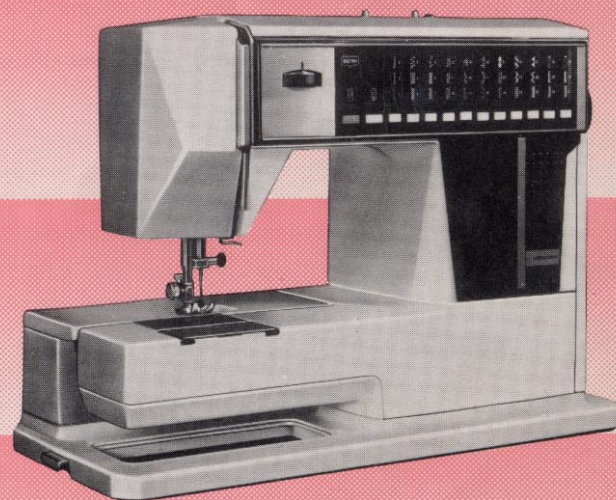


MEMORY

JANOME

INSTRUCTION BOOK



MODEL 5001



Dear Customer,

You are now the owner of the most advanced sewing machine ever built and we welcome you to a new world of sewing pleasure.

To make the best use of your MEMORY 7, read this booklet carefully.

The next page gives a brief overview of the machine's many exciting features followed by step-by-step operating and care instructions.

Multiple Memory, Instant Automatic Stitch Settings, One-Touch Pattern Selection

When the MEMORY 7 is turned on, it will automatically select straight stitch sewing with a stitch length suitable for most fabrics.

To select a pattern, simply touch the button under the desired stitch and the machine will automatically select the proper stitch length, stitch width and sewing speed. A red signal light will tell you when the pattern has been selected and memorized. Should you want to alter the stitch length or width of the pattern, the automatic settings can be changed manually.

Each time you select a pattern the MEMORY 7 will automatically return to the beginning of the design enabling you to sew rows of matched decorative stitches for borders, turning corners, etc. Patterns can also be combined in a memorized sequence and/or inverted for a mirror image.

After the first buttonhole is sewn, the MEMORY 7 will memorize the length and sew identical buttonholes repeatedly.

Additional Features

Electronic Motor Control:

1. Sewing speed can be easily adjusted without loss of power for sewing through heavy fabrics.
2. The needle will automatically rise to the highest position when you stop sewing, eliminating constant needle re-threading.

Horizontal Full Rotary Hook:

1. Bobbin can be removed easily. A "see-through" window lets you see when the bobbin is almost empty. With the large capacity bobbin most garments can be completed without re-winding the bobbin.
2. The bobbin holder can be removed for easy cleaning insuring a lifetime of trouble-free sewing.

Convertible Flat Bed—Free Arm

1. The panel behind the needle plate slides back for convenient free arm sewing with children's clothes, cuffs, etc.

Convenient "Flip-Top" Sewing Boxes:

1. The foot storage on the top of the machine stores presser feet and also contains an instruction panel.
2. The flip-top sewing box behind the free arm stores bobbins and other sewing accessories.

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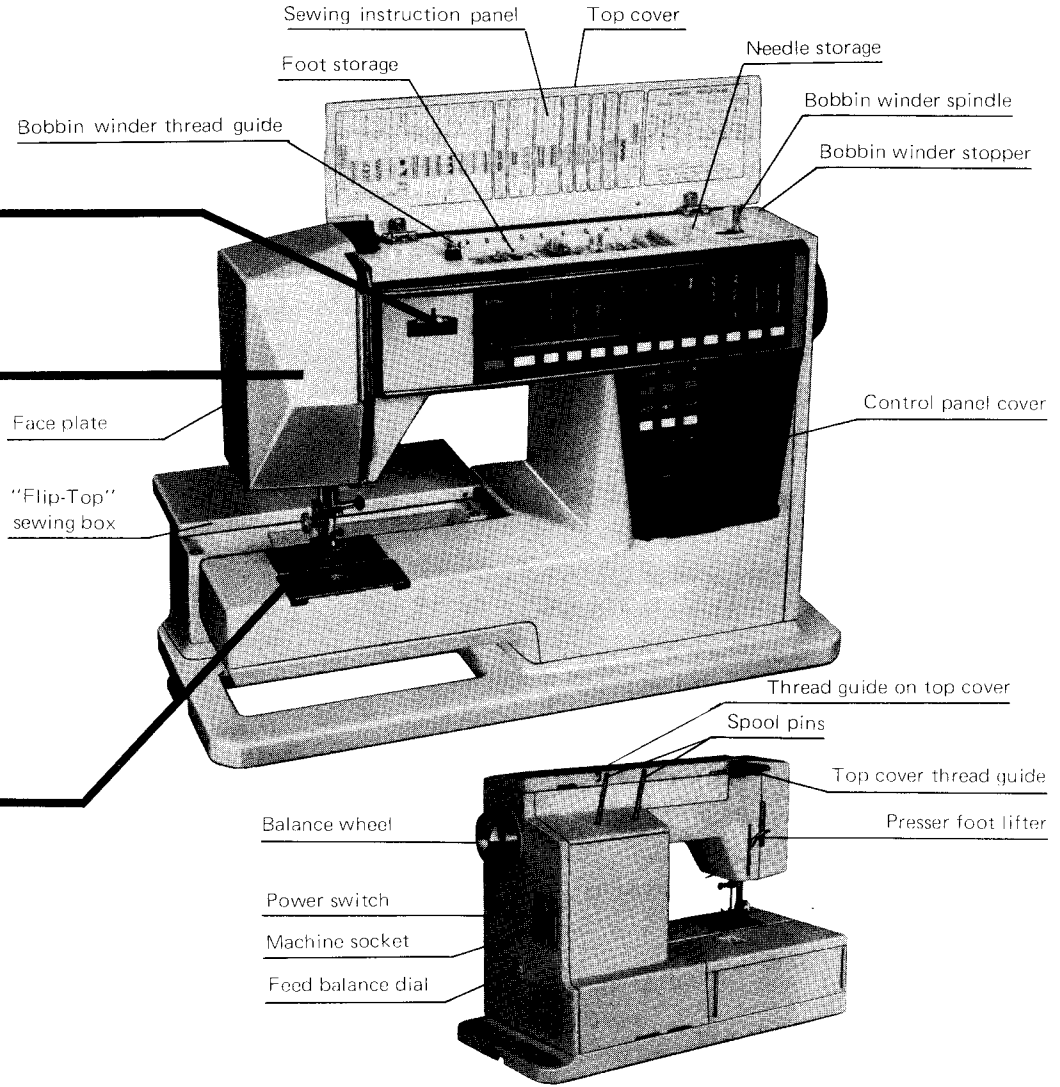
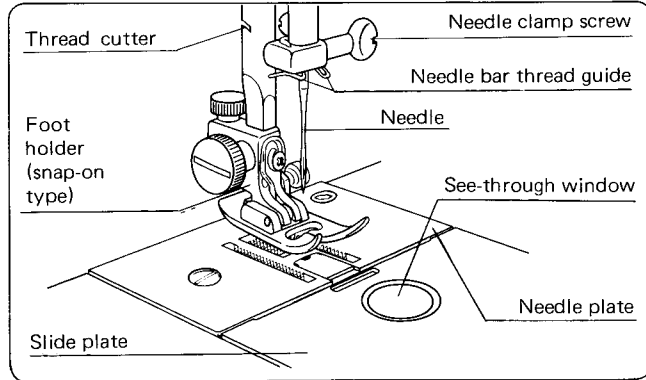
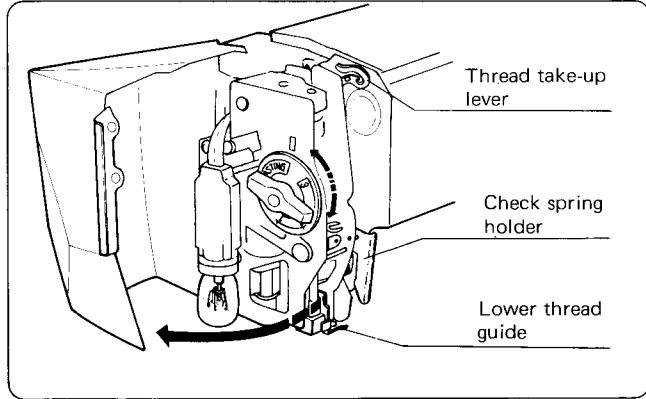
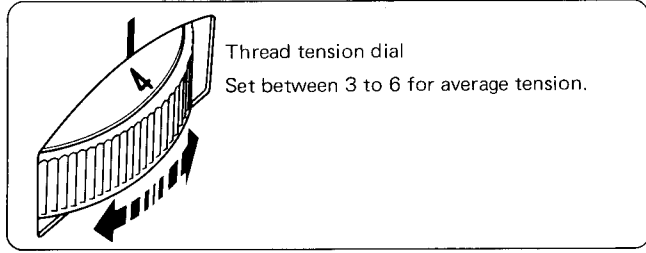
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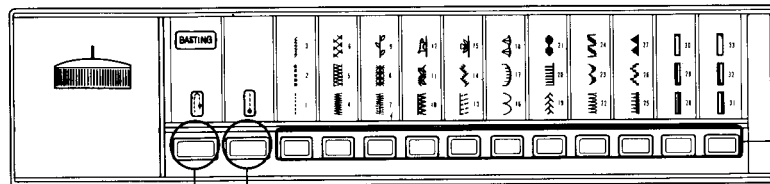
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Essential Parts and What They Do



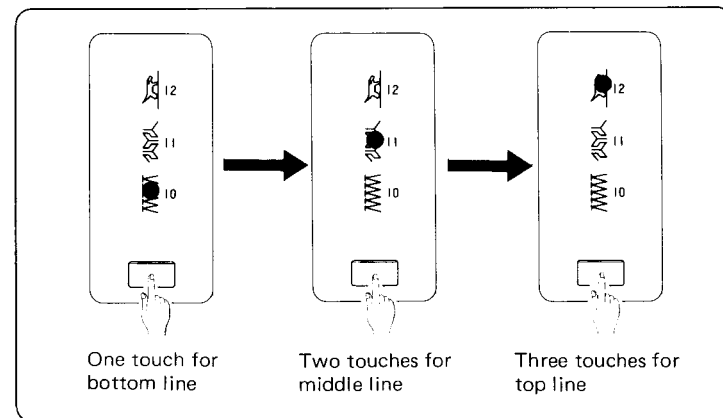
Pattern Selection Panel



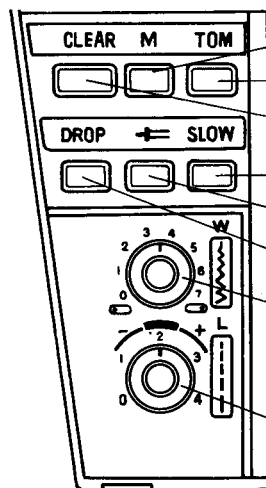
- "AUTO-LOCK STITCH" button
- "REVERSE STITCH" button

■ One touch pattern selection

Pattern Selection



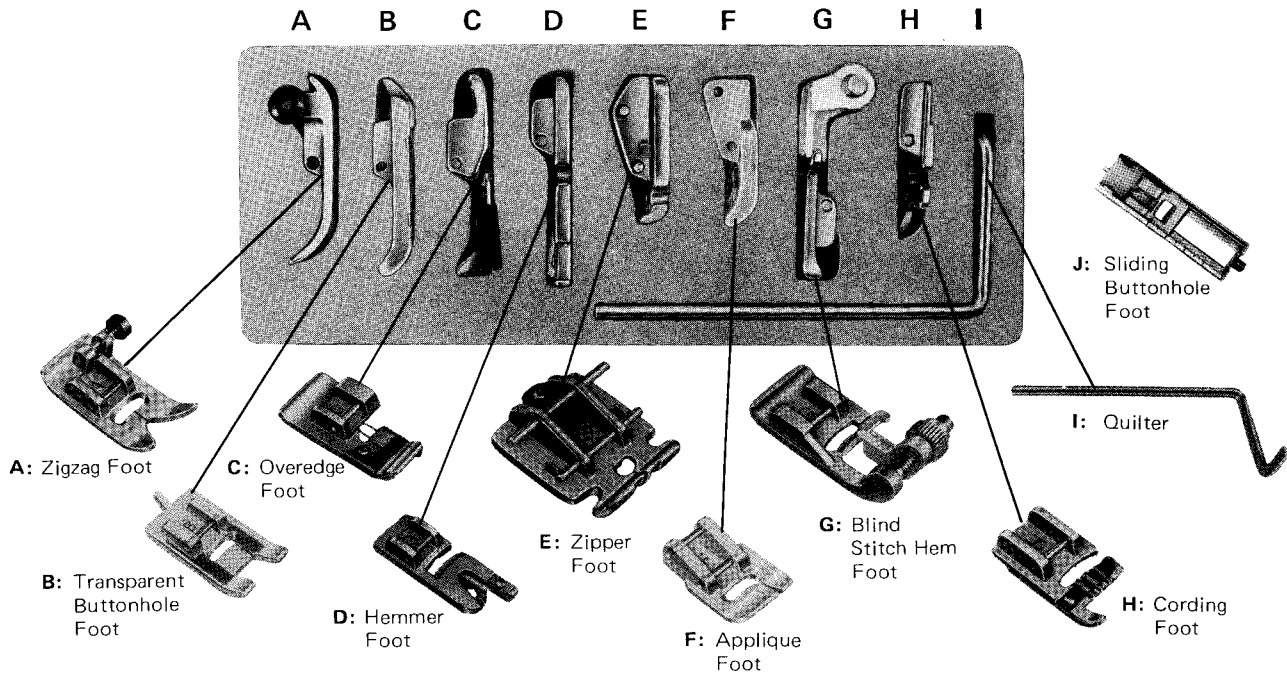
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| <p>MEMORY PROGRAMME</p> <table border="1"> <thead> <tr> <th colspan="4">MEMORY STITCHES</th> <th colspan="4">AUTO-LOCK STITCHES</th> </tr> </thead> <tbody> <tr> <td></td> <td>27 M</td> <td></td> <td>8 M</td> <td></td> <td>15 M</td> <td></td> <td>24 M</td> <td></td> <td>15 M</td> <td></td> <td>15 M</td> <td></td> <td>27 M</td> </tr> <tr> <td></td> <td>15 M</td> <td></td> <td>21 M</td> <td></td> <td>12 M</td> <td></td> <td>TOM</td> <td></td> <td>12 M</td> <td></td> <td>15 M</td> <td></td> <td>27 M</td> </tr> <tr> <td></td> <td>26 M</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>15 M</td> <td></td> <td>12 M</td> <td></td> <td>15 M</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>15 M</td> <td></td> <td>12 M</td> <td></td> <td>15 M</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>15 M</td> <td></td> <td>12 M</td> <td></td> <td>15 M</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>15 M</td> <td></td> <td>12 M</td> <td></td> <td>15 M</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>15 M</td> <td></td> <td>12 M</td> <td></td> <td>15 M</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>15 M</td> <td></td> <td>12 M</td> <td></td> <td>15 M</td> </tr> </tbody> </table> <p>Memory Programming is effective up to Seven Patterns including Auto-lock Stitch.</p> | | | | | | | | | | | | | | MEMORY STITCHES | | | | AUTO-LOCK STITCHES | | | | | 27 M | | 8 M | | 15 M | | 24 M | | 15 M | | 15 M | | 27 M | | 15 M | | 21 M | | 12 M | | TOM | | 12 M | | 15 M | | 27 M | | 26 M | | | | | | | | 15 M | | 12 M | | 15 M | | | | | | | | | | 15 M | | 12 M | | 15 M | | | | | | | | | | 15 M | | 12 M | | 15 M | | | | | | | | | | 15 M | | 12 M | | 15 M | | | | | | | | | | 15 M | | 12 M | | 15 M | | | | | | | | | | 15 M | | 12 M | | 15 M |
| MEMORY STITCHES | | | | AUTO-LOCK STITCHES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 27 M | | 8 M | | 15 M | | 24 M | | 15 M | | 15 M | | 27 M | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 15 M | | 21 M | | 12 M | | TOM | | 12 M | | 15 M | | 27 M | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 26 M | | | | | | | | 15 M | | 12 M | | 15 M | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | 15 M | | 12 M | | 15 M | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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FUNDAMENTALS OF OPERATION

For Your Safety

1. While in operation, always keep your eye on the needle, and do not touch any moving parts such as the take-up lever, balance wheel or needle.
2. Always turn off the machine, and unplug from the power supply:
 - * After using the machine
 - * When leaving the machine for any period of time
 - * When attaching or removing parts
 - * When cleaning the machine
3. Do not place anything on the speed controller, except for your foot.

Before Using the Machine

- § Wipe the machine with a clean cloth to remove any dust or oil.
- § To replace presser feet or needles follow the guides on the instruction panel or in the instruction book.
- § When programming the machine for sewing, test the stitches on a small piece of the fabric with the threads that will be used for actual sewing.

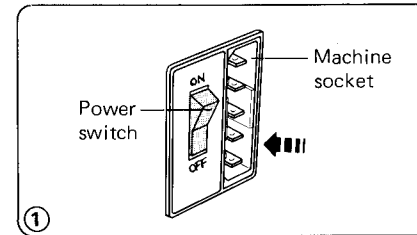
For Longer Life of the Machine

- § Your machine requires no oiling under normal conditions.
- § Do not expose the machine to the sun for long periods of time nor store near a radiator.
- § Do not store the machine in an area of high humidity.
- § Handle the machine with care to avoid dropping or bumping.

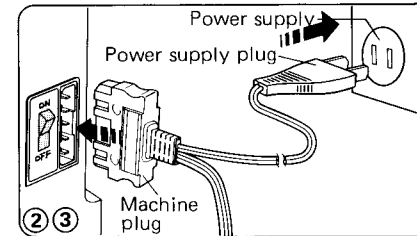
Repair and/or Adjustments

- § Should the machine not work correctly, refer to the "Trouble Shooting" charts on pages 54 to 56.
If you cannot adjust the machine properly, please contact your retailer or sewing machine specialist.

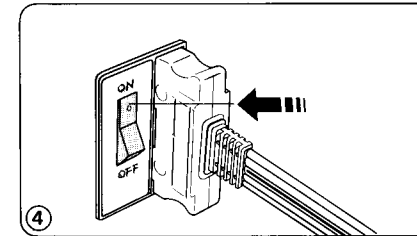
Connecting the Machine to the Power Supply



- ① Turn off the power switch.

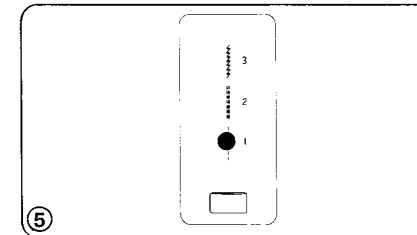


- ② Fit the non-reversible machine plug into the machine socket.
- ③ Plug the machine into your power supply.



- ④ Turn on the power switch.

* Be sure that the point of needle is over the needle plate.

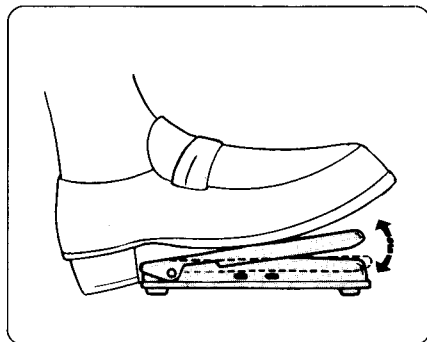


- ⑤ By turning the power switch on, the machine is automatically set for straight sewing, and the red signal light for pattern No. 1 comes on.

* Before plugging in your sewing machine, be sure that the voltage and number of cycles indicated at the right end of the machine, conform to your electrical power supply.

* During sewing, turn off the power switch when you are not actually using the machine.

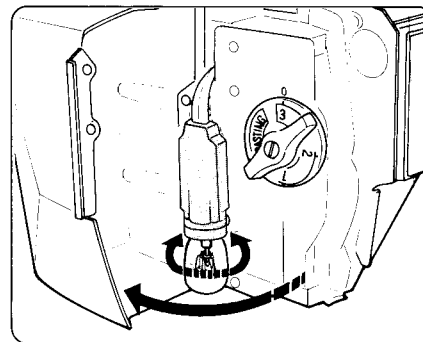
Controlling Sewing Speed



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

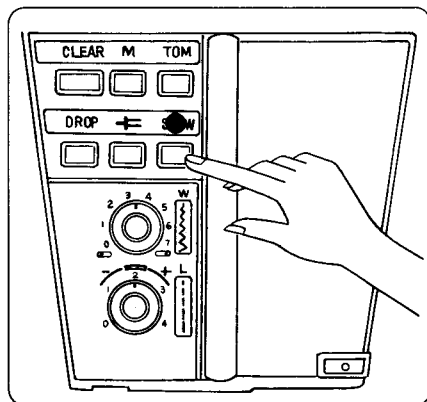
- * By releasing the controller, the machine stops running automatically with the needle in its highest position.
- * Before using the machine, practice controlling the speed without threading.

Sewing Light



The sewing light is located behind the face plate.

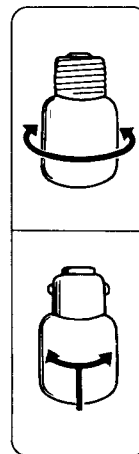
Using the Slow Speed Button



Touch the slow speed button and the red signal light (LED) will come on to indicate the slow speed mechanism is working.

The slow speed mechanism restricts the top speed of the machine, without reducing the needle penetration force. When you press the slow speed button a second time the red signal light will go out, indicating the machine has returned to the normal speed range.

Replacing Bulbs



- To remove Unscrew
- To replace Screw
- To remove Push and twist counterclockwise
- To replace Push and twist clockwise

* Before replacing a bulb, disconnect the machine from the power supply.

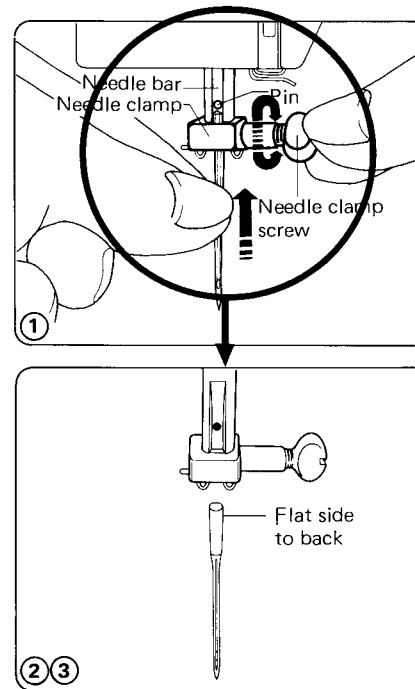
* Bulbs are available from sewing machine retailers. (Use a 15 Watt bulb)

Thread and Needle Chart

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

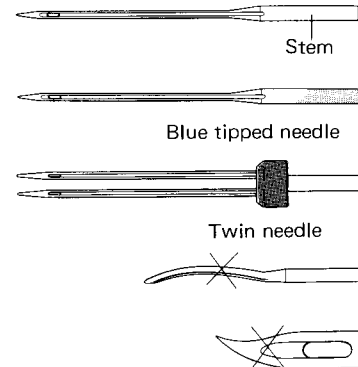
- In general, fine thread and needles are used for sewing thin fabrics, and thicker threads and needles are used for sewing heavy fabrics. Always test thread and needle size on a small piece of fabric which will be used for actual sewing.
- Use the same thread for needle and bobbin.
- When sewing stretch,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

Changing Needles



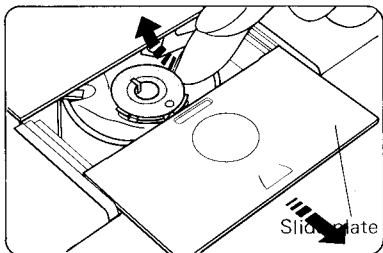
- ① Loosen the needle clamp screw by turning its top edge toward you. Remove the needle from the clamp.
- ② Insert the new needle into the needle clamp with its flat side away from you.
- ③ When inserting the needle into the clamp push it up as far as it will go and tighten the clamp screw firmly.

To Select a Suitable Needle



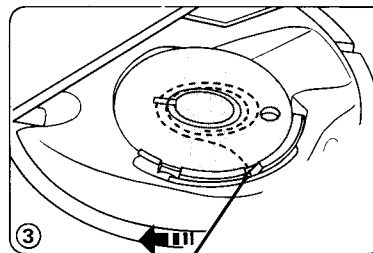
- * A number indicating the size of needle is marked on the stem. The higher the number, the thicker the needle.
- * A BLUE TIPPED needle is supplied with the machine.
- * When using a twin needle, use a black shank twin needle supplied with the machine.
- * Do not use any needle which is bent or blunted.

Removing the Bobbin

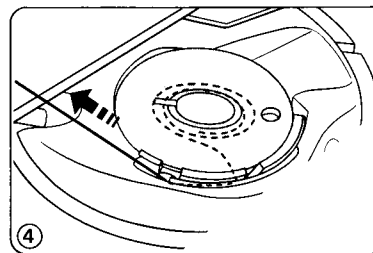


To Remove the Bobbin

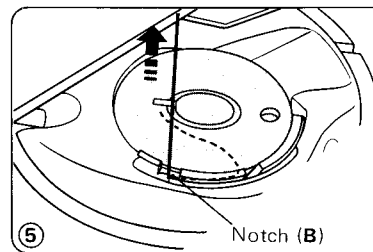
Open the slide plate and take out the bobbin as shown.



③ Draw the thread to the left sliding it outside the notch (A) and between the tension spring blade.

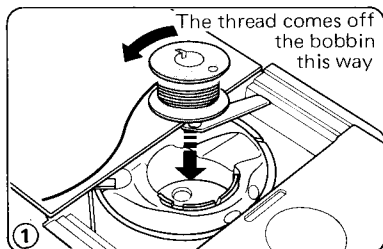


④⑤ Continue to draw lightly on the thread until the bobbin rotates to the left, and the thread slips into the notch (B).

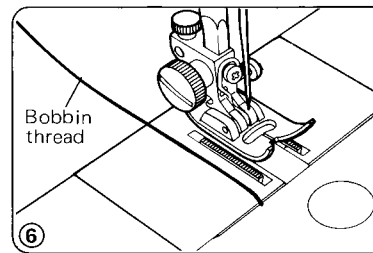
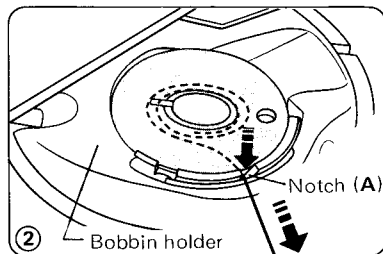


To Insert the Bobbin

① Place the bobbin in the bobbin holder with the thread running counter-clockwise.

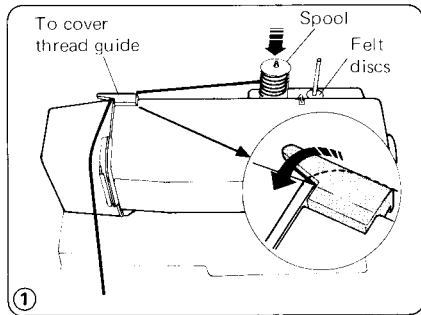


② Guide the thread into the notch (A) on the front side of the bobbin holder.

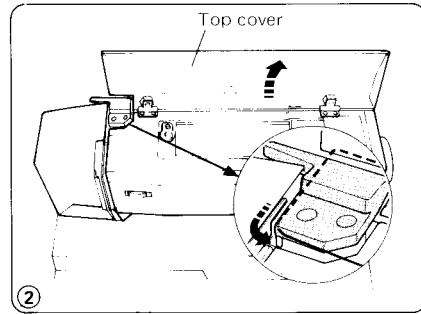


⑥ Draw about 15 cm (6") the thread away from you and close the slide plate.

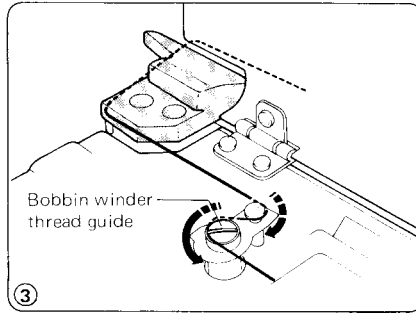
Winding Bobbin Thread



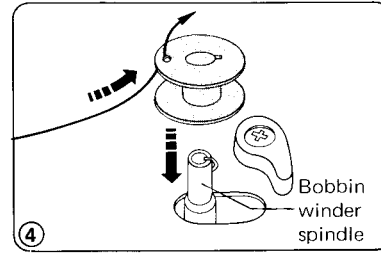
① Place the felt discs on the spool pins. Then put a spool onto one of the pins. Pull the thread from the spool, and pass it through the top cover thread guide.



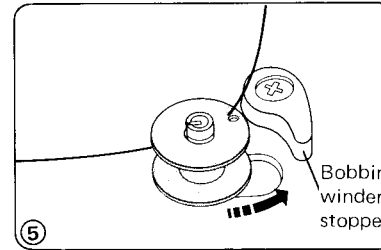
② Open the top cover and pass the thread under the thread guide.



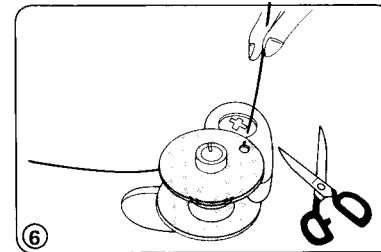
③ Pass the thread around the bobbin winder thread guide so the thread forms the shape of the letter "Z".



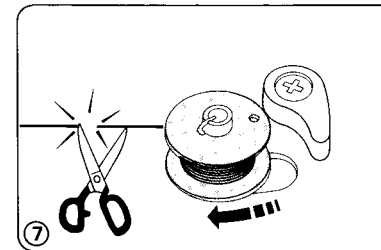
④ Pass the thread through the hole in the bobbin, threading from the inside to the outside.



⑤ Put the bobbin on the bobbin winder spindle, and push it to the right.

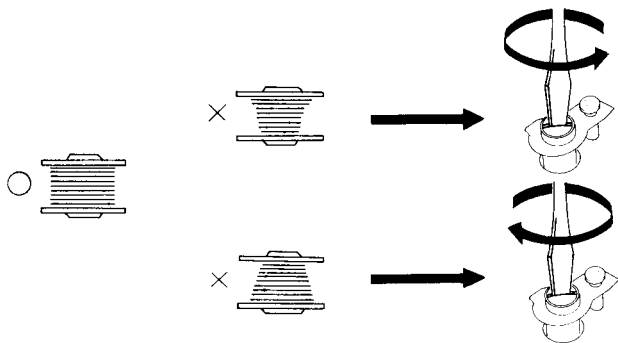


⑥ With the free end of the thread held in your hand, press the speed controller. Stop the bobbin winder when it has made a few turns, and cut the thread close to the hole in the bobbin.



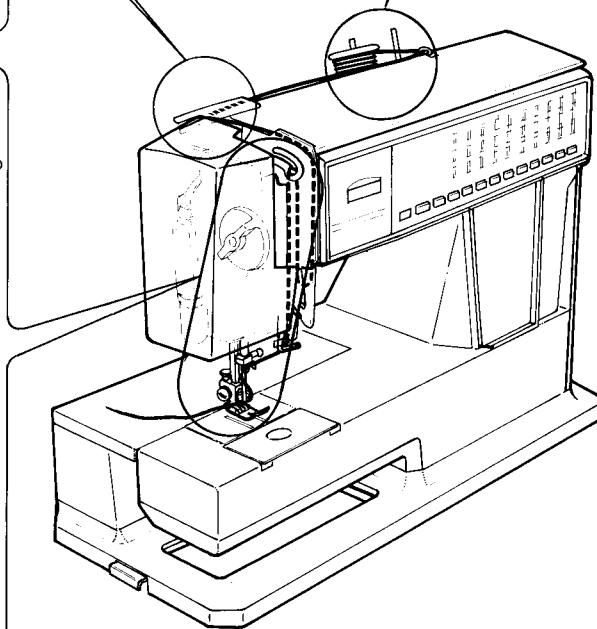
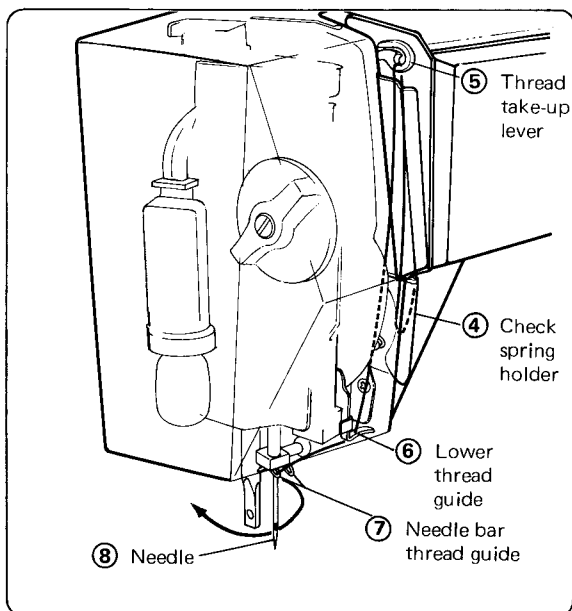
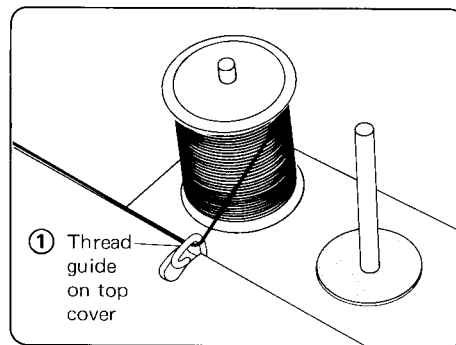
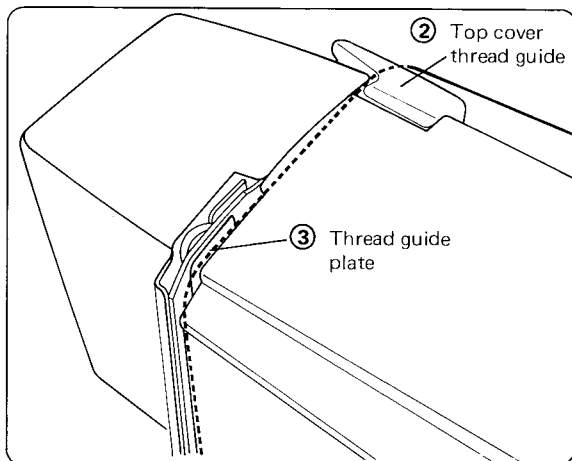
⑦ When the bobbin is fully wound, it will stop automatically. Return the bobbin winder to its original position by moving the spindle to the left, and cut the thread as shown.

* If the thread is not properly wound on the bobbin



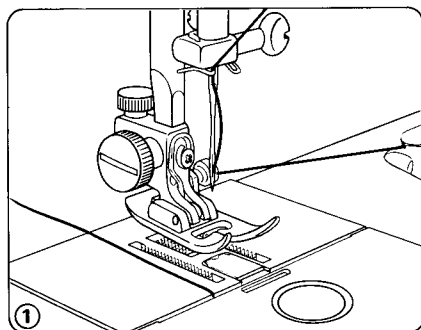
* Stop the machine before moving the bobbin winder spindle.

Threading the Machine

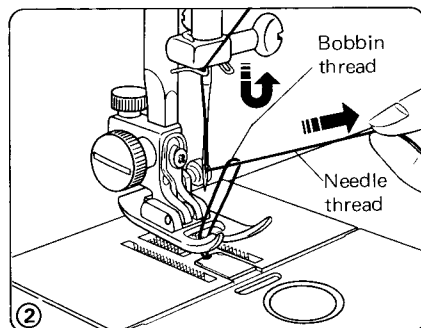


- ① Raise the presser foot and turn the balance wheel toward you until the take-up lever is at its highest position. Take the thread from the spool and slide into the thread guide on the right hand side of the top cover.
- ② Pass the thread through the top cover thread guide at the left side.
- ③ Draw the thread along the thread guide plate.
- ④ Then down around the check spring holder.
- ⑤ Draw the thread from right to left over the take-up lever
- ⑥ And down through the lower thread guide.
- ⑦⑧ Slide the thread behind the needle bar thread guide and through the needle eye.

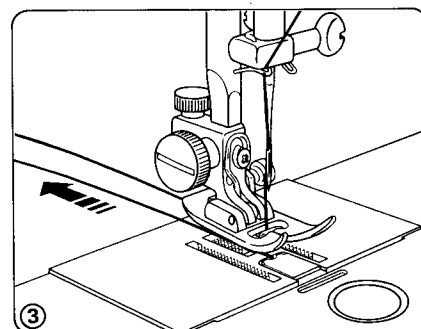
Drawing up Bobbin Thread



- ① Hold the needle thread lightly with your left hand.

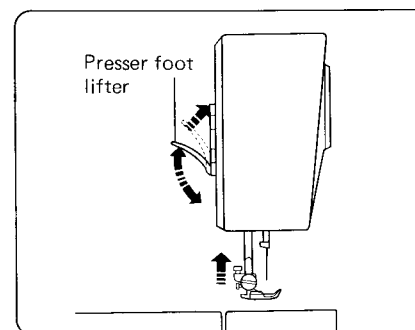


- ② Turn the balance wheel slowly towards you with your right hand until the needle goes down and continue turning balance wheel until the take-up lever is at its highest position. Lightly draw up the needle thread forming a loop with the bobbin thread.



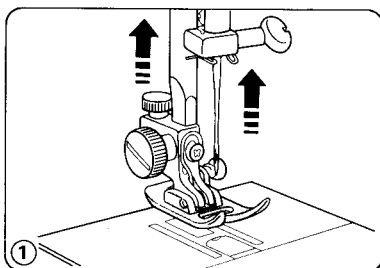
- ③ Pull 15 cm (6") of both threads back and under the presser foot.

Raising or Lowering the Presser Foot



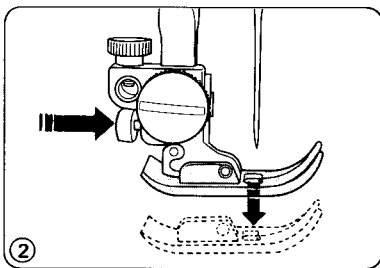
By raising or lowering the presser foot lifter, the presser foot goes up and down respectively. For additional clearance, the presser foot lifter can be raised higher to sew on heavy fabrics.

Removing the Presser Foot



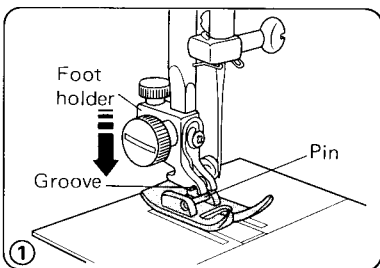
To Remove :

- 1 To remove the presser foot, turn the balance wheel towards you and raise the needle to its highest position.



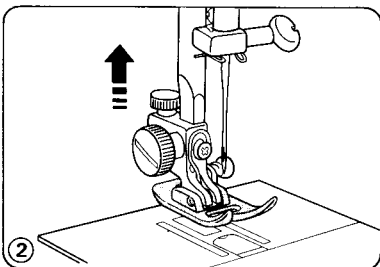
- 2 Lift the presser foot. By pressing the red button on the back of the foot holder, the presser foot will drop off.

* Do not force the presser foot to remove it.



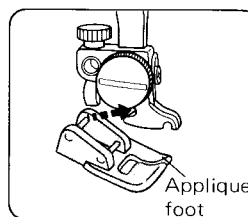
To Attach :

- 1 To attach the presser foot, place the presser foot so that the pin on the foot lies just under the groove of the foot holder. Lower the presser foot lifter. When attaching the presser foot, the pressure dial should always be at position "3". (See page 15)

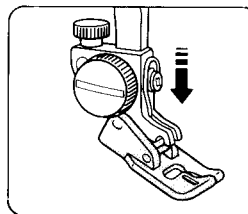


- 2 When the presser foot lifter is raised you'll find that the presser foot is locked in place.

Attaching an Applique or Zipper Foot

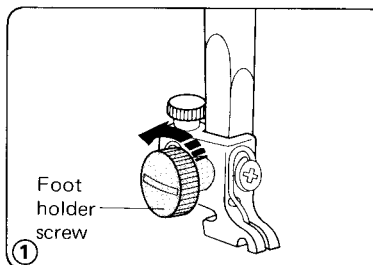


- 1 Fit the pin located at the rear of the presser foot into the groove at the rear of the foot holder.



- 2 Place the presser foot under the foot holder so that the pin at the front of the presser foot comes directly below the groove of the foot holder. Lower the presser foot lifter.

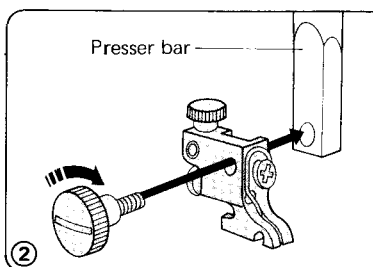
Removing the Foot Holder



It is not necessary to remove the foot holder unless you use optional attachments like the alphabet, spiral and flower stitches, or to allow clearance when you clean the bobbin holder and feed dog.

To Remove :

Unscrew the foot holder screw by turning it counter-clockwise with a screwdriver.

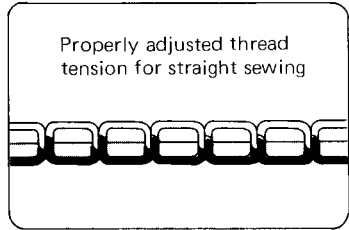


To Attach :

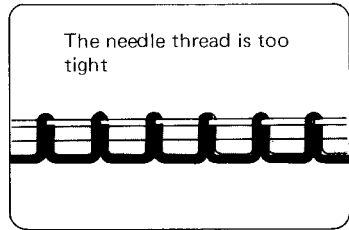
Align the hole in the foot holder with the threaded hole in the presser bar, and fit the foot holder screw into the hole. Tighten the screw by turning it clockwise.

Adjusting Thread Tension

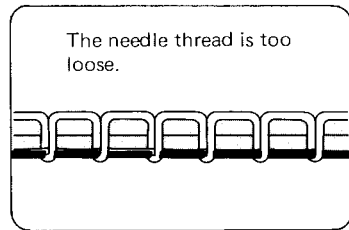
Thread tension may be adjusted if necessary by tightening or loosening the thread tension dial. Normal sewing tension is 3 to 6.



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

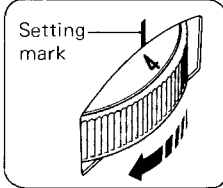


The bobbin thread appears on the upper surface of the fabrics.

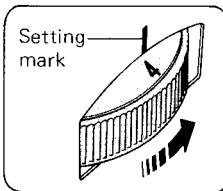


The needle thread appears on the underside of the fabrics.

Dial Setting of Needle Thread Tension



Loosen the needle thread tension by moving the dial to the left (lower number).

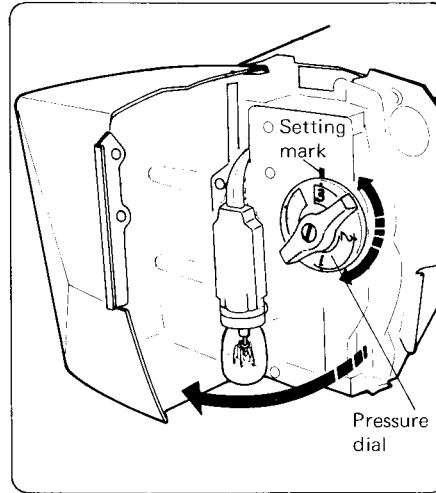


Tighten the needle thread tension by moving the dial to the right (higher number).

* There are many reasons for having to reset your tension. The best tension for one fabric may not be correct for another. The required tension depends upon the stiffness of fabric, thickness of the fabric, numbers of layers of fabric being sewn, as well as the type of stitch you are making.

* It is best to test the stitching on a scrap of the fabric you are using before starting to make a garment.

Operation of the Pressure Dial

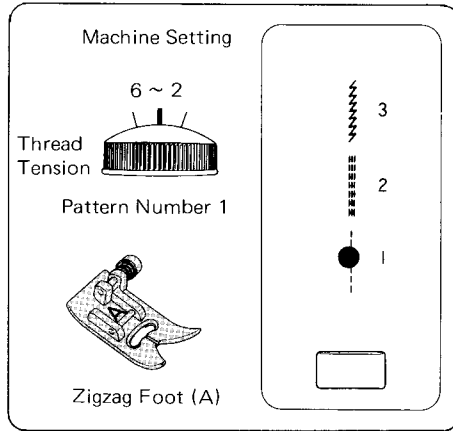


The pressure dial should normally be set at 3, except for the following:

- § Set the dial at 2 for applique.
- § Set the dial at 1 for sewing delicate synthetic fabrics, and knitted fabrics which tend to stretch out of shape.
- § Set the dial at "DARNING" for darning and mending.
- § Set the dial at "BASTING" for one-stitch basting.

* When the dial has been turned to a position other than 3, it must always be reset to 3 for normal sewing.

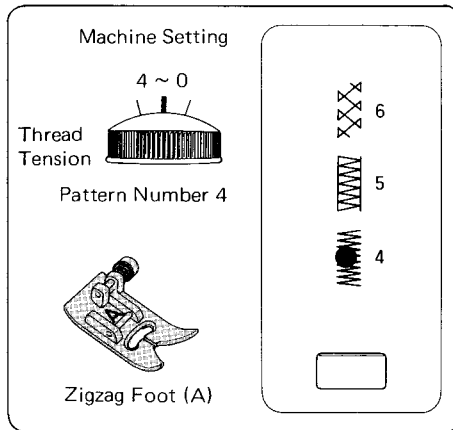
Straight Stitching



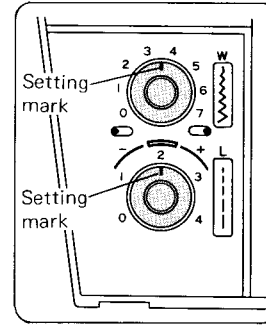
When the machine is turned on, it is programmed automatically for straight sewing. To change back from a pattern stitch to straight sewing, press the pattern selector button for straight sewing.

When the machine is set for straight sewing, the needle hole automatically closes to reduce puckering and skipped stitches. Should the needle hole not close automatically, turn the balance wheel with your hand to raise the needle.

Zigzag Stitching

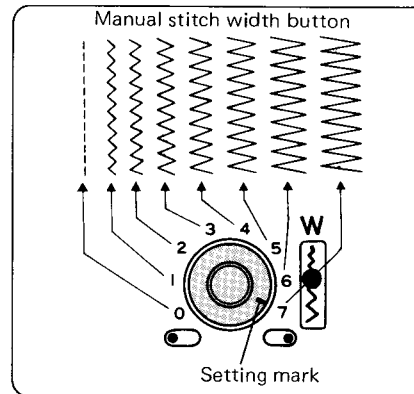
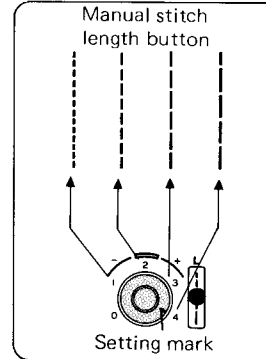


To Activate the Manual Stitch Length Button and the Manual Stitch Width Button




It is seldom necessary to adjust the stitch length and the stitch width since it is automatically adjusted. To accommodate different fabric characteristics or achieve a desired effect, you can change programmed settings.

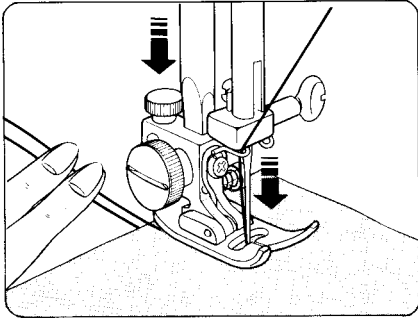
- 1 Turn the manual stitch length button and/or the manual stitch width button to the desired setting then push the button. The red signal light indicates that the setting is programmed.
- 2 By pushing the button again, the stitch length and/or the stitch width will return to the automatic setting, and the light will go out.



* When a different pattern selector button is pushed, manual settings will clear automatically.

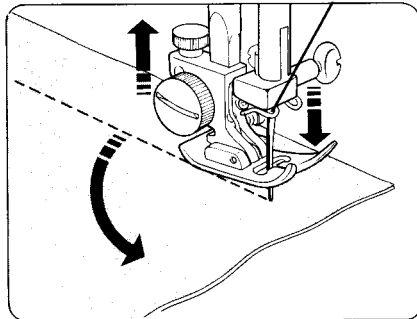
* The  mark shows the range of the stitch length adjustment permissible for buttonhole stitches.

Starting Sewing



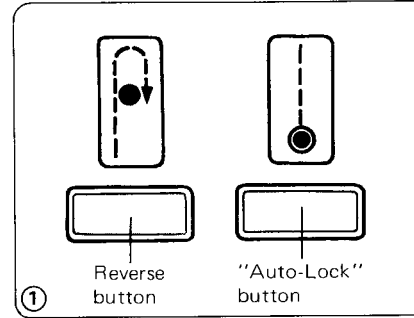
- ① Be sure both the threads are drawn back under the presser foot.
- ② While holding the threads with your left hand, turn the balance wheel toward you to bring the needle into the fabric where you wish to start sewing.
- ③ Lower the presser foot, and press the speed controller gently, then start sewing slowly.

Changing Sewing Directions



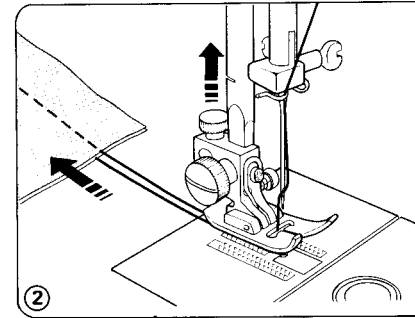
- ① Stop the machine, and the needle will automatically stop in the "UP" position.
- ② Turn the balance wheel toward you to bring the needle down into the fabric.
- ③ Raise the presser foot.
- ④ Pivot the fabric around the needle to change direction as desired.

Fastening Seams or Locking Threads

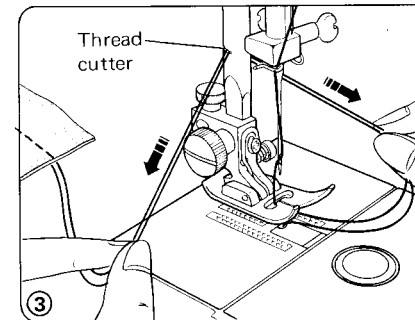


- ① For fastening the ends of seams, press the reverse button and sew several reverse stitches or ... You can press the "Auto-Lock" button. The machine will automatically knot the threads. The needle will move to the "UP" position and the machine will stop sewing.

* When sewing a reverse stitch or locking stitch stop the machine, press the button and sew.

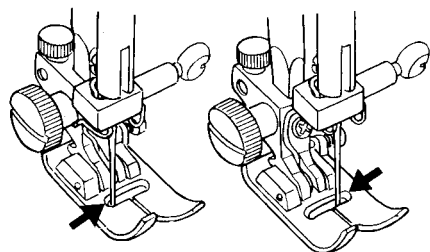
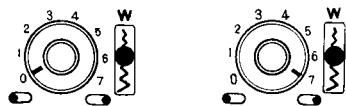


- ② To remove the fabric, raise the presser foot and draw the fabric out to the rear.



- ③ Sever threads on thread cutter at the rear of presser bar or with a pair of scissors, leaving about 15cm (6") of thread from the needle eye.

Changing Needle Position for Top Stitching



Left needle position

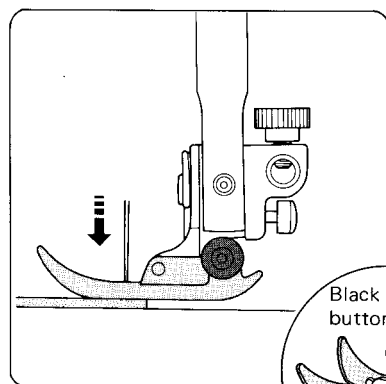
Right needle position

The needle position can be moved to the right or left for accurate top stitching using a straight stitch (Pattern Number 1) or a triple stretch stitch (Pattern Number 2).

- ① Place the edge of the foot along the edge of the fabric.
- ② Turn the manual stitch width button to the desired position and push the button.

A right needle position will be useful when sewing narrow folded edges.

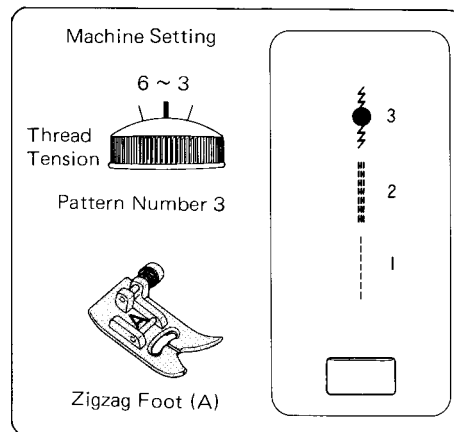
Straight Stitching on Heavy Fabrics



Black button

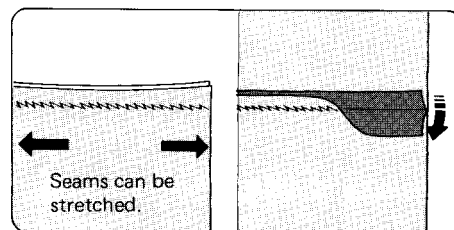
- ① Lower the needle into the fabric at the point where you wish to start sewing. Press the small black button on the zigzag foot with your right hand to "lock" the presser foot to the fabric.
- ② Lower the presser foot with your left hand, keeping pressure on the black button with your right hand.
- ③ Release the black button and start sewing.

Outline Stretch Stitch



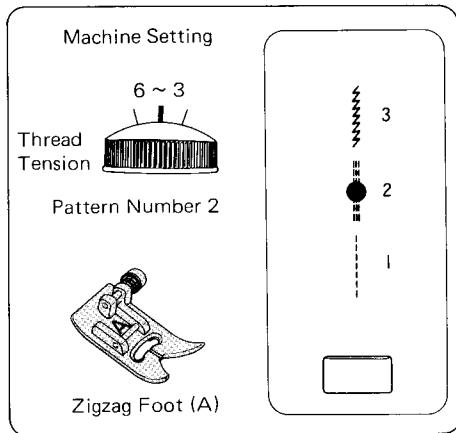
Seams have elasticity with this type of stitch and they can be pressed open. The stitch can be used on light weight knits such as jersey and tricot, double knits and fabrics cut on the bias.

* When sewing light weight fabrics, set the pressure dial at "1" or "2", and use a BLUE TIPPED needle.



Seams can be stretched.

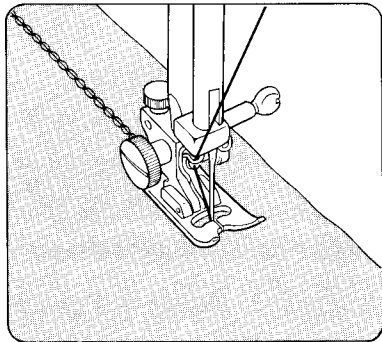
Triple Stretch Stitch



In this type of sewing, the fabric moves backwards and forwards for extra strong seams that stretch.

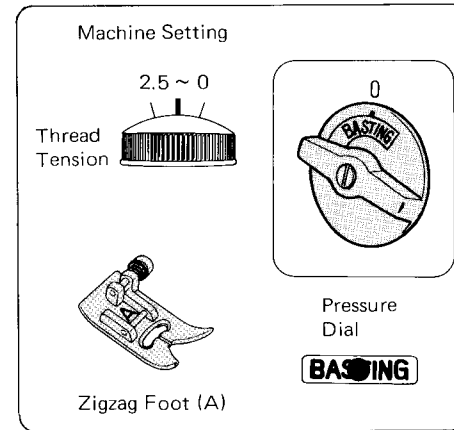
Use with medium to heavy weight knitted and woven fabrics.

The stitch can also be used for top stitching.



* When the machine is set for triple stretch stitching, the needle hole closes to prevent puckering.

Basting

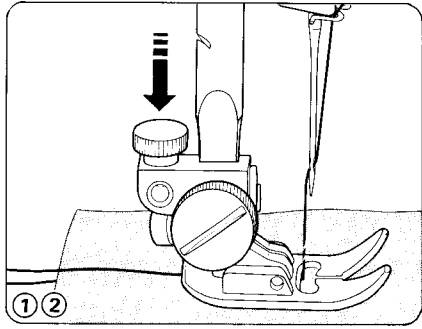


When the machine is set for basting, the needle hole closes. If the needle hole does not close, raise the needle by turning the balance wheel with your hand.

* When the pressure dial is set to "BASTING", no other patterns can be selected.

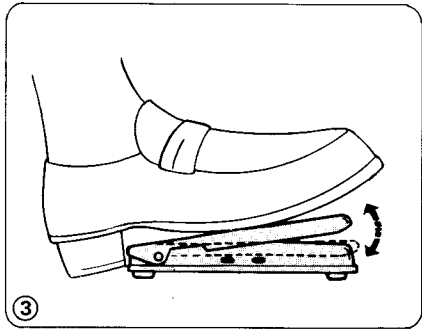
* When basting is completed, return the pressure dial to "3".

Turn to Next Page

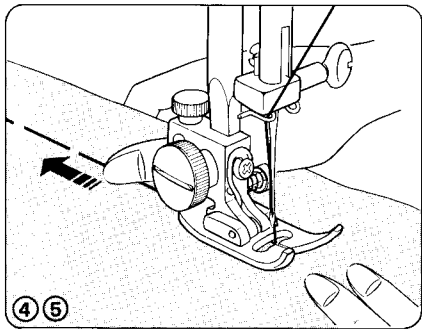


① Draw the needle and bobbin threads away from you and lower the presser foot.

② Hold the fabric taut.



③ Press all the way down on the speed controller. Then lift your foot after the machine has made one stitch and stopped automatically.

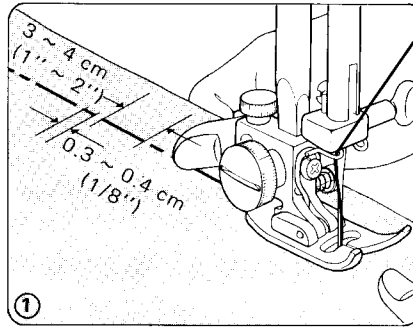


④ Hold the fabric close to the presser foot and slide it away from you. Repeat the same procedure.

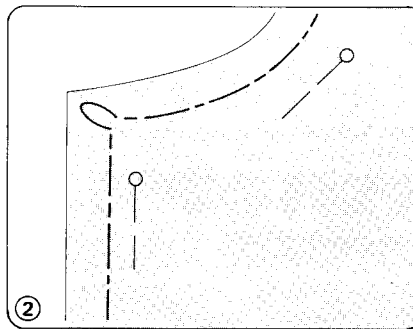
⑤ To remove the fabric, raise the presser foot and draw the fabric and threads out to the rear holding them together.

* This stitch is unsuitable for fabrics that will show needle marks.

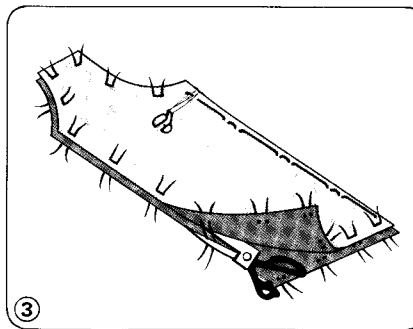
Tailor Tacking



① Sew two short stitches 0.3 cm (1/8'') apart, then one long stitch 3 to 4 cm (1'' to 2'') in length. Stitch slowly, supporting the fabric in front and back of the presser foot.



② When changing sewing direction, make two short stitches, and draw loose threads at corners.

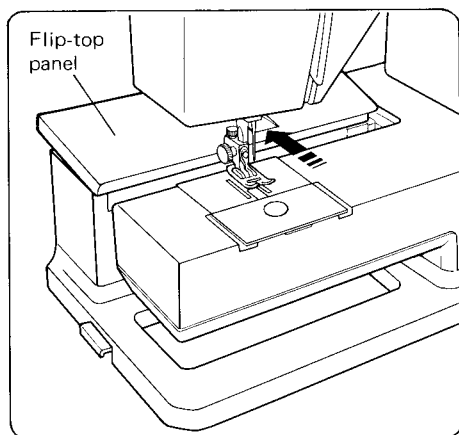


③ Cut the long stitches on both sides of the fabric. Also cut the thread in between the two fabrics after opening them slightly. Cut all the threads evenly in lengths of about 0.5 cm (1/4''), and press them flat.

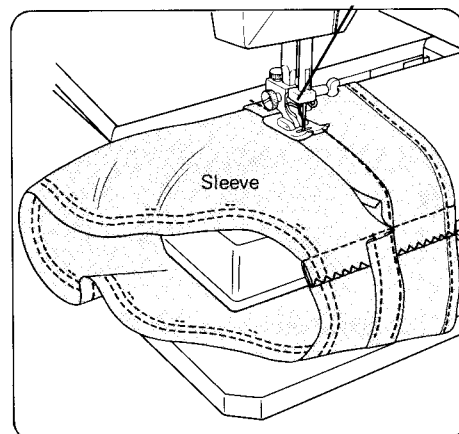
* Do not use any fabrics which will show needle marks.

* Do not pull the fabric while stitching, which may bend the needle, causing it to break.

Free Arm Sewing



Slide the flip-top panel backwards for free arm sewing.



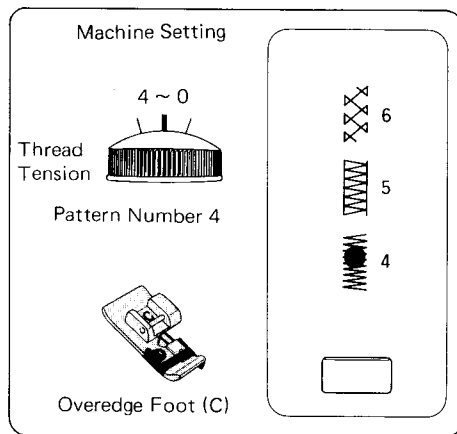
Use the free arm for sewing sleeves, cuffs, children's clothes, etc., by placing them around the free arm.

Applications of Free Arm Sewing



Overcasting and Overedging Stitches

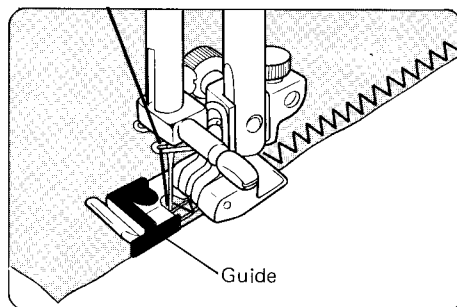
These stitches are used to prevent fabrics from fraying at raw edges, particularly at shoulders, sleeves, armholes, front or back facings, and inseams of trousers. There are several types; zigzag stitch, overedging stitch, tricot stitch and knit stitch.



1. Zigzag Stitch

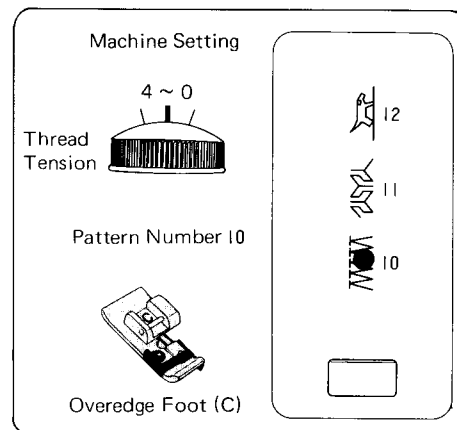
This type of stitch is used on the seam allowance to prevent fabrics from fraying at raw edges.

It can also be used to finish a hem edge.



Place the edge of fabric against the guide of the overedge foot.

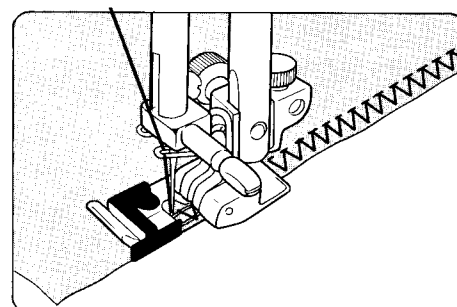
* For sewing stretch fabrics, set the pressure dial at "1" or "2", and use a BLUE TIPPED needle.



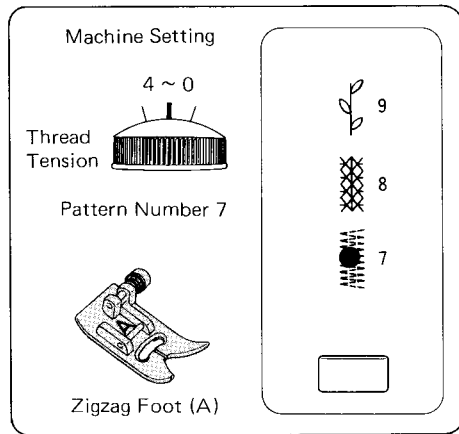
2. Overedging Stitch

This type of stitch is suitable for overedging and seaming loosely woven fabrics and light weight stretch fabrics.

Both overedging and basic straight sewing are done simultaneously.



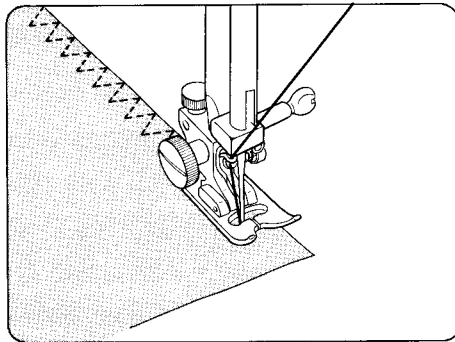
* When sewing stretch fabrics, set the pressure dial at "1" or "2", and use a BLUE TIPPED needle.



3. Tricot Stitch

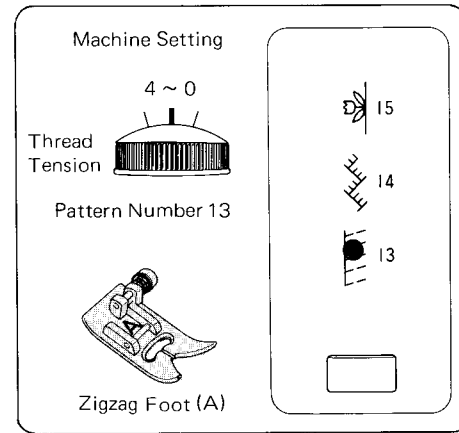
The tricot stitch is used to finish seam allowance on synthetics and other fabrics that tend to pucker.

The stitch is excellent for darning and mending tears in fabric.



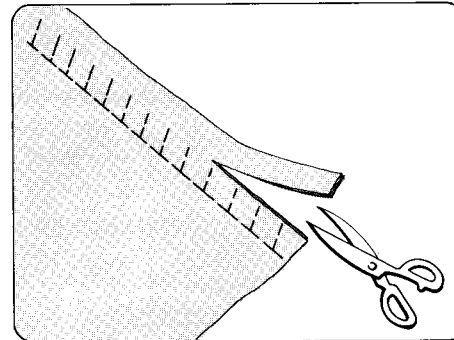
Place the fabric under the presser foot so that the edge will be slightly inside the right hand side of the presser foot. Guide the work so the right hand stitches fall at the edge of the fabric.

* For sewing stretch fabrics, set the pressure dial at "1" or "2", and use a BLUE TIPPED needle.



4. Knit Stitch

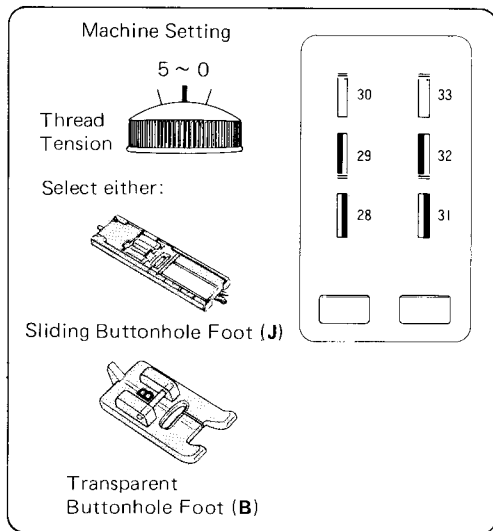
With this type of sewing, overedging and seaming are done simultaneously. It is suitable for sewing medium to heavy weight stretch fabrics; sleeve and neckline seams in both knitted and woven fabrics.



Sew the seam leaving a seam allowance, which should be cut off after seam is completed. Trim close to stitching and press seam to one side.

* When sewing stretch fabric, set the pressure dial at "1" or "2", and use a BLUE TIPPED needle.

Buttonhole Stitching



Your machine offers you two types of buttonholes—standard or shirt-type. Always make a test buttonhole duplicating the number of thicknesses of fabric and interfacing if appropriate, to determine which buttonhole best suits your garment.

* To attach the sliding buttonhole foot, raise the presser foot lifter to the higher position (see page 13).

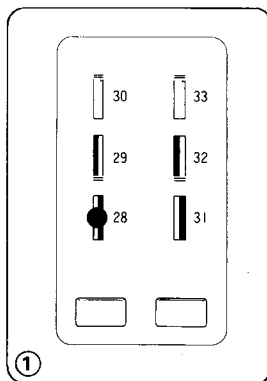
You have the choice of either buttonhole number 28 or 31.

Use number 28 to 30 for light and medium weight fabrics.

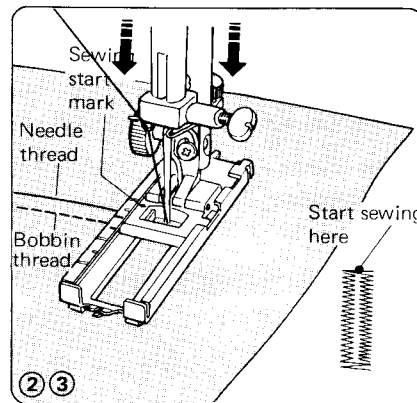
Use number 31 to 33 for heavier fabrics.

Use the sliding buttonhole foot (J) when you want to make several buttonholes of the exact same size.

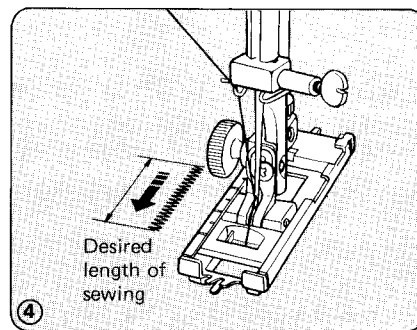
Use the transparent buttonhole foot (B) when you want to make individual buttonholes.



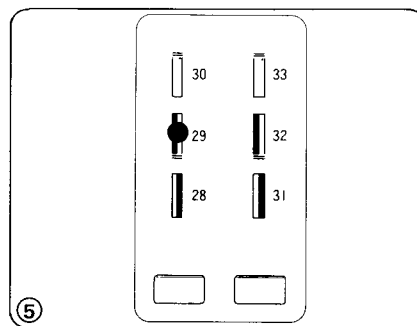
Multiple Buttonholes



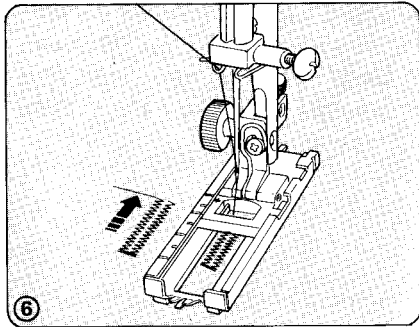
- ① Press button 28 or 31.
- ② Pass the needle thread through the opening in the buttonhole foot and draw needle and bobbin threads to the left side.
- ③ Place the fabric under the buttonhole foot and lower the needle into the fabric where the buttonhole is to begin. Lower the buttonhole foot.



- ④ Sew the desired length down the right side of the buttonhole, then stop the machine.



- ⑤ Press the same button again and the light will appear at number 29 or 32.

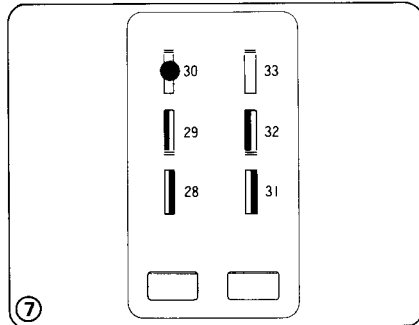
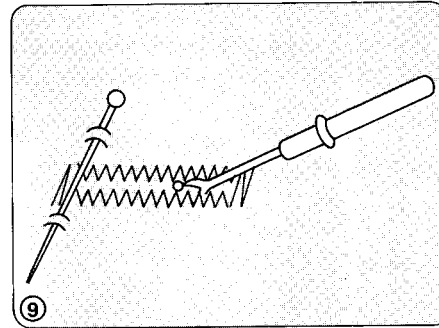


⑥ The machine will automatically bar tack and sew up the left side.

⑦ When you reach the starting point, stop the machine. Then press the button, 30 or 33.

⑧ The machine will make the final bar tack, sew four locking stitches and stop automatically.

⑨ Remove the fabric from the machine and cut the sewing threads. Insert a pin inside the bar tack, then cut the opening with a seam ripper. Take care not to cut the stitches.



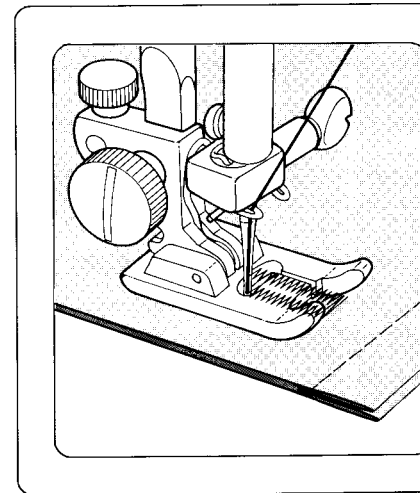
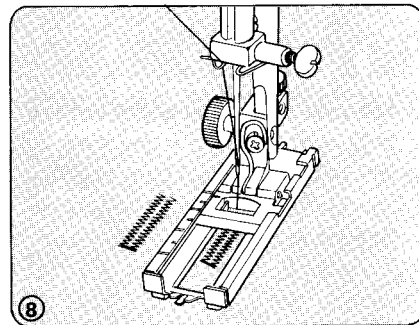
You have now programmed the buttonhole length. Every subsequent buttonhole will be exactly the same size. Simply move the fabric, lower the presser foot and push down on the foot control. **Do not** press any button.

* If you wish to reinforce the buttonhole, the buttonhole foot should not be raised. Just press down on the foot controller again.

* Set the pressure dial at "2" when making buttonholes on stretch fabrics. Use interfacing to prevent "stretching out of shape" during wear and laundry.

* If stitches on one side of the buttonhole may not appear even with the other side with some fabrics, make adjustments (see page 27).

* To accommodate different fabric characteristics or achieve a desired effect, you can change the programmed settings by activating manual stitch length button (see page 27).

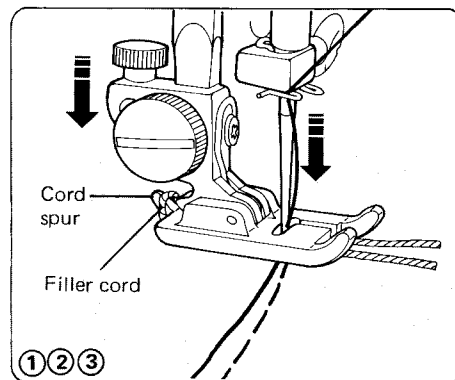
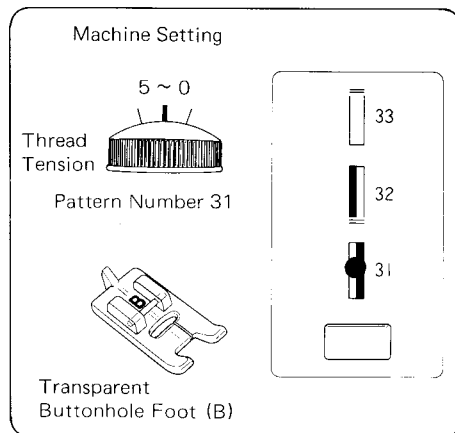


When you sew buttonhole stitches near the edge of folded material, sew towards the edge as shown.

Individual Buttonholes

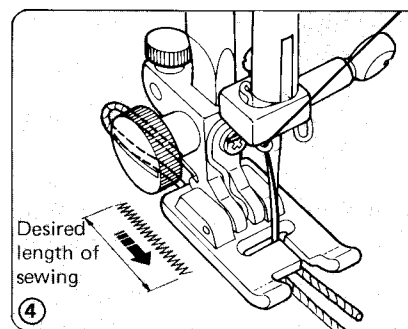
Use the transparent buttonhole foot (B) to make individual buttonholes. Follow steps ① through ⑨.

Corded Buttonhole

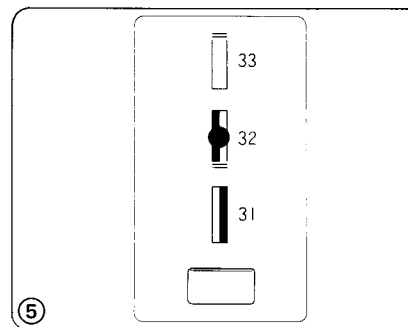


To sew:

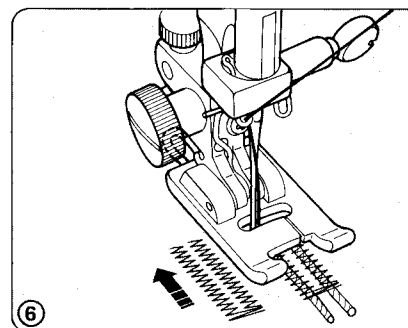
- ① Select pattern 31.
- ② Hook a filler cord on the cord spur located at the rear of the buttonhole foot, and pull the ends forward under the buttonhole foot.
- ③ Lower the needle into the garment where the buttonhole is to start, and lower the buttonhole foot.



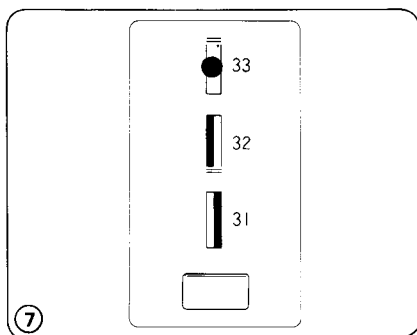
- ④ Stitch over the cord on the right hand side to the desired length while holding the cord ends parallel with your hand. Stop the machine.



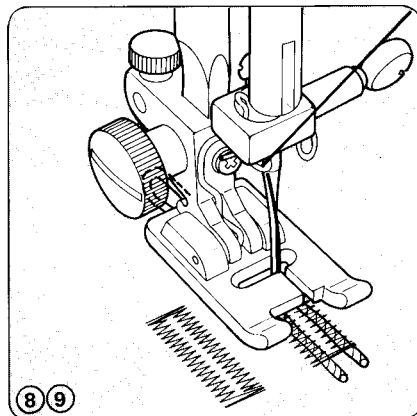
- ⑤ Select pattern 32.



- ⑥ Let the loop lay down on the fabric. The machine will make the bar tack at the end of the buttonhole, and stitch over the cord up the left hand side. Upon reaching the starting point of the buttonhole, stop the machine.

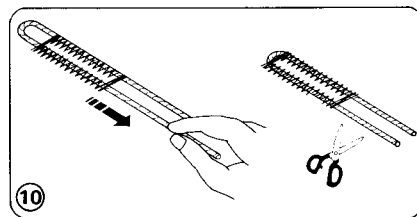


- ⑦ Select pattern 33.



- ⑧ The machine will bar tack the end of the buttonhole, sew four locking stitches and stop automatically.

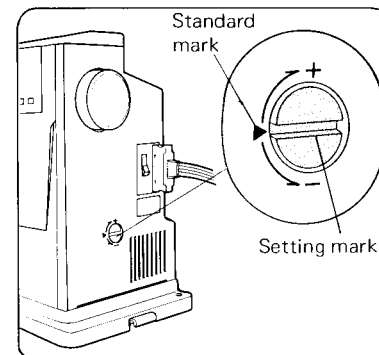
- ⑨ Raise the presser foot, remove the fabric from the machine, and cut off the sewing threads.



- ⑩ Pull the end of the filler cord on the left hand side to make the cord tight, and cut off the excess cord.

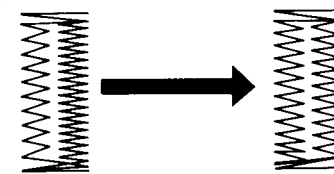
Adjustment of Buttonhole Stitch Density

With some fabrics, stitches on one side of the buttonhole may not appear even with the other side. If this happens, make the adjustments described below.



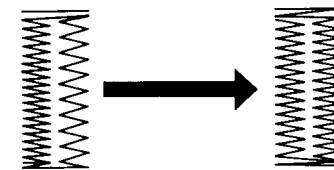
If the stitches on the left hand side are too far apart:

Turn the feed balance dial towards the "+" sign.

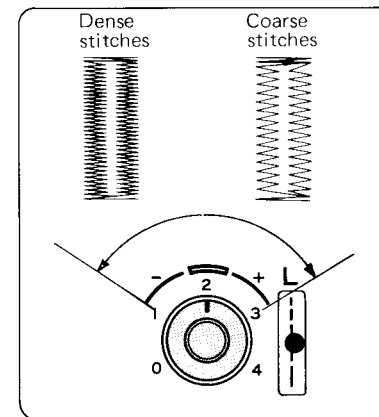


If the stitches on the right hand side are too far apart:

Turn the feed balance dial towards the "-" sign.



* After making adjustment described above, sew another test buttonhole to make sure the adjustment is correct. Remember to turn the feed balance dial to the standard mark indicated by "▶", when buttonholes are completed.

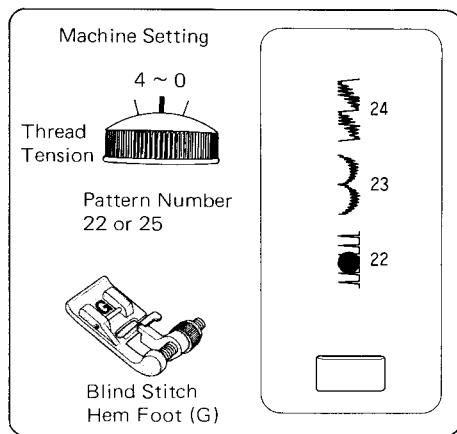


To Change the Stitch Length of Buttonholes

If you wish to change the stitch length from that of the automatic setting, follow the procedure below.

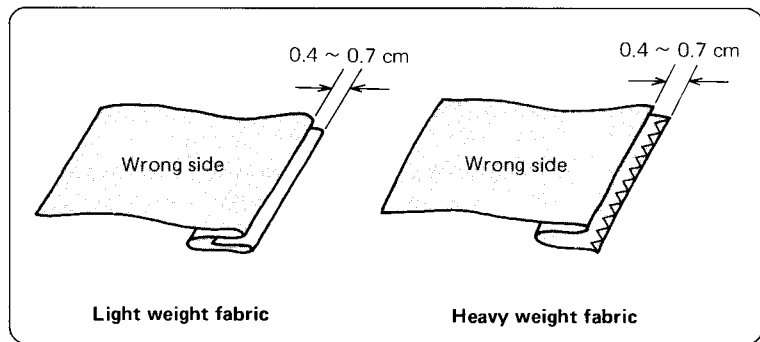
Adjustment can be made by turning the manual stitch length button within the range indicated by the "↔" mark. Press the button, making sure that the red signal light is on before sewing.

Blind Stitch Hemming

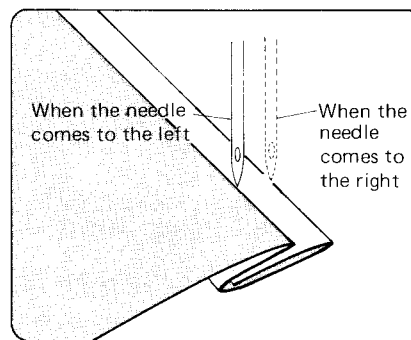


* When sewing stretch materials, select pattern 25.

(How to fold the fabric)

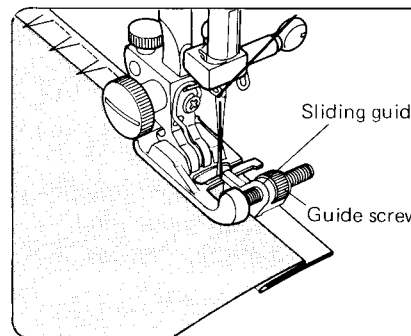


1. On heavy weight fabrics that ravel, the raw edge should be overcast first. On lightweight fabrics the raw edge can be turned under and pressed.
2. Fold up the hem the desired amount and pin in place.
3. Then fold the hem under the fabric as illustrated.

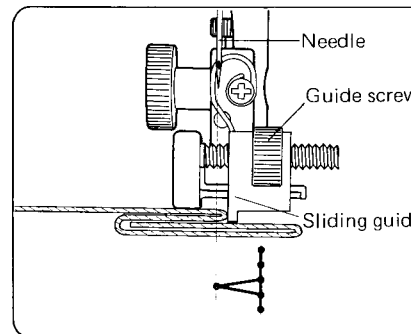


To sew:

- ① Position the fabric on the machine so that the needle just pierces the folded part of the fabric when the needle comes over to the extreme left side. Lower the presser foot.



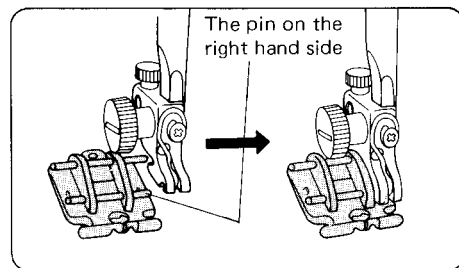
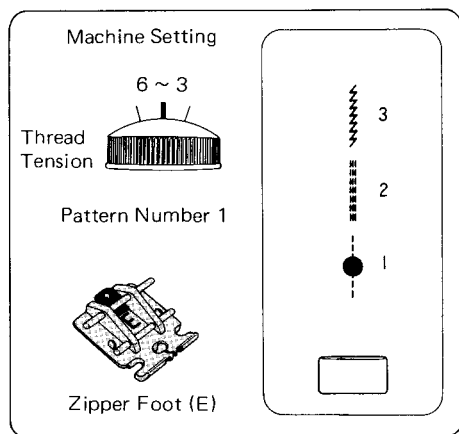
- ② Adjust the sliding guide to the folded edge by turning the guide screw, making sure the needle will not miss the fold when you sew.



* Feed the folded edge smoothly along the edge of the sliding guide.

* Always make a practice blind stitch on a scrap fabric you plan to use.

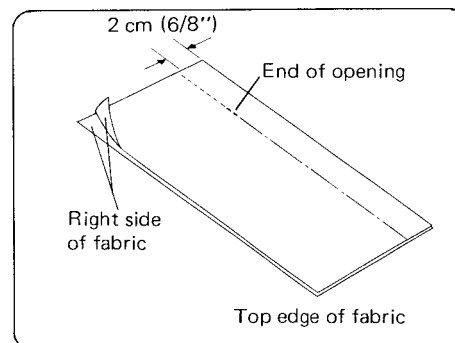
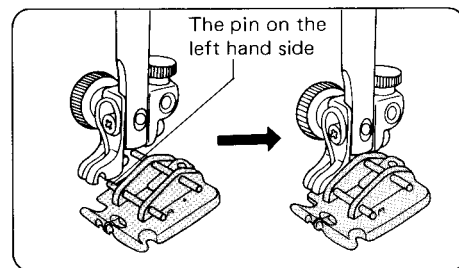
Zipper Application



To attach the zipper foot:

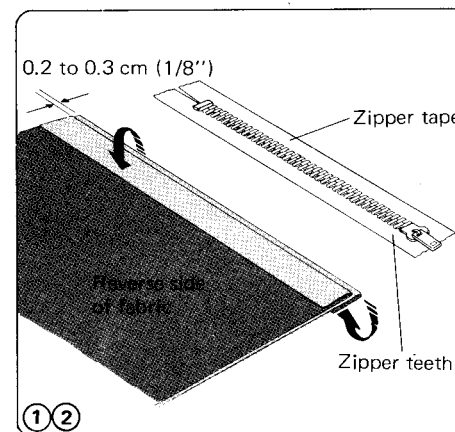
To sew the left side of the zipper, attach the zipper foot to the pin on the right hand side.

To sew the right side of the zipper, attach the zipper foot to the pin on the left hand side.



Fabric Preparation:

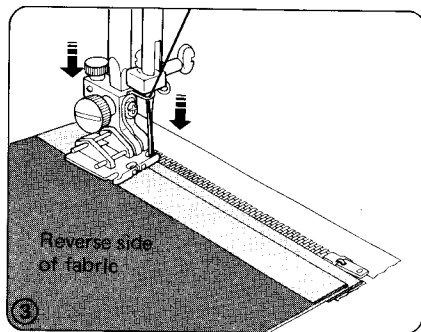
Place right sides of fabric together and sew to the end of the zipper opening. Reverse stitch to knot the stitches. Sew the zipper opening with a basting stitches.



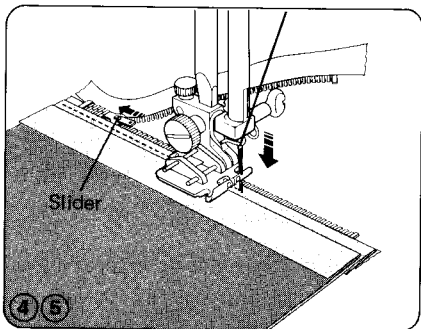
To Sew:

- ① Fold back the left seam allowance.
- ② Turn under the right seam allowance to form a 0.2 to 0.3 cm (1/8'') fold.

Place the zipper teeth next to 0.2 to 0.3 cm (1/8'') fold and pin in place.

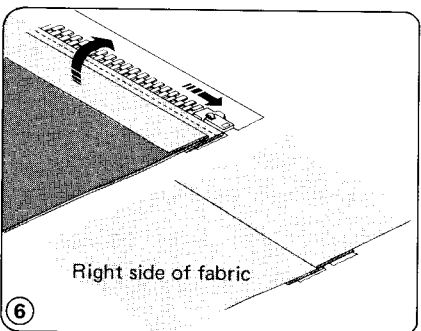


- ③ Attach the zipper foot with the pin on the right hand side. Lower the zipper foot.

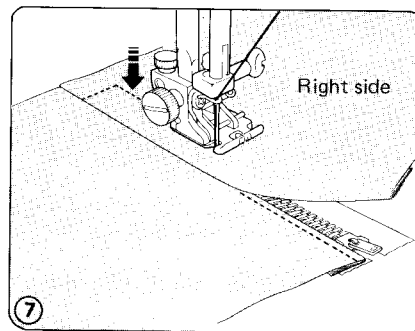


- ④ Sew through fold and zipper tape. Stop just before the zipper foot reaches the slider on the zipper tape.

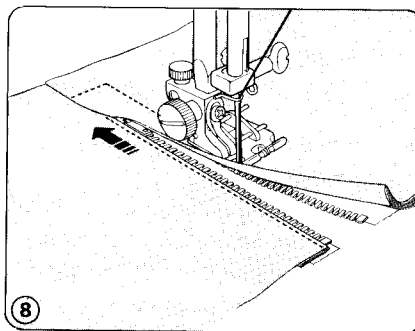
- ⑤ Turn the balance wheel by hand and lower the needle into the fabric. Raise the zipper foot and open the zipper. Lower the foot and stitch the remainder of the seam.



- ⑥ Close the zipper and spread the fabric flat with the right side facing up.

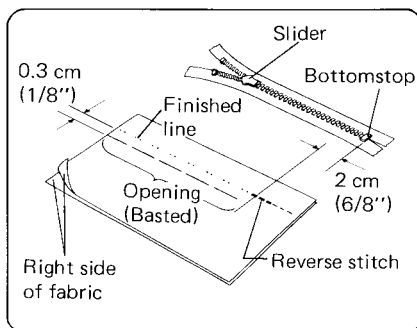


- ⑦ Move the zipper foot to the left pin. Guide the edge of the foot along the zipper teeth and stitch through garment and zipper tape. Stop about 5 cm (2") from the top of the zipper.



- ⑧ With the needle down in the fabric, raise the foot, remove the basting stitches and open the zipper. Then lower the foot and stitch the remainder of the seam making sure the fold is even.

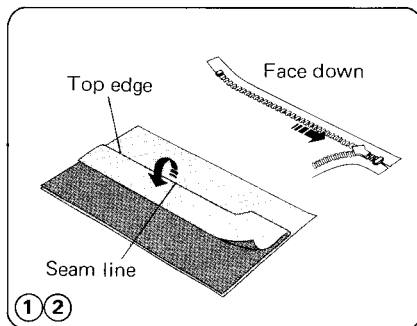
Hidden Zipper



Fabric Preparation:

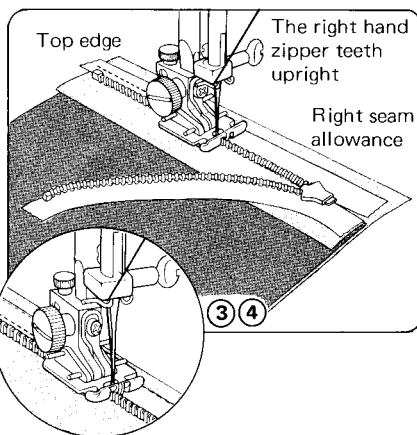
Place right sides of fabric together and sew to the end of the zipper opening. Reverse stitch to knot the threads. Sew the zipper opening with a basting stitch 0.3 cm (1/8'') from the finished line as illustrated.

Use a zipper about 2 cm (6/8'') longer than the opening.

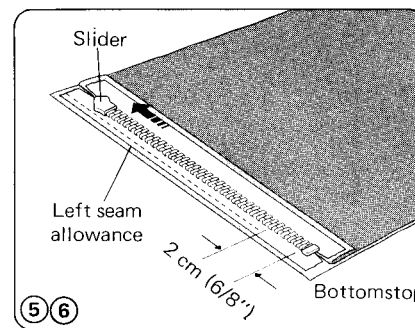


To Sew:

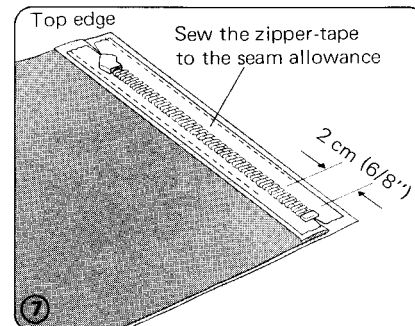
- 1 Fold back the seam allowance.
- 2 Open the zipper, turn face down, and place the right hand zipper teeth next to the seam line. The lower edge of the zipper should extend 2 cm (6/8'') below basted opening.



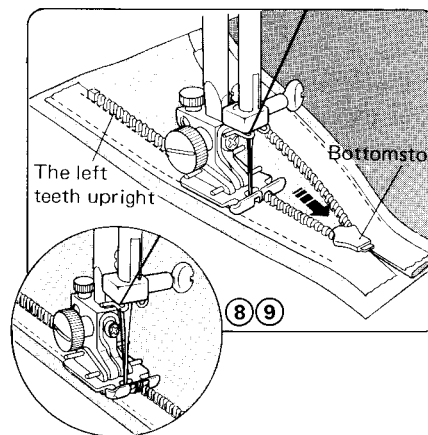
- 3 Attach the zipper foot at the center pin. Fit the zipper teeth upright under the left groove of the zipper foot.
- 4 Sew the zipper from the top edge to the end of the basted opening.



- 5 Remove the fabric and close the zipper.
- 6 Move the zipper foot to the right hand pin. Fold the garment under the zipper and stitch the zipper tape to the left seam allowance, ending 2 cm (6/8'') from the lower end of the basting.



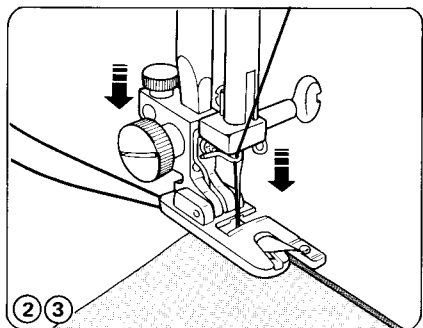
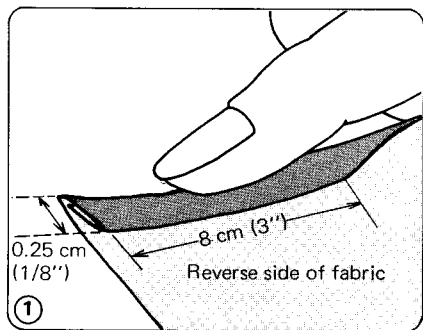
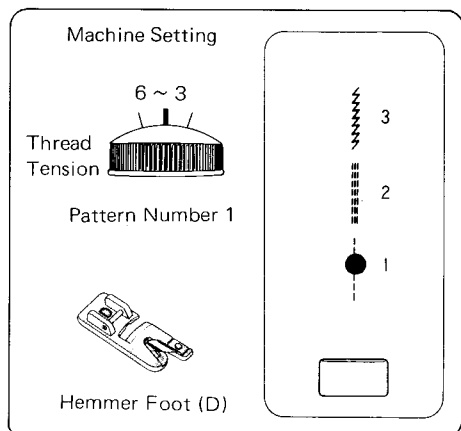
- 7 Move the zipper foot to the left pin. Fold the garment again under the zipper foot and stitch the zipper tape to the right seam allowance, ending 2 cm (6/8'') from the end of the bottom opening.



- 8 Move the zipper foot to the center pin. Remove the basting. Fold the garment under the zipper foot and open the zipper. Fit the left zipper teeth upright under the right hand groove of the foot.
- 9 Stitch the zipper ending 2 cm (6/8'') from the end of the bottom opening.

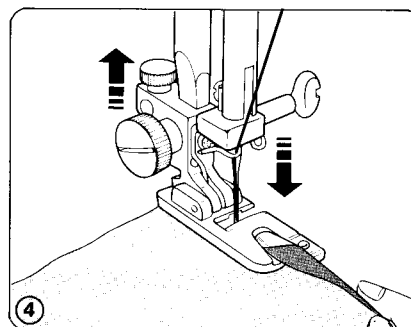
* Stitches can be locked at the end of each row of stitching by pushing the "Auto-Lock" button.

Rolled Hem

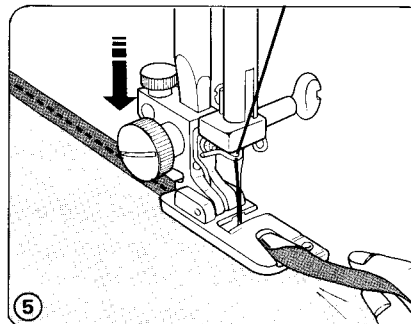


To Sew:

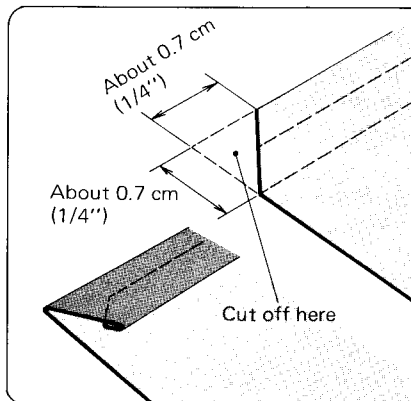
- ① Make a double 0.25 cm (1/8") fold approximately 8 cm (3") in length.
- ② Lower the needle into the fabric at the point where sewing is to begin, then lower the hemmer foot.
- ③ Sew 3 or 4 stitches while holding the needle and bobbin threads.



- ④ Lower the needle into the fabric and lift the hemmer foot. Insert the folded portion of the fabric into the curl of the hemmer foot.

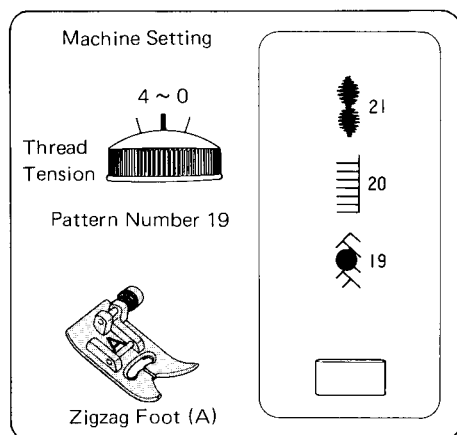


- ⑤ Lower the hemmer foot, then sew by lifting up the edge of the fabric to keep it feeding smoothly and evenly.

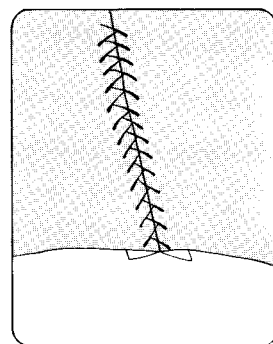


* Trim about 0.7 cm (1/4") from corners as illustrated, to reduce bulk.

Feather Stitch



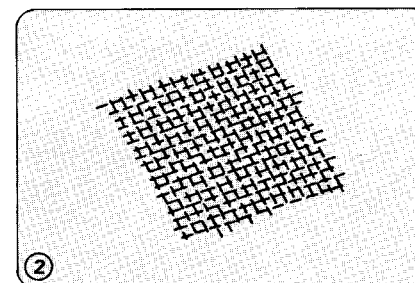
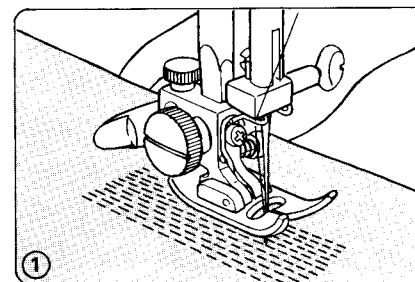
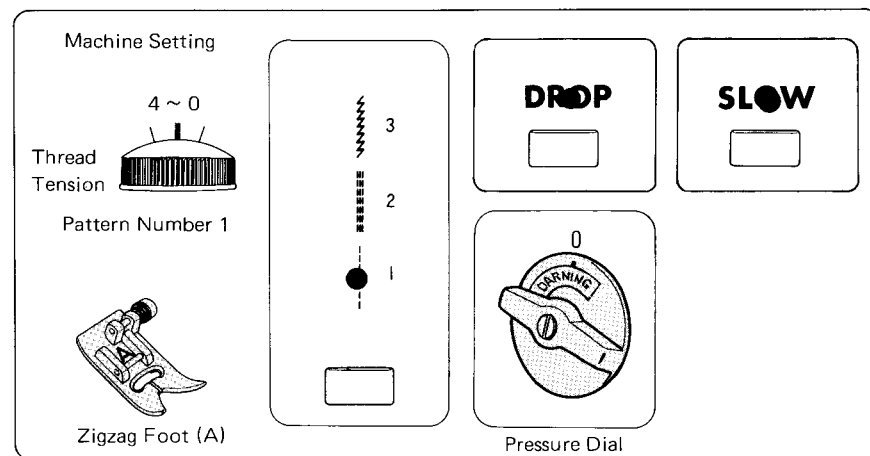
With this type of sewing, seams are elastic and fabrics can be joined firmly. Use the feather stitch to sew bathing suits, mend girdles and bras and as a decorative top stitch.



- ① Sew a regular seam using pattern number 2 or 3 if you're working with stretch fabrics.
- ② Set machine to feather stitch (pattern number 19) with the right side of the fabric facing up. Center the stitching over the seam line.

- * This stitch can also be used for lapped seams.
- * When sewing light weight stretch fabrics set the pressure dial at "1" or "2" and use a BLUE TIPPED needle.

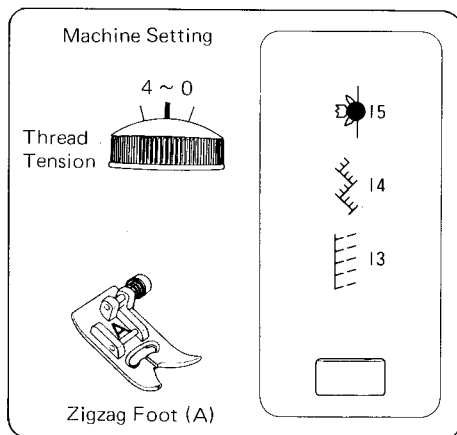
Darning



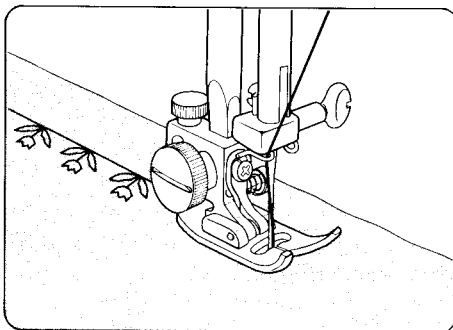
- ① Place a backing fabric underneath the area and lower the presser foot. Start stitching pulling the fabric gently away from you. Then guide the fabric forward and backward as you fill the area with parallel lines of stitching.
- ② Fill the area with crosswise lines of stitching, in case you need a additional strength.

- * Upon completion of sewing, press the button again to clear the "DROP FEED" and be sure to return the pressure dial to "3".

Automatic Pattern Sewing



* Select pattern 4 to 27.

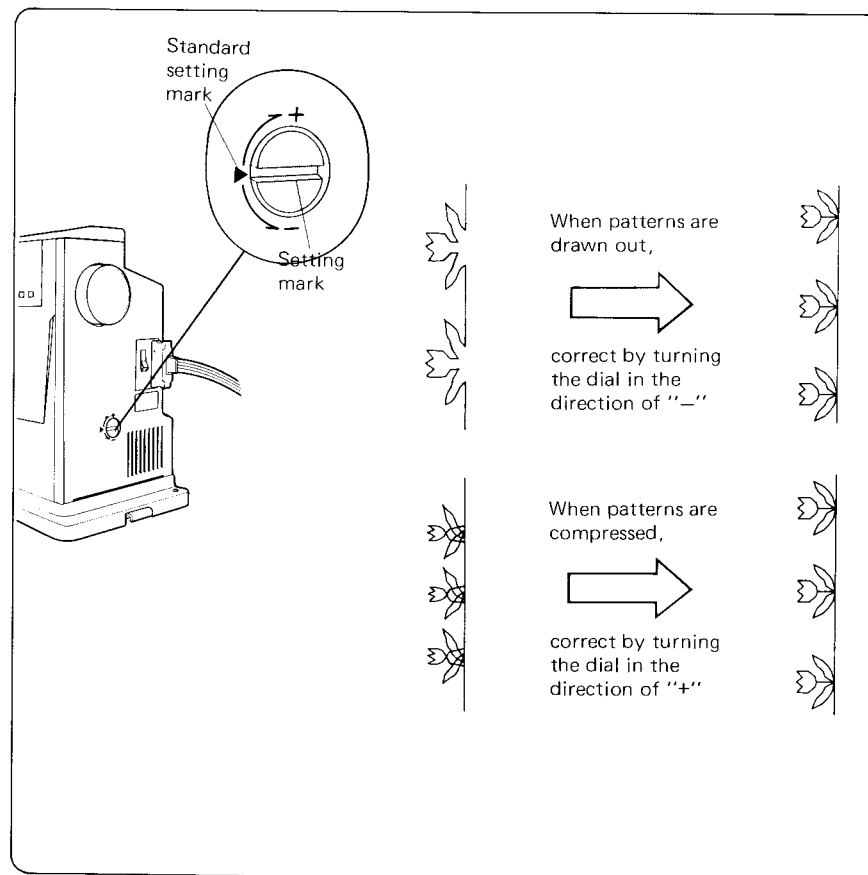


Your machine will produce most of your stitching requirements at automatic settings. Stitch length and width are automatically selected for each individual pattern in suitable sewing speed.

If you wish to alter the automatic setting to satisfy a desired effect on your fabric, varied patterns can be obtained by manually changing the length or width of stitches.

To Adjust Distorted Pattern

If patterns are uneven when sewing with a particular fabric, adjust them with the feed balance dial.

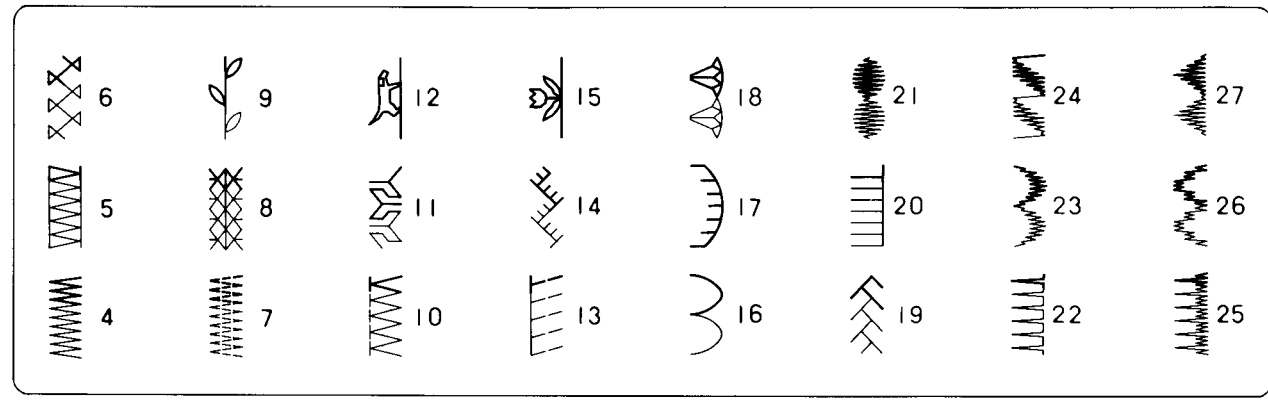


* After sewing with an altered dial setting, you must reset the dial to “▶”.

Programmed Sewing

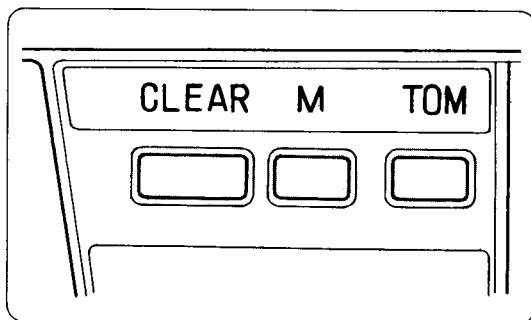
1. To Programme

The machine will memorize up to seven different pattern units.
It will stitch each pattern starting at the beginning of each unit.



* Each pattern unit is indicated by bold lines.

2. To Use Memory Button, Turn-Over Memory Button, "Auto-Lock" Stitch Button and "Clear" Button

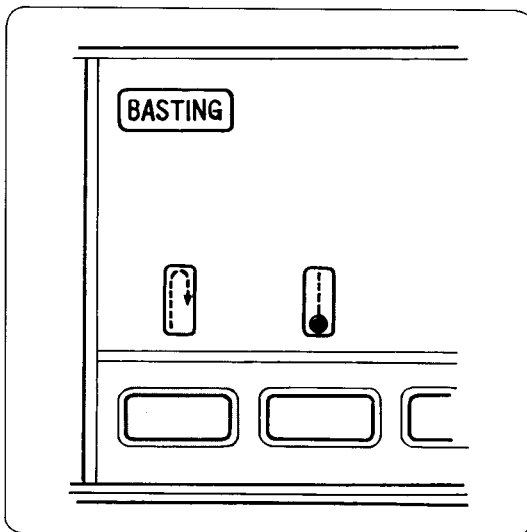


Memory Button:

- ① Press the button for the desired pattern then press the memory button "M". The machine will memorize that pattern.
 - ② Select another pattern and press the memory button. The machine has now memorized two patterns. You may select a total of seven patterns.
 - ③ If you press more than seven patterns, only the first seven will be memorized.
 - ④ You are now ready to sew. The machine will sew the patterns repeatedly until you clear the memory.
- * Once you start to sew a set of memorized patterns, do not touch any pattern selector button, otherwise the machine will clear the memory.

Turn-Over Memory Button:

- ① Press the button for the desired pattern then press the turn-over memory button "TOM". The machine will memorize a reverse or mirror image of that pattern.
- ② You can select seven turn-over memory patterns.
- ③ Memory and turn-over memory patterns can be combined in sequence of seven.



"Auto-Lock" Stitch Button:

Use the "Auto-Lock" stitch when you want to match stitches for turning corners, matching rows of patterns for turning corners, matching rows of patterns for borders, curved design, etc.

- ① Select a pattern, push the memory button, push the "Auto-Lock" button and push the memory button. The machine will automatically lock the threads after sewing one cycle and stop.
- ② When you push down on the speed controller again, the machine will sew another cycle and stop.
- ③ The machine will memorize a total of six patterns plus the "Auto-Lock" stitch.

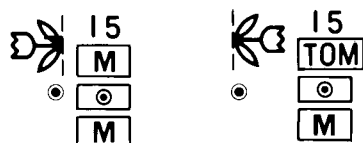
"Clear" Button:

Touch the clear button to cancel memorized patterns. When the machine is turned off the memory is cancelled.

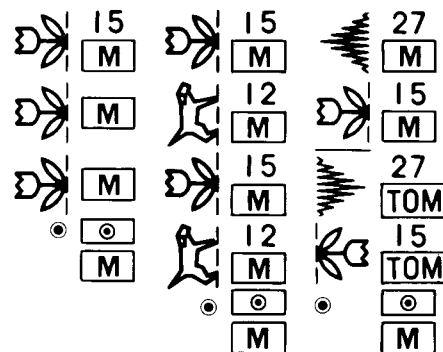
- * Once you start to sew a set of memorized patterns, you cannot add additional patterns. Push the clear button instead and re-programme.

3. Pattern Programming Chart

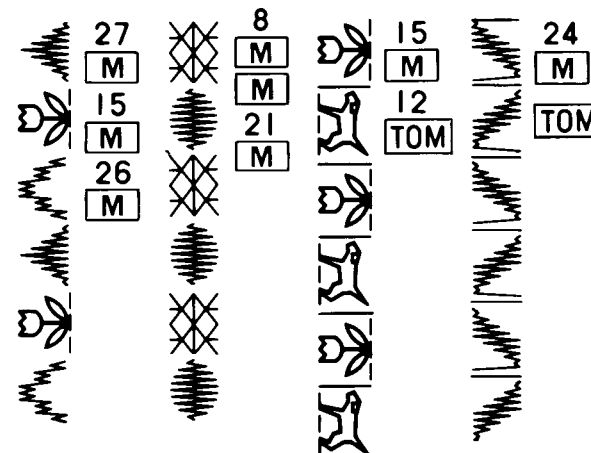
One-Point Memory
Stitching



Cycle Stitching
With "Auto-Lock"
Stitch



Cycle Stitching



15 : Pattern number

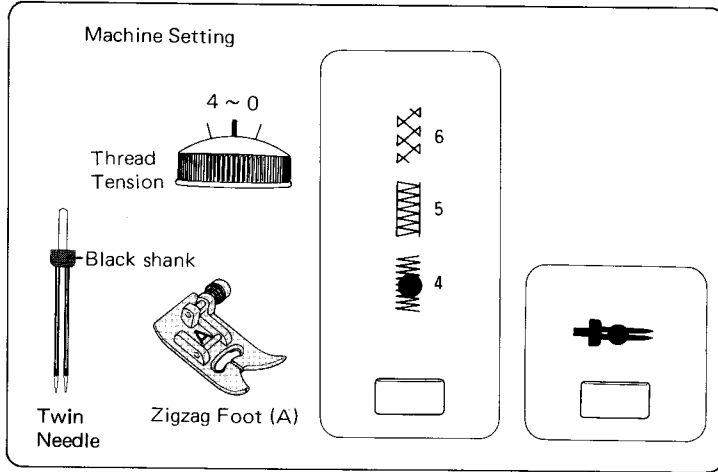
M : Memory button

TOM : Turn-over memory button

⊙ : Auto-Lock stitch button

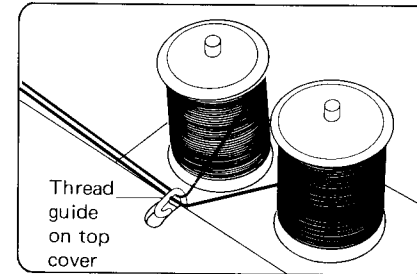
* Patterns 4 to 27 can be combined in any sequence. Press the button until the light appears under the stitch you want, then press the memory button. Be sure to press the memory button after each pattern is selected.

Twin Needle Stitching

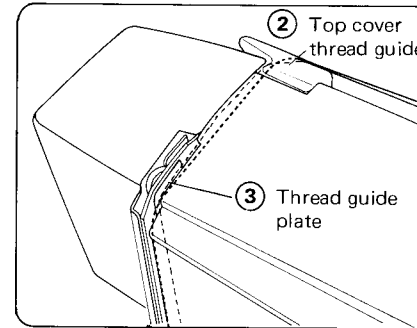


- * Pattern numbers (1), (3), (4), (5), (11), (13), (16), (17), (19) and (25) can be used.
- * When using a twin needle, use a black shank twin needle supplied with the machine.
- * Be sure to press the twin needle button "⚡" and then attach the black shank twin needle.
- * When changing sewing direction, raise the needle until they clear the fabric. Then pivot the fabric.
- * Upon completion of sewing, change the needle and press the twin needle button to clear the machine.

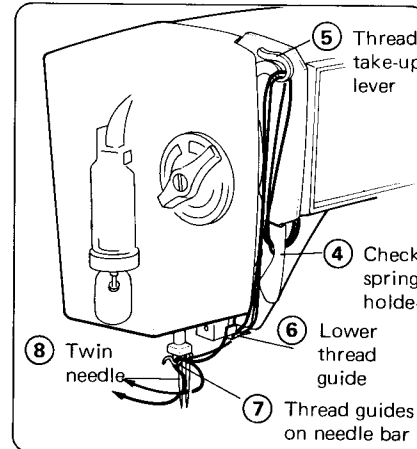
Twin Needle Threading



- ① Pass the two threads through the thread guide on the top cover and
- ② the top cover thread guide at the left side
- ③ Separate the threads with one thread on each side of the thread guide plate.

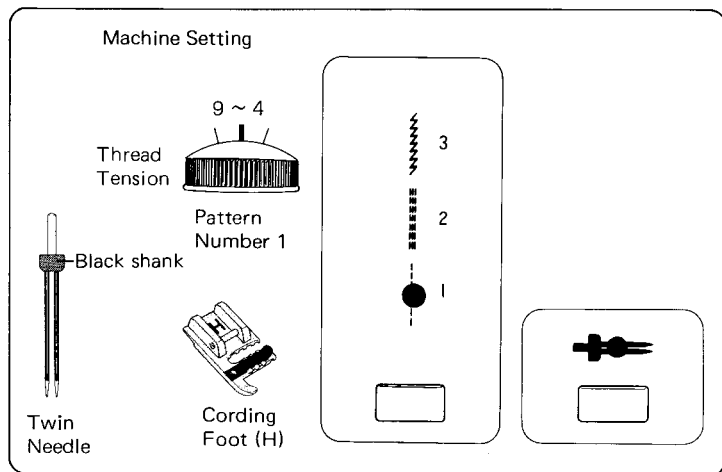


- ④ Draw the two threads down around the check spring holder, and
- ⑤ over the thread take-up lever slot,
- ⑥ then through the lower thread guide.
- ⑦ Separate the threads with one thread through each of the two thread guides on the needle bar.

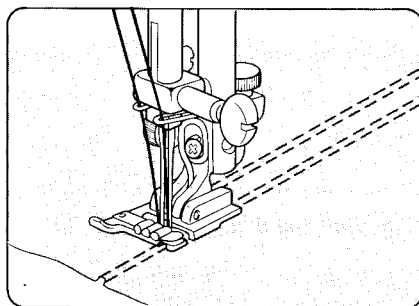


- ⑧ Thread the twin needles.
- * Be careful not to tangle the two threads while threading the machine.

Pin Tucking



- * When using a twin needle, use a black shank twin needle supplied with the machine.



Hold the material taut, while sewing. When several rows of pin tucks are to be sewn, place the previous pin tuck under the notch of the cording foot, to keep all the pin tucks parallel.

Press the pin tucks to one side.

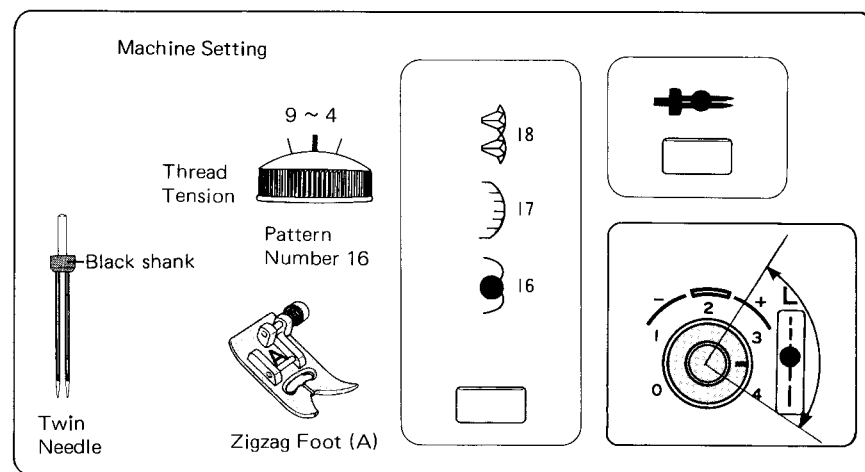
- * For threading the machine, see page 38.

- * For adjusting stitch length, see page 16.

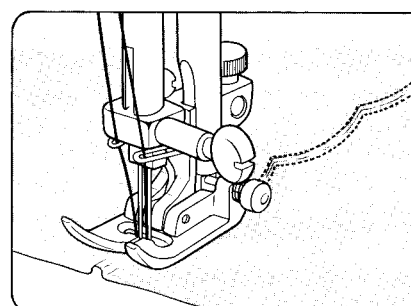
- * This type of sewing is only suitable for thin fabrics. Be sure to make a test seam, using the same kind of fabric.

- * Upon completion, remove the twin needle and press the twin needle button to cancel the red signal light.

Scalloping Tuck



- * When using a twin needle, use a black shank twin needle supplied with the machine.



Test woven fabrics on the bias to check stitch length on hems, etc.


SECTION IV

Scalloping

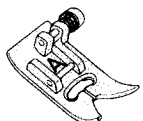
Machine Setting

6 ~ 3

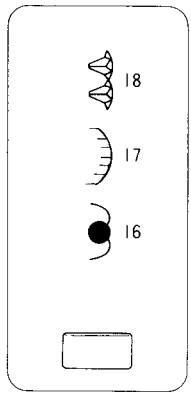
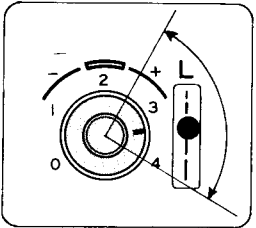
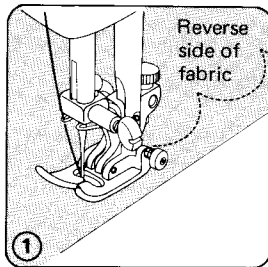
Thread Tension



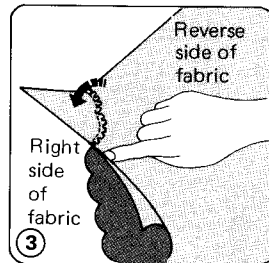
Pattern Number 16



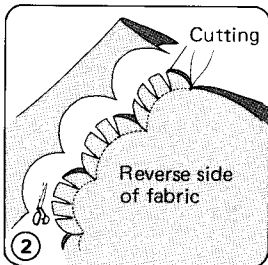
Zigzag Foot (A)

① Fold garment reverse side up and press. Sew scallops 1 cm (3/8") from folded edge.

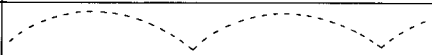
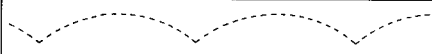



③ Turn the hem to right side and press.



② Trim close to stitching leaving 0.3 cm (1/8") seam allowance.

Variations of stitch length using manual stitch length button


| Stitch Length | Seam Variations |
|---------------|--|
| 4 |  |
| 3.5 |  |
| 2.5 |  |

Decorative Scalloping


Machine Setting

4 ~ 0

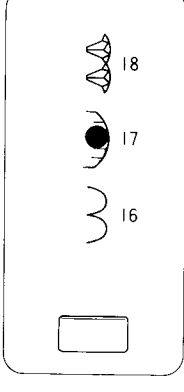
Thread Tension



Pattern Number 17

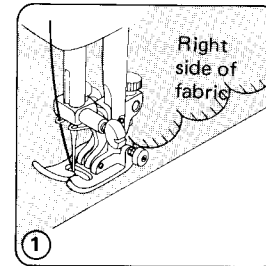


Zigzag Foot (A)

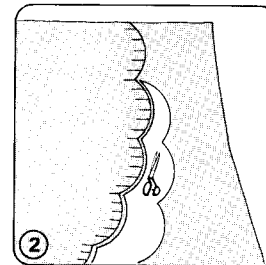


Pattern number 17 can be used to finish a hem edge or as a decorative stitch anywhere on the garment.

As a hem:

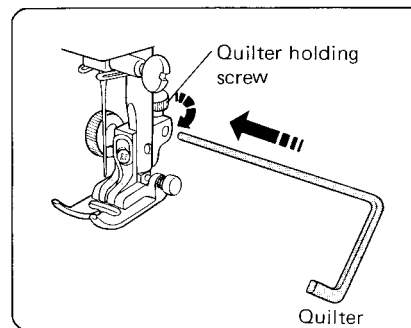
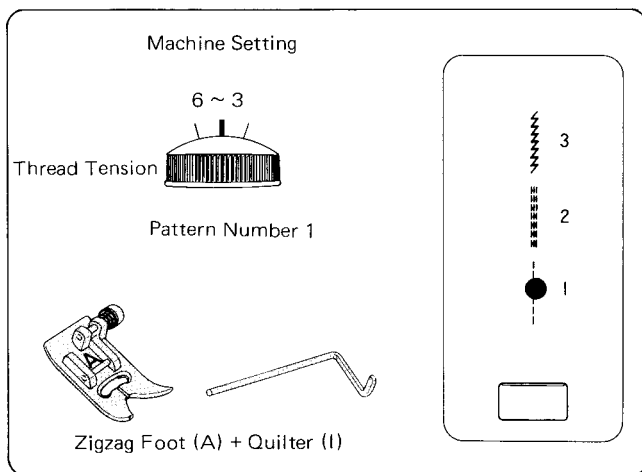


① Fold the garment right side up and press. Sew 1 cm (3/8") from the folded edge.



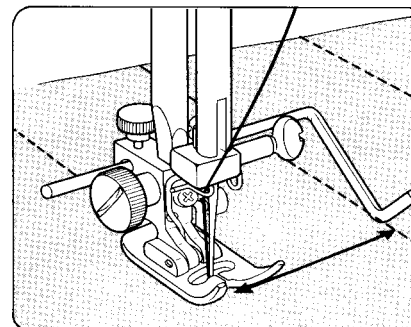
② Trim close to the stitching, taking care not to cut the thread.

Quilting

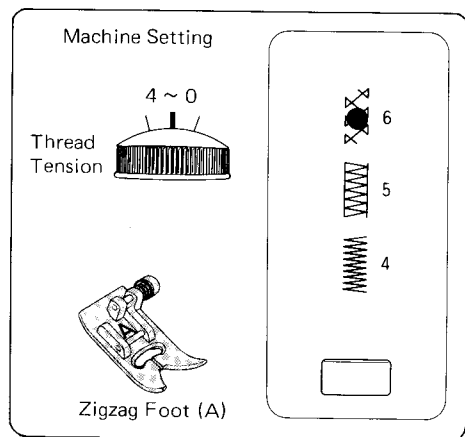


Loosen the quilter holding screw, and fit the quilter into the hole. Slide the quilter to the desired stitching width and tighten the screw.

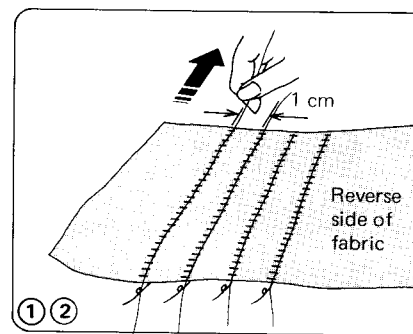
Use the quilting finger as a stitching guide.



Smocking



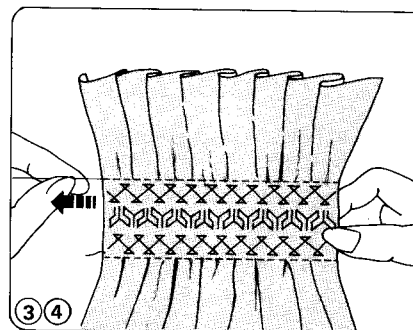
* Pattern numbers (6), (9), (11) and (14)



① Mark the area you want to smock. With the manual stitch length button at 3 to 4, sew straight lines 1 cm (1/2") apart. -

② Knot the threads along one edge. Pull the bobbin threads and distribute the gathers evenly.

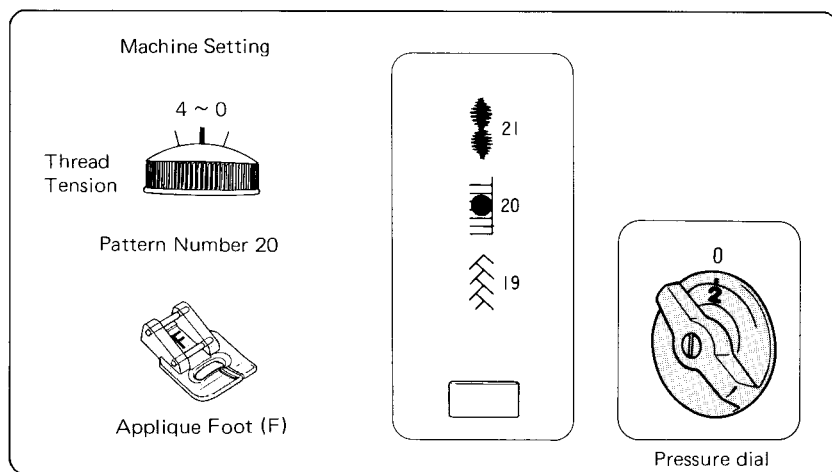
③ Sew pattern stitches between the straight seams.



④ Pull out the gathering stitches.

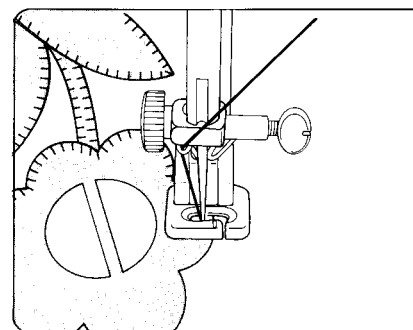
* A looser needle tension will make gathering easier.

Applique



* For attaching applique foot, see page 14.

* When sewing is completed, be sure to return the pressure dial to "3".

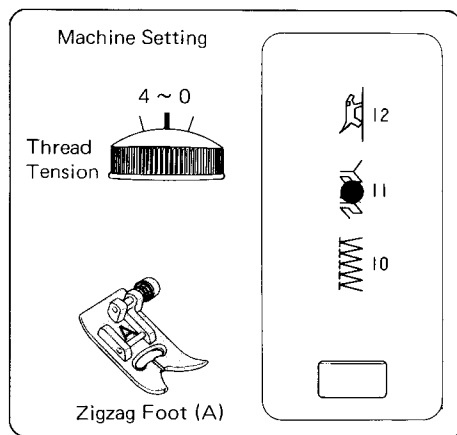


To sew:

Baste (or fuse with iron-on fabric joiner) applique pieces on the fabric. Stitch around the applique making sure the needle falls along the outer edge of the applique.

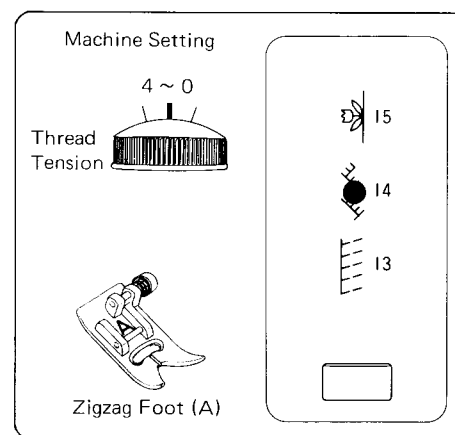
When sewing curves, lower the needle down into the fabric. Raise the presser foot and pivot the fabric to the right or left.

Patch Work

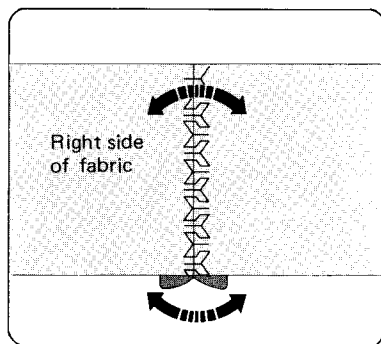


* Pattern numbers (6), (11) and (19)

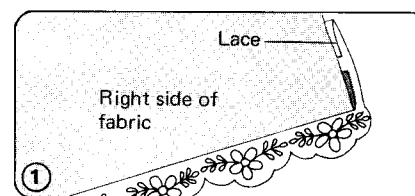
Lace Edging



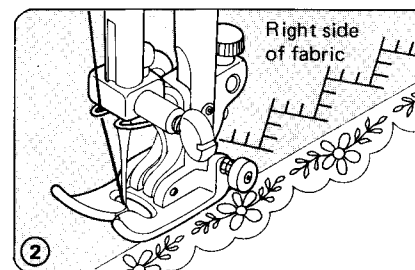
* Pattern numbers (6), (9), (11), (12) and (14)



Sew seam and press seam allowances open. Sew pattern stitch on right side of garment centering stitches over the seam line.

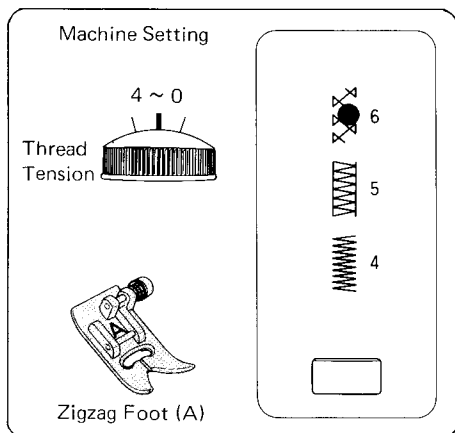


① Fold under the hem and place the lace under the folded edge.

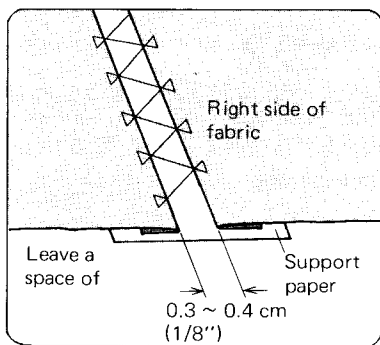


② Sew the pattern stitch making sure the lace is caught in the stitching.

Fagoting



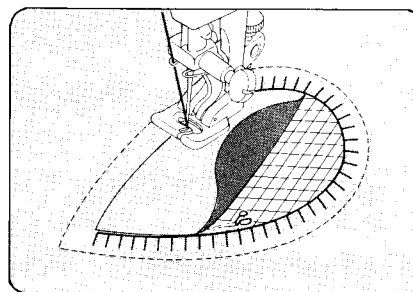
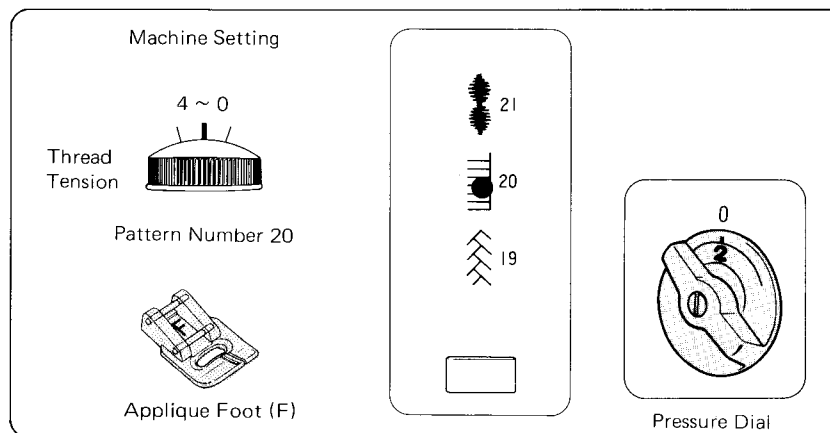
* Pattern numbers (6), (11) and (19)



- ① Fold under the seam allowance on both pieces of fabric and press.
- ② Pin the two fabrics to support paper 0.3 to 0.4 cm (1/8'') apart.
- ③ Sew the pattern stitch keeping the stitches centered. Make sure the stitch catches each side of the fabric.

* This stitch can be used on blouses and patch pockets.

Cut Work

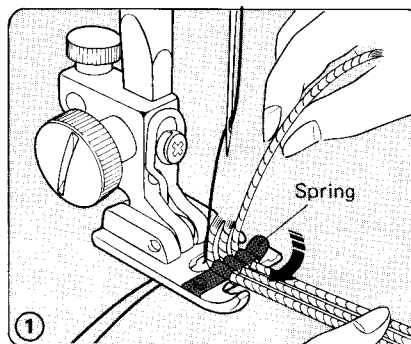
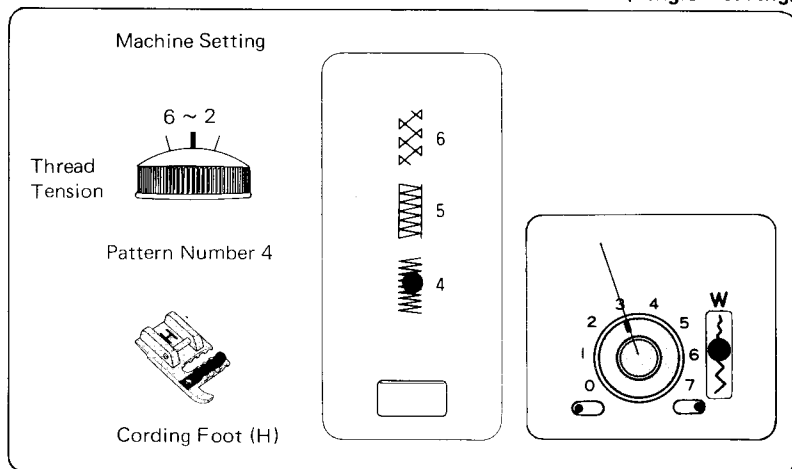


- ① Baste the design on the garment with a basting stitch.
- ② Place a piece of tulle or other fabric next to the reverse side of the garment and baste or pin in place.
- ③ Stitch around the design using pattern 20.
- ④ Cut out the fabric in the center of the design being careful not to cut the stitches or the tulle.

* When sewing is completed, be sure to return the pressure dial to "3".

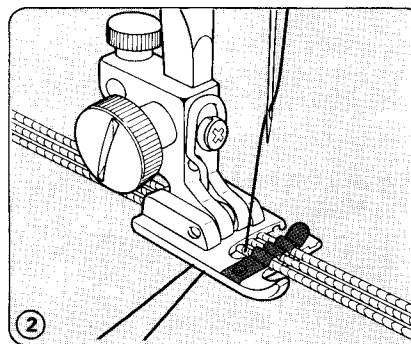
Cording

(Single Cording)



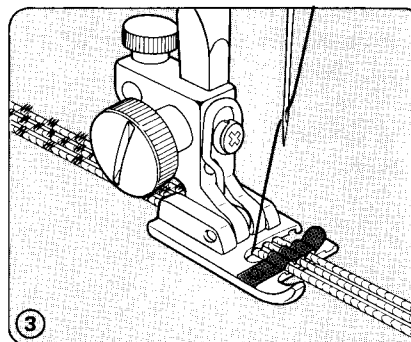
Single Cording

- ①② Insert cord in the center groove of the cording foot with 10 cm (4") extending behind the foot.
- ③ Set manual stitch width button at 3 (See page 16) making sure the stitches cover the cord.

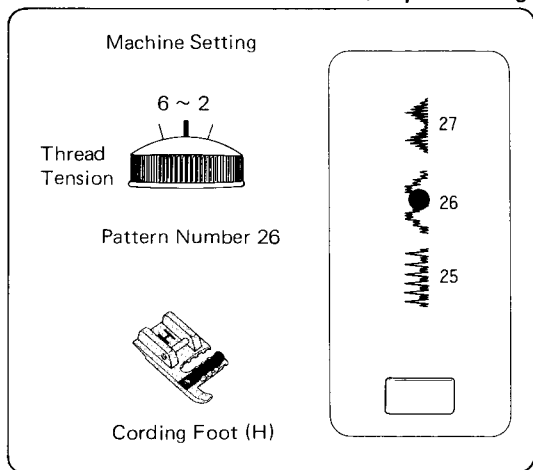


Triple Cording

- ①② Insert three cords in the cording foot with 10 cm (4") extending behind the foot. Slide the sewing threads to the left.
- ③ Use the recommended pattern number 26. As you sew, the stitches will form over the cording.

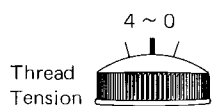


(Triple Cording)

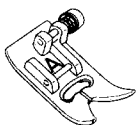


Gathering

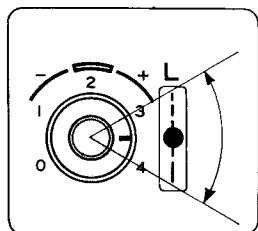
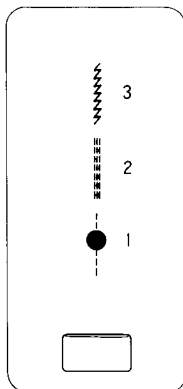
Machine Setting



Pattern Number 1

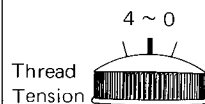


Zigzag Foot (A)



Blanket Stitch

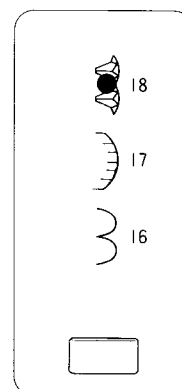
Machine Setting



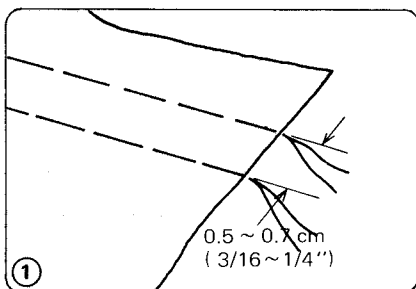
Pattern Number 18



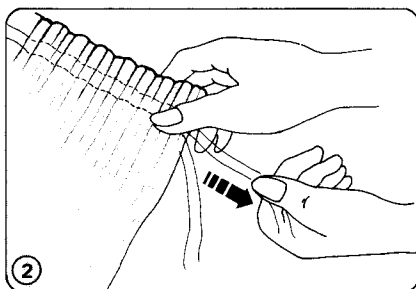
Zigzag Foot (A)



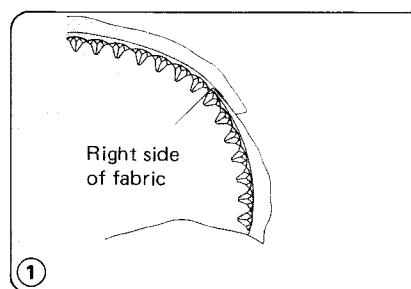
Use as hemming stitch for blankets, tablecloth and draperies.



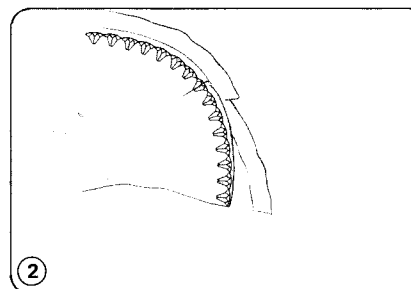
- ① Set manual stitch length button at 4 (See page 16). Loosen the needle thread tension. Sew two rows 0.5 to 0.7 cm (3/16 to 1/4") apart, with the first row 2 cm (3/4") from the top edge.



- ② Draw up the bobbin thread working from each end of the fabric until the desired amount is gathered. Knot the threads at each end and distribute the gathers evenly.



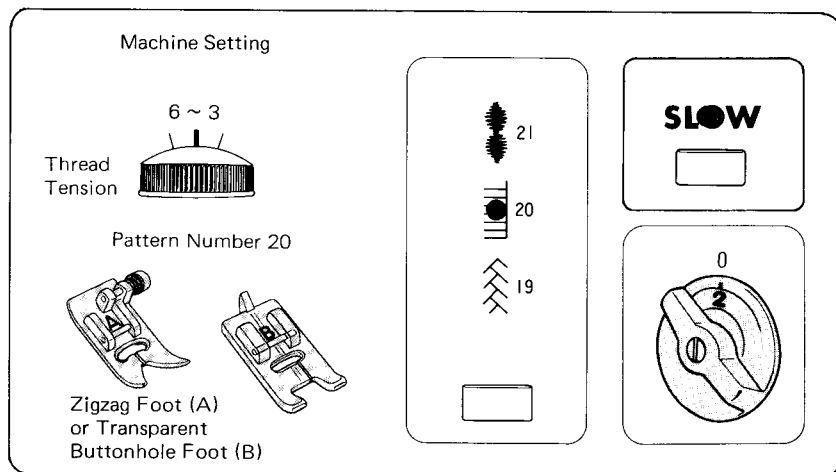
- ① Place the fabric right side up, and sew 1 cm (3/8") from the edge.



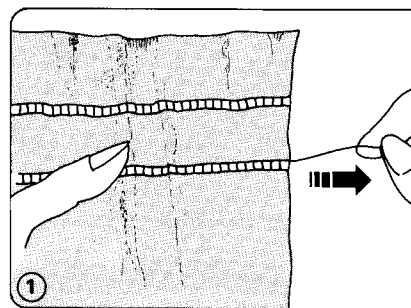
- ② Trim close to stitching. The stitch will prevent raveling.

* On light weight fabrics, fold under a hem and press. Stitch 1 cm (3/8") from folded edge. Trim close to stitching.

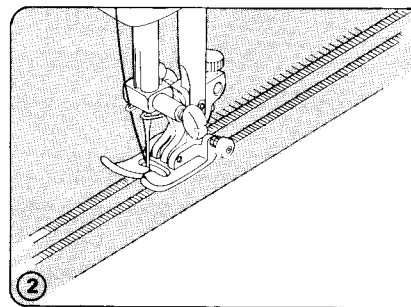
Drawn Work



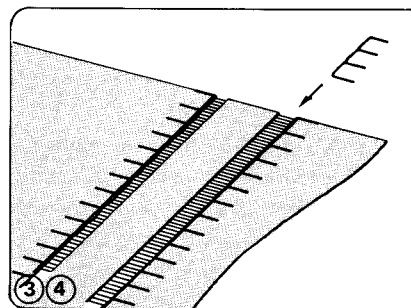
These patterns can be used to finish placemats, table linens and linen towels. Use on even weaves, medium to heavy weight fabrics.



- 1 Mark the width for the drawn work. Pull out one or two fabric yarns at each edge of the drawn work.



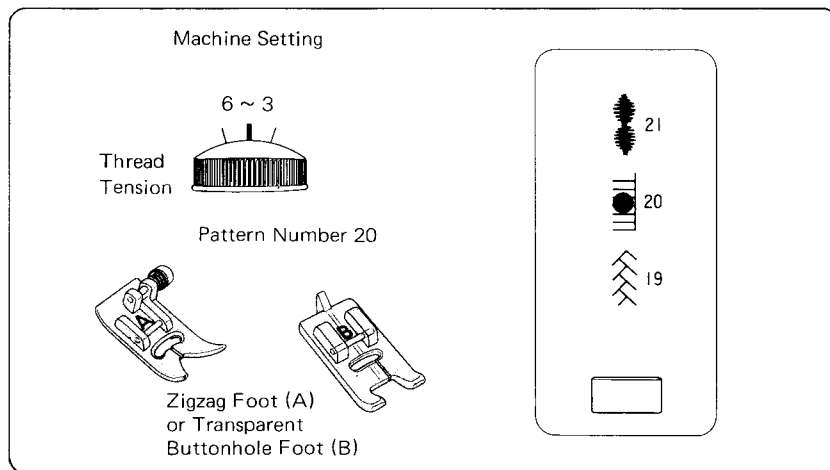
- 2 Sew along the left edges.



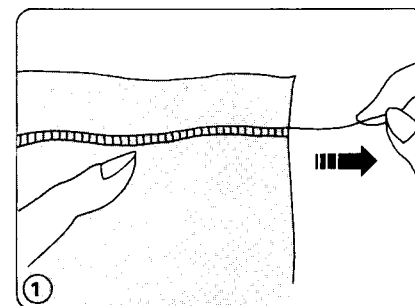
- 3 Push the "TOM" button and sew along the right edges.
- 4 Pull out all the yarns where the drawn work is required.

* When sewing is completed, be sure to return the pressure dial to "3".

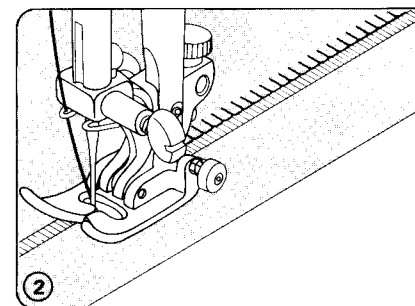
Fringing



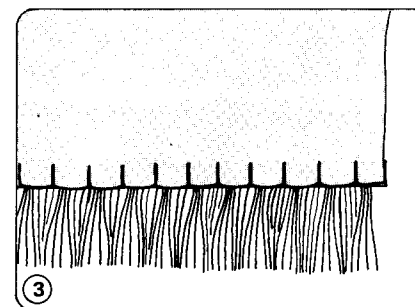
Use a medium to heavy weight, even weave fabric.



- ① Draw out 2 and 3 yarns where fringing is to begin.

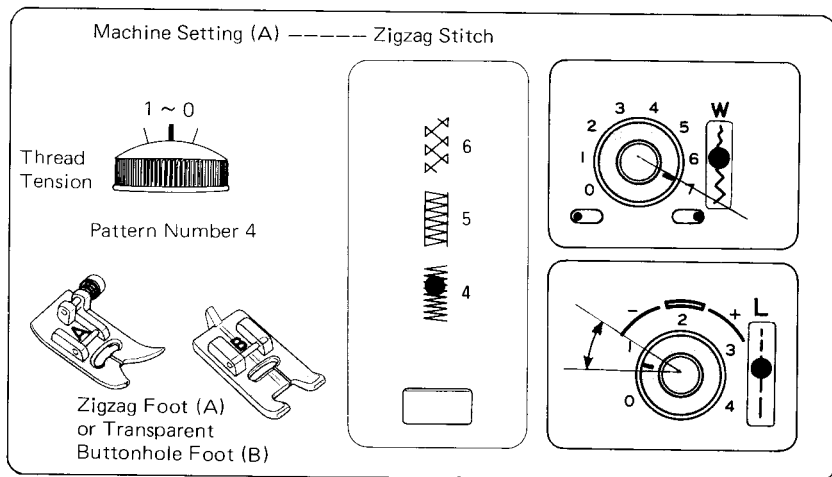


- ② Sew along the upper edge where the yarns are drawn out.

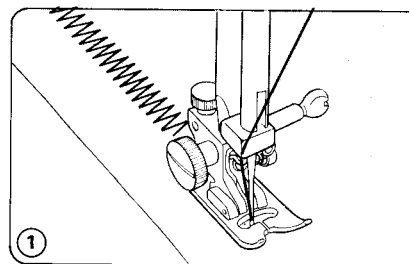
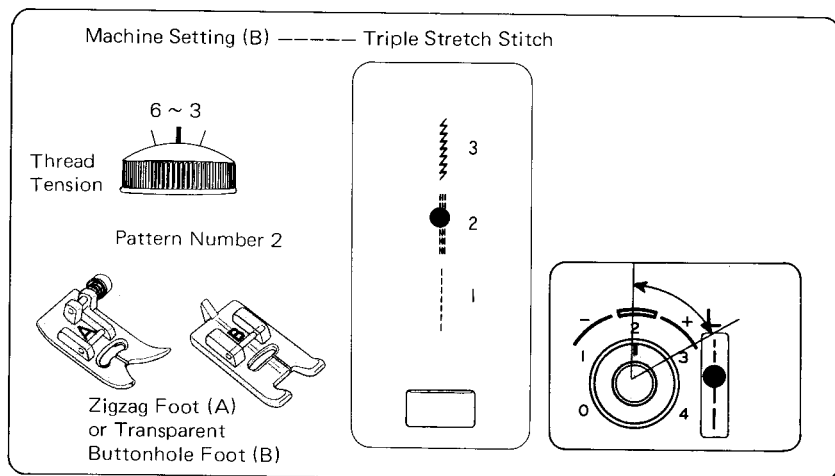


- ③ Draw out remaining yarns.

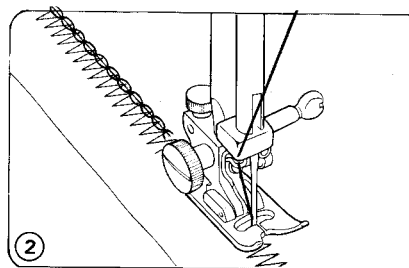
Fringing with Threads



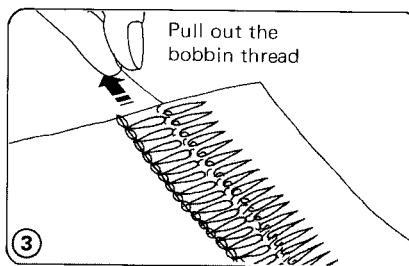
This type of fringing works best on light weight, tightly woven fabrics. Use as a hem edge or decoration on children's clothes and stuffed animals.



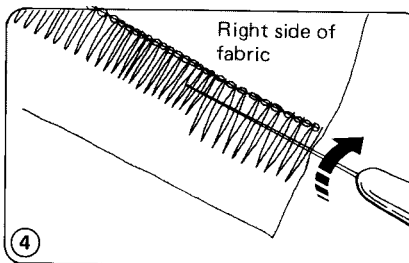
- ① Loosen the needle thread tension and press pattern number 4. Sew a row of zigzag stitches.



- ② Set machine to pattern number 2 and sew over the upper edge of the zigzag stitching.

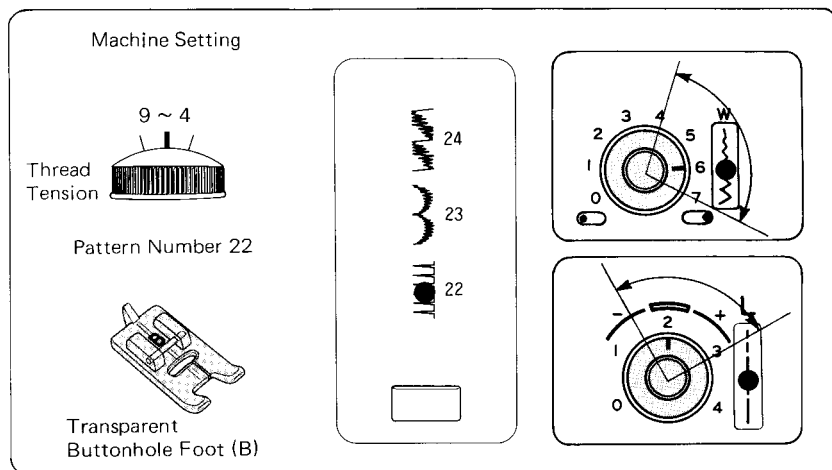


- ③ Pull out the bobbin thread on the zigzag stitching.



- ④ Lift up the needle threads.

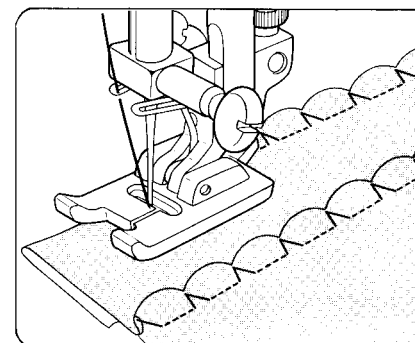
Shell Tuck



Shell tucking can be used on blouse fronts or as a hem finish on shirts, blouses, collars, and cuffs.

This finish works best with stretch fabrics.

* Make a trial seam with the thread tension dial set between 4 and 9, to see what tension is best for the fabric you are using.



- ① Fold non-stretch fabrics on bias. Stretch fabrics can be sewn in any direction.
 - ② Place the fabric on the machine with the folded edge to the left. The needle should fall just beyond the fold when it swings to the left.
- * When sewing tucks on a blouse, press the tuck to one side.

- * When used a hem finish, trim the hem allowance close to the stitching.
- * Use a BLUE TIPPED needle with stretch fabrics.

It is important to take good care of your machine. Always keep it clean and ready for use. If you experience some difficulty, please refer to pages 54 to 56 for adjustment instructions.

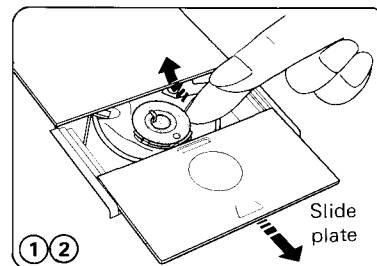
Cleaning the Outside of the Machine

Wipe off dust gently with a soft cloth. Use a neutral cleanser for the portable case.

- * The use of petrol, benzine or cleaning compound is prohibited.
- * Be sure to turn off and unplug the machine when cleaning.

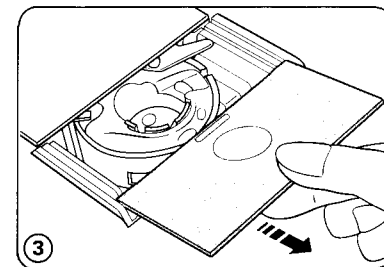
Cleaning Bobbin Holder

Loose threads and dust may cause puckered stitches and thread breakage during stitching. Check for lint build-up after each garment is completed.

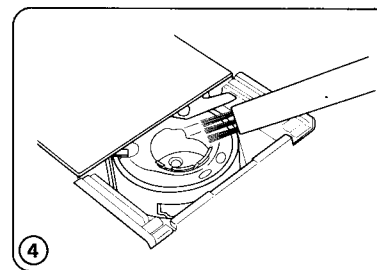


① Turn off the power or unplug the machine.

② Open the slide plate and take out the bobbin.

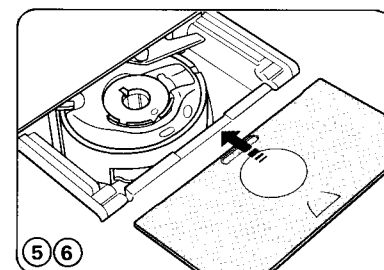


③ Remove the slide plate from the machine by firmly pulling it toward you.



④ Brush out dust and lint.

* You may use a vacuum cleaner for removing any dry dust.



⑤ Replace the bobbin.

⑥ Refit the slide plate, by pushing it into the grooves on both sides.

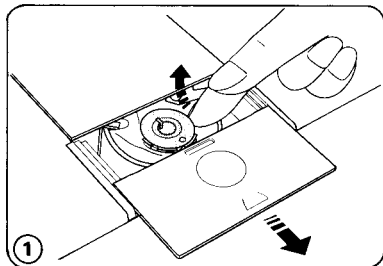
Cleaning Hook Race and Feed Dog

(Preparation)

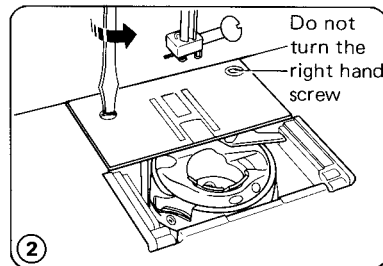
1. Select pattern 4.
2. Turn off the power or unplug the machine.
3. Remove the needle and presser foot holder.

* To ensure a lifetime of trouble-free sewing, clean the hook race and feed dogs every few months, depending on how often you use the machine.

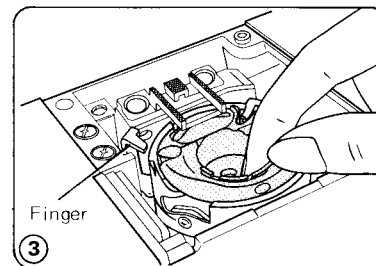
◀Dismantling of Bobbin Holder▶



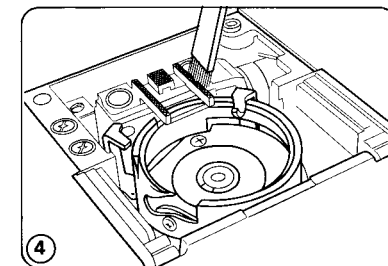
- ① Remove the slide plate, and take out the bobbin.



- ② With the screwdriver supplied with the machine, remove the screw on the **left hand side** of the needle plate, and remove the needle plate.

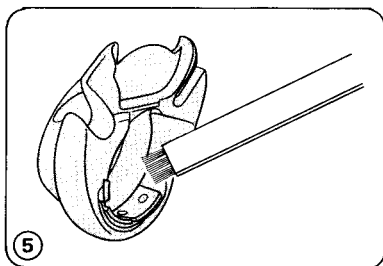


- ③ Remove the black bobbin holder by lifting it up gently.



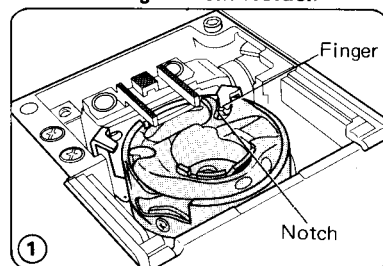
- ④ Clean the feed dog with a lint brush. Wipe the hook race with a dry cloth gently.

* Slight movement of balance wheel may be needed when removing and replacing bobbin holder.
* Do not bend fingers.

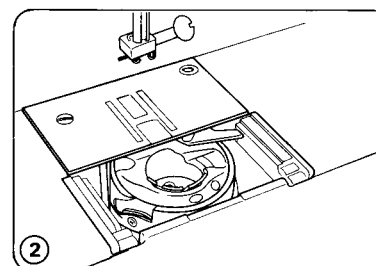


- ⑤ Clean the bobbin holder with a brush and wipe it with a dry cloth.

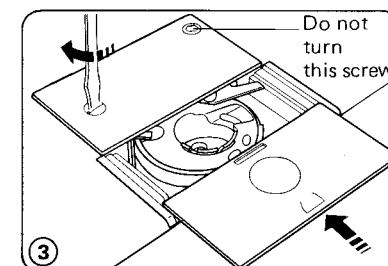
◀Assembling Bobbin Holder▶



- ① Insert the black bobbin holder into the hook race by fitting the finger into the notch (See illustration.)



- ② Place the needle plate back into position.



- ③ Refit and tighten the screw on the left side of the needle plate. Replace the slide plate into its grooves.

* Do not remove or disassemble other parts than those mentioned above.

Trouble Shooting

| Condition | Cause | Reference |
|--|---|--|
| The machine does not run smoothly and is noisy. | <ol style="list-style-type: none"> 1. Threads have been caught in hook mechanism. 2. The feed dog is packed with lint. | <p>See Pages 52, 53 See Page 53</p> |
| The needle thread breaks. | <ol style="list-style-type: none"> 1. The needle thread is not threaded properly. 2. The needle thread tension is too tight. 3. The needle is bent or blunt. 4. The needle is incorrectly inserted. 5. The fabric is not being drawn to the rear when sewing is finished. 6. The thread is either too heavy or too fine for the needle. | <p>See Page 12 See Page 15 See Page 9 See Page 9 See Page 17 See Page 9</p> |
| The bobbin thread breaks. | <ol style="list-style-type: none"> 1. The bobbin thread is not threaded properly in the bobbin holder. 2. Lint has collected in the bobbin holder. | <p>See Page 10 See Page 52</p> |
| The needle breaks | <ol style="list-style-type: none"> 1. The needle is incorrectly inserted. 2. The needle is bent or blunt. 3. The needle clamp screw is loose. 4. The tension of the needle thread is too tight. 5. The fabric is not drawn to the rear when sewing is finished. 6. The needle is too fine for the fabric being sewn. 7. The twin needle button has not been pressed when using a twin needle. 8. The pattern selection button has been pressed or the power supply has been plugged in, while the needle was in the material. | <p>See Page 9 See Page 9 See Page 14 See Page 15 See Page 17 See Page 9 See Page 38 See page 7</p> |
| Skipped stitches | <ol style="list-style-type: none"> 1. The needle is incorrectly inserted. 2. The needle is bent or blunt. 3. The needle and/or threads are not suitable for the work being sewn. 4. A BLUE TIPPED needle is not being used for sewing stretch, very fine fabrics and synthetics. 5. The needle thread is not threaded properly. 6. The presser foot pressure is not strong enough. 7. The fabric is not taut in basting. | <p>See Page 9 See Page 9 See Page 9 See Pages 9, 22, 23 See Page 12 See Page 15 See Page 20</p> |

| Condition | Cause | Reference |
|--|--|--|
| Seam Puckering | <ol style="list-style-type: none"> 1. The needle thread tension is too tight. 2. The machine is not threaded correctly. 3. The needle is too heavy for the cloth being sewn. 4. The stitches are too coarse for the cloth being sewn. 5. The presser foot pressure is not correctly adjusted. <p>* When sewing light weight materials, place a sheet of paper underneath the fabric being sewn.</p> | <p>See Page 15 See Page 12 See Page 9 Make the stitches denser. See Page 15</p> |
| Stitches form loops below the work | <ol style="list-style-type: none"> 1. The needle thread tension is too loose. 2. The needle is either too heavy or too fine for the thread. | <p>See Page 15 See Page 9</p> |
| The cloth is not feeding smoothly | <ol style="list-style-type: none"> 1. The feed dog is packed with lint. 2. The presser foot pressure is too weak. 3. The stitches are too fine. 4. The fabric is not being correctly fed at the start of the sewing. 5. The feed dogs not raised after "Drop feed" has been used. | <p>See Page 53 See Page 15 Make the stitches coarser. See Page 18 Push the "Drop" button for turning off the red signal light.</p> |
| The machine does not operate. | <ol style="list-style-type: none"> 1. The machine has not been plugged in firmly. 2. Threads have been caught in the hook mechanism. | <p>See Page 7 See Pages 52, 53</p> |
| The electricity cuts off a few seconds after applying the controller. | <ol style="list-style-type: none"> 1. Lint has collected in the hook mechanism. | <p>See Pages 52, 53</p> |

| Condition | Cause | Reference |
|--|--|--|
| The needle hole does not alter for the straight stitch | 1. The thread take up lever is in a down position. | See Page 16 Turn the balance wheel to raise it to the highest position. |
| Pattern stitches not forming | 1. You are pushing another pattern selector button while making straight stitch, or triple stretch stitch. 2. The pressure dial is set to "BASTING". | Stop the machine. Then push pattern selection button. See Page 8 |
| Patterns are distorted | 1. Feed balance dial is not set properly. 2. The feed is not suitable for the fabric being sewn. 3. The control circuit is not working correctly. | See Page 34 See Page 34 Turn off the machine and turn it on again. Then set for desired pattern. |
| The buttonhole stitches are not balanced | 1. The stitch length is not suitable for the fabric being sewn. 2. The feed balance dial is not set properly. 3. The thickness of the fabric varies where the buttonhole is made. 4. The work is being pulled or held back. 5. Interfacing is not used with stretch fabrics. | See Page 27 See Page 27 See Page 25 See Page 25 See Page 25 |

