elastic (29)
14	$\gamma \gamma$	1 - 2	1.5-4		Blind Stitch (23) Shell Stitch (24)
15	$\cap$	1 - 2.5	2.5-7	Silver	Scalloping (37)
16		0.3-0.5	11	Orange	Embroidery
17	١		11		11
18	<b>\$</b> 1\$	11		"	U
19			11		
20	)	11		**	
21		11			Scalloping(37) Embroidery
22		11			Embroidery

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# 5. STRAIGHT SEWING

We begin by sewing a straight stitch which is the stitch most frequently used for seams. Set the machine as shown opposite.

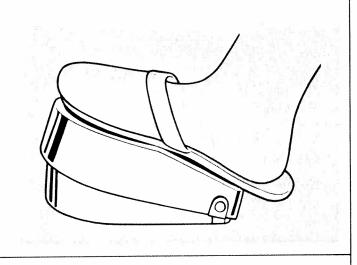


#### Starting Sewing

With the presser foot up, turn the hand wheel towards you and put the needle into the material about 1cm(3/8") in from the bottom edge.

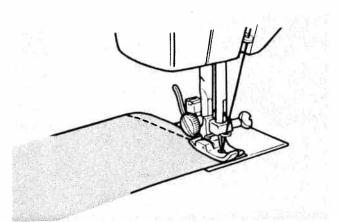
To reinforce the seam at the beginning, sew in reverse to the bottom edge of the material.

After a few stitches of reverse sewing, release the reverse sewing button and commence forward sewing by gently pressing down on the foot controller.



#### Foot Controller

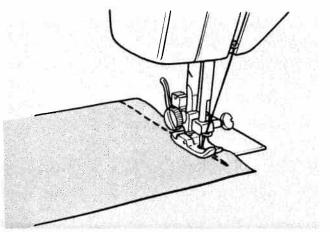
The speed of the machine is regulated solely by increasing or decreasing pressure on the foot controller. You should never try to increase the feed ing or slow it down by pull ing the material.



# Turning Corners

Slow the speed as you ap proach the corner and stop *i* stitch away from the corner. Then turn the hand wheel towards you manually to posi tion the needle in the materia at the pivot point.

Raise the presser foot anturn the material with th needle in. Lower the presse foot and sew forward in th new direction.



#### Ending a Seam

At the end of a seam, pres the reverse sewing button t sew a few stitches for reir forcement and stop the ma chine when the take-up leve is in its highest position. Raise the presser foot an remove the material away fror you. Cut the thread with th thread cutter at the back c the presser bar.

#### Cloth Guide

The cloth guide is used when sewing a seam with a certain interval from the edge. Set the guide in the hole of the arm, right to the needle plate, and adjust the distance.

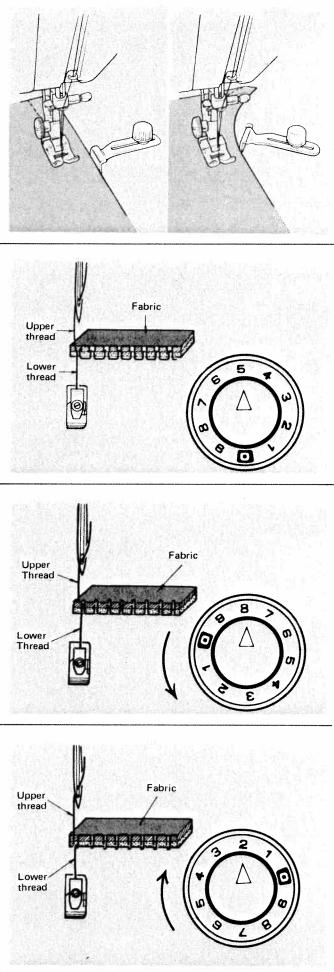
Run the machine with the edge of the fabric touching the guide. Position the cloth guide at an angle to sew a curved seam.

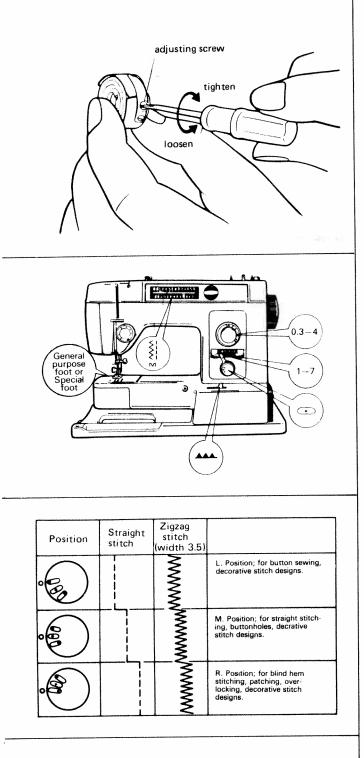
Thread Tension Adjustment Perfect tension: The tension on the upper and the lower threads should be equal and strong enough to lock both threads in the centre of the work.

Your machine has been tested with the thread which accompanies the machine. It may be necessary to adjust the thread tension somewhat if you use thread of a different thickness.

Upper tension too tight: If the upper thread lies straight along the upper surface of the material, decrease the tension by turning the upper thread tension dial counter-clockwise.

Upper tension too loose: If the lower thread lies straight along the underside of the material, increase the tension by turning the upper thread tension dial clockwise.





The back side of fabric The right side of fabric **Tension of lower thread:** Us the small screwdriver to adjus the tension of the lowe thread.

Turn the adjusting screv clockwise if the lower thread i too loose and counter-clock wise if it is too tight.

### 6. ZIGZAG SEWING

When changing to zigza stitching, set the machine a shown opposite.

#### **Needle Position Control**

The needle position can b changed by turning the needl position control.

When selecting the position make sure the needle is abov the needle plate to avoid tear ing the material or bending th needle.

# Thread Tension for Zigza, Stitching

For better-looking zigzag stitch ing as shown opposite, loose the upper tension slightly. This stitching requires les tension than straight stitching

#### 7. TWIN NEEDLE SEWING

Set the machine as shown opposite.

#### Twin Neendle Threading

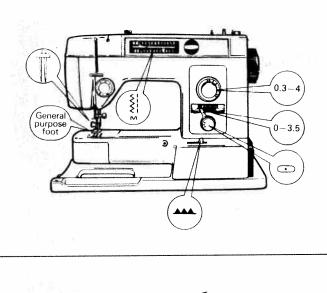
Thread in the same way as normal threading except at points (3), (4), and (9). (See P.11 for normal threading.)

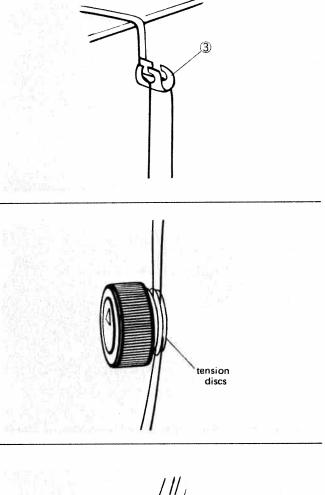
At point (3), pass the threads separately to the right and the left.

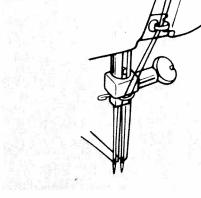
To thread the tension discs  $\langle \underline{4} \rangle$ , lead one of the threads between the front and the middle of each disc, and the other between the middle and the back.

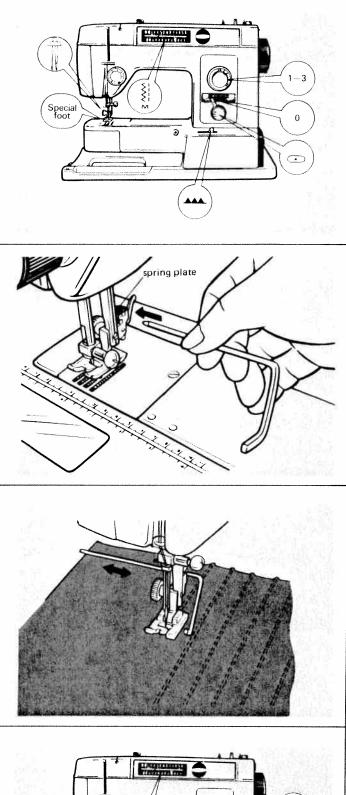
Pass the threads separately through the two needle eyes. Leave the ends of the threads about 15cm(6").

Note: Set the zigzag width lever between 0 and 3.5. To set the lever above 3.5 will cause the needle to break.









# 8. PIN TUCKING

Set the machine as show opposite.

Use sheer material and tighte the lower thread a little for better appearance.

Insert the spacing guide under the spring plate on the holde

Mark the first line with pencil or tailor's chalk, ar sew. From the second linjust sew following the sea of the first line with the guid The interval between th seams can be adjusted the moving the guide in the diretion of the arrow.

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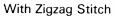
# 9. ROLL HEMMING

The roll hemming foot is use when you wish to sew lor hems in material which is nexcessively thick.

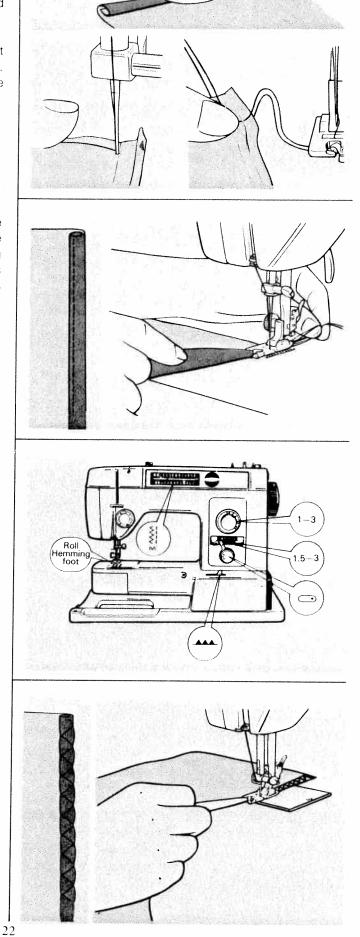
With Straight Stitch: Set the machine as shown. Make a 0.3cm(1/8'') double fold for about 5cm (2'') at the very edge of the material, and crease it.

Lower the needle twice at 0.6 cm (1/4'') from the edge. Draw the work out and leave about 15 cm(6'') of thread.

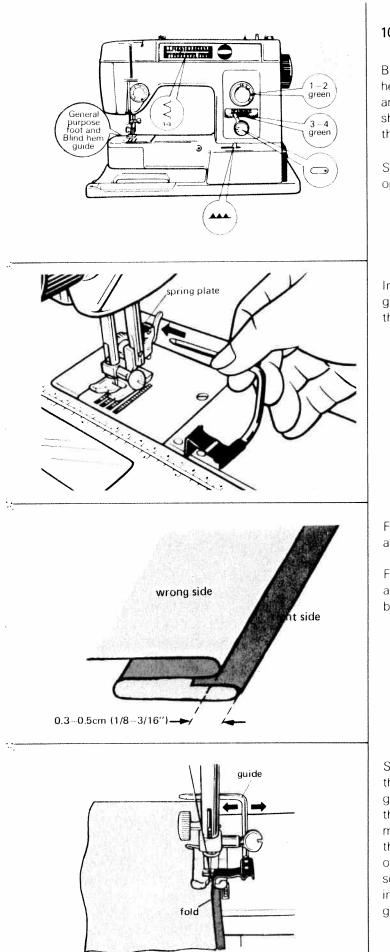
Place the material under the presser foot and guide the edge into the scroll, pulling the six thread ends towards the back. Sew a few stitches as shown. Keep guiding the material holding the raw edge about 0.6cm(1/4") in front of the foot.



Set the machine as shown opposite.



Sew in the same way as for straight stitch hemming.



#### 10. BLIND HEM STITCH ING

Blind hem stitch is used f hemming skirts, trousers, su and so on without the stitch showing on the right side the material.

Set the machine as show opposite.

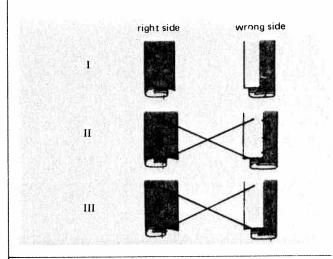
Insert the blind hem stit guide under the spring plate the foot holder.

Fold the material as show and place it under the foot.

For a neater finish it is prefable to tack or iron the hebeforehand.

Start sewing slowly turni the hand wheel. Adjust t guide and the zigzag width that the straight stitches a made on the hem edge, a the slanting stitches pier only one or two threads of 1 soft fold. Sew carefully, gu ing the soft fold against t guide.

- I. Correct seam.
- II. The needle is catching the edge of the fold too much.
- **III.** The needle is not catching the edge of the fold at all.





1

N. ....

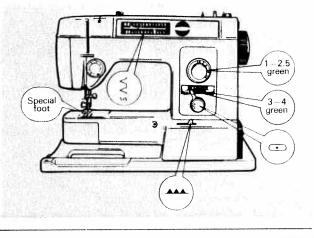
- On soft and fine fabrics, shell stitch makes an attractive trimming.
  - Set the machine as shown opposite.

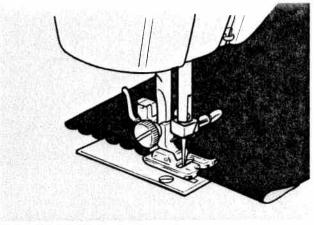
Fold the edge of the material. With the folded edge to the left, place it under the presser foot. Pull the thread ends towards the back when starting sewing. Make sure the needle misses the raw edge of the fold when it moves sideways.

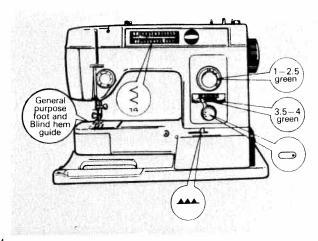
#### Application of Blind Hem Stitch Guide

Set the machine as shown opposite.

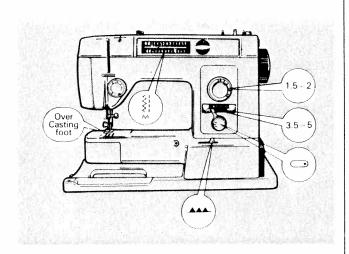
Sew in the same way as above, setting the guide so that the edge of the material is touching the right side of the guide.







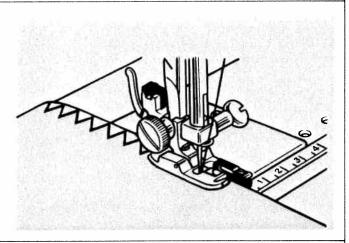
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#### 12. OVERCASTING & OVERLOCKING

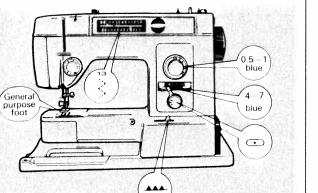
#### Overcasting Light Weight Material

Zigzag stitch makes the overcasting particularly durable. Set the machine as showr opposite.



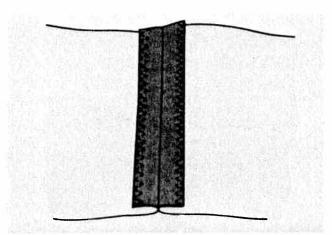
Place the edge of the materia against the cloth guide of the overcasting foot. Sew, guiding the right edge of the material along the cloth guide so that the needle goes slightly off the edge of the

material.



# Overcasting Thick Material and Elastic Material

Overcast with multiple zigzaç stitching, using the machine setting shown opposite.

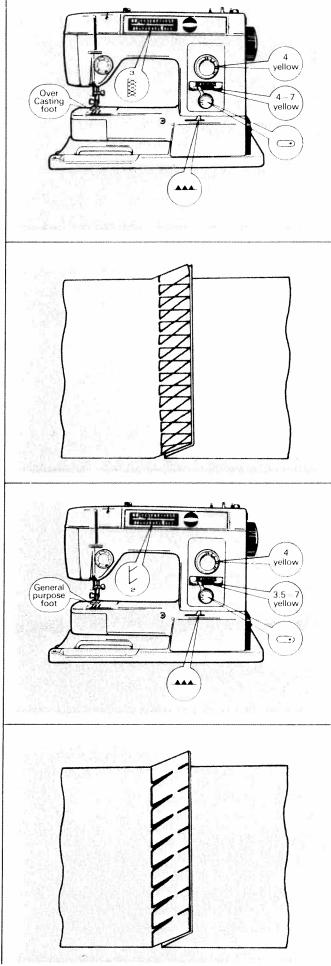


Sew carefully so that all the stitches on the right side are flush with the edge of the fabric.

Overlocking stitches make it possible to sew and overcast at the same time.

#### Overlocking Medium and Heavy Weight Material

Set the machine as shown opposite.



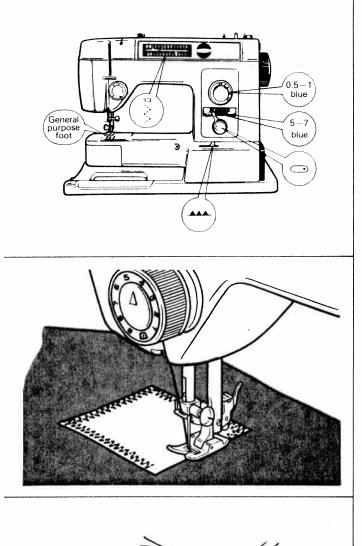
Put two pieces of cloth together with the right sides facing and sew guiding the edge of the fabric against the cloth guide of the overcasting foot.

#### Overlocking Stretch Material

Very stretch jerseys, tricot, knits, etc. can be overlocked using the machine setting shown opposite.

Sew carefully so that the right side stitches drop outside the edge of the material to prevent the edge from fraying.

In some cases, overlocking stitches can be used for over-casting.



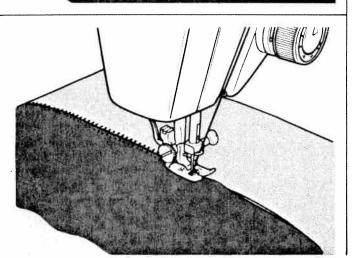
# 13. PATCHING

Set the machine as showr opposite.

Patching Non-Elastic Material Cut out a patch large enough to cover the worn out par completely. Sew along the edge of the patch on the righ side. Trim away the worr part close to the seam.

#### Patching Jersey Material

Reduce the pressure of the presser foot a little to prevent the material stretching too much. Pin the patch onto the worn part and sew. It is recommended to place a piece of paper underneath the material



#### 14. EDGE-TO-EDGE STITCHING

Set the machine in the same way as for patching.

Sew carefully, keeping the line where the materials together in the centre of the foot.

# 15. FAGOTING

Seam edges joined with fagoting are a delicate addition to blouses, dresses, lingerie, and children's clothes.

Fold the edges of the two pieces of material and press. Tack the folded edges to a piece of thin paper, leaving a space between them, so that the stitches catch into the material fold on alternate sides. When finishing sewing, remove the tacking and gently pull the paper away.

## 16. ELASTIC STITCH

#### For Heavy Stretch Material

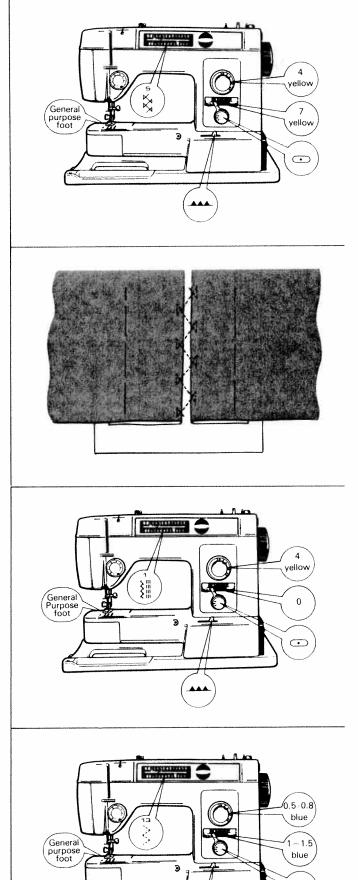
Use triple-lock stitch(1), which has stretchability and strength. The stitch is particularly useful for sewing seams where added strength is needed, i.e., sleeve insertion, as well as for sewing jersey and other stretch material.

#### For Light Stretch Material

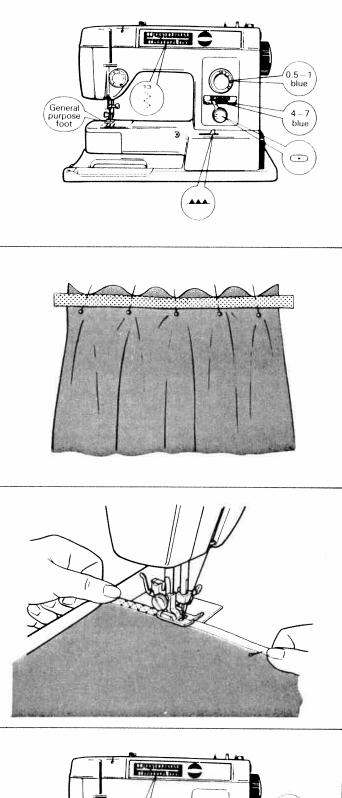
Set the machine as shown opposite.

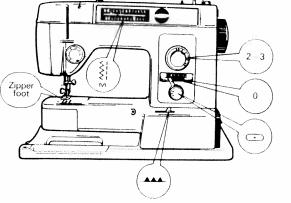
It is recommended to reduce the pressure of the presser foot a little.

A ball-point needle is essential. Paper may be laid under knits for smoother feeding.



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# 17. ATTACHING ELAST

Set the machine as show opposite.

Decide the length of the elas and the material to be us and pin the elastic onto t material at several points. Place the material under t foot with the elastic upwarc

Sew 5–7 stitches with stit length 0 at first. Hold t elastic and the material tog ther at the first pinned poi and stretch the elastic wh holding the thread ends beh the foot to prevent the mate slipping out of the foot. Sialong the centre, pulling t elastic evenly both in frc of and behind the presfoot.

## 18. ZIPPER SEWING

Set the machine as show opposite.

With the right sides of the material together, hand-tack on the seam line the exact length of the opening. Open the tacked seam and fold under the back seam allowance 0.3 cm (1/8'') from the tacked seam.

Place the folded edge over the right side of the zipper and hand-tack on it as shown.

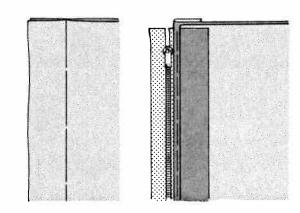
Set the foot holder on the right pin of the zipper foot so that the needle comes to the right groove. Stitch from the bottom to the top. Remove the hand-tacking.

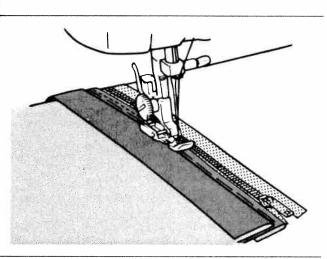
Turn the material to the right side. Ease the material and the zipper. Hand-tack 1.3cm(1/2") from the wrapped edge as a stitching guide. Shift the zipper foot to the right of the needle. Double-stitch across the lower end, then up along the zipper. Remove the handtacking.

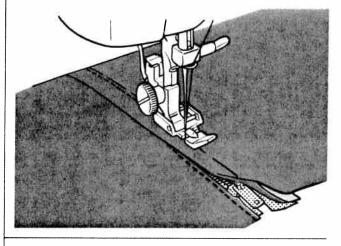
#### 19. MAKING BUTTON-HOLES

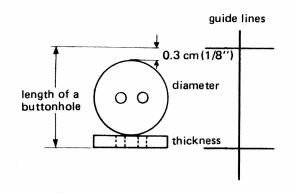
#### Determine the Length

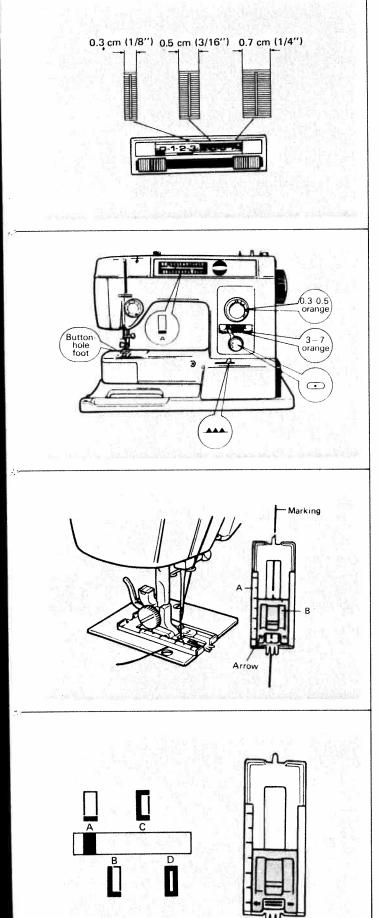
Measure the diameter and the thickness of the button and add 0.3cm(1/8") for bar tacks. Mark the buttonhole size on the material.











#### Width of the Buttonhole

Determine the width accordito the diameter of the butto and its thickness, and the kii of material.

Set the machine as shown o posite.

Make a test buttonhole in piece of the material you a working with, and check th satin stitch spacing. Use a s ghtly loose tension on top f a neater finish. For stretc fabrics, lay a piece of pap where the buttonhole will b placed.

The bottom sliding part "A" the buttonhole foot should I pushed completely to the baat the start.

The marking of the buttonhc should pass right through th middle of the foot, and th arrow marked on the top pa "B" of the foot should be c the beginning line of the bu tonhole.

**Bar tacking:** Set the pattern selection dial to A ( $\square$ ) ar sew 5-6 stitches as for b. tacking.

Left side: Change the pattern to B ( ). Sew the left side from front to back until it reaches the end line.

When making same-size buttonholes, memorize the point where the arrow shows so that it is not necessary to mark the end lines for all the buttonholes.

**Bar tacking:** Change the pattern to C (  $\square$  ) and sew 5-6 stitches on the marking.

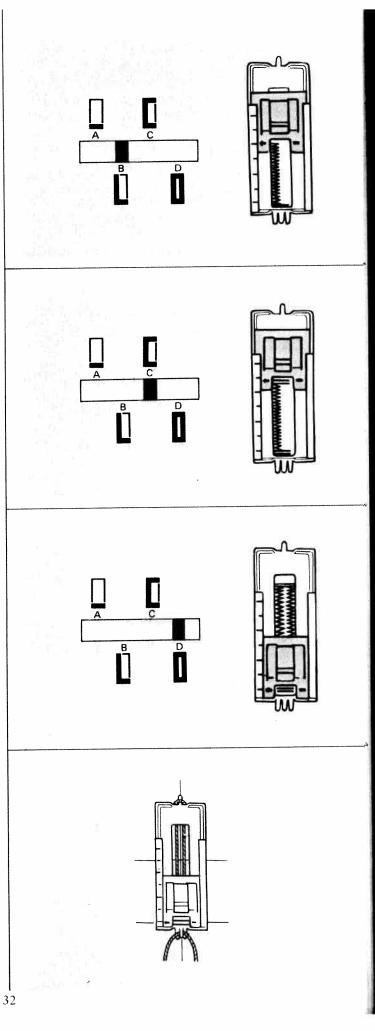
**Right side:** Change the pattern to D (**D**) and sew the right side until it catches the first bar tack.

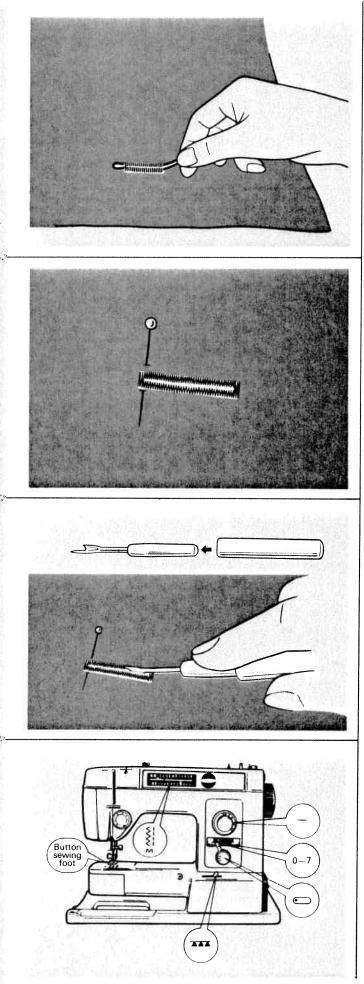
**Quick finish:** To prevent unstitching, set the zigzag width at "0" and proceed for a few stitches.

#### Corded Buttonholes

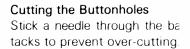
For stretch fabrics such as knits, a corded buttonhole is effective to keep the finished buttonhole in shape.

Hook the filler cord on the top spur and lead the ends of the cord under the foot, pull taut, and hook them to the bottom notches as shown. Proceed with stitching as for regular buttonholes.





When the buttonhole is completed, pull the filler cord end so that the loop on the othe end disappears into the but tonhole stitching. Cut bot ends of the cord or, even bet ter, thread them to the revers side and tie.



Cut the buttonhole in the mic dle with the buttonhole cutter

#### 20. SEWING ON BUTTON:

Set the machine as showi opposite.

When the needle comes to the left side of the stitch, position a button and the material under the foot. Lower the foot.

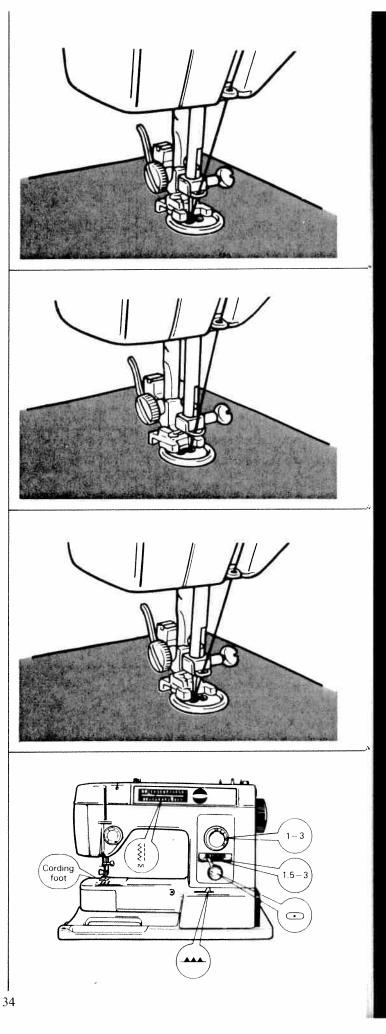
Raise the needle and adjust the zigzag width so that the needle goes through the right hole of the button.

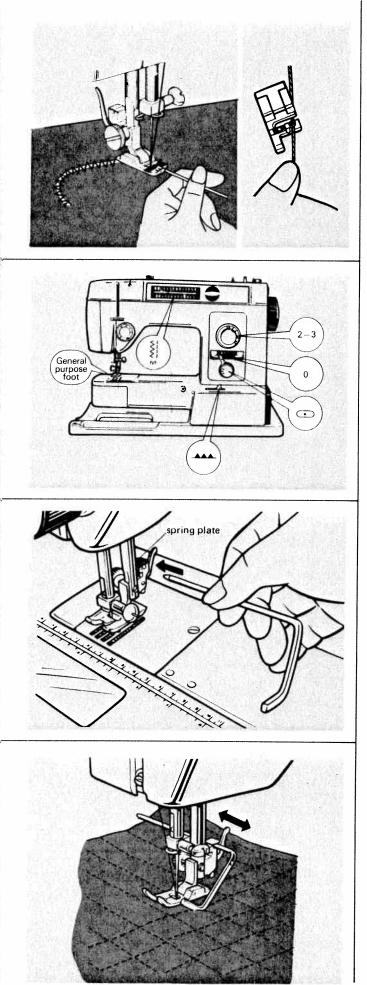
Run the machine at medium speed and sew 5-6 zigzag stitches.

Stop the machine when the needle is in the upper position. Set the zigzag width control lever to 0 and sew 3-4 stitches to prevent unstitching.

# 21. CORDING

Set the machine as shown opposite.





Draw the design on the material with a pencil or tailor's chalk. Pass the cord under the spring of the cording foot, then to the groove at the back of the foot. Decide the width and the length of the zigzag stitch according to the thickness of the cord. Sew on the cord along the design while guiding the cord.

## 22. QUILTING

Set the machine as shown opposite.

Tack the layers of material to prevent them from slipping out as you sew.

Insert the spacing guide under the spring plate on the holder. Draw the first line on the padding, and sew on it.

From the second line, just sew following the seam of the first line with the guide. The interval between the seams can be adjusted by moving the guide in the direction of the arrow.

### 23. EMBROIDERY

Set the machine as shown opposite.

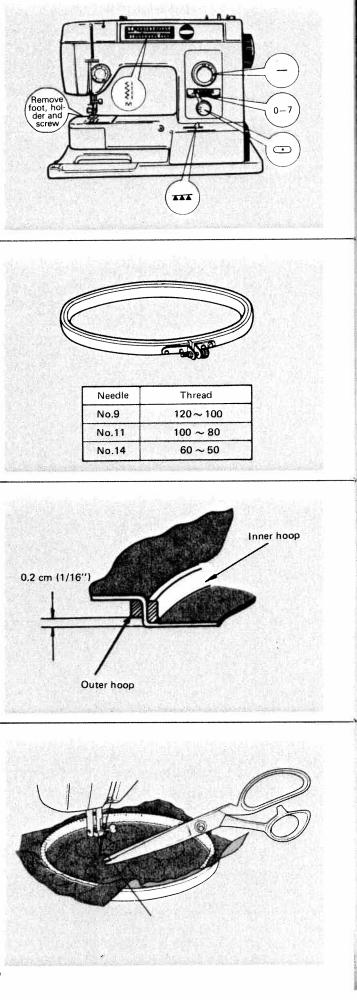
Remove the foot, foot holder and holder screw. To avoid the lower thread being pulled up, reduce the upper thread tension.

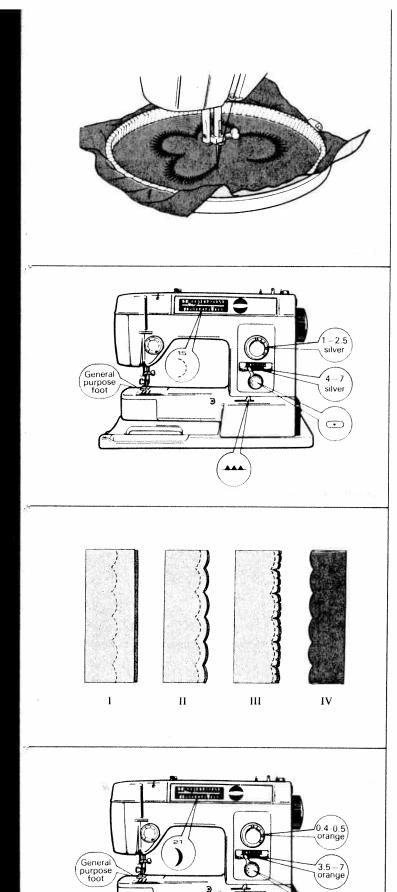
For good embroidery, it is mportant to use the right needles and the right kind of thread.

Jse thin embroidery silk for the upper thread, and a thinner silk of the same kind and colour for the lower thread.

Trace your design on the material and centre it in the embroidery hoop, then push the inside hoop agout 0.2cm (1/16") out. Make sure the material is taut.

Pull out the lower thread by turning the hand wheel towards you while holding the upper thread lightly. Be sure the presser foot lifter is lowered.





Hold both threads and start filling in the design with satir stitch, working inwards from the outline. Guide the hoop slowly with the left hand, controlling the zigzag width with the right hand. To finish filling, sew several stitches with the zigzag width at 0.

Lay typewriting paper underneath when embroidering sheer fabric.

### 24. SCALLOPING

METHOD I Set the machine as shown opposite.

Put two pieces of cloth together with the right sides facing, and sew. (I) Trim the edge 0.3cm(1/8'') away from the stitching. (II)

Cut notches in the seam edges at evenly spaced intervals.(III) Turn the material right-sideout, gently working the seam edges between the thumb anc finger to bring the stitching line to the very edge. (IV) Press it to retain the shape of the scallops.

#### METHOD II

Set the machine as shown opposite.

-

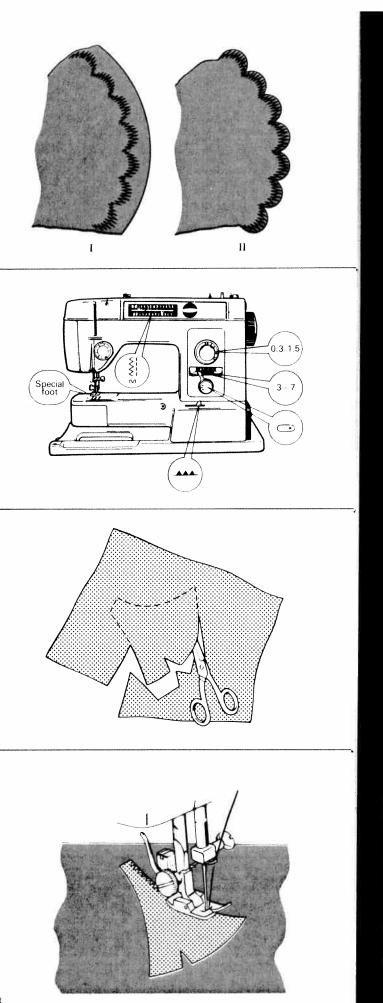
Adjust the zigzag width and the length according to the type of material, and sew.(I) After finishing sewing, cut the surplus border close to the edge of the stitch.(II)

### 25. APPLIQUE WORK

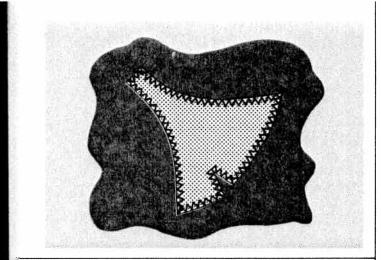
Set the machine as shown opposite.

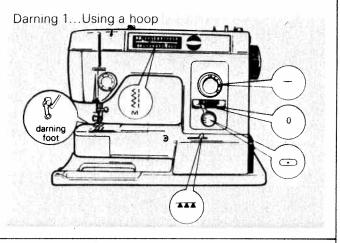
Draw the design on the material to be used as an applique and cut it out. Place the cutout on the base material and tack it.

Sew around the outline with zigzag stitch, adjusting the stitch length and width according to the shape and size of the cut-out and the type of base material.



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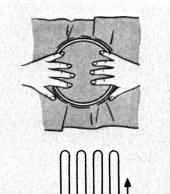
To change direction at corner, or to sew very sma circles, put the needle in a the outer edge, lift the presse foot, and turn the materia Lower the presser foot.

Sew a few stitches at the enc with the zigzag width at 0, t prevent unstitching.

### 26. DARNING

Step-1

Step-2



Stretch the fabric on the hoop with the worn-out part in the center.

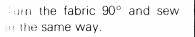
Hold the hoop correctly as shown.

Place the upper thread unde the foot passing through the hole of the foot.

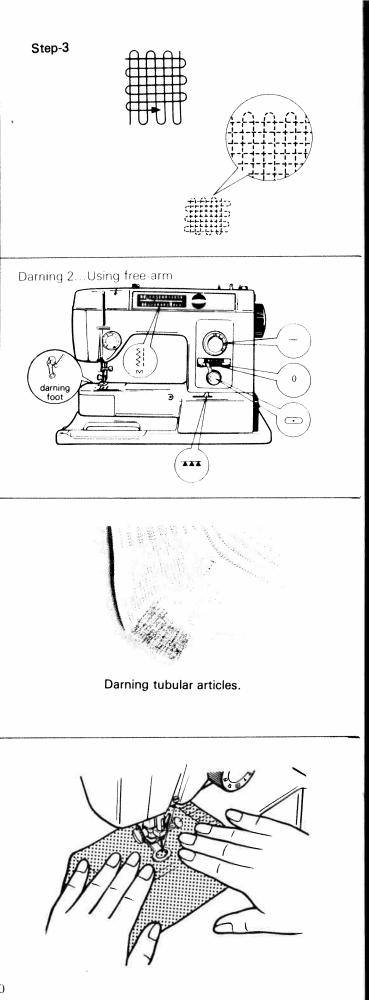
Sew over the worn-out part guiding the hoop back and forth by hand.

Making stitches closely spaced gives a better finish.

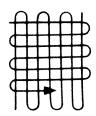
\*Be sure the presser foot is lowered.

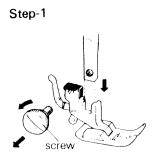


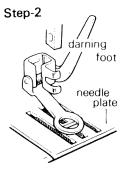
By making the turning points blunt, the darned part becames softer and more flexible.



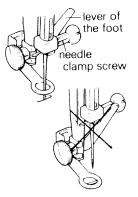
- (1) Remove the extension table for free-arm sewing.
- (2) Place the upper thread under the foot passing through the hole of the foot.
- (3) Loop the article onto the free-arm.
- Place your fingers as close as possible to the darned part.







Step-3



- (5) Sew the darned part vert cally, guiding the fabr with your fingers.
  - \*Be sure the presser foc is lowered.
- (6) Sew the darned part hor zontally, guiding the fabr with your fingers.
  - •Elastic materials can b darned easily by stretchin the worn-out part wit your fingers while sewing

## Changing a foot

# Screw-snap presser foot (darning foot)

Remove the foot and the holder by loosening the screw with a screwdriver.

Align the hole of the darnir foot with the hole of the needle plate.

Lower the needle by turnir the handwheel toward you.

The lever of the foot shou be behind the needle clam screw.

Tighten the screw on the holder.

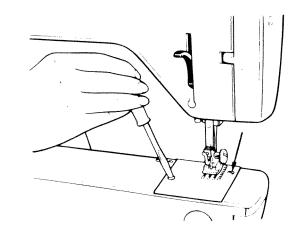
## 27. MAINTENANCE

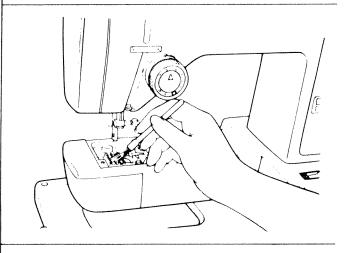
call new machine requires
cipalar cleaning and oiling for
atralactory sewing perfor cance. A machine which is
code for a few hours a day
coeds to be cleaned and oiled
ance a month.

### Cleaning

Remove the needle plate, loosening the screws with the arge screwdriver.

Brush off all the dust and lint on the feed dog with the cleaning brush.





Dpen the shuttle cover and emove the bobbin case. Clean the hook with the brush in the same way.

When thread is caught in the nook groove, turn the hand wheel away from you and take out the thread.

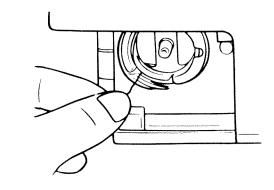
Never use a screwdriver or any other sharp instrument for cleaning.

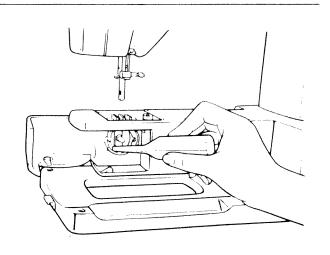
### Oiling

Use oil manufactured specially for sewing machine use. Other ads will eventually cause the mechanism to jam.

Take a small opening at the  ${\rm sp}$  of the oil container with a  ${\rm sh}$ 

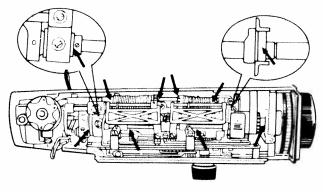
sply one drop of oil to the object part of the hook.





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Remove the top cover by loosening the two screws with the large screwdriver.

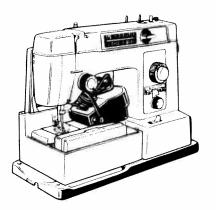


Apply one drop of oil to the lubricating points indicated by arrows.

Open the face plate and apply the oil in the same way.

Be careful not to put on too much oil or it may stain your material and cause some sewing difficulty.

After oiling, run the machine for 1-2 minutes to allow the oil to penetrate to every part.



## 28. PACKING THE MACHINE

Put back all the accessories and tools in the accessory box and place it in the compartment.

Unplug the machine and wind the cord. Slide in the compartment and the extension table, and place the foot controller and the cord on the arm as shown.

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# 29. TROUBLE CHART

Trouble	Probable Cause	Correct Operation
Machine does not sew	Not plugged in properly. Power supply switch is not on. Thread is stuck in the hook groove.	Page 4 4
Making noise Running slowly	Lack of oil. Dust of thread jamming the rotary hook. Dust of thread jamming the feed dog. Thread is stuck in the hook goove.	43 42 42 42
Breaking upper thread	Improper threading. Upper thread tension too tight. Needle bent or blunt. Improper needle setting. Removing fabric when take-up lever is not in the highest position. Upper thread too thick or too thin for needle used.	11 18 9 9  9
Breaking lower thread	Improper threading. Lower thread tension too tight. Dust of thread jamming the bobbin case or around the spring of the bobbin case.	8 19 
Skipping stitches	Improper needle setting. Needle bent. Improper needle and thread for the fabric. Improper upper threading. Too much oil.	9 9 9 11 43

Trouble	Probable Cause	Correct Operation
Stitches not locked	Upper thread tension too loose. Improper tension of the lower thread. Improper needle for the thread.	18 8,19 9
Wrinkled fabrics	Upper or lower thread tension too tight. Improper threading of upper or lower thread. Needle too thick for the fabric. Stitch length too long for the fabric. *When sewing very fine fabric, place thin paper underneath the fabric for better results.	18,19 8,11 9 13
Fabric not moving	Dust of thread jamming on the feed dog. Feed dog is lowered.	42 14
Breaking needle	Improper needle setting. Needle bent. Needle clamp screw too loose. Upper thread tension too tight. Needle too thin for the fabric. Changing pattern or width of the stitch with the needle down in the fabric. Setting stitch width more than 3.5 when sewing with twin needle.	9 9 18 9 13 20
Light going out	Not plugged in properly. Power supply switch is not on. Light bulb burnt out.	4 4 6

N.B. If trouble is still apparent in the machine, please consult your nearest dealer. Do not try to correct the fault by yourself.

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