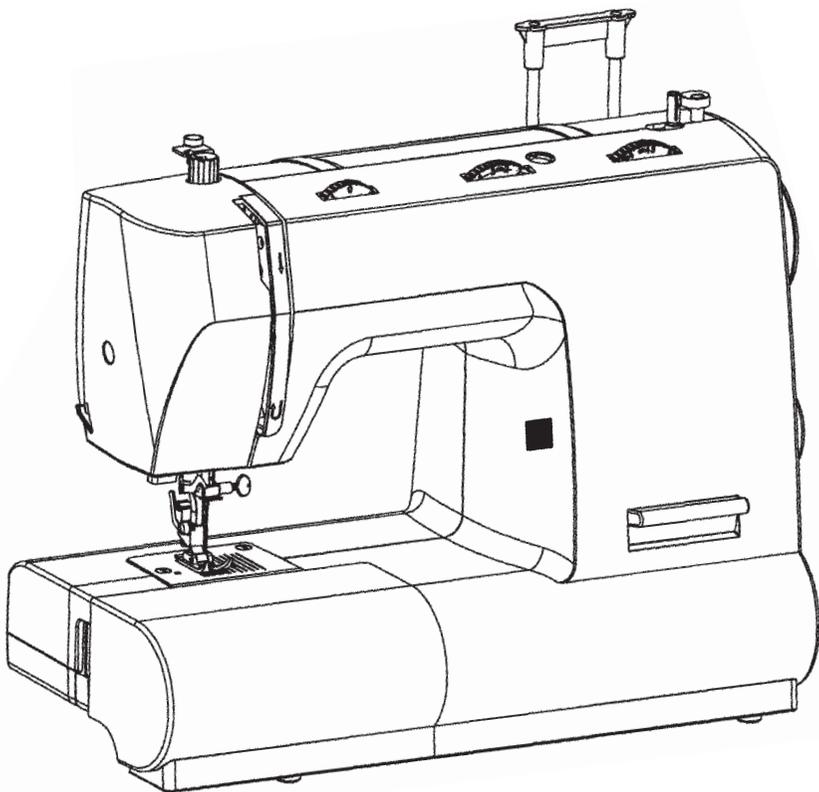


gemini[™]-----
STITCH

BY CRAFTER'S COMPANION



MODEL: **STITCH-L100**



IMPORTANT SAFETY INSTRUCTIONS

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

Read all instructions before using this sewing machine.

DANGER - To reduce 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.

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

1. Do not allow the machine 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 in water.
4. Never operate the appliance with any air openings blocked. 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 or changing the needle, threading the bobbin, or changing the presser foot, and the like.

10. Always unplug the 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 the plug from the outlet.

15. Do not unplug by pulling on the cord. To unplug, grasp the plug, not the cord.

SAVE THESE INSTRUCTIONS

This sewing machine is intended for household use only.



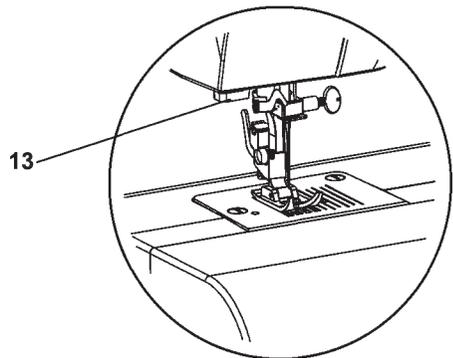
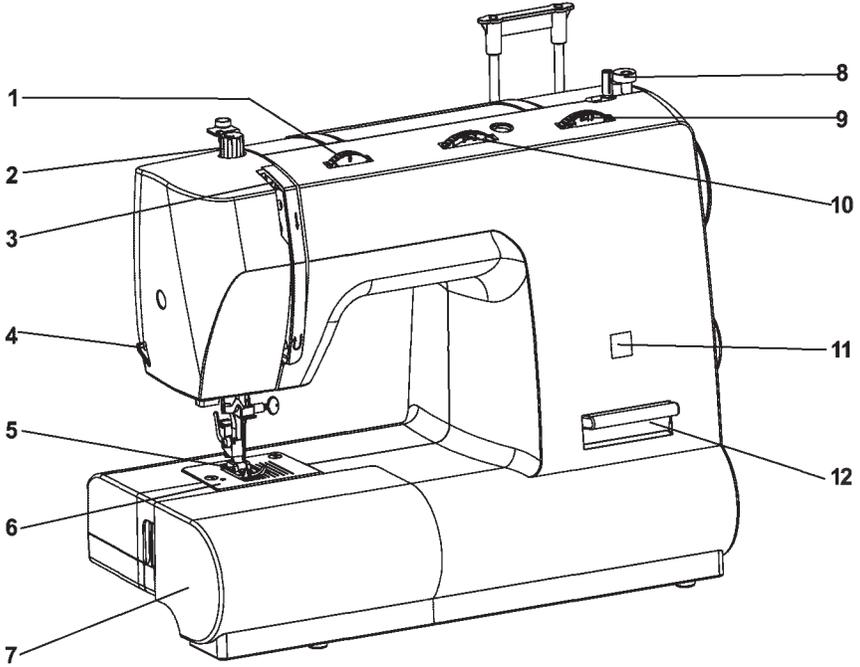
List of Contents

| | |
|--|-----|
| Principal Parts..... | 2/3 |
| Accessories..... | 4 |
| Fitting the Snap-In Sewing Table and Spool Pin..... | 5 |
| Connecting the Machine to a Power Source..... | 6 |
| Two-Step Presser Foot Lever/Adjusting the Presser Foot Pressure..... | 7 |
| Attaching the Presser Foot Holder..... | 8 |
| Winding the Bobbin..... | 9 |
| Inserting the Bobbin..... | 10 |
| Changing the Needle..... | 11 |
| Threading the Upper Thread..... | 12 |
| Automatic Needle Threader..... | 13 |
| Thread Tension..... | 14 |
| Bringing up the Lower Thread..... | 15 |
| Reverse Sewing/Removing the Work/Cutting the Thread..... | 16 |
| Matching Needle, Fabric and Thread..... | 17 |
| How to Choose Your pattern..... | 18 |
| Straight Stitching and Needle Position..... | 19 |
| Zigzag Stitches..... | 20 |
| Blind Hem/Lingerie Stitch..... | 21 |
| Overlock Stitches..... | 22 |
| Sewing on Buttons..... | 23 |
| How to 4-Step Buttonholes..... | 24 |
| Zippers and Piping..... | 25 |
| Sewing with a Rolled Hem Foot..... | 26 |
| 3-Step Zigzag Stitch..... | 27 |
| Triple Stitch Selection..... | 28 |
| Smocking Stitch..... | 29 |
| Sewing with a Cording Foot..... | 30 |
| Free Motion Darning..... | 31 |
| Practical Stitches..... | 32 |
| Darning..... | 33 |
| Attaching Lace..... | 34 |
| Appliqué..... | 35 |
| Twin Needle..... | 36 |
| Quilting..... | 37 |
| Gathering..... | 38 |
| Patch Work..... | 39 |
| Maintenance..... | 40 |
| Trouble Shooting Guide..... | 41 |



Principal Parts

1. Thread Tension Dial
2. Presser Foot Pressure
3. Thread Take-Up Lever
4. Thread Cutter
5. Presser Foot
6. Needle Plate
7. Sewing Table and Accessory Box
8. Bobbin Stopper
9. Stitch Length Dial
10. Stitch Width Dial
11. Stitch Display
12. Reverse Sewing Lever
13. Automatic Threader

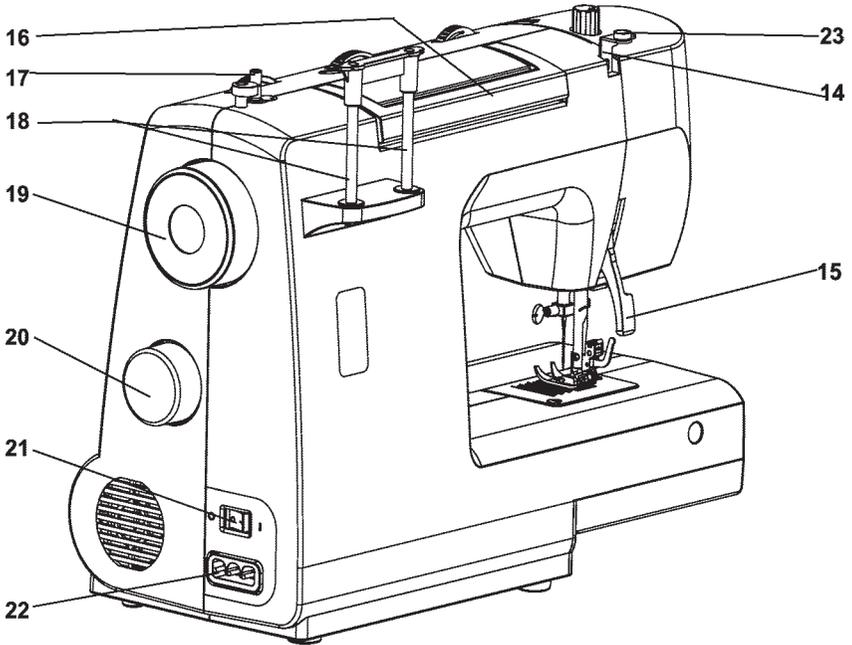




Principal Parts

- 14. Upper Thread Guide
- 15. Presser Foot Lever
- 16. Handle
- 17. Bobbin Winder
- 18. Spool Pin
- 19. Handwheel
- 20. Pattern Selector Dial

- 21. Power Switch
- 22. Main Plug Socket
- 23. Bobbin Thread Guide

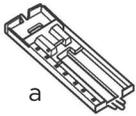




Accessories

Standard Accessories (1)

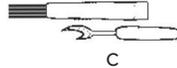
- a. 4-Step Buttonhole Foot
- b. Butterfly-Shape Screwdriver
- c. Seam Ripper/Brush
- d. Lubricating Oil
- e. 3 x Needles
- f. 3 x Bobbins
- g. Twin Needle
- h. Small Screwdriver
- i. Large Screwdriver
- j. Edge/Quilting Guide
- k. Embroidering/Darning Plate
- l. Spool Holder
- m. All-Purpose Foot
- n. Zipper Foot
- o. Embroidering/Darning foot



a



b



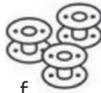
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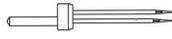
d



e



f



g



h



i



j



k



l



m



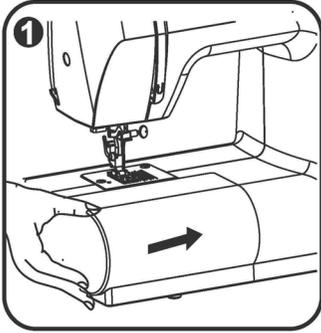
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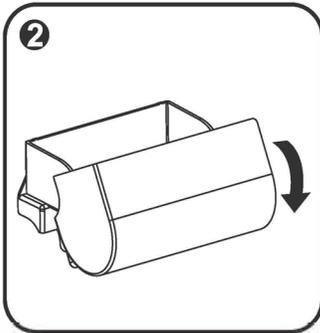
o



Fitting the Snap-In Sewing Table and Spool Pin



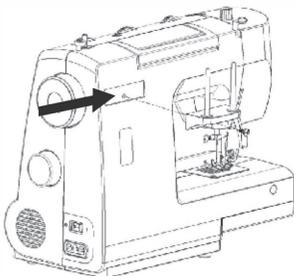
Hold the snap-in sewing table horizontal, and push it in the direction of the arrow. (Pic 1)



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

To open, lift it up at the point of the arrow. (Pic 2)

Fitting the Spool Pin

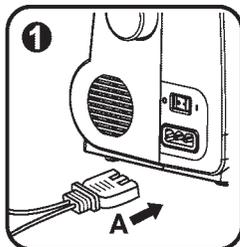


Poly Foam

1. Take out the spool pin from the poly foam.
2. Loosen the screw as shown.
3. Install the spool pin as illustrated then tighten the screw

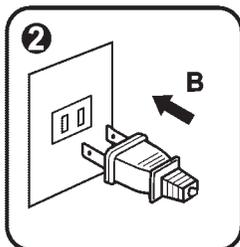


Connecting the Machine to a Power Source



Caution:

Always make sure that the machine is unplugged from the power source and the main switch is off ("O") when the machine is not in use and before inserting or removing parts.

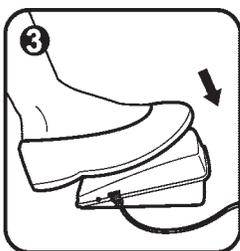


- This machine is equipped with a polarized plug which must be used with an appropriate electrical outlet.
- Connect the machine to a power source as illustrated. (Pic 1 and Pic 2)

- The power switch is located above the terminal box. Your machine will not operate unless this switch is on ("I"). (Pic 1)

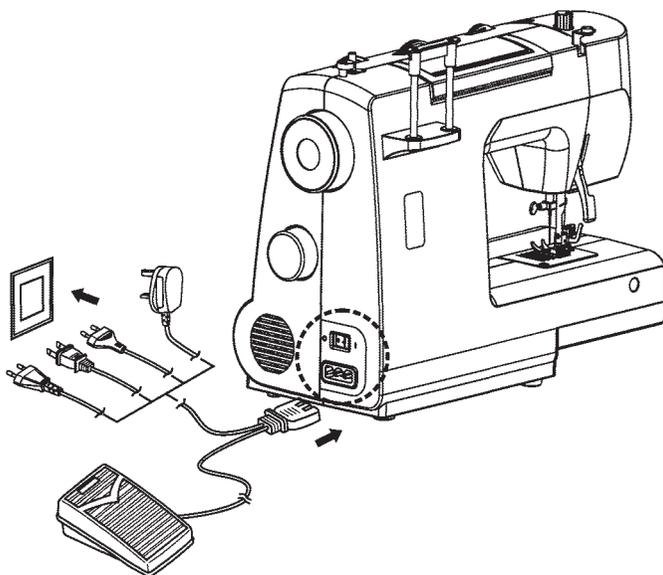
- Sewing light turns on automatically when the main switch is on ("I").

- To start the machine, press the foot control (Pic 3). The speed of the machine is regulated by the amount of pressure exerted on the foot control.



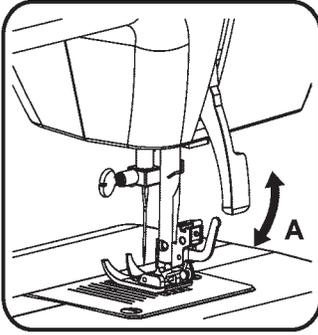
Attention:

Consult a qualified electrician if in doubt when connecting the machine to a power source. Unplug the power cord when the machine is not in use. The appliance must be used with the foot controller included.



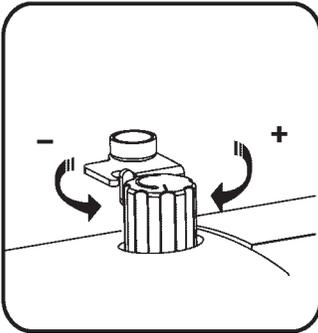


Two-Step Presser Foot Lever



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

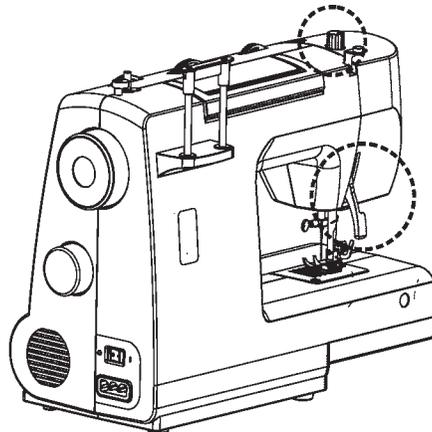
Adjusting the Presser Foot Pressure



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).

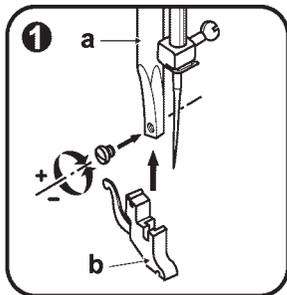
However, if you need to adjust the presser foot pressure, turn the presser foot pressure dial as shown.

For sewing very thin fabric, loosen the pressure by turning the dial anti-clockwise, and for heavy fabric, tighten by turning it clockwise.





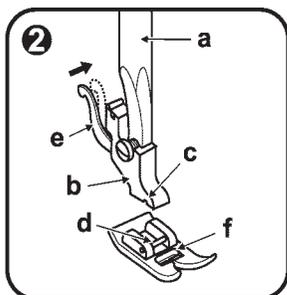
Attaching the Presser Foot Holder



Attention:

Turn power switch to “O” before carrying out any of the operations below.

Turn the handwheel to raise the needle to its highest position and raise the presser foot lever. Attach the presser foot holder (b) to the presser foot bar (a). (Pic 1)

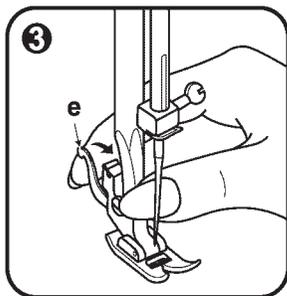


Attaching the Presser Foot:

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

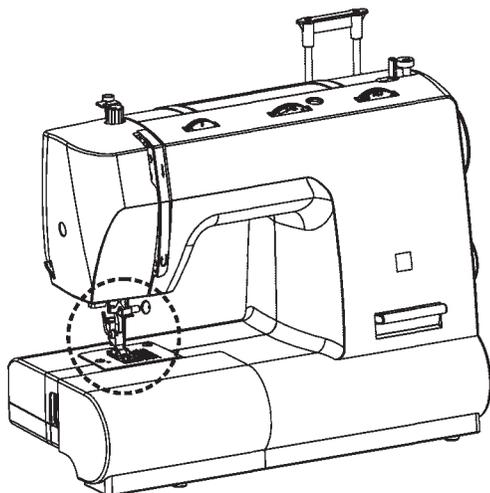
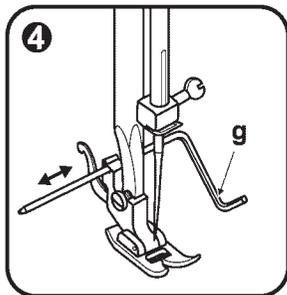
Removing the Presser Foot:

Raise the presser foot lever. Release the pressure foot by raising lever (e) located at the back of the foot holder. (Pic 3)



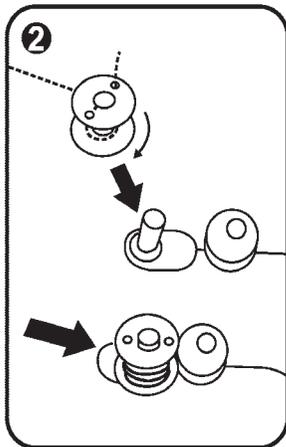
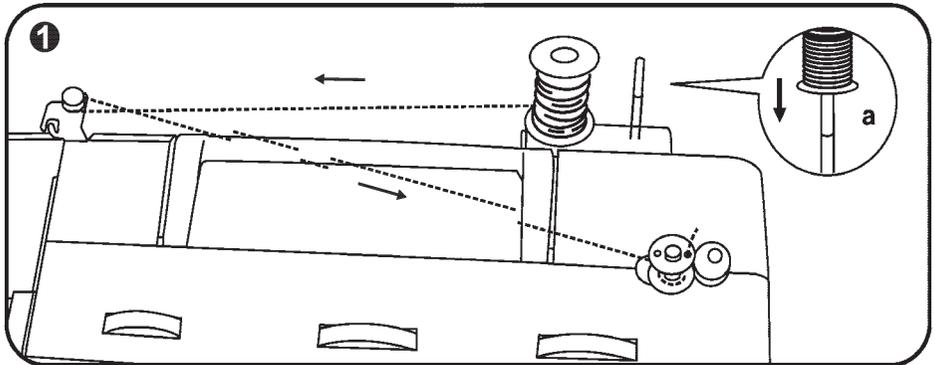
Attaching the Seam Guide (Optional):

Attach the seam guide (g) in the slot as illustrated. Adjust the distance as required for hems, pleats, etc....(Pic 4)





Winding the Bobbin



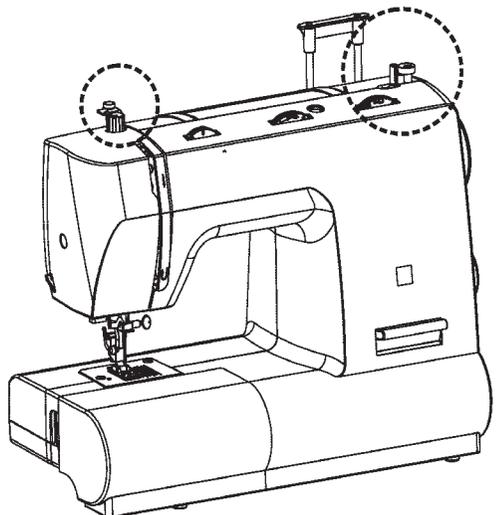
Place a thread spool on the spool pin (a). (Pic 1)

Take the thread from the spool through the bobbin thread guide and wind the thread a few times by hand around the empty bobbin in a clockwise direction. Push the bobbin to the right towards the bobbin winding position. (Pic 1 and Pic 2)

Turn the machine on and press the foot control gently. The bobbin will stop winding when it is full. Push the bobbin to the left to “sewing position” and remove it.

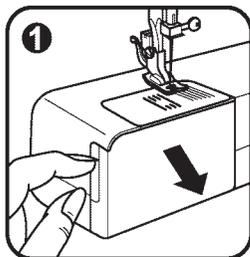
Please Note:

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





Inserting the Bobbin



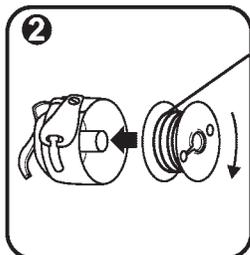
Attention:

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

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

- Slide the accessory box off and open the hinged cover. (Pic 1)

- Remove the bobbin case by pulling on the hinged latch. (Pic 2)

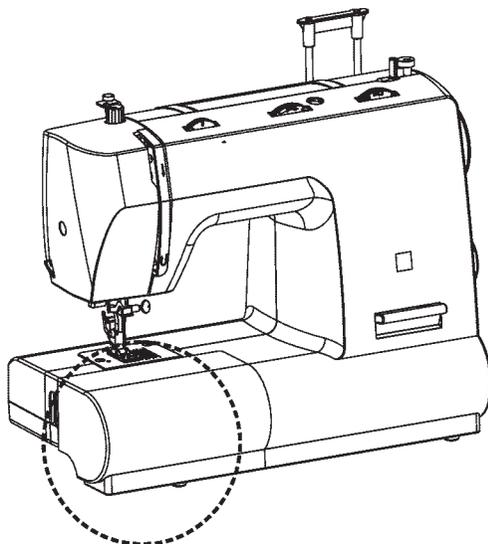
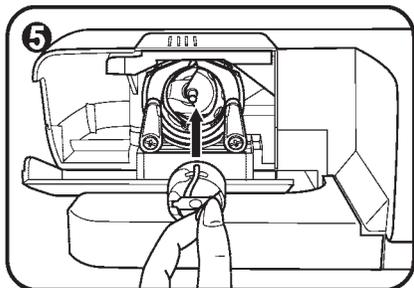
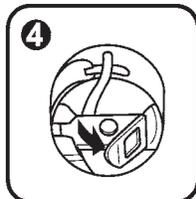
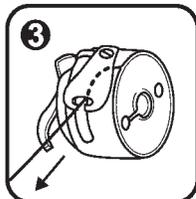


- Hold the bobbin case with one hand on the latch and insert the bobbin so that the thread runs in a clockwise direction. (Pic 2)

- Pull the thread through the slot, down and to the left until it enters the delivery eyelet (rectangular opening) under the tension spring. (Pic 3)

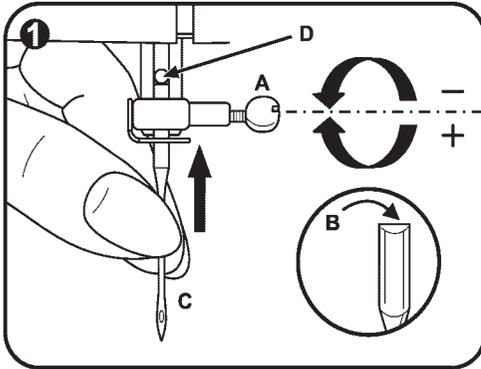
- Hold the bobbin case by the hinged latch. (Pic 4)

- Insert the bobbin case fully into the shuttle race and release the latch. Make sure that the metal finger fits into the notch at the top of the race cover. (Pic 5)





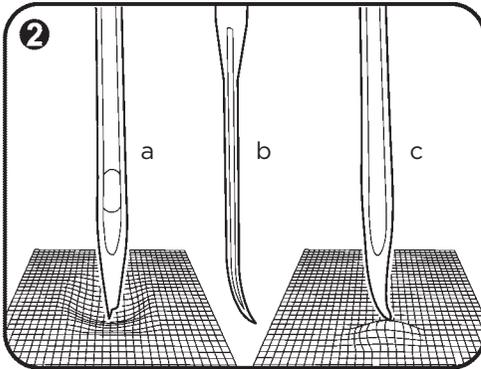
Changing the Needle



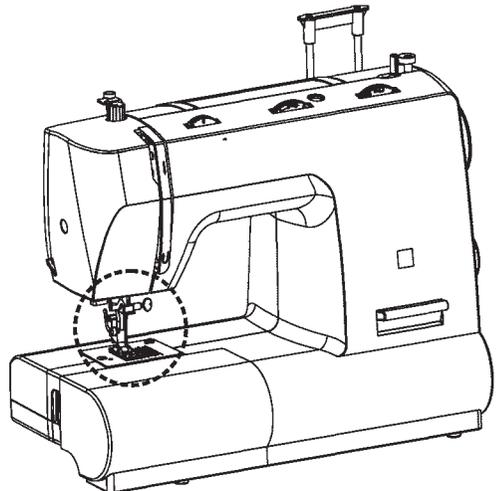
Caution:

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

Replace the needle at the first sign of thread breakage or skipped stitches. Select the correct type and size of needle for the fabric to be sewn. Turn the handwheel towards you until the needle is at the highest position. Loosen the needle clamp screw (A). The flat side of the needle shaft should be facing away from you (B). Push the needle up (C) into the needle clamp as far as it will go (D). (Pic 1)

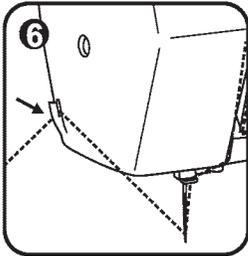
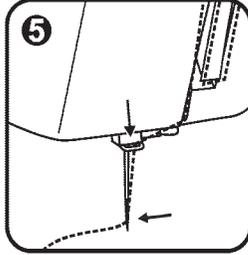
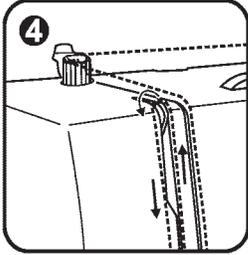
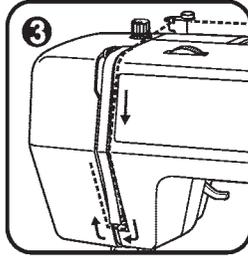
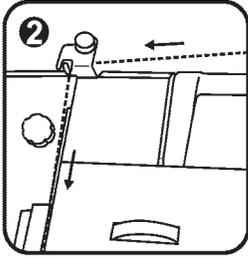


Tighten the needle clamp screw firmly. The sewing needle must always be straight and sharp for smooth sewing. Replace the needle if it is blunt (a), bent (b) or the point is damaged (c). (Pic 2)





Threading the Upper Thread



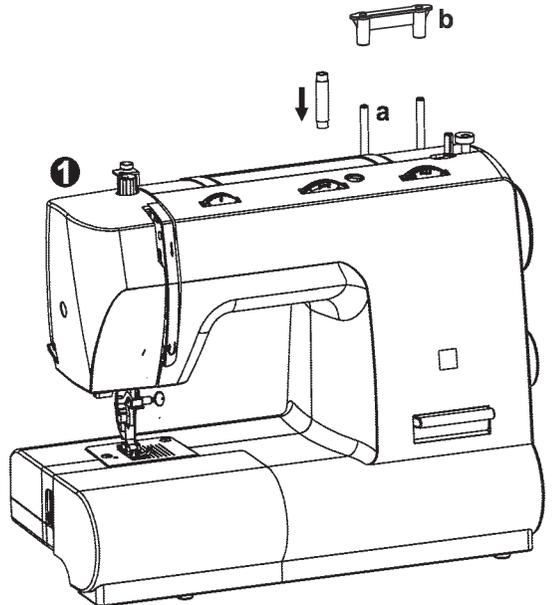
Caution:

Before threading, turn power switch to "O".

Raise the needle to its highest position. Follow exactly the numbered threading sequence illustrated. If you skip a step or fail to properly engage the thread in any of the thread guides, the machine will not sew properly. (Pic 1 to 5)

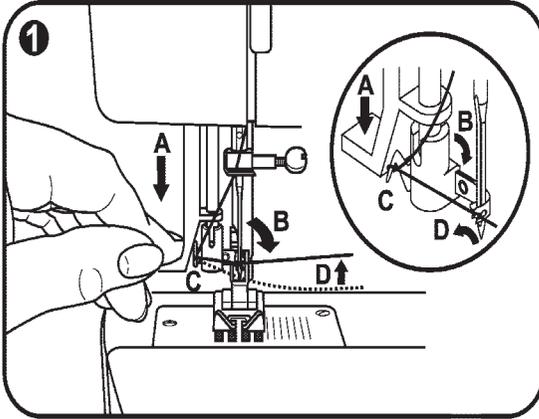
Continue to draw the thread down and into the needle bar thread guide. Use the automatic needle threader (page 13), or manually insert the thread through the eye of the needle from front to back. Use the thread cutter to leave about 10cm (4") of thread loose behind the needle. (Pic 6)

- a. Spool Pin
- b. Spool Holder





Automatic Needle Threader



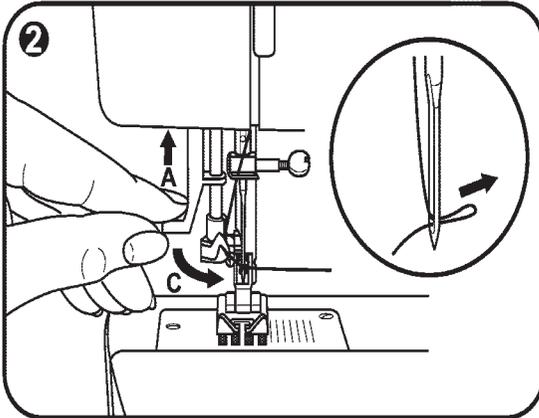
Attention:

Turn power switch to off "O".

Raise the needle to its highest position.

Press lever (A) right down. (Pic 1)

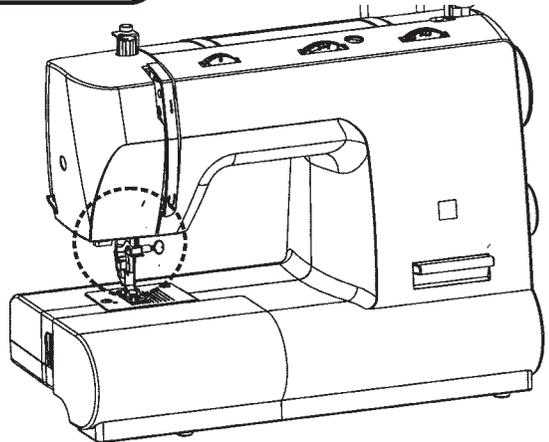
The threader automatically swings to the threading position (B). (Pic 1)



Take the thread around the hook (C). (Pic 1)

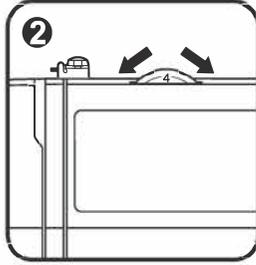
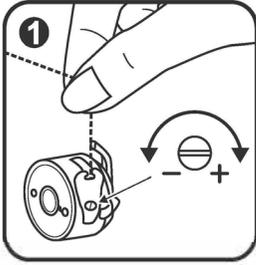
Take the thread in front of the needle round the hook (D) from the bottom to the top. (Pic 1)

Release lever (A) and pull the thread through the eye of the needle. (Pic 2)





Thread Tension



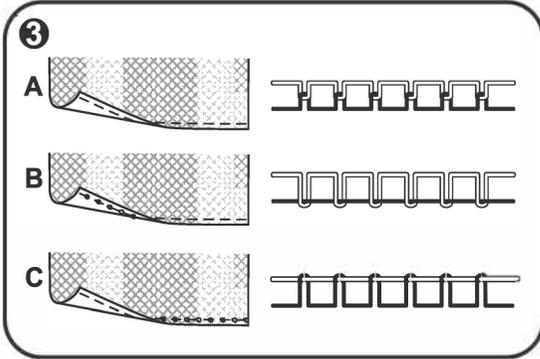
Note:

The bobbin thread tension has been adjusted at the factory and readjustment is usually not required.

Lower Thread Tension

To test the bobbin thread tension, remove the bobbin case and bobbin from the machine and hold the bobbin case suspended by the thread. Shake 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 will not unwind. If the tension is too loose, the thread will unwind for more than two inches.

To adjust, turn the small screw on the side of the bobbin case. (Pic 1)

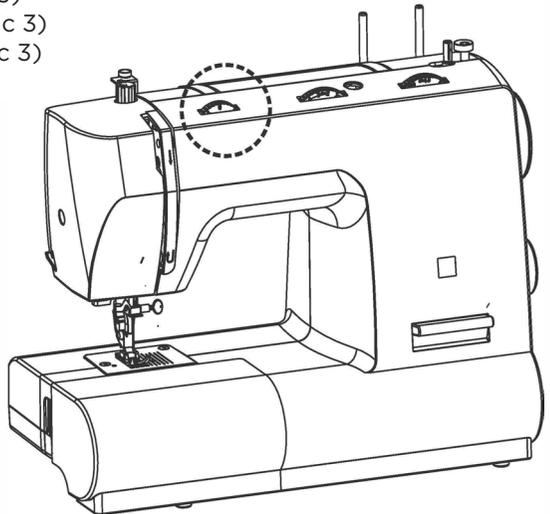


Upper Thread Tension

Basic thread tension setting "4". (Pic 2)

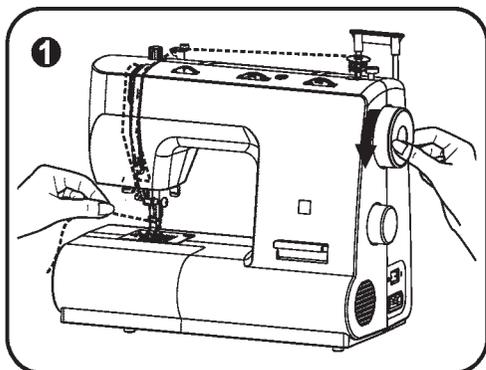
To increase the tension, turn the dial up to a higher number. To reduce the tension, turn the dial to a lower number.

- A. Normal thread tension. (Pic 3)
- B. Thread tension too loose. (Pic 3)
- C. Thread tension too tight. (Pic 3)



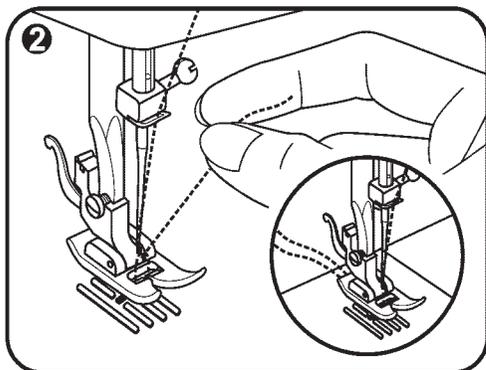


Bringing Up the Lower Thread



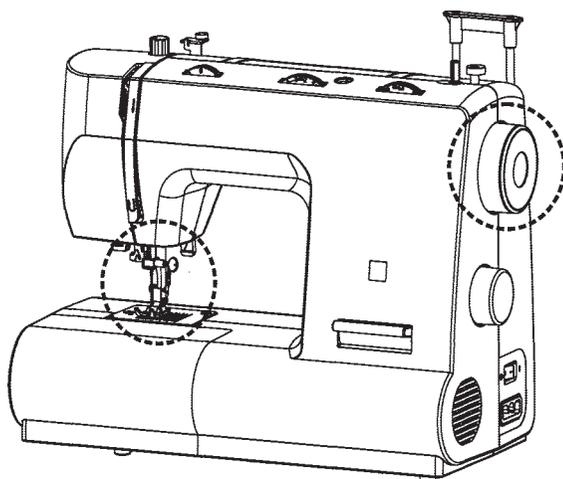
Lift the presser foot lever. Hold the upper thread with the left hand. Turn the handwheel towards you with your right hand until the needle goes down and comes up again to its highest position. (Pic 1)

- Lightly draw the needle thread forming a loop with the bobbin thread. The upper thread should have caught the lower thread in a loop.



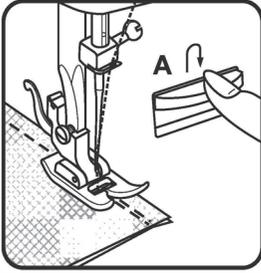
- Pull the needle thread towards you and the lower thread will come up from the bobbin in a large loop. (Pic 2)

- Pull about 15cm (6") of both threads away from you under the presser foot. (Pic 2)



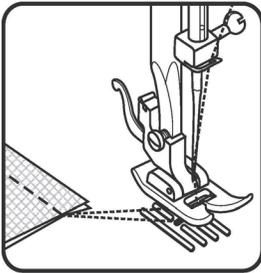


Reverse Sewing



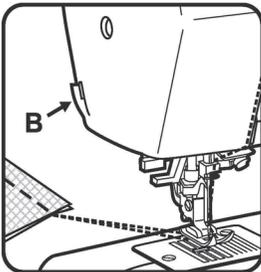
Reverse sewing is used for locking the end of seams and where reinforcement is needed. At the end of a seam, press down the reverse sewing lever and touch the foot control lightly. Sew a few reverse stitches. Release the lever and the machine will sew forwards again (A).

Removing the Work

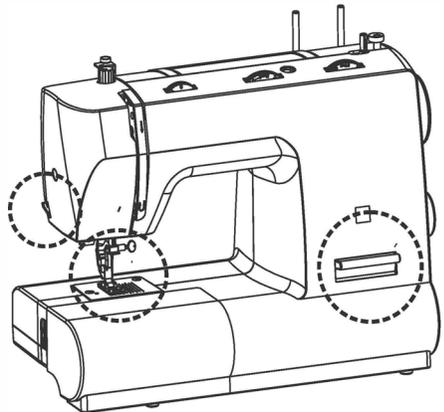


Turn the handwheel towards you to bring the thread take up lever to its highest position. Raise the presser foot and draw the fabric away from you.

Cutting the Thread



Hold the threads behind the presser foot. Using both hands, guide them to the slit at the rear of the presser bar and press down to cut the thread. You can also use the thread cutter on the side of the machine (B).





Matching Needle, Fabric and 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 the best results. Always use the same thread on the top and bottom |
| 14 (90) | Medium-weight fabrics/cotton duck, woollen, 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 |

Needle, Fabric Selection

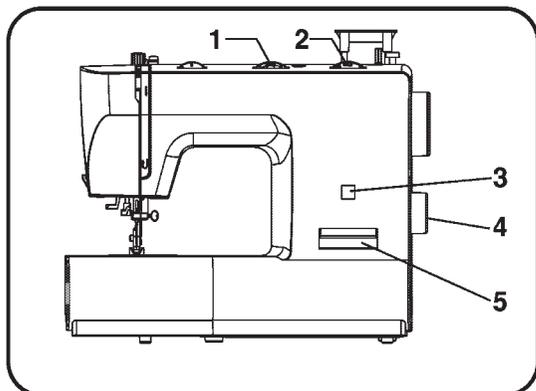
| Needle Type | Explanation | Fabric Type |
|---------------------|---|--|
| Universal | Standard needles. Sizes range from 9 (65) to 18 (110) | Natural and synthetic woven fabrics and some knit fabrics (check with specialised needles below). |
| Sharps | Sharp pointed needles. Sizes range from 9 (65) to 18 (110) | Natural woven fabrics - wool, cotton, silk, cotton jersey, linen, etc... |
| Ballpoint or Jersey | Ballpoint needles with a rounded tip that separates fibres. Sizes range from 9 (65) to 18 (110) | Natural and synthetic woven fabrics, polyester blends, viscose, double knits, rib knits, cotton knits, interlock, fleece, jersey, etc... |
| Stretch | Ballpoint needles with a coating to glide through fibres. Sizes range from 9 (65) to 18 (110) | Sweater knits, Lycra, swimsuit fabric, elastic |
| Leather | Spear-shaped needles that cut rather than pierce. Sizes range from 12 (80) to 18 (110) | Leather, vinyl, upholstery, heavy canvas |

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 "2.5".
3. European needles show sizes 65, 70, 80 etc... American and Japanese needles show sizes 9, 11, 12 etc...
4. Replace the needle often (approximately every 8 hours of sewing) and/or at the sign of first thread breakage or skipped stitches.

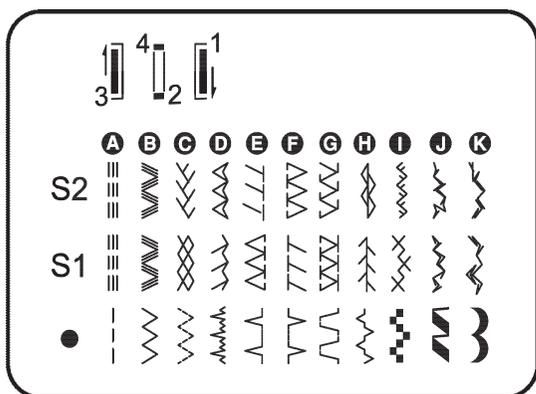


How to Choose Your Pattern



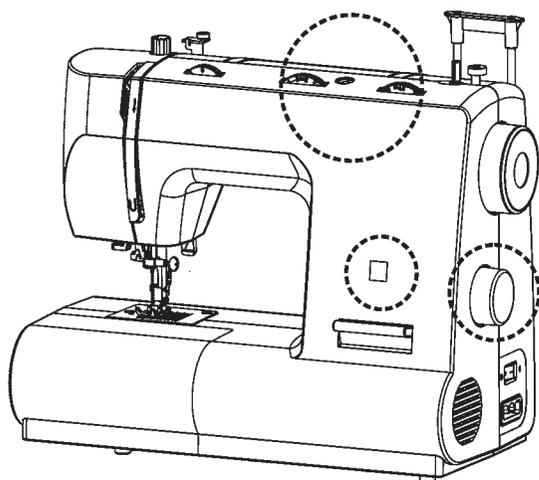
For straight stitch, select pattern "A" with the pattern selector dial (4). Adjust the stitch length with the stitch length dial (2). You may choose any needle position by turning the stitch width dial (1).

For zigzag stitch, select pattern "B" with the pattern selector dial (4). Adjust the stitch length (2) and stitch width (1) according to the fabric being used.



To obtain any of the patterns on the upper row, turn the stitch length dial to "S2", select the pattern desired with the pattern selector dial, and adjust the stitch width with the stitch width dial.

To obtain any of the patterns on the second row, turn the stitch length dial to "S1", select the pattern desired with the pattern selector dial, and adjust the stitch width with the stitch width dial.

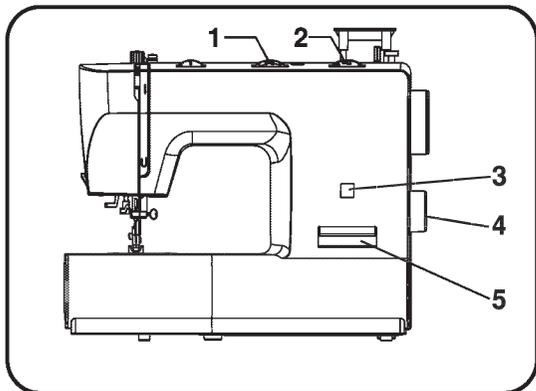


To obtain any of the other patterns shown on the third row on the stitch selection panel, select the letter above the stitch with the pattern selector dial. Adjust the stitch length and the stitch width with the control dials according to the result desired.

1. Stitch Width Dial
2. Stitch Length Dial
3. Stitch Display
4. Pattern Selector Dial
5. Reverse Sewing Lever



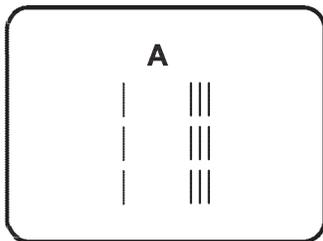
Straight Stitching and Needle Position



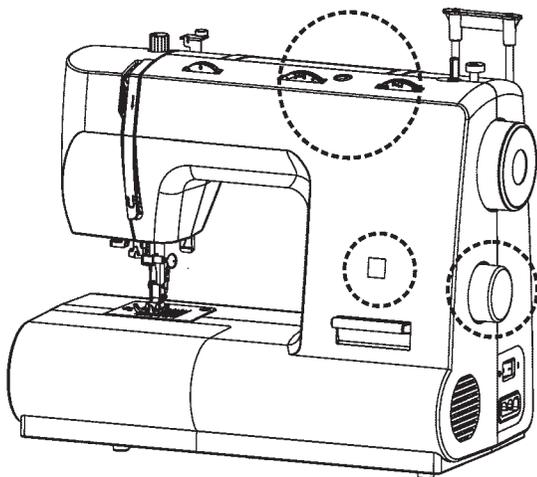
Turn the pattern selector dial so that the stitch display shows the letter "A" for the straight stitch position.

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

Whilst using the straight stitch, the needle position can be changed using the stitch width dial (1) from "0" to "5".

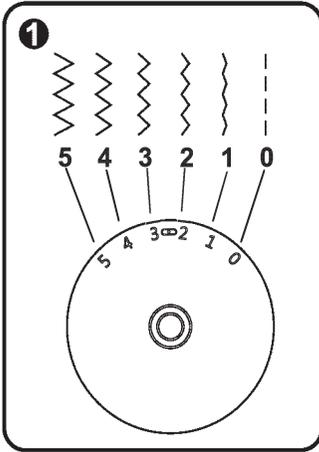


1. Stitch Width Dial
2. Stitch Length Dial
3. Stitch Display
4. Pattern Selector Dial
5. Reverse Sewing Lever





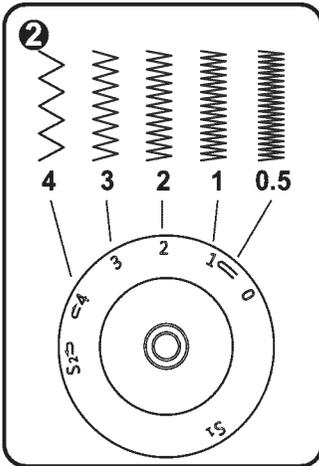
Zigzag Stitches



Turn the pattern selector dial so that the stitch display shows the letter “B” for the zigzag stitch position.

Function of Stitch Width Dial

The maximum zigzag stitch width for zigzag stitching is “5”; however, the width can be reduced on any pattern. The width increases as you move the zigzag dial from “0” to “5”. For twin needle sewing, the maximum width should be “2.5”, however, always turn the handwheel through the entire stitch and adjust the width accordingly before sewing. (Pic 1)



Function of Stitch Length Dial for Zigzag Stitch

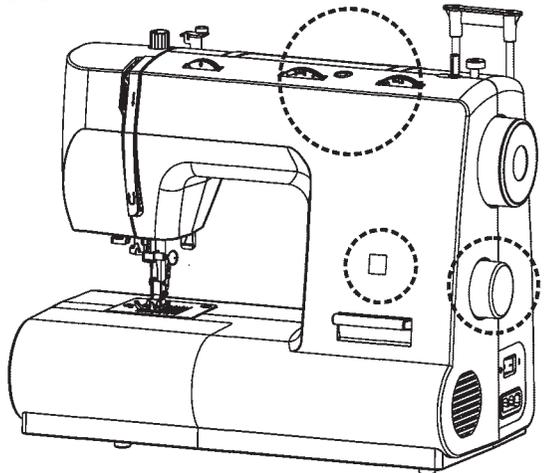
The density of zigzag stitches increases as the setting of the stitch length dial approaches “0”. Neat zigzag stitches are usually achieved at “3.5” or below. (Pic 2)

Satin Stitch

When the stitch length is set between “0” and “1”, the stitches are very close together producing the ‘satin stitch’ which is used for making buttonholes and decorative stitches.

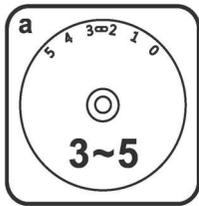
Sewing Thin Fabrics

When sewing very thin fabrics, it is suggested that you use interfacing on the backside of the fabric.





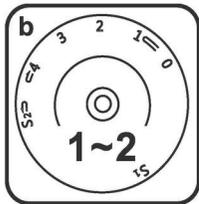
Blind Hem/Lingerie Stitch



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

For hems, curtains, trousers, skirts, etc...

... Blind hem for stretch fabrics, turn the pattern selector dial so that the stitch display shows the letter "D".

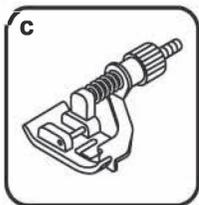


... Blind hem/lingerie for firm fabrics, turn the pattern selector dial so that the stitch display shows the letters "E" or "F".

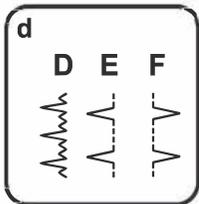
Set the machine as illustrated.

Note:

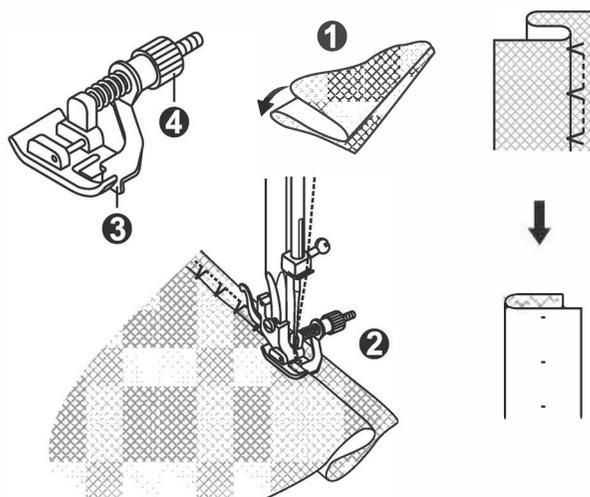
It takes practice to sew blind hems. Always make a sewing test piece first.



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. The needle 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 b. Stitch Length c. Presser Foot
d. Stitch Pattern





Overlock Stitches

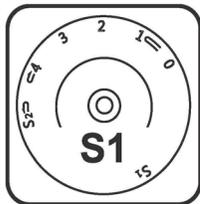


*The overcasting foot is an optional accessory not supplied with your machine.

For seams, neatening, visible hems etc...

Turn the stitch length dial to "S1".

The stitch width can be adjusted to suit the fabric.



Stretch Overlock: 

For fine knits, jerseys, neck edges, ribbing. (Pic A)

Double Overlock Stitch: 

For fine knits, handknits, seams. (Pic B)

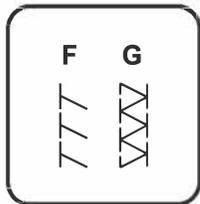


All overlock stitches are suitable for sewing and neatening edges and visible seams in one operation.

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

Attention:

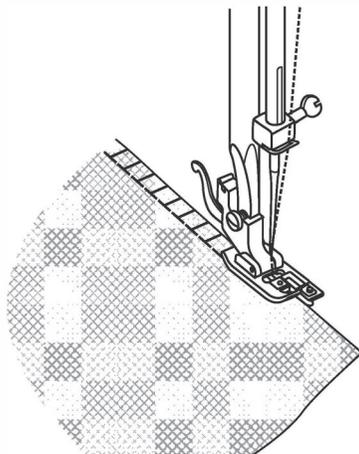
Use new needles or ballpoint needles or stretch needles.



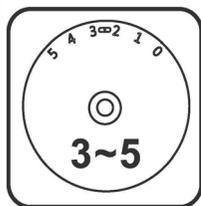
A



B



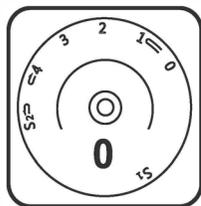
Sewing on Buttons



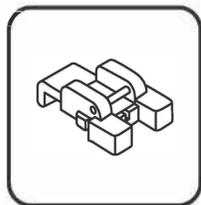
*The button sewing foot is an optional accessory not supplied with your machine.

Install the embroidering plate to the needle plate as illustrated. (Pic 1)

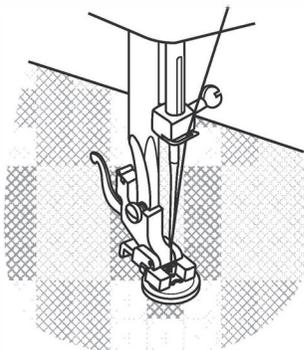
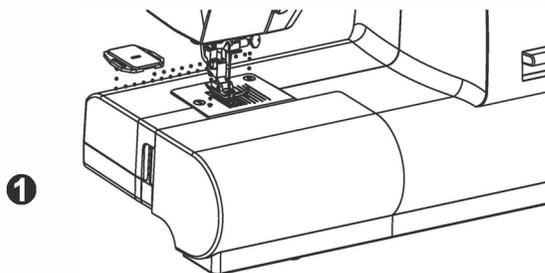
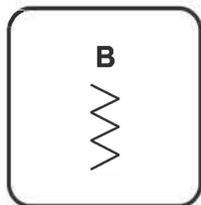
Change the presser foot to the button sewing foot.



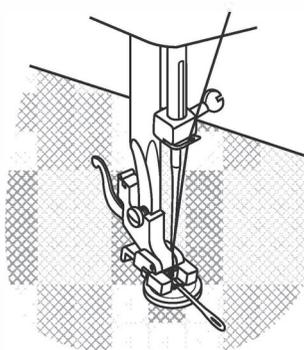
Position the work under the foot. Place the button in the desired position and lower the foot. Set the pattern selector dial on zigzag stitch "Z". Adjust the stitch width to "3" to "5" according to the distance between the two holes of the button. Turn the handwheel to check that the needle goes cleanly into the left and right holes of the button and slowly sew on the button with about 10 stitches. Secure the threads on the reverse by hand.



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



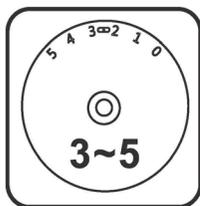
2



3



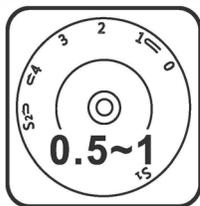
How to Sew 4-Step Buttonholes



Prepare

Take off the all-purpose foot and attach the buttonhole foot.

Measure the diameter and thickness of the button and add 0.3cm (1/8") for bar tacks; mark the buttonhole size on the fabric.



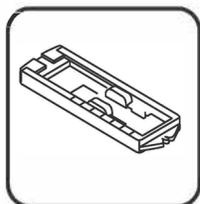
Place the fabric under the foot so that the markings on the fabric line up with the corresponding markings on the foot. Lower the foot so that the buttonhole centre line marked on the fabric aligns with the centre of the buttonhole foot.

Adjust the stitch length dial between "0.5" to "1" to set the stitch density.

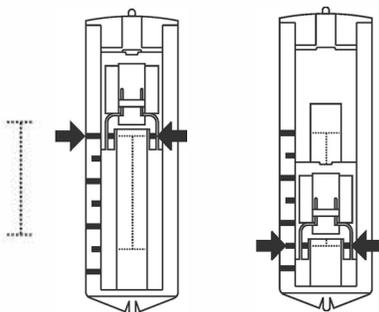
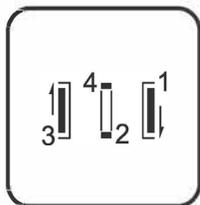
Note:

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 stitch pattern selector dial. Take care not to sew too many stitches in steps 2 and 4. Use a seam ripper and cut the buttonhole open from both ends towards the middle.



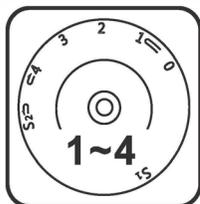


Zippers and Piping



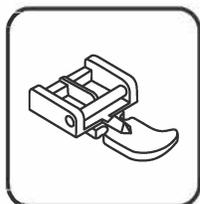
Set the machine as illustrated. Turn the pattern selector dial so that the stitch display shows the letter “A” for the straight stitch position.

Set the stitch length control between “1” to “4” (according to the thickness of the fabric).

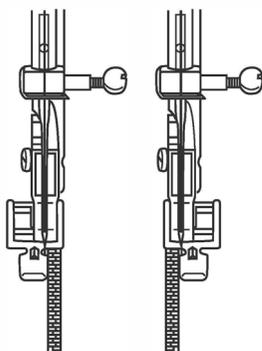
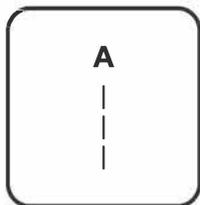


The zipper foot can be inserted right or left, depending on which side of the foot you are going to sew. (Pic 1)

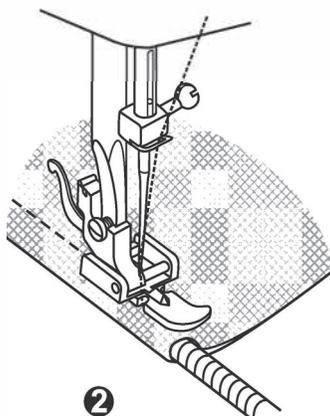
To sew past the zipper pull, lower the needle into the fabric, raise the presser foot and push the zipper pull behind the presser foot. Lower the foot and continue to sew.



It is also possible to sew in a length of piping cord into a bias strip to form a ‘welt’. (Pic 2)



1



2



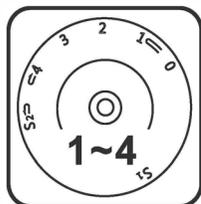
Sewing with a Rolled Hem Foot



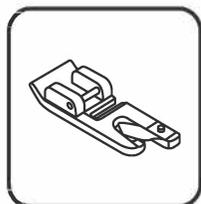
*The rolled hem foot is an optional accessory not supplied with your machine.

This foot is useful for hems in fine or sheer fabrics.

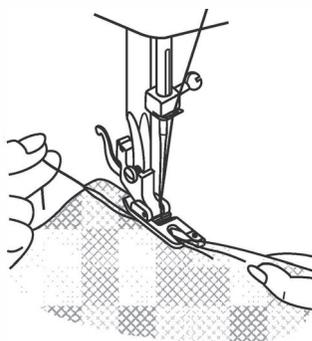
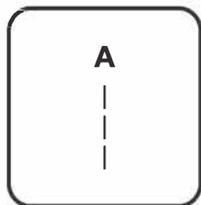
Set the machine as illustrated. Turn the pattern selector dial so that the stitch display shows the letter "A" for the straight stitch position.



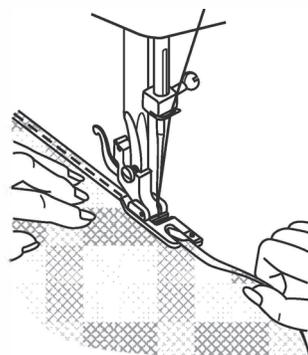
At the beginning of the hem, turn under the edge by about 3mm ($\frac{1}{8}$ ") and sew 4 to 5 stitches to secure. Pull the thread slightly towards the back. Insert the needle into the fabric, raise the presser foot and guide the fold into the scroll on the foot. (Pic 1)



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. (Pic 2)



1



2

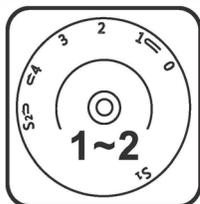


3-Step Zigzag Stitch



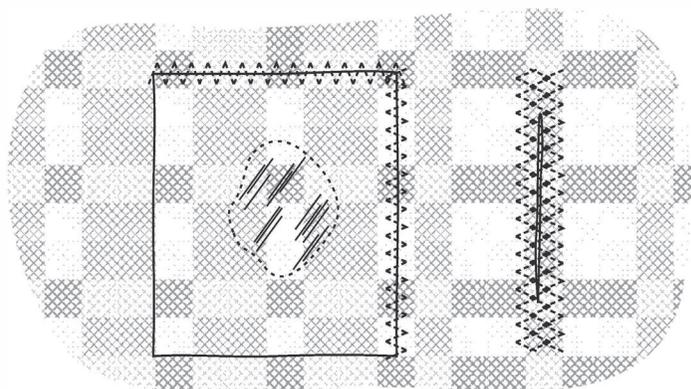
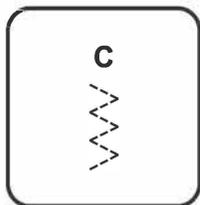
This stitch is useful for sewing on lace and elastic, and for darning, mending and reinforcing edges.

Set the machine as illustrated. Turn the pattern selector dial so that the stitch display shows the letter “C” for the 3-step zigzag stitch position.



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

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

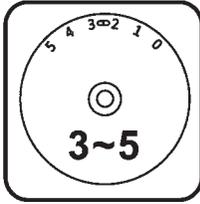


1

2



Triple Stitch Selection



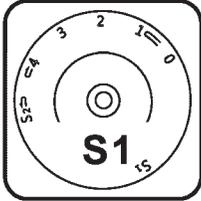
Triple Straight Stitch: (Pic 1 and Pic 3)

This stitch is useful for hard-wearing seams and stretch fabrics.

Turn the pattern selector dial so that the stitch display shows the letter "A" for the triple straight stitch position.

Turn the stitch length dial to "S1".

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



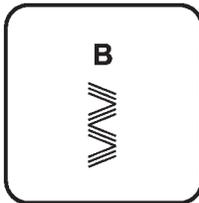
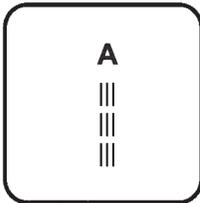
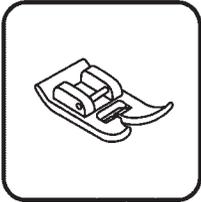
Triple Zigzag Stitch: (Pic 2 and Pic 4)

This stitch is useful for hard-wearing seams, hems and decorative seams. It's suitable for firm fabrics such as denim, corduroy etc...

Turn the pattern selector dial so that the stitch display shows the letter "B" for the triple zigzag stitch position.

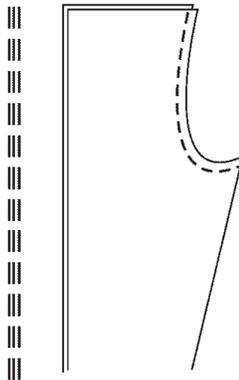
Turn the stitch length dial to "S1".

Adjust the stitch width dial to between "3" and "5".

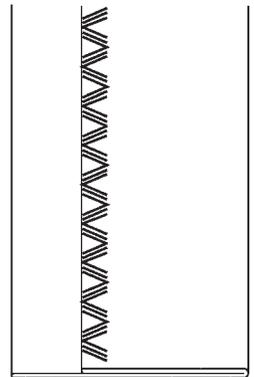


1

2



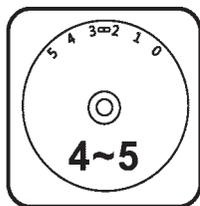
3



4

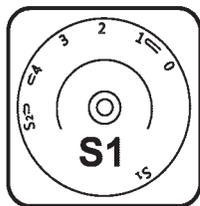


Smocking Stitch



This stitch can be used for all types of jersey as well as for woven fabrics for seams, hems etc... (Pic 1)

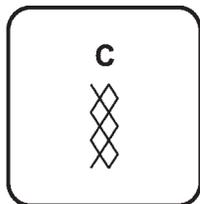
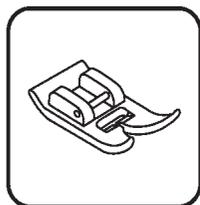
Set the machine as illustrated. Turn the pattern selector dial so that the stitch display shows the letter "C" for the smocking stitch position.



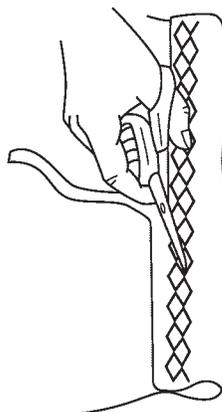
Turn the stitch length dial to "S1".

Set the stitch width dial between "4" and "5".

Sew at 1cm ($\frac{1}{4}$ ") from the fabric edge and trim the surplus fabric. (Pic 2)



1



2



Sewing with a Cording Foot



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

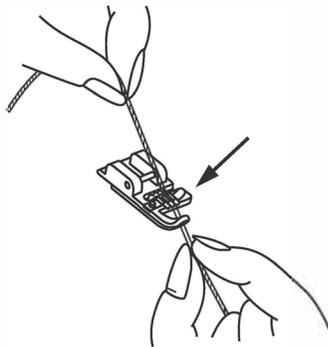
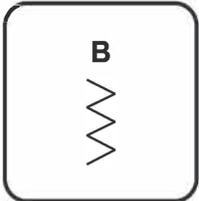
This foot is useful for decorative effects, cushions, tablecloths, etc...



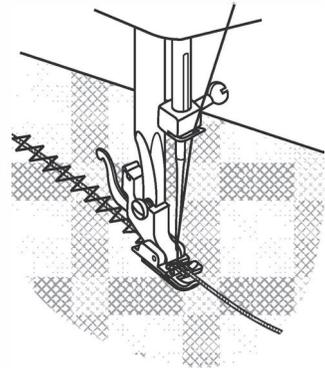
Set the machine as illustrated. Turn the pattern selector dial so that the stitch display shows the letter "B" for the zigzag stitch position. Various stitches are suitable for sewing on cord, e.g zigzag, triple zigzag and decorative stitches.



Insert the cord between the spring covering the cord groove and the foot. 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. (Pic 1 and Pic 2)



1



2



Free Motion Darning

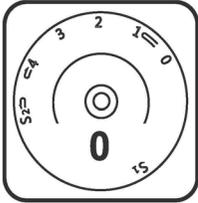


*The darning foot is included with your machine.

Set the machine as illustrated.

Install the embroidering plate. (Pic 1)

Remove the presser foot clamp. (Pic 2)

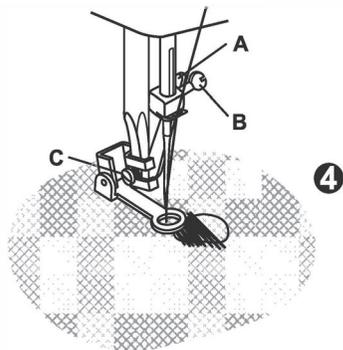
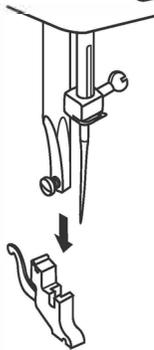
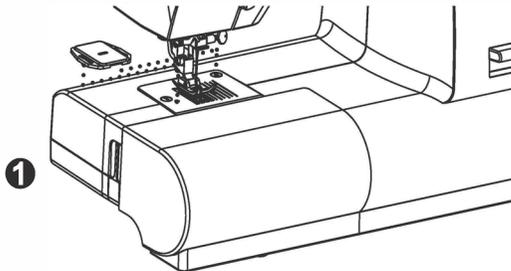
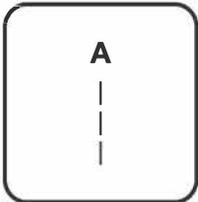


Attach the darning foot to the presser foot bar. The lever (A) should be behind the needle clamp screw (B). Press the darning foot on firmly from behind with your index finger and tighten the screw (C). (Pic 3)

First sew round the edge of the hole (to secure the threads). (Pic 4)



First row: Always work from left to right.
Turn the work by 90 degrees and oversew.

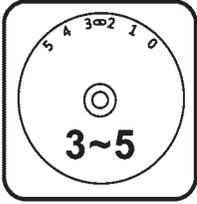


1

2

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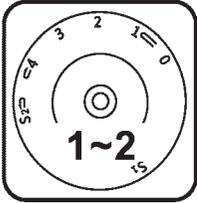


Set the machine as illustrated.

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

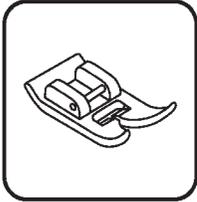
Shell Hem Stitch (F)

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



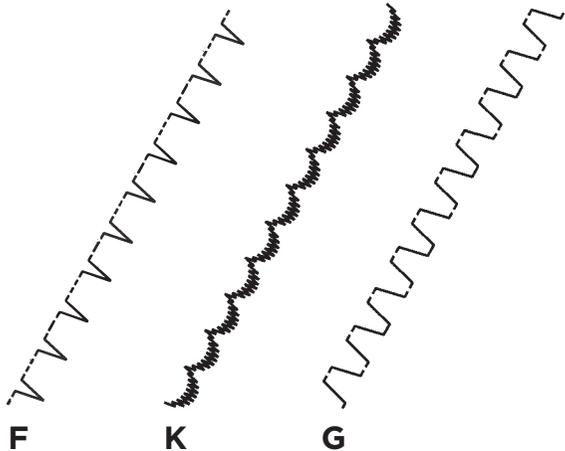
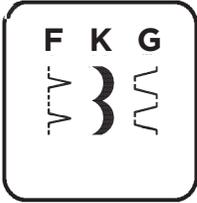
Crescent Stitch (K)

Suitable for a delicate edge finish along the edge of fabric. Stitch length should be set from "0.5" to "1.0".



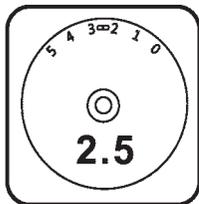
Rampart Stitch (G)

Suitable for flat joining seams, sewing on elastic and visible hems. This stitch can be used for firm, thicker fabrics.



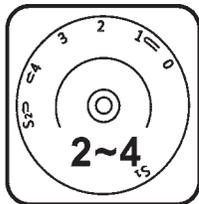


Darning



- Turn the stitch length dial to the desired length.

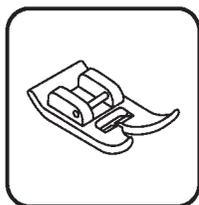
- Turn the pattern selector dial so that the stitch display shows the letter "A" for the straight stitch position, and select the centre needle position.



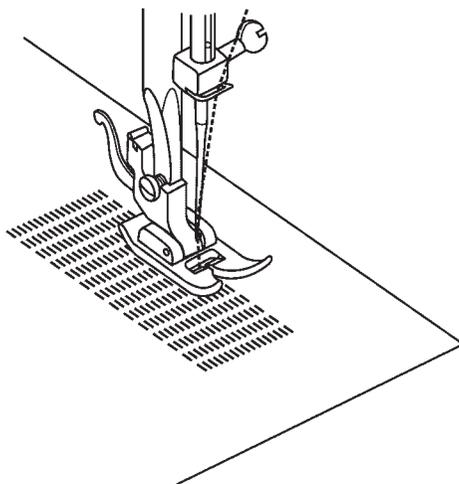
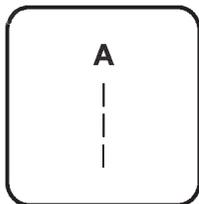
- Position the fabric to be darned under the presser foot together with the under laying fabric to be used.

- 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 16.



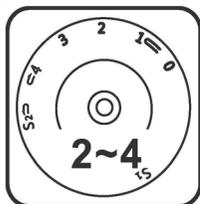


Attaching Lace



- Turn the stitch length dial to the desired length.

- Turn the pattern selector dial so that the stitch display shows the letter "A" for the straight stitch position, and select the centre needle position.

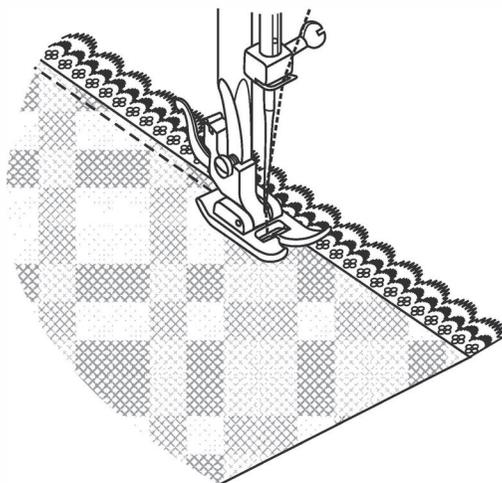
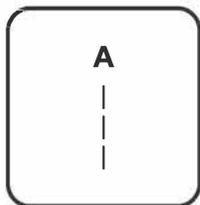


- Fold in the edge of the fabric (approximately 6mm ¼").

- 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.



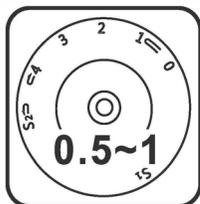
Appliqué



- Turn the stitch length dial to the desired length.

- Turn the pattern selector dial so that the stitch display shows the letter "B" for the zigzag stitch position.

- Select a narrow zigzag width.



- Cut out the appliqué design and either tack it to the fabric by hand, or adhere it using a fabric adhesive.

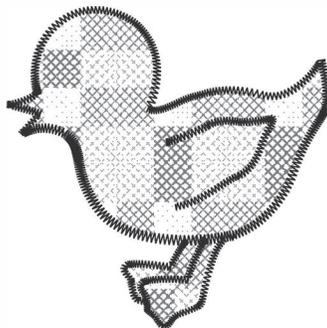
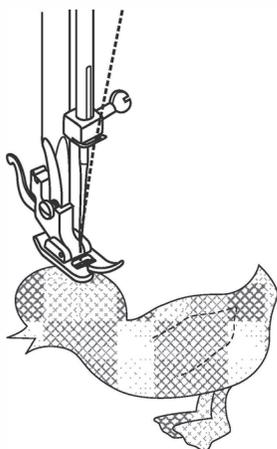
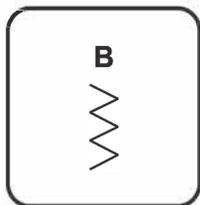
- Sew slowly around the edge of the design.

- Trim any excess material outside the stitching. Make sure not to cut any stitches.



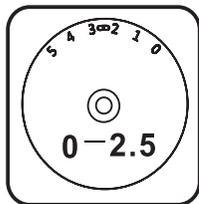
- Remove the tacking stitches if used.

- Tie the top and bottom thread under the appliqué to avoid unraveling.



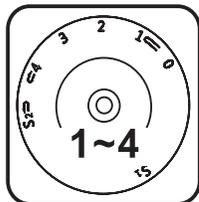


Twin Needle



- Turn the stitch length dial to the desired stitch length.
- Turn the pattern selector dial so that the stitch display shows the letter "A" for the straight stitch position, and select the centre needle position.

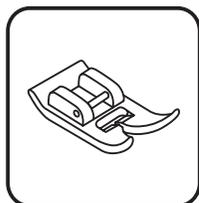
- Select a stitch width setting of "2.5".



- Make sure that the two threads used to thread the twin needle are of the same weight. You can use one or two colours.

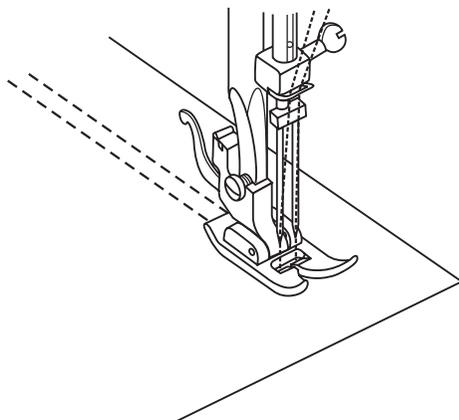
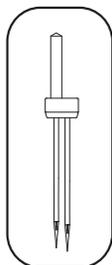
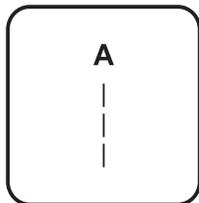
- Insert the twin needle in the same way as a single needle. The flat side of the needle should face away from you.

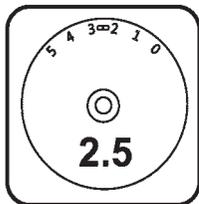
- Follow instructions for single needle threading. Thread each needle separately.



Note:

When sewing with a twin needle, always proceed slowly and make sure to maintain a low speed to ensure quality stitching. When using a twin needle on a zigzag stitch, make sure the stitch width dial is set between "0" and "2.5". Do not use a twin needle at setting above "2.5".

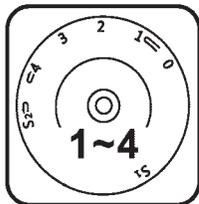




*The quilting foot is an optional accessory not supplied with this machine.

Turn the pattern selector dial so that the stitch display shows the letter "A" for the straight stitch position.

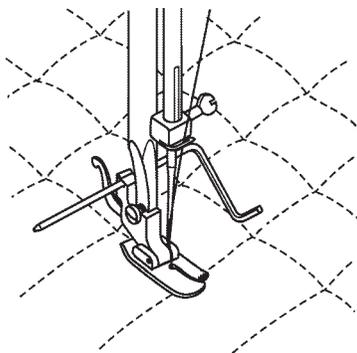
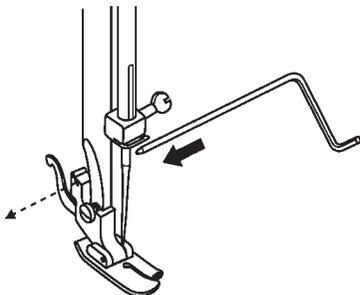
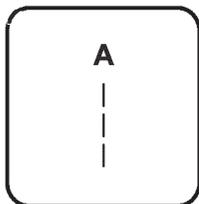
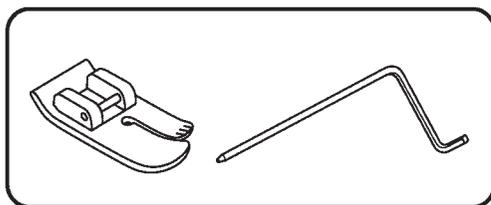
Insert the quilting guide in presser foot holder and set the space as desired (refer to page 8).



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

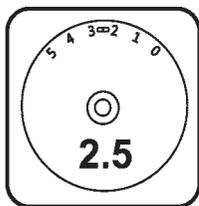
Note:

If you don't have this foot, substitute it with the all-purpose foot.



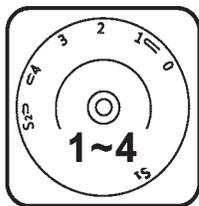


Gathering



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

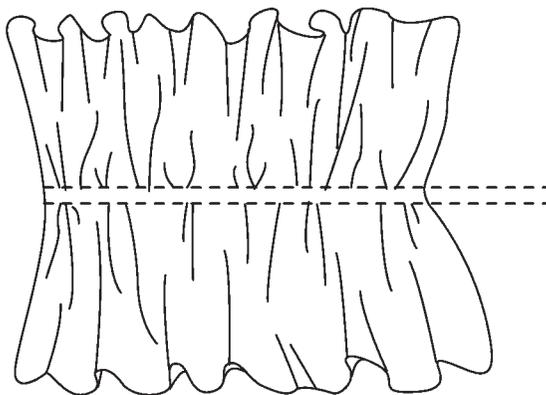
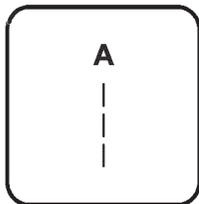
Turn the pattern selector dial so that the stitch display shows the letter "A" for the straight stitch position.



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.

Please Note:

If you don't have this foot, substitute it with the all-purpose foot and gather the fabric by hand by lowering the tension setting to below "2" and pulling the lower thread to gather the material.



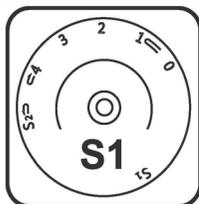


Patch Work



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 tack the edges to a thin piece of paper by hand, leaving a small space between them.

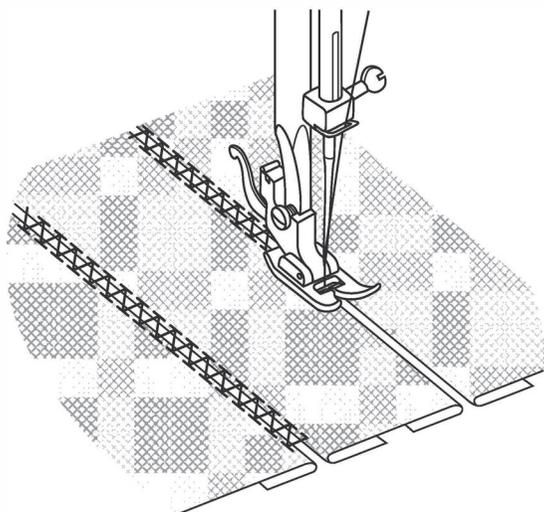
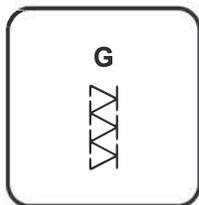


2. Turn the pattern selector dial so that the stitch display shows the letter "G". Turn the stitch length dial to "S1"

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 tacking stitches and the paper. Finish by tying knots on the reverse side at the beginning and the end of the seams.





Caution:

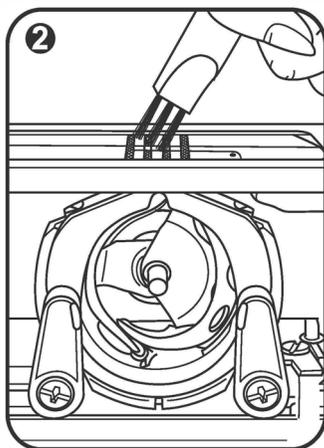
Always make sure that the machine is unplugged from power source and the main switch is off ("O") before inserting or removing any parts and before cleaning.

Remove the Stitch Plate:

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

Cleaning the Feed Dogs:

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

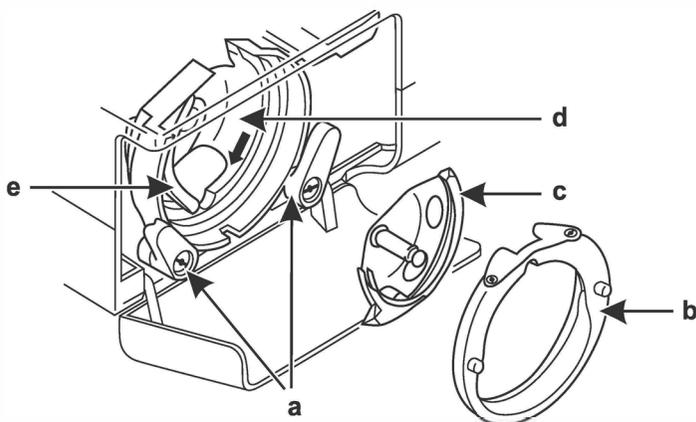


Cleaning and Lubricating the Hook:

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 to 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. Insert the bobbin case and bobbin and replace the stitch plate.

Important:

Fabric fluff and threads must be removed regularly. Your machine should be serviced at regular intervals.





Trouble Shooting Guide

| Problem | Cause | Correction |
|------------------------------|---|---|
| Upper thread breaks | <ol style="list-style-type: none">1. The machine is threaded incorrectly2. The thread tension is too tight3. The thread is too thick for the needle4. The needle is inserted incorrectly5. The thread is wound round the spool 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 the thread onto the reel6. Replace the needle |
| Lower thread breaks | <ol style="list-style-type: none">1. The bobbin case is inserted incorrectly2. The bobbin case is threaded wrongly3. The lower thread tension is too tight | <ol style="list-style-type: none">1. Remove and reinsert the bobbin case and pull on the thread2. Check the bobbin and bobbin case3. Loosen the lower thread tension as described |
| Skipped stitches | <ol style="list-style-type: none">1. The needle is inserted incorrectly2. The needle is damaged3. The wrong size needle is in use4. The foot is attached incorrectly | <ol style="list-style-type: none">1. Remove and reinsert the needle (flat side towards the back)2. Insert a new needle3. Choose a needle to suit thread and fabric4. Check and attach correctly |
| Needle breaks | <ol style="list-style-type: none">1. The needle is damaged2. The needle is inserted incorrectly3. Wrong size needle for fabric is in use4. The wrong foot is attached | <ol style="list-style-type: none">1. Insert a new needle2. Insert needle correctly (flat side towards the back)3. Choose a needle to suit thread and fabric4. Select the correct foot |
| Loose stitches | <ol style="list-style-type: none">1. The machine is threaded incorrectly2. The bobbin case is threaded incorrectly3. Needle/fabric/thread combination is wrong4. Thread tension is wrong | <ol style="list-style-type: none">1. Check the threading2. Thread the bobbin case as illustrated3. Needle size must suit 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 wrongly 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. Poor quality thread2. The bobbin case is threaded incorrectly3. Fabric has been pulled | <ol style="list-style-type: none">1. Select a better quality thread2. Remove the bobbin case, rethread and insert it correctly3. Do not pull on the fabric while sewing, let it be taken up by the machine |
| Noisy machine | <ol style="list-style-type: none">1. The machine needs to be lubricated2. Fluff or oil has collected on the hook or needle bar3. Poor quality oil has been used4. The needle is damaged | <ol style="list-style-type: none">1. Lubricated as described2. Clean the hook and feed dogs as described3. Use only good quality sewing machine oil4. Replace the needle |
| 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 |

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BY CRAFTER'S COMPANION

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Gemini™ Stitch is not intended for use by children without adult supervision. Age 14+