



**TOYOTA**  
**4500 EL**

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**WARNING: THIS APPLIANCE MUST BE CONNECTED**

**IMPORTANT**

**PLEASE READ CAREFULLY**

The wires in this mains lead are coloured  
in accordance with the following code:

**BLUE—NEUTRAL**

**BROWN—LIVE (OR ACTIVE)**

As the colours of the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug — PROCEED AS FOLLOWS: The earth plug pin is unnecessary. As the machine is designed under double insulation structure, the earth wire is removed from the machine. The wire coloured BROWN must be connected to the terminal marked L or A or coloured RED.

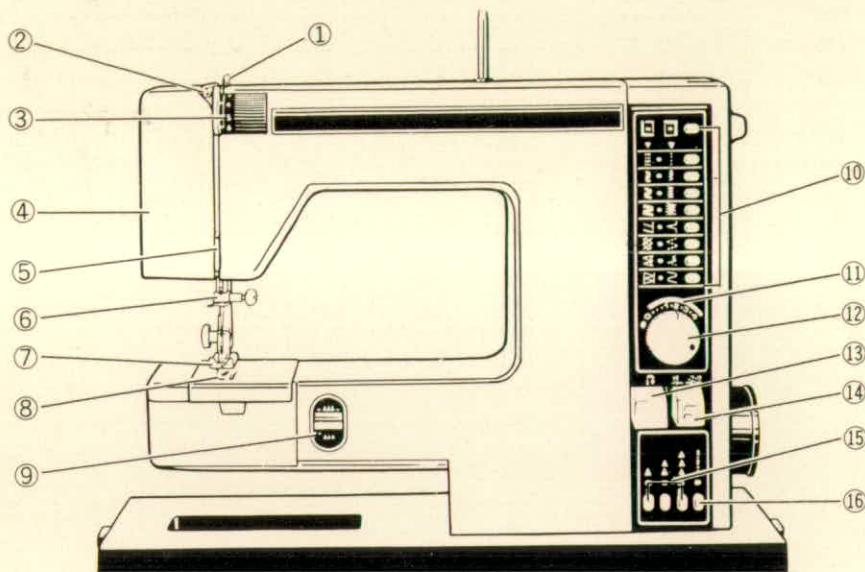
The wire coloured BLUE must be connected to the terminal marked N or coloured BLACK.

If a 13A plug is used, fit a 3A FUSE, or if any other type of plug is used, a 5A FUSE either in the plug or adaptor or at the distribution board.

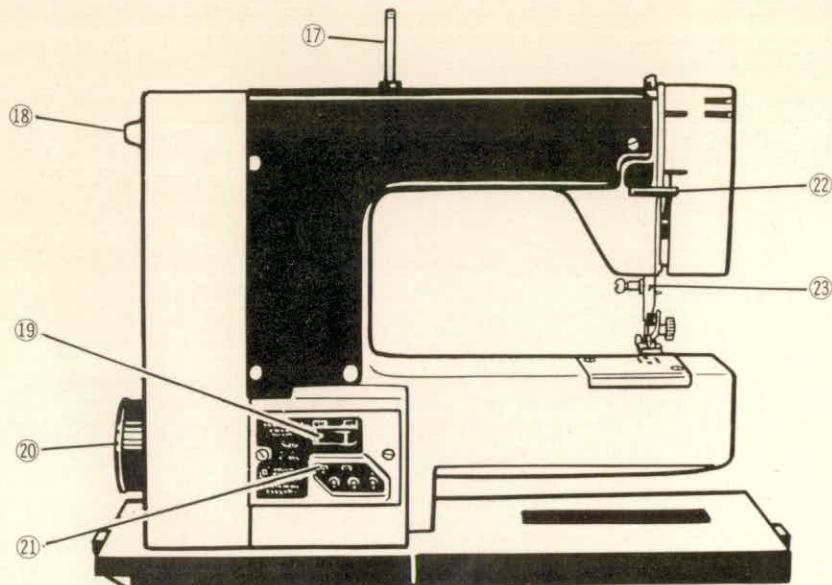
Voltage of lamp if lighting attachment is supplied must not exceed 15 watts.

**THIS APPLIANCE (U.K. SPECIFICATIONS) COMPLIES WITH BS 800 STANDARD.**

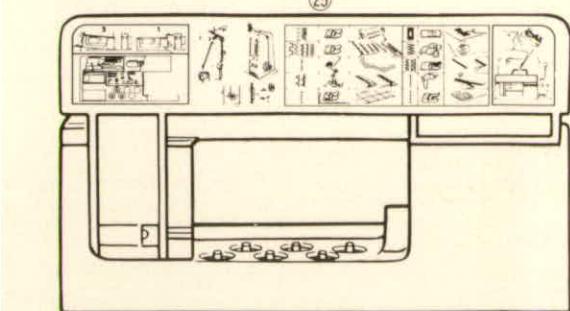
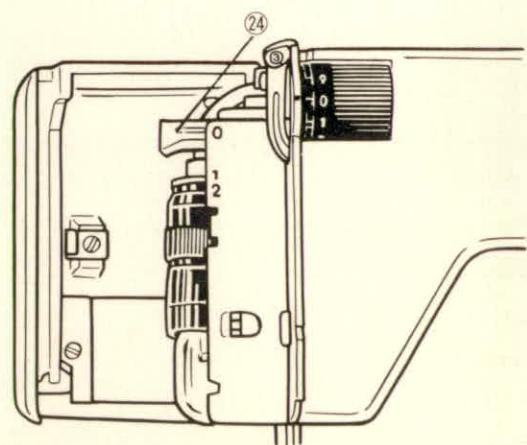
## NAMES OF PARTS



- ① Top Thread Guide
- ② Take-up Lever
- ③ Upper Thread Tension
- ④ Face Cover
- ⑤ Thread Guide
- ⑥ Needle Clamp Screw
- ⑦ Snap-on Presser Foot
- ⑧ Feed Dog
- ⑨ Drop Feed Lever
- ⑩ Pattern Selection Buttons
- ⑪ Automatic Stitch Length Indicator
- ⑫ Stitch Length Dial
- ⑬ Reverse Button
- ⑭ Lower Thread Pick-up Button
- ⑮ Speed Control Buttons
- ⑯ Tacking Button

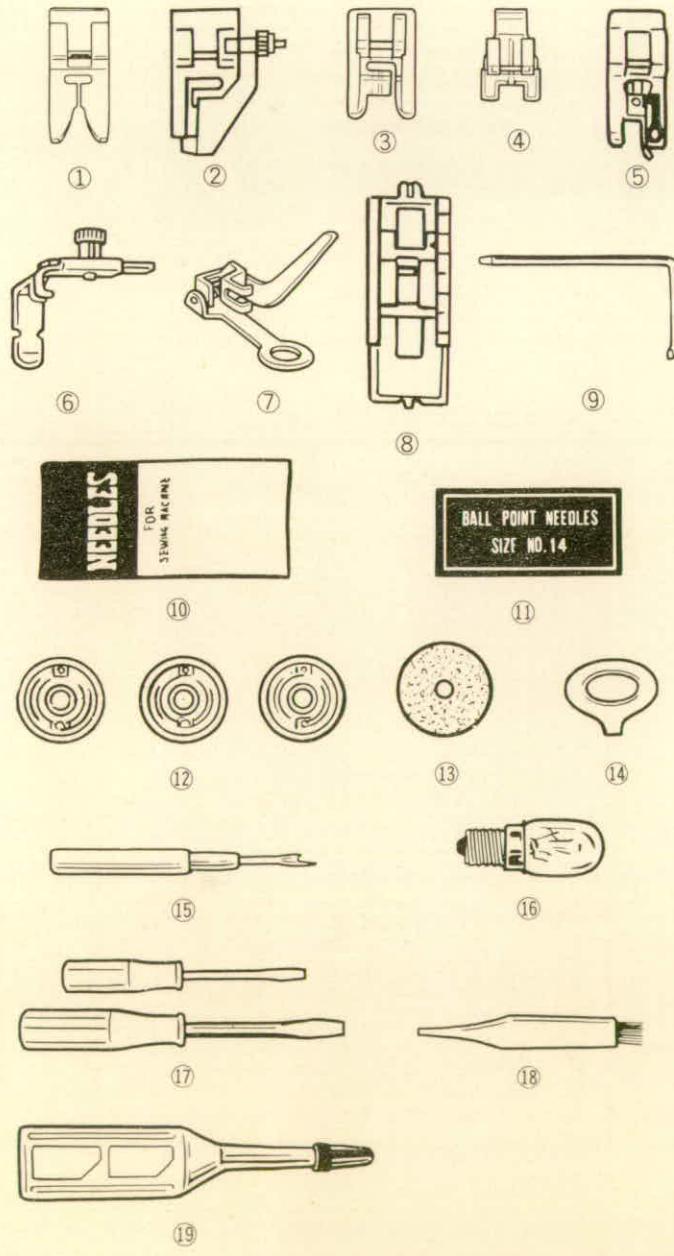
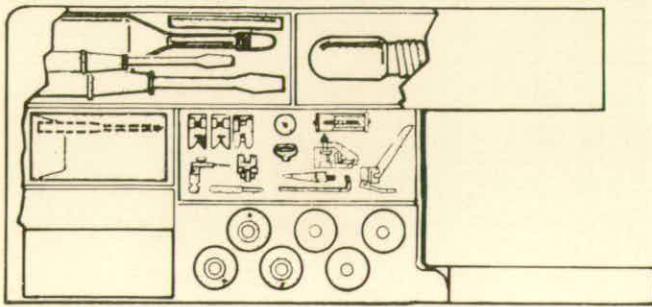


- (17) Spool Pin (Retractable)
- (18) Thread Guide to Wind Bobbin
- (19) Power and Light Switch
- (20) Declutch Hand Wheel
- (21) Socket
- (22) Presser Foot Lifter
- (23) Thread Cutter
- (24) Foot Pressure Lever
- (25) Extension Table



## ACCESSORIES

Store accessories in the accessory box in the bottom of the extension table.

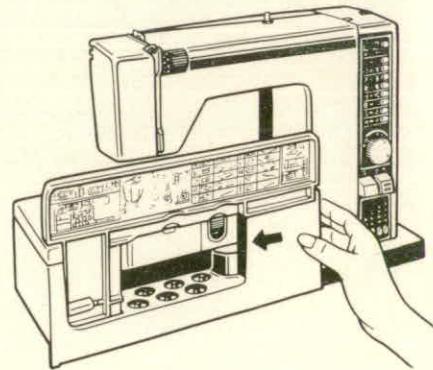


## BEFORE SEWING

### Unpacking the Machine

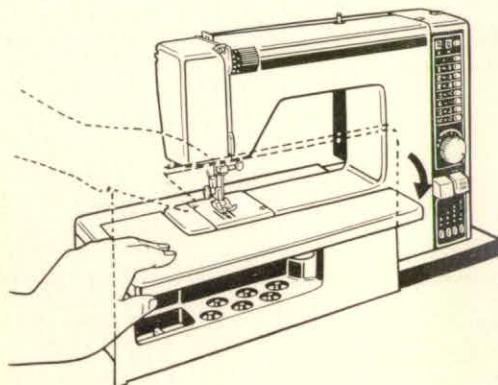
Put your machine on the table, unlatch and remove the carrying case cover.

Pull out the extension table in the direction of the arrow.



### For Flat Bed Use

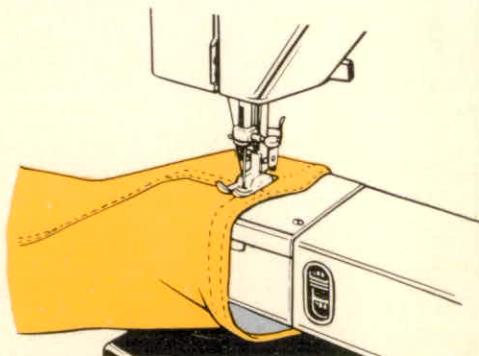
Pull down the fold-down cover.



### For Free Arm Use

Detach the extension table by lifting it up and sliding it off.

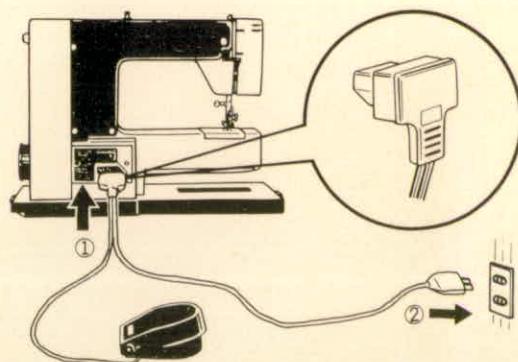
The free arm is very handy when sewing trousers, sleeves cuffs, etc.



### Connecting Foot Controller

Plug in, in the order shown, ① and ②.

Turn on the switch above the socket.

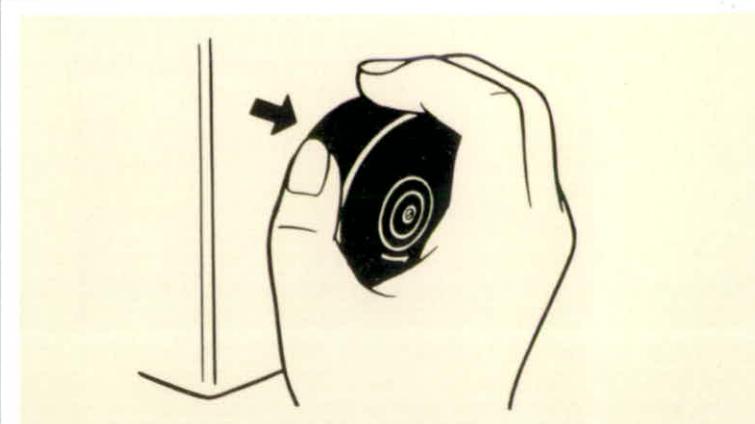
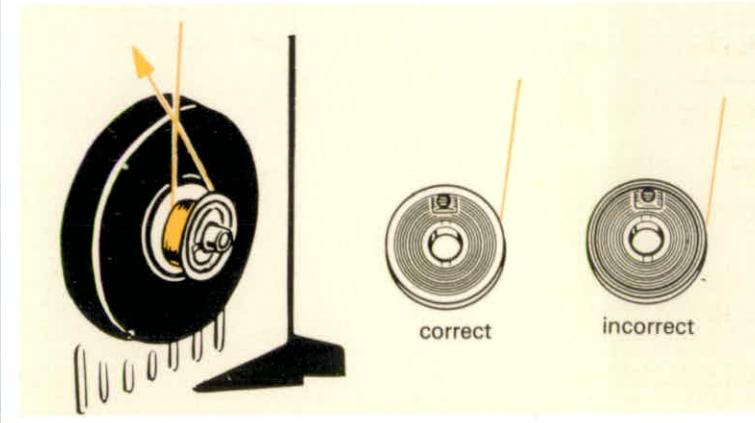
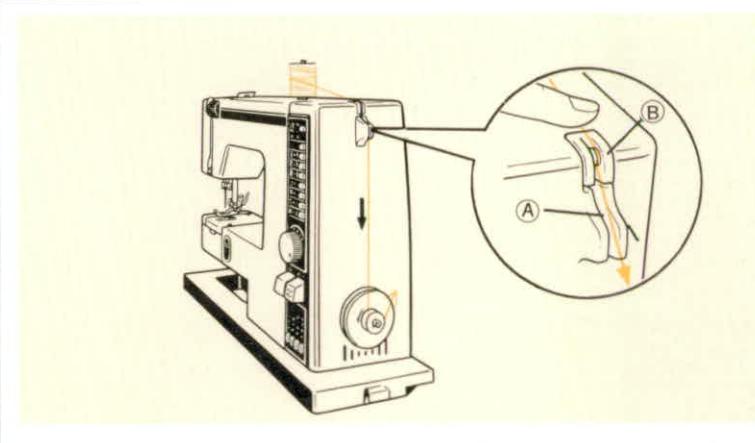
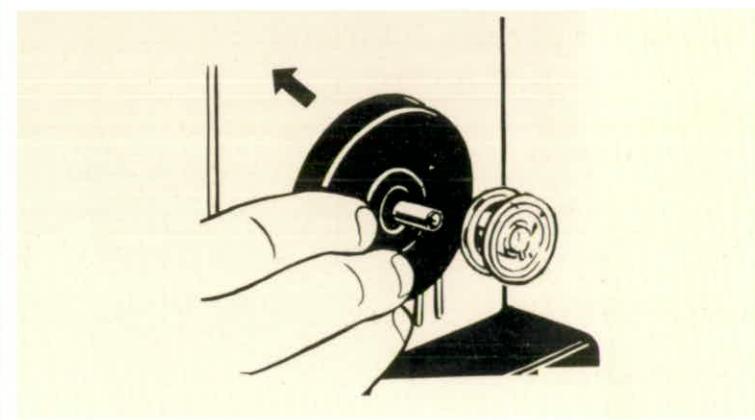


## Material, Thread and Needle Table

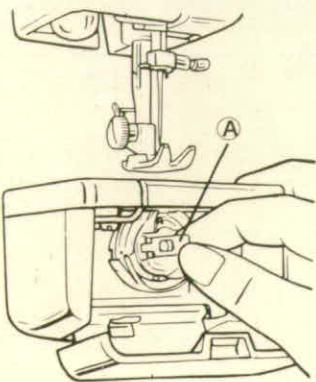
MATERIAL	THREAD			NEEDLE			REMARKS
	European Cotton	Mercerized Cotton	Cotton Covered Polyester, Silk, Nylon	European 705	U.S. Size 15x1	Point Style	
VERY SHEER; <b>Lace</b> , Voile, Chiffon, Net	70	60	Silk Nylon	65-70	9	Regular	Loosen upper tension one or two points
SHEER; <b>Blouse Crepe</b> , Lawn, Organdy, Taffeta	50-70	60	Silk Nylon	65-70	9	"	
LIGHT-WEIGHT; <b>Crepe</b> , <b>Wool</b> , Brocade, Velvet	30	50	Silk	75-80	11	"	
MEDIUM; <b>Wool</b> , <b>Silk</b> , Linen, <b>Velvetten</b> , Pique, Faille, Terrycloth	30	50	Silk	80-90	11-14	"	
HEAVY; <b>Denim</b> , Duck, Sailcloth	30	Heavy Duty	C.C.Poly.	100	16	"	
EXTRA HEAVY; <b>Upholstery</b> , Canvas, Awning	30	Heavy Duty	C.C.Poly.	120	19	"	
[KNITS]							
LIGHT-WEIGHT; Tricot	50-70	60	Silk Nylon	70	9	Light Ball	Reduce pressure of presser foot to "1".
MEDIUM-WEIGHT; <b>Jersey</b> , Double Knit, Power Net	30	50	Silk Nylon C.C.Poly.	70-80	9-10	Light to Medium Ball	
HEAVY-WEIGHT; Double knit, Power Net	30	50	Silk Nylon C.C.Poly.	80-90	11-14	Medium to Heavy Ball	
FAKE-FURS, VELOURS	30	Heavy Duty	C.C.Poly.	90-100	14-16	Ball or Sharp	
[LEATHER]							
VINYLS FILMS	30	50	C.C.Poly.	90	14	Wedge	Lay a paper between the presser foot and the materials for smoother feeding.
LIGHT-TO-MEDIUM-WEIGHT	30	50	C.C.Poly.	90-100	14-16	"	
HEAVY LEATHER	30	Heavy Duty	C.C.Poly.	100-110	16-18	"	
[DECORATIVE TOUCHES]							
TOP STITCHING	Silk twist			100-110	16-18	Regular	
MACHINE EMBROIDERY	Size 50-70			65-80	9-11	"	

## Winding the Lower Thread

- (1) Switch on.
- (2) Push in the hand wheel and put the bobbin onto the spindle.  
\* If you switch on the machine with the hand wheel in, three lights; ▽ (red), ▽ (green) and ○ (green), may flash.  
Please switch off and pull out the hand wheel.  
Then start again in the order (1) and (2).
- (3) Pull out the spool pin on the top of the machine and place a spool of thread on it.
- (4) Lead the thread from the spool pin through the thread guide to the bobbin. When you guide the thread to the guide groove **A**, make sure to push the thread well into the guide spring **B**, by holding the thread with the tip of your finger.
- (5) Wind the thread around the bobbin, counter-clockwise, several times.
- (6) Press the foot controller to wind the bobbin, checking carefully the amount of thread wound.  
Stop pressing the foot controller when the thread reaches the outer circle on the bobbin.  
\* There are three choices of speed to wind thread (see p.11).  
\* You can not use the tacking button for winding the lower thread.

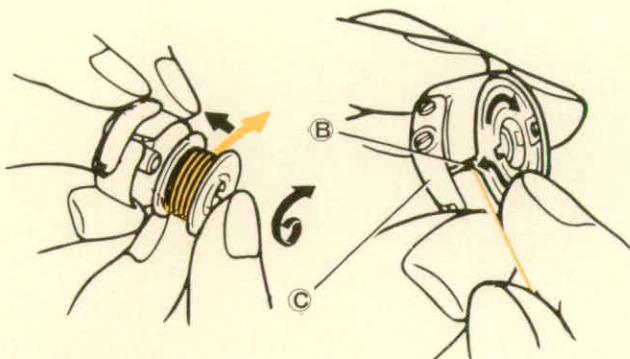


PULL OUT THE HAND WHEEL WHEN BOBBIN WINDING IS COMPLETED.



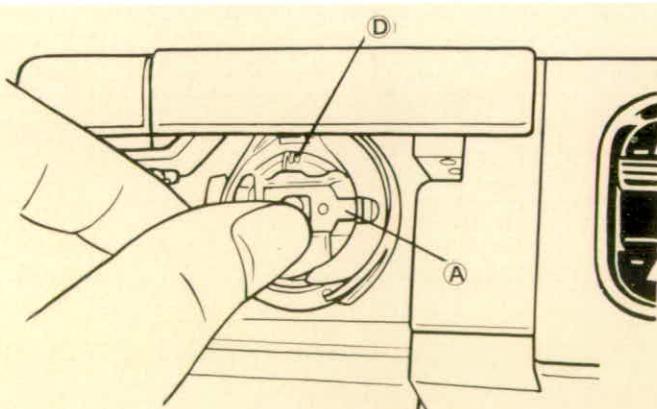
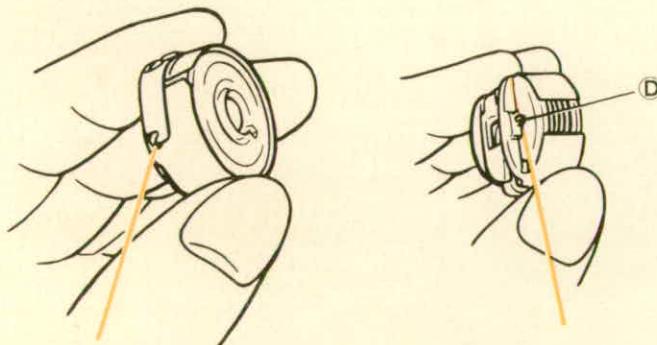
## Removing the Bobbin Case

- (1) Raise the needle to its highest position by pushing the lower thread pick-up button.
- (2) Open the shuttle cover and take out the bobbin case, holding the hinged latch (A) of the bobbin case.
- (3) Remove the bobbin with factory-wound thread.



## Threading the Lower Thread

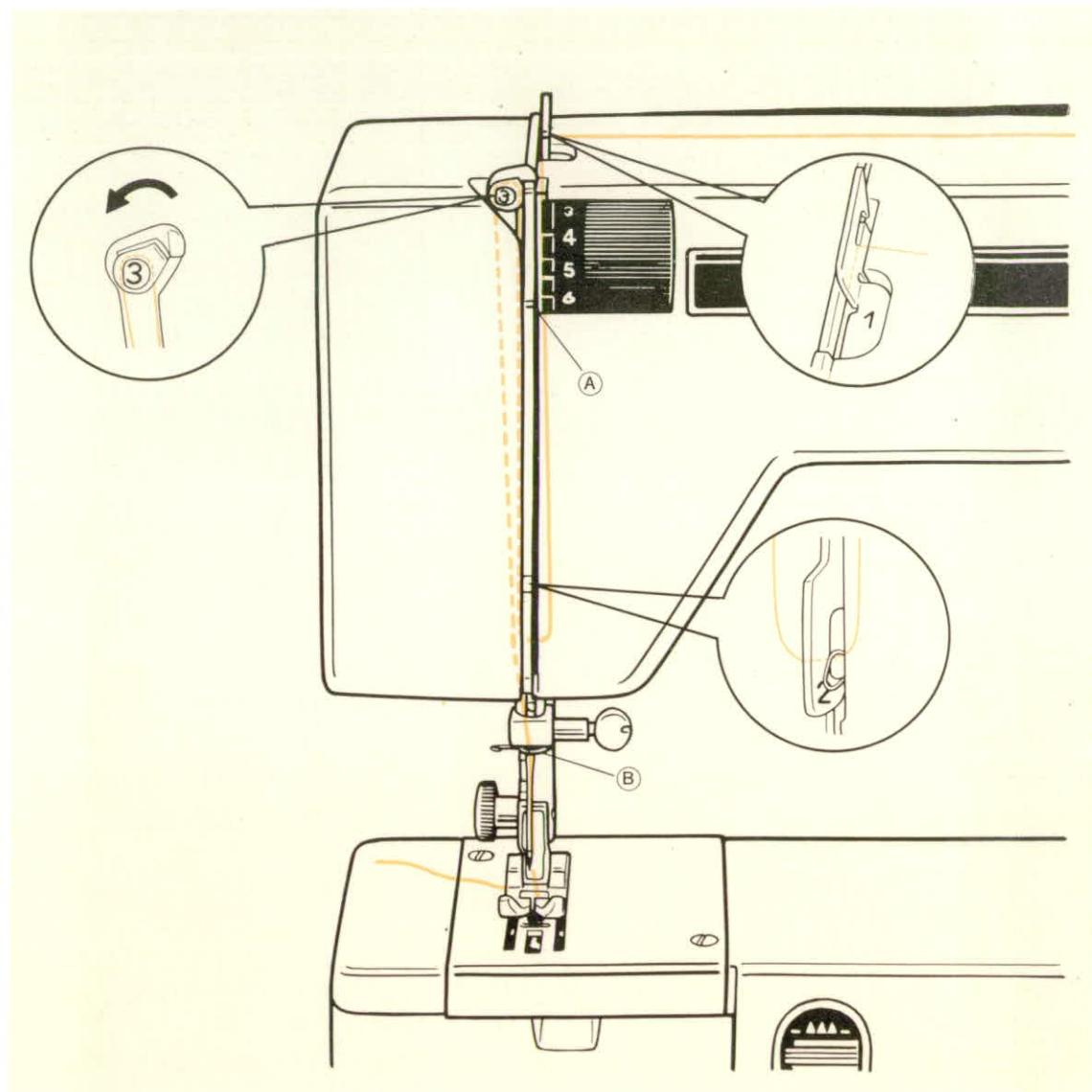
- (1) Lead the thread through the slit (B) and underneath the tension spring (C), then through the coiled thread guide (D).
- (2) Leave a thread end about 10cm (4") long from the bobbin.



## Inserting the Bobbin Case

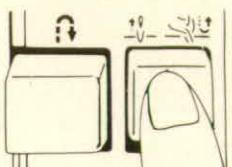
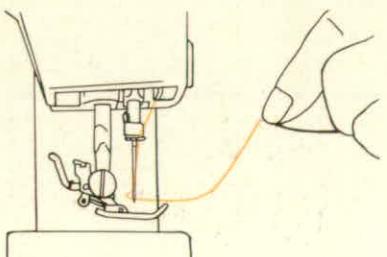
- (1) Make sure that the needle is raised above the needle plate.
- (2) Push the bobbin case onto the rotary hook until it fits well, holding the latch of the bobbin case with your thumb and index finger.

## Threading the Upper Thread



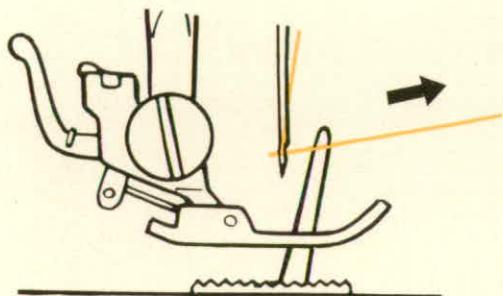
Thread the take-up lever 3 by leading the thread from right to left.

- (5) Thread through the guide B in front, from left to right.
- (6) Thread the needle from front to back, leaving a thread end about 15cm(6") long.

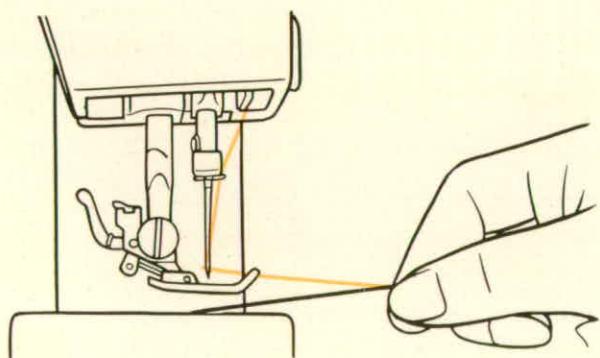


### Drawing up the Lower Thread

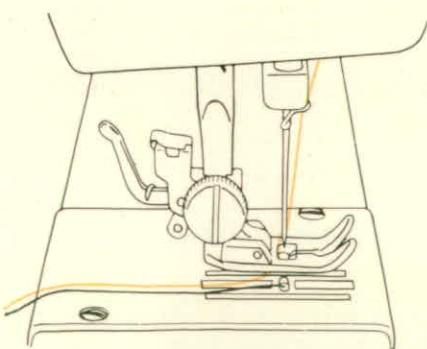
- (1) Gently pull the end of the upper thread by hand.
- (2) Push the lower thread pick-up button as far as it will go.



- (3) Pull the upper thread and the lower thread will come out.



- (4) Pull out both thread ends about 15cm(6").



- (5) Bring both thread ends under the foot and leave them behind the foot.

## Selecting Pattern

### Buttonhole sewing

See p.17.

### How to set for automatic stitches (red)

- \* Make sure the red pattern selection light on the right is lit.

(1) Push the button for the pattern that you are going to use.  
The light will move and stop at the position you have chosen.

(2) Adjust the orange indicator on the stitch length dial to the place you wish, within the limits shown by the red light.

### How to set for super stretch stitches (green)

(1) Turn the stitch length dial to the left until the two green marks meet.

The pattern selection light will change to green on the left.

(2) Push the button for the pattern that you wish to use.

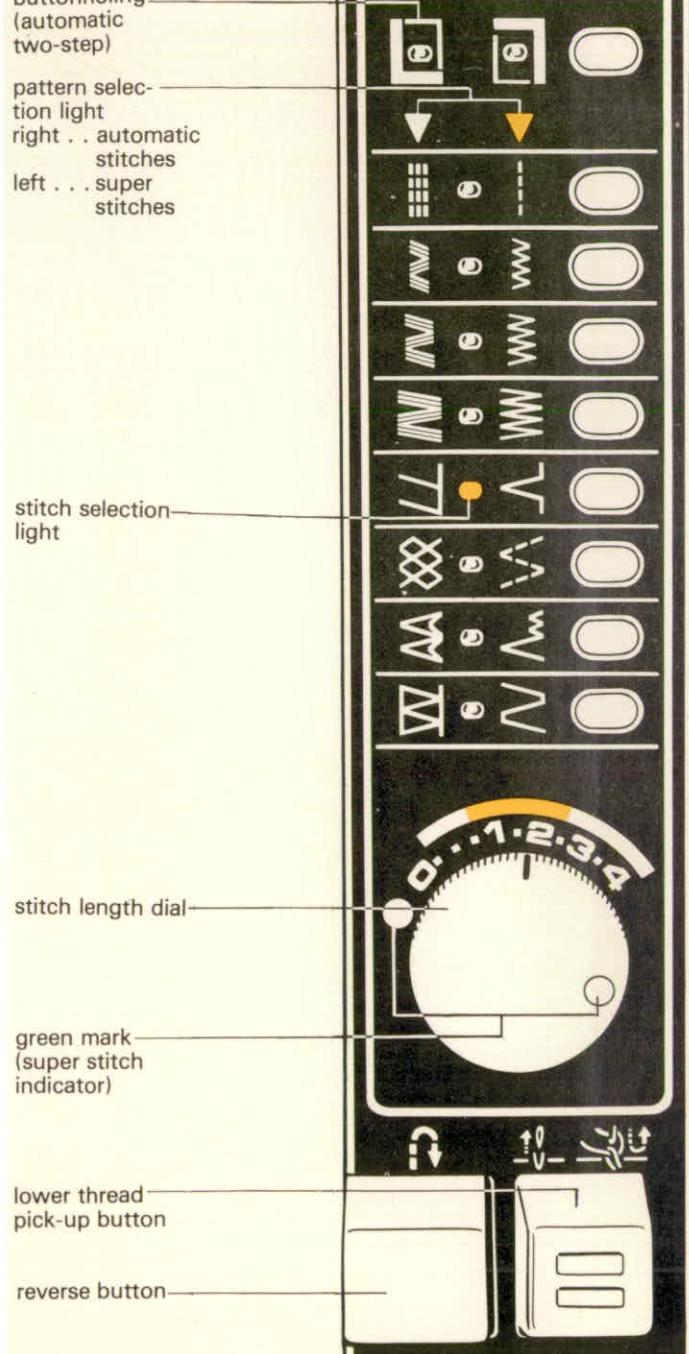
### Lower thread pick-up button

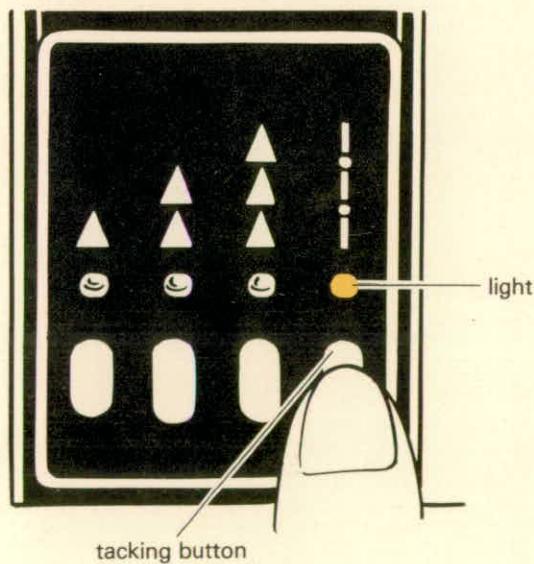
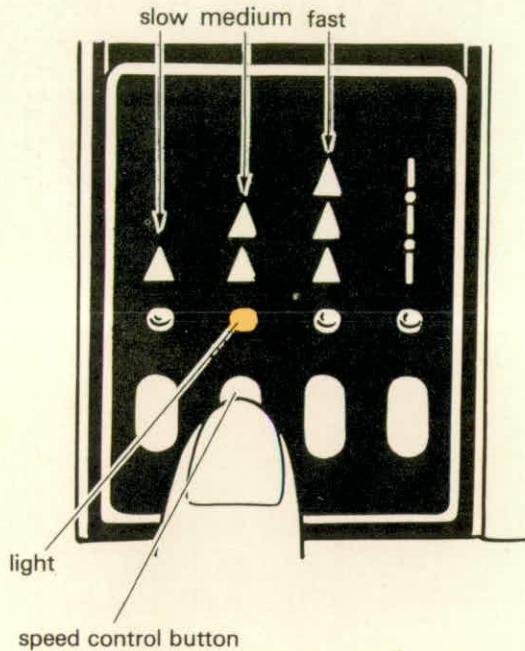
When you push the lower thread pick-up button, the needle will be in the highest position, or pick up the lower thread.

### Reverse button

See p.14.

**YOU CANNOT CHANGE TO A DIFFERENT PATTERN WHILE RUNNING THE MACHINE.**





## Sewing Speed

There are three choices of sewing speed, slow, medium and fast.

For subtle adjustment, you can adjust the amount of pressure on the foot controller.

- \* You can not change to a different speed while running the machine.
- \* When you switch on, the machine is automatically set at low speed.
- \* When set for buttonhole sewing, the machine is automatically set at a suitable speed.

## Tacking Button

(1) Push the tacking button. The machine is now automatically set for straight sewing.

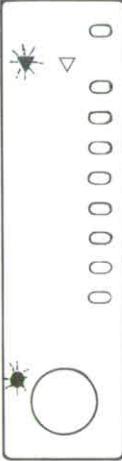
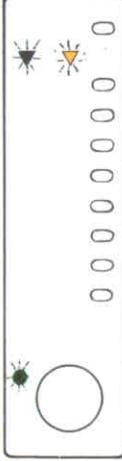
(2) One step on the foot controller makes one length of sewing.

\* If the stitch length dial is set for super stretch stitches,  $\nabla$  (green) and  $\bigcirc$  (green) lights will go on and off. Bring the orange indicator on the dial within the limits shown by the red light.

\* After tacking, when you set the machine for a different automatic stitch pattern, the light of the tacking button will automatically change to indicate low-speed sewing.  
(How to tack, see p.24.)

## If Lights Flash . . .

When you make a mis-operation, electronics will warn you by flashing lights.

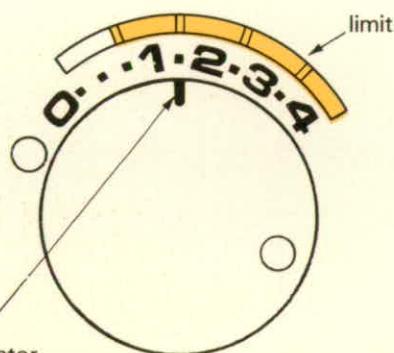
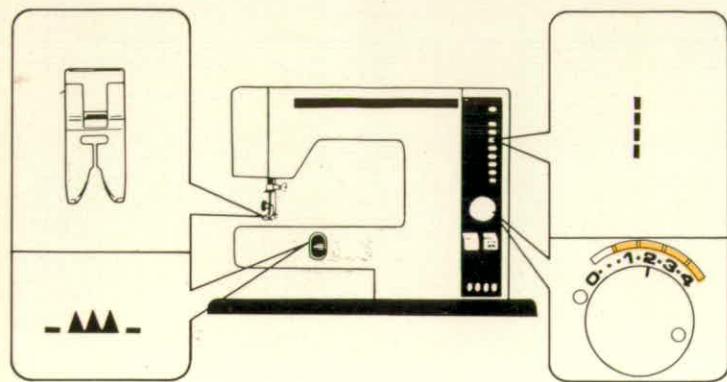
	Probable Cause	Correction
 Two lights (▽ green and ○ green) go on and off.	Button for buttonhole sewing (or tacking) is on; at the same time, stitch length dial is turned to the left so that the two green marks meet.	Select another button than buttonhole sewing (or tacking), or change stitch length dial to automatic stitches.
 Three lights (▽ red, ▽ green ○ green) go on and off.	Power switch turned on when the hand wheel is pushed in.	Turn off power switch, pull out hand wheel and switch on.

## STRAIGHT STITCH AND BASICS

### Straight Sewing

Foot...Zigzag foot

\* When you switch on, the machine is set automatically for straight sewing at low speed.



orange indicator

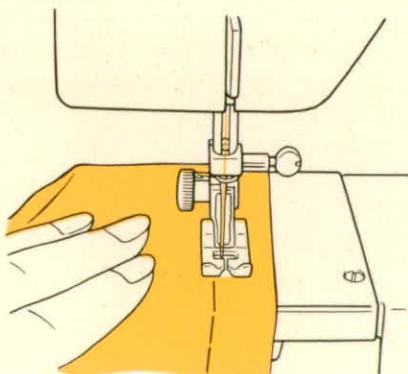
### Stitch Length Dial

Set the orange indicator within the limits shown by the red light.

For large stitches, turn the dial towards 4.

For short stitches, turn it towards 0.

\* When sewing super stretch stitches, turn the stitch length dial to the left until the two green marks meet.



(1) Place the material under the presser foot.

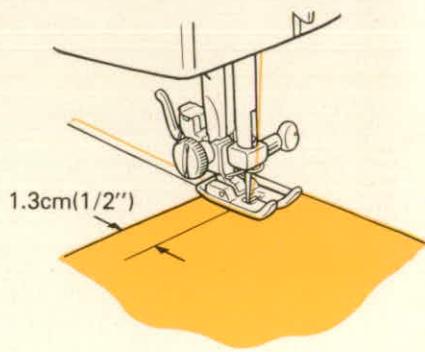
(2) Place your left hand as shown.  
Lower the needle and presser foot.  
Gradually press the foot controller.  
Never pull the material, nor try to sew fast at the beginning.

\* When machine is running, you can not change setting of pattern nor speed even if you touch the button.

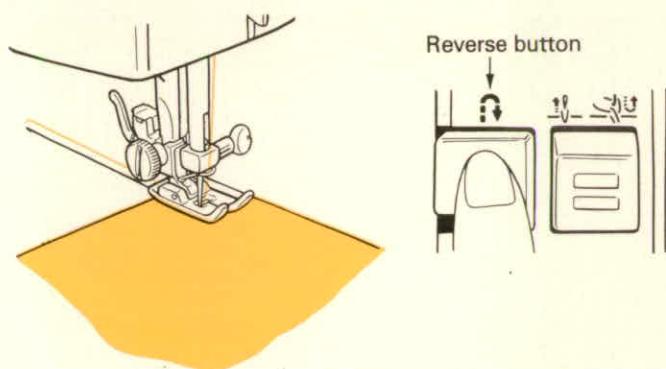
## Reverse Sewing

Reverse sewing at the end of stitching is to prevent the thread end from fraying.

- (1) Place the material under the foot about 1.3cm(1/2") in from the edge.
- (2) Lower the needle and presser foot. Leave the ends of the threads about 15cm(6") long.



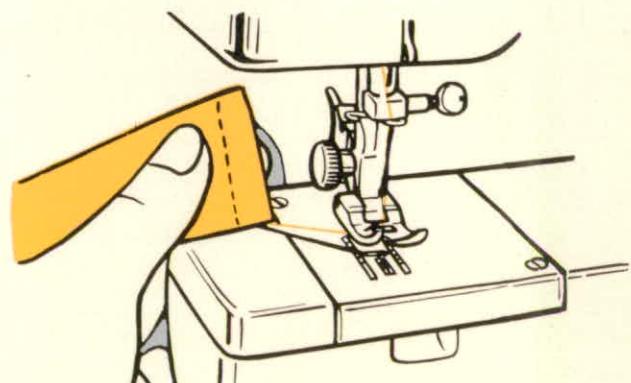
- (3) Push the reverse button, the stitches will then be in reverse. The length of a reverse stitch is at most 0.2cm(1/16").



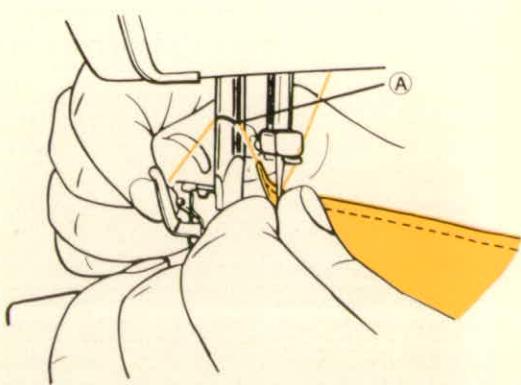
## Thread Cutter

At the end of sewing, raise the needle to its highest position by one push of the lower thread pick-up button. Lift the foot and remove the material by pulling it towards the left.

\* Never pull the thread too hard as it may cause the needle to bend.

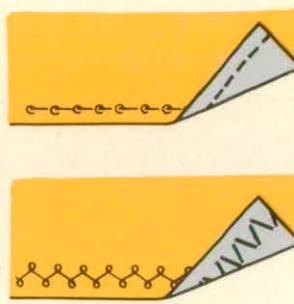
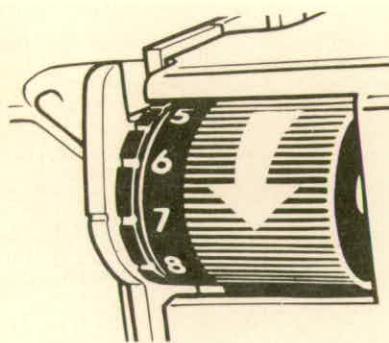
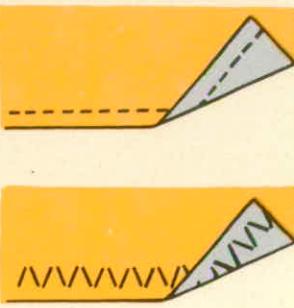
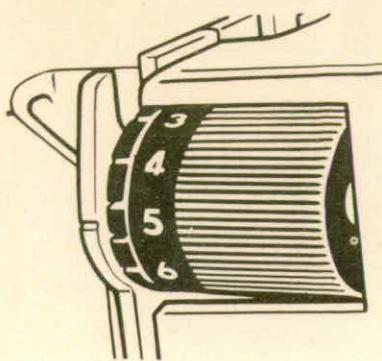


Cut both threads together with the thread cutter Ⓐ.

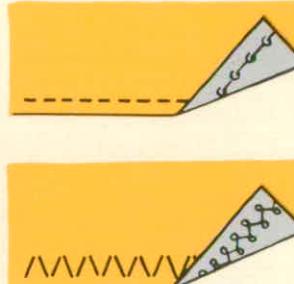
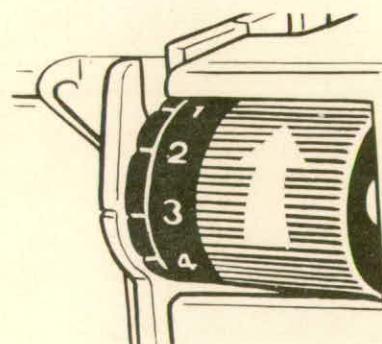


## Adjusting Thread Tension

The suitable upper tension is between 3–6 for sewing with ordinary thread and materials.

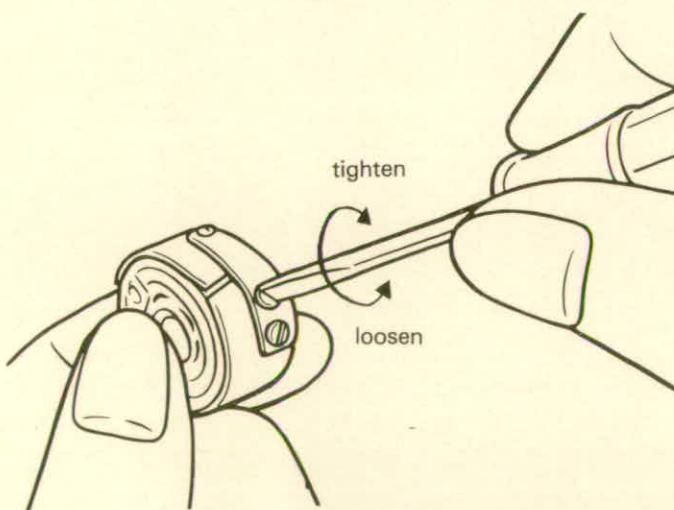


If the upper tension is too tight, turn the thread tension dial downward in the direction of the arrow.



If the upper tension is too loose, turn the thread tension dial upward in the direction of the arrow.

NEVER FORCIBLY TURN THE TENSION DIAL EITHER OVER 9 OR UNDER 0.



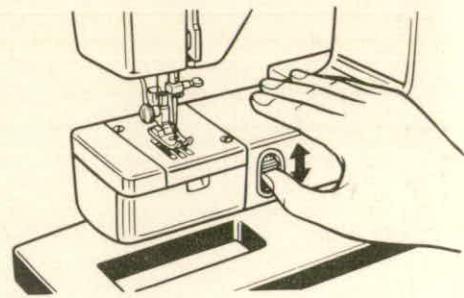
## Adjusting Bobbin Thread Tension

Bobbin tension is already controlled, but if it needs to be adjusted, this can be done with the small screwdriver.

## Drop Feed Lever

▲ Lower the feed dog for darning, embroidering etc., by pressing down the drop feed button.

▲ Press the button up to engage feeding for normal sewing.



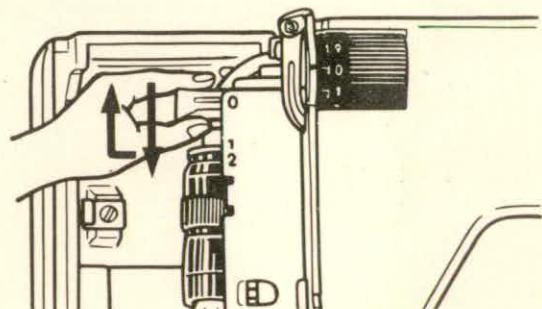
## Foot Pressure

Adjust foot pressure with the lever inside the face cover.

2...for normal sewing

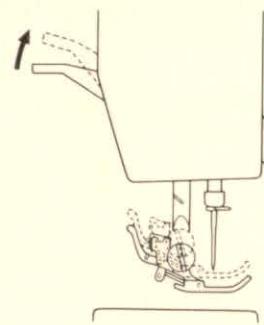
1...for very elastic materials,  
thick fabrics, etc.

0...for darning; etc.

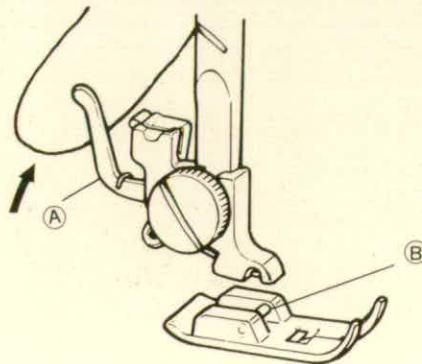


## Double Presser Foot Lifter

For very thick material, push up the presser foot lifter firmly, as far as it will go, to give a wider space.

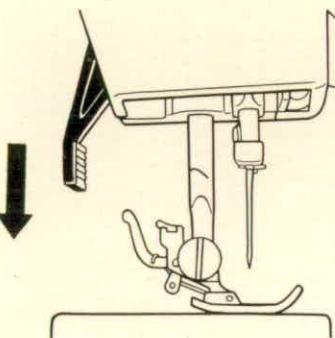


## Changing Presser Foot



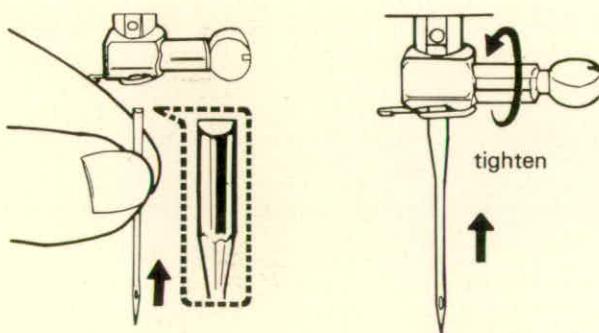
(1) Pull the lever **A** towards you so that the presser foot will come off.

(2) Centre the bar **B** of the new presser foot under the shank.



(3) Lower the presser foot lifter so that the shank fits over the bar.

\* If the shank does not fit well, pull the lever towards you.



## Changing Needle

(1) Push the lower thread pick-up button to bring the needle to its highest position.

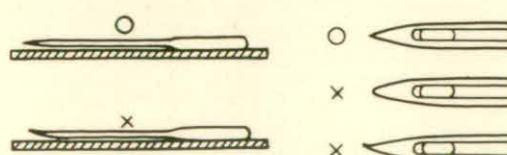
Loosen the screw and take out the needle.

(2) Insert the new needle, flat side away from you, as far as it will go.

(3) Tighten the screw firmly.

Place the needle on a flat surface to check if it straight.

Do not use needles that are blunt, rough, dirty, or damaged in any way.



## PRACTICAL SEWING

### Stretch Seams

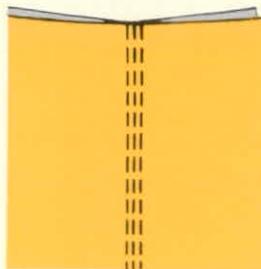
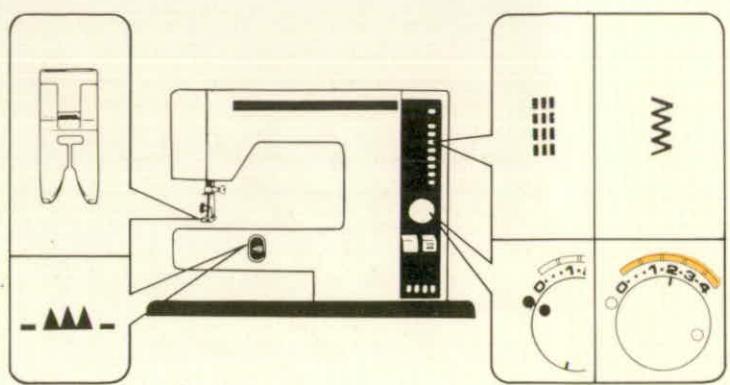
Foot...Zigzag foot

A ball-point needle is essential.  
Paper may be laid under knits for smoother feeding.  
When stitching light-weight or slippery fabrics, start sewing slowly, pulling the thread ends, until a few stitches have been made.

\* Reduce the foot pressure for very elastic materials.

Medium-weight fabrics...  
double knit, jersey  
Apply elastic triple stitch, (A).

Light-weight fabrics  
Apply small zigzag, (B).

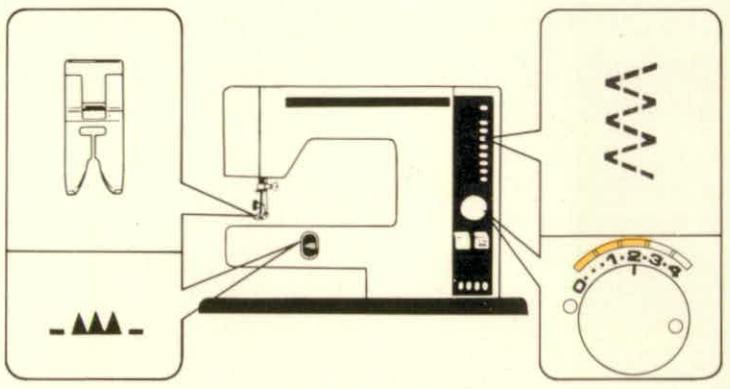


(A)

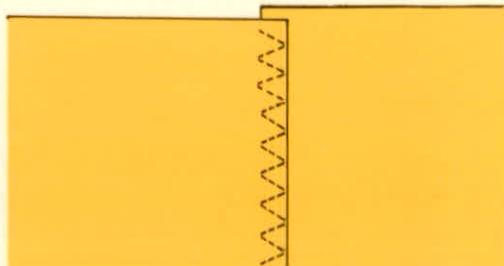


(B)

Foot...Zigzag foot



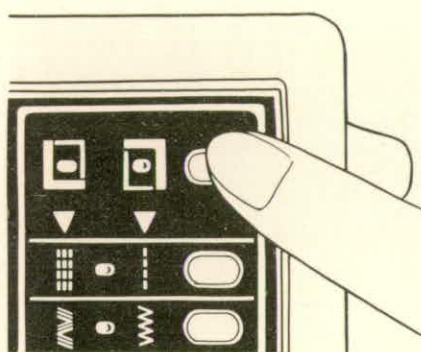
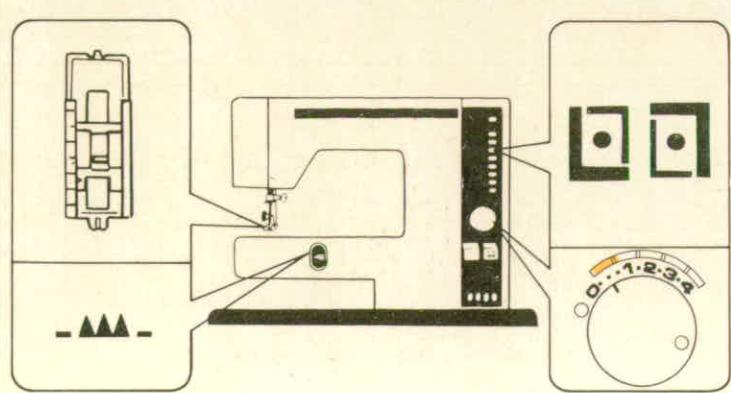
Very elastic fabrics...  
spandex (power net)  
Use a lapped or abutted seam with multiple zigzag stitch.



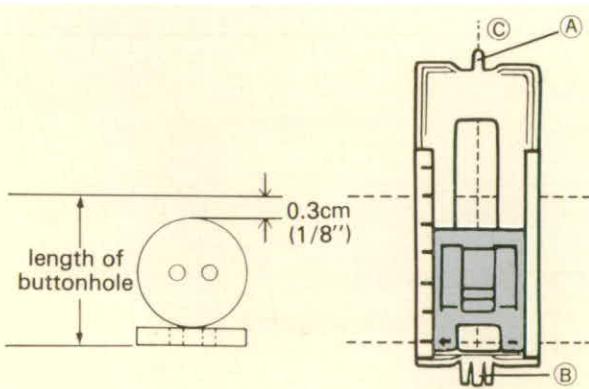
## Buttonhole Sewing Foot...Buttonhole foot

Set the stitch length dial properly as shown.

If the stitch length dial is set so that the two green marks meet, (green) and (green) lights will go on and off, and buttonhole sewing cannot be done.



Push the buttonhole button.  
The mark will light up.  
Push the button again.  
The mark should now light up.

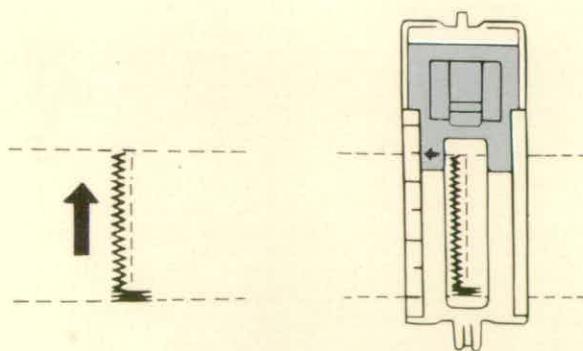


(1) Measure the button and its thickness and add 0.3cm(1/8") for bar tacks.

Mark the guide lines on the material as shown.

Place the material under the foot, matching the centre line with projections and .

Push back the sliding base as far as it will go.



(2) Push the buttonhole button to set the mark.

Start sewing.

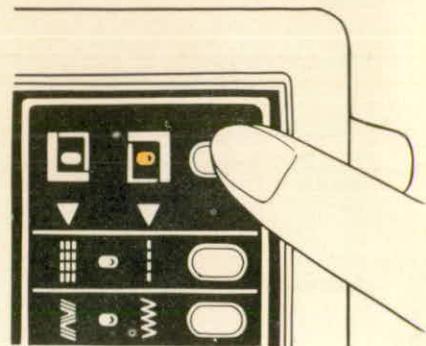
It will proceed automatically from the first bar-tacking to left side stitching.

Sew until you reach the mark on the fabric.

\* For a neater finish, slightly loosen the upper thread tension.

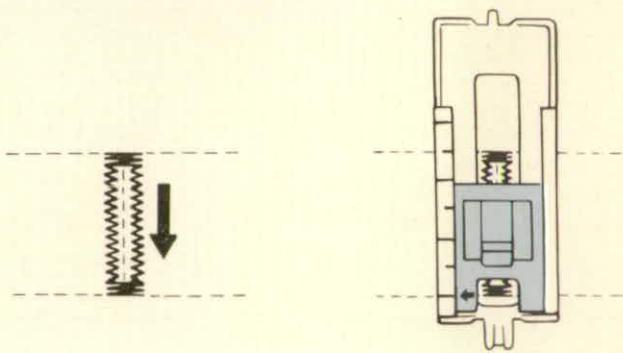
\* When sewing buttonholes on stretch fabrics, it is recommended to insert thin paper under the material.

- (3) Push the button to set the □ mark.



- (4) It will proceed automatically from the second bar-tacking to right side stitching.  
Sew until you reach the mark on the material.

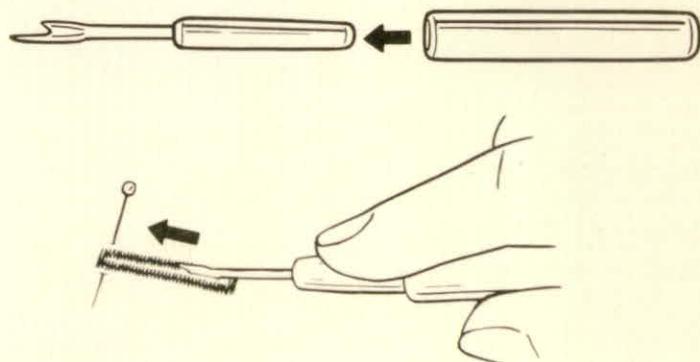
- (5) Push the straight stitch button and sew 5—6 stitches to complete the buttonhole sewing.



#### Cutting buttonhole

Cut the buttonhole in the middle by pushing the cutter forwards.

Stick a needle through the bar-tacks to prevent over-cutting.

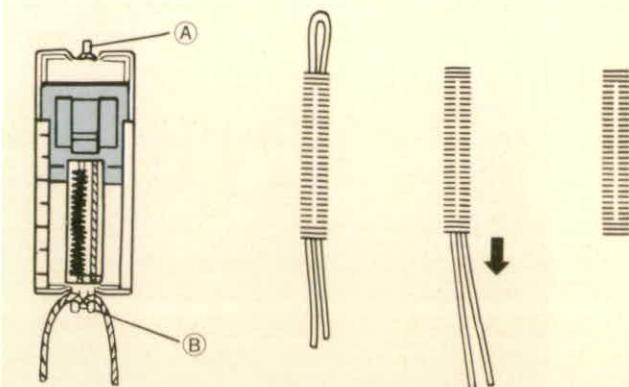


#### **Corded Buttonhole**

To reinforce buttonholes, a corded buttonhole is useful, especially for knits.

- (1) Hook a piece of crochet cotton to the projection A on the buttonhole foot, and bring to the slit B. Holding both ends, sew in the same way as for an ordinary buttonhole.

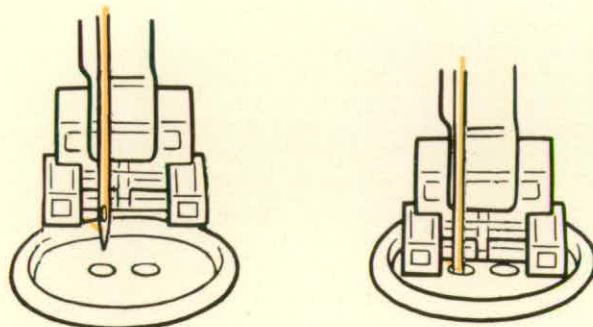
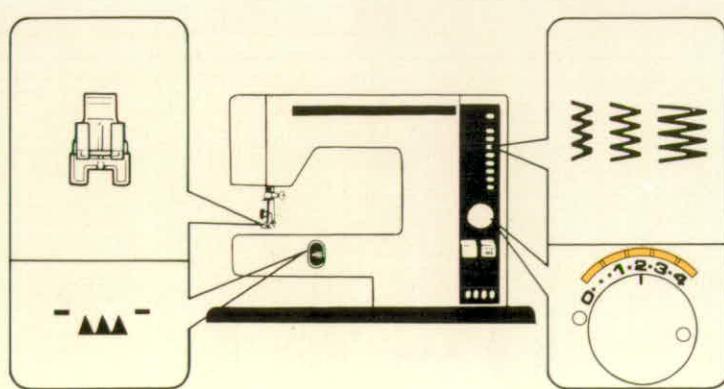
- (2) After finishing, pull both ends of the thread and cut them.



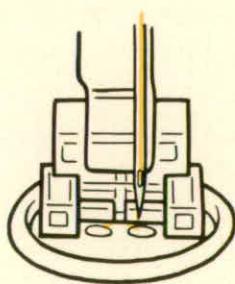
## Sewing on Buttons

Foot...Button sewing foot

Choose a suitable zigzag width from three different kinds.  
You can sew almost all sizes of button using three kinds of width.

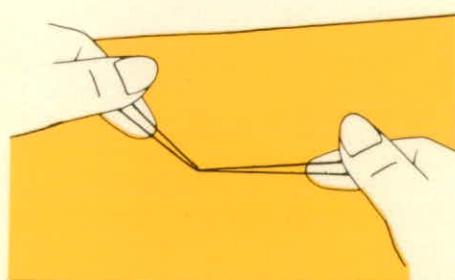


- (1) Position the button under the foot.  
Turn the hand wheel by hand until the needle comes to the left hole of the button.  
Lower the foot.



- (2) Turn the hand wheel until the needle comes to the right hole.  
If the needle did not go through, bring the needle up enough, and change the zigzag width.

- (3) Sew about 10 stitches, running the machine at medium speed.

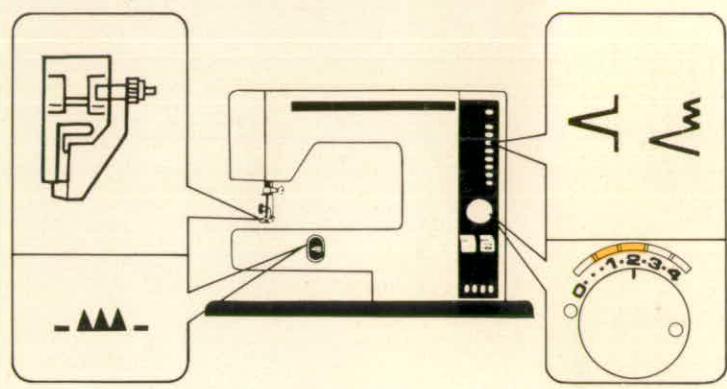


- (4) Draw the thread ends through to the wrong side and tie a knot.

## Blind Hemming

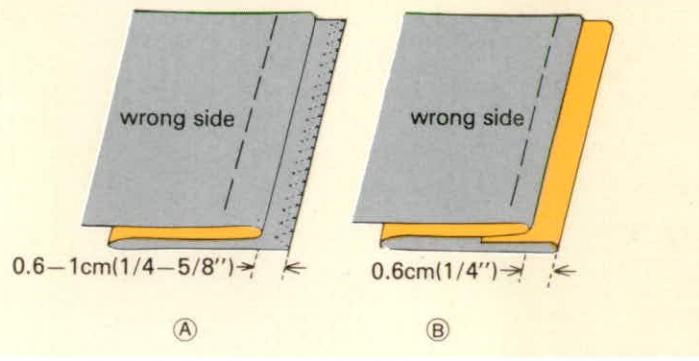
Foot...Blind hem foot

\* For elastic blind hemming, use the pattern .

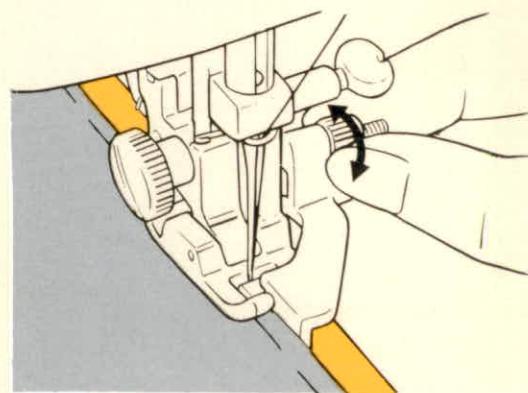


(1) Fold the material as shown, hand-tack the hem.

- (A) ...For medium & light-weight fabrics
- (B) ...For sheer fabrics



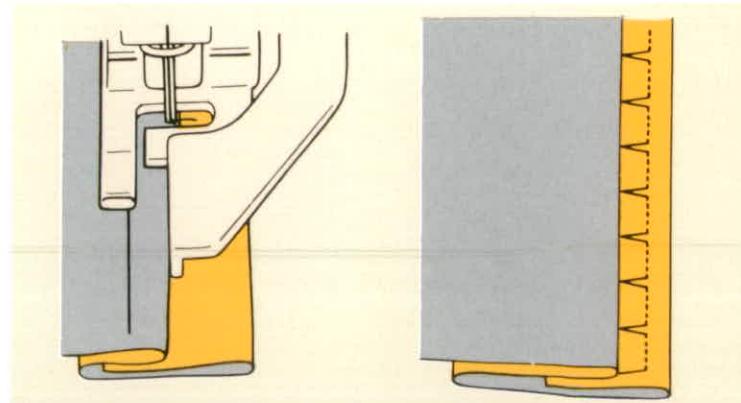
(2) Adjust the hem-width corresponding to the pattern by turning the small screw on the right side of the cloth guide.

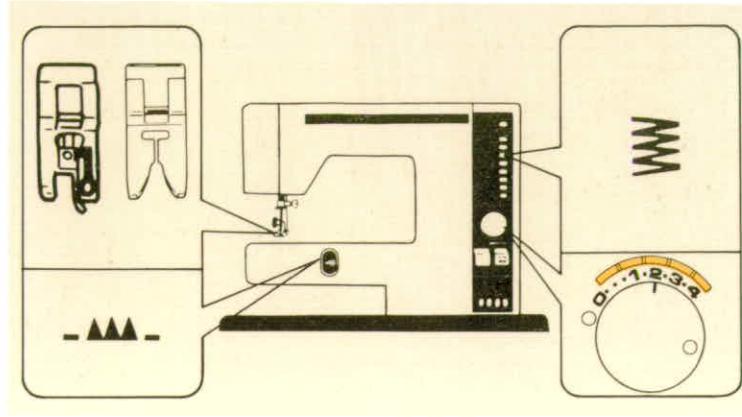


(3) Sew carefully, guiding the soft fold against the guide.

Make sure the slanting stitches pierce only one or two threads of the soft fold.

Remove the tacking.

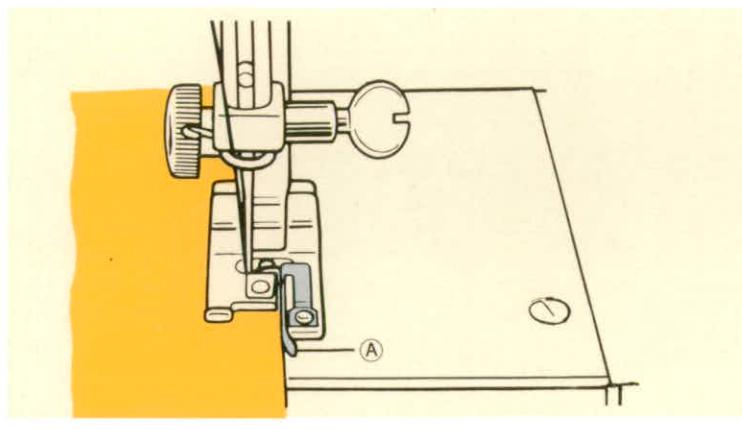




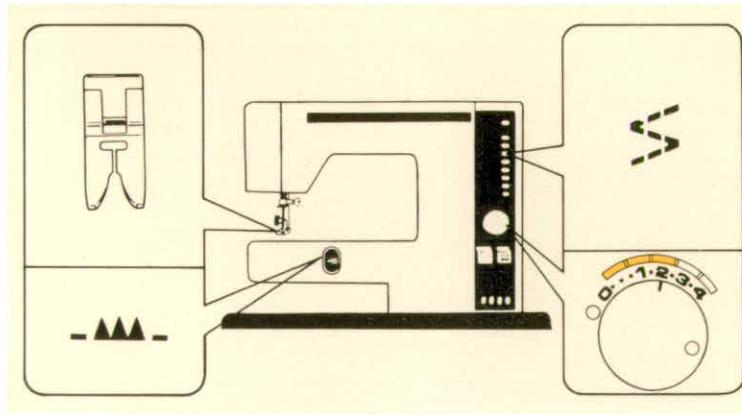
### **Overcasting**

Foot...  (big)—Overcasting foot  
 (medium, small)—Zigzag foot

Overcasting prevents the edge of the fabric from fraying and produces a neat finish.



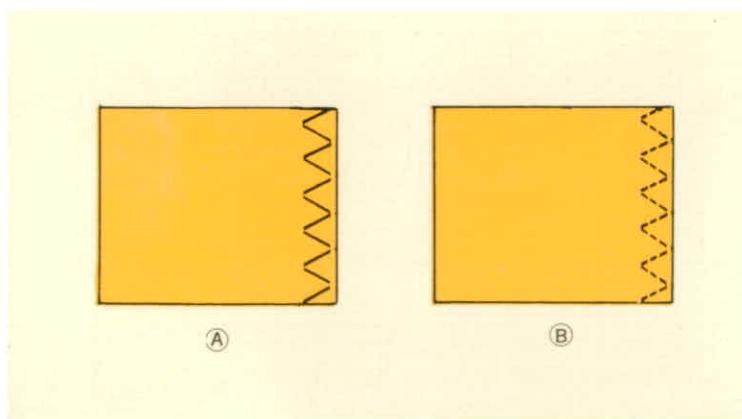
Sew carefully, guiding the right edge of the fabric along the cloth guide A of the foot.



## Overcasting for elastic materials

Foot...Zigzag foot

For stretch fabrics such as jersey and tricot, overcasting with multiple zig-zag stitch is effective to prevent the edge from fraying.



- A) ...Overcasting for light weight materials

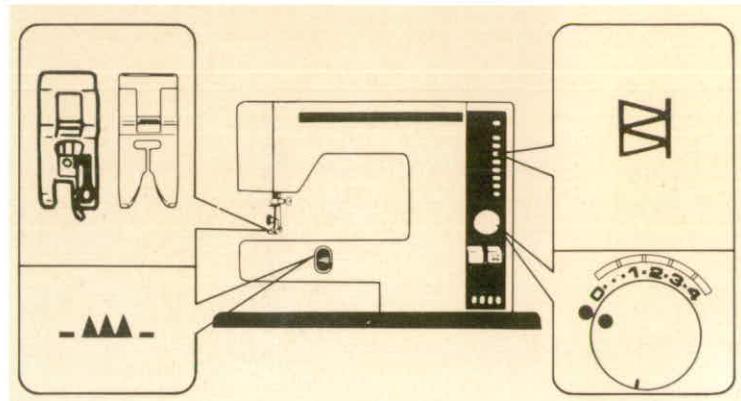
- ⑧ ... Overcasting for elastic materials

## Overlocking

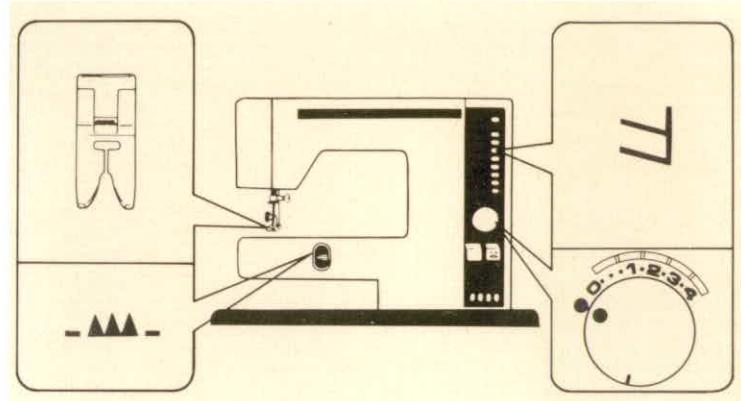
This machine has two types of overlocking stitch.

These stitches sew stretch seams and finish them in one operation.

Foot...Zigzag foot  
or overcasting foot

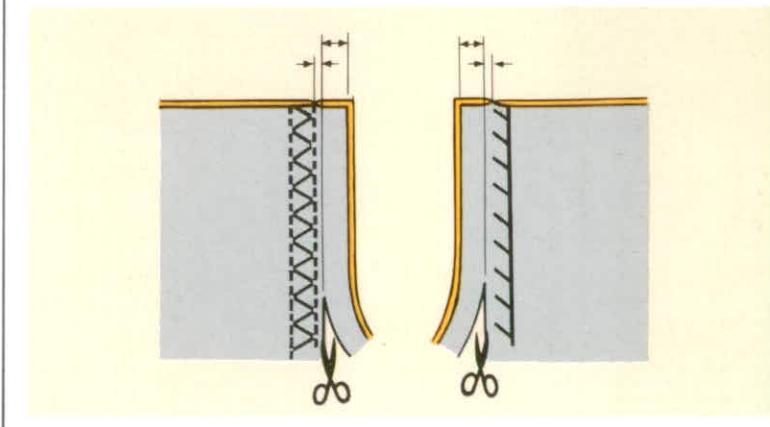


Foot...Zigzag foot



### Neat way

- (1) Place the pieces of material with edges together.
- (2) Sew the edge, about 0.5cm(1/4") in from the hem.
- (3) Cut off the margin 0.1cm(1/24") away from the stitch.  
(Be careful not to cut the thread.)



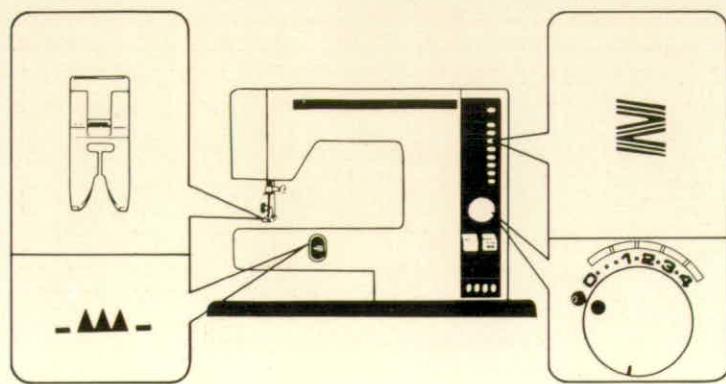
## Lapped Seam Sewing

Foot...Zigzag foot

Use ric rac stitch to make lapped seams in one operation.

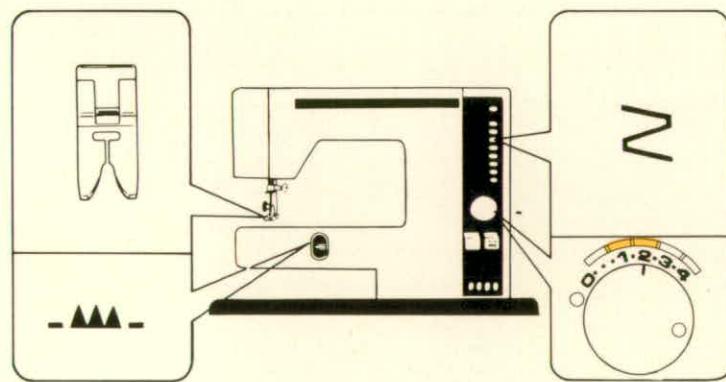
Sew over the lapped part with ric rac stitch.

This seam is useful for ladies foundation garments which require strong and elastic seams.



For easy-to-fray materials, fold the edges as shown (A).

For non-fray materials, fold the edges as shown (B).



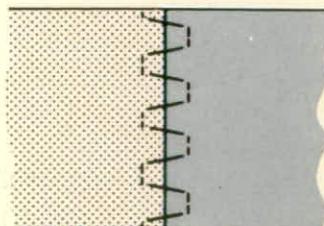
## Edge to Edge Sewing

Foot...Zigzag foot

Double action stitch is used to join the edges of abutted materials.

It is also used to mend seams in elastic fabrics for underwear, knitwear, etc.

Sew carefully, keeping the line where the pieces of material come together in the centre of the foot.

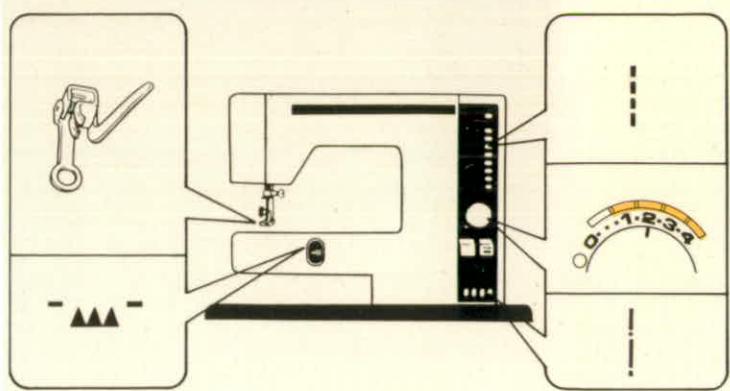


## Tacking

Foot...Darning foot

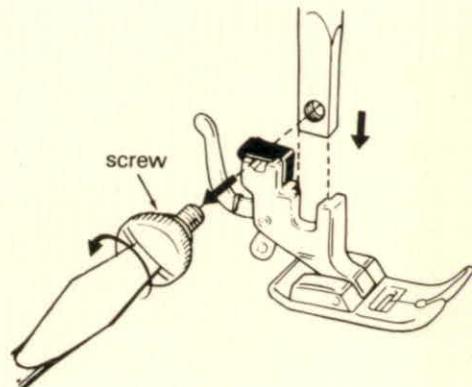
Push the tacking button.

The machine is automatically set for straight sewing.

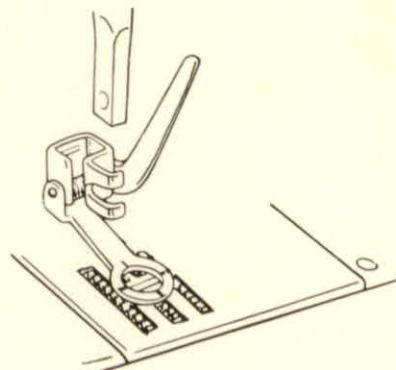


### How to set darning foot

- (1) Lift the presser foot lifter.
- (2) Push the lower thread pick-up button, so that the needle is in its highest position.  
**SWITCH OFF.**  
\* The needle can also be raised by turning the hand wheel.
- (3) Remove the foot and the holder by loosening the screw with a screw-driver.

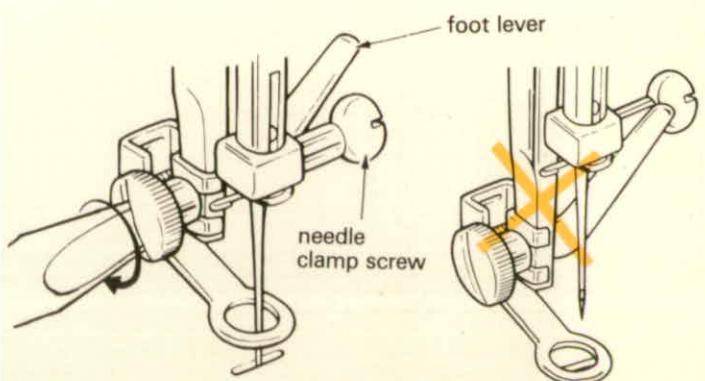


- (4) Align the hole of the darning foot with the hole of the needle plate.



- (5) Lower the needle by turning the hand wheel towards you.  
**THE FOOT LEVER SHOULD BE BEHIND THE NEEDLE CLAMP SCREW.**

- (6) Tighten the screw onto the holder.



### How to sew

- (1) One step on the foot controller makes one length of sewing.
  - (2) Leave the end of the upper thread through the hole of the foot in the direction the material is moving.
  - (3) When the needle stops, pull the material and two thread ends in the direction of the arrow, and press the foot controller again.
- \* Use a ball-point needle if stitches are skipped.

### How to use tacking stitch

#### --Tacking--

Use soft thread such as tacking thread.

Tack adjusting the stitch length as required.

#### --Thread marking--

Use this method for materials such as thick wool, lace and shaggy material for which you can not use a tracing spatula, roulette or chalk.

- (1) Place the pieces of material with right sides facing, and the paper pattern on them.  
Pin and cut the materials.
- (2) Sew along the line with one long stitch of about 3cm(1") and one short, about 0.3cm(1/8"), alternately.
- (3) Remove the paper pattern.  
Cut the long loops between the stitches.  
Cut the thread, also between the two pieces of material.

#### --Gathering--

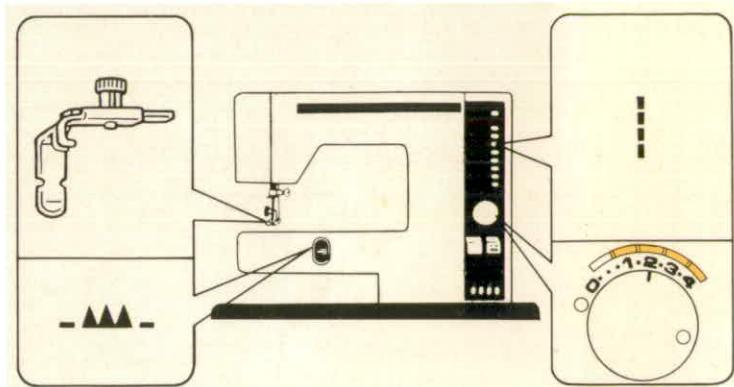
Tack, and pull the lower thread so that the material is gathered.



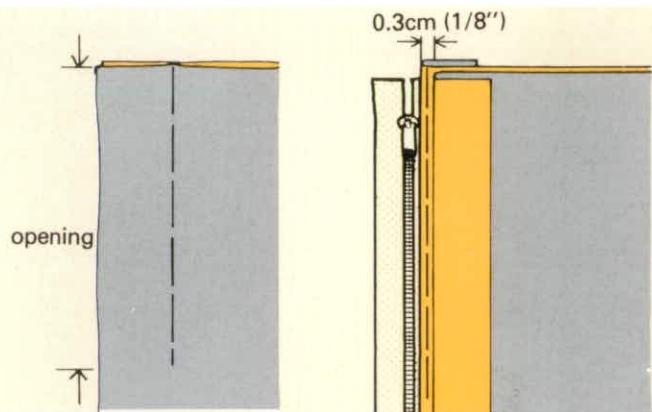
## Zipper Sewing (in lapped seam)

Foot...Zipper foot

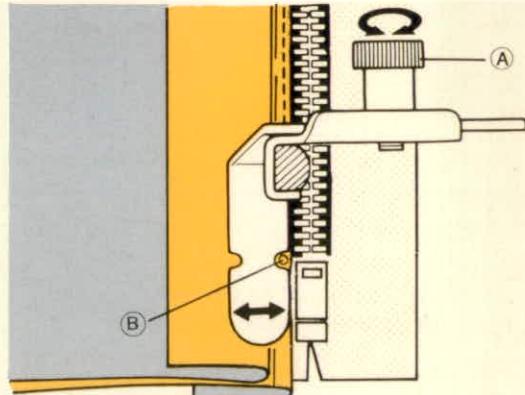
By using the special zipper foot with the sliding adjuster, zipper sewing can be easily done without turning the material.



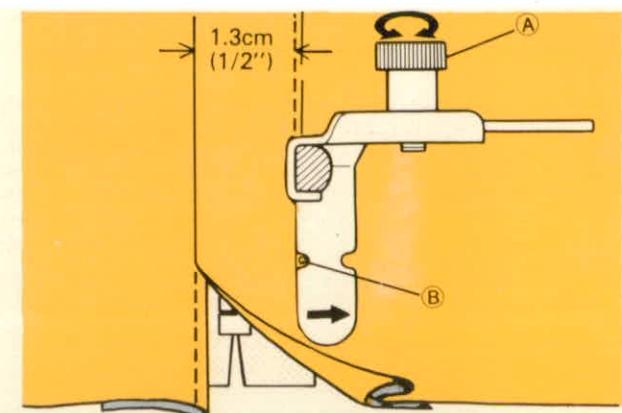
- (1) With right sides together, tack along seam line of the opening.
- (2) Open the tacked seam and pull out the lower material 0.3cm(1/8"). Place the folded edge over the right side of the zipper and tack over it.



- (3) Loosen the screw Ⓐ and slide the foot so that the needle comes into position Ⓑ. Tighten the screw.
- (4) Sew carefully, guiding the material so that the left side teeth of the zipper are parallel with the right edge of the foot.  
Turn the upper material to the right side.



- (5) Loosen the screw Ⓐ and slide the foot so that the needle comes into position Ⓑ.  
Tighten the screw and sew on.  
Remove the tacking stitches.



## Mending

Foot...Zigzag foot

### Mending a rip.

Sew the middle of the tear first. Guiding the material, sew on either side.

A piece of gauze can be placed underneath to reinforce the mending.

### Patching

Place the patch over the worn part. Sew along the edge of the patch on the right side. Trim away the worn part close to the seam.

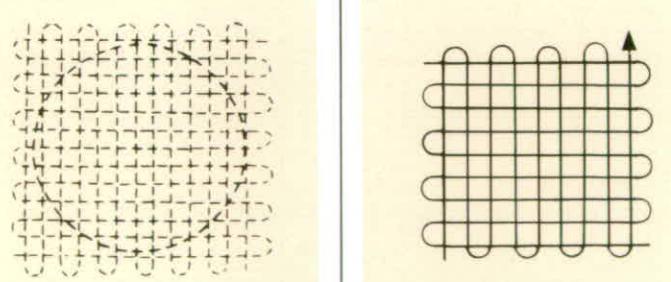
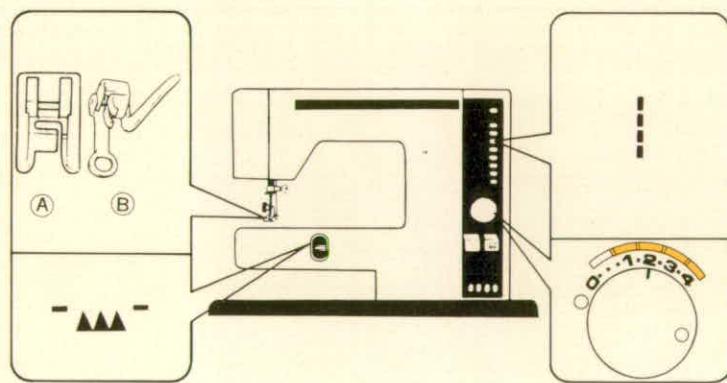
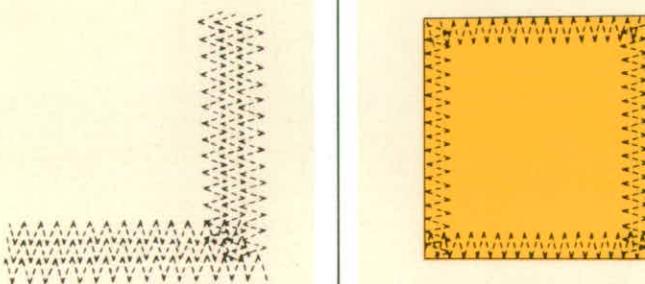
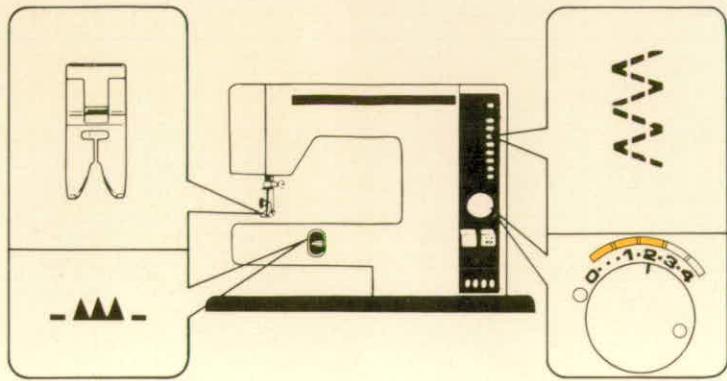
## Darning

Ⓐ Using special foot;  
Foot pressure...0

Ⓑ Using darning foot;  
Foot pressure...1—2  
To attach darning foot, see p.26.

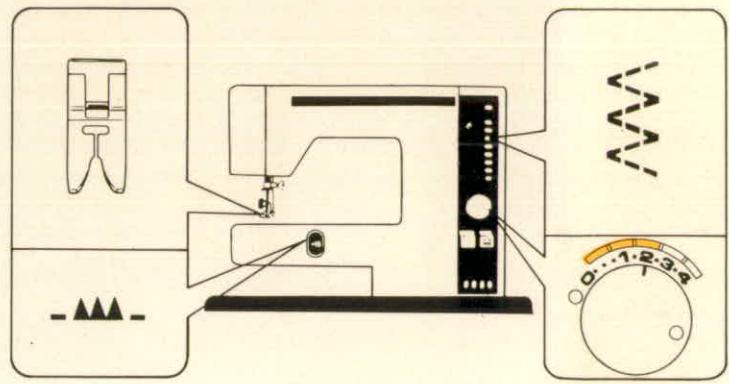
Sew over the hole, sliding the material back and forth by hand.

Turn the material  $90^{\circ}$  and sew again as shown.



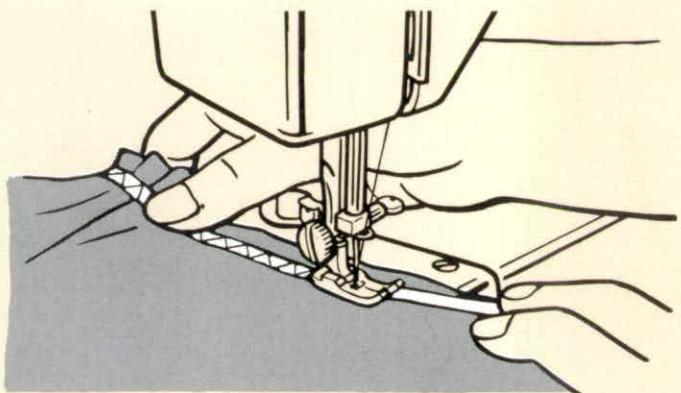
## Attaching Elastic

Foot...Zigzag foot  
Foot pressure...1—2



- (1) Place the elastic on the material and stretch it at both ends.
- (2) Sew along the centre, pulling the elastic evenly.

For more decorative sewing, sew the elastic with smocking stitch.

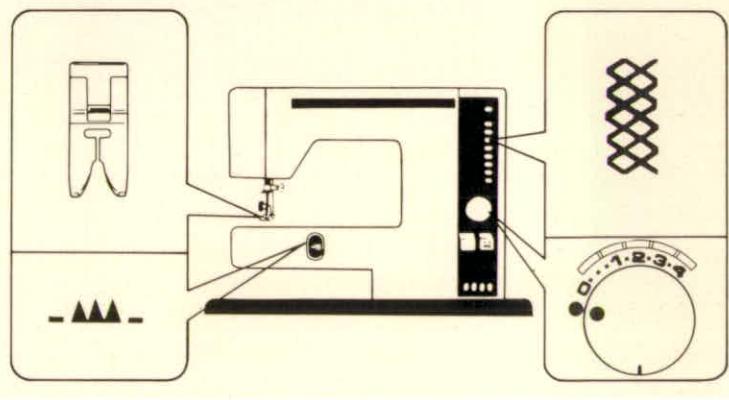


## DECORATIVE TOUCHES

### Smocking

Foot...Zigzag foot

Smocking is attractive on children's blouses, pillow cases, etc.



### Pre-gather the material by machine

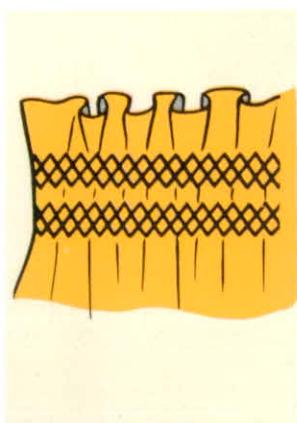
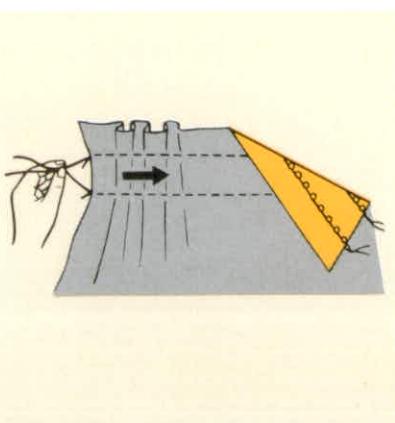
Set the machine for straight stitching and length 4.

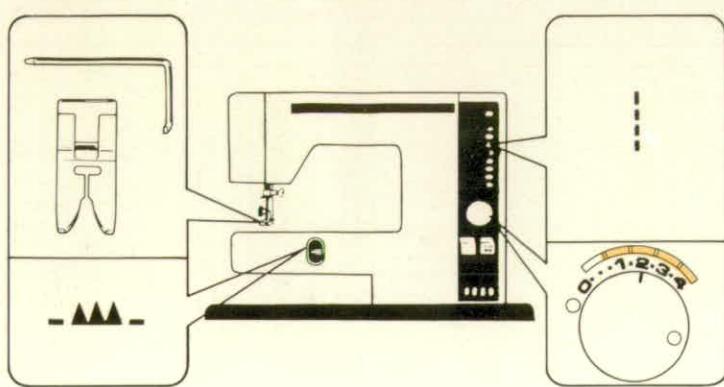
Sew with very loose upper tension.

Make a knot in one end of the lower thread.

Gather the fabric towards the knot.

Set the machine as shown above and work smocking stitch over the gathered part.

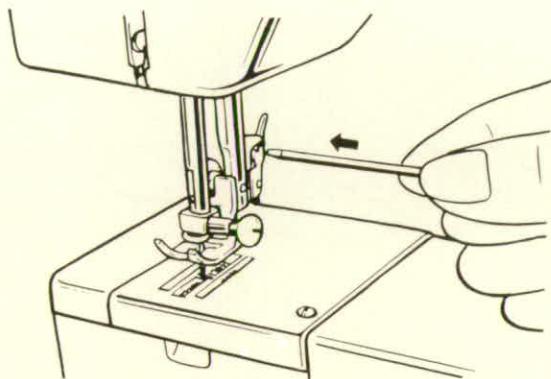




## Quilting

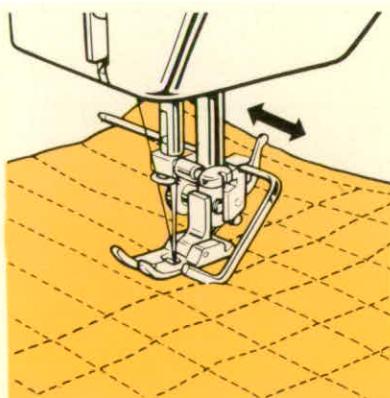
Foot...Zigzag foot  
Spacing guide

The spacing guide is very handy for sewing parallel lines on padded fabric. No need to mark lines in advance.



(1) Draw the first line on the padding and sew.

(2) Attach the spacing guide and stitch by guiding it along the previous row.

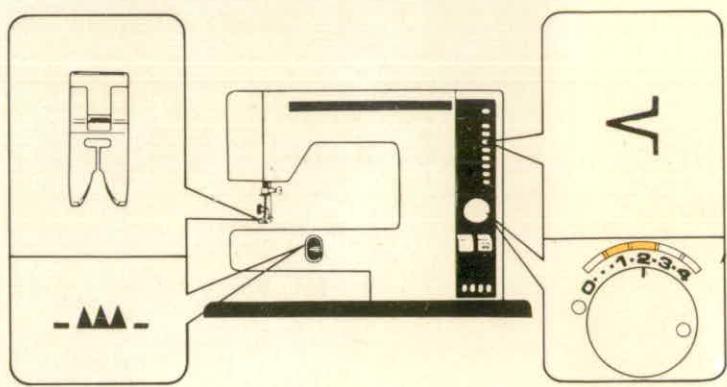


## Shell Stitching

Foot...Zigzag foot

Sheer fabrics such as silk, nylon organdy are suitable.

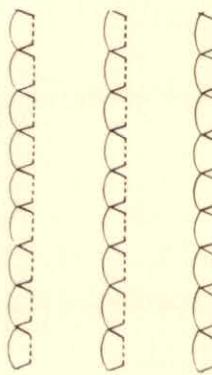
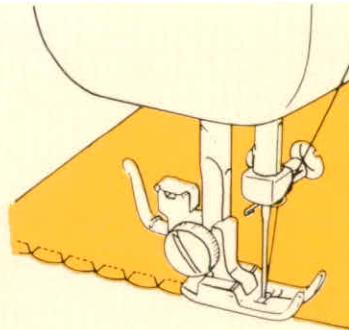
For a neat finish, tighten the lower tension slightly.



- (1) Fold the material and tack it.
  - (2) Place the fold to the left under the presser foot.  
Stitch slowly, guiding the material.

\* Make sure the needle misses the raw edge of the fold when it moves sideways.

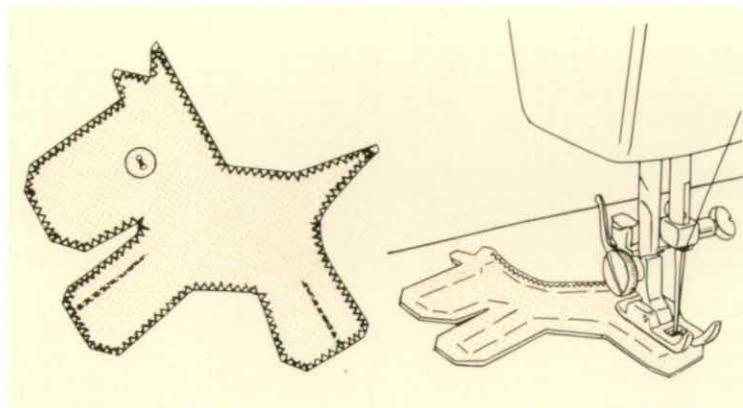
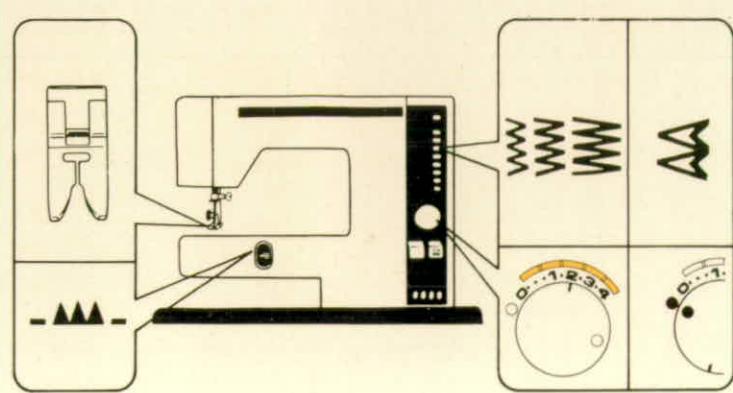
\* The spacing guide can be attached.



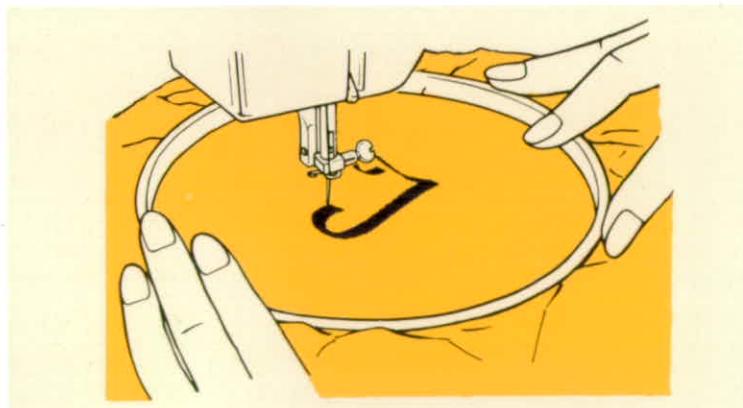
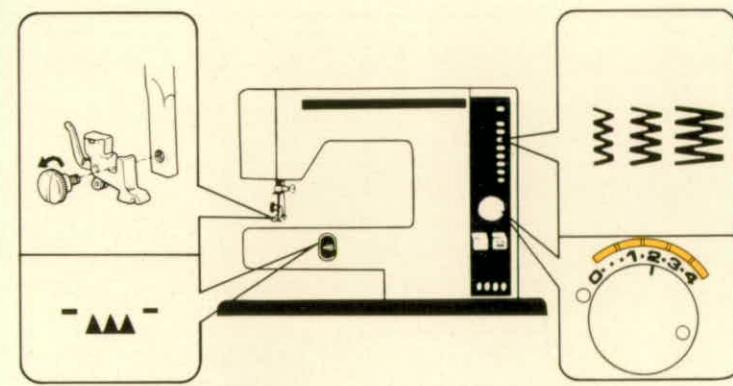
## Applique

Foot...Zigzag foot

\*  stitch gives you an attractive effect in applique work.



- (1) Tack the applique piece onto the material first, and start sewing.
- (2) For sewing at the corners, put the needle in at the outer edge, lift the presser foot and turn the material.  
Put the presser foot down.
- (3) Sew a few stitches at the end with straight stitches, length "0", to prevent fraying.



## Embroidering

Foot...Remove the foot, the holder and screw.

Use an embroidery hoop (available).

- (1) Draw the desired design on the material with a pencil or tailor's chalk.
- (2) Stretch the material on the embroidery hoop as firmly and evenly as possible.
- (3) Lower the presser foot lifter and sew along the outline of the design with satin stitch, guiding the hoop by hand.

For a neater finish, use a fine, silky-type thread, and loose upper tension.

\* You can choose a zigzag stitch from three different widths.

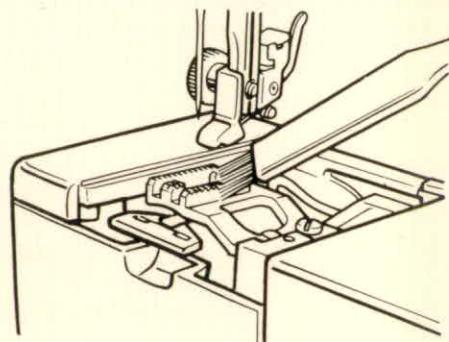
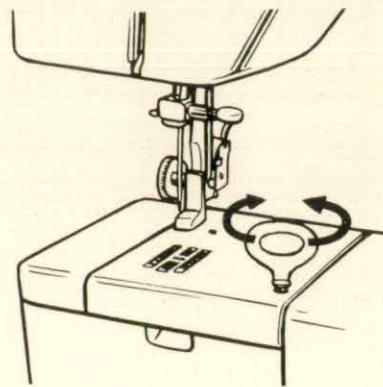
It is not possible to change the width while the machine is running.

## MAINTENANCE

Your new machine requires regular cleaning and oiling for satisfactory performance.

### Cleaning

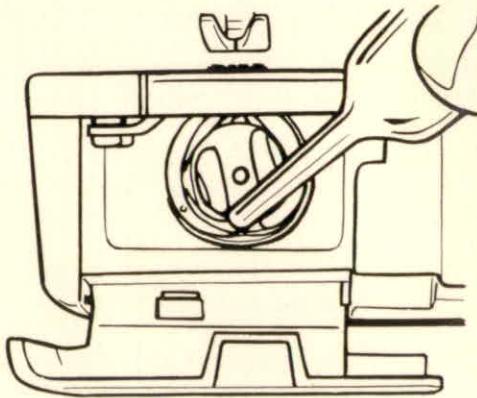
Detach the needle plate with the specially designed screw-driver and brush off the lint and dust around the feed dog and hook.



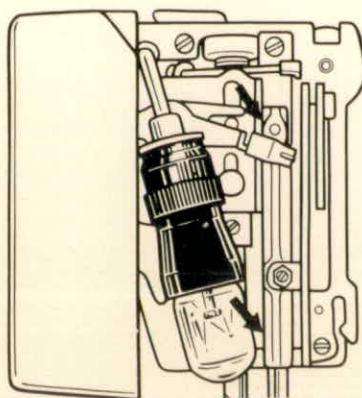
### Oiling

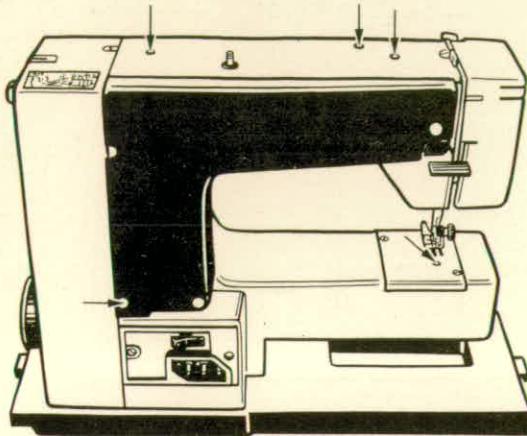
(1) Apply a few drops of oil to the rotary hook.

TOO MUCH OIL MAY STAIN YOUR MATERIAL.



(2) Open the face cover and apply a few drops of oil to the parts indicated by arrows.

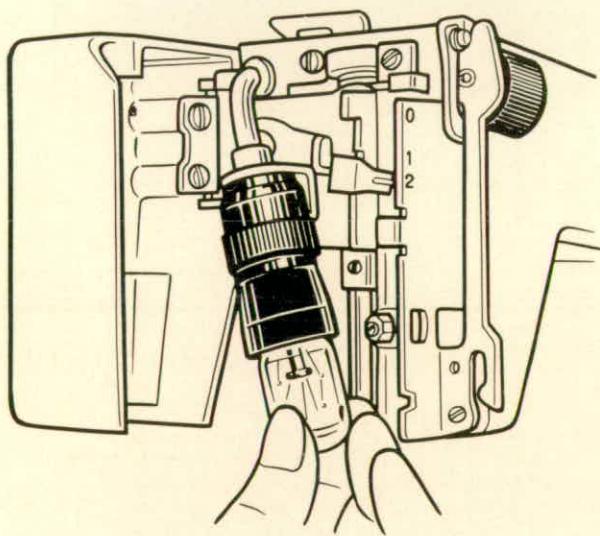




(3) Apply oil also to the lubricating points shown by the arrows.

(4) After oiling, run the machine fast for about one minute to allow the oil to reach every part.

\* NEVER OPEN BROWN COLOURED BACK COVER.



### Changing Bulb

When changing the bulb,  
ALWAYS MAKE SURE THAT THE  
CONTROLLER PLUG IS OUT.

Open the face cover, and remove the  
bulb by unscrewing it (counter-clockwise).

Install a new bulb and plug in.

## PROBLEMS AND WHAT TO DO

In most cases the problems will be caused by incorrect operation of the machine. Examine if your operation corresponds correctly with the procedures in this manual. Although, if you still need help, call your nearest dealer.

Trouble	Probable Cause	Correction
Machine does not run	Not plugged in properly Thread stuck in the hook groove	P. 4 P.34
When winding bobbin, hand wheel does not work	Foot controller is stepped in, while tacking button is on and hand wheel is pushed in.	Change to speed control buttons.
Making noise Running slowly	Lack of oil Fluff stuck in the rotary hook and the hook groove Fluff stuck in the feed dog	P.34 P.34 P.34
Breaking upper thread	Incorrect threading Upper thread tension too tight Needle bent or blunt Wrong needle setting Poor quality or knotted upper thread Needle and thread not matching Starting with take-up lever in lower position. Needle plate has a crack	P. 8 P.15 P.17 P.17 Use good quality thread P. 5 Always start with lever in highest position. Change needle plate or rub with sandpaper
Breaking lower thread	Thread not wound evenly on the bobbin or not drawn up correctly Lower thread tension too tight Fluff stuck in the bobbin case and inside the tension spring	P. 6,P. 9 P.15 Remove lint and fluff with a cleaning brush

Trouble	Probable Cause	Correction
Breaking needle	Needle not correctly inserted Needle bent Needle clamp screw too loose Upper thread tension too tight Needle too fine for the material	P.17 P.17 P.17 P.15 P. 5
Skipping stitches	Needle not fully inserted Needle bent Size or type of needle and thread not suitable for the material Incorrect upper threading Too much oil on the hook	P.17 P.17 P. 5 P. 8 P.34
The material puckers	Upper or lower thread tension too tight Stitch too long for material Thread too thick Incorrect threading of upper or lower thread	P.15 P.13 P. 5 P.7,P.8
Irregular stitches	Incorrect size of needle for the material Upper thread tension too loose Incorrect lower tension	P. 5 P.15 P.15
The material not fed correctly	Incorrect presser foot pressure Incorrect feed dog height Fluff stuck on the feed dog	P.16 P.16 P.34
Light bulb does not work	Not plugged in Switch is off Bulb is loose Bulb is burnt out	P. 4 P. 4 P.35 P.35

**MEMO**

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**AISIN SEIKI CO., LTD.**

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