# **Operation** Manual Sewing Machine





# **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.

# **A WARNING** - To reduce the risk of burns, fire, electric shock, or injury to

- 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 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 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.

# 4 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
- · 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
- · Do not place this machine on an unstable surface, such as an unsteady or slanted table, otherwise the machine may fall, resulting in injuries.

# 5 Special care is required when sewing:

· Always pay close attention to the needle. Do not use bent or damaged needles.

Note

· 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.

# **6** 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

# **7** 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
- 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.

# 8 For repair or adjustment:

- If the Light unit (light-emitting diode) is damaged, it must be replaced by authorized dealer.
- · 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 dealer.

XF3656-001

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

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

# SAVE THESE INSTRUCTIONS

This machine is intended for household use.

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 @ 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 dealer to obtain the correct lead.

# **Using Your Sewing Machine**

## **A 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.

   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 machi
  - 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

# **A** 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
- 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.

# ■ Connecting plugs

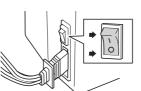
the power supply cord. When restarting the sewing machine, follow the necessary procedure to correctly

# (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 ntended 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.

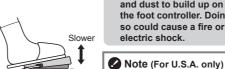
If a power outage occurs while the sewing machine is being operated, turn off the main power and unplug

### ■ 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

# **A** CAUTION

 Do not allow pieces of cloth the foot controller. Doing so could cause a fire or electric shock.

Foot Controller: Model KD-

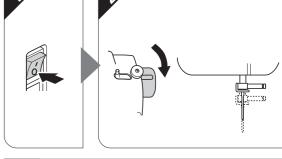
1902 This foot controller car be used on the machine with product code 888-X53/X54/ X55/X56. The product code is mentioned on the machine rating plate

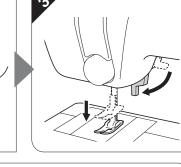
# Replacing the needle

# **A** 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.

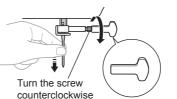
# ■ Checking the needle Parallel space Level surface x **○ →** x≥



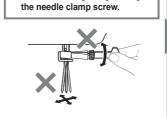


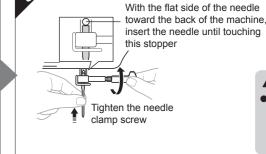
# **A CAUTION**

# Before replacing the needle, place fabric or paper ser foot to prevent the needle from



### Note Do not use excessive force when loosening or tightening





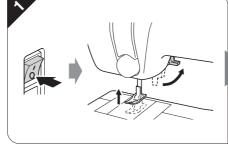
# **A** CAUTION

 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

# Changing the presser foot

## **A** 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 rise the

# Sewing thick fabrics

sewn or if the fabric is pushed with too much

force, the needle may bend or break.

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



# Stabilizer material or paper

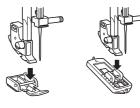
# First, baste the pieces of fabric together, and then

**Sewing stretch fabrics** 



to the shank

# ■ Presser foot installation orientation



# **A** 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
- the reverse sewing lever. The machine will then sew forward.
- The length of reverse stitches is fixed at 2 mm (1/16 inch)

foot controller. To sew forward, release



# Reverse sewing lever

# 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

# direction Stop the machine with the needle in the fabric at the

Changing the sewing

**\$**)0 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

point where you want to

**A** CAUTION If fabric more than 6 mm (15/64 inch) thick is

# 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

WAR.

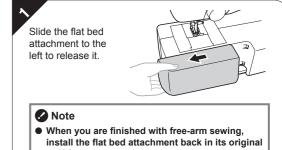
Remove the presser foot by

pulling it vertically downward

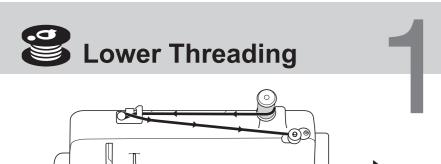
# sew without stretching the

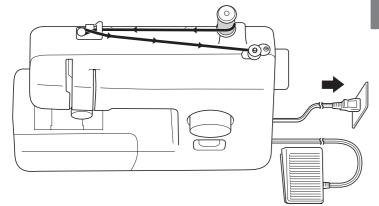
**PARTITION** 

# Stitching cylindrical pieces



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





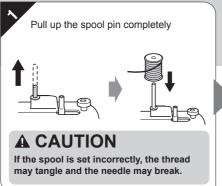
# **A** CAUTION

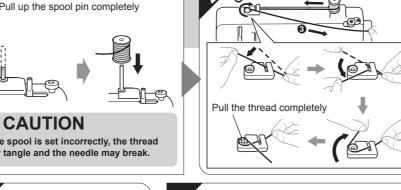
# **A** CAUTION

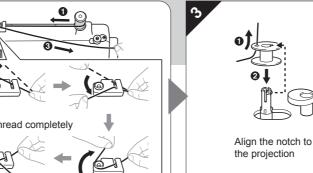
Wind the bobbin properly, or the thread tension may loosen, and the needle may break.

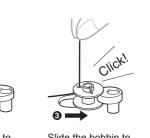












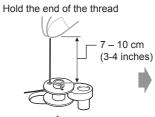


Slide the bobbin to the right



**A** CAUTION

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

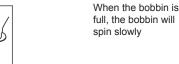


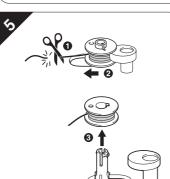


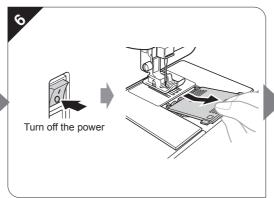
1 cm (1/2 inch)

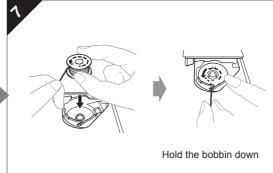
Wind the thread few times around the



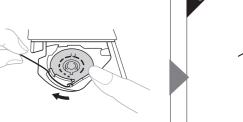


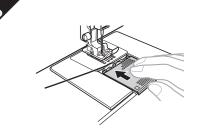








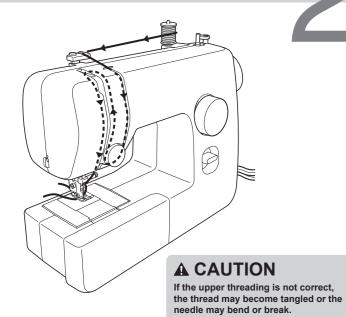


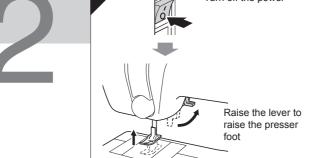


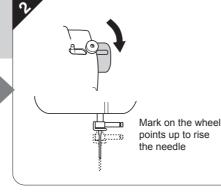
With the end of the thread comes out from the cover toward the rear of the

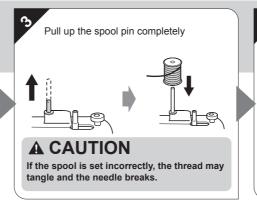


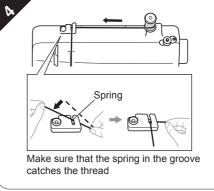
# **Upper Threading**

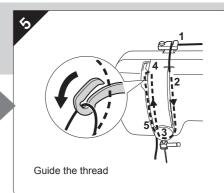


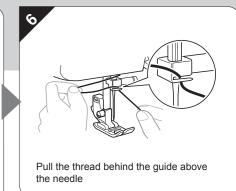


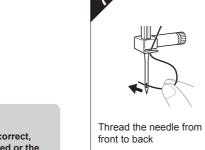


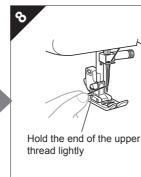


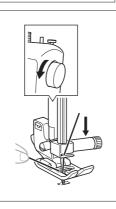


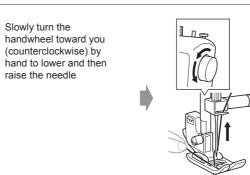


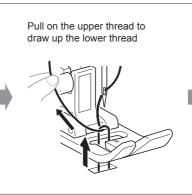


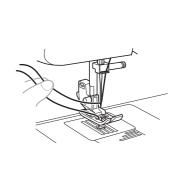


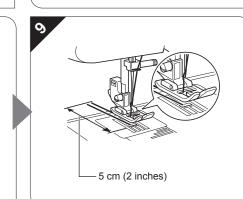












# Start sewing - Straight Stitch

# **A** 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
- Do not start sewing without placing the fabric under the presser foot, otherwise the presser foot may be damaged.



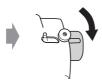
# **A** CAUTION

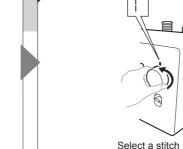
Do not turn the power on while pressing the foot controller down, otherwise your may be injured.

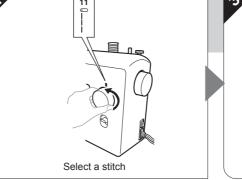


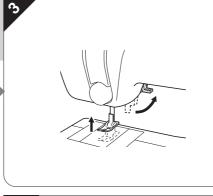
Turn the

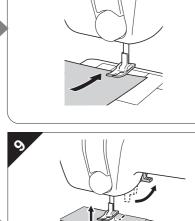
power on

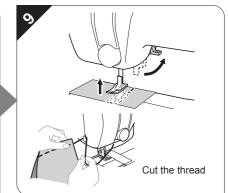




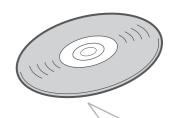




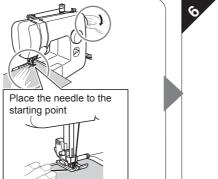


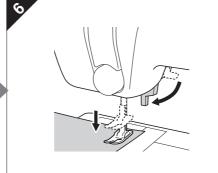




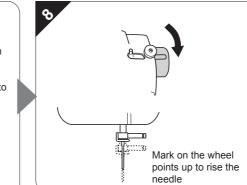


Find more information about your sewing machine in the included instructional DVD.



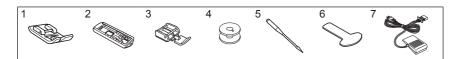








# Included accessories



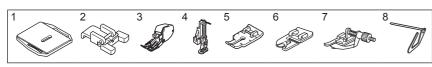
Americas   Others		Part Name	Part Code	
2       Buttonhole foot "A"       X59369-321         3       Zipper foot "I"       XE9369-001         4       Bobbin (One is on machine)       SA156       SFB:XA5539-151         5       Needle set (90/14 needle)       3-piece set: XE5328-001         6       Screwdriver       XF3557-001         Model KD-1902 for 110-120V area	0.		Americas	Others
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           6         Screwdriver         XF3557-001           Model KD-1902 for 110-120V area	1 Z	Zigzag foot "J" (on machine)	XC4901-121	
4 Bobbin (One is on machine)  5 Needle set (90/14 needle)  6 Screwdriver  SA156 SFB:XA5539-151  3-piece set: XE5328-001  2-piece set: XE7064-001  Model KD-1902 for 110-120V area	2 E	Buttonhole foot "A"	X59369-321	
5     Needle set (90/14 needle)     3-piece set: XE5328-001       2-piece set: XE7064-001     2-piece set: XE7064-001       6     Screwdriver     XF3557-001       Model KD-1902 for 110-120V area	3 Z	Zipper foot "I"	XE9369-001	
5 Needle set (90/14 needle) 2-piece set: XE7064-001 6 Screwdriver	4 E	Bobbin (One is on machine)	SA156	SFB:XA5539-151
2-piece set: XE7064-001  6 Screwdriver XF3557-001  Model KD-1902 for 110-120V area	-	Needle set (90/14 needle)	3-piece set: XE5328-001	
Model KD-1902 for 110-120V area	יון כ		2-piece set: XE7064-001	
	3 8	Screwdriver	XF3557-001	
7   Foot controller   KD-1902 for 110-127V area (Brazi		Foot controller		
	7   F		KD-1902 for 110-127V area (Brazil only)	
Model KD-2902 for 220-240V area			Model KD-2902 for 220-240V area	

### Note

- The included accessories vary depending on the machine model.

  The foot controller part code different days.
- The foot controller part code differs depending on the country or region. Contact your dealer or the nearest authorized service center.

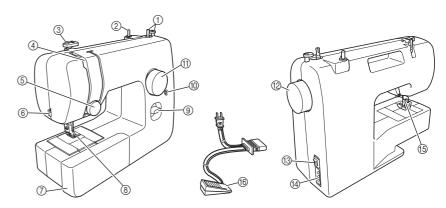
# **Optional accessories**



No.	Part Name	Part Code	
INO.		Americas	Others
1	Darning Plate	XC6063-021	
2	Button sewing foot "M"	XE2137-001	
3	Walking Foot	SA107	F034N: XC2165-002
4	Quilting Foot	SA129	F005N: XC1948-052
5	1/4-inch Quilting Foot	SA125	F001N: XC1944-052
6	Narrow Hemmer Foot	SA127	F003N: XC1945-052
7	Blind Stitch Foot	SA134	F018N: XC1976-052
8	Quilting guide	SA132	F016N: XC2215-052

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

# The main parts

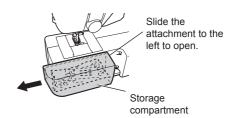


- Bobbin winder
  - This winds the thread onto the bobbin for use as the lower thread.
- ② **Spool pin**This holds the spool of thread.
- ③ Thread guide
  - This is used when winding the thread onto the bobbin and then threading the machine
- 4 Thread take-up lever
- **⑤** Upper tension-control dial This controls the tension of the upper thread.
- (6) Thread cutter Pass the threads through the thread cutter to cut them.
- (7) Flat bed attachment with accessory compartment
- Presser foot
- Reverse sewing lever Push this lever to stitch in the reverse

- ® Buttonhole fine-adjustment screw
- (1) Pattern selection dial Rotate the dial in either direction to choose the stitch you want.
- Handwheel Used to manually raise and lower the needle.
- Main power and sewing light switch You can turn the main power and sewing light switch on and off.
- Foot controller jack / socket Plug in the foot controller plug and connect the machine to the power supply.
- (5) Presser foot lever
- Used to raise and lower the presser foot.
- (6) 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.

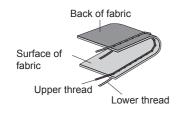


# **Thread tension**

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.

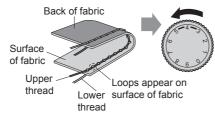


# ■ Upper tension is too tight

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" of Sheet 1 to rethread the bobbin thread.



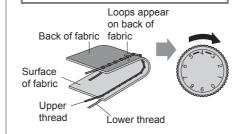
Solution: Reduce the tension by turning the upper tension control dial to a lower number.

### ■ 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 Sheet 1 and rethread the upper thread.



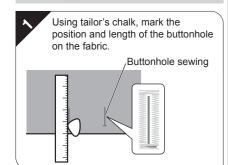
Solution: Increase the tension by turning the upper tension control dial to a higher number.



### **A 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



# 3 Securing the Stitching and **Cutting the Buttonhole**

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.

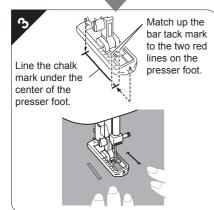
# **A CAUTION**

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.



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

Cut an opening in the middle of the buttonhole with the seam ripper tool.



Be careful not to cut through and

# 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.

# 2 Making a buttonhole

Step	Sewn section	Pattern
Step 1 (Front bar tack)	<b>≥</b> a	ac ac

- . 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		

- 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)





- 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.

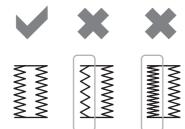
Step 4 (Right side)



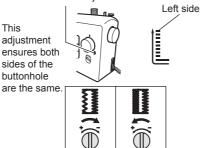
- 1. Set the pattern selection dial to "d"
- 2. Sew the right side until the needle reaches the stitches sewn in step 1

# **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



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



# 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

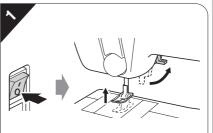


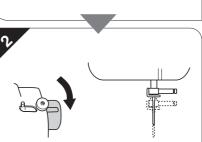
 In order to extend the life of this machine, periodically turn it on and use it. Storing this machine for an extended period of time without using it may reduce its efficiency.

# Cleaning

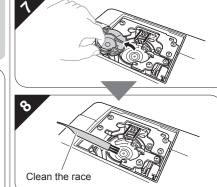
# **A CAUTION**

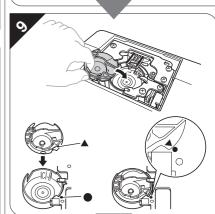
Make sure you unplug the machine before you clean it, otherwise you risk getting an electric shock or being injured.

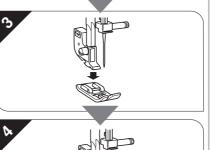


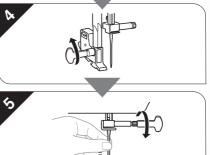


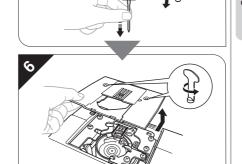
Mark on the wheel points up to rise the needle

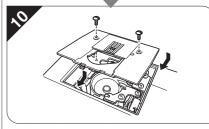












# **A** CAUTION

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

