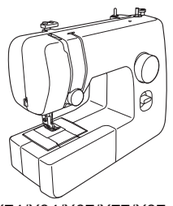
Operation Manual

Sewing Machine

brother



Video tutorials included on DVD.

888-X64/X74/X84/X67/X77/X87

XG4099-001

IMPORTANT SAFETY INSTRUCTIONS

Please read these safety instructions before attempting to use the machine.

⚠ DANGER

- To reduce the risk of electric shock:

1 Always unplug the machine from the electrical outlet immediately after using, when cleaning, when making any user servicing adjustments mentioned in this manual, or if you are leaving the machine unattended.

⚠ WARNING

- To reduce the risk of burns, fire, electric shock, or injury to persons.

2 Always unplug the machine from the electrical outlet when making any adjustments mentioned in the instruction manual:

- To unplug the machine, switch the machine to the symbol “O” position to turn it off, then grasp the plug and pull it out of the electrical outlet. Do not pull on the cord.
- Plug the machine directly into the electrical outlet. Do not use an extension cord.
- Always unplug your machine if the power is cut.

3 Electrical Hazards:

- This machine should be connected to an AC power source within the range indicated on the rating label. Do not connect it to a DC power source or inverter. If you are not sure what kind of power source you have, contact a qualified electrician.
- This machine is approved for use in the country of purchase only.

4 Never operate this machine if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or water is spilled on the unit. Return the machine to the nearest authorized Brother dealer or service center for examination, repair, electrical or mechanical adjustment.

- While the machine is stored or in use if you notice anything unusual, such as an odor, heat, discoloration or deformation, stop using the machine and immediately unplug the power cord.
- When transporting the machine, be sure to carry it by its handle. Lifting the machine by any other part may damage the machine or result in the machine falling, which could cause injuries.
- When lifting the machine, be careful not to make any sudden or careless movements, otherwise you may injure your back or knees.

5 Always keep your work area clear:

- Never operate the machine with any air openings blocked. Keep ventilation openings of the machine and foot control free from the build up of lint, dust, and loose cloth.
- Do not store objects on the foot controller.
- Do not use extension cords. Plug the machine directly into the electrical outlet.
- Never drop or insert any object into any opening.
- Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
- Do not use the machine near a heat source, such as a stove or iron; otherwise, the machine, power cord or garment being sewn may ignite, resulting in fire or an electric shock.
- Do not place this machine on an unstable surface, such as an unsteady or slanted table, otherwise the machine may fall, resulting in injuries.

6 Special care is required when sewing:

- Always pay close attention to the needle. Do not use bent or damaged needles.
- Keep fingers away from all moving parts. Special care is required around the machine needle.
- Do not turn on the machine while pressing down the foot controller. The machine may start unexpectedly and cause personal injury or damage to the machine.
- Switch the machine to the symbol “O” position to turn it off when making any adjustments in the needle area.
- Do not use a damaged or incorrect needle plate, as it could cause the needle to break.
- Do not push or pull the fabric when sewing, and follow careful instruction when freehand stitching so that you do not deflect the needle and cause it to break.

7 This machine is not a toy:

- Your close attention is necessary when the machine is used by or near children.
- The plastic bag that this machine was supplied in should be kept out of the reach of children or disposed of. Never allow children to play with the bag due to the danger of suffocation.
- Do not use outdoors.

8 For a longer service life:

- When storing this machine, avoid direct sunlight and high humidity locations. Do not use or store the machine near a space heater, iron, halogen lamp, or other hot objects.
- Use only neutral soaps or detergents to clean the case. Benzene, thinner, and scouring powders can damage the case and machine, and should never be used.
- Always consult the operation manual when replacing or installing any assemblies, the presser feet, needle, or other parts to assure correct installation.

9 For repair or adjustment:

- If the light unit (light-emitting diode) is damaged, it must be replaced by authorized Brother Service Center.
- In the event a malfunction occurs or adjustment is required, first follow the troubleshooting table in the back of the operation manual to inspect and adjust the machine yourself. If the problem persists, please consult your local authorized Brother Service Center.

Use this machine only for its intended use as described in this manual.

Use accessories recommended by the manufacturer as contained in this manual.

The contents of this manual and specifications of this product are subject to change without notice.

For additional product information, visit our web site at www.brother.com

SAVE THESE INSTRUCTIONS

This machine is intended for household use.

FOR USERS IN COUNTRIES EXCEPT EUROPEAN COUNTRIES

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

FOR USERS IN EUROPEAN COUNTRIES

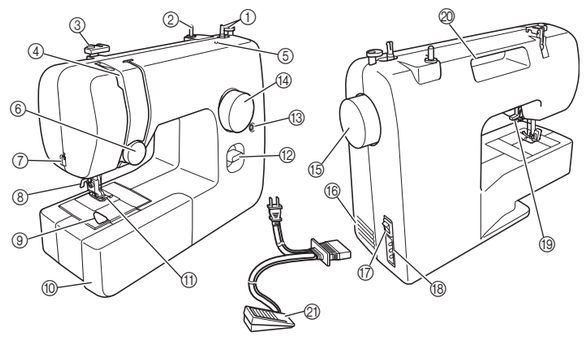
This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

FOR USERS IN THE UK, EIRE, MALTA AND CYPRUS ONLY

IMPORTANT

- In the event of replacing the plug fuse, use a fuse approved by ASTA to BS 1362, i.e. carrying the ASTA mark, rating as marked on plug.
- Always replace the fuse cover. Never use plugs with the fuse cover omitted.
- If the available electrical outlet is not suitable for the plug supplied with this equipment, you should contact your authorized Brother Service Center to obtain the correct lead.

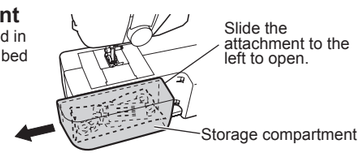
The main parts



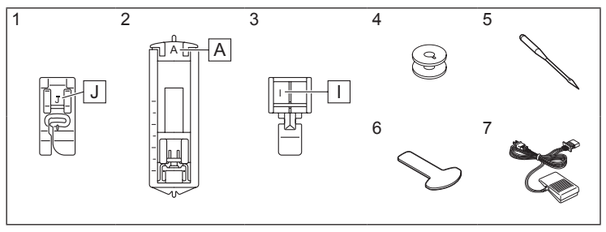
① **Bobbin winder**
This winds the thread onto the bobbin for use as the lower thread.
② **Spool pin**
This holds the spool of thread.
③ **Thread guide**
This is used when winding the thread onto the bobbin and then threading the machine.
④ **Thread take-up lever**
⑤ **Hole for extra spool pin**
This holds a second spool of thread for sewing with the twin needle.
⑥ **Upper tension-control dial**
This controls the tension of the upper thread.
⑦ **Thread cutter**
Pass the threads through the thread cutter to cut them.
⑧ **Needle threader**
⑨ **Quick-set bobbin**
⑩ **Flat bed attachment with accessory compartment**
⑪ **Presser foot**
⑫ **Reverse sewing lever**
Push this lever to stitch in the reverse direction.
⑬ **Buttonhole fine-adjustment screw**
⑭ **Pattern selection dial**
Rotate the dial in either direction to choose the stitch you want.
⑮ **Handwheel**
Used to manually raise and lower the needle.
⑯ **Air vent**
The air vent allows the air surrounding the motor to circulate.
Do not cover the air vent while the machine is being used.
⑰ **Main power and sewing light switch**
You can turn the main power and sewing light switch on and off.
⑱ **Foot controller jack / socket**
Plug in the foot controller plug and connect the machine to the power supply.
⑲ **Presser foot lever**
Used to raise and lower the presser foot.
⑳ **Handle**
Carry the machine by its handle when transporting.
㉑ **Foot controller**
You can use this to control the sewing speed, and to start and stop sewing.

■ Flat bed attachment

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



Included accessories

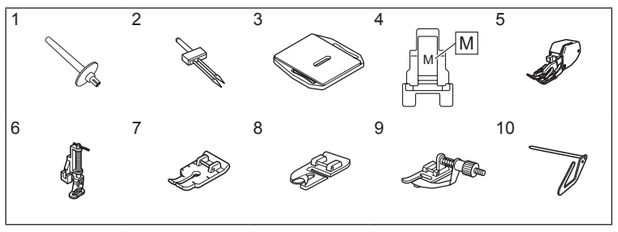


No.	Part Name	Part Code	
		Americas	Others
1	Zigzag foot “J” (on machine)	XC4901-121	
2	Buttonhole foot “A”	X59369-321	
3	Zipper foot “I”	XE9369-001	
4	Bobbin (One is on machine)	SA156	SFB:XA5539-151
5	Needle set (90/14 needle)	3-piece set: XE5328-001	
		2-piece set: XE7064-001	
6	Screwdriver	XF3557-001	
7	Foot controller	Model KD-1902 for 110-120V area KD-1902 for 110-127V area (Brazil only)	
		Model KD-2902 for 220-240V area	

Note

- **The included accessories vary depending on the machine model.**
- **The foot controller part code differs depending on the country or region. Contact your Brother dealer or the nearest authorized Brother Service Center.**

Optional accessories



No.	Part Name	Part Code	
		Americas	Others
1	Extra spool pin	XG3488-001	
2	Twin needle (2.0/75 needle)	X57521-021	
3	Darning Plate	XC6063-021	
4	Button sewing foot “M”	XE2137-001	
5	Walking Foot	SA107	F034N: XC2165-002
6	Quilting Foot	SA129	F005N: XC1948-052
7	1/4-inch Quilting Foot	SA125	F001N: XC1944-052
8	Narrow Hemmer Foot	SA127	F003N: XC1945-052
9	Blind Stitch Foot	SA134	F018N: XC1976-052
10	Quilting guide	SA132	F016N: XC2215-052

Note

- **The optional accessories are to be purchased separately. Depending on the model you purchased, some accessories may be included with your machine.**

Using Your Sewing Machine

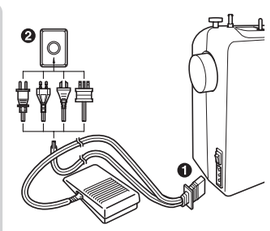
⚠ WARNING

- **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 Brother Service Center 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.**

■ Connecting plugs



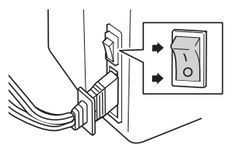
Note

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

(For U.S.A. only)

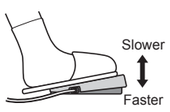
- **This appliance has a polarized plug (one blade wider than the other). To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to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

■ Main power and sewing light switch



Press the power switch toward the “I” mark to turn the main power and sewing light on. Press toward the “O” mark to turn off.

■ Foot controller



Press the foot controller down to start sewing. Take your foot off the foot controller to stop sewing.

⚠ CAUTION

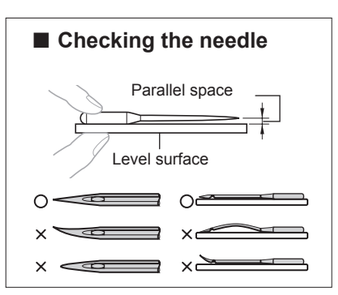
- **Do not allow pieces of cloth and dust to build up on the foot controller. Doing so could cause a fire or an electric shock.**

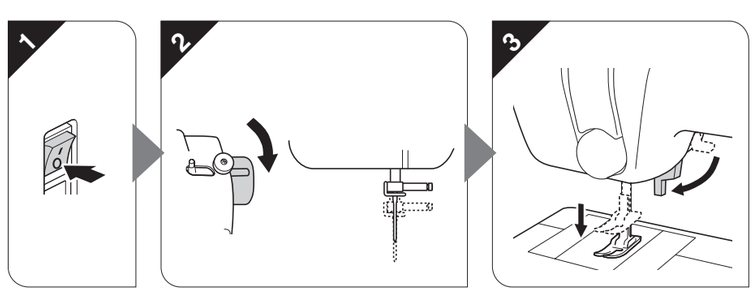
Replacing the needle

⚠ CAUTION

- **Always turn off the machine before you change the needle. Otherwise, injuries may occur if the foot controller is accidentally pressed and the machine starts sewing.**
- **Only use sewing machine needles for home use. Other needles may bend or break and cause injury.**
- **Never sew with a bent needle. A bent needle will easily break and cause injury.**

■ Checking the needle





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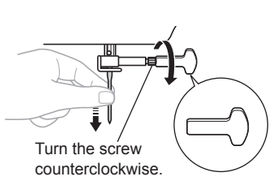
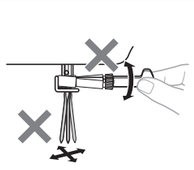
⚠ CAUTION

- **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.**

Note

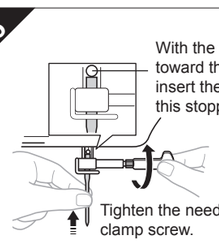
- **Do not use excessive force when loosening or tightening the needle clamp screw.**



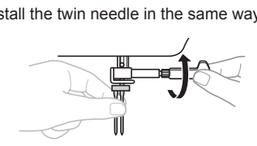


5

With the flat side of the needle toward the back of the machine, insert the needle until touching this stopper.



Install the twin needle in the same way.



⚠ CAUTION

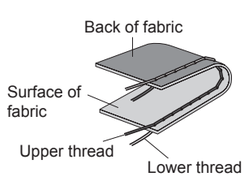
- **Make sure you insert the needle until it touches the stopper, and securely tighten the needle clamp screw with a screwdriver, otherwise the needle may break or the machine may be damaged.**

Thread tension

The tension of the thread will affect the quality of your stitches. You may need to adjust it when you change fabric or thread. We recommend that you do a test sample on scrap of a fabric before you start to sew.

■ Correct tension

Correct tension is important as too much or too little tension will weaken your seams or cause puckers on your fabric.

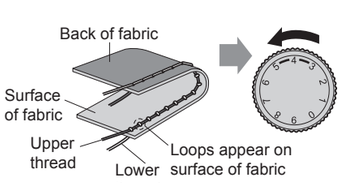


■ Upper tension is too tight

Loops will appear on the surface of the fabric.

Note

- **If the bobbin thread was incorrectly threaded, the upper thread may be too tight. In this case, refer to “1 Lower threading” on the back side to rethread the bobbin thread.**



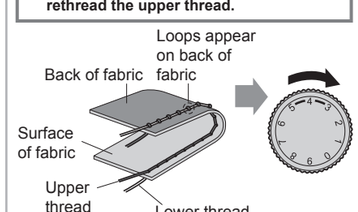
Solution: Reduce the tension by turning the upper tension control dial to a lower number.

■ Upper tension is too loose

Loops appear on the back of the fabric.

Note

- **If the upper thread was incorrectly threaded, the upper thread may be too loose. In this case, refer to “2 Upper threading” on the back side and rethread the upper thread.**

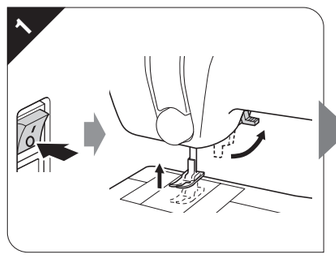


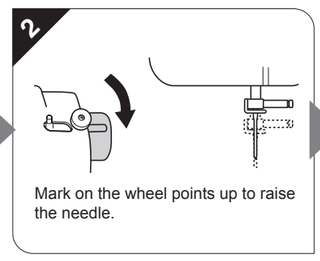
Solution: Increase the tension by turning the upper tension control dial to a higher number.

Changing the presser foot

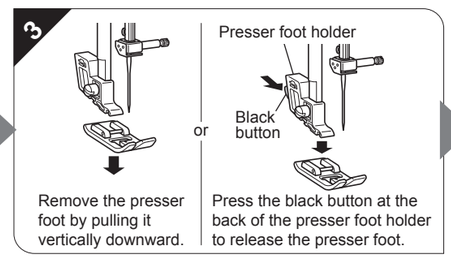
⚠ CAUTION

- **Always turn off the machine 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 any other presser foot may cause accident or injury.**



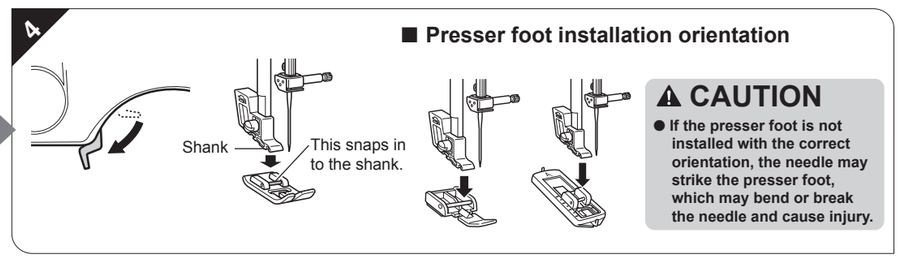


Mark on the wheel points up to raise the needle.



Remove the presser foot by pulling it vertically downward.

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



■ Presser foot installation orientation

⚠ CAUTION

- **If the presser foot is not installed with the correct orientation, the needle may strike the presser foot, which may bend or break the needle and cause injury.**

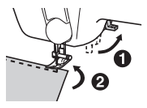
Reverse sewing

- To sew in reverse, push the reverse sewing lever in as far as possible and hold it in that position while you lightly push the foot controller.
- To sew forward, release the reverse sewing lever. The machine will then sew forward.
- The length of reverse stitches is fixed at 2 mm (1/16 inch).

Trial sewing

Use a piece of fabric and thread that are the same as those used for your project, and check the thread tension and stitch length and width.

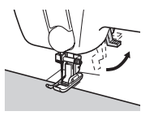
Changing the sewing direction



Stop the machine with the needle in the fabric at the point where you want to change the sewing direction, and then raise the presser foot lever. Using the needle as a pivot, turn the fabric, lower the presser foot lever, and then continue sewing.

Sewing thick fabrics

If the fabric does not fit easily under the presser foot, raise the presser foot lever even higher to bring the presser foot to its highest position.

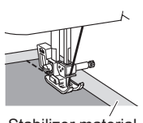


⚠ CAUTION

If fabric more than 6 mm (15/64 inch) thick is sewn or if the fabric is pushed with too much force, the needle may bend or break.

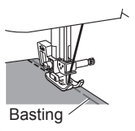
Sewing thin fabrics

When sewing thin fabrics, the stitching may become misaligned or the fabric may not feed correctly. If this occurs, place thin paper or stabilizer material under the fabric and sew it together with the fabric. When you have finished sewing, tear off any excess paper.



Sewing stretch fabrics

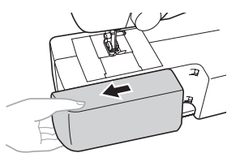
First, baste the pieces of fabric together, and then sew without stretching the fabric.



Stitching cylindrical pieces

1

Slide the flat bed attachment to the left to release it.

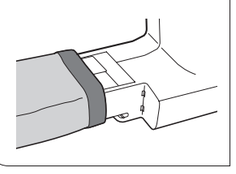


Note

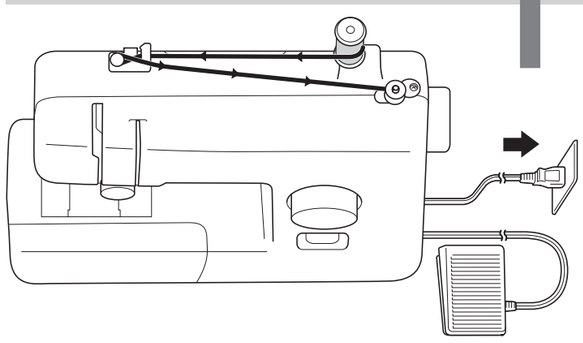
- **When you are finished with free-arm sewing, install the flat bed attachment back in its original position.**

2

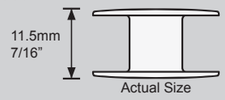
Slide the part that you wish to sew onto the arm, and then sew from the top.



1 Lower Threading

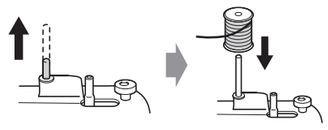


⚠ CAUTION
Be sure to use the correct bobbin.



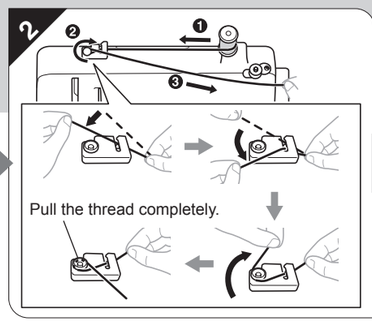
⚠ CAUTION
Wind the bobbin properly, or the thread tension may loosen, and the needle may break.

1. Pull up the spool pin completely.

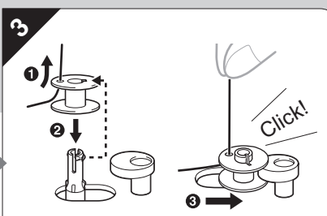


⚠ CAUTION
If the spool is set incorrectly, the thread may tangle and the needle may break.

2. Pull the thread completely.



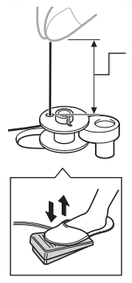
3. Align the notch to the projection. Slide the bobbin to the right.



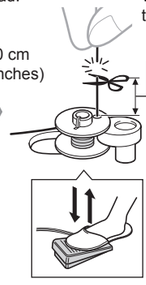
4. Turn the power on.

⚠ CAUTION
Do not turn the power on while pressing the foot controller down, otherwise your may be injured.

Hold the end of the thread.

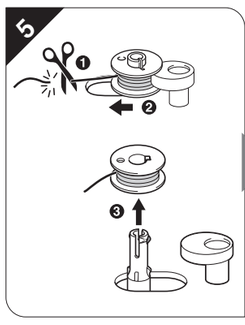


Wind the thread few times around the bobbin.

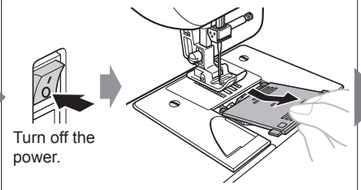


When the bobbin is full, the bobbin will spin slowly.

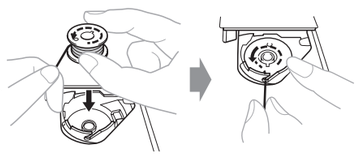
5.



6. Turn off the power.

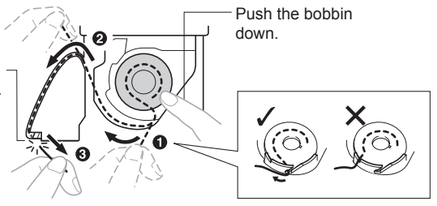


7. Hold the bobbin down.

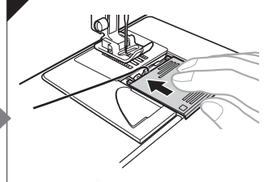


Cut the thread with the cutter.

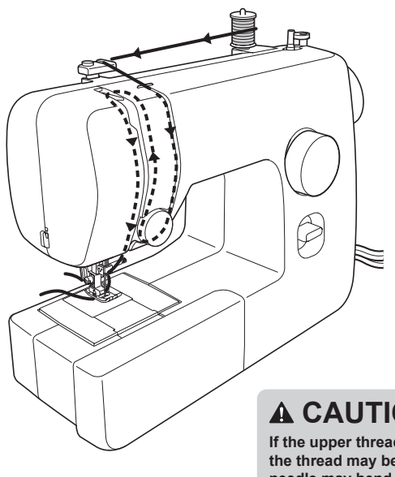
Push the bobbin down.



8. With the end of the thread comes out from the cover toward the rear of the machine.

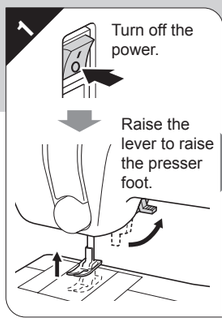


2 Upper Threading



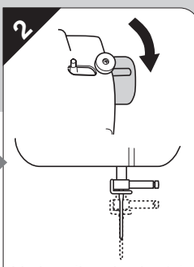
⚠ CAUTION
If the upper threading is not correct, the thread may become tangled or the needle may bend or break.

1. Turn off the power.



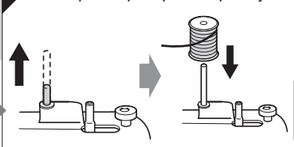
Raise the lever to raise the presser foot.

2.



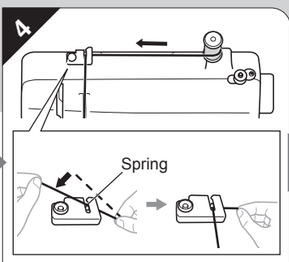
Mark on the wheel points up to raise the needle.

3. Pull up the spool pin completely.



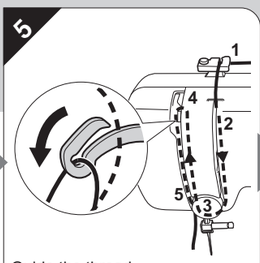
⚠ CAUTION
If the spool is set incorrectly, the thread may tangle and the needle breaks.

4.



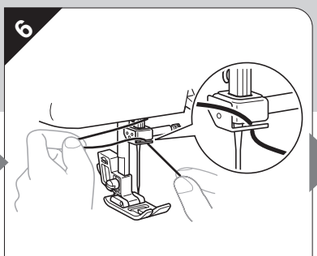
Make sure that the spring in the groove catches the thread.

5.



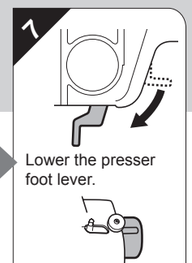
Guide the thread.

6.



Pull the thread behind the guide above the needle.

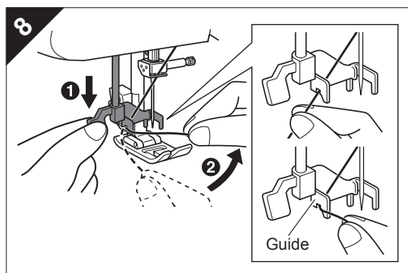
7.



Lower the presser foot lever.

Mark on the wheel points up.

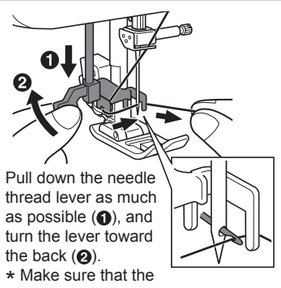
8.



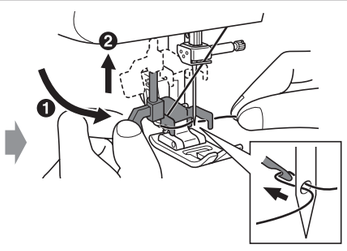
While lowering the needle threader lever (❶), hook the thread onto the guide (❷).

Pull down the needle thread lever as much as possible (❶), and turn the lever toward the back (❷).

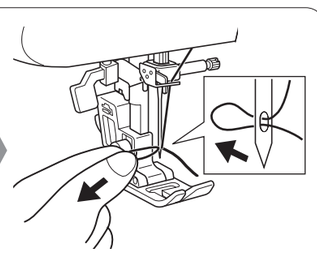
* Make sure that the hook passes through the eye of the needle and grabs the thread.



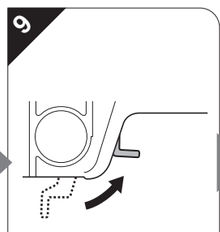
Turn the needle threader lever toward the front (❶), and then raise the needle threader lever (❷).



Pull the loop of the thread toward the back of the machine.

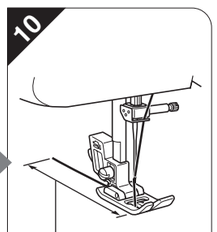


9.



Raise the presser foot lever.

10.



5 cm (2 inches)

3 Start sewing – Straight Stitch

⚠ CAUTION

- **To avoid being injured, watch the needle carefully while you are using the machine. Keep your hands away from moving parts.**
- **Do not stretch or pull the fabric during sewing, otherwise the needle may be damaged and you may be injured.**
- **Do not use bent or broken needles, otherwise you may be injured.**
- **Take care that the needle does not hit basting pins or other objects during sewing. The needle may break and you may be injured.**
- **Always use the correct presser foot. If you use the wrong presser foot, the needle may hit the presser foot and bend or break and you may be injured.**
- **When you turn the handwheel by hand, always turn it toward you (counterclockwise). Turning it the other way may cause the thread to tangle and damage the needle or fabric, and you may be injured.**
- **Do not start sewing without placing the fabric under the presser foot, otherwise the presser foot may be damaged.**

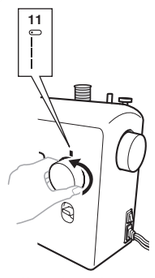
1.

Turn the power on.

⚠ CAUTION
Do not turn the power on while pressing the foot controller down, otherwise your may be injured.

Mark on the wheel points up.

2.



Select a stitch.

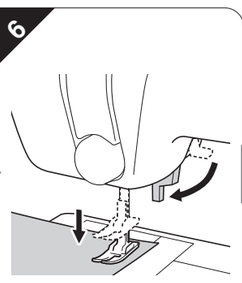
3.

4.

5.

Place the needle to the starting point.

6.

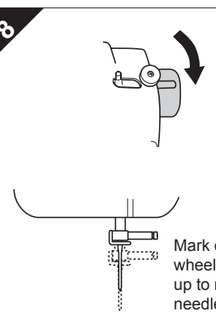


7.

Gently press down to start sewing.

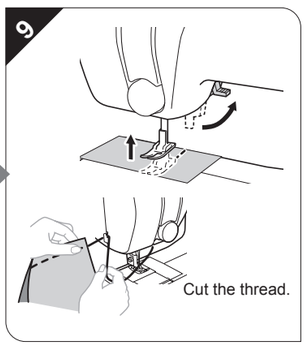
Take off your foot to stop sewing.

8.



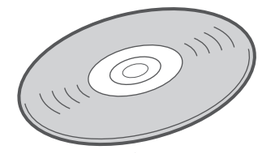
Mark on the wheel points up to raise the needle.

9.



Cut the thread.

4



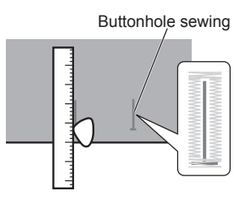
Find more information about your sewing machine in the included instructional DVD.

Sewing Buttonholes and Buttons

⚠ CAUTION
Always turn off the machine before replacing the presser foot. Otherwise, injuries may occur if the foot controller is accidentally pressed and the machine starts sewing.

1 Preparation

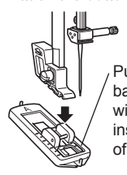
1. Using tailor's chalk, mark the position and length of the buttonhole on the fabric.



2.

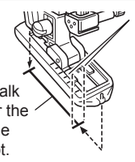
⚠ CAUTION
If the presser foot is not installed with the correct orientation, the needle may strike the presser foot, which may bend or break the needle and cause injury.

Attach the buttonhole foot.



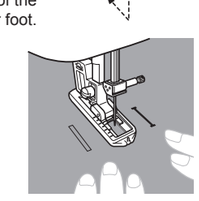
Push the frame back until it stops with the plastic insert at the front of the frame.

3.



Line the chalk mark under the center of the presser foot.

Match up the bar tack mark to the two red lines on the presser foot.



2 Making a buttonhole

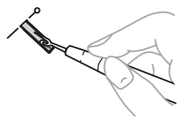
Step	Sewn section	Pattern
Step 1 (Front bar tack)	a	ac, c, a
1. Set the pattern selection dial to "a". 2. Lower the presser foot and sew 5 to 6 stitches. 3. Stop the machine when the needle is at the left side of the stitches and then raise the needle from the material.		
Step 2 (Left side)	b	b
1. Turn the pattern selection dial to "b". 2. Sew the length of the tailor's chalk line. 3. Stop the machine when the needle is at the left side of the stitch and then raise the needle.		
Step 3 (Back bar tack)	c	ac, c, a
1. Turn the pattern selection dial to "c" (same position as in step 1). 2. Sew 5 to 6 stitches. 3. Stop the machine when the needle is at the right side of the stitch and then raise the needle from the material.		
Step 4 (Right side)	d	d
1. Set the pattern selection dial to "d". 2. Sew the right side until the needle reaches the stitches sewn in step 1.		

3 Securing the Stitching and Cutting the Buttonhole

1. To secure the stitching, turn the material 90 degrees counterclockwise and sew straight stitches to the end of the front bar tack of the buttonhole.

2. Remove the material from the machine. We recommend that you put pins across both ends of the buttonhole to prevent the stitches from being cut.

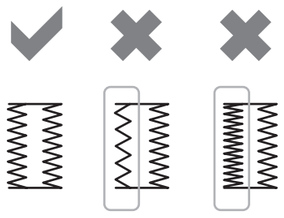
3. Cut an opening in the middle of the buttonhole with the seam ripper tool. Be careful not to cut through and stitches.



⚠ CAUTION
When using the seam ripper to open the buttonhole, do not put your hand or finger in the path of the ripper. The seam ripper may slip and you may be injured.

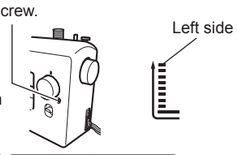
Adjusting buttonholes

After sewing the left side of the buttonhole, stitch the right side and observe the feeding.



If the left side is too open or tight compared with the right side, adjust the buttonhole fine-adjustment screw.

This adjustment ensures both sides of the buttonhole are the same.



Turn the buttonhole fine-adjustment screw with a large screwdriver as indicated in the illustrations, according to the buttonhole appearance.

Maintenance

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 Brother Service Center or the nearest authorized Brother 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.

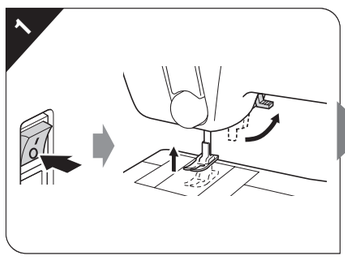
- Exposed to extremely high temperatures
- Exposed to extremely low temperatures
- Exposed to extreme temperature changes
- Exposed to high humidity or steam
- Near a flame, heater or air conditioner
- Outdoors or exposed to direct sunlight
- Exposed to extremely dusty or oily environments

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

⚠ CAUTION
Make sure you unplug the machine before you clean it, otherwise you risk getting an electric shock or being injured.

1.



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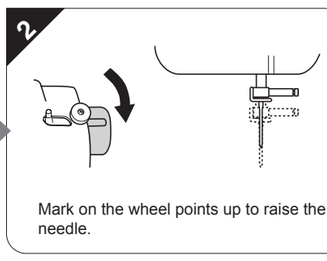
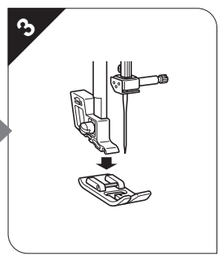


Mark on the wheel points up to raise the needle.

3.



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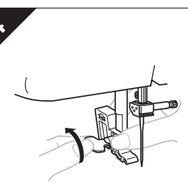

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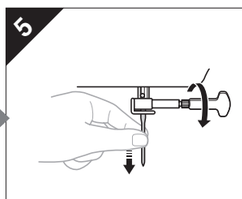
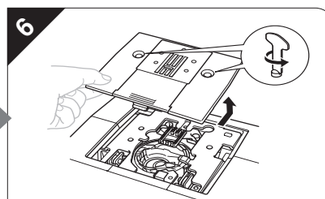


6.



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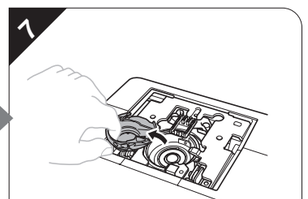

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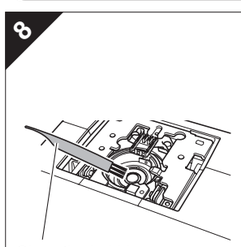
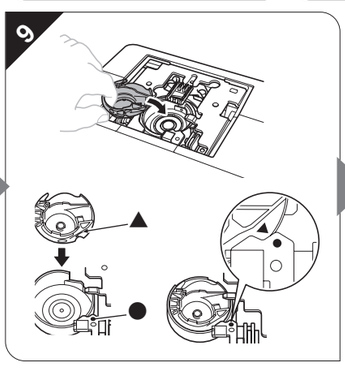


Clean the bobbin race.

9.



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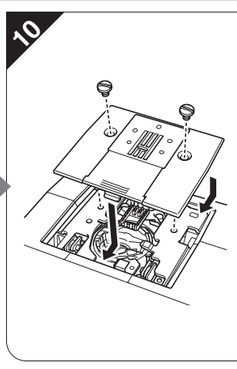

⚠ CAUTION

- **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: XE9326-001), contact your nearest authorized Brother Service Center.**
- **Make sure that you fit the bobbin case properly, otherwise the needle may break.**