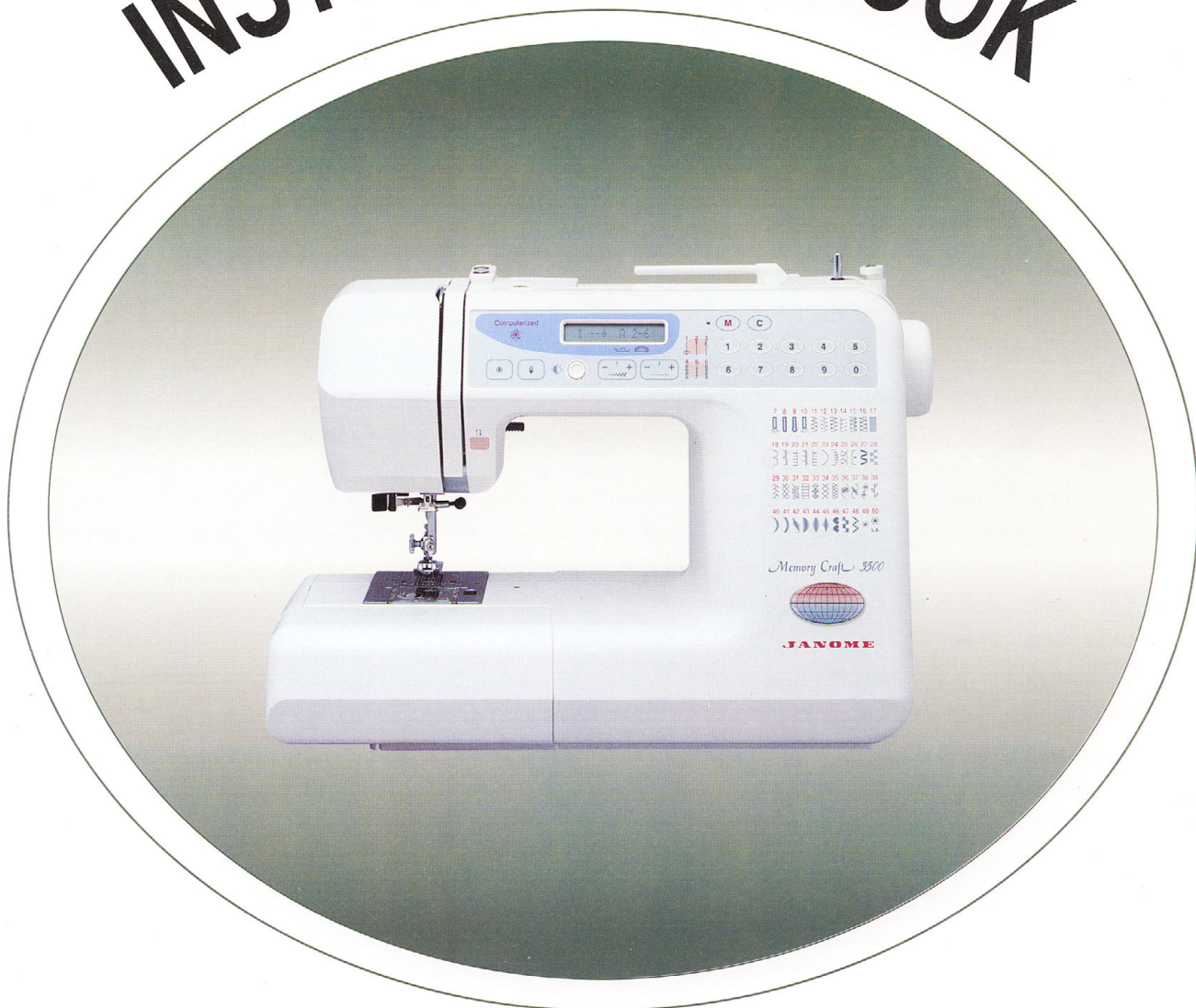


# INSTRUCTION BOOK



*Memory Craft 3500*

## IMPORTANT SAFETY INSTRUCTIONS

Your sewing machine is designed and constructed only for HOUSEHOLD use.  
Read all instructions before using this sewing machine.

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

1. An appliance should never be left unattended when plugged in. Always unplug this appliance from the electric outlet immediately after using and before cleaning.
2. Always unplug before relamping. Replace bulb with same type rated 13.2 V d.c., 3 Watts.
3. Do not reach for the appliance that has fallen into water. Unplug immediately.
4. Do not place or store appliance where it can fall or be pulled into a tub or sink. Do not place in 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 appliance is used by or near children.
2. Use this appliance only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
3. Never operate this appliance if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the appliance to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
4. Never operate the appliance with any air opening blocked. Keep ventilation openings of the sewing machine and foot controller free from 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 (‘‘0’’) 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 the sewing machine needle.
11. Always use the 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 the sewing machine off (‘‘0’’) when making any adjustment in the needle area, such as threading needle, changing needle, threading bobbin, or changing presser foot, and the like.
15. 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.

## SAVE THESE INSTRUCTIONS

### **IMPORTANT**

Be sure to keep machine away from static electricity, heat sources, humidity, and direct sunlight.  
When using your sewing machine for the first few times, place a waste fabric under the presser foot and run the machine without thread for a few minutes. Wipe away any oil which may have appeared.

## TABLE OF CONTENTS

### SECTION I NAME OF PARTS

Names of Parts .....	2
Extension Table (Accessory Storage Box).....	3


### SECTION II GETTING READY TO SEW

Connecting Machine to Power Supply .....	4
Controlling Sewing Speed .....	4
Main Function of Keys .....	5-6
Winding the Bobbin .....	7-8
• Set the Spool .....	7
• Removing the Bobbin .....	7
• Winding the Bobbin .....	7
• Inserting the Bobbin .....	8
Threading the machine .....	9-11
• Threading the machine .....	9
• Needle Threader .....	10
• Drawing Up the Bobbin Thread .....	11

### SECTION III BASIC SEWING

Straight Stitching .....	12-13
• Starting to Sew .....	12
• Changing Sewing Direction .....	12
• Finishing Sewing .....	12
• Adjusting Stitch Length Manually .....	13
• Variable Needle Position .....	13
Variation of Straight Stitching .....	14
• Straight Stitch .....	14
• Locking Stitch .....	14
• Lock-A-Matic .....	14
• Triple Stretch Stitch .....	14
• Stretch Stitch .....	14
• Saddle Stitch .....	14
Adjust the Top Thread Tension .....	15
• Choose the Correct Tension .....	15
• Tension is too tight .....	15
• Tension is too loose .....	15
Seam Allowance Lines .....	16
Turn a Square Corner .....	16
When Sewing Heavy Fabrics .....	16
Pressure Adjusting Lever .....	16
To Raise or Drop the Feed Dog .....	16
Changing Needles .....	17
To Remove and Attach Presser Foot .....	17
To Remove and Attach the Foot Holder .....	17
Choose Your Needle and Thread .....	18
Zigzag Stitch .....	19
• Manual Stitch Width and Length .....	19

### SECTION IV UTILITY STITCHING

Overcasting .....	20
• Zigzag Stitch .....	20
• Overcasting Variations .....	20
Buttonhole .....	21-26
• Buttonhole Variations .....	21
Sensor Buttonhole .....	21-23
• Preparation for Sewing .....	21
• To Sew .....	21
• To Alter Buttonhole Stitch Width and Density .....	23
• Rounded and Keyhole Buttonholes .....	24
Automatic Buttonhole (BH 10  ) .....	25
Corded Buttonhole .....	26
Sew a Button .....	27
Zipper Sewing .....	28-29
• To Snap On the Zipper Foot .....	28
• Fabric Preparation .....	28
• To Sew .....	28
Blind Stitch Hemming .....	30
• Changing Needle Position .....	30
Rolled Hem .....	31

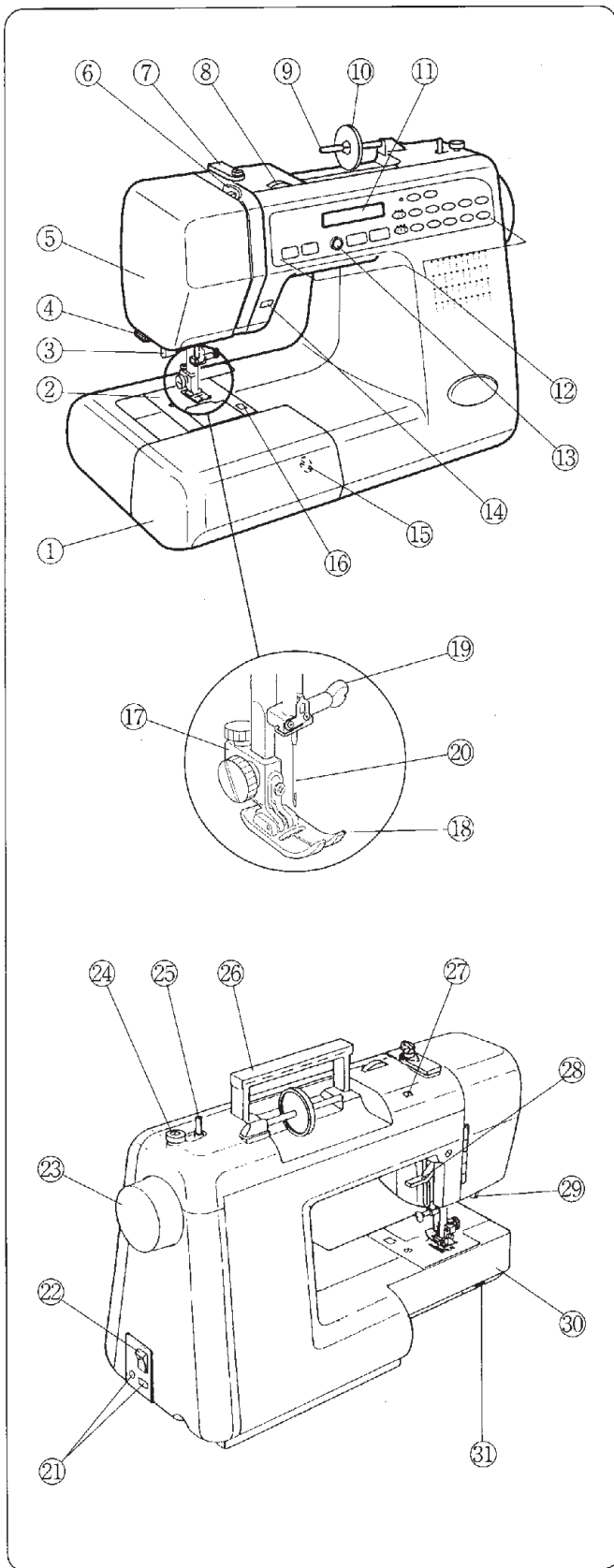
### SECTION V DECORATIVE STITCHING

Shell Stitch .....	32
Patchwork .....	32
Smocking .....	32
Decorative Stitches .....	33
Scallop Hems .....	33
Edging .....	33
Appliqué .....	34
Drawn Work .....	34
Cording .....	35
Wide Cording .....	36
Cross Stitch .....	36
Quilting .....	36
Darning .....	37
Adjusting Pattern Balance .....	38
Program Decorative Stitch Patterns .....	39-40

### SECTION VI CARE OF YOUR MACHINE

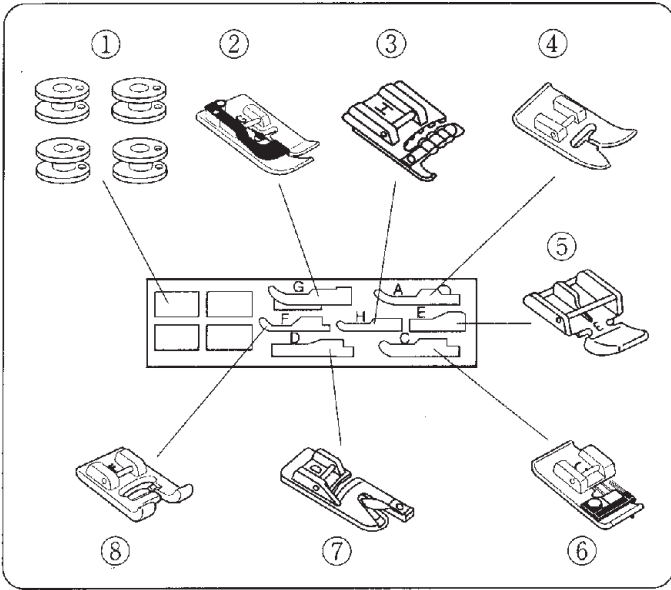
Care of Your Machine .....	41
Cleaning the Hook Race and Feed Dog .....	41
Replacing the Bobbin Holder .....	41
Troubleshooting .....	42-43
Replacing the Light Bulb .....	44
When Message Appear on the Screen .....	44

## SECTION I NAME OF PARTS



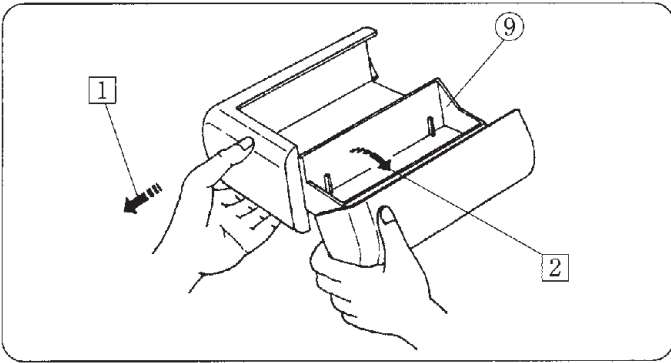
### Names of Parts

- ① Extension table (Accessory box)
- ② Needle plate
- ③ Needle threader
- ④ Thread cutter
- ⑤ Face plate
- ⑥ Thread take-up lever
- ⑦ Upper thread guide
- ⑧ Thread tension dial
- ⑨ Spool pin
- ⑩ Spool holder
- ⑪ Liquid crystal display
- ⑫ Function keys
- ⑬ Screen sharpness adjusting knob
- ⑭ Reverse button
- ⑮ Feed balancing dial
- ⑯ Hook cover plate release button
- ⑰ Foot holder
- ⑱ Presser foot
- ⑲ Needle clamp screw
- ⑳ Needle
- ㉑ Machine sockets
- ㉒ Power switch
- ㉓ Hand wheel
- ㉔ Bobbin winder stopper
- ㉕ Bobbin winder spindle
- ㉖ Carrying handle
- ㉗ Hole for additional spool pin
- ㉘ Presser foot lifter
- ㉙ Buttonhole lever
- ㉚ Free arm
- ㉛ Drop feed lever

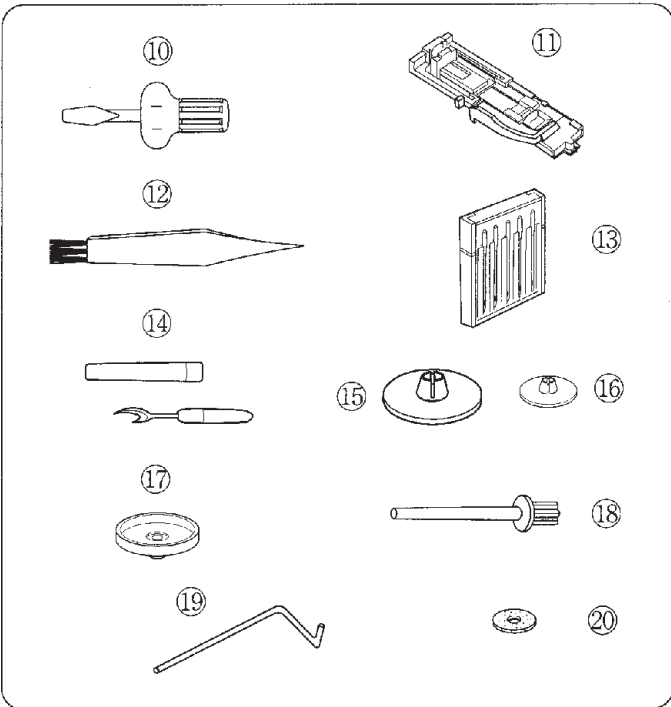


### Extension Table (Accessory Storage Box)

- ① Bobbin
- ② G: Blind hem stitch foot
- ③ H: Cording foot
- ④ A: Zigzag foot
- ⑤ E: Zipper foot
- ⑥ C: Overedge foot
- ⑦ D: Hemmer foot
- ⑧ F: Satin stitch foot



- ⑨ Extension Table
- ① Pull the end of the extension table away from the machine, as illustrated.
- ② The lid of the accessory storage box lifts open toward you.  
Sewing accessories are conveniently located in the box.



- ⑩ Screwdriver
- ⑪ R: Automatic buttonhole foot
- ⑫ Lint brush
- ⑬ Set of needles
- ⑭ Seam ripper
- ⑮ Large spool holder
- ⑯ Small spool holder
- ⑰ Spool stand
- ⑱ Additional spool pin
- ⑲ Quilter
- ⑳ Spool pin felt

## SECTION II GETTING READY TO SEW

### Connecting Machine to Power Supply

Before connecting the power cord, make sure the voltage and frequency shown on the machine conform to your electrical power.

#### For Use of the Foot Control:

- \* Turn off the power switch, and insert the foot control plug ① and the machine plug ② into the machine and the power supply plug ③ into the wall, in this order.

- |                     |                     |
|---------------------|---------------------|
| ① Foot control plug | ④ Power switch      |
| ② Machine plug      | ⑤ Power supply cord |
| ③ Power supply plug | ⑥ Foot control      |

#### For Your Safety:

1. While in operation, always keep your eye on the sewing area, and do not touch any moving parts such as the thread take-up lever, handwheel or needle.
2. Always turn off the power switch and unplug from the power supply:
  - \* When leaving the machine unattended.
  - \* When attaching or removing parts.
  - \* When cleaning the machine.
3. Do not place anything on the foot control, except in use.

#### Operating Instructions:

The symbol "0" on the power switch indicates the off position.

For appliances with a polarized plug (one blade wider than the other):

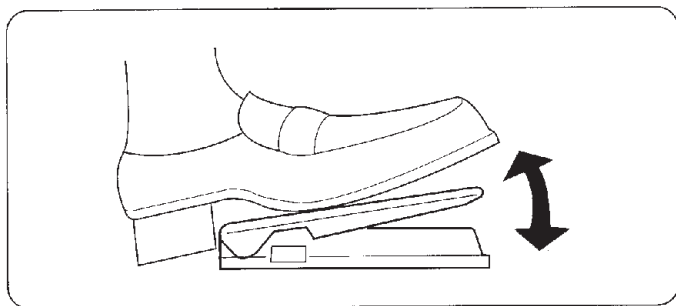
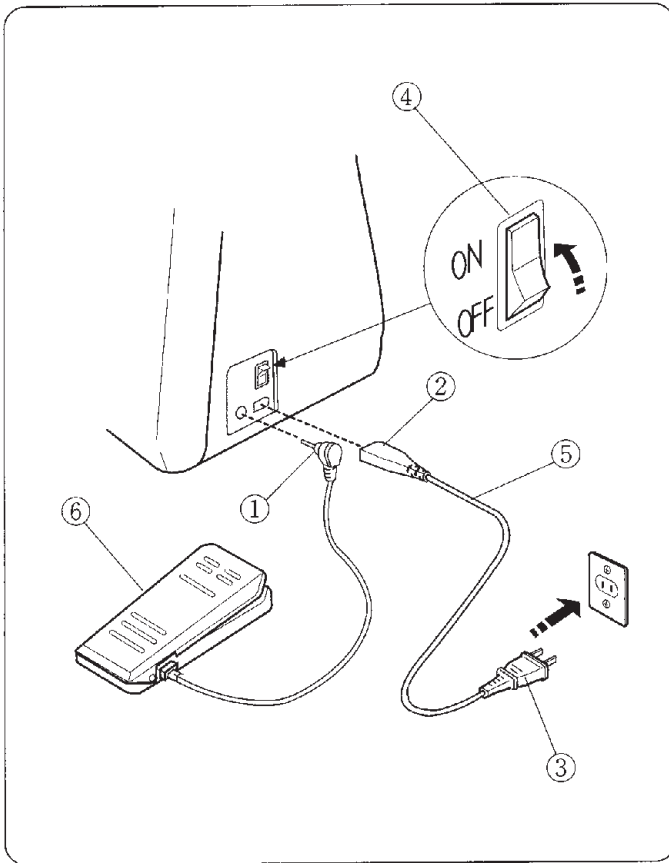
To reduce the risk of electric shock, this plug is intended to fit in an outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not modify the plug in any way.

Foot Controller Model 21249 use with Sewing Machine Model MC3500.

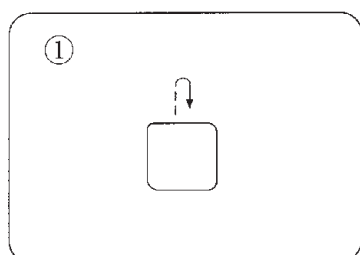
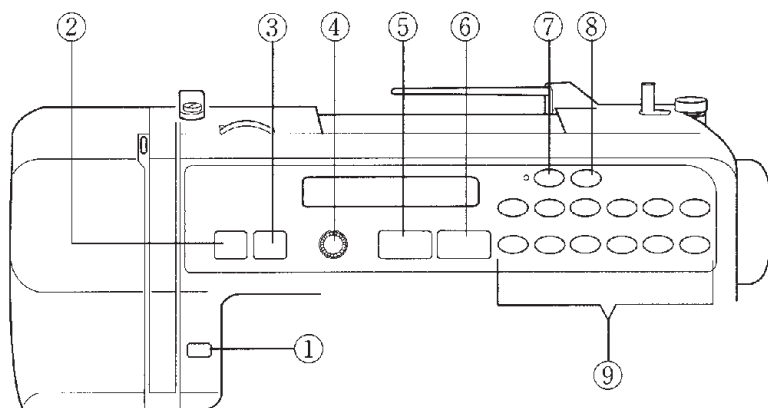
(For U.S.A. market only.)

### Controlling Sewing Speed

Sewing speed can be varied by the foot control. The harder you press on the foot control, the faster the machine runs.



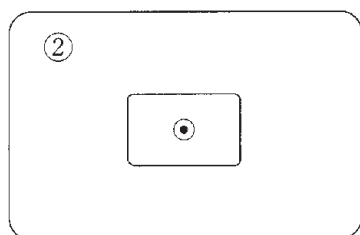
## Main Function of Keys



### ① Reverse Button

During straight stitching  $\downarrow$ , zigzag stitching  $\text{wv}^{\text{11}}$  and multiple zigzag stitching  $\text{wv}^{\text{12}}$ , press and hold the reverse button. The machine will sew in reverse until you release the button.

During utility stitching and decorative stitching, press this button and the machine will sew an auto-lock stitch and stop automatically.



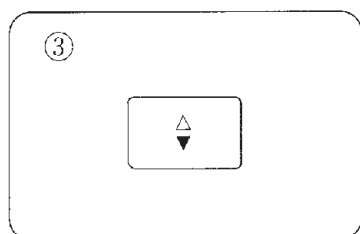
### ② Auto-Lock Key

During straight stitching  $\downarrow$ , zigzag stitching  $\text{wv}^{\text{11}}$  and multiple zigzag stitching  $\text{wv}^{\text{12}}$ :

The machine will take a few stitches in place and stop automatically.

During utility stitching and decorative stitching:

Press this key when running the machine to sew an auto-lock stitch at the end of pattern and stop automatically.

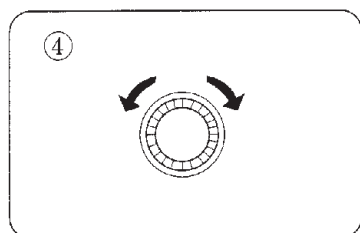


### ③ Up/Down Needle Position Key

When you press this key, the needle will go up or down.

If the needle is up and you press this key, the needle will go down to its lowest position.

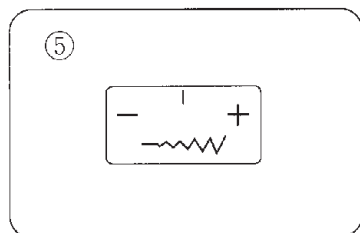
If the needle is down and you press this key, the needle will go to its highest position.



### ④ Screen Sharpness Adjusting Knob

For adjusting the clarity of the display screen.

\* Turn the screen sharpness adjusting dial if the display screen is not clear (or completely dark), when turning on the power switch.



### ⑤ Stitch Width Control Key

Stitch width and stitch length will show on the liquid crystal display.

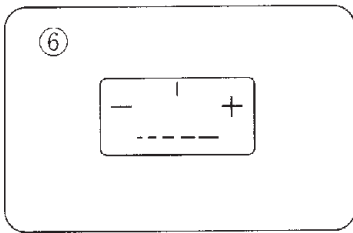
\* To decrease the stitch width, press the “ - ” key .

The stitch width will decrease.

\* To increase the stitch width, press the “ + ” key .

The stitch width will increase.

\* You can change the needle drop position when using these patterns: 1, 2, 3, 4, 18 & 19 (see page 30).



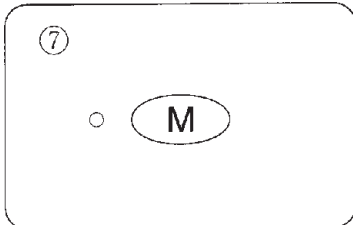
⑥ **Stitch Length Control Key**

Stitch width and stitch length will show on the display.

To decrease the stitch length, press the “-” key.

The stitch length will decrease. To increase the stitch length, press the “+” key.

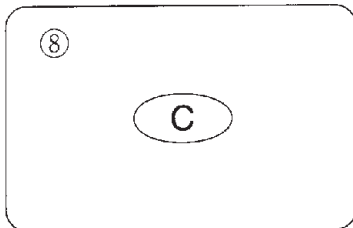
The stitch length will increase.



⑦ **Memory Key**

When this key is pressed after selecting a pattern, the pattern will be memorized as many times as the key is pressed. When the key is pressed after selecting another pattern, that pattern will be memorized after the previously memorized pattern.

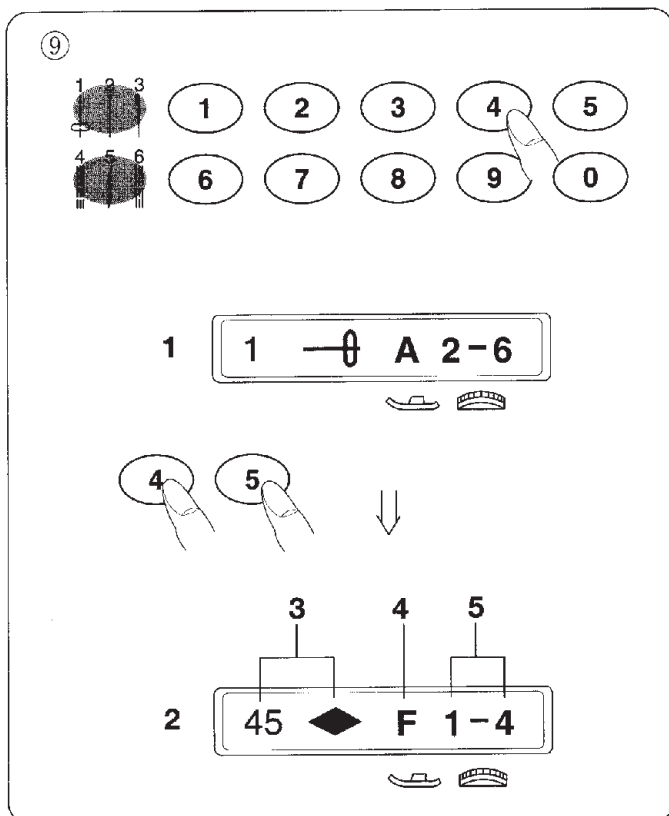
(Up to 50 patterns, including the locking stitch at the end, can be programmed in the memory.) (Stitch patterns 2, 3, BH 7~10, 17, 18, 19 can not be programmed in the memory.)



⑧ **Clear Key**

When this key is pressed before starting sewing, the memorized characters can be cleared one by one.

When the key is pressed after starting sewing, the entire memorized program is cleared.



⑨ **Pattern Selection Number (Keys)**

Patterns 1 to 6 can be selected by pressing keys 1 to 6 directly.

\* To select Pattern 24 (for example), press the number 2 key and the number 4 key.

To select Pattern 4 (example), press the clear key C, then press 4.

To choose patterns 7 to 50, use the number keys to select the desired pattern.

**1**— Appears on the screen when you turn on the power switch or select Pattern 1.

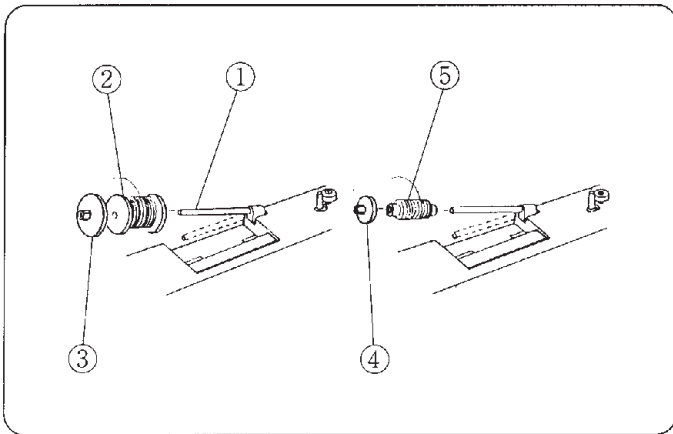
**2**— Displayed when you select Pattern 45 (example).

**3**— Indicates the stitch pattern number and stitch.

**4**— Indicates the recommended presser foot for the selected pattern.

**5**— Indicates the recommended thread tension for the selected pattern.





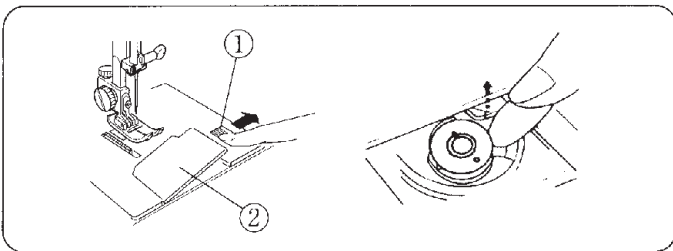
## Winding the Bobbin

### • Set the Spool

Lift up the spool pin and place the spool of thread on it with the thread coming off the spool, as shown. Press the large spool holder firmly against the spool of thread.

\* The small spool holder is for small or narrow spools of thread.

- ① Spool pin
- ② Ordinary spool
- ③ Large spool holder
- ④ Small spool holder
- ⑤ Small spool

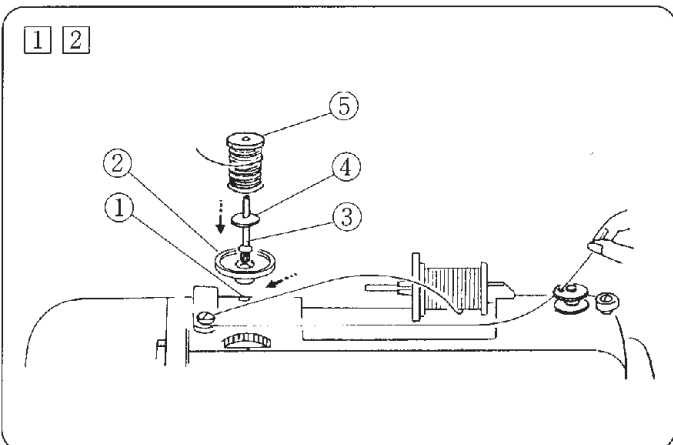


### • Removing the Bobbin

Slide the hook cover plate release button to the right and remove the cover plate.

Lift out the bobbin.

- ① Hook cover plate release button
- ② Hook cover plate



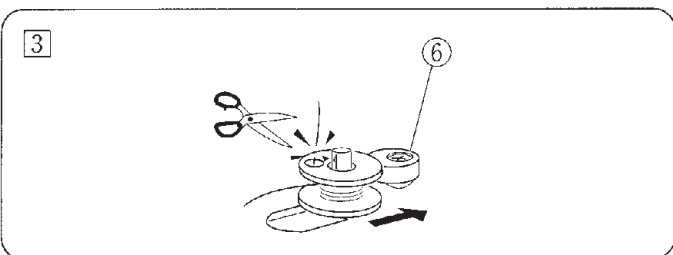
### • Winding the Bobbin

① Guide the thread around the thread guide.

② Thread through the hole in the bobbin from the inside to the outside.

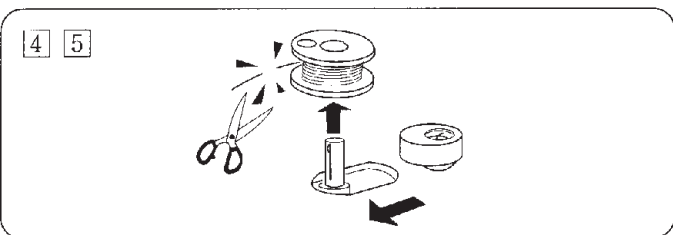
\* The additional spool pin is used to wind an extra bobbin without unthreading the machine. To use, insert the spool stand and the additional spool pin in the hole. Place the felt and spool on the pin with the thread coming off the spool as shown.

- ① Hole for additional spool pin
- ② Spool stand
- ③ Additional spool pin
- ④ Felt
- ⑤ Spool



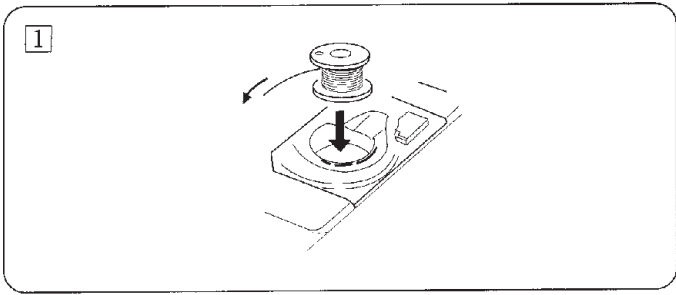
③ Put the bobbin on the bobbin winder spindle and push it to the right. With the free end of the thread held in your hand, depress the foot control. Stop the machine when it has made a few turns, and cut the thread close to the hole in the bobbin.

- ⑥ Bobbin winder stopper



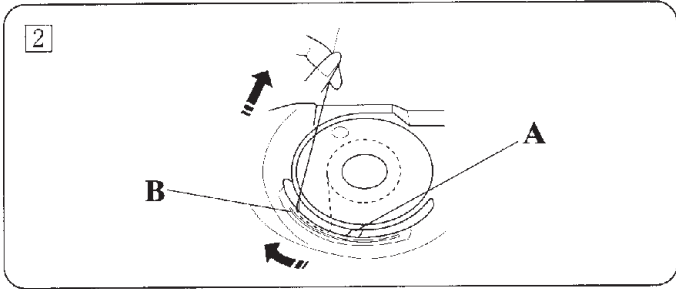
④ Depress the foot control again. When the bobbin is fully wound, it will stop automatically.

⑤ Return the bobbin winder to its original position by moving the spindle to the left, and cut the thread as shown.

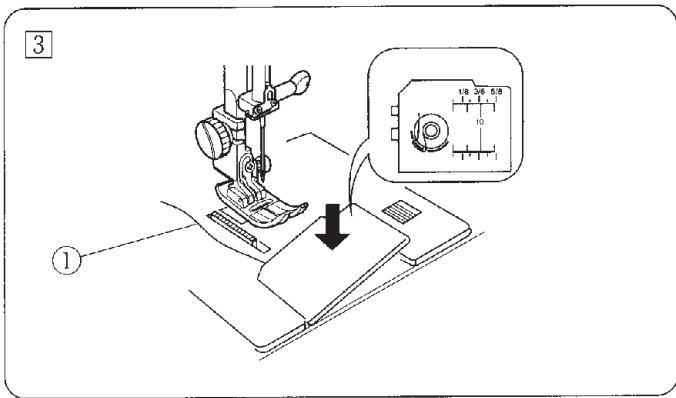


• **Inserting the Bobbin**

- 1 Place the bobbin in the bobbin holder with the thread running counterclockwise.



- 2 Guide the thread into notch **A** on the front side of the bobbin holder.  
 Draw the thread to the left, sliding it between the tension spring blade.  
 Continue to draw the thread lightly until the thread slips into notch **B**.  
 Pull out about 15 cm (6") of thread.

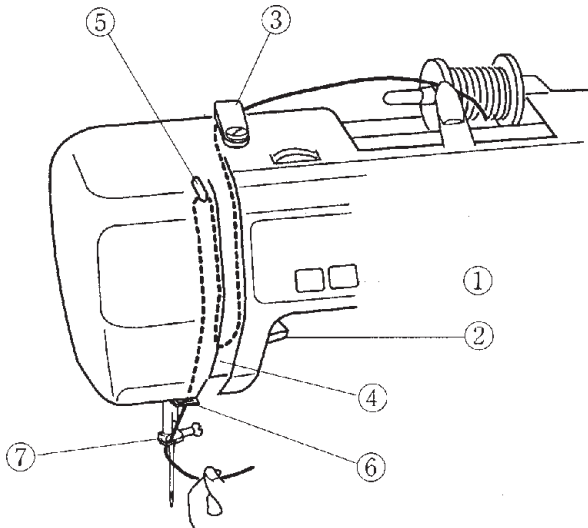


- 3 Attach the hook cover plate.  
 Check the threading by referring to the chart shown on the hook cover plate.

- ① Bobbin thread

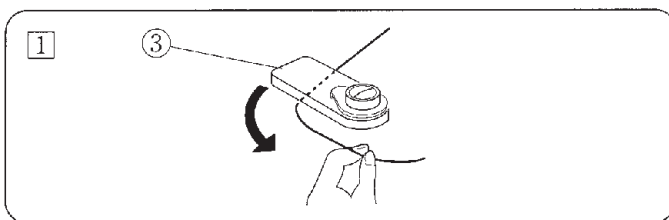
## Threading the Machine

### • Threading the Machine

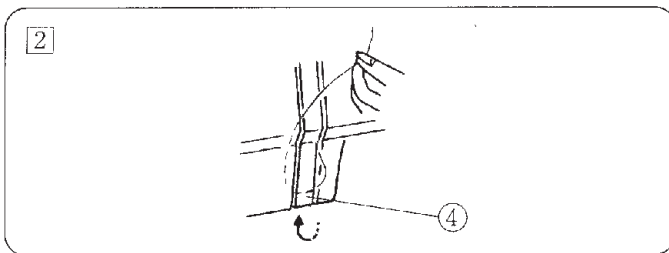


- \* Raise the presser foot lifter.
- \* Press the up/down needle position key twice to raise the needle.

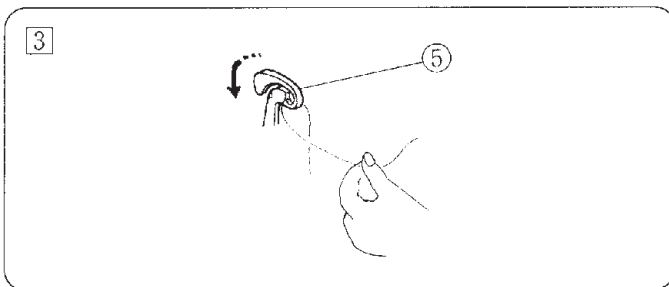
- ① Up/down needle position key
- ② Presser foot lifter



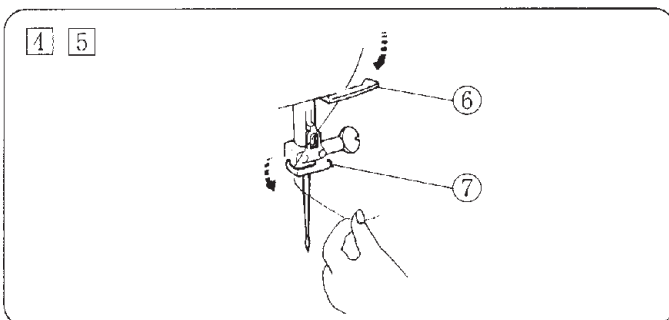
- ① Draw the thread around the upper thread guide.
- ③ Upper thread guide



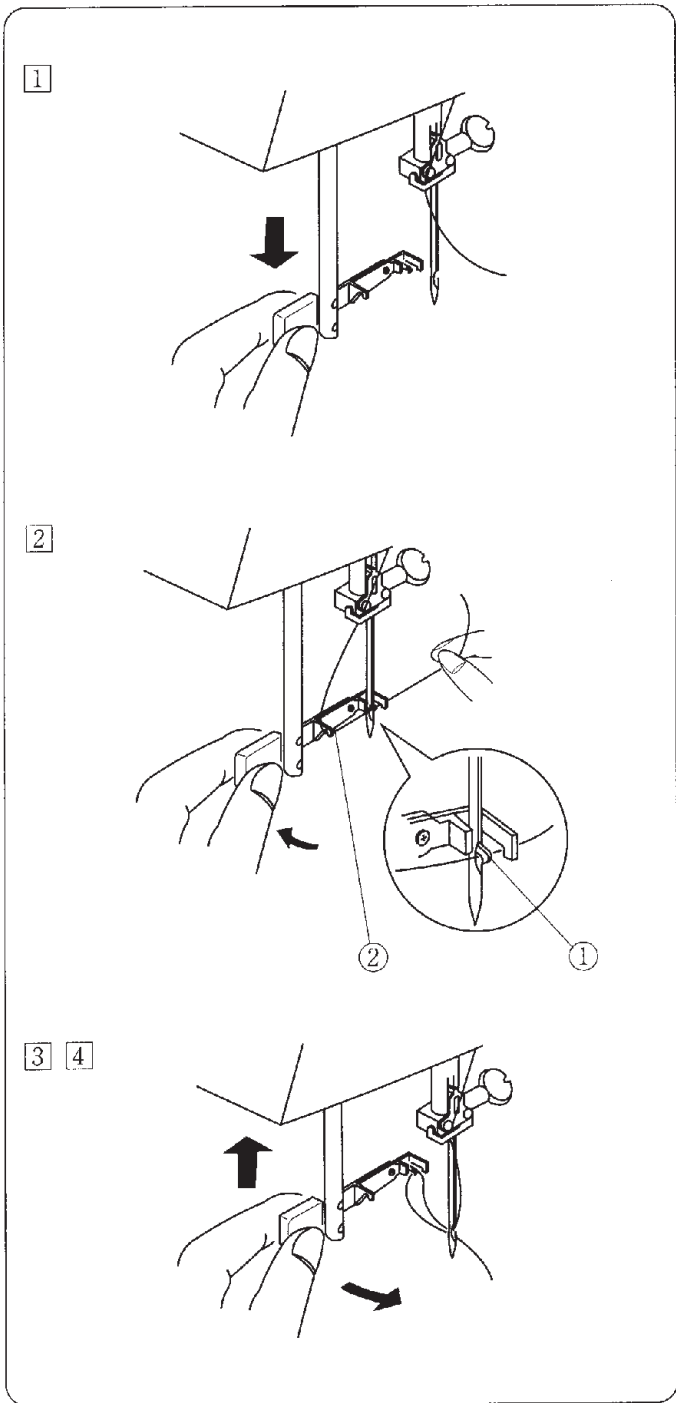
- ② Then, down around the check spring holder.
- ④ Check spring holder



- ③ Firmly draw the thread from right to left over the take-up lever and down into the take-up lever eye.
- ⑤ Thread take-up lever



- ④ Then, down through the lower thread guide.
- ⑥ Lower thread guide
- ⑤ Slide the thread behind the needle bar thread guide on the left. Thread the needle from front to back or use the needle threader.
- ⑦ Needle bar thread guide



• **Needle Threader**

1 Raise the needle to its highest position. Pull down the needle threader knob as far as it will go.

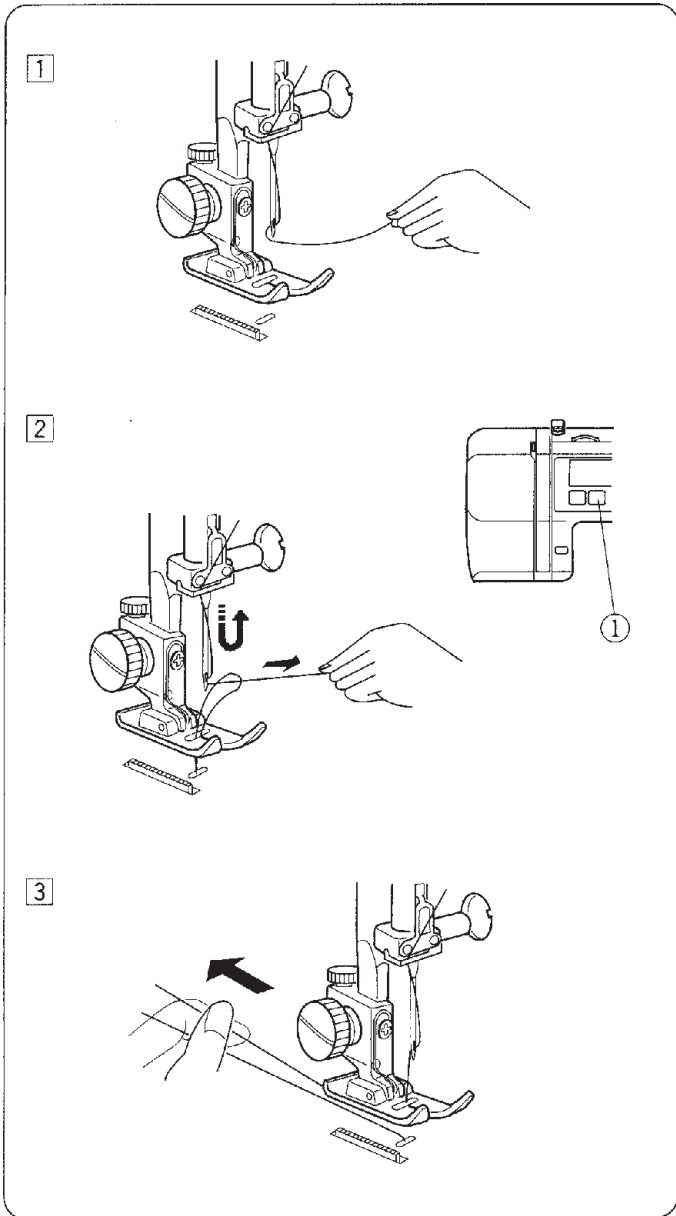
2 Turn the knob in the direction of the arrow in the illustration, then insert Hook ① into the needle eye. Lead the thread around Guide ② and under Hook ①.

① Hook

② Guide

3 Turn the knob in the direction of the arrow in the illustration, drawing the thread loop through the needle.

4 Pull the thread through the needle eye. The needle threader can be used with a #11 to #16 needle or a blue tipped needle. Thread size 50 to 100 should also work well.



• **Drawing Up the Bobbin Thread**

1 Raise the presser foot. Hold the needle thread lightly with your left hand.

2 Press the up/down needle position key twice to pick up the bobbin thread. Draw up the needle thread together with a loop of bobbin thread.

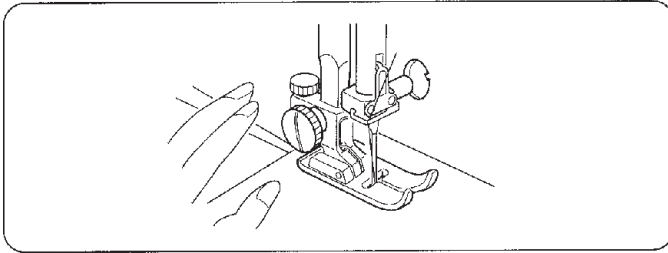
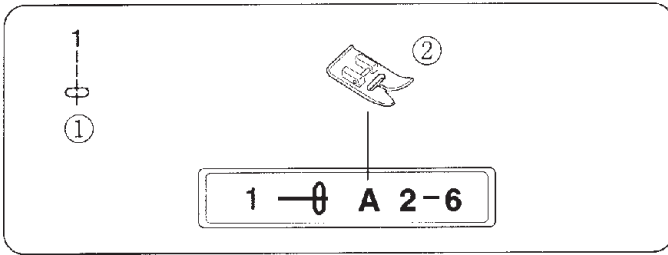
① Up/down needle position key

3 Pull 10 cm (4") of both threads to the back under the presser foot.

## SECTION III BASIC SEWING

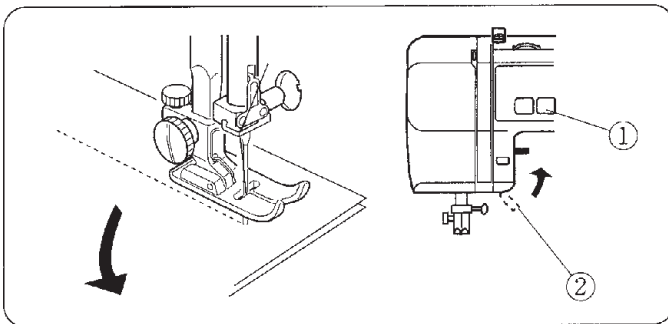
### Straight Stitching

- ① Selected stitch
- ② A: Zigzag foot



#### • Starting to Sew

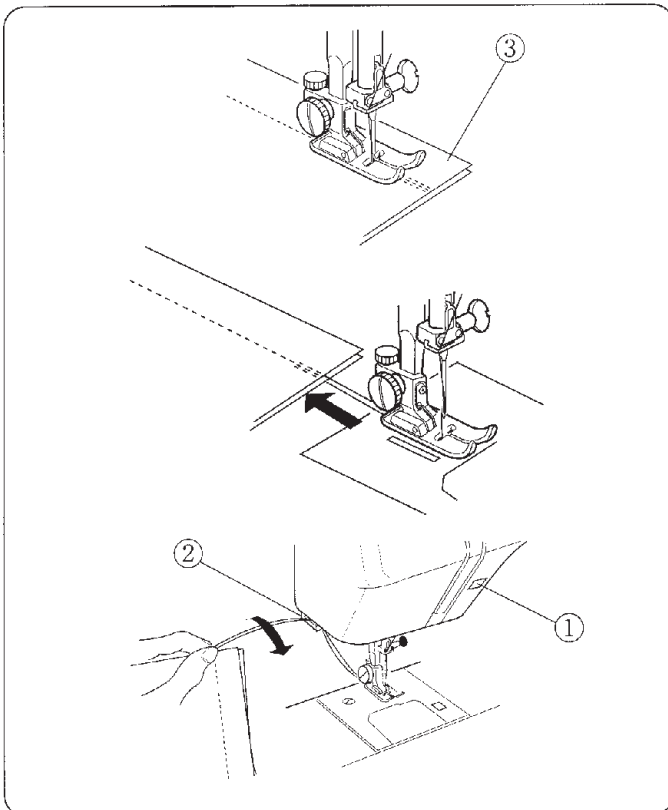
Raise the presser foot and position the fabric next to a seam guide line on the needle plate (see page 16). Lower the needle to the point where you want to start. Lower the presser foot and pull the threads toward the back. Depress the foot control. Gently guide the fabric along a seam guide line letting the fabric feed naturally.



#### • Changing Sewing Direction

Stop the machine and bring the needle down into the fabric by pressing the up/down needle position key. Raise the presser foot. Pivot the fabric around the needle to change sewing direction as desired. Lower the presser foot.

- ① Up/down needle position key
- ② Presser foot lifter



#### • Finishing Sewing

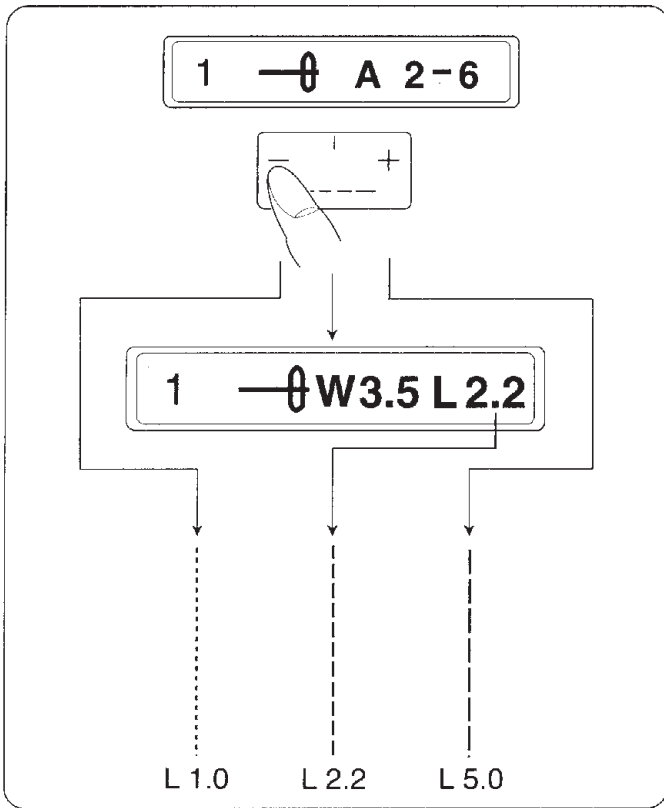
To fasten the ends of seams, press the reverse button and sew several reverse stitches.

- \* When pattern  $\uparrow$  is selected, reverse stitches are sewn automatically at the beginning of the seam, and forward again.


Raise the presser foot. Remove the fabric, draw the threads to the back and cut using the thread cutter.

The threads are cut the proper length for starting the next seam.


- ① Reverse button
- ② Thread cutter
- ③ Fabric




• **Adjusting Stitch Length Manually**

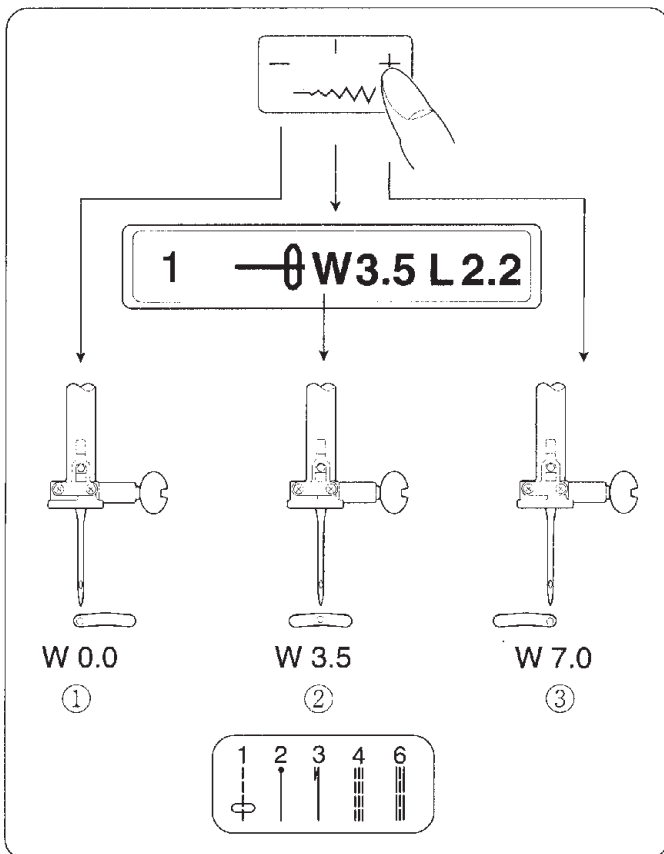
When you press the stitch width key , the pre-programmed setting (2.2) will appear on the screen.

It can be set between 0 and 5.


Press the minus mark . The number on the screen will get smaller and the stitch length will get shorter.

Press the plus mark . The number on the screen will get bigger and the stitch length will get longer.

\* The reverse stitch length cannot be set longer than 2.5 mm (3/32").


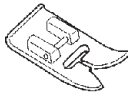

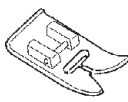

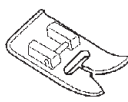

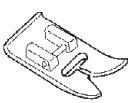

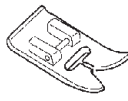

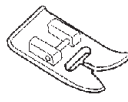


• **Variable Needle Position**

When the patterns listed below are selected and the needle position key  is pressed, you can move the needle to any position desired.

- ① Left
- ② Middle
- ③ Right

## Variation of Straight Stitching

<p>①</p> 	<p>②</p> 
<p>2</p> 	
<p>3</p> 	
<p>4</p> 	
<p>5</p> 	
<p>6</p> 	

### • Straight Stitch

When the machine is turned on, it is automatically set to sew a straight stitch.

This stitch can be used for regular seams, zippers, topstitching, etc.

① Selected stitch      ② A: Zigzag foot

### • Locking Stitch

Lower the needle close to the front edge of the fabric. The machine will sew several locking stitches in place and continue sewing forward. If you press the reverse button at the end of the seam, the machine will sew several locking stitches in place, then stop sewing automatically.

### • Lock-A-Matic

The machine will sew four stitches forward, four stitches in reverse, then continue sewing forward. When you reach the end of the fabric, press the reverse button once.

The machine will sew four reverse stitches, four forward stitches, then stop sewing.

### • Triple Stretch Stitch

This strong, durable stitch is recommended where both elasticity and strength are needed to insure comfort and durability.

Use it to reinforce areas such as crotch and armhole seams. Also use when constructing items such as backpacks for extra strength.

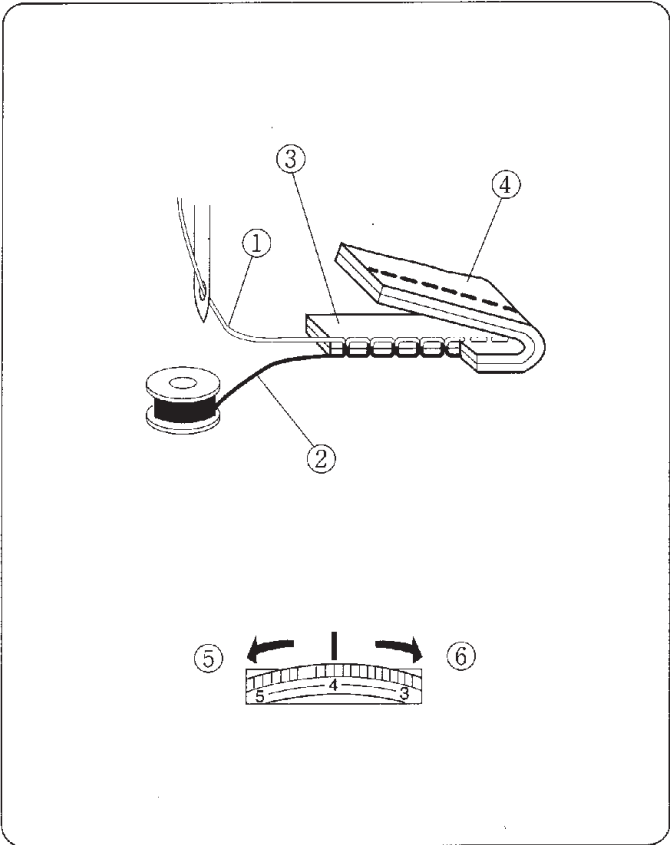
### • Stretch Stitch

This stitch is a narrow stretch stitch designed to eliminate puckering on knit fabrics and bias seams, while permitting the seam to be pressed completely flat. The stitch can also be used to simultaneously seam and overcast when sewing on tricot and chiffons for a narrow, almost invisible seam or seam finish.

### • Saddle Stitch

For topstitching suits, blazers, jumpers and denim outfits.





**Adjust the Top Thread Tension**

**• Choose the Correct Tension**

For Straight Stitch:

The ideal straight stitch will have threads locked between the two layers of fabric, as shown left (magnified to show detail).

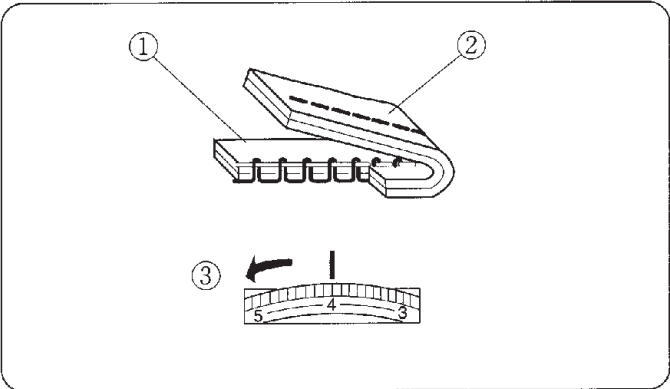
If you look at the top and bottom of the seam, you will notice that there are no gaps; that each stitch is smooth and even.

When adjusting top thread tension, the higher the number, the tighter the top thread.

Results depend on;

- \* stiffness and thickness of the fabric
- \* number of fabric layers
- \* type of stitch

- ① Needle thread (top thread)
- ② Bobbin thread (bottom thread)
- ③ Right side of fabric
- ④ Wrong side of fabric
- ⑤ To loosen
- ⑥ To tighten

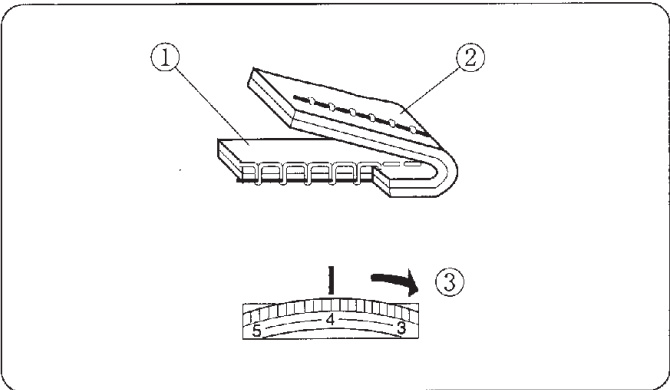


**• Tension is too tight**

The bobbin thread shows through on the right side of the fabric and it will feel bumpy.

Turn the dial to the left to loosen the top thread tension.

- ① Right side of fabric
- ② Wrong side of fabric
- ③ To loosen

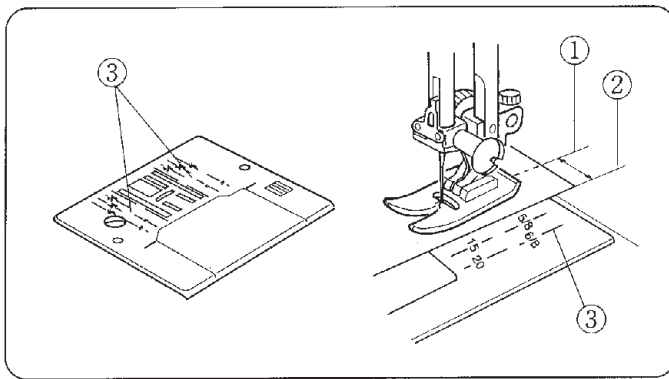


**• Tension is too loose**

The top thread shows through on the wrong side of the fabric and it will feel bumpy.


Turn the dial to the right to tighten the top thread tension.

- ① Right side of fabric
- ② Wrong side of fabric
- ③ To tighten



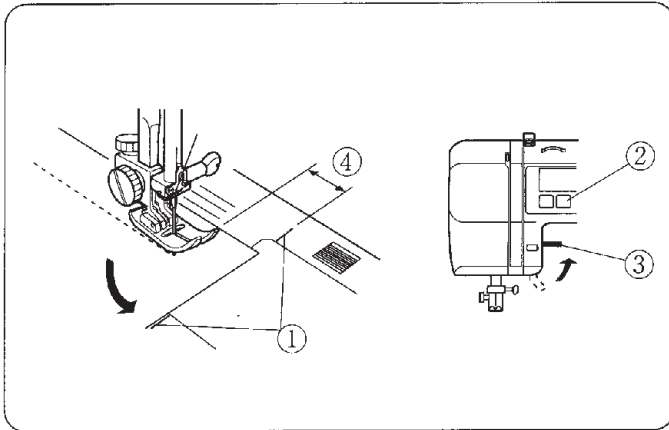
### Seam Allowance Lines

The seam guides on the needle plate and hook cover plate help you measure seam width.

- \* The number indicates the distance between the middle needle position  and the seam allowance line.

Marks on needle plate	Millimeters		Inches		
	15	20	4/8"	5/8"	6/8"

- ① Middle needle position
- ② Edge of fabric
- ③ Needle plate guide lines

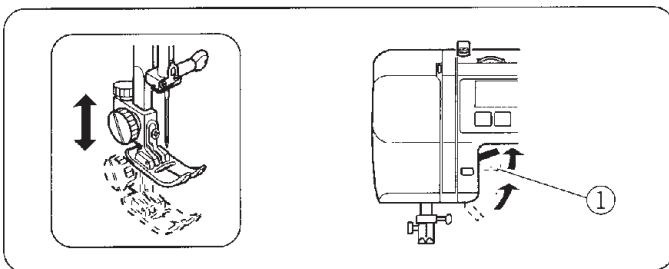


### Turn a Square Corner

To turn a square corner 1.6 cm approx.(5/8") from the fabric edge.

1. Stop stitching and lower the needle by pressing the up/down needle position button when the fabric edge facing you lines up with the cornering guide as shown.
2. Raise the presser foot and turn the fabric to line the edge with the 1.6 cm (5/8") seam guide.
3. Lower the presser foot and begin stitching in the new direction.

- ① Cornering guide
- ② Presser foot lifter
- ③ Up/down needle position button
- ④ 1.6 cm (5/8")

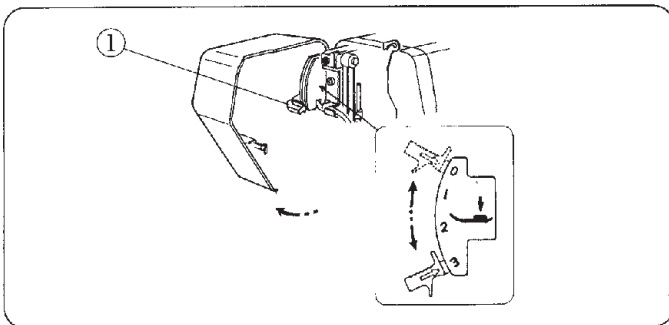


### When Sewing Heavy Fabrics

The presser foot lifter raises and lowers the presser foot.

You can raise it about 0.7 cm (1/4") higher than the normal up position for easy removal of the presser foot or to help you place heavy fabrics under the presser foot.

- ① Presser foot lifter



### Pressure Adjusting Lever

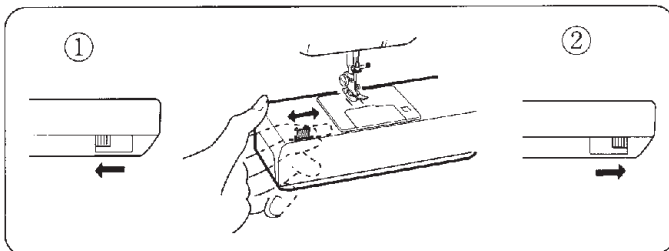
The pressure adjusting lever should be set at 3 for regular sewing.

Reduce the pressure to 2 for appliqué, cut work, drawn work, basting and embroidery.

Set the pressure to 1 when sewing chiffon, lace, organdy and other fine fabrics.

Velours and knits with a lot of stretch may also require a 1 setting.

- ① Pressure adjusting lever



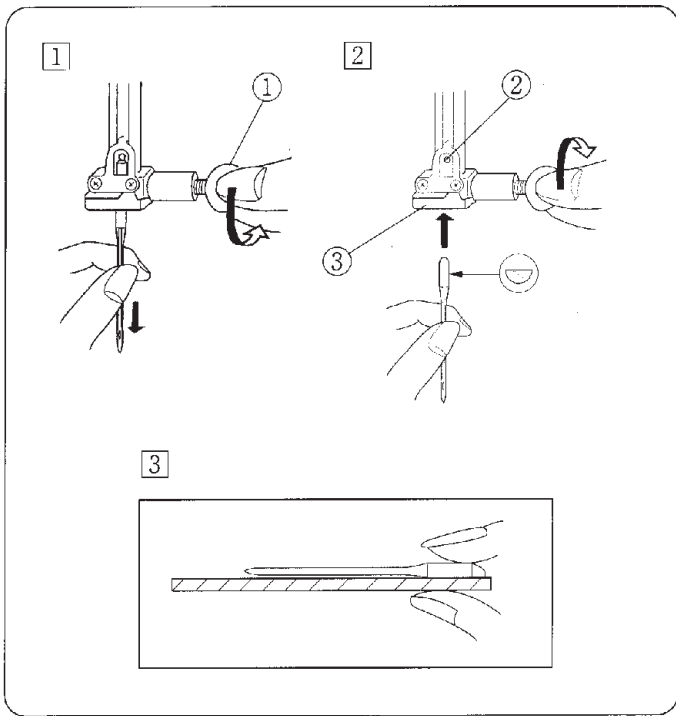
### To Raise or Drop the Feed Dog

For button sewing, drop the feed dog.

After finished sewing, raise it again.

The feed dog should be up for normal sewing.

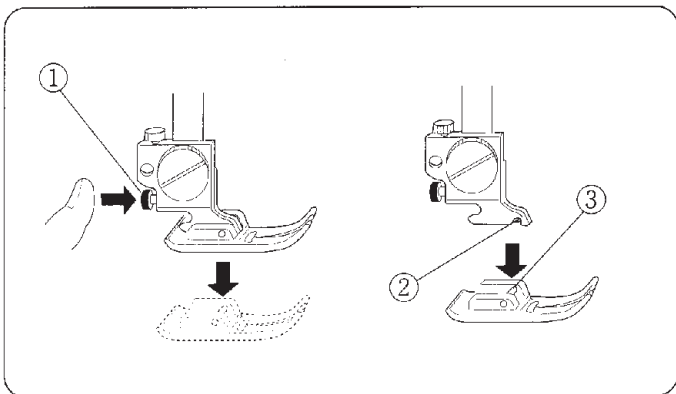
- ① Lowered position
- ② Raised position



### Changing Needles

- 1 Raise the needle by pressing the up/down needle position key and lower the presser foot. Turn off the power switch. Loosen the needle clamp screw by turning it counterclockwise.
- 2 Remove the needle from the clamp. Insert the new needle into the needle clamp with the flat side to the rear. When inserting the needle into the clamp, push it up as far as it will go and tighten the clamp screw firmly.
- 3 To find a good needle, put the flat side of the needle onto something flat (a needle plate, glass, etc.). The gap between the needle and the flat surface should be consistent. Never use a bent or blunt needle.

- ① Needle clamp screw
- ② Pin
- ③ Needle clamp

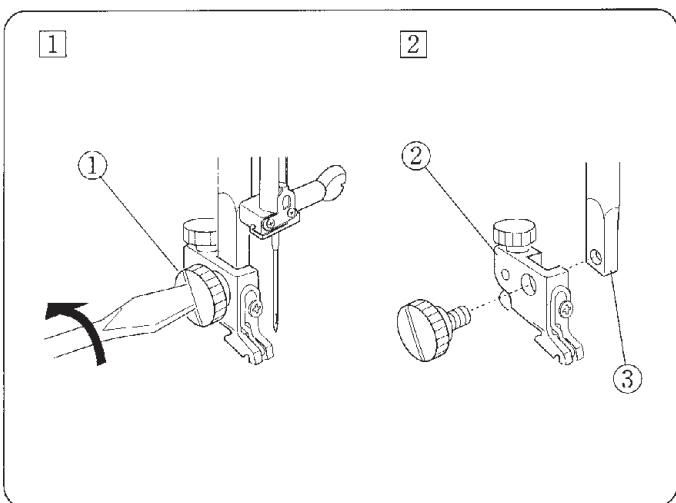


### To Remove and Attach Presser Foot

Press the red button on the back of the foot holder. The presser foot will drop off. Place the selected presser foot so the pin on the foot lies just under the groove of the foot holder.

Lower the presser bar to lock the foot in place.

- ① Red button
- ② Groove
- ③ Pin



### To Remove and Attach the Foot Holder

#### 1 To Remove:

Remove the thumb screw by turning the screw counterclockwise with the screwdriver.

- ① Thumb screw

#### 2 To Attach:

Match the hole in the foot holder with the threaded hole in the presser bar.

Fit the thumb screw into the hole.

Tighten the screw by turning it clockwise.

- ② Foot holder
- ③ Presser bar

## Choose Your Needle and Thread

	<b>FABRICS</b>	<b>THREADS</b>	<b>NEEDLE SIZE</b>
<b>LIGHT-WEIGHT</b>	Crepe de Chine, Voile, Lawn, Organdy, Georgette, Tricot	Fine Silk Fine Cotton Fine Synthetic Fine Cotton-covered Polyester	9 or 11
<b>MEDIUM-WEIGHT</b>	Linens, Cotton, Pique, Serge, Double Knits, Percale	50 Silk 50 to 80 Cotton 50 to 60 Synthetic Cotton-covered Polyester	11 or 14
<b>HEAVY-WEIGHT</b>	Denim, tweed, Gabardine, Coating, Drapery, and Upholstery Fabric	50 Silk 40 to 50 Cotton 40 to 50 Synthetic Cotton-covered Polyester	14 or 16

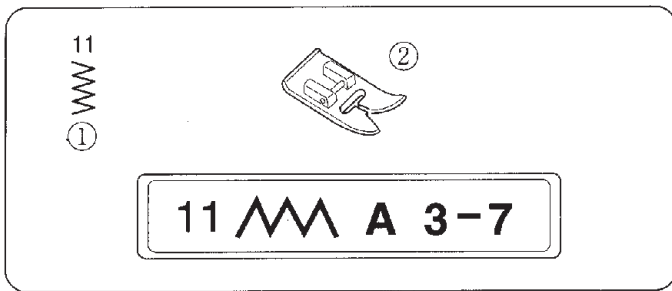
### NOTE:

In general, fine threads and needles are used for sewing thin fabrics, and thicker threads and needles are used for sewing heavy fabrics.

Always test thread and needle size on a small piece of fabric which will be used for actual sewing.

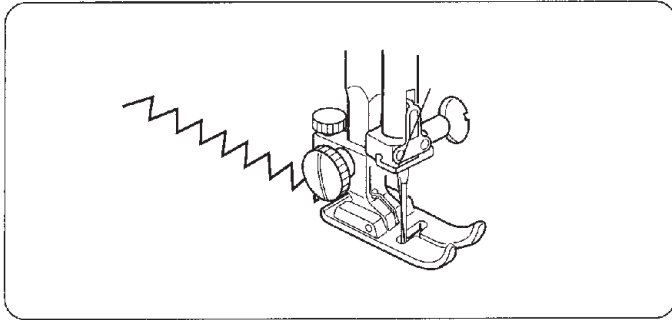
Use the same thread for needle and bobbin.

When sewing stretch, very fine fabrics and synthetics, use a blue tipped needle. The blue tipped needle effectively prevents skipped stitches.



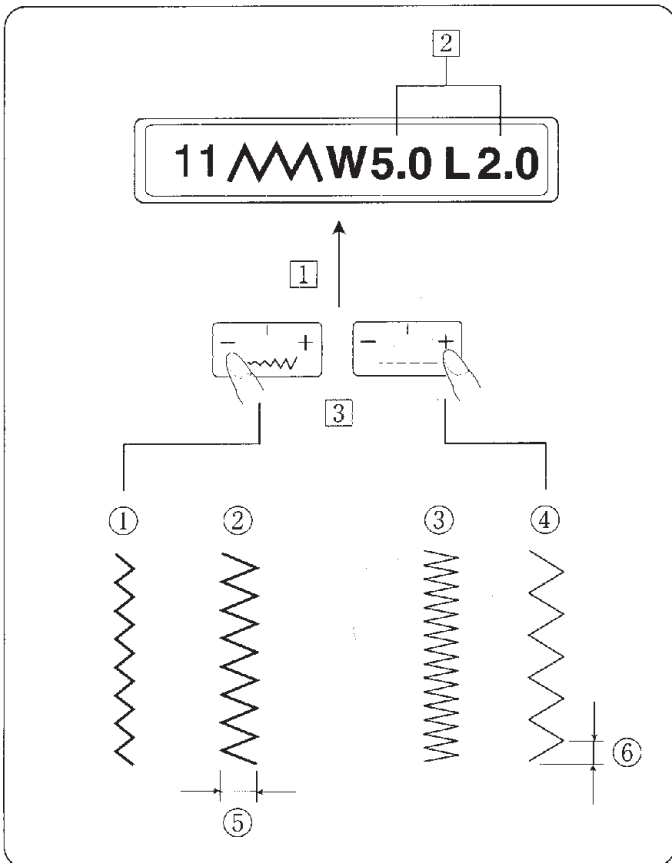
## Zigzag Stitch

- ① Selected stitch
- ② A: Zigzag foot



A simple zigzag stitch is widely used for overcasting, appliqué, etc.

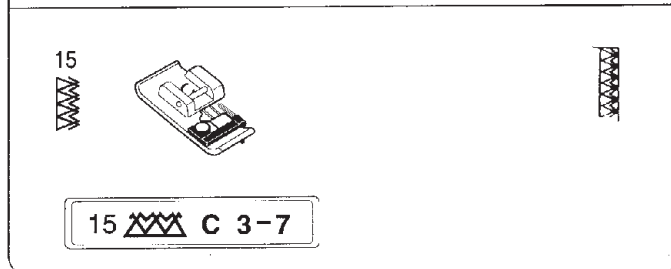
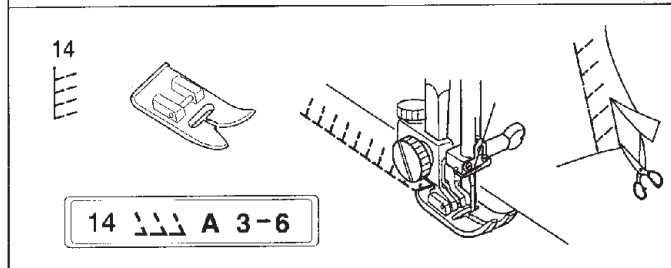
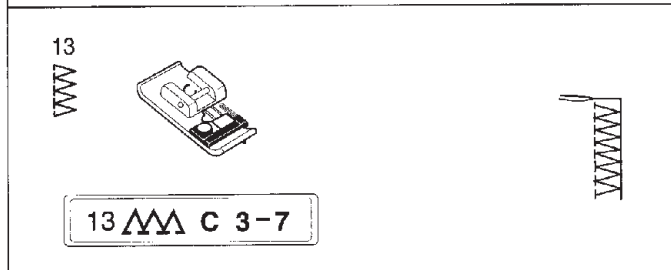
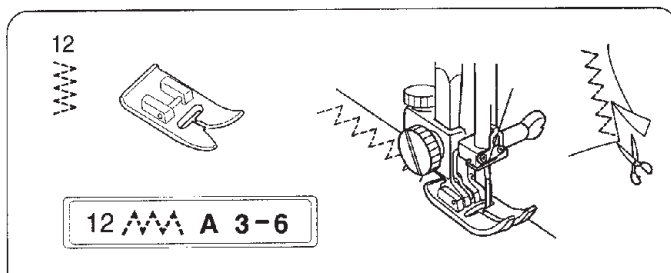
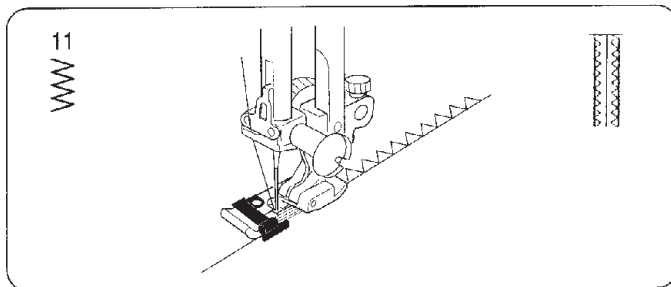
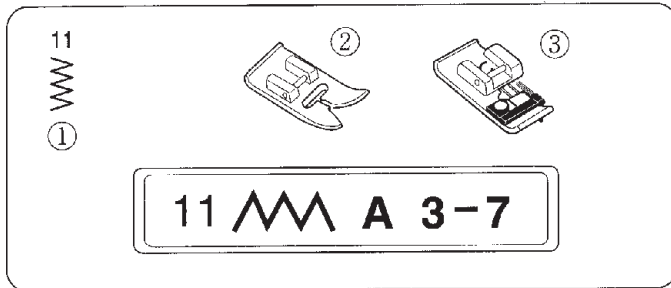
- \* Stabilize with interfacing on stretch fabric.



### • Manual Stitch Width and Length

- ① Press the or key to change the stitch width and length manually.
- ② Pre-programmed stitch settings.
- ③ When the “+” or “-” key is pressed, the width and the length will be changed accordingly.
  - ① Narrower width (smaller number)
  - ② Wider width (larger number)
  - ③ Denser stitch (smaller number)
  - ④ Coarser stitch (larger number)
  - ⑤ Width
  - ⑥ Length

## SECTION IV UTILITY STITCHING



### Overcasting

- ① Selected stitch
- ② A: Zigzag foot
- ③ C: Overedge foot

\* Set the stitch width at 5.0–7.0.

#### • Zigzag Stitch

This stitch can be used on most woven fabrics. It's the fastest way to finish an edge, leaving it neat and flat.

A dense zigzag can also be used for appliqué.

- ① C: Overedge foot

Set the stitch width from 5.0 to 7.0 when the overedge foot C is used to prevent needle breakage or damaging the foot.

#### • Overcasting Variations

**Multiple zigzag:**

This stitch is used to finish the seam allowance on synthetics and other fabrics that tend to pucker. It is also handy for darning and mending tears. Place your fabric to allow a 1.5 cm (5/8") seam. Trim the seam allowance after sewing.

**Overcasting:**

This stitch can be used to simultaneously stitch and overcast seams in one step.

Use this stitch when you do not need to press seams open flat.

Test the stitch on the actual fabric for best results.

- \* Set the zigzag width between 5.0 and 7.0.

**Knit stitch:**

This stitch is recommended for sewing fabrics such as swimwear and stretch velour as it provides the greatest amount of elasticity and strength.

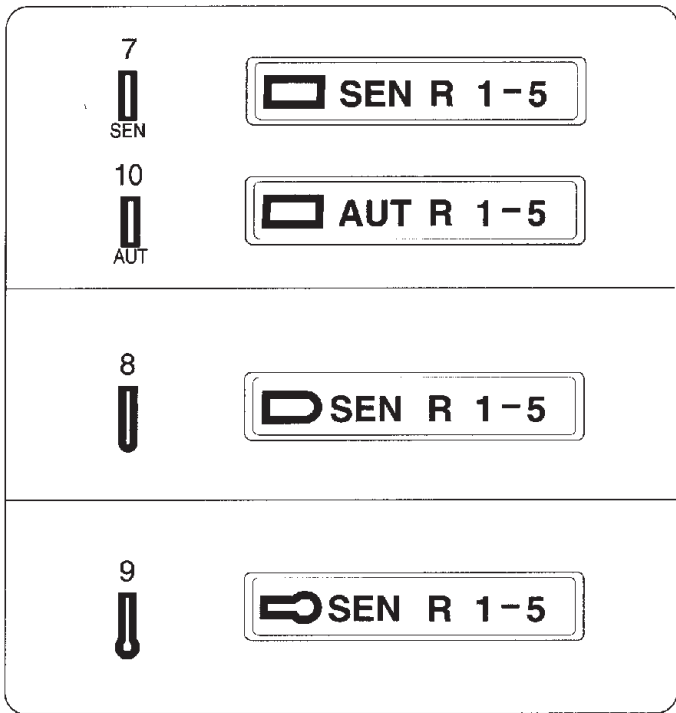
A pressure of 1 is recommended so that the knit will retain shape as you are sewing.

**Double overedge stitch:**

This stitch is excellent for fabrics that tend to fray extensively such as linens and gabardines.

Two rows of zigzag stitches are simultaneously sewn over the edge to insure that your seams will not ravel.

- \* Set the zigzag width between 5.0 and 7.0 for sewing.



## Buttonhole

### • Buttonhole Variations

Square Buttonhole:

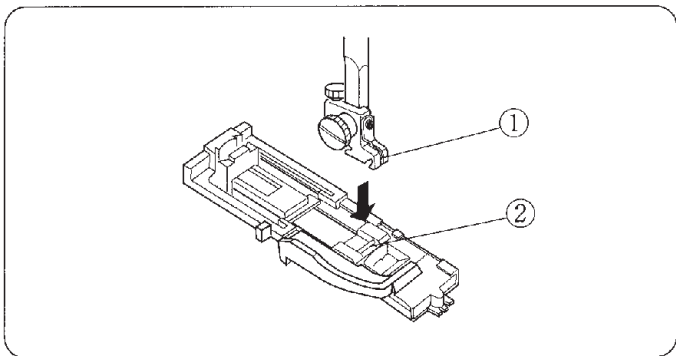
For buttonholes on shirts and blouses.

Rounded Buttonhole:

For buttonholes on shirts and blouses made of fine fabric.

Keyhole Buttonhole:

For buttonholes on jackets.

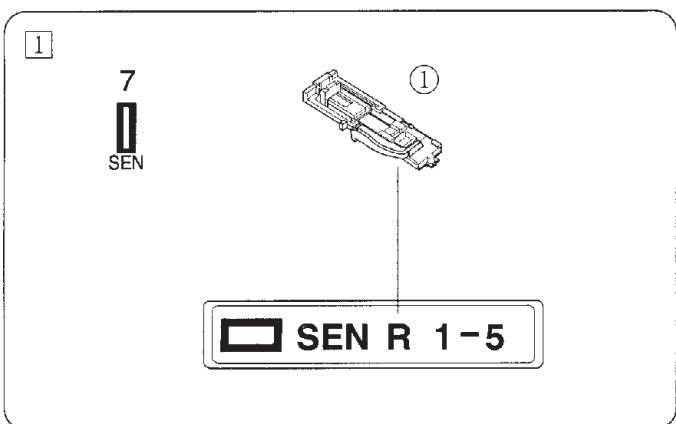


## Sensor Buttonhole

### • Preparation for Sewing

Attach the automatic buttonhole foot R. Make sure the groove on the holder catches the pin on the foot when lowering the presser foot.

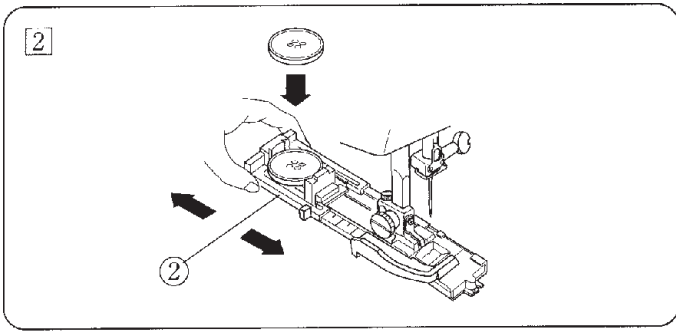
- ① Groove
- ② Pin



### • To Sew

- 1 The size of buttonhole is automatically set by placing the button in the rear of the automatic buttonhole foot. The button holder on the foot takes a button up to 2.5 cm (1") in diameter. Alter the buttonhole width to match the material and thread (see page 23). Make a test buttonhole on an extra piece of the fabric to check your settings. Use interfacing on stretch fabrics.

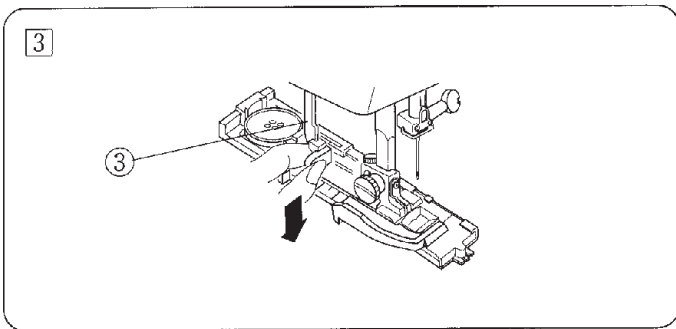
- ① R: Automatic buttonhole foot



### Sensor Buttonhole, cont'd

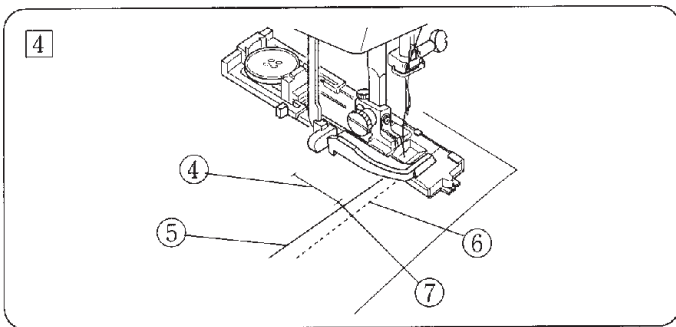
- 2 Pull the button holder to the back, and place the button in it. Push it together tightly on the button.

2 Button holder



- 3 Pull the buttonhole lever downward as far as it will go.

3 Buttonhole lever



- 4 Draw both threads to the left under the foot. Insert the garment under the foot and lower the needle at the starting point.

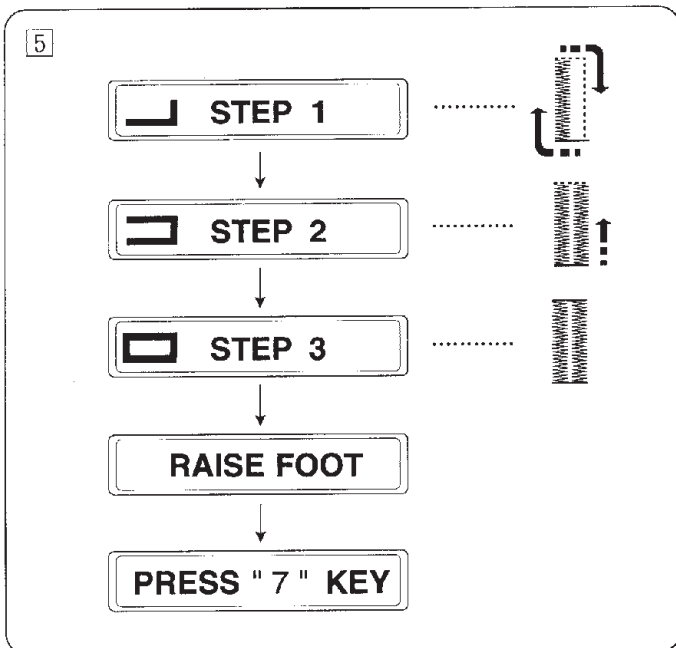
Then lower the automatic buttonhole foot.

4 Mark

5 Needle thread

6 Bobbin thread

7 Starting point




- 5 Depress the foot control until the machine stops by itself .

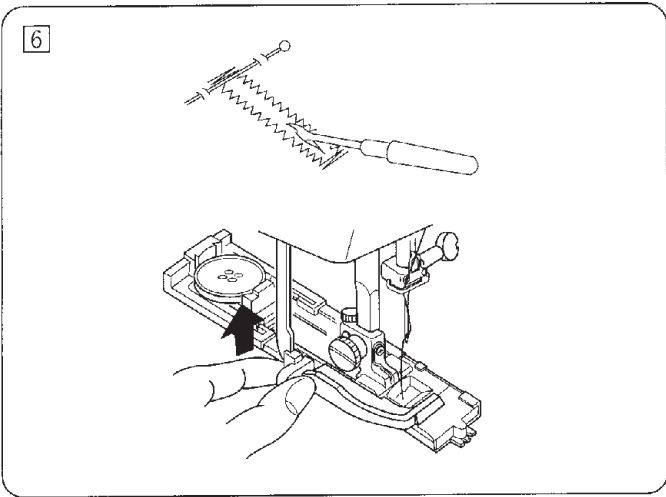
\* The buttonhole will be automatically sewn: the front bartack and left row first, then the right row and back bartack.

The machine will stop automatically.

Before you sew buttonholes on the actual garment, make some practice buttonholes.

To sew another buttonhole or to start from the beginning of the buttonhole press the BH1 (  ) key, then depress the foot control.



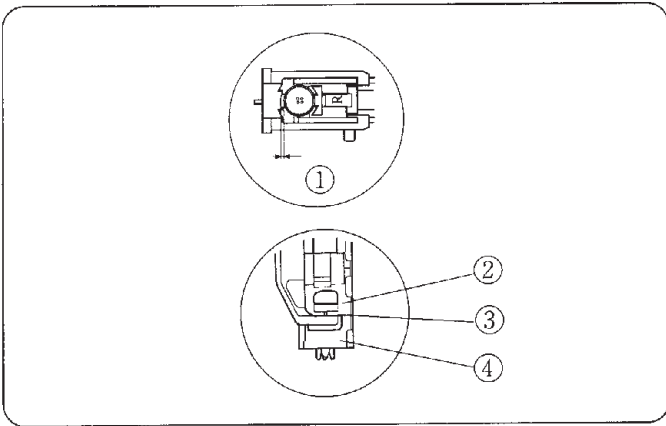


**Sensor Buttonhole, cont'd**

⑥ Remove the fabric and place a pin just before the bartack at each end to prevent accidentally cutting bartacks.

Cut the opening with the seam ripper.

When buttonhole sewing is finished, push the buttonhole lever upward as far as it will go.

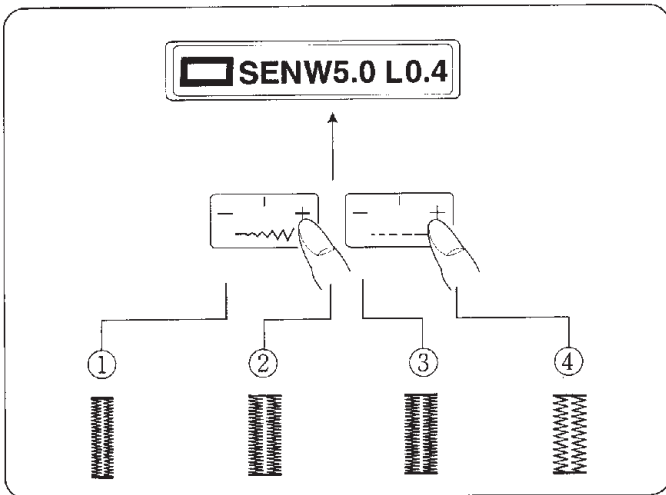


If the button is extremely thick, make a test buttonhole.

If it is difficult to fit the button through the test buttonhole, you can lengthen the buttonhole by pulling the carriage on the foot back a little extra.

The length of the hole will be automatically increased.

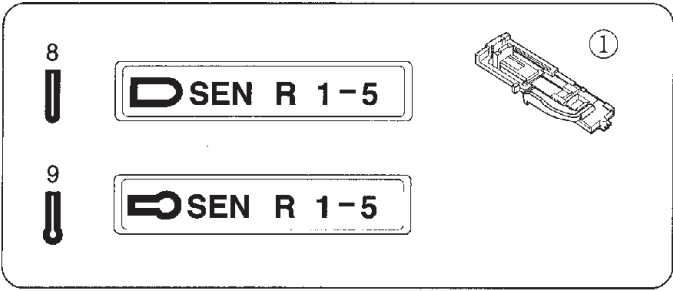
- ① Gap
- ② Slider
- ③ There should be no gap.
- ④ Spring holder



• **To Alter Buttonhole Stitch Width and Density**

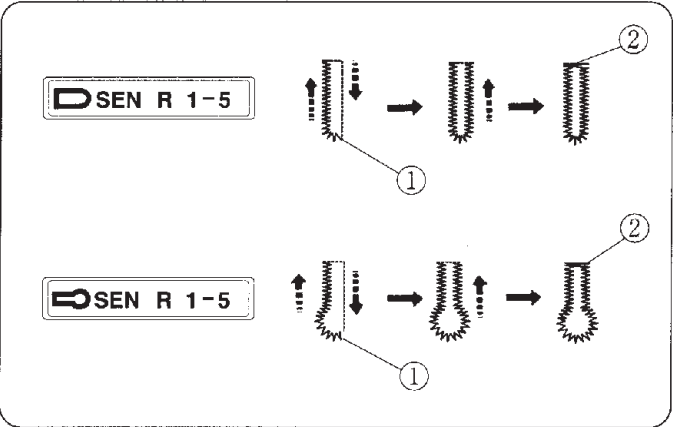
The pre-programmed stitch settings are shown on the screen.

- ① Narrow
- ② Wide
- ③ Dense
- ④ Coarse




• **Rounded and Keyhole Buttonholes**

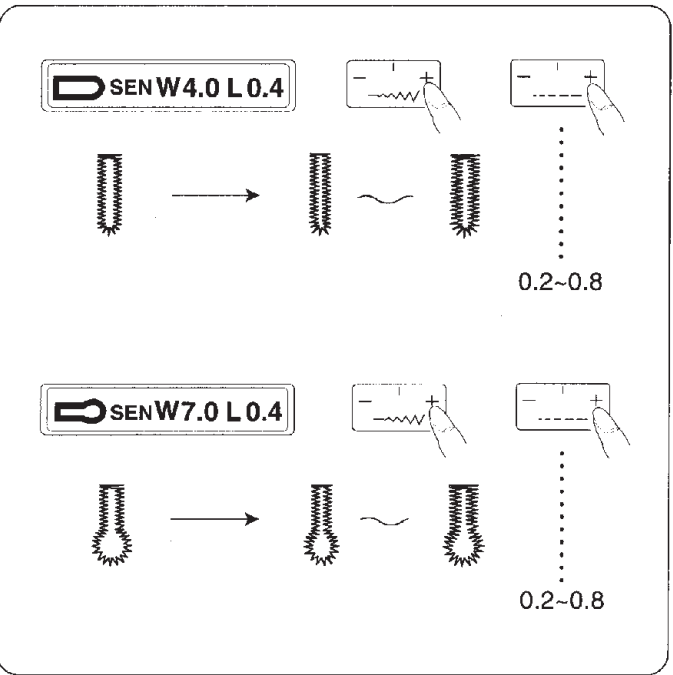
① R: Automatic buttonhole foot



**To Sew:**

For sewing, use the same procedure as when the key (  ) is selected.

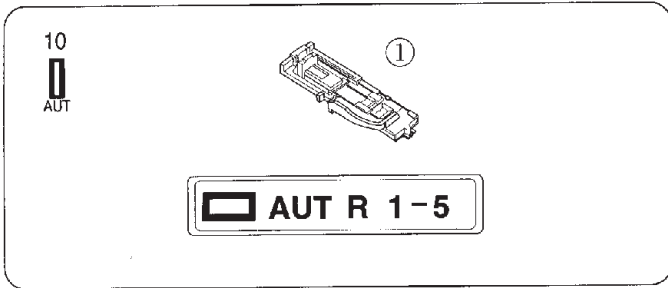
- ① Starting point
- ② Bartack



**Adjust the Stitch Width and Density:**

Adjust the stitch density as appropriate for the material and thread.

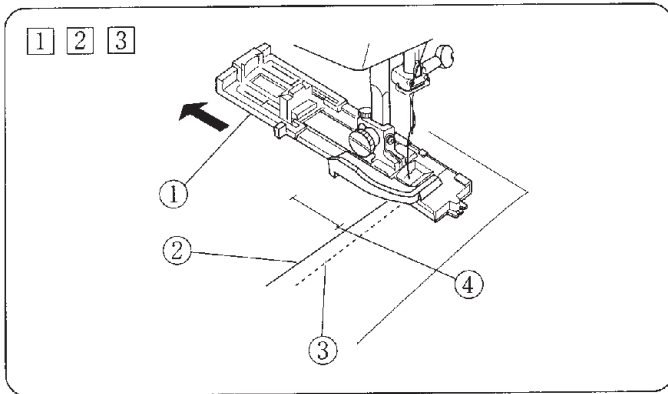
- 0.2 ..... Fine density  
(for lawn and georgette)
- 0.4 ..... Standard density  
(for gabardine, denim and other thick or heavy materials)
- 0.8 ..... Coarse seam  
(for thick wool and jersey knits)



## Automatic buttonhole (BH10 )

① R: Automatic buttonhole foot

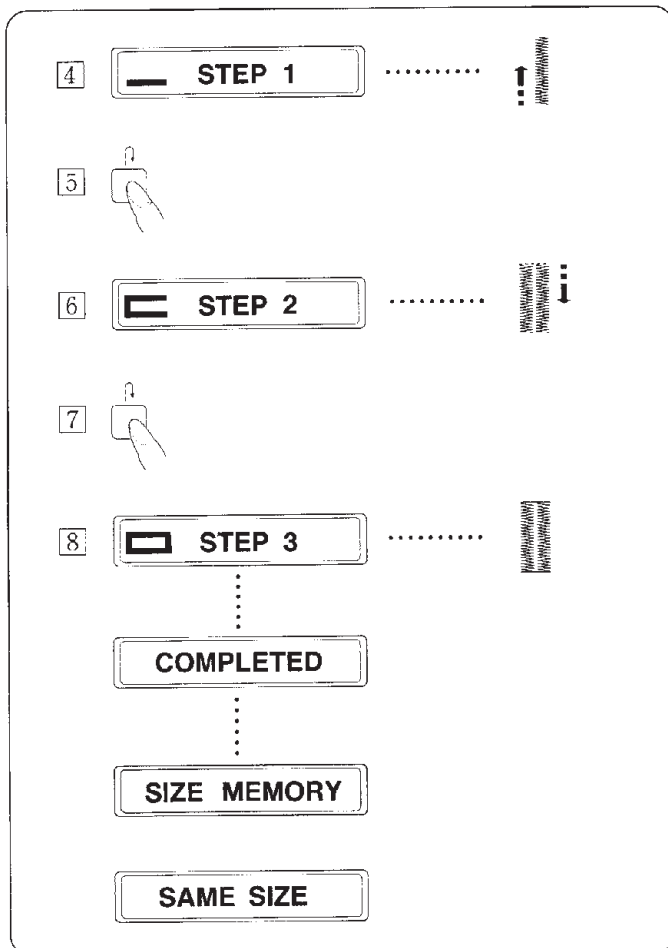
\* To alter the stitch width and density, refer to page 23.



### To sew:

- ① Pull the button holder all the way back.
- ② Insert the fabric under the foot.  
Remove the fabric to the left to draw both threads to the left.
- ③ Insert the garment under the foot and lower the needle at the starting point.  
Then lower the automatic buttonhole foot.

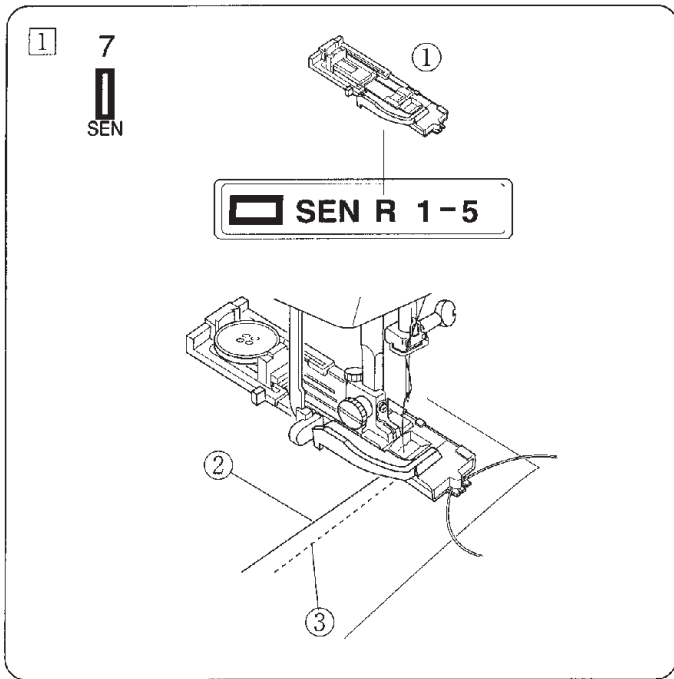
① Button holder      ③ Bobbin thread  
② Needle thread      ④ Starting point



- ④ Sew the desired length for the left side of the buttonhole and stop.
- ⑤ Press the reverse button then depress the foot control.  
The machine will automatically bartack and sew up the right side of the buttonhole.
- ⑥ Stop the machine when you are 2 or 3 stitches past the first stitch on the lefthand side.
- ⑦ Press the reverse button.  
Keep the foot control depressed.
- ⑧ The machine will bartack, knot the stitches and stop sewing by itself.  
To make the next buttonhole, position the fabric and step down on the foot control.  
The Memory Craft will sew another buttonhole identical to the first, each time you step down on the foot control.

\* To reinforce the buttonhole or make it denser, simply depress the foot control again without raising the buttonhole foot.

Example: The screen display is the English version.



## Corded Buttonhole

1 For sewing, use the same procedure as when the pattern is selected (see pages 21–23 ).

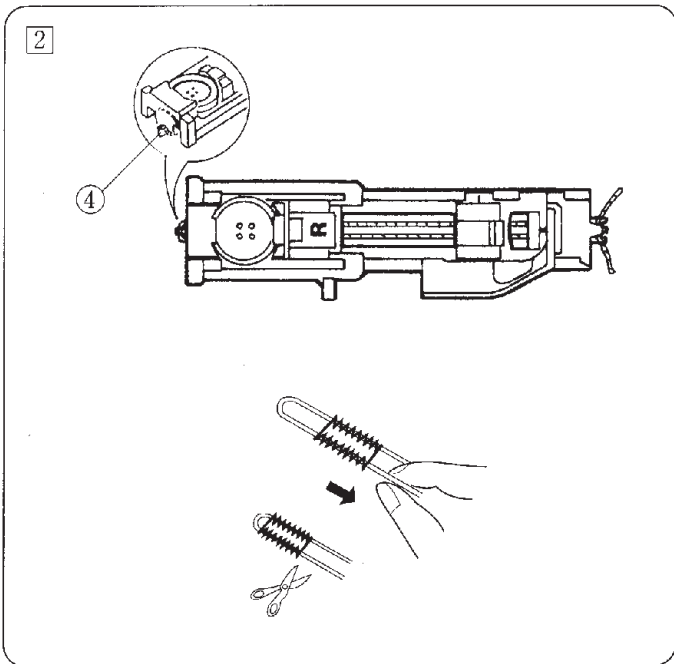
- \* Set the stitch width to match the thickness of the cord used.

With the buttonhole foot raised, hook the filler cord on the spur at the back of the buttonhole foot. Bring the ends toward you under the buttonhole foot, clearing the front end.

Hook the filler cord into the forks on the front of automatic buttonhole foot R to hold them tight.

Lower the needle into the garment where the buttonhole will start and lower the foot.

- ① R: Automatic buttonhole foot
- ② Needle thread
- ③ Bobbin thread



2 Depress the foot control gently and sew the buttonhole.

Each side of the buttonhole and the bartacks will be sewn over the cord.

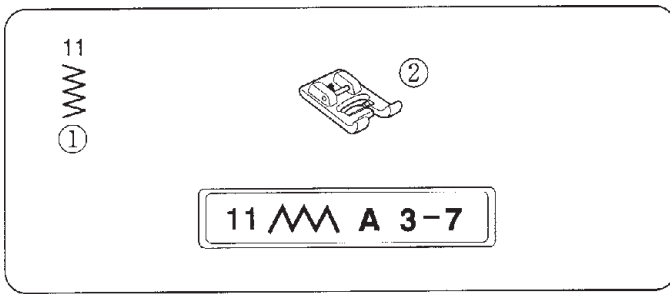
Remove the fabric from the machine and cut the sewing threads only.

Pull the left end of the filler cord to tighten it.

Thread the end through a darning needle, draw to the wrong side of the fabric and cut.

- \* To cut the buttonhole opening, refer to the instructions on page 23.

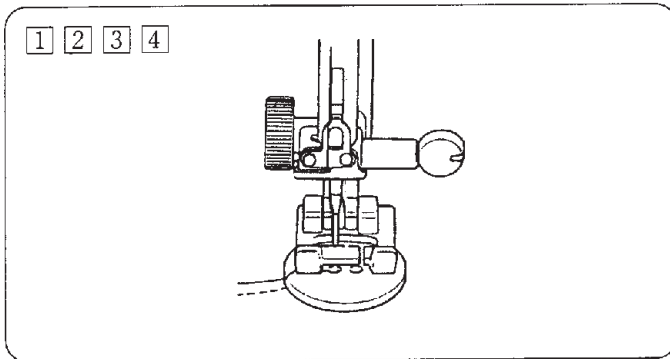
④ Spur



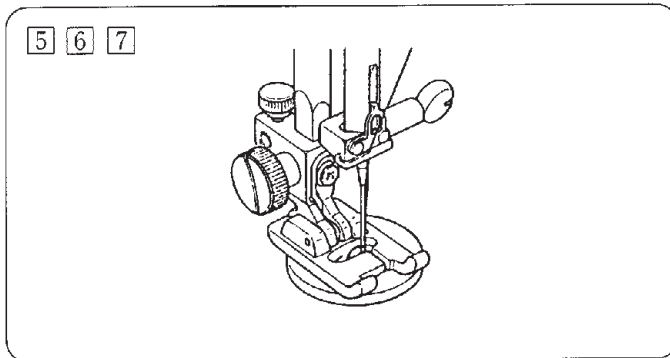
## Sew a Button

- ① Selected stitch
- ② F: Satin stitch foot

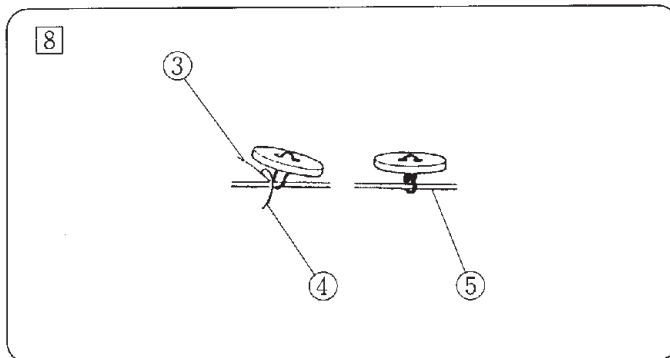
\* Set the stitch width in accordance with the position of the holes on the button.



- ① Match the button holes to the horizontal slot on the presser foot.
- ② Lower the foot to hold the button in place.
- ③ Turn the handwheel by hand until the needle point is just above the button.
- ④ Press the stitch width key “+” or “-” so the needle will enter the left hole of the button.

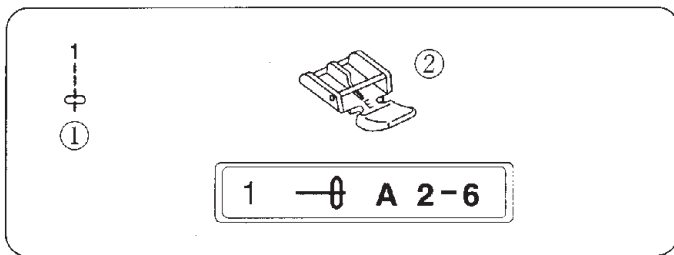


- ⑤ Turn the handwheel so the needle will enter the right hole of the button. Readjust the stitch width if necessary.
- ⑥ Stitch several times.
- ⑦ After you finish sewing, cut the thread but leave 10 to 15 cm (4 - 6") of thread at the button.



- ⑧ Draw the needle thread to the reverse side of the fabric and knot the threads.

- ③ Needle thread
- ④ Bobbin thread
- ⑤ Fabric



## Zipper Sewing

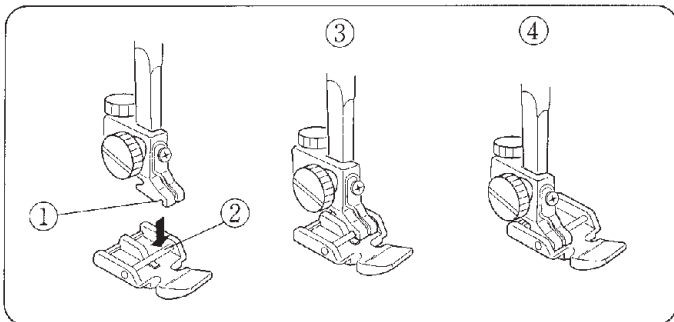
Choose Stitch Pattern 1 and attach Foot E.

- ① Selected stitch
- ② E: Zipper foot

### • To Snap On the Zipper Foot

Fit the pin on the zipper foot into the groove on the foot holder.

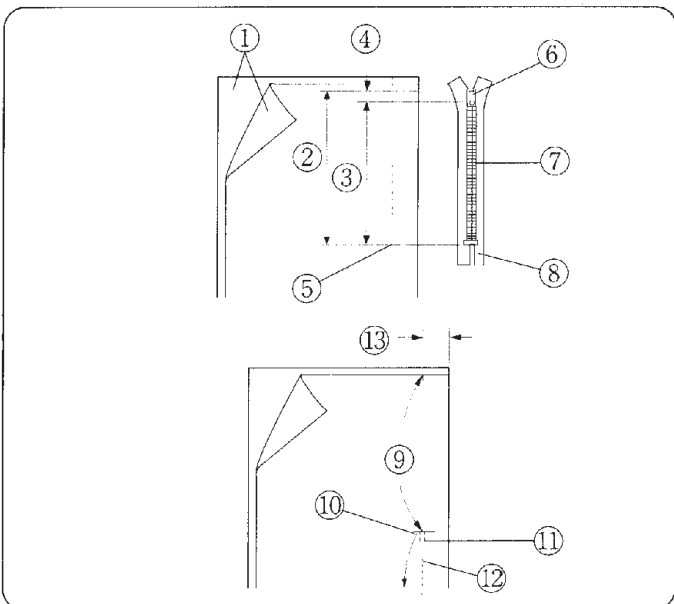
- \* To sew the left side of the zipper, attach the zipper foot on the right-hand side.
- \* To sew the right side of the zipper, attach the zipper foot on the left-hand side.



- ① Groove
- ② Pin
- ③ When the left side is sewn.
- ④ When the right side is sewn.

### • Fabric Preparation

Add 1 cm (1/2") to the zipper size. This is the overall opening size.

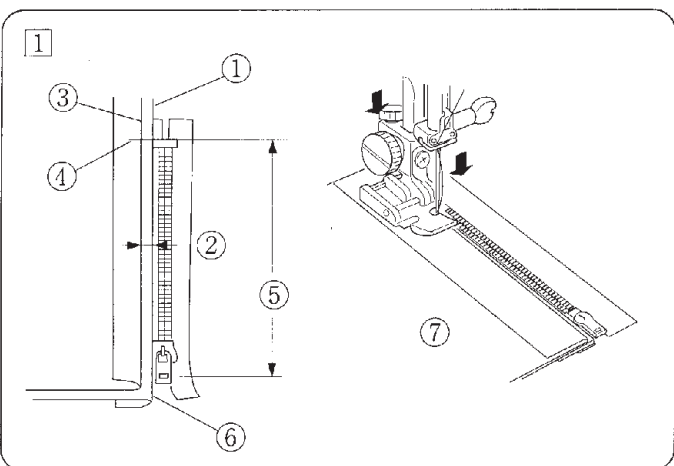


- ① Right side of fabric
- ② Opening size
- ③ Zipper size
- ④ 1 cm (1/2")
- ⑤ End of opening
- ⑥ Slider
- ⑦ Zipper teeth
- ⑧ Zipper tape

Place right sides of fabric together and sew to the end of the zipper opening. Reverse stitch to lock the stitches. Manually increase the stitch length to 4.5 and sew the zipper opening.

- ⑨ 4.5 (stitch length)
- ⑩ End of opening
- ⑪ Reverse stitch
- ⑫ Straight stitch
- ⑬ 2 cm (3/4")

### • To Sew



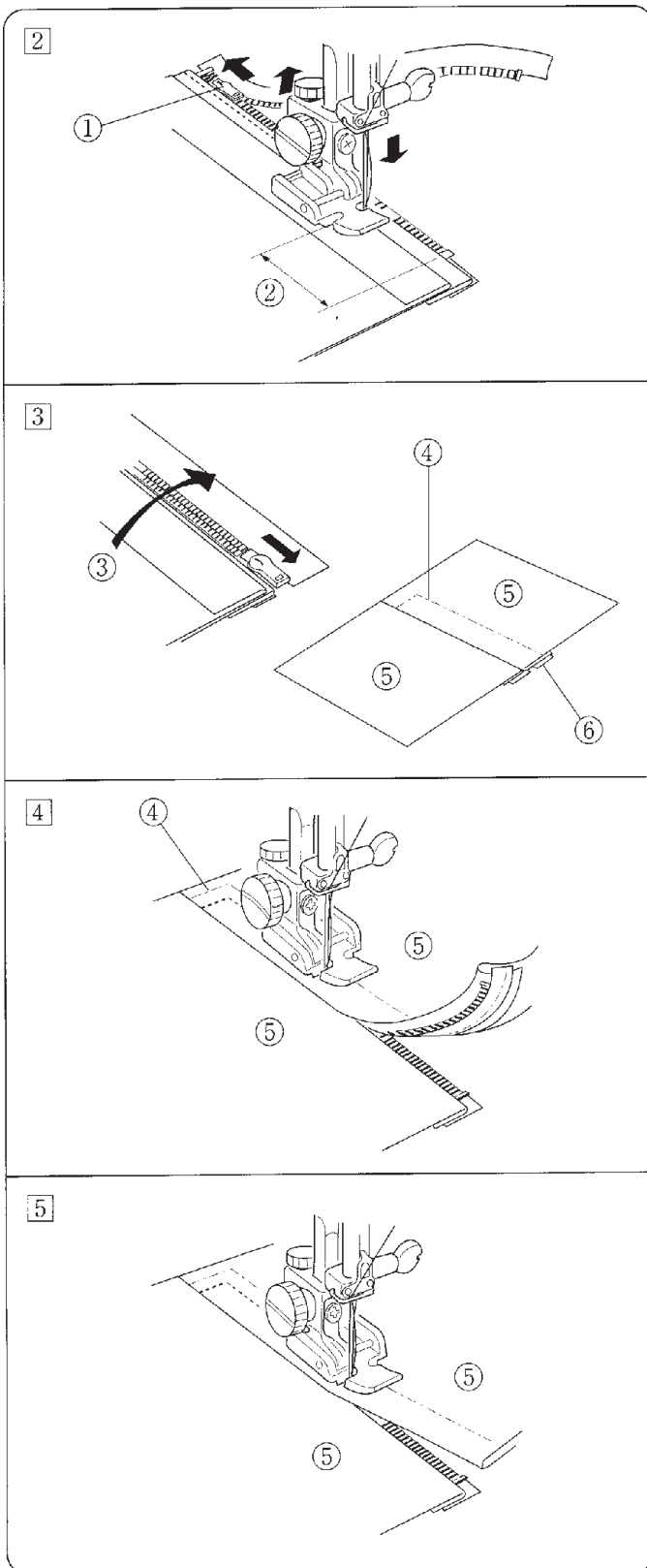
1 Fold back the left seam allowance. Turn under the right seam allowance to form a 0.2 to 0.3 cm (1/8") fold. Place the zipper teeth next to this fold and pin in place.

Attach the zipper foot with the pin on the right-hand side.

Lower the zipper foot on the top side at the bottom of the zipper so that the needle pierces the fabric next to the fold and the zipper tape.

- ① Fold
- ② 0.3 cm (1/8")
- ③ Stitch line
- ④ End of opening
- ⑤ Opening size
- ⑥ Lower fabric
- ⑦ Wrong side of fabric

## Zipper Sewing, cont'd



2 Sew through all layers next to the fold. Stop just before the zipper foot reaches the slider on the zipper tape. Lower the needle slightly into the fabric. Raise the zipper foot and open the zipper. Lower the foot and stitch the remainder of the seam.

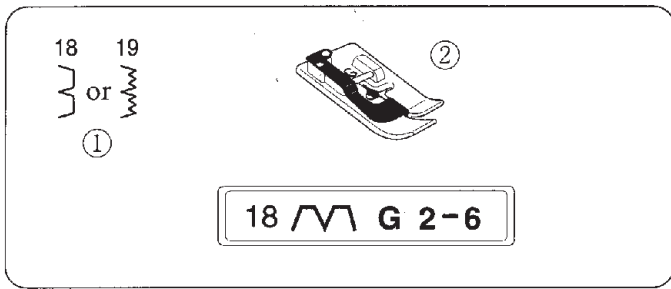
- ① Slider
- ② 5 cm (2")

3 Close the zipper and spread the fabric flat with the right side facing up. Baste the opened fabric and zipper tape together.

- ③ Wrong side of upper fabric
- ④ Basting stitch
- ⑤ Right side of fabric
- ⑥ Zipper tape

4 Move the zipper foot to the left pin. Guide the edge of foot along the zipper teeth and stitch through the garment and zipper tape. Stop about 5 cm (2") from the top of the zipper.

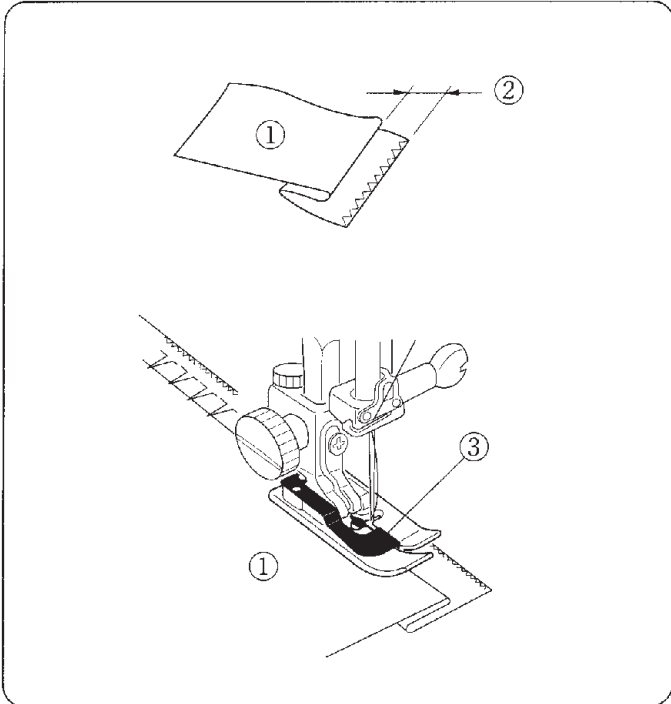
5 Lower the needle slightly into the fabric, raise the foot, remove the basting stitches and open the zipper. Lower the foot and stitch the remainder of the seam, making sure the fold is even.



## Blind Stitch Hemming

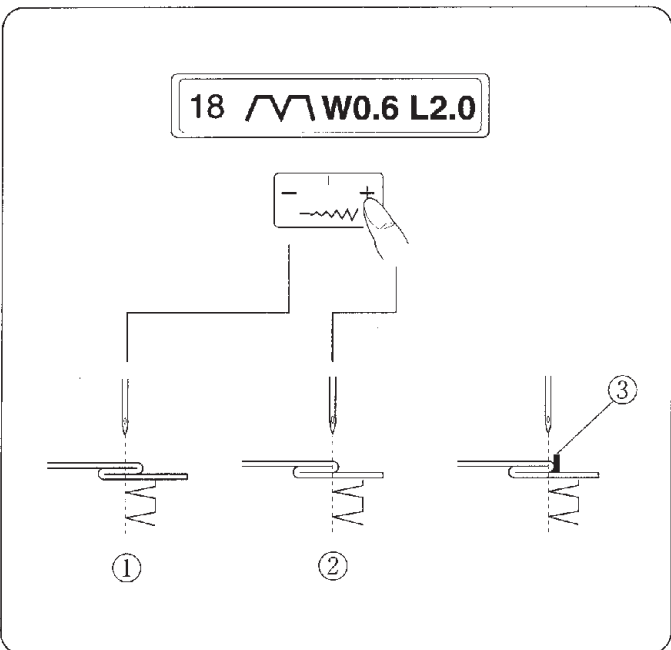
Choose Stitch Pattern 11 and attach Foot G.

- ① Selected stitch
- ② G: Blind hem stitch foot



Position the fabric so that the folded edge comes to the left side of guide. Lower the presser foot. Adjust the position of needle swing with the stitch width key so that the needle just pierces the folded edge of the fabric when the needle comes over to the left side. Sew guiding the folded edge along the guide. For a professional looking hem, fold the fabric reducing the width to about 0.2 cm (1/8"). As you sew, the right hand stitch will fall off the fabric edge forming a chain stitch.

- ① Wrong side of fabric
- ② 0.4 – 0.7 cm (1/4" – 3/8")
- ③ Guide



### • Changing Needle Position

Press the key.

The hemming width indicator shows "0.6".

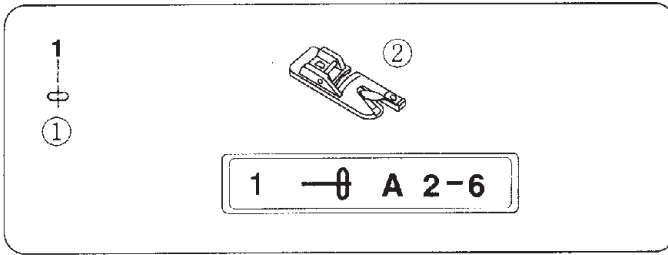
\* "0.6" on the visual touch screen indicates the distance between the guide and the needle point.

- ① If the needle comes over the folded edge too far, move the needle drop position to the right by pressing the "–" key.
- ② If the needle doesn't touch the folded edge, move the needle drop position to the left by pressing the "+" key.
- ③ Guide

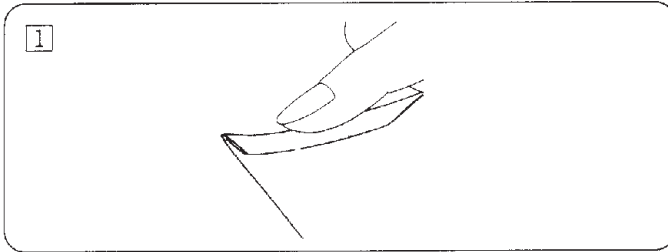
\* With Pattern 18 (blind hem stitch), the zigzag width does not change when you press the stitch width key. Instead, the needle position moves left and right, as shown.



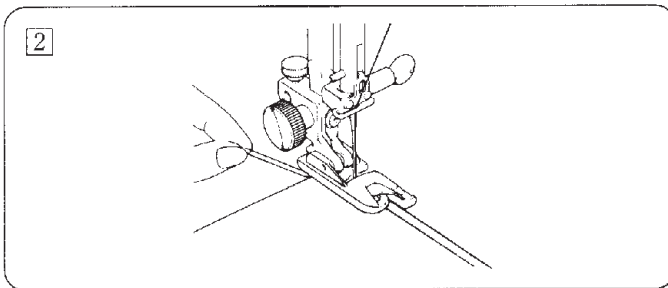
## Rolled Hem



- ① Selected stitch
- ② D: Hemmer foot

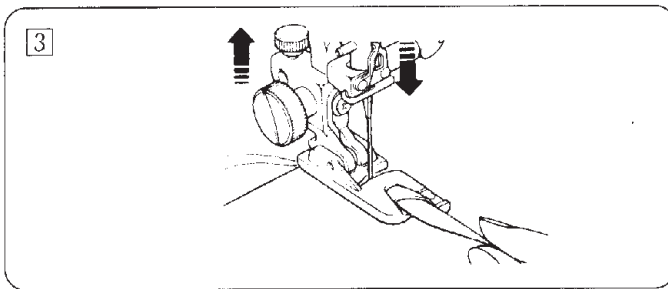


- ① Make a double 0.25 cm (1/8") fold approximately 8 cm (3") in length.



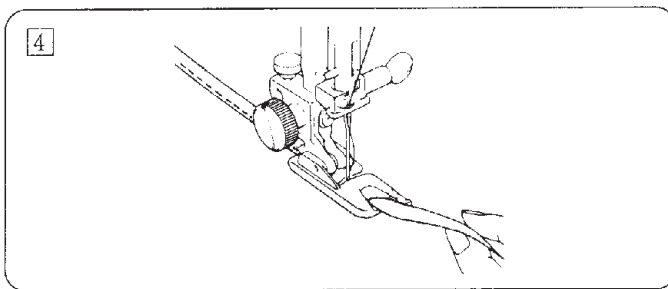
- ② Lower the needle into the fabric at the point where sewing is to begin and lower the hemmer foot.

Sew 3 or 4 stitches while holding the needle and bobbin threads.

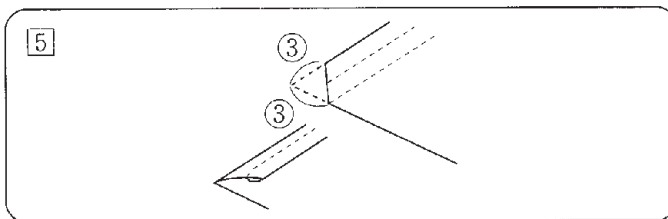


- ③ Lower the needle into the fabric and lift the hemmer foot.

Insert the folded portion of the fabric into the curl of the hemmer foot.



- ④ Lower the hemmer foot, then sew by lifting up the edge of the fabric to keep it feeding smoothly.

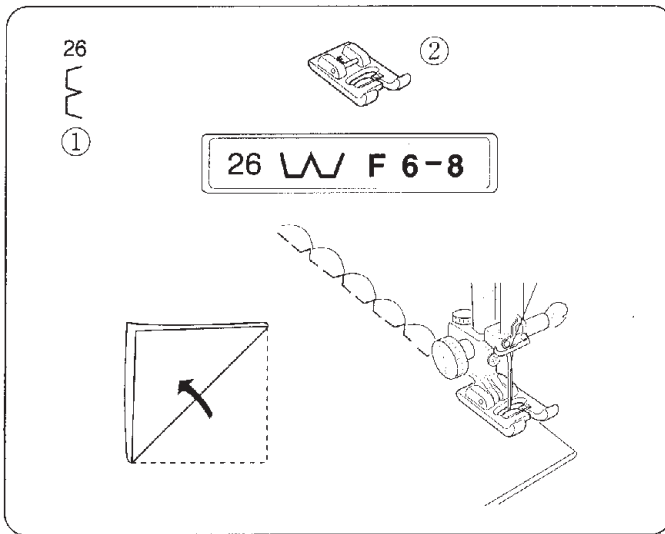


- ⑤ Trim about 0.7 cm (1/4") from corners as illustrated, to reduce bulk.

③ 0.7 cm (1/4")

## SECTION V DECORATIVE STITCHING

### Shell Stitch

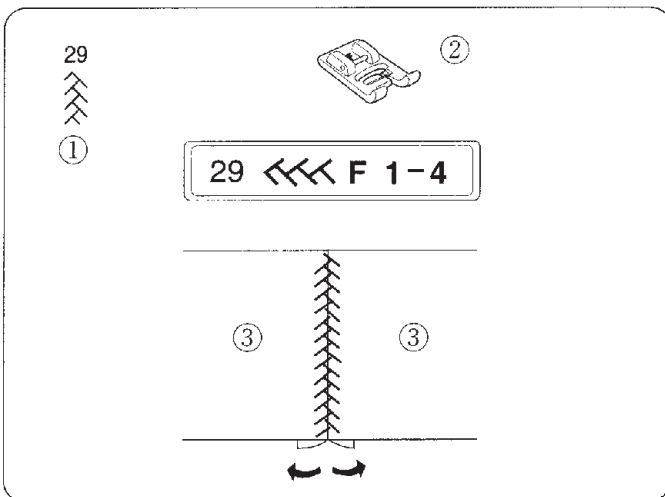


- ① Selected stitch
- ② F: Satin stitch foot

\* Use a lightweight fabric such as tricot. Fold and stitch on the bias. Set the stitch width and length as you desire. You may need to tighten the top thread slightly. Allow the needle to just clear the folded edge of the fabric when it zigzags.

If you sew rows of shell stitches, space the rows 1.5 cm (5/8") apart. You can sew shell stitches on knits or soft silky wovens in any direction.

### Patchwork

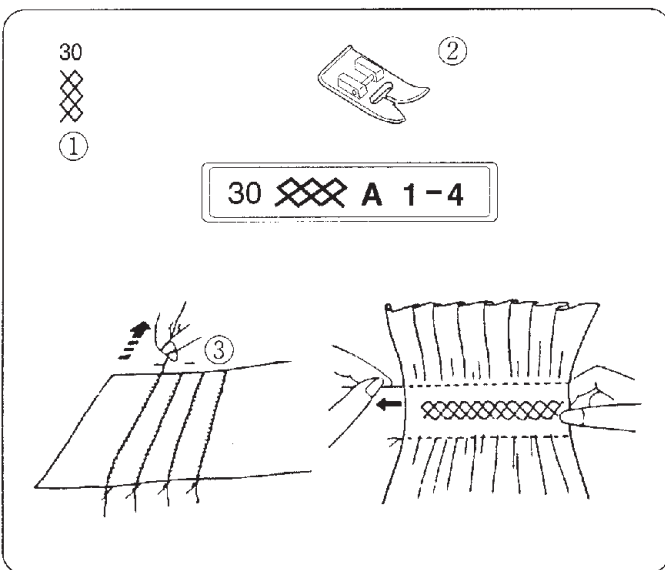


- ① Selected stitch
- ② F: Satin stitch foot

Sew seam and press seam allowance open. Sew pattern stitch on right side of garment centering over the seam line.

- ③ Right side of fabric

### Smocking



- ① Selected stitch
- ② A: Zigzag foot

With the manual stitch length at 4.5, sew straight lines 1 cm (3/8") apart, across the area to be smocked. A looser needle thread tension will make gathering easier. Knot the threads along one edge.

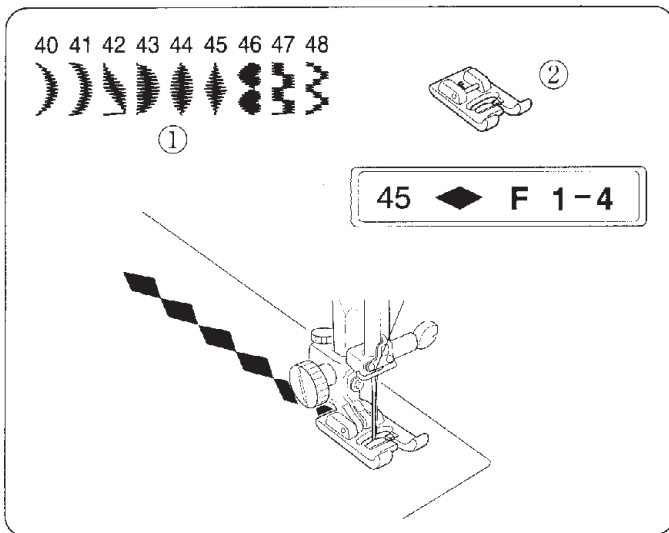
Pull the bobbin threads and distribute the gathers evenly.

Secure the threads at the other end.

Reduce the tension and pressure if necessary and sew pattern stitches between the straight seams.

Pull out the gathering stitches.

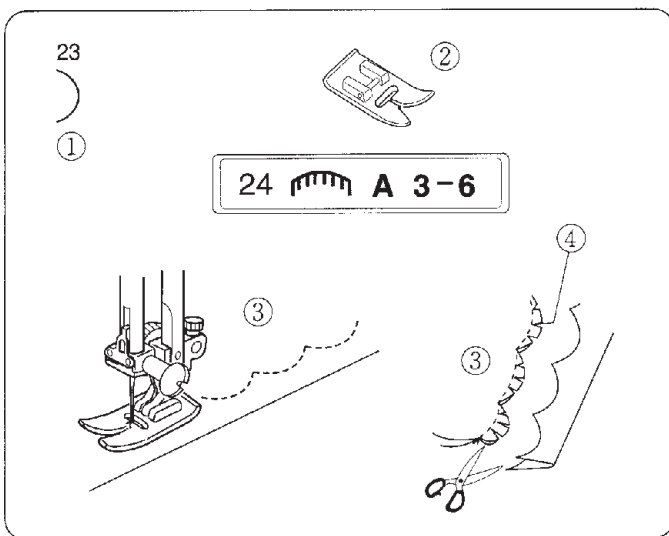
- ③ 1.0 cm (3/8")



### Decorative stitches

- ① Selected stitch
- ② F: Satin stitch foot

For a delicate appearance on fabric such as chiffon, use a single layer with a tear-away backing, if necessary.



### Scallop Hems

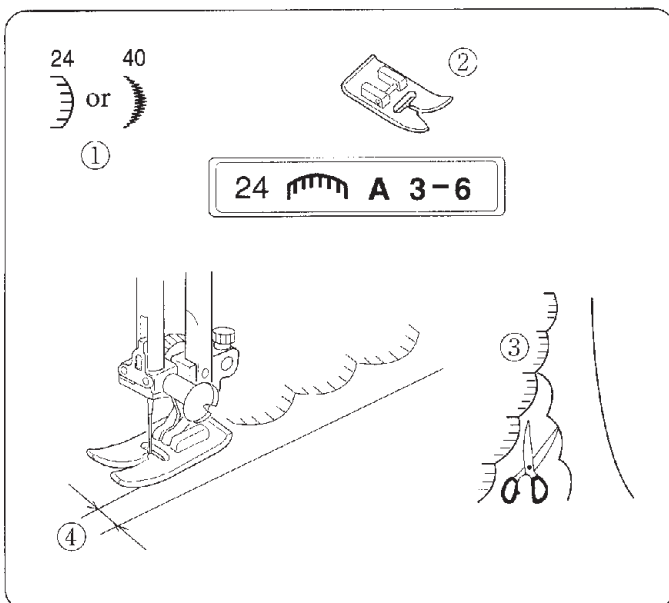
- ① Selected stitch
- ② A: Zigzag foot
- ③ Wrong side of fabric
- ④ Cutting

Fold hem with right sides together. Sew scallops 1 cm (3/8") from folded edge.

Trim close to stitching leaving 0.3 cm (1/8") seam allowance.

Clip seams as shown or trim with pinking shears.

Turn the hem to right side and press.



### Edging

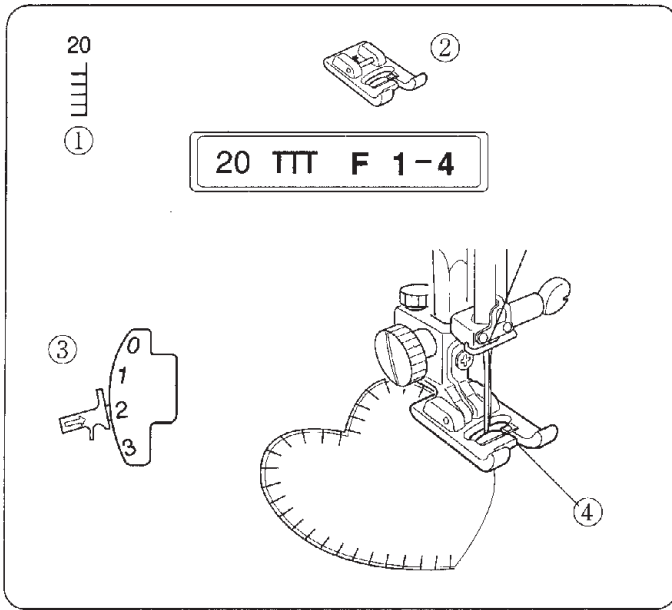
- ① Selected stitch
- ② A: Zigzag foot

Some of the craft patterns can be used to attractively finish the edges of collars, pockets and place mats.

To edge a collar, place interfacing between upper and under collar and sew the pattern on the seam line.

After sewing, trim fabric close to stitching, taking care not to cut thread.

- ③ Right side of fabric
- ④ 1 cm (3/8")



## Appliqué

- ① Selected stitch
- ② F: Satin stitch foot

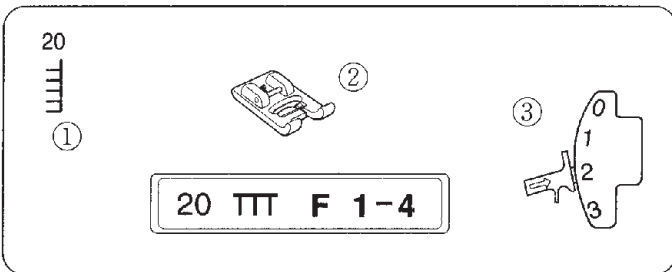
In this type of appliqué, raw edges are folded under. To finish the raw edge, first cut the appliqué design out of cardboard.

Fuse a lightweight interfacing to the wrong side of the fabric, then cut the fabric slightly larger than the cardboard.

Fold the fabric around the cardboard and press to form a perfectly shaped design.

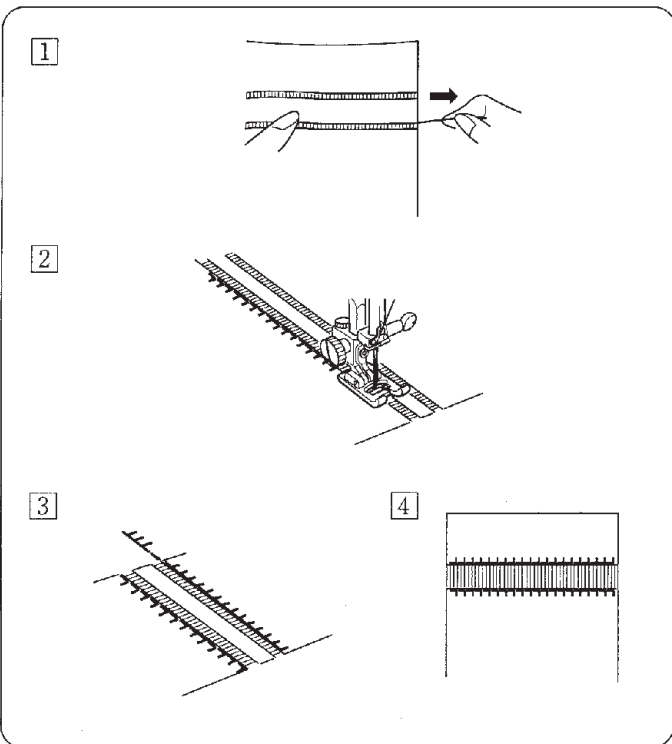
Tape the appliqué in place and sew, guiding the slit on Foot F next to the finished edge of the appliqué.

- ③ Set pressure adjusting lever at "2"
- ④ Slit



## Drawn work

- ① Selected stitch
- ② F: Satin stitch foot
- ③ Set pressure adjusting lever at "2"



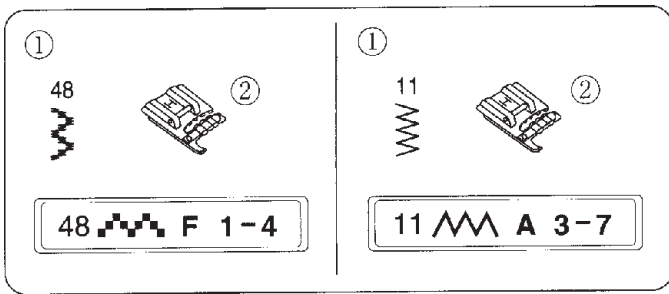
1 Pull out one or two threads on both sides where you would like to sew the drawn work, as shown.

2 Sew down the left side where you pulled out the threads.

3 Sew down the right side.

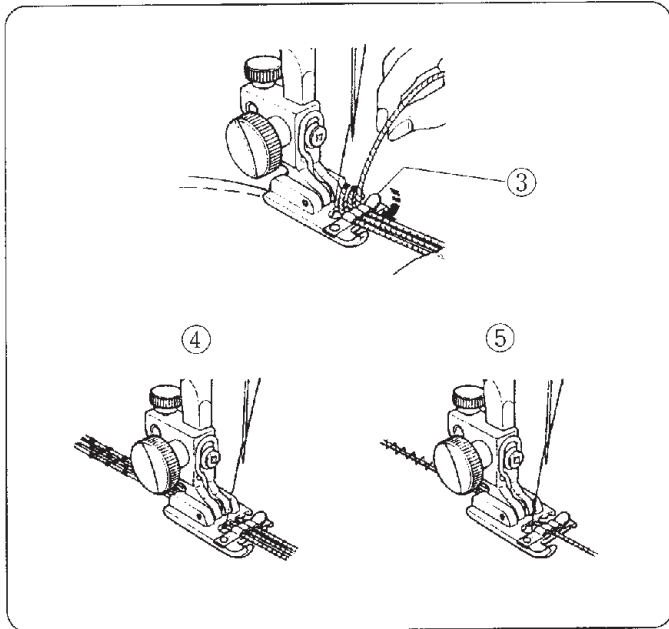
4 After both sides are sewn where you pulled out threads, pull out all the remaining threads from the fabric, as shown.

\* After sewing, reset the pressure adjusting lever to "3".



## Cording

- ① Selected stitch
- ② H: Cording foot

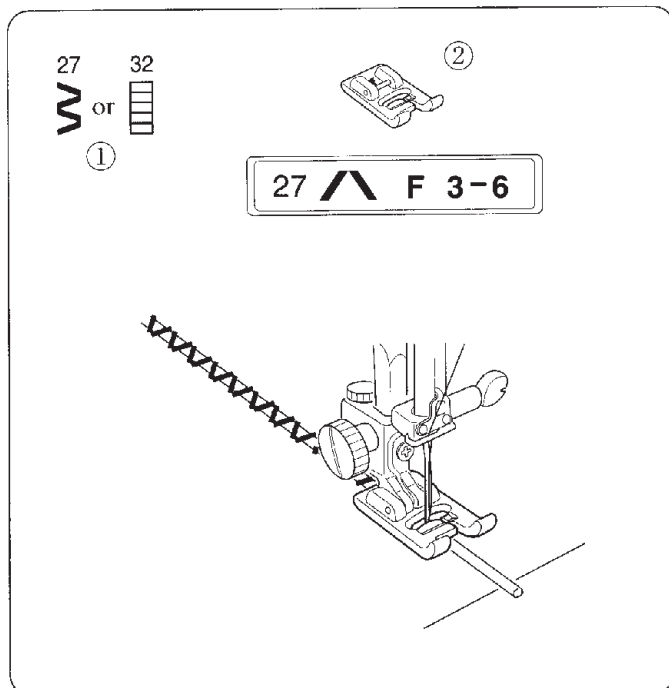


Slide the sewing threads to the left and insert three strands of cording into the slots of foot H with 5 cm (2") extending behind the foot.

The slots on foot H will hold the lengths of cording in place while the stitches form over the cording.

- \* Insert cording in the center groove of foot H for single cording.
- \* Fine wool, embroidery thread or lace thread can be used for cord.

- ③ Spring
- ④ Triple cording
- ⑤ Single cording

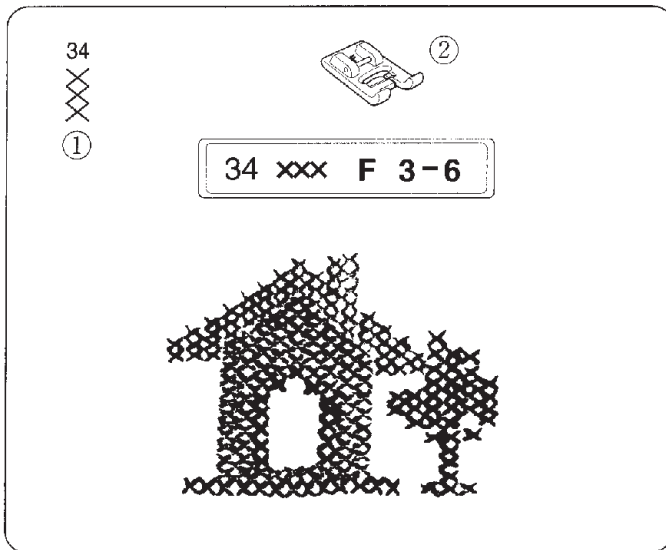


## Wide Cording

- ① Selected stitch
- ② F: Satin stitch foot

Place 0.5 to 0.6 cm (1/4") of thick cord or braid under the presser foot and sew.

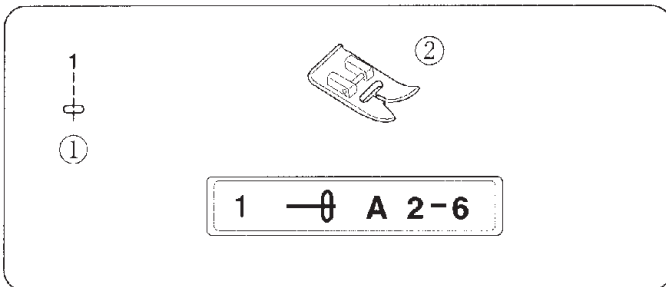
- \* Secure the leading end of the cord or braid with the same color thread before starting sewing. (Sew a few stitches by hand.)



### Cross Stitch

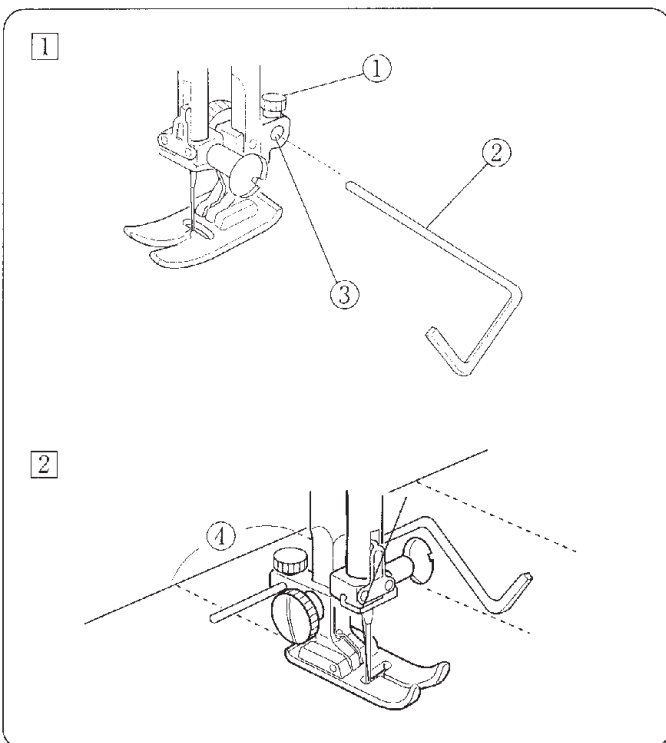
You'll love the beautiful designs you can sew with this craft stitch pattern, and in half the time it would take if embroidered by hand.

- ① Selected stitch
- ② F: Satin stitch foot



### Quilting

- ① Selected stitch
- ② A: Zigzag foot



The quilting guide will help to keep the stitching lines straight.

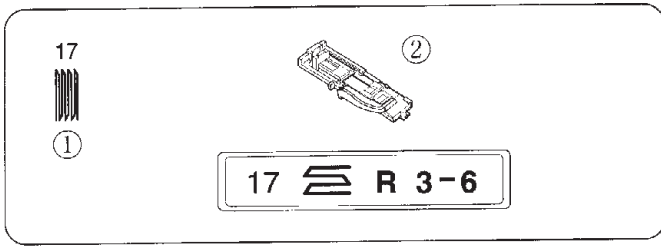
- ① Loosen the quilter screw.

Slide the quilter in the opening to the desired width and tighten the screw.

- ① Quilter holding screw
- ② Quilter
- ③ Hole

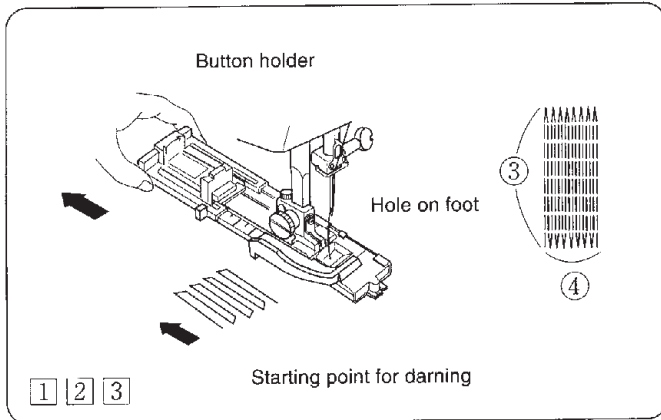
- ② Sew, guiding the quilter over the previous row of stitching.

- ④ Distance

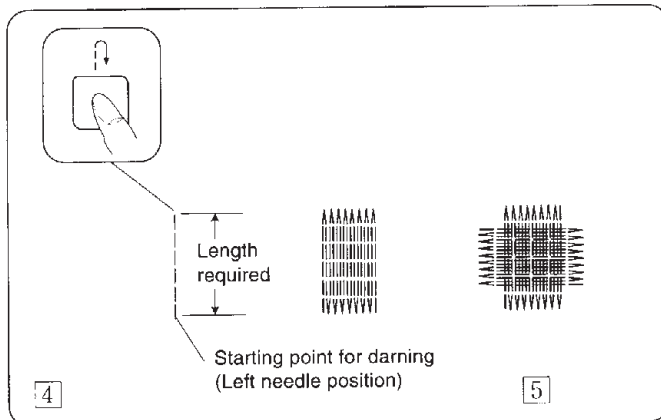


## Darning

- ① Selected stitch
- ② R: Automatic buttonhole foot

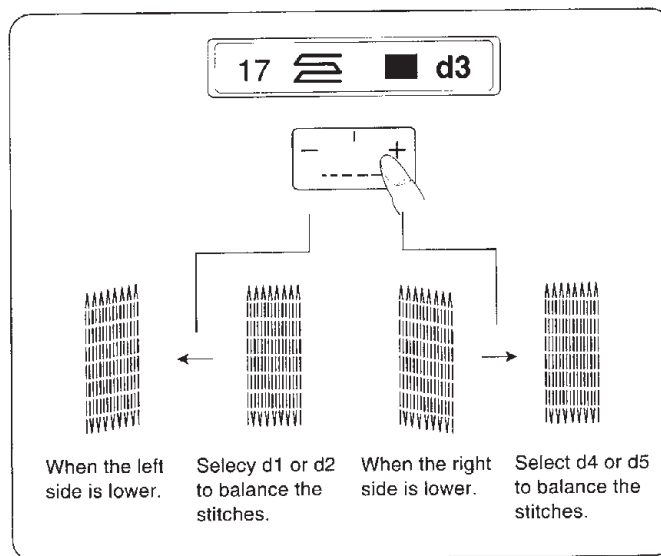


- 1 Pull the button holder to the rear.
- 2 Place the garment under the presser foot. Press the up/down needle button key twice to pull up the bobbin thread. Remove the fabric to the left to draw both threads under the foot and put the fabric under the foot again.
- 3 Place the needle where you would like to sew and lower the foot. Press the foot control. The machine will lock stitch, sew 16 rows of darning, lock stitch again and stop automatically.
  - \* The size of one cycle is variable. However, the maximum stitch length is 2 cm (3/4") and the maximum stitch width is 0.7 cm (1/4").



### For darning a length of less than 2 cm.

- 4 Sew the desired length, then stop the machine and press the reverse button. The required length has now been determined. Now, restart the machine and continue sewing until the machine stops automatically.
- 5 Turn the fabric to change the sewing direction for repeat the darn across the first one.



### To memorize darning stitches.

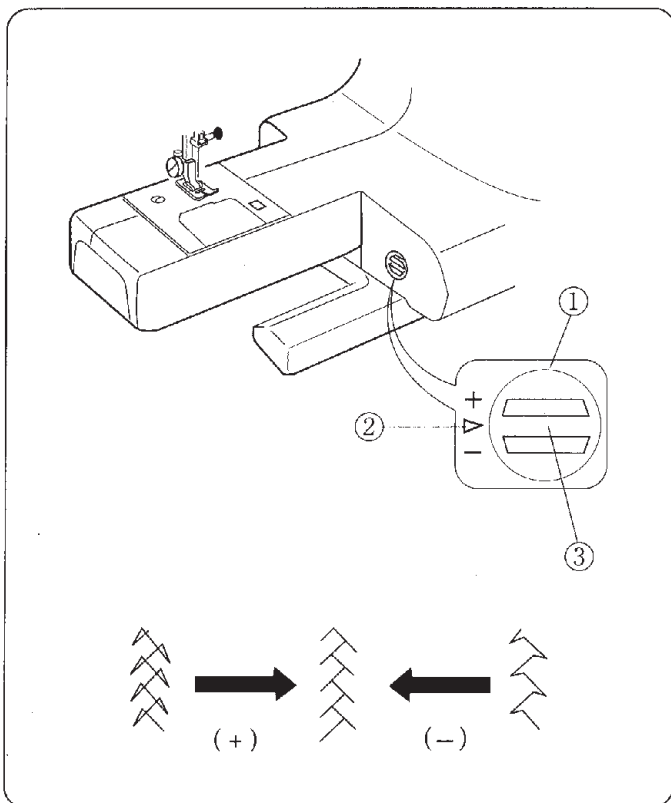
When you press the memory key after steps 3 and 4, you can repeatedly sew the same size darn to repair a side rip.

### To adjust the balance of the darning stitches.

If one side of the darn is higher or lower than the other, make them even by pressing the “-” or “+” key.

“d3” will appear on the display screen automatically when you press the stitch length adjusting key “-” or “+”.

Adjust the darning stitches between d1 and d5 by pressing the “-” or “+” key.



## Adjusting Pattern Balance

If stretch stitch patterns are uneven when you sew on a particular fabric, adjust them with the feed balancing dial.

- ① Feed balancing dial
- ② Standard mark
- ③ Setting mark

To Adjust distorted patterns:

- \* If patterns are compressed, correct by turning the dial in the direction of “+”.
- \* If patterns are drawn out, correct by turning the dial in the direction of “-”.



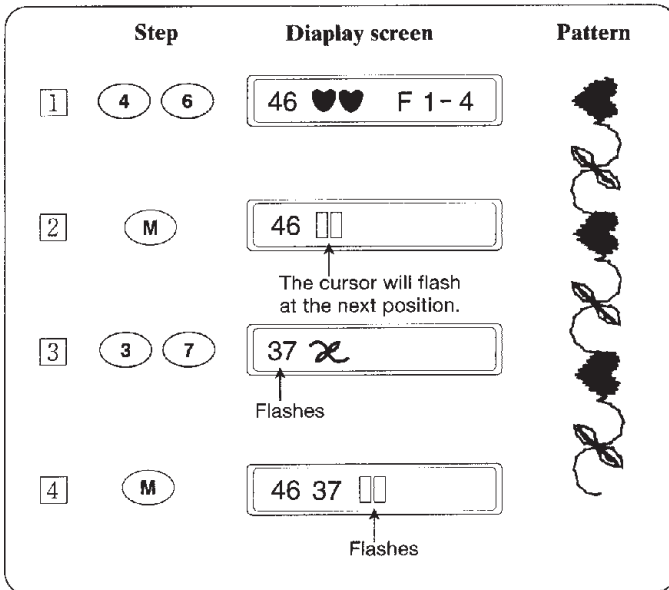
## Program Decorative Stitch Patterns

### Example: Combining Patterns 46 and 37 for continuous sewing.

You can sew the memorized stitch patterns repeatedly.

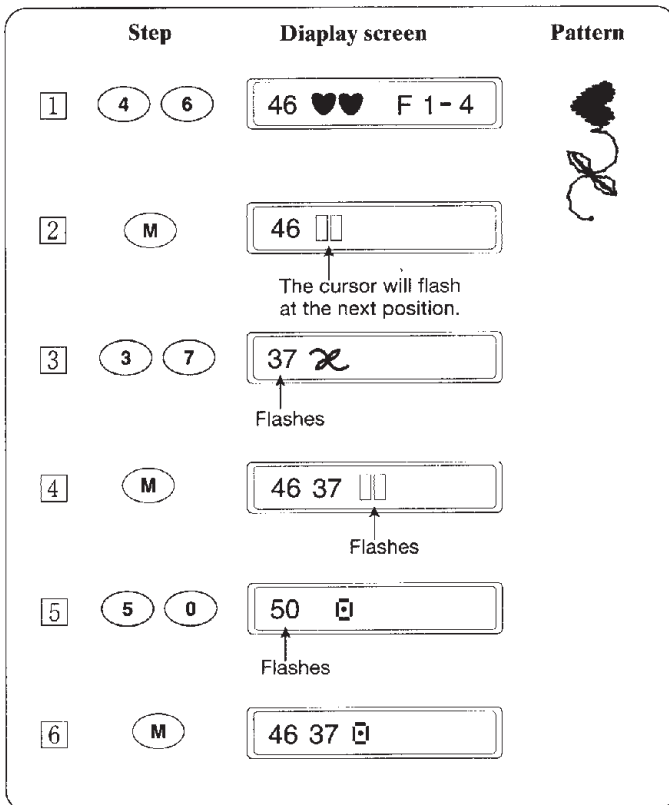
- 1 Select Pattern 46.
- 2 Memorize Pattern 46.
- 3 Select Pattern 37.
- 4 Memorize Pattern 37.

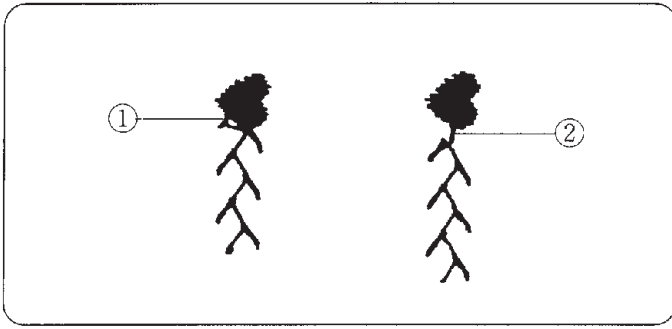
\* You can start sewing even though the cursor is still blinking.



### Example: Combining patterns with lock stitch (Pattern 50)

- 1 Select Pattern 46.
- 2 Memorize Pattern 46.
- 3 Select Pattern 37.
- 4 Memorize Pattern 37.
- 5 Select Pattern 50.
- 6 Memorize Pattern 50.





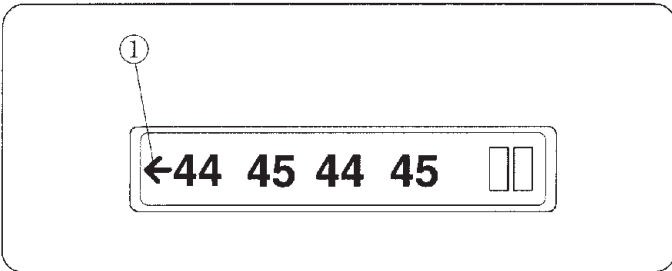
### To adjust overlapping patterns.

When sewing two different patterns in a row, do the following if they tend to overlap:

Memorize one straight stitch (Pattern 1) in between them to add space.

See example, left: combining patterns 24 and 14.

- ① Overlapping point
- ② Straight stitch (Pattern 1)



### Note concerning display screen

If you memorize more than 5 patterns, the display screen shows an arrow in the leftmost position, as shown.

This indicates that the first patterns you memorized still exist but can't be displayed on the screen.

- ① Arrow

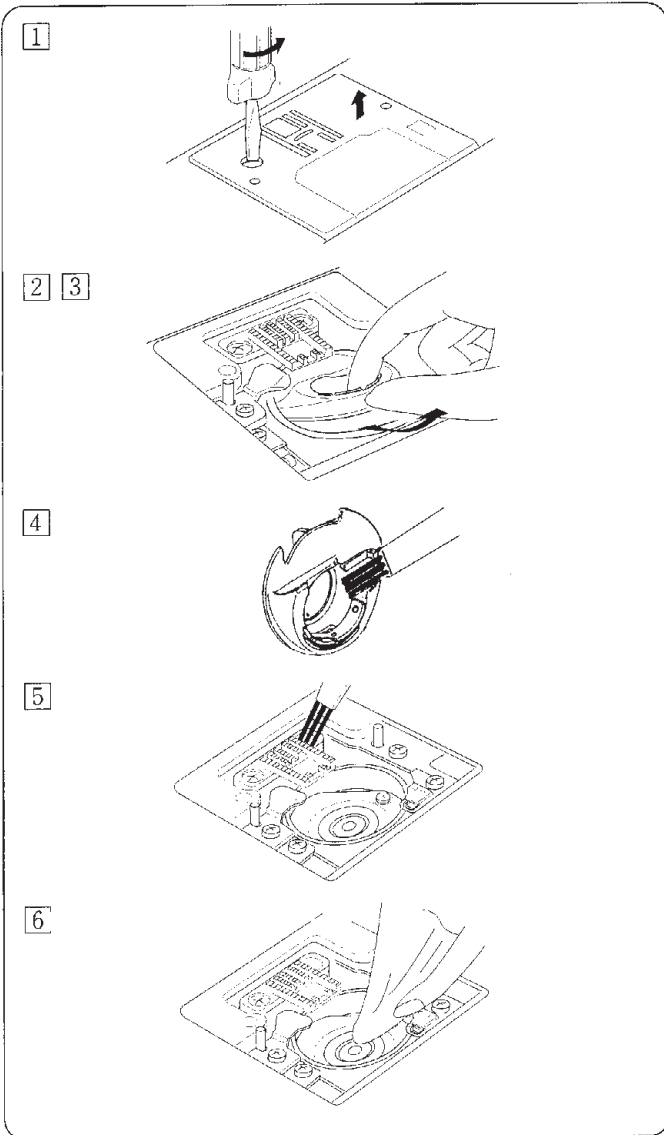
## SECTION VI CARE OF YOUR MACHINE

### Care of Your Machine

- \* Press the up/down needle position key to raise the needle and unplug the machine before cleaning.
- \* Do not dismantle the machine other than explained on this page.
- \* The machine never needs oiling.
- \* Do not store the machine in a high humidity area, near a heat radiator or in direct sunlight.
- \* Clean the outside of the machine with a soft cloth and neutral soap.

### Cleaning the Hook Race and Feed Dog

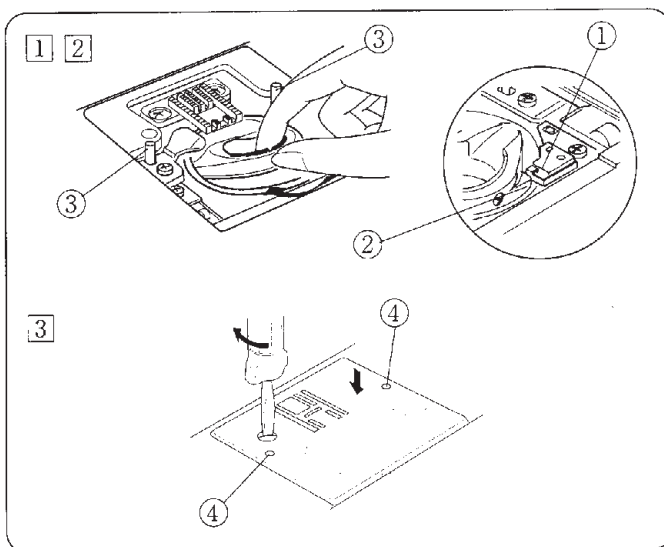
- 1 Remove the presser foot and needle. Remove the screw on the left side of the needle plate with the screwdriver supplied with the machine.
- 2 Remove the needle plate and take out the bobbin.
- 3 Lift up the bobbin holder and remove it.
- 4 Brush out dust and lint.
- 5 Clean the feed dogs and hook race with the lint brush.
- 6 Wipe out gently with soft, dry cloth.
  - \* You may also use a vacuum cleaner.



### Replacing the Bobbin Holder

- 1 Insert the bobbin holder so that the knob fits next to the stopper in the hook race.
  - ① Stopper
  - ② Knob
- 2 Insert the bobbin.
- 3 Replace the needle plate, inserting the two needle plate guide pins into the holes in the needle plate. Replace the screw.
  - ③ Needle plate guide pins
  - ④ Guide holes

After cleaning, be sure to replace the needle and presser foot.



## Troubleshooting

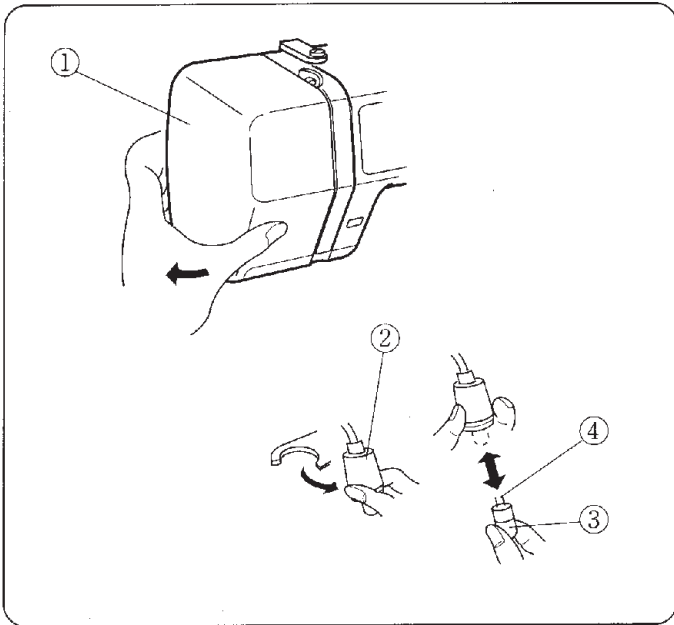
Condition	Cause	Reference
<b>The needle thread breaks.</b>	<ol style="list-style-type: none"> <li>1. The needle thread is not threaded properly.</li> <li>2. The needle thread tension is too tight.</li> <li>3. The needle is bent or blunt.</li> <li>4. The needle is incorrectly inserted.</li> <li>5. The needle thread and the bobbin thread are not set properly under (drawn to the rear of) the presser foot when sewing is starting.</li> <li>6. The fabric is not drawn to the rear when sewing is finished.</li> <li>7. The thread is too heavy or too fine for the needle.</li> </ol>	<p>Refer to page 9  Refer to page 15  Refer to page 17  Refer to page 17  Refer to page 12</p> <p>Refer to page 12  Refer to page 18</p>
<b>The bobbin thread breaks.</b>	<ol style="list-style-type: none"> <li>1. The bobbin thread is not threaded properly in the bobbin holder.</li> <li>2. Lint has collected in the bobbin holder.</li> <li>3. The bobbin is damaged and doesn't turn smoothly.</li> </ol>	<p>Refer to page 8</p> <p>Refer to page 41  Change the bobbin</p>
<b>The needle breaks.</b>	<ol style="list-style-type: none"> <li>1. The needle is incorrectly inserted.</li> <li>2. The needle is bent or blunt.</li> <li>3. The needle clamp screw is loose.</li> <li>4. The needle thread tension is too tight.</li> <li>5. The fabric is not drawn to the rear when sewing is finished.</li> <li>6. The needle is too fine for the fabric being sewn.</li> </ol>	<p>Refer to page 17  Refer to page 17  Refer to page 17  Refer to page 15  Refer to page 12  Refer to page 18</p>
<b>Screen is not clear.</b>	<ol style="list-style-type: none"> <li>1. The sharpness of the liquid crystal display is not adjusted properly.</li> </ol>	<p>Refer to page 5  Readjust</p>
<b>Skipped stitches.</b>	<ol style="list-style-type: none"> <li>1. The needle is incorrectly inserted.</li> <li>2. The needle is bent or blunt.</li> <li>3. The needle and/or threads are not suitable for the work being sewn.</li> <li>4. A blue tipped needle is not being used for sewing stretch, very fine fabrics or synthetics.</li> <li>5. The needle thread is not threaded properly.</li> <li>6. The presser foot pressure is not strong enough.</li> <li>7. The wrong needle is used.</li> </ol>	<p>Refer to page 17  Refer to page 17  Refer to page 18</p> <p>Refer to page 18</p> <p>Refer to page 9  Refer to page 16  Change the needle</p>
<b>Seam puckering.</b>	<ol style="list-style-type: none"> <li>1. The needle thread tension is too tight.</li> <li>2. The needle thread is not threaded properly.</li> <li>3. The needle is too heavy for the fabric being sewn.</li> <li>4. The stitch length is too long for the fabric.</li> <li>5. The presser foot pressure is not correctly adjusted.</li> </ol>	<p>Refer to page 15  Refer to pages 8, 9  Refer to page 18  Shorten stitch length  Refer to page 16</p>
<b>The cloth is not feeding smoothly.</b>	<ol style="list-style-type: none"> <li>1. The feed dog is packed with lint.</li> <li>2. The presser foot pressure is too weak.</li> <li>3. The stitches are too fine.</li> <li>4. The feed dog was not raised after "drop feed" was used.</li> </ol>	<p>Refer to page 41  Refer to page 16  Make stitches longer  Refer to page 16</p>

## Troubleshooting, cont'd

<b>Condition</b>	<b>Cause</b>	<b>Reference</b>
<b>Gathering</b>	<ol style="list-style-type: none"><li>1. The needle thread tension is too loose.</li><li>2. The needle is too heavy or light for the fabrics being sewn.</li></ol>	Refer to page 15 Refer to page 18
<b>The machine doesn't work.</b>	<ol style="list-style-type: none"><li>1. The machine is not plugged in.</li><li>2. A thread is caught in the hook race.</li><li>3. The bobbin winder spindle is still in the winding position.</li></ol>	Refer to page 4 Refer to page 41 Refer to page 7
<b>Patterns are distorted.</b>	<ol style="list-style-type: none"><li>1. The stitch is not balanced.</li></ol>	Refer to page 38
<b>The automatic buttonhole stitches are not working.</b>	<ol style="list-style-type: none"><li>1. The stitch density is not suitable for the fabric being sewn.</li><li>2. Interfacing is not being used with stretch fabrics.</li></ol>	Refer to page 24 Refer to page 21
<b>Noisy operation</b>	<ol style="list-style-type: none"><li>1. There is thread caught in the hook race.</li><li>2. Lint has built up in the bobbin holder or hook race.</li><li>3. Slight humming sound coming from internal motor.</li></ol>	Refer to page 41 Refer to page 41 Not abnormal

### **STOP FOR SAFETY PURPOSE**

This message may appear on the display screen for 15 seconds if the machine stops due to thread jamming, the fabric being sewn is too heavy, the needle is bent, etc.  
Please remedy the problem and restart the machine.



### Replacing the Light Bulb

To replace the light bulb, turn off the power supply and remove the power cord from the wall outlet. Remove the light after it has cooled down.

#### To remove the light bulb.

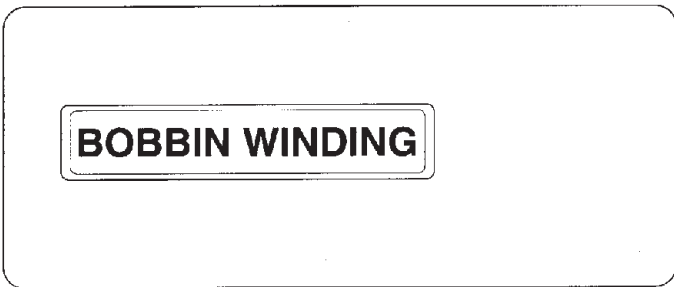
Open the face plate and remove the lamp socket. Pull out the light gently.

- ① Face plate
- ② Lamp socket
- ③ Lamp

#### To attach the light bulb.

While replacing the lamp, be careful to match the pins on the lamp with the holes in the socket. Attach the lamp socket and close the face plate.

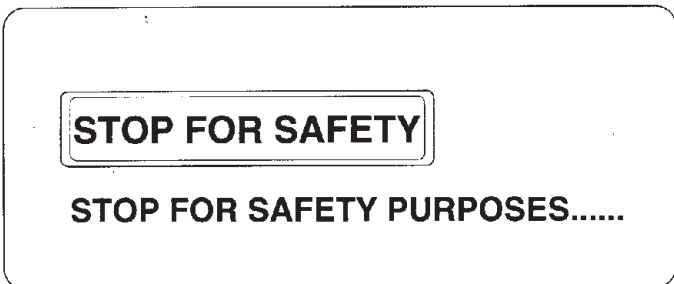
- ④ Pins



### When Messages Appear on the Screen

The liquid crystal display shows “ BOBBIN WINDING”.

After the bobbin is wound, return the bobbin winder to its original position by moving the spindle to the left.



The message “ STOP FOR SAFETY PURPOSES....” scrolls across the screen when the machine is overloaded.

Refrain from operating the machine until this message disappears (about 15 seconds).

\* See note on previous page.