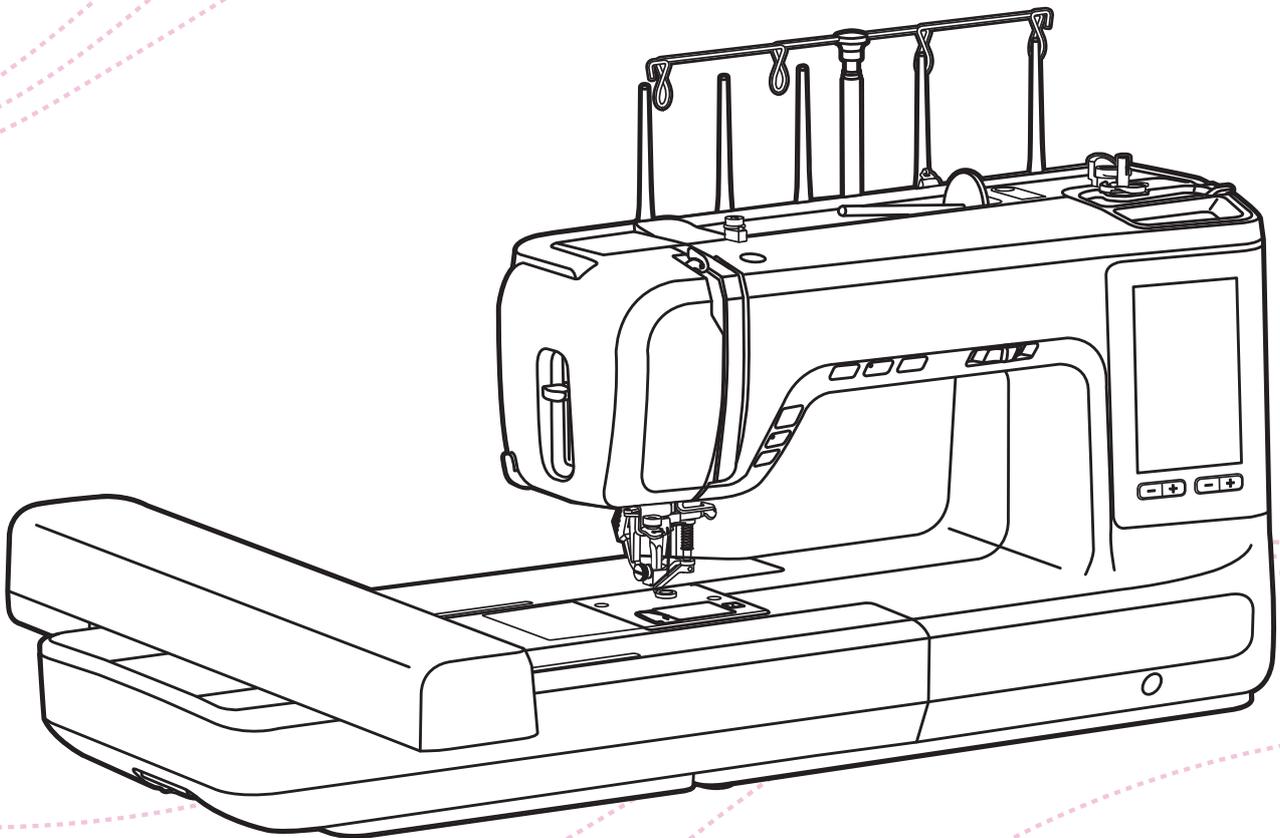


# Instruction Manual

SEWING+EMBROIDERY COMBO



Artist Tool





# 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 80dB(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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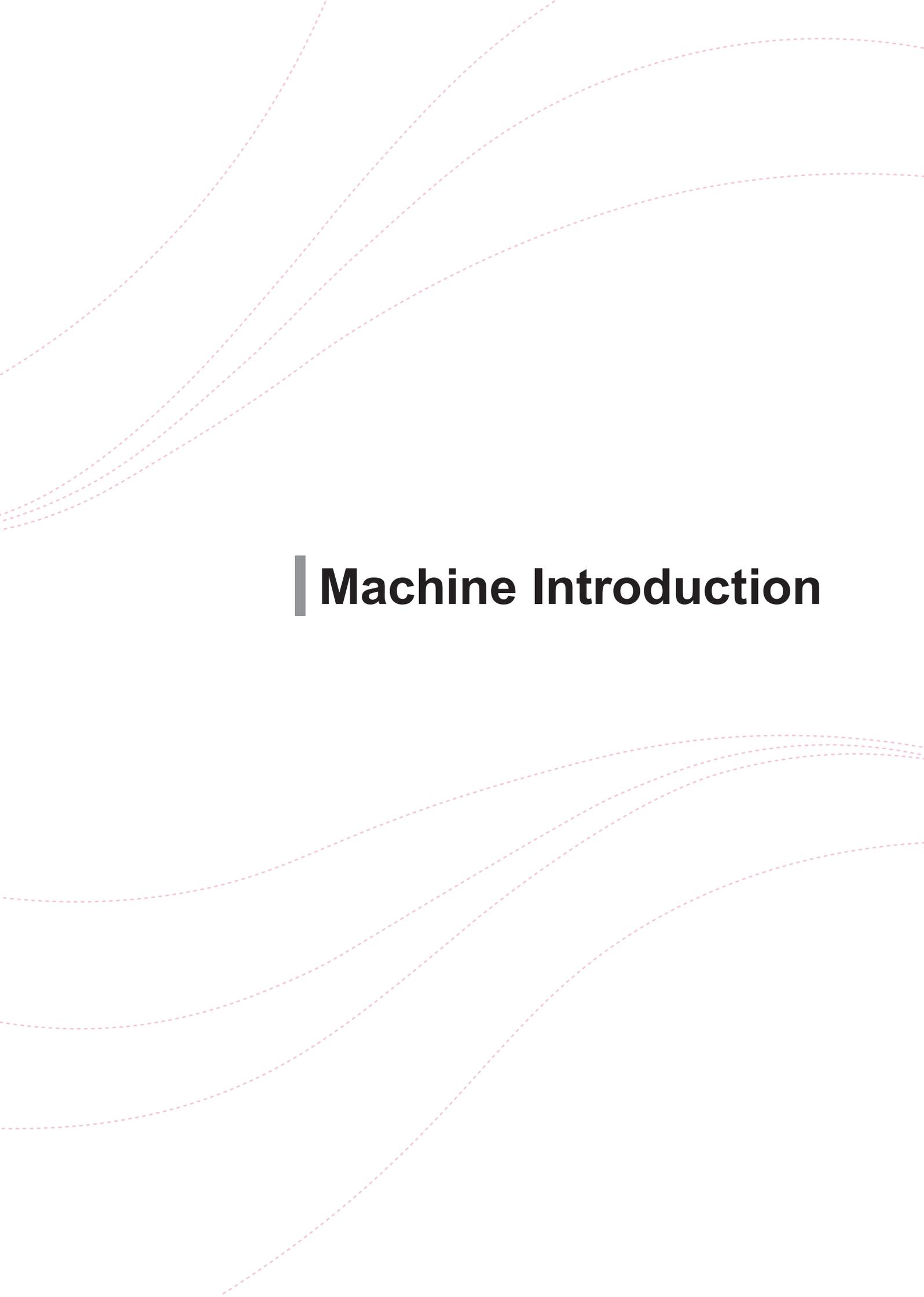
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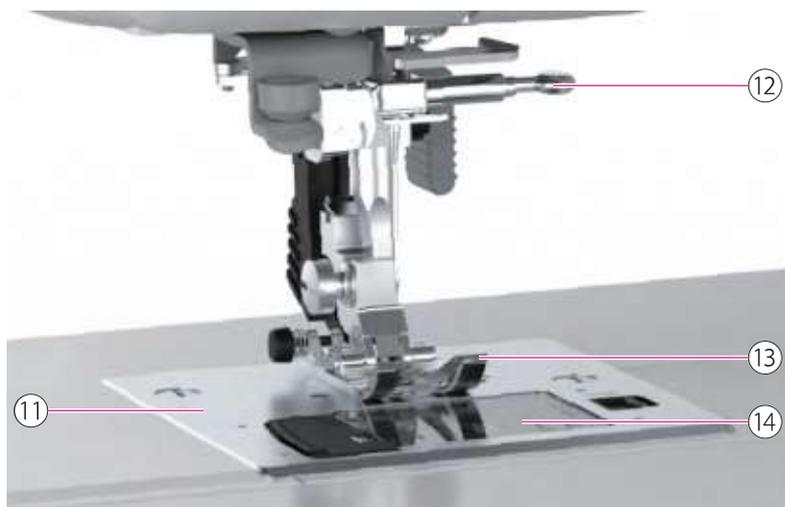
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# **Machine Introduction**

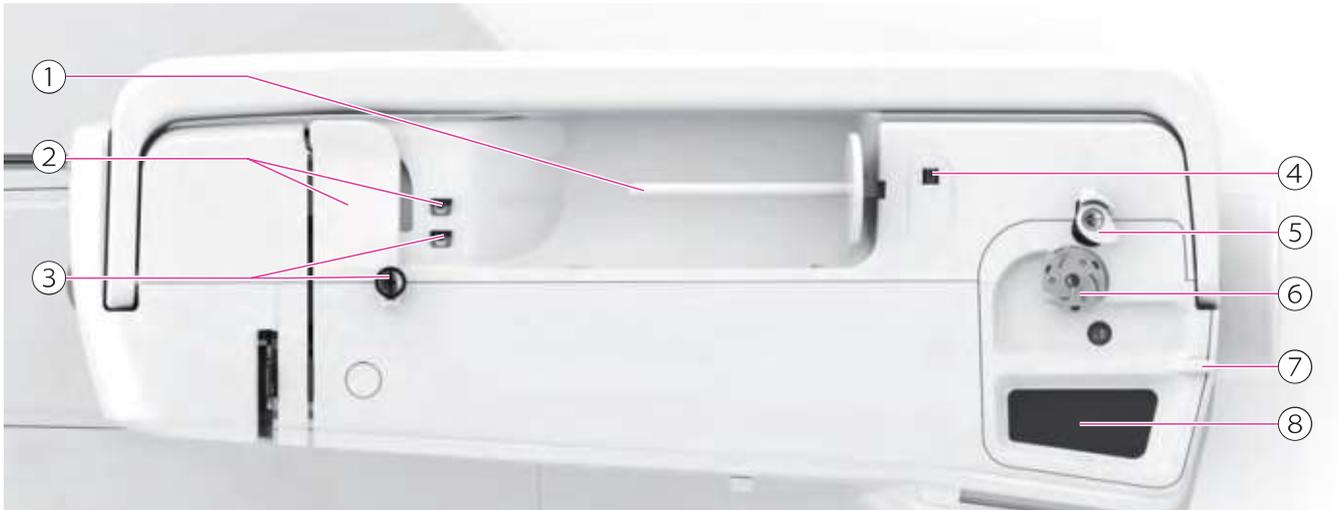
# Principal parts of the machine

## Front overview



- ① Take-up lever
- ② Operation buttons
- ③ Automatic needle threader lever
- ④ Thread cutter
- ⑤ Sewing light
- ⑥ Sewing table and accessory box
- ⑦ Drop feed lever
- ⑧ Speed adjustment slider
- ⑨ LCD screen (touch panel)
- ⑩ Knee lifter slot
- ⑪ Needle plate
- ⑫ Needle clamp screw
- ⑬ Presser foot
- ⑭ Bobbin cover

## Top overview



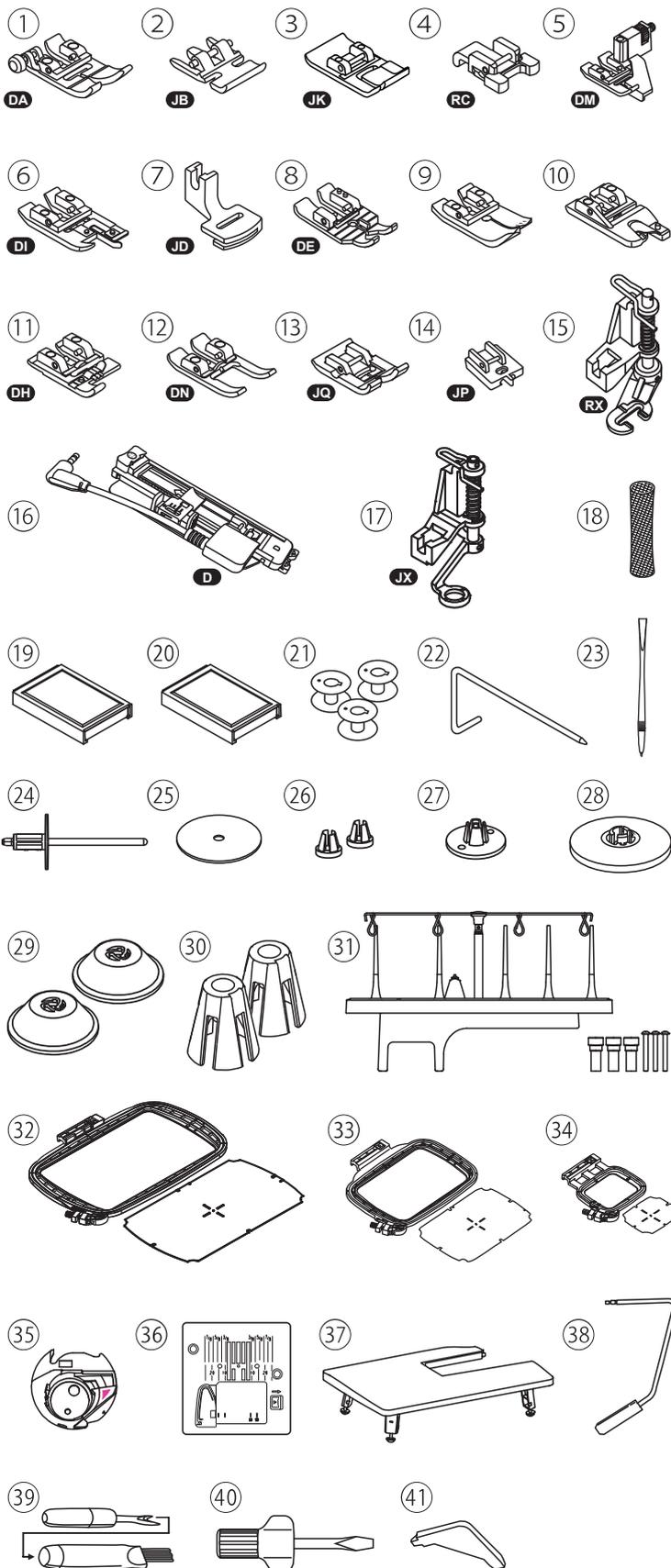
- |                         |                        |
|-------------------------|------------------------|
| ① Horizontal spool pin  | ⑥ Bobbin winder seat   |
| ② Upper thread guide    | ⑦ Bobbin thread cutter |
| ③ Bobbin thread guide   | ⑧ Magnet               |
| ④ Second spool pin hole |                        |
| ⑤ Bobbin winder switch  |                        |

## Back overview



- |                          |                                     |
|--------------------------|-------------------------------------|
| ① Handwheel              | ⑦ Handle                            |
| ② Stylus                 | ⑧ Electronic buttonhole foot socket |
| ③ USB port               | ⑨ Dual-feed system (DFS)            |
| ④ Main power switch      | ⑩ Presser foot lifter               |
| ⑤ Foot control connector |                                     |
| ⑥ Power cord socket      |                                     |

# Accessories



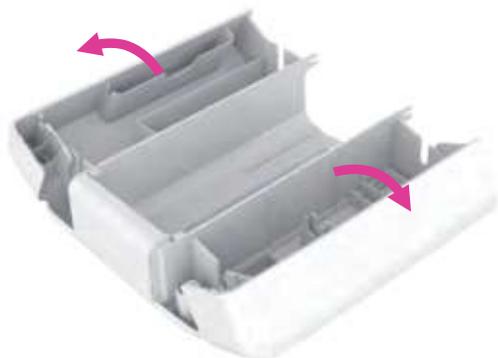
- ① All purpose foot
- ② Zipper foot
- ③ Satin stitch foot
- ④ Button sewing foot
- ⑤ Blind hem foot
- ⑥ Overcasting foot
- ⑦ Gathering foot
- ⑧ 1/4" Quilting foot
- ⑨ Quilting foot
- ⑩ Hemmer foot
- ⑪ Cording foot
- ⑫ Open toe foot
- ⑬ Non-stick foot
- ⑭ Invisible zipper foot
- ⑮ Darning/embroidery foot
- ⑯ Electronic buttonhole foot
- ⑰ Embroidery foot
- ⑱ Thread net
- ⑲ Needle set (#11/75\*2, #14/90\*3)
- ⑳ Twin needle ( #12/80, 2.5mm)
- ㉑ Bobbin (3x)
- ㉒ Edge/quilting guide
- ㉓ Stylus
- ㉔ Second spool pin
- ㉕ Spool pin felt
- ㉖ Spool holder (S)
- ㉗ Spool holder (M)
- ㉘ Spool holder (L)
- ㉙ Spool holder (For spool stand)
- ㉚ Cone holder (For spool stand)
- ㉛ Spool stand set
- ㉜ Embroidery set (160\*260mm)
- ㉝ Embroidery set (120\*180mm)
- ㉞ Embroidery set (50\*70mm)
- ㉟ Embroidery bobbin case
- ⓫ Straight stitch needle plate
- ⓬ Extension table
- ⓭ Knee lifter
- ⓮ Seam ripper/brush
- ⓯ Screwdriver
- ⓰ L-screwdriver

# Using the accessory box



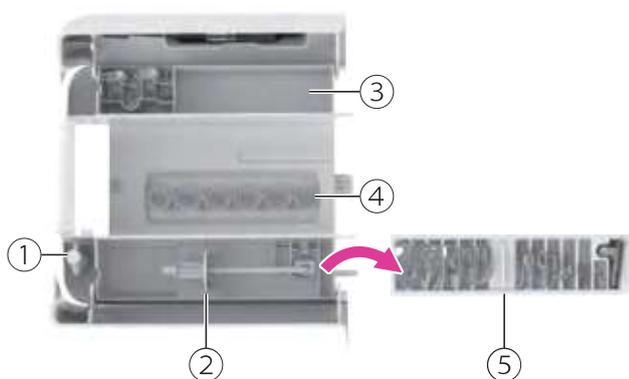
Hold the sewing table horizontally, then pull toward the left to remove it from the machine.

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



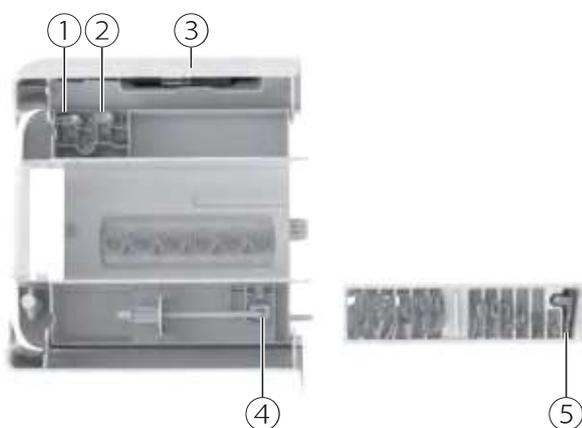
The inside space of the sewing table is used as an accessory box.

To store the accessories in the compartment of the sewing table, pull the top of the flat bed attachment to open the accessory compartment.



Individual compartment for specific purpose storage.

- ① Screwdriver storage space
- ② Second spool pin storage space
- ③ Additional storage space
- ④ Bobbin storage space
- ⑤ Presser foot storage trays

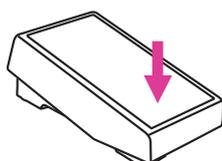
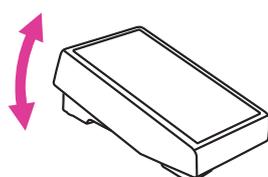
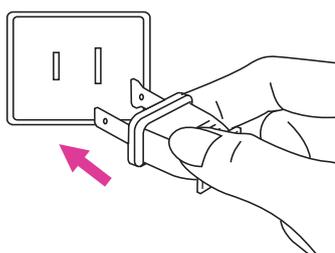


Specific presser foot can be stored in designated space.

- ① Darning/embroidery foot(RX)
- ② Embroidery foot(JX)
- ③ Electronic buttonhole foot
- ④ Gathering foot(JD)
- ⑤ Blind hem foot(DM)

Other accessories can be also stored in the compartment in the presser foot storage trays.

# 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.

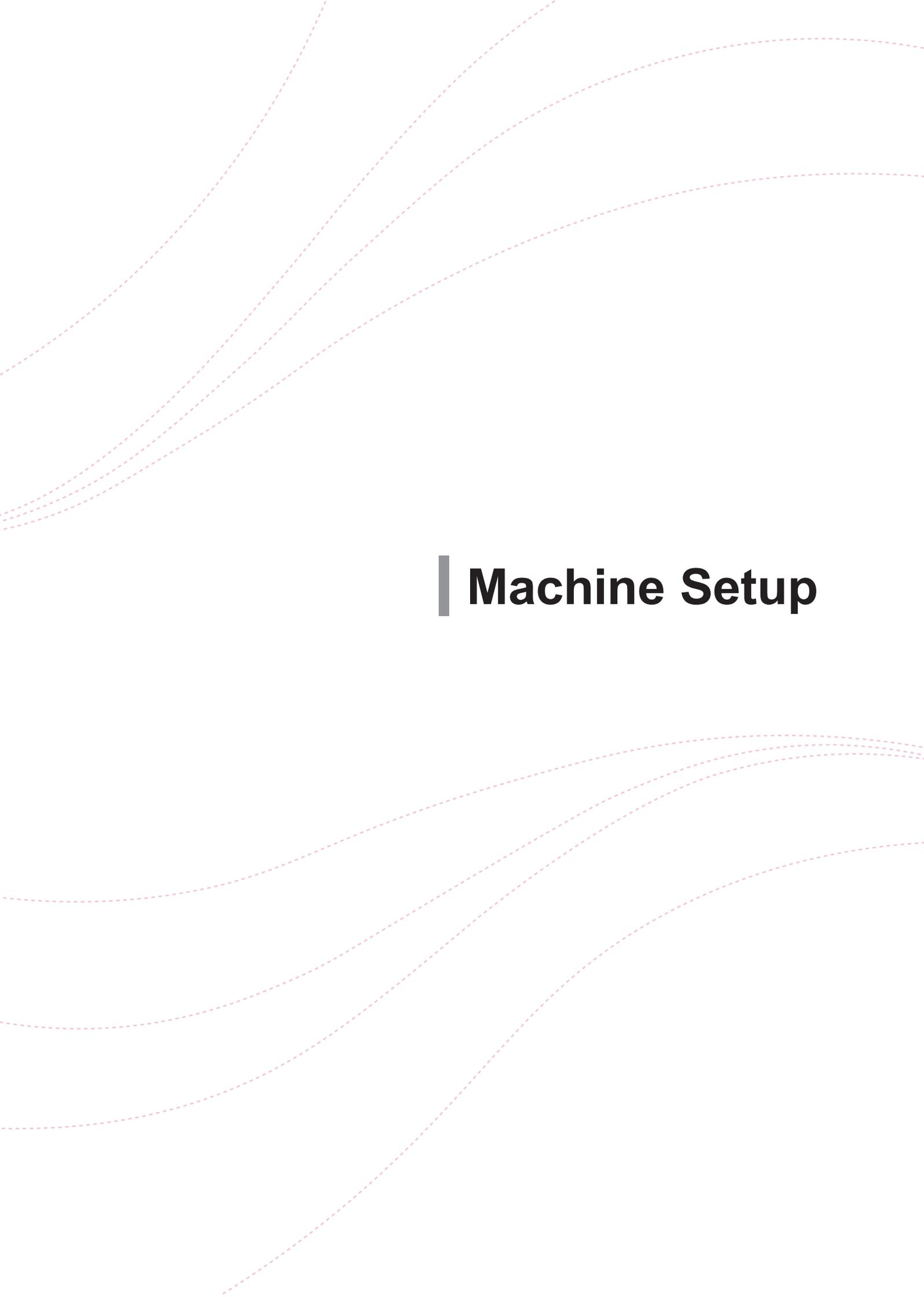
Sink the heel back on the foot control to raise/lower the needle. The foot control can be programmed individually.

## ⚠ 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.



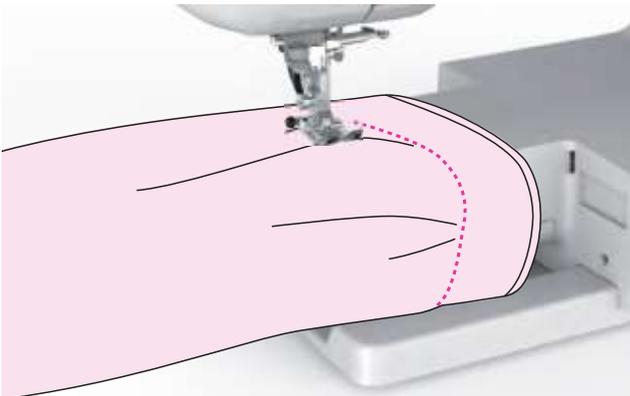
# **Machine Setup**

# 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.



## Free arm

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

# Using the extension table



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

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



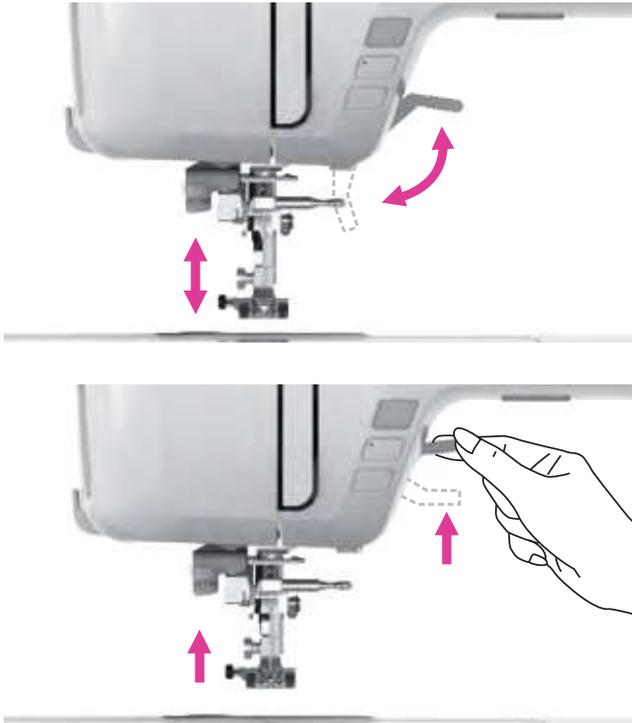
Snap (A) of the extension table into (B) of the machine.

Extension table can help moving during sewing.

### Note

The needle must always be at the highest position.

## 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 knee lifter



The knee lifter is extremely helpful when sewing applique, patchwork and quilting since it allows you to handle the fabric while your knee controls the presser foot.

Match the ribs on the knee lifter with the notches in the knee lifter socket and insert the knee lifter.

Adjust the sitting height so that the knee lifter can be operated with the knee.

Push the knee lifter with the knee to the right to raise the presser foot. Simultaneously the thread tension is released.

Release the knee lifter slowly to lower the presser foot.

### ⚠ Attention

Do not touch the knee lifter while sewing, otherwise the fabric will not be fed correctly.

# Dual feed system (DFS)

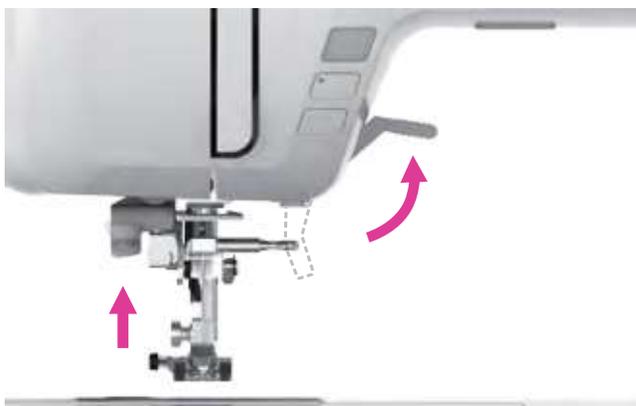
The DFS system feeds fabric from the top and bottom simultaneously to ensure matching of checked, striped or plaid fabrics. When sewing light or difficult materials such as silk or rayon fabrics, the DFS system prevents seam puckering.



## ⚠ Attention

For all work with the DFS, use presser feet with the center back cut-out.

① Center back cut-out



## To engage the DFS

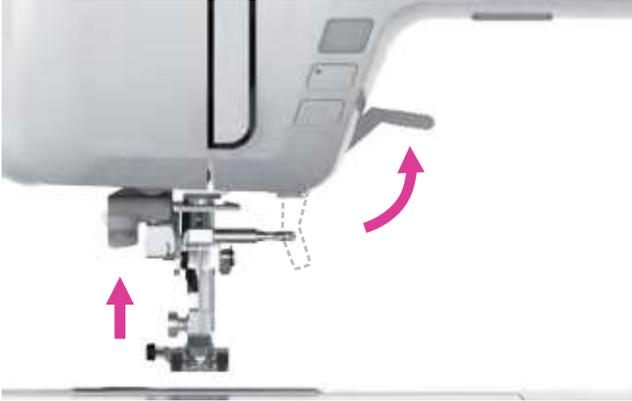
Raise the presser foot lifter.



Lower the DFS mechanism slowly.



Swing the DFS mechanism forward under the back of the presser foot until it is engaged and stays in the lowered position.



## To disengage the DFS

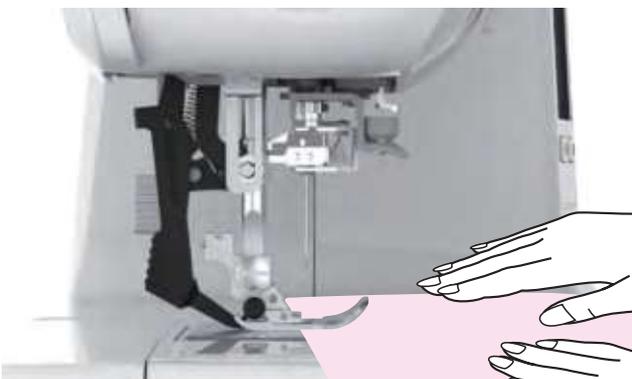
Raise the presser foot lifter.



Pull down the DFS mechanism and swing it to the rear to disengage.



Push the DFS mechanism up.



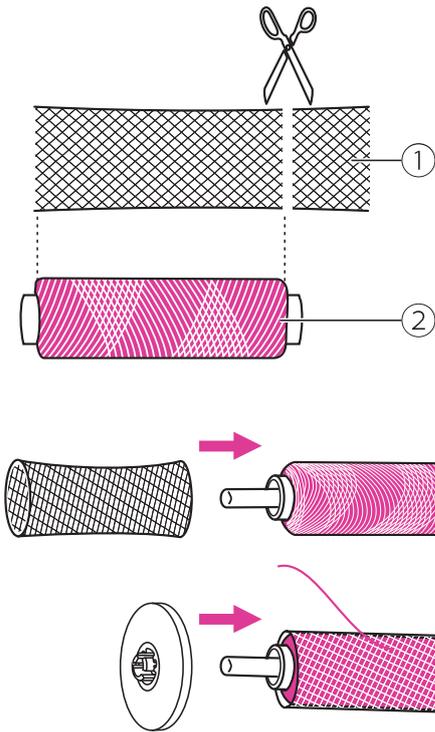
## Fabric positioning

Place fabric flat on top of needle plate and position the fabric under presser foot.

While holding the thread tails with left hand turn handwheel with right hand to insert the needle into the fabric. Lower the presser foot and make 3-4 stitches.

Place hands on each side of the presser foot and gently guide the fabric while sewing.

# Using the thread net



## Note

- In order to prevent tangling of the thread, please use a thread net. The net is especially useful when using large or loose wound spools.
- Reduce the thread tension if necessary.

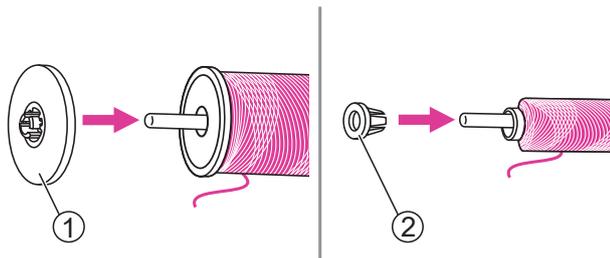
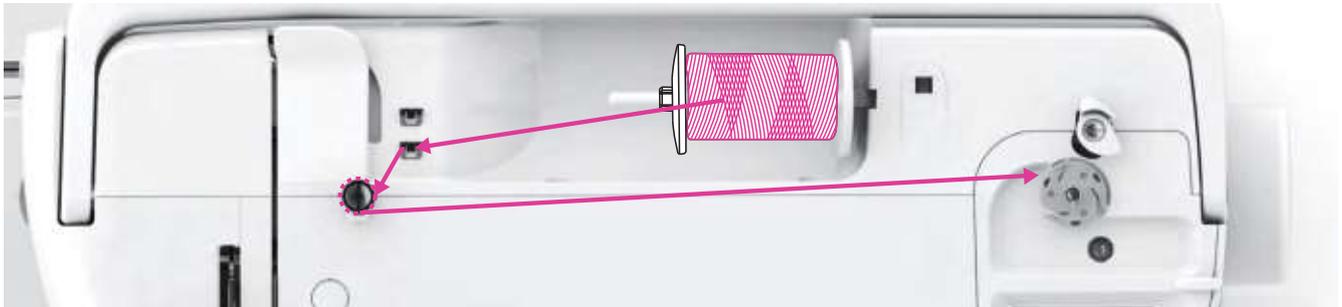
When using special threads which spin quickly off the thread spool, attach a net to the spool before using.

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

- ① Thread net
- ② Thread

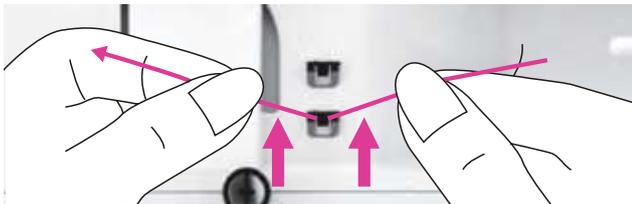
# Winding the bobbin

It is important to carry out the threading correctly to get a quality sewing. Otherwise several problems will occur.

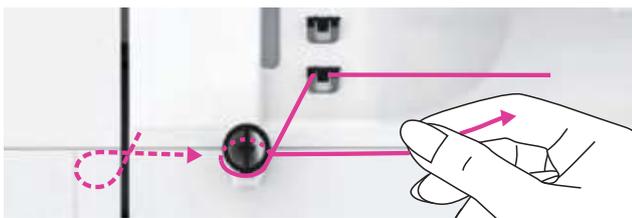


1. Place the thread and spool holder onto the spool pin. For better sewing quality, choose a proper size of the spool holder for the thread and attach it next to the spool.

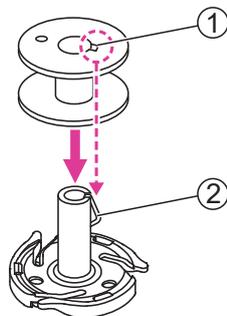
- ① Large spool holder
- ② Small spool holder



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

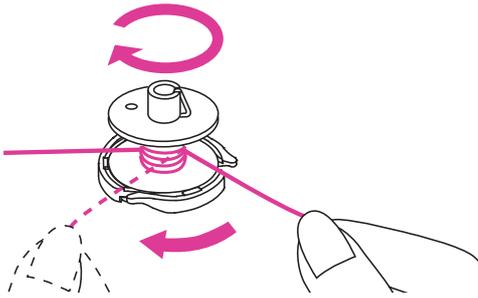


3. Wind the thread clockwise around the tension discs.

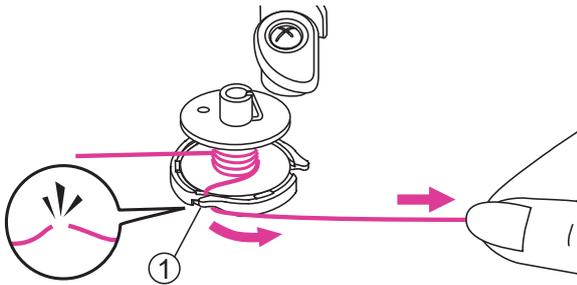


4. Place the empty bobbin on the bobbin winder spindle. Then align the notch with bobbin winder spindle spring.

- ① Notch
- ② Bobbin winder spindle spring

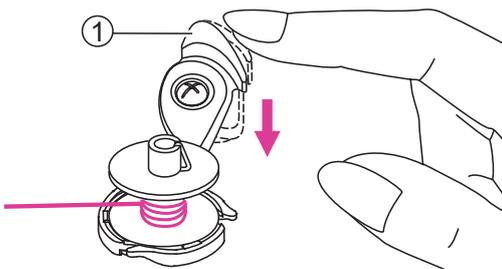


5. Wind the thread clockwise around the bobbin 5-6 rounds.



6. Wind the thread into the cutter of bobbin winder base and pull the thread to the right to cut.

- ① Bobbin winder seat
- ② Guide slit (with built-in cutter)



7. Push the bobbin winder switch, when the bobbin winder spindle is in position, it will start winding the bobbin. When winding is finished, the bobbin winder switch will stop and automatically pop back to original position.

- ① Bobbin winder switch

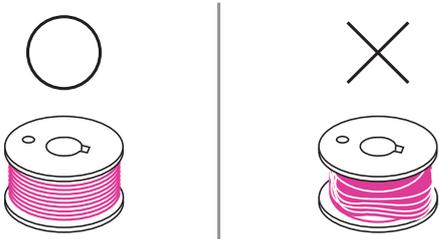
**△ Attention**

Since this machine is equipped with an independent bobbin winder, the sewing speed controller does not effect the winding speed. Keep fingers clear of the needle area while winding the bobbin.



8. Remove the bobbin then use the thread cutter on the right side to cut.

- ① Thread cutter



**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

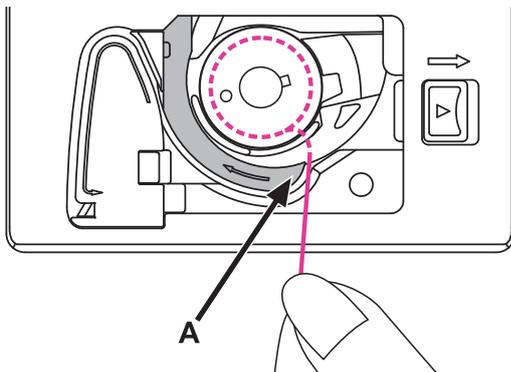
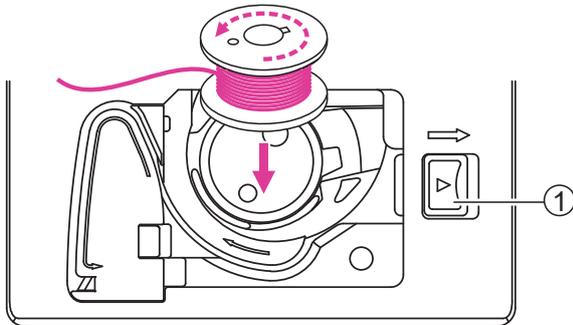
Turn the power switch to off ("O").

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

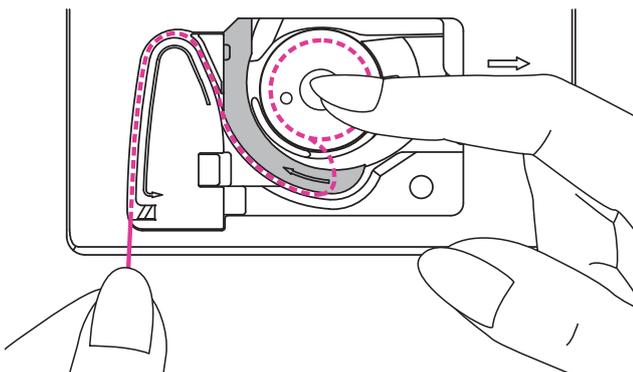
Open the bobbin cover by pushing the release button to the right.

① Release button

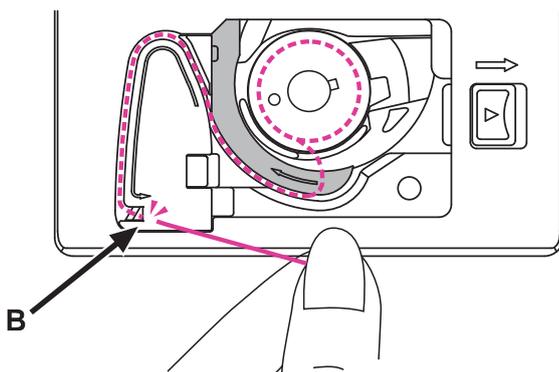
Insert the bobbin in the bobbin case with the thread running in a counter-clockwise direction (arrow).



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.

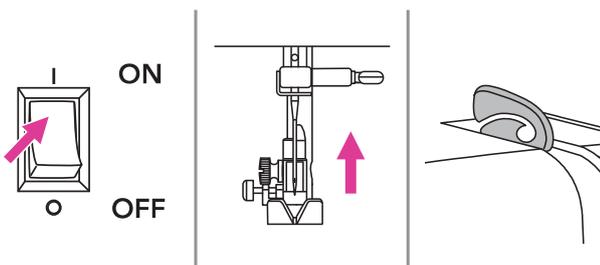
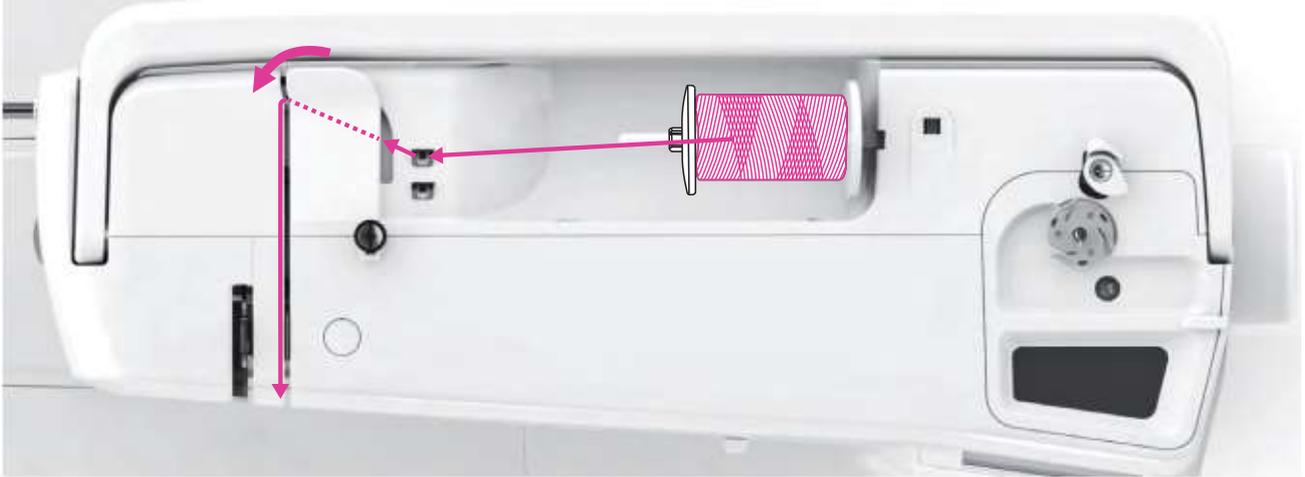


To cut off excessive thread, pull it to the cutter at point (B).

Close the bobbin cover.

# Threading the upper thread

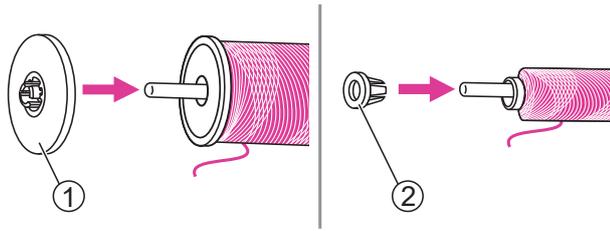
It is important to carry out the threading correctly to get a quality sewing. Otherwise several problems will occur.



## ⚠ Attention

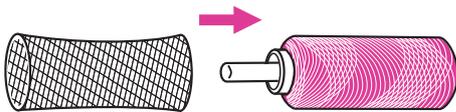
The needle threader can be with a 75/11 through 100/16 home sewing machine needle.

1. Turn the power switch to on ("I"), the needle, presser foot and take-up lever will automatically raise to the highest position.

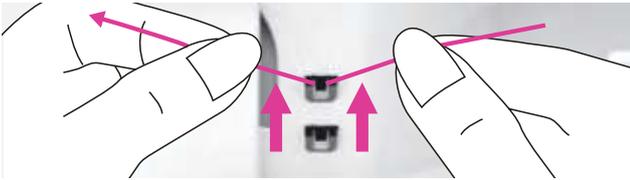


- Place the thread and spool holder onto the spool pin. For better sewing quality, choose a proper size of the spool holder for the thread and attach it next to the thread.

- ① Large spool holder
- ② Small spool holder



In order to prevent tangling of the thread, please use a spool net. The net is especially useful to work from large or loose wound spools.



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



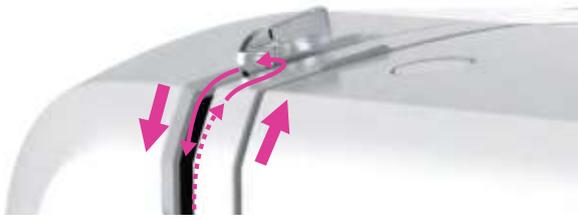
- Guide the thread ahead and pull the thread through the pre-tension spring as illustrated.



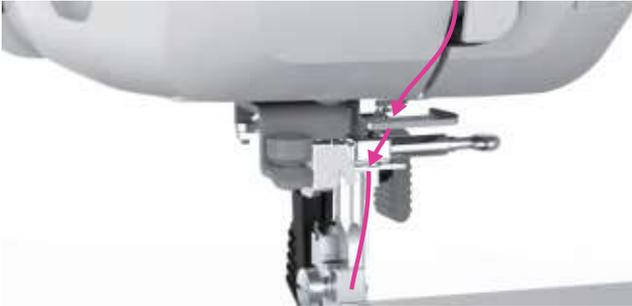
- Continue to guide the thread into the silver discs to keep the thread in proper tension.



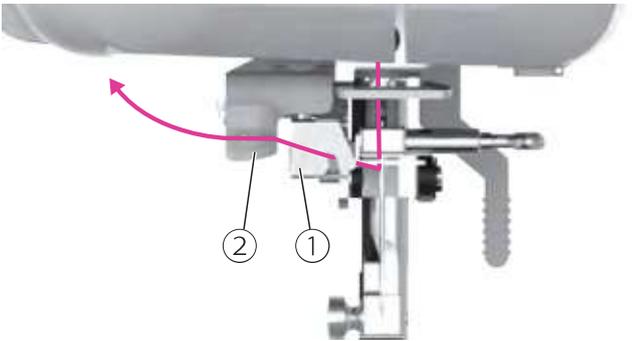
- Pass the thread under the take-up spring then pull it upwards as arrow marks illustrated.



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



8. Pass the thread behind the flat, horizontal thread guide. Threading to the right side of the thread guide.



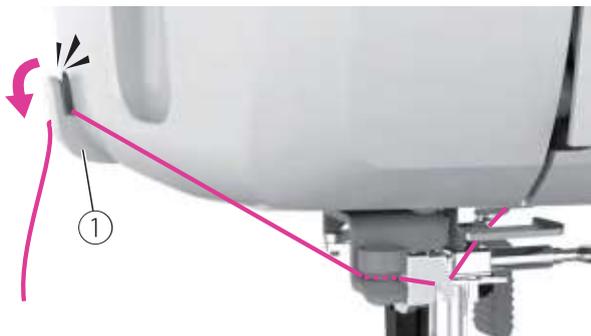
9. Pull the thread to the left, pass through the guide plate from back to the front and then through the thread guide disk.

① Guide plate

② Thread guide disk

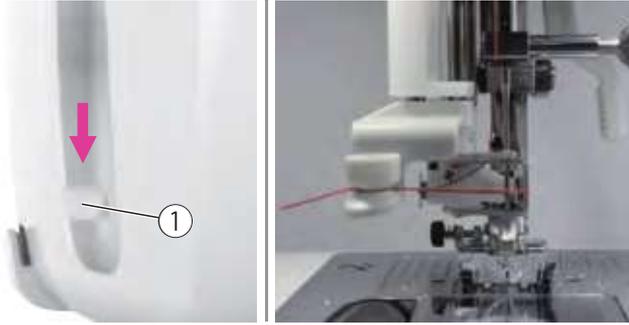
**Note**

Please make sure the thread is actually pass through the guide plate and thread guide disk, or it might cause thread cannot threading the needle eye successfully.



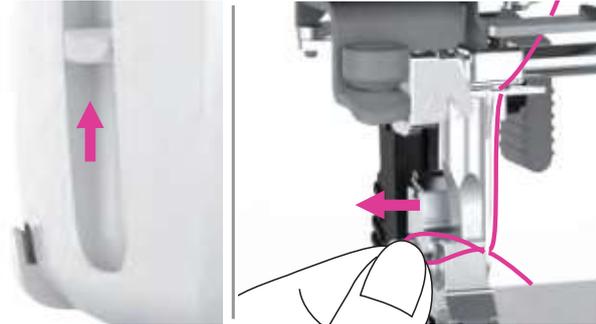
10. Guide the threads to the side of the face plate and into the thread cutter to cut them.

① Thread cutter



11. Press down the automatic needle threader lever on the left side of face cover to the bottom, when you hear a "click" sound, it is the correct position and the hook pin passes through the needle eye.

① Lever



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

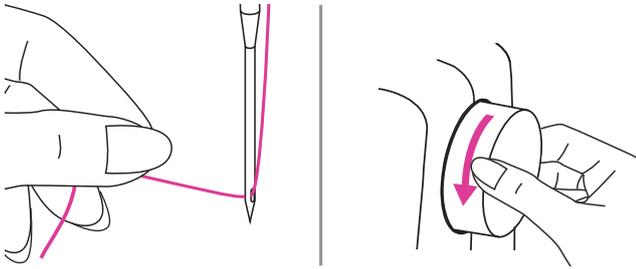
Pull the thread through the needle eye to finish threading.

#### Note

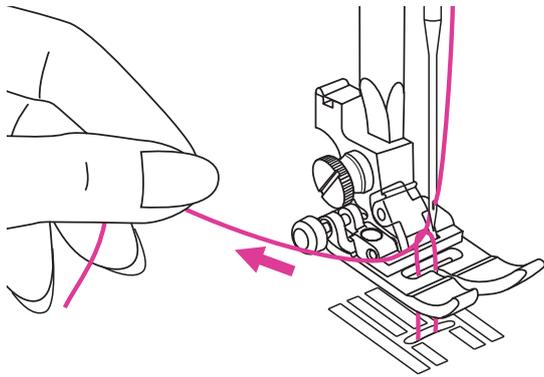
Your machine is threaded and ready for sewing, follow the instructions on "Starting to sew" chapter to start sewing.

# Bringing up the bobbin thread

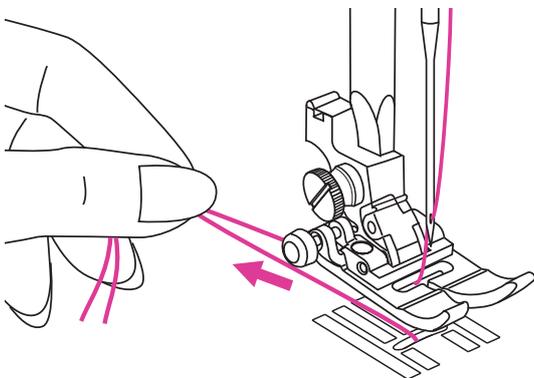
When sewing gathering or smocking stitch, bring up the bobbin thread first as below instruction.



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.



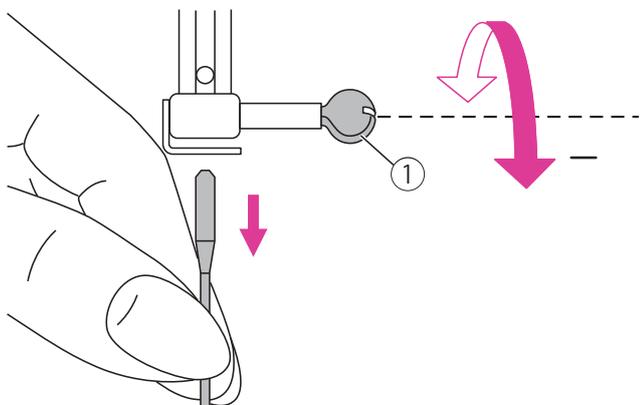
Gently pull on the upper thread to bring the bobbin thread up through the needle plate hole. The bobbin thread will come up in a loop.



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.

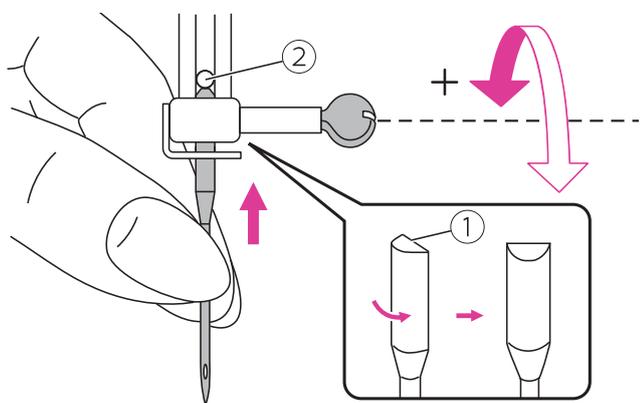


## ⚠ Attention

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

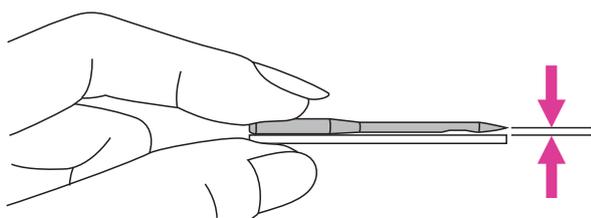


When inserting a new needle, keep the flat side of the shaft to the back.

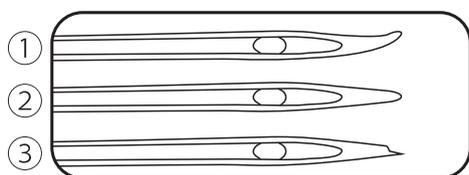
Push the needle into the clamp until it touches the pin and stops. Then secure it by tightening the needle clamp screw.

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

FABRICS	THREAD	NEEDLE SIZE
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.	65/9 - 75/11 
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.	80/12 
Medium weight fabrics- cotton duck, woolen, heavier knits, terrycloth, denims.	Use polyester threads on synthetic materials and cotton on natural woven fabrics for best results.	90/14 
Heavyweight fabrics- canvas, woolens, outdoor tent and quilted fabrics, denims, upholstery material (light to medium).	Always use the same thread on top and bottom.	100/16 

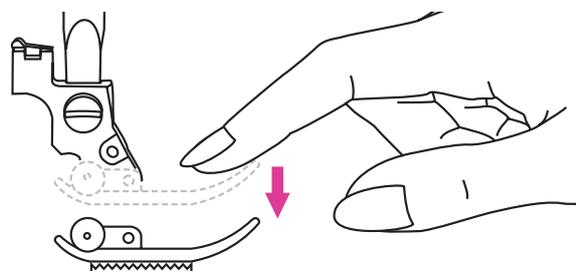
## Note

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

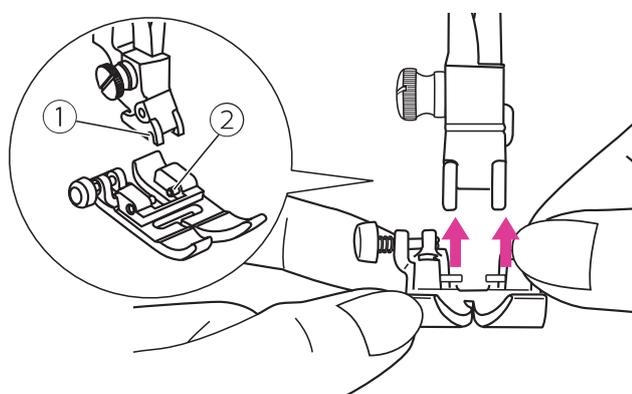
- Turn the power switch to off ("O").
- Always use the proper foot for the selected stitch. The wrong foot can cause the needle to break.



## Remove the presser foot

Raise the presser foot lifter.

Press down on the front of the presser foot sole by hand.



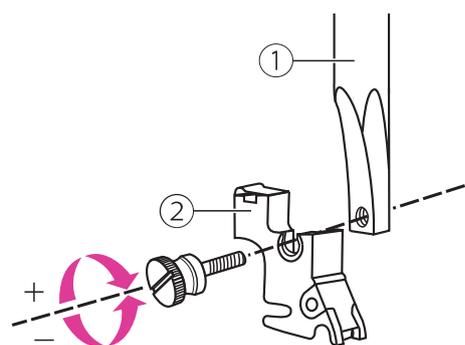
## Attach the presser foot

Raise the presser foot lifter.

Place the presser foot under the shaft groove so that the shaft groove is above the presser foot sole pin.

Then push the new presser foot sole upward until it engages.

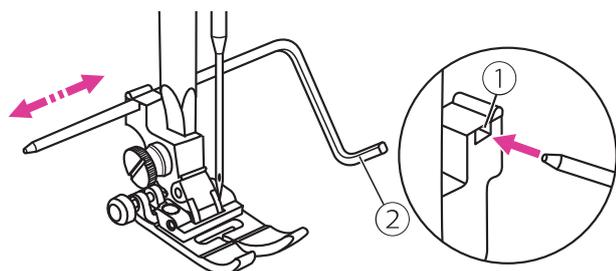
- ① Shaft groove
- ② Pin



## 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

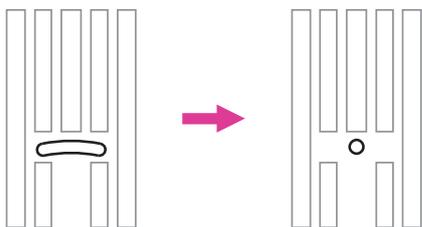
Insert the edge/quilting guide in the slot as illustrated. Adjust the needed width according to your sewing applications.

- ① Slot
- ② Edge/quilting guide

# Replacing the needle plate

## ⚠ Attention

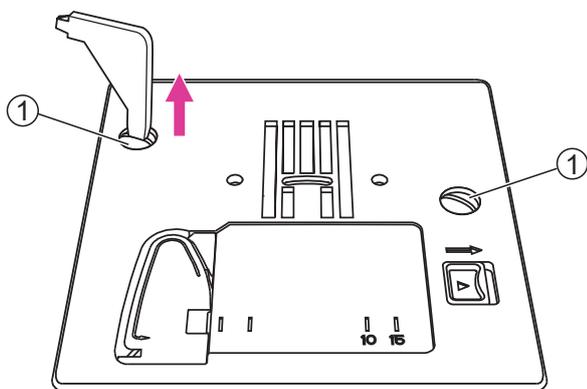
Turn the power switch to off ("O").



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.

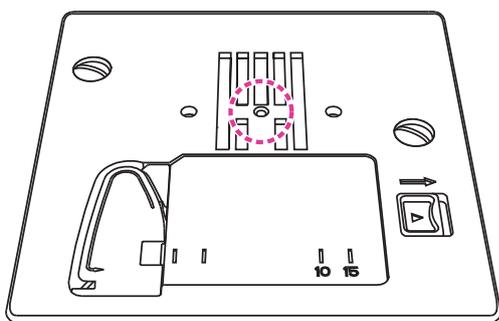
Thus, the fabric can be prevented from being pulled down into bobbin/hook area, especially in the beginning or end of a seam.



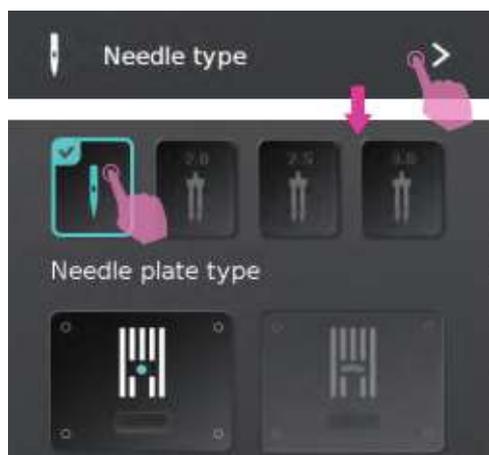
Remove the needle, presser foot and presser foot holder.

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

① Screws



Change the straight stitch plate and tighten the screws.



After changing to straight stitch plate, please go to needle type setting and choose single needle, the machine will automatically sensor which needle plate is using.

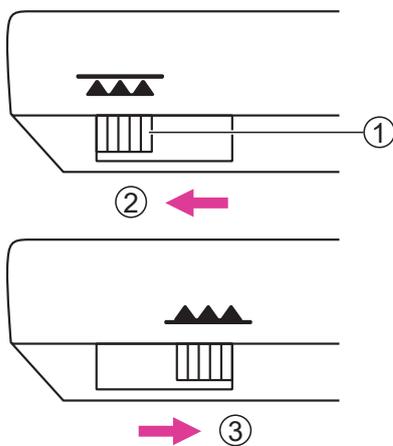
The stitch width is automatically selected.

# 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.

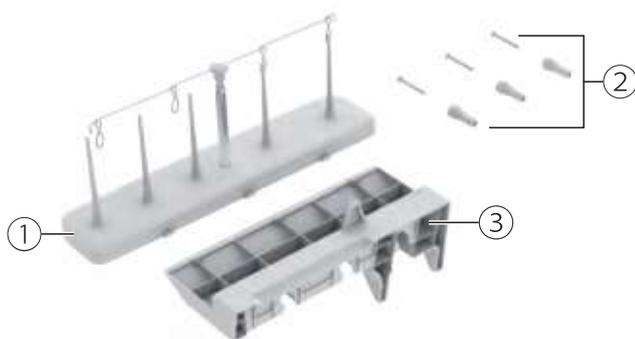
# How to install multiple-spool holder stand



The spool stand has room for up to 5 spools, enabling quick access to threads of different colors.

Quick access to a wide range of spools of different colors is a real time saver when working on multicolored embroidery designs.

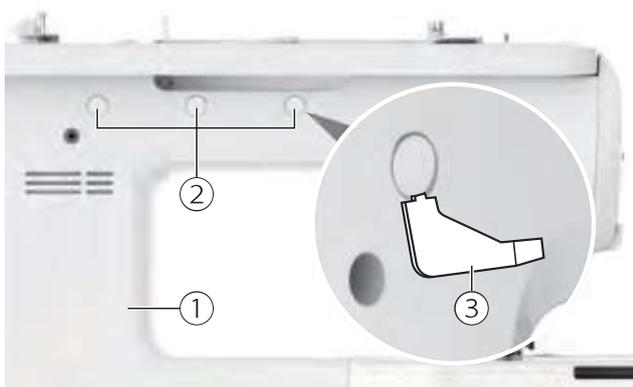
Also, the telescopic thread guide can be adjusted upwards: the thread has a longer path to the needle, allowing different kind of threads to untangle and flow freely before they reach the start of the sewing process.



## Parts introduction

The spool stand set attaches easily to the handle of your machine.

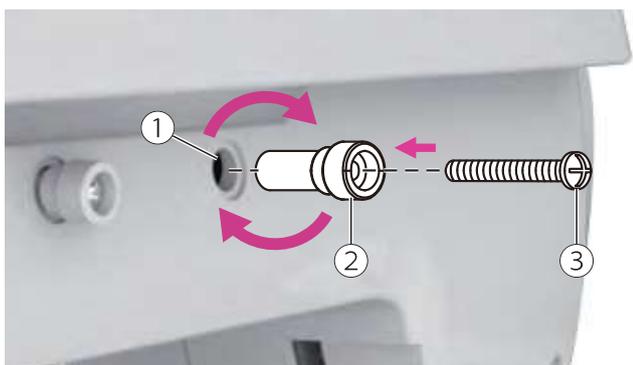
- ① Spool stand
- ② Screws/screw holder (can find it in the accessories bag)
- ③ Spool base



## How to install the spool base

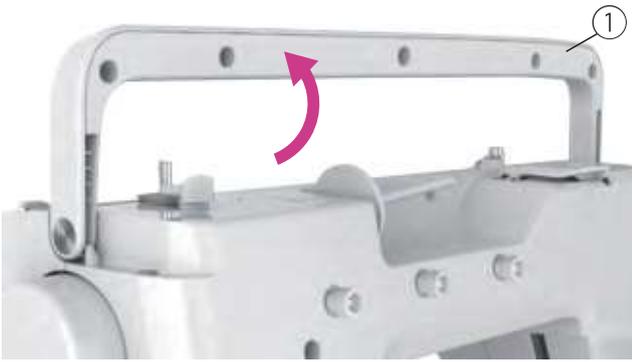
At the back of the machine, use the L-screwdriver to remove the caps.

- ① Back cover
- ② Caps
- ③ L-screwdriver



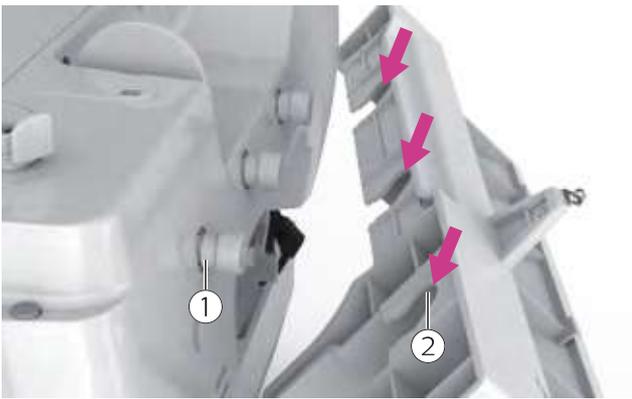
Take out the screws and screw holders from the accessories bag, screws has to be inserted through the screw holders. Then insert the 3 screw holders with screws into the holes and tight it clockwise.

- ① Hole
- ② Screw holders
- ③ Screw



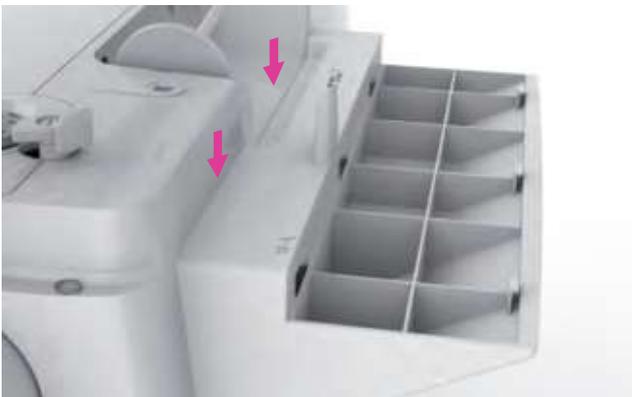
Pull up the handle to fixed position

- ① Handle

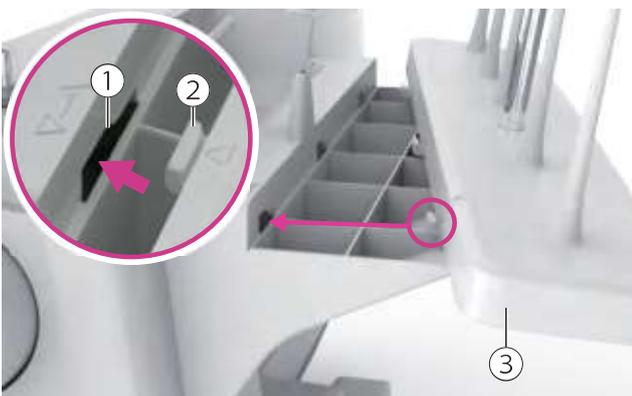


Align the three grooves of the spool base to the rear cover where the screw holders are attached.

- ① Screw holder
- ② Grooves of the spool base



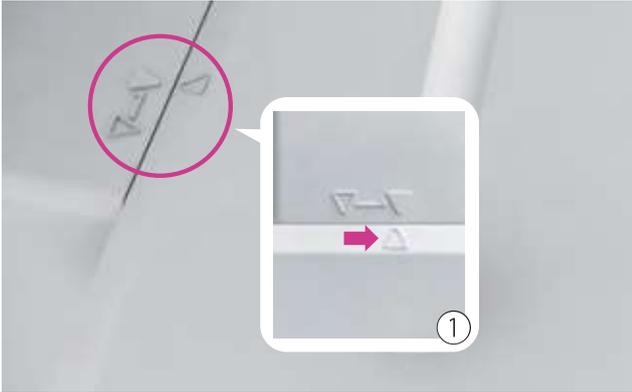
Insert from top to bottom on the screw holders. Installation is completed.



### Spool holder stand installation

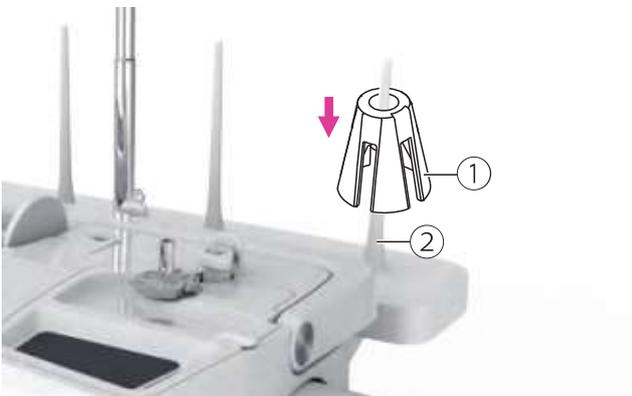
Align and insert the three protrusions of the spool holder stand to the grooves of the spool base.

- ① Spool holder stand rear protrusions
- ② Spool base grooves
- ③ Spool holder stand



Push to the right and spool holder stand will be fixed.

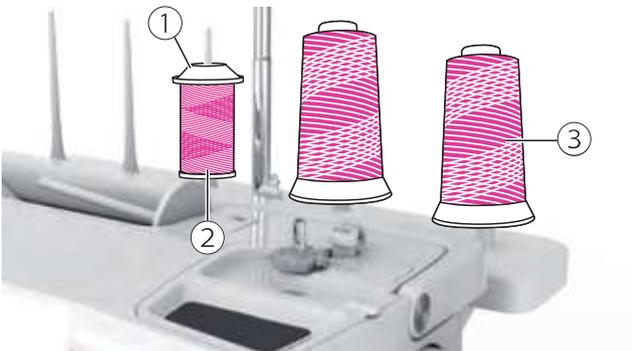
- ① Lock position



### Process of threading using spool stand

Take out the cone holders from the accessory bag and insert it on the spool pin.

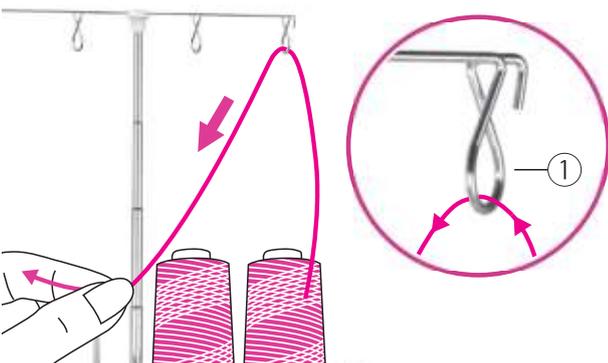
- ① Cone holders
- ② Spool pin



There are 5 spool pins. Two of the right side are for larger threads and three of the left side are for small threads.

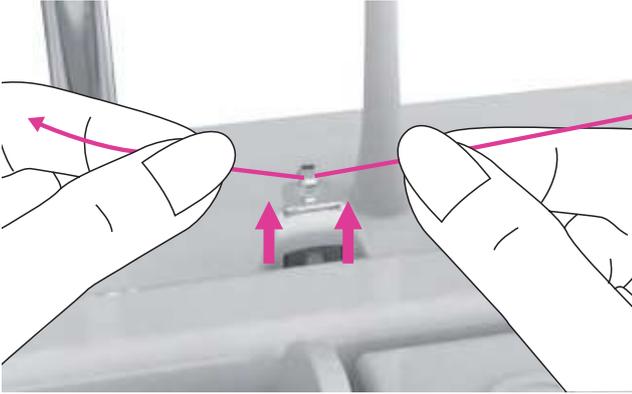
Place the threads over the spool pin and secure it with spool holder, to avoid fall off while sewing.

- ① Spool holder
- ② Small thread
- ③ Large thread

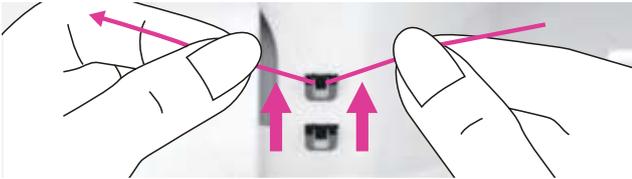


Pull the thread and pass it through the thread guide on the thread stand from back to front and pull down.

- ① Thread guide



Pass the thread through the thread guide on the spool base.



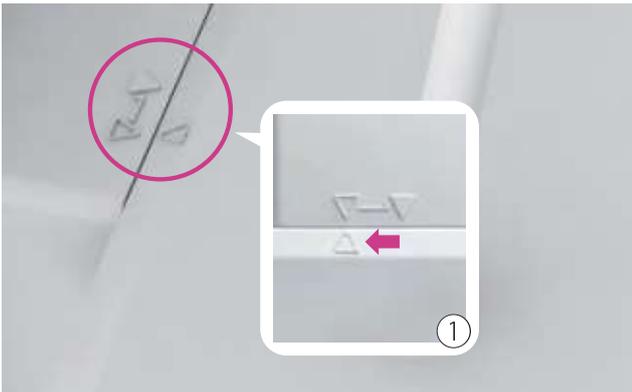
Guide the thread forward and pass through upper thread guide.



Guide the thread to the left and pass through the guide plate.

#### Note

For more information, please check "Threading the upper thread" chapter.



### Remove spool holder stand

Push the spool holder stand to left and pull out.

- ① Remove position

# Operation buttons



## ① Reverse button

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.

### Note

The utility stitches number 013, 033-038 and the button holes stitches number 039-054 can not use reverse button function. If reverse button is pressed, the machine will stop and make a hint sound.



## ② Auto-lock button

When machine is not sewing: Press the auto lock button, machine will sew locking stitches in the same position then stop. The LED light on the button will flash during auto-lock sewing and stop when it's finished.

During machine is sewing: Press the auto lock button, the machine will execute auto-lock according to pattern unit setting. The LED light on the button will flash during auto-lock sewing and stop when it's finished.

### Note

- While combination pattern is sewing and pressing auto-lock button, it will execute auto-lock after the current pattern is completed.
- To set up number of stitches on auto-lock, please refer to the chapter "Settings".
- Auto-lock setting on pattern unit, please refer to "Setting stitch" chapter for more information.



## ③ Start/stop button

Press the start/stop button to start machine running. Press the start/stop button again to stop machine.

The LED light colors on the button will change according to its operation mode:

- Green light: the machine is ready or is running / it is embroidering
- Orange light: Not in conditions to sew / embroidery
- Red light: Machine can not sew
- This way you may operate the machine without foot control.

### Note

When the presser foot is up, press and hold the start/stop button, the machine will automatically lower the presser foot and start sewing.



#### ④ Presser foot up/down position button

Press presser foot up/down button, presser foot will go up and press again to lower the presser foot.

##### Note

During sewing, can not use presser foot up/down button.



#### ⑤ 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. If the needle is set to be down, then the LED light will turn on.

Press needle up/down button, the needle will go up and pressing again will go down.

##### Note

During sewing, can not use the needle up/down button.



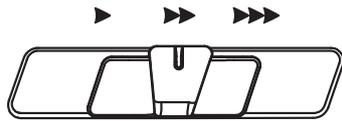
#### ⑥ Thread cutter button

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

After executing cutting the thread, press start/stop button then will continue to sew.

##### Note

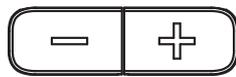
- During sewing, can not use the thread cutter button.
- To set up auto-lock function, please refer to chapter "Setting".



### ⑦ Speed adjustment slider

In the sewing mode, the speed adjustment slider can control the sewing speed. To increase the speed, slide the lever to the right. To decrease the sewing speed, slide the lever to the left.

The sewing speed can be adjusted without foot controller.



### ⑧ Value setting buttons (Left/Right)

Press "-" button to decrease the value; press "+" button to increase the value. This button can be used to adjust the value in each screen.



# **Instruction**

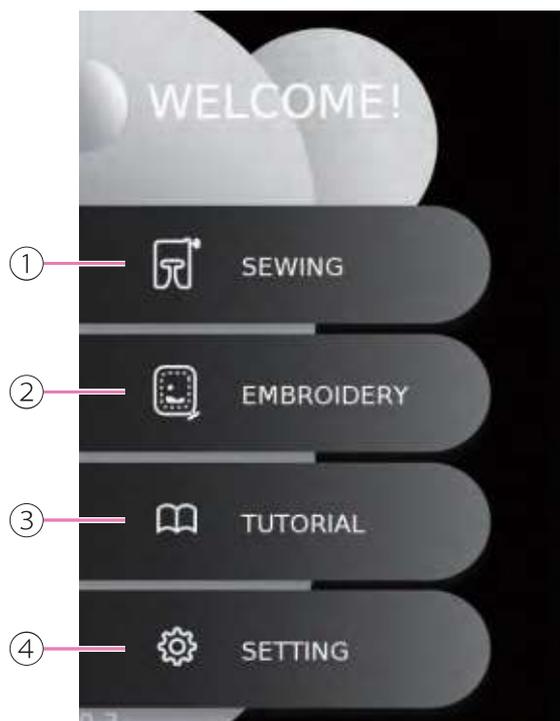
# LCD screen



- ① Pop out and close the menu selection
- ② Home
- ③ Setting
- ④ Tutorial
- ⑤ Advisor
- ⑥ Safety

## Note

Use only your finger or the included stylus to tap the screen. Please do not use a sharp pencil, screwdriver, or other stiff, sharp objects. Do not click the screen forcefully. If click hard or use a sharp objects may damage the screen.



## Home page

- ① Sewing
- ② Embroidery
- ③ Tutorial
- ④ Setting



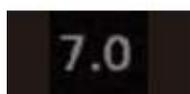
①



②



③



④



⑤

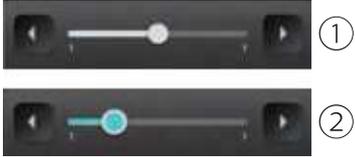


⑥

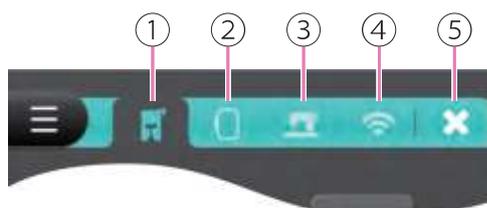
## Note

- ① Function not available
- ② Function available
- ③ Function is already enabled or active
- ④ Value is not adjustable
- ⑤ Default value
- ⑥ Value is already adjusted, click on the value to go back its default value.

## Function buttons and icon

Icon	Name	Application
	Switch pages	Switch pages up/down
		
		
	Turn on/off switch	① Turn on function ② Turn off function
	Back to default value	
	Slider	Hold the slider to increase or reduce setting values ① Default values ② Values are adjusted
	Reduce/increase	Reduce or Increase setting values
	Virtual multifunction icon	By function to adjust the position, spacing, curvature, degree of rotation, etc.
	Virtual multifunction icon	By function to adjust the position
	Select multiple points, layer switching	Starting from the currently selected point, select forward/backward part. Switch up and down to view layers
	Next step	To the next screen
	Back	
	Close	Sewing: Close window Embroidery: Back to embroidery edit screen/close window

# Setting



- ① Sewing setting
- ② Embroidery setting
- ③ Machine setting
- ④ Wi-Fi setting
- ⑤ Close setting page

## Sewing setting

### Change upper tension

Adjusting the upper thread tension will affect to all stitch patterns. Upper thread tension is also adjustable for current stitch pattern.

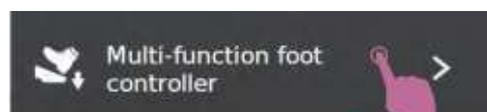


### Presser foot pressure adjustment

The most suitable presser foot pressure can be adjusted according to the fabric thickness.

When sewing thick fabrics, it is recommended to reduce the pressure on the presser foot. So presser foot will slightly raise to make the fabric easier to be moved.

When sewing thin fabrics, it is recommended to increase the presser foot pressure. It will prevent the fabric from moving freely.



### Multi-function foot controller

Initial setting by stepping on the back of the foot controller can lift /lower the needle.

The multi-function foot controller can be set up the auto-lock, trimming, or raising the presser foot function based on personal needs.



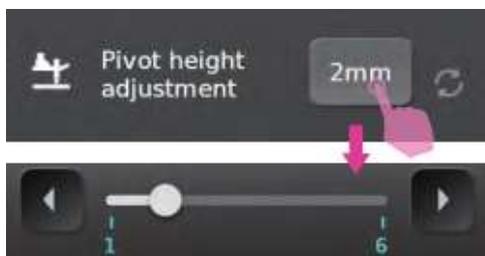
### Button setting

Machine button setting, to set the number of stitches of auto-lock at the end of pattern sewing, whether to execute the auto-lock function before trimming and the number of stitches of auto-lock.



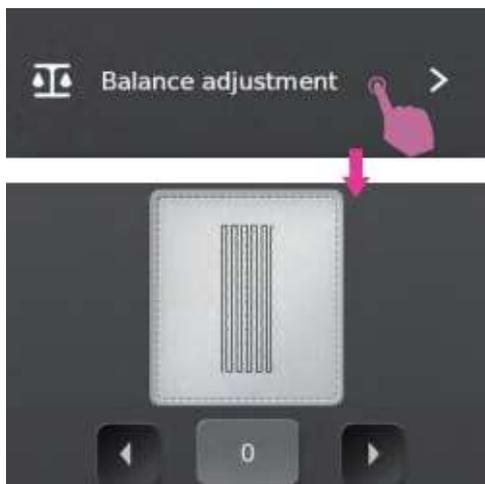
### Fabric thickness sensor

When the sensor is turned on, machine will detect the fabric thickness and will adjust presser foot pressure to make sure the fabric moves forward stable.



### Pivot height adjustment

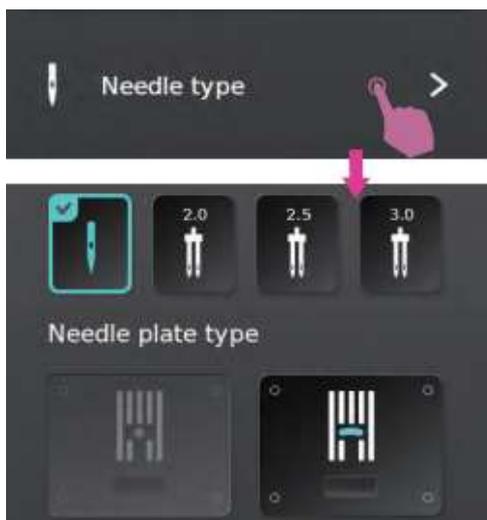
The pivot height can be changed according to the type of fabric. When sewing is stopped, the needle is at lower position and the presser foot is raised to the set height.



### Balance adjustment

Different fabrics, threads and stabilizers will affect the sewing result. It may result in the inability to sew the correct pattern. Balance adjustment can correct such differences and the pattern can be made according to the most suitable adjustment for selected fabric.

Select a pattern to sew, and it will display on the preview screen. Comparing the sewing result with the desired patterns, click the "left" or "right" icon or slider to adjust the balance, until the pattern previewed on the screen and result on the fabric are the same. The machine will automatically to adjust the stitch balance accordingly.

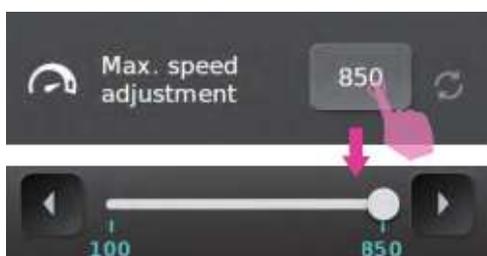


## Needle type

After replacing the needle plate, machine will automatically detect whether it's using the correct needle plate. It also can select the needle type in this same page.

### Note

Please use single needle for embroidering.



## Embroidery setting

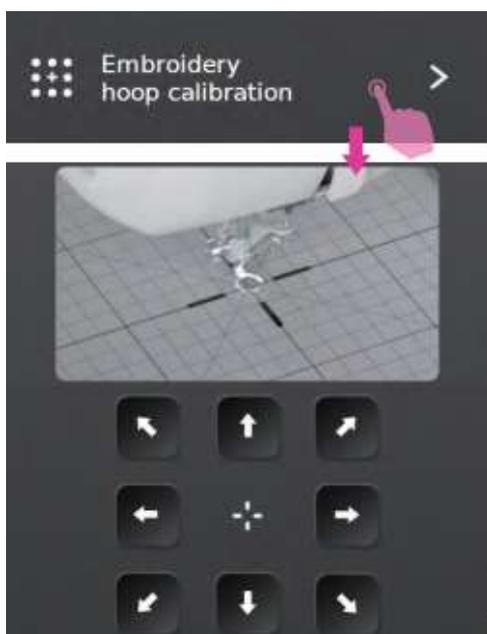
### Max. speed adjustment

This function can adjust the embroidery speed.



### Upper thread tension adjustment

Adjusting the upper thread tension in the Setting page will affect to all embroidery patterns.



### Embroidery hoop calibration

The embroidery hoop calibration is to enable the needle to be positioned in the center position.

The machine will automatically detect the size of the connected embroidery hoop, and then move to the center of the hoop.

Click the direction arrow icon on the screen to move the embroidery hoop, the center of the hoop will align to the needle position to complete the calibration.

### Note

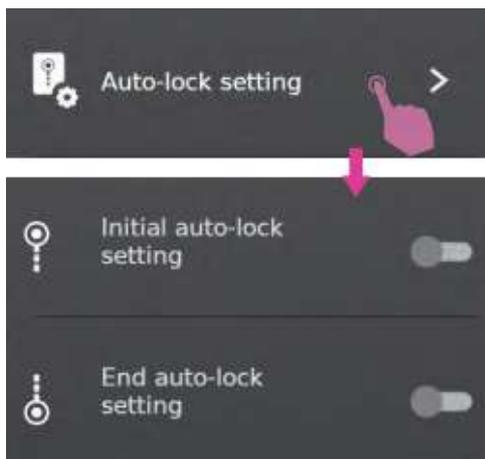
Please make sure the embroidery unit, embroidery hoop and embroidery sheet are installed before using this feature.



### Trim thread

The default setting of thread trim is on, the machine will stop after 7 stitches, the message will pop out and the user can trim the thread.

When turning off this function, machine will not stop.

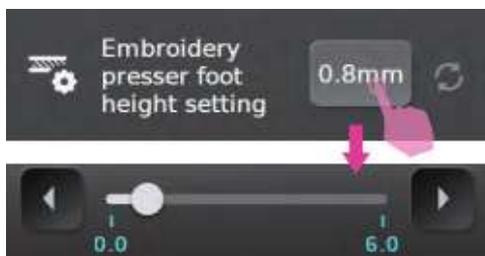


### Auto-lock setting

The default setting of auto-lock is off in the embroidery mode.

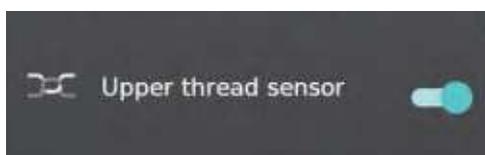
When turn on initial auto-lock setting, the machine will lock 3 stitches at the beginning.

When turn on end auto-lock setting, the machine will lock 3 stitches at the end and stop.



### Embroidery presser foot height setting

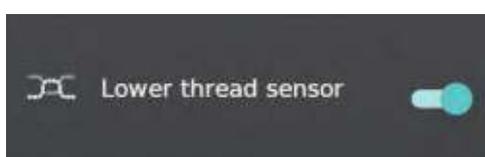
The distance between needle plate and presser foot is adjustable.



### Machine setting

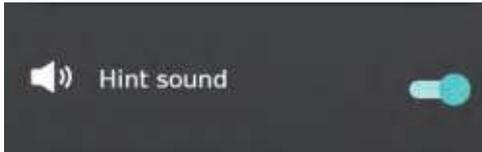
#### Upper thread sensor

Turn on/off upper thread sensor, when the upper thread is broken, not threaded correctly or thread is about to run out, a warning message will pop out on the screen.



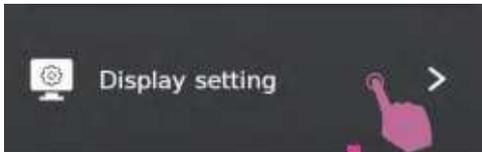
#### Lower thread sensor

Turn on/off lower thread sensor, when the lower thread is broken or thread is about to run out, a warning message will pop out on the screen.



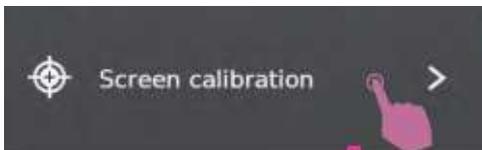
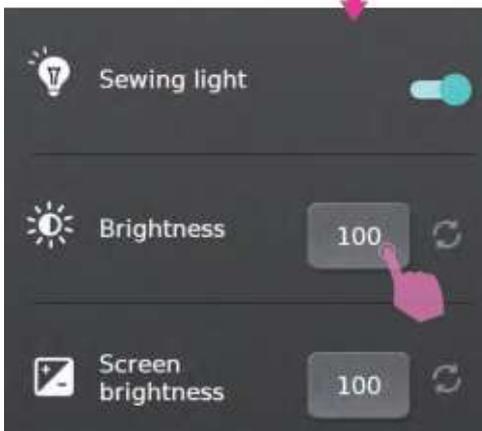
### Hint sound

To turn on/off the sound. Default setting is on.



### Display setting

To adjust the light brightness on the working area and display brightness.



### Screen calibration

Follow and click the number shown on the screen, clicked all 5 points to finish screen calibration.

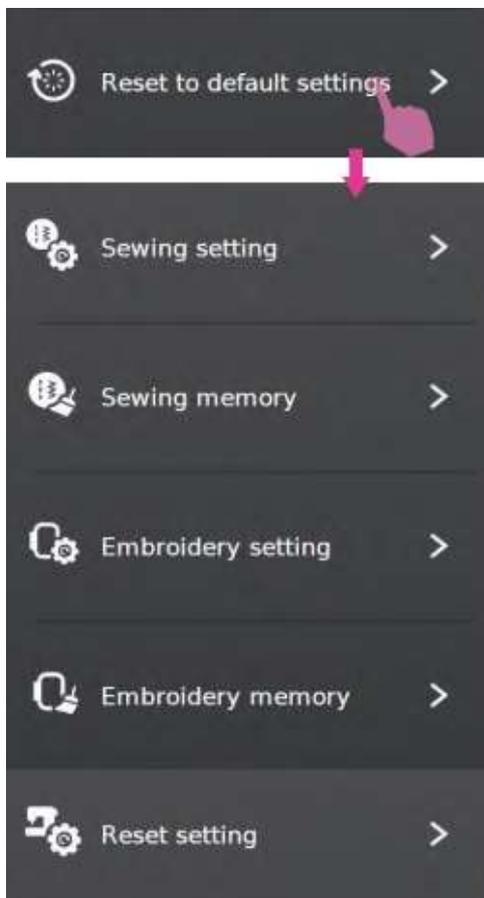


When turn on the machine, press and hold the "+" physical buttons on the right and left multi-function buttons at the same time to enter the screen calibration function.



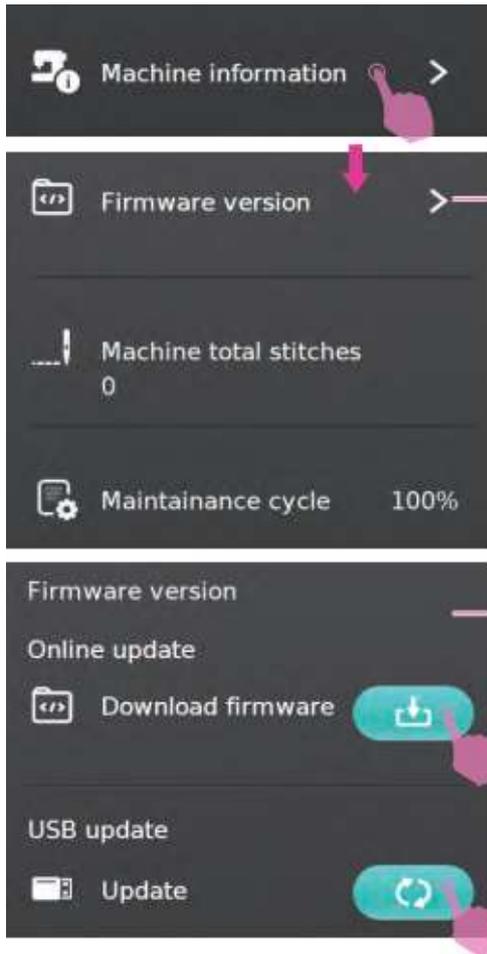
## Language

To select different languages.



## Reset to default settings

Restore factory settings. To remove all personal settings.



### Machine information

**Firmware version:** Display current software version. A ! icon indicates any new version is detected.

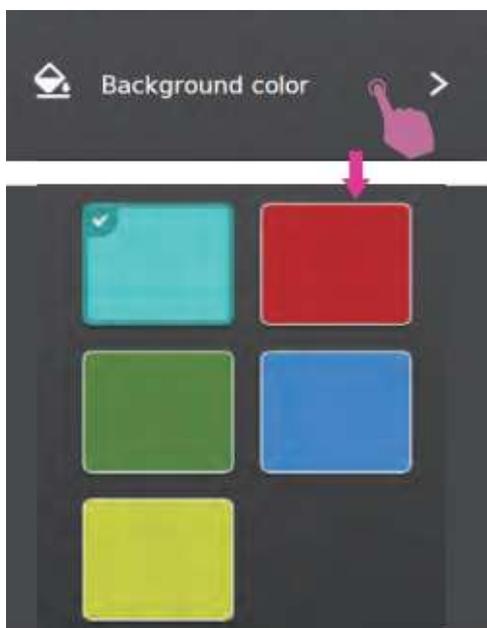
**Machine total stitches:** Display the total number of stitches have used after the machine left the factory, including sewing and embroidery.

**Maintenance cycle:** Display the remaining cycle for machine maintenance.

Once machine is online, it will automatically search the latest software version. Whenever update version is available, you can click the icon to download and update the software.

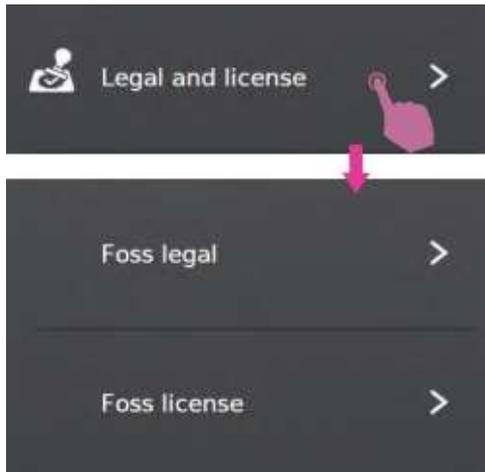
#### Note

When using USB flash drive to update the software, please wait until the update is completed then remove the USB. If the USB is removed during software update, the machine will be unable to use. Restart the machine after the software is update successfully.



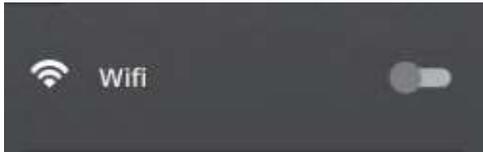
### Background color

Select the background color.



## Legal and licence

Display related legal information.



## Wi-Fi setting

### Connect to Wi-Fi

Turn on the Wi-Fi connection.



## Searching for internet

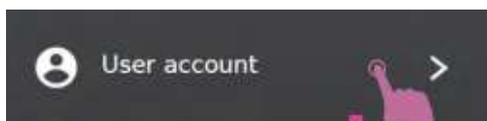
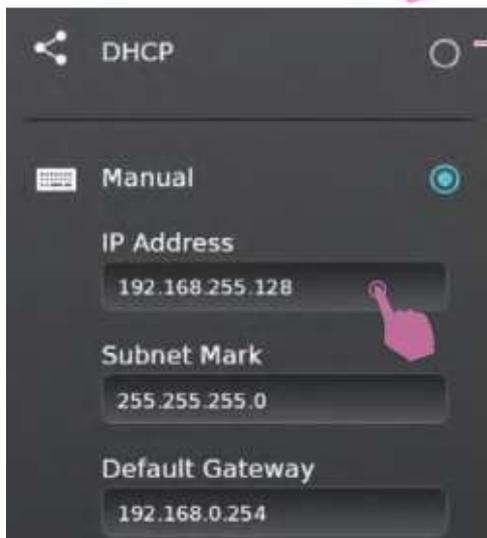
Search Wi-Fi router and select Wi-Fi router.

### Note

Adding a new network, please input the name and password then connect.

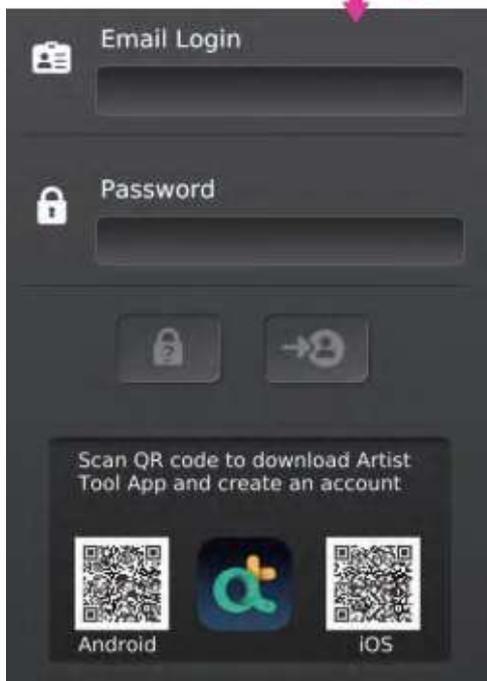


**Note**  
Change IP address and machine name manually is available.



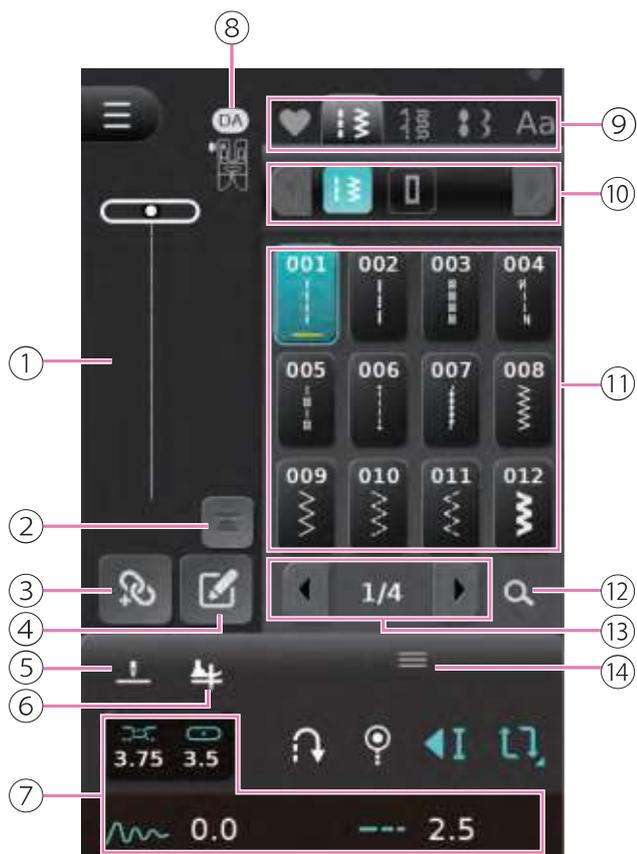
**User account**

When Wi-Fi have successfully been connected, please input user account.



**Note**  
Register the account on App, it can be downloaded by scanning the QR Code.

# Selecting stitch



## Introduction of sewing mode screen

- ① Needle position display
- ② Back to initial stitch
- ③ Combination mode
- ④ Edit mode
- ⑤ Needle up/down setting
- ⑥ Pivot setting
- ⑦ Sewing values adjustment (upper thread tension, needle position, length, width)
- ⑧ Suggested presser foot icon and reference number
- ⑨ Stitch pattern/letters category
- ⑩ Stitch pattern group
- ⑪ Stitch pattern list
- ⑫ Stitch pattern search
- ⑬ Switch pages
- ⑭ Toolbox



## Selecting stitch

Turn on the machine and enter the sewing mode.

Select the desired stitch pattern by click the icon or search by using reference number.

- ① Utility stitches group
- ② Quilting stitches group
- ③ Decorative stitches group
- ④ Alphabet stitches group
- ⑤ Search for stitch pattern



Click the Search icon and go to searching page, it can refer to the chart and key in the stitch pattern number. Click Confirm icon after key in the pattern number, close the page and it will appear the selected stitch pattern.

Click the Delete icon to delete last digit number, long press the Delete icon to delete all numbers.

- ① Confirm
- ② Delete
- ③ Close

After select the stitch pattern, the value is adjustable.



#### Note

- ① This stitch pattern can not be selected
- ② This Stitch pattern can be selected
- ③ This Stitch pattern can be selected, values have been adjusted
- ④ Stitch pattern that have been selected
- ⑤ Stitch pattern that have been selected, values have been adjusted

# Altering stitch



## 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.

Press the "+" or "-" button to adjust the stitch width. For a narrower stitch, press the "-" button. For a wider stitch, press the "+" button.



Click Width icon will pop out a slider window which can adjust the values faster. Click anywhere on the screen to leave the window. Click Width value icon can be returned to the default value.

Different stitches will have different width limitation.



## 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.

Press the "+" or "-" button to adjust the stitch length. For a shorter stitch length, press the "-" button. For a longer stitch length, press the "+" button.



Click Length icon will pop out a slider window which can adjust the values faster. Click anywhere on the screen to leave the window. Click Length value icon can be returned to the default value.

Different stitches will have different length 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.

After the stitch pattern is selected, the machine will automatically apply its default thread tension value.

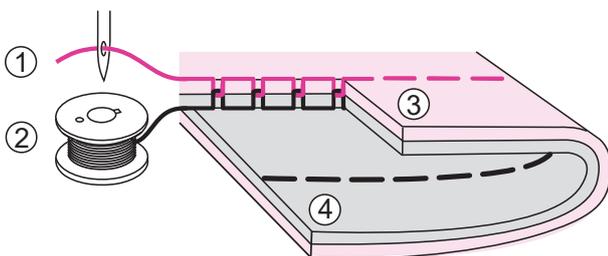
Click Thread tension and Needle position icons, the stitch length/width setting will be replaced. Switch to the bottom of the screen and adjust the tension value.



Press the "+" or "-" button to adjust the stitch tension.

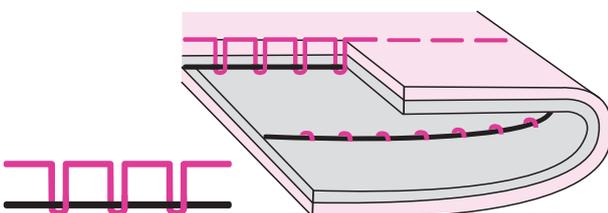


Click the Thread tension icon and a slider will pop out for quick value adjustment. Click anywhere on the screen to leave the window. Click the Thread tension value icon will reset the value to default.

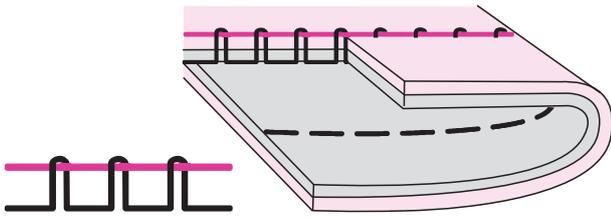


Normal thread tension for straight stitch sewing.

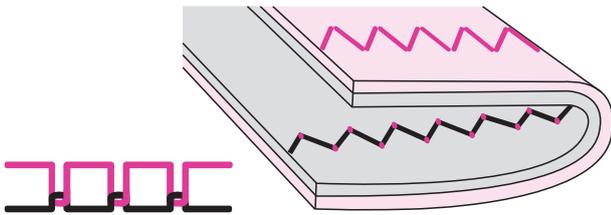
- ① Upper thread
- ② Bobbin thread
- ③ Surface
- ④ Wrong side



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



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



Normal thread tension for zig zag and decorative sewing.

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

When a small number of the upper thread appears on the bottom side of fabric is the correct thread tension.

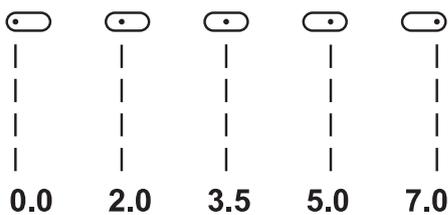


### Changing needle position

Click Thread tension and Needle position icons, the stitch length/width setting will be replaced. Switch to the bottom of the screen and adjust the tension value.

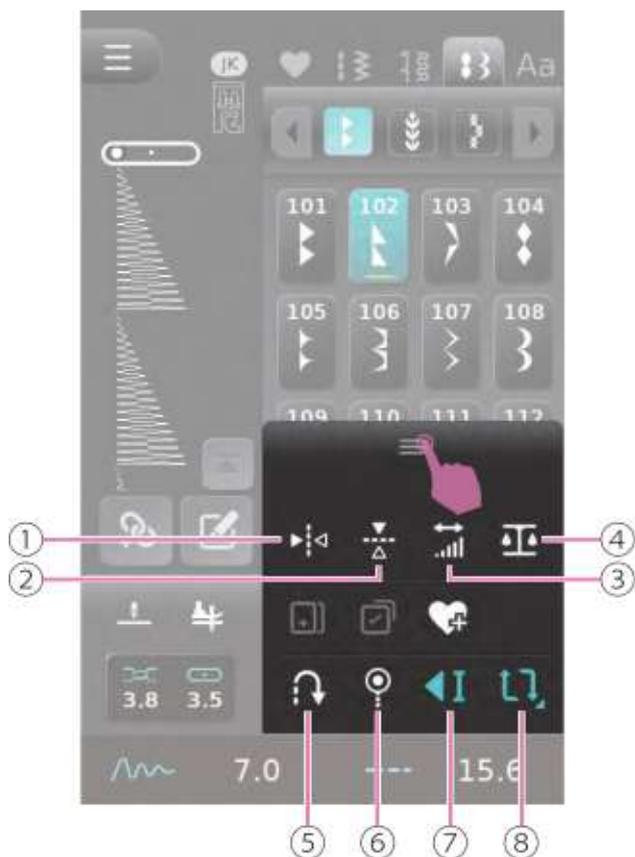
The default position setting to "3.5", center position.

Press the "+" or "-" button to adjust the needle position. Press the "+" button to move the needle position to the right. Press the "-" button to move the needle position to the left.



Click the Needle position icon and a slider will pop out for quick value adjustment. Click anywhere on the screen to leave the window. Click the Needle position value icon will reset the value to default.

# Setting stitch

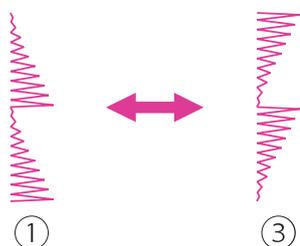
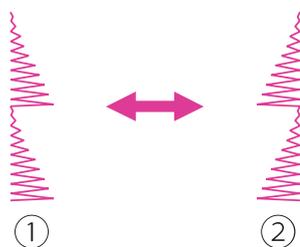


After selecting stitch pattern, open the tool box to adjust stitch pattern function setting.

- ① Horizontal mirror function
- ② Vertical mirror function
- ③ Elongation / Density setting
- ④ Balance calibration on current stitch pattern
- ⑤ Reverse sewing
- ⑥ Initial auto-lock
- ⑦ Pattern unit sewing
- ⑧ Stitch cycling setting

### Note

If the pattern does not have this function, the icon will turn gray and can not be selected.



## Mirror

**The mirror function is to create the mirror image of selected stitch.**

Click Horizontal mirror icon, the pattern can be flipped horizontally. Click Vertical mirror icon, the pattern can be flipped vertically.

The mirror stitch will display on the LCD screen.

The machine will continue to sew the mirror stitch until you click the icon again.

- ① Normal pattern
- ② Horizontal mirror function
- ③ Vertical mirror function

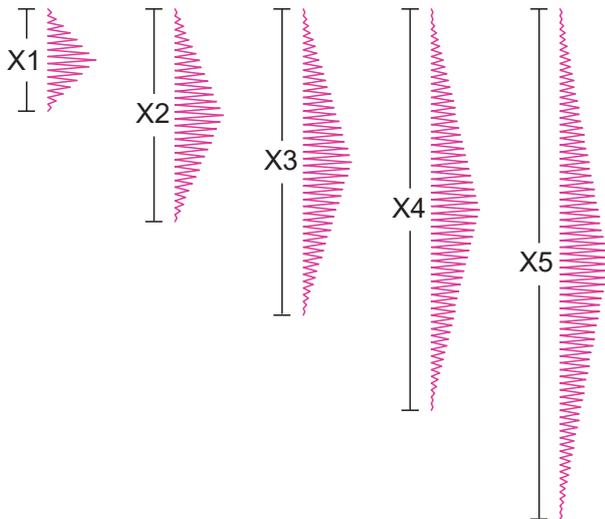


## Elongation

Click the Left or Right icon or slider to adjust the stitch which can be elongated up to 5 times the original length.

For a longer stitch, click the Right icon. For a shorter stitch, click the Left icon.

The elongation stitch will display on the LCD screen.



The machine will continue to sew the elongation stitch until you reset the elongation ratio.

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



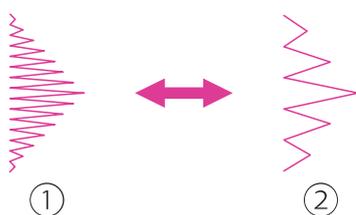
## Density

Click the Left or Right icon or slider to adjust the density. The density default setting is in high density.

Reduce density, click the Right icon.

Increase density, click the Left icon.

The density stitch will display on the LCD screen.



- ① Normal pattern
- ② Reduce density



## Balance calibration on current stitch pattern

Different fabrics, threads and stabilizers will affect the sewing result. It may result in the inability to sew the correct pattern. Balance adjustment can correct such differences and the pattern can be made according to the most suitable adjustment for selected fabric.

Select a desired pattern or letter, it will display on the preview screen. Check the result after sewing.

Comparing the sewing result with the desired patterns, click the Left or Right icon or slider to adjust the balance, until the pattern previewed on the screen and result on the fabric are the same. The machine will automatically to adjust the stitch balance accordingly. The range can be adjusted from -50 to 50.

### Note

Altered balance settings can be saved for each stitch in the my favorite program.



## Reverse sewing

Click Reverse sewing icon for continuously reverse sewing. Stitch previewed on the screen will display reversely.



### Initial auto-lock

Click Initial auto-lock icon, it will lock the stitches at the beginning of sewing. To set up the number of auto-lock stitches, please go to "Button Setting" in the Setting page.



### Pattern unit sewing

After click Pattern unit sewing icon, if you press the auto-lock button during the sewing, it will auto-lock the stitches after sewing a complete pattern unit.



### Stitch cycling setting

Click Stitch cycling icon one time to sew a complete pattern. Continuously click the Stitch cycling icon to set up the cycling times, it can up to 9 times. Long press the icon to reset the cycling times.

The icon will decrease with the number of sewing, after the sewing is completed, the machine will stop automatically.

# 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.



## Save pattern

After editing the pattern, click My favorite icon to save the pattern.

- ① Add current stitch pattern to my favorite



Click the "+" icon to save the pattern.

There are 100 patterns that can be saved in my favorite program, which creates a quick and easy access at all times.



## Overwrite pattern

Click My favorite icon and select the pattern that want to be overwritten.

The warning message will pop out then click Confirm icon to overwrite the pattern.



## Recall pattern

Click My favorite icon to recall the saved patterns.

Press the start/stop button to start sewing.



## Delete pattern

To delete the saved patterns, click the Delete icon.

① Delete



Select the pattern you want to delete.

The warning message will pop out, click Confirm icon to delete the pattern.

Click again the Delete icon, will exit delete mode.

# 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

Click Combination icon to combination mode. Select the desired patterns.

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

Click Combination icon again to return to the single stitch mode.

- ① Combination mode

### Note

Stitch patterns that can not be combined, the icon will turn gray and can not be selected.



## Add patterns

Click 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.

- ① Current pattern
- ② Cursor
- ③ Move to previous pattern
- ④ Move to next pattern
- ⑤ Move to last pattern
- ⑥ Move to first pattern
- ⑦ Number of current pattern/total number of patterns



## Delete patterns

Click Move icon to move the cursor to the pattern you want to delete. Click Delete icon to delete it and next pattern will move forward to fill the vacant position.

If you want to delete all patterns, long press Delete icon and the warning message will pop out, click Confirm icon to delete all patterns.

- ① Delete



## Combination setting

Click Move icon to move the cursor to the pattern you want to change the setting.

To adjust the setting of stitch width, stitch length, tension, mirror, elongation, density and balance calibration, stitch cycling, etc.

- ① Current pattern

### Note

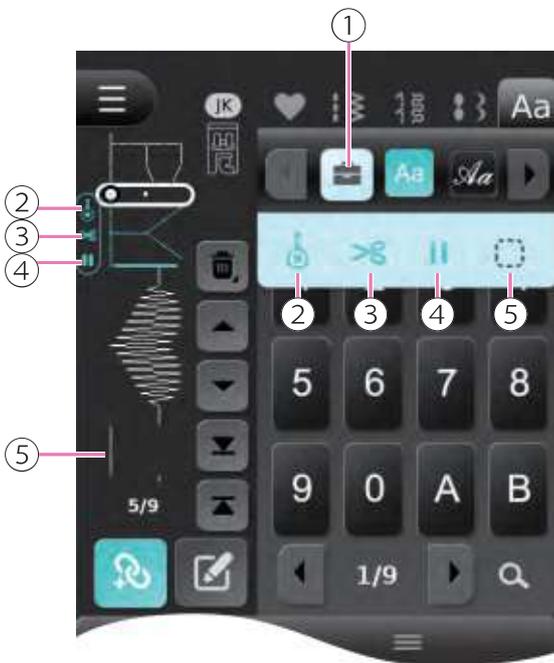
If the pattern does not have this function, the icon will turn gray and can not be selected.



Click Copy icon to copy the previous pattern and all parameter settings of it.

Click Select all icon to select all combination patterns, and it also can set mirror function to all combination patterns at one time.

- ① Copy
- ② Select all



### Instructions to set combination patterns

Click Sewing kit icon, you can set up auto-lock, thread cutter, pause, space functions. After start sewing, it will execute the functions.

Move the cursor to the pattern where the functions wants to add, click on the functions icon and the function will add to the desired patterns. Click the functions icon again to cancel the setting.

When auto-lock function is added, it will auto-lock stitches after finish sewing current pattern, then continue to the next pattern.

When thread cutter function is added, it will cut the thread after finish sewing current pattern, then continue to the next pattern.

When pause function is added, it will stop after finish sewing current pattern. This function is helpful for you to add multiple applications on your project.

The order to execute the functions are auto-lock -> thread cutter -> pause.

- ① Sewing kit
- ② Auto-lock
- ③ Thread cutter
- ④ Pause
- ⑤ Space

#### Note

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



## Creating your own combination pattern

You can create your own stitch in the combination.

Move the cursor to the pattern where you want to replace to your own design stitch, click Edit mode icon to enter design page. After finished the design, it will replace a desired pattern to your own design. Please refer to Chapter "Creating your own pattern" for more information.

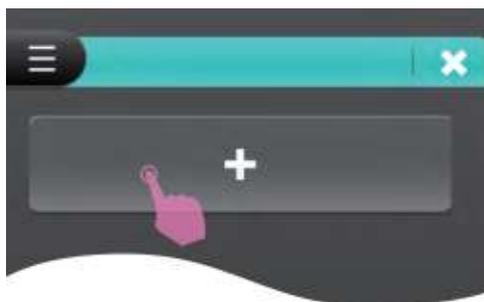
① Edit mode



## Save combination patterns

When you finish combination patterns, click My favorite icon to save the pattern.

① Add pattern to My favorite



Click the "+" icon to save the pattern.

There are 20 groups of combination patterns can be saved in My favorite program, which creates a quick and easy access at all times.



## Overwrite combination patterns

Click My favorite icon and go to next page, select the pattern that need to overwrite.

The warning message will pop out, click Confirm icon to overwrite and save the new pattern.



## Recall combination patterns

In combination mode, click My Favorite icon to enter setting. Click on Combination pattern icon and select the desired pattern.

- ① Normal pattern
- ② Combination pattern

Press the start/stop button to start sewing.



## Delete combination patterns

To delete the saved patterns, click the Delete icon.

- ① Delete



Select the pattern you want to delete.

The warning message will pop out then click Confirm icon to delete the pattern.

Click again the Delete icon, will exit delete mode.

# Creating your own pattern



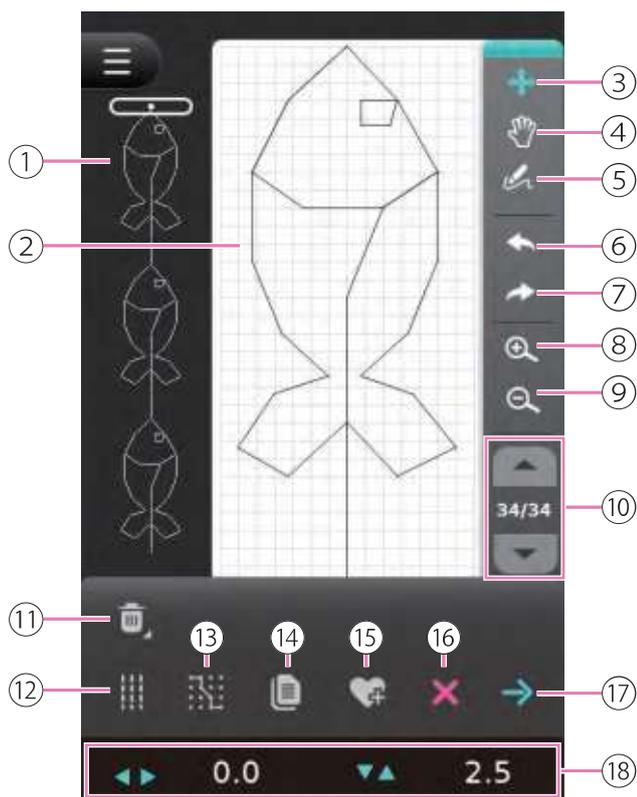
Creating your own pattern allows you to edit existing patterns and create your own unique patterns.

After select the pattern, click on Edit mode icon to enter the design page.

## ① Edit mode

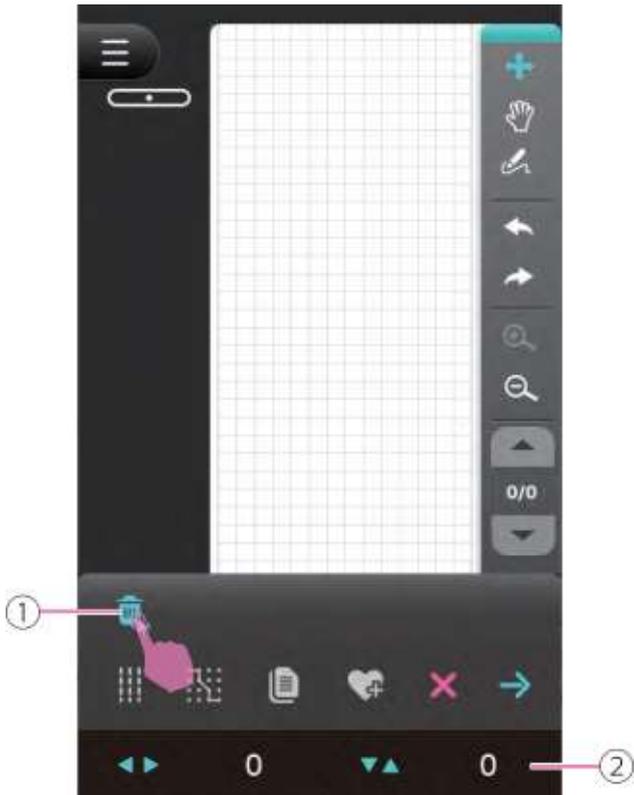
### Note

- Buttonholes and darning stitches are not available in the Edit mode function.
- The created stitch patterns can be saved in "My favorite".



## Edit mode icon introduction

- ① Preview screen
- ② Pattern design screen
- ③ Move stitch point
- ④ Drag the object
- ⑤ Drawing the stitch
- ⑥ Undo
- ⑦ Redo
- ⑧ Zoom in
- ⑨ Zoom out
- ⑩ The current stitch / Total stitches
- ⑪ Delete
- ⑫ Triple stitch sewing
- ⑬ Grid
- ⑭ Duplicate
- ⑮ Add current pattern to My favorite
- ⑯ Close (Exit without saving current design)
- ⑰ Confirm
- ⑱ Coordinate



## Creating your own pattern

Select the desired pattern and edit, if you want to delete the current design, long press the Delete icon, the warning message will pop out and click Confirm icon to delete it.

The coordinate information of the selected point will display on the bottom screen.

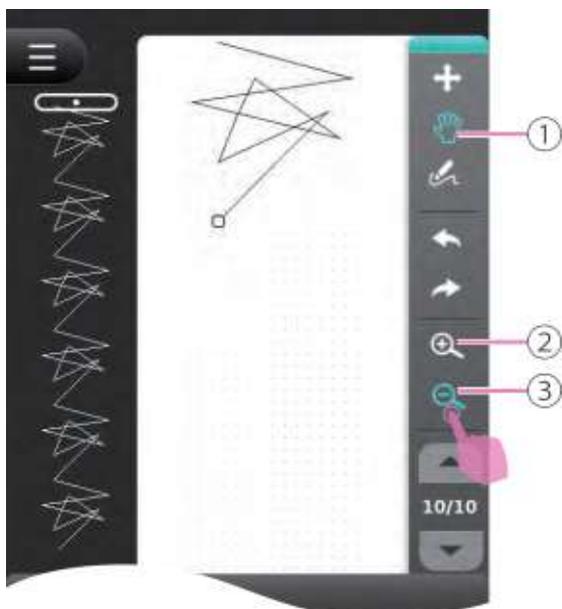
- ① Delete
- ② Coordinate

The stitch width position is the horizontal distance from the selected needle point to the center line(mm). The stitch length position is the vertical distance from the selected stitch point and the previous stitch point(mm).

The designed stitch width is 0.3mm between each needle points. The pattern can design a length up to 70mm. Needle points are limited to 99 points and can no longer be drawn.

### Note

- If the designed pattern ends with the reverse stitches or closed (circle) shape, you need to add the pattern from the last stitch point so the design can sew continuously.
- In the preview screen can check if there is a continuously design sewing pattern.

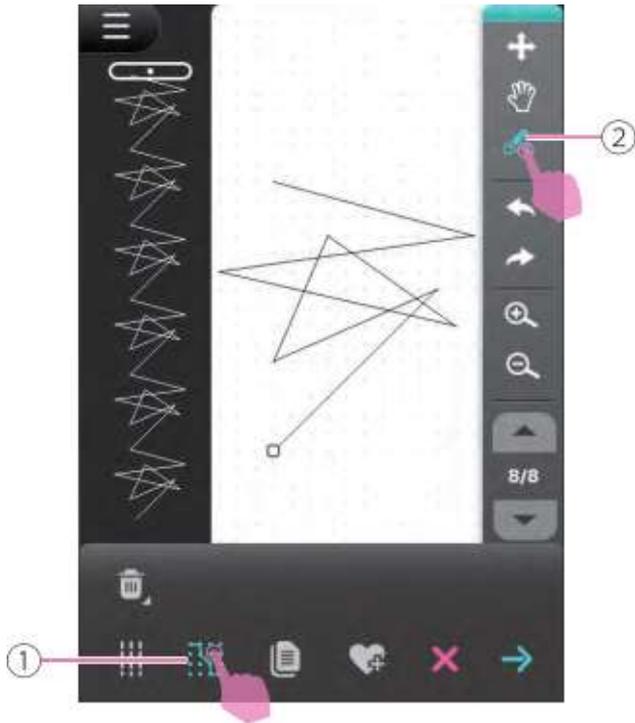


## Pattern design screen

Click the Zoom in/Zoom out icon, the pattern design screen will zoom in or zoom out to view the design.

Click Drag the object icon, using stylus or finger to move the design screen.

- ① Drag the object
- ② Zoom in
- ③ Zoom out



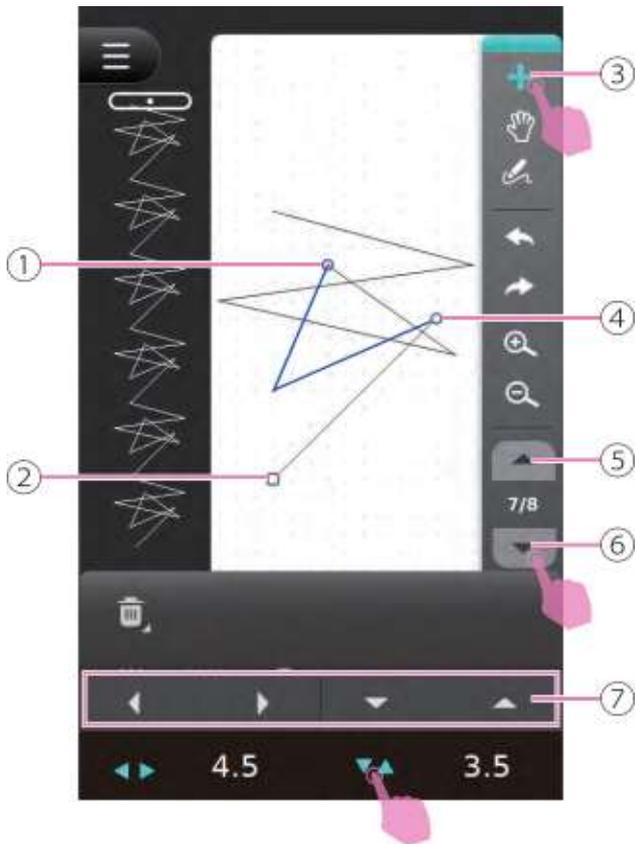
## Using Grid to create a pattern

Click the Grid icon, the screen will display grid in line or point.

When it display grid in point, each drawing needle point will automatically snap to the nearest point and created the stitch.

Click Drawing the stitch icon, you can drawing the stitch by using stylus or finger.

- ① Grid (Line/Point)
- ② Drawing the stitch

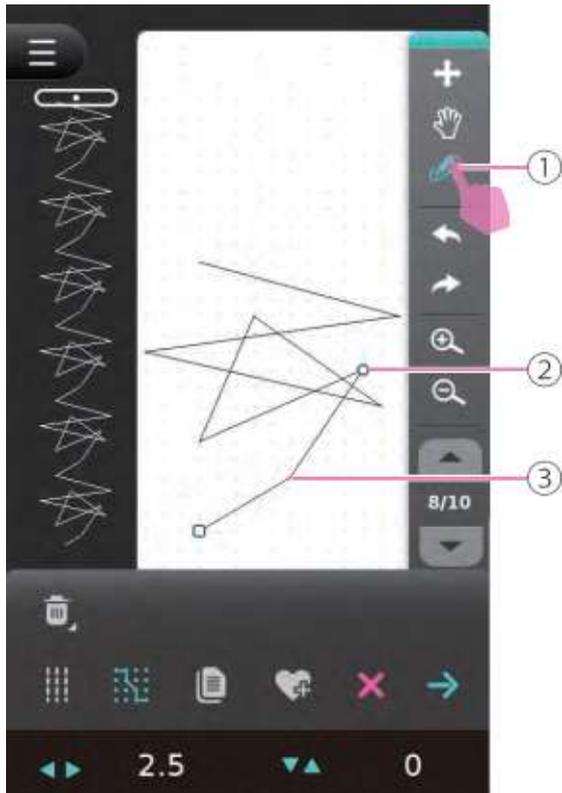


## Move stitch point

Click Move stitch point icon, then select the desired point, you can move stitch point by dragging the needle point or click the Direction icon of the coordinate and using control bar to move it.

Click Select multiple needle points upward and down icon, it will select the multiple needle points upward or down from the current stitch point. The selected stitch points will turn blue. You can move stitch points by dragging the blue segment or click the Direction icon of the coordinate and using control bar to move it to the desired position.

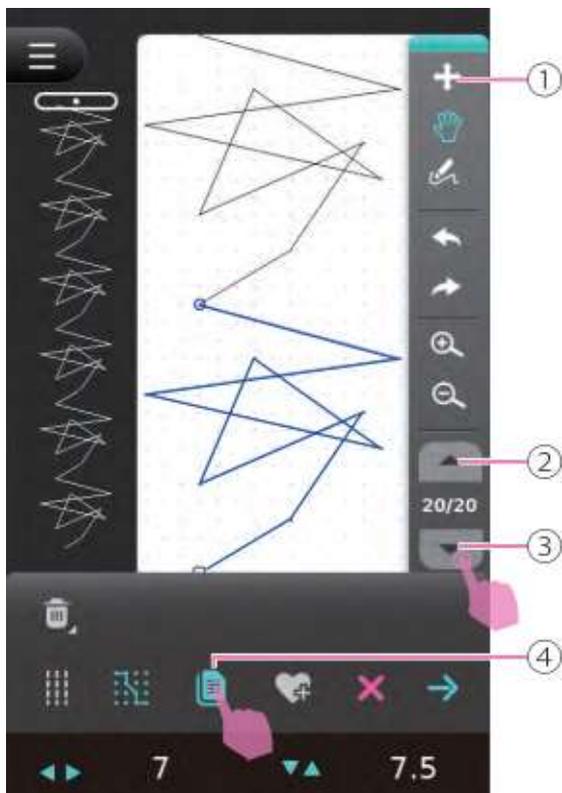
- ① Select the starting needle point
- ② The last needle point of the pattern
- ③ Move stitch point
- ④ The current selected needle point
- ⑤ Select multiple needle points upward
- ⑥ Select multiple needle points down
- ⑦ Control bar



## Insert needle point

Click Move stitch point icon, and select the desired point, then click Drawing the stitch icon to insert the needle point. You can insert the needle point by using stylus or finger.

- ① Drawing the stitch
- ② The current selected needle point

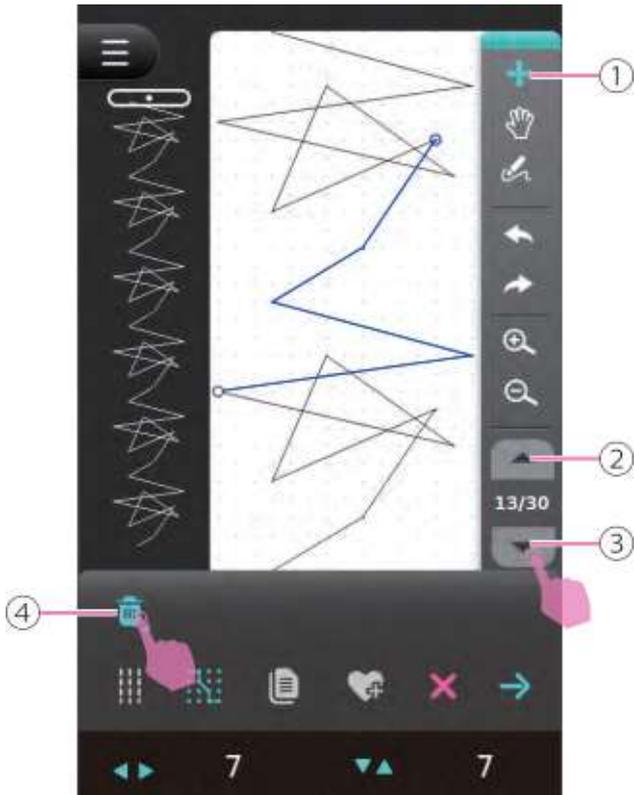


## Duplicate needle point

Click Move stitch point icon to select the needle point or click Select multiple needle points up/down icon to select the needle points, the selected needle points will turn blue.

Click the Duplicate icon, the selected needle points (blue segment) will copy and insert to the select point.

- ① Move stitch point
- ② Select multiple needle points up
- ③ Select multiple needle points down
- ④ Duplicate

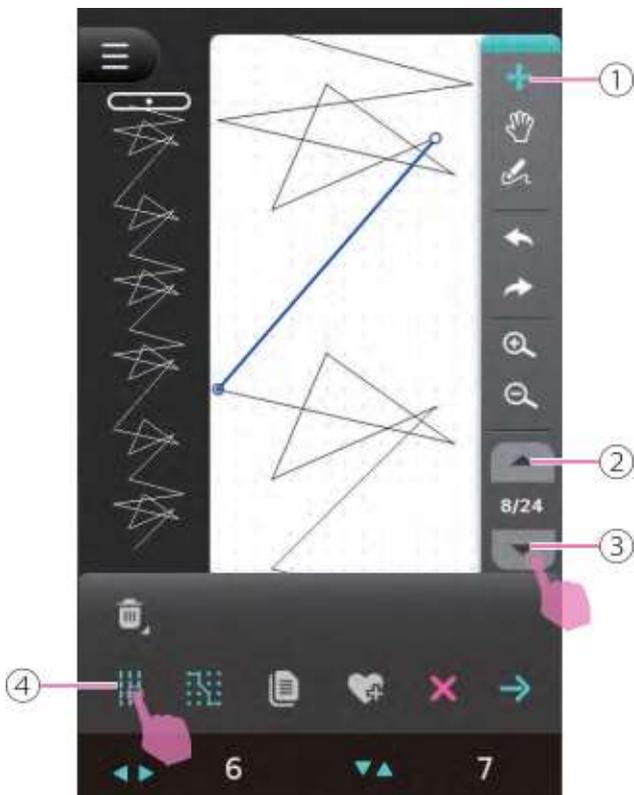


## Delete needle point

Click Move stitch point icon to select the needle point or click Select multiple needle points upward/down icon to select the needle points, the selected needle points will turn blue.

Click the Delete icon, can delete the selected needle points (blue segment). Long press the Delete icon can delete all needle points. The warning message will pop out and click "Confirm" to delete all.

- ① Move stitch point
- ② Select multiple needle points upward
- ③ Select multiple needle points down
- ④ Delete



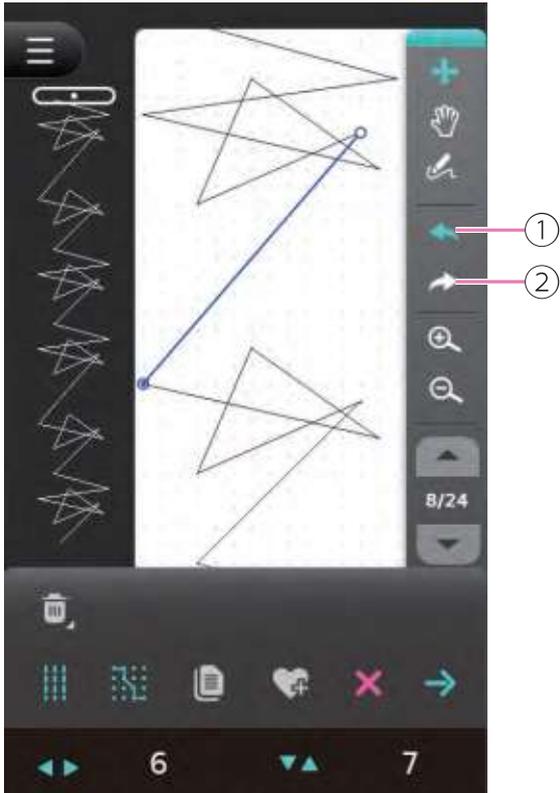
## Triple stitch sewing

Click Move stitch point icon to select the needle point or click Select multiple needle points upward/down icon to select the needle points, the selected needle points will turn blue.

Click the Triple stitch sewing icon, the selected needle points (blue segment) will set to triple stitch sewing. If only select one needle point, the distance between the current and last needle point will set to triple stitch sewing.

Click again the Triple stitch sewing icon to cancel the setting.

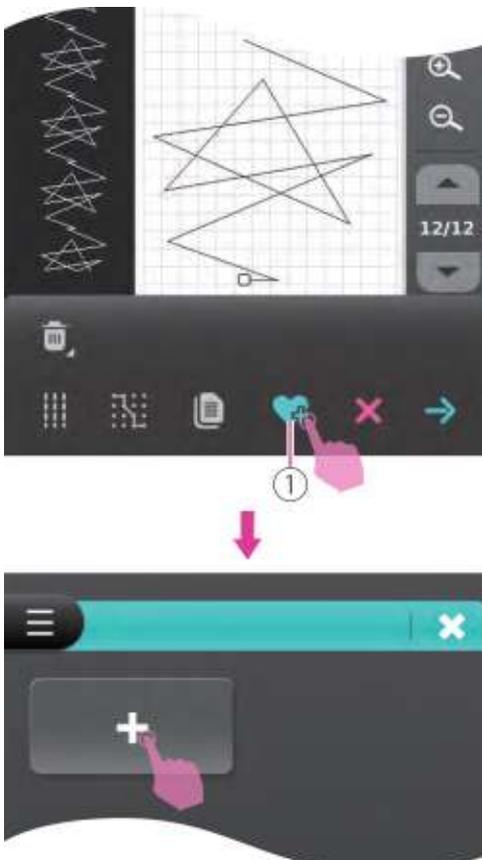
- ① Move stitch point
- ② Select multiple needle points upward
- ③ Select multiple needle points down
- ④ Triple stitch sewing



## Undo/Redo

Click Undo icon to cancel or reverse the last steps. Click Redo icon to do last steps again.

- ① Undo
- ② Redo



## Save Creating pattern to My Favorite

After editing the pattern, click My favorite icon to save the pattern.

To save the pattern, please refer to Chapter "My favorite program" for more information.

- ① Add current pattern to My favorite



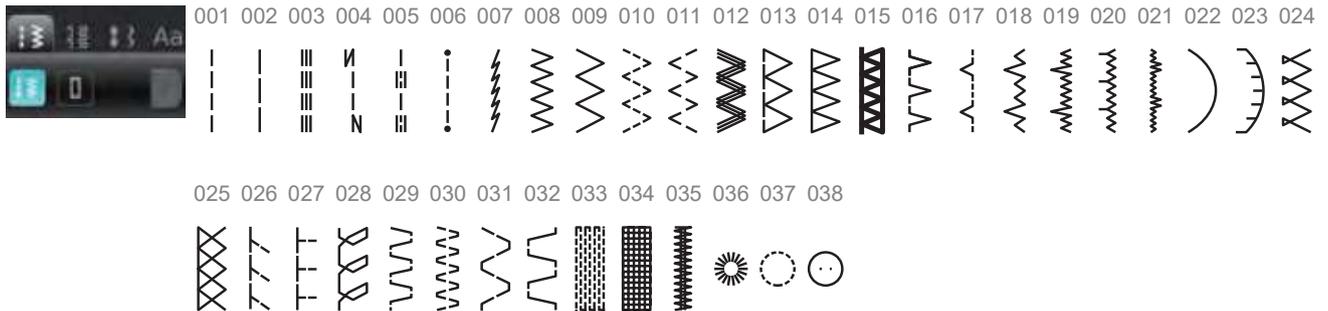
# Stitch Chart

# Stitch chart

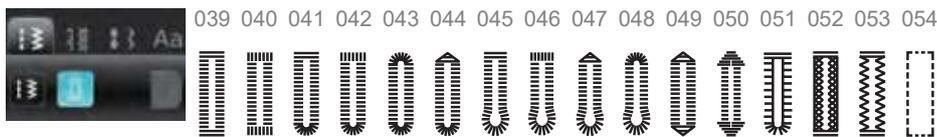
## Note

- Patterns 015 & 251 can be used with Wing Needles and will provide best results (Wing needle are not included in the accessories).
- Please do not use Wing Needle in the combination patterns, will not provide good results and may cause danger.

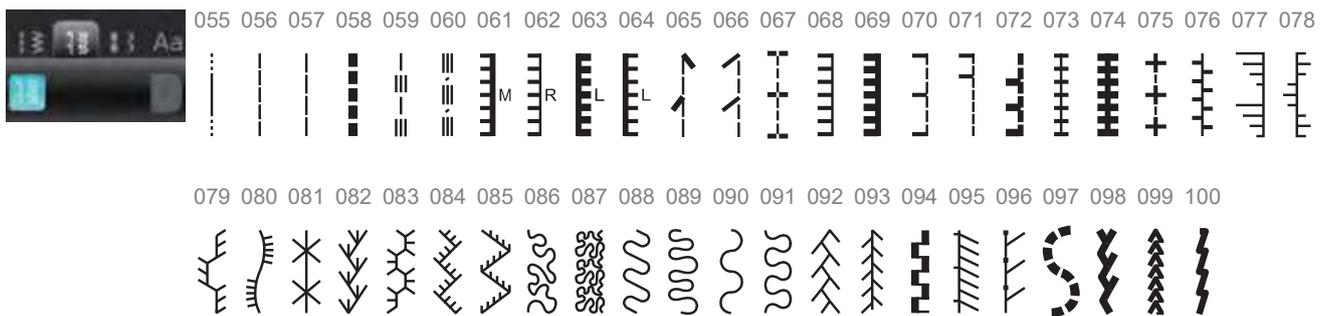
## Utility



## Buttonholes



## Quilting



## Satin



## Decorative\_Satin



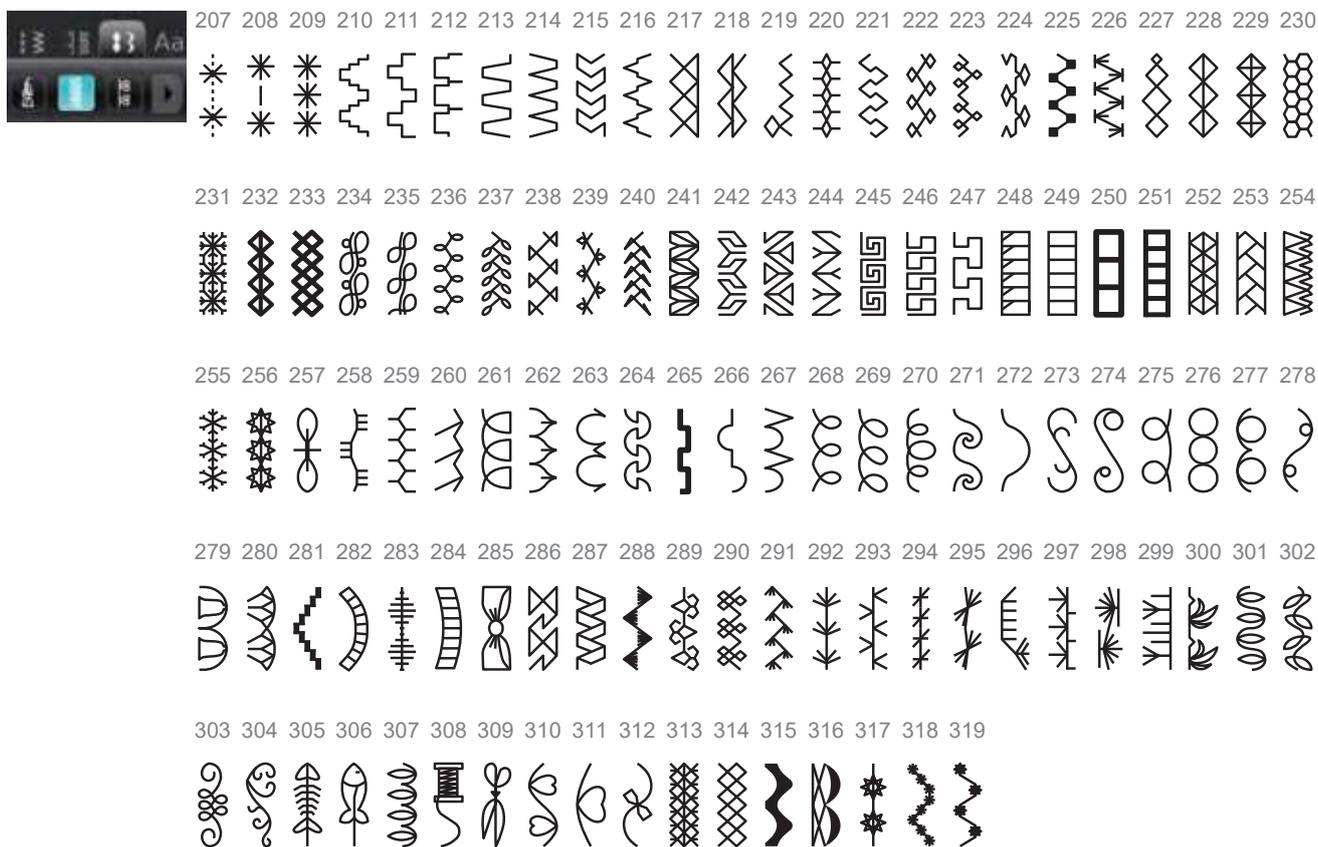
## Cross



## Florals



## Ornamental



## Novelty



320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343

344 345 346 347 348 349 350 351 352 353

## Alphabet-block style



01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

1 2 3 4 5 6 7 8 9 0 A B C D E F G H I J K L M N

25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48

O P Q R S T U V W X Y Z a b c d e f g h i j k l

49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72

m n o p q r s t u v w x y z Ä Å Æ Ñ Ö Ø Ç Ü ä å

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## Alphabet-script style



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O P Q R S T U V W X Y Z a b c d e f g h i j k l

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## Alphabet-outline style

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	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
	O	P	Q	R	S	T	U	V	W	X	Y	Z	a	b	c	d	e	f	g	h	i	j	k	l
	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
	m	n	o	p	q	r	s	t	u	v	w	x	y	z	Ä	Å	Æ	Ñ	Ö	Ø	Ç	Û	ä	å
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
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	97	98	99																					
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## Alphabet-Russian style

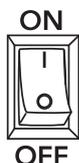
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	1	2	3	4	5	6	7	8	9	0	А	Б	В	Г	Д	Е	Ё	Ж	З	И	Й	К	Л	М
	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
	Н	О	П	Р	С	Т	У	Ф	Х	Ц	Ч	Ш	Щ	Ъ	Ы	Ь	Э	Ю	Я	а	б	в	г	д
	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
	е	ё	ж	з	и	й	к	л	м	н	о	п	р	с	т	у	ф	х	ц	ч	ш	щ	ъ	ы
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
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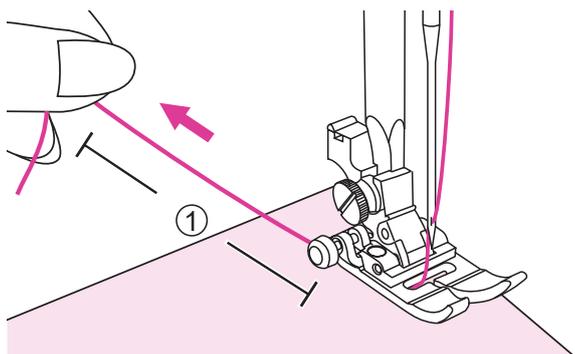
# | Sewing Basics

# Starting to sew

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

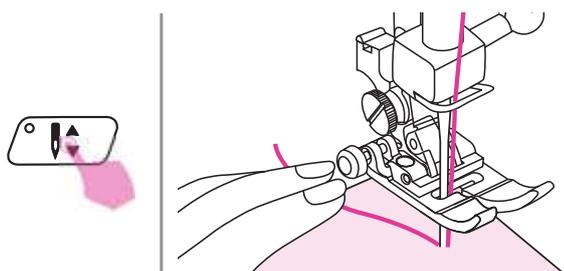


1. Turn the power switch to on ("I").

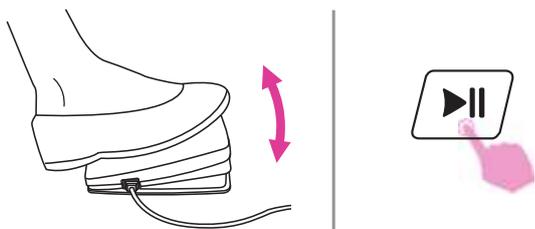


2. Place the fabric under the presser foot, pass the thread under the presser foot, and then pull out about 10cm of thread toward the rear of the machine.

① 10cm



3. Press the needle up/down position button to lower the needle into the fabric at the beginning of the stitching.

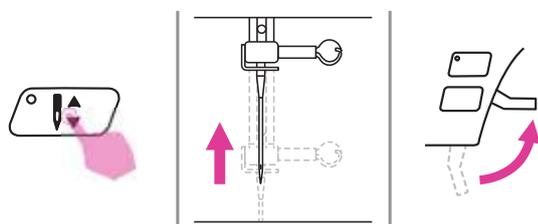


4. Slowly press down the foot control or long press the start/stop button to start sewing, presser foot will automatically lower at the same time.

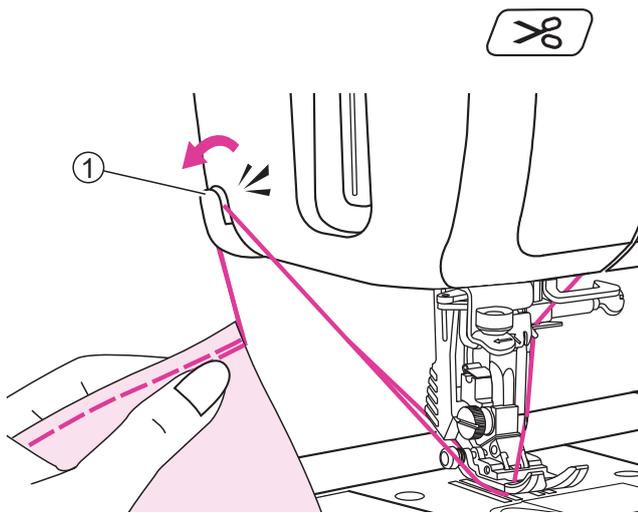
Release the foot control or press the start/stop button again to stop the machine.

## 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.



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



6. 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

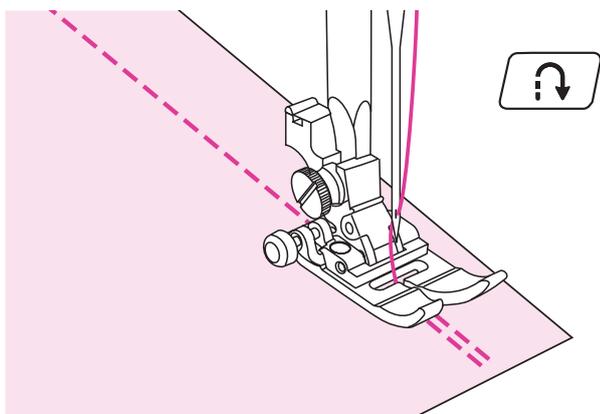
# Useful skills

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.

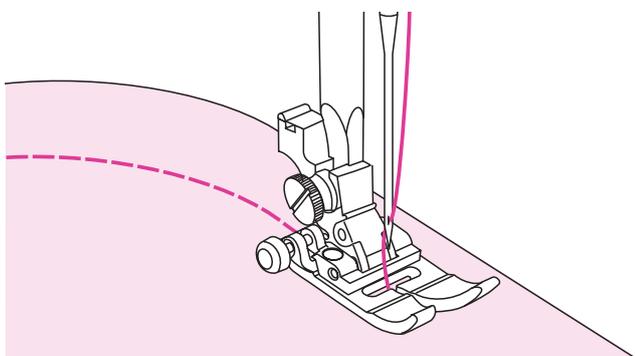


## Reverse sewing

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

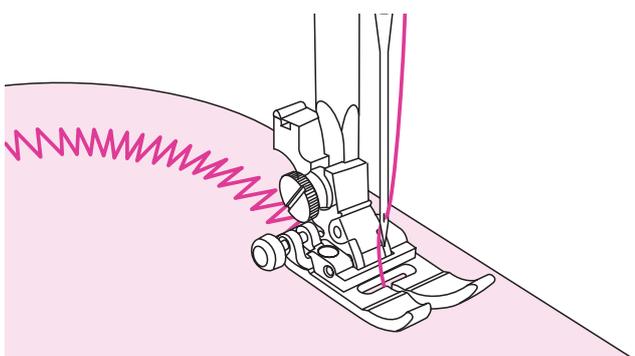
Press the reverse button and sew 4-5 stitches.

The machine will sew forward when the button is released.

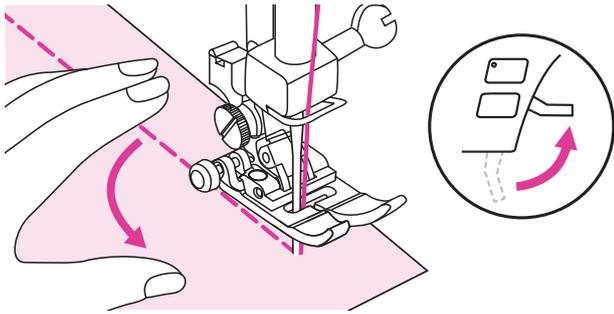


## Sewing curves

Slightly change the sewing direction to sew around the curve.



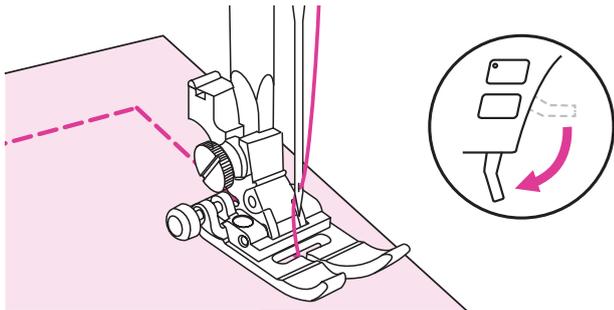
When sewing along a curve while using a zigzag stitch, select a shorter stitch length in order to obtain a finer stitch.



## 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.

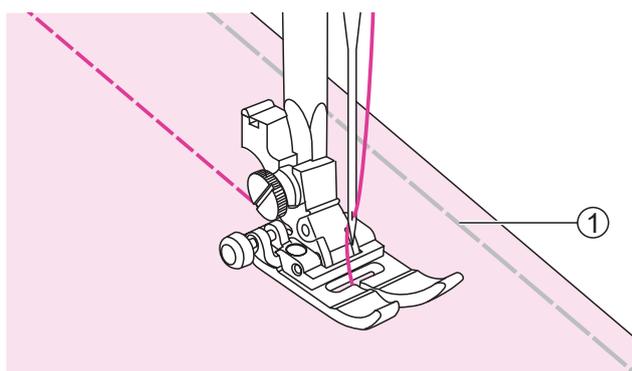


When you want to change the sewing direction, you can also set the pivot function in the sewing mode. When you stop sewing, the needle will stay in the fabric, and presser foot will automatically lift, which can easily rotate the fabric. This function is very useful. (Presser foot height setting, please refer to "setting" chapter for more information.)

### ① Pivot setting

#### Note

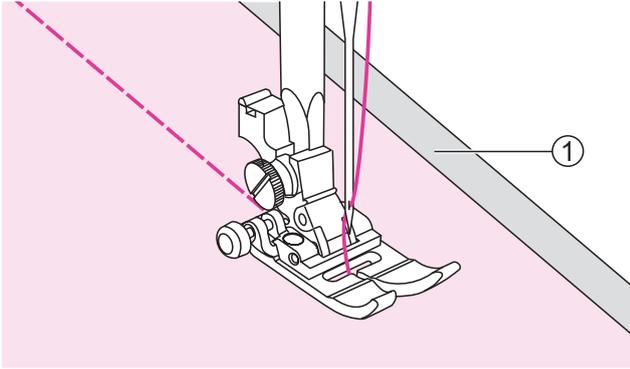
- After setting the pivot function, the machine will automatically set the needle position down when sewing stops.
- If the needle position is set to be up, the pivot setting will be canceled simultaneously.



## Sewing stretch fabrics

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

### ① Basting

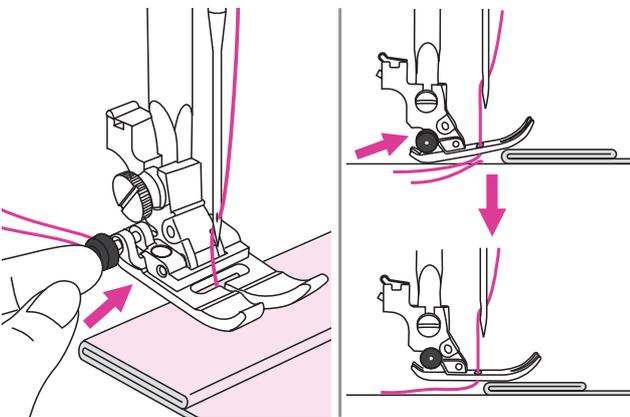


## Sewing thin fabrics

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.

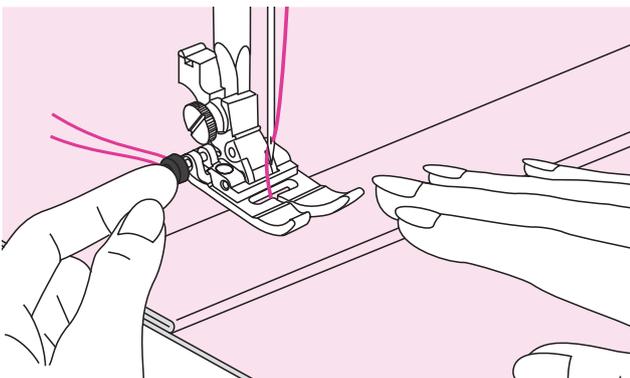
① Stabilizer material or paper



## Sewing heavy fabric

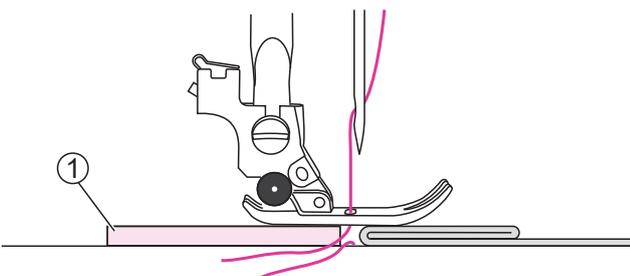
The black button on the left side of the presser foot will lock the presser foot in a horizontal position if you push it in before lowering the presser foot.

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.

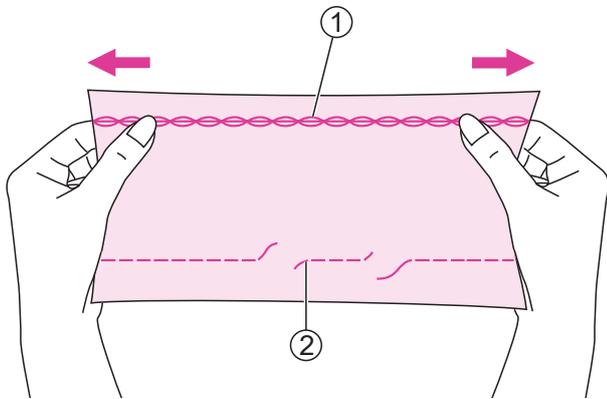
① Cardboard or thick fabric



# Utility Stitches

# Stretch stitch

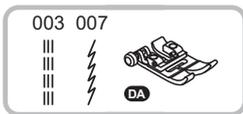
Use this stitch with knitted tricot or other stretchy fabrics. The stitch enables your seam to stretch without breaking the thread.



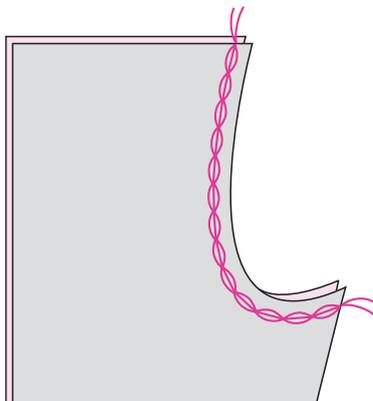
Good for easy to ravel and knit fabrics. It's good for joining durable fabric such as denims.

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

- ① Stretch stitch
- ② Straight stitch

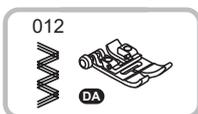


Using the all purpose foot.

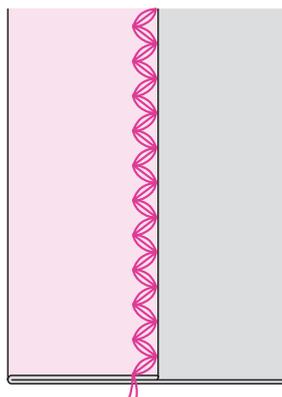


## Straight stretch stitch

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



Using the all purpose foot.



## Zigzag stretch stitch

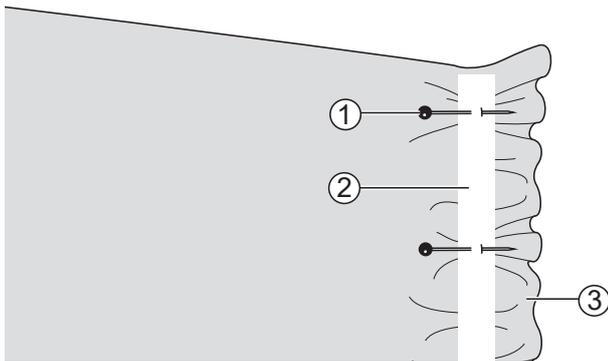
Triple zigzag stretch stitch is suitable for firm fabrics like denim, poplin, etc.

# 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.

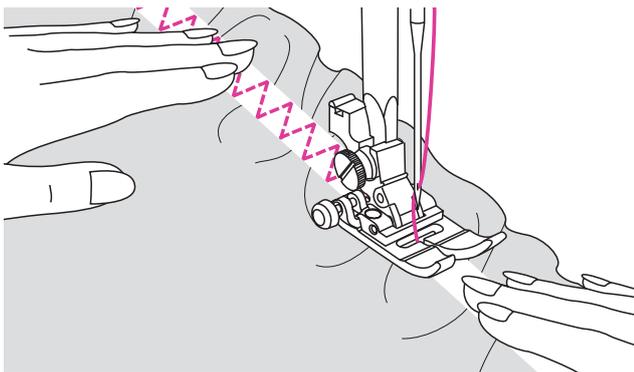


Using the all purpose foot.



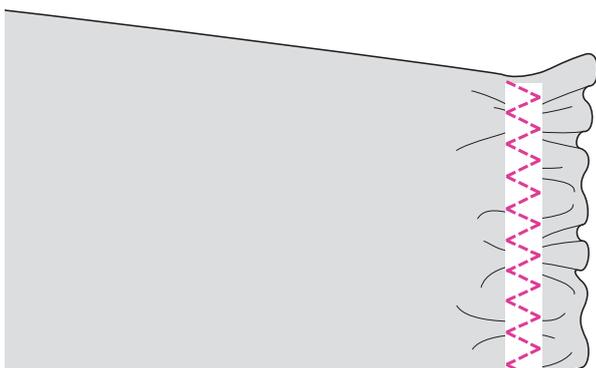
Pin the elastic tape to the wrong side of fabric at a few points to make sure that the tape is uniformly positioned on the fabric.

- 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.

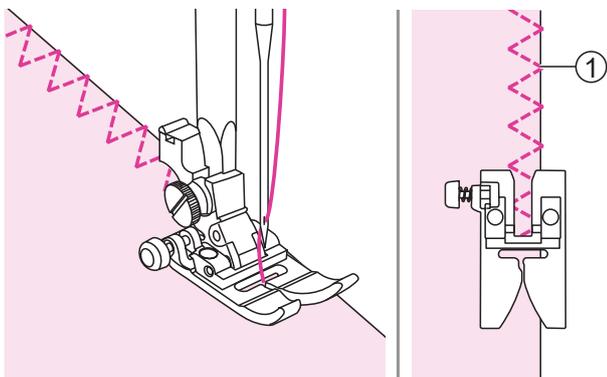


## Note

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.

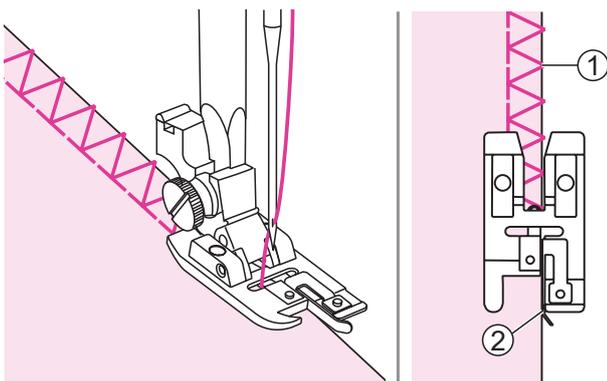
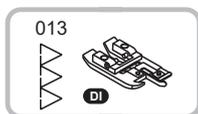


## Using the all purpose foot

Attach the all purpose foot.

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

- ① Needle drop point



## Using the overcasting foot

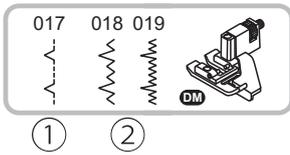
Attach the overcasting foot.

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.

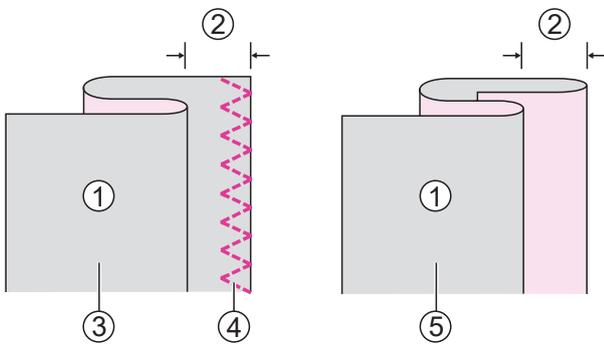


Using the blind hem foot.

- ① Blind hem/lingerie for firm fabrics.
- ② Blind hem for stretch fabrics.

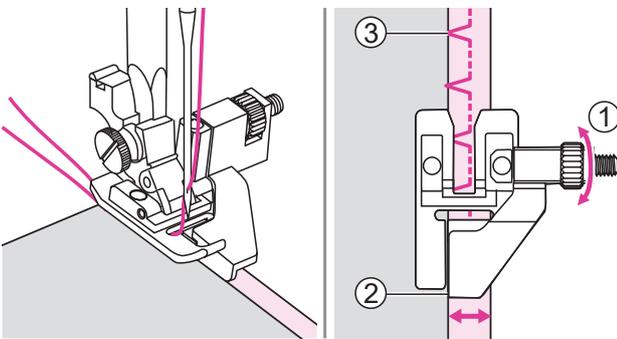
### Note

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



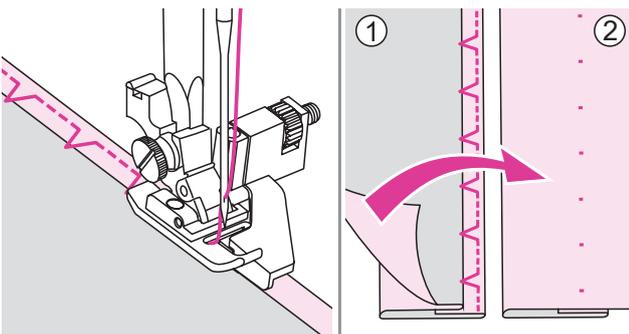
Fold the fabric as illustrated with the wrong side up.

- 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.

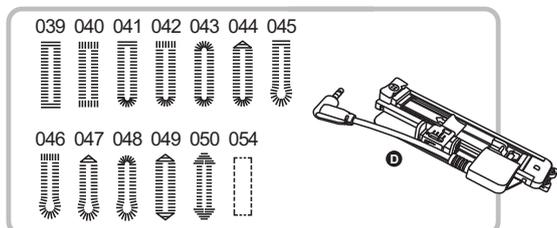
Turn over the fabric.

- 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 electronic buttonhole foot.

039/041/043: For thin or medium fabric

045/046: For suits or overcoats

040/042: Heavy-duty buttonholes with vertical bar tacks

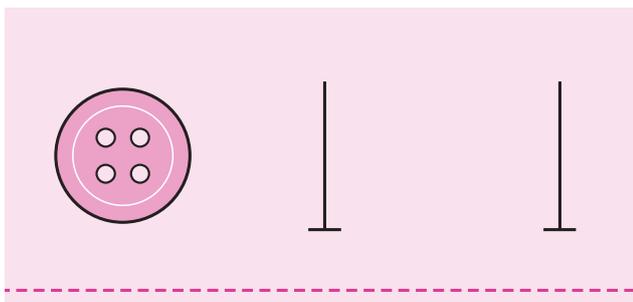
044/049/050: Reinforced waist tapered buttonhole

047/048: For jeans or trousers

054 : Program for staystitching buttonholes, for pocket openings, reinforcing buttonholes: especially for buttonholes in leather and imitation leather

## Note

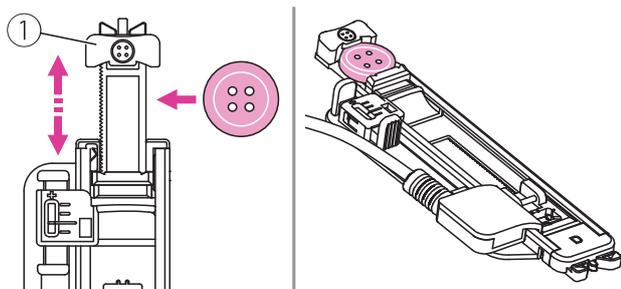
Please use the same fabric of the project and do a sewing test in advance.



Mark the positions of the buttonhole on the fabric.

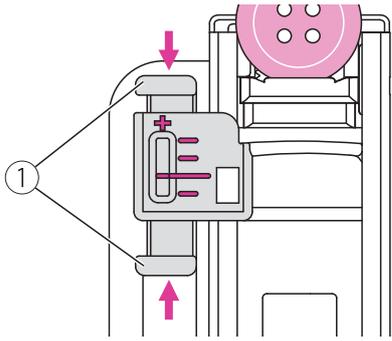
The maximum buttonhole length is 3cm. (Total of diameter + thickness of button.)

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



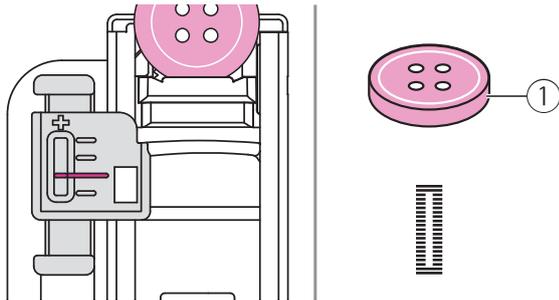
Pull the button holder plate to the back, and place the button in it. Push back the button holder plate against the button to hold it tight.

① Button holder plate



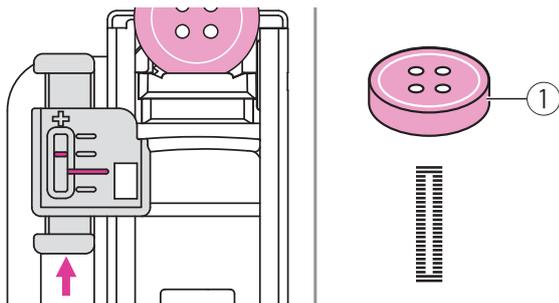
Consider the shape and height of each button, buttonhole fine tuning adjuster provides fine adjustment of the buttonhole length.

① Buttonhole fine tuning adjuster



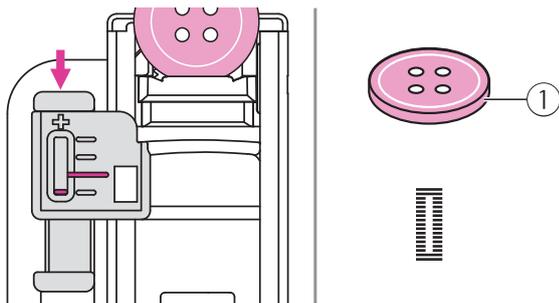
The red mark is the standard setting for regular button, adjust the pointer align with the red mark.

① Regular button



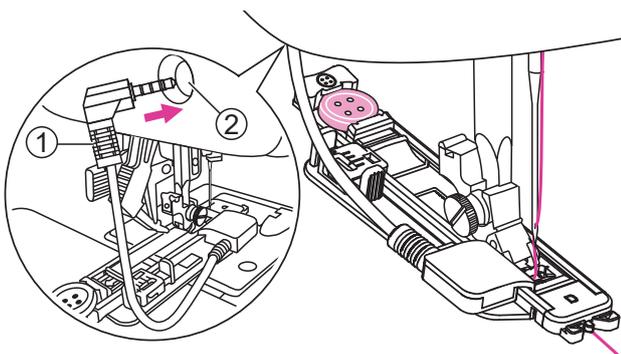
The buttonhole length may need to be increased for thick button, adjust the pointer toward to "+" for fine tuning.

① Thick button



The buttonhole length may need to be decreased for thin button, adjust the pointer toward to "-" for fine tuning.

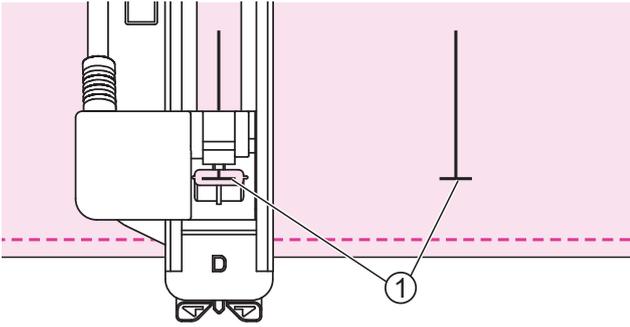
① Thin button



Attach the electronic buttonhole foot and plug the cord into the socket behind the face cover.

The upper thread should be passed through the hole of electronic buttonhole foot and bring the upper thread to the front of electronic buttonhole foot.

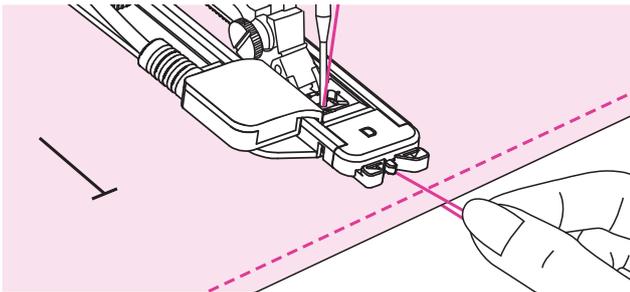
- ① Cord
- ② Socket



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.

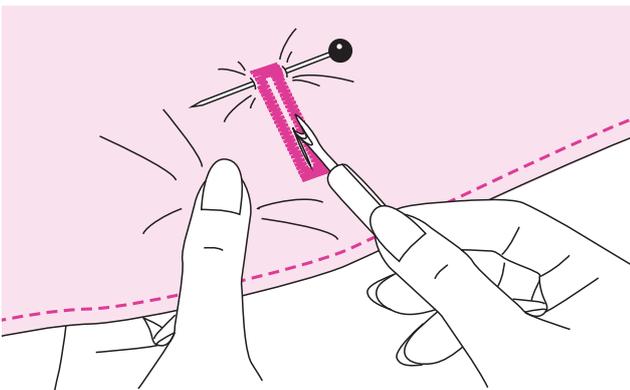


Slightly hold the end of the upper thread and start sewing. Pull two lines together.

**Note**

- Gently feed the fabric by hand.
- Before stopping, the machine will automatically sew a reinforcement stitch after the buttonhole is sewn.

When you finish sewing, raise the presser foot lifter and cut the thread. To sew over the same buttonhole, raise the presser foot lifter.

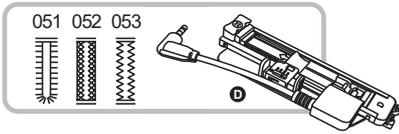


Use the seam ripper to cut the center of the buttonhole being careful not to cut any stitches on either side. Use a pin as a stopper at the bar tack so you do not cut too much.

**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

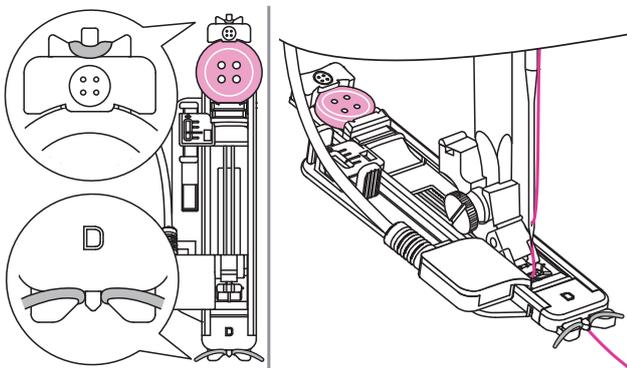


051: For light to medium weight woven fabrics

052: For stretch fabric

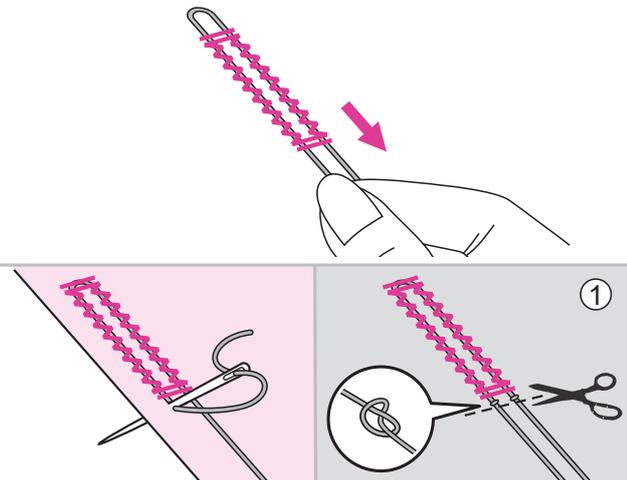
053: For stretch or woven fabric

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



Attach the electronic buttonhole foot and plug the cord into the socket above the presser foot bar. 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.



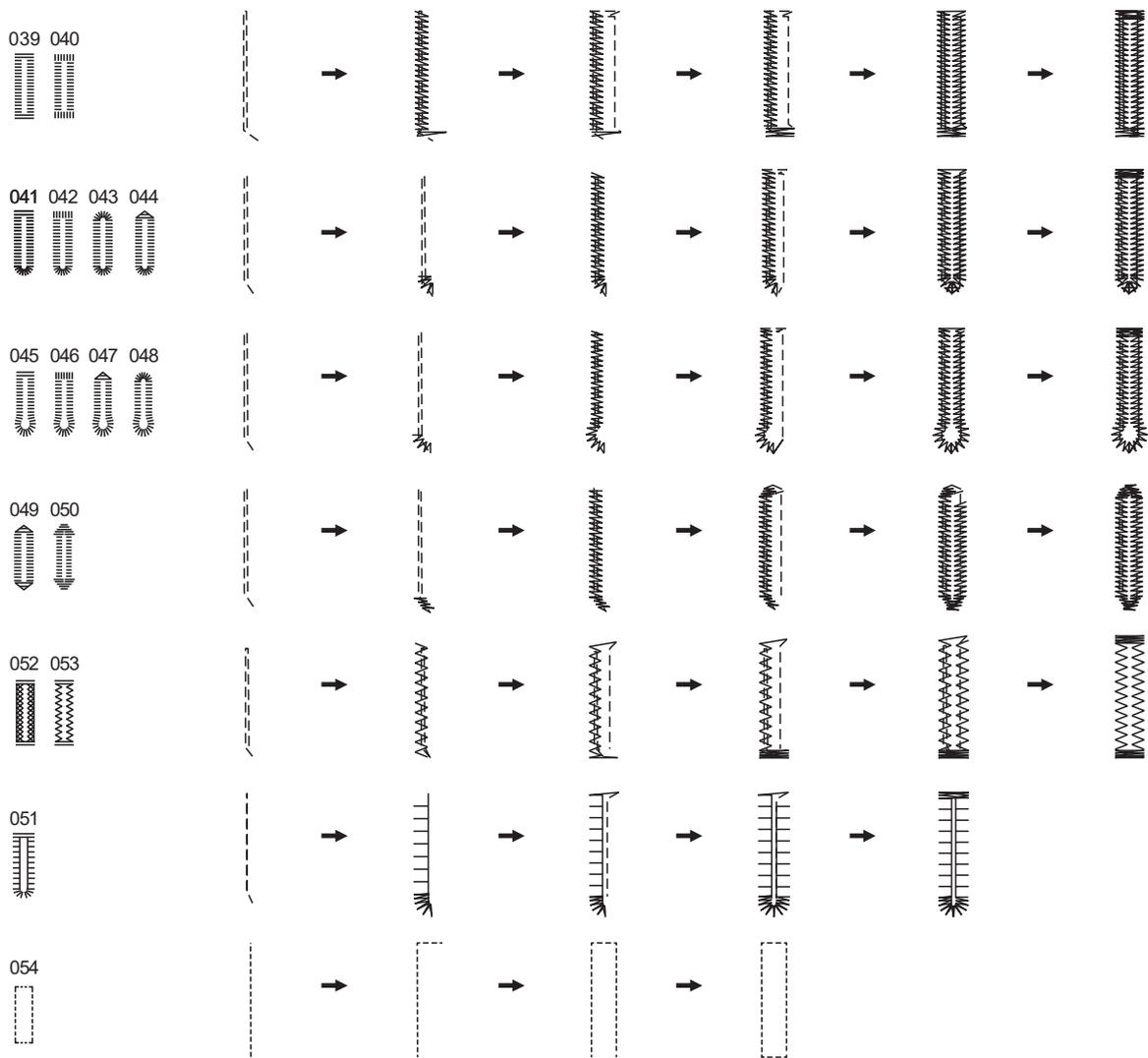
Once sewing is completed, pull the gimp thread gently to remove any slack. Cross the gimp in front of the needle and thread gimp ends into a large needle, pull to the wrong side and knot ends before cutting excess.

① Wrong side

### Note

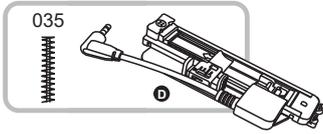
It is suggested that you sew with a stabiliser material under the fabric.

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

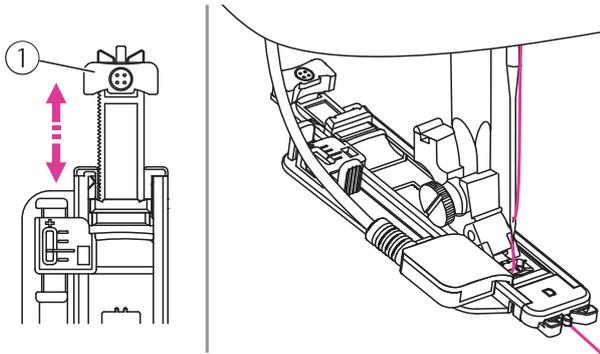


# Bar tack stitch

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



Using the electronic buttonhole foot.

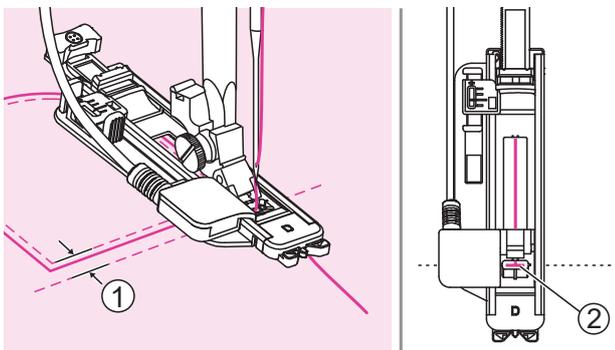


Extend the button holder plate and set to the desired length. Adjust the stitch width and the stitch length to the desired width and density.

## ① Button holder plate

Attach the electronic buttonhole foot and plug the cord into the socket above the presser foot bar.

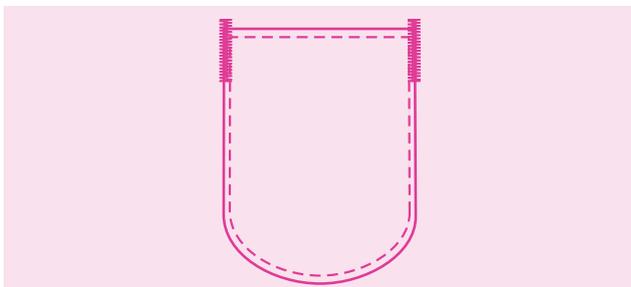
The upper thread should be passed through the hole of electronic buttonhole foot and bring the upper thread to the front of electronic buttonhole foot.



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

- ① 2mm
- ② Starting point

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



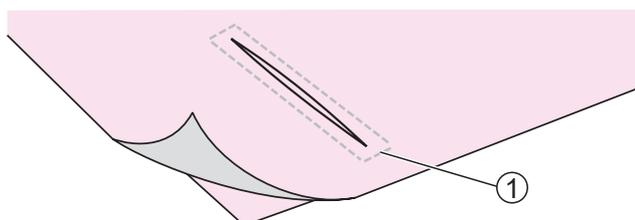
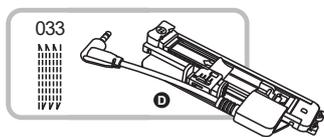
Bar tack stitches are sewn.

### Note

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

# Darning stitch

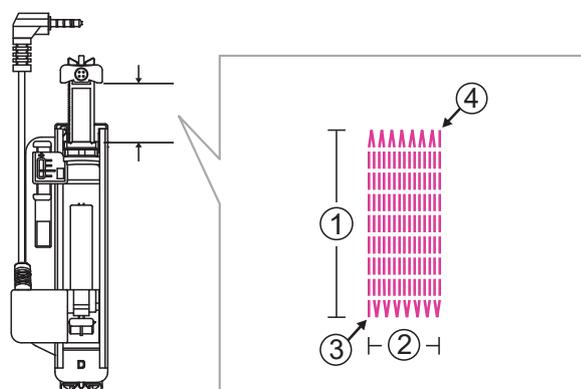
Darning a small hole or a tear before it becomes larger can save a garment. Choose a fine thread in a color as close to your garment as possible.



Using the electronic buttonhole foot.

Baste the upper fabric and the under fabric together.

① Basting



The size of one darn cycle is variable.

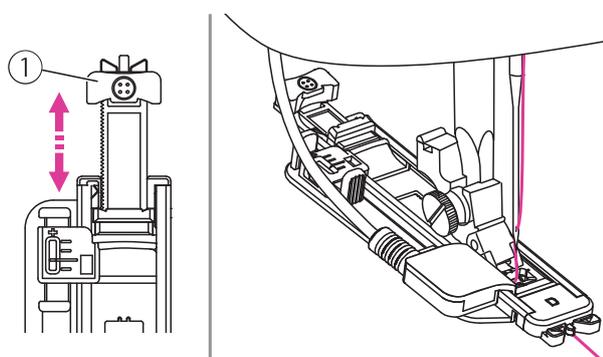
However, the maximum stitch length is 2.6cm and the maximum stitch width is 7mm.

① The length of sewing

② The width of sewing

③ Start

④ Stop

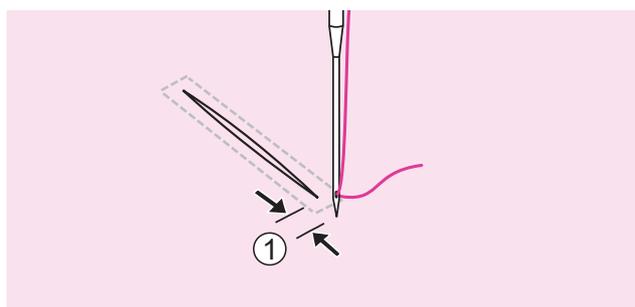


Extend the button holder plate and set to the desired length. Adjust the stitch width and the stitch length to the desired width and density.

① Button holder plate

Attach the electronic buttonhole foot and plug the cord into the socket above the presser foot bar.

The upper thread should be passed through the hole of electronic buttonhole foot and bring the upper thread to the front of electronic buttonhole foot.



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

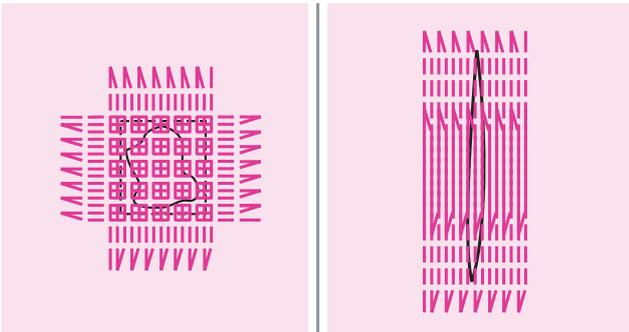
Slightly hold the end of the upper thread and start sewing.



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

**Note**

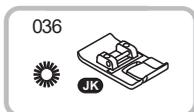
If the fabric does not feed, for example, because it is too thick, increase the stitch length.



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.

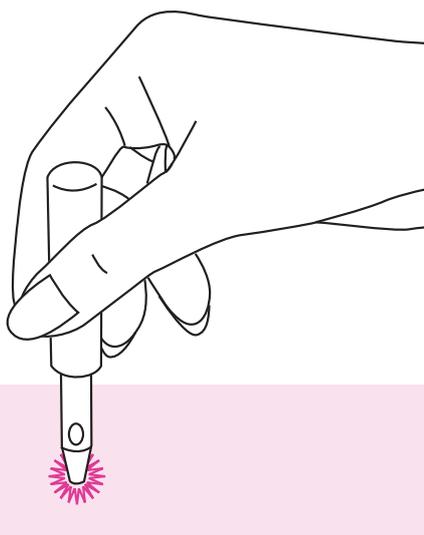


Using the satin stitch foot.

Press the "+" or "-" button to alter the size of the eyelet.

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.

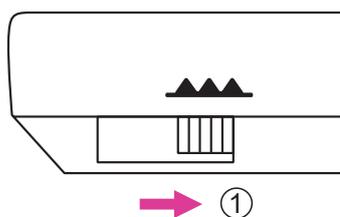
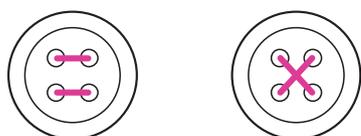
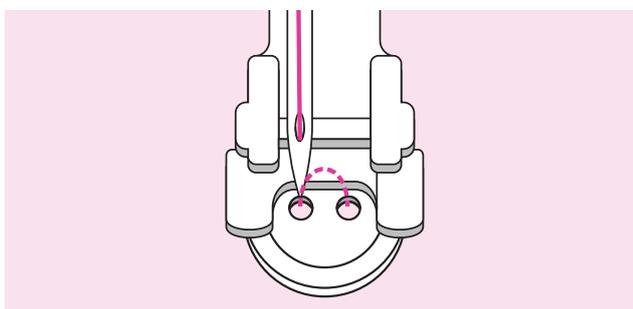
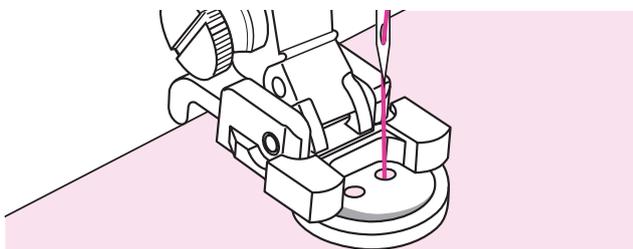
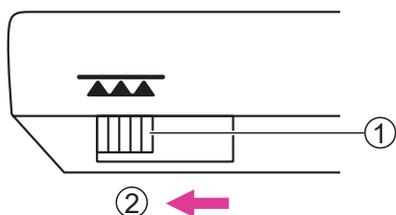
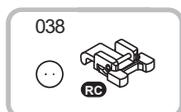
\* Eyelet punch is not included with the machine.

## 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 Drop feed lever
- ② 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

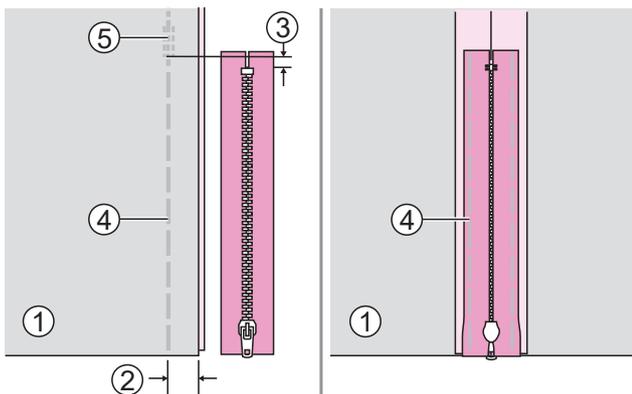
This foot can be set to sew on each side of the zipper, the edge of the foot guides the zipper to ensure straight placement.



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

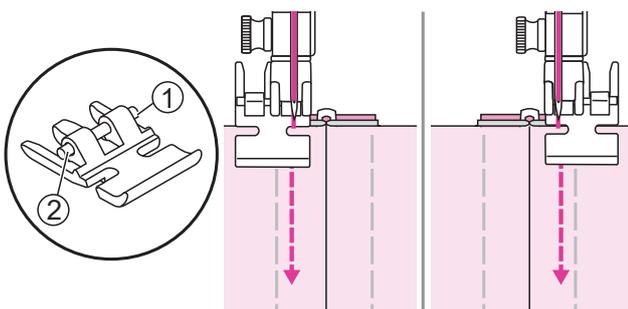


## Inserting a centered zipper

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.

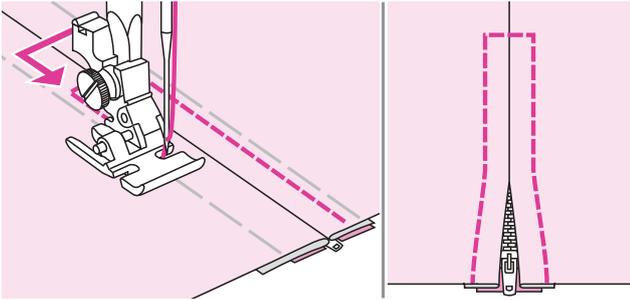
Press open the seam allowance. Place the zipper face down on the seam allowance with the teeth against the seam line. Baste the zipper tape in place.

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

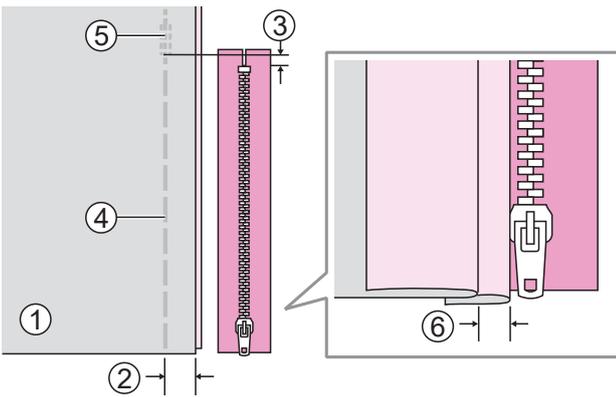


Attach the zipper foot.

- 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.

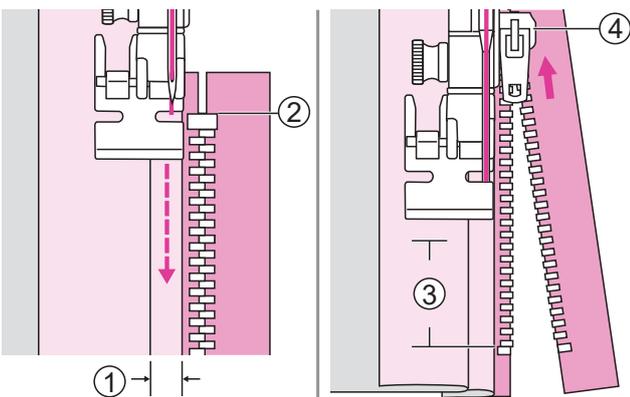


### Inserting a side zipper

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.

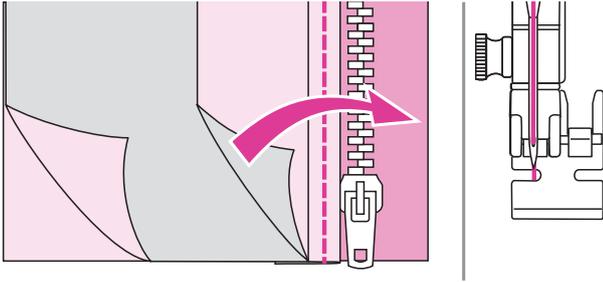
- ① Wrong side
- ② 2cm
- ③ 5mm
- ④ Basting
- ⑤ Reverse stitches
- ⑥ 3mm



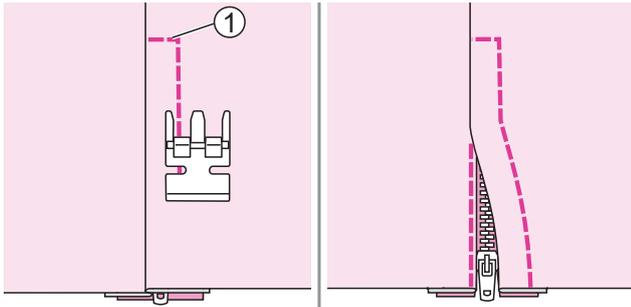
Attach the zipper foot. Attach the right pin for sewing the left side of the zipper. Sew the zipper to the piece of fabric with the extra 3mm, starting from the end of the zipper.

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.



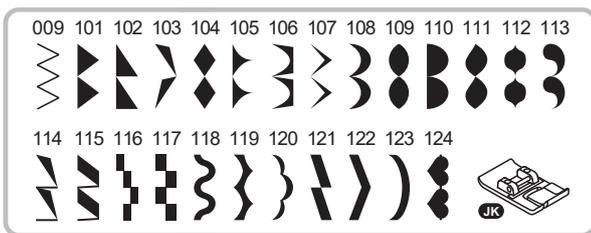
Stitch across the lower end and the right side of the zipper.

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

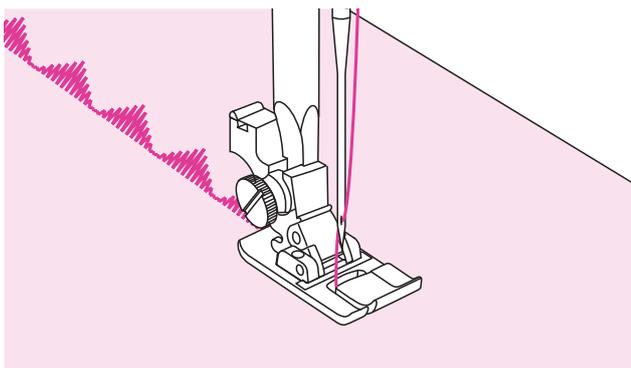
Use the satin stitch foot for satin stitching and sewing decorative stitches.



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.

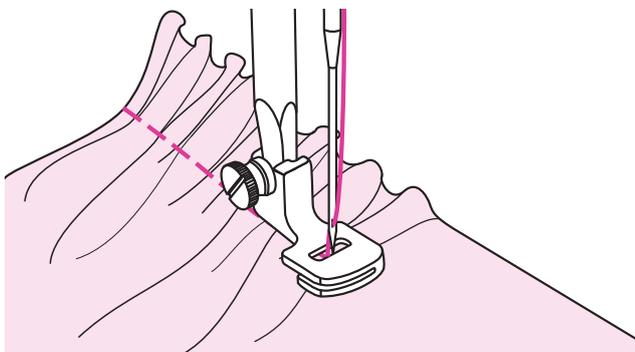


This foot has a groove on the underside which allows dense stitching to pass freely underneath.

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

# Gathering

The Gathering Foot is used for gathering fabrics. Ideal for clothing as well as home decor. It works best on thin to medium weight fabrics.



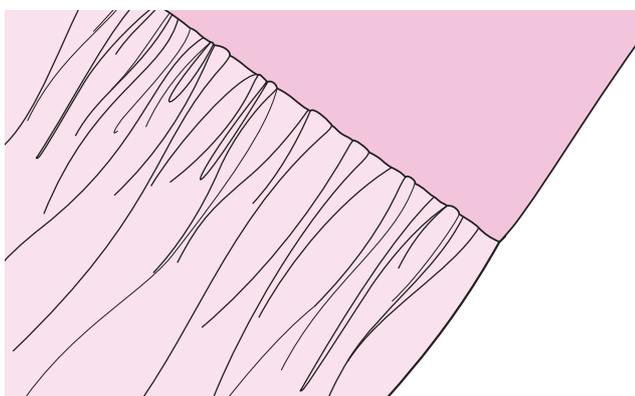
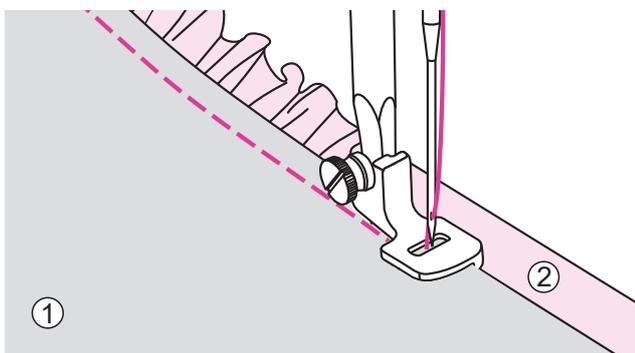
Using the gathering foot.

## Gathered fabric

Remove the presser foot holder and attach the gathering foot, set the tension below 2. Place fabric to be gathered under presser foot to the right of the presser foot.

Sew a row of stitching, keeping the raw edge of fabric aligned with the right edge of foot. The stitches automatically cause the fabric to gather.

Suitable for light to medium weight fabrics. If your fabric is light, such as batiste or lace, you will have more gathers.



## To gather and attach gathered fabric in one step

Look closely at the gathering foot to see a slot on the bottom. When using the slot, you can gather the bottom layer of the fabric while attaching it to a flat top layer, such as the waistband on a dress bodice.

Remove the presser foot holder and attach gathering foot. Place the fabric to be gathered with right side up under the foot. Place top layer of the fabric right side down in the slot. Guide the two layers as illustrated. Turn the top layer of fabric right side out.

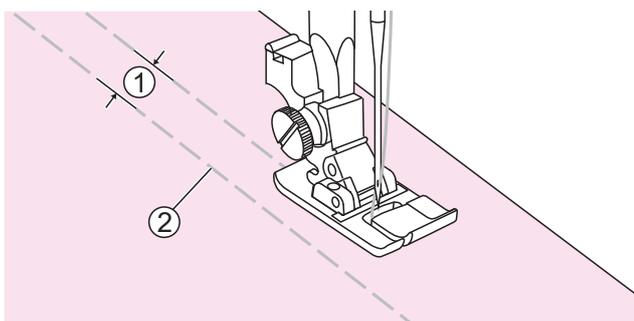
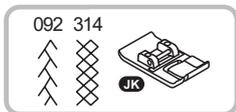
- ① Top layer of fabric (wrong side)
- ② Bottom layer of fabric (right side)

### Note

- Please use the same fabric of the project and do a sewing test in advance. When testing machine for adjustments to achieve desired fullness, work with 25cm of the fabric, trims or elastic. This makes it easier to determine the adjustments and how much change is needed for your project
- Sew slow to medium speed for better fabric control.

# Smocking

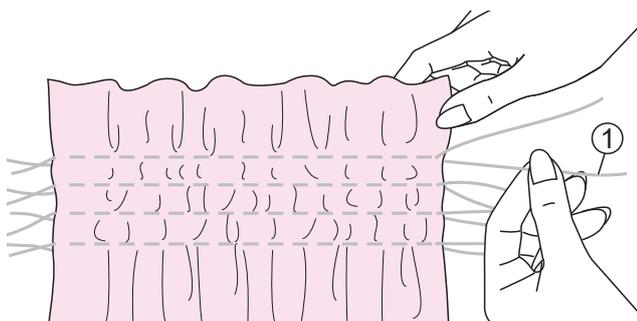
The decorative stitch created by stitching or embroidering over gathers is called "smocking". It is used to decorate the front of blouses or cuffs. The smocking stitch adds texture and elasticity to the fabric.



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.

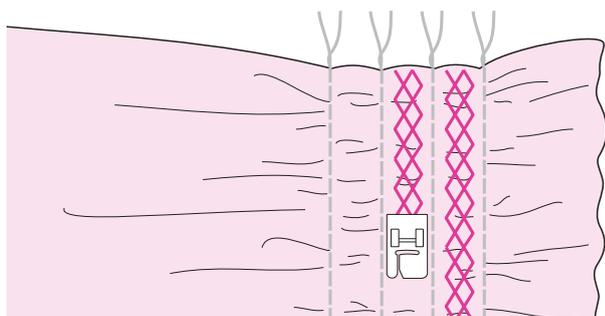
- ① 1cm
- ② Basting



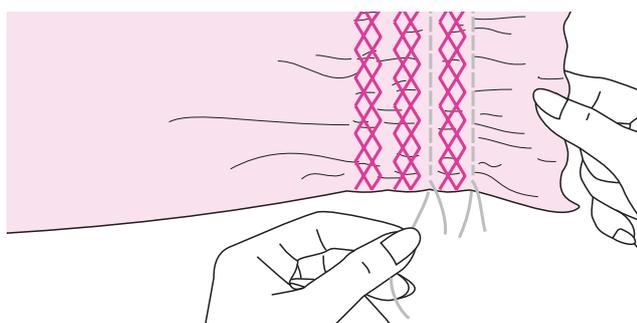
Knot the threads along one edge.

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

- ① Bobbin thread

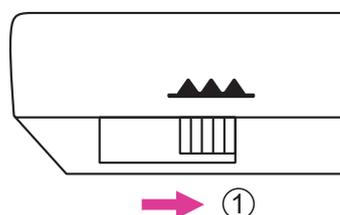
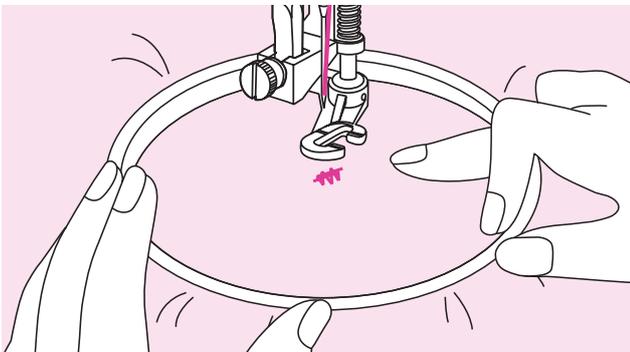
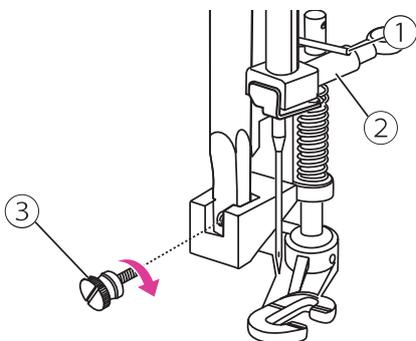
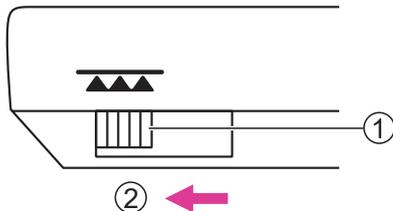
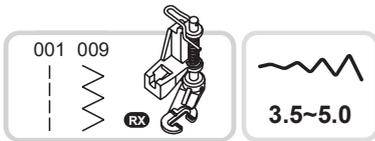


Reduce the tension if necessary and sew decorative stitches between the straight seams.



Pull out the basting.

# Free motion darning, embroidery and monogramming



## Preparation for embroidering and monogramming

\* Embroidery hoop is not included with the machine.

Using the darning/embroidery foot.

Move the drop feed lever to lower the feed dogs.

- ① Drop feed lever
- ② Lowered position

Remove the presser foot holder and attach the darning/embroidery foot. The lever should be behind the needle clamp screw. Press the darning/embroidery foot on firmly from behind with your index finger and tighten the screw.

- ① Lever
- ② Needle clamp screw
- ③ Screw

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.

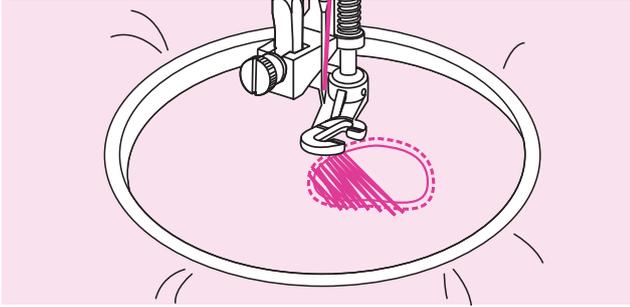
### ⚠ Attention

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



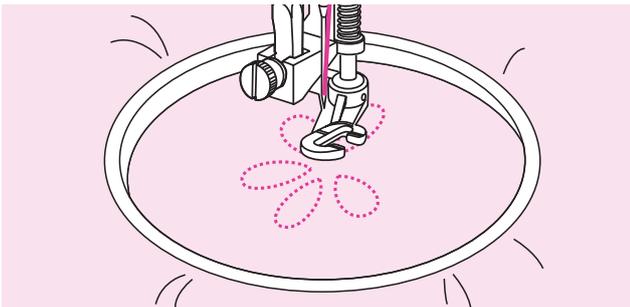
## Darning

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.

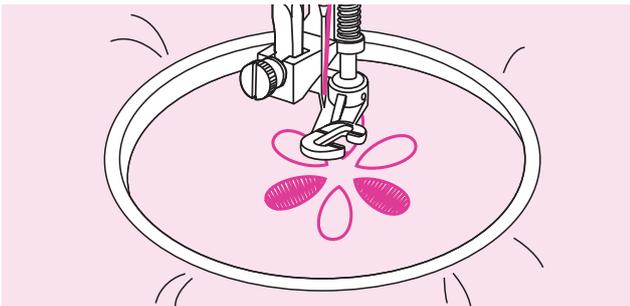
### Note

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

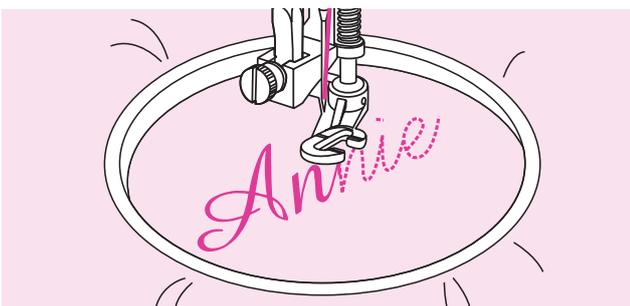
Stitch along the outline of the design by moving the embroidery hoop. When sewing, make sure to maintain a constant speed.



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.

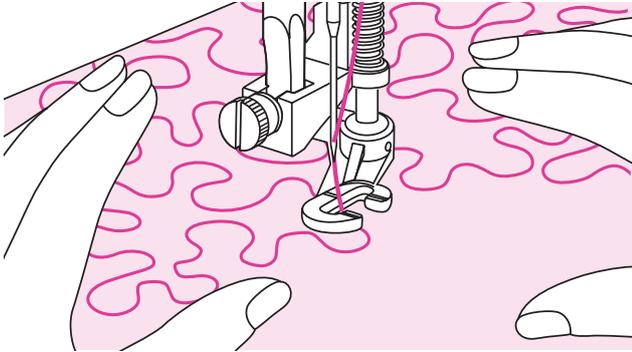
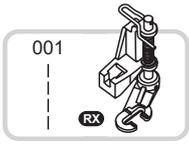
Secure with reinforcement stitches at the end of the design.



## 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.



Using the darning/embroidery foot.

### Free motion

Adjust the upper thread tension and the balance to the sewing project if necessary.

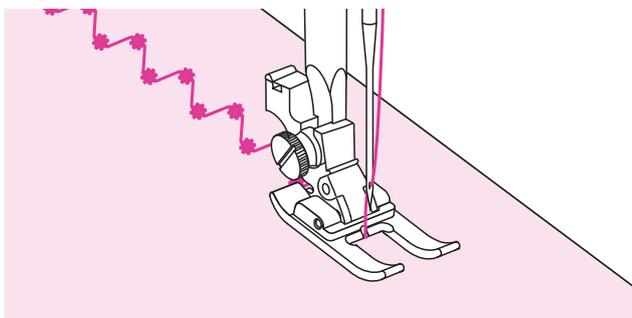
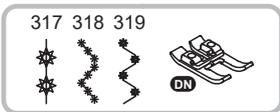
Slowly press down the foot control or press the start/stop button to start sewing.

Hold both hands close to the presser foot like an embroidery hoop to guide the fabric.

If the thread is lying on top of the fabric, slow down the movement. If there are knots on the wrong side of the fabric, move the fabric more quickly.

## Open toe foot

This foot makes quick work of appliqués and embroidery projects, as well as the sewing over of lines and patterns. The open shape ensures a clear view of the seam, and is therefore ideal for sewing on tapes and ribbon.

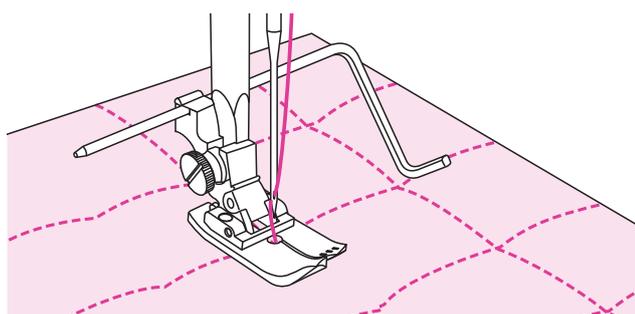
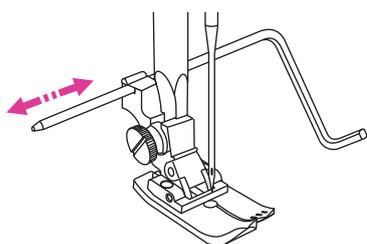
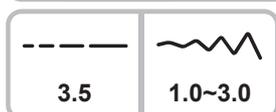
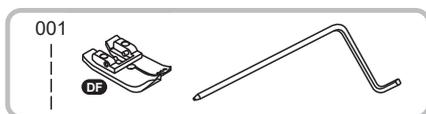


Using the Open toe foot.

Set the machine to the desired decorative stitch and begin to sew.

# 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 Quilting foot with edge/quilting guide.

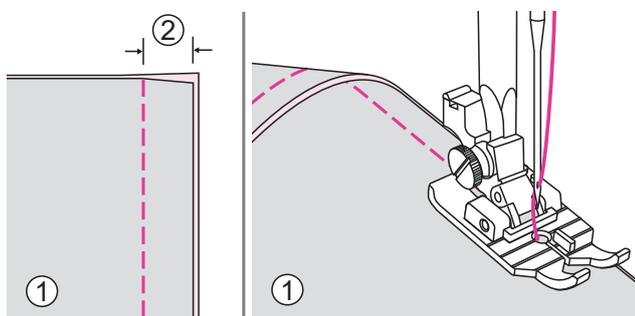
### △ Attention

Only center straight stitches are applicable while using quilting foot.

## 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.



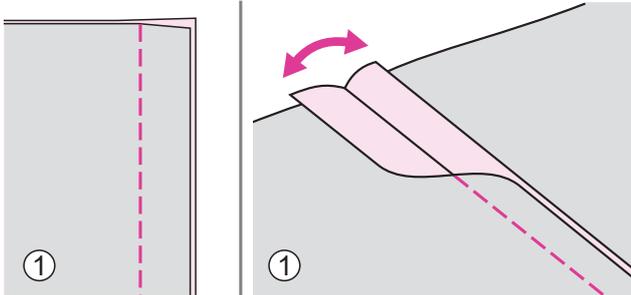
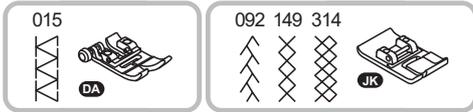
Using the 1/4" quilting foot

## Joining the pieces of the fabric

Use the right edge of the presser foot as a guide for a 1/4" seam. There are markings on the foot which serve as 1/4" and 1/8" pivot points, both in front and behind the needle.

Place fabric under the 1/4" quilting foot and lower the presser foot lever. Sew while keeping the fabric edge(s) lined up evenly with the right edge of the presser foot. To pivot, when the edge of the fabric reaches the foot's 1/4" turning mark (the first marking toward the front of the foot), leave the needle down in the fabric, pivot the fabric and continue sewing the next 1/4" seam.

- ① Wrong side
- ② 5mm



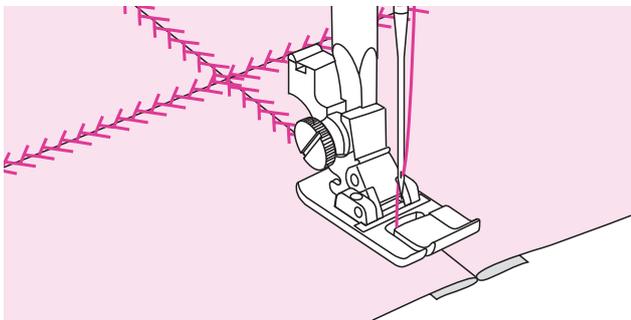
Using the all purpose foot or satin stitch foot.

### Patchwork stitching

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

Open the seam allowance and press it flat.

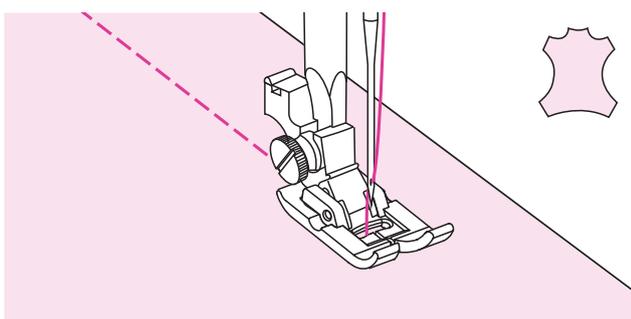
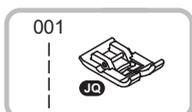
- ① Wrong side



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.

## Non-stick foot

Due to the special coating on the bottom of this foot, it's perfect for sewing hard-to-feed fabrics, like leather, foam, plastic, imitation leathers and plastic-coated fabrics, such as leather or vinyl.



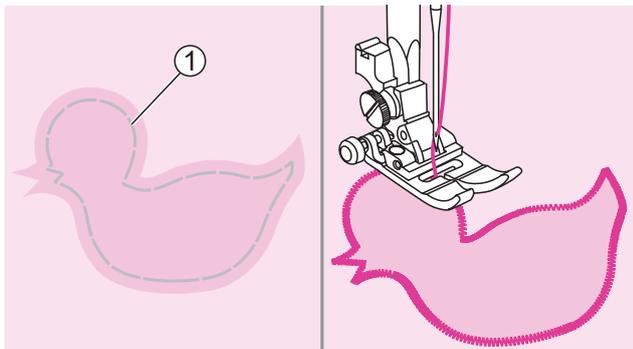
Using the non-stick foot.

Select desired stitch.

Sew slowly and guide the layers.

# 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.

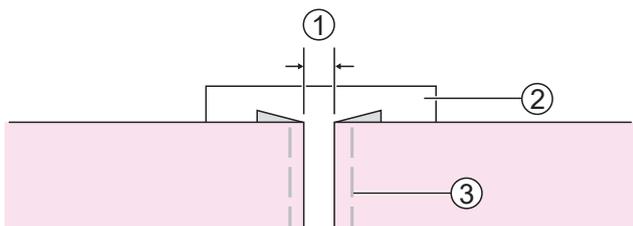
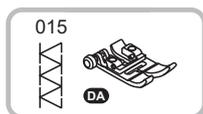
Cut out the applique design and baste it on the fabric. Sew slowly around the edge of the design.

## ① Basting

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

# Fagoting

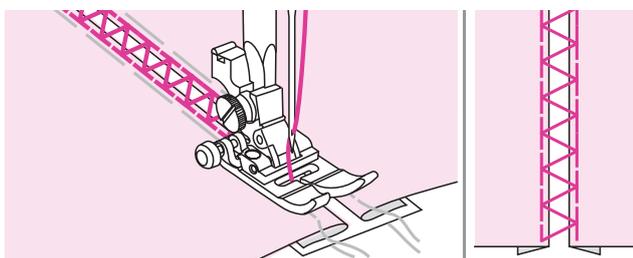
Stitching across an open seam is called "fagoting". It is used on blouses and children's clothing. This stitch is more decorative when thicker thread is used.



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

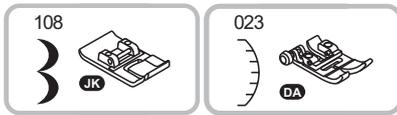


Align the center of the presser foot with the center of the two pieces of fabric and begin sewing.

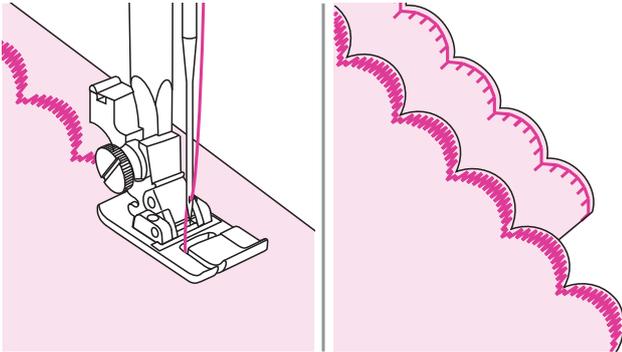
After sewing, remove the stabilizer and basting.

# Scallop stitch

The wave-shaped repeating stitch, 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.

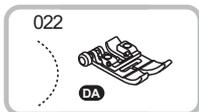


## Scallop edging

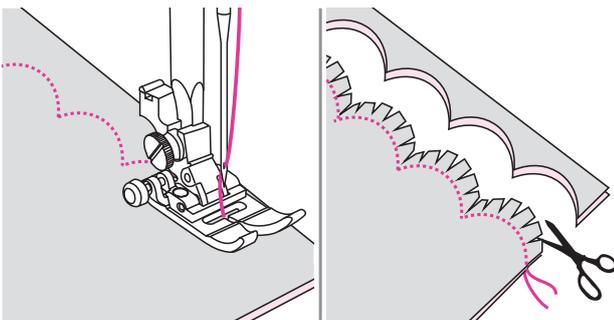
Stitch along the edge of the fabric, making sure not to sew directly on the edge of the fabric.

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.

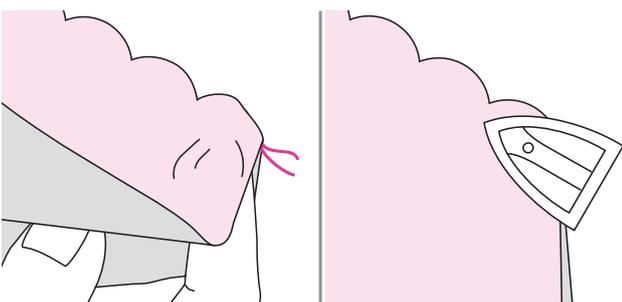


## Scallop hem

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.

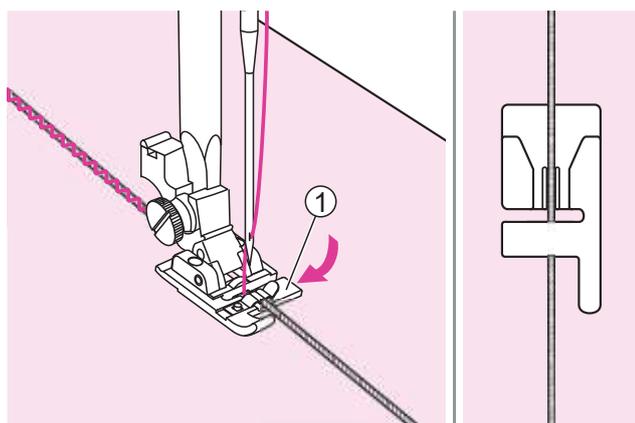
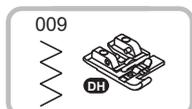
Notch the allowance.



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

# Cording

Used for embellishing 1 to 3 cords or decorative threads. Sew over one strand of cording to create a pretty swirled design on a jacket or vest or sew over three strands of cording for border trims. Pearl cotton, knitting yarn, embroidery floss, lace thread, fine wool or lily yarn can be used for cording.



Using the cording foot.

## Single cording

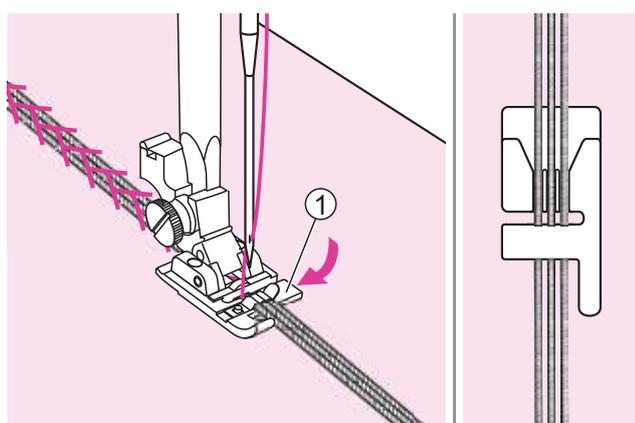
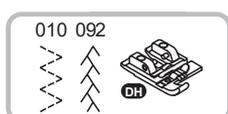
Mark the design on the fabric. Insert the cord in the center groove of the cording foot from the right side opening.

① Right side opening

Place the cord under the groove of the cording foot and pull the cord about 5cm behind the foot.

The grooves under the foot will hold the length of the cord in place while the stitches are being formed over the cord.

Select the stitch and adjust the stitch width so that the stitches are just covering the cord. Lower the presser foot lifter and sew slowly, guiding the cord over the design.



Using the cording foot.

## Striple cording

Mark the design on the fabric. Insert the cord in the center groove of the cording foot from the right side opening.

① Right side opening

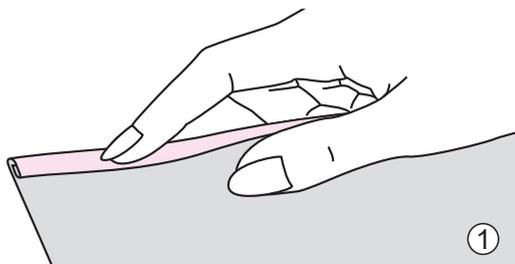
Place three cords under the grooves of the cording foot and pull the cord about 5cm behind the foot.

The grooves under the foot will hold the length of the cord in place while the stitches are being formed over the cord.

Select the stitch and adjust the stitch width so that the stitches are just covering the cord. Lower the presser foot lifter and sew slowly, guiding the cord over the design.

# Narrow hemming

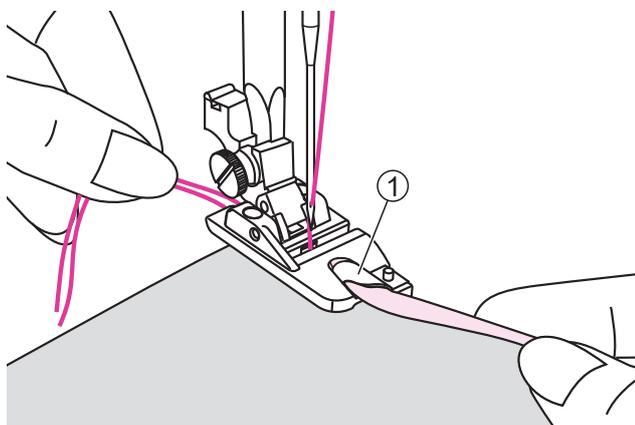
The hemmer foot is used to stitch the narrow rolled hems usually found on shirt tails, table linens and along the edge of frills.



Using the hemmer foot.

Fold edge of fabric over about 3mm, then fold it over again 3mm for about 5cm along the edge of the fabric.

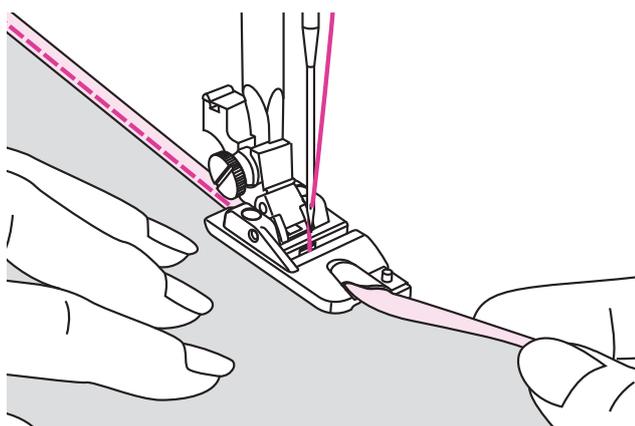
① Wrong side



Insert the needle into the fold by turning the handwheel toward you, and lower the presser foot lifter. Sew several stitches and raise the presser foot lifter.

Insert the fabric fold into the spiral opening of hemmer foot. Move fabric back and forth until the fold forms a scroll shape.

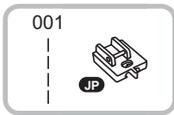
① Scroll shape of the hemmer foot



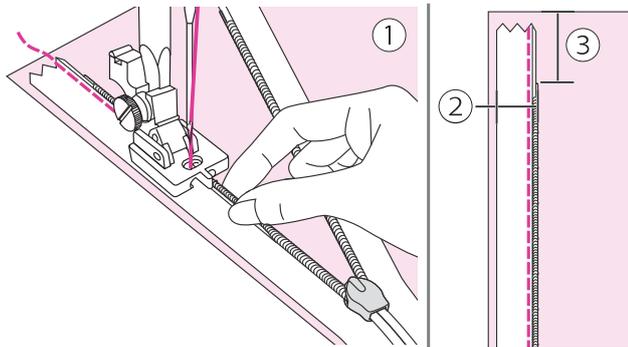
Lower the presser foot lifter and start sewing slowly guiding the raw edge of the fabric in front of the hemmer foot evenly into the scroll of the foot.

# Invisible zipper application

The invisible zipper foot provides an invisible closing on skirts, dresses and a variety of garments and accessories.

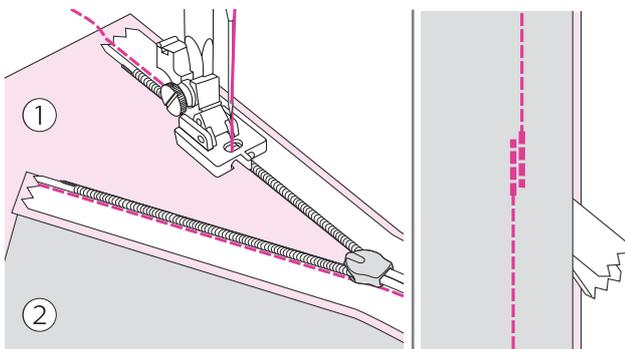


Using the invisible zipper foot.



Attach the invisible zipper foot to the machine, with the needle lined up with center mark. Place open zipper face-down on right side of fabric as shown. Pin in place with coil on seam line (1.6 cm) and top stop 1.9 cm below raw edge of garment. With right-hand groove of foot over coil, stitch zipper until the foot hits the slider (remove pins as you come to them.) Back-tack.

- ① Right side
- ② 1.6cm
- ③ 1.9cm



To attach the other half of the zipper, pin tape face-down with coil on seam line (1.6 cm) and top stop 1.9 cm below raw edge of garment, as before. Make sure that the zipper is not twisted at the bottom. Use the left-hand groove of foot, making sure that the center marking is still lined up with the needle and stitch, as before.

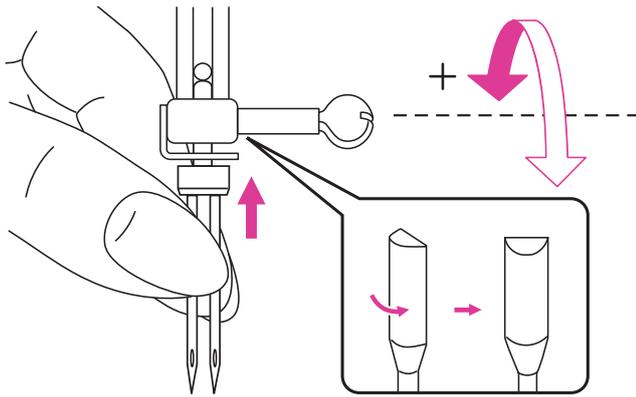
Close zipper. Slide zipper foot to the left so that needle is in the outer notch. Pin the seam together below zipper opening. Fold end of zipper out of the way and lower the needle by hand slightly above and to the left of the last stitch.

Stitch seam for about 5 cm, as shown. Pull thread through to one side and tie. Change to regular presser foot and complete the seam.

At zipper end, stitch about 2.5 cm of each zipper tape to seam allowance only.

- ① Right side
- ② Wrong side

# Twin needle



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

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



Set the second spool pin into the hole on the top of the machine and put spool pin felt and thread onto second spool holder.

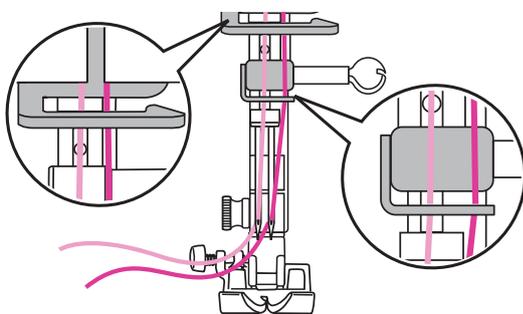
Threading twin needle is the same instruction as single needle. Please refer to "Threading the upper thread" chapter for more information.



## ⚠ Attention

The thread from horizontal spool holder must through from left side of the guide plate and the second spool holder thread pass through from right side of the guide plate.

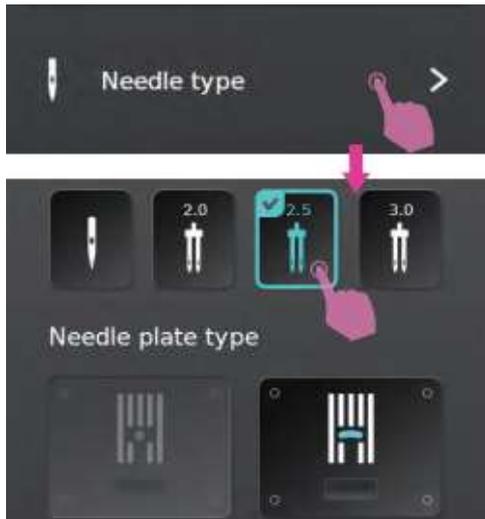
① Twin needle thread guide plate



As shown in the picture, pull the thread from the horizontal spool holder pass through left needle hole manually and thread from the second spool holder pass through right needle hole.

## Note

- Twin needle can not use automatic needle threader.
- Make sure that the two threads used to thread the twin needle are of the same weight. You can use one or two colors.

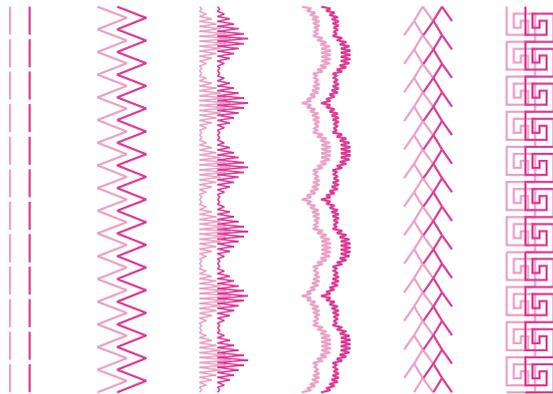


## Twin needle setting

Enter the needle type setting page, select the twin needle size to use. The machine automatically reduces the maximum width for the twin needle sewing.

### ⚠ Attention

- Be sure to set the twin needle mode when using the twin needle. Using the twin needle in the single needle mode may cause the needle to break, resulting in damage.
- If you use the straight needle plate after setting the twin needle, a warning message will pop up in the screen, and the machine will automatically set to the single needle mode, and please replace the single needle, otherwise it will cause the needle to break and cause danger.



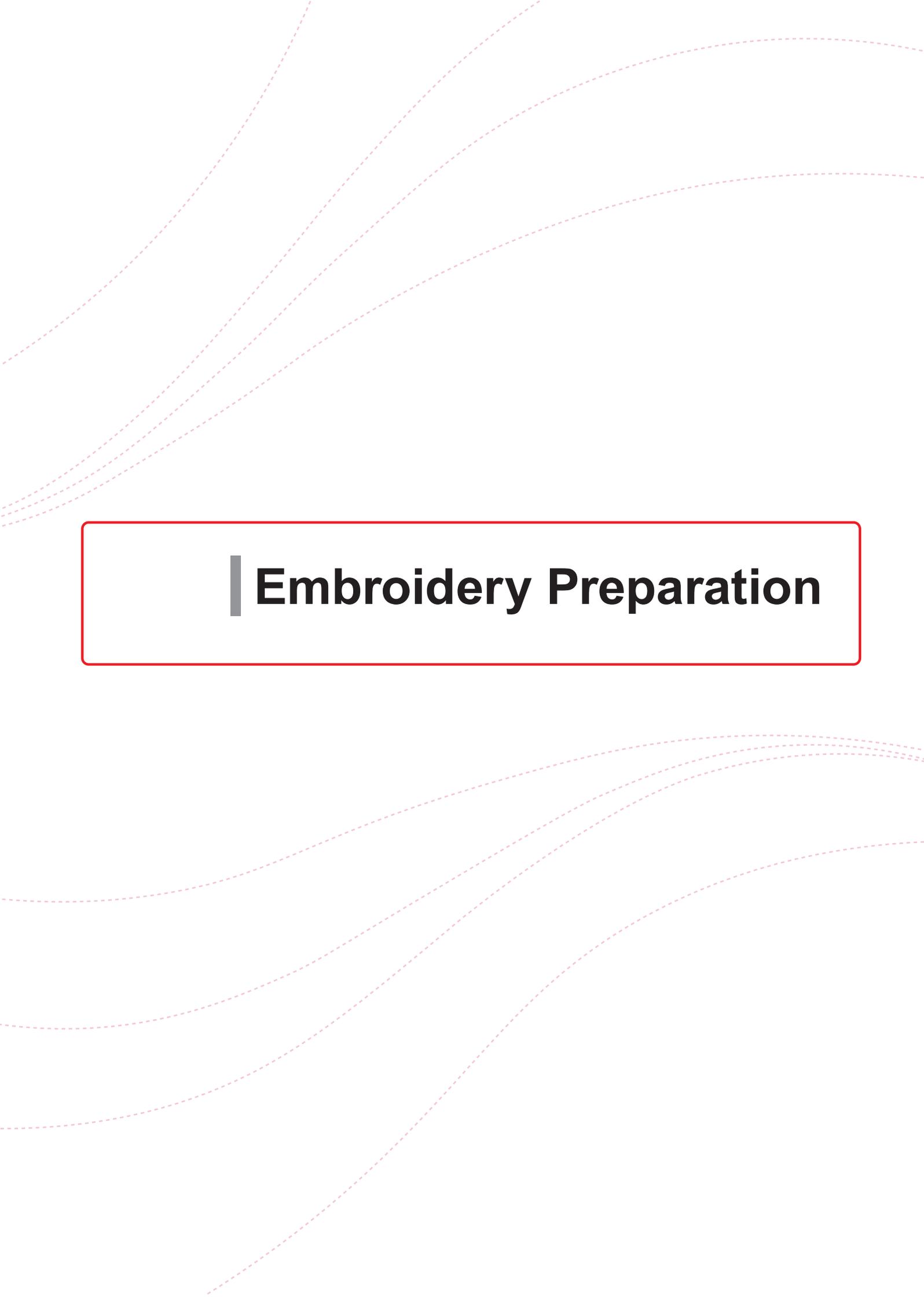
Two lines of stitching are sewn parallel to each other.

### Note

- When sewing with twin needle, always proceed slowly, and make sure to maintain a low speed to insure quality stitching.
- When twin needle sewing has been selected, it will remain active even the stitch is changed.

### ⚠ Attention

After finishing sewing, please remember to change from twin needle to single needle and go to setting page to select the single needle mode.



# **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

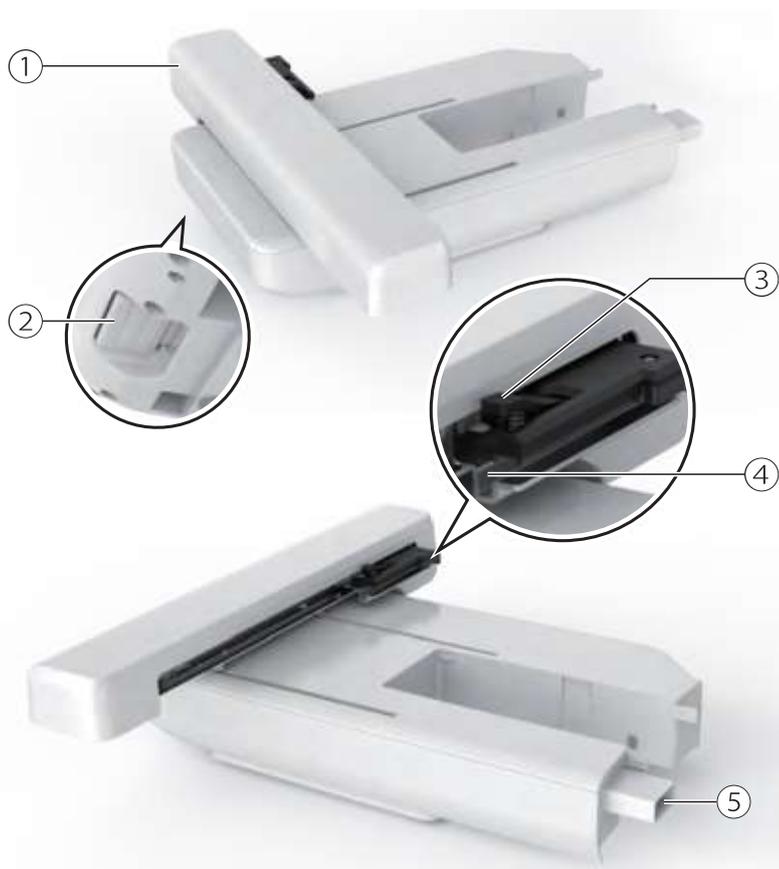
Water soluble stabilizer looks like plastic wrap. When you finish embroidery design, simply submerge project in warm water to dissolve stabilizer. Water soluble stabilizer helps keep the stitches from disappearing in high-pile fabrics (such as towels or fluffy cotton).

- 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.

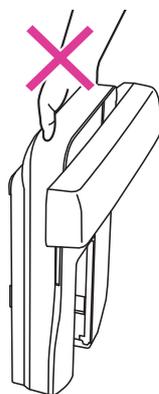
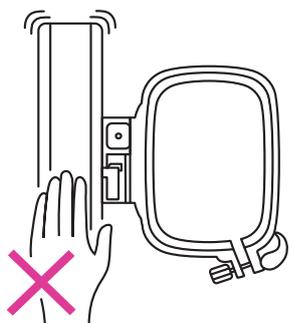
Application:

- 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



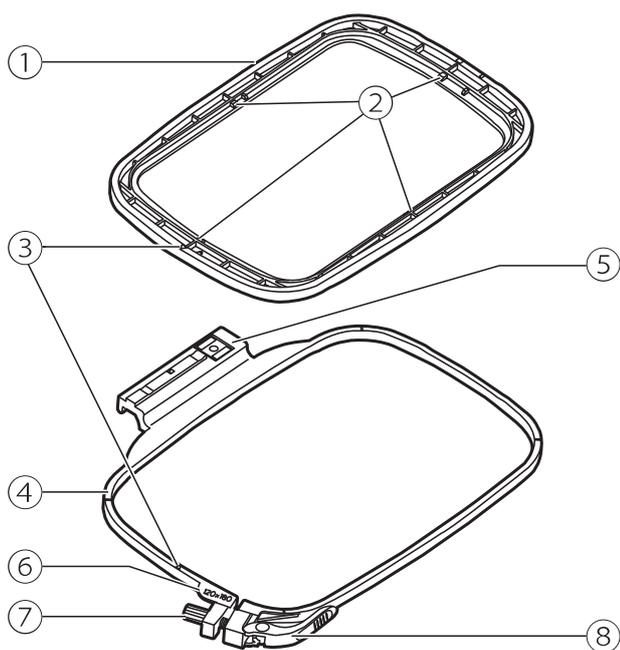
## Note

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



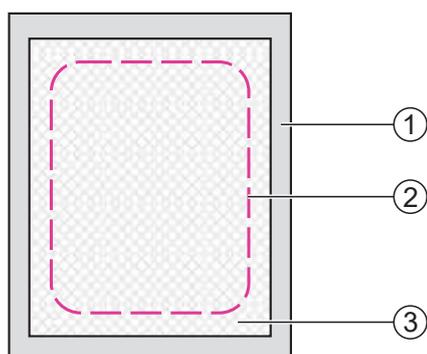
- ① Inner hoop
- ② Center marks
- ③ Triangular mark
- ④ Outer hoop
- ⑤ Embroidery hoop connector
- ⑥ Hoop size marks
- ⑦ Fastening screw
- ⑧ Quick release device

# Preparing the embroidery hoop

## Attaching a stabilizer to the fabric

### ⚠ Attention

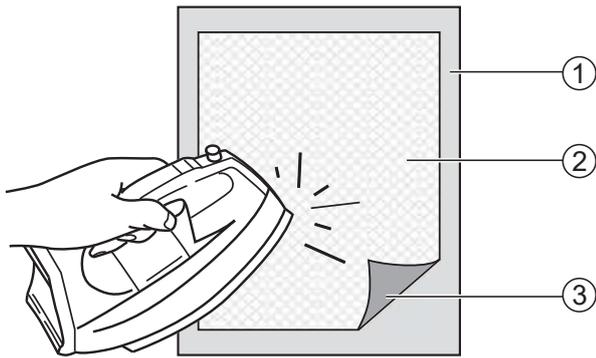
Always use stabilizer material when embroidering. The needle may break or bend without using stabilizer material for thin fabrics or stretch fabrics in embroidering works. Furthermore, the pattern may not be sewn perfectly.



**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

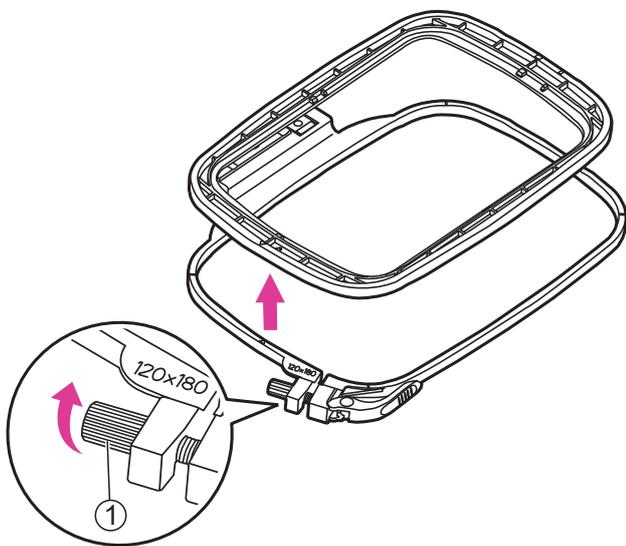
### ⚠ Attention

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

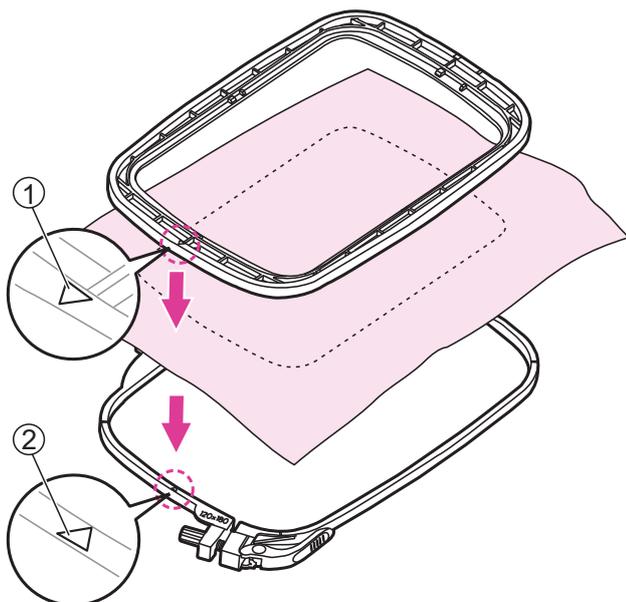


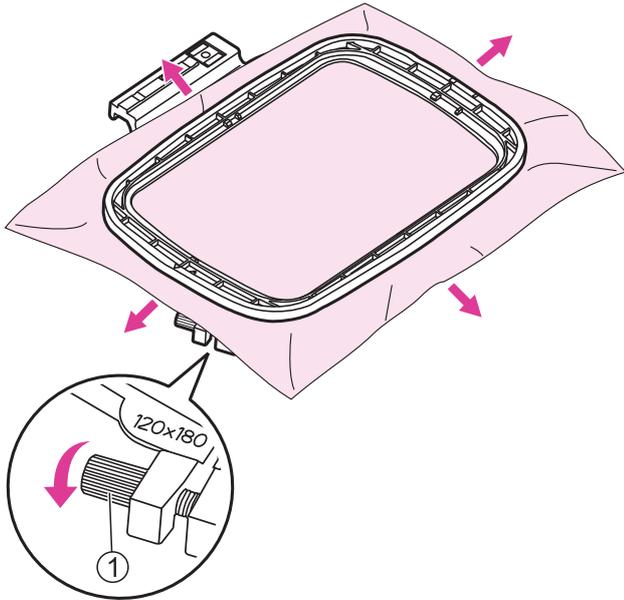
Place the outer hoop on a sturdy flat space.

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.

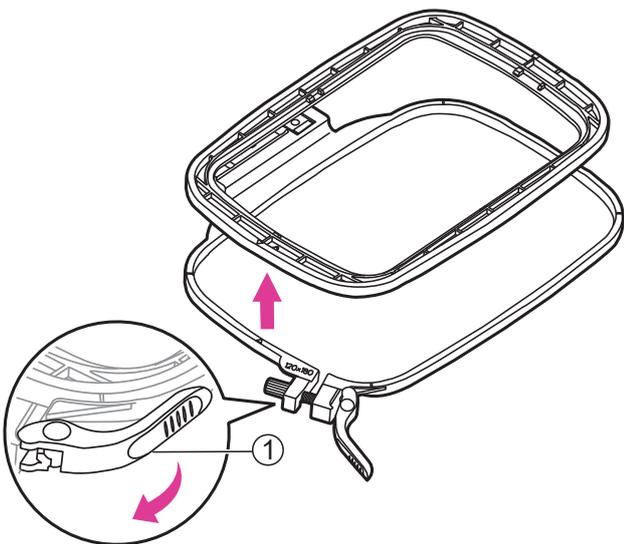
When the fabric and inner hoop are completely fit into the outer hoop, pull the fabric from the four sides marked with the arrows so that the fabric is stretched drum-tight in the hoop, and then press the inner hoop downwards so that it sinks into the outer hoop a little and tighten the fastening screw.

① Fastening screw

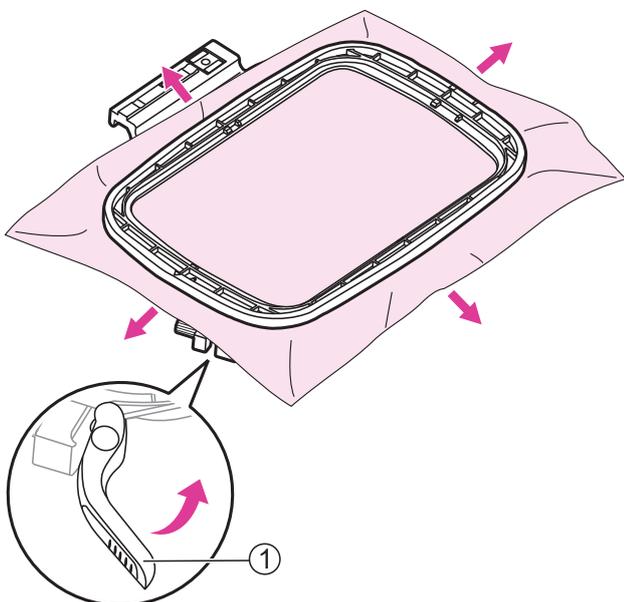
### Use the quick release device

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

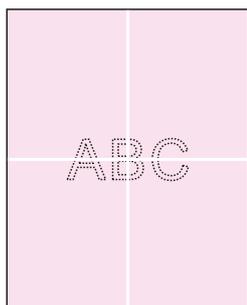
Separate the inner hoop and outer hoop.



① Quick release device



Place the inner hoop on the fabric and press firmly until them 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.



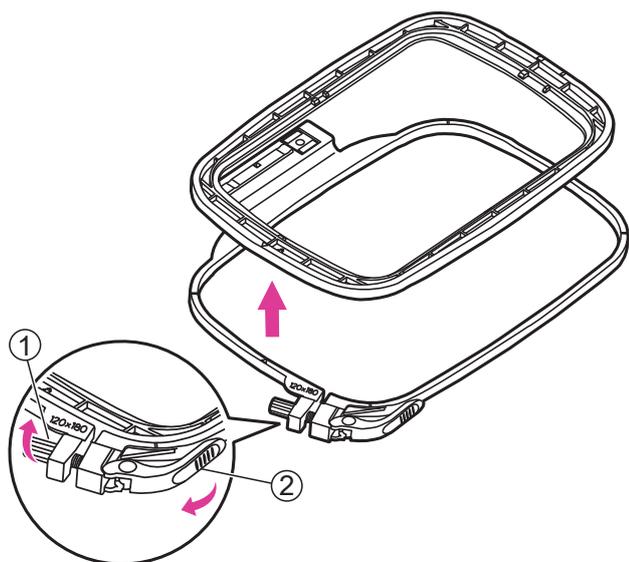
## Using embroidery sheet

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).

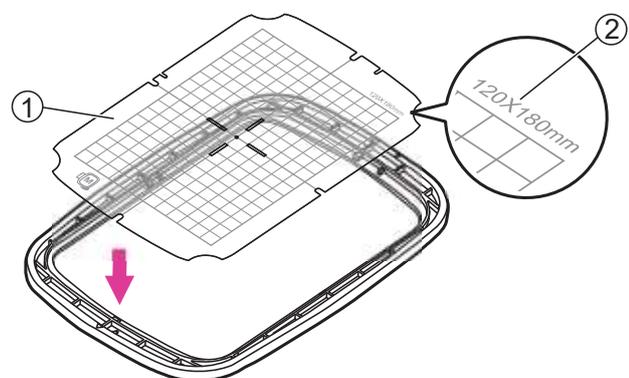
Separate the inner hoop and outer hoop.

- 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.

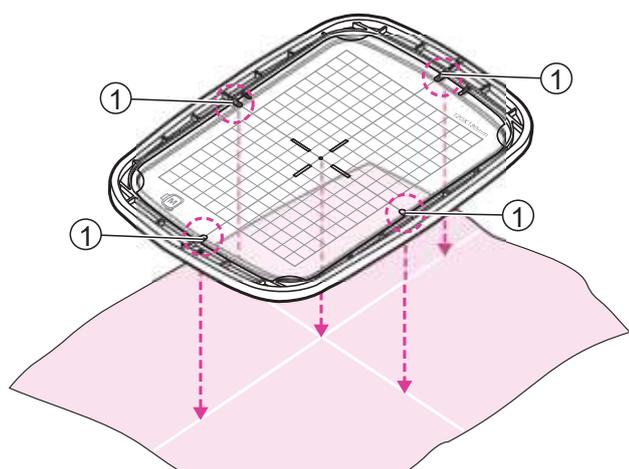
- ① Embroidery sheet
- ② Hoop size

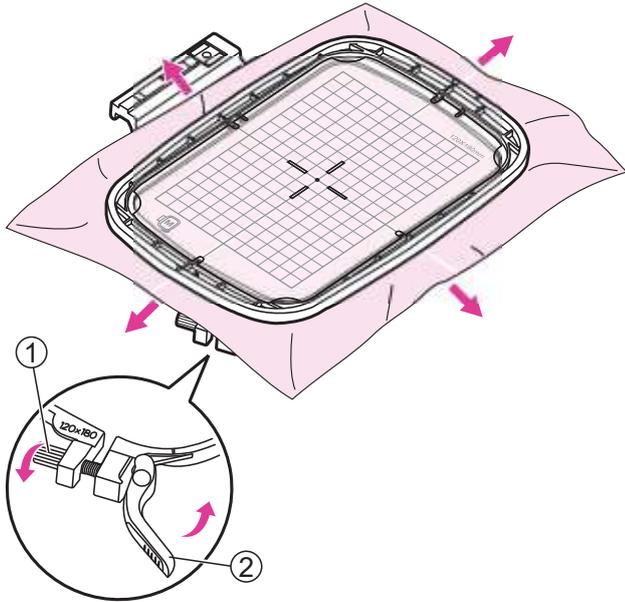


Line the mark on the fabric up with the base line on the embroidery sheet.

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

- ① Center marks

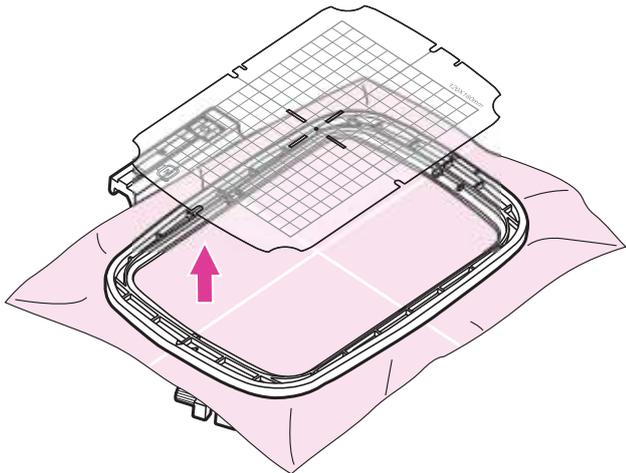




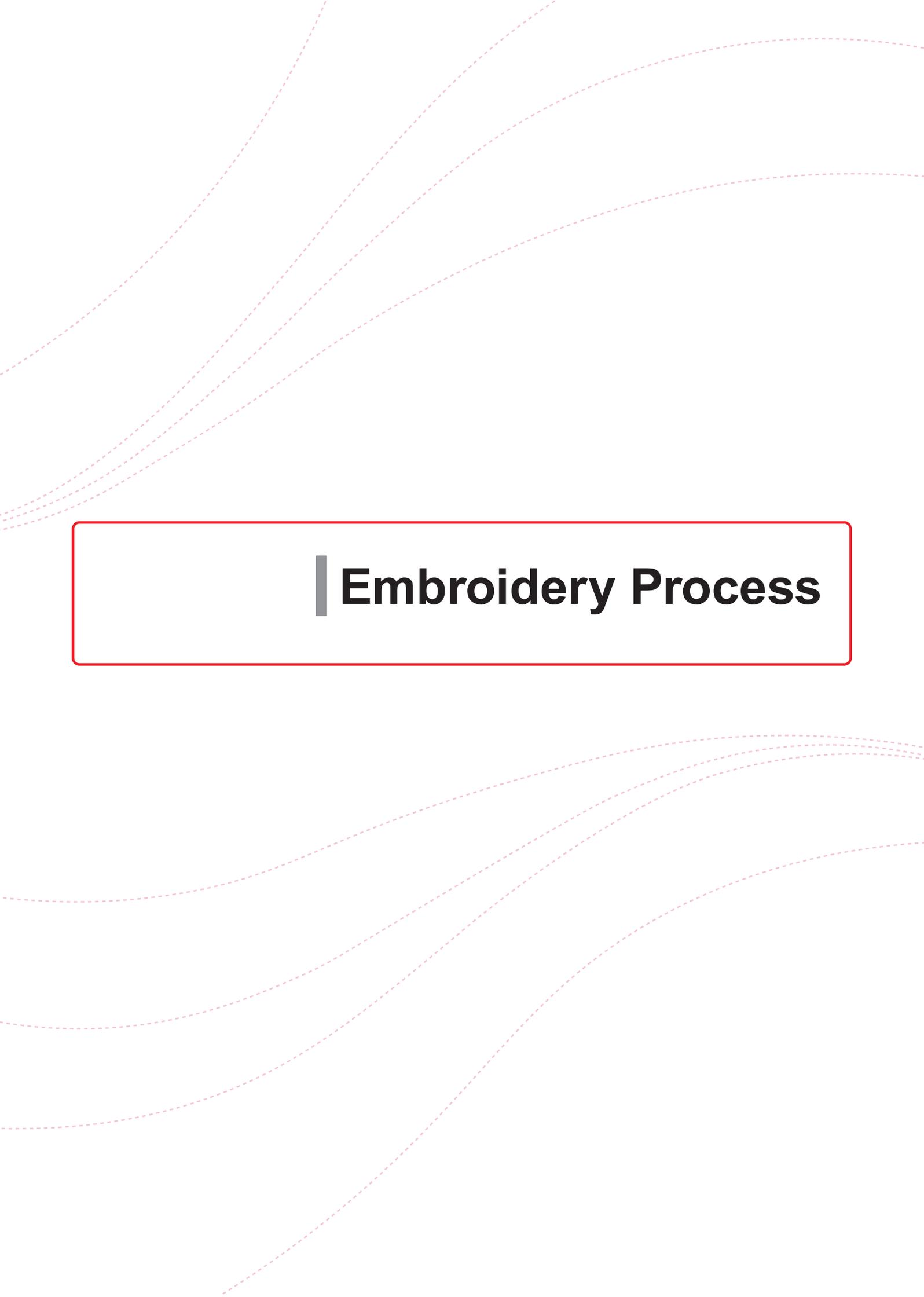
Place the inner hoop on the fabric and press firmly until they are securely fit to outer hoop perfectly. If the inner hoop cannot fit properly, loosen the outer hoop's fastening screw and adjust until fitted.

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.

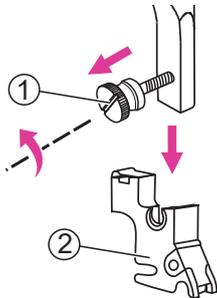


# **Embroidery Process**

# Preparation for embroidery

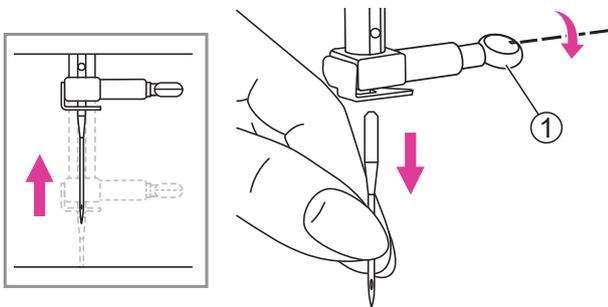


Turn the power switch to off ("O"). Raise the presser foot lifter.



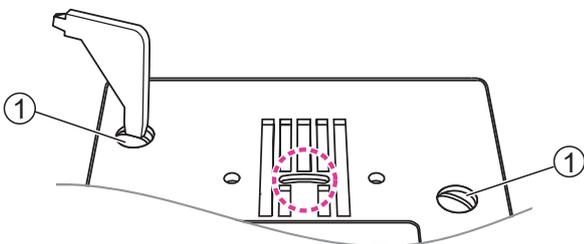
Loosen the screw counter-clockwise to remove the presser foot holder.

- ① Screw
- ② Presser foot holder



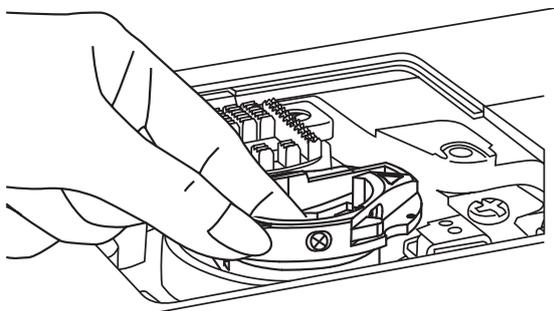
Turn the handwheel toward you to raise the needle then loosen the needle clamp screw to remove the needle.

- ① Needle clamp screw

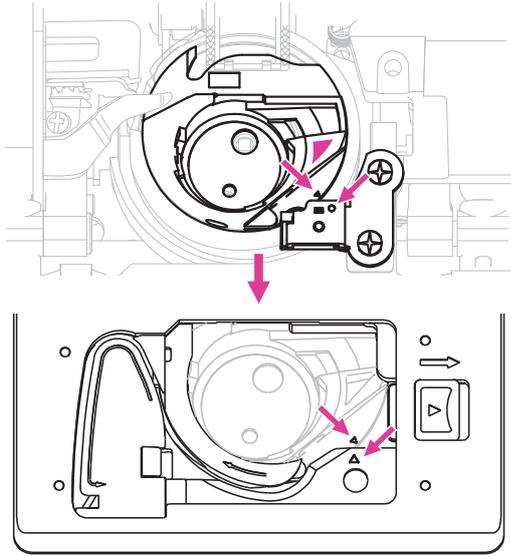


Remove the screws on the needle plate then remove the needle plate.

- ① Screws

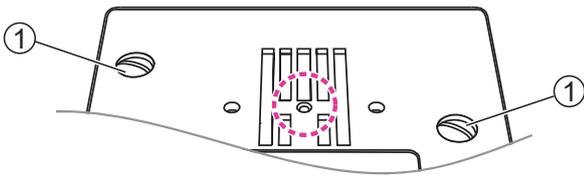


Remove the standard bobbin case.



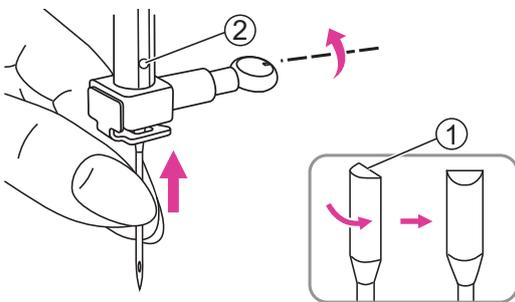
To achieve optimum embroidery results, use the high thread tension bobbin case.

Make sure that the markings of the bobbin case and the stitch plate are aligned identically.



Change the straight stitch plate and tighten the screws.

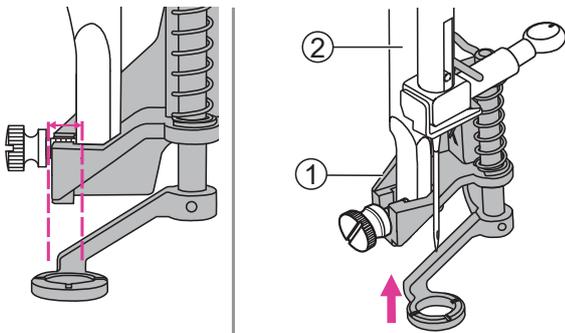
- ① Screws



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.

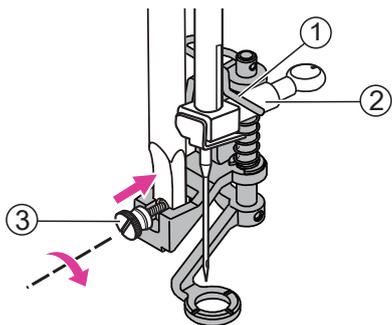
- ① Flat side of the shaft
- ② Pin



Make the embroidery foot lever upwards.

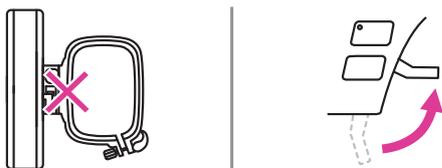
Tilt the embroidery foot and insert it from left to right so that the notch fits into the presser foot bar, and then push the embroidery foot upwards until it is aligned with the screw.

- 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.



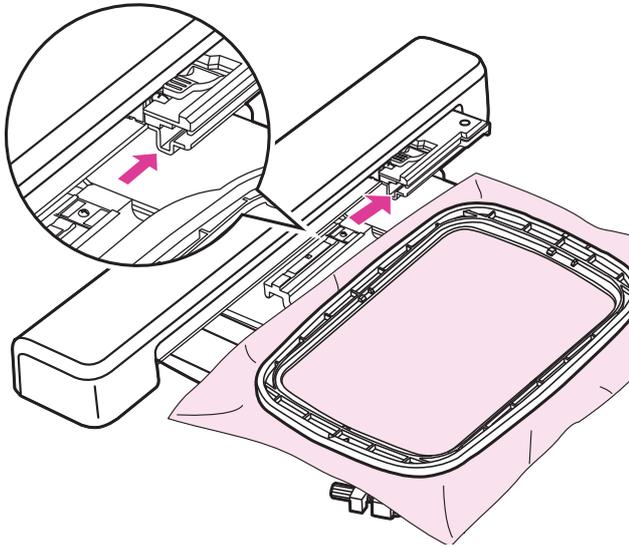
Slide the embroidery unit onto the machine arm. Push lightly until the unit clicks into place.

#### ⚠ 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.



## △ Attention

Install or remove the embroidery hoop, please make sure the needle and presser foot are the highest position, so that can put in & take out smoothly. Otherwise may damage the needle and presser foot.

The embroidery hoop has three built-in sizes which are 160x260mm, 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 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.

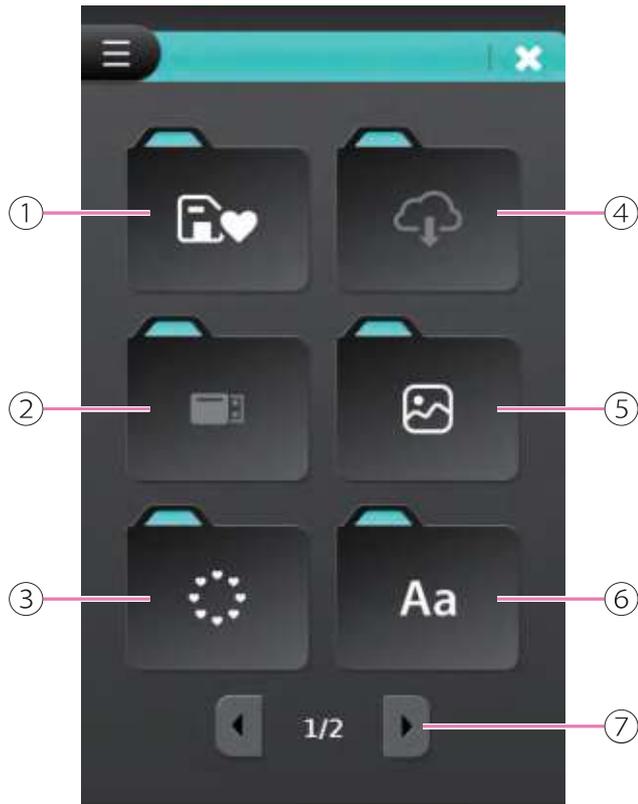
## Note

- Please raise the presser foot 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 on the power and enter embroidery mode.

- ① Personal embroidery patterns
- ② USB flash drive
- ③ Frame
- ④ Cloud file
- ⑤ Built-in embroidery pattern
- ⑥ Text
- ⑦ Page switching
- ⑧ Monogram
- ⑨ Return to the previous page
- ⑩ Go to edit page





## Built-in embroidery pattern

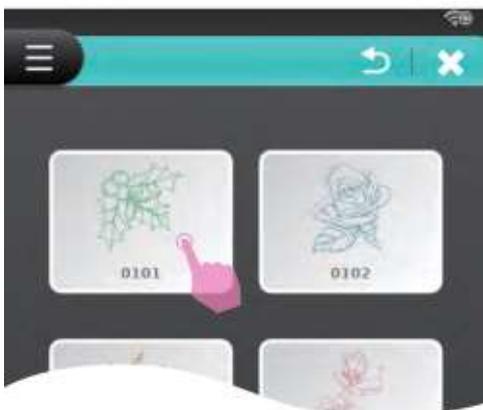
Click Built-in embroidery pattern icon and enter the category page.

- ① Built-in embroidery pattern



There are multiple groups of built-in embroidery pattern, click Page switching icon to review the category and select the desired pattern.

- ① Select the pattern
- ② Page switching



Select the desired pattern to enter editing page.

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

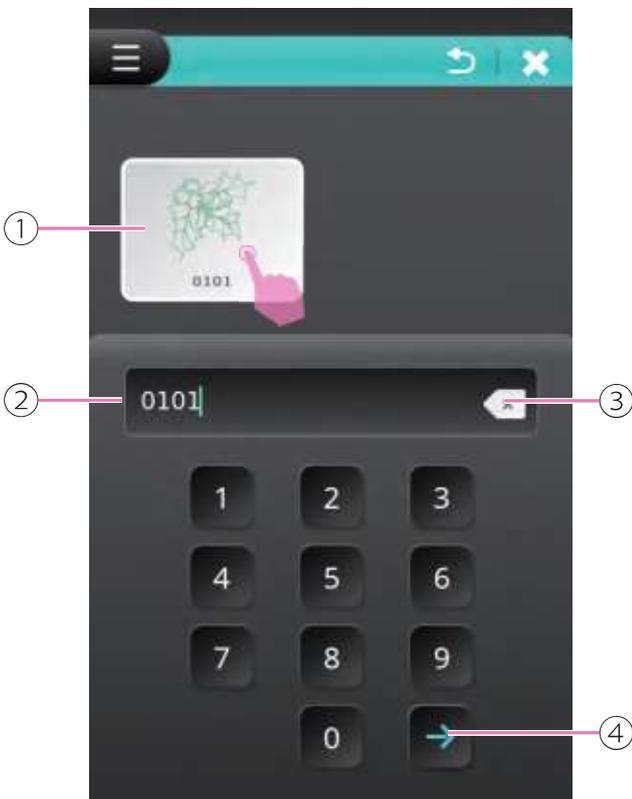


Click Search icon to enter quick pattern search page.

Click Return icon to the previous page.

Click Close icon to go to edit page.

- ① Search
- ② Return
- ③ Close



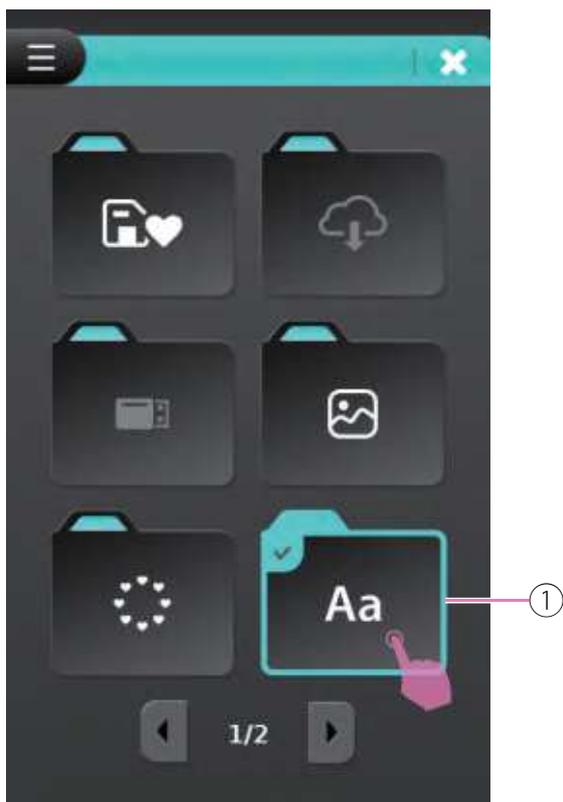
Refer the pattern number and key in to search. Click Confirm icon to display the desired pattern. If the number is not valid, it will display the warning message.

Click Delete icon to delete last digit number, long press delete icon to delete all numbers.

Select the desired pattern to enter editing page.

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

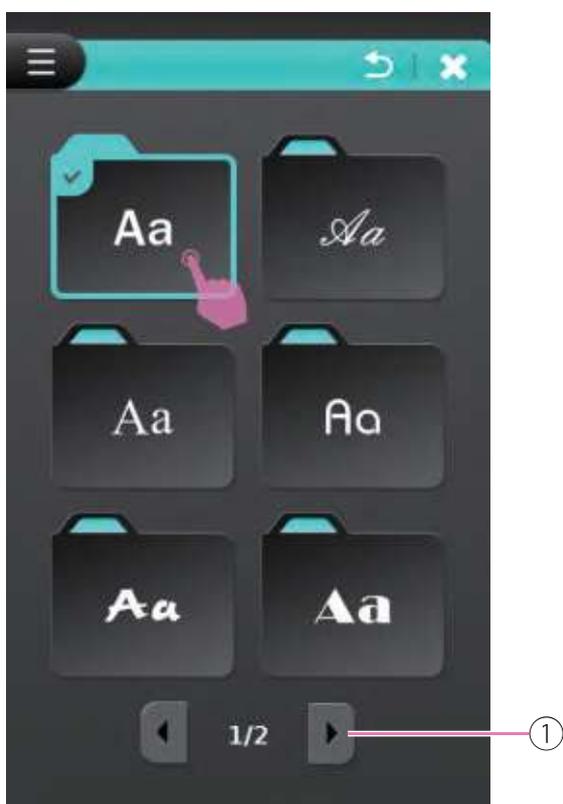
- ① Embroidery pattern
- ② Key in bar
- ③ Delete
- ④ Confirm



## Built-in embroidery letter

Click the Embroidery letter icon to enter selection screen.

① Text



There are multiple fonts of built-in embroidery text, click Page switching icon to review the category and select the desired text.

① Page switching

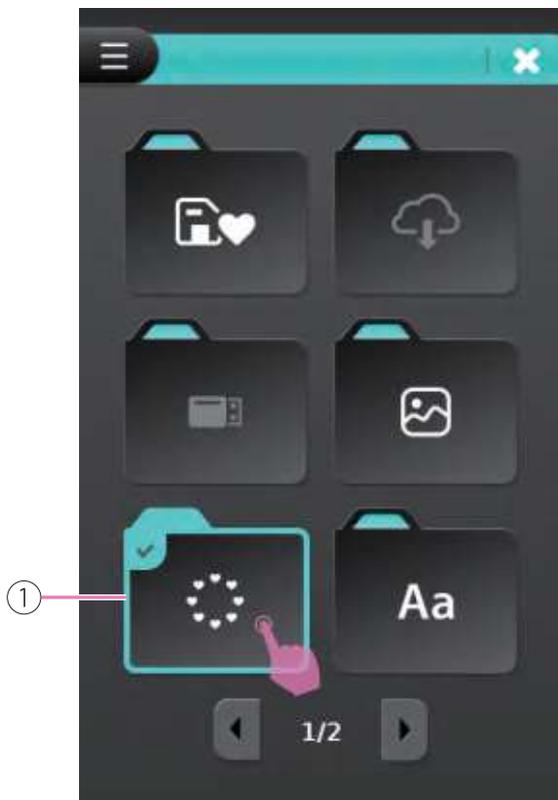


Key in the desired letter to make a combination. Click Delete icon to delete last letter, long press delete icon to delete all letters. Click Cancel icon to return to the Text category page.

After the input is completed, click Confirm icon to enter the embroidery editing page.

- ① Key in bar
- ② Delete
- ③ Upper letters
- ④ Lower letters
- ⑤ Special characters
- ⑥ Numbers and symbols
- ⑦ Cancel
- ⑧ Confirm

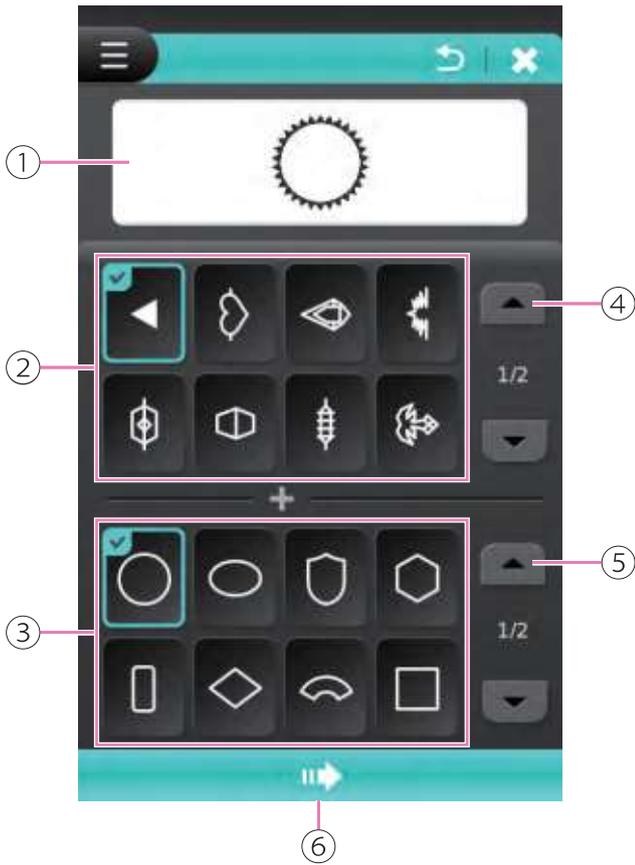
Please refer to "Editing the embroidery pattern" chapter for more information.



## Built-in frame designs

Click the Frame designs icon to enter frame selection page.

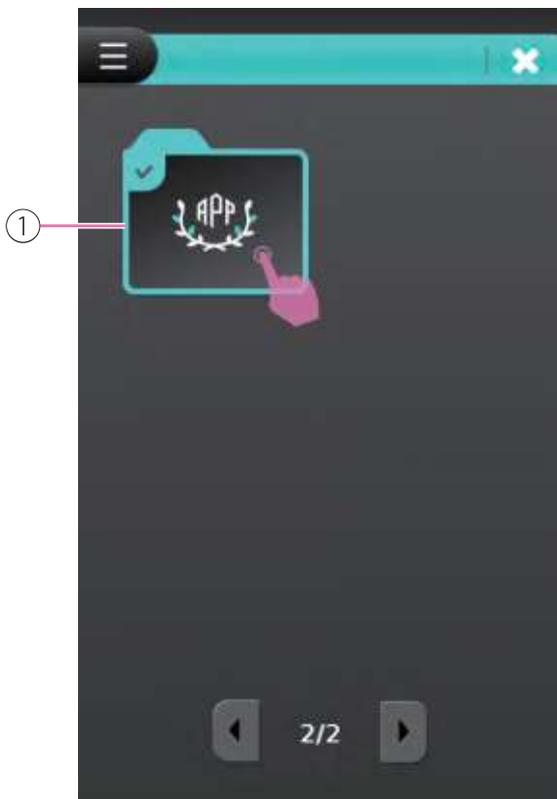
- ① Frame



Click the desired frame pattern and frame shape to combine. Click Switching icon to view other patterns and shapes. Click Next icon to enter edit page.

- ① Preview
- ② Frame pattern selection
- ③ Frame shape selection
- ④ Frame pattern switching
- ⑤ Frame shape switching
- ⑥ Next

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



### Built-in monogram letters

Click the Monogram letters icon to enter frame selection page.

- ① Monogram



Click two letters or three letters and combine with the frame. Click Page switching icon to view other designs. Click Next icon to enter edit page.

- ① Letters selection
- ② Frame selection
- ③ Page switching
- ④ Next



Input the desired text to finish the monogram and it will display the preview on the screen.

Click Delete icon to delete last letter, long press Delete icon to delete all letters.

After finished the editing, click Next icon to the edit page.

- ① Preview screen
- ② Key in bar
- ③ Delete
- ④ Next

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

## Designs from USB

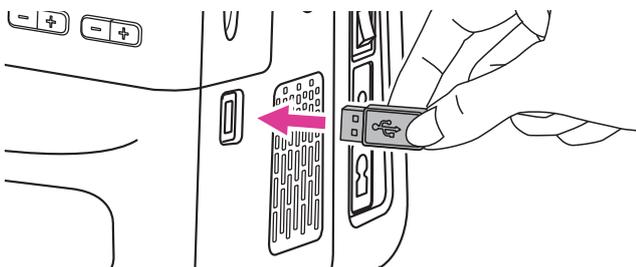
The machine has a USB port for memory stick. Through a USB, you can import patterns from the computer to the machine.

### 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.)

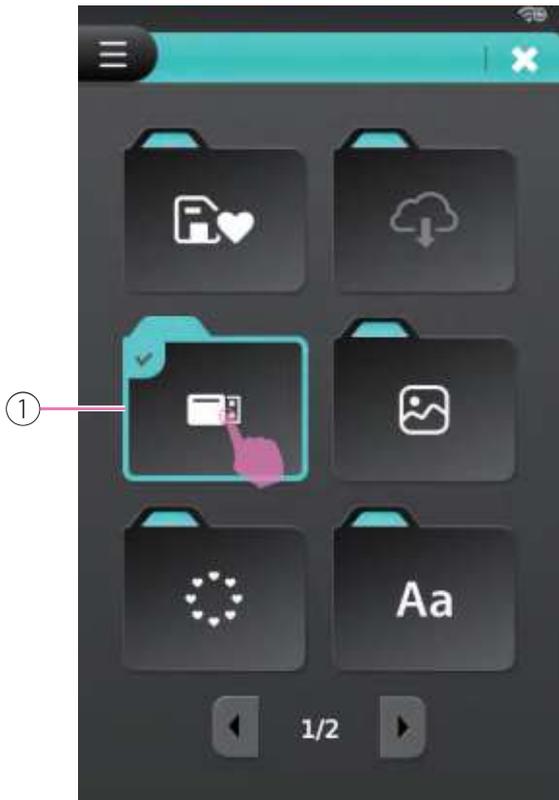
### Please be aware of the following tips, otherwise malfunctioning may happen.

- The USB import function will need to use with Artist Toolkit software. Please contact your local dealers for more information. This machine can read following format: .zhs, .zhx, .dst, .pes, .exp, .hus, .vip, .jef, .sew, .vp3, .pcs, .xxx, .ent, .pec
- Embroidery data must be stored in root directory in USB storage device.
- The embroidery file name can be up to 256 characters and it can be letters, numbers, . (dot), \_ (underline), and - (hyphen).
- 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 160 x 260 mm (W x H).
- The color of the embroidery pattern is no limited.
- The embroidery pattern can not exceed a maximum number of 120,000 stitches.



### Connect to USB port

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



Click USB flash drive file to enter the selection page.

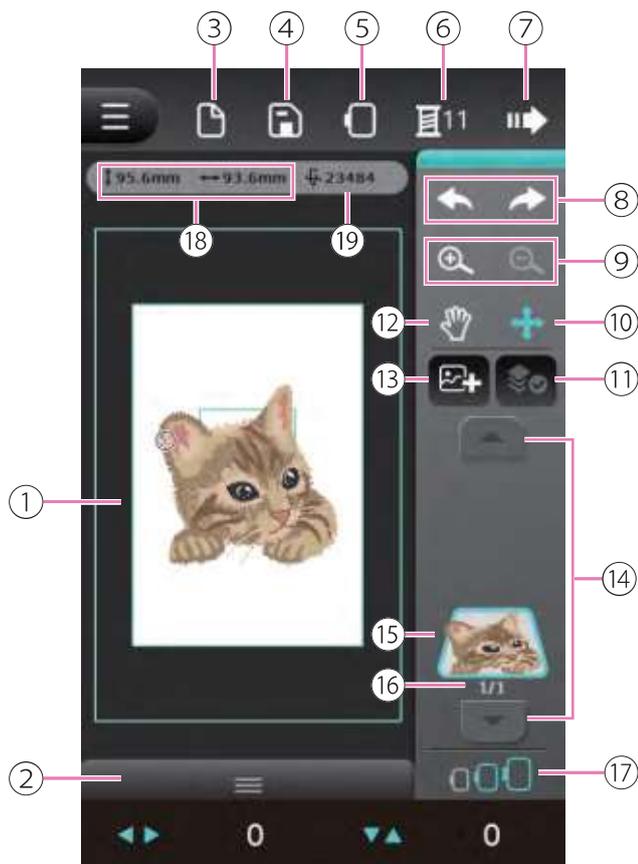
- ① USB flash drive



Select the desired pattern to enter edit page.

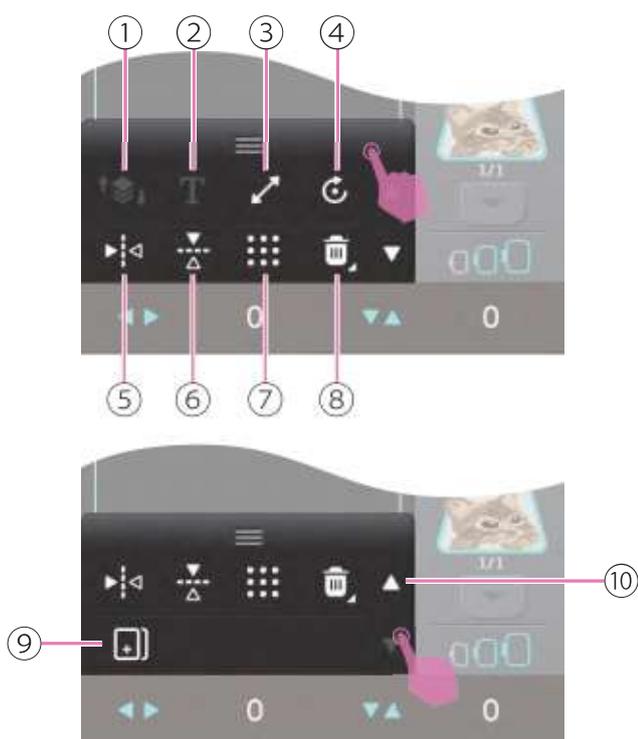
Please refer to "Editing the embroidery pattern" chapter for more information.

# Editing the embroidery pattern



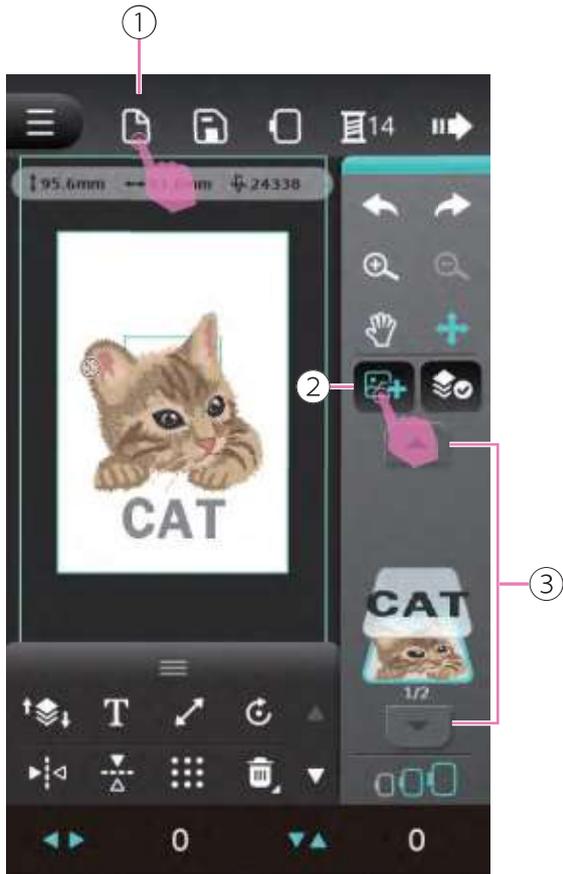
When the embroidery pattern is selected, you can adjust the angle, size, position and color in your preference.

- ① Preview screen
- ② Toolbox
- ③ New file
- ④ Save file
- ⑤ Embroidery hoop list
- ⑥ Color setting
- ⑦ Next
- ⑧ Undo/Redo
- ⑨ Zoom in/Zoom out
- ⑩ Move the patterns
- ⑪ Select all layers
- ⑫ Drag the object
- ⑬ Add new patterns
- ⑭ Switching layers
- ⑮ Layer
- ⑯ The current layer/Total layers
- ⑰ Suggested embroidery hoop
- ⑱ Embroidery pattern size
- ⑲ Embroidery pattern total stitches



Expand the toolbox to display the edit options. Click Page switching icon to view other edit options.

- ① Move layers
- ② Text
- ③ Lock aspect ratio
- ④ Rotate
- ⑤ Horizontal mirror function
- ⑥ Vertical mirror function
- ⑦ Check the embroidery pattern size
- ⑧ Delete
- ⑨ Duplicate
- ⑩ Page switching



## Adding embroidery pattern

Select the pattern and enter edit page. Click Add new patterns icon to select the new patterns. The layer will be display in order by selecting sequence. Click Switching layers icon to display each layer.

To create a new file, click New file icon. It will display the warning message then open a new layer.

- ① New file
- ② Add new patterns
- ③ Switching layers



## Move the embroidery pattern layers

Click Move layers icon, the selected layer will shown in the action color in the switching layers section. The layer sequence can be changed up by moving up or down.

Long press the Layer icon can also change layer sequence.

In the preview screen, it will display the current layer and total layer numbers.

- ① Move layer
- ② The current layer / Total layers
- ③ Switching layers
- ④ Layer



Click Move layer icon to display the multifunction list, the left and right arrow keys can move the selected layer up or down to edit.

- ① Multifunction list
- ② Move layer

**Note**

It also can use the physical buttons +/- to move the layers.



**Zoom in/Zoom out function**

Click Zoom in/Zoom out icon to preview the pattern. When you zoom in the pattern, the complete design will show on the left top to preview. Drag the frame to view the specific area at the same time.

Click Drag the preview icon can view the specific area after zoom in, and it will not affect the actual pattern's position.

- ① Preview screen
- ② Zoom in/Zoom out
- ③ Drag the preview



## Select all layers

Click Select all layers icon to edit all layers at the same time.

- ① Select all layers

### Note

Select all layers function works with two or more layers.



## Undo/Redo

Click Undo icon to cancel or reverse the last steps. Click Redo icon to do last steps again.

- ① Undo
- ② Redo



## Move the embroidery pattern

Move the embroidery pattern is a default function.

Click Move the patterns icon to move the patterns in the preview screen. Under the preview screen, the left and right arrow shows the X-axis position and up and down arrow shows the Y-axis position.

- ① Move the patterns
- ② X-axis position
- ③ Y-axis position



Click Direction icon to display multifunction list. The default value is 0. The left and right, up and down icon can adjust X-axis and Y-axis position.

Click X-axis or Y-axis value will reset to default value 0.

- ① Multifunction list
- ② Direction
- ③ X-axis value
- ④ Y-axis value

### Note

- It also can use the physical buttons +/- to adjust value(position).
- When the embroidery pattern exceeds the hoop, the hoop frame will turn red.



### Rotate the embroidery pattern

Click Rotate icon to rotate the patterns.

It can set to rotate 1° or 15° each time.

- ① Rotate
- ② Rotate 1°
- ③ Rotate 15°



Preview screen will display the rotated patterns. The default value is 0, click Angle icon to display multifunction list. The left and right icon can adjust the angle clockwise or counterclockwise.

Click 1° or 15° angle value will both reset to default value 0.

- ① Multifunction list
- ② Angle
- ③ 1° angle value adjustment
- ④ 15° angle value adjustment

**Note**

It also can use the physical buttons +/- to adjust value(position).



- ①
- ②

## Mirror the embroidery pattern

Click Horizontal mirror function icon to flip or mirror a pattern in the horizontal direction.  
Click Vertical mirror function icon to flip or mirror a pattern in the vertical direction.

- ① Horizontal mirror function
- ② Vertical mirror function



Preview screen will display the mirrored patterns.

Click the Horizontal mirror function icon or the Vertical mirror function icon again to cancel mirror function, the pattern will restore to last steps.



## Resize the embroidery pattern

Click Lock aspect ratio icon to adjust the pattern size with the fixed proportion.

- ① Lock aspect ratio



Preview screen will display the adjusted patterns. The default value is 100%. Click Lock aspect ratio icon to display multifunction list. The left and right arrow icon can scaling the pattern size with the fixed proportion.

- ① Multifunction list
- ② Lock aspect ratio



Click the Left and Right arrow icon to adjust 1% proportion each time. The scaling size range is 80%~120%.

Click Lock aspect ratio value icon again to restore to default value.

- ① Multifunction list
- ② Lock aspect ratio value

**Note**

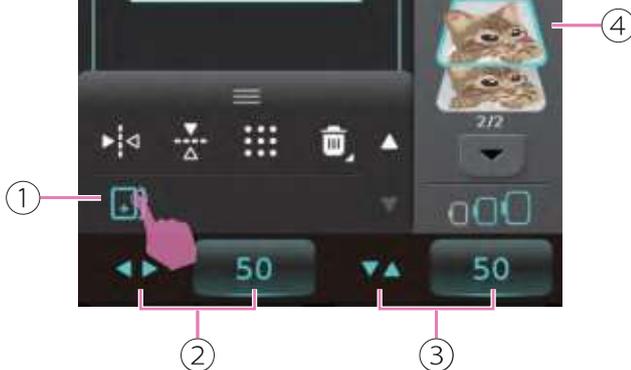
- It also can use the physical buttons +/- to adjust value.
- When the embroidery pattern is exceed the hoop, the hoop will turn red.



**Duplicate the embroidery pattern**

Click Duplicate icon to copy the current pattern with all adjusted value to the last layer. The duplicate layer will overlap on the original pattern.

- ① Duplicate
- ② X-axis value
- ③ Y-axis value
- ④ Duplicated layer

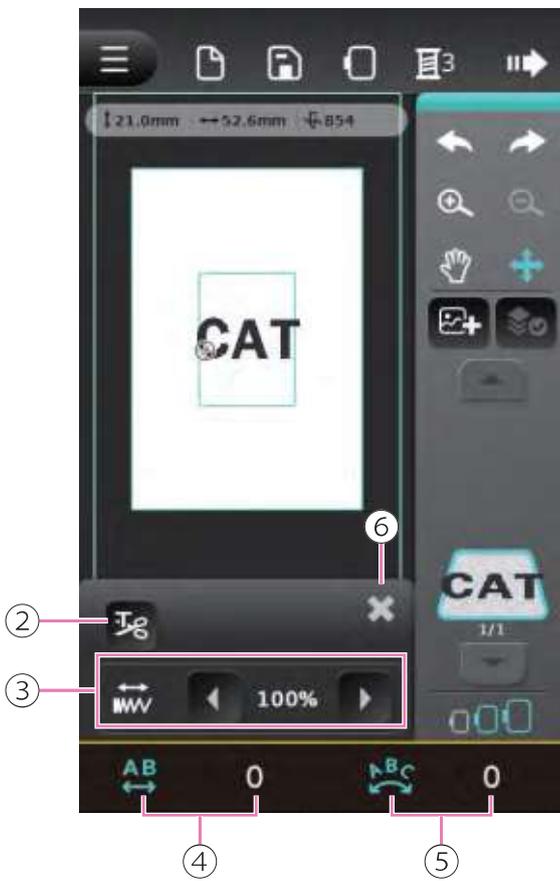




## Edit text

Key in the text and click Text icon to enter edit page to adjust spacing or radian.

- ① Text
- ② Split text
- ③ Adjust stitch density
- ④ Adjust text spacing
- ⑤ Adjust radian
- ⑥ Close





## Split text

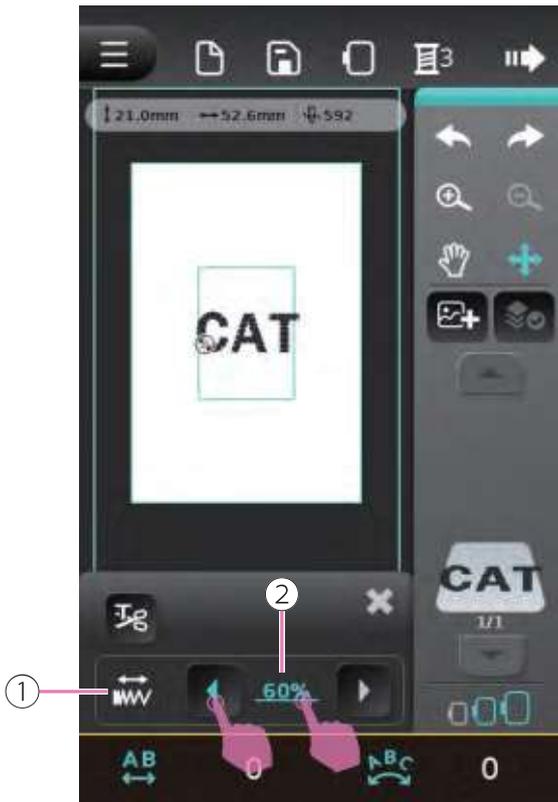
Click Split text icon to break up the text and the layer will split according to the letter numbers.

- ① Split text
- ② The current selected layer
- ③ The current layer / Total layers

### Note

Split text function works with two or more letters.



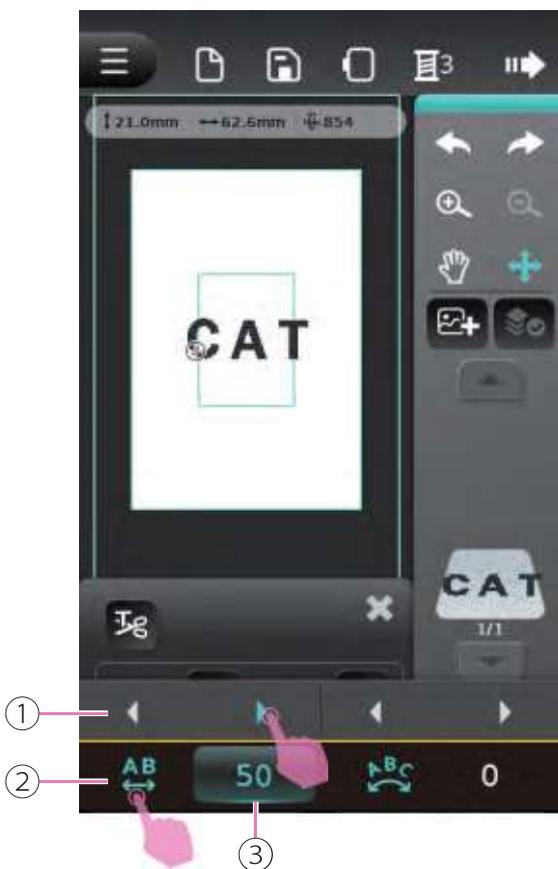


## Stitch density adjustment

Click the left and right arrow icon to adjust stitch density. The default value is 100%, the adjust range for each increment is 20%, the adjustment range is 60%~140%.

Click Stitch density value to restore to default value.

- ① Adjust stitch density
- ② Density proportion



## Text spacing adjustment

Click Adjust spacing icon to display multifunction list. The left and right arrow icon can adjust the text spacing. The default value is 0, and the adjust range for each increment is 1, the adjustment range is 0~500.

Click Adjust spacing value icon to restore to default value 0.

- ① Multifunction list
- ② Adjust text spacing
- ③ Adjust text spacing value

### Note

- Adjust text spacing function works with two or more letters.
- It also can use the physical buttons +/- to adjust value.



## Text radian adjustment

Click Adjust radian icon to display multifunction list. The left and right arrow icon can adjust the text radian. The default value is 0, and the adjust range for each click is 1, the adjustment range is -100~100.

Click Adjust radian value icon to restore to default value 0.

- ① Multifunction list
- ② Adjust text radian
- ③ Adjust text radian value

### Note

- Adjust text radian function works with two or more letters.
- It also can use the physical buttons +/- to adjust value.



## Check the embroidery pattern size

Click Check the embroidery pattern size icon to display the edit page. It can view the actual position in the embroidery hoop.

- ① Check the embroidery pattern size

### Note

- Please check the embroidery unit and hoop is installed.



Use the center of the pattern as the alignment reference point.

Accordingly to the selected icons, the embroidery hoop will move simultaneously to the position where your needle will align to: center, four corners of pattern, or encircle around the pattern.

Click Close icon to save current setting and close multifunction list and return to the last edit page.

- ① The upper left corner of the pattern
- ② The center of the pattern
- ③ The upper right corner of the pattern
- ④ Close
- ⑤ The lower left corner of the pattern
- ⑥ The lower right corner of the pattern
- ⑦ The embroidery hoop will surround four directions

**Note**

- When the embroidery pattern exceeds the hoop, it cannot check the pattern's size.
- When the embroidery pattern exceeds the hoop, the hoop will turn red.



### Delete the embroidery pattern

Select the desired embroidery pattern layer to delete, the layer will shown in the action color. Click Delete icon, the screen will display the warning message to confirm delete the selected layer.

Long press Delete icon, the screen will display the warning message to confirm delete all layers.

- ① Delete
- ② The selected embroidery pattern layer



Once deletion completed, the preview screen will display the remaining embroidery layer.

# Changing the colors of the embroidery motif



Click Color setting icon to enter edit page.

① Color setting

### Note

The number means how many thread colors will be used in this layer.



In the color setting edit page, you can change the embroidery thread color.

- ① Change thread brand
- ② Sync to change all thread brand
- ③ Close
- ④ Selected color
- ⑤ Color list layer
- ⑥ Switch color
- ⑦ Search pantone number
- ⑧ Switch pantone chart list
- ⑨ Selected color's information
- ⑩ Thread brand
- ⑪ Color list



## Change the thread brand

Click Change the thread brand icon to display other brands selection. It will suggest the similar color's brands on the right side. The left and right arrow icon can switch and view the brand options and details.

Select the desired thread brand to change and the preview screen will change to selected brand's correspond colors.

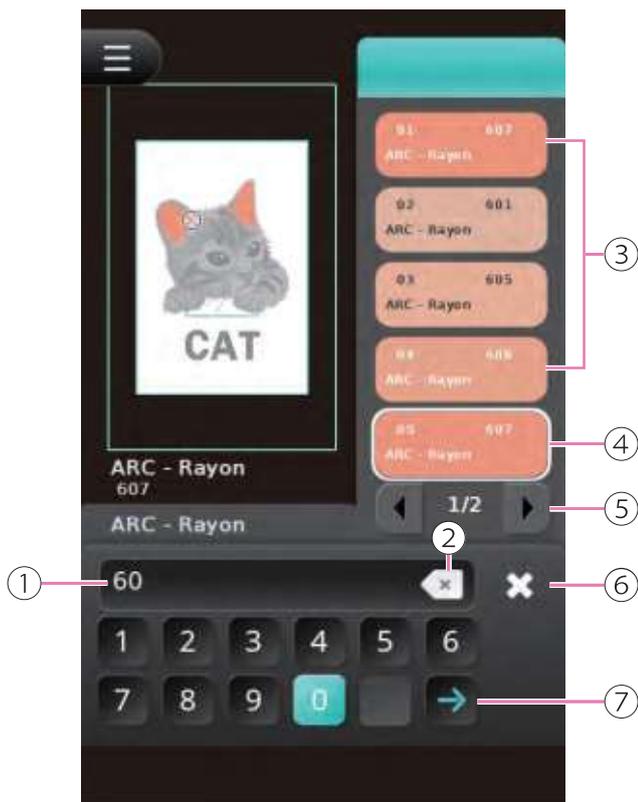
- ① Return to last steps
- ② Select the desired thread brand
- ③ Thread brand selection
- ④ Page switching



## Sync to change all thread brand

Click Sync to change all thread brand icon to change all thread to the selected brand.

- ① Sync to change all thread brand
- ② Selected color layer



## Search color list numbers

Click Search color list numbers icon to enter the searching page. Input the numbers in color chart, can input up to 12 letters. After input two or more letters and click Confirm icon, the correspond colors will display on the right side.

- ① Input bar
- ② Clear
- ③ Color list
- ④ Selected color
- ⑤ Page switching
- ⑥ Close
- ⑦ Confirm

### Note

Searching function is under the same thread brand.

# Saving embroidery motifs



## Save embroidery pattern

Click Save icon to display the saving options. Click Machine icon to save the embroidery pattern in My favorite folder in the machine.

- ① Save
- ② Save patterns in My favorite folder



Click Add icon to save the pattern, after saved the pattern, the screen will go back to the edit page. The saved pattern will save in order. If you want to save the new pattern by replacing the existing file, click the existing pattern and confirm the warning message.

The folder can save up to 50 patterns. After the memory is full, you can save patterns by replacing the existing files. Click Page switch icon to view other patterns.

Click Close icon to return back to edit page without saving pattern.

- ① Add and save pattern
- ② Close
- ③ The newest saved pattern
- ④ Page switching



## Delete saved patterns

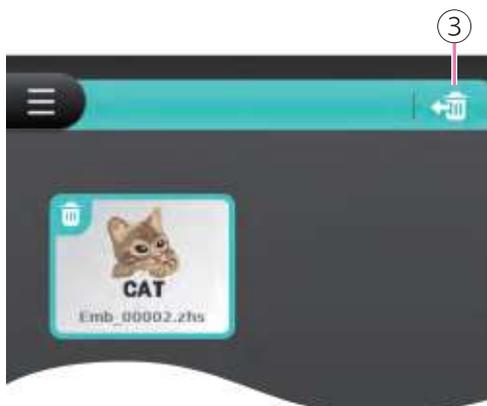
Click My favorite icon to enter saved patterns folder. Click Delete icon, saved pattern will be shown in action color, then select the desired pattern to delete. Confirm the warning message to delete the pattern.

Click Return icon to back to My favorite folder.

① My favorite

② Delete

③ Return





## Save embroidery pattern in USB flash drive

Click Save icon to display the saving options. Click USB flash drive icon to save the embroidery pattern in the USB flash drive.

- ① Save
- ② Save patterns in USB flash drive



Click Add and save pattern icon to save the pattern, after the pattern saved, the screen will go back to the edit page. The saved pattern will be shown in order. If you want to save the new pattern by replacing the existing file, click the existing pattern and confirm the warning message.

After the USB flash drive's memory is full, you can save patterns by replacing the existing files. Click page switch icon to view other patterns.

Click Close icon to return back to edit page without saving pattern.

- ① Add and save pattern
- ② Close
- ③ The newest saved pattern
- ④ Page switching

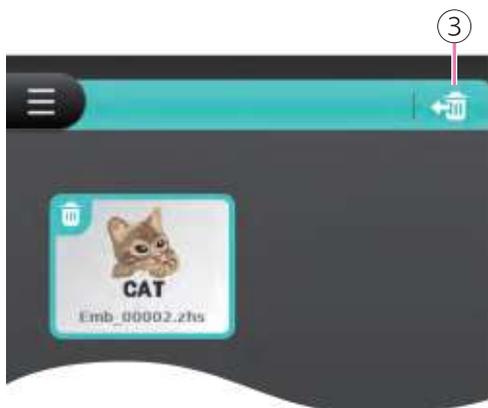


## Delete the saved pattern in USB flash drive

Click USB flash drive icon to enter the folder. Click Delete icon, the saved patterns will be shown in the action color. Select the desired pattern and confirm warning message to delete.

Click Return icon to back to USB flash drive folder.

- ① USB flash drive
- ② Delete
- ③ Return



# Edit frame



## Move to the center of embroidery hoop

Click the Hoop center icon, the embroidery hoop will move to the place where hoop center and needle point align with.

- ① Move to center of the hoop



## Grid

Turning on the grid function can position the embroidery pattern more accurately.

Click the Grid icon one time, the icon displays the cross mark.

Click the Grid icon second time, the icon displays the grid mark.

Click the Grid icon third time, the cross mark and grid mark will disappear and icon shows blank.

- ① Grid



## The center point of the pattern

To position the embroidery hoop to ensure the needle will be aligned with embroidery pattern's center.

Click The centerpoint of the pattern icon, the embroidery hoop will use the pattern's centerpoint as the position point. Click the icon again, the position point will return to last position.

- ① The centerpoint of the pattern



## Hoop relocater

Click the Hoop relocater icon, the embroidery unit will return to the starting position in order to stored correctly.

- ① Hoop relocater

# Embroidery

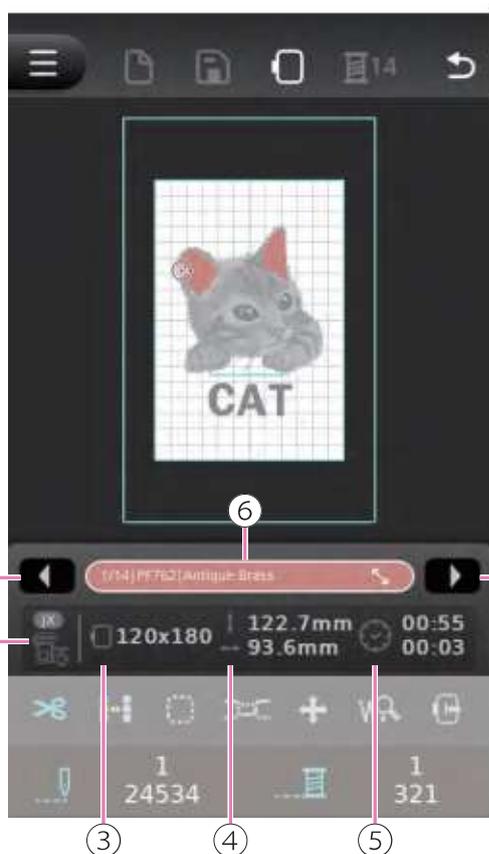


After finish editing the embroidery patterns, click Next icon to enter setting page.

① Next

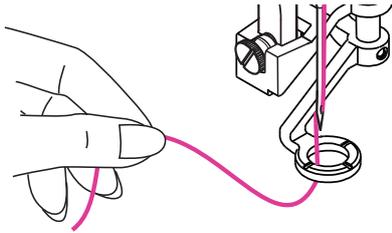
### Note

If click Next icon without saving patterns, it will pop out the warning message and enter the save pattern page.



Prepare the embroidery thread, the required thread information will display on the edit page.

- ① The left and right arrow icon to switch the layer
- ② Required presser foot icon
- ③ The current selected embroidery hoop size
- ④ Embroidery pattern size
- ⑤ Required embroidery time
- ⑥ Thread color information



#### Note

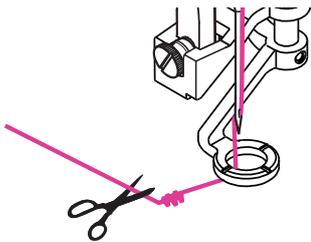
Please refer to page "Threading the upper thread" chapter for more information.



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



Press the start/stop button to start embroidering.



#### Note

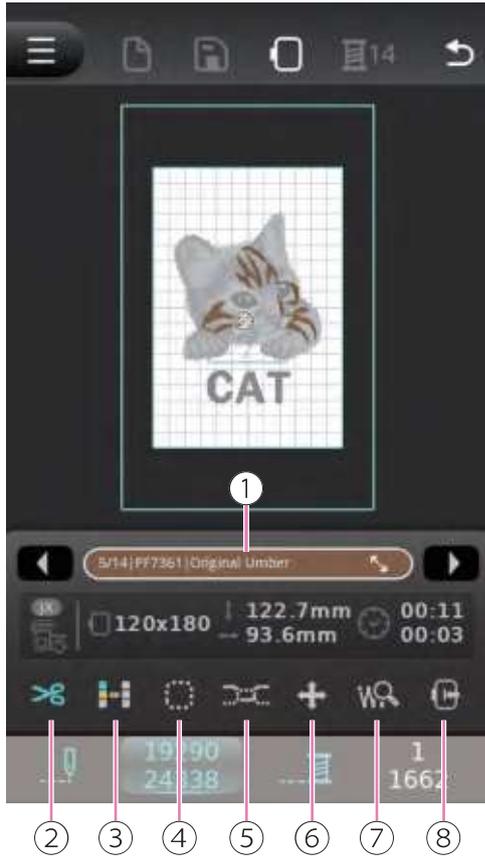
After sewing 5 to 6 stitches, the warning message will pop out, cut the thread at the beginning of the stitching, then press the start/stop button to continue embroidering.



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

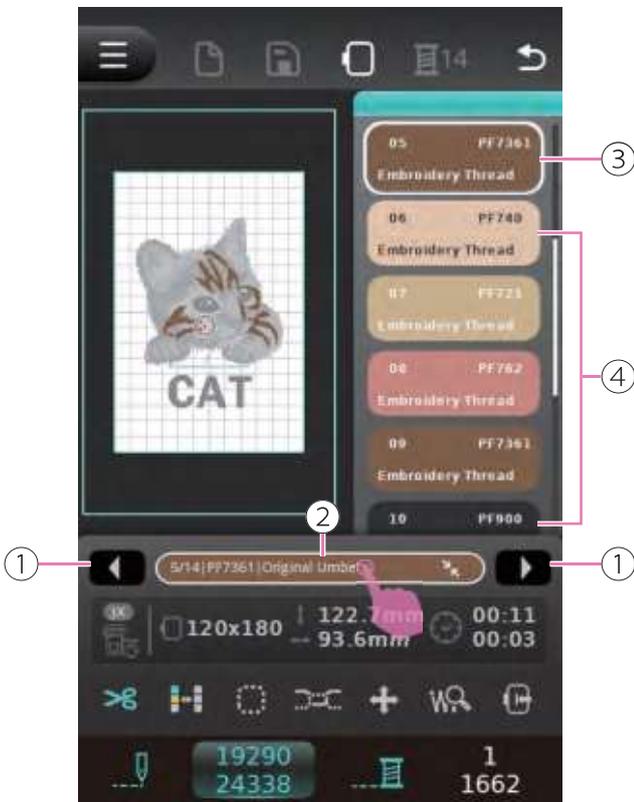
The prompt message pop out then click "check" to return to embroidery pattern types selection screen.

# Embroidery setting adjustment



The embroidery setting can adjust with the following options:

- ① Thread color information
- ② Thread cutter
- ③ Single color / multiple colors
- ④ Basting stitch
- ⑤ Thread tension
- ⑥ Move the patterns
- ⑦ Enlarge stitch position
- ⑧ Switch hoop position for threading



## Thread color information

Click Thread color information to display the color name and number, pantone number, thread brand name.

Click the left and right arrow icon or move color layer's slider to view information.

- ① The left and right arrow icon to switch the layer
- ② Color information
- ③ The current thread color
- ④ Thread color layers

### Note

If switch the layer, the needle position will change to that layer's first stitch.



## Thread cutter setting

Click Thread cutter icon to display the setting. Click Spacing distance setting icon and the left and right arrow icon can adjust the spacing value. The default value is 2mm, and the adjust range for each click is 1mm, the adjustment range is 1mm~15mm.

Click Color lump setting icon can turn on/off the function to trim the thread after each color lump is finish embroidering. The color lump default setting is on and will trim the thread automatically after each color is finish embroidering.

Click Finished cut setting icon can turn on/off the function to trim the thread after finish embroidering. The finished cut default setting is on.

After finished the setting and saved, click Close icon to return to last page.

- ① Thread cutter
- ② Spacing distance setting
- ③ Spacing distance value
- ④ Color lump setting
- ⑤ Finished cut setting
- ⑥ Close

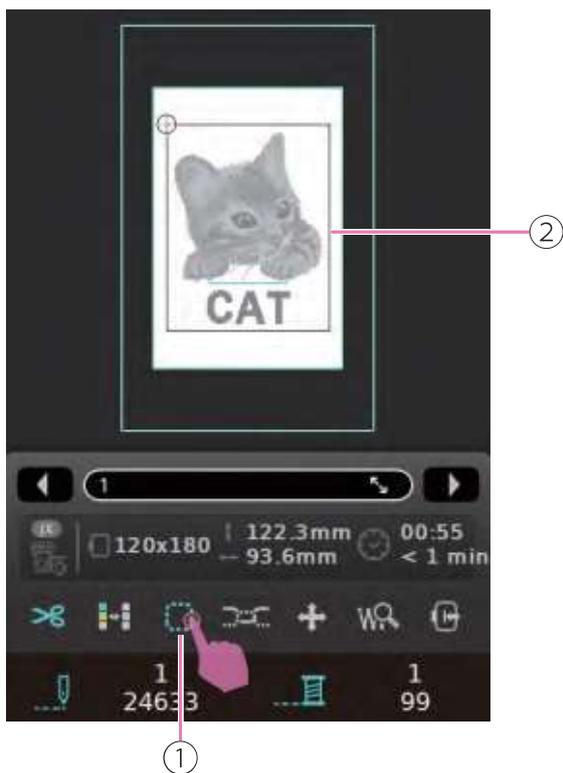


## Single color/multiple colors

Click Single color/multiple colors icon to turn on the single color function. It will regard all different colors as single color and embroidering. The color lump cut will be the connect stitch cut, after cut the thread, no need to trim the beginning of the stitching.

Click Single color/multiple colors icon again to switch back to multiple colors.

- ① Single color/multiple colors



## Basting

Click Basting icon to baste around the patterns. It can strengthen and fixed the fabric and the lining to prevent them from slipping or shifting.

The square frame will display in the preview screen around the pattern. Baste stitches will not have auto lock stitches at the beginning and at the end.

Click Basting icon again to close baste function.

- ① Basting
- ② Square frame

### Note

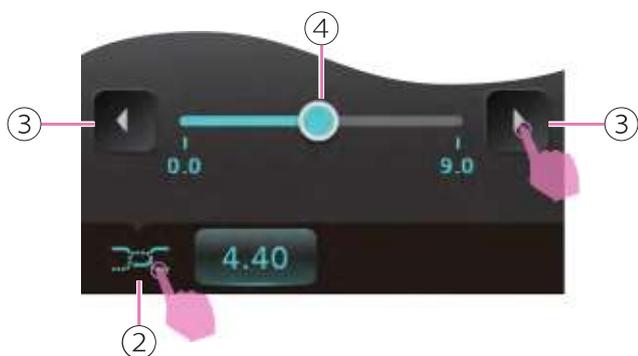
After embroidering with basting function, the preview screen will have the warning message to return back to the first stitch.



## Adjusting the embroidery thread tension

Click Thread tension icon to display the thread tension value, click The thread tension icon to display the slider and the left and right arrow icon.

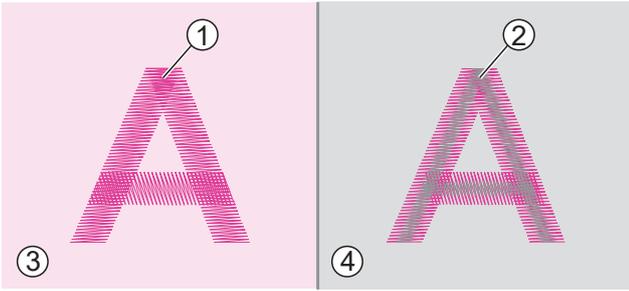
Move the slider or click The left and right arrow icon to adjust the tension value. The default value is 4, and the adjust range for each click is 0.2, the adjustment range is 0.0~9.0.



- ① Thread tension
- ② Thread tension
- ③ The left and right arrow icon
- ④ Tension slider

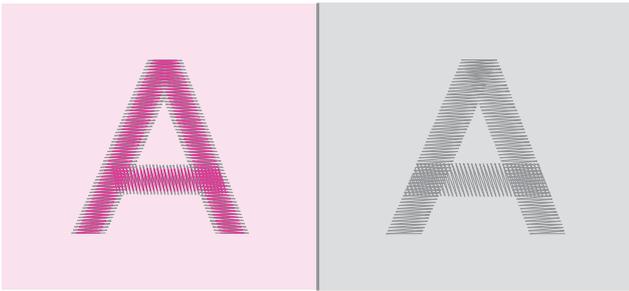
### Note

It also can use the physical buttons +/- to adjust value.

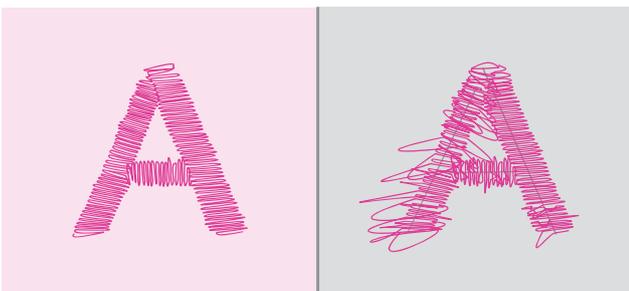


The thread tension is correct when upper thread is just visible on back of the fabric.

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



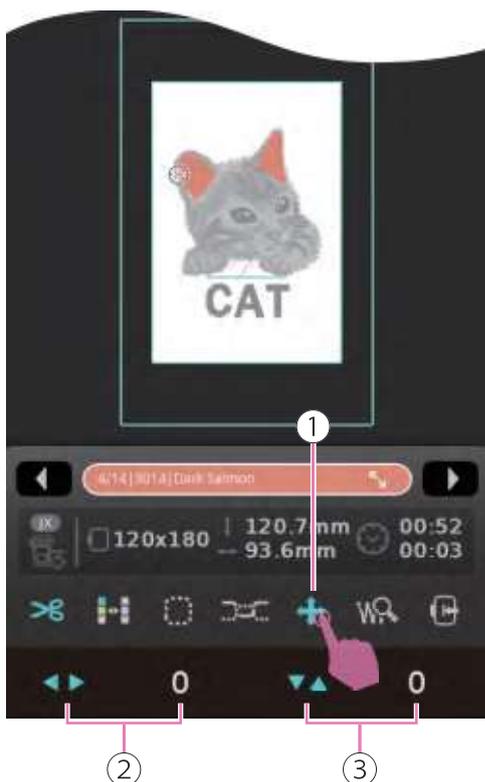
When the bobbin thread is visible on the front of the fabric, the thread tension is too tight for embroidering. To reduce the tension, press the "-" button.



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

#### Note

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

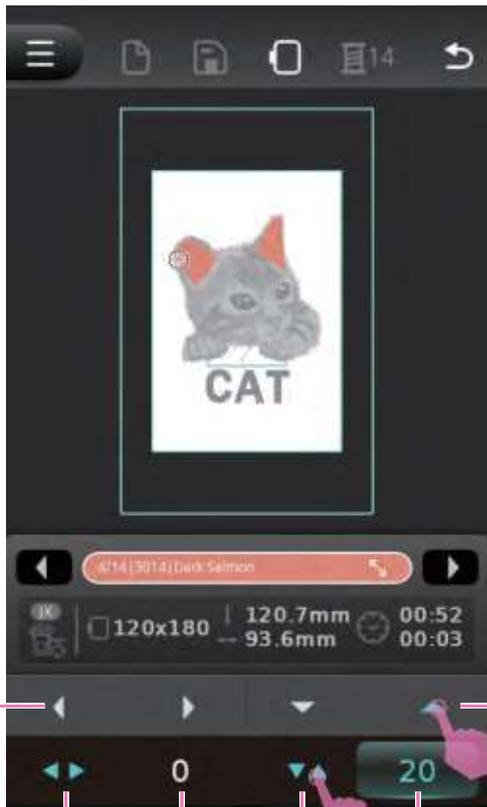


### Move the patterns

Click Move the patterns icon to display the multifunction list and move the patterns position.

It will display X-axis and Y-axis position under the preview screen.

- ① Move the patterns
- ② X-axis position
- ③ Y-axis position



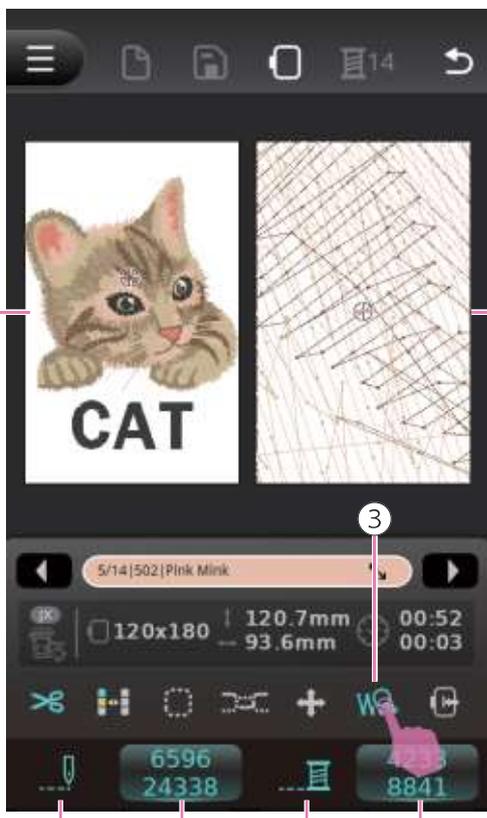
- ④
- ①
- ②
- ①
- ③
- ④

Click Direction icon to display the multifunction list. The default value is 0, The left and right or up and down arrow icon in the multifunction list can adjust the X-axis and Y-axis position.

- ① Direction icon
- ② X-axis value
- ③ Y-axis value
- ④ Multifunction list

**Note**

It also can use the physical buttons +/- to adjust value.



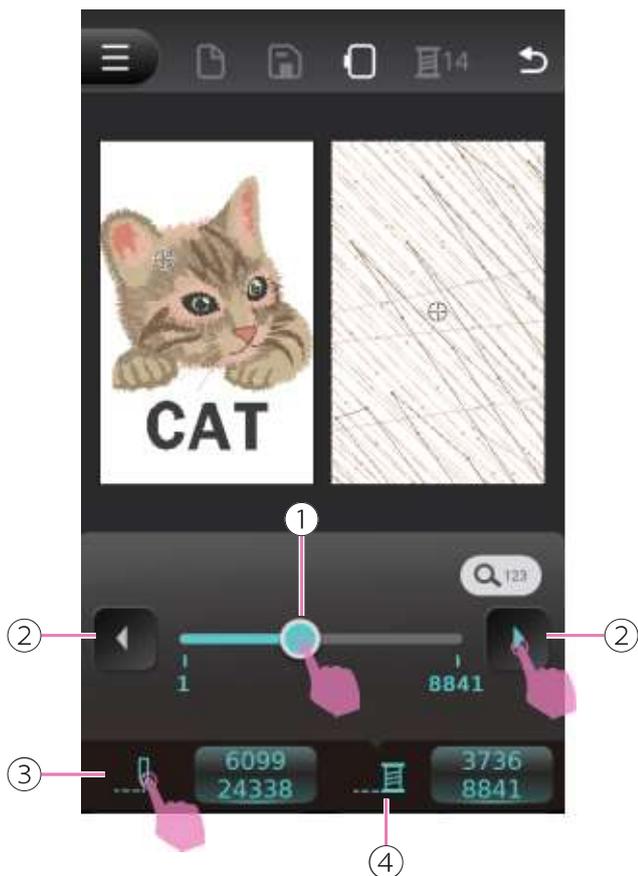
- ①
- ②
- ③
- ④
- ⑤

### Enlarge stitch position

Click Enlarge stitch position icon to display the pattern preview screen and the stitch preview screen. It can display all patterns preview and zoom in to view the current stitch position.

Click anywhere in the pattern preview screen, the stitch preview screen will corresponding to show the enlarge stitch. It will display the current stitch number / total stitch numbers and the current stitch number of the layer / total stitch numbers of all layers under the preview screen.

- ① Pattern preview screen
- ② Stitch preview screen
- ③ Enlarge stitch position
- ④ Current stitch number/Total stitch numbers
- ⑤ Current stitch number of the layer/Total stitch numbers of all layers



## Adjust stitch position

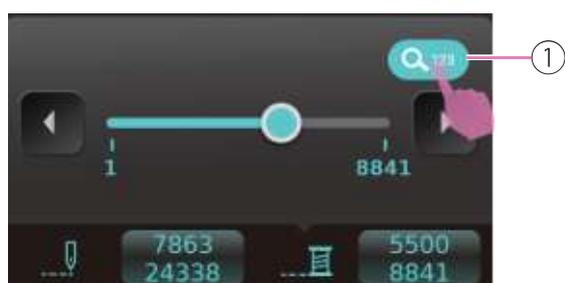
Click Current stitch number/Total stitch numbers or Current stitch number of the layer/Total stitch numbers of all layers icon to display the needle position slider and multifunction list.

Move the needle position slider or click the left and right arrow icon in the multifunction list to adjust the stitch position. The adjust range is 1 stitch to increase or decrease for each click. The stitch position can adjust to the reciprocal 3 stitches of the total stitch numbers.

- ① Needle position slider
- ② The left and right arrow
- ③ Current stitch number/Total stitch numbers
- ④ Current stitch number of the layer/Total stitch numbers of all layers

### Note

- If the thread breaks, adjust the stitch number to the first few stitch where the thread broken. It can prevent the obviously seam or segment difference.
- It also can use the physical buttons +/- to adjust value.

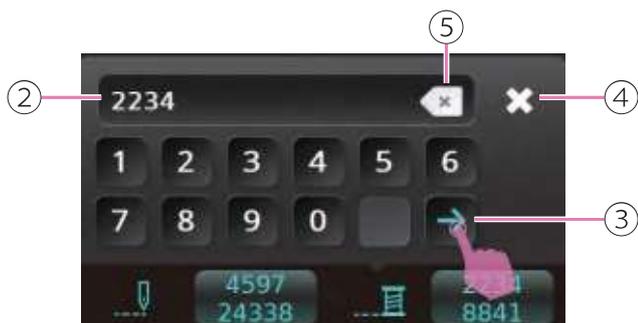


## Search stitch position

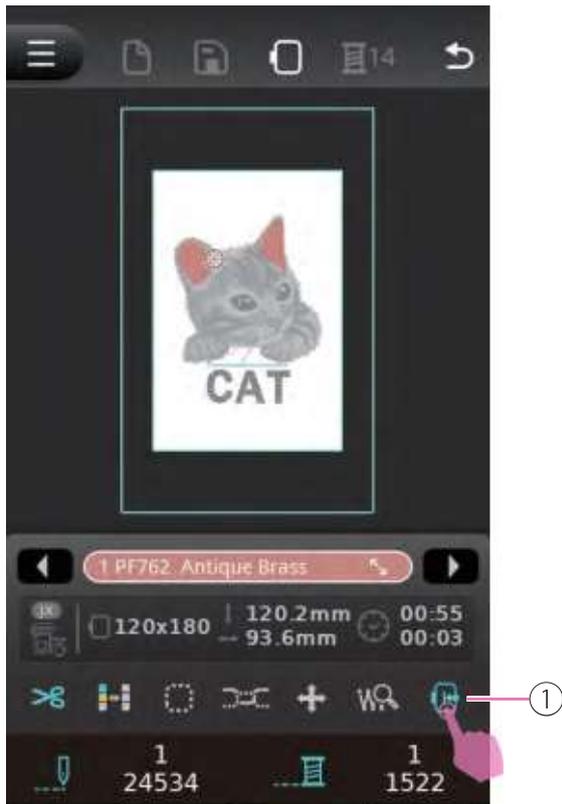
Click Search stitch position icon to enter the next page. Click input bar to enter the numbers to search.

Click Delete icon to delete last number, long press Delete icon to delete all numbers.

Click Confirm or Close icon to return back to the adjust stitch position page.



- ① Search stitch position
- ② Key in bar
- ③ Confirm
- ④ Close
- ⑤ Delete



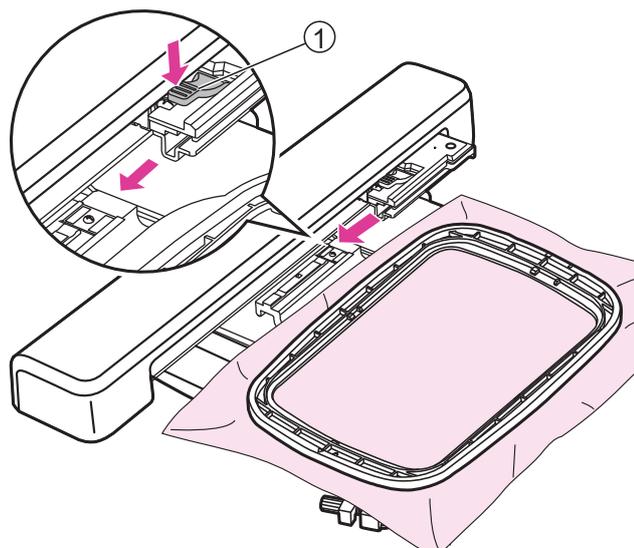
## Switch hoop position for threading

When the embroidery need to change the thread and the hoop is too close to the needle, use switch hoop position function to move the hoop and it's easier for threading.

Click Switch hoop position for threading icon and it will display the warning message. Click confirm, the center of the hoop will align to the needle position.

- ① Switch hoop position for threading

# Back to sewing mode



## Remove embroidery hoop

### ⚠ Attention

Install or remove the embroidery hoop, please make sure the needle and presser foot are the highest position, so that can put in & take out smoothly. Otherwise may damage the needle and presser foot.

Press the hoop-securing lever to pull the embroidery hoop backward to remove the embroidery hoop.

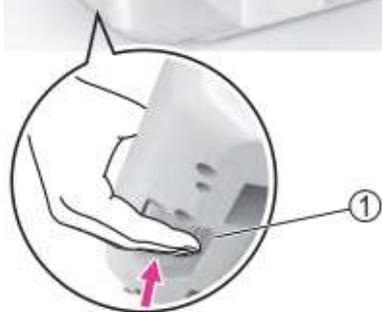
- ① Hoop-securing lever



## Remove embroidery unit

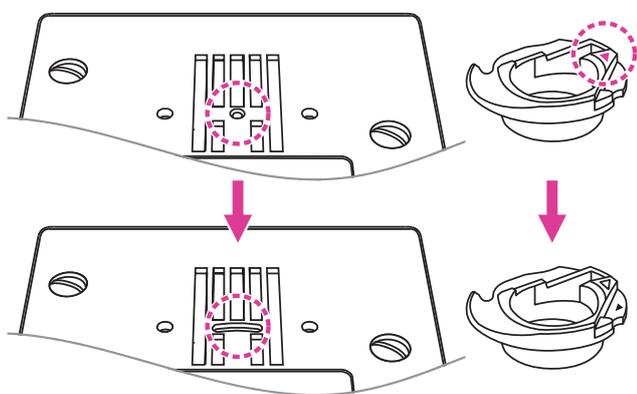
Hold the embroidery unit and press the release button, then slide the embroidery unit to the left to move out it.

- ① Release button



### Note

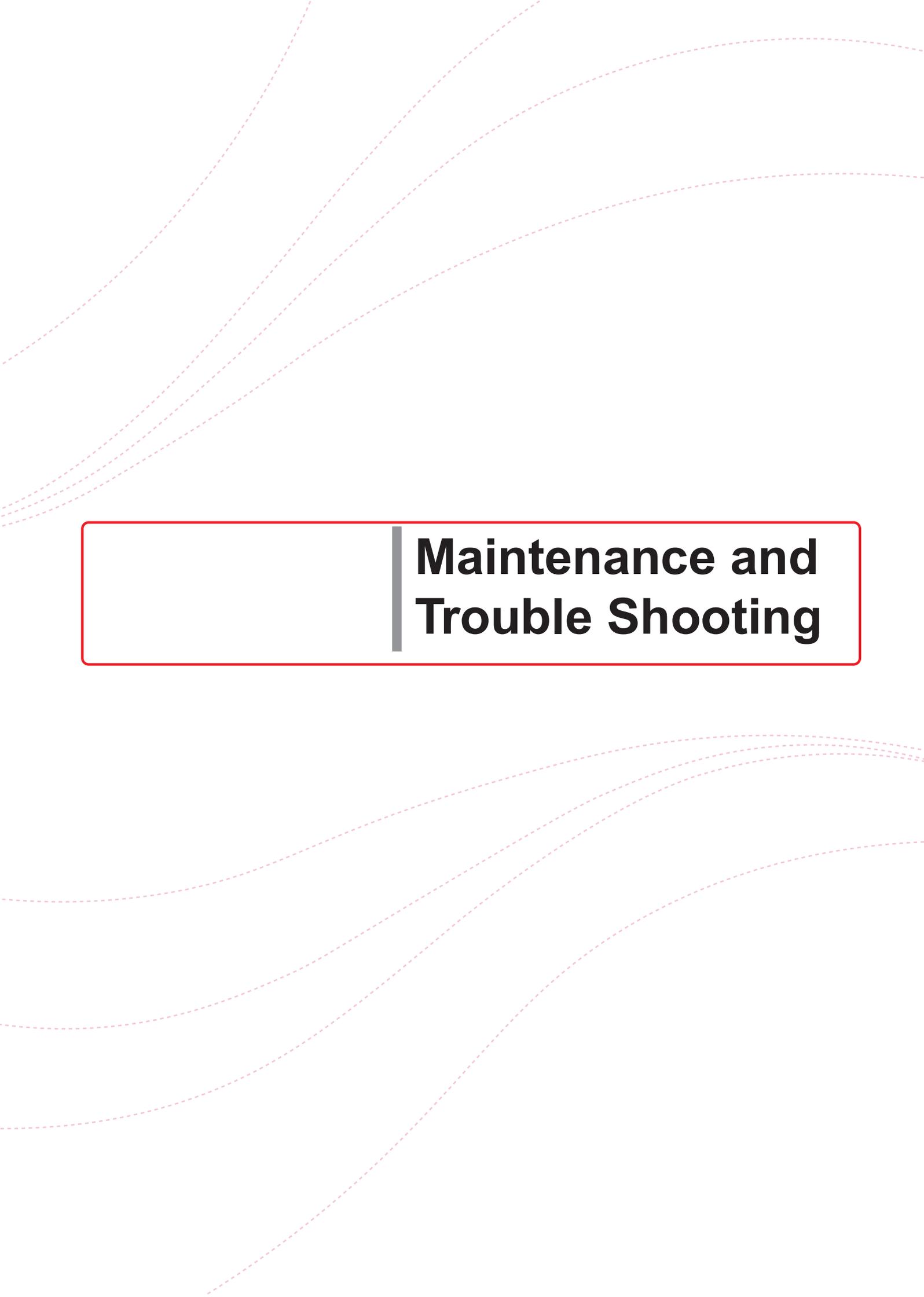
Please firstly remove the embroidery hoop before removing the embroidery unit.



Replacing the straight stitch needle plate to normal needle plate.

Replacing the high thread tension bobbin case to standard bobbin case.

Replacing the needle and presser foot.



# **Maintenance and Trouble Shooting**

# Maintenance

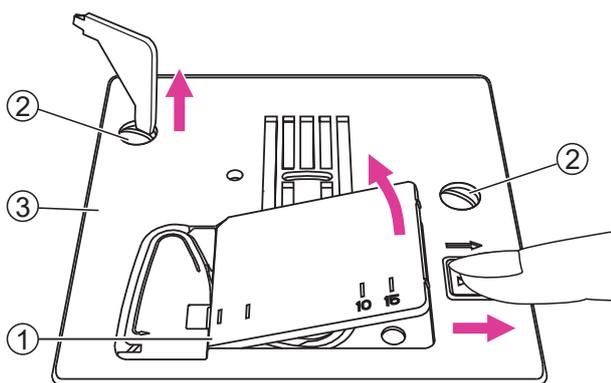
## ⚠ Attention

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

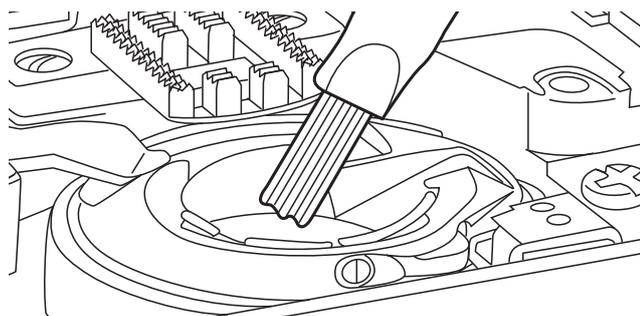
If lint and bits of thread accumulate in the hook, this will interfere with the smooth operation of the machine. Check regularly and clean the stitching mechanism when necessary.

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: 3-short 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.

### 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.

# Trouble shooting guide

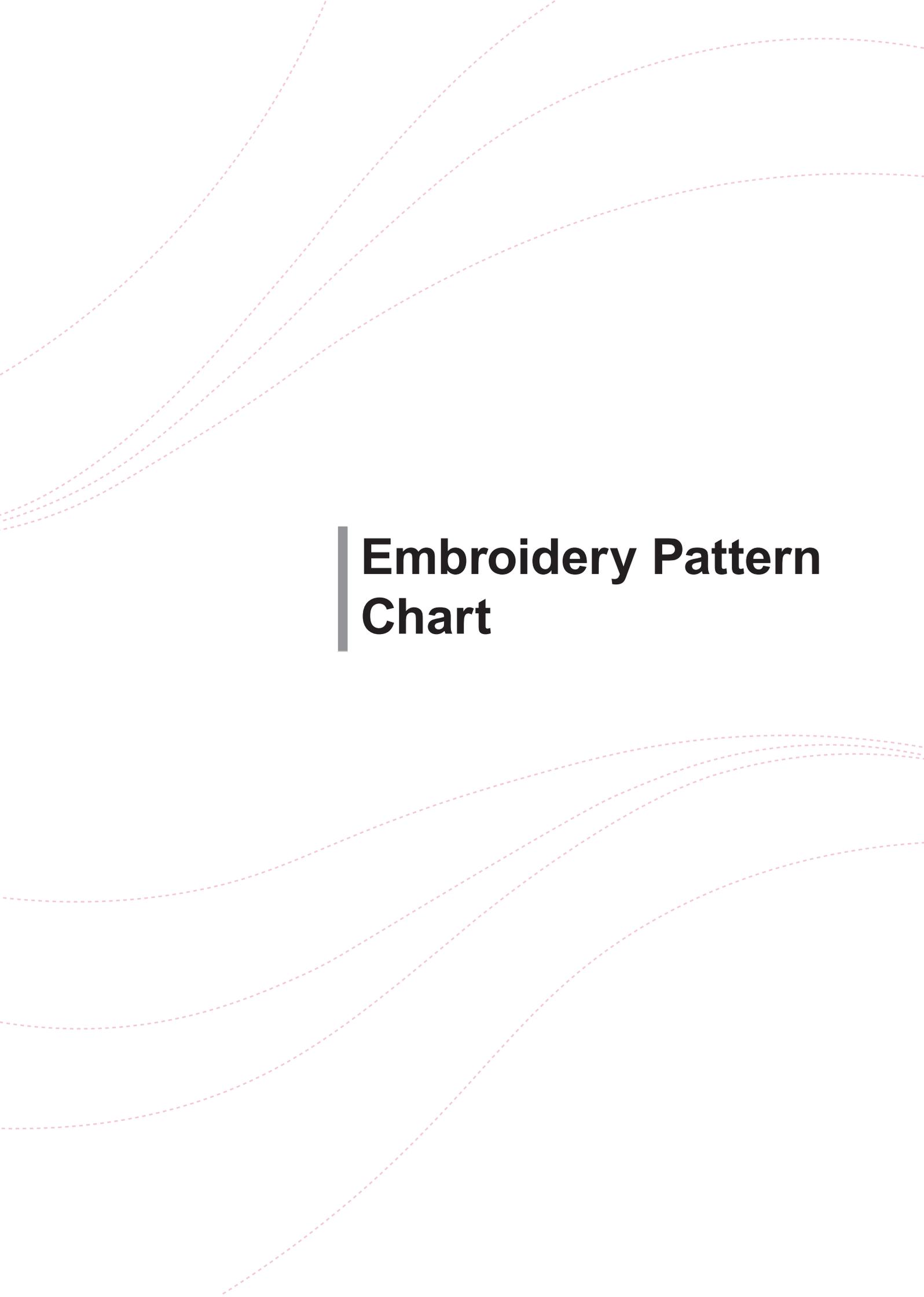
Before calling for service, check below trouble shooting guides in advance, if problem still exist, please contact nearest dealer or local service center.

Problem	Cause	Correction
Upper thread breaks	1. The machine is not threaded correctly.	1. Rethread the upper thread.
	2. The thread tension is too tight.	2. Reduce the thread tension (to lower number).
	3. The thread is too thick for the needle.	3. Select a larger needle size.
	4. The needle is not inserted correctly.	4. Remove and reinsert the needle (flat side towards the back).
	5. The thread is wound around the spool holder pin.	5. Remove the reel and wind up the thread onto the reel.
	6. The needle is damaged.	6. Insert a new needle.
Bobbin thread breaks	1. The bobbin case is not inserted correctly.	1. Remove and reinsert the bobbin case and pull on the thread.
	2. The bobbin case is threaded wrong.	2. Check both bobbin and bobbin case if on the correct position.
Skipped stitches	1. The needle is not inserted correctly.	1. Remove and reinsert the needle (flat side towards the back).
	2. The needle is damaged.	2. Insert a new needle.
	3. The wrong size needle has been used.	3. Choose a needle to suit the thread.
	4. The presser foot is not attached correctly.	4. Check and attach it correctly.
	5. The machine is not threaded correctly.	5. Rethread the upper thread.
Needle breaks	1. The needle is damaged.	1. Insert a new needle.
	2. The needle is not correctly inserted.	2. Insert the needle correctly (flat side towards the back).
	3. Wrong needle size for the fabric.	3. Choose a needle to suit the thread and fabric.
	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.
	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.

Problem	Cause	Correction
Loose stitches	1. The machine is not correctly threaded.	1. Check the threading and rethread.
	2. The bobbin case is not threaded correctly.	2. Thread the bobbin case as illustrated.
	3. Needle/fabric/thread combination is wrong.	3. The needle size must suit the fabric and thread.
	4. The thread tension is wrong.	4. Correct the thread tension.
Seam gather or pucker	1. The needle is too thick for the fabric.	1. Select a correct needle size.
	2. The stitch length is wrong.	2. Adjust the stitch length.
	3. The thread tension is too tight.	3. Loosen the thread tension.
Seam puckering	1. The needle thread tension is too tight.	1. Loosen the thread tension.
	2. The needle thread is not threaded correctly.	2. Rethread the machine.
	3. The needle is too heavy for the fabric being sewn.	3. Choose a needle to suit the thread and fabric.
	4. The stitch length is too long for the fabric.	4. Adjust the stitch length shorter.
	5. Sewing on thin fabric.	5. Sew with a stabilizer material under the fabric.
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.
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.
	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.
	2. The needle is damaged.	2. Insert a new needle.
	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.
	4. The feed dogs are packed with lint.	
Uneven stitches, uneven feed	1. Poor quality thread.	1. Select a better quality thread.
	2. The bobbin case is threaded uncorrect.	2. Remove the bobbin case and the thread and reinsert them correctly.
	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>
The sewing machine doesn't operate	1. The machine is not turned on.	1. Turn on the machine.
	2. The presser foot lifter is raised.	2. Lower the presser foot lifter.
	3. The machine is not plugged in.	3. Connect the power cord to the electric outlet.
Embroidery unit does not move	1. The embroidery unit is not set up correctly.	1. Reset the embroidery unit up correctly.
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.
	2. The thread tension is incorrect.	2. Adjust the tension of the upper thread.
	3. The fabric is not fully stretched on the embroidery hoop. The fabric is loose.	3. Stretch the fabric properly on the embroidery hoop.
	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.
	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>
The embroidery result is not good enough	1. The thread tension is not right.	1. Adjust to proper thread tension setting.
	2. Poor quality thread.	2. Select a better quality thread and attach spool net to thread.
	3. The thread tends to break and out the thread spool easily while using particular thread type.	3. Attach spool net on the thread.
	4. The wrong size needle has been used.	4. Choose a proper needle according to the fabric.
	5. No enough support due to lack of stabilizer.	5. Use a proper stabilizer according to fabric type.
The embroidery result is not good while sewing thin fabric	1. The thread tension is not right.	1. Set a smaller thread tension.
	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.
	4. No enough support due to lack of stabilizer.	4. Use a proper stabilizer according to fabric type.
Poor quality for cotton batting	1. The thread tension is wrong.	1. Adjust to proper tension setting. (number between 3-5)
	2. The stitch length is wrong.	2. Adjust to proper stitch length. (number between 3.0-4.0)
Embroidery unit doesn't work	1. The machine isn't turned on.	1. Turn on the machine.
	2. No embroidery pattern selected.	2. Select a embroidery pattern.
	3. Install embroidery hoop but without initializing in advance.	3. Remove the embroidery hoop.
Touch screen isn't accurate	1. Touch screen isn't accurate.	1. Re-calibrate the touch screen function.



# Embroidery Pattern Chart

# Embroidery pattern chart

01

0101

1 PF233



↓ 114.4mm  
↔ 110.0mm  
⊕ 2878

0102

1 PF304



↓ 165.2mm  
↔ 147.4mm  
⊕ 6778

0103

1 PF754



↓ 99.0mm  
↔ 86.0mm  
⊕ 2378

0104

1 PF108



↓ 217.4mm  
↔ 159.0mm  
⊕ 4575

0105

1 PF489



↓ 189.6mm  
↔ 135.8mm  
⊕ 4543

0106

1 PF489



↓ 225.2mm  
↔ 156.0mm  
⊕ 5059

0107

1 PF900



↓ 238.2mm  
↔ 158.6mm  
⊕ 5493

0108

1 PF157

2 PF256



↓ 115.2mm  
↔ 54.4mm  
⊕ 1949

0109

1 PF785

2 PF563

3 PF501

4 PF715



↓ 98.0mm  
↔ 143.2mm  
⊕ 17193

0110

1 PF275

2 PF672

3 PF674

4 PF676



↓ 100.0mm  
↔ 33.6mm  
⊕ 3409

0111

1 PF182

2 PF1037

3 PF1083

4 PF1011

5 PF182



↓ 96.6mm  
↔ 106.0mm  
⊕ 10513

0112

1 PF521

2 PF523

3 PF261

4 PF254

5 PF466



↓ 154.0mm  
↔ 118.4mm  
⊕ 10043

0113

1 PF275

2 PF282

3 PF256

4 PF105

5 PF1011



↓ 72.4mm  
↔ 42.8mm  
⊕ 4604

0114

1 PF254

2 PF132

3 PF134

4 PF130

5 PF715

6 PF548



↓ 96.2mm  
↔ 88.8mm  
⊕ 12552

0115

1 PF1085

2 PF231

3 PF108

4 PF192

5 PF523

6 PF1085



↓ 150.0mm  
↔ 109.6mm  
⊕ 7702

0116

1 PF244

2 PF257

3 PF136

4 PF134

5 PF133

6 PF502



↓ 134.8mm  
↔ 48.6mm  
⊕ 6704

0117

1 PF276

2 PF273

3 PF277

4 PF578

5 PF576

6 PF574

7 PF578



↓ 87.6mm  
↔ 115.2mm  
⊕ 14457

0118

1 PF257

2 PF730

3 PF5205

4 PF542

5 PF531

6 PF561

7 PF2335



↓ 99.6mm  
↔ 99.2mm  
⊕ 11830

0119

1 PF1602

2 PF1600

3 PF2412

4 PF249

5 PF1182

6 PF208

7 PF244



↓ 75.4mm  
↔ 42.8mm  
⊕ 5591

0120

1 PF229

2 PF232

3 PF256

4 PF1513

5 PF703

6 PF1511

7 PF198

8 PF546



↓ 46.6mm  
↔ 67.6mm  
⊕ 3332

0121



1 PF229 PF647  
2 PF276 PF523  
3 PF688  
4 PF662  
5 PF641  
6 PF523  
↓ 137.4mm  
↔ 141.0mm  
☞ 19714

0122



1 PF216  
2 PF135  
3 PF132  
4 PF138  
5 PF133  
6 PF208  
↓ 154.2mm  
↔ 102.8mm  
☞ 13963

0123



1 PF254 PF195  
2 PF184 PF524  
3 PF186  
4 PF147  
5 PF190  
6 PF256  
↓ 255.8mm  
↔ 85.6mm  
☞ 22332

0124



1 PF143 PF595  
2 PF155 PF244  
3 PF190 PF245  
4 PF194  
5 PF143  
6 PF593  
↓ 108.0mm  
↔ 108.6mm  
☞ 27866

0125



1 PF2615 PF147  
2 PF255 PF1586  
3 PF248 PF5205  
4 PF1084  
5 PF144  
6 PF1084  
↓ 87.4mm  
↔ 82.4mm  
☞ 13928

0126



1 PF256 PF190  
2 PF253 PF1128  
3 PF256 PF140  
4 PF252  
5 PF195  
6 PF156  
↓ 175.6mm  
↔ 94.8mm  
☞ 13362

0127



1 PF226 PF672  
2 PF231 PF671  
3 PF233 PF520  
4 PF674 PF523  
5 PF676  
6 PF664  
↓ 59.2mm  
↔ 74.0mm  
☞ 6615

0128



1 PF512 PF1081  
2 PF275 PF1107  
3 PF277 PF1086  
4 PF275 PF518  
5 PF800 PF512  
6 PF482  
↓ 121.4mm  
↔ 139.8mm  
☞ 16195

0129



1 PF277 PF1511  
2 PF276 PF900  
3 PF701 PF779  
4 PF156 PF543  
5 PF192  
6 PF1545  
↓ 142.6mm  
↔ 119.6mm  
☞ 15290

0130



1 PF282 PF1128  
2 PF285 PF1120  
3 PF1602 PF1123  
4 PF1609 PF1609  
5 PF1128 PF1602  
6 PF116  
↓ 130.8mm  
↔ 105.6mm  
☞ 16781

0131



1 PF247 PF575  
2 PF253 PF572  
3 PF226 PF188  
4 PF247 PF578  
5 PF575 PF572  
6 PF578  
↓ 187.0mm  
↔ 148.4mm  
☞ 20936

0132



1 PF254 PF232  
2 PF688 PF276  
3 PF307 PF254  
4 PF1121 PF2005  
5 PF720 PF502  
6 PF276  
↓ 142.2mm  
↔ 91.8mm  
☞ 13262

0133



1 PF248 PF1586  
2 PF276 PF153  
3 PF5683 PF1083  
4 PF1083 PF1085  
5 PF153 PF1586  
6 PF1083 PF1020  
↓ 98.4mm  
↔ 87.6mm  
☞ 12297

0134



1 PF273 PF132  
2 PF275 PF1403  
3 PF277 PF194  
4 PF132 PF576  
5 PF1403 PF275  
6 PF135 PF277  
↓ 161.8mm  
↔ 108.0mm  
☞ 26999

02

0201



1 PF525  
↓ 71.6mm  
↔ 99.0mm  
☞ 3312

0202



1 PF135  
↓ 87.6mm  
↔ 118.0mm  
☞ 2753

0203



1 PF512  
↓ 86.6mm  
↔ 99.0mm  
☞ 6304

0204

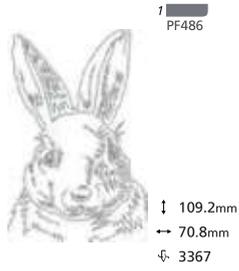


1 PF309  
↓ 100.0mm  
↔ 85.8mm  
☞ 5390

0205



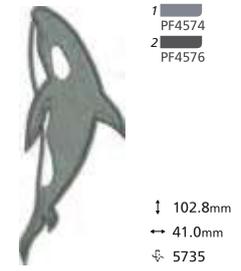
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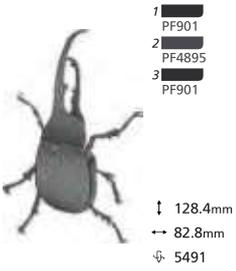
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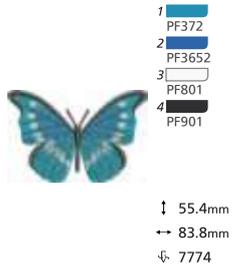
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0209



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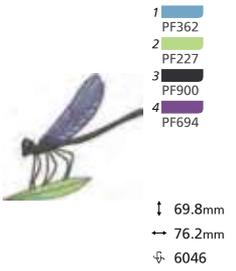
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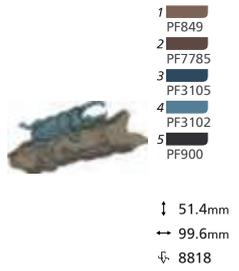
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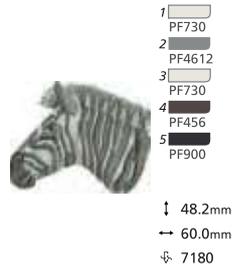
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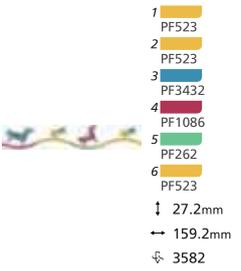
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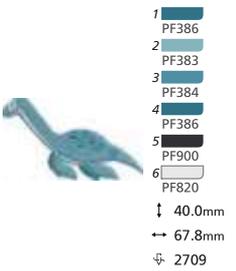
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0216



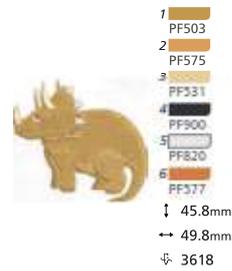
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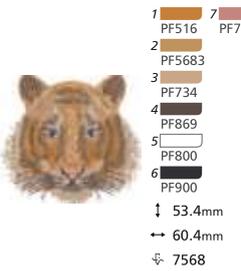
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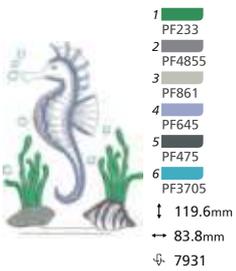
0219



0220



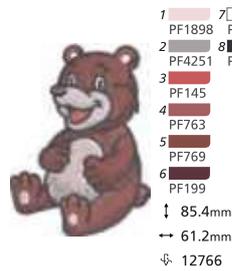
0221



0222



0223



0224



0225



- 1 PF778 PF778
  - 2 PF1128 PF900
  - 3 PF745
  - 4 PF737
  - 5 PF744
  - 6 PF820
- ↓ 46.46mm  
↔ 49.6mm  
⊕ 3945

0226



- 1 PF255 PF438
  - 2 PF4571 PF157
  - 3 PF4611 PF192
  - 4 PF4323
  - 5 PF4324
  - 6 PF4325
- ↓ 90.4mm  
↔ 84.4mm  
⊕ 15210

0227



- 1 PF560 PF7362
  - 2 PF563 PF900
  - 3 PF565 PF707
  - 4 PF7362
  - 5 PF730
  - 6 PF565
- ↓ 60.6mm  
↔ 56.4mm  
⊕ 6638

0228



- 1 PF254 PF196
  - 2 PF502 PF701
  - 3 PF2814 PF196
  - 4 PF720 PF720
  - 5 PF502 PF256
  - 6 PF254
- ↓ 91.8mm  
↔ 118.0mm  
⊕ 14911

0229



- 1 PF762 PF721
  - 2 PF740 PF762
  - 3 PF721 PF3361
  - 4 PF839 PF900
  - 5 PF7361 PF730
  - 6 PF740
- ↓ 95.6mm  
↔ 93.6mm  
⊕ 23484

0230



- 1 PF140 PF192
  - 2 PF140 PF900
  - 3 PF185 PF232
  - 4 PF305 PF503
  - 5 PF305 PF514
  - 6 PF185 PF730
- ↓ 24.6mm  
↔ 130.8mm  
⊕ 3950

0231



- 1 PF4252 PF4353 PF900
  - 2 PF900 PF4252
  - 3 PF4353 PF821
  - 4 PF7982 PF420
  - 5 PF4353 PF7982
  - 6 PF4252 PF185
- ↓ 90.0mm  
↔ 97.0 mm  
⊕ 13637

0232



- 1 PF731 PF859
  - 2 PF779 PF813
  - 3 PF813
  - 4 PF453
  - 5 PF859
  - 6 PF779
- ↓ 98.6 mm  
↔ 97.6mm  
⊕ 10173

0233



- 1 PF901 PF541 PF2016
  - 2 PF453 PF466 PF450
  - 3 PF450 PF901 PF901
  - 4 PF801 PF4572 PF466
  - 5 PF283 PF2014 PF493
  - 6 PF282 PF210 PF801
- ↓ 69.2mm  
↔ 95.4mm  
⊕ 9700

03

0301



- 1 PF900
- ↓ 40.0mm  
↔ 139.2mm  
⊕ 5649

0302



- 1 PF192
- ↓ 104.2mm  
↔ 120.2mm  
⊕ 4238

0303



- 1 PF301
- ↓ 37.4mm  
↔ 37.4mm  
⊕ 2372

0304



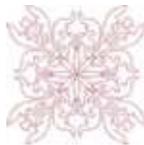
- 1 PF3433
- ↓ 120.0mm  
↔ 120.0mm  
⊕ 4095

0305



- 1 PF138
- ↓ 119.8mm  
↔ 119.8mm  
⊕ 3733

0306



- 1 PF1729
- ↓ 119.8mm  
↔ 119.8mm  
⊕ 4274

0307



- 1 PF192
- ↓ 117.0mm  
↔ 111.8mm  
⊕ 3776

0308



- 1 PF192
- ↓ 175.4mm  
↔ 160.0mm  
⊕ 11948

0309

1  
PF7371



↓ 120.0mm  
↔ 104.0mm  
⊕ 2257

0310

1  
PF602



↓ 199.4mm  
↔ 89.4mm  
⊕ 12496

0311

1  
PF1123



↓ 167.4mm  
↔ 68.0mm  
⊕ 7206

0312

1  
PF1545



↓ 219.4mm  
↔ 83.4mm  
⊕ 14186

0313

1  
PF561



↓ 157.2mm  
↔ 55.6mm  
⊕ 6177

0314

1  
PF3214



↓ 220.0mm  
↔ 76.4mm  
⊕ 14225

0315

1  
PF192



↓ 259.4mm  
↔ 31.8mm  
⊕ 4592

0316

1  
PF140

2  
PF140



↓ 28.8mm  
↔ 114.0mm  
⊕ 4426

0317

1  
PF186

2  
PF186



↓ 30.6mm  
↔ 119.0mm  
⊕ 2221

0318

1  
PF3218

2  
PF3218



↓ 38.6mm  
↔ 139.4mm  
⊕ 5871

0319

1  
PF563

2  
PF563



↓ 39.0mm  
↔ 140.4mm  
⊕ 8341

0320

1  
PF2812

2  
PF2812



↓ 45.6mm  
↔ 156.6mm  
⊕ 2922

0321

1  
PF190

2  
PF190

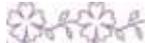


↓ 39.8mm  
↔ 126.8mm  
⊕ 1732

0322

1  
PF602

2  
PF602



↓ 25.6mm  
↔ 78.6mm  
⊕ 1403

0323

1  
PF1032

2  
PF1032



↓ 39.0mm  
↔ 119.6mm  
⊕ 5631

0324

1  
PF1900

2  
PF1904



↓ 40.2mm  
↔ 80.8mm  
⊕ 2925

0325

1  
PF237

2  
PF1120



↓ 67.4mm  
↔ 69.6mm  
⊕ 3112

0326

1  
PF244

2  
PF136



↓ 137.4mm  
↔ 139.0mm  
⊕ 13168

0327

1  
PF1900

2  
PF165



↓ 50.0mm  
↔ 49.0mm  
⊕ 1843

0328

1  
PF334

2  
PF674



↓ 96.2mm  
↔ 45.6mm  
⊕ 4450

0329



- 1 PF153
- 2 PF153

↓ 162.6mm  
 ↔ 43.4mm  
 ⚡ 3383

0330



- 1 PF2042
- 2 PF2042
- 3 PF294

↓ 19.0mm  
 ↔ 119.8mm  
 ⚡ 2435

0331



- 1 PF255
- 2 PF255
- 3 PF1123

↓ 46.6mm  
 ↔ 131.2mm  
 ⚡ 8151

0332



- 1 PF646
- 2 PF646
- 3 PF201

↓ 32.2mm  
 ↔ 87.8mm  
 ⚡ 8066

0333



- 1 PF135
- 2 PF2411
- 3 PF135

↓ 99.8mm  
 ↔ 60.4mm  
 ⚡ 5981

0334



- 1 PF141
- 2 PF141
- 3 PF145
- 4 PF291

↓ 29.0mm  
 ↔ 119.8mm  
 ⚡ 4006

0335



- 1 PF700
- 2 PF700
- 3 PF525
- 4 PF2215

↓ 64.2mm  
 ↔ 80.0mm  
 ⚡ 4179

0336



- 1 PF523
- 2 PF107
- 3 PF523
- 4 PF107

↓ 89.6mm  
 ↔ 87.0mm  
 ⚡ 8590

0337



- 1 PF3875
- 2 PF3875
- 3 PF3873
- 4 PF3874

↓ 131.2mm  
 ↔ 115.0mm  
 ⚡ 10942

0338



- 1 PF2615
- 2 PF155
- 3 PF180
- 4 PF2635
- 5 PF155

↓ 152.0mm  
 ↔ 109.4mm  
 ⚡ 11737

0339



- 1 PF800
- 2 PF800
- 3 PF700
- 4 PF3211
- 5 PF525
- 6 PF2215

↓ 81.2mm  
 ↔ 100.2mm  
 ⚡ 7535

0340



- 1 PF142 PF643
- 2 PF621
- 3 PF173
- 4 PF142
- 5 PF800
- 6 PF621

↓ 97.0mm  
 ↔ 108.8mm  
 ⚡ 13113

0341



- 1 PF675 PF10
- 2 PF689
- 3 PF10
- 4 PF675
- 5 PF689
- 6 PF6001

↓ 90.6mm  
 ↔ 87.0mm  
 ⚡ 6501

0342



- 1 PF220 PF220
- 2 PF1513
- 3 PF593
- 4 PF800
- 5 PF1513
- 6 PF593

↓ 114.2mm  
 ↔ 92.6mm  
 ⚡ 18358

04

0401



- 1 PF172
- 2 PF800
- 3 PF3878

↓ 47.4mm  
 ↔ 74.0mm  
 ⚡ 4546

0402



- 1 PF4573
- 2 PF4574
- 3 PF4571
- 4 PF4576

↓ 68.8mm  
 ↔ 79.8mm  
 ⚡ 5257

0403



- 1 PF820
- 2 PF4321
- 3 PF192
- 4 PF4255
- 5 PF416

↓ 60.0mm  
 ↔ 84.6mm  
 ⚡ 5514

0404



- 1 PF800
- 2 PF483
- 3 PF779
- 4 PF900
- 5 PF503

↓ 55.2mm  
 ↔ 55.2mm  
 ⚡ 7895

0405



- 1 PF303
  - 2 PF305
  - 3 PF301
  - 4 PF306
  - 5 PF359
  - 6 PF800
- ↓ 48.0mm  
↔ 101.8mm  
⊕ 9653

0406



- 1 PF754
  - 2 PF784
  - 3 PF753
  - 4 PF752
  - 5 PF4613
  - 6 PF900
- ↓ 75.6mm  
↔ 74.4mm  
⊕ 5020

0407



- 1 PF800 PF245
  - 2 PF483
  - 3 PF4252
  - 4 PF416
  - 5 PF900
  - 6 PF244
- ↓ 60.6mm  
↔ 79.6mm  
⊕ 10489

0408



- 1 PF720 PF188
  - 2 PF733 PF900
  - 3 PF735
  - 4 PF800
  - 5 PF4571
  - 6 PF4574
- ↓ 47.0mm  
↔ 94.8mm  
⊕ 4046

0409



- 1 PF745 PF244
  - 2 PF778 PF243
  - 3 PF779
  - 4 PF800
  - 5 PF779
  - 6 PF245
- ↓ 49.6mm  
↔ 95.4mm  
⊕ 8489

0410



- 1 PF117 PF1123
  - 2 PF1083 PF4576
  - 3 PF391
  - 4 PF393
  - 5 PF117
  - 6 PF1083
- ↓ 50.0mm  
↔ 60.6mm  
⊕ 6783

0411



- 1 PF3315 PF4855
  - 2 PF332 PF483
  - 3 PF333 PF245
  - 4 PF900 PF244
  - 5 PF483
  - 6 PF485
- ↓ 63.4mm  
↔ 95.6mm  
⊕ 6876

0412



- 1 PF800 PF154
  - 2 PF483 PF369
  - 3 PF520 PF370
  - 4 PF522 PF483
  - 5 PF102
  - 6 PF104
- ↓ 55.6mm  
↔ 80.2mm  
⊕ 8216

05

0501



- 1 PF356
- ↓ 56.8mm  
↔ 74.8mm  
⊕ 2679

0502



- 1 PF334
- ↓ 66.4mm  
↔ 80.0mm  
⊕ 3950

0503



- 1 PF730 PF900
  - 2 PF3101
  - 3 PF7981
  - 4 PF195
  - 5 PF438
  - 6 PF730
- ↓ 35.4mm  
↔ 109.8mm  
⊕ 5645

0504



- 1 PF578 PF900
  - 2 PF593
  - 3 PF720
  - 4 PF593
  - 5 PF302
  - 6 PF304
- ↓ 66.2mm  
↔ 89.8mm  
⊕ 12390

0505



- 1 PF739 PF900
  - 2 PF739
  - 3 PF275
  - 4 PF155
  - 5 PF532
  - 6 PF800
- ↓ 150.0mm  
↔ 36.8mm  
⊕ 4834

0506



- 1 PF368 PF4895 PF525
  - 2 PF820 PF4256 PF900
  - 3 PF900 PF4251 PF820
  - 4 PF820 PF368 PF703
  - 5 PF4895 PF356 PF900
  - 6 PF900 PF20
- ↓ 57.4mm  
↔ 96.0mm  
⊕ 14236

0507



- 1 PF703 PF486
  - 2 PF730 PF643
  - 3 PF526
  - 4 PF3431
  - 5 PF502
  - 6 PF434
- ↓ 50.2mm  
↔ 25.8mm  
⊕ 2562

0508



- 1 PF730 PF489
  - 2 PF7981 PF199
  - 3 PF703 PF900
  - 4 PF502
  - 5 PF753
  - 6 PF4253
- ↓ 110.0mm  
↔ 65.4mm  
⊕ 7848

0509



- 1 PF900 PF275
  - 2 PF900 PF3761
  - 3 PF200 PF543
  - 4 PF737
  - 5 PF701
  - 6 PF253
- ↓ 164.8mm  
↔ 54.4mm  
⊕ 5520

0601

1 PF700



↓ 54.6mm  
↔ 75.6mm  
⌘ 1439

0602

1 PF700



↓ 88.6mm  
↔ 89.0mm  
⌘ 6699

0603

1 PF700



↓ 71.2mm  
↔ 60.2mm  
⌘ 1567

0604

1 PF900  
2 PF703  
3 PF277  
4 PF703



↓ 46.6mm  
↔ 101.0mm  
⌘ 5061

0605

1 PF236  
2 PF236  
3 PF239  
4 PF703  
5 PF190  
6 PF526



↓ 20.0mm  
↔ 89.0mm  
⌘ 3226

0606

1 PF239  
2 PF239  
3 PF236  
4 PF526  
5 PF532  
6 PF702



↓ 29.6mm  
↔ 99.0mm  
⌘ 3175

0607

1 PF248  
2 PF703  
3 PF192  
4 PF730  
5 PF4323  
6 PF322



↓ 43.6mm  
↔ 108.2mm  
⌘ 13104

0608

1 PF256 PF526  
2 PF256  
3 PF259  
4 PF730  
5 PF900  
6 PF702



↓ 34.0mm  
↔ 119.0mm  
⌘ 3871

0609

1 PF738 PF778  
2 PF820 PF820  
3 PF744  
4 PF433  
5 PF188  
6 PF900



↓ 55.4mm  
↔ 54.6mm  
⌘ 6029

0610

1 PF7371 PF274 PF3  
2 PF518 PF2417  
3 PF512 PF192  
4 PF518 PF144  
5 PF7371 PF3  
6 PF249 PF192



↓ 43.8mm  
↔ 51.0mm  
⌘ 5882

0611

1 PF206 PF539  
2 PF203 PF157  
3 PF522 PF199  
4 PF206 PF192  
5 PF277  
6 PF820



↓ 119.2mm  
↔ 85.0mm  
⌘ 15911

0612

1 PF4895 PF1085  
2 PF730 PF4614  
3 PF7367 PF186  
4 PF4895 PF4895  
5 PF4574 PF198  
6 PF900



↓ 202.6mm  
↔ 159.2mm  
⌘ 42020

0613

1 PF703 PF274  
2 PF1609 PF1609  
3 PF800 PF703  
4 PF720 PF156  
5 PF249 PF1609  
6 PF276 PF800



↓ 112.4mm  
↔ 106.6mm  
⌘ 20090

0614

1 PF738 PF502  
2 PF778 PF701  
3 PF277 PF188  
4 PF246 PF512  
5 PF276 PF484  
6 PF730 PF438



↓ 60.0mm  
↔ 49.6mm  
⌘ 6699

0615

1 PF701 PF2014 PF565  
2 PF1082 PF701 PF571  
3 PF190 PF1082  
4 PF2014 PF190  
5 PF214 PF2014  
6 PF234 PF503



↓ 194.6mm  
↔ 156.8mm  
⌘ 25125

0616

1 PF769 PF4251 PF703  
2 PF719 PF4571 PF192  
3 PF255 PF900  
4 PF222 PF820  
5 PF2411 PF869  
6 PF369 PF4251



↓ 239.6mm  
↔ 150.8mm  
⌘ 26964

0701

1 PF193  
2 PF900



↓ 72.2mm  
↔ 101.2mm  
⌘ 5038

0702

1 PF4571  
2 PF383



↓ 150.8mm  
↔ 125.0mm  
⌘ 22262

0703

1 PF521  
2 PF484



↓ 156.0mm  
↔ 100.0mm  
⌘ 10703

0704

1 PF900  
2 PF548  
3 PF190



↓ 71.6mm  
↔ 101.4mm  
⌘ 5385

0705

- 1 PF548
- 2 PF703
- 3 PF900



↓ 75.2mm  
 ↔ 102.2mm  
 ⚡ 7519

0706

- 1 PF172
- 2 PF228
- 3 PF703



↓ 93.8mm  
 ↔ 70.0mm  
 ⚡ 7558

0707

- 1 PF565
- 2 PF152
- 3 PF720
- 4 PF523



↓ 98.2mm  
 ↔ 56.8mm  
 ⚡ 6919

0708

- 1 PF1086 PF1086
- 2 PF1086
- 3 PF523
- 4 PF117
- 5 PF160
- 6 PF3432



↓ 30.8mm  
 ↔ 140.8mm  
 ⚡ 4266

0709

- 1 PF779 PF779
- 2 PF744
- 3 PF537
- 4 PF1051
- 5 PF523
- 6 PF239



↓ 98.6mm  
 ↔ 82.0mm  
 ⚡ 10251

0710

- 1 PF643 PF105
- 2 PF641 PF800
- 3 PF643
- 4 PF644
- 5 PF512
- 6 PF503



↓ 60.8mm  
 ↔ 158.8mm  
 ⚡ 15148

0711

- 1 PF743 PF4251
- 2 PF703 PF759
- 3 PF172
- 4 PF502
- 5 PF3715
- 6 PF2814



↓ 79.6mm  
 ↔ 99.8mm  
 ⚡ 7557

0712

- 1 PF173 PF274
- 2 PF712 PF277
- 3 PF596
- 4 PF173
- 5 PF592
- 6 PF273



↓ 95.8mm  
 ↔ 117.4mm  
 ⚡ 10487

0713

- 1 PF148 PF900
- 2 PF769 PF4575
- 3 PF4575
- 4 PF900
- 5 PF4571
- 6 PF471



↓ 65.6mm  
 ↔ 45.8mm  
 ⚡ 4982

0714

- 1 PF701 PF602
- 2 PF701 PF900
- 3 PF371
- 4 PF172
- 5 PF501
- 6 PF200



↓ 248.0mm  
 ↔ 61.0mm  
 ⚡ 6488

0715

- 1 PF277 PF277
- 2 PF257 PF276
- 3 PF186 PF257
- 4 PF785
- 5 PF172
- 6 PF560



↓ 162.8mm  
 ↔ 158.4mm  
 ⚡ 18327

0716

- 1 PF172 PF544
- 2 PF170 PF239
- 3 PF900 PF249
- 4 PF4351
- 5 PF4575
- 6 PF700



↓ 65.2mm  
 ↔ 46.8mm  
 ⚡ 4753

0717

- 1 PF779 PF4575 PF4575
- 2 PF503 PF779
- 3 PF779 PF767
- 4 PF767 PF181
- 5 PF800 PF1085
- 6 PF900 PF503



↓ 203.8mm  
 ↔ 155.8mm  
 ⚡ 19831

0718

- 1 PF635 PF634 PF634
- 2 PF6655 PF635 PF6655
- 3 PF634 PF6655 PF632
- 4 PF635 PF503 PF592
- 5 PF503 PF1085
- 6 PF475 PF155



↓ 190.0mm  
 ↔ 159.6mm  
 ⚡ 17293

0719

- 1 PF544 PF820 PF154
- 2 PF154 PF4253 PF820
- 3 PF604 PF4251 PF900
- 4 PF365 PF486
- 5 PF532 PF900
- 6 PF512 PF371



↓ 98.8mm  
 ↔ 71.6mm  
 ⚡ 15503

08

0801

- 1 PF454



↓ 46.2mm  
 ↔ 59.8mm  
 ⚡ 855

0802

- 1 PF735
- 2 PF779



↓ 110.0mm  
 ↔ 69.4mm  
 ⚡ 3685

0803

- 1 PF7125
- 2 PF712
- 3 PF7369



↓ 65.0mm  
 ↔ 62.2mm  
 ⚡ 4098

0804

- 1 PF454
- 2 PF3325
- 3 PF489



↓ 104.0mm  
 ↔ 95.8mm  
 ⚡ 4251

0805



- 1 PF309
  - 2 PF304
  - 3 PF301
- ↓ 60.2mm  
↔ 43.8mm  
⊕ 3090

0806



- 1 PF592
  - 2 PF4352
  - 3 PF1084
  - 4 PF370
- ↓ 51.0mm  
↔ 47.4mm  
⊕ 3310

0807



- 1 PF521
  - 2 PF700
  - 3 PF106
  - 4 PF523
- ↓ 62.8mm  
↔ 50.0mm  
⊕ 3880

0808



- 1 PF501
  - 2 PF501
  - 3 PF155
  - 4 PF170
  - 5 PF501
- ↓ 142.2mm  
↔ 26.8mm  
⊕ 4038

0809



- 1 PF145
  - 2 PF523
  - 3 PF7371
  - 4 PF487
  - 5 PF7371
- ↓ 48.0mm  
↔ 101.2mm  
⊕ 5372

0810



- 1 PF486
  - 2 PF102
  - 3 PF673
  - 4 PF900
  - 5 PF4835
- ↓ 41.6mm  
↔ 52.6mm  
⊕ 2117

0811



- 1 PF900
  - 2 PF778
  - 3 PF751
  - 4 PF720
  - 5 PF502
- ↓ 72.0mm  
↔ 78.0mm  
⊕ 6551

0812



- 1 PF5681
  - 2 PF744
  - 3 PF4256
  - 4 PF781
  - 5 PF489
- ↓ 84.8mm  
↔ 80.0mm  
⊕ 5304

0813



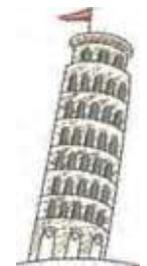
- 1 PF800
  - 2 PF4571
  - 3 PF190
  - 4 PF197
  - 5 PF900
- ↓ 68.2mm  
↔ 61.2mm  
⊕ 6074

0814



- 1 PF720
  - 2 PF523
  - 3 PF152
  - 4 PF3431
  - 5 PF523
- ↓ 47.2mm  
↔ 38.4mm  
⊕ 3421

0815



- 1 PF5681
  - 2 PF744
  - 3 PF1512
  - 4 PF4256
  - 5 PF489
- ↓ 69.2mm  
↔ 32.2mm  
⊕ 2636

0816



- 1 PF283
  - 2 PF735
  - 3 PF820
  - 4 PF163
  - 5 PF700
  - 6 PF546
- ↓ 76.8mm  
↔ 70.4mm  
⊕ 6661

0817



- 1 PF1512
  - 2 PF291
  - 3 PF522
  - 4 PF233
  - 5 PF3705
  - 6 PF489
- ↓ 93.6mm  
↔ 77.8mm  
⊕ 6536

0818



- 1 PF592
  - 2 PF730
  - 3 PF265
  - 4 PF533
  - 5 PF306
  - 6 PF6655
  - 7 PF306
- ↓ 56.4mm  
↔ 43.6mm  
⊕ 4835

0819



- 1 PF171
  - 2 PF142
  - 3 PF676
  - 4 PF673
  - 5 PF3433
  - 6 PF3431
  - 7 PF106
- ↓ 65.6mm  
↔ 33.4mm  
⊕ 3810

0820



- 1 PF753
  - 2 PF421
  - 3 PF100
  - 4 PF282
  - 5 PF573
  - 6 PF769
  - 7 PF753
  - 8 PF573
- ↓ 46.8mm  
↔ 45.8mm  
⊕ 5004

0821



- 1 PF305
  - 2 PF188
  - 3 PF198
  - 4 PF302
  - 5 PF304
  - 6 PF4576
  - 7 PF305
  - 8 PF721
  - 9 PF720
- ↓ 103.8mm  
↔ 57.4mm  
⊕ 5071

0822



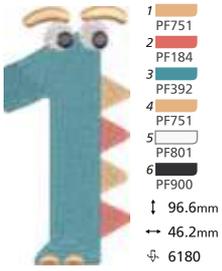
- 1 PF386
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  - 4 PF565
  - 5 PF2041
  - 6 PF219
  - 7 PF561
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  - 9 PF482
  - 10 PF721
- ↓ 80.0mm  
↔ 96.0mm  
⊕ 6259

0823

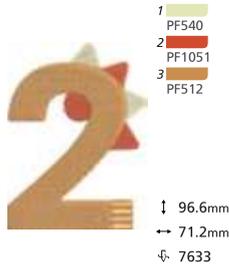


- 1 PF711
  - 2 PF712
  - 3 PF713
  - 4 PF111
  - 5 PF1510
  - 6 PF1511
  - 7 PF1512
  - 8 PF369
  - 9 PF3705
  - 10 PF1511
  - 11 PF1512
  - 12 PF1511
- ↓ 98.2mm  
↔ 44.6mm  
⊕ 13450

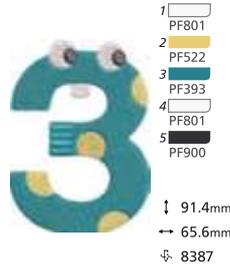
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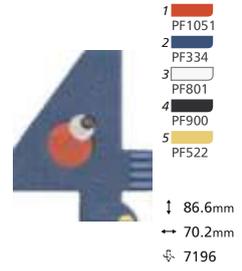
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0903



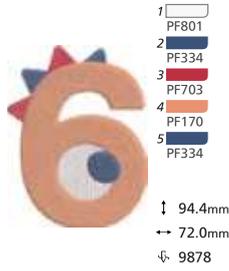
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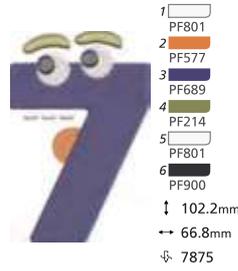
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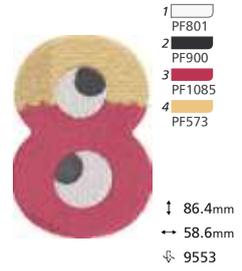
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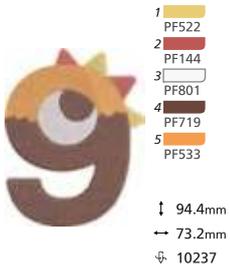
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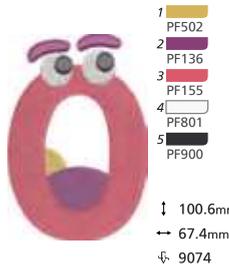
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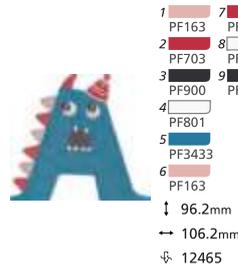
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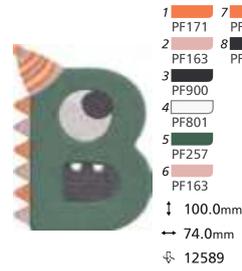
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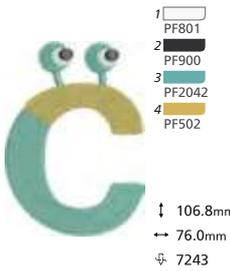
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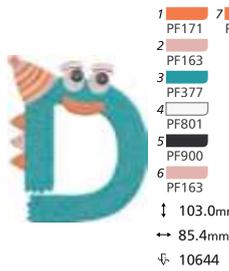
0912



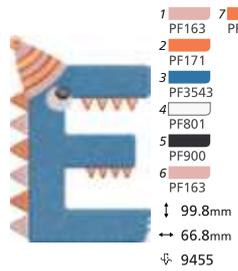
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0914



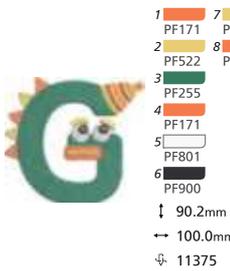
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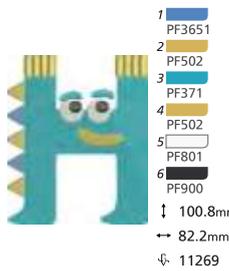
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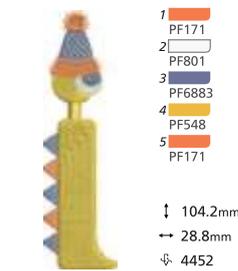
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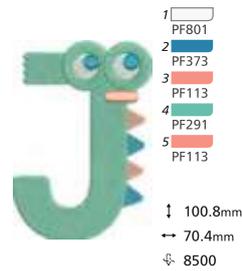
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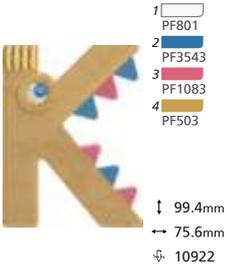
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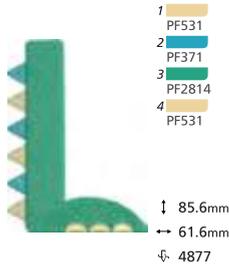
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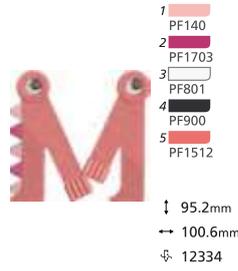
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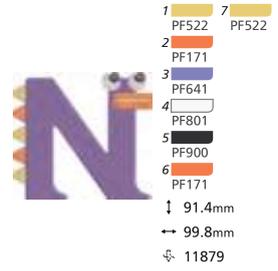
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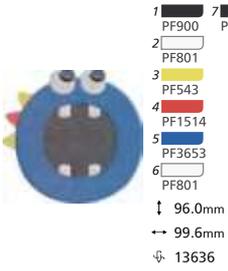
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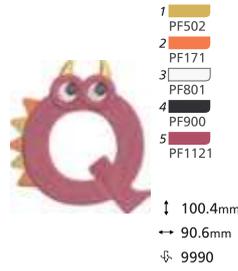
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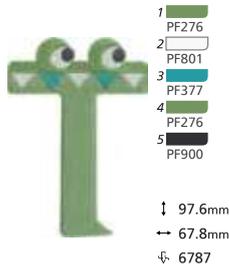
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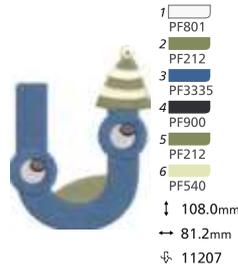
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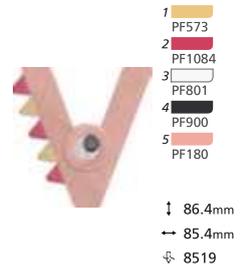
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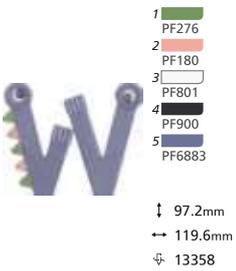
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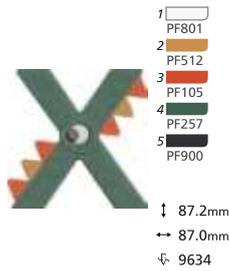
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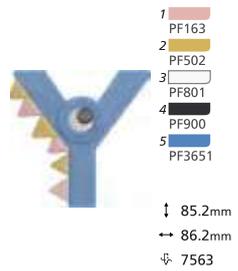
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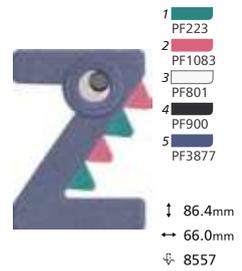
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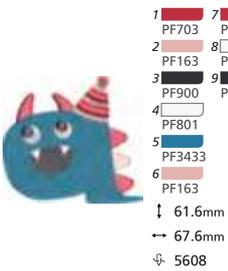
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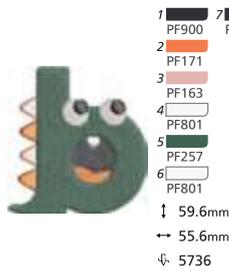
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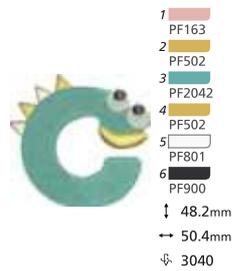
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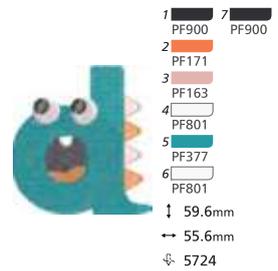
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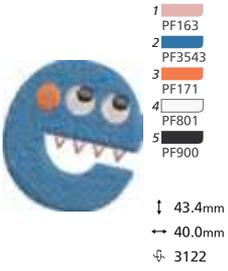
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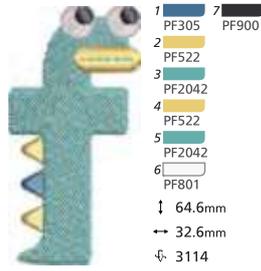
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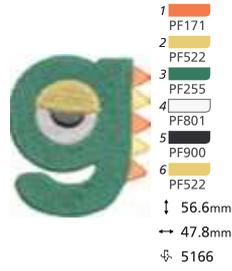
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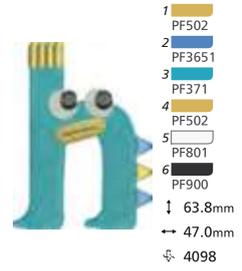
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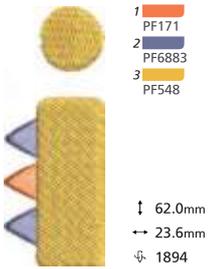
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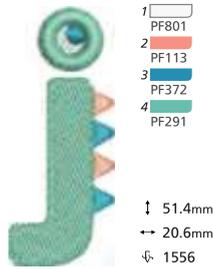
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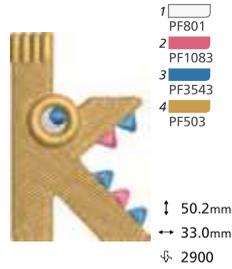
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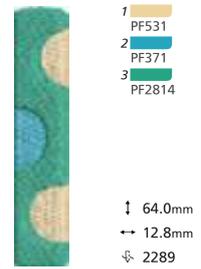
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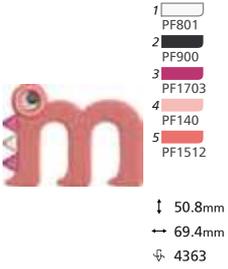
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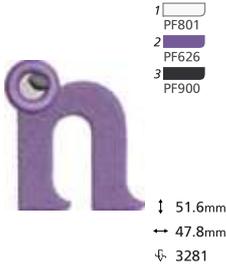
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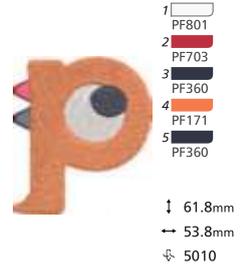
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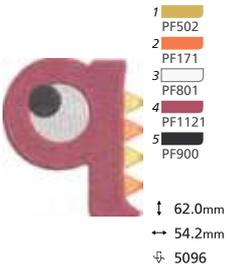
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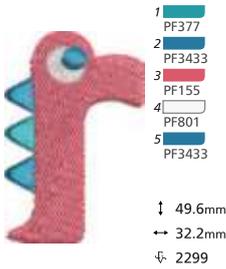
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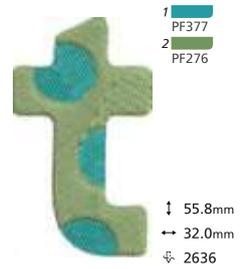
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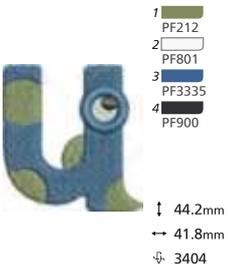
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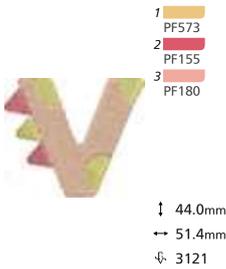
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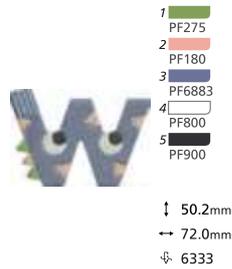
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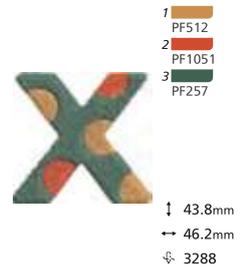
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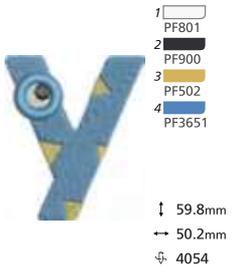
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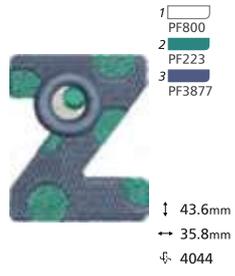
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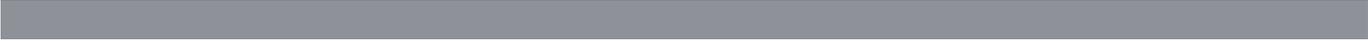


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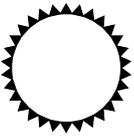


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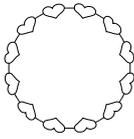




01



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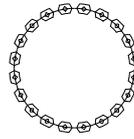
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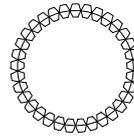
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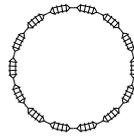
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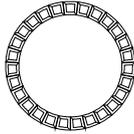
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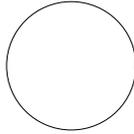
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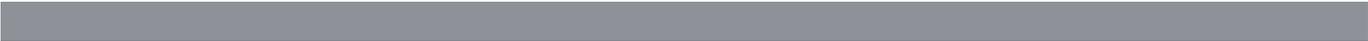
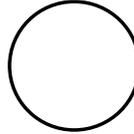
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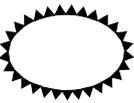
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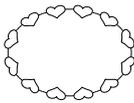
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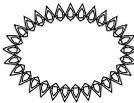
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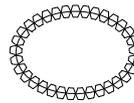
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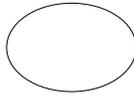
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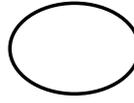
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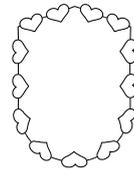
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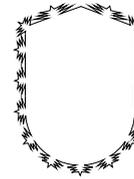
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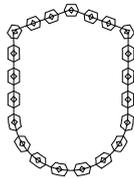
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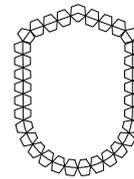
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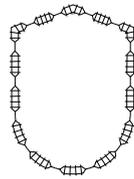
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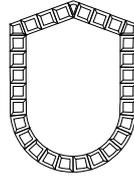
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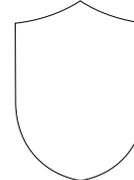
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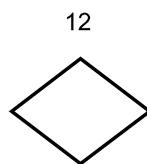
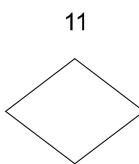
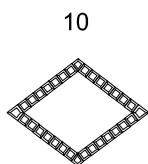
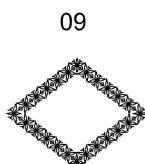
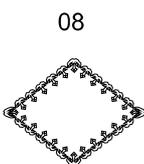
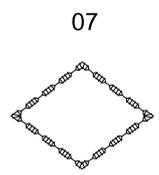
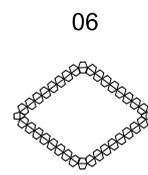
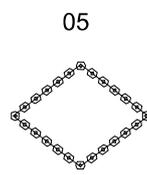
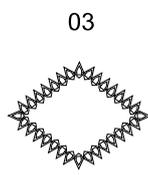
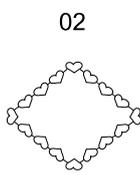
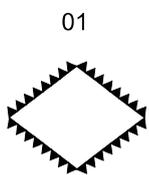
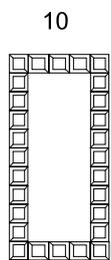
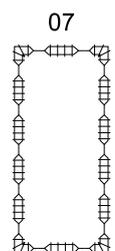
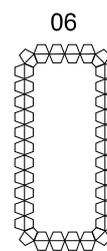
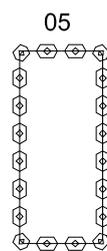
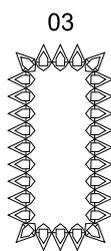
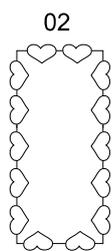
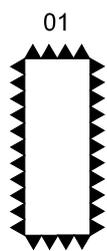
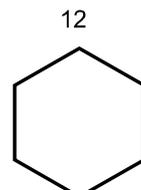
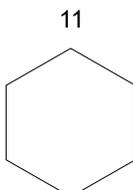
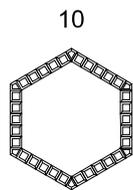
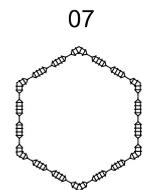
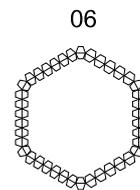
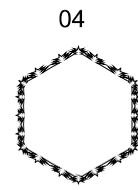
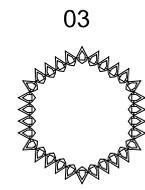
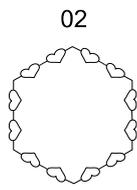
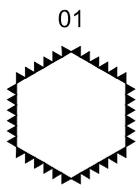


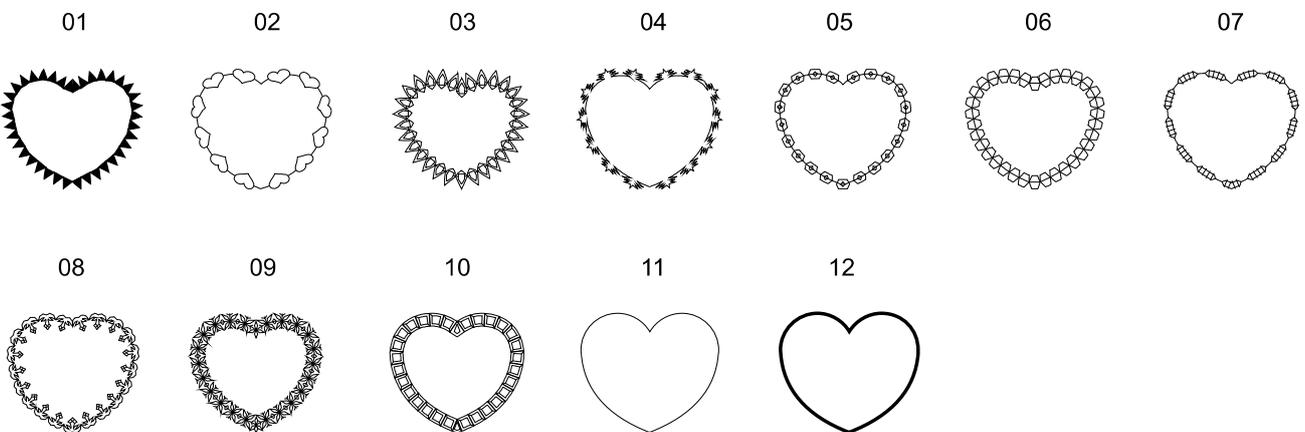
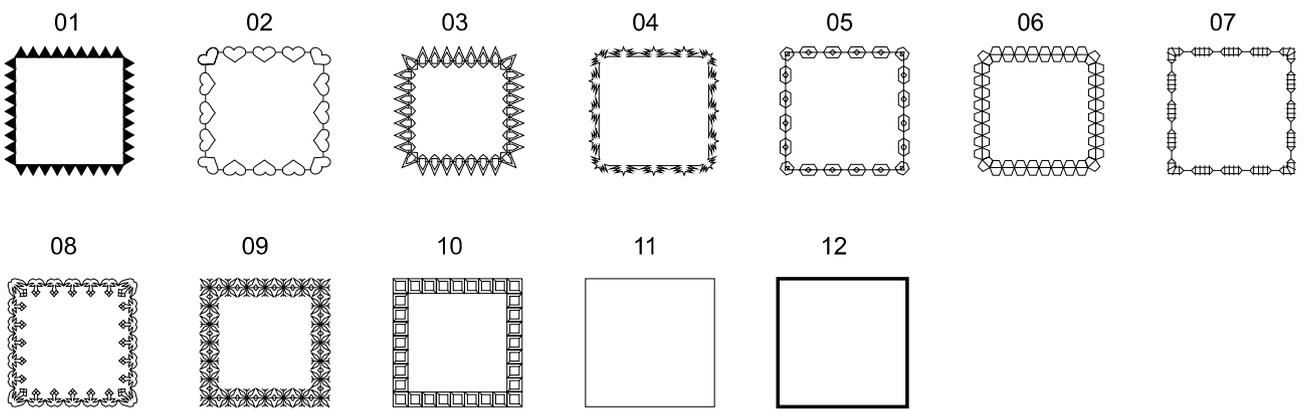
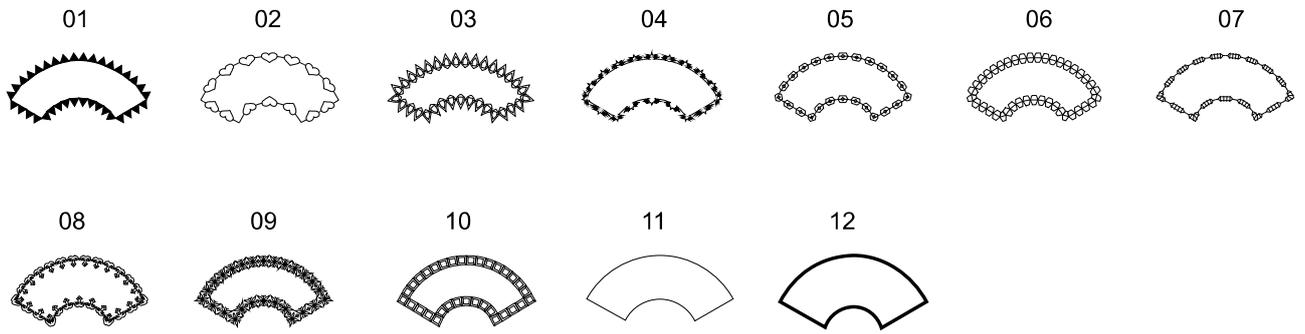
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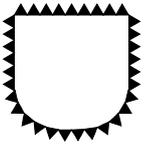
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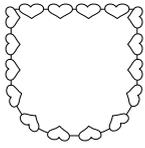




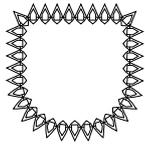
01



02



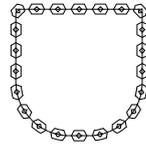
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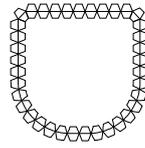
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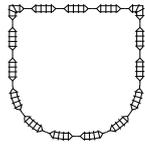
05



06



07



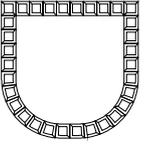
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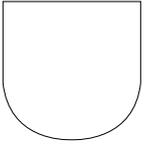
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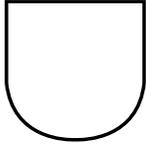
10



11



12



000 003      000 006 007 008 009 010  
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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**  
037      030 040 041 042 043 044 045 046 047 048 049 050 051 052 053 054 055 056 057 058 059 060 061 062  
**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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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  
037      030 040 041 042 043 044 045 046 047 048 049 050 051 052 053 054 055 056 057 058 059 060 061 062  
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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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01	02	03	04	05	06	07	08	09	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
14	15	16	17	18	19	20	21	22	23	24	25	26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z



01	02	03	04	05	06	07	08	09	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
14	15	16	17	18	19	20	21	22	23	24	25	26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z

2001

1 PF185



↓ 34.0mm  
↔ 81.2mm  
⊕ 1346

2002

1 PF199



↓ 94.8mm  
↔ 102.4mm  
⊕ 3974

2003

1 PF524



↓ 77.8mm  
↔ 80.8mm  
⊕ 2929

2004

1 PF564  
2 PF544



↓ 29.4mm  
↔ 95.6mm  
⊕ 1033

2005

1 PF130  
2 PF132



↓ 79.8mm  
↔ 78.4mm  
⊕ 2729

2006

1 PF243  
2 PF163



↓ 99.0mm  
↔ 94.0mm  
⊕ 7224

2007

1 PF102  
2 PF103



↓ 84.8mm  
↔ 76.8mm  
⊕ 2045

2008

1 PF561  
2 PF564



↓ 77.2mm  
↔ 50.4mm  
⊕ 2573



01	02	03	04	05	06	07	08	09	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
14	15	16	17	18	19	20	21	22	23	24	25	26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z



01	02	03	04	05	06	07	08	09	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
14	15	16	17	18	19	20	21	22	23	24	25	26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z



01	02	03	04	05	06	07	08	09	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
14	15	16	17	18	19	20	21	22	23	24	25	26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z

3001

1 PF512



↓ 40.2mm  
↔ 70.0mm  
⊕ 3117

3002

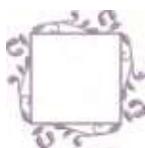
1 PF200



↓ 69.0mm  
↔ 110.2mm  
⊕ 3652

3003

1 PF601



↓ 113.4mm  
↔ 113.6mm  
⊕ 7223

3004

1 PF332



↓ 111.0mm  
↔ 88.4mm  
⊕ 8162

3005

1 PF305



↓ 94.0mm  
↔ 41.2mm  
⊕ 1479

3006

1 PF103

2 PF310



↓ 105.0mm  
↔ 93.6mm  
⊕ 2478

3007

1 PF147

2 PF737



↓ 128.0mm  
↔ 90.4mm  
⊕ 5889

3008

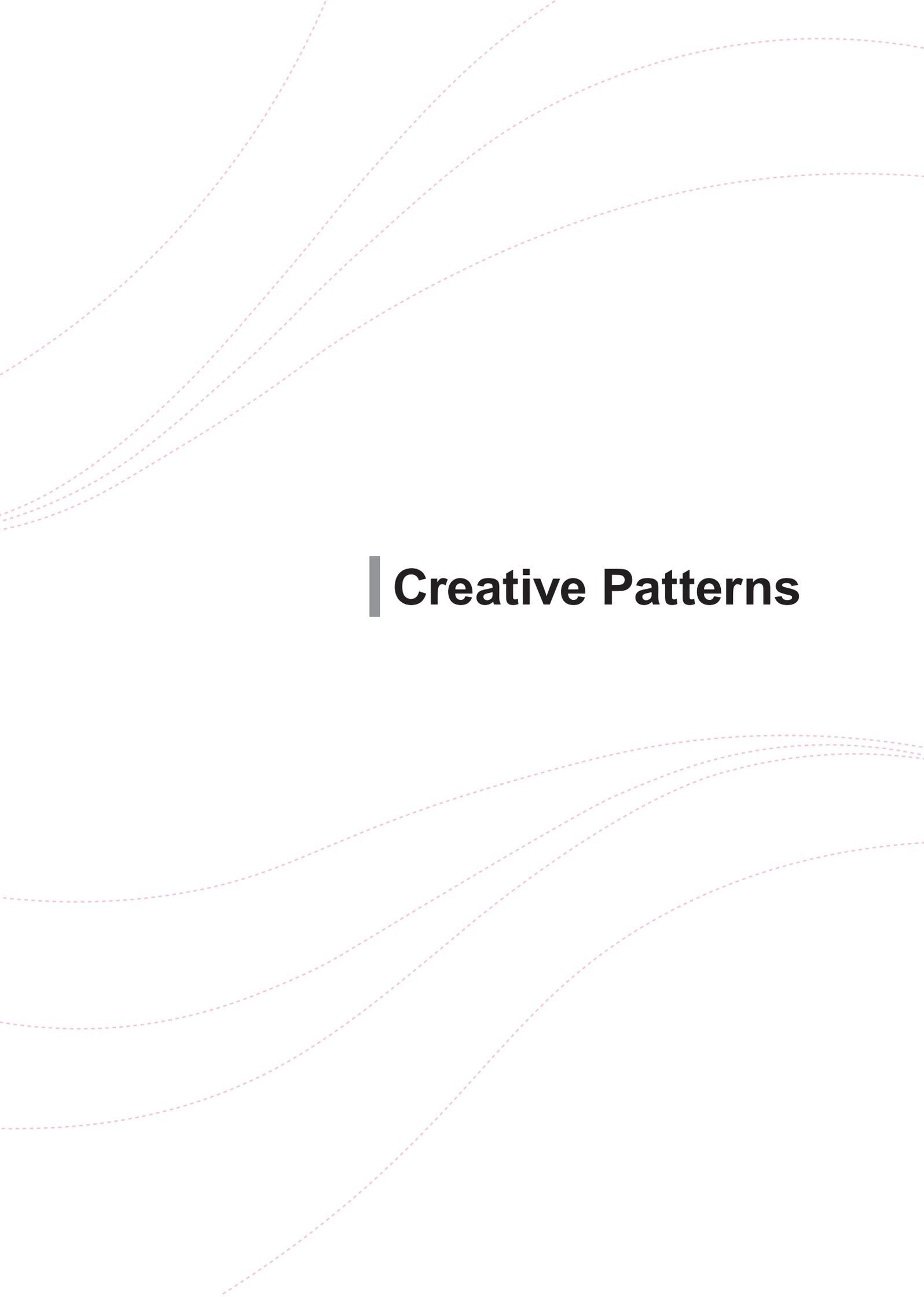
1 PF564

2 PF525

3 PF544



↓ 103.0mm  
↔ 104.2mm  
⊕ 1960



# **| Creative Patterns**

# Creative patterns chart

10



1001

- 1  PF742
- 2  PF591
- 3  PF7785
- 4  PF522
- 5  PF3211
- 6  PF742

↓ 69.8mm  
↔ 57.4mm  
⚡ 5036



1002

- 1  PF273
- 2  PF275
- 3  PF277
- 4  PF695
- 5  PF135

↓ 97.4mm  
↔ 98.0mm  
⚡ 10509



1003

- 1  PF713
- 2  PF7367
- 3  PF355
- 4  PF1083
- 5  PF901
- 6  PF535

↓ 56.0mm  
↔ 70.6mm  
⚡ 2453



1004

↓ 80.6mm  
↔ 51.2mm  
⚡ 3407

- 1  PF169
- 2  PF181
- 3  PF434
- 4  PF521
- 5  PF523
- 6  PF181
- 7  PF434
- 8  PF901



1005

↓ 83.4mm  
↔ 83.2mm  
⚡ 4244

- 1  PF534
- 2  PF700  
Add appliqué fabric
- 3  PF3214  
Trim appliqué fabric
- 4  PF700  
Add appliqué fabric
- 5  PF3214  
Trim appliqué fabric
- 6  PF3651
- 7  PF534
- 8  PF900



1006

↓ 87.2mm  
↔ 99.6mm  
⚡ 4232

- 1  PF700  
Add appliqué fabric
- 2  PF3214  
Trim appliqué fabric
- 3  PF561



1007

- 1  PF133
- 2  PF135

↓ 79.8mm  
↔ 80.2mm  
⌵ 12738



1008

- 1  PF206
- 2  PF720  
Add EVA
- 3  PF1085
- 4  PF544

↓ 99.9mm  
↔ 53.5mm  
⌵ 3067



1009

- 1  PF522
- 2  PF142
- 3  PF1601  
Add EVA
- 4  PF184  
Add EVA
- 5  PF142

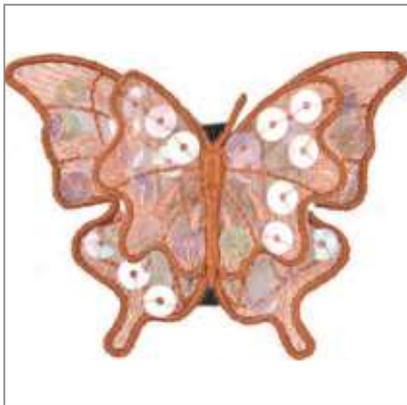
↓ 55.6mm  
↔ 69.0mm  
⌵ 4192



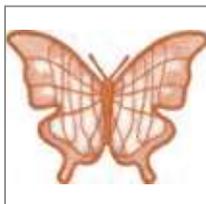
1010

- 1  PF1107
- 2  PF522
- 3  PF371
- 4  PF355

↓ 244.8mm  
 ↔ 29.2mm  
 ↕ 15234



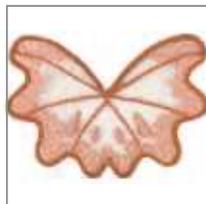
1011



- 1  PF782
  - 2  PF754
  - 3  PF754
  - 4  PF754
- Add pop up design (b)

↓ 63.8mm  
 ↔ 81.6mm  
 ↕ 4093

1012



- 1  PF782
- 2  PF754

↓ 40.6mm  
 ↔ 58.2mm  
 ↕ 2057



1013

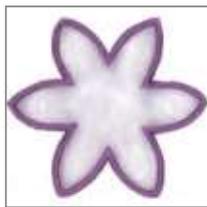


1 PF604

↓ 57.0mm  
↔ 61.6mm  
⌘ 1218



1014



1 PF604

↓ 53.4mm  
↔ 61.4mm  
⌘ 1329



1015



1 PF604

↓ 53.6mm  
↔ 49.0mm  
⌘ 909



1016



1 PF604

↓ 53.4mm  
↔ 46.2mm  
⌘ 1135



1017



1 PF604

↓ 36.8mm  
↔ 42.4mm  
⌘ 951



1018



1 PF604

↓ 18.6mm  
↔ 18.4mm  
⌘ 315



1019



1 PF218

↓ 27.2mm  
↔ 28.2mm  
⌘ 623



1020



1 PF218

↓ 23.0mm  
↔ 38.0mm  
⌘ 603



1021



1 PF218

↓ 31.8mm  
↔ 29.4mm  
⌘ 655



# Icon illustrate



## Post-processing

Additional processing is required to complete the project.

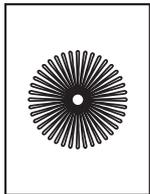
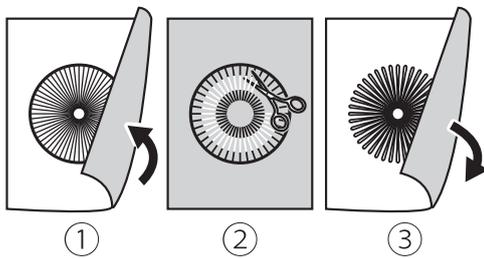


## Fringe embroidery

Three processing choices available to complete the Fringe Embroidery.



A



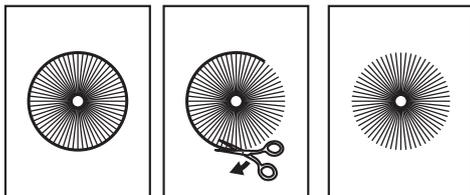
④

### Method A:

- ① After finish the embroidering, turn the piece over to the backside.
- ② Cut the lower threads of embroidery patterns.
- ③ Turn the piece over to the frontside.
- ④ Completed.



B



①

②

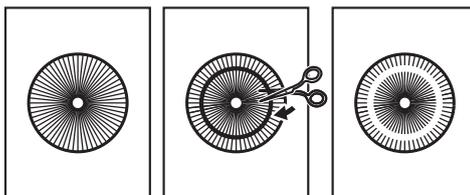
③

### Method B:

- ① Finish the embroidering.
- ② Cut the outer edge threads of embroidery patterns.
- ③ Completed.



C



①

②

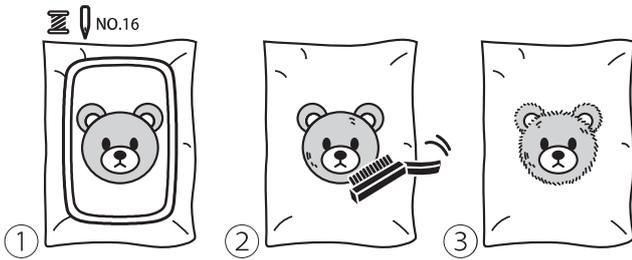
③

### Method C:

- ① Finish the embroidering.
- ② Cut the upper threads of embroidery patterns.
- ③ Completed.



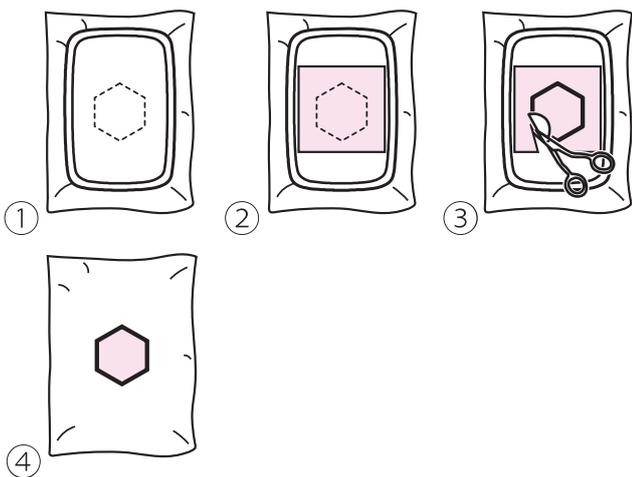
## Brushed embroidery



- ① Change needle size to #16/100, use wool embroidery thread and JX presser foot.
- ② Brush the thread by iron brush or velcro.
- ③ Completed.



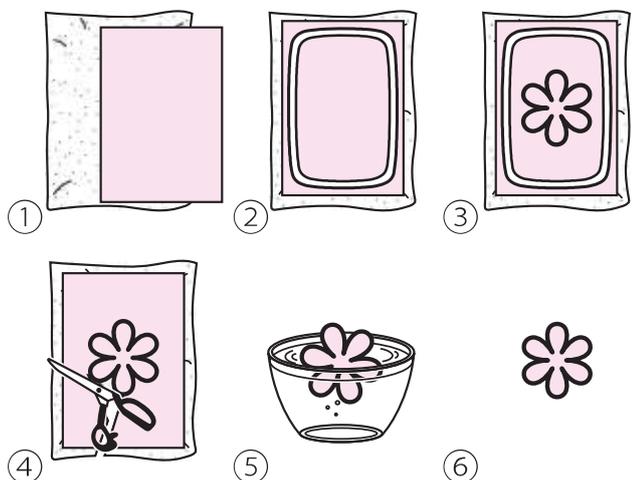
## Appliqué



- ① Mark the patch position on the fabric first.
- ② Place the patch on the embroidery area and continue embroidery.
- ③ Cut the excess fabric away.
- ④ Completed.



## Freestanding organza



- ① Use water-soluble stabilizer and organza.
- ② Place the water-soluble stabilizer underneath the organza, and hoop them firmly.
- ③ Finished the embroidery.
- ④ Cut the excess organza and stabilizer away.
- ⑤ Soak the design until the water-soluble stabilizer has dissolved.
- ⑥ Completed.



## Freestanding



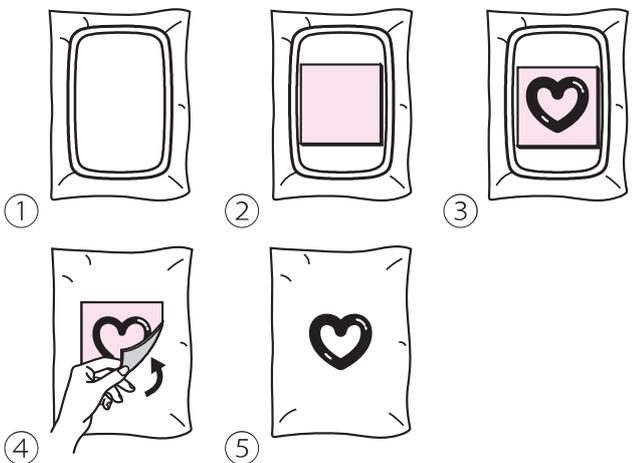
- ① Use water-soluble stabilizer.
- ② Finished the embroidery.
- ③ Soak the design until the water-soluble stabilizer has dissolved.
- ④ Completed.



④



## 3D foam embroidery



- ① Hooping the fabric firmly.
- ② Place EVA foam over the patterns where you want to embroidery.
- ③ Finish the embroidery.
- ④ Remove excess foam material.
- ⑤ Completed.

# Post-processing tutorial - Butterfly



It will need to use the embroidery pattern 1011~1012.



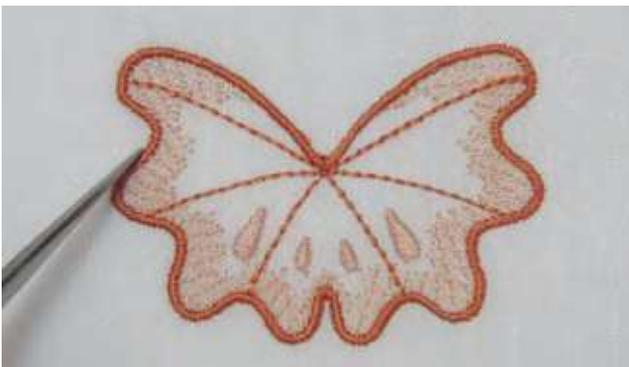
## Material preparation:

- ① Organza fabric
- ② Water-soluble stabilizer
- ③ Hand stitching needle and embroidery thread
- ④ Few pieces of sequins
- ⑤ Hair pin \*1pc
- ⑥ Webbing 1\*pc 6mm
- ⑦ Glue gun



## Hooping

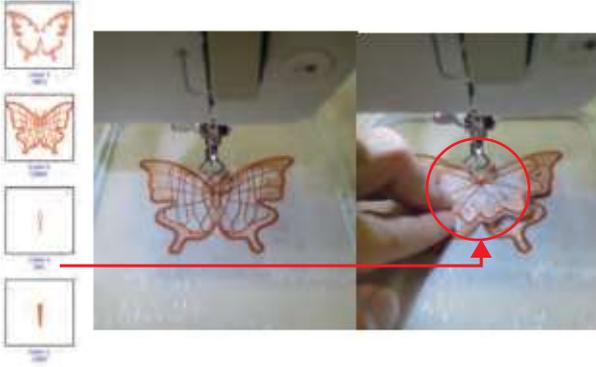
Place the two layers of water-soluble stabilizer underneath the organza, and hoop them firmly. Make sure it's tight with no wrinkles, to have a better embroidery performance.



## Start Embroidery

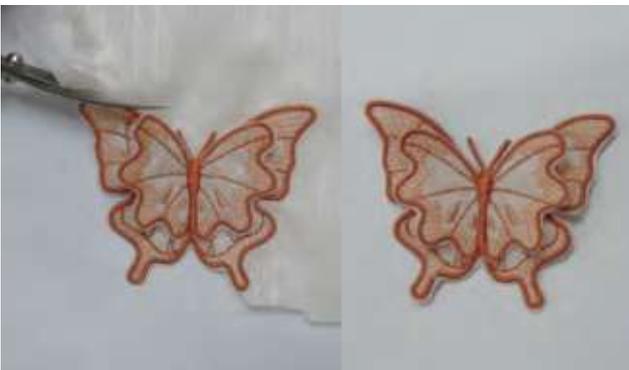
Finish embroidery pattern #1012 (Use the same bobbin color thread as upper thread).

When embroidery is finished, please trim the picture according to the shape .



### Start Embroidery

- Finish embroidery pattern #1011. (Use the same bobbin color thread as upper thread)
- Finish the third layer embroidery, put above of #1012 pattern at the center place.
- Finish the fourth layer embroidery. (Fix the #1012 embroidery pattern)



Cut out the shape.

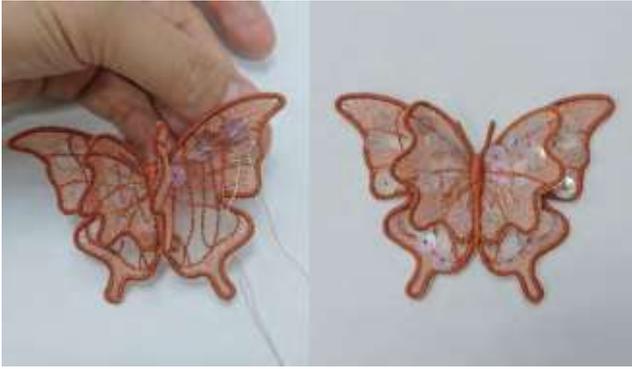


### Dissolved the water-soluble stabilizer

Soak the butterfly design until the water-soluble stabilizer has dissolved.



Place a fabric in between and use flatiron to dry the design.



### Sequins

Place the sequins at the wings and sew (Use the same bobbin color thread as upper thread).



### Fixed hairpin

Cut the webbing to hairpin length, then use a glue gun to stick the webbing on the hairpin.



Use a glue gun to stick the butterfly on the webbing.



Completed!

# Post-processing tutorial - Flower



It will need to use the embroidery pattern 1013~1021.



## Material preparation:

- ① Organza (purple/green)
- ② Water-soluble stabilizer
- ③ Hand stitching needle and embroidery thread
- ④ Pearl \*1pc
- ⑤ Clip \*1pc
- ⑥ Non-woven fabric
- ⑦ Glue gun



## Hooing

Place the two layers of water-soluble stabilizer underneath the purple organza, and hoop them firmly. Make sure it's tight with no wrinkles, to have a better embroidery performance.



## Start embroidery - petals (1013-1018)

Finish embroidery pattern of the petals (Use the same bobbin color thread as upper thread).



### **Hooping**

Place the two layers of water-soluble stabilizer underneath the green organza, and hoop them firmly. Make sure it's tight with no wrinkles, to have a better embroidery performance.



### **Start embroidery - leafs (1019-1021)**

Finish embroidery pattern of the leafs (Use the same bobbin color thread as upper thread).



Cut out the shape.



### **Dissolved the water-soluble stabilizer**

Soak the petals and leafs design until the water-soluble stabilizer has dissolved.



Place a fabric in between and use flatiron to dry the design.



**Place petals in the proper order**

Stitch all pieces by hand to complete the project.



Place petals in proper order and hand stitching petals along with a bead to fit it.



**Adhesive the clip**

Use the glue gun to adhesive the non-woven fabric behind the clip.



Use the glue gun to adhesive the non-woven fabric in the back of the leaves.



Use the glue gun to adhesive the leaves in the back of the petals.



Completed!



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**