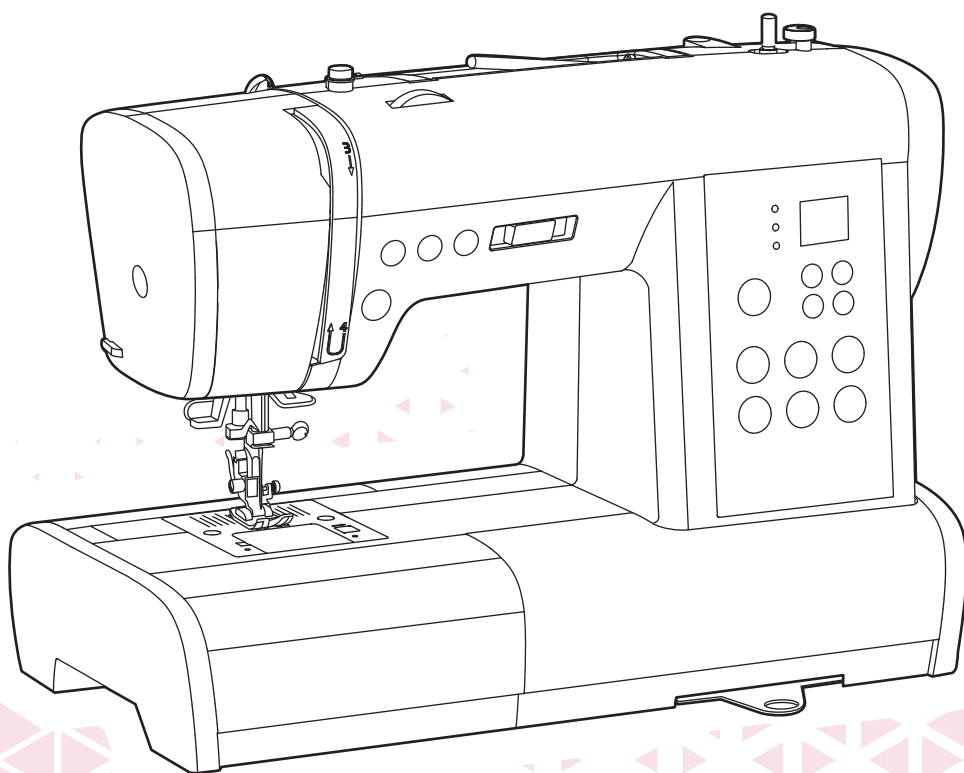




# ***Instruction Manual***



# Important safety instructions

## **DANGER - To reduce the risk of electric shock:**

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

Read all instructions before using this sewing machine.

1. An appliance should never be left unattended when plugged in.
2. Always unplug this appliance from the electric outlet immediately after using and before cleaning.

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

1. Read the instruction carefully before you use the machine
2. Keep the instructions at a suitable place close to the machine and hand it over if you give the machine to a third party.
3. Use the machine only in dry locations.
4. Never leave the machine unattended with children or elderly people due to they may not be able to estimate the risk.
5. This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
6. Children shall not play with the appliance.
7. Cleaning and user maintenance shall not be made by children without supervision.
8. Always switch off the machine if you carry out preparation for work (change the needle, feed the yarn through the machine, change the footer, etc.).
9. Always unplug the machine if you leave it unattended, to avoid injury by expediently switch on the machine.
10. Always unplug the machine if you changing the lamp or carry out maintenance (oiling, cleaning).
11. Don't use the machine if it's wet or in humid environment.
12. Never pull at the cord, always unplug the machine by gripping the plug.
13. If the LED lamp is damaged or broken, it must be replaced by the manufacturer or its service agent or a similarly qualified person, in order to avoid a hazard.

14. Never place anything on the pedal.
15. Never use the machine if the air vents are blocked, keep the air vents of the machine and the foot pedal free from dust, fusel and leftovers.
16. The machine may only be used with foot pedal type C-8001.
17. The sound pressure level at normal operation is smaller than 75dB(A).
18. Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities.
19. Contact your local government for information regarding the collection systems available.
20. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.
21. When replacing old appliances with new ones, the retailer is legally obligated to take back your old appliance for disposal at least for free of charge.
22. The appliance is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction. (For outside Europe)
23. Children being supervised not to play with the appliance. (For outside Europe)

## **SAVE THESE INSTRUCTIONS**

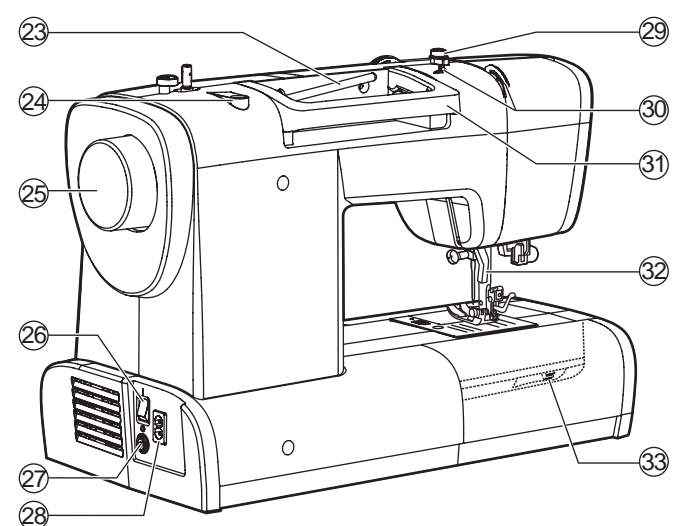
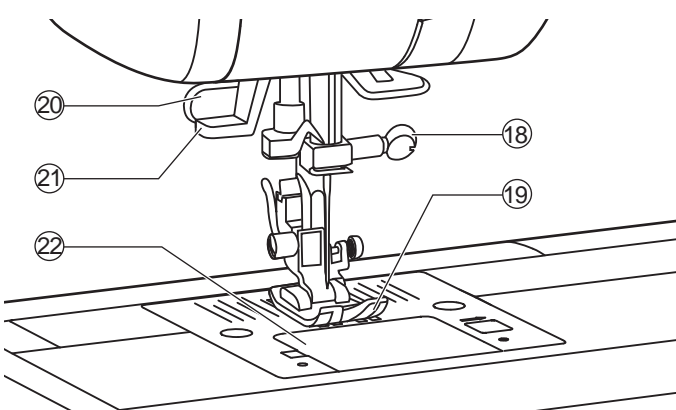
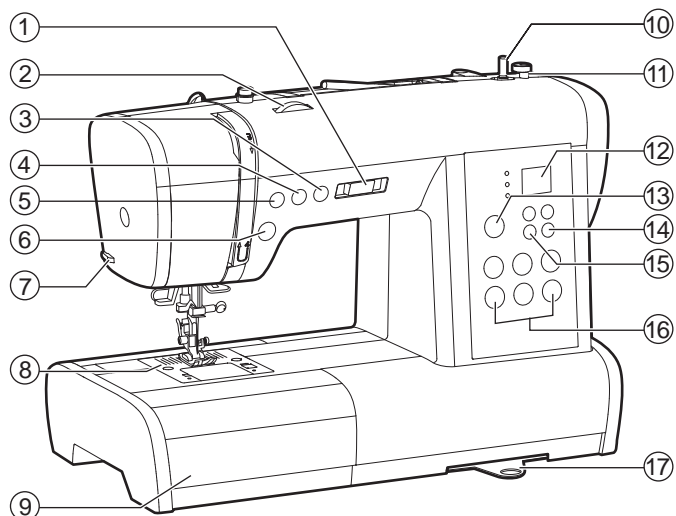
This sewing machine is intended for household use only.

# Contents

<b>Principal parts of the machine</b> .....	<b>1</b>
<b>Accessories</b> .....	<b>2</b>
Standard .....	2
Optional .....	2
<b>Connecting machine to power source</b> .....	<b>3</b>
Polarized plug information.....	3
Foot Control.....	3
<b>Sewing table</b> .....	<b>4</b>
Free arm .....	4
<b>Winding the bobbin</b> .....	<b>5</b>
<b>Inserting the bobbin</b> .....	<b>7</b>
<b>Threading the upper thread</b> .....	<b>8</b>
<b>Using the needle threader</b> .....	<b>10</b>
<b>Replacing the needle</b> .....	<b>11</b>
<b>Matching needle/ fabric/ thread</b> .....	<b>12</b>
<b>Two-step presser foot lifter</b> .....	<b>13</b>
<b>Changing the presser foot</b> .....	<b>14</b>
Removing the presser foot .....	14
Attaching the presser foot .....	14
Removing and inserting the presser foot holder .....	14
Inserting the edge/ quilting guide.....	14
<b>To raise or drop the feed dog</b> .....	<b>15</b>
<b>Thread tension</b> .....	<b>16</b>
<b>Buttons of the machine</b> .....	<b>18</b>
<b>Operation buttons</b> .....	<b>19</b>
<b>Stitch chart</b> .....	<b>23</b>
<b>Useful skills</b> .....	<b>25</b>
Sewing corners.....	25
Sewing curves .....	25
Sewing thin fabrics .....	26
Sewing heavy fabric .....	26
Sewing stretch fabrics .....	27
Cutting the thread.....	27
Installing the extension table.....	27
<b>Straight stitch</b> .....	<b>28</b>
<b>Changing the needle position</b> .....	<b>29</b>
<b>Zigzag stitch</b> .....	<b>30</b>
<b>Stretch stitch</b> .....	<b>31</b>
Straight Stretch Stitch .....	31
Zigzag Stretch Stitch .....	31
<b>Sewing stretch fabrics and elastic tape</b> .....	<b>32</b>
<b>Overcasting stitch</b> .....	<b>33</b>
Using the overcasting foot.....	33
Using the all purpose foot .....	33
<b>Blind Hem</b> .....	<b>34</b>
<b>Buttonhole stitch</b> .....	<b>35</b>
Making a buttonhole on stretch fabrics .....	38
<b>Bar tack stitch</b> .....	<b>39</b>
<b>Button sewing</b> .....	<b>40</b>

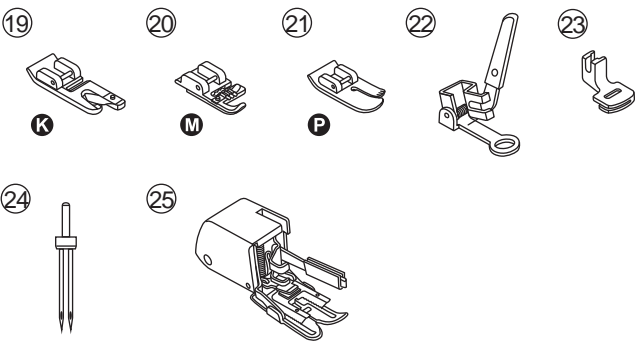
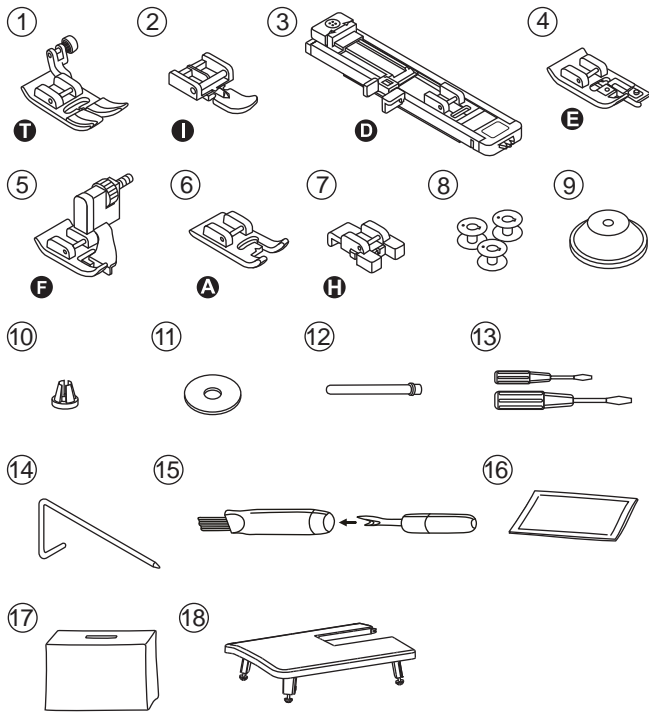
<b>Zipper insertion</b> .....	<b>41</b>
Inserting a centered zipper .....	41
Inserting a side zipper .....	42
<b>Satin stitch sewing</b> .....	<b>43</b>
<b>Gathering</b> .....	<b>44</b>
<b>Smocking</b> .....	<b>45</b>
<b>Free motion darning, embroidery and monogramming</b> .....	<b>46</b>
Preparation for embroidering and monogramming .....	46
Darning .....	47
Embroidery .....	47
Monogramming .....	48
<b>Quilting</b> .....	<b>49</b>
Using the edge/ quilting guide.....	49
Joining the pieces of the fabric .....	50
Patchwork stitching .....	50
<b>Applique</b> .....	<b>51</b>
<b>Fagoting</b> .....	<b>52</b>
<b>Scallop stitch</b> .....	<b>53</b>
Scallop hem.....	53
Scallop edging.....	53
<b>Maintenance</b> .....	<b>54</b>
Cleaning the hook .....	54
Cleaning the sewing machine surface .....	54
<b>Trouble shooting guide</b> .....	<b>55</b>

# Principal parts of the machine



1. Speed limiting adjustment lever
2. Tension dial
3. Needle up/ down position button
4. Auto-lock button
5. Reverse button
6. Start/stop button
7. Thread cutter
8. Needle plate
9. Sewing table and accessory box
10. Bobbin winder spindle
11. Bobbin winder stopper
12. Number display
13. Mode selection button
14. Stitch width adjustment buttons
15. Stitch length adjustment buttons
16. Direct stitch selection buttons
17. Stitch pattern plate
18. Needle clamp screw
19. Presser foot
20. Buttonhole lever
21. Needle threader
22. Bobbin cover plate
23. Horizontal spool pin
24. Hole for second spool pin
25. Handwheel
26. Main power switch
27. Foot controller connector
28. Power cord
29. Bobbin thread guide
30. Upper thread guide
31. Handle
32. Presser foot lifter
33. Drop feed lever

# Accessories



## ❖ Standard

1. All purpose foot
2. Zipper foot
3. Buttonhole foot
4. Overcasting foot
5. Blind hem foot
6. Satin stitch foot
7. Button sewing foot
8. Bobbin (3x)
9. Spool holder (Large)
10. Spool holder (Small)
11. Spool pin felt
12. Second spool pin
13. Screwdriver (L & S)
14. Edge/ quilting guide
15. Seam ripper/ brush
16. Pack of needles
17. Soft cover
18. Extension table

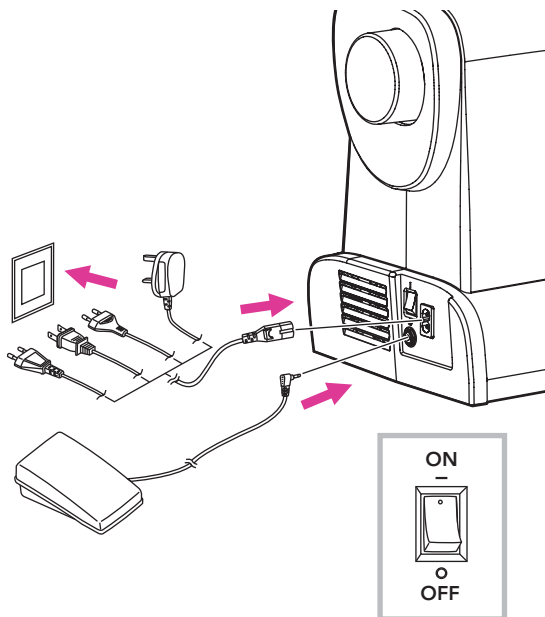
## ❖ Optional

19. Hemmer foot
20. Cording foot
21. Quilting foot
22. Darning/ Embroidery foot
23. Gathering foot
24. Twin needle
25. Walking foot

## ➔ Note :

- Accessories are stored inside the accessory box.
- Optional accessories are not supplied with this machine; they are however available as special accessories from your local dealer.

# Connecting machine to power source



## ⚠ Attention:

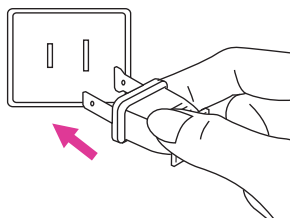
Always make sure that the machine is unplugged from power source and the main switch is on ("O") when the machine is not in use and before inserting or removing parts.

Before connecting the power supply, make sure that the voltage and frequency shown on the rating plate is conforming with your mains power.

Place the machine on a stable table.

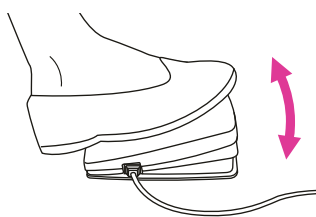
1. Connect the machine to a power source as illustrated.
2. Turn on the power switch.

The sewing lamp will light up when the switch is turned on.



## ❖ Polarized plug information

This appliance has a polarized plug (one blade wider than the other), to reduce the risk of electrical shock; this plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not modify the plug in any way.



## ❖ Foot Control

With the sewing machine turned off, insert the foot control plug into its connector on the sewing machine.

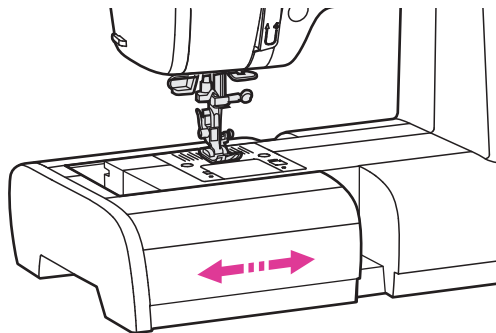
Turn on the sewing machine, and then slowly depress the foot control to start sewing. Release the foot control to stop the sewing machine.

When machine powers on and is in still, users can quickly kick one step on the foot controller to change the needle position (up or down). This action will also automatically set the needle position when you finish sewing projects.

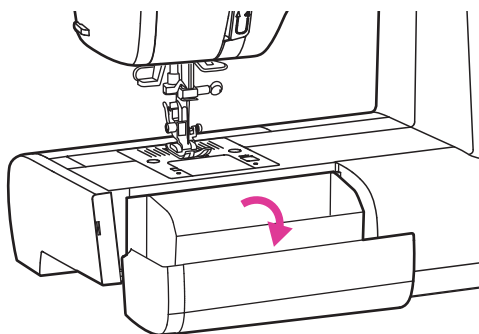
## ➔ Note:

Consult a qualified electrician if in doubt as to connect the machine to the power source.

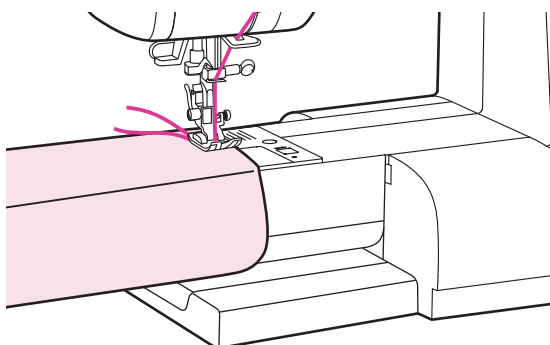
# Sewing table



Keep the sewing table horizontal, and pull it in the direction of the arrow.



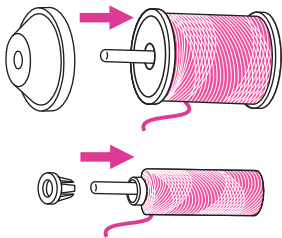
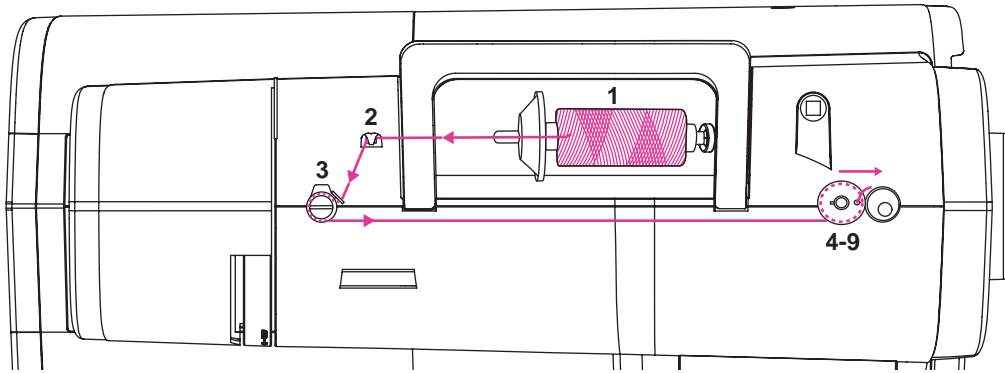
The inside of the sewing table is used as an accessory box.



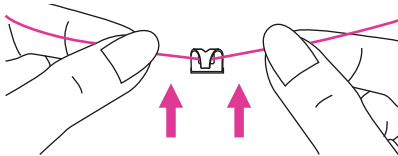
## ❖ Free arm

Free-arm sewing is convenient for sewing tubular areas such as pant hems and cuffs.

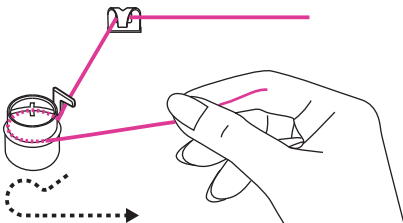
# Winding the bobbin



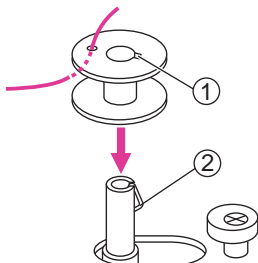
1. Place the thread and spool holder onto the spool pin. For smaller spools of thread, place the spool holder with the small side next to the spool or use the small spool holder.



2. Draw the thread from the spool through the upper thread guide.



3. Wind the thread counter-clockwise around the bobbin winder tension discs.

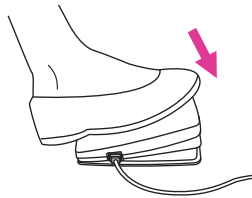
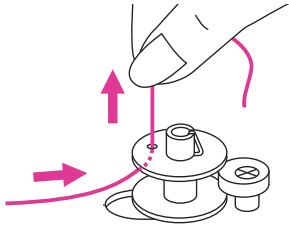


4. Place the thread end through one of the inner holes as illustrated and place the empty bobbin on the spindle.

- ① Notch
- ② Bobbin winder shaft spring

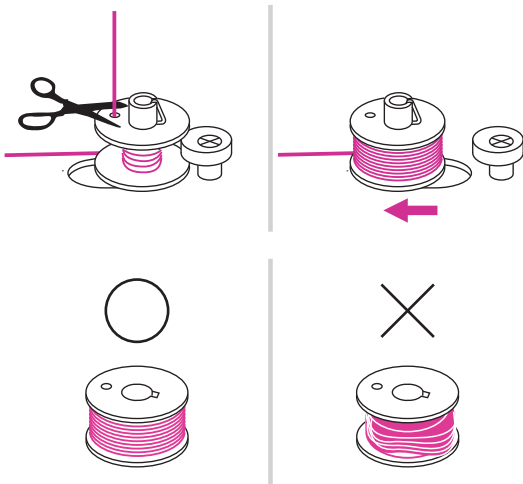


5. Push the bobbin to the right. When the bobbin winder shaft is pushed to the right, the number display will show "SP".



6. Hold the thread tail securely in one hand.

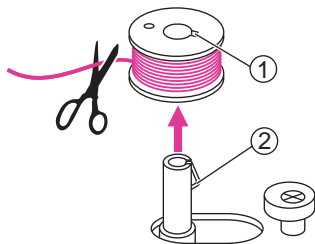
7. Press on the foot control to start winding the bobbin.



8. After the bobbin has wound a few turns stop the machine and cut the thread near the hole of the bobbin. Continue filling the bobbin until it is full. Once the spool is full, it rotates slowly. Release the pedal or stop the machine. Push the bobbin winder spindle to the left.

**Note:**

Use a bobbin that has been correctly wound with thread, otherwise the needle may break or the thread tension will be incorrect.

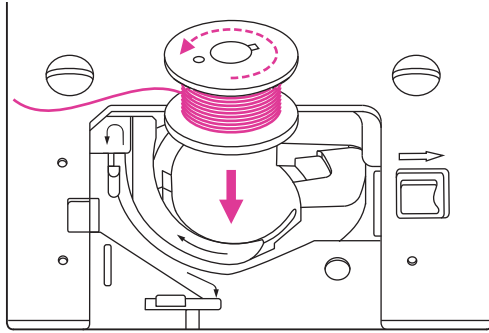


9. Cut the thread and then remove the bobbin.

**Note:**

When the bobbin winder spindle is placed on the right, "bobbin winding position", the machine will not sew and the handwheel will not turn. To start sewing, push the bobbin winder spindle to the left "sewing position".

# Inserting the bobbin



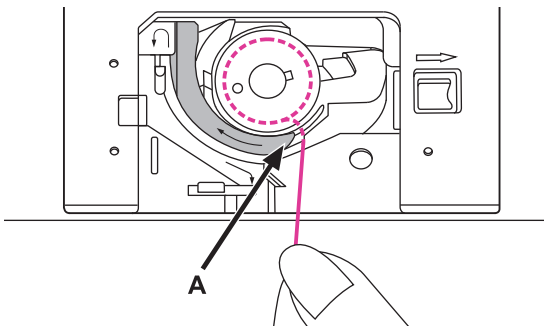
## ⚠ Attention:

Turn the power switch to off ("O") before inserting or removing the bobbin.

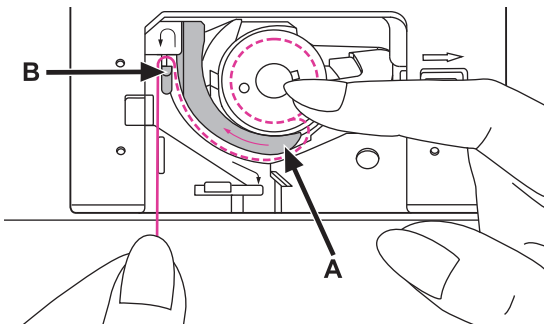
When inserting or removing the bobbin, the needle must be fully raised.

Open the needle plate cover.

Insert the bobbin in the bobbin case with the thread running in a counterclockwise direction (arrow).

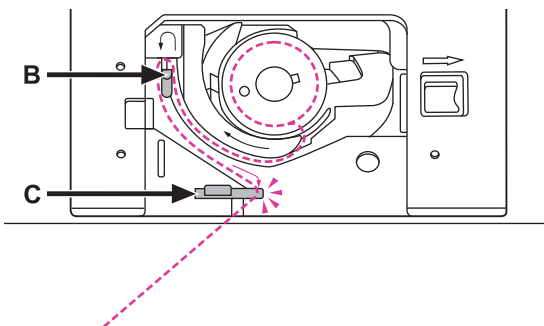


Pull the thread through the slit (A).



Held gently on top of the bobbin with a finger.

Draw the thread at the arrow markings into the stitch plate thread guide from (A) to (B).

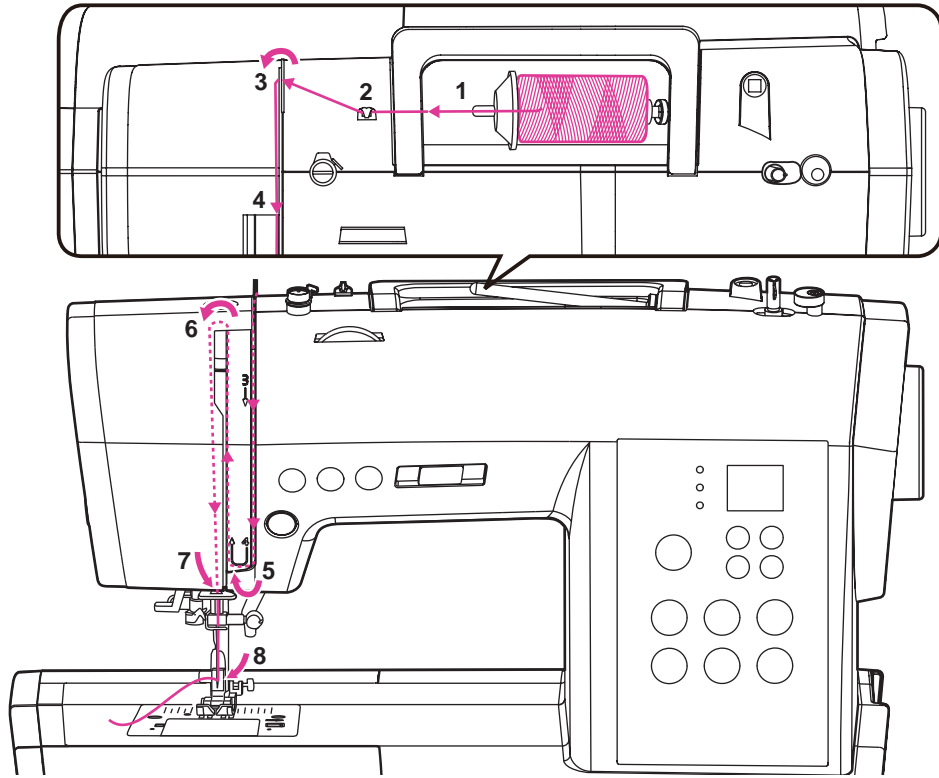


Pull the thread at the arrow markings into the stitch plate thread guide from (B) to (C).

To cut off excess thread pull thread back over the cutting off blade at point (C).

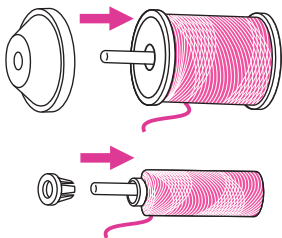
Close the needle plate cover.

# Threading the upper thread

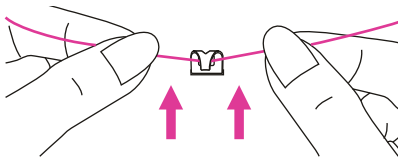


## Note:

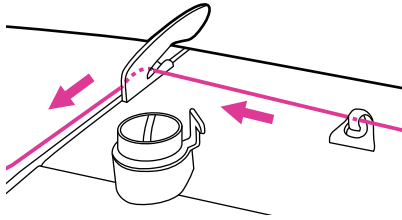
It is important to carry out the threading correctly otherwise sewing problems may result.



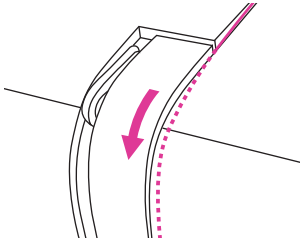
1. Place the thread and spool holder onto the spool pin. For smaller spools of thread, place the spool holder with the small side next to the spool or use the small spool holder.



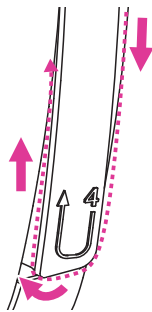
2. Draw the thread from the spool through the upper thread guide.



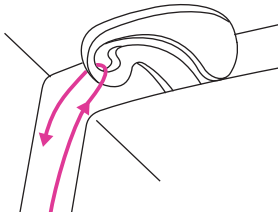
3. Guide the thread around the thread guide pulling the thread through the pre-tension spring as illustrated.



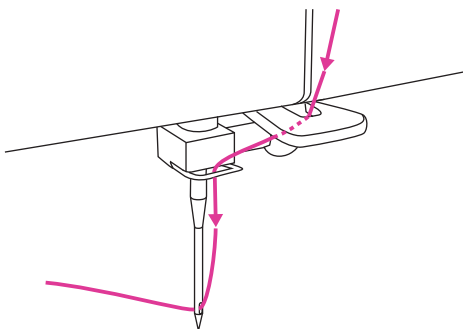
4. Thread the tension module by passing the thread between the silver discs.



5. Then, down and around the check spring holder.

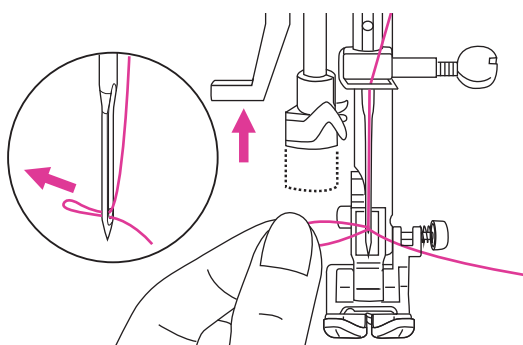
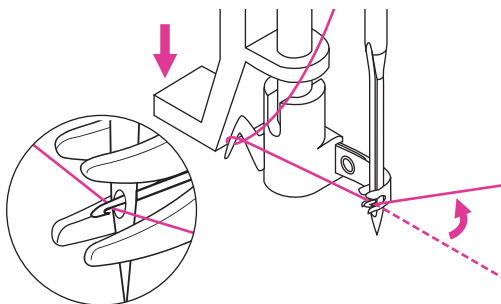
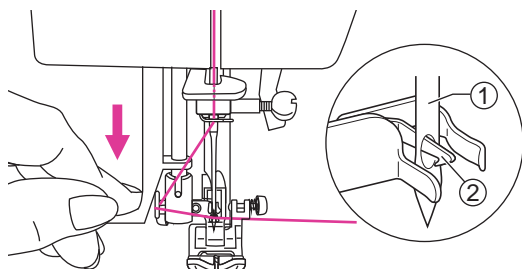
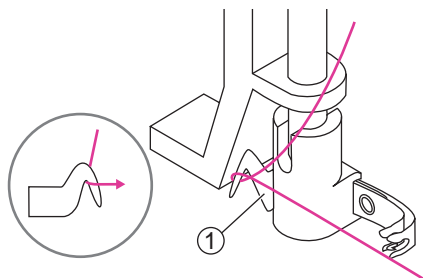


6. At the top of this movement pass the thread from right to left through the slotted eye of the take-up lever and then downwards again.



7. Now pass the thread behind the thin wire needle clamp guide.
8. Pull the end of the thread through the needle from front to rear and pull out about 10 cm of thread. Use the needle threader to thread the needle.

# Using the needle threader



## ⚠ Attention:

Turn the power switch to the off position ("O").

Raise the needle to its highest position and lower the presser foot.

Pass the thread around the thread guide.

① Thread guide

Press the lever down as far as it goes.

The needle threader turns automatically to the threading position and the hook pin passes through the needle eye.

① Needle

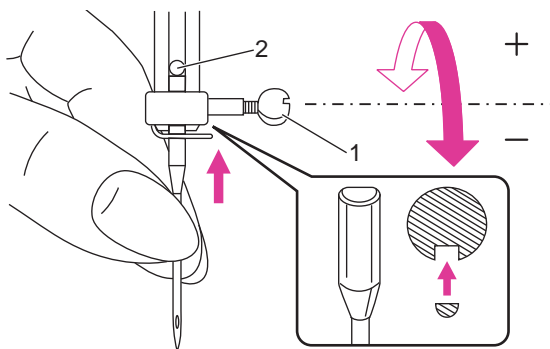
② Hook

Take the thread in front of the needle.

Hold the thread loosely and release the lever slowly. The hook turns and passes the thread through the needle eye forming a loop.

Pull the thread through the needle eye.

# Replacing the needle



## ⚠ Attention:

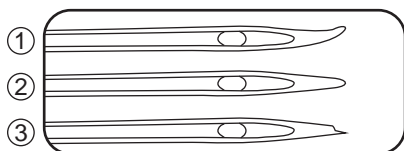
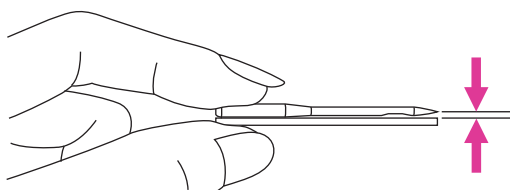
Turn the power switch to off ("O") when carrying out any of the above operations!

Change the needle regularly, especially when it shows signs of wear or if it causes problems.

Insert the needle following the illustrated instructions.

1. Turn the handwheel towards you (counterclockwise) lowering, then raising the needle. Turn the needle clamp screw counterclockwise to remove the needle. The flat side of the shaft should be positioned towards the back.
2. Insert the needle up as far as it goes. Then tighten the needle clamp.

Needles must be in perfect condition.



Problems can occur with:

- ① Bent needles
- ② Blunt needles
- ③ Damaged points

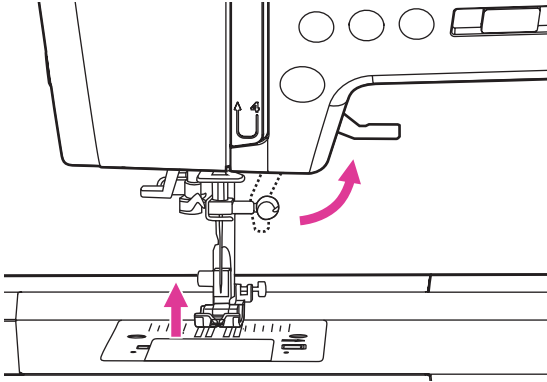
# Matching needle/ fabric/ thread

NEEDLE SIZE	FABRICS	THREAD
9-11 (70-80)	Lightweight fabrics-thin cottons, voile, serge, silk, muslin, Qiana, interlocks, cotton knits, tricot, jerseys, crepes, woven polyester, shirt & blouse fabrics.	Light-duty thread in cotton, nylon, polyester or cotton wrapped polyester.
11-14 (80-90)	Medium weight fabrics-cotton, satin, kettlecloth, sailcloth, double knits, lightweight woollens.	Most threads sold are medium size and suitable for these fabrics and needle sizes.  Use polyester threads on synthetic materials and cotton on natural woven fabrics for best results.  Always use the same thread on top and bottom.
14 (90)	Medium weight fabrics-cotton duck, woolen, heavier knits, terrycloth, denims.	
16 (100)	Heavyweight fabrics-canvas, woollens, outdoor tent and quilted fabrics, denims, upholstery material (light to medium).	
18 (110)	Heavy woollens, overcoat fabrics, upholstery fabrics, some leathers and vinyls.	Heavy duty thread, carpet thread.

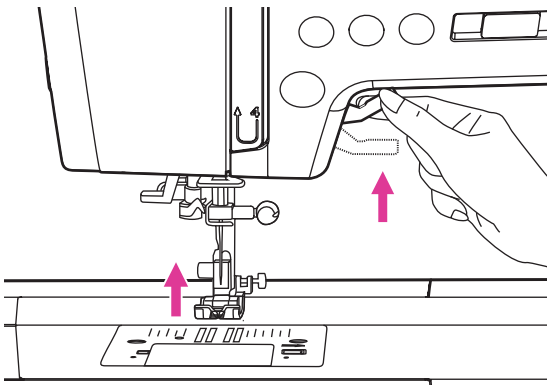
## Note:

- In general, fine threads and needles are used for sewing fine fabrics, and thicker threads and needles are used for sewing heavy fabrics.
- Always test the thread and the needle size on a small piece of fabric which will be used for actual sewing.
- Use the same thread for needle and bobbin.
- Use a backing for fine or stretchy fabrics.

# Two-step presser foot lifter



The presser foot lifter raises and lowers your presser foot.



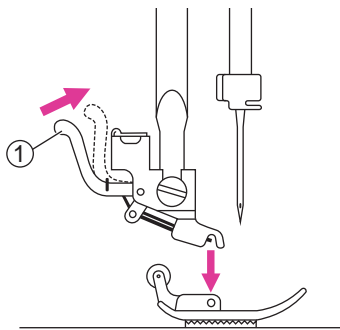
When sewing several layers or thick fabrics, the presser foot can be raised a second stage for easy positioning of the work.

**Note:**

The needle must always be at the highest position.

---

# Changing the presser foot



## ⚠ Attention:

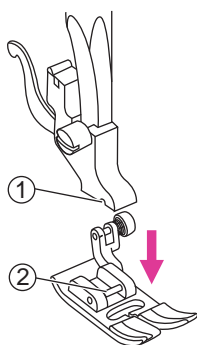
Turn the power switch to off ("O") when carrying out any of the below operations!

### ❖ Removing the presser foot

Raise the presser foot.

Press the lever and the foot disengages.

① Lever



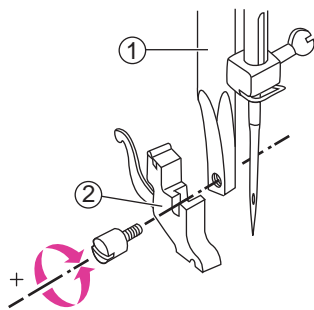
### ❖ Attaching the presser foot

Lower the presser foot holder until the cut-out is directly above the pin.

The presser foot engages automatically.

① Cut-out

② Pin

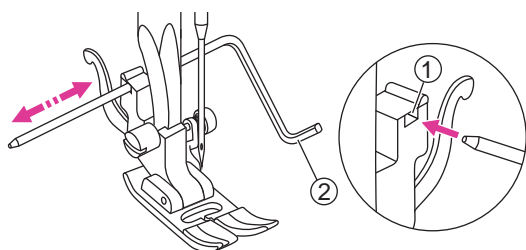


### ❖ Removing and inserting the presser foot holder

Raise the presser foot bar. Align the presser foot holder with the lower left side of the presser bar. Hold the presser foot holder, then tighten the screw using the screwdriver.

① Presser foot bar

② Presser foot holder



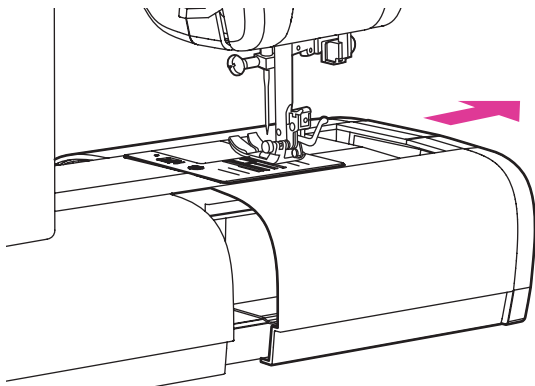
### ❖ Inserting the edge/ quilting guide

Insert the edge/ quilting guide in the slot as illustrated. Adjust according to need for hems, pleats, etc.

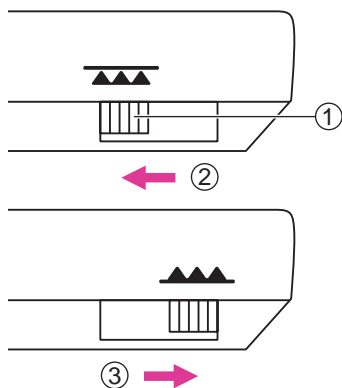
① Slot

② Edge/ quilting guide

# To raise or drop the feed dog



The feed dog adjustment lever can be seen on the base at the rear side of the sewing machine.



Move the drop feed lever to lower or raise the feed dogs. The feed dogs are raised automatically when you start sewing.

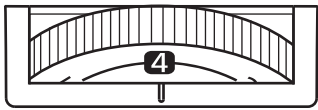
- ① Drop feed lever
- ② Lowered position
- ③ Raised position

## ➔ Note:

When you finish the work, (ex. button sewing, free motion darning, embroidery and monogramming) move the drop feed control to raise the feed dogs.

---

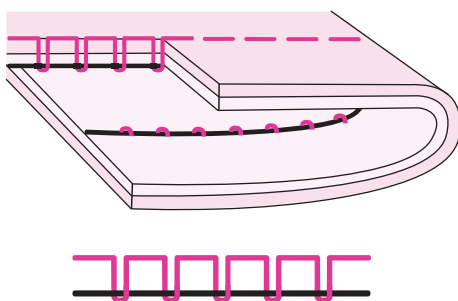
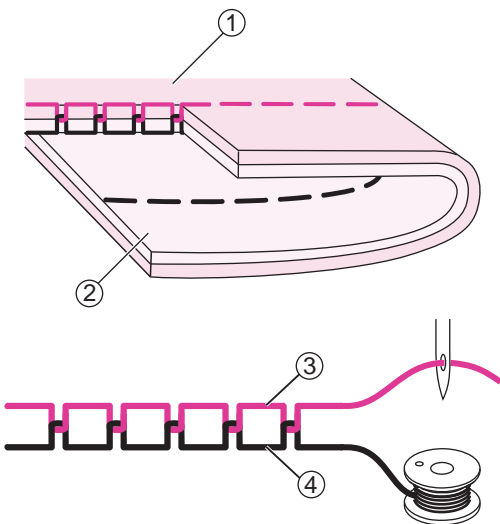
# Thread tension



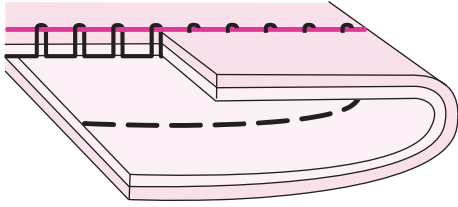
- Basic thread tension setting: "4"
- To increase the tension, turn the dial up to the next number. To reduce the tension, turn the dial down to the next number.
- Proper setting of tension is important for good sewing.
- For all decorative sewing you will always obtain a nicer stitch and less fabric puckering when the upper thread appears on the bottom side of your fabric.
- There is no single tension setting appropriate for all the stitch functions and fabrics.

Normal thread tension for straight stitch sewing.

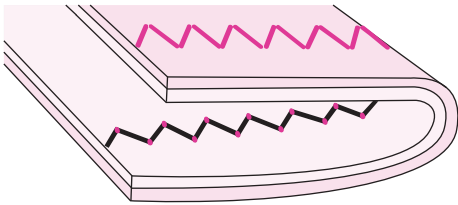
- ① Surface
- ② Reverse side
- ③ Upper thread
- ④ Bobbin thread



Thread tension is too loose for straight stitch sewing. Turn the dial to the higher number.



Thread tension is too tight for straight stitch sewing. Turn the dial to the lower number.

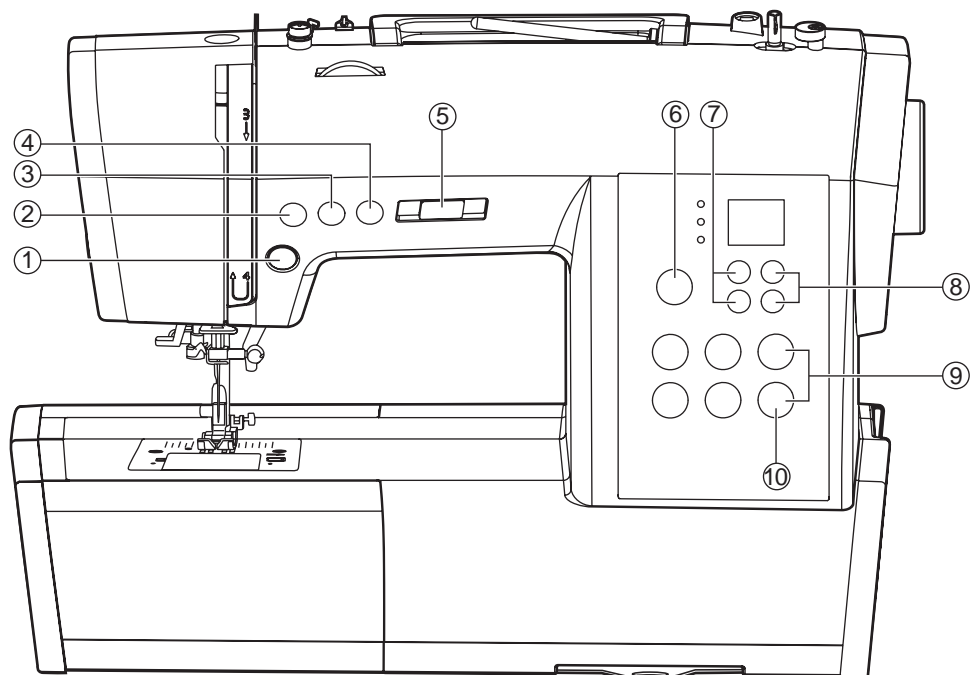


Normal thread tension for zig zag and decorative sewing.

Correct thread tension is when a small number of the upper thread appears on the bottom side of fabric.



# Buttons of the machine



1. Start/stop button
2. Reverse button
3. Auto-lock button
4. Needle up/down position button
5. Speed limiting adjustment lever
6. Mode selection button
7. Stitch length adjustment button
8. Stitch width adjustment button
9. Direct pattern selection and number buttons
10. Sound button

# Operation buttons



## Start/stop button

The machine will start running when the Start/Stop button is pressed and it will stop when this button is pressed a second time. The machine rotates slowly at the beginning of the sewing.

The sewing speed can be controlled by the speed limiting adjustment lever.

This way you may operate the machine without foot control.



## Reverse button

When the stitches 00-05 are selected, the machine will sew reverse at a low speed if the reverse button is pressed. The machine will sew forward after the button is released. When the stitches 06-14, 21-79 are selected, the machine will sew a reinforcement stitch immediately if the reverse button is pressed. The machine stops sewing after the button is released.



## Auto-lock button

If the button is pushed before sewing the machine will immediately sew 3 locking stitches. While sewing the stitches 00-05, the machine will immediately sew 3 locking stitches when the Auto-lock button is pressed, then automatically stops.

While sewing the stitches 06-14, 21-79 are selected, press the Auto-lock button, the machine will sew 3 locking stitches at the end of the current pattern and automatically stops. The function will be cancelled if you press the button once again or select another stitch.



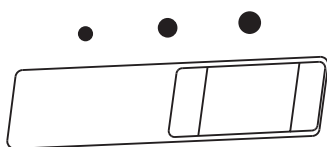
### Needle up/ down position button

With the needle up/ down position button, you decide whether the needle stops in the highest or in the lowest position (i.e. in the fabric) when you stop sewing.

### Note:

During sewing, the function of the button is not activated.

---

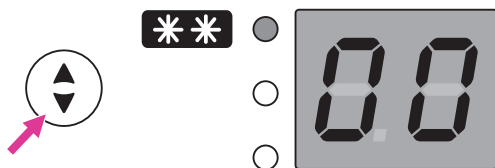


### Speed adjustment lever

The speed limiting adjustment lever can control the sewing speed. To increase the speed, slide the lever to the right. To decrease the sewing speed, slide the lever to the left.

### Mode selection button

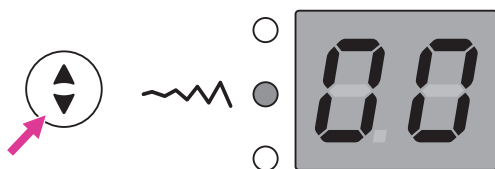
The LED light will be set at utility and decorative stitch mode when the machine is turned on. The light runs according to the sequence of stitches, stitch width, and stitch length mode.



### Utility and decorative stitch mode

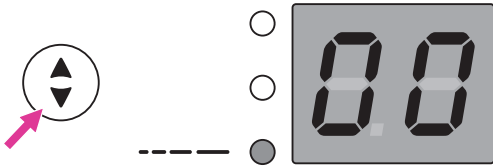
There are 80 stitches for selection.

To select the desired stitch (00~79) use the stitch width and length adjustment button.



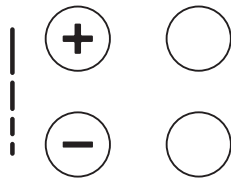
### Stitch width mode

Adjust the width of the stitch using the stitch width adjustment button.



### Stitch length mode

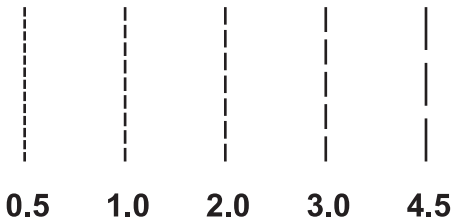
Adjust the length of the stitch using the stitch length adjustment button.



### Stitch length adjustment button

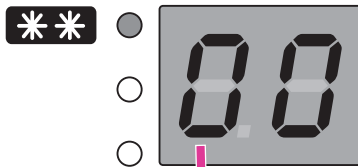
When you select a stitch the machine will automatically set the recommended stitch length (auto-position).

If the pre-set stitch length needs to be adjusted once the stitch is selected, push mode selection button to move to the stitch length position.



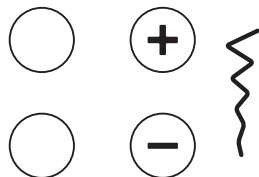
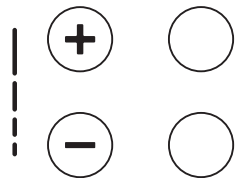
To shorten the stitch length, press the "-" button. For a longer stitch length, press the "+" button. The stitch length can be adjusted between "0.0-4.5". Certain stitches have a limited length.

When the setting is set at auto position, the number in the display will blink 3 times.



### Selecting stitches

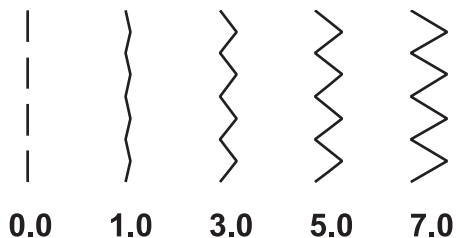
When the mode selection button is set on pattern, press stitch length adjustment buttons "+" or "-" for decade digit between 0~7.



### Stitch width adjustment button

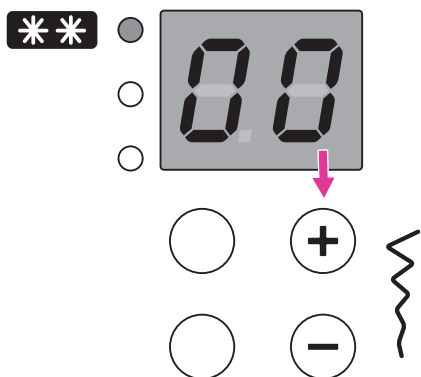
When you select a stitch the machine will automatically set the recommended stitch width (auto position).

If the pre-set stitch width needs adjusting once the pattern is selected, push mode selection button to move to the stitch width position.



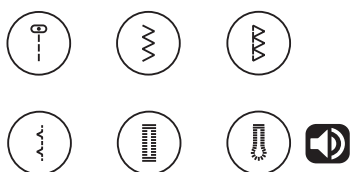
For a narrower stitch, press the "-" button. For a wider stitch, press the "+" button. The stitch width can be adjusted between "0.0-7.0". Certain stitches have a limited stitch width.

When the setting is at the auto position, the number display will blink 3 times.



### Selecting stitches

When the mode selection button is set on stitch selection, press stitch width adjustment buttons "+" or "-" for unit position between 0~9.



### Direct pattern selection buttons

Frequently used patterns are available by direct pattern selection buttons.

Direct selection buttons can be operated in any mode.



### Sound button














































#### Buzzer turn off:

Press the sound button for 2 seconds and when you hear the machine delivering a short beep, the sound will be turned off.

#### Buzzer turn on:

When machine is in silent mode, press the button for 2 seconds and it will deliver two short beeps to remind you that the sound is turned on now.

# Stitch chart

Stitch Pattern		Width(mm)		Length(mm)		Presser Foot	Fuctions		
		Auto	Manual	Auto	Manual		Reverse	Auto-lock	
Utility stitches	00		3.5	0.0~7.0	2.5	0.0~4.5	T	*	*
	01		0	0.0~7.0	2.5	0.0~4.5	T	*	*
	02		0	0.0~7.0	2.5	1.0~3.0	T	*	*
	03		1.0	1.0~6.0	2.5	1.0~3.0	T	*	*
	04		3.5	0.0~7.0	2.5	1.5~3.0	T	*	*
	05		5.0	0.0~7.0	2.0	0.3-1.0 1.0-4.5	T	*	*
	06		5.0	2.0~7.0	1.0	0.3-1.0 1.0-4.5	T	*	*
	07		5.0	2.5~7.0	2.5	1.0~3.0	A	*	*
	08		5.0	3.5~7.0	2.5	1.0~3.0	E	*	*
	09		5.0	2.5~7.0	2.5	1.0~3.0	T	*	*
	10		3.5	1.5~7.0	2.0	0.5~4.5	F	*	*
	11		3.5	2.5~7.0	1.0	0.5~4.5	F	*	*
	12		5.0	2.5~7.0	2.5	1.0~3.0	T	*	*
	13		7.0	2.5~7.0	2.5	1.0~3.0	A	*	*
14		5.0	2.5~7.0	2.5	1.0~3.0	A	*	*	
Buttonhole stitches	15		5.0	3.0~7.0	1.0	0.3~1.0	D		
	16		5.0	3.0~5.5	2.5	0.3~1.0	D		
	17		5.0	3.0~5.5	2.5	0.3~1.0	D		
	18		7.0	5.5~7.0	2.5	0.3~1.0	D		
Buttonhole sewing stitches	19		3.5	2.5~4.5	—	—	H		
Bar tack stitches	20		2.0	1.0~3.0	0.5	0.5~1.0	D		
Satin stitches	21		7.0	2.5~7.0	0.4	0.3~1.0	A	*	*
	22		7.0	2.5~7.0	0.4	0.3~1.0	A	*	*
	23		7.0	2.5~7.0	0.4	0.3~1.0	A	*	*
	24		7.0	2.5~7.0	0.4	0.3~1.0	A	*	*
	25		7.0	2.5~7.0	0.4	0.3~1.0	A	*	*
	26		7.0	2.5~7.0	0.4	0.3~1.0	A	*	*
	27		7.0	2.5~7.0	0.4	0.3~1.0	A	*	*
	28		7.0	2.5~7.0	0.4	0.3~1.0	A	*	*
	29		7.0	2.5~7.0	0.4	0.3~1.0	A	*	*
	30		7.0	2.5~7.0	0.4	0.3~1.0	A	*	*
	31		7.0	2.5~7.0	0.4	0.3~1.0	A	*	*
Cross stitches	32		5.0	2.5~7.0	2.5	1.0~3.0	A	*	*
	33		4.0	3.0~7.0	1.0	1.0~3.0	A	*	*
	34		6.0	3.0~7.0	1.0	1.0~3.0	A	*	*
Quilt stitches	35		3.5	2.5~7.0	2.5	1.5~3.0	T	*	*
	36		3.5	2.5~7.0	2.5	1.5~3.0	T	*	*
	37		3.5	2.5~7.0	2.5	1.5~3.0	T	*	*
	38		4.0	2.5~7.0	2.0	1.0~4.5	T	*	*
	39		7.0	3.0~7.0	1.5	1.0~4.5	T	*	*
	40		5.0	2.5~7.0	2.0	1.0~3.0	T	*	*
	41		6.0	3.5~7.0	1.5	1.0~3.0	A	*	*
	42		5.0	2.5~7.0	2.0	1.0~3.0	A	*	*
Decorative stitches	43		7.0	2.5~7.0	2.0	1.5~3.0	T	*	*
	44		7.0	3.5~7.0	1.5	1.5~3.0	T	*	*
	45		7.0	5.0~7.0	2.0	2.0~3.0	A	*	*
	46		5.0	2.5~7.0	1.5	1.0~3.0	T	*	*
	47		5.0	2.5~7.0	2.0	1.0~3.0	T	*	*
	48		5.0	2.5~7.0	1.5	1.0~3.0	T	*	*
	49		5.0	3.0~7.0	3.0	1.5~3.0	A	*	*
	50		7.0	2.5~7.0	2.0	1.0~3.0	T	*	*

Stitch Pattern		Width(mm)		Length(mm)		Presser Foot	Fuctions		
		Auto	Manual	Auto	Manual		Reverse	Auto-lock	
Decorative stitches	51		7.0	2.5~7.0	2.5	1.5~3.0	T	*	*
	52		5.0	2.5~7.0	2.5	1.5~3.0	T	*	*
	53		7.0	2.5~7.0	1.5	1.0~3.0	A	*	*
	54		7.0	2.5~7.0	2.5	1.0~4.5	T	*	*
	55		7.0	2.5~7.0	1.5	1.0~3.0	T	*	*
	56		7.0	3.5~7.0	2.0	1.0~3.0	T	*	*
	57		7.0	3.5~7.0	1.0	1.0~3.0	A	*	*
	58		5.0	2.5~7.0	1.0	1.0~4.5	T	*	*
	59		6.0	3.5~7.0	2.0	1.5~3.0	A	*	*
	60		7.0	4.0~7.0	2.0	2.0~3.0	A	*	*
	61		5.0	2.5~7.0	2.0	2.0~3.0	A	*	*
	62		7.0	4.0~7.0	2.5	2.0~3.0	A	*	*
	63		7.0	3.0~7.0	3.0	1.0~3.0	A	*	*
	64		7.0	2.5~7.0	3.0	2.0~3.0	A	*	*
	65		7.0	3.0~7.0	2.0	1.5~3.0	A	*	*
	66		7.0	2.5~7.0	2.0	1.0~3.0	A	*	*
	67		5.0	3.5~7.0	1.0	1.0~3.0	A	*	*
	68		7.0	3.0~7.0	2.0	1.5~3.0	A	*	*
	69		6.0	4.0~7.0	2.0	2.0~3.0	A	*	*
	70		7.0	3.0~7.0	2.5	1.5~3.0	T	*	*
	71		5.5	2.5~7.0	1.5	1.0~3.0	A	*	*
	72		7.0	3.0~7.0	2.5	1.0~3.0	T	*	*
	73		7.0	2.5~7.0	2.0	1.5~3.0	T	*	*
	74		6.0	3.0~7.0	2.0	1.5~3.0	A	*	*
	75		7.0	3.5~7.0	2.5	1.5~3.0	T	*	*
	76		5.0	2.5~7.0	2.0	1.0~3.0	T	*	*
	77		5.0	2.5~7.0	2.0	1.0~3.0	T	*	*
	78		7.0	5.0~7.0	2.5	2.0~3.0	A	*	*
	79		5.0	3.0~7.0	1.5	1.0~3.0	T	*	*

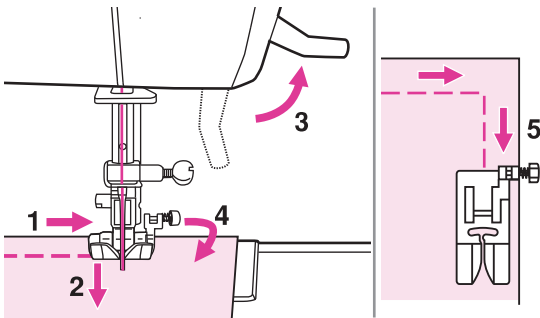
# Useful skills

Various ways to achieve better results for your sewing projects are described below. Refer to these tips when sewing your project.

A trial piece of fabric should be sewn because, depending on the type of fabric and stitching being sewn, the desired results may not be achieved.

For the trial sewing, use a piece of fabric and thread that are the same as those used for your project and check the thread tension and stitch length and width.

Since the results differ depending on the type of stitching and the number of layers of fabric sewn, perform the trial sewing under the same conditions that will be used with your project.

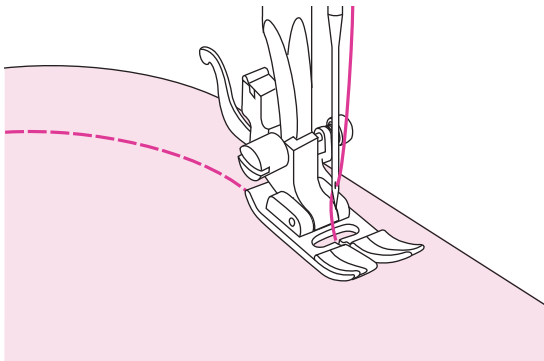


## ❖ Sewing corners

Stop the sewing machine when you reach a corner.

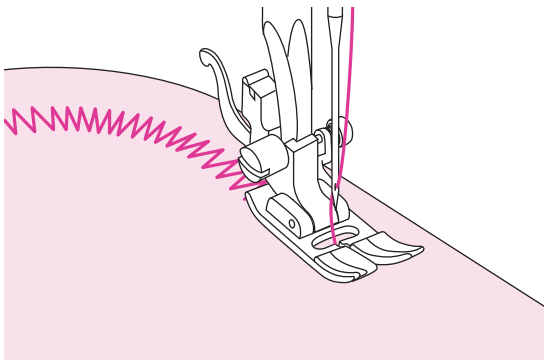
Lower the needle into the fabric. Raise the presser foot. Use the needle as a pivot and turn the fabric.

Lower the presser foot and resume sewing.

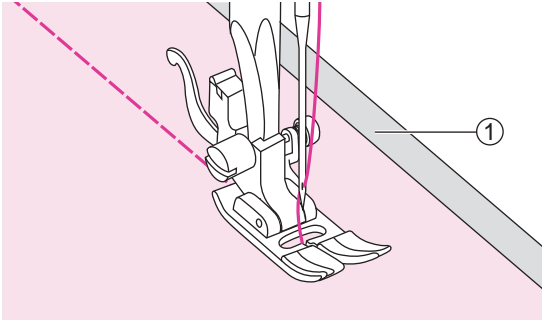


## ❖ Sewing curves

Slightly change the sewing direction to sew around the curve.



When sewing along a curve while using a zigzag stitch, select a shorter stitch length in order to obtain a finer stitch.

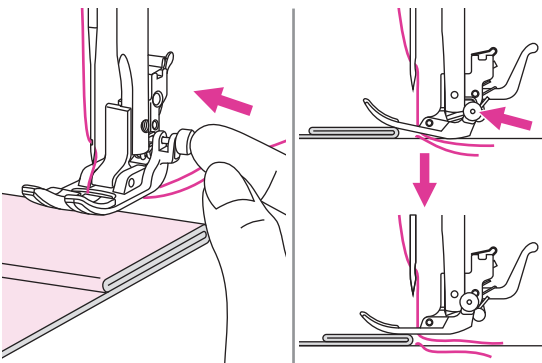


### ❖ Sewing thin fabrics

When sewing thin fabrics, the stitching may become misaligned or the fabric may not feed correctly. If this occurs, place thin paper or stabilizer material under the fabric and sew it together with the fabric.

When you have finished sewing, tear off any excess paper.

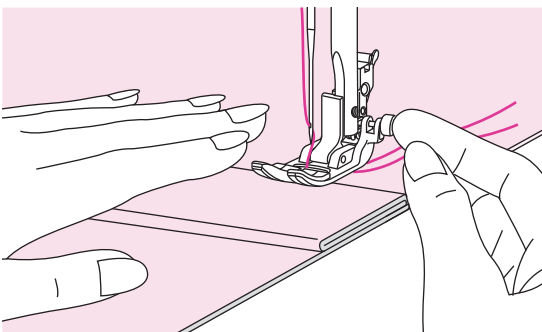
① Stabilizer material or paper



### ❖ Sewing heavy fabric

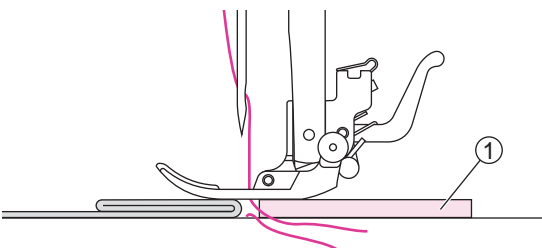
The black button on the right side of the presser foot will lock the presser foot in a horizontal position if you push it in before lowering the presser foot.

This ensures even feeding at the beginning of a seam and helps when sewing multiple layers of fabric such as sewing over seams when hemming jeans.



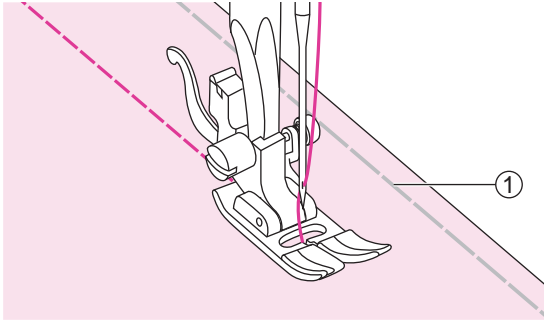
When you reach the point of an increased thickness, lower the needle and raise the presser foot. Press the toe of the foot and push in the black button, then lower the foot and continue sewing.

The black button releases automatically after sewing few stitches.



You also can place another piece of fabric with the same thickness at the back of the seam. Or support the presser foot while feeding by hand and sewing toward the folded side.

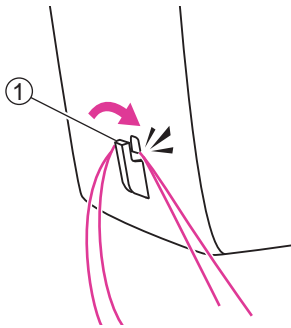
① Cardboard or thick fabric



### ❖ Sewing stretch fabrics

Baste the pieces of fabric together, and then sew without stretching the fabric.

- ① Basting stitching

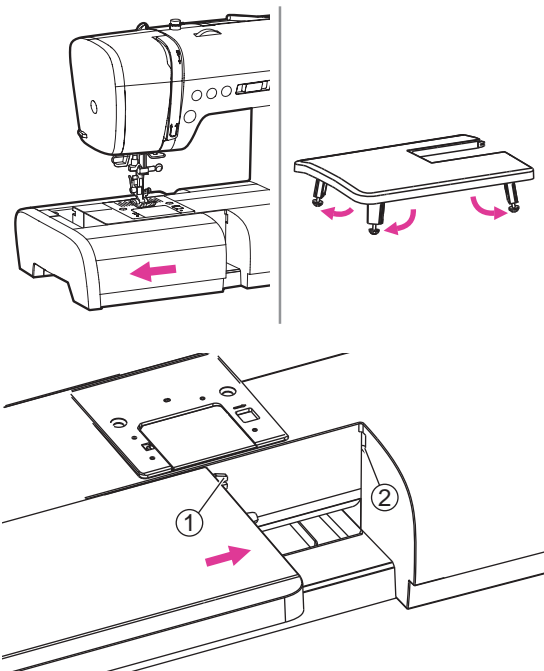


### ❖ Cutting the thread

Bring the thread take up lever to its highest position, raise the presser foot and remove the fabric.

Guide both threads to the side of the face plate and into the thread cutter. Pull the threads down to cut them.

- ① Thread cutter



### ❖ Installing the extension table

Pull the sewing table and accessory box off by sliding it to the left.

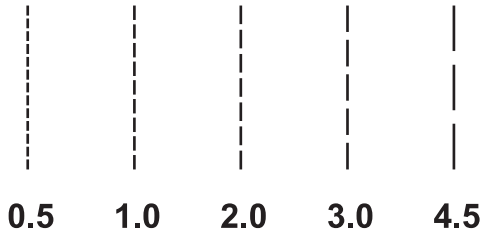
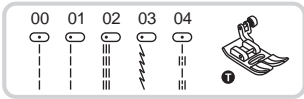
Follow the arrow, and stretch the foot of the extension table.

Push the extension table until it snaps into the machine.

Extension table can help moving during sewing.

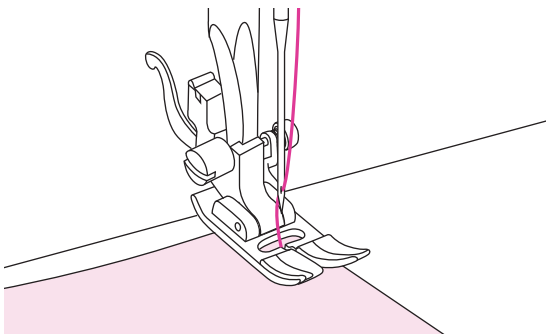
- ① Projection
- ② Hole

# Straight stitch



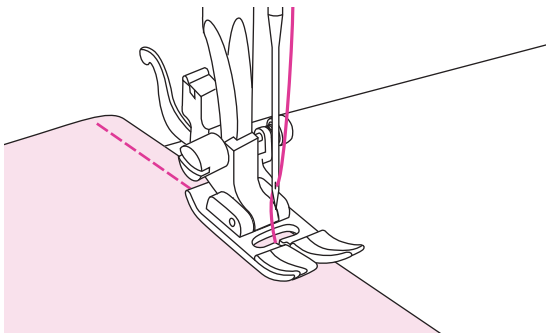
To shorten the stitch length, press the "-" stitch length adjustment button. For a longer stitch length, press the "+" stitch length adjustment button.

Generally speaking, the thicker the fabric, thread and needle, the longer the stitch should be.



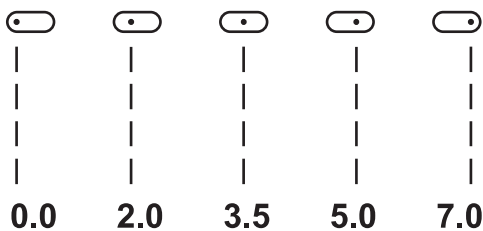
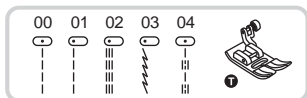
To begin sewing, set the machine for straight stitch.

Place the fabric under the presser foot with the fabric edge lined up with the desired seam guide line on the needle plate.



Lower the presser foot lifter and then step on the foot controller to start sewing.

# Changing the needle position



Set the pattern as shown in figure.

The Stitch width button is the control for the straight stitch needle position.

The pre-set position is "3.5", center position.

Press the stitch width adjustment button "+", the needle position will move to the right.

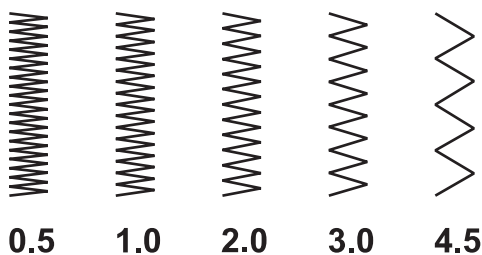
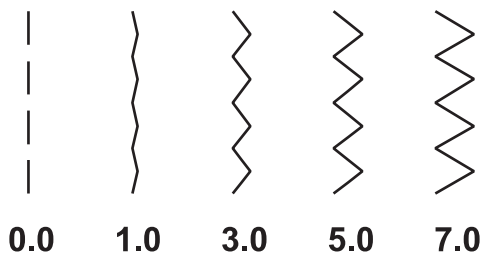
Press the stitch width adjustment button "-", the needle position will move to the left.

# Zigzag stitch



The width increases as you press the stitch width adjustment button from "0.0-7.0".

The width can be reduced on any patterns.



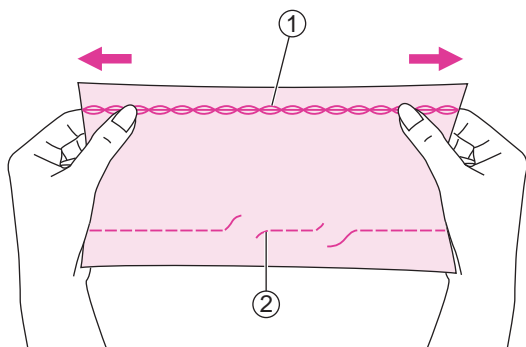
The length increases as you press the stitch length adjustment button from "0.0-4.5".

Neat zig-zag stitches are usually achieved at "2.5" or below.

Closed up zigzag stitches (close together) are referred to as a satin stitch.

# Stretch stitch

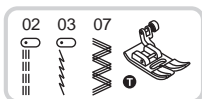
Use this stitch with knitted tricot or other stretchy fabrics. The stitch enables your seam to stretch without breaking the thread.



Good for easy to ravel and knit fabrics. Good for joining durable fabric such as denims.

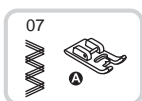
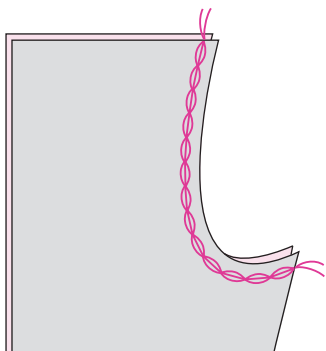
These stitches can also be used as a decorative top stitches.

- ① Straight stretch stitch
- ② Straight stitch



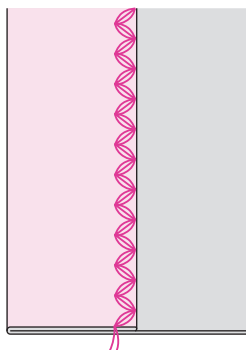
## ❖ Straight Stretch Stitch

Straight stretch stitch is used to add triple reinforcement to stretch and hardwearing seams.



## ❖ Zigzag Stretch Stitch

Triple zigzag stretch stitch is suitable for firm fabrics like denim, poplin, duck, etc.



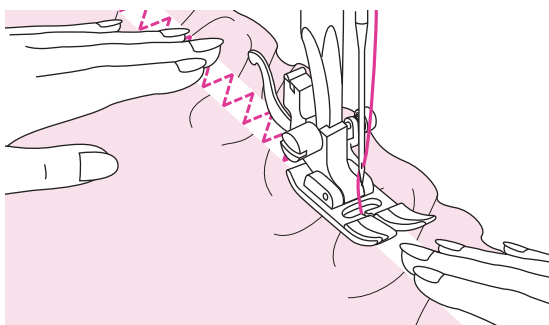
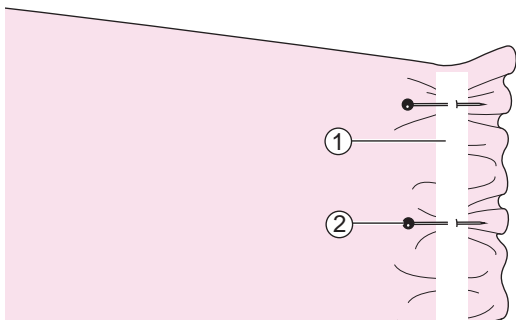
# Sewing stretch fabrics and elastic tape

When elastic tape is attached to the cuff or waist of a piece of clothing, the finished dimensions will be that of the stretched elastic tape. Therefore, it is necessary that a suitable length of the elastic tape be used.



Pin the elastic tape to the fabric at a few points to make sure that the tape is uniformly positioned on the fabric.

- ① Elastic tape
- ② Pin

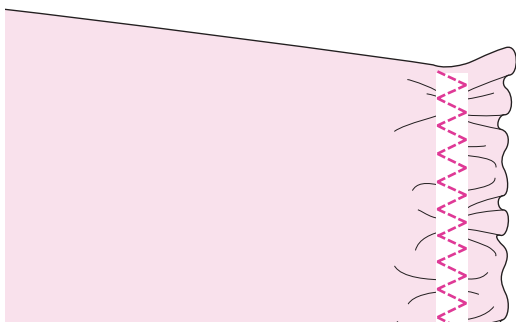


Sew the elastic tape to the fabric while stretching the tape so that it is the same length as the fabric.

While pulling the fabric behind the presser foot with your left hand, pull the fabric at the pin nearest the front of the presser foot with your right hand.

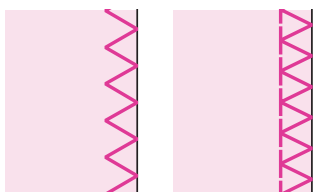
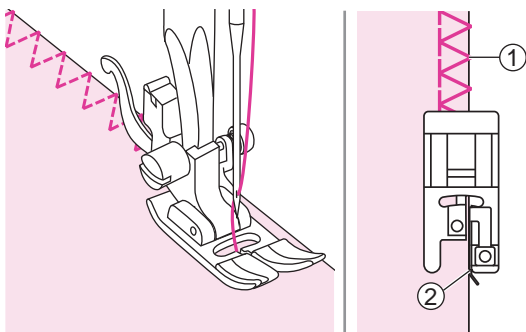
## ➔ Note:

When sewing, be sure that the needle does not touch any pins, otherwise the needle may bend or break.



# Overcasting stitch

Sewing overcasting stitches along the edge of fabric prevent it from fraying.

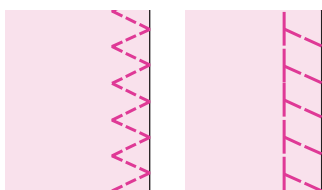
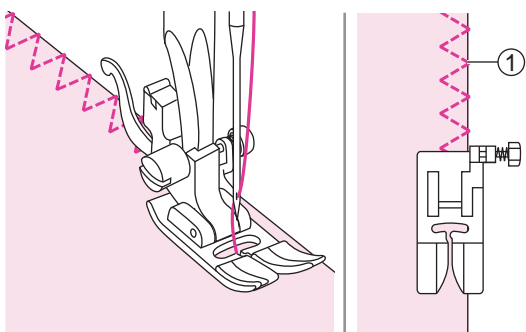


## ❖ Using the overcasting foot

Attach the presser foot to the overcasting foot.

Sew the fabric with the fabric edge against the guide of the overcasting foot.

- ① Needle drop point
- ② Guide



## ❖ Using the all purpose foot

Attach the presser foot to the all purpose foot.

Sewing the overcasting along the edge of the fabric so that the needle drops over the edge of the fabric on the right side.

- ① Needle drop point

# Blind Hem

Secure the bottom of skirts and pants with a blind hem, this stitch will sew without stitches showed on the right side of the fabric.



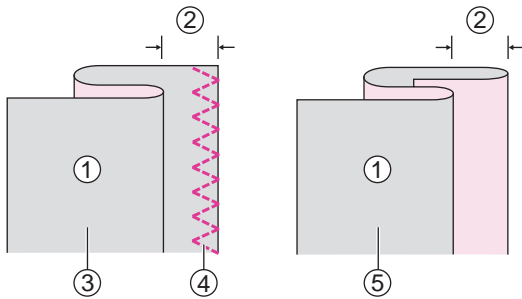
10: Blind hem/lingerie for firm fabrics.

11: Blind hem for stretch fabrics.

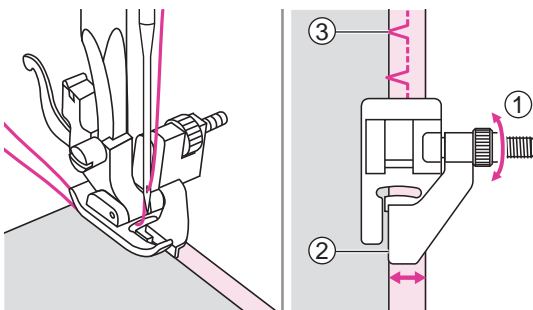
## ➔ Note:

It takes practice to sew blind hem. Always make a sewing test first.

Fold the fabric as illustrated with the reverse side up.

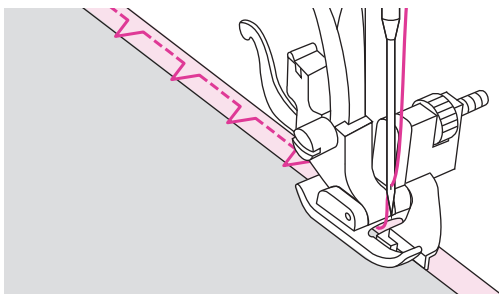


- ① Reverse side
- ② 5mm
- ③ Heavy weight fabric
- ④ Overcasting stitch
- ⑤ Light/ Medium weight fabric

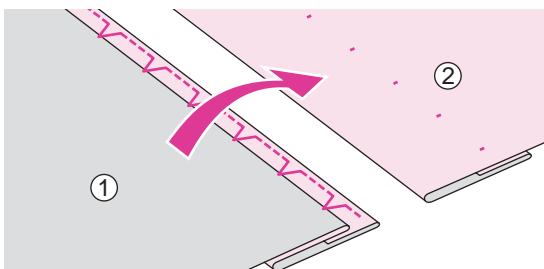


Place the fabric under the foot. Turn the handwheel forwards until the needle swings fully to the left. It should just pierce the fold of the fabric. If it does not, adjust the stitch width accordingly. Adjust the guide by turning the knob so that the guide just rests against the fold.

- ① Knob
- ② Guide
- ③ Needle drop point



Sew slowly, guiding the fabric carefully along the edge of the guide.



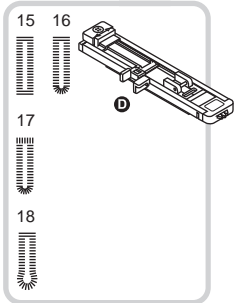
Turn over the fabric.

- ① Reverse side
- ② Right side

# Buttonhole stitch

Buttonholes can be adapted to the size of the button.

For stretch fabric or thin fabric, it is recommended to use a stabilizer for a better buttonhole finish.



15: For thin or medium fabric

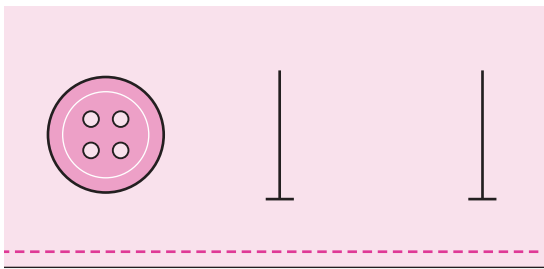
16: For horizontal holes on blouses or shirts made from thin or medium fabric

17: For heavy weight fabrics

18: For suits or overcoats

## ➔ Note:

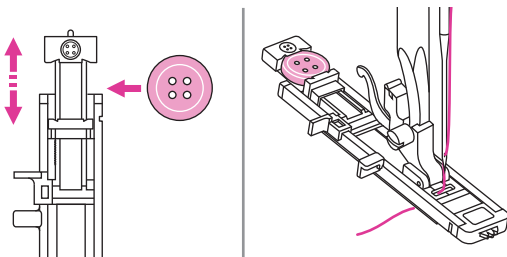
Before sewing a buttonhole on your project, practice on a scrap piece of the same type of fabric.



Mark the positions of the buttonhole on the fabric.

The maximum buttonhole length is 3cm. (Total of diameter + thickness of button.)

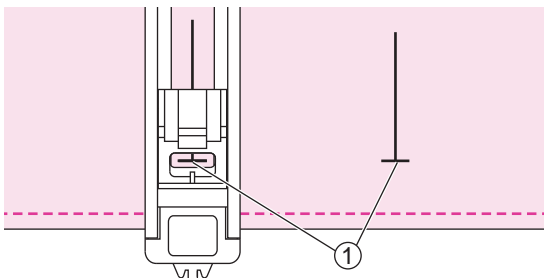
The size of the buttonhole is determined by the button inserted in the button plate.



Pull the button holder plate to the back, and place the button in it. Push back the button holder plate against the button to hold it tight.

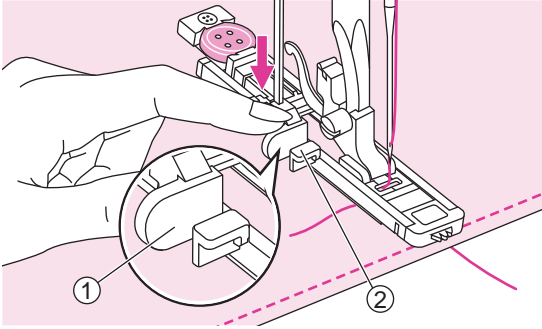
Attach the buttonhole foot.

The thread should be passed through the hole in the presser foot, then be placed under the foot.



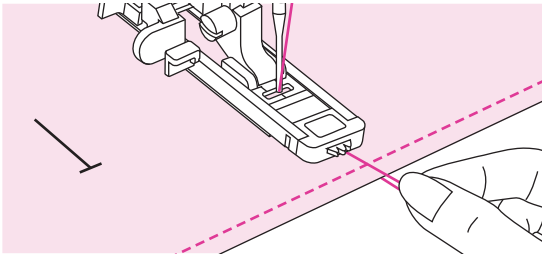
Position the fabric under the presser foot with the front end of the buttonhole mark aligned with the center line on the buttonhole foot.

① Starting point



Pull the buttonhole lever all the way down and position it behind the bracket on the buttonhole foot.

- ① Buttonhole lever
- ② Bracket



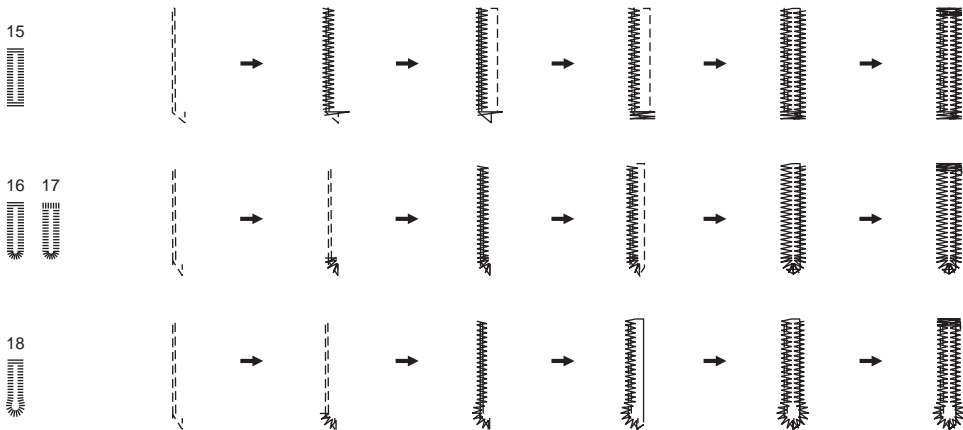
Slightly hold the end of the upper thread and start sewing.

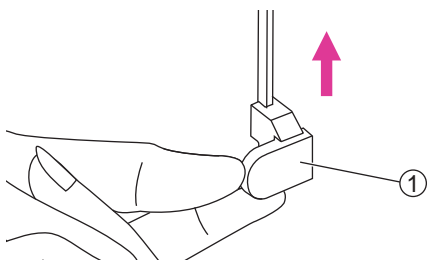
**Note:**

Gently feed the fabric by hand.

Before stopping, the machine will automatically sew a reinforcement stitch after the buttonhole is sewn.

\* Buttonholes are sewn from the front of the presser foot to the back, as shown.

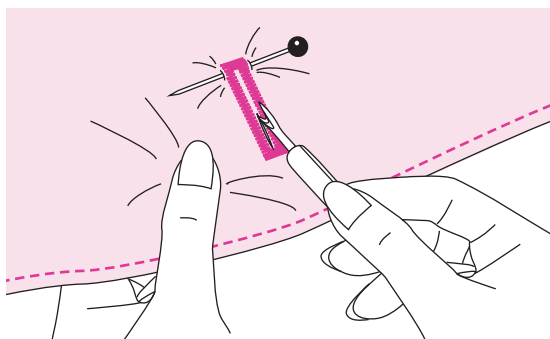




Raise the presser foot and cut the thread. To sew over the same buttonhole, raise the presser foot (it will return to its original position).

After sewing the buttonhole stitch, raise the buttonhole lever as far as it will go.

① Buttonhole lever

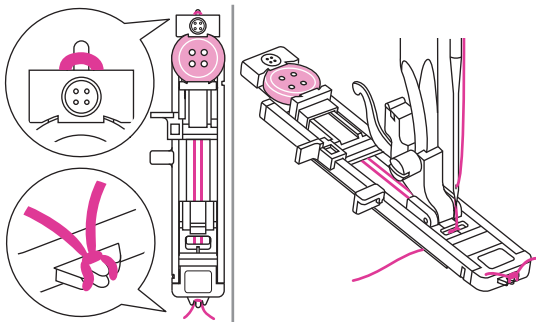


Cut the center of the buttonhole being careful not to cut any stitches on either side. Use a pin as a stopper at the bar tack so you do not cut too much.

**Note:**

When cutting the buttonhole with the seam ripper, do not place your hands in the cutting direction, otherwise injuries may result.

---



## ❖ Making a buttonhole on stretch fabrics

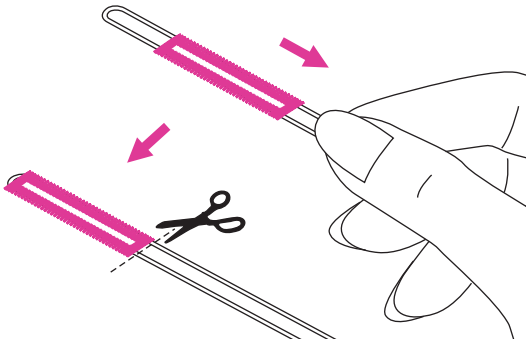
When sewing buttonholes on stretch fabric, hook heavy thread or cord under the buttonhole foot.

Attach the buttonhole foot.

Bring the two gimp thread ends to the front of the foot and insert them into the grooves, then tie them there temporarily. Lower the presser foot and start sewing.

Set the stitch width to match the diameter of the gimp thread.

Once sewing is completed, pull the gimp thread gently to remove any slack, then trim off any excess.

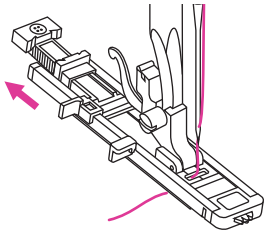
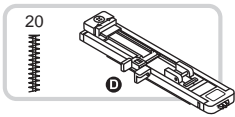


### ➔ Note:

It is suggested that you sew with a stabilizer material under the fabric.

# Bar tack stitch

Bar tack stitch is used to reinforce points subject to strain, such as pocket corners and openings.

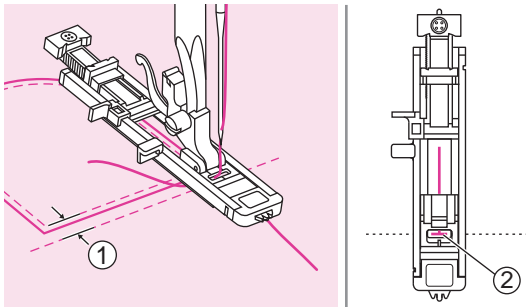


Extend the button holder plate and set to the desired bar tack length.

Adjust the stitch width and the stitch length to the desired width and density.

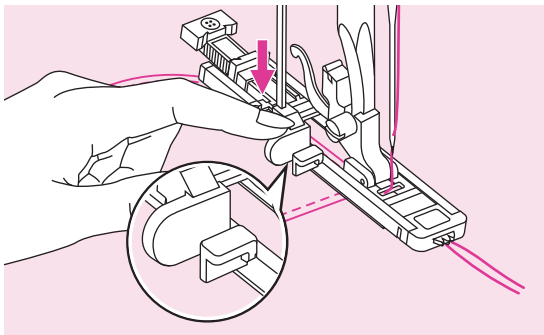
Attach the buttonhole foot.

The thread should be passed through the hole in the presser foot, then be placed under the foot.



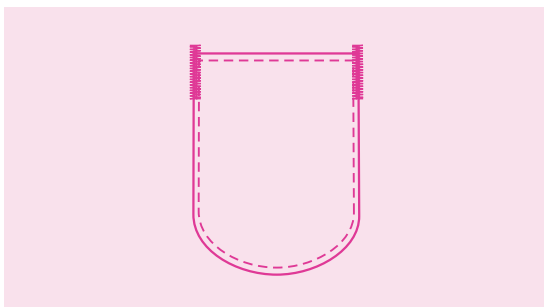
Position the fabric so that the needle is 2mm in front of where you want the sewing to start, and then lower the presser foot.

- ① 2mm
- ② Starting point



Pull the buttonhole lever all the way down and position it behind the bracket on the buttonhole foot.

Slightly hold the end of the upper thread and start sewing.



Bar tack stitches are sewn.

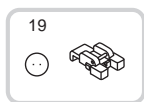
As an example, the illustration shows the procedure for sewing bar tacks at pocket corners.

## ➔ Note:

It is suggested that you sew with a stabilizer material under the fabric.

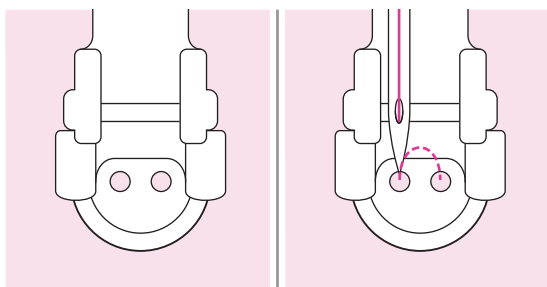
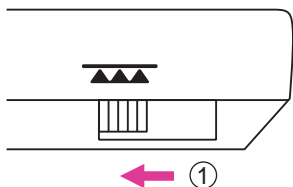
# Button sewing

Buttons can be sewn on with the sewing machine. Buttons with 2 or 4 holes can be attached.



Move the drop feed lever to lower the feed dogs.

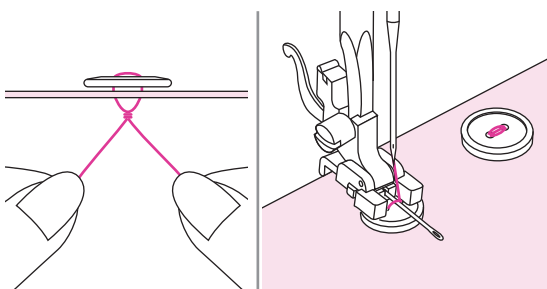
① Lowered position



Position the work under the foot. Place the button in the desired position, lower the foot.

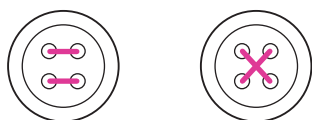
Select zig zag pattern. Adjust the stitch width according to the distance between the two holes of the button.

Turn the handwheel to check that the needle goes cleanly into the left and right holes of the button.

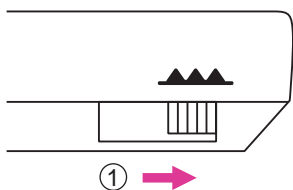


If a shank is required, place a darning needle on top of the button and sew.

Pull end of the upper thread to the reverse side of the fabric, then tie it with the bobbin thread.



For buttons with 4 holes, sew through the front two holes first, push work forward and then sew through the back two holes.



**Note:**

When you finish the work, move the drop feed lever to raise the feed dogs.

① Raised position

# Zipper insertion

This foot can be set to sew on each side of the zipper, the edge of the foot guides the zipper to ensure straight placement.



## ⚠ Attention:

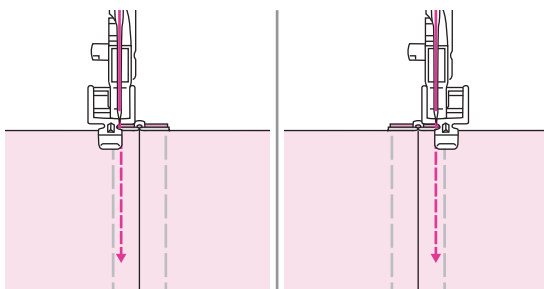
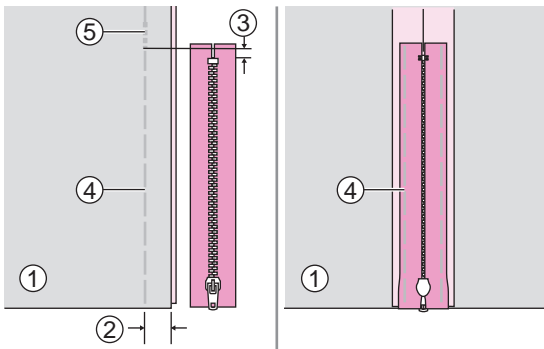
Zipper foot should be used for sewing stitches straight only. It is possible that the needle could hit the presser foot and break when sewing other patterns.

## ❖ Inserting a centered zipper

Place the right sides of the fabric together. Sew a bottom seam 2cm from the right edge of the zipper bottom stop position. Sew a few stitches in reverse to lock. Increase the stitch length to maximum, set the tension below 2 and baste the remaining length of the fabric.

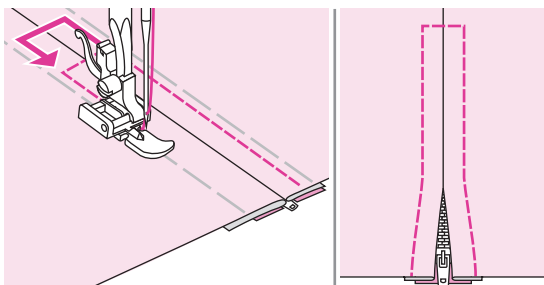
Press open the seam allowance. Place the zipper face down on the seam allowance with the teeth against the seam line. Baste the zipper tape.

- ① Reverse side
- ② 2cm
- ③ 5mm
- ④ Basting stitching
- ⑤ Reverse stitches



Attach the right side of the presser foot pin to the holder when sewing the left side of the zipper.

Attach the left side of the presser foot pin to the presser foot holder when sewing the right side of the zipper.



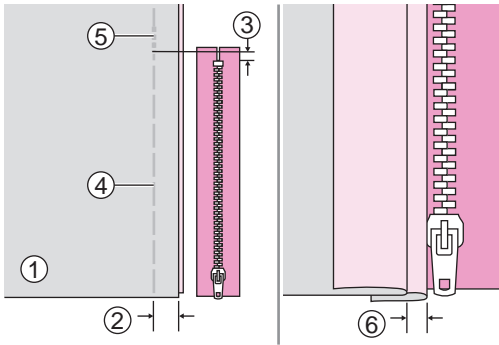
Stitching around the zipper.

## ➡ Note:

When sewing, be sure that the needle does not touch the zipper, otherwise the needle may bend or break.

Remove the basting stitching and press.

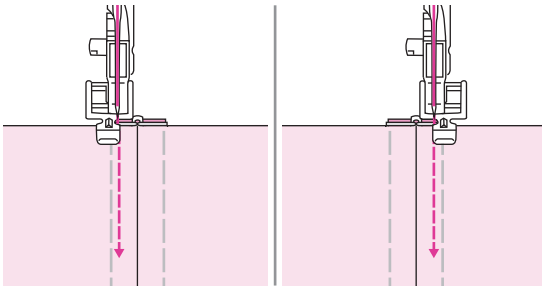
## ❖ Inserting a side zipper



Place the right sides of the fabric together. Sew a bottom seam 2cm from the right edge of the zipper bottom stop position. Sew a few stitches in reverse lock. Increase the stitch length to maximum, set the tension below 2 and baste the remaining length of the fabric.

Fold back to the left the seam allowance. Turn under the right the seam allowance to form a 3mm fold.

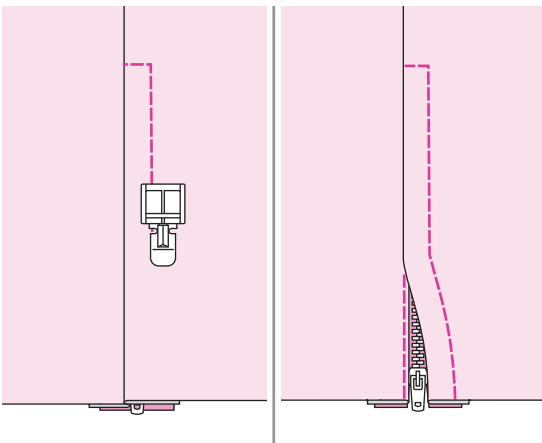
- ① Reverse side
- ② 2cm
- ③ 5mm
- ④ Basting stitching
- ⑤ Reverse stitches
- ⑥ 3mm



Attach the right side of the presser foot pin to the holder when sewing the left side of the zipper.

Attach the left side of the presser foot pin to the presser foot holder when sewing the right side of the zipper.

Sew the zipper to the piece of fabric with the extra 3mm, starting from the base of the zipper. When you are about 5cm from the end of the zipper, stop the sewing machine with the needle lowered (in the fabric), raise the presser foot lever, and then open the zipper and continue sewing.

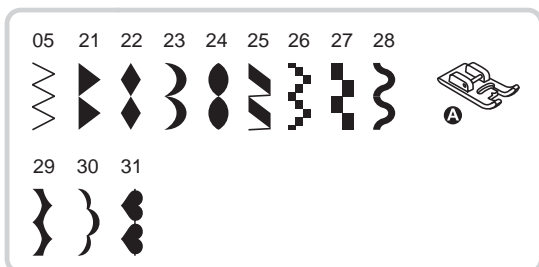


Turn the fabric right side out, stitch across the lower end and the right side of the zipper.

Stop about 5cm from the top of the zipper. Remove the basting stitching and open the zipper. Stitch the remaining of the seam.

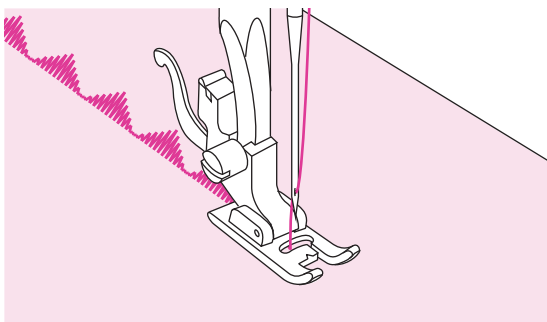
# Satin stitch sewing

Use the satin stitch foot for satin stitching and sewing decorative stitches.



This foot has a full indentation on the underside to allow easy sewing over the thickness of the stitches formed by closely spaced zigzag stitches, and even feeding of the fabric.

To tailor the satin or decorative stitch pattern, you may adjust the length and width of the pattern by pressing the stitch length and width adjustment button. Experiment with fabric scraps until you get the desired length and width.



## Note:

When sewing very thin fabrics, it is suggested that you sew with a stabilizer material under the fabric.

---

# Gathering

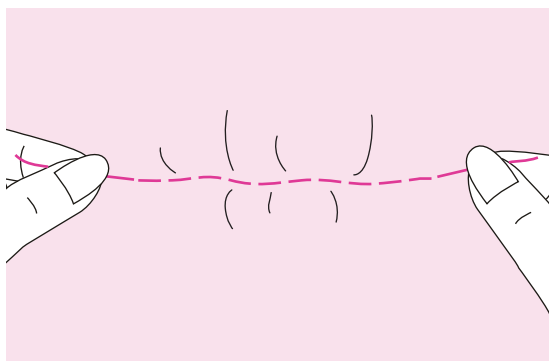
Ideal for clothing as well as home decor. It works best on thin to medium weight fabrics.



Loosen the tension of the upper thread so that the lower thread lies on the underside of the material.

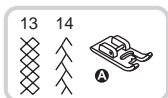
Sew a single row (or many rows) of straight stitches.

Pull the lower threads to gather the material.



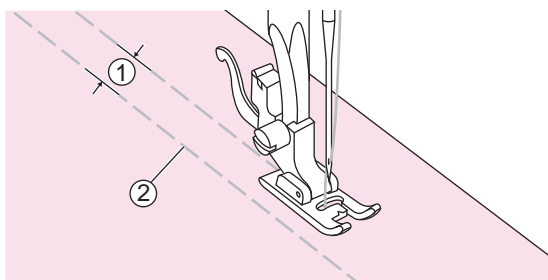
# Smocking

The decorative stitch created by stitching or embroidering over gathers is called "smocking". It is used to decorate the front of blouses or cuffs. The smocking stitch adds texture and elasticity to the fabric.



Increase the stitch length to maximum, set the tension below 2 and basting lines 1cm across the area to be smocked.

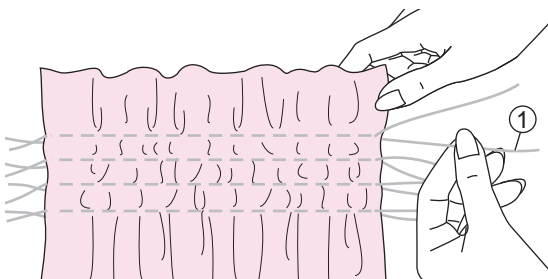
- ① 1cm
- ② Basting stitching



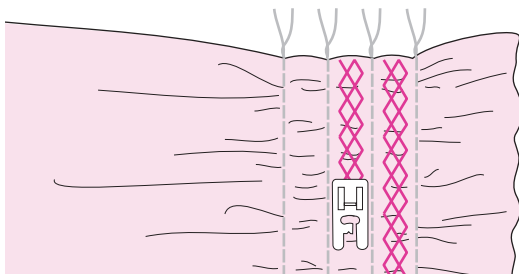
Knot the threads along one edge.

Pull the bobbin threads and distribute the gathers evenly. Secure the threads at the other end.

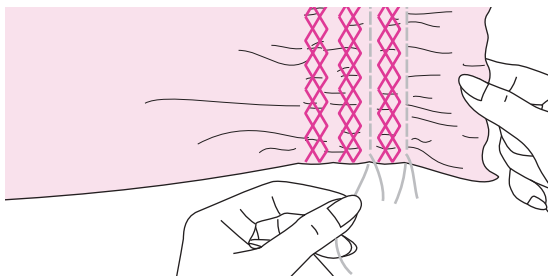
- ① Bobbin thread



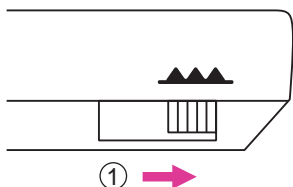
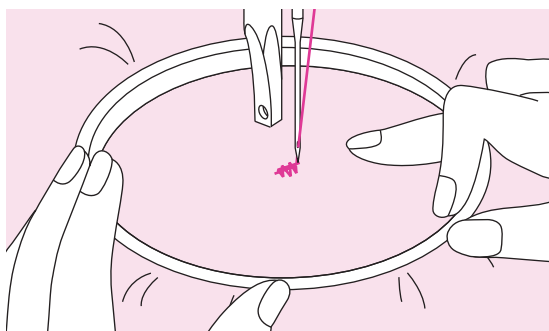
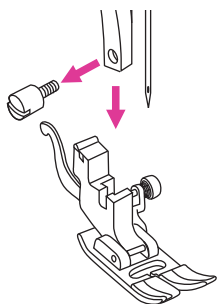
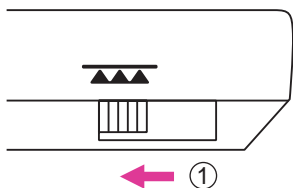
Reduce the tension if necessary and sew decorative pattern stitches between the straight seams.



Pull out the basting stitching.



# Free motion darning, embroidery and monogramming



## ❖ Preparation for embroidering and monogramming

\* Embroider hoop is not included with the machine.

Move the drop feed lever to lower the feed dogs.

① Lowered position

Remove the presser foot and the presser foot holder.

Draw the desired lettering or design on the surface of the fabric.

Stretch the fabric between the embroidery hoop as firmly as possible.

Place the fabric under the needle. Make sure the presser foot bar is down to its lowest position.

Turn the handwheel towards you to bring up the lower thread through the fabric. Sew a few securing stitches at the starting point.

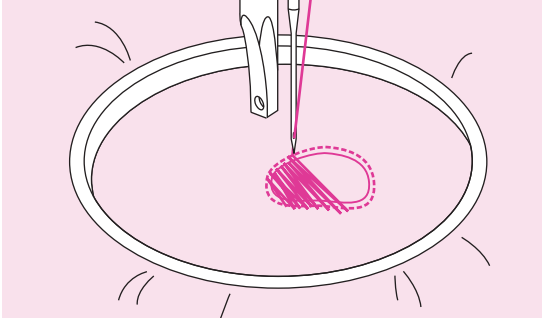
Hold the hoop with thumb and forefinger of both hands while pressing the material with the middle and third finger and supporting the outside of the hoop with your small finger.

## ➔ Note:

Keep fingers away from moving parts, especially needles.

When you finish the work, move the drop feed lever to raise the feed dogs.

① Raised position



## ❖ Darning

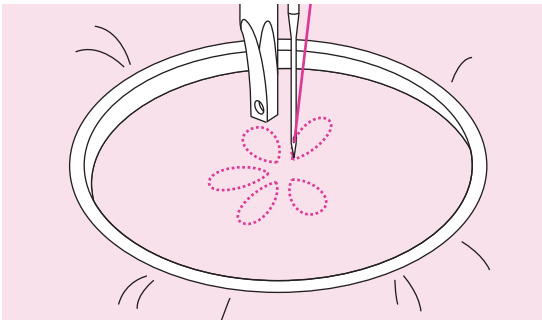
First sew around the edges of the hole (to secure the threads). Working from left to right, sew over the hole in a constant and continuous movement.

Turn the work by 1/4 and sew over the first stitching moving the work slower over the hole to separate the threads and not form big gaps between the threads.

## ➔ Note:

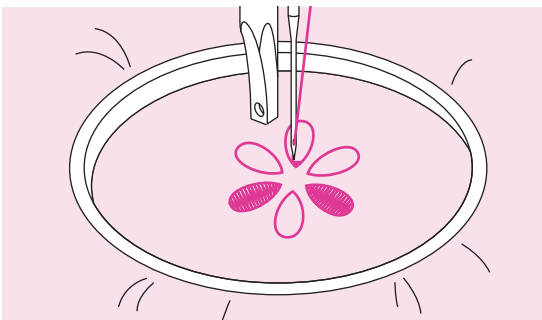
Free motion darning is accomplished without the sewing machine internal feed system. Movement of the fabric is controlled by the operator. It is necessary to coordinate sewing speed and movement of fabric.

---



## ❖ Embroidery

Stitch along the outline of the design moving the embroidery hoop. Make sure to maintain a constant speed.



Fill in the design working from the outline towards the inside. Keep the stitches close together.

You will get longer stitches by moving the hoop faster and shorter stitches by moving the hoop slower.

Secure with reinforcement stitches at the end of the design.



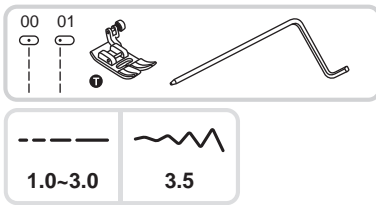
### ❖ **Monogramming**

Sew at constant speed, moving the embroidery hoop slowly along the lettering.

When the letter is finished secure with reinforcement stitches at the end of the design.

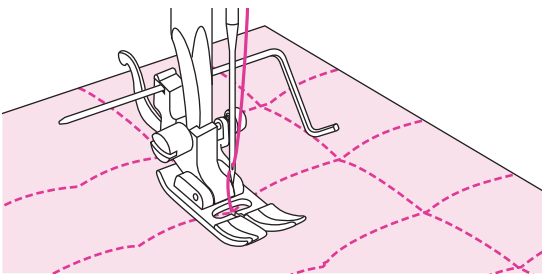
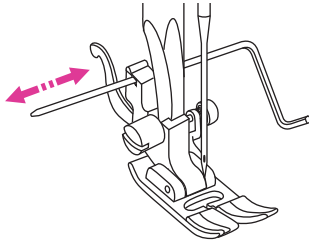
# Quilting

Sandwiching batting between the top and bottom layers of fabric is call "Quilting". The top layer is usually formed by multiple geometrically shaped pieces of materials joined together.

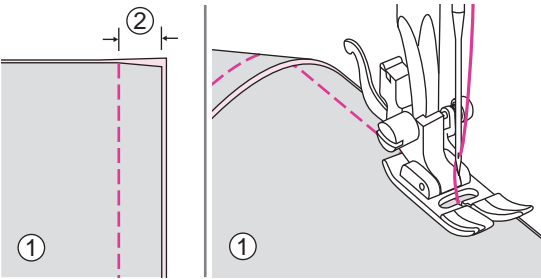


## ❖ Using the edge/ quilting guide

Attaching the edge/ quilting guide in the presser foot holder as illustrated and set the space as you desire.



Sew the first row and move over the fabric to sew successive rows with the guide riding along the previous row of stitches.



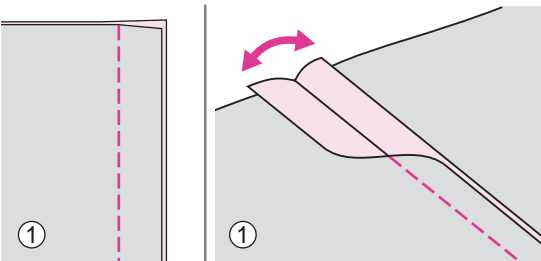
### ❖ Joining the pieces of the fabric

Place the two pieces of fabric with the right side together and sew with the straight stitch.

Join the pieces of fabric with a seam allowance of 5mm.

Sew with the side of the presser foot aligned with the edge of the fabric.

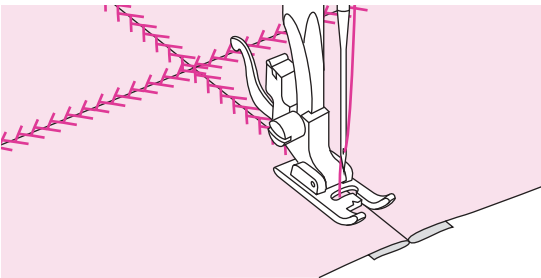
- ① Reverse side
- ② 5mm



### ❖ Patchwork stitching

Open the seam allowances and presses it flat.

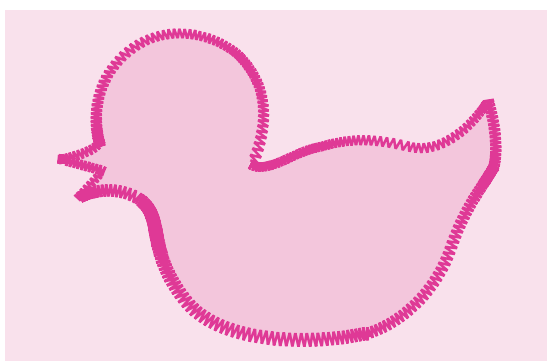
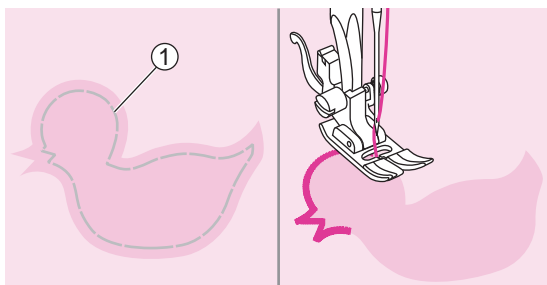
- ① Reverse side



Place the center of the presser foot on the seam line of the joined pieces of fabric and sew over the seam.

# Applique

You can create and applique by cutting a different piece of fabric into a shape and using it as a decoration.



Cut out the applique design and baste it on the fabric.

Sew slowly around the edge of the design.

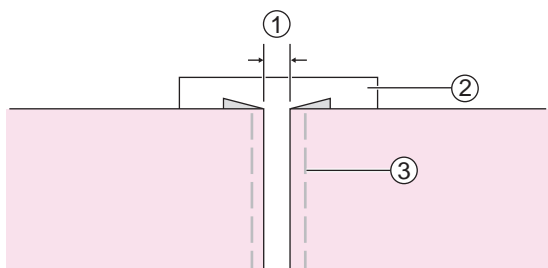
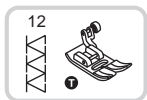
① Basting stitching

Trim the excess material outside the stitching. Make sure not to cut any stitches.

Remove the basting stitching.

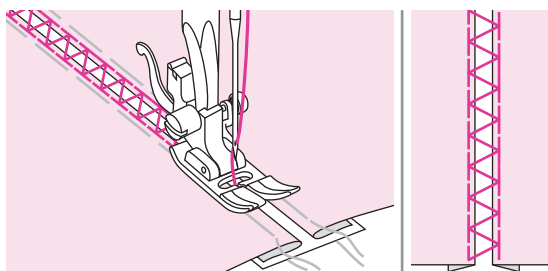
# Fagoting

Stitching across an open seam is called "fagoting". It is used on blouses and children's clothing. This stitch is more decorative when thicker thread is used.



Separate the folded edges of the fabric pieces with a gap of 4mm and baste them onto a piece of thin paper or water-soluble stabilizer sheet.

- ① 4mm
- ② Thin paper or water-soluble stabilizer
- ③ Basting stitching

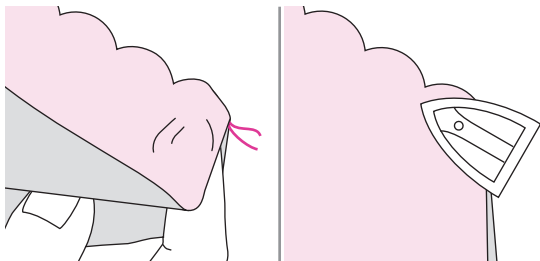
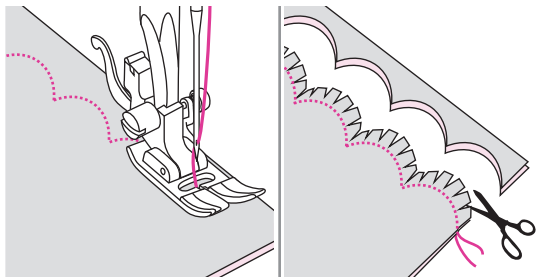
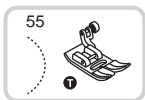


Align the center of the presser foot with the center of the two pieces of fabric and begin sewing.

After sewing, remove the paper.

# Scallop stitch

The wave-shaped repeating pattern, that looks like shells, is called "scalloping". It is used to decorate the collar of blouses and the edges of knitting projects.



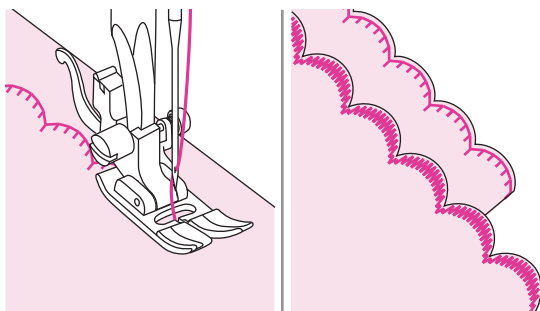
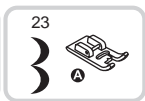
## ❖ Scallop hem

Fold the fabric right side together in and sew along the edge.

Cut the fabric along the seam leaving an allowance of 3mm for seaming.

Notch the allowance.

Turn the fabric over and push out the curved seam to the surface and iron it.



## ❖ Scallop edging

Stitch along the edge of the fabric, making sure not to sew directly on the edge of the fabric.

For better results, apply spray starch onto the fabric and press with a hot iron before it is sewn.

Trim along the stitches, be careful not to cut the stitches.

# Maintenance

## ⚠ Attention:

Disconnect the machine from the wall outlet before carrying out any maintenance, otherwise injury or electrical shock may result.

## ❖ Cleaning the hook

If lint and bits of thread accumulate in the hook, this will interfere with the smooth operation of the machine. Check regularly and clean the stitching mechanism when necessary.

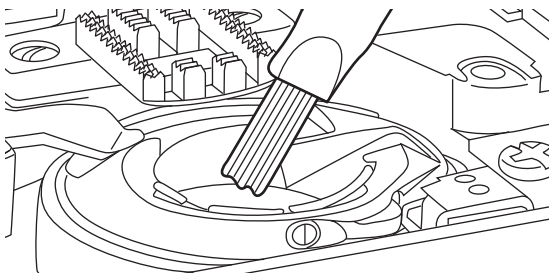
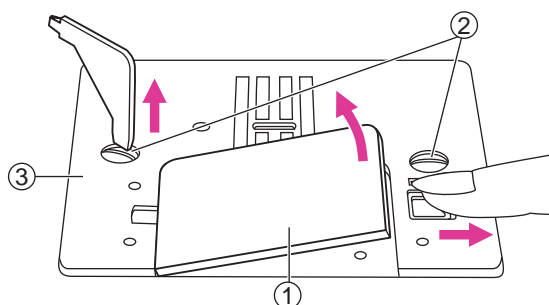
Remove the needle, presser foot and presser foot holder.

Remove the bobbin cover plate and bobbin.

Remove the screws holding the stitch plate and remove the stitch plate.

- ① Bobbin cover plate
- ② Screws
- ③ Stitch plate

Clean the feed dogs and bobbin case with a brush. Also clean them, using a soft, dry cloth.



## ❖ Cleaning the sewing machine surface

If the surface of the sewing machine is dirty, lightly soak a cloth in mild detergent, squeeze it out firmly and then wipe the surface. After cleaning it once in this way, wipe the surface again with a dry cloth.

Do not use any organic solvents or detergents.

# Trouble shooting guide

Before calling for service, check the following items. If the problem still persists, contact the place of purchase or your nearest authorized dealer.

Problem	Cause	Correction	Reference
Upper thread breaks	1. The machine is not threaded correctly.	1. Rethread the machine.	8
	2. The thread tension is too tight.	2. Reduce the thread tension (lower number).	16
	3. The thread is too thick for the needle.	3. Select a larger needle.	12
	4. The needle is not inserted correctly.	4. Remove and reinsert the needle (flat side towards the back).	11
	5. The thread is wound around the spool holder pin.	5. Remove the reel and wind up the thread onto the reel.	8
	6. The needle is damaged.	6. Replace the needle.	11
Lower thread breaks	1. The bobbin case is not inserted correctly.	1. Remove and reinsert the bobbin case and pull on the thread. The thread should run easily.	7
	2. The bobbin case is threaded wrong.	2. Check both bobbin and bobbin case.	7
Skipped stitches	1. The needle is not inserted correctly.	1. Remove and reinsert the needle (flat side towards the back).	11
	2. The needle is damaged.	2. Insert a new needle.	11
	3. The wrong size needle has been used.	3. Choose a needle to suit the thread.	12
	4. The foot is not attached correctly.	4. Check and attach it correctly.	14
	5. The machine is not threaded correctly.	5. Rethread the machine.	8
Needle breaks	1. The needle is damaged.	1. Insert a new needle.	11
	2. The needle is not correctly inserted.	2. Insert the needle correctly (flat side towards the back).	11
	3. Wrong needle size for the fabric.	3. Choose a needle to suit the thread and fabric.	12
	4. The wrong foot is attached.	4. Select the correct foot.	-
	5. The needle clamp screw is loose.	5. Use the screwdriver to tighten the screw.	11
	6. The presser foot that is used is not appropriate for the type of stitch that you wish to sew.	6. Attach the presser foot that is appropriate for the type of stitch that you wish to sew.	-
	7. The upper thread tension is too tight.	7. Loosen the upper thread tension.	16

<b>Problem</b>	<b>Cause</b>	<b>Correction</b>	<b>Reference</b>
Loose stitches	1. The machine is not correctly threaded.	1. Check the threading.	8
	2. The bobbin case is not threaded correctly.	2. Thread the bobbin case as illustrated.	7
	3. Needle/ fabric/ thread combination is wrong.	3. The needle size must suit the fabric and thread.	12
	4. The thread tension is wrong.	4. Correct the thread tension.	16
Seam gather or pucker	1. The needle is too thick for the fabric.	1. Select a finer needle.	12
	2. The stitch length is wrong.	2. Readjust the stitch length.	24
	3. The thread tension is too tight.	3. Loosen the thread tension.	16
Seam puckering	1. The needle thread tension is too tight.	1. Loosen the thread tension.	16
	2. The needle thread is not threaded correctly.	2. Rethread the machine.	8
	3. The needle is too heavy for the fabric being sewn.	3. Choose a needle to suit the thread and fabric.	12
	4. The stitch length is too long for the fabric.	4. Make the stitch length shorter.	24
	5. If you are sewing on thin fabric.	5. Sew with a stabiliser material under the fabric.	30
Patterns are distorted	1. The correct presser foot is not used.	1. Select the correct foot.	-
	2. The needle thread tension is too tight.	2. Loosen the thread tension.	16
The machine jams	1. Thread is caught in the hook.	Remove the upper thread and bobbin case, turn the handwheel backwards and forwards and remove the thread remnants.	54
	2. The feed dogs are packed with lint.		
The machine is noisy	1. Fluff or oil have collected on the hook or needle bar.	1. Clean the hook and feed dog.	54
	2. The needle is damaged.	2. Replace the needle.	11
	3. Slight humming sound coming from internal motor.	3. Normal.	-
	4. Thread is caught in the hook.	Remove the upper thread and bobbin case, turn the handwheel backwards and forwards and remove the thread remnants.	54
	5. The feed dogs are packed with lint.		

<b>Problem</b>	<b>Cause</b>	<b>Correction</b>	<b>Reference</b>
Uneven stitches, uneven feed	1. Poor quality thread.	1. Select a better quality thread.	12
	2. The bobbin case is threaded wrong.	2. Remove the bobbin case and the thread and reinsert them correctly.	7
	3. Fabric has been pulled on.	3. Do not pull on the fabric while sewing, let it be taken up by the machine.	-
The sewing machine doesn't operate	1. The machine is not turned on.	1. Turn on the machine.	3
	2. The presser foot lifter is raised.	2. Lower the presser foot lifter.	13
	3. The machine is not plugged in.	3. Connect the power line plug to the electric outlet.	3