SINGER

### **CONGRATULATIONS**

As the owner of a new Singer sewing machine, you are about to begin an exciting adventure in creativity. From the moment you first use your machine, you will know you are sewing on one of the easiest to use sewing machines ever made.

In addition to the many familiar Singer exclusives, like a removable extension table (6212) and a friction-free spool holder, this machine offers you these features:

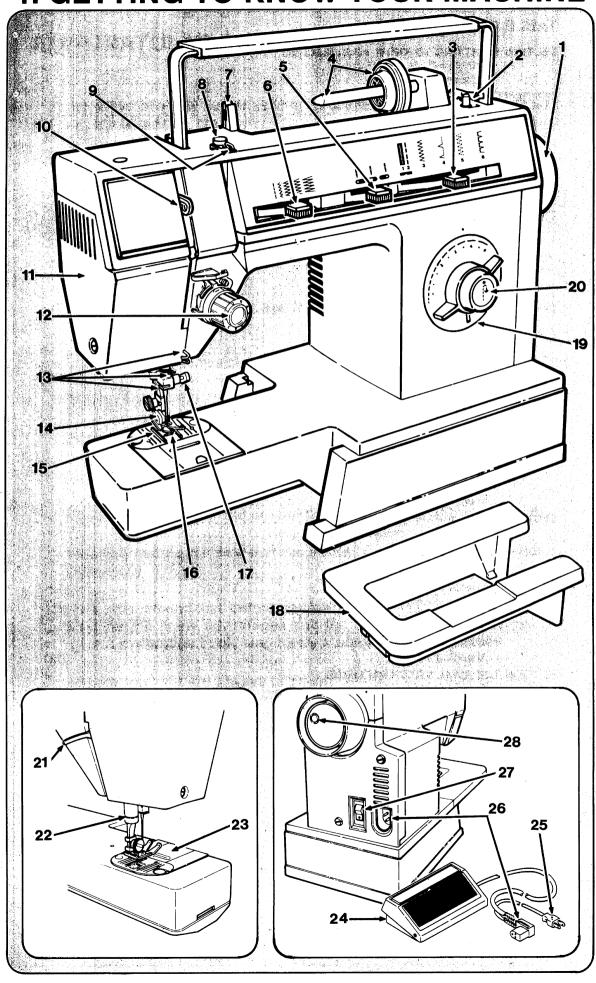
- Zig-zag stitching for buttonholes, mending and decorative stitches.
- Built-in 4-step buttonholer that takes the difficulty out of making a buttonhole.
- Blindstitching for invisible hems.
- Easy to find "Letter-Coded" Accessories.
- Drop in front bobbin for easy, quick bobbin replacement.
- Simple stitch length dial and push button reverse stitching.
- Snap-on presser feet that are quickly removed and easily replaced.
- One-way needle insertion that makes it impossible to insert the needle incorrectly.

May we recommend that, before you start to use your sewing machine, you discover the many advantages and the ease of operation by going through this instruction book, step by step, seated at your machine.

To ensure that you are always provided with the most modern sewing capabilities, the manufacturer reserves the right to change the appearance, design or accessories of this sewing machine when considered necessary.

	GETTING TO KNOW YOUR MACHINE
	Principal Parts
	Accessories
<b>SECTION 2</b>	GETTING READY TO SEW
	Important Safeguards
	Operating the Machine
	Connecting the Machine
	Choosing and Changing Needles
	Changing Snap-On Presser Feet
	Changing Screw-On Presser Feet
	Changing the Needle Plate
	Attaching the Feed Cover
	Removing and Replacing the Extension Table
	Fabric, Thread, and Needle Table
	Winding a Bobbin
	Inserting a Bobbin
	Threading the Machine
	Raising the Bobbin Thread
SECTION 3	STRAIGHT STITCHING
	Stitch Width Selector
	Needle Position Selector
	Stitch Length Selector
	Adjusting Thread Tension
	Sewing a Seam
	Placing Fabric Under Foot
	Basting
	Keeping Seams Straight
	Starting a Seam
	Guiding and Supporting Fabric
	Sewing in Reverse
	Darning
	Quilting
	Inserting a Zipper
SECTION 4	ZIG-ZAG STITCHING
	Stitch Pattern Selector
	Needle Position Selector
	Stitch Width Selector
	Adjusting Stitch Length
	Needle Thread Tension
	Zig-Zag Stitch
	Seam Finishing
	Satin Stitching
	Block Monogramming
	Attaching a Button
SECTION 5	SPECIAL STITCH PATTERNS
SECTION 5	SPECIAL STITCH PATTERNS  Blindstitch #4
SECTION 5	SPECIAL STITCH PATTERNS
SECTION 5	SPECIAL STITCH PATTERNS  Blindstitch #4
SECTION 5	SPECIAL STITCH PATTERNS  Blindstitch #4  Ladder Seams
SECTION 5	SPECIAL STITCH PATTERNS  Blindstitch #4  Ladder Seams  Multi-Stitch #5  Mending a Tear
SECTION 5	SPECIAL STITCH PATTERNS  Blindstitch #4  Ladder Seams  Multi-Stitch #5  Mending a Tear  Bar Tacks
SECTION 5	SPECIAL STITCH PATTERNS  Blindstitch #4 Ladder Seams Multi-Stitch #5 Mending a Tear Bar Tacks  "M" Stitch #6
SECTION 5	SPECIAL STITCH PATTERNS  Blindstitch #4 Ladder Seams Multi-Stitch #5 Mending a Tear Bar Tacks  "M" Stitch #6 Elastic Insertion
	SPECIAL STITCH PATTERNS  Blindstitch #4 Ladder Seams Multi-Stitch #5 Mending a Tear Bar Tacks "M" Stitch #6 Elastic Insertion Lace Insertion
	SPECIAL STITCH PATTERNS  Blindstitch #4 Ladder Seams Multi-Stitch #5 Mending a Tear Bar Tacks "M" Stitch #6 Elastic Insertion Lace Insertion 4-STEP BUTTONHOLE
	SPECIAL STITCH PATTERNS  Blindstitch #4 Ladder Seams Multi-Stitch #5 Mending a Tear Bar Tacks  "M" Stitch #6 Elastic Insertion Lace Insertion 4-STEP BUTTONHOLE Balancing the Buttonhole
	SPECIAL STITCH PATTERNS  Blindstitch #4 Ladder Seams Multi-Stitch #5 Mending a Tear Bar Tacks "M" Stitch #6 Elastic Insertion Lace Insertion 4-STEP BUTTONHOLE
SECTION 6	SPECIAL STITCH PATTERNS  Blindstitch #4 Ladder Seams Multi-Stitch #5 Mending a Tear Bar Tacks  "M" Stitch #6 Elastic Insertion Lace Insertion 4-STEP BUTTONHOLE Balancing the Buttonhole
SECTION 6	SPECIAL STITCH PATTERNS  Blindstitch #4 Ladder Seams Multi-Stitch #5 Mending a Tear Bar Tacks  "M" Stitch #6 Elastic Insertion Lace Insertion 4-STEP BUTTONHOLE Balancing the Buttonhole Free-Arm Sewing CARING FOR YOUR MACHINE
SECTION 6	SPECIAL STITCH PATTERNS  Blindstitch #4 Ladder Seams Multi-Stitch #5 Mending a Tear Bar Tacks  "M" Stitch #6 Elastic Insertion Lace Insertion 4-STEP BUTTONHOLE Balancing the Buttonhole Free-Arm Sewing  CARING FOR YOUR MACHINE Removing and Replacing Bobbin Case
SECTION 6	SPECIAL STITCH PATTERNS  Blindstitch #4 Ladder Seams Multi-Stitch #5 Mending a Tear Bar Tacks  "M" Stitch #6 Elastic Insertion Lace Insertion 4-STEP BUTTONHOLE Balancing the Buttonhole Free-Arm Sewing  CARING FOR YOUR MACHINE Removing and Replacing Bobbin Case Changing the Light Bulb
SECTION 6	SPECIAL STITCH PATTERNS  Blindstitch #4 Ladder Seams Multi-Stitch #5 Mending a Tear Bar Tacks  "M" Stitch #6 Elastic Insertion Lace Insertion 4-STEP BUTTONHOLE Balancing the Buttonhole Free-Arm Sewing  CARING FOR YOUR MACHINE Removing and Replacing Bobbin Case Changing the Light Bulb Cleaning the Machine
SECTION 6	SPECIAL STITCH PATTERNS  Blindstitch #4  Ladder Seams Multi-Stitch #5  Mending a Tear  Bar Tacks  "M" Stitch #6  Elastic Insertion  Lace Insertion  4-STEP BUTTONHOLE  Balancing the Buttonhole Free-Arm Sewing  CARING FOR YOUR MACHINE  Removing and Replacing Bobbin Case Changing the Light Bulb Cleaning the Machine Lubricating the Machine
SECTION 6	SPECIAL STITCH PATTERNS  Blindstitch #4 Ladder Seams Multi-Stitch #5 Mending a Tear Bar Tacks  "M" Stitch #6 Elastic Insertion Lace Insertion 4-STEP BUTTONHOLE Balancing the Buttonhole Free-Arm Sewing  CARING FOR YOUR MACHINE Removing and Replacing Bobbin Case Changing the Light Bulb Cleaning the Machine

## 1. GETTING TO KNOW YOUR MACHINE



#### PRINCIPAL PARTS .....

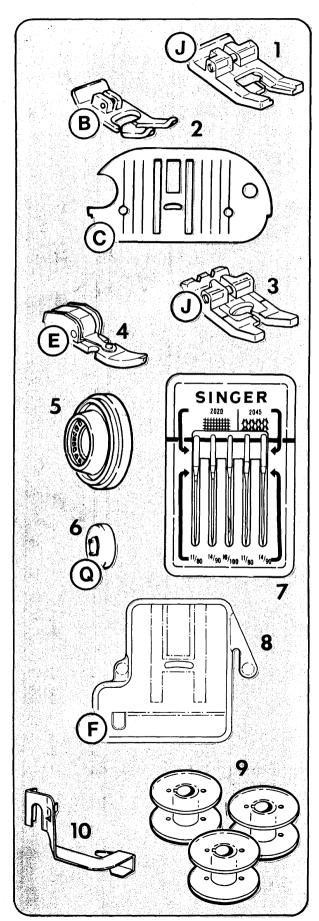
### What they are and what they do

- HAND WHEEL provides a means of raising or lowering needle manually.
- 2. BOBBIN WINDER is for filling the bobbin with thread.
- 3. PATTERN SELECTOR LEVER for selecting different patterns.
- FRICTION-FREE SPOOL PIN AND CAP hold the top thread supply and allow it to unwind smoothly.
- NEEDLE POSITION SELECTOR positions needle in left, center or right position for special applications.
- STITCH WIDTH LEVER controls width of patterns and sets needle for straight stitching.
- 7. SNAP-IN THREAD GUIDE helps to insure smooth flow of thread.
- 8. BOBBIN WINDER TENSION DISC provides thread tension when bobbin winding.
- **9. THREAD GUIDE** leads thread down into tension discs.
- TAKE UP LEVER draws correct amount of thread from spool for best stitch formation.
- 11. FACE PLATE is a removable cover protecting movable parts and sewing light.
- 12. NEEDLE THREAD TENSION DIAL controls top thread tension.
- **13. THREAD GUIDES** lead thread to needle.
- **14. SNAP ON PRESSER FOOT** holds fabric against feed system teeth.
- **15. FEED SYSTEM** moves fabric under presser foot.
- **16. NEEDLE PLATE** supports the fabric during sewing.

- 17. ONE-WAY NEEDLE CLAMP holds needle in machine and prevents incorrect insertion.
- 18. REMOVABLE EXTENSION TABLE lets you change from flat bed to free arm. (6212)
- 19. STITCH LENGTH DIAL allows for a variety of stitch lengths.
- 20. REVERSE STITCH BUTTON, when pushed in provides continuous reverse fabric movement. When turned right or left, adjusts balance of buttonhole.
- 21. PRESSER FOOT LIFTER, at the back of machine, lets you raise and lower presser foot.
- 22. THREAD CUTTER, on presser bar is built-in for ease.
- 23. SLIDE PLATE opens for easy removal and replacement of bobbin.
- 24. SPEED CONTROLLER, designed for safety, regulates the speed of your sewing machine.
- 25. ELECTRICAL POWER CORD connects machine to your electrical outlet.
- 26. MACHINE PLUG connects the speed controller and power line to the motor. Push the machine plug into the machine receptacle to the right of the power and light switch.
- 27. POWER AND LIGHT SWITCH turns on machine and sewing light at one time.
- 28. BOBBIN WINDING INDENT, on hand wheel. When pressed, stops needle movement for smooth even bobbin winding.

#### **ACCCESSORIES**

The following accessories furnished with your sewing machine are designed to simplify your sewing projects and increase the versatility of your machine.



The letter you see next to the illustrated part is actually on the part itself and is to help you make sure your selection is correct when sewing different applications.

- 1. SPECIAL PURPOSE PRESSER FOOT (J) is used for decorative and zig-zag sewing.
- GENERAL PURPOSE NEEDLE PLATE (A) and PRESSER FOOT (B) are on your machine when delivered. Use together for alternating between straight and zig-zag stitching.
- BUTTONHOLE PRESSER FOOT (L) is used with the General Purpose Needle Plate to make fourstep buttonholes.
- ZIPPERFOOT (E) is used for inserting zippers and stitching corded seams.
- 5. FRICTION FREE SPOOL HOLDER is used to hold various size spools and allows thread to unwind smoothly. The spool does not turn.
- SMALL THREAD SPOOL HOLDER (Q) for use with small diameter spools of thread.
- NEEDLE PACK includes an assortment for sewing various types of fabrics.
- 8. FEED COVER (F) is used to prevent the feed from moving the fabric when darning or free motion embroidery.
- **9. TRANSPARENT BOBBINS** for easy viewing of thread supply.
- BLINDSTITCH HEM GUIDE, is used to position the hem for blindstitch hemming.

When mounting the machine to a cabinet, use Kit #313180 only. Use of any other kit could cause damage to the machine and become a safety hazard.

## 2. GETTING READY TO SEW

### **IMPORTANT SAFEGUARDS**

- 1. Disconnect the power-line plug from the socket outlet when changing needles, feet, or needle plates, or when leaving the machine unattended. This eliminates the possibility of starting the machine by accidentally pressing the speed controller.
- 2. Before removing the bobbin case, disconnect the power-line plug from the socket outlet.
- 3. Because of the up and down movement of the needle, you must work carefully and watch the sewing area when operating the machine.
- 4. Do not pull the fabric while you are stitching as this may deflect the needle, causing it to break.
- 5. Before cleaning your machine, disconnect the power-line plug from the socket outlet.
- 6. Do not attempt to adjust the motor belt. Contact your nearest Service Center or an authorized Singer dealer should any adjustment be required.
- 7. Before changing light bulb, make sure you have disconnected powerline plug from socket outlet. Be sure to replace the head end cover which covers the light bulb before operating the machine.
- 8. This machine is designed to use a 15-watt maximum light bulb.
- 9. This machine is double insulated. When servicing, use only identical replacement parts.

This product is suppressed for radio and television interference with the International Electro-technical Commission requirements of the CISPR.

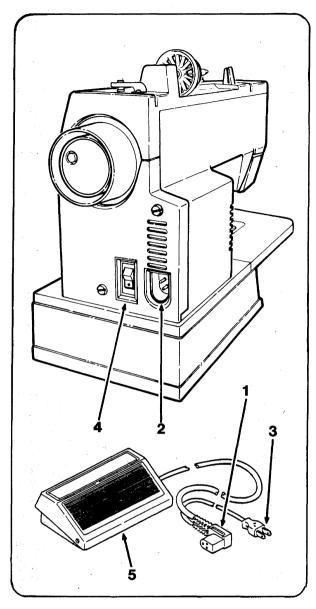
Machines for Great Britain and some other countries having similar wiring standards are shipped from the factory without a plug for connection to the mains. The wires in this mains lead are coloured in accordance with the following code:

Blue: neutral (N) Brown: live (L)

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red. If a 13 Amp. (BS 1363) plug is used, a 3 Amp. fuse must be fitted, or if any other type of plug is used, a 5 Amp. fuse must be fitted either in the plug or adaptor or at the distribution board.

#### **OPERATING THE MACHINE**



#### Connecting the machine

Push plug (1) into the receptacle (2) at the right end of the machine. Then connect plug (3) to your socket outlet.

#### Running the machine

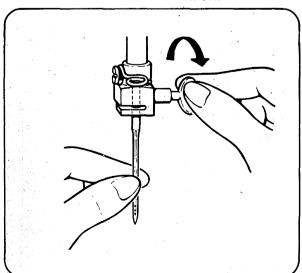
To turn on machine and sewing light, press upper portion of power switch (4). To turn off machine and light, press lower portion "0" of power switch.

To run the machine and control speed, press the speed controller (5) with your foot. The harder you press, the faster the machine will sew. To stop machine, remove foot from controller.

NOTE: Do not operate machine without fabric under the presser foot as this may damage the feed and the presser foot.

#### **CHOOSING AND CHANGING NEEDLES**

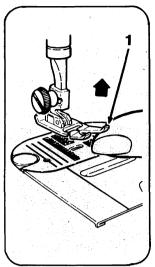
For best results from your sewing machine, use only Singer needles. Check the needle package, and the Fabric, Thread and Needle Table on page 9 for the correct needle and fabric combination.

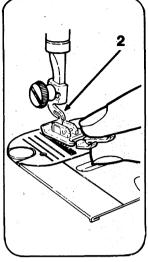


- Raise needle to its highest position.
- Loosen needle clamp screw and remove needle.
- With flat side of needle to the back, insert new needle up into clamp as far as it will go.
- Tighten needle clamp screw securely.

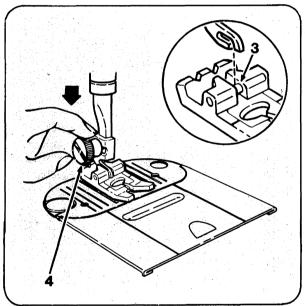
## CHANGING SNAP-ON PRESSER FEET (B),(D),(J),(L)

Your machine comes with the General Purpose Presser Foot (B) already attached. You can easily change to any one of the other presser feet which snap onto a common shank by following the directions below.





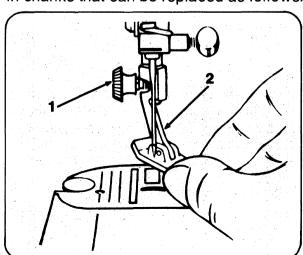
- Raise needle to its highest position by turning hand wheel toward you.
- Raise presser foot using presser foot lifter in back of machine.
- Push toe of presser foot (1) up, until it snaps off the shank (2).
- Take foot off machine.



- Place new foot under center of shank.
- Lower presser foot lifter, fitting shank over presser foot pin (3).
- Don't turn screw. Instead, push presser foot screw (4) down, firmly until foot snaps into place.

## CHANGING SCREW-ON PRESSER FEET (H),(G)

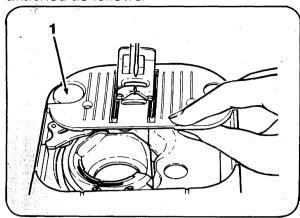
Some special presser feet can be purchased at your sewing center which have builtin shanks that can be replaced as follows:



- Raise needle and presser foot.
- Loosen presser foot screw (1) and remove presser foot with shank (2), guiding it toward you and to the right.
- To replace presser foot with shank, hook shank around the presser bar and tighten presser foot screw.

### CHANGING THE NEEDLE PLATE (A),(C)

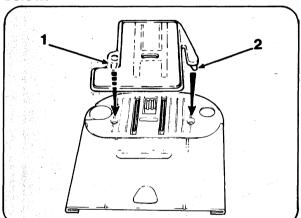
Your machine comes with the General Purpose Needle Plate (A) attached. The Straight Stitch Needle Plate (C) may be purchased at your sewing center and can be attached as follows:



- Raise needle and presser foot.
- Open slide plate.
- Lift up needle plate from right corner and slide out from under foot.
- To replace needle plate, slide it under pin (1) and push it firmly to the left.
- Press down until it snaps into place.

## ATTACHING THE FEED COVER (F)

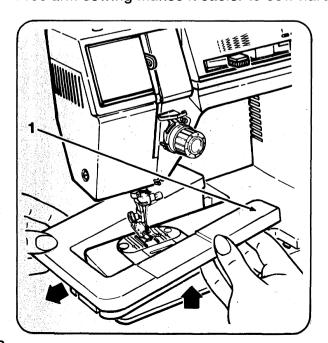
The feed cover is used to keep the feed from moving the fabric when attaching a button, darning or sewing free-motion embroidery. To attach it, follow the directions below:



- · Raise needle and presser foot.
- · Open slide plate.
- Slide feed cover on top of needle plate, pressing tabs (1) and (2) into holes.
- Close slide plate.
- To remove, open slide plate and lift front edge of cover; pull it away.

## **REMOVING THE EXTENSION TABLE (6212)**

Free arm sewing makes it easier to sew hard-to-reach areas.



To change machine for free arm sewing, lift right edge (1) of extension table, slide it to the left and off the machine.

To replace the extension table, slide it to the right keeping it even with the free arm, until the tabs on the right lock into place.

## FABRIC, THREAD AND NEEDLE TABLE

The needle and thread you choose will depend upon the fabric being sewn. The table below is a practical guide to needle and thread selection. Always refer to it before beginning a sewing project. Be sure to use the same size and type of thread in both needle and bobbin.

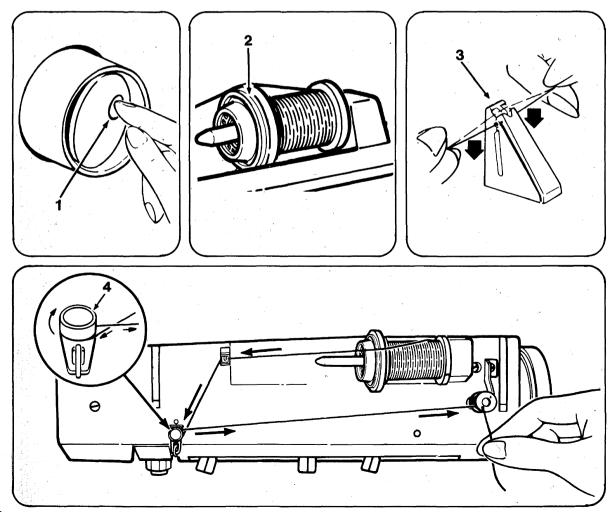
silk, wool,	he fabrics below can be of any fiber: cotton, linen, ilk, wool, synthetic, rayon, blends. They are listed as xamples of weight.		NEEDLES		
	FABRICS	THREAD	TYPE	SIZE	
Light- Weight	Batiste Chiffon Crepe	Cotton-wrapped Polyester 100% Polyester †Mercerized Size 50 Nylon	2020	11	
Medium- Weight	Corduroy Flannel Gabardine Gingham Linen Muslin Wool Crepe	Cotton-wrapped Polyester 100% Polyester †Mercerized Size 50 Nylon		Polyester 100% Polyester †Mercerized Size 50	14
Medium- Heavy	Bonded Wovens Canvas Coating Denim Duck Sailcloth	Cotton-wrapped Polyester 100% Polyester †Mercerized Size 40 †"Heavy Duty"	2020	16 18	
Knits	Bonded Knits Double Knit Jersey Tricot	Cotton-wrapped Polyester Polyester Nylon	Ball-Point 2045 Size 11,14,16		

<sup>†</sup>Not recommended on stretch fabrics.

#### WINDING A BOBBIN

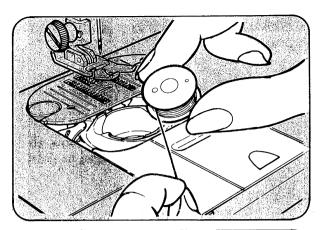
Winding a bobbin is quick and easy when you follow the directions below. Always wind the bobbin before threading the machine and needle.

- Push in indent (1) on hand wheel disc. This will stop the needle from moving.
- Place spool of thread on spool pin.
- Slide spool cap (2) firmly over rim of spool to prevent thread tangling.
- Lead thread from spool and snap into thread guide post (3).
- Wind thread clockwise around front of bobbin winder tension disc (4).
- Pass thread end, from inside, through small hole in rim of bobbin.
- Place bobbin on spindle and push it to the right.
- Holding thread end, step on speed controller to run machine until desired amount of thread is wound. (Winding stops automatically once bobbin is full.)
- Cut thread; push bobbin to the left and remove it from spindle.
- Trim thread end from top of bobbin.
- Return hand wheel disc to sewing position by pressing on side opposite indent.

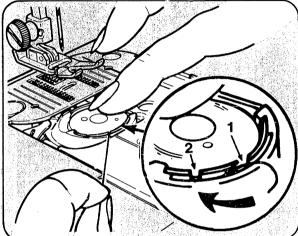


#### **INSERTING A BOBBIN**

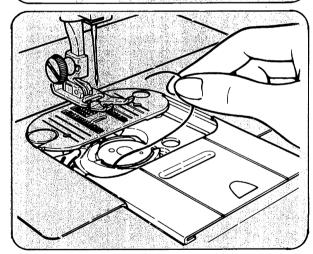
To insert a bobbin, follow the instructions below:



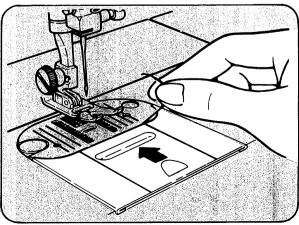
- Raise presser foot.
- Turn hand wheel toward you until needle is in its highest position.
- Open slide plate and remove empty bobbin.
- 1. Pull 4" (10cm) of thread from replacement bobbin and insert bobbin into case, as shown.



2. Holding bobbin in place, guide thread into notch (1) and then down the slot to the left and guide around into notch (2).



3. Draw several inches of thread diagonally across the bobbin toward the back of the machine.

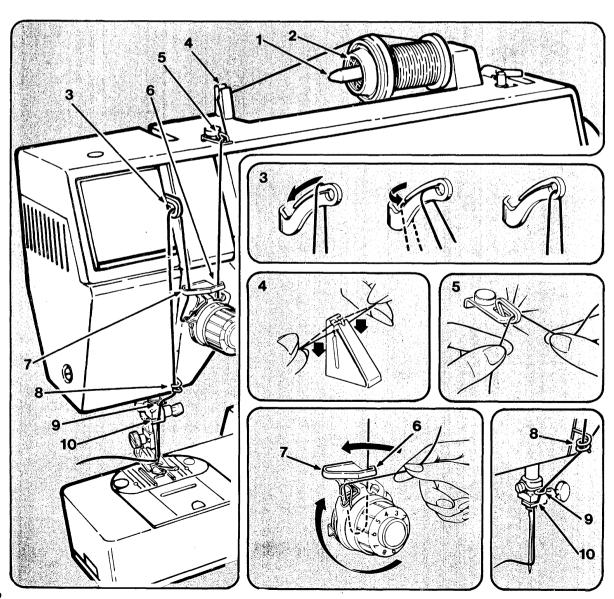


- While holding thread on outside, close the slide plate, allowing thread to extend through the slot between the slide plate and needle plate.
  - Follow directions for "Raising Bobbin Thread" on page 14.

#### THREADING THE MACHINE

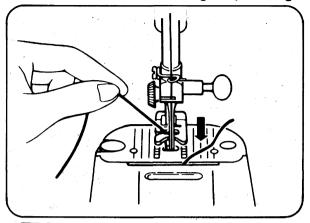
To thread your machine correctly, follow the steps below:

- Raise take-up lever (3) to highest position by turning hand wheel toward you.
- Raise presser foot to release thread tension.
- Place spool of thread on spool pin (1).
- Slide spool cap (2) firmly over rim of spool to prevent thread tangling.
- Lead thread from spool and snap into thread guides (4) and (5).
- Thread the tension discs by leading thread down behind the thread guide, (6) between and around the tension discs and up under the spring on the left side. Holding spool lightly with finger, pull thread gently up and to the right, lifting the spring and allowing thread to slip into spring thread guard. Then, lead thread up behind thread guide (7).
- Slip thread into take-up lever as illustrated (3).
- Pass thread through guides (8) and (9).
- When sewing with common, heavy weight threads, do not thread the lower thread guide (10).
- Thread needle from front to back, pulling 4" (10cm) of thread through eye.

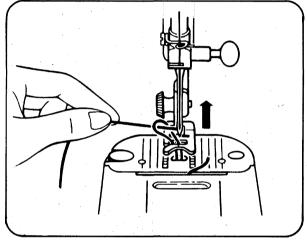


#### **RAISING THE BOBBIN THREAD**

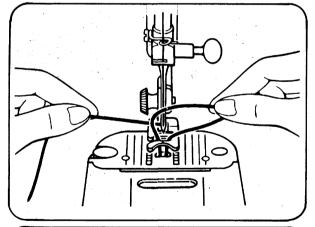
Once the needle has been threaded and the bobbin placed in the bobbin case, the bobbin thread must be brought up through the hole in the needle plate.



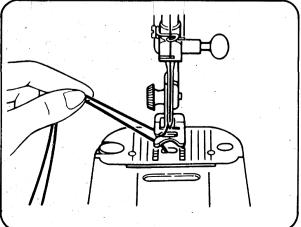
- 1. Hold needle thread loosely with left hand.
  - Turn hand wheel slowly toward you, lowering needle into hole in plate.



- 2. Continue to do this until needle rises above needle plate.
  - Pull gently on needle thread and bring up bobbin thread in a loop.

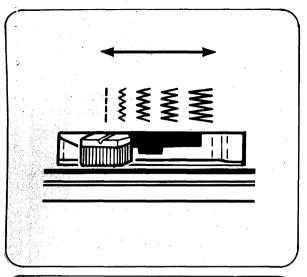


3. Open loop with fingers to find end of bobbin thread.



- 4. Draw needle thread through left side opening in presser foot.
  - Pull both threads to back of machine.

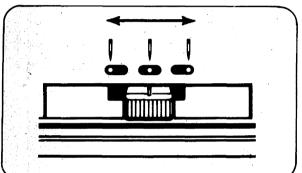
## 3. STRAIGHT STITCHING



#### STITCH WIDTH SELECTOR

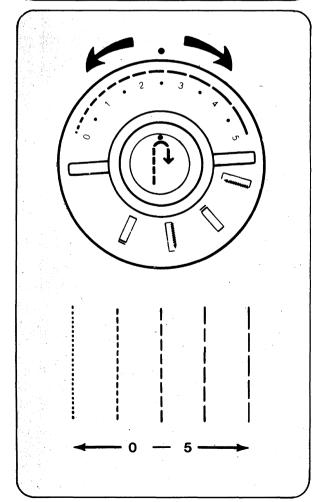
Before you move the selectors to set your machine for straight stitching, turn the hand wheel toward you until needle is above the needle plate.

Straight stitching can be performed with pattern selector in any position; stitch width lever must be set at only.



## NEEDLE POSITION SELECTOR

Needle Position Selector positions the needle in left ( , ), center ( , ) or right ( , ) needle positions.



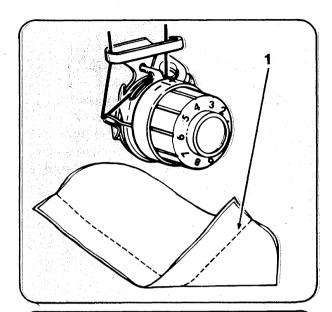
## STITCH LENGTH SELECTOR

The stitch length indicator is numbered 0 to 5. The lower numbers are shorter stitches. Shorter stitches are best for lightweight fabrics; longer ones for heavy fabrics. To adjust the length of your stitches, turn the dial so that desired stitch length is positioned under ( • ) symbol.

- To shorten stitch length, turn dial toward a lower number.
- To lengthen stitch length, turn dial toward a higher number.

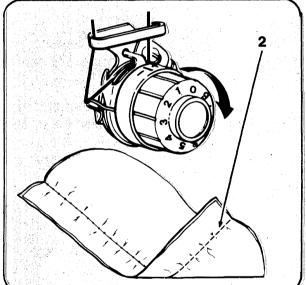
#### ADJUSTING THREAD TENSION

When an even amount of tension is exerted on both threads, a smooth even stitch, known as a balanced stitch, is produced.



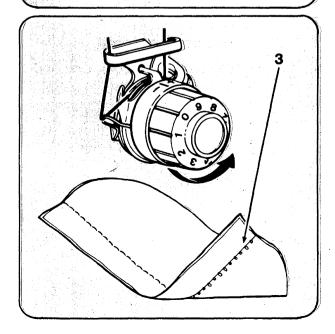
Correct tension is important because too much or too little will weaken your seams or cause your fabric to pucker. Make a test sample with the fabric and thread you plan to use and examine it.

A perfect, well balanced stitch (1), will have the needle and bobbin threads locked between the two layers of fabric with no loops on top or bottom and no puckers.



Too much, tension will produce a tight stitch (2) which will cause the fabric to pucker.

 To decrease tension, turn the dial to a lower number.

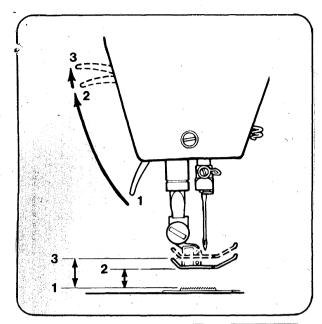


Too little tension will produce a loose stitch (3) which will cause loops in your seam.

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

#### **SEWING A SEAM**

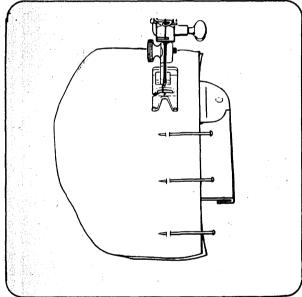
You can sew seams easily and accurately when you follow the suggestions below.



#### Placing fabric under foot

Most fabrics can be placed under the foot by raising the presser foot lifter (1) to its normal "Up" position (2), where it locks in place. When using bulky fabric, multiple fabric layers or an embroidery hoop, raise the lifter to the high rise position (3), thus increasing the space between the foot and the needle plate.

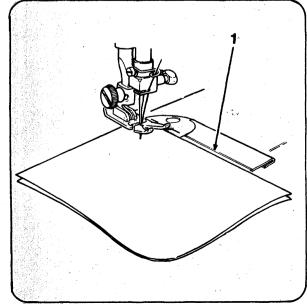
• Lower presser foot lifter all the way down and you are ready to sew.



#### **Basting**

Pin basting and hand basting are easy ways to make temporary seams before machine sewing.

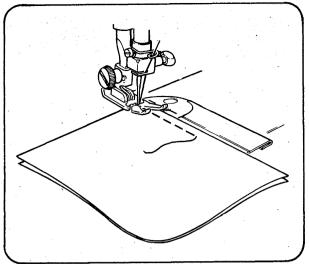
- To pin baste, insert pins at stitching line. NEVER place pins on the underside of fabric in contact with the feed. Do not sew over pins; pull them out as you stitch.
- To hand baste, make long, loose stitches that can be easily removed.

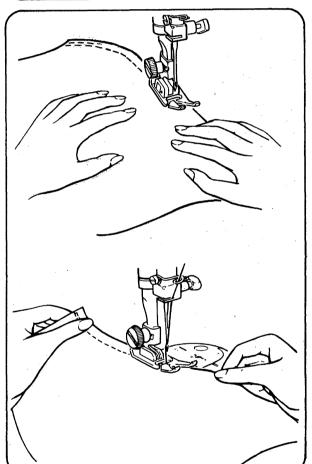


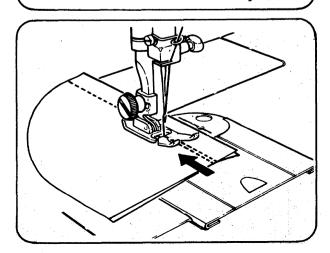
#### Keeping seams straight

To keep seams straight, use one of the guidelines on the needle plate.

The most commonly used line (1), the 5/8 inch (1.6 cm) seam allowance, is extended onto the slide plate.







#### Starting a seam

Place fabric under presser foot 1/2 inch (12 mm) from rear of fabric. Align the right edge with one of the seam guidelines on the throat plate. Lower the presser foot.

Backstitch to the edge of the fabric for reinforcement by pushing in the reverse button located in center of the stitch length dial. Hold button in until stitching reaches edge of fabric.

Release push button for forward stitching.

#### **Guiding and support fabric**

Most fabrics need only to be guided in front of the presser foot. Some fabrics, however, require support while being stitched.

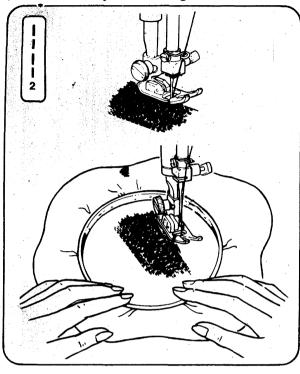
- For tricot, and other similar synthetic knits, apply gentle tension by holding fabric tight in front and back of presser foot as you sew. Do not pull fabric.
- For elasticized fabric, stretch lace, and knits with an unusual amount of elasticity, apply firm tension in front and back of the presser foot to stretch the seam as the stitches are being placed.

#### Sewing in reverse

For strengthening the end of a seam, push in the reverse button and backstitch 3-4 stitches. Raise needle and presser foot and remove fabric by drawing it to the back and left. Cut thread on thread cutter on presser bar.

#### DARNING

Worn or torn spots on children's clothes, and household linens can be darned effor lessly and quickly with little practice. When greater control is needed, an embroidery hoop and a special darning and embroidery foot, which may be purchased at your sewing center, should be used.



#### RECOMMENDED SETTINGS

Stitch Selection: Straight Stitch

Needle Position: Stitch Width: ∰ ≸ ≸ ≸

Stitch Length: 2-4

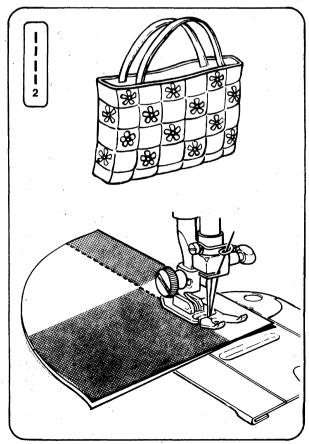
Foot: General Purpose (B)

Needle Plate: General Purpose (A)

- Attach feed cover plate (F).
- If the area to be darned is open, baste a backing on the underside.
- Place area to be darned, right side up, under presser foot; lower the foot and begin stitching, alternately drawing the fabric toward you and pulling it gently away from you.
- Continue this forward and backward motion as you fill the area in with parallel lines of stitching.

#### QUILTING

Quilting is the art of stitching two or more thicknesses of fabric together in a planned design. A padding is used to produce a soft, puffed effect.



#### **RECOMMENDED SETTINGS**

Stitch Selection: Straight Stitch

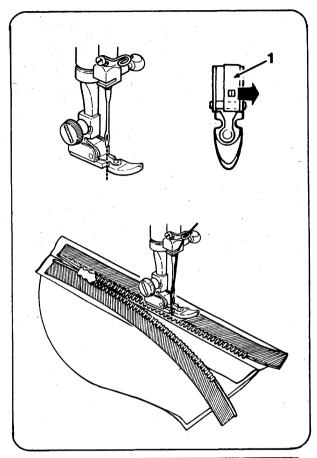
Needle Position: ↓↓↓↓
Stitch Width: □ § § § §
Foot: General Purpose (B)

right side of garment.

- Mark the design or quilting lines with a chalk or a washable marker on the
- Place a filler, or padding, over the underside of garment and cover it with a backing or lining fabric.
- Baste together to prevent the layers from shifting.
- Place fabrics under needle and carefully begin to stitch along your marked pattern on the fabric.
- If you are quilting a very large piece, work from the center of the fabric to the outside edge and guide fabric with two hands.

### **INSERTING A ZIPPER**

Most zipper packages will provide complete easy to follow instructions for inserting various types of zippers. We recommend using the zipper foot to form an even line of stitching close to the zipper.



#### **RECOMMENDED SETTINGS**

Stitch Selection: Straight Stitch

Needle Position: 📥

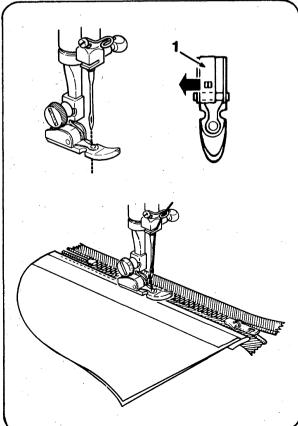
Stitch Width: ∏§§§§

Stitch Length: 2-4 Foot: Zipper (E)

Needle Plate: General Purpose (A)

When the zipper teeth are to the left of the needle.

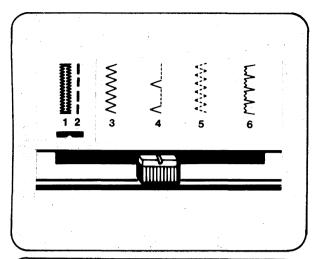
- Slide the adjusting block, (1) which slides on the pin, all the way to the right.
- Snap on the foot to the left side of the pin. (See changing snap-on presser feet.)
- Check the position of the foot by lowering the needle into the notch on the side of the foot, making sure it clears the foot.



When the zipper teeth are to the right of the needle.

- Slide the adjusting block, (1) all the way to the left.
- Snap-on the foot to the right side of the pin. (See changing snap-on presser feet.)
- Check the position of the foot by lowering the needle into the notch on the side of the foot, making sure it clears the foot.

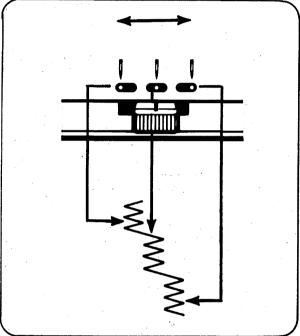
## 4. ZIG-ZAG STITCHING



# STITCH PATTERN SELECTOR

Before moving pattern selector, make sure needle is fully raised.

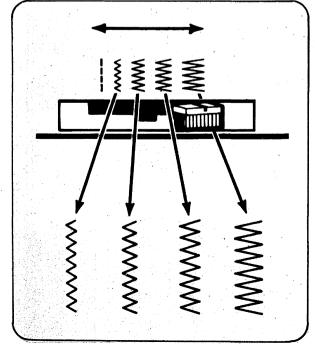
- The stitch pattern selector, located on the control panel, controls stitch selection.
- To select a pattern, slide pattern selector under the desired stitch.



## NEEDLE POSITION SELECTOR

Before moving selector, make sure needle is fully raised.

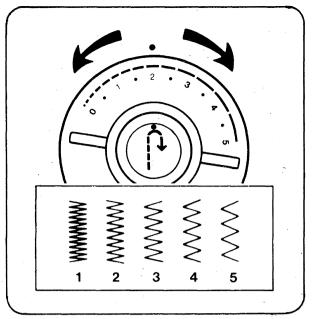
- Most of your zig-zag stitching, will be done in the center ( ) needle position.
- Left ( ) and right ( ) settings are used for special stitch placement.



#### STITCH WIDTH SELECTOR

Before moving selector, make sure needle is fully raised.

To produce any of the zig-zag stitches, the stitch width selector is moved from its straight position ( i )to any of its other four positions. The further you move the selector lever toward the right, the wider your stitch will be.

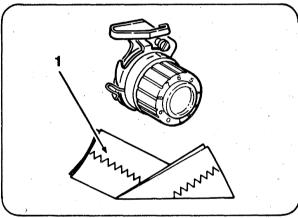


## ADJUSTING STITCH LENGTH

Any stitch length setting from 1 to 5 will give you an open zig-zag stitch.

The higher the number, the more open, or further apart your stitches will be.

The area between 0 and 1 on the dial is used for satin stitching, a series of closely spaced plain zig-zag stitches that form a smooth, satin-like surface.

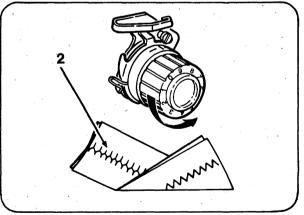


#### **NEEDLE THREAD TENSION**

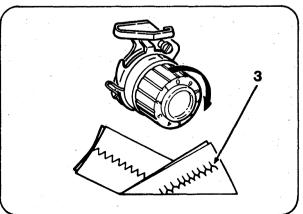
The needle-thread tension dial regulates the amount of tension on the needle thread and lets you select just the right setting for your fabric and thread.

Zig-Zag stitching usually requires less tension than straight stitching.

Proper tension produces a smooth, even stitch (1).



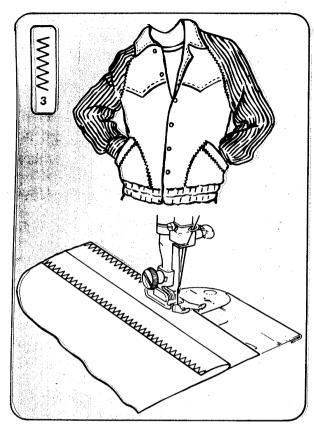
Too much tension will produce a tight stitch (2), causing fabric to pucker. Loosen tension by turning dial to a lower number.



Too little tension will produce a loose stitch (3), causing loops in your pattern. Tighten tension by turning dial to a higher number.

#### ZIG-ZAG STITCH #3

The Zig-Zag Stitch can be used when sewing seams, appliqueing, monogramming or decorating.

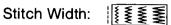


#### **RECOMMENDED SETTINGS**

Stitch Selection: Zig-Zag Stitch #3

Needle Position:





Stitch Length: 2-4

Foot: Special Purpose (J)

Needle Plate: General Purpose (A)

#### Seam finishing

Use a zig-zag stitch to finish seam edges of fabrics that are likely to unravel.

- · Sew seams as desired; trim and press open.
- Place edge of seam allowance under foot, as shown.
- Stitch close to edge, letting outer zigzag fall over edge.

#### Satin stitching

#### **RECOMMENDED SETTINGS**

Stitch Selection: Zig-Zag Stitch #3

Needle Position:



Stitch Width:



Stitch Length: 0-2

Foot: Special Purpose (J)

Needle Plate: General Purpose (A)

Satin stitching is a series of closely spaced zig-zag stitches. Satin stitch monograms, embroidery and appliques for a smooth, satin-like finish.

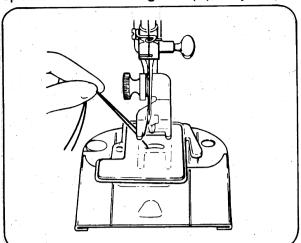
 Practice to get desired stitch appearance.

#### **Block monogramming**

- · Lightly trace letters on right side of fabric.
- Center tracing under needle.
- Stitch entire outline, leaving needle in fabric when turning.
- Pull threads to wrong side of fabric, tie and trim.

#### ATTACHING THE BUTTON

Flat buttons can be sewn on quickly and easily using the plain zigzag stitch. A special button sewing foot (H), may be purchased at your sewing center.



#### RECOMMENDED SETTINGS

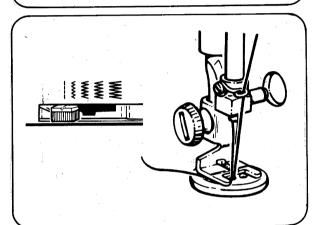
Stitch Selection: Zig-Zag Stitch #3

Needle Position: Stitch Width: To suit Button Foot: Button Sewing (H)

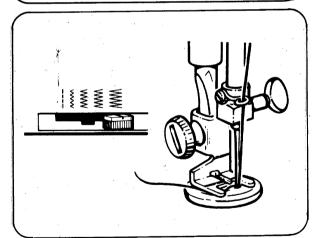
Needle Plate: General Purpose (A)

Attach Feed Cover (F)

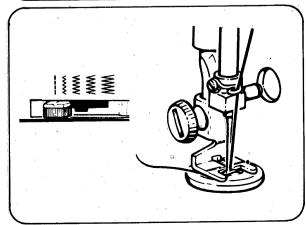
Before you can attach a button, the bobbin thread must be brought up through the hole in the feed cover.



1. Set stitch width at position selector at position button under foot and lower and needle into the center of the left hole. Lower the foot. Turn hand wheel toward you until needle rises out of button and is above the foot.



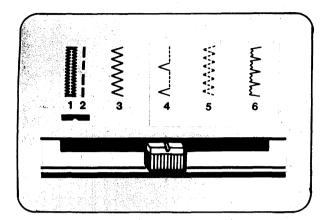
2. Move stitch width selector until needle is over the other hole in the button. Then, when you begin to stitch, the needle should enter into the right hole of the button. Take six or more zig-zag stitches to attach button and finish with the needle on the left side.



 To fasten stitching, adjust width to ( ; ), and take three or four stitches. Remove work, draw threads to underside, fasten, and trim.

## 5. SPECIAL STITCHES

The 3 Special Stitches on your machine have a variety of practical and decorative uses. In this section are recommended applications for each stitch. However, these stitches can be used for many other sewing projects.

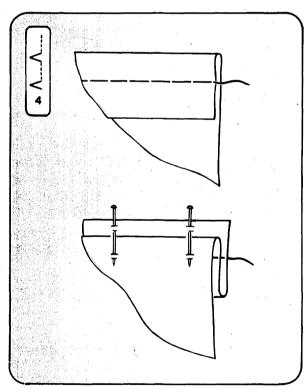


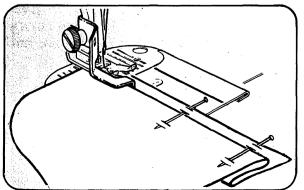
Before beginning a sewing project, check the Fabric, Thread and Needle Table on page 9 for the best needle and thread combination for your fabric.

With each application, recommended settings have been given. These have been highlighted for easy identification. You can adjust each setting, however, as desired.

#### **BLINDSTITCH #4**

Blindstitching provides a durable hem finish that can be used on a variety of different weight fabrics. Blindstitching takes a little practice, however, so make a test sample first.





## RECOMMENDED SETTINGS

Stitch Selection: Blindstitch #4

Needle Position: 📥 📥

Stitch Width: ∦ § § §

Stitch Length: 1-1/2 to 2-1/2 Foot: General Purpose (B)

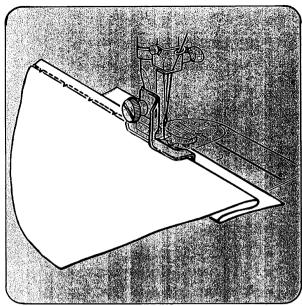
Needle Plate: General Purpose (A)

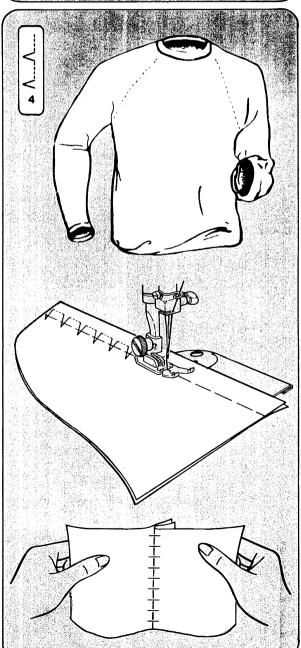
Attach blindstitch hem guide

Prepare the hem by folding it and pressing it in the usual way. You may want to baste the hem to hold it in place, as shown. If so, be sure to place the basting at least ½ inch (12mm) below the top edge of the hem allowance.

With the wrong side of fabric uppermost, turn the hem under, as shown, creating a soft fold from the top edge of hem. Pin or baste all three layers together in place.

Position the hem under the presser foot with the soft fold resting against wall of the guide. Be sure the flange of the guide is between the soft fold and the top of the hem, as shown.





- Lower the presser foot and begin sewing making certain the straight stitches fall on the edge of the hem and the zig-zag stitches just pierce the soft fold of the work. Adjust stitch width if necessary. While stitching, guide the hem edge in a straight line and feed the soft fold evenly against the wall of the guide.
- If layers of fabric are pinned together, remove pins as you come to them. Do not sew over pins.

#### LADDER SEAMS

A ladder seam made with blindstitching is functional and decorative at the same time. Appropriate for stretch and knit fabrics, it provides stretchable, decoratively constructed seams and edge finishes for collars, pockets and necklines in sportwear and swimwear.

#### RECOMMENDED SETTINGS

Stitch Selection: Blindstich #4

Needle Position:



Stitch Width:

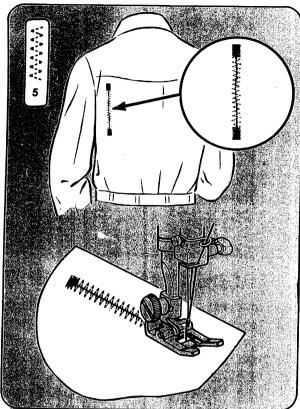


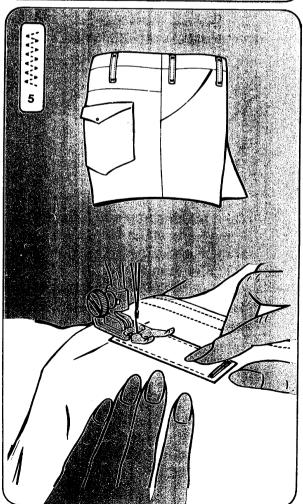
Stitch Length: 1-1/2 to 2-1/2 Foot: General Purpose (B)

- Make a test sample to adjust thread tension and stitch length to suit your fabric. Needle thread tension should be lighter than normal.
- Cut and fit garment, allow % inch (16mm) seam allowance. Baste seam line.
- Position fabric so that the large zigzag stitches fall on the stitching line, towards the center of the garment.
- When stitching is completed, open the seam by pulling the fabric back on opposite sides of seam to produce a ladder effect and press seam allowances.

#### **MULTI-STITCH ZIG-ZAG #5**

Mending, overcasting, joining or reinforcing can all be done using the Multi-Stitch Zig-Zag.





#### **RECOMMENDED SETTINGS**

Stitch Selection: Multi-Stitch

Zig-Zag #5

Needle Position:



Stitch Width:



Stitch Length: 1-2

Foot: Special Purpose (J)

Needle Plate: General Purpose (A)

#### Mending a tear

- Trim ragged edges of tear.
- · Cut a lining for reinforcement.
- · Bring the edges of tear together and baste lining to wrong side of fabric.
- Place tear, right side up, under foot.
- Stitch over the line of the tear, shortening stitch length at each end for reinforcement.
- Trim thread ends close to fabric.
- If needed, sew over tear again.
- Trim away lining close to stitching.

#### Bar tacks

Strong multi-stitch bartacks are effective for tacking belt loops on heavy fabrics such as denim.

#### **RECOMMENDED SETTINGS**

Stitch Selection: Multi-Stitch

Zig-Zag #5

Needle Position:



Stitch Width:



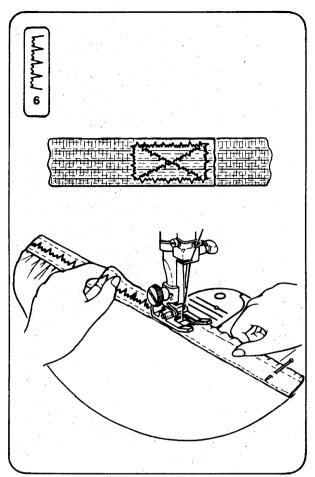
Stitch Length: 1-2

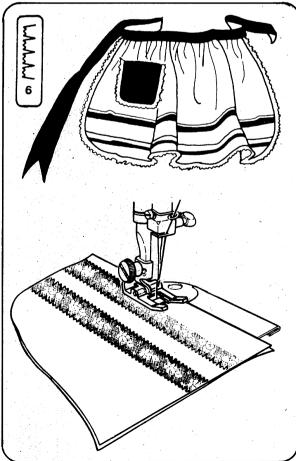
Foot: Special Purpose (J)

- Mark beginning and finishing lines of belt loop on fabric.
- Place one end of belt loop, wrong side up, on beginning mark on fabric and straight stitch in place.
- Trim raw end close to stitching and fold belt loop over, right side up.
- Stitch a bar tack about 1/8" (3 mm) from the fold, as shown.
- Fold loose end of belt loop under and press it in place on finishing line.
- Stitch second bar tack about 1/8" (3 mm) from the fold.

#### "M" STITCH

This stitch can be used for stretch seams and decorative stitching.





#### Elastic insertion

#### **RECOMMENDED SETTINGS**

Stitch Selection: "M" Stitch #6

Needle Position:

Stitch Width: │ § § § § § § § §

Stitch Length: 1-2

Foot: Special Purpose (J)

Needle Plate: General Purpose (A)

- Fit elastic for snugness and allow 1 inch (25mm) for joining. Lap the two ends and stitch.
- Divide elastic and garment into equal quarters. Place elastic over the fabric and pin the two together at these points keeping top edges even.
- Anchor the elastic to the fabric with a few stitches. Now stretch elastic between the pins as you sew, using both hands to hold elastic tight in front and back of presser foot.

#### Lace insertion

Lace is inserted after fabric is cut, but before it is sewn together.

#### **RECOMMENDED SETTINGS**

Stitch Selection: "M" Stitch #6

Needle Position:

Stitch Width: │ ፟ ፟ ፟ ፟ ፟ ፟ ፟ ፟ ፟ ፟ ፟ ፟

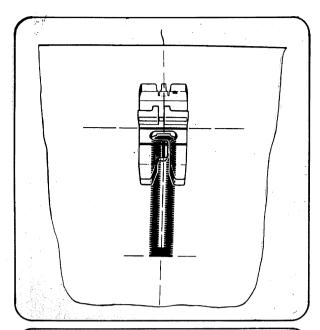
Stitch Length: ½-2

Foot: Special Purpose (J)

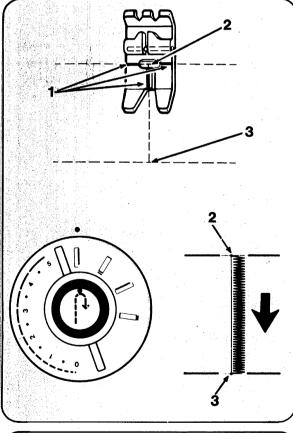
- · Cut lace to desired size.
- Position lace on right side of fabric and pin in place.
- Place the work under the presser foot so that the stitches fall over the lace edges, as shown.
- After both sides of lace are sewn, turn fabric over to the back side and cut the fabric on both sides close to the stitching lines and remove.

## 6. FOUR-STEP BUTTONHOLE

Your machine makes buttonholes to any size you choose in only four, easy steps.



- You never need to move the fabric or reposition the needle.
- Always make a practice buttonhole on a sample of your fabric.
- Be sure bobbin contains enough thread.
- When making buttonholes on hardto-reach areas convert machine bed to free arm sewing. (6212).
- Mark buttonhole position on fabric as indicated in pattern.



#### **RECOMMENDED SETTINGS**

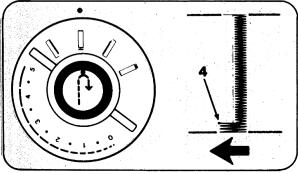
Stitch Selection: Buttonhole Stitch #1

Stitch Width: Pre-set Foot: Buttonhole (L)

Needle Plate: General Purpose (A)

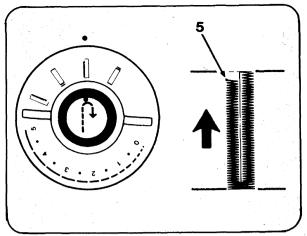
#### Step 1

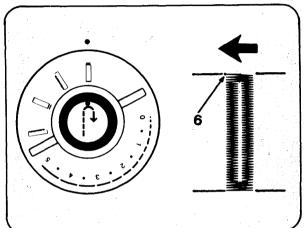
- Raise presser foot.
- Place fabric under foot.
- Center 3 red guidelines (1) of foot around beginning line of buttonhole.
- Turn buttonhole dial to the first buttonhole symbol for the first step.
- Position needle in fabric at point (2) by turning the hand wheel towards you.
- Stitch down to point 3.

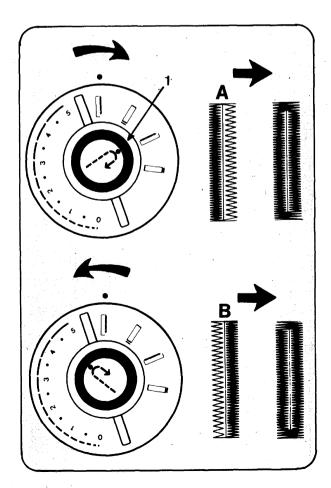


#### Step 2

- Raise needle out of fabric.
- Turn buttonhole dial to the second buttonhole symbol for the second step.
- Make at least four stitches, ending at point (4).







#### Step 3

- · Raise needle out of fabric.
- Turn buttonhole dial to the third buttonhole symbol for the third step.
- Stitch up to point (5).

#### Step 4

- Raise needle out of fabric.
- Turn buttonhole dial to the fourth buttonhole symbol for the fourth step.
- Make at least four stitches, ending at point (6).
- Raise presser foot and remove garment from machine. Clip thread ends.
- Carefully cut buttonhole opening with a seam ripper or small, sharp scissors.

#### **Balancing the buttonhole**

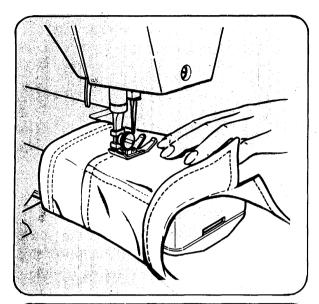
On some kinds of fabrics, there may be a difference in the density of the stitches on the right or the left side of the buttonhole. This is easily adjusted by turning the balance knob (1), in the center of the stitch length dial to balance the density of the stitching. A very slight turn of the dial will produce a noticeable change.

- If the stitches on the right side of the buttonhole (A) are too open, turn the balance dial slightly to the right, until the density of the stitches increases.
- If the stitches on the left side of the buttonhole (B), are too open, turn the balance slightly to the left, until the density of the stitches increases.

After the buttonhole has been made and the balance has been altered, return the balance dial back to its neutral position after all the buttonholes on the garment have been sewn.

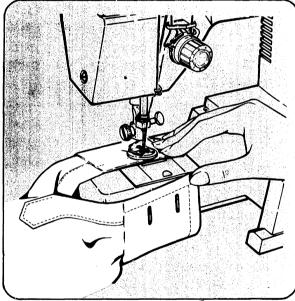
### **FREE-ARM SEWING (6212)**

Fabric handling, when sewing tubular and hard to reach garment areas, is simplified and made easier when you use the free-arm sewing capability of your sewing machine.



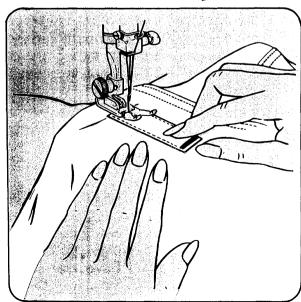
#### **Sleeves**

 Free-arm sewing takes the difficulty out of topstitching, sleeves, finishing waistbands and pant legs rotates smoothly under the needle, around the arm, allowing you to place your stitching accurately.



#### **Buttons**

 Sewing buttons on a cuff or neckband is easy with freearm sewing. The sewing arm allows room for cuffs to slip onto without being stretched out of shape, and you can also see and handle the stitching area more easily.



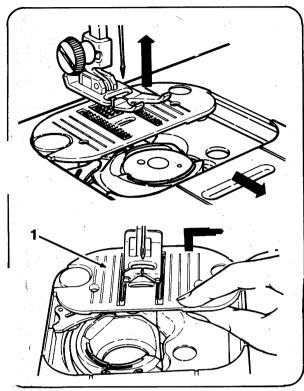
#### **Bar tacks**

 Bar tacks reinforce areas of strain and can be applied to ready-made garments, as well as to those sewn at home. Use the free arm surface to avoid fabric bulk around the needle when you apply bar tacks to pockets, plackets and waistlines.

## 7. CARING FOR YOUR MACHINE

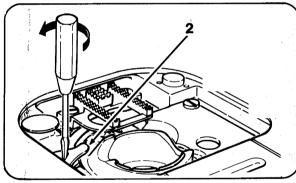
#### REMOVING AND REPLACING BOBBIN CASE

Before cleaning or adjusting the machine, disconnect electrical power cord.



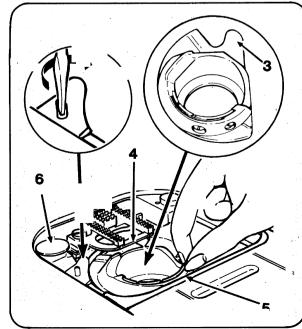
- Raise presser foot and needle.
- Open slide plate and remove bobbin.

- To remove the bobbin case, the needle plate must be removed first.
- Lift needle plate (1) from right corner and slide out from under foot.



#### To remove bobbin case

- With a small screwdriver, turn bobbin case holder (2) to the rear as far as it will go.
- · Lift out bobbin case.



#### To replace bobbin case

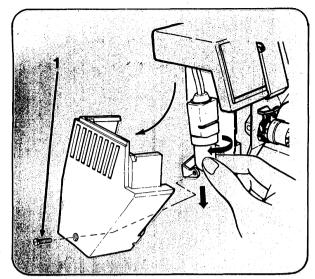
- Guide forked end (3) of bobbin case under feed (4).
- Draw rim of bobbin case under slide plate (5).
- Turn lever (2) forward as far as it will go, locking bobbin case in place.

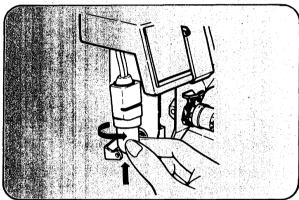
**NOTE:** After locking case in place, be sure it is not tight, but can move slightly. Turn the hand wheel towards you to check to make sure it is properly replaced.

- To replace needle plate, slide it under pin (6) and push it to the left.
- Press needle plate down in place.
- Insert bobbin and close slide plate.

#### CHANGING THE LIGHT BULB

Before changing light bulb, make sure you have disconnected power-line plug and remove face plate which covers the light bulb.



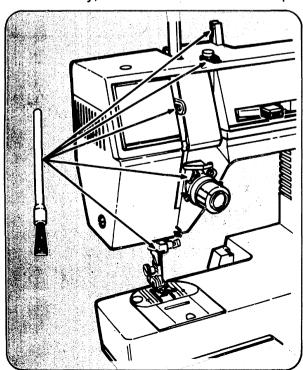


This machine is designed to use a 15-watt maximum light bulb with a locking pin base.

- Loosen and remove screw (1) located on face plate.
- Remove face plate by grasping it around the bottom edge and pulling toward the left, then down and away from machine.
- Do not attempt to unscrew light bulb.
- Push bulb up into socket and turn in the direction of arrows to unlock bulb pin.
- Pull bulb down and out of socket.
- Push new bulb up into socket and turn in the direction of arrows until pins lock into position.
- Making sure the presser foot lifter is up, replace the face plate by guiding front top corner under and behind lowest front corner of top cover.
   Push bottom of face plate up and back until it is aligned with top cover.
- Insert screw and tighten.

### **CLEANING THE MACHINE**

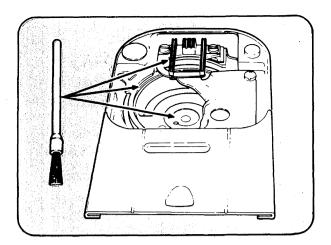
Your machine is designed to give you many years of dependable service. To ensure this reliability, take a few minutes to keep the machine clean.



The machine surfaces and covers can be cleaned when necessary, with a damp, soft cloth and a mild soap.

Remove lint and fluff from exposed parts and, with a soft cloth, clean these parts:

- Tension discs.
- Take-up lever and thread guides.
- · Presser and needle bars.

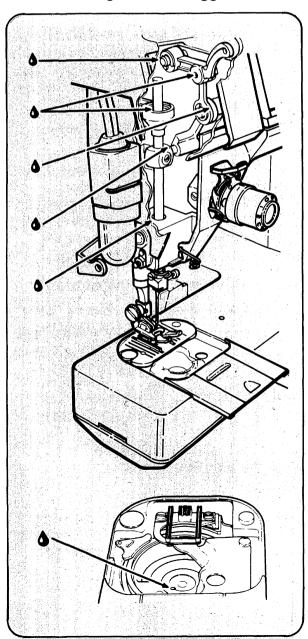


• Bobbin case and needle plate areas.

Your machine should be periodically checked by your local sewing center or an authorized Singer dealer for wear.

#### LUBRICATING THE MACHINE

How often you need to lubricate the machine depends on how often you use it and where you keep it. The following general guidelines assume that you will be sewing several times a week. But if you use your machine more frequently, lubricate it more often than the guidelines suggest.



Before lubricating, make sure you have disconnected power-line plug and thoroughly cleaned all areas as previously instructed.

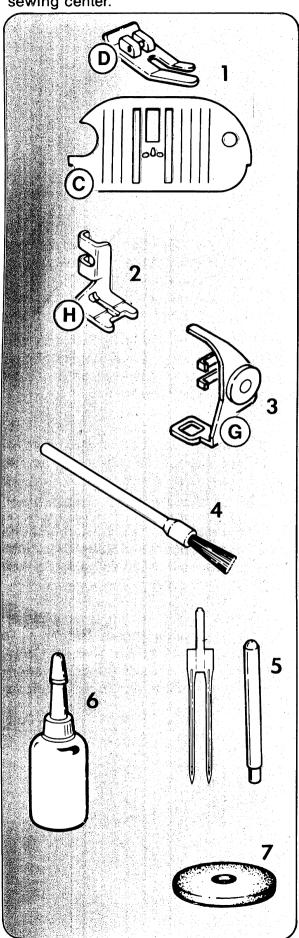
Approximately once a year, lubricate all moving connections, as shown, to ensure freedom of movement and to protect metal parts from excessive wear.

To determine which connections move and need lubrication, turn the handwheel slowly, by hand, while face plate is removed.

When lubricating, apply only Singer oil at the points shown. Singer oil is specially prepared and does not contain harmful deposits that can interfere with the smooth action of precision parts.

### **ADDITIONAL ACCESSORIES**

Additional Accessories for your sewing machine are available for purchase at your sewing center.



- STRAIGHT STITCH PRESSER FOOT (D) AND NEEDLE PLATE (C) are used together when straight stitching lightweight fabrics or when your fabric or sewing procedure requires close control.
- 2. BUTTON SEWING FOOT (H) is used to hold any two-hole or fourhole button securely for stitching.
- 3. DARNING AND EMBROIDERY FOOT (G) is recommended for free motion work, such as embroidery, monogramming and decorative designs.
- LINT BRUSH is used for cleaning hard to reach areas on your sewing machine.
- 5. TWIN NEEDLE AND SPOOL PIN are used to stitch two parallel rows of decorative stitching simultaneously.
- **6. OIL CONTAINER** for machine lubrication.
- 7. FELT for twin needle spool pin.

#### PERFORMANCE CHECKLIST

When sewing difficulties occur, look back through this manual to make sure you are correctly following the instructions. If you still have a problem, the reminders below may help you to correct it.

#### **Needle Does Not Move**

Is machine connected to electrical supply?

Is the power and light switch on?
Is controller connected?

Is bobbin winder engaged?

## Needle Moves But Stitch Is Not Formed

Is needle defective?
Is needle fully inserted into needle clamp?
Are bobbin and needle correctly threaded?
Is bobbin correctly inserted into bobbin case?

#### **Needle Breaks**

Is needle straight and sharp?
Is needle correct size?
Is needle fully inserted into needle clamp?
Are controls properly set?
Are accessories correct for application?

### **Bobbin Winding Difficulties**

Is thread unwinding freely from spool?
Is bobbin winder engaged?
Is thread end securely held at start of wind?
Is thread hanging up on the slit on the thread spool?

#### **Upper Thread Breaks**

Is machine properly threaded?
Is thread freely unwinding from spool?
Is proper spool can being used

Is proper spool cap being used? Is needle correct size for thread? Is upper thread tension too tight? Is bobbin case properly inserted? Is bobbin rim free of nicks?

#### **Lower Thread Breaks**

Is bobbin correctly wound?
Is bobbin correctly inserted into bobbin case?
Is bobbin case correctly threaded?
Is thread hanging up on the slit on the thread spool?

#### **Skipped Stitches**

Is machine properly threaded? Is fabric firmly held down? Is needle correct style and size? Is needle straight and sharp?

## Fabric Does Not Move Properly Under Presser Foot

Is presser foot correctly attached to machine?
Is presser foot lowered?
Is stitch length correctly set?

## INDEX

Accessories 4	Performance Checklist 35
Additional Accessories 34	Power and Light Switch 2,3,6
Basting 16	Presser Feet 4,34
Blindstitch Hem Guide 4,25	Changing 7
Bobbin 4	General Purpose 4
Winding 10	Special Purpose 4
Inserting11	Straight Stitch
Bobbin Case 31	Presser Foot Lifter 2,3,16
Removing 31	Presser Foot,
Cleaning 32	Changing Screw-On 7
Bobbin Thread, Raising 13	Principal Parts
Buttonhole Balancing 29	Reverse Stitching 17
Buttonholes, Making 28	Safeguards, Important 5
Buttonhole Presser Foot 4,28	Seams, Sewing 16
Button Sewing Foot 23,34	Keeping Straight 16
Caring for the Machine 31	Starting 17
Cleaning the Machine 32	Guiding & Supporting Fabric 17
Connecting the Machine 6	Slide Plate 2,3
Controller, Speed 2,3,6	Special Stitches 24
Electrical Power Cord 2,3,6	Blindstitch 24
Extension Table 2,3,8	Ladder Seams 25
Fabric, Thread & Needle Table 9	Multi-Stitch 26
Face Plate, Removing 32	Mending a Tear 26
Feed Cover 4	Bar Tacks 26
Attaching 8	"M" Stitch 27
Feed System 2,3	Elastic Insertion 27
Free-Arm Sewing	Lace Insertion 27
General Purpose Needle Plate 4	Spool Cap 4,10
General Purpose Presser Foot 4	Stitch Pattern Selector 2,3,20
Handwheel 2,3,10	Stitch Width Selector 14,20
Length, Adjusting Stitch 14,21	Stitch Length Selector 14,20
Light Bulb, Replacing 32	Straight Stitching 14
Lint Brush 34	Darning 18
Monogramming 22	Quilting 18
Needles 4	Zig-Zag Stitching 20
Choosing and Changing 6	Seam Finishing 22
Twin Needle 34	Satin Stitching 22
Needle Clamp 2,3,6	Monogramming 22
Needle Plate 4	Tension, Thread 2,3,12,15
Changing, 8	Thread Cutter 2,3
Straight Stitch, 34	Threading the Machine 12
Needle Position Selector 14,20	Zipper, Inserting a
Operating the Machine	Zipper Foot 4,19
Patterns, Selecting	,

<del></del>
Dear Customer:
We recommend that for future reference you record the Serial Nur f your Sewing Machine in the space provided.
Refer to illimate and in the second s
at right for location
of Serial Number or
your machine Serial No. 6
Serial No
🖊 - Company of the C