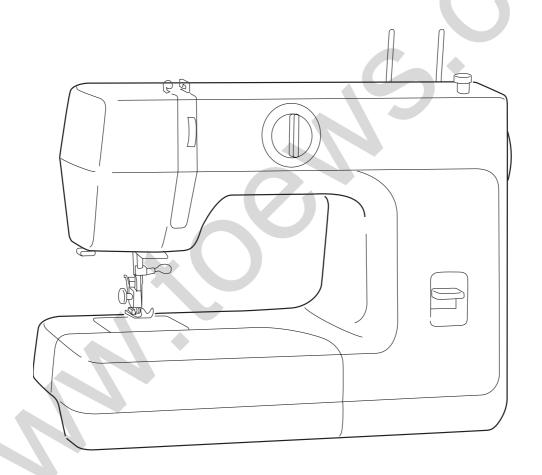
Janome US2004 Instruction Manual



MODEL US-2004

Do's and Don'ts

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

IMPORTANT SAFETY INSTRUCTIONS

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

DANGER - To reduce the risk of electric shock:

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

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

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

SAVE THESE INSTRUCTIONS

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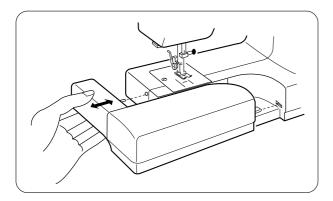
8 9 10 0 11 12 13 20 17 19 18

SECTION I ESSENTIAL PARTS

Name of Parts

- 1 Reverse stitch button
- 2 Pattern selector dial
- 3 Bobbin winder stopper
- 4 Bobbin winder spindle
- 5 Spool pins
- 6 Bobbin winder thread guide
- 7 Thread guide
- 8 Thread take-up lever
- 9 Thread tension dial
- 10 Face plate
- 11 Thread cutter
- 12 Presser foot holder
- 13 Needle plate
- 14 Extension table
- 15 Carrying handle
- 16 Handwheel
- 17 Power switch
- 18 Machine socket
- 19 Needle clamp screw
- 20 Free arm
- 21 Presser foot lifter

SECTION II GETTING READY TO SEW



Extension Table

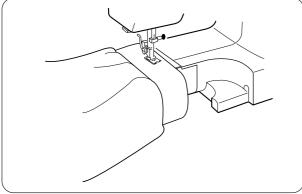
The extension table provides added sewing surface and can be easily removed for free arm sewing.

Detaching the table:

Pull the table away from the machine, as illustrated.

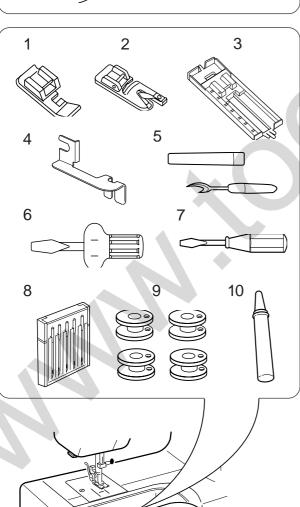
Attaching the table:

Push the extension table until it snaps into the machine.



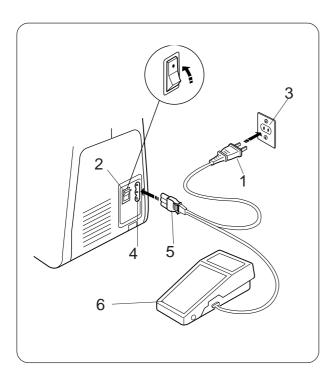
Advantages and uses of free arm sewing:

- * Avoid fabric bunching around the needle when bartacking to reinforce pockets, plackets and waistlines.
- * For stitching sleeves, waistbands, pants legs or any circular garment area.
- * For darning socks or mending knees, elbows or areas of wear in children's clothes.



Standard Accessories and Storage Place

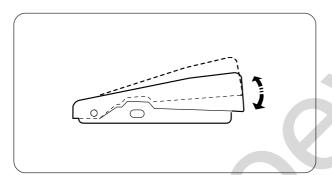
- 1 Zipper foot
- 2 Hemmer foot
- 3 Sliding buttonhole foot
- 4 Hem guide
- 5 Seam ripper
- 6 Large screwdriver
- 7 Small screwdriver
- 8 Set of needles
- 9 Bobbins
- 10 Oil
- 11 Extension table



Connecting the Machine to the Power Supply

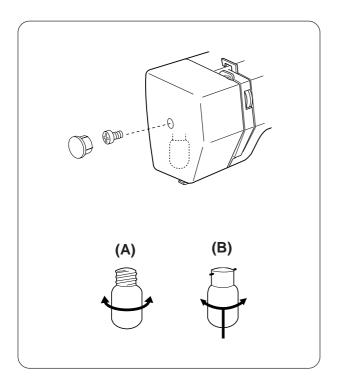
Before connecting the power cord, mark sure the voltage and frequency shown on the machine conform to your electrical power.

- 1. Turn off the power switch 2.
- 2. Insert the machine plug 5 into the machine socket ${\bf 4}$
- 3. Insert the power supply plug 1 into the outlet 3.
- 4. Turn on the power switch 2 to turn on the power and sewing light.
 - 1 Power supply plug
 - 2 Power switch
 - 3 Outlet
 - 4 Machine socket
 - 5 Machine plug
 - 6 Foot control



Foot control

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



Sewing Light

The sewing light is located behind the face plate.

To change the bulb, take the face plate off the sewing machine by removing the set screw.

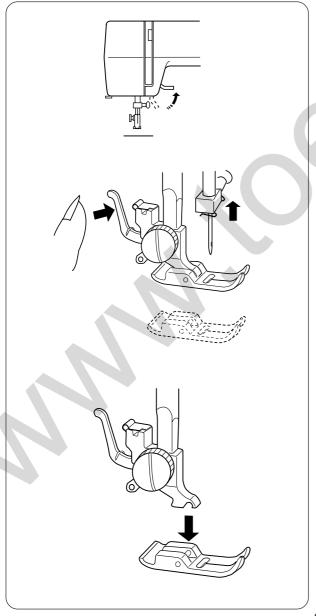
* Unolug the power supply before changing the bulb.

(A) To remove Turn to the left.

To replace Turn to the right.

(B) To remove Push and twist to the left.

To replace Push and twist to the right.



To Remove and Attach the Presser Foot

To remove

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

Raise the presser foot.

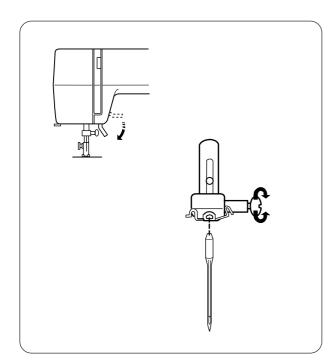
Press the lever on the back of the foot holder.

The presser foot will drop off.

To attach

Place the presser foot so the pin on the foot lies just under the groove of the foot holder.

Lower the foot holder to lock the foot in place.



Changing Needle

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

Loosen the needle clamp screw by turning it counterclockwise.

Remove the needle from the clamp.

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

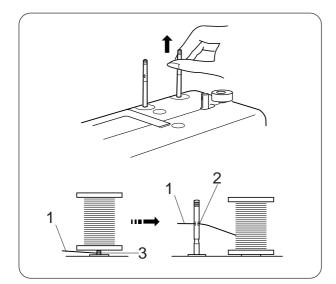
When inserting the needle into the clamp, push it up as far as it will go and tighten the clamp screw firmly with the screwdriver.

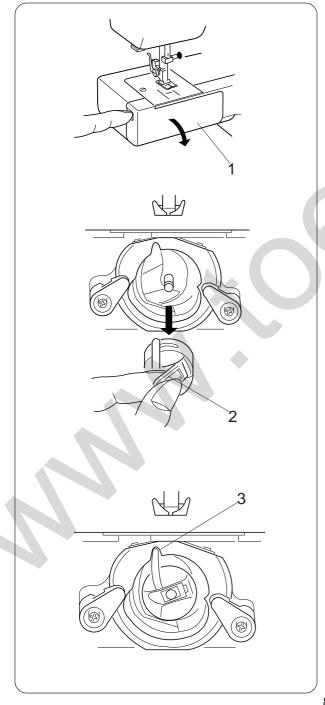
* Check your needles frequently for barbed or blunted points. Snags and runs in knits, fine silks and silk-like fabrics are permanent and are almost always caused by a damaged needle.

Thread and Needle Chart

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

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





Setting Spool Pins

The spool pins are used for holding the spool of thread in order to feed thread to the machine.

To use, pull up the spool pin. Push down for storage.

- 1 Upper thread
- 2 Hole
- 3 Tangle

NOTE: When using thread which has tendency to tangle around spool pin, thread through the hole of spool pin as shown.

The hole should face the thread spool.

Removing or Inserting the Bobbin Case

Open the hook cover.

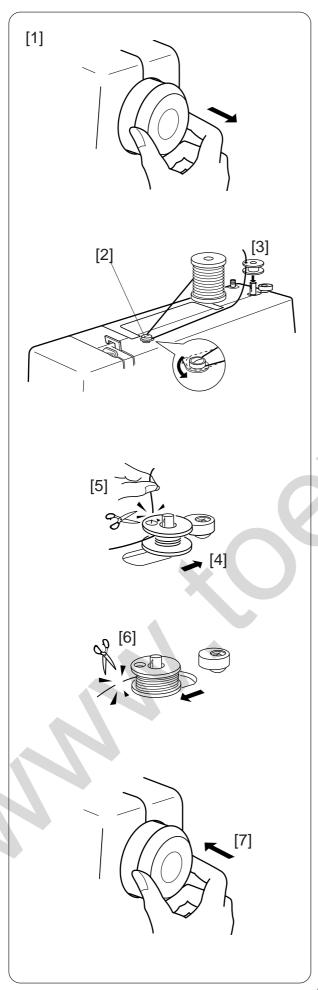
1 Hook cover

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

2 Latch

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

3 Horn

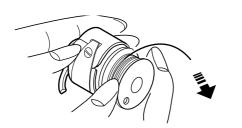


Winding the bobbin

- [1] Pull the handwheel out.
- [2] Draw the thread from spool.
 Guide the thread around the bobbin winder thread guide.
- [3] Insert the thread through the hole in the bobbin from the inside to the outside.

 Put the bobbin on the bobbin winder spindle.
- [4] Push it to the right.
- [5] With the free end of the thread held in your hand, depress the foot control.Stop the machine when it has made a few turns, and cut the thread close to the hole in the bobbin.
 - [6] Depress the foot control again.
 When the bobbin is fully wound, stop the machine.
 Return the bobbin winder spindle to its original position by moving the spindle to the left, and cut the thread.
 - [7] Push the handwheel to the left. (original position).
 - **NOTE:** Return the bobbin winder spindle when the machine stops.

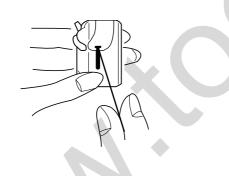
[1]



[2]



[3]

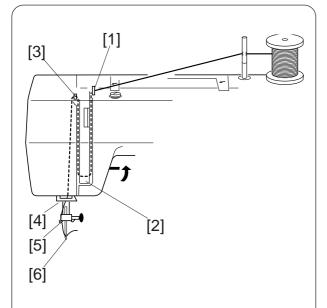


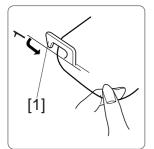
Threading Bobbin Case

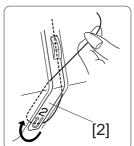
[1] Place the bobbin into the bobbin case.
Make sure the thread unwinds in the direction of arrow.

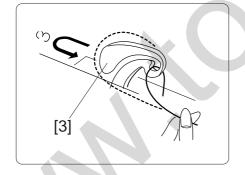
[2] Pull the thread into the bobbin case slot.

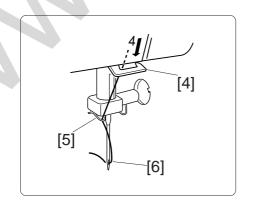
- [3] Draw the thread under the tension spring and into the delivery eye.
 - * Leave about 10 cm (4") of free thread.











Threading the Machine

Raise the takeĐup lever to its highest position by turning the handwheel toward you.

Raise the presser foot.

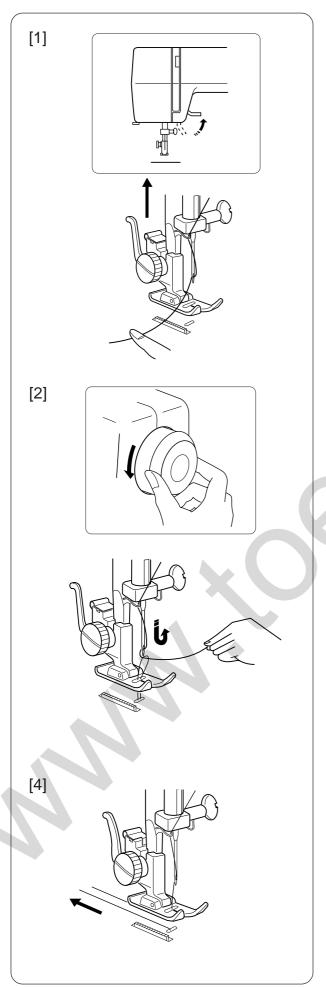
Place the spool on the spool pin as shown, with the thread coming from back of the spool.

- [1] Draw the thread into the thread guide using both hands.
- [2] While holding the thread near the spool, draw the thread down into the tension area and then around the check spring holder.

[3] Firmly draw the thread up and through the take-up lever from right to left.

- [4] Then draw the thread down and slip it into the lower thread guide.
- [5] Draw the thread down and slip it into the needle bar thread guide.
- [6] Thread the needle eye from front to back.

NOTE: You may want to cut the end of thread with the sharp scissors for easier needle threading.



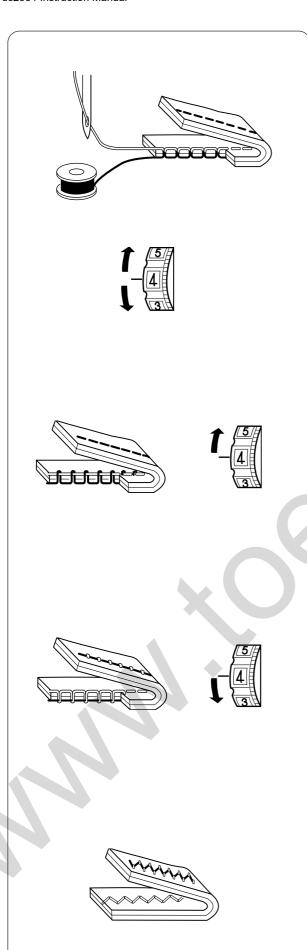
Drawing Up Bobbin Thread

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

[2] Turn the handwheel slowly toward you with your right hand until the needle goes down and continue turning the handwheel until the take-up lever is at its highest position.

Lightly draw up the needle thread forming a loop of the bobbin thread.

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



Balancing Needle Thread Tension

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

1 Match the desired of the thread tension number with the setting mark.

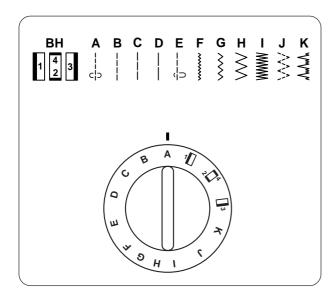
2 Loosen the needle thread tension by moving the dial to a lower number.

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

Thread Tension for Zigzag Sewing

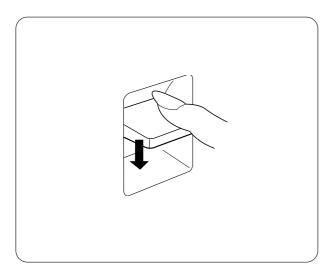
To obtain better zigzag stitches, the upper tension should be slightly weaker than in the case of straight sewing.

The upper thread should appear slightly on the reverse side of the fabric.



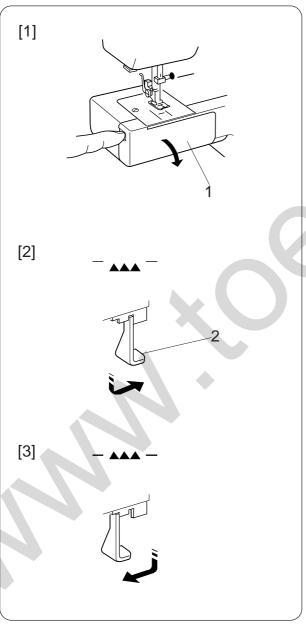
Pattern Selector Dial

Raise the needle above the fabric and match the desired pattern with the setting mark by turning the pattern selector dial.



Reverse Stitch Button

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

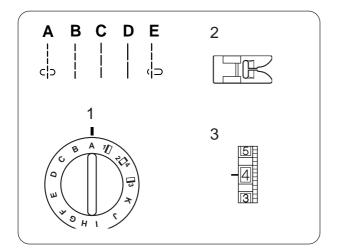


Dropping the Feed Dog

- [1] Open the hook cover.
 - 1 Hook cover

- [2] To drop the feed dogs, pull down the lever and move it in the direction of the arrow, as illustrated.
 - 2 Lever

- [3] To raise the feed dog, pull down the lever and move it in the direction of the arrow, as illustrated.
 - * The feed dog must be up for normal sewing.

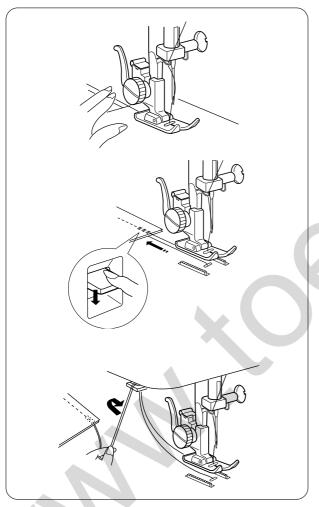


SECTION III BASIC SEWING

Straight Stitch Sewing

Stitch selector: A - E
 Presser foot: Zigzag foot

3 Thread tension: 2-6



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

Lower the needle into the fabric.

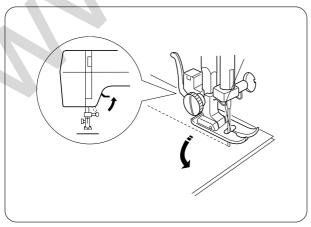
Lower the presser foot and smooth the threads toward the back. Depress the foot control.

Gently guide the fabric along the guide line letting the fabric feed by itself.

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

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

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

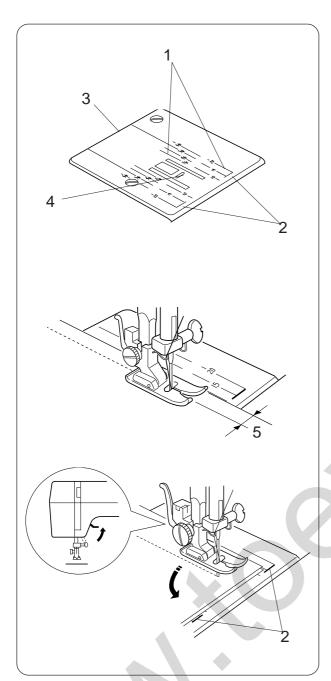


To Change Sewing Direction

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

Raise the presser foot.

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



Using the seam guides on the needle plate

The seam guides on the needle plate helps you measure seam width.

* The numbers indicate the distance between the center needle position and the guide line.

Numbers on the needle plate	10	15	20	3/8"	4/8"	5/8"	6/8"
Distance in centimeters	1.0	1.5	2.0	1.0	1.3	1.6	1.9

- 1 Guide lines
- 2 Cornering guide
- 3 Needle plate
- 4 Needle plate hole
- 5 Seam width from the center needle position

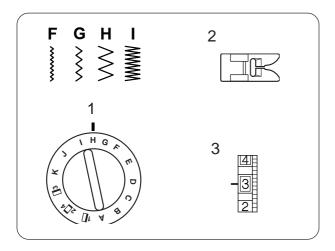
Turning square corners

To turn a square corner 1.6 cm (5/8") from the fabric edge.

When the fabric edge facing you lines up with the cornering guide as illustrated, stop stitching and lower the needle by turning the handwheel toward you. Raise the presser foot and turn the fabric to line the edge with the 1.6 cm (5/8") seam guide. Lower the presser foot and begin stitching in the new

2 Cornering guide

direction.

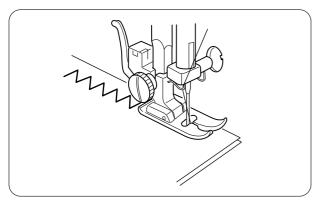


Zigzag Stitching

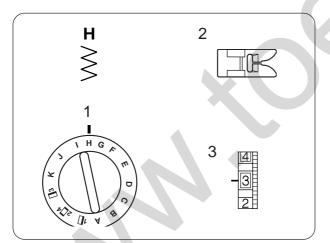
Stitch selector: F - I

2 Presser foot: Zigzag foot

3 Thread tension: 2-5



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



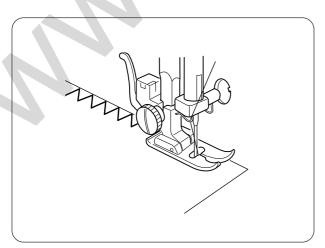
SECTION IV UTILITY STITCHING

Overcasting

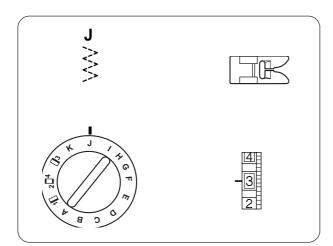
1 Stitch selector: H

2 Presser foot: Zigzag foot

3 Thread tension: 1-4



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

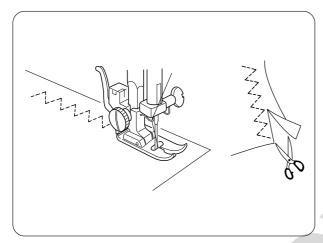


Multiple zigzag

1 Stitch selector: J

2 Presser foot: Zigzag foot

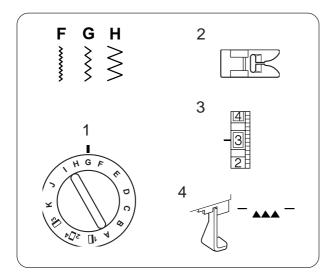
Thread tension: 1-4



This stitch is used to finish the seam allowance on synthetics and other fabrics that tend to pucker. It is also handy for darning and mending tears.

Place your fabric to allow a 1.5 cm (5/8") seam.

Trim the seam allowance after sewing.

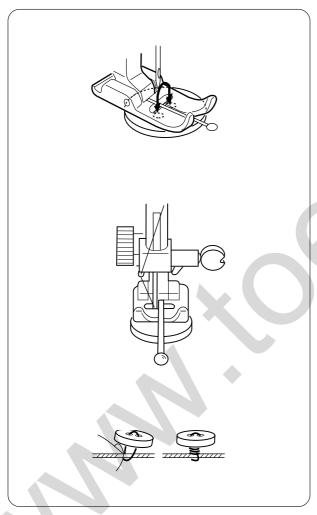


Sewing Buttons

1 Stitch selector: F - H 2 Presser foot: Zigzag foot

3 Thread tension: 1-3

4 Feed dog: Dropped (See page 16).



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Tape the button over the placement mark.

A pin can be placed on top of the foot to from a shank. Set the pattern selector at "F, G or H".

Align both holes of the button with the slot of the foot and place the left hole of the button just below the needle point.

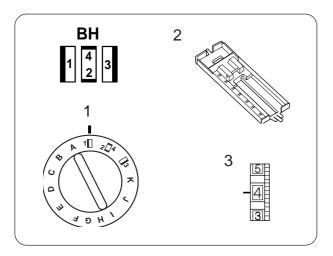
Lower the foot and turn the pattern selector until the needle point comes just above the right hole of the button.

Sew about five stitches and raise the needle.

To strengthen the shank, cut the threads leaving a 20 cm (8") tail.

Bring the needle thread down through the hole in the button and wind it around the shank.

Draw the thread to the wrong side and knot.

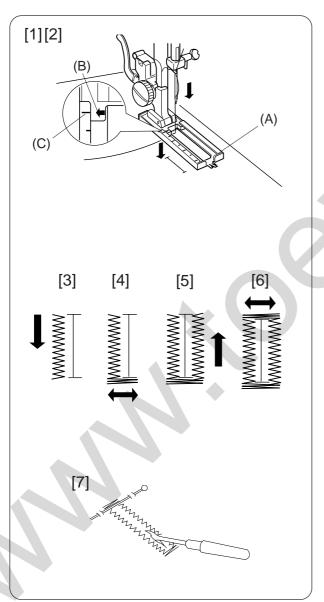


Buttonhole

1 Stitch selector: BH

2 Presser foot: Sliding buttonhole foot

3 Thread tension: 1 - 5

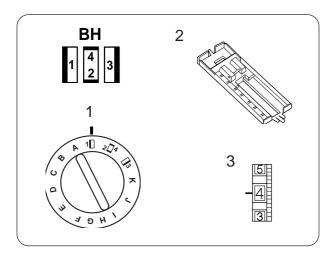


- [1] Carefully mark buttonhole length on fabric.

 Place the fabric under the foot with the buttonhole marking running toward you.
- [2] Move the slider (A) toward you so that the top mark (C) on the slider meets the start mark (B). Line up the markings on the foot with the top mark on the fabric. Lower the presser foot.

NOTE: The marking on the slider are engraved in centimeters.

- [3] Set the stitch selector at 1 . Sew forward until you reach the front marking of your buttonhole. Stop sewing at a left stitch.
- [4] Set the stitch selector at ²□⁴. Sew four (4) to six (6) stitches. Stop sewing at a right stitch.
- [5] Set the stitch selector at []3. Sew until you reach the back marking of the buttonhole. Stop sewing at a right stitch.
- [6] Set the stitch selector at ²□⁴. Sew four (4) to six
 (6) stitches. Stop sewing at a left stitch.
- [7] Remove the fabric and open a hole with a seam ripper/buttonhole opener.

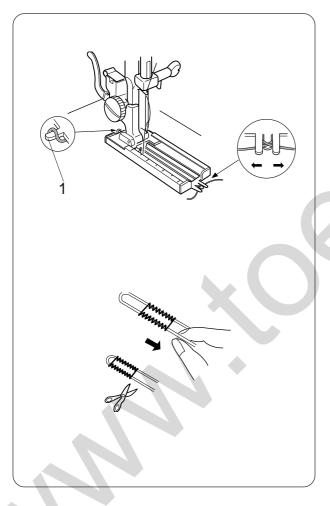


Corded Buttonhole

1 Stitch selector: BH

2 Presser foot: Sliding buttonhole foot

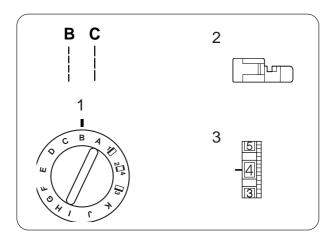
3 Thread tension: 1 - 5



- 1. When the buttonhole foot is raised, hook the cord on the cord spur at the back of the buttonhole foot.
 - 1 Spur
- 2. Bring the ends toward you under the buttonhole foot until they clear the front end.
- 3. Hook the filler cord into the forks on the front of foot to hole them tight.
- 4. Lower the needle into the garment where the buttonhole will start and lower the foot.
- 5. Depress the foot control gently and sew the buttonhole.

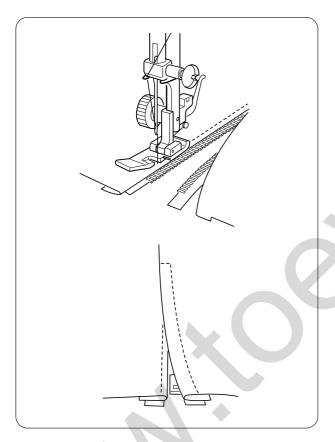
Each side of the buttonhole and the bartacks will be sewn over the cord.

- 6. Remove the fabric from the machine and cut the sewing threads.
- 7. Pull the left end of the filler cord to tighten it.
- 8. Thread the end through a darning needle, draw to the other side of the fabric and cut.



Zipper Sewing

Stitch selector: B or C
Presser foot: Zipper foot
Thread tension: 3 - 6

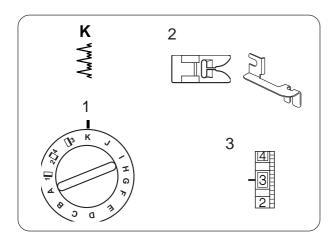


Pin or baste zipper tape to fabric and place it under the foot.

Smooth the threads toward the back and lower the foot.

To sew the left side of the zipper, guide the edge of the zipper along the zipper teeth and stitch through the garment and zipper tape.

Turn the fabric and sew the other side of the zipper in the same way as you did the left side.



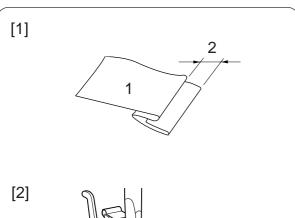
Blind Stitch Hemming

1 Stitch selector: K

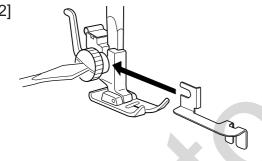
2 Presser foot: Zigzag foot

Hem guide

3 Thread tension: 2 - 4

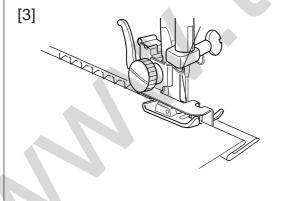


- [1] How to fold the fabric.
 - 1 Wrong side of fabric
 - 2 0.4 0.7 cm (5/32"- 1/4")



[2] Lower the presser foot, then loosen the foot holder screw to place the hem guide between the screw and the shank of foot holder.

Tighten the screw making sure the wall of hem guide is placed in the middle of the toes of the presser foot.

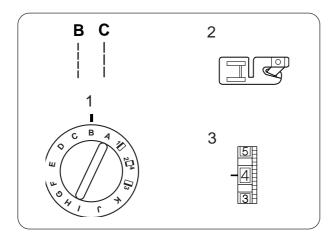


[3] Raise the presser foot and place the fabric under the foot so that the soft fold rests against the wall of hem guide.

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

[4] Spread the fabric flat the right side facing up.

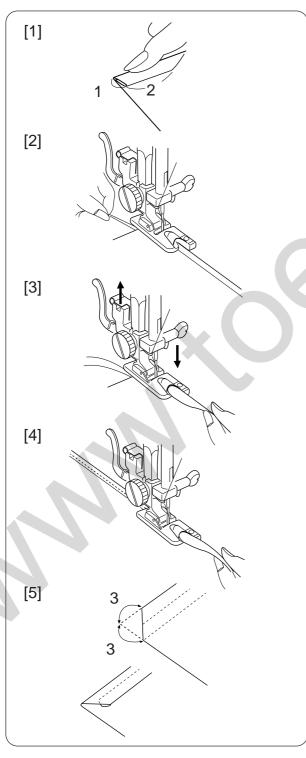




Rolled Hem

Stitch selector: B or C
 Presser foot: Hemmer foot

3 Thread tension: 2 - 6



- [1] Make a double 0.25 cm fold approximately 8 cm in qlength.
 - 1 0.25 cm
 - 2 8 cm
- [2] Lower the needle into the fabric at the point where sewing is to begin, then lower the hemmer foot. Sew 3 or 4 stitches while holding the needle and bobbin thread.
- [3] Lower the needle into the fabric and lift the hemmer foot.

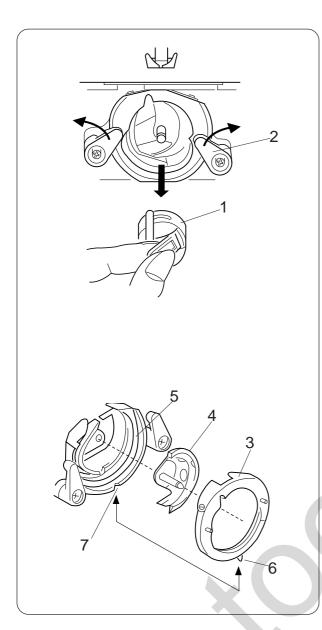
 Insert the folded portion of the fabric into the curl

of the hemmer foot.

[4] Lower the hemmer foot, then sew by lifting up the edge of the fabric to keep it feeding smoothly and

- [5] Trim about 0.7 cm from corners as illustrated, to reduce bulk.
 - 3 0.7 cm

evenly.



SECTION V CARE OF YOUR MACHINE

Dismantling and Assembling Hook Race

Note: Turn off the power switch or unplug the machine.

To dismantle hook race:

Raise the needle to its highest position and open the hook cover

Open the hinged latch of bobbin case and take it out of the machine.

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

Remove the hook.

- * Clean the hook race with a brush and a soft dry cloth.
 - 1 Bobbin case
 - 2 Hook race ring holder
 - 3 Hook race ring
 - 4 Hook
 - 5 Hook race

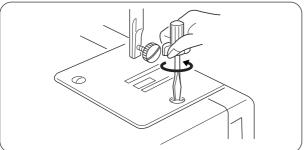
To assemble hook race:

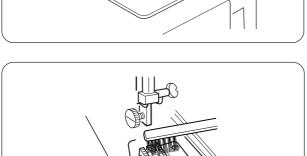
Hold the hook by the center pin and fit it carefully back into the hook race, forming a perfect circle with the shuttle driver.

Attach the hook race ring making sure the bottom pin fits into the notch.

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

- 1 Pin
- 2 Notch





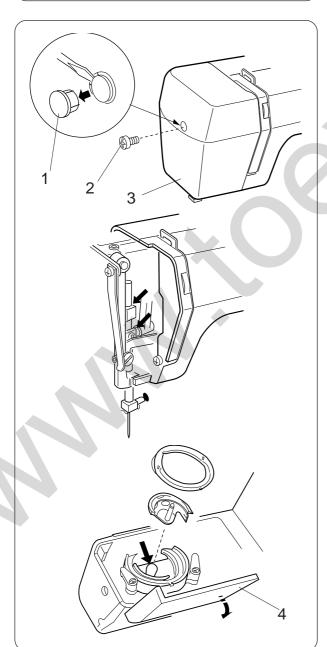


Note: Turn off the power switch or unplug the machine before cleaning the feed dog.

Remove the needle and the presser foot. Remove the needle plate set screw and remove the needle plate.

With a brush, clean out dust and lint clogging the feed dog teeth.

Reset the needle plate.



Oiling the Machine

Note: Turn off the power switch or unplug the machine.

Oil the points as shown at least once a year.

Use good quality sewing machine oil.

One or two drops of oil is sufficient.

Remove excess oil, otherwise it may stain fabric. If machine has not been used for an extended time, oil it before sewing.

Oil behind the face plate

Remove the cap, screw and face plate. Oil the point indicated in the illustration.

- 1 Cap
- 2 Screw
- 3 Face plate

Oiling the shuttle hook area

Open the hook cover by pulling down the embossed part on the left side of the cover.

Oil the point indicated in the illustration.

4 Hook cover

Troubleshooting

Condition	Cause	Reference
The needle thread	1. The needle thread is not threaded properly.	See Page 12
breaks.	2. The needle thread tension is too tight.	See Page 14
	3. The needle is bent or blunt.	See Page 8
	4. The needle is incorrectly inserted.	See Page 8
	5. The fabric is not being drawn to the back when sewing is finished	dSee Page 17
	6. The thread is either too heavy or too fine for the needle.	See Page 8
The bobbin thread	1. The bobbin thread is not threaded properly in the bobbin case.	See Page 11
breaks.	2. Lint has collected in the bobbin case.	Clean the bobbin case
	3. The bobbin is damaged and doesn't turn smoothly.	Exchange bobbin
The needle breaks.	1. The needle is incorrectly inserted.	See Page 8
	2. The needle is bent or blunt.	See Page 8
	3. The needle clamp screw is loose.	See Page 8
	4. The tension of the needle thread is too tight.	See Page 14
	5. The fabric is not drawn to the back when sewing is finished.	See Page 17
	6. The needle is too fine for the fabric being sewn.	See Page 8
	7. The pattern selector dial had been turned while the needle was in the material.	See Page 17
	in the material.	
Skipped stitches.	1. The needle is incorrectly inserted.	See Page 8
	2. The needle is bent or blunt.	See Page 8
	The needle and/or threads are not suitable for the work being sewn.	See Page 8
	4. A BLUE TIPPED needle is not being used for sewing stretch, ve	%See Page 8
	fine fabrics and synthetics.	0 5 40
	5. The needle thread is not threaded properly.	See Page 12
Seam puckering.	1. The needle thread tension is too tight.	See Page 14
	2. The machine is not threaded correctly.	See Page 12
	3. The needle is too heavy for the fabric being sewn.	See Page 8
	4. The stitches are too coarse for the fabric being new line sewn.	Make the
	* When sewing extremely light weight materials, place a sheet	stitches denser.
	of paper underneath the fabric.	
Stitches from loops	1. The needle thread tension is too loose.	See Page 14
below the work	2. The needle is either too heavy or too fine for the thread.	See Page 8
The cloth is not	1. The feed dog is packed with lint.	See Page 28
feeding smoothly.	2. The stitches are too fine.	Make the
		stitches coarser.
The machine does not	The machine is not plugged in.	See Page 6
work.	2. Thread is caught in the hook race.	See Page 27
	3. Handwheel has been disengaged for bobbin winding.	See Page 10
The machine does not	Threads have been caught in hook mechanism.	See page 27
run smoothly and is	2. The feed dog is packed with lint.	See Page 28
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