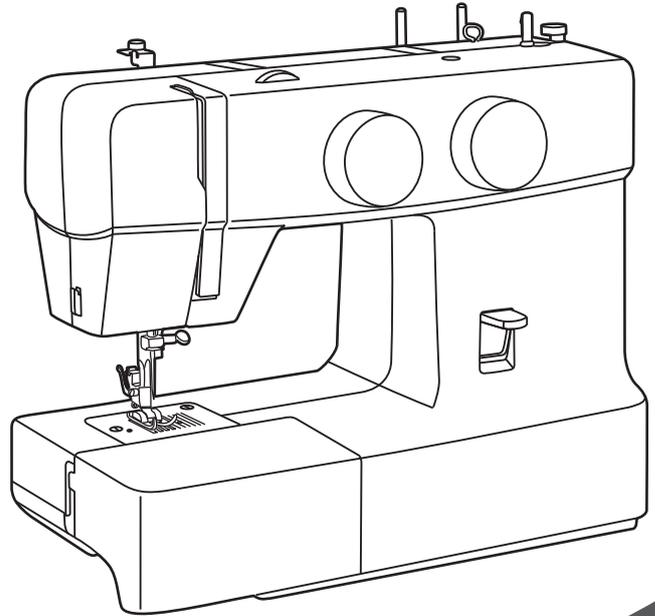


# Instruction Manual



# IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic safety should always be followed, including the following:

Read all instructions before using this sewing machine.

## **DANGER** - To reduce the risk of electric shock:

1. An appliance should never be left unattended when plugged in.
2. Always unplug this appliance from the electric outlet immediately after using and before cleaning.
3. Always unplug before re-lamping. Replace bulb with same type rated 10 watts (110-120V area) or 15 watts (220-240V area).

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

1. Do not allow to be used as a toy. Close attention is necessary when this appliance is used by or near children.
2. Use this appliance only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
3. Never operate this appliance if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the appliance to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
4. Never operate the appliance with any air openings block. Keep ventilation openings of the sewing machine and foot controller free from accumulation of lint, dust, and loose cloth.
5. Keep fingers away from all moving parts. Special care is required around the sewing machine needle.
6. Always use the proper needle plate. The wrong plate can cause the needle to break.
7. Do not use bent needles.
8. Do not pull or push fabric while stitching. It may deflect the needle causing it to break.

9. Switch the sewing machine off ("O") when making any adjustments in the needle area, such as threading needle, changing needle, threading bobbin, or changing presser foot, and the like.
10. Always unplug sewing machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.
11. Never drop or insert any object into any opening.
12. Do not use outdoors.
13. Do not operate where aerosol spray products are being used or where oxygen is being administered.
14. To disconnect, turn all controls to the off ("O") position, then remove plug from outlet.
15. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
16. The sound pressure level under normal operating conditions is 75dB(A).
17. Please turn off the machine or unplug when the machine is not operating properly.
18. Never place anything on the foot controller.
19. If the supply cord that fixed with foot controller is damaged, it must be replaced by the manufacturer or its service agent or a similar qualified person in order to avoid a hazard.
20. 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.
21. Children should be supervised to ensure that they do not play with the appliance.

## **SAVE THESE INSTRUCTIONS**

This sewing machine is intended for household use only.

## **Congratulations**

As the owner of a new sewing machine, you will enjoy precision quality stitching on all types of fabrics, from multiple layers of denim to delicate silks.

Your sewing machine offers the ultimate in simplicity and ease of operation. For your safety and to fully enjoy the many advantages and ease of operation of your sewing machine, we recommend that you read all the important safeguards and use and care instructions in this instruction book.

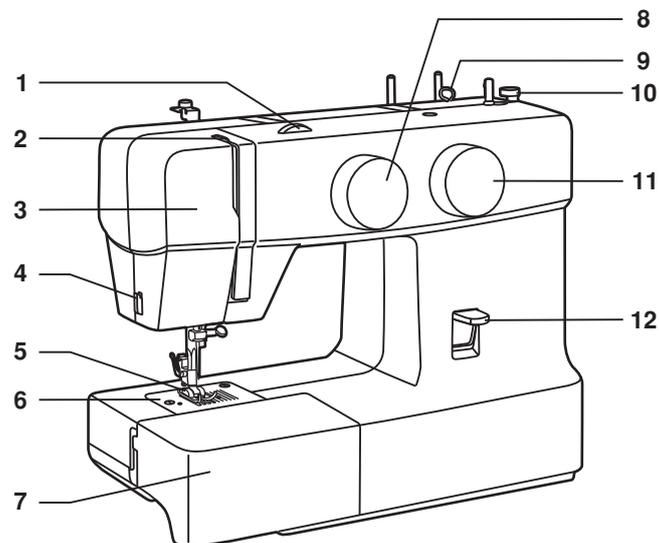
May we suggest that before you start to use your sewing machine, you discover the many features and advantages by going through this instruction book, step by step, while seated at your sewing machine.

## List of contents

Details of the machine .....	2/3	How to choose your pattern .....	17
Accessories .....	4	Stitch length dial (2-dial model only) .....	18
Fitting the snap-in sewing table .....	5	Sewing straight stitch .....	19
Connecting machine to power source .....	6	Reverse sewing/ Removing the work/ Cutting the thread .....	20
Changing the bulb .....	7	Blind hem/ lingerie stitch .....	21
Two-step presser foot lifter .....	8	Sewing on buttons (1-dial model only) .....	22
Attaching the presser foot holder .....	9	Sewing on buttons (2-dial model only) .....	23
Winding the bobbin.....	10	Sew 4-step buttonholes .....	24
Inserting the bobbin.....	11	Zippers and piping .....	25
Inserting the needle (System 130/705H).....	12	3-step zig-zag .....	26
Threading the upper thread .....	13	Applique .....	27
Thread tension .....	14	Monogramming and embroidering with Embroidery hoop*.....	28/29
Raising the bobbin thread .....	15	Maintenance .....	30
Matching needle/ fabric/ thread .....	16	Trouble shooting guide.....	31

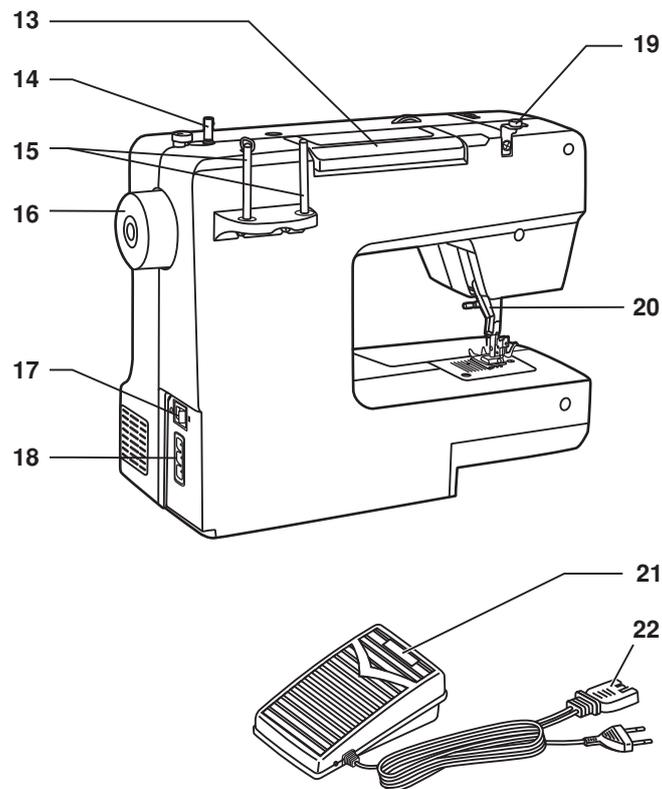
## Details of the machine

1. Thread tension dial
2. Thread take-up lever
3. Face plate
4. Thread cutter
5. Presser foot
6. Needle plate
7. Sewing table and accessory box
8. Pattern selector dial
9. Thread guide
10. Bobbin stopper
11. Stitch length dial (2-dial model)
12. Reverse sewing lever



## Details of the machine

- 13. Handle
- 14. Bobbin winding spindle
- 15. Spool pins
- 16. Handwheel
- 17. Power switch
- 18. Main plug socket
- 19. Bobbin thread guide
- 20. Presser foot lifter
- 21. Foot control
- 22. Power cord



# Accessories

## Standard accessories (1)

- a. All purpose foot
- b. Zipper foot
- c. Buttonhole foot
- d. Button sewing foot
- e. L-screwdriver
- f. Seam ripper/ brush
- g. Oil bottle
- h. Spool pin felt (2x)
- i. Pack of needles (3x)
- j. Edge/ quilting guide
- k. Bobbin (3x)
- l. Darning plate

## Optional accessories (2)

- m. Quilting foot
- n. Overcasting foot
- o. Hemmer foot
- p. Blind hem foot
- q. Satin stitch foot
- r. Darning/ embroidery foot

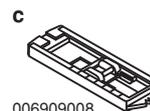
## 1 Standard accessories



006806008



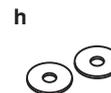
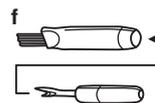
006905008



006909008



006914008



## 2 Optional accessories



006916008



006803008



006800008



006812008



006804008

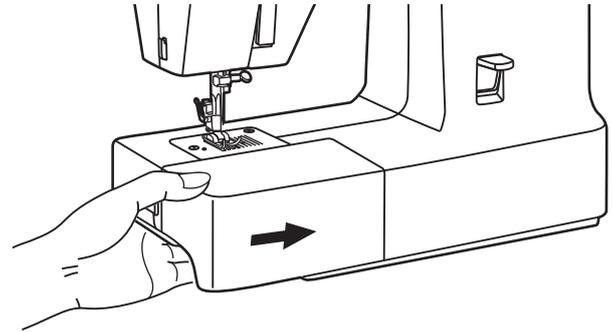


006016008

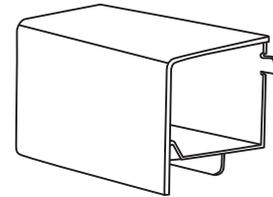
## Fitting the snap-in sewing table

Keep the snap-in sewing table horizontal, and push it in the direction of the arrow. (1)

The inside of the snap-in sewing table can be utilized as an accessory box. (2)



1



2

## Connecting machine to power source

Connect the machine to a power source as illustrated. (1)  
For appliance is equipped with a polarized plug which must be used with the appropriate polarized outlet. (2)

### Attention:

Unplug power cord when machine is not in use.

### Foot control

Foot control regulates the sewing speed. (3)

### Attention:

Consult a qualified electrician if in doubt as to connect machine to power source.

Unplug power cord when machine is not in use.

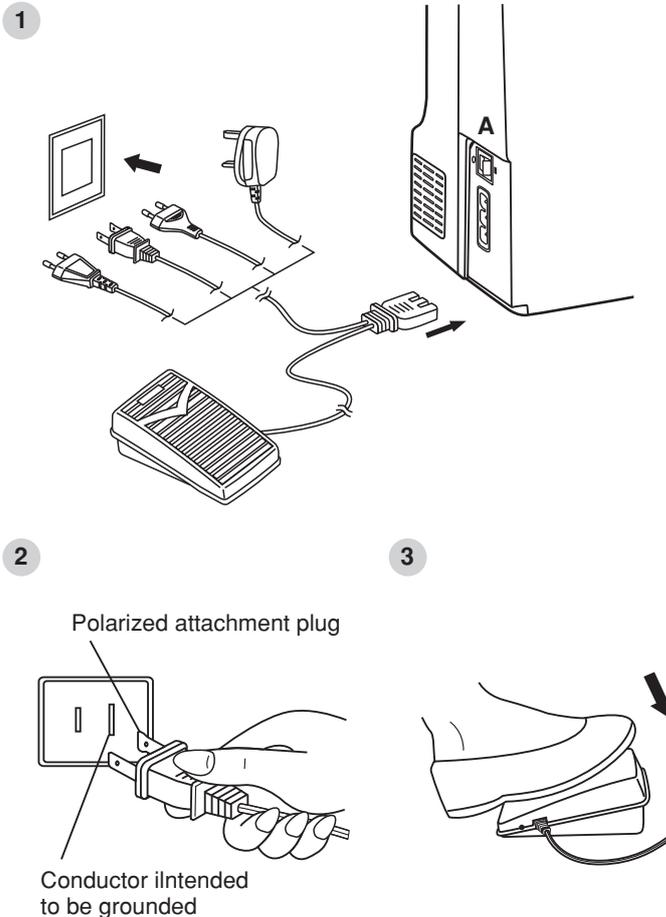
The foot control must be used with the appliance by FC-1902 (110-120V area)/ FC-2902A (220-240V area) manufactured by ZHEJIANG FOUNDER MOTOR CORPORATION LTD. (China) 4C-316B (110-120V area)/ 4C-326G (230V area) manufactured by Wakaho Electric Ind. Co., Ltd. (Vietnam)

### Sewing light

Press main switch (A) for power and light on ("I").

### IMPORTANT NOTICE

For appliance with a polarized plug (one blade is 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 it 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. (2)



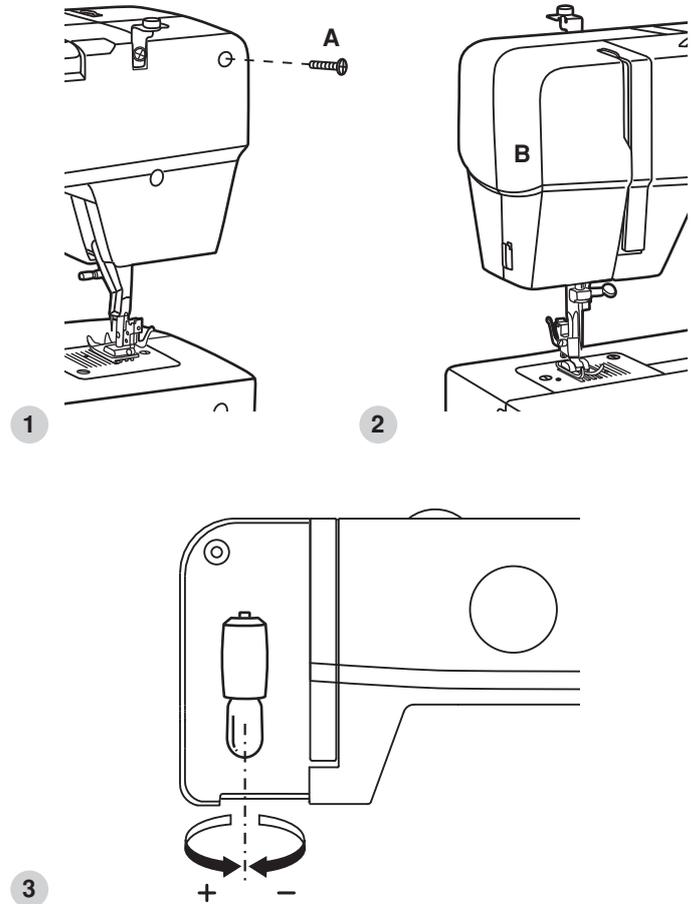
## Changing the bulb

Disconnect the machine from the power supply by removing the plug from the main socket!

Replace bulb with same type rated 10 watts(110-120V area) or 15 watts (220-240V area).

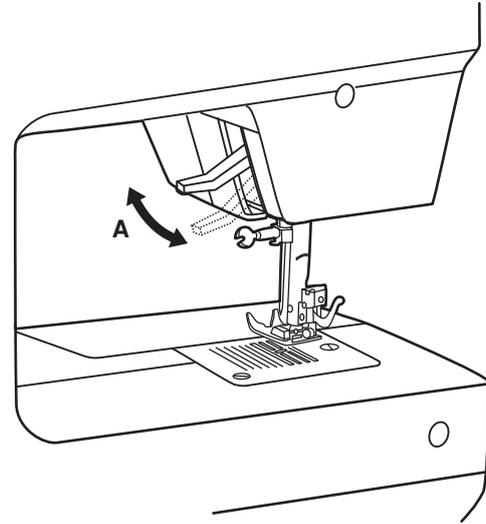
- Loosen screw (A) as illustrated. (1)
- Remove the face plate (B). (2)
- Unscrew the bulb and fit new one (C). (3)
- Replace the cover and tighten screw.

Should there be any problem. Ask your local dealer for advice.



## Two-step presser foot lifter

When sewing several layers or thick fabrics, the presser foot can be raised a second stage for easy positioning of the work (A).



## Attaching the presser foot holder

Raise the presser clamp (a) with the presser foot lifter. Attach the presser foot holder (b) as illustrated. (1)

### Attaching the presser foot

Lower the presser foot holder (b) using the presser foot lifter, until the cut-out (c) is directly above the pin (d). (2) The presser foot (f) will engage automatically.

### Removing the presser foot

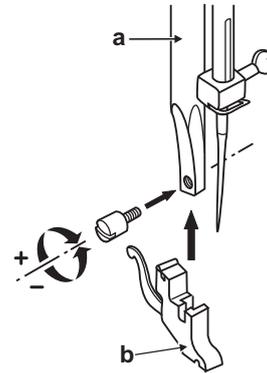
Raise the presser foot using the presser foot lifter.  
Raise the lever (e) and the foot disengages. (3)

### Attaching the edge/ quilting guide

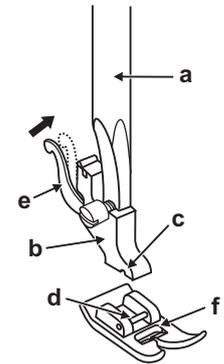
Attach the edge/ quilting guide (g) in the slot as illustrated.  
Adjust as needed for hems, pleats, quilting, etc. (4)

#### Attention:

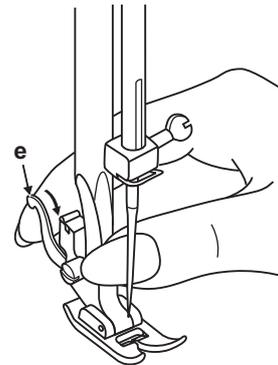
Turn power switch to off ("O") when carrying out any of the above operations!



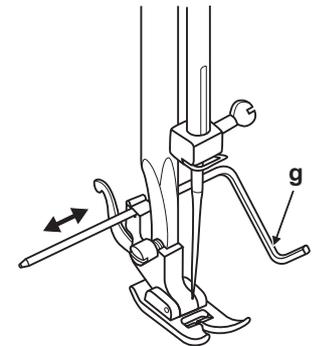
1



2



3



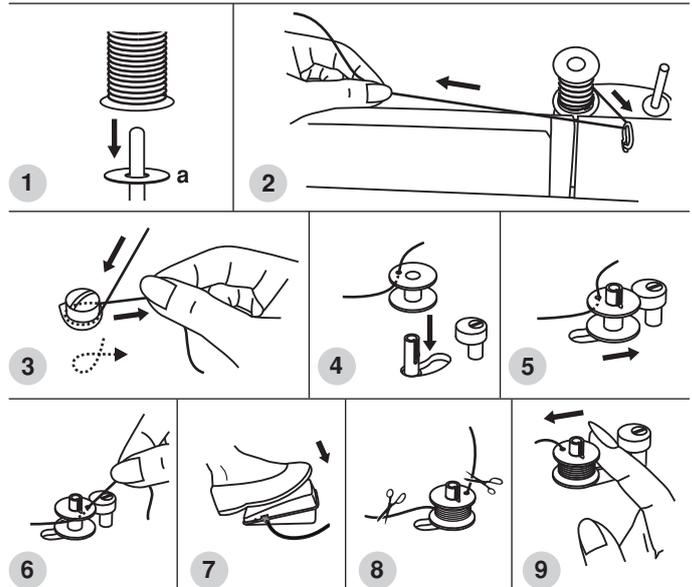
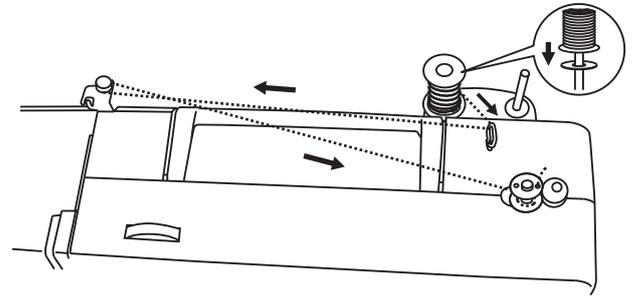
4

## Winding the bobbin

- Place the thread and Spool pin felt (a) onto the spool pin. (1)
- Pass the thread through the thread guide. (2)
- Wind thread clockwise around bobbin winder tension discs. (3)
- Thread bobbin as illustrated and place on spindle. (4)
- Push bobbin spindle to right. (5)
- Hold thread end. (6)
- Step on foot control pedal. (7)
- Cut thread. (8)
- Push bobbin spindle to left (9) and remove.

### Please Note:

When the bobbin winder spindle is in "bobbin winding" position, the machine will not sew and the hand wheel will not turn. To start sewing, push the bobbin winder spindle to the left (sewing position).



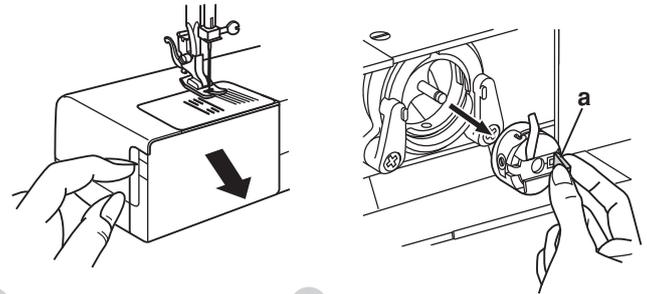
## Inserting the bobbin

**When inserting or removing the bobbin, the needle must be fully raised.**

- Remove the sewing table, then open the hinged cover. (1)
- Pull the bobbin case tab (a) and remove the bobbin case. (2)
- Hold the bobbin case with one hand. Insert the bobbin so that the thread runs in a clockwise direction (arrow). (3)
- Pull the thread through the slit and under the finger. (4) Leave a 6 inch tail of thread.
- Hold the bobbin case by the hinged latch. (5)
- Insert it into the shuttle. (6)

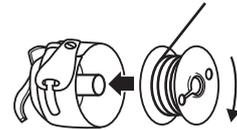
**Attention:**

Turn power switch to off ("O") before inserting or removing the bobbin.



1

2

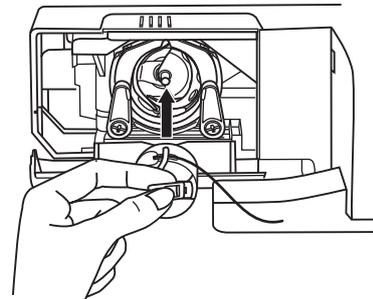


3

4



5



6

## Inserting the needle (System 130/705H)

Change the needle regularly, especially if it is showing signs of wear and causing problems.

Insert the needle as illustrated as follows:

- A. Loosen the needle clamp screw and tighten again after inserting the new needle. (1)
- B. The flat side of the shaft should be towards the back.
- C/D. Insert the needle as far up as it will go.

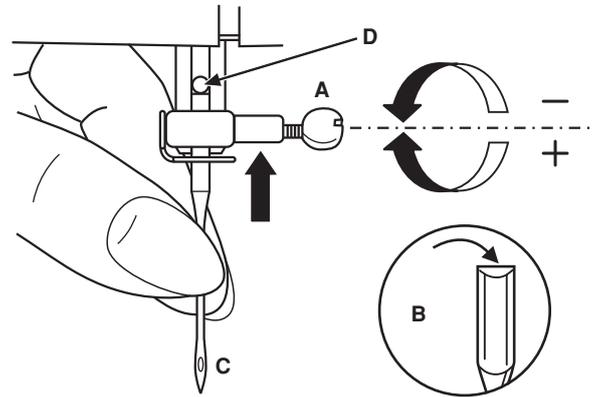
**Attention:**

Turn power switch to off ("O") before inserting or removing the needle.

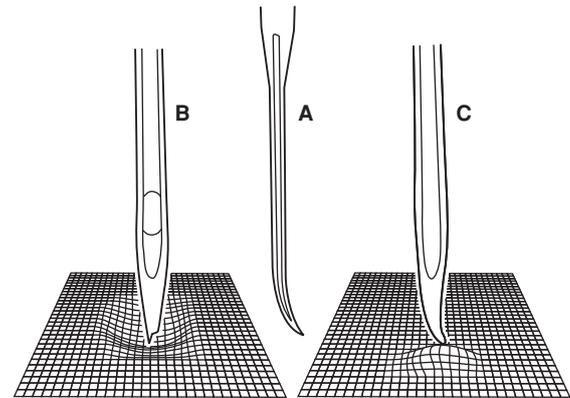
Needles must be in perfect condition. (2)

Problems can occur with:

- A. Bent needles
- B. Damaged points
- C. Blunt needles



1



2

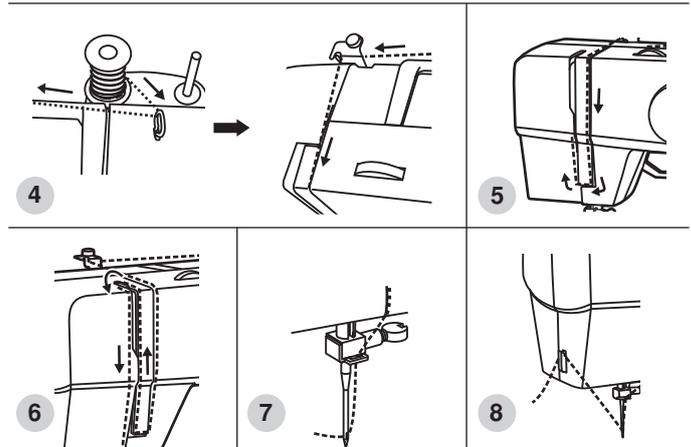
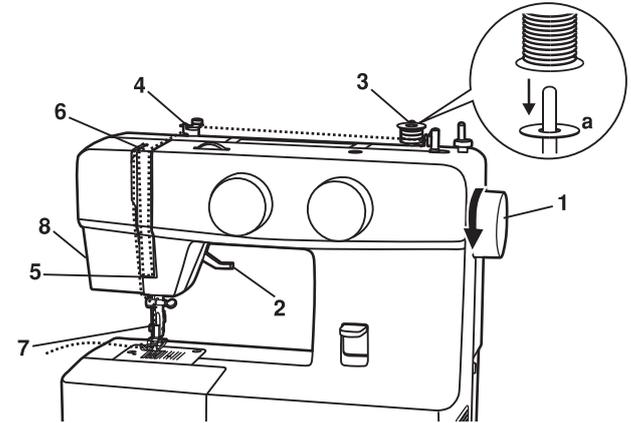
## Threading the upper thread

This is a simple operation but it is important to carry out correctly as by not doing so several sewing problems could result.

- Start by raising the needle to its highest point (1), and continue turning the handwheel counterclockwise until the needle just slightly begins to descend. Raise the presser foot to release the tension discs. (2)

**Note:** For safety, it is strongly suggested you turn off the power before threading.

- Place the thread and spool pin felt (a) onto the spool pin. (3)
- Draw thread from spool through the thread guide to the upper thread guide. (4)
- Thread tension module by leading thread down right channel and up left channel. (5) During this process it is helpful to hold the thread between the spool and thread guide.
- At the top of this movement pass thread from right to left through the slotted eye of the take-up lever and then downwards again. (6)
- Now pass thread behind the thin wire needle clamp guide (7) and then down to the needle which should be threaded from front to back. (8)
- Pull about 6-8 inches of thread to the rear beyond the needle eye. Trim thread to length with built in thread cutter. (8)



# Thread tension

## Upper thread tension

Basic thread tension setting: "4" (1)

To increase the tension, turn the dial to the next number up.  
To reduce the tension, turn the dial to the next number down.

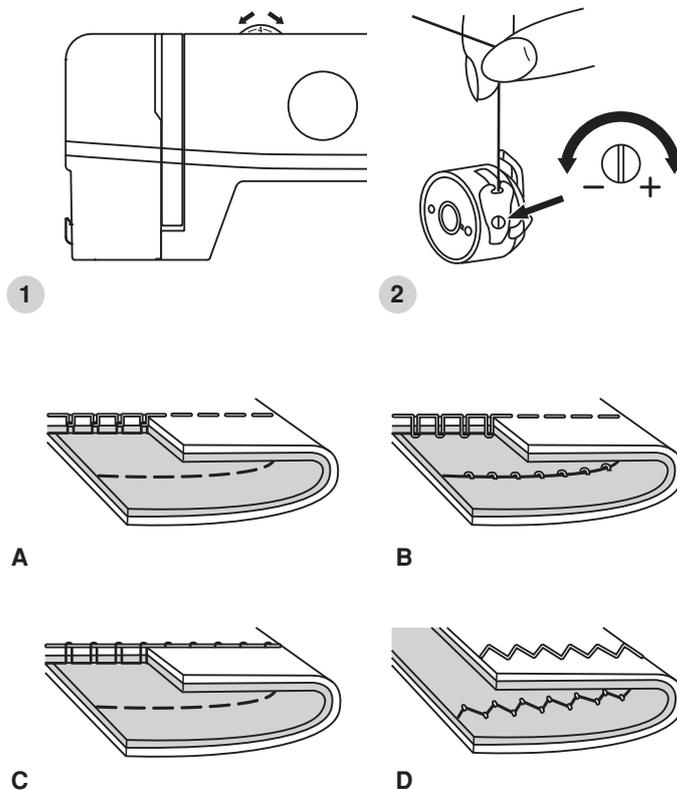
- A. Normal thread tension for straight stitch sewing.
- B. Thread tension too loose for straight stitch sewing. Turn dial to higher number.
- C. Thread tension too tight for straight stitch sewing. Turn dial to lower number.
- D. Normal thread tension for zig zag and decorative sewing.  
Correct thread tension is when a small amount of the upper thread appears on the bottom side of fabric.

## Lower thread tension (2)

To test the bobbin thread tension, remove the bobbin case and bobbin and hold it by suspending it by the thread. Jerk it once or twice. If the tension is correct, the thread will unwind by about an inch or two. If the tension is too tight, it does not unwind at all. If the tension is too loose, it will drop too much. To adjust, turn the small screw on the side of the bobbin case.

### Please note:

- Proper setting of tension is important to good sewing.
- There is no single tension setting appropriate for all stitch functions, thread or fabric.
- A balanced tension (identical stitches both top and bottom) is usually only desirable for straight stitch construction sewing.
- 90% of all sewing will be between "3" and "5".
- For zig zag and decorative sewing stitch functions, thread tension should generally be less than for straight stitch sewing.
- For all decorative sewing you will always obtain a nicer stitch and less fabric puckering when the upper thread appears on the bottom side of your fabric.



## Raising the bobbin thread

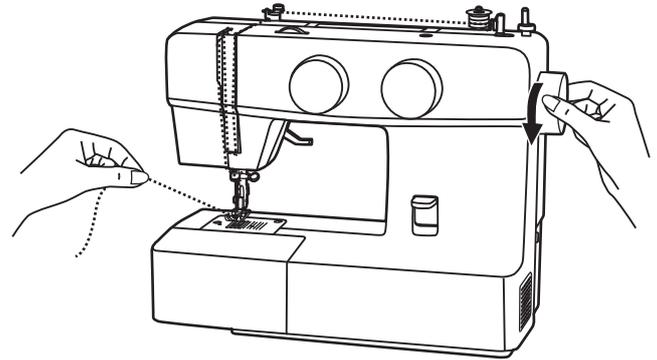
Hold the upper thread with the left hand. Turn the handwheel (1) towards you (counterclockwise) lowering, then raising needle.

**Note:**

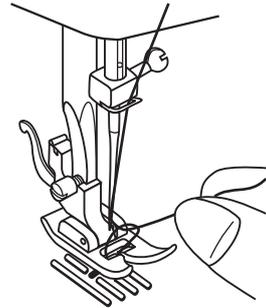
If it is difficult to raise the bobbin thread, check to make sure the thread is not trapped by the hinged cover or the sewing table.

Gently pull on the upper thread to bring the bobbin thread up through the needle plate hole. (2)

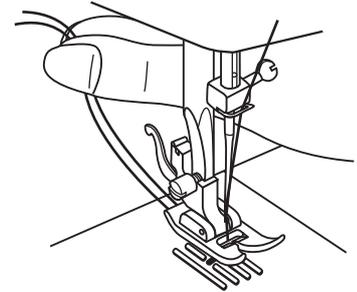
Lay both threads to the back under the presser foot. (3)



1



2



3

## Matching needle/ fabric/ thread

### NEEDLE, FABRIC, THREAD SELECTION GUIDE

NEEDLE SIZE	FABRICS	THREAD
9-11(65-75)	Lightweight fabrics-thin cottons, voile, serge, silk, muslin, Qiana, interlocks, cotton knits, tricot, jerseys, crepes, woven polyester, shirt & blouse fabrics.	Light-duty thread in cotton, nylon or polyester.
12(80)	Medium weight fabrics-cotton, satin, kettleclote, sailcloth, double knits, lightweight woollens.	Most threads sold are medium size and suitable for these fabrics and needle sizes. Use polyester threads on synthetic materials and cotton on natural woven fabrics for best results. Always use the same thread on top and bottom.
14(90)	Medium weight fabrics-cotton duck, woolen, heavier knits, terrycloth, denims.	
16(100)	Heavyweight fabrics-canvas, woollens, outdoor tent and quilted fabrics, denims, upholstery material (light to medium).	
18(110)	Heavy woollens, overcoat fabrics, upholstery fabrics, some leathers and vinyls.	Heavy duty thread, carpet thread. (Use heavy foot pressure-large numbers.)

IMPORTANT: Match needle size to thread size and weight of fabric

### NEEDLE, FABRIC SELECTION

NEEDLES	EXPLANATION	TYPE OF FABRIC
HAx1 15x1	Standard sharp needles. Sizes range thin to large. 9 (65) to 18(110)	Natural woven fabrics-wool, cotton, silk, etc. Qiana. Not recommended for double knits.
15x1/705H(SUK)	Semi-ball point needle, scarfed. 9(65) to 18(110)	Natural and synthetic woven fabrics, polyester blends. Knits-polyesters, interlocks, tricot, single and double knits. Can be used instead of 15x1 for sewing all fabrics.
15x1/705H(SUK)	Full ball point needle 9(65) to 18(110)	Sweater knits, Lycra, swimsuit fabric, elastic.
130 PCL	Leather needles. 12(80) to 18(110)	Leather, vinyl, upholstery. (Leaves smaller hole than standard large needle.)

- Note:**
1. Twin needles, can be purchased for utility and decorative work.
  2. When sewing with twin needles, the stitch width dial should be set at less than "3".
  3. European needles show sizes 65, 70, 80 etc. American and Japanese needles show size 9, 11, 12 etc.
  4. Replace needle often (approximately every other garment ) and / or at first thread breakage or skipped stitches.



## Stitch length dial (2-dial model only)

### Function of stitch length dial for when straight stitching

For straight stitch sewing, turn the pattern selector dial to the straight stitch setting. (1) Turn the stitch length dial, and the length of the individual stitches will decrease as the dial approaches "0". The length of the individual stitches will increase as the dial approaches "4". (2) Generally speaking, use a longer stitch length when sewing heavier weight fabrics or when using a thicker needle or thread. Use a shorter stitch length when sewing lighter weight fabrics or when using a finer needle or thread.

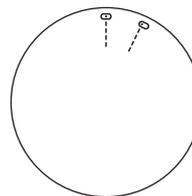
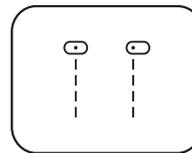
### Function of stitch length dial while zig-zag stitching

Turn the pattern selector dial to "zig-zag". (3)

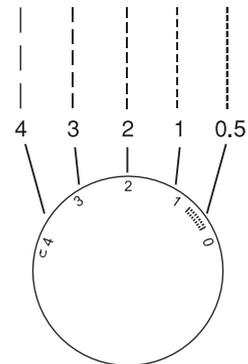
The density of zig-zag stitches increases as the setting of stitch length dial approaches "0".

Neat zig-zag stitches are usually achieved at "2.5" or below.

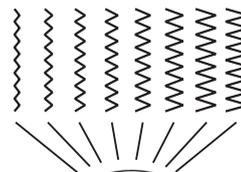
Dense zig-zag stitches are called satin stitches. (4)



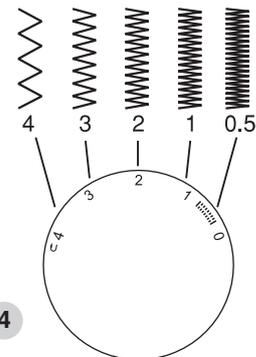
1



2



3



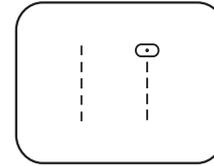
4

## Sewing straight stitch

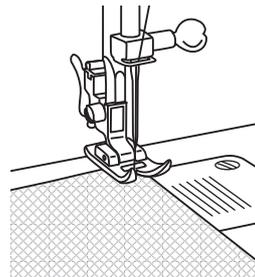
To begin sewing, set the machine for straight stitch. (1)

Place the fabric under the presser foot with the fabric edge lined up with the desired seam guide line on the needle plate. (2)

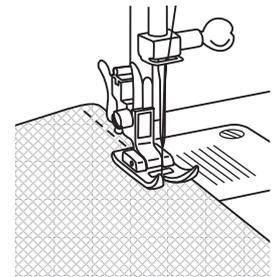
Lower the presser foot lifter, and then step on the foot controller to start sewing. (3)



1



2



3

## Reverse sewing

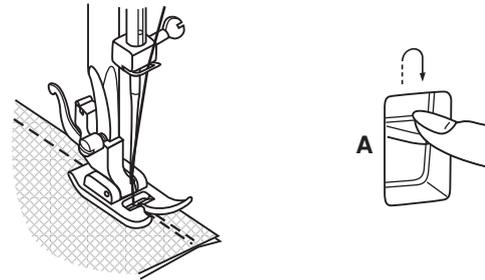
To secure the beginning and the end of a seam, press down the reverse sewing lever (A). Sew a few reverse stitches. Release the lever and the machine will sew forward again. (1)

## Removing the work

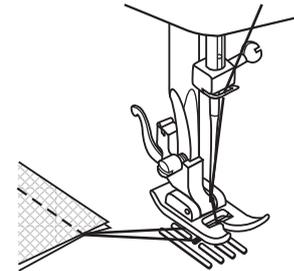
Turn the handwheel toward you (counterclockwise) to bring the thread take up lever to its highest position, raise the presser foot and remove work behind the needle and presser foot. (2)

## Cutting the thread

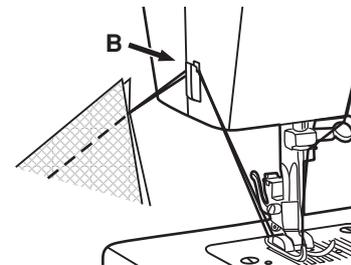
Pull the threads under and behind the presser foot. Guide the threads to the side of the face plate and into thread cutter (B). Pull threads down to cut. (3)



1



2



3

## Blind hem/ lingerie stitch

For hems, curtains, trousers, skirts, etc.

..A..A.. Blind hem for stretch fabrics.

..A...A.. Blind hem/ lingerie for firm fabrics.

### Note:

It takes practice to sew blind hems. Always make a sewing test first.

### Blind Hem:

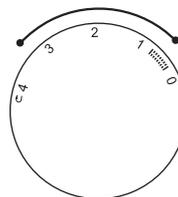
Turn up the hem to the desired width and press. Fold back (as shown in Fig. 1) against the right side of the fabric with the top edge of the hem extending about 7 mm (1/4") to the right side of the folded fabric.

Start to sew slowly on the fold, making sure the needle touches slightly the folded top to catch one or two fabric threads. (2)

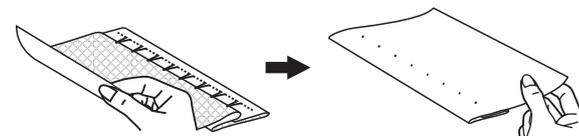
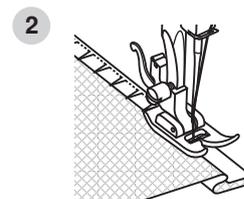
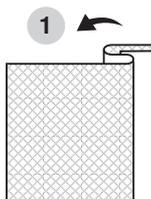
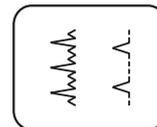
Unfold the fabric when hemming is completed and press.

### Lingerie Stitch:

Turn up the hem to the desired width and press. Place fabric right side up with edge of hem to the left. Begin sewing so the needle swings off the left edge of the fabric to form a small scallop. Tightening the tension slightly will produce a deeper scallop.



2-dial model only



## Sewing on buttons (1-dial model only)

Install the darning plate. (1)

Change the all purpose foot to button sewing foot. (2)

Position the work under the foot.

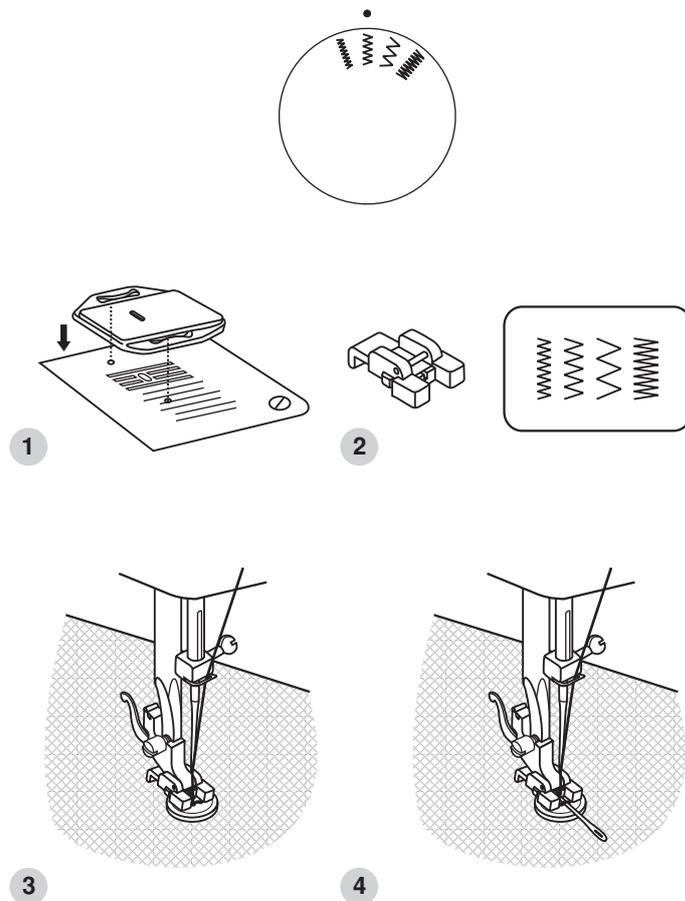
Place the button in the desired position and lower the foot.

Set the Pattern Selector Dial for the second zig-zag pattern (as shown), which should correspond to the distance between the two holes of the button. Turn the handwheel toward you to check if the needle goes into the right and left hole of the button without hitting the button. Slowly sew on the button with about 10 stitches. (3)

Bring the thread tails to the back of the work, then tie off manually.

If a shank is required, place a darning needle on top of the button and sew. (4)

For buttons with 4 holes, sew through the front two holes first, push the work forward and then sew through the back two holes.



## Sewing on buttons (2-dial model only)

Install the darning plate. (1)

Change the all purpose foot to button sewing foot. (2)

Position the work under the foot.

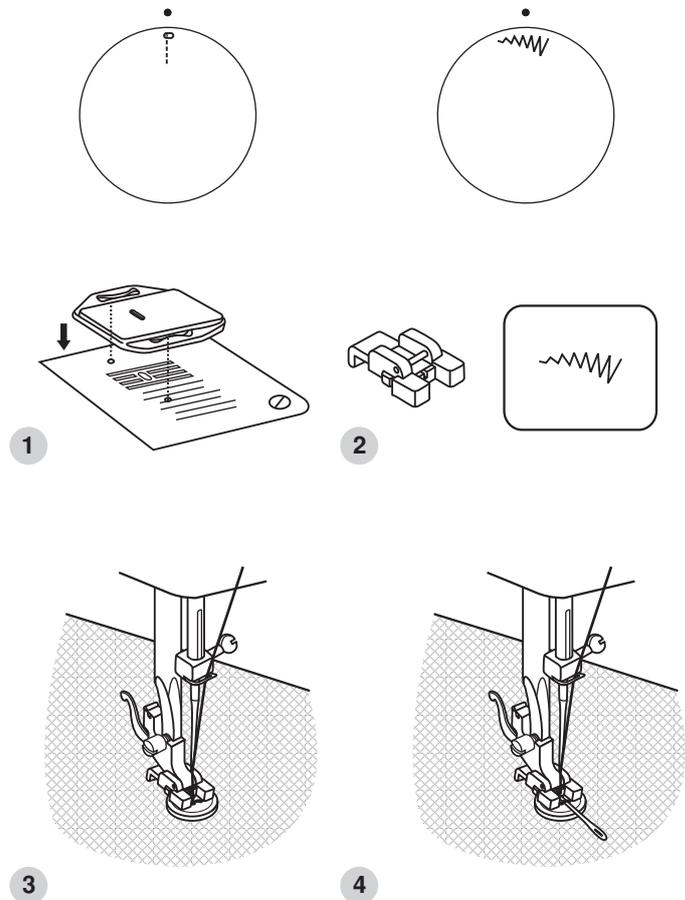
Place the button in the desired position and lower the foot.

Set the pattern selector dial on "0" and sew a few securing stitches. Select one of the narrow zig-zag patterns according to the distance between the two holes of the button. Turn the handwheel to check if the needle goes into the right and the left hole of the button without hitting the button. Slowly sew on the button with about 10 stitches.

Select pattern "0" and sew a few securing stitches. (3)

If a shank is required, place a darning needle on top of the button and sew. (4)

For buttons with 4 holes, sew through the front two holes first, push the work forward and then sew through the back two holes.



# Sew 4-step buttonholes

## Prepare

1. Take off the all purpose foot and attach the buttonhole foot.
2. Measure diameter and thickness of button and add 0.3cm (1/8") for bartacks to obtain correct buttonhole length; mark buttonhole size on fabric (a).
3. Place fabric under the foot, so that marking on the buttonhole foot aligns with starting marking on fabric. Lower the foot, so that the buttonhole center line marked on the fabric aligns with the center of the buttonhole foot (b).

Adjust the stitch length dial (2-dial model only) in the " : : : : " range to set stitch density.

### Note:

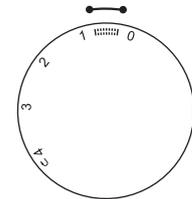
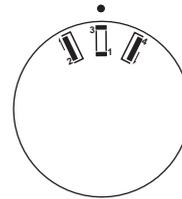
Density varies according to the fabric.

Always test sew a buttonhole on the fabric you are using to sew the buttonhole.

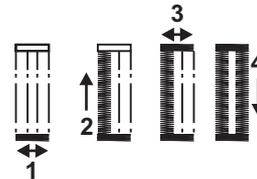
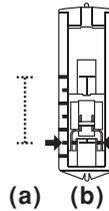
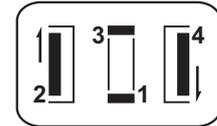
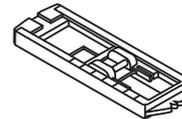
Follow the 4-step sequence changing from one step to another with the pattern selector dial. When moving from one step to another through the buttonhole process, be sure that the needle is raised before turning the pattern selector dial to the next step. Take care not to sew too many stitches in steps 1 and 3. Use seam ripper and cut buttonhole open from both ends towards the middle.

### Tips:

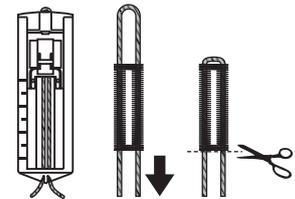
- Slightly reducing upper thread tension will produce better results.
  - Use a stabilizer for fine or stretchy fabrics.
  - It is advisable to use heavy thread or cord for stretch or knit fabrics. The zig-zag should sew over the heavy thread or cord.
- (A)



2-dial model only



A



## Zippers and piping

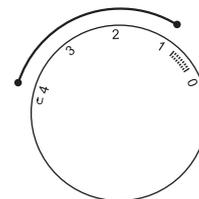
Set the machine as illustrated.

The zip foot can be inserted right or left, depending on which side of the foot you are going to sew. (1)

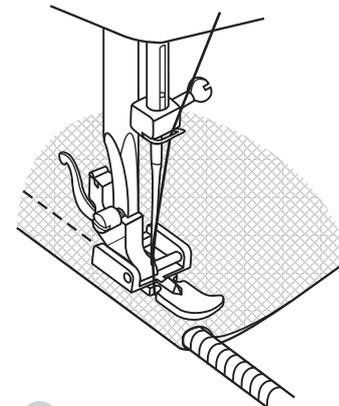
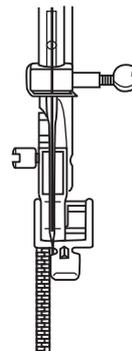
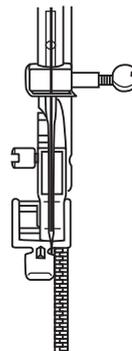
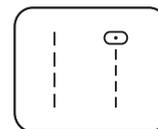
To sew past the zip pull, lower the needle into the fabric, raise the presser foot and push the zip pull behind the presser foot. Lower the foot and continue to sew. (2)

It is also possible to sew in a length of cord, into a bias strip to form a 'welt'. (2)

Set stitch length dial between "1" - "4" (according to thickness of fabric).



**2-dial model only**



1

2

## 3-step zig-zag

Sewing on lace and elastic, darning, mending, reinforcing edges.

Set the machine as illustrated.

Place patch in position. The stitch length can be shortened to produce very close stitches. (1)

When mending tears, it is advisable to use a piece of backing fabric to reinforce. The stitch density can be varied by adjusting the stitch length. First sew over the center and then overlap on both sides. Depending on the type of fabric and damage, sew between 3 and 5 rows. (2)

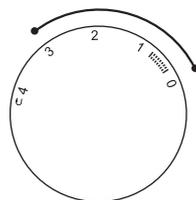
### Sewing elastic

1. Place the elastic on the fabric.
2. As you sew, stretch the elastic both in the front and behind the presser foot as shown in fig. (3)

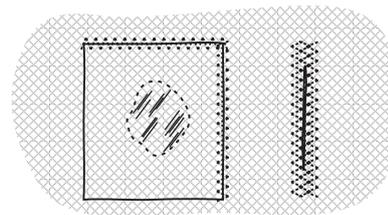
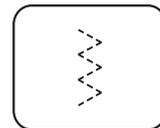
### Joining fabric

The elastic stitch can be used to join two pieces of fabric together and is very effective when sewing knitted fabrics. If nylon thread is used, the stitch will not be visible.

1. Place the edges of the two pieces of fabric together and center them under the presser foot.
2. Sew them together using the elastic stitch taking care to keep the two fabric edges close together as shown in fig. (4)

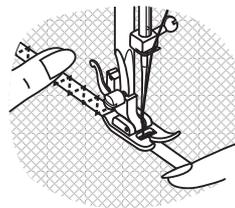


2-dial model only

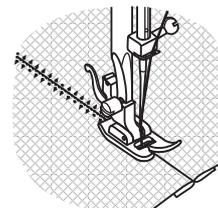


1

2



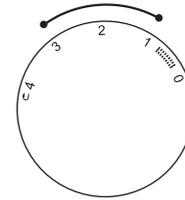
3



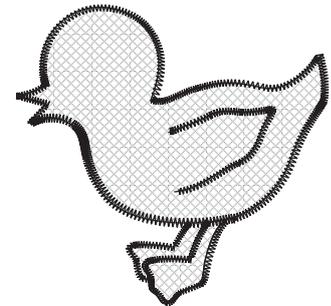
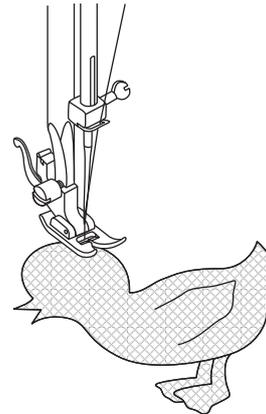
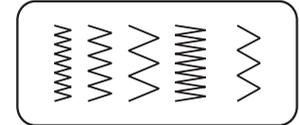
4

# Applique

- Turn stitch length dial to the desired length.
- Turn pattern selector dial to small zig zag width.
- Cut out the applique design and baste it to the fabric.
- Sew slowly around the edge of the design.
- Trim excess material outside the stitching. Make sure not to cut any stitches.
- Remove the basting thread.
- Tie top and bottom thread under the applique to avoid unraveling.



**2-dial model only**



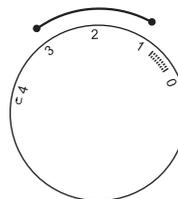
## Monogramming and embroidering with embroidery hoop\*

- Set the machine as illustrated above.
- Remove the presser foot and the presser foot holder.
- Attach the darning plate.
- Lower presser foot lever before starting to sew.
- Adjust the stitch width according to the size of lettering or design.

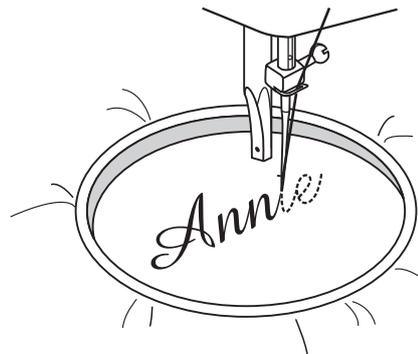
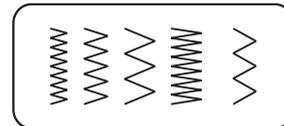
### Preparation for Monogramming and Embroidering\*

- Draw the desired lettering or design on the right side of the fabric.
- Stretch the fabric between embroidery hoop as firmly as possible.
- Place the fabric under the needle. Make sure the presser foot bar is down in its lowest position.
- Turn the balance wheel towards you to bring up the lower thread through the fabric. Sew a few securing stitches at the starting point.
- Hold the hoop with thumb and forefingers of both hands while pressing the material with the middle and third fingers and supporting the outside of hoop with smaller finger.

\* Embroidery hoop not included with machine.



2-dial model only



## Monogramming and embroidering with embroidery hoop\*

### Monogramming

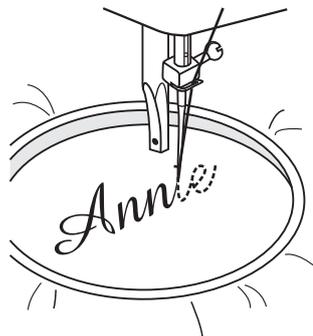
1. Sew, moving the hoop slowly along the lettering at a constant speed.
2. Secure with a few straight stitches at the end of the last letter.

### Embroidering

1. Stitch the outline of the design by moving the embroidery hoop.
2. Fill in the design working from the outline of the design to the inside and from the inside to the edge of the outline until the design is completely filled in. Keep the stitching close together.

\* A long stitch is made by moving the hoop rapidly and a short stitch is made by moving it slowly.

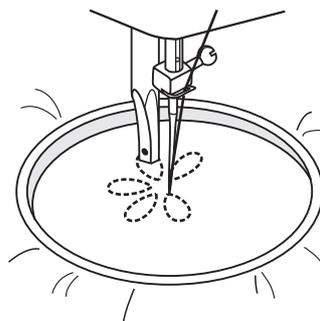
3. Secure with a few Straight Stitches at the end of the design.



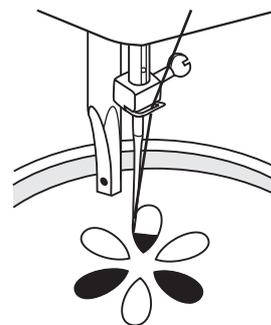
1

Annie

2



3



4

## Maintenance

### Attention:

Disconnect the machine from the electricity supply by removing the plug from the mains socket. When cleaning the machine, it must always be disconnected from the electricity supply.

### Remove the needle plate:

Turn the handwheel until the needle is fully raised. Open the hinged front cover and unscrew the needle plate screw with the screw driver. (1)

### Cleaning the feed dog:

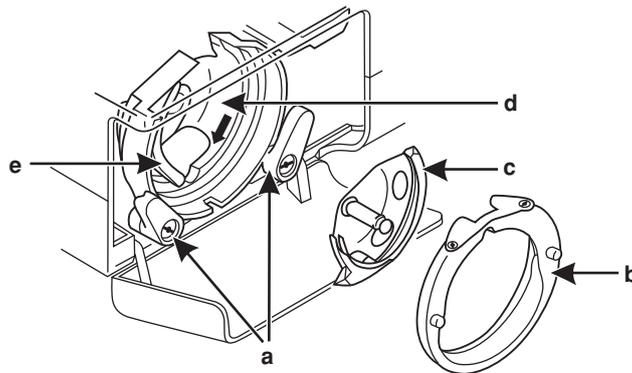
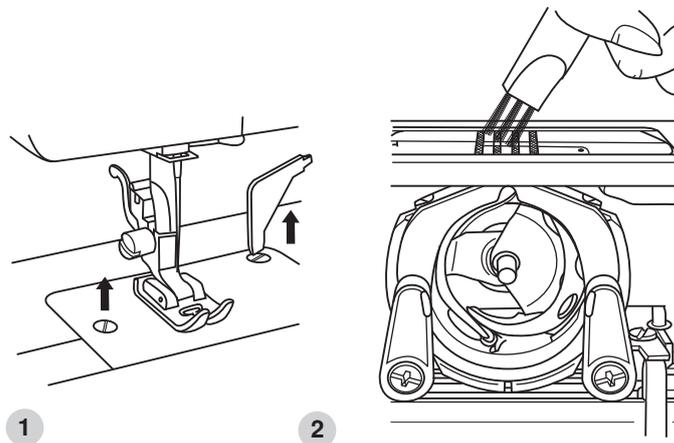
Remove the bobbin case and use the brush supplied to clean the whole area. (2)

### Cleaning and lubricating the hook:

Remove the bobbin case. Snap the two hook retaining arms (a) outwards. Remove the hook race cover (b) and the hook (c) and clean with a soft cloth. Lubricate at the points (d) (1-2 drops) with sewing machine oil. Turn the handwheel until the hook race (e) is in the left position. Replace the hook (c). Replace the hook race cover and snap back the two hook retaining arms.

### Important:

Fabric fluff and threads must be removed regularly. Your machine should be serviced at regular intervals at one of our service agencies.



## Trouble shooting guide

<b>Problem</b>	<b>Cause</b>	<b>Correction</b>
Upper thread breaks	<ol style="list-style-type: none"><li>1.The machine is not threaded correctly.</li><li>2.The thread tension is too tight.</li><li>3.The thread is too thick for the needle.</li><li>4.The needle is not inserted correctly.</li><li>5.The thread is round wound the spool holder pin.</li><li>6.The needle is damaged.</li></ol>	<ol style="list-style-type: none"><li>1.Rethread the machine.</li><li>2.Reduce the thread tension (lower number).</li><li>3.Select a larger needle.</li><li>4.Remove and reinsert the needle (flat side towards the back).</li><li>5.Remove the reel and wind thread onto reel.</li><li>6.Replace the needle.</li></ol>
Lower thread breaks	<ol style="list-style-type: none"><li>1.The bobbin case is not inserted correctly.</li><li>2.The bobbin case is threaded wrongly.</li><li>3.The lower thread tension is too tight.</li></ol>	<ol style="list-style-type: none"><li>1.Remove and reinsert the bobbin case and pull on the thread. The thread should pull easily.</li><li>2.Check both bobbin and bobbin case.</li><li>3.Loosen lower thread tension as described.</li></ol>
Skipped stitches	<ol style="list-style-type: none"><li>1.The needle is not inserted correctly.</li><li>2.The needle is damaged.</li><li>3.The wrong size needle has been used.</li><li>4.The foot is not attached correctly.</li></ol>	<ol style="list-style-type: none"><li>1.Remove and reinsert needle(flat side towards the back).</li><li>2.Insert a new needle.</li><li>3.Choose a needle to suit the thread and fabric.</li><li>4.Check and attach correctly.</li></ol>
Needle breaks	<ol style="list-style-type: none"><li>1.The needle is damaged.</li><li>2.The needle is not correctly inserted.</li><li>3.Wrong needle size for the fabric.</li><li>4.The wrong foot is attached.</li></ol>	<ol style="list-style-type: none"><li>1.Insert a new needle.</li><li>2.Insert the needle correctly (flat side towards the back).</li><li>3.Choose a needle to suit the thread and fabric.</li><li>4.Select the correct foot.</li></ol>
Loose stitches	<ol style="list-style-type: none"><li>1.The machine is not correctly threaded.</li><li>2.The bobbin case is not correctly threaded.</li><li>3.Needle/ fabric/ thread combination is wrong.</li><li>4.Thread tension wrong.</li></ol>	<ol style="list-style-type: none"><li>1.Check the threading.</li><li>2.Thread the bobbin case as illustrated.</li><li>3.The needle size must suit the fabric and thread.</li><li>4.Correct the thread tension.</li></ol>
Seams gather or pucker	<ol style="list-style-type: none"><li>1.The needle is too thick for the fabric.</li><li>2.The stitch length is wrongly adjusted.</li><li>3.The thread tension is too tight.</li></ol>	<ol style="list-style-type: none"><li>1.Select a finer needle.</li><li>2.Readjust the stitch length.</li><li>3.Loosen the thread tension.</li></ol>
Uneven stitches, uneven feed	<ol style="list-style-type: none"><li>1.Poor quality thread.</li><li>2.The bobbin case is wrongly threaded.</li><li>3.Fabric has been pulled.</li></ol>	<ol style="list-style-type: none"><li>1.Select a better quality thread.</li><li>2.Remove bobbin case and retread and insert correctly.</li><li>3.Do not pull on the fabric while sewing, let it be taken up by the machine.</li></ol>
The machine is noisy	<ol style="list-style-type: none"><li>1.The machine must be lubricated.</li><li>2.Fluff or oil have collected on the hook or needle bar.</li><li>3.Poor quality oil has been used.</li><li>4.The needle is damaged.</li></ol>	<ol style="list-style-type: none"><li>1.Lubricate as described.</li><li>2.Clean the hook and feed dog as described.</li><li>3.Only use good quality sewing machine oil.</li><li>4.Replace the needle.</li></ol>
The machine jams	Thread is caught in the hook.	Remove the upper thread and bobbin case, turn the handwheel backwards and forwards by hand and remove the thread remnants. Lubricate as described.



Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities.

Contact your local government for information regarding the collection systems available.

If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

When replacing old appliances with new ones, the retailer is legally obligated to take back your old appliance for disposal at least for free of charge.