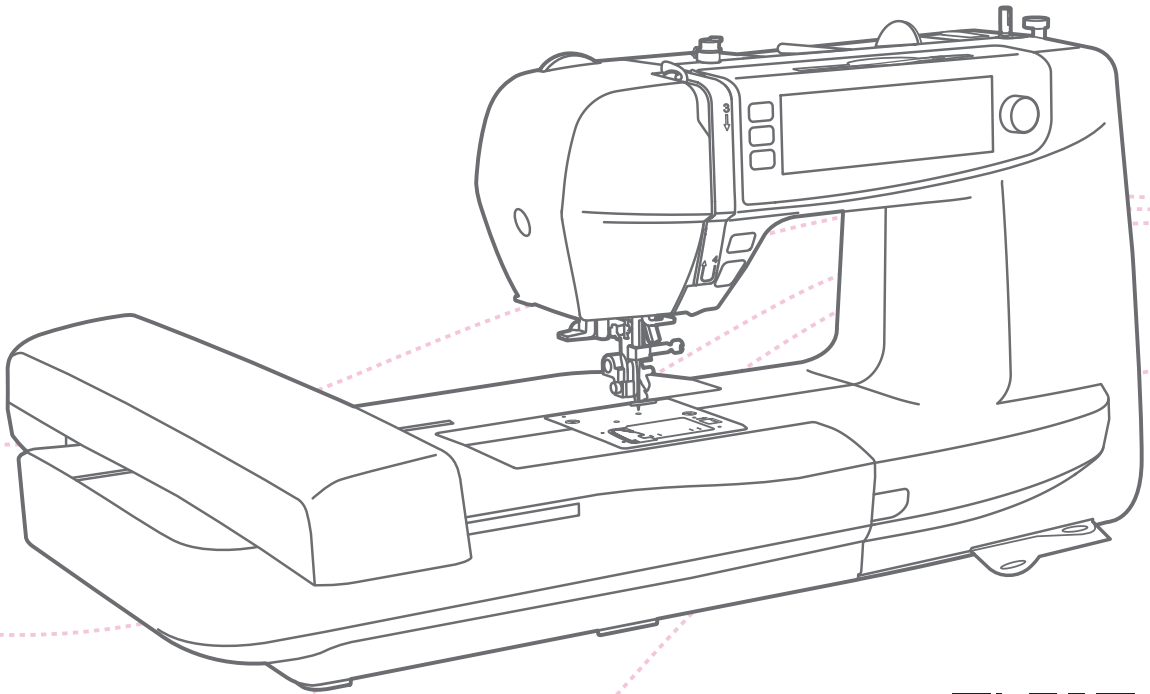


# Instruction Manual

SEWING+EMBROIDERY COMBO



→ Start your sewing & embroidery design !





# Important safety instructions

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

Read all instructions before using this sewing machine.

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

1. An appliance should never be left unattended when plugged in.
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 as 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 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 it's 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 must only be used with designated foot controller, in order to avoid a hazard. If the foot controller is damaged or broken, it must be replaced by the manufacturer or its service agent or a similarly qualified person.
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.

Be sure to use the sewing machine in the temperature range from 5°C to 40°C. If the temperature is excessively low, the machine can fail to operate normally.

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

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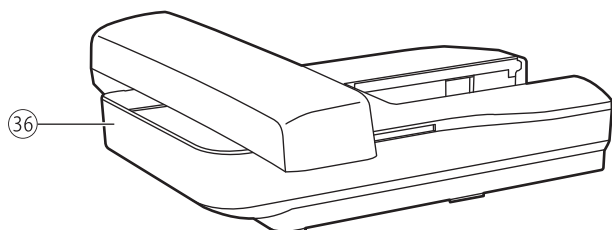
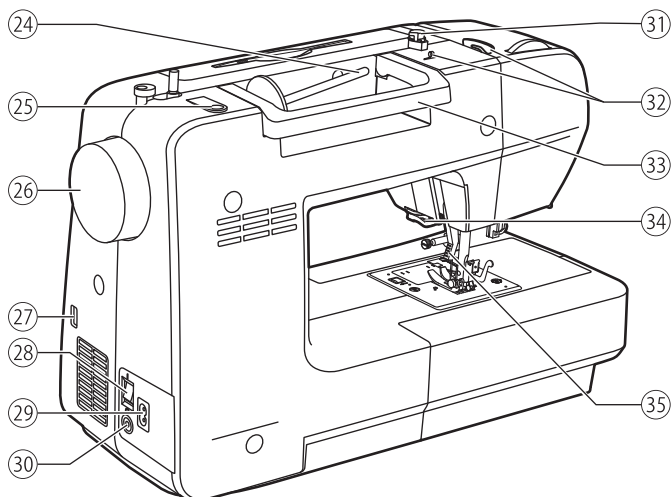
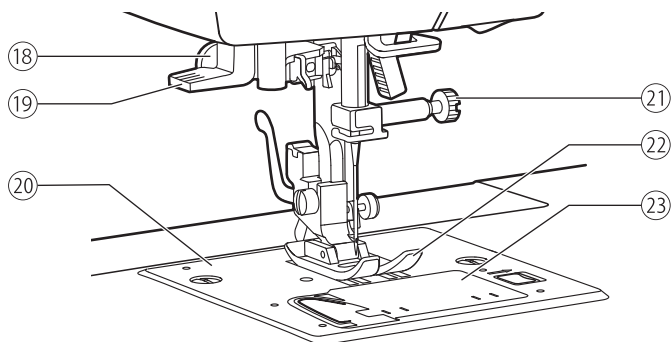
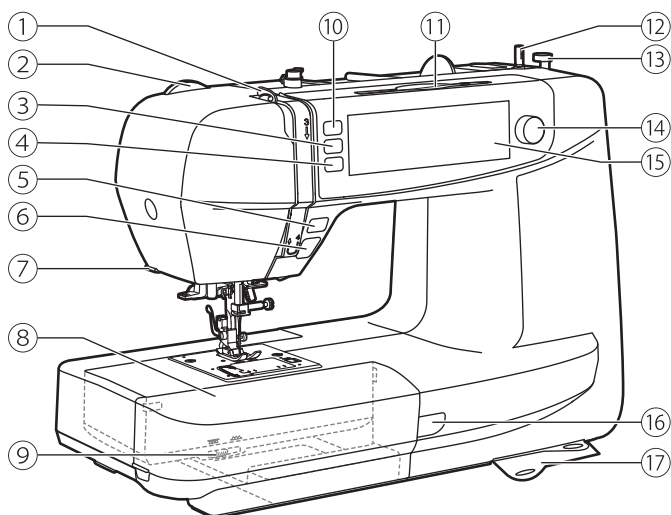
## Embroidery pattern chart

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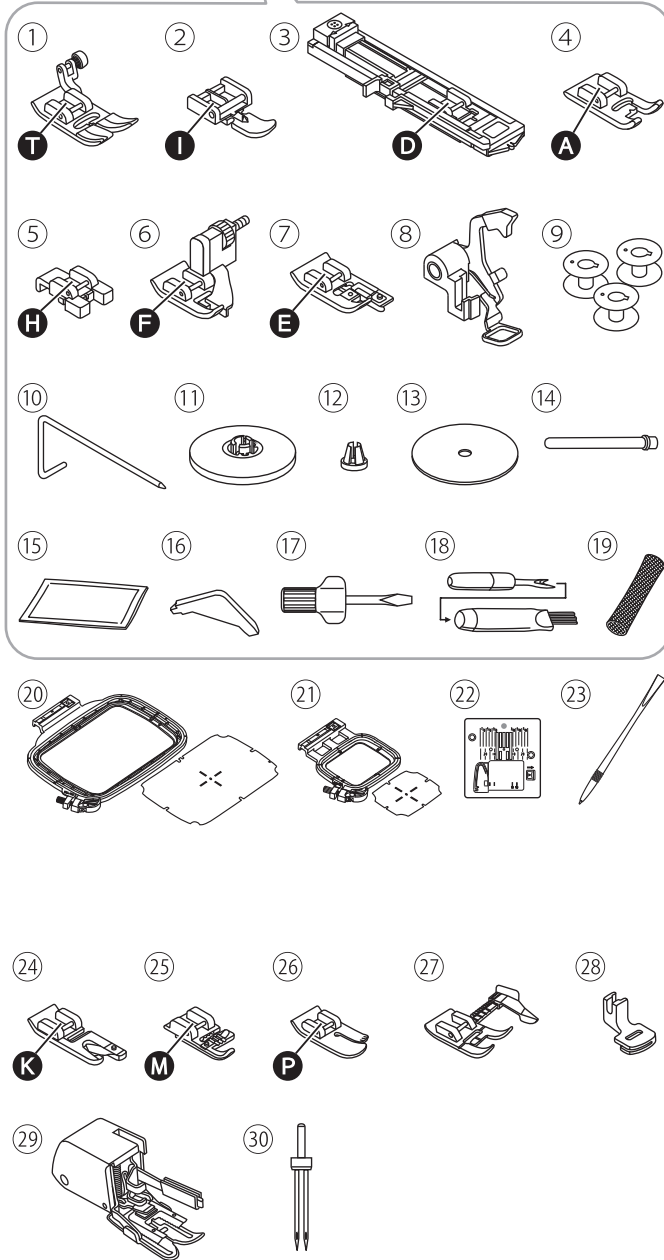
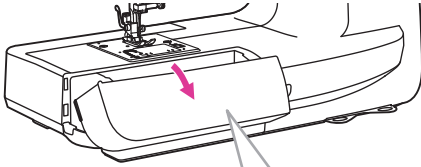
# **Machine Introduction**

# Principal parts of the machine



- ① Take-up lever
- ② Presser foot pressure dial
- ③ Needle up/down position button
- ④ Auto-lock button
- ⑤ Reverse button
- ⑥ Start/stop button
- ⑦ Thread cutter
- ⑧ Sewing table and accessory box
- ⑨ Drop feed lever
- ⑩ Thread cutter button
- ⑪ Touchscreen pen
- ⑫ Bobbin winder spindle
- ⑬ Bobbin winder stopper
- ⑭ Speed adjustment dial
- ⑮ LCD screen (touch panel)
- ⑯ Status indicator
- ⑰ Quick reference plate
- ⑱ Buttonhole lever
- ⑲ Needle threader
- ⑳ Needle plate
- ㉑ Needle clamp screw
- ㉒ Presser foot
- ㉓ Bobbin cover
- ㉔ Horizontal spool pin
- ㉕ Second spool pin hole
- ㉖ Handwheel
- ㉗ USB port
- ㉘ Main power switch
- ㉙ Power cord socket
- ㉚ Foot control connector
- ㉛ Bobbin thread guide
- ㉜ Upper thread guide
- ㉝ Handle
- ㉞ Thread cutter
- ㉟ Presser foot lifter
- ⓪ Embroidery unit

# Accessories



Accessories are stored inside the accessory box.

## ❖ Standard

- ① All purpose foot
- ② Zipper foot
- ③ Buttonhole foot
- ④ Satin stitch foot
- ⑤ Button sewing foot
- ⑥ Blind hem foot
- ⑦ Overcasting foot
- ⑧ Darning/embroidery foot
- ⑨ Bobbin (3x)
- ⑩ Edge/quilting guide
- ⑪ Spool holder (Large)
- ⑫ Spool holder (Small)
- ⑬ Spool pin felt
- ⑭ Second spool pin
- ⑮ Pack of needles
- ⑯ L-screwdriver
- ⑰ Screwdriver
- ⑱ Seam ripper/brush
- ⑲ Thread net
- ⑳ Embroidery set (120\*180mm)
- ㉑ Embroidery set (50\*70mm)
- ㉒ Straight stitch plate
- ㉓ Touchscreen pen

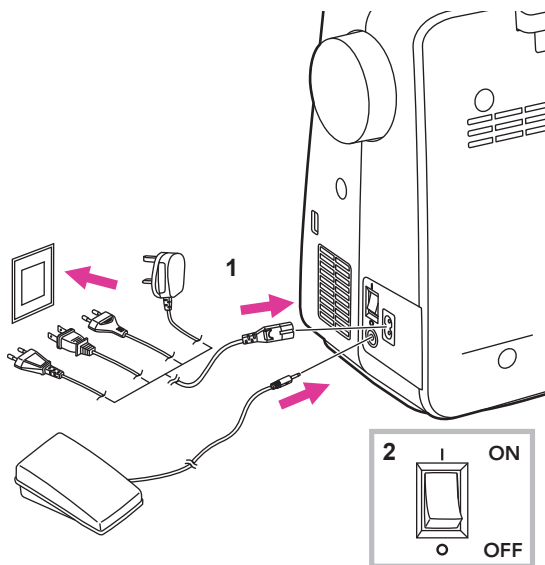
## ❖ Optional

- ㉔ Hemmer foot
- ㉕ Cording foot
- ㉖ Quilting foot
- ㉗ Adjustable guide foot
- ㉘ Gathering foot
- ㉙ Walking foot
- ㉚ Twin needle

### Note

To purchase optional accessories, please consult your local dealer for further information.

# Connecting machine to power source



## ⚠ Attention

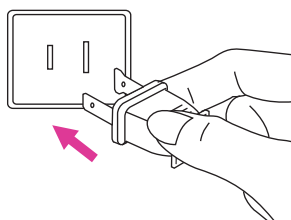
Always make sure that the machine is unplugged from power source and the main switch is off ("O"), when the machine is not in use and before inserting or removing parts.

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

Put the machine on a stable table.

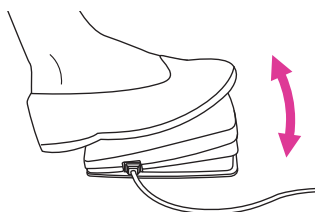
1. Connect the machine to a power source as illustrated.
2. Turn the power switch to on ("I").

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



## ❖ Polarized plug information

This appliance has a polarized plug (one blade is 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.

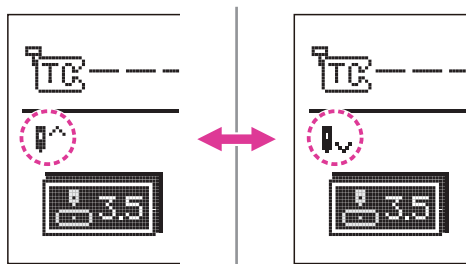


## ❖ Foot control (In sewing mode)

When the machine is off, insert the foot control plug into its connector on the machine.

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

User can quickly kick one step on the foot control to change the needle position and set the stop position at the same time. The set needle position will be displayed on the screen.



## ⚠ Attention

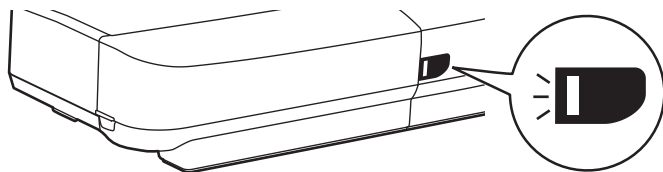
Foot control will be disabled in embroidery mode.

## Note

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

# Display instruction

## ❖ Status indicator

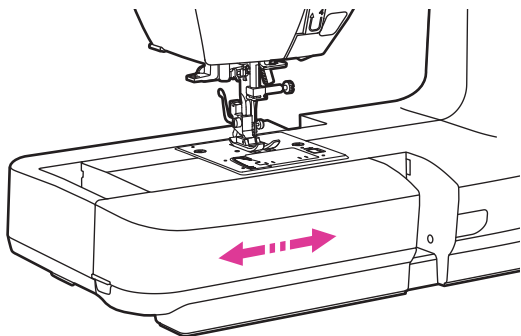


Display	In general	Sewing mode	Embroidery mode
<b>Green</b>	<p>When the upper thread breaks, the motor will stop. Green light will flash 3 times then back resume to constantly bright status.</p> <p>When remaining amount of bobbin thread is low, the motor will stop. Green light will flash 3 times then back resume to constantly bright status.</p>	<p>Constantly bright: Machine is ready to sew; long press the start/stop button to start sewing immediately.</p>	<p>Constantly bright: Machine is ready to embroider; long press the start/stop button to start embroidering immediately.</p>
<b>Yellow</b>	-	Machine is not able to sew.	Machine is not able to sew.
<b>Red</b>	<p>Motor is overloaded or the shaft locked down.</p> <p>Once the problem solved, the lighting will resume to previous condition.</p>	-	-



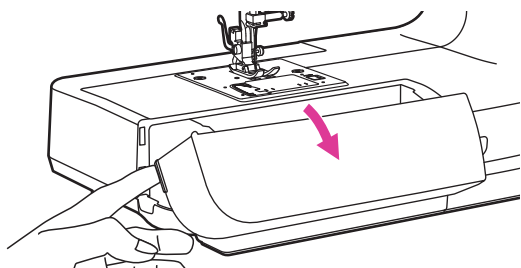
# Machine Setup

# Sewing table

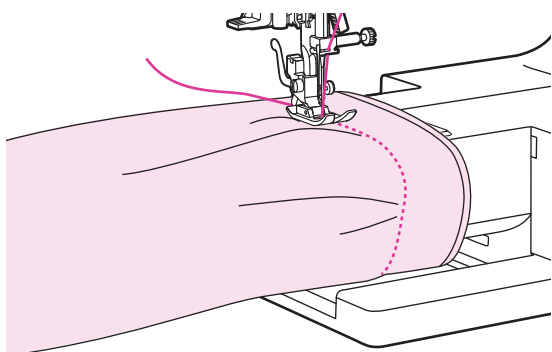


Hold the sewing table horizontally, then pull toward the left to remove it from the machine.

Attach the sewing table, and then push it to the right.



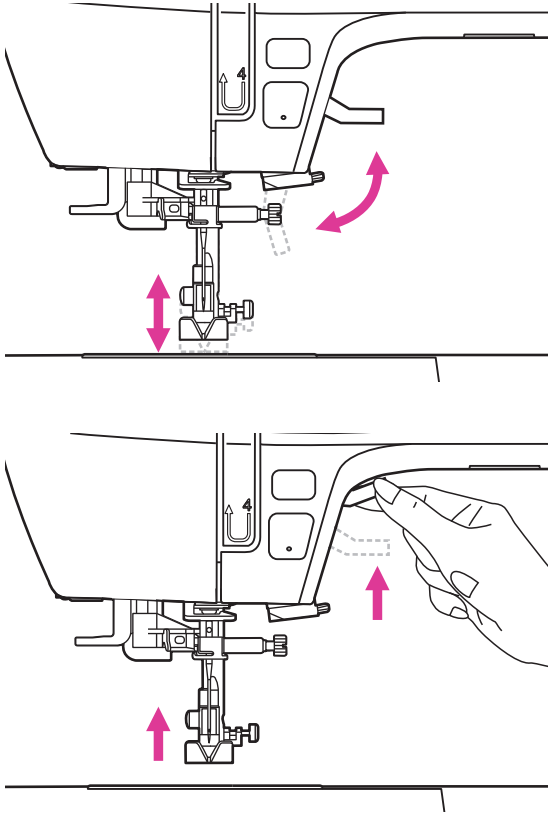
The inside space of the sewing table is used as an accessory box.



## ❖ Free arm

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

# Two-step presser foot lifter



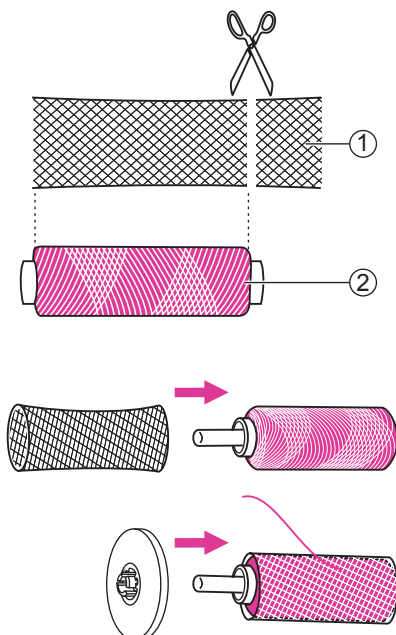
The presser foot lifter is to raise or lower your presser foot.

When sewing multi-layers or thick fabrics, the presser foot can be further raised up manually to allow enough space for your sewing work.

### Note

The needle must always be at the highest position.

# Using the thread net



### Note

In order to prevent tangling of the thread, please use a thread net. The net is especially usefull when using large or loose wound spools.

Reduce the thread tension if necessary.

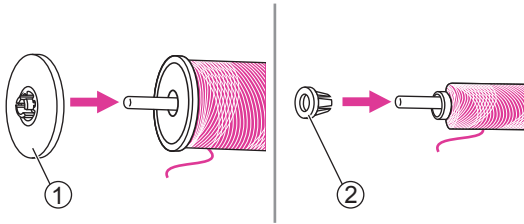
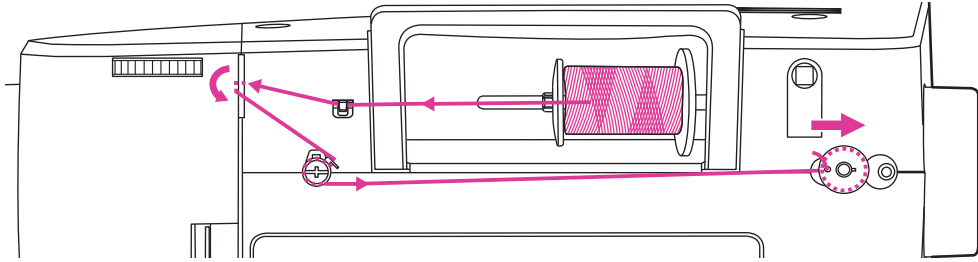
When using special threads which spin quickly off the thread spool, attach a net to the spool before using.

If the net is too long, cut the thread net to match the size of the spool.

- ① Thread net
- ② Thread

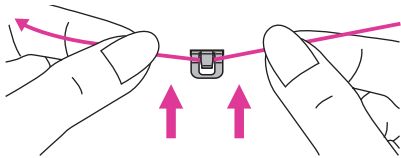
# Winding the bobbin

Please following the number order and see the corresponding illustrations below.

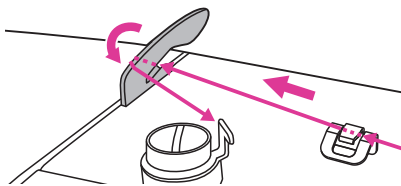


1. Place the thread and spool holder onto the spool pin. For better sewing quality, choose a proper size of the spool holder for the thread and attach it next to the spool.

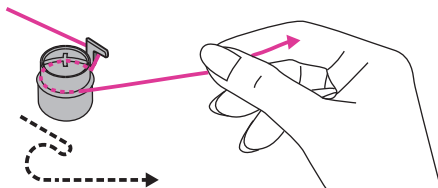
- ① Large spool holder
- ② Small spool holder



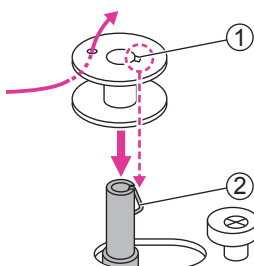
2. Draw the thread from the spool and place the thread in between the upper thread guide.



3. Guide the thread ahead and pull the thread through the pre-tension spring as illustrated.

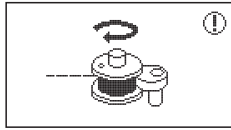
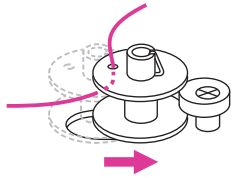


4. Wind the thread counter-clockwise around the tension discs.

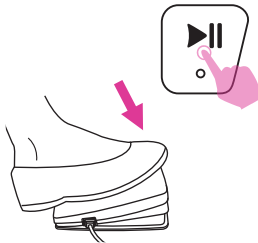
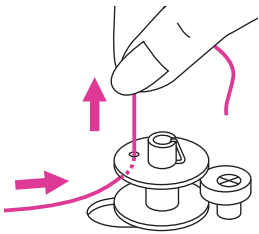


5. Place the thread end through one of the inner holes as illustrated and place the empty bobbin on the bobbin winder spindle. Then align the notch with bobbin winder spindle spring.

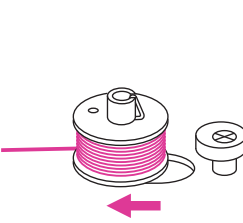
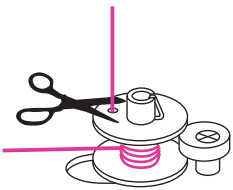
- ① Notch
- ② Bobbin winder spindle spring



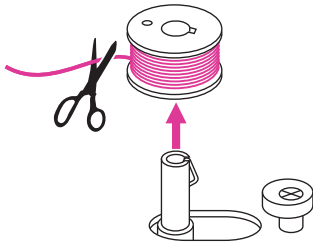
6. Push the bobbin to the right. When the bobbin winder spindle is pushed to the right, the screen will display the figure.



7. Hold the thread tail securely in one hand. Step on the foot control (only in the sewing mode) or long press the start/stop button to start winding the bobbin.



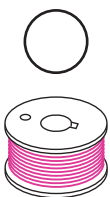
8. After the bobbin has wound a few rounds, stop the machine and cut the thread near the hole of the bobbin. Continue filling the bobbin until it is full. Once the bobbin is full, it rotates slowly. Release the foot control or press the start/stop button to stop the machine, then push the bobbin winder spindle to the left.



9. Cut the thread and then remove the bobbin.

#### Note

When the bobbin winder spindle is pushed to the right position, it's in "bobbin winding" mode and the machine is not allowed to sew and the handwheel will not be able to turn. To start sewing, push the bobbin winder spindle back 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.

# Inserting the bobbin

## ⚠ Attention

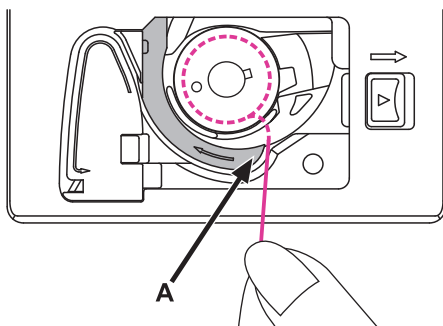
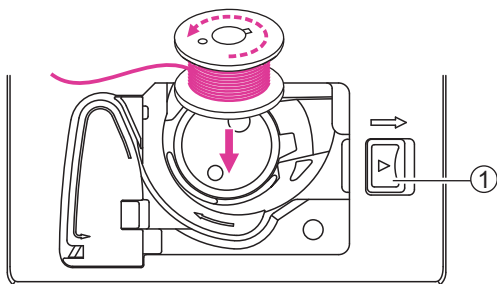
Turn the power switch to off ("O").

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

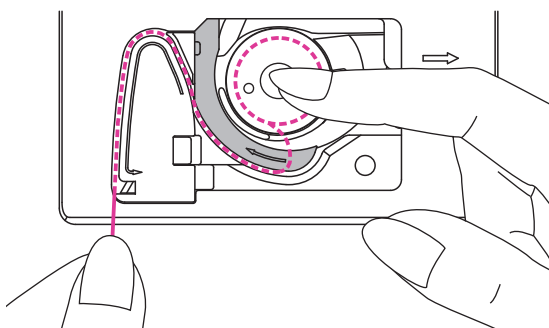
Open the bobbin cover by pushing the release button to the right.

① Release button

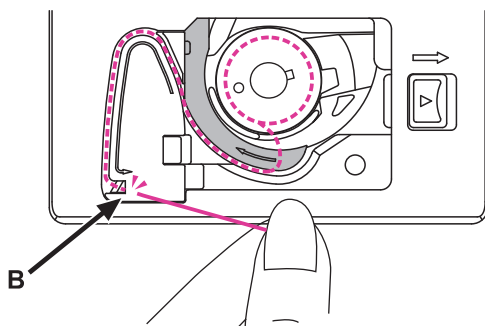
Insert the bobbin in the bobbin case with the thread running in a counter-clockwise direction (arrow).



Pull the thread through the slit (A).



With a finger hold gently on top of the bobbin, please follow the arrow markings and draw the thread into the bobbin thread guide.

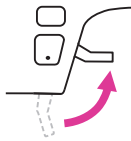
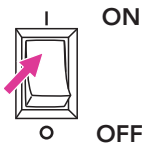
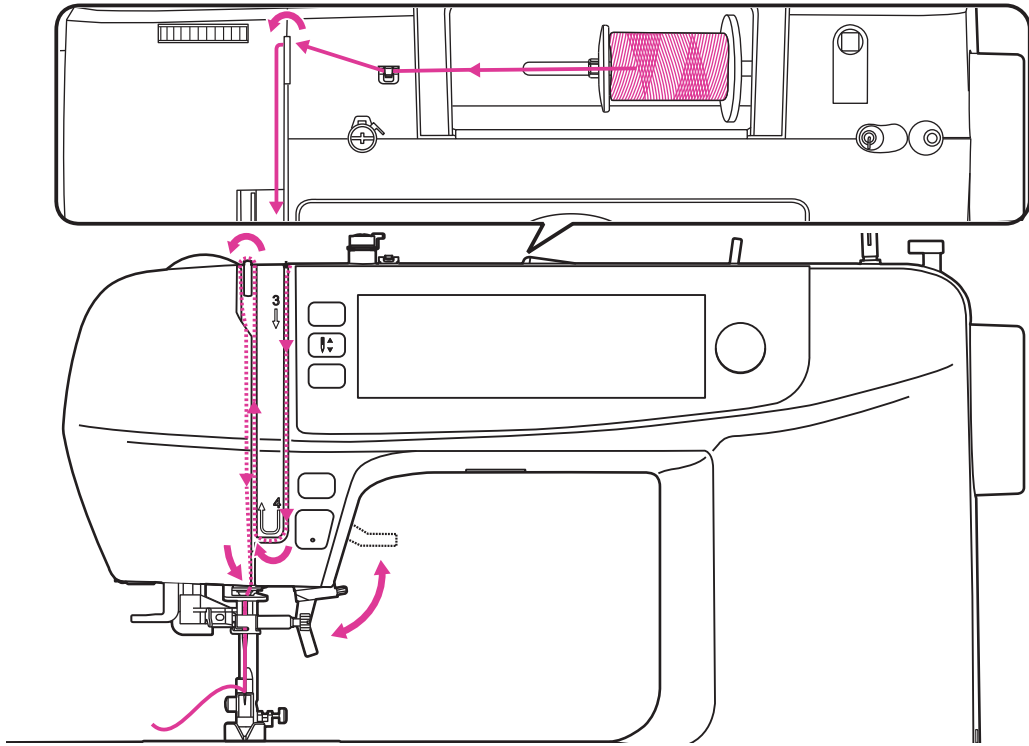


To cut off excessive thread, pull it to the cutter at point (B).

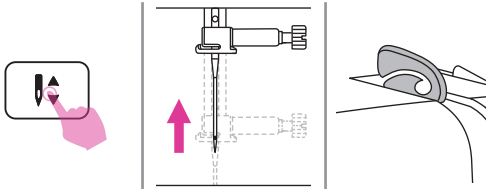
Close the bobbin cover.

# Threading the upper thread

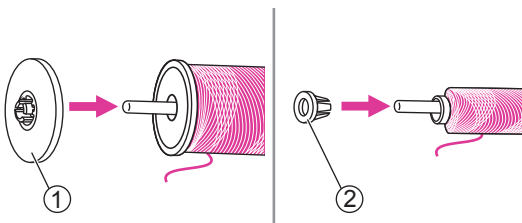
Please following the number order and see the corresponding illustrations below. It is important to carry out the threading correctly to get a quality sewing. Otherwise several problems will occur.



1. Turn the power switch to on ("I"). Raise the presser foot lifter.

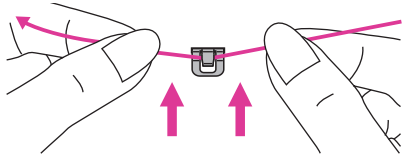


2. Press the needle up/down position button to bring the needle and take-up lever to highest position.

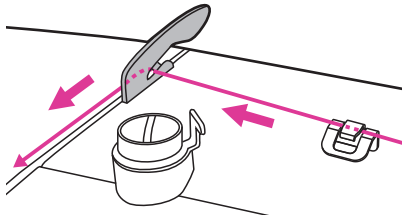


3. Place the thread and spool holder onto the spool pin. For better sewing quality, choose a proper size of the spool holder for the thread and attach it next to the thread.

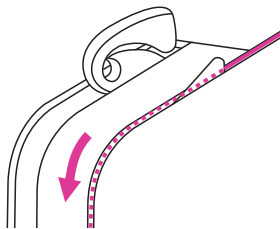
- ① Large spool holder
- ② Small spool holder



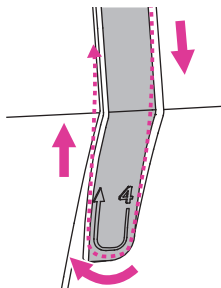
4. Draw the thread from the spool and place the thread in between the upper thread guide.



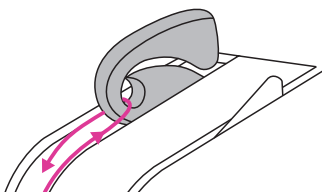
5. Guide the thread ahead and pull the thread through the pre-tension spring as illustrated.



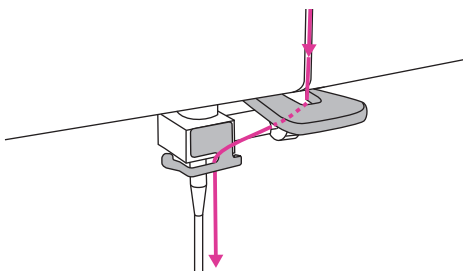
6. Continue to guide the thread into the silver discs to keep the thread in proper tension.



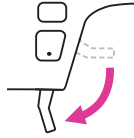
7. Pass the thread under the take-up spring then pull it upwards as arrow marks illustrated.



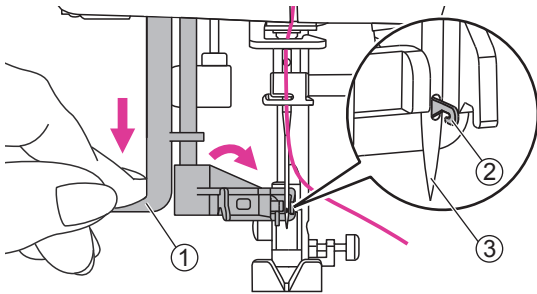
8. Pull the thread to the top then pass the thread through the slotted eye of the take-up lever. Guide the thread down afterwards.



9. Pass the thread behind the flat, horizontal thread guide. Use the needle threader to thread the needle.

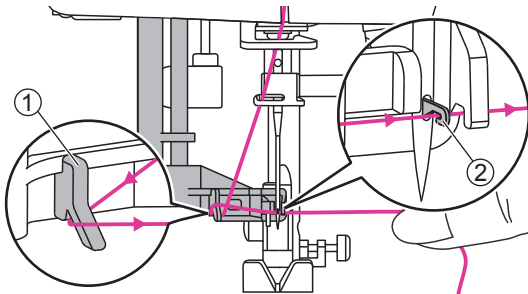


10. Lower the presser foot lifter.



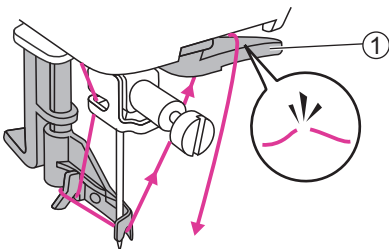
11. Pull down the lever to the very bottom. When heard a "click" sound, it will be on the right position to do the needle threading and the hook pin passes through the needle eye.

- ① Lever
- ② Hook pin
- ③ Needle



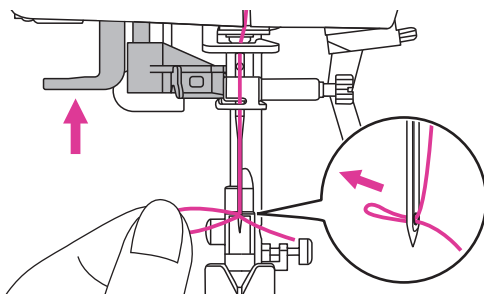
12. Pass the thread around the thread guide. Take the thread in front of the needle and make sure it is under the hook pin.

- ① Thread guide
- ② Hook pin



13. To cut the excess thread, take thread end and gently slip it over the thread cutter located on the right of the needle.

- ① Thread cutter



14. Raise the lever, the hook will rotate and pass the thread through the needle eye to form a loop.

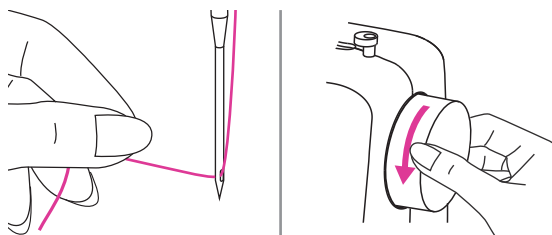
Pull the thread through the needle eye to finish threading.

#### Note

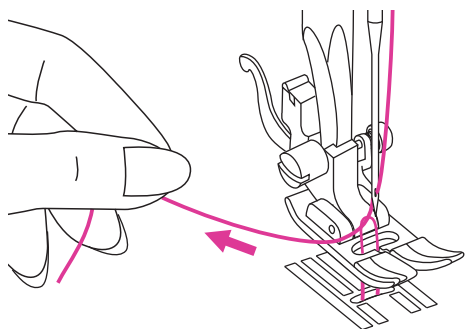
Your machine is threaded and ready for sewing, follow the instructions on "Starting to sew" chapter to start sewing.

# Bringing up the bobbin thread

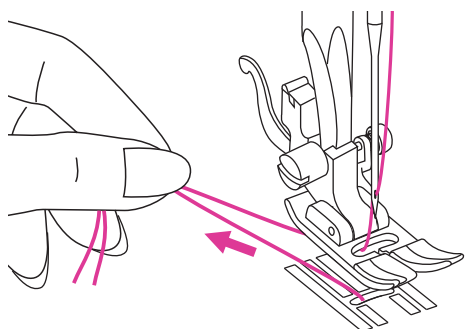
When sewing gathering or smocking stitch, bring up the bobbin thread first as below instruction.



Hold the upper thread with your left hand. Turn the handwheel towards you (counter-clockwise) to lower the needle down below the needle plate then raise it to bring the bobbin thread up.



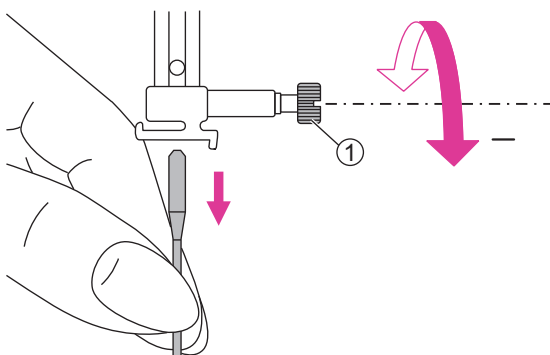
Gently pull on the upper thread to bring the bobbin thread up through the needle plate hole. The bobbin thread will come up in a loop.



Pull both threads to the back under the presser foot.

# Replacing the needle

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

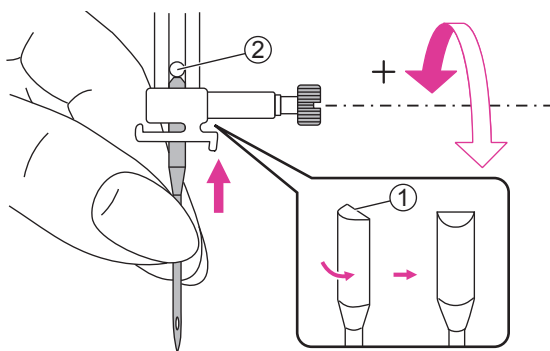


## ⚠ Attention

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

Turn the handwheel toward you to raise the needle then loosen the needle clamp screw to remove the needle.

① Needle clamp screw

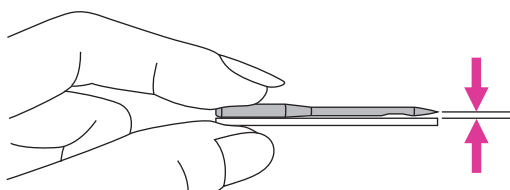


When inserting a new needle, keep the flat side of the shaft to the back.

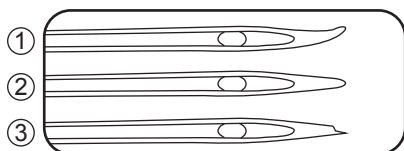
Push the needle into the clamp until it touches the pin and stops. Then secure it by tightening the needle clamp screw.

① Flat side of the shaft

② Pin



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
65/9 - 75/11 	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.
80/12 	Medium weight fabrics- cotton, satin, kettleclote, sailcloth, double knits, lightweight woolens.	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.
90/14 	Medium weight fabrics- cotton duck, woolen, heavier knits, terrycloth, denims.	
100/16 	Heavyweight fabrics- canvas, woolens, outdoor tent and quilted fabrics, denims, upholstery material (light to medium).	

## Note

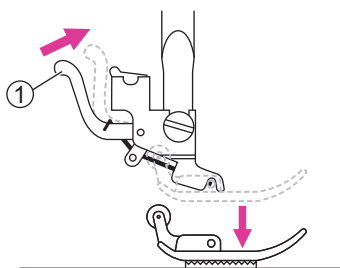
1. In general, fine threads and needles are used for sewing fine fabrics, thicker threads and needles are used for sewing heavy fabrics.
2. Always test thread and needle size on a small piece of fabric which will be used for actual sewing.
3. Use the same thread for needle and bobbin.
4. Use a stabilizer or place a backing for fine or stretchy fabrics, and select the correct presser foot.
5. It is recommended that a 90/14 needle should be used when embroidering on heavyweight fabrics or stabilizing products (for example, denim, puffy foam, etc.). A 75/11 needle may bend or break, which could result in injury.
6. For transparent nylon thread, always use needle 90/14 - 100/16. The same thread is usually used for the bobbin thread and upper threading.

# Changing the presser foot

## ⚠ Attention

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

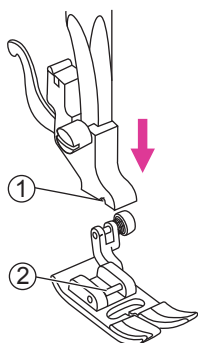
Always use the proper foot for the selected stitch. The wrong foot can cause the needle to break.



## ❖ Remove the presser foot

Raise the presser foot lifter. Press the back lever to release the presser foot.

- ① Lever

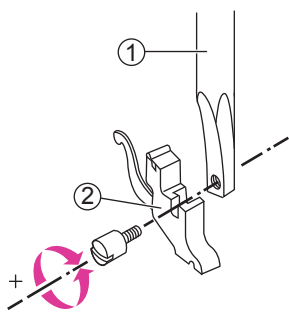


## ❖ Attach the presser foot

Lower the presser foot lifter until the cut-out meets the pin.

The presser foot will attach to the presser foot holder automatically.

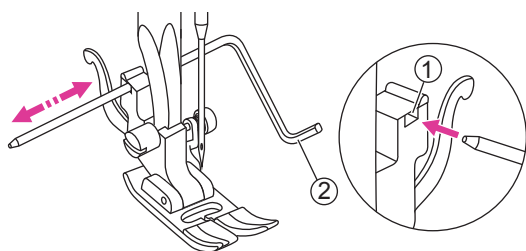
- ① Cut-out
- ② Pin



## ❖ Remove and insert the presser foot holder

Raise the presser foot lifter. 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 enclosed screwdriver.

- ① Presser foot bar
- ② Presser foot holder

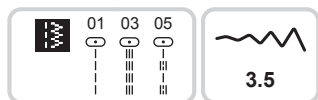


## ❖ Insert the edge/quilting guide

Insert the edge/quilting guide in the slot as illustrated. Adjust the needed width according to your sewing applications.

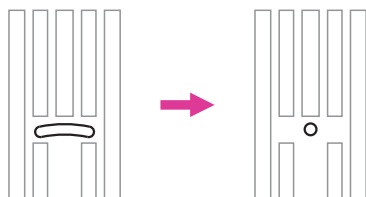
- ① Slot
- ② Edge/quilting guide

# Replacing the needle plate



**⚠ Attention**  
Turn the power switch to off ("O").

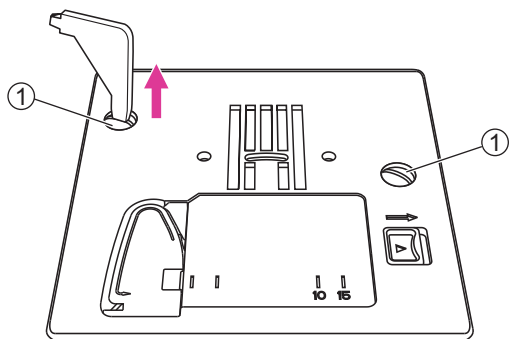
Only specific straight stitches are applicable while using straight stitch plate. (A group patterns 01 & 03 & 05)



The straight stitch plate is recommended for embroidery mode for better embroidery quality. It can be also used for straight stitches in middle needle position in normal sewing mode.

The particular design of smaller central hole can give a better support of the fabric during straight stitch sewing.

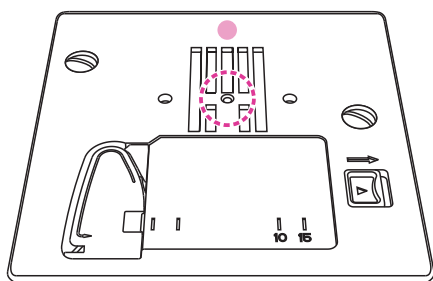
Thus, the fabric can be prevented from being pulled down into bobbin/hook area, especially in the beginning or end of a seam.



Remove the needle, presser foot and presser foot holder.

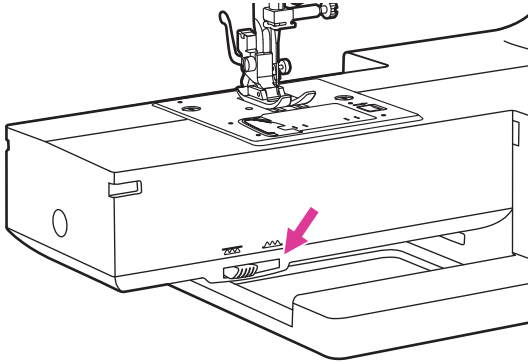
Remove the screws on the needle plate then remove the needle plate.

① Screws



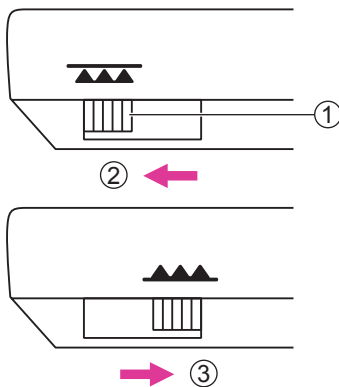
Change the straight stitch plate and tighten the screws.

# To raise or drop the feed dogs



The drop feed lever can be seen on the base at the front side of the sewing machine, when the sewing table is opened.

Sliding the drop feed lever to lower or raise the feed dogs. When lever is in raised position, the feed dog will arise automatically when you are sewing.

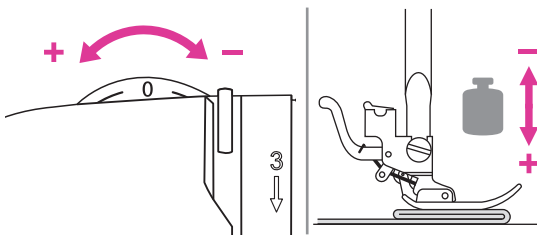


- ① Drop feed lever
- ② Lowered position
- ③ Raised position

## Note

When you finish the work, (e.g. button sewing, free motion darning, embroidery and monogramming), please move the drop feed lever to raised position for general sewing purpose.

# Adjusting the presser foot pressure



The presser foot pressure dial is on the top left of the face plate.

The presser foot pressure of the machine has been pre-set and requires no particular adjustment for general sewing.

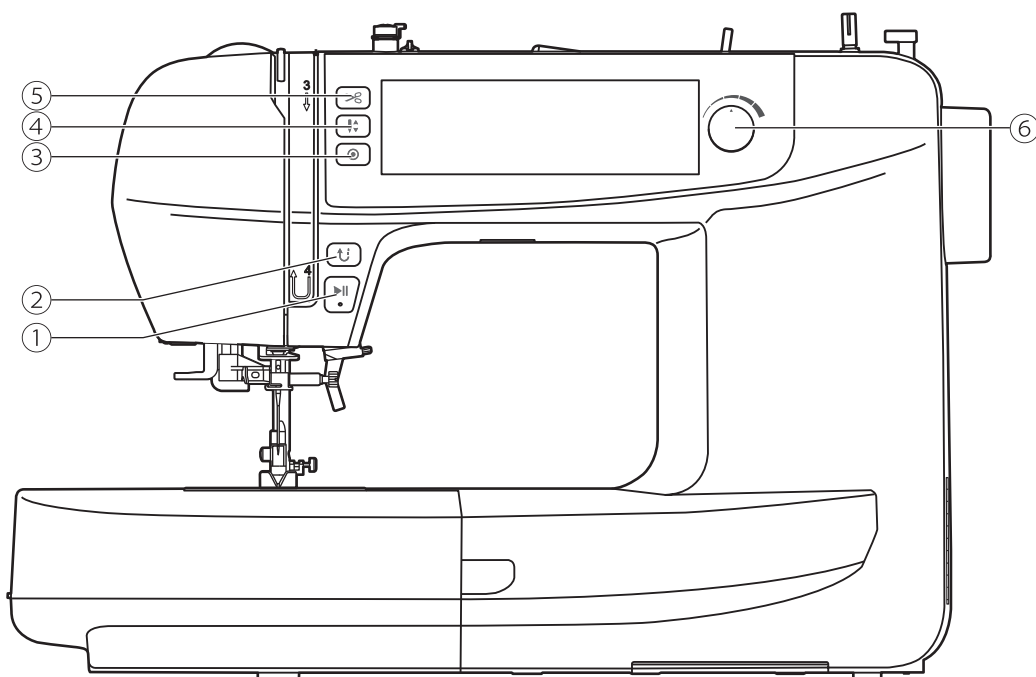
Basic presser foot pressure setting: "0".

For sewing with very thin fabric, reduce the pressure by turning the knob clockwise (-1, -2, -3) and for heavy fabric, increase the pressure by turning it counter-clockwise (+1, +2).



# **| Instruction**

# Operation buttons

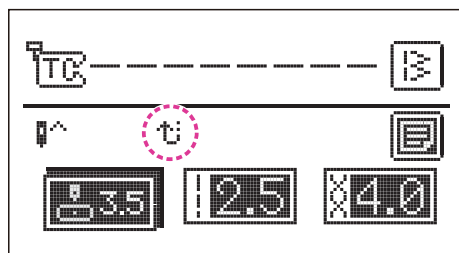


## 1. Start/stop button

Long press the start/stop button to start machine running. Press the start/stop button again to stop machine. The machine rotates slowly at the beginning of the sewing.

The sewing speed can be controlled by the speed adjustment dial.

This way you may operate the machine without foot control.

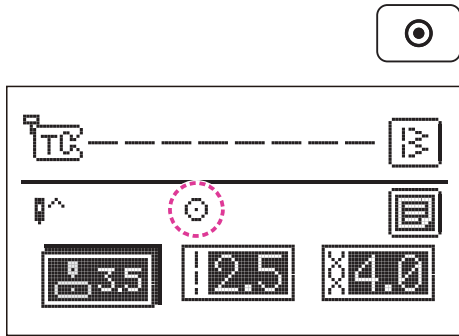


## 2. Reverse button

When the A group patterns 01-06 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 A group patterns 07-88 are selected, the machine will immediately sew 3 locking stitches when the reverse button is pressed, then automatically stop.

The LCD screen will display the reverse icon.



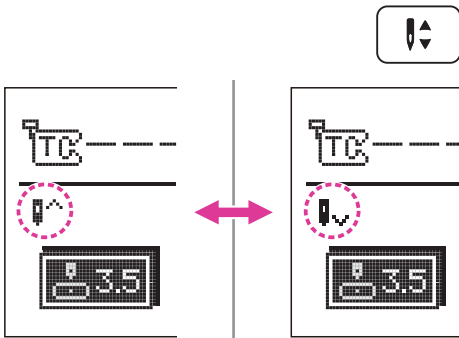
### 3. Auto-lock button

When machine is not sewing: Press the auto lock button, machine will sew 3 stitches in the same position then stop.

During machine is sewing: When A group patterns 01-06 are selected and the auto-lock button is pressed, the machine will sew 3 locking stitches. Then it will stop automatically.

During machine is sewing: When A group patterns 07-88 are selected and the auto-lock button is pressed, the machine will sew 3 locking stitches at the end of the current pattern. Then it will stop automatically. The function will be cancelled if you press the button once again or select another pattern.

The LCD screen will display the icon until the machine is stopped.



### 4. 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

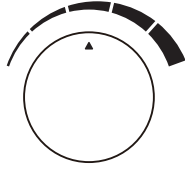
During sewing, press the needle up/down position button, the machine will stop automatically.

Press the button so that the arrow on the LCD screen points upward and the needle stops in the highest position. Press the button so that the arrow points downward, the machine stops with the needle in the lowest position.



### 5. Thread cutter button

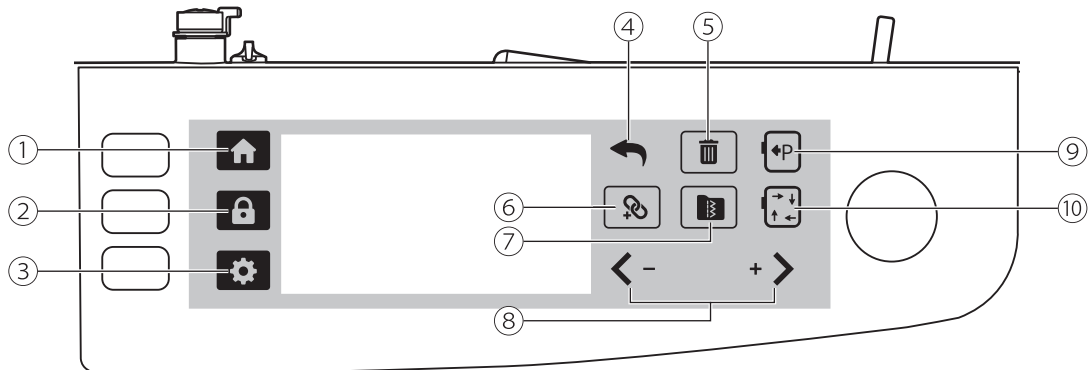
Press this button after finishing sewing and the machine will trim the thread.



## 6. Speed adjustment dial

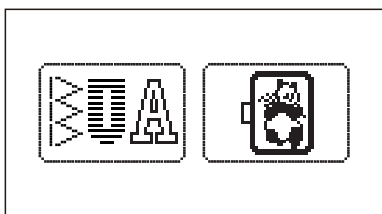
In the sewing mode, the speed adjustment dial can control the sewing speed. Turn the dial clockwise to make sewing speed faster. Turn the dial counter-clockwise to make sewing speed slower.

# Operation panel



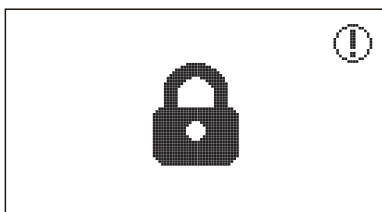
## 1. Home icon

Touch the home icon in any mode will return to sewing mode/embroidery mode.



## 2. Lock icon

Touch the lock icon to lock the machine, it will show a lock on the screen. Touch this icon again to unlock the setting.



## 3. Settings icon

Touch the settings icon to change sewing mode and embroidery mode settings. Please refer to "Advanced setting" chapter for more information.



## 4. Backward icon

Touch the backward icon to return to the last page.



### 5. Delete icon

Touch the delete icon to delete each stitch individually. If you want to delete all stitches, long touch the delete icon, after the prompt message pop out then click "check" to delete all stitches.



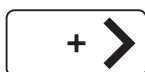
### 6. Combination icon (In sewing mode)

Touch the combination icon to enter or exit the combination mode.



### 7. Memory icon (In sewing mode)

Touch the memory icon to recall/save/delete patterns saved in my favorite program or memory program.



### 8. Move/Value adjustment icon

- Go to previous/next page.
- Adjust the parameter value setting.
- Move the cursor to the position you want.



### 9. Park position icon (In embroidery mode)

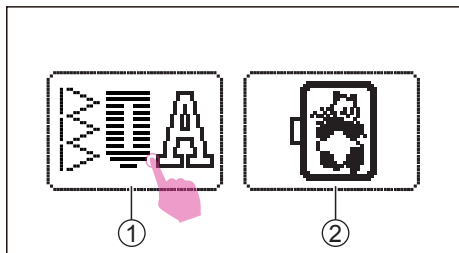
When you want to change the thread and find the distance between the embroidery carriage and the needle is too close, please touch the park position icon to move the embroidery carriage to left side, and it will be easier for you to change the thread. Touch the icon again, the embroidery carriage will be back to the original position.



### 10. Trace icon (In embroidery mode)

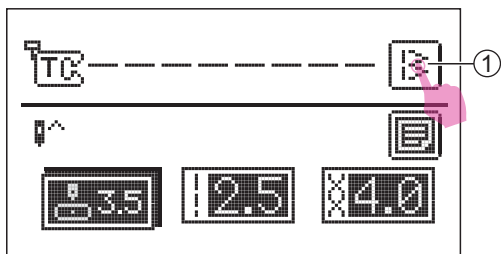
Touch the trace icon to check the size of the embroidering area in the editing mode.

# Selecting stitch



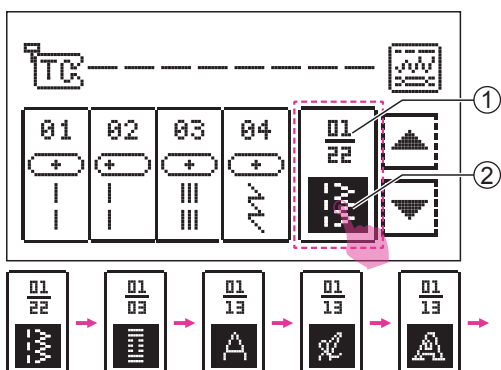
Turn the power switch to on ("I"). Touch the sewing mode icon.

- ① Sewing mode icon
- ② Embroidery mode icon



The default pattern setting is middle needle position in group A. If you want to change to other stitch, touch the select pattern icon to selecting screen.

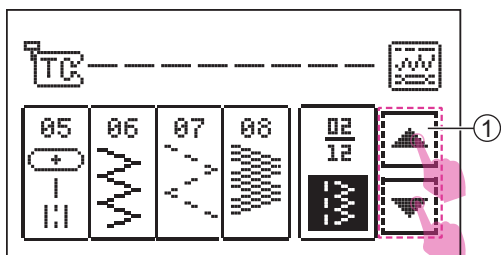
- ① Select pattern icon



There are 5 groups for patterns selection. (Utility stitches/ buttonhole stitches/ alphabet stitches-block style, script style, outline style)

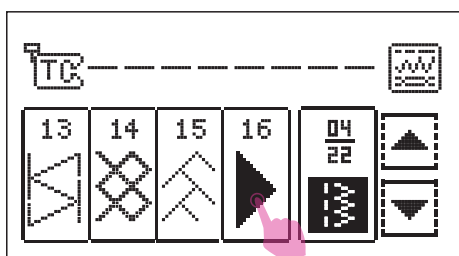
Continuously touch the mode selection icon to view other groups.

- ① Number of current page/total number of page
- ② Mode selection icon

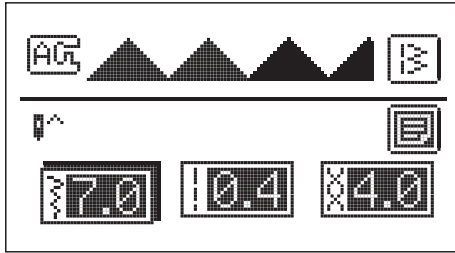


Touch the previous/next page icon to view other page in the same pattern group.

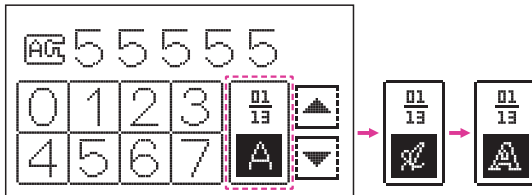
- ① Previous page icon/next page icon



Choose the desired stitch.



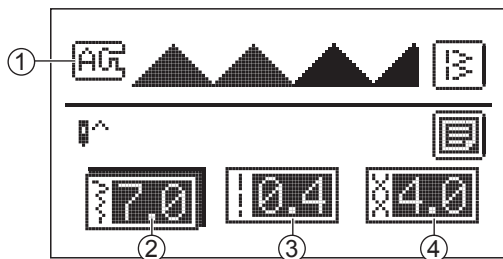
Enter the stitch parameter setting screen.



**Note**

When alphabet stitches selected, only the tension can be adjusted. The stitch width, stitch length, mirror, twin needle, elongation and density functions are locked.

# Altering stitch



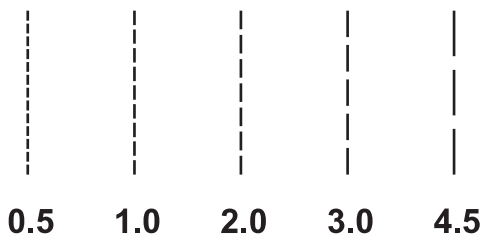
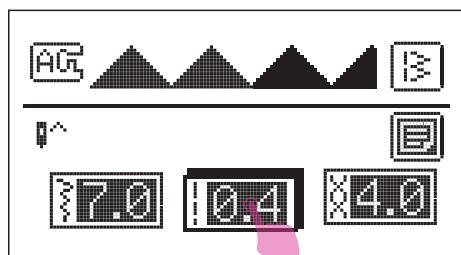
After selecting the stitch, you can adjust stitch width, stitch length and tension.

- ① Suggested presser foot and identification letter
- ② Stitch width icon
- ③ Stitch length icon
- ④ Tension icon



## Note

- ① Default value
- ② Value after setting adjustment
- ③ Default value in adjusting mode
- ④ Non-default value in adjusting mode



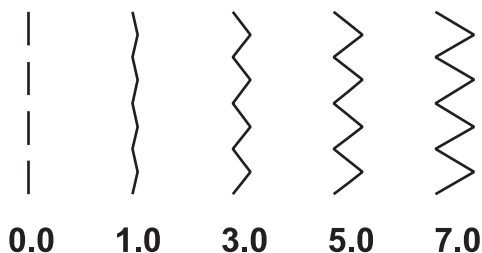
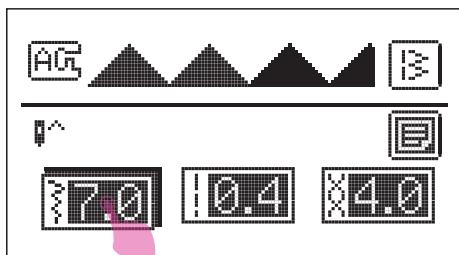
## ❖ Altering the stitch length

When you select a stitch, the machine will automatically set the recommended stitch length values which will be shown on the LCD screen.

After selecting the stitch, touch the stitch length icon to adjusting mode. Touch the value adjustment icon "+" or "-" to adjust the stitch length.

For a shorter stitch length, touch the "-" icon. For a longer stitch length, touch the "+" icon.

Different stitches will have different length limitation.



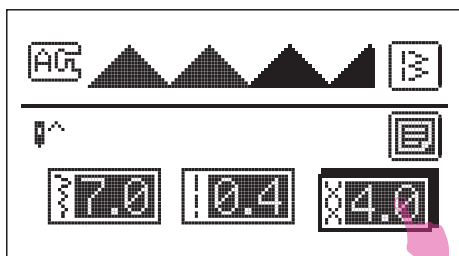
## ❖ Altering the stitch width

When you select a stitch, the machine will automatically set the recommended stitch width values which will be shown on the LCD screen.

After selecting the stitch, touch the stitch width icon to adjusting mode. Touch the value adjustment icon "+" or "-" to adjust the stitch width.

For a narrower stitch, touch the "-" icon. For a wider stitch, touch the "+" icon.

Different stitches will have different width limitation.

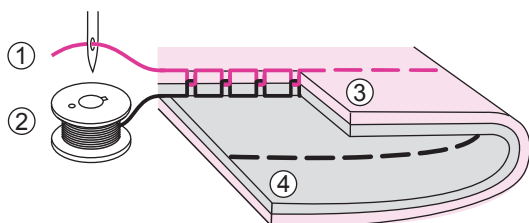


## ❖ Altering the thread tension

**Proper tension setting is important for sewing. There is no single tension setting appropriate for all the stitch functions and fabrics.**

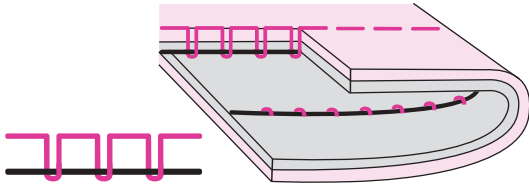
Basic thread tension setting: "4".

After selecting the stitch, touch the thread tension icon to adjusting mode. Touch the value adjustment icon "+" or "-" to adjust the stitch tension.

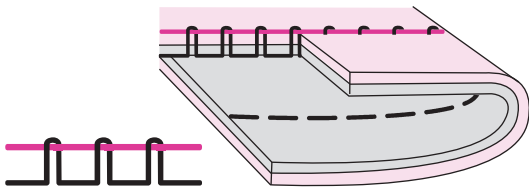


Normal thread tension for straight stitch sewing.

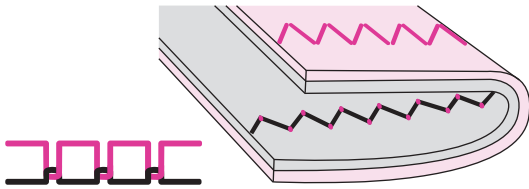
- ① Upper thread
- ② Bobbin thread
- ③ Surface
- ④ Wrong side



Thread tension is too loose for straight stitch sewing. To increase the tension, touch the "+" icon.



Thread tension is too tight for straight stitch sewing. To reduce the tension, touch the "-" icon.

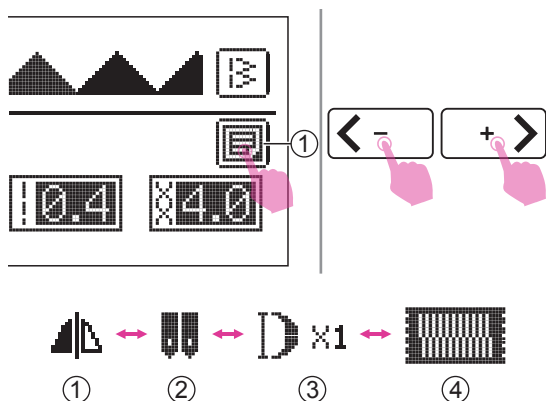


Normal thread tension for zig zag and decorative sewing.

For all decorative sewing you will always obtain a nicer stitch and less fabric puckering.

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

# Settings icon



Touch the setting icon to enter or exit the pattern function screen.

## ① Setting icon

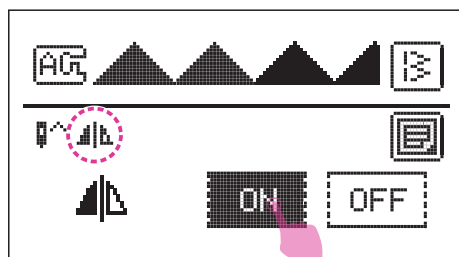
Touch the move icon to switch to different function settings in below sequence:

- ① Mirror
- ② Twin needle
- ③ Elongation
- ④ Density

If the function is not able to perform in this pattern, will not show on the screen.

## ❖ Mirror

**The mirror function is to create the horizontal mirror image of selected stitch. Except the stitches 01-03, 05 from the A group patterns, the other stitches can be created as mirror images.**

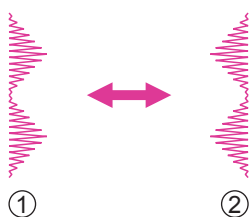


After selecting the stitch, touch the setting icon to enter pattern function screen.

Touch the ON icon to set the mirror function then the LCD screen will display the mirror icon.

The machine will continue to sew the mirror stitch until you touch the OFF icon in the mirror function setting screen.

The mirror function also will be canceled if the stitch changed.

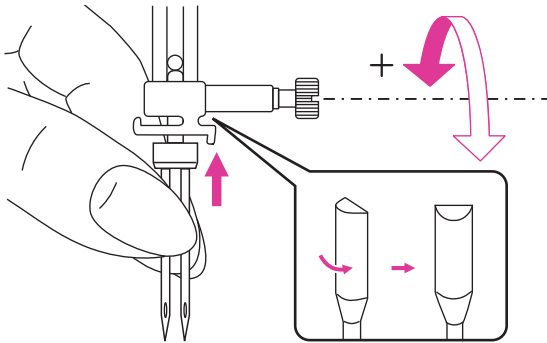


- ① Normal pattern
- ② Mirror image pattern



## ❖ Twin needle

\* The twin needle is optional. It is not included with the machine.

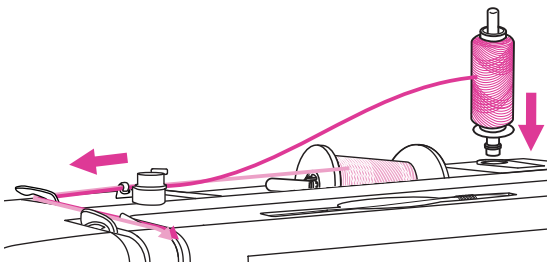


Insert the twin needle. Please refer to "Replacing the needle" chapter for more information.

### ⚠ Attention

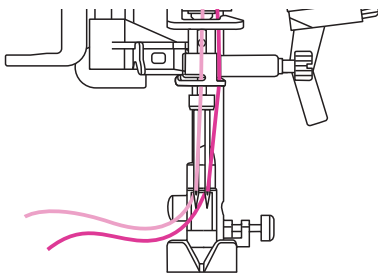
When using twin needles, be sure to attach the suggested presser foot which screen appears.

Use only twin needle assemblies with max. 2.5mm needle distance, 12(80) needle size.



Follow the instructions for single-needle threading using the horizontal spool pin. Thread through the left needle.

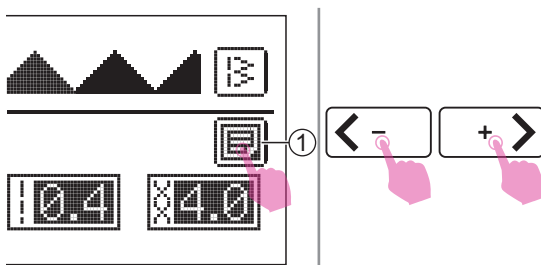
Set the second spool pin into the hole on the top of the machine. Thread through remaining points, making certain to omit the thread guide above the needle and pass thread through the right needle.



Thread each needle separately.

### Note

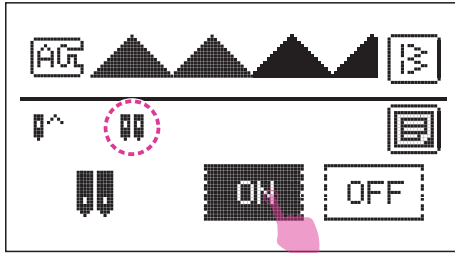
Make sure that the two threads used to thread the twin needle are of the same weight. You can use one or two colors.



After selecting the stitch, touch the setting icon to enter pattern function screen.

① Setting icon

Touch the move icon to switch to the twin needle function setting screen.

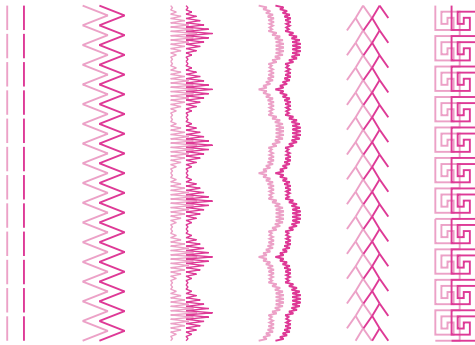


Touch the ON icon to set the twin needle function then the LCD screen will display the twin needle icon.

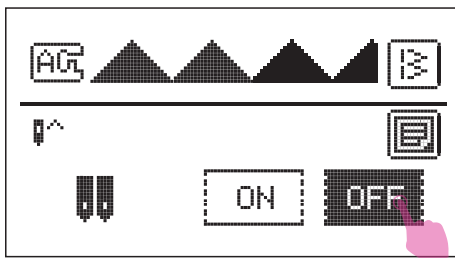
Touch it to set the twin needle mode, the stitch width will be adjusted in the safety range. When you cancel the twin needle mode, the width parameter will be remained.

#### Note

When double needle sewing has been selected, it will remain active even the stitch pattern is changed.



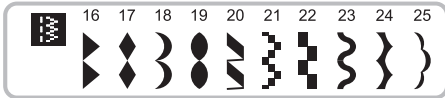
Two lines of stitching are sewn parallel to each other.



The machine will continue to sew the twin needle stitch until you touch the OFF icon in the twin needle function setting screen.

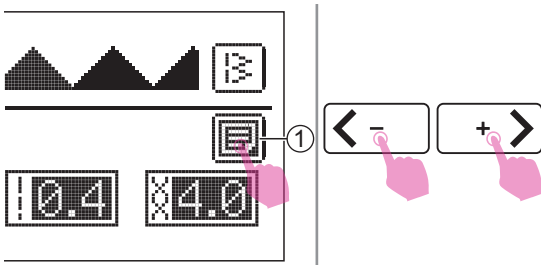
#### Note

When sewing with twin needle, always proceed slowly, and make sure to maintain a low speed to insure quality stitching.



## ❖ Elongation

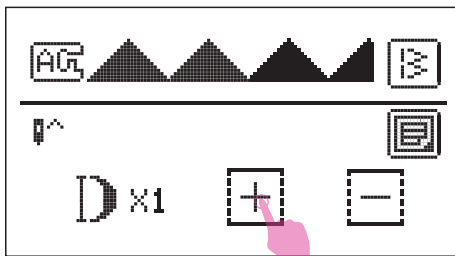
A group patterns 16-25 can be elongated.



After selecting the stitch, touch the setting icon to enter pattern function scene.

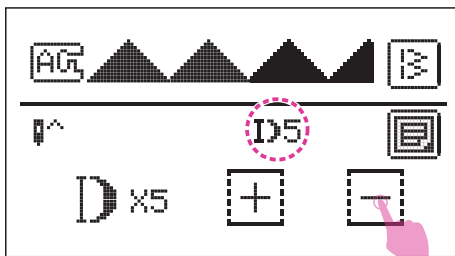
① Settings icon

Touch the move icon to switch to the elongation function setting scene.



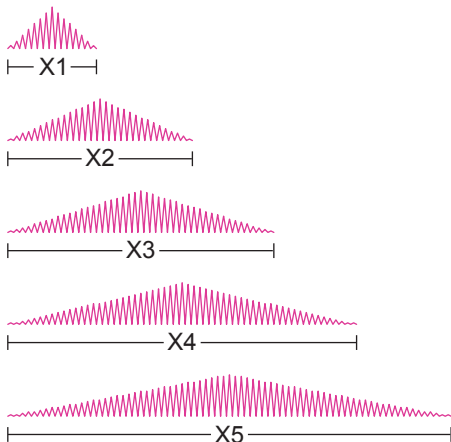
Touch the "+" or "-" icon to adjust the stitch which can be elongated up to 5 times the original length.

For a longer stitch, touch the "+" icon.



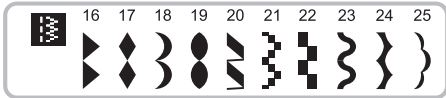
For a shorter stitch, touch the "-" icon.

The LCD screen will display the elongation icon.



The machine will continue to sew the elongation stitch until you reset the elongation ratio in the elongation function setting scene.

When the width or length or stitch is changed, a greater variety of patterns are available.



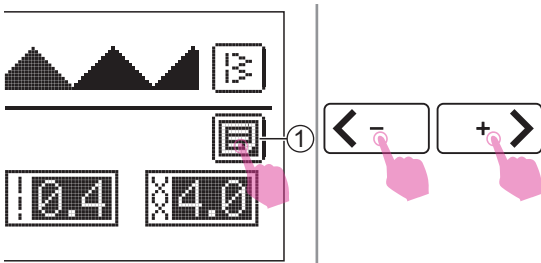
## ❖ Density

A group patterns 16-25 density can be adjusted.

After selecting the stitch, touch the setting icon to enter pattern function screen.

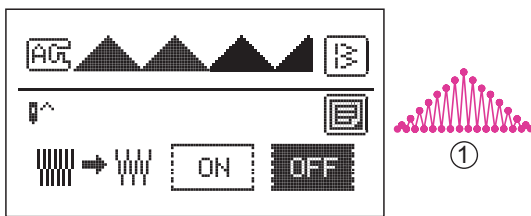
① Settings icon

Touch the move icon to switch to the density function setting screen.



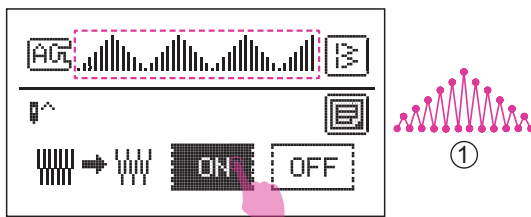
The density default setting is in high density.

① The density of stitch length is 0.4mm

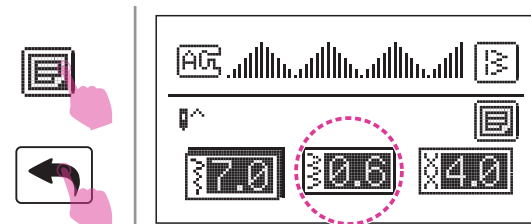


Touch the ON icon to set the density function then the LCD screen will display the adjusted pattern.

① The density of stitch length 0.4mm\*1.5 times=0.6mm in density.

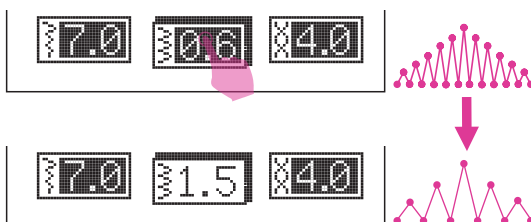


After adjusting the density. Touch the setting icon or backward icon return to the stitch parameter setting mode, the LCD screen will display the density icon °



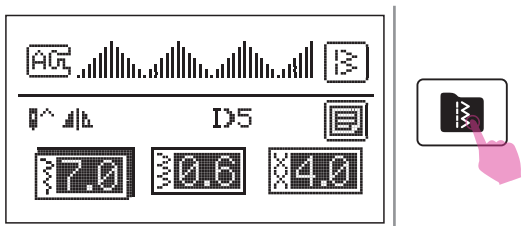
If you need to adjust the stitch density, touch the density icon to adjusting mode.

Touch the value adjustment icon "+" or "-" to adjust the density.

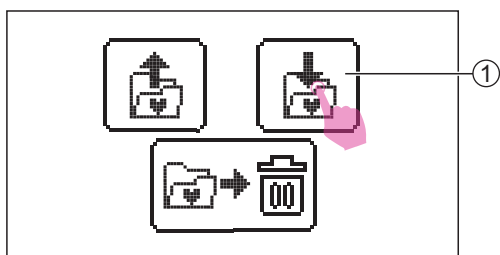


# My favorite program

You can set your favorite stitches and alphabets that you use most. Since stored patterns are not lost after the sewing machine is turned off, they can be recalled at any time.



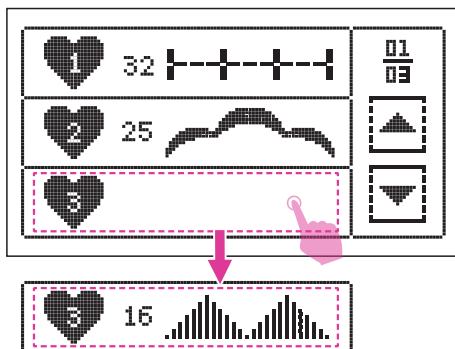
After editing the pattern, touch the memory icon to enter my favorite mode.



## ❖ Save pattern

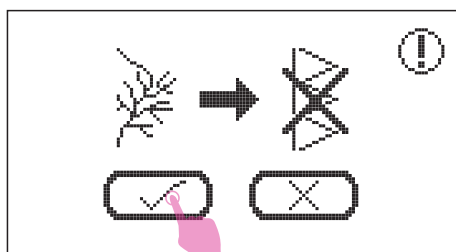
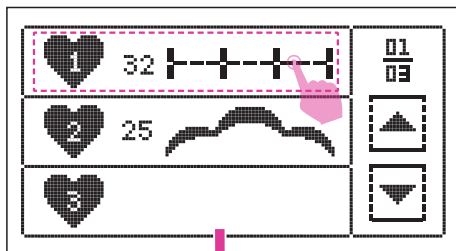
Touch the save icon to enter my favorite program screen.

① Save icon



There are 9 patterns that can be saved in my favorite program, which creates quick and easy access at all times.

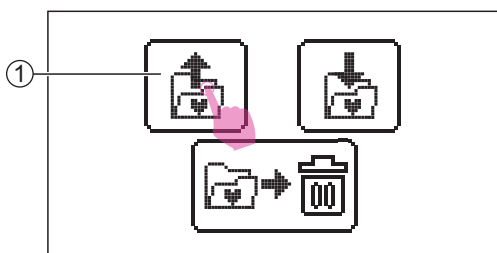
Selecting the folder you want to save the patterns.



### ❖ Overwrite pattern

Select the number to be overwritten.

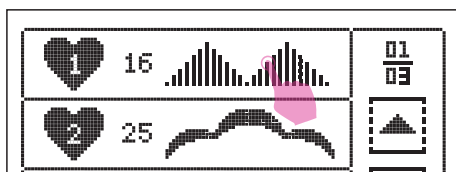
The prompt message will pop out then click "check" to overwrite the pattern.



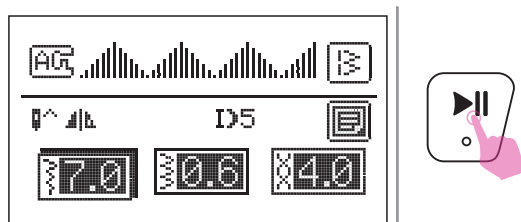
### ❖ Recall pattern

Touch the recall icon to enter my favorite program screen.

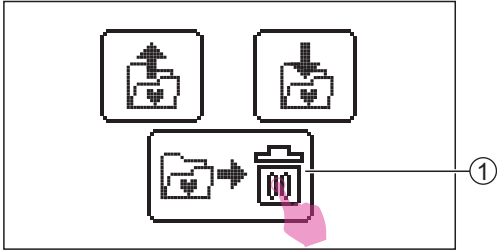
① Recall icon



Select the desired pattern.



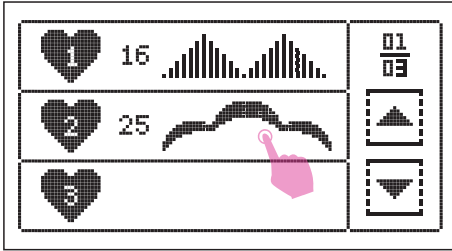
Long press the start/stop button to start sewing.



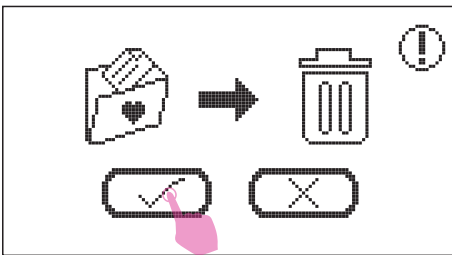
## ❖ Delete pattern

To delete the saved patterns, touch the delete icon to enter my favorite program screen.

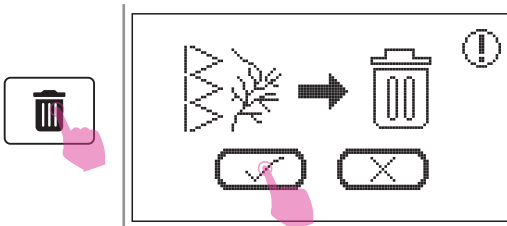
① Delete icon



Select the pattern you want to delete.



The prompt message will pop out then click "check" to delete the pattern.



If you want to delete all saved patterns, long touch the delete icon and the prompt message will pop out then click "check" to delete all patterns.

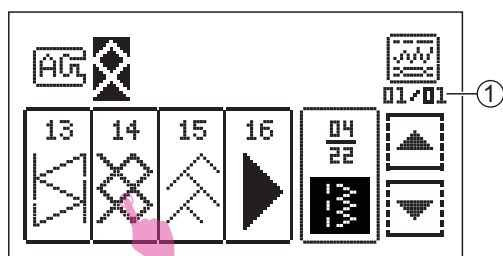
# Combination mode

To use the combine function, you can select each pattern to create combined patterns and continued sewing the combined patterns. This is convenient for patterns, such as names, that will be used often.



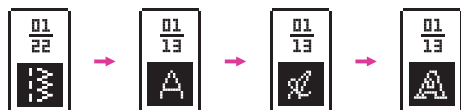
## ❖ Combine patterns

Touch combination icon to selecting screen.



Select the desired pattern.

① Number of current unit/total number of unit

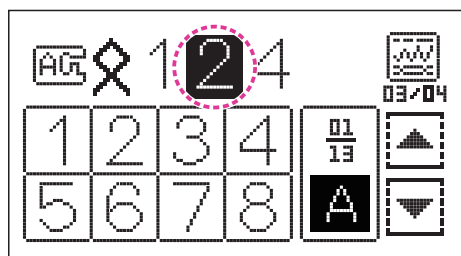


Except for buttonhole stitches group, each group pattern can mix and match with each other.

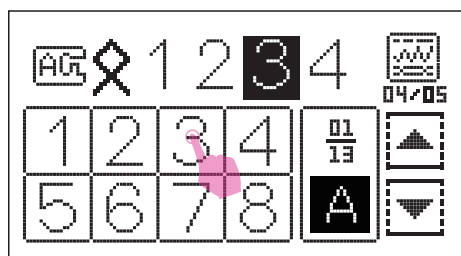


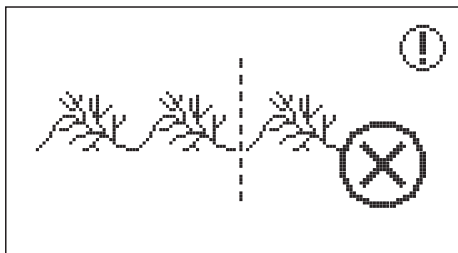
## ❖ Add patterns

Touch the move icon to move the cursor to the position which you want to add new pattern after it.

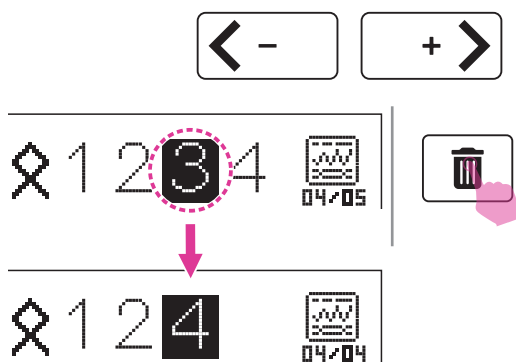


Select the pattern you want to insert and add it.



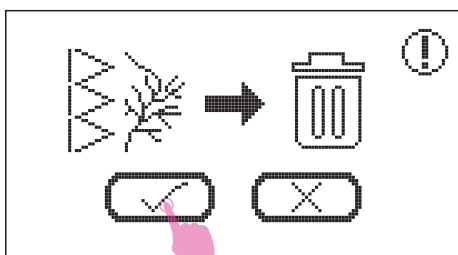


Please note a maximum of 20 units stitches can be combined in each module. When the pattern is over 20 units, the prompt message will pop out.

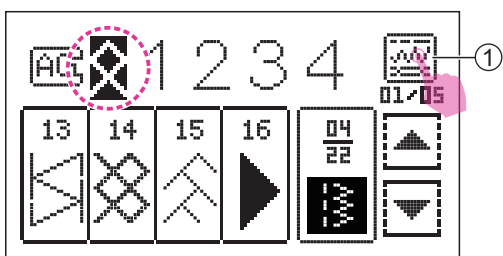


### ❖ Delete patterns

Touch the move icon to move the cursor to the pattern you want to delete. Touch the delete icon to delete it and next pattern will advance to fill the vacant position.



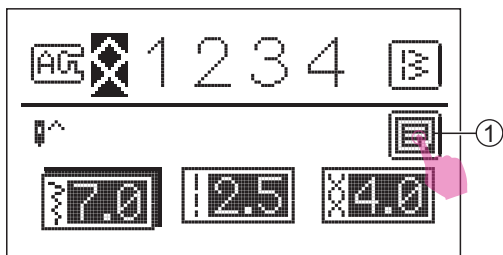
If you want to delete all patterns, long touch the delete icon and the prompt message will pop out then click "check" to delete all patterns.



### ❖ Combination setting

Move the cursor to the pattern you want to change the setting, touch the pattern parameter setting icon to enter the setting screen.

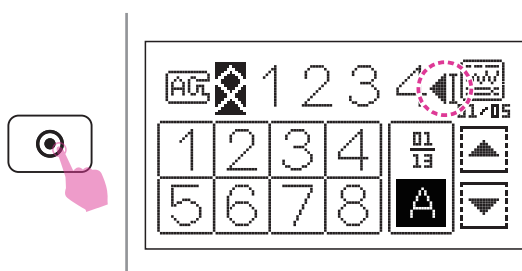
① Pattern parameter setting icon



To adjust the stitch width, stitch length, and tension. Touch the setting icon to enter or exit the pattern function scene.

① Settings icon

Except twin needle function, you can touch the move icon to switch to mirror, elongation and density function. (If the pattern does not have this function, then corresponding icon will not be displayed.)



Press the auto-lock button, the LCD screen will display the icon. When you finish sewing all the stitches, the machine will sew until the current pattern ends, it will also sew locking stitches and stop automatically.

**Note**

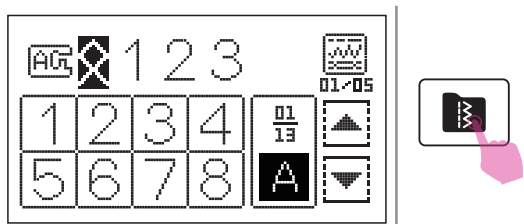
The letter combination cannot adjust stitch width, stitch length, mirror, twin needle, elongation and density function.

**Note**

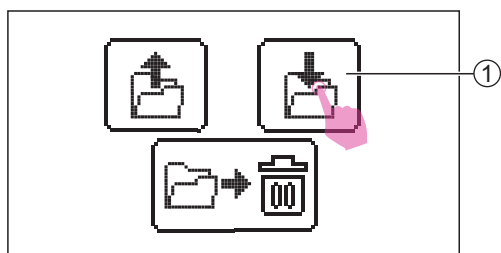
If the cursor moves to a specific position, the machine will sew from this position.

# Memory program

You can save frequent-use combining patterns for future use. Since stored patterns are not lost after the sewing machine is turned off, they can be recalled at any time.



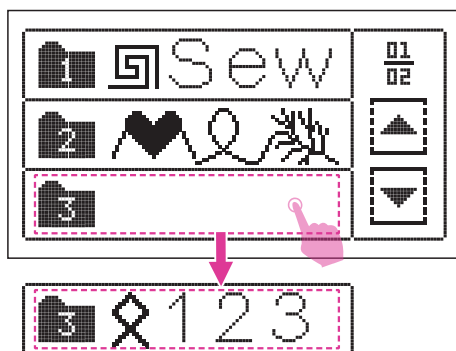
When you finish combination, touch the memory icon to enter memory mode.



## ❖ Save combined patterns

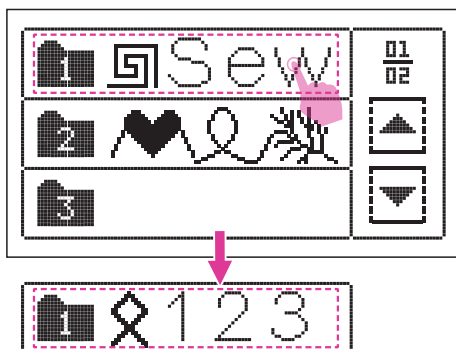
Touch the save icon to enter memory screen.

① Save icon



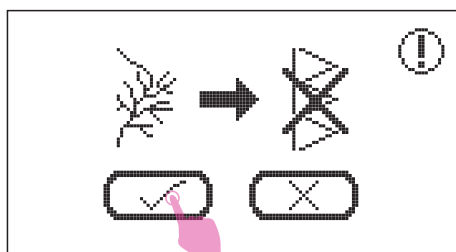
There are 6 groups of combination can be saved in the built-in memory, which creates a quick and easy access at all times.

Selecting the folder you want to save current combined patterns.

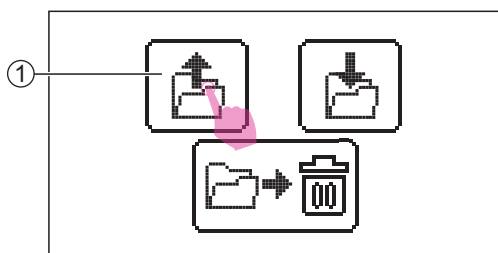


### ❖ Overwrite combined patterns

Select the number to be overwritten.



The prompt message will pop out then click "check" to overwrite the pattern.



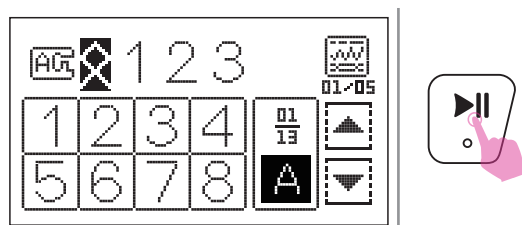
### ❖ Recall combined patterns

Touch the recall icon to enter memory screen.

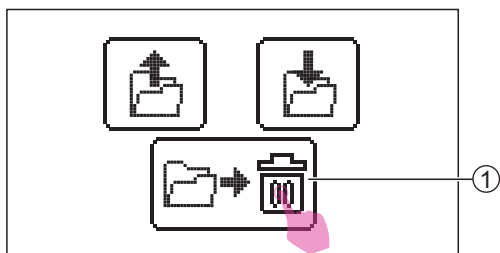
① Recall icon



Select the desired pattern.



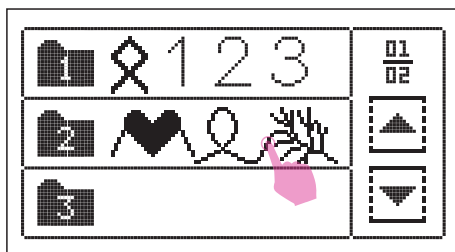
Press the start/stop button to start sewing.



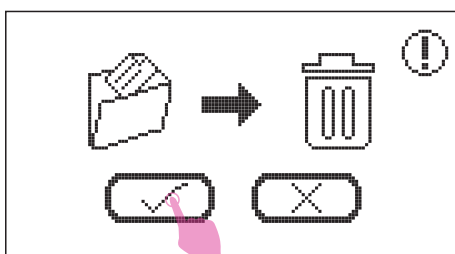
### ❖ Delete combined patterns

If you want to delete the saved combined patterns, touch the delete icon to enter memory screen.

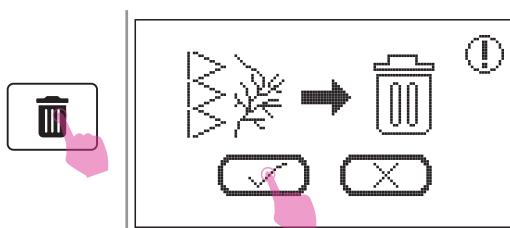
① Delete icon



Select the folder you want to delete.



The prompt message will pop out then click "check" to delete the pattern.



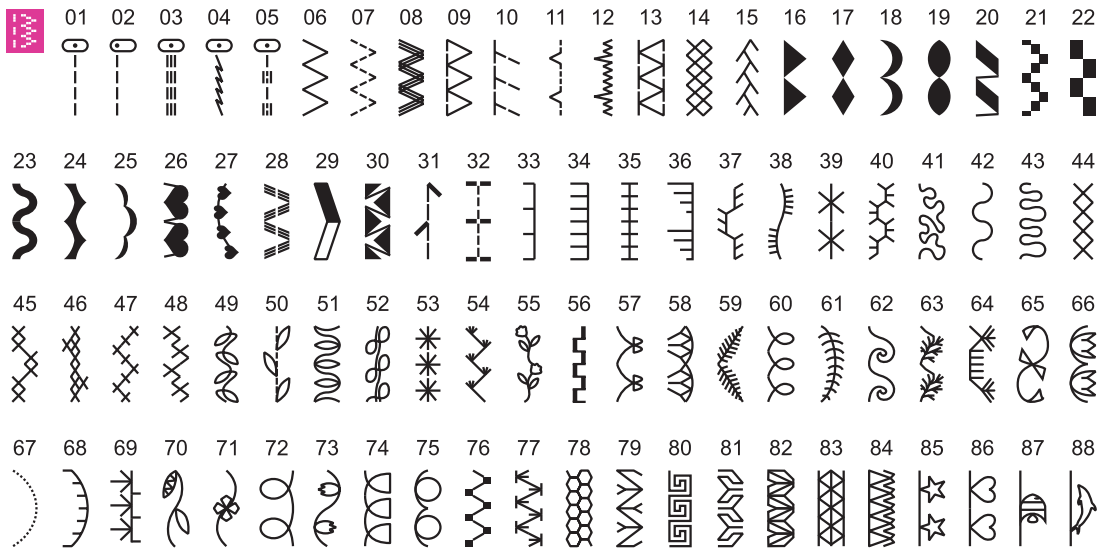
If you want to delete all saved patterns, long touch the delete icon and the prompt message will pop out then click "check" to delete all patterns.



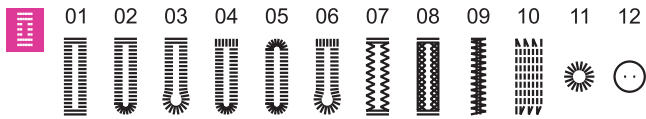
# Stitch Chart

# Stitch chart


## ❖ A group patterns




## ❖ B group patterns




## ❖ Alphabet-block style

	01	02	03	04	05	06	07	08	09	10															
	1	2	3	4	5	6	7	8	9	0															
11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88
Ä	Å	Æ	Ñ	Ö	Ø	Ç	Ü	ä	ã	å	æ	ë	è	é	ê	ñ	ö	õ	ø	ì	ç	ü	û	ß	&
89	90	91	92	93	94	95	96	97																	
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## ❖ Alphabet-script style

	01	02	03	04	05	06	07	08	09	10															
	1	2	3	4	5	6	7	8	9	0															
11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88
Ä	Å	Æ	Ñ	Ö	Ø	Ç	Ü	ä	ã	å	æ	ë	è	é	ê	ñ	ö	õ	ø	ì	ç	ü	û	ß	&
89	90	91	92	93	94	95	96	97																	
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## ❖ Alphabet-outline style

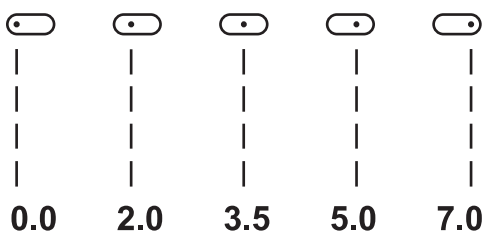
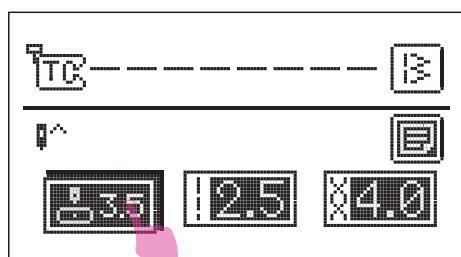
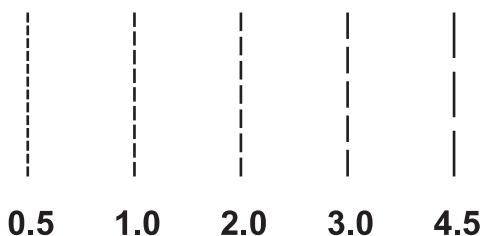
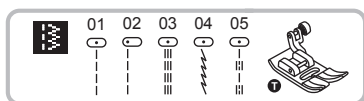
	01	02	03	04	05	06	07	08	09	10															
	1	2	3	4	5	6	7	8	9	0															
11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88
Ä	Å	Æ	Ñ	Ö	Ø	Ç	Ü	ä	ã	å	æ	ë	è	é	ê	ñ	ö	õ	ø	ì	ç	ü	û	ß	&
89	90	91	92	93	94	95	96	97																	
?	!	_	'	,	.	-	(	)																	



# **Sewing Basics**

# Straight stitch

While sewing straight stitches, please use straight stitch plate for better stitch performance.



Using the all purpose foot.

Set the pattern as shown in figure.

After selecting the stitch, touch the stitch length icon to enter the adjusting mode. Touch the value adjustment icon to adjust the stitch length.

For a shorter stitch length, touch the "-" icon. For a longer stitch length, touch the "+" icon.

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

## ❖ Changing the needle position

The needle position for straight stitches can be changed by adjusting the stitch width.

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

After selecting the stitch, touch the needle position icon to enter the adjusting mode. Touch the value adjustment icon to adjust the needle position.

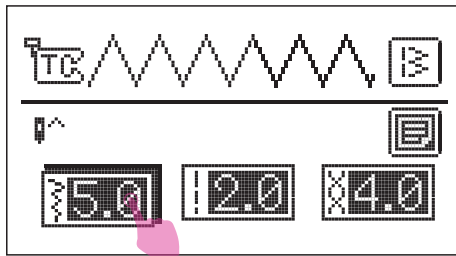
Touch the "+" icon, the needle position will be moved to the right.

Touch the "-" icon, the needle position will be moved to the left.

# Zigzag stitch



Using the all purpose foot or satin stitch foot.

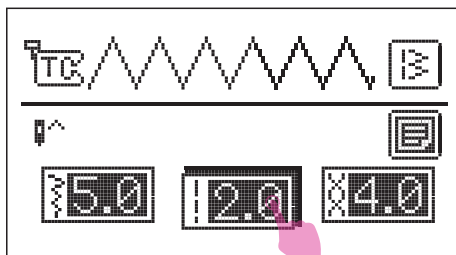
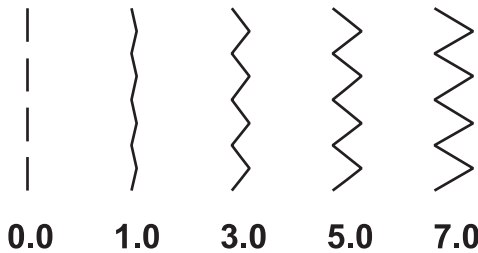


Set the pattern as shown in figure.

After selecting the stitch, touch the stitch width icon to enter the adjusting mode. Touch the value adjustment icon to adjust the stitch width.

The width can be adjusted between "0.0-7.0" as you touch the "+" or "-" icons.

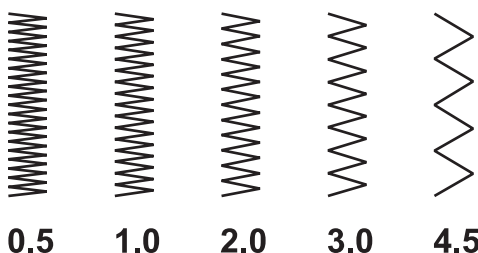
The width can be reduced on any patterns.



After selecting the stitch, touch the stitch length icon to enter the adjusting mode. Touch the value adjustment icon to adjust the stitch length.

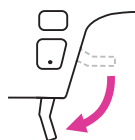
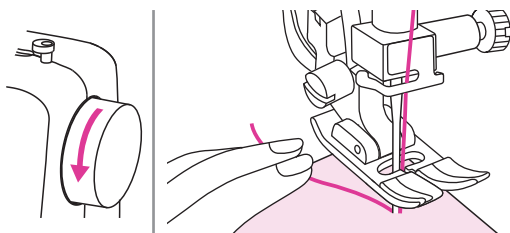
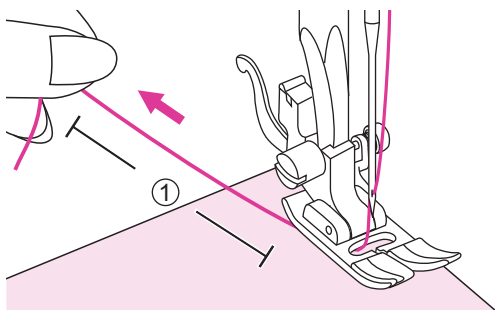
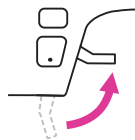
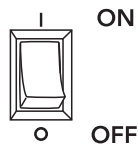
Neat zig-zag stitches are usually achieved at "2.5" or below.

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

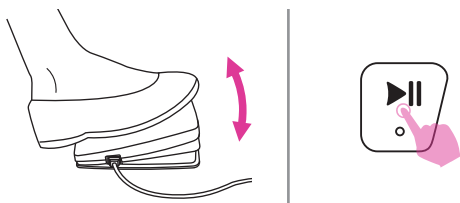


# Starting to sew

Make sure you follow the needle/fabric/thread combinations and use the suggested presser foot before sewing.



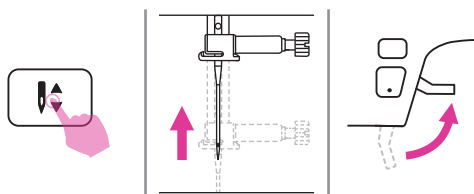
1. Turn the power switch to on ("I").
2. Press the needle up/down position button to bring the needle to highest position.
3. Raise the presser foot lifter. Select a stitch.
4. Place the fabric under the presser foot, pass the thread under the presser foot, and then pull out about 10cm of thread toward the rear of the machine.  
① 10cm
5. Turn the handwheel toward you (counter-clockwise) to lower the needle into the fabric at the beginning of the stitching.
6. Lower the presser foot lifter.



7. Slowly press down the foot control or long press the start/stop button to start sewing. Release the foot control or press the start/stop button again to stop the machine.

**Note**

You can use reverse sewing for back tacking and reinforcing seams by pressing the reverse button. Please refer to "Useful skills" chapter for more information.



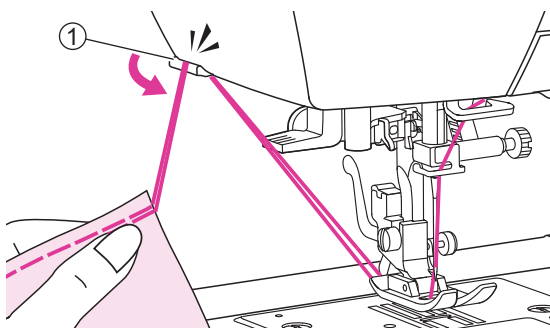
8. Press the needle up/down position button to raise the needle. Raise the presser foot lifter and remove the fabric.



9. Press the thread cutter button to trim the threads.

Or guide both threads to the side of the face plate and into the thread cutter to cut them.

- ① Thread cutter



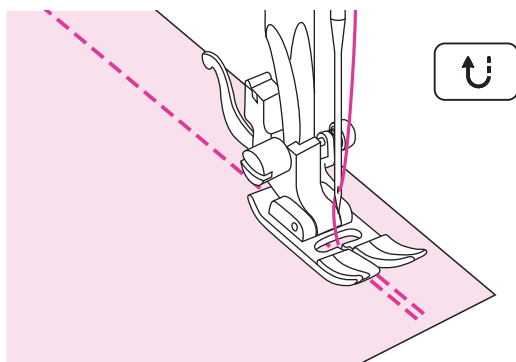
# Useful skills

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

The results depend on types of fabrics and stitches. Please use the same fabric of the project and do a sewing test in advance.

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

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

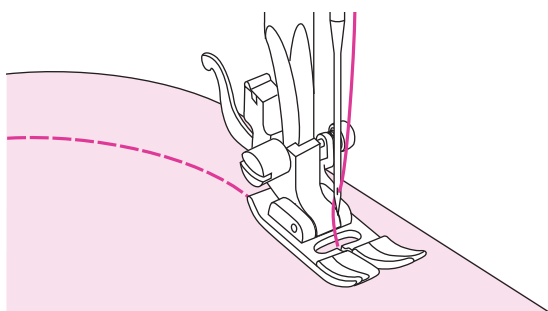


## ❖ Reverse sewing

Reverse stitching is used to secure the threads at the beginning and at the end of a seam.

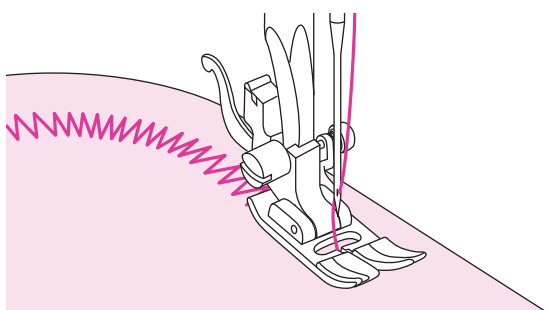
Press the reverse button and sew 4-5 stitches.

The machine will sew forward when the button is released.

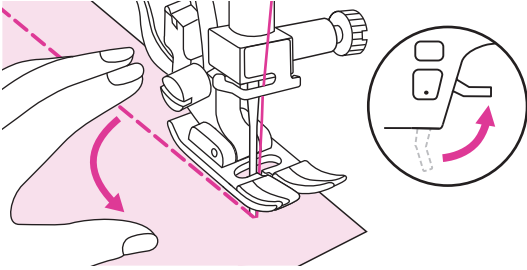


## ❖ Sewing curves

Slightly change the sewing direction to sew around the curve.



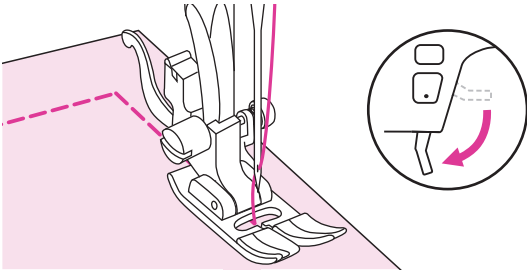
When sewing along a curve while using a zigzag stitch, select a shorter stitch length in order to obtain a finer stitch.



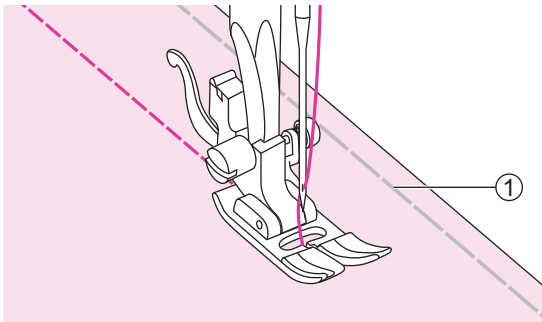
### ❖ Sewing corners

Stop the sewing machine when you reach a corner.

Lower the needle into the fabric. Raise the presser foot lifter. Use the needle as a pivot and turn the fabric 90°.



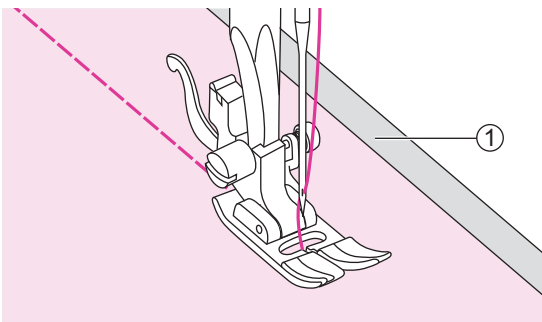
Lower the presser foot lifter and resume sewing.



### ❖ Sewing stretch fabrics

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

① Basting

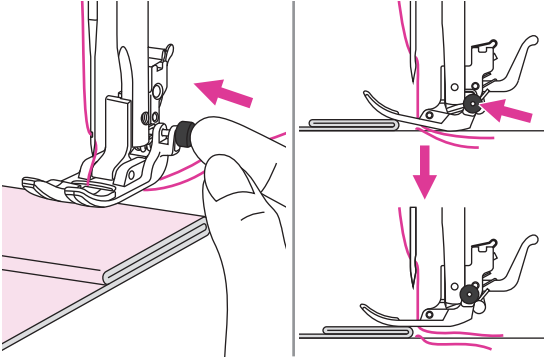


### ❖ Sewing thin fabrics

When sewing thin fabrics, the stitches 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.

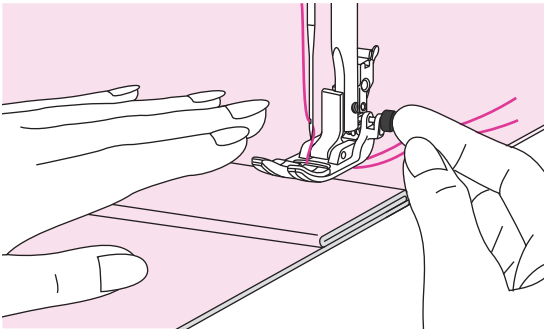
① Stabilizer material or paper



## ❖ Sewing heavy fabric

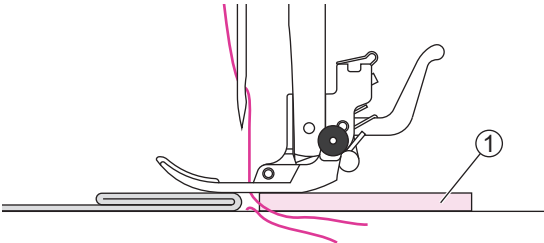
The black button on the right side of the presser foot will lock the presser foot in a horizontal position if you push it in before lowering the presser foot.

This ensures even feeding at the beginning of a seam and helps when sewing multiple layers of fabrics 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 lifter. Press the toe of the foot to the horizontal line 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.

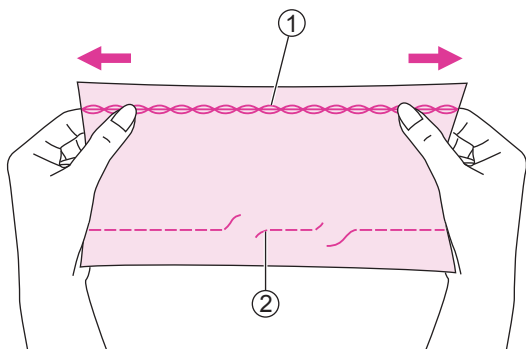
① Cardboard or thick fabric



# Utility Stitches

# Stretch stitch

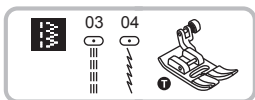
Use this stitch with knitted tricot or other stretchy fabrics. The stitch enables your seam to stretch without breaking the thread.



Good for easy to ravel and knit fabrics. It's good for joining durable fabric such as denims.

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

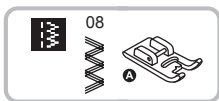
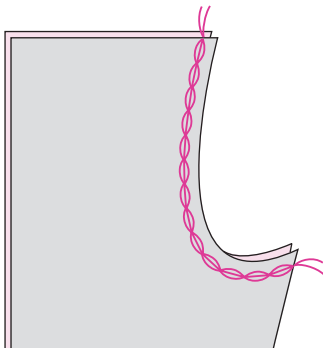
- ① Stretch stitch
- ② Straight stitch



Using the all purpose foot.

## ❖ Straight stretch stitch

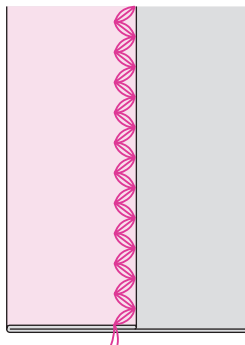
Straight stretch stitch is used to add triple reinforcement to stretch and hardwearing seams.



Using the satin stitch foot.

## ❖ Zigzag stretch stitch

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



# Sewing stretch fabrics and elastic tape

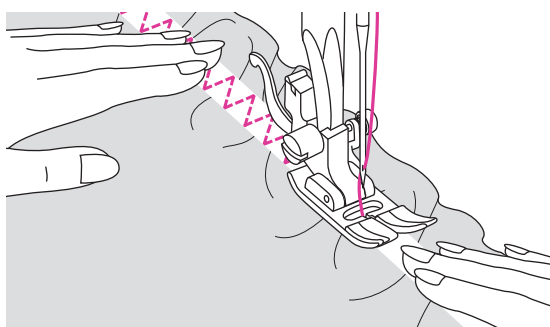
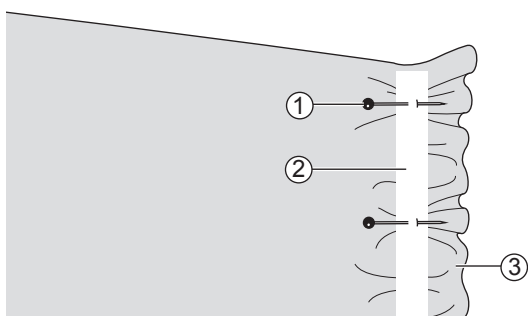
When elastic tape is attached to the cuff or waist of a piece of clothing, the finished dimensions will be that of the stretched elastic tape. Therefore, it is necessary that a suitable length of the elastic tape be used.



Using the all purpose foot.

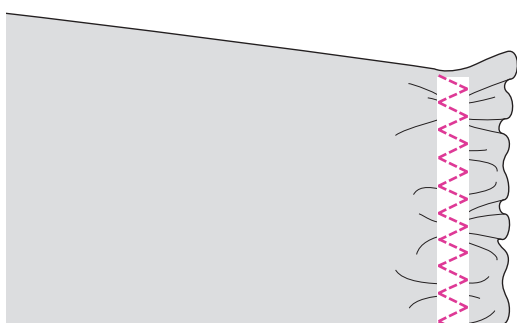
Pin the elastic tape to the wrong side of fabric at a few points to make sure that the tape is uniformly positioned on the fabric.

- ① Pin
- ② Elastic tape
- ③ Wrong side



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.

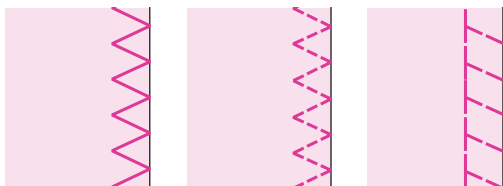
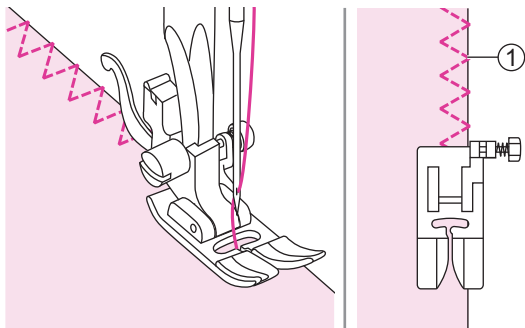


## Note

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 to prevent it from fraying.

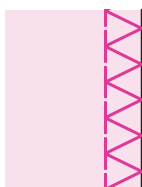
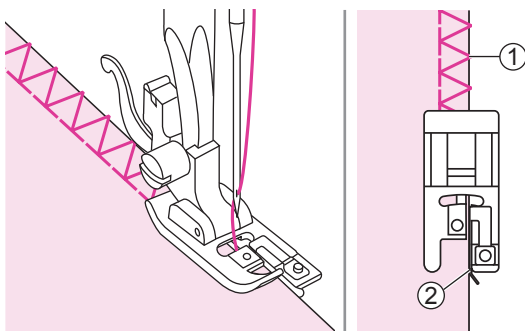


## ❖ Using the all purpose foot

Attach the all purpose foot.

Sew 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



## ❖ Using the overcasting foot

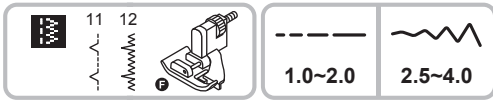
Attach the overcasting foot.

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

- ① Needle drop point
- ② Guide

# Blind Hem

Secure the bottom of skirts and pants with a blind hem, this stitch will sew with invisible stitch on the right side of the fabric.



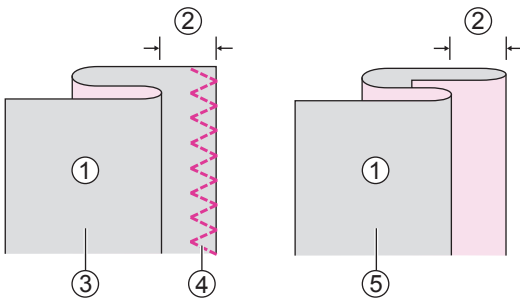
Using the blind hem foot.

11: Blind hem/lingerie for firm fabrics.

12: Blind hem for stretch fabrics.

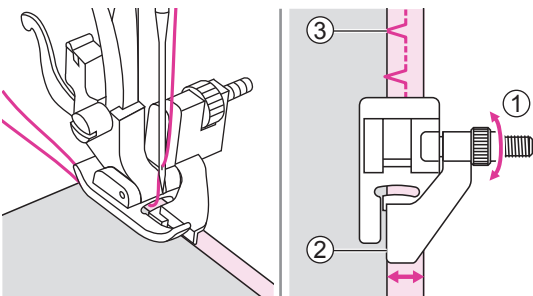
## Note

Please use the same fabric of the project and do a sewing test in advance.



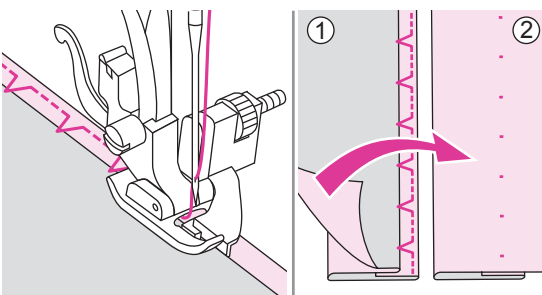
Fold the fabric as illustrated with the wrong side up.

- ① Wrong side
- ② 5mm
- ③ For heavy weight fabric
- ④ Overcasting stitch
- ⑤ For 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.

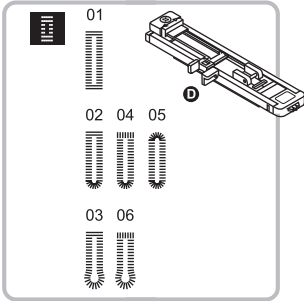
Turn over the fabric.

- ① Wrong 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 sewing. Slightly reduce upper thread tension to produce better results.



Using the buttonhole foot.

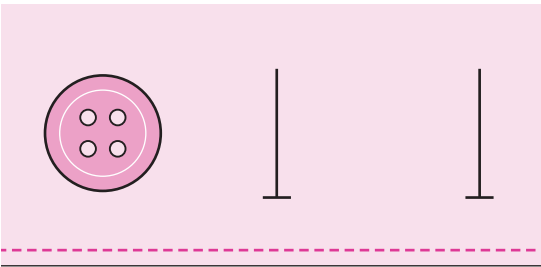
01/02/05: For thin or medium fabric

03/06: For suits or overcoats

04: For horizontal buttonholes on thick fabrics

## Note

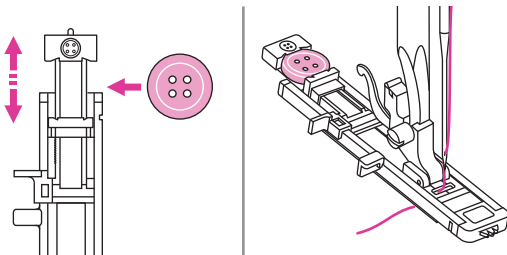
Please use the same fabric of the project and do a sewing test in advance.



Mark the positions of the buttonhole on the fabric.

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

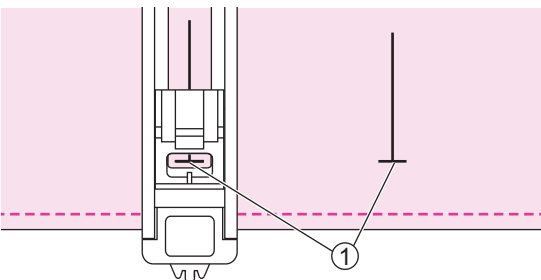
The size of the buttonhole is determined by the button inserted in the button plate.



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.

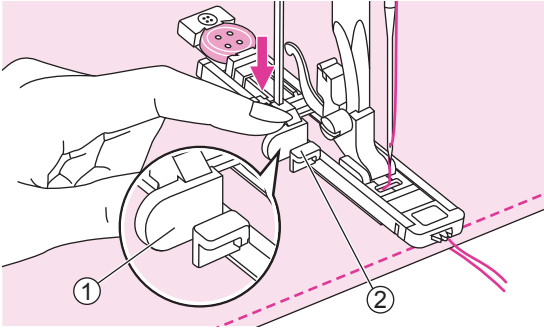
The thread should be passed through the hole in the presser foot, then be placed under the foot.



Position the fabric under the presser foot so that the centerline's mark is aligning with the center of the buttonhole foot.

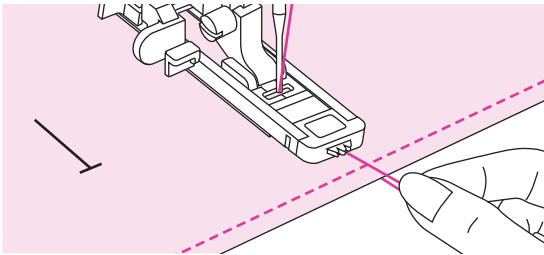
① Starting point

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



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

- ① Buttonhole lever
- ② Bracket

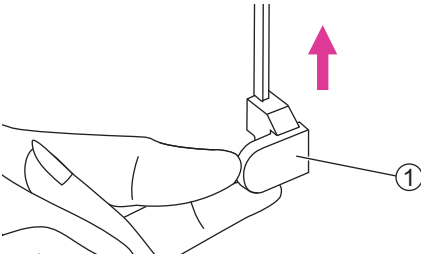


Slightly hold the end of the upper thread and start sewing. Pull two lines together.

#### Note

Gently feed the fabric by hand.

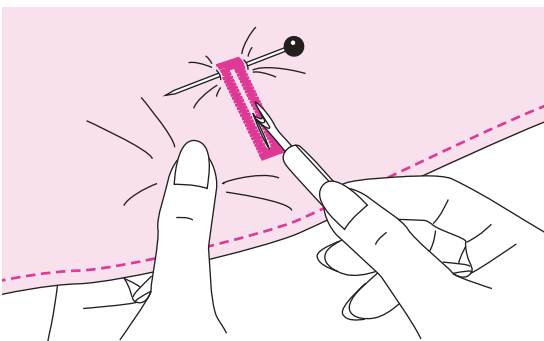
Before stopping, the machine will automatically sew a reinforcement stitch after the buttonhole is sewn.



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

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

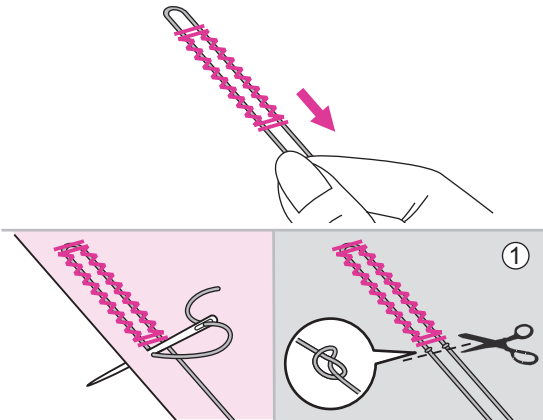
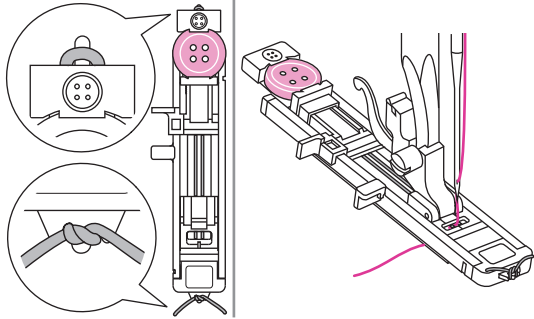
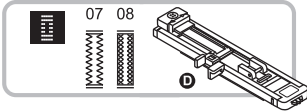
- ① Buttonhole lever



Use the seam ripper to 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

07: For jeans or stretch fabric with a coarse weave

08: For stretch fabric

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

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

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

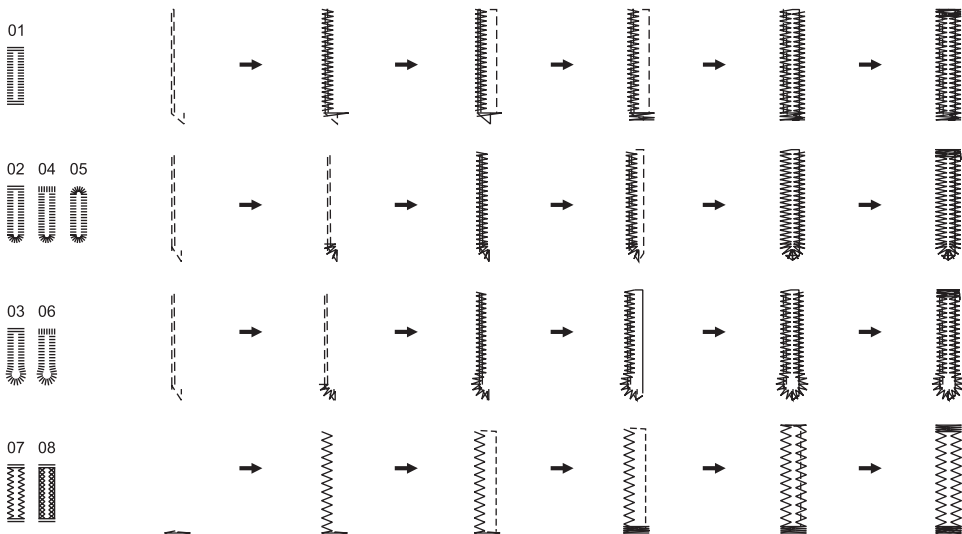
Once sewing is completed, pull the gimp thread gently to remove any slack. Cross the gimp in front of the needle and thread gimp ends into a large needle, pull to the wrong side and knot ends before cutting excess.

① Wrong side

### Note

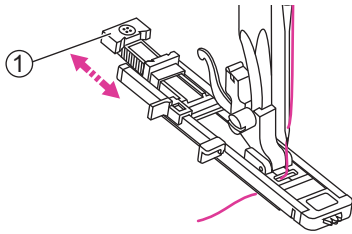
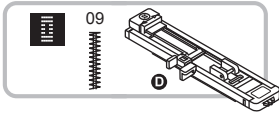
It is suggested that you sew with a stabiliser material under the fabric.

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



# Bar tack stitch

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

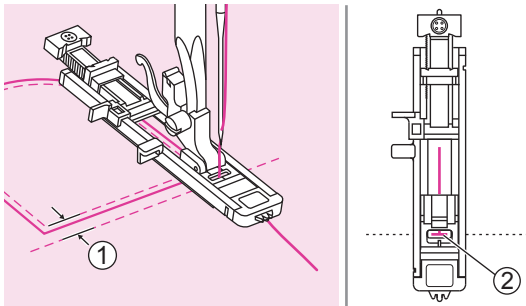


Using the buttonhole foot.

Extend the button holder plate and set to the desired length. Adjust the stitch width and the stitch length to the desired width and density.

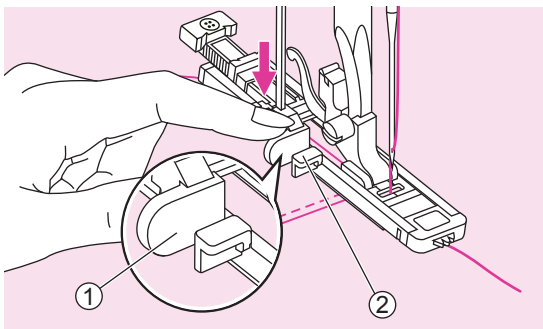
Attach the buttonhole foot. The thread should be passed through the hole in the presser foot, then be placed under the foot.

- ① Button holder plate



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 lifter.

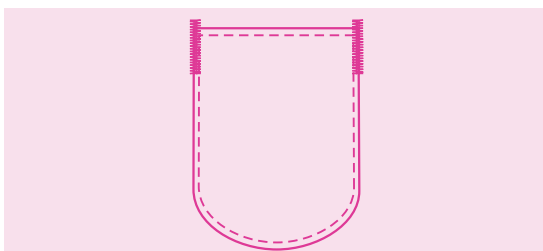
- ① 2mm
- ② Starting point



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.

- ① Buttonhole lever
- ② Bracket



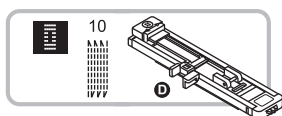
Bar tack stitches are sewn.

## Note

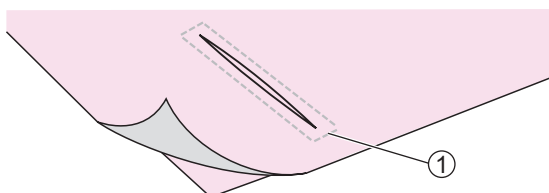
It is suggested that you sew with a stabilizer material under the fabric.

# Darning stitch

Darning a small hole or a tear before it becomes larger can save a garment. Choose a fine thread in a color as close to your garment as possible.

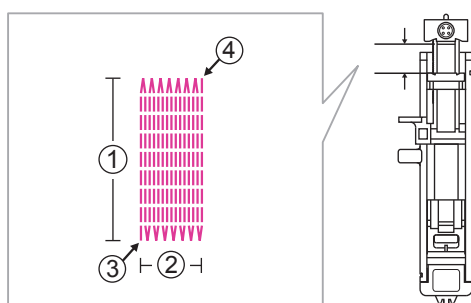


Using the buttonhole foot.



Baste the upper fabric and the under fabric together.

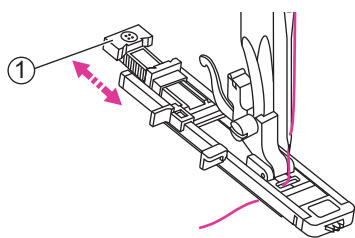
① Basting



The size of one darn cycle is variable.

However, the maximum stitch length is 2.6cm and the maximum stitch width is 7mm.

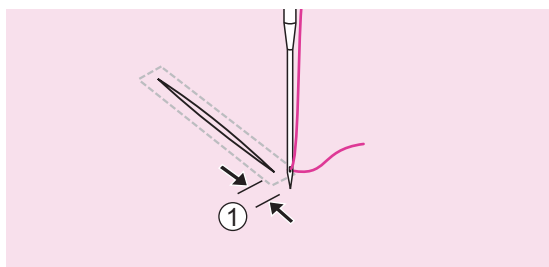
- ① The length of sewing
- ② The width of sewing
- ③ Star
- ④ Stop



Extend the button holder plate and set to the desired length. Adjust the stitch width and the stitch length to the desired width and density.

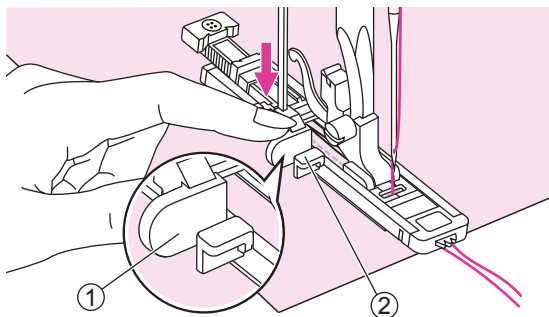
Attach the buttonhole foot. The thread should be passed through the hole in the presser foot, then be placed under the foot.

① Button holder plate



Position the fabric so that the needle is 2mm in front of the area to be darned, and then lower the presser foot lifter.

① 2mm



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.

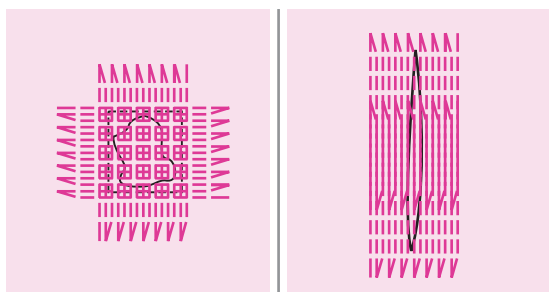
- ① Buttonhole lever
- ② Bracket



Darning stitches are sewn from the front of the presser foot to the back, as shown.

#### Note

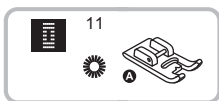
If the fabric does not feed, for example, because it is too thick, increase the stitch length.



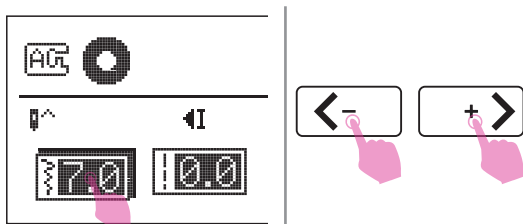
If the sewing range is too big to sew, then we suggest you can sew several times (or cross sew) to get better sewing result.

# Eyelet stitch

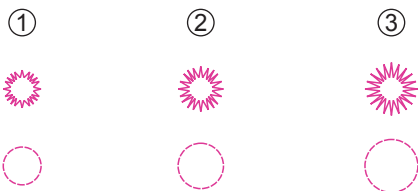
Eyelet stitches are used for making belt holes and other similar applications.



Using the satin stitch foot.



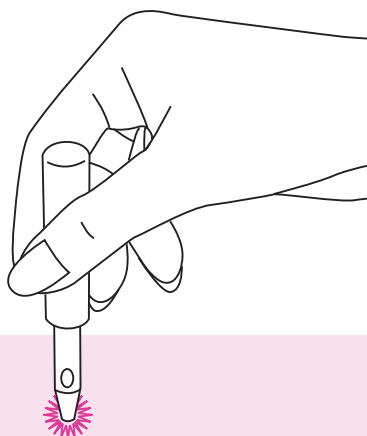
Touch the stitch width icon to adjusting mode. Touch the value adjustment icon to select the eyelet size.



- ① Small: 5.0mm
- ② Medium: 6.0mm
- ③ Large: 7.0mm

Lower the needle into the fabric at the beginning of the stitching, and then lower the presser foot lifter.

Once sewing is completed, the machine automatically sews reinforcement stitches, then stops.



Make a hole at the center using an eyelet punch.

\* Eyelet punch is not included with the machine.

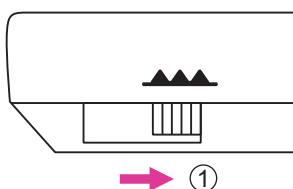
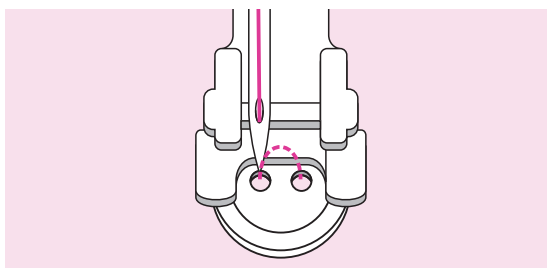
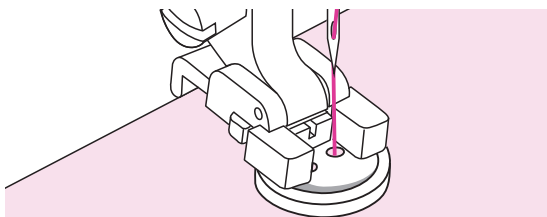
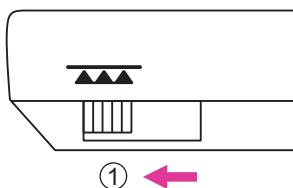
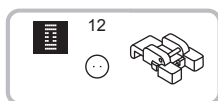
## Note

When using the eyelet punch, place thick paper or some other protective sheet under the fabric before punching the hole in the fabric.

If thin thread is used, the stitching may be coarse. If this occurs, sew the eyelet twice one on top of the other.

# Button sewing

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



Using the button sewing foot.

Move the drop feed lever to lower the feed dogs.

① Lowered position

Put the work under the foot and place the button in desired position, then lower the foot.

Select the buttonhole sewing stitch and 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.

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

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.

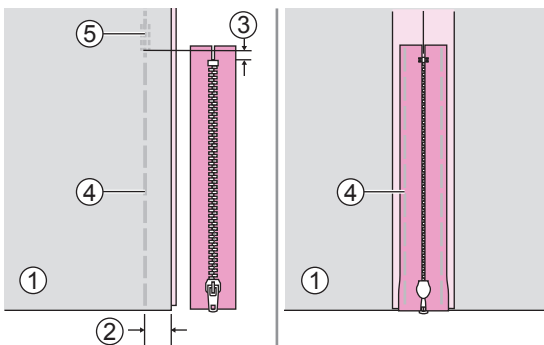


Using the zipper foot.

### ⚠ Attention

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

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

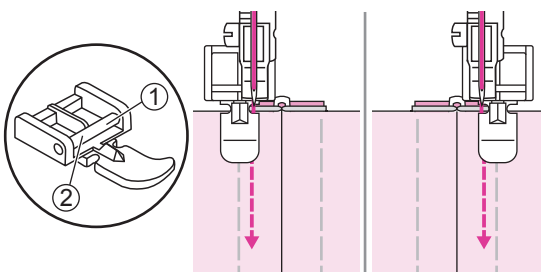


### ❖ Inserting a centered zipper

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

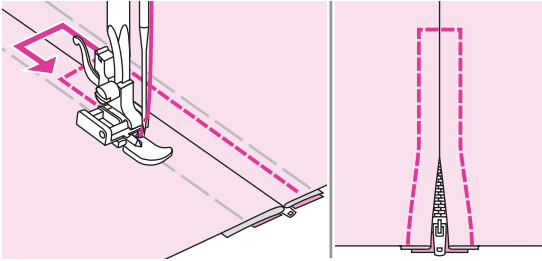
Press open the seam allowance. Place the zipper face down on the seam allowance with the teeth against the seam line. Baste the zipper tape in place.

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

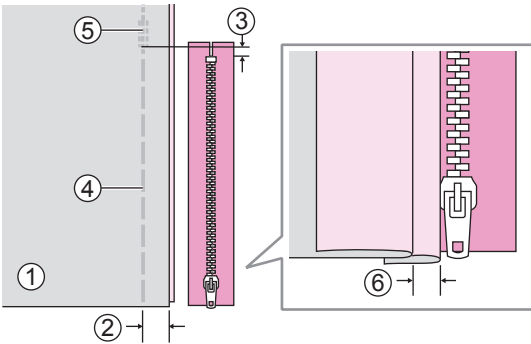


Attach the zipper foot.

- ① Attach the right pin for sewing the left side of the zipper.
- ② Attach the left pin for sewing the right side of the zipper.



Stitching around the zipper. Remove the basting and press.

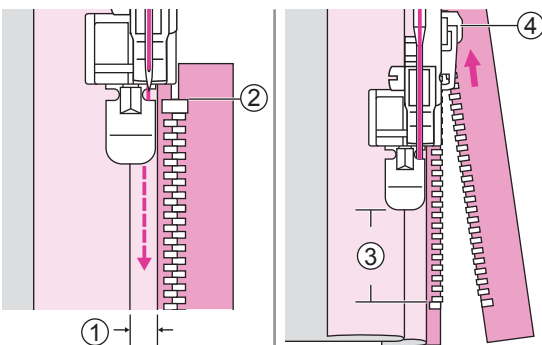


### ❖ Inserting a side zipper

Place the right sides of the fabric together. Sew a bottom seam 2cm from the right edge of the zipper bottom stop position. Sew few reverse stitches for fixed. 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.

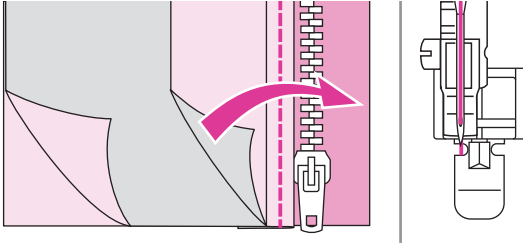
- ① Wrong side
- ② 2cm
- ③ 5mm
- ④ Basting
- ⑤ Reverse stitches
- ⑥ 3mm



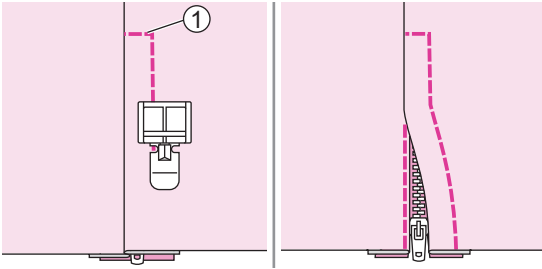
Attach the zipper foot. Attach the right pin for sewing the left side of the zipper. Sew the zipper to the piece of fabric with the extra 3mm, starting from the end of the zipper.

Stop the machine about 5cm from the top of the zipper. Lowered the needle into the fabric, raise the presser foot lifter, and then open the zipper and continue sewing.

- ① 3mm
- ② The end of zipper
- ③ 5cm
- ④ Zipper



Turn the fabric right side out. Attach the left pin for sewing the rightside of the zipper.



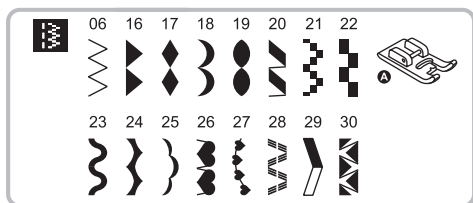
Stitch across the lower end and the right side of the zipper.

① Lower end

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

# Satin stitch sewing

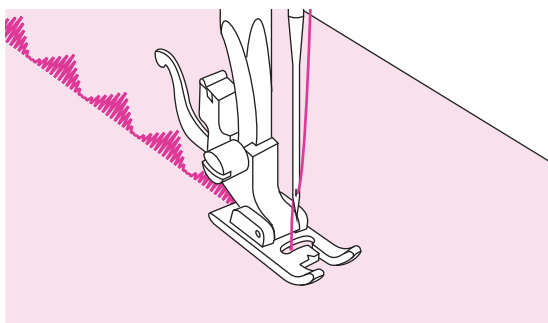
Use the satin stitch foot for satin stitching and sewing decorative stitches.



Using the satin stitch foot.

### Note

When sewing very lightweight fabrics, it is recommended that you use interfacing or stabilizer on the wrong side of the fabric.

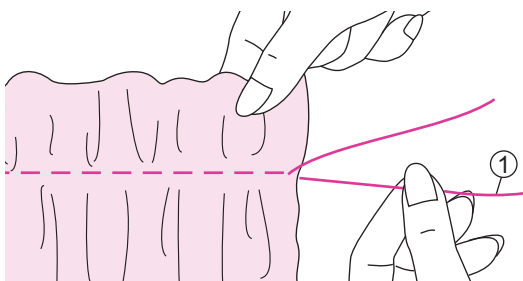


This foot has a groove on the underside which allows dense stitching to pass freely underneath.

To sew the satin or decorative stitch pattern, you may adjust the length and width of the pattern. Experiment with fabric scraps until you get the desired length and width.

# Gathering

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



Using the all purpose foot.

Before sewing, please check the upper and bobbin threads are already pulled out about 5cm to leave enough room for sewing. Please refer to "Bringing up the bobbin thread" chapter for more information.

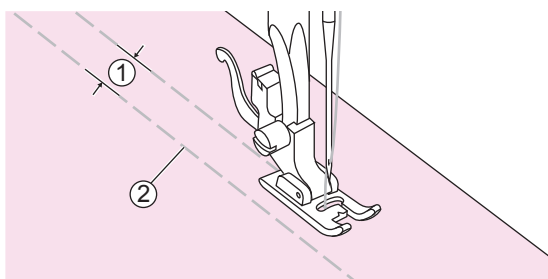
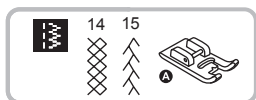
Set the tension below 2. Sew a single row (or many rows) of straight stitches.

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

① Bobbin thread

# Smocking

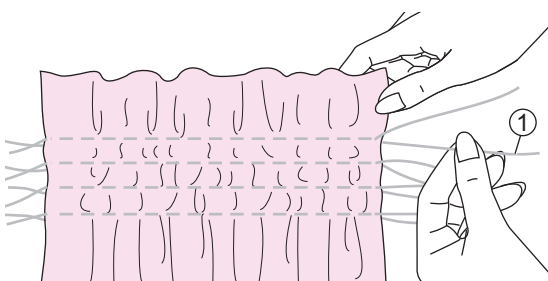
The decorative stitch created by stitching or embroidering over gathers is called "smocking". It is used to decorate the front of blouses or cuffs. The smocking stitch adds texture and elasticity to the fabric.



Using the satin stitch foot.

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

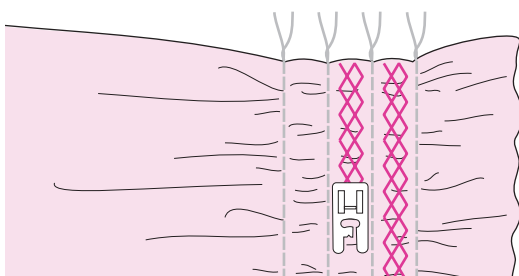
- ① 1cm
- ② Basting



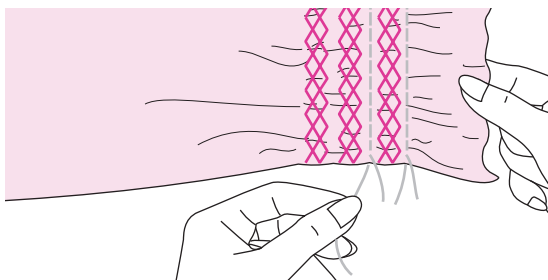
Knot the threads along one edge.

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

- ① Bobbin thread

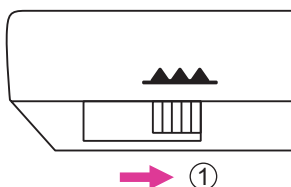
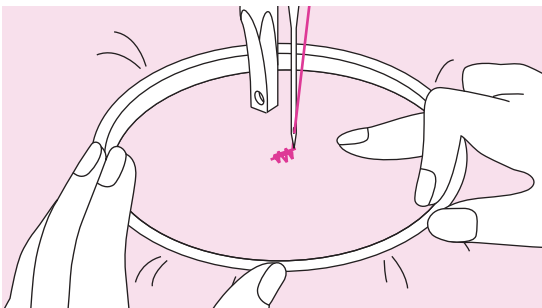
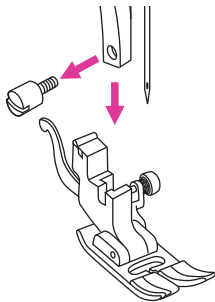
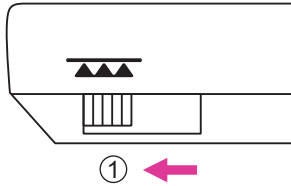
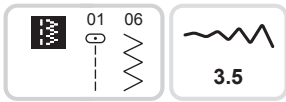


Reduce the tension if necessary and sew decorative pattern stitches between the straight seams.



Pull out the basting.

# Free motion darning, embroidery and monogramming



## ❖ Preparation for embroidering and monogramming

\* Embroidery 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 bobbin 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.

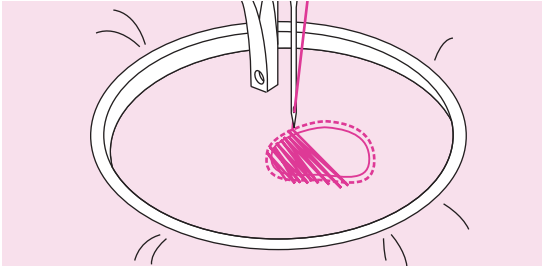
### ⚠ Attention

Keep fingers away from moving parts, especially needles.

### Note

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

① Raised position



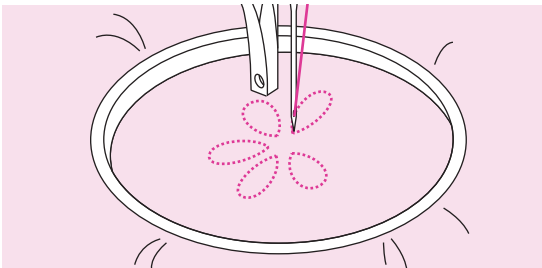
### ❖ Darning

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.

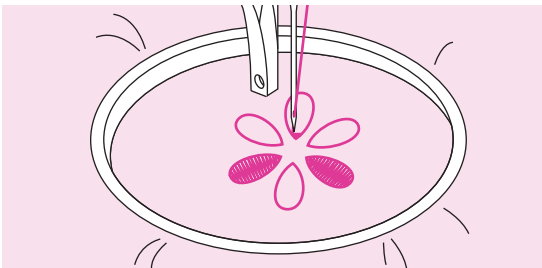
#### Note

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 by moving the embroidery hoop. When sewing, 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.



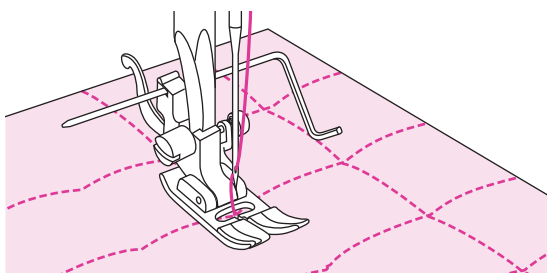
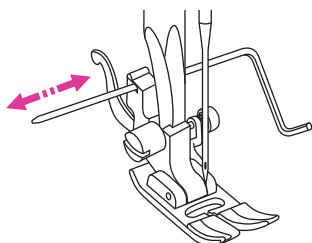
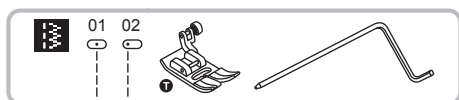
### ❖ Monogramming

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

Sandwich 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.

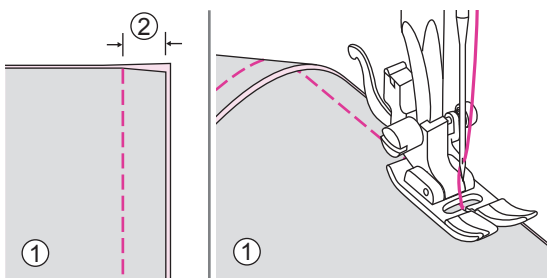
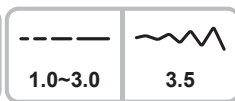


Using the all purpose foot with edge/quilting guide.

## ❖ Using the edge/quilting guide

Attach 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 stitching.



Using the all purpose foot.

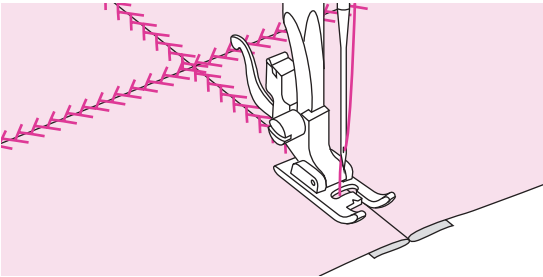
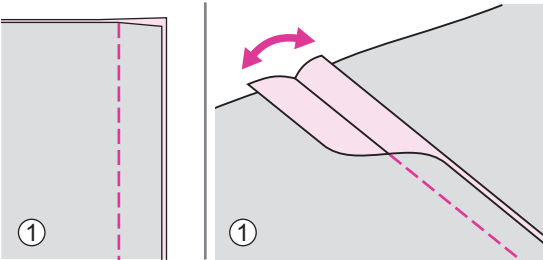
## ❖ Joining the pieces of the fabric

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 Wrong side
- ② 5mm



Using the all purpose foot or satin stitch foot..

### ❖ Patchwork stitching

Place the two fabrics, right sides together and sew using a straight stitch.

Open the seam allowance and press it flat.

① Wrong side

Working on the right side of the fabric, place the center of the presser foot on the seam line of the joined fabrics and stitch 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.

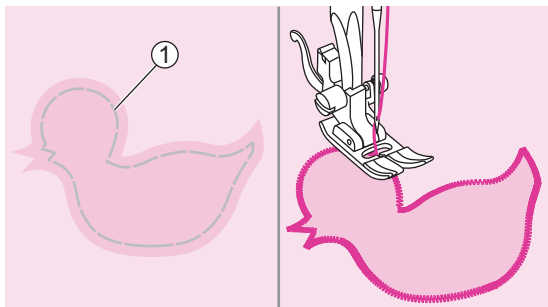


Using the all purpose foot.

Cut out the applique design and baste it on the fabric. Sew slowly around the edge of the design.

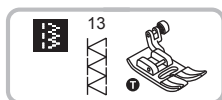
## ① Basting

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



# 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.



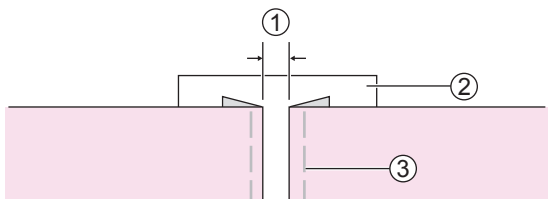
Using the all purpose foot.

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

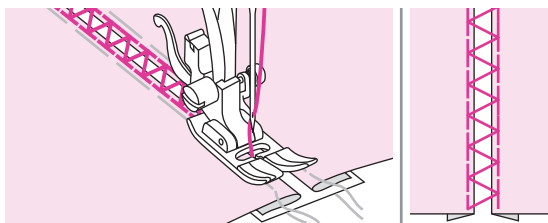
## ② Thin paper or water-soluble stabilizer

## ③ Basting



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

After sewing, remove the stabilizer and basting.

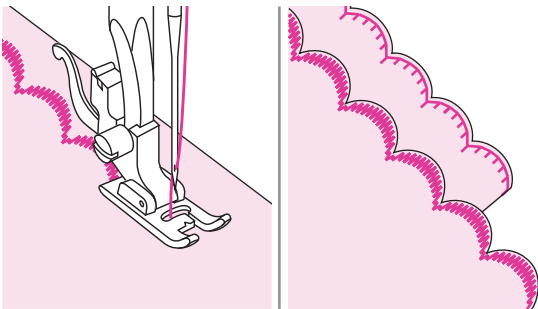


# Scallop stitch

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.



Using the satin stitch foot or all purpose foot.

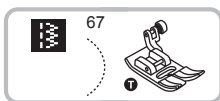


## ❖ Scallop edging

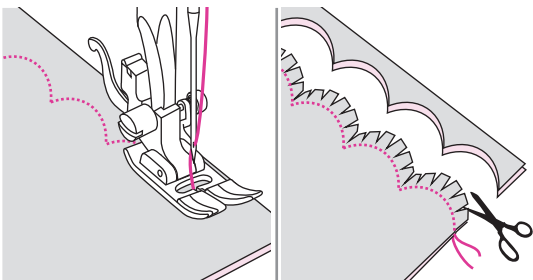
Stitch along the edge of the fabric, making sure not to sew directly on the edge of the fabric.

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

Trim the fabric close to the stitching taking care not to cut the stitches.



Using the all purpose foot.

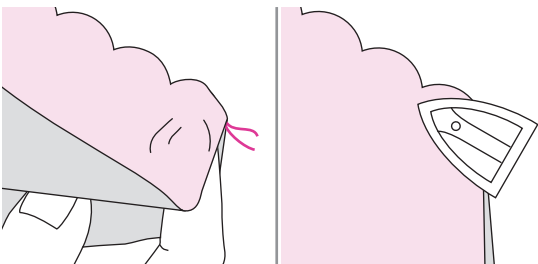


## ❖ Scallop hem

Fold the fabric right side together. Sew along the folded edge as illustrated.

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.



# **Embroidery Preparation**

# Important embroidery information

## ❖ Embroidery threads

A good quality thread is essential for embroidery to avoid poor stitch formation, needle break, etc.

Good embroidery performance will be effective by using 40wt glossy rayon or polyester embroidery threads as upper threads. They are available in a wide range of colors for beautiful embroidery.

### **Polyester threads**

Polyester is a glossy thread with high tensile strength, hard wearing and colorfast features, which is suitable for all type of embroidery.

### **Rayon threads**

Rayon is a soft viscose fiber with a brilliant sheen and suitable for fine, delicate embroidery, or items that will not receive excessive wear and tear.

### **Metallic threads**

Metallic thread is a light to medium weight thread suitable for special effects in embroidery.

Reduce the thread tension when embroidering with metallic threads.

### **Embroidery needle**

- Select correct thread size and needle size for embroidery.
- Replace the needle regularly.

#### Note

Please use the second spool pin when metallic or special material threads been used.

## ❖ Bobbin threads

### **Bobbin Fill (special bobbin thread)**

Bobbin Fill is an especially soft and light polyester thread suitable for bobbin thread. This special bobbin thread ensures a steady thread tension and best performance of pieces of the upper and bobbin thread.

## Darning and embroidery thread

Fine mercerized cotton thread which is suitable for embroidering on cotton.

### Note

In most cases, bobbin thread for embroidery is either white or black. Some special cases require the same for upper and bobbin thread.

## ❖ Stabilizer

### Tear-away stabilizers

- The excess is easily to tear away.
- One or more layers can be used.
- Available for light and thick materials.
- Before hooping, apply a little spray onto back side of fabric can bring more stability on performance.
- Carefully tear away excess stabilizer from the back of the project after completion.
- Ensure the embroidery pattern will not be deformed.
- Leaving the stabilizer under the larger embroidered areas.

Application:

- Available for all woven materials and non-stretch materials.

### Cut-away stabilizers

- One or more layers can be used.
- Available for light and thick materials.
- Before hooping, apply a little spray onto back side of fabric can bring more stability on performance.
- Carefully cut away excess stabilizer from the back of the project after completion.
- Ensure the embroidery patten will not be deformed.
- Leaving the stabilizer under the larger embroidered areas.

Application:

- For all elastic materials.

## ❖ **Adhesive Spray**

Avoid using spray adhesive next to your embroidery machine.

- Keep about 25-30 cm distance while using the spray.
- Use the spray carefully.
- Spray the stabilizer and adhere to back side of material carefully and iron to prevent wrinkles.

Application:

- Keep stretch and knitted material in shape.
- Prevent layers of fabric slipping while smooth material been used.
- Appliques can be exactly positioned.
- Place cloth on stabilizer, e.g. pocket flaps.
- Do not place the napped materials(i.e. velvet) in the hoop. It may have hoop marks on the material.
- Fix the area to be embroidered.

## **Spray starch for additional stiffening**

Spray starch is ideal for additional stiffening on fine, soft or loosely woven materials.

- Spray on the area to be embroidered
- Wait until dry; or press gently with a warm iron if necessary
- Always use an additional stabilizer such as water soluble stabilizer to be applied on the material.

Application:

- Ideal for fine, loosely woven materials, e.g. batiste, fine linen, etc.

## ❖ Iron-on interfacing

Iron-on interfacings are available in a variety of weights. Iron-on interfacings should be selected to suit the material being used. Use an iron-on interfacing which is easily removable from the material.

Use the iron-on interfacing to the wrong side of material and press.

Application:

- Please use an appropriate stabilizer and cut it in a bigger shape than your embroidery pattern. Then place it onto the design for support.

## Paper-backed adhesive stabilizer

- Place stabilizer in hoop with paper side up.
- Use a pointed tool (e.g. scissors) to score the paper.
- Remove the paper to reveal the sticky surface.
- Position the fabric over the sticky surface and smooth into place.

Application:

- Intended for delicate materials such as jersey or silk etc.
- For hard-to-hoop parts and materials.

### Note

Make sure that the adhesive residue on needle, stitch plate and hook area are totally removed.

## Water soluble stabilizer

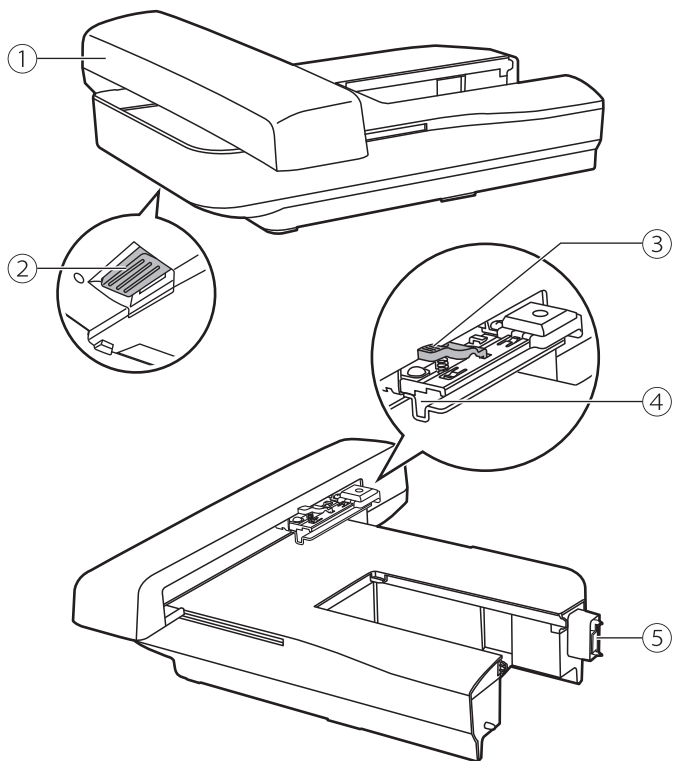
Water soluble stabilizer looks like plastic wrap. When you finish embroidery design, simply submerge project in warm water to dissolve stabilizer. Water soluble stabilizer helps keep the stitches from disappearing in high-pile fabrics (such as towels of fluffy cotton).

- Place the water-soluble stabilizer on top of the fabric.
- Place all layers together into the embroidery hoop.
- Use adhesive spray to fix stabilizer if necessary.
- For pile fabrics, an additional stabilizer on the wrong side is suggested for reinforcement.
- After finishing the sewing, dissolve it and lay the project until dry.

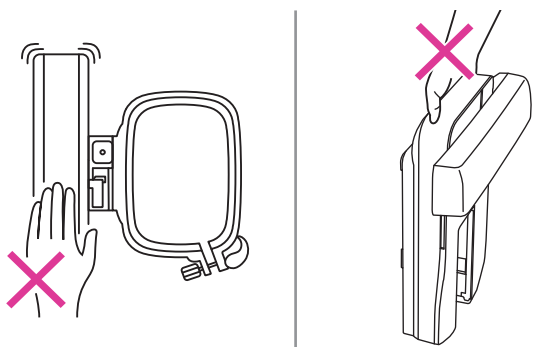
Application:

- Available for towel, velvet, bouclé and etc.
- Available for fine, sheer material such as organdy, bastiste and etc.
- Available for lace embroidery.

# Embroidery unit overview



- ① Embroidery carriage
- ② Embroidery unit release button
- ③ Hoop-securing lever
- ④ Embroidery hoop holder
- ⑤ Embroidery unit detection device



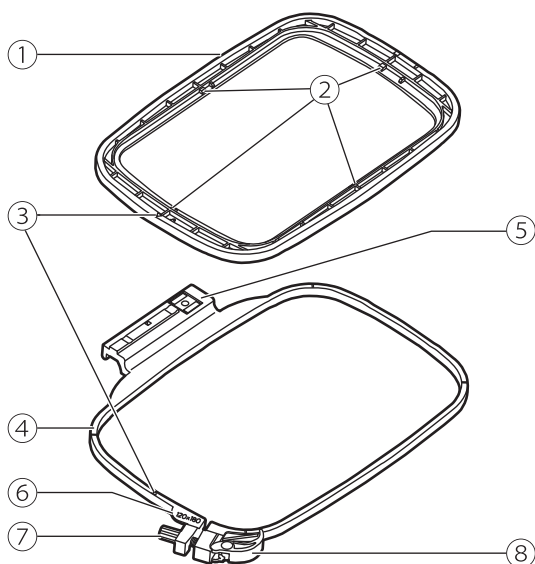
## Note

Do not touch the embroidery unit detection device. The connector could be damaged, and it may cause malfunctions.

Do not press or force on embroidery carriage, and do not lift it up. It may cause malfunctions.

Do not carry the embroidery unit by holding the release button compartment.

# Embroidery hoop overview



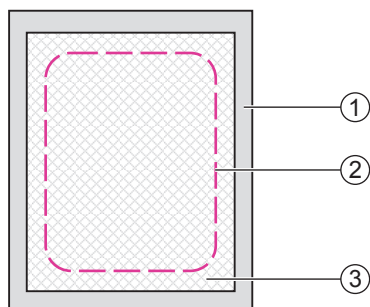
- ① Inner hoop
- ② Center marks
- ③ Triangular mark
- ④ Outer hoop
- ⑤ Embroidery hoop connector
- ⑥ Hoop size marks
- ⑦ Fastening screw
- ⑧ Quick release device

# Preparing the embroidery hoop

## ❖ Attaching a stabilizer to the fabric

### ⚠ Attention

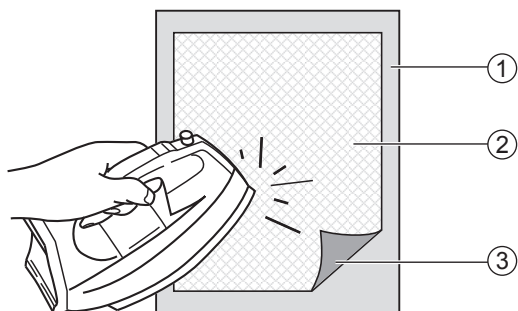
Always use stabilizer material when embroidery. The needle may break or bend without using stabilizer material for thin fabrics or stretch fabrics in embroidering works. Furthermore, the pattern may not be sewn perfectly.



**To obtain the best embroidery performance, it is important to use stabilizers.**

Prepare stabilizer material that is larger than the embroidery hoop being used.

- ① Wrong side
- ② Size of embroidery hoop
- ③ Stabilizer



If you are using adhesive stabilizers, place the adhesive surface of the stabilizer material against the wrong side of the fabric, and iron.

- ① Wrong side
- ② Stabilizer
- ③ Adhesive surface

## ❖ Hooping the fabric

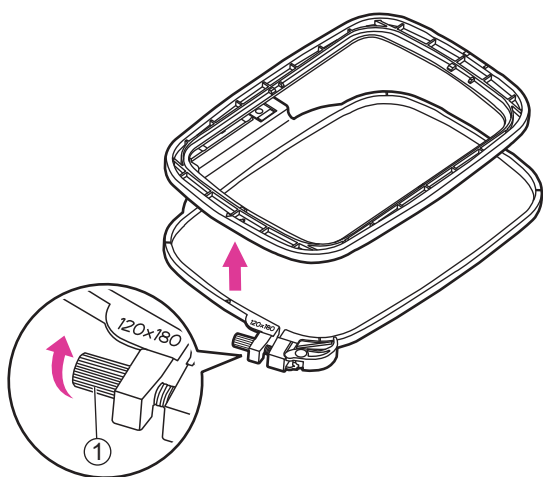
### ⚠ Attention

Thick layers of fabric and stabilizer may cause skipped stitches, or broken threads, needles and damage on embroidery hoops.

Loosen the fastening screw under the outer hoop.

Separate the inner hoop and outer hoop.

- ① Fastening screw

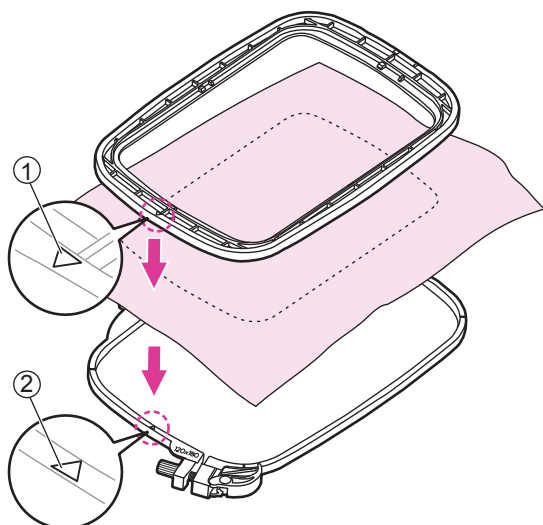


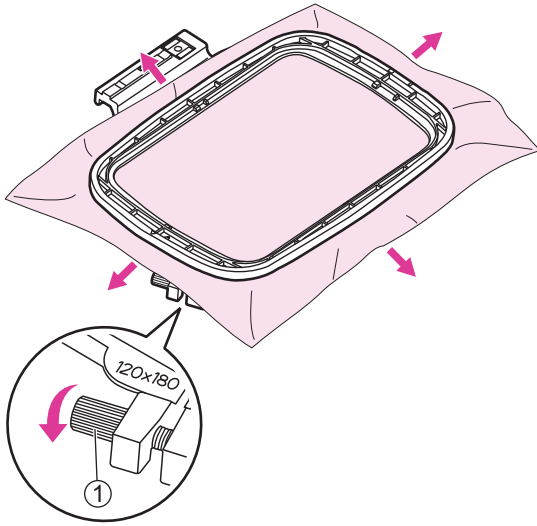
Place the outer hoop on a sturdy flat space.

Make sure the fabric with right side upwards, place the stabilizer underneath the fabric for better support, and then place the fabric and stabilizer altogether on the outer hoop. It can achieve better embroidery performance.

Align both triangular marks and fix the fabric in place.

- ① Inner hoop's triangular mark
- ② Outer hoop's triangular mark





Place the inner hoop on the fabric and press firmly until they are securely fit to outer hoop perfectly. If the inner hoop cannot fit properly, loosen the outer hoop's fastening screw and adjust until fitted.

When the fabric and inner hoop are completely fit into the outer hoop, pull the fabric from the four sides marked with the arrows so that the fabric is stretched drum-tight in the hoop, and then press the inner hoop downwards so that it sinks into the outer hoop a little and tighten the fastening screw.

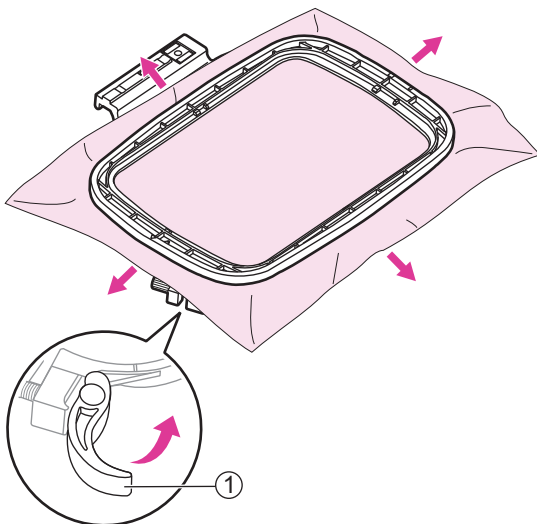
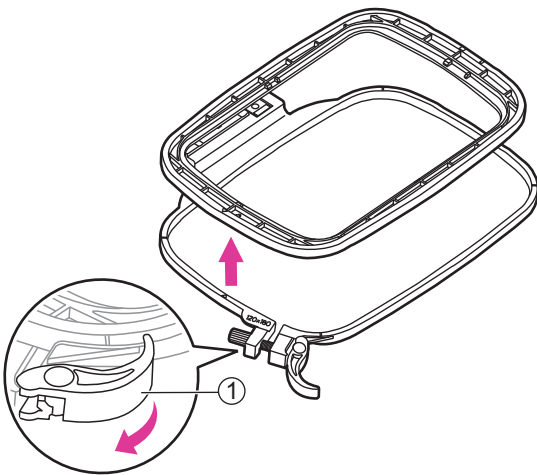
- ① Fastening screw

### ❖ Use the quick release device

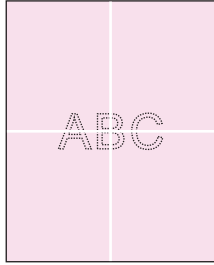
If same type of fabric is used for embroidery, open the quick release device under the outer hoop.

Separate the inner hoop and outer hoop.

- ① Quick release device



Place the inner hoop on the fabric and press firmly until they are securely fit to outer hoop perfectly, pull the fabric from the four sides marked with the arrows so that the fabric is stretched drum-tight in the hoop, and then press the inner hoop downwards so that it sinks into the outer hoop a little and close the quick release device.



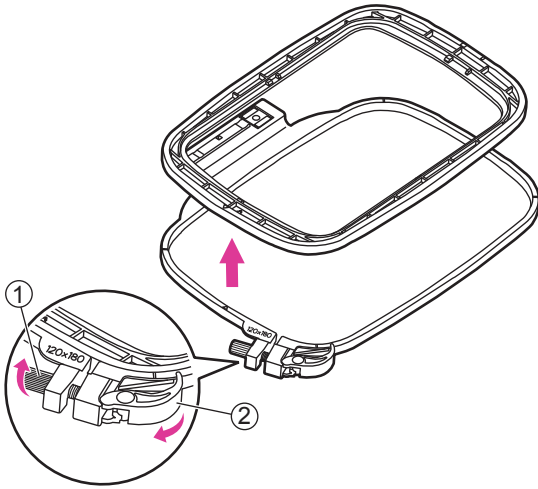
## ❖ Using embroidery sheet

Make a mark with a chalk at the center of the position for the pattern to be embroidered.

Loosen the fastening screw or open the quick release device (if same type of fabric is used for embroidery).

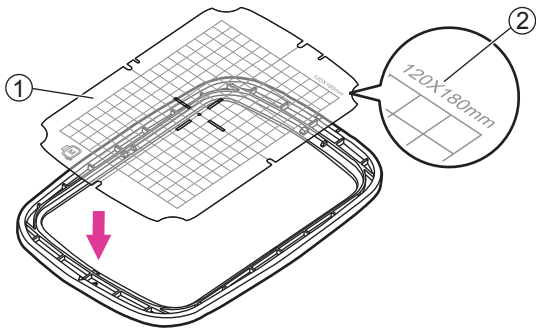
Separate the inner hoop and outer hoop.

- ① Fastening screw
- ② Quick release device



Place the embroidery sheet on the inner hoop. Make sure the hoop size printing is on top right side.

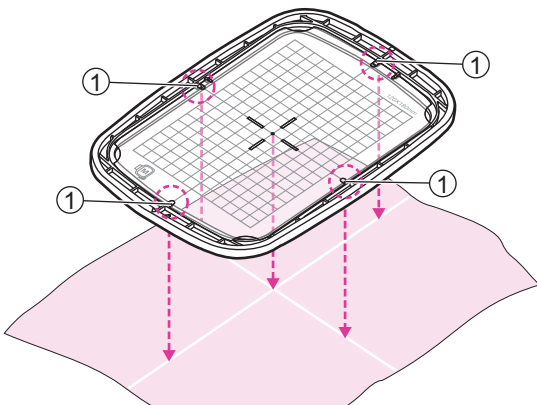
- ① Embroidery sheet
- ② Hoop size

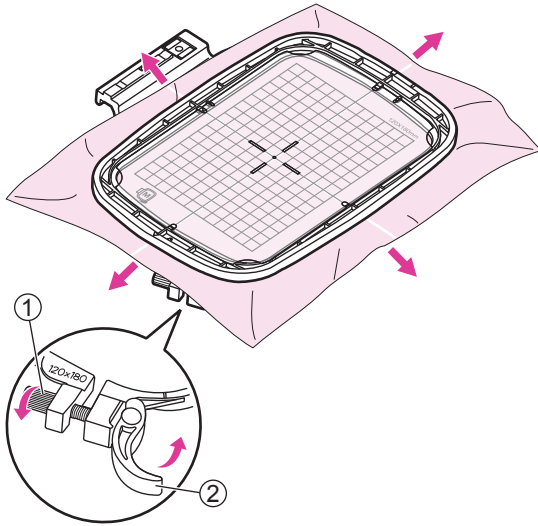


Line the mark on the fabric up with the base line on the embroidery sheet.

Also, align the cross mark of the fabric to the center marks on the four sides of the inner hoop.

- ① Center marks

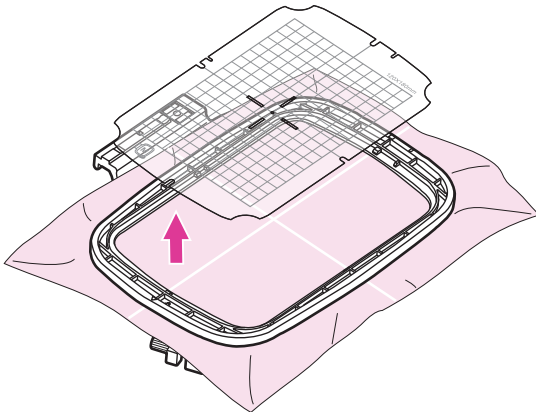




Place the inner hoop on the fabric and press firmly until they are securely fit to outer hoop perfectly. If the inner hoop cannot fit properly, loosen the outer hoop's fastening screw and adjust until fitted.

When the fabric and inner hoop are completely fit into the outer hoop, pull the fabric from the four sides marked with the arrows so that the fabric is stretched drum-tight in the hoop, and then press the inner hoop downwards so that it sinks into the outer hoop a little and tighten the fastening screw or close the quick release device (if same type of fabric is used for embroidery).

- ① Fastening screw
- ② Quick release device

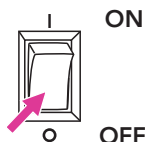


Remove the embroidery sheet.

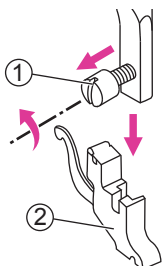


# **Embroidery Process**

# Preparation for embroidery

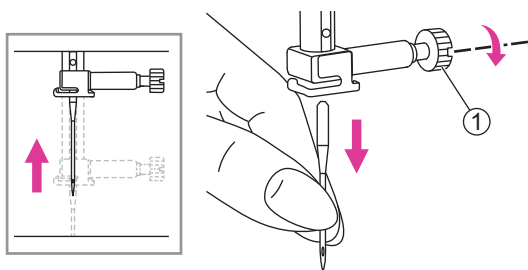


Turn the power switch to off ("O"). Raise the presser foot lifter.



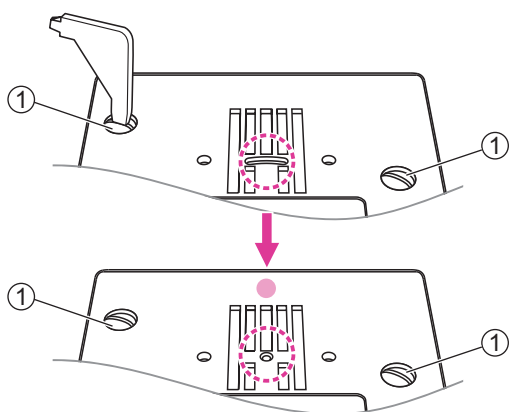
Loosen the screw counter-clockwise to remove the presser foot holder.

- ① Screw
- ② Presser foot holder



Turn the handwheel toward you to raise the needle then loosen the needle clamp screw to remove the needle.

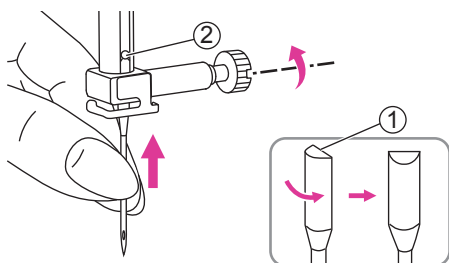
- ① Needle clamp screw



Remove the screws on the needle plate then remove the needle plate.

Change the straight stitch plate and tighten the screws.

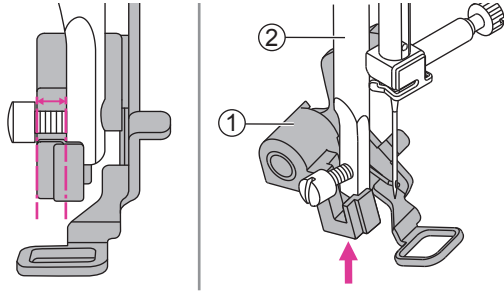
- ① Screws



Inserting a proper needle, keep the flat side of the shaft to the back.

Please refer to page "Matching needle/fabric/thread" and "Replacing the needle" for more information.

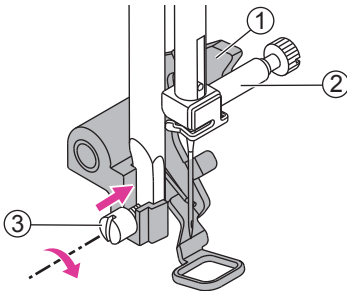
- ① Flat side of the shaft
- ② Pin



Make the embroidery foot lever upwards.

Tilt the embroidery foot and insert it from left to right so that the notch fits into the presser foot bar, and then push the embroidery foot upwards until it is aligned with the screw.

- ① Embroidery foot
- ② Presser foot bar



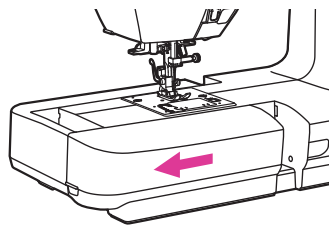
The embroidery foot lever will be against the top of the needle clamp screw, then tighten the screw by using the screwdriver.

- ① Embroidery foot lever
- ② Needle clamp screw
- ③ Screw

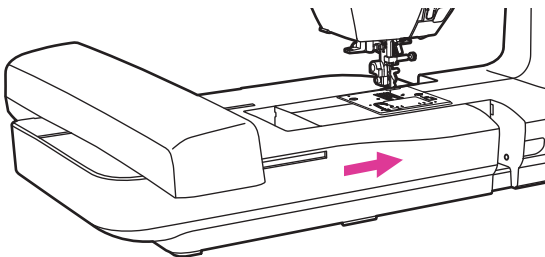


#### Note

Please check and make sure the presser foot is raised and remove embroidery hoop first before attaching embroidery unit onto the machine.



Hold the sewing table horizontally, then pull toward the left to remove it from the machine.



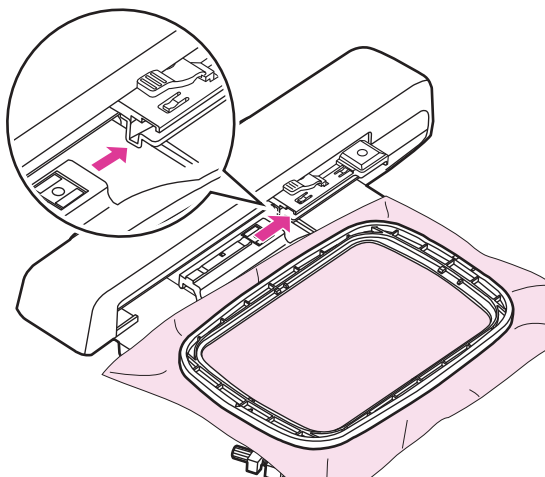
Slide the embroidery unit onto the machine arm. Push lightly until the unit clicks into place.

#### ⚠ Attention

Once embroidery unit is installed, foot control cannot be operated.

# Install the embroidery hoop

After editing the embroidery image file, place the embroidery hoop with the corresponding size to perform the preparations for embroidering.



The embroidery hoop has two built-in sizes which are 120x80mm and 50x70mm, respectively. Select the corresponding size according to the image design.

Once the power is turned on, hoop the fabric in the selected embroidery hoop and use your finger to lightly raise the presser foot lifter, slide the embroidery hoop into the embroidery unit to assemble them. When you hear a "click", it means that the embroidery hoop installation is completed.

## Note

Please raise the presser foot lifter while the embroidery hoop is resetting.

The reset action must be performed every time when a different size embroidery hoop is re-installed.

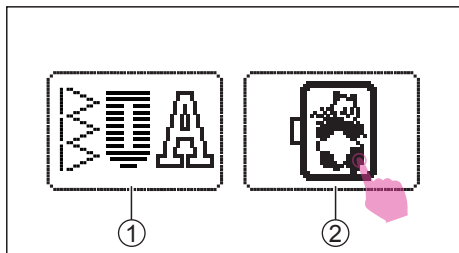
## ⚠ Attention

Please check the fabric thickness in advance, if the fabric is too thick, please don't use it for embroidery.

If there is space between the presser foot and the fabric, the fabric can be embroidered. If there is not space, do not embroider the fabric. Otherwise, the needle may break, resulting in injury.

Please be careful when sewing overlapping patterns as the needle might break due to the difficulty of fabric penetration.

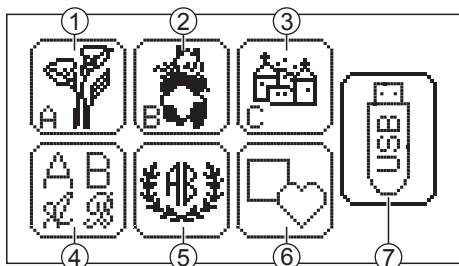
# Selecting embroidery pattern



## ❖ Embroidery pattern types

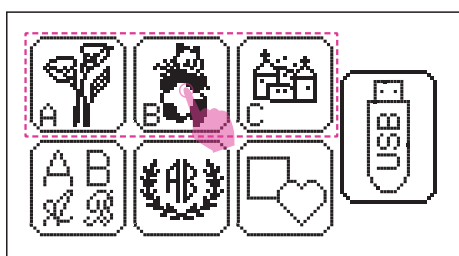
Turn the power switch to on ("I"). Touch the embroidery mode icon.

- ① Sewing mode icon
- ② Embroidery mode icon



There are 7 categories of embroidery patterns available in embroidery mode.

- ① A group icon:  
Built-in 52 embroidery patterns
- ② B group icon:  
Built-in 33 embroidery patterns
- ③ C group icon:  
Built-in 15 embroidery patterns
- ④ Embroidery letter icon:  
Including upper case / lower case / special character / numbers & symbols
- ⑤ Monogram letters icon:  
2-letter monogram with 4 types of frame combination
- ⑥ Frame Designs icon:  
10 types of frame with 12 decorative frame patterns available
- ⑦ USB icon:  
Use the USB flash drive to import patterns

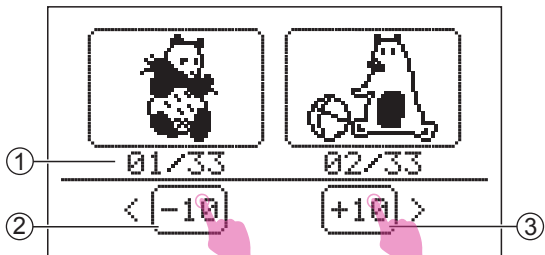


## ❖ Built-in embroidery pattern

There are 3 groups of embroidery patterns. Select the desired group and enter the embroidery pattern selection screen.

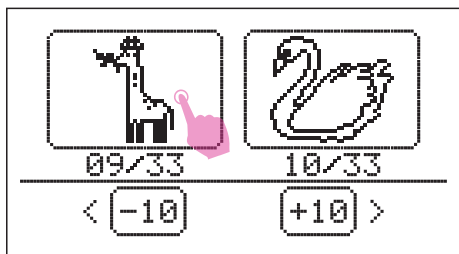
Touch the move icon to switch to other pages.





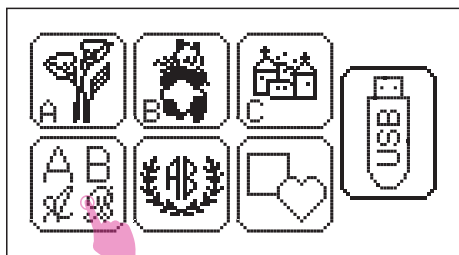
Also can touch +10 icon/-10 icon to view from the 10 patterns.

- ① Number of current unit /total number of unit
- ② Moves forward 10 patterns
- ③ Moves backward 10 patterns



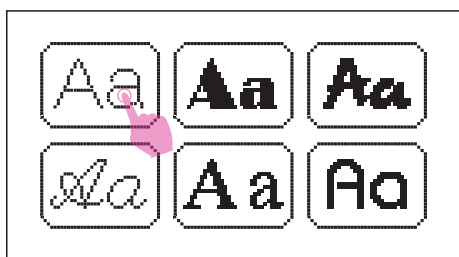
Select the desired pattern to enter editing screen.

Please refer to "Editing the embroidery pattern" chapter for more information.

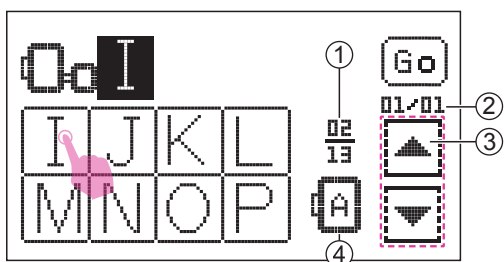


### ❖ Built-in embroidery letter

Touch the embroidery letter icon to enter selection screen.

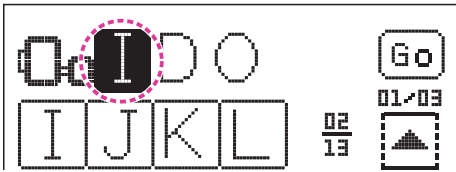


There are 6 fonts available (Franklin Gothic Medium, Broadway BT, TimeScrDBol, EnglischeSch T, Time New Roman, Bauhaus Md BT)

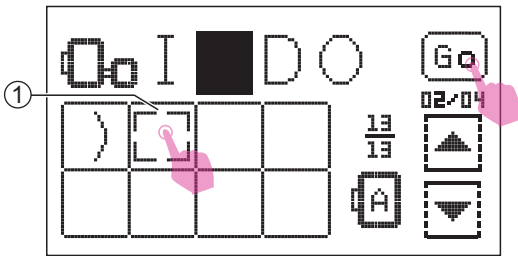


Select the desired alphabet. You can touch the previous/next page icon to switch to other pages.

- ① Number of current page/total number of page
- ② Number of current unit/total number of unit
- ③ Previous page icon/next page icon
- ④ Alphabet direction



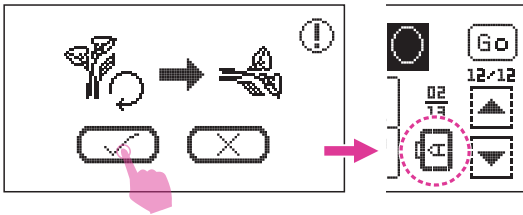
Touch the move icon to move the cursor to the position which you want to add a new letter after it.



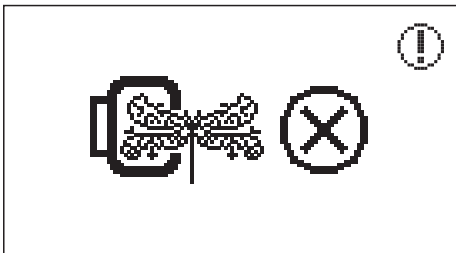
Enter the letter you want to insert and add it.

① Space

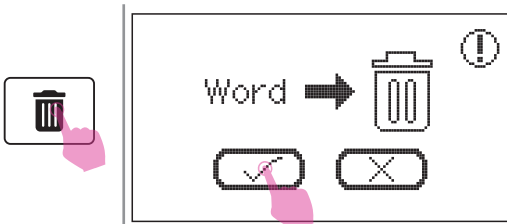
Touch the Go icon to enter editing screen.



When the embroidery letter exceeds the width of the embroidery frame, the prompt message will pop out and ask if the text needs to be rotated 90 degrees. Click "check", the alphabet direction will be change.

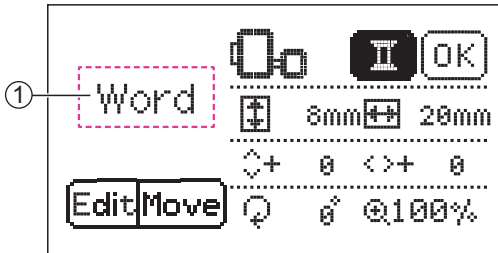


A maximum of 20 letters can be saved. (Which depends on the embroidery hoop you are using. The prompt message will pop out to remind you of not adding anymore.)



#### Note

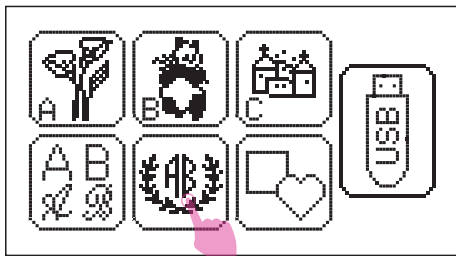
Touch the delete icon to delete each letter individually. If you want to delete all letters, long touch the delete icon and the prompt message will pop out then click "check" to delete all letters.



### Note

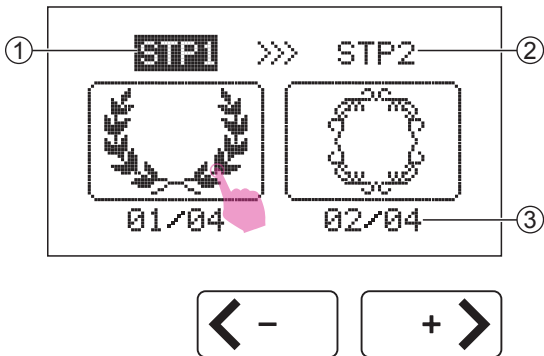
- ① The icon-in letter will not display on the screen. The screen will only show "word".

Please refer to "Editing the embroidery pattern" chapter for more information.



### ❖ Built-in Monogram Letters

Touch the monogram letters icon to enter frame selection screen.



#### STEP1:

There are 4 frames available, touch the move icon to switch to other pages.

Select the desired frame and go to STEP2.

- ① Current step
- ② Next step
- ③ Number of current unit/total number of unit



#### STEP2:

Select the desired two letters, touch the move icon to switch to other pages.

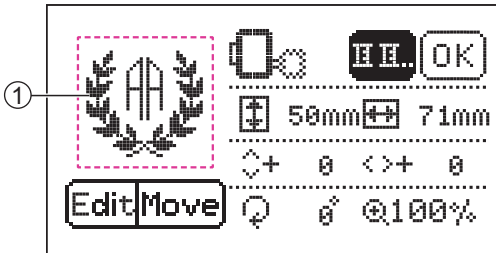
- ① Selected frame
- ② Selected letter
- ③ Number of current page/total number of page

Touch the Go icon to enter editing screen.



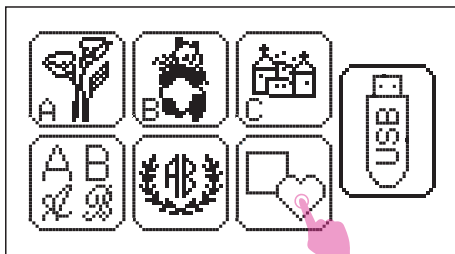
### Note

Touch the delete icon to delete selected letter.



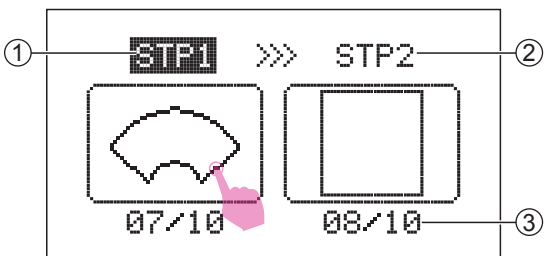
### ① Built-in combination letters

Please refer to "Editing the embroidery pattern" chapter for more information.



### ❖ Built-in frame designs

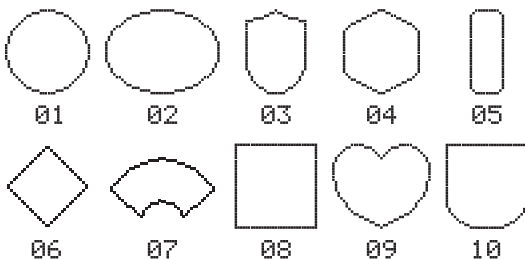
Touch the frame designs icon to enter frame selection screen.



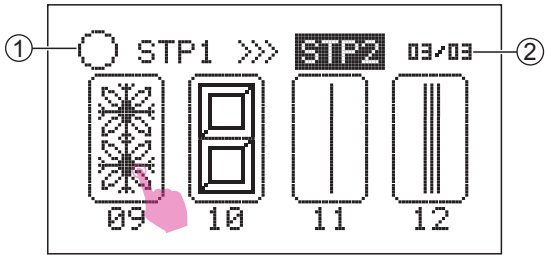
### STEP1:

There are 10 frames available, touch the move icon to switch to other pages.

- ① Current step
- ② Next step
- ③ Number of current unit/total number of unit



Select the desired frame and go to STEP2.

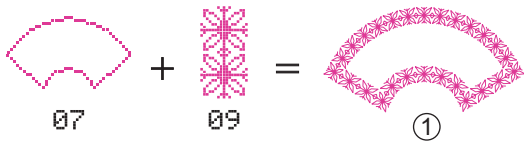


**STEP2:**

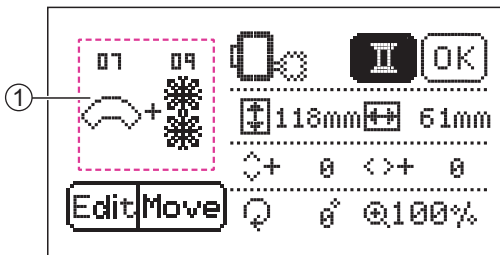
There are 12 decorative patterns available, touch the move icon to switch to other pages.

- ① Selected frame
- ② Number of current page/total number of page

Select the desired decorative pattern and touch the Go icon to enter editing screen.



- ① Decorative frame composed by frame and decorative pattern



**Note**

- ① The final performance of the decorative frame will not display on the screen. Please refer to "Embroidery pattern chart" in the final chapter of this manual.

Please refer to "Editing the embroidery pattern" chapter for more information.

## ❖ Designs from USB

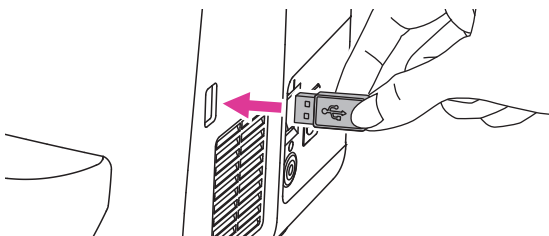
The machine has a USB port for memory stick. Through a USB, you can import patterns from the computer to the machine.

### Note

- The USB storage device such as RAM disk is not included with the machine, but such kind of devices are easily available in computer shops and camera shops.
- The USB storage device must be of either FAT32 formats only.
- The USB storage device's max allowed capacity is 256GB. (256G storage capacity is tested and available.)

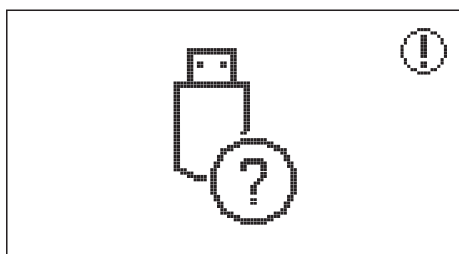
### Please be aware of the following tips, otherwise malfunctioning may happen.

- This feature only supports files generated from the EZDesign or EZ Converter application software with .zhs format. More detailed information please contact nearest authorized retailer.
- Embroidery data must be stored in root directory in USB storage device.
- The file length of each individual file should not exceed 64 characters.
- If somehow the file cannot be read by the machine correctly. It could be because the file name of the file has contained irregular character(s). The valid file names need to be made of any of the 26 English letters or the numbers 0 through 9.
- The sizes of the embroidery patterns cannot exceed 120 x 180 mm (W x H).
- The color mixes of the embroidery patterns cannot exceed 30.
- The embroidery pattern can not exceed a maximum number of 100,000 stitches.

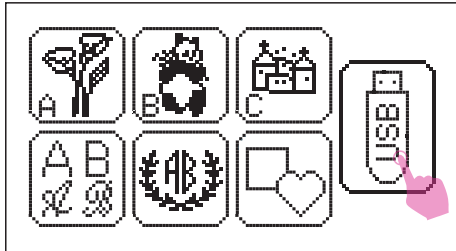


## ❖ Connect to USB port

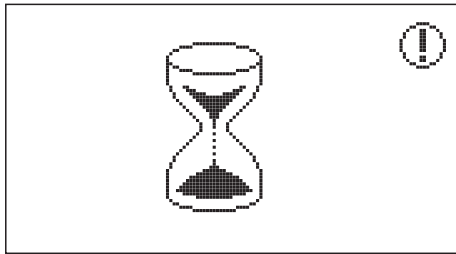
Insert the USB storage device into the USB port on the right side of the embroidery machine.



This machine can't save the embroidery pattern loaded from the USB stick. Please do not remove USB while the machine is in the editing or embroidery process, otherwise it will lead to data loss. An alarm screen will pop up if you remove the USB stick.

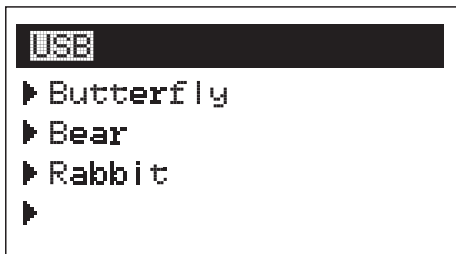


Touch the USB icon to enter selection screen.

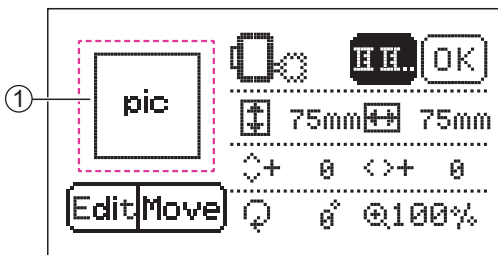


#### ⚠ Attention

If the funnel-shaped icon pops on, it indicates that data transfer is in progress, be sure to wait and not to interrupt until this icon disappears. After this icon disappears, the new patterns can be downloaded from the USB storage device.



Touch the move icon to switch to other pages and select the desired embroidery pattern. Then enter the editing screen.



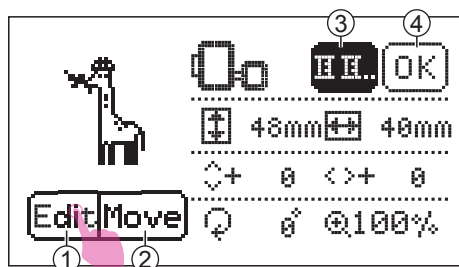
#### Note

① The loaded embroidery pattern will not display on the screen. The screen will only show "pic".

Please refer to "Editing the embroidery pattern" chapter for more information.

When finishing the embroidery, remove the USB storage device out carefully.

# Editing the embroidery pattern

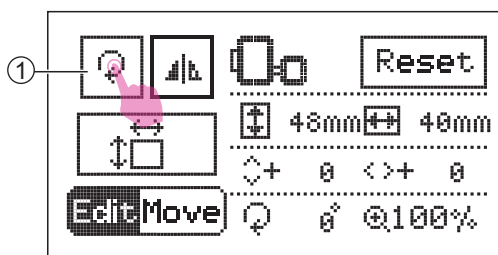


When the embroidery pattern is selected, you can adjust the angle, size, position and color in your preference.

- ① Edit icon
- ② Move icon
- ③ Color change icon
- ④ Embroidery icon



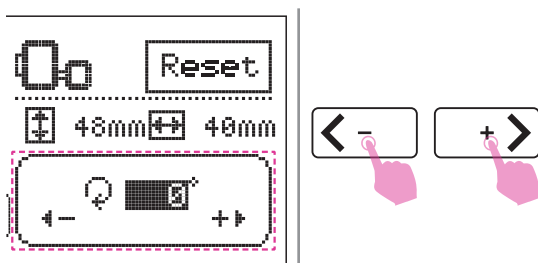
- ① Middle hoop (120x180mm) and small hoop (50x70mm) are available
- ② Only middle hoop (120x180mm) is available



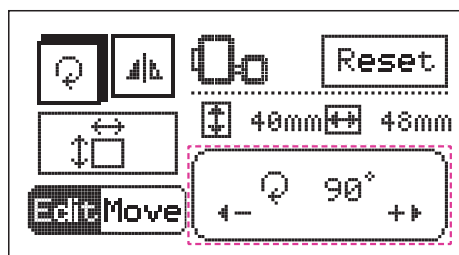
## ❖ Rotate the embroidery pattern

Touch the Edit icon to enter edit mode. Touch the rotation icon to rotate the embroidery pattern.

- ① Rotation icon



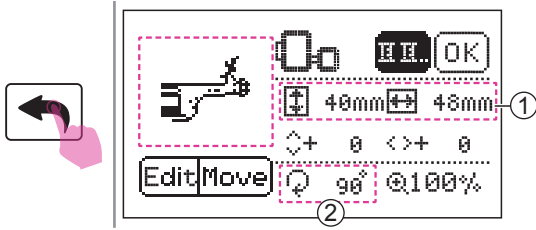
The screen will show the rotation option. The default is in 0 degree, and you can touch the value adjustment icon to rotate selected pattern clockwise or counter-clockwise.



Rotate the pattern 90 degrees at a time.

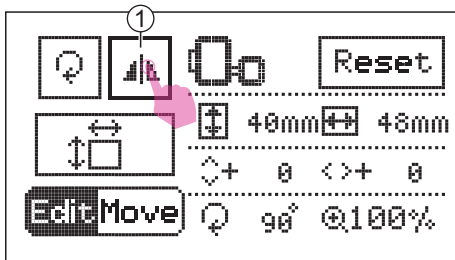
### Note

The setting of the frame designs will only display the adjusted value, and the screen cannot display the adjusted embroidery pattern.



Touch the backward icon will return to editing screen, and the screen will display the adjusted pattern.

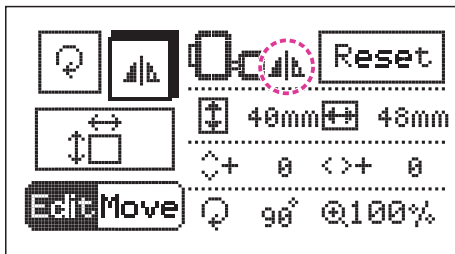
- ① Size display
- ② Rotate degree



### ❖ Mirror the embroidery pattern

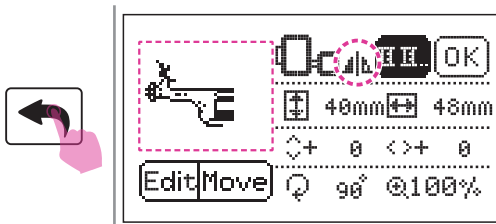
Touch the Edit icon to enter edit mode. Touch the mirror icon to mirror the embroidery pattern.

- ① Mirror icon

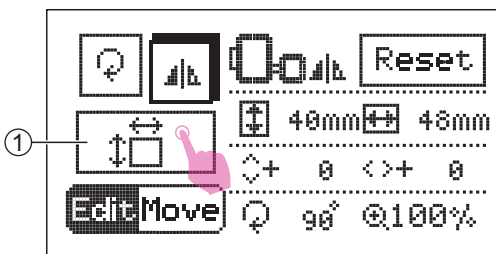


The LCD screen will display the mirror icon.

Touch the mirror icon again to cancel the mirror function and the mirror icon will disappear on screen.



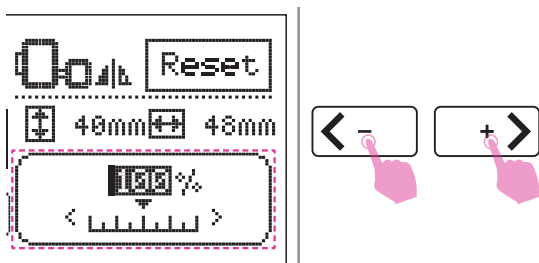
Touch the backward icon will return to the editing screen, and the screen will display the mirror icon of selected pattern.



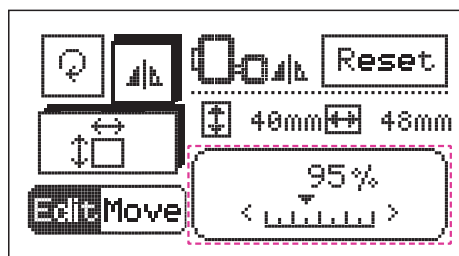
### ❖ Resize the embroidery pattern

Touch the Edit icon to enter edit mode. Touch the resize icon to resize the embroidery pattern.

- ① Resize icon

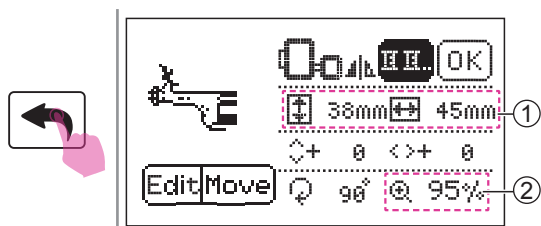


The screen will show the pattern size percentage. The default percentage is 100%, and you can touch the value adjustment icon to change the embroidery pattern size.



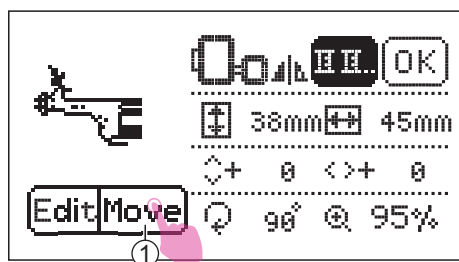
The size change is 5% for each increment.

You can change the size of embroidery pattern from 80% to 120% of the original size.



Touch the backward icon to return to the editing screen, and the screen will display the resized pattern.

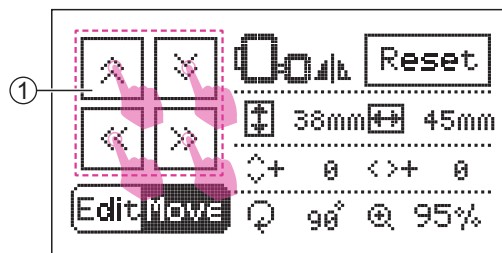
- ① Size display
- ② Degrees



### ❖ Move the embroidery pattern

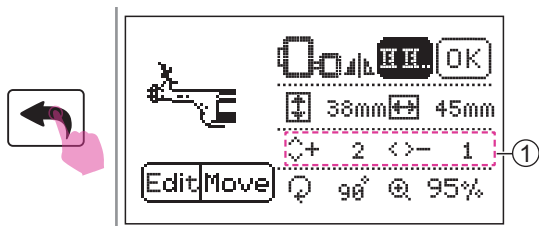
Touch the Move icon to enter edit mode.

- ① Move icon



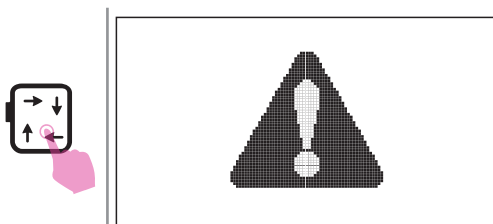
Touch the change position icon to change its position. A short touch will move one unit per time and a long touch will move 5 units per time.

- ① Change position



Touch the backward icon to return to the editing screen, and the screen will display the resized pattern.

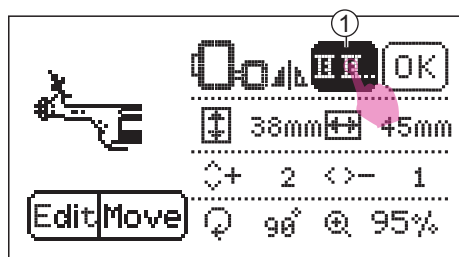
- ① Embroidery distance from the center



After finishing editing, touch the trace icon to move the embroidery carriage and detect if the pattern can be embroidered on the correct position.

#### ⚠ Attention

When touching the trace icon, a warning message will pop out. The embroidery carriage is moving and do not approach. After initializing, the message will be disappeared.



#### ❖ Single/multi color

The color default setting is different from each embroidery pattern.

If the original color setting is single color, you can finish embroidery work without changing thread.

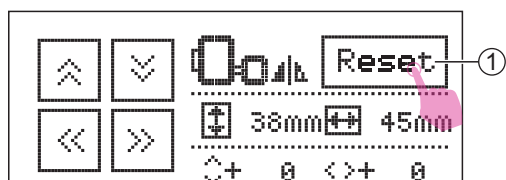
If the original color setting is multicolor, you should change the thread by layers while embroidering.

Touch the color change icon to set the single or multi color.

- ① Color change icon



- ① Single color
- ② Multicolor

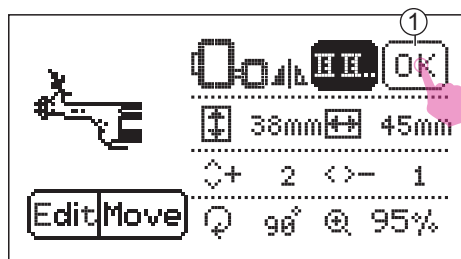


#### Note

Touch the reset icon to return all settings in default.

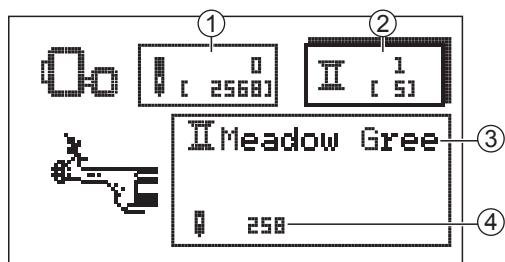
- ① Reset icon

# Begin to embroider



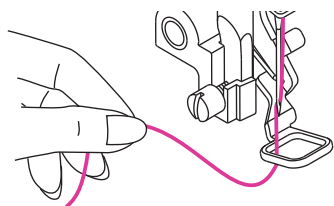
Touch the embroidery icon to enter embroidery screen.

- ① Embroidery icon



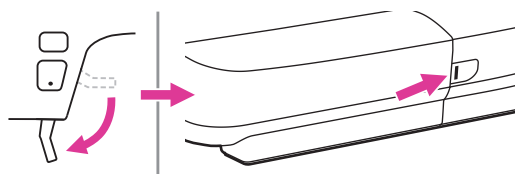
Please place the first color of threads to embroider according to the instruction on the screen.

- ① Current stitch count (total number of stitch count)
- ② Current color layer (total layers)
- ③ Current thread color
- ④ Current stitch count



## Note

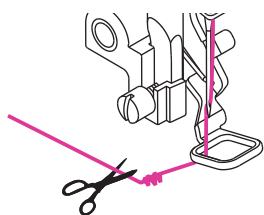
Please refer to page "Threading the upper thread" chapter for more information.



Lower the presser foot lifter and the status light will change from yellow to green, which means that everything is ready.



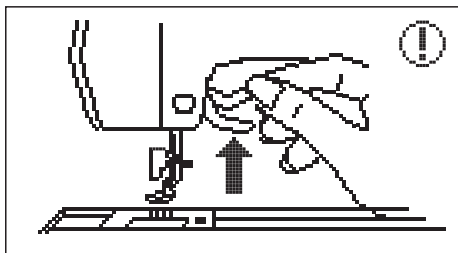
Long press the start/stop button to start embroidering.



## Note

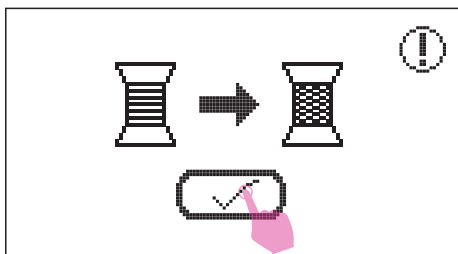
After sewing 5 to 6 stitches, press the start/stop button again to stop the embroidering. Raise the presser foot lifter. Cut the thread at the beginning of the stitching.

Lower the presser foot lifter. Long press the start/stop button to continue embroidering.



The machine will sew locking stitches then stop and trim the threads automatically when the first color section is finished.

Then screen will display the lifting up presser foot image.



After lifting up presser foot, the screen will display the changing thread image, please click "check" and go to next step.



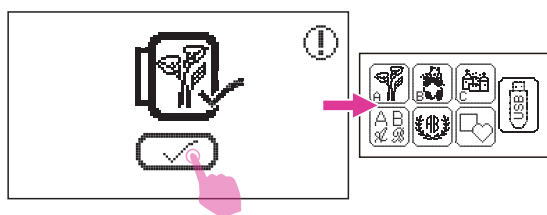
The screen will show next color, please change to the next thread and click "check" to confirm.

Then long press the start/stop button to start embroidering.



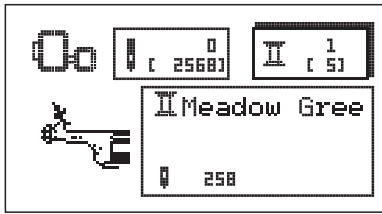
#### Note

If you need to change thread to other color, please touch the park position icon, embroidery carriage will move to left horizontally. When you touch the park position icon again, embroidery hoop will return to original position.



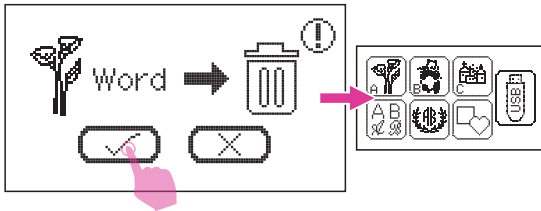
Once all the color threads have been embroidered, your exclusive embroidery pattern has completed.

The screen will show complete picture, please click "check" to return to embroidery pattern types selection screen.



### Note

If you want to give up embroidery pattern in embroidery mode, you can touch the backward icon. The prompt message will pop up then click "check" to give up this pattern, and it will return to mbroidery pattern types selection screen.

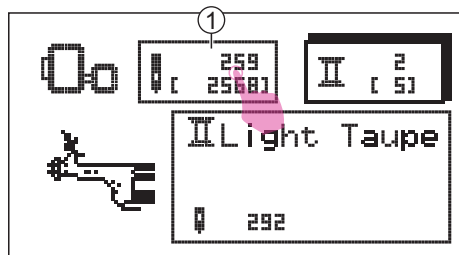


# Embroidery process adjustment



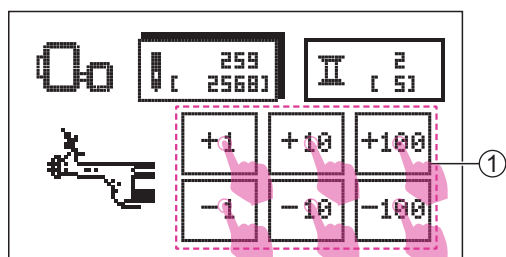
## ❖ Adjusting current stitch count

Long press the start/stop button to stop embroidering.



Touch the change the needle icon to enter needle adjustment screen.

① Change the needle icon



Touch the stitch count adjustment icon to adjust the required stitch count.

① Stitch count adjustment icon



Long press the start/stop button to start embroidering.

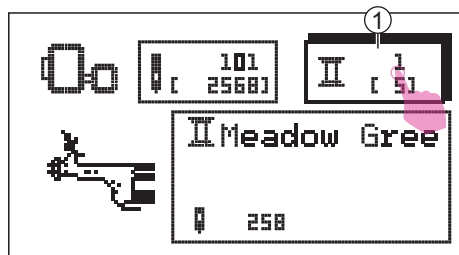
### Note

When the upper thread or the bobbin thread runs out while sewing, the sewing machine stops. Adjusting the stitch count back about 10 stitches and resume sewing.



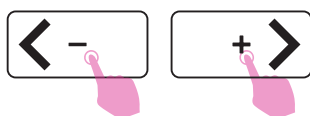
## ❖ Adjusting color layer

Long press the start/stop button to stop embroidering.

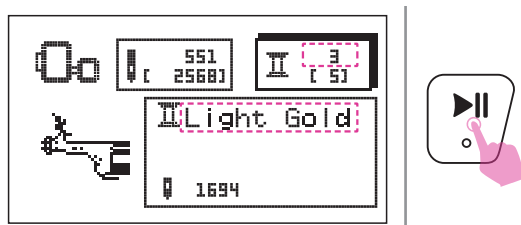


Touch the color change icon to adjust to required color layer.

① Color change icon



Touch the move icon to switch color layer.



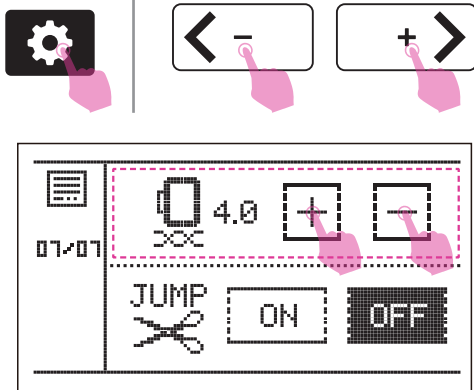
After adjusting color layer, long press the start/stop button to start embroidering.

### Note

If you need to restarting power because of power interruption in embroidery, the machine is unable to save related settings of the final stitch count. Please take note the current settings in order to continue embroidering from last stitch count.

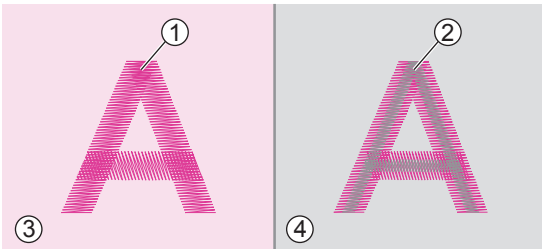
## ❖ Adjusting the embroidery thread tension

- Proper tension setting is important for sewing. There is no single tension setting appropriate for all the stitch functions and fabrics.
- Basic thread tension setting: "4"



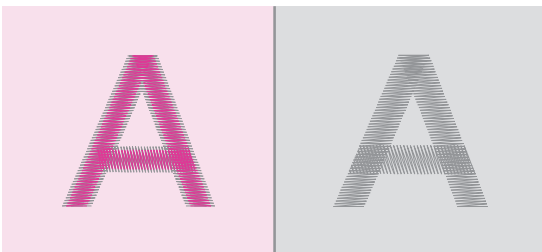
Touch the settings icon to enter setup program. Touch the move icon to switch to thread tension page.

Touch the "+" or "-" icon to adjust embroidery tension.



The thread tension is correct when upper thread is just visible on back of the fabric.

- ① Upper thread
- ② Bobbin thread
- ③ Right side
- ④ Wrong side



When the bobbin thread is visible on the front of the fabric, the thread tension is too tight for embroidering. To reduce the tension, touch the "-" icon.

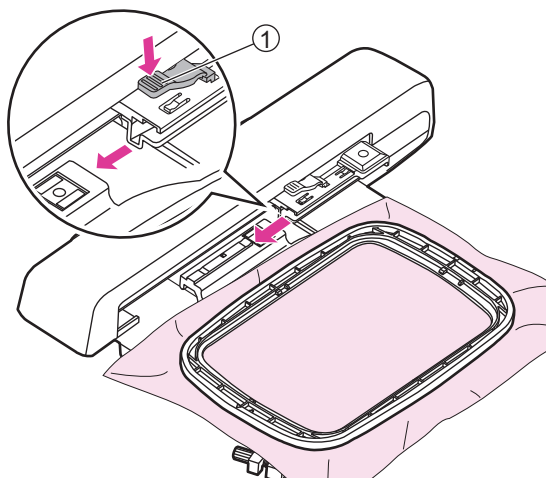


When the upper thread has slack, the thread tension is too loose for embroidering. To increase the tension, touch the "+" icon.

### Note

Please use the same fabric of the project and do a sewing test in advance.

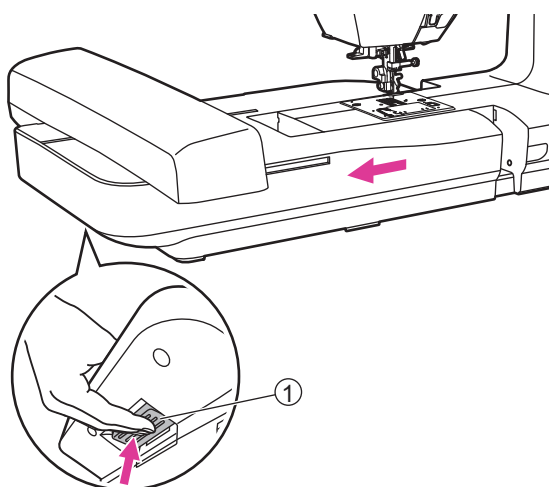
# Back to sewing mode



## ❖ Remove embroidery hoop

Raise the presser foot lifter and confirm the needle is at the highest position. And then press the hoop-securing lever to pull the embroidery hoop backward to remove the embroidery hoop.

① Hoop-securing lever



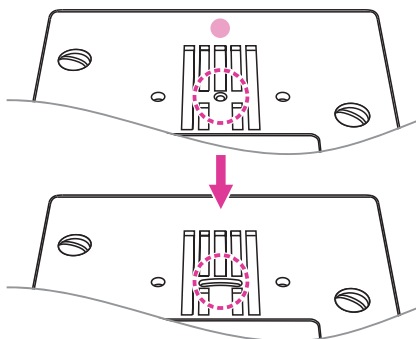
## ❖ Remove embroidery unit

Hold the embroidery unit and press the release button, then slide the embroidery unit to the left to move out it.

① Release button

### Note

Please firstly remove the embroidery hoop before removing the embroidery unit.



Replacing the straight stitch plate to normal needle plate.

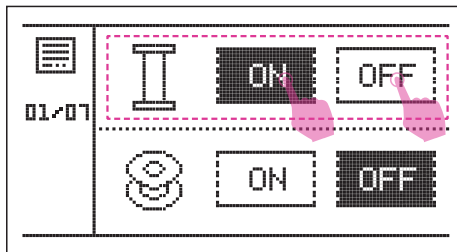
Replacing the needle and presser foot.

# Advanced setting



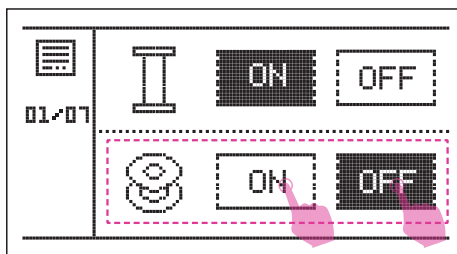
Touch the settings icon to enter setup program and change settings, touch the settings icon again to leave setup program.

There are 14 functions in the program. Touch the move icon to switch the setup program.



## ❖ Monitoring upper thread indicator

Touch the "ON" or "OFF" icon to turn on or turn off monitoring function.



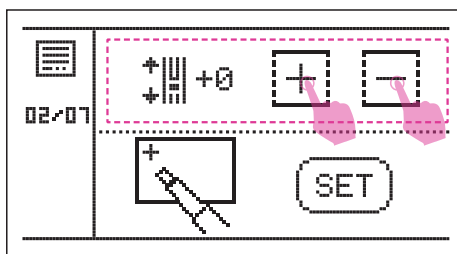
## ❖ Monitoring lower thread indicator

Touch the "ON" or "OFF" icon to turn on or turn off monitoring function.

## ❖ Stitch balance adjustment

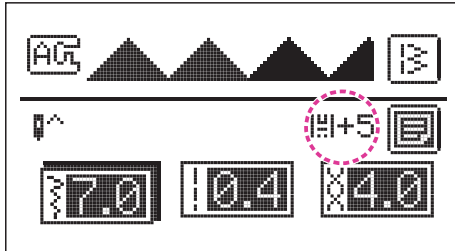
The stitch performance may be slightly different in regards to fabric types, thickness or sewing speed.

If decorative stitches, letter, numbers or buttonhole are uneven on a particular fabric, then just adjust the stitch balance for a better performance.

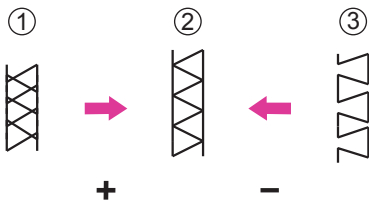


The default setting is in 0.

Touch the "+" or "-" icon to adjust deformed pattern, the range can be adjusting from -9 to +9.

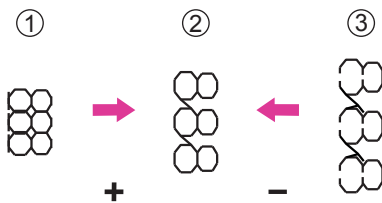


After setting, the LCD screen will display the icon.



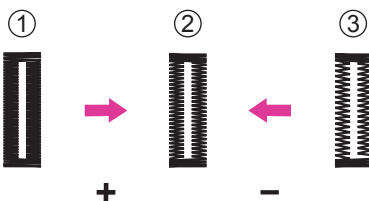
#### Adjusting distorted stretch stitches

- ① Stitches are too compressed, touch the "+" icon
- ② Stitches in normal situation
- ③ Stitches are too drawn out, touch the "-" icon



#### Adjusting distorted letters or numbers

- ① Letters or numbers are overlap, touch the "+" icon
- ② Letters or numbers in normal situation
- ③ Letters or numbers are too far, touch the "-" icon

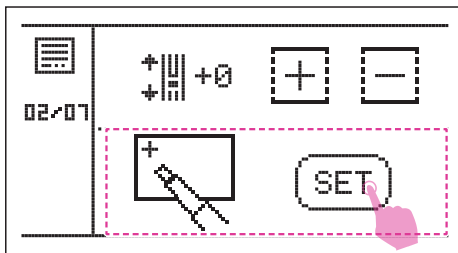


#### Adjusting the stitch density for iconhole

- ① Buttonhole is too dense, touch the "+" icon
- ② Buttonhole in normal situation
- ③ Buttonhole is less dense, touch the "-" icon

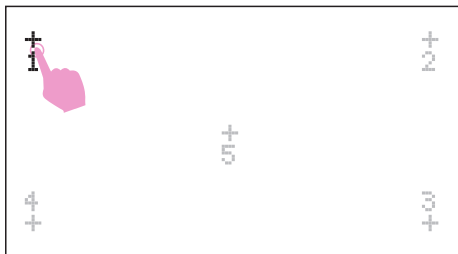
#### Note

It takes practice on a scrap piece of the same type of fabric. Please use the same fabric of the project and do a sewing test in advance.

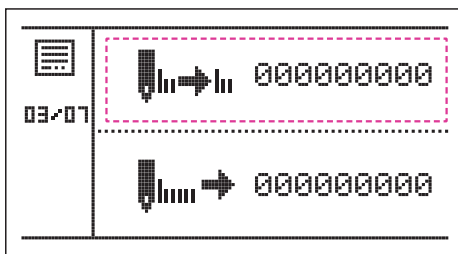


### ❖ Touch screen calibration

Touch the "SET" icon to enter calibrating screen.



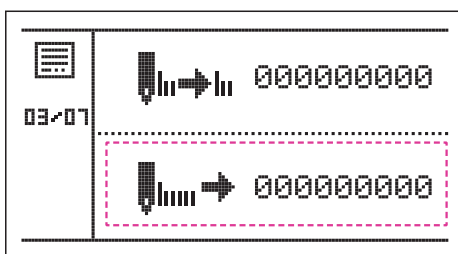
Touch the display digits one by one to complete the screen calibration.



### ❖ Service counter

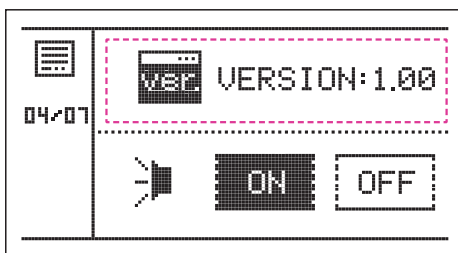
Counter for total stitch finished (including embroidery), it's a reminder of normal maintenance.

For more detailed information, please contact the authorized dealer for after service.



### ❖ Stitch counter

Shows the number of stitches that have been sewn since the machines delivered.



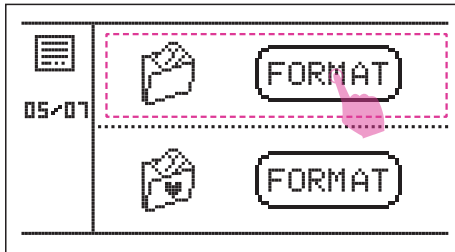
### ❖ Program version

Software program version.



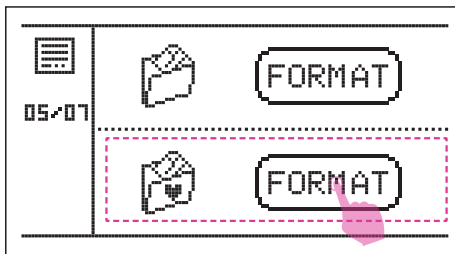
### ❖ Buzzer

Touch the "ON" or "OFF" icon to turn on or turn off buzzer.



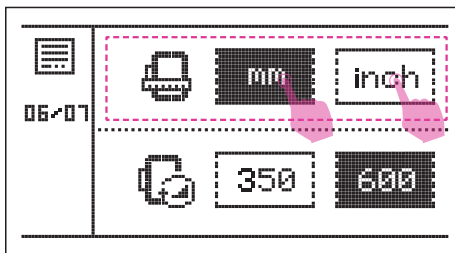
### ❖ Delete all (memory)

Touch the "FORMAT" icon to delete all machine's memory.



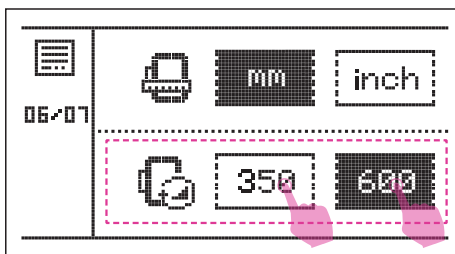
### ❖ Delete all (my personal program)

Touch the "ON" or "OFF" icon to delete all my favorite program.



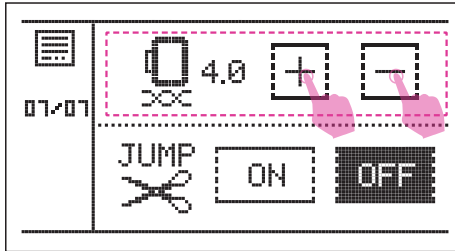
### ❖ Display unit

The default unit is millimeters. You can set the unit by touching the "mm" or "inch" icon.



### ❖ Embroidery speed setting

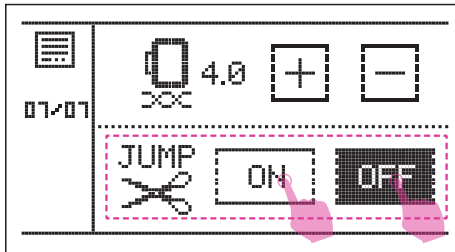
The default speed is 600SPM. You can set the speed by touching the "350" or "600" icon. (per minute)



### ❖ Embroidery tension

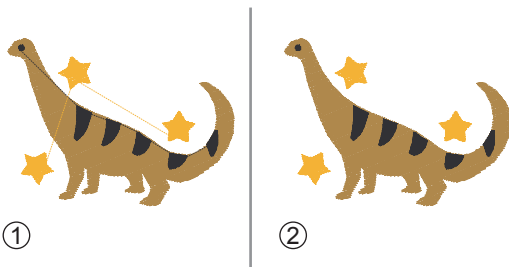
The default embroidery tension is in 4.0. You can adjust the tension by touching the "+" or "-" icon.

Please refer to "Adjusting the embroidery thread tension" chapter for more information.



### ❖ Jump stitch trim

In embroidery mode, the jump stitch trim function is setting on. That means when the option is turned on, the machine trim the thread when it stops to change the thread to the next color. You can touch the "ON" or "OFF" icon to make it active or non-active.



- ① Jump stitch trim function is non-active
- ② Jump stitch trim function is active

#### Note

Restart the machine, jump stitch trim will be ON as a preset mode.



# **Maintenance and Trouble shooting**

# Maintenance

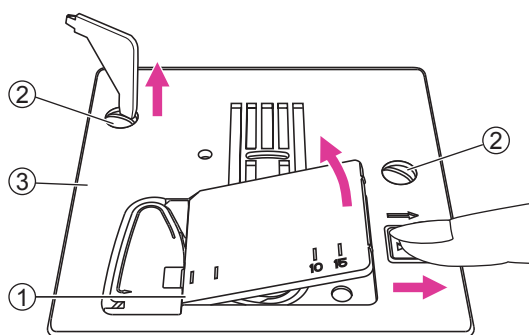
## ⚠ Attention

Disconnect the power cord from the wall socket before carrying out any maintenance, otherwise injury or electrical shock may result.

### ❖ Clean the 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



### ❖ Clean the hook

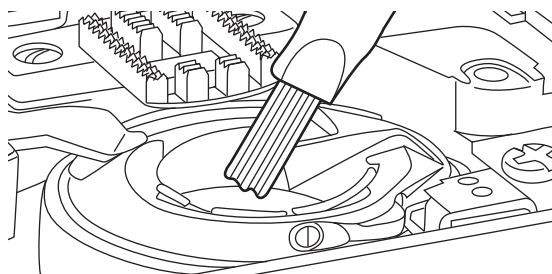
If lint and bits of thread accumulate in the hook, this will interfere with the smooth operation of the machine. Check regularly and clean the stitching mechanism when necessary.

Remove the needle, presser foot and presser foot holder.

Remove the bobbin cover and bobbin.

Remove the screws on the needle plate then remove the needle plate.

- ① Bobbin cover
- ② Screws
- ③ Needle plate



Clean the feed dogs and bobbin case with a brush. And also use a soft and dry cloth to clean them.

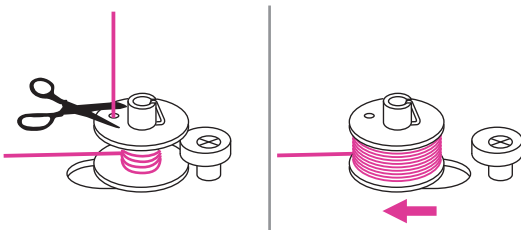
# Warning Function



## ❖ Warning beeping sound

- Operate correctly: 1 beep.
- Operate incorrectly: 3-short beeps.
- When the sewing machine is in trouble and can't sew: 1-long beeps.

It means that the thread may be twisted or jammed and the handwheel axle can't move. Please look through the "Trouble shooting guide" to find the solution. After the problem has been solved, the machine will be able to sew.



## Return bobbin winder spindle to left

When the bobbin thread is full or machine stop, if the bobbin winder spindle is still in the right position, you will hear 3-short beeps by pressing any button until you push the spindle to the left.

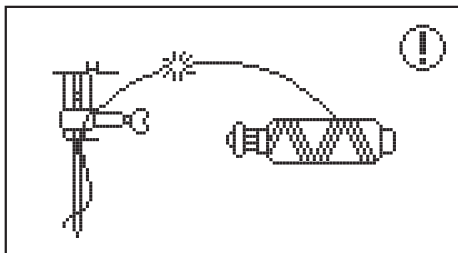
Return the bobbin winder spindle to the left.

### Note

If the problem is still not solved, please contact your local dealer.

### ⚠ Attention

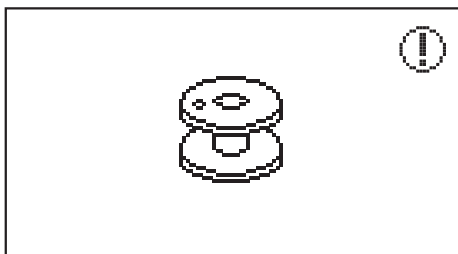
During sewing, if the thread has been jammed inside the hook and needle movement stops. If you continue to sew, the machine will stop automatically due to safety. If machine stops, please turn off the machine firstly then turn on again.



## ❖ Warning message

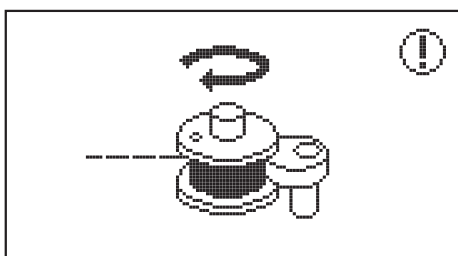
### Upper thread error

The upper thread is broken or almost running out. Or the threading way is incorrect.



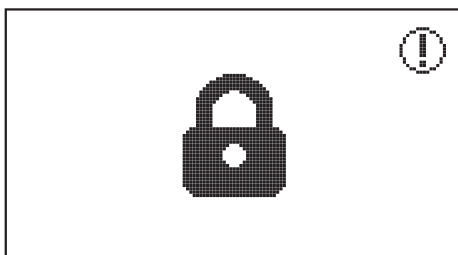
### Bobbin thread error

The bobbin thread is broken or almost running out.



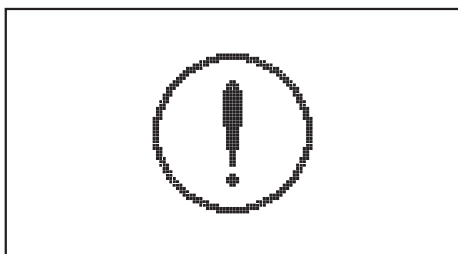
### Winding the bobbin

Bobbin winder spindle is on the right for bobbin winding.



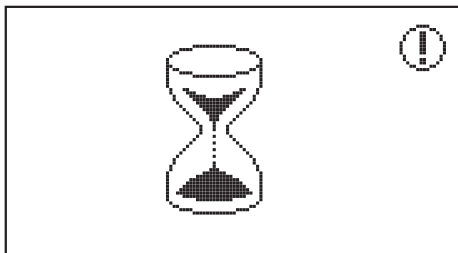
### Screen & function lockout

Touch the lock icon to lock all functions, it will show a lock on the screen. Touch this icon again to unlock the setting.

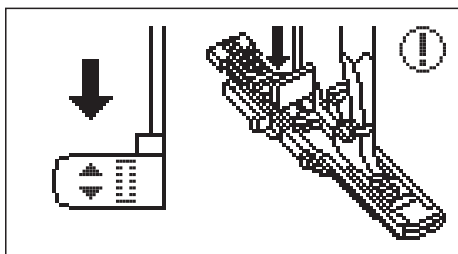


### Motor overload protection

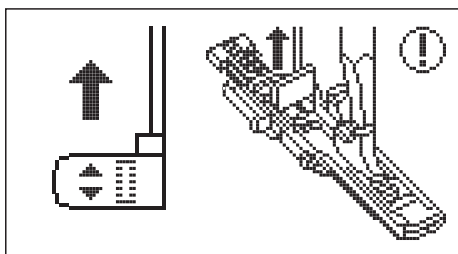
It means that the thread may be twisted or jammed and the hand wheel axle can't move. The buzzer will sound.



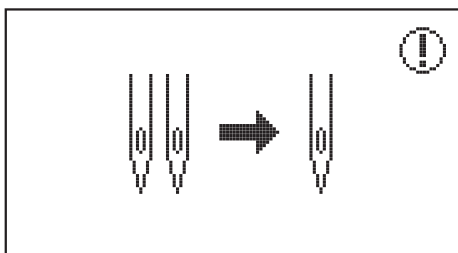
**File is loading**



**Lower the buttonhole lever**

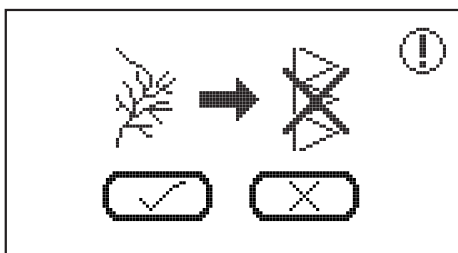


**Raise the buttonhole lever**



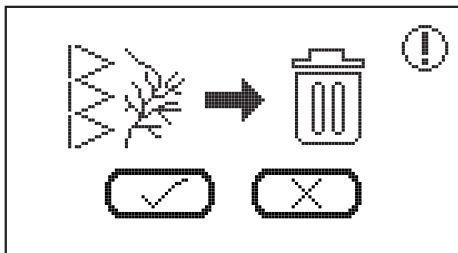
**Single needle sewing only**

Twin needle function is turned off, please replace single needle with double needle.



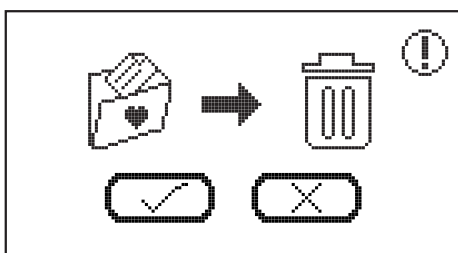
**Overwrite the existing pattern?**

In my favorite program or memory program .



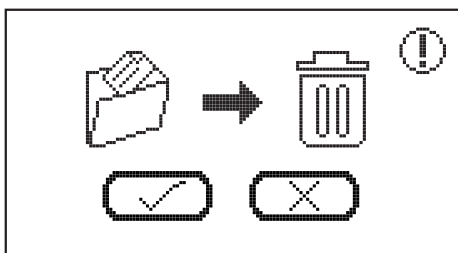
### Delete the pattern?

- In my favorite program, select the pattern you want to delete and the prompt message will pop out then click "check" to delete the pattern.
- In memory program, select the patterns you want to delete and the prompt message will pop out then click "check" to delete the patterns.



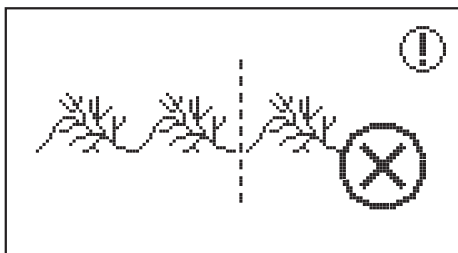
### Delete all patterns in my favorite program?

To delete the pattern in my favorite program, long touch the delete icon and the prompt message pop out then click "check" to delete all patterns.



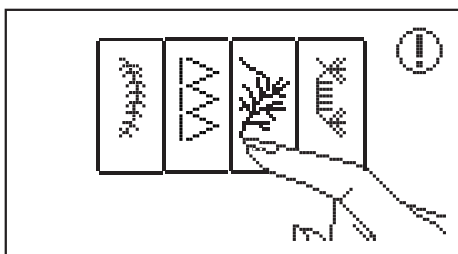
### Delete all patterns in memory program?

To delete the pattern in memory program, long touch the delete icon and the prompt message pop out then click "check" to delete all patterns.



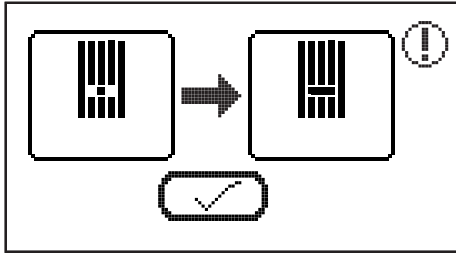
### Combine limit

Please note a maximum of 20 units stitches can be combined in each module. When the pattern is over 20 units, the prompt message will pop out.



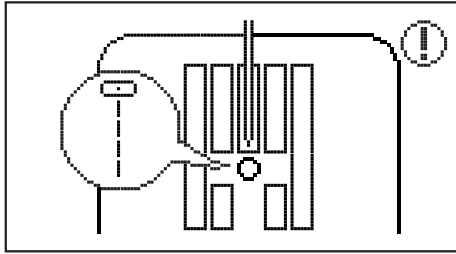
### Select a stitch

In combination mode: If users press start/stop button without selecting a pattern in advance, the prompt message will pop out.

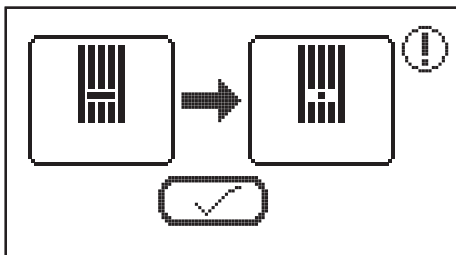


### Changing the needle plate

In sewing mode: The prompt message will pop up to remind you to change and use regular stitch plate.

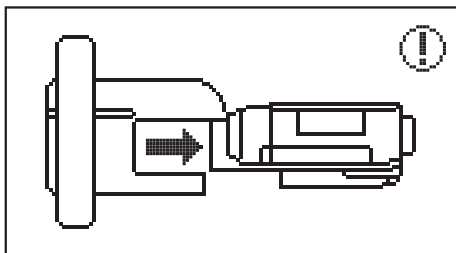


**Only specific straight stitches are applicable while using straight stitch plate in sewing mode. (A group patterns 01 & 03 & 05)**

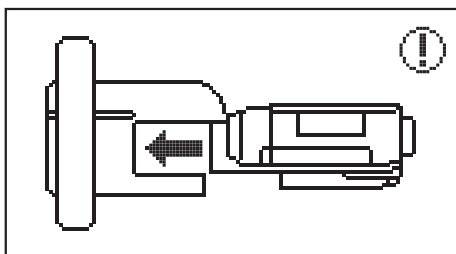


### Change the straight stitch plate

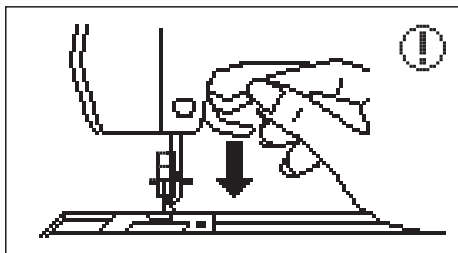
In embroidery mode: The prompt message pop up to remind you to change and use straight stitch plate.



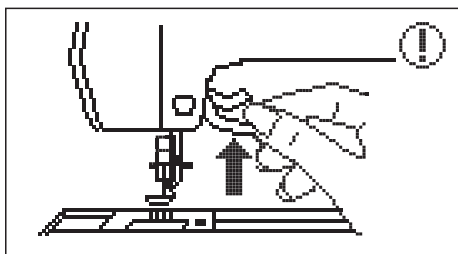
### Attach the embroidery unit



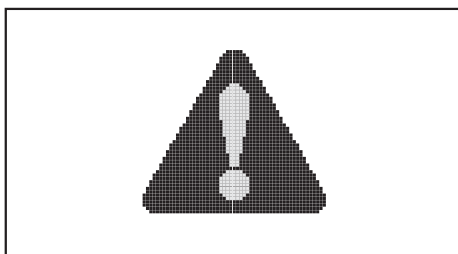
### Remove the embroidery unit



**Lower the presser foot lifter**

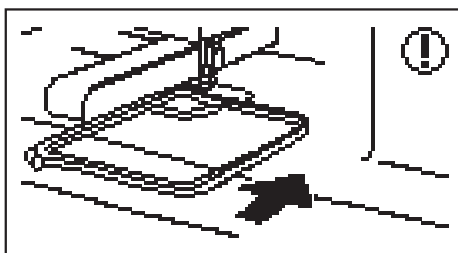


**Raise the presser foot lifter**

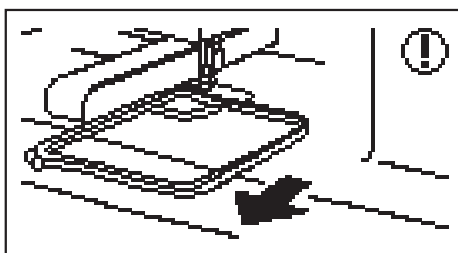


**The embroidery carriage is moving**

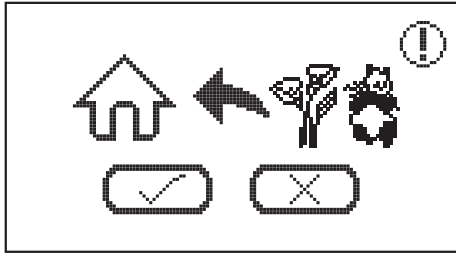
The embroidery carriage is moving and do not approach. After initializing, the message will be disappeared.



**Attach the embroidery hoop**

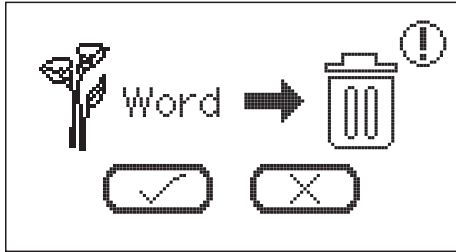


**Remove the embroidery hoop**



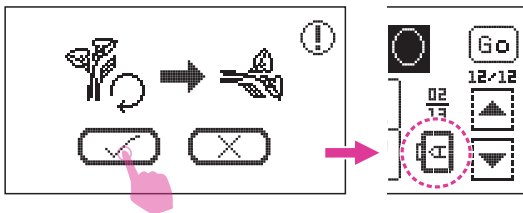
### Leave embroidery mode?

In embroidery mode: Enter the embroidery pattern selecting screen, and touch the home icon, the prompt message will pop out as illustrated.



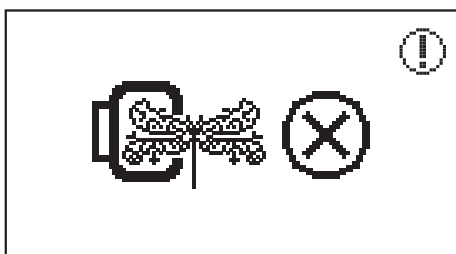
### Give up the pattern?

- After selecting the pattern, touch the backward icon, the prompt message will pop out as illustrated.
- In embroidery mode: Enter embroidery letter selection screen, and touch the delete icon for 3 seconds, the prompt message will pop out as illustrated.

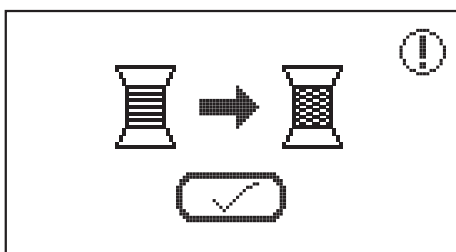


### The embroidery letter exceeds the width of the embroidery frame

The prompt message will pop out and ask if the text needs to be rotated 90 degrees. Click "check", the alphabet direction will be change.



### The embroidery pattern size is over embroidery hoop

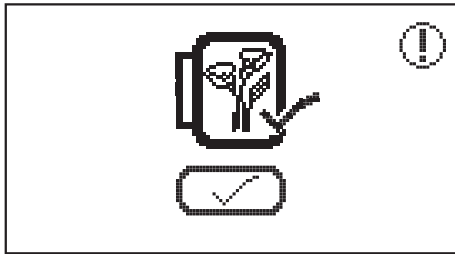


### Changing the thread color

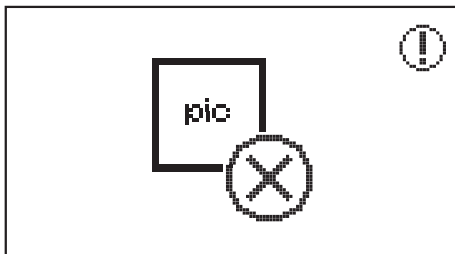
The prompt message will pop out to remind you to change next thread color.



**Notification of the next thread color**

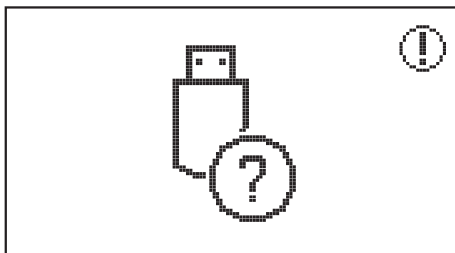


**Embroidery finish**



**Can not recognize the data/ The data may be corrupted**

Touch the USB icon · when the data can't be recognize, the prompt message will pop out as illustrated.



**USB isn't inserted correctly**

# Trouble shooting guide

Before calling for service, check below trouble shooting guides in advance, if problem still exist, please contact nearest dealer or local service center.

Problem	Cause	Correction	Reference
Upper thread breaks	1. The machine is not threaded correctly.	1. Rethread the upper thread.	12
	2. The thread tension is too tight.	2. Reduce the thread tension (to lower number).	30
	3. The thread is too thick for the needle.	3. Select a larger needle size.	17
	4. The needle is not inserted correctly.	4. Remove and reinsert the needle (flat side towards the back).	16
	5. The thread is wound around the spool holder pin.	5. Remove the reel and wind up the thread onto the reel.	12
	6. The needle is damaged.	6. Insert a new needle.	16
Bobbin thread breaks	1. The bobbin case is not inserted correctly.	1. Remove and reinsert the bobbin case and pull on the thread.	9
	2. The bobbin case is threaded wrong.	2. Check both bobbin and bobbin case if on the correct position.	9
Skipped stitches	1. The needle is not inserted correctly.	1. Remove and reinsert the needle (flat side towards the back).	16
	2. The needle is damaged.	2. Insert a new needle.	16
	3. The wrong size needle has been used.	3. Choose a needle to suit the thread.	17
	4. The presser foot is not attached correctly.	4. Check and attach it correctly.	18
	5. The machine is not threaded correctly.	5. Rethread the upper thread.	12
Needle breaks	1. The needle is damaged.	1. Insert a new needle.	16
	2. The needle is not correctly inserted.	2. Insert the needle correctly (flat side towards the back).	16
	3. Wrong needle size for the fabric.	3. Choose a needle to suit the thread and fabric.	17
	4. The wrong presser foot is attached.	4. Select the correct presser foot.	-
	5. The needle clamp screw is loose.	5. Use the screwdriver to tighten the screw.	16
	6. The presser foot is not appropriate for the type of stitch that you sew.	6. Attach appropriate presser foot for the type of stitch that you sew.	-
	7. The upper thread tension too tight.	7. Loosen the upper thread tension.	30

<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 and rethread.	12
	2. The bobbin case is not threaded correctly.	2. Thread the bobbin case as illustrated.	9
	3. Needle/fabric/thread combination is wrong.	3. The needle size must suit the fabric and thread.	17
	4. The thread tension is wrong.	4. Correct the thread tension.	30
Seam gather or pucker	1. The needle is too thick for the fabric.	1. Select a correct needle size.	17
	2. The stitch length is wrong.	2. Adjust the stitch length.	29
	3. The thread tension is too tight.	3. Loosen the thread tension.	30
Seam puckering	1. The needle thread tension is too tight.	1. Loosen the thread tension.	30
	2. The needle thread is not threaded correctly.	2. Rethread the machine.	12
	3. The needle is too heavy for the fabric being sewn.	3. Choose a needle to suit the thread and fabric.	17
	4. The stitch length is too long for the fabric.	4. Adjust the stitch length shorter.	29
	5. Sewing on thin fabric.	5. Sew with a stabilizer material under the fabric.	55
Patterns are distorted	1. The presser foot is not suited for the pattern.	1. Select the correct foot.	-
	2. The needle thread tension is too tight.	2. Loosen the thread tension.	30
Thread has jammed	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.	121
	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.	121
	2. The needle is damaged.	2. Insert a new needle.	16
	3. Thread is caught in the hook.	Remove the upper thread and bobbin case, turn the handwheel backwards and forwards and remove the thread remnants.	121
	4. The feed dogs are packed with lint.		
Uneven stitches, uneven feed	1. Poor quality thread.	1. Select a better quality thread.	17
	2. The bobbin case is threaded uncorrect.	2. Remove the bobbin case and the thread and reinsert them correctly.	9
	3. Fabric has been pulled on.	3. Do not pull on the fabric while sewing, let it be taken up by the machine.	-

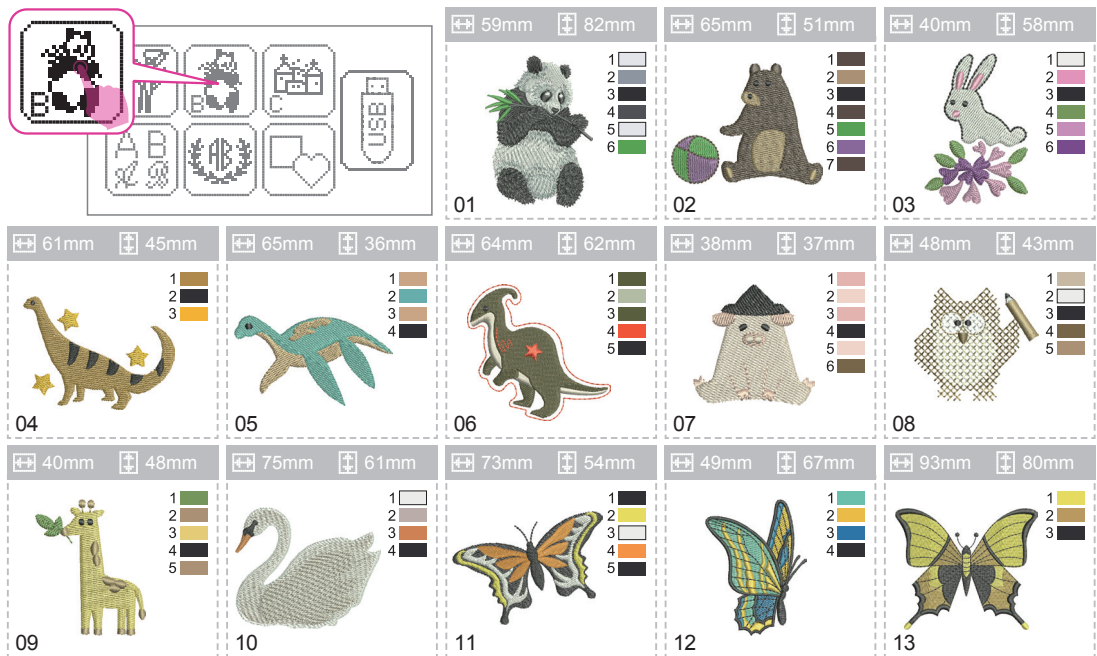
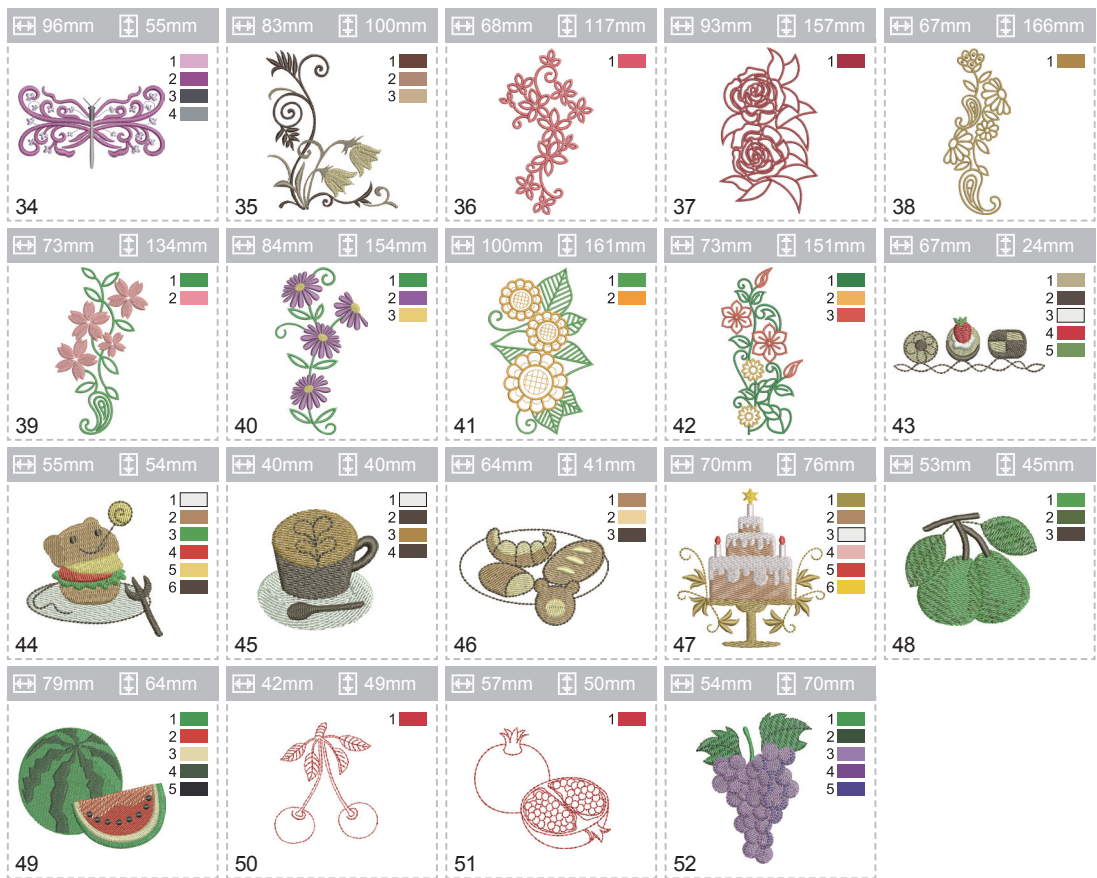
<b>Problem</b>	<b>Cause</b>	<b>Correction</b>	<b>Reference</b>
The sewing machine doesn't operate	1. The machine is not turned on.	1. Turn on the machine.	4
	2. The presser foot lifter is raised.	2. Lower the presser foot lifter.	8
	3. The machine is not plugged in.	3. Connect the power cord to the electric outlet.	4
Embroidery unit does not move	1. The embroidery unit is not set up correctly.	1. Reset the embroidery unit up correctly.	94
Embroidery is not neatly completed	1. The thread is tangled and the bobbin case, etc., is plugged up.	1. Remove the tangled thread. When the bobbin case is plugged up, clean the race.	121
	2. The thread tension is incorrect.	2. Adjust the tension of the upper thread.	113
	3. The fabric is not fully stretched on the embroidery hoop. The fabric is loose.	3. Stretch the fabric properly on the embroidery hoop.	88
	4. No stabilizer material is attached.	4. Always use stabilizer material for embroidery with stretch fabrics, thin fabrics, fabrics with a loose weave and fabrics where stitches easily contract.	87
	5. Objects are placed near the carriage or embroidery hoop.	5. If the embroidery unit carriage or embroidery hoop bumps into objects, the pattern will be misaligned. Do not place objects within the range of embroidery hoop motion.	-
	6. Material coming out of the embroidery hoop is causing problems.	6. Stretch the fabric on the hoop once again so that the material coming out of the embroidery hoop does not cause problems, rotate the pattern and embroider.	-
	7. Embroider with a heavy fabric or the fabric material is hanging on the table.	7. During embroidery, if the fabric is hanging on the table will affect the embroidery unit movement, please hold the fabric gently in this case.	-
	8. The fabric is catching. It is pinched.	8. Stop the sewing machine and set the fabric up correctly.	-
	9. The embroidery carriage was moved while the embroidery hoop was being removed or attached during embroidery.	9. If the embroidery carriage is moved during the process, the pattern may be misaligned. Be careful when removing or attaching the embroidery hoop.	-

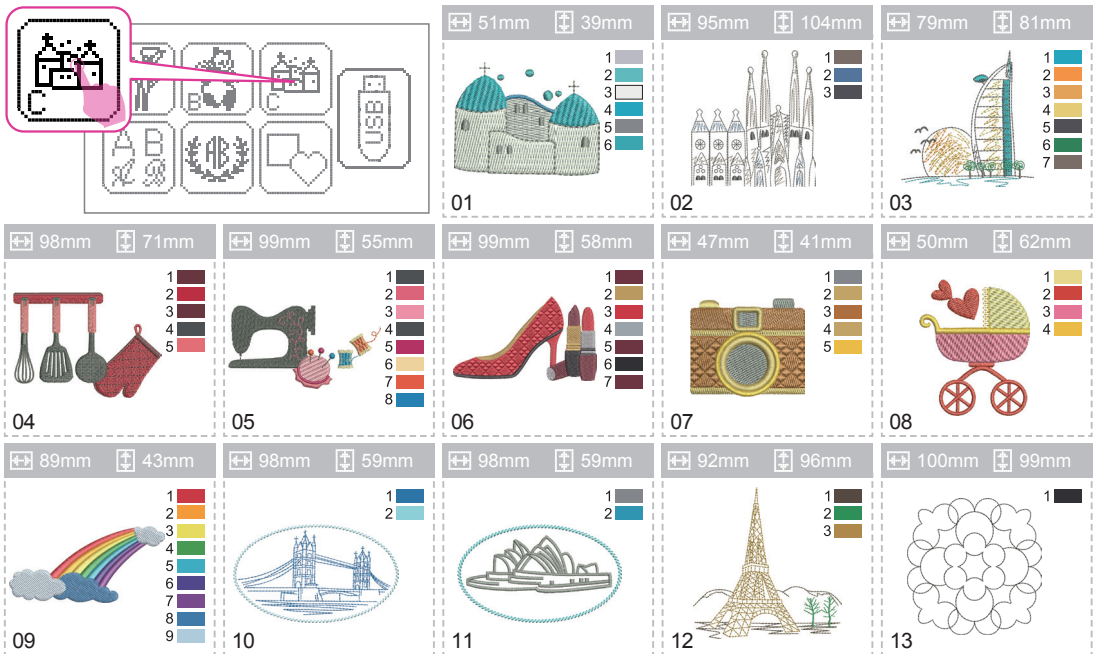
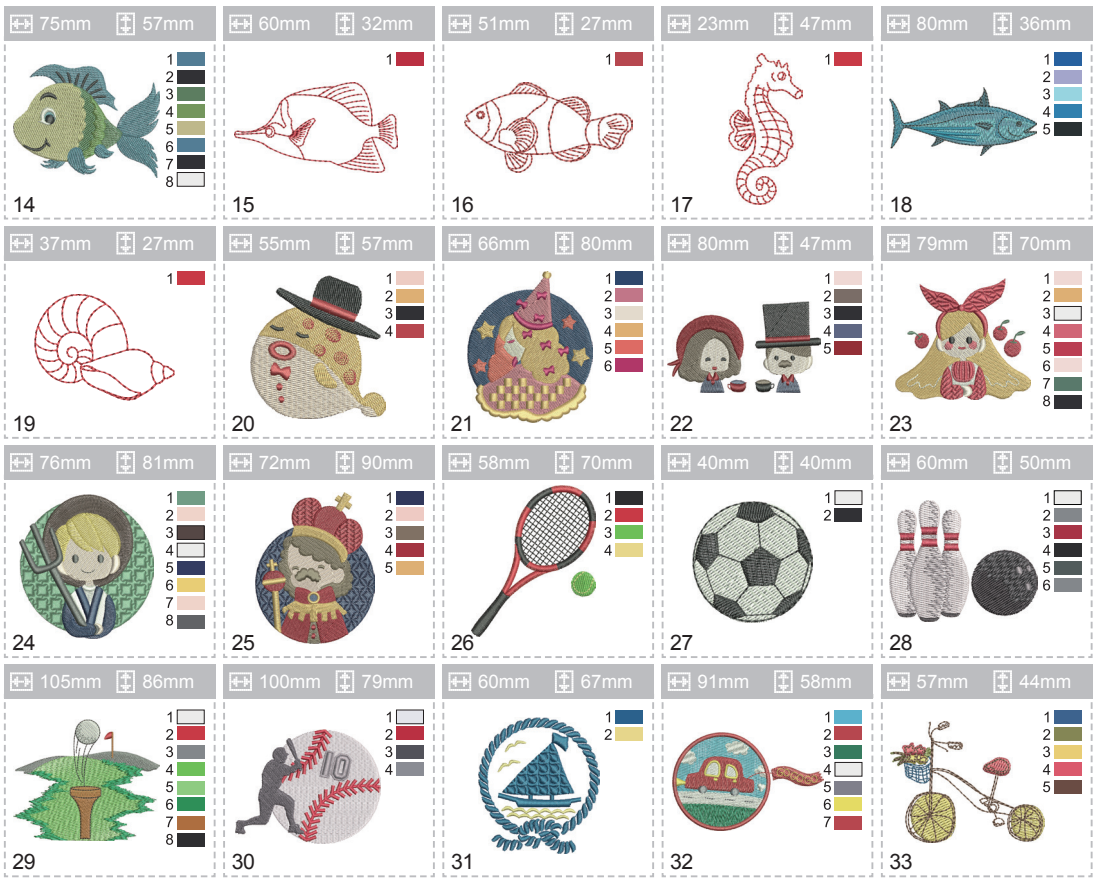
<b>Problem</b>	<b>Cause</b>	<b>Correction</b>	<b>Reference</b>
The embroidery result is not good enough	1. The thread tension is not right.	1. Adjust to proper thread tension setting.	30
	2. Poor quality thread.	2. Select a better quality thread and attach spool net to thread.	8
	3. The thread tends to break and out the thread spool easily while using particular thread type.	3. Attach spool net on the thread.	8
	4. The wrong size needle has been used.	4. Choose a proper needle according to the fabric.	17
	5. No enough support due to lack of stabilizer.	5. Use a proper stabilizer according to fabric type.	83
The embroidery result is not good while sewing thin fabric	1. The thread tension is not right.	1. Set a smaller thread tension.	30
	2. Poor quality thread.	2. Select a better quality thread.	-
	3. The wrong size needle has been used.	3. Choose a needle size between 9-11 by your fabric type.	17
	4. No enough support due to lack of stabilizer.	4. Use a proper stabilizer according to fabric type.	83
Poor quality for cotton batting	1. The thread tension is wrong.	1. Adjust to proper tension setting. (number between 3-5)	30
	2. The stitch length is wrong.	2. Adjust to proper stitch length. (number between 3.0-4.0)	29
Embroidery unit doesn't work	1. The machine isn't turned on.	1. Turn on the machine.	4
	2. No embroidery pattern selected.	2. Select a embroidery pattern.	96
	3. Install embroidery hoop but without initializing in advance.	3. Remove the embroidery hoop.	88
Touch screen isn't accurate.	1. Touch screen isn't accurate.	1. Re-calibrate the touch screen function	117

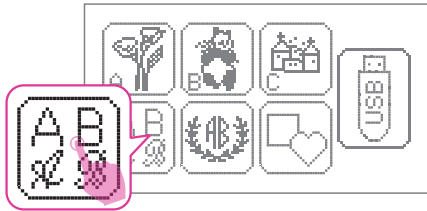
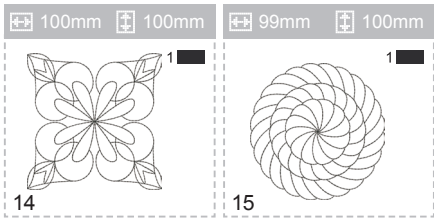


# Embroidery pattern chart









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**A B C D E F G H I J K L M N O P Q R S T U V W X Y Z**  
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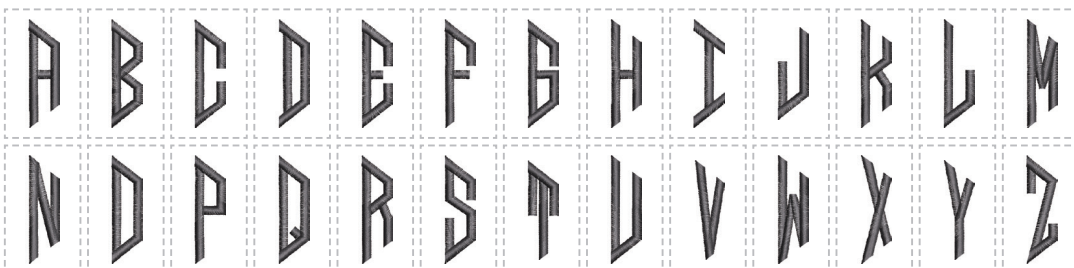
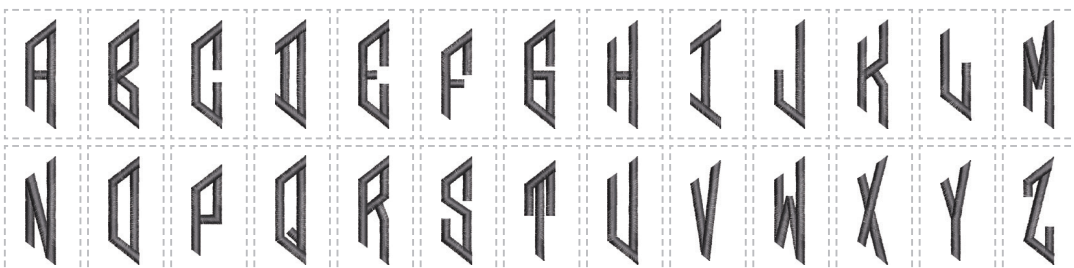
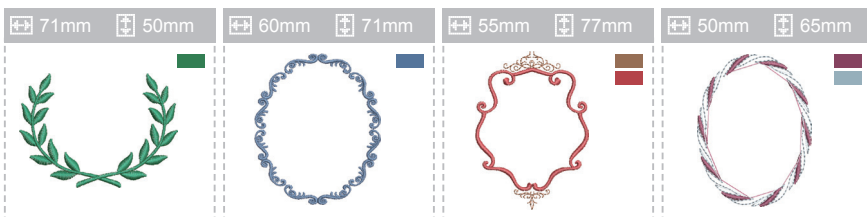
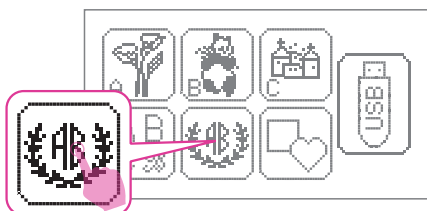
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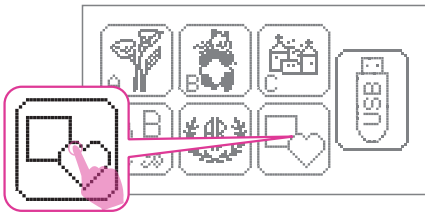
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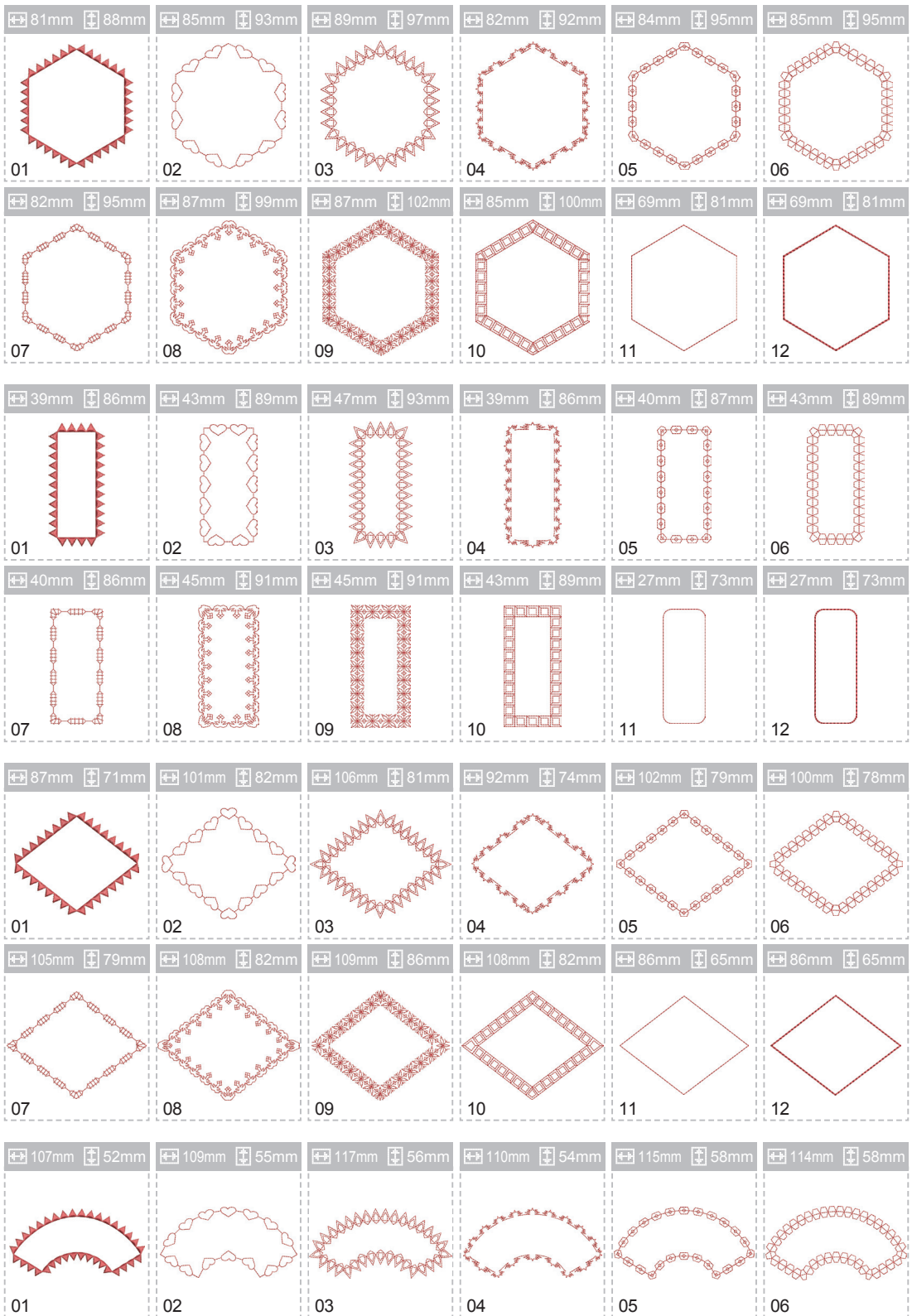
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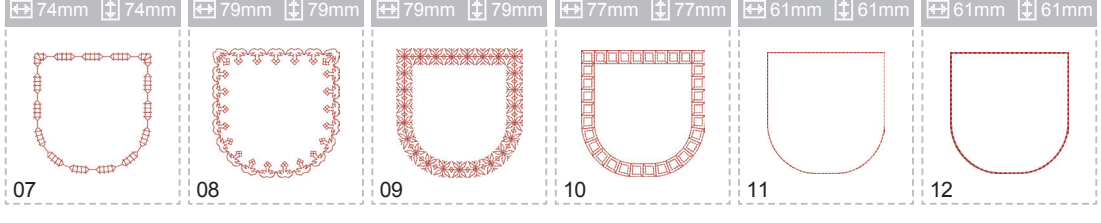
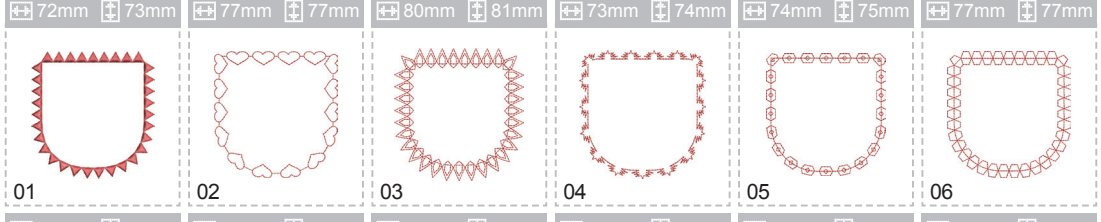
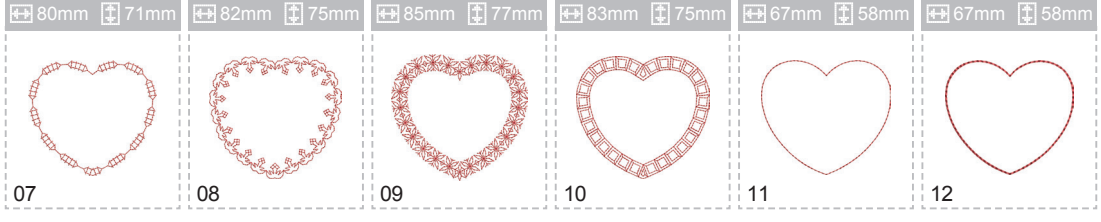
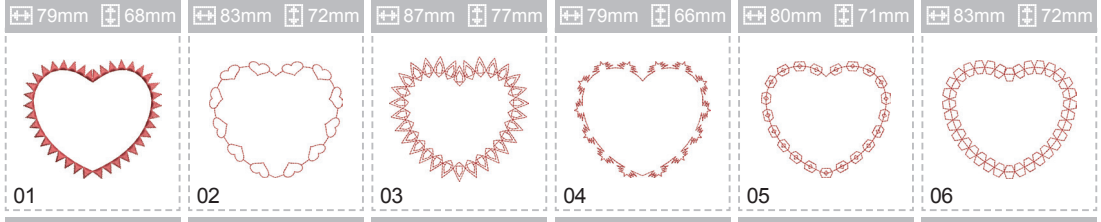
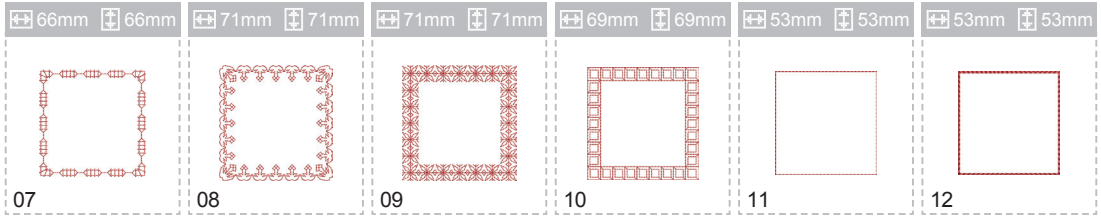
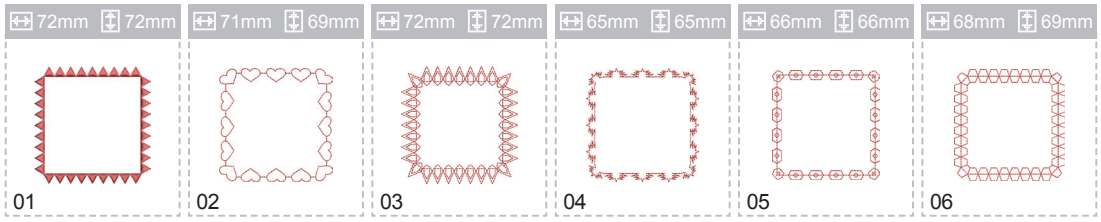
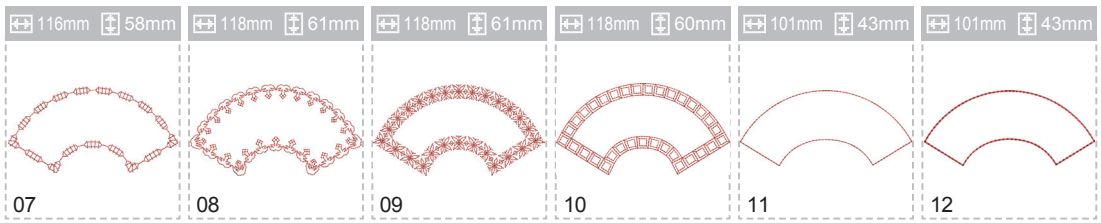
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75mm x 75mm 01 	77mm x 77mm 02 	82mm x 82mm 03 	75mm x 74mm 04 	75mm x 75mm 05 	78mm x 78mm 06 
75mm x 75mm 07 	80mm x 80mm 08 	80mm x 80mm 09 	78mm x 78mm 10 	62mm x 62mm 11 	62mm x 62mm 12 
84mm x 61mm 01 	88mm x 64mm 02 	93mm x 68mm 03 	85mm x 61mm 04 	86mm x 62mm 05 	89mm x 64mm 06 
86mm x 61mm 07 	90mm x 66mm 08 	91mm x 66mm 09 	89mm x 64mm 10 	73mm x 48mm 11 	73mm x 48mm 12 
61mm x 79mm 01 	63mm x 84mm 02 	67mm x 88mm 03 	60mm x 78mm 04 	61mm x 83mm 05 	63mm x 86mm 06 
60mm x 82mm 07 	65mm x 86mm 08 	66mm x 89mm 09 	63mm x 86mm 10 	47mm x 70mm 11 	42mm x 70mm 12 







Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities.

Contact your local government for information regarding the collection systems available.

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.

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.

*SEWING+EMBROIDERY* COMBO