

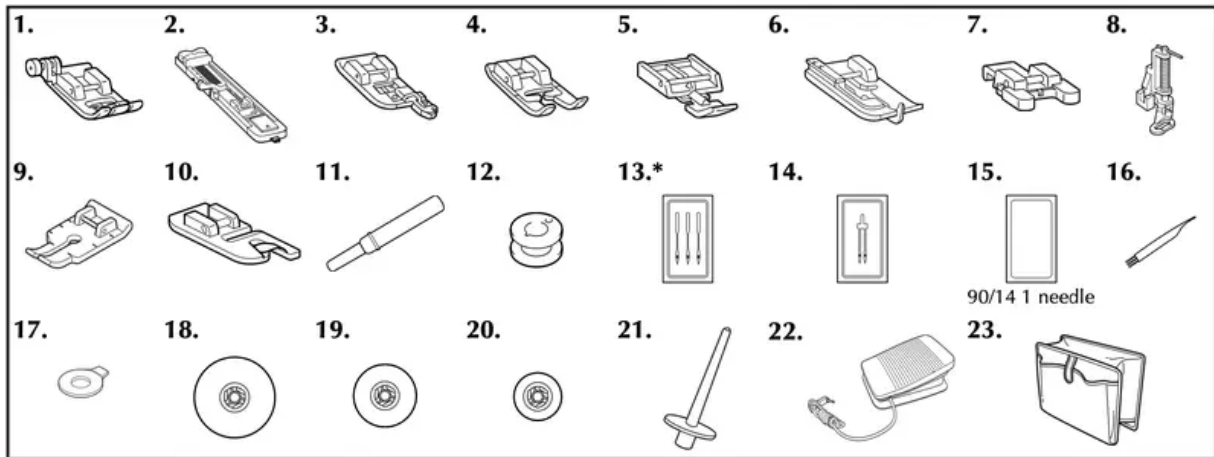
ACCESSORIES

Included accessories

After opening the box, check that the following accessories are included. If any item is missing or damaged, contact your dealer.

Note

- Foot controller: Model T
This foot controller can be used on the machine with product code 888-E42. The product code is mentioned on the machine rating plate.
- The screw of the presser foot holder is available through your authorized dealer. (Part code: 132730-122)



No.	Part Name	Part Code
1	Zigzag foot "J" (on machine)	XZ5134-001
2	Buttonhole foot "A"	XC2691-033
3	Overcasting foot "G"	XC3098-031
4	Monogramming foot "N"	XD0810-031
5	Zipper foot "I"	X59370-021
6	Blind stitch foot "R"	XE2650-001
7	Button fitting foot "M"	XE2137-001
8	Quilting foot	SA129
9	1/4-inch quilting foot	SA125
10	Narrow hemmer foot	SA126
11	Seam ripper	XZ5082-001
12	Bobbin (4) (One is on machine.)	SA156

No.	Part Name	Part Code
13	Needle set*	XC8834-021
14	Twin needle	131096-121
15	Ball point needle (gold colored)	XD0360-021
16	Cleaning brush	X59476-051
17	Disc-shaped screwdriver	XC1074-051
18	Spool cap (large)	130012-024
19	Spool cap (medium) (on machine)	XE1372-001
20	Spool cap (small)	130013-124
21	Extra spool pin	XE2241-001
22	Foot controller	XC8816-071
23	Premium durable dust cover	XG6864-001

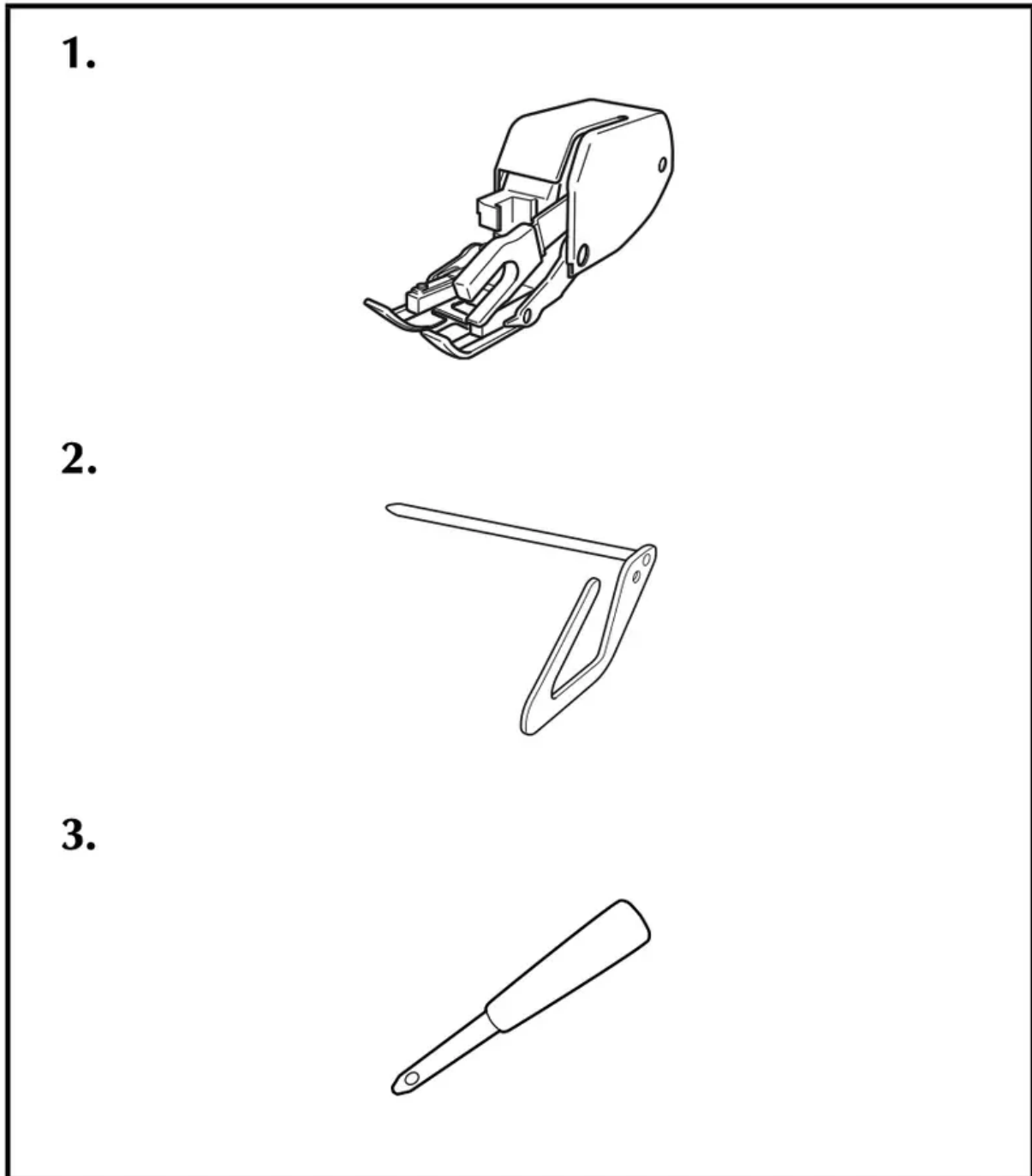
Memo

- About zigzag foot “J”;

Press the black button on the left side of the foot when it is difficult for thick seams to be fed, for example, at the beginning of sewing thick fabrics. (page 45)

Optional accessories

The following are available as optional accessories to be purchased separately.

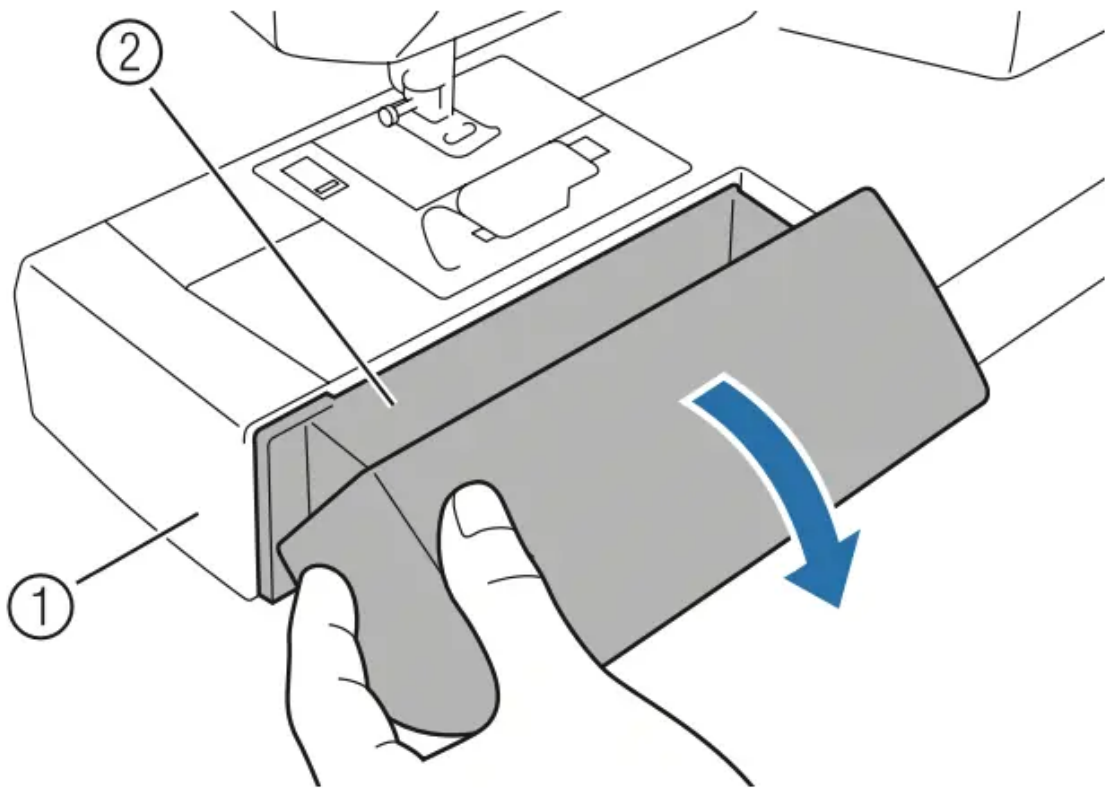


No.	Part Name	Part Code
1	Walking foot	SA140
2	Quilting guide	SA132
3	Eyelet punch	XZ5051-001

Accessory compartment

The accessories are stored in a compartment inside the flat bed attachment.

Open the compartment as shown in the figure below.

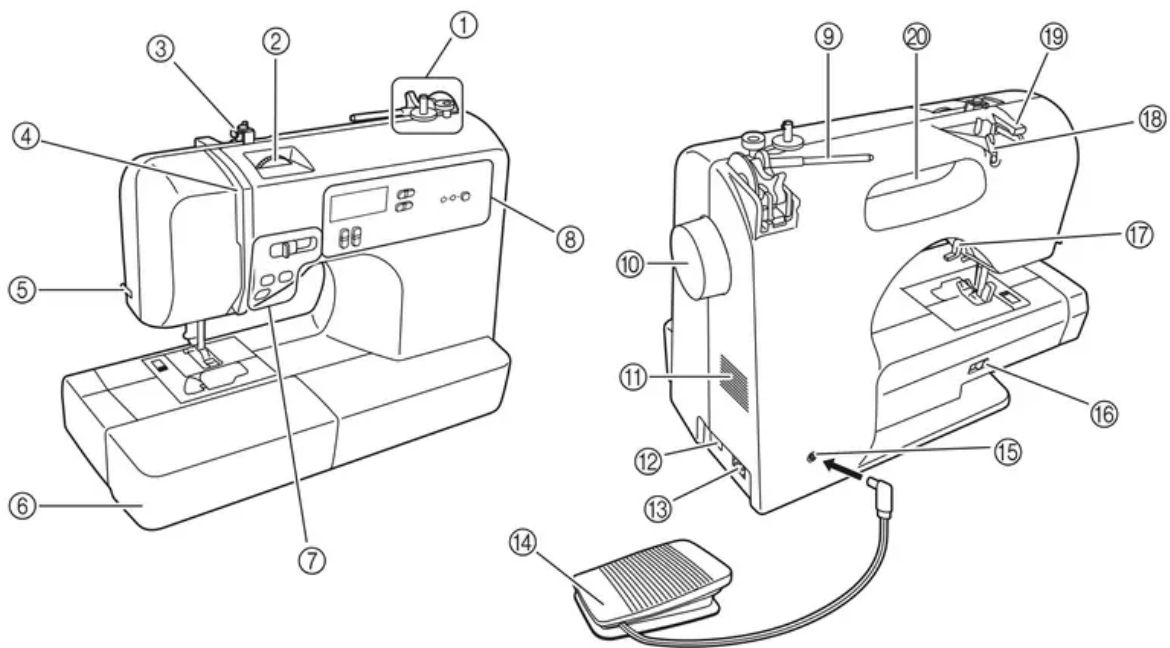


1. Flat bed attachment
2. Storage compartment

Note: Store the accessories in the compartment when they are not used.

NAMES OF MACHINE PARTS AND THEIR FUNCTIONS

The main parts



1. Bobbin winder (page 17)

This winds the thread onto the bobbin for use as the lower thread.

2. Upper tension-control dial (page 43)

This controls the tension of the upper thread.

3. Bobbin-winding thread guide and pre-tension disc (page 19)

Pass the thread under this thread guide and around the pre-tension disc when winding the bobbin thread.

4. Thread take-up lever (page 27)

5. Thread cutter (page 42)

Pass the threads through the thread cutter to cut them.

6. Flat bed attachment with accessory compartment (page 7 and 46)

7. Operation buttons (page 9)

8. Operation panel (page 10)

This is used to select the stitch and specify the various settings.

9. Spool pin (page 10, 17 and 25)

This holds the spool of thread.

10. Handwheel

This is used to manually raise and lower the needle.

11. Air vent

This vent allows the air surrounding the motor to circulate. Do not cover the air vent while the sewing machine is being used.

12. Main power and sewing light switch (page 14)

You can turn the main power and sewing light switch on and off.

13. Jack/socket connector (page 14)

Insert the plug on the power supply cord into the jack/ socket connector.

14. Foot controller (page 14)

You can use this to control the sewing speed, and to start and stop sewing.

15. Foot controller jack/socket (page 14)

Plug in the foot controller plug.

16. Feed dog position lever (page 57 and 67)

Use the feed dog position lever to lower the feed dogs.

17. Presser foot lever (page 25)

This is used to raise and lower the presser foot.

18. Thread guide (page 18 and 27)

This is used when winding the thread onto the bobbin and then threading the machine.

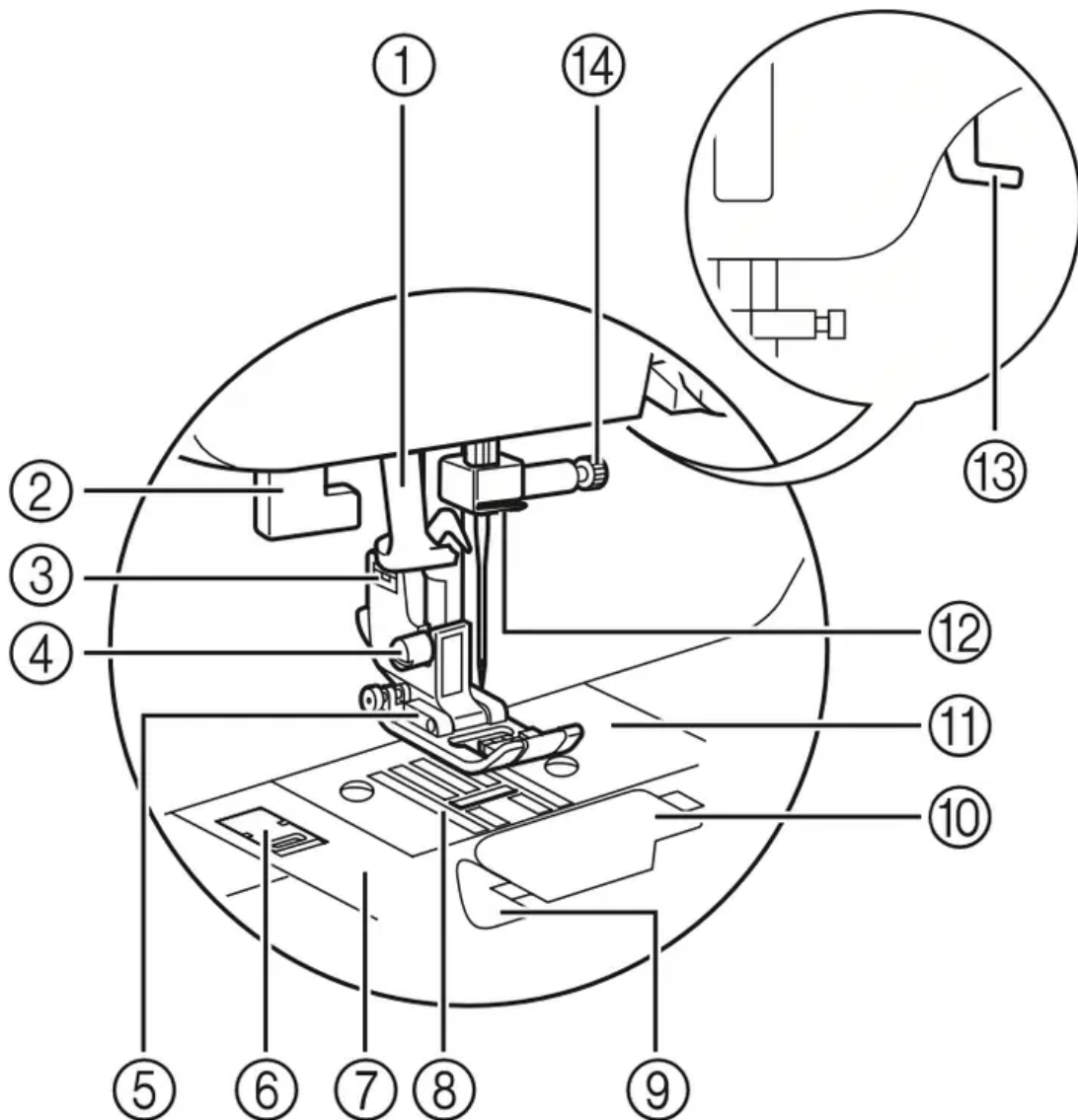
19. Thread guide cover (page 18 and 27)

Pass the thread under this thread guide when winding the bobbin thread and threading the machine.

20. Handle

Carry the sewing machine by its handle when transporting the machine.

Needle and presser foot section



1. **Needle threader (page 28)**

2. **Buttonhole lever**

Lower the buttonhole lever when sewing buttonholes and bar tacks.

3. **Presser foot holder**

The presser foot is installed onto the presser foot holder.

4. **Presser foot holder screw**

Use the presser foot holder screw to hold the presser foot holder in place.

5. **Presser foot**

The presser foot applies pressure consistently on the fabric as the sewing takes place. Attach the appropriate presser foot for the selected stitching.

6. Needle plate cover release

Use when removing the needle plate cover.

7. Needle plate cover

Remove the needle plate cover to clean the race.

8. Feed dogs

The feed dogs feed the fabric in the sewing direction.

9. Quick-set bobbin

You can start sewing without pulling up the bobbin thread.

10. Bobbin cover

Open the bobbin cover to set the bobbin.

11. Needle plate

The needle plate is marked with guides for sewing straight seams.

12. Needle bar thread guide

Pass the upper thread through the needle bar thread guide.

13. Presser foot lever

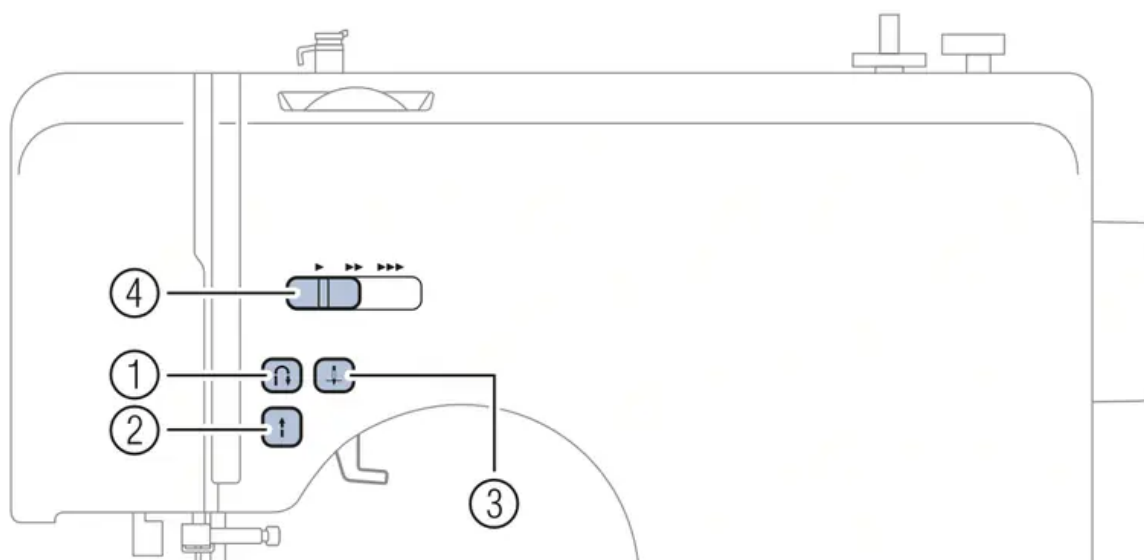
Raise and lower the presser foot lever to raise and lower the presser foot.

14. Needle clamp screw

Use the needle clamp screw to hold the needle in place.

Operation buttons

The operation buttons help you to easily perform various basic sewing machine operations.



1. **Reverse/reinforcement stitch button**

Press the reverse/reinforcement stitch button to sew reverse stitches. Reverse stitches

are sewn by keeping the button pressed down to sew in the opposite direction. For details, refer to “Sewing reinforcement stitches” (page 42).

2. **Start/stop button** 

Press the start/stop button to start or stop sewing. The machine sews at a slow speed at the beginning of sewing while the button is pressed. When sewing is stopped, the needle is lowered in the fabric. For details, refer to “Starting to sew” (page 41).

3. **Needle position button** 

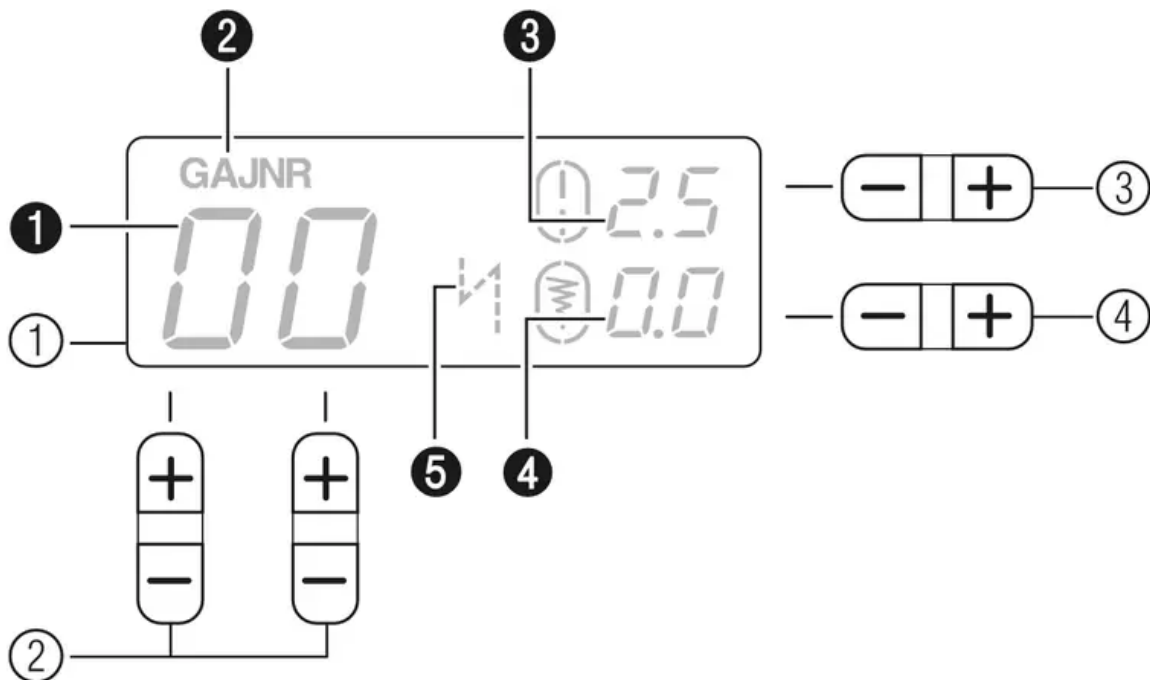
Press the needle position button to raise or lower the needle. Be sure to raise the needle before threading the needle. Use this button to change the sewing direction or for detailed sewing in small areas. Pressing the button twice sews one stitch.

4. **Sewing speed controller**

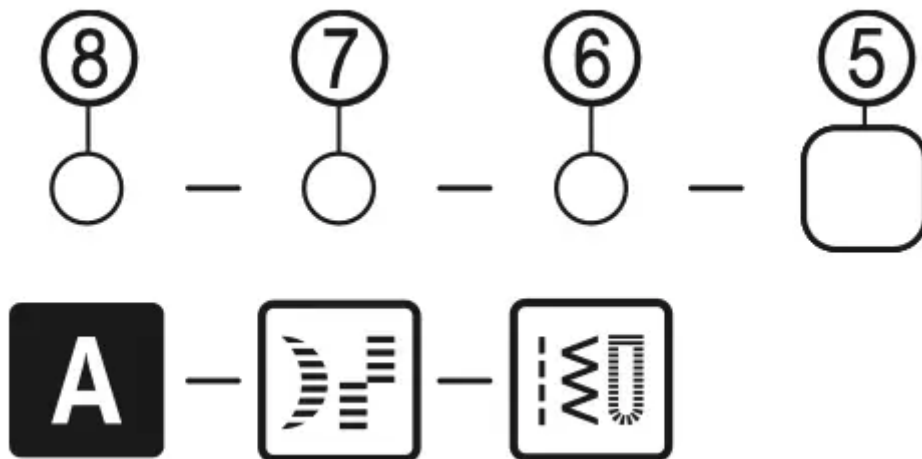
Slide the sewing speed controller to adjust the sewing speed.

Operation panel

The operation panel, located on the front of the sewing machine, allows you to select a stitch and specify how the stitch will be sewn.



Keys and indicators provided on some models



1. LCD (liquid crystal display)

The number of the selected stitch (1), the presser foot type to be used (2), the stitch length (mm) (3), the stitch width (mm) (4), and the auto reverse/ reinforcement (5) are displayed here.

2. Stitch selection keys

Press the stitch selection keys, and then select the number for the stitch that you wish to use. For details, refer to “Selecting a stitch” (page 39).

3. Stitch length adjustment key

Press this key to adjust the stitch length. (Press the “–” side to reduce the stitch length; press the “+” side to increase the stitch length.)

4. Stitch width adjustment key

Press this key to adjust the stitch width. (Press the “–” side to reduce the stitch width; press the “+” side to increase the stitch width.)

5. Stitch category selection key

Press this key to select desired stitch category. For details, refer to “Selecting a stitch” (page 39) .

6. Utility stitch indicator

This indicator lights up when the utility stitch is selected with the stitch category selection key.

7. Satin stitch indicator

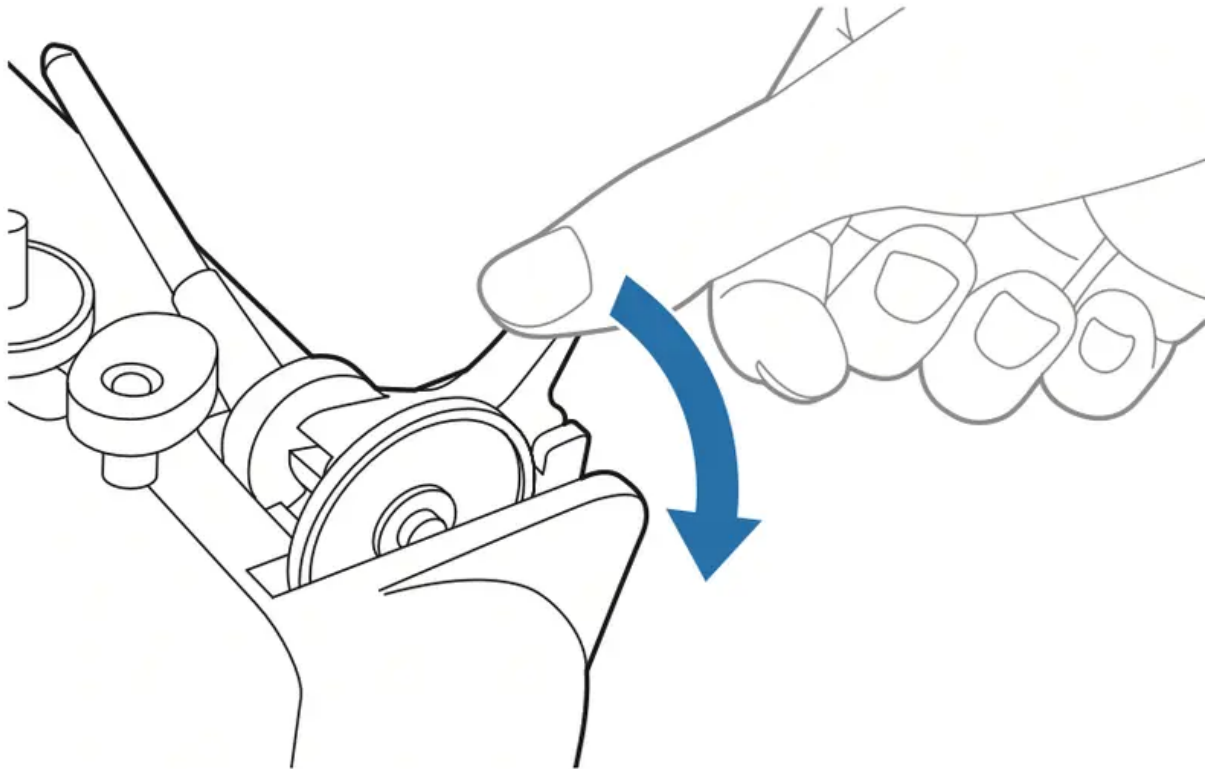
This indicator lights up when the satin stitch is selected with the stitch category selection key.

8. Character stitch indicator

This indicator lights up when the character stitch is selected with the stitch category selection key.

Spool pin

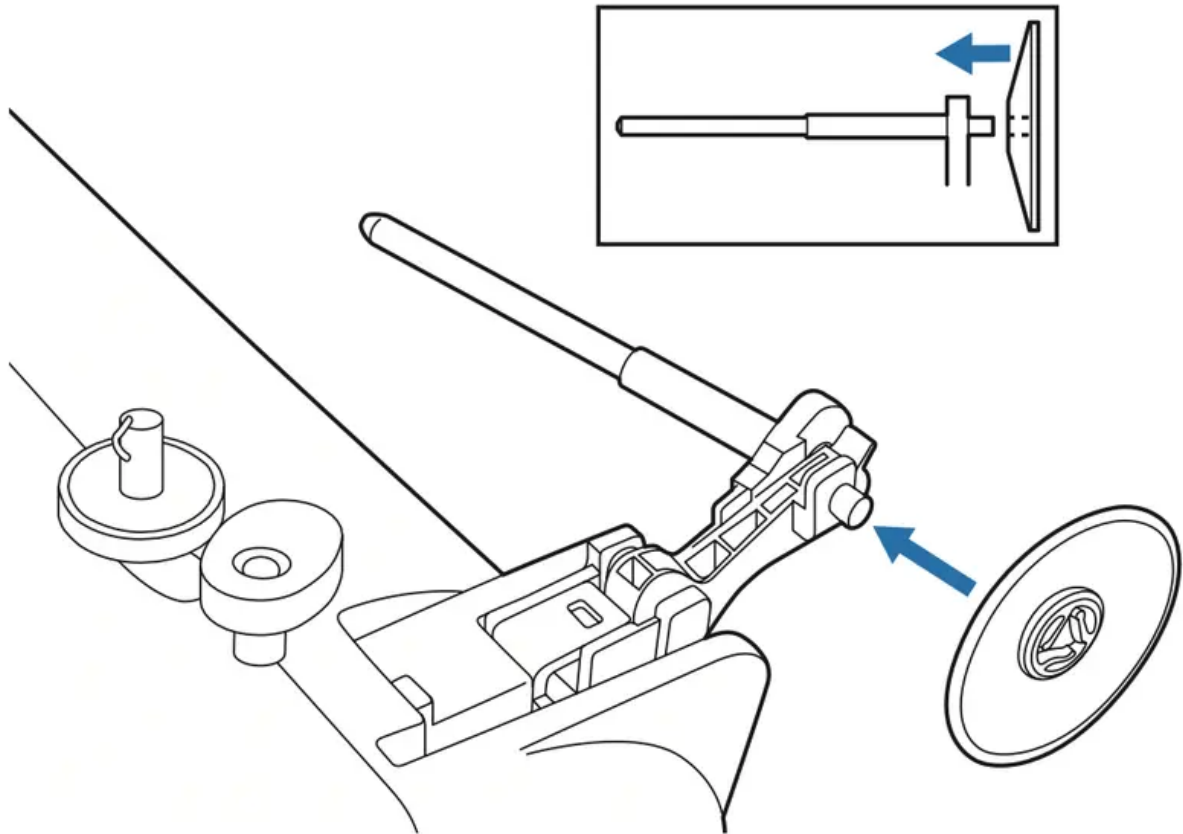
As shown, press down on the spool pin lever with your finger to raise the spool pin.



CAUTION: Do not grab the bar to raise the spool pin, otherwise, the spool pin may bend or break.

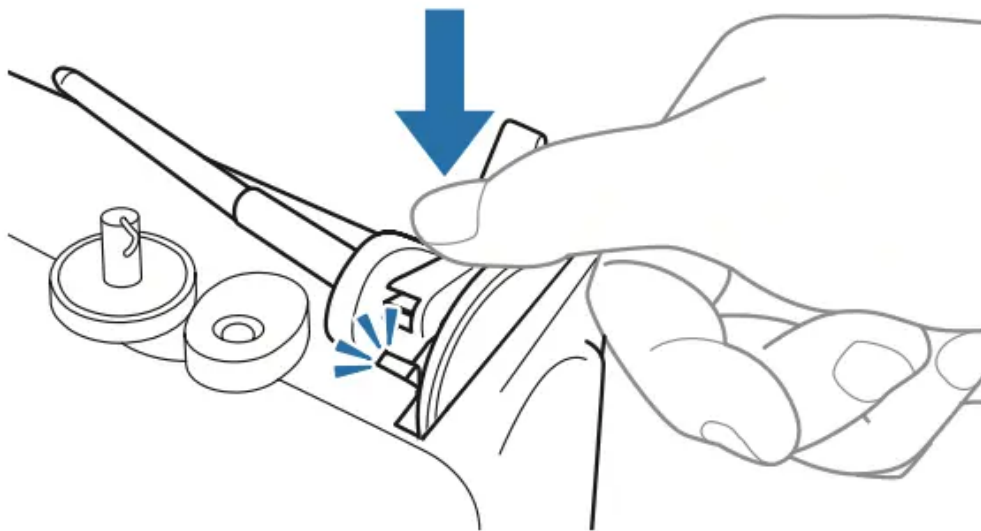
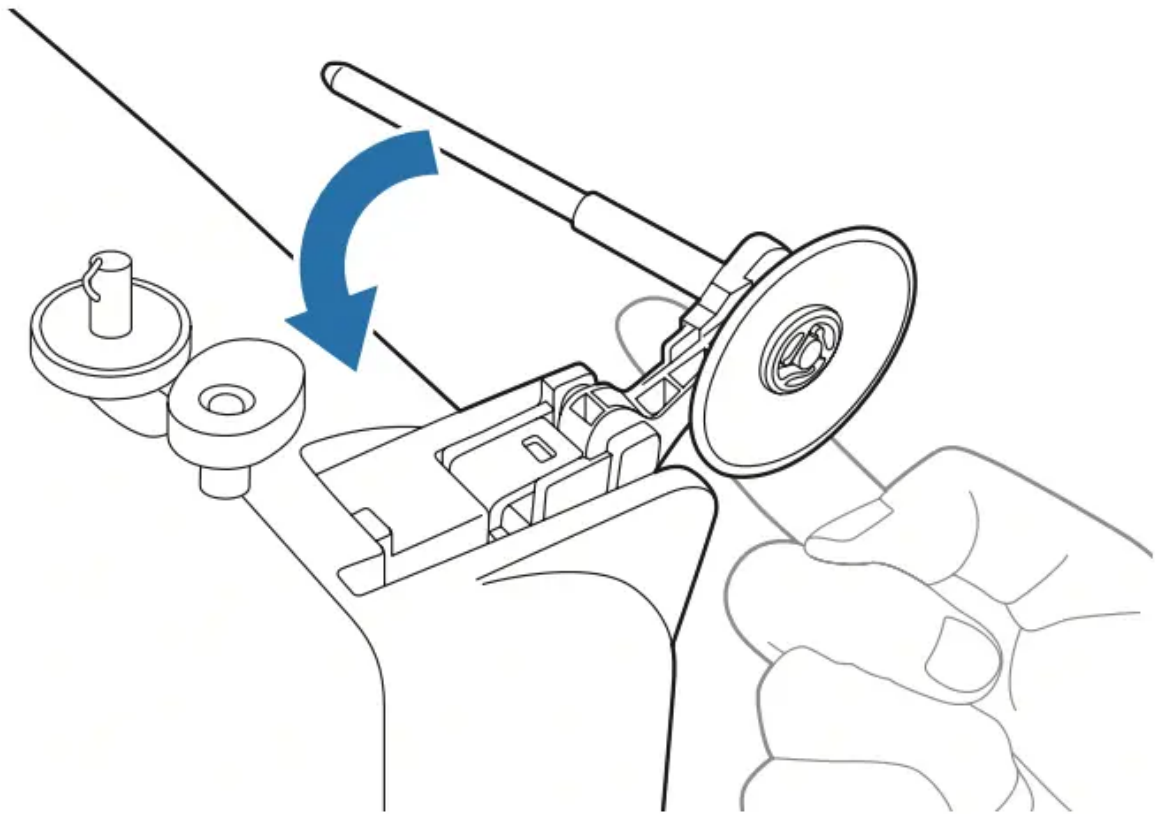
- **Storing the spool cap**

The enclosed spool cap (large, medium, small) can be stored by attaching it to the spool pin as shown in the illustration. When attaching the spool cap, position it with the rounded side toward the spool pin.



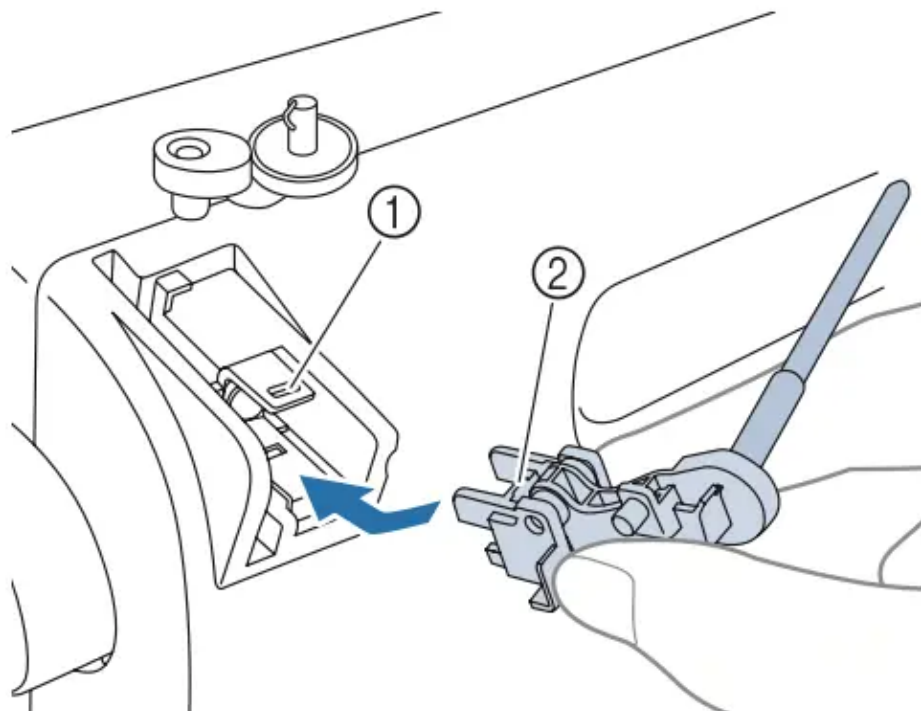
- **Storing the spool pin**

When placing the cover on the sewing machine before storing or if the spool pin will not be used, return the spool pin to its storage position. Remove the spool from the spool pin, and then fold up the spool pin, as shown in the illustration, until it snaps into place to secure it.



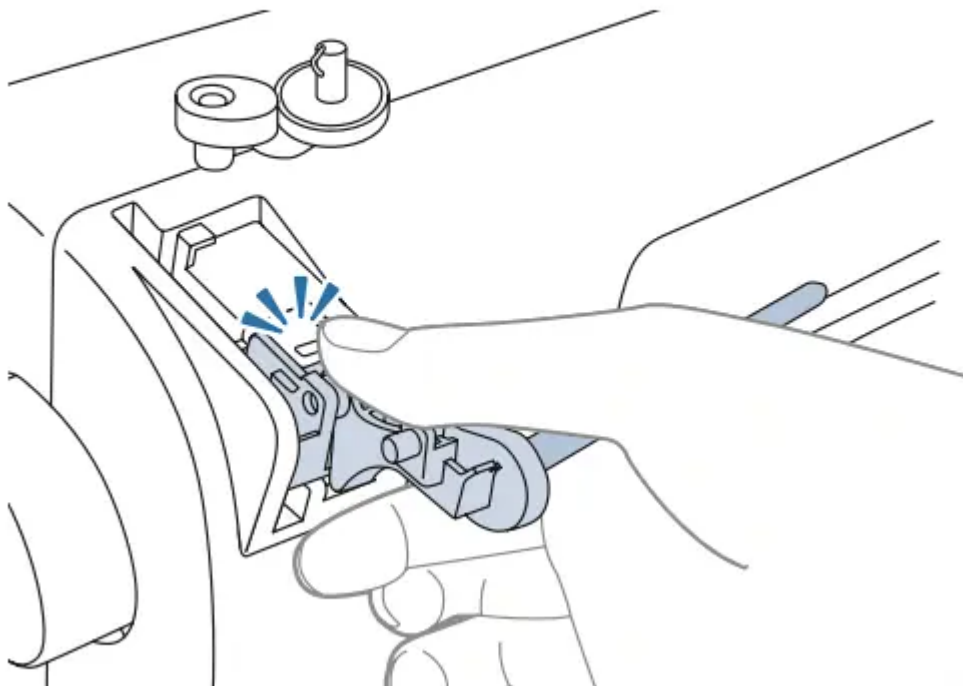
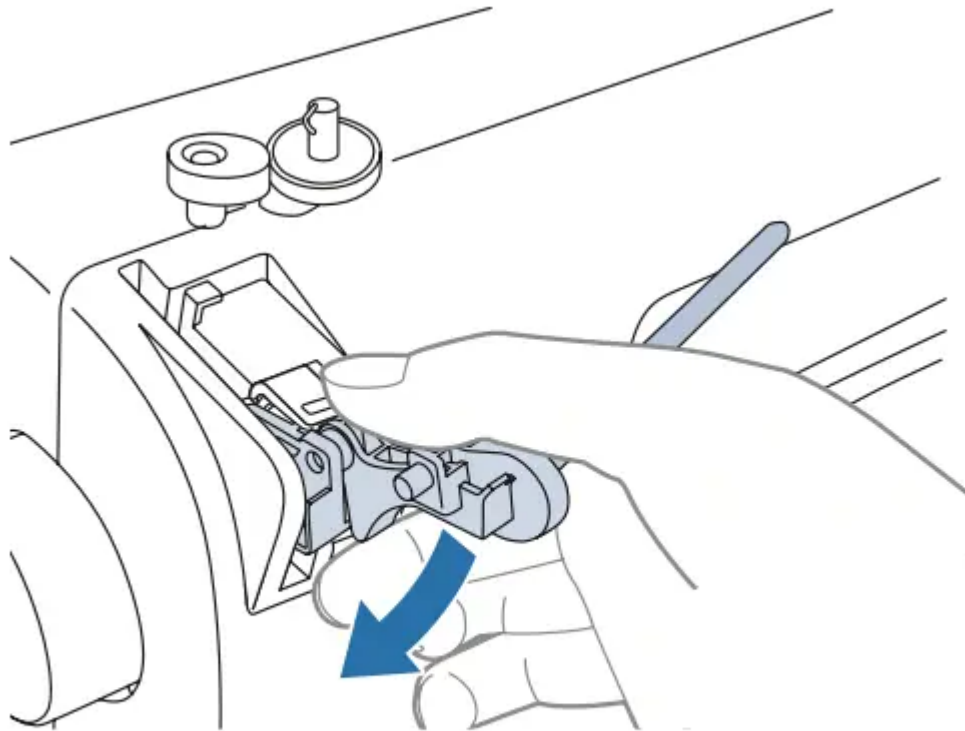
- Installing the spool pin

1. If the spool pin has been removed from the machine, insert the tab on the spool pin into the hole on the back of the machine, as shown.



- ① Hole
- ② Tab

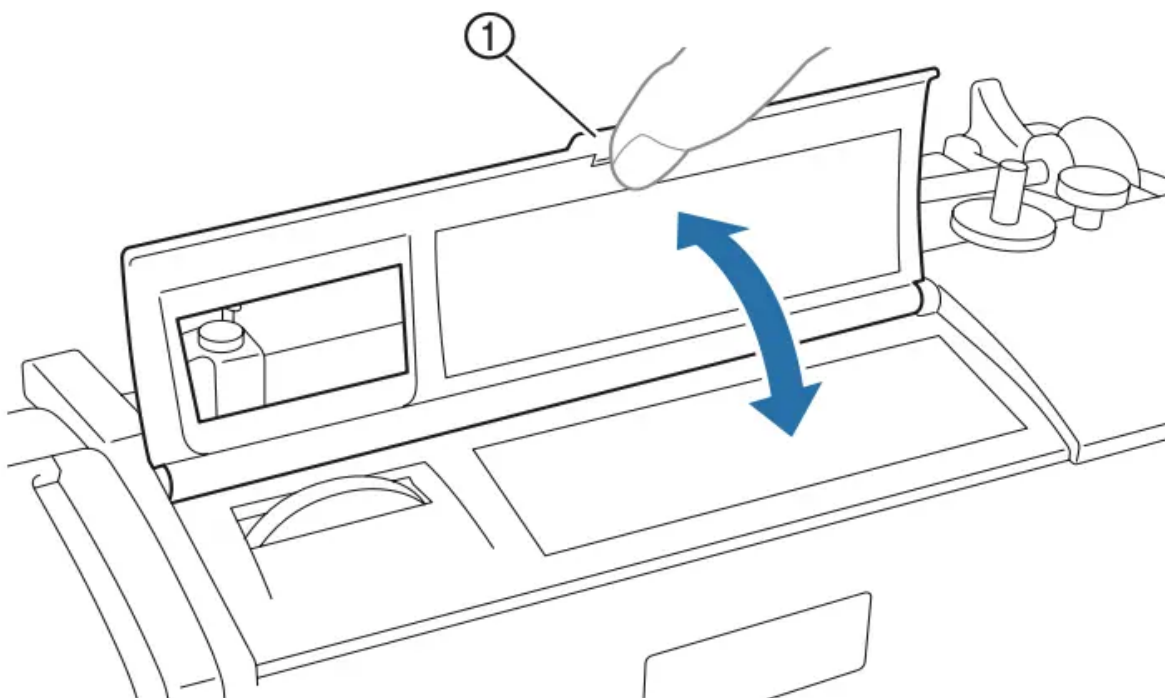
2. Push the spool pin down until it locks into place.



Flip chart

You can check the pattern numbers of the stitches using the flip chart on the machine.

Hold the notch with your finger to flip the chart.



① Notch

USING YOUR SEWING MACHINE

Power supply precautions

Be sure to observe the following precautions concerning the power supply.

WARNING

- Use only regular household electricity for the power source. Using other power sources may result in fire, electric shock, or damage to the machine.
- Make sure that the plugs on the power cord are firmly inserted into the electrical outlet and the power supply jack on the machine. Otherwise, a fire or electric shock may result.
- Do not insert the plug on the power cord into an electrical outlet that is in poor condition.
- Turn off the main power and remove the plug in the following circumstances:
 - When you are away from the machine
 - After using the machine

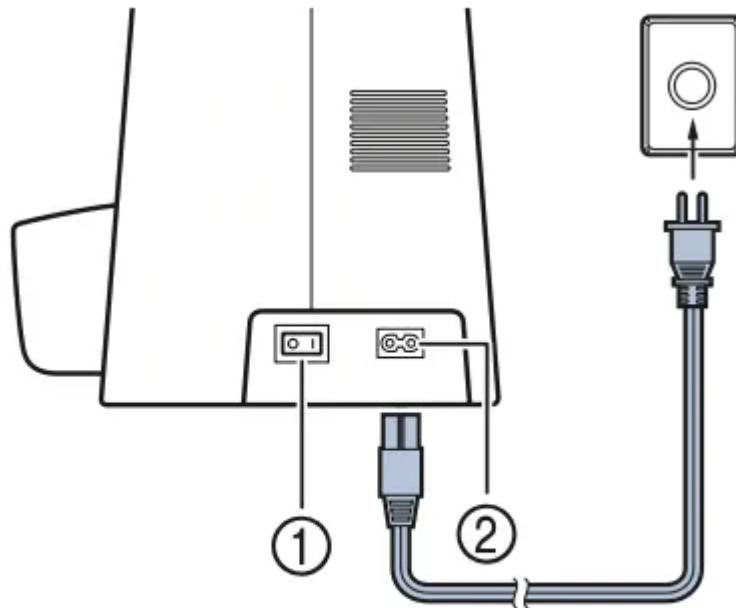
- When the power fails during use
- When the machine does not operate correctly due to a bad connection or a disconnection
- During electrical storms

CAUTION

- Use only the power cord included with this machine.
- Do not use extension cords or multi-plug adapters with many other appliances plugged in to them. Fire or electric shock may result.
- Do not touch the plug with wet hands. Electric shock may result.
- When unplugging the machine, always turn off the main power first. Always grasp the plug to remove it from the outlet. Pulling on the cord may damage the cord, or lead to fire or electric shock.
- Do not allow the power cord to be cut, damaged, modified, forcefully bent, pulled, twisted, or bundled.
- Do not place heavy objects on the cord. Do not subject the cord to heat. These things may damage the cord and cause fire or electric shock. If the cord or plug is damaged, take the machine to your authorized dealer for repairs before continuing use.
- Unplug the power cord if the machine is not to be used for a long period of time. Otherwise a fire may result.

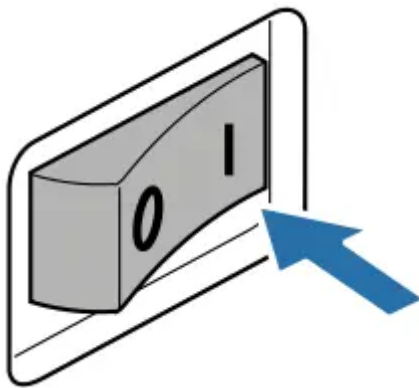
Power supply

1. Insert the plug into a wall outlet.



- ① Main power switch
- ② Jack/socket connector

2. Set the main power switch to “I”.



The sewing light comes on when the machine is turned on.

Memo: When the machine is turned on, the needle and the feed dogs will make sound when they move; this is not a malfunction.

3. To turn off the machine, set the main power switch to “O”.
The sewing light goes off when the machine is turned off.

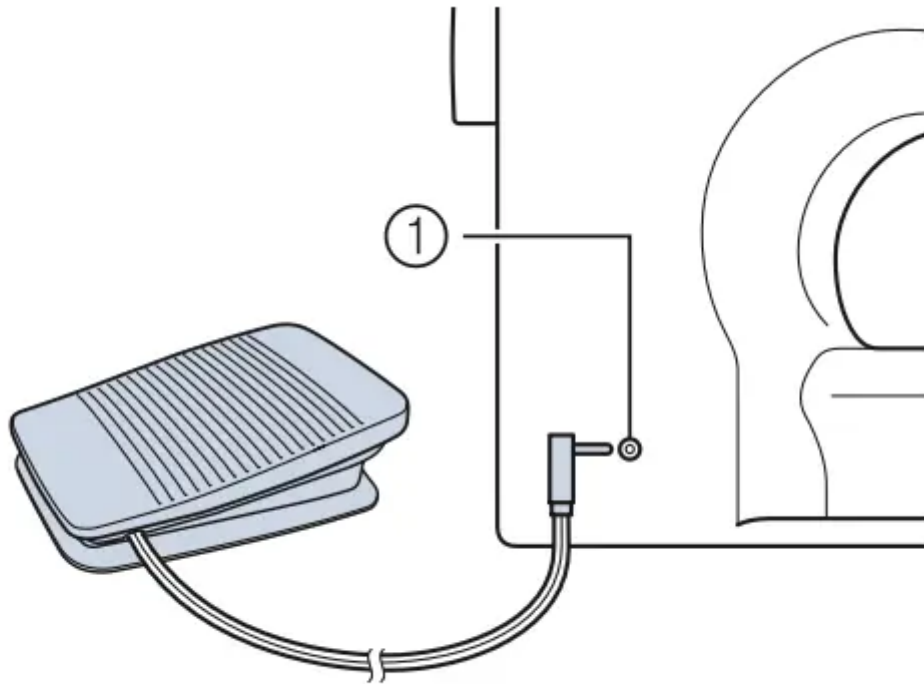
Note

- If a power outage occurs while the sewing machine is being operated, turn off the sewing machine and unplug the power supply cord. When restarting the sewing machine, follow the necessary procedure to correctly operate the machine.

- This appliance has a polarized plug (one blade wider than the other). To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not modify the plug in any way.

Foot controller

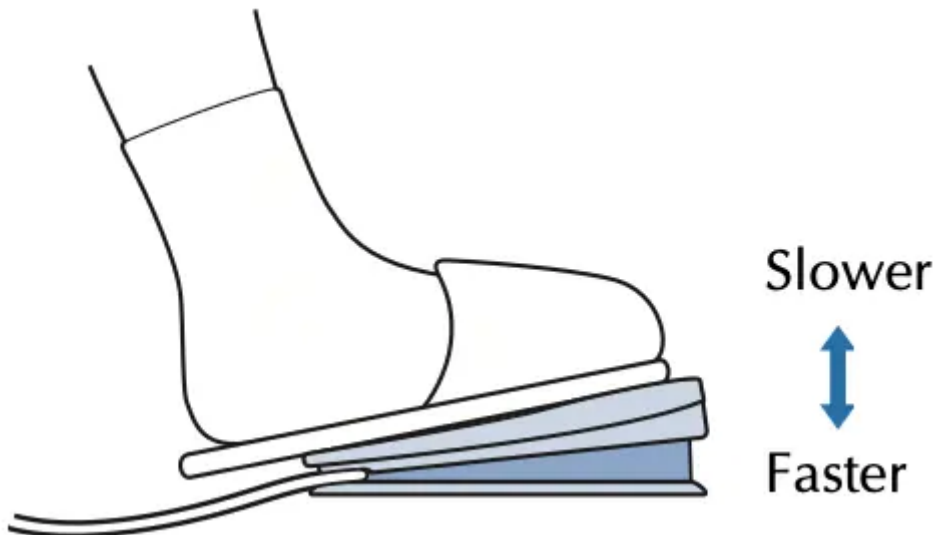
Insert the foot controller plug into its jack/socket on the rear side of the sewing machine.



① Foot controller jack/socket

CAUTION: When connecting the foot controller, be sure to turn off the sewing machine in order to prevent the machine from accidentally being started.

When you press the foot controller down lightly, the machine will run at a low speed. When you press harder, the machine's speed will increase. When you take your foot off the foot controller, the machine will stop.



You should make sure that nothing is placed on the foot controller when the machine is not in use.

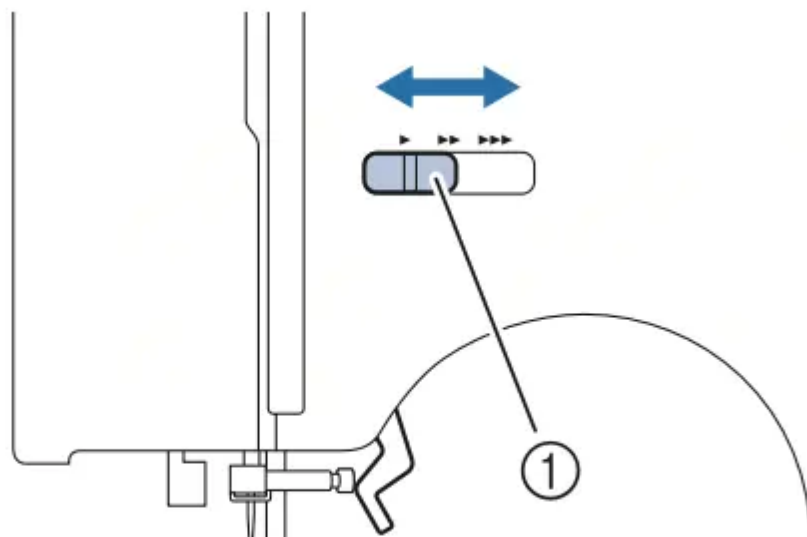
CAUTION: Do not allow pieces of cloth and dust to build up on the foot controller. Doing so could cause a fire or an electric shock.

Note: When the foot controller is plugged in, the start/stop button cannot be used to start sewing.

Sewing speed controller

1. **Slide the sewing speed controller to the left or right to select the desired sewing speed.**

Slide the sewing speed controller to the left to sew at a slower speed, or slide the speed controller to the right to sew at a faster speed.



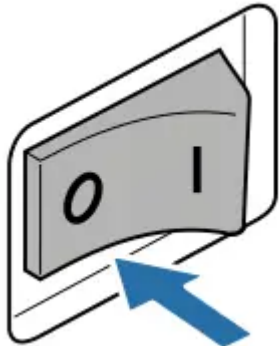
① Sewing speed controller

The speed set using the sewing speed controller is the foot controller's maximum sewing speed.



Changing the needle stop position

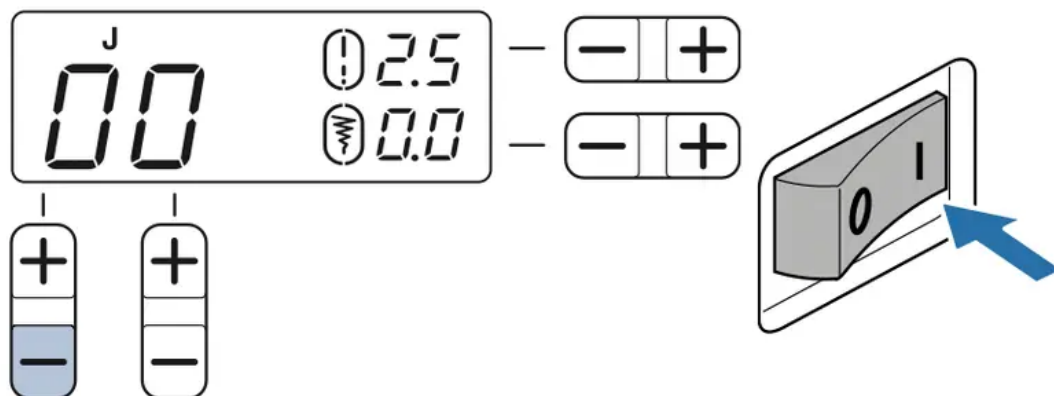
Normally, the sewing machine is set to leave the needle in the fabric when sewing is stopped. Instead, the machine can be set to leave the needle raised when sewing is stopped.

1. Turn off the sewing machine.



- 2.

Hold down the “-” side of  (stitch selection key) on the left and turn on the sewing machine. After turning on the sewing machine, release the “-” side of  (stitch selection key).



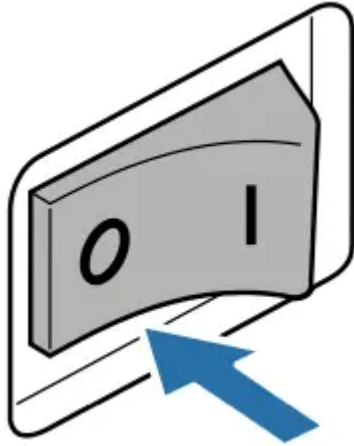
The needle stop position changes to the raised position.


Memo: Perform the same operation to change the needle stop position to the lowered position.


Changing the initial needle position

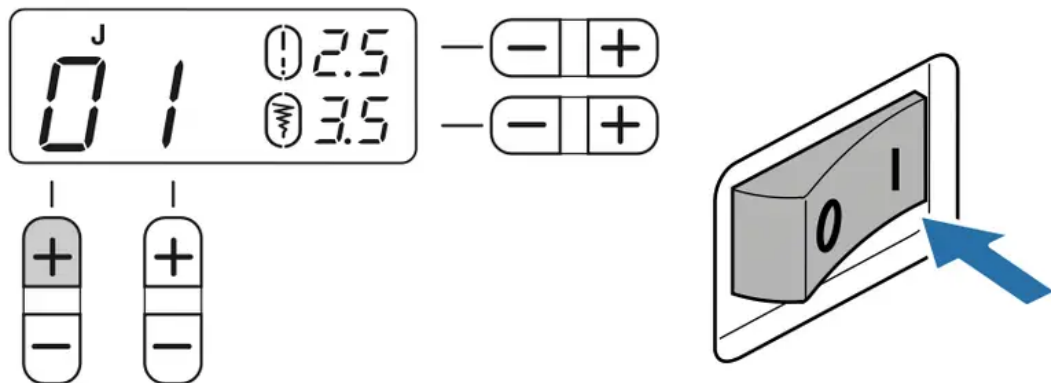
Normally, the straight stitch (left needle position) is automatically selected when the sewing machine is turned on. The machine can be set so that the straight stitch (center needle position) is automatically selected when it is turned on.

1. Turn off the sewing machine.



2. Hold down the "+" side of  (stitch selection key) on the left and turn on the sewing machine.

After turning on the sewing machine, release the "+" side of  (stitch selection key).



The initial needle position changes to the center needle position.

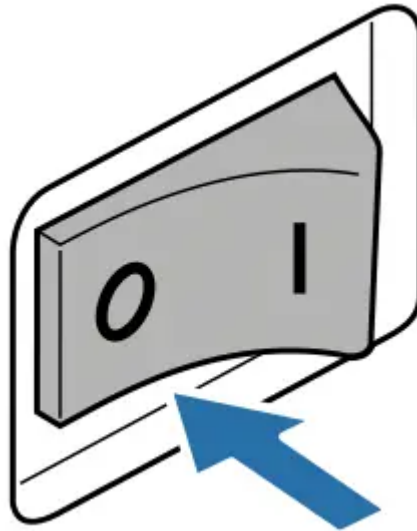
Memo

- The specified initial needle position is maintained even after the machine is turned off.
- Perform the same operation to change the initial needle position to the left needle position.


Cancelling the operation beep


When the sewing machine is purchased, it is set to beep each time a key is pressed. This setting can be changed so that the machine does not beep.

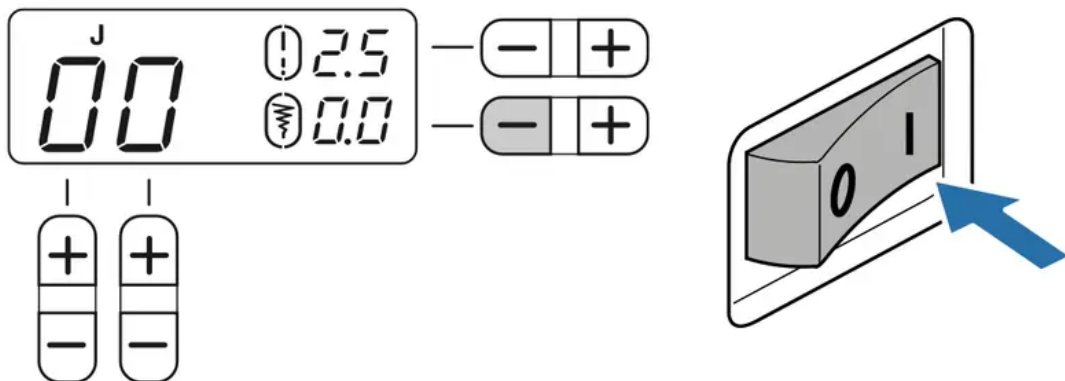
1.



Turn off the sewing machine.

2. Hold down the “-” side of  (stitch width adjustment key) and turn on the sewing machine.

After turning on the sewing machine, release the “-” side of  (stitch width adjustment key).



The machine is now set so that it will not beep.

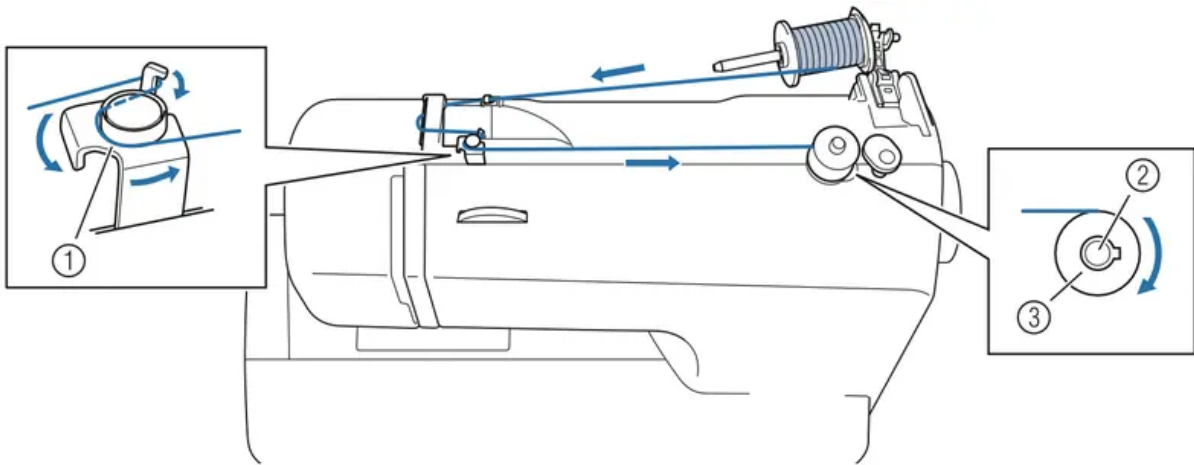
Memo: Perform the same operation to change the setting so that machine beeps.

THREADING THE MACHINE

Winding the bobbin

This section describes how to wind the thread onto the bobbin.

- For details on the fast bobbin winding, see page 20.

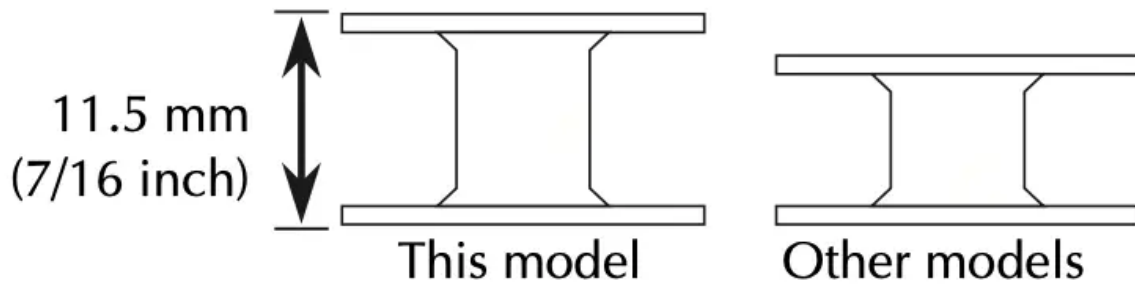


1. Bobbin-winding thread guide
2. Bobbin winder shaft
3. Bobbin

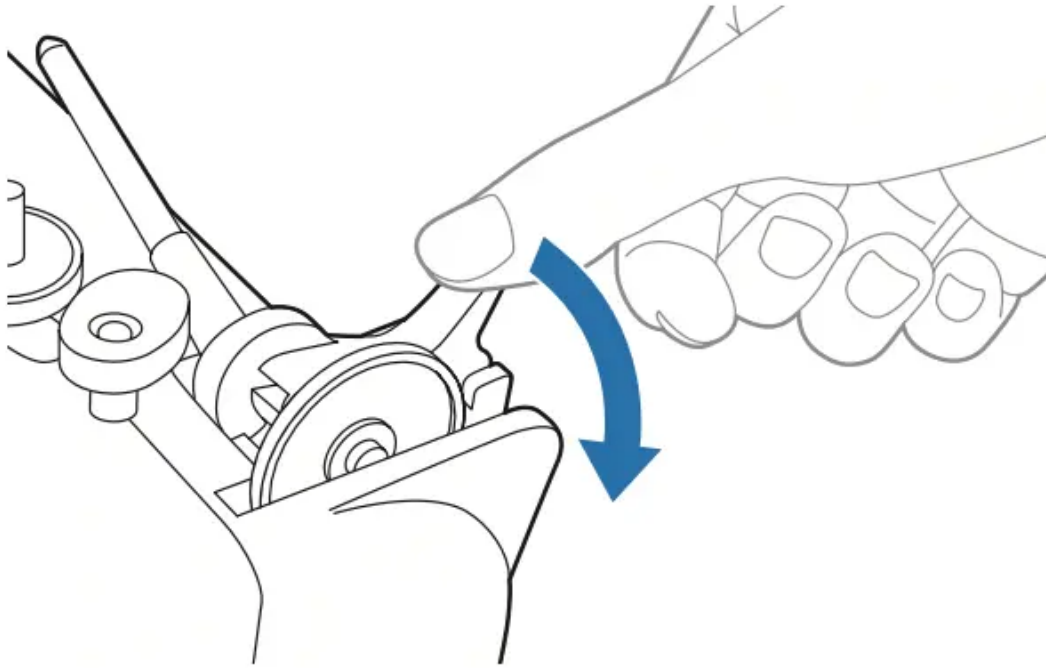
CAUTION

- Only use bobbins (part code: SA156, SFB: XA5539-151) that have been designed for this sewing machine. Using other bobbins may cause damage to the machine.
- We designed the bobbin that comes with this machine. If you use bobbins from other models, the machine will not work properly. Only use the bobbin that comes with this machine or bobbins of the same type (part code: SA156, SFB: XA5539-151).

Actual size

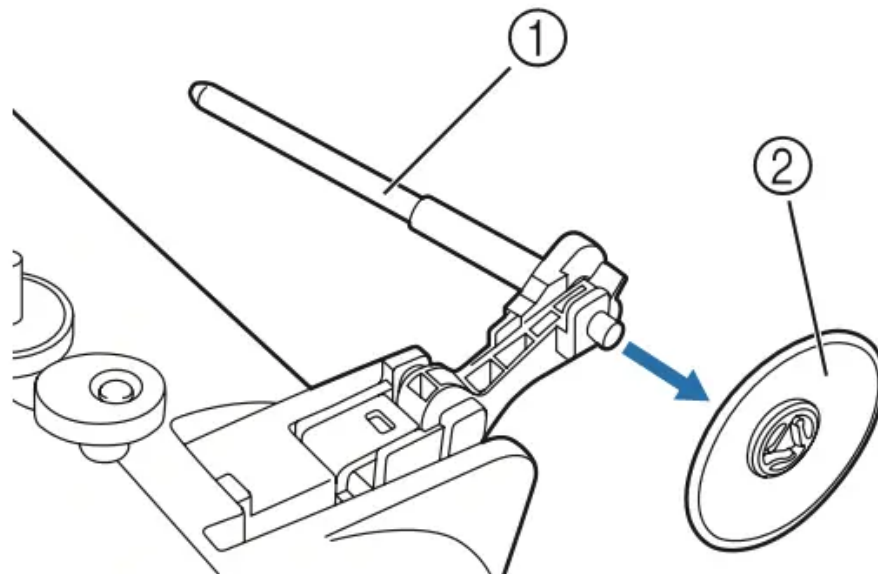


1. **As shown, press down on the spool pin lever with your finger.**
The spool pin swings up.



CAUTION: Do not grab the bar to raise the spool pin, otherwise, the spool pin may bend or break.

2. Remove the spool cap.



- ① Spool pin
- ② Spool cap

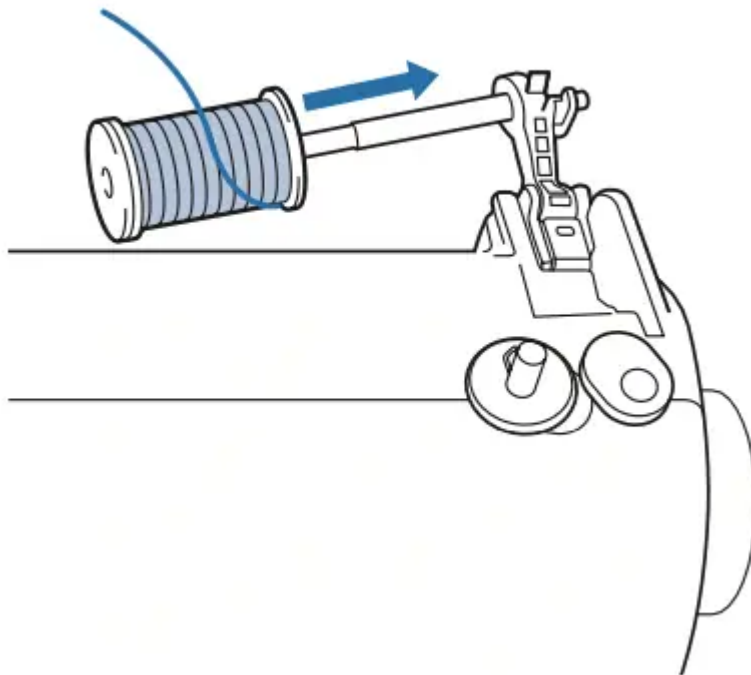
CAUTION: Be sure to raise the spool pin when winding the bobbin. The thread may become tangled if the bobbin winder is used without raising the spool pin.

3. Fully insert the spool of thread for the bobbin onto the spool pin.

Slide the spool onto the pin so that the spool is horizontal and the thread unwinds to the

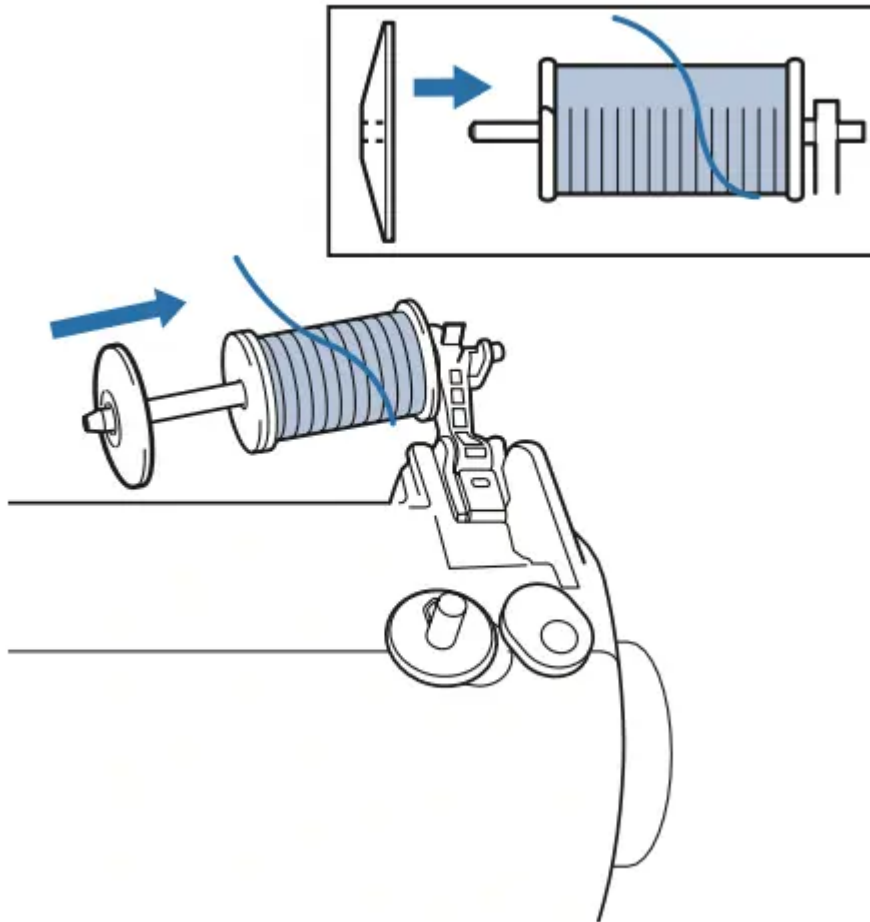


front at the bottom.



4. Slide the spool cap onto the spool pin.

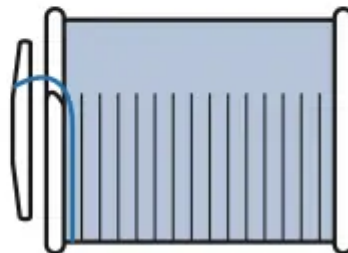
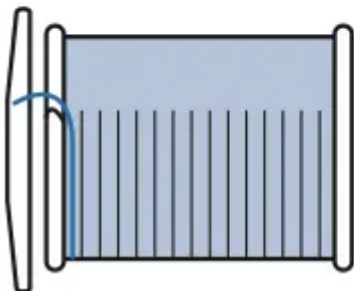
With the slightly rounded side of the spool cap positioned toward the left, slide the spool cap onto the spool pin as far as possible to the right so that the spool is moved to the right end of the spool pin.



CAUTION

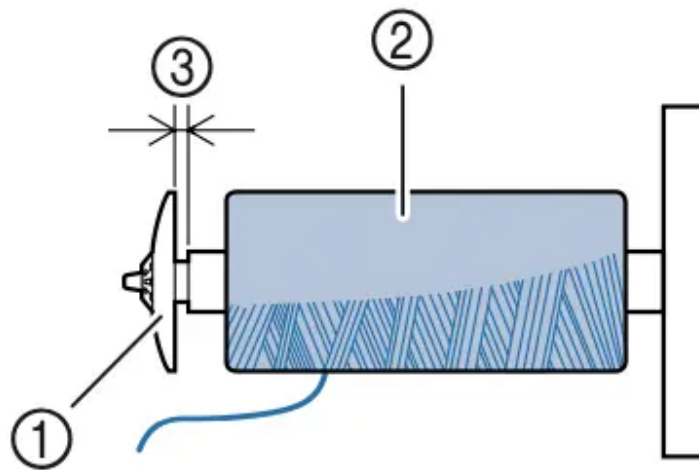
If the spool or the spool cap is not positioned correctly, the thread may become tangled around the spool pin or the machine may be damaged.

Three spool cap sizes are available, allowing you to choose a spool cap that best fits the size of spool being used. If the spool cap is too small for the spool being used, the thread may catch on the slit in the spool or the machine may be damaged.



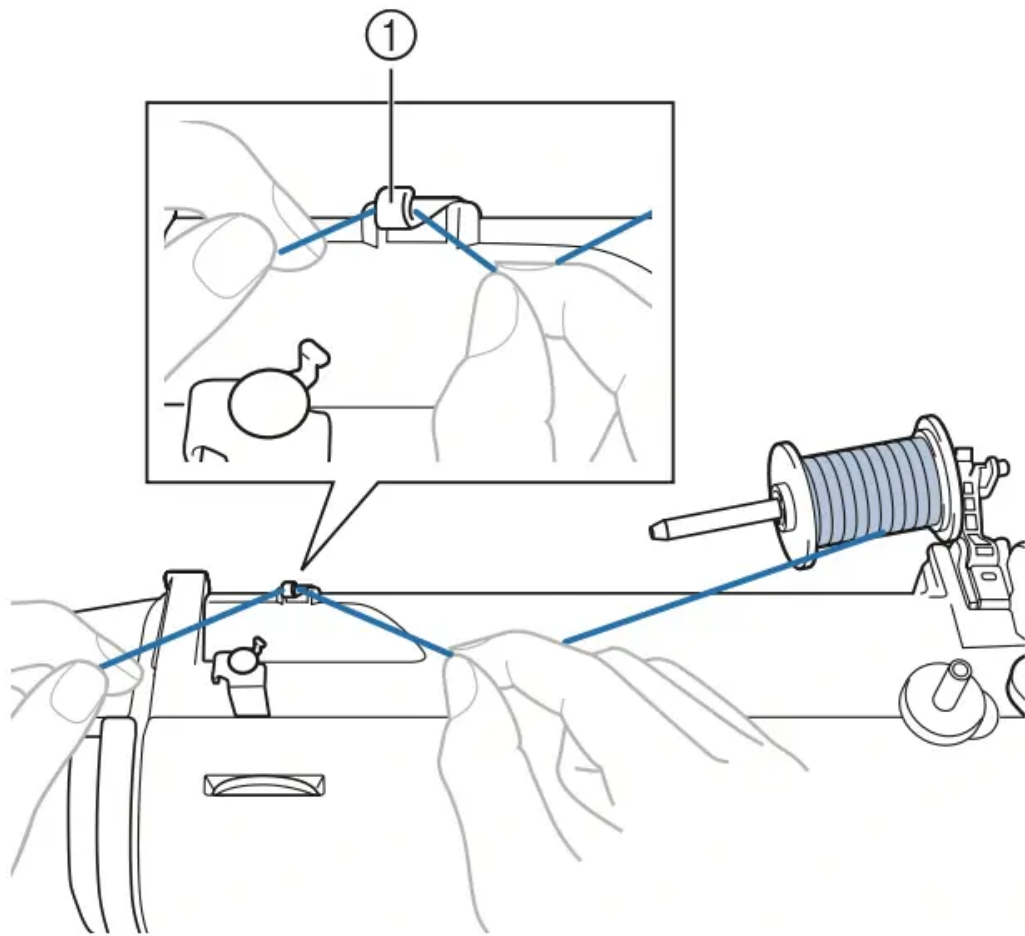
Memo: When sewing with fine, cross-wound thread, use the small spool cap, and leave

a small space between the cap and the spool.



- ① Spool cap (small)
- ② Spool (cross-wound thread)
- ③ Space

5. While holding the spool with your right hand, and then

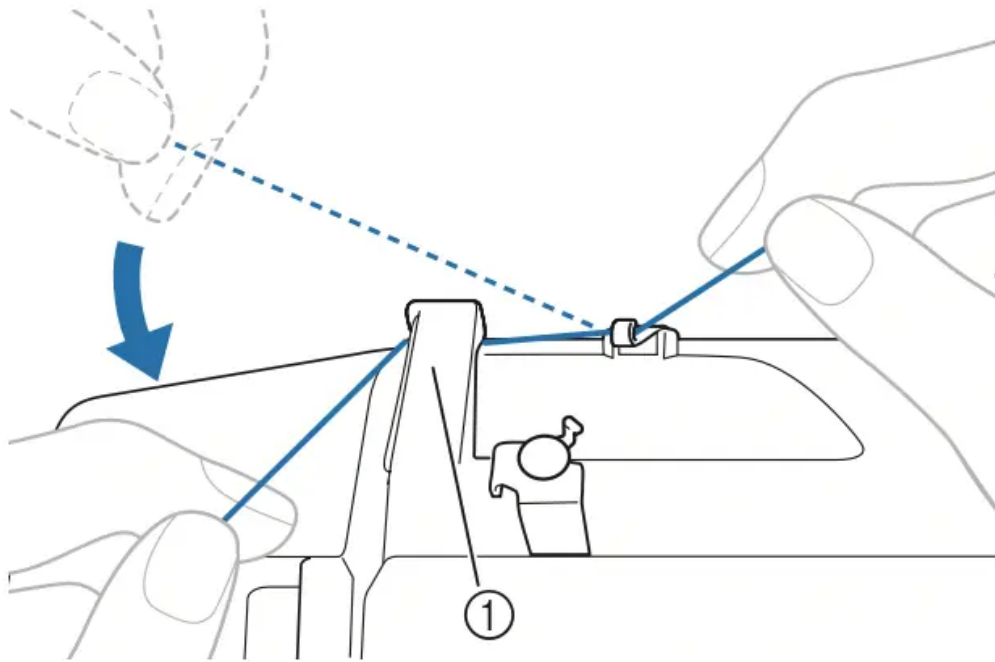


① Thread guide

6. Pass the thread under the thread guide cover from the back to the front.

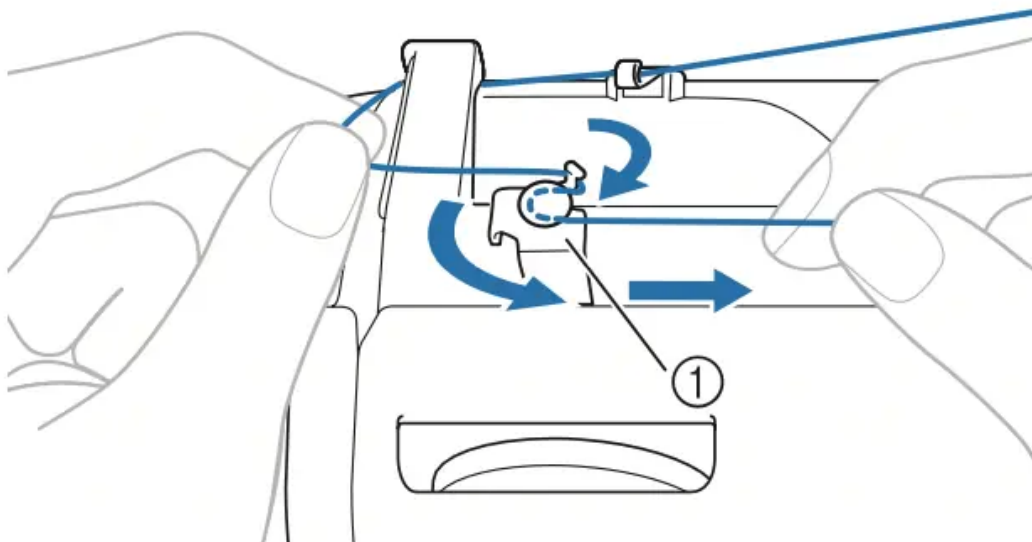
Hold the thread with your right hand so that there is no slack in the thread that is pulled

out, and then pass the thread under the thread guide cover with your left hand.



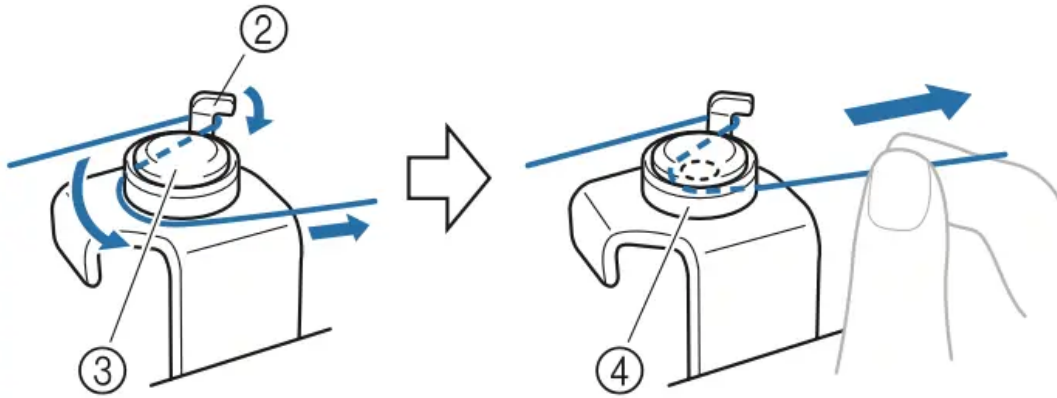
① Thread guide cover

7. Pull the thread to the right, pass it under the hook of the bobbin-winding thread guide, and then wind the thread counterclockwise between the discs, pulling it in as far as possible.



① Bobbin-winding thread guide

Make sure that the thread passes under the pre-tension disk.

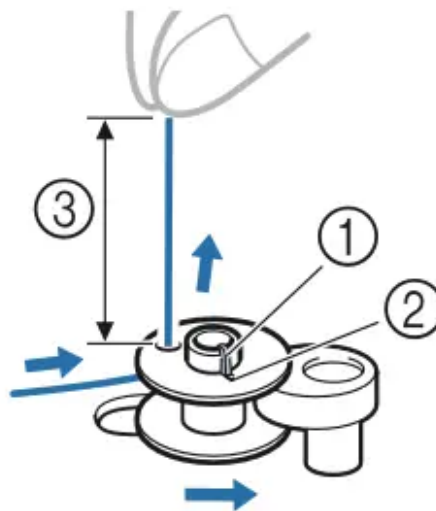


- ② Hook
- ③ Pre-tension disk
- ④ Pull it in as far as possible.

Note: Make sure that the thread is pulled as far as possible into the pre-tension disk, otherwise the bobbin may not be wound cleanly.

8. **Put the bobbin onto the bobbin winder shaft and slide the bobbin winder shaft to the right. Turn the bobbin clockwise, by hand, until the spring on the shaft slides into the notch in the bobbin.**

Make sure to pull out 7 to 10 cm (2-3/4 to 3-15/16 inches) of thread from the hole on the bobbin.




- ① Spring on the shaft
- ② Notch
- ③ 7 – 10 cm (2-3/4 – 3-15/16 inches)

CAUTION: Pull the thread taut and hold the end of the thread straight up. If the thread is

too short, not pulled taut or held at an angle, injuries may occur when the thread is wound around the bobbin.

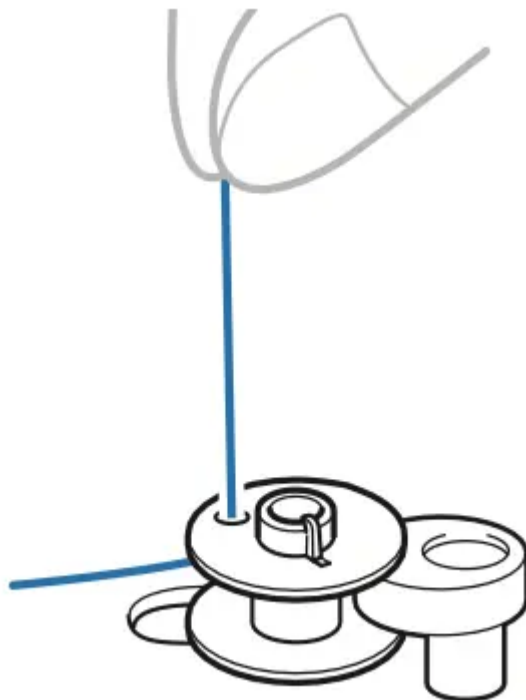
9. **Turn on the sewing machine.**

10. **While holding the end of the thread, gently press the foot controller or press  (start/stop button) to wind the thread around the bobbin a few times. Then stop the machine.**

Note

If the sewing machine is to be operated using the foot controller, connect the foot controller before turning on the machine.

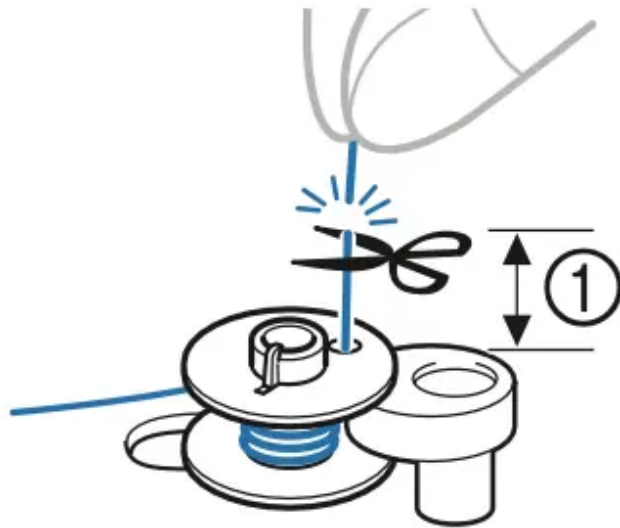
When the foot controller is plugged in, the start/stop button cannot be used to start



sewing.

11. **Trim the excess thread above the bobbin.**

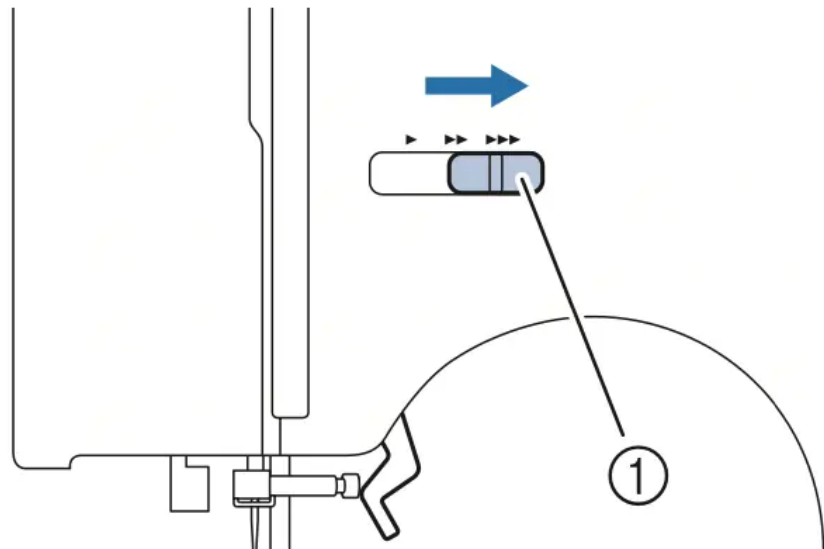
Pull 1 cm (3/8 inch) of thread from the hole on the bobbin.



① 1 cm (3/8 inch)

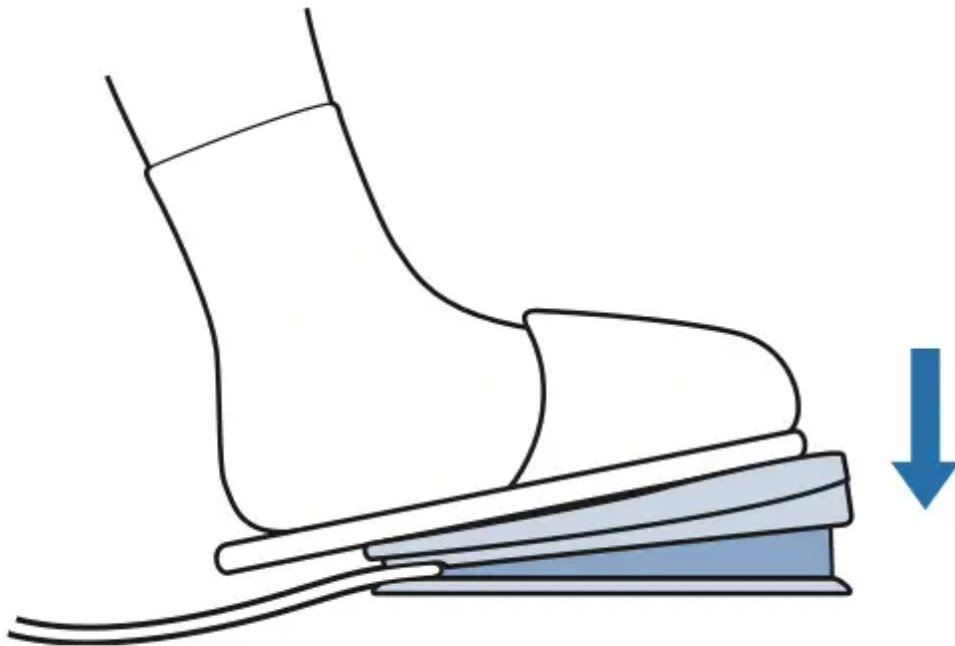
CAUTION: Make sure you follow the instructions carefully. If you do not cut the thread completely, and the bobbin is wound, when the thread runs low it may tangle around the bobbin and cause the needle to break.


12. **Slide the sewing speed controller to the right (to set the speed to fast).**



① Sewing speed controller

13. Press the foot controller or press  (start/stop button) to start.

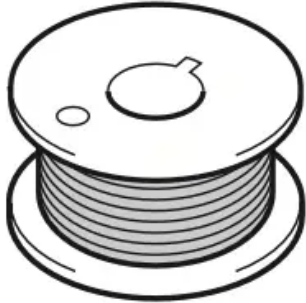


14. When the bobbin seems full and begins spinning slowly, take your foot off the foot controller or press  (start/stop button).
15. Cut the thread, slide the bobbin winder shaft to the left and remove the bobbin.
16. Slide the sewing speed controller back to its original position.

Memo

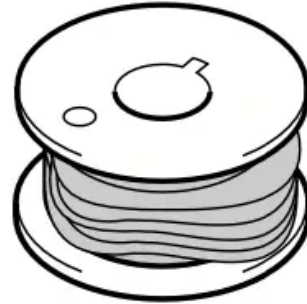
- When the sewing machine is started or the handwheel is turned after winding the thread around the bobbin, the machine will make a clicking sound; this is not a malfunction.
- The needle bar does not move when you slide the bobbin winding shaft to the right.

CAUTION: Not winding the bobbin properly may cause the thread tension to loosen, and may break the needle.



①

① Wound evenly

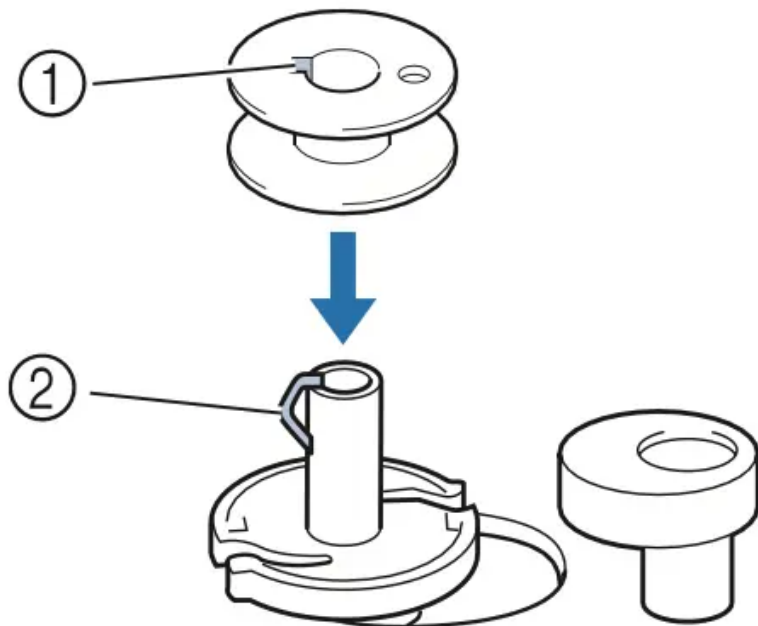


②

② Wound poorly

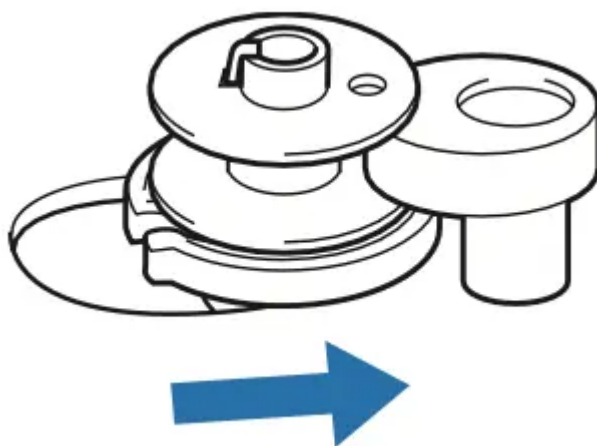
- Winding the bobbin with the fast bobbin winding system

1. Place the bobbin on the bobbin winder shaft so that the spring on the shaft fits into the notch in the bobbin.



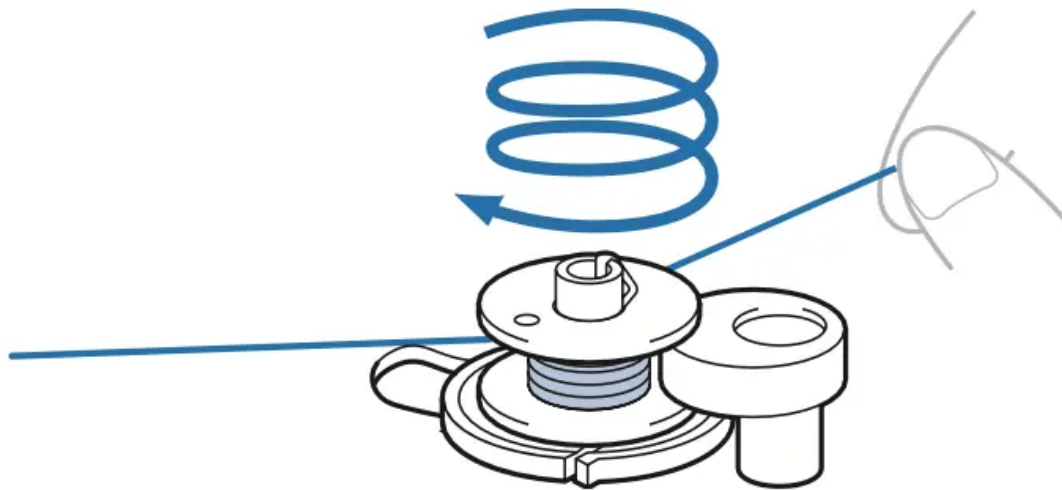
- ① Notch
- ② Bobbin winder shaft spring

2. Slide the bobbin winder shaft to the right.

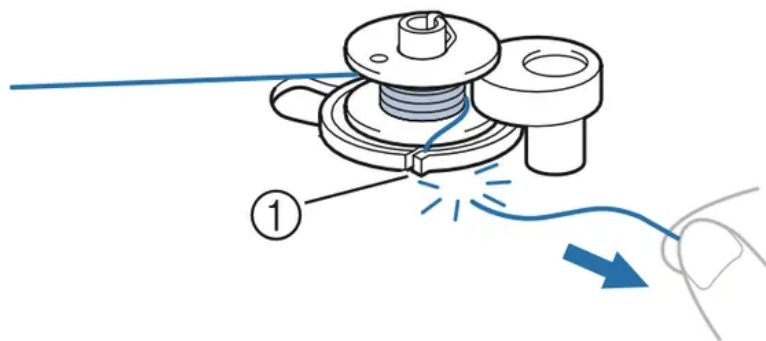


3. Follow steps 1 through 7 of the procedure in “Winding the bobbin” to pass the thread around the pre-tension disk (page 17).
4. While holding the thread that wraps around the pre-tension disk with your left hand, use your right hand to wind the free end of the thread clockwise around the

bobbin five or six times



5. Pull the thread to the right and pass it through the slit in the bobbin winder seat.

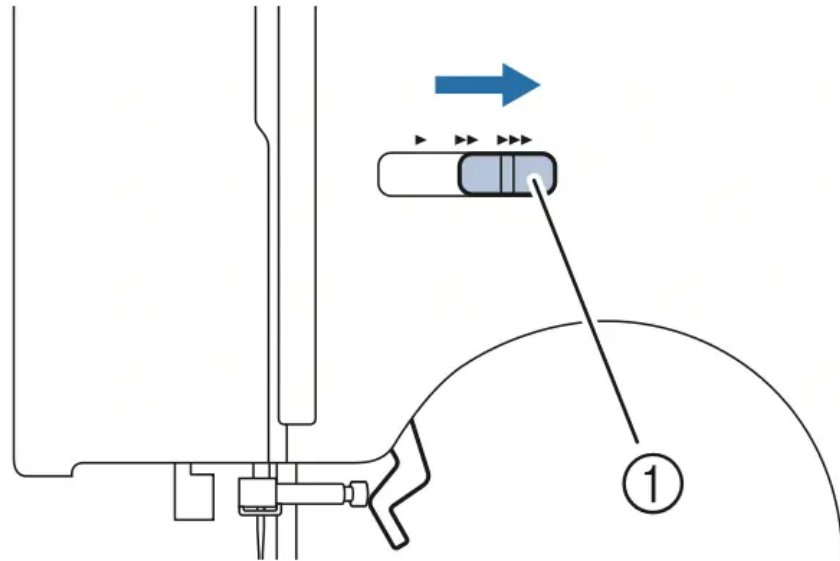


① Slit in bobbin winder seat (with built-in cutter)

The thread is cut to a suitable length.

CAUTION: Be sure to cut the thread as described. If the bobbin is wound without cutting the thread using the cutter built into the slit in the bobbin winder seat, the thread may become tangled in the bobbin or the needle may bend or break when the bobbin thread starts to run out.

6. Slide the sewing speed controller to the right (to set the speed to fast).



① Sewing speed controller

7. Turn on the sewing machine.

8. Press the foot controller or press  (start/stop button) to start.

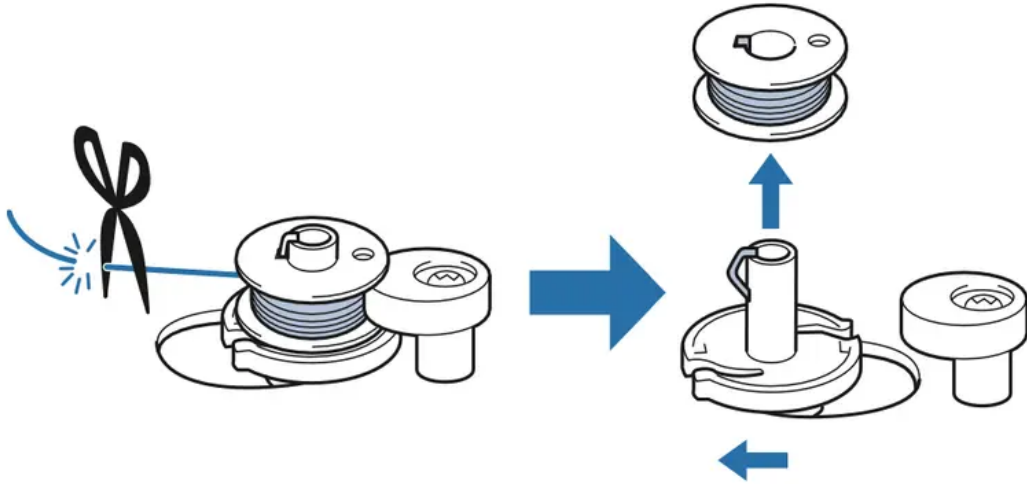
Note:

If the sewing machine is to be operated using the foot controller, connect the foot controller before turning on the machine.

When the foot controller is plugged in, the start/stop button cannot be used to start sewing.

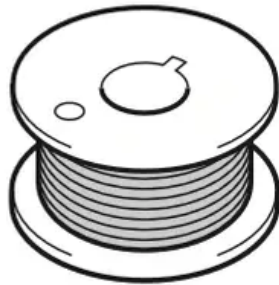
9. When the bobbin begins spinning slowly, take your foot off the foot controller or press  (start/stop button).

10. Cut the thread, slide the bobbin winder shaft to the left, and then remove the bobbin from the shaft.

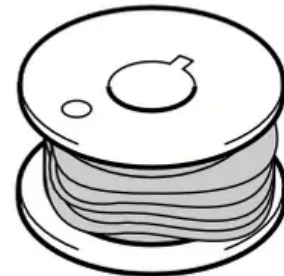


11. Slide the sewing speed controller back to its original position.

CAUTION: Not winding the bobbin properly may cause the thread tension to loosen, and may break the needle.



①



②

① Wound evenly

② Wound poorly

Memo:

- When the sewing machine is started or the handwheel is turned after winding the thread around the bobbin, the machine will make a clicking sound; this is not a malfunction.
- The needle bar does not move when you slide the bobbin winding shaft to the right.

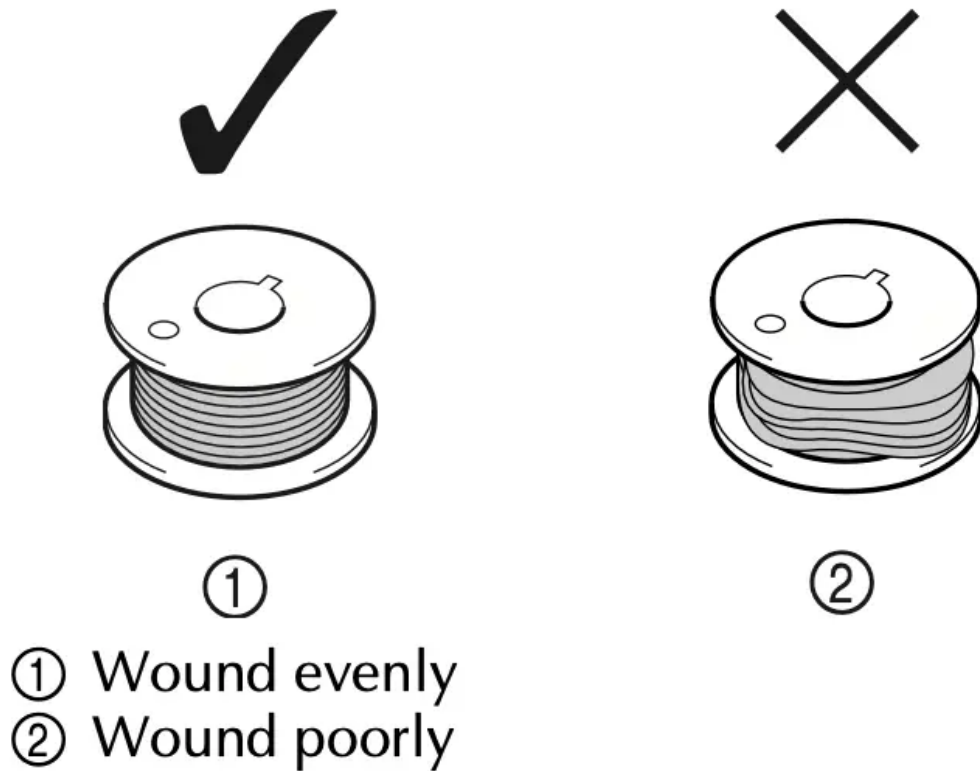
Lower threading

Install the bobbin wound with thread.

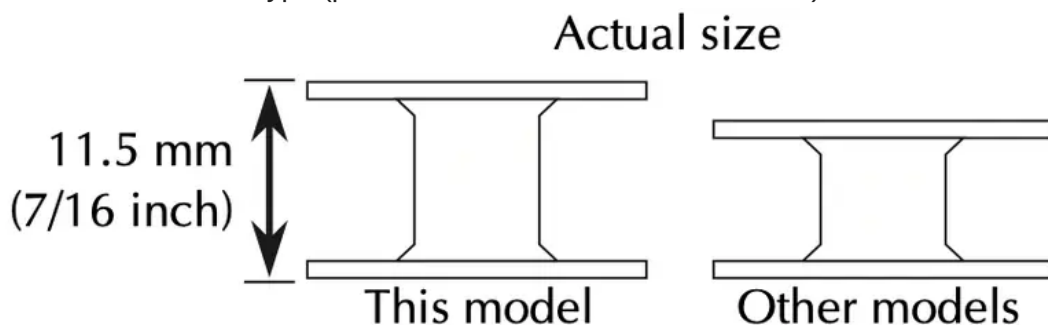
- For more details on quick-set bobbin, see page 23.

CAUTION

- Winding the bobbin improperly may cause the thread tension to loosen, breaking the needle and resulting in injury.

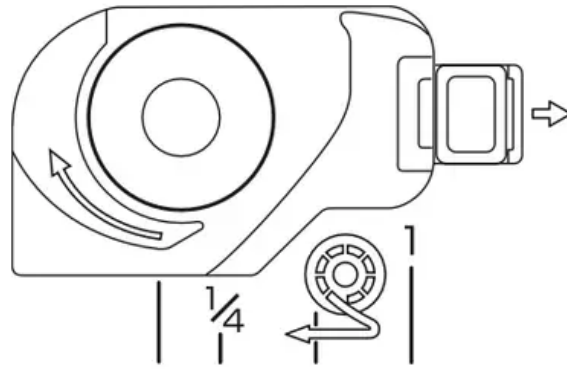



- The bobbin was designed specifically for this sewing machine. If bobbins from other models are used, the machine will not operate correctly. Use only the enclosed bobbin or bobbins of the same type (part code: SA156, SFB: XA5539-151).



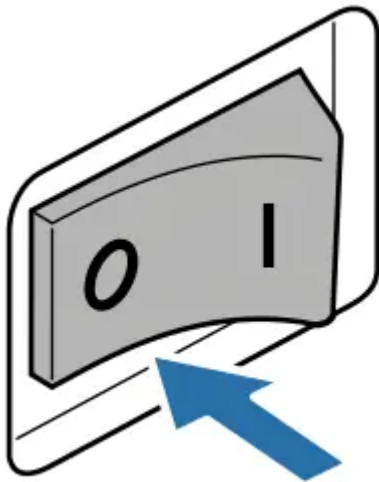
CAUTION: Make sure you turn the power off while threading the machine. If you accidentally step on the foot controller and the machine starts to sew, you could be injured.

Memo: The direction for feeding the bobbin thread is indicated by marks on the needle plate cover. Be sure to thread the machine as indicated.

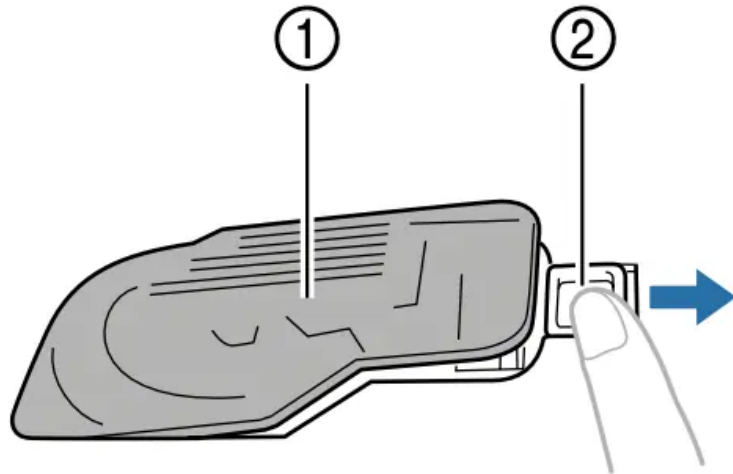


1. Raise the needle to its highest position by turning the handwheel toward you (counterclockwise) or press  (needle position button), and raise the presser foot lever.

2. Turn off the sewing machine.



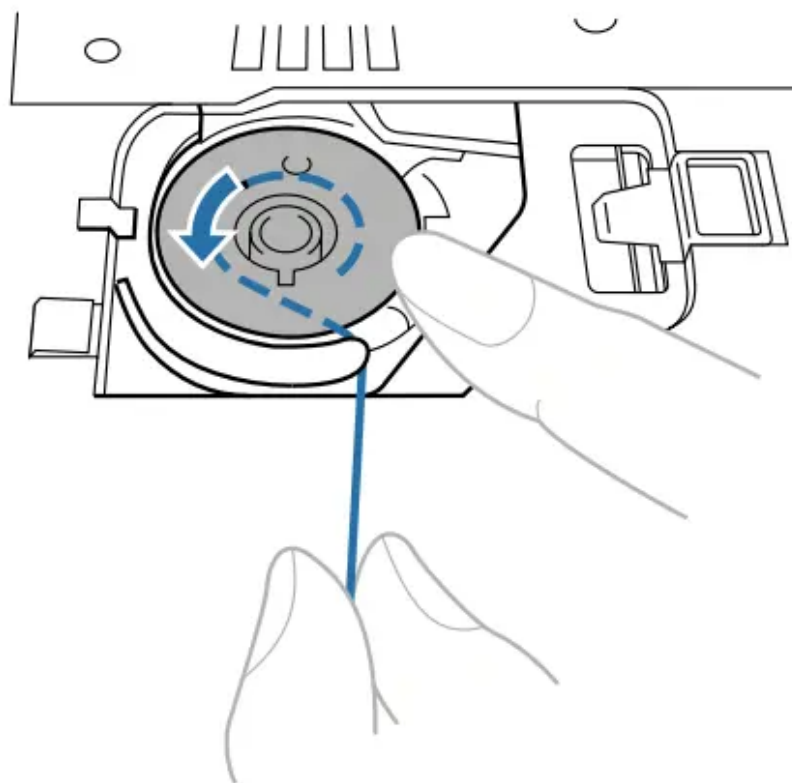
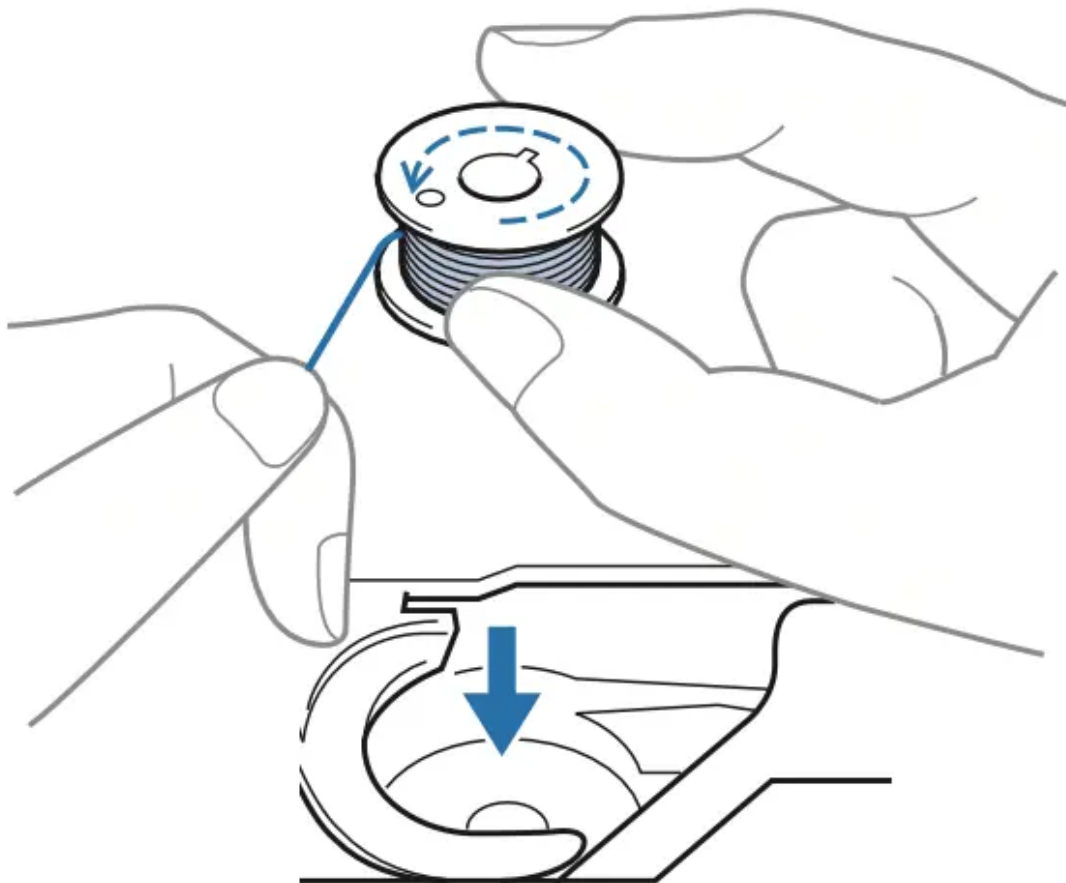
3. Slide the button and open the cover.



- ① Cover
- ② Slide button



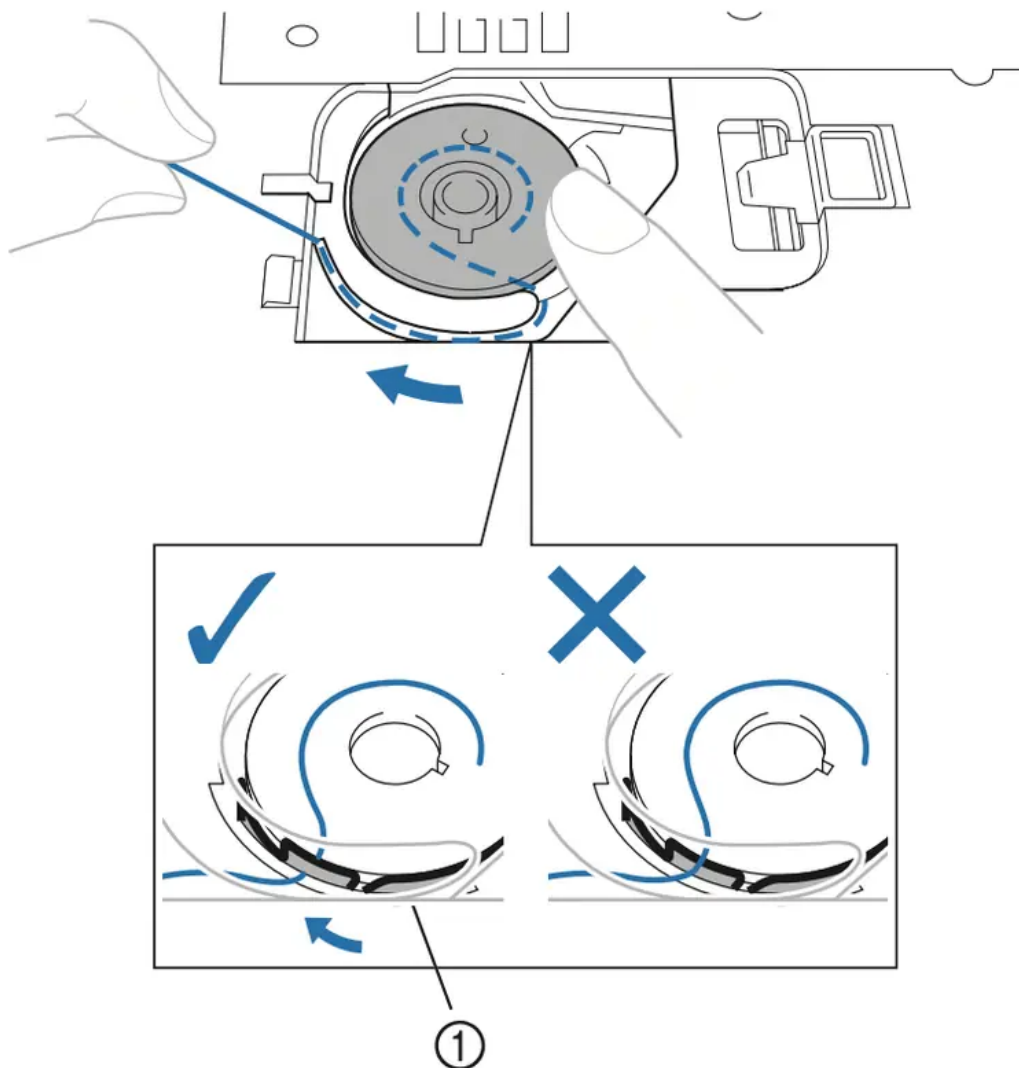
4. Put the bobbin in so the thread comes out in the direction shown by the arrow.



CAUTION: Make sure you set the bobbin so the thread unrolls in the right direction. If the thread unrolls in the wrong direction, it may cause the thread tension to be incorrect or break the needle.

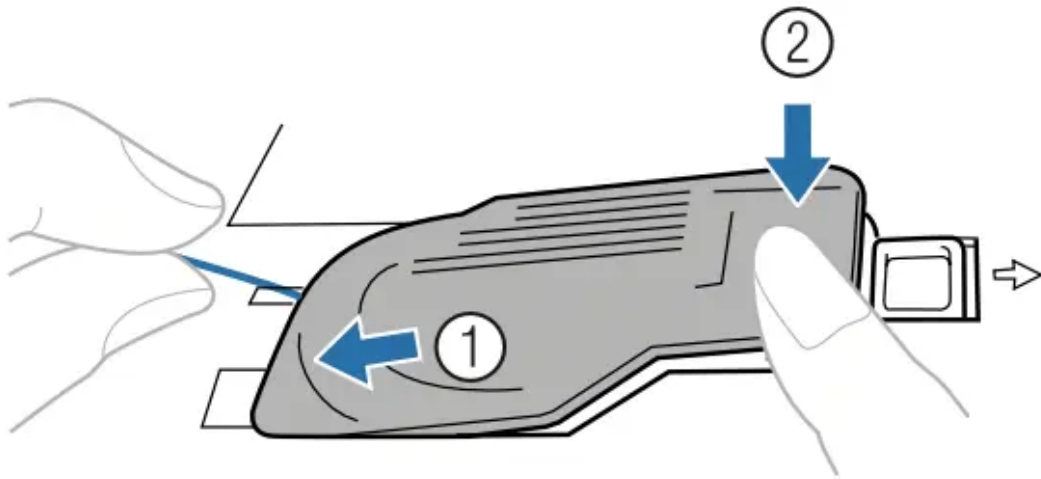
5. **Hold the end of the thread, push the bobbin down with your finger, and then pass the thread through the slit, as shown.**

If the thread is not correctly inserted through the tension-adjusting spring of the bobbin case, it may cause incorrect thread tension (page 43).



① Tension-adjusting spring

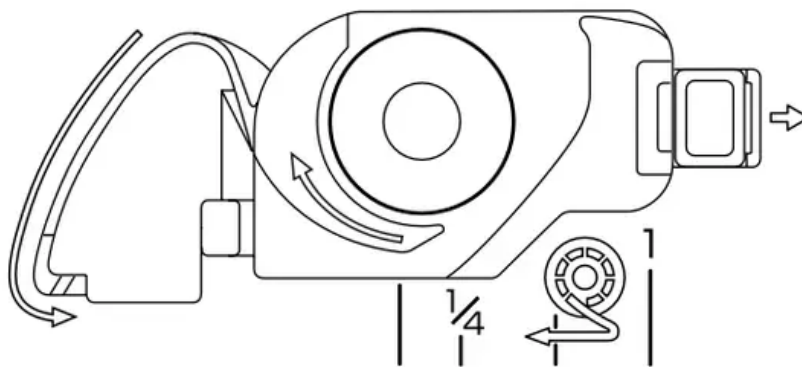
6. **Replace the bobbin cover. Put the left tab in place (see arrow 1), and then press lightly on the right side (see arrow 2) until the cover clicks into place.**




Replace the cover so that the end of the thread comes out from the left side of the cover (as shown by the line in the diagram).

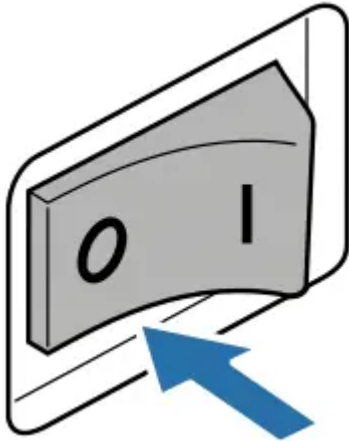
Lower threading with the quick-set bobbin

Memo: The direction for feeding the bobbin thread is indicated by marks on the needle plate cover. Be sure to thread the machine as indicated.

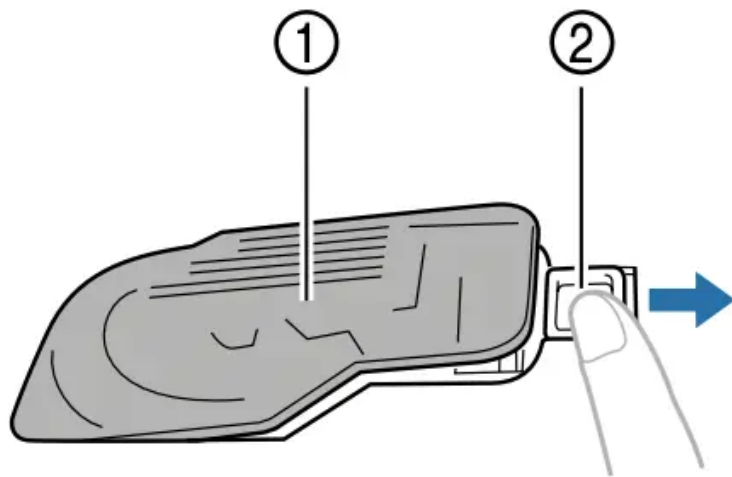


1. Raise the needle to its highest position by turning the handwheel toward you (counterclockwise) or press  (needle position button), and raise the presser foot lever.

2. Turn off the sewing machine.

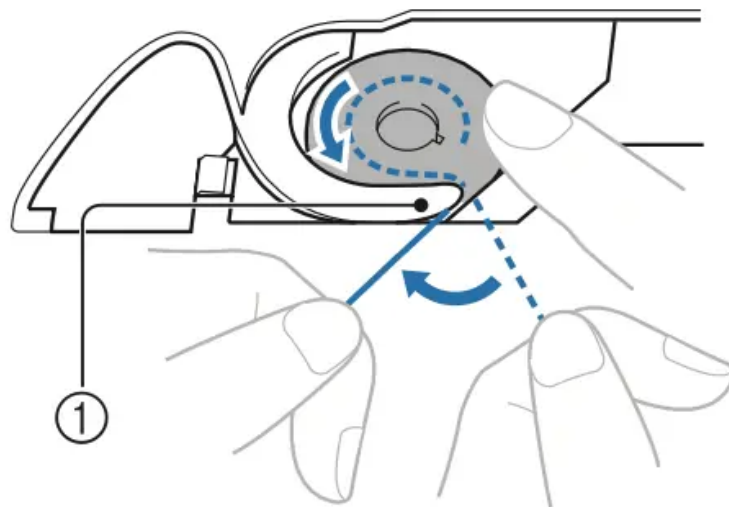
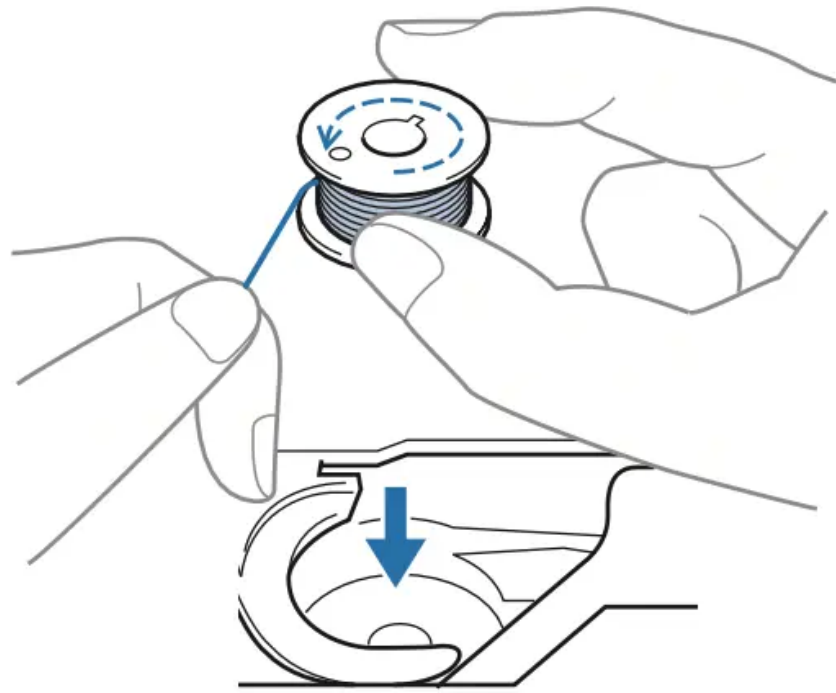


3. Slide the button and open the cover.



- ① Cover
- ② Slide button

4. Insert the bobbin with your right hand so that the end of the thread is on the left, and then, after pulling the thread firmly around the tab with your left hand as shown, lightly pull the thread to guide it through the slit.



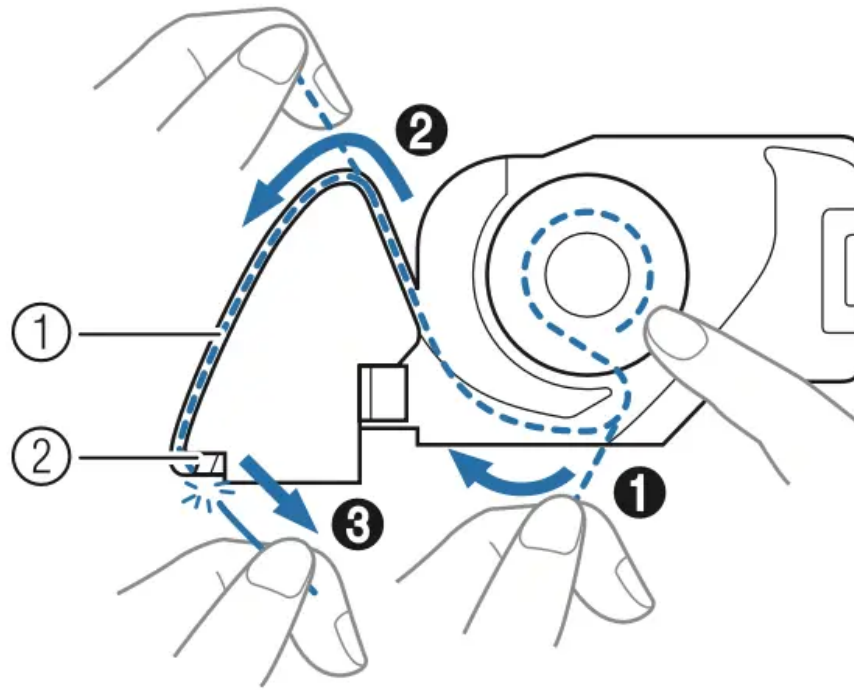
① Tab

CAUTION: Make sure you set the bobbin so the thread unrolls in the right direction. If the thread unrolls in the wrong direction, it may cause the thread tension to be incorrect or break the needle.

5. **While lightly holding down the bobbin with your right hand as shown, guide the thread through the slit (1 and 2).**

At this time, check that the bobbin easily rotates counterclockwise.

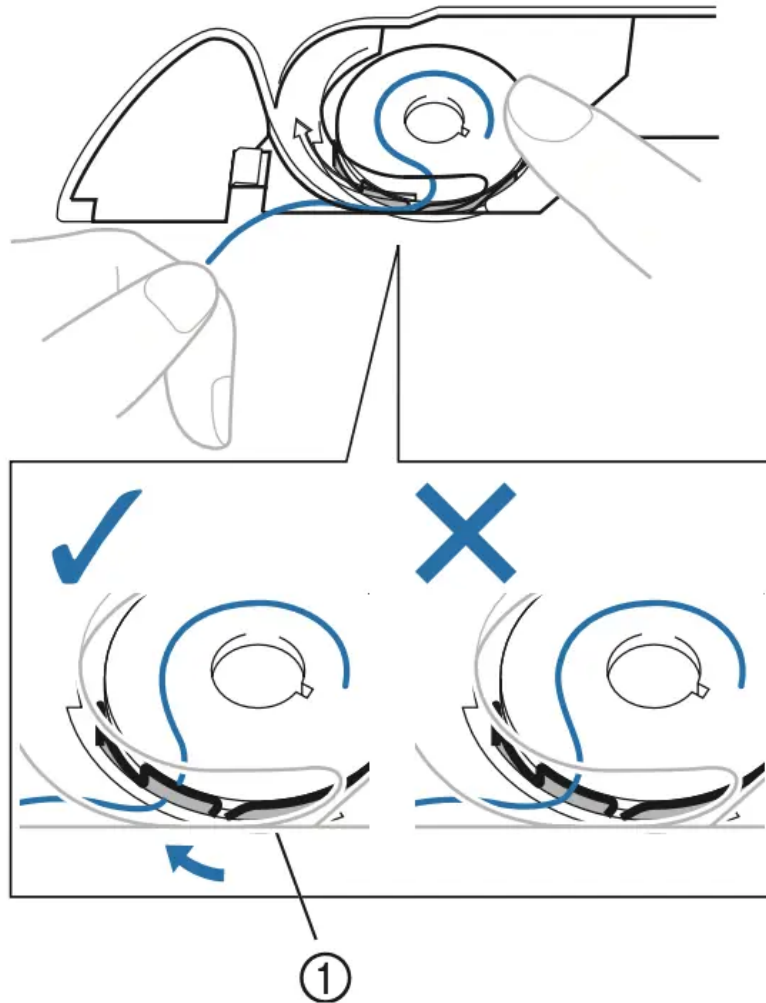
Then, pull the thread toward you to cut it with the cutter (3).



- ① Slit
- ② Cutter (Cut the thread with the cutter.)

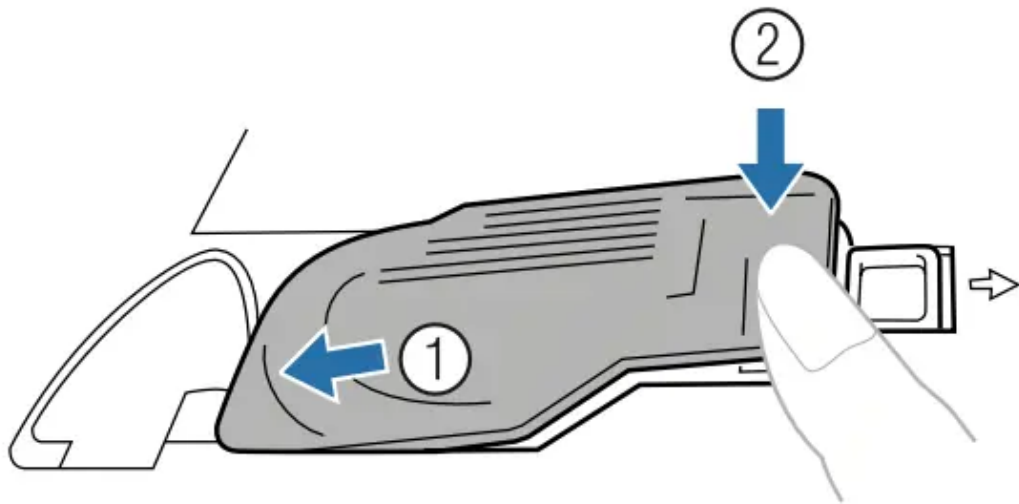
Note: If the thread is not correctly inserted through the tension-adjusting spring of the

bobbin case, it may cause incorrect thread tension (page 43).



① Tension-adjusting spring

6. Replace the bobbin cover. Put the left tab in place (see arrow 1), and then press lightly on the right side (see arrow 2) until the cover clicks into place.

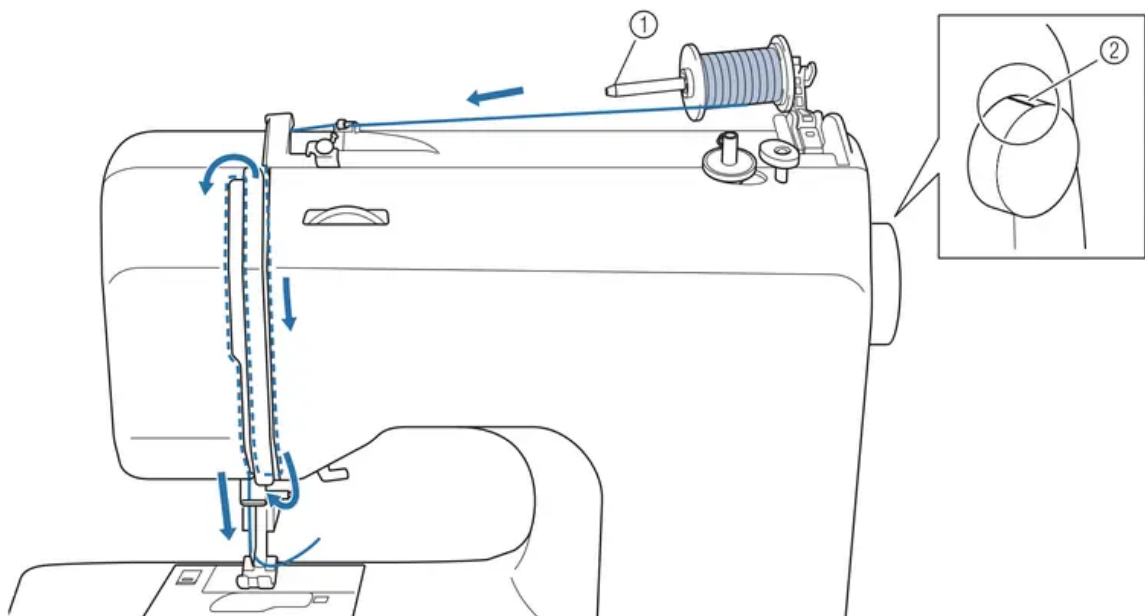


Memo: You can begin sewing immediately without drawing up the bobbin thread. If you want to draw up the bobbin thread before you start to sew, follow to the procedure in “Drawing up the lower thread” (page 30).

Upper threading

Set the upper thread and thread the needle.

- For details on the needle threader, see page 28.



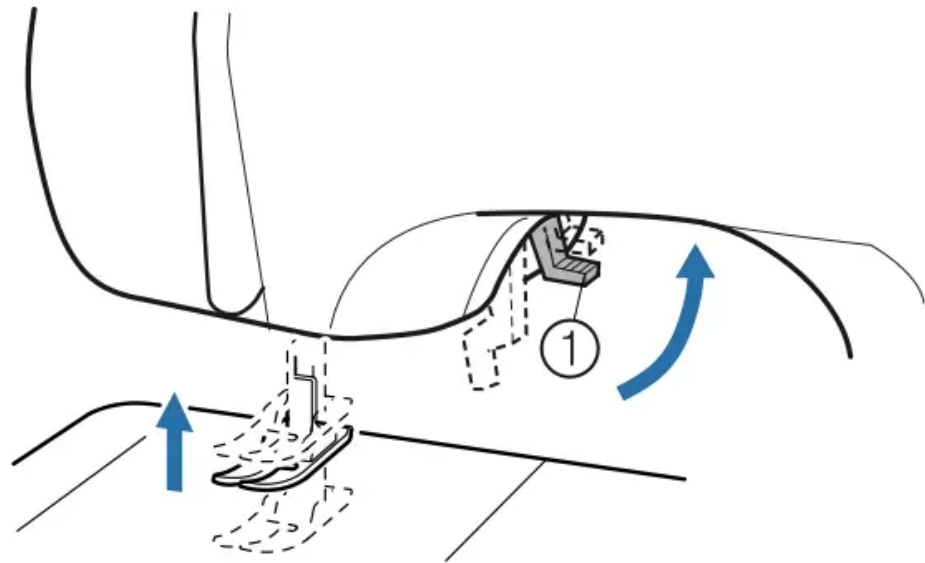
1. Spool pin

2. Mark on the handwheel

CAUTION


- When threading the upper thread, carefully follow the instructions. If the upper threading is not correct, the thread may become tangled or the needle may bend or break.
- Never use a thread weight of 20 or lower.
- Use the needle and the thread in the correct combination. For details on the correct combination of needles and threads, refer to “Needle types and their uses” (page 31).

1. Turn on the sewing machine.
2. Raise the presser foot using the presser foot lever.

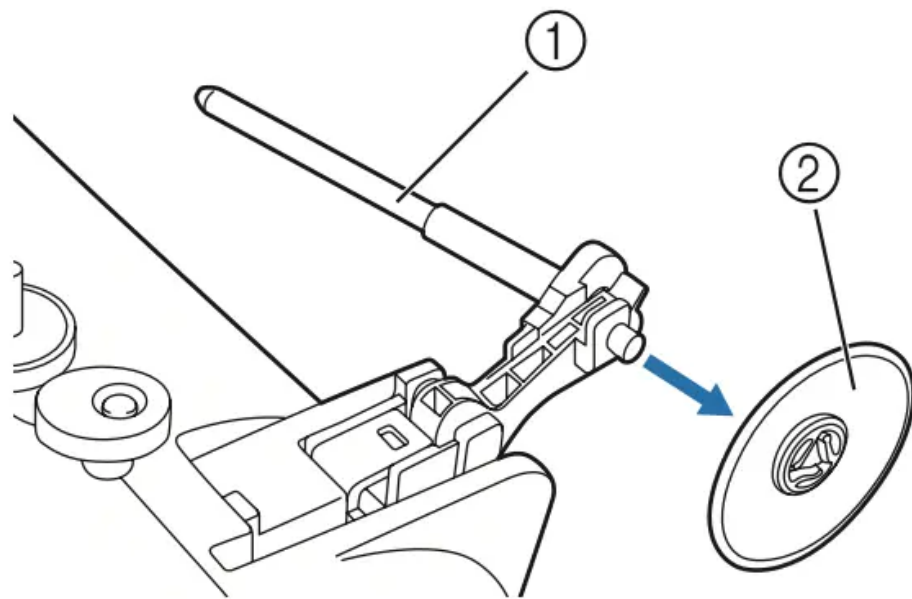


① Presser foot lever

CAUTION: If the presser foot is not raised, the sewing machine cannot be threaded correctly.

3. Raise the needle by turning the handwheel toward you (counterclockwise) so that the mark on the wheel points up, or press  (needle position button) once or twice to raise the needle.

5. Remove the spool cap.



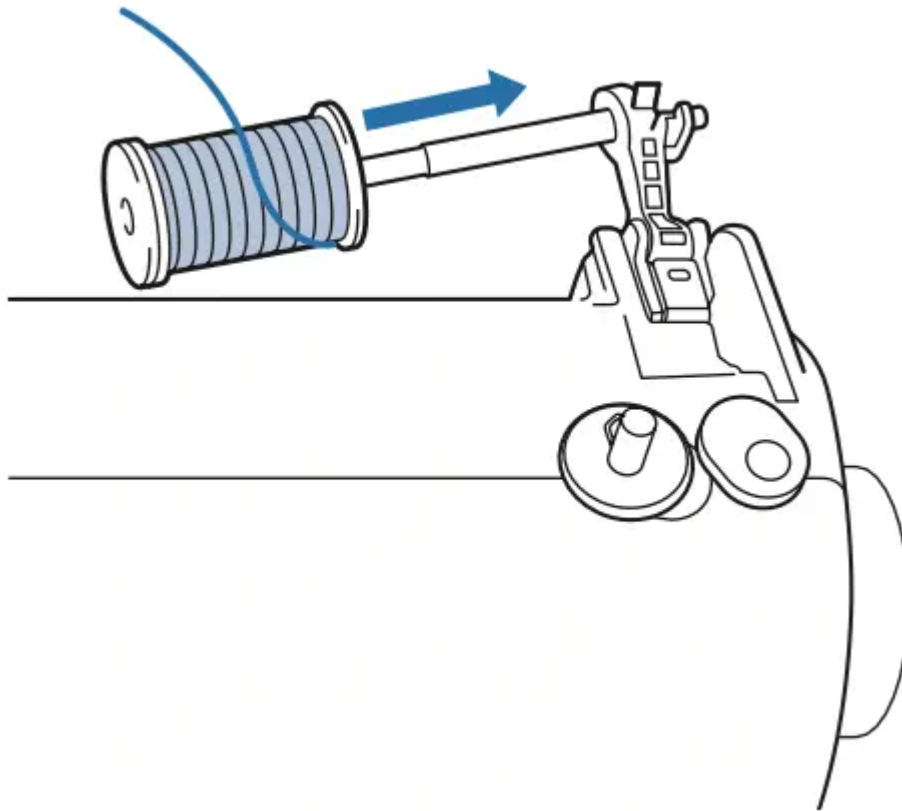
- ① Spool pin
- ② Spool cap

CAUTION: Be sure to raise the spool pin before use. If the spool of thread is in the wrong place, or is set incorrectly, the thread may tangle on the spool pin and cause the needle to break.

6. Fully insert the spool for the upper thread onto the spool pin.

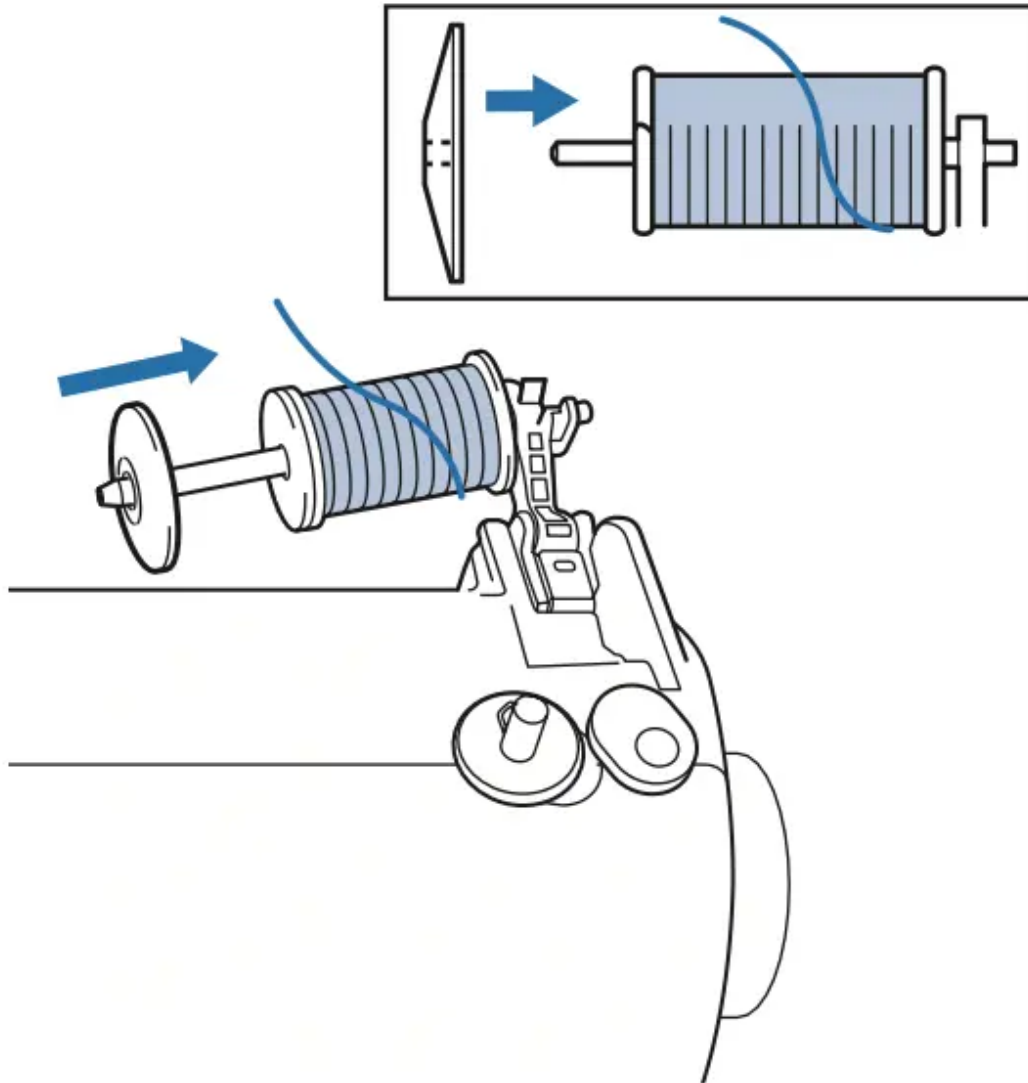
Slide the spool onto the pin so that the spool is horizontal and the thread unwinds to the

front at the bottom.



7. Slide the spool cap onto the spool pin.

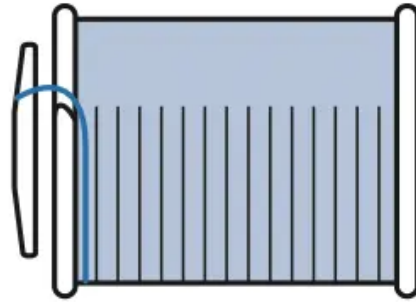
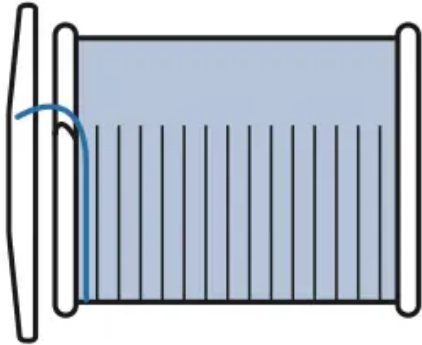
With the slightly rounded side of the spool cap positioned toward the left, slide the spool cap onto the spool pin as far as possible to the right so that the spool is moved to the right end of the spool pin.



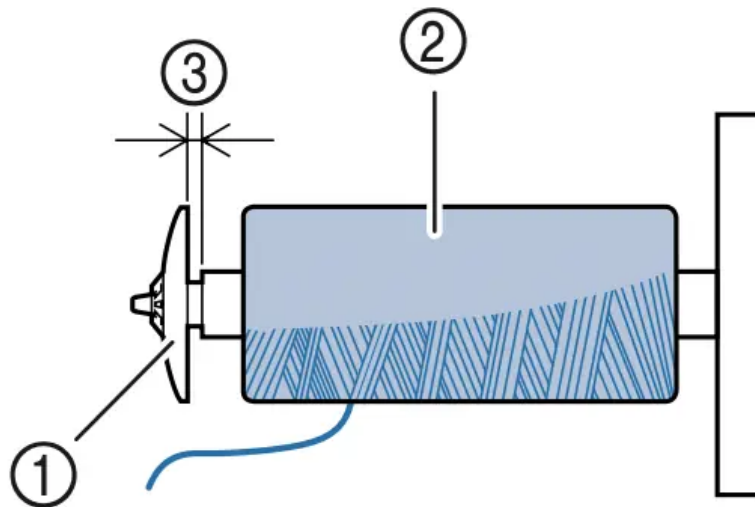
CAUTION

If the spool or the spool cap is not positioned correctly, the thread may become tangled around the spool pin or the needle may break.

Three spool cap sizes are available, allowing you to choose a spool cap that best fits the size of spool being used. If the spool cap is too small for the spool being used, the thread may catch on the slit in the spool or the needle may break.

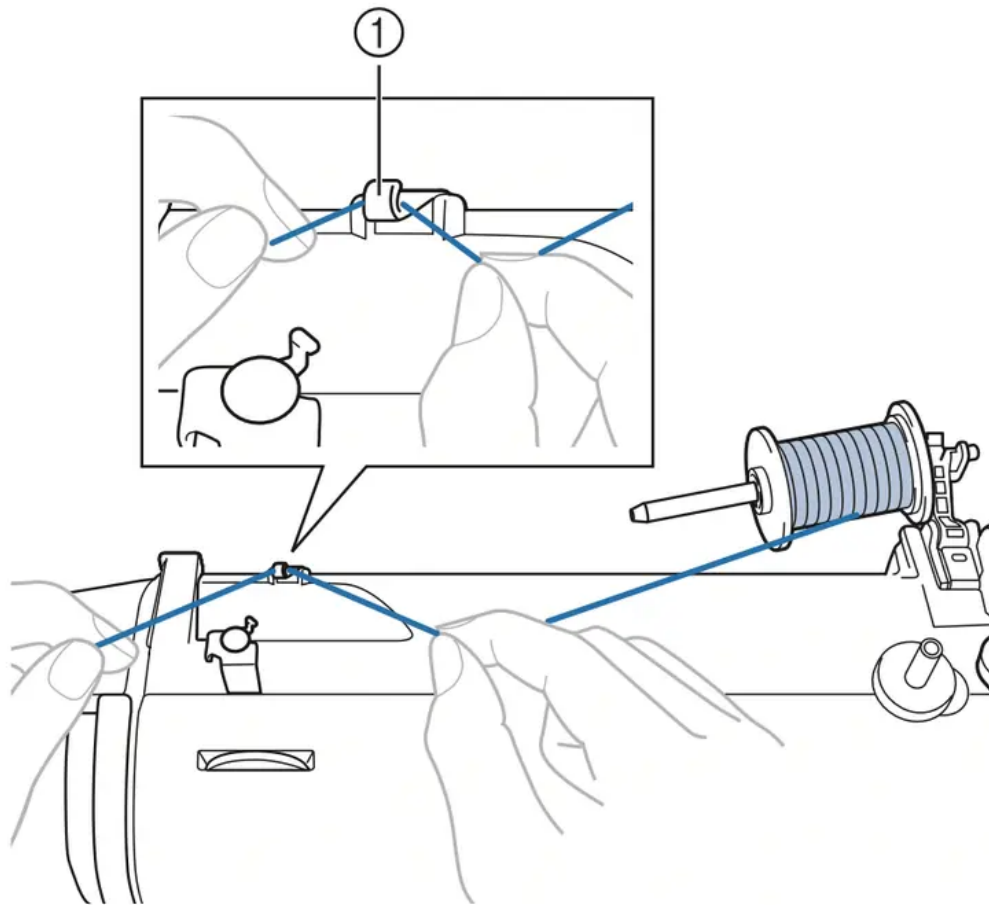


Memo: When sewing with fine, cross-wound thread, use the small spool cap, and leave a small space between the cap and the spool.



- ① Spool cap (small)
- ② Spool (cross-wound thread)
- ③ Space

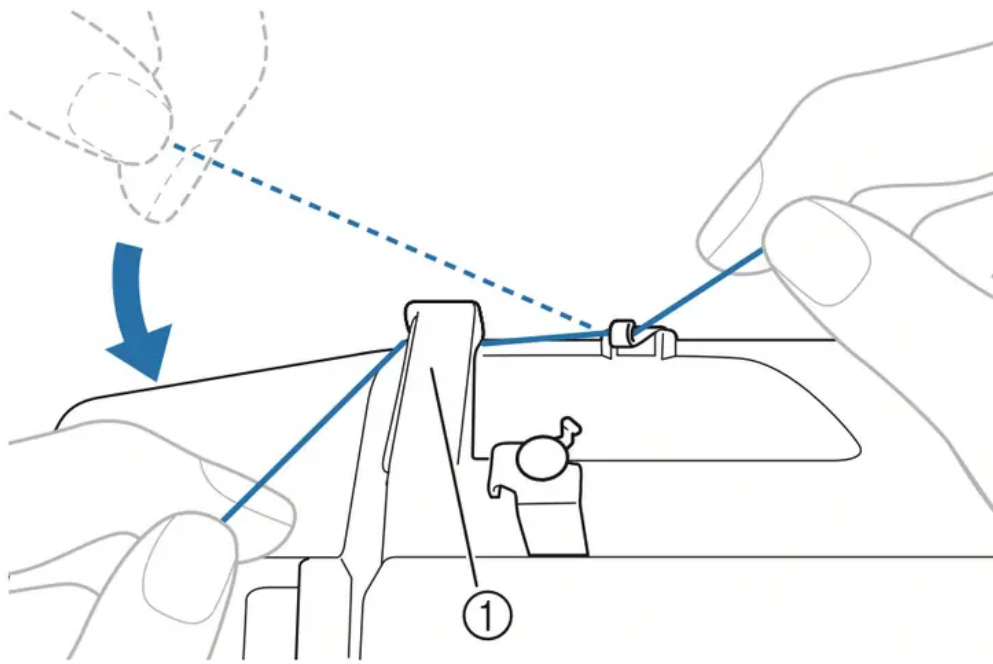
8. While holding the spool with your right hand, and then pass the thread under the thread guide.



① Thread guide

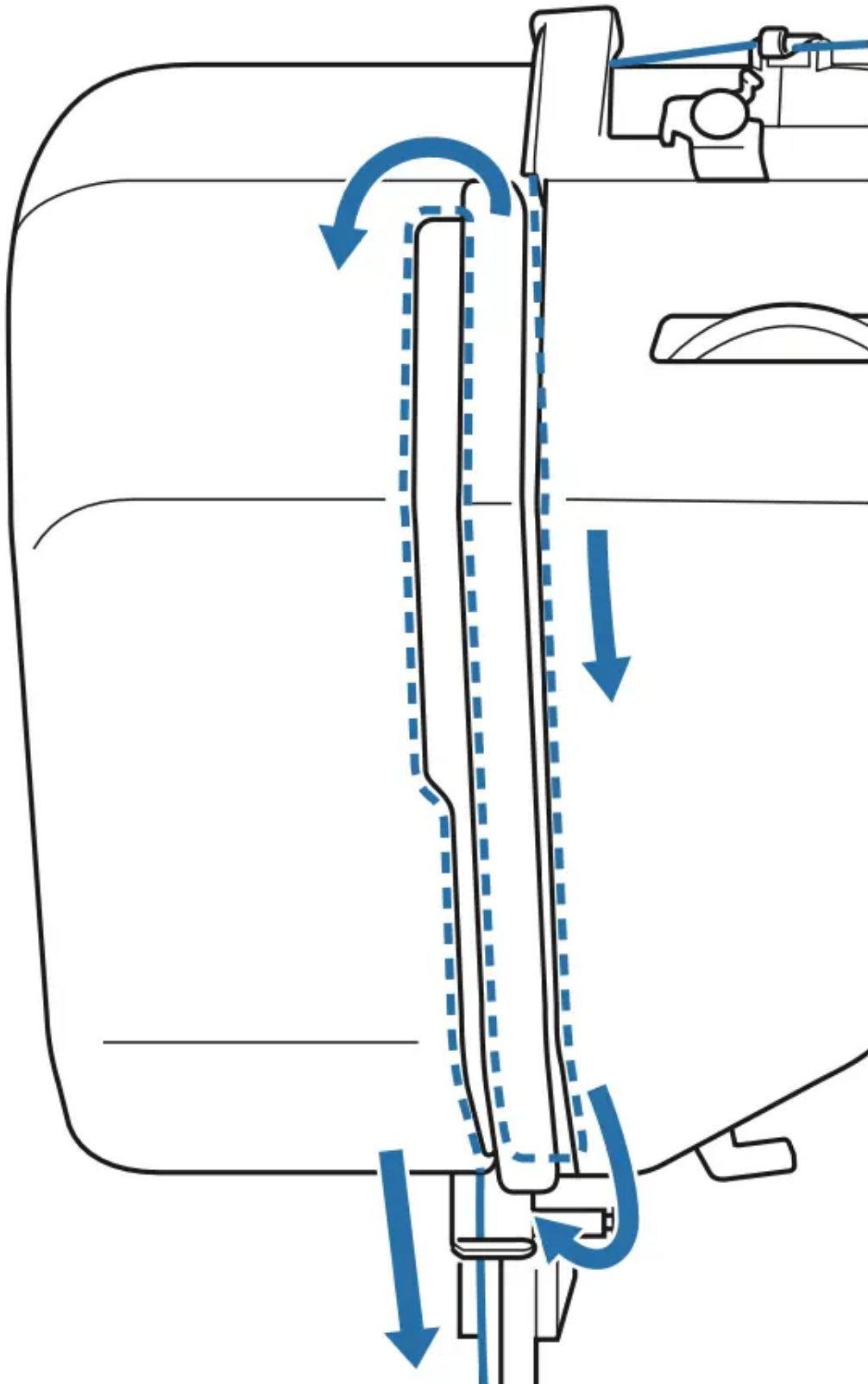
9. Pass the thread under the thread guide cover from the back to the front. Hold the thread with your right hand so that there is no slack in the thread that is pulled out, and then pass the thread under the thread guide cover with your left

hand.

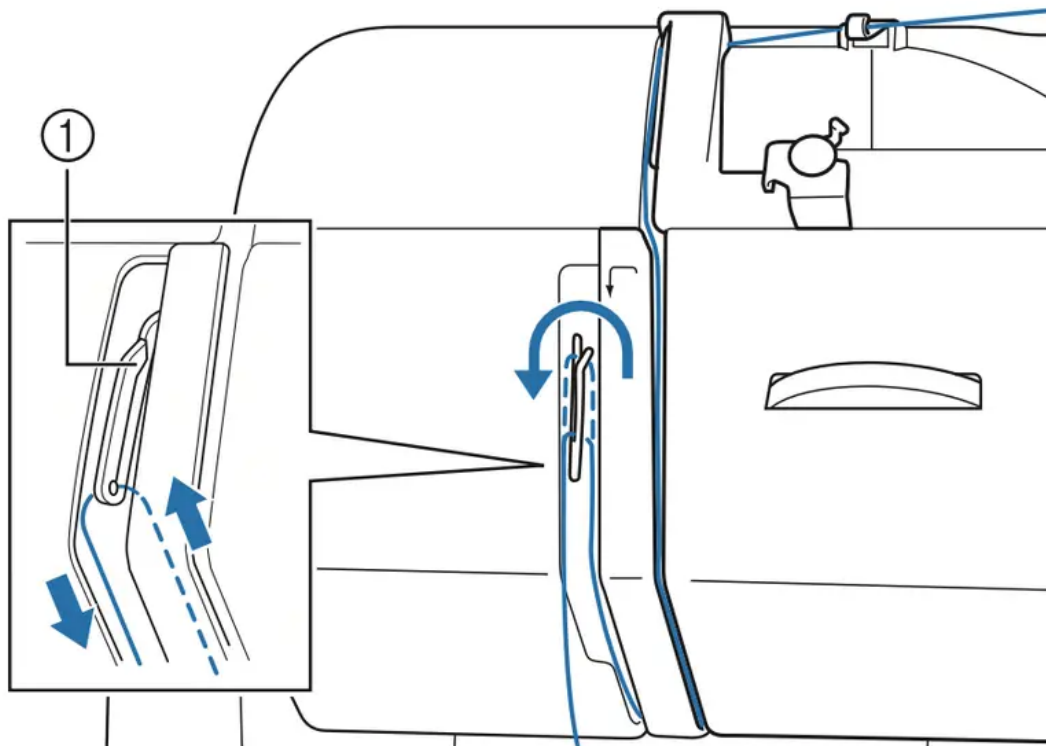


① Thread guide cover

10. Feed the upper thread as shown in the illustration below.



11. Make sure you guide the thread through the thread take-up lever from right to left as shown in the illustration below.



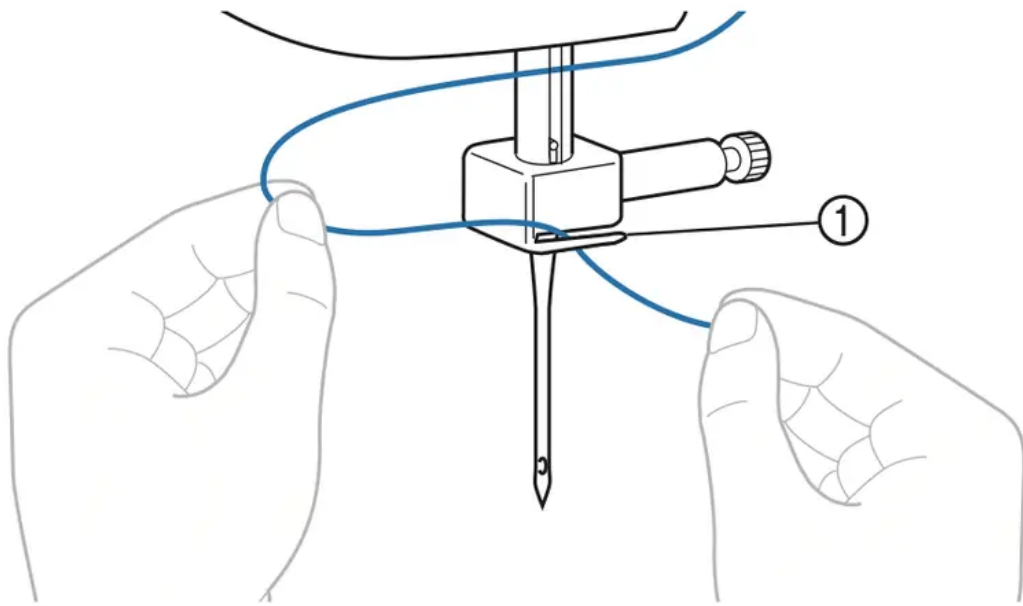
① Thread take-up lever

Memo: If the needle is not raised, the thread take-up lever cannot be threaded. Be sure to press the needle position button to raise the needle before threading the thread take-up lever.

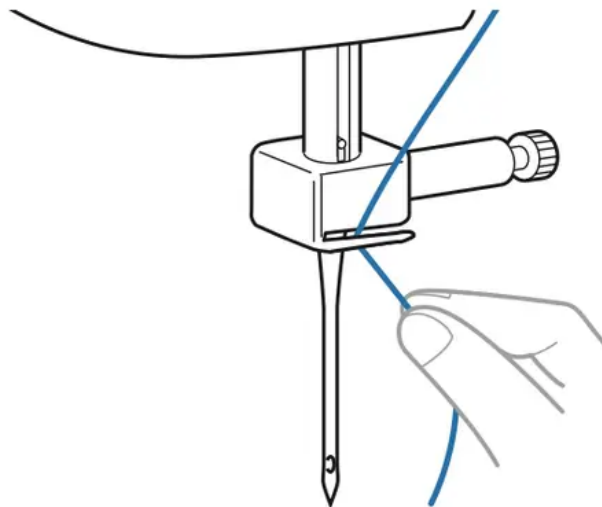
12. Put the thread behind the needle bar thread guide above the needle.

The thread can easily be passed behind the needle bar thread guide by holding the

thread in your left hand, then feeding the thread with your right hand.



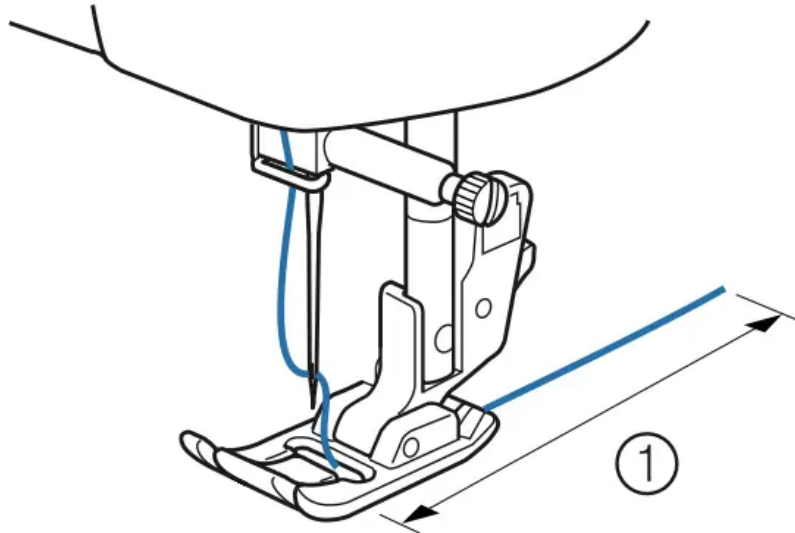
① Needle bar thread guide



13. Turn off the sewing machine.

CAUTION: Make sure you turn the power off while threading the machine without using the needle threader. If you accidentally step on the foot controller and the machine starts to sew, you could be injured.

14. Thread the needle from front to back and pull out about 5 cm (2 inches) of thread.



① 5 cm (2 inches)

Note

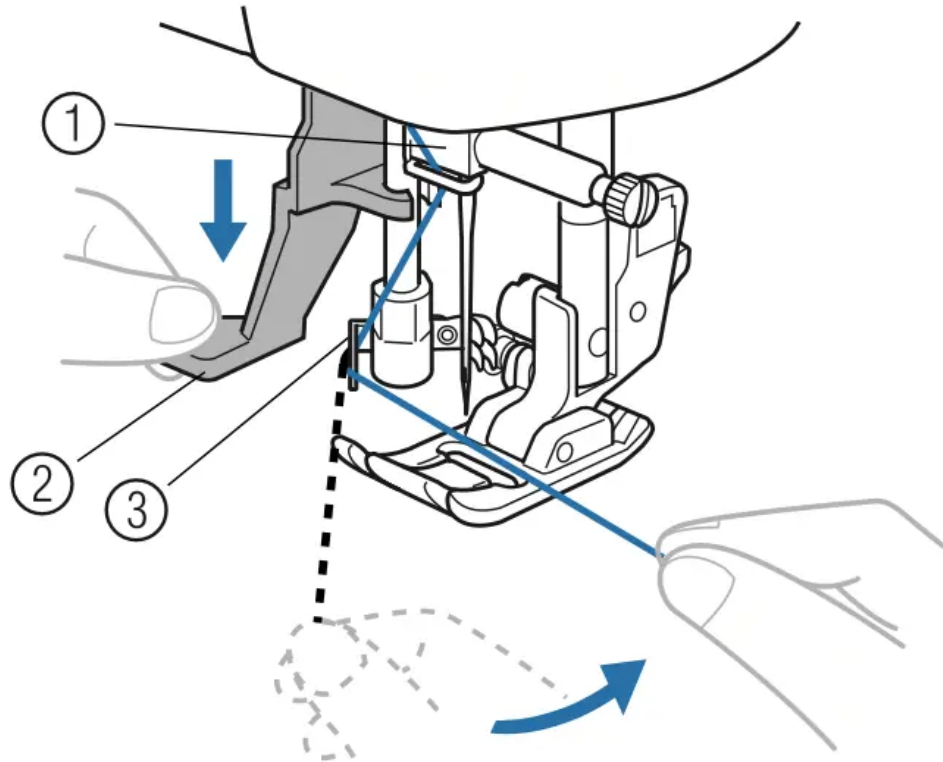
- If the thread take-up lever is lowered, the upper thread cannot be wrapped around the thread take-up lever. Make sure you raise the presser foot lever and the thread take-up lever before you feed the upper thread.
- If you incorrectly feed the thread you may cause sewing problems.

Using the needle threader

CAUTION

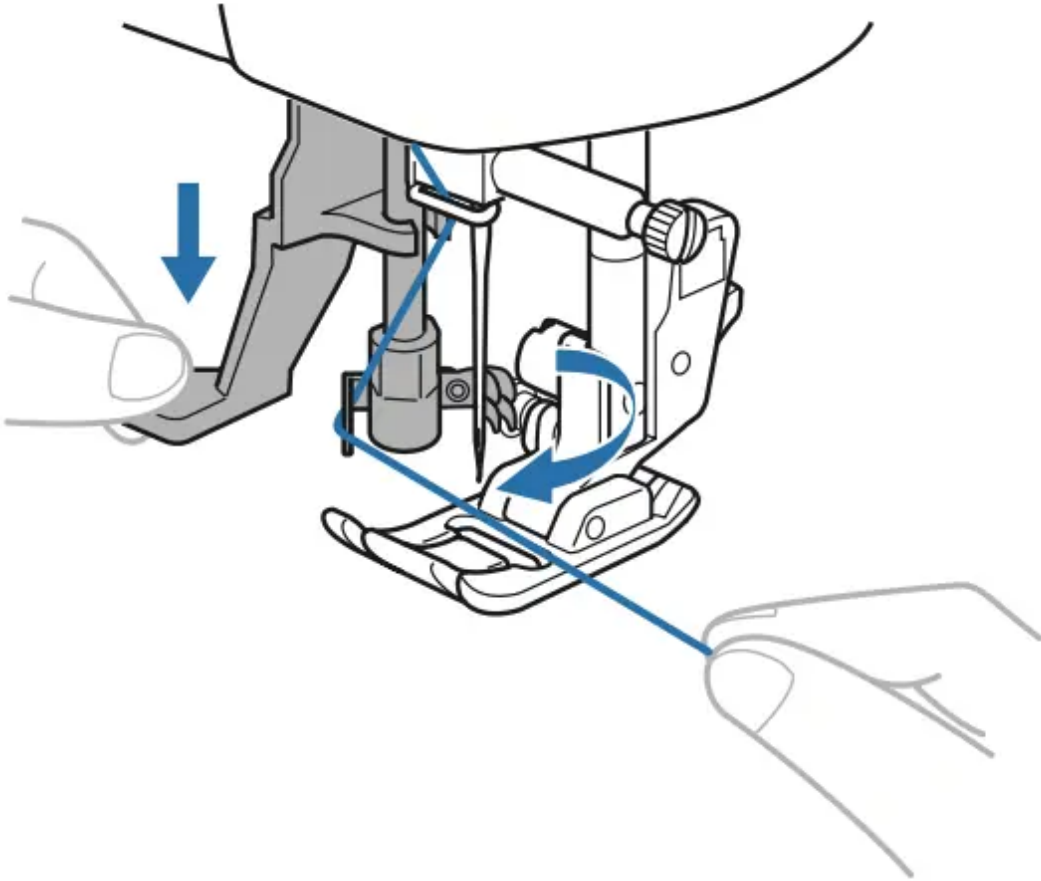
- The needle threader can be used with a 75/11 through 100/16 home sewing machine needle. However, the needle threader cannot be used with a 65/9 home sewing machine needle. When using special thread such as transparent nylon thread or metallic thread, the needle threader cannot be used.
 - Thread with a thickness of 130/120 or thicker cannot be used with the needle threader.
 - The needle threader cannot be used with the wing needle or the twin needle.
 - If the needle threader cannot be used, refer to “Upper threading” (page 25).
1. Follow steps 1 through 13 of the procedure in “Upper threading” to thread the machine to the needle bar thread guide.
 2. Lower the presser foot lever.

3. While lowering the needle threader lever, hook the thread onto the guide.



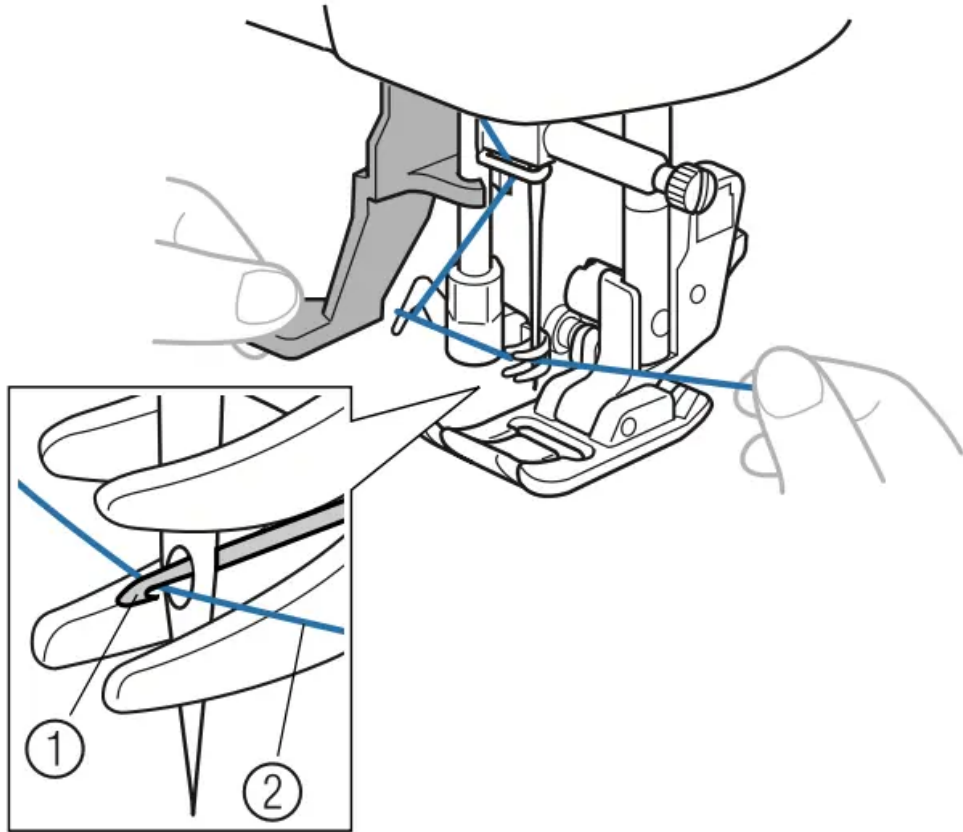
- ① Needle holder
- ② Needle threader lever
- ③ Guide

4. Fully lower the needle threader lever.



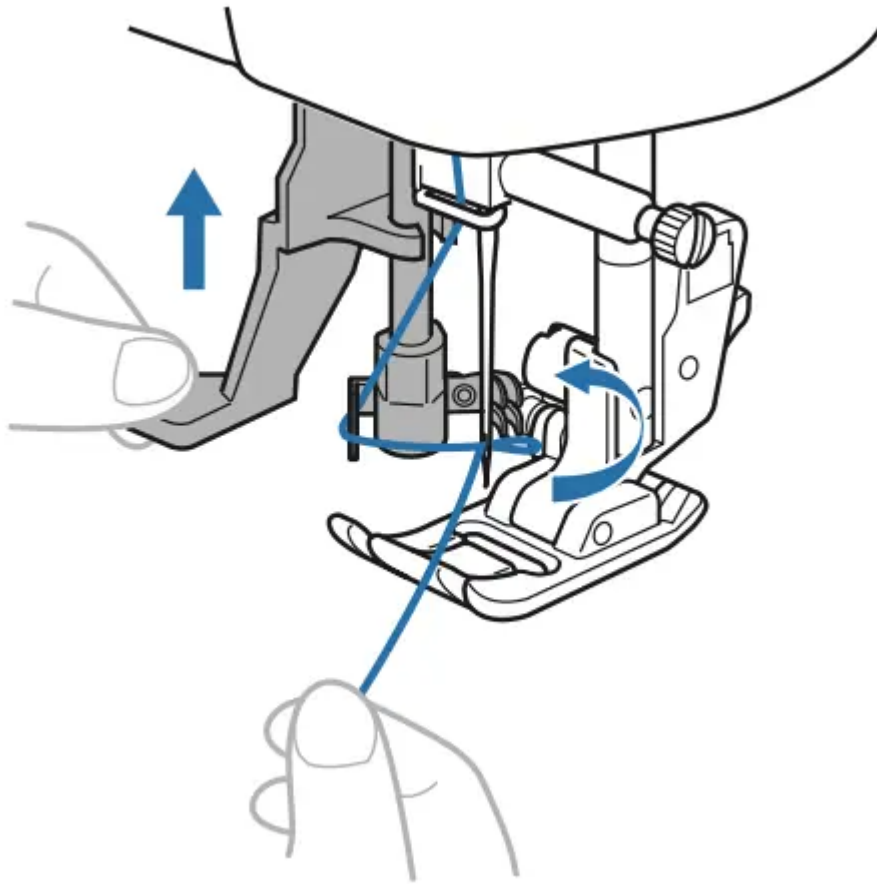
The end of the needle threader rotates toward you and the hook passes through the eye of the needle.

5. Catch the thread on the hook as shown below.

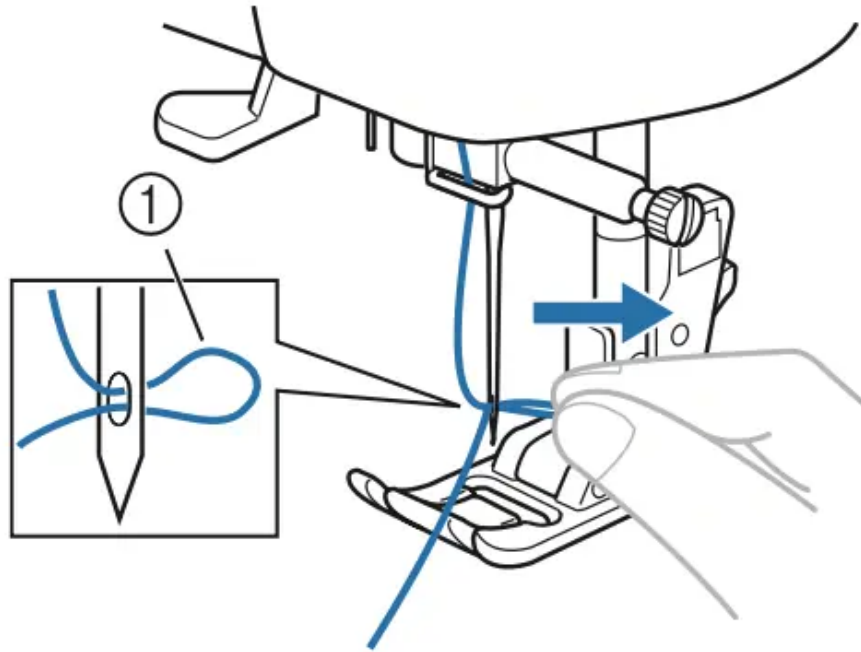


- ① Hook
- ② Thread

6. While lightly holding the thread, release the needle threader lever. The hook will pull the thread through the needle.



7. Pull the loop of the thread passed through the eye of the needle toward the rear of the machine.



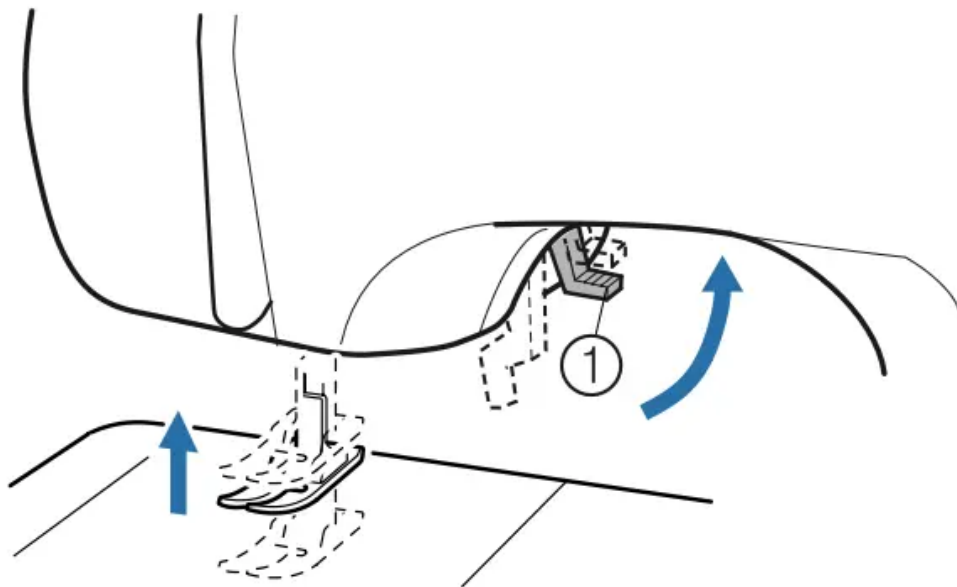
① Loop of thread

CAUTION

Be careful not to pull on the thread with force or it may bend the needle.

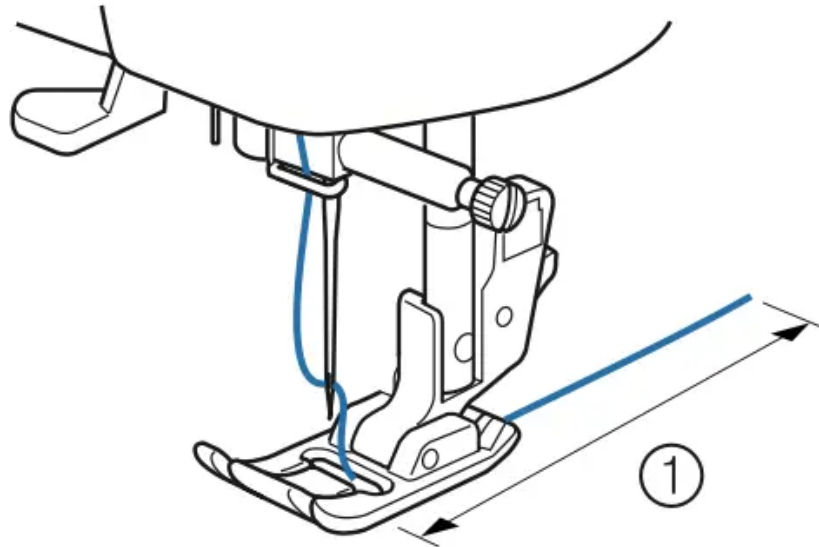
If the thread does not pass through the eye of the needle, start from step 3 again.

8. Raise the presser foot lever.



① Presser foot lever

9. Pass the end of the thread through the presser foot, and then pull out about 5 cm (2 inches) of thread toward the rear of the machine.

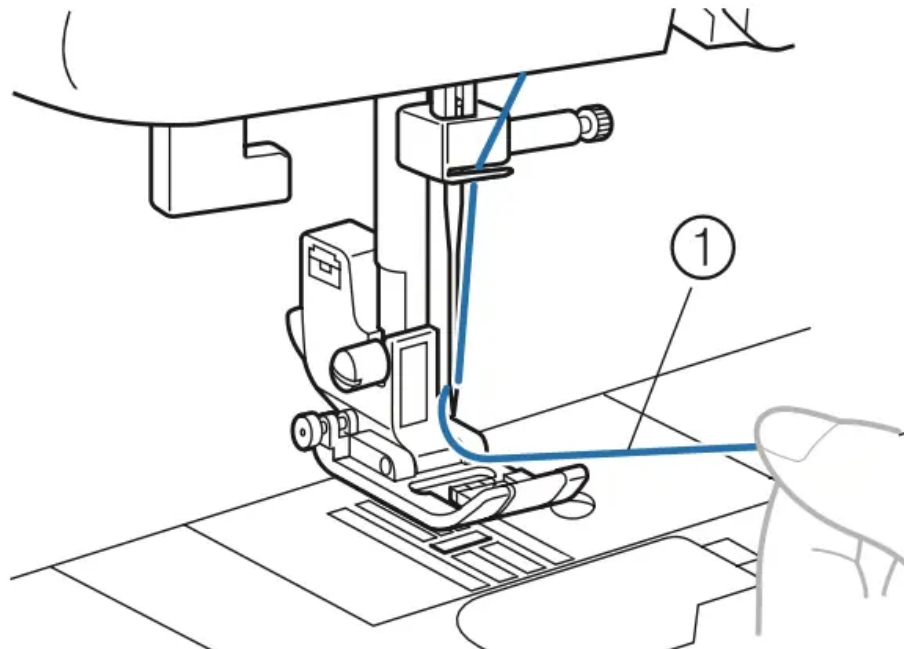


① 5 cm (2 inches)

Note: If you incorrectly feed the thread you may cause sewing problems.

Drawing up the lower thread

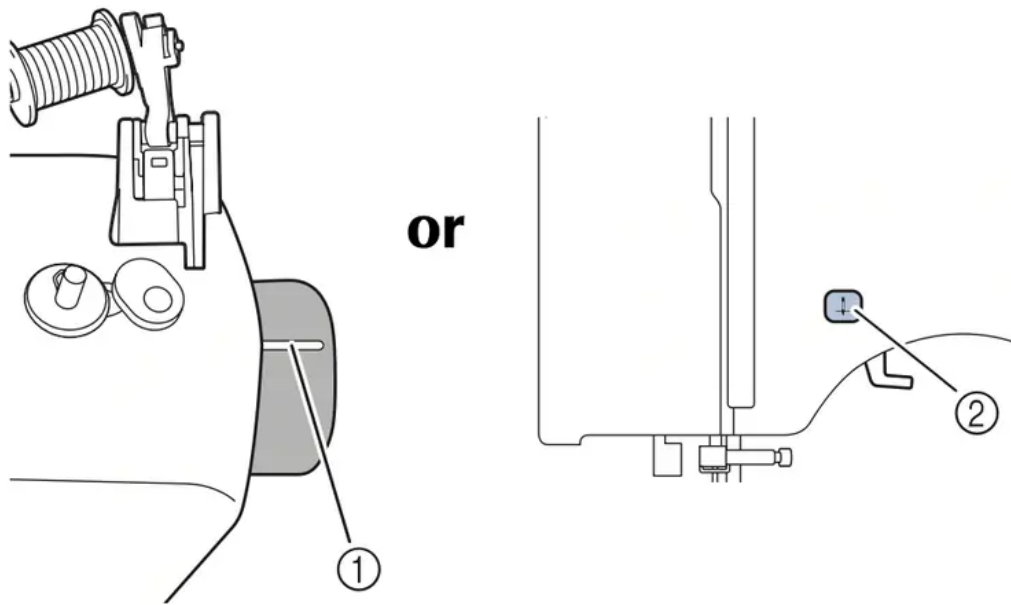
1. Lightly hold the end of the upper thread.



① Upper thread

2. While holding the end of the upper thread, raise the needle either by turning the handwheel toward you (counterclockwise) so that the mark on the wheel points up

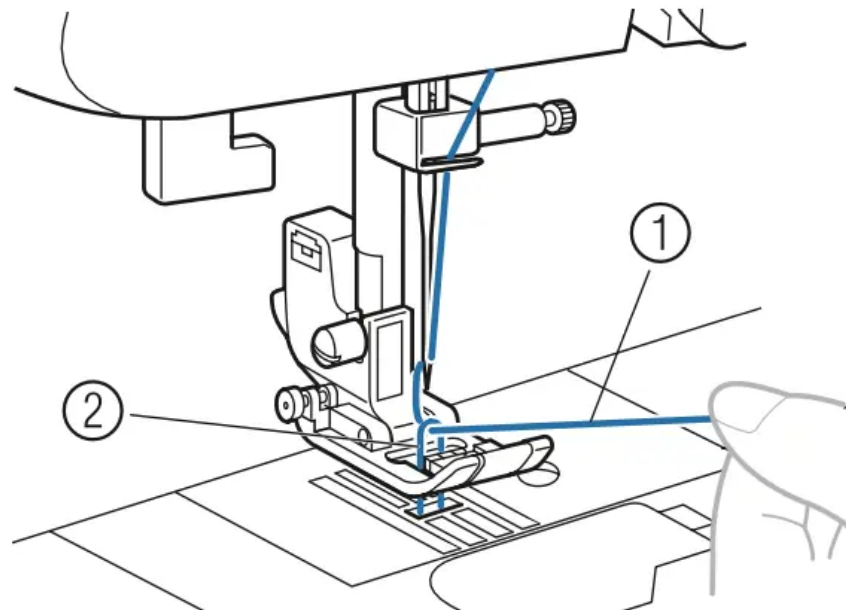
or by pressing  (needle position button) once or twice.



① Mark

② Needle position button

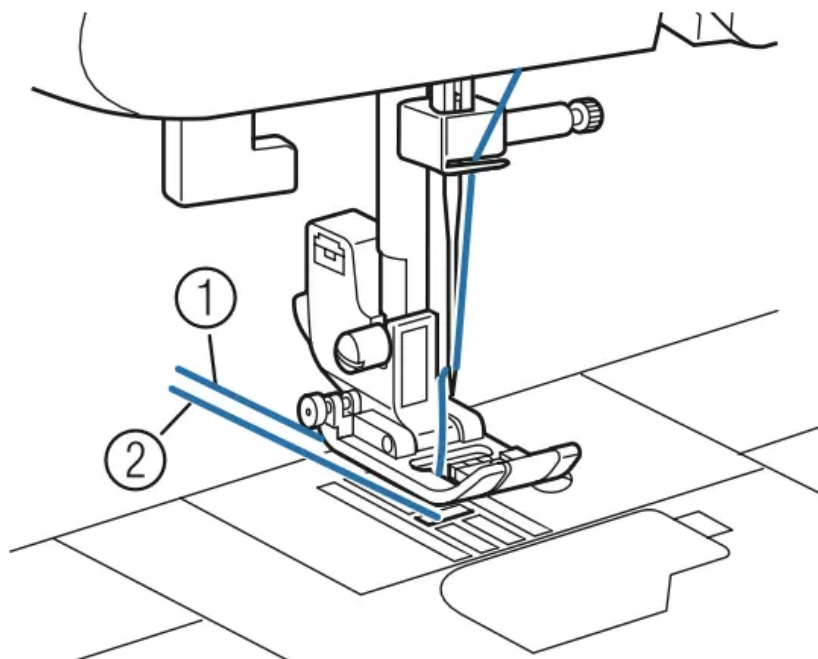
3. Pull on the upper thread to draw up the lower thread.



① Upper thread

② Lower thread

4. Pull out about 10 cm (4 inches) of both threads and pull them toward the back of the machine under the presser foot.

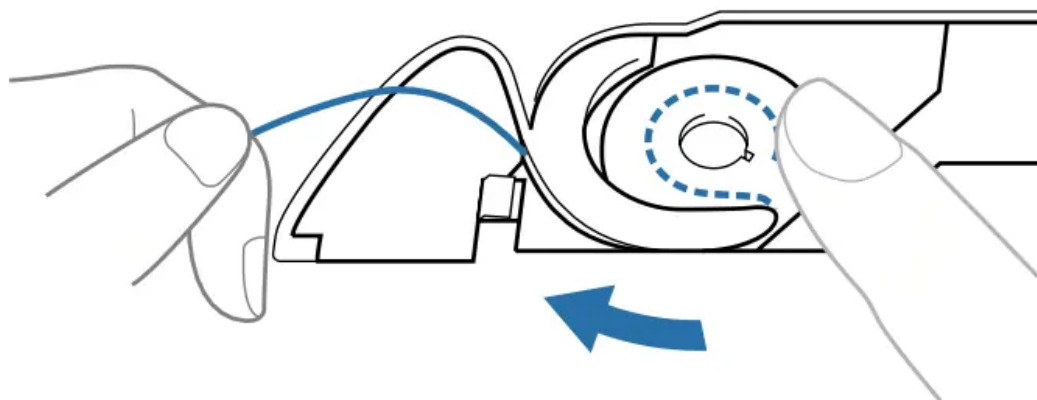


- ① Upper thread
- ② Lower thread

Drawing up the lower thread with the quick-set bobbin

You can begin sewing immediately without drawing up the bobbin thread. When sewing gathers or darts, you can draw up the lower thread by hand so that some thread will be left over. Before you draw up the lower thread, put the bobbin back in.

1. Pass the thread along the slit in the direction of the arrow, and leave it there without cutting it.



The bobbin cover should still be removed.

2. Draw up the lower thread as described in steps 1 to 4.
3. Replace the bobbin cover.

REPLACING THE NEEDLE

This section provides information on sewing machine needles.

Needle precautions

Be sure to observe the following precautions concerning the handling of the needle. Failure to observe these precautions is extremely dangerous. Be sure to read and carefully follow the instructions below.

CAUTION

- Only use home sewing machine needles. Use of any other needle may bend the needle or damage the machine.
- Never use bent needles. Bent needles can easily break, possibly resulting in injury.

Needle types and their uses

The sewing machine needle that should be used depends on the fabric and thread thickness. Refer to the following table when choosing the thread and needle appropriate for the fabric that you wish to sew.

Fabric Type/Application		Thread		Size of Needle
		Type	Size	
Medium weight fabrics	Broadcloth	Cotton thread	60–90	75/11–90/14
	Taffeta	Synthetic thread		
	Flannel, Gabardine	Silk thread	50	
Thin fabrics	Lawn	Cotton thread	60–90	65/9–75/11
	Georgette	Synthetic thread		
	Challis, Satin	Silk thread	50	
Thick fabrics	Denim	Cotton thread	30	100/16
			50	90/14–100/16
	Corduroy	Synthetic thread	50–60	
	Tweed	Silk thread		
Stretch fabrics	Jersey	Thread for knits	50–60	Ball point needle 75/11–90/14 (gold colored)
	Tricot			
Easily frayed fabrics		Cotton thread	50–90	65/9–90/14
		Synthetic thread		
		Silk thread	50	
For top-stitching		Synthetic thread Silk thread	30	100/16
			50–60	75/11–90/14

Note: Never use a thread of weight 20 or lower. It may cause malfunctions.

Memo: The lower the thread number, the thicker the thread; and the higher the needle number, the thicker the needle.

Ball point needle

Use the ball point needle when sewing on stretch fabrics or fabrics where skipped stitches easily occur.

Use the ball point needle for best results when sewing patterns using monogramming foot “N”. The factory recommended needle is “HG-4BR” (Organ). Schmetz needles “JERSEY BALL POINT” 130/705H SUK 90/14 may be used as a substitute.

Transparent nylon thread

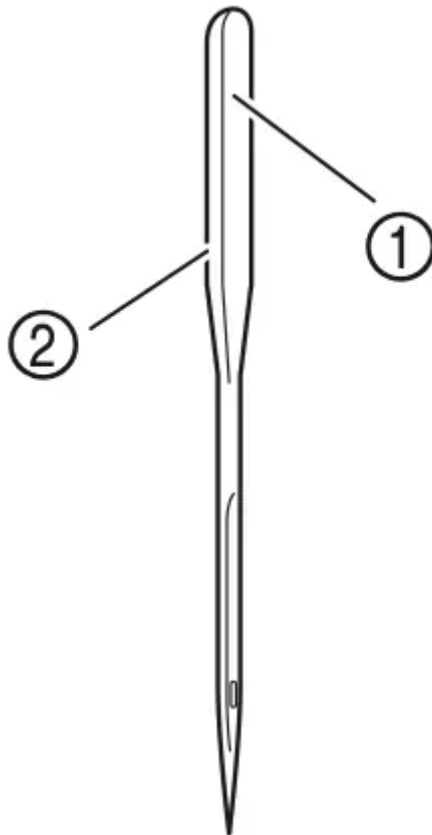
Use a 90/14 to 100/16 needle, regardless of the fabric or thread.

CAUTION: The appropriate fabric, thread and needle combinations are shown in the table on the previous page. If the combination of the fabric, thread and needle is not correct, particularly when sewing thick fabrics (such as denim) with thin needles (such as 65/9 to 75/11), the needle may bend or break. In addition, the stitching may be uneven or puckered or there may be skipped stitches.

Checking the needle

Sewing with a bent needle is extremely dangerous since the needle may break while the machine is being operated.

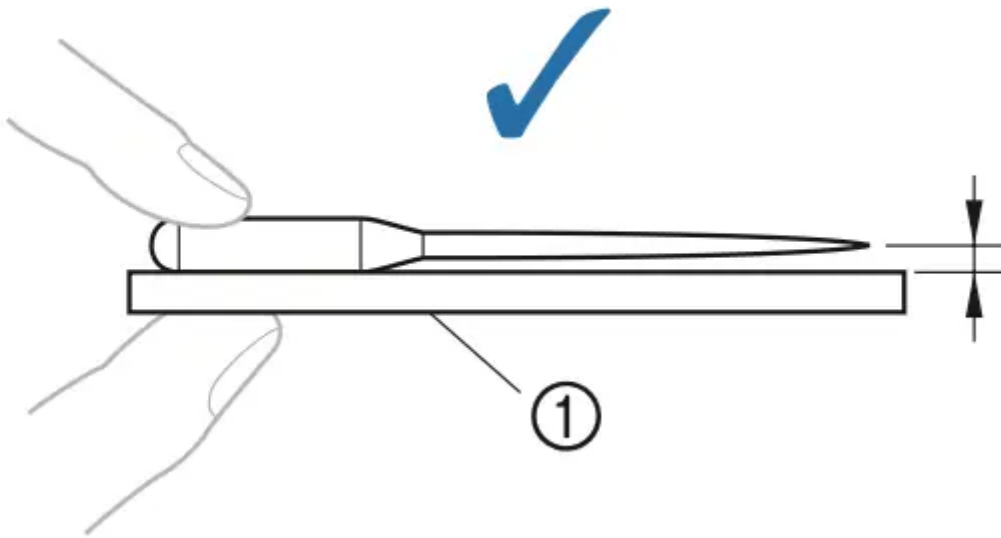
Before using the needle, place the flat side of the needle on a flat surface and check that the distance between the needle and the flat surface is even.



1. Flat side

2. Needle type marking

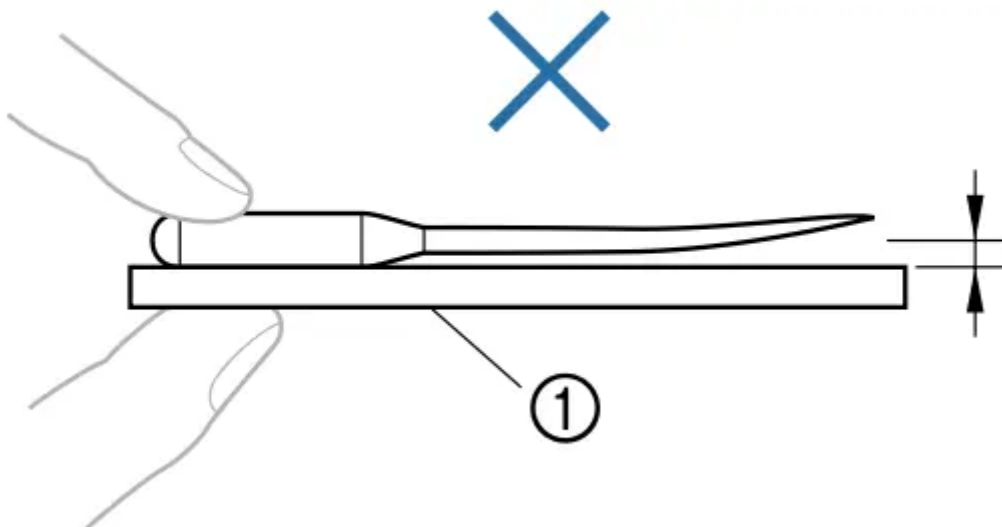
Correct needle



1. Flat surface

Incorrect needle


If the distance between the needle and the flat surface is not even, the needle is bent. Do not use a bent needle.

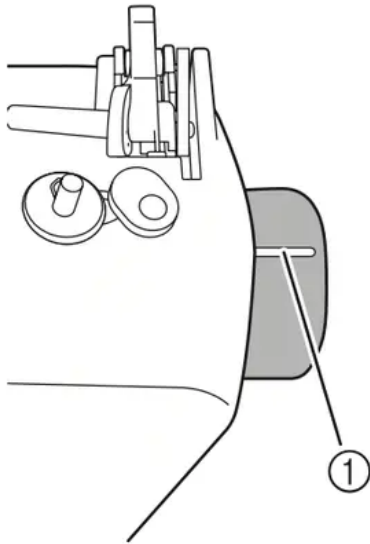


1. Flat surface

Replacing the needle

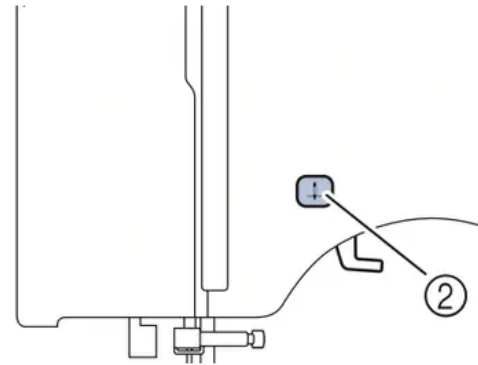
Replace the needle as described below. Use the disc-shaped screwdriver and a needle that has been determined to be straight according to the instructions in “Checking the needle”.

1. **Raise the needle by turning the handwheel toward you (counterclockwise) so that the mark on the wheel points up, or raise the needle by pressing  (needle position button) once or twice.**



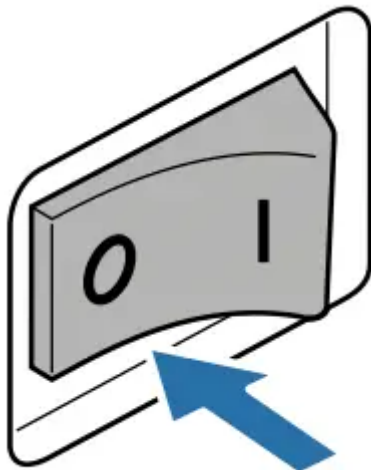
① Mark

or



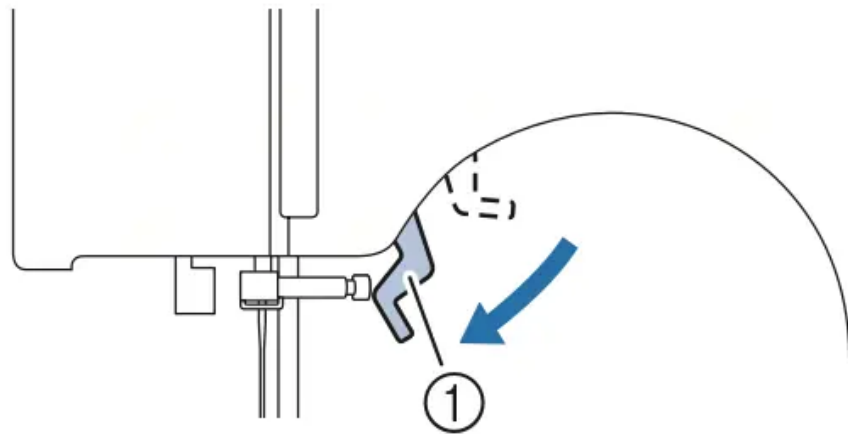
② Needle position button

2. **Turn off the sewing machine.**



CAUTION: Before replacing the needle, be sure to turn off the sewing machine, otherwise injuries may occur if the foot controller or the start/ stop button is accidentally pressed and the machine starts sewing.

3. Lower the presser foot lever.

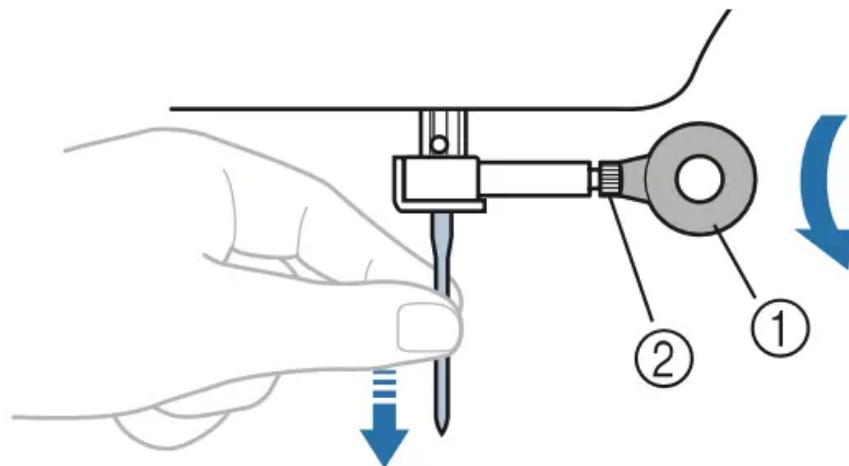


① Presser foot lever

CAUTION: Before replacing the needle, place fabric or paper under the presser foot to prevent the needle from falling into the hole in the needle plate.

4. **Hold the needle with your left hand, and then use a disc-shaped screwdriver to turn the needle clamp screw counterclockwise to remove the needle.**

Note: The needle can be removed by simply loosening the needle clamp screw about one turn. (If the needle clamp screw is loosened too much, the needle clamp (which holds the needle) may fall off. Therefore, do not loosen the needle clamp screw too much.)

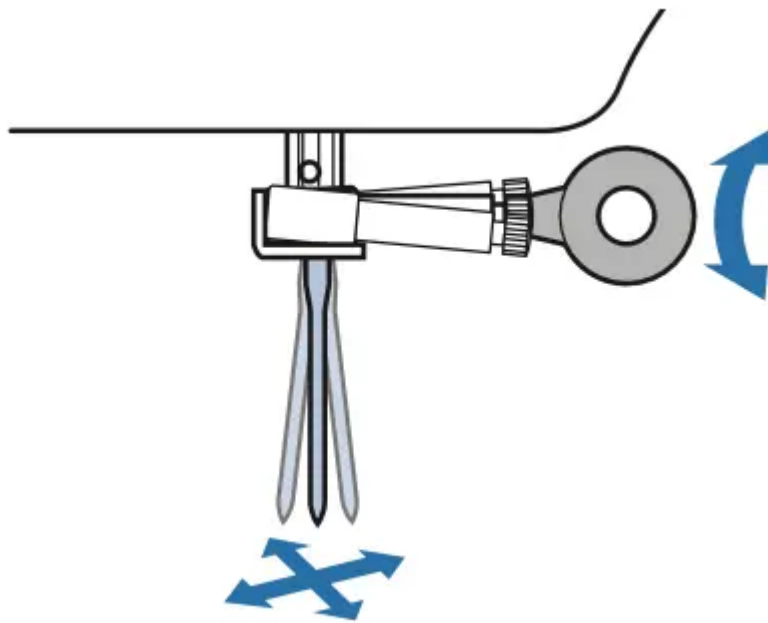


① Disc-shaped screwdriver

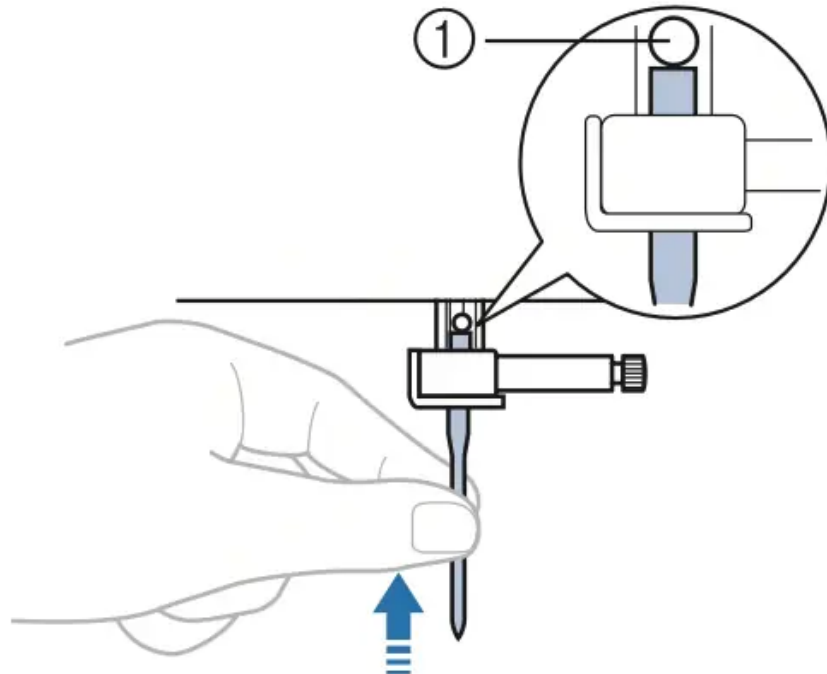
② Needle clamp screw

Do not apply strong force when loosening or tightening the needle clamp screw,

otherwise certain parts of the sewing machine may be damaged.

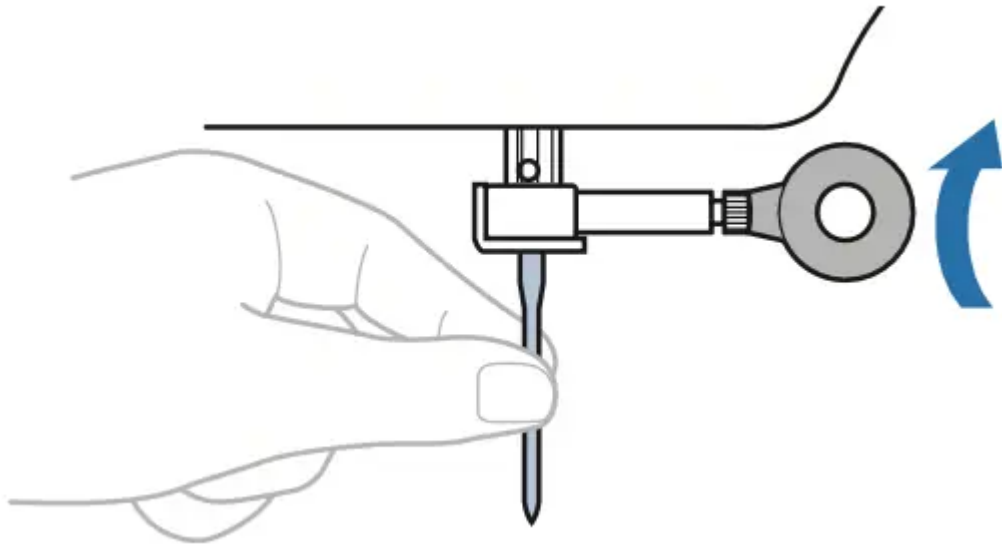


5. With the flat side of the needle toward the rear of the machine, insert the needle until it touches the needle stopper.

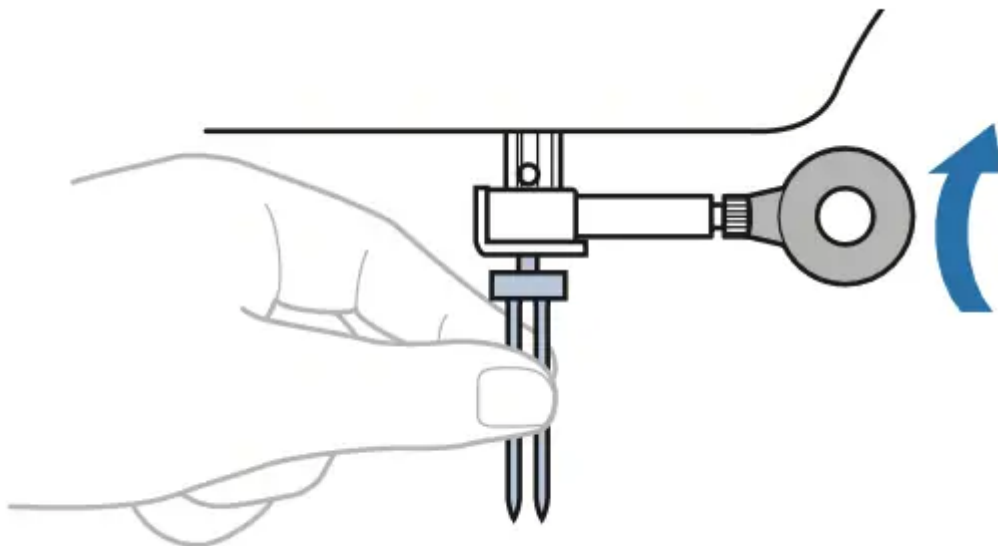


① Needle stopper

6. While holding the needle with your left hand, use the disc-shaped screwdriver to tighten the needle clamp screw by turning it clockwise.



Install the twin needle in the same way.



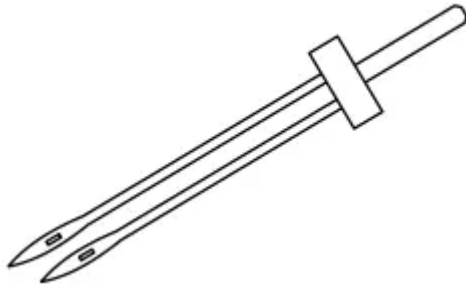
CAUTION: Be sure to insert the needle until it touches the needle stopper and securely tighten the needle clamp screw with the disc-shaped screwdriver, otherwise the needle may break or damage may result.

Sewing with the twin needle

We have designed your machine so you can sew with this needle and two top threads. You can use the same color or two different colors of thread for making decorative stitches.

For details on the stitches that can be sewn with the twin needle, refer to “STITCH SETTINGS” (page 82).

1. Twin needle



2. Extra spool pin



CAUTION

- Use only twin needles that have been made for this machine (part code: 131096-121). Other needles could break, and damage the machine.
- Do not sew with bent needles. The needle could break and injure you.
- You can not use the needle threader to thread the twin needle. Instead, thread the twin needle by hand, from front to back. Using the needle threader may damage the machine.
- When using the twin needle, be sure to select an appropriate stitch, otherwise the needle may break or the machine may be damaged.
- Select a stitch width of 5.0 mm (3/16 inch) or less, otherwise the needle may break or the machine may be damaged.

1. **Install the twin needle.**

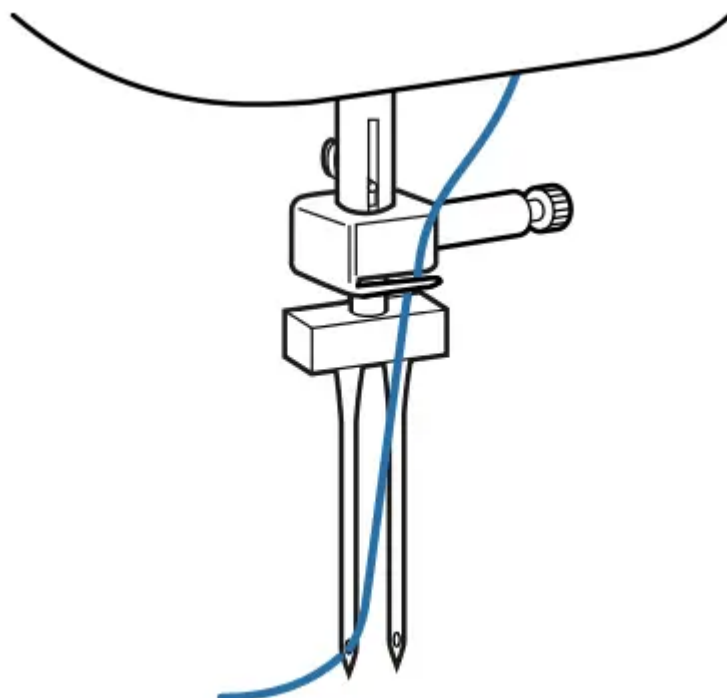
For details on installing a needle, refer to “Replacing the needle” (page 32).

2. **Thread the upper thread for the left needle.**

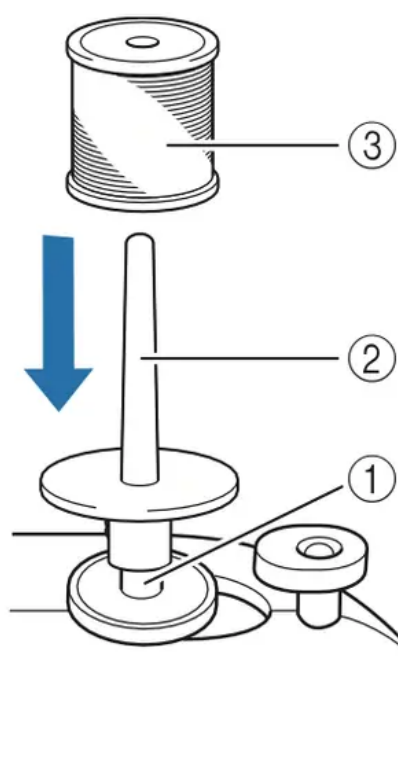
For details, refer to steps a through l of “Upper threading” (page 25).

3. Manually thread the left needle with the upper thread.

Pass the thread through the eye of the needle from the front to the back.



4. Insert the extra spool pin onto the end of the bobbin winder shaft.

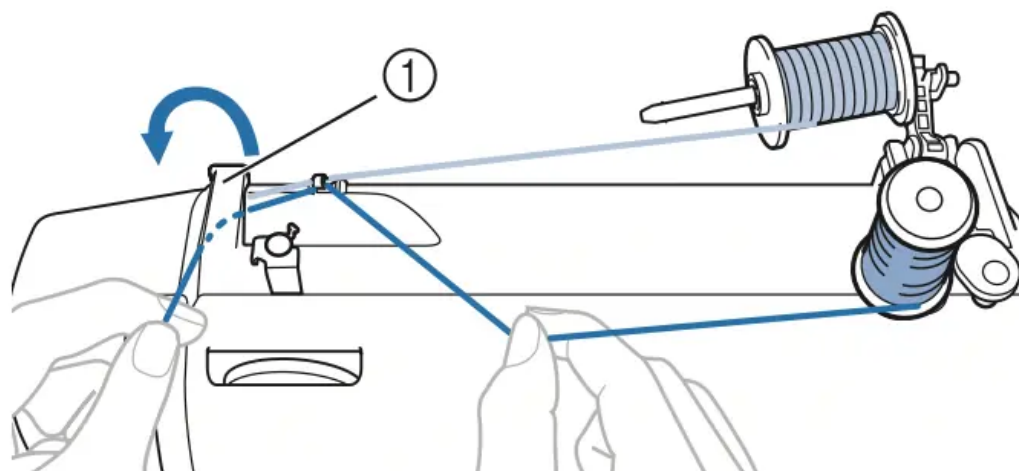


- ① Bobbin winder shaft
- ② Extra spool pin
- ③ Thread spool

5. **Install the thread spool and thread the upper thread.**

Memo: When setting the thread spool, set it so that the thread winds off from the front of the spool.

6. **Thread the upper thread for the right side in the same way that the upper thread for the left side was threaded.**

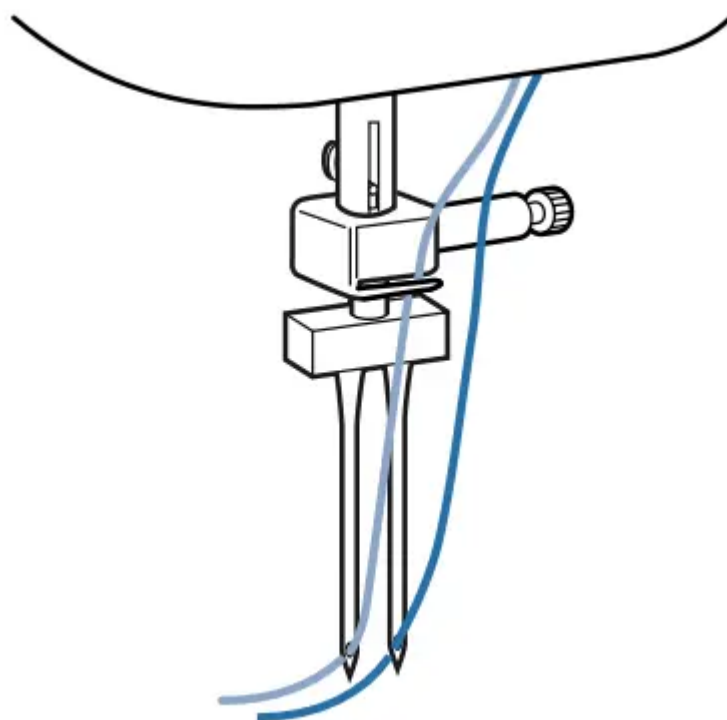


① **Thread guide cover**

For details, refer to step 8 through 11 of “Upper threading” (page 25).

7. **Without passing the thread through the needle bar thread guide, manually thread the right needle.**

Pass the thread through the eye of the needle from the front to the back.



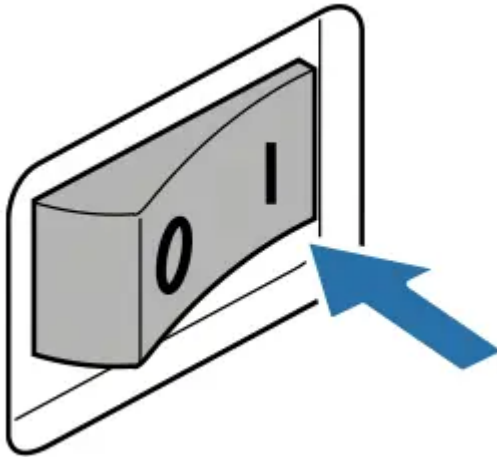
8. Attach zigzag foot “J”.

For details on changing the presser foot, refer to “Replacing the presser foot” (page 36).

Note: You cannot use the needle threader to thread the twin needle. Instead, thread the twin needle by hand, from front to back. Using the needle threader may damage the machine.

CAUTION: When using the twin needle, be sure to attach zigzag foot “J”, otherwise the needle may break or the machine may be damaged.

9. Turn on the sewing machine.



10. Select a stitch.

For details on selecting a stitch, refer to “Selecting a stitch” (page 39).

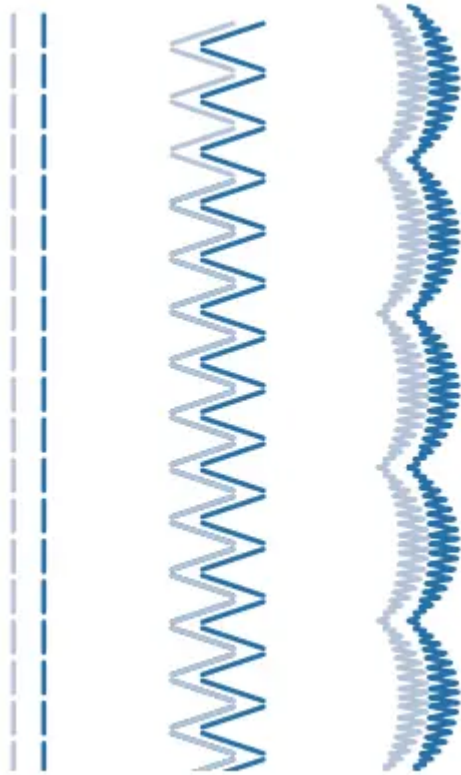
For details on the stitches that can be sewn with the twin needle, refer to “STITCH SETTINGS” (page 82).

CAUTION: After adjusting the stitch width, slowly turn the handwheel toward you (counterclockwise) and check that the needle does not touch the presser foot. If the needle hits the presser foot, the needle may bend or break.

11. Start sewing.

For details on starting to sew, refer to “Starting to sew” (page 41).

Two lines of stitching are sewn parallel to each other.



Note: When using the twin needle, the stitches may become bunched together, depending on the types of thread and fabric that are used. If this occurs, increase the stitch length. For details on adjusting the stitch length, refer to “Adjusting the stitch length and width” (page 40).

CAUTION

- When changing the sewing direction, be sure to raise the needle from the fabric, and then raise the presser foot lever and turn the fabric. Otherwise the needle may break or the machine may be damaged.
- Do not try turning the fabric with the twin needle left down in the fabric, otherwise the needle may break or the machine may be damaged.

REPLACING THE PRESSER FOOT


CAUTION

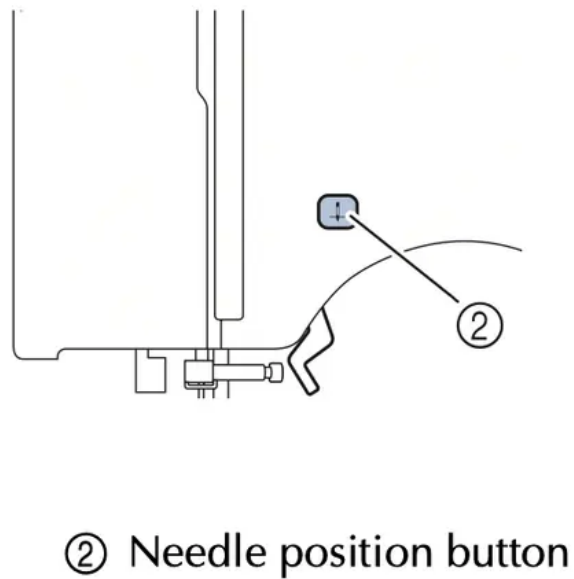
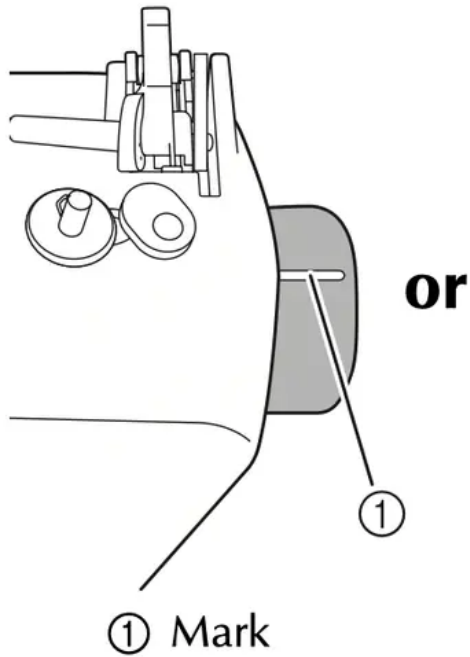
- Always turn off the power before you change the presser foot. If you leave the power on and step on the controller, the machine will start and you may be injured.
- Always use the correct presser foot for the stitch pattern you have chosen. If you use the wrong presser foot, the needle may strike the presser foot and bend or break, and may cause injury.

- Only use presser feet that have been designed to be used with this machine. Using other any presser feet may cause an accident or injury.

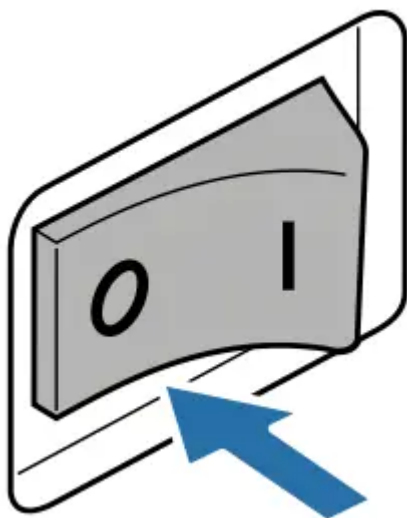
Replacing the presser foot

Replace the presser foot as described below.

1. **Raise the needle by turning the handwheel toward you (counterclockwise) so that the mark on the wheel points up, or raise the needle by pressing  (needle position button) once or twice.**



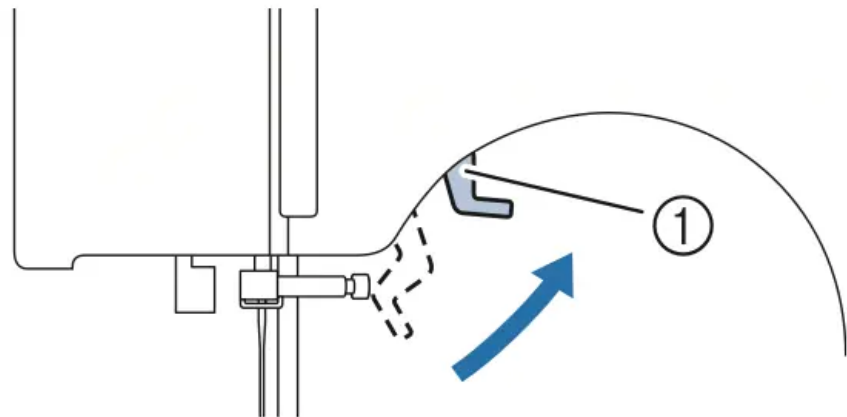
2. If the sewing machine has been turned on, turn it off.



CAUTION: Before replacing the presser foot, be sure to turn off the sewing machine,

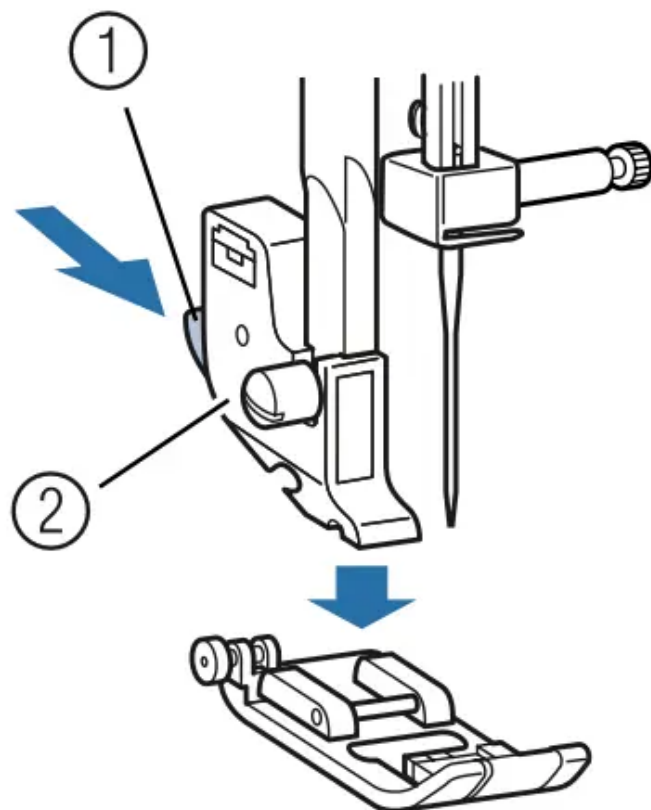
otherwise injuries may occur if the foot controller or the start/stop button is accidentally pressed and the machine starts sewing.

3. **Raise the presser foot lever.**



① Presser foot lever

4. **Press the black button at the back of the presser foot holder to release the presser foot.**

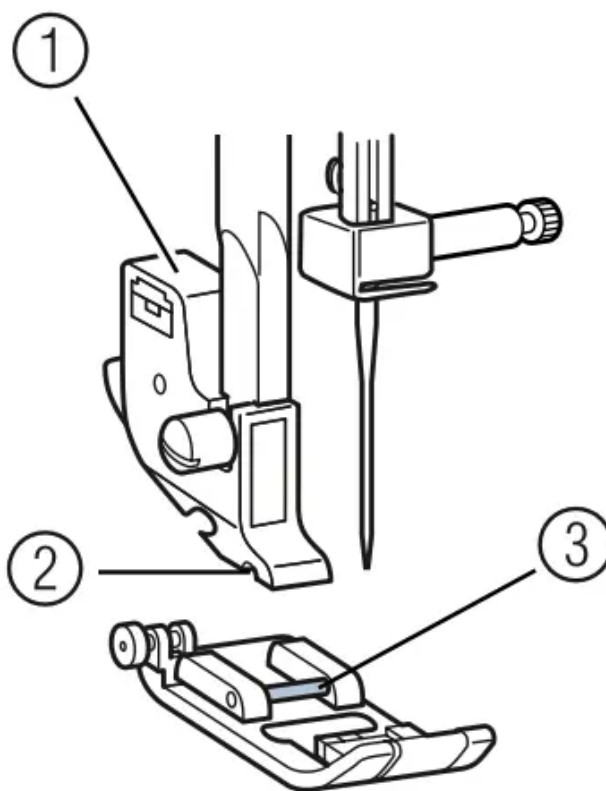


① Black button

② Presser foot holder

5. **Place a different presser foot below the holder so that the presser foot pin is aligned with the shank in the holder.**

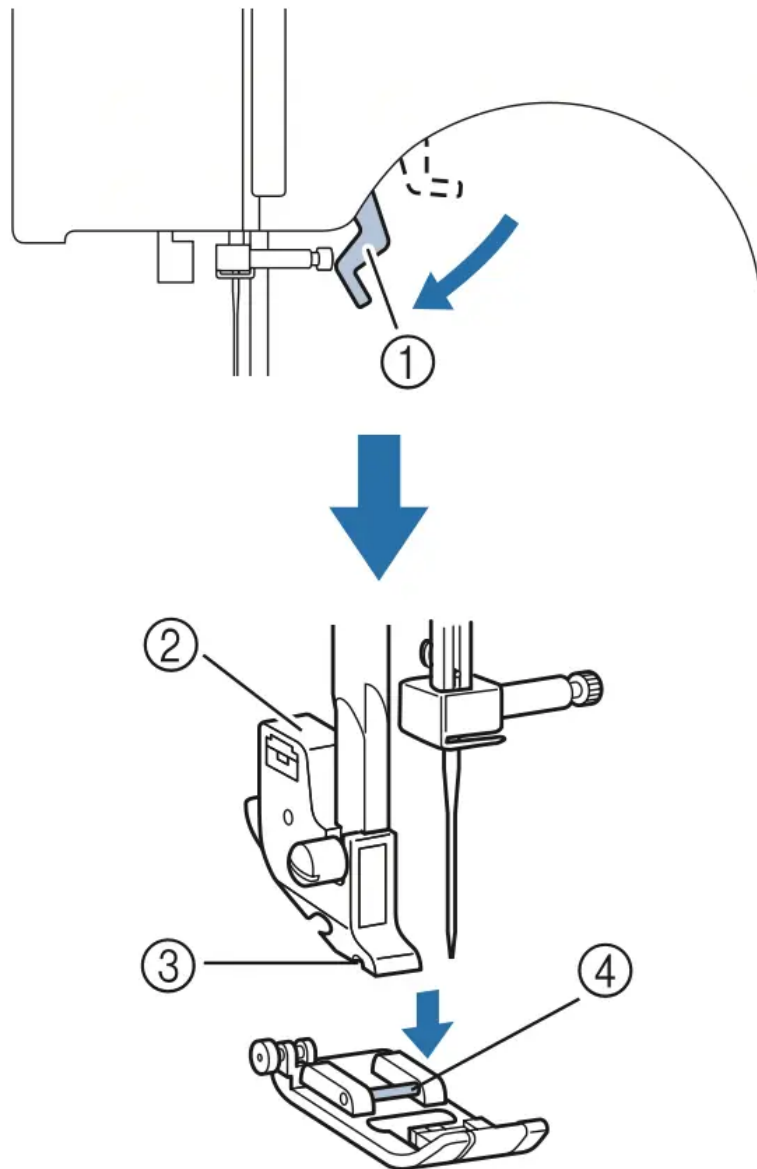
Position the presser foot so the letter indicating the presser foot type (J, A, etc.) is positioned to be read.



- ① Presser foot holder
- ② Shank
- ③ Pin

Note: The presser foot to be used with each stitch appears in the LCD. To select a stitch, refer to “Selecting a stitch” (page 39).

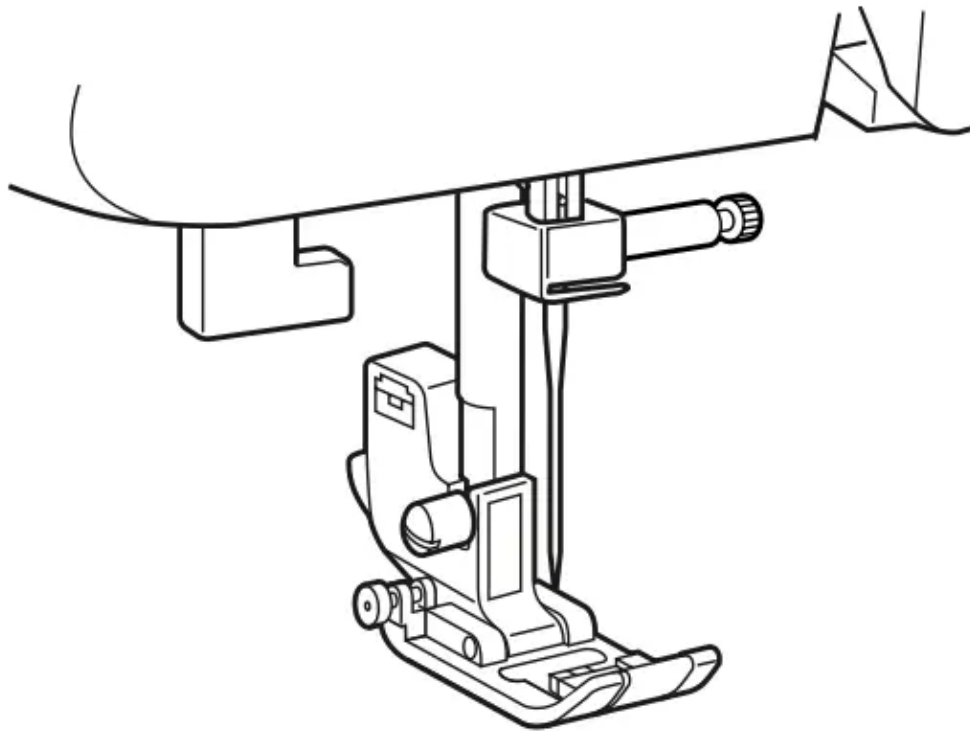
6. **Slowly lower the presser foot lever so that the presser foot pin snaps into the shank in the presser foot holder.**



- ① Presser foot lever
- ② Presser foot holder
- ③ Shank
- ④ Pin

The presser foot is attached.

7. Raise the presser foot lever to check that the presser foot is securely attached.



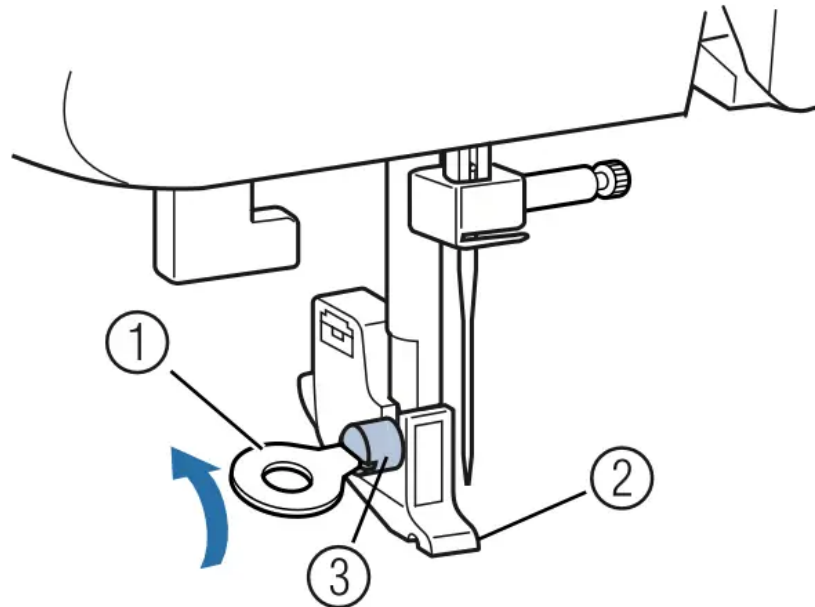
Removing the presser foot holder

Remove the presser foot holder when cleaning the sewing machine or when installing a presser foot that does not use the presser foot holder, such as the quilting foot. Use the disc-shaped screwdriver to remove the presser foot holder.

1. Remove the presser foot.

For details, refer to “Replacing the presser foot” (page 36).

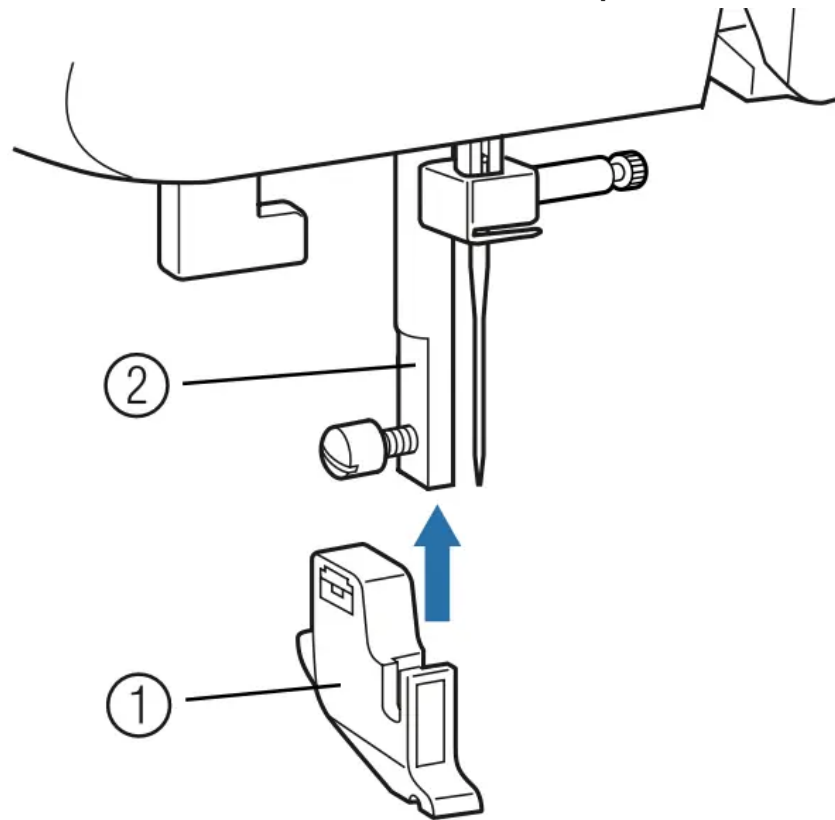
2. Use the disc-shaped screwdriver to loosen the presser foot holder screw.



- ① Disc-shaped screwdriver
- ② Presser foot holder
- ③ Presser foot holder screw

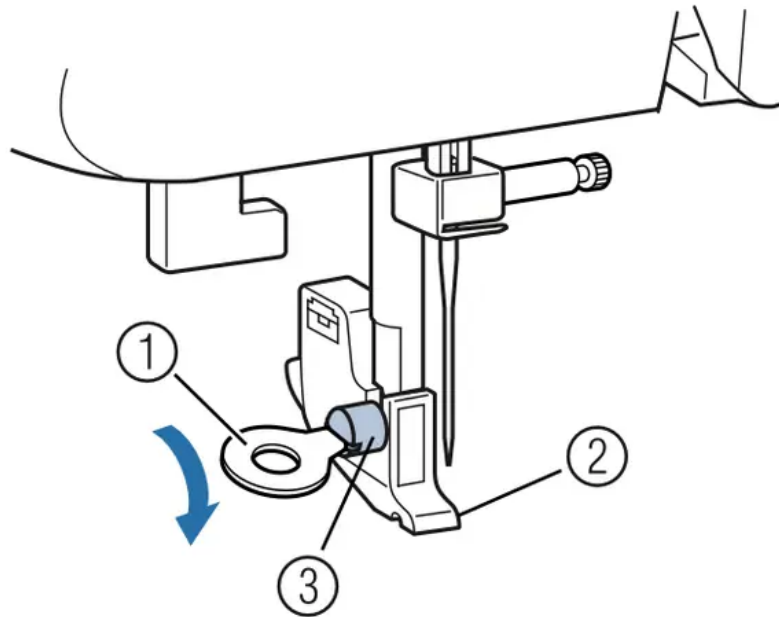
Attaching the presser foot holder

1. Align the presser foot holder with the lowerleft side of the presser bar.



- ① Presser foot holder
- ② Presser bar

2. Hold the presser foot holder in place with your right hand, and then tighten the screw using the disc-shaped screwdriver in your left hand.



- ① Disc-shaped screwdriver
- ② Presser foot holder
- ③ Presser foot holder screw

Note: If the presser foot holder is not correctly installed, the thread tension will be incorrect.

CAUTION: Be sure to securely tighten the presser foot holder screw, otherwise the presser foot holder may fall off and the needle may strike it, causing the needle to bend or break.

MAINTENANCE

Simple sewing machine maintenance operations are described below.

Restrictions on oiling

In order to prevent damaging this machine, it must not be oiled by the user.

This machine was manufactured with the necessary amount of oil applied to ensure correct operation, making periodic oiling unnecessary.

If problems occur, such as difficulty turning the handwheel or an unusual noise, immediately stop using the machine, and contact your authorized dealer or the nearest authorized service center.

Precautions on storing the machine

Do not store the machine in any of the locations described below, otherwise damage to the machine may result, for example, rust caused by condensation.

- Exposed to extremely high temperatures
- Exposed to extremely low temperatures
- Exposed to extreme temperature changes
- Exposed to high humidity or steam
- Near a flame, heater or air conditioner
- Outdoors or exposed to direct sunlight
- Exposed to extremely dusty or oily environments

Note: In order to extend the life of this machine, periodically turn it on and use it. Storing this machine for an extended period of time without using it may reduce its efficiency.

Cleaning the machine surface

If the surface of the machine is dirty, lightly soak a cloth in neutral detergent, squeeze it out firmly, and then wipe the surface of the machine. After cleaning it once with a wet cloth, wipe it again with a dry cloth.

CAUTION: Unplug the power supply cord before cleaning the machine, otherwise injuries or an electric shock may occur.

Cleaning the race

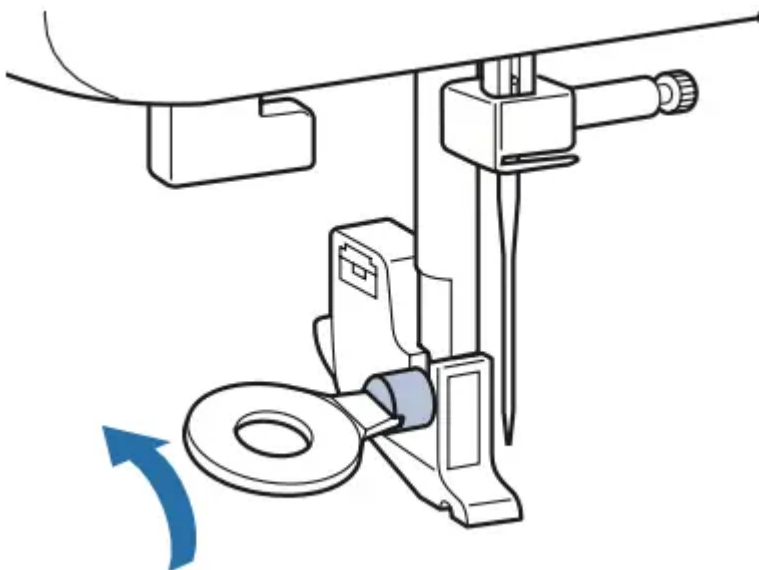
Sewing performance will suffer if dust collects in the race therefore, it should be cleaned periodically.

1. **Switch the machine off and unplug it.**

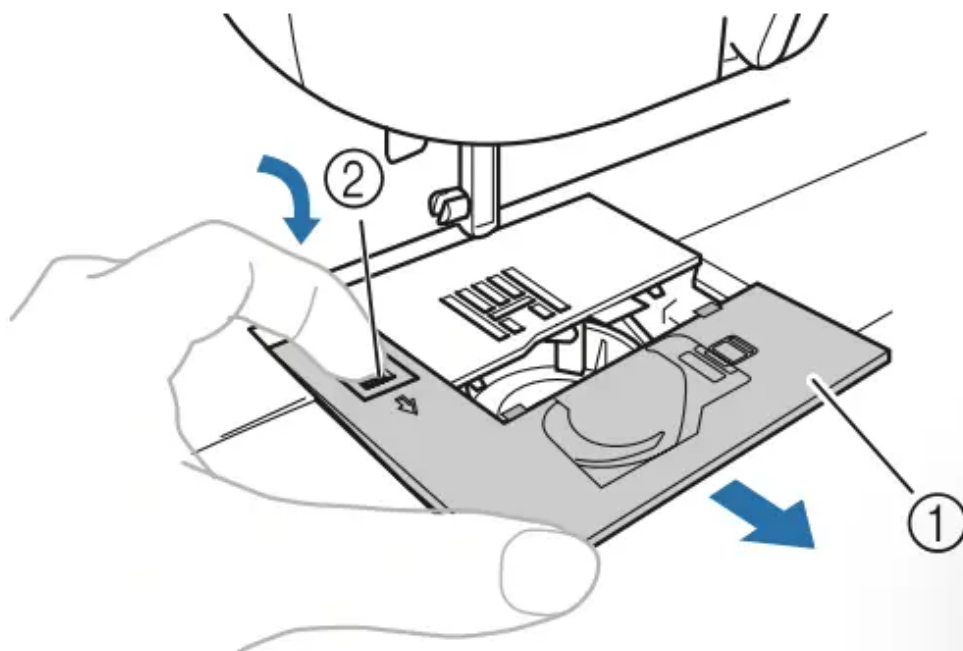
CAUTION: Make sure you unplug the machine before you clean it. Otherwise, you may get an electric shock or be injured.

2. **Raise the needle and the presser foot.**

3. Loosen the presser-foot screw and the needle clamp screw to remove the presser-foot holder and the needle.



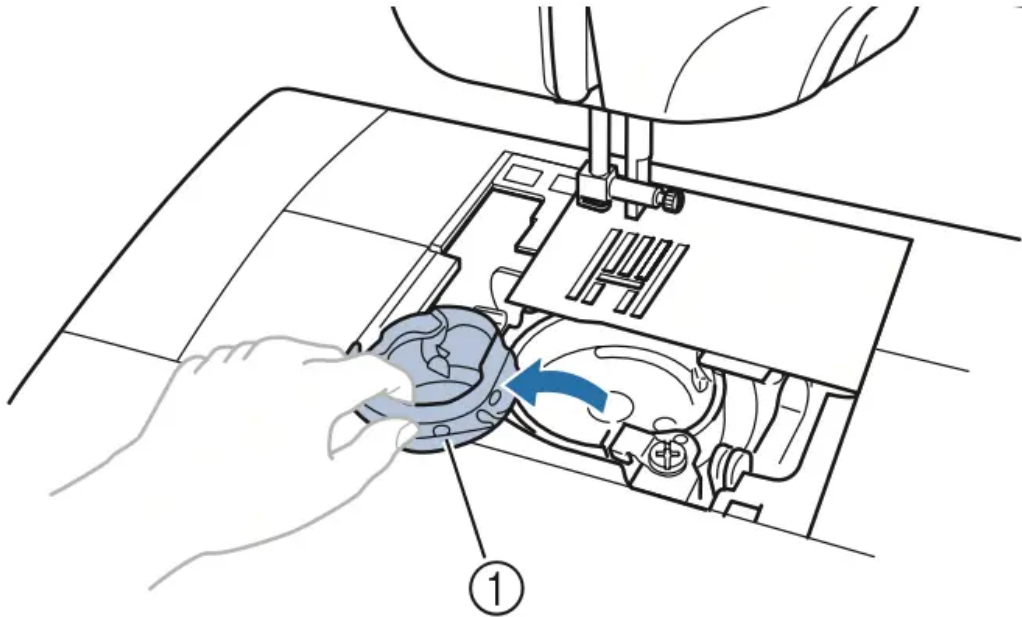
4. Slide the needle plate cover release toward you to remove the needle plate cover.



- ① Needle plate cover
② Needle plate cover release

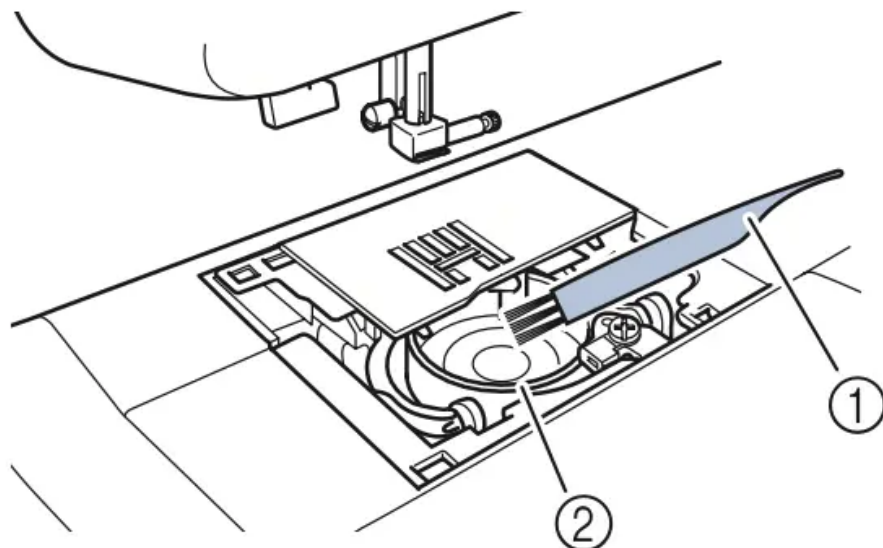
5. **Remove the bobbin case.**

Grasp the bobbin case, and then pull it out.



① Bobbin case

6. **Use the cleaning brush or a vacuum cleaner to remove any dust from the race and its surrounding area.**

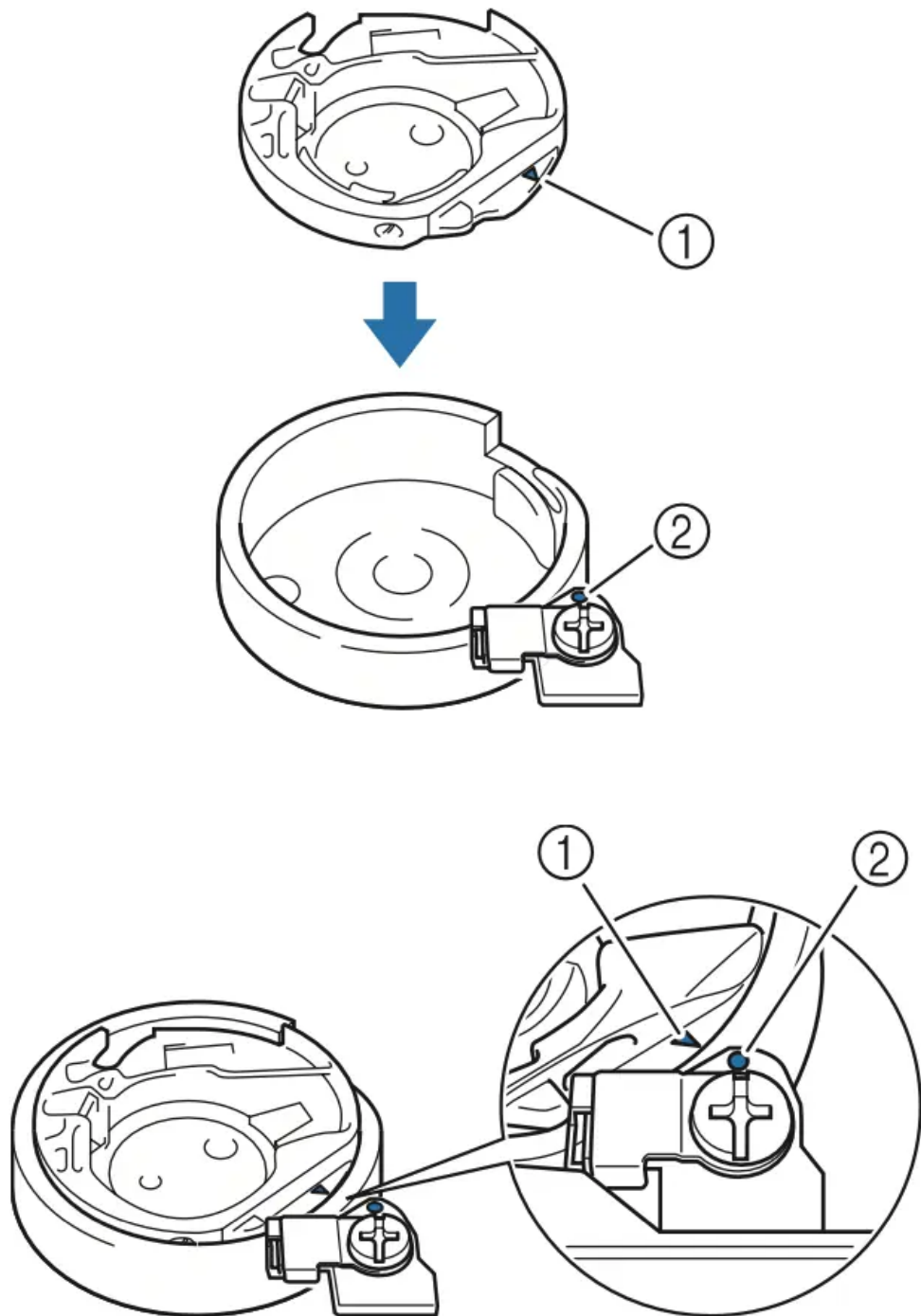


① Cleaning brush

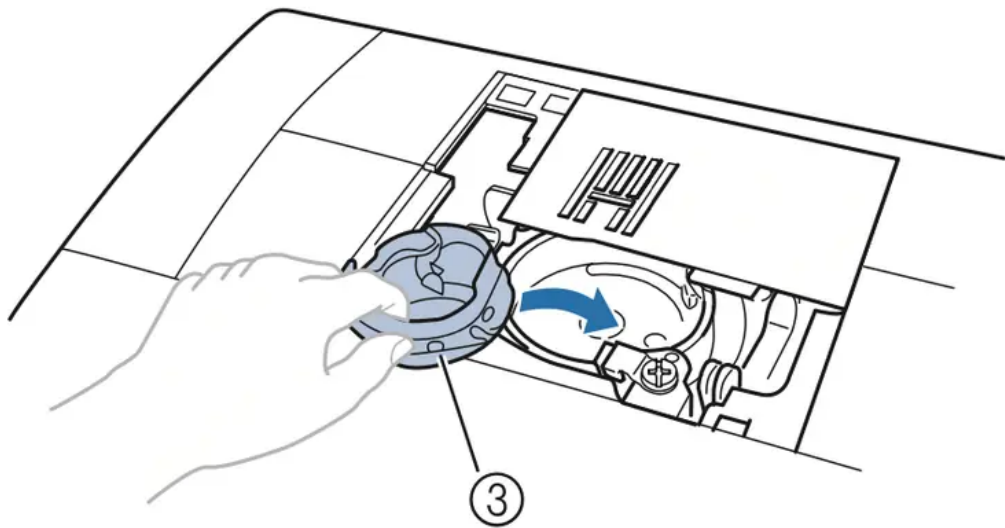
② Race

Note: Do not put oil on the race.

7. Insert the bobbin case so that the ▲ mark on the bobbin case aligns with the ● mark on the machine.



Align the ▲ and ● marks.



- ① ▲ mark
- ② ● mark
- ③ Bobbin case

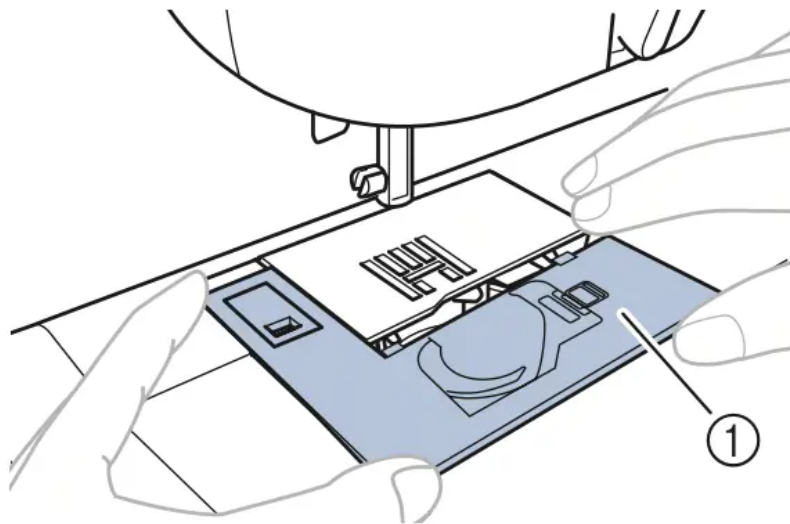
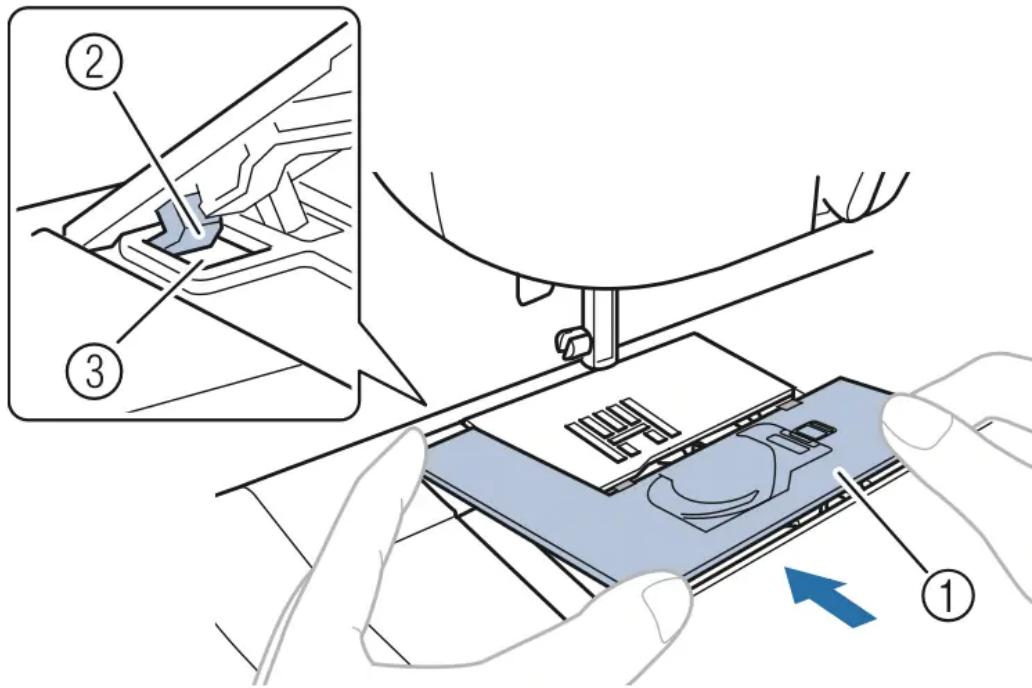
Make sure that the indicated points are aligned before installing the bobbin case.

CAUTION

Never use a bobbin case that is scratched, otherwise the upper thread may become tangled, the needle may break or sewing performance may suffer. For a new bobbin case (part code: XE7560-001), contact your nearest authorized service center.

Make sure that you fit the bobbin case properly, otherwise the needle may break.

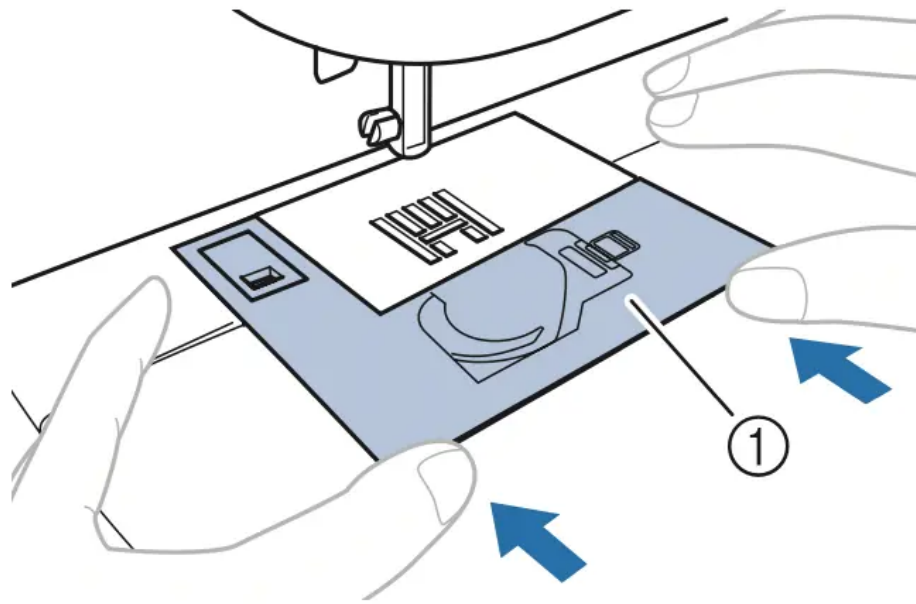
8. **As shown, insert the tab on the needle plate cover into the hole in the needle plate, and then correctly position of the needle plate cover.**



- ① Needle plate cover
- ② Tab
- ③ Hole

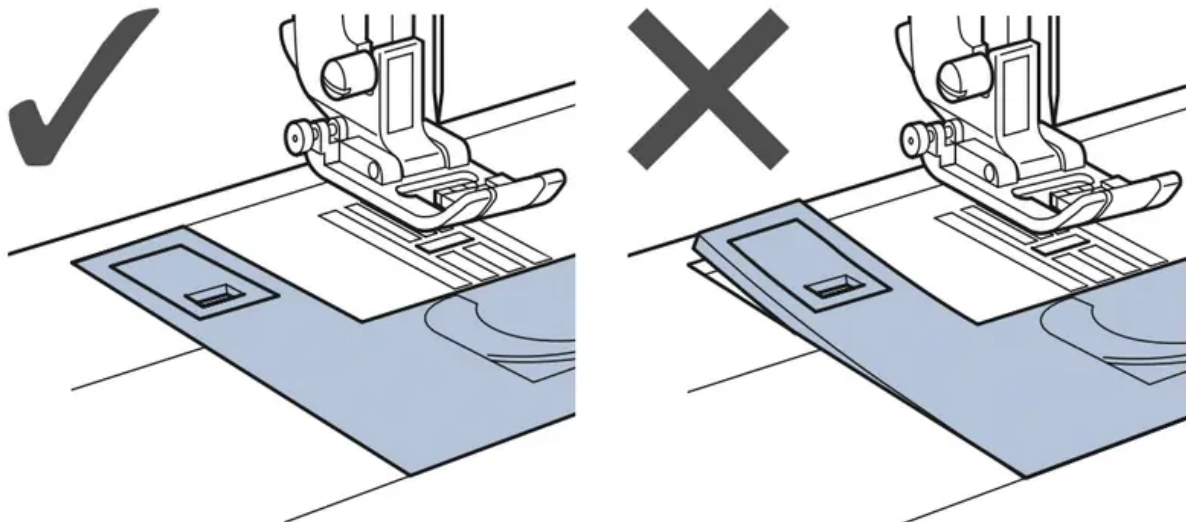
Check that the needle plate cover is flush with the top surface of the machine.

9. From the front, slide the needle plate cover back into position.



① Needle plate cover

CAUTION: If the needle plate cover is not flush with the surface of the machine as shown below, remove the needle plate cover (step 4), and then install it again (steps 8 and 9). Sewing while the needle plate cover is not flush with the surface of the machine may cause the needle plate cover to come off of the machine, resulting in injuries if your fingers touch the race.



TROUBLESHOOTING

If the machine stops operating correctly, check the following possible problems before requesting service. You can solve most problems by yourself. If you need additional help, the Brother

Solutions Center offers the latest FAQs and troubleshooting tips. Visit us at “ [http:// support.brother.com/](http://support.brother.com/) ” .

If the problem persists, contact your dealer or the nearest authorized service center.

Frequent troubleshooting topics

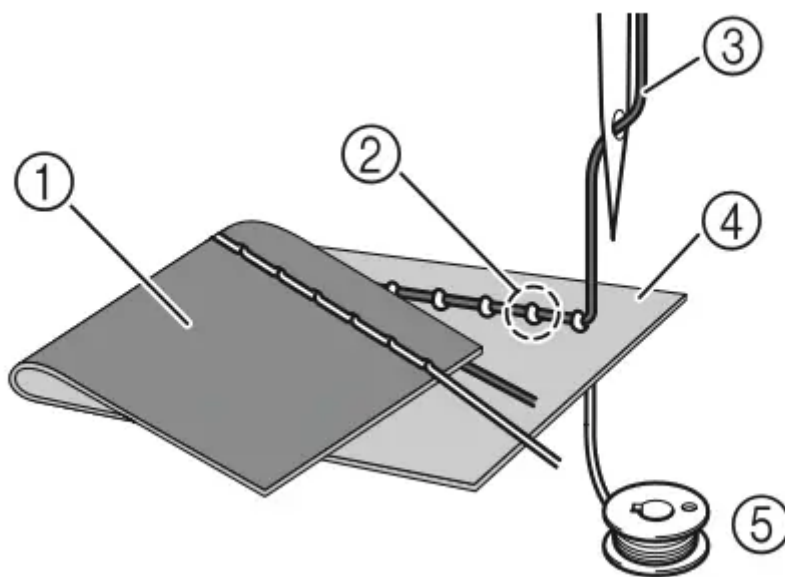
Detailed causes and remedies for common troubleshooting topics are described below. Be sure to refer to this before contacting us.

■ Upper thread tightened up	page 94
■ Tangled thread on wrong side of fabric	page 95
■ Incorrect thread tension	page 98
■ Fabric is caught in the machine and cannot be removed	page 99
■ Error message “E6” appears in the LCD	page 103

Upper thread tightened up

Symptom

- The upper thread appears as a single continuous line.
- The lower thread is visible from the upper side of the fabric. (Refer to the illustration below.)
- The upper thread has tightened up, and comes out when pulled.
- The upper thread has tightened up, and wrinkles appear in the fabric.
- The upper thread tension is tight, and the results do not change even after the thread tension is adjusted.



1. Lower side of fabric

2. Lower thread visible from upper side of fabric
3. Upper thread
4. Upper side of fabric
5. Lower thread

Cause

Incorrect lower threading

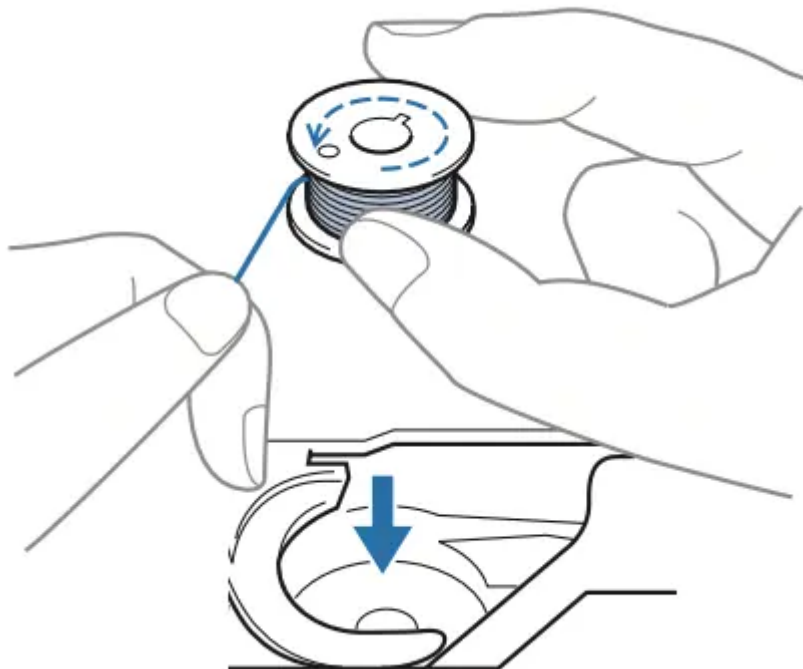
If the lower thread is incorrectly threaded, instead of the appropriate tension being applied to the lower thread, it is pulled through the fabric when the upper thread is pulled up. For this reason, the thread is visible from the upper side of the fabric.

Remedy/check details

Correctly install the lower thread.

1. **Turn off the sewing machine.**
2. **Remove the bobbin from the bobbin case.**
3. **Place the bobbin in the bobbin case so that the thread unwinds in the correct direction.**

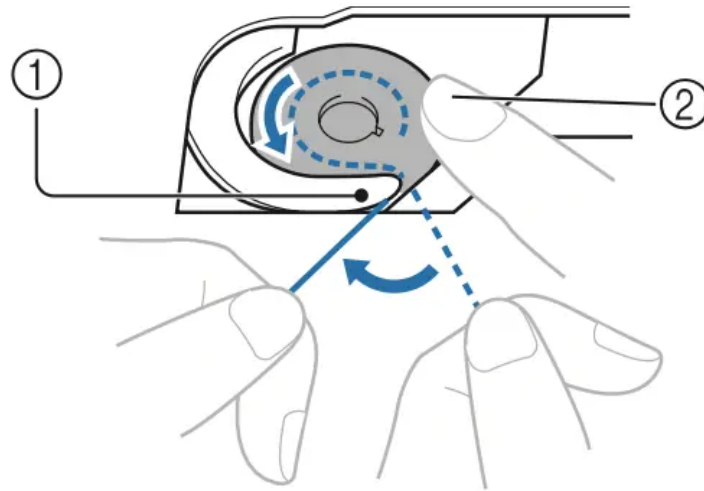
Hold the bobbin with your right hand with the thread unwinding to the left, and hold the end of the thread with your left hand. Then, with your right hand, place the bobbin in the bobbin case.



If the bobbin is inserted with the thread unwinding in the wrong direction, sewing will be done with an incorrect thread tension.

4. **While holding the bobbin in place with your finger, pass the thread through the slit in the needle plate.**

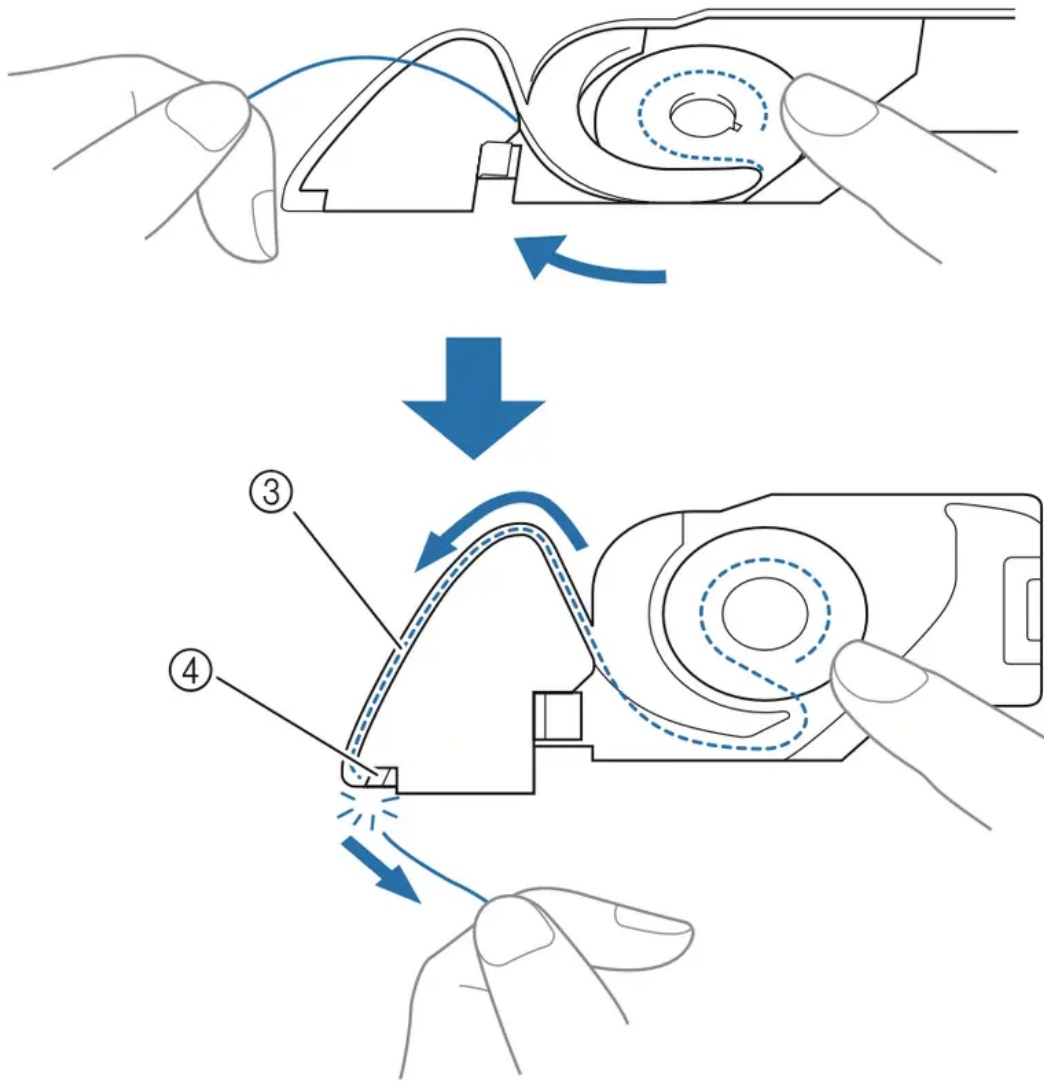
Hold down the bobbin with your right hand, and then pull the end of the thread around the tab with your left hand.



① Tab

② Hold down the bobbin with your right hand.

On models equipped with the quick-set bobbin, pull the thread to pass it through the slit in the needle plate, then cut it with the cutter.



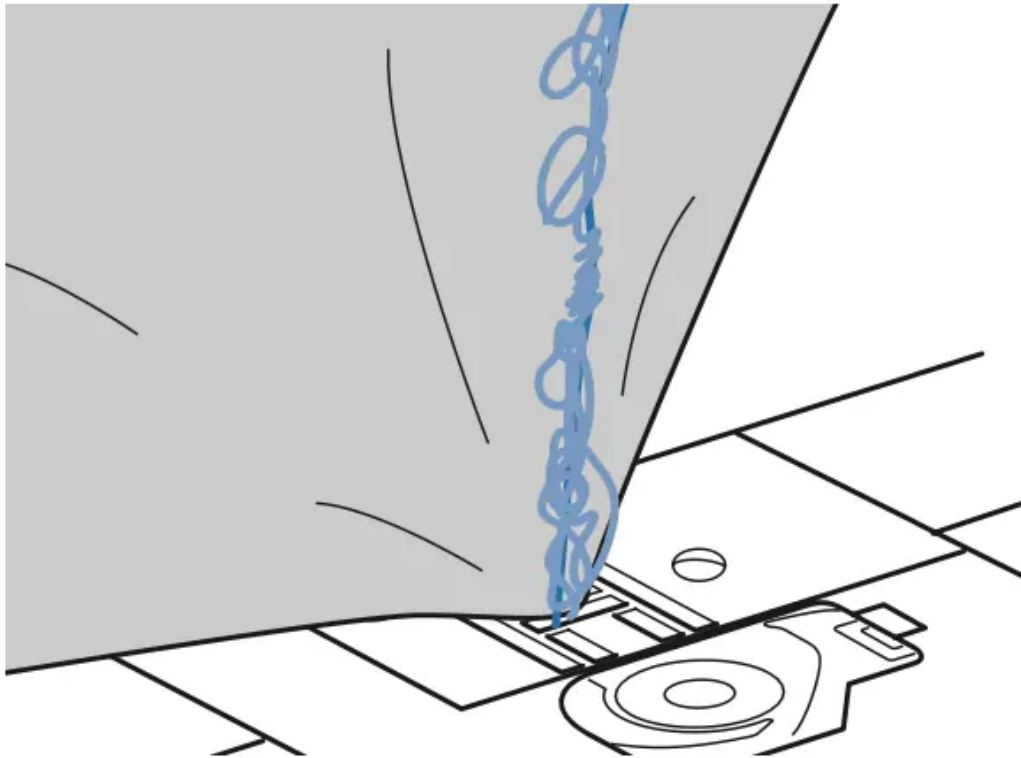
- ③ Slit
- ④ Cutter

Sewing with the correct thread tension is possible after the bobbin has been correctly installed in the bobbin case.

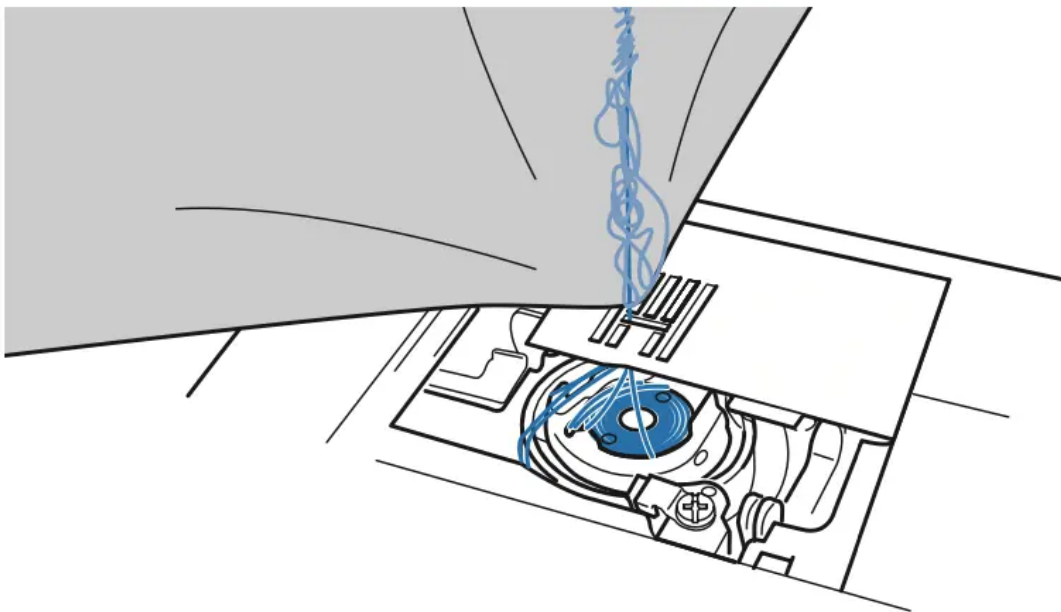
Tangled thread on wrong side of fabric

Symptom

- The thread becomes tangled on the lower side of the fabric.



- After starting sewing, a rattling noise is made and sewing cannot continue.
- Looking under the fabric, there is tangled thread in the bobbin case.



Cause

Incorrect upper threading

If the upper thread is incorrectly threaded, the upper thread passed through the fabric cannot be firmly pulled up and the upper thread becomes tangled in the bobbin case, causing a rattling noise.

Remedy/check details

Remove the tangled thread, and then correct the upper threading.

1. **Remove the tangled thread. If it cannot be removed, cut the thread with scissors.**

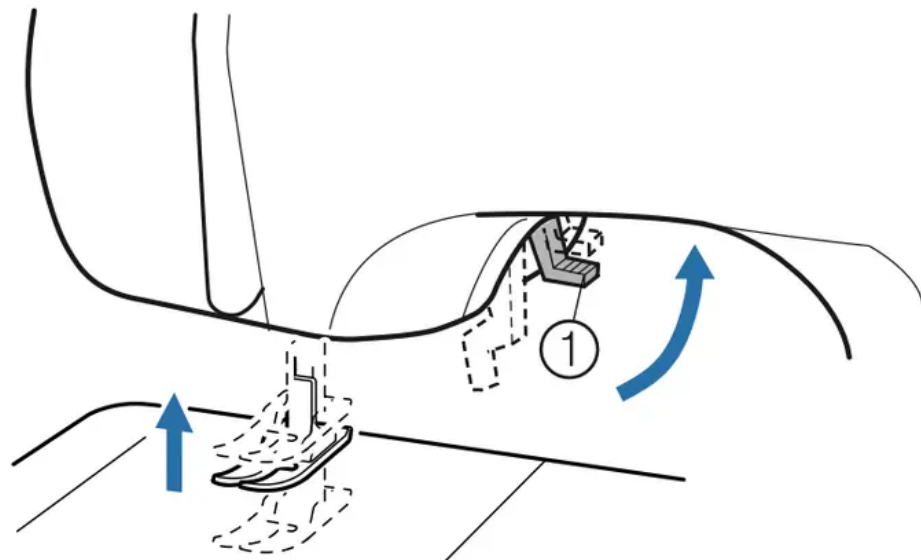
For details, refer to “Cleaning the race” on page 91.

2. **Remove the upper thread from the machine.**

3. **Refer to the following steps to correct the upper threading.**

If the bobbin was removed from the bobbin case, refer to “Lower threading” (page 22) and “Remedy/check details” in the section “Upper thread tightened up” (page 94) to correctly install the bobbin.

4. **Raise the presser foot using the presser foot lever.**



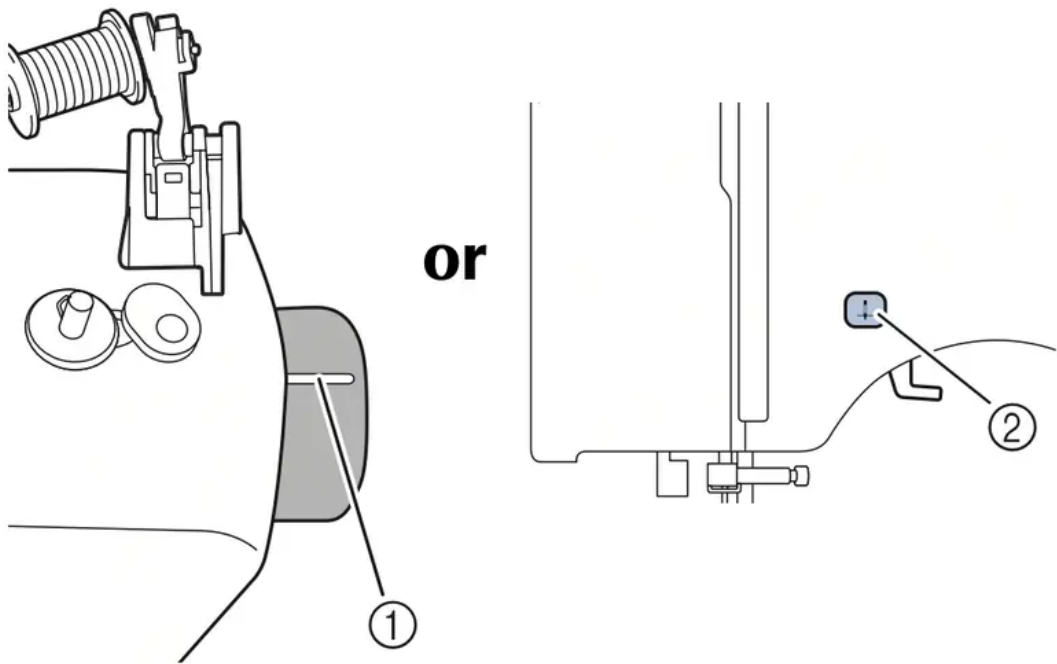
① Presser foot lever

If the presser foot is not raised, the sewing machine cannot be threaded correctly.

5. **Raise the needle by turning the handwheel toward you (counterclockwise) so that**

the mark on the wheel points up, or press  (needle position button) once or

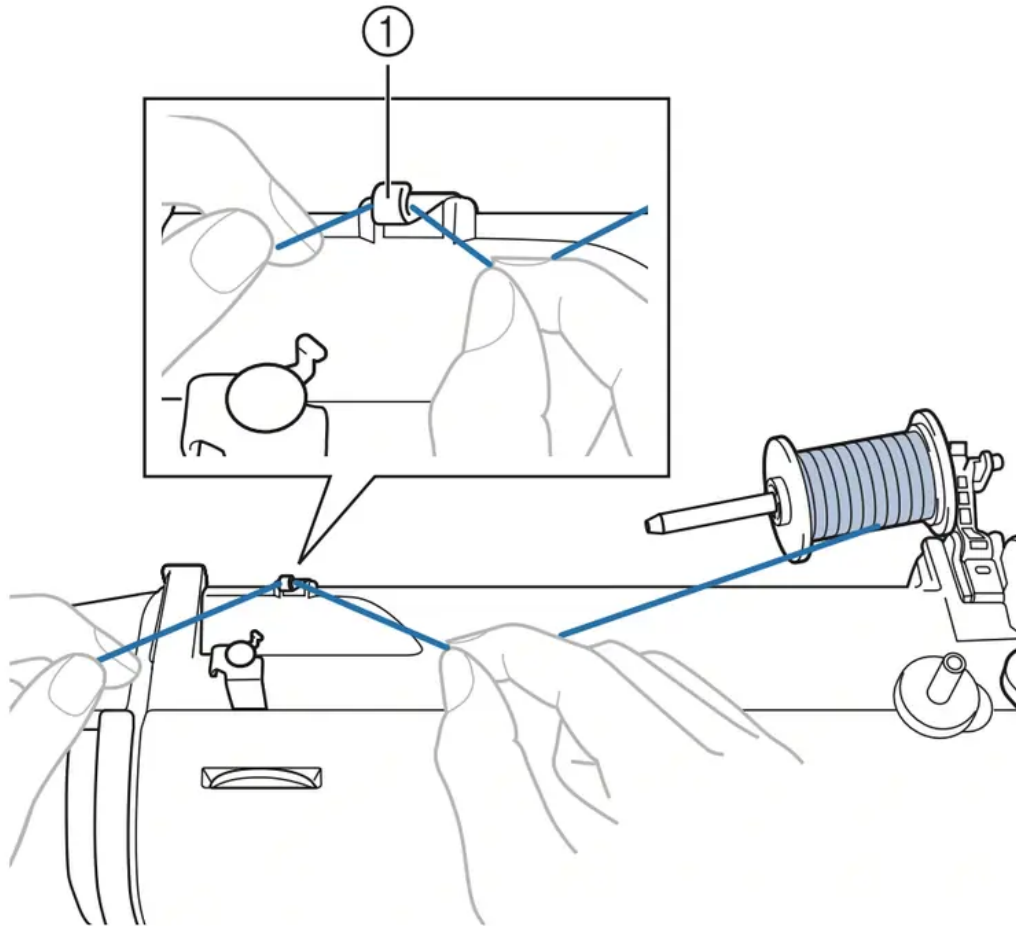
twice to raise the needle.



or

- ① Mark
- ② Needle position button

6. Pull some thread off the spool, and then pass the thread under the thread guide.

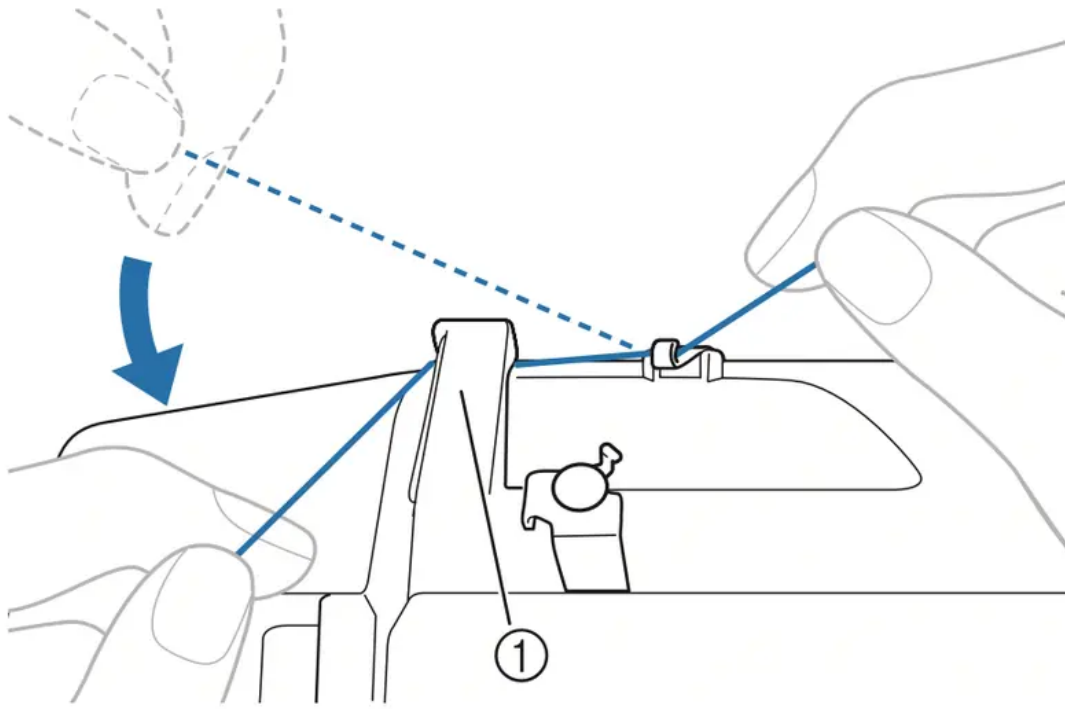


① Thread guide

7. Pass the thread under the thread guide cover from the back to the front.

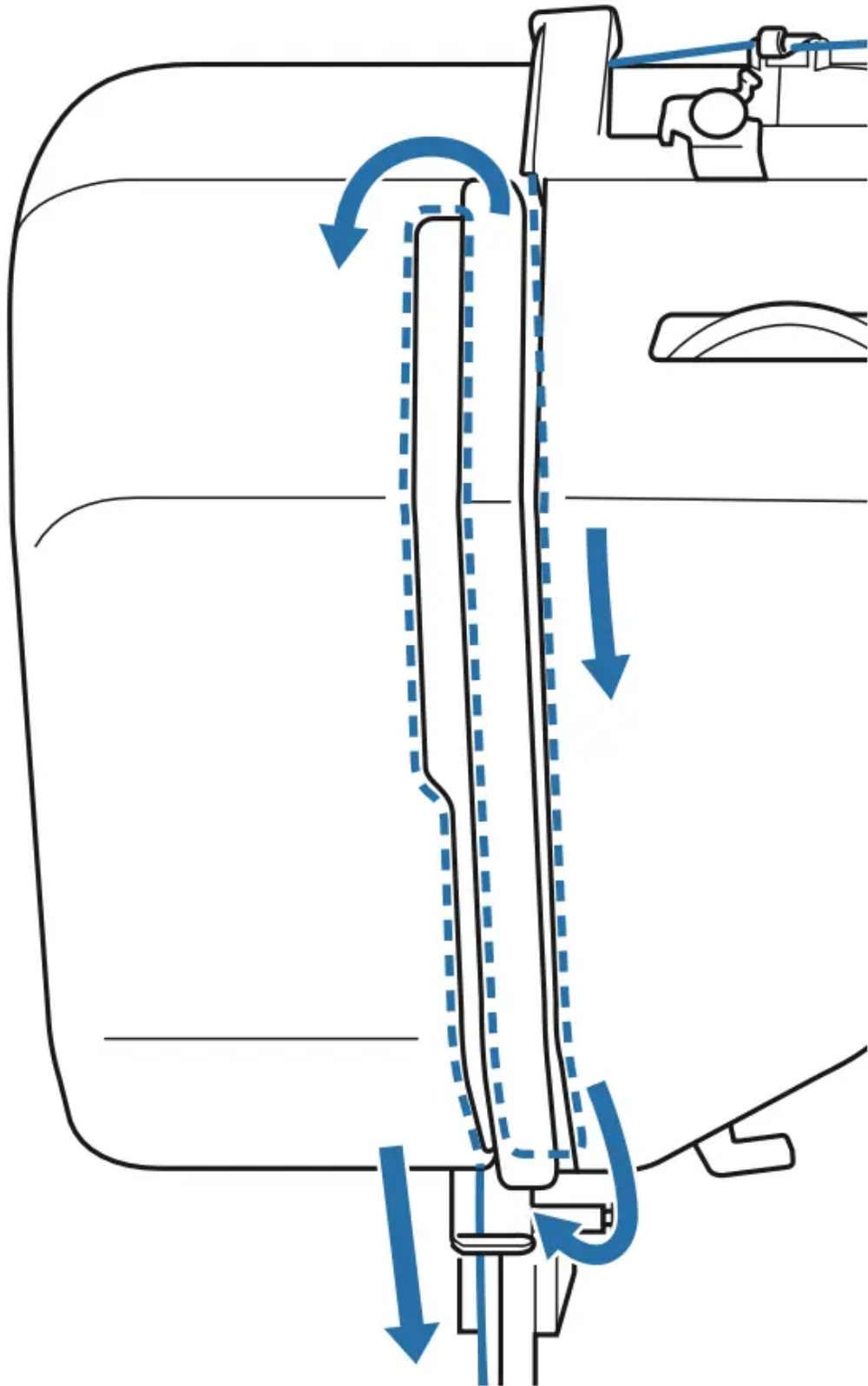
Hold the thread with your right hand so that there is no slack in the thread that is pulled

out, and then pass the thread under the thread guide cover with your left hand.



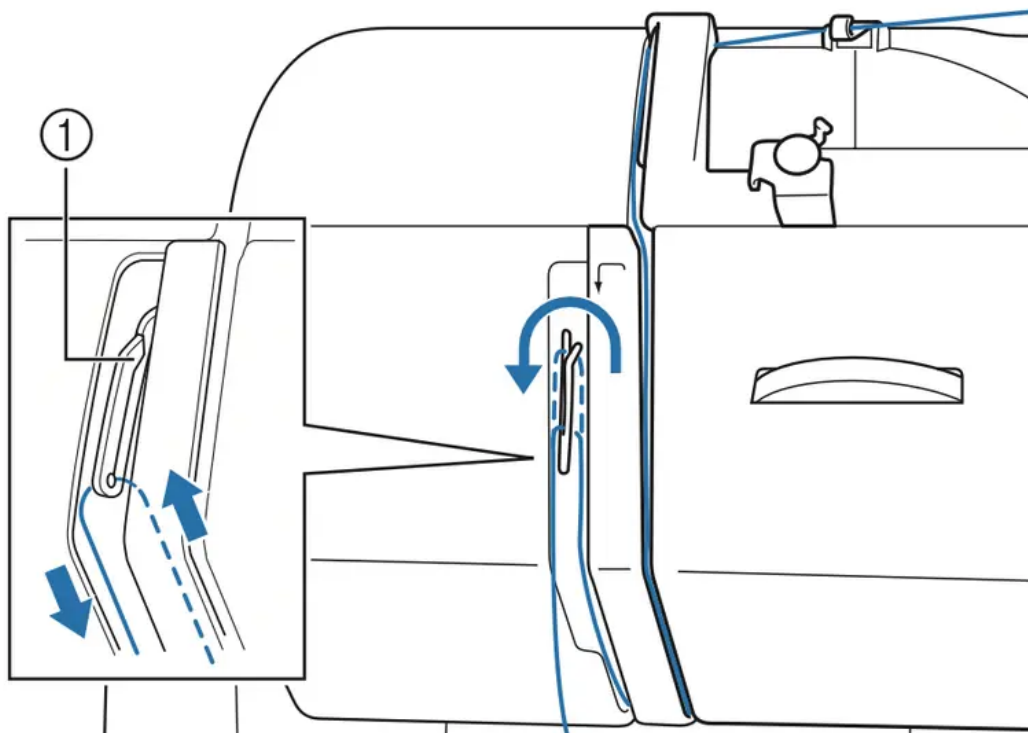
① Thread guide cover

8. Feed the upper thread as shown in the illustration below.



9. Make sure you guide the thread through the thread take-up lever from right to left as shown in the illustration below.

Sewing is possible only if the thread is securely hooked on the thread take-up lever.



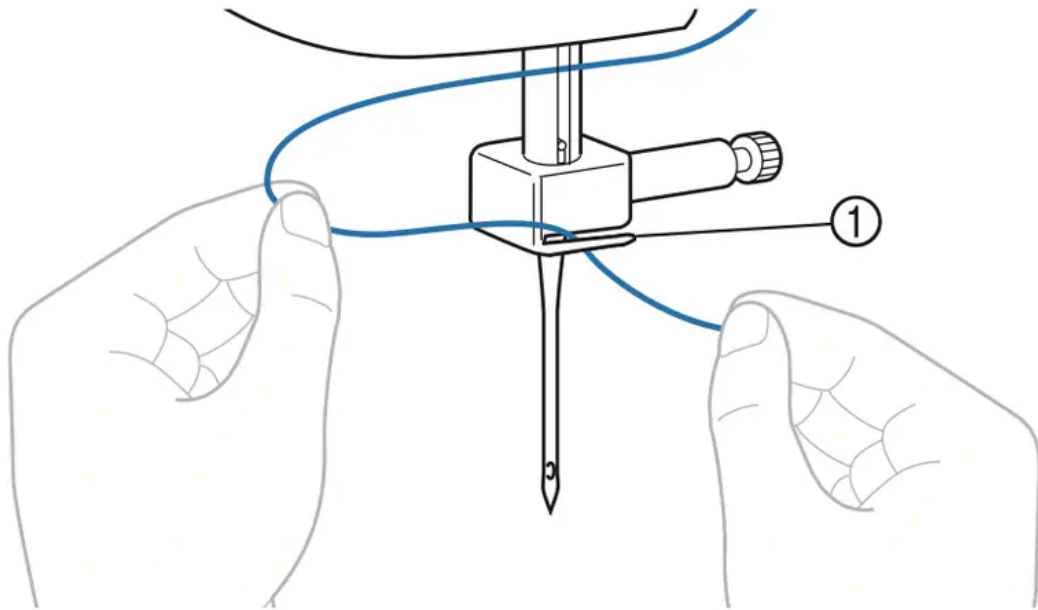
① Thread take-up lever

Make sure that the thread is securely hooked on the thread take-up lever.

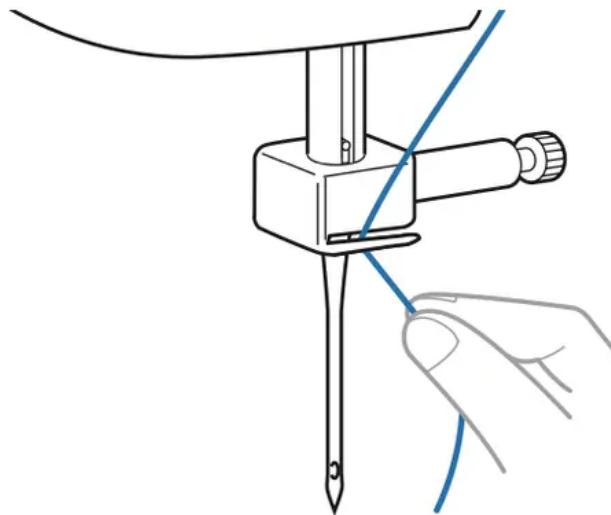
10. **Put the thread behind the needle bar thread guide above the needle.**

The thread can easily be passed behind the needle bar thread guide by holding the

thread in your left hand, then feeding the thread with your right hand.



① Needle bar thread guide

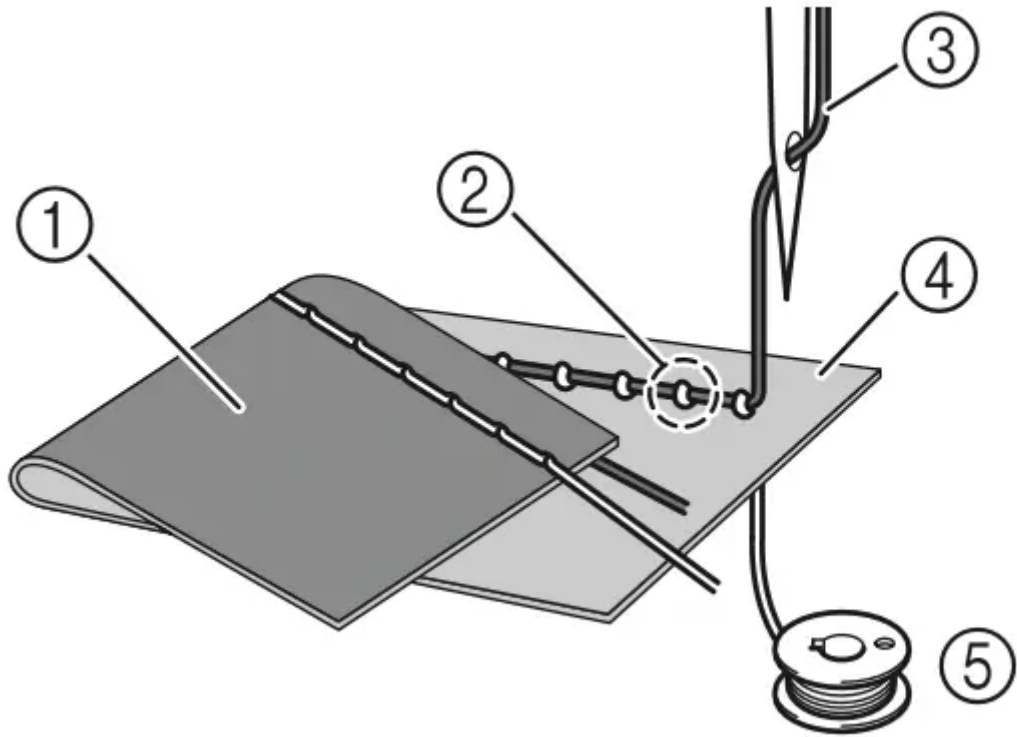


11. Thread the needle according to steps 13 and 14 in “Upper threading” (page 28) or steps 2 through 9 in “Using the needle threader” (page 28).

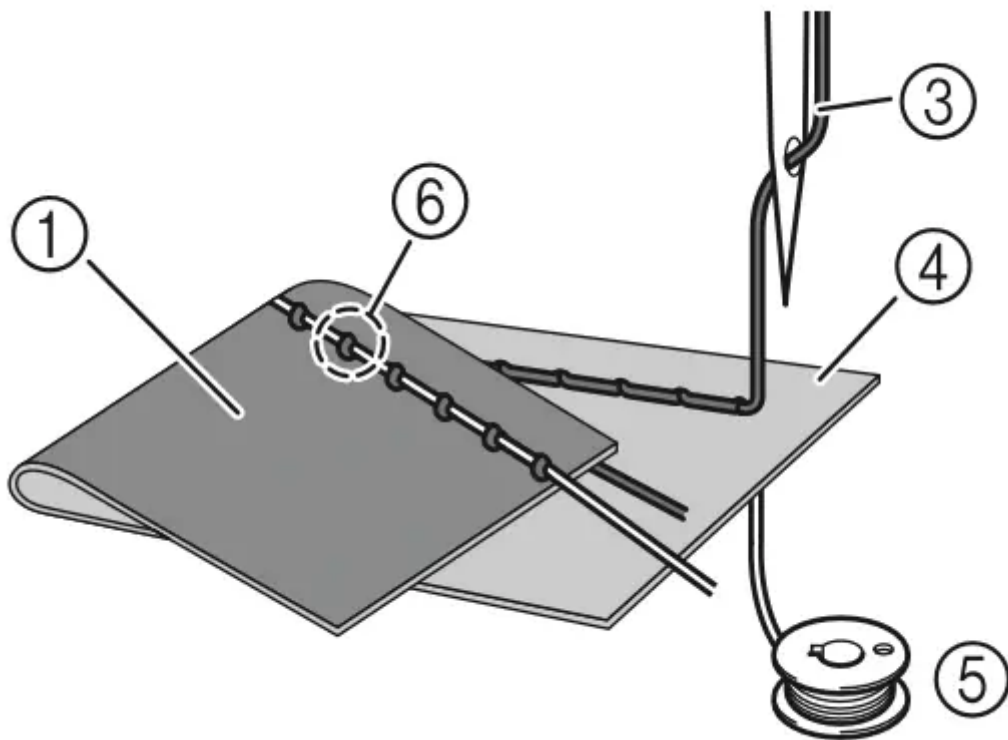
Incorrect thread tension

Symptoms

- Symptom 1: The lower thread is visible from the upper side of the fabric.
- Symptom 2: The upper thread appears as a straight line on the upper side of the fabric.
- Symptom 3: The upper thread is visible from the lower side of the fabric.
- Symptom 4: The lower thread appears as a straight line on the lower side of the fabric.
- Symptom 5: The stitching on the lower side of the fabric is loose or has slack.



Symptom 1



Symptom 3

1. Lower side of fabric

2. Lower thread visible from upper side of fabric
3. Upper thread
4. Upper side of fabric
5. Lower thread
6. Upper thread visible from lower side of fabric

Cause/remedy/check details

- **Cause 1**

- **The machine is not correctly threaded.**

- <With symptoms 1 and 2 described above>

- The lower threading is incorrect.

- Return the upper tension-control dial to “4”, and then refer to “Upper thread tightened up” (page 94) to correct the threading.

- <With symptoms 3 through 5 described above>

- The upper threading is incorrect.

- Return the upper tension-control dial to “4”, and then refer to “Tangled thread on wrong side of fabric” (page 95) to correct the upper threading.

- **Cause 2**

- **A needle and thread appropriate for the fabric are not being used.**

- The sewing machine needle that should be used depends on the type of fabric sewn and the thread thickness.

- If a needle and thread appropriate for the fabric are not being used, the thread tension will not be adjusted correctly, causing wrinkles in the fabric or skipped stitches.

- Refer to “Needle types and their uses” (page 31) to check that a needle and thread appropriate for the fabric are being used.

- **Cause 3**

- **An appropriate setting on the upper tension-control dial is not selected.**

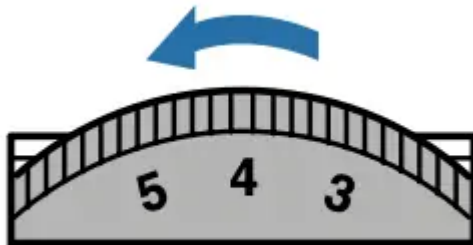
- Turn the upper tension-control dial to select an appropriate thread tension.

- The appropriate thread tension differs according to the type of fabric and thread being used.

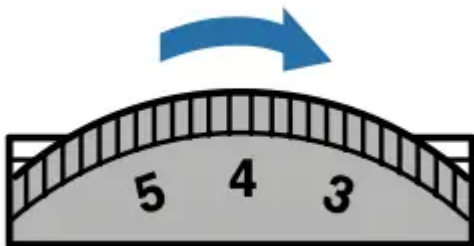
- * Adjust the thread tension while test sewing on a piece of scrap fabric that is the same as that used in your project.

Note: If the upper threading and lower threading are incorrect, the thread tension cannot be adjusted correctly, even by turning the upper tension-control dial. Check the upper threading and lower threading first, and then adjust the thread tension.

- When the lower thread is visible from the upper side of the fabric. Turn the upper tension-control dial to a lower number (toward the left). (Loosen the thread tension.)



- When the upper thread is visible from the lower side of the fabric. Turn the upper tension-control dial to a higher number (toward the right). (Tighten the thread tension.)



Fabric is caught in the machine and cannot be removed

If the fabric is caught in the sewing machine and cannot be removed, the thread may have become tangled under the needle plate. Follow the procedure described below to remove the fabric from the machine. If the operation could not be completed according to the procedure, instead of attempting to complete it forcefully, contact your nearest authorized service center.

Removing the fabric from the machine

- 1. Immediately stop the sewing machine.**
- 2. Turn off the sewing machine.**
- 3. Remove the needle.**

If the needle is lowered into the fabric, turn the handwheel away from you (clockwise) to raise the needle out of the fabric, and then remove the needle.

Refer to “Replacing the needle” (page 32).

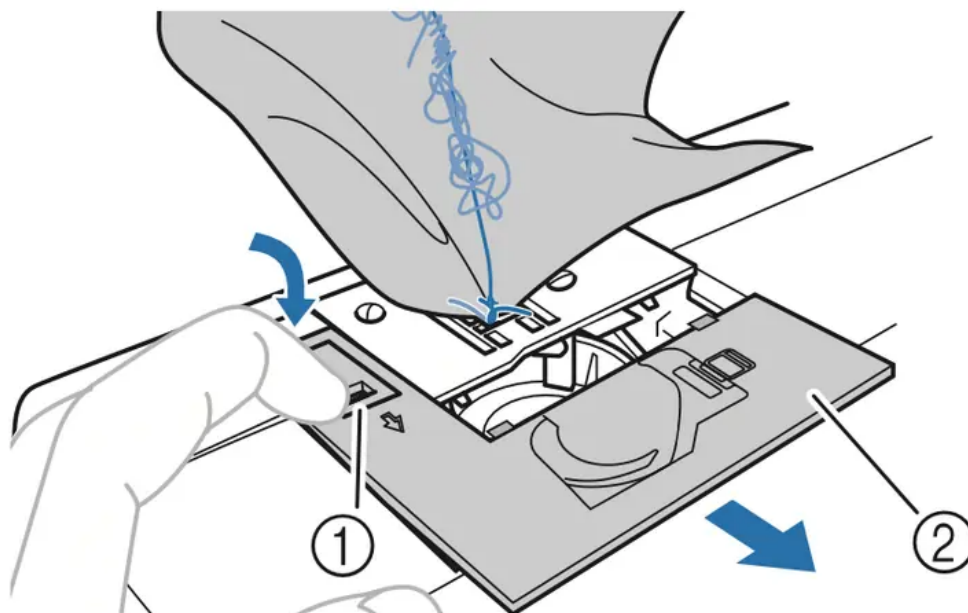
- 4. Remove the presser foot and presser foot holder.**

Refer to “Replacing the presser foot” (page 36) and “Removing the presser foot holder” (page 37).

5. Lift up the fabric and cut the threads below it.

If the fabric can be removed, remove it. Continue with the following steps to clean the race.

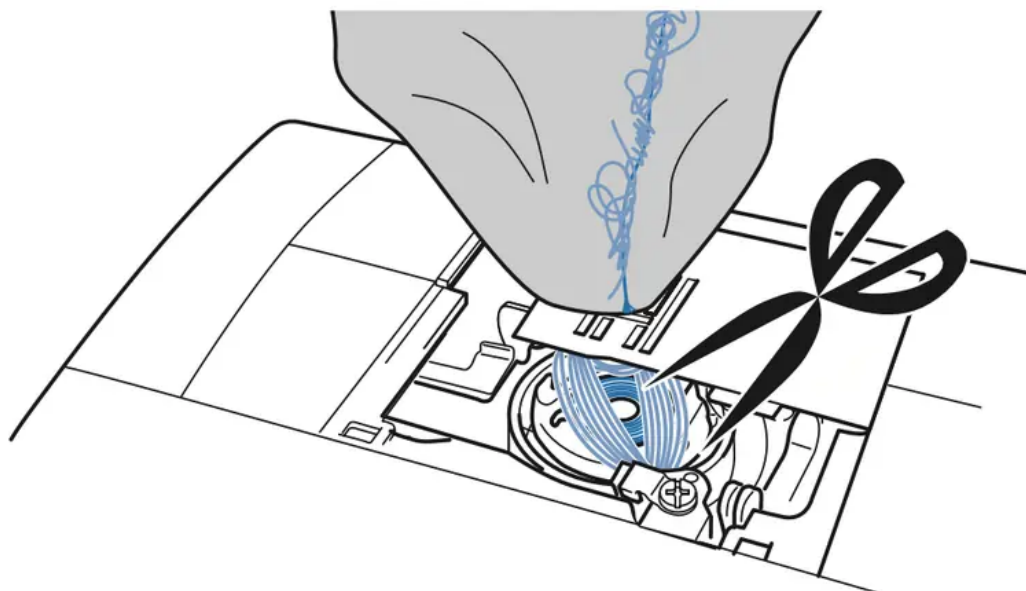
6. Remove the needle plate cover.



① Needle plate cover release

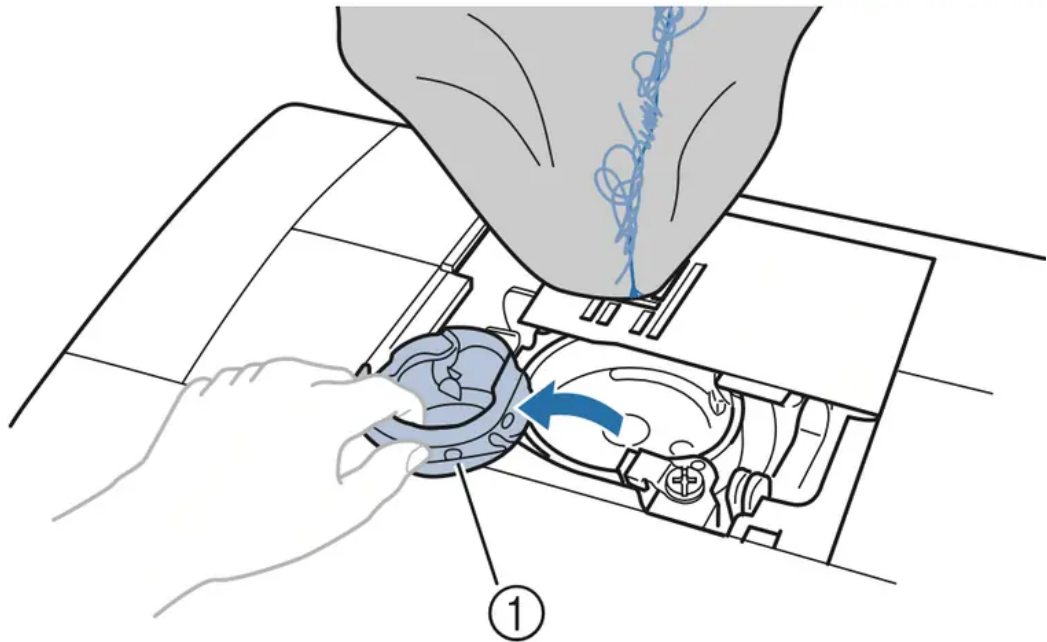
② Needle plate cover (front part)

7. Cut out the tangled threads, and then remove the bobbin.



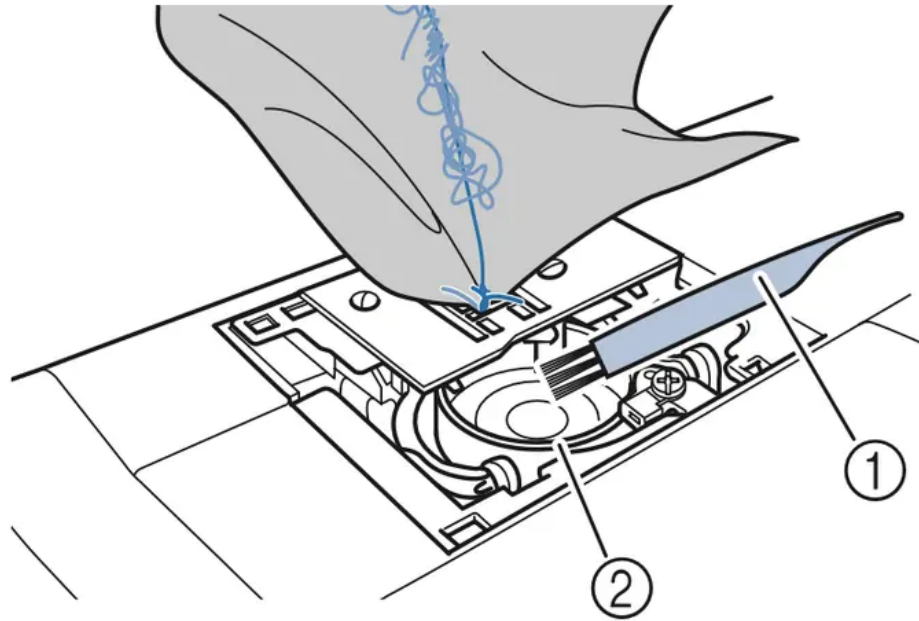
8. Remove the bobbin case.

If threads remain in the bobbin case, remove them.



① Bobbin case

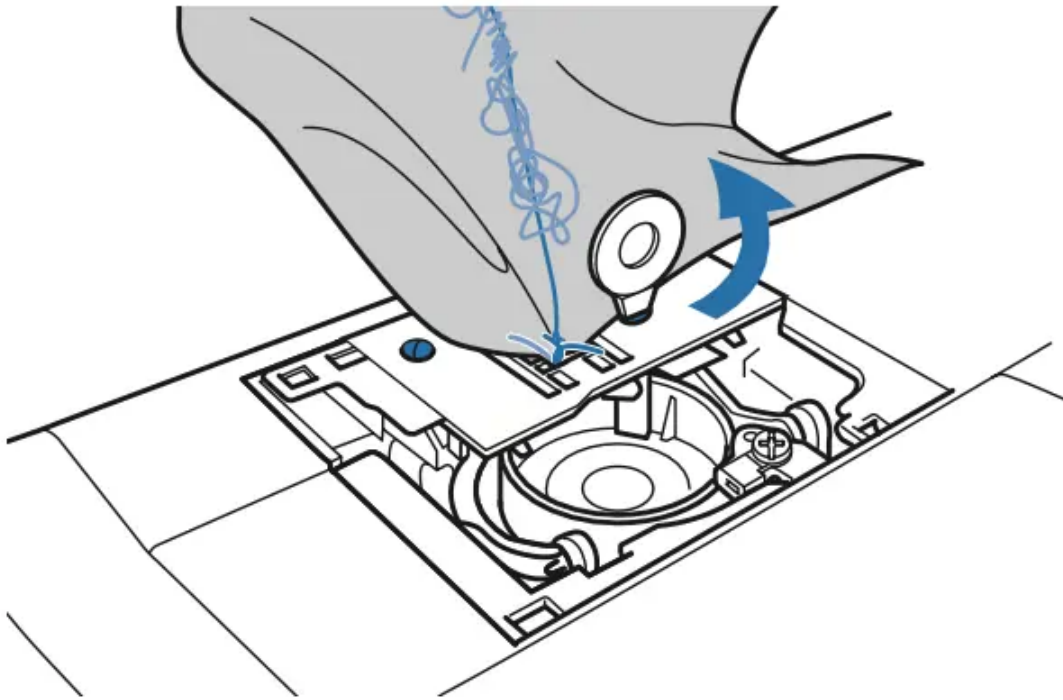
9. Use the cleaning brush or a vacuum cleaner to remove any dust from the race and its surrounding area.



- ① Cleaning brush
- ② Race

If the fabric could be removed	Continue to step 16 .
If the fabric could not be removed	Continue to step 10 .

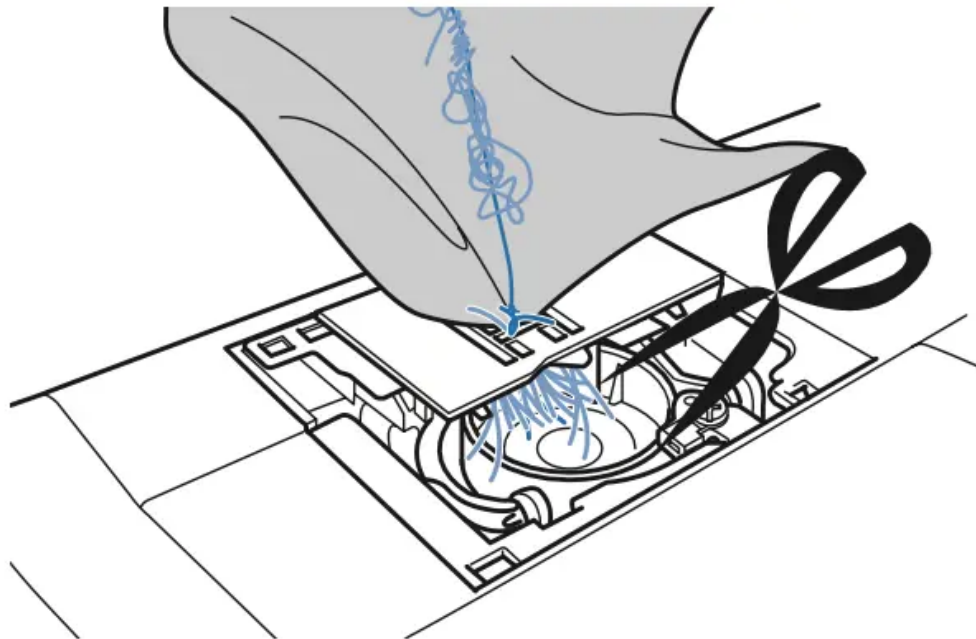
10. Use the enclosed disc-shaped screwdriver to loosen the two screws on the needle plate.



Note: Be careful not to drop the removed screws in the machine.

11. **Slightly lift up the needle plate, cut any tangled threads, and then remove the needle plate.**

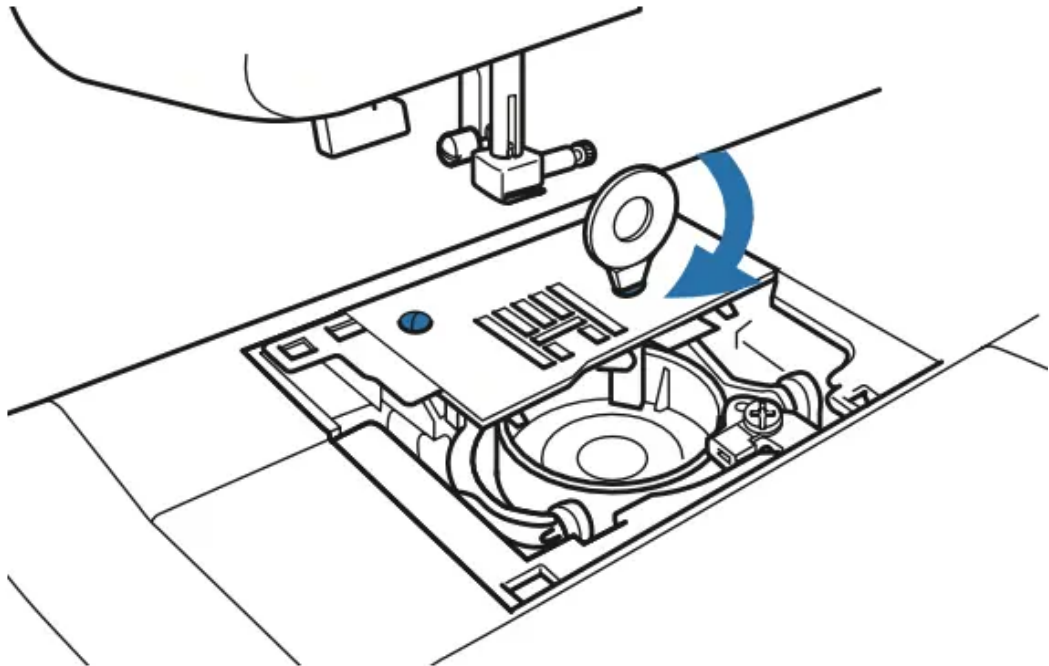
Remove the fabric and threads from the needle plate.



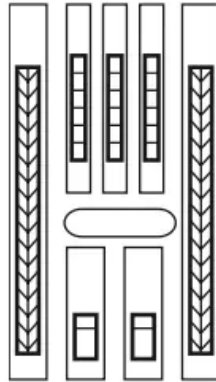
If the fabric cannot be removed, even after completing these steps, contact your nearest authorized service center.

12. **Remove any threads in the race and around the feed dogs.**
13. **Turn the handwheel to raise the feed dogs.**
14. **Align the two screw holes in the needle plate with the two holes at the needle plate mounting base, and then fit the needle plate onto the machine.**

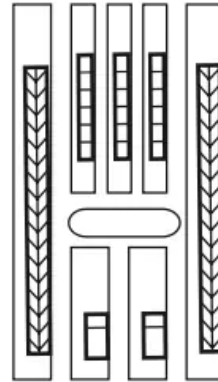
15. Lightly finger-tighten the screw on the right side of the needle plate. Then, use the discshaped screwdriver to firmly tighten the screw on the left side. Finally, firmly tighten the screw on the right side.



Turn the handwheel to check that the feed dogs move smoothly and do not contact the edges of the slots in the needle plate.



①



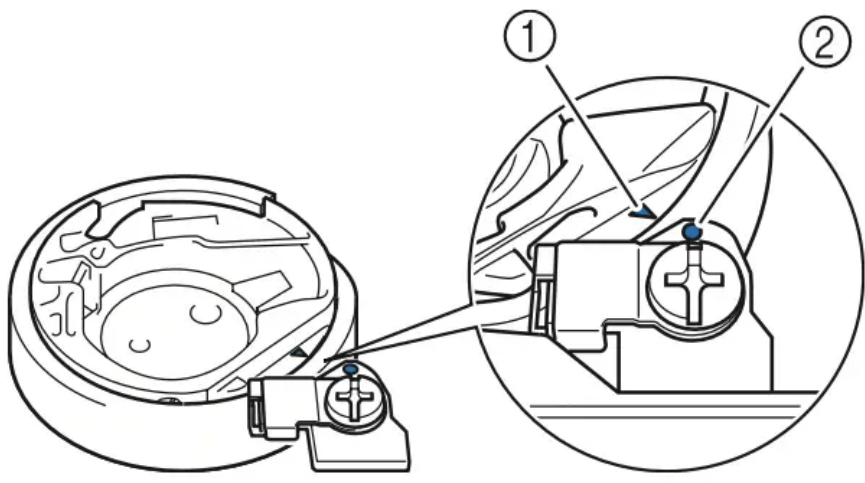
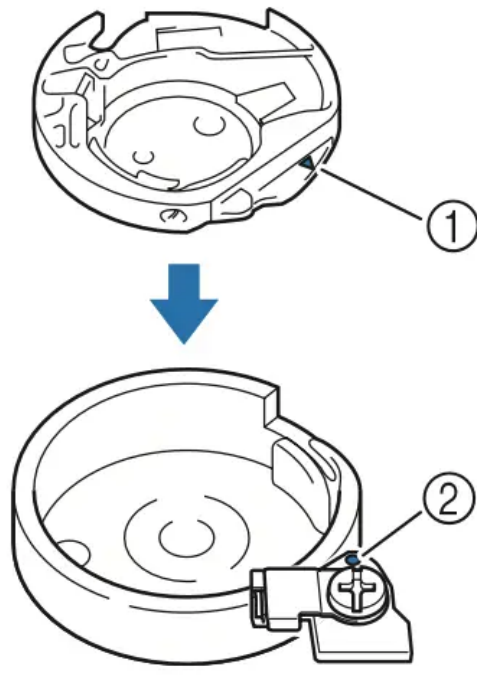
②

① Correct position of feed dogs

② Incorrect position of feed dogs

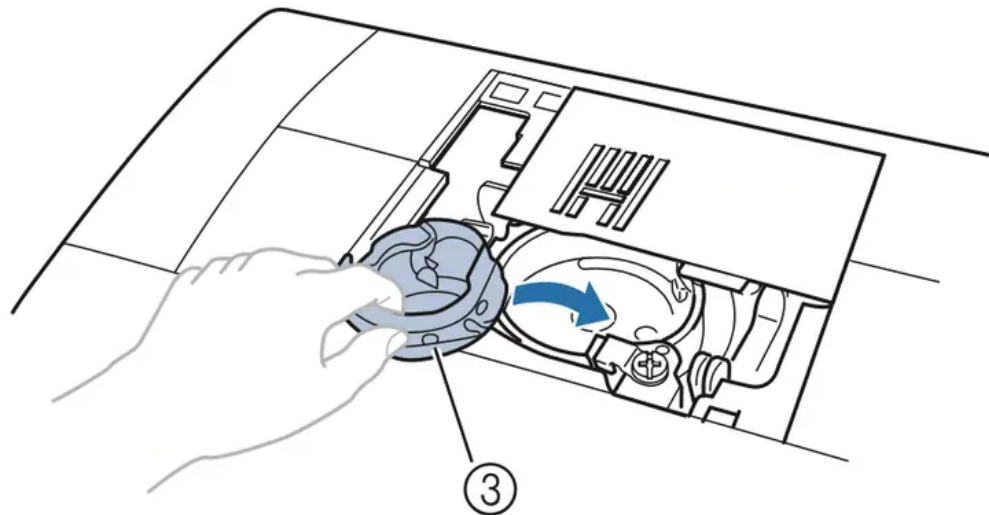
Note: Be careful not to drop the removed screws in the machine.

16. Insert the bobbin case so that the ▲ mark on the bobbin case aligns with the ● mark on the machine.



Align the ▲ and ● marks.





- ① ▲ mark
- ② ● mark
- ③ Bobbin case

Make sure that the indicated points are aligned before installing the bobbin case.

CAUTION:

Never use a bobbin case that is scratched, otherwise the upper thread may become tangled, the needle may break or sewing performance may suffer. For a new bobbin case (part code: XE7560-001), contact your nearest authorized service center.

Make sure that you fit the bobbin case properly, otherwise the needle may break.

17. **Attach the needle plate cover according to steps 8 and 9 in “Cleaning the race” (page 93).**

18. **Check the condition of the needle, and then install it.**

If the needle is in a poor condition, for example, if it is bent, be sure to install a new needle.

Refer to “Checking the needle” (page 32) and “Replacing the needle” (page 32).

CAUTION: Never use bent needles. Bent needles can easily break, possibly resulting in injuries.

Note: After completing this procedure, continue with the following procedure in “Checking machine operations” to check that the machine is operating correctly.

Memo: Since the needle may have been damaged when the fabric was caught in the machine, we recommend replacing it with a new one.

Checking machine operations

If the needle plate has been removed, check machine operations to confirm that installation has been completed correctly.

1. **Turn on the machine.**

2.

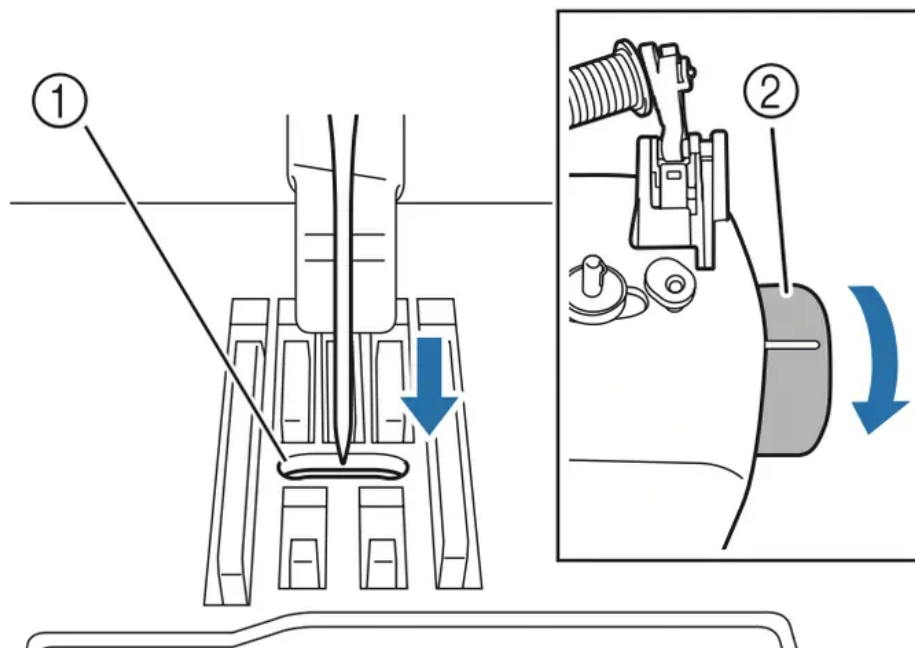


Select (middle needle position stitch).

Note: Do not yet install the presser foot and thread.

3. **Slowly turn the handwheel toward you (counterclockwise), and look from all sides to check that the needle falls at the center of the hole in the needle plate.**

If the needle contacts the needle plate, remove the needle plate, and then install it again, starting with step 13 in “Removing the fabric from the machine” (page 100).



- ① Hole in the needle plate
- ② Handwheel

4.



Select zigzag stitch . At this time, increase the stitch length and width to their maximum settings.

For details on changing the settings, refer to “Adjusting the stitch length and width” (page 40).

5. **Slowly turn the handwheel toward you (counterclockwise) and check that the needle bar and feed dogs operate correctly.**

If the needle or feed dogs contact the needle plate, the machine may be malfunctioning; therefore, contact your nearest authorized service center.

6. **Turn off the machine, and then install the bobbin and presser foot.**

Refer to “Lower threading” (page 22) and “Replacing the presser foot” (page 36).

7. **Correctly thread the machine.**

For details on threading the machine, refer to “Upper threading” (page 25).

Note: The thread may have become tangled as a result of incorrect upper threading. Make sure that the machine is correctly threaded.

8. **Perform trial sewing with normal fabric.**

Note: Incorrect sewing may be the result of incorrect upper threading or sewing thin fabrics. If there are poor results from the trial sewing, check the upper threading or the type of fabric being used.

Error message “E6” appears in the LCD

If the error message “E6” appears in the LCD with the occurrence of one of the following symptoms, follow the procedure below to solve the problem.

Symptom 1: The machine rattles and then stops just after sewing is started.

Symptom 2: The upper thread is tangled, for example, in the race, or fabric is caught in the machine.

Symptom 3: The needle breaks, or the needle bends and thus hits the needle plate.

Symptom 4: The fabric is not fed.

Symptom 1: The machine rattles and then stops just after sewing is started.

Cause

- The upper thread is not threaded correctly.
- The thread take-up lever is not threaded.

* When the machine stops just after sewing is started, the upper thread may not be threaded correctly.

Note: If the needle is not raised, the upper thread cannot be threaded correctly. Be sure to press the needle position button to raise the needle before threading the upper thread.

Remedy

Thread the upper thread again correctly by following the procedure below.

1. **Turn off the machine.**

2. **If the thread is tangled, remove the tangled thread.**

Refer to “Cleaning the race” (page 91) and “Tangled thread on wrong side of fabric” (page 95).

3. **Remove the upper thread from the machine.**

4. Turn the handwheel toward you (counterclockwise) to check if the handwheel moves smoothly.

If the handwheel moves smoothly	Continue to step 10.
If the handwheel does not move smoothly	Continue to step 5.

5. Remove the needle plate cover, and then remove the bobbin and bobbin case.
6. Insert the bobbin case so that the ▲ mark on the bobbin case aligns with the ● mark on the machine.
Refer to “Cleaning the race” (page 91).
7. Attach the needle plate cover.
Refer to “Cleaning the race” (page 91).
8. Set the bobbin in the bobbin case.
Refer to “Cleaning the race” (page 91).
9. If the needle is bent, replace it with a new one.
Refer to “Replacing the needle” (page 32).
10. Turn on the machine, and then press the needle position button to raise the needle.
Refer to “Upper threading” (page 25).
11. Thread the machine correctly.
For details on threading the machine, refer to “Upper threading” (page 25).

Symptom 2: The upper thread is tangled, for example, in the race, or fabric is caught in the machine.

• **Cause**

Thread is tangled below the needle plate.

• **Remedy**

Remove the fabric and reset the thread and bobbin by following the procedure below.

1. Turn off the machine.
2. Remove the fabric from the machine.
Refer to “Fabric is caught in the machine and cannot be removed” (page 99).
3. Remove the upper thread and bobbin.
Refer to “Fabric is caught in the machine and cannot be removed” (page 99).
4. Remove the bobbin case.
Refer to “Fabric is caught in the machine and cannot be removed” (page 99).

5. If threads remain in the bobbin case, remove it.
Refer to “Fabric is caught in the machine and cannot be removed” (page 99).
6. Insert the bobbin case so that the ▲ mark on the bobbin case aligns with the ● mark on the machine.
Refer to “Cleaning the race” (page 91).
7. Attach the needle plate cover.
Refer to “Cleaning the race” (page 91).
8. Set the bobbin in the bobbin case.
Refer to “Cleaning the race” (page 91).
9. If the needle is bent, replace it with a new one.
Refer to “Replacing the needle” (page 32).
10. Turn on the machine, and then press the needle position button to raise the needle.
Refer to “Upper threading” (page 25).
11. Thread the machine correctly.
For details on threading the machine, refer to “Upper threading” (page 25).

Symptom 3: The needle breaks, or the needle bends and thus hits the needle plate.

- **Cause**

You have not used the right combination of fabric, thread and needle.

- **Remedy**

Choose a thread and needle that are appropriate for the type of fabric.

- Refer to “Needle types and their uses” (page 31).

Symptom 4: The fabric is not fed.

- **Cause**

The thread has become clogged as the stitch is too fine.

- **Remedy**


Lengthen the stitch length.

- Refer to “Adjusting the stitch length and width” (page 40).

List of symptoms

Before sewing

Symptom	Possible cause	How to put it right	Reference
The needle threader can not be used.	You have not moved the needle holder to its highest position.	Raise the needle either by turning the handwheel toward you (counter clockwise) so that the mark on the wheel points up or by pressing  (needle position button) once or twice.	page 25
	The needle is incorrectly installed.	Correctly install the needle.	page 32
The sewing light does not come on.	The machine is not turned on.	Turn on the machine.	page 14
Bobbin thread does not wind neatly on the bobbin.	The thread is not passed through the bobbin-winding thread guide correctly.	Correctly pass the thread through the bobbin-winding thread guide.	page 19
	Bobbin spins slowly.	Move the sewing speed controller to the right (so that the speed will be fast).	page 21
	The thread that was pulled out was not wound onto the bobbin correctly.	Wind the thread that was pulled off round the bobbin five or six times clockwise.	page 20

The thread does not pass through the eye of the needle.	You have not moved the needle holder to its highest position.	Raise the needle either by turning the handwheel toward you (counter clockwise) so that the mark on the wheel points up or by pressing  (needle position button) once or twice.	page 25
	The needle is incorrectly installed.	Correctly install the needle.	page 32
The needle threader lever does not lower to the correct position.	The needle has not been raised to the correct position.	Press the needle position button.	page 25
While winding the bobbin, the bobbin thread was wound below the bobbin winder seat.	You have not wound the bobbin thread properly.	After removing the thread wound below the bobbin winder seat, wind the bobbin correctly.	page 17

While sewing


Symptom	Possible cause	How to put it right	Reference
The sewing machine does not work.	The machine is not plugged in.	Plug the machine in.	page 14
	The main power switch is turned off.	Turn on the main power switch.	page 14
	The bobbin winder shaft is pushed to the right.	Move the bobbin winder shaft to the left.	page 20, 21
	You have not used the foot controller properly.	Use the foot controller properly.	page 14
	The foot controller or the start/stop button was not pressed.	Press the foot controller or the start/ stop button.	page 41
	The presser foot lever is raised.	Lower the presser foot lever.	page 41
	The start/stop button was pressed, even though the foot controller is connected.	Do not use the start/stop button when the foot controller is connected. To use the start/stop button, disconnect the foot controller.	page 42
Fabric being sewn with the machine cannot be removed.	Thread is tangled below the needle plate.	Lift up the fabric and cut the threads below it, and clean the race.	page 99
The needle breaks.	The spool or spool cap is incorrectly installed.	Correctly install the spool or spool cap.	page 26

The upper thread was not threaded correctly.	Correct the upper threading.	page 25
The needle is incorrectly installed.	Correctly install the needle.	page 32
The needle clamp screw is loose.	Use the disc-shaped screwdriver to firmly tighten the screw.	page 33
The needle is bent or blunt.	Replace the needle.	page 32
You have not used the right combination of fabric, thread and needle.	Choose a thread and needle that are appropriate for the type of fabric.	page 31
The presser foot you are using is not appropriate for the type of stitch that you want to sew.	Attach the presser foot that is correct for the type of stitch that you want to sew.	page 82
The upper thread tension is too tight.	Loosen the upper thread tension.	page 43
You are pulling the fabric too much.	Lightly guide the fabric.	–
The area around the hole in the needle plate is scratched.	Replace the needle plate. Contact your retailer or the nearest authorized service center.	–
The area around the hole in the presser foot is scratched.	Replace the presser foot. Contact your retailer or the nearest authorized service center.	–

	The bobbin case is scratched.	Replace the bobbin case. Contact your retailer or the nearest authorized service center.	–
	You have not used a bobbin that has been designed for this machine.	Incorrect bobbins will not work properly. Only use a bobbin that has been designed for this machine.	page 17
The upper thread breaks.	The upper thread was not threaded correctly. (for example, the spool is not installed correctly, the spool cap is too big for the spool being used, or the thread has come out of the needle bar thread guide.)	Correct the upper threading. Use the spool cap that best fits the size of the spool being used.	page 25
	There are knots or tangles in the thread.	Remove any knots or tangles.	–
	The needle is not appropriate for the thread you are using.	Choose a needle that is appropriate for the type of stitch.	page 31
	The upper thread tension is too tight.	Loosen the upper thread tension.	page 43
	The thread is tangled, for example, in the race.	Remove the tangle thread. If the thread is tangled in the race, clean the race.	page 91, 95
	The needle is bent or blunt.	Replace the needle.	page 32
	The needle is incorrectly installed.	Correctly install the needle.	page 32

	The area around the hole in the needle plate is scratched.	Replace the needle plate. Contact your retailer or the nearest authorised service center.	–
	The area around the hole in the presser foot is scratched.	Replace the presser foot. Contact your retailer or the nearest authorised service center.	–
	The bobbin case is scratched, or has a burr on it.	Replace the bobbin case. Contact your retailer or the nearest authorised service center.	–
	You have not used a bobbin that has been designed for this machine.	Incorrect bobbins will not work properly. Only use a bobbin that has been designed for this machine.	page 17
The lower thread is tangled or breaks.	You have not wound the bobbin thread properly.	Wind the bobbin thread properly.	page 17
	The bobbin is scratched or does not turn smoothly.	Replace the bobbin.	–
	The thread is tangled.	Remove the tangled thread and clean therace.	page 91, 95
	You have not used a bobbin that has been designed for this machine.	Incorrect bobbins will not work properly. Only use a bobbin that has been designed for this machine.	page 17

	Bobbin is set incorrectly.	Reset the bobbin thread correctly.	page 22, 23
The fabric is wrinkled.	You have not threaded the upper thread properly or fitted the bobbin properly.	Thread the upper thread and wind the bobbin thread properly.	page 22,23, 25
	The spool or spool cap is incorrectly installed.	Correctly install the spool or spool cap.	page 26
	You have not used the right combination of fabric, thread and needle.	Choose a thread and needle that are appropriate for the type of fabric.	page 31
	The needle is bent or blunt.	Replace the needle.	page 32
	If thin fabrics are being sewn, the stitch is too long or the fabric is not being fed correctly.	Sew with the stabilizer material under the fabric.	page 46
	If thin fabrics are being sewn, the stitch is too coarse.	Shorten the stitch length, or sew with stabilizer material under the fabric.	page 40, 46
The fabric is wrinkled.	The presser foot you are using is not appropriate for the type of stitch that you want to sew.	Attach the presser foot that is correct for the type of stitch that you want to sew.	page 82
	The thread tension is incorrect.	Adjust the tension of the upper thread.	page 43, 98
Stitches are skipped.	You have not threaded the upper thread properly.	Correct the upper threading.	page 25

	You have not used the right combination of fabric, thread and needle.	Choose a thread and needle that are appropriate for the type of fabric.	page 31
	The needle is bent or blunt.	Replace the needle.	page 32
	The needle is incorrectly installed.	Correctly install the needle.	
	Dust has accumulated under the needle plate or in the race.	Remove the needle plate cover and clean the plate and the race.	page 91
There is a high-pitched noise while sewing.	Dust has built up in the feed dogs or in the race.	Remove the needle plate cover and clean the plate and the race.	page 91
	You have not threaded the upper thread properly.	Correct the upper threading.	page 25
	The bobbin case is scratched.	Replace the bobbin case. Contact your retailer or the nearest authorized service center.	–
	You have not used bobbin that has been designed for this machine.	Incorrect bobbins will not work properly. Only use a bobbin that has been designed for this machine.	page 17
The fabric does not feed.	The feed dogs are lowered.	Slide the feed dog position lever to  .	page 57, 67

	The stitch is too fine.	Lengthen the stitch length.	page 40
	You have not used the right combination of fabric, thread and needle.	Choose a thread and needle that are appropriate for the type of fabric.	page 31
	The thread is tangled, for example, in the race.	Remove the tangle thread. If the thread is tangled in the race, clean the race.	page 91, 95
	The presser foot you are using is not appropriate for the type of stitch that you want to sew.	Attach the presser foot that is correct for the type of stitch that you want to sew.	page 82
	The needle is bent or blunt.	Replace the needle.	page 32
	Zigzag foot "J" is slanted on a thick seam at the beginning of stitching.	Use the presser foot locking pin (black button on the left side) on zigzag foot "J" to keep the presser foot level while sewing.	page 45
The fabric feeds in the opposite direction.	The feed mechanism is damaged.	Contact your retailer or the nearest authorized service center.	—

After sewing

Symptom	Possible cause	How to put it right	Reference
The upper thread has tightened up.	The bobbin thread is incorrectly installed.	Correctly install the bobbin thread.	page 22, 94
The thread tension is incorrect.	You have not threaded the upper thread properly.	Correct the upper threading.	page 25
	You have not wound the bobbin thread properly.	Wind the bobbin thread properly.	page 17
	The bobbin thread is incorrectly installed.	Correctly install the bobbin thread.	page 22
	You have not threaded the right combination of thread and needle for the fabric you are using.	Choose a thread and needle that are appropriate for the type of fabric.	page 31
	You have not attached the presser foot holder properly.	Attach the presser-foot holder properly.	page 37
	The thread tension is incorrect.	Adjust the tension of the upper thread.	page 43, 98
	You have not used a bobbin that has been designed for this machine.	Incorrect bobbins will not work properly. Only use a bobbin that has been designed for this machine.	page 17
	Bobbin is set incorrectly.	Reset the bobbin thread correctly.	page 22, 23

The thread is tangled on the wrong side of the fabric.	You have not threaded the upper thread properly.	Correct the upper threading.	page 25, 95
The stitch is not sewn correctly.	The presser foot you are using is not appropriate for the type of stitch that you want to sew.	Attach the presser foot that is correct for the type of stitch that you want to sew.	page 82
	The thread tension is incorrect.	Adjust the tension of the upper thread.	page 43, 98
	The thread is tangled, for example, in the race.	Remove the tangle thread. If the thread is tangled in the race, clean the race.	page 91, 95
	The stitch adjustment level is incorrect.	Adjust the stitch.	page 80

ERROR MESSAGES

If an operation is performed incorrectly before the sewing machine is set up, an error message appears on the operation panel. Follow the instructions indicated in the table.

If you press the stitch selection key or do the operation correctly while the error message is displayed, the message disappears.

Error Message	Probable Cause	Solution
E1	The foot controller was pressed (or the start/ stop button was pressed if the foot controller is not connected) and the reverse/reinforcement stitch button was pressed while the presser foot is raised.	Lower the presser foot lever before continuing the operation.
E2	A stitch other than the button hole or bar tack stitch was selected and the foot controller was pressed (or the start/stop button was pressed if the foot controller is not connected) while the button hole lever is lowered.	Raise the button hole lever before continuing the operation.
E3	The button hole or bar tack stitch was selected and the foot controller was pressed (or the start/ stop button was pressed if the foot controller is not connected) while the button hole lever is raised.	Lower the buttonhole lever before continuing the operation.
E4	The reverse/reinforcement stitch button or needle position button was pressed while the bobbin winder shaft is moved to the right.	Move the bobbin winder shaft to the left before continuing the operation.
E5	The start/stop button was pressed while the foot controller was connected.	Disconnect the foot controller, and then press the start/stop button. Otherwise, operate the machine by using the foot controller.
E6	The motor locked up because the thread became tangled, or the needle bent and thus hit the needle plate.	Clean the race to remove the tangled thread (page 91). Check the needle. If the needle is bent or broken, replace the needle (page 32).

		If both of the above fail, refer to “Error message “E6” appears in the LCD” (page 103).
<i>F 1 - F 9</i>	The machine may be malfunctioning.	Contact your nearest authorized service center.

Operation beep

Each time a key is pressed you will hear one beep. If a non-functioning key is pressed or an incorrect operation is performed you will hear two or four beeps (only for models equipped with the operation beep).

- If a key is pressed (correct operation) One beep sounds.
- If an incorrect operation is performed or a non-functioning key is pressed Two or four beeps sound.
- If the machine locks up, for example, because the thread is tangled The sewing machine beeps for four seconds and the machine automatically stops. Be sure to check for the cause of the error, and correct it before continuing to sew.

Warning

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.