

Solaris™ & Solaris™ 2

Embroidery and Sewing Upgrade III

Instruction and Reference Guide

Model BLSAU3



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This manual provides details on the functions added/upgraded. Before using this manual, upgrade your machine according to the procedure in the Installation Guide. Before using the functions described in this manual, read the Instruction and Reference Guide included with the machine.
The screen illustrations in this manual may differ from actual ones shown on the machine.

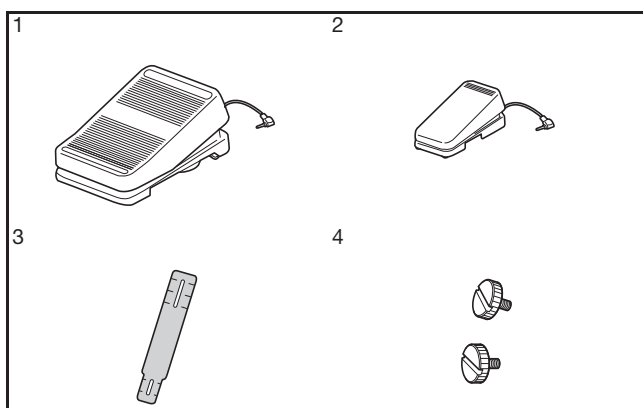
INCLUDED ACCESSORIES

Using Advanced Multi-Function Foot Controller

With the advanced multi-function foot controller, various sewing machine operations in addition to starting/stopping sewing, such as thread cutting and reverse stitching, can be specified to be performed.

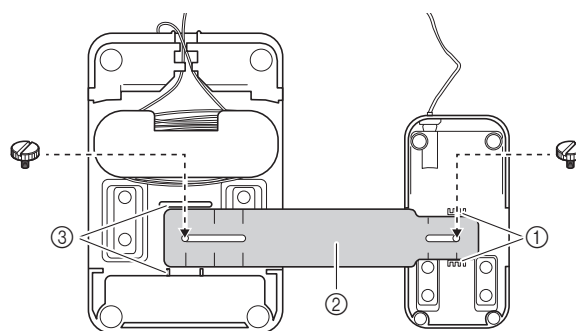
⚠ WARNING

- The advanced multi-function foot controller contains small parts. Keep the product out of the reach of children to prevent accidental ingestion of small parts.



No.	Part Name
1	Main foot controller
2	Side pedal
3	Mounting plate
4	Mounting screw × 2

- 1 Align the smaller end of the mounting plate with the guide on the bottom of the side pedal, and then gently fasten them together with the mounting screw.
Align the larger end of the mounting plate with the guide on the bottom of the main foot controller, and then gently fasten them together with the mounting screw.



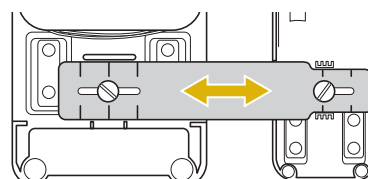
- ① Guide on side pedal
- ② Mounting plate
- ③ Guide on main foot controller

Memo

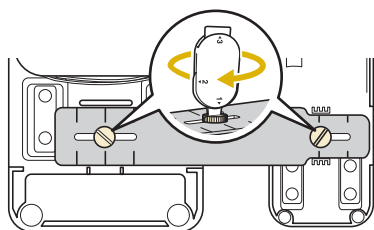
- The side pedal can be mounted on either the left or right side of the main foot controller.
- The main foot controller and side pedal can also be used without installing the mounting plate.

- 2 Adjust the spacing between the main foot controller and side pedal.

- * Use the markings on the mounting plate as a convenient guide to adjust the spacing.



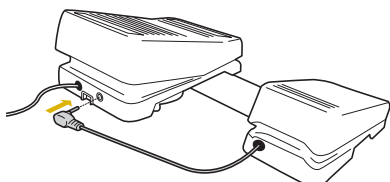
- 3** Firmly tighten the mounting screws to secure the main foot controller and side pedal.



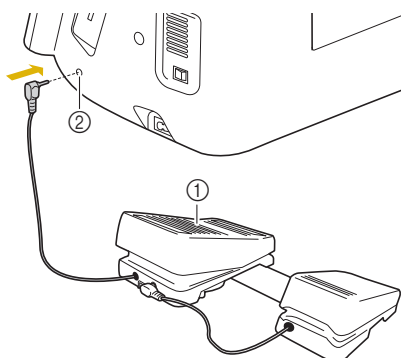
Memo

- To readjust the spacing between the main foot controller and side pedal, slightly loosen the mounting screws, and then adjust the positions of the main foot controller and side pedal.

- 4** Insert the plug for the side pedal into the jack on the main foot controller.




- 5** Insert the plug for the main foot controller into the foot controller jack on the right side of the machine.



- ① Main foot controller
② Foot controller jack

Memo

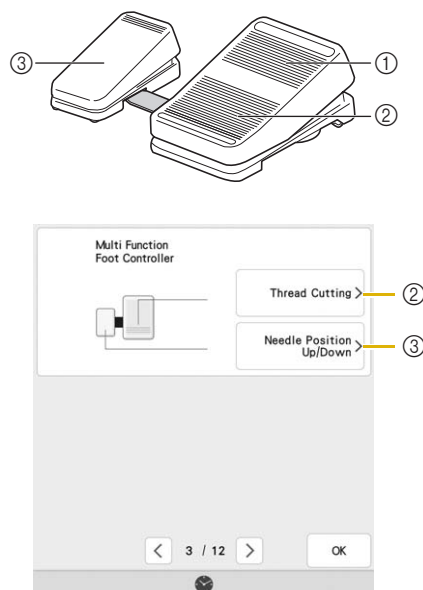
- The length of the cord for the main foot controller can be adjusted. (page 4)

- 6** Turn on the machine. And then touch  and display page 3 of the settings screen.

Memo

- Before specifying the functions, connect the multi-function foot controller to the machine. The settings screen is activated the first time that the machine detects the multi-function foot controller.

- 7** Select the functions to be performed by the multi-function foot controller.



	Controller	Functions that can be specified
①	Main foot controller	Start/Stop
②	Heel switch	Select any of the following: <ul style="list-style-type: none"> • [Thread Cutting] • [Needle Position – Up/Down]
③	Side pedal	<ul style="list-style-type: none"> • [Single Stitch] • [Reverse Stitch] (Reinforcement Stitch) * • [Presser Foot Up/Down] • [No Setting]

* If you set the “Reverse Stitch” function on the heel switch, machine operates the same as pressing the “Reverse Button” on the machine.

* Reinforcement stitching may be applied depending on the selected stitch pattern. For details, refer to “Automatic Reinforcement Stitching” in the machine’s Instruction and Reference Guide (Sewing).

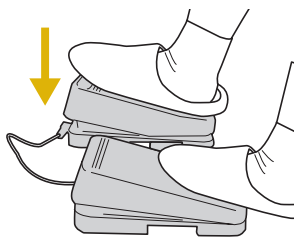
Memo

- If you set [Reverse Stitch] on the side pedal, you can create a darning stitch effect using zigzag stitches. With both feet, keep pressing the main foot controller, and repeat pressing and releasing the side pedal to sew forward and reverse in turn. Machine will reverse at the speed you press the main foot controller.

- 8** Touch .

9 Sew trial stitches and confirm that the settings are as desired.

Pressing down on the main foot controller increases the sewing speed; releasing the pressure on the main foot controller decreases the sewing speed. Release the main foot controller or side pedal to stop sewing.



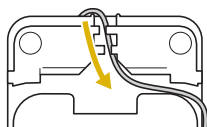
Memo

- The speed that is set using the sewing speed controller will be the main foot controller's maximum sewing speed.
- When the multi-function foot controller is connected, the "Start/Stop" button cannot be used to start sewing.

■ Adjusting the Length of the Cord for the Main Foot Controller

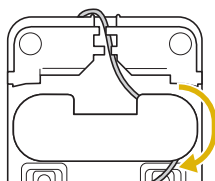
1 Unwind the cord for the main foot controller.

2 Guide the cord between the tabs.

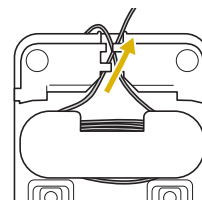


3 Wind the cord until it is the desired length.

- * The cord can be wound either clockwise or counterclockwise.



4 Pass the cord between the tabs.

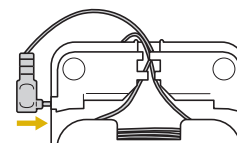


Note

- In order to avoid stepping on the cord with the main foot controller, pass the cord between the tabs.

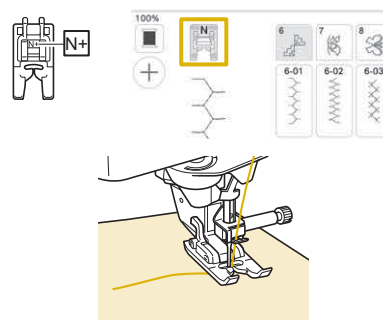
Memo

- When storing the cord, pass it between the tabs, and then insert the plug into the jack on the main foot controller.



Using Advanced Monogramming Foot "N+"

This presser foot can be used in the same way as monogramming foot "N". We recommend using advanced monogramming foot "N+" when sewing fabric that is hard to feed, such as leather and vinyl.



Note

- Sew test stitches on the fabric before sewing your project.
- If character/decorative stitch patterns become misaligned, make adjustments to the pattern settings. For details on making pattern adjustments, refer to "Making Adjustments" in the Instruction and Reference Guide (Sewing).

Using Fine Tipped Stylus Pen

Touch the LCD screen using the fine tipped stylus pen. Since the pen tip is clearly visible, it is ideal for drawing.

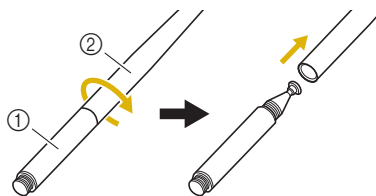
⚠ WARNING

- The fine tipped stylus pen contains small parts. Keep the product out of the reach of children to prevent accidental ingestion of small parts.

IMPORTANT

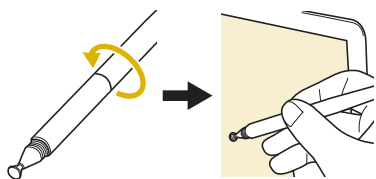
- Touch the LCD screen with the transparent disc on the fine tipped stylus pen. Using any other part to touch the LCD screen may cause scratches.
- Do not pull on the transparent disc, otherwise damage may result.

- 1 While holding the handle, turn the pen tip cap to remove it.



- ① Handle
② Pen tip cap

- 2 Attach the pen tip cap to the handle before using the pen.



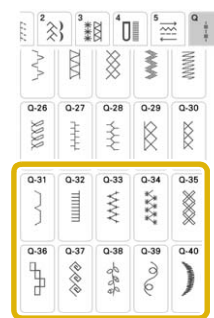
📖 Memo



- Touching the LCD screen with the fine tipped stylus pen at an excessive angle may prevent the contact position from being correctly detected.

UTILITY STITCHES AND CHARACTER/DECORATIVE STITCHES

The Utility Stitch Patterns

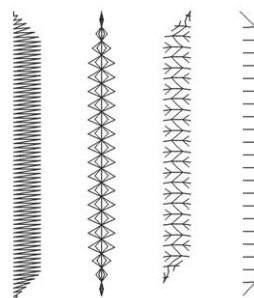
10 utility stitch patterns have been added. These stitches are also designed with the Dual Feed Foot.



In addition, the stitch patterns (other than ) of the  category can be used with the dual feed foot.

Changing the Start and End Angles of the Stitch Pattern (Stitch Tapering Function)

The angles of the start and end of stitch patterns can be changed. This is useful when sewing projects with sharply defined angles or decorative stitching, attaching appliques, etc.



Use the method for finishing sewing the stitch pattern, according to your needs.

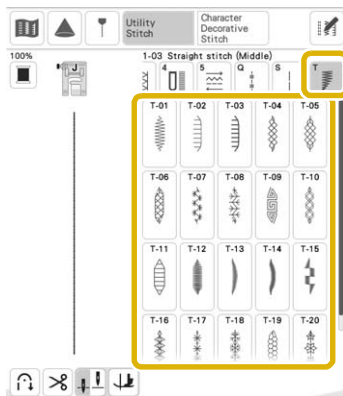
- Method 1: Begin Changing the Angle at the End of Sewing by Pressing the "Reverse Stitch" Button (page 6)
- Method 2: Sewing a Specified Number of Stitch Patterns (page 7)
- Method 3: Specifying the Sewing End Point with an End Point Sticker (page 8)

Note

- Using the same material and stitch pattern as your project, sew trial stitches to check the result. If necessary, attach a stabilizer material.
- If reinforcement stitches at the beginning and end of sewing are needed, use “Reinforcement Stitch” button. “Reverse Stitch” button cannot be used for reinforcement stitching when stitch tapering function is on.

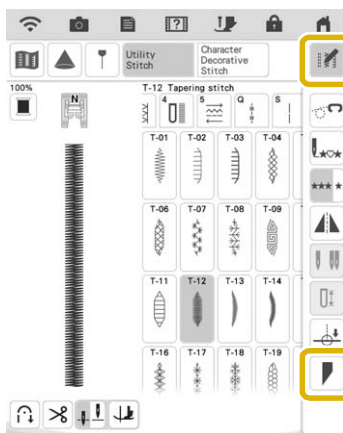
■ Method 1: Begin Changing the Angle at the End of Sewing by Pressing the “Reverse Stitch” Button

- 1 Touch **Utility Stitch**, then , and then select a stitch pattern for stitch tapering.

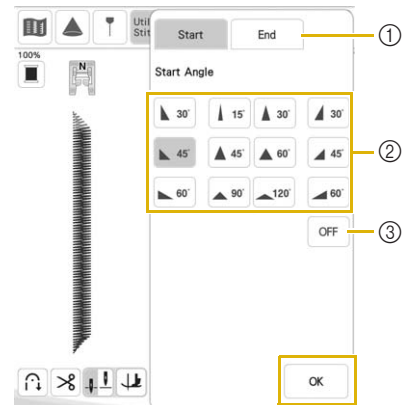


- 2 If necessary, change the stitch width and stitch length.


- 3 Touch , and then touch .

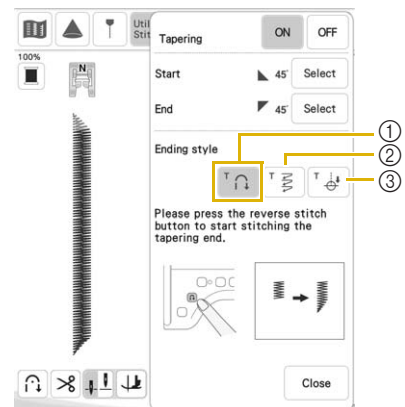


- 4 Touch **Select**, select the angle settings for the start and end of sewing, and then touch **OK**.



- 1 Select the start or end of sewing.
- 2 Select an angle.
- 3 Specify that the angle does not change.

- 5 Select the method for finishing sewing. For this example, since the angle at the end of sewing will begin changing when the “Reverse Stitch” button is pressed, select .

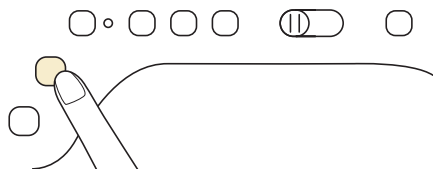


- 1 Press the “Reverse Stitch” button for the angle at the end of sewing to start changing; the machine stops when sewing is finished.
- 2 The machine stops when the specified number of stitch patterns have been sewn. The number of patterns that are specified includes the number of patterns used to change the angle. (page 7)
- 3 The machine stops at the position where the end point sticker is affixed. (page 8)

6 If necessary, use a chalk pencil to draw a line at the location to be sewn.

7 Start sewing.

8 After sewing the desired length, press the “Reverse Stitch” button.



→ When the “Reverse Stitch” button is pressed, the angle at the end of sewing begins to change, and the machine stops when sewing is finished.

Memo

- If you stop sewing at the point where end tapering should begin (either by pressing the “Start/Stop” button or by lifting your foot from the foot controller), press the “Reverse Stitch” button and resume sewing by either pressing the “Start/Stop” button or pressing on the foot controller. End tapering will begin as soon as sewing resumes.

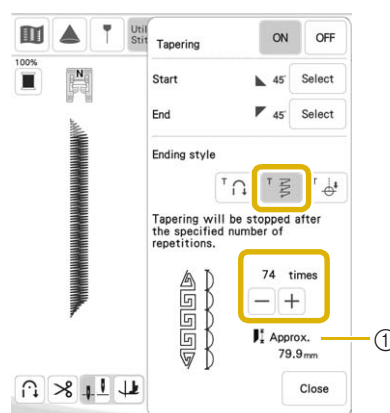
9 When finished sewing, set [Tapering] to [OFF], and then touch .

■ Method 2: Sewing a Specified Number of Stitch Patterns

With this method, the number of stitch patterns (including those used to change the angle) are specified. This allows stitch patterns of the same length to be repeatedly sewn.

1 Refer to steps **1** through **4** of “Method 1: Begin Changing the Angle at the End of Sewing by Pressing the “Reverse Stitch” Button” on page 6 to select the angle settings for the start and end of sewing.

2 Touch , and then specify the number of stitch patterns (including those used to change the angle).



① Approximate length of the stitch pattern

Memo

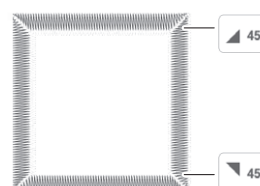
- The number of stitch patterns used to change the angle depends on the pattern and angle. Perform trial sewing to check the result.

3 Start sewing.

→ The machine stops automatically when sewing is finished.

Memo

- To sew stitching in a square, select 45° for the start of sewing and 45° for the end of sewing, and then continue sewing the same stitch pattern, rotating the fabric 90° after sewing each line of stitching. The pivot setting is useful when changing the sewing direction. For details, refer to “Pivoting” in the machine’s Instruction and Reference Guide (Sewing).

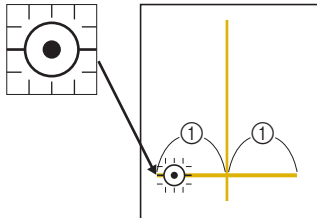


Method 3: Specifying the Sewing End Point with an End Point Sticker

Memo

- (For users of BLSA)
KIT II must be activated in order to use this function. The optional Upgrade KIT II (BLSAU2) is required in order to activate KIT II.
For details on the procedure as well as precautions, refer to the Instruction and Reference Guide of the optional Upgrade KIT II.
If KIT II is not activated, the key in step 4 is not available.
- (For users of BLSA2)
For details on the procedure as well as precautions, refer to “Specifying the Sewing End Point” in the machine’s Instruction and Reference Guide (Sewing).

- 1 With a chalk pencil, mark the fabric with lines for sewing the stitch pattern and for the end of stitching.
- 2 Affix an end point sticker, avoiding the sewing area. Attach the end point sticker within 4 cm (approx. 1-1/2 inches) to the left or right of the chalkline where the end point for sewing has been drawn.



① 4 cm (Approx. 1-1/2 inches)

Memo

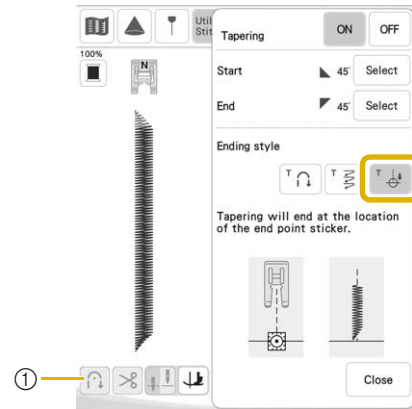
- If you cannot affix an end point sticker avoiding the sewing area, refer to “Temporary Stop Setting” in the machine’s Instruction and Reference Guide (Sewing) or the Upgrade KIT II Instruction and Reference Guide.



- 3 Refer to steps 1 through 4 of “Method 1: Begin Changing the Angle at the End of Sewing by Pressing the “Reverse Stitch” Button” on page 6 to select the angle settings for the start and end of sewing.

- 4 Touch .

* If the key appears in light gray, this function cannot be used with the selected stitch length.



- ① Automatic reinforcement stitching function and automatic thread cutting function are not available.

- 5 Start sewing.

→ The machine stops automatically when sewing is finished.

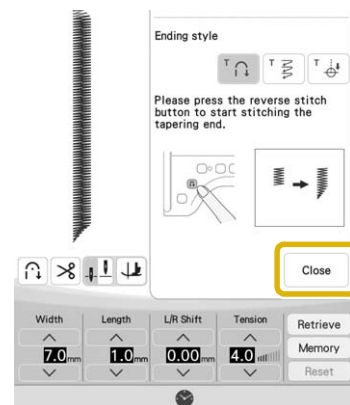
- 6 Peel off the end point sticker.

Saving Settings

Specified angle for start and end, finish tapering method, and stitch settings can be saved in machine’s memory.

- 1 After setting the tapering function, touch

Close .



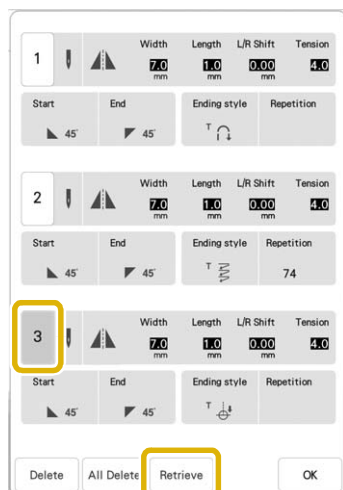
- 2 Touch  Memory .

Retrieving Saved Settings

1 Touch **Retrieve** to retrieve the saved setting after selecting pattern.

2 Touch the numbered key of the settings to be retrieved and then touch **Retrieve**.

* The settings cannot be retrieved if stitch tapering function is set to [ON].



Memo

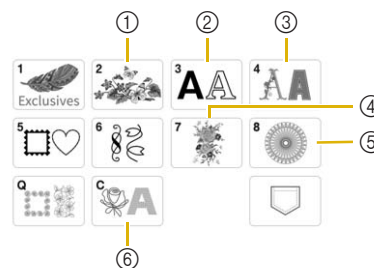
- For more information on saving and recalling settings, refer to “Saving Your Stitch Settings” in the machine’s Instruction and Reference Guide (Sewing).









EMBROIDERY

New Embroidery Patterns

Patterns have been added to the following categories.

For details, refer to the “Embroidery Design Guide” for this Upgrade KIT III.

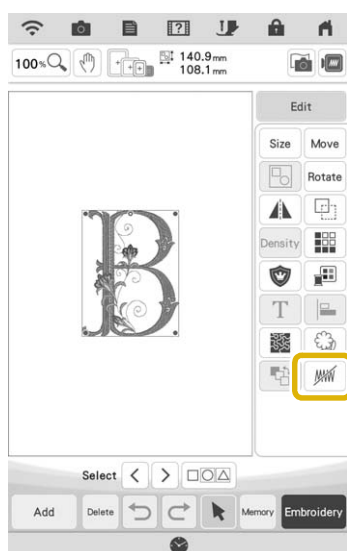


- ①  has been added.
- ②     have been added.
- ③   have been added.
- ④ Split embroidery patterns have been added.
- ⑤ Long-Stitch embroidery patterns have been added.
Before embroidering, refer to the “Embroidery Design Guide” for this Upgrade KIT III, which includes precautions for obtaining best results.
- ⑥  (fill couching embroidery font) has been added. For details on embroidery couching, refer to “Embroidering Couching Patterns” on page 23.

Deselect Region Setting (No Sew Setting)

The deselect region setting (which specifies that a thread color will not be embroidered) can be applied to a part of the pattern with a specific color.

- 1 Touch  in the embroidering edit screen.




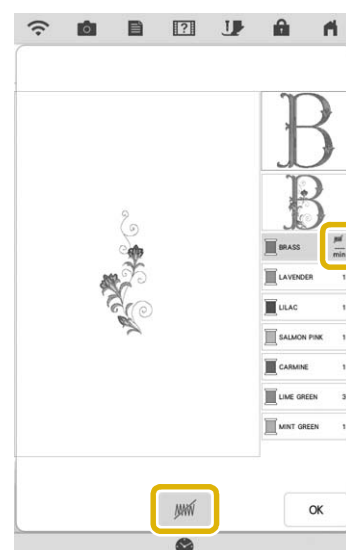
- 2 From the thread color sequence display, select the thread color that will not be embroidered.

→ The selected thread color is highlighted in blue.




- 3 Touch .

→ The mark  appears to indicate that the selected thread color will not be embroidered. The parts of the pattern that will not be embroidered are hidden in the pattern preview screen.





Memo

- To cancel the setting, select the thread color and touch .

- 4 If necessary, repeat steps 2 and 3 for all thread colors that will not be embroidered.

- 5 After specifying the desired settings, touch .

- 6** Touch  and then touch  to check an enlarged image of the finished embroidery.

* After deselecting a region, check the image to be sure no previously hidden stitches are visible.



Memo

- When a pattern with the deselect region setting applied is saved, the deselect region setting is also saved. However, the pattern cannot be saved if the deselect region setting is applied to all thread colors.
- The parts with the deselect region setting applied are merely not displayed; they are not deleted. The embroidering area required to embroider the pattern is the same as for the original pattern.

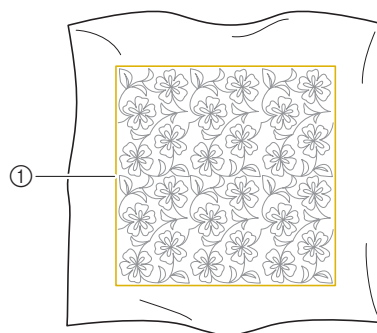


Embroidering a Quilting Pattern Across the Entire Fabric (Edge-to-Edge Quilt Function)

Connect quilting patterns to embroider from edge to edge of a specified area. By rehooping a large piece of fabric, you can continue embroidering the quilting pattern across the entire fabric.

■ Creating Edge-to-Edge Quilt Data

- 1** Determine the area of the fabric to be embroidered, and then draw a line around it with a chalk pencil. Measure the width and height.

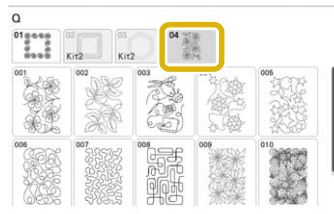


① Embroidering area

Note

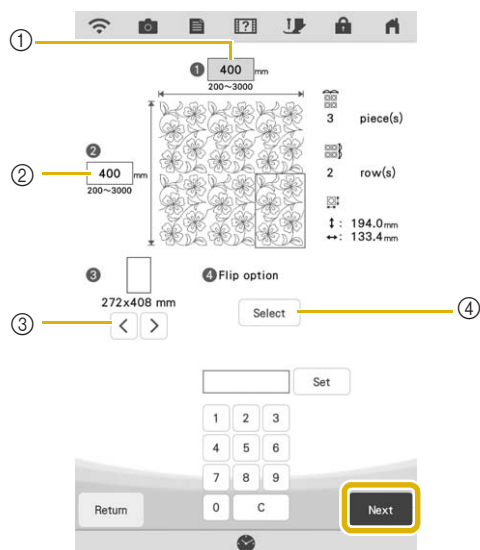
- Make sure that the chalk pencil line is within the embroidering area when the fabric is hooped.

- 2** Touch , and then touch .



3 Select the pattern that you want to embroider, and then touch **Set**.

4 Specify ① to ④, and then touch **Next**.



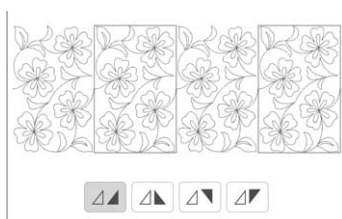
① Width

② Height

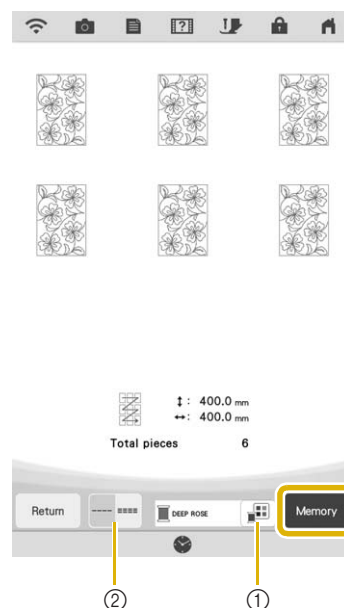
* After entering a value, touch **Set** to apply the value. To clear the entered value, touch **C**.

③ Touch **<** or **>** to select the embroidery frame size.

④ Touch **Select** to flip every other pattern. Select the desired flip arrangement (no flipping, left/right flipping, up/down flipping, left/right and up/down flipping) from the flip keys, and then touch **OK**.



5 Check the pattern, and then touch **Memory** to save it.

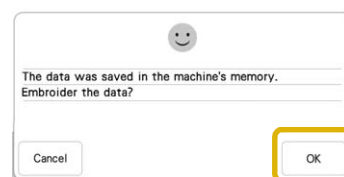


① The thread color can be changed.

② Select single stitching or triple stitching.

6 After the following message appears, touch

OK.



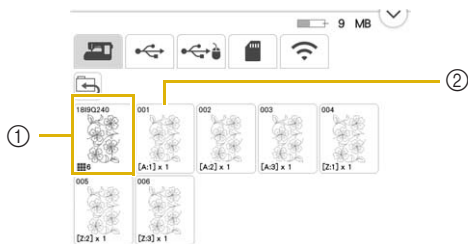
→ A screen appears so that a pattern from the machine's memory can be selected.

■ Embroidering the Edge-to-Edge Quilt Pattern

1 In the screen for selecting a pattern from the machine's memory, select the saved data.



- 2** For this example, since we will embroider the edge-to-edge quilt pattern according to the on-screen instructions, select the thumbnail for the entire edge-to-edge quilt pattern. And then touch **Set**.



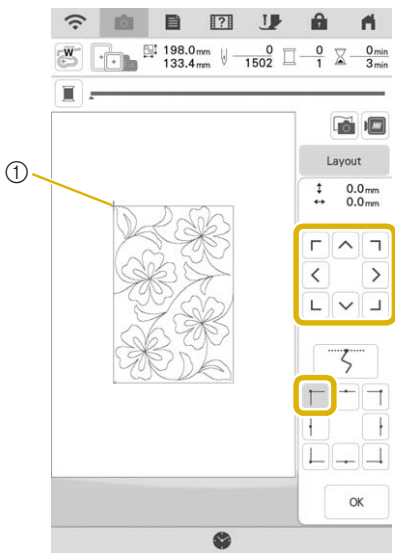
- ① Touch this key to embroider the edge-to-edge quilt pattern according to the on-screen instructions. The number in the lower-left corner indicates the total number of segments for the edge-to-edge quilt pattern.
- ② To embroider by visually aligning the pattern sections, touch each pattern section to be embroidered.
You can check where and how many times the part will be embroidered with the codes written on each key.
“A” refers to rows other than the last one, “Z” refers to the last row, and the numbers indicate the order in which the patterns are to be connected.
Example: When connecting patterns in four rows and four columns

A:1	A:2	A:3	A:4
A:1	A:2	A:3	A:4
A:1	A:2	A:3	A:4
Z:1	Z:2	Z:3	Z:4

- 3** Hoop the quilt in the embroidery frame so that the marked upper-left corner of the edge-to-edge quilt pattern is in the embroidering area, and then attach the embroidery frame.



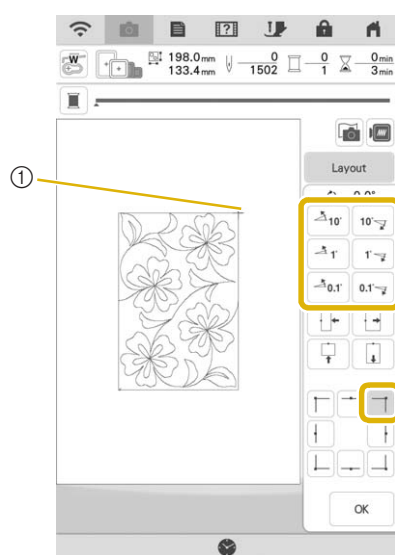
- 4** Use the move pattern keys to align the upper-left corner of the chalk reference lines previously drawn on the quilt with the upper-left corner of the part projected by the projector. Then, touch **OK**.



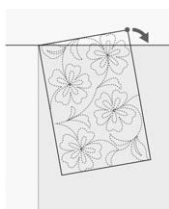
- ① Upper-left corner



- 5** Rotate the pattern to align the upper-right corner with the chalk reference line.



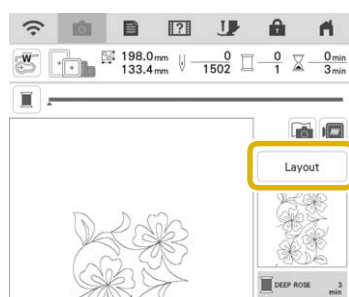
① Upper-right corner



- 6** Touch to display the embroidery screen.

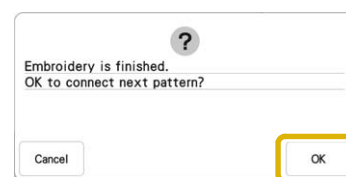
Memo

- To readjust the position or angle of the pattern, touch , and then touch or .



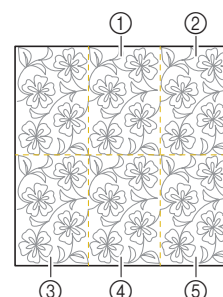
- 7** Press the "Start/Stop" button to embroider the first part.


- 8** When embroidering is finished and the following message appears, touch .

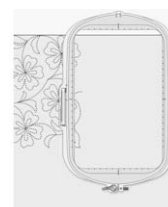


→ The next part to be embroidered appears.

- 9** Position each part and embroider it according to the on-screen instructions. You will be prompted to align the starting point and to rehoop the quilt when necessary.



- ① Second column of first row ()



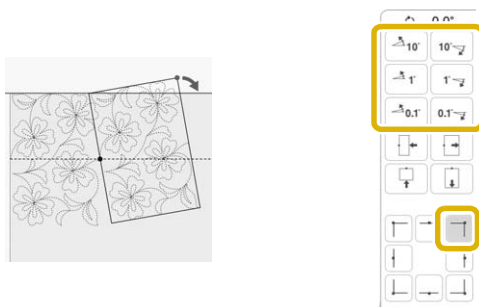
Use the move pattern keys to align the start point with the end point of the previous pattern.



Note

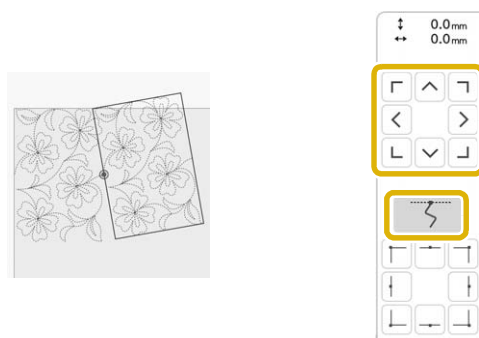
- For precise positioning of the start point, rotate the handwheel toward you to check the exact needle drop point. After checking the needle position, be sure to use the needle up/down key to return the needle to its highest position.

Rotate the pattern to align the upper-right corner with the chalk reference line.



② Rightmost column of first row ()

Use the move pattern keys to align the start point with the end point of the previous pattern.

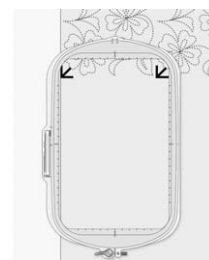


To align the upper-right corner with the chalk reference lines, adjust the angle and width of the pattern.

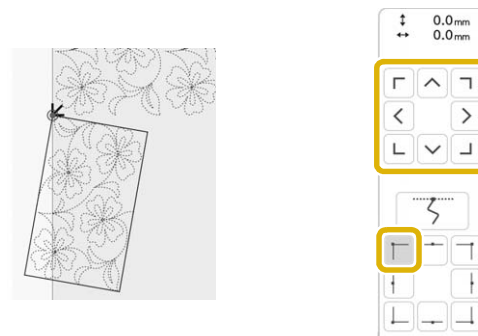


- ① Touch to change the angle of the pattern.
- ② Touch to change the width of the pattern.

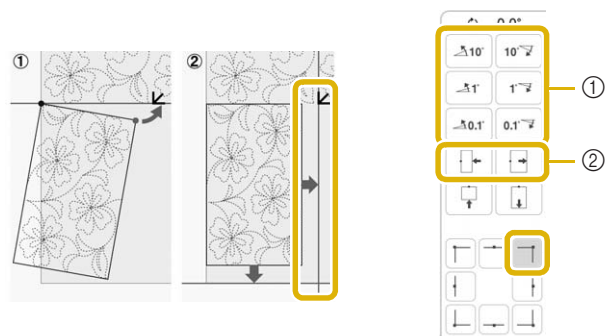
③ Leftmost column of second row (last row) ()




Use the move pattern keys to align the upper-left corner with the thread mark of the embroidered pattern above.

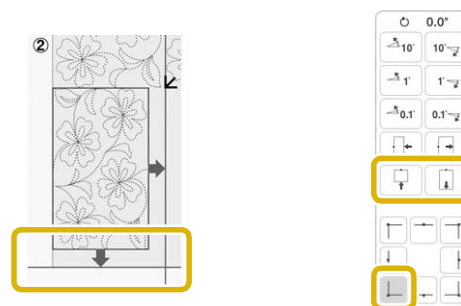


To align the upper-right corner with the thread mark of the embroidered pattern above, adjust the angle and width of the pattern.



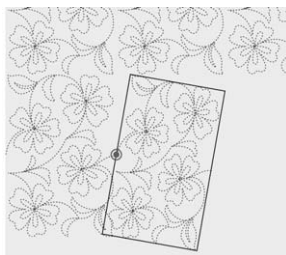
- ① Touch to change the angle of the pattern.
- ② Touch to change the width of the pattern.

Touch , and then adjust the length to align the pattern with the chalk reference line.

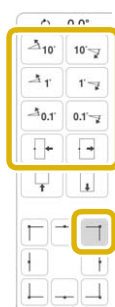
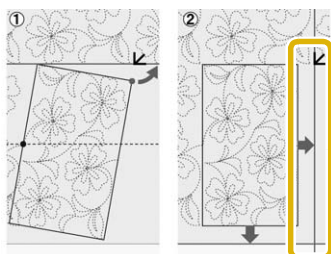



④ **Second column of the second row (last row)** ()

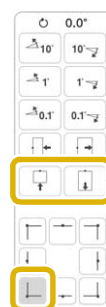
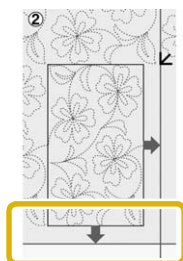
Use the move pattern keys to align the start point with the end point of the previous pattern.



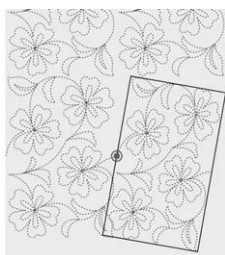
To align the upper-right corner with the thread mark of the embroidered pattern above, adjust the angle and width of the pattern.



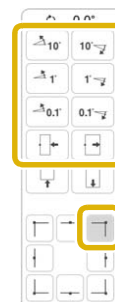
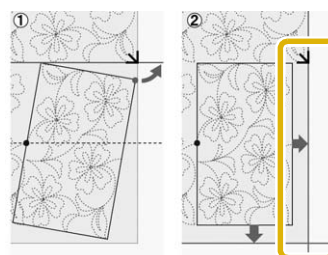
Touch , and then adjust the length to align the pattern with the chalk reference line.


⑤ **Rightmost column of second row (last row)** ()

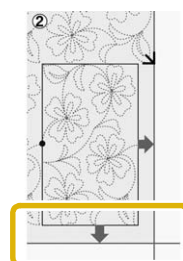
Use the move pattern keys to align the start point with the end point of the previous pattern.



To align the upper-right corner with the thread mark of the embroidered pattern above, adjust the angle and width of the pattern.

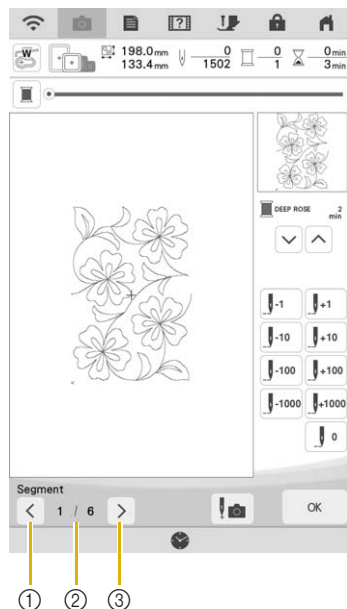


Touch , and then adjust the length to align the pattern with the chalk reference line.

10 **Remove the thread marks.**

Memo

- If you need to restitch a segment or skip a segment, you can touch in the embroidery screen to continue to the next pattern or return to the previous pattern. Select the desired pattern in the embroidering order, and then touch .



- ① Return to the previous pattern.
- ② Embroidering order of current pattern/Total number of segments
- ③ Continue to the next pattern.

Embroidering Split Embroidery Patterns

This Upgrade KIT III includes several built-in large-size split embroidery patterns.

Split embroidery patterns are large patterns that are divided into multiple sections. A large pattern can be created by embroidering the connected pattern sections one after the other.

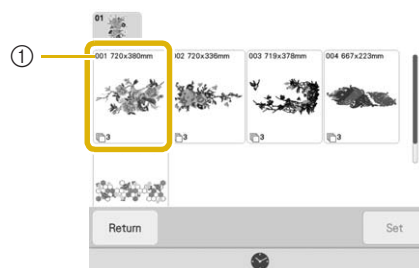
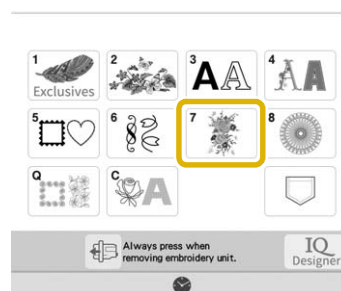
Additional split embroidery patterns can be created in Palette version 7 or later. For details, refer to the manual for Palette.

There are two methods: one uses the built-in camera to connect the patterns and the other connects the patterns manually.

■ Connecting the Pattern Sections with the Camera

- 1 Touch and then select a pattern.

* To ensure the entire large-connect pattern can be successfully embroidered, prepare fabric and stabilizer at least 300 mm (12 inches) longer and wider than total design size.

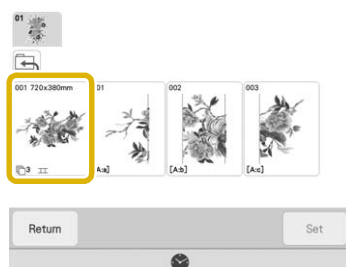


- ① Size of the entire pattern

Memo

- Printable templates of each large-connect design can be downloaded from “Babylock.com/accessories/machine-upgrades/solaris-embroidery-and-sewing-upgrade-3”. These templates will assist with positioning the patterns. Do not enlarge or shrink the page.
- To embroider split embroidery patterns created with Palette, retrieve the pattern from USB media and so on. For details on recalling patterns, refer to “Recalling from USB Media/SD card” and “Receiving Embroidery Patterns on the Machine” in the machine’s Instruction and Reference Guide (Embroidery). Check the entire pattern size with Palette.

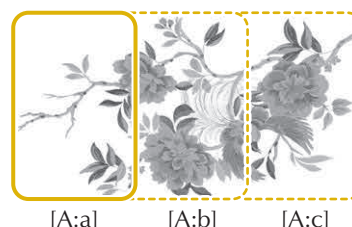
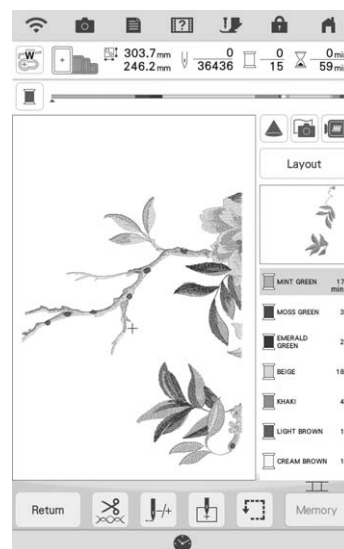
- 2** Touch the whole pattern icon to connect the pattern sections with the camera. And then touch .



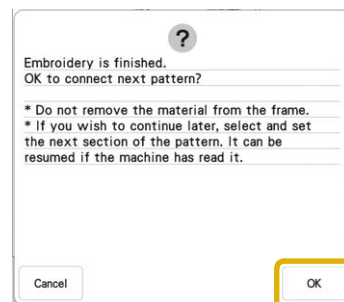
Memo

- To connect the pattern sections without using the camera, refer to “Connecting the Pattern Sections Manually” on page 21.

- 3** Embroider the first pattern.



- 4** Touch .



Note

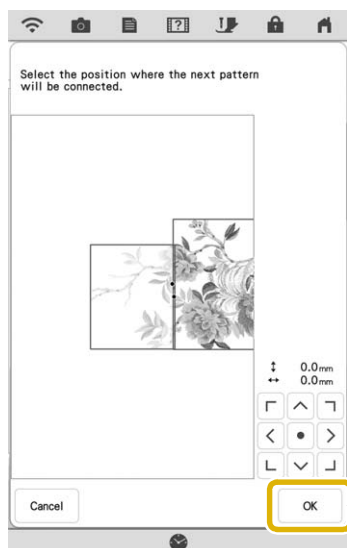
- Do not remove the fabric from the embroidery frame.

5 Touch .

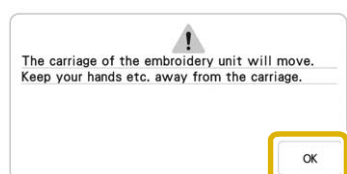


6 Check the pattern arrangement, and then touch .

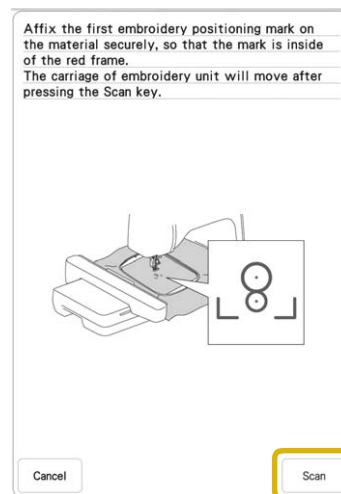
- * Since each built-in pattern has been properly arranged, there is no need to move it.



7 Touch .



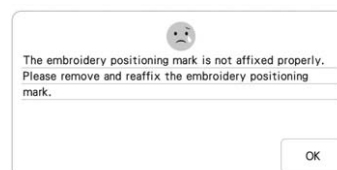
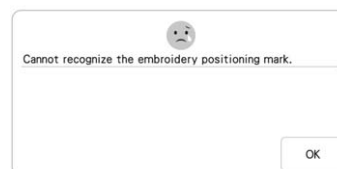
8 Affix the first embroidery positioning sticker onto the fabric within the red lines by using both hands to press down on each corner of the sticker. Affix the sticker with the large circle to the top as shown on machine. Then, touch .



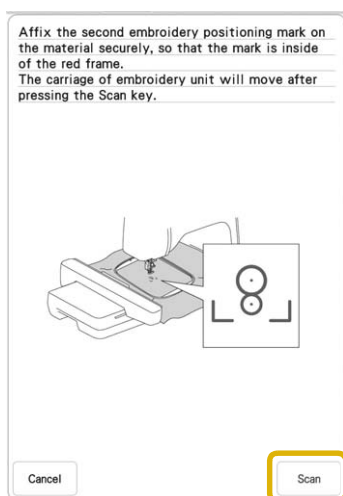
→ The camera detects the first embroidery positioning sticker.

Note

- If any of the following messages appear, reattach the embroidery positioning sticker firmly in the correct position.



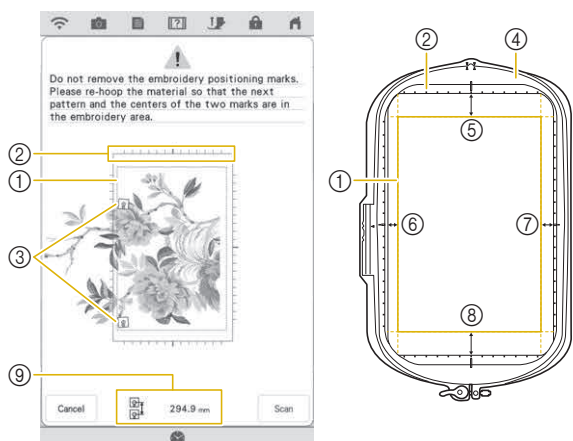
- 9** Affix the second embroidery positioning sticker to the fabric as described in step 8, and then touch **Scan**.



→ The camera detects the second embroidery positioning sticker.

- 10** While making sure that the two embroidery positioning stickers do not peel off, remove the embroidery frame from the machine, and then rehoop the fabric.

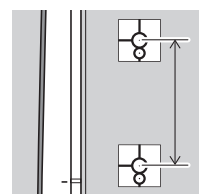
* Be sure to hoop the fabric so the next pattern and both the embroidery positioning stickers are within the embroidery area.



- ① Embroidery area
- ② If a built-in large-size split embroidery pattern is selected and the embroidery frame (408 mm × 272 mm (approx. 16 inches × 10-5/8 inches)) is installed, a scale for the embroidery frame appears in the screen.
- ③ Embroidery positioning stickers
- ④ Embroidery frame (408 mm × 272 mm (approx. 16 inches × 10-5/8 inches))
- ⑤ Approx. 34 mm (Approx. 1-11/32 inches)
- ⑥ Approx. 10.8 mm (Approx. 27/64 inch)
- ⑦ Approx. 15.5 mm (Approx. 39/64 inch)
- ⑧ Approx. 28 mm (Approx. 1-7/64 inches)
- ⑨ Distance between the embroidery positioning stickers

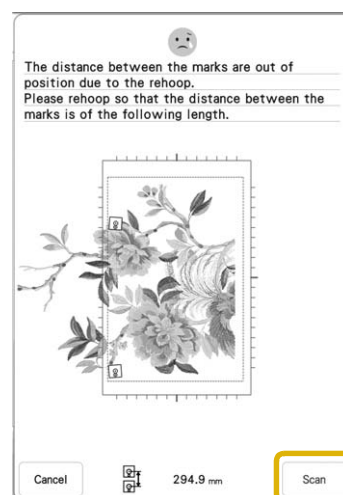
Memo

- In order to cleanly connect the first and second patterns, make sure that the distance between the embroidery positioning stickers (distance between the centers of the large circles) is the same before and after rehooping the fabric. If the distance is not the same, the fabric may not be taut. At this time, do not correct the distance by moving a sticker.

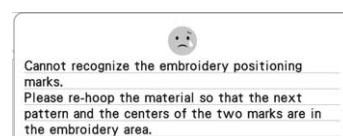


If the following message appears after step 11, rehoop the fabric so that the distance is the same as that displayed. And then touch

Scan.



- If the following message appears, rehoop the fabric so that the next pattern and both the embroidery positioning stickers are within the embroidery area as indicated in the screen. If problem persists, the machine may not detect the embroidery positioning sticker. Check the items below.
 - Block light from the outside.
 - Make sure that nothing obstructs the embroidery positioning sticker.
 - Adjust the brightness of the lighting.
 - Set the fabric into the frame correctly.

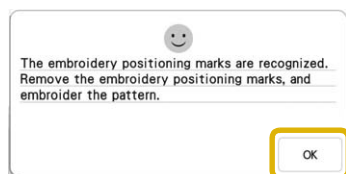


- For best results, if fabric puckers, iron the wrong side of the fabric to smooth out before rehooping. At this time, do not iron over or remove the embroidery positioning stickers.

11 Reattach the embroidery frame and touch

Scan .

12 Touch **OK**, and then remove the stickers.



Memo

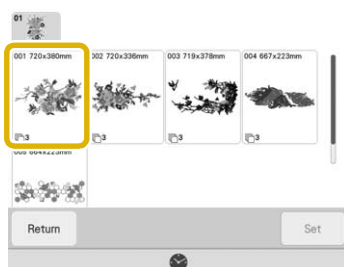
- With a built-in large-size split embroidery pattern, if the distance between the embroidery positioning stickers (distance between the centers of the large circles) differs by a few millimeters before and after the fabric is rehooped, the pattern will be automatically resized.

13 Embroider the second pattern.

14 Embroider the remaining patterns in the same way.

Connecting the Pattern Sections Manually

1 Touch and then select a pattern.

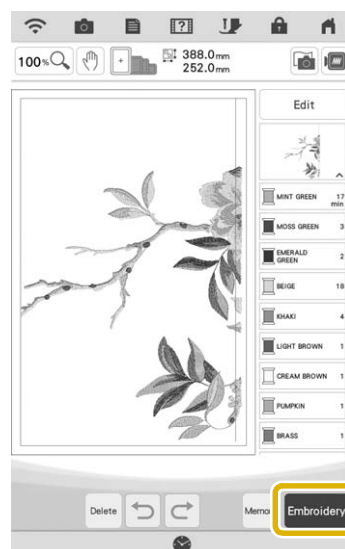


2 Select section to be embroidered.

- * Select the sections in alphabetical order.



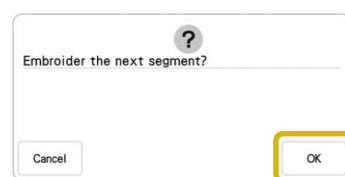
3 Touch **Embroidery** to display the embroidery screen.



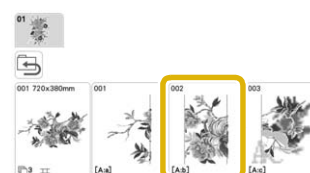
4 Embroider the first pattern.



→ The pattern and alignment stitching are embroidered.

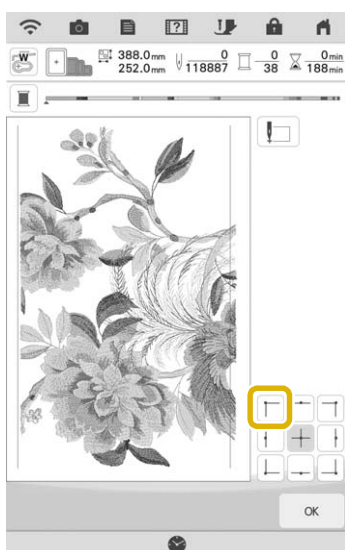
5 Touch **OK**.



6 Select the next pattern, and then touch **Embroidery**.






- 7** Rehoop the fabric. Adjust the position and angle for the next pattern so that the alignment stitching embroidered with the first pattern and the needle position for the next pattern are aligned. For this example, touch , select the upper-left needle position, and then touch .

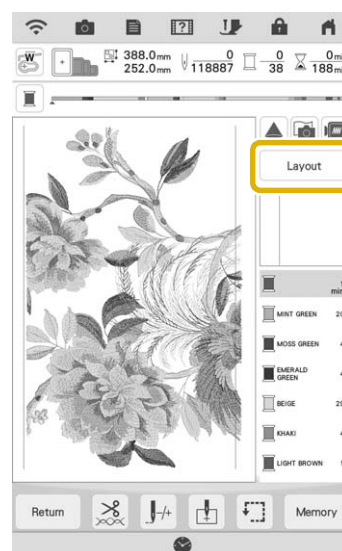


Memo

- For best results, if fabric puckers, iron the wrong side of the fabric to smooth out before rehooping.

- 8** Touch , and then adjust the position and angle for the next pattern so that the needle position is aligned with the alignment stitching embroidered with the first pattern.

- * To adjust the position of the pattern, touch .
- * To adjust the angle of the pattern, touch .



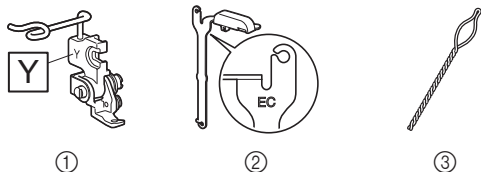
① Alignment stitching

- 9** In the same way, select the lower-left needle position, and then adjust the position and angle of the next pattern so that the needle aligns with the thread mark embroidered with the first pattern.
- 10** Embroider the second pattern.
- 11** Embroider the remaining patterns in the same way as with the second pattern.
- 12** Remove the thread marks.

Embroidering Couching Patterns

Note

- (For users of BLSA)
The following parts are required for embroidery couching.



- ① Embroidery couching foot "Y" (XH1815-101)
- ② Yarn guide for embroidery couching (XH3803-001)
- ③ Yarn threader (XF7187-001)

If you own an optional Upgrade KIT (BSLAU), you can use the parts included in the KIT. If you do not have the necessary parts, contact your authorized BabyLock retailer.

Couching patterns can be embroidered using yarn.

CAUTION

- When using yarn, we recommend selecting yarn of weight 4 (MEDIUM (4)). Medium yarn is often referred to as worsted weight, 20 knitted stitches per 10 cm, or 9-11 wraps per inch. The diameter of the yarn is approximately 2-3 mm (1/12-1/8 inch). If the yarn is extremely thin or thick, has an unusual shape (flat or furry), or more than 2 yarns, the best finishing results may not be achieved, or injuries or damage may result.

Note

- Before embroidering your project, do trial embroidery on a scrap piece of fabric that is the same as that used in your project.

Preparing for Embroidery Couching

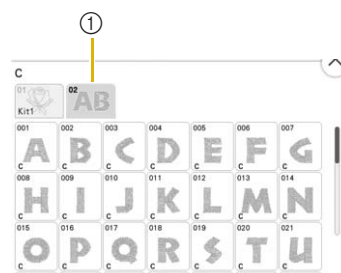
- ① Turn off the machine.
Attach the embroidery unit.
- ② Install a bobbin wound with embroidery bobbin thread.
- ③ Turn on the machine.

4 Touch .



5 Select the desired pattern.

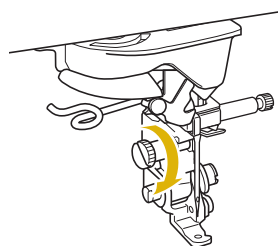
And then touch .



- ① Fill couching embroidery font

6 Touch to lock all keys and buttons, and then raise the presser foot lever.

7 Attach embroidery couching foot "Y".

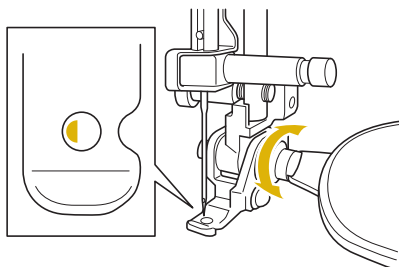


CAUTION

- When using embroidery couching foot "Y", make sure the machine is in embroidery mode. Otherwise, the needle will strike the embroidery couching foot, causing the needle to break and possibly causing injury.

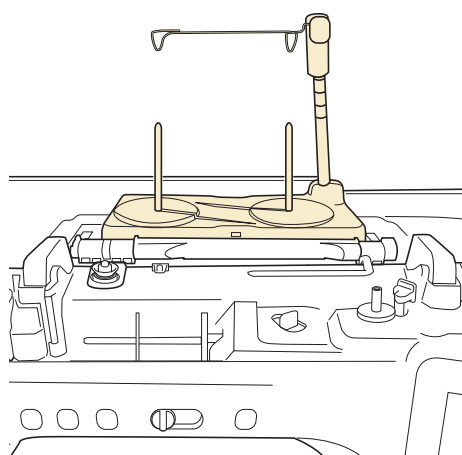
8 Rotate the handwheel and check that the needle is in the left half of the hole in embroidery couching foot "Y".

If the needle is not in the left half, use the multi-purpose screwdriver to turn the screw of embroidery couching foot "Y" to adjust the position of the embroidery foot. Turn the screw toward you to move the embroidery foot to the right. Turn the screw toward the back to move the embroidery foot to the left. After making adjustments, rotate the handwheel and check that the needle does not touch the presser foot.



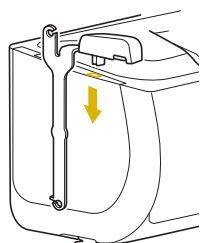
9 Attach the spool stand to the machine.

At this time, do not raise the telescopic thread guide shaft.



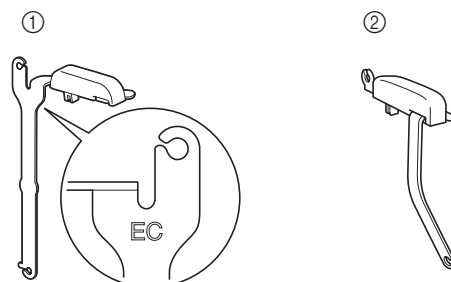
* Refer to "Assembling the Spool Stand" in the machine's Instruction and Reference Guide (Sewing).

10 Insert the yarn guide for embroidery couching into the slot on the top left of the machine.



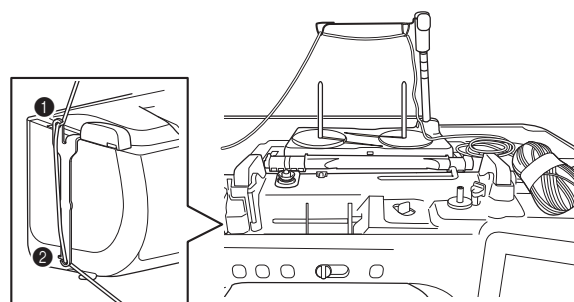
Note

- There are two yarn guides: one for sewing couching and one for embroidery couching. Check the shape of the part, and then install the appropriate guide.



- ① Yarn guide for embroidery couching
- ② Yarn guide for sewing couching

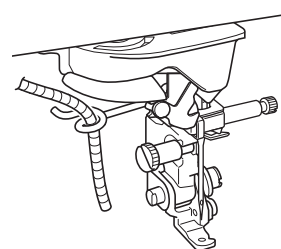
11 Pass the yarn through the telescopic thread guide and the yarn guide (①) to (②).



Note

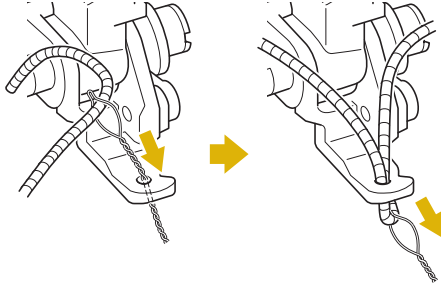
- Pull off an appropriate amount of yarn from the ball so that the yarn does not become taut.
- Make sure that the yarn does not become entangled as you work.

12 Pass the yarn through the guide on embroidery couching foot "Y".



13 Thread the yarn through embroidery couching foot “Y”.

Pass the yarn through the loop in the yarn threader, and then pass the threader from top to bottom through the hole in embroidery couching foot “Y”. Pull the yarn to the front of the machine.



Memo

- Place a sheet of paper under the presser foot to smoothly pass the yarn threader through the hole in embroidery couching foot “Y”.

14 Touch to unlock all keys and buttons.

15 Thread the machine with the upper thread.

Note

- Do not use the spool stand for upper thread. Otherwise thread may tangle with yarn.

Memo

- For best results, use an upper thread that is the same color as the yarn.

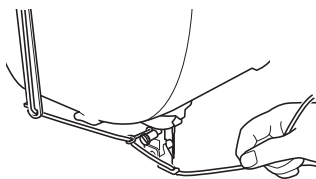
16 Press the "Presser Foot Lifter" button twice to raise the presser foot and then attach the embroidery frame to the embroidery unit.

■ Embroidering a Couching Pattern

1 Touch .

2 Make sure that about 20 cm (8 inches) of yarn is pulled to the front of the machine.

3 While holding the yarn in your hand in front of you, press the “Start/Stop” button.



⚠ CAUTION

- Pulling the yarn upwards may cause it to catch on the needle, causing it to break. Be careful not to allow the yarn to catch on the needle.

Note

- Before embroidering, make sure that there is enough yarn, upper thread and bobbin thread.
- Make sure that the yarn passes smoothly through the guides. Unravel as much yarn from the ball as necessary so that the yarn does not become taut.
- Use yarn that has no knots.

4 After embroidering several stitches, release the yarn.

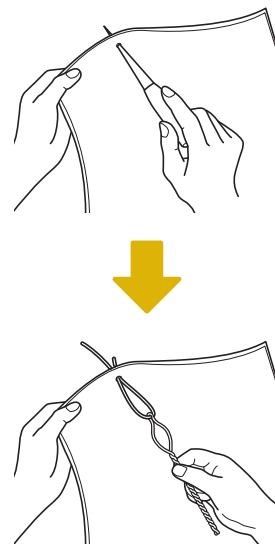
→ When embroidering is finished, the machine will automatically trim the threads and stop.

Memo

- When using a high-density yarn, the upper thread tension may be disturbed. If this happens, it is possible to improve it by raising the [Embroidery Foot Height] by about 1 mm on the settings screen.

5 Cut the yarn, leaving about 20 cm (8 inches).

6 Punch a hole through the fabric with an awl or tapestry needle and then use the yarn threader to pull the excess yarn to the wrong side of the fabric.

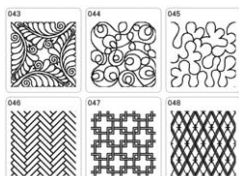


7 Tie the end of the yarn so it cannot be pulled out, and then use scissors to cut off any excess yarn.

IQ DESIGNER

Additional Patterns

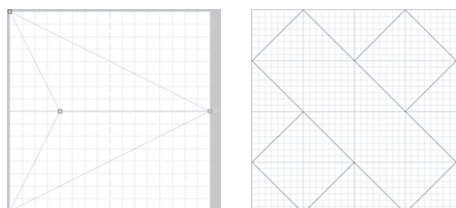
Six decorative fill patterns have been added.



Importing Motif Stitch Pattern Data or Decorative Fill Pattern Data

Motif stitch pattern data (.pmf) or decorative fill pattern data (.plf) created in [Programmable Stitch Creator] of Palette can be imported into IQ Designer.

- * Motif stitch pattern data (.pmf) can be created on Palette version 4 or later. Decorative fill pattern (.plf) can be created on Palette version 11 or later.

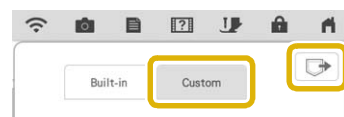



- 1 Save the motif stitch pattern data (.pmf) and/or decorative fill pattern data (.plf) in the USB media.
- 2 Insert the USB media into the USB port on the machine.
- 3 Touch [IQ Designer].

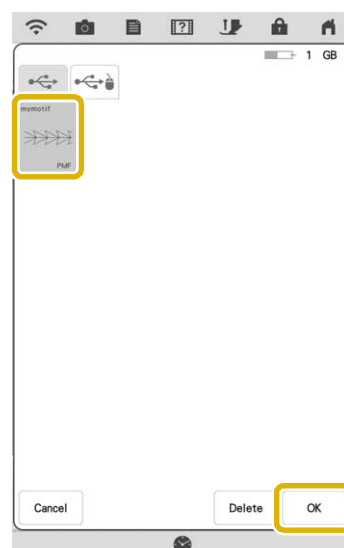
- 4 To import motif stitch pattern data (.pmf), touch . After the Line Property screen appears, touch , then .



- 5 Touch [Custom], then .



- 6 Touch the key for the USB port where the USB media has been inserted, select the motif stitch pattern data (.pmf), and then touch .



→ The motif stitch pattern data is saved to the machine.

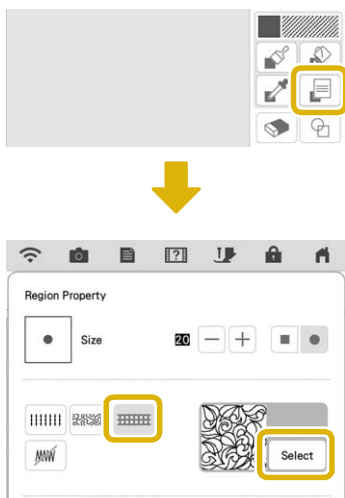
- 7** Select the motif stitch pattern to be used, and then touch **OK**.



Memo

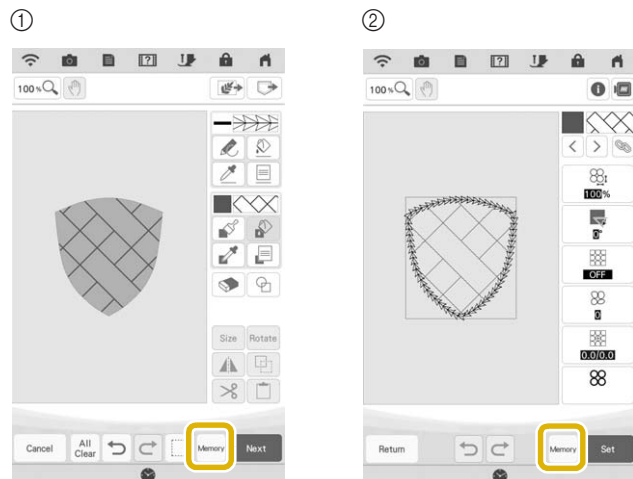
- Saved motif stitch patterns are assigned a pattern number. The pattern number appears in the upper-left corner of the key.
- Up to 12 motif stitch patterns can be saved to the machine. When trying to save more motif stitch pattern data than this maximum, a message will appear. Follow the on-screen instructions, and select the pattern number of the motif stitch pattern data to be replaced.
- Touch **Clear all** to delete all saved motif stitch pattern data.

- 8** To import decorative fill pattern data (.plf), touch . After the Region Property screen appears, touch , then **Select**.



- 9** Refer to steps **5** through **7** to select an imported decorative fill pattern.

- 10** Edit the pattern. If necessary, touch **Memory** to save the pattern.



- ① Pattern drawing screen
② Stitch settings screen

Memo

- When saving a pattern (that contains an imported motif stitch pattern or decorative fill pattern) as pattern drawing data (.pm9), it can only be saved in the machine's memory.
- When recalling a saved design, the motif stitch pattern or decorative fill pattern currently saved under the assigned pattern number is imported. (If the custom stitch pattern that was assigned to a saved design has been replaced by another custom stitch pattern, the original stitch pattern will not be recalled. It will be replaced with the replacement stitch pattern.)
- If all custom stitch patterns are cleared, the custom stitch pattern that was assigned to a saved design will not be recalled. It will be replaced with a default stitch pattern. Patterns with deleted custom motif patterns will be recalled with a zigzag stitch. Patterns with deleted custom decorative fill patterns will be recalled with a standard fill stitch.
- If the design is saved on the embroidery edit screen after touching **Set** on stitch settings screen, the custom motif and decorative fill pattern will be preserved.

OTHER FUNCTIONS

The tutorial videos about the new features have been added. Refer to “Playing a Tutorial Video” in the machine’s Instruction and Reference Guide (Sewing).

