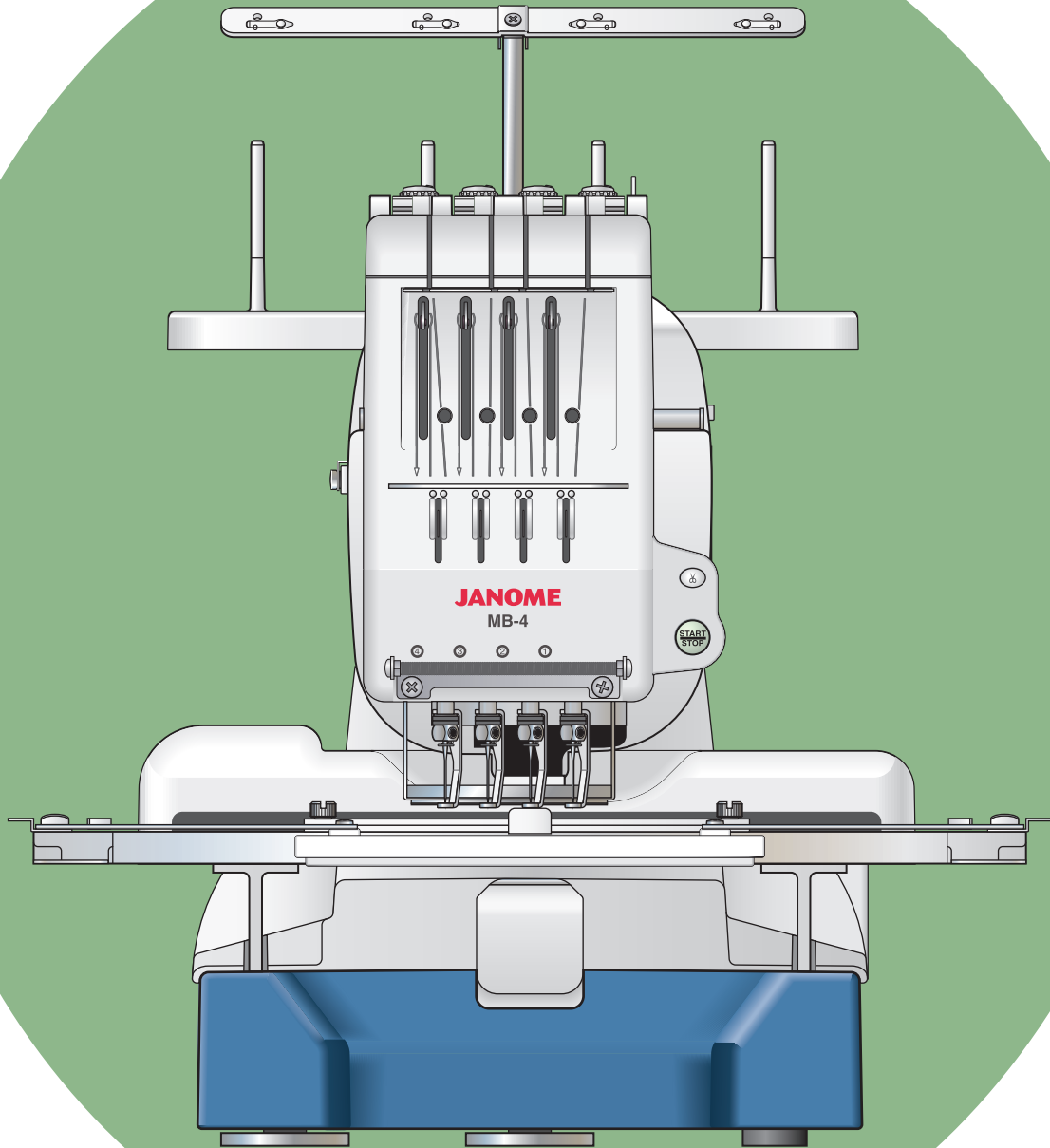# Instruction Book

JANOME

MB-4

IMPORTANT SAFETY INSTRUCTIONS

The machine is not intended for use by children or mentally infirm persons without proper supervision.

This machine is designed and manufactured for household use.

When using an electrical appliance, basic safety precautions should always be followed, including the followings:
Read all instructions before using this machine.

DANGER—To reduce the risk of electric shock:

1. The machine should never be left unattended when plugged in. Always unplug this machine 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. Do not allow the machine to be used as a toy. Close attention is necessary when this machine is used by or children.
2. Use this machine only for its intended use as described in this instruction book.
3. Never operate this machine if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water.
   Return this machine to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
4. Never operate this machine with any air openings blocked. Keep ventilation openings of this machine free from accumulation of lint, dust and loose cloth.
5. Never drop or insert any object into any opening.
6. Do not use outdoors.
7. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
8. Connect this machine to a properly grounded outlet only. See Grounding Instructions.
9. To disconnect, turn all controls to the off ("O") position, then remove plug from outlet.
10. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
11. Keep fingers away from all moving parts. Special care is required around the machine needle.
12. Do not use bent needles.
13. Do not hold the embroidery hoop while stitching. It may deflect the needle causing it to break.
14. Switch the machine off ("o") when making any adjustment in the needle area, such as threading the needle with your hand, changing the needle, inserting the bobbin, and the like.
15. Always unplug this machine from the electrical outlet when making any adjustments mentioned in this instruction book.

SAVE THESE INSTRUCTIONS

The design and specifications are subject to change without a prior notice.

Please note that on disposal, this product must be safely recycled in accordance with relevant National legislation relating to electrical/electronic products. If in doubt please contact your retailer for guidance. (European Union only)

GROUNDING INSTRUCTIONS

This product must be grounded. In the event of malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock.
This product is equipped with a cord having an equipment grounding conductor and a grounding plug.
The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER — Improper connection of the equipment-grounding conductor can result in a risk of electric shock.

1. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor.
2. If repair or replacement of the cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.
3. Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the product is properly grounded.
   Do not modify the plug provided with the product if it will not fit the outlet, have a proper outlet installed by a qualified electrician.
4. This product is for use on a nominal 120 V circuit, and has a grounding plug that looks like the plug illustrated in Fig. A. A temporary adaptor, which looks like the adaptor illustrated in Fig. C, may be used to connect this plug to a 2-pole receptacle as shown in Fig B. If a properly grounded outlet is not available, the temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green colored rigid ear, lug, and the like, extending from the adaptor must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adaptor is used, it must be held in place by the metal screw.
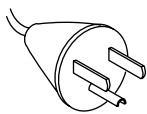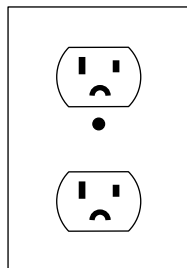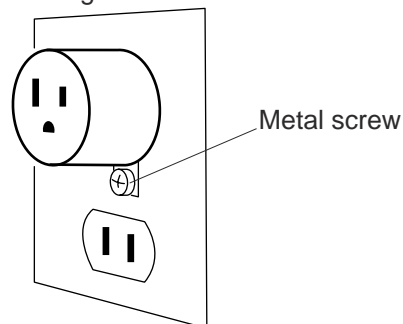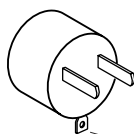
Fig. A

Fig.B

Fig.C

Metal screw

Fig.C

grounding means

SECTION 1. SETTING UP THE MACHINE

SECTION 2. BASIC OPERATION

SECTION 1. SETTING UP THE MACHINE
Installing the Machine

Place the machine on a flat and stable surface such as a sturdy table that could withstand the machine's weight and vibration.
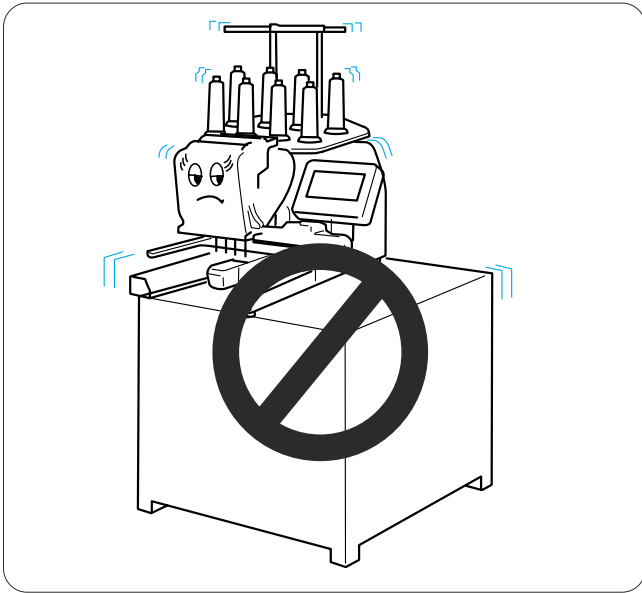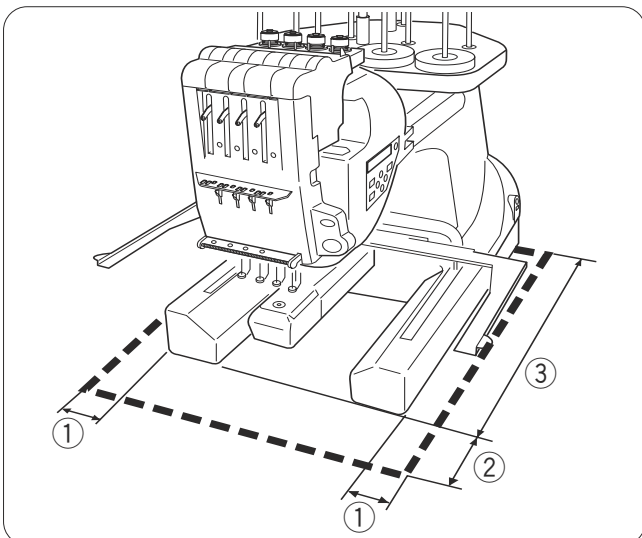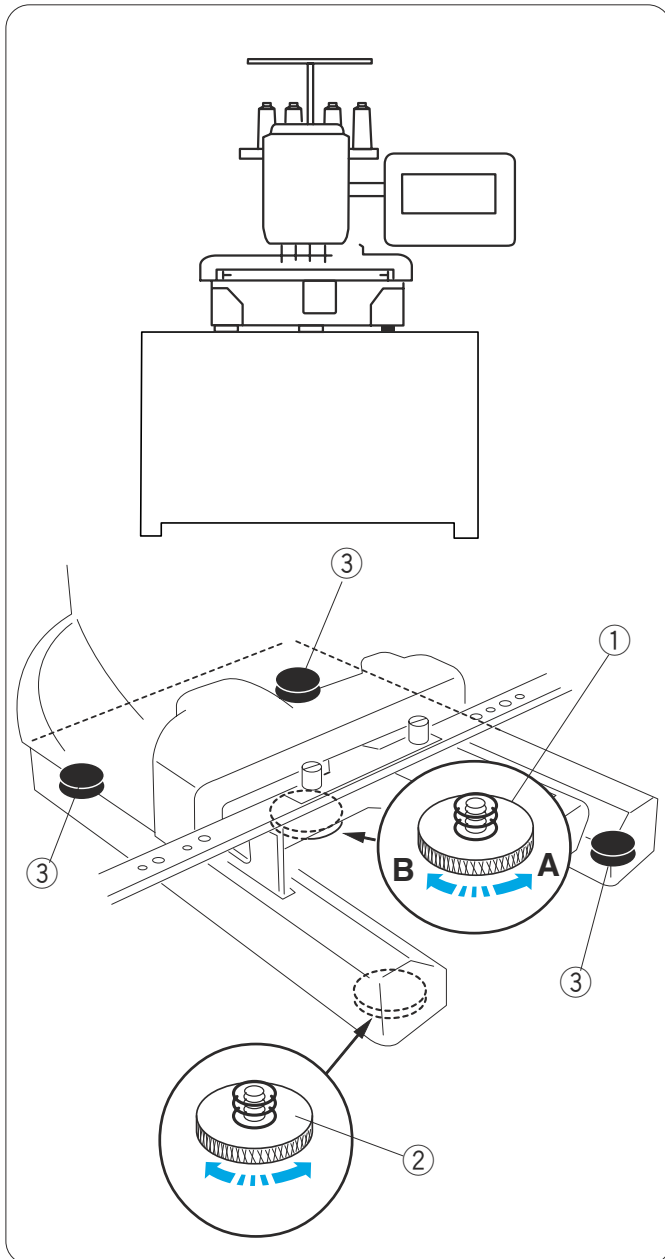
Place the machine on the flat and level surface.
Make sure that all the feet firmly contact the surface.
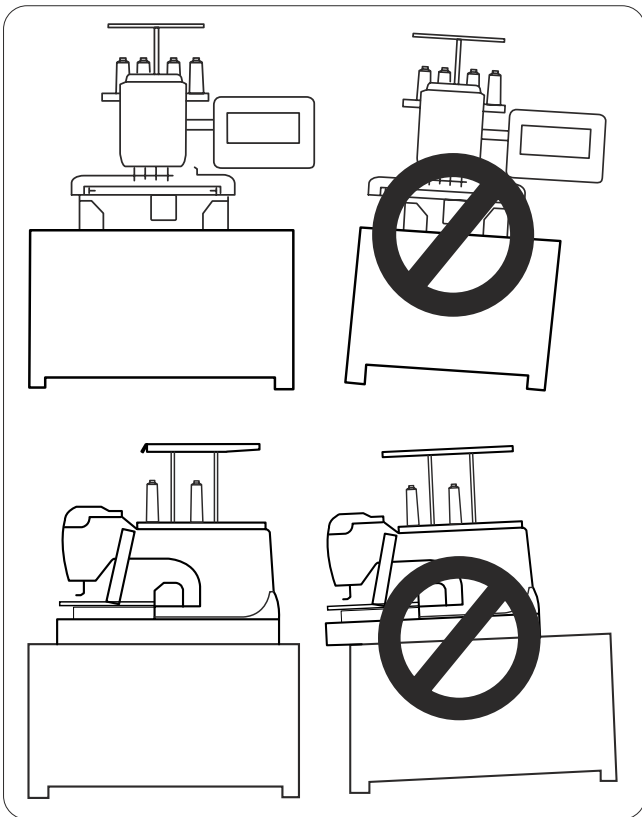
Provide a sufficient space around the machine to allow the hoop to move freely.
① 8.5 cm (3–3/8")
② 20 cm (7–7/8")
③ 30 cm (11–7/8")

Adjusting the feet

Turn the adjusting screw counterclockwise (in the direction of **A**) as much as possible, before placing the machine on a surface.

① Adjusting screw

Place the machine on a flat and level surface.

Turn the adjustable foot so the four feet firmly contact the surface.

② Adjustable foot
③ Foot

Turn the adjusting screw clockwise (in the direction **B**) until it contacts the surface.

NOTE:
Make sure that the machine sits on the surface without shaking.
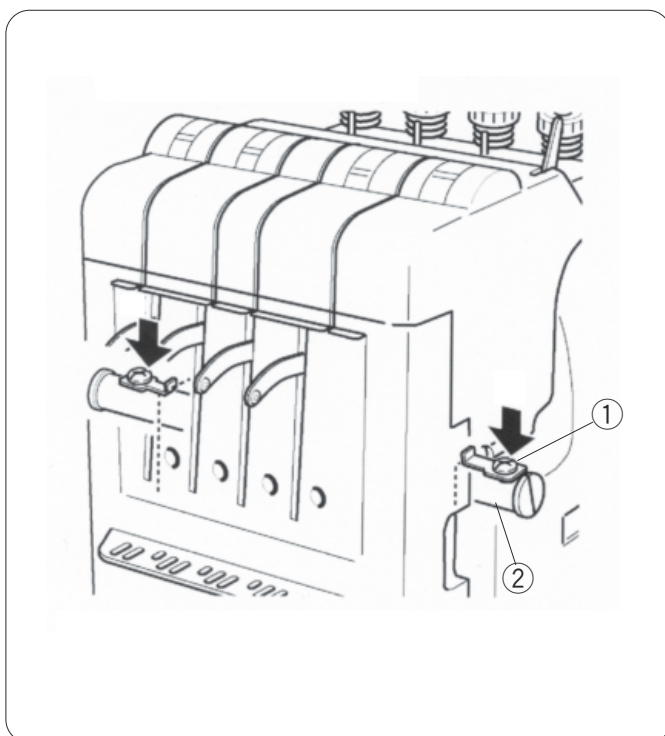
Removing the Head Stoppers

To prevent the machine from a damage during transportation, the machine is delivered with the head stoppers installed on the guide bar to fix the needle bar head.

Make sure to remove the two head stoppers on both sides of the guide bar before operating the machine.

① Head stopper
② Guide bar

When you repack the machine for transportation, attach the two head stopper against the metal frame with the screws to fix the needle bar head.

NOTE:
Select the needle bar No. 3 in the Ready to Sew mode and turn the power off then attach the stoppers (refer to pages 26, 39) .

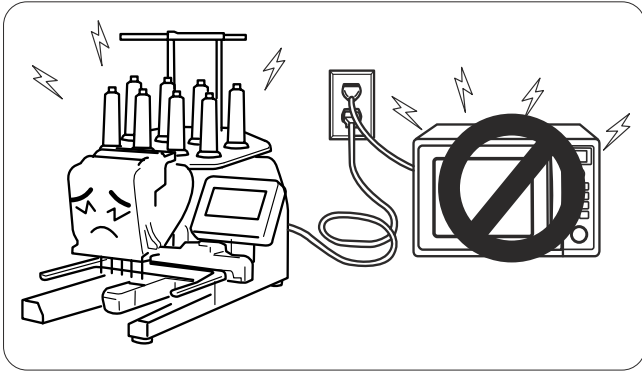Do not use the machine near appliances that radiate electromagnetic noise such as a microwave oven, or do not plug in the machine to the same branch circuit where such appliances are connected.
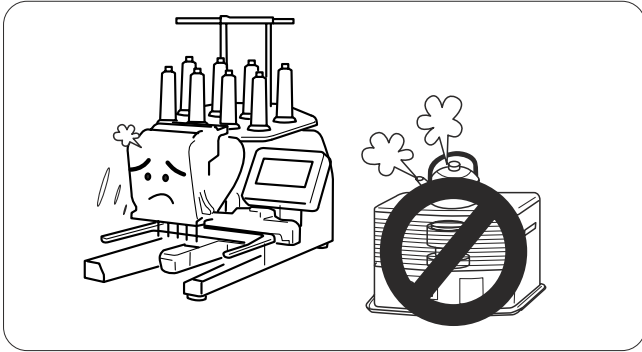
Do not use or store the machine near a heat radiator or in a place with dust or high humidity.
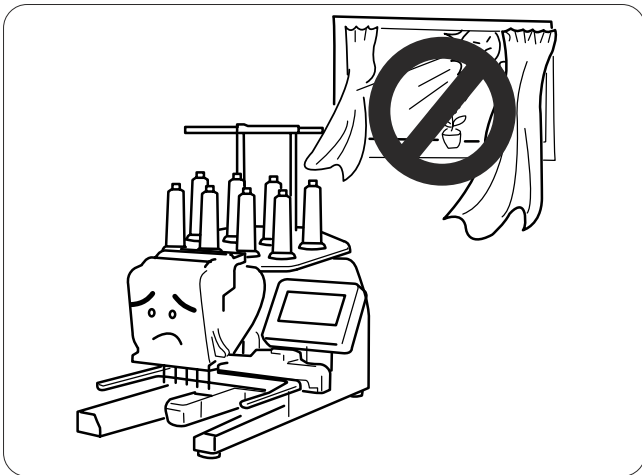
Do not expose the machine to direct sunlight or open air.
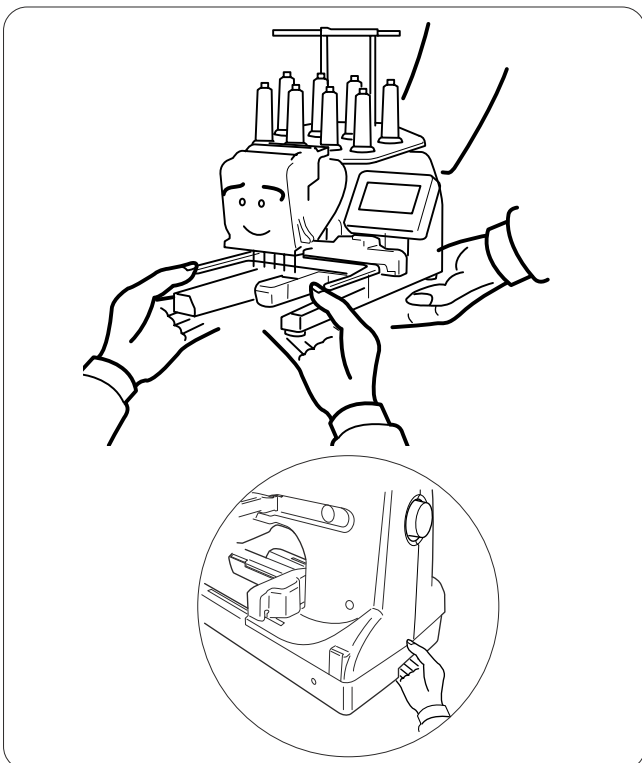
When transporting the machine, be sure it is lifted by two persons.
Hold the machine by the two legs and the hand grip on the bottom of the backside of the machine.

Remove the hoop supporter when transporting the machine to avoid damage by hitting the supporter.

Names of Parts
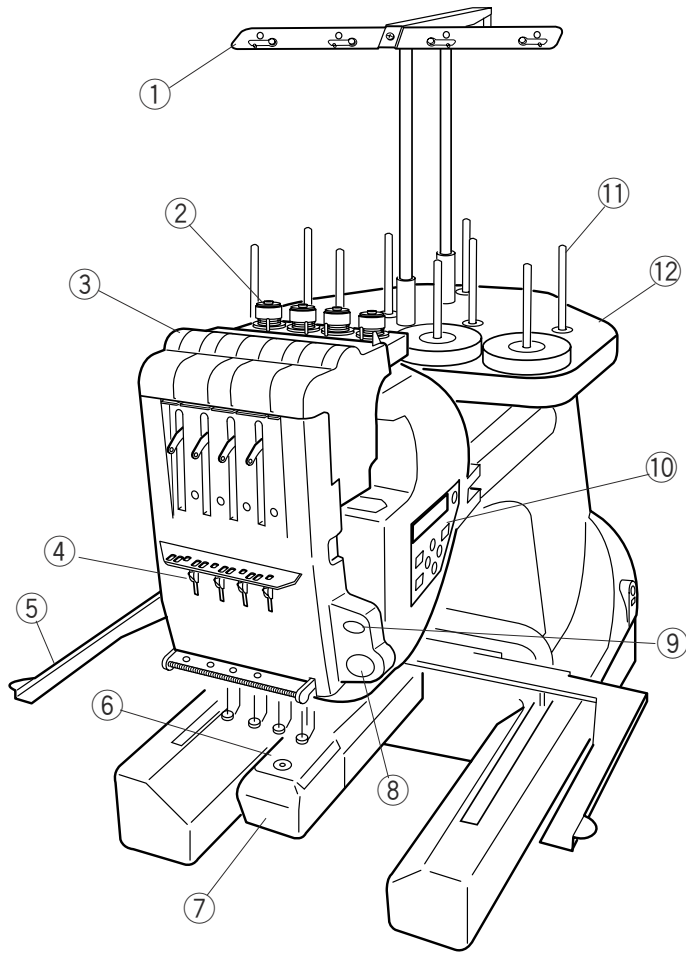
① Thread guide bar
② Pre-tension control
③ Tension control
④ Check spring
⑤ Hoop supporter
⑥ Needle plate
⑦ Hook cover
⑧ Start/Stop button
⑨ Auto thread cutter button
⑩ Sub control panel
⑪ Spool pins
⑫ Spool stand
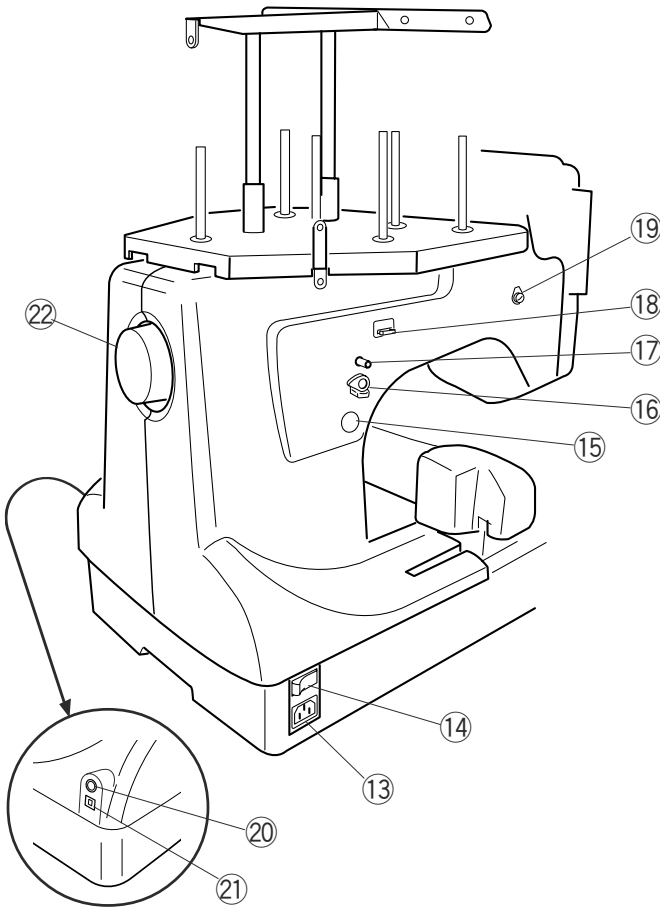
⑬ Machine socket
⑭ Power switch
⑮ Bobbin winder button
⑯ Bobbin winder stopper
⑰ Bobbin winder spindle
⑱ Bobbin thread cutter
⑲ Bobbin winder thread guide
⑳ RCS connector socket
㉑ USB port
㉒ Handwheel
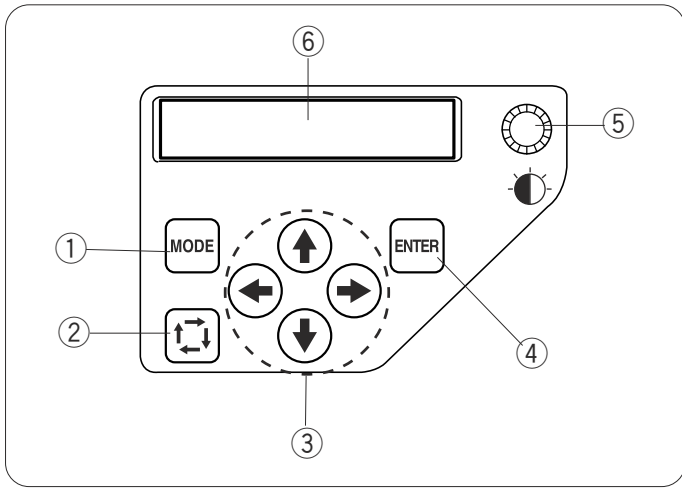
Sub control panel

① Mode button
② Trace button
③ Arrow button
④ Enter buttons
⑤ LCD brightness adjusting dial
⑥ LCD display
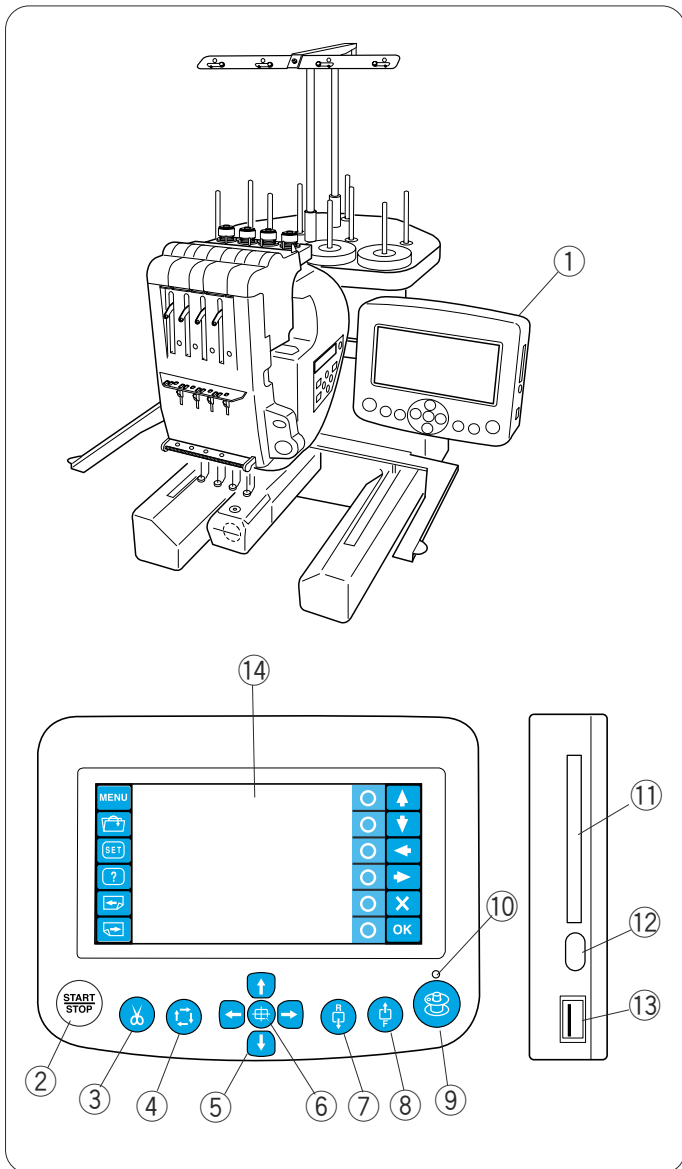
RCS unit (optional item)

① RCS unit
② Start/Stop button
③ Auto thread cutter button
④ Trace button
⑤ Jog buttons
⑥ Carriage return button
⑦ Stitch back button
⑧ Stitch forward button
⑨ Bobbin winder button
⑩ Bobbin winder indicator
⑪ Card slot
⑫ Card ejector button
⑬ USB port
⑭ LCD touch panel

⚠ **CAUTION:**

Do not press the LCD touch panel with hard or sharp pointed objects like pencils, screwdrivers or the like.
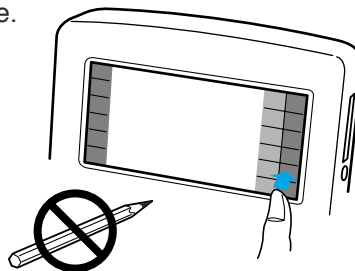
Standard Accessories
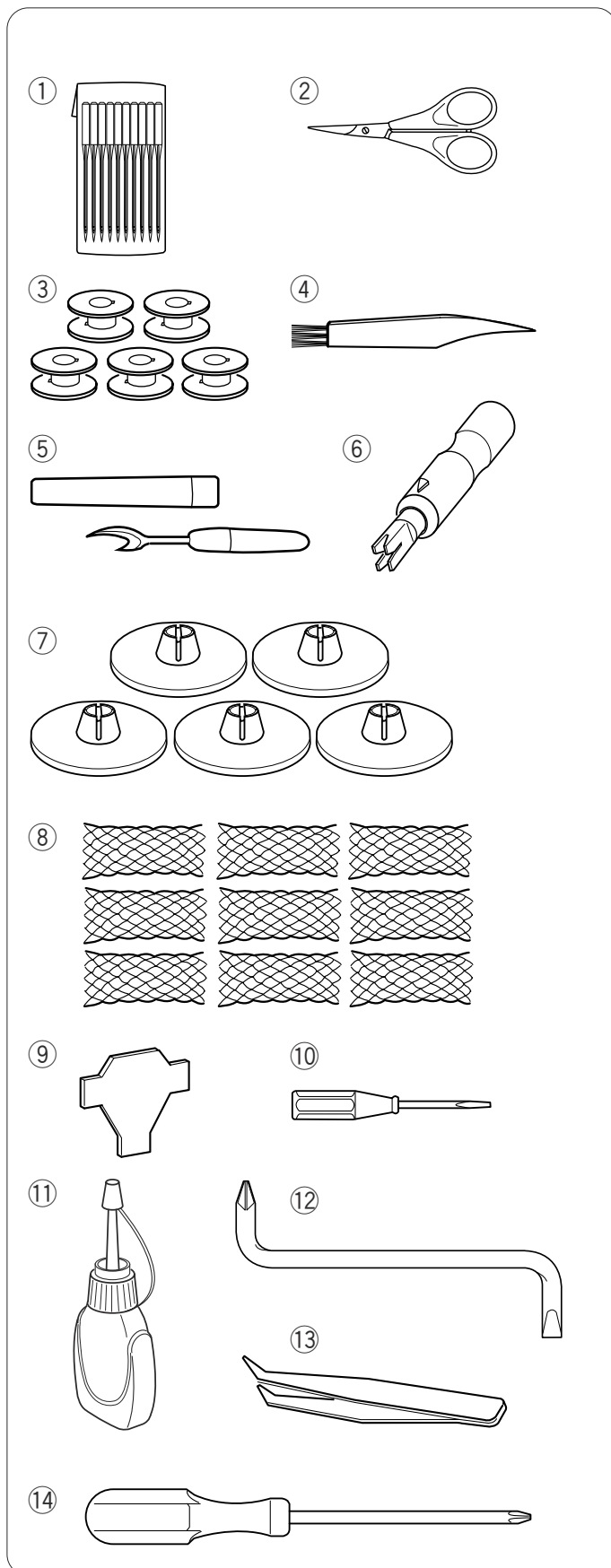
① Needle (DB x K5Q1-NY)
② Scissors
③ Bobbins
④ Lint brush
⑤ Seam ripper
⑥ Handy needle threader
⑦ Spool caps
⑧ Spool net
⑨ Screwdriver
⑩ Screwdriver (small)
⑪ Oiler
⑫ Offset screwdriver
⑬ Tweezers
⑭ Screwdriver (large)
⑮ Accessory box
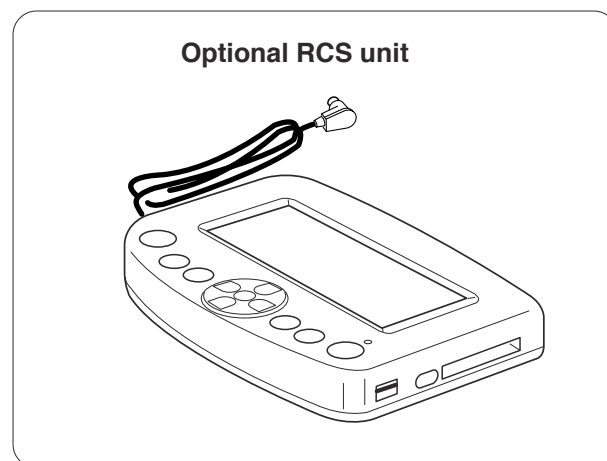
Optional RCS unit
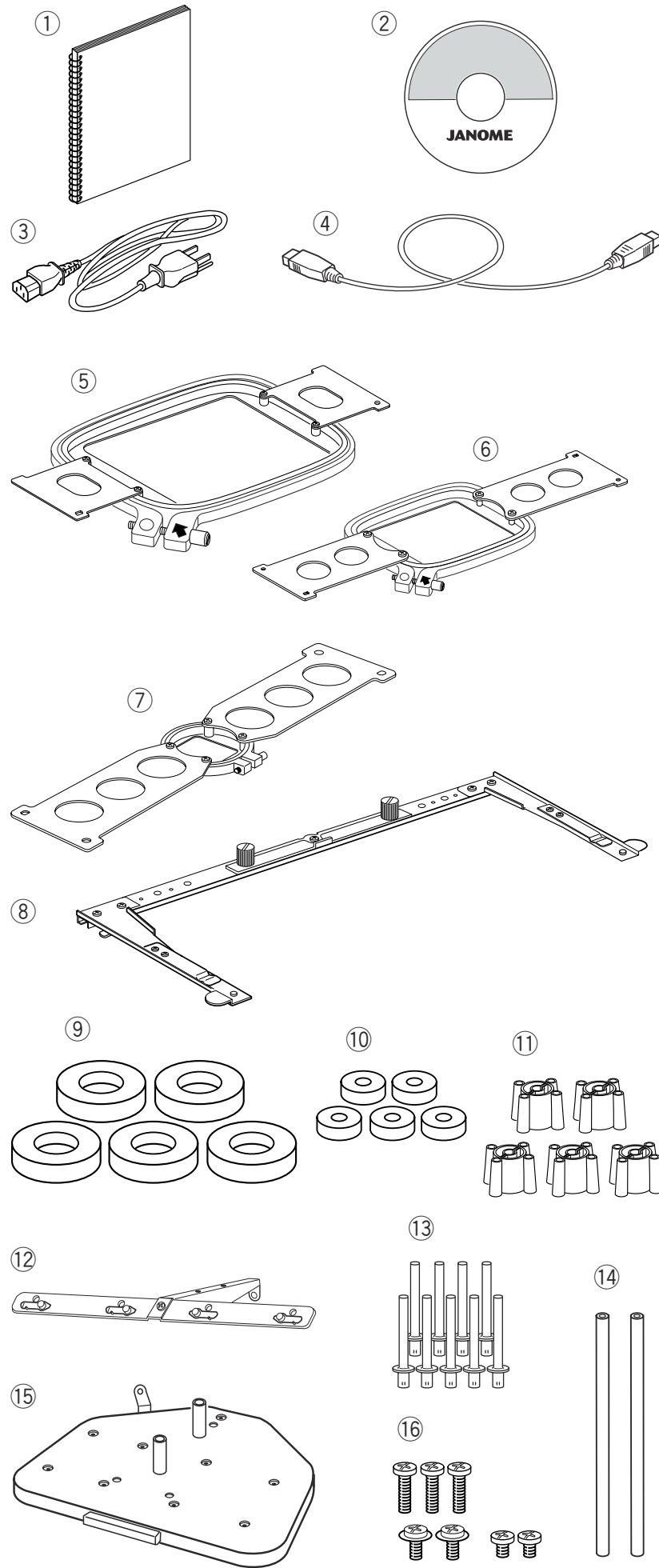
Standard Accessories

① Instruction book
② Instructional movie CD-ROM
③ Power supply cable
④ USB cable
⑤ Hoop M1 (MB Hoop 240 X 200)
⑥ Hoop M2 (MB Hoop 126 X 110)
⑦ Hoop M3 (MB Hoop 50 X 50)
⑧ Hoop supporter
⑨ Felt ring (large)
⑩ Felt ring (small)
⑪ Spool rest
⑫ Thread guide bar
⑬ Spool pin
⑭ Thred guide pole
⑮ Spool stand
⑯ Setscrew

Assembling the Spool Stand
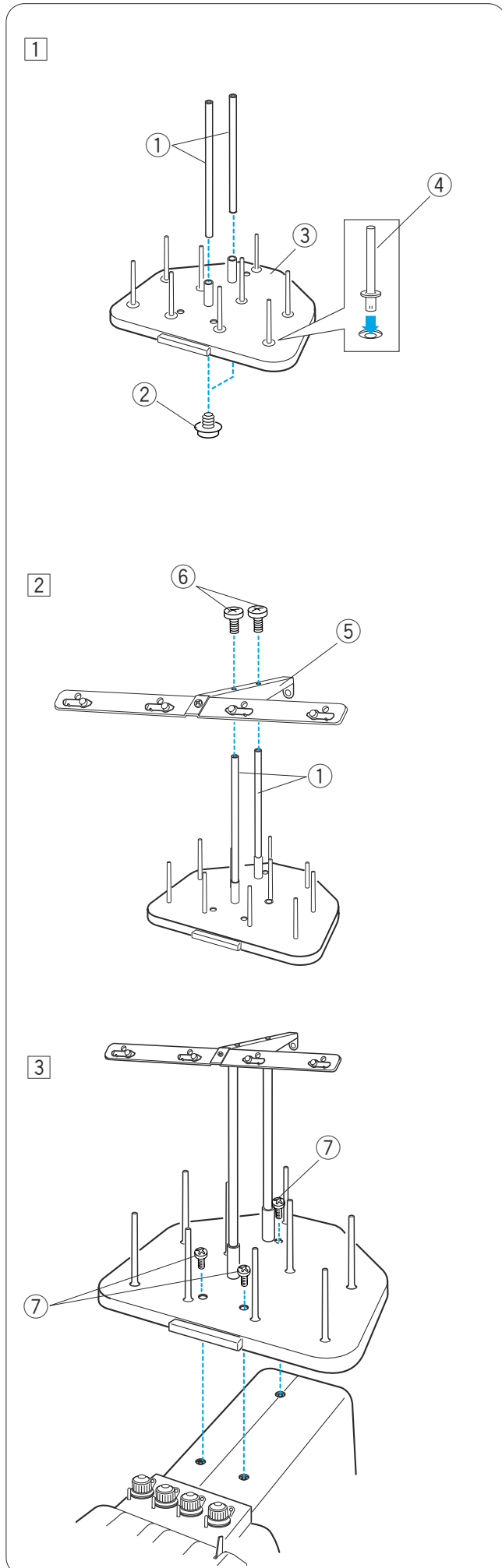
1 Insert the thread guide poles into the sleeve of the spool stand. Secure the poles with setscrews (**A**) from the bottom.
Insert the spool pins into the spool stand.
- ① Thread guide poles
- ② Setscrews (**A**)
- ③ Spool stand
- ④ Spool pin

2 Attach the thread guide bar to the thread guide poles with the setscrews (**B**).
- ⑤ Thread guide bar
- ⑥ Setscrews (**B**)

3 Attach the assembled spool stand to the machine with the 3 setscrews (**C**).
- ⑦ Setscrews (**C**)

9

Setting the Thread Cones or Spools of Thread

Use the 4 spool pins in the front row for sewing, and second row spool pins are for the standby spools.
Use the rear most spool pin for bobbin winding.

Felt rings of two sizes are provided to accommodate various types of spools of thread and thread cones.
Use the large felt rings for large thread cones. For small thread cones or spools of thread, insert the small felt rings into the large rings.

① Spool pin
② Felt ring (large)
③ Felt ring (small)
④ Small spool of thread
⑤ Spool pin for bobbin winding

Setting the thread cone

Attach the spool rests on the spool pins.
Place the thread cones on the spool pins.

Cover the thread cone with the spool net if the thread is shaky or kinky when sewing.
If the net is too long for a spool, fold the net and place it on the spool.

⑥ Spool rest
⑦ Spool net

Setting the spool of thread

Place the spool of thread on the spool pin, with the thread coming out from the left backside.
Attach the spool cap and firmly press it against the spool.

⑧ Spool cap

NOTE:
To prevent the thread from unraveling, leave the net on the thread cone or hook the thread end into the notch of the spool when it is not in use.

⑨ Notch

10

Installing the Hoop Supporter
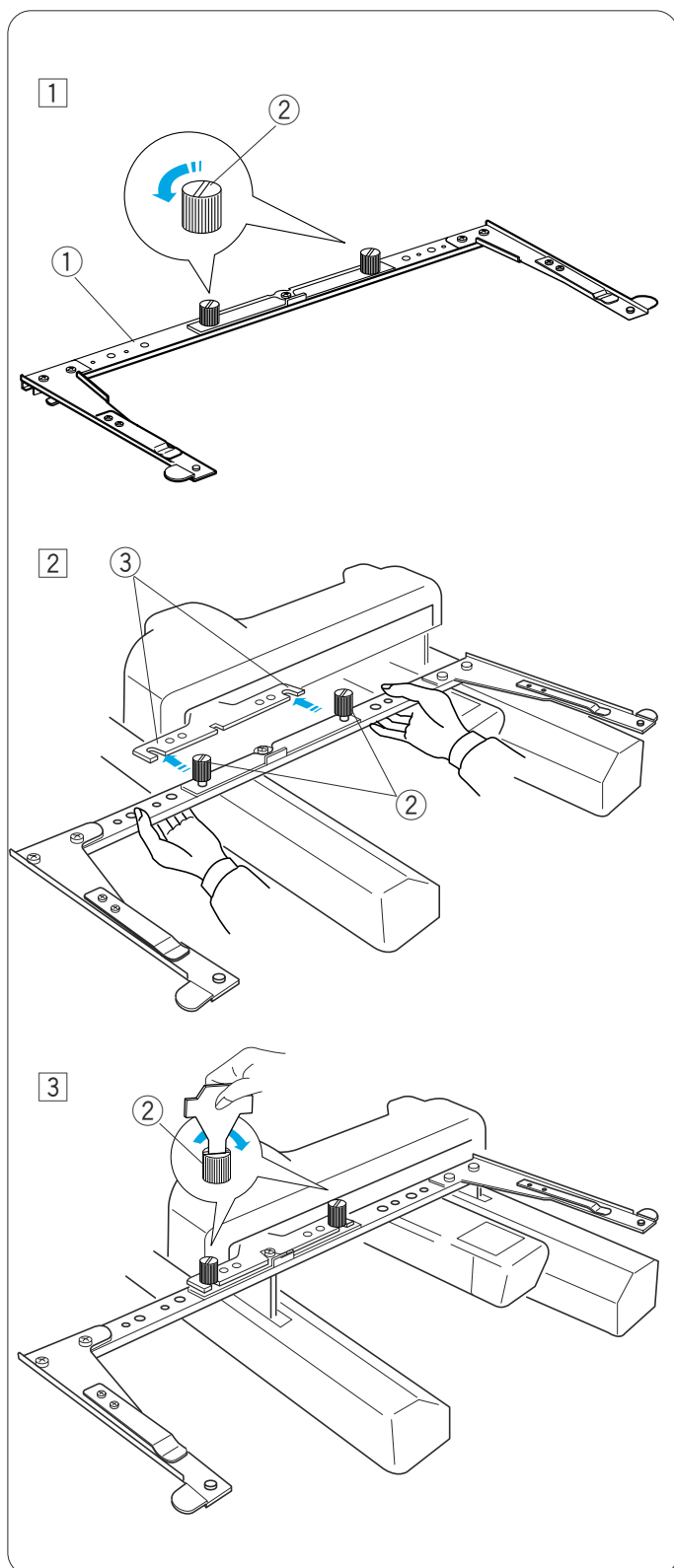
1 Loosen the two thumbscrews on the hoop supporter.
- ① Hoop supporter
- ② Thumbscrew

2 Turn the power switch on to move the carriage to the center.
Hold the hoop supporter with both hands and place it under the carriage plate by inserting the necks of both thumbscrews into the slots in the carriage plate.
- ③ Slot in the carriage plate

3 Tighten the thumbscrews with the screwdriver to secure the hoop supporter.

Installing the RCS Unit (optional item)

1️⃣ Loosen the thumbscrew and open the mounting arm.
- ① Thumbscrew
- ② Mounting arm

2️⃣ Loosen the screw knob **A** and set the RCS unit on the mounting arm by hooking the RCS unit on the pins.

Tighten the screw knob **A** to secure the RCS unit. Adjust the angle of the mounting arm as desired and tighten the thumbscrew.
- ③ Screw knob **A**
- ④ RCS unit
- ⑤ Pin

3️⃣ Loosen the screw knob **B** on the end of the mounting arm and tilt the RCS unit to adjust the angle of the LCD screen for easier viewing.

Tighten the screw knob **B** to secure the RCS unit.
- ⑥ Screw knob **B**

4️⃣ Insert the connector into the connector socket on the back of the machine.

Fold the cable and put it under the spool stand.
- ⑦ Connector
- ⑧ Connector socket

NOTE:
You can connect the RCS unit when the machine is turned on. However do not connect the RCS unit while the machine is running or the LCD screen of the sub control panel is displaying a message.

If you are using the RCS unit on the tabletop, simply insert the connector into the connector socket on the back of the machine.

Extend the two legs on the backside of the RCS unit so that it rests on an angle for easier viewing.
- ① Leg
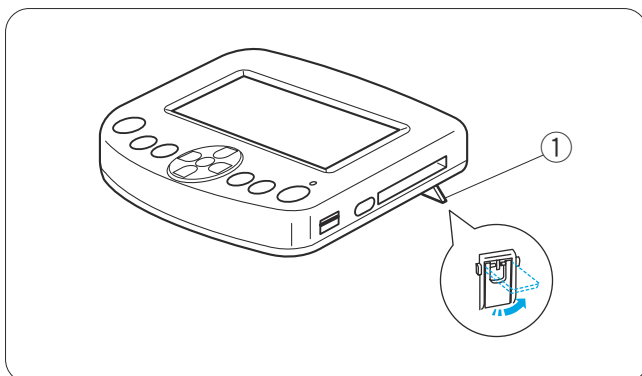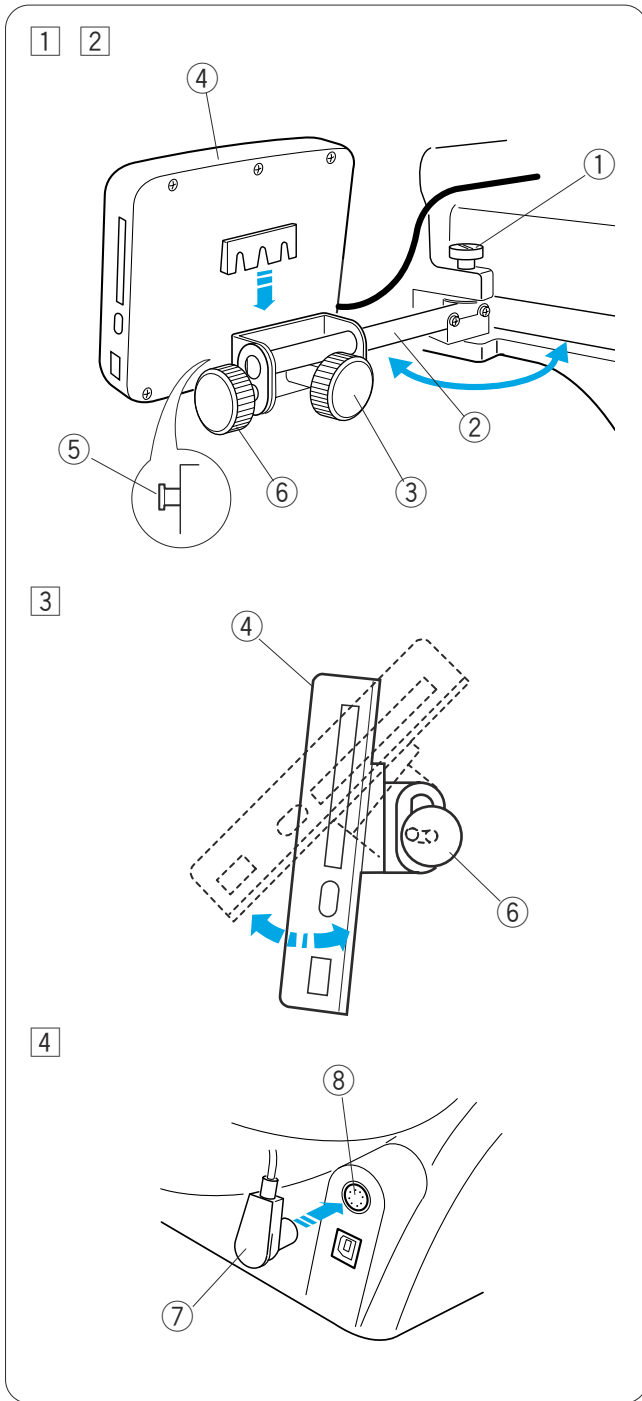
Connecting the Power Supply

⚠ **CAUTION:**
Turn the power switch off before connecting the machine to the power supply.
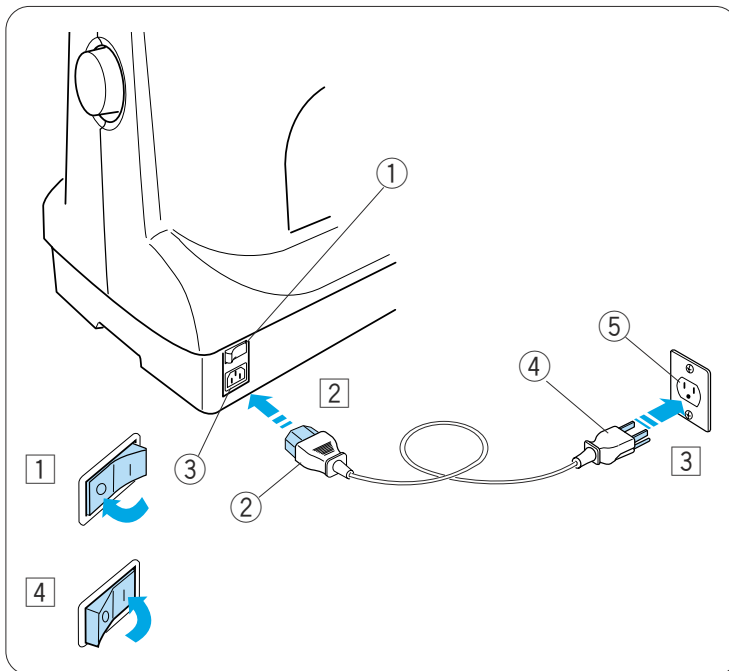
1 Turn the power switch off.
    ① Power switch

2 Insert the machine plug into the machine socket.
    ② Machine plug
    ③ Machine socket

3 Insert the power supply plug into the properly grounded outlet.
    ④ Power supply plug
    ⑤ Wall outlet (grounded)

4 Turn the power switch on.

Grounding Instructions:
This machine is equipped with a grounding cable and plug.
The plug must be plugged into an appropriate outlet that is properly installed and grounded.
If a properly grounded outlet is not available, contact a qualified electrician to install the properly grounded outlet.
Refer to page II for more instructions.

Direct PC-Link

The MB-4 can be connected to the PC with the USB cable included as standard accessory.
You need **Digitizer MB for multi-needle** software (optional item) to operate the machine via direct PC-link.

Connecting the Machine and PC

Start up the MB-4 and PC, and insert the type **A** USB connector in to the PC.
Insert the type **B** USB connector into the USB port on the machine.

     ① Type **A** USB connector
     ② Type **B** USB connector
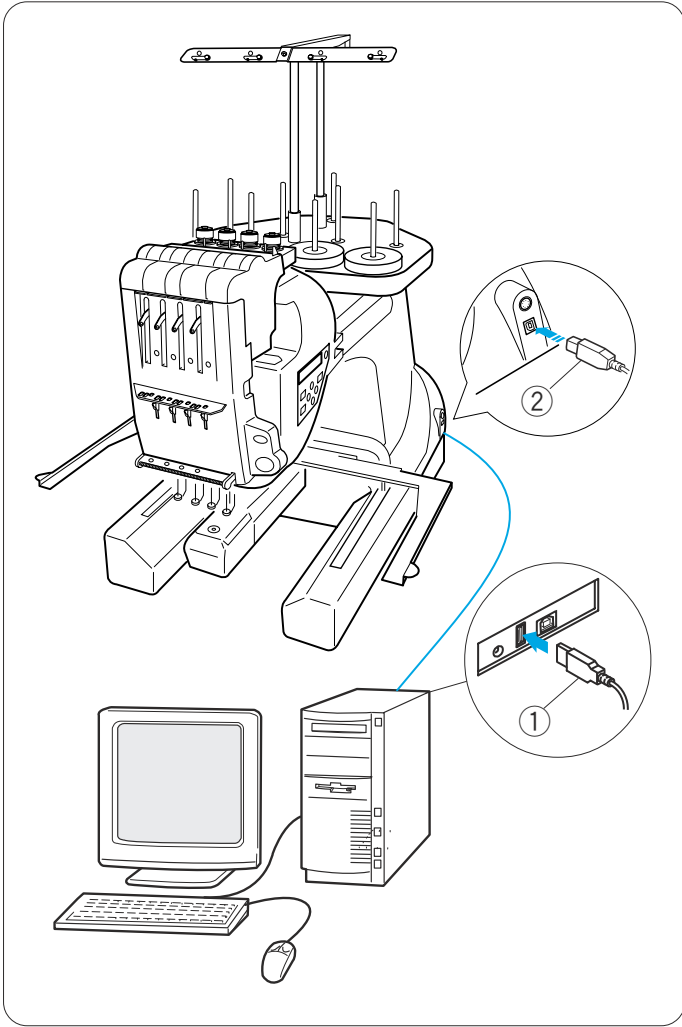
Transfer the embroidery pattern data files between the machine and PC by using optional **Digitizer MB for multi-needle**.

After the data transfer is finished, the LCD screen will show the Ready to Sew mode display or return to the previous screen, depending on the setting you have made on **Digitizer MB for multi-needle**.
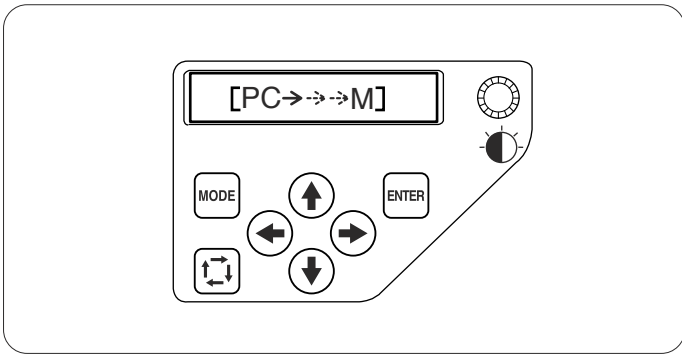
⚠ CAUTION:
Do not turn the power switch off or disconnect the USB cable while the data transfer is in progress. Otherwise the data will be lost or the memory will be damaged.

NOTE:
Refer to instruction book of optional **Digitizer MB for multi-needle** for further details.

Bobbin Threads

Cotton or spun rayon threads sizes 80 to 120 (74 to 100 dtex/2) are recommended for bobbin thread.

Do not use poor quality prewound bobbins.

Needles

Use the DB x K5Q1-NY, size 11 needles (Janome part number 770811000).

Adhesive (Iron-on) Stabilizer
Place the Wrong side of fabric and the glossy side of the stabilizer together. Fold up a corner of the stabilizer and fuse it with an iron.

NOTES:
- Fold up a corner of the stabilizer, to make it easier to peel off the excess stabilizer after
- stitching.
  Ironing temperatures vary depending on kind of adhesive type stabilizer.

Stabilizers

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

Types of stabilizer

Tear-away stabilizer:
Use tear-away stabilizers for stable woven fabrics.

Iron-on stabilizer:
Fuse it to the wrong side of the fabrics with an iron.

Cut-away stabilizer:
Use cutaway stabilizers for knits and all kinds of unstable fabrics.

Water soluble stabilizer:
Use this stabilizer for cutwork or lace embroidery, and also for the right side of looped fabrics such as towelling to avoid loops coming through the embroidery.

Sticky stabilizer:
This stabilizer is a sticky paper used for securing a small fabric or work that cannot be secured in the hoop.
It is also used for velvet and other napped fabric that would be permanently marked by the hoop.

Usage:
- The stabilizer should be attached to the wrong side of fabric.
- More than one layer may be required.
- Felt or stable fabrics do not need to be stabilized and you may embroider directly on them.
- For firm fabrics, you may place a thin paper under the fabric.
- The non-adhesive type should be used when embroidering fabric, which cannot be ironed or for sections, which are difficult to iron.
- Cut the stabilizer larger than the embroidery hoop and set it on the hoop so that the entire piece is fastened within the hoop to prevent looseness of the fabric.

Winding the Bobbin

1 Place the thread cone (spool of thread) on the rear most spool pin.
Pass the thread through the thread guide **A**.
① Thread guide **A**

2 Pass the thread through the upper hole and lower hole in the thread guide **B**.
② Thread guide **B**

3 Draw the thread to the front.
Hold the thread with both hands and pass the thread firmly around and under the tension disk.
③ Tension disk

4 Pass the thread through the hole in the bobbin from the inside.
Put the bobbin on the bobbin winder spindle.
④ Hole in the bobbin
⑤ Bobbin winder spindle

5 Push the bobbin winder stopper up against the bobbin.
⑥ Bobbin winder stopper

6 Press the bobbin winding button while holding the thread end.

⑦ Bobbin winder button

7 Press the bobbin winder button to stop the machine when the bobbin has wound a few layers.
Cut the thread close to the bobbin and press the bobbin winder button again.

8 When the bobbin is fully wound, the machine will stop automatically.
Remove the bobbin from the bobbin winder spindle.

9 Cut the thread with the bobbin thread cutter.
⑧ Bobbin thread cutter
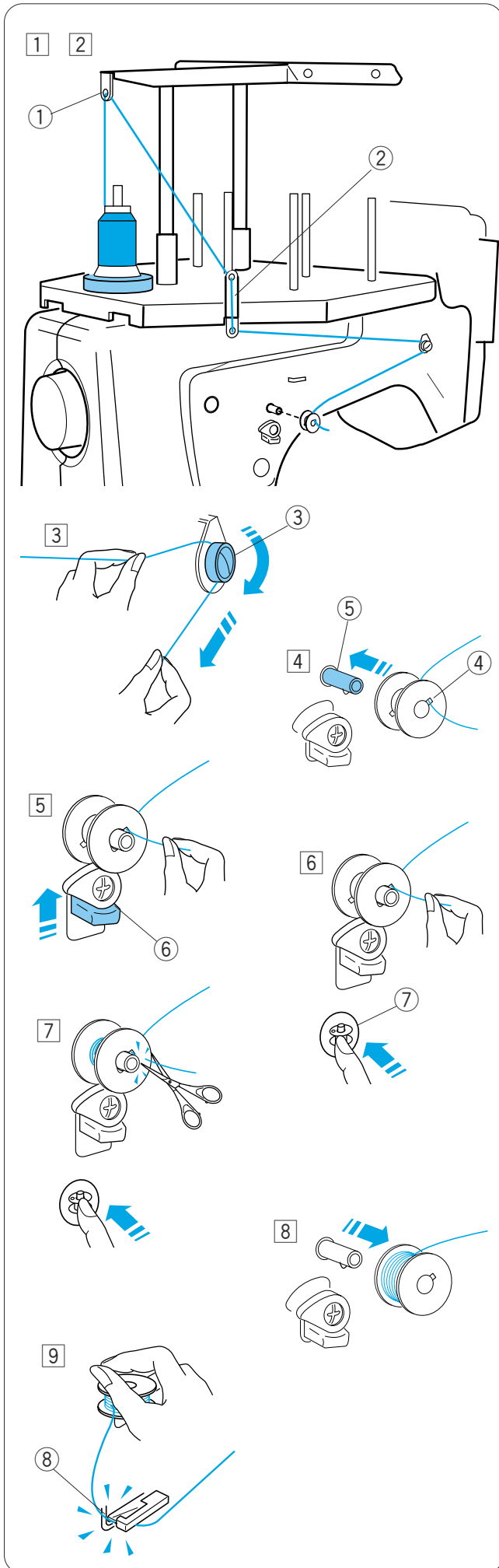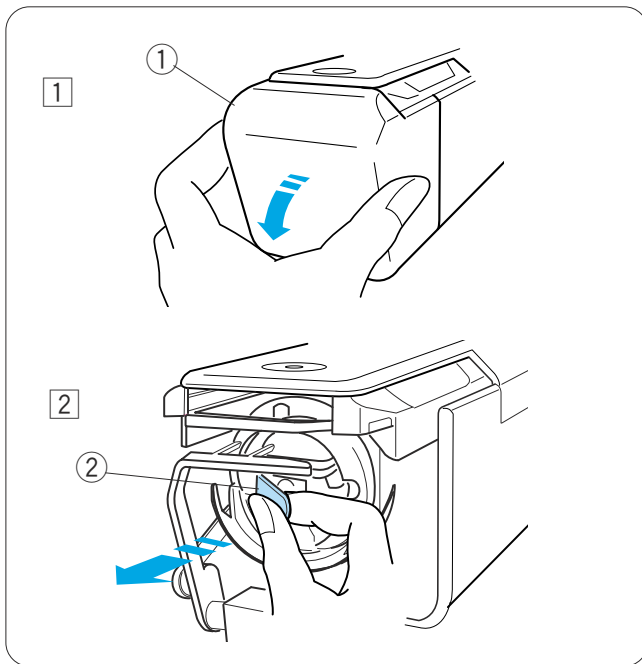
Removing the bobbin case

1 Open the hook cover toward you.
　① Hook cover

2 Hold and open the latch of the bobbin case.
　Take the bobbin case out from the machine.
　② Latch
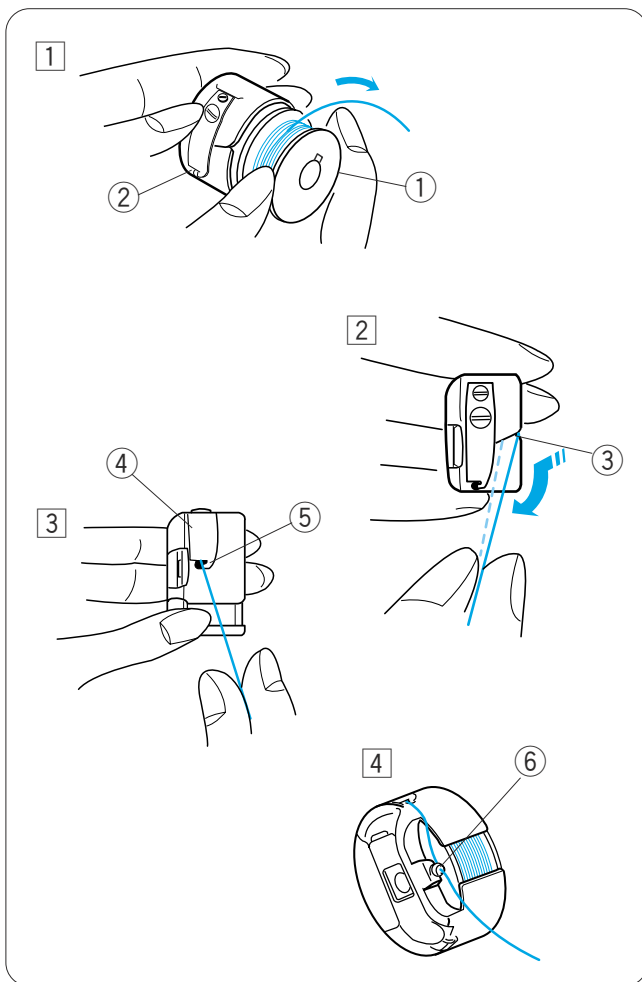
Inserting the bobbin

1 Insert the bobbin into the bobbin case leaving a 2"
　(5 cm) thread tail as illustrated.
　① Bobbin
　② Bobbin case

2 Draw the thread to slip it into the slit of the bobbin
　case.
　③ Slit

3 Pull the thread to slide it under the tension blade
　until the thread comes out from the opening.
　④ Tension blade
　⑤ Opening

4 Pass the thread through the pigtail by spiralling the
　thread around the pigtail.
　⑥ Pigtail
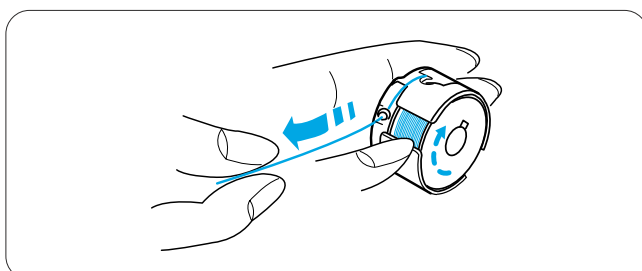
NOTE:
The bobbin should turn clockwise when the thread is pulled.

Inserting the bobbin case

Hold the bobbin case with the latch and insert the bobbin case into the hook, aligning the rib with the notch. Push the bobbin case as far as it will go and release the latch.

① Latch
② Rib
③ Notch

Close the hook cover.
④ Hook cover

Threading the Needle

The threading path of all needles is similar. Review the threading procedure of the first needle when threading other needles.

Threading needle No.1

1. Place a thread cone on the front right spool pin. Draw the thread up and pass it through the right hole in the thread guide bar from behind. Slip the thread under the tension leaf.
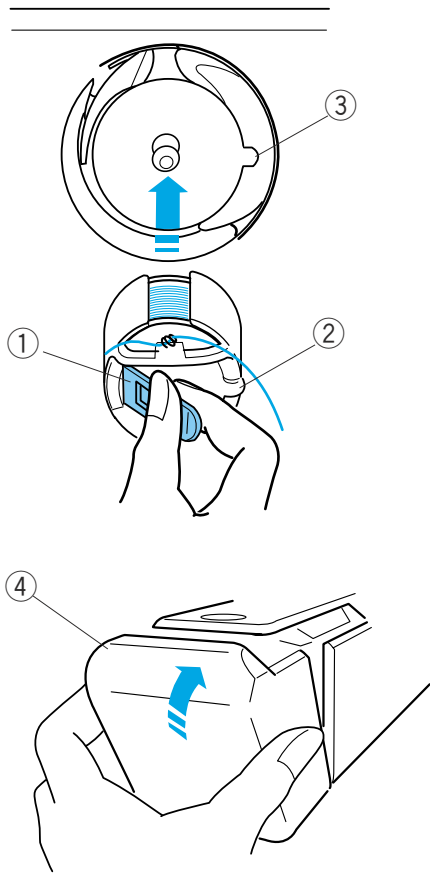   - ① Hole in the thread guide bar
   - ② Tension leaf

2. Draw the thread to the right pre-tension control. Pass the thread through the guide hole from behind.
   While holding the thread with both hands, slip the thread under the tension disk of the pre-tension control.
   Hook the thread aroung the guide pin from right to left.
   Make sure to insert the thread under the tension disk by tugging the thread.
   - ③ Guide hole
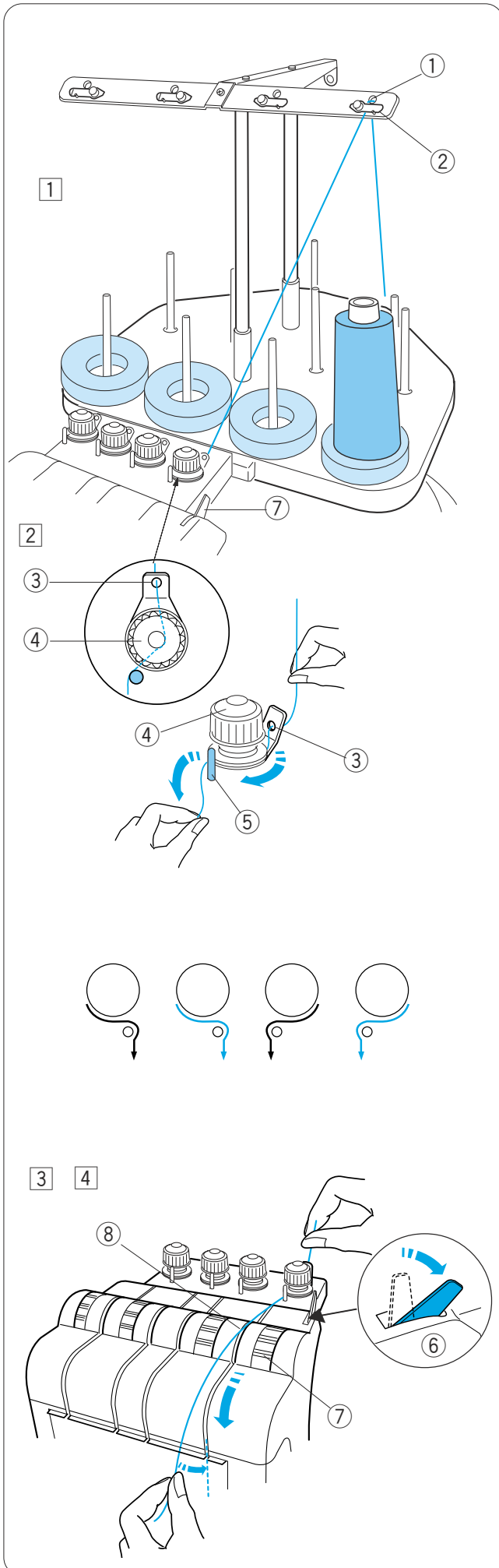   - ④ Pre-tension control
   - ⑤ Guide pin

NOTE:
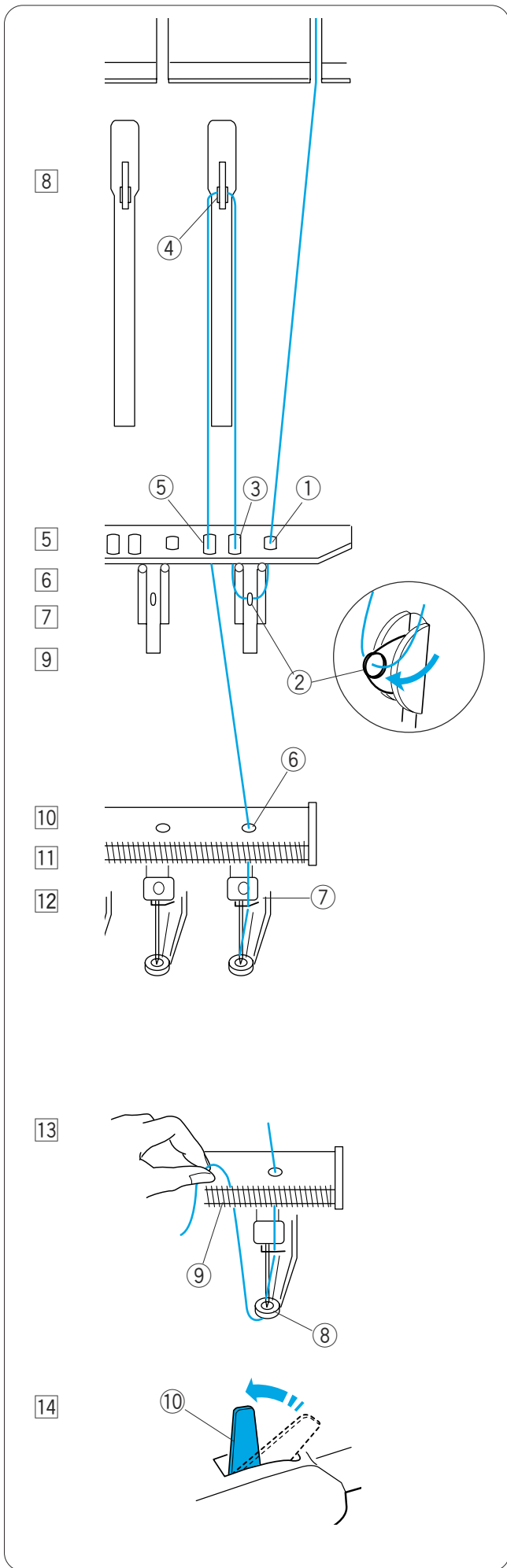Refer to the illustration for the thread path of each pre-tension.

3. Push back the tension release lever so the tension disk of the tension control will open.
   - ⑥ Tension release lever
   - ⑦ Tension control

4. Hold the thread with both hands and pull it down along the right channel.
   - ⑧ Channel

5 Draw the thread down and pass it through the right hole in the guide plate.
- ① Right hole in the guide plate

6 Pass the thread through the eye of the right check spring.
- ② Eye of the check spring

7 Pull the thread up and pass it through the second hole from the right.
- ③ Second hole from the right

8 Continue to pull the thread up to the right take-up lever. Pass the thread through the eye of the take-up lever.
- ④ Take-up lever

9 Draw the thread down and pass it through the third hole from the right in the guide plate.
- ⑤ Third hole from the right

10 Continue to draw the thread down to the lower guide plate and pass the thread through the right hole.
- ⑥ Right hole in the lower guide plate

11 Hold the thread with both hand and slip the thread behind in the right needle bar thread guide.
- ⑦ Needle bar thread guide

12 Thread the needle with the handy needle threader (refer to the next page).

13 Pass the thread through the hole in the presser foot.
Draw the thread up and pinch the thread tail with the holder spring.
- ⑧ Hole in the presser foot
- ⑨ Holder spring

14 Pull up the tension release lever to close the tension disks.
- ⑩ Tension release lever

20

Threading the needle with the needle threader
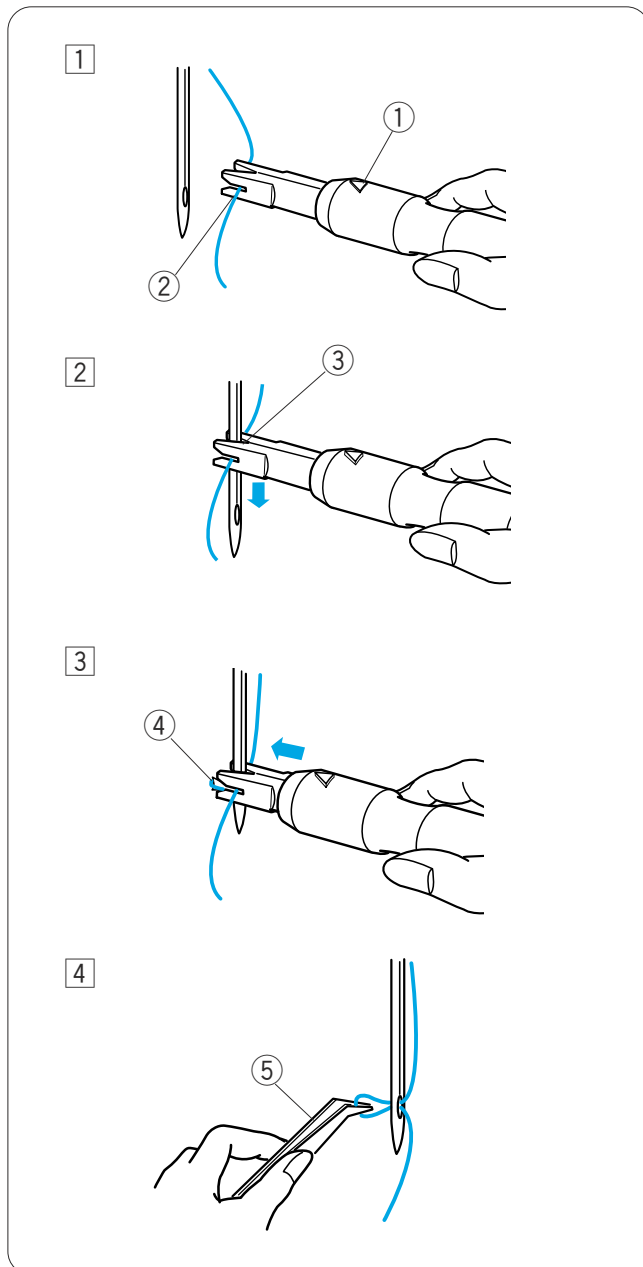
1 Hold the needle threader with a triangle mark facing up. Insert the thread into the Y-notch of the threader from the right.
    ① Triangle mark
    ② Y-notch

2 Slide the threader down along the needle while pushing it gently until the threader pin goes into the needle eye.
Place the V-notch over the needle just above the needle eye.
    ③ V-notch

3 Push the threader until the threader pin comes out through the needle eye with a loop of thread.
    ④ Threader pin

4 Remove the threader from the needle slowly, leaving the thread loop behind the needle eye.
Using the tweezers, pull the loop of the thread out to the back.
    ⑤ Tweezers

Setting the Fabric in the Embroidery Hoop

1 Attach stabilizer to the wrong side of the fabric. Mark the centerlines for pattern placement on the right side of the fabric.
- ① Fabric
- ② Centerlines
- ③ Stabilizer

2 Place the inner hoop with the template on the fabric. Make sure that the arrow marks on the hoop and template are facing away from you. Align the centerlines on the fabric and template.
- ④ Inner hoop
- ⑤ Template
- ⑥ Arrow mark

3 Loosen the hoop tightening screw on the outer hoop.
- ⑦ Outer hoop
- ⑧ Hoop tightening screw

4 Hold the inner hoop and fabric together and push them into the outer hoop. Make sure to keep the centerlines aligned.
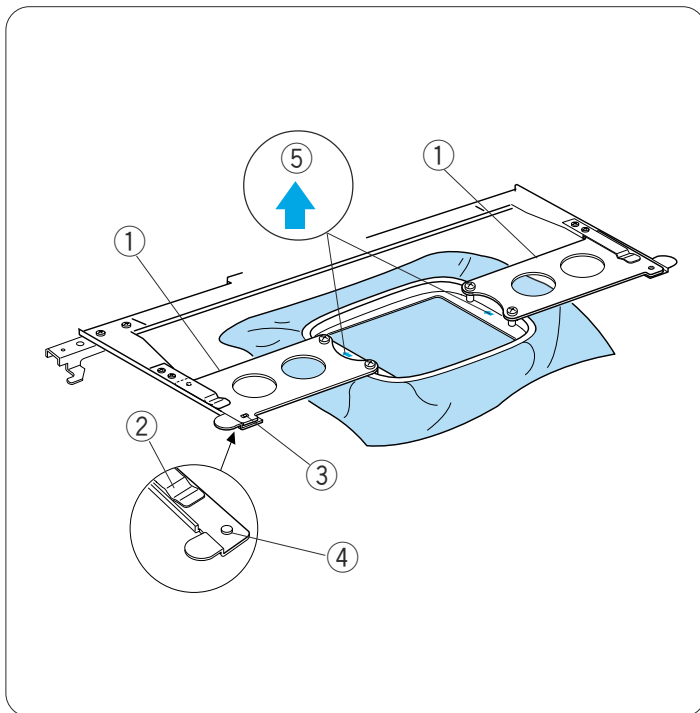Do not push the setting plates, push the 4 corners of the inner hoop
- ⑨ Setting plate

5 Tighten the hoop tightening screw slightly. Pull the edge of the fabric to stretch it drum-tight.

NOTE:
Make sure the bottom of the inner hoop is level with the outer hoop.

6 Tighten the hoop tightening screw securely.

7 Remove the template.

Setting the Embroidery Hoop

Hold the setting plate with both hands and insert them under the holder clips.
Slide the hoop on the hoop supporter until the holes catch the positioning pins on the hoop supporter.
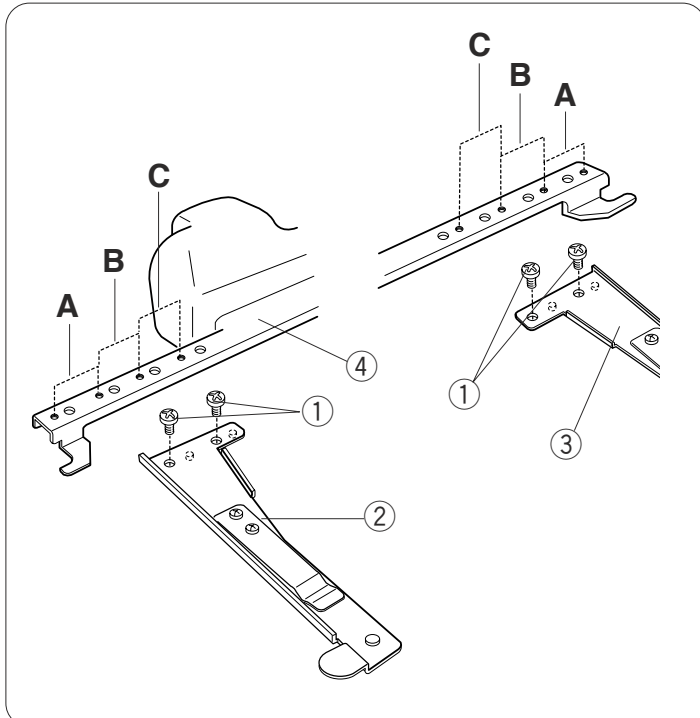
① Setting plate
② Holder clip
③ Hole in the setting plate
④ Positioning pin

NOTES:
Do not set the hoop front-side back or upside down. The arrow mark on the inner hoop should face away from you.

⑤ Arrow mark

Be careful not to pinch the fabric edge under the hoop supporter.

Adjusting the Hoop Supporter for Optional Hoops

The hoop supporter provides 2 alternate positions to adapt optional hoops available on the market, such as Tajima's hoop.

Remove setscrews on both left and right hoop supporter arms and remove them.

① Setscrew

Attach both hoop supporter arms to the hoop supporter bar in the position **B** or **C** depending on the hoop you wish to use.
Secure the supporter arms with the setscrews.

② Left hoop supporter arm
③ Right hoop supporter arm
④ Hoop supporter bar

NOTE:
Position **A** is for the standard hoops.

SECTION 2. BASIC OPERATION

Basic Operation with the Sub Control Panel

Machine operating buttons

① **Start/Stop button**
Press this button to start or stop the machine.
The button glows red when the machine is stitching, and green, when the machine has stopped.

② **Auto thread cutter button**
Press this button to trim the threads.

③ **Bobbin winding button**
Press this button to wind the bobbin.

Use the sub control panel to operate the machine without the RCS unit.

Function buttons

① **MODE button**
Press this button to select one of the following modes.
1. Ready to Sew
2. Stitch count setting
3. Color section setting
4. Needle bar number setting
5. Pattern selection
6. My setting

② **Trace button**
Press this button to trace the outline of the embroidery pattern without stitching.
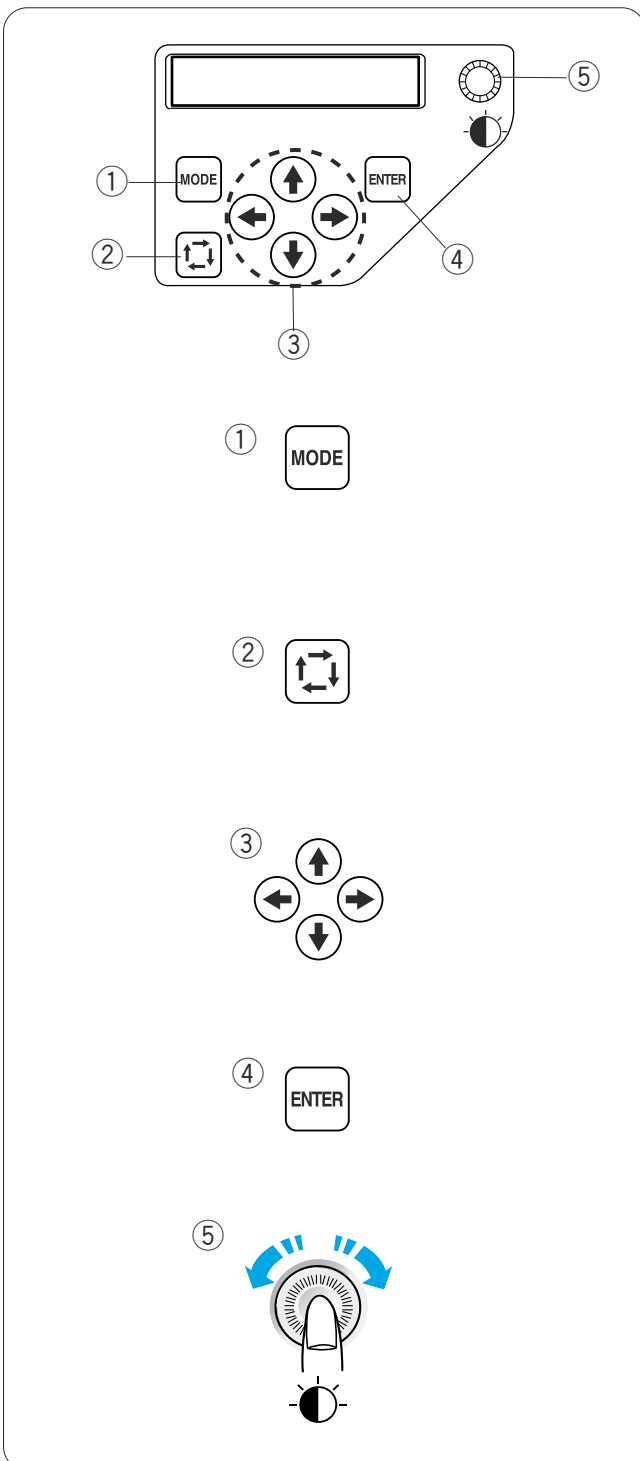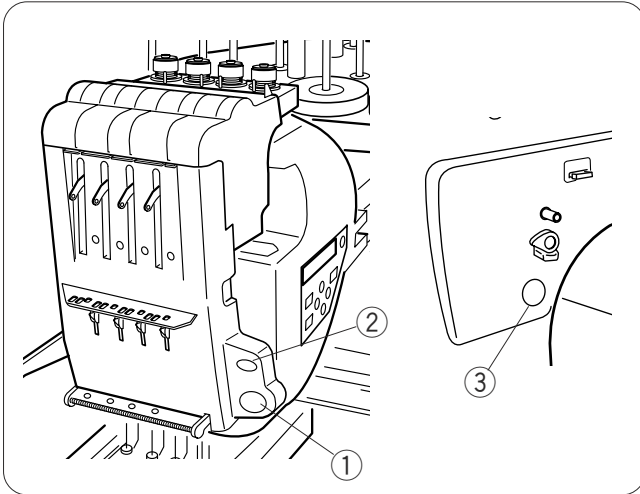
③ **Arrow buttons**
These buttons can be used as Jog buttons in the Ready to Sew mode.
In other modes, these button are used for selecting the items.
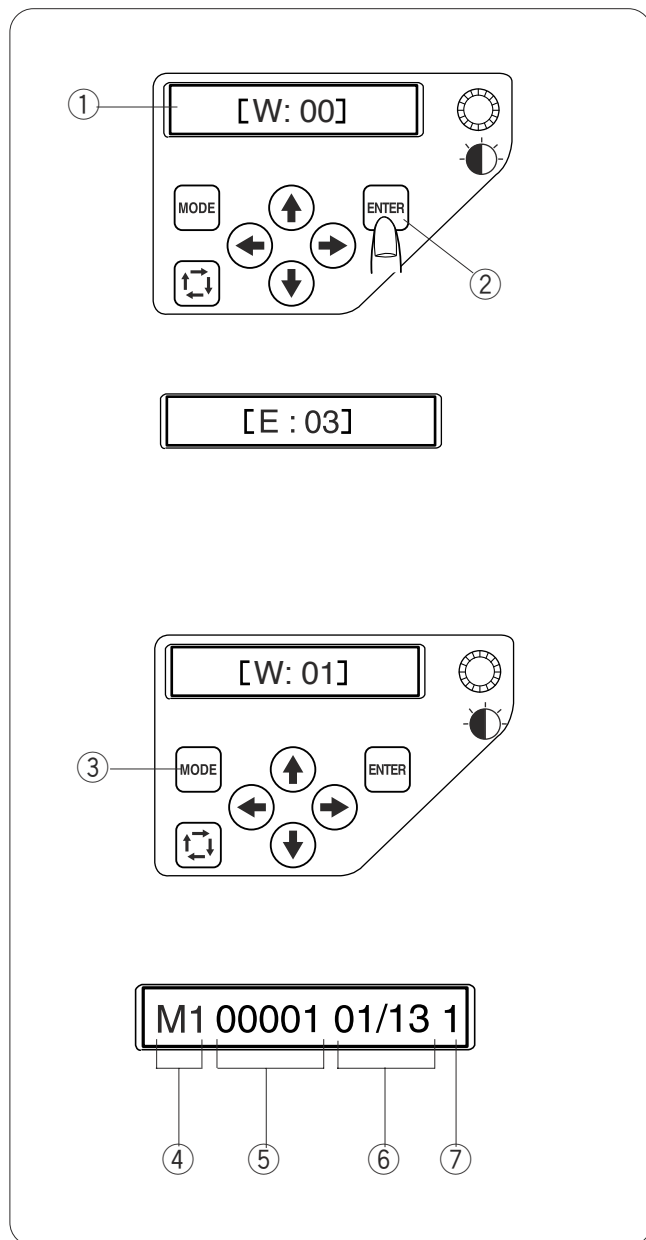
④ **ENTER button**
Press this button to confirm your selection or register the settings.

⑤ **LCD brightness adjusting dial**
Turn this dial with your fingertip to adjust the brightness of the LCD screen.

LCD screen

[1] When turning the power on, the LCD screen will show **[W:00]**.
Press the ENTER button and the hoop will move to the home position.
    ① LCD screen
    ② ENTER button

> **NOTE:**
> If the LCD screen shows **[E:03]**, press the ENTER button to initialize the needle bar position.
> After initializing, the LCD screen will show **[W:00]**.

[2] The LCD screen will show **[W:01]**.
Press the MODE button to start a new project or press the ENTER button if you wish to continue the last job before you turned the power off.
    ③ MODE button

[3] The LCD screen will show the Ready to Sew mode display.
In the Ready to Sew mode, the LCD screen shows the following information.

    ④ Hoop type
        M1: MB Hoop 240 x 200
        M2: MB Hoop 126 x 110
        M3: MB Hoop 50 x 50
        M4: Cap frame 100 x 60 (optional item)

    ⑤ Stitch count

    ⑥ Color section
        13: Total number of colors
        01: Order number of the current color

    ⑦ Needle bar number

Machine Settings

Press the MODE button to select the item you wish to change the setting.
The selected item will blink.
Press the MODE button to select the next item or press the ENTER button to change the setting of the selected item.

    ① MODE button
    ② ENTER button

`M1 00001 01/13 1`

Stitch count setting

You can set the stitch count to where you wish to start sewing.
Press the MODE button to select the stitch count setting and press the ENTER button.
Press the upward or downward arrow buttons to change the stitch count value.
Press the ENTER button to register the new setting.

`M1 00001 01/13 1`

Color section (layer) setting

You can change the color section to where you wish to start sewing.
Press the MODE button to select the color section setting and press the ENTER button.
Press the upward or downward arrow buttons to select the desired section.
Press the ENTER button to register the new setting.

`M1 00001 01/13 1`

Needle bar number setting

You can select the needle bar to where you would like to begin sewing.
Press the MODE button to select the needle bar number setting and press the ENTER button.
Press the upward or downward arrow buttons to select the desired needle bar.
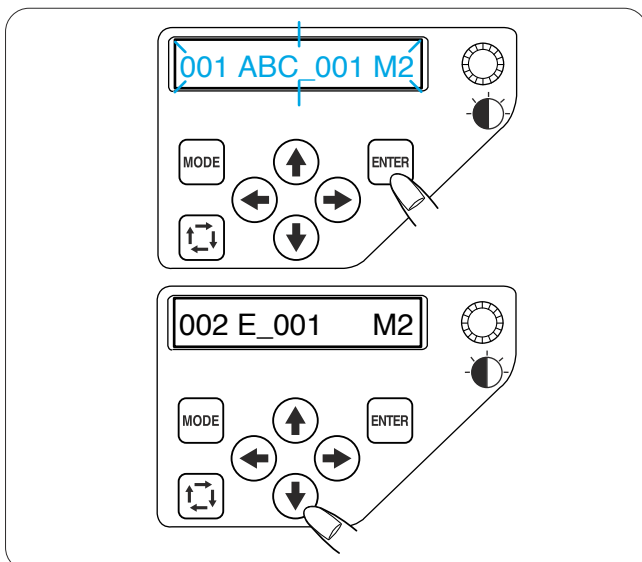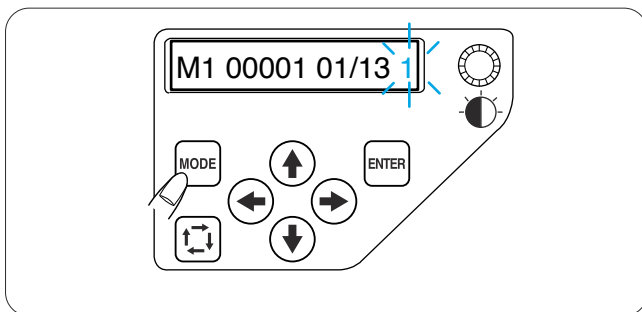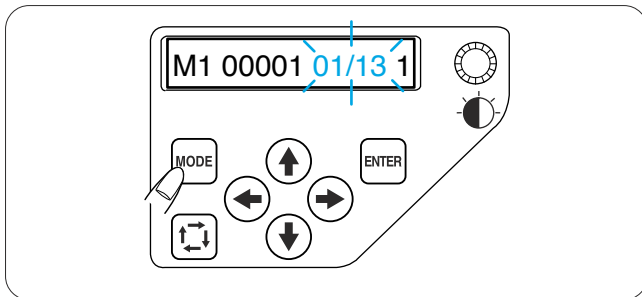Press the ENTER button to register the new setting.

`M1 00001 01/13 1`

Selecting the Embroidery Pattern

You need to save the data file of the embroidery pattern in the internal memory of the machine by using **Digitizer MB for multi-needle** or the RCS unit (optional items).
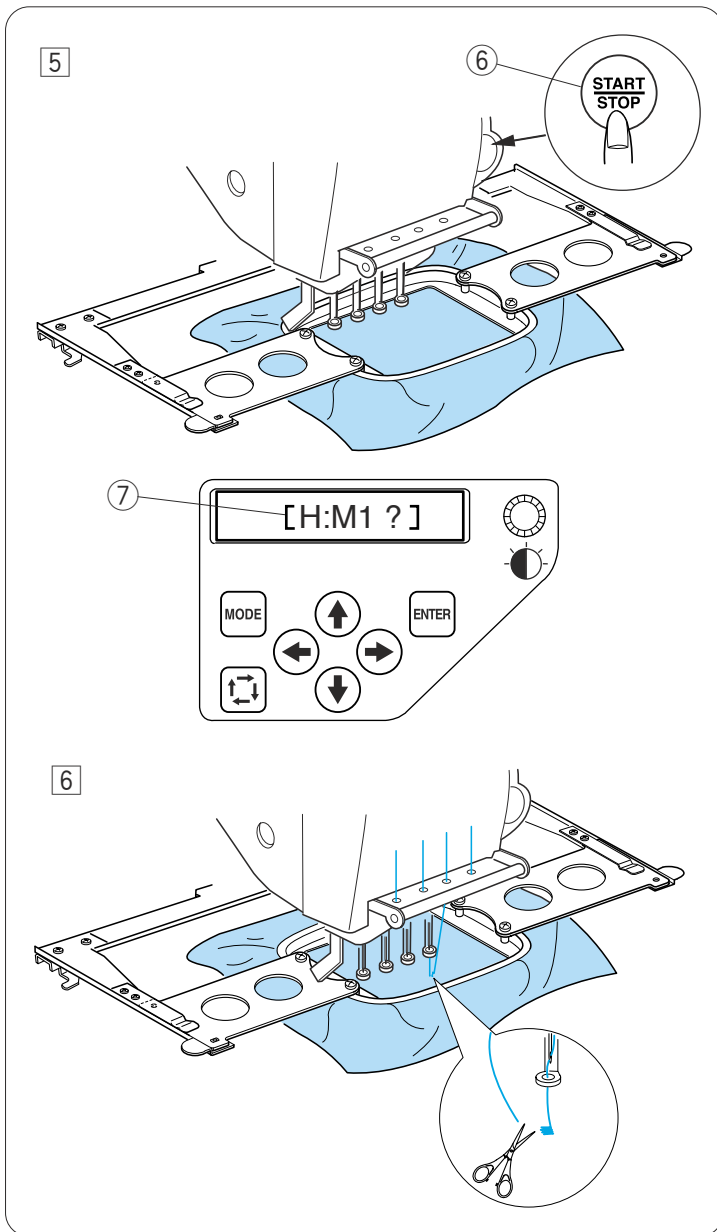
Press the MODE button to select the pattern selection mode and press the ENTER button.
Press the upward or downward arrow buttons to select the desired data file.
Press the ENTER button to confirm your selection.

`001 ABC_001 M2`

`002 E_001      M2`

Starting to Embroider

1 Select the pattern you wish to sew. The LCD screen shows the Ready to sew mode display.

> **NOTE:**
> The embroidery result may vary depending on the fabric and threads used. Make a test embroidery using the same fabric and threads before sewing on the actual garment.

2 Press the ENTER button to check the thread color assigned to each needle bar. The screen will show the needle bar number and color code.
> ① ENTER button
> ② Needle bar number
> ③ Color code

Adjust the hoop position by pressing the arrow buttons if necessary.
> ④ Arrow buttons

3 To check the needle drop position, lower the needle bar with the small screwdriver so you can see the needle point closer to the fabric.

Push down the needle bar using the screwdriver while pressing it against the needle clamp as illustrated.
The needle bar can be lowered by turning the handwheel clockwise.

> ⚠ **CAUTION:**
> Make sure to bring the needle bar and presser foot to the up position by pressing the auto thread cutter button before pressing the trace button or turning the machine off.

4 Press the trace button to check the size and position of the selected pattern against the hoop.
> ⑤ Trace button

> **NOTE:**
> Check if the fabric edge will not obstruct the movement of the

5 Press the START/STOP button, the LCD screen will show the reminder asking you to confirm the hoop type to be used.
   ⑥ START/STOP button
    ⑦ Reminder display

NOTE:
If you press the START/STOP button when the tension release lever is in the open position, a warning sign [W:03] will appear.
Pull the tension release lever up to close the tension disk.

Check the hoop size and press the START/STOP button again to sew a few stitches.

6 Press the START/STOP button to stop the machine.
Trim the thread at the beginning.

Then, press the START/STOP button again. The machine will sew up to the fourth color and stop automatically.

Re-thread each needle with the next color and press the START/STOP button to continue sewing.
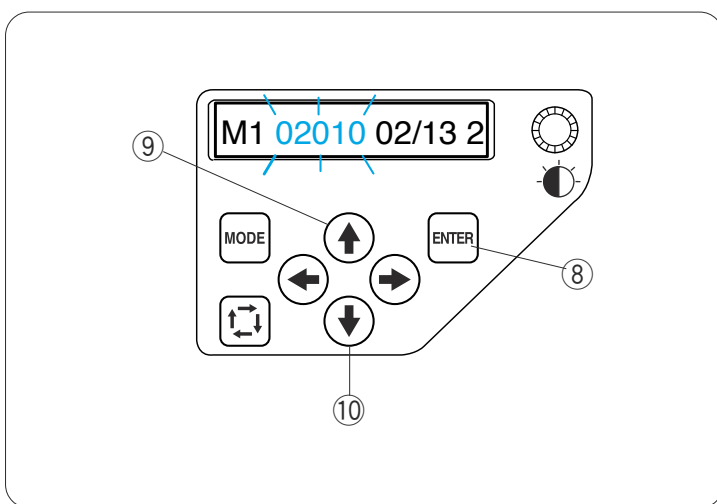
If the thread breaks or runs out while stitching, the machine will automatically stop and the hoop will go back to the position where the thread broke or ran out.
However, you can fine-tune the restarting position by moving the hoop.

Press the ENTER button to select the stitch count setting.
    ⑧ ENTER button

Press the upward arrow button to move the hoop forward 10 stitches.
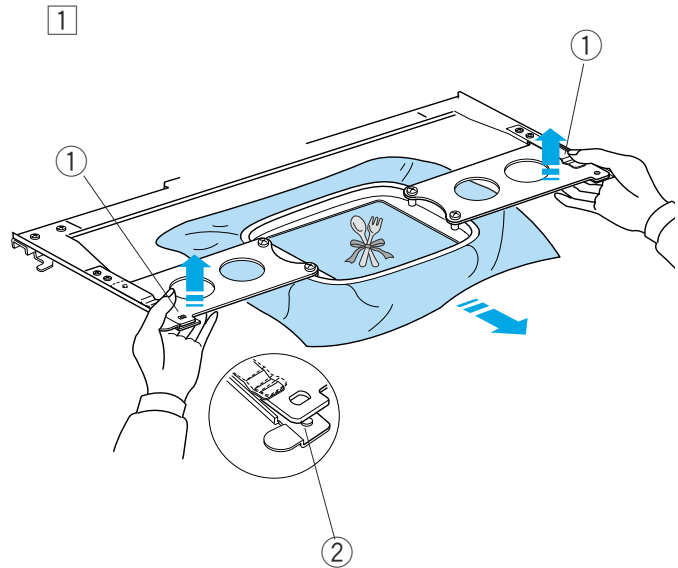   ⑨ Upward arrow button

Press the downward arrow button to move the hoop backward 10 stitches.
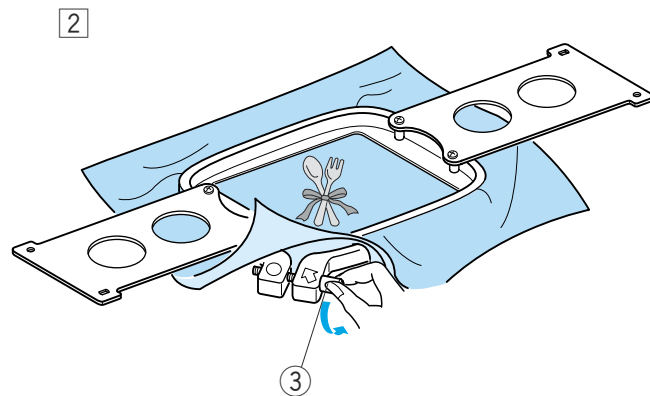   ⑩ Downward arrow button

Removing the Hoop

1️⃣ Hold the setting plates with both hands and lift the front side of the setting plates to release them from the positioning pins. Slide the hoop toward you and remove it from the machine.
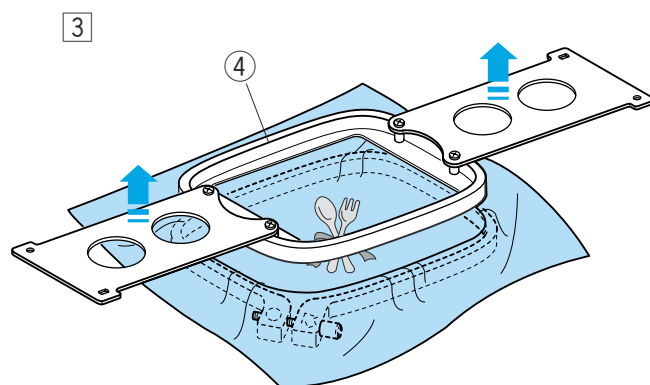 ① Setting plate
  ② Positioning pin

2️⃣ Loosen the hoop tightening screw.
  ③ Hoop tightening screw

3️⃣ Remove the inner hoop and the fabric.
  ④ Inner hoop

NOTE:
Before you turn the machine off, make sure to bring the needle bar to up position by pressing the Auto thread cutter button.

Adjusting the Thread Tension
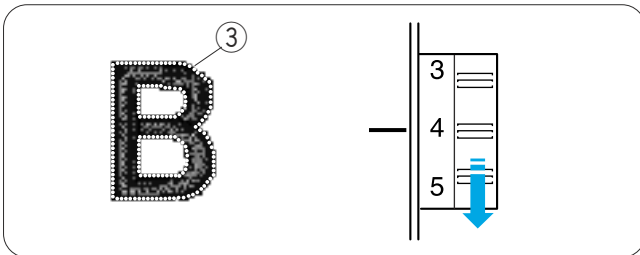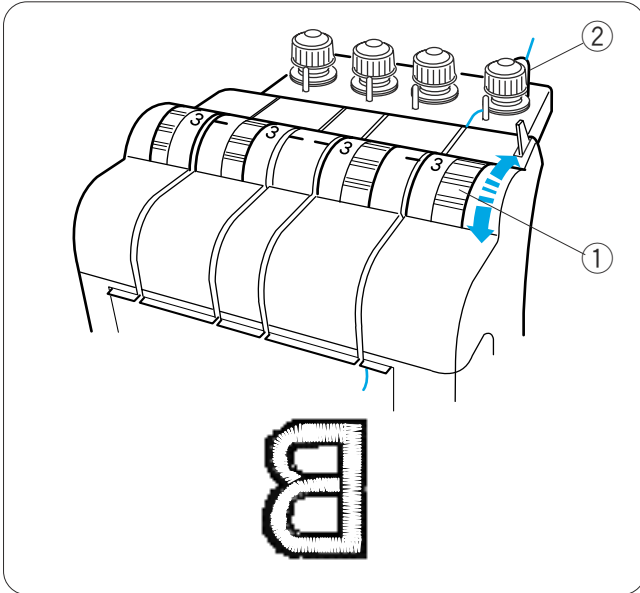
Adjusting the needle thread tension

Adjust the needle thread tension by turning the tension dial so that a small amount of the needle thread shows on the wrong side of the fabric.

① Tension dial

NOTE:
If the thread kinks while stitching, turn the pre-tension dial clockwise slightly to eliminate kinks.
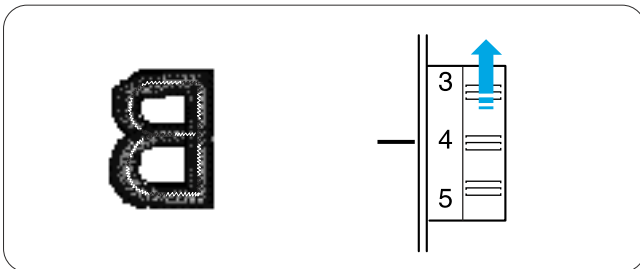
② Pre-tension dial

Tension is too tight
If the needle thread tension is too tight, the bobbin thread shows on the right side of the fabric.
Reduce the tension by turning the tension dial to a lower number.

③ Bobbin thread

Tension is too loose
If the needle thread tension is too loose, the needle thread forms loops and the stitches look shaggy.
Tighten the tension by turning the tension dial to a higher number.

Adjusting the bobbin thread tension

To tighten the bobbin thread tension, turn the adjusting screw clockwise.

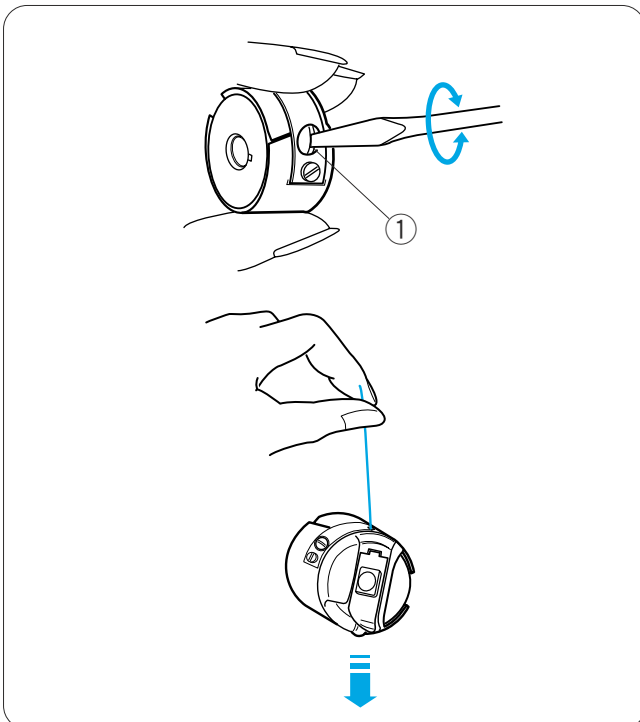To loosen the bobbin thread tension, turn the adjusting screw counterclockwise.

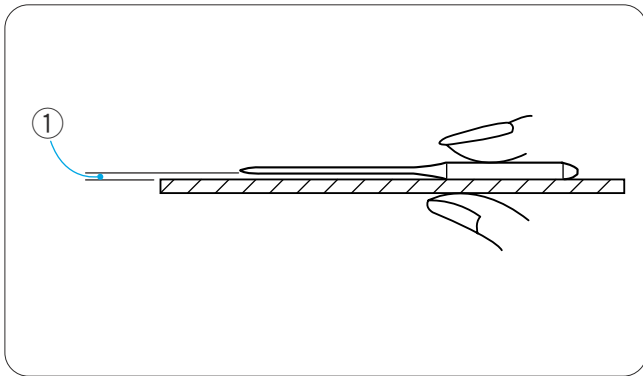After the adjustment, test the tension by jerking the bobbin case with the thread end held by hand.
The bobbin case should be falling slowly.

NOTE:
When adjusting the tension, turn the adjusting screw slightly since the adjustment is sensitive.

① Adjusting screw

Replacing the Needle

⚠ WARNING:
Always make sure to turn the power off before replacing the needle.

Checking the needle

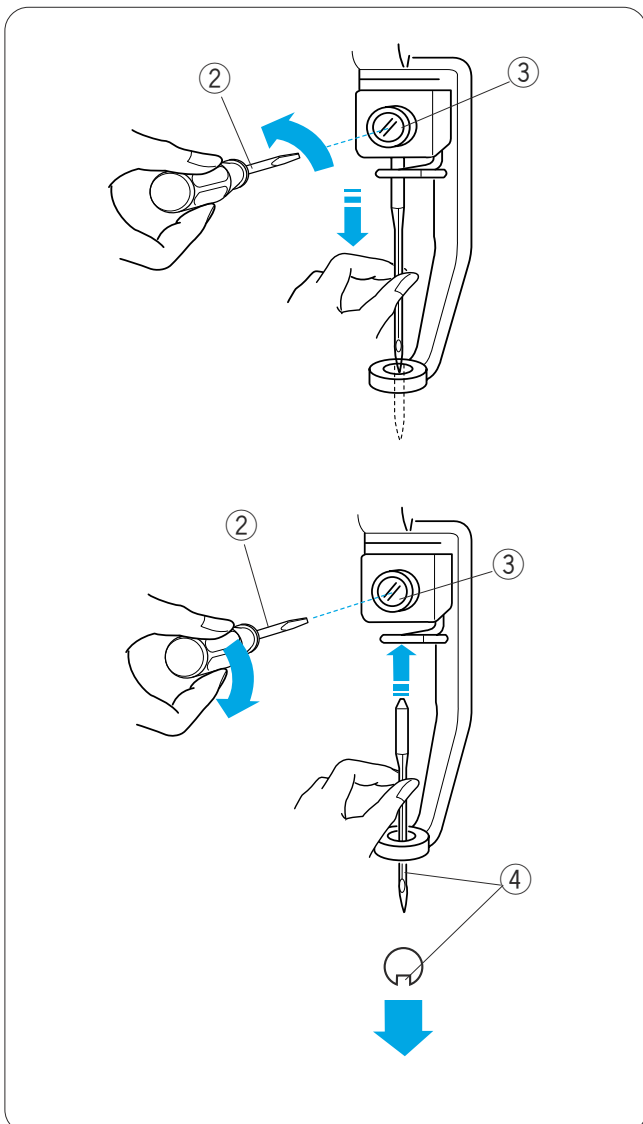Check the needle regularly and replace it with new one if it is bent or dull.

To check the straitness of the needle, place it onto something flat. The gap between the needle shaft and the flat surface should be consistent.
　　① Gap

⚠ CAUTION:
Do not use the bent or blunt needle.
The bent needle can cause it to break.

Replacing the needle

Loosen the needle clamp screw with the small screwdriver included in the standard accessary.
Pull the needle out from the needle clamp.
　　② Small screwdriver
　　③ Needle clamp screw

Insert a new needle into the needle clamp with the long groove facing you.
Push the needle up as far as it will go and tighten the needle clamp screw securely with the screwdriver.
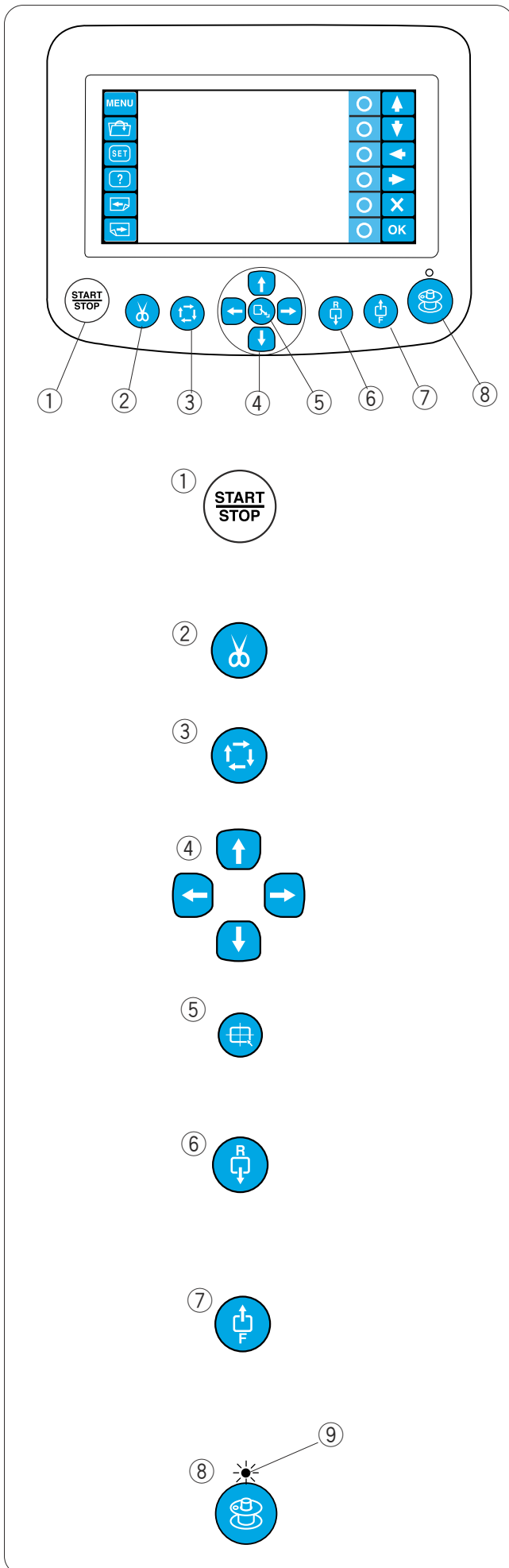　　④ Long groove

NOTE:
Use the DB x K5Q1-NY, size 11 needles (Janome part number 770811000).

Basic Operation of the Optional RCS Unit

Machine operating buttons

① **Start/Stop button**
Press this button to start or stop the machine.
The button glows red when the machine is stitching, and green, that the machine has stopped.

② **Auto thread cutter button**
Press this button to trim the threads.

③ **Trace button**
Press this button to trace the outline of the embroidery pattern without stitching.

④ **Jog buttons**
Press these buttons to move the hoop for precise positioning.

⑤ **Carriage centering button**
Press this button to move the carriage to the center position.

⑥ **Stitch back button**
Press this button to move the hoop backward.
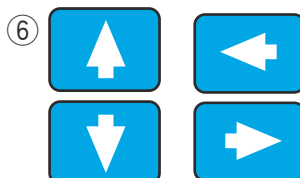The hoop will move backward 10 stitches each time you press this button.

⑦ **Stitch forward button**
Press this button to move the hoop forward.
The hoop will move forward 10 stitches each time you press this button.

⑧ **Bobbin winding button**
Press tis button to wind the bobbin.
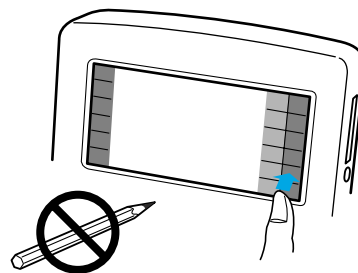The indicator lights up while winding the bobbin.
⑨ Indicator

Function keys

⚠️ **CAUTION:**
Do not press the LCD touch panel with hard or sharp pointed objects like pencils, screwdrivers or the like.

① **MENU key**
Press this key to assign mode selection to the circle keys.
There are 4 modes available.
- Built-in design selection
- Monogramming
- Editing
- Disconnecting the RCS unit

② **File open key**
Press this key to open the embroidery data files saved in the various location.

③ **SET key**
Press this key to enter the My setting mode.

④ **Help key**
Press tis key to open the help movie menu.

⑤ **Page keys**
Press the previous page key 🔙 to show the previous display.
Press the next page key 🔜 to show the next display.

⑥ **Arrow keys**
Press these keys to select the next item in the direction of arrow.

⑦ **Exit key**
Press this key to close the current window and return to the previous window.

⑧ **OK key**
Press this key to confirm your selection or register the settings you have made.

⑨ **Circle keys (Function keys)**
The icon next to each circle key indicates the function assigned to that key.
These keys carry out different functions in different situations.

On-screen Help Movie

Press the help (?) key to open the help movie menu.
You can view 6 help topics of essential operations.

 ① Help key

Select the help topic you wish to view by pressing the arrow keys and press the OK key.

 ② Arrow keys
 ③ OK key

Press the circle key next to the playback icon to start the help movie. Press the circle key next to the stop icon to stop playing.

You can search the movie in forward or reverse direction by pressing the circle key next to the fast forward or rewind icon.

 ④ Circle key (playback)
 ⑤ Circle key (stop)
 ⑥ Circle key (fast forward)
 ⑦ Circle key (rewind)

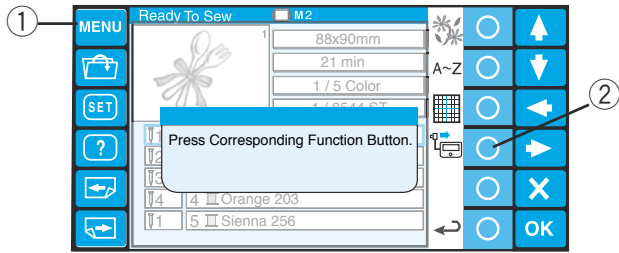Press the circle key next to the return icon to go back to the help menu.

 ⑧ Circle key (return)
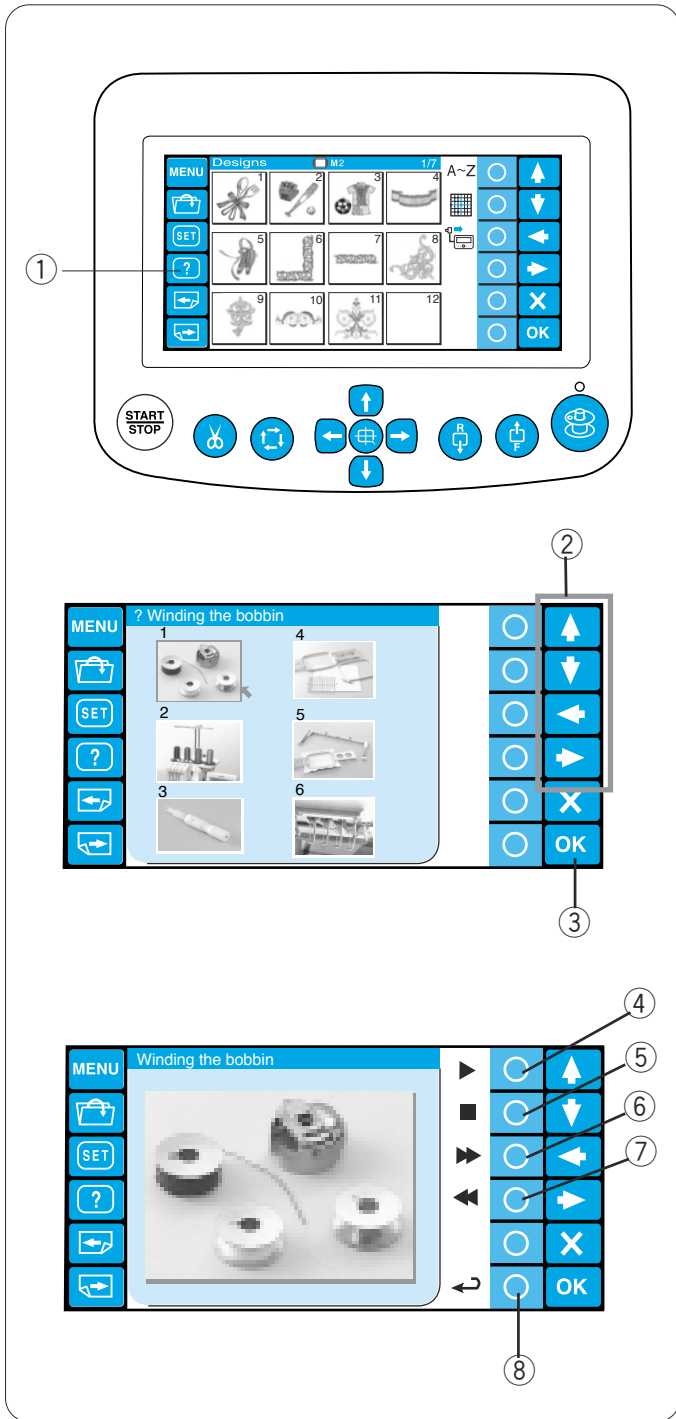
Disconnecting the RCS Unit

You can use the RCS unit to control two more MB-4s. After setting up the first unit of the MB-4, press the MENU key and press the circle key next to the RCS icon.
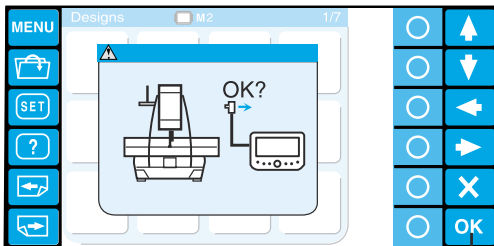
    ① MENU key
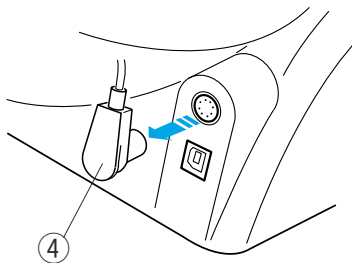   ② Circle key (RCS)

The confirmation dialog box will open.
Press the OK key and the LCD touch panel turns off.

    ③ OK key

Disconnect the RCS connector from the machine.

    ④ RCS connector

The LCD screen of the sub control panel will display the setting corresponding to the LCD touch panel of the RCS unit.

    ⑤ Sub control panel