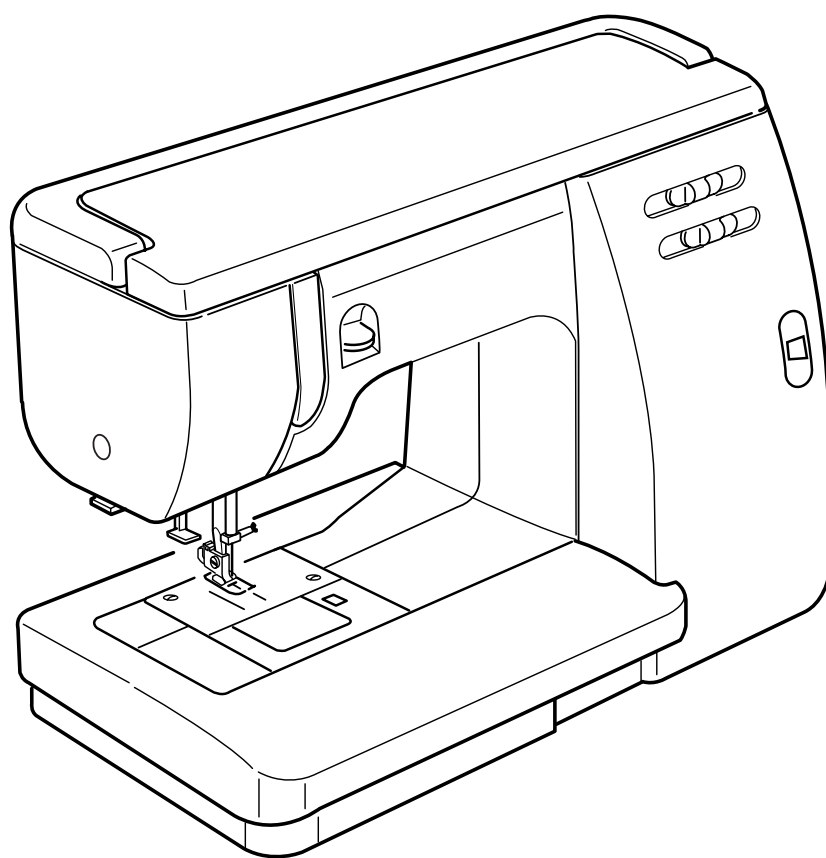


INSTRUCTION BOOK



6019

Quilter's Companion

IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic safety precautions should always be followed, including the followings:

Read all instructions before using this appliance.

DANGER— To reduce the risk of electric shock:

1. An appliance should never be left unattended when plugged in. Always unplug this sewing machine from the electric outlet immediately after using and before cleaning.
2. Always unplug before replacing a sewing machine bulb. Replace bulb with same type rated 15 Watts.

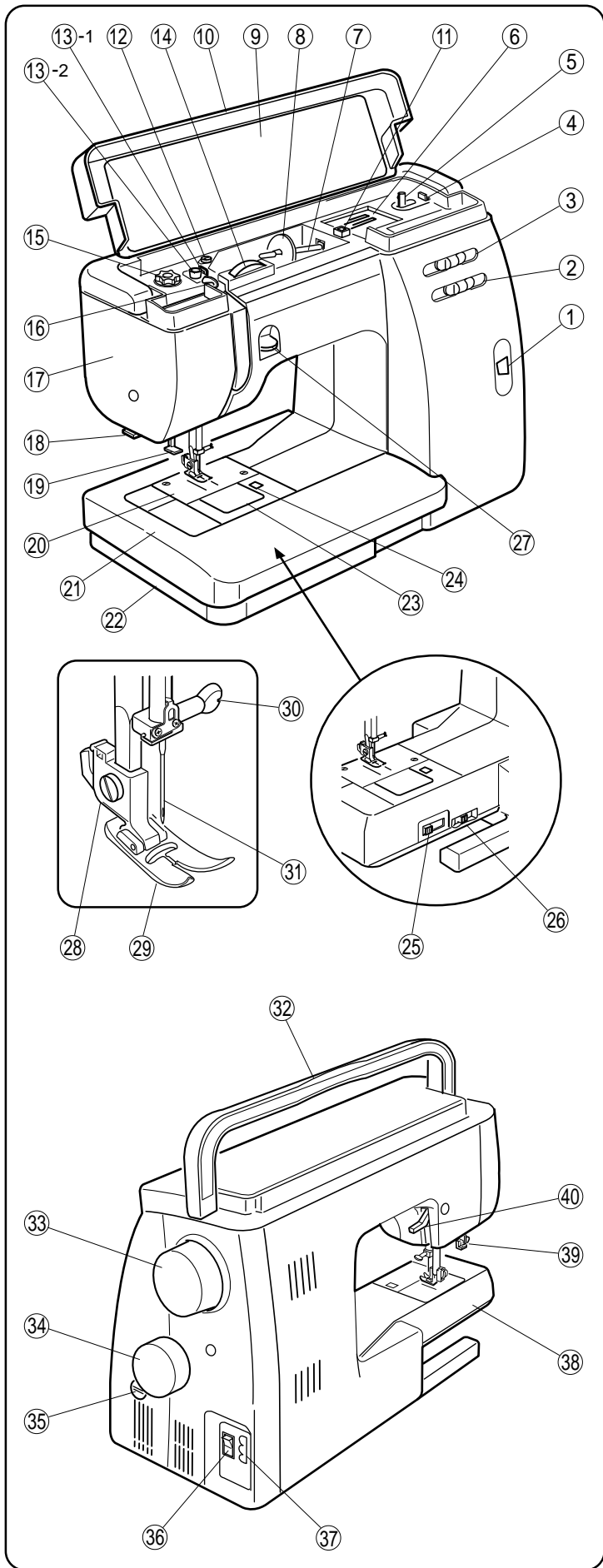
WARNING— To reduce the risk of burns, fire, electric shock, or injury to persons:

1. Do not allow to be used as a toy. Close attention is necessary when this sewing machine is used by or near children.
2. Use this appliance only for its intended use as described in this owner's manual.
Use only attachments recommended by the manufacturer as contained in this owner's manual.
3. Never operate this sewing machine 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 this sewing machine to the nearest authorized dealers or service center for examination, repair, electrical or mechanical adjustment.
4. Never operate the appliance with any air opening blocked. Keep ventilation openings of this 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 this sewing machine off ("0") when making any adjustment in the needle area, such as threading the needle, changing the needle, threading the bobbin or changing the presser foot, and the like.
15. Always unplug this sewing machine from the electrical outlet when removing covers, lubricating, or when making any other adjustments mentioned in this owner's manual.

SAVE THESE INSTRUCTIONS

TABLE OF CONTENTS

Name of Parts	2	Sewing on Buttons	21
Standard Accessories and Storage	3	Automatic Buttonhole	22-24
Extension Table and Free Arm Sewing	4	Corded Buttonhole	25
GETTING READY TO SEW			
Connecting to the Power Supply	5	Zipper Application	26-28
Controlling Sewing Speed	5	Rolled Hem	29
Reverse Stitch Button	5	Blind Hem Stitch	30
Dropping the Feed Dog	6	SEWING APPLICATION AND DECORATIVE STITCHES	
Adjusting the Foot Pressure	6	Appliqué	31
Changing the Presser Foot	6	Quilting	31
Detaching and Attaching the Foot Holder	6	Pin Tucking	32
Raising and Lowering the Presser Foot	7	Patchwork	32
Balancing Thread Tension	7	Shell Tucking	33
Changing the Needle	8	Fagoting	33
Selecting Threads and Needles	8	Smocking	34
Winding the Bobbin	9-10	Scallop Stitch	34
● Removing the bobbin	9	Decorative Satin Stitches	35
● Winding the bobbin	9	Decorative Stretch Stitches	36
● Inserting the bobbin	10	Adjusting Stretch Stitch Balance	36
Threading the Machine	11	CARE OF YOUR MACHINE	
● Threading the needle thread	11	Replacing the Light Bulb	36
Automatic Needle Threader	12	Cleaning Hook Race and Feed Dog	37
Drawing Up Bobbin Thread	13	Replacing Bobbin Holder and Needle Plate	37
Pattern Selector Dial	14	Troubleshooting	38
Stitch Width Lever	14		
Stitch Length Lever	15		
UTILITY STITCHES			
Straight Stitch	16-17		
● Starting to sew	16		
● Changing sewing direction	16		
● Fastening the seam/Thread cutter	16		
● Using the seam guide lines	17		
Straight Stretch Stitch	18		
Stretch Stitch	18		
Basic Zigzag Stitch	19		
Overcasting	19		
Overedge Stitch	20		
Multiple Zigzag Stitch (Tricot Stitch)	20		

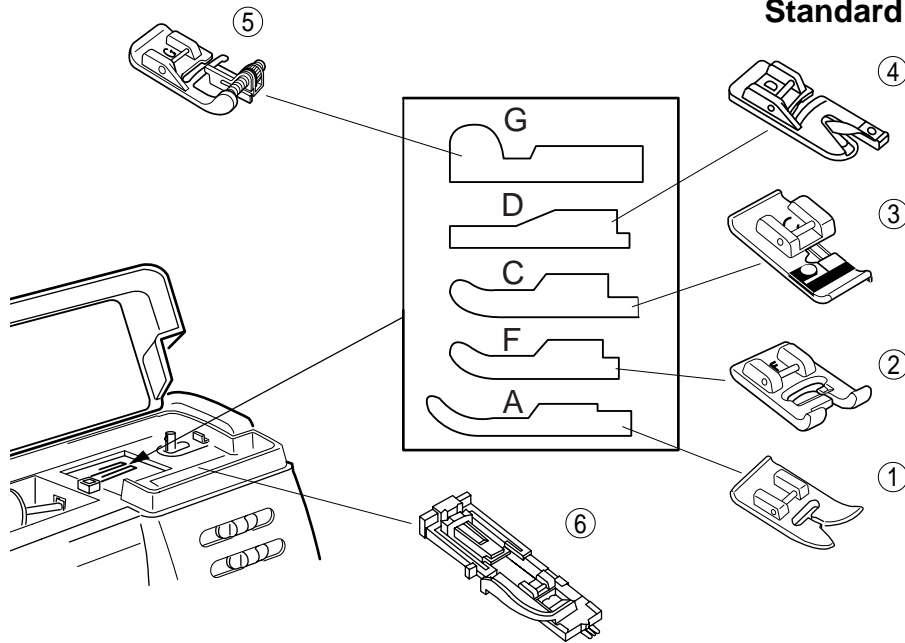


Name of Parts

- ① Pattern indicating window
- ② Stitch length lever
- ③ Stitch width lever
- ④ Bobbin winder stopper
- ⑤ Bobbin winder spindle
- ⑥ Accessory storage compartment
- ⑦ Spool pin
- ⑧ Spool holder
- ⑨ Reference chart
- ⑩ Top cover
- ⑪ Hole for the additional spool pin
- ⑫ Bobbin winder thread guide
- ⑬-1 Thread guide (A)
- ⑬-2 Thread guide (B)
- ⑭ Thread tension dial
- ⑮ Foot pressure control dial
- ⑯ Thread take-up lever
- ⑰ Faceplate
- ⑱ Thread cutter
- ⑲ Automatic threader
- ⑳ Needle plate
- ㉑ Extension table (Accessory box)
- ㉒ Accessory storage box
- ㉓ Hook cover
- ㉔ Hook cover release button
- ㉕ Drop feed lever
- ㉖ Buttonhole pitch balance adjuster
- ㉗ Reverse stitch button
- ㉘ Foot holder
- ㉙ Presser foot
- ㉚ Needle clamp screw
- ㉛ Needle
- ㉜ Carrying handle
- ㉝ Handwheel
- ㉞ Pattern selector dial
- ㉟ Stretch stitch balancing dial
- ㊱ Power switch
- ㊲ Power supply inlet
- ㊳ Free arm
- ㊴ Buttonhole lever
- ㊵ Presser foot lifter

NOTE: The design and specifications are subject to change without prior notice.

Standard Accessories and Storage

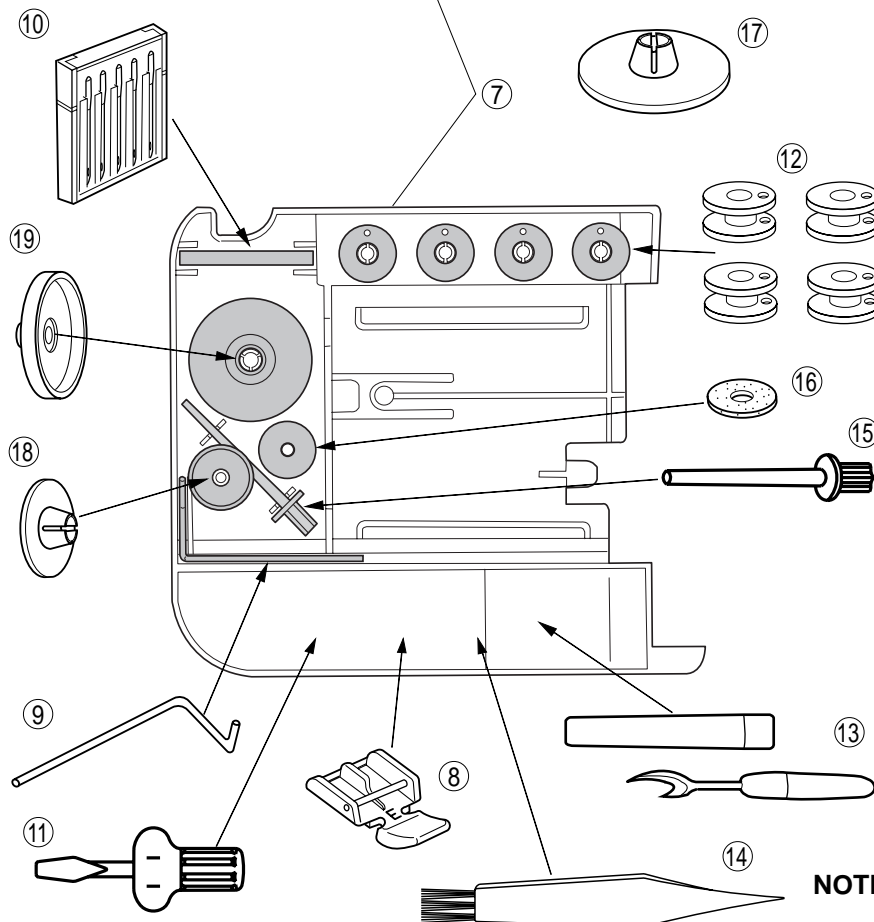
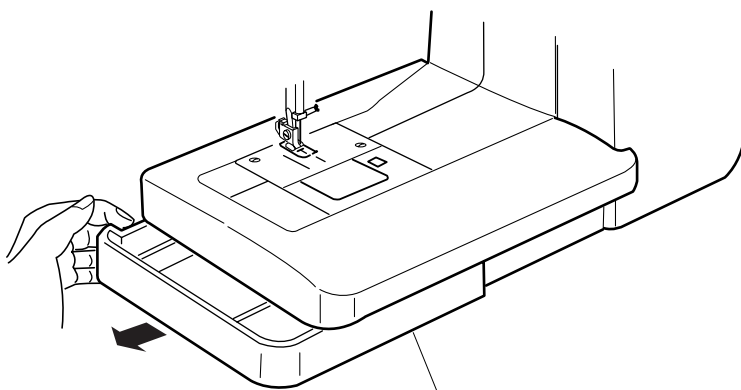


- ① A: Zigzag foot
(set on the machine)
- ② F: Satin stitch foot
- ③ C: Overedge foot
- ④ D: Rolled hem foot
- ⑤ G: Blind hem foot
- ⑥ R: Automatic buttonhole foot

Accessory storage box

Accessories are conveniently stored in the storage box.

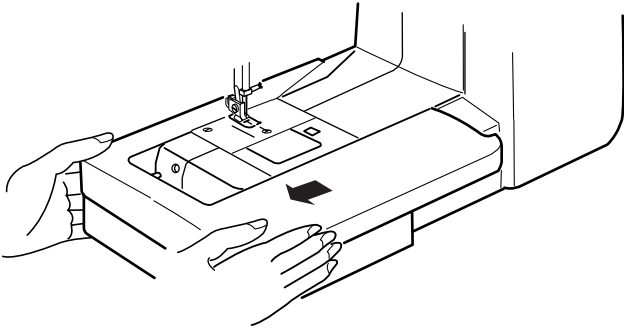
Draw out the storage box by pulling the dent on the box to the left.



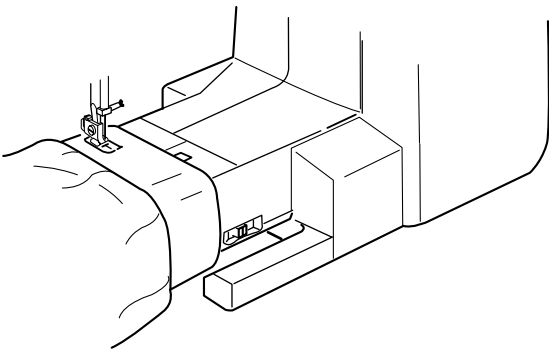
- ⑦ Accessory storage box
- ⑧ E: Zipper foot
- ⑨ L: Quilting bar
- ⑩ Set of needles
- ⑪ Bobbins
- ⑫ Screwdriver
- ⑬ Seam ripper (Buttonhole opener)
- ⑭ Lint brush
- ⑮ Additional spool pin
- ⑯ Felt
- ⑰ Spool holder (Large)
(set on the spool pin)
- ⑱ Spool holder (Small)
- ⑲ Spool stand

NOTE: The design and specifications are subject to change without prior notice.

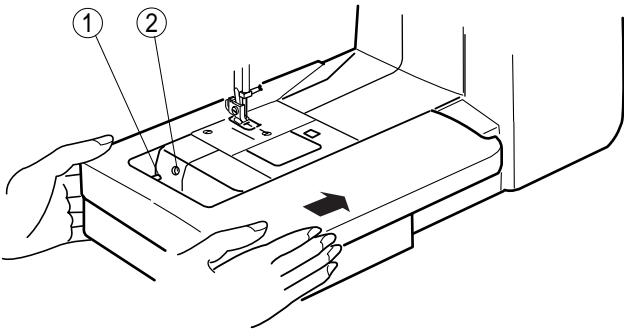
1



2



3



Extension Table and Free Arm Sewing

To detach:

Pull the extension table to the left.

Free arm sewing:

The free arm is useful for stitching sleeves, waistbands, pant legs or any tubular garment, also for darning socks or mending knees, elbows and children's wear.

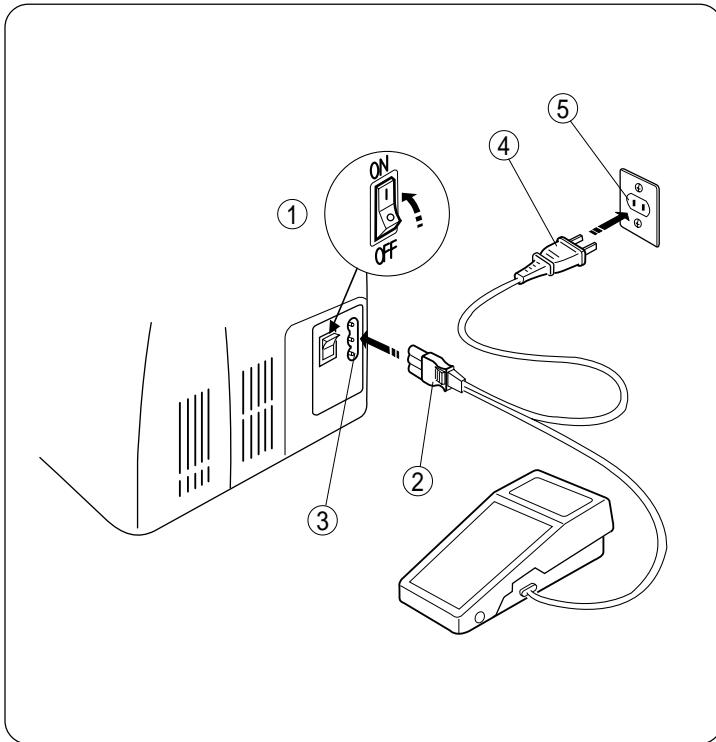
To attach:

Slide the extension table along the free arm, inserting the pin into the hole to attach.

- ① Pins
- ② Holes

GETTING READY TO SEW

Connecting to the Power Supply



1. Turn the power switch OFF.
2. Insert the machine plug into the machine socket.
3. Insert the power supply plug into the outlet.
4. Turn the power switch ON.

- ① Power switch
- ② Machine plug
- ③ Power supply plug
- ④ Outlet

The symbol “○” of a switch indicates the “OFF” position of a switch.

For appliances with a polarized plug (one blade is 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 it 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.

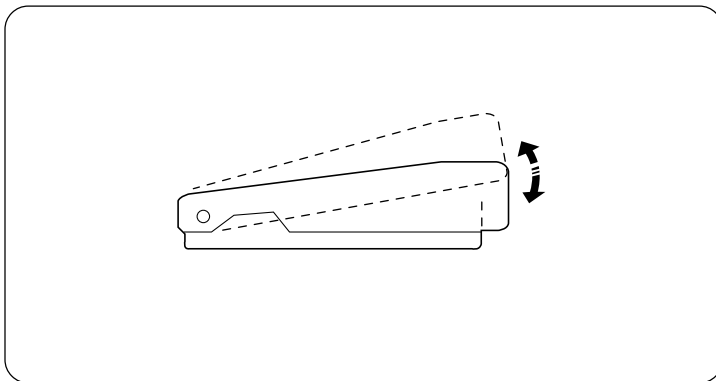
Foot controller Model YC-482J-1 or TJC-150 is used with sewing machine Model 6019.

Controlling Sewing Speed

Foot control:

Sewing speed is varied by the foot control.

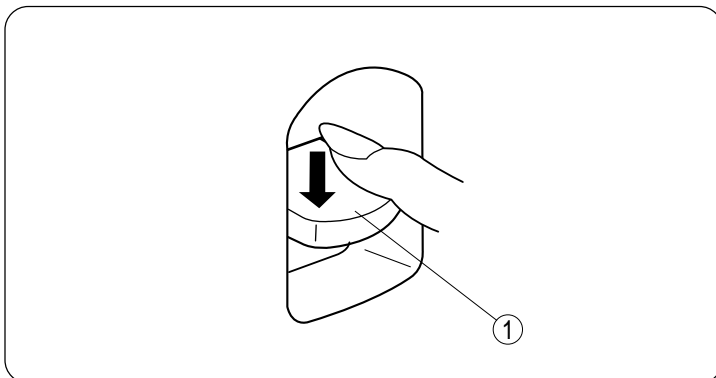
The harder you depress the foot control, the faster the machine runs.

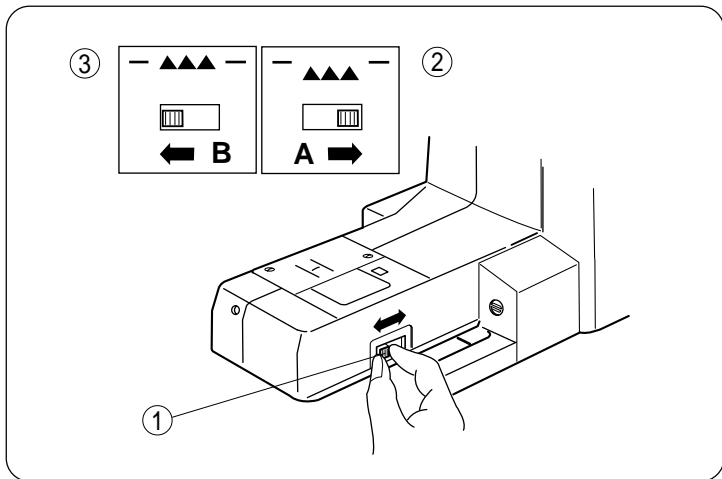


Reverse Stitch Button

While the reverse stitch button is pressed, the machine sews backwards.

- ① Reverse stitch button



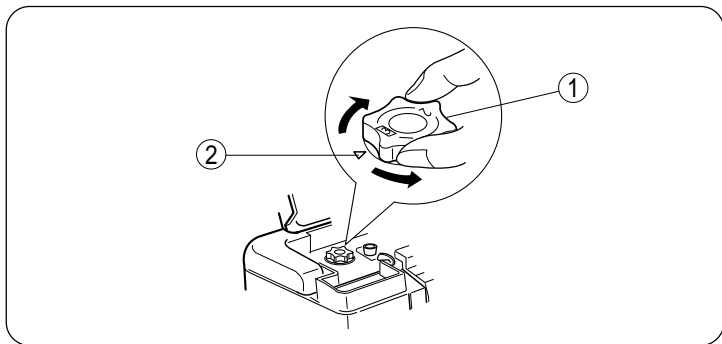


Dropping the Feed Dog

The feed dog can be lowered by the drop feed lever for sewing on buttons, manual embroidery etc. Push the drop feed lever to the direction **A** to lower the feed dog.

Push the lever to the direction **B** to raise the feed dog, it will return to the up position when starting the machine.

NOTE: The feed dog should be in up position for normal sewing.

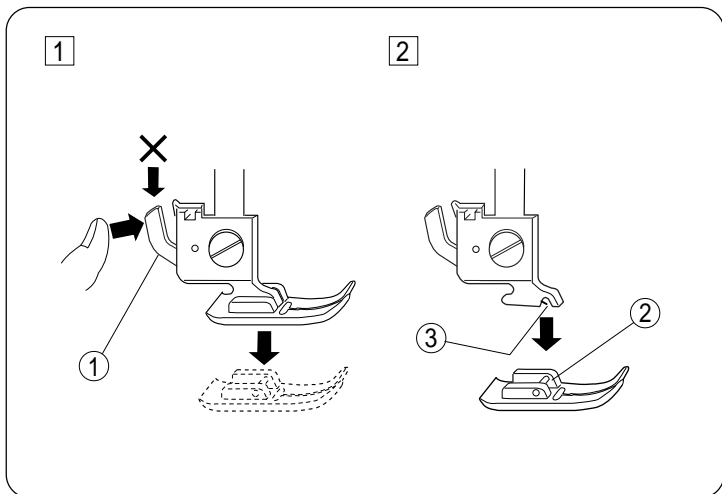


Adjusting the Foot Pressure

The foot pressure control dial should be set at “ 3 ” for regular sewing.

Reduce the pressure to “ 2 ” for appliqué, cutwork, drawn work and basting.

Set the dial at “ 1 ” when sewing the extra fine fabrics.



Changing the Presser Foot

1 To snap off:

Raise the needle and presser foot.

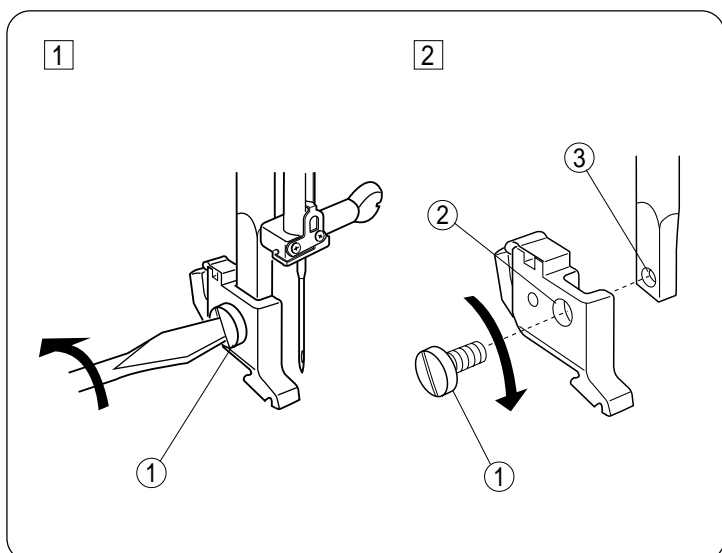
Press the lever on the back of the foot holder and the foot will drop off.

2 To snap on:

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.

- ① Lever
- ② Pin
- ③ Groove



Detaching and Attaching the Presser Foot

1 To detach:

Raise the presser bar and turn the setscrew counter-clockwise to remove it.

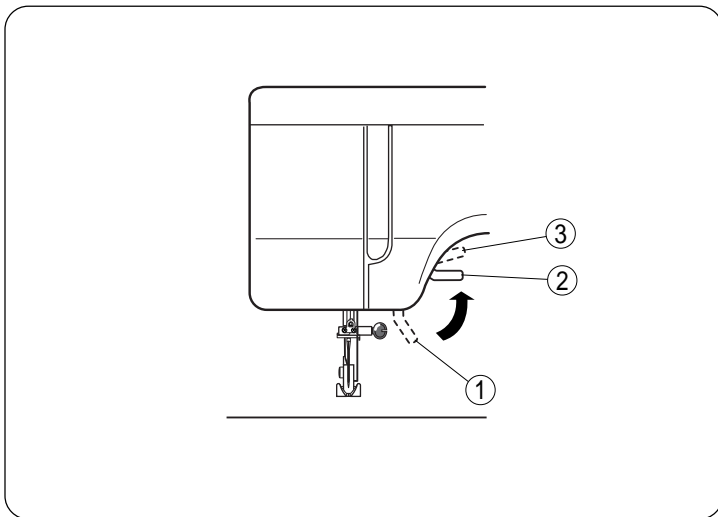
Remove the foot holder.

2 To attach:

Align the hole in the foot holder with the threaded hole in the presser bar and setscrew through the hole.

Tighten the setscrew by turning it clockwise.

- ① Setscrew
- ② Hole on the holder
- ③ Threaded Hole

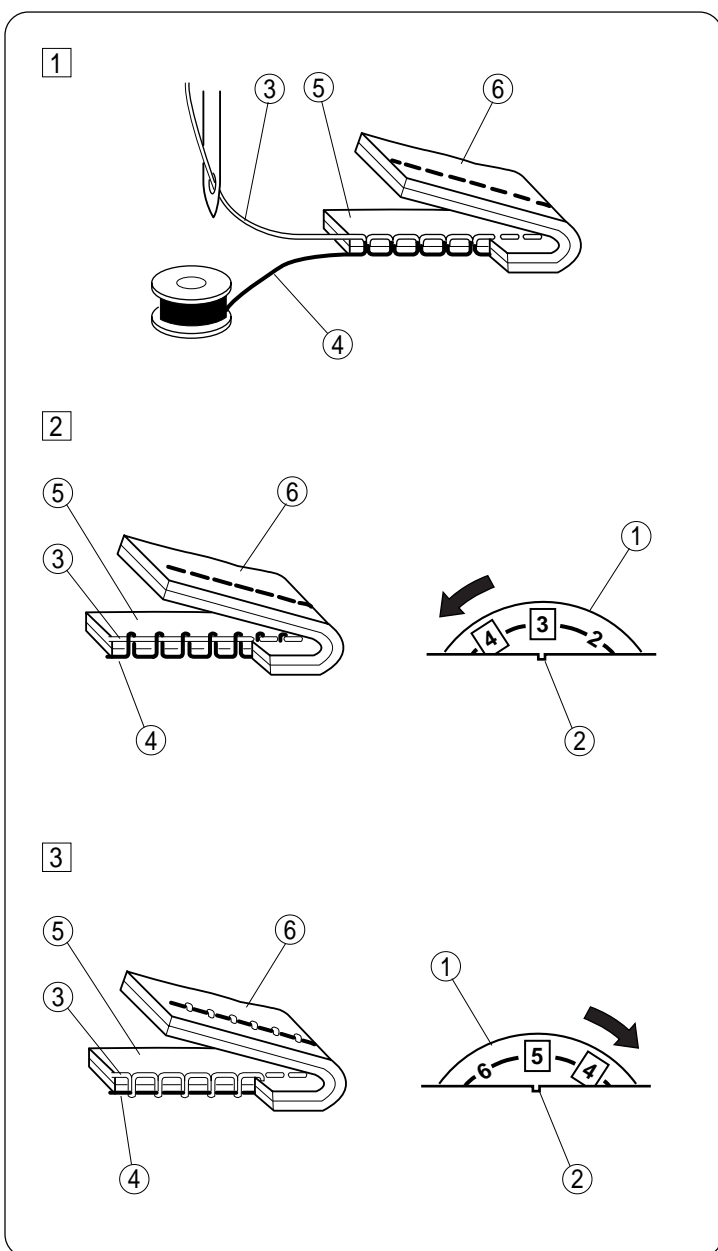


Raising and Lowering the Presser Foot

The presser foot lifter raises and lowers the presser foot.

You can raise it about 0.6 cm (1/4") higher than the normal up position for easy removal of the presser foot, or to help you to place heavy fabric under the foot.

- ① Lowered position
- ② Raised position (Normal)
- ③ Highest position



Balancing Thread Tension

Thread tension is adjusted depending on the sewing materials, layers of fabric and other sewing conditions.

- ① Thread tension dial
- ② Setting mark
- ③ Needle thread
- ④ Bobbin thread
- ⑤ Right side of the fabric
- ⑥ Wrong side of the fabric

1 Correct tension:

The ideal straight stitch has threads locked between two layers of fabric

For an ideal zigzag stitch, the bobbin thread does not show on the right side of the fabric, and the needle thread shows slightly on the wrong side of the fabric.

2 Needle thread tension is too tight:

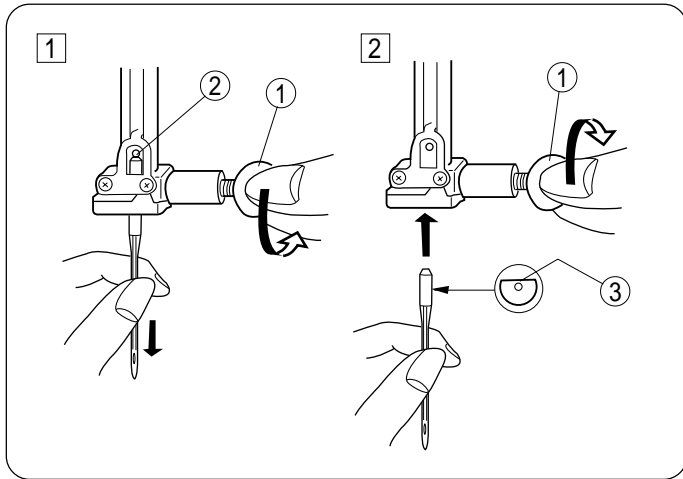
The bobbin thread will appear on the right side of the fabric.

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

3 Needle thread tension is too loose:

The needle thread will appear on the wrong side of the fabric.

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



Changing the Needles

WARNING: Turn OFF the power switch and unplug the machine.

- 1 Loosen the needle clamp screw and pull out the needle.
- 2 Insert a new needle into the needle clamp with the flat side facing back. Push the needle up against the stopper pin and tighten the needle clamp screw firmly.

- ① Needle clamp screw
- ② Stopper pin
- ③ Flat side

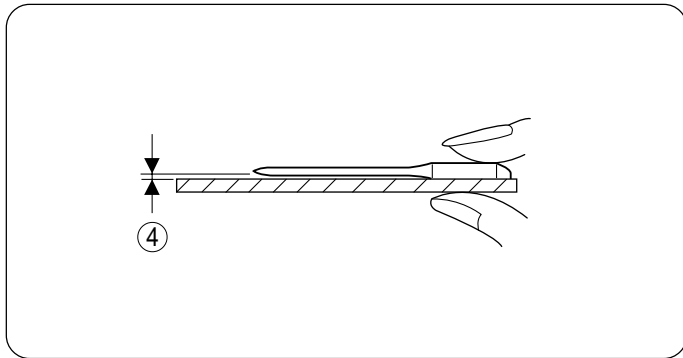
To check the needle:

Place the flat side of the needle onto something flat (needle plate, glass etc).

The clearance between the needle and the flat surface should be consistent. Never use a bent or blunt needle.

CAUTION: A damaged needle can cause permanent snags or runs in knits, fine silks and silk-like fabrics.

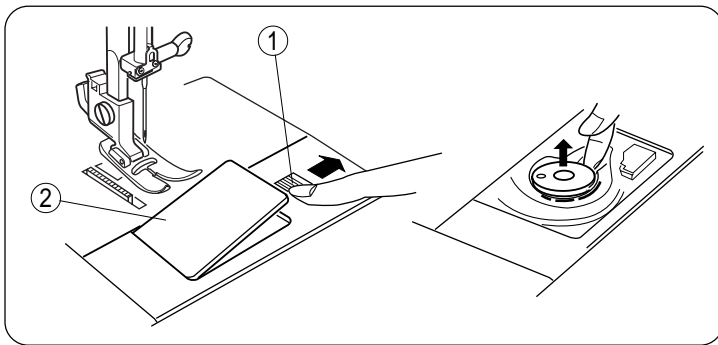
- ④ Clearance



Selecting Threads and Needles

	Fabric	Thread	Needle
Light	Lawn Georgette Tricot Wool, Synthetic	Silk #80-100 Cotton #80-100 Synthetic #80-100	#9/65-11/75
Medium	Cotton, Synthetic Fine jersey Wool	Silk #50 Cotton #60-80 Synthetic #50-80 Cotton #50	#11/75-14/90 #14/90
	Denim Jersey Coating Quilting	Silk #50 Cotton #40-50 Synthetic #40-50 Silk #30	#14/90-16/100 #16/100

- * For general sewing, use needle size #11/75 or #14/90.
- * A fine thread and needle should be used for sewing lightweight fabrics, so the fabric will not be marred. Heavy fabrics require a needle large enough to pierce the fabric without fraying the needle thread.
- * Always test the thread and needle size on a small piece of fabric, which will be used for actual sewing.
- * In general, use 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.



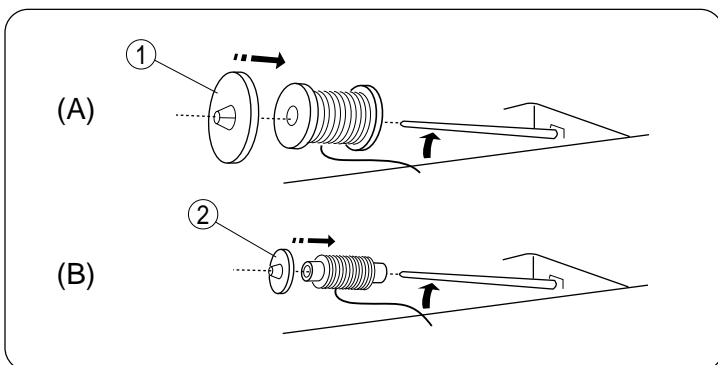
Winding the Bobbin

• Removing the bobbin

Slide the hook cover release button to the right, and remove the hook cover.

Lift the bobbin out.

- ① Hook cover release button
- ② Hook cover



Setting the spool of thread

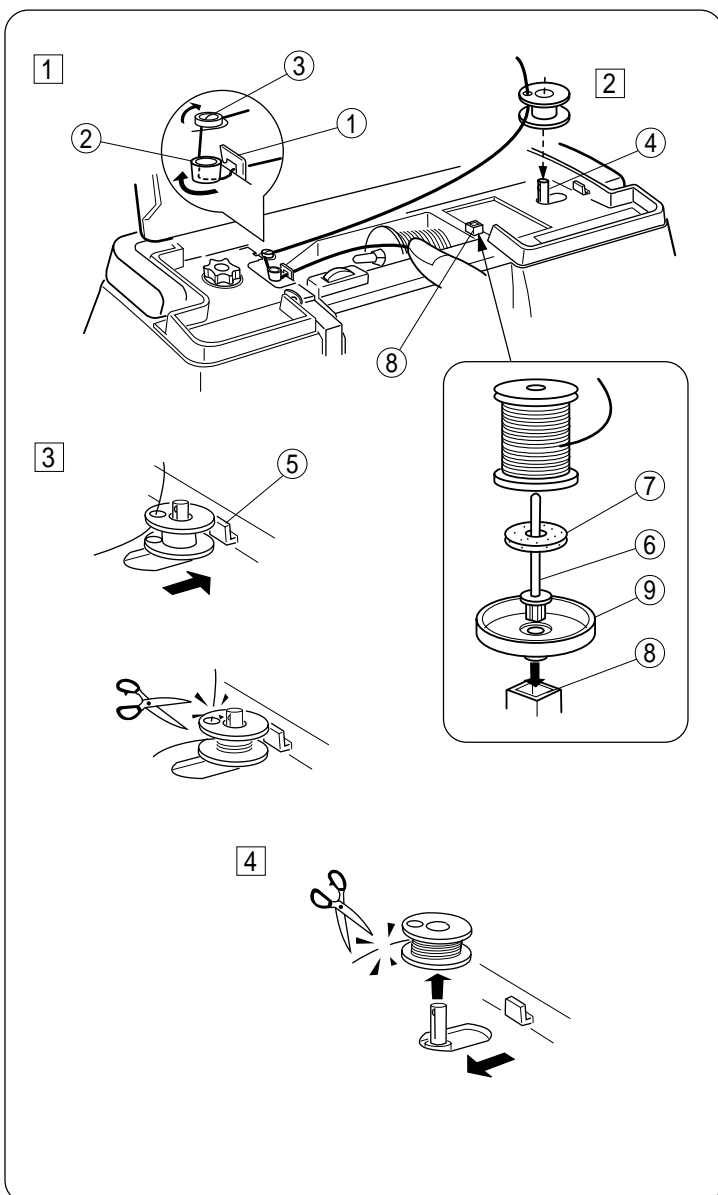
Lift up the spool pin. Place the spool of thread on the spool pin with the thread coming off the spool as shown.

(A) For an ordinary spool: Use the large spool holder.

- ① Large spool holder

(B) For a narrow or small spool: Use the small spool holder.

- ② Small spool holder



• Winding the bobbin

① Guide the thread around the thread guides (A), (B) and bobbin winder thread guide.

② Insert the thread through the hole on the bobbin, threading from the inside to the outside. Put the bobbin on the bobbin winder spindle.

- ① Thread guide (A)
- ② Thread guide (B)
- ③ Bobbin winder thread guide
- ④ Bobbin winder spindle

③ Push the bobbin winder spindle to the right. With the free end of the thread held in your hand, depress the foot control. Stop the machine when the bobbin has made a few turns, and cut the thread close to the hole on the bobbin.

- ⑤ Bobbin winder stopper

④ Depress the foot control again. When the bobbin is fully wound, it will stop automatically. Return the bobbin to its original position by moving the spindle to the left, and cut the thread as shown.

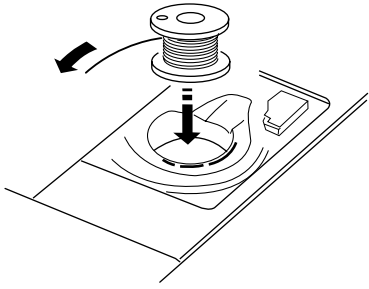
NOTE: Do not move the bobbin winder spindle while the machine is running.

Additional spool pin

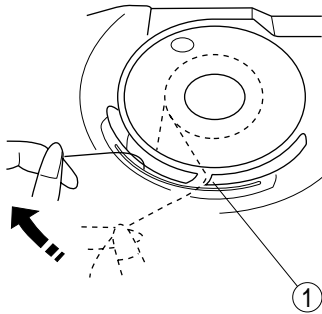
Insert the additional spool pin into the spool stand and the hole on the machine. Place the felt and spool on the spool pin as shown.

- ⑥ Additional spool pin
- ⑦ Felt
- ⑧ Hole for additional spool pin
- ⑨ Thread guide

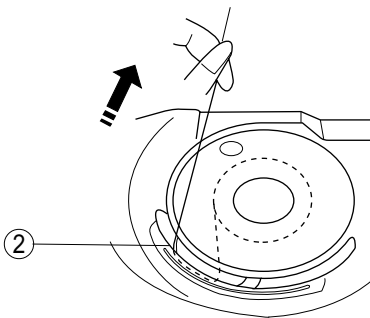
1



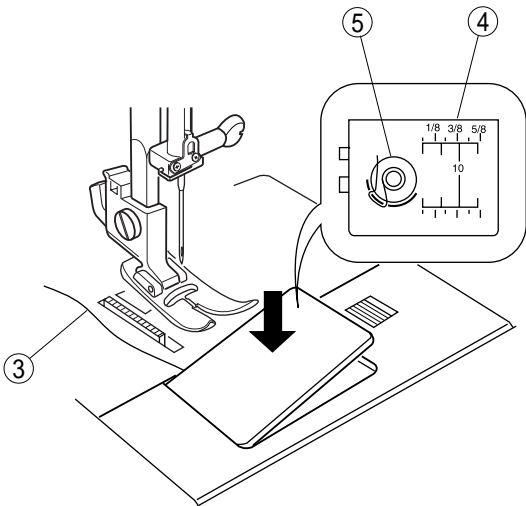
2



3



4



• Inserting the bobbin

1 Remove the hook cover and 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. Draw the thread to the left sliding it between the tension spring blades.

① Notch A

3 Continue to draw the thread lightly until it slips into notch **B**.

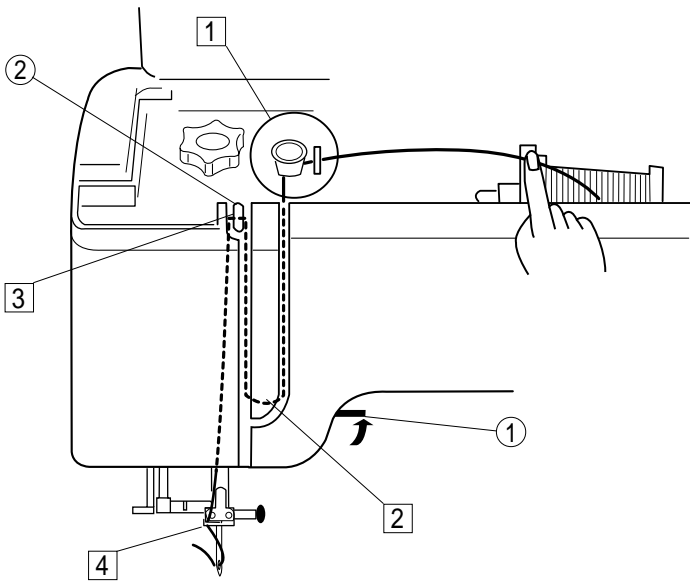
② Notch B

4 Pull out about 10 cm (4") of thread and attach the hook cover.

③ Bobbin thread

④ Hook cover plate

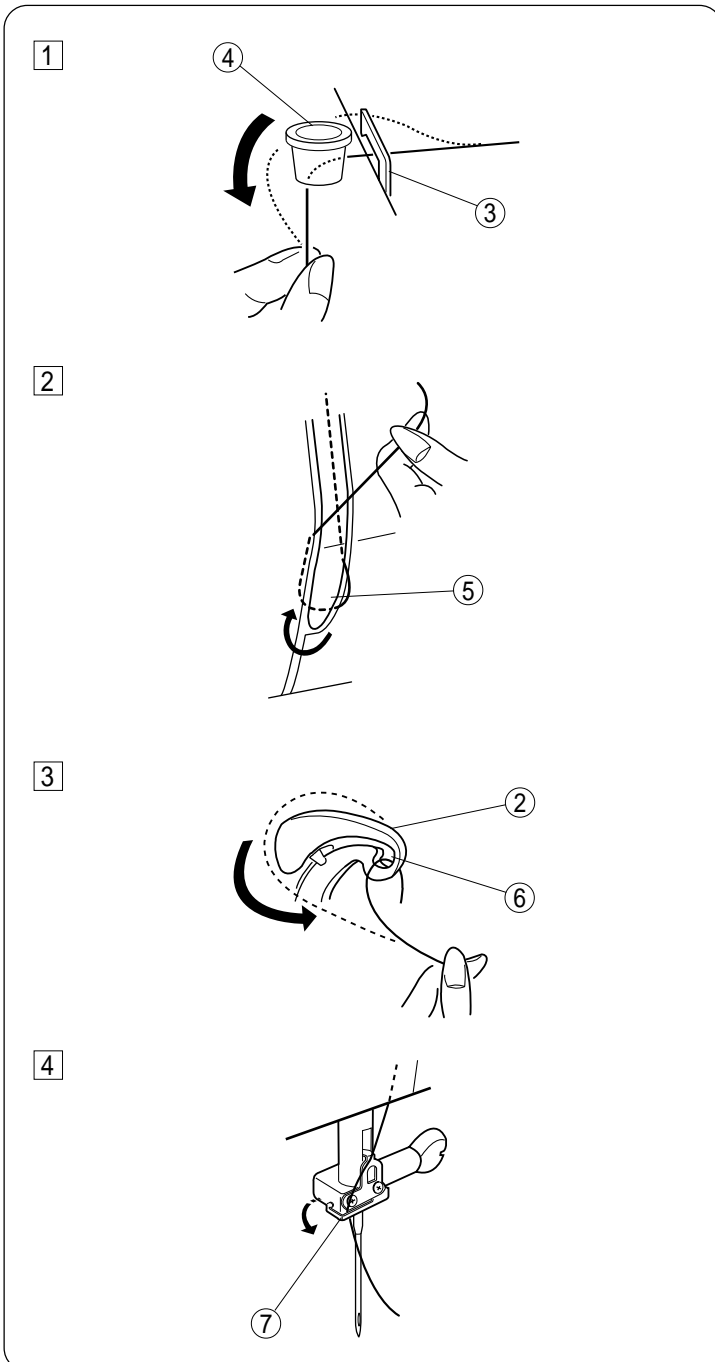
⑤ Threading diagram



Threading the Machine

• Threading the needle thread

- * Raise the presser foot.
- * Turn the handwheel to bring the take-up lever to its highest position.
- * Turn off the power switch.



- 1 Draw the end of the thread with your left hand and pass it under the thread guide (A) then hook around the thread guide (B) while holding the spool with your right hand.

- ① Thread guide (A)
- ② Thread guide (B)

- 2 Draw the end of the thread down around the thread guide plate and draw it up.

- ③ Thread guide plate

- 3 Firmly draw up the thread up to the take-up lever, and down into the eye of the thread take-up lever from the right to left.

- ④ Thread take-up lever
- ⑤ Eye of the thread take-up lever

- 4 Slip the thread in the needle bar thread guide on the left.

- ⑥ Needle bar thread guide

NOTE: Refer to page 12 for the automatic needle threader.

Automatic Needle Threader

1 Lower the presser foot. Depress the needle threader knob as far as it will go. The hook comes out through the needle eye from behind.

- ① Needle threader knob
- ② Hook

2 Draw the thread down around the threader guide and under the hook.

- ③ Threader guide
- ④ Hook

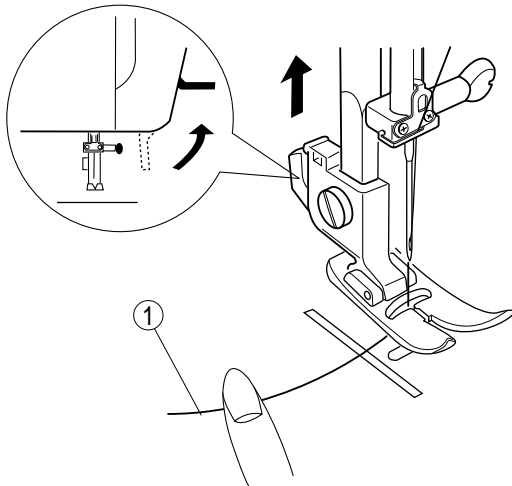
3 Release the threader knob slowly while holding the thread end with your hand. A loop of the thread is pulled up through the needle eye.

4 Remove the loop from the threader and pull out the thread end from the needle eye.

NOTE: The automatic threader works well with the threads #50-100 and needles #11-16, the blue tipped needle as well.

Drawing Up Bobbin Thread

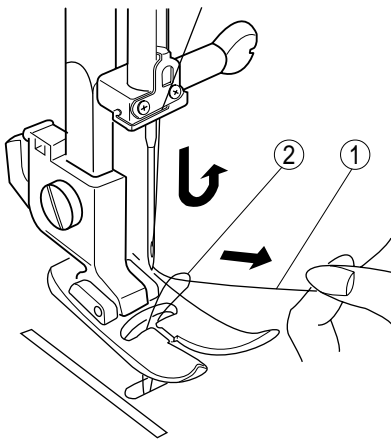
1



1 Raise the presser foot and hold the needle thread with your fingers.

① Needle thread

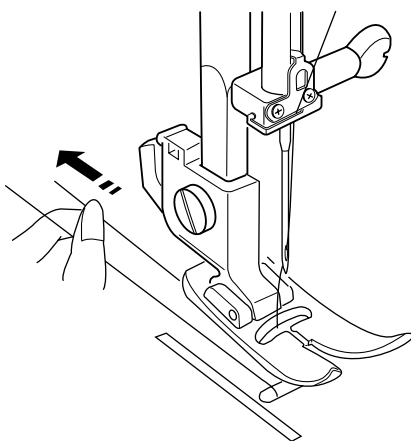
2



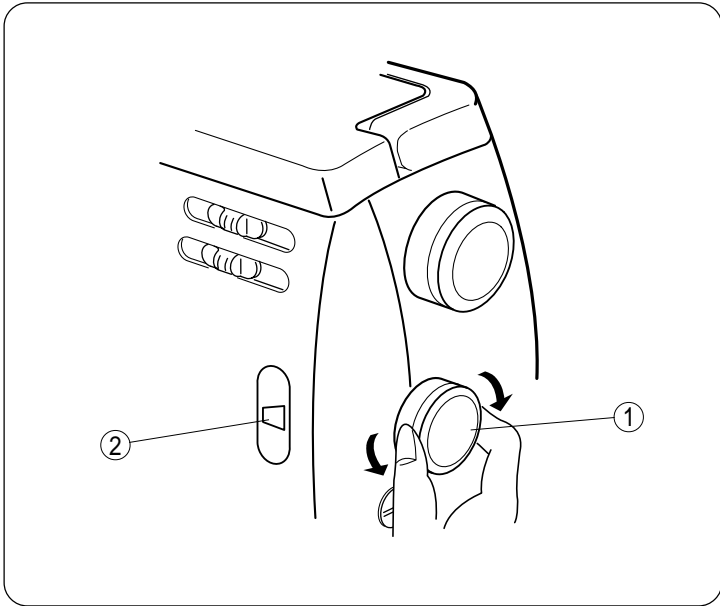
2 Turn the handwheel one complete rotation toward you and raise the needle to its highest position. Pull the needle thread to pick up a loop of the bobbin thread.

② Bobbin thread

3



3 Draw 10 cm (4") of both threads to the back under the presser foot.

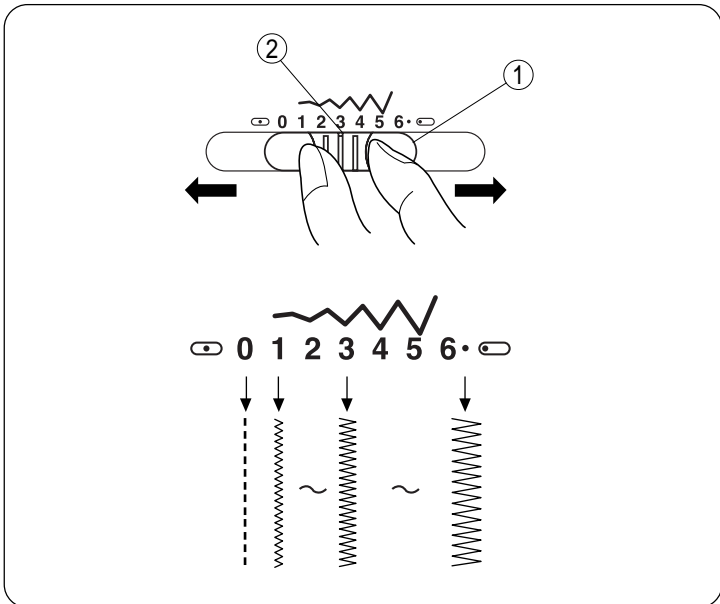


Pattern Selector Dial

Turn the pattern selector dial to select the desired pattern. The selected pattern will be shown in the pattern indicating window.

NOTE: Raise the needle above the fabric when turning the pattern selector dial.

- ① Pattern selector dial
- ② Pattern indicating window



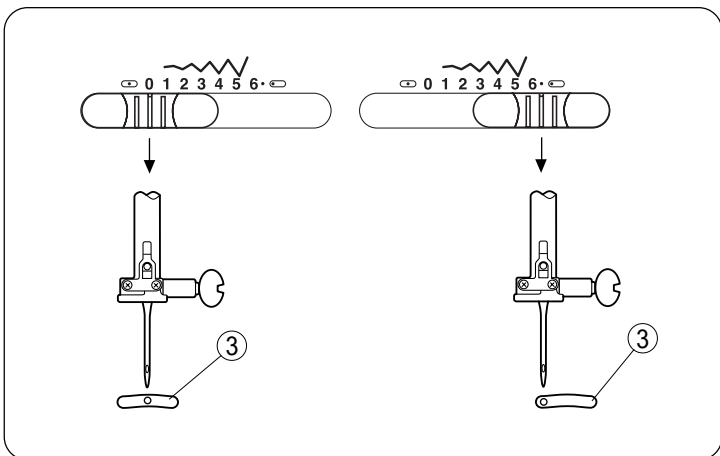
Stitch Width Lever

Slide the stitch width lever to set the setting mark at the desired stitch width.

The higher the number, the wider the stitch width.

- ① Stitch Width Lever
- ② Setting mark

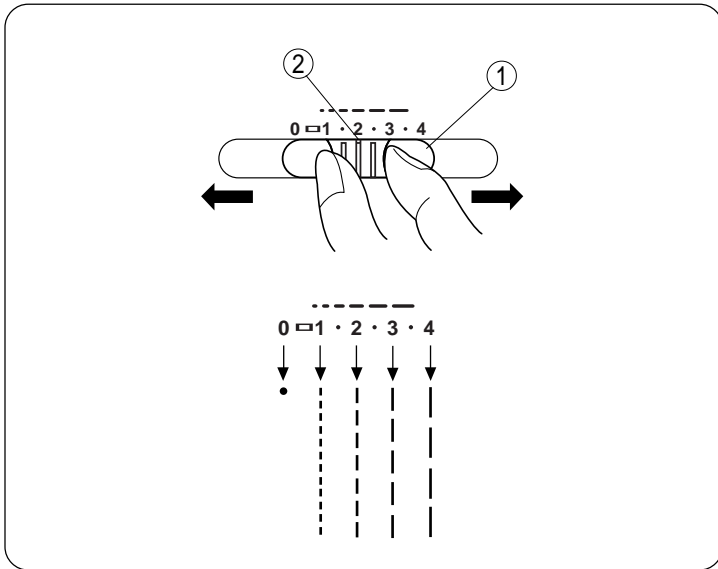
NOTE: Raise the needle above the fabric when sliding the stitch width lever.



Variable Needle Drop Position

When one of the straight stitches (patterns #2, 23 and 24) is selected, you can move the needle between center and left needle positions.


- ③ Hole on the needle plate



Stitch Length Lever

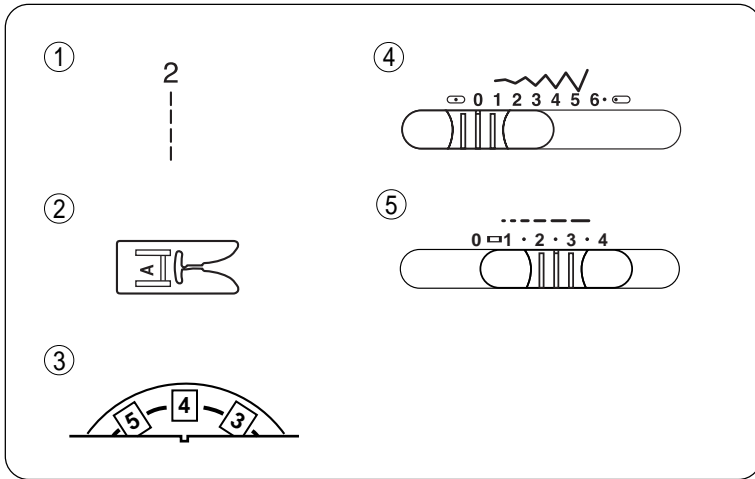
Slide the stitch length lever to set the setting mark at the desired stitch length.

The higher the number, the longer the stitch length.

NOTES:  mark indicates the adjustable allowance for buttonhole stitch density. Raise the presser foot when sliding the stitch length lever.

- ① Stitch length lever
- ② Setting mark

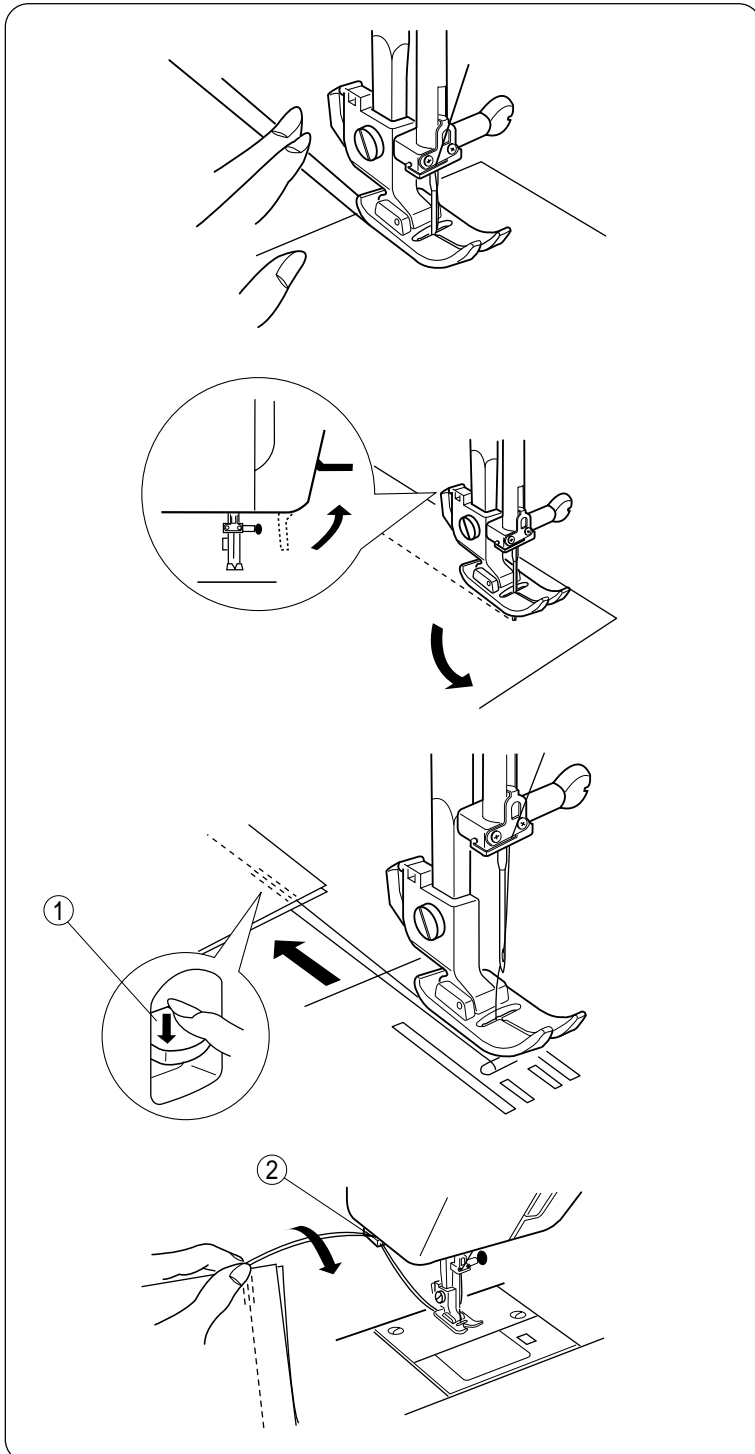
UTILITY STITCHES



Straight Stitch

Machine setting

- | | |
|------------------|----------------|
| ① Pattern | #2 |
| ② Foot | A: Zigzag foot |
| ③ Thread tension | 2 ~ 6 |
| ④ Stitch width | 0 or 6.5 |
| ⑤ Stitch length | 1.5 ~ 4 |



• Starting to sew

Raise the presser foot and place the fabric on the machine.

Lower the needle into the fabric where you want to start.

Lower the presser foot and start sewing.

NOTE: To fasten the beginning of the seams, sew several reverse stitches by pressing the reverse stitch button.

• Changing Sewing Direction

Stop the machine and bring the needle down into the fabrics by turning the handwheel toward you.

Raise the presser foot.

Pivot the fabric around the needle to change the sewing direction as desired.

Lower the presser foot and start sewing in a new direction.

• Fastening the seam/Tread cutter

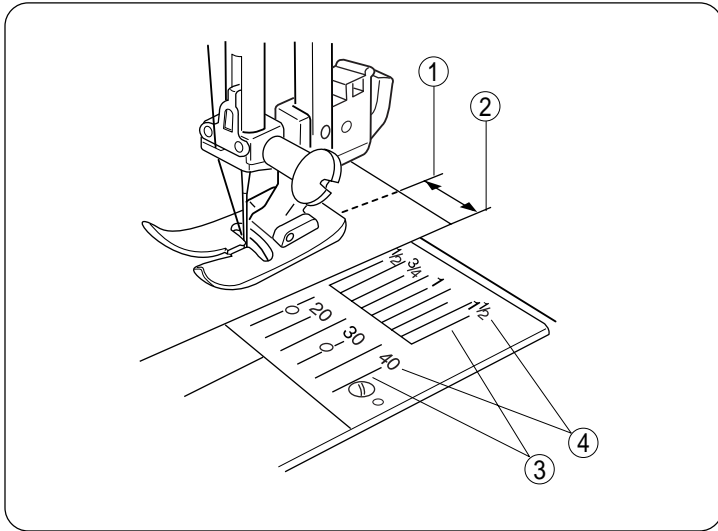
Sew several stitches in reverse by pressing the reverse stitch button to fasten the end of seam.

Raise the presser foot and pull the fabric to the rear.

Draw the threads up and into the thread cutter.

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

- ① Reverse stitch button
- ② Thread cutter



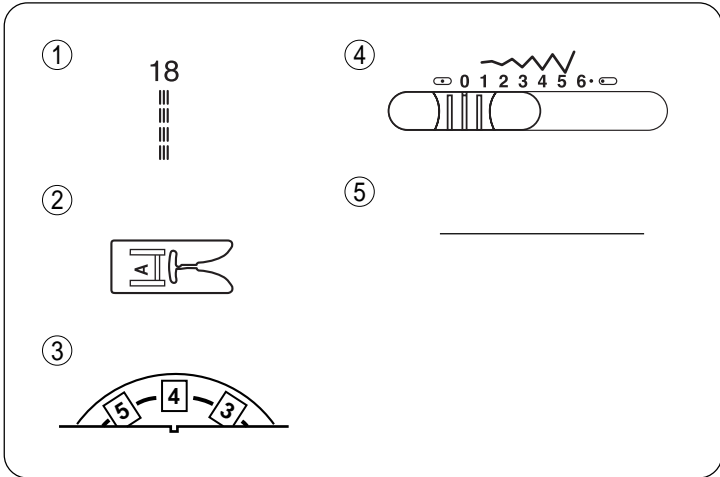
• Using the seam guide lines

The seam guides on the needle plate and hook cover help you to measure seam allowance.

Note: The number indicates the distance from the center needle position.

Number	10	20	30	40	1/2	3/4	1	1 1/2
Distance (cm)	1.0	2.0	3.0	4.0	1.3	1.9	2.5	3.8

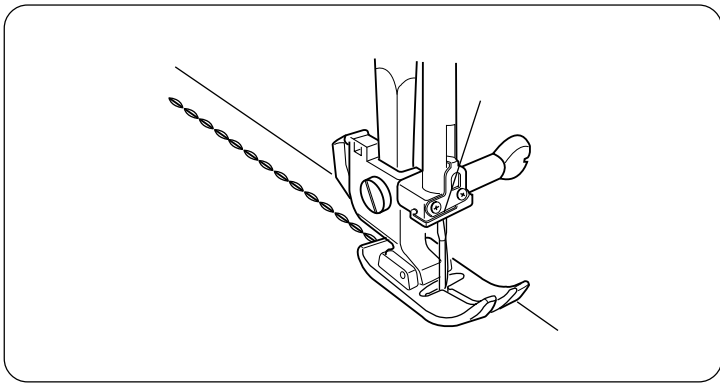
- ① Center needle position
- ② Edge of the fabric
- ③ Guide lines
- ④ Numbers



Straight Stretch Stitch

Machine setting

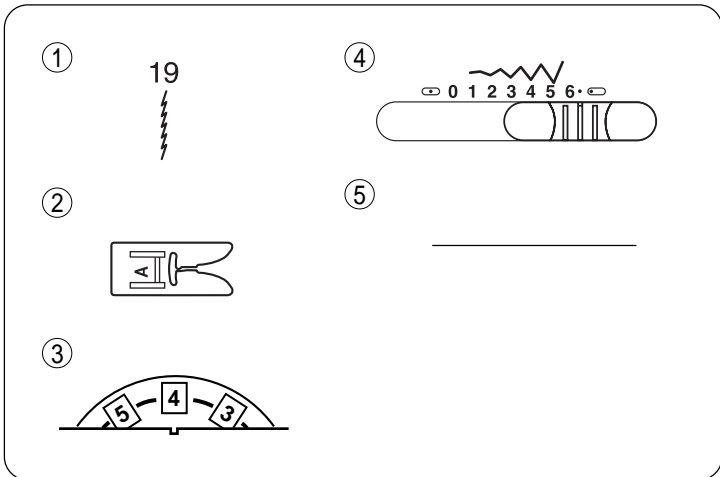
- | | |
|------------------|-------------------------------|
| ① Pattern | #18 |
| ② Foot | A: Zigzag foot |
| ③ Thread tension | 2 ~ 6 |
| ④ Stitch width | 0 or 6.5 |
| ⑤ Stitch length | Any (not necessary to adjust) |



This strong, durable stitch is recommended where both elasticity and strength are required.

Use this stitch when constructing items requiring extra strength such as backpacks, pant legs etc.

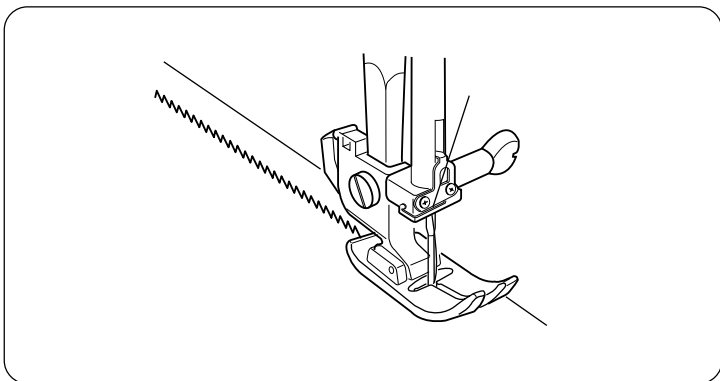
As the fabric moves back and forth, guide the fabric carefully to keep the seam straight.



Stretch Stitch

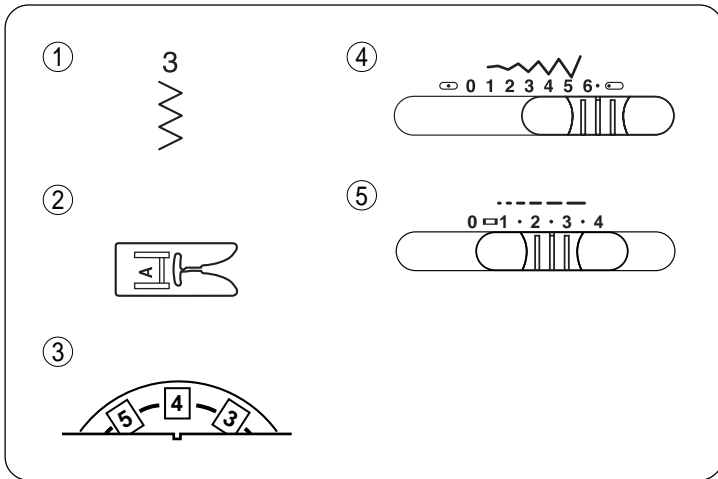
Machine setting

- | | |
|------------------|-------------------------------|
| ① Pattern | #19 |
| ② Foot | A: Zigzag foot |
| ③ Thread tension | 3 ~ 6 |
| ④ Stitch width | 5 ~ 6.5 |
| ⑤ Stitch length | Any (not necessary to adjust) |



This flexible stitch is recommended for seaming stretch fabrics such as knit and tricot that tend to pucker.

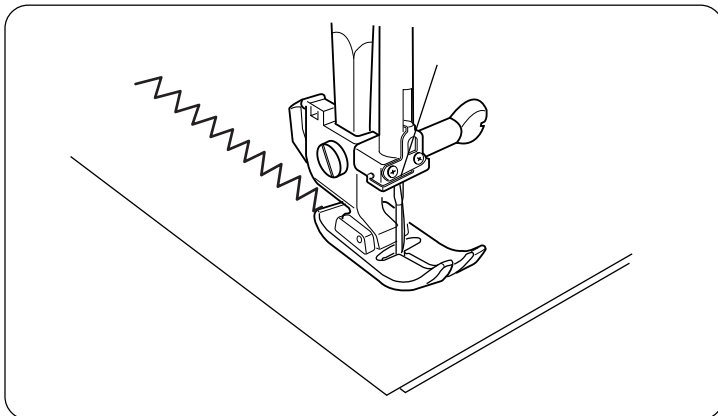
The seam can be opened flat.



Basic Zigzag Stitch

Machine setting

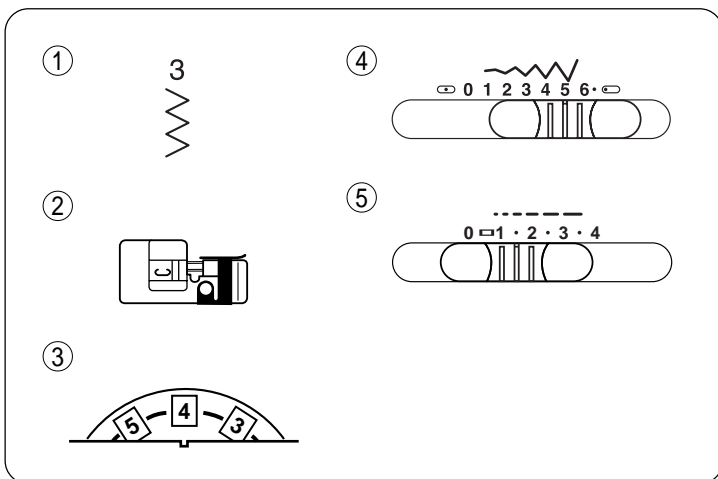
- | | |
|------------------|----------------|
| ① Pattern | #3 |
| ② Foot | A: Zigzag foot |
| ③ Thread tension | 3 ~ 5 |
| ④ Stitch width | 1 ~ 6.5 |
| ⑤ Stitch length | 0.5 ~ 3 |



Zigzag stitch is one of the most useful and versatile stitches.

It is used for overcasting, mending, appliqué also used as a decorative stitch.

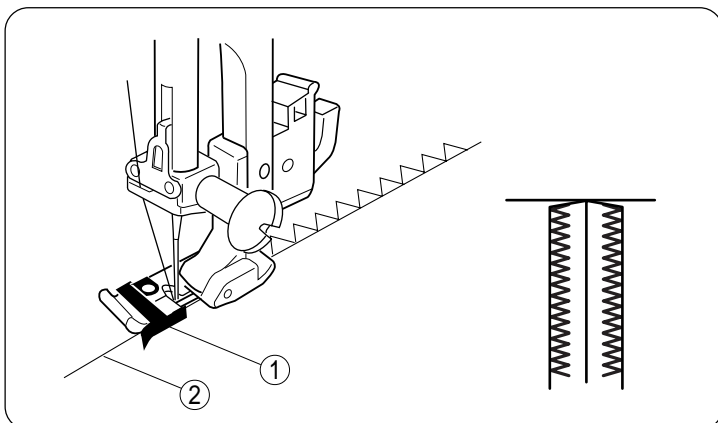
NOTE: Use an interface when sewing on the stretch fabric such as knit, jersey or tricot.



Overcasting

Machine setting

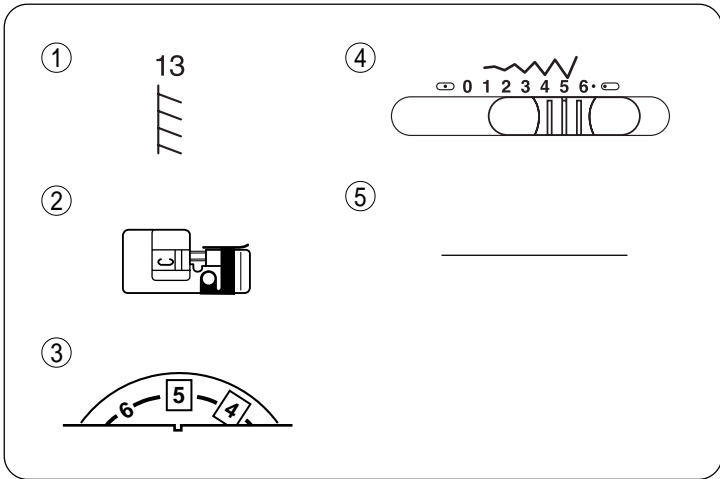
- | | |
|------------------|------------------|
| ① Pattern | #3 |
| ② Foot | C: Overedge foot |
| ③ Thread tension | 3 ~ 7 |
| ④ Stitch width | 5 ~ 6.5 |
| ⑤ Stitch length | 1 ~ 2 |



CAUTION: Do not set the stitch width less than 5 when using the overedge foot to prevent the needle from hitting the wires on the foot.

Finish a raw edge of the fabric to prevent fraying. Place the raw edge of the fabric next to the guide of the foot and start sewing.

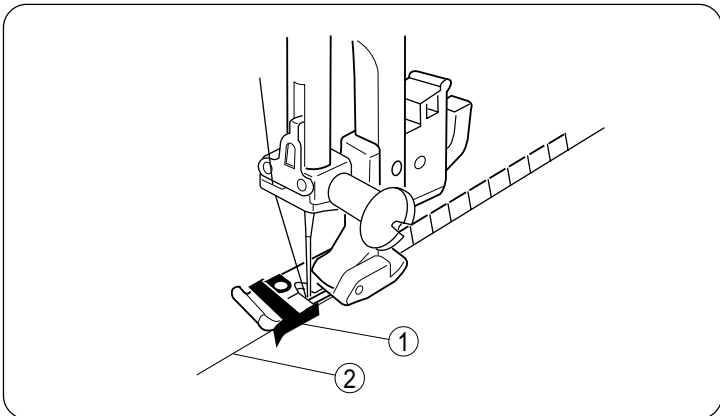
- ① Guide
- ② Edge of the fabric



Overedge Stitch

Machine setting

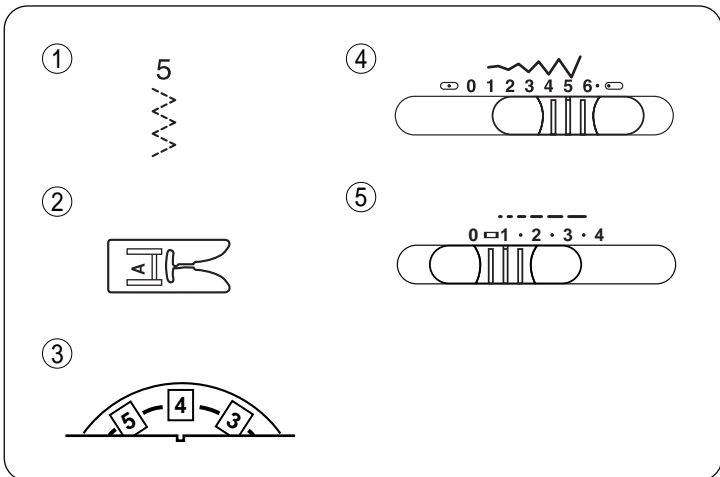
- | | |
|------------------|------------------|
| ① Pattern | #13 |
| ② Foot | C: Overedge foot |
| ③ Thread tension | 3 ~ 7 |
| ④ Stitch width | 5 |
| ⑤ Stitch length | Any |



CAUTION: Do not set the stitch width less than 5 when using the overedge foot to prevent the needle from hitting the wires on the foot.

This stitch overcast and seam the raw edge at the same time, it prevents fraying.

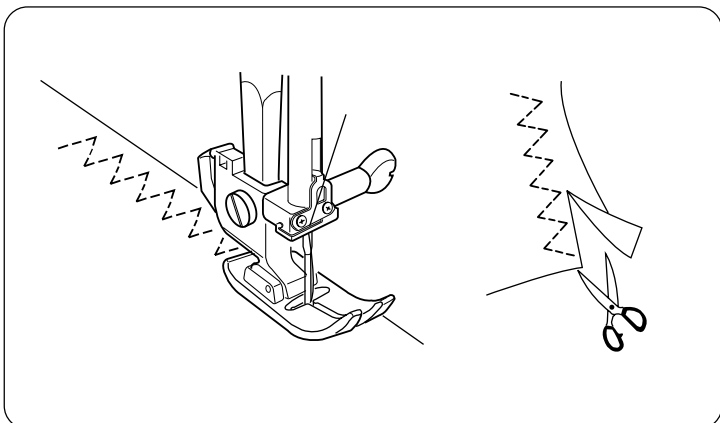
- ① Guide
- ② Edge of the fabric



Multiple Zigzag Stitch (Tricot Stitch)

Machine setting

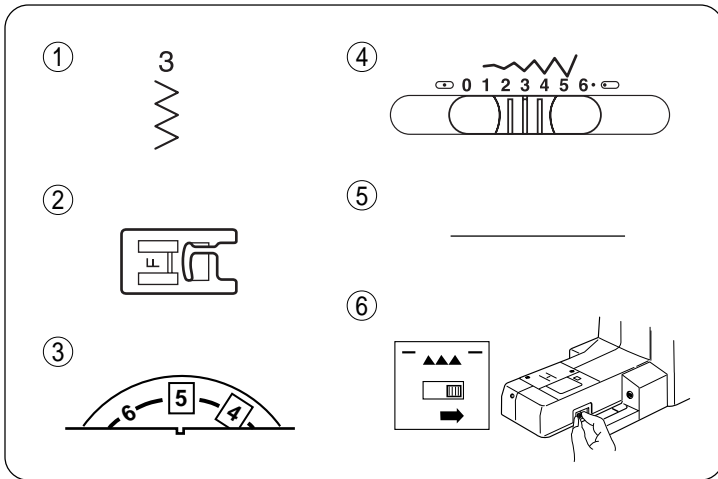
- | | |
|------------------|----------------|
| ① Pattern | #5 |
| ② Foot | A: Zigzag foot |
| ③ Thread tension | 3 ~ 6 |
| ④ Stitch width | 3 ~ 6.5 |
| ⑤ Stitch length | 0.5 ~ 1.5 |



This stitch is used to finish a raw edge of synthetics and other stretch fabrics that tend to pucker.

Sew along the fabric edge leaving an enough seam allowance.

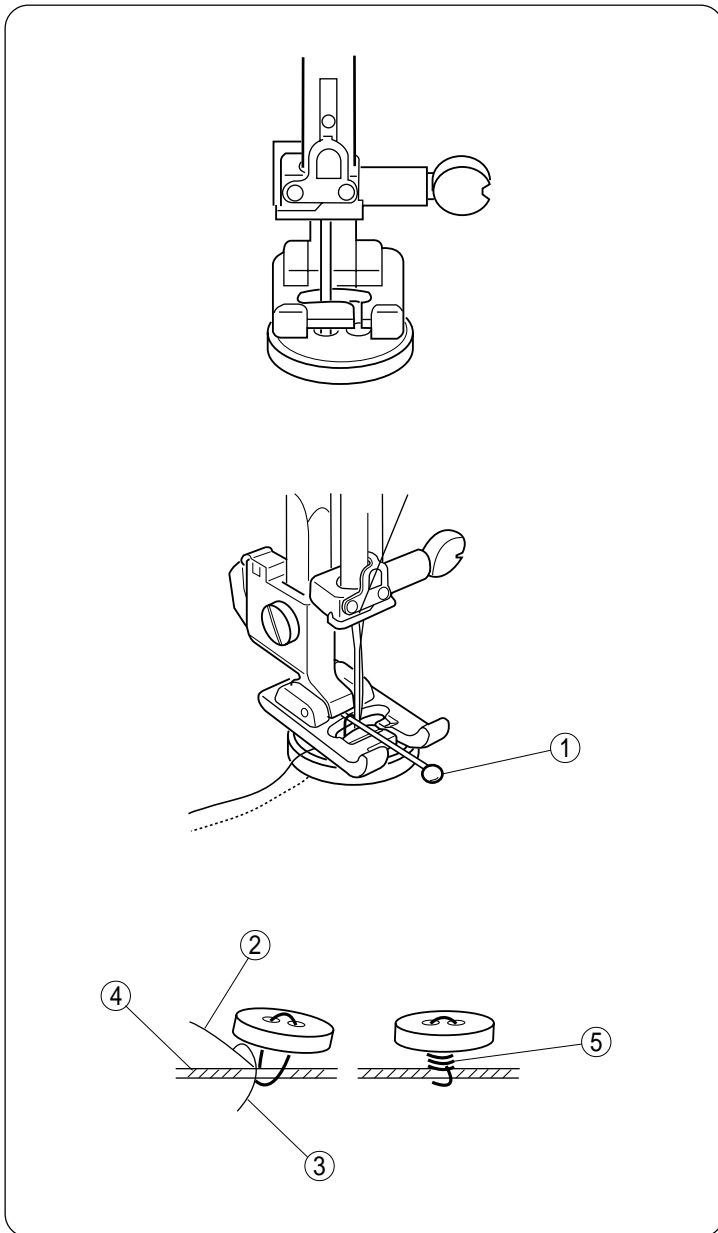
After sewing, trim off the seam allowance close to the stitches as shown.



Sewing on Buttons

Machine setting

① Pattern	#3
② Foot	F: Satin stitch foot
③ Thread tension	3 ~ 7
④ Stitch width	Adjust as necessary
⑤ Stitch length	Any (not necessary to adjust)
⑥ Feed dog	Dropped



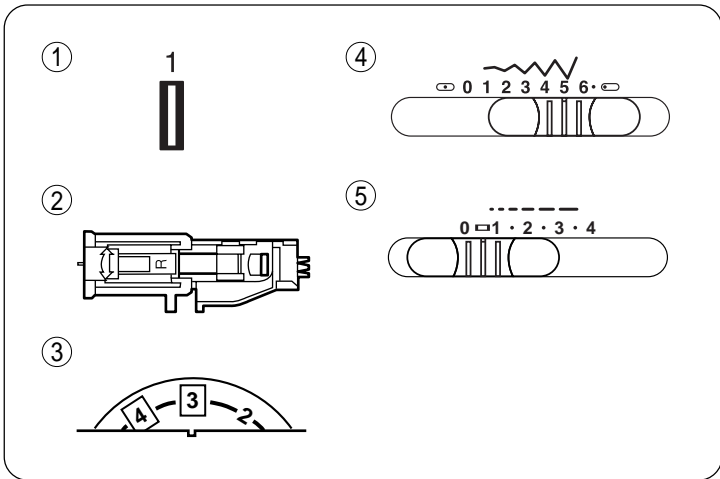
- ① Unthread the needle. Adjust the stitch width to match the needle swing with the span of the holes on the button.
- ② Rethread the needle and lower the presser foot to hold the button in place.
A pin can be placed on top of the foot to from a shank.
- ③ Turn the handwheel toward you to check the needle enters both left and right holes of button.
- ④ Press the foot control to sew 10 stitches and stop the machine.
- ⑤ Raise the foot and draw out the fabric, and cut the threads leaving 20 cm (8") tails.

NOTE: Trim both needle and bobbin threads at the beginning of stitches.

- ⑥ Draw the needle thread through the hole on the button to bring it between the button and fabric. Pull the needle thread to pick the bobbin thread up to the right side of the fabric. Wind the threads in opposite directions around the thread shank a few times and tie them together.

NOTE: After finish sewing, raise the feed dog by shifting the drop feed lever to the original position.

- ① Pin
- ② Needle thread
- ③ Bobbin thread
- ④ Fabric
- ⑤ Shank



Automatic Buttonhole

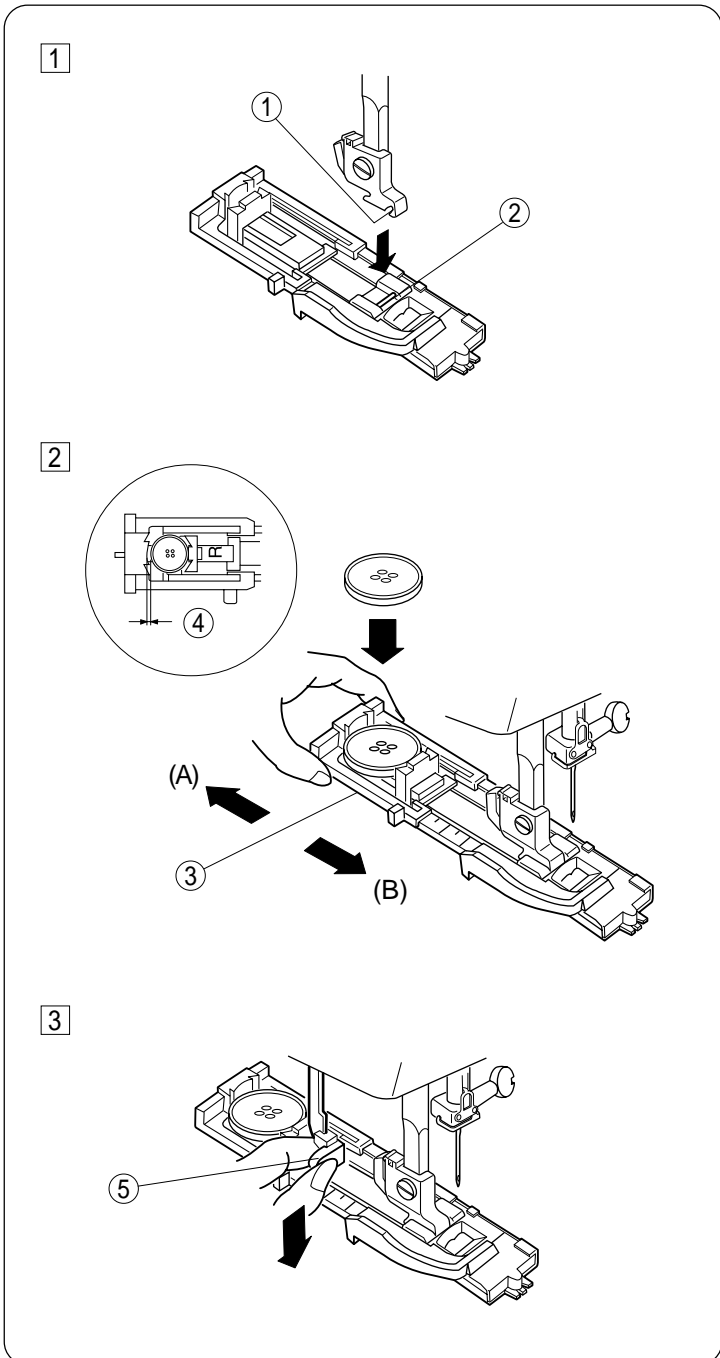
Machine setting

① Pattern	#1
② Foot	R: Automatic buttonhole foot
③ Thread tension	1 ~ 5
④ Stitch width	4 ~ 6.5
⑤ Stitch length	0.5 ~ 1

NOTES: The size of buttonhole is automatically set by placing the button in the rear of the automatic buttonhole foot R.

The button holder of the foot takes a button size up to 2.5 cm (1") in diameter.

Use the interfacing on the stretch fabrics.



① Raise the needle and foot. Place the automatic buttonhole foot with its pin just under the groove of the foot holder. Lower the presser bar to attach the automatic buttonhole foot.

- ① Groove
- ② Pin

② Pull the button holder to the back (A), and place the button in it. Push back the button holder toward you (B) to hold the button.

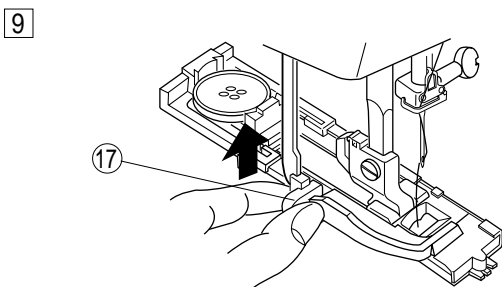
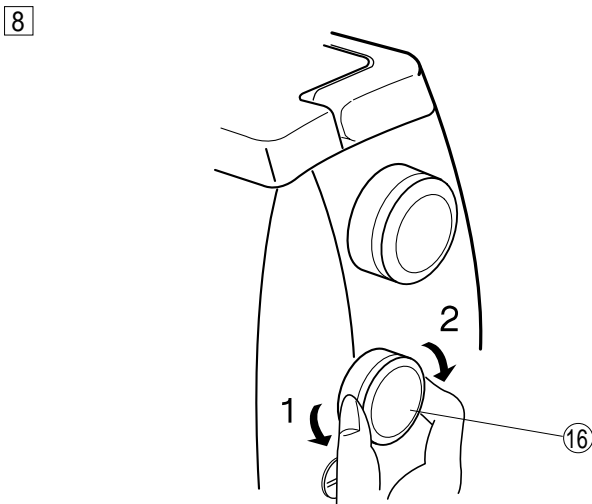
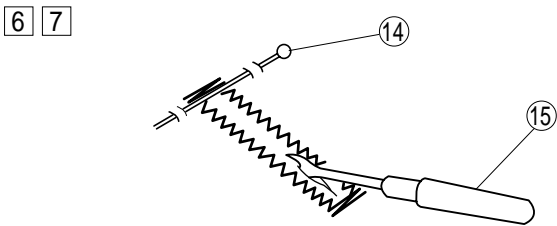
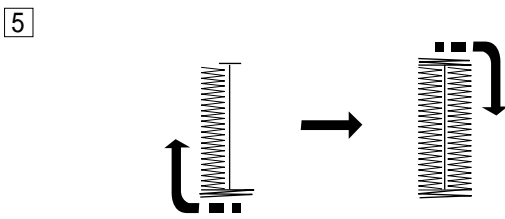
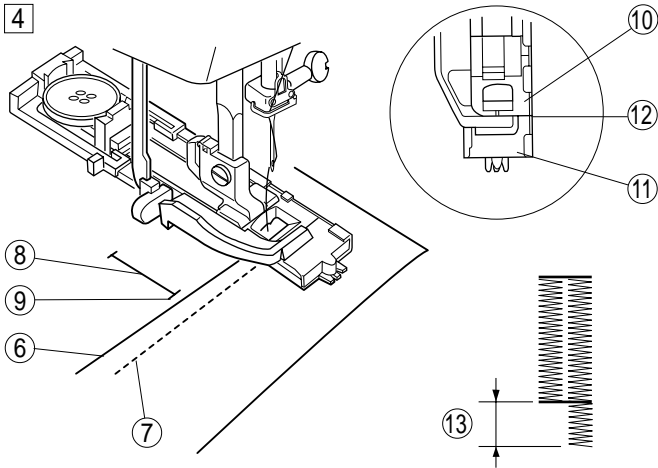
- ③ Button holder

NOTE: If the button is extremely thick, make a test buttonhole. If it is difficult to fit the button through the test buttonhole, lengthen the buttonhole by pulling the button holder back to create a gap.

- ④ Gap

③ Pull the buttonhole lever downward as far as it will go.

- ⑤ Buttonhole lever



4 Draw the needle thread to the left through the hole on the foot. Place the fabric under the foot and lower the needle at the starting point of the buttonhole mark. Then lower the foot.

- 6 Needle thread
- 7 Bobbin thread
- 8 Buttonhole mark
- 9 Starting point

NOTE: Make sure there is no gap between the slider and spring holder, otherwise the left and right length will be different.

- 10 Slider
- 11 Spring holder
- 12 No gap
- 13 Sewing gap

5 Depress the foot control to sew a buttonhole. Stop the machine when the buttonhole is completed.

6 Raise the foot and cut the both needle and bobbin threads leaving 10 cm (4") thread ends. Pull the bobbin thread to draw the needle thread to the wrong side of the fabric, and tie them together.

7 Remove the fabric and place a pin just before the bartack at each end to prevent cutting bartacks. Cut the opening with the seam ripper.

- 14 Pin
- 15 Seam ripper

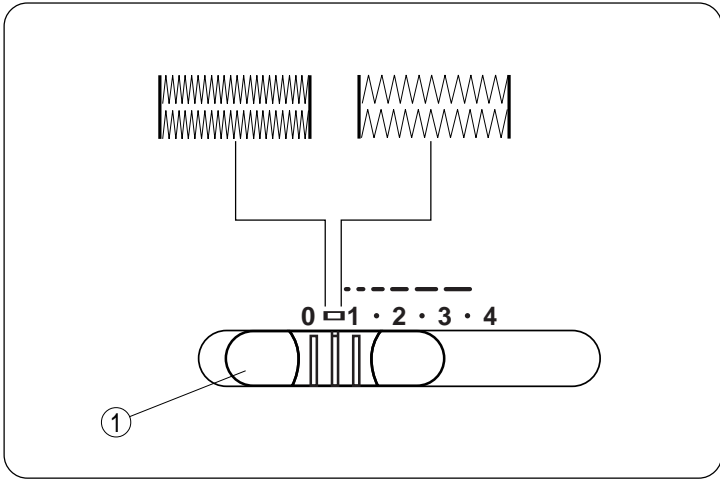
To repeat buttonhole sewing:

8 Select the other pattern and re-select the buttonhole by turning the pattern selector dial in either " 1 " or " 2 " direction to reset for sewing the next buttonhole.


- 16 Pattern selector dial

9 After the buttonhole sewing is finished, push the buttonhole lever upward as far as it will go.

- 17 Buttonhole lever



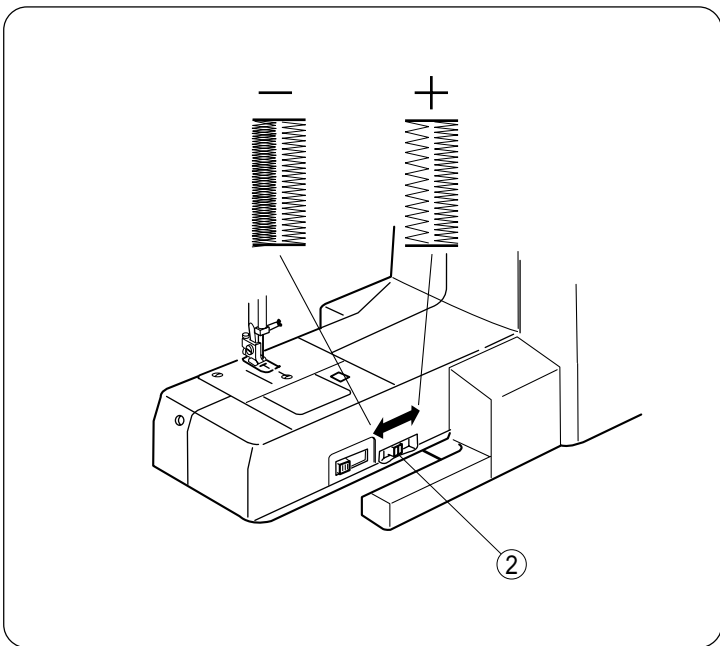
To adjust the stitch density of the buttonhole:

Adjust the stitch density within a range of  .

Slide the stitch length lever toward “1” for coarser stitch.

Slide the stitch length lever toward “0” for denser stitch.

- ① Stitch length lever



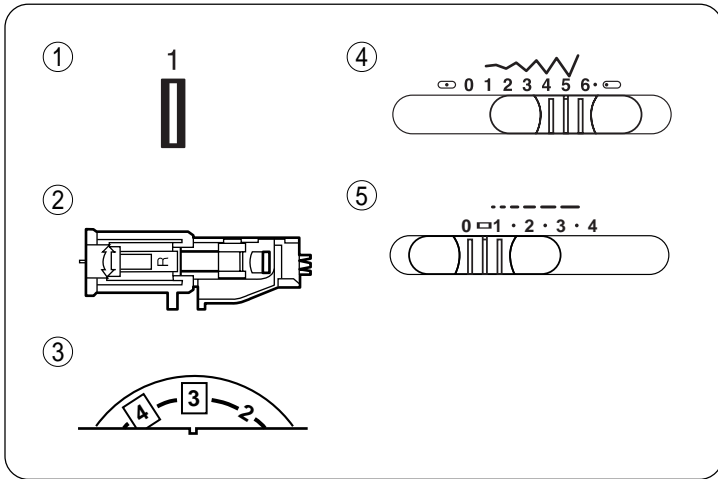
To adjust the stitch balance of the buttonhole:

If the stitches on each side are not balanced, adjust it by the buttonhole pitch balance adjuster.

Move the adjuster to the right (+), if the left side is denser than the right side.

Move the adjuster to the left (-), if the left side is coarser than the right side.

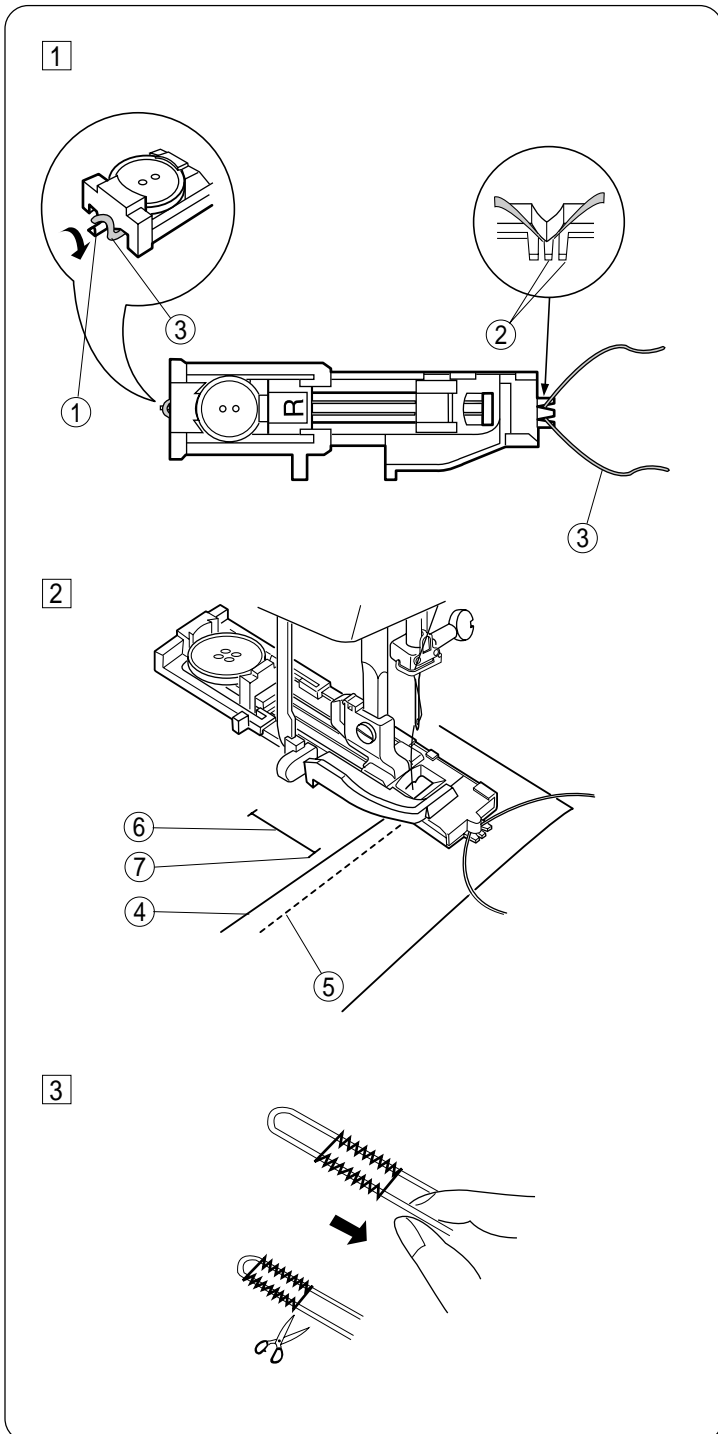
- ② Buttonhole pitch balance adjustor



Corded Buttonholes

Machine setting

① Pattern	1
② Foot	R: Automatic buttonhole foot
③ Thread tension	1 ~ 5
④ Stitch width	4 ~ 6.5
⑤ Stitch length	0.5 ~ 1



① With the buttonhole foot raised, hook the filler cord on the cord spur on the back of the buttonhole foot. Bring the ends toward you under the foot, and hook the filler cord into the forks on the front of the foot to hold them tight.

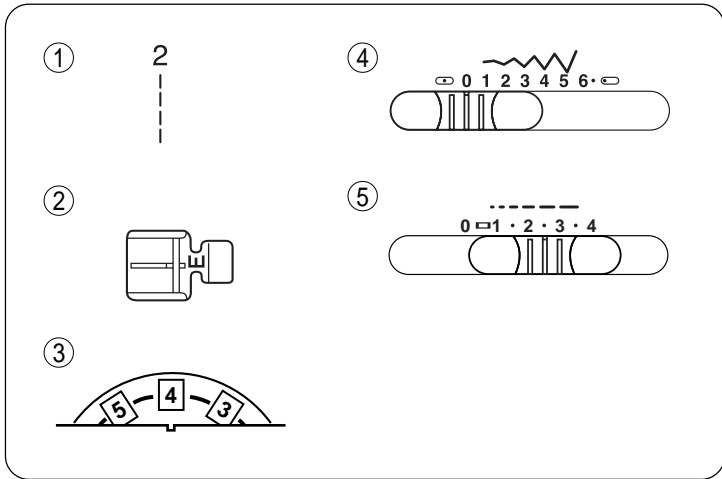
- ① Spur
- ② Forks
- ③ Filler cord

② Lower the needle into the garment where the buttonhole will start and lower the foot. Depress the foot control and sew the buttonhole over the cord.

NOTE: The sewing procedure is the same as the automatic buttonhole.

- ④ Needle thread
- ⑤ Bobbin thread
- ⑥ Buttonhole mark
- ⑦ Starting position

③ Remove the fabric and pull the left end of the cord to tighten it. Cut the excess cord.



Zipper Application

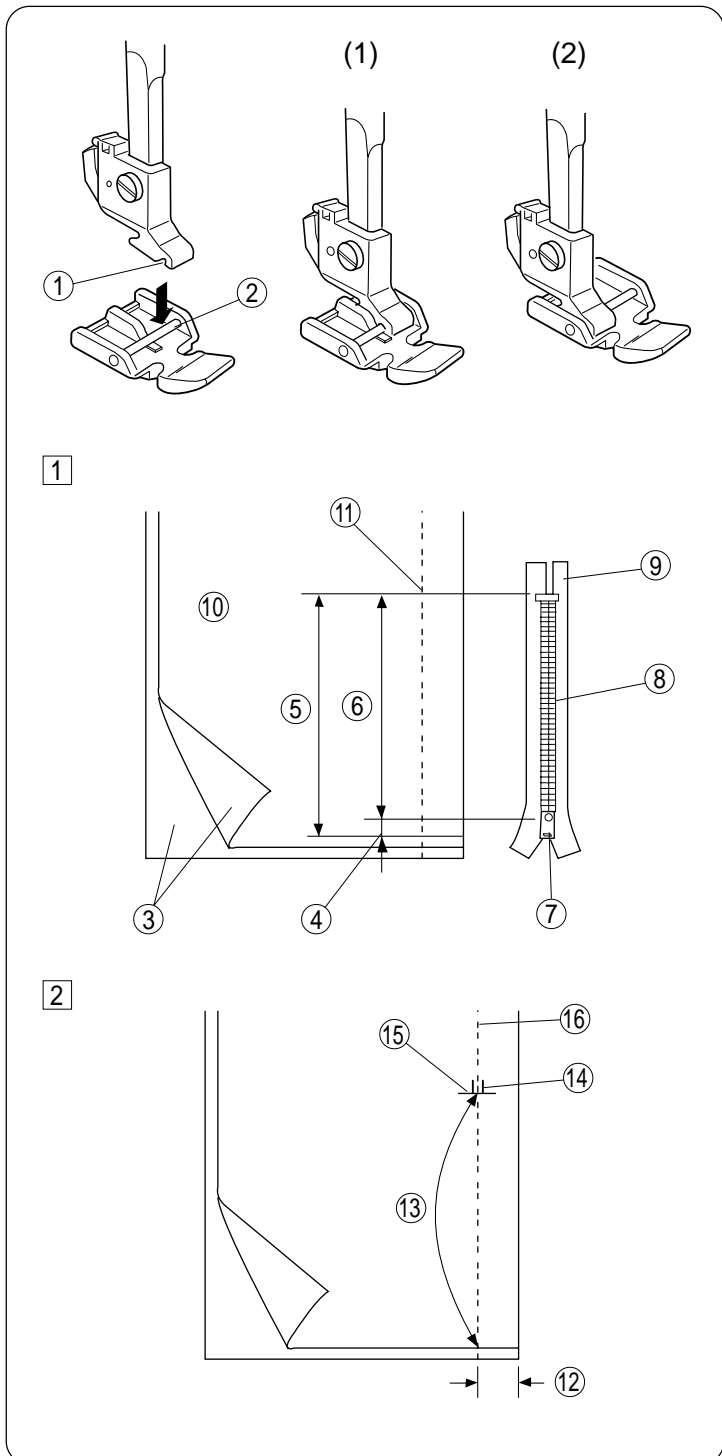
Machine setting

① Pattern	#2
② Foot	E: Zipper foot
③ Thread tension	3 ~ 6
④ Stitch width	0
⑤ Stitch length	1.5 ~ 2 (4 for basting)

To attach the zipper foot:

- (1) Attach the zipper foot with the pin on the right, when sewing on the left side of the zipper.
- (2) Attach the zipper foot with the pin on the left, when sewing on the right side of the zipper.

- ① Groove
- ② Pin



Fabric preparation:

- ① Add 1 cm (3/8") to the zipper size. This is the overall opening size.

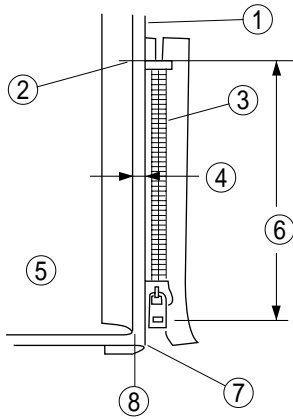
- ③ Right side of the fabric
- ④ 1 cm (3/8")
- ⑤ Opening size
- ⑥ Zipper size
- ⑦ Slider
- ⑧ Zipper teeth
- ⑨ Zipper tape
- ⑩ Wrong side of the fabric
- ⑪ End of the opening

- ② Place the right sides of the fabric together and sew up to the end of the zipper opening, with a 2 cm (13/16") seam allowance. Reverse the stitch to fasten the seam. Baste along the zipper opening with the stitch length 4 (0.4 cm).

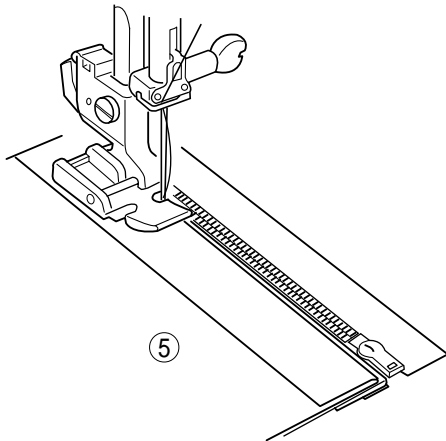
- ⑫ 2 cm (13/16")
- ⑬ Zipper opening (Basting)
- ⑭ Reverse stitches
- ⑮ End of the opening
- ⑯ Seam

NOTE: Loosen the thread tension to one (1) for the basting stitch.

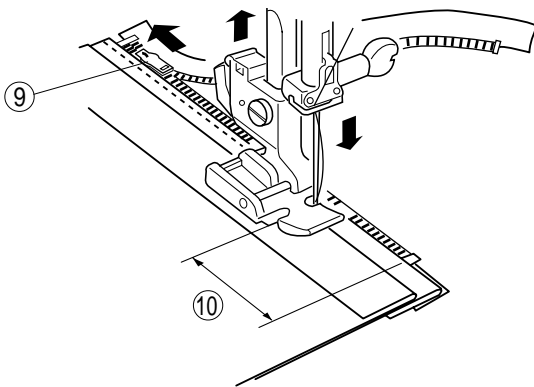
1



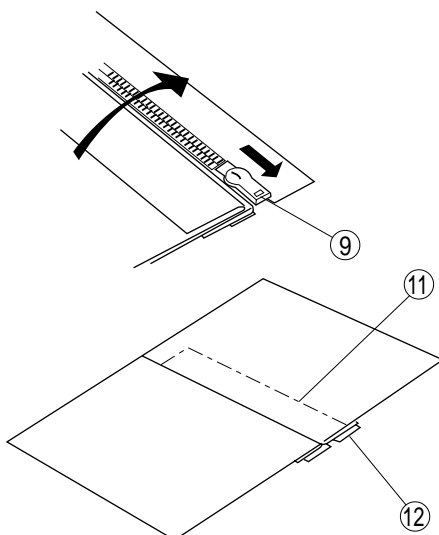
2



3



4



To sew:

1 Fold up the upper seam allowance. Fold back the bottom seam allowance to form a 0.3 cm (1/8") fold. Place the zipper teeth next to the fold and pin it in place.

- ① Bottom fabric
- ② End of the zipper opening
- ③ Zipper teeth
- ④ 0.3 cm (1/8")
- ⑤ Wrong side of the upper fabric
- ⑥ Opening size
- ⑦ Fold
- ⑧ Basting stitches

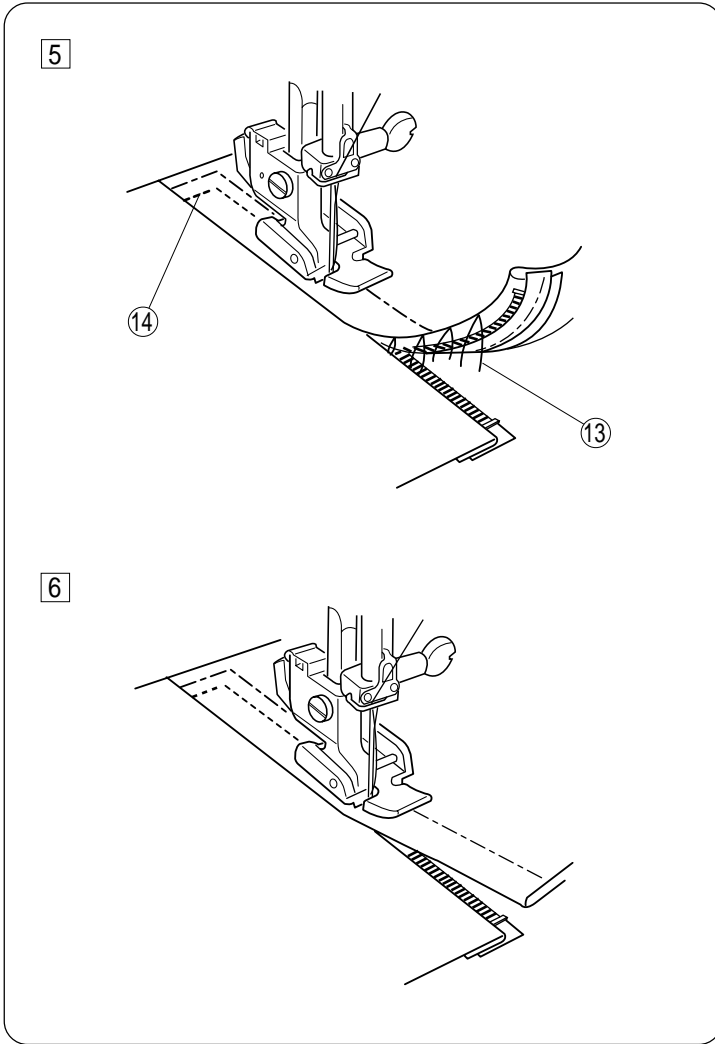
2 Attach the foot with the pin on the right. Sew through all the layers from the end of the zipper opening, guiding the zipper teeth along the edge of the foot.

3 Stop the machine 5 cm (2") before the foot reaches the slider on the zipper tape. Lower the needle into the fabric, and raise the foot. Open the zipper, then lower the foot and stitch the remainder of the seam.

- ⑨ Slider
- ⑩ 5 cm (2")

4 Close the zipper and open the upper fabric flat over the zipper. Baste the upper fabric and zipper tape together.

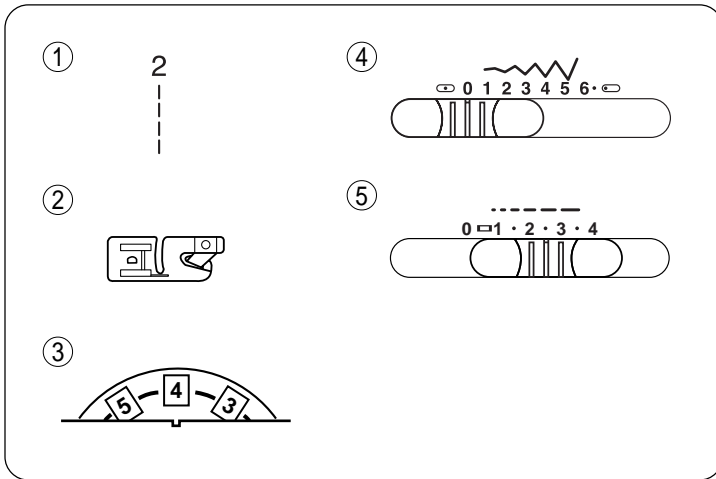
- ⑪ Basting stitch
- ⑫ Zipper tape



5 Detach the foot and re-attach it with the pin on the left. Backstitch across the end of opening to 0.7 – 1 cm (3/8"). Turn the fabric 90 degrees and stitch through the garment and zipper tape. Stop the machine 5 cm (2") before the foot reaches the slider on the zipper tape. Lower the needle into the fabric, and raise the foot. Remove the basting stitches.

- 13 Basting stitches
- 14 Backstitch (0.7-1cm)

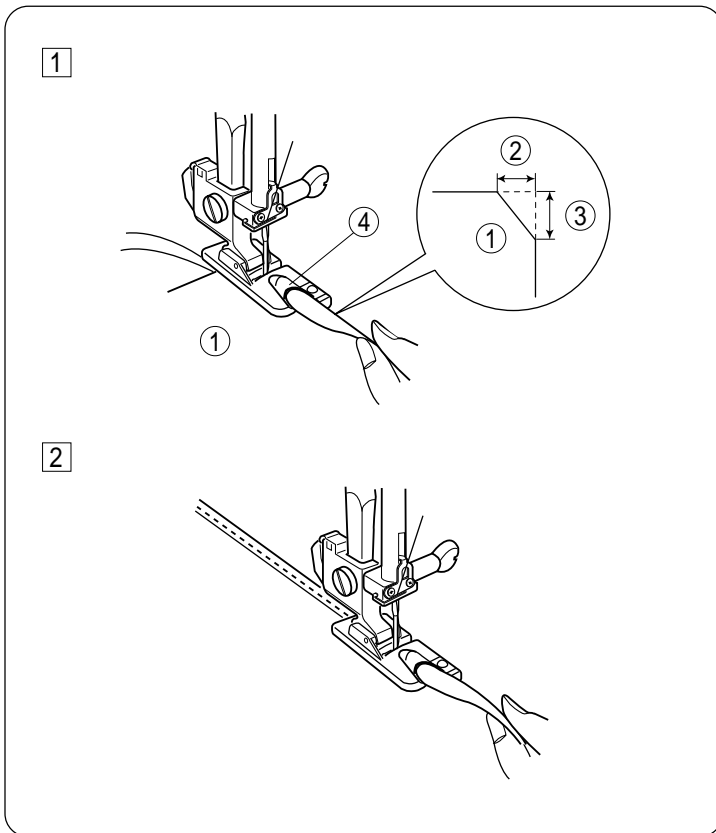
6 Open the zipper, then lower the foot and stitch the remainder of the seam.



Rolled Hem

Machine setting

① Pattern	#2
② Foot	D: Rolled hem foot
③ Thread tension	3-6
④ Stitch width	0
⑤ Stitch length	1.5-4



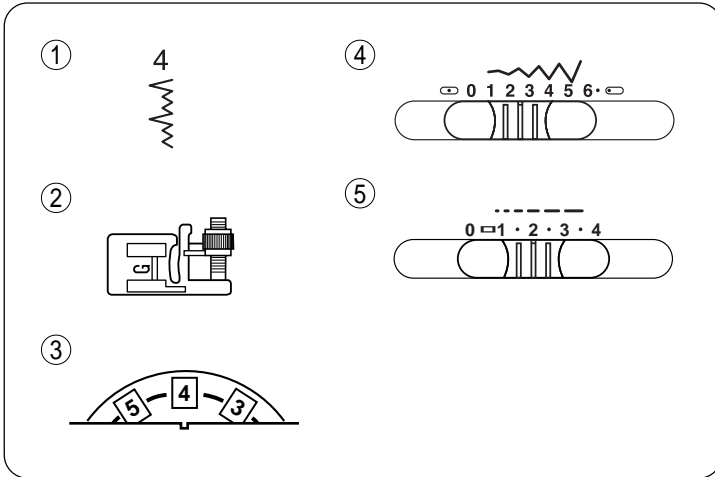
Trim off the corner of the fabric 0.5 cm (3/16") by 0.8 cm (5/16") to avoid a bulkiness of the hem at the corner.

Fold the fabric edge twice 0.3 cm (1/8") wide and 6 cm (2 3/8") long.

- ① Right side of the fabric
- ② 0.5 cm
- ③ 0.8 cm
- ④ Curl of the foot

① Place the fabric aligning the hem edge with the guide on the foot. Lower the foot and sew several stitches while pulling both threads to the back. Stop the machine with the needle in the fabric and raise the presser foot. Insert the folded portion of the fabric into the curl of the foot.

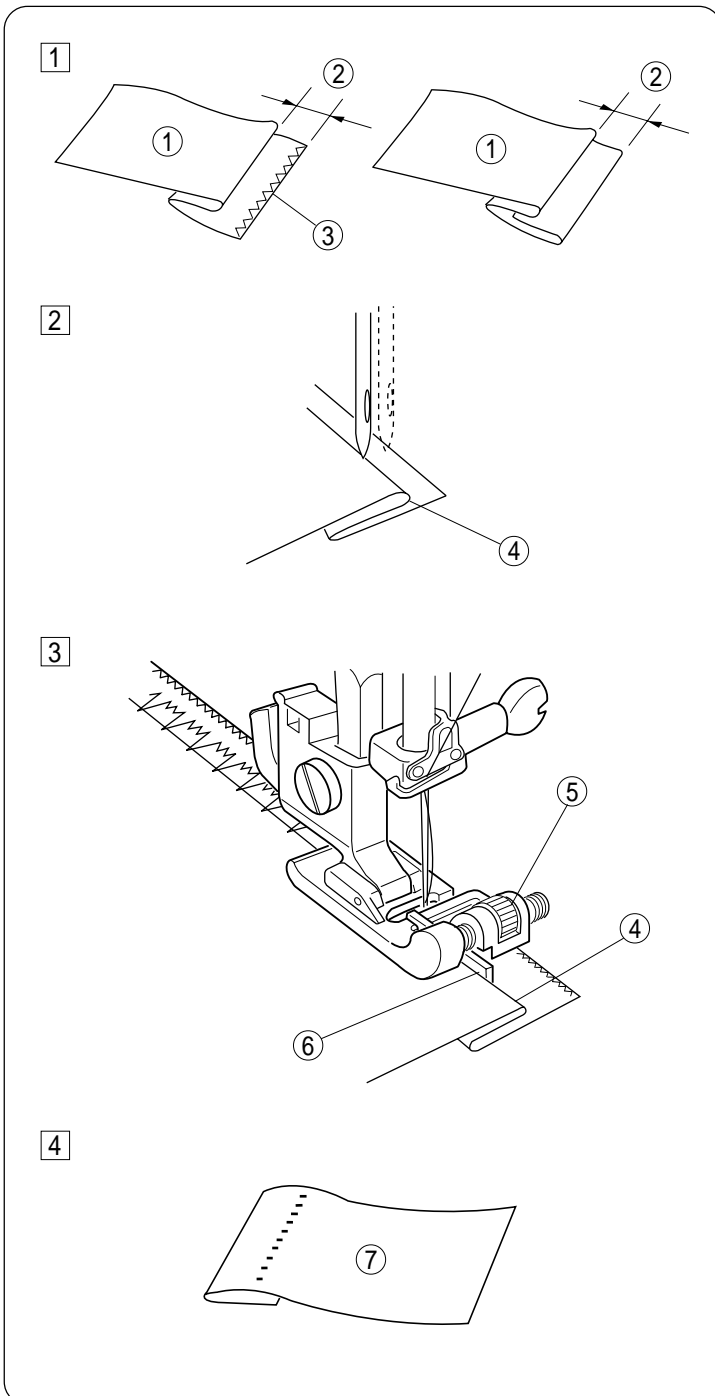
② Lower the foot and sew while lifting up the fabric edge to keep it feeding smoothly and evenly.



Blind Hem Stitch

Machine setting

① Pattern	#4
② Foot	G: Blind hem foot
③ Thread tension	2 ~ 6
④ Stitch width	2 ~ 3
⑤ Stitch length	1 ~ 3



① Fold a hem with the wrong side up forming a 0.4 ~ 0.7 cm (3/16 ~ 5/16") allowance.

- ① Wrong side of the fabric
- ② 0.4 ~ 0.7 cm (3/16 ~ 5/16")
- ③ Overcasting

Notes: On heavy weight fabrics that ravel, the raw edge should be overcast first.
Fold the hem under the fabric as illustrated for fine or medium weight fabrics.

② Place the fabric so that the needle just pierces the folded edge when the needle comes over the extreme left side. Lower the presser foot.

- ④ Folded edge

③ Turn the guide screw to adjust the position of the guide to match it with the folded edge. Sew guiding the folded edge along the guide.

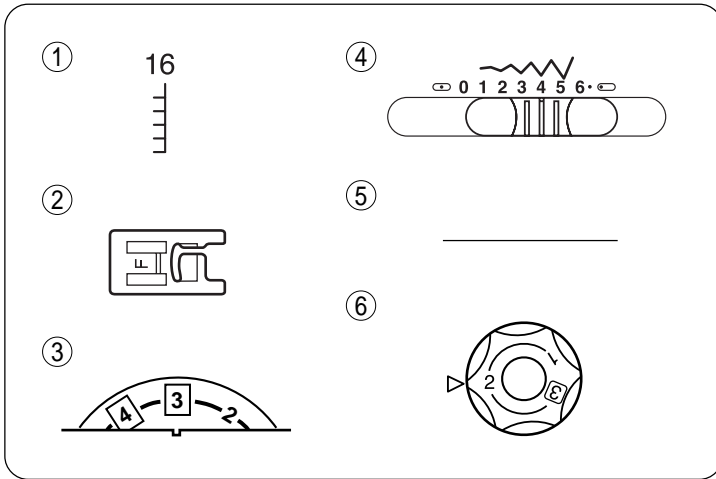
- ⑤ Guide screw
- ⑥ Guide

④ Open the fabric after sewing is finished.

NOTE: If the needle pierces too far left, the stitches will show on the right side of fabric.

- ⑦ Right side of the fabric

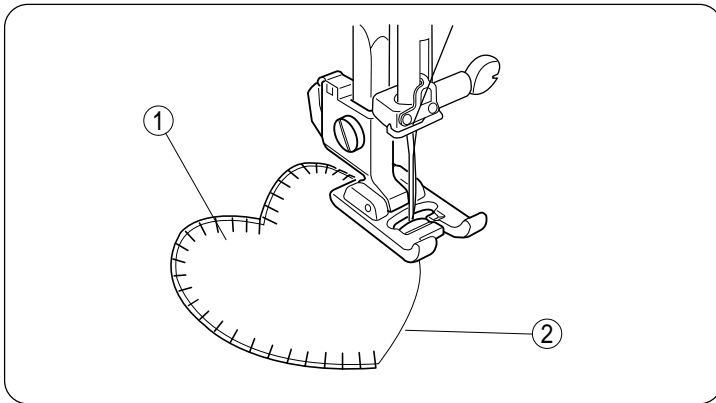
SEWING APPLICATION AND DECORATIVE STITCHES



Appliqué

Machine setting

- | | |
|----------------------|-------------------------------|
| ① Pattern | #16 |
| ② Foot | F: Satin stitch foot |
| ③ Thread tension | 1 ~ 4 |
| ④ Stitch width | 3 ~ 6.5 |
| ⑤ Stitch length | Any (not necessary to adjust) |
| ⑥ Foot pressure dial | 2 |



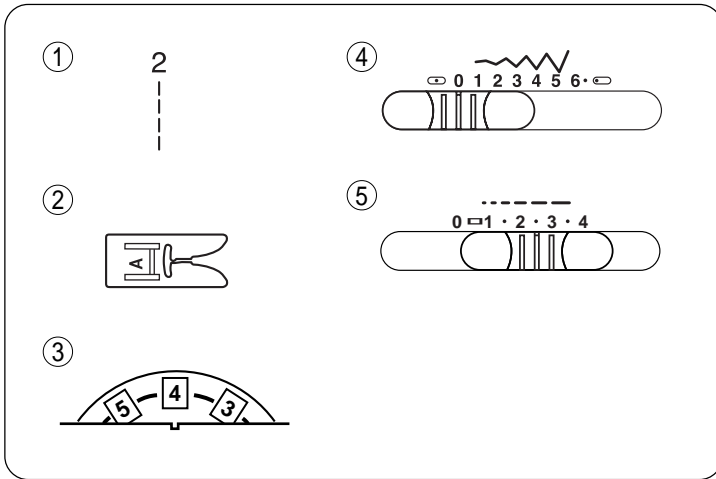
Baste or glue applique pieces on the fabric.

Stitch around the applique making sure the needle falls along the outer edge of the applique.

When turning corners, lower the needle down into the outer edge of the appliqué, and raise the presser foot to pivot the fabric.

- ① Applique
- ② Edge of the applique

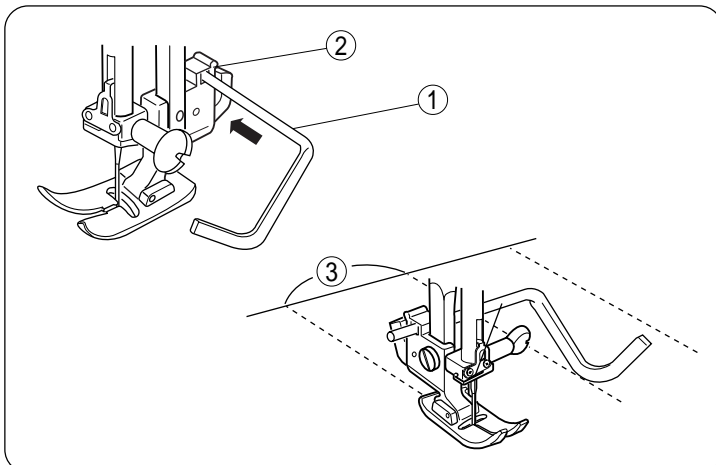
NOTE: After finish appliqué-sewing, raise the feed dog for normal sewing.



Quilting

Machine setting

- | | |
|------------------|----------------|
| ① Pattern | #2 |
| ② Foot | A: Zigzag foot |
| ③ Thread tension | 3 ~ 6 |
| ④ Stitch width | 0 or 6.5 |
| ⑤ Stitch length | 1.5 ~ 4 |

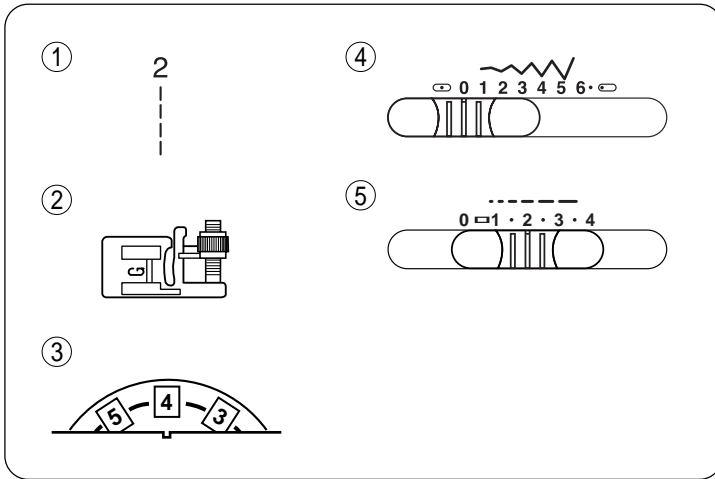


Insert the quilting bar into the opening on the back of the foot holder.

Shift the quilting bar to the desired position.

- ① Quilting bar
- ② Opening
- ③ Seam spacing

Sew tracing the previous seam with the quilting bar to keep constant seam spacing.

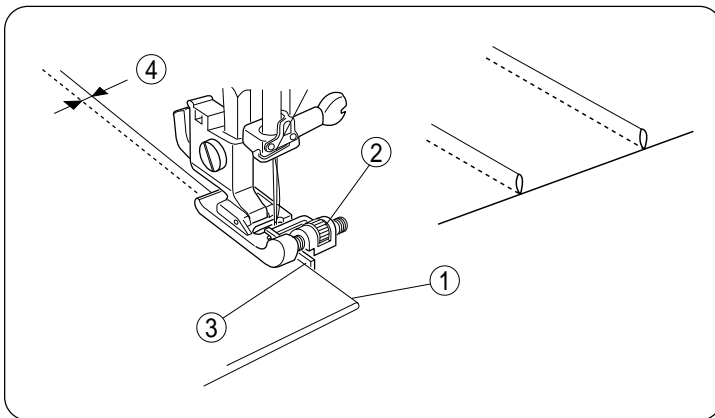


Pin Tucking

Machine setting

- | | |
|------------------|-------------------|
| ① Pattern | #2 |
| ② Foot | G: Blind hem foot |
| ③ Thread tension | 2 ~ 6 |
| ④ Stitch width | 0 or 6.5 |
| ⑤ Stitch length | 1.5 ~ 3 |

Pin tucking is used to decorate chest of blouses, dress shirts etc.



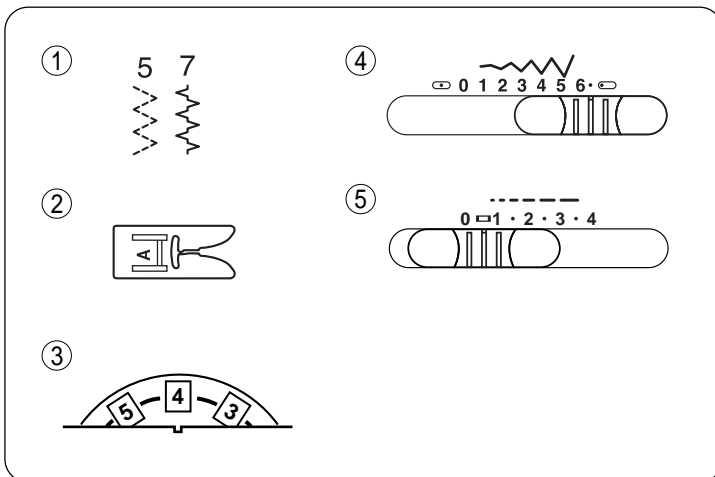
Fold the fabric with wrong side together.

Position the fabric so that the needle pierces 0.1 ~ 0.2 cm (1/16") inside of the folded edge, and lower the foot.

Turn the guide screw and move the guide next to the folded edge. Sew guiding the folded edge along the guide.

Open the fabric and press the tucks to one side.

- ① Folded edge
- ② Guide screw
- ③ Guide
- ④ 0.1 ~ 0.2 cm (1/16")



Patchwork

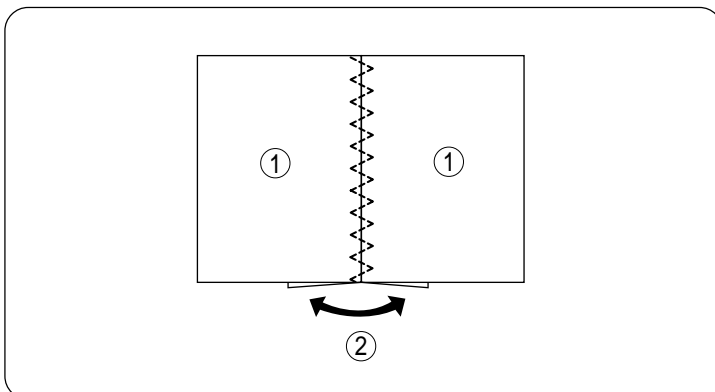
Machine setting

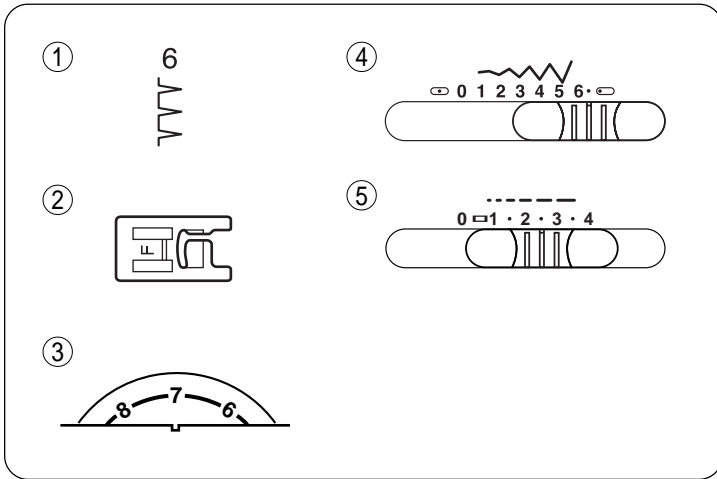
- | | |
|------------------|----------------|
| ① Pattern | #5, #7 |
| ② Foot | A: Zigzag foot |
| ③ Thread tension | 3 ~ 6 |
| ④ Stitch width | 5 ~ 6.5 |
| ⑤ Stitch length | 0.5 ~ 1.5 |

Seam two layers of the fabric with right side together.

Open the fabric flat and sew the pattern over the seam line on the right side of the fabric.

- ① Right side of the fabric
- ② Open the seam

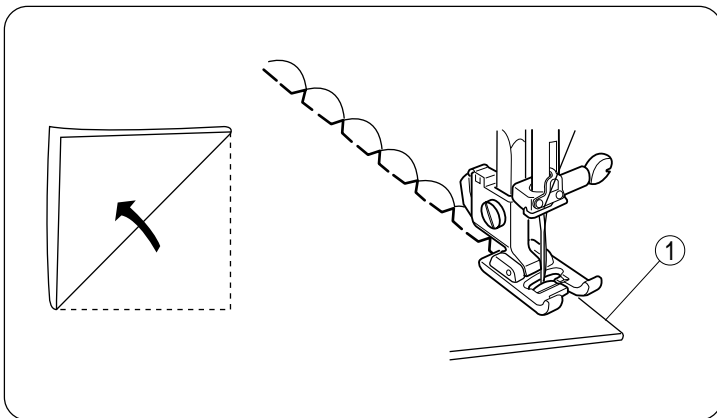




Shell Tucking

Machine setting

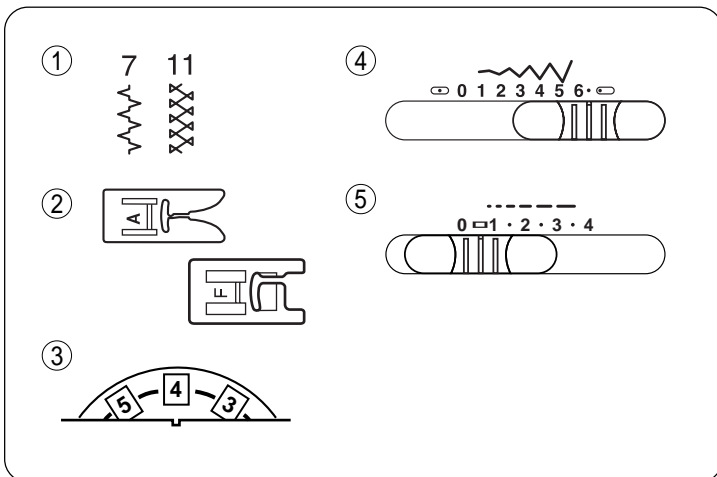
- | | |
|------------------|----------------------|
| ① Pattern | #6 |
| ② Foot | F: Satin stitch foot |
| ③ Thread tension | 6 ~ 8 |
| ④ Stitch width | 5 ~ 6.5 |
| ⑤ Stitch length | 2 ~ 3 |



Fold the fabric in bias. Sew along the folded edge so that the needle on the right swing just clear the folded edge to form tucks.

Open the fabric with the right side up and press the tucks to one side.

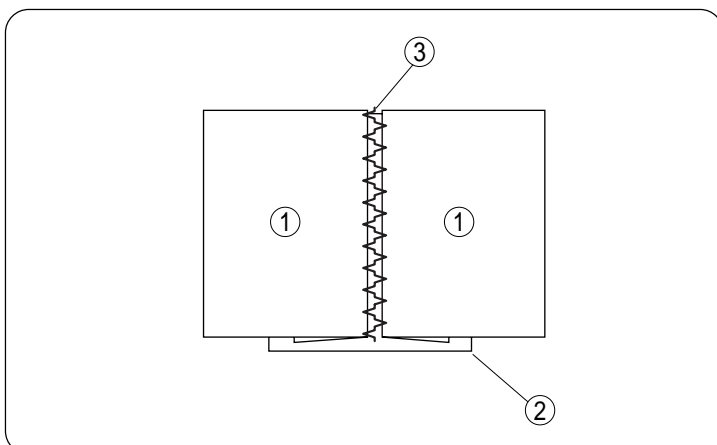
NOTE: You may need to adjust the needle thread tension to achieve the best result.



Fagoting

Machine setting

- | | |
|------------------|--|
| ① Pattern | #7, 11 |
| ② Foot | A: Zigzag foot or F: Satin stitch foot |
| ③ Thread tension | 3 ~ 6 |
| ④ Stitch width | 5 ~ 6.5 |
| ⑤ Stitch length | 0.5 ~ 1 (for Pattern #7),
Any (for Pattern #11) |

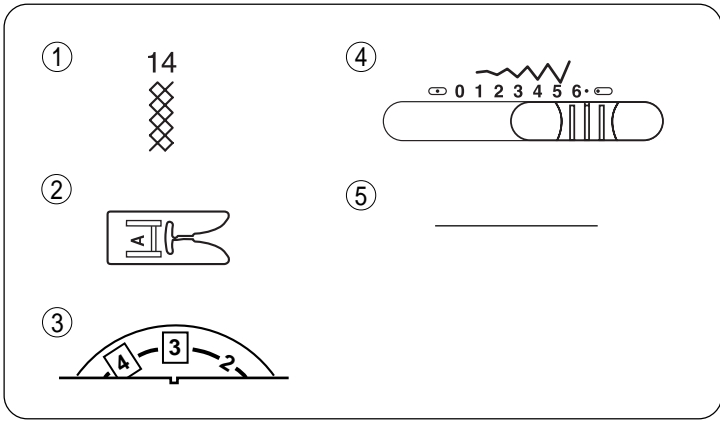


1. Fold under 1.5 cm (1/2") on each fabric edge and press. Pin the two edges to a piece of paper 0.3 cm (1/8") apart.

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

3. Peel off the paper from the fabric.

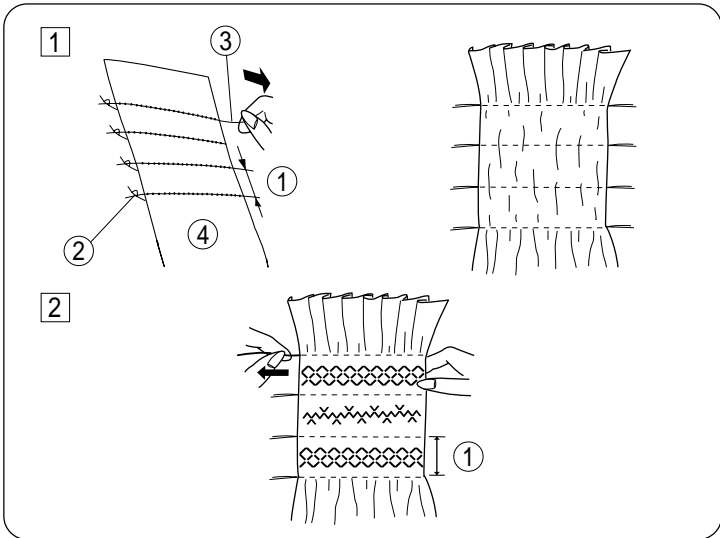
- ① Right side of the fabric
- ② Paper
- ③ Space (0.3 cm)



Smocking

Machine setting

- | | |
|------------------|-------------------------------|
| ① Pattern | #14 |
| ② Foot | A: Zigzag foot |
| ③ Thread tension | 1 ~ 4 |
| ④ Stitch width | 3 ~ 6.5 |
| ⑤ Stitch length | Any (not necessary to adjust) |

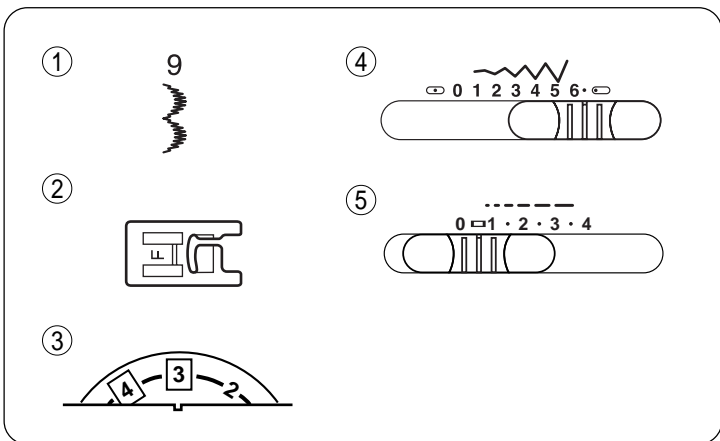


- ① Set the thread tension dial at 1 ~ 3, and stitch length dial at 3 ~ 4, sew straight lines 1 cm (3/8") apart across the area to be smocked.

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

- ① 1 cm (3/8")
- ② Knot
- ③ Bobbin thread
- ④ Wrong side of the fabric

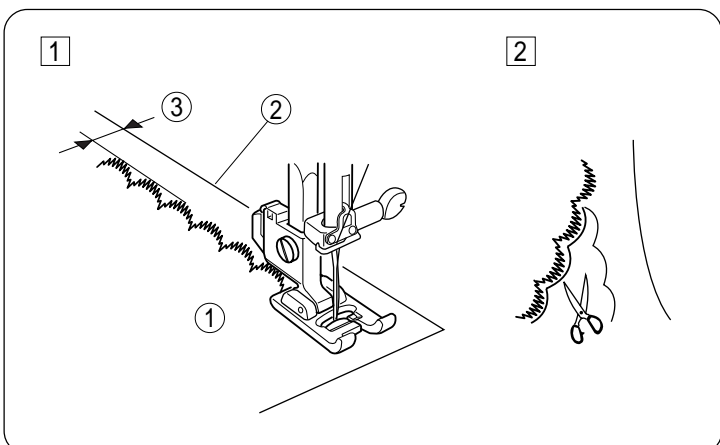
- ② Sew lines of the pattern between the straight seams. Pull out the gathering stitches.



Scallop Stitch

Machine setting

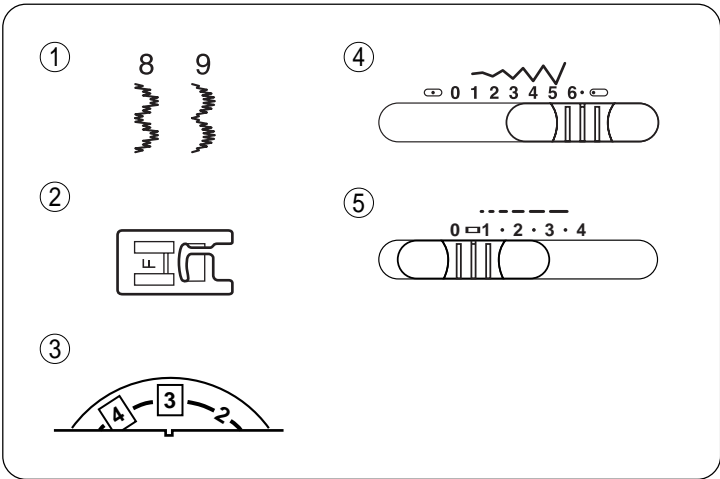
- | | |
|------------------|----------------------|
| ① Pattern | #9 |
| ② Foot | F: Satin stitch foot |
| ③ Thread tension | 1 ~ 4 |
| ④ Stitch width | 3 ~ 6.5 |
| ⑤ Stitch length | 0.5 ~ 1 |



- ① Sew along the raw edge of the fabric leaving a 1 cm allowance.

- ② Trim off the excess allowance close to the stitches. Make sure not to cut the stitches.

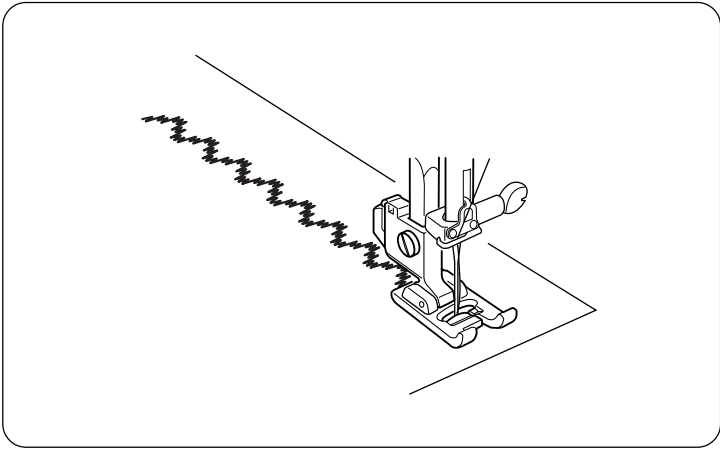
- ① Right side of the fabric
- ② Raw edge
- ③ 1cm



Decorative Satin Stitches

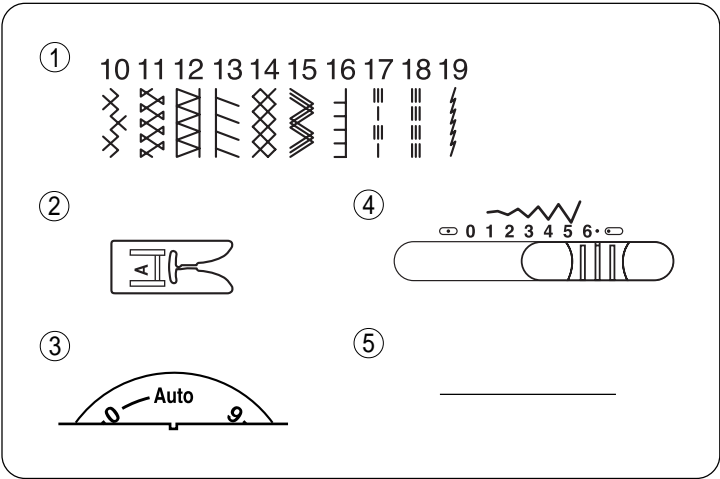
Machine setting

- ① Pattern #8, #9
- ② Foot F: Satin stitch foot
- ③ Thread tension 1 ~ 4
- ④ Stitch width 3 ~ 6.5
- ⑤ Stitch length 0.5 ~ 1



Test the stitch on the actual fabric for the desired patterns and adjust the stitch density for the best sewing results.

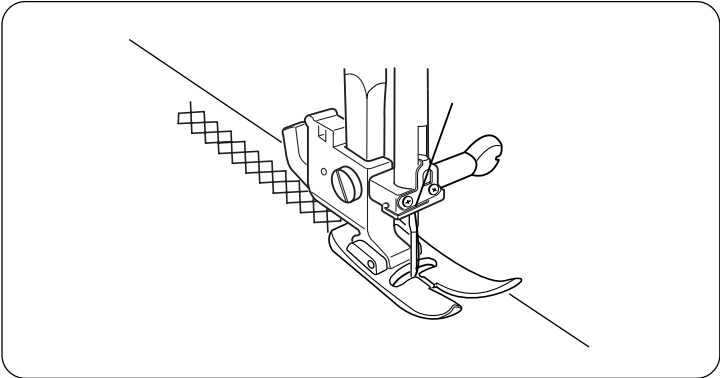
NOTE: For fine and stretch fabrics, use an adhesive type stabilizer or a piece of paper on the wrong side of the fabric to prevent puckering.



Decorative Stretch Stitches

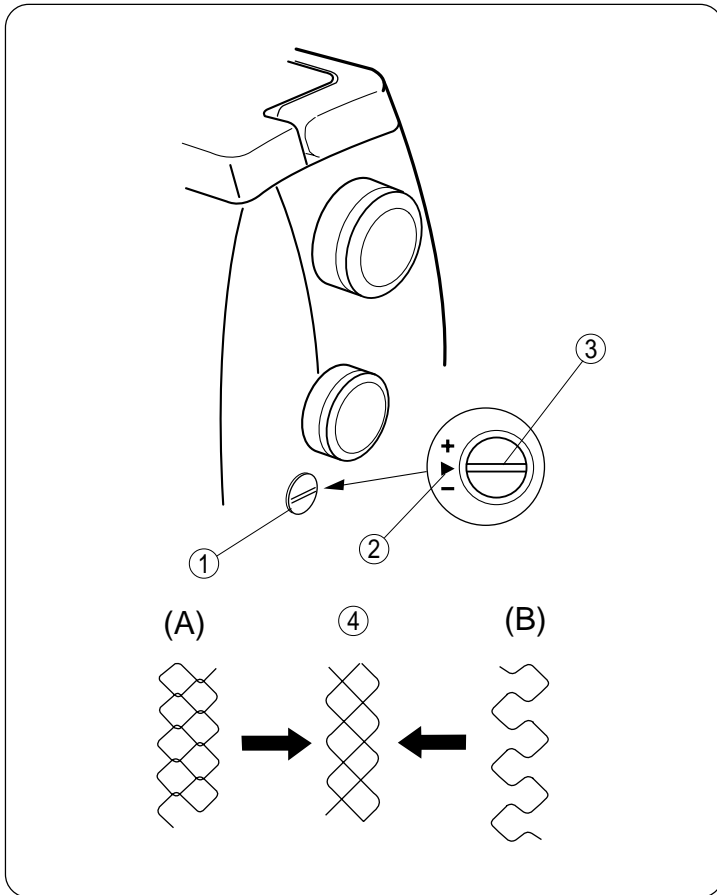
Machine setting

- ① Pattern #10 ~ 19
- ② Foot A: Zigzag foot
- ③ Thread tension 3 ~ 6
- ④ Stitch width 3 ~ 6.5
(0 or 6.5 for patterns #17, #18)
- ⑤ Stitch length Any



As the fabric moves back and forth in the stretch stitch sewing, guide the fabric carefully to keep the seams straight.

NOTE: If patterns are uneven when sewing with a particular fabric, adjust them with the stretch stitch balancing dial (see page 36).



Adjusting Stretch Stitch Balance

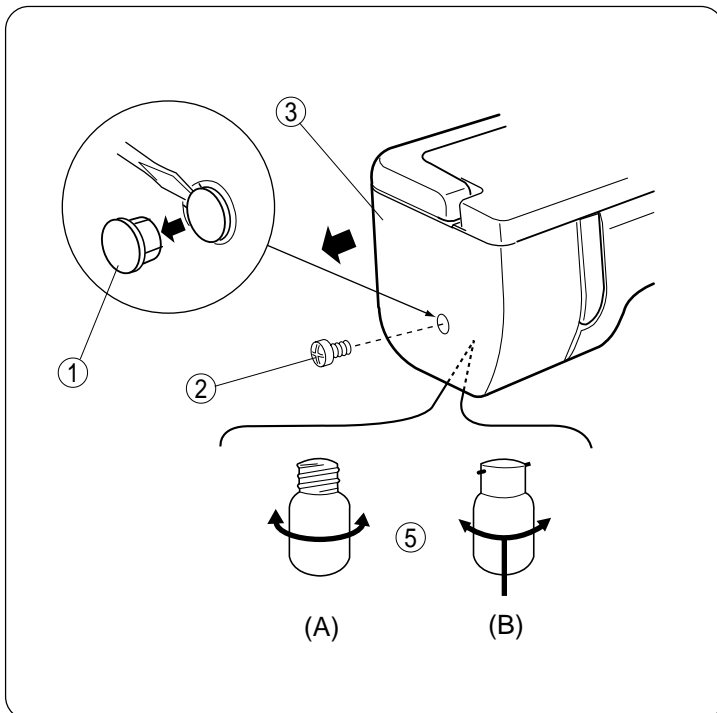
The sewing results of the stretch stitch patterns may vary depending upon the sewing conditions, such as sewing speed, type of the fabric, number of layers etc. Always make test sewing on a scrap piece of the fabric that you wish to use.

- (A) If the pattern is compressed, turn the stretch stitch balancing dial in the direction of “+”.
- (B) If the pattern is drawn out, turn the stretch stitch balancing dial in the direction of “-”.

NOTE: In normal sewing, set the dial to the neutral position, i.e. the groove on the dial is centered with the standard setting mark.

- ① Stretch stitch balancing dial
- ② Standard setting mark
- ③ Groove
- ④ Correct shape

CARE OF YOUR MACHINE



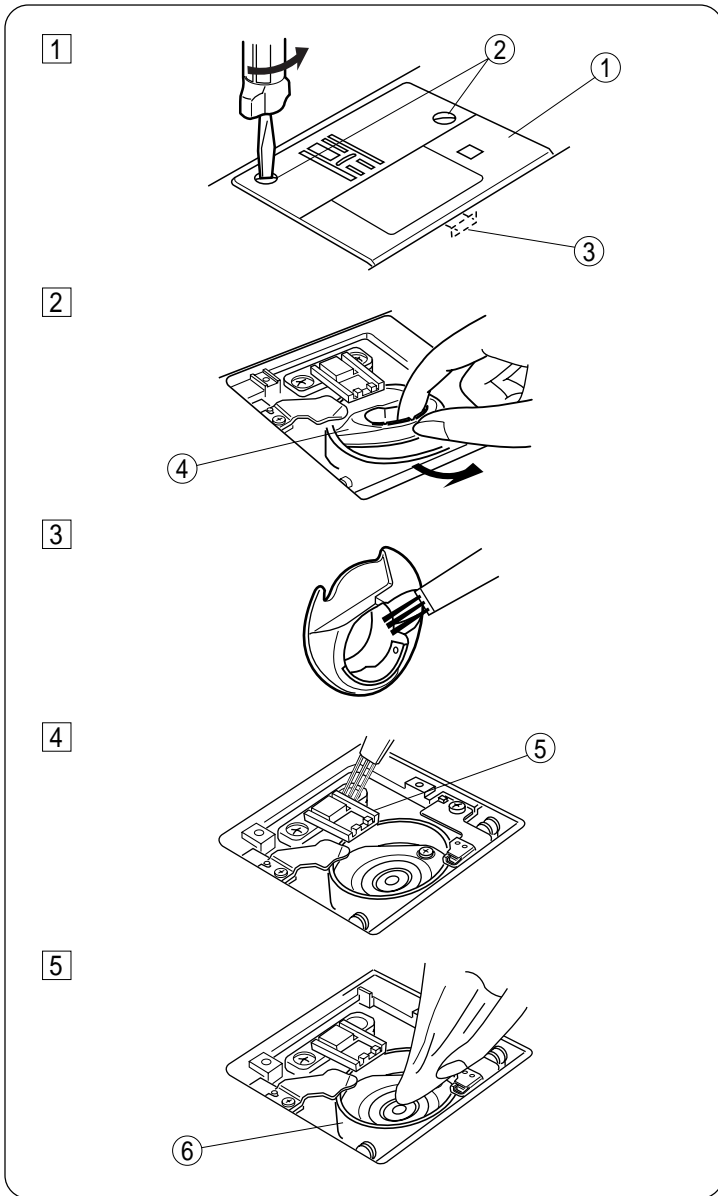
Replacing the Light Bulb

WARNINGS:

Turn off the power before replacing the light bulb. The bulb could be HOT, wait until it has cooled down before touching it.

- (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.

- ① Cap
- ② Setscrew
- ③ Face plate
- ④ Lamp Socket
- ⑤ Light bulb

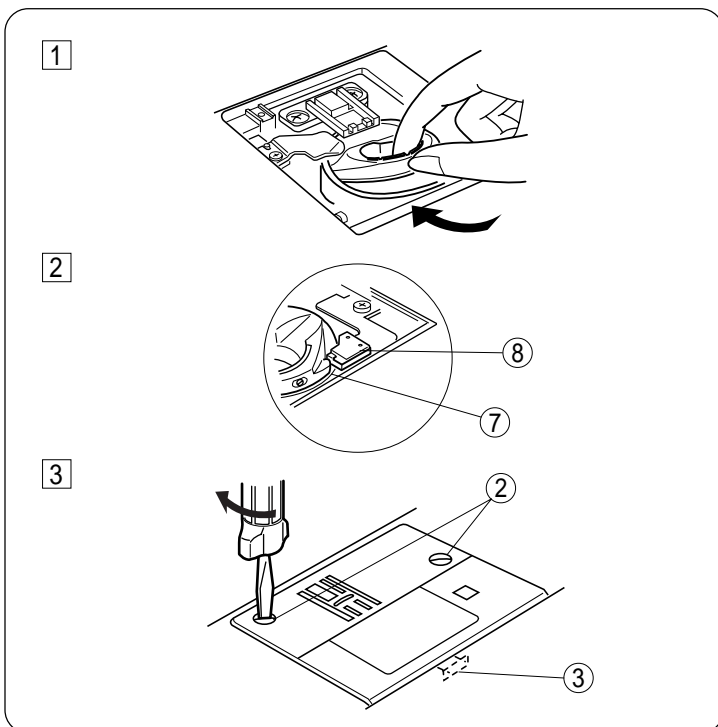


Cleaning Hook Race and Feed Dog

WARNING: Raise the presser foot and needle, and then unplug the machine.
DO NOT dismantle the machine other than as explained in this section.

- 1 Remove the needle and presser foot.
Remove the two setscrews and unhook the hook to remove the needle plate.
 - ① Needle plate
 - ② Setscrew
 - ③ Hook
- 2 Take out the bobbin and bobbin holder.
 - ④ Bobbin holder
- 3 Clean the bobbin holder with the lint brush and soft dry cloth
- 4 Brush out dust and lint from the feed dog and clean the hook race with the lint brush.
 - ⑤ Feed dog
- 5 Wipe inside of the hook race with a dry cloth.
 - ⑥ Hook race

NOTE: You may use vacuum cleaner.



Replacing Bobbin Holder and Needle Plate

- 1 Insert the bobbin holder.
- 2 Fit the knob next to the stopper in the hook race.
 - ⑦ Knob
 - ⑧ Stopper
- 3 Insert the bobbin and attach the needle plate aligning the holes with the guide pins.

NOTE: After cleaning the machine, make sure to attach the needle and presser foot.

Troubleshooting

Condition	Cause	Reference
The needle thread breaks.	<p>The needle thread is not threaded properly.</p> <p>The needle thread tension is too tight.</p> <p>The needle is bent or blunt.</p> <p>The needle is incorrectly inserted.</p> <p>The needle thread and the bobbin thread are not set under the presser foot when start sewing.</p> <p>The threads were not drawn to the back after sewing.</p> <p>The thread is too heavy or too fine for the needle.</p>	<p>Page 12</p> <p>Page 8</p> <p>Page 9</p> <p>Page 9</p> <p>Page 17</p> <p>Page 17</p> <p>Page 9</p>
The bobbin thread breaks.	<p>The bobbin thread is not threaded properly in the bobbin holder.</p> <p>Lint has collected in the bobbin holder.</p> <p>The bobbin is damaged and doesn't turn smoothly.</p>	<p>Page 11</p> <p>Page 39</p> <p>Change the bobbin</p>
The needle breaks.	<p>The needle is incorrectly inserted.</p> <p>The needle clamp screw is loose.</p> <p>The threads were not drawn to the back after sewing.</p> <p>The needle is too fine for the fabric being used.</p>	<p>Page 9</p> <p>Page 9</p> <p>Page 17</p> <p>Page 9</p>
Skipped stitches	<p>The needle is incorrectly inserted, bent or blunt.</p> <p>The needle and/or threads are not suitable for the work being sewn.</p> <p>The blue tipped needle is not used for sewing stretch, very fine fabrics and synthetics.</p> <p>The needle thread is not threaded properly.</p> <p>The poor quality needle is used.</p>	<p>Page 9</p> <p>Page 9</p> <p>Page 9</p> <p>Page 12</p> <p>Change the needle</p>
Seam puckering	<p>The needle thread tension is too tight.</p> <p>The needle thread is not threaded properly.</p> <p>The needle is too heavy for the fabric being sewn.</p> <p>The stitch length is too long for the fabric.</p> <p>Foot pressure is not adequate.</p>	<p>Page 8</p> <p>Pages 11-12</p> <p>Page 9</p> <p>Make stitch shorter.</p> <p>Page 7</p> <p>Use stabilizer.</p>
The cloth is not feeding smoothly.	<p>The feed dog is packed with lint.</p> <p>The stitches are too fine.</p> <p>The feed dog is not raised after "drop feed" sewing.</p>	<p>Page 39</p> <p>Make stitch longer.</p> <p>Page 7</p>
Loops on the seams	<p>The needle thread tension is too loose.</p> <p>The needle is too thick or too fine for the fabric.</p>	<p>Page 8</p> <p>Page 9</p>
Fabric layers shift	<p>Foot pressure is not adequate.</p>	<p>Page 7</p>
The machine doesn't work.	<p>The machine is not plugged in.</p> <p>Thread has been caught in the hook race.</p> <p>The bobbin winder spindle is not returned to the left after bobbin winding. (The machine is in bobbin winding condition)</p>	<p>Page 5</p> <p>Page 39</p> <p>Page 10</p>
Buttonhole is not sewn properly.	<p>The stitch density is not suitable for the fabric being sewn.</p> <p>The suitable interface material has not been used for the stretch or synthetic fabric.</p>	<p>Page 25</p> <p>Page 23</p>
The machine is noisy.	<p>Thread has been caught in the hook race.</p> <p>Lint has built up in the hook race or bobbin holder.</p>	<p>Page 39</p> <p>Page 39</p>