

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	Overcasting stitches.....	24
Accessories.....	4	Sewing on buttons	25
Fitting the snap-in sewing table.....	5	How to sew buttonholes	26
Installing the extension table.....	6	Zippers and piping.....	27
Connecting machine to power source.....	7	Sewing with the optional Hemmer foot	28
Changing the bulb	8	Multi-stitch zig-zag	29
Two-step Presser foot lever	9	Straight stretch stitch and Ric Rac stitch.....	30
Adjusting presser foot pressure	9	Honeycomb stitch.....	31
Attaching the presser foot holder	10	Sewing with the optional cording foot.....	32
Winding the bobbin	11	Free motion darning	33
Inserting the bobbin.....	12	Practical stitches	34
Inserting the needle (System 130/705H).....	13	Darning.....	35
Threading the upper thread.....	14	Attaching lace.....	36
Automatic needle threader (optional)	15	Applique	37
Thread tension	16	Twin needle.....	38
Bringing up the lower thread	17	Monogramming and embroidering with embroidery hoop.....	39
Reverse sewing/ Removing the work/ Cutting the thread/ Changing sewing directions.....	18	Quilting	40
Matching needle/ fabric/ thread.....	19	Gathering	41
How to choose your pattern	20	Patch work	42
Straight stitching and needle position	21	The walking foot accessory.....	43
Stitch width dial & stitch length dial	22	Maintenance.....	44
Blind hem/ lingerie stitch	23	Trouble shooting guide.....	45

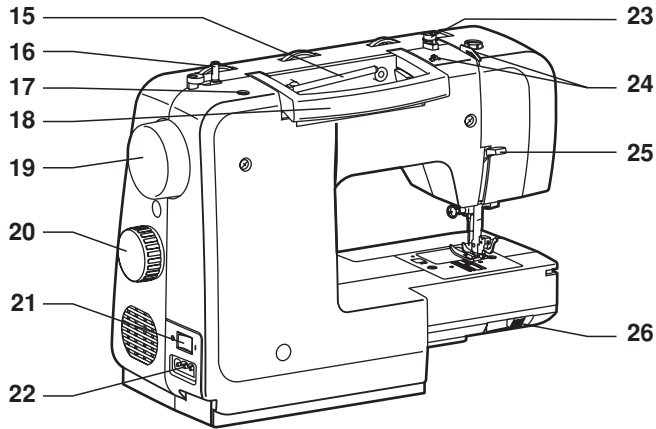
Details of the machine

1. Tension dial
2. Presser foot pressure (optional)
3. Thread take up lever
4. Reverse sewing lever
5. Thread cutter
6. Presser foot
7. Needle plate
8. Sewing table and accessory box
9. Stitch width dial (for model- 3 dials)*
10. Bobbin winder stopper
11. Stitch length dial
12. Stitch display
13. One step buttonhole lever
14. Automatic needle threader (optional)

*Note:

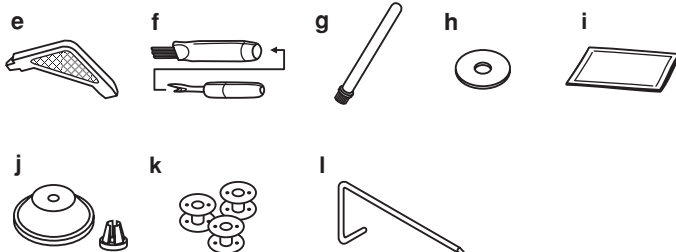
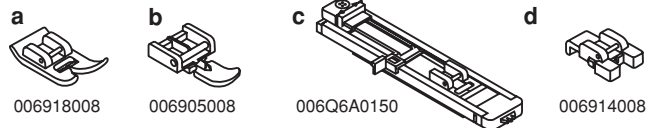
If your machine does not have a stitch width dial, it will be referred to as "model- 2 dials" throughout this instruction book.

Details of the machine

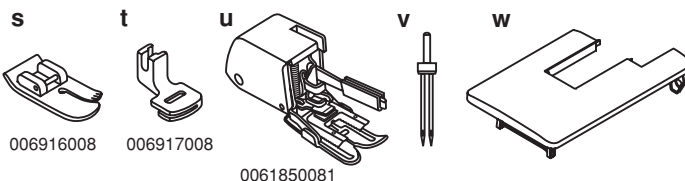
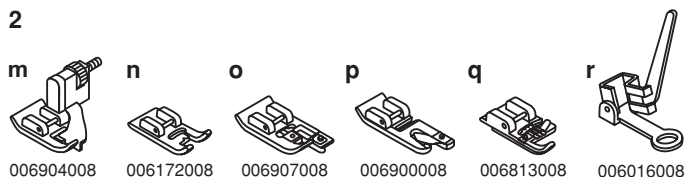


- 15. Spool pin
- 16. Bobbin winder spindle
- 17. Hole for second spool pin
- 18. Handle
- 19. Handwheel
- 20. Pattern select dial
- 21. Power switch
- 22. Main plug socket
- 23. Bobbin thread guide
- 24. Upper thread guide
- 25. Presser foot lifter
- 26. Drop feed control

1



2



Accessories

Standard accessories (1)

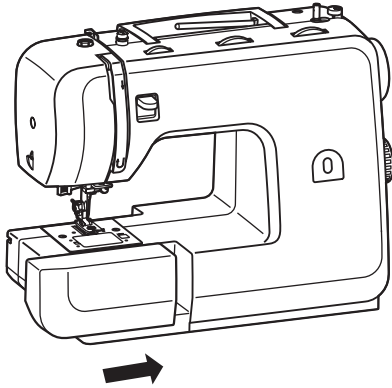
- a. All purpose foot
- b. Zipper foot
- c. Buttonhole foot
- d. Button sewing foot
- e. L-screwdriver
- f. Seam ripper / brush
- g. Second spool pin
- h. Spool pin felt
- i. Pack of needles (3x)
- j. Spool holder
- k. Bobbin (3x)
- l. Edge/quilting guide

Optional accessories (2)

- m. Blind hem foot
- n. Satin stitch foot
- o. Overcasting foot
- p. Hemmer foot
- q. Cording foot
- r. Darning/ embroidery foot
- s. Quilting foot
- t. Gathering foot
- u. Walking foot
- v. Twin needle
- w. Extension table

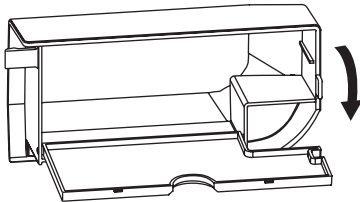
Fitting the snap-in sewing table

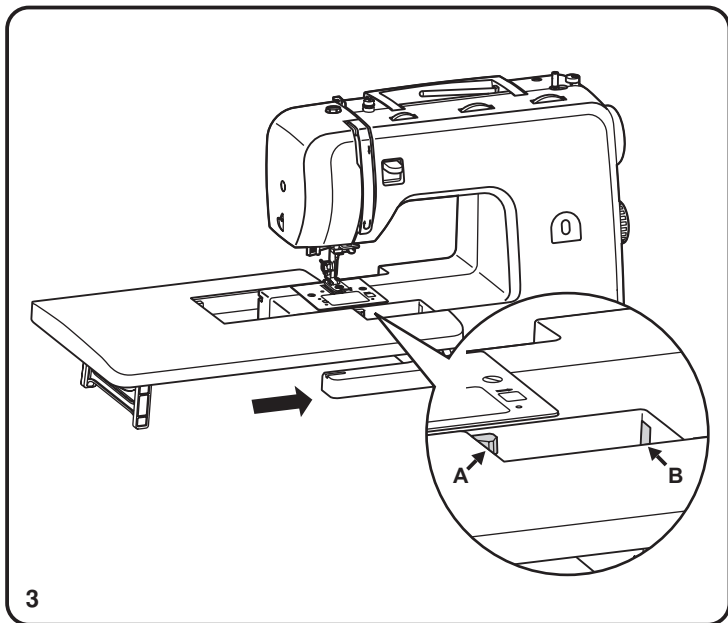
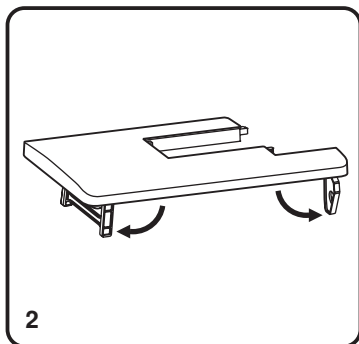
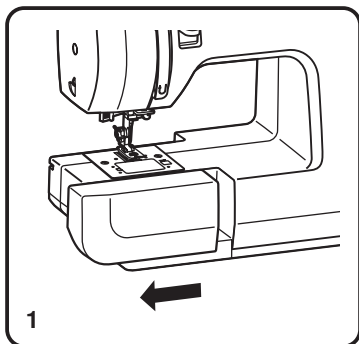
Keep the snap-in sewing table horizontal, and push it in the direction of the arrow. (1)



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

To open, flip cover down as shown. (2)





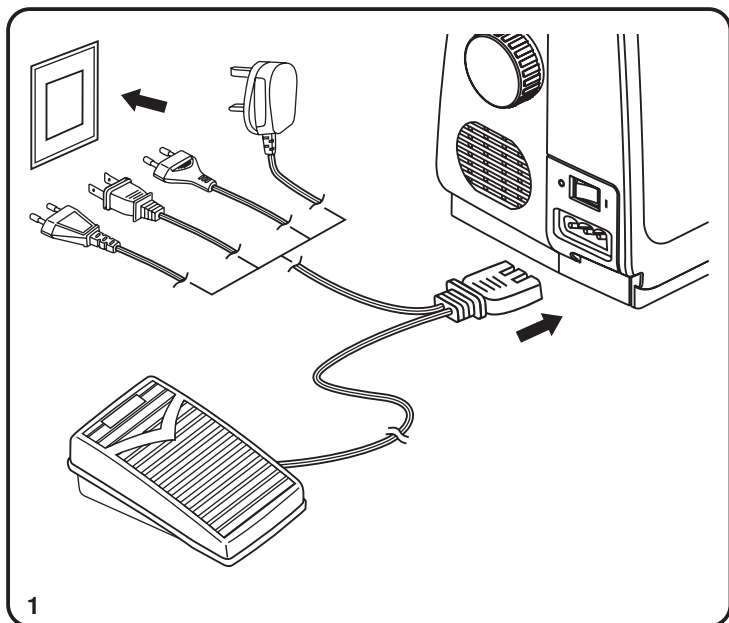
Installing the extension table

Pull the sewing table and accessory box off by sliding it to the left. (1)

Follow the arrow, and stretch the foot of the extension table. (2)

Snap A of the extension table into B of the machine. (3)

Extension table can help moving during sewing.



Connecting machine to power source

Connect the machine to a power source as illustrated. (1)

The sewing machine is equipped with a polarized plug which must be used with an appropriate polarized outlet. (2)

Attention:

Unplug the power cord when machine is not in use.

Foot control

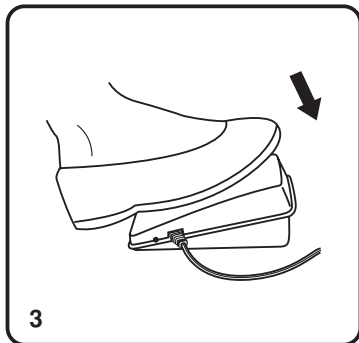
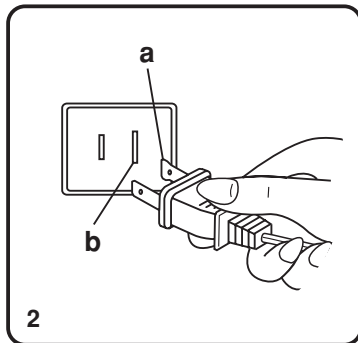
The foot control pedal regulates the sewing speed. (3)

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 KD-1902 (110-120V area)/ KD-2902 (220-240V area) manufactured by ZHEJIANG FOUNDER MOTOR CORPORATION Ltd.



Sewing light

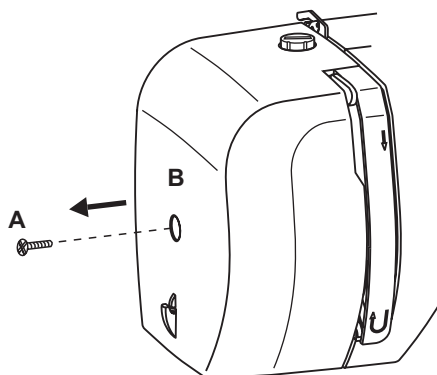
Press the main switch to "I" for power and light on. (1)

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)

a. Polarized attachment plug

b. Conductor intended to be grounded



1

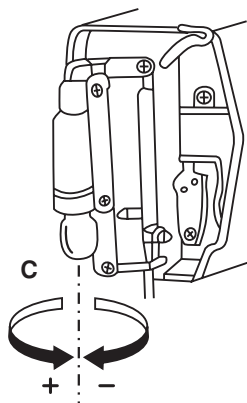
Changing the bulb

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

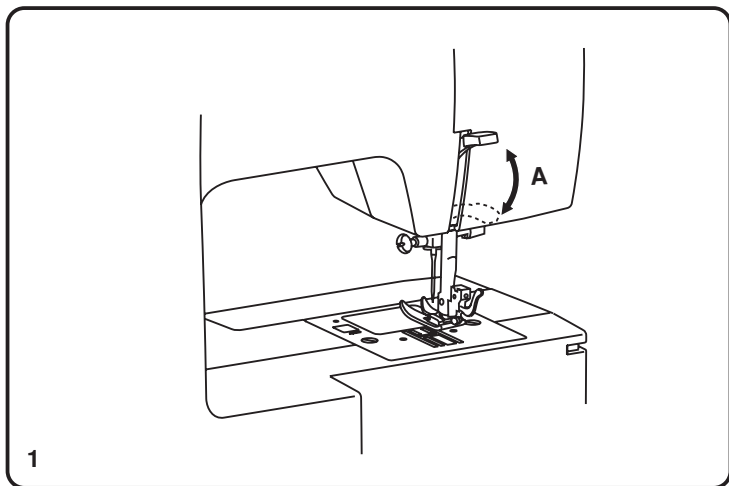
Replace bulb with same type rated 10 watts(110-120V area) or 15 watts (220-240V area).

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

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

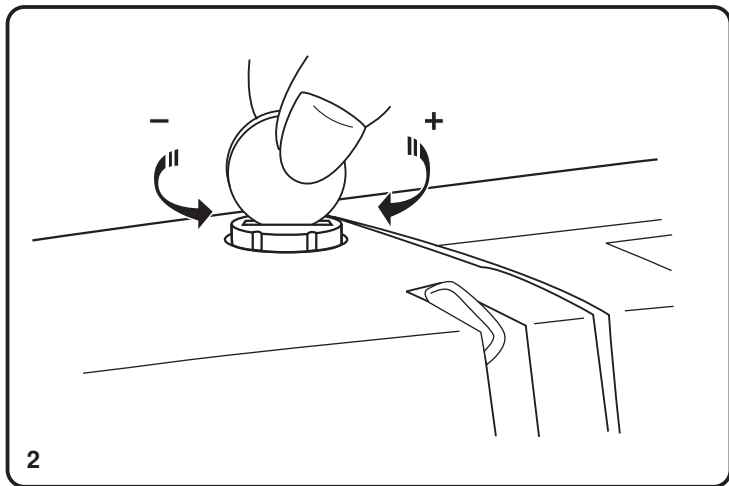


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Two-step presser foot lifter

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

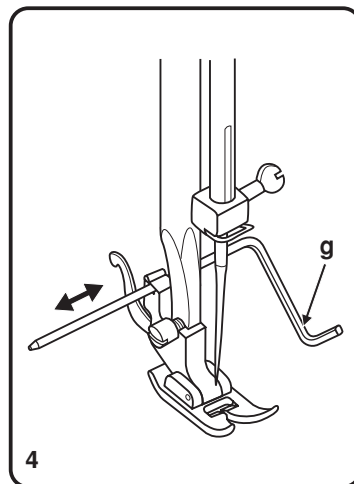
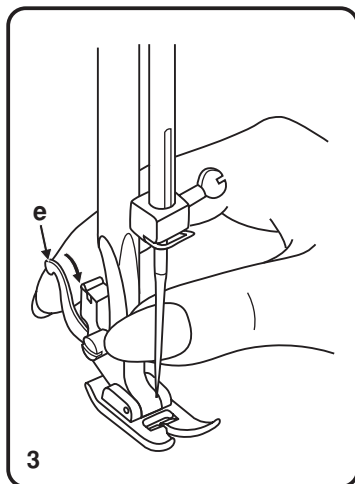
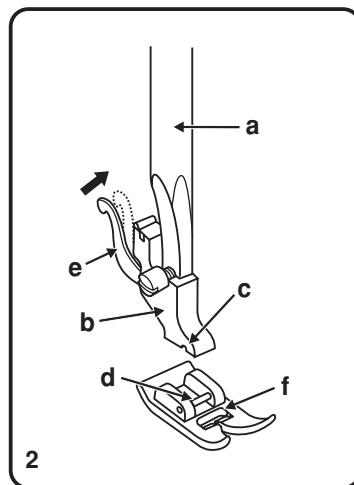
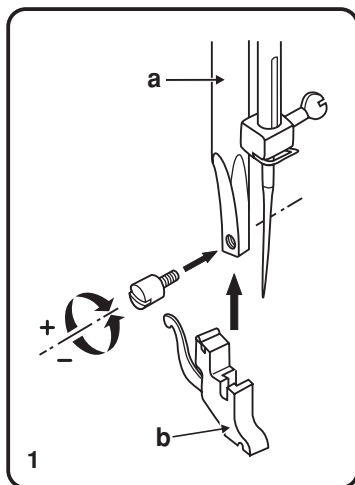


Adjust presser foot pressure (optional)

The presser foot pressure of the machine has been pre-set and requires no particular readjustment according to the type of fabric (light-or-heavy weight).

However, if you need to adjust the presser foot pressure, turn the presser adjusting screw with a coin.

For sewing very thin fabric, loosen the pressure by turning the screw counter clockwise, and for heavy fabric, tighten by turning it clockwise.



Attaching the presser foot holder

Raise the presser foot bar (a). (1)

Attach the presser foot holder (b) as illustrated.

Attaching the presser foot

Lower the presser foot holder (b) until the cut-out (c) is directly above the pin (d). (2)

Raise the lever (e).

Lower the presser foot holder (b) and the presser foot (f) will engage automatically.

Removing the presser foot

Raise the presser foot. (3)

Raise the lever (e) and the foot disengages.

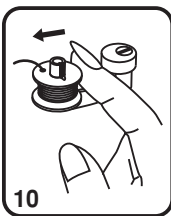
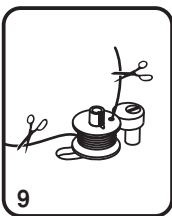
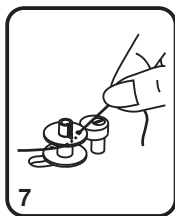
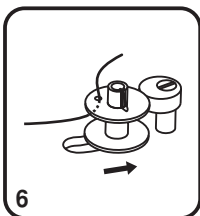
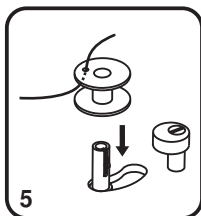
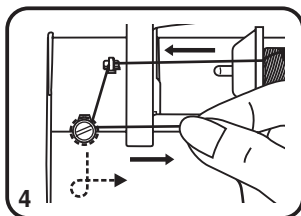
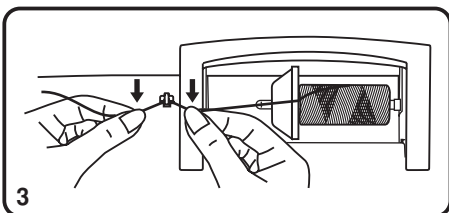
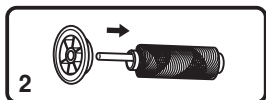
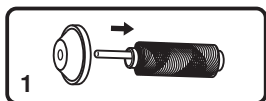
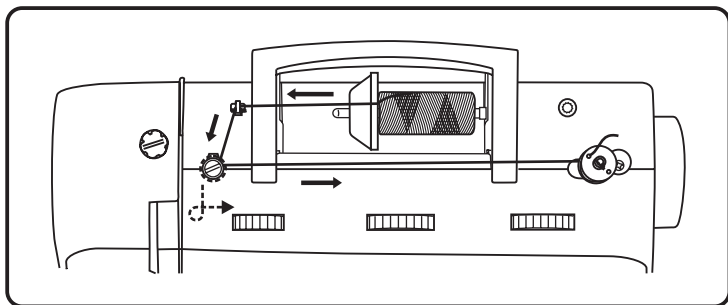
Attaching the Edge/quilting guide

Attach the edge/quilting guide (g) in the slot as illustrated.

Adjust according to need for hems, pleats, etc. (4)

Attention:

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

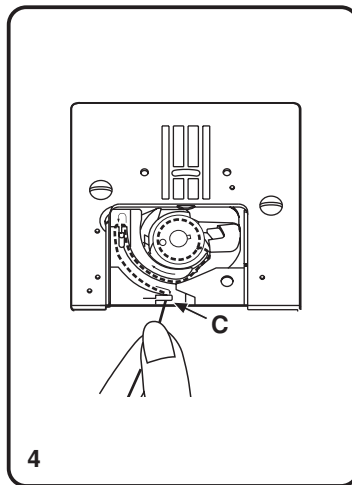
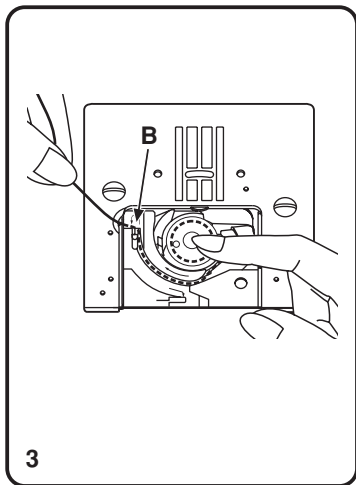
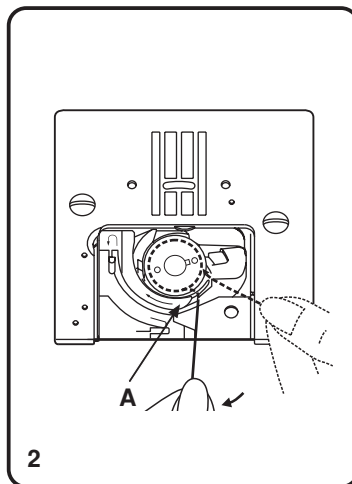
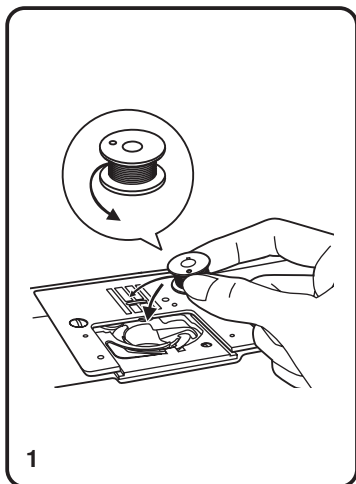


Winding the bobbin

- Place thread and spool holder onto spool pin (1).
- For smaller spools of thread place spool holder with small side next to spool (2).
- Snap thread into thread guide (3).
- Wind thread clockwise around bobbin winder tension discs (4).
- Thread bobbin as illustrated and place on spindle (5).
- Push bobbin to right (6).
- Hold thread end (7).
- Step on foot control pedal (8).
- Cut thread (9).
- Press bobbin to left (10) 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).



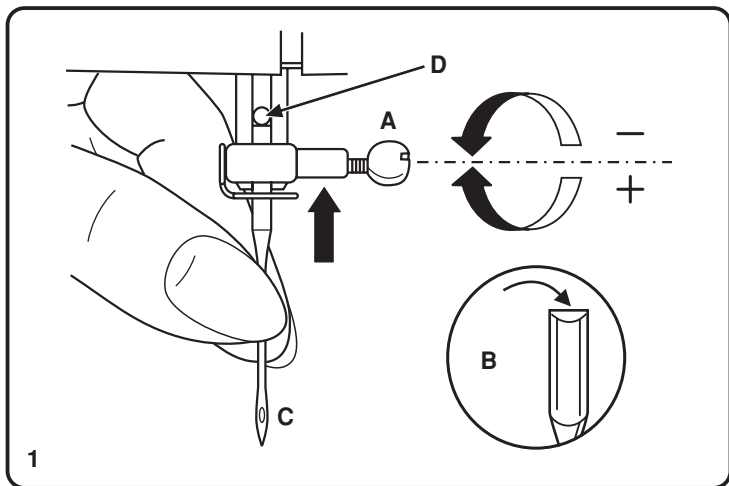
Inserting the bobbin

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

1. Inserting the bobbin in the bobbin holder with the thread running counter clockwise direction (arrow).
2. Pull the thread through the slit (A).
3. Draw the thread at the arrow markings into the stitch plate thread guide from (B) to (C).
4. To cut off excess thread pull thread back over the cutting off blade at point (C). To close the bobbin cover.

Attention:

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



Inserting the needle (System 130/705H)

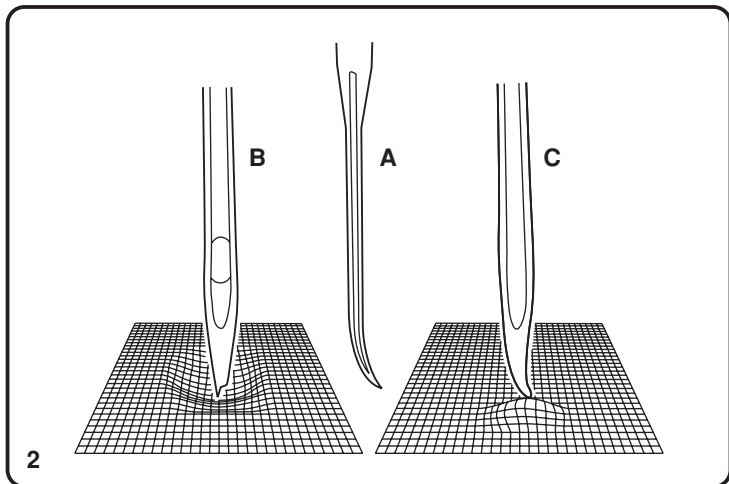
Change the needle regularly, especially if it is showing signs of wear and causing problems.

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:

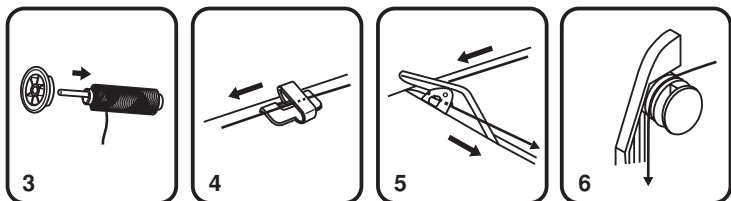
Turn power switch to "O" before inserting or removing the needle.



Needles must be in perfect condition. (2)

Problems can occur with:

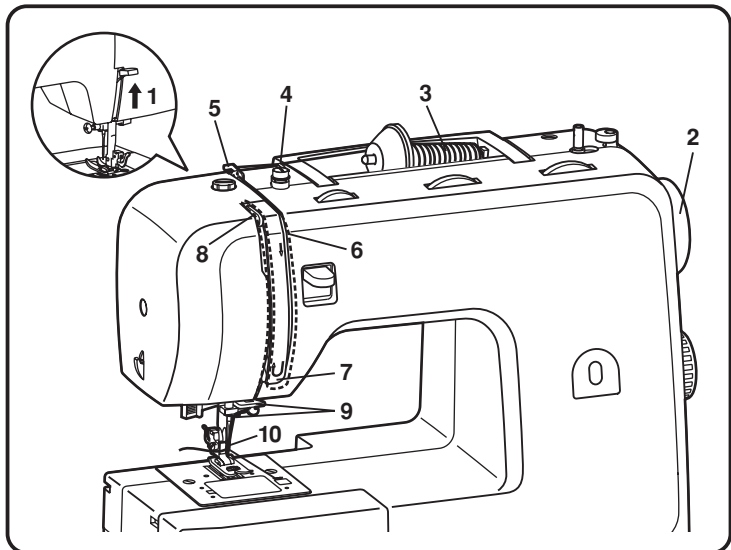
- A. Bent needles
- B. Damaged points
- C. Blunt needles



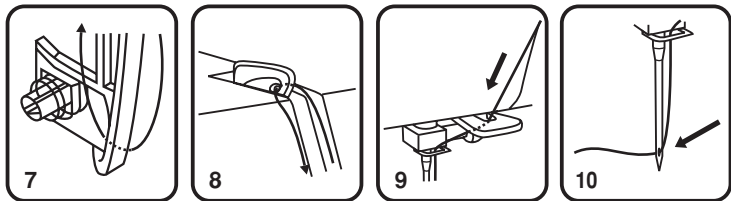
Threading the upper thread

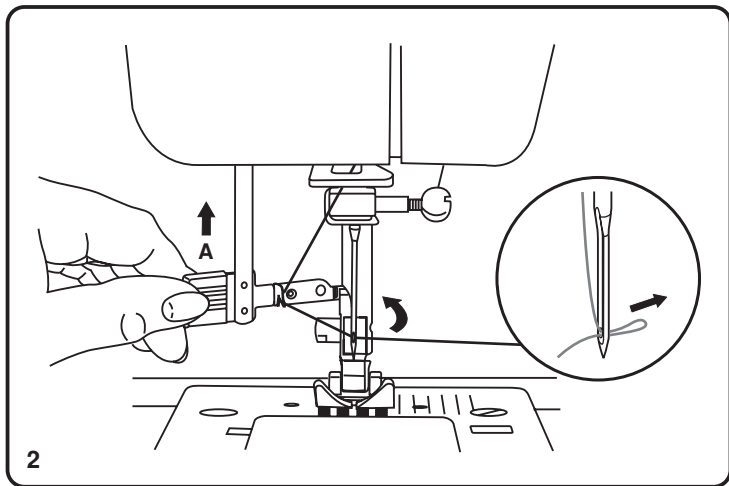
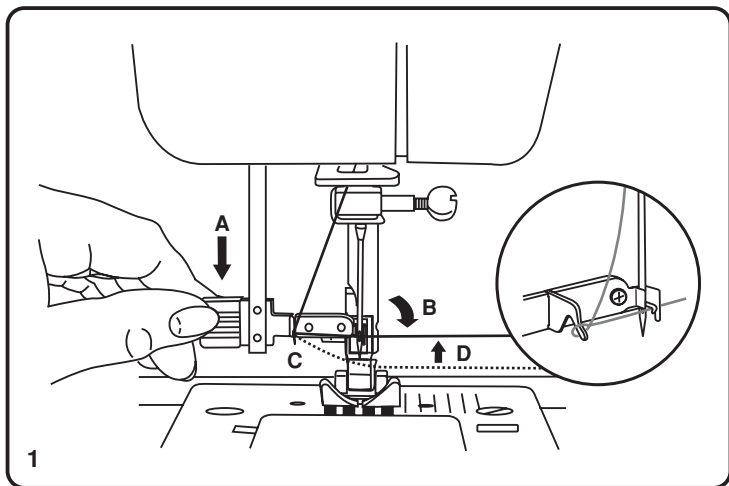
This is a simple operation but it is important to carry out correctly as by not doing so several sewing problems could result.

Start by raising the needle to its highest point, and also raise the presser foot to release the tension discs. (1/2)



1. Lift up the spool pin. Place the spool of the thread on the holder with the thread coming off the spool as shown. (3)
For small thread spools, use the spool holder opposite.
2. Draw thread from spool to the upper thread guides. (4/5)
3. Bring forward towards you and through the two tension discs in the top front of the machine. (6)
4. Continue downwards on the right side of the large vertical thread guide passing under and up the left side allowing the thread to engage with the check spring as it passes upwards. (7)
5. At the top of this movement pass it from right to left through the slotted eye of the take-up lever and then downwards again. (8)
6. Pass behind the flat, horizontal thread guide. (9)
7. Now take it behind the thin wire needle clamp guide and then down to the needle which should be threaded from front to back. Pull about 6-8 inches of thread to the rear beyond the needle eye. (10)





Automatic needle threader (optional)

* The automatic needle threader is a factory installed option.
If your machine has this option use the following instructions:

- Raise the needle to its highest position.
- Press lever (A) right down.
- The threader automatically swings to the threading position (B).
- Take the thread round the hook (C).
- Take the thread in front of the needle round the hook (D) from bottom to top.
- Release lever (A).
- Pull the thread through the needle eye.

Attention:

Turn power switch to "O"!

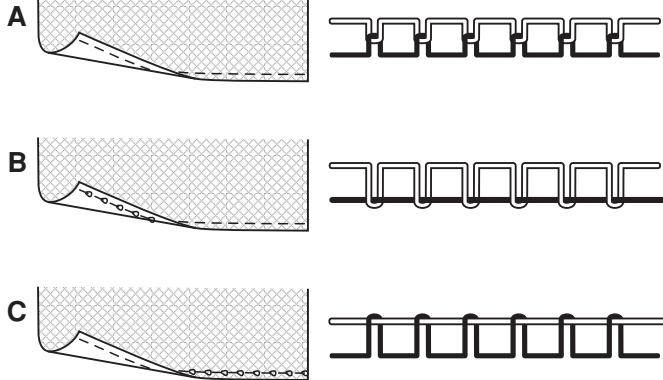
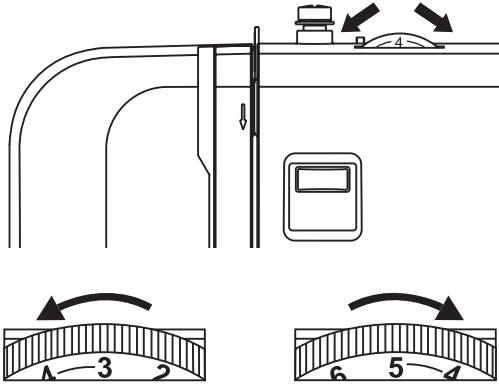
Thread tension

Upper thread tension

Basic thread tension setting: "4".

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

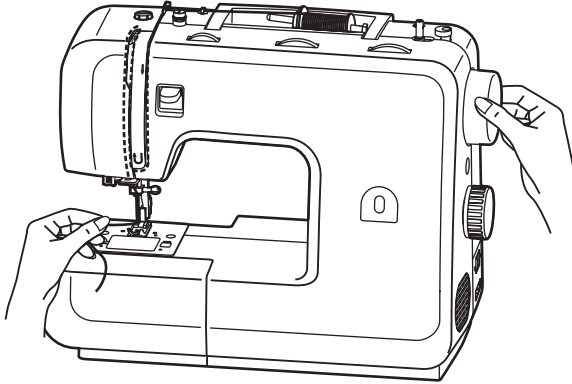
To reduce the tension, turn the dial to the next number down.



- A. Normal thread tension
- B. Thread tension too loose
- C. Thread tension too tight

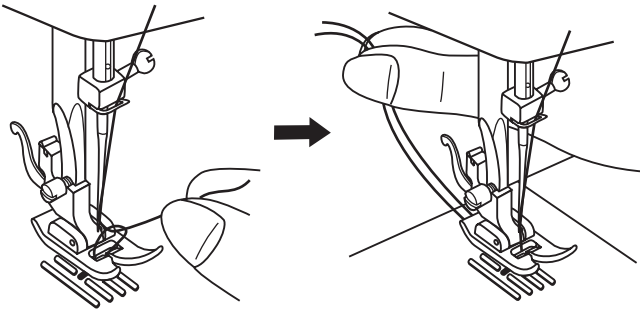
Bringing up the lower thread

Hold the upper thread with the left hand. Turn the handwheel forwards until the needle is raised. (1)

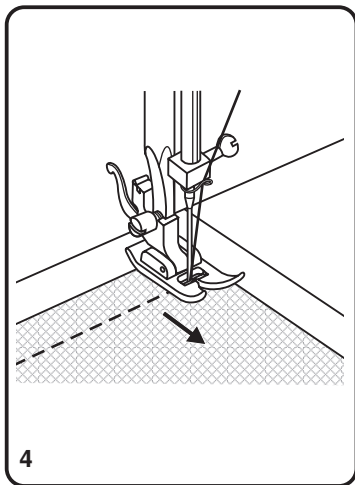
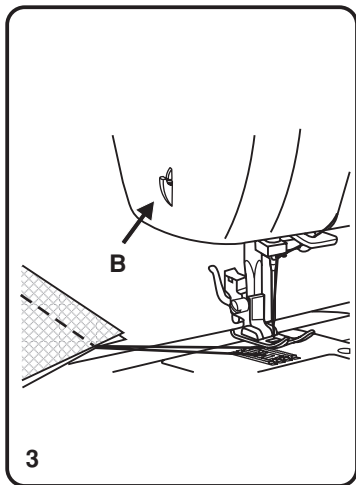
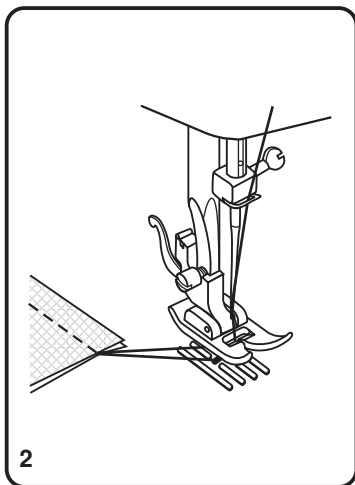
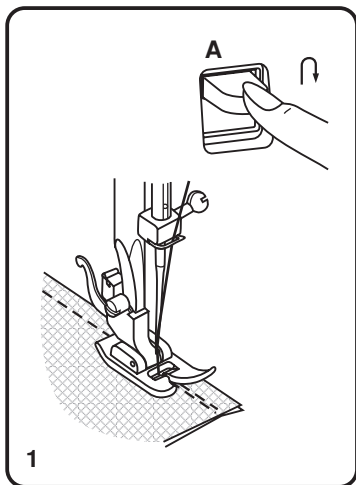


1

Pull on the upper thread to bring the lower thread up through the stitch plate hole. Lay both threads to the back under the presser foot. (2)



2



Reverse sewing

At the end of seam, press down the reverse sewing lever. Sew a few reverse stitches. Release the lever and the machine will sew forwards again. (A/1)

Removing the work

Turn the handwheel towards to bring the thread take up lever to its highest position, raise the presser foot and remove work towards the back. (2)

Cutting the thread

Hold the threads behind the presser foot with both hands, guide them to the slit (B) and press down. (3)

Changing sewing directions

1. Stop the machine at the point where you wish to change directions with the needle still in the fabric.
2. Raise the presser foot and turn the fabric to line up its new direction using the needle as a turning point. (4)
3. Lower the presser foot and start sewing in the new direction.

Matching needle/ fabric/ thread

NEEDLE, FABRIC, THREAD SELECTION GUIDE

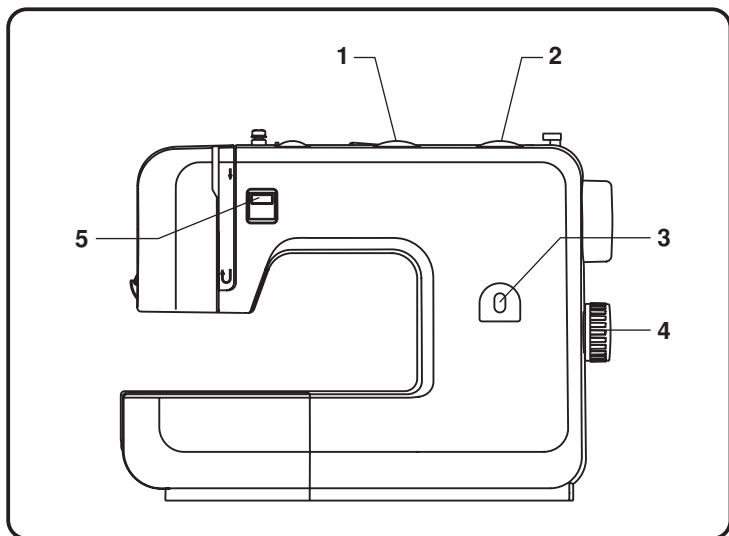
NEEDLE SIZE	FABRICS	THREAD
9-11(65-75)	Lightweight fabrics-thin cottons, voile, serge, silk , muslin, Qiana, interlocks, cotton knits, tricots, jerseys, crepes, woven polyester, shirt & blouse fabrics.	Light-duty thread in cotton, nylon or polyester.
12(80)	Medium weight fabrics-cotton, satin, kettleclote, 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, terry cloth, 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	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.



How to choose your pattern

To select a stitch, simply turn the pattern selector dial. The pattern selector dial may be turned in either direction.

For straight stitch, select pattern "1" or "1" with the pattern selector dial. Adjust the stitch length with the stitch length dial.

For zigzag stitch, select pattern "3" with the pattern selector dial. Adjust the stitch length and stitch width according to the fabric being used.

To obtain the other patterns, turn the stitch length dial to "S1" or "S2", select the pattern desired with pattern selector dial, and adjust the stitch width with the stitch width dial.

Please consult the following stitch patterns chart.

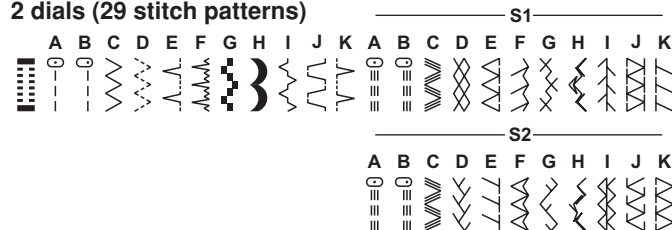
2 dials (21 stitch patterns)



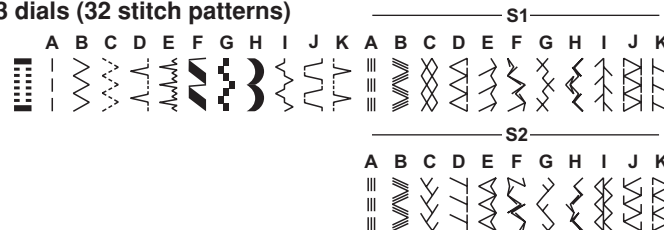
3 dials (23 stitch patterns)

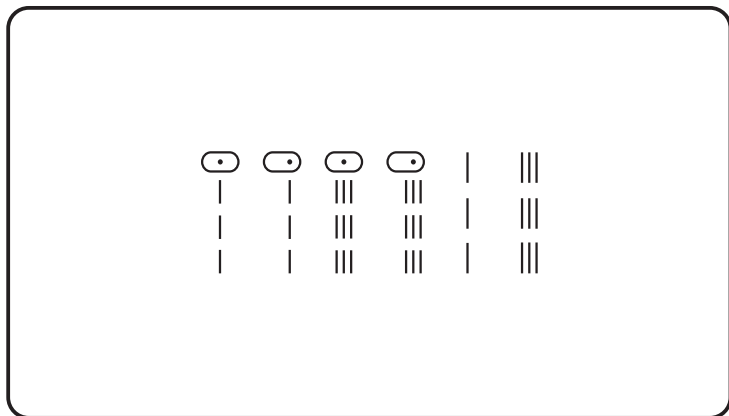
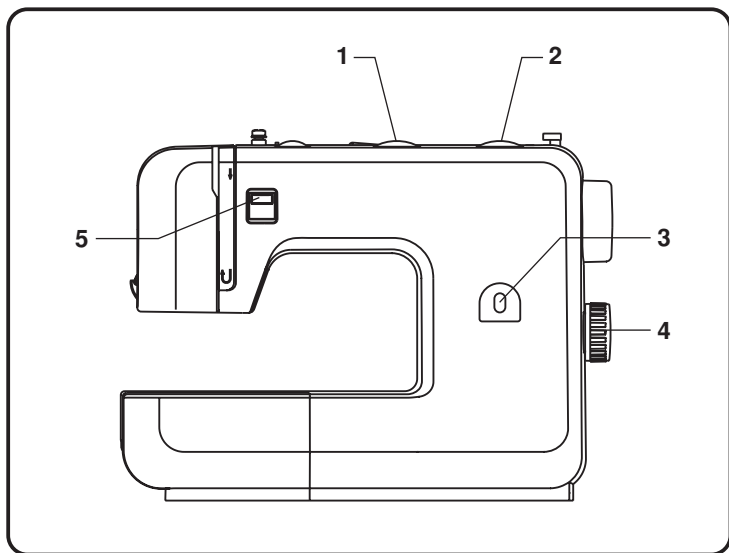


2 dials (29 stitch patterns)



3 dials (32 stitch patterns)





Straight stitching and needle position

Turn the pattern selector dial so that the stitch display shows the straight stitch position.

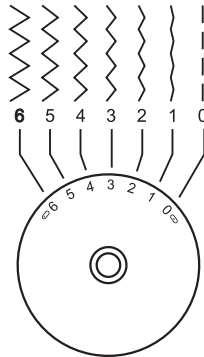
Generally speaking, the thicker the fabric, thread and needle, the longer the stitch should be.

Choose your needle position, from center needle position or left needle position. (for model- 2 dials)

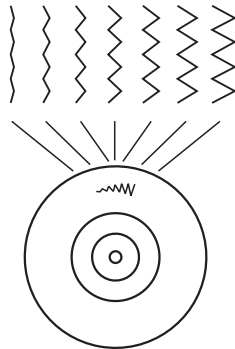
Choose your needle position, from center position to left needle position by changing the stitch width dial (1) from "0" to "6". (for model- 3 dials)

1. Stitch width dial (for model- 3 dials)
2. Stitch length dial
3. Stitch display
4. Pattern selector dial
5. Reverse sewing lever

Stitch width dial



For 2-dial model



1

Stitch width dial & stitch length dial

Function of stitch width dial

The maximum zigzag stitch width for zigzag stitching is 5mm; however, the width can be reduced on any patterns. The width increases as you move stitch width dial from "0" - "6". (1)

The Stitch width dial is also the control for the straight stitch infinite needle position. "0" position is center and "6" is full left needle position (for 3-dial model).

Function of stitch length dial while zig-zag stitching

Set the pattern selector dial to zig-zag.

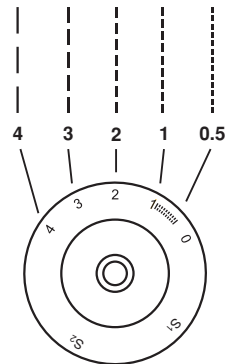
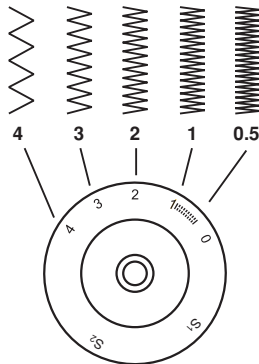
The density of zig-zag stitches increase as the setting of stitch length dial approaches "0".

Neat zig-zag stitches are usually achieved at "3" or below. (2)

Function of stitch length dial for straight stitching

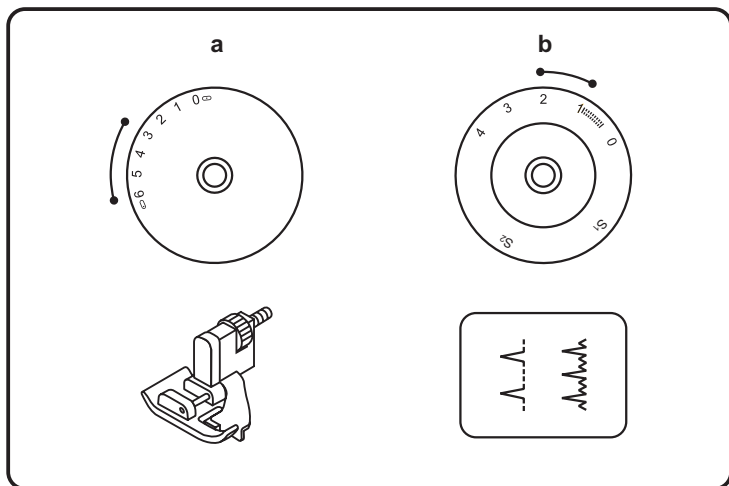
For straight stitch sewing, turn the pattern selector dial to the straight stitch setting. Turn the stitch length dial, and the length of the individual stitches will decrease as the dial approaches "0". The length of the individual stitches will increase as the dial approaches "4". (3) Generally speaking, 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.

Stitch length dial



2

3



Blind hem/ lingerie stitch

* The blind hem foot is an optional accessory not supplied with your machine.

For hems, curtains, trousers, skirts, etc.

..... Blind hem for stretch fabrics.

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

Set the machine as illustrated.

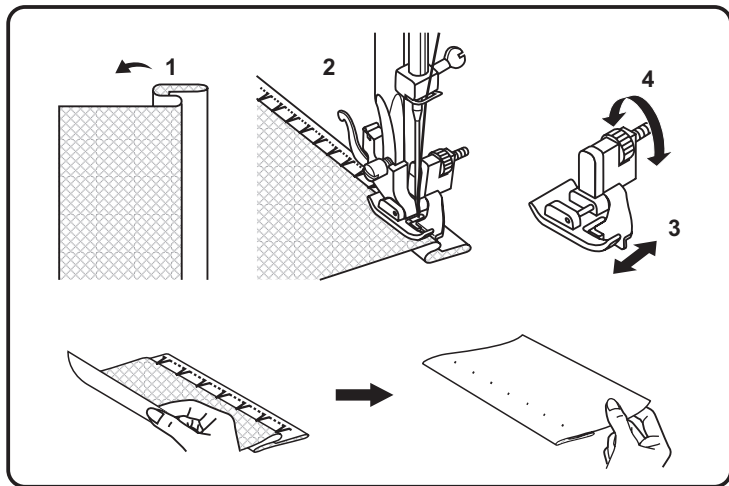
Note:

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

Fold the fabric as illustrated with the wrong side uppermost. (1)

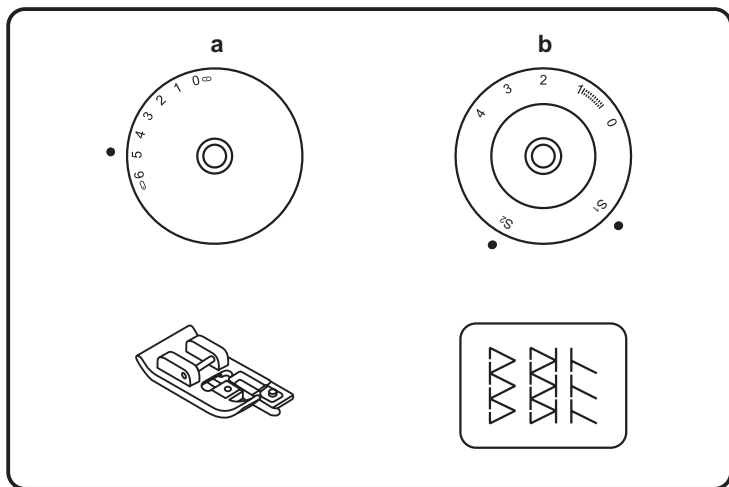
Place the fabric under the foot. Turn the handwheel forwards by hand until the needle swings fully to the left. It should just pierce the fold of the fabric. If it does not, adjust the stitch width accordingly. (2)

Adjust the guide (3) by turning the knob (4) so that the guide just rests against the fold. Sew slowly, by pressing the foot control lightly guiding the fabric along the edge of the guide.



a. Stitch width (for model- 3 dials)

b. Stitch length



Overcasting stitches

* The overcasting foot is an optional accessory not supplied with your machine.

Seams, neatening, visible hems.

Turn the stitch length dial to "S1" or "S2".
The stitch width can be adjusted to suit the fabric.

Standard overlock:

For fine knits, jerseys, neck edges, ribbing. (1)

Double overlock stitch:

For fine knits, handknits, seams. (2)

Stretch overlock:

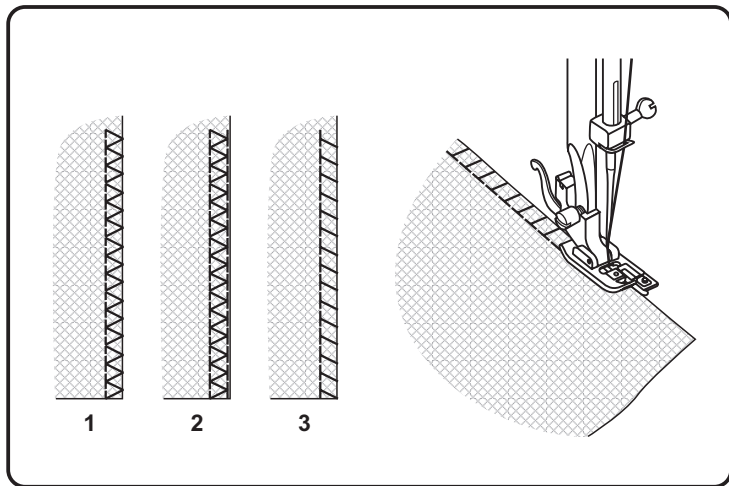
For fine knits, jerseys, neck edges, ribbing. (3)

All overlock stitches are suitable for sewing and neatening edges and visible seams in one operation.

When neatening, the needle should just go over the edge of the fabric.

Attention:

Use new needles or ball point needles or stretch needle!



a. Stitch width (for model- 3 dials)

b. Stitch length

Sewing on buttons

Move the drop feed control to lower the feed dogs. (1)

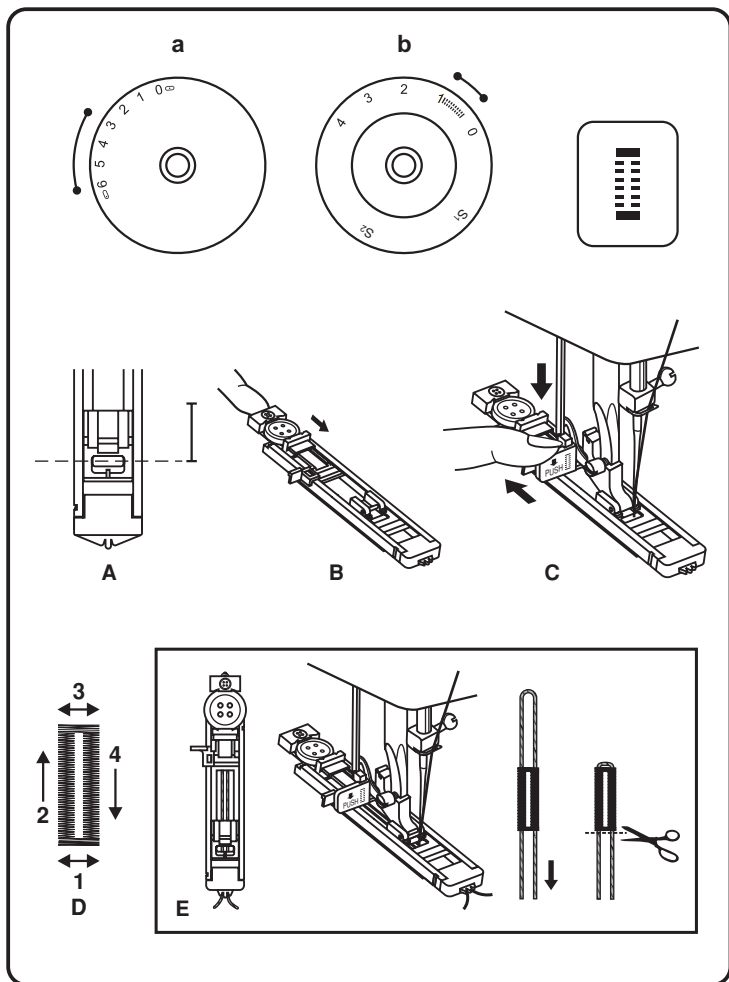
Change presser foot to button sewing foot.

Position the work under the foot. Place the button on the marked position and lower the foot. Set the pattern selector knob on "1" and sew a few securing stitches. Select the zig-zag stitch width 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 any obstruction (adjust the stitch width according to the button). Slowly sew on the button with about 10 stitches. Select pattern "1" and sew a few securing stitches. (2) (for 2-dial model)

Position the work under the foot. Place the button in the desired position, lower the foot. Set the pattern selector knob on zig zag stitch "5". Adjust the stitch width to "3" - "5" according to the distance between the two holes of the button. Turn the handwheel to check that the needle goes cleanly into the left and right holes of the button. Set the pattern selector knob on straight stitch "1", and sew a few securing stitches. Set the pattern selector knob on zig zag stitch "5", and slowly sew on the button with about 10 stitches. Set the pattern selector knob on straight stitch "1", and sew a few securing stitches. (2) (for 3-dial model)

If a shank is required, place a darning needle on top of the button and sew. (3) For buttons with 4 holes, sew through the front two holes first (2), push work forward and then sew through the back two holes as described. (3)

a. Stitch width (for model- 3 dials)
b. Stitch length



How to sew buttonholes

Buttonhole sewing is a simple process that provides reliable results. However, it is strongly suggested to always make a practice buttonhole on a sample of your fabric and interfacing.

Making a Buttonhole

1. Using tailor's chalk, mark the position of the buttonhole on the fabric.
2. Attach the buttonhole foot and set the pattern selector dial to "1". Set stitch length dial to "1/4". Adjust stitch width to desired width.
3. Lower the presser foot aligning the marks on foot with the marks on the fabric (A). (The front bar tack will be sewn first.)
4. Open the button plate and insert the button (B).
5. Lower the buttonhole lever and gently push it back (C).
6. While lightly holding the upper thread, start the machine.
7. Buttonhole stitching is done in the order (D).
8. Stop the machine when the buttonhole is sewn.

Making a Buttonhole on Stretch Fabrics (E)

When sewing buttonholes on stretch fabric, hook heavy thread or cord under the buttonhole foot. When the buttonhole is sewn the legs will overcast the cord.

1. Mark the position of the buttonhole on the fabric with the tailor's chalk, attach the buttonhole foot, and set the pattern selector dial to "1". Set stitch length dial to "1/4".
2. Hook the heavy thread onto the back end of the buttonhole foot, then bring the two heavy thread ends to the front of the foot, insert them into the grooves and temporarily tie them there.
3. Lower the presser foot and start sewing.
*Set the stitch width to match the diameter of the gimp thread.
4. Once sewing is completed, gently pull the heavy thread to remove any slack, then trim off the excess.

- a. Stitch width (for model- 3 dials)
b. Stitch length

Zippers and piping

Set the pattern selector dial to "1" or "1".

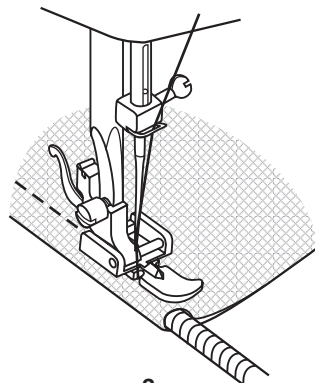
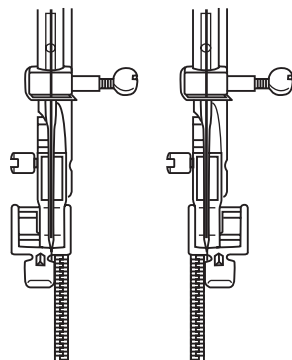
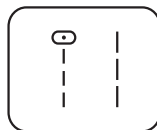
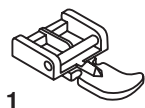
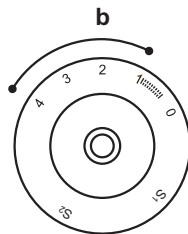
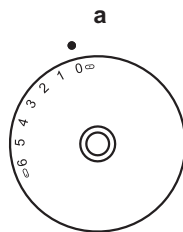
Change to zipper foot. (1)

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

The zipper foot can be attached right or left depending on which side of the foot you are going to sew. (2)

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

It is also possible to sew in a length of cord, into a bias strip to form a welt (3).



a. Stitch width (for model- 3 dials)

b. Stitch length

Sewing with the optional Hemmer foot

* The hemmer foot is an optional accessory not supplied with your machine.

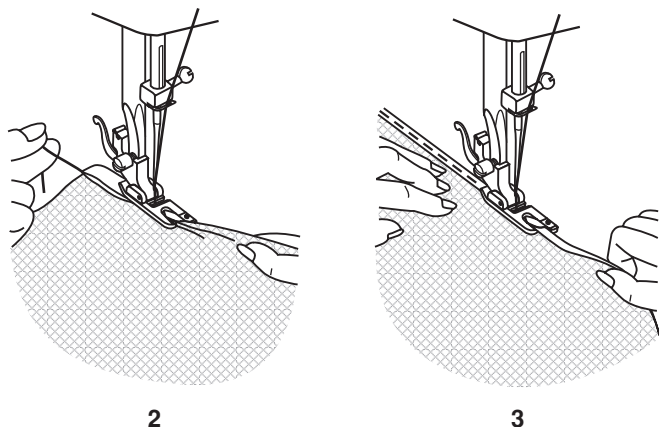
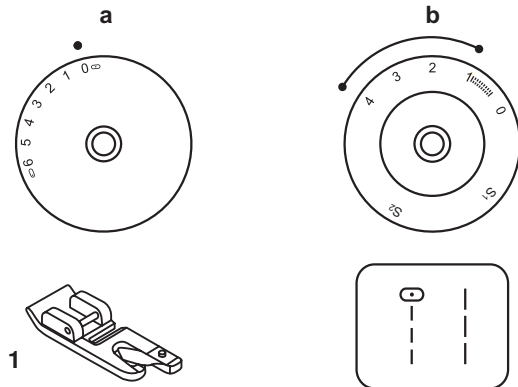
For hems in fine or sheer fabrics.

Set the stitch pattern dial to "1" or "2".

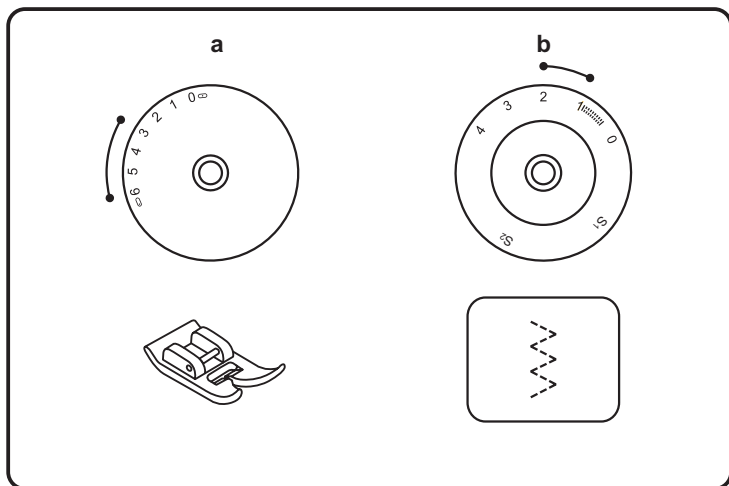
Change to optional hemmer foot. (1)

Neaten the edge of the fabric. At the beginning of the hem, turn under the edge twice by about 3 mm (1/8") and sew 4-5 stitches to secure. Pull the thread slightly towards the back. Insert the needle into the fabric, raise the presser foot and guide the fold into the scroll on the foot (2).

Gently pull the fabric edge towards you and lower the presser foot. Begin sewing, guiding the fabric into the scroll by holding it upright and slightly to the left (3).



a. Stitch width (for model- 3 dials)
b. Stitch length



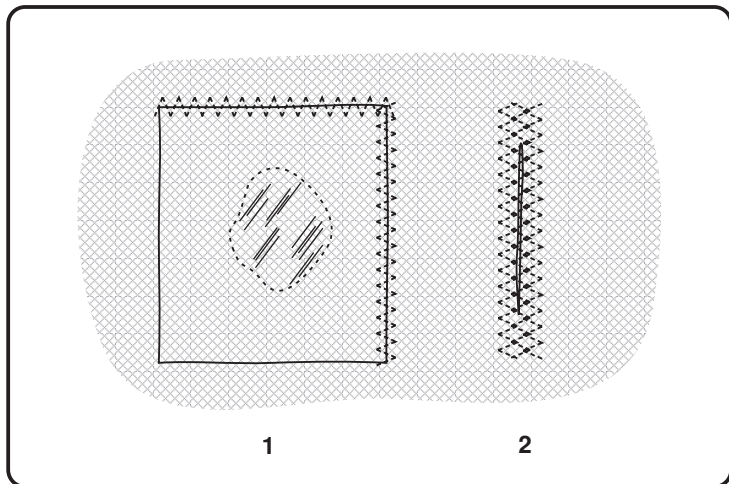
Multi-stitch zig-zag

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

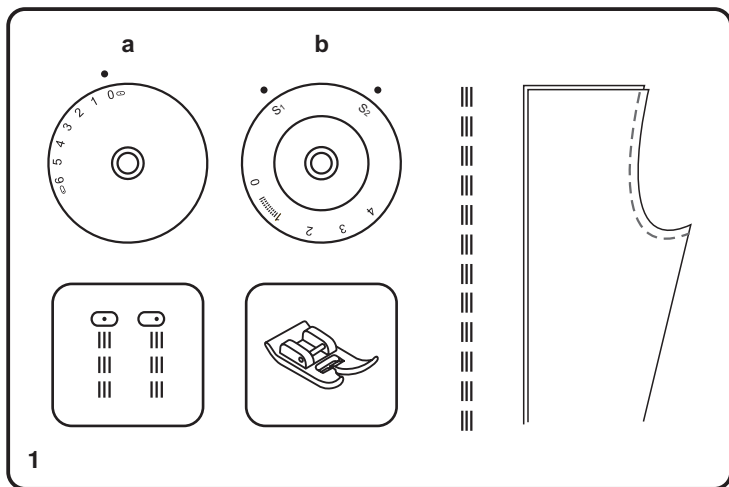
Set the stitch pattern dial to "  ".

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 6 rows. (2)



a. Stitch width (for model- 3 dials)
b. Stitch length



Straight stretch stitch and Ric Rac stitch

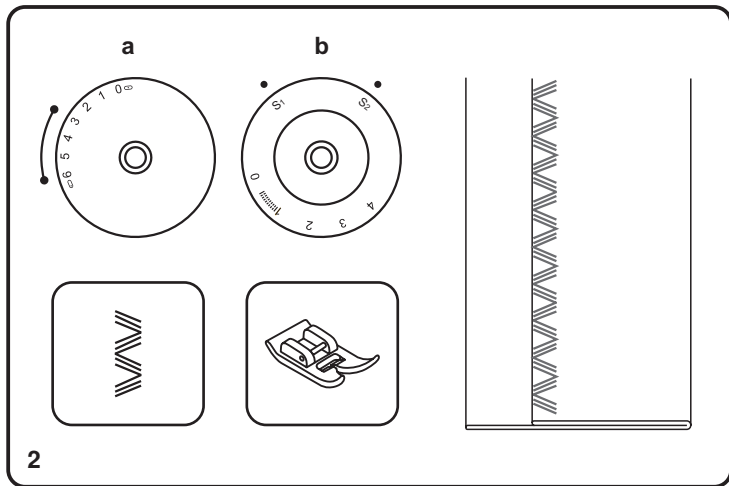
Triple straight stitch: (1/3)

Pattern selector on "1/3".

For hardwearing seams.

Turn the stitch length dial to "S1" or "S2".

The machine sews two stitches forwards and one stitch backwards. This gives triple reinforcement.



Triple zig-zag: (2/4)

Pattern selector on "2/4".

For hardwearing seams, hems and decorative seams.

Turn the stitch length dial to "S1" or "S2".

Adjust the stitch width dial to between "3" and "6". (for model- 3 dials)

Triple zig-zag is suitable for firm fabrics like denim, corduroy, etc.

a. Stitch width (for model- 3 dials)

b. Stitch length


Honeycomb stitch

Seams, hems, T-shirts, underwear, etc.

Set the machine as illustrated.

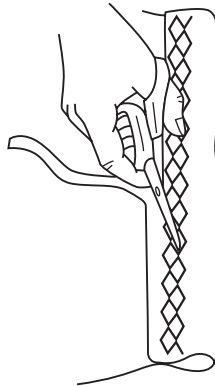
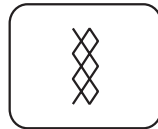
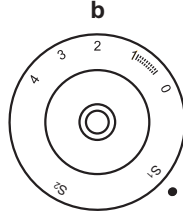
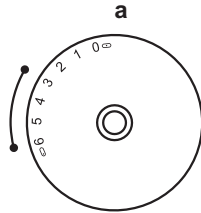
Turn the stitch length dial to "S1".

Set the stitch width dial to between "3" and "6". (For model- 3 dials)

Set stitch pattern selector on "  ".

This stitch can be used for all types of jersey and woven fabrics.

When using Honeycomb stitch pattern for hemming sew at 1cm (1/4") from the fabric edge and trim the surplus fabric.




a. Stitch width (for model- 3 dials)

b. Stitch length

Sewing with the optional cording foot

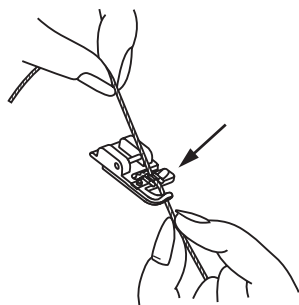
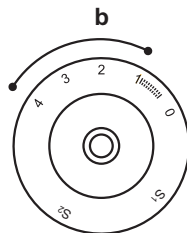
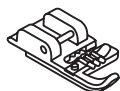
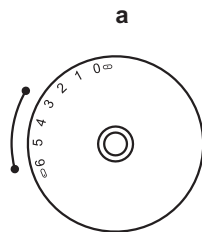
* The cording foot is an optional accessory not supplied with your machine.

Decorative effects, cushions, tablecloths, etc.

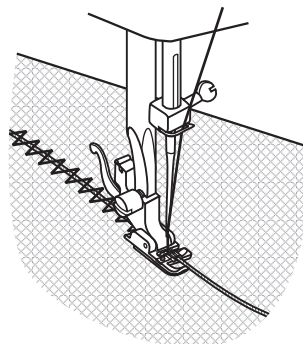
Set stitch selector to position "  ".

In addition to zig zag, various other stitches are suitable for sewing on cord, e.g. blindhem, multi-stitch zig zag, decorative stitches.

Insert the cord between the spring covering the cord groove and the foot (1). The cord should run in the groove. One, two or three cords can be sewn on. The stitch width is adjusted according to the number of cords and the stitch selected (2).



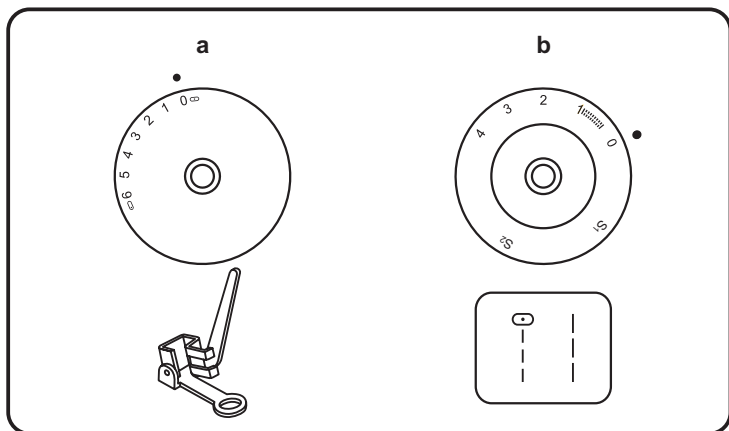
1



2

a. Stitch width (for model- 3 dials)

b. Stitch length



Free motion darning

* The Darning/ embroidery foot is an optional accessory not included with your machine.

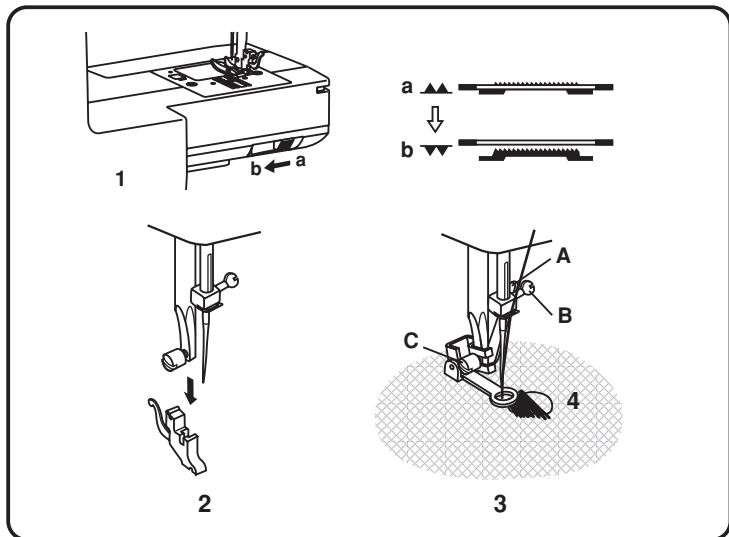
Move the drop feed control to lower the feed dogs. (1)

Set the pattern selector dial to "1" or "2".

Remove the presser foot holder (2).

Attach the darning foot to the presser foot bar. The lever (A) should be behind the needle clamp screw (B). Press the Darning/ embroidery foot on firmly from behind with your index finger and tighten the screw (C) (3).

First sew around the edge of the hole (to secure the threads) (4). First row: Always work from left to right. Turn work by 1/4 and oversew. A darning ring is recommended for easier sewing and better results.

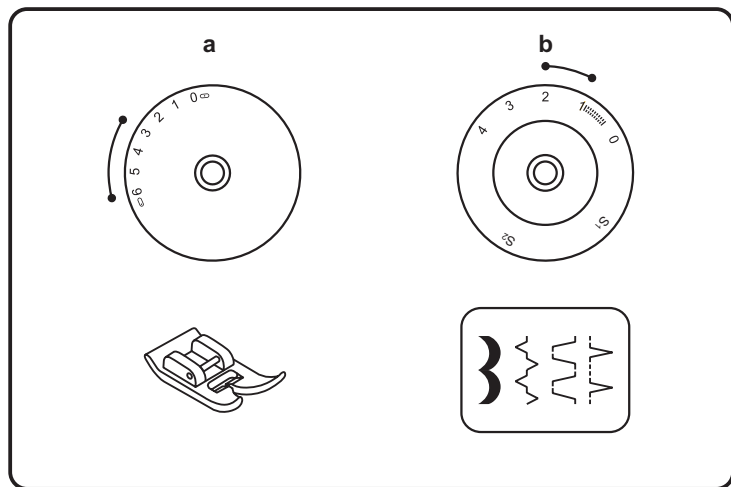


Note:

Free motion darning is accomplished without the sewing machine internal feed system. Movement of the fabric is controlled by the operator. It is necessary to coordinate sewing speed and movement of fabric.

a. Stitch width (for model- 3 dials)

b. Stitch length



Practical stitches

Set the machine as illustrated.

Turn the switch width dial and stitch length dial to suit the fabric.

Crescent stitch (1)

For a delicate edge finish along the edge of fabric.

Bridging (2)

For seams, place mats, tablecloths.

Decorative joining seam for a fagotted effect. Gathering with cord or shirring elastic.

Rampart (3)

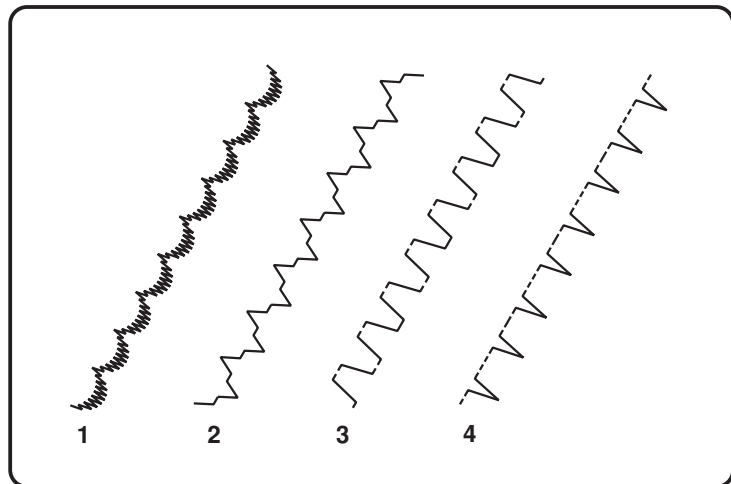
For flat joining seams, sewing on elastic, visible hems.

This stitch can be used for firm, thicker fabrics.

Shell hem (4)

For decorative edges.

Suitable for edges on sheer, fine and stretch fabrics. The larger stitch should go just over the edge of the fabric to create the shell effect.



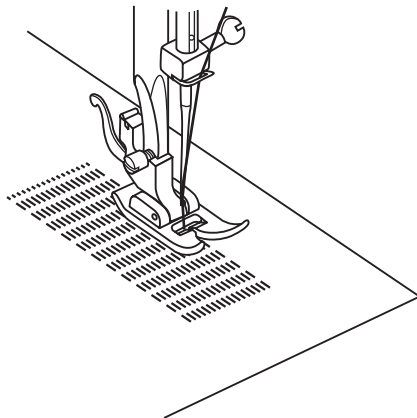
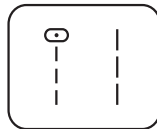
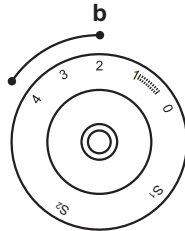
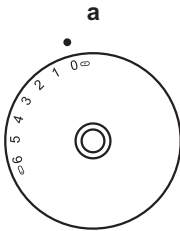
a. Stitch width (for model- 3 dials)

b. Stitch length

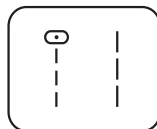
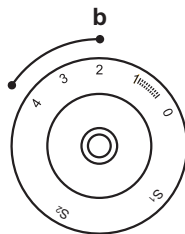
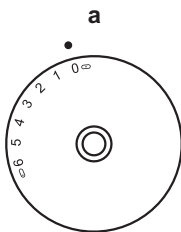
Darning

- Turn stitch length dial to the desired length.
- Turn stitch selector to straight stitch, center needle position.
- Position the fabric to be darned under the presser foot together with the under laying fabric to be used.
- Lower the presser foot and alternately sew forward or reverse using the lever.
- Repeat this motion until the area to be darned is filled with rows of stitching.

For reverse sewing instructions, see page 18.

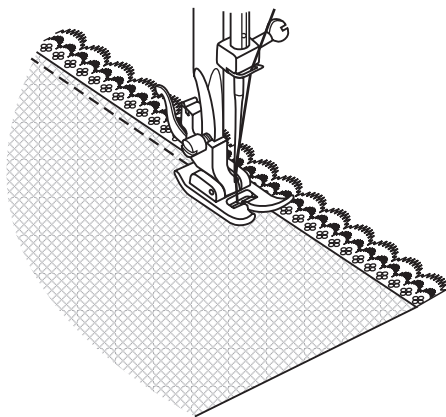


- a. Stitch width (for model- 3 dials)
- b. Stitch length

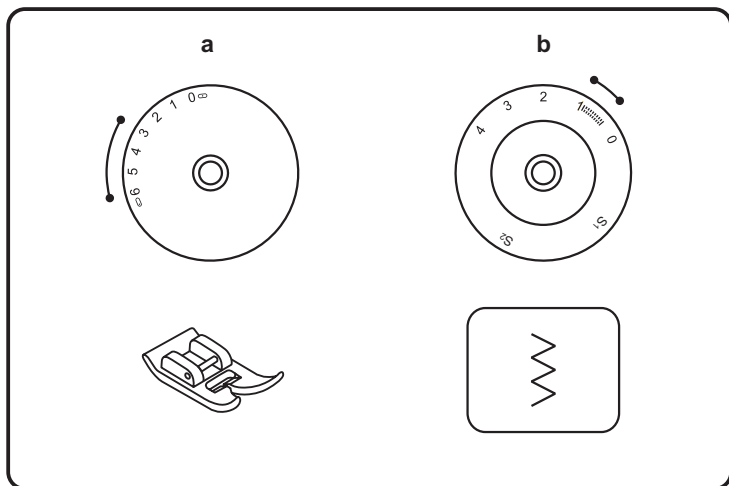


Attaching lace

- Turn stitch length dial to the desired length.
- Turn the stitch selector to straight stitch, center needle position.
- Fold in the edge of the fabric (approximately 6 mm 1/4").
- Place the lace under the folded edge of the fabric allowing it to under lap the fabric slightly as required by the pattern of the lace.
- Sew on the edge of the fabric fold.
- You can add a decorative touch by using the satin stitch to sew the lace.

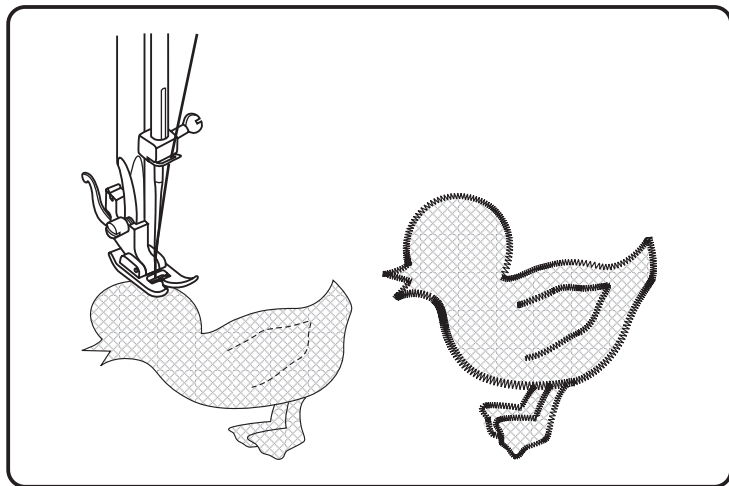


- a. Stitch width (for model- 3 dials)
b. Stitch length

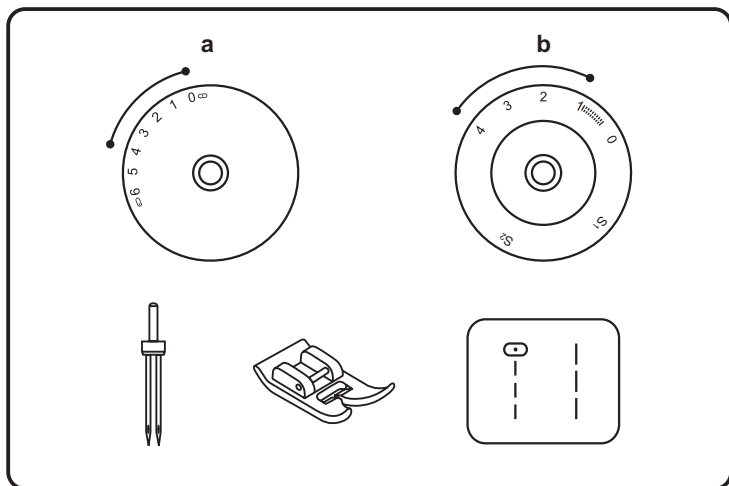


Applique

- 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.



- a. Stitch width (for model- 3 dials)
- b. Stitch length



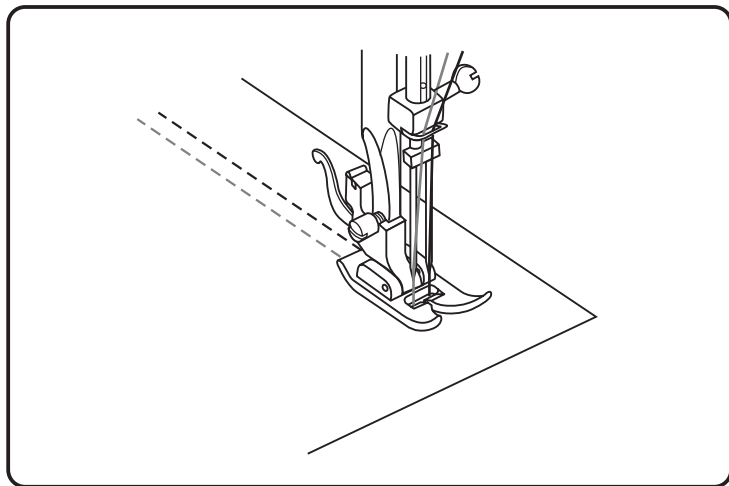
Twin needle

- Turn stitch length dial to the desired stitch length.
- Turn stitch selector to straight stitch, center needle position, width setting "0". (For model- 3 dials)
- Make sure that the two threads used to thread the twin needle are of the same weight. You can use one or two colors.
- Insert the twin needle in the same way as single needle. Flat side of needle should face away from you.
- Thread each needle separately.

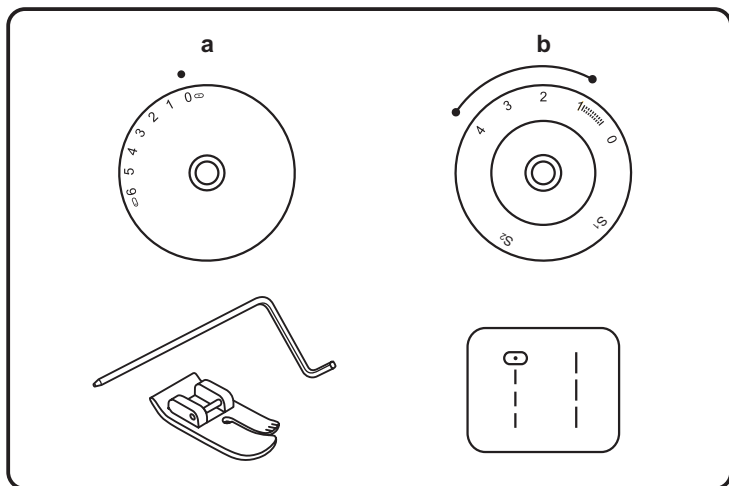
Please Note:

When sewing with twin needle, always proceed slowly, and make sure to maintain a low speed to insure quality stitching.

When using twin needle on zig-zag make sure the stitch width dial is set between "1" and "3". Do not use twin needle at setting above "3". (For model- 3 dials)





- a. Stitch width (for model- 3 dials)
- b. Stitch length



Quilting

* The quilting foot is an optional accessory not supplied with this machine.

Set pattern selector as illustrated.

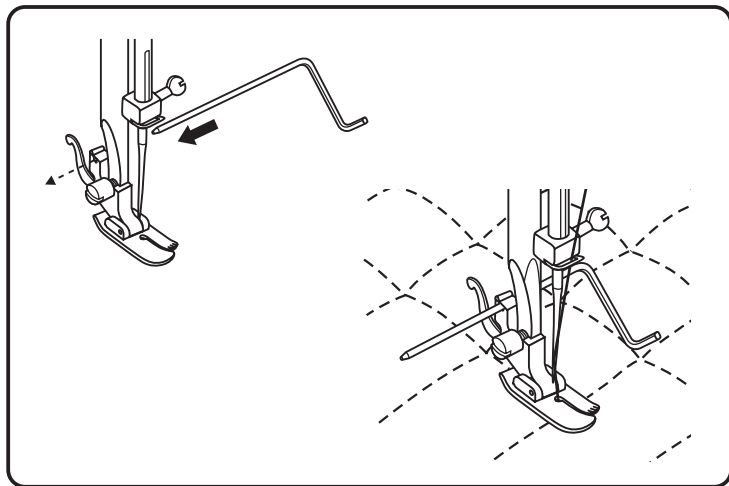
Dial selector on "  " or "  ".

Insert the quilting guide in presser foot holder and set the space as you desired.

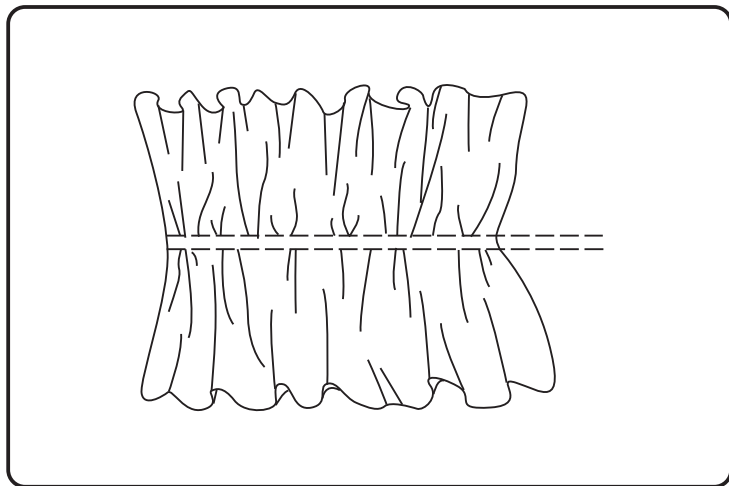
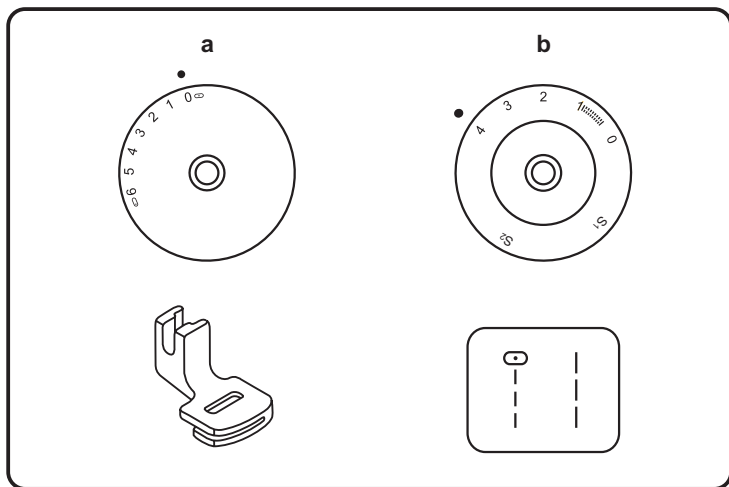
Move the fabric over and sew successive rows with the guide riding along on the previous row of stitching.

Note:

Presser foot shown is the optional quilting foot which does not come with your machine. If you have not purchased this foot substitute the all purpose foot.





- a. Stitch width (for model- 3 dials)
- b. Stitch length



Gathering

* The gathering foot is an optional accessory not supplied with this machine.

Set the pattern selector as illustrated.

Dial selector on "  " or "  ".

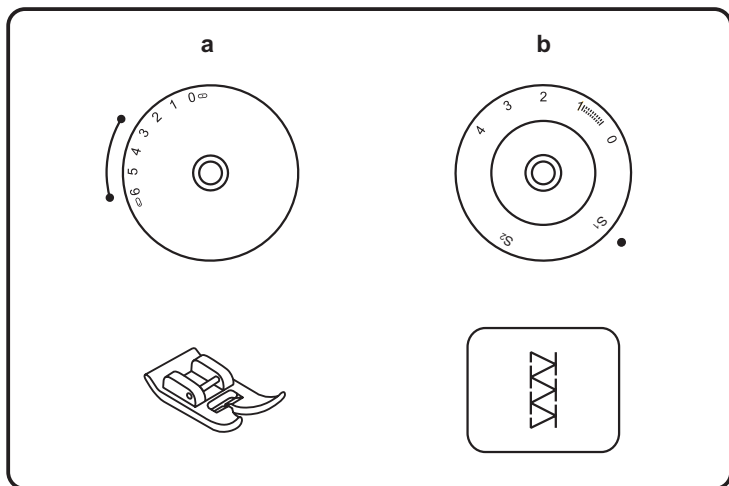
1. Attach the gathering foot.
2. Sew a single row or multiple rows of straight stitches.
3. If more gathering is required, loosen the upper thread tension to below 2 so that the lower thread lies on the under side of the material.
4. Pull the lower thread to gather more of the material.

Note:

Presser foot shown is the optional gathering foot which does not come with your machine. If you have not purchased this foot substitute the all purpose foot and gather fabric by hand by lowering the tension setting to below 2 and pulling the lower thread to gather the material.

a. Stitch width (for model- 3 dials)

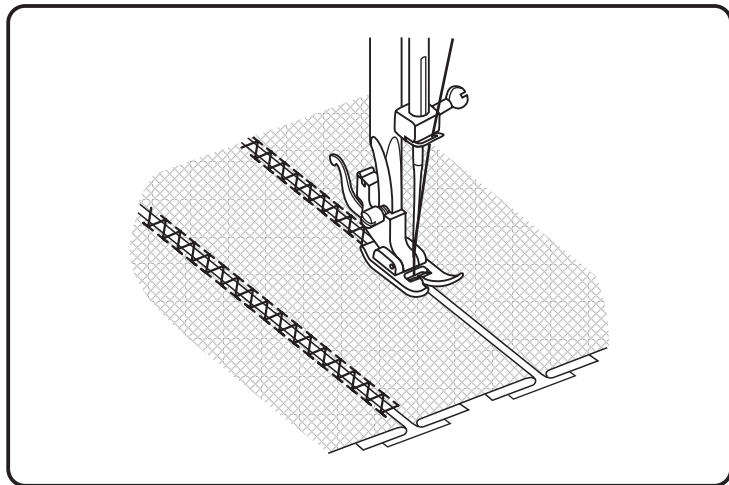
b. Stitch length



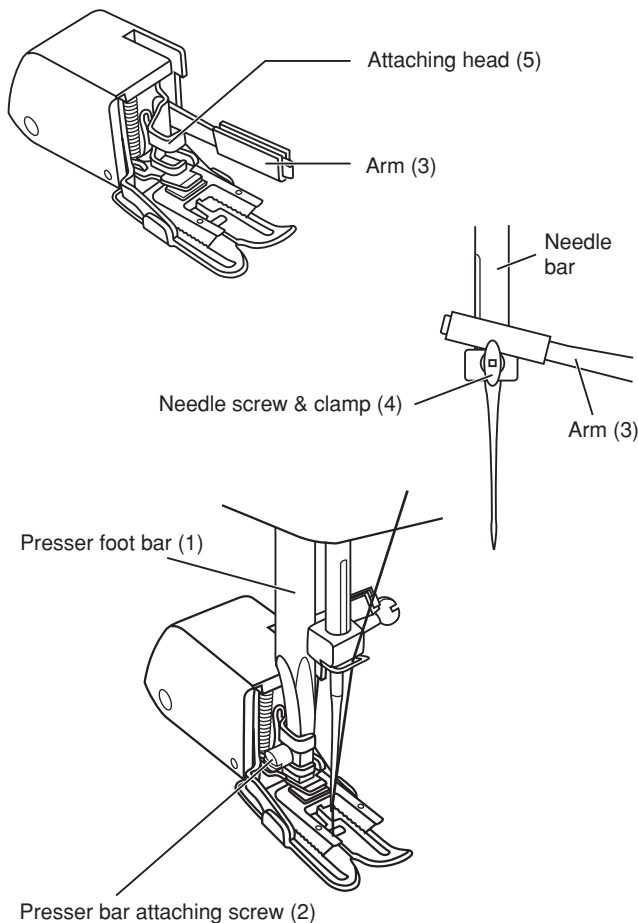
Patch work

These stitches are used to join two pieces of fabric while leaving a space between their edges.

1. Fold over the edges of the two pieces of fabric for the hem and baste the edges to a thin piece of paper leaving a small space between them.
2. Set the Pattern selector on "Z".
Turn the stitch length dial to "S1".
3. Stitch along the edge, pulling both threads slightly when beginning to sew.
* Use thicker than normal threads for sewing.
4. After sewing, remove the basting and the paper. Finish by tying knots on the reverse side at the beginning and the end of the seams.



- a. Stitch width (for model- 3 dials)
- b. Stitch length



The walking foot accessory

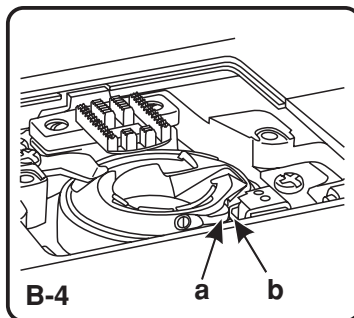
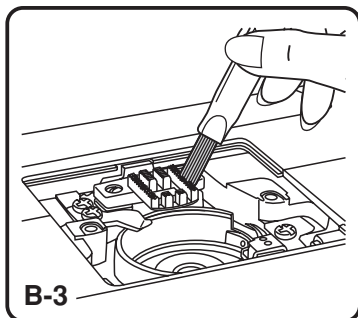
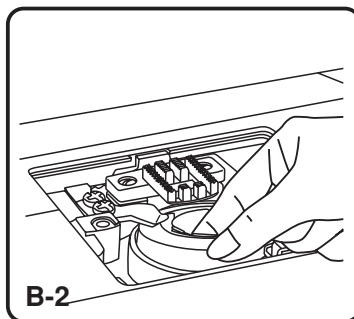
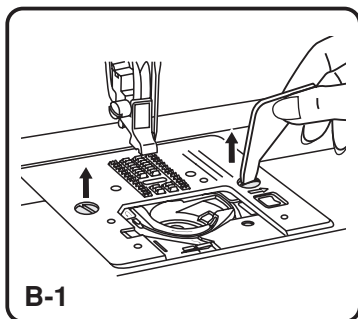
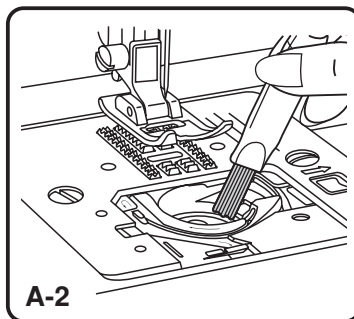
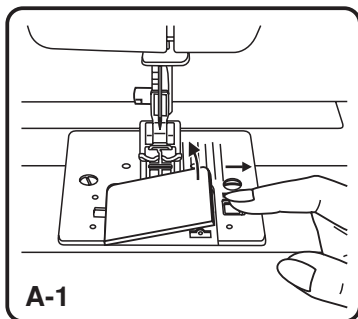
* The evenfeed foot accessory is optional. It is not included with this machine.

Always try to sew first without the evenfeed foot accessory which should be used only when necessary.

It is easier to guide the fabric and you have a better view of the seam when using the standard, regular foot on your machine. Your sewing machine offers excellent stitch quality on a wide range of fabrics from delicate chiffons to multiple layers of denim.

The evenfeed Foot accessory equalizes the feeding of the upper and lower layers of fabric and improves the matching of plaids, stripes and patterns. It also helps to prevent uneven feeding of very difficult fabrics.

1. Lift the presser foot lifter to raise the presser foot bar (1).
2. Remove the presser foot holder by unscrewing (counterclockwise) the presser bar attaching screw (2).
3. Attach the evenfeed foot to the machine as follows:
 - i) The arm (3) should fit into above the needle screw and clamp (4).
 - ii) Slide the plastic attaching head (5) from your left to right so that it is fitted into the presser foot bar.
 - iii) Lower the presser foot bar (1).
 - iv) Replace and tighten (clockwise) the presser bar attaching screw (2).
4. Make sure both the needle screw (4) and the presser bar attaching screw (2) are tightly secured.
5. Draw the bobbin thread up and place both the bobbin thread and the needle thread behind the walking foot attachment.



Maintenance

Disconnect the machine from the mains before carrying out any maintenance or changing the sewing light bulb.

Cleaning

If lint and bits of thread accumulate in the hook, this will interfere with the smooth operation of the machine. Check regularly and clean the stitching mechanism when necessary.

A. Bobbin holder

Remove the bobbin cover plate and bobbin.

Clean the bobbin holder with a brush.

B. Hook race and feed dog

1. Remove the needle, presser foot and holder.

Remove the bobbin cover plate and bobbin.

Remove the screw holding the needle plate and remove the needle plate.

2. Lift up bobbin holder and remove it.

3. Clean the hook race, feed dog and bobbin holder with a brush. Also clean them, using a soft, dry cloth.

4. Replace the bobbin holder into the hook race so that the tip (a) fits to the stopper (b) as shown.

Trouble shooting guide

Problem	Cause	Correction
Upper thread breaks	<ol style="list-style-type: none">1. The machine is not threaded correctly2. The thread tension is too tight3. The thread is too thick for the needle4. The needle is not inserted correctly5. The thread is wound around the spool holder pin6. The needle is damaged	<ol style="list-style-type: none">1. Rethread the machine2. Reduce the thread tension (lower number)3. Select a larger needle4. Remove and reinsert the needle (flat side towards the back)5. Remove the reel and wind thread onto reel6. Replace the needle
Lower thread breaks	<ol style="list-style-type: none">1. The bobbin case is not inserted correctly2. The bobbin case is threaded wrong3. The lower thread tension is too tight	<ol style="list-style-type: none">1. Remove and reinsert the bobbin case and pull on the thread. The thread should pull easily2. Check both bobbin and bobbin case3. Loosen lower thread tension as described
Skipped stitches	<ol style="list-style-type: none">1. The needle is not inserted correctly2. The needle is damaged3. The wrong size needle has been used4. The foot is not attached correctly	<ol style="list-style-type: none">1. Remove and reinsert needle(flat side towards the back)2. Insert a new needle3. Choose a needle to suit the thread and fabric4. Check and attach correctly
Needle breaks	<ol style="list-style-type: none">1. The needle is damaged2. The needle is not correctly inserted3. Wrong needle size for the fabric4. The wrong foot is attached	<ol style="list-style-type: none">1. Insert a new needle2. Insert the needle correctly (flat side towards the back)3. Choose a needle to suit the thread and fabric4. Select the correct foot
Loose stitches	<ol style="list-style-type: none">1. The machine is not correctly threaded2. The bobbin case is not correctly threaded3. Needle/ fabric/ thread combination is wrong4. Thread tension wrong	<ol style="list-style-type: none">1. Check the threading2. Thread the bobbin case as illustrated3. The needle size must suit the fabric and thread4. Correct the thread tension
Seams gather or pucker	<ol style="list-style-type: none">1. The needle is too thick for the fabric2. The stitch length is wrong adjusted3. The thread tension is too tight	<ol style="list-style-type: none">1. Select a finer needle2. Readjust the stitch length3. Loosen the thread tension
Uneven stitches, uneven feed	<ol style="list-style-type: none">1. The machine must be lubricated2. Poor quality thread3. The bobbin case is wrong threaded4. Fabric has been pulled	<ol style="list-style-type: none">1. Take machine to dealer for proper servicing2. Select a better quality thread3. Remove bobbin case, thread and insert correctly4. Do not pull on the fabric while sewing, let it be taken up by the machine
The machine is noisy	<ol style="list-style-type: none">1. Fluff or oil have collected on the hook or needle bar2. The needle is damaged	<ol style="list-style-type: none">1. Clean the hook and feed dog as described2. Replace the needle
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.



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.