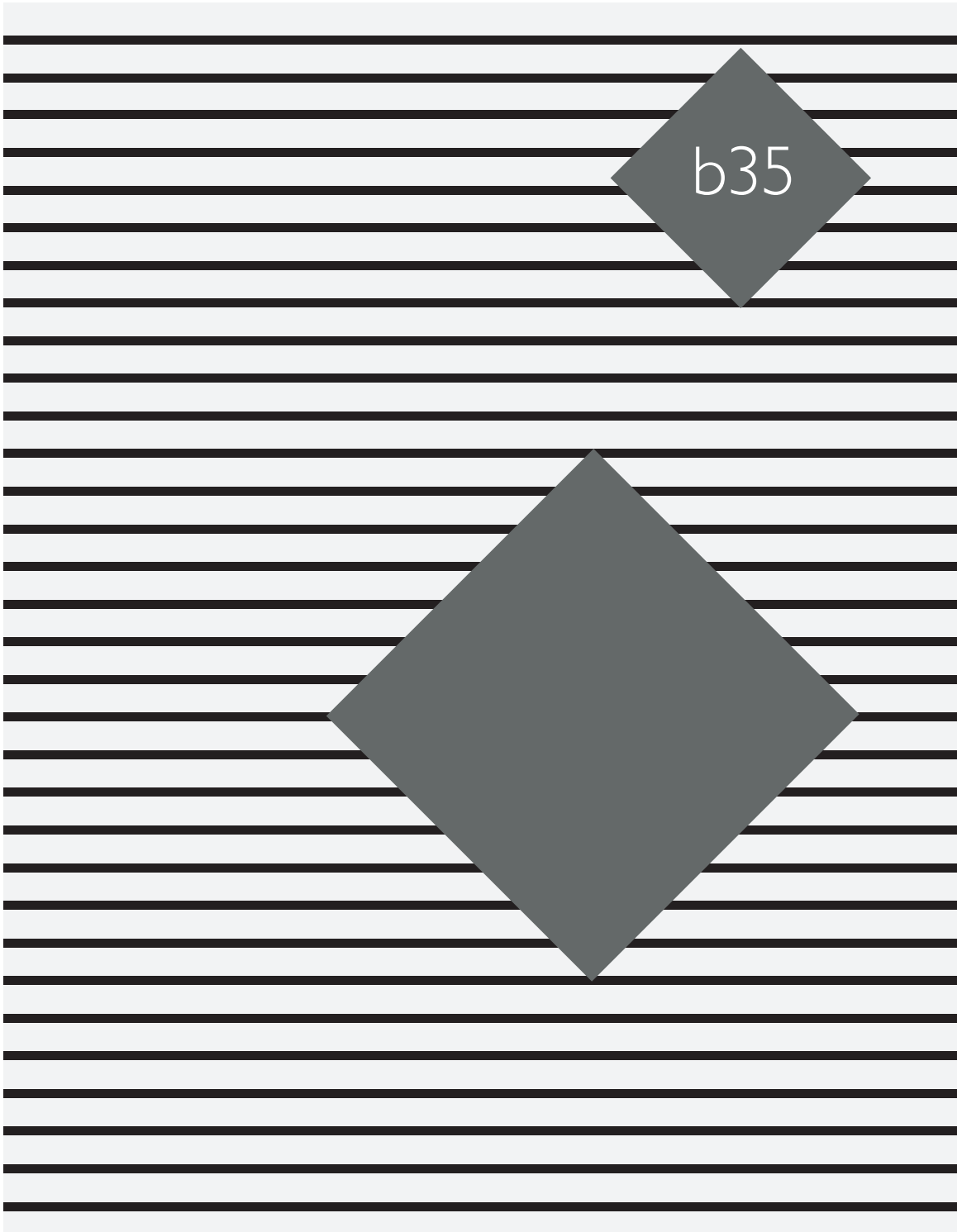

Instruction Manual

bernette
SWISS DESIGN

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IMPORTANT

The following basic safety precautions must be observed when operating an electrical device:

Please read the instruction manual carefully before using this machine.

Keep the instruction manual at a suitable place with the machine and hand it over if you give the machine to a third party.

When the machine is not in use or left unattended, always disconnect the machine from the power supply system. Unplug it from the outlet.

DANGER!

To reduce the risk of electric shock:

1. Never leave the machine unattended when it is plugged in.
2. Always unplug this machine from the electric outlet immediately after using and before cleaning.
3. LED RADIATION: Do not look directly at the LED using an optical instrument.

WARNING!

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

1. The machine mustn't be used by children under 8 or by people with reduced physical, sensory or mental capabilities or if there is a lack of experience and knowledge how to operate the machine. Unless they have been given instruction concerning the use of the machine and the involved risks by a person who is responsible for their safety.
2. Do not use this machine as a toy. Close attention is necessary when this machine is used by children, near children or people with reduced sensation.
3. Use this machine only for its intended use as described in this manual. Use only accessories recommended by the manufacturer.
4. Children should be supervised to ensure that they do not play with the machine.
5. Never operate this 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 the machine to the nearest authorized dealer or service centre for examination, repair, electrical or mechanical adjustment.
6. Never operate the machine with any air openings blocked. Keep ventilation openings of the machine and the foot control free from accumulation of lint, dust, and loose cloth.
7. Keep fingers away from all moving parts. Special care is required around the machine needle.
8. Always use the proper stitch plate. Using the wrong stitch plate can result in needle breakage.
9. Do not use bent needles.
10. Do not pull or push the fabric while sewing. This can result in needle breakage.
11. Switch the machine off ("O") when making any adjustments in the needle area, such as threading or changing the needle, threading the bobbin, or changing the presser foot, and the like.
12. Always unplug the machine when performing cleaning or maintenance work-such as replacing the sewing light or when making any other user maintenance adjustments mentioned in the instruction manual (disconnect the power plug). Cleaning and maintenance work must not be carried out by children without supervision.
13. Never drop or insert any object into any openings.
14. Use this machine only in dry and protected areas. Never operate the machine in a damp or wet environment.
15. Do not operate the machine where aerosol spray products are being used or where oxygen is being administered.
16. To disconnect, turn the power switch to ("O")(off), then remove the plug from the outlet. Do not unplug by pulling the cord, instead grasp the plug to pull it from the outlet.
17. If the supply cord of the foot control is damaged, it must be replaced by the manufacturer or an appropriate service agent or a similar qualified person in order to avoid endangerment.
18. Never place anything on the foot control.
19. The machine may only be used in combination with a type C-1028 (100-120 V) or KD-2902 (220-240 V) foot control.

20. The sound pressure level during normal operation is lower than 75dB(A).
21. This machine is provided with double insulation (except U.S.A/Canada). Use only identical replacement parts. See instructions for Servicing of double-insulated products.

SERVICING OF DOUBLE-INSULATED PRODUCTS

In a double-insulated product, two systems of insulation are provided instead of grounding. No grounding means is provided on a double-insulated product nor should a means for grounding be added to the product. Servicing a double-insulated product requires extreme care and knowledge of the system and should only be done by qualified service personnel. Replacement parts for a double-insulated product must be identical to those parts in the product. A double insulated product is marked with the words «DOUBLE INSULATION» or «DOUBLE INSULATED».

The symbol ⧈ may also be marked on the product.

WARNING:

This machine is intended for household use only. If used intensively or commercially, regular cleaning and especially attentive care is required.
Signs of wear and tear owing to intensive or commercial use are not covered automatically, even if they occur within the warranty period. The decision on how to deal with any such cases rests with the local authorised servicing staff.

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)

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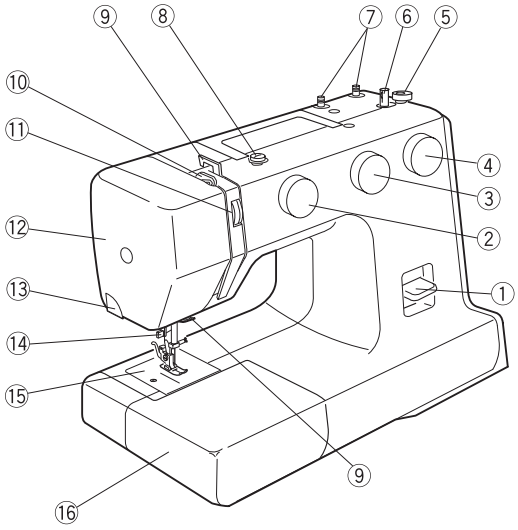
For technical and product improvement reasons, the machine's features, parts and accessory are subject to unannounced changes and alterations at any time. The accessory included can differ from country to country.

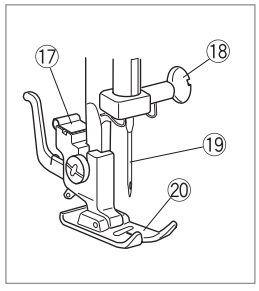
PLEASE NOTE:

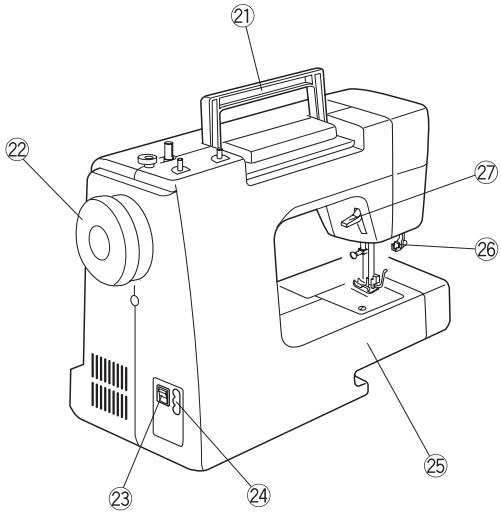
If the machine is stored in a cold room, it should be brought to a warm room about one hour before use.

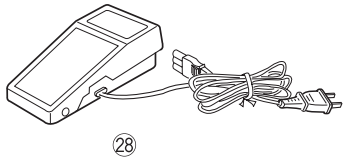
SAVE THESE INSTRUCTIONS!

Europe only: This appliance may only be used by children over eight and by persons with reduced physical, sensory or mental capabilities or by persons who lack experience and knowledge of how to operate the machine under supervision, after instruction on how to use the equipment safely and once they have understood the potential dangers. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
Outside of Europe (except for the USA and Canada): This appliance may only be used by persons (including children) with reduced physical, sensory or mental capabilities or by persons who lack experience and knowledge of how to operate the machine under supervision and after instruction on how to use the equipment safely by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.









ESSENTIAL PARTS

Names of Parts

① Reverse sewing lever
② Stitch pattern selector knob
③ Stitch length knob
④ Stitch width knob
⑤ Bobbin winder stopper
⑥ Bobbin winder spindle
⑦ Spool pin
⑧ Bobbin winder pre-tension
⑨ Thread guide
⑩ Thread take-up lever
⑪ Thread tension dial
⑫ Head cover
⑬ Thread cutter
⑭ Needle threader
⑮ Stitch plate
⑯ Sewing table (accessory box)
⑰ Presser foot holder
⑱ Needle clamp screw
⑲ Needle
⑳ Presser foot (Zigzag foot)
㉑ Carrying handle
㉒ Handwheel
㉓ Power switch
㉔ Power/Foot control connection
㉕ Free arm
㉖ Buttonhole lever
㉗ Presser foot lever
㉘ Foot control*

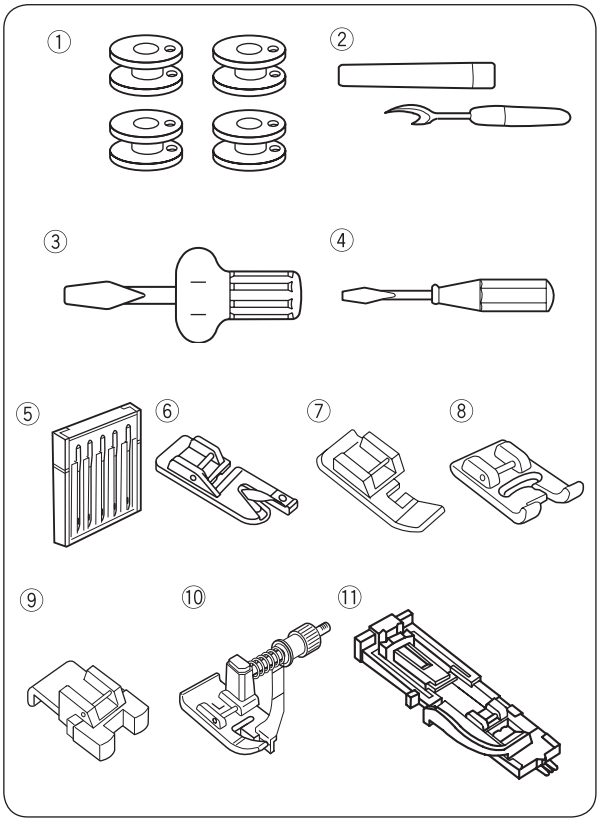
PLEASE NOTE:

To carry the sewing machine, hold the carrying handle with your hand, and support the sewing machine with the other hand.

PLEASE NOTE:

Design and specifications are subject to change without prior notice.

* The foot control included may differ from the illustration.

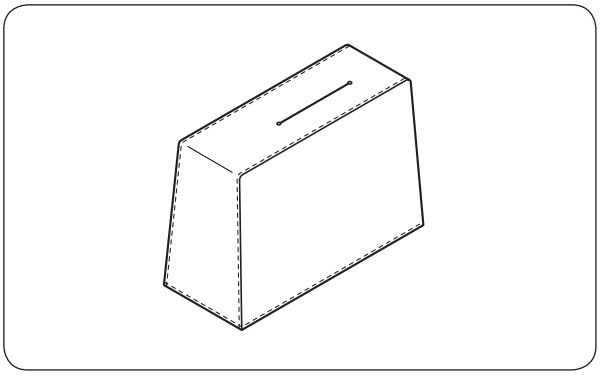


Standard Accessories

① Bobbins (4x)
② Seam ripper (buttonhole opener)
③ Screwdriver (large)
④ Screwdriver (small)
⑤ Needle assortment
⑥ Hemmer foot
⑦ Zipper foot
⑧ Satin stitch foot
⑨ Button-sew-on foot
⑩ Blindstitch foot
⑪ Buttonhole foot with slide

More information on optional accessories can be found on our website:

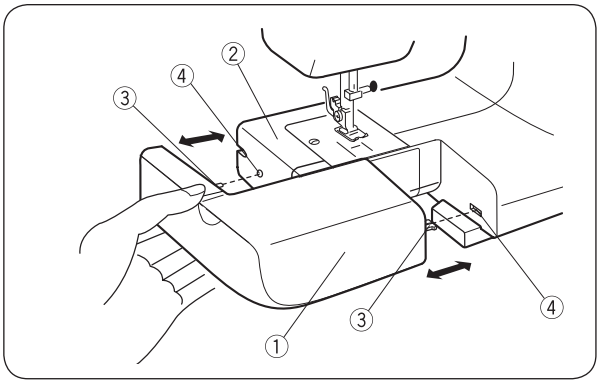
http://www.mybernette.com/accessories



Dust cover

Sewing instructions for your own personalized dust cover are available at:

www.mybernette.com/cover



Sewing table

The sewing table increases the sewing area and is easy to remove for freehand sewing.

- **Removing the sewing table:**

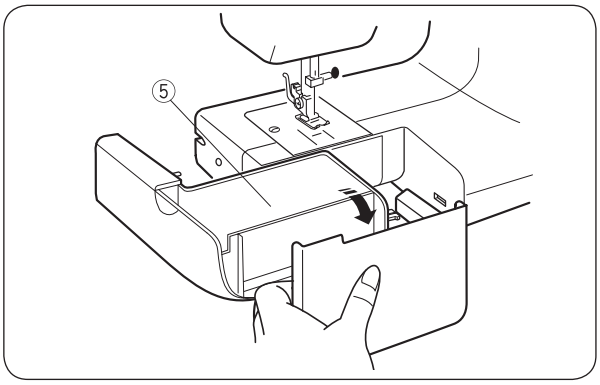
Pull the table away from the machine.

① Sewing table

- **Attaching the sewing table:**

Slide the sewing table along the free arm and insert the guides into the openings until the table locks into the machine.

② Free arm
③ Guide
④ Hole

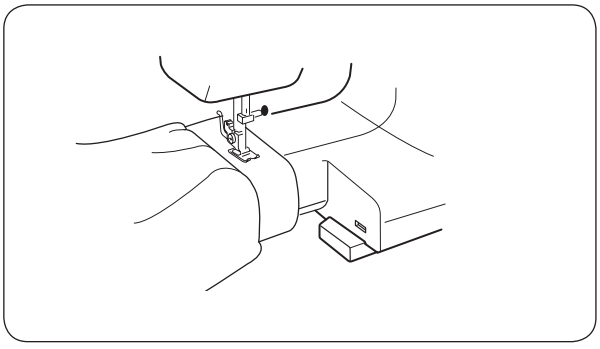


Accessory box

The accessories are stored inside the sewing table.

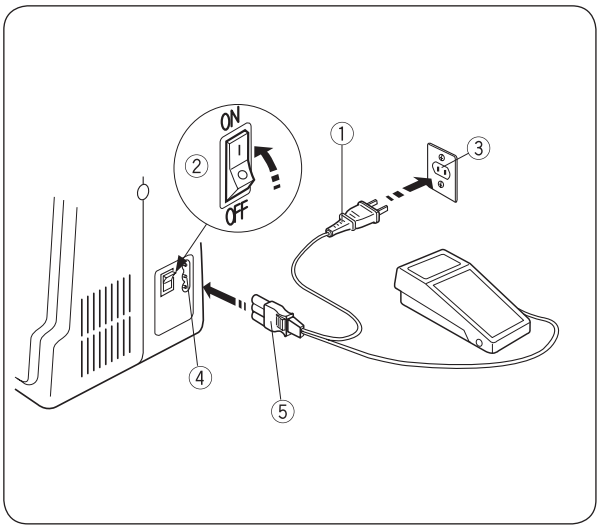
Unfold the cover to open the accessory box.

⑤ Accessory box



Free arm Sewing

Free arm sewing is used for stitching sleeves, waistbands, pant legs or any other tubular garments. It is also useful for darning socks or mending knees or elbows.



GETTING READY TO SEW

Connecting the Power Supply

1 Switch off the power switch.

2 Insert the machine plug into the Power/Foot control connection.

3 Insert the power supply plug into the wall outlet.

4 Turn the power switch on.

① Power supply plug
② Power switch
③ Wall outlet
④ Power/Foot control connection
⑤ Machine plug

⚠ CAUTION:

Before connecting to the power supply, make sure the voltage shown on the machine conforms to your electrical power.

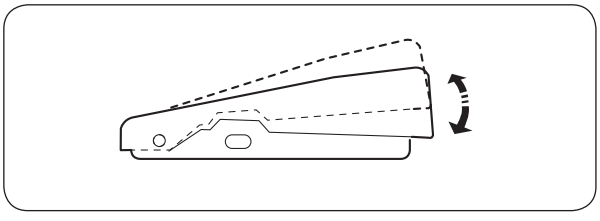
⚠ WARNING:

While in operation, always keep your eyes on the sewing area, and do not touch any moving parts such as the thread 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.

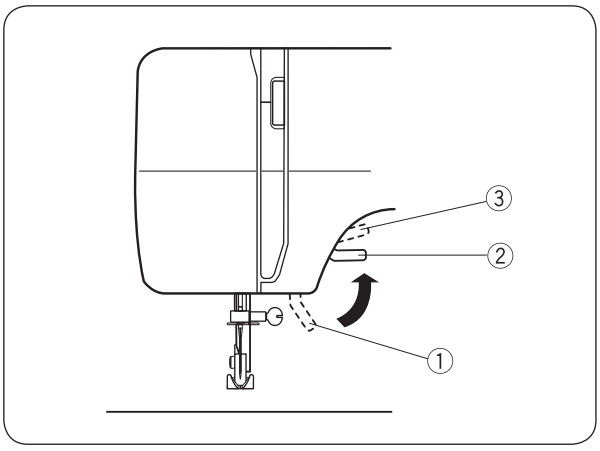
Do not place anything on the foot control, otherwise the machine will run intermittently.



Controlling the Sewing Speed

Sewing speed can be varied by the foot control.

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

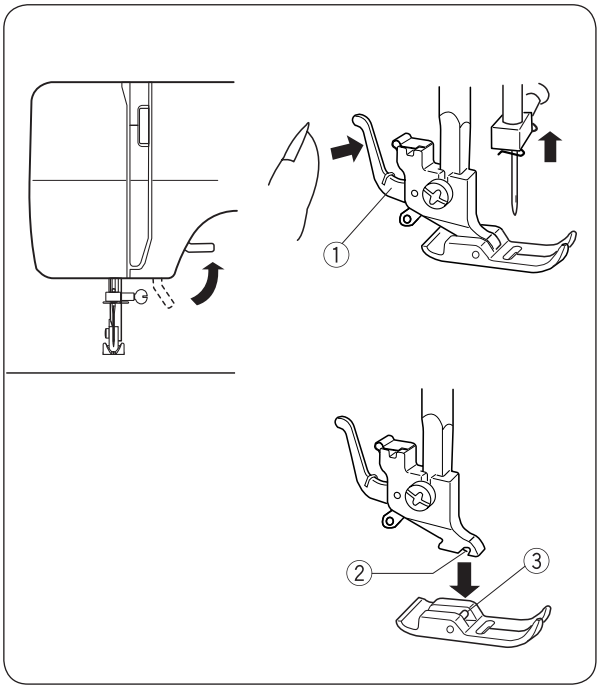


Presser foot lever

The presser foot lever raises and lowers the presser foot.

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

① Lowered position
② Normal up position
③ Highest position



Changing the Presser Foot

⚠ CAUTION:

Turn OFF the power switch before changing the foot. Always use the foot that corresponds to the selected stitch. The wrong foot can cause the needle to break.

① Presser foot release lever
② Groove
③ Pin

- **To remove:**

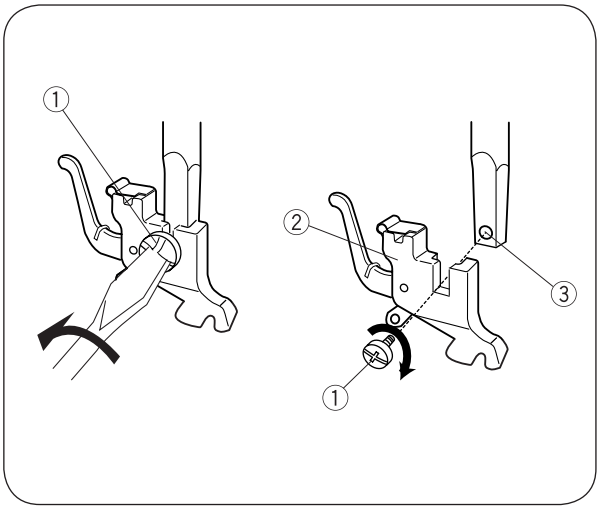
Turn the handwheel toward you to raise the needle bar to its highest position.

Raise the presser foot.

Push the presser foot release lever to snap off the presser foot holder.

- **To attach:**

Place the presser foot so that the pin on the foot lines up directly below the groove of the presser foot holder. Lower the presser foot.



Attaching and removing the presser foot holder

⚠ CAUTION:

Turn OFF the power switch before changing the presser foot holder.

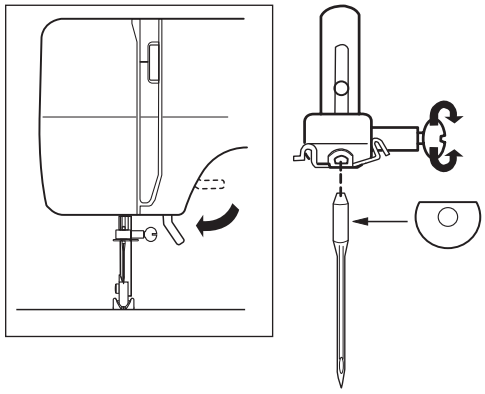
① Setscrew
② Presser foot holder
③ Threaded hole

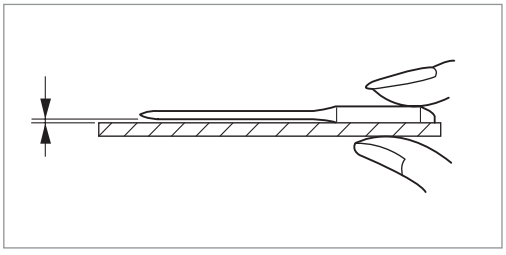
- **To remove:**

Remove the setscrew by turning it counterclockwise with a screwdriver.

- **To attach:**

Match the hole in the presser foot holder with the threaded hole in the presser bar. Fit the setscrew into the hole. Tighten the screw by turning it clockwise with screwdriver.





Changing the needle

CAUTION:

Always make sure to turn the power switch off and disconnect the machine from power supply before changing the needle.

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

Switch off the power switch.

1. Loosen the needle clamp screw by turning it counterclockwise.

   Remove the needle from the clamp.

2. Insert a new needle into the needle clamp with the flat side of the needle to the rear.

   When inserting the needle into the needle clamp, push it up against the stopper pin and tighten the needle clamp screw firmly.

- **To check the needle:**

To check needle straightness, place the flat side of the needle onto something flat (a stitch plate, glass etc.) The gap between the needle and the flat surface should be consistent.

Never use a blunt needle.

Fabric		Thread	Needle
Fine	Lawn Georgette Tricot Organza Crepe	Silk #80-100 Cotton #80-100 Synthetic #80-100	#9/65-11/75
Medium weight	Sheeting Jersey Broadcloth Fleece	Silk #50 Cotton #50-80 Synthetic #50-80	#11/75-14/90
Heavy weight	Denim Tweed Coating Quilting	Silk #30-50 Cotton #40-50 Synthetic #40-50	#14/90-16/100

Fabric and Needle Chart

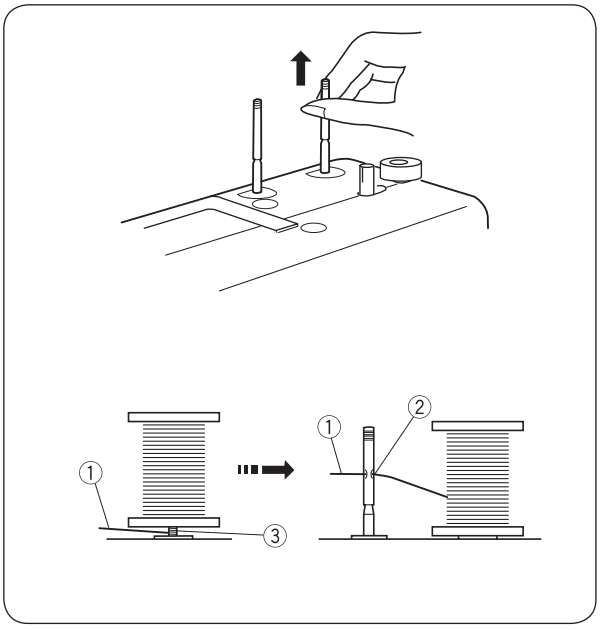
- Use a needle size of 11/75 or 14/90 for general sewing work.
- A fine thread and a fine needle must be used to sew lightweight fabric to prevent damage to the fabric.
- Heavy fabric requires a needle large enough to pierce the fabric without the needle thread fraying.
- Always test the needle size on a spare section of the fabric you will be using for sewing.
- In general, use the same thread for the needle and the bobbin.

PLEASE NOTE:

The needle assortment includes 1 x blue shank needle (no. 11/75), 2 x no. 11/75 needles and 2 x no. 14/90 needles.
For optimal sewing results, it is recommend using Organ needles.

PLEASE NOTE:

Use a blue shank needle (available separately) when sewing flexible fabrics, very fine fabrics and synthetic fabrics. The blue shank needle effectively prevents skipped stitches.



Setting Spool Pins

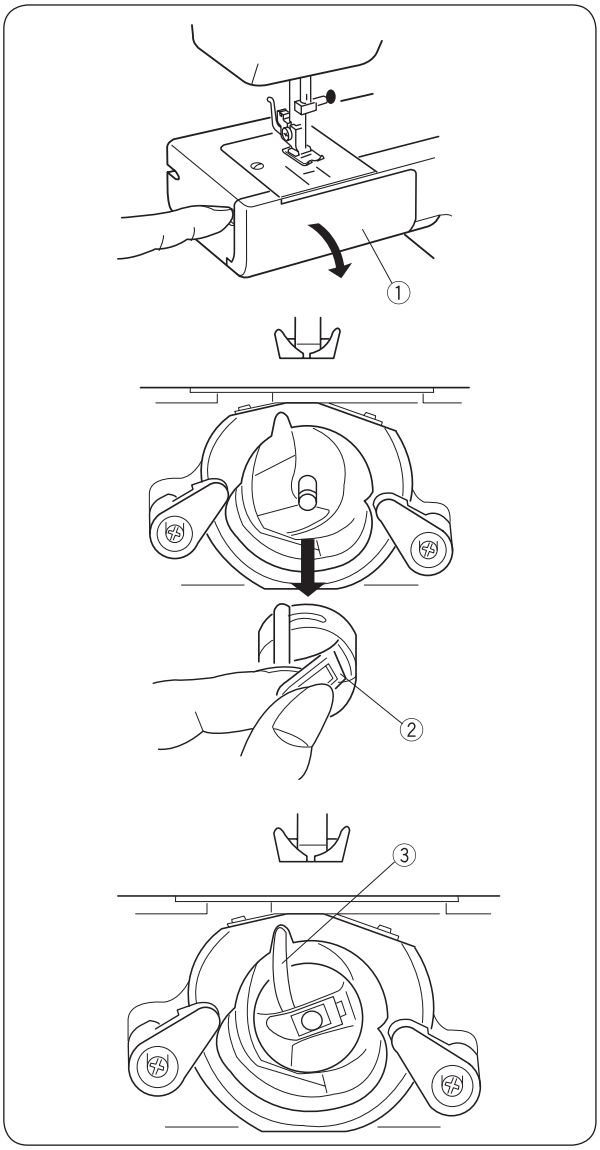
The spool pins are used for holding the spool of thread in order to feed thread to the machine.

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

PLEASE NOTE:

When using thread which has tendency to tangle around spool pin, thread through the hole of spool pin as shown. The hole should face the thread spool.

① Upper thread
② Hole
③ Tangle



Removing or Inserting the Bobbin Case

Remove the sewing table by pulling it to the left.

Open the bobbin cover.

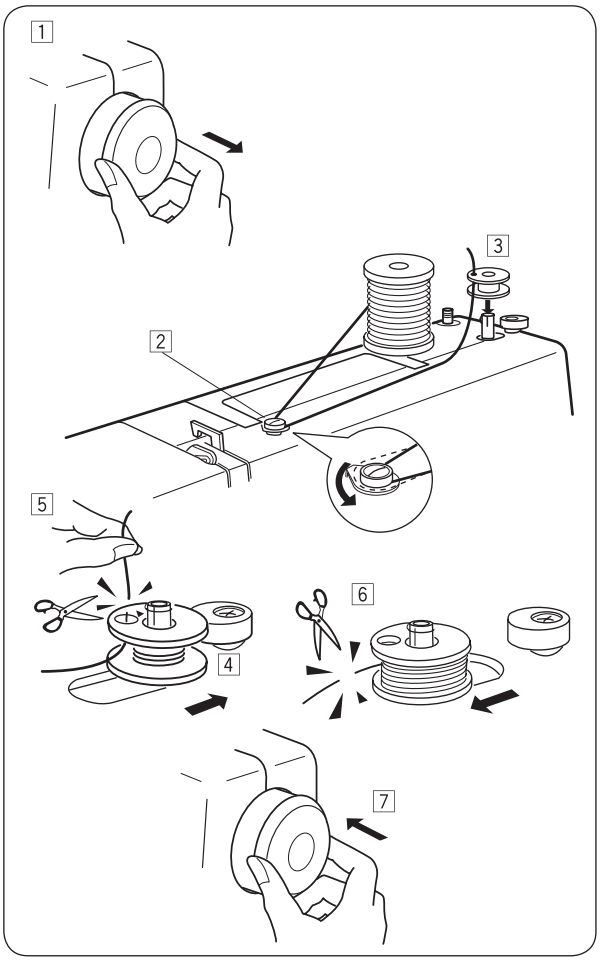
① Bobbin cover

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 the spool.

Guide the thread around the bobbin winder pre-tension.

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

Put the bobbin on the bobbin winder spindle.

4 Push it to the right.

5 With the free end of the thread held in your hand, depress the foot control.

Stop the machine when it has made a few turns, and cut the thread close to the hole in the bobbin.

6 Depress the foot control again.

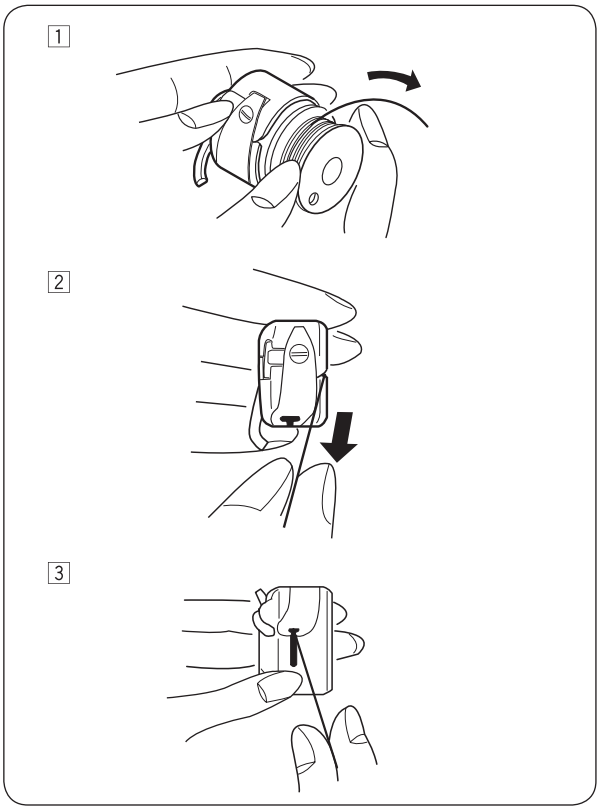
When the bobbin is fully wound, stop the machine.

Return the bobbin winder spindle to its original position by moving the spindle to the left, and cut the thread.

7 Push the handwheel back into the original position.

PLEASE NOTE:

When stopping the machine, push the bobbin winder spindle to the left.



Threading the Bobbin Case

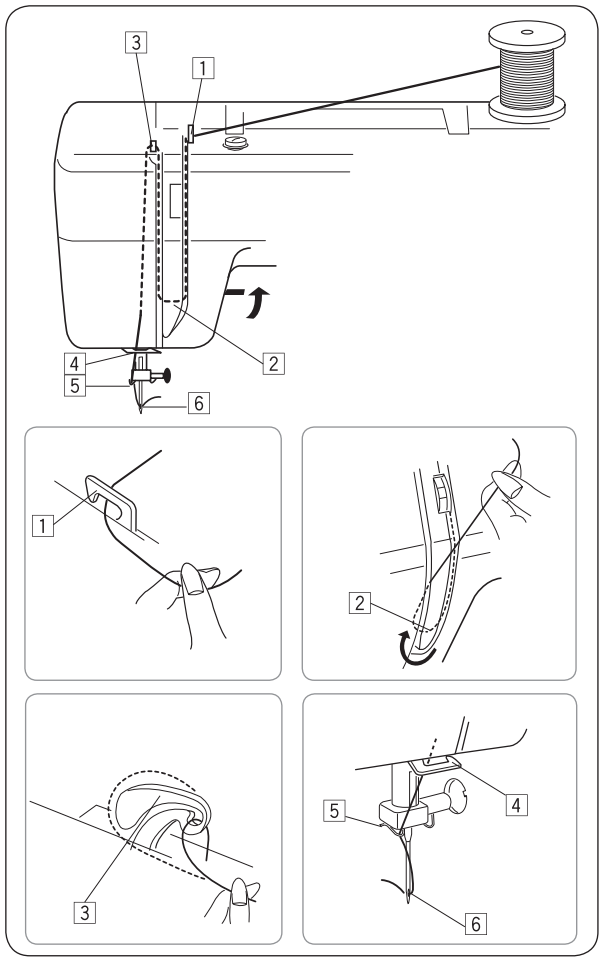
1 Place the bobbin into the bobbin case.

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.

* Pull a thread roughly 4" (10 cm) long from the bobbin.



Threading the Machine

Raise the thread 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.

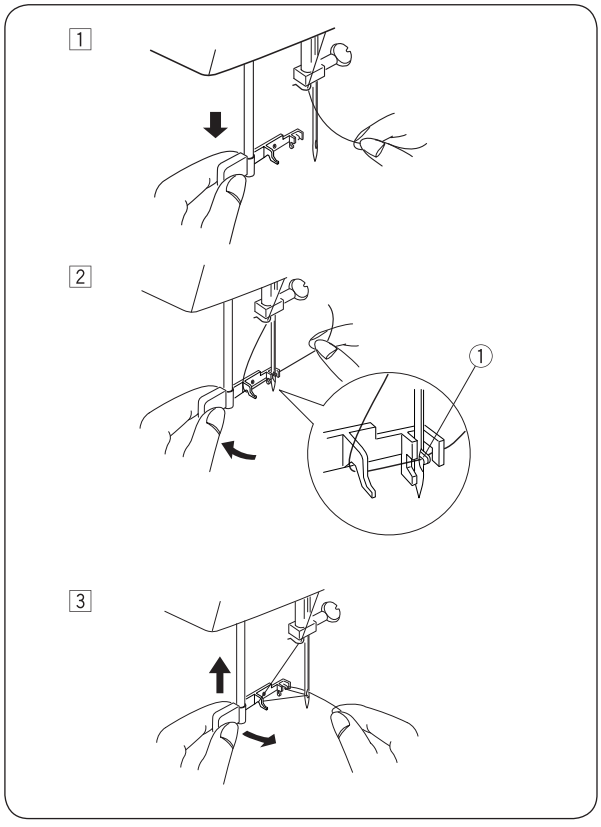
2 While holding the thread near spool, draw thread down into the tension area and then around the check spring holder.

3 Firmly draw the thread up and through the take–up lever from right to left.

4 Then pull the thread downwards and guide it into the thread guide on the bottom of the sewing head, moving from right to left.

5 Pull the thread downwards and, on the left side of the needle bar, insert it into the thread guide.

6 Thread the needle eye from front to back.



Needle threader

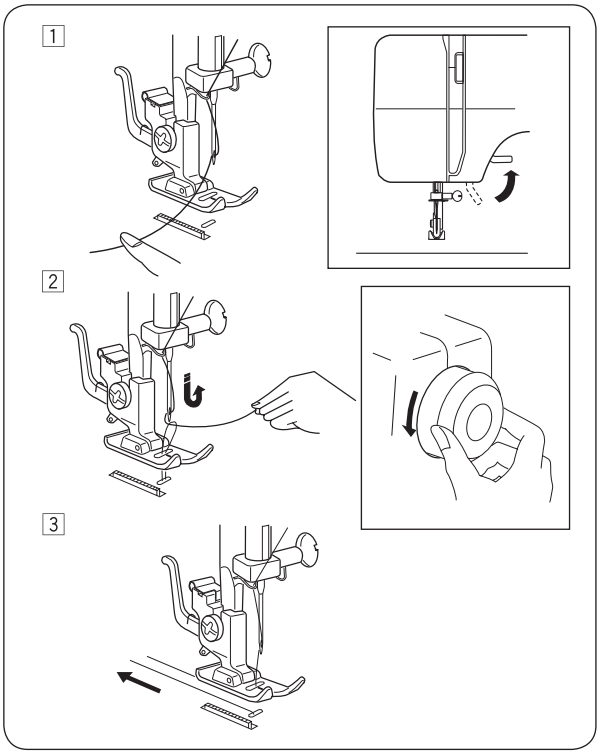
1 Raise the needle to its highest position by turning the handwheel toward you. Pull down the needle threader as far as it will go.

2 Turn the needle threader away from you so the hook comes out through the needle eye from behind.

Pull the thread around the guide and under the Hook. Take particular care with the point of the needle when doing so.

① Hook

3 Turn the needle threader toward you to pull the thread through the needle eye. Release the needle threader slowly while holding the thread end with your hand. A loop of the thread is pulled up through the needle eye.



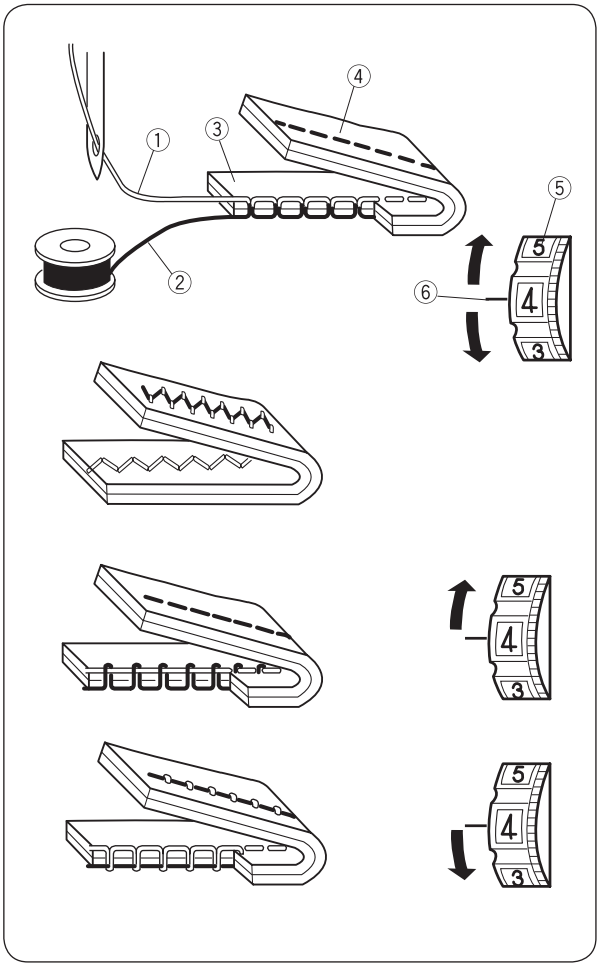
Drawing Up Bobbin Thread

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

2 Use your right hand to slowly turn the handwheel counterclockwise until the needle has been lowered. Continue turning the handwheel until the thread take-up lever is at its highest point.

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

3 Pull 10 cm (4˝) of both threads back and under the presser foot.



Thread tension dial

- **Correct tension**

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

In an ideal zigzag stitch, the bobbin thread does not show on the right side (top) of the fabric, and the needle thread shows slightly on the wrong side (bottom) of the fabric.

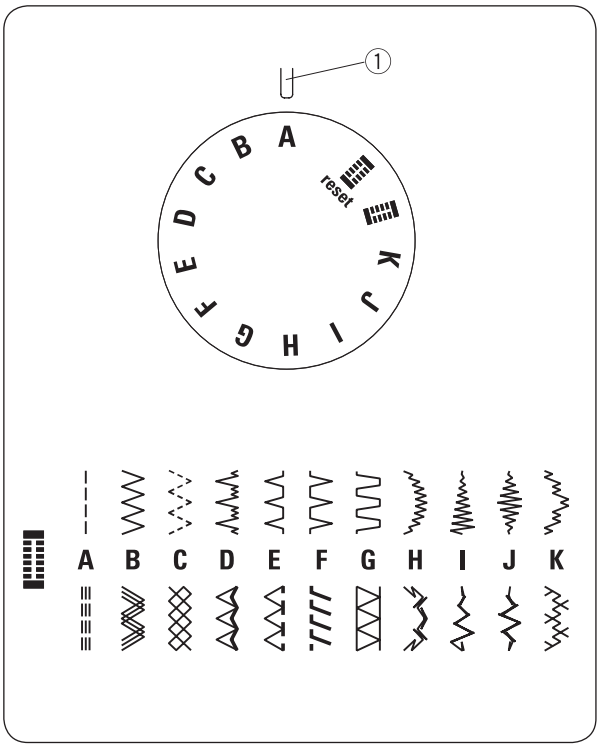
① Needle thread (Top thread)
② Bobbin thread (Bottom thread)
③ Right side (Top side) of fabric
④ Wrong side (Bottom side) of fabric
⑤ Thread tension dial
⑥ Setting mark

- **The needle thread tension is too tight**

When the bobbin thread (bottom thread) appears on the right side (top side) of the fabric, loosen the needle thread tension by moving the dial to a lower number.

- **The needle thread tension is too loose**

When the needle thread (top thread) appears on the wrong side (bottom side) of the fabric, tighten the needle thread tension by moving the dial to a higher number.



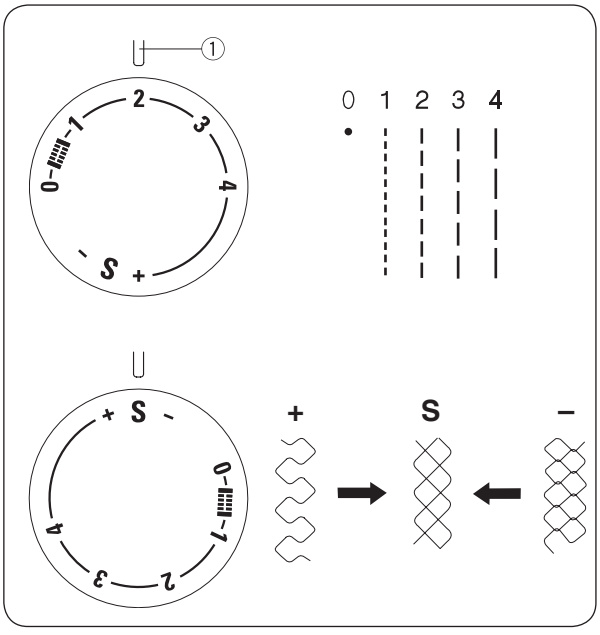
Stitch pattern selector knob

Turn the stitch pattern selector knob so that the symbol with the desired stitch pattern points at the setting mark.

① Setting mark

CAUTION

To avoid needle or fabric damage, make sure the needle is up and out of the fabric while selecting a stitch.



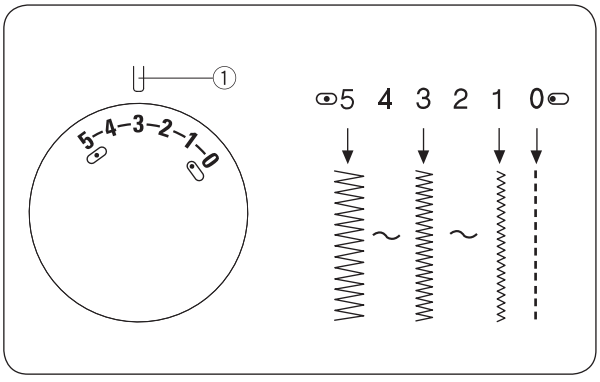
Stitch length knob

Turn the stitch length knob so that the symbol with the desired stitch length points at the setting mark.

The higher the number, the longer the stitch length.

① Setting mark

- Set the knob for sewing with a zigzag stitch between 0.5 and 4.
- Turn the knob to "S" to sew with stretch stitch patterns, which are marked on the machine in red.
- If the stretch stitch pattern is irregular, turn the stitch length knob towards "–" to condense the stitch or towards "+" to expand the stitch.



Stitch width knob

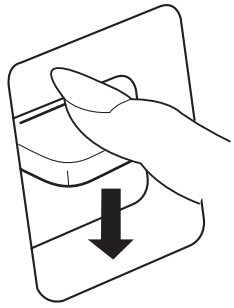
Set the stitch width knob so that the symbol with the desired stitch width points at the setting mark.

The higher the number, the wider the stitch width

① Setting mark

PLEASE NOTE:

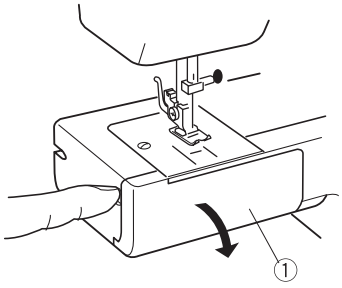
Raise the needle above the fabric, when you turn the stitch width knob.



Reverse sewing lever

As long as you keep the reverse sewing lever depressed, the machine will sew in reverse.

1



Lowering and raising the feed dog

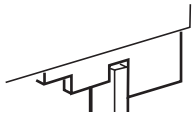
Remove the sewing table by pulling it to the left.

1 Open the bobbin cover.

① Bobbin cover

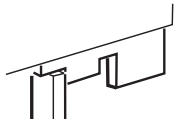
2

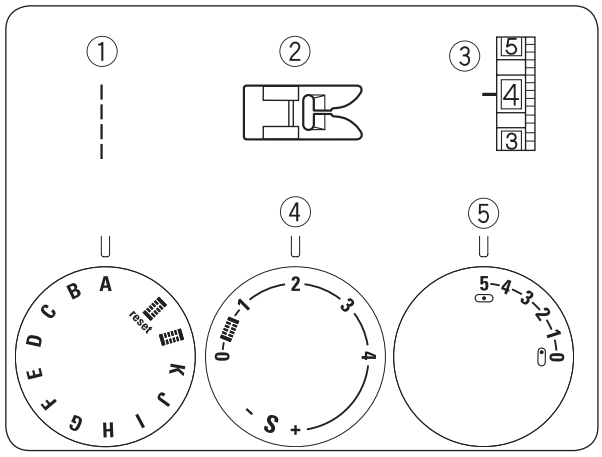
2 To lower the feed dog, press the lever down and move it in the direction indicated by the arrow (see figure)

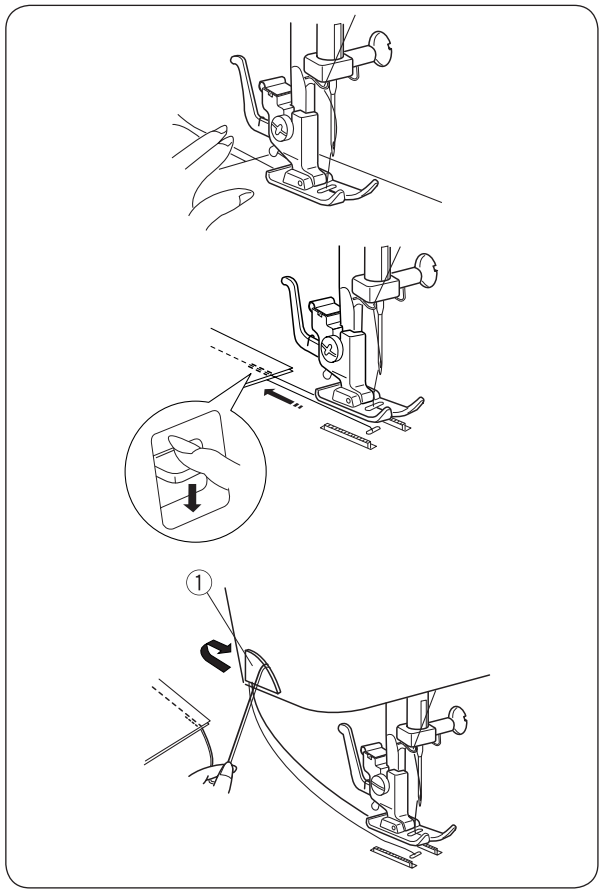


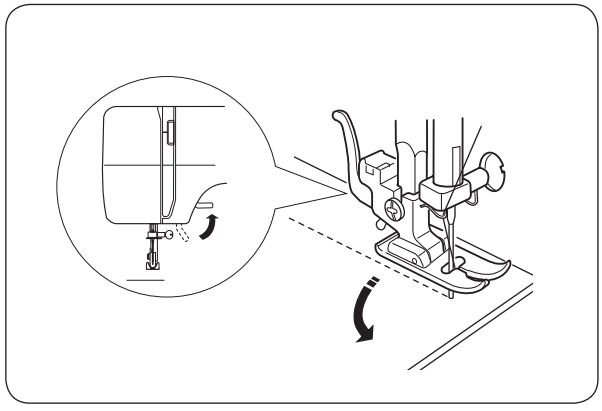
3

3 To raise the feed dog, press the lever down, move it in the direction indicated by the arrow (see figure) and turn the handwheel counterclockwise.









BASIC SEWING

Straight stitch

① Stitch selection: A
② Presser foot: Zigzag foot
③ Thread tension: 2 – 6
④ Stitch length: 1.5 – 4
⑤ Needle position: ⊂⊃ (0) or ⊂⊃ (5)

- **Starting sewing**

Raise the presser foot and position the fabric with its edge lining up with a seam guide line on the stitch 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.

PLEASE NOTE:

Draw the threads to the left when sewing with the buttonhole foot with slide.
To fasten the beginning of the seam, first sew several stitches in reverse then sew forward.

- **Finishing sewing**

For fastening the end of seams, press the reverse sewing lever and sew several reverse stitches.

Raise the presser foot and remove the fabric. Draw the threads towards the back as you do so.

Cut the threads with the thread cutter ①.

The threads are now the proper length to begin sewing the next seam.

① Thread cutter

Changing the Sewing Direction

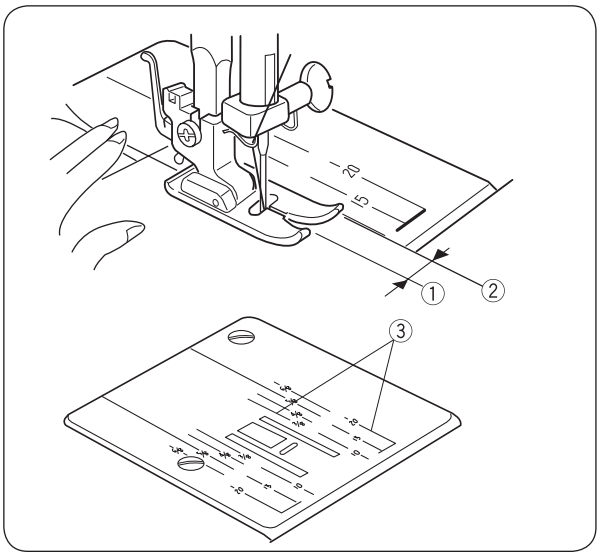
CAUTION:

Keep fingers away from the presser foot when guiding the fabric. Otherwise fingers may be struck and injured by the needle clamp screw.

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

Raise the presser foot.

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



Seam Guide Lines

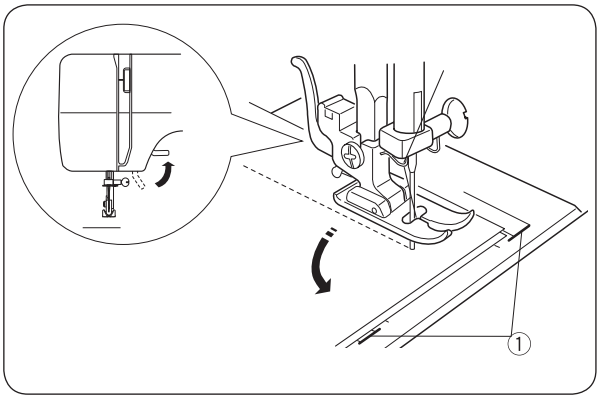
The numbers on the stitch plate indicate the distance between the center needle position and the guideline.

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
Distance (cm)	1	1.5	2	—	—	—	—
Distance (inch)	—	—	—	3/8	1/2	5/8	3/4

① Center needle position
② Guide lines
③ Numbers



Turning a Square Corner

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

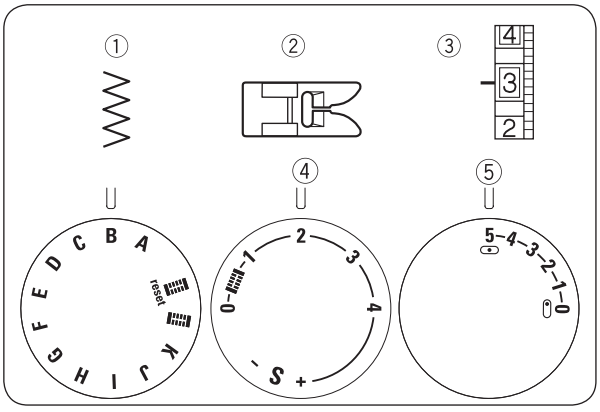
Stop stitching and lower the needle by turning the handwheel counterclockwise.

Raise the presser foot and turn the fabric to line the edge with the 5/8″ (1.6 cm) seam guide.

Lower the presser foot and begin stitching in the new direction.

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

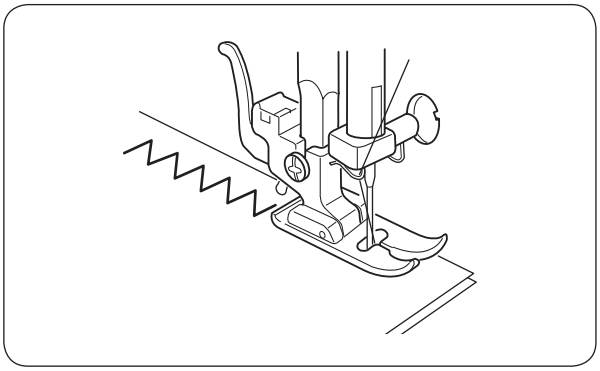
① Cornering guide



UTILITY STITCHES

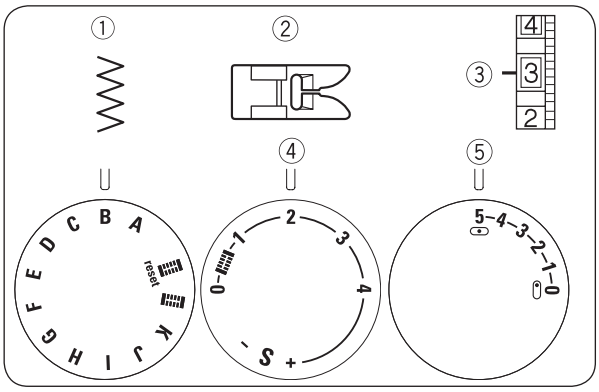
Zigzag

① Stitch selection: B
② Presser foot: Zigzag foot
③ Thread tension: 2 – 5
④ Stitch length: 0.5 – 4
⑤ Stitch width: 0 – 5



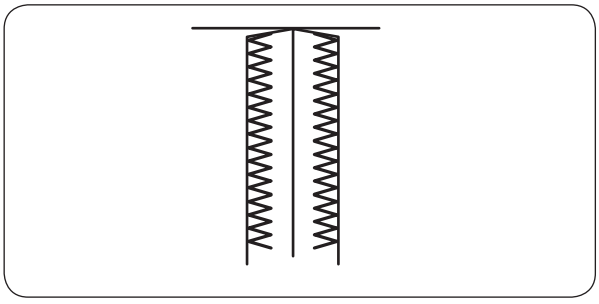
Simple zigzag stitching is frequently used for overcasting, sewing on buttons, etc.

Adjust the stitch length to suit your sewing needs.



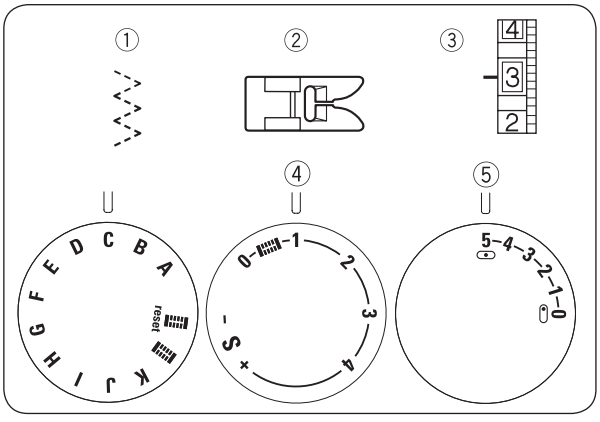
Overcasting

① Stitch selection: B
② Presser foot: Zigzag foot
③ Thread tension: 1 – 4
④ Stitch length: 1 – 2
⑤ Stitch width: 5



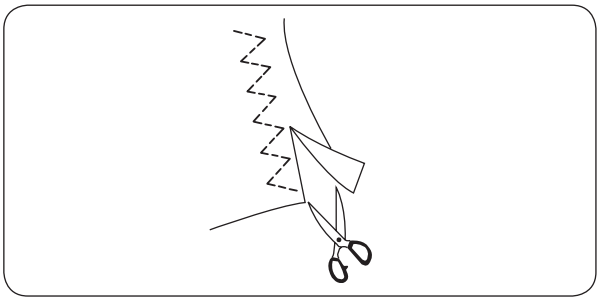
Simple zigzag stitching is used to finish raw edges (overcasting) on most fabrics in order to prevent fraying. This is the fastest way to finish an edge.

Place the fabric edge against the black guide on the foot. Sew.



3-step zigzag

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

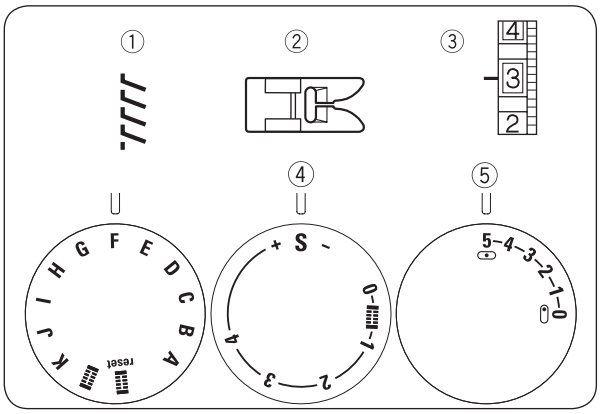


This stitch is used to finish the raw edge on synthetics and other fabrics that tend to pucker.

Place your fabric to allow a 1.6 cm (5/8˝) seam.

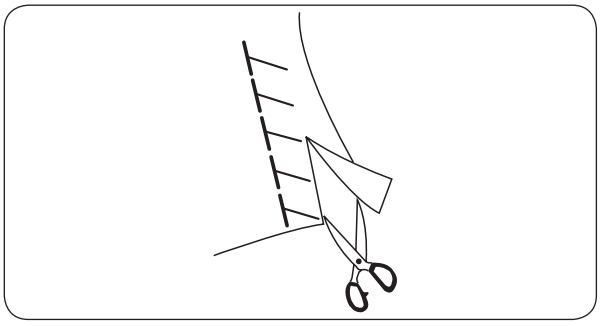
Trim the seam allowance after sewing.

Be careful not to cut the stitches.



Stretch-Overlock Stitch

① Stitch selection: F
② Presser foot: Zigzag foot
③ Thread tension: 1 – 4
④ Stitch length: S
⑤ Stitch width: 5

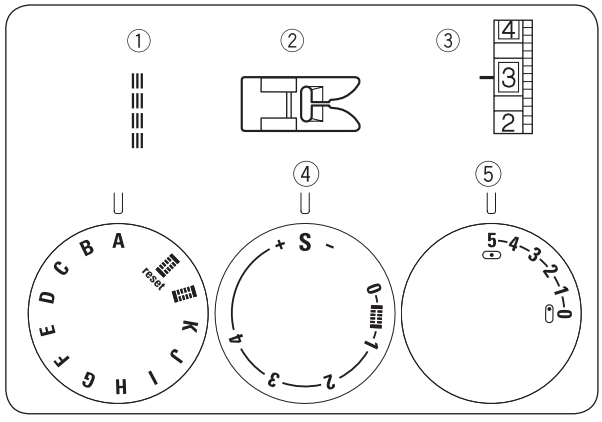


This knit stitch is ideal for sewing swimwear and stretch velour because it provides the greatest amount of elasticity and strength.

Place your fabric to allow a 1.6 cm (5/8˝) seam.

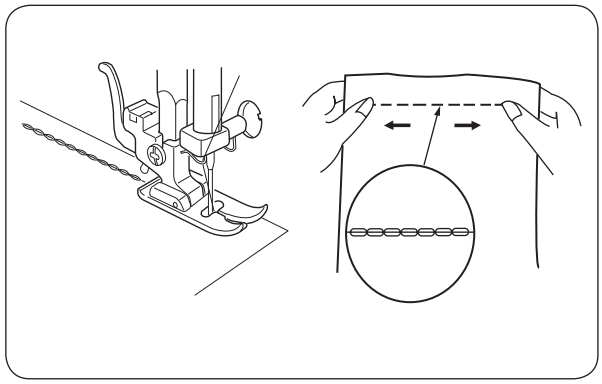
Trim the seam allowance after sewing.

Be careful not to cut the stitches.



Triple straight stitch

① Stitch selection: A
② Presser foot: Zigzag foot
③ Thread tension: 2 – 6
④ Stitch length: S
⑤ Needle position: ⊂⊃ (0) or ⊂⊃ (5)

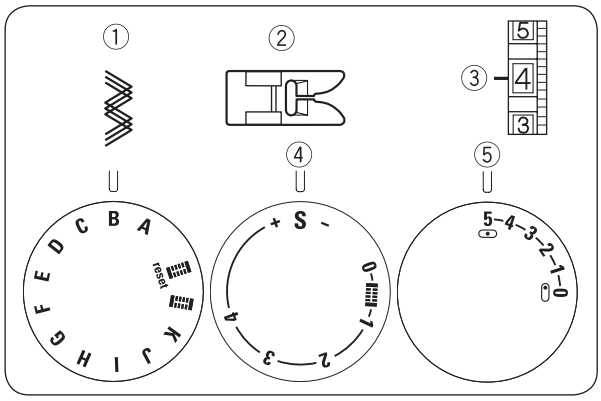


The stitch is sewn with two forward stitches and one reverse stitch, creating a seam that is difficult to tear.

Use it to reinforce areas such as crotch and armhole seams.

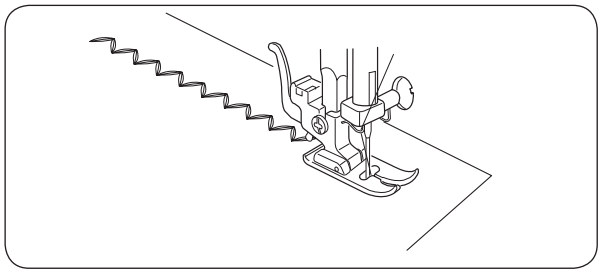
Also use it when constructing items such as backpacks for extra strength.

Carefully guide the fabric while sewing as the fabric moves back and forth.



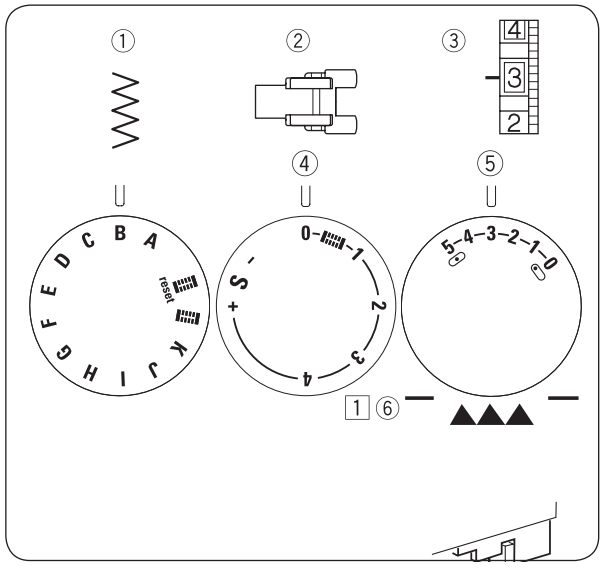
Triple zigzag

① Stitch selection: B
② Presser foot: Zigzag foot
③ Thread tension: 2 – 6
④ Stitch length: S
⑤ Stitch width: 2 – 5



Sew on stretch fabrics in any area that you might use a zigzag stitch.

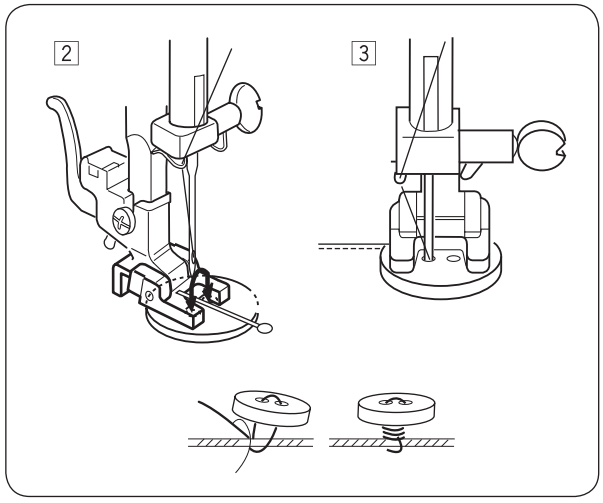
This stitch is also used as a decorative stitch.



Sewing Buttons

① Stitch selection: B
② Presser foot: Button-sew-on foot
③ Thread tension: 2 – 6
④ Stitch length: 0
⑤ Stitch width: Adjust as required
⑥ Feed dog: Lowered

1 Lower the feed dog.



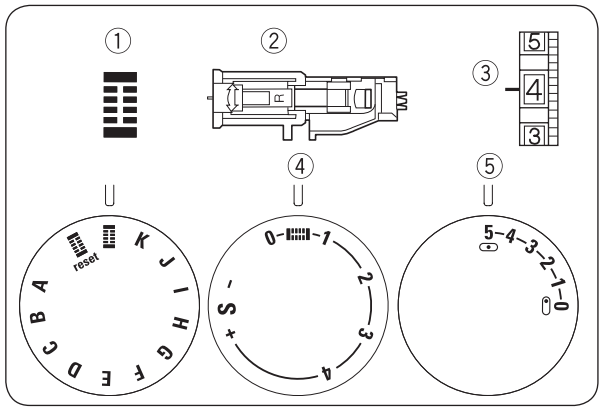
2 Match the holes in the button with the horizontal slot on the presser foot.

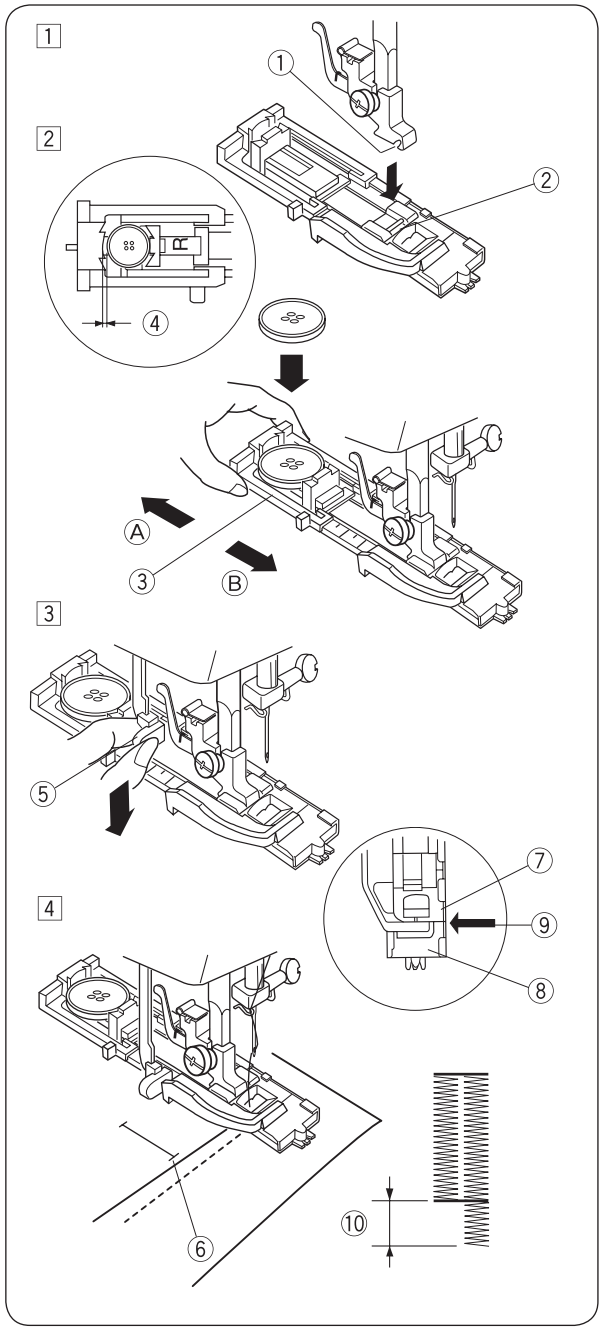
Adjust the stitch width matching the distance of the holes in the button.

Lower the foot to hold the button in place. Check to see if the needle enters into the holes in the button by turning the handwheel by hand.

3 Sew about ten (10) stitches.

To strengthen the shank, cut the threads leaving about 4.0˝ (10.0 cm). Bring the needle thread down through one of the holes in the button and wind it around the shank. Bring the needle thread to the wrong side (bottom side) and knot.





Automatic Buttonhole

① Stitch pattern:
② Presser foot: Buttonhole foot with slide
③ Thread tension: 1 – 5
④ Stitch length:
⑤ Stitch width: 5

* The size of buttonhole is automatically set by placing the button in the rear of the buttonhole foot with slide.

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

* Sew a test buttonhole on a stitch that matches the fabric, the interfacing and the seams on the actual item of clothing.

* Use interfacing on stretch fabrics.

1 Raise the needle by turning the handwheel toward you.

Raise the presser foot lever.

Attach the buttonhole foot with slide.

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 as far as it will go.

③ Button holder

* 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

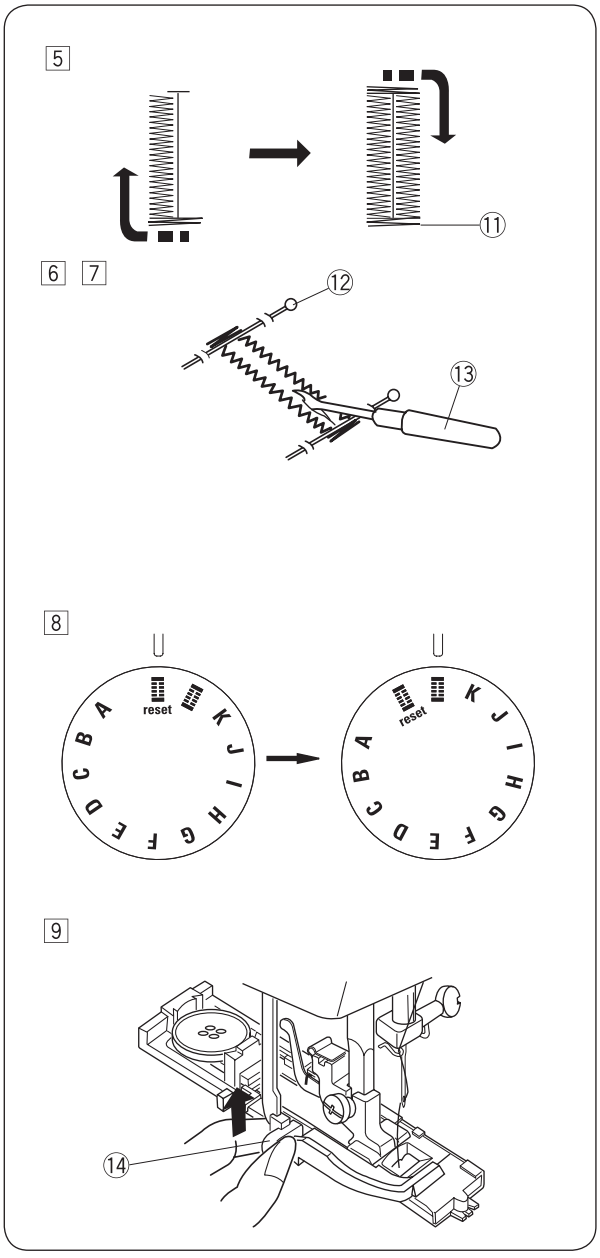
4 Insert the fabric under the foot. Turn the handwheel toward you one rotation and remove the fabric to the left to draw both threads to the left. Insert the garment under the foot, and lower the needle at the starting point. Then lower the buttonhole foot with slide.

⑥ Starting point

PLEASE NOTE:

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

⑦ Slider
⑧ Spring holder
⑨ There should be no gap.
⑩ Sewing gap



5 Depress the foot control to sew a buttonhole.

The machine automatically sews the front bartack, the left row, the rear bartack and the right row. Stop the machine at the ending point.

⑪ Ending point

6 Raise the presser foot and cut the both needle and bobbin threads leaving 10 cm (4˝) thread ends.

Draw the needle thread to wrong side of the fabric by pulling the bobbin thread.

Then, knot the threads.

7 Place a pin on both buttonhole ends directly in front of the bartacks to prevent the bartacks being cut open. Cut the opening with the seam ripper.

⑫ Pin
⑬ Seam ripper

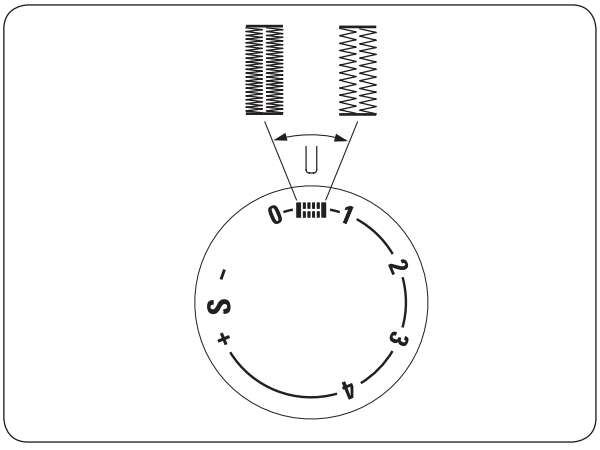
- **Repeating buttonhole sewing**

8 To repeat buttonhole sewing, turn the stitch selector to reset, then back to again, as shown.

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

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

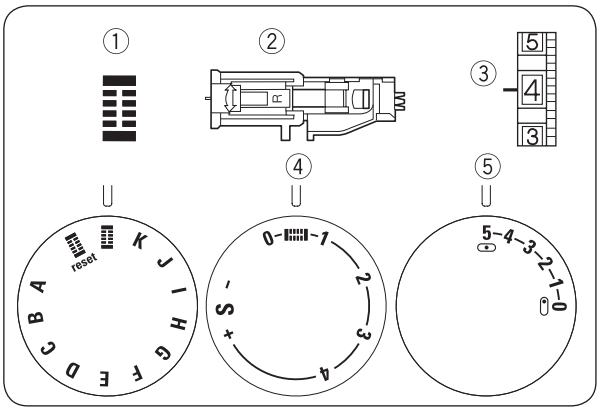
⑭ Buttonhole lever



- **Adjusting stitch density for buttonholes**

Turn the stitch length knob to the right for a coarser density.

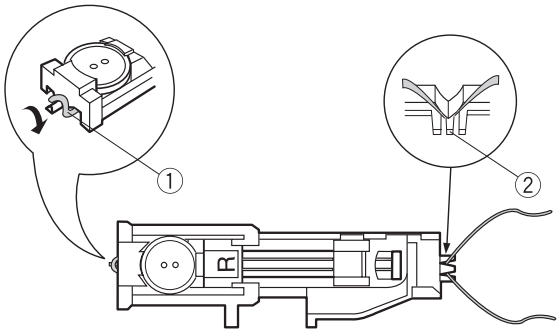
Turn the stitch length knob to the left for a tighter density.



Buttonhole with cord

① Stitch pattern:
② Presser foot: Buttonhole foot with slide
③ Thread tension: 1 – 5
④ Stitch length:
⑤ Stitch width: 5

1



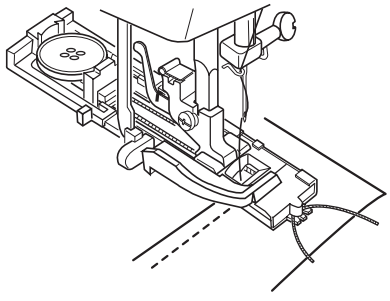
1 With the buttonhole foot with slide raised, hook the filler cord on the cord pin at the back of the buttonhole foot with slide.

Bring the ends toward you under the buttonhole foot with slide until they clear the front end.

Hook the filler cord into the slits on the front of the buttonhole foot with slide to hold them tight.

① Pin
② Slits

2

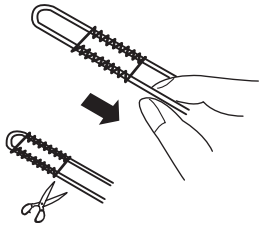


2 Lower the needle into the garment where the buttonhole will start and lower the foot. Depress the foot control gently and sew the buttonhole.

Both sides of the buttonhole and the bartacks are sewn over the filler cord.

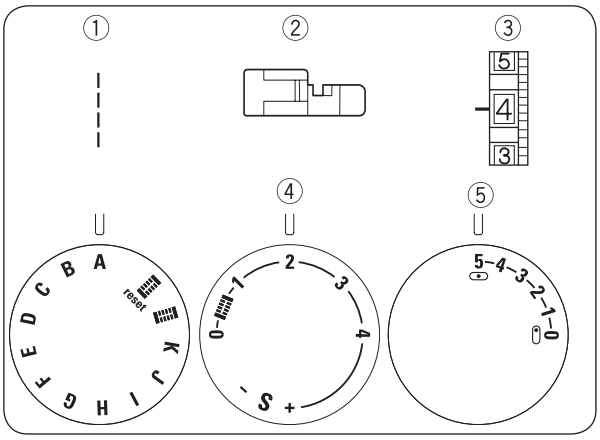
* The sewing steps are the same as the buttonhole sewing.

3



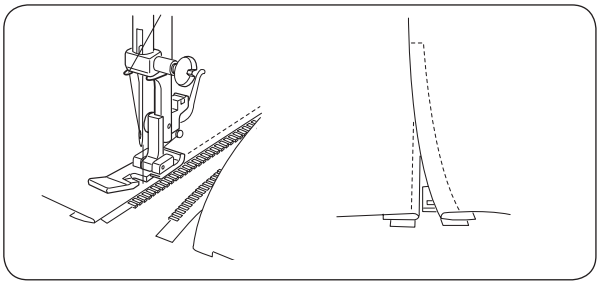
3 Remove the fabric from the machine and cut the sewing threads.

Pull the left end of the filler cord to tighten it. Thread the end through a darning needle, draw to the bottom side of the fabric and cut.



Zipper Application

① Stitch selection: A
② Presser foot: Zipper foot
③ Thread tension: 2 – 6
④ Stitch length: 1.5 – 4
⑤ Stitch width: 5

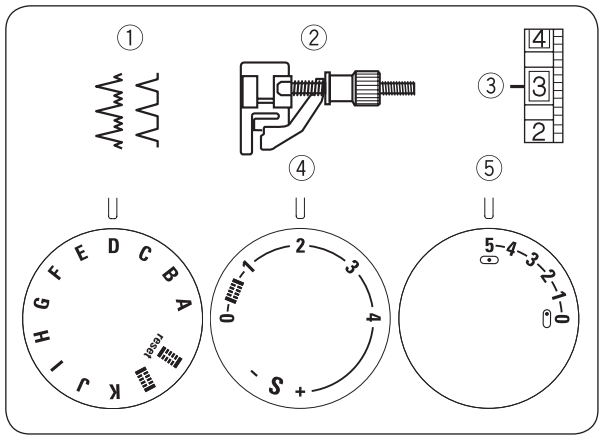


Pin or baste zipper tape to fabric and place it under the foot.

Pull the threads towards the back and lower the foot.

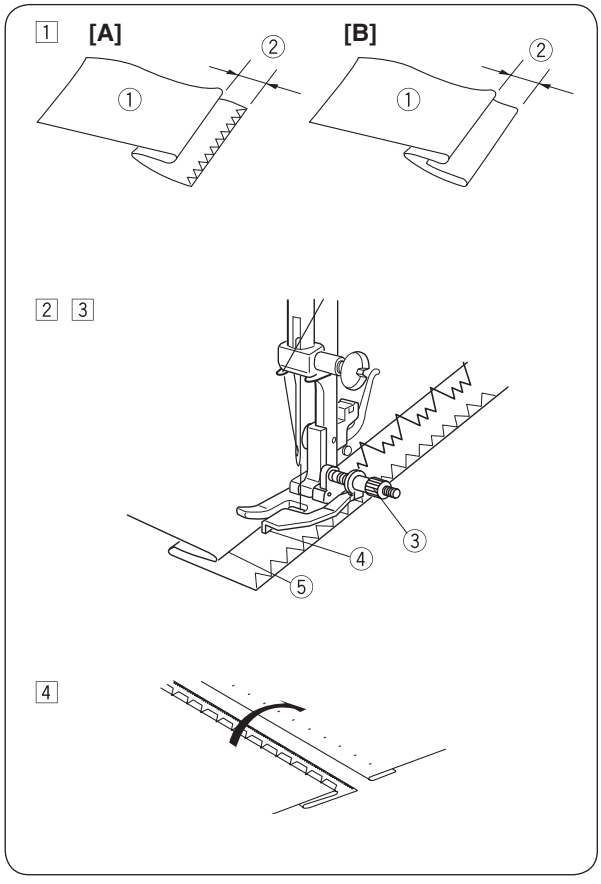
To sew the left side of the zipper, guide the zipper teeth along the edge of the foot and stitch through the garment and zipper tape.

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



Blindstitch

① Stitch selection: D or E
② Presser foot: Blindstitch foot
③ Thread tension: 2 – 4
④ Stitch length: 1 – 3
⑤ Stitch width: 5



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)
[A] Heavy weight fabrics
[B] Fine or medium weight fabrics

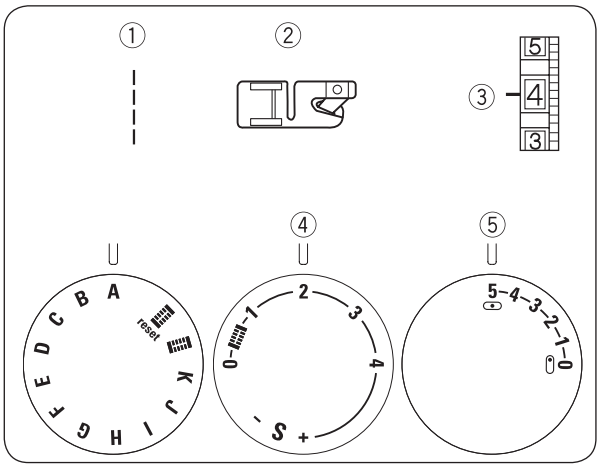
2 Position the fabric, so that the needle at its leftmost position just pierces the edge of the fold

3 Turn the guide screw to adjust the guide aligning with the folded edge.

Sew along the folded edge guiding the fabric so the needle catches the folded edge.

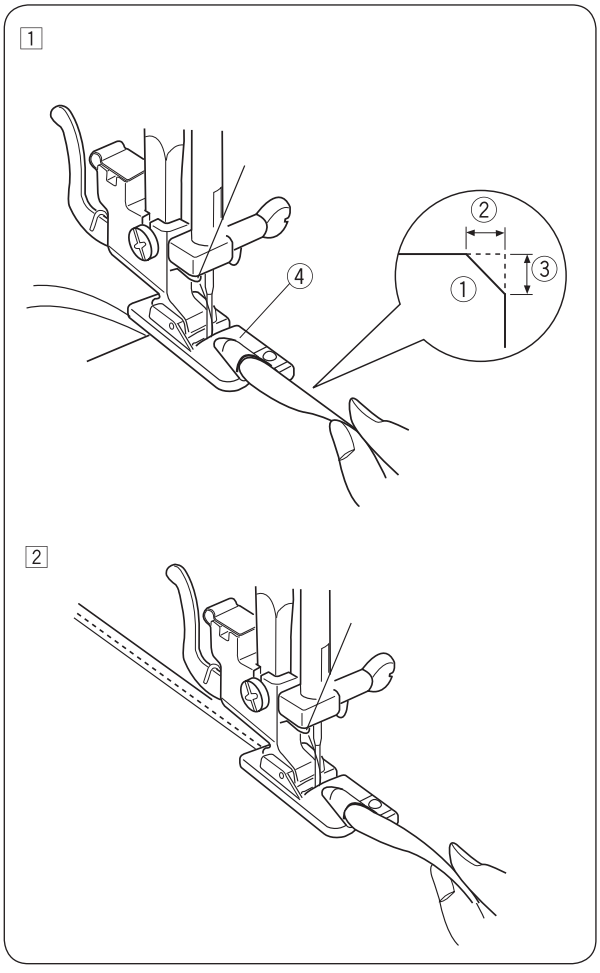
③ Guide screw
④ Guide
⑤ Folded edge

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



Rolled Hem

① Stitch selection: A
② Presser foot: Hemmer foot
③ Thread tension: 2 – 6
④ Stitch length: 2
⑤ Stitch width: 5

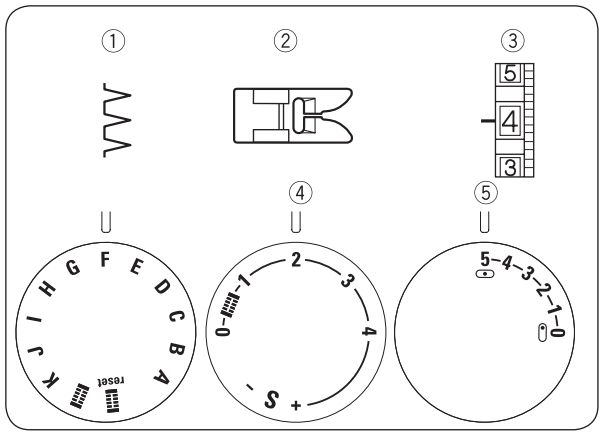


1 Trim off the corner of the fabric 0.5 cm (3/16˝) by 0.8 cm (5/16˝) to avoid a bulkiness of the hem at the corner.

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

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

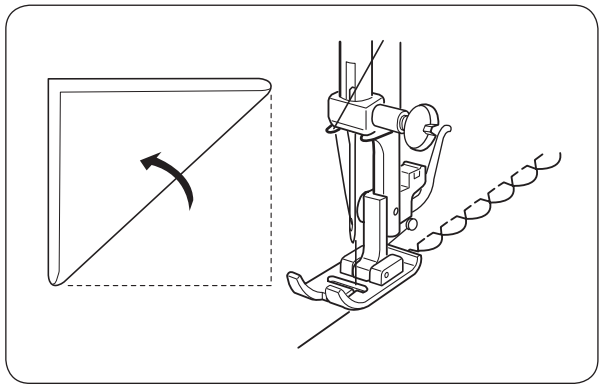
2 Place the fabric aligning the hem edge with the guide on the foot. Lower the foot and sew several stitches while pulling both threads to the back. Stop the machine with the needle in the fabric and raise the presser foot. Insert the folded portion of the fabric into the curl of the foot. Lower the foot and sew. Raise the edge in the process so that it feeds in evenly.



DECORATIVE STITCHING

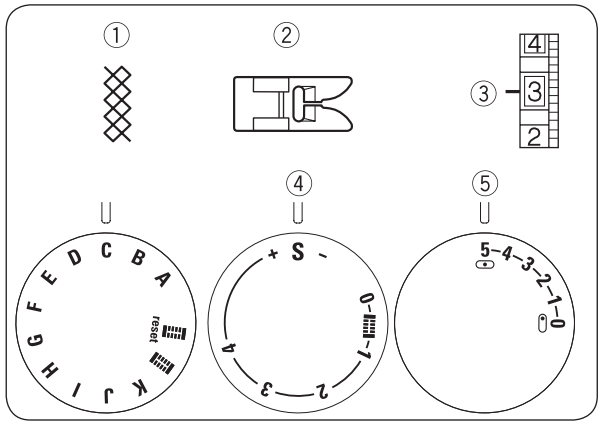
Vari-Overlock (scallop hem)

① Stitch selection: F
② Presser foot: Zigzag foot
③ Thread tension: 2 – 6
④ Stitch length: 2 – 3
⑤ Stitch width: 5



Use a lightweight fabric such as tricot. Fold the fabric and stitch on the bias. You may need to increase the needle thread tension slightly. Allow the needle to just clear the folded edge of the fabric at zigzag stitches.

When sewing Vari-Overlock stitches, the distance between the rows should be at least 5/8" (1.5 cm). The Vari-Overlock can also be sewn in any direction on knitted fabrics or fabrics with a soft and smooth texture.



Smocking

① Stitch selection: C
② Presser foot: Zigzag foot
③ Thread tension: 1 – 4
④ Stitch length: S
⑤ Stitch width: 5

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

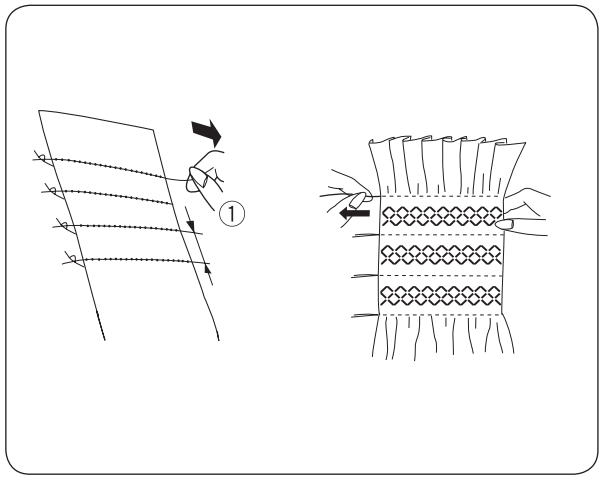
Knot the threads along one edge. Pull the bobbin threads and distribute the gathers evenly.

Secure the threads at the other end.

Sew the decorative stitch between the gathering stitches.

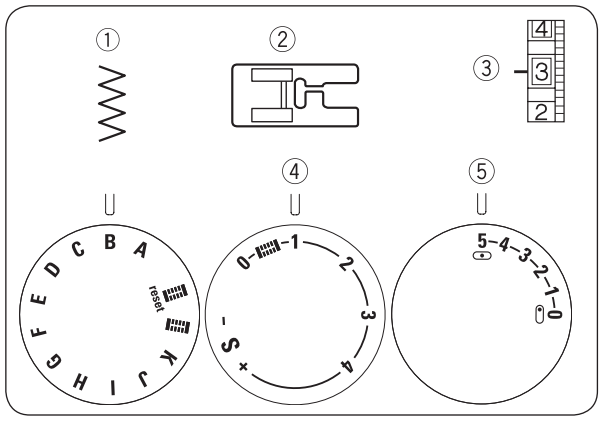
Pull out the gathering stitches.

① 3/8˝ (1 cm)



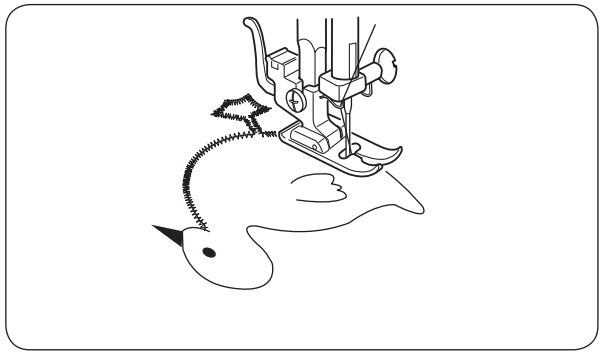
PLEASE NOTE:

A similar effect can be achieved by using an elastic thread as the bottom thread. Wind the elastic thread by hand onto the bobbin. Use a straight stitch.



Appliqué

① Stitch selection: B
② Presser foot: Satin stitch foot
③ Thread tension: 1 – 4
④ Stitch length: 0.5 – 1
⑤ Stitch width: 5

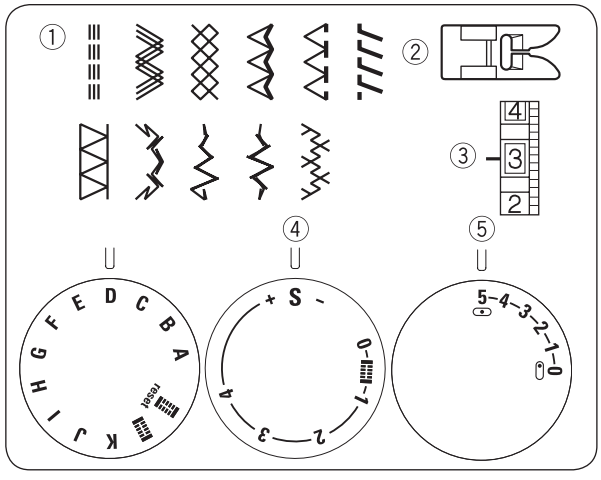


Baste (or fuse with iron-on fabric joiner) appliqué pieces on the fabric.

Sew on the appliqué, ensuring that the needle sews along the outer edge of the appliqué.

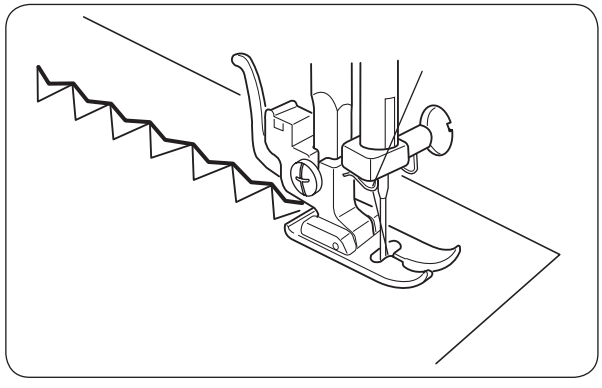
When sewing corners, lower the needle down into the fabric.

Raise the presser foot and pivot the fabric to the right or left.



Stretch Stitch Patterns

① Stitch selection: A – K
② Presser foot: Zigzag foot
③ Thread tension: 1 – 4
④ Stitch length: S
⑤ Stitch width: 5



The balance must be adjusted if the nature of the fabric prevents a uniform forward and backward feed. To do so, turn the stitch length knob as follows:

If the stitches are being condensed, turn the knob towards "+".

If the stitches are being expanded, turn the knob towards "–".

CARE OF YOUR MACHINE

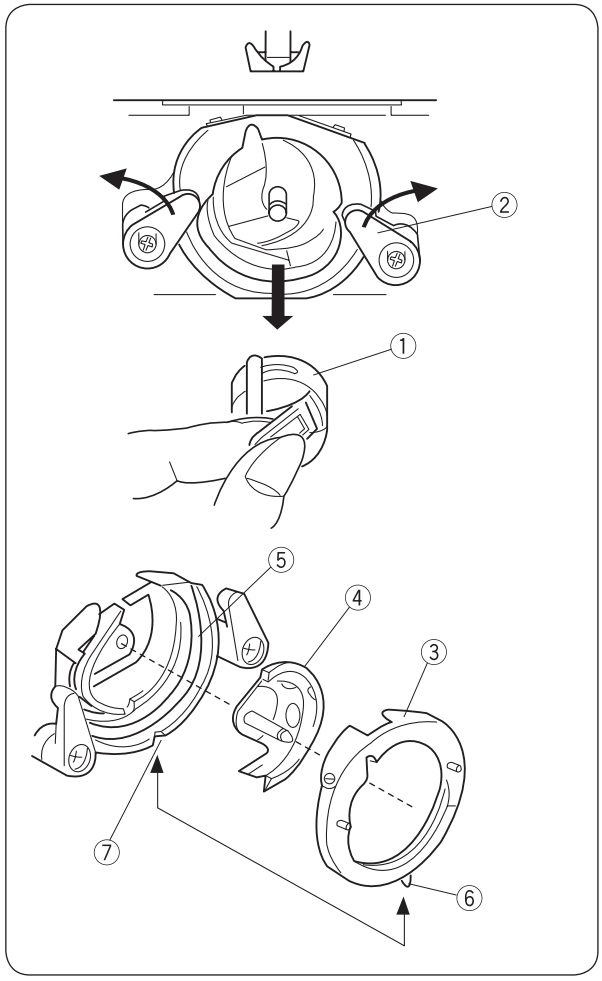
Cleaning the Bobbin Case and the Shuttle Race

⚠ WARNING:

Always switch off the power switch and/or unplug the machine from the power supply before disassembling or cleaning the machine.
The machine must only be disassembled as described in this section.

⚠ CAUTION:

Do not store the machine in a high-humidity area, near a heat radiator, or in direct sunlight.



Dismantling Shuttle Race Unit

Raise the needle to its highest position and open the bobbin cover.

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

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

Remove the shuttle.

* Clean the shuttle 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

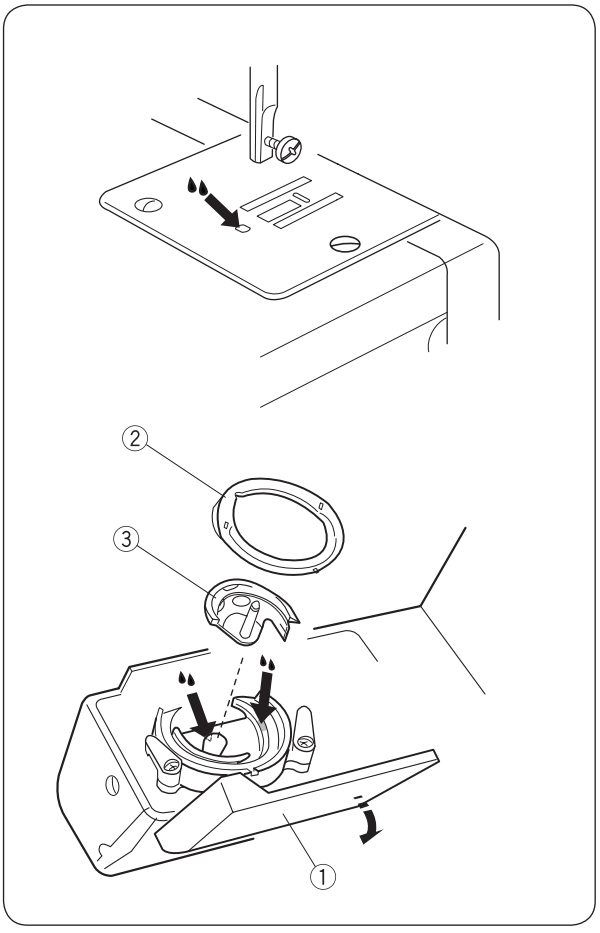
Assembling Shuttle Race Unit

Hold the shuttle 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



Oiling

WARNING:

- Always switch off the power switch and/or unplug the machine from the power supply before oiling the shuttle race unit.
- Remove the shuttle race unit as described.
- If the machine will not be used for the time being, do not apply the oil until its next use.
- Only use high-quality oil that is suitable for sewing machines.
- 1-2 drops of oil are sufficient.
- Remove any excess oil from the stitch plate as otherwise it may contaminate the fabric.

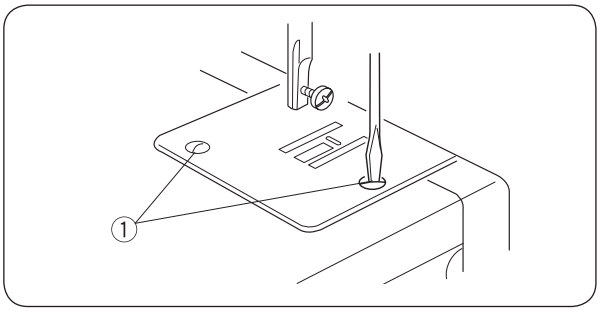
- **Oiling the shuttle race**

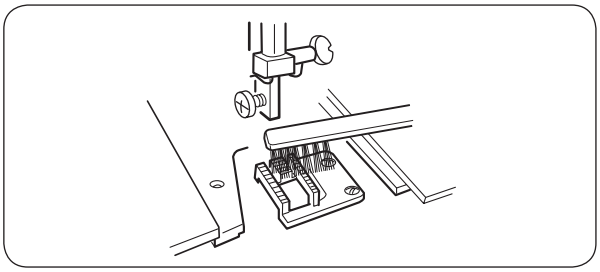
Open the shuttle cover.

Remove the shuttle race ring and the shuttle. Clean the hook area with a brush and a soft dry cloth.

Oil the indicated location.

① Shuttle cover
② Shuttle race ring
③ Shuttle





Cleaning the feed dog

CAUTION:

Always switch off the power switch and/or unplug the machine from the power supply before cleaning the feed dog.

Remove the needle and the presser foot.

Remove the stitch plate setscrew and remove the stitch plate.

① Setscrew

Remove dust and lint from the feed dog using a brush.

Reset the stitch plate.

Troubleshooting

Condition	Cause	Remedy
The needle thread breaks.	1. The needle thread is not threaded properly.	Page 14
	2. The needle thread tension is too tight.	Page 15
	3. The needle is bent or blunt.	Page 11
	4. The needle is incorrectly inserted.	Page 11
	5. The needle thread and the bobbin thread are not set properly under the presser foot at the beginning of sewing.	Page 15
	6. The fabric is not drawn to the rear when the sewing has finished.	Page 18
	7. The thread is either too heavy or too fine for the needle.	Page 11
The bobbin thread breaks.	1. The bobbin thread is not threaded properly in the bobbin case and shuttle.	Page 13
	2. Lint has collected in the shuttle area.	Page 31
	3. The bobbin is damaged and does not turn smoothly.	Replace the bobbin
The needle breaks.	1. The needle is incorrectly inserted.	Page 11
	2. The needle is bent or blunt.	Page 11
	3. The needle clamp screw is loose.	Page 11
	4. The needle thread tension is too tight.	Page 15
	5. The fabric is not drawn to the rear when the sewing has finished.	Page 18
	6. The needle is too fine for the fabric being sewn.	Page 11
Skipped stitches.	1. The needle is incorrectly inserted.	Page 11
	2. The needle is bent or blunt.	Page 11
	3. The needle and/or threads are not suitable for the work being sewn.	Page 11
	4. A blue shank needle is not being used for sewing stretch, very fine fabrics and synthetics.	Page 11
	5. The needle thread is not threaded properly.	Page 14
	6. The wrong needle is being used.	Change the needle
Seam puckering	1. The needle thread tension is too tight.	Page 15
	2. The needle thread is not threaded properly.	Page 14
	3. The needle is too heavy for the fabric being sewn.	Page 11
	4. The stitch length is too long for the fabric.	Make the stitch shorter
The fabric is not feeding smoothly.	1. Accumulation of lint on the feed dog.	Page 31
	2. The stitches are too fine.	Make the stitch longer
The machine does not work.	1. The machine is not plugged in.	Page 9
	2. A thread is jammed in the shuttle race.	Page 31
	3. The clutch is disengaged. The handwheel is pulled out.	Page 13
Noisy operation	1. A thread is jammed in the shuttle race.	Page 31
	2. Lint has built up in the shuttle or the shuttle race.	Page 31

Stitch pattern		Stitch	Presser foot	Stitch length	Stitch width	Thread tension	Description
		One-step button-hole	Buttonhole slide	0.5 - 1.0	5	1-5	Standard button hole
A		Straight stitch	Zigzag foot	1.5 - 4.0		2-6	Sewing together, top-stitching and sewing in zippers. Can also be used as a basted seam. A stitch length of approx. 1/10" (2.5 mm) is ideal for normal seams, while the length should be longer for basted seams or on firmer fabrics such as jeans.
B		Zigzag	Zigzag foot	0.5 - 4.0	2-5	2-6	Overcasting edges, sewing on bands, appliqué, sewing on buttons and securing lace inserts. Reduce the stitch length to roughly 1/50" (0.5 mm) for sewing appliqué.
C		3-step zigzag	Zigzag foot	0.5 - 4.0	5	1-4	Overcasting and reinforcing fabric edges, sewing on elastic bands, decorative seams, darning tears and patching work.
D		Elastic blindstitch	Blindstitch foot	1.0 - 3.0	5	2-4	For an invisible hem fastening with simultaneous edge over-casting on elastic fabrics.
E		Blindstitch	Blindstitch foot	1.0 - 3.0	5*	1-3	For an invisible hem fastening on woven fabrics.
F		Vari-Overlock	Zigzag foot	2.0 - 3.0	5	2-6	Overcasting double-knitted fabrics like tricot, jersey or other lightweight fabrics on edges to create shell edging. Embellish-ing any sewing projects.
G		Universal stitch	Zigzag foot	1.5 - 3.0	5	6-8	Flat joining seams, visible hems, sewing on elastic bands and decorative seams.
H		Satin stitch	Satin foot	0.5 - 1	5	3	Decorative stitch
I		Satin stitch	Satin foot	0.5 - 1	5	3	Decorative stitch
J		Satin stitch	Satin foot	0.5 - 1	5	3	Decorative stitch
K		Decorative stitch	Satin foot	0.5 - 1	5	3	Decorative stitch

Stitch pattern		Stitch	Presser foot	Stitch length	Stitch width	Thread tension	Description
A		Triple straight stitch	Zigzag foot	S	–	2-6	For hard-wearing seams in firm fabrics, visible hems and visible seams.
B		Triple zigzag	Zigzag foot	S	2-5	2-6	Elastic stitch for decorative hem ends and quilting seams.
C		Honeycomb stitch	Zigzag foot	S	5	1-4	Elastic, decorative stitch for decorative seams on flexible materials and for sewing on elastic thread and bands.
D		Florentine stitch	Zigzag foot	S	5	1-4	Decorative elastic stitch. For decorating knitted or woven fabrics. Also ideal for crazy quilting.
E		Reinforced overlock	Zigzag foot	S	5*	1-4	For sewing together and overcasting elastic fabrics in a single operation. Also for decorating items of clothing, household textiles and handicrafts.
F		Stretch overlock	Zigzag foot	S	5	1-4	Sewing together and simultaneously overcasting elastic fabrics.
G		Double overlock	Zigzag foot	S	5	1-4	Sewing together and simultaneously overcasting elastic fabrics.
H		Decorative stitch	Satin foot	S	5	3	Decorative stitch
I		Decorative stitch	Satin foot	S	5	3	Decorative stitch
J		Decorative stitch	Satin foot	S	5	3	Decorative stitch
K		Cross stitch	Satin foot	S	5	3	Decorative cross stitch

* Stitch width max. 2 mm

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