



Bernette Chicago 7 Sewing/Embroidery Machine



Training:
Reservation:
Unsupervised Use:
Supervised Use:

Required
Library decision

Bernette Chicago 7 Sewing/Embroidery Machine

Introduction to machine:

This machine can be set up for regular sewing or for embroidery. With the sewing table attached, the machine can be used for straight stitching, zigzag stitching, and various decorative stitching. With the embroidery unit attached, 100 preprogrammed embroidery designs or designs transferred from a USB stick may be stitched onto various items.

Introduction to ARTlink software:

ARTlink is loaded on all the LIS computers and may be used to transfer purchased designs to a USB stick for use on the embroidery machine. The software has some tools for editing designs such as resizing and rotating, but it cannot turn a picture into an embroidery design.

Certification Process

Makers will learn how to operate the machine in the sewing mode, the embroidery mode, or both.

By the end of the sewing training, you will have learned the following:

- Proper machine safety
- Setting up the machine for sewing
- Use of the function buttons
- Selecting various stitches

By the end of the embroidery training, you will have learned the following:

- Proper machine safety
- Setting up the machine for embroidery
- Use of the function buttons
- Hooping the item with stabilizer
- Selecting and loading patterns

Project for Sewing Certification:

Straight stitches and several decorative stitches of the student's choice will be practiced.

Project for Embroidery Certification:

A preprogrammed pattern of the student's choice will be embroidered.

Machine Safety

- Always move presser foot to up position before winding bobbin, loading bobbin, or threading machine.
- Always turn off machine before changing a presser foot or needle.
- Always turn off machine before removing thread or cloth jammed in the presser foot.
- Always turn off machine before removing the stitch plate.
- Be careful when working around needle.
- Never put your fingers under the needle or presser foot when the machine is in motion.
- Do not use bent needles.
- Gently guide fabric--do not pull or push fabric while stitching.
- Never place anything but your foot on the foot control.

Reference Sheet – Chicago 7 Sewing/Embroidery Machine

Approved Materials:

For embroidery, 60 wt. embroidery thread and bobbin thread should be used.

Maximum Embroidery Area:

170 mm. x 110 mm. or 6.68" x 4.33"

Machine Accessories:

- All-purpose foot
- Buttonhole foot
- Blind hem foot
- Button sewing foot
- Overcasting foot
- Satin stitch foot
- Zipper foot
- Darning/Embroidery foot
- Simple embroidery foot
- Dust cover
- Brush & Seam ripper
- Bobbins (12)
- Screwdriver
- L-Screwdriver
- Embroidery hoop
- Embroidery template
- Seam guide/Quilting bar
- Needles, size 11 and 14
- Spool pin
- Spool pin felt
- Spool holder (large)
- Spool holder (small)
- Spool net
- Scissors
- USB Flash drives (2)
- Bobbin thread, black and white
- Container of embroidery thread

Consumables for Sale

- Stabilizer
- Aprons

Important Information:

- Never carry embroidery module by holding the release lever area.
- Never manually move embroidery hoop arm while embroidery module is attached to the machine.
- Don't touch the embroidery hoop arm while the machine is embroidering.
- Always thread machine with the presser foot all the way up.

Workflow:

- Embroidery patterns other than preloaded: use ARTlink to transfer patterns to a USB drive
 - Embroidery projects: apply stabilizers as needed
1. Setup machine
 2. Choose stitch or embroidery pattern
 3. Hoop material if embroidering
 4. Sew or embroider
 5. Return accessories and thread to containers
 6. Clear away scraps

Certification

For certification on the Bernette Chicago 7, the maker should cover all the following items that are detailed with illustrations in the *Instruction Manual* (also available electronically: https://www.bernina.com/en-US/SupportData/bernette/Chicago-7/502020-83-11_2013_06_bernette_chicago7_Manual_EN_o).

1. Connecting machine: power cord, on/off switch, and foot pedal: *Instruction Manual*, page 7
2. Changing from sewing table to embroidery unit and back: *Instruction Manual*, pages 8 and 89-90
3. Changing the general purpose sewing foot to the simple embroidery foot and back: *Instruction Manual*, pages 18 and 88
4. Wind bobbins: *Instruction Manual*, pages 9-10
Note: White or black bobbin thread should be used for embroidery.
5. Insert a bobbin: *Instruction Manual*, page 11
6. Thread the upper thread: *Instruction Manual*, pages 12-14
Note: Thread tension is very important in avoiding thread jams or breaks: Do not use handwheel to move needle to an up position, use the Needle Up/Down button noted below if the needle does not stop in the up position. Move the presser foot to an up position for threading until you are ready to thread the needle eye itself, then you may lower the presser foot.
Note: Colored embroidery thread is available in a plastic bin.
7. Adjust tension
This model can be a bit finicky—always follow exact instructions for threading top thread and loading bobbin.

For embroidery, first try straight sewing to set tension for the cloth and stabilizer to be used.

Start with tension wheel at position 4.

If bobbin thread shows on top

- Gradually turn tension wheel to lower number

If top thread shows on bottom

- Gradually turn tension wheel to higher number
- For embroidery mode, it is better to have the top thread show slightly on the bottom

If thread is jamming underneath cloth
















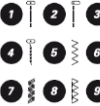
- Re-thread top thread checking the following
 - Needle is in proper up position
 - Presser foot is in highest up position until threading the eye of the needle
 - Spool cap is holding spool firmly
 - Thread should pull off without spool moving
 - Thread is not caught behind spool cap
 - Thread is correctly wound through all thread guides
 - Thread is not twisted around needle

- If thread is coming off spool too quickly, either when threading or sewing, try using the spool net
- Reload bobbin
 - Inspect bobbin and case for stray threads
 - Check that thread unwinds from bobbin properly
 - If not using bobbin thread in bobbin, change to bobbin wound with bobbin thread
- Adjust tension wheel
- Add another layer of stabilizer beneath hoop

8. Understand the function buttons, knobs, and the LCD panel: brief overview below and more detailed information in *Instruction Manual*, pages 23, 26-31





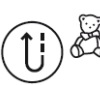






Sewing function buttons and knobs


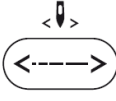

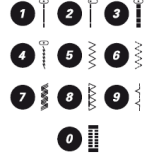
The icons on the buttons and knobs indicate their functions in the sewing mode.

	<i>Start/Stop (used as alternative to foot control)</i>		<i>Mirror Image Horizontal</i>		<i>Stitch Width</i>		<i>OK</i>
	<i>Reverse</i>		<i>Elongation</i>		<i>Memory</i>		<i>Menu Navigation</i>
	<i>Auto-lock Stitching</i>		<i>Double Needle</i>		<i>Clear</i>		<i>Speed Control</i>
	<i>Needle Up/Down-- Needle Stop</i>		<i>Stitch Length</i>		<i>Pattern Group Selection</i>		<i>Pattern Number Selection</i>

Embroidery function buttons and knobs

The icons above or to the side of the buttons indicate their function when the embroidery module is attached. Some buttons have the same function in both sewing and embroidery modes.

	<i>Start/Stop (foot control does not work in this mode)</i>		<i>Mirror Image Horizontal</i>		<i>Move thru Thread Color Changes</i>		<i>OK</i>
	<i>Pattern Selection</i>		<i>Resize</i>		<i>Set-up/ Adv Settings</i>		<i>Menu Navigation</i>
	<i>Trace</i>		<i>Rotate</i>		<i>Return to Previous Display</i>		

	Needle (Up/Down -- Needle Stop		Move Forward/ Backward Stitch by Stitch		Single/ Multi- Color		Pattern Number Selection
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If certifying for sewing:

9. Choosing a stitch pattern in sewing mode: *Instruction Manual*, page 32-35

10. Using memory function for decorative stitches: *Instruction Manual*, pages 70-83

If certifying for the embroidery mode, cover 1-8 above and the following items.

11. Stabilizers and sprays: *Instruction Manual*, pages 95-97

- For woven, non-stretchy material, tearaway stabilizer may be used
- For stretchy materials, or for projects where more stability is desired, use cutaway stabilizer

Note: See Resources list for videos on embroidering different types of projects.

Note: When working with cloth that has a nap (e.g. fleece, terry cloth, etc.), use a water soluble stabilizer on top of the cloth to hold the pattern stitches above the nap. Also use a water soluble stabilizer on top of a thin stretchy material like a tee shirt. This stabilizer must be provided by the user.

12. Hooping item to be embroidered: *Instruction Manual*, pages 92-93

13. Attaching and removing hoop: *Instruction Manual*, page 94

14. Choosing and setting up a pre-loaded pattern in embroidery mode: *Instruction Manual*, pages 98-101, 104-106

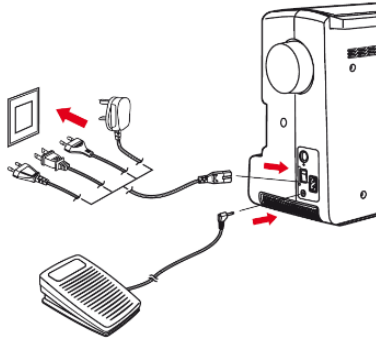
Note: If importing a design, see pages 10-11 in this binder in addition to *Instruction Manual*, pages 101, 104-106

15. Embroidering design and changing thread if multi-color design: *Instruction Manual*, pages 102-103

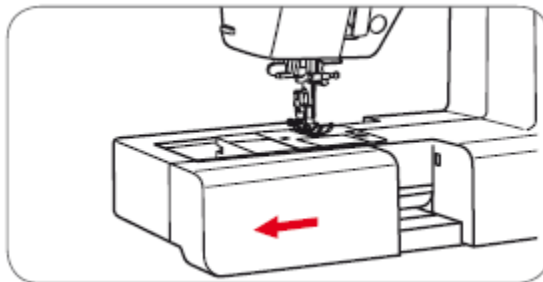
Note: If using imported design, verify that listed color changes match vendor's pattern chart.

Set Up

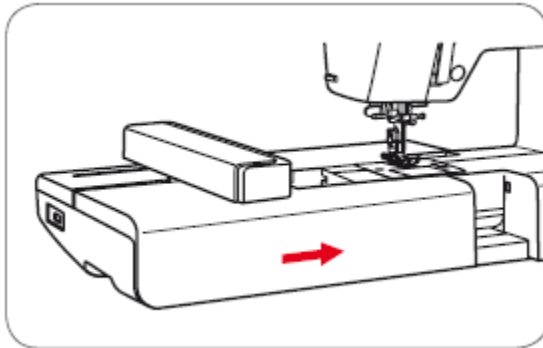
1. Plug in power cord to machine and outlet.
2. Plug in foot control (optional).



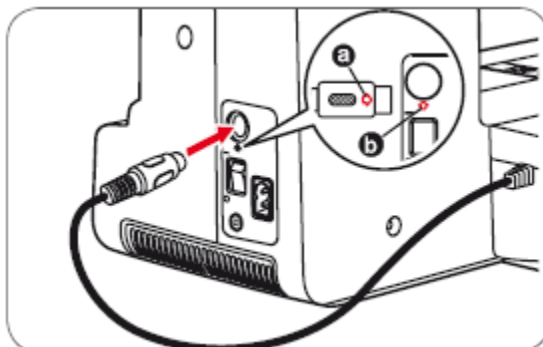
3. Change out sewing table for embroidery module or vice versa as needed.
Remove the sewing table by pulling it to the left.



Slide on embroidery module and push lightly until it clicks into place



Insert plug into embroidery connector.

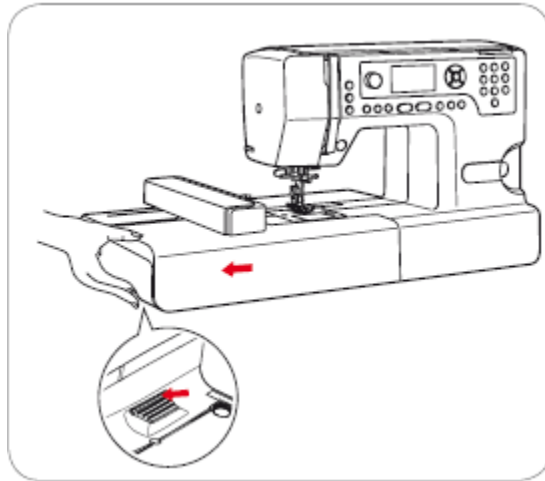


To remove the embroidery module:

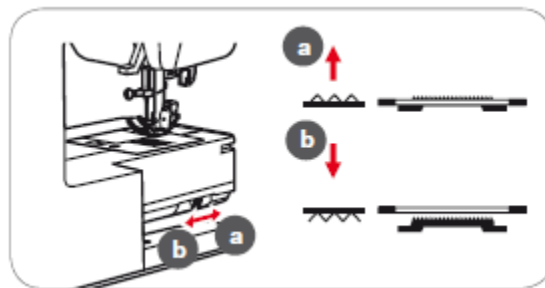
Turn off machine.

Unplug the embroidery connector (see above).

Press the release button on the embroidery module underneath the left side and pull.



Before replacing the sewing table, move the feed dog up (position a in the illustration below).

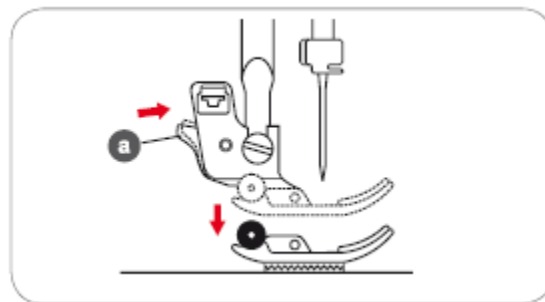


5. Change out presser foot as needed.

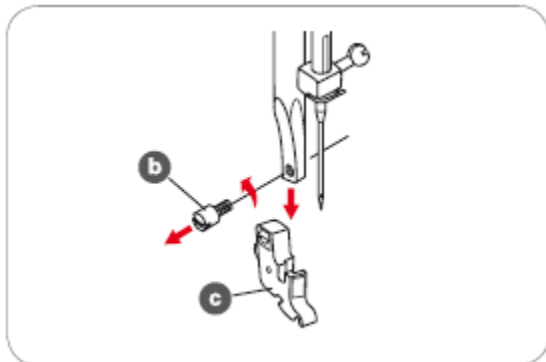
Changing to the embroidery foot:

Raise the presser foot to its highest position.

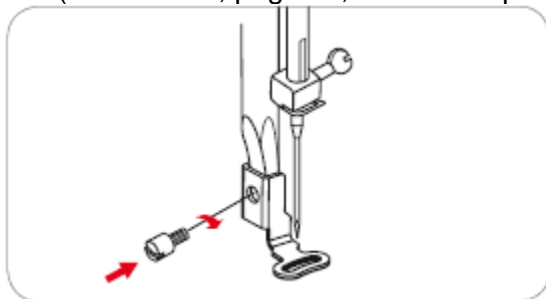
Remove the foot from the presser foot holder by pressing the black lever at the back.



Remove the presser foot holder by loosening the screw.

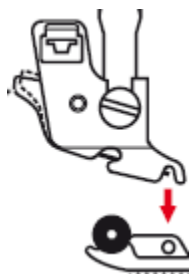


Attach the embroidery foot of choice and tighten screw. The illustration below shows the simple embroidery foot, we recommend using the darning/embroidery foot (see Manual, page 21, for a description of the presser feet).



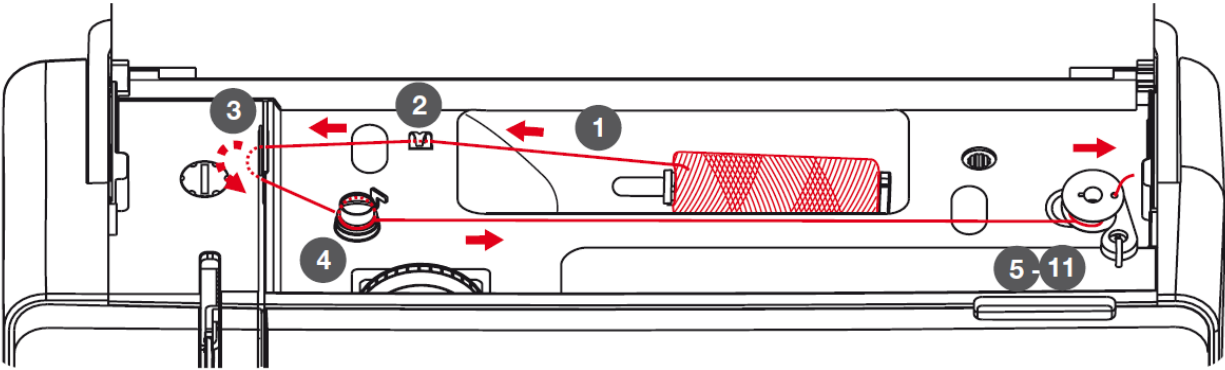
To replace the embroidery foot with a regular sewing foot, reverse the order of the above steps to reattach the presser foot holder.

Attach the desired presser foot by snapping its pin into the cutout (or follow alternate instructions in manual, page 18).

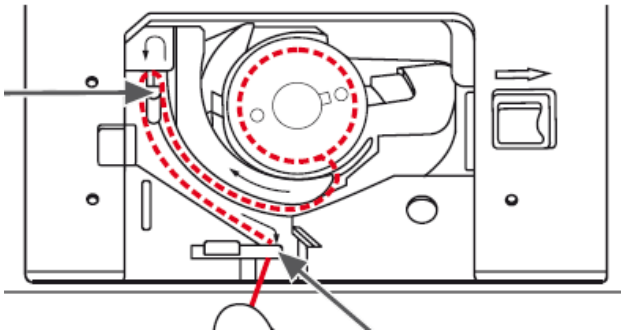


6. Turn on machine (switch in front of power cord on right side of machine).

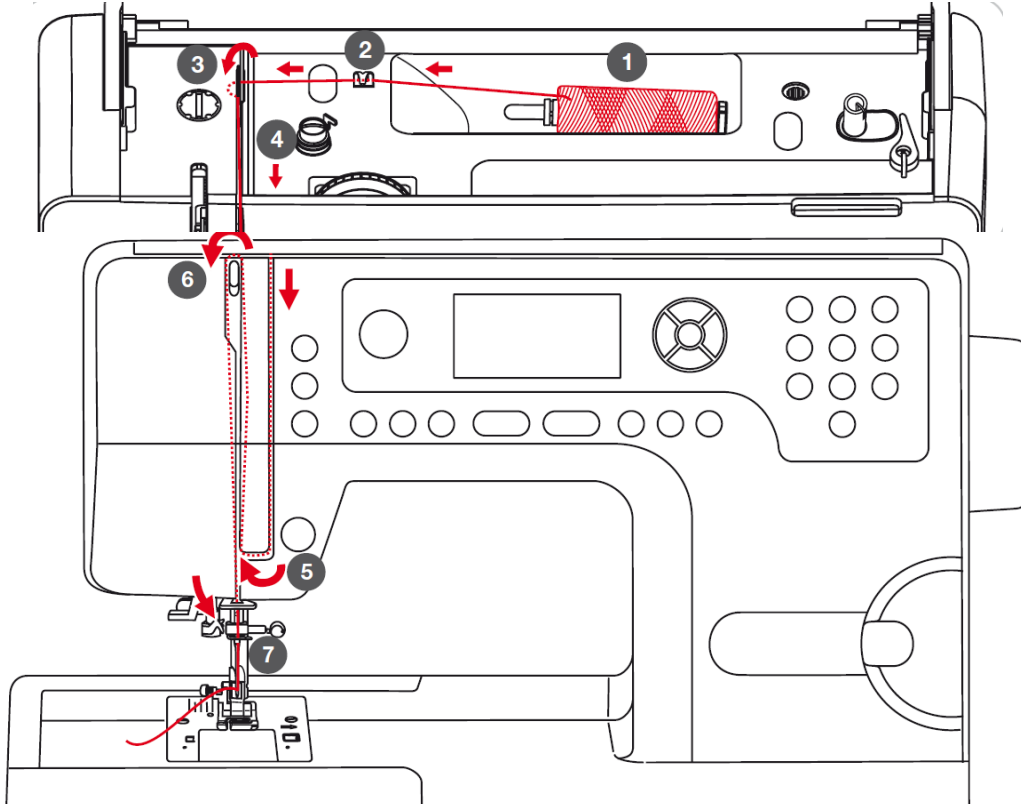
7. Wind bobbins (More detailed instruction in *Instruction Manual*, pages 8-10)



8. Insert a bobbin (More detailed instruction in *Manual*, page 11)



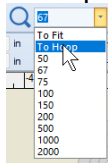
9. Thread the upper thread (More detailed instruction in *Instruction Manual*, pages 12-14)



Importing Embroidery Designs on the Bernette Chicago 7 Sewing and Embroidery Machine

NOTE: Neither this software nor the sewing/embroidery machine has the capability to create a stitch pattern from an image.

1. Open ARTlink software on a Library Innovation Studio computer.
2. Click Open folder icon or CTRL+O
3. Under “Look in:” navigate to C:>Utility>Patterns for provided patterns or to the USB drive if you are using your own pattern.
4. Change “Files of type:” to All Files (*.*)
5. Double click on desired pattern name.
 - See binder for provided pattern images and descriptions
 - Rename the file before opening it if the file name is more than 17 characters long or includes anything but upper or lower case letters, numbers or the following special characters & ! _.-()
6. To see the full hoop, click on the down arrow in the magnification section of the tool bar and select: To Hoop



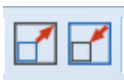
Note: if the numbers 110 x 170 do not show at the bottom of the hoop image, this is not the correct hoop for the machine. In the menu bar select Settings>Options>Hoop and from the dropdown box choose Bernette hoop 110 x 170.

7. Click OK on pop-up box.
***Please note the pop-up box is a warning that the quality of the embroidery may be poor if the design size is increased or decreased by more than 10%.**

8. When file opens, if you need to use any of the following features, click on the pattern to select it (small black boxes will appear at each corner and side center point):



- Rotate the pattern to the correct direction



- Resize: the increase or decrease icons only allow 20% increments. It may be advisable to do a test run of the pattern before embroidering the actual item




- Mirror the design horizontally or vertically

***Please note the pattern cannot be more than 110mm x 170mm or 4.33” x 6.68”;** if it does not exceed these measurements but needs to be rotated or decreased in size to fit inside the red box in the hoop, a pop-up warning will appear when you try to save the pattern to a USB drive. The pattern cannot have more than 30 color changes to transfer.

***If you are purchasing embroidery patterns from online vendors such as emblibrary.com purchase them in the EXP format. Again, make sure they fit in the Chicago 7's hoop so they must be no larger than 110mm x 170mm or 4.33" x 6.68". You will notice that vendors generally offer their patterns in a variety of sizes and formats so make sure to choose the correct one.**

9. Insert a USB drive into the computer's USB port

***Please note the USB drive should not be larger than 256MB and there should be no other files on it.**

10. Click  on –the Write to Card/Machine icon in the tool bar.

11. Click on “Deco” in the Device Selection pop-up box.

12. Click OK on the pop-up box that states the design has been successfully transferred to an EmbF5 folder.

13. Eject the USB drive.

14. With the embroidery module installed on the Chicago 7 machine and the machine turned on, insert the USB drive into the port at the left end of the embroidery module.

15. After a few seconds, the LCD panel will flash momentarily to a picture of a USB in the embroidery module and then go back to the embroidery design selection menu. Using the arrow buttons, highlight the USB icon and press the OK/check mark button.

16. After several seconds, a menu listing the EmbF5 folder will display on the LCD panel, press the OK/check mark button.

17. After several more seconds, a menu listing three files will appear. Use the arrow buttons to move down to the pattern name, press the OK/check mark button.

18. After more than a few seconds, the embroidery set up menu will display with “USB” in place of a picture of your design.

19. Depending on the size of your design, you may use the function to move the needle to change the starting center of the design.

20. Press the OK/check mark button when design editing has been completed.

21. Press the OK/check mark button to confirm the hoop size.

22. Use the Color Forward/Backward button to see if the correct color changes were imported. If not, you will need to check the vendor's color change chart.

23. Follow the usual steps to complete embroidery project.

Resources

Electronic version of Instruction Manual: https://www.bernina.com/en-US/SupportData/bernette/Chicago-7/502020-83-11_2013_06_bernette_chicago7_Manual_EN_o

Online Course on Niche Academy produced by the Nebraska Library Commission:

To access Niche Academy online makerspace courses produced by the Nebraska Library Commission, go to: <https://my.nicheacademy.com/innovationtraining>

Those who want to access the Library Innovation Studio lessons must first create a personal account with a login. To create a free account you enter a first name, last name, and email address.

Tips, Tricks, and Tutorials

Beginning to Sew with Bernette Chicago 7
<https://www.youtube.com/watch?v=a8qL6yTn9fM>

Embroidery process
<https://youtu.be/6QkBYVFR9Qk>

Embroidering on Terrycloth Towels (discusses stabilizers and fitting in hoop):
<https://www.youtube.com/watch?v=7W6IHNMHzhU&feature=youtu.be>

Note: depending on the pattern, water-soluble stabilizer can be used on top and underneath terrycloth

Maintenance – For Staff Use Only

At least once a month, use the brush to clean off the wire hoop above the needle and the bobbin case.