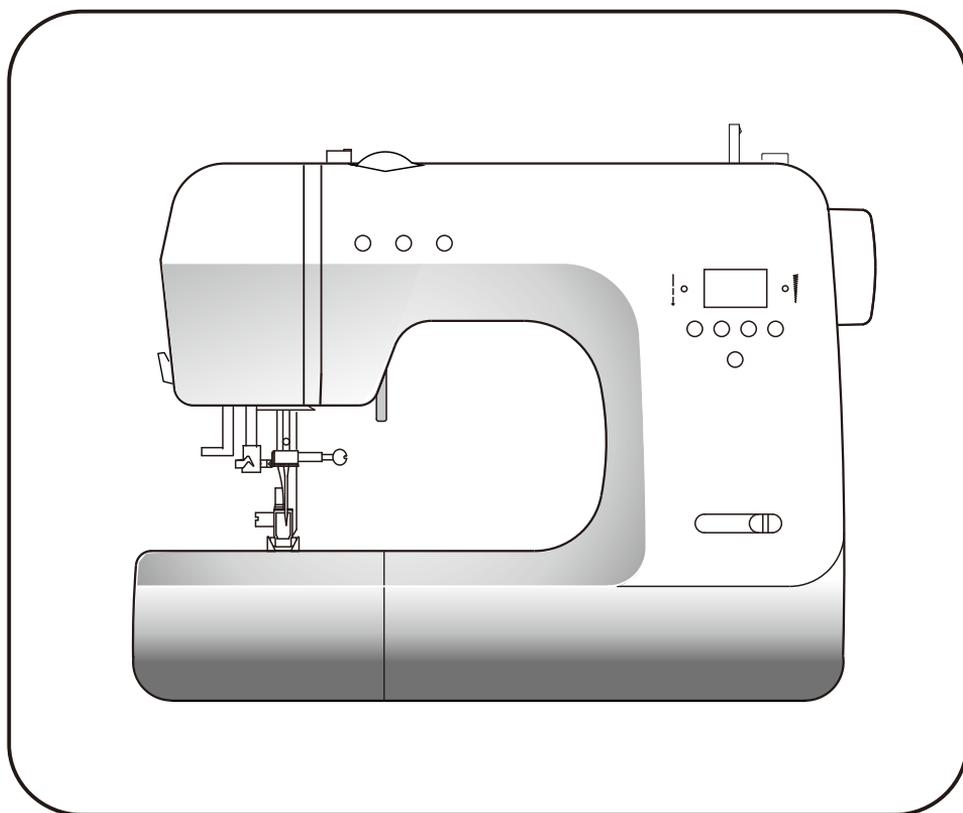


INSTRUCTION BOOK

MODEL : FA99



IMPORTANT SAFETY INSTRUCTIONS

When using this sewing machine, basic safety precautions should always be followed, including the following:

Read all instructions before using.

DANGER — — To reduce the risk of electric shock.

- 1 This sewing machine should never be left unattended when plugged in . Always unplug this sewing machine from the electrical outlet immediately after using and before cleaning.
2. Always unplug before relamping. Replace the bulb with same type rated 15 watts.
3. Do not reach for this sewing machine that has fallen into water. Unplug immediately.
4. Do not place or store sewing machine where it can fall or be pulled into a tub or sink. Do not place or drop into water or other liquid.

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 sewing machine is used by or near children.
2. Use this sewing machine 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 sewing machine 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 this sewing machine to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
4. Never operate this sewing machine with any air openings blocked. Keep ventilation openings of this sewing machine and foot control free from the accumulation of lint, dust, and loose cloth.
5. Never drop or insert any object into any opening.
6. Do not use outdoors.
7. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
8. To disconnect, turn all controls to the off (O) position, then remove plug from outlet.
9. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
10. Keep fingers away from all moving parts. Special care is required around this sewing machine needle.
11. Always use proper needle plate. The wrong plate can cause the needle to break.
12. Do not use bent needles.
13. Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
14. Switch this sewing machine off (O) when making any adjustments in the needle area, such as threading needle , changing needle m threading bobbin, or changing presser foot, etc.
15. Always unplug sewing machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in this instruction manual.
16. Never operate on a soft surface such as a bed or couch where the air openings may be blocked.
17. Appliance (230-240V) is provided with double insulation. Use only identical replacement parts. See instructions for servicing Double-insulate Products.

Servicing Double-Insulated Products (230V-240V)

In a double-insulated product, two systems of insulation are provided instead of grounding. No grounding means is provided on a double-insulated product nor should a means for grounding be added to the product. Servicing a double-insulated product requires extreme care and knowledge of the system and should only be done by qualified service personnel. Replacement parts for a double-insulated product must be identical to those parts in the product. The symbol is marked on the double-insulated product.

This sewing machine is intended for household use.

SAVE THESE INSTRUCTIONS

UK ONLY IMPORTANT PLEASE READ CAREFULLY

The wires in this mains lead are coloured in accordance with the following code:

BLUE - NEUTRAL BROWN - LIVE (OR ACTIVE)

As the colours of the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug **PROCEED AS FOLLOWS:**

The earth plug pin is unnecessary. As the machine is designed under double insulation structure, the earth wire is removed from the machine. The wire coloured BROWN must be connected to the terminal marked L or A or coloured RED. The wire coloured BLUE must be connected to the terminal marked N or coloured BLACK. Neither core is to be connected to the earth terminal of a three-pin plug.

EU ONLY

RECYCLING



We are committed to the protection of the environment. We strive to minimize the environmental impact of our products by continuously improving product design and our manufacturing methods.



DO NOT THROW AWAY!

At end of life please dispose of this product in an environmentally responsible way.

The crossed-out wheellie bin symbol featured above and on the product's data-plate means that this product falls under the scope of the E.U. "Waste Electrical and Electronic Equipment" (WEEE) directive and "Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment" (ROHS) directive and should not be disposed of with your household waste. At end of life, you must ensure that this product is disposed of in accordance with national and local legislation and that it is sorted as Category 2 "Small Domestic Appliances" WEEE. You may be liable under local and national laws for improper disposal of this product. Please consult the web, or a competent national or local body, for the return and collections systems available to you and the locations of your nearest recycling points. If you purchase a new product direct from us we will take your old product back, irrespective of the brand, if it is a like for like sale.

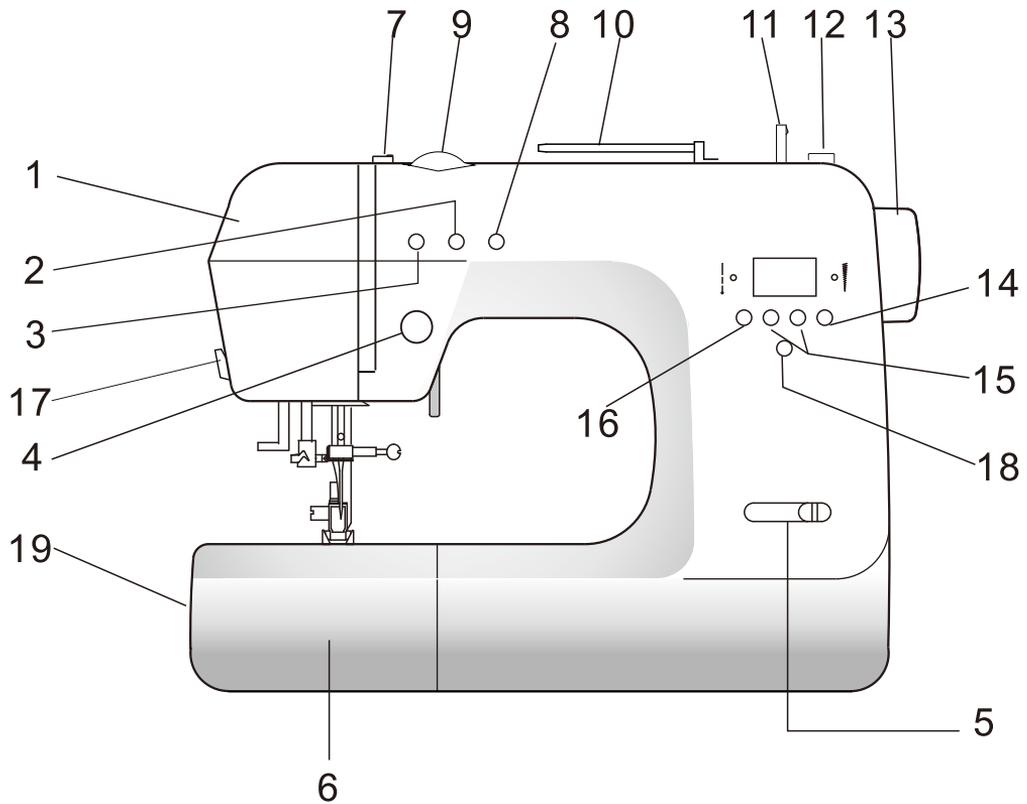
As an individual you can make a positive impact on reuse, recycling and other forms of recovery of WEEE. This will reduce use of landfill and minimize the environmental impact of the products you use.

Hazardous substances in electronic and electrical products can have a harmful impact on human health and on the environment.

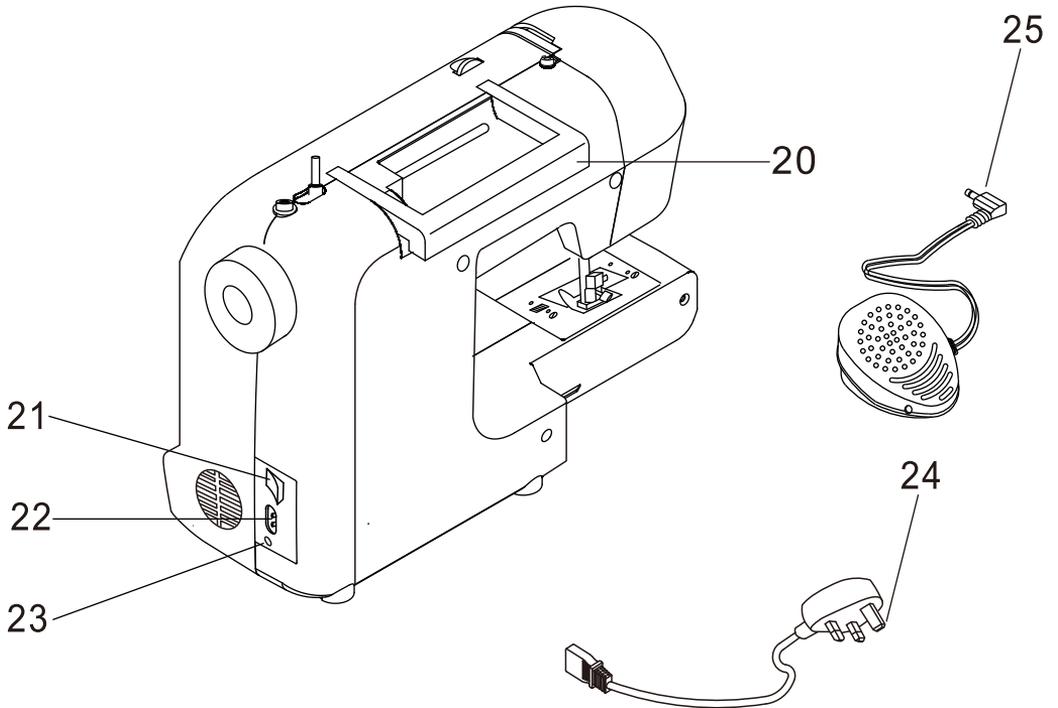
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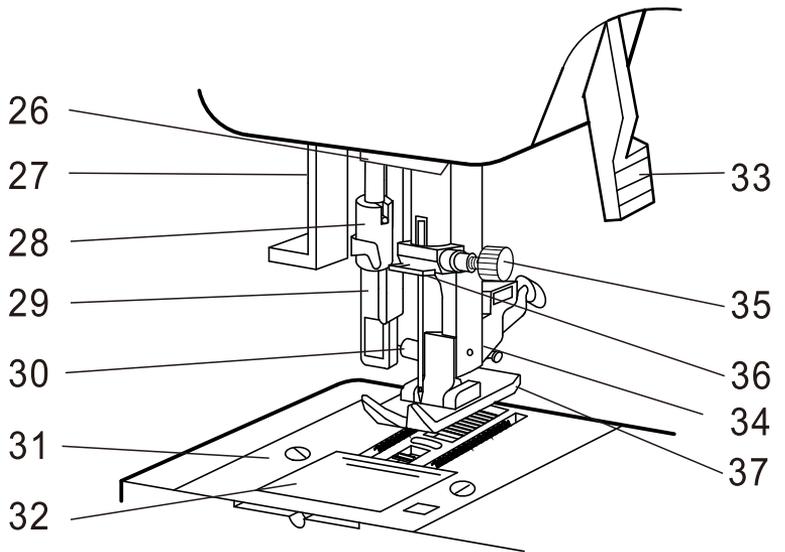
MAIN PARTS



- | | |
|---|-----------------------------|
| 1. Face Cover | 10. Horizontal Spool Pin |
| 2. Reverse Stitch Button | 11. Bobbin Winder Shaft |
| 3. Lock Stitch Button | 12. Bobbin Winder Stop |
| 4. Start/Stop Button | 13. Handwheel |
| 5. Sewing Speed Controller | 14. Stitch Width Button |
| 6. Flat bed attachment with Accessory Compartment | 15. Pattern Selector Button |
| 7. Upper Thread Guide | 16. Stitch Length Button |
| 8. Needle Up/Down Button | 17. Thread Cutter |
| 9. Thread Tension Dial | 18. Forward Button |



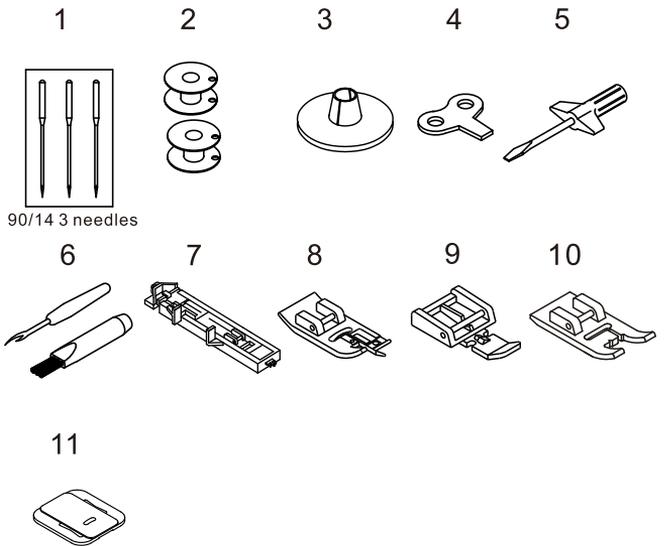
- 20. Carrying Handle
- 21. Power Switch
- 22. Power Cord Receptacle
- 23. Foot Controller Jack
- 24. Power Cord
- 25. Foot Controller
- 26. Lower Thread Guide
- 27. Needle Threader Lever
- 28. Needle Threader
- 29. Buttonhole Lever
- 30. Presser Foot Holder Screw
- 31. Needle Plate
- 32. Bobbin Cover
- 33. Presser Foot Lever
- 34. Presser Foot Holder
- 35. Needle Clamp Screw
- 36. Needle Bar Thread Guide
- 37. Presser Foot



ACCESSORIES

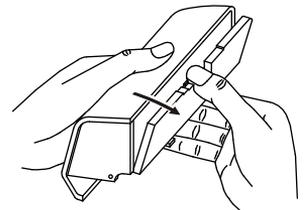
Some accessories are provided in the accessory case.

1. Needle Set
2. Bobbin(2)
3. Spool Cap(small)
4. Needle Plate Screwdriver
5. Screwdriver(small)
6. Seam Ripper with Brush
7. Buttonhole Foot
8. Overcasting Foot
9. Zipper Foot
10. Satin Foot
11. Darning Plate



FLAT BED ATTACHMENT WITH ACCESSORY COMPARTMENT

Accessories can be stored in the flat bed attachment within the accessory compartment.

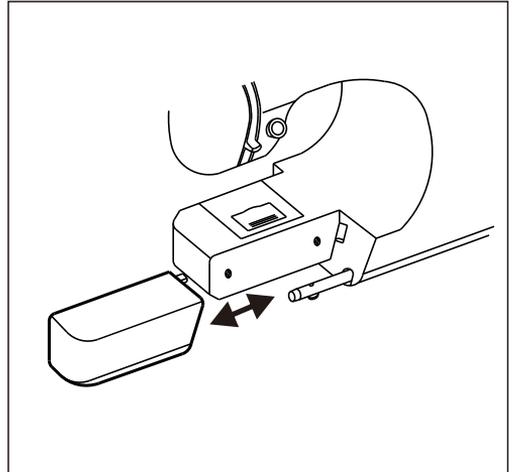


OPENING THE ACCESSORY COMPARTMENT

To open the accessory compartment, remove flat bed attachment from machine, turn attachment so the inside of the compartment is facing you. Slip thumb into opening and pull down.

a. REMOVING THE FLAT BED ATTACHMENT

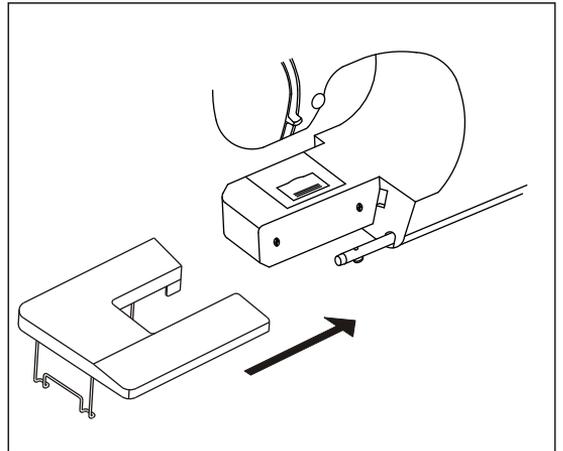
- ① Pull the flat bed attachment off to the left.
 - ▶ With the flat bed attachment removed, free arm sewing is available for another sewing purpose.
- ② Install the flat bed attachment back in its original position.



LARGE EXTENSION TABLE

For a larger sewing surface, attach the large extension table.

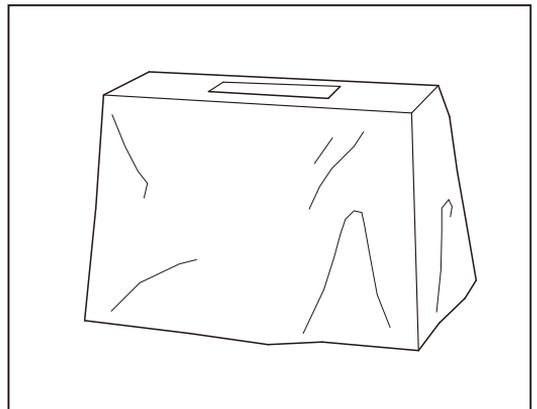
- ① Pull the flat bed attachment off to the left.
- ② Lower the metal leg of the large extension table until it clicks into position.
- ③ Slide the large extension table to the right and into position.



DUST COVER

Cover the machine with dust cover when it is not in use.

This manual will be stored on the holder provided on the side of the cover.



CHANGING THE PRESSER FOOT

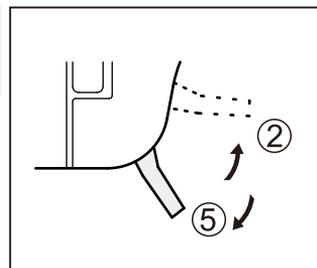
The presser foot must be changed according to the stitch you sew, or work you do.



CAUTION: To prevent accidents.

Turn OFF the power switch before you change the presser foot.

1. Turn the handwheel toward you until the needle is at its highest position.
2. Raise the presser foot lever.
3. Remove the presser foot by pushing the presser foot release lever toward you.
4. Place desired foot with its pin (A) directly under the slot (B) in presser foot holder.
5. Lower the presser foot lever and presser foot will snap into the place

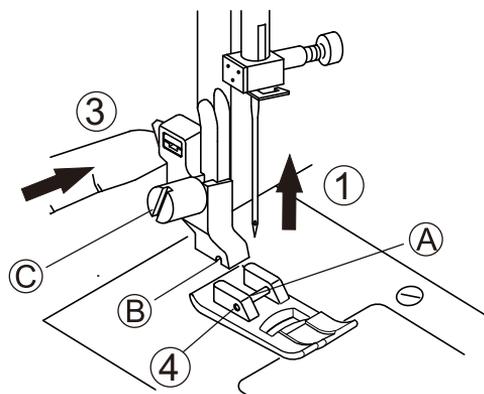


REMOVING THE PRESSER FOOT HOLDER

You may need to remove the presser foot holder to use other presser feet.

To remove, raise the presser foot lever and loosen the presser foot holder screw (C).

To attach, tighten the screw after raising the presser foot holder.



- (A) Presser foot pin
- (B) Presser foot holder slot
- (C) Presser foot holder screw

CHANGING THE NEEDLE

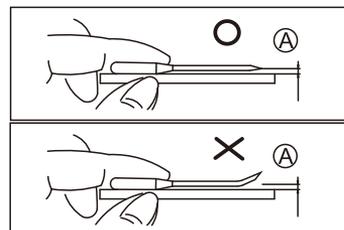
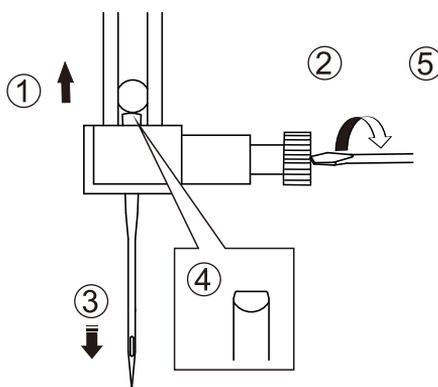
Select a needle of the right type and size for the fabric to be sewn.
(See Fabric, Thread and Needle Table on page 18.)



CAUTION: To prevent accidents.

Turn OFF the power before removing the needle.

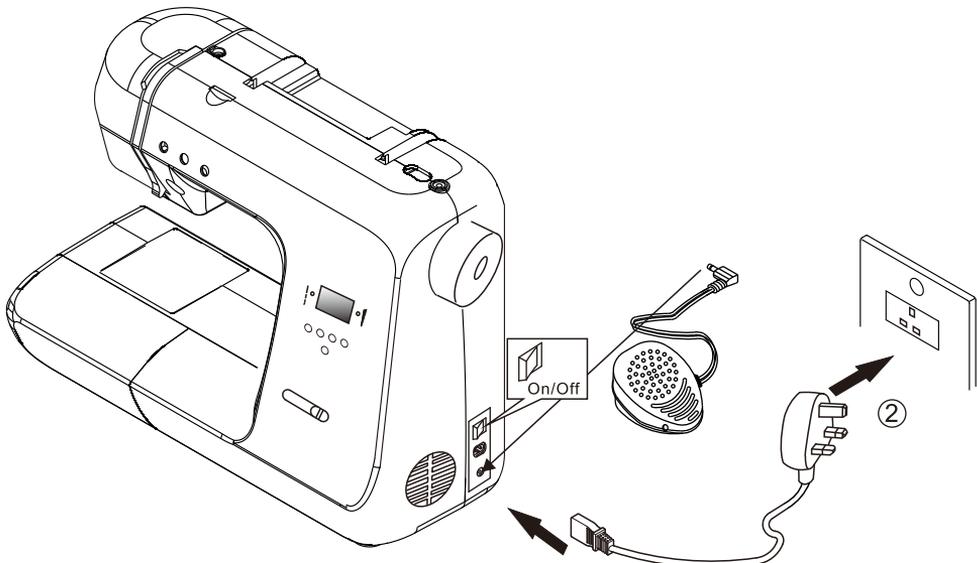
1. Turn the handwheel toward you until the needle is at its highest position.
 2. Loosen the needle clamp screw with screwdriver.
 3. Remove the needle.
 4. Insert new needle into needle clamp with the flat side to the back and push it up as far as it will go.
 5. Tighten the needle clamp screw.
- A. Place needle on a flat surface and check to see if bent.
Do Not use any bent or blunt needles.



CONNECTING THE MACHINE

Place the machine on a stable table.

1. Connect the power cord to the machine by inserting the 2-hole plug into the plug socket.
2. Connect the power cord plug to the electric outlet.
3. Turn "ON" the power switch.
4. A lamp will light up when switch is turned on.
5. To disconnect, turn the power switch to the "OFF" position, then remove plug from outlet.



DANGER:
-To reduce the risk of electric shock.

Never leave the machine unattended when plugged in. Always unplug this machine from the electric outlet immediately after using and before maintenance.



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

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

CONTROL BUTTONS

A. REVERSE STITCH BUTTON

- Stitches 1, 2 and 6: The REVERSE STITCH button will sew in reverse while the button is pressed and return to forward stitching when the button is released.
- Other stitches: The REVERSE STITCH button will sew 3-4 stitches to tie-off the stitching and then stop sewing. Continue sewing by pressing the START/STOP button or foot control.

B. NEEDLE UP/DOWN BUTTON

- Press the needle up/down button to raise or lower the needle. Pressing the button twice sews one stitch.
- The needle may be set so it will stop in the DOWN position or UP position.

C. SEWING SPEED CONTROLLER

Slide the sewing speed controller to right or left to adjust the sewing speed.

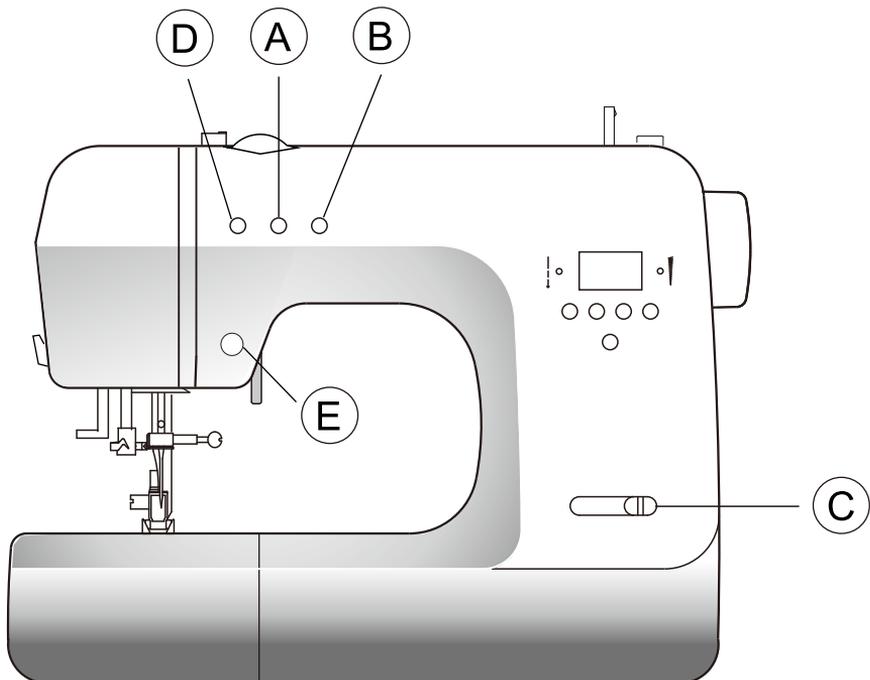
D. ● LOCK STITCH

Stop machine and then press Lock Stitch button to sew 4 tie-off stitches at same position. Machine will then automatically stop.

E. START/STOP BUTTON

The machine will start running when START/STOP button is pressed and will stop when pressed the second time.

The machine will stitch slowly for the first 3 stitches.

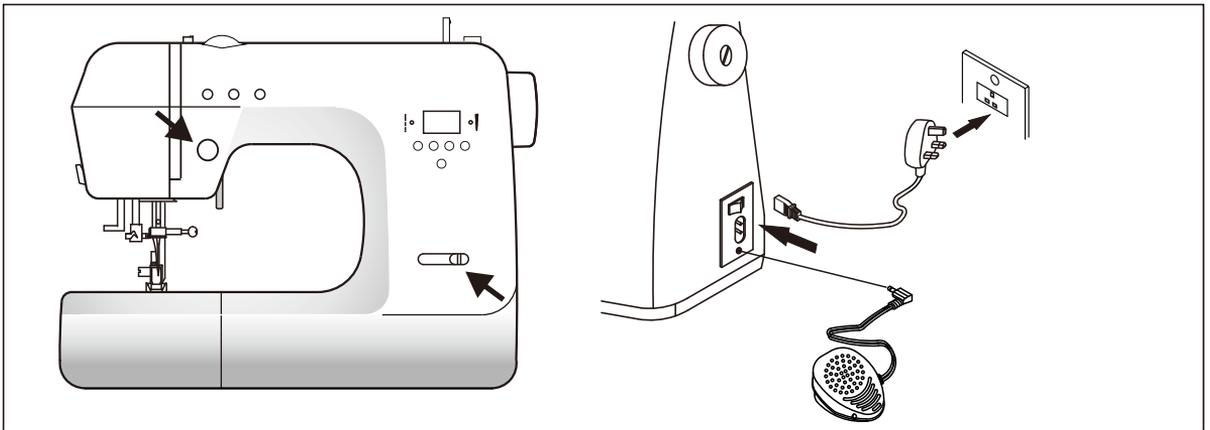
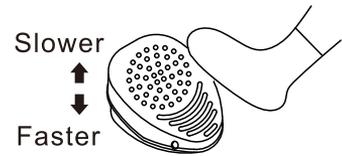


FOOT CONTROLLER



CAUTION: To prevent accidents.

1. Turn off the power switch.
2. Push foot controller plug into receptacle on machine.
3. Place foot controller at your feet and turn on power switch.
Sew faster by increasing the pressure on the controller.
To stop, remove your foot from the controller.



CONTROL BUTTON FUNCTIONS

The control button functions described in previous page will change when the foot control is connected.

- **START/STOP BUTTON**

This button will be deactivated.

- **REVERSE STITCH BUTTON**

When using stitches 1,2 and 6, the machine will continue to sew reverse at slow speed while this button is pressed. When released, the machine will sew forward.

When sewing other stitches, the reverse stitch button is used as a reinforcement stitch.

- **SEWING SPEED CONTROLLER**

The sewing speed controller only functions while using the START/STOP button. It will not operate when foot control is connected.

SAFETY FEATURE OF ELECTRONIC MODEL

If the machine is jammed, it will stop with three beep sounds. After the cause of jamming is removed, step on the foot control and it will run in normal condition.

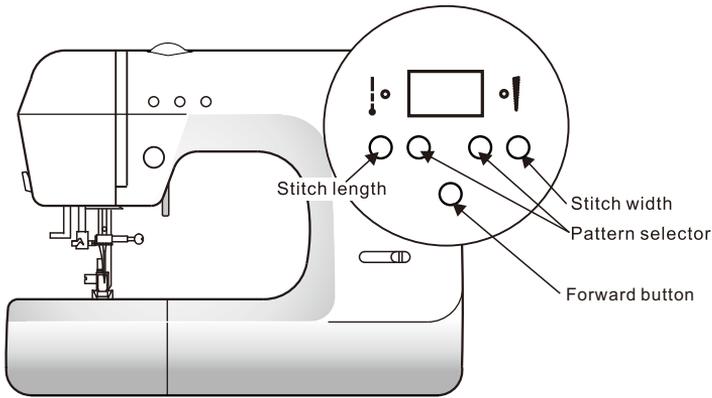


WARNING:

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

1. Handle the foot controller with care and avoid dropping it on the floor. Be sure not to place anything on top of it.
2. Use only foot controller provided with this machine. If replacement is necessary, use electronic Model YSD180034(USA only)

WHERE TO USE EACH STITCH



- **Stitch length :**
Press stitch length button, indicator light, LED display auto change to show the size of stitch length.

- **Stitch width :**
Press stitch width button, indicator light, LED display auto change to show the size of stitch width.

- **Pattern selector :**
Press pattern selector button; LED displays number.
To choose the various pattern selections press the up or down.

- **Forward button :**
By pressing the forward button, the pattern will jump 10 patterns each time the button is pressed. This allows easy access for selection of pattern.

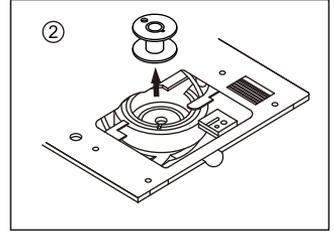
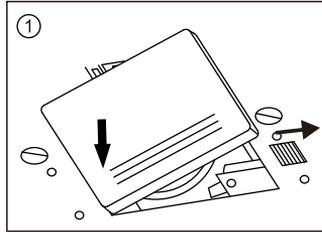
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71	72	73	74	75	76	77	78	79	80	81	82	83	84
H	I	J	K	L	M	N	O	P	Q	R	S	T	U
85	86	87	88	89	90	91	92	93	94	95	96	97	98
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BOBBIN WINDING

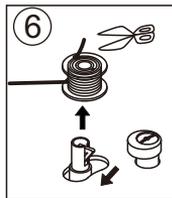
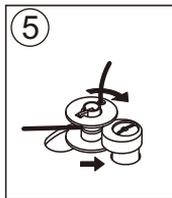
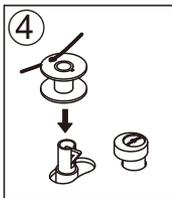
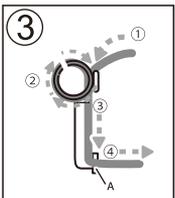
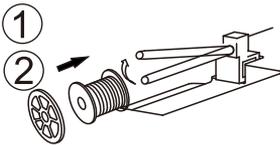
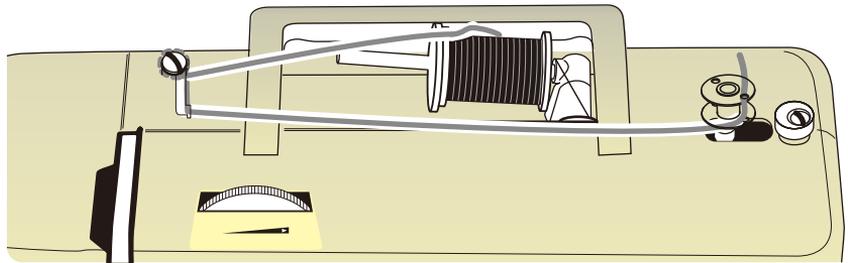
REMOVING THE BOBBIN

1. Remove the bobbin cover by sliding the bobbin cover latch to right and push down the left lower corner of this cover at same time.

2. Remove the bobbin from the machine.



WINDING THE BOBBIN

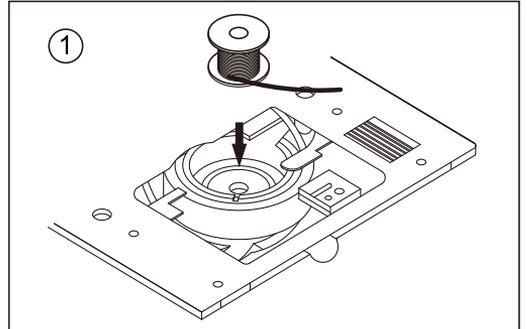


Use a bobbin that has been correctly wound with thread, otherwise the needle may break or the thread tension will be incorrect.

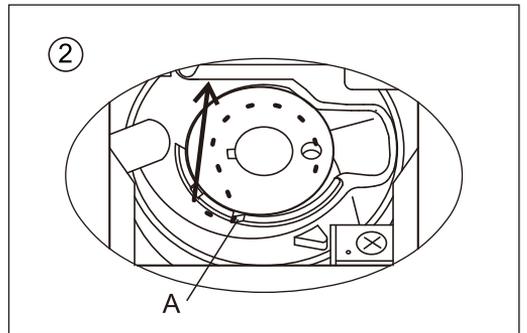
1. Slightly raise horizontal spool pin.
2. Slide a spool of thread onto the spool pin so the thread unwinds to the front from the top of the thread spool.
Secure it with the spool cap that best fits the size of spool being used to ensure smooth flow of thread.
3. Pass thread from spool around and under the upper thread guide as shown.
4. Pull end of thread through hole in bobbin as shown.
5. Make sure the bobbin winder shaft is in left position. Place bobbin onto shaft and rotate until it snaps into position with end of thread coming from top of bobbin.
6. Start machine to wind bobbin. Stop machine after several turns to trim the thread tail with scissors. Bobbin will cease turning when completely filled.
Cut thread and push shaft to the left to remove bobbin.

INSERTING THE BOBBIN

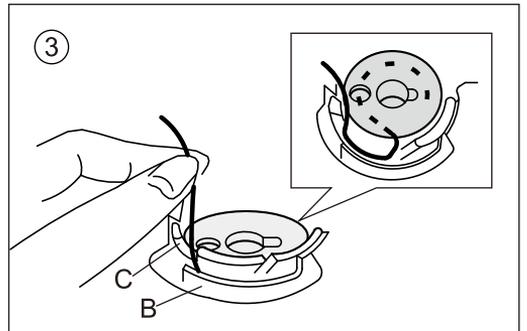
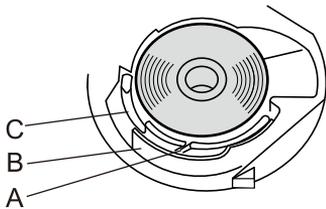
1. Insert the bobbin into bobbin case with the thread unwinding counterclockwise.



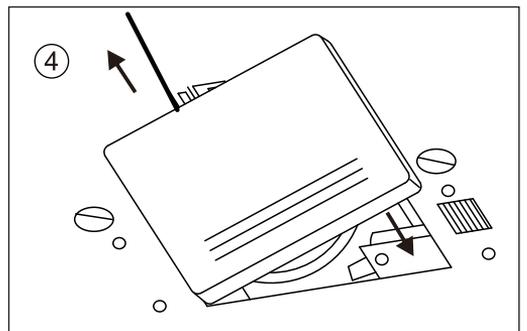
2. Draw thread into notch (A).



3. Pull thread toward the left and along the inside of spring (B) until it slips into notch (C) being sure that thread does not slip out of notch (A).

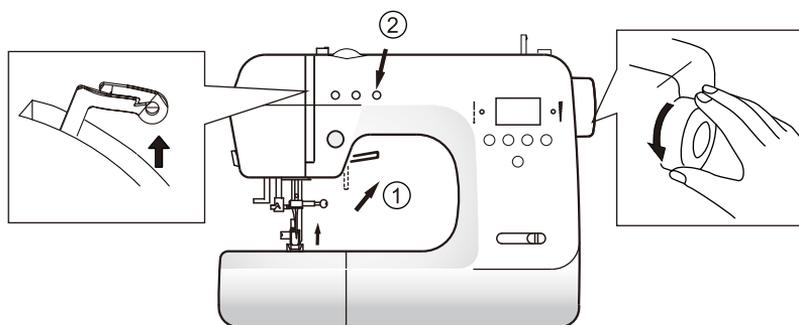


4. Pull thread out about 10 inches and replace the bobbin cover.

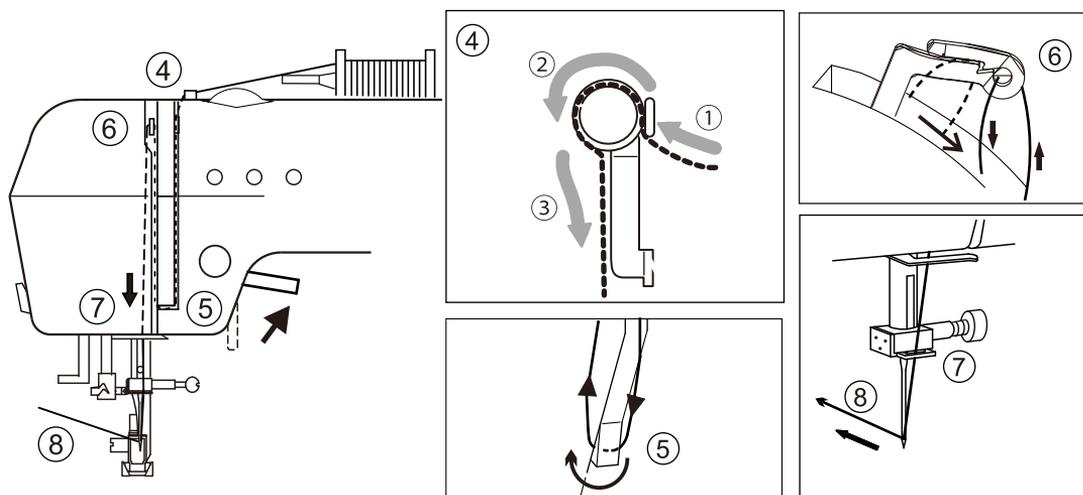


THREADING THE MACHINE

THREADING THE UPPER THREAD

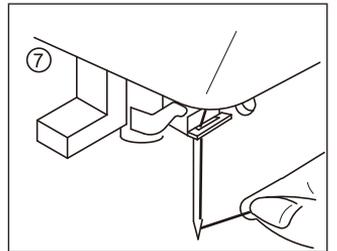
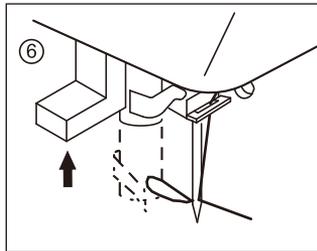
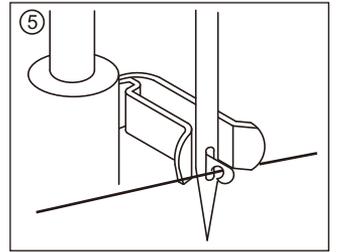
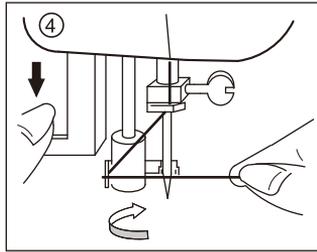
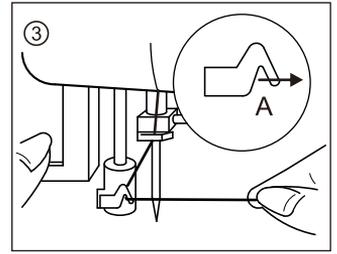
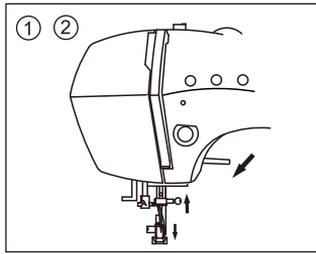


1. Raise presser foot lever.
2. Press the needle up/down button or rotate the handwheel toward you to raise the needle into the up position.
3. Place a spool of thread onto the spool pin and secure with the proper size spool cap.(see page 11)
4. Pass the thread around upper thread guide for upper threading.
5. Bring thread forward down the right channel, then to the left and up the left channel.
6. Pull the thread through and into the take-up lever from right to left.
7. Pass the thread down the left channel and into the lower thread guide. Slide the thread from right to left into the thread guide on the needle clamp.
8. Thread the needle from front to back or follow directions for using the needle threader.(see page 14)



NEEDLE THREADER

1. Lower the presser foot.
2. Set needle in up position.
3. Lower the threader slowly and draw thread through thread guide(A) and pull toward the right.
4. Lower the lever as far as it will go so the threader turns and the hook pin will go through the needle eye.
5. Position thread below the needle eye and under the hook pin.
6. Hold thread loosely and release the lever. Hook will turn and pass thread through needle eye while making a loop.
7. Raise presser foot and pull thread out about 10 inches from needle eye.
Note: The needle threader is used for needle sizes 11, 14 and 16.

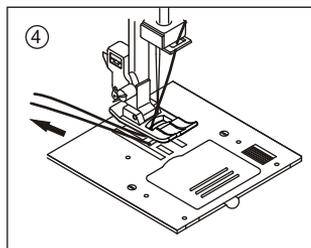
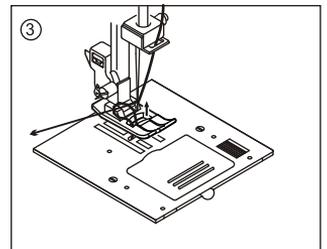
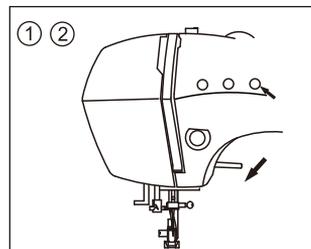


CAUTION: To prevent accidents.

Do not lower the threader lever while machine is operating.

DRAWING UP THE BOBBIN THREAD

1. Raise the presser foot.
2. Hold the upper thread loosely and press needle up/down button twice.
The handwheel will turn one complete turn.
3. Pull upper thread lightly. Bobbin thread will come up in a loop.
4. Pull both upper and bobbin threads about 10 inches toward the back and under the presser foot.



STARTING TO SEW

The machine will be set at 01 automatically to sew straight stitches when power switch is turned on.

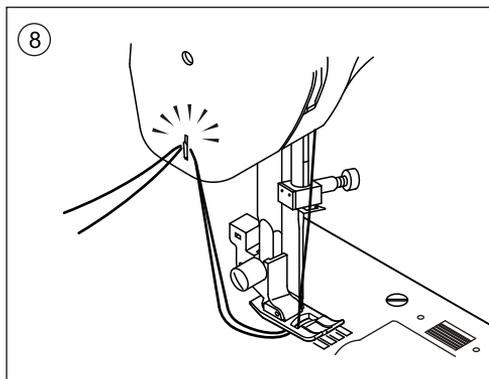
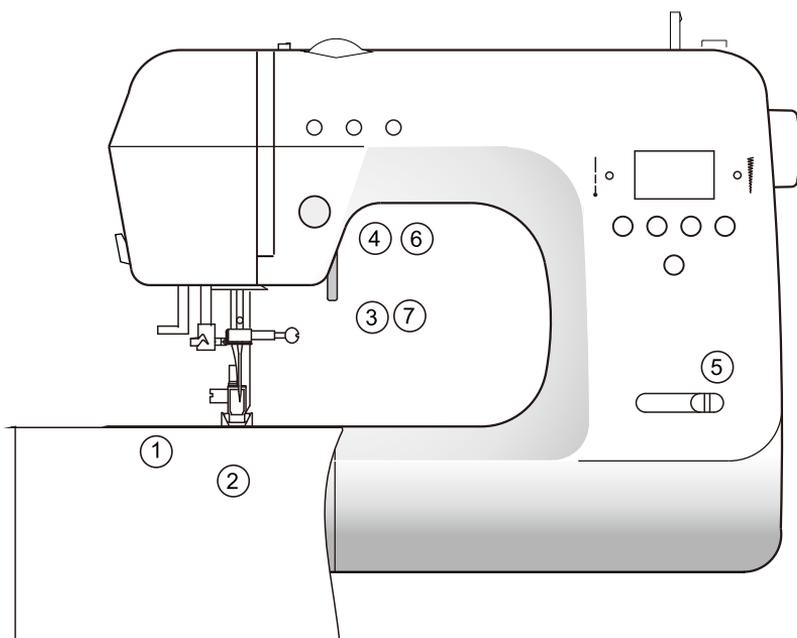


CAUTION: To prevent accidents.

While sewing, special care is required around the needle.

The machine will automatically feed the fabric, do not pull or push fabric.

Simply guide the fabric to sew straight.

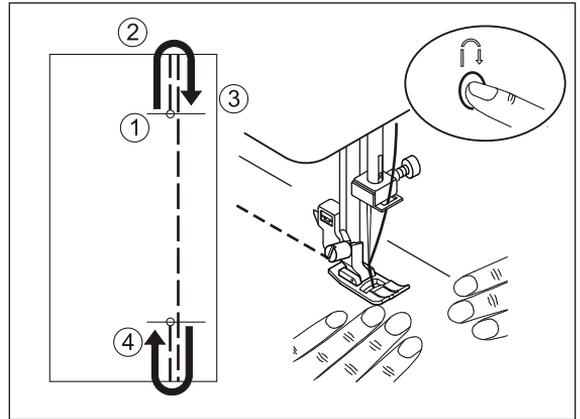


1. Check the presser foot (All Purpose Presser Foot). Refer to page 6 for changing the presser foot.
2. Place the fabric under the presser foot.
3. Lower the presser foot.
4. Hold both threads to the back when starting to sew. Let threads go after sewing a few stitches.
5. While sewing regulate the speed with sliding speed control lever or foot control.
6. Stop machine when you reach end of seam.
7. Raise the presser foot lifter.
8. When you have reached the end of a seam, stop sewing and turn the hand wheel toward you to bring the needle to highest position. Raise the presser foot and pull the fabric out from under the foot to the back of the machine. Cut the threads with the thread cutter on left side of the machine.

REVERSE STITCHING

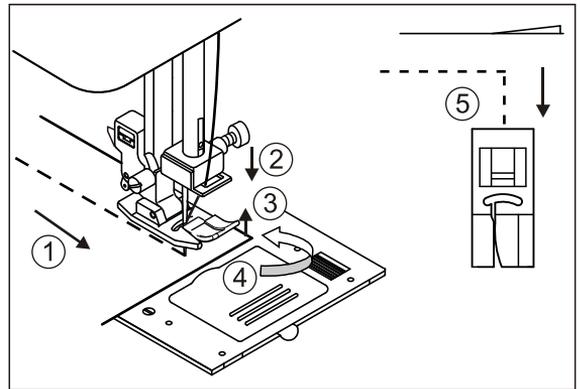
Reverse stitching is used for reinforcing the ends of the seams.

1. Place the fabric in position where back stitching is to be made and lower the presser foot.
2. Press reverse stitch button and sew 4-5 stitches. (If using foot control, press pedal while pressing reverse stitch button.)
3. Press start button and resume sewing. (If using foot control, release reverse stitch button and press foot control to sew forward.)
4. When you reach the end of seam, press reverse stitch button and sew 4-5 reverse stitches.



TURNING CORNERS

1. Stop the machine when you reach a corner.
2. Lower needle into the fabric. To lower the needle, you can either use the needle up/down button or turn the handwheel toward you.
3. Raise the presser foot.
4. Use the needle as a pivot and turn fabric.
5. Lower the presser foot and resume sewing.

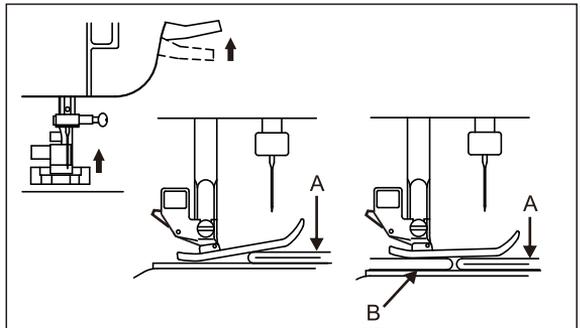


SEWING HEAVY FABRIC

When sewing heavy fabrics, the toe end of presser foot tends to lift up and sewing will hesitate at the point that the fabric is thicker. In this case, place a piece of cardboard or fabric of same thickness under the heel end of the presser foot.

- The presser foot lever can be raised 1 step higher for placing heavy materials under the presser foot easily.

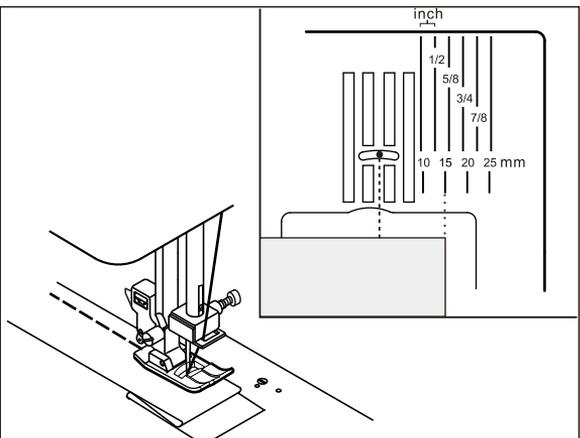
Carefully guide the fabric with your hand when sewing over thick fabric areas.



A: Fabric B: Thick paper or fabric

SEAMING GUIDE ON THE STITCH PLATE

The figure on each guide line on the stitch plate indicates the distance between this guide line and the center needle position. Guide the fabric along the specific guide line in order to get the desired seam allowance between the stitching and the edge of the fabric.

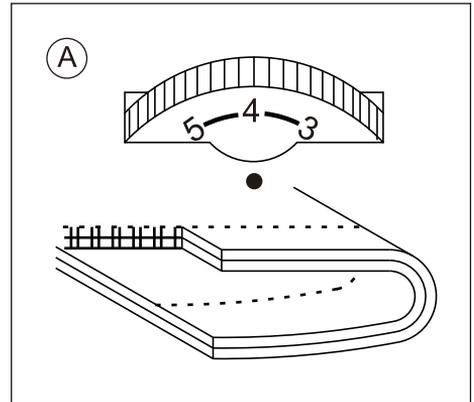


ADJUSTING THE THREAD TENSIONS

The thread tension must be properly balanced. If adjustment is required, it can be made by changing the upper thread tension.

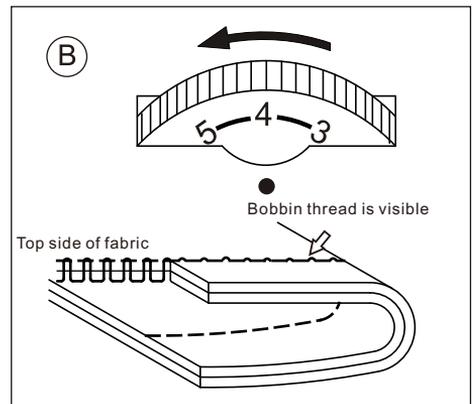
A. Correct Thread Tension

Upper and bobbin threads should interlock approximately in the middle of fabric.



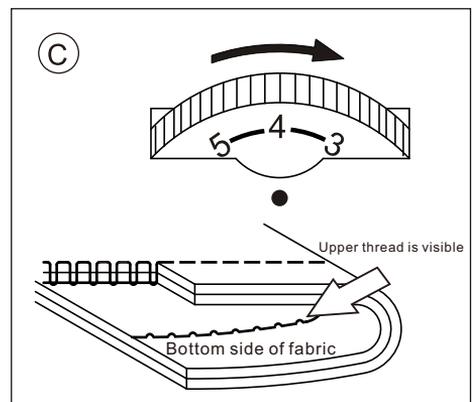
B. When bobbin thread appears on top side of fabric.

Turn the tension dial to a lower number to loosen the upper thread tension.



C. When upper thread appears on the bottom side of fabric.

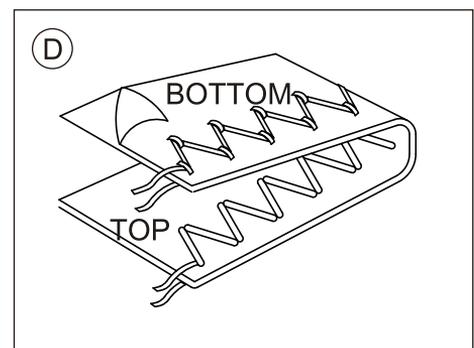
Turn the tension dial to a higher number to tighten the upper thread tension.



D. Thread Tension for Zigzag Stitches

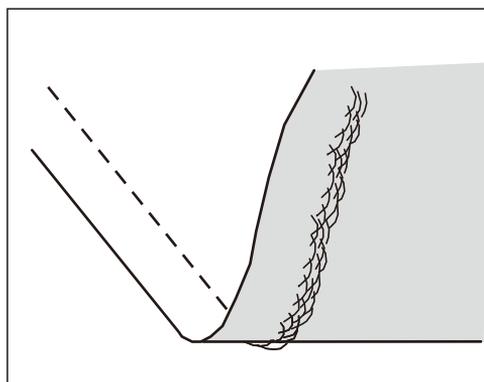
To sew zigzag stitches, the thread tension should be set to a slightly weaker tension than when sewing straight stitches.

You will obtain a nicer stitch when upper thread appears slightly on bottom side of fabric.



● **Helpful Hint**

Like shown in drawing, stitches on top side of fabric are good but bottom side tends to have a bunch of thread, it usually means that the upper thread is not threaded correctly (especially threading of the upper thread tension regulator may not correct.) Refer to page 13 for correct threading.



CAUTION: To prevent accidents.

The feed dog will feed the fabric automatically. Do not pull or push on fabric with hands. It will cause needle breakages or poor quality stitches.

FABRIC, THREAD AND NEEDLE TABLE

Needle system	Needle size															
	5	7	8	9	10	11	12	13	14	16	18	19	20	21	22	23
Ha×1																
System 705	45	55	60	65	70	75	80	85	90	100	110	120	125	130	140	160

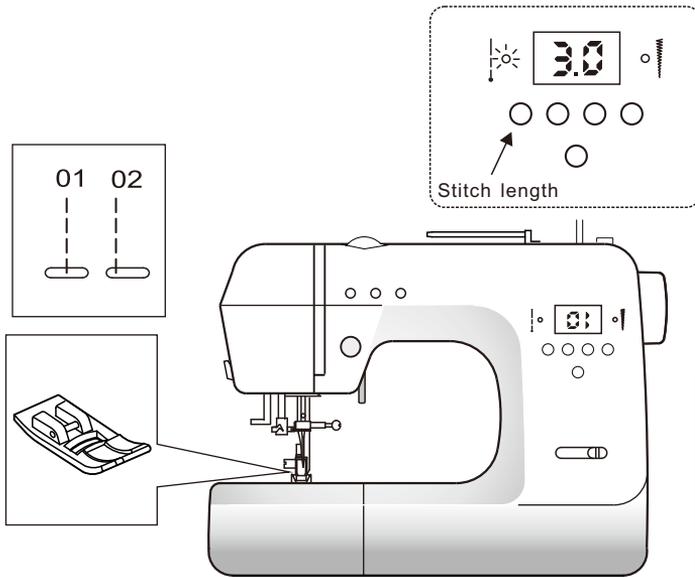
Select size of thread and needle in accordance with fabric to be sewn.

Type of Fabric	Thread Size	Needle Size
● Light Weight-thin georgette, organdy, viole, taffeta, silk, etc.	Ctn.# 80 - 100 Silk 60 - 80 Syn. 80 - 100	70/09-75/11 70/10-80/12
● Medium Weight-gingham, pique, linen, cotton, satin, thin corduroy, velvet	Ctn.# 50- 80 Silk 50 Syn. 50 - 80	80/12-90/14
● Heavy Weight-gabardine, tweed, denim, corduroy	Ctn.# 40 -50 Silk 50 Syn. 50 - 60	90/14-100/16
● Stretch-double knit, tricot, spandex, jersey	Ctn.# 50 - 80 Silk 50 Thread for knit	80/12-90/14 Needle for knit and synthetic fabric

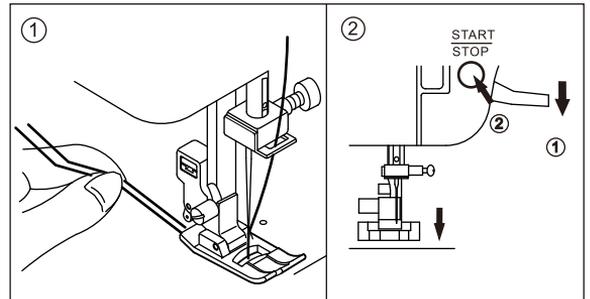
To change needle, see page 6.

STRAIGHT STITCH SEWING

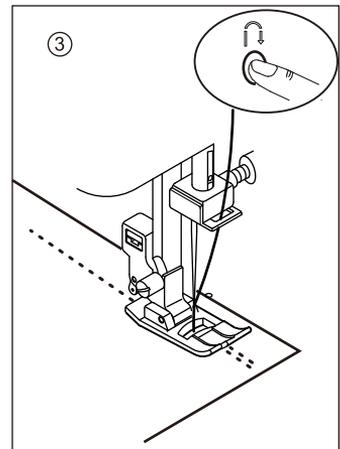
Straight stitch patterns should be selected according to the type of fabric being sewn.



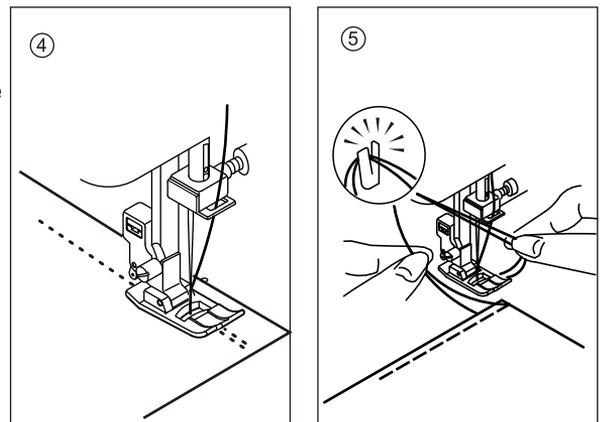
- Select the straight stitch pattern 01 or 02
- Attach all purpose foot.
- Adjust the stitch length and stitch width (see page 10) according to the type of fabric being sewn.



1. Position the fabric under the presser foot and lower it. Hold the upper thread and bobbin thread loosely behind the presser foot.
2. Lower the presser foot lever and press START/STOP button to start sewing.
(When foot control is used, press the pedal.)
Place hand lightly on the fabric while sewing to guide the fabric.

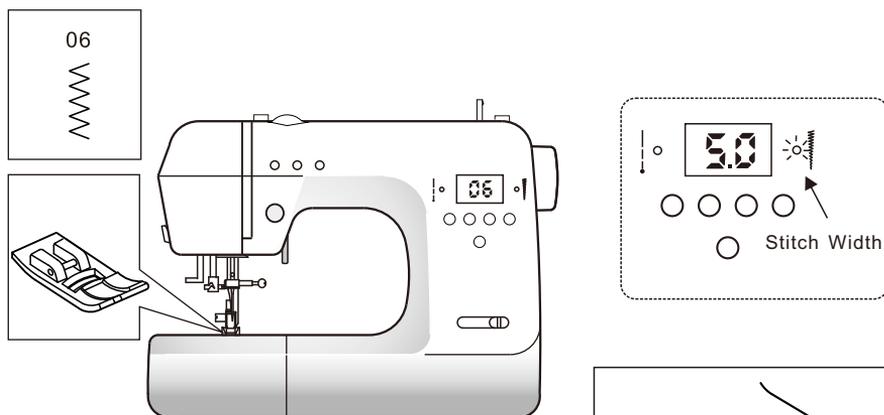


3. When you reach the end of seam, press the reverse button to sew 3-4 stitches.
4. Release the reverse button and stop sewing by pressing the START/STOP button (or releasing the pressure on foot control.)
5. Raise the presser foot and cut thread.



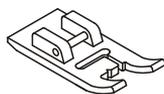
ZIGZAG STITCH SEWING

Your machine can sew zigzag stitches of various widths and lengths by changing the settings of the stitch width and stitch length.



Zigzag stitches are very good for joining two pieces of fabrics, applique and sewing various decorative patterns.

SATIN STITCHING

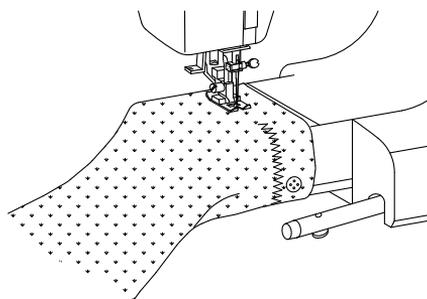
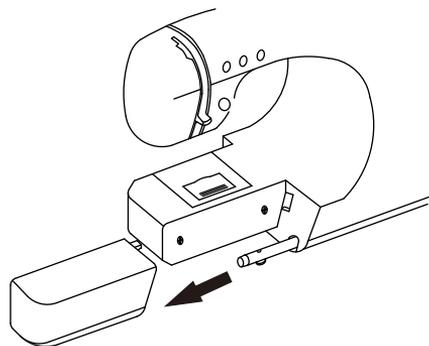
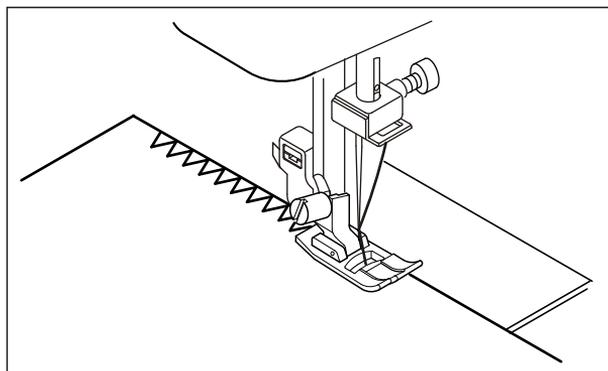


When you sew a satin stitch by shortening the stitch length, attach the satin foot.

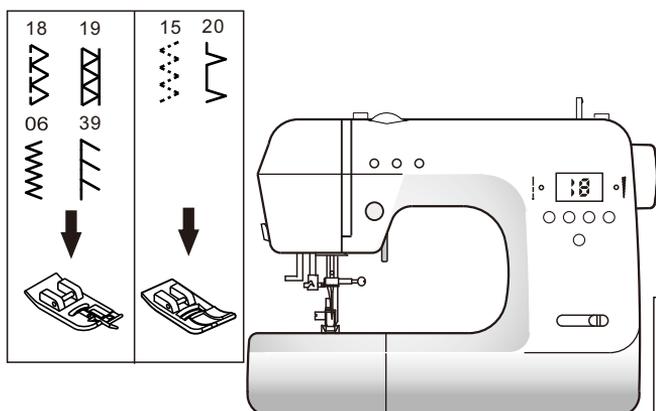
FREE ARM SEWING

By simply removing the flat bed attachment, machine becomes a free arm machine making hard to reach areas readily accessible.

- Refer to page 5 for removing flat bed attachment.



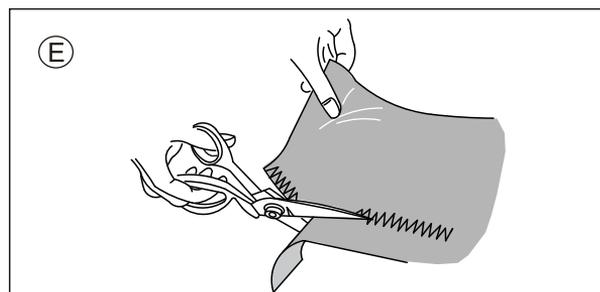
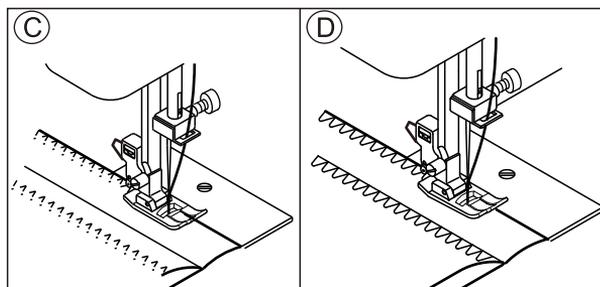
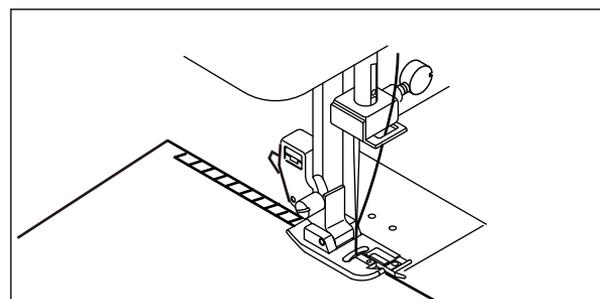
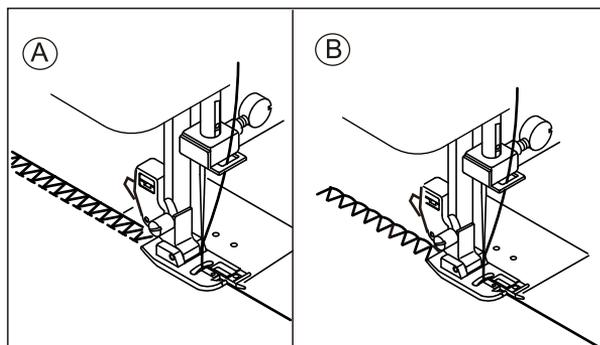
OVERCASTING-OVERLOCKING



USING THE OVERCASTING FOOT

Position the fabric against the guide plate of the overcasting foot so that the needle falls near the edge of the fabric.

- A. Overcasting stitches (width 7.0-5.0) are used for preventing raveling of fabrics.
- B. Some stitches can sew the seam and overcasting at the same time. Therefore, it is convenient for sewing easy to ravel and stretch fabrics.



CAUTION: To prevent accidents.

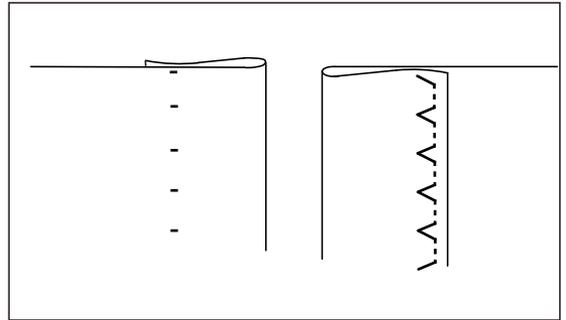
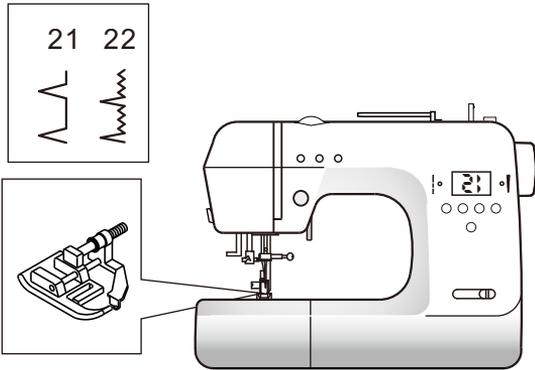
Overcasting foot should be used for sewing patterns 06, 18, 19, and 39 only and do not change the stitch width narrower than 5.0. It is possible that needle could hit the presser foot and break when sewing other patterns and width.

USING THE GENERAL PURPOSE FOOT

When using the all-purpose foot, place the fabric so that the needle will fall near the edge of fabric.

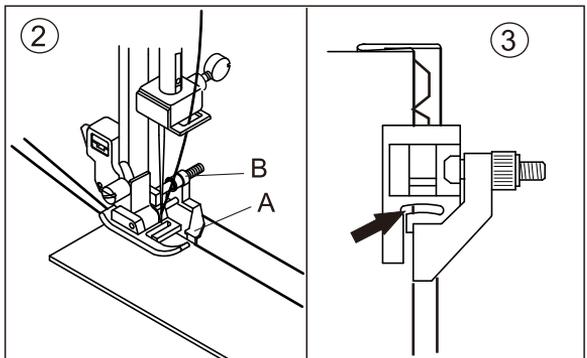
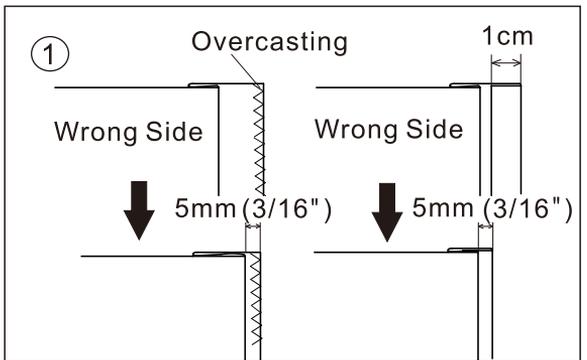
- C. Use a narrower zigzag width for thin or fine fabrics.
- D. Adjust the width and length for various weights of knit and stretch fabrics. (When using overcasting foot, do not change the width narrower than 5.0 mm)
- E. For ½ inch seam allowances, sew then trim the excess fabric close to the stitching. Be careful not to cut thread when cutting the fabric edge.

BLIND HEM STITCHING



This stitch will sew without stitches showing on right side of fabric.

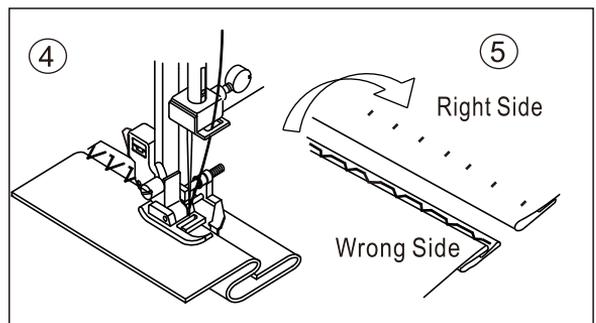
1. Fold the fabric as shown on drawing. Leave 5mm (approximately 3/16 inch) extended past the folded edge.
2. The guide (A) on the blind hem foot ensures even feeding of the fabric when blind hem stitching. The guide (A) is adjusted by turning the adjusting screw (B).
3. Place fabric so that the straight stitches are on the extended hem edge and the zigzag stitches just catch one thread of the folded edge. Turn the screw so that the guide barely touches the folded edge of fabric.
4. Lower the presser foot and sew hem, guiding fabric evenly along the guide.
5. Turn the fabric over when you have completed sewing.



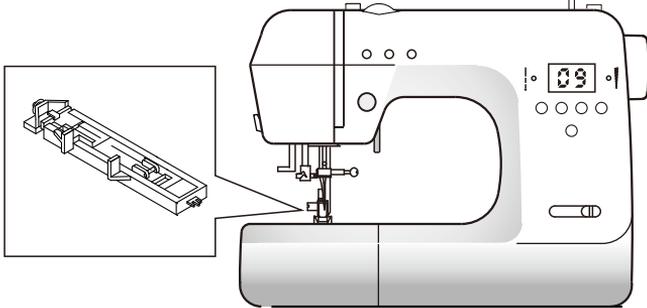
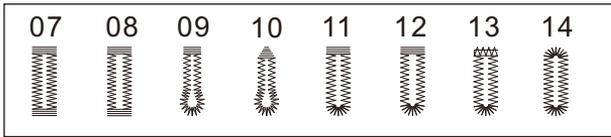
Note:

If too much of the stitching shows on the right side of the fabric, change to a narrower stitch width or move the guide on the foot to the right.

If the zigzag does not meet the fold, widen the stitch width or move the guide on the foot to the left.



BUTTONHOLE SEWING



1. Mark position and length of buttonhole on fabric.
2. Set button on the base and slide base forward to secure button.

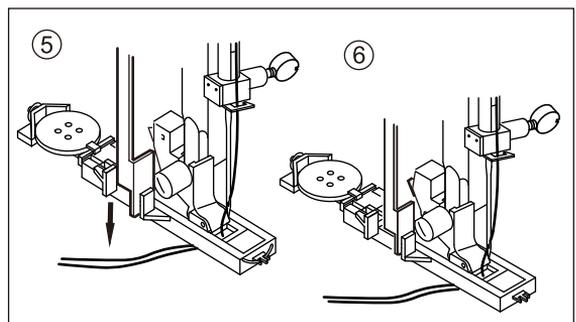
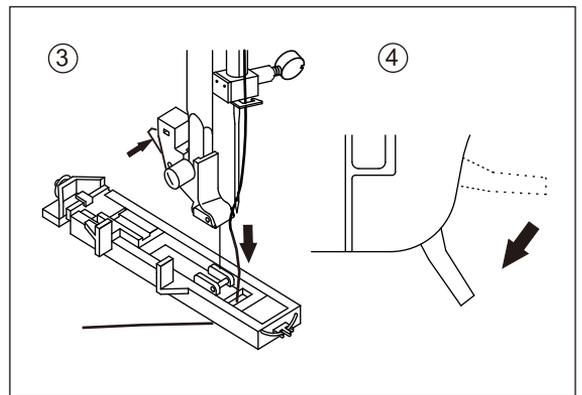
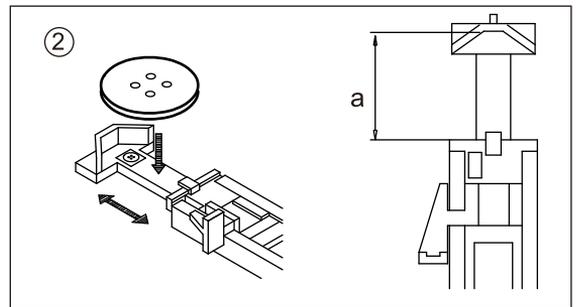
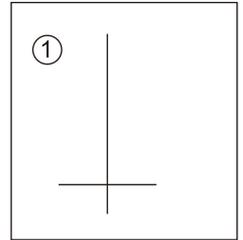
* If button does not fit on the base, adjust slide on base to diameter of button plus thickness of button.

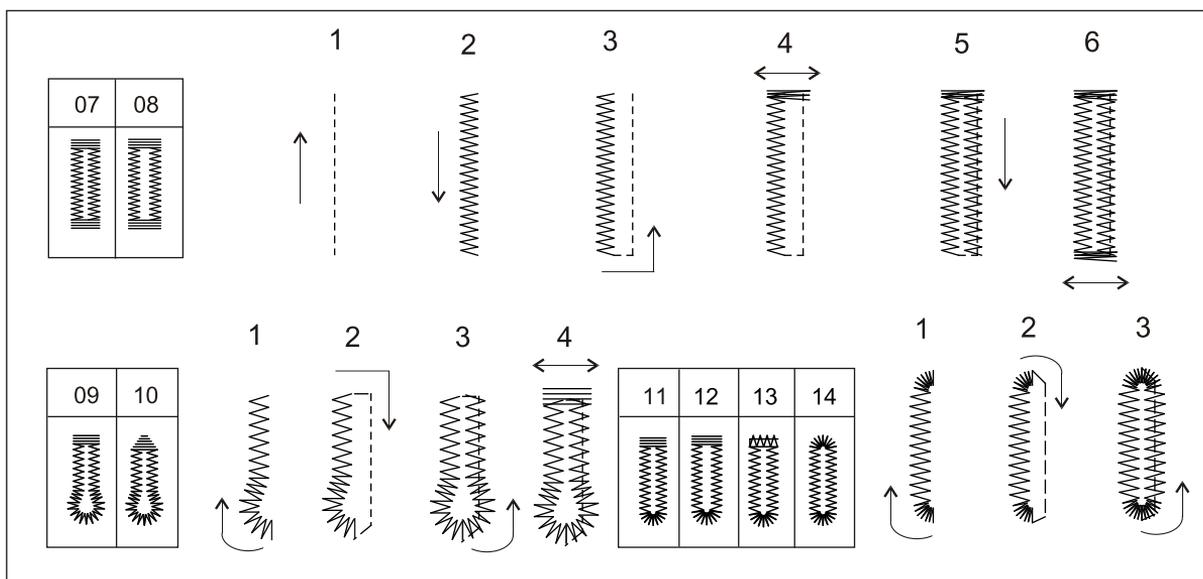
a = Length of button + thickness

3. Pass upper thread through the hole of buttonhole foot and attach buttonhole foot to machine. Bring upper and bobbin threads to the left under foot.
4. Position fabric under presser foot so that the center line mark is in the center of the needle opening in the buttonhole foot. With the main part of the foot pushed to the back lower the presser foot lever.
5. Lower the buttonhole foot lever so it is positioned behind the raised finger on the foot (see step 5 illustration). If this lever is not in position, the number will be flashed on LED screen.

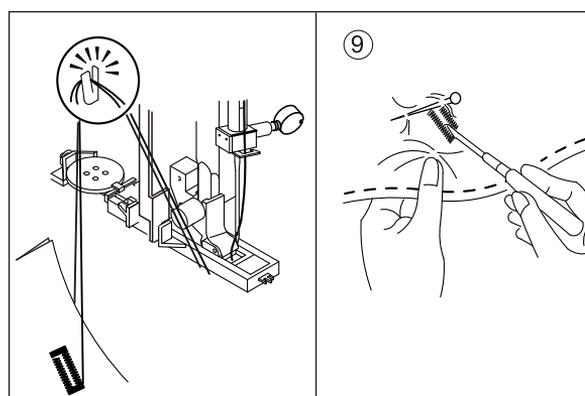
6. Hold upper thread lightly and start the machine.

Note: Machine will not start to sew if buttonhole lever is not lowered properly or buttonhole foot is not positioned correctly.





7. Machine will sew the buttonhole in the order as shown and stop automatically when buttonhole is completed
8. Raise the presser foot and cut threads. To sew same buttonhole, raise presser foot to return to buttonhole starting position.
9. With buttonhole cutter, cut center of buttonhole being careful not to cut stitches on either side. Use a pin as a stopper.



CAUTION: To prevent accidents.
When using buttonhole cutter, do not put your finger in the path of the cutter.

NOTE: When sewing stretch fabric
It is suggested that you use interfacing on the backside of the fabric.

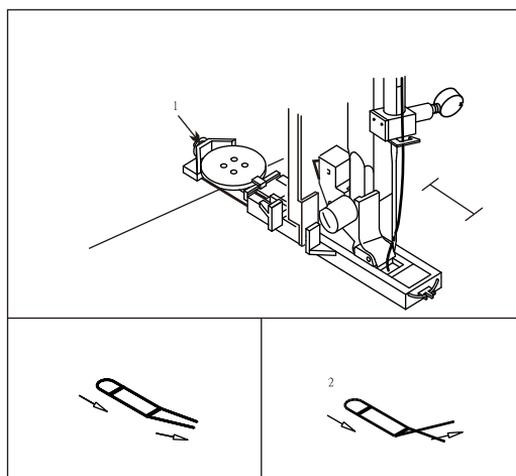
Note: Density of buttonhole legs may be adjusted with stitch length control.

CORDED BUTTONHOLES

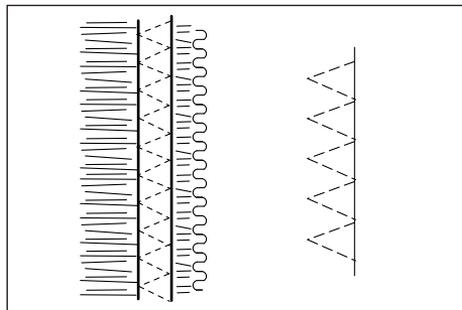
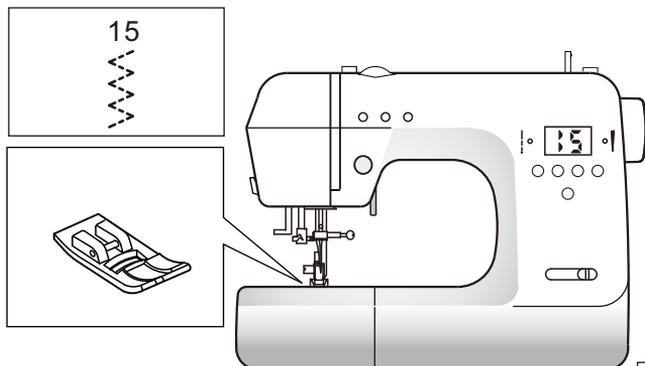
Hook the filler cord (crochet thread or buttonhole twist) to the spur in the back of the foot. Pull both ends of the cord forward and parallel under the guide.

Sew buttonhole in the way that zigzag stitches cover the cord. When completed, release the cord from foot.

Pull ends of the cord forward and snip off extra length.



MULTI-STITCH ZIGZAG



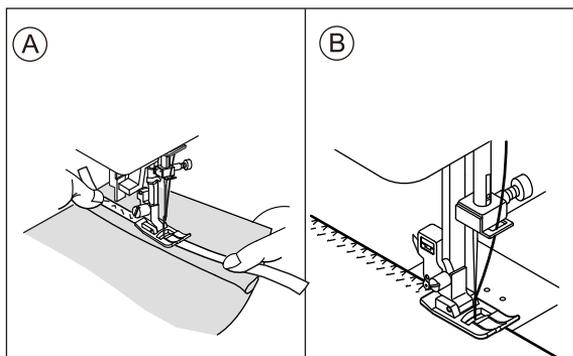
Used for sewing on elastic band and overcast stitching on knit fabrics.

A. Elastic Sewing

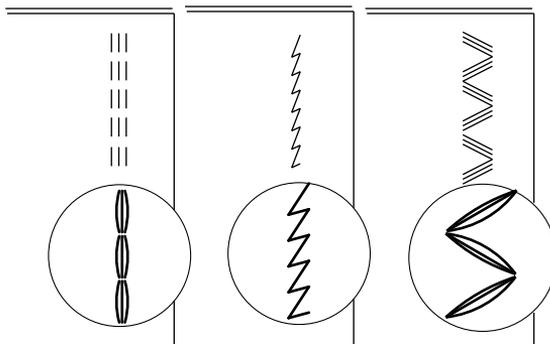
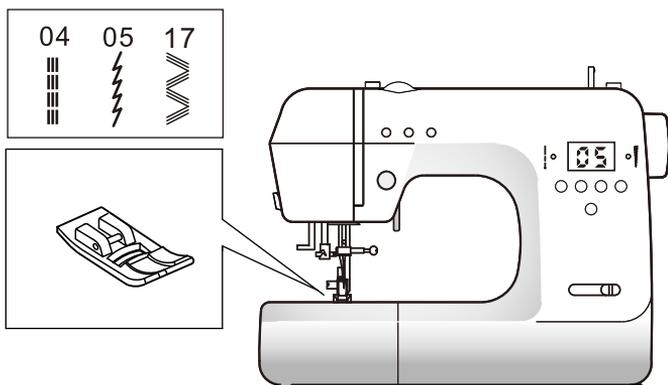
Stretch elastic in front and back of needle while sewing. Be careful not to bend needle while stitching.

B. Overcast stitching

Used for easy to ravel and knit fabrics. Guide fabric so right side is at the edge on the fabric.



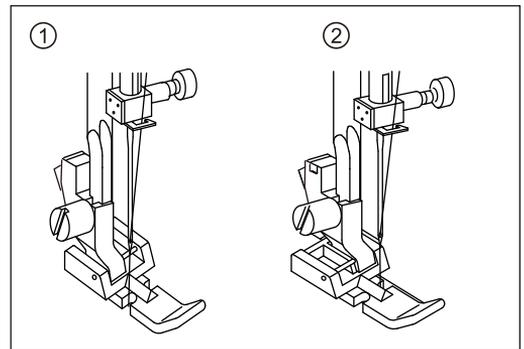
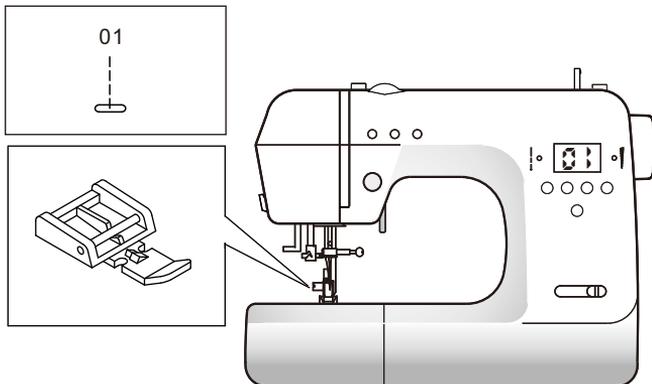
ELASTIC STITCH SEWING



Elastic stitch sewing assures you of a stitch that is strong and flexible and will give with the fabric without breaking. Good for stretch or knit fabrics and seams that require flexibility. It is good for joining durable fabrics such as denims.

We recommend that you use a needle for knit and synthetic fabrics to prevent skipped stitches and thread breakages.

INSERT ZIPPERS AND PIPING



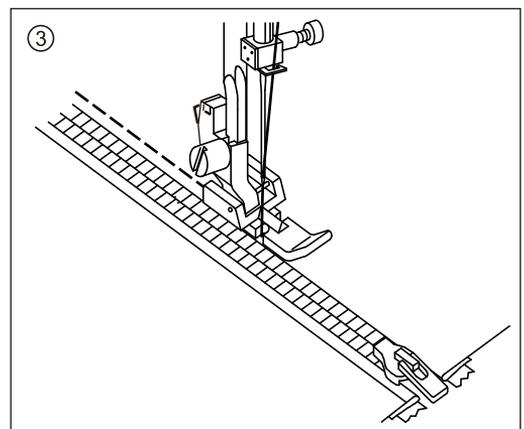
Align the right side or the left side of the zipper foot pin with the presser foot holder, lower the presser foot lever to attach the foot.

1. Needle stitches to the left of foot.

2. Needle stitches to the right of foot.

3. To insert zippers, consult the zipper package for instructions on how to prepare zipper placket and place zipper. To sew close to the zipper on the right side, snap the zipper foot onto the presser foot holder on the left side so the needle passes through the opening on the left side of the foot.

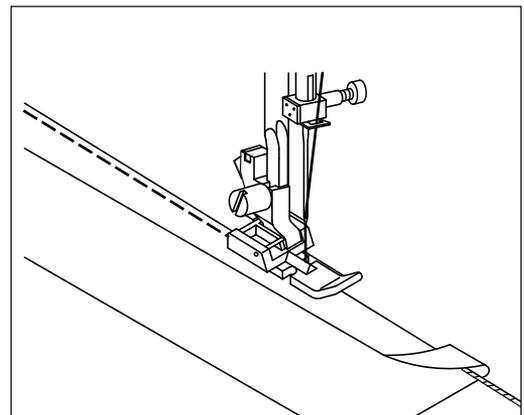
Snap the foot onto the presser foot holder on the other side of the foot to sew close to the left side of the zipper.



PIPING

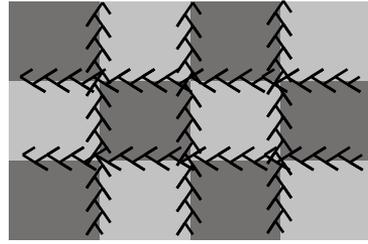
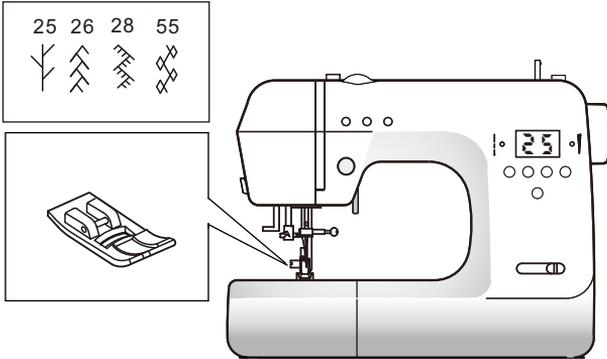
To insert piping, purchase pre-made piping or cover cording with a bias strip of fabric using the zipper foot snapped on to the right side of the presser foot holder. Place the piping between two layers of fabric. Stitch with the piping next to the foot so the stitching is tight against the cord.

Note: You may use stitch #02 if needle position has to be adjusted closer to your zipper or piping.



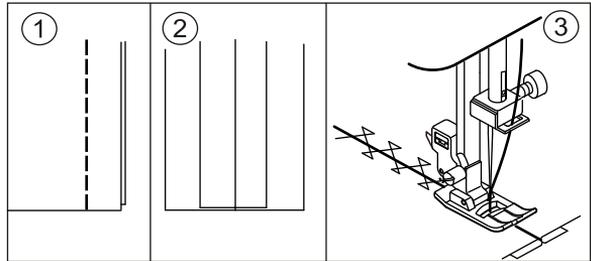
CAUTION: When using this stitch be **extremely careful** that the needle does not hit the presser foot. Turn handwheel towards you to insure the needle passes through the zipper foot opening. For the left side of the zipper foot it is recommended to adjust width **no higher** than 4.0 mm. For the right side of the zipper foot it is recommended to adjust width **no lower** than 3.5mm

PATCH WORK



For additional decorative purposes, use different kind of materials.

1. Place two pieces of fabric right sides together and sew a basting stitch.
2. Press the seam open.
3. Place fabric right side up and stitch with the seam line in the center of the foot. Stitches should fall on both sides of the seam line.

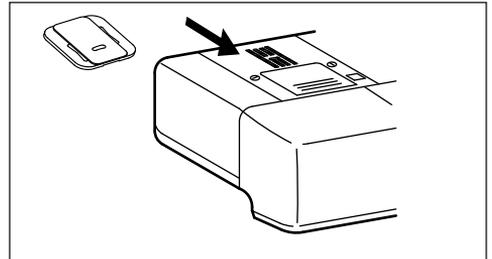


Darning

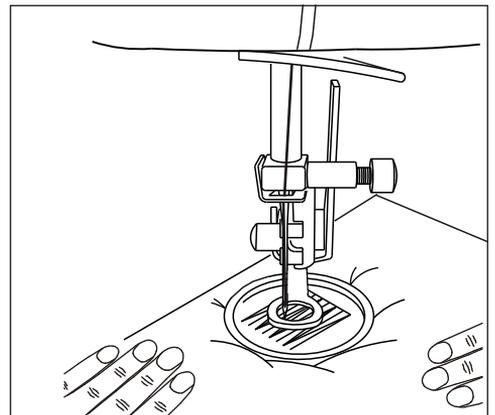
Select center needle position, straight stitch sewing stitch number 01. Set darning plate on the top of the needle plate over feed dog teeth. Align tabs on bottom of darning plate and snap into the two openings located on each side of feed dog teeth on needle plate.

Remove the presser foot and presser foot holder. Screw the darning foot onto the presser bar with the extended arm of the foot resting above the needle clamp screw. Holding the needle thread, take one stitch and pick up bobbin thread through the fabric.

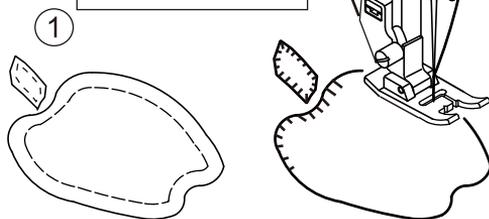
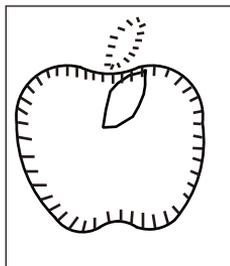
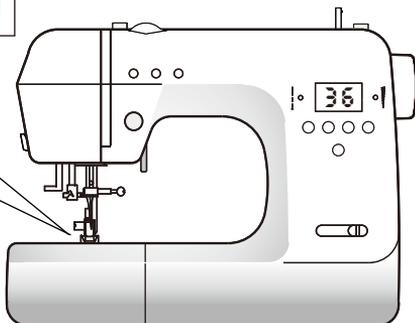
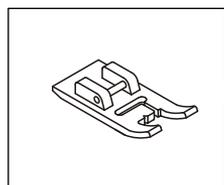
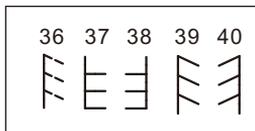
Lower presser foot lever and start sewing at a slow to medium speed, moving the fabric back and forth with a steady rhythm. Turn fabric and sew another layer of stitching across the first layer of stitching.



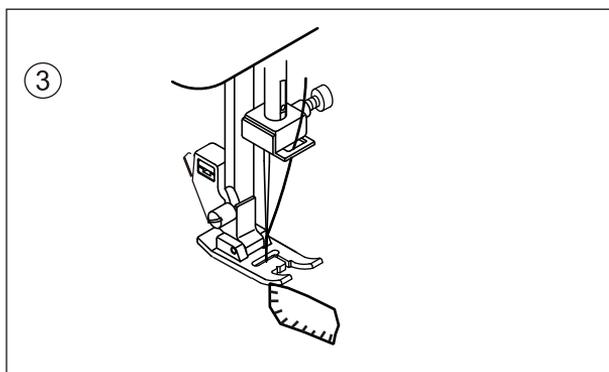
CAUTION: When using darning foot on machine with zig-zag stitches do not set the stitch width any wider than 4.0. Otherwise needle may deflect and hit the darning foot causing damage to machine or possible injury.



APPLIQUE



1. Position the applique on fabric with fabric glue, fusible iron on stabilizer or basting stitches. (When using fabric with frayed edges for the applique, press under 1/4 inch on all the edges.)
2. Sew along the edge of the applique. Align the straight part of the stitch with the edge of the applique to give this project a hand-made appearance.
3. When pivoting corners, lower the needle in the right side of the stitch. Raise the presser foot and use the needle to pivot and turn the fabric.



SCALLOP STITCH

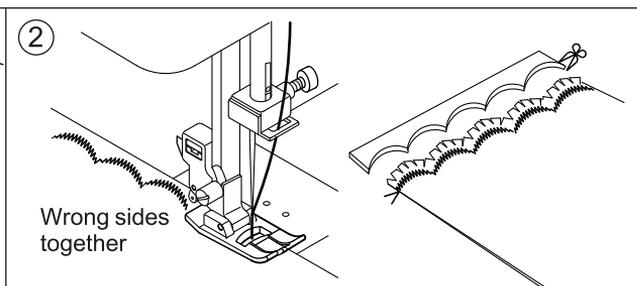
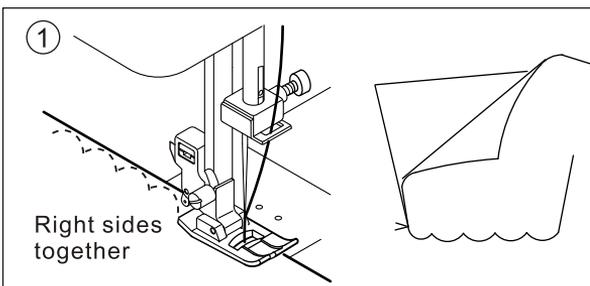
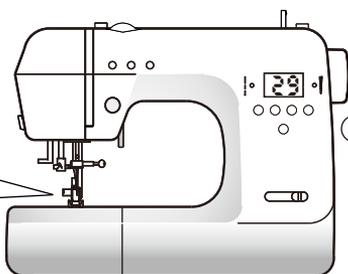
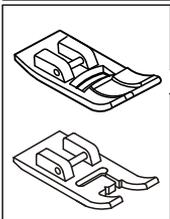
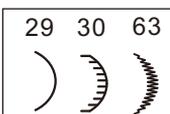
These stitches are used to sew a decorative edge on garments and table cloths.

① SCALLOP HEM

1. Fold the fabric with right sides together and sew near the edge.
2. Cut the fabric along the seam leaving an allowance of 3 mm (1/8") for seaming. Notch the allowance.
3. Turn fabric with right sides out and gently push out the curved seam then press.

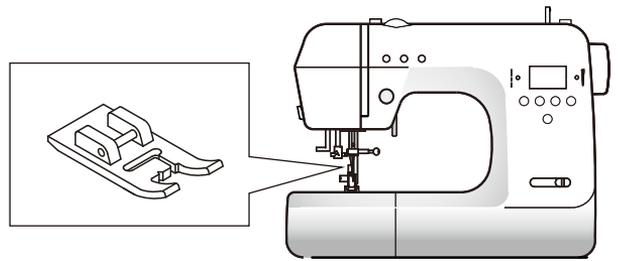
② DECORATIVE SCALLOP EDGE

1. Place the fabric with wrong sides together and stitch near the edge.
2. Trim along the outside edge of the stitching (being careful not to cut the stitching).
3. Use seam sealant or fabric glue to secure edges of the scallop stitching.



SEWING LETTERS

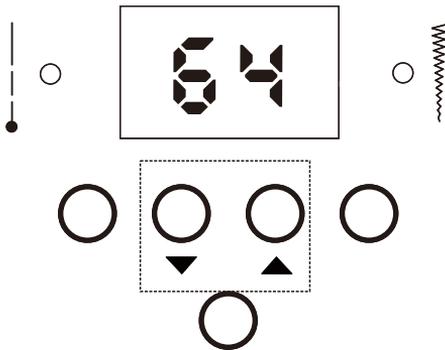
1. When you sew letters please use the open toe foot instead of general presser foot, it will have good effect and quality on your sewing.



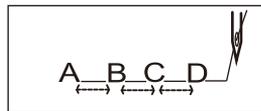
2. Please refer to letter chart to select numbers for the desired letters you want to sew.

3. For example, to sew ^{64 65 66 67}
A B C D

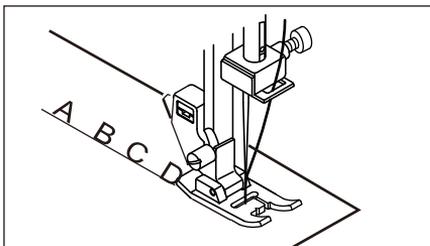
Select desired letters by pressing pattern selector.
Please refer to pattern chart on right side.



64	65	66	67	68	69	70	71	72	73	74	75	76	77
A	B	C	D	E	F	G	H	I	J	K	L	M	N
78	79	80	81	82	83	84	85	86	87	88	89	90	91
O	P	Q	R	S	T	U	V	W	X	Y	Z	0	1
92	93	94	95	96	97	98	99						
2	3	4	5	6	7	8	9						



4. A letter will sew each time, you may measure the distance among letters before sewing.



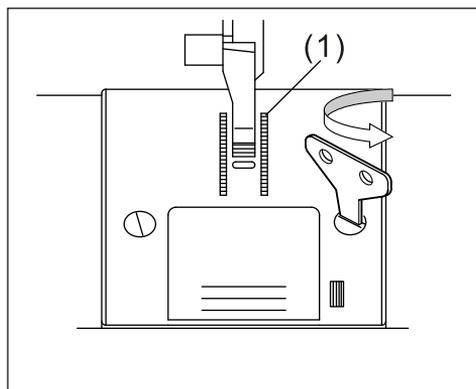
CARING FOR YOUR MACHINE

To ensure the best possible operation of your machine, it is necessary to keep the essential parts clean at all times. Always disconnect the machine from power supply by removing the plug from the electric outlet.



CAUTION: To prevent accidents.

Please switch off the power and unplug from electric outlet before you start cleaning.

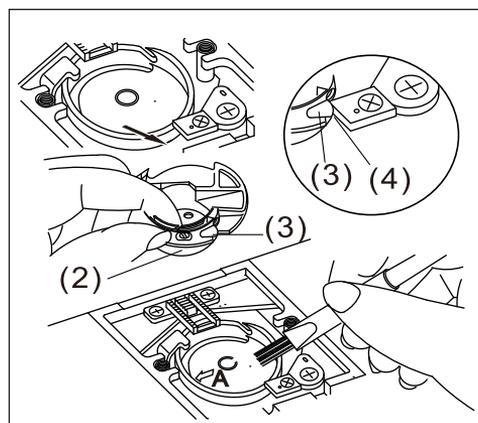


CLEANING THE FEED DOGS AND HOOK AREA

1. Raise the needle to its highest position.
2. Remove the needle plate (1)
3. Remove the bobbin and bobbin case (2)
4. Clean the feed dog and hook area with the lint brush.

NOTE: Put drop of sewing machine oil on the hook race as indicated by the arrow A.

5. Replace the bobbin case with the projection (3) positioned against the spring (4). Replace the needle plate.



HELPFUL HINTS

PROBLEM	CAUSE	CORRECTION	PAGE
Upper thread breaks	<ul style="list-style-type: none"> ● Machine not properly threaded. ● Thread entwined around bobbin. ● Needle inserted incorrectly. ● Thread tension too tight. ● Thread of incorrect size or poor quality. 	Re-thread machine.	13
		Remove entwined thread.	12
Lower thread breaks	<ul style="list-style-type: none"> ● Bobbin threaded incorrectly. ● Bobbin wound unevenly or too full. ● Dirt in the bobbin and hook area. 	Re-thread the bobbin.	12
		Rewind the bobbin.	11
Machine skips stitches	<ul style="list-style-type: none"> ● Needle inserted incorrectly. ● Bent or blunt needle. ● Incorrect size of needle on stretch fabric. 	Re-insert needle.	6
		Insert new needle.	6
Fabric puckers	<ul style="list-style-type: none"> ● Machine not properly threaded. ● Bobbin threaded incorrectly. ● Blunt needle. ● Thread tension too tight. 	Choose correct size of needle for fabric.	18
		Use stretch needle	18
Machine makes loose stitches or loops	<ul style="list-style-type: none"> ● Bobbin threaded incorrectly. ● Machine not properly threaded. ● Tension not adjusted properly. 	Re-thread machine.	13
		Re-thread the bobbin.	12
Threader does not thread needle eye	<ul style="list-style-type: none"> ● Needle is not raised. ● Needle inserted incorrectly. ● Bent needle. 	Insert new needle.	6
		Raise the needle.	8
Machine does not feed properly	<ul style="list-style-type: none"> ● Darning plate attached. ● Lint and dust accumulated around feed dog. 	Remove darning plate.	27
		Clean the feed dog area.	30
Needle breaks	<ul style="list-style-type: none"> ● Fabric pulled while sewing. ● Needle is hitting the presser foot. ● Needle inserted incorrectly. ● Incorrect size needle or thread for fabric being sewn. 	Do not pull fabric.	15
		Select correct foot and pattern.	19
Machine runs with difficulty	<ul style="list-style-type: none"> ● Dirt or lint accumulated in the hook race and feed dog. 	Re-insert needle.	6
		Choose correct size needle and thread.	18
Machine will not run	<ul style="list-style-type: none"> ● Cord not plugged into electrical outlet. ● Power switch is not turned on. ● Bobbin winder spindle is pushed to the right. ● Presser foot is not lowered. ● Buttonhole Sewing Mode; – Buttonhole lever is not lowered completely. – Buttonhole foot is not attached. 	Remove the needle plate and bobbin case and clean the hook race and feed dog.	30
		Insert plug fully into outlet.	7
		Turn on the power switch.	7
		Push spindle to the left.	11
		Lower the foot.	15
–Lower the buttonhole lever.	23		
–Attach the buttonhole foot.	23		

