

INSTRUCTION BOOK

RX 18S

OPERATION INSTRUCTION:

The symbol “0” on a switch indicates the “off” position of a switch.

For appliances with a polarized plug (one blade wider than the other):

To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only one way.

If the plug does not fit fully in the outlet, reverse the plug.

If it still does not fit, contact a qualified electrician to install the proper outlet.

Do not modify the plug in any way.

Foot Controller TJC-150 for use with Sewing Machine RX18S (for U.S.A. market only).

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 before 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.
2. 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 the 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.
13. 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 adjustments mentioned in the instruction manual.

SAVE THESE INSTRUCTIONS

IMPORTANT

Be sure to keep machine away from static electricity, heat sources, humidity, and direct sunlight. When using your sewing machine for the first few times, place a waste fabric under the presser foot and run the machine without thread for a few minutes. Wipe away any oil which may have appeared.

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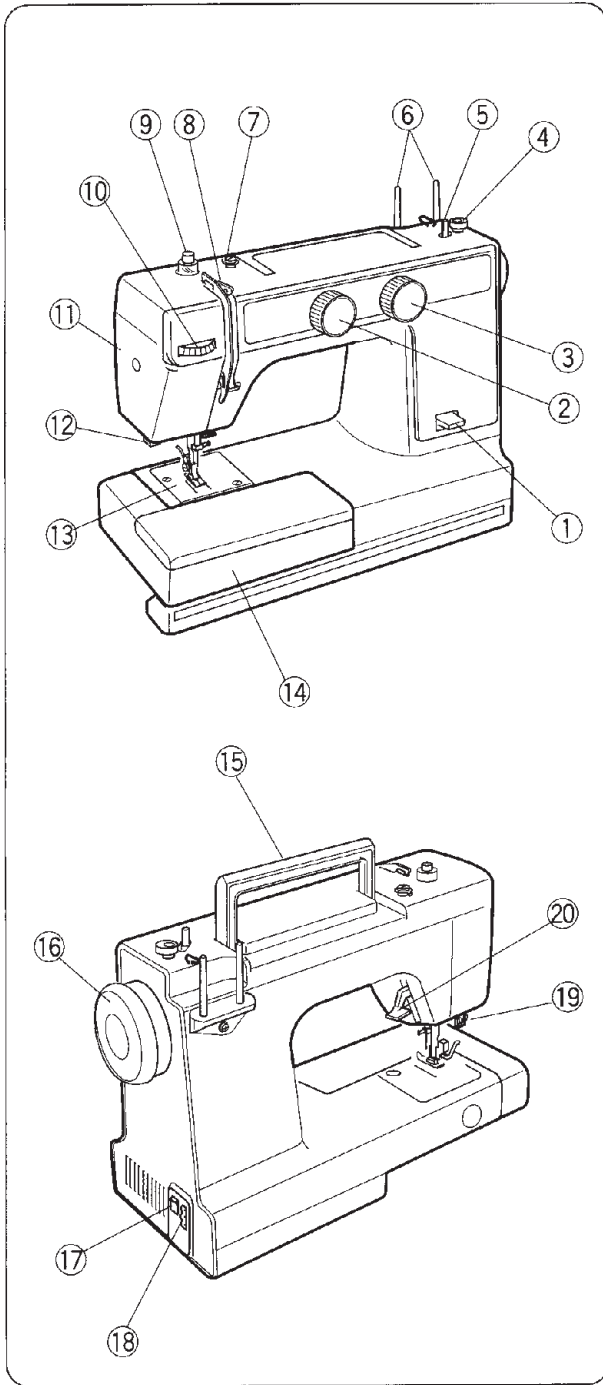
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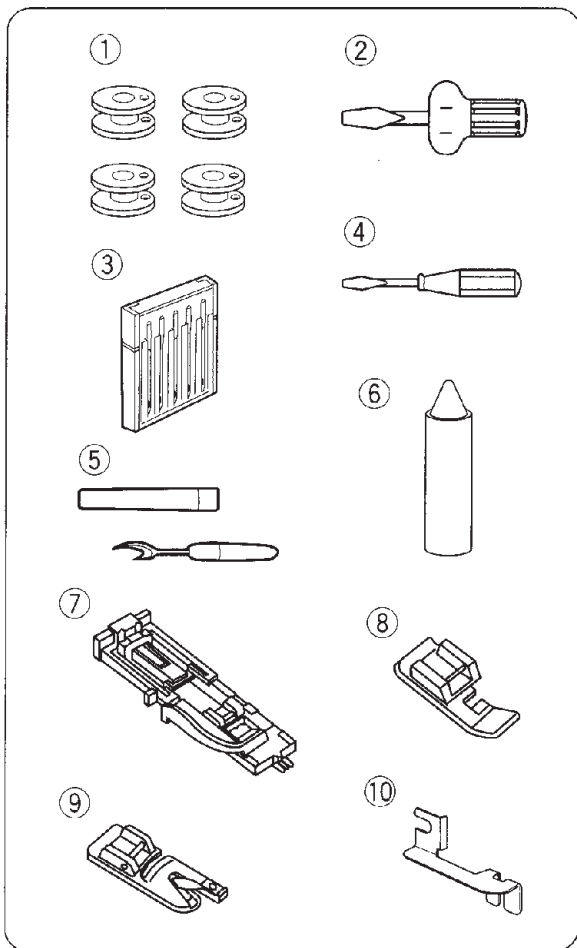
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SECTION 1 ESSENTIAL PARTS

Names of Parts

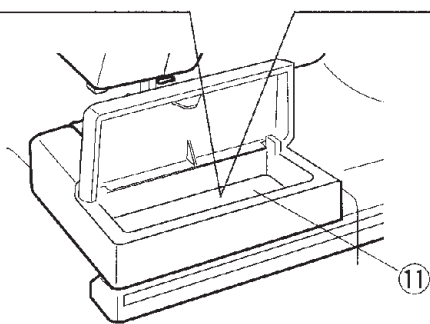


- ① Reverse stitch button
- ② Pattern selector dial
- ③ Stitch length dial
- ④ Bobbin winder stopper
- ⑤ Bobbin winder spindle
- ⑥ Spool pins
- ⑦ Bobbin winder thread guide
- ⑧ Thread take-up lever
- ⑨ Pressure regulator
- ⑩ Thread tension dial
- ⑪ Face plate
- ⑫ Thread cutter
- ⑬ Needle plate
- ⑭ Extension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



Standard Accessories

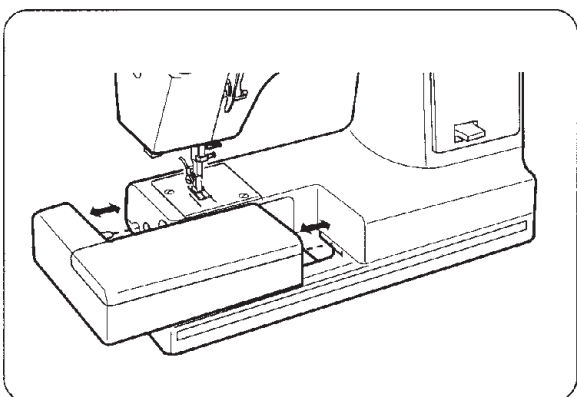
- ① Bobbins
- ② Large screwdriver
- ③ Needle set
- ④ Small screwdriver
- ⑤ Seam ripper/ Buttonhole opener
- ⑥ Oil
- ⑦ Automatic buttonhole foot
- ⑧ Zipper foot
- ⑨ Hemmer foot
- ⑩ Hem guide



Accessory Storage Box

Sewing accessories are conveniently located in the extension table.

- ⑪ Accessory storage box



Extension Table

For free arm sewing

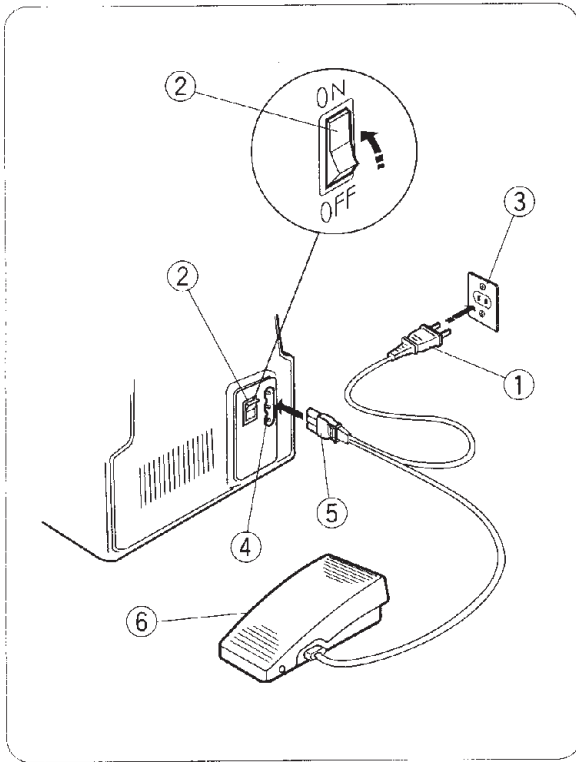
Pull the end of the extension table away from the machine, as illustrated.

To attach the table

Slide the extension table to the right, making sure the pins match the receiving holes.

SECTION 2 GETTING READY TO SEW

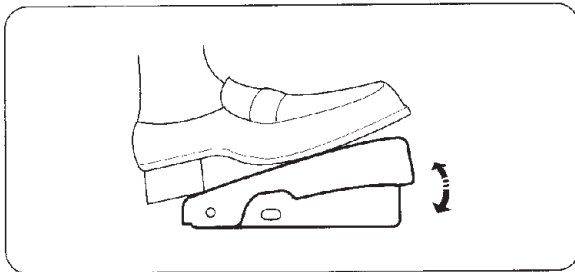
Connecting Machine to Power Supply



- ① Power supply plug
- ② Power switch
- ③ Outlet
- ④ Machine socket
- ⑤ Machine plug
- ⑥ Foot control

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

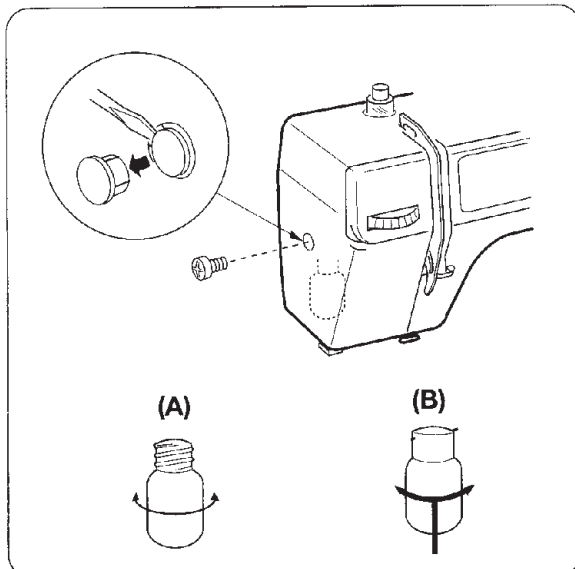
1. Turn off the power switch ② .
2. Insert the machine plug ⑤ into the machine socket ④ .
3. Insert the power supply plug ① into the outlet ③ .
4. Turn on the power switch ② to turn on the power and sewing light.



Controlling Sewing Speed

Sewing speed can be varied by the foot control.

The harder you press on the foot 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 screw.

* Unplug the power supply before changing the bulb.

- (A) • To remove.....Turn counterclockwise.
- To replace.....Turn clockwise.
- (B) • To remove.....Push and turn counterclockwise.
- To replace.....Push and turn clockwise.

Pressure Regulator

To increase pressure, push down the pressure regulator button until suitable pressure is obtained.

- ① Pressure regulator button

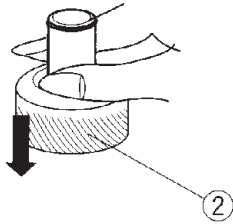
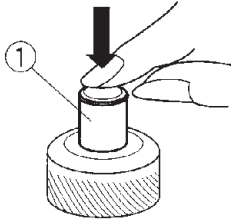
To release pressure, push down on the ring, then the button will spring up to its highest position.

- ② Ring

Setting Position

The button should normally be about 3/4 of the way down, except in the following situations:

- Press the button about 1/4 of the way down for sewing delicate synthetic fabrics and knitted fabrics which tend to stretch out of shape.
- Press the button all the way down for thick or heavy fabrics.



Dropping the Feed Dog

- ① Open the hook cover.

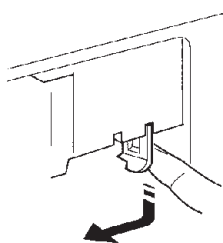
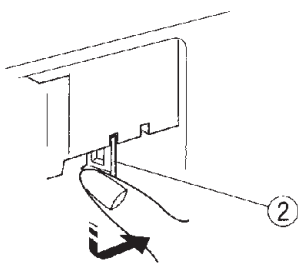
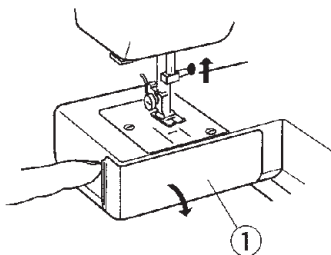
- ① Hook cover

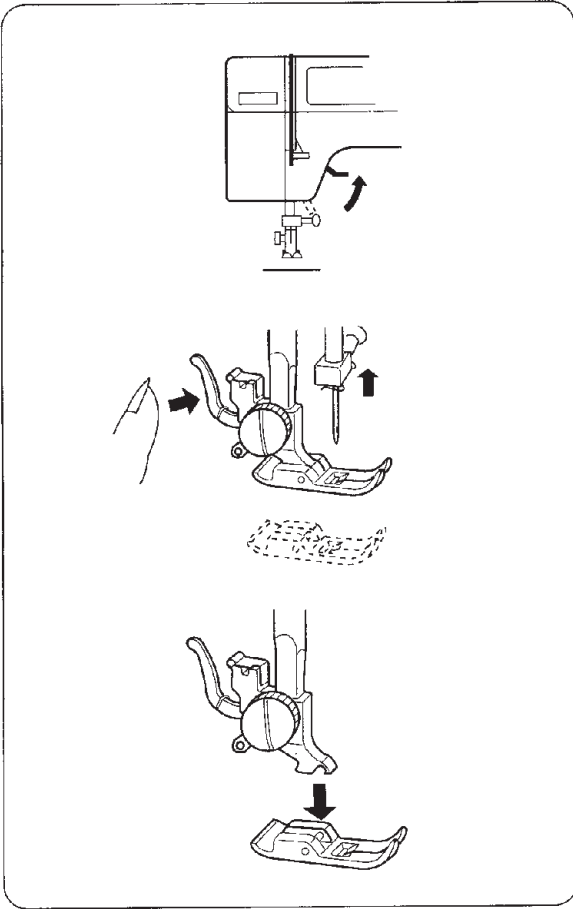
- ② To drop the feed dogs, pull down the lever and move it in the direction of the arrow, as illustrated.

- 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.





To Attach and Remove the Presser Foot

To remove

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

Raise the presser foot.

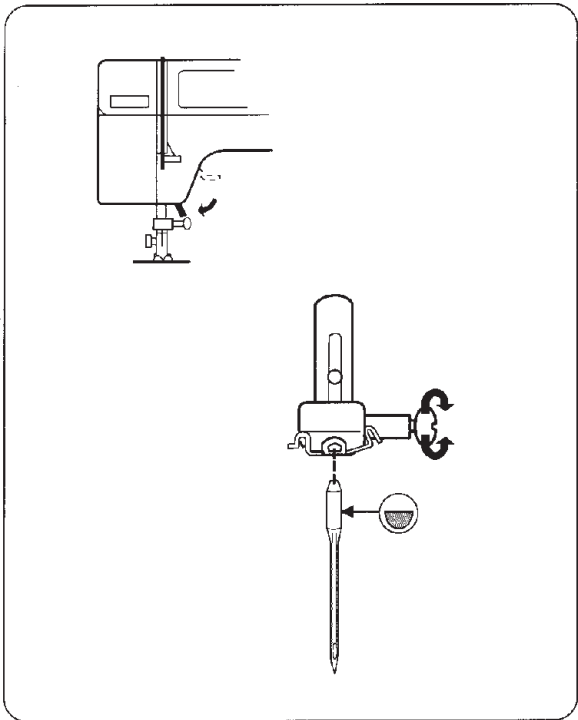
Press the lever on the back of the foot holder.

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

Turn off the power switch.

Raise the needle by turning the handwheel toward you, then 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 needle 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

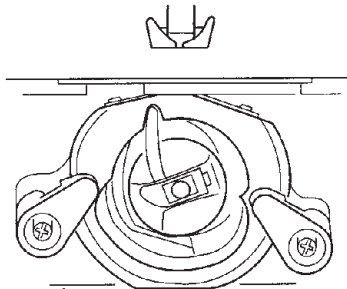
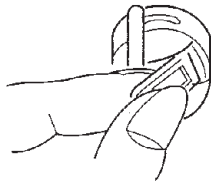
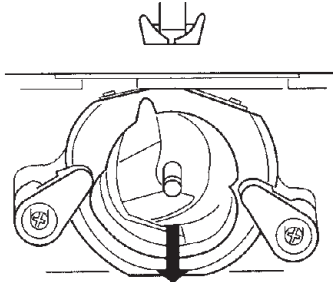
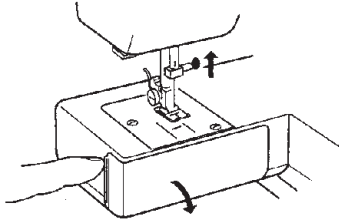
	FABRICS	THREADS	NEEDLE SIZE
LIGHT WEIGHT	Crepe de Chine, Voile, Lawn, Organdy, Georgette, Tricot	Fine Silke Fine Cotton Fine Synthetic Fine Cotton Covered Polyester	9 or 11
MEDIUM WEIGHT	Linens, Cotton, Pique, Serge, Double Knits, Percale	50 Silk 50 to 80 Cotton 50 to 60 Synthetic Cotton covered Polyester	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

Note:

- * In general, fine threads 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.

Removing or Inserting the Bobbin Case

Open the hook cover.



Raise the needle by turning the handwheel toward you.

Take out the bobbin case by holding the latch.

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

Winding the Bobbin

① Pull the handwheel out.

② Draw the thread from spool.

Pass the thread through the top cover thread guide.

③ Guide the thread around the bobbin winder thread guide.

④ Insert the thread through the hole in the bobbin from the inside to the outside.

Pull the bobbin on the bobbin winder spindle.

⑤ Push it to the right.

⑥ 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.

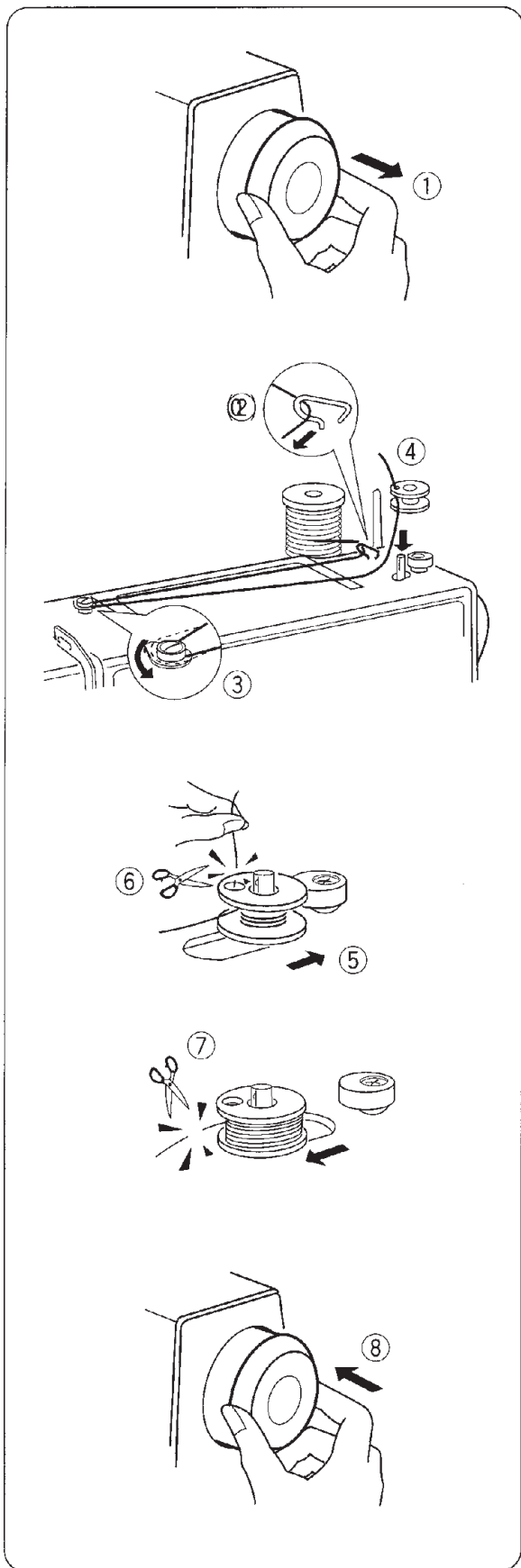
⑦ Depress the foot control again.

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.

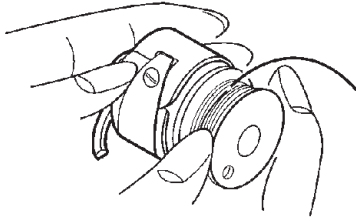
⑧ Push the handwheel to the left (original position).

Note: Return the bobbin winder spindle when the machine stops.



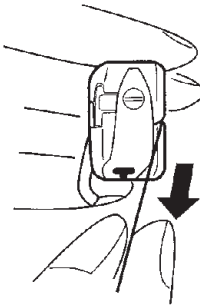
Threading Bobbin Case

①



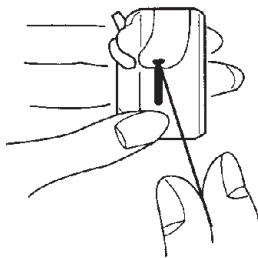
- ① Place the bobbin into the bobbin case. Make sure the thread unwinds in the direction of arrow.

②



- ② Pull the thread into the bobbin case slot.

③



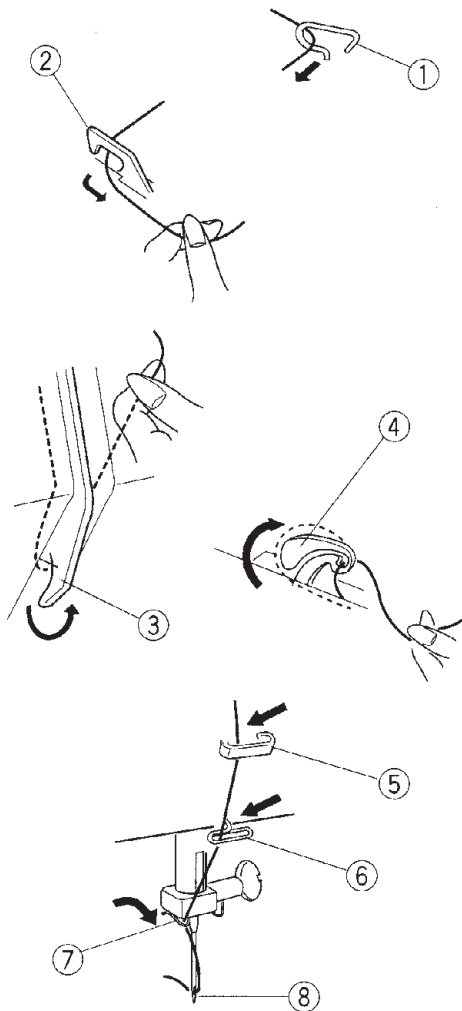
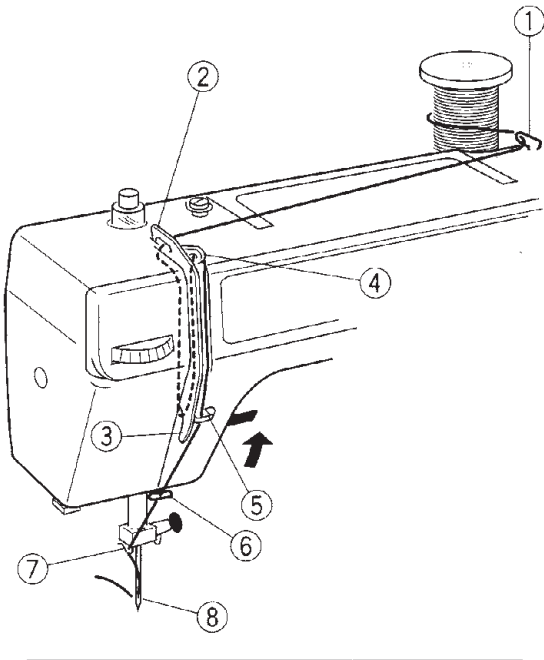
- ③ Draw the thread under the tension spring and into the delivery eye.

* Leave about 10 cm (4") of free thread.

Threading the Machine

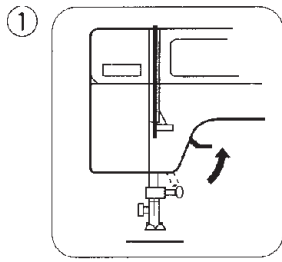
Raise the thread take-up lever to the highest point by turning the handwheel towards you.

Raise presser foot with presser foot lifter and pass the thread in the order from ① to ⑧.

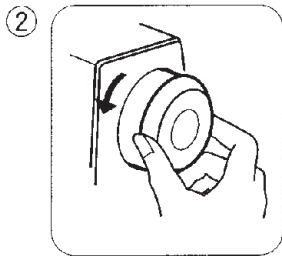
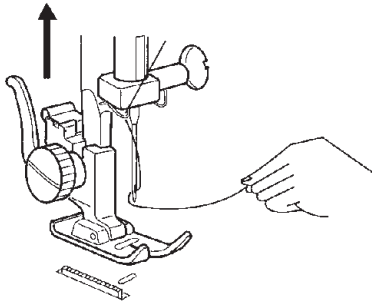


- ① Pass the thread through the top cover thread guide.
- ② Draw the thread around the thread guide and down into the tension groove.
- ③ Then down around the check spring holder.
- ④ Firmly draw the thread from left to right over the take-up lever and down into the take-up lever eye.
- ⑤ ⑥ Then down through the lower thread guides.
- ⑦ Slide the thread behind the needle bar thread guide on the left.
- ⑧ Thread the needle from front to back.

Drawing Up Bobbin Thread

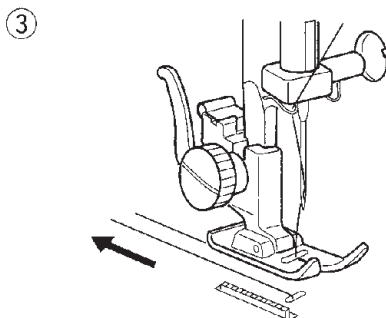
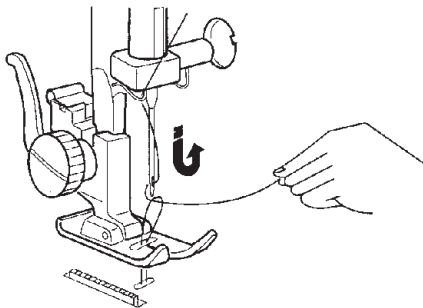


- ① Raise the presser foot and hold the needle thread lightly with your left hand.



- ② Turn the handwheel slowly towards 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.

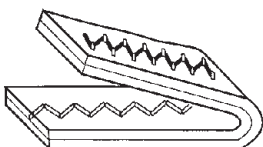
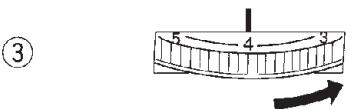
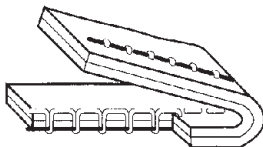
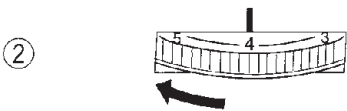
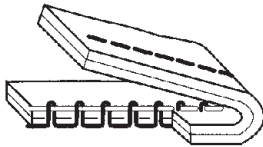
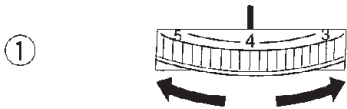
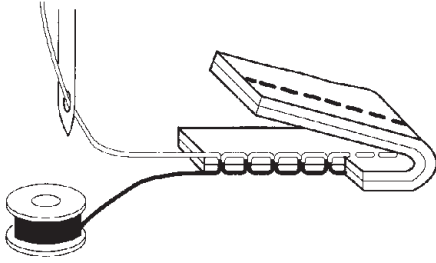
Lightly draw up the needle thread forming a loop of the bobbin thread.



- ③ 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 fabric when sewing straight seams.



- ① Move the desired thread tension number to the setting mark to set.

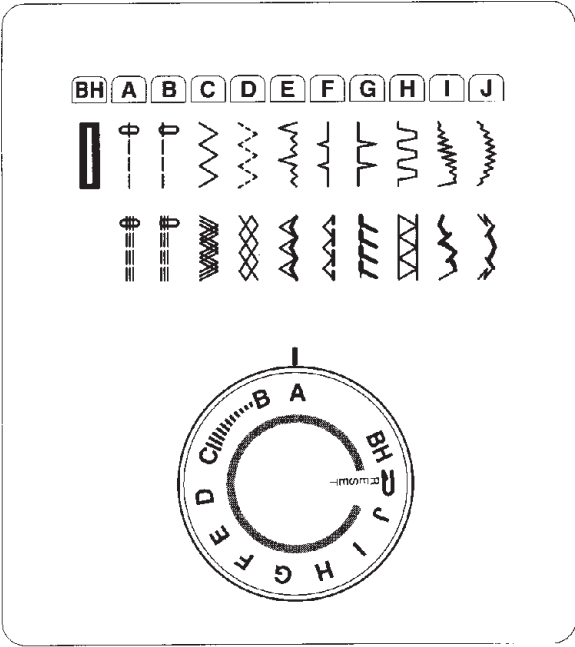
- ② Loosen the needle thread tension by moving the dial to a lower number.

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

Tread 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.

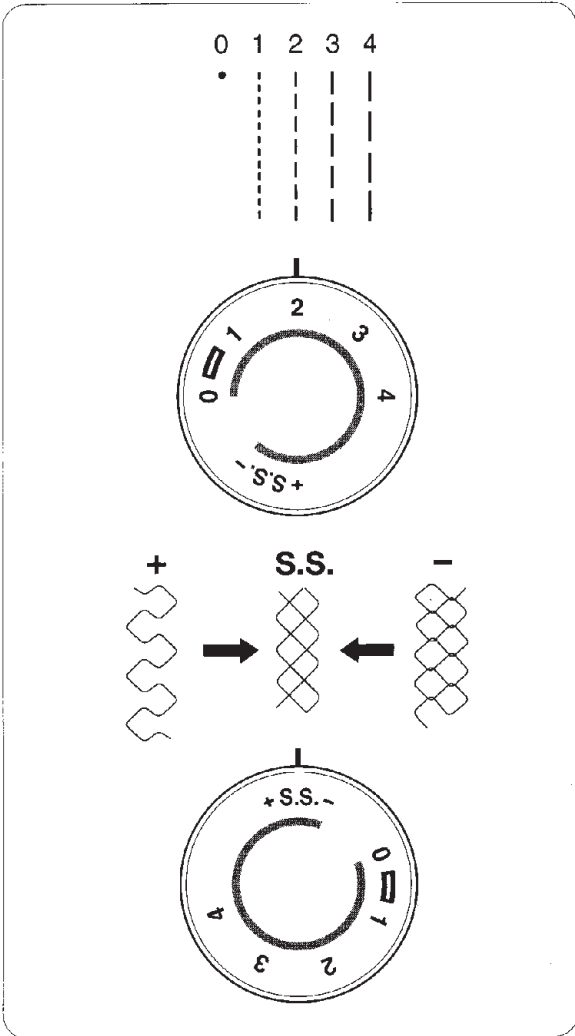
- **Selecting Stretch Stitch Patterns**

When sewing stretch stitch, set the stitch length dial at “ S.S ”.


If forward and reverse feeds become unbalanced due to the type of fabric, restore the balance as follows:

If patterns are compressed, turn the dial toward “ + ”.

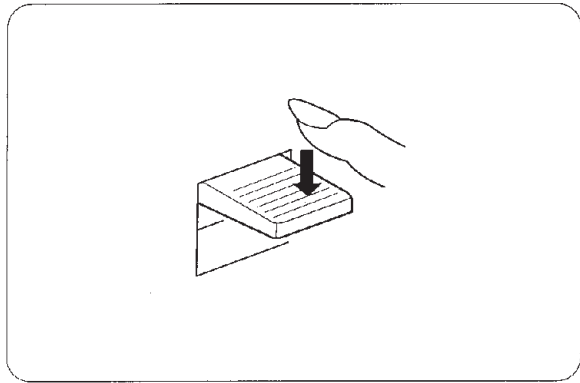
If patterns are drawn out, turn the dial toward “ - ”.



Stitch Length Dial

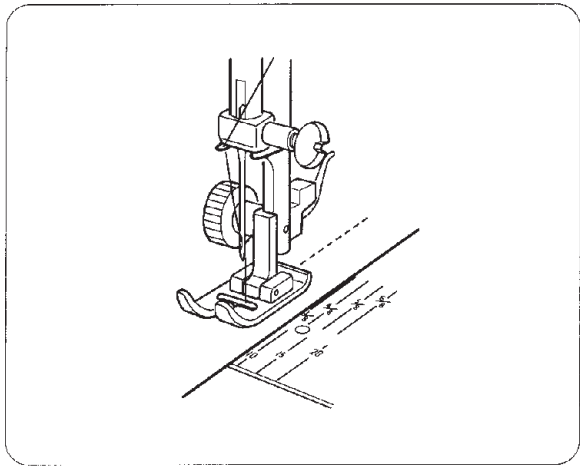
- Place the desired number at the setting mark by turning the stitch length dial.
- The higher the number, the longer the stitch length.
- “  ” is the correct setting for buttonhole stitching.
- Adjust the dial in the 0.3 to 4 range when you sew the zigzag stitch.
- Place “ S.S. ” at the setting mark to sew the stretch stitch pattern correctly.
- How to make the stretch stitch pattern look best.

If the stretch stitch pattern is not attractive, turn the stitch length dial in the direction of “ - ” to compress it, and “ + ” to expand it.



Reverse Stitch Button

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



Seam Guide Line

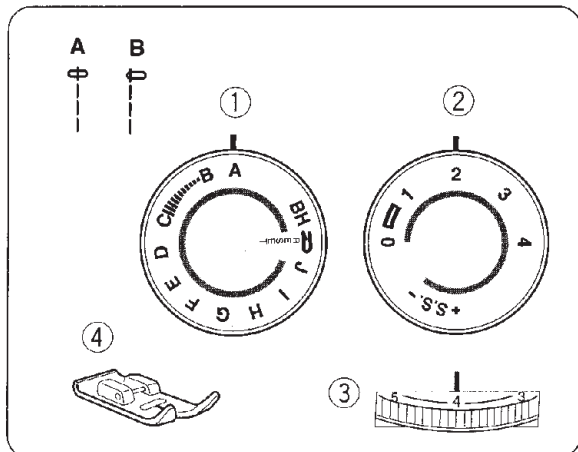
The numbers on the needle plate indicate the distance between the center needle position and the line.

The numbers in front are millimeters.

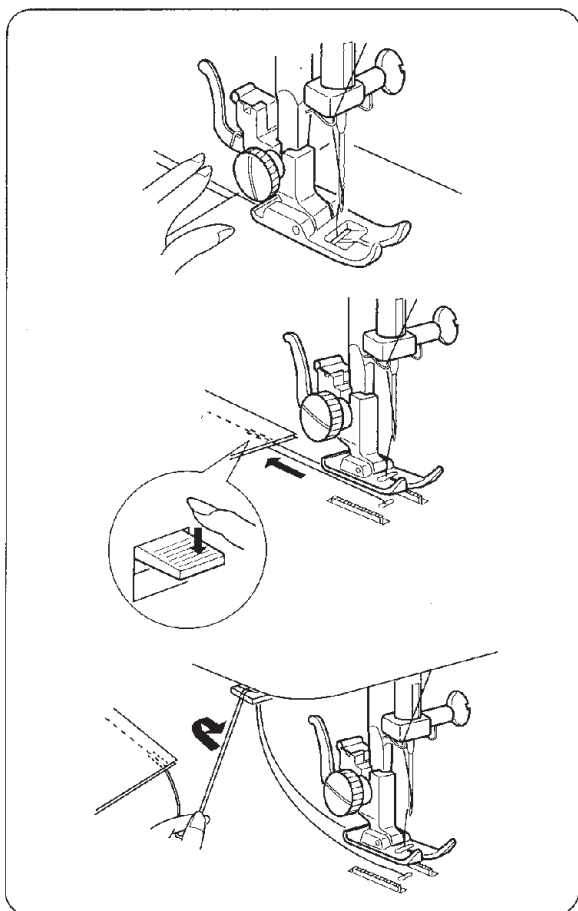
The numbers in back are fractions of an inch.

SECTION 3 BASIC SEWING

Straight Stitch Sewing



- ① Stitch selector: A or B
- ② Stitch length: 1.5–4
- ③ Tread tension: 2–6
- ④ Presser foot: Zigzag foot



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

Lower the needle into the fabric.

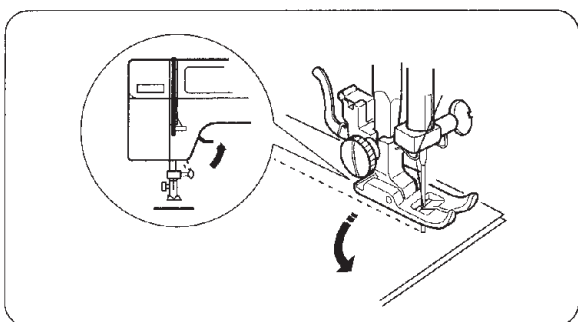
Lower the presser foot and smooth the threads toward the back. Depress the foot control.

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.

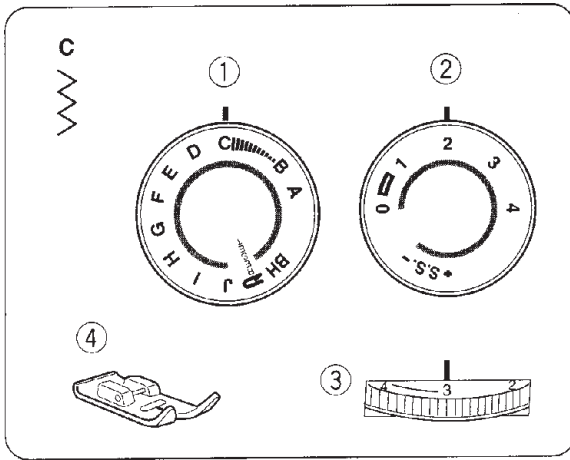


To Change Sewing Direction

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

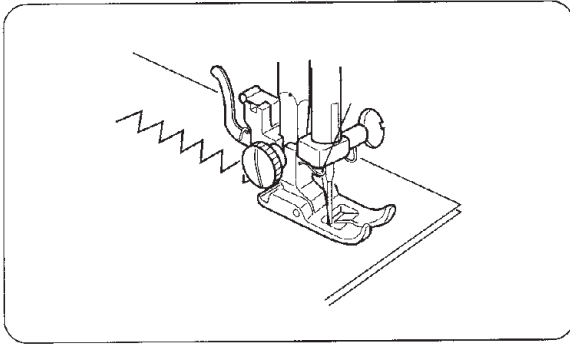
Raise the presser foot.

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



Zigzag Stitching

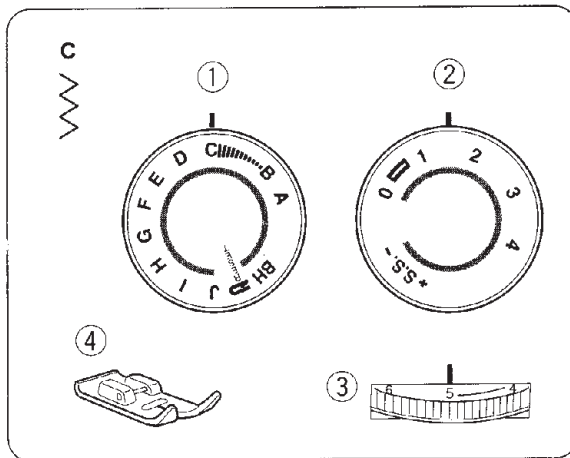
- ① Stitch selector: C
- ② Stitch length: 0.5–4
- ③ Thread tension: 2–5
- ④ Presser foot: Zigzag foot



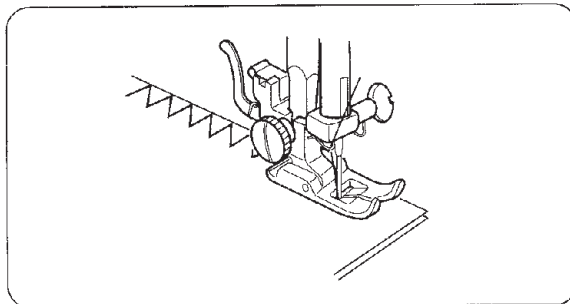
Simple zigzag stitching is widely used for overcasting, sewing on buttons, etc.

SECTION 4 UTILITY STITCHING

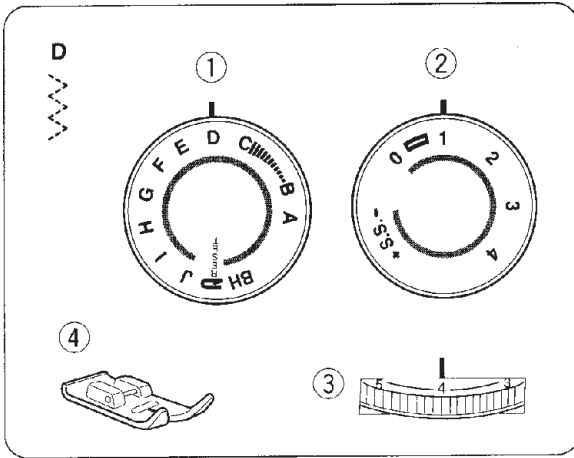
Overcasting



- ① Stitch selector: C
- ② Stitch length: 1–2
- ③ Thread tension: 3–7
- ④ Presser foot: Zigzag foot

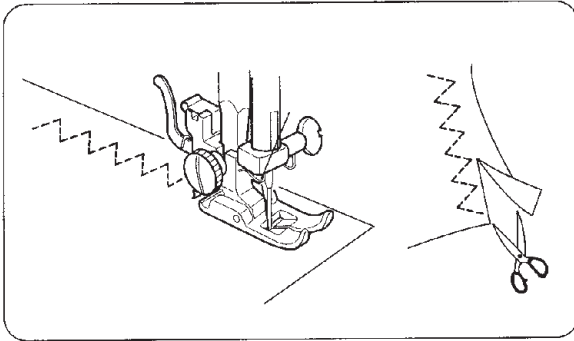


This type of stitch is used on the seam allowance to prevent fabric from fraying at raw edges.



Tricot Stitch

- ① Stitch selector: D
- ② Stitch length: 0.5–1.5
- ③ Thread tension: 3–6
- ④ Presser foot: Zigzag foot

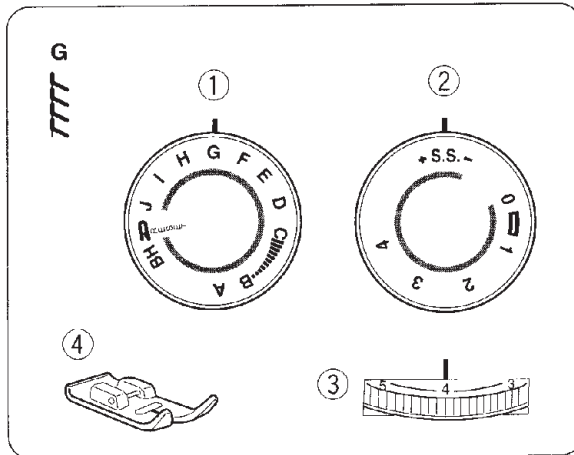


This stitch is used to finish the seam allowance on synthetics and other fabrics that tend to pucker. It is also excellent for darning and mending tears.

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

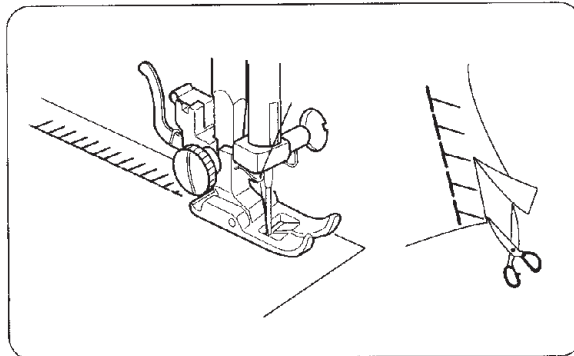
Trim the seam allowance after sewing.

Note: Be careful not to cut the stitches.



Knit Stitch

- ① Stitch selector: G
- ② Stitch length: S.S.
- ③ Thread tension: 3–7
- ④ Presser foot: Zigzag foot

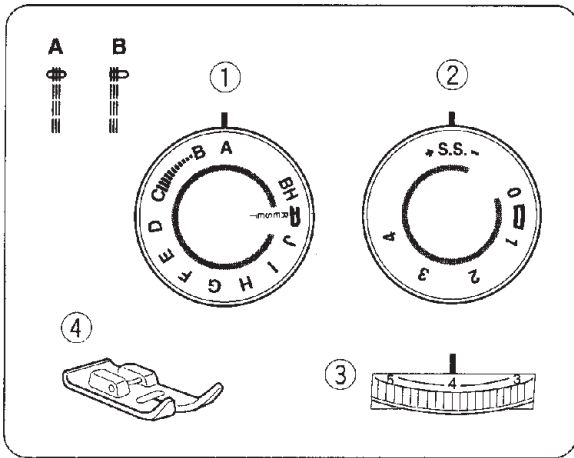


This knit stitch is ideal for sewing swimwear and stretch velour because it provides the greatest amount of elasticity and strength.

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

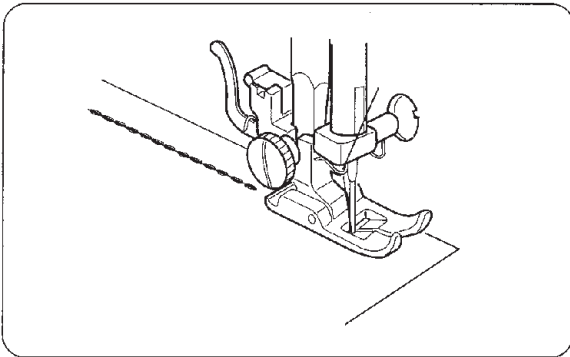
Trim the seam allowance after sewing.

Note: Be careful not to cut the stitches.



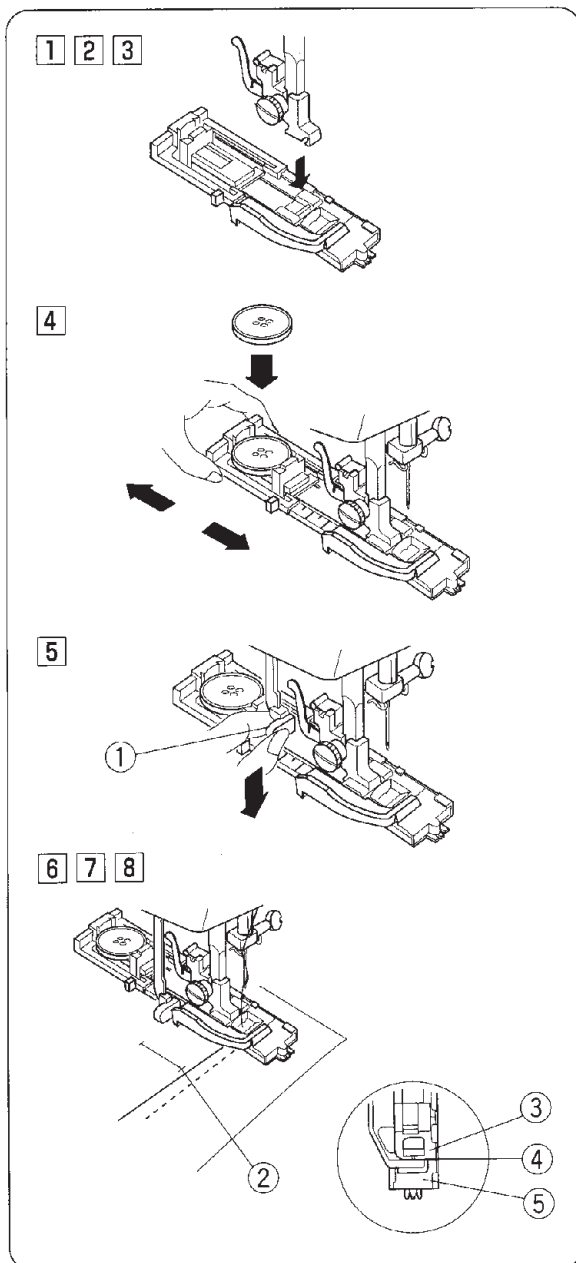
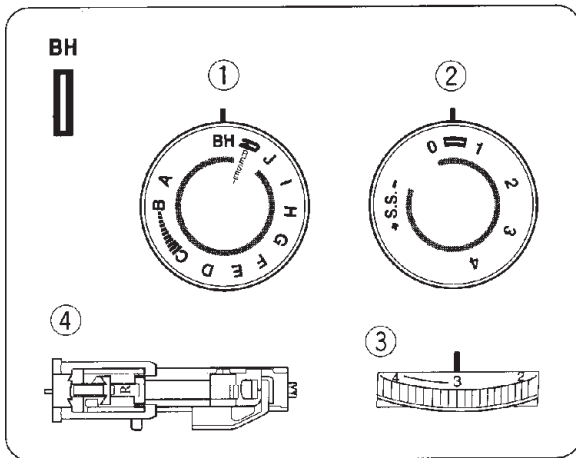
Triple Strength Stitch

- ① Stitch selector: A or B
- ② Stitch length: S.S.
- ③ Thread tension: 2-6
- ④ Presser foot: Zigzag foot



The stitch is sewn with two stitches forward and one stitch backward forming a seam that does not rip easily.

Garments should be basted for fitting before seaming.



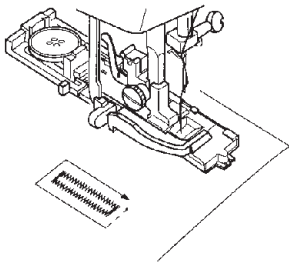
Automatic Buttonhole

- ① Stitch selector: BH
- ② Stitch length:
- ③ Thread tension: 1-5
- ④ Presser foot: Automatic buttonhole foot (R)

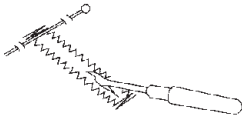
- * The size of buttonhole is automatically set by placing the button in the automatic buttonhole foot (R).
- * The button holder of the foot takes a button size up to 2.5 cm (1") in diameter.
- * Make a test buttonhole on a sample duplicating the fabric, interfacing and seams of the actual garment.
- * Place the buttonhole on the fabric sample and mark the top and bottom to determine the position of buttonhole. Use interfacing on stretch fabrics.

- 1 Turn the handwheel toward you to raise the needle to its highest position. Raise the presser foot lifter.
 - 2 Select the pattern "BH" by turning the pattern selector dial. If the BH pattern is already selected, reset the dial once according to the procedure in 12 (on page 22).
 - 3 Attach the automatic buttonhole foot (R).
 - 4 Pull the button holder to the back, and place the button in it. Push back the button holder toward you as far as it will go.
 - 5 Pull the buttonhole lever downward as far as it will go.
 - ① Buttonhole lever
 - 6 Insert fabric under the foot. Turn the handwheel slowly towards you with your right hand until the needle goes down and continue turning handwheel until the take-up lever is at its highest position.
 - 7 Remove the fabric to the left to draw both threads to the left.
 - 8 Insert the garment under the foot, and lower the needle at the starting point. Then lower the automatic buttonhole foot.
 - ② Strating point
- Note:** There should be no gap between the slider and spring holder of the foot as shown above.
- ③ Slider
 - ④ There should be no gap
 - ⑤ Spring holder

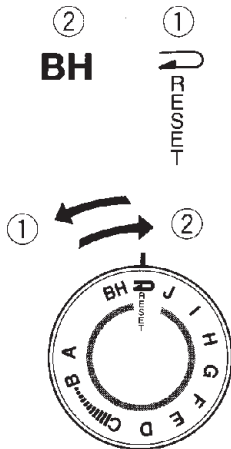
9



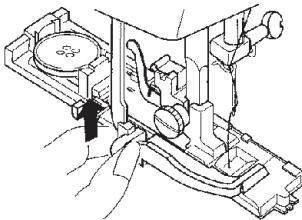
10 11



12



13



9 Sew slowly and stop the machine at the strating point when a buttonhole is completed.

* The front bartack and left row first, then the back bartack and right row.

10 Cut both needle and bobbin threads leaving about 10 cm (4") thread ends. Draw the needle thread to wrong side of fabric by pulling the bobbin thread. Then, knot the threads.

11 Insert a pin inside the bartack. Then cut the opening with a seam ripper.

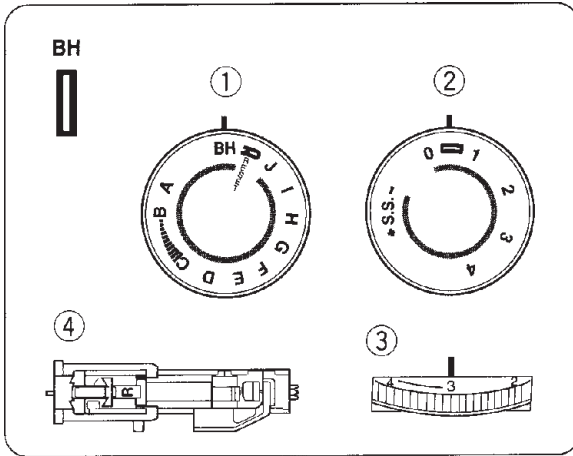
Take care not to cut the stitches.

12 To make the next buttonhole.

To continue the same size of buttonhole stitching, return the pattern selector dial to ①, then back to ② again, as shown.

Now, simply step on the foot control sew an identical buttonhole.

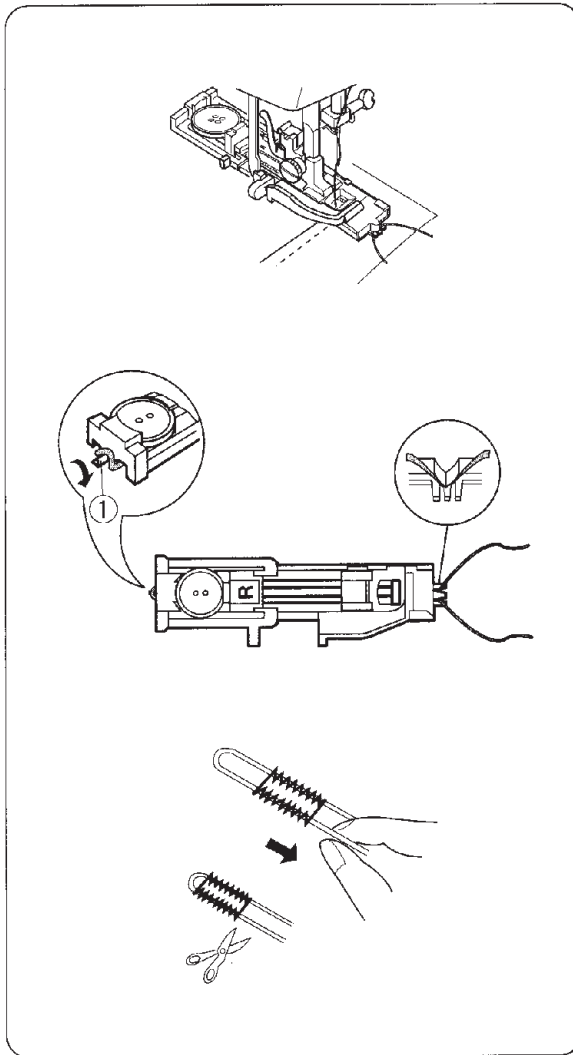
13 When buttonhole sewing is finished, push the buttonhole lever upward as far as it will go.



Corded Buttonhole

- ① Stitch selector: BH
- ② Stitch length:
- ③ Thread tension: 1-5
- ④ Presser foot: Automatic buttonhole foot (R)

- * Set the stitch width in accordance with the thickness of the cord used.
- * To cut the opening and to reset for sewing the next buttonhole, refer to the instructions on pages 21 and 22.



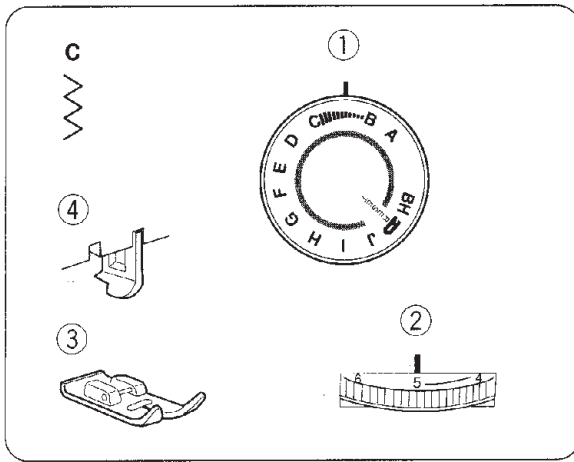
1. With the buttonhole foot raised, hook the cord on the cord spur at the back of the buttonhole foot.

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 R to hold 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.

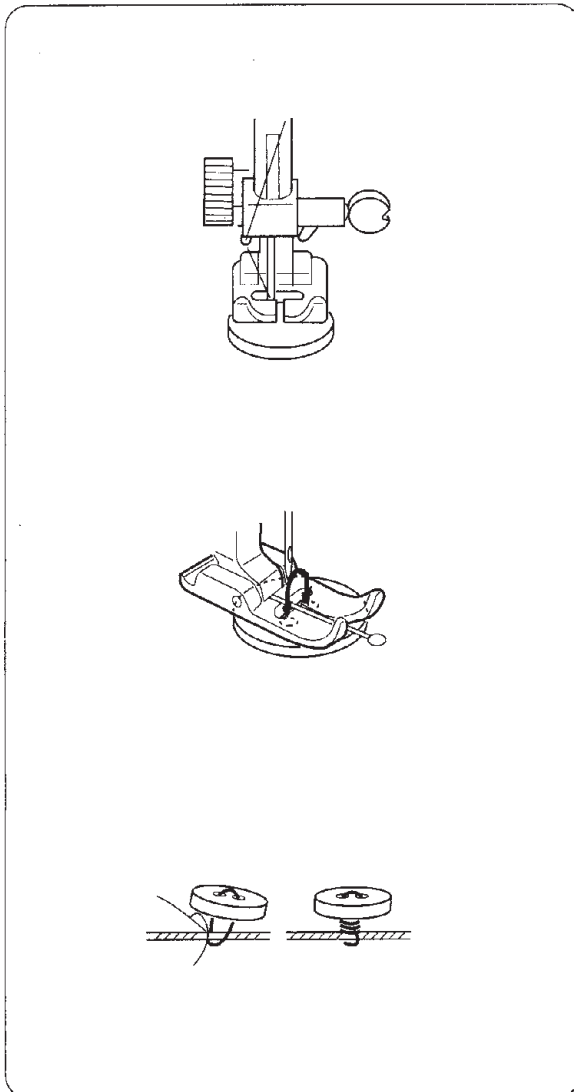


Sewing Buttons

- ① Stitch selector: C
- ② Thread tension: 3-7
- ③ Presser foot: Zigzag foot
- ④ Feed dogs: Dropped

* Set stitch length dial any number (not necessary to adjust).

* Drop the feed dog (see page 6).



Tape the button over the placement mark. A pin can be placed on top of the foot to form a shank.

Set the pattern selector at "B."

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.

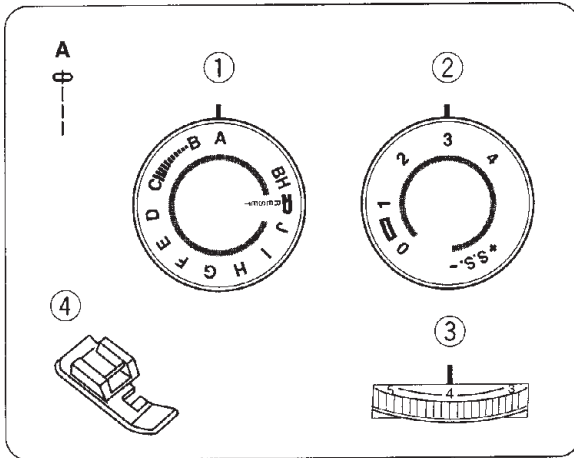
Set the pattern selector at "B" again and sew a few stitches to lock thread.

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

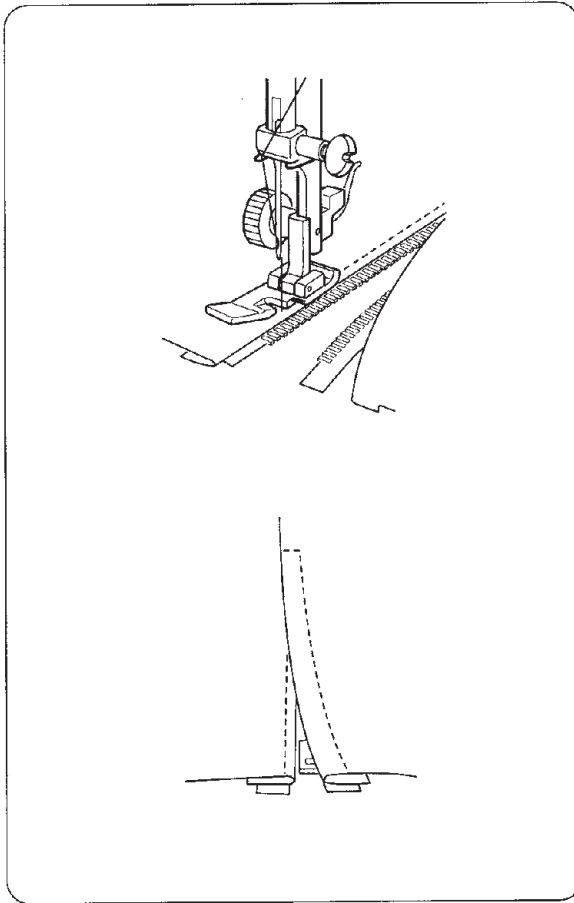
Bring the needle thread down through the hole in the button and wind it around the shank.

Draw the thread to the wrong side and knot.

Zipper Application



- ① Stitch selector: A
- ② Stitch length: 1.5–4
- ③ Thread tension: 3–6
- ④ Presser foot: Zipper foot

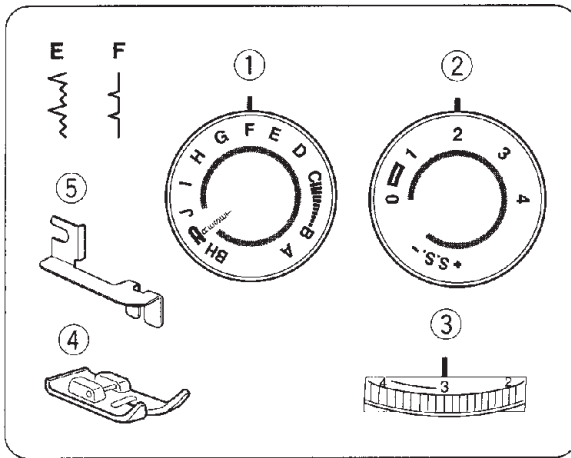


Pin or baste zipper tape to fabric and place it under the foot.

Smooth the threads toward the back and lower the foot.

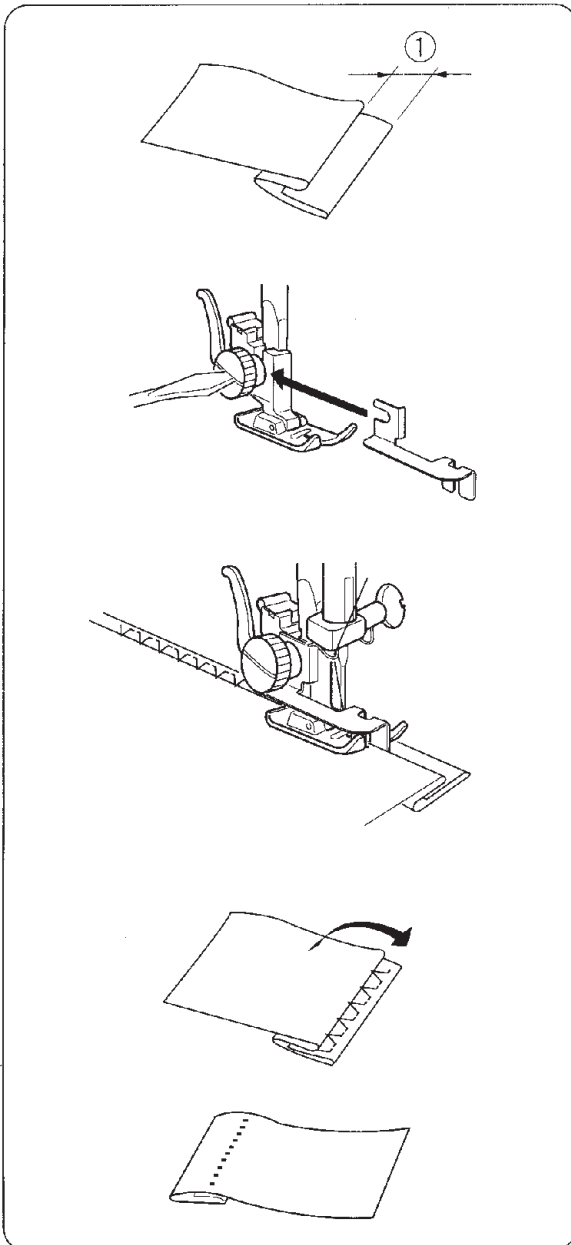
To sew the left side of the zipper, guide the edge of the zipper along the zipper teeth and stitch through the garment and zipper tape.

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: E or F
- ② Stitch length: 1-3
- ③ Thread tension: 1-4
- ④ Presser foot: Zigzag foot
- ⑤ Hem guide



Fold up the fabric as illustrated.

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.

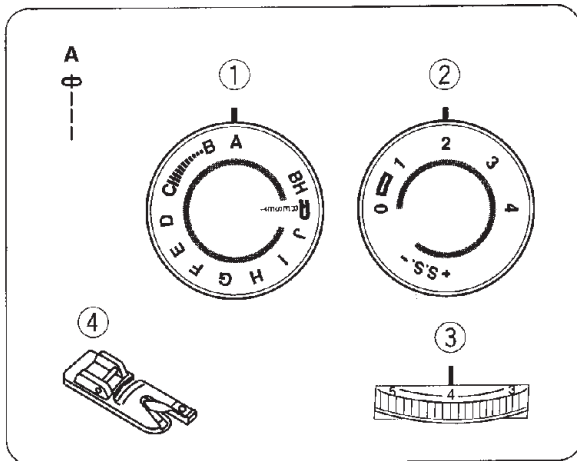
- ① 0.4 – 0.7 cm (1/4"–7/16")

Raise the presser foot and place the fabric under the foot so that the 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 fold.

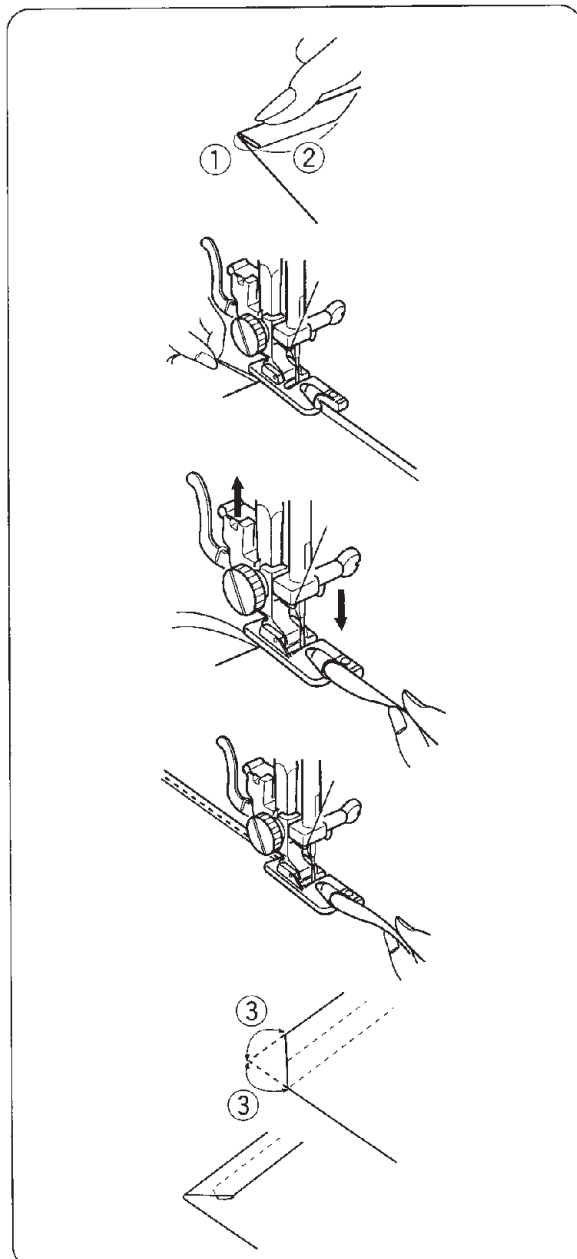
While sewing, make sure the fold runs along the wall of hem guide.

Spread the fabric flat with the right side facing up.



Rolled Hem

- ① Stitch selector: A
- ② Stitch length: 1.5-4
- ③ Thread tension: 3-6
- ④ Presser foot: Hemmer foot



Make a double 0.25 cm (1/8") fold approximately 8 cm (3") in length.

- ① 0.25 cm (1/8")
- ② 8 cm (3")

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 threads.

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.

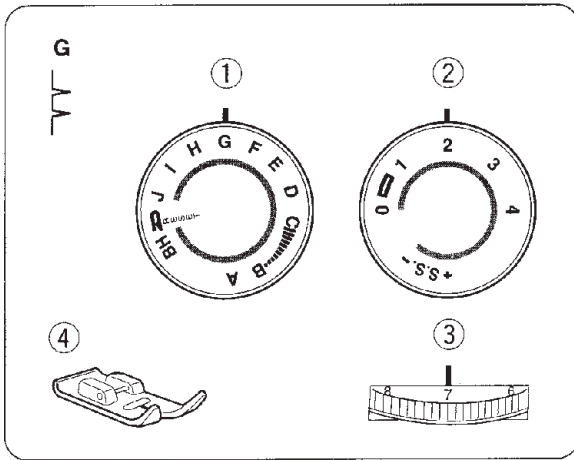
Lower the hemmer foot, then sew by lifting up the edge of the fabric to keep it feeding smoothly and evenly.

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

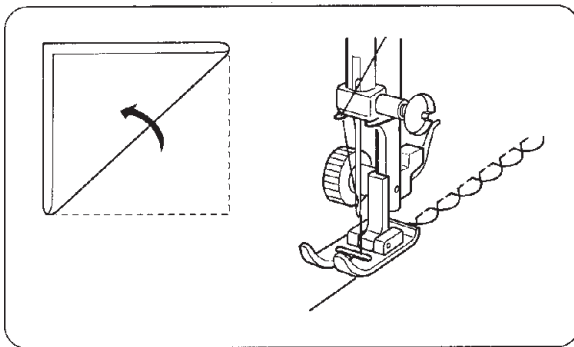
- ③ 0.7 (1/4")

SECTION 5 DECORATIVE STITCHING

Shell Tuck

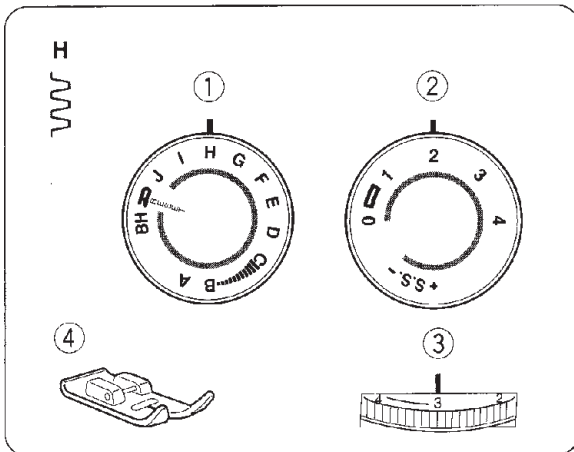


- ① Stitch selector: G
- ② Stitch length: 2-3
- ③ Thread tension: 6-8
- ④ Presser foot: Zigzag foot




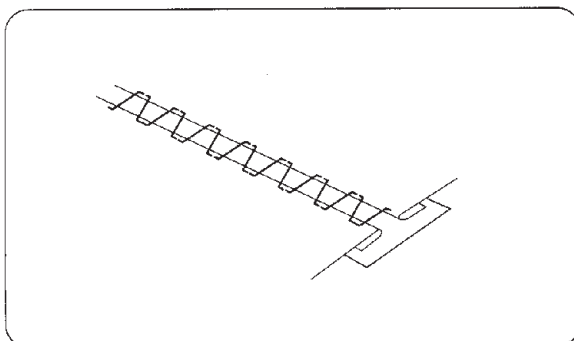
Use a lightweight fabric such as tricot. Fold the fabric and stitch on the bias. You may need to increase the top thread tension slightly. Allow the needle to just clear the folded edge of the fabric at zigzag stitches. If you sew rows of shell stitches, space the rows at least 1.5 cm (5/8") apart. You can also sew shell stitches on knits or soft silky woven fabrics in any direction.

Fagoting



- ① Stitch selector: H
- ② Stitch length: 2-3
- ③ Thread tension: 1-4
- ④ Presser foot: Zigzag foot

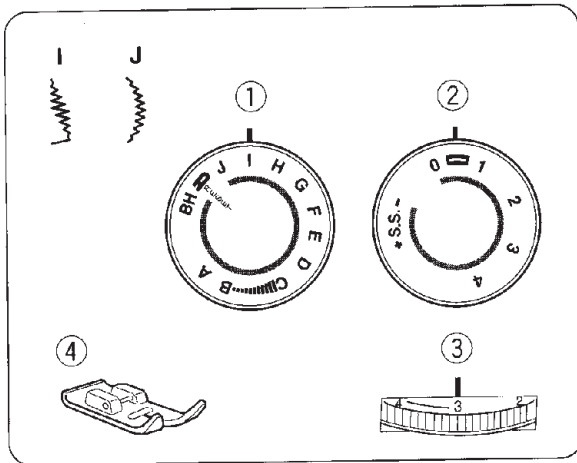
* This pattern  can also be used for fagoting.
(② Stitch length: Set it at S.S. position)



Fold under 1.5 cm (5/8") on each fabric edge and press.

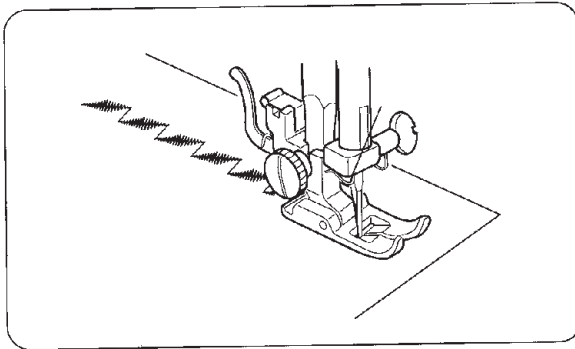
Pin the two edges to paper 0.3 cm (1/8") apart.

Sew slowly, guiding the fabric so the needle catches the folded edge on each side.

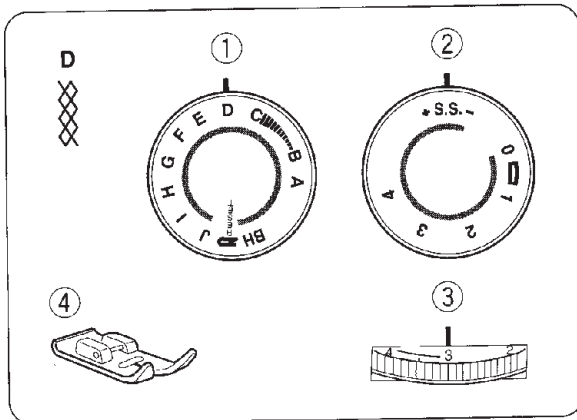


Decorative Satin Stitch Pattern

- ① Stitch selector: I or J
- ② Stitch length: 4
- ③ Thread tension: 1-4
- ④ Presser foot: Zigzag foot

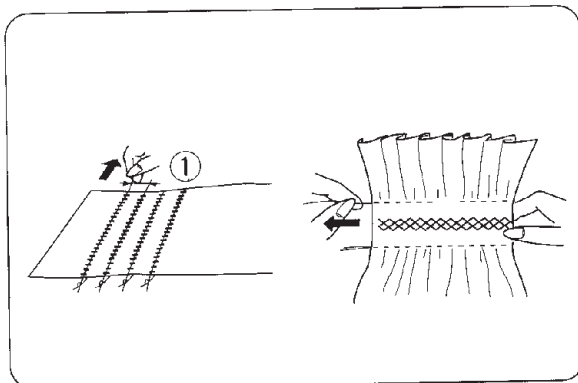


For a delicate appearance on fabric such as chiffon, use a single layer with a tear-away backing, if necessary.



Smocking

- ① Stitch selector: D
- ② Stitch length: S.S.
- ③ Thread tension: 1-4
- ④ Presser foot: Zigzag foot



With the stitch length at "4", sew straight stitching lines 1 cm (3/8") apart, across the area to be smocked.

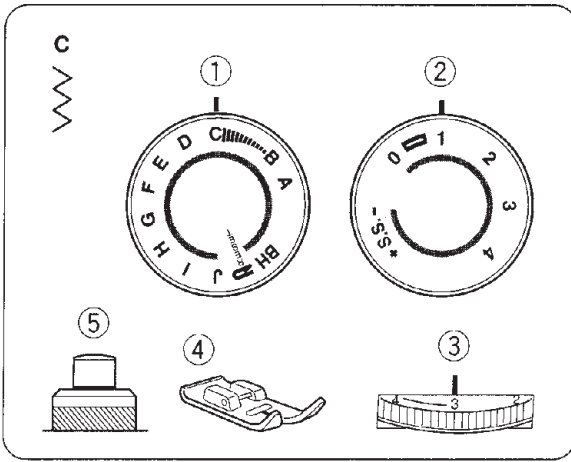
Knot the threads along one edge. Pull the bobbin threads and distribute the gathers evenly.

Secure the threads at the other end.

Sew the decorative stitch between the gathering stitches. Pull out the gathering stitches.

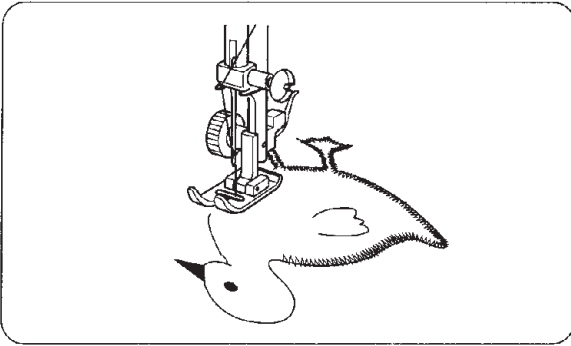
Note: Loosen the top thread tension to make gathering easier.

- ① 1 cm (3/8")



Appliqué

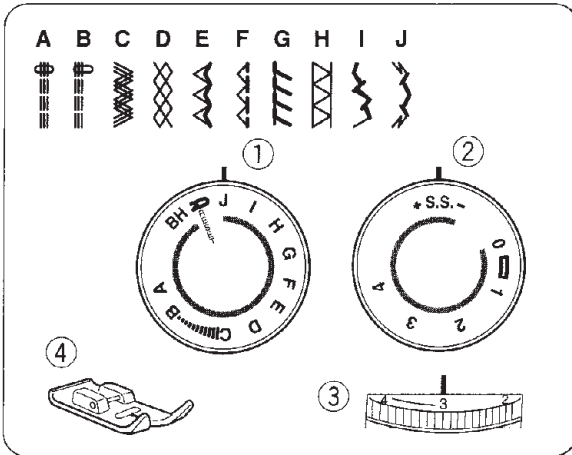
- ① Stitch selector: C
- ② Stitch length: 0.5–1
- ③ Thread tension: 1–4
- ④ Presser foot: Zigzag foot
- ⑤ Pressure Regulator: 1/4 Position



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

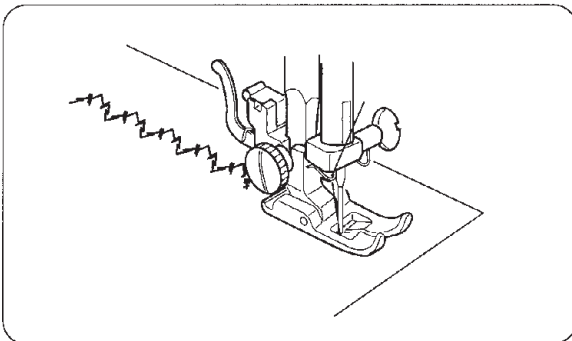
When sewing corners, lower the needle down into the fabric. Raise the presser foot and pivot fabric to the right or left.

* After sewing, reset the pressure regulator to its original position (see page 6).



Stretch Stitch Patterns

- ① Stitch selector: A-J
- ② Stitch length: S.S.
- ③ Thread tension: 1–4
- ④ Presser foot: Zigzag foot



If forward and reverse feeds become unbalanced due to the type of fabric, restore the balance by turning the stitch length dial as follows:

If patterns are compressed, turn the dial toward “+”.

If patterns are drawn out, turn the dial toward “-”.

SECTION 6 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

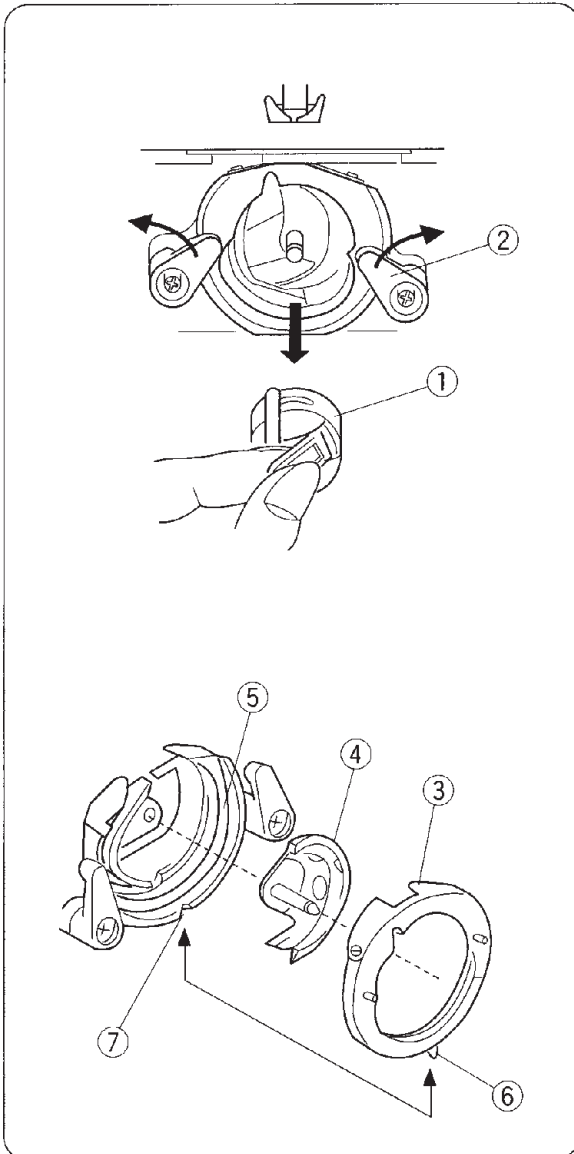
To assemble hook race:

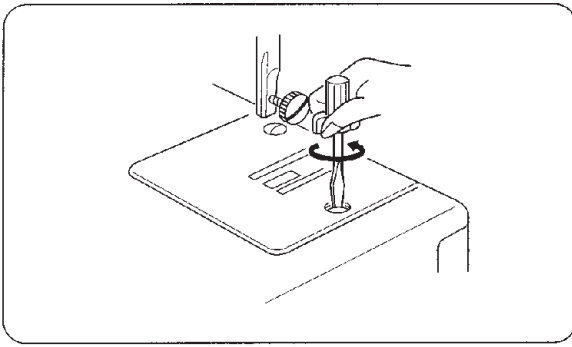
Hold the hook by the center pin and fit it carefully back into the hook race, forming a perfect circle with the shuttle driver.

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.

- ⑥ Pin
- ⑦ Notch

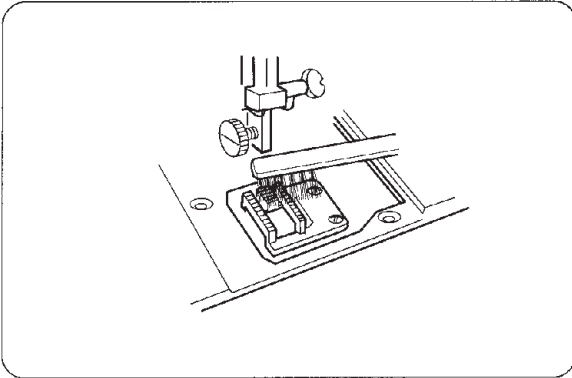




Cleaning the Feed Dog

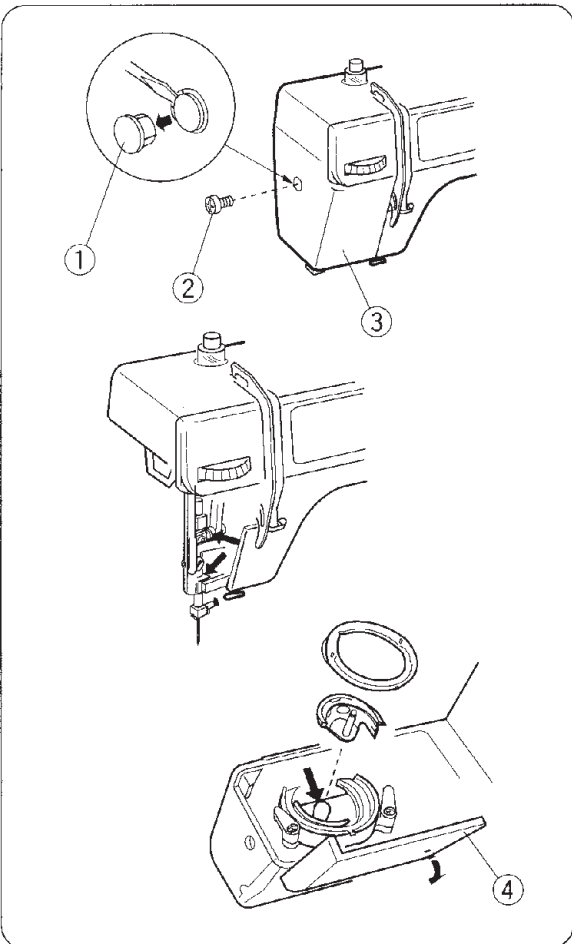
Note: Turn off the power switch or unplug the machine before cleaning the feed dog.

Remove the needle and the presser foot. Remove the needle plate set screws 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 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 Page 31 See Page 32</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 back when sewing is finished. 6. The thread is either too heavy or too fine for the needle. 	<p>See Page 12 See Page 14 See Page 8 See Page 8 See Page 17 See Page 8</p>
The bobbin thread breaks.	<ol style="list-style-type: none"> 1. The bobbin thread is not threaded properly in the bobbin case. 2. Lint has collected in the bobbin case. 3. The bobbin is damaged and doesn't turn smoothly. 	<p>See Page 11 Clean the bobbin case. Replace bobbin.</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 back when sewing is finished. 6. The needle is too fine for the fabric being sewn. 7. The pattern selector dial had been turned while the needle was in the material. 	<p>See Page 8 See Page 8 See Page 8 See Page 14 See Page 17 See Page 8 See Page 15</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. 	<p>See Page 8 See Page 8 See Page 8 See Page 8 See Page 12</p>
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 long for the fabric being sewn. <p>* When sewing extremely light weight materials, place a sheet of paper underneath the fabric.</p>	<p>See Page 14 See Page 12 See Page 8 Make the stitches shorter.</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 14 See Page 8</p>
The cloth is not feeding smoothly.	<ol style="list-style-type: none"> 1. The feed dog is packed with lint. 2. The stitches are too short. 	<p>See Page 32 Mke the stitches longer.</p>
The machine does not work.	<ol style="list-style-type: none"> 1. The machine is not plugged in. 2. A thread is caught in the hook race. 3. Handwheel has been disengaged for bobbin winding. 	<p>See Page 5 See Page 31 See Page 10</p>
The buttonhole stitches are not balanced.	<ol style="list-style-type: none"> 1. The stitch length is not suitable for the fabric being sewn. 2. Interfacing is not being used with stretch fabrics. 	<p>See Page 15 See Page 21</p>