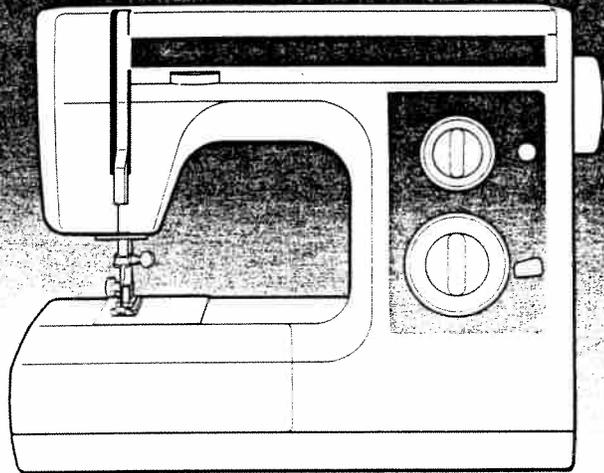


Blue
Jeans
Machine



1599

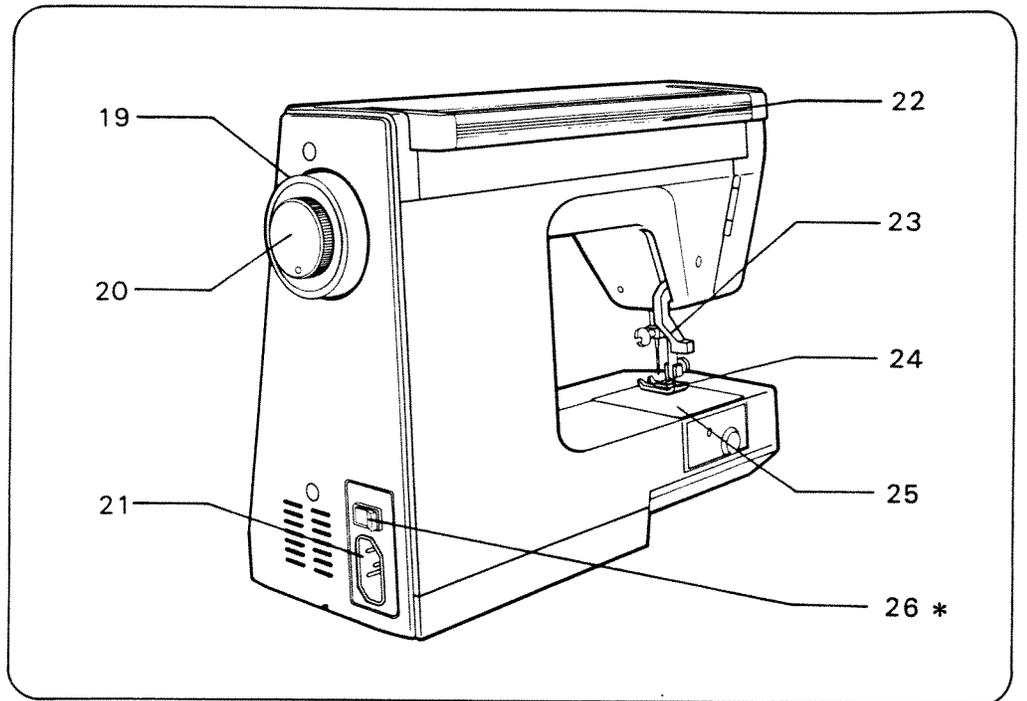
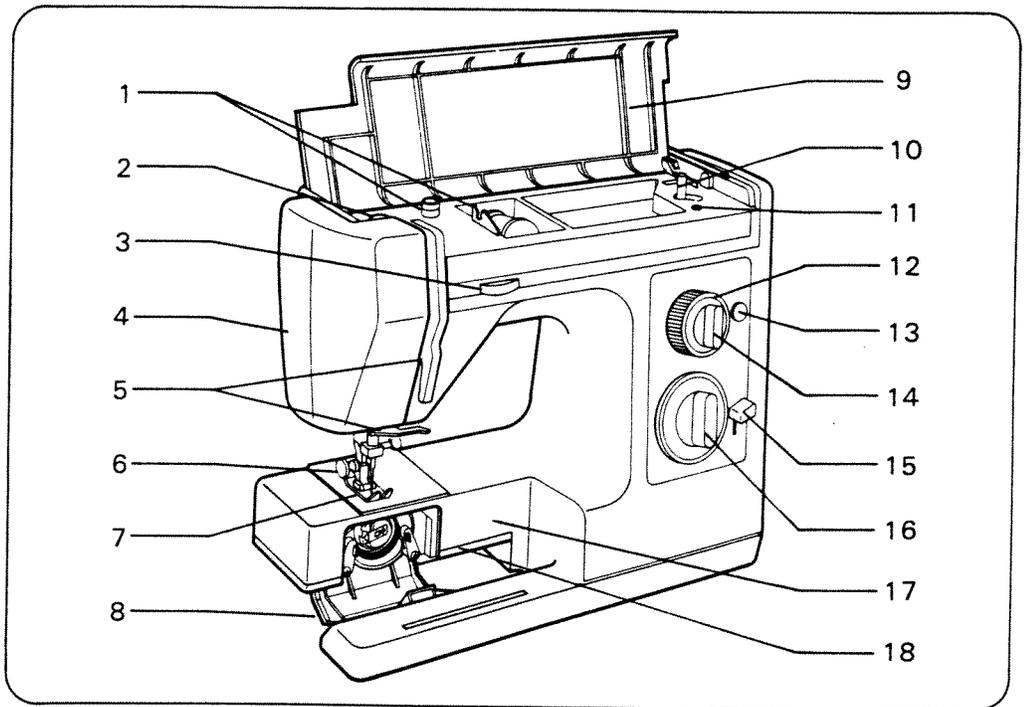
INSTRUCTION BOOK



WHITE
SEWING MACHINE

CONTENTS

1. NAMES OF PARTS.....	2
2. ACCESSORIES.....	3
3. BEFORE SEWING.....	4
Detaching Extension Table.....	4
Connecting Foot Controller and Power Cord.....	5
Changing Needle.....	6
Changing Foot.....	7
Bobbin Winding.....	8
Inserting Bobbin.....	11
Adjusting Lower Tension.....	12
Drop Feed Lever.....	12
Threading Upper Thread.....	13
Twin Needle Threading.....	14
Decorative Tucks or Designs.....	14
Drawing Up Lower Thread.....	15
Foot Pressure.....	15
Fabric, Thread and Needle Table.....	16
Pattern Setting.....	17
4. STRAIGHT SEWING.....	18
Pattern Selection Dial.....	18
Stitch Length Dial.....	18
Starting to Sew.....	19
Double Presser Foot Lifter.....	19
Cloth Guide.....	20
Adjusting Thread Tension.....	20
Applications of Straight Stitch.....	21
5. ZIGZAG SEWING.....	22
Zigzag Width Control.....	22
Thread Tension for Zigzag Stitch.....	22
6. MAKING BUTTONHOLES.....	23
Determine Length.....	23
Determine Width.....	23
Buttonhole Density Adjustment.....	25
Cutting Buttonholes.....	26
7. SEWING ON BUTTONS.....	27
8. OVERCASTING.....	28
9. OVERLOCKING.....	29
Application of Rick-Rack.....	31
Application of Decorative Fun Patterns.....	32
10. STRAIGHT STRETCH STITCH.....	30
Adjusting Stretch Stitch Balance.....	30
11. BLIND HEM STITCH.....	33
Elastic Blind Hem Stitch.....	34
12. STRETCH SEAM.....	35
13. ZIPPER SEWING.....	36
14. SHELL STITCHING.....	37
15. PIN TUCKING.....	38
16. QUILTING.....	39
17. MENDING.....	40
Patching.....	40
Mending a Rip.....	40
18. DARNING.....	41
19. APPLIQUE WORK.....	42
20. MAINTENANCE.....	44
Cleaning.....	44
Oiling.....	45
21. TROUBLE CHART.....	46
Changing Light Bulb.....	47



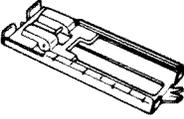
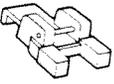
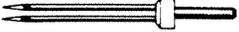
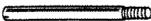
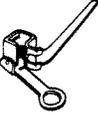
1. NAMES OF PARTS

1. Thread guide for bobbin winding
2. Foot pressure regulator
3. Upper thread tension dial
4. Face cover
5. Thread guide for upper threading
6. Presser foot thumb screw
7. Presser foot
8. Shuttle cover
9. Top cover
10. Bobbin winding spindle
11. Screw hole for extra spool pin
12. Zigzag width control
13. Special buttonhole adjustment
14. Stitch length dial
15. Reverse sewing lever
16. Pattern selection dial
17. Free arm
18. Drop feed lever

19. Handwheel
20. Stop motion knob
21. Socket
22. Handle
23. Presser foot lifter
24. Feed dog
25. Needle plate
26. Switch *

* Specifications vary from country to country.

2. ACCESSORIES

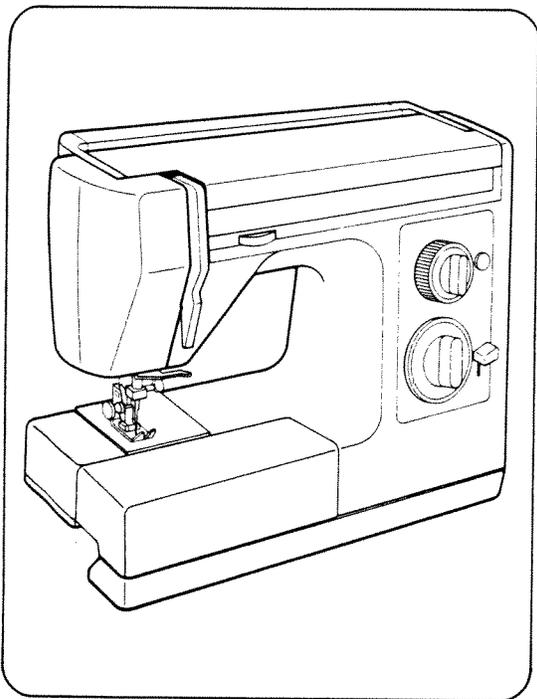
<p>Felts (2 pcs.)</p> 	<p>Bobbins (3 pcs.)</p> 
<p>Buttonhole foot</p> 	<p>Needles</p>  <p>Ordinary needles (3 pcs.)</p>
<p>Button sewing foot</p>  <p>21016</p>	<p>Ball point needle (1 pc.)</p>  <p>Twin needle (1 pc.)</p> 
<p>Zipper foot</p>  <p>21004</p>	<p>Extra spool pin (For twin needle sewing).</p>  <p>5844</p>
<p>Darning foot</p>  <p>21014</p>	<p>Spool cover</p> 
<p>Quilting guide</p> 	<p>Oiler</p> 
<p>Cloth guide</p> 	<p>Screw drivers (small)</p> 
<p>Buttonhole cutter</p>  <p>401539901</p>	<p>Screw drivers (large)</p> 

3. BEFORE SEWING

Machine is stored in flat-bed style which makes your work easier for ordinary sewing.

Detaching Extension Table

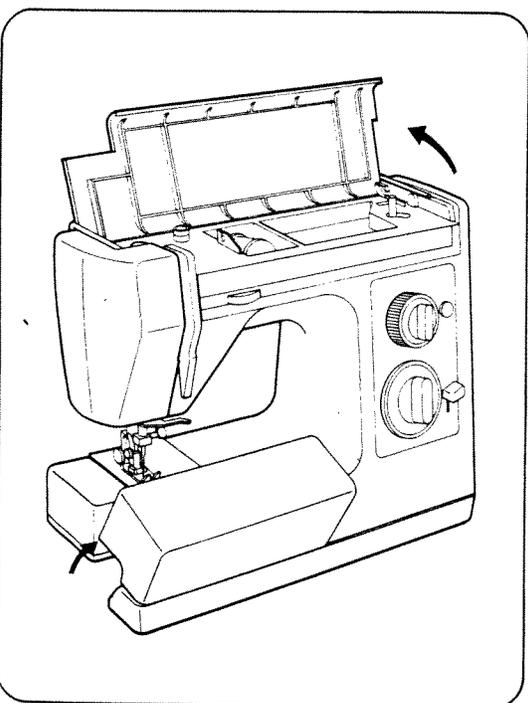
Slide off, and the machine is used as a free-arm model.



To open top cover of accessory box, push open, as illustrated.

Do vice-versa of above steps to attach extension table.

Free-arm is convenient to sew or embroider; trousers, sleeves, cuffs, T-shirts, blouses, etc.

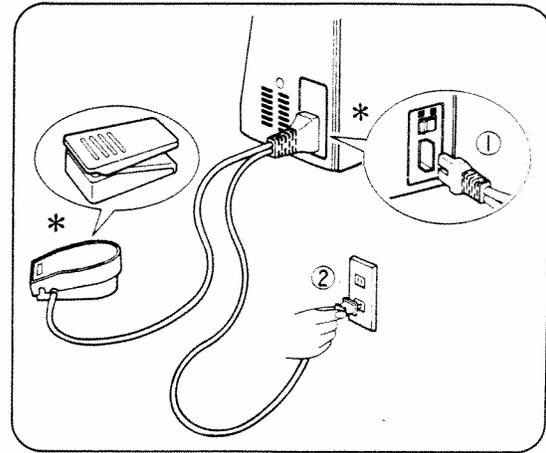


Connecting Foot Controller and Power Cord

Connect foot controller and power cord ① ② .

- Before plugging in your machine, be sure that voltage is same as that of your machine (* written on a plate at back of machine)

* Specifications vary from country to country.

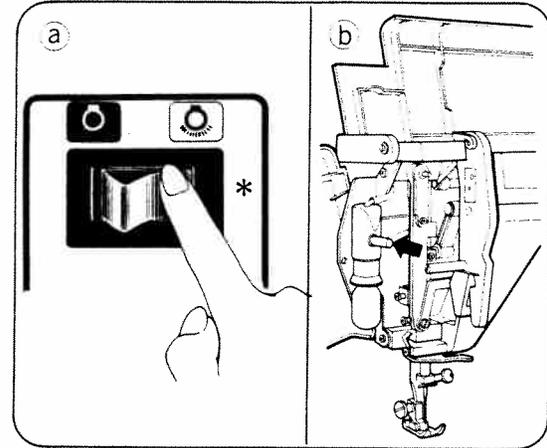


a Put power switch on the machine and turn on the sewing light.

b Push button to turn sewing light on and off.

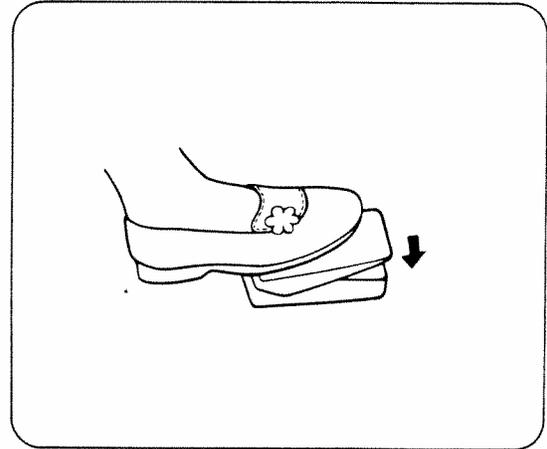
Always switch off or unplug machine when not in use.

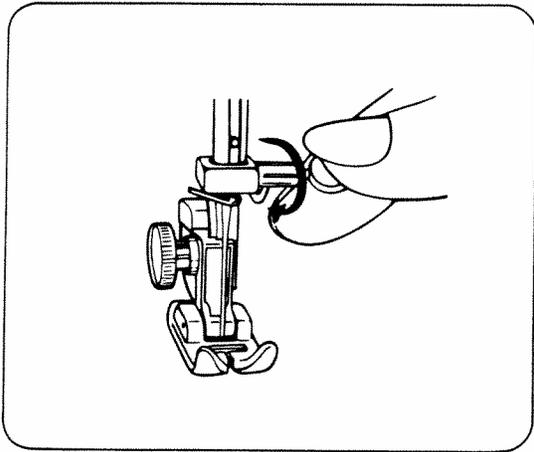
* Specifications vary from country to country.



The more you press foot controller, the faster the machine runs.

CAUTION: When machine is not in use always detach plug from wall outlet.

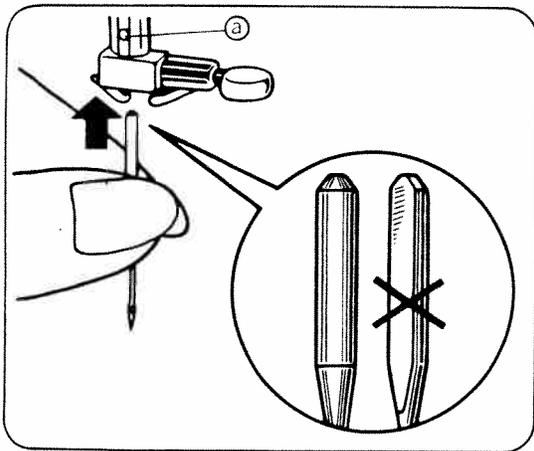




Changing Needle

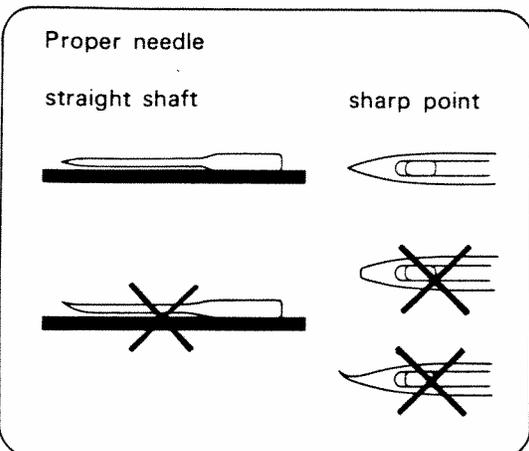
Set needle in the highest position by turning handwheel towards you.

Loosen needle clamp screw and take out needle.



With flat face away from you, insert a new needle into groove of needle bar.

Push needle until it reaches stopper **a** and tighten needle clamp screw firmly.



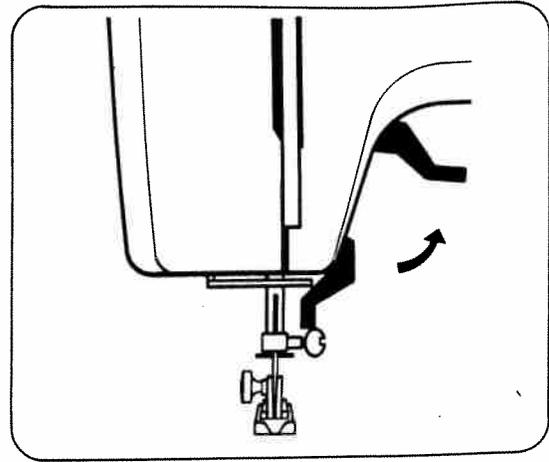
Always use a straight needle with a sharp point.

Using defective or worn needles not only causes stitch skipping, breakage of needles or snapping of thread; it also can damage hook and needle plate.

Changing Foot

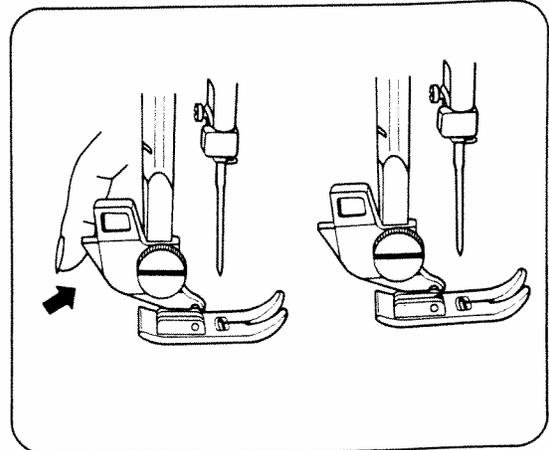
Raise presser foot lifter.

Set needle in the highest position by turning handwheel towards you.

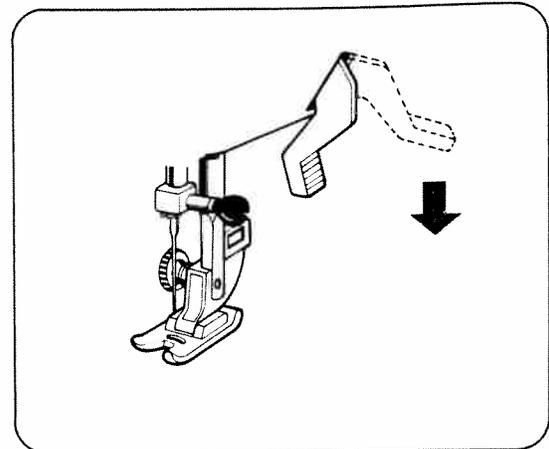


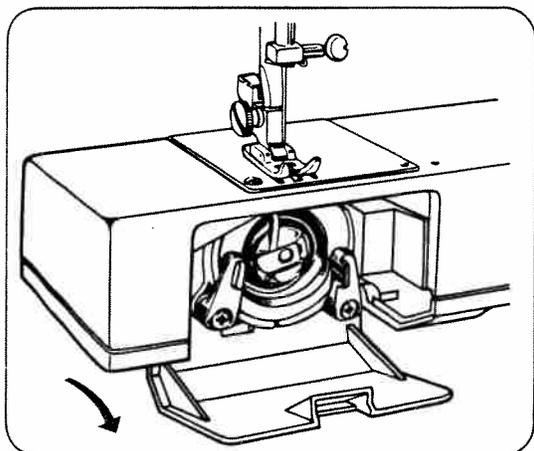
(1) Push button of holder towards you and foot will come off.

(2) Position a new foot by aligning holding groove of shank with pin of foot.



(3) Lower presser foot lifter so that holder catches presser foot.

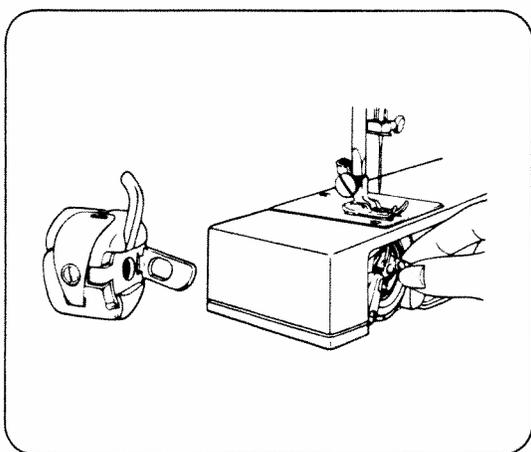




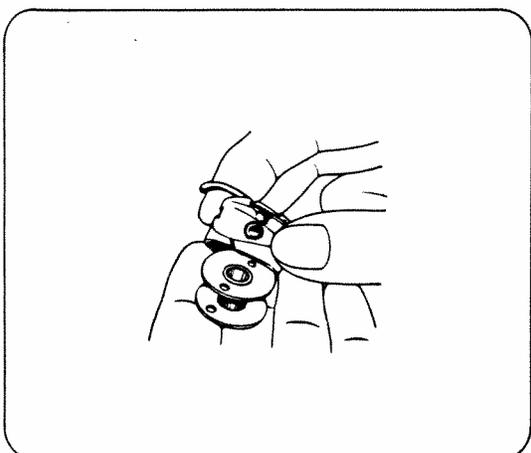
Bobbin Winding

Set needle in the highest position by turning handwheel towards you .

Open shuttle cover.



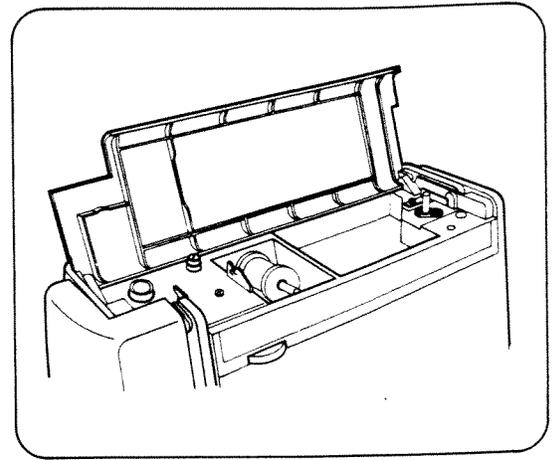
Open latch of bobbin case and remove case.



Release latch of bobbin case and bobbin comes out easily.

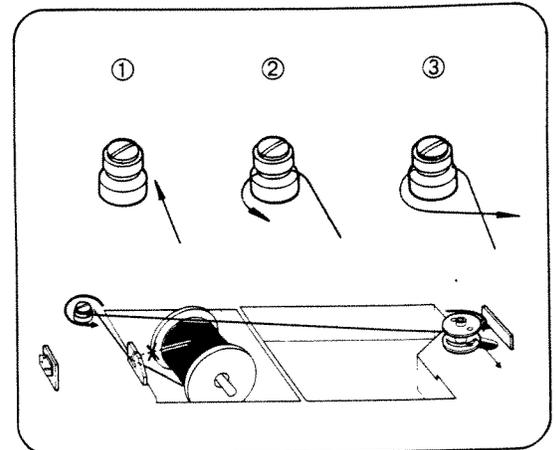
Push back to fold handle.

Open top cover.



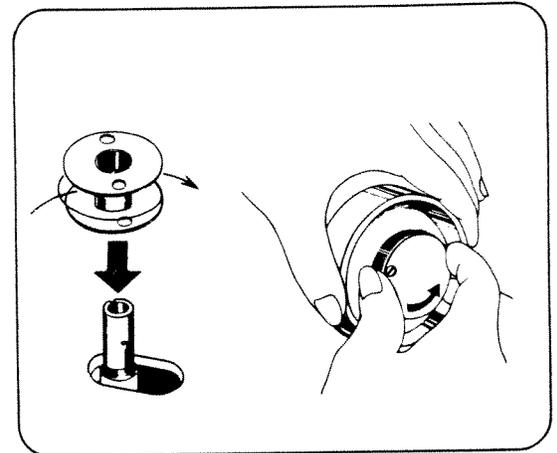
Put a spool on spool pin.
Draw thread from spool pin through
thread guide and pretension device,
following numbers ①, ② and ③.

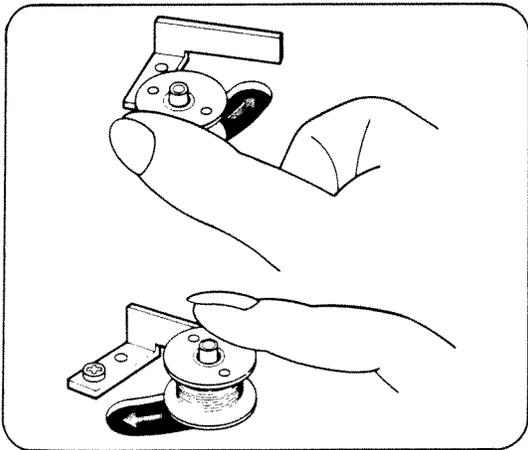
Caution:
*Spool should be put on spool pin
in the manner of its thread being
drawn from under side of spool.*



Wind thread clockwise around bob-
bin several times.
Push bobbin onto spindle.

Holding handwheel with your left
hand disengage handwheel by
unscrewing stop motion knob.

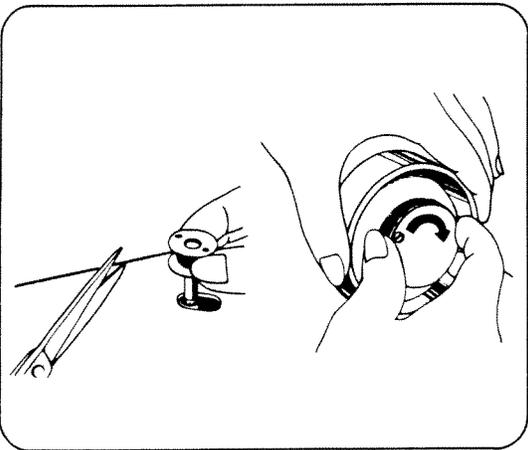




Push bobbin to right and press down foot controller.

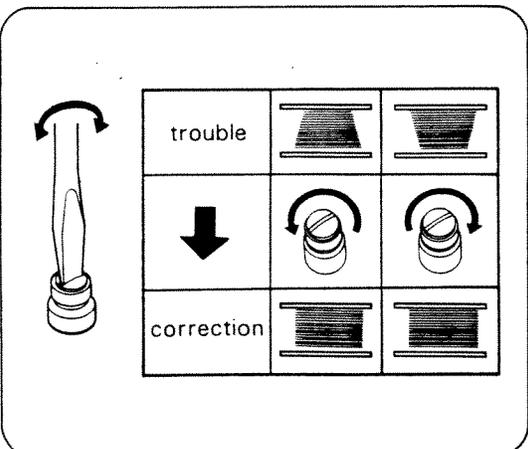
Machine stops automatically when bobbin is full.

Push bobbin to left, to disengage from wheel.



Take off bobbin from spindle and cut thread.

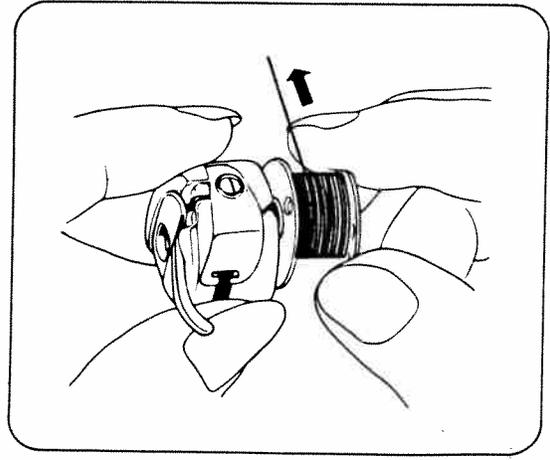
Retighten stop motion knob.



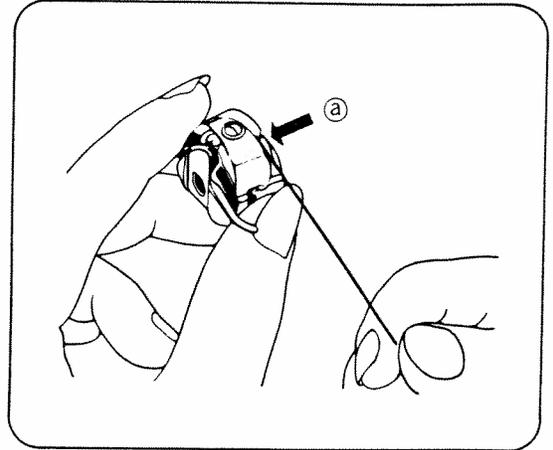
If bobbin is wound unevenly as shown, open top cover and use screw driver to adjust the guide for bobbin winding.

Inserting Bobbin

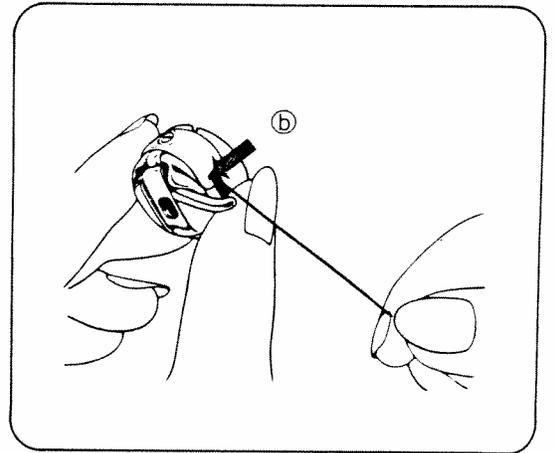
Place bobbin in case with thread running in direction of arrow.

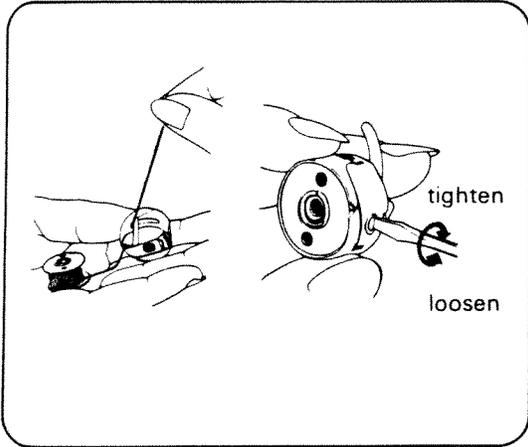


Guide thread into slot **a** of bobbin case.



Pulling thread to left, bring it under tension spring then to delivery groove **b**.



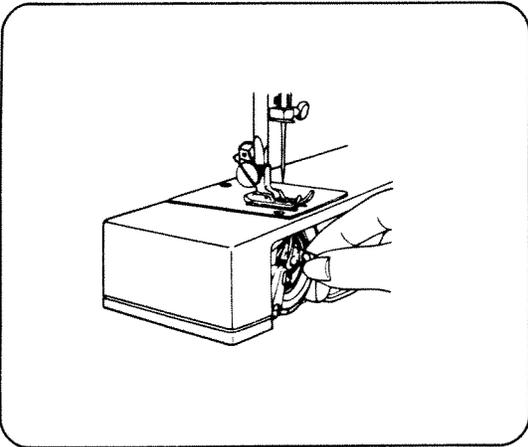


Adjusting Lower Tension

To test bobbin tension, hang and shake bobbin case as shown.

At proper tension bobbin case will gradually drop a small amount.

To adjust tension, turn adjusting screw with small screwdriver.

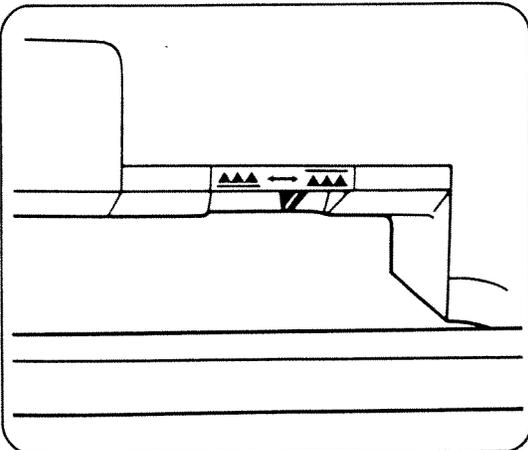


Raise needle to highest position.

Leave end of thread of about 10 cm (4") from bobbin case.

Take hold of latch and push bobbin case into hook.

Release latch when bobbin case is fully inserted.



Drop Feed Lever

The lever is in the right side of shuttle cover. For normal sewing, move the lever to ▲▲▲ position.

To lower feed dog, move the lever to ▲▲▲ position.

This position is used for button sewing, darning and embroidery.

Threading Upper Thread

Raise presser foot.

Set take-up lever to the highest position by turning handwheel towards you.

Open top cover and put spool into spool pin.

Caution:

Spool should be put on spool pin in the manner of its thread being drawn from under side of spool.

Thread, following numbers ①-⑧.

Pass thread through guide ① then to ②.

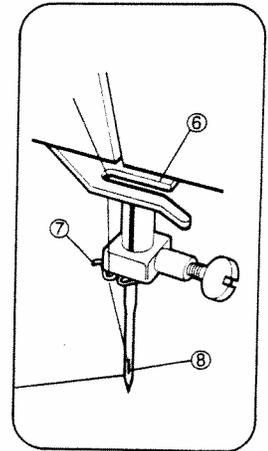
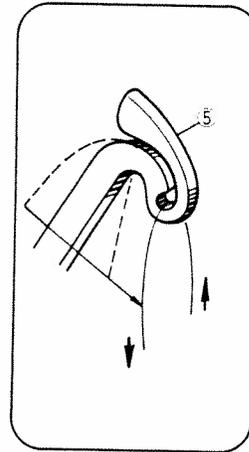
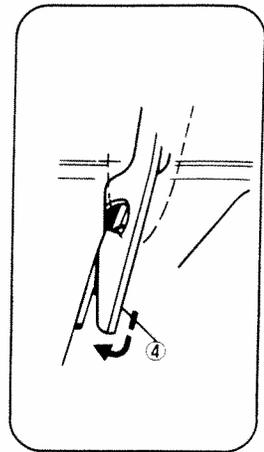
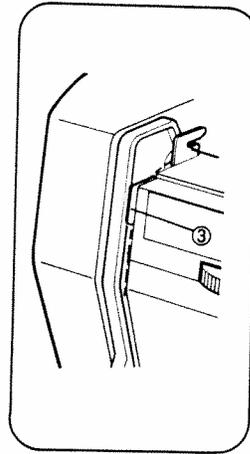
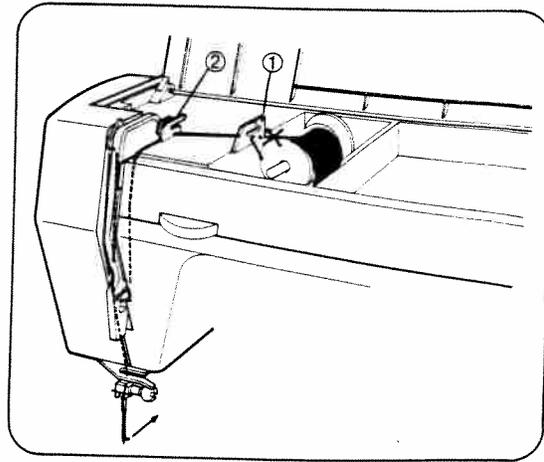
Lead thread thru either side of tension disc ③.

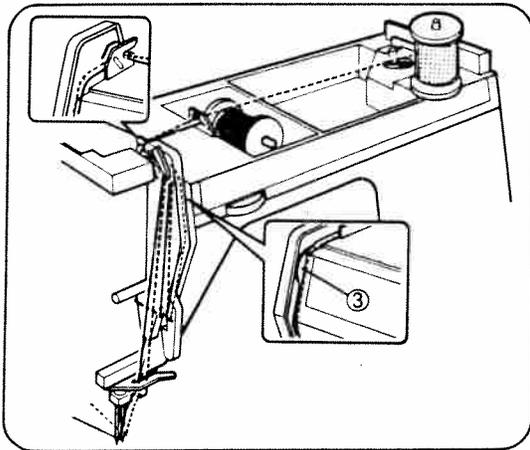
Hook it to lower guide ④ from right to left upwards.

Thread take-up lever ⑤.

Pass thread to guide ⑥ from right to left, and needle guide ⑦ (use left one) then to needle eye ⑧.

Allow about 15cm (6") of thread extra.





Twin Needle Threading

Extra spool pin is packed in accessory tray.

Screw thread extra spool pin in screw hole, place a felt and put another spool.

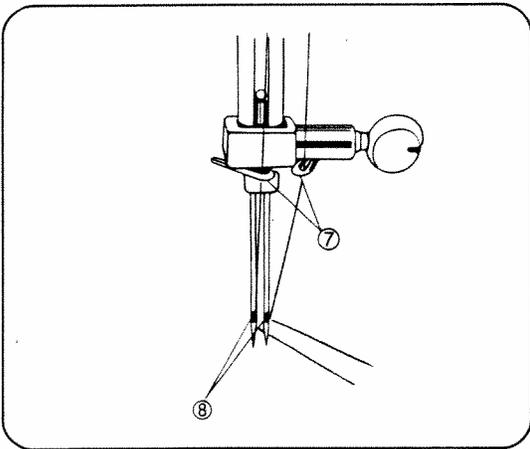
Thread in the same way as normal threading, except at points ③, ⑦ and ⑧.

At point ③, pass threads separately to right and left of tension disc.

At guide ⑦, pass one of threads to right guide and the other at left guide.

At point ⑧, thread from right guide should be lead to right needle eye, and from left guide to left needle eye.

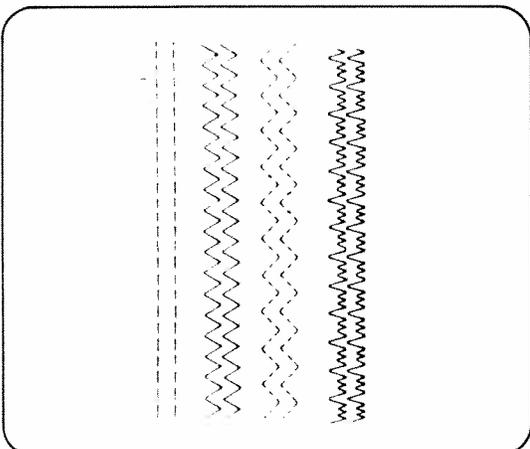
Allow about 15cm (6") of thread extra.



Decorative Tucks or Designs

Any stitch can be used with the twin needle for decorative effects. Most attractive are the multiple stitch zigzag and blind hem stitch for fancy tucks. The satin stitch or tapered zigzag designs in two colors are effective for creative trims.

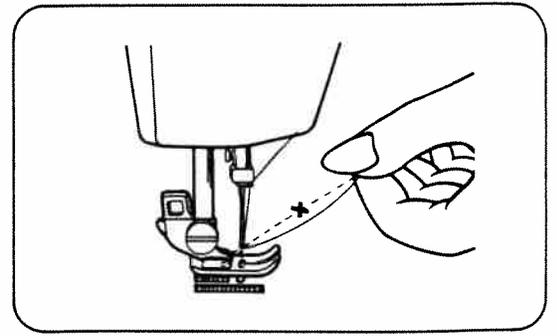
CAUTION: Remember to use no more than 2.5 zigzag width .



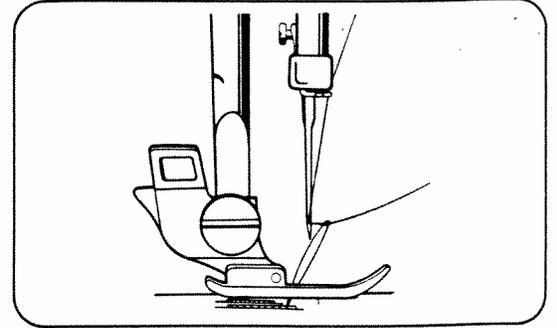
Drawing Up Lower Thread

Hold the end of upper thread with left hand.

Turn handwheel slowly towards you until needle moves down and up again.

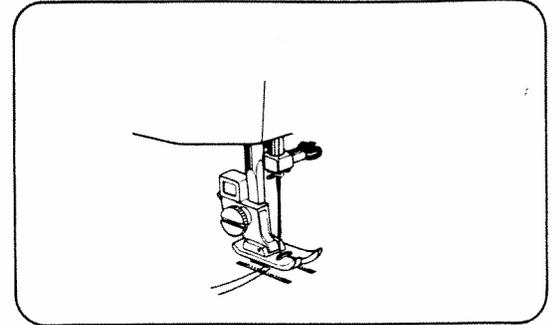


Pull upper thread slowly and lower thread will be brought up in a loop.



Pull out both threads about 15cm (6") and place them together under presser foot to left.

NOTE: Always place thread to the back or left when starting to sew a seam.
Failure to do this may cause thread jamming.

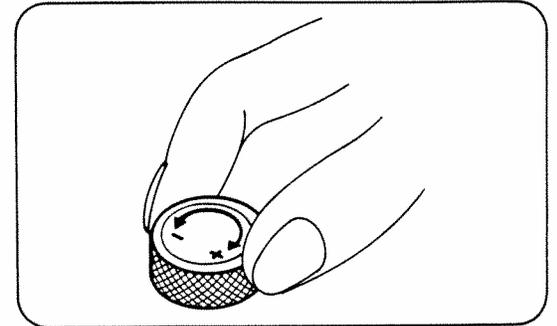


Foot Pressure

To increase the pressure, turn the regulator clockwise; and to reduce the pressure, turn the regulator counter-clockwise.

Insufficient pressure may cause poor feeding of the fabric, skipped stitches, or difficulty in guiding the fabric. If feed dogs or presser foot marks appear on the fabric, reduce the pressure.

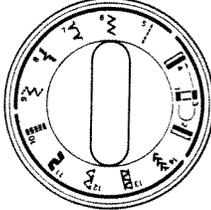
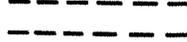
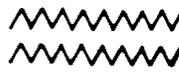
When sewing multiple thickness or heavy fabric, reduce the pressure. Increase pressure when sewing lighter weight fabrics.

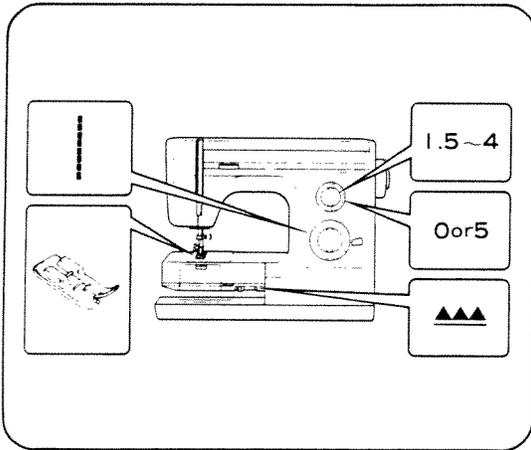


Fabric, Thread and Needle Table

FABRIC	THREAD			NEEDLE			REMARKS
	European Cotton	Mercerized Cotton	Cotton Covered Polyester, Silk, Nylon	European 705	U.S. Size 15x1	Point Style	
VERY SHEER: LACE. Voile, Chiffon, Net	70	60	Silk Nylon	65-70	9	Regular	Loosen upper tension one or two points -----
SHEER; Blouse Crepe, Lawn, Organdy, Taffera	50-70	60	Silk Nylon	65-70	9	Regular	
LIGHT-WEIGHT; Crepe, Wool, Brocade, Velvet	30	50	Silk	75-80	11	Regular	
MEDIUM; Wool, Silk, Linen, Velvetten, Pique, Faille, Terrycloth	30	50	Silk	80-90	11-14	Regular	
HEAVY; Denim, Duck, Sailcloth	30	Heavy Duty	C.C. Poly.	100	16	Regular	
EXTRA HEAVY; Upholstery, Canvas, Awning	30	Heavy Duty	C.C. Poly.	120	19	Regular	
[KNITS]							
LIGHT-WEIGHT; Tricot Power net	50-70	60	Silk Nylon	70	9	Light Ball	
MEDIUM-WEIGHT; Jersey, 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	
LIGHT-TO-MEDIUM-WEIGHT	30	50	C.C. Poly.	90-100	14-16	Wedge	
HEAVY LEATHER	30	Heavy Duty	C.C. Poly.	100-110	16-18	Wedge	
[DECORATIVE TOUCHES]							
TOP STITCHING	Silk twist			100-110	16-18	Regular	
MACHINE EMBROIDERY	Size 50-70			65-80	9-11	Regular	

Pattern Setting

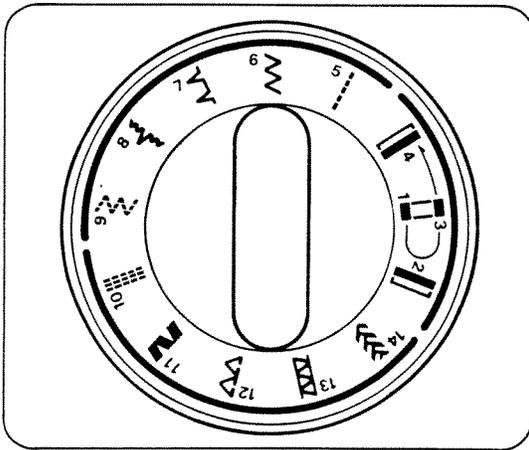
	 PATTERN SELECTOR	 TWIN NEEDLE	PATTERN NAME
1-4			BUTTONHOLE
5			STRAIGHT
6			ZIGZAG
7			BLIND HEM
8			STRETCH BLIND HEM
9			MULTIPLE ZIG ZAG
10			STRAIGHT STRETCH
11			RICK RACK
12			OVERLOOK
13			OVERLOCK
14			BRIAR



4. STRAIGHT SEWING

Set machine as shown.

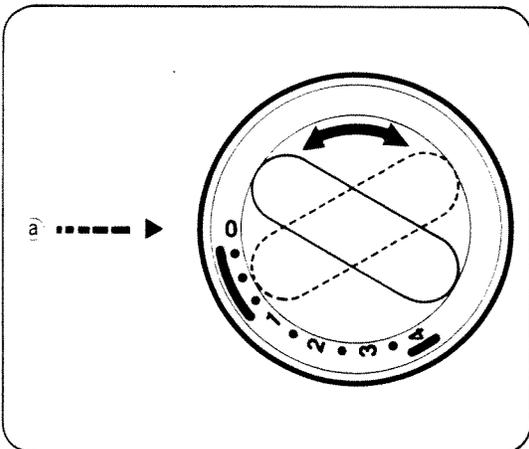
If you need to move needle position to left side, set zigzag width control 5.



Pattern Selection Dial

Turn dial to choose pattern.
Dial can be turned either to right or to left.

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



Stitch Length Dial

Set dial at indicating point **a** according to stitch size required.

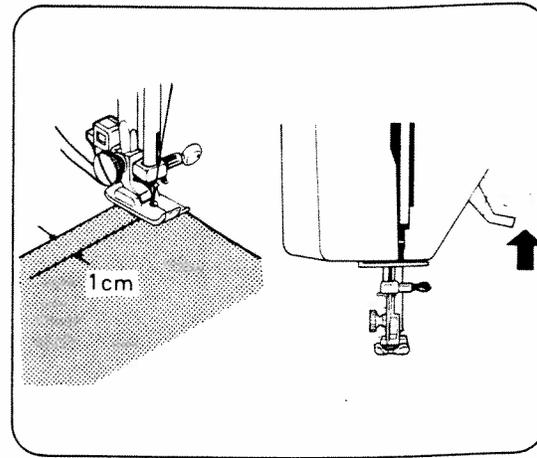
For a longer stitch, turn dial to right.
For a shorter stitch, turn it to left.

For normal sewing it is set between 2 and 3.

Place fabric under foot about 1cm (0.4") inside the edge.
Lower presser foot lifter.

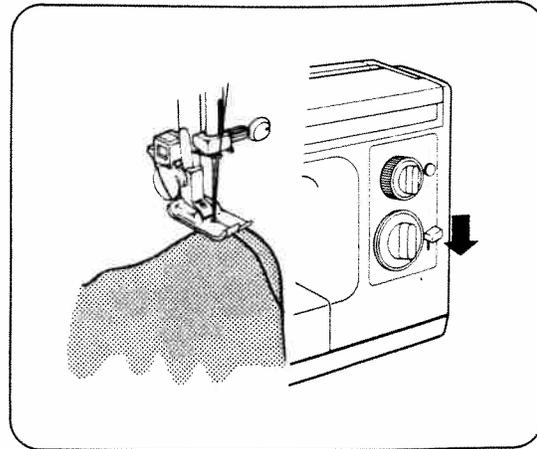
Double Presser Foot Lifter

In order to obtain wider gap when using very thick materials, firmly push presser foot lifter up as far as it will go.

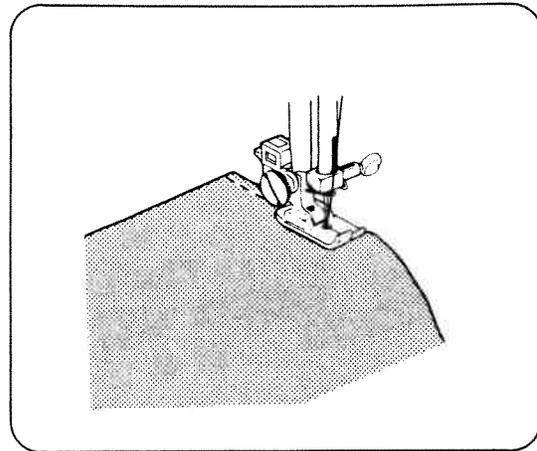


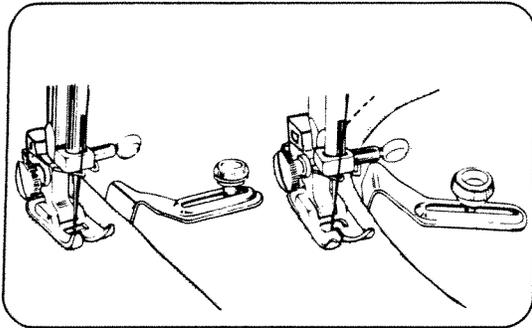
To reinforce seam, sew backwards to the edge of fabric by pushing down reverse sewing lever.

Hold lever down for longer reverse sewing.



Release lever and commence forward sewing, guiding fabric by hand as it is fed.
Never pull material.



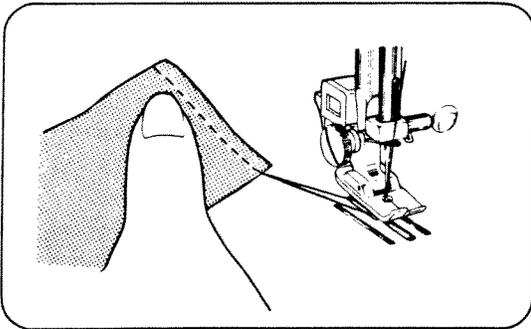


Cloth Guide

Use cloth guide when sewing a long seam of regular distance from edge of material.

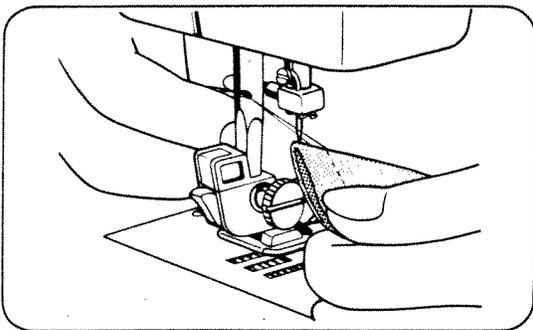
Set guide in hole on arm, at right of needle plate, and adjust distance. Run machine with edge of fabric touching guide.

Position cloth guide at an angle to sew a curved seam.

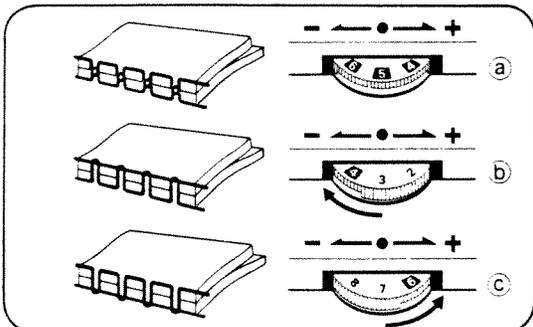


Sew reverse stitches for reinforcement at end of seam.

Draw fabric to left when sewing is finished.



Cut threads with thread cutter behind presser bar.



Adjusting Thread Tension

Test stitch performance on a scrap of material you are going to use.

With correct tension (a), upper and lower threads tension is equal and strong enough to lock both threads in center.

If upper tension is too tight (loose), upper (lower) thread lies straight along upper (lower) surface of fabric (b c). Correct by turning tension dial.

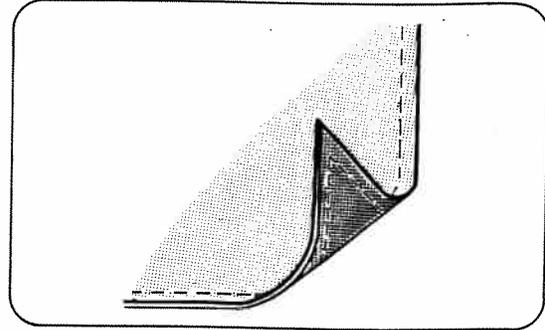
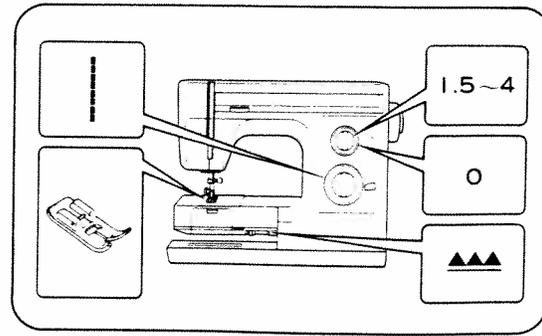
Applications of Straight Stitch

A. Seams

The normal stitch length for most fabrics is 3, but the length chosen should depend on the fabric and area of usage.

Usually, heavier fabrics require longer stitches, and lighter weight fabrics require shorter stitches.

For curved seams and bias cut areas use a shorter stitch length to add strength and elasticity to the seam.

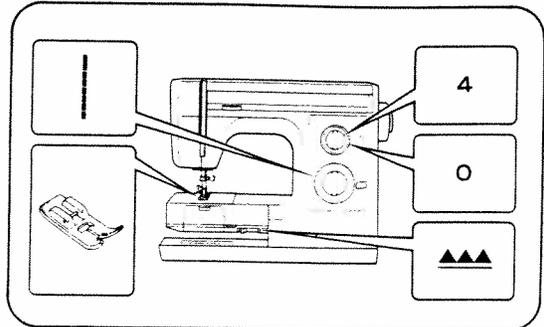


B. Basting/Topstitching

Sewing a seam with a longer stitch is useful for temporary seams prior to fitting.

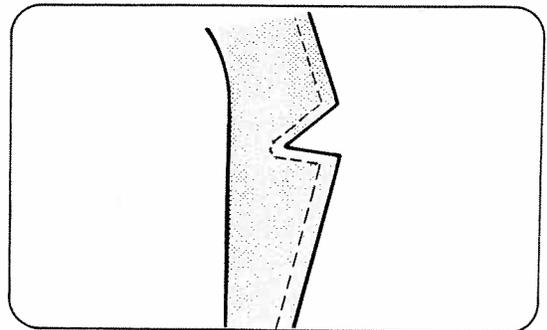
Basting stitches also may be used when gathering in fullness.

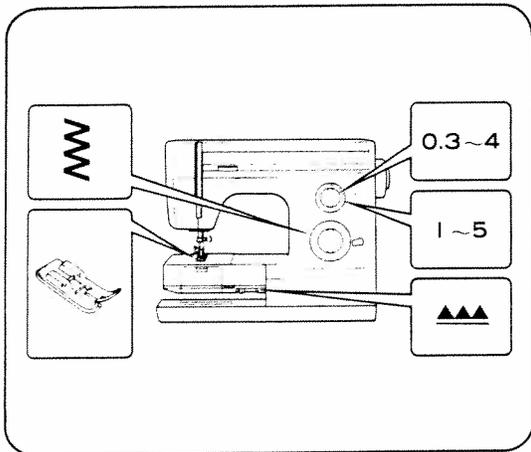
Topstitching can be done very effectively with the long straight stitch.



For a bolder stitch, two threads of the same type can be threaded through one needle (size 14 or 16). A heavier thread such as buttonhole twist may be used for topstitching, but be sure to use a larger needle (size 16 or 18).

The triple stretch straight stitch may be used, but caution must be used as this stitch is difficult to remove.

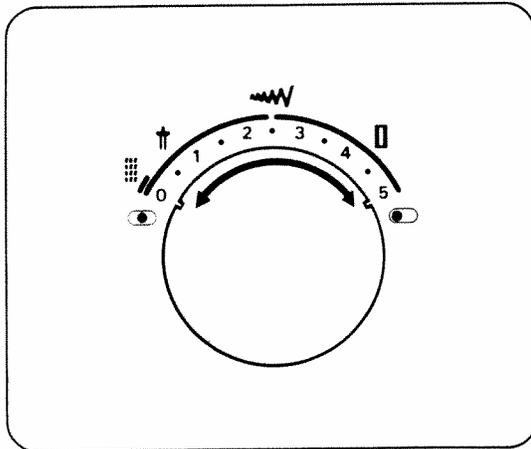




5. ZIGZAG SEWING

Set machine as shown.

To prevent seam ends unravelling, set machine for straight stitch and sew in reverse at beginning and ending of seam.

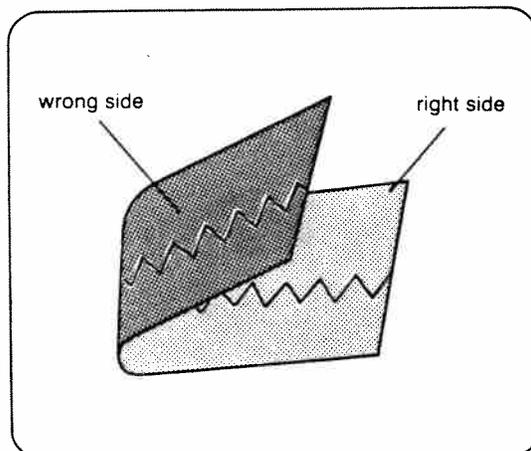


Zigzag Width Control

Set control at required number. Larger the number, wider the stitch.

Set it at 0 for straight sewing.

Make sure needle is in upper position when you set control, and extra thread is placed to the left or rear.



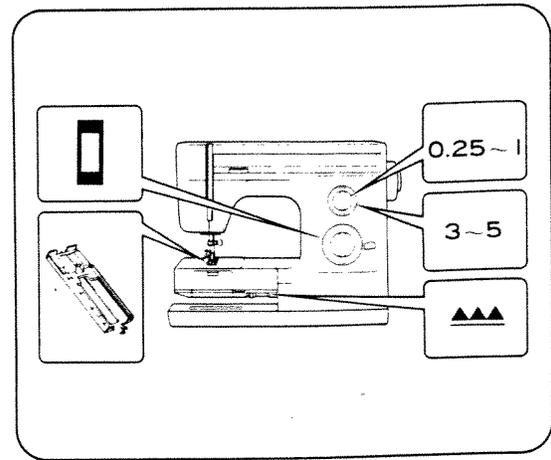
Thread Tension for Zigzag Stitch

Better-looking zigzag stitching requires less upper tension than straight stitching.

Loosen upper tension slightly.

6. MAKING BUTTONHOLES

Set machine as shown.



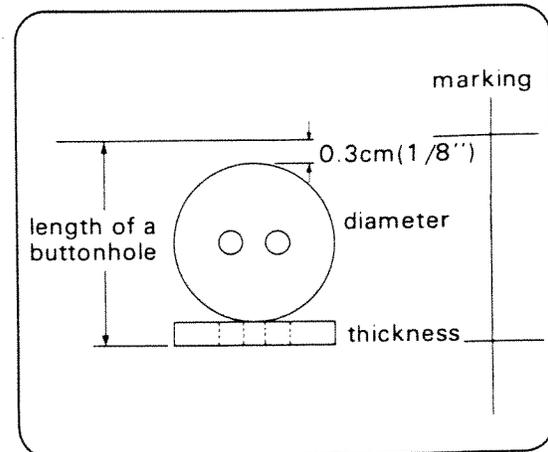
Determine Length

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

Mark buttonhole size on material.

Determine Width

Determine width according to diameter of button, its thickness, and kind of material.

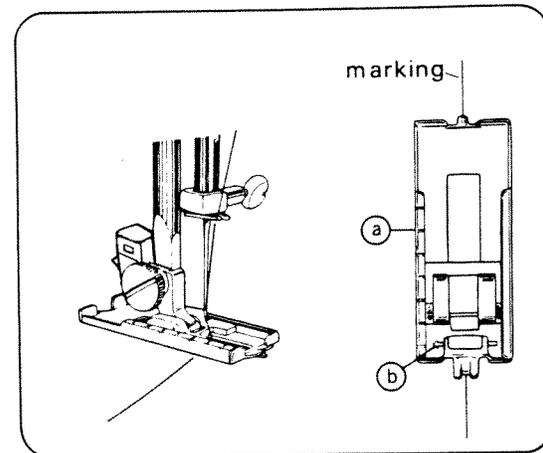


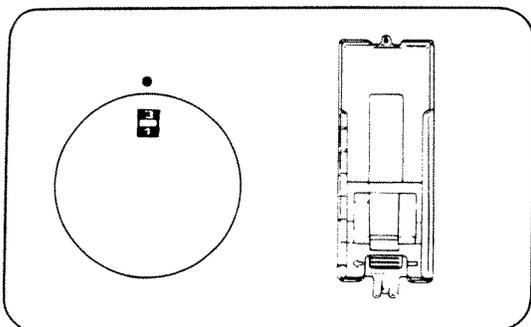
Attach buttonhole foot.

Completely push back sliding part (a) of buttonhole foot.

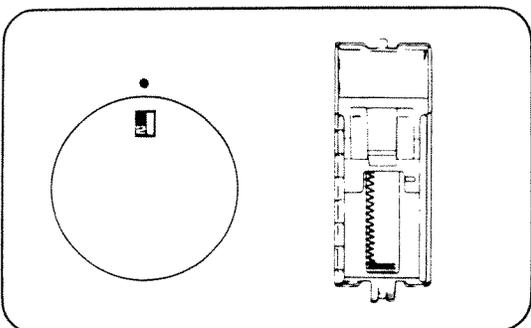
Place material under foot so that marking of buttonhole passes through center of foot. Arrow (b) of foot indicates beginning line of marking.

Extra thread is placed under foot and then to left or back.



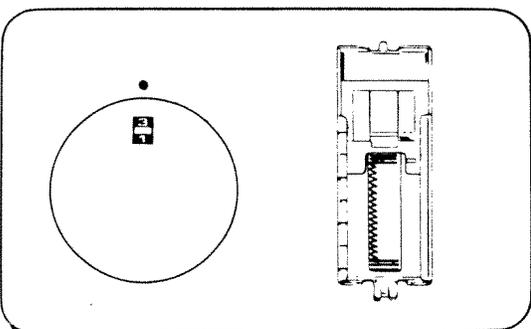


Bar tacking: Set pattern selection dial to 1 () and sew 5-6 stitches.

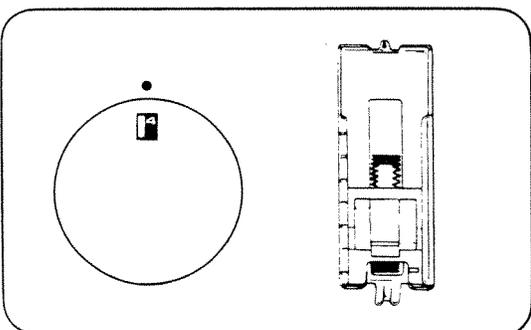


Left side: Change pattern to 2 (). Sew left side from front to back until it reaches end line.

Remember the point of arrow so that it is not necessary to mark end lines for all buttonholes.



Bar tacking: Change pattern to 3 () and sew 5-6 stitches.



Right side: Change pattern to 4 () and sew right side until it reaches first bar tack.

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

Buttonhole Density Adjustment

Adjustment is located to right of stitch length dial.

With some materials it is possible that the sides or density of a buttonhole will vary, it is possible to adjust or balance these sides by turning the special buttonhole adjustment to “+” or “-” to attain a correct balance.

It is advised to always turn this adjustment to center as this may vary some of the other stitches slightly.

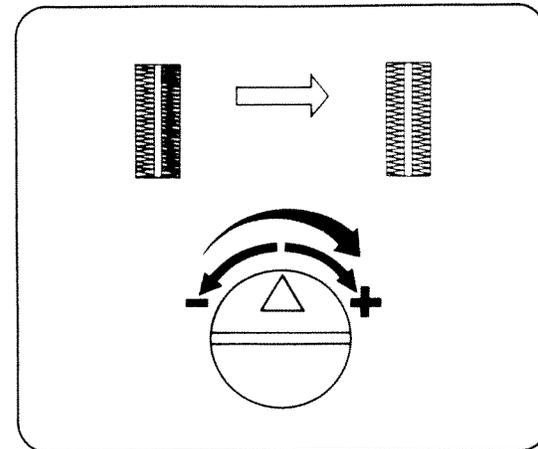
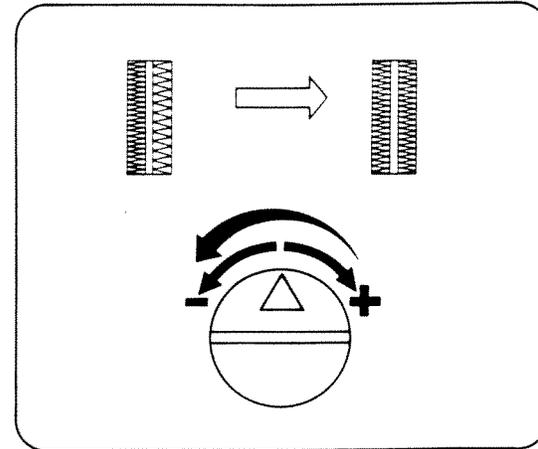
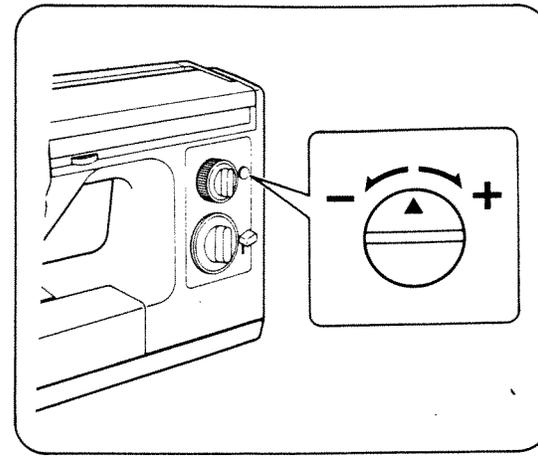
If the stitches on the right side of the buttonhole are too open, turn the dial counter-clockwise.

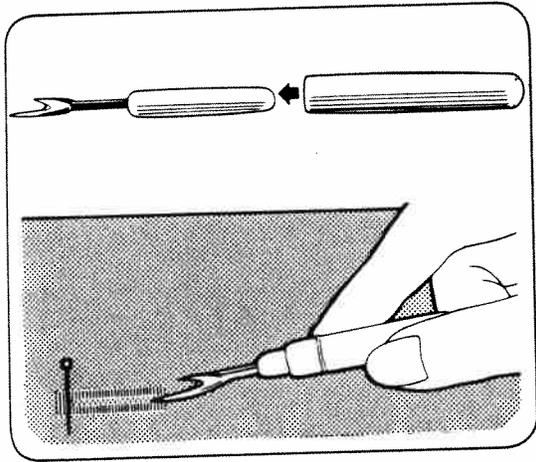
Turning dial counter-clockwise closes right side and opens left side.

If the stitches on the right side of the buttonhole are too close together, turn the dial clockwise (+).

Turning dial clockwise opens right side and closes left side.

This dial can simultaneously adjust stretch stitch balance. Therefore please refer to page 30 when you move this dial.





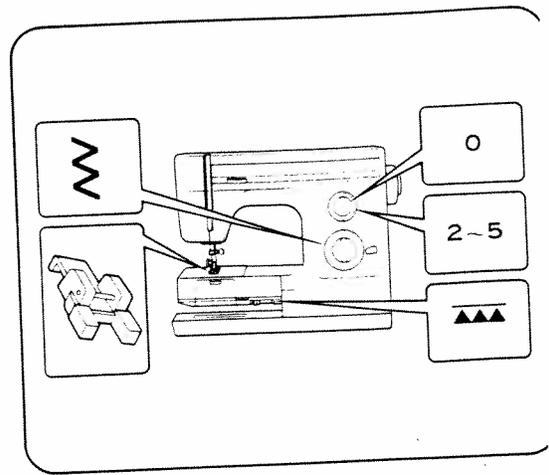
Cutting Buttonholes

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

Cut buttonhole along center with buttonhole cutter.

7. SEWING ON BUTTONS

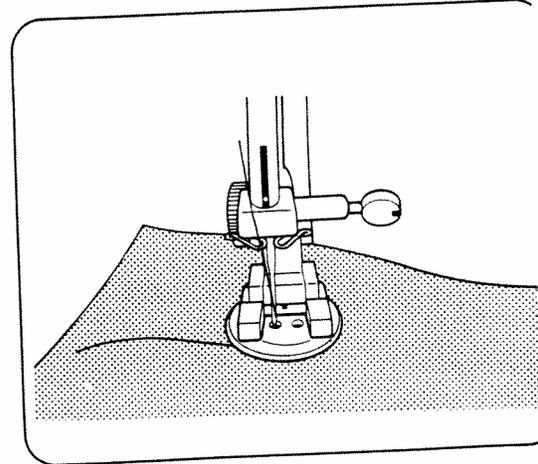
Set machine as shown.



Position a button and material under foot. When needle comes to left side of stitch, lower foot. Raise needle and adjust zigzag width so that needle comes to right hole of button.

Make one stitch be certain that needle is aligned with button's holes.

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

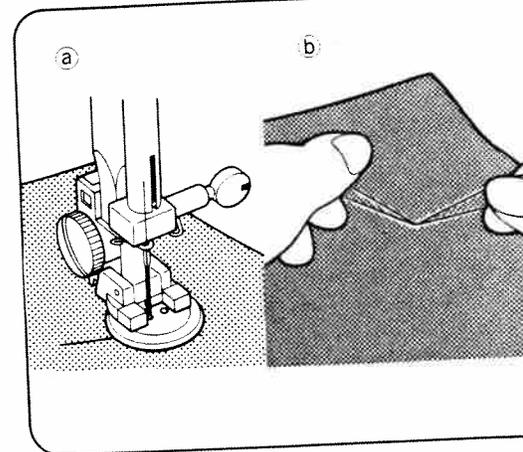


Stop machine when needle is in upper position.

a Set zigzag width control to 0, align needle with button's hole and sew 3-4 stitches to prevent stitches from unlocking.

OR

b Remove work and cut off threads. Draw thread ends through to wrong side and tie a knot.

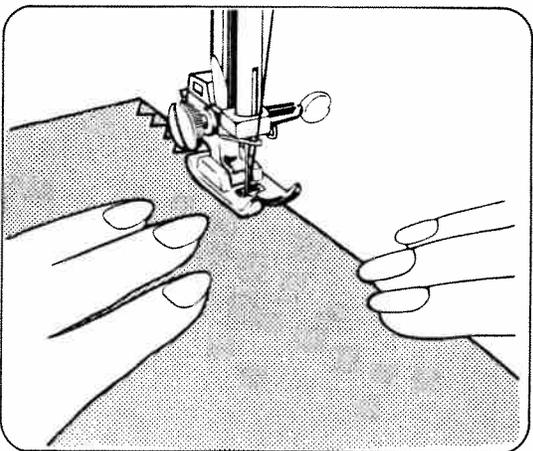
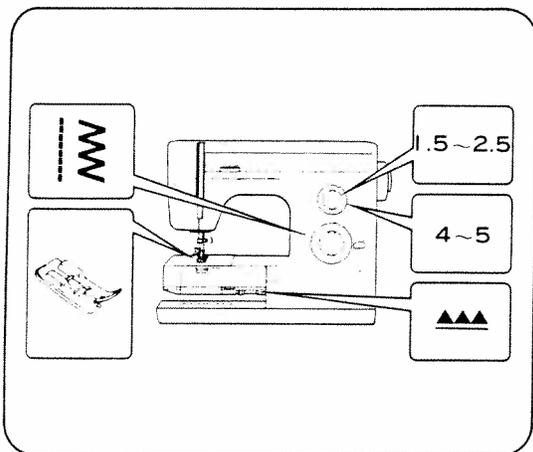


8. OVERCASTING

For light weight material:

Set machine as shown.

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

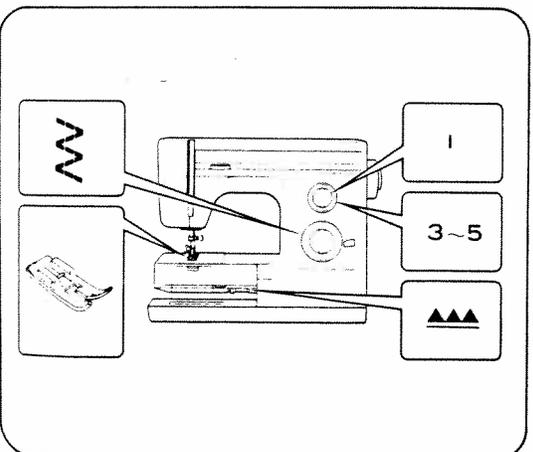


Sew carefully so that all stitches on right side are flush with edge of fabric.

For thick and elastic material:

Set machine as shown.

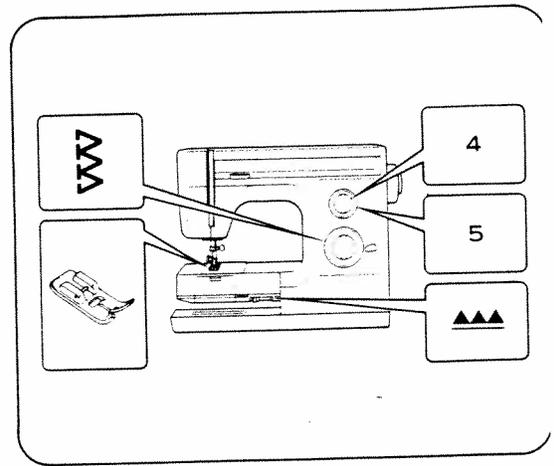
Sew in the same way above.



9. OVERLOCKING

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

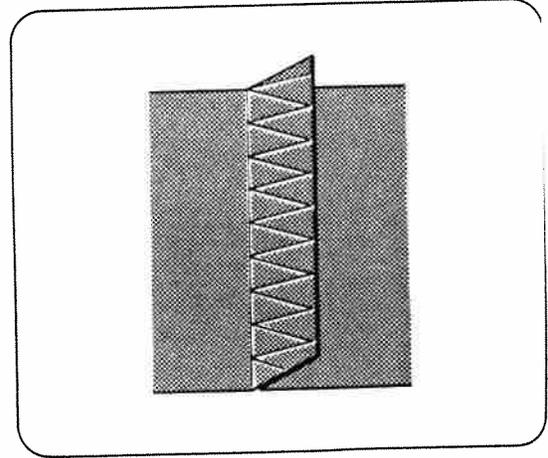
Set machine as shown.

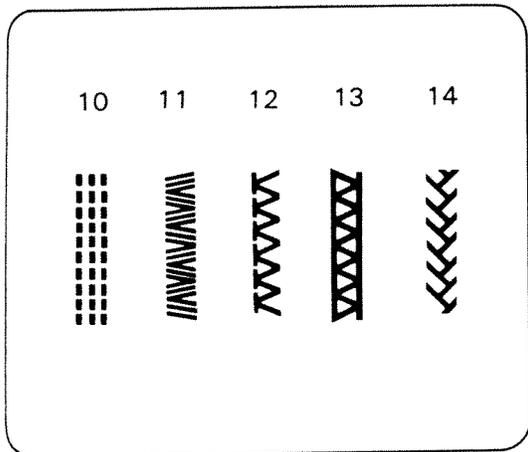


Put two pieces of cloth together with right sides facing and sew.

To prevent edges from fraying, sew so that right side stitches drop outside the edge of material. Then press flat.

In some cases overlocking stitches can be used for overcasting.

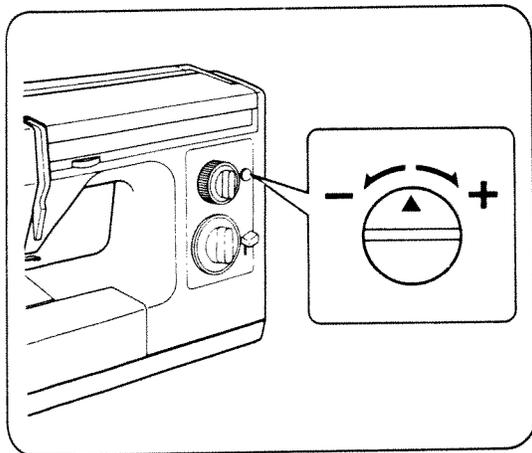




10. STRETCH STITCHING

The stitches shown are all used with stretch and knit fabrics. These are special utility stitches built in the machine for your quick selection.

- 10 Straight stretch
- 11 Rickrack briar stretch
- 12 Overlock stretch
- 13 Double overlock stretch
- 14 Briar stretch



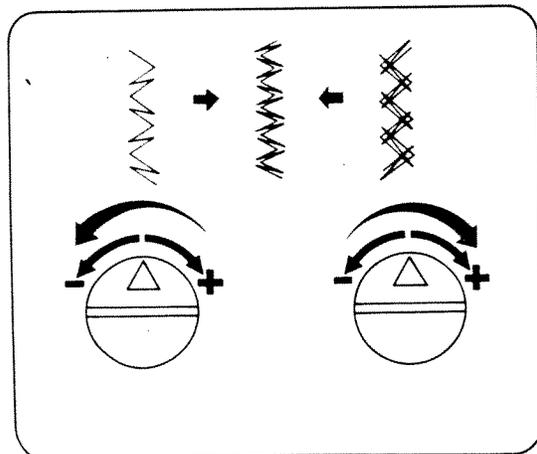
Adjusting Stretch Stitch Balance

In stretch stitch sewing, the stretch stitch adjuster should usually be in a neutral position (between "+" and "-").

When sewing some fabrics, you may need to adjust this control to balance the stitches for appearance sake.

If design seems open like the illustrations to the left, adjust the control slightly toward "-" until design looks like the center design.

If the design appears to be closed as in the right hand illustrations, turn the control toward "+" until stitching is as you desire.



This dial can simultaneously adjust left and right side balance of buttonhole. Therefore please refer to page 25 when you move this dial.

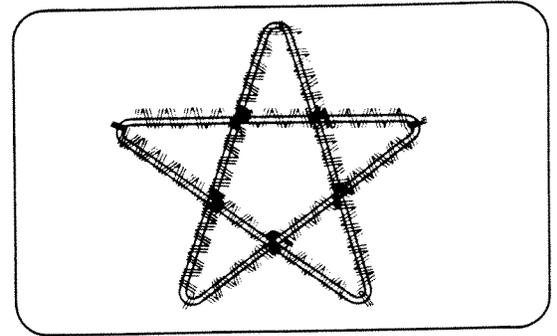
Always return to center position after making adjustments for stretch stitches.

Application of Rick-Rack



A. Topstitching/Rick-Rack

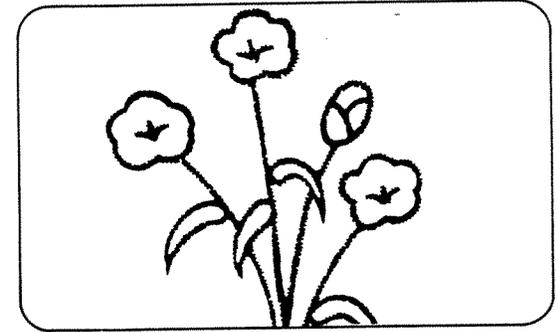
A decorative topstitch can be produced with the rick-rack stitch. Stitch around the structural lines of the garment for a special effect. Topstitch braid or a decorative inset to add an additional creative flair.



B. Tapering/Rick-Rack

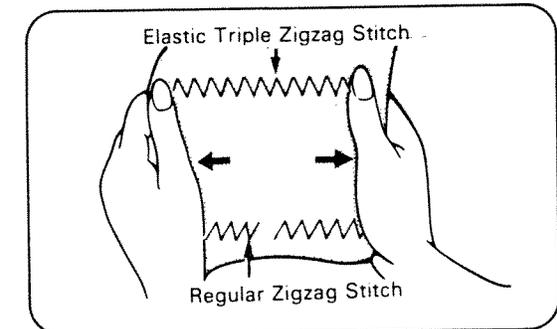
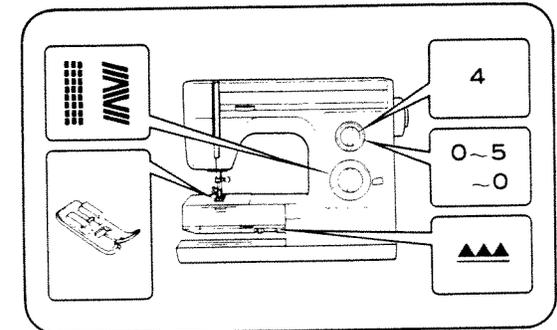
The rick-rack stitch may be tapered to form creative stems and petals of flowers, embroidered pictures and wall hangings.

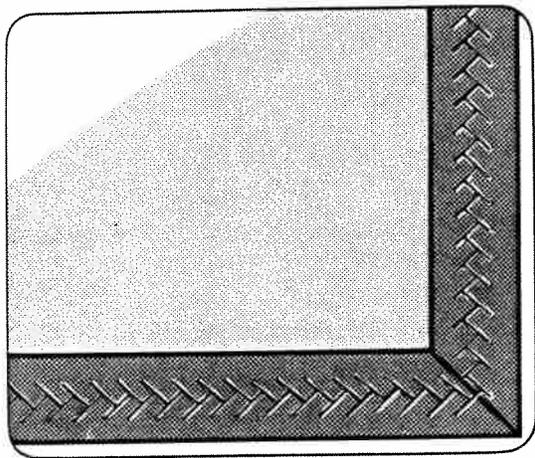
As in tapering the zigzag, slowly turn the stitch width dial from 0 to 5 and back to 0. A group of these tapered rick-rack stitch will form a bouquet-like effect.



C. Procedure:

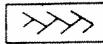
- The elastic rick-rack stitch is a zigzag line of stitching that is desired so that seams may be pressed open.
- Apply this stitch to areas of stress on both wovens and knits.
- Use narrow width of zigzag as a heavy duty triple stitch for seams.
- Use medium and wide widths of zigzag for overcasting edges of seams, facings and hems of heavier weight fabrics such as terry-cloth, and for attaching elastic.
- Use also for decorative stitching.
- Guide your fabric from the front. Do not pull or push as it will cause poor stitching.





Application of Decorative Fun Patterns

A. Fun stitches-Briar



The reverse stitch patterns produce briar designs for use on household linens and children clothes.

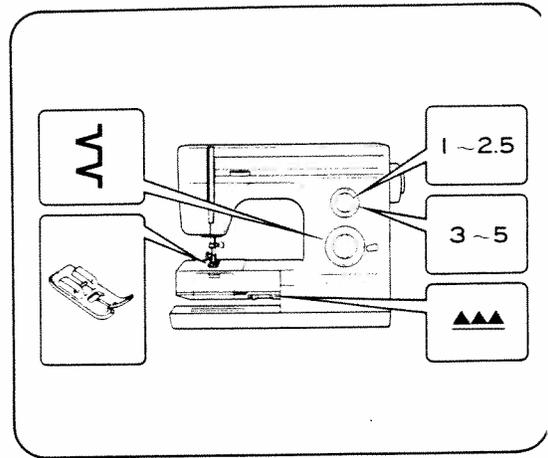
These reverse stitch pattern can be used to sew in hems.

The reverse stitch patterns can also be used for topstitching bindings and ribbons for decorative effect. This is done in the same manner that lace is applied with the zigzag stitch. The straight stitched edge of the reverse stitch patterns on the left should be sewn on the left edge of the binding or ribbon. This decorative effect can be used on towels and placemats for a pleasant appearance. The reverse stitch patterns can also be corded for stronger decorative edges on placemats and tablecloths. Simply place four strands of pearl cotton, embroidery floss or yarn under the presser foot. A transparent foot will help guide the cord evenly while sewing the reverse stitch patterns. The reverse stitch patterns can be sewn with two threads through one needle for a more effective decorative stitch. Simply thread two sewing threads through the upper threading system. A larger needle should be used to accommodate the two threads. Use this decorative technique for enhancing tablecloths, placemats, napkins, and curtains.

NOTE: Narrow patterns may be made by setting zigzag width to 4-3-2.

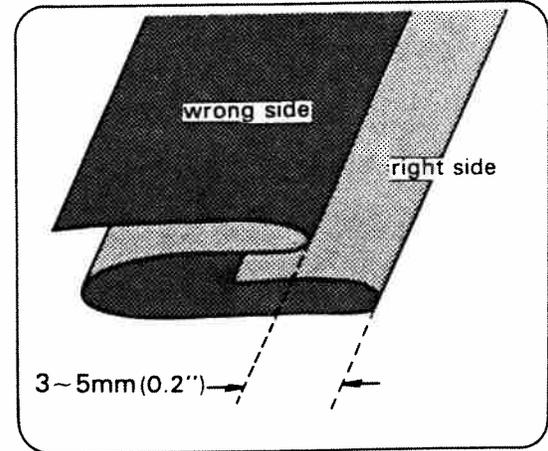
11. BLIND HEM STITCH

Set machine as shown.

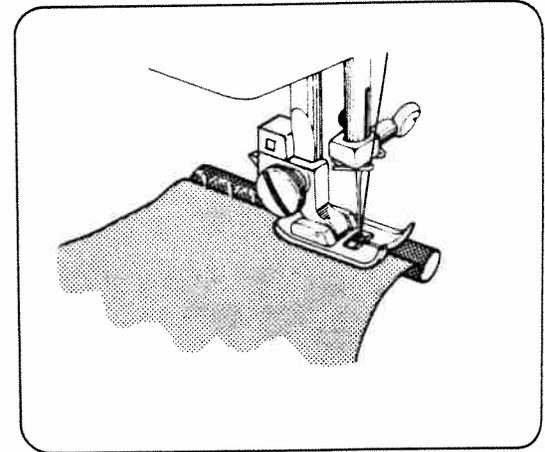


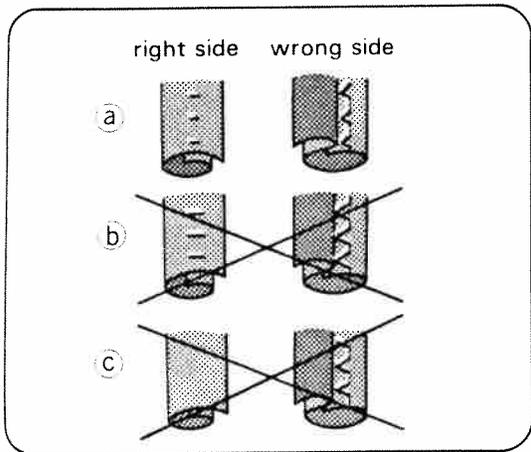
Fold material as shown and place under foot.

For a neater finish, it is preferable to baste or iron the hem beforehand.

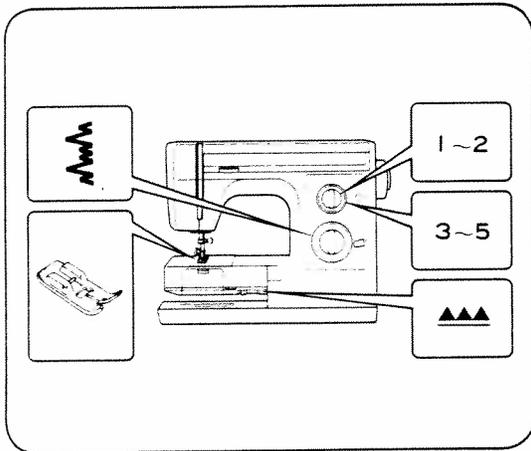


Sew carefully, so that straight stitches are made on hem edge, and slanting stitches pierce only one or two threads of fold.





- Ⓐ Correct seam.
- Ⓑ Needle is catching edge of fold too much.
- Ⓒ Needle is not catching edge of fold at all.



Elastic Blind Hem Stitch

For elastic materials, set machine as shown and sew in the same way as for normal blind hem stitch.

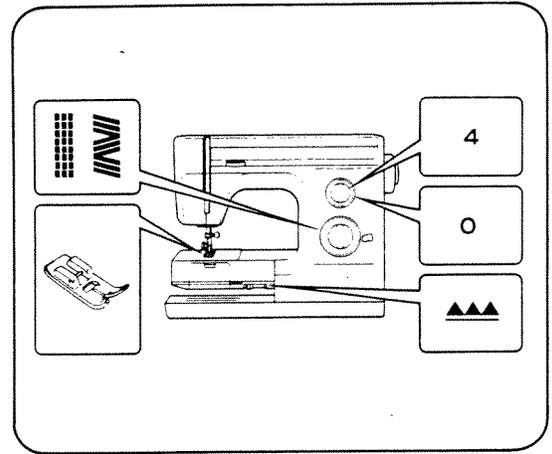
12. STRETCH SEAM

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

a Medium-weight fabrics

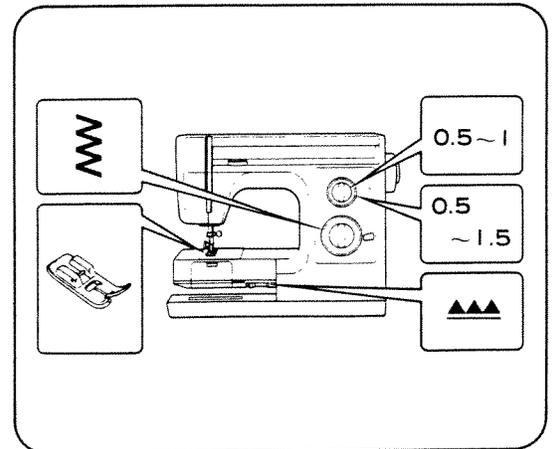
Double knit, jersey.

Apply elastic triple straight stitch.



b Light-weight fabrics

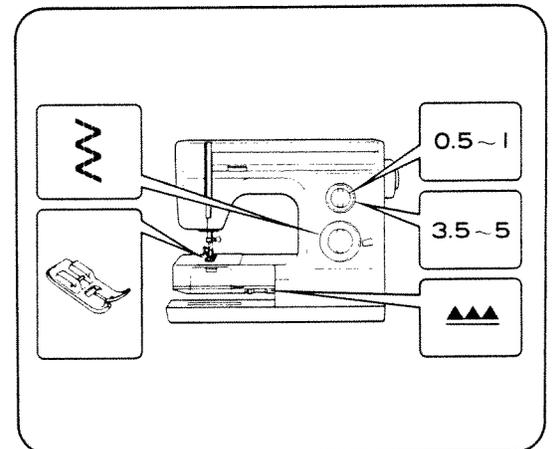
Apply small zigzag. Reduce upper and lower thread tension.

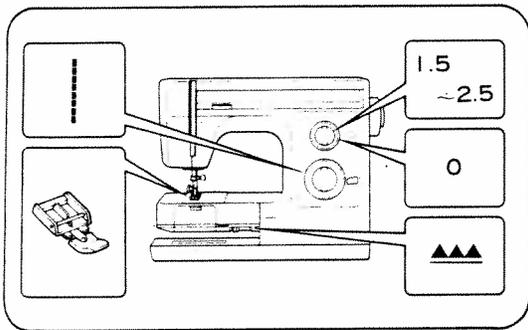


c For Very elastic fabrics

Spandex (power net)

Use lapped or abutted seam.
Apply multiple zigzag.



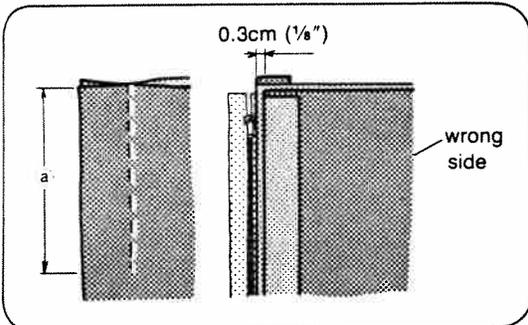


13. ZIPPER SEWING

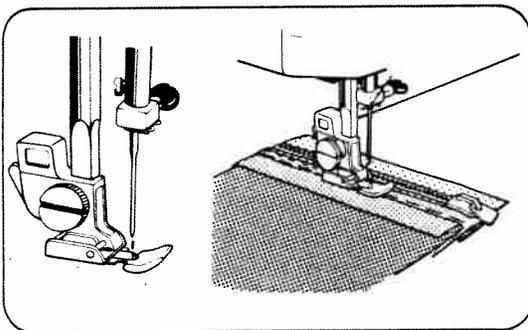
Set machine as shown.

Used for dresses, blouses skirts, trousers, bags, etc.

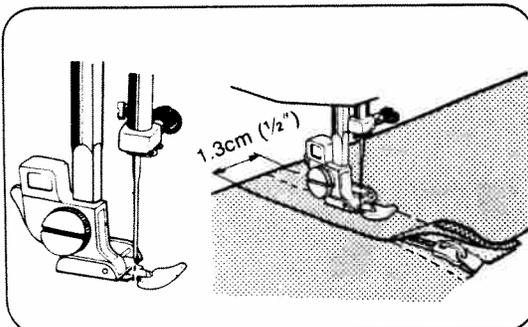
By using the special zipper foot, zipper sewing can be easily done.



- (1) With right sides together, tack along seam line of the opening \textcircled{a} .
- (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) Replace the presser foot with the zipper foot on the left of the needle. The zipper foot can be shifted either to the right or the left of the zipper, so the zipper can be sewn without difficulty. Stitch from the bottom to the top. Remove the tacking.

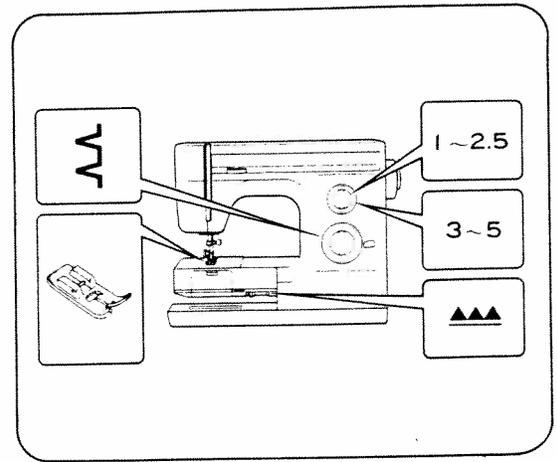


- (4) Turn the material to the right side. Ease the material and the zipper. Tack a measured 1.3cm (1/2") from the tacked seam as a stitching guide. Shift the zipper foot to the right of the needle. Doublestitch across the lower end, then up along the zipper. Remove the tacking.

14. SHELL STITCHING

Silk, nylon organdy or similar sheer fabrics are suitable.

Set machine as shown.

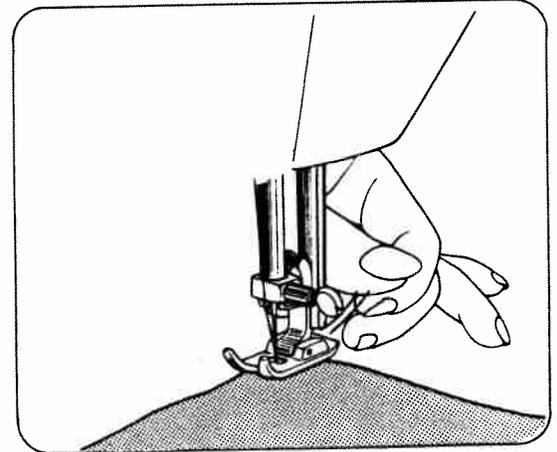


Fold edge of material. With folded edge to left, place it under presser foot.

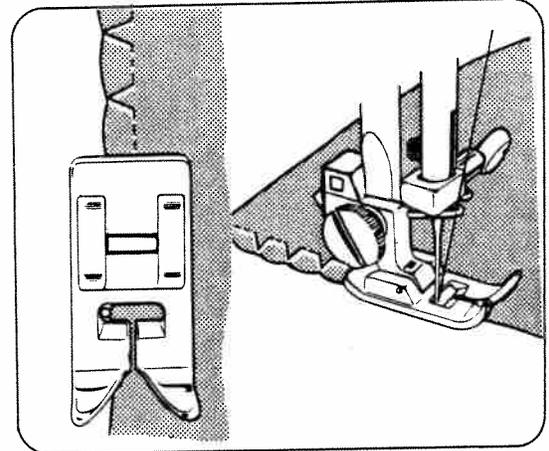
Pull thread ends towards back when starting sewing.

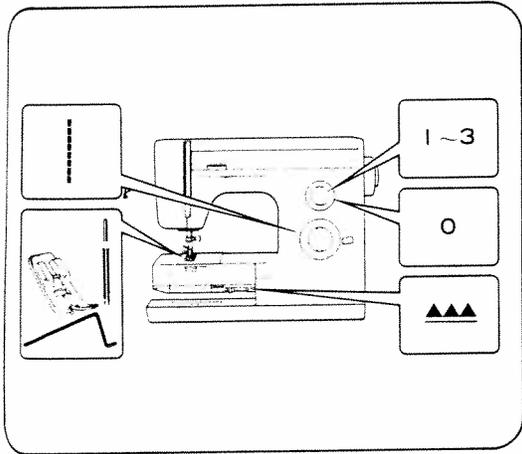
Adjust tension to 8 or 9 to form the shell effects.

Always return the tension setting to normal when finishing the shell effect.



Make sure needle misses raw edge of fold when it moves side ways.



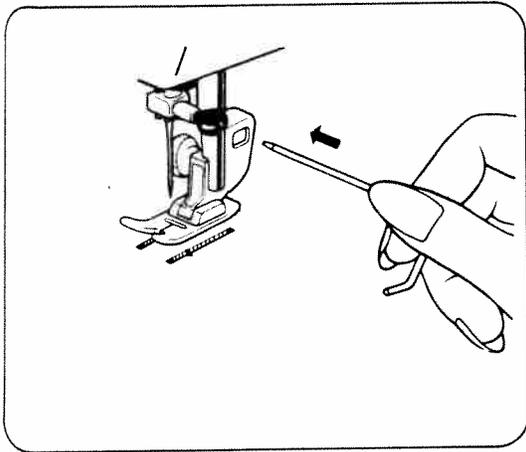


15. PIN TUCKING

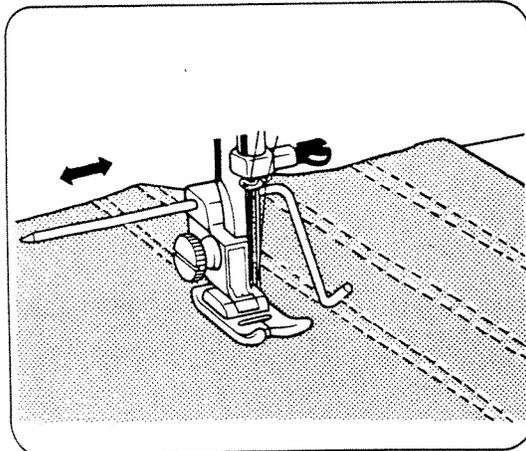
Set machine as shown.

For better appearance, use sheer material and tighten lower thread a little.

For twin needle threading see p.14 .



Insert the quilting guide under the spring plate on the holder.



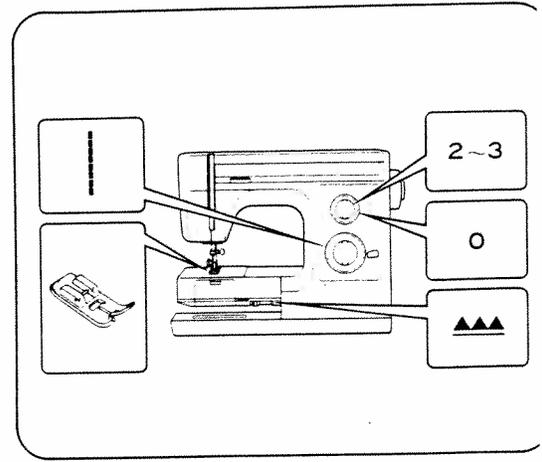
Mark first line with pencil or tailor's chalk, and sew.

From second line, just sew, following seam of first line using guide.

Interval between seams can be adjusted by moving guide in direction of arrow.

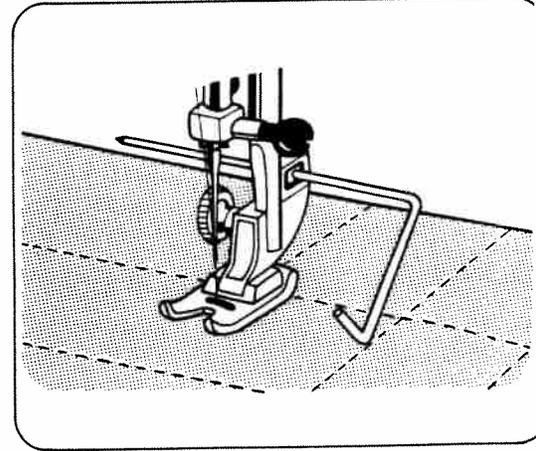
16. QUILTING

Set machine as shown.



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

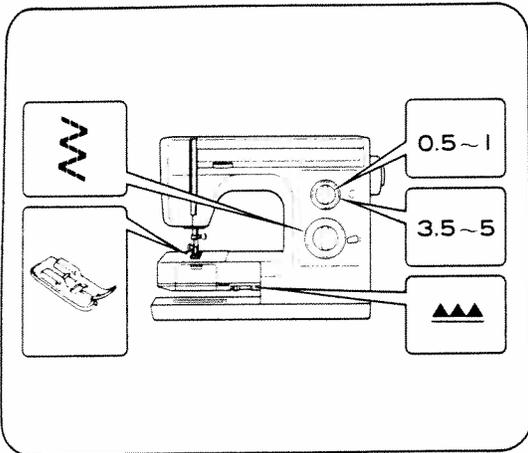
Attach quilting guide and sew in the same way as pin tucking.



17. MENDING

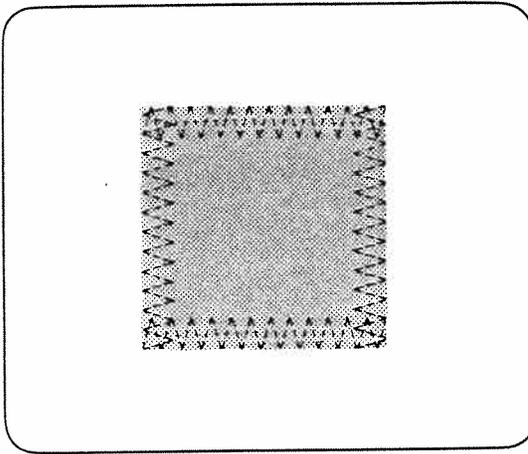
Patching

Set machine as shown.



Place the patch over the worn part.
Pull thread ends toward back or left
when starting sewing.

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



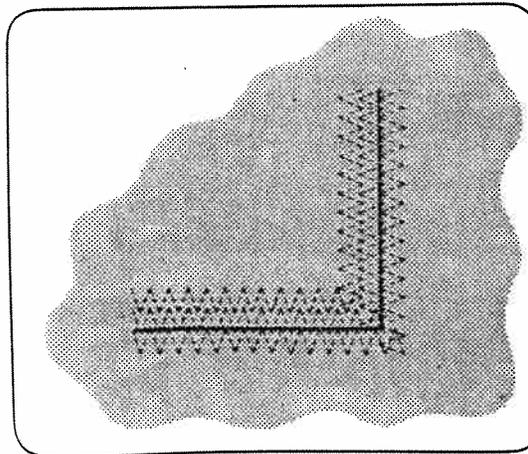
Mending a Rip

Set machine in the same way as for
patching.

Sew the edges of tear together first.

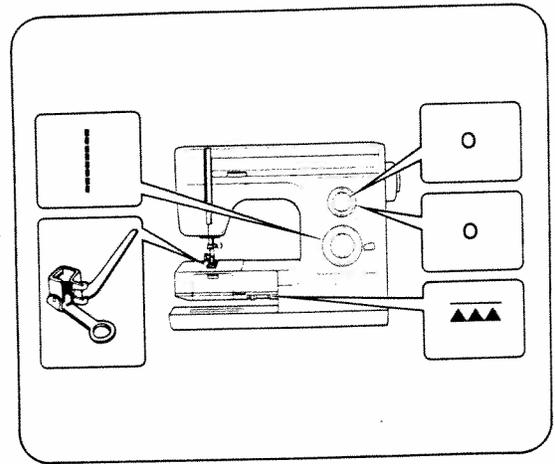
Then sew two more seams on either
side.

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

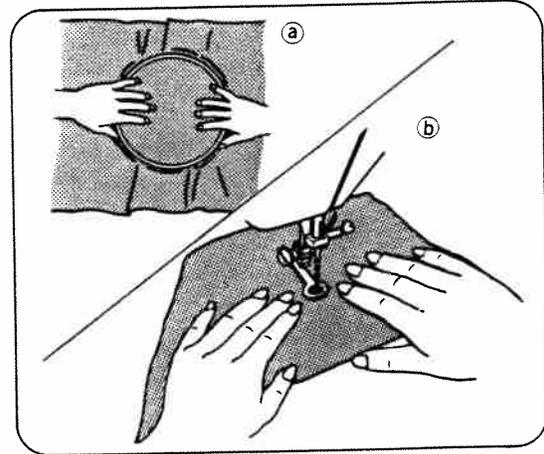


Darning

Set machine as shown.

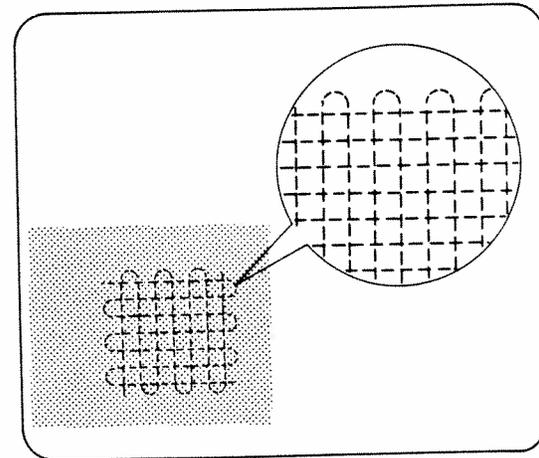


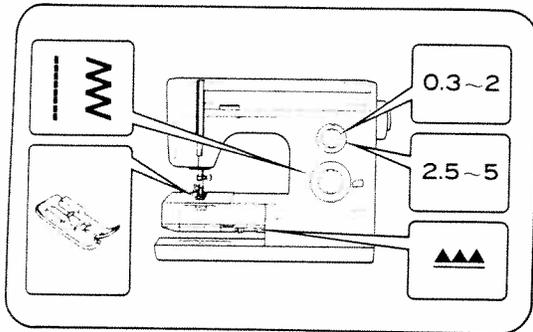
Stretch fabric over the hoop **a** or sew with free arm **b** according to the part you are going to darn.



Sew over the worn-out part with closely spaced stitches, guiding material back and forth by hand.

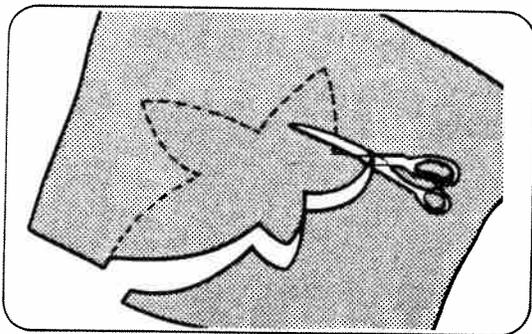
By making turning points blunt, the darned part becomes softer and more flexible.



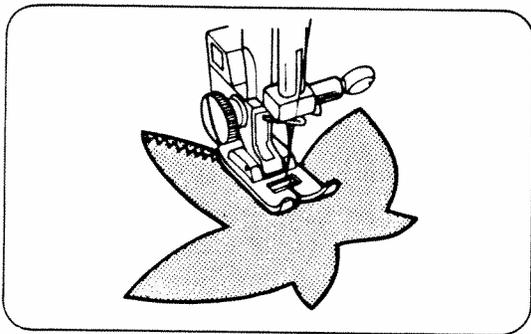


19. APPLIQUE WORK

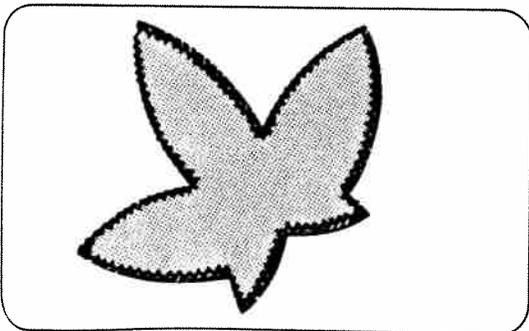
Set machine as shown.



Draw design on material to be used as an applique and cut it out. Place cut-out on base material and baste it.



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



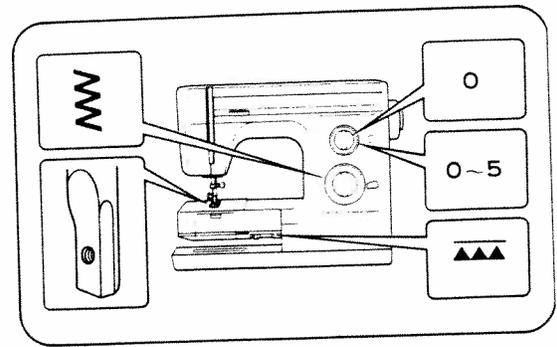
To change direction at corners, or to sew very small circles, stop machine, positioning needle just away from edge of cut-out, lift presser foot and turn material. Lower presser foot and continue sewing.

Sew a few stitches at end with zigzag width at 0. This is to prevent unstitching.

Set machine as shown.

Remove foot, and holder screw.

To avoid lower thread being pulled up, reduce upper thread tension.



For good embroidery, it is important to use correct needles and thread. Use thin embroidery silk for upper thread and a thinner silk of same kind and color for lower thread.

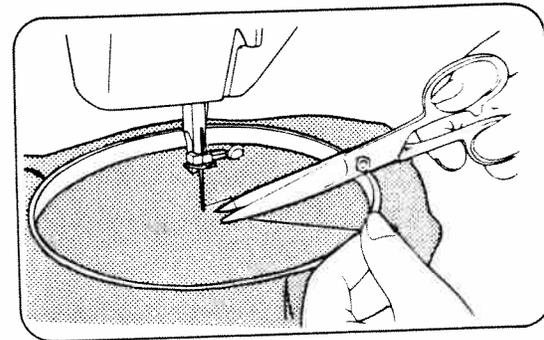
Trace your design on material and center it in embroidery hoop. Make sure material is taut.

Needle	Thread
No. 9	120~100
No. 11	100~80
No. 14	60~50

Pull up lower thread by turning handwheel towards you while holding upper thread lightly.

Lower presser foot lifter.

Grasp lower thread then make two or three stitches, snip off excess threads.

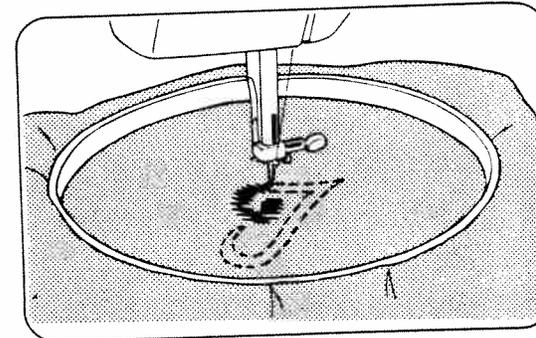


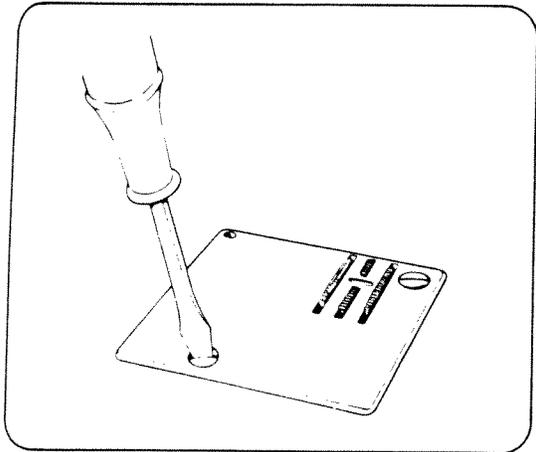
Start sewing along outline of design with satin stitch.

Continue sewing with guiding hoop by hand.

To finish filling, sew several stitches with zigzag width at 0.

Lay typewriting paper underneath when embroidering sheer fabric.

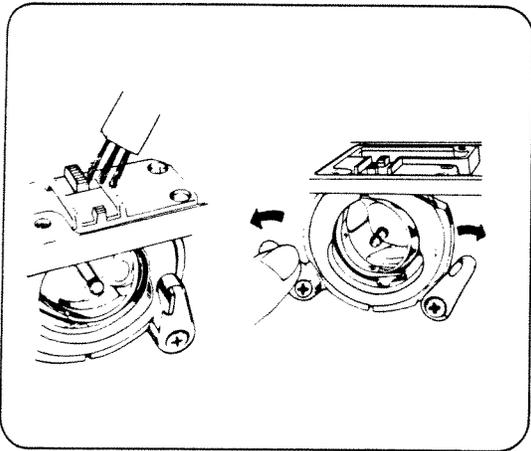




20. MAINTENANCE

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

A machine which is used for a few hours a day needs to be cleaned and oiled once a month.

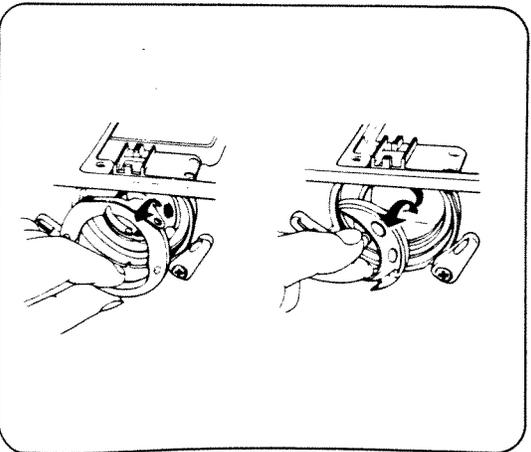


Cleaning

Remove foot and needle.
Remove needle plate.

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

Turn latches outwards.



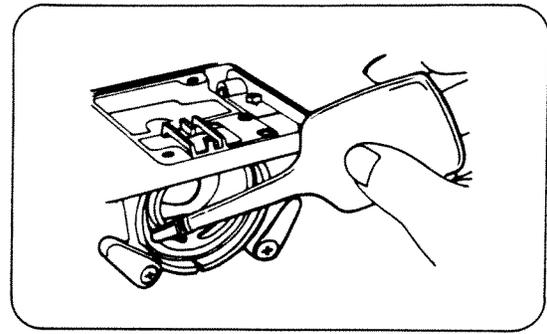
Remove hook race cover.
Remove hook. Clean hook race with a cleaning brush and a soft cloth.

Oiling

Use oil manufactured especially for sewing machine use. Other oils will eventually cause mechanism to jam.

Apply one drop of oil to hook where friction occurs.

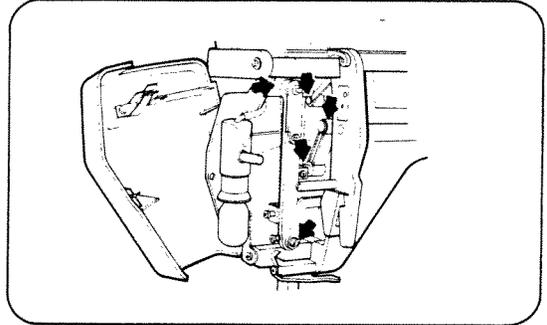
Replace hook and race cover carefully, turn handwheel manually to insure correct assembly.



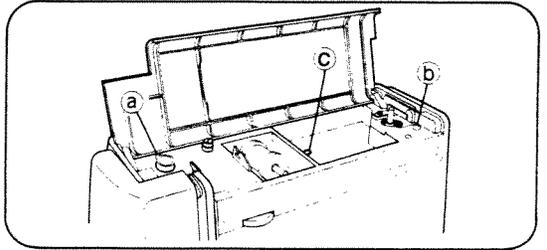
Open face cover and apply oil to points indicated with arrow.

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

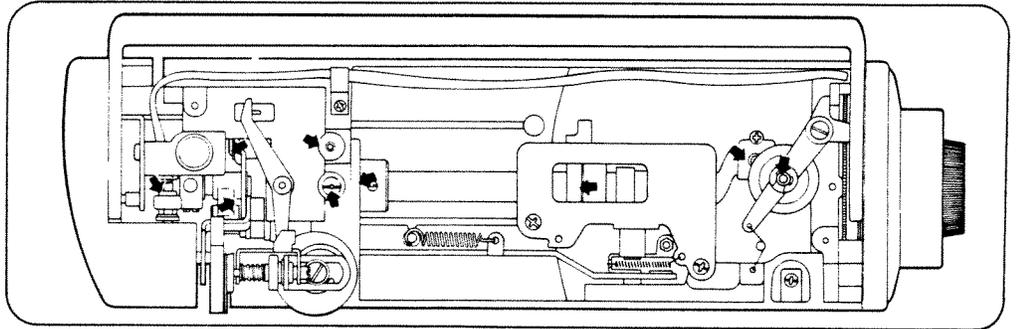
After oiling, run machine for 1-2 minutes to allow oil to penetrate to every part.



Remove top cover by loosening screws **a**, **b** and **c** with large screwdriver.



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



21. TROUBLE CHART

PROBLEM	PROBABLE CAUSE	CORRECTION
Breaking lower thread	Thread not wound evenly on the bobbin or not drawn up correctly	P.10, P.15
	Lower thread tension too tight	P.12
	Lint stuck in the bobbin case and inside the tension spring	Remove lint and fluff with a cleaning brush
Skipping stitches	Needle not fully inserted	P. 6
	Needle bent	P. 6
	Size or type of needle and thread not suitable for the material	P.16
	Incorrect upper threading	P.13
	Too much oil on the hook	P.45
Irregular stitches	Incorrect size of needle for the material	P.16
	Upper thread tension too loose	P.20
	Incorrect lower tension	P.12
The material not fed correctly	Pattern selection dial not set correctly	P.17
	Incorrect feed dog height	P.12
	Lint stuck on the feed dog	P.44
Noisy machine	Check for thread in race, the slightest amount of thread in race may cause noise or binding, use material like tooth pick or cotton swab to clean.	P.45