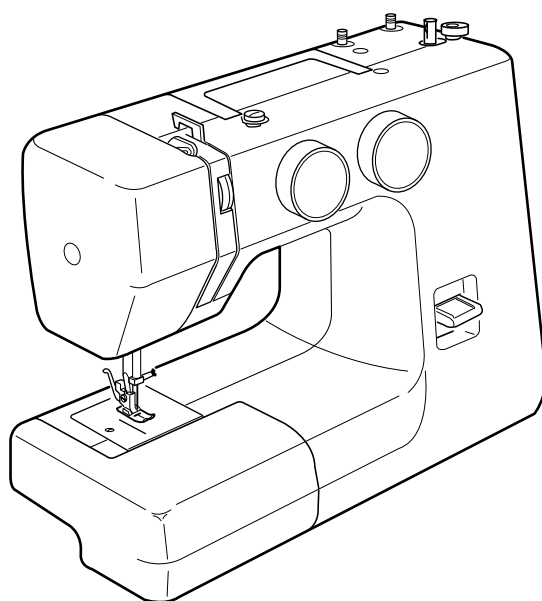


Instruction Manual



IMPORTANT SAFETY INSTRUCTIONS

This sewing machine is not a toy. Do not allow children to play with this machine.

The machine is not intended for use by children or mentally infirm persons without supervision.

This sewing machine is designed and manufactured for household use only.

Read all instruction 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 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.
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 children to play with the machine. The machine is not intended for use by children or infirm persons without proper supervision.
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.
4. Never operate the appliance with any air opening blocked. Keep ventilation opening of this sewing machine and foot controller free from accumulation of lint, dust and loosen 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 ("O") 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 ("O") 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

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



Please note that on disposal, this product must be safely recycled in accordance with relevant National legislation relating to electrical/electronic products. If in doubt please contact your retailer for guidance. (European Union only.)

INDICE

SECTION 1. ESSENTIAL PARTS

Name of Parts	2
---------------------	---

SECTION 2. GETTING READY TO SEW

Extension Table	3
Standard Accessories	3
Accessories Storage Box	3
Connecting the Machine to the Power Supply	4
Foot Control	4
Presser Foot Lifter	5
To Attach and Remove the Presser Foot	5
Changing Needle	6
Thread and Needle Chart	6
Setting Spool Pins	7
Removing or Inserting the Bobbin Case	7
Winding the Bobbin	8
Threading Bobbin Case	8
Threading the Machine	9
Drawing Up Bobbin Thread	10
Balancing Needle Thread Tension	11
Pattern Selector Dial	12
Stitch Length Dial	13
Reverse Stitch Button	14
Darning Plate	14

SECTION 3. BASIC SEWING

Straight Stitch Sewing	15
To change the direction	15
Seam Guide Line	16
Turn a Square Corner	16
Zigzag Stitching	17
Tricot Stitch	18
Overedge Stitching	18
Triple Stitch	19
Sewing Buttons	20
Buttonhole	21
Blind Hem Stitch	22

SECTION 4. DECORATIVE STITCHES

Shell Tuck	23
Stretch Stitch Patterns	23
Smocking	24
Applique	24

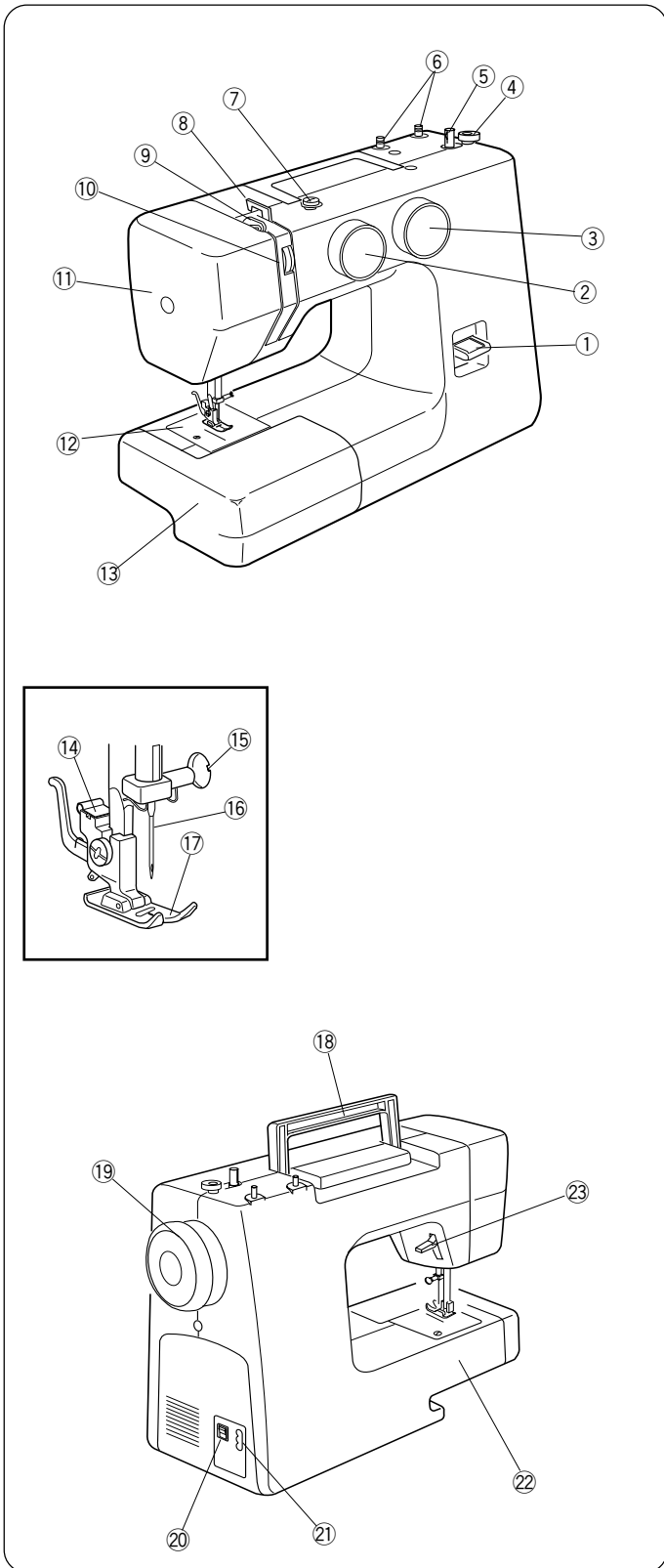
SECTION 5. CARE OF YOUR MACHINE

Dismantling and Assembling	25
Shuttle Race Unit	25
Cleaning the Feed Dog	25
Sewing Light	26
Troubleshooting	27

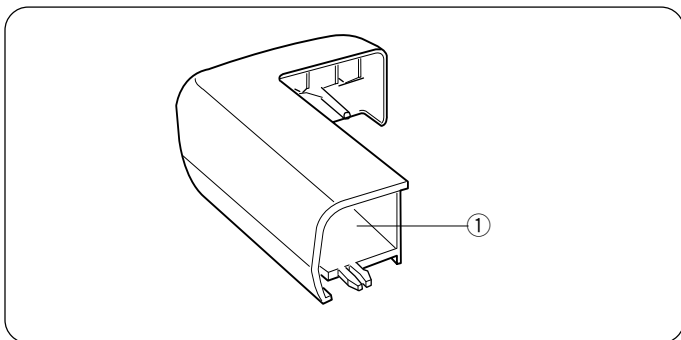
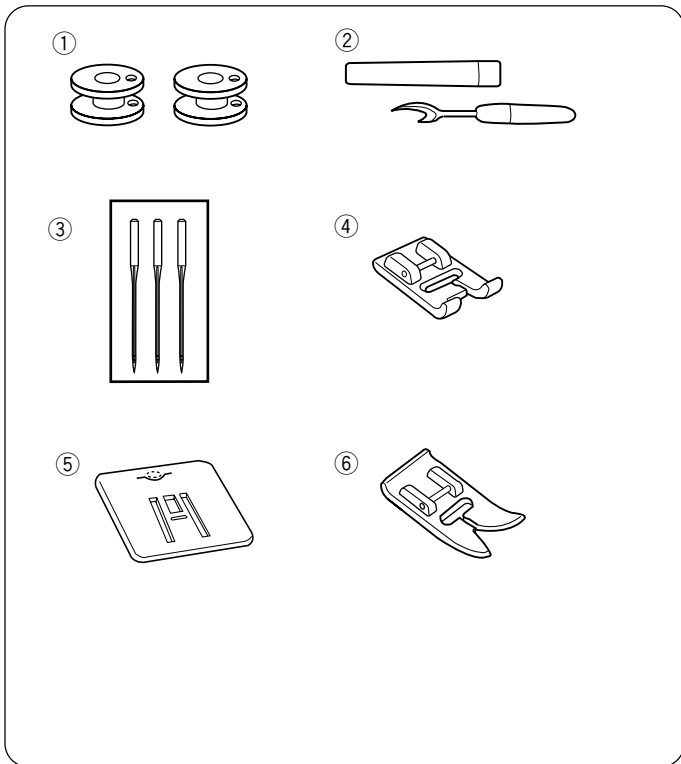
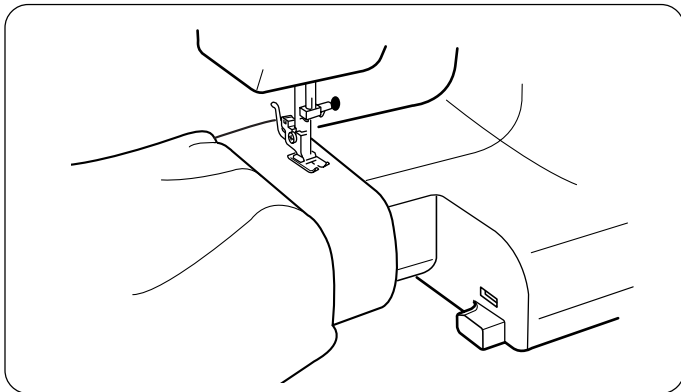
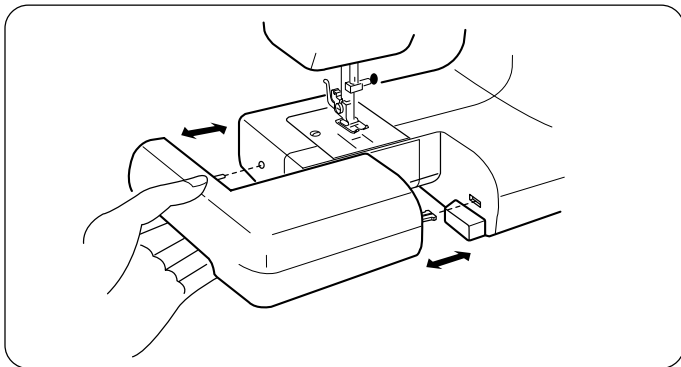
SECTION 1. ESSENTIAL PARTS

Name 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 guide
- ⑨ Thread take-up lever
- ⑩ Thread tension dial
- ⑪ Face plate
- ⑫ Needle plate
- ⑬ Extension table
- ⑭ Presser foot holder
- ⑮ Needle clamp screw
- ⑯ Needle
- ⑰ Presser foot
- ⑱ Carrying handle
- ⑲ Balance wheel
- ⑳ Power switch
- ㉑ Machine socket
- ㉒ Free arm
- ㉓ Presser foot lifter



Note: The specifications are subject to change without prior notice.



SECTION 2. GETTING READY TO SEW

Extension Table

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

Detaching the table:

Pull the table away from the machine.

Attaching the table:

Push the extension table until it snaps into the machine.

• Advantages and uses of free arm sewing:

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

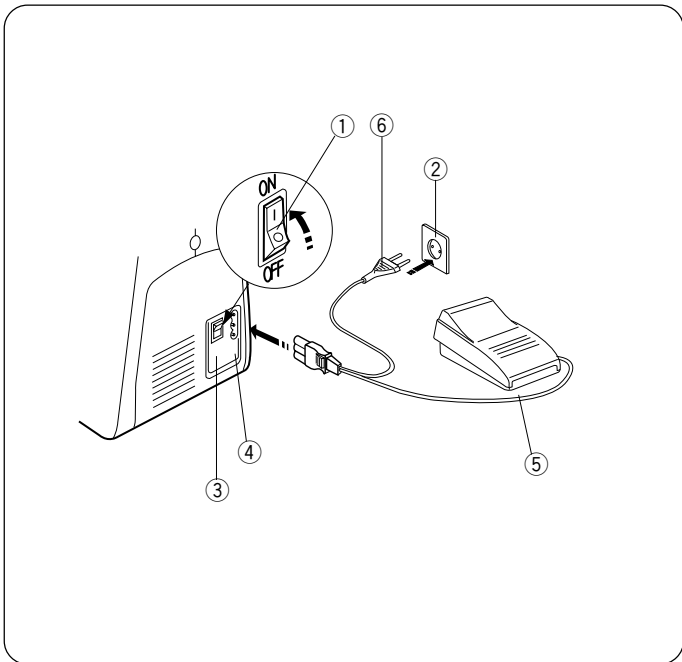
Standard Accessories

- ① Bobbins
- ② Seam ripper/ Buttonhole opener
- ③ Needle set
- ④ Buttonhole foot
- ⑤ Darning plate
- ⑥ Zigzag foot

Accessories Storage Box

Sewing accessories are conveniently located in the extension table.

- ① Accessories storage box

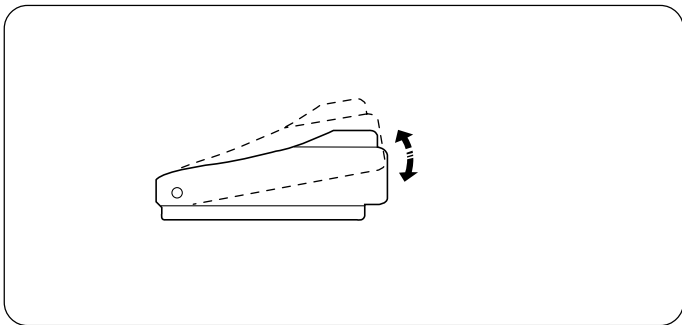


Connecting the Machine to the Power Supply

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

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



Foot Control

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

Caution:

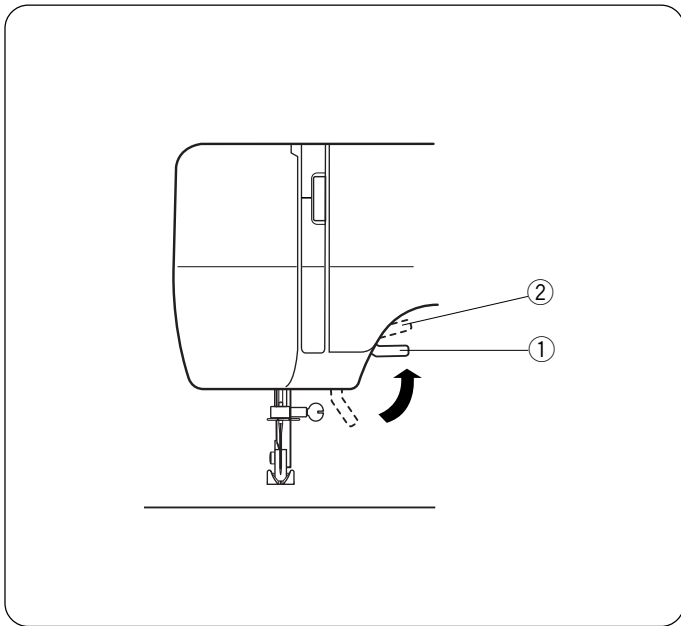
Do not place anything on the foot control, otherwise the machine will start advertently.

WARNING:

While in operation, always keep your eyes on the sewing area, and do not touch any moving parts such as the thrad take-up lever, handwheel or needle. Always turn off the power switch and unplug from the power supply:

- when leaving the machine unattended.
- when attaching or removing parts.
- when cleaning the machine.

Do not place anything on the foot control, otherwise the machine will run intermittently.

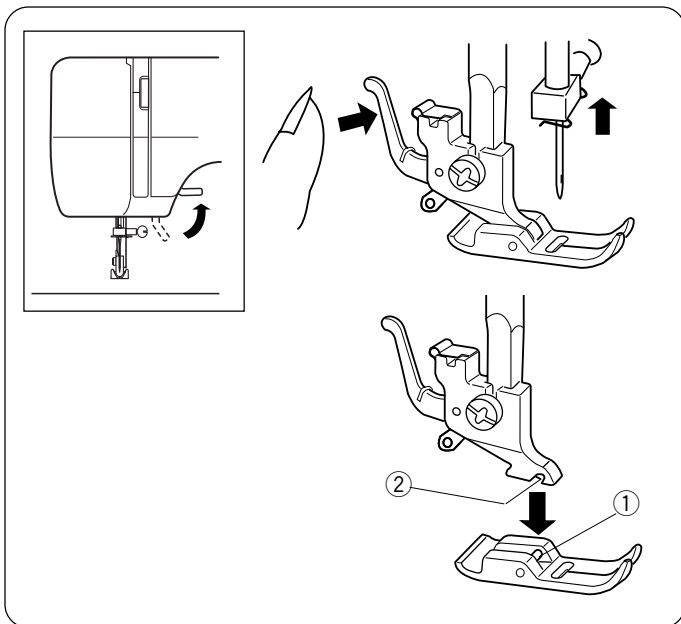


Presser Foot Lifter

The presser foot lifter raises and lowers your 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 Normal up position
- ② Highest position



To Attach and Remove the Presser Foot



CAUTION:

Turn off the power switch when changing a presser foot.

To remove

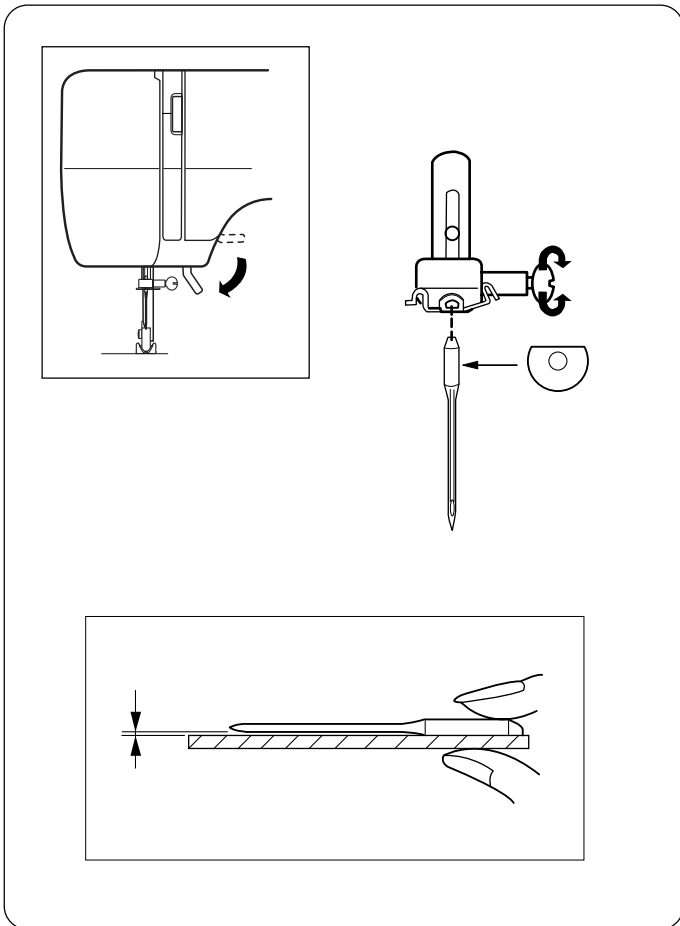
Turn the handwheel toward you to raise the needle to its highest position.
Raise the presser foot.

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.

- ① Pin
- ② Groove



Changing Needle



CAUTION:

Turn off the power switch when changing a needle.

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

Loosen the needle clamp screw by turning it counter-clockwise.

Remove the needle from the clamp.

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

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

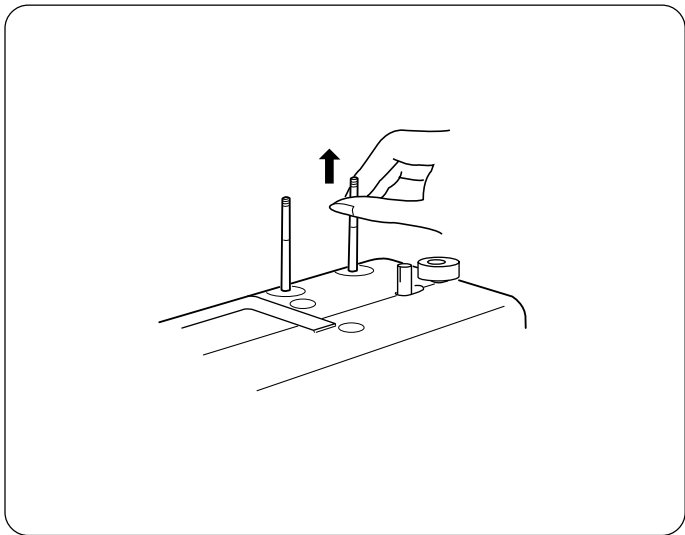
- * Check your needles frequently for barbed or blunted points. Snags and runs in knits, fine silks and silk-like fabrics are permanent and are almost always caused by a damaged needle.

To check the needle

Place the flat side of the needle on something flat (needle plate, glass etc.). The clearance between the needle and flat surface should be consistent. Never use a bent or blunt needle.

Thread and Needle Chart

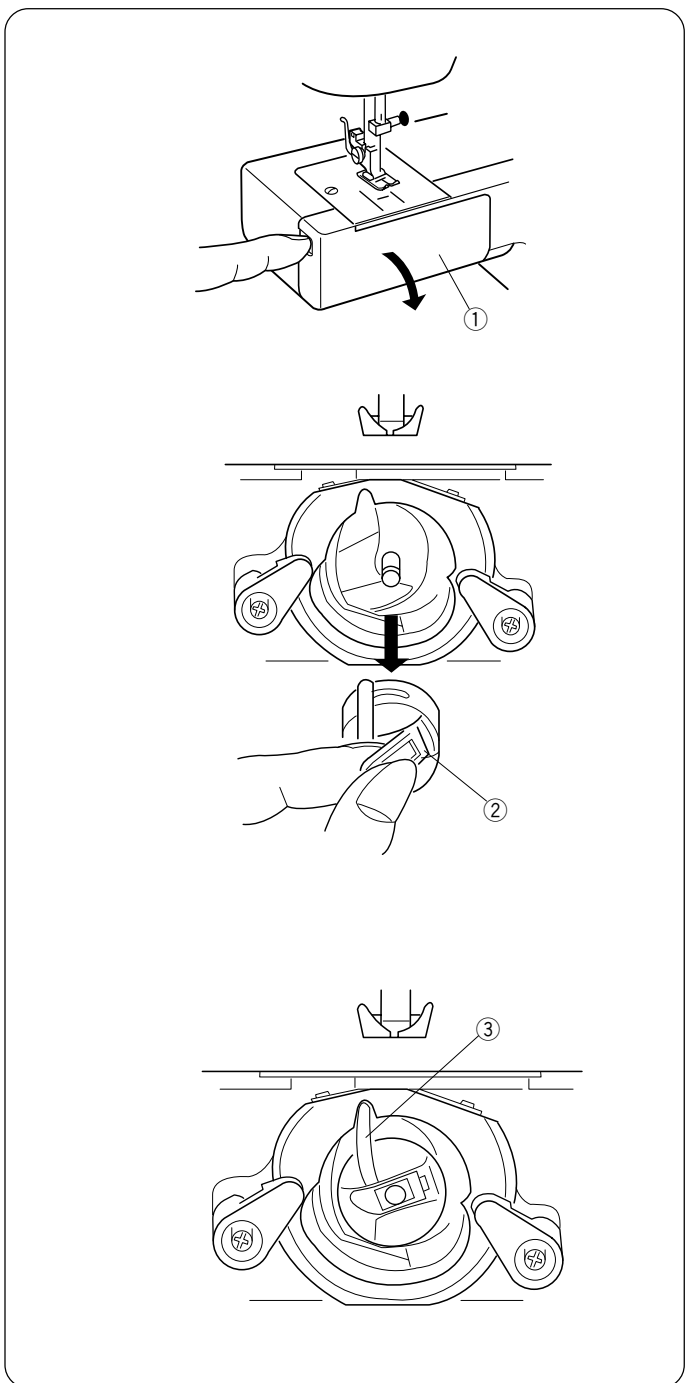
	Fabrics	Thread	Needle Size
Light weight	Crepe de Chine, Voile, Lawn, Organdy, Georgette, Tricot	Fine Silk Fine Cotton Fine Synthetic Fine Cotton Covered Polyester	9 or 10
Medium weight	Linens, Cotton. Pique, Serge, Double Knits, Percale	50 silk 50 to 80 Cotton 50 to 60 Synthetic Cotton Coverd Polyester	11 or 14
Heavy weight	Denim, Tweed, Gabardine, Coating, Drapery and Uphollstery Fabric	50 silk 40 to 50 Cotton 40 to 50 Synthetic Cotton Coverd Polyester	14 16



Setting Spool Pins

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

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



Removing or Inserting the Bobbin Case

Open the hook cover.

① Hook cover

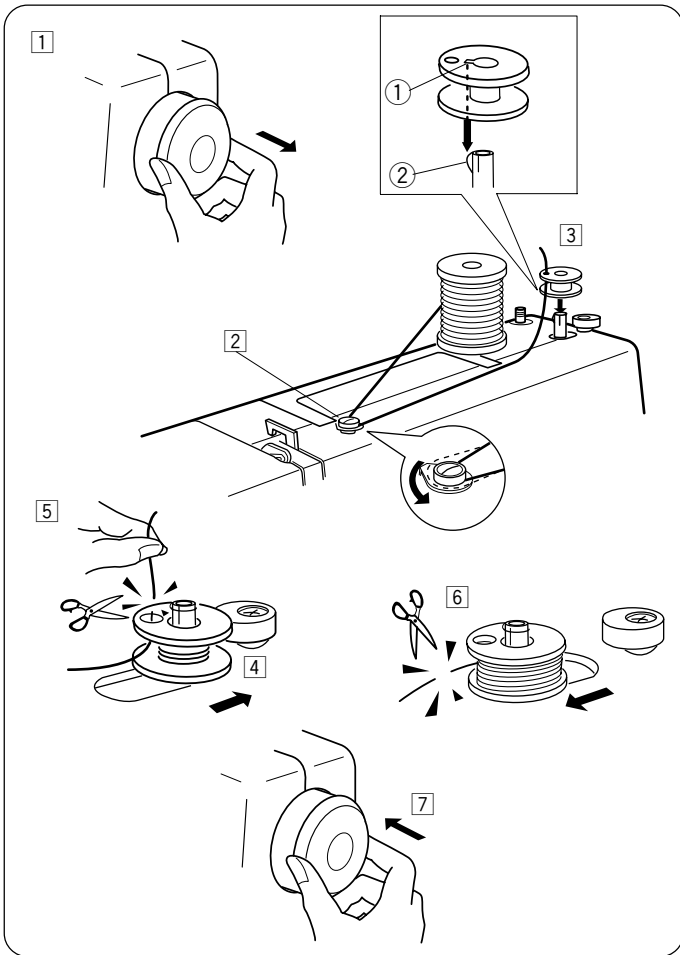
Raise the needle by turning the handwheel toward you.

Take out the bobbin case by holding the latch.

② Latch

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

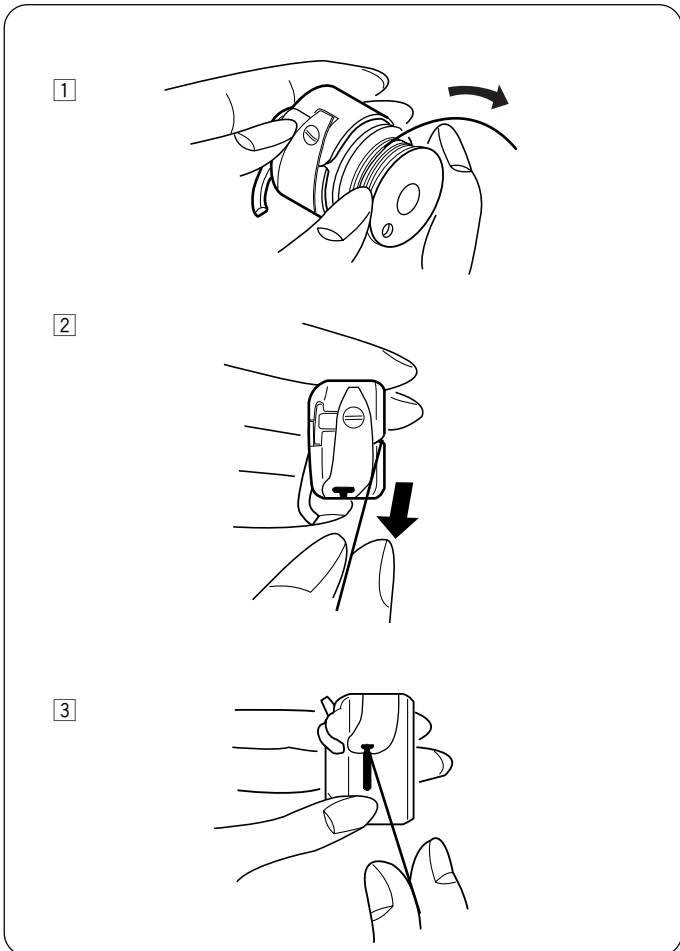
③ Horn



Winding the Bobbin

- 1 Pull the handwheel out.
- 2 Draw the thread from spool.
Guide the thread around the bobbin winder thread guide.
- 3 Insert the thread through the hole in the bobbin from the inside to the outside.
Align the notch ① of bobbin to the bobbin winder spindle rib ②.
Put the bobbin on the bobbin winder spindle.
- 4 Push it to the right.
- 5 With the free end of the thread held in your hand, depress the foot control.
Stop the machine when it has made a few turns, and cut the thread close to the hole in the bobbin.
- 6 Depress the foot control again.
When the bobbin is fully wound, stop the machine.
Return the bobbin winder spindle to its original position by moving the spindle to the left, and cut the thread.
- 7 Push the handwheel to the left. (original position).

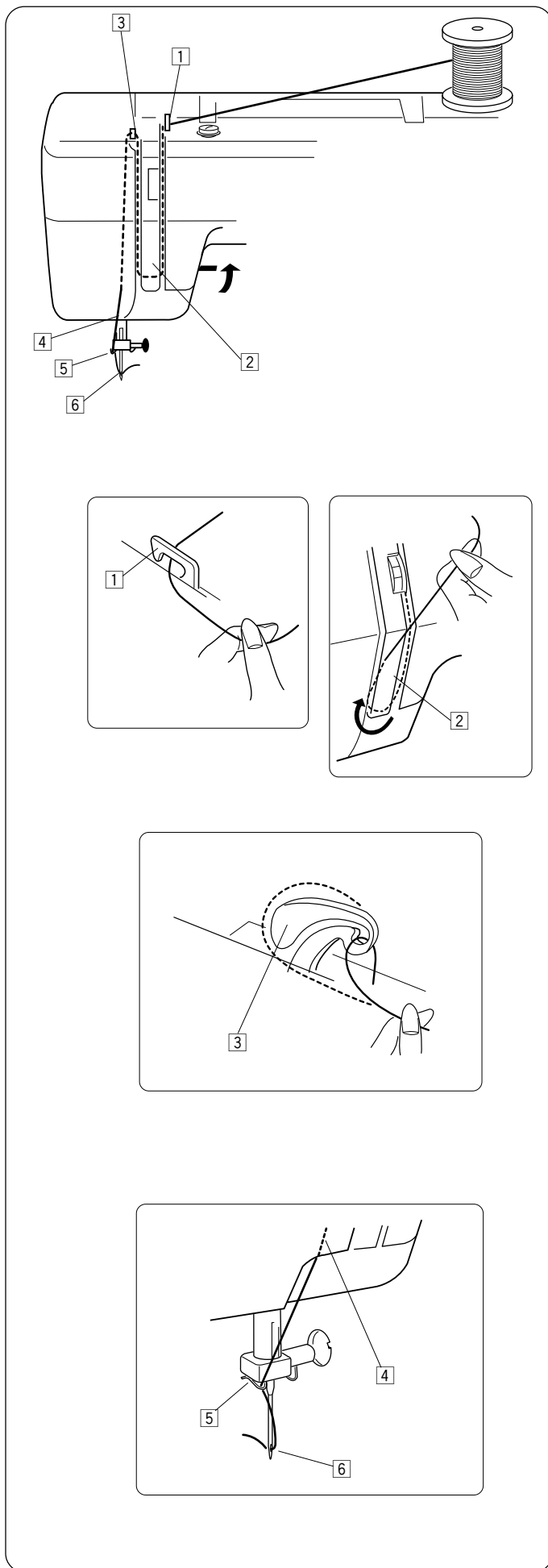
Note: Return the bobbin winder spindle when the machine stops.



Threading Bobbin Case

- 1 Place the bobbin into the bobbin case.
Make sure the thread unwinds in the direction of arrow.
- 2 Pull the thread into the bobbin case slot.
- 3 Draw the thread under the tension spring and into the delivery eye.

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



Threading the Machine

Raise the take-up lever to its highest position by turning the handwheel toward you.

Raise the presser foot.

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

- 1 Draw the thread into thread guide using both hands.
- 2 While holding the thread near spool, draw thread down into the tension area and then around the check spring holder.
- 3 Firmly draw the thread up and through the take-up lever from right to left.
- 4 Then draw the thread down and slip it into the lower thread guide.
- 5 Draw the thread down and slip it into needle bar thread guide on the left.
- 6 Thread the needle eye from front to back.

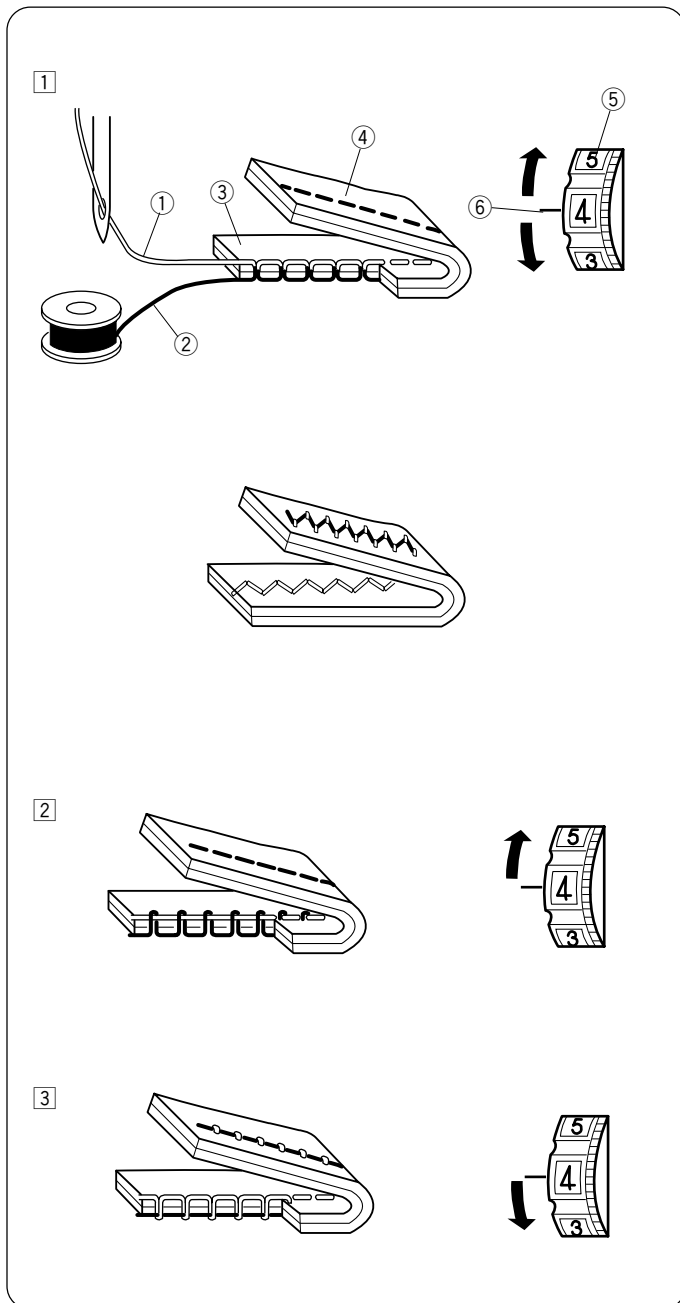
Note : You may want to cut the end of thread with sharp scissors for easier needle threading.

Drawing Up Bobbin Thread

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

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

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



Balancing Needle Thread Tension

1 Correct tension

The thread tension is adjusted depending on the sewing materials, layers of fabric and sewing method.

- * The ideal straight stitch has threads looked between two layers of fabric, as illustrated (magnifies to show detail).
- * For an ideal zigzag stitch, the bobbin thread does not show on the right side (top side) of the fabric, and the needle thread shows slightly on the wrong side (bottomside) of the fabric.

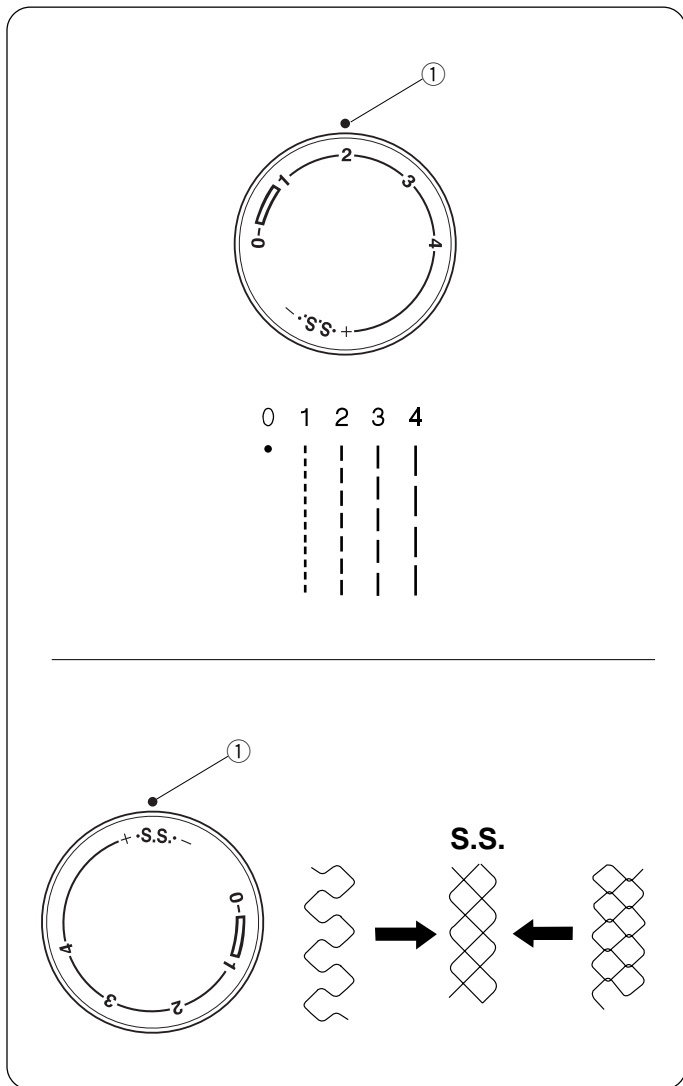
- ① Needle thread (Top thread)
- ② Bobbin thread (Bottom thread)
- ③ Right side (Top side) of fabric
- ④ Wrong side (Bottom side) of fabric
- ⑤ Thread tension dial
- ⑥ Setting mark

2 Needle thread tension is too tight

The bobbin thread (bottom thread) will appear on the right side (top 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 (top thread) will appear on the wrong side (bottom side) of the fabric.....Tighten the needle thread tension by moving the dial to a higher number.




Stitch Length Dial

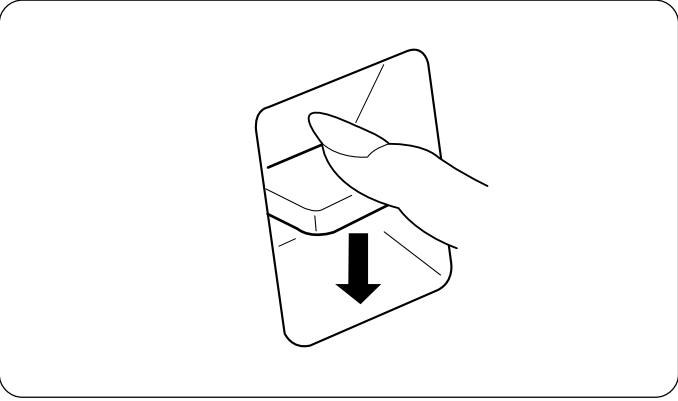
Turn the stitch length dial to set the desired stitch length at the setting mark.

The higher the number, the longer the stitch length

① Setting mark

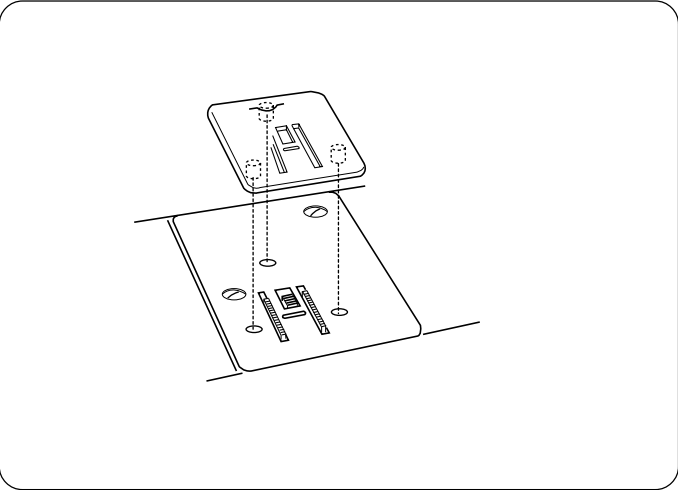
- "  " is the recommended setting for buttonhole stitching.
- Adjust the dial in the 0.5–4 range when you sew the zigzag stitch.

- Set the dial at "S.S." to sew the stretch stitch pattern.
- If the stretch stitch pattern is not even, turn the stitch length dial in toward "-" to compress it, or "+" to expand it.



Reverse Stitch Button

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

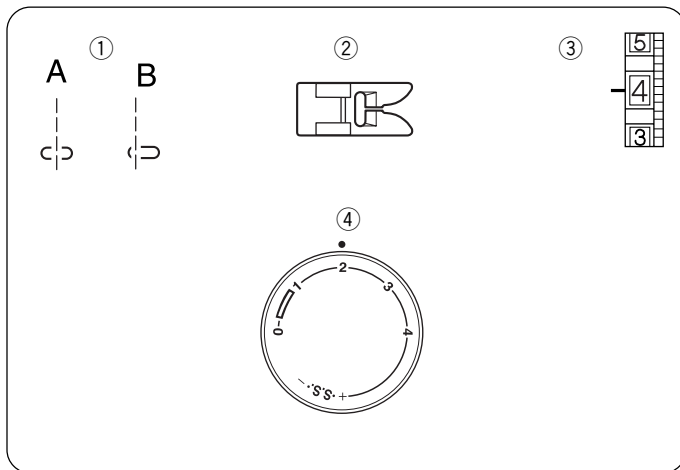


Darning Plate

To set the darning plate:

Position the darning plate with the 3 pins on the bottom.

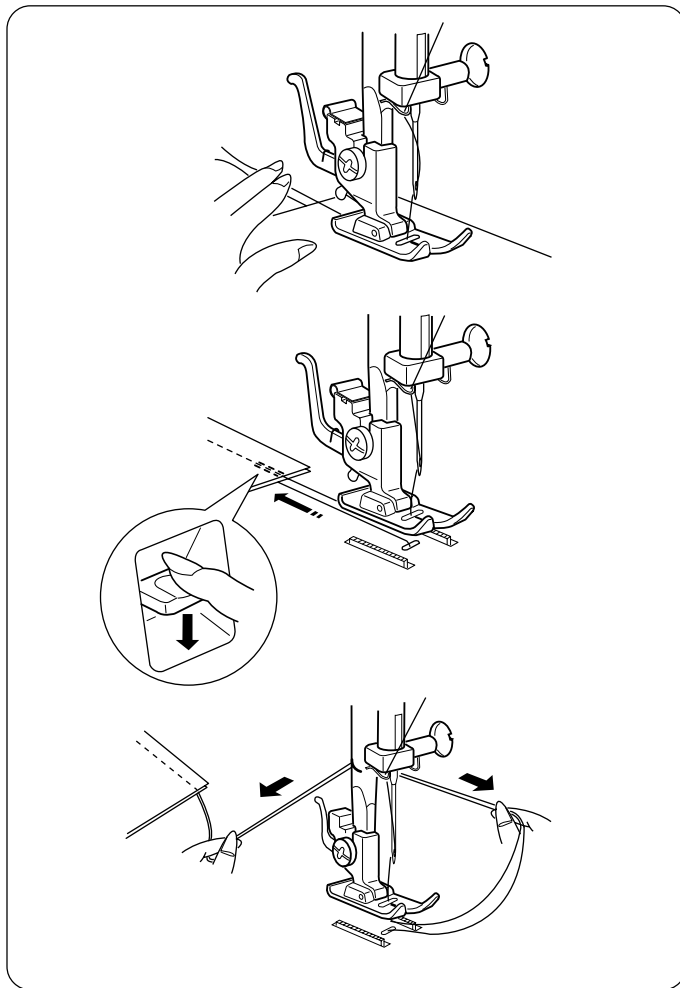
Fit the darning plate pins into the needle plate holes. The feed dogs will show through the darning plate holes.



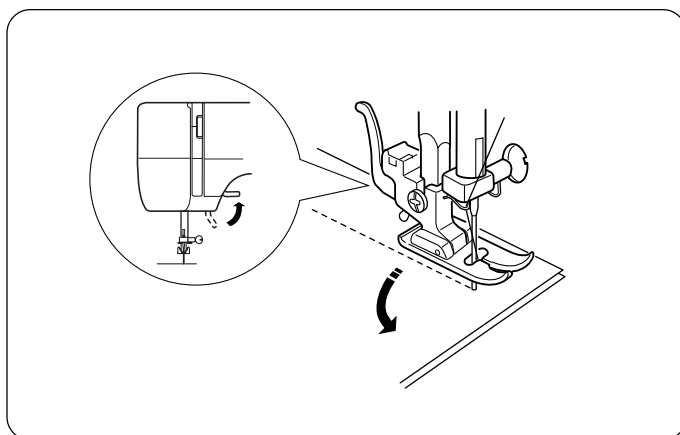
SECTION 3. BASIC SEWING

Straight Stitch Sewing

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



- 1 Raise the presser foot and position the fabric with its edge lining up with a seam 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.
- 2 For fastening the end 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.
- 3 Draw the threads up and into the thread cutter. The threads are cut the proper length for starting the next seam.



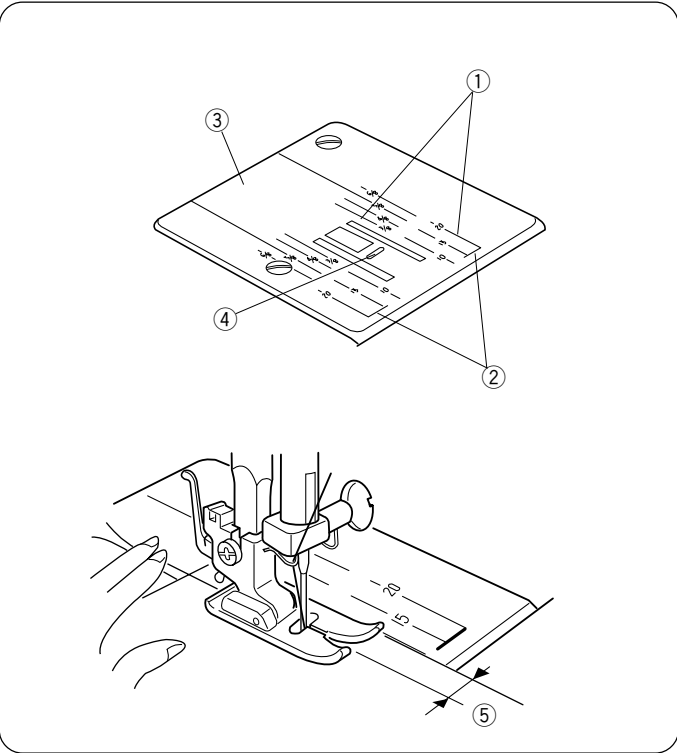
To change the direction

Stop the machine and turn the balance wheel 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.



Seam Guide Line

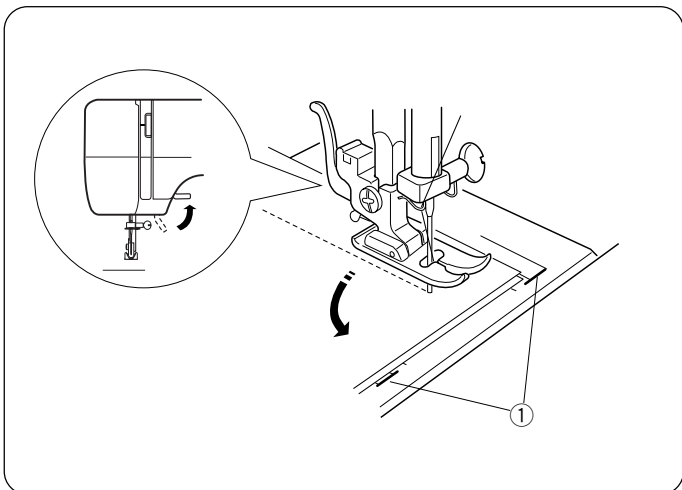
The numbers on the needle plate indicate the distance between the center needle position and the line ④.

The numbers in front are centimeters.

The numbers in back are fractions of an inch.

Number	10	15	20	3/8"	4/8"	5/8"	6/8"
Centimeters (cm)	1.0	1.5	2.0	1.0	1.3	1.6	1.9

- ① Guide lines
- ② Cornering guide
- ③ Needle plate
- ④ Center needle position
- ⑤ Distance between the center needle position and line



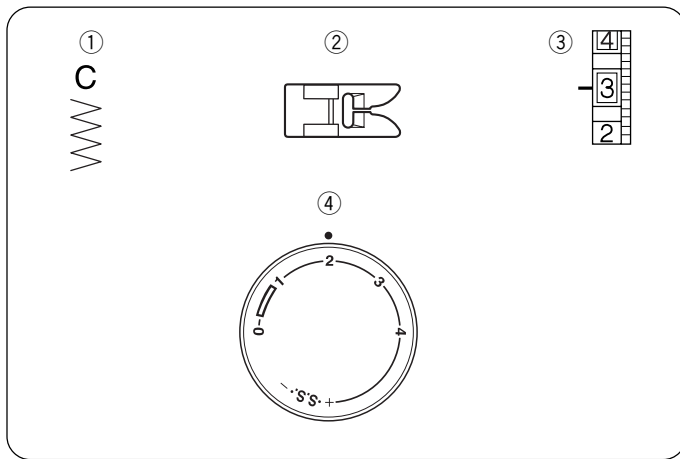
Turn a Square Corner

- ① Cornering guide

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

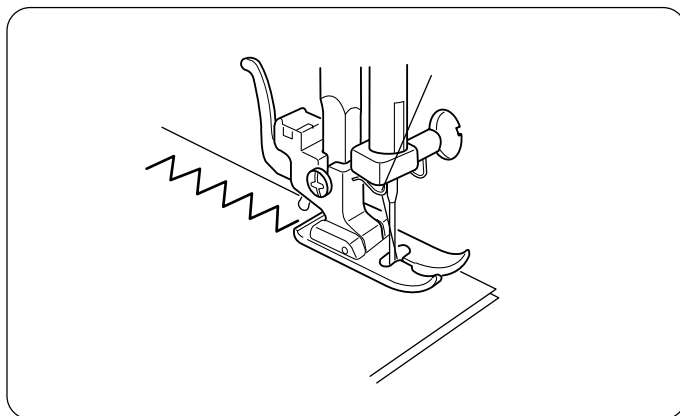
1. Stop stitching and lower the needle by turning the handwheel counterclockwise.
2. Raise the presser foot and turn the fabric to line the edge with the 5/8" (1.6 cm) seam guide.
3. Lower the presser foot and begin stitching in the new direction.

Line up the fabric edge facing you with the cornering guide shown.

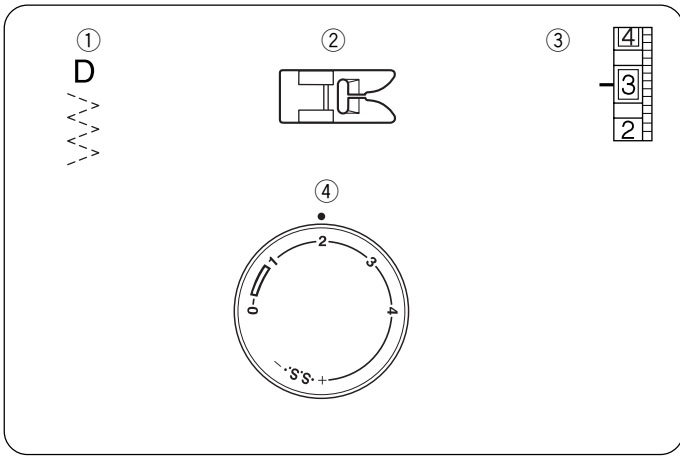


Zigzag Stitching

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

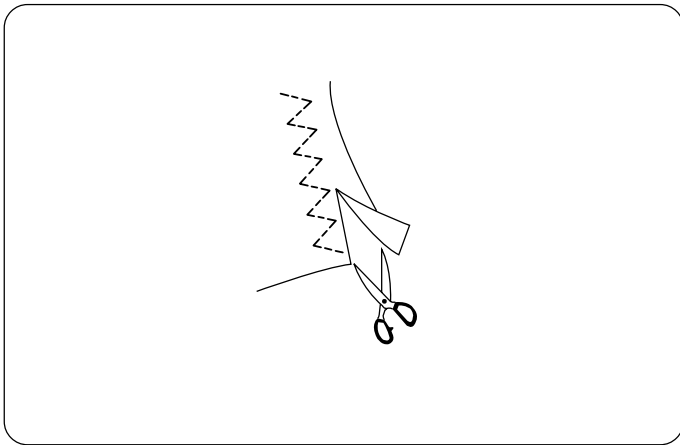


Simple zigzag stitching is widely used for overcasting, sewing on buttons, etc.



Tricot Stitch

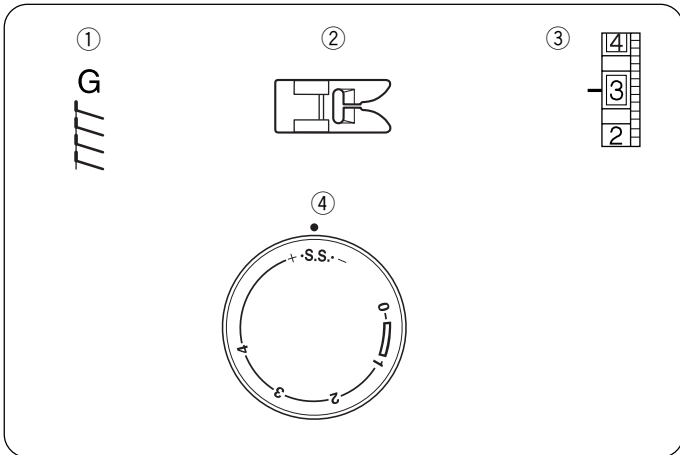
- ① Pattern selector: D
- ② Presser foot: Zigzag foot
- ③ Thread tension: 1-4
- ④ Stitch length: 0.5-4



Place the fabric under the presser foot so that the edge is just inside the right edge of the presser foot.

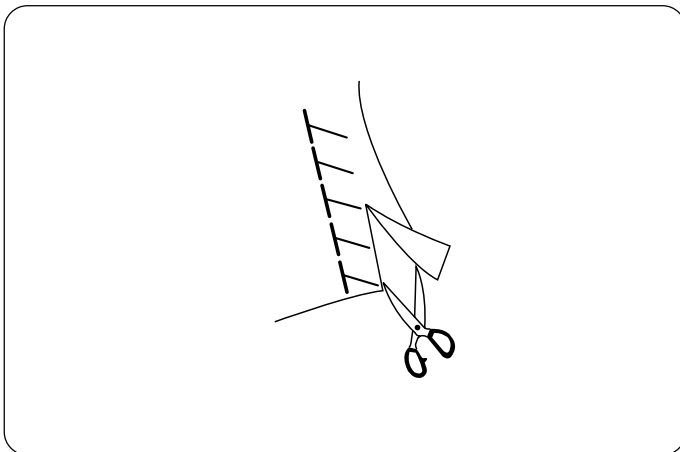
Guide the work so the right hand stitches fall off the edge of the fabric.

Note : Be careful not to cut the stitches.



Overedge Stitching

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

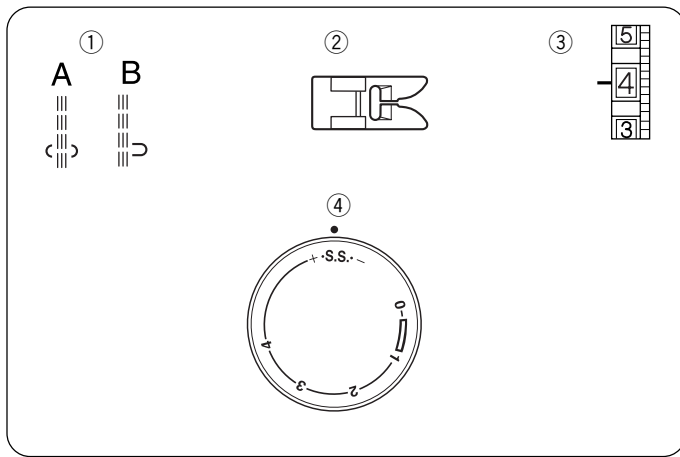


This Overedge stitch is ideal for sewing swimwear and stretch velour because it provides the greatest amount of elasticity and strength.

Overedge stitch will be done most successfully when the right side stitches of zigzag fall slightly off the edge of the fabric.

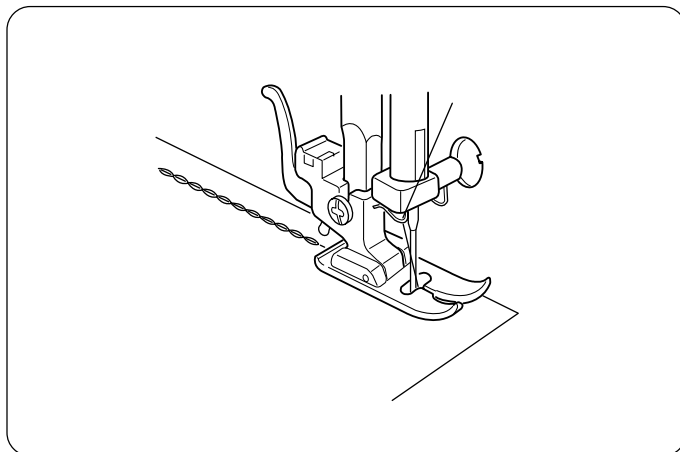
Place your fabric to allow a 1.6 cm (5/8") seam. Trim the seam allowance after sewing.

Note : Be careful not to cut the stitches.



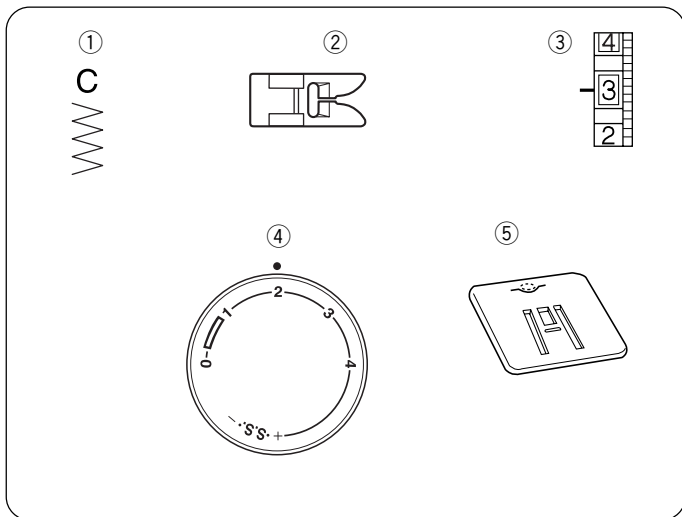
Triple Stitch

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




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

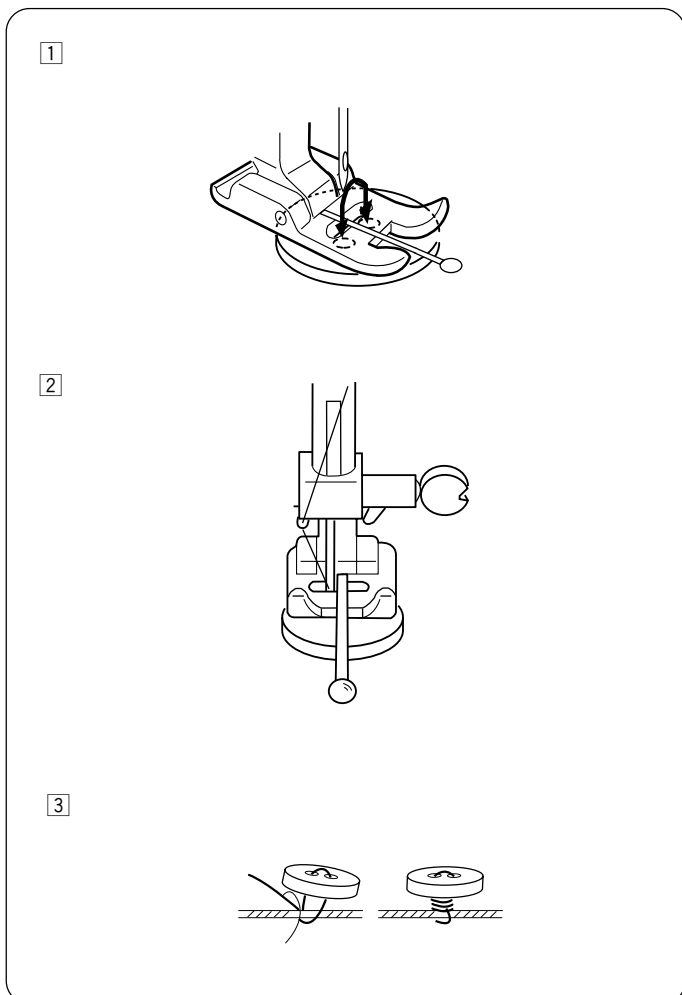
Garments should be basted for fitting before seaming.



Sewing Buttons

- | | |
|---------------------|---|
| ① Pattern selector: |  |
| ② Presser foot: | Zigzag foot |
| ③ Thread tension: | 1-3 |
| ④ Stitch length: | Any |
| ⑤ Darning plate | |

Use the darning plate for button sewing. (see page 14.)



Set the Pattern Selector at **B** (left needle position).

Mark the button placements on the fabric.

Position the darning plate onto the needle plate.

Place fabric under the foot.

Place the button under the foot aligning the left hole with the needle point.

Lower the foot. Sew a few stitches to lock the threads. Place a straight pin on top of the button in between the holes.

(See illustration) When sewing over the button and straight pin, a shank will be created.

Set the Pattern Selector at **C**. Select the zigzag width to match the holes in the button.

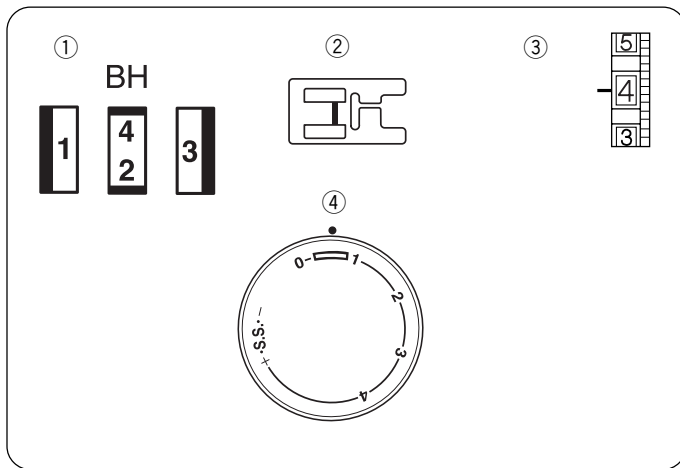
Turn the balance wheel to confirm correct width. Sew several stitches to secure the button to the fabric.

Set the Pattern Selector at **B**. Sew several stitches to lock the threads.

Cut the threads 20 cm (8") leaving a thread tail.

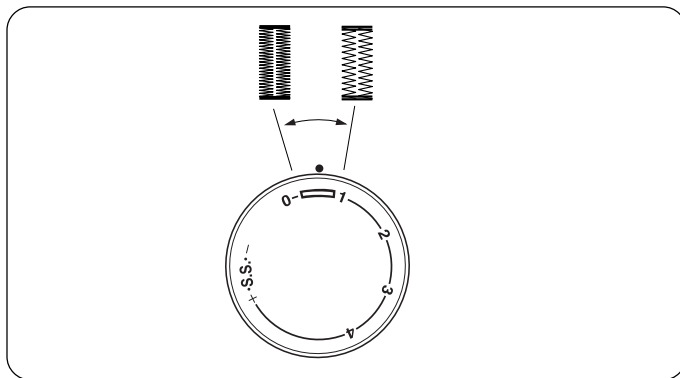
Bring the needle thread down through the button hole and wind it around the thread shank.

Draw the thread to the wrong side and knot.



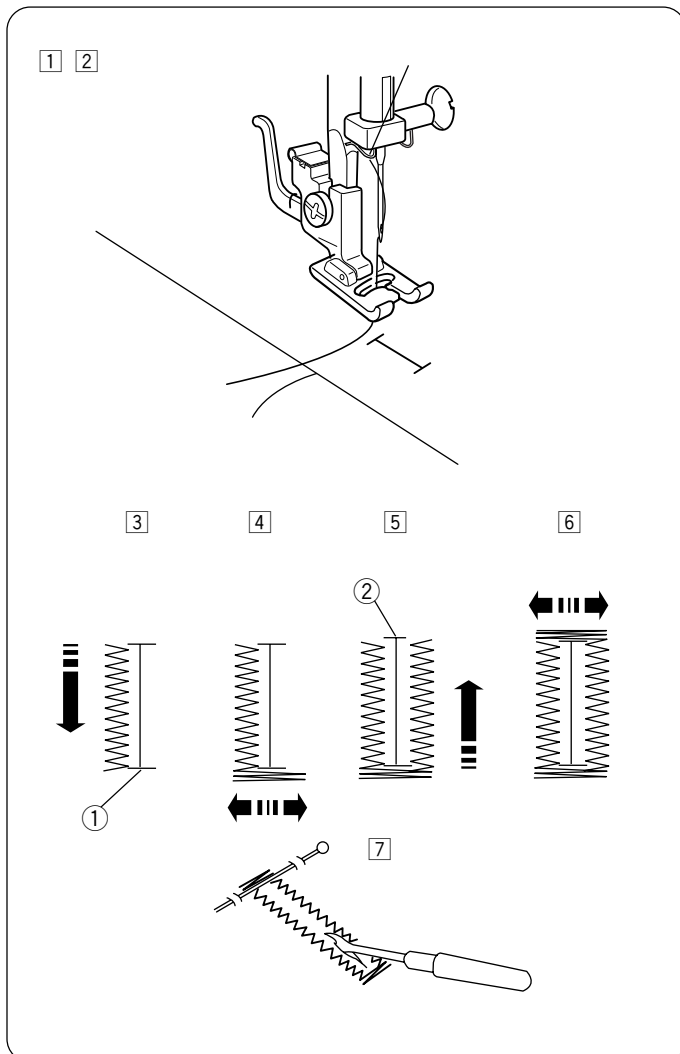
Buttonhole

- ① Pattern selector: Buttonhole foot
- ② Presser foot: Buttonhole foot
- ③ Thread tension: 1-5
- ④ Stitch length:

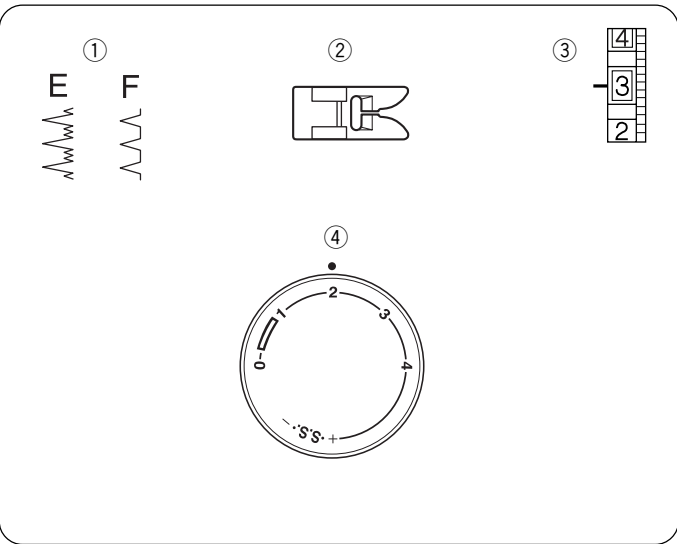


To adjust buttonhole stitch density:

Set the stitch length dial between 0.5 and 1.0 to adjust the buttonhole stitch density.

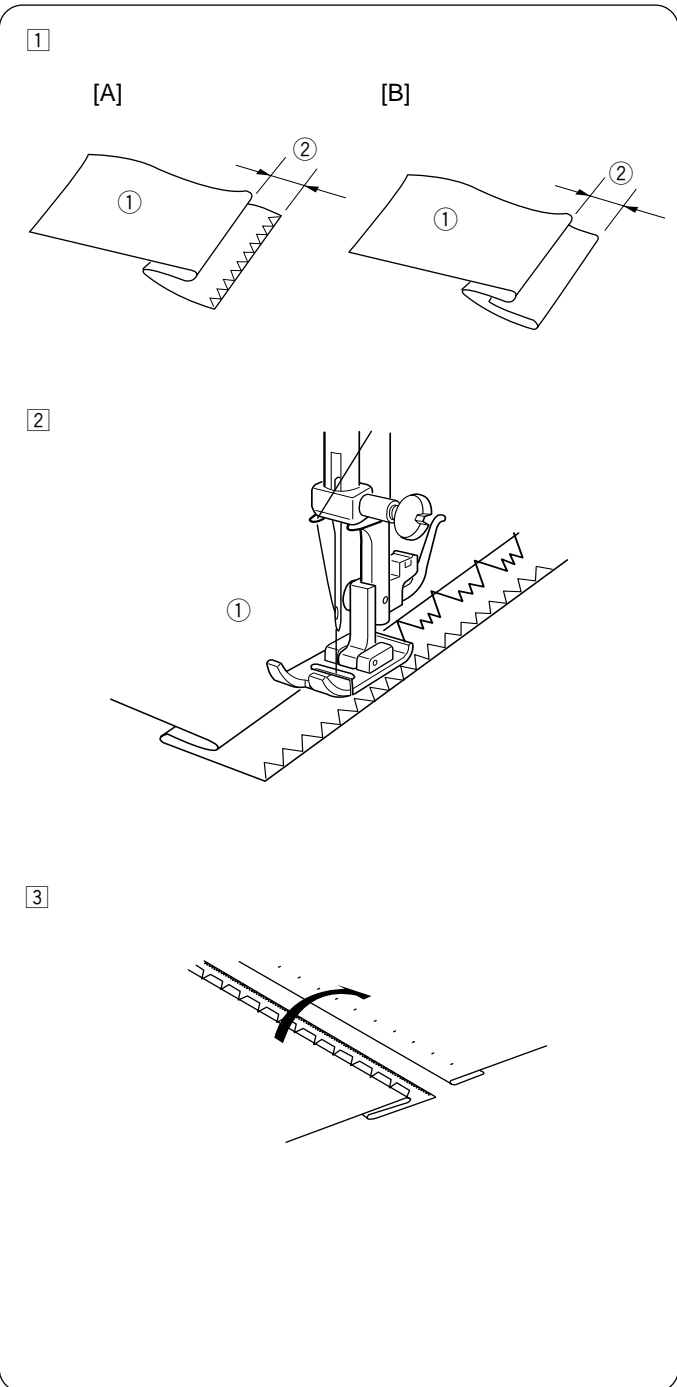


- 1 Carefully mark buttonhole length on fabric. Place the fabric under the foot with the buttonhole marking running toward you.
- 2 Slide both threads to the left. Line up the foot with the top mark on the fabric. Lower the needle into the garment where the buttonhole is to start, and lower the foot.
- 3 Set the pattern selector dial at “1”. Sew forward until you reach the front marking ① of your buttonhole. Stop sewing at a left stitch.
- 4 Set the pattern selector dial at “4/2”. Sew 5 stitches. Stop sewing at a right stitch.
- 5 Set the pattern selector dial at “3”. Sew until you reach the back marking ② of the buttonhole. Stop sewing at a right stitch.
- 6 Set the pattern selector dial at “4/2”. Sew a few bartacks and raise the needle from the fabric. Set the stitch length dial to “0” and the pattern selector dial at straight sewing. Sew a few locking stitches.
- 7 Remove the fabric from the machine and cut the sewing thread. Insert a pin inside the bartack. Then cut the opening with a seam ripper. Take care not to cut the stitches.



Blind Hem Stitch

- ① Pattern selector: E or F
- ② Presser foot: Zigzag foot
- ③ Thread tension: 2-4
- ④ Stitch length: 1-3

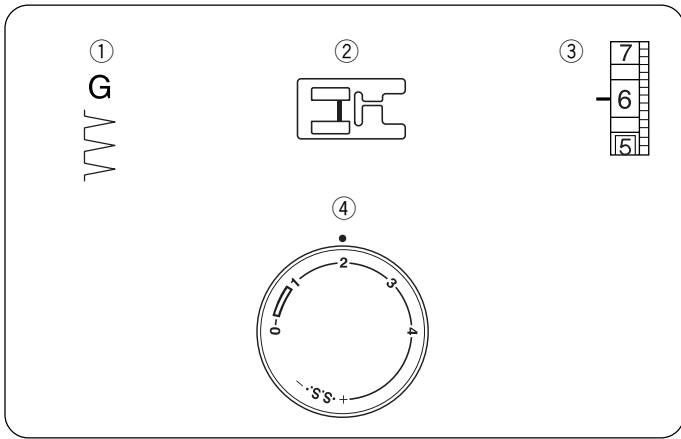


① On heavyweight fabrics that ravel, the raw edge should be overcast first. Then fold the hem, as illustrated, leaving 1/4" (0.7 cm) of the hem edge showing.

- ① Wrong side of the fabric
- ② 1/4" (0.7 cm)

② Position the fabric, so that the needle at its leftmost position just pierces the edge of the fold.

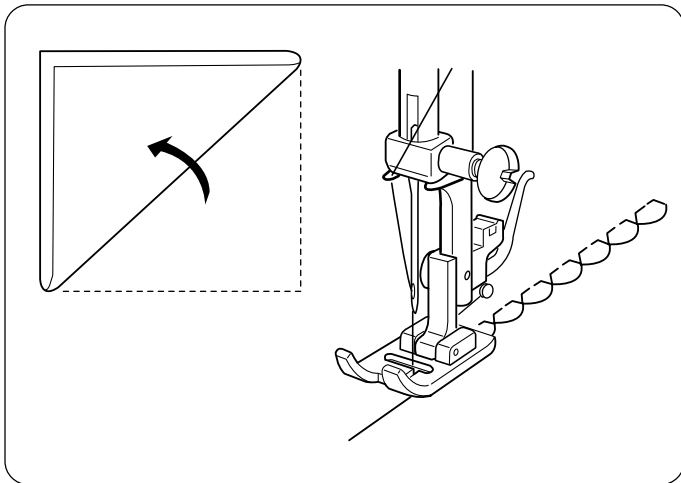
③ After hemming is completed, press together both sides of the finished hem. The top side of the fabric should show only the blind stitches.



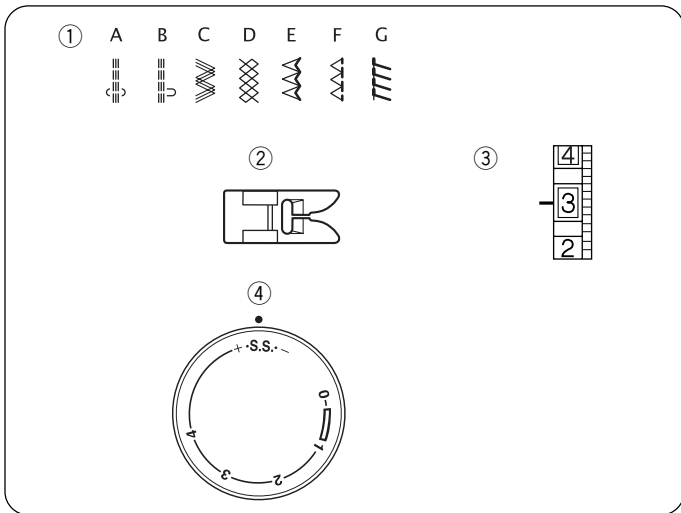
SECTION 4. DECORATIVE STITCHES

Shell Tuck

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

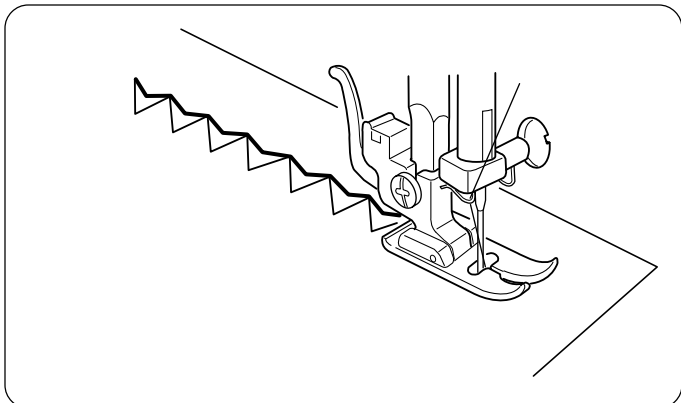


Place the folded edge along the slot of foot. The needle should fall off the edge of the fabric on the right forming a tuck.



Stretch Stitch Patterns

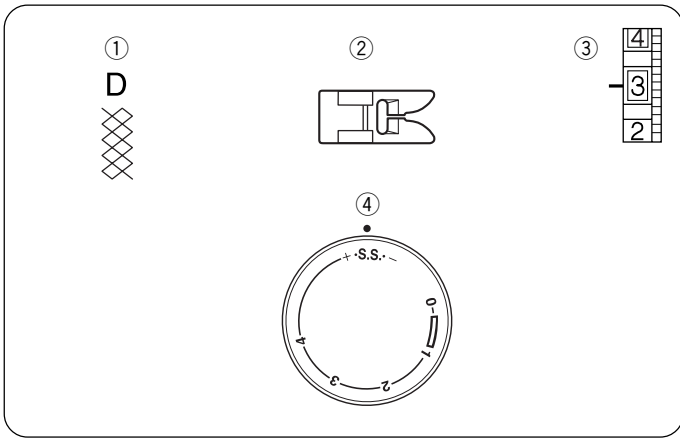
- ① Pattern selector: A-G
- ② Presser foot: Zigzag foot
- ③ Thread tension: 1-4
- ④ Stitch length: S.S.



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

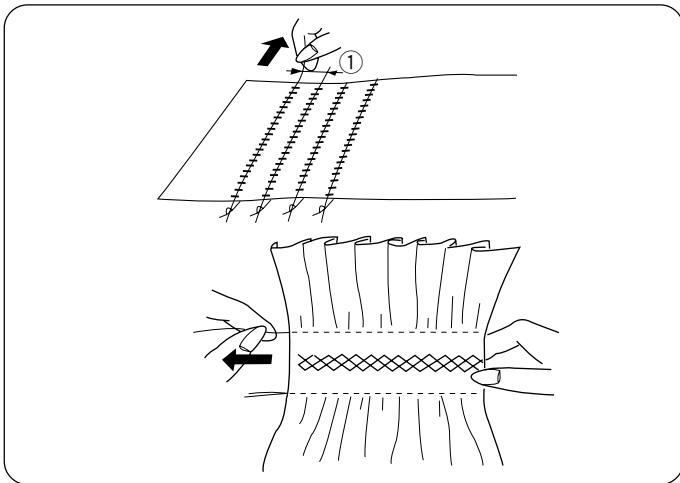
If patterns are compressed, turn the dial toward "+".

If patterns are drawn out, turn the dial toward "-".
(See Page 27.)



Smocking

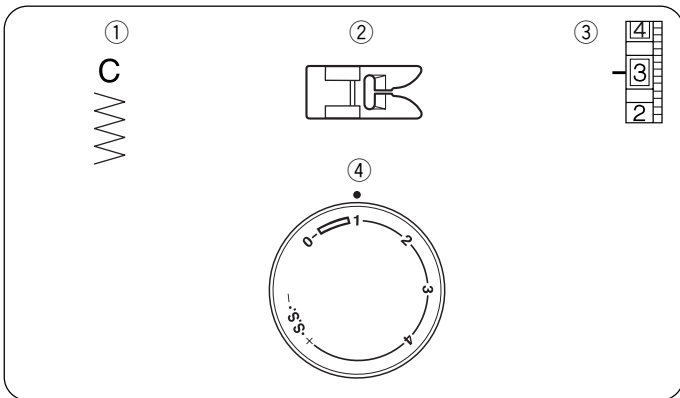
- ① Pattern selector: D
- ② Presser foot: Zigzag foot
- ③ Thread tension: 1-4
- ④ Stitch length: S.S.



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.

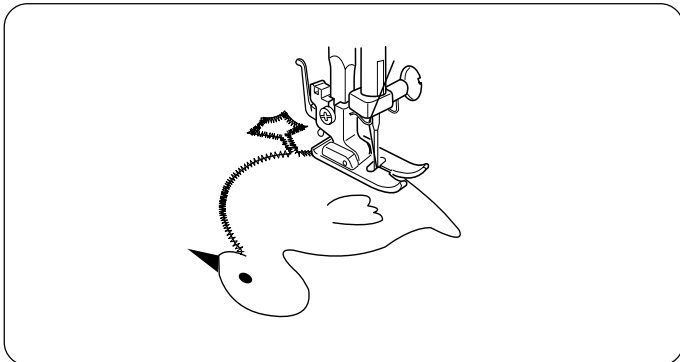
Note: Loosen the needle thread tension to make gathering easier.

- ① 1 cm (3/8")



Applique

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



Baste (or fuse with iron-on fabric joiner) applique pieces on the fabric. Stitch around the applique making sure the needle falls along the outer edge of the applique. When sewing corners, lower the needle down into the fabric. Raise the presser foot and pivot the fabric to the right or left.

SECTION 5. CARE OF YOUR MACHINE

Dismantling and Assembling

Shuttle Race Unit

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

To dismantle shuttle race unit:

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 shuttle race ring.
Remove the hook.

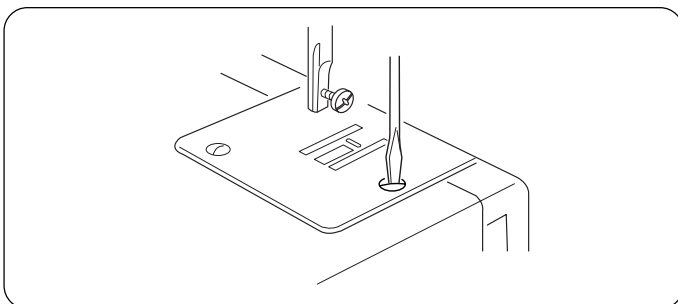
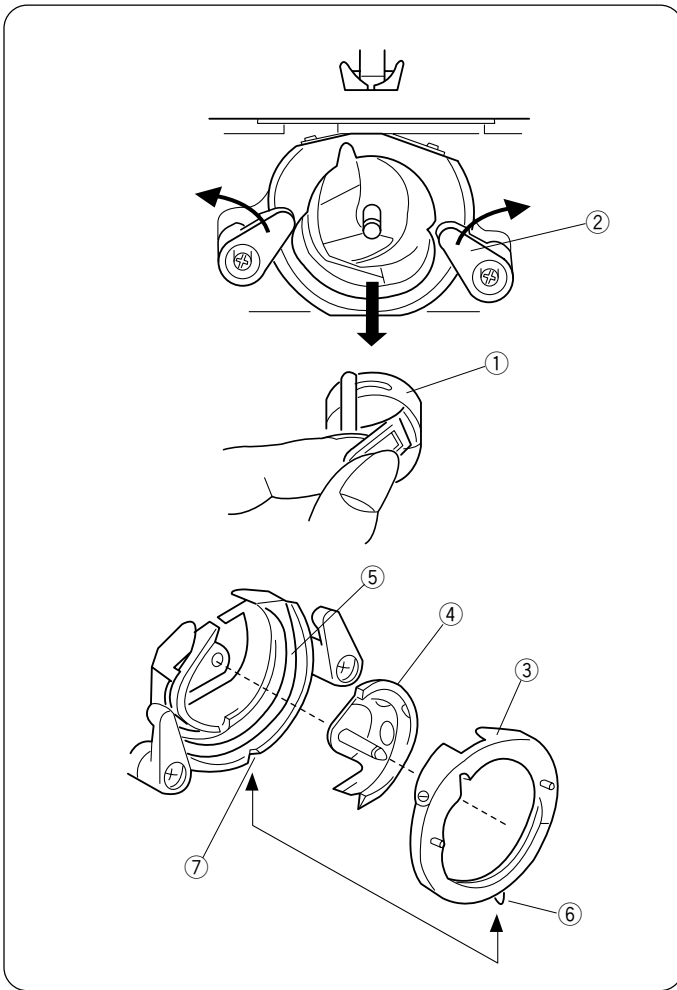
* Clean the hook race with a brush and a soft dry cloth.

- ① Bobbin case
- ② Shuttle race ring holder
- ③ Shuttle race ring
- ④ Shuttle
- ⑤ Shuttle race

To assemble shuttle race unit:

Shuttle the hook by the center pin and fit it carefully back into the shuttle race, forming a perfect circle with the shuttle driver.
Attach the shuttle race ring making sure the bottom pin fits into the notch.
Lock the shuttle race ring by turning the holders back into position. Insert the bobbin case.

- ⑥ Pin
- ⑦ Notch

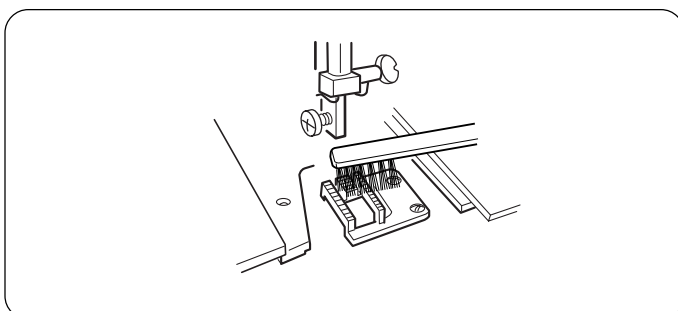


Cleaning the Feed Dog



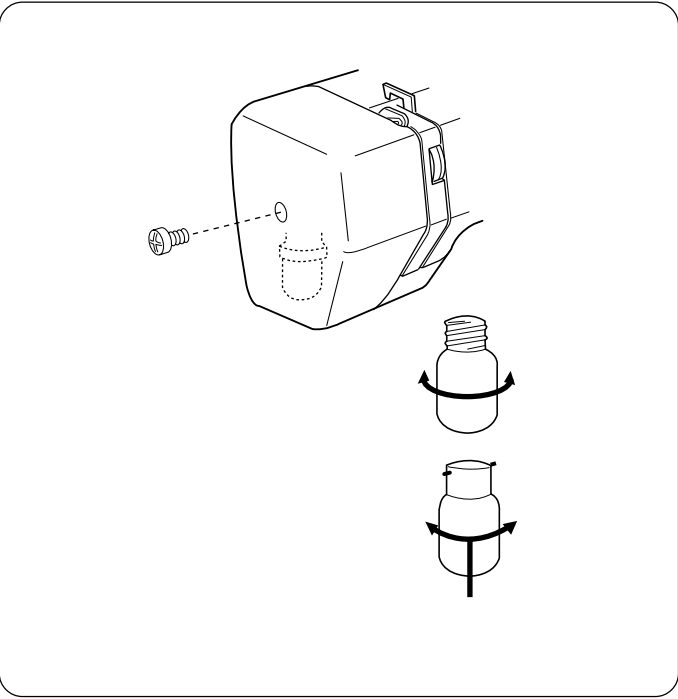
WARNING:

Turn off the power switch and/or unplug the machine before cleaning the feed dog.



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

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



Sewing Light

The sewing light is located behind the face plate. To change the bulb, take the face plate off the sewing machine by removing the set screw.

- Unplug the power supply before changing the bulb.
- To remove, turn the bulb to the left.
- To attach, turn the bulb to the right.



WARNING:

The bulb could be HOT. Protect your fingers when handle it.

Troubleshooting

Condition	Cause	Reference
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 9 See Page 11 See Page 6 See Page 6 See Page 15 See Page 6</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 8 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 6 See Page 6 See Page 6 See Page 11 See Page 15 See Page 6 See Page 12</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. The needle thread is not threaded properly. 	<p>See Page 6 See Page 6 See Page 6 See Page 9</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 fabric being sewn. 4. The stitches are too coarse for the fabric being new line sewn. <p>* When sewing extremely light weight materials, place a sheet of paper underneath the fabric.</p>	<p>See Page 11 See Page 9 See Page 6 Make the stitches denser.</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 11 See Page 6</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 fine. 	<p>See Page 25 Make the stitches coarser.</p>
The machine does not work.	<ol style="list-style-type: none"> 1. The machine is not plugged in. 2. Thread is caught in the hook race. 3. Handwheel has been disengaged for bobbin winding. 	<p>See Page 4 See Page 25 See Page 8</p>
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 25 See Page 25</p>

