

# Kenmore

## INSTRUCTIONS

### MODEL 1914 • ZIG • ZAG SEWING MACHINE



## Sears, Roebuck and Co.

Dear Homemaker:

You have just invested in a very fine zigzag sewing machine. Before using your new Kenmore machine, please pause for a moment and carefully read this booklet which contains instructions on how to operate and care for your machine.

Specific instructions are given on threading, tension adjustments, cleaning, oiling, etc. This will help you obtain the best sewing results and avoid unnecessary service expense for conditions beyond our control.

Advice on the operation and care of your machine is always available at your nearest Sears Retail Store. Should you have any further questions on your sewing machine, please write to me at the address given below.

Please remember, any correspondence or reference to your machine must mention the model number and serial number of your machine.

### Kenmore Sewing Machine

Record in space provided below the model number and serial number of this appliance. The model number and serial number are located on the nomenclature plate, as identified on Page 3 of this booklet.

Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_  
Retain these numbers for future reference.

Consumer Services Manager  
Department 620  
Simpsons-Sears Limited  
Toronto, Ontario, Canada

Consumer Services Manager  
Department 620  
Sears, Roebuck and Co.  
Sears Tower  
Chicago, Illinois 60684

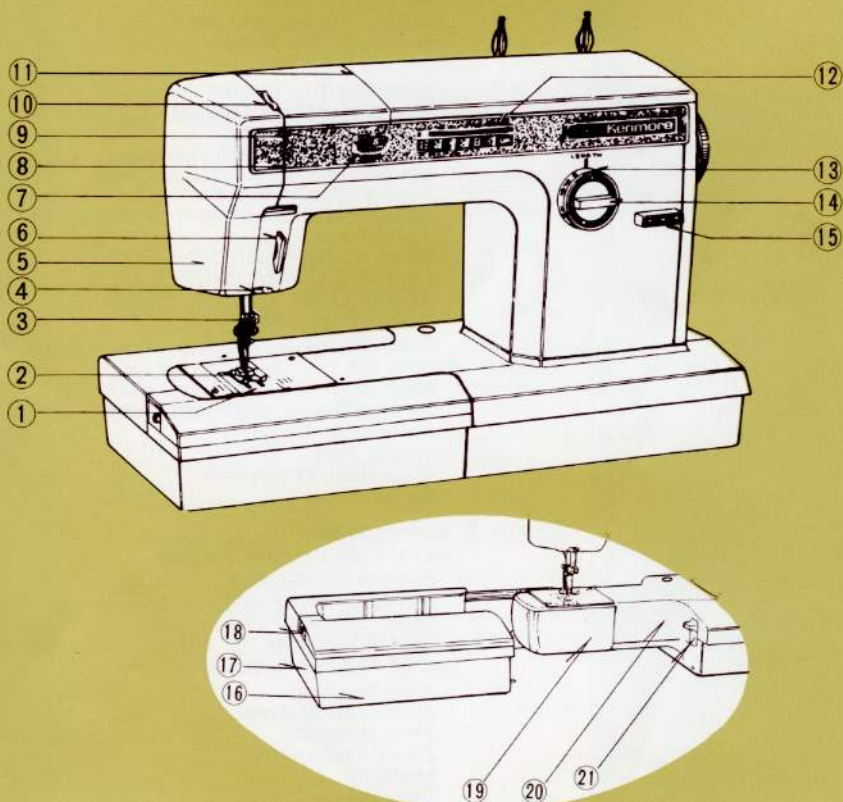


# TABLE OF CONTENTS

<b>Section I</b>	<b>Knowing Your Sewing Machine</b>	
	Identifying Parts	2, 3
	Installing Machine	4
	Converting to Free-arm Sewing	5
	Winding the Bobbin	6
	Threading the Bobbin Case	7
	Threading of Top Thread	8
	Using the Controls	
	Adjusting Top Tension	9
	Adjusting Bobbin Tension	10
	Checking Tensions	11
	Stitch Length Control	12, 13
	Stitch Width Control	12, 13
	Reverse Stitch Control	14, 15
	Special Stitch Modifier	14, 15
	Special Stitch Dial	16
	Pressure Regulator	17
	Feed Dog Control	18
	Sewing Light	18
	Needle Plate Inserts	19
	Seam Guides	19
	Accessories	
	Needles	20
	Needle, Thread, and Fabric Chart	21
	Buttonhole Guide	21
	Presser Feet	22
	Buttonhole Attachment	23
	Design Cams	24
<b>Section II</b>	<b>Starting to Sew</b>	1
	Garment Construction Stitches	
	Straight Stitching	2
	Zigzag Stitching	3
	Chain Stitching	4
	Stretch Stitching	5
	Special Finishing Stitches	
	Satin Stitching	6
	Buttonhole Making	7
	Blind Hemming	8
	Zipper Application	9
	Mending	10
	Darning	10
	Button Sewing	11
	Bar Tacking	11
	Special Edge Stitch, Fagoting Stitch	12
	Special Sewing Aids	13
	Free-arm Sewing	14
	Special Design Stitches	15
	Single Needle Designs	16
	Basic Decorative Designs	17
	Reverse Stitch Designs	18
	Reverse Stitch Designs	
	-Using Special Stitch Modifier	19
	Using the Double Needle	20
<b>Section III</b>	<b>Checking Performance Problems</b>	1
	Hints on Sewing on Different Fabrics	2
<b>Section IV</b>	<b>Caring for the Machine</b>	
	Cleaning Feed Dogs and Shuttle	1
	Oiling Under Arm Cover Plate	2
	Oiling Underside	3
	Oiling in Face Cover Plate	4
	Parts List	5, 6

# Knowing Your Sewing Machine

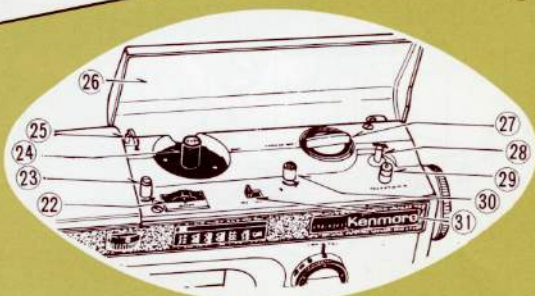
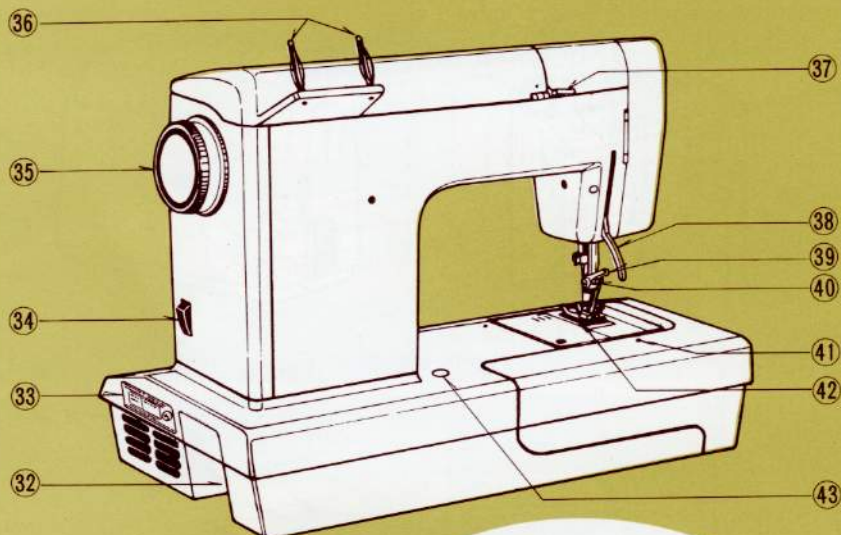
FRONT VIEW



- |                               |  |
|-------------------------------|--|
| 1. Zigzag Stitch Needle Plate | 13. Stitch Length Control                          |
| 2. Presser Foot               | 14. Special Stitch Modifier and Buttonhole Control |
| 3. Needle Clamp Screw         | 15. Reverse Stitch Control                         |
| 4. Thread Guide               | 16. Base   |
| 5. Face Cover Plate           | 17. Base Front Cover                               |
| 6. Thread Tension Spring      | 18. Front Cover Release Button                     |
| 7. Top Thread Tension Control | 19. Shuttle Cover                                  |
| 8. Threading Path             | 20. Free Arm                                       |
| 9. Thread Guide               | 21. Feed Dog Control                               |
| 10. Take-up Lever             |  |
| 11. Threading Path            |  |
| 12. Special Stitch Indicator  |  |



# BACK VIEW



- |                                |                                 |
|--------------------------------|---------------------------------|
| 22. Stitch Width Control       | 34. Light and Power Switch      |
| 23. Bobbin Winder Tension Disc | 35. Hand Wheel                  |
| 24. Cam Holder                 | 36. Spool Pins                  |
| 25. Bobbin Winder Thread Guide | 37. Thread Guide                |
| 26. Top Cover Plate            | 38. Presser Foot Lever          |
| 27. Special Stitch Selector    | 39. Presser Foot Lock           |
| 28. Bobbin Winder Shaft        | 40. Thread Cutter               |
| 29. Bobbin Winder Latch        | 41. Buttonhole Attachment Guide |
| 30. Bobbin Winder Thread Guide | Pin Hole                        |
| 31. Cam Release Lever          | 42. Feed Dogs                   |
| 32. Electric Cord Receptacle   | 43. Base Release Button         |
| 33. Nomenclature Plate         |                                 |

## INSTALLING MACHINE

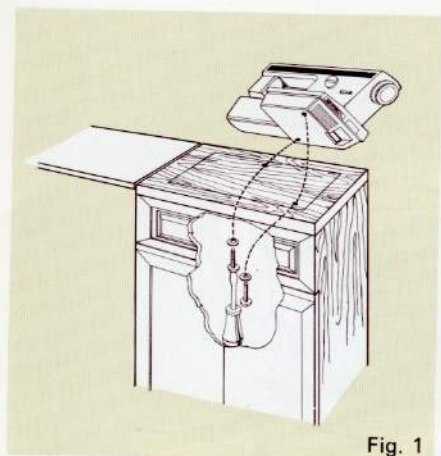


Fig. 1



Fig. 3



Fig. 2

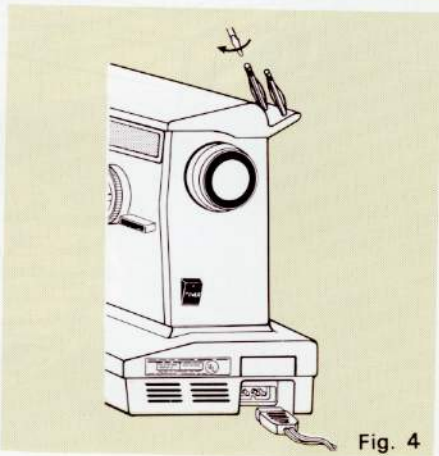


Fig. 4

1. To install the machine in cabinet, position machine head on cabinet platform so that holes on bottom of machine match those on boards. Insert washers and screws and tighten into place. (Fig. 1)

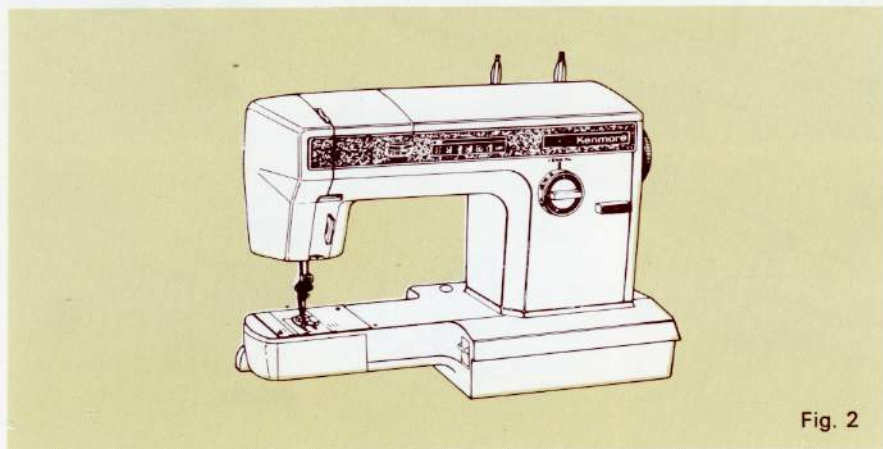
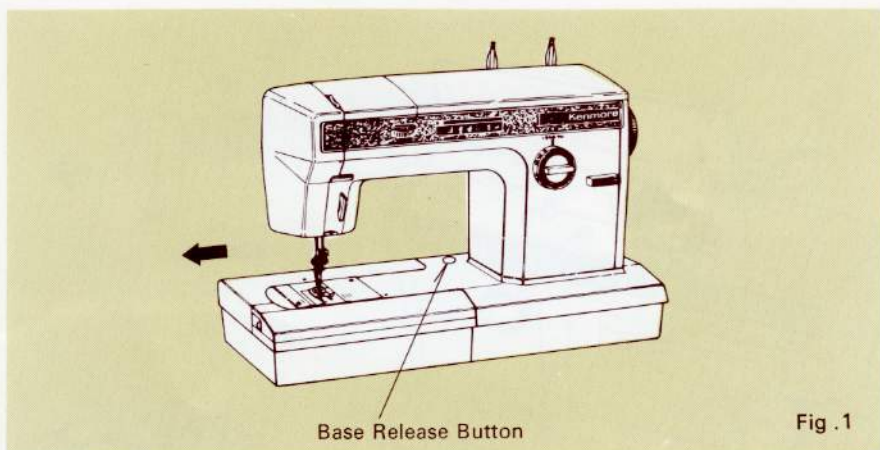
2. A separate base and cover is available to carry the machine when needed. The base must be removed when machine is used.

To install machine in carrying case, set machine into base, with word **FRONT** in base facing you. (Fig. 2)

Place cover on machine with word **"SEARS"** on handle facing you. The case slopes in the same direction of the machine. (Fig. 3)

3. Push the speed control plug onto three-prong connector. Plug machine cord into any 110-120 volt wall outlet. Turn on power by pushing light and power switch. (Fig. 4)
4. Spool pins are packed in accessory box. Screw thread spool pins in place securely with a screw driver as shown in Fig. 4.

## CONVERTING TO FREE-ARM SEWING

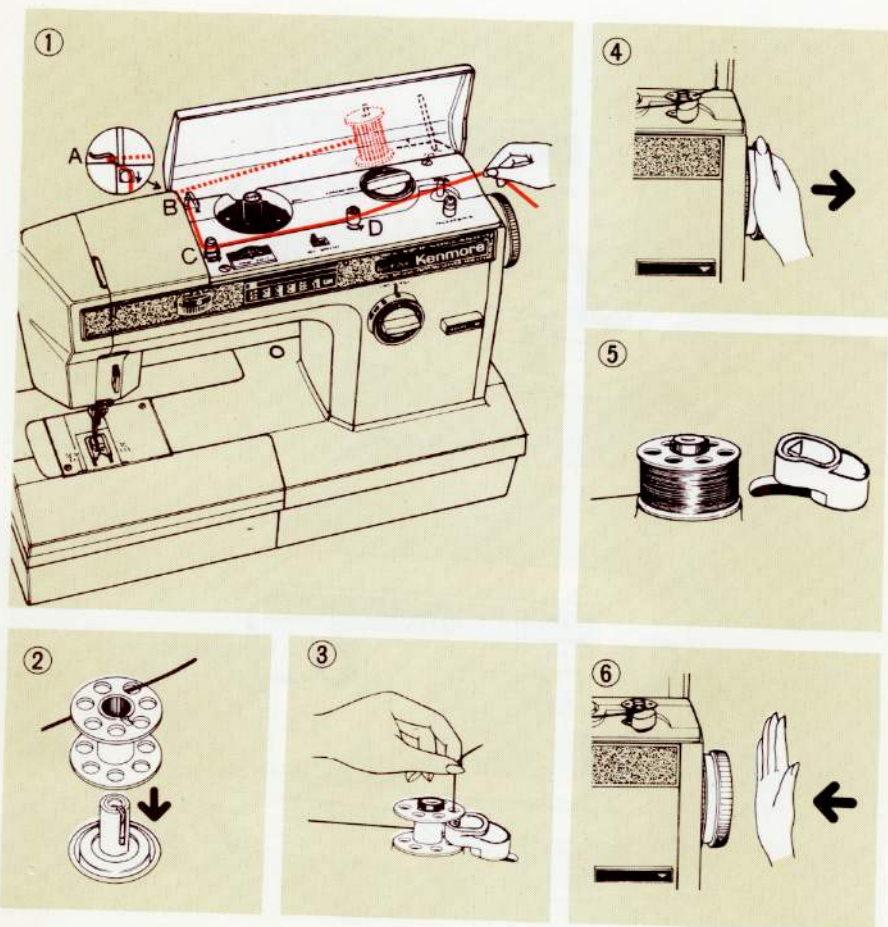


1. Remove the base from the machine by pushing the release button and pulling the base to the left at the same time. (Fig. 1, 2)
2. To replace the base, simply slide it along the free arm to its original position. (Fig. 1)

Note: Base cannot be removed or replaced unless shuttle cover is closed.

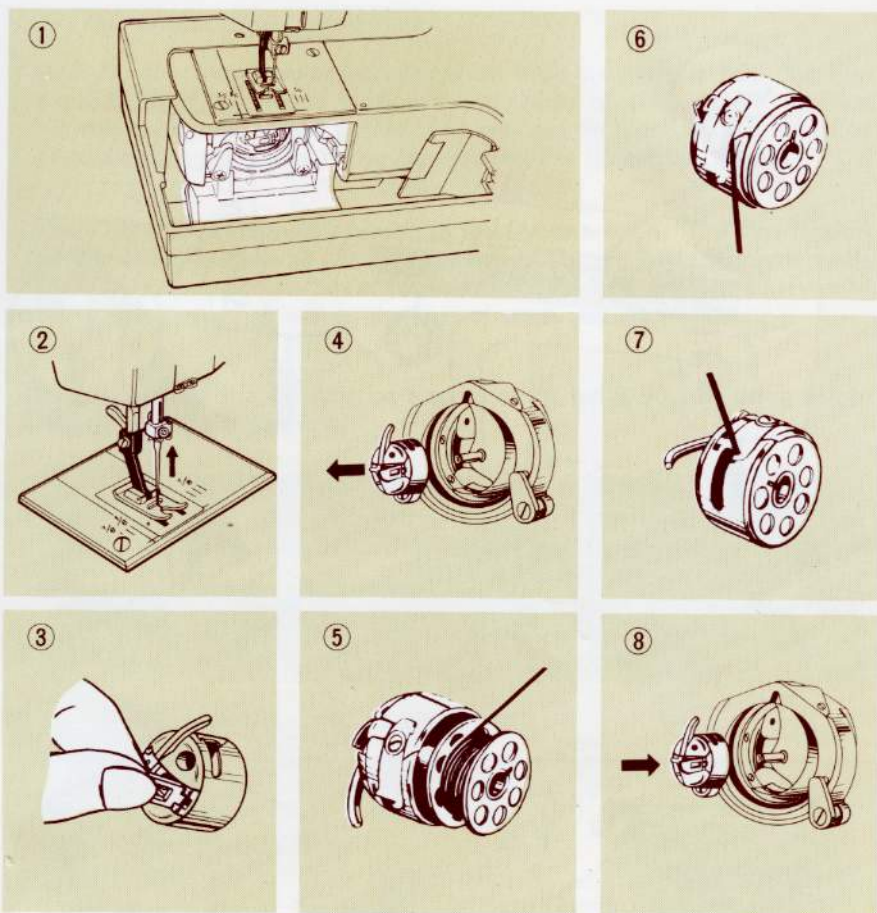


## WINDING THE BOBBIN



1. Open top cover plate. Draw thread from spool through rear thread guide (A), bobbin winder guide (B), tension disc (C) and in front of guide (D) as shown in Fig. 1.
2. Pull end of thread through hole in bobbin and place bobbin onto bobbin winder shaft with end of thread coming from the top of the bobbin.
3. Push bobbin winder latch against bobbin until it clicks.
4. Release clutch by pulling hand wheel as shown in Fig. 4. Start machine, holding onto end of thread. When bobbin is slightly filled, release end of thread.
5. When bobbin is full, winding mechanism stops.
6. Push in hand wheel to return to stitching position. Remove bobbin.

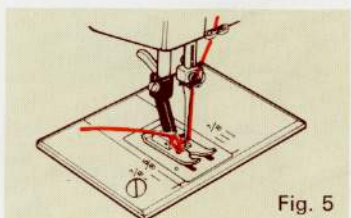
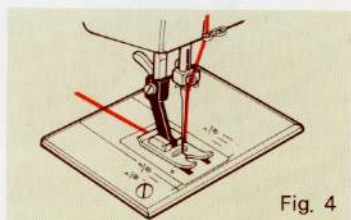
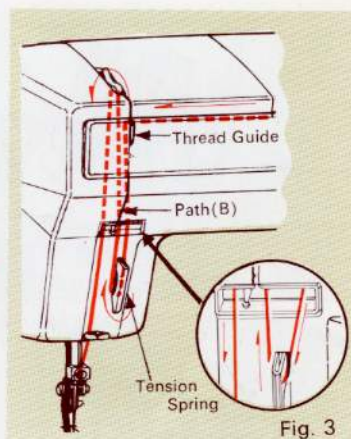
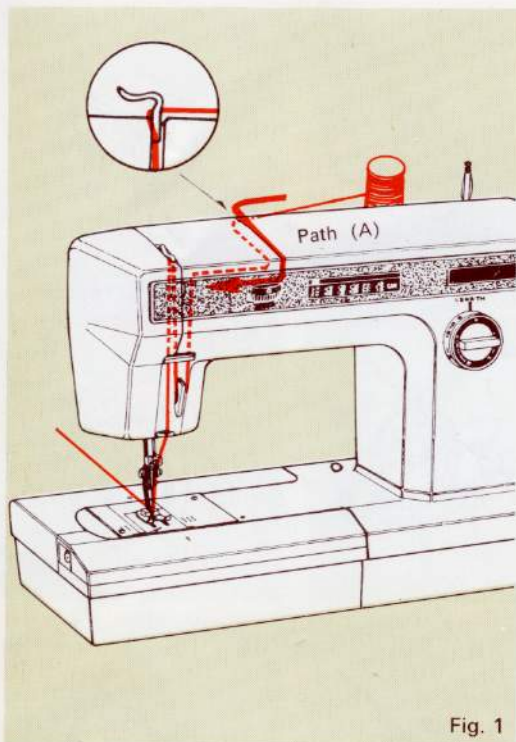
## THREADING THE BOBBIN CASE



1. Remove base front cover by pushing the release button on the left side. Open the shuttle cover.
2. Raise needle to its highest position by rotating hand wheel toward you.
3. To remove bobbin case from shuttle, pull open latch of bobbin case.
4. Pull bobbin case straight out of shuttle.
5. Insert bobbin into bobbin case making sure thread is coming from bobbin as shown.
6. Pull thread through slot of case as shown.
7. Pull thread under tension spring.
8. Holding latch open, position case into shuttle, and release latch. Case should lock into place when latch is released.



## THREADING OF TOP THREAD



Place thread on spool pin as shown with thread coming from back of the spool. Holding the spool stationary with right hand to hold thread taut (See Fig. 2), draw thread through rear thread guide, into top threading path (A) and then to the left.

Draw thread over guide and down into threading path (B). Thread tension spring by pulling thread up into the spring. (See Fig. 3). Release spool of thread. Follow path (B)

through the take up lever and down to lower thread guides.

Continue to thread down through guides as shown in Fig. 4. Needle must always be threaded from front to back as shown in Fig. 4.

Hold needle thread loosely in left hand and rotate hand wheel toward you one complete turn. Bring bobbin thread up by pulling upper thread.



## CONTROLS

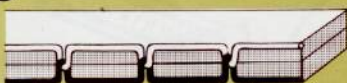
### ADJUSTING TOP TENSIONS

Probably the most important control on your machine is this one that regulates your top thread tension. It consists of discs above the dial between which the thread passes. The pressure on these discs is regulated by turning the dial. The higher the number, the tighter the tension.

There are many reasons for having to reset your tension. The best tension for one fabric may not be correct for another. The required tension depends upon the stiffness of the fabric, thickness of the fabric, numbers of layers of fabric being sewn, as well as the type of stitch you are making.

It is best to test the stitching on a scrap of the fabric you are using before starting to make a garment.

1



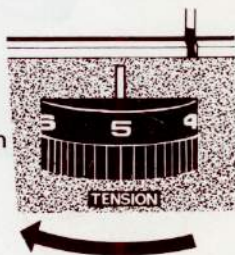
A perfect straight stitch will have threads locked between the two layers of fabric with no loops on top or bottom.

2

Upper thread too tight



Decrease Tension

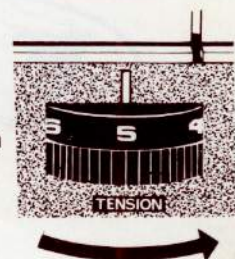


3

Upper thread too loose



Increase Tension



## ADJUSTING BOBBIN TENSIONS

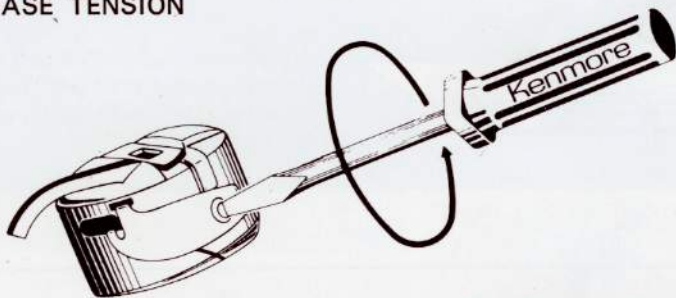
Bobbin tension requires adjusting less frequently than the upper thread tension.

If the stitch is satisfactory but the seam is puckered, it may be necessary to loosen the tension on both the top and bottom threads. Be sure to balance them as indicated on Page 9.

When adjusting the tension on the bobbin case, make slight adjustments with a screwdriver.

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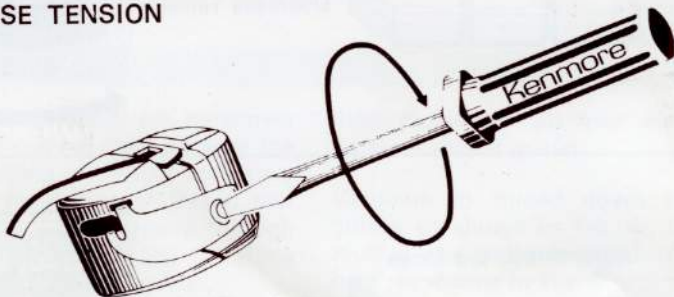
### DECREASE TENSION



Turn Counter Clockwise.

---

### INCREASE TENSION



Turn Clockwise.

---

## CHECKING TENSIONS

The easiest way to check tensions is to sew a medium zig zag stitch on the fabric you will be using. Use the appropriate type of thread and needle. Use different colors of thread on the bobbin and upper spool.

Sew a line of zig zag stitches. The bobbin thread should not show on the top of the fabric.

Adjust the top tension if necessary to achieve the stitch balance mentioned above.

**UNBALANCED**



**BALANCED**





## STITCH LENGTH CONTROL


The stitch length control regulates the length of the stitch you select. THE HIGHER THE NUMBER - THE SHORTER THE STITCH. Turn only the outer rim of this control to set the stitch length.

The number on stitch length control indicates the approximate number of stitches per inch. The stitch setting you use will be determined by the thickness of the fabric you are sewing.

A longer stitch setting should be used for thicker fabric or more layers of fabric.

The middle range of the control is the 10-12 stitch per inch range which is the most commonly used.

A basting stitch is made by using the longest possible stitch setting - 6 stitches per inch.

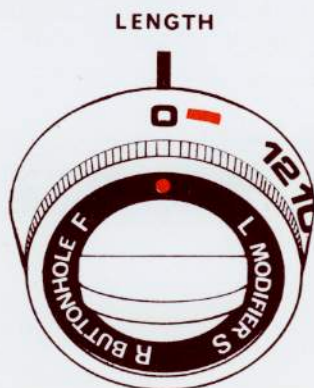
The red marking  on the control is the setting used for the shortest stitches such as in Satin Stitching.

## STITCH WIDTH CONTROL

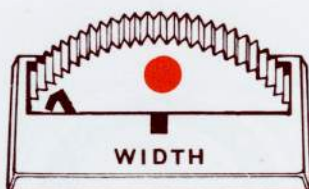
This control regulates the width of the stitch you select. THE HIGHER THE NUMBER - THE WIDER THE STITCH. You may vary your zigzag stitch width by adjusting this control to the setting you desire.

This control must be on Red Dot in order to do straight stitching.

## STITCH LENGTH CONTROL



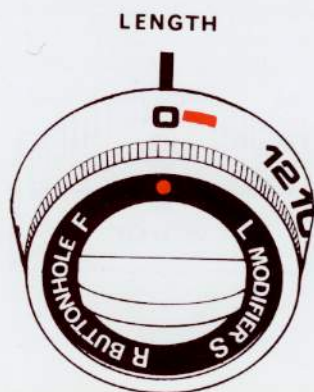
## STITCH WIDTH CONTROL



## REVERSE STITCH CONTROL



## SPECIAL STITCH MODIFIER AND BUTTONHOLE CONTROL





## REVERSE STITCH CONTROL

It is best to begin and end seams with a few stitches taken in reverse. This is called back tacking. Back tacking fastens the ends of the seams firmly and prevents raveling.

When reverse stitching is needed, turn the control clockwise and hold there during sewing. The fabric will immediately start feeding backwards and seam will be fastened.

## SPECIAL STITCH MODIFIER AND BUTTONHOLE CONTROL

This control determines the feed of the feed dogs. All simple forward stitches require that this control be set at red dot. These stitches are the straight stitch, zigzag, mending, blind hem and basic decorative designs.

Those stitches requiring an automatic reverse feed of the feed dogs are the stretch stitches and the reverse decorative designs. Then the Stitch Modifier must be set somewhere between S and L. See next section for specific settings for individual stitches.

This control is also used in making buttonholes. Detailed instructions are given in the next section of the book.

## SPECIAL STITCH SELECTOR AND INDICATOR

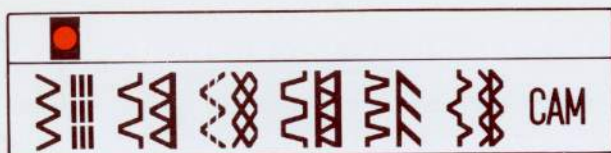
There are certain types of stitches that are used more often than others in your garment construction. Because of their frequent use, you will soon realize the convenience offered to you by this control. As you turn the Special Stitch Selector, the desired stitch is indicated on the front panel.

All stitches printed in red on the indicator must be sewn with the Special Stitch Modifier set at the Red Dot.

Stitches printed in white on this indicator may be obtained with the Special Stitch Modifier set at S.

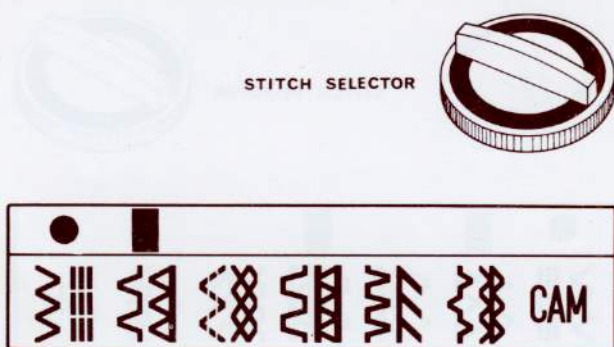
### THE RED DOT SETTING

STITCH SELECTOR



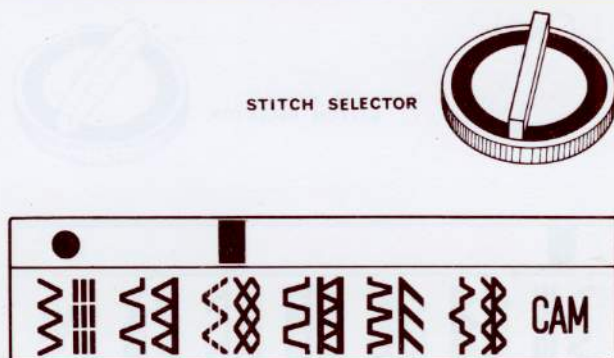
The setting illustrated above is the one used for most of your stitching. At this setting you may straight stitch, stretch stitch and make a simple zig zag stitch. As each stitch is dependent upon the settings of your other controls, carefully read the directions in the next section of the book for the various stitches.

## BLIND STITCH AND OVERCAST STRETCH STITCH



Blind hems are made by using the setting shown with the Stitch Modifier on the red dot. When the Modifier is set on the White "S", overcast stretch stitching is made.

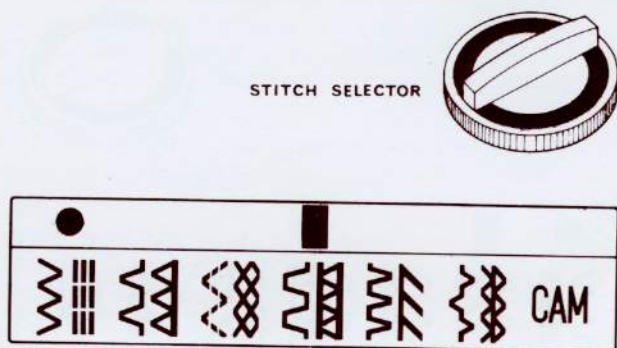
## SPECIAL MENDING STITCH AND SMOCKING STRETCH



You will find that much of your sewing is in the mending category. For this reason you have been provided with a stitch for the repair of tears. It is accomplished with the illustrated setting and the Modifier set at the Red Dot. When the Modifier is turned to the White "S", a Smocking stitch results. For directions, see the next section of this book.

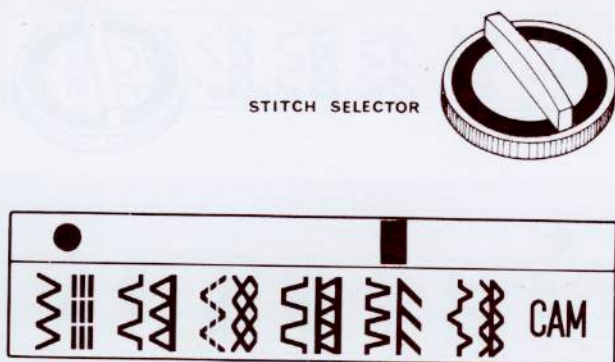


## SPECIAL BOX STITCH AND ELASTIC STRETCH



The setting illustrated is used for special edge finishing and special stretch stitch for sewing elastic such as sportswear, girdles and other garments that require stretch. See next section of this book for detailed use of the stitches.

## SERGING OR PINE LEAF STRETCH



Serging or pine leaf stretch is used for seam finishing on all types of fabrics. It is a stitch used in the garment industry. It forms a good looking seam, stitching and overcasting the edges. This stitch is useful for seaming of swimwear, stretch ski pants and other types of knit sportswear. Modifier must be set on the White "S".

If Modifier is set on the red dot, a Shell Stitch can be made on nylon tricot.

## FAGOTING STITCH

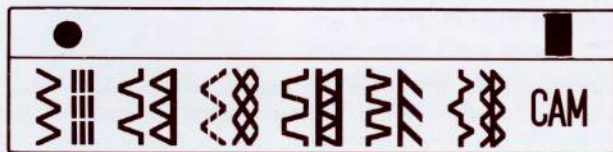
STITCH SELECTOR



The fagoting stitch is decorative. It is used as a trim between seams. See next section for detailed use of the stitch.

## CAM SETTING

STITCH SELECTOR

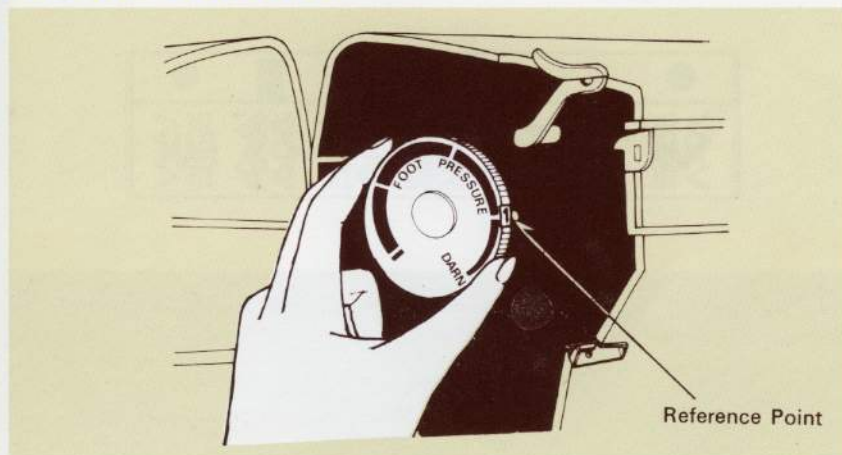


The CAM setting on the dial is used whenever you wish to use any of the 30 insert cams to make decorative embroidery patterns.

## OTHER ADJUSTMENTS OF MACHINE IN SEWING

In addition to the obvious controls of your machine, there are other small regulators and controls to aid you in using your sewing machine.

### PRESSURE REGULATOR



The pressure on the presser foot is regulated by turning the dial of this regulator which is situated in face cover plate (See above). To increase the pressure, turn the dial clockwise, until a suitable pressure is obtained. Make certain presser foot lever is in the up position during adjustment.

Insufficient pressure may cause poor feeding of the fabric, skipped stitches, or difficulty in guiding the fabric.

When sewing multiple thickness or heavy fabric, reduce the pressure. Increase pressure when sewing lighter weight fabrics. If feed dog or presser foot marks appear on the fabric, reduce the pressure.



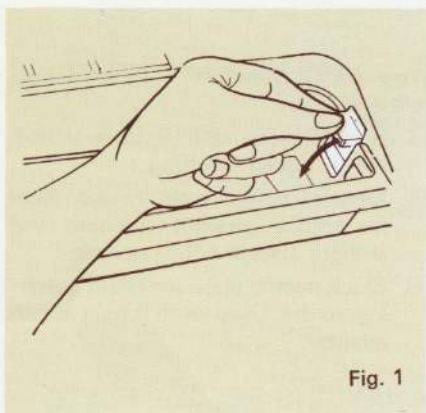


Fig. 1

## FEED DOG CONTROL

There are a few times when you want to control the feeding of the fabric yourself. Remove the base cover from the base. Pull down the feed dog control shown in Fig. 1. The feed dogs will drop. You may then determine the movement of the fabric yourself.

For most of your stitching, the feed dog control should be in the up position.

Whenever you raise or lower the feed dogs, be sure to have the presser foot in the up position.

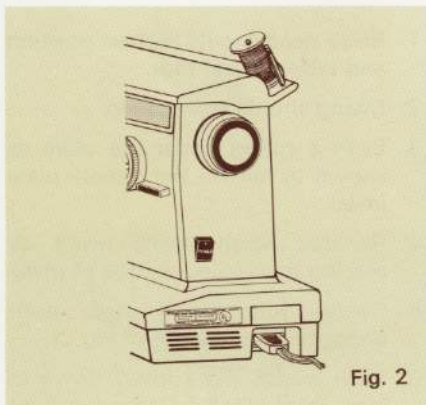


Fig. 2

## SEWING LIGHT

The light and power switch shown in Fig. 2 provides the electric current for the motor as well as for the light. In order to operate the machine, this switch must be on. To turn on the light, depress the upper side of the switch. If you are interrupted while sewing and must leave the machine unattended, just turn off the switch and the machine cannot be started accidentally.

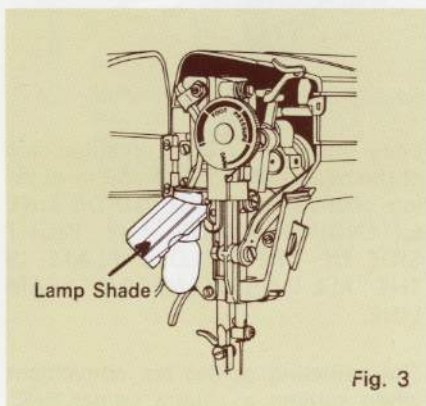


Fig. 3

The sewing light is located inside the face cover plate as shown. To replace the bulb, turn light off and swing the face cover plate open. Raise lamp shade. Push up the bulb slightly and turn clockwise. Remove bulb from socket. Push in new bulb and turn counter-clockwise.

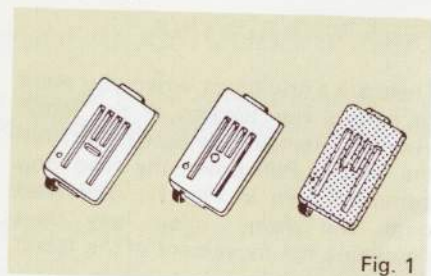


Fig. 1

## NEEDLE PLATE INSERTS

You are provided with three needle plate inserts:

- A. Needle plate with wide oval hole for all zigzag stitching.
- B. Needle plate with round hole for regular straight stitching and straight stretch stitch sewing.
- C. Black needle plate for chain stitching to be used with chain stitch adapter.

## CHANGING NEEDLE PLATE INSERTS

1. Raise needle to its highest position and raise presser foot.
2. Swing shuttle cover open.
3. Push a spring under the plate as shown to release the needle plate insert.
4. Remove needle plate insert by placing thumb under edge of plate.
5. Replace the needle plate insert positioning as shown in Fig. 3.
6. Push needle plate insert down to lock into place. Reposition the shuttle cover.



Fig. 2

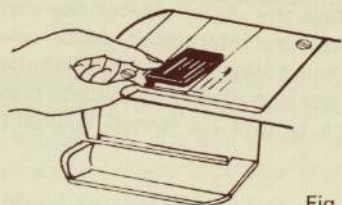
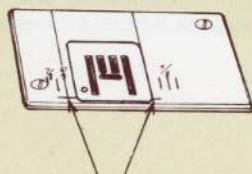


Fig. 3



Cornering Guide

Fig. 4

## SEAM GUIDES

Seam guides are printed on either side of the needle plate to aid you in guiding your fabric. THE GUIDE LINE EXTENDING ABOVE THE RIGHT SIDE OF THE NEEDLE PLATE IS THE "ALL IMPORTANT" 5/8" SEAM LINE.

The cornering guides are convenient when turning a square corner 5/8" from the fabric edge. See next section of this book for directions.

## ACCESSORIES

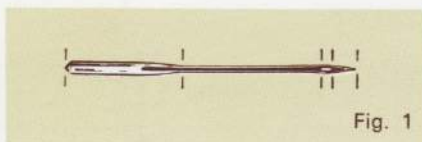


Fig. 1

## NEEDLES

Use KENMORE needles. The size of the needle should conform with the size of the thread and both should be suitable to the fabric (See next page).

Never use a bent needle or one with a blunt point.

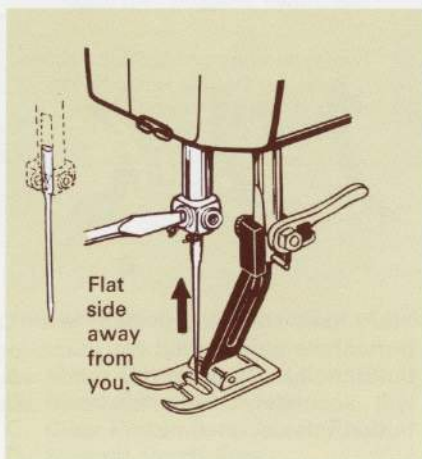
Fig. 1. shows you the exact length of your needle. Be sure you never use one in your machine that is not this exact length.

You will find among your accessories "Q NEEDLES"™ with blue shanks. These special needles are to be used when sewing certain knits and certain difficult synthetic fabrics. If you experience skipped stitches in any of your sewing, use "Q NEEDLE"™.

## PLACEMENT OF NEEDLE

Raise needle bar to its highest position by turning the hand wheel toward you. Loosen the needle clamp screw. Holding the needle with the flat side away from you, slip the needle into the needle bar. Make certain it is up as far as it can go. Tighten the needle clamp screw with a screwdriver.

If you have a double needle for decorative stitching, it is inserted in the same manner as the single needle.

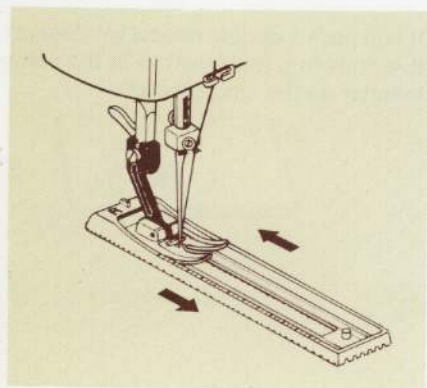




## NEEDLE, THREAD AND FABRIC CHART

THREAD SIZE	NEEDLE SIZE	FABRIC
Polyester Core/Cotton Wrap Fine Mercerized Cotton Polyester Synthetic Silk A	9 or 11	Lightweight: Batiste, Dimity, Chiffon, Silks, Synthetic Jerseys, Fine Lace, Organza, Crepe, Taffetta, Voile, Organdy
50 Mercerized Cotton Polyester Synthetic Silk A	14	Medium Weight: Cotton, Cotton Blends, Percale, Gingham, Shantung, Pique, Seersucker, Satin, Knits, Vinyl, Suitings, Linen, Wool Crepe, Leather
50 Mercerized Cotton Mercerized Heavy Duty Polyester Synthetic Silk A	14 or 16	Medium Heavy Weight: Corduroy, Denim, Wool, Sailcloth, Wool Flannel, Gabardine, Velvets, Leather
Heavy Duty Mercerized Cotton Polyester Synthetic Silk A	18	Heavy Weight: Coatings, Upholstery, Cotton Duck, Heavy Twills, Canvas
Silk Buttonhole Twist	16, 18 or "Q NEEDLE" <sup>TM</sup>	Decorative Top-stitching on all
Polyester Synthetic 50 Mercerized Cotton	"Q SET" <sup>TM</sup> ("Q NEEDLE" <sup>TM</sup> and "Q FOOT" <sup>TM</sup> )	Synthetic Knits and Stretch Fabrics: Polyester Double Knits, Nylon Tricot, Jersey, Stretch Terry, Spandex, Cire Tricot

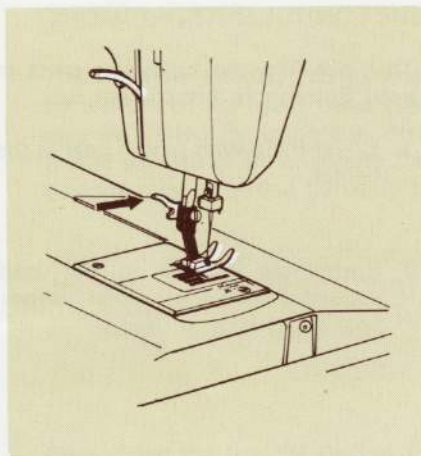
## BUTTONHOLE GUIDE



You have been provided with a buttonhole guide to aid you in making buttonholes. By using this guide, you will accurately make identical size buttonholes every time.

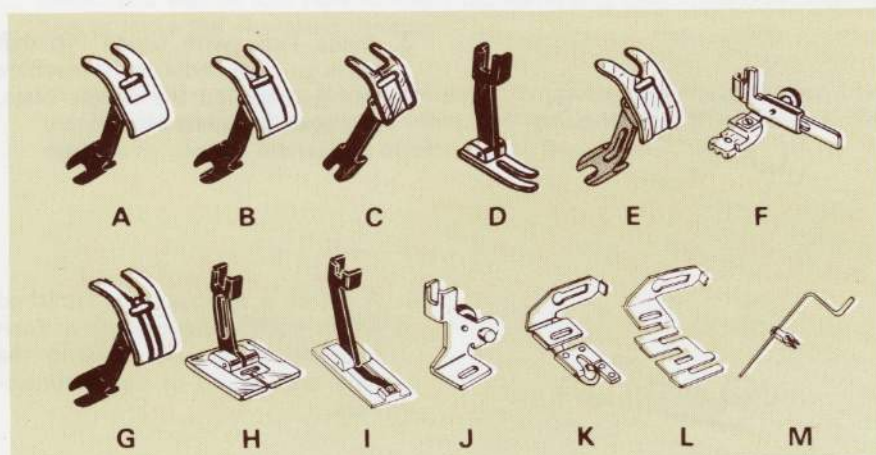
The guide just slips onto the regular zigzag foot as illustrated.

Details in using this attachment are given in the next section. Follow those directions carefully for perfectly formed buttonholes.



## PRESSER FEET

To replace any of the feet with ease, simply drop the presser foot lock and slip the foot away from the presser bar. To aid you in the placement of the presser foot, the presser foot lever can raise the foot beyond the normal "up" position. After the foot is placed on the presser bar, lift the lock as high as it will go to hold the foot securely.



You have been given a variety of presser feet:

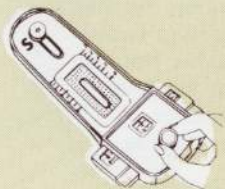
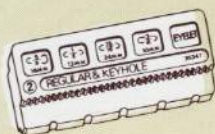
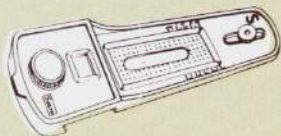
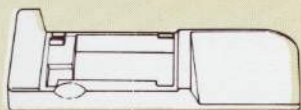
- |                                    |  |
|------------------------------------|--|
| A. Metal Zigzag Foot               | H. Buttonhole Foot used with Buttonhole Attachment |
| B. Metal Satin Stitch Foot         | I. Overcasting Foot                                |
| C. Clear Plastic Satin Stitch Foot | J. Adjustable Holder                               |
| D. Straight Stitch Foot            | K. Narrow Hemmer                                   |
| E. "Q FOOT"™                       | L. Edgestitcher                                    |
| F. Plastic Zipper Foot             | M. Quilting Guide                                  |
| G. Built-in Buttonhole Foot        |  |

## BUTTONHOLE ATTACHMENT

You will find the following parts in your Buttonhole Attachment Box:

1. Cover Plate with pinion gear in the center.
2. Buttonhole adapter to be used instead of base cover when buttonhole attachment is used.
3. Guide Plate with Guide Pin that fits in guide pin hole on the machine bed just behind the needle plate, and with Template Holder.
4. A set of 5 templates is furnished with each attachment. Each template is marked showing the type and length of each buttonhole.
5. Desired size of buttonhole is selected by turning template advance knob. Length of buttonhole appears in window on top side of guide plate.

Details in using this attachment are given in the next section. Follow those directions carefully for perfectly formed buttonholes.





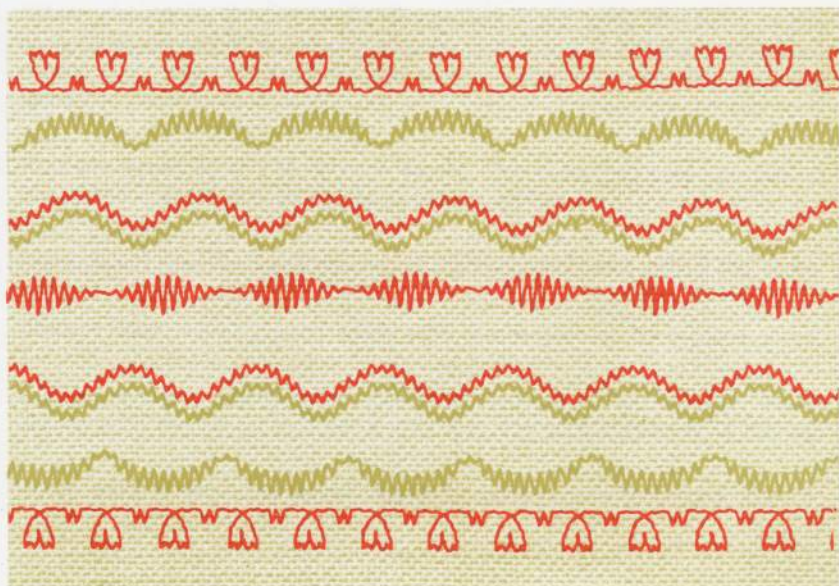
## DESIGN CAMS

This machine enables you to sew beautiful decorative embroidery patterns by the use of the many cams supplied with your machine. All the designs may be varied by using the double needle and two different colors of thread as well as by changing the width of the zigzag stitch. Some of the designs may be varied by using the Special Stitch Modifier as illustrated.



Please read the Special Design Stitching pages in the next section of the book. You will be told how to insert the cams and the machine settings to use to make the illustrated designs.

You will find many uses for the designs in combination with appliques, bias tapes, laces and other decorative trimmings. It is possible to combine several designs to give an interesting effect.



## Starting to Sew

Now that you are familiar with the controls on your machine and with the accessories provided for the machine, you are ready to start to sew with your new Kenmore sewing machine. Below are some good habits to follow each time you sit down to sew:

1. Test the needle - it should be straight, properly set and sharp on the point. It should be the correct size for the fabric and thread being used. Do not be afraid to change your needle frequently. Many of the new fabrics made of synthetic blends tend to dull the needles more easily than fabrics made of natural fibers.
2. Before placing the material on the machine, see that the ends of the threads have been drawn about 4 inches to the rear of the machine. Hold on to threads during the sewing of the first 3 or 4 stitches of the seam.
3. Test the machine stitch on a scrap of fabric you plan to use. The fabric should be double thickness. Adjust the machine for the length of stitch and tension suitable to your fabric.
4. Fabric should be placed under the presser foot with the bulk of the material to the left of the needle and the right edge of the material placed on the 5/8" seam marking on the needle plate when making a simple seam.
5. Run the machine at a slow even speed. The more pressure you put on the speed control, the faster the machine will sew.
6. Fasten each seam by back tacking at the beginning and end of the seam.
7. Always finish sewing each seam with the needle at its highest point.
8. Guide the fabric gently with your hand in front of the needle. Never pull or hold the fabric in such a way that the normal feeding is altered.
9. When turning the hand wheel manually, always turn it toward you.



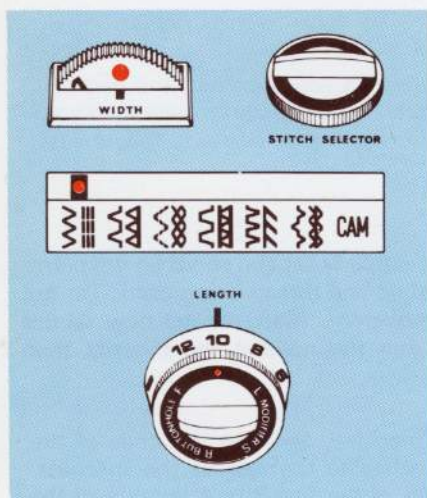
## GARMENT CONSTRUCTION STITCHES

### STRAIGHT STITCHING

Set your machine just as shown in the illustration in order to straight stitch. It is important that each dial has the following settings.

#### SETTINGS

Special Stitch Selector -   
Stitch Width Control - Red Dot  
Stitch Length Control - Any Number  
Special Stitch Modifier - Red Dot  
Use straight stitch foot and straight stitch needle plate.



You will find in garment construction that you are doing two types of sewing - temporary and permanent.

1. Temporary stitching - Usually the longest stitch possible and often done on a single layer of fabric. The various types of temporary stitching are:

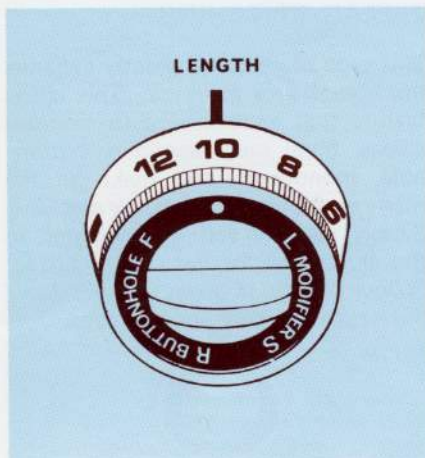
- Basting
- Stay stitching
- Guide line marking

2. Permanent stitching - This is the actual stitching that holds the garment together. Much of this stitching is visible on the outside of the garment and therefore must be good looking.

You must remember to lengthen the stitch for heavier fabrics, multiple layers of fabric and thicker seams. Some of these seams are:

- Common two layer seams
- Curved two layer seams
- Top stitched three layer seams
- Top stitched four layer seams



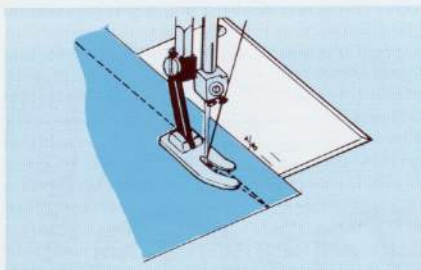


## STITCH LENGTH CONTROL

The best length straight stitch to use for medium weight fabrics is 10 to 12 stitches per inch.

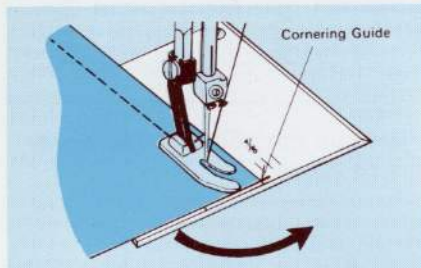
To control stitch length, just turn your control dial as shown.

When you have two seams crossing each other with considerable thickness, sew slowly and carefully so seam will be strong as possible. It may be necessary to lengthen your stitch slightly and reduce the pressure on the presser foot if you are sewing very thick fabrics.



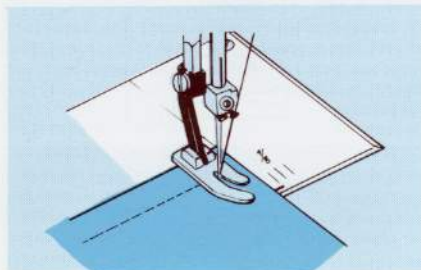
## FASTENING A SEAM

Be sure both threads are drawn back under the presser foot. Lower needle into fabric about 1/2 inch from beginning of seam. Turn the reverse stitch control clockwise and stitch in reverse until needle reaches beginning of seam. Release control and complete seam. When you reach the end, turn the control clockwise and sew back over 1/2 inch of completed seam.



## TURNING A SQUARE CORNER

To turn a square corner 5/8" from the fabric edge, stop stitching with the needle tip piercing the fabric, when reaching the cornering guide as shown. Raise the presser foot, turn fabric. New stitching line will align with 5/8" seam guide on side of needle plate. Lower the presser foot and begin stitching in new direction.

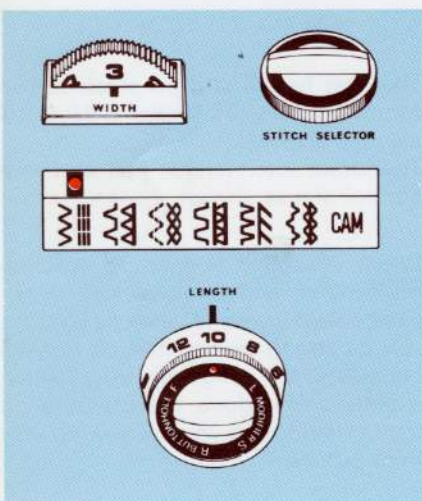


## ZIGZAG STITCHING

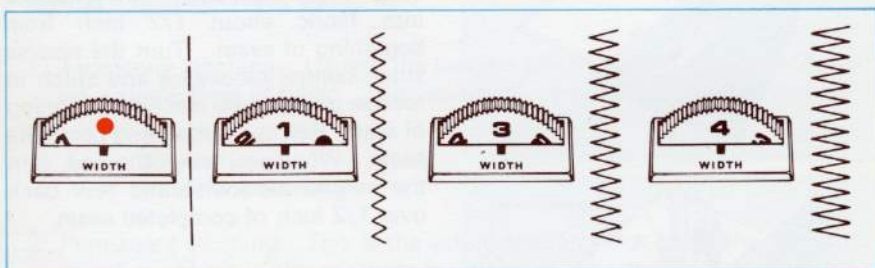
This type of stitching greatly expands the use of your machine. This is the feature that enables you to overcast seams, blind hem, applique, button-hole, monogram, and make all the pretty embroidery designs by machine. Simply use the settings indicated in the illustration for the simple zigzag. Follow directions given in the following pages for more specific uses.

### SETTINGS

Special Stitch Selector -   
Stitch Width Control - 1 to 4  
Stitch Length Control - Any Number  
Special Stitch Modifier - Red Dot  
Use zig zag presser foot and zig zag needle plate.

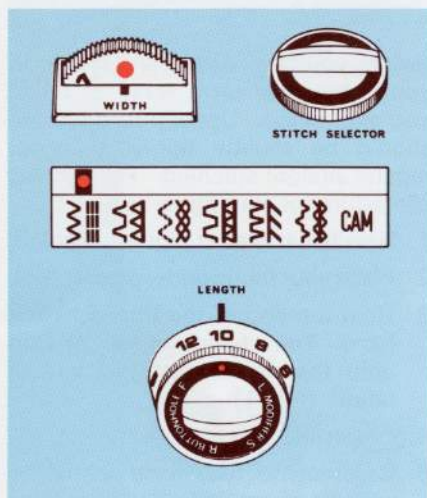


## ZIGZAG WIDTH CONTROL



In order to get Simple Zig Zag Stitches, just turn this control. The higher the number, the wider the stitch as illustrated above.





## CHAIN STITCHING

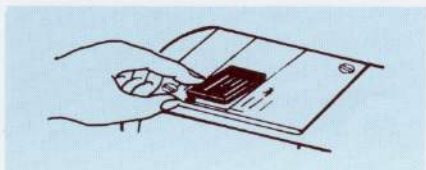
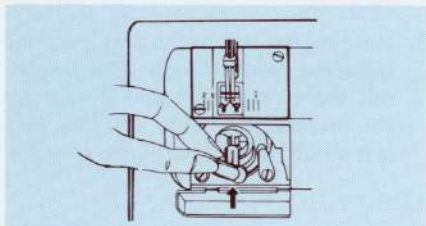
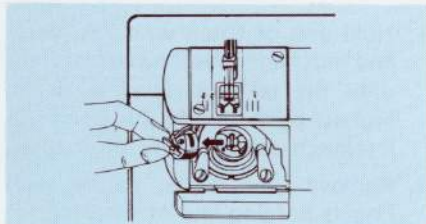
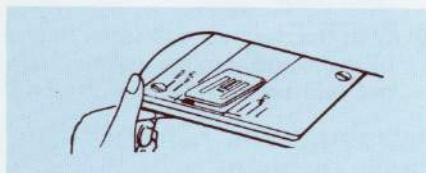
Your machine will make a special temporary type stitch - a chain stitch. The chain stitch is made by the upper thread only. The appearance of the stitch from the top of fabric is almost the same as regular straight stitch. Just pull on the thread end, you can remove thread easily.

### SETTINGS

Special Stitch Selector -   
 Stitch Width Control - Red Dot  
 Stitch Length Control - Around 10  
 Special Stitch Modifier - Red Dot  
 Use straight stitch foot, chain stitch adapter and chain stitch needle plate.

## ADJUSTING MACHINE FOR CHAIN STITCHING

1. Be sure the needle is at its highest position by turning handwheel.
2. Remove base front cover by pushing the release button. Open the shuttle cover.
3. Remove regular needle plate, bobbin and bobbin case from shuttle.
4. Insert chain stitch adapter onto the shuttle center pin. Be sure the adapter clicks into place when you fit it onto shuttle.
5. Replace needle plate with black needle plate.





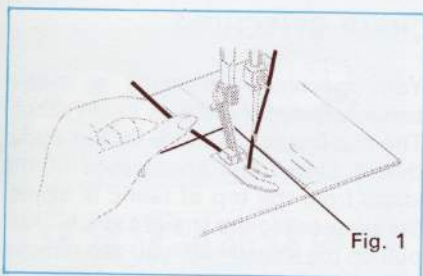


Fig. 1

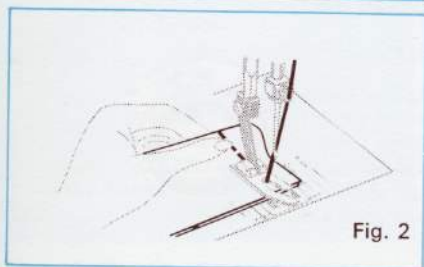


Fig. 2

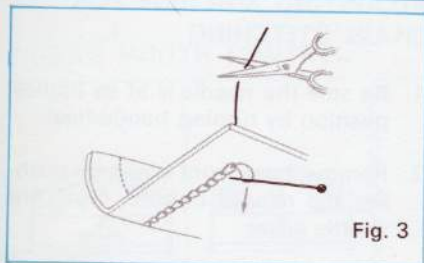


Fig. 3

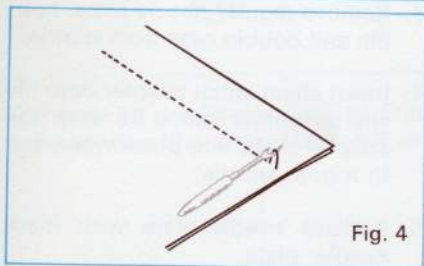


Fig. 4

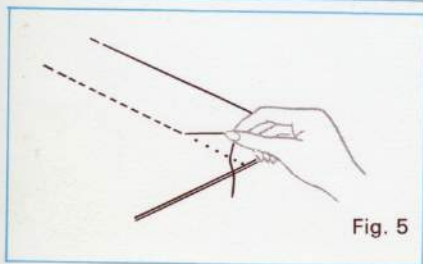


Fig. 5

## START TO SEW

Before you sew with chain stitch on your fabric, test on a scrap of fabric you plan to use. Upper thread tension should be slightly tighter than for regular straight stitching. Follow next procedure for starting to sew.

1. Needle bar is at its highest position.
2. Place your fabric under presser foot.
3. Hold the end of the thread by left hand. Turn hand wheel forward until the needle just pierces the fabric. (Fig. 1)
4. Lower the presser foot.
5. Continue to turn hand wheel by right hand until a few stitches have been made.
6. Start the machine and stitch to end of seam, and stop the machine. Do not sew beyond the end of fabric.

## REMOVING THE FABRIC FROM MACHINE

1. Hold end of stitch with left hand, and turn hand wheel away from you until the take up lever is at its highest position. At this point the last stitch is released by the adapter.
2. Remove your fabric gently with fingers holding end of stitching. (Fig. 2)
3. Holding the last stitch and material between your thumb and finger, cut the thread and pull thread to the underside. This will lock the last stitch. See illustration. (Fig. 3)

## REMOVING THE THREAD

1. To remove the stitching quickly, the thread from last stitch must be on top. Simply pull the thread and all the stitching unravels. (Fig. 4, Fig. 5)



# S-T-R-E-T-C-H






STITCHING

Kenmore

This KENMORE sewing machine provides you with a full range of stitches specially designed to automatically produce the stitch most suitable for today's newly developed stretch and elastic materials.





You choose your fabric with confidence that you have available the right stitch for the job you want your KENMORE to do for you, in the manner you want it done. You need no longer limit your choice of fabric because you lack the capability of fashioning it in the most desirable manner.

### Specially for Stretch

			U S E
	STRAIGHT STRETCH	BUILT IN	Use on stretch knit fabrics. Use to repair knit ready made garments where seams need give. Use to seam areas of stress in children's and adult sportswear -- crotch seams, armholes, etc. Sew center seam of men's neck ties. Sew any seam that is on the bias and must give.
	RICK-RACK STRETCH	BUILT IN	Use for all-purpose heavy duty sewing of stretch fabrics. Same usages as that of zigzag stitch on lighter weight stretch fabrics.
	SMOCKING STRETCH	BUILT IN	Use on yoke, insert or band on baby clothes, little girls' dresses, or lingerie.
	ELASTIC STRETCH	BUILT IN	Use to apply elastic to top of lingerie garments. Use to repair ready made lingerie when elastic must be replaced or restitched.
	SERGING OR PINE LEAF STRETCH	BUILT IN	Use for overcasting fabrics that ravel extensively. Use for sportswear for formation of seams that need a great deal of stretch -- swimwear and girdles.






# U S E

	MAXI-STRETCH	CAM NO.38	Can be used for seams of sportswear. Attaching elastic and stretch laces.
	OVEREDGE STRETCH	CAM NO.42	Use on sportswear, swimwear and skiwear where 1/2 seams are required. Makes and finishes seam at the same time.
	FEATHER STRETCH	CAM NO.40	Sew on laces. Sew lingerie and girdle seams. Seams of swimwear.
	MAXI-STITCH STRETCH	BUILT IN	Sew on all types of elastics in swimwear, lingerie, and sportswear.

## Useful Stitches with Stretch Applications

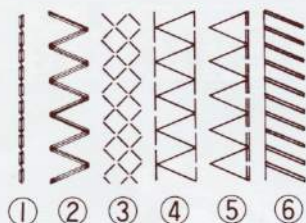
# U S E

	PLAIN ZIGZAG	BUILT IN	Use for all-purpose stretch sewing, seam finishing, edge finishing, or attaching stretch laces.
	SHELL STITCH	BUILT IN	Overcast seam finishing on all types of stretch fabrics. For shell hems in lingerie or so fine fabrics. Flexible blind hemming.
	SCALLOP STITCH	CAM NO.10	Use for attaching girdle panels and applying stretch laces.

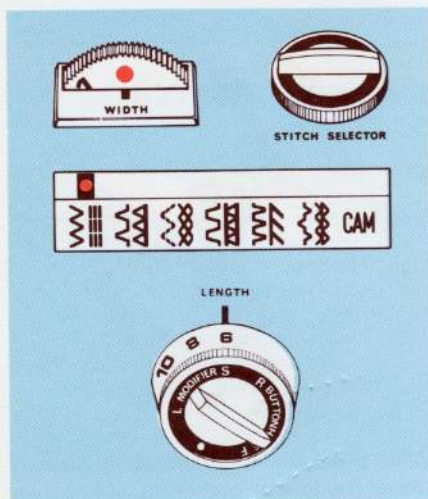
For optimum sewing of stretch fabrics,  
use "Q FOOT"<sup>TM</sup> with gold shank and  
"Q NEEDLE"<sup>TM</sup> with blue shank.

## STRETCH STITCHING

The stitches shown below are all for use with stretch and knit fabrics. These are special stitches built in to the machine for your quick selection.



1. Straight Stretch
2. Rick - Rack Stretch
3. Smocking Stretch
4. Elastic Stretch
5. Overcast Stretch
6. Serging or Pine Leaf Stretch



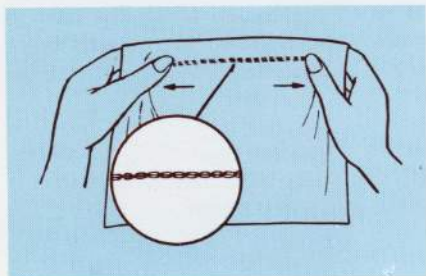
## STRAIGHT STRETCH STITCHING

### SETTINGS

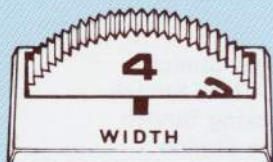
Special Stitch Selector -   
 Stitch Width Control - Red Dot  
 Stitch Length Control - 6  
 Special Stitch Modifier - White "S"  
 Use straight stitch presser foot and straight stitch needle plate.

This stitch enables you to press open your seams as with any straight stitched seam. The seam will stretch with fabric without breaking the thread.

This is also a good stitch to use on curved seams that will receive a great deal of strain when worn, such as in children's shorts and slacks as well as adult sport clothes.








## RICK-RACK STRETCH STITCHING

### SETTINGS

Special Stitch Selector -   
 Stitch Width Control - 1 to 4  
 Stitch Length Control - 6  
 Special Stitch Modifier - White "S"  
 Use "Q FOOT"<sub>™</sub> and "Q NEEDLE"<sub>™</sub> and  
 zig zag needle plate.



## SMOCKING STRETCH STITCHING

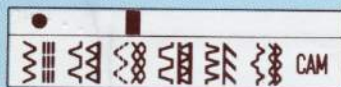
### SETTINGS

Step 1. Make a straight line of gathers across the fabric that you wish to smock.

Step 2. Settings

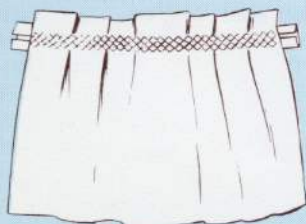
Special Stitch Selector -   
 Stitch Width Control - 3 to 4  
 Stitch Length Control - 6  
 Special Stitch Modifier - White "S"

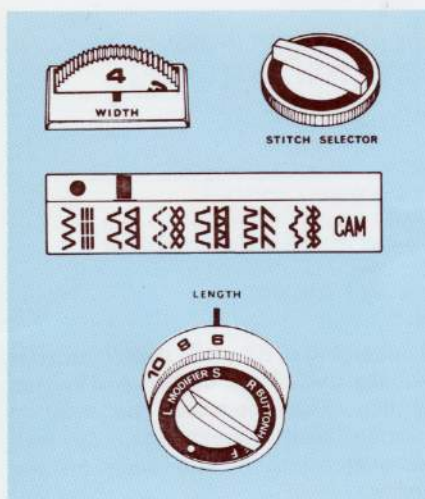
Use "Q FOOT"<sub>™</sub> and "Q NEEDLE"<sub>™</sub> and  
 zig zag needle plate.



With a narrow strip of fabric directly under the line of gathering, stitch over the gathers. The design will be a series of small diamonds. Make the design more interesting by using two different colors of thread and the double needle.

When smocking a garment, the stitching should be done before the piece is sewn into the garment.





## OVERCAST STRETCH STITCHING

### SETTINGS

Special Stitch Selector -   
Stitch Width Control - 4  
Stitch Length Control - 6  
Special Stitch Modifier - White "S"  
Use "Q FOOT"™ and "Q NEEDLE"™ and zig zag needle plate.

This is the same type of stitch used by the garment industry in making sportswear. It is used for seams of 3/8" to 1/4". The seam is formed and finished in one operation. It must be used when you are making swimwear, ski pants and other garments that require stretch.

Fig. 1 shows the raw edge finished.

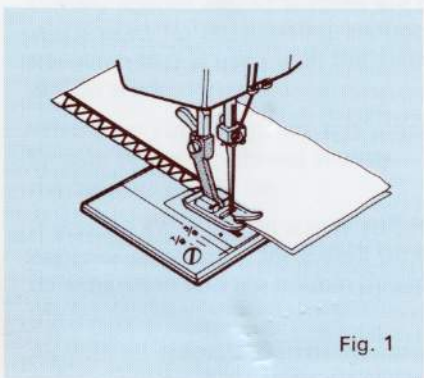


Fig. 1

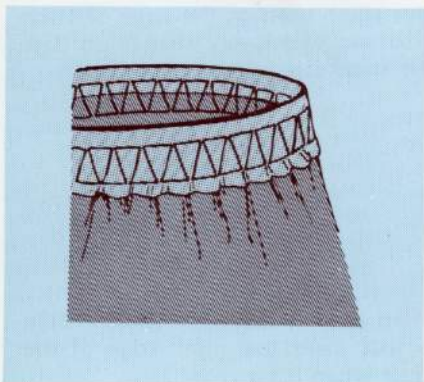
Stitch so the needle pierces the fabric just short of the outside edge.

Raw or worn edges of older garments can be overcast to prevent further raveling.

## ELASTIC STRETCH STITCHING

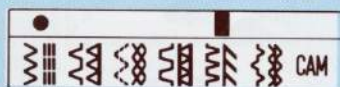
### SETTINGS

Special Stitch Selector -   
Stitch Width Control - 4  
Stitch Length Control - 6  
Special Stitch Modifier - White "S"  
Use "Q FOOT"™ and "Q NEEDLE"™ and zig zag needle plate.



This is a good stitch to use in making or repairing lingerie. The stitch is decorative as well as useful. Simply stitch the elastic into place around the waist of the garment, making sure that the elastic is evenly spaced. To do this mark the correct length piece into quarters and match these markings with center front and back of the garment as well as side seams.



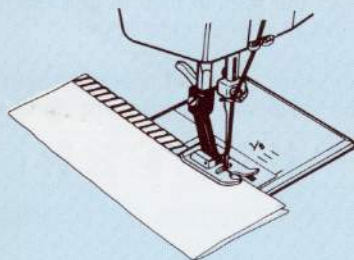


## SERGING OR PINE LEAF STRETCH STITCHING

### SETTINGS


Special Stitch Selector -   
 Stitch Width Control - 4  
 Stitch Length Control - 6  
 Special Stitch Modifier - White "S"  
 Use "Q FOOT"™ and "Q NEEDLE"™ and zig zag needle plate.

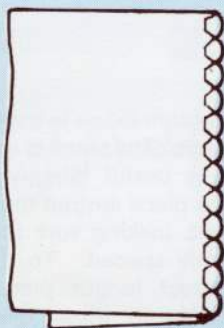
The serging or pine leaf stretch stitch is equally useful with woven and knitted fabrics. This stitch can be used in making elastic swimwear, as well as overcasting a neat edge on the seams.



## SHELL STITCHING

This stitch used on the edge of nylon tricot makes a lovely shell finish. Use the following settings:

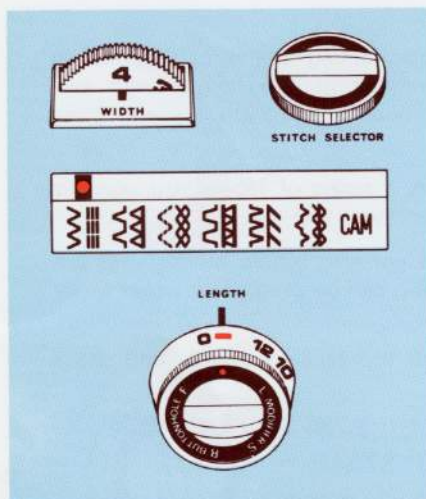
Special Stitch Selector -   
 Stitch Width Control - 4  
 Stitch Length Control - 10  
 Special Stitch Modifier - Red Dot  
 Use "Q FOOT"™ and "Q NEEDLE"™ and zig zag needle plate.



When sewing this stitch, allow needle to just clear the right edge of the fabric when it zig zags.



## SPECIAL FINISHING STITCHES



### SATIN STITCHING

#### SETTINGS

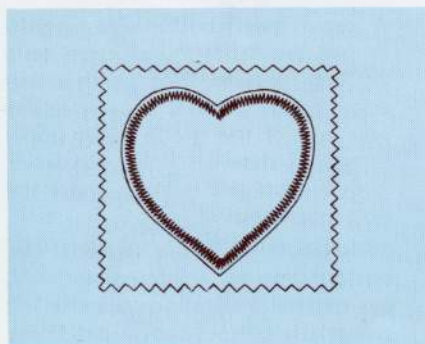
- Special Stitch Selector - 
- Stitch Width Control - Any Number 1 to 4
- Stitch Length Control - Red Zone
- Special Stitch Modifier - Red Dot
- Use satin stitch foot and zig zag needle plate.

Closely spaced zigzag stitches are called satin stitches. This is an attractive stitch used for appliqueing, monogramming, buttonhole making. It is also the stitch that is used with the many decorative pattern cams for embroidery design work.

Whenever you are using this stitch, it is well to remember to loosen the tension of the top thread slightly. The wider the stitch you make, the looser the tension should be.

If you are stitching on a very soft fabric, it is well to use a backing of tissue paper or interfacing for a well formed stitch. Puckering of the material will be eliminated and the bobbin thread will not be visible on the right side of the fabric.

As with all special stitches, it is best to make a sample design on your fabric before starting the design on the garment.



### APPLIQUEING

#### SETTINGS

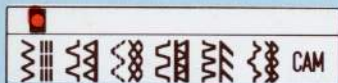
Same as with Satin Stitching

Select an applique design to be applied to your garment and baste it in place. Satin stitch around the raw edge of the applique completely covering the edge. You may want to do this with a contrasting color of thread or self color. By using one of the decorative cams, you may sew around the applique giving it an interesting appearance.

## BUTTONHOLE MAKING

This machine provides you with two buttonholing methods: the built-in buttonhole system sews straight buttonholes in any length with two buttonhole control settings, and the buttonhole attachment lets you make five kinds of buttonholes automatically.

1. Always make a practice buttonhole on a scrap of fabric you plan to use. Try the buttonhole with the button you will use.
2. Always use an interfacing in area of garment where buttonholes are placed. Tissue paper or regular interfacing can be used. Tear paper away after stitching, if it is used.
3. For heavier weight fabrics, loosen your top tension slightly and use a wider stitch width setting.



## BUILT-IN BUTTONHOLE SYSTEM

The built-in buttonholer is very useful for making extra long buttonholes.

### SETTINGS

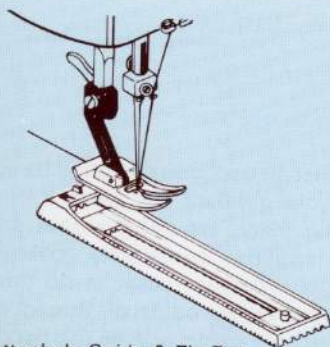
- Special Stitch Selector - 1
- Stitch Width Control - 1 to 1½
- Stitch Length Control - 12
- Special Stitch Modifier - F
- Zig Zag Needle Plate

For buttonholes up to 2 inches long use Buttonhole Guide and Zig Zag Presser Foot.  
For buttonholes larger than 2 inches use Built-in Buttonhole Foot only.

1. Carefully mark the buttonhole length on your garment.

If you use buttonhole guide, mount the buttonhole guide onto zig zag presser foot so that rear edge of the presser foot is at the rear end of the guide, with upper thread as shown. Place the fabric with buttonhole marked under the buttonhole guide.

(Reproduction of the identical size buttonholes is facilitated with the aid of the graduations on the left side of the buttonhole guide. These graduations are 1/8" apart. Graduations act as reference mark.)



Buttonhole Guide & Zig Zag Presser Foot





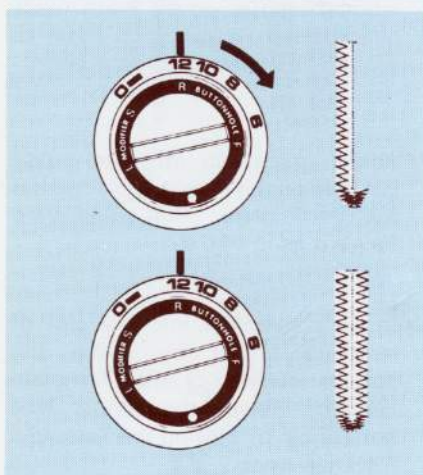
Built-in Buttonhole Foot

If you use built-in buttonhole foot, place the fabric with buttonhole marked under the foot.

Without lowering the foot, let the needle pierce the fabric at the beginning of the buttonhole. Lower the presser foot.



2. With the buttonhole control at F, stitch forward until you approach the front marking of your buttonhole.



3. Turn the control to "R" stitching back to the beginning of the buttonhole. The speed with which the control is turned determines the number of stitches at the end of the buttonhole. The slower the control is turned while sewing, the more stitches formed.



4. Turn the control back to F to finish buttonhole.



## BUTTONHOLE MAKING -USING BUTTONHOLE ATTACHMENT

### REGULAR WORKED BUTTONHOLE (STRAIGHT, KEYHOLE AND EYELET)

#### SETTINGS

Special Stitch Selector -   
 Stitch Width Control - 1 to 1½  
 Stitch Length Control - 0  
 Special Stitch Modifier - Red Dot  
 Feed Dogs - Down  
 Buttonhole Foot used with Buttonhole  
 Attachment  
 Zig Zag Needle Plate

1. Turn hand wheel so needle is down. Remove base front cover by pushing release button. Open shuttle cover. Insert buttonhole adapter minus cover plate with pinion gear. Insert cover plate at 45 degree angle. Snap into place.
2. Screw guide pin into the guide pin hole on the base directly behind the needle plate. Pull guide plate forward as in Fig. 2.
3. Insert a template into the slot of template holder by lifting the bottom portion of the Template Holder. Select the proper size buttonhole by turning the Template Advance Knob.
4. Pull guide plate all the way forward so that guide pin is at S. This will enable you to start at one end of the buttonhole. Drop guide plate into place over gear on cover plate.

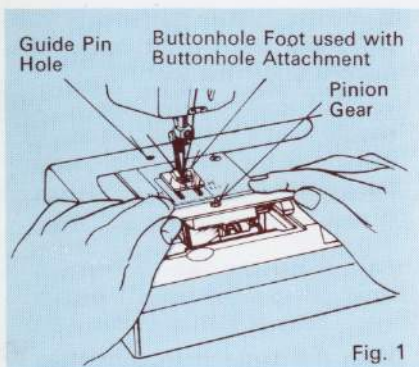


Fig. 1

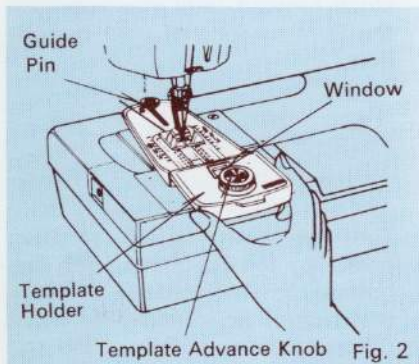


Fig. 2

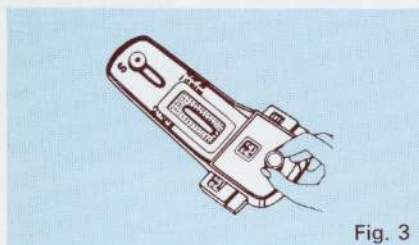


Fig. 3

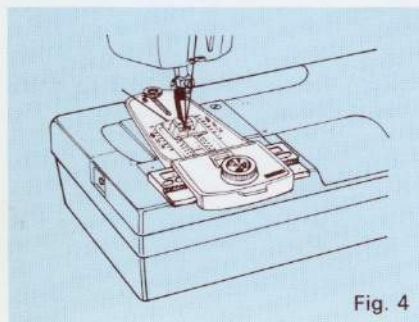


Fig. 4

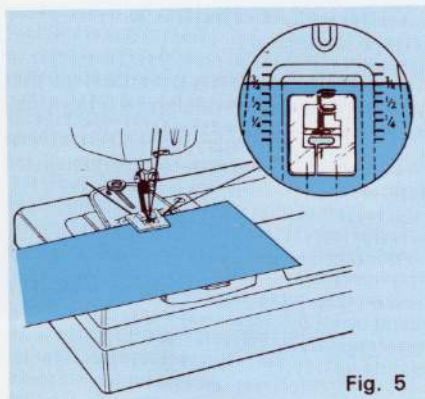


Fig. 5

5. Pick up bobbin thread through guide plate by turning hand wheel and drawing thread to back of machine. Place fabric between presser foot and guide plate. Line up edge of fabric with marked indentation on guide. See Fig. 5. If you wish all buttonholes to be 3/4 inch from edge of garment, line up fabric with 3/4 inch marking each time you start sewing a buttonhole.

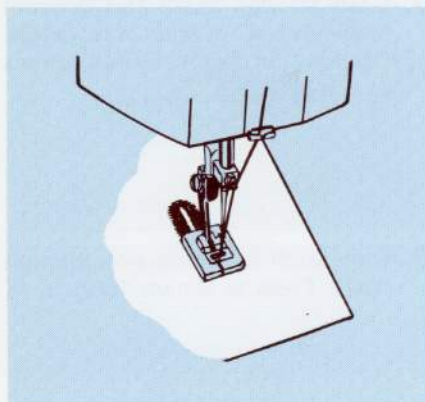
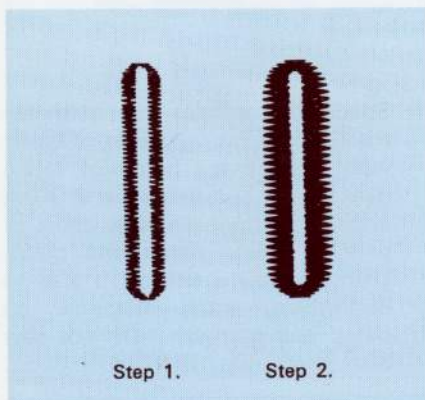
## PURL-EDGE BUTTONHOLE

To add a professional touch to your sewing you will want to make purl-edged buttonholes. These are obtained by sewing a wide buttonhole over a narrow stitched buttonhole.

You have two templates for making these buttonholes. Choose the correct size for your button, insert the template into the guide plate turning to the narrower of the sizes. Use the same settings as for regular buttonhole and adjust stitch width control to 1.

Drop the guide plate over the pinion gear and sew around the buttonhole once.

To sew wider outer buttonhole, lift the guide plate from the pinion gear and turn the template to wider size. Adjust stitch width setting to 2 and sew around buttonhole once more.





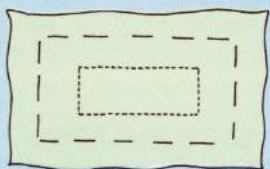
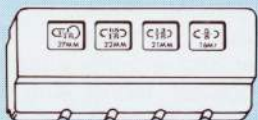


Fig. 1

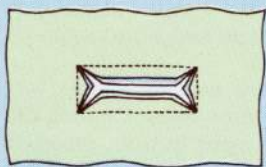


Fig. 2

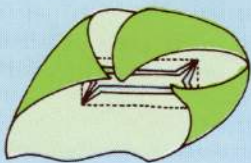


Fig. 3

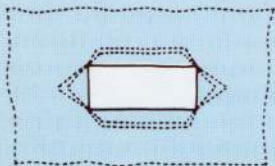


Fig. 4

## BOUND BUTTONHOLE

A template has been provided so that you may sew perfectly sized rectangles each time you make a bound buttonhole. Just follow the directions given below.

### SETTINGS

Special Stitch Selector -   
Stitch Width Control - Red Dot  
Stitch Length Control - 0  
Special Stitch Modifier - Red Dot  
Feed Dogs - Down  
Buttonhole Foot used with Buttonhole Attachment  
Zig Zag Needle Plate

1. Space buttonholes on garment-mark length on right side of fabric with pins. Place patch of fabric over each buttonhole and mark ends of buttonhole with chalk or pencil. Baste patch into place. Using template similar in size to buttonhole, stitch rectangle on patch and garment. Do not sew over pins. (Fig. 1)
2. Slash through patch and garment to within 1/4" of ends of rectangle. Carefully cut diagonally into corners as shown. (Fig. 2)
3. Turn patch to wrong side through slash. Press as shown. (Fig. 3, 4)



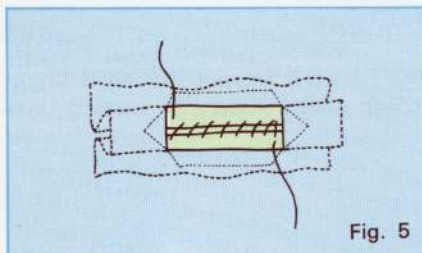


Fig. 5

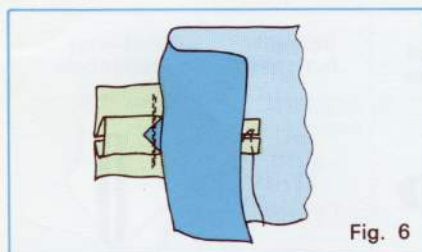


Fig. 6

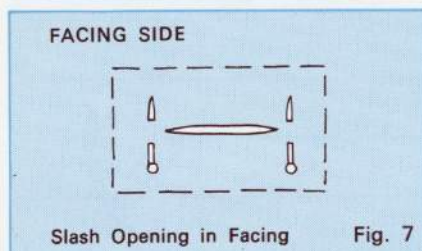


Fig. 7

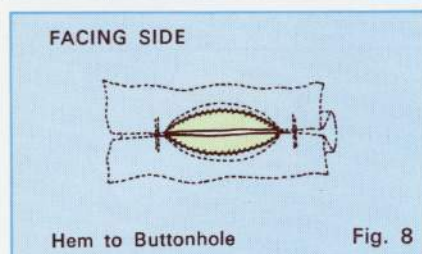


Fig. 8

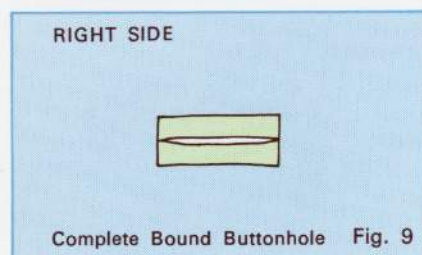


Fig. 9

4. Fold patch forming lips of buttonhole. Press and baste lips together. (Fig. 5)

5. Stitch across pleats formed by lips of patch. (Fig. 6)





6. After buttonhole has been pressed, baste facing of garment around buttonhole and slash opening in facing same length as buttonhole. (Mark ends of buttonhole with pins for guides). Turn under facing edges and hem to buttonhole carefully. (Fig. 7, 8)

7. Remove all bastings and press. (Fig. 9)

## BUTTONHOLE STITCH WIDTH

The stitch width indicated at MACHINE SETTINGS is an approximate setting. You may need to increase or decrease stitch width slightly by turning the stitch width control to suit your fabric.

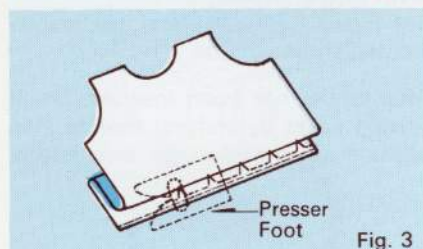
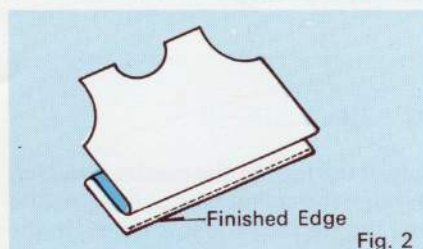
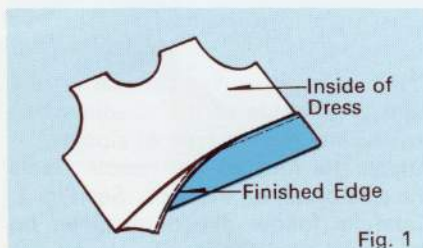
## BUTTONHOLE SIZE CHART

Template #	Straight buttonhole	Keyhole and eyelet buttonhole	Bound buttonhole	Purl-edge buttonhole
				
35346	$\frac{5}{16}"$ , $\frac{5}{8}"$ , $\frac{9}{16}"$ , $1\frac{1}{16}"$	$1\frac{1}{16}"$		
35347	$\frac{3}{8}"$ , $\frac{1}{2}"$ , $\frac{5}{8}"$	Eyelet, $\frac{7}{8}"$		
35348				$\frac{5}{16}"$ , $\frac{5}{8}"$
35349				$\frac{9}{16}"$ , $1\frac{1}{16}"$
35350			$1\frac{1}{16}"$ , $\frac{5}{16}"$ , $\frac{9}{16}"$ , $\frac{5}{8}"$	

## BLIND HEMMING

### SETTINGS

Special Stitch Selector -   
 Stitch Width Control - 2 to 3  
 Stitch Length Control - 12 to 10  
 Special Stitch Modifier - Red Dot  
 Use zig zag foot or edgestitcher and zig zag needle plate.



1. Finish edge of hem anyway you desire. Turn up hem appropriate width. (Fig. 1)
2. Fold garment away from hem leaving 1/8" of hem edge extending. (Fig. 2)
3. Place garment under presser foot in such a manner that straight stitches will be sewn on extended edge. The zigzag stitch should just catch the fold of the garment. (Fig. 3)
4. Press both sides of the finished hem. The right side of the garment will show only the blind stitches. (Fig. 4)



## ZIPPER APPLICATION

### SETTINGS

Special Stitch Selector -   
Stitch Width Control - Red Dot  
Stitch Length Control - 12 to 10  
Special Stitch Modifier - Red Dot  
Use zipper foot and straight stitch needle plate.

### REGULAR ZIPPER

The foot is adjustable for use on the right or left side of the needle when sewing the regular type of zipper. Adjust the foot so the needle clears the side notch on the foot. See Fig. 1. Carefully follow directions given on the zipper package.

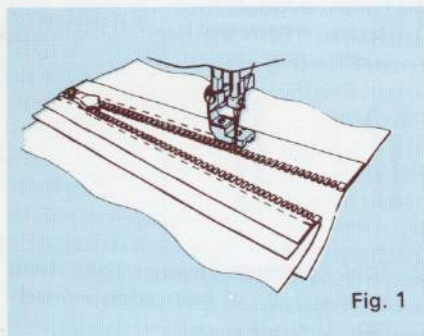


Fig. 1

### INVISIBLE ZIPPER

Adjust the foot so the needle is sewing through the center hole of the foot and one groove of the foot is riding on the teeth of the zipper. See Fig. 2. Follow the zipper manufacturer's instructions.

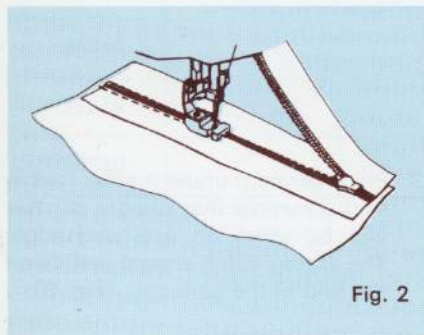


Fig. 2

After zipper has been inserted, finish sewing seam by shifting foot to side position sewing through side notch.

### CORDING

Foot can also be used to make cording for slipcovers etc. Cover a cord with a strip of bias fabric and sew as shown in Fig. 3.

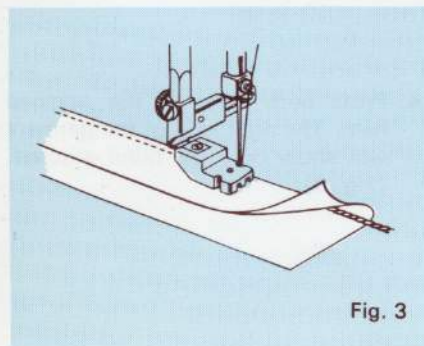
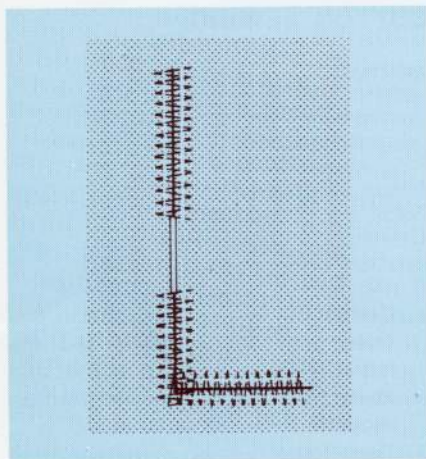


Fig. 3



## MENDING

### SETTINGS

Special Stitch Selector - 

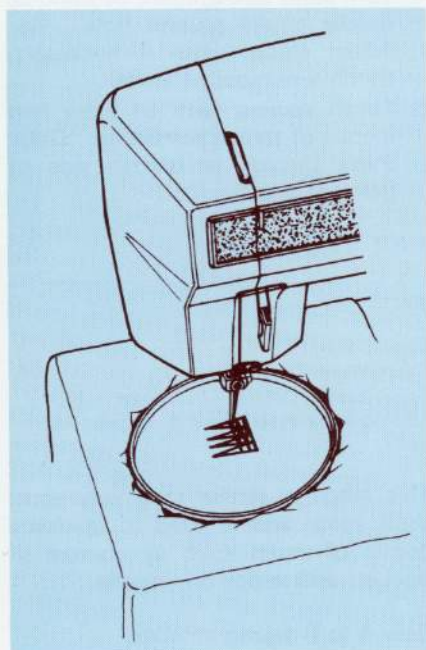
Stitch Width Control - 4

Stitch Length Control - Red Zone

Special Stitch Modifier - Red Dot


Use zig zag foot and zig zag needle plate.

To repair a straight or three-cornered tear, position the tear under the needle in such a way that the stitching catches both sides of the tear. When mending a three-cornered tear, stitch from each end to the center. It is well to use a piece of fabric under the tear for reinforcement.



## DARNING

### SETTINGS

Special Stitch Selector - 

Stitch Width Control - Red Dot

Special Stitch Modifier - Red Dot

Feed Dogs - Up

No Presser Foot

Remove presser foot, stretch fabric between embroidery hoops with hole centered. Draw the bobbin thread up through the fabric by holding the top thread and taking one stitch at the spot where you wish to start darning. Lowering the presser bar, start sewing at a slow to medium speed. Move the fabric back and forth with a steady rhythm to cover the darning area. When it is covered, turn the fabric and sew another layer of stitching across the first layer of stitching.



## BUTTON SEWING

### SETTINGS

Special Stitch Selector -   
Stitch Width Control - Must be adjusted  
Stitch Length Control - Any Number  
Special Stitch Modifier - Red Dot  
Feed Dogs - Down  
Clear Plastic Satin Stitch Foot  
Zig Zag Needle Plate

1. Center the left hole of button between straight seamline and the left edge of needle slot of foot and lower foot to hold the button securely.
2. Turn hand wheel manually until needle point is just above button.
3. Adjust stitch width control so needle will enter right hole of the button.
4. Turn hand wheel again by hand so needle enters second hole. Re-adjust stitch width if necessary. Stitch a number of times.
5. Finish sewing with an extra two inches of thread remaining. Draw these threads to reverse side of garment and tie.

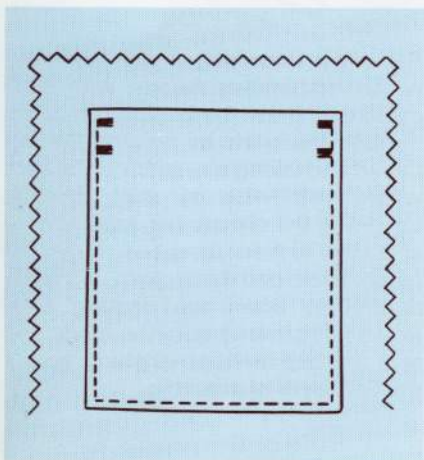
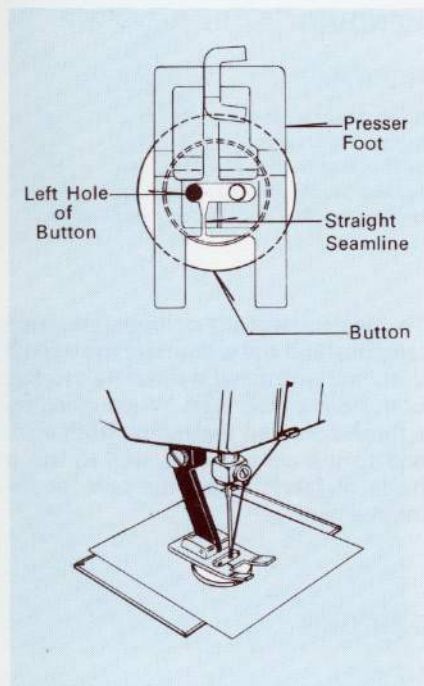
## BAR TACKING

### SETTINGS

Special Stitch Selector -   
Stitch Width Control - 2 to 4  
Stitch Length Control - Red Zone  
Use zig zag presser foot and zig zag needle plate.

This stitch is similar to a very short satin stitch and is used to reinforce points of strain such as corners of pockets and straps on lingerie.

Sew 4 to 6 zigzag stitches.





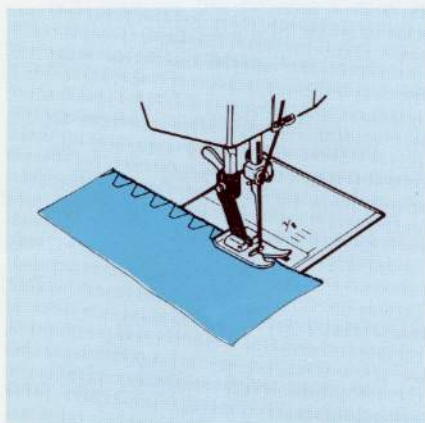
## SPECIAL STITCHING

### SPECIAL EDGE STITCH

#### SETTINGS

Special Stitch Selector -   
Stitch Width Control - 1 to 4  
Stitch Length Control - Red Zone  
Special Stitch Modifier - Red Dot  
Use satin stitch foot and zig zag needle  
plate.

This is an attractive overcasting stitch you may want to use on fabrics that fray easily.



### FAGOTING STITCH

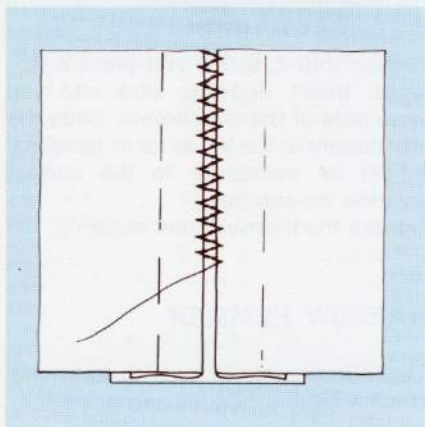
Step 1. Fold under the seam allowance on the cut edges and press. Baste the folded edges to paper, allowing 1/8 inch between the edges.

#### Step 2. Settings

Special Stitch Selector -   
Stitch Width Control - 4  
Stitch Length Control - Red Zone  
to 12

(May vary depending upon type of material)

Special Stitch Modifier - Red Dot  
Use zig zag foot and zig zag needle plate.

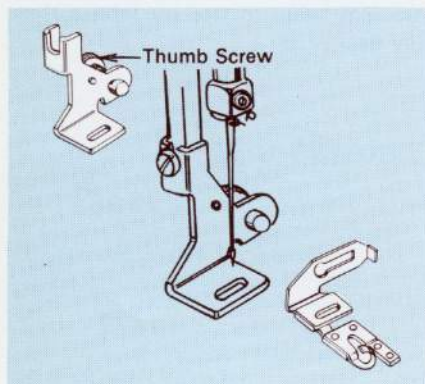


Stitch over 1/8 inch allowance, catching into the fabric fold on both sides. When finished, remove bastings and paper. Press.

## SPECIAL SEWING AIDS

### HELPFUL SUGGESTIONS

1. When replacing the regular presser foot with a sewing aid be sure that the presser bar is up and that the needle is at its highest point. Always lift the presser foot lock as high as it will go to hold the foot securely after the sewing aid is in place.
2. After you have threaded the machine correctly, turn the hand wheel to bring up the bobbin thread. Draw both threads under the sewing aid and to the back of the machine to avoid tangling your threads.
3. When using any sewing aid, always test stitching first on a scrap of the same fabric you intend to use to be sure of satisfactory results.

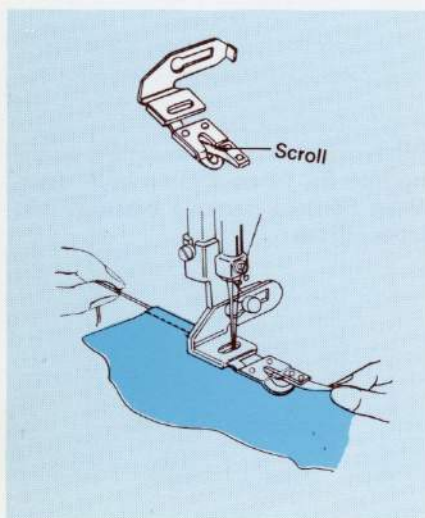


### ADJUSTABLE HOLDER

(To be used with the Hemmer and Edgestitcher)

Replace the regular presser foot with the Adjustable Holder.

Loosen thumb screw and press it forward. Insert opposite end into the large hole of the attachment. Slide the attachment to the left as far as possible. Adjust as necessary to the correct position for stitching. Tighten the thumb screw securely.



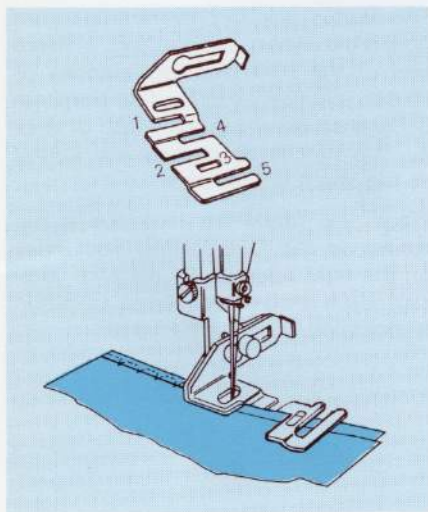
### NARROW HEMMER

This attachment is used to form and stitch a narrow hem in one operation.

Attach the narrow hemmer to the adjustable holder. Set all controls for straight stitching.

Make sure that the edge of the cloth is cut straight, never torn or pinked. Turn a tiny double hem (1/8 inch) along edge for about 2 inches. Place the end of this hem under the Narrow Hemmer. Draw the threads to the back of the machine. Holding the threads tautly, stitch along the inside edge of the hem for about one inch. Feed fabric gradually into the scroll guiding the edge of the fabric as shown.

## EDGESTITCHER



This attachment can be used for joining edges or inserting lace, piping seam and finishing edges of seams and facings. Slots numbered 1 to 5 serve as guides in sewing various edges together.

Attach the Edgestitcher to the Adjustable Holder. Set the controls for straight stitching or whatever special stitch desired.

Draw threads through the needle hole and to the back of the machine.

Slot 1 will guide the fabric to be joined to lace. Lace is placed in slot 4.

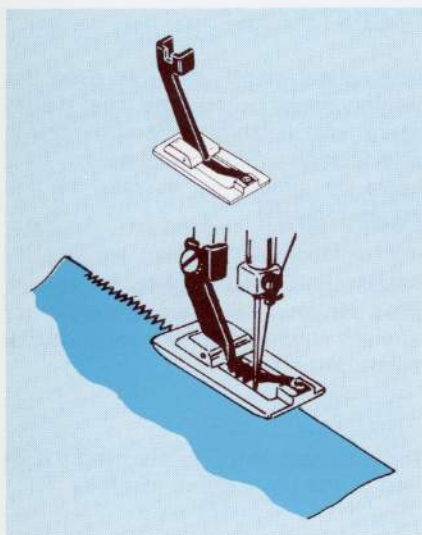
Slot 3 will guide the piping when joining it to the edge of fabric. Guide the fabric through slots 2 or 4.

Slot 5 may be used as a guide when sewing a French seam.

To guide fabric with ease during blind hemming, use slots 1 and 2.

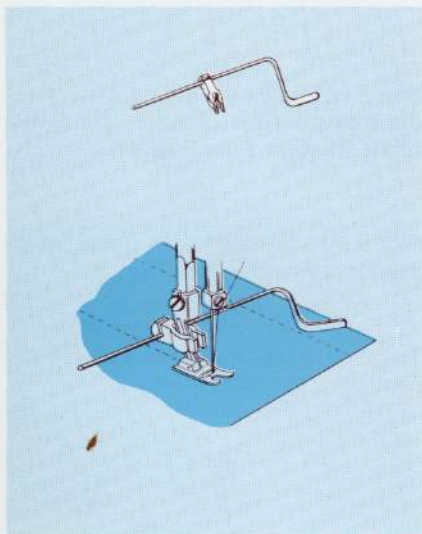


## OVERCASTING FOOT



This foot is used to prevent fabric from puckering when overcasting. Select one of the plain zig zag stitches or stretch stitches used for this purpose. Be sure to set the stitch width at 3 or 4. The needle must miss the spring as the stitch is formed.

Place the fabric so that the metal spring on the Overcasting Foot rides on the right edge of the material. Zig-zag stitch around raw edge of fabric to completely cover the edge.



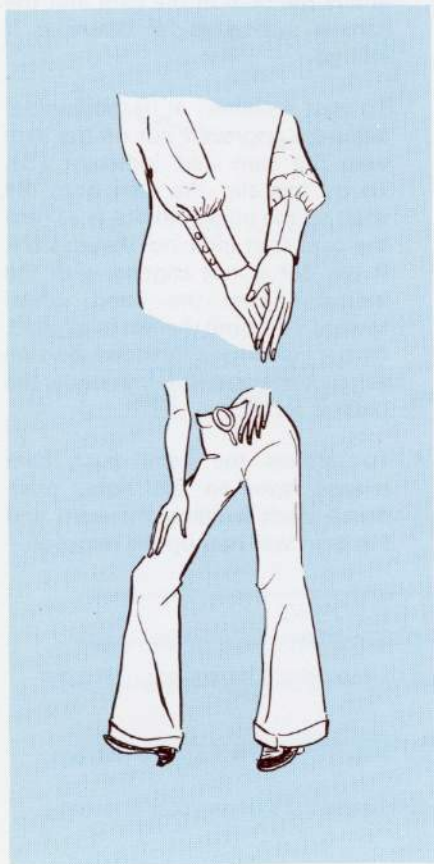
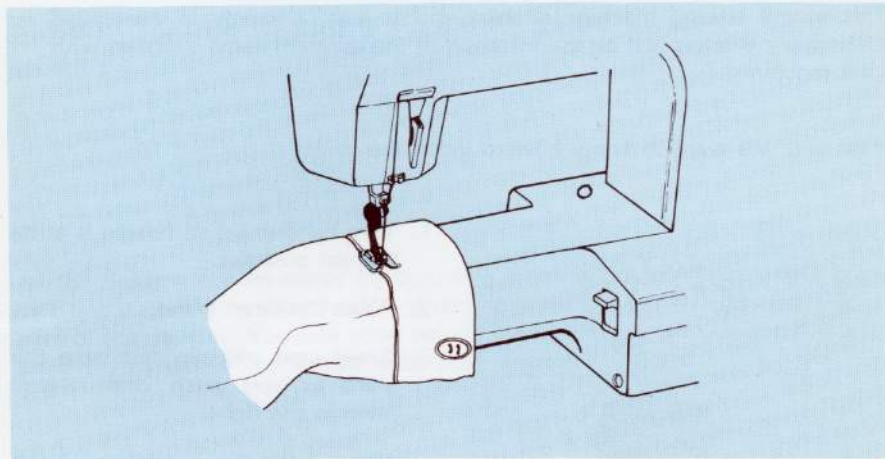
## QUILTING GUIDE

This attachment is actually a guide consisting of a curved prong attached to a long bar on a holder. The prong may be shifted back and forth on the holder. This enables you to place rows of stitching an equal distance apart.

Attach the quilting guide to the presser foot as shown in the illustration. Select the desired stitch. It can be a straight stitch or an embroidery type stitch.

After completing the first row of stitching, place the guiding prong on this stitched line. The second row will be placed the desired distance from the first. Continue in this manner until the cloth is covered with rows of stitching.

## FREE-ARM SEWING



This sewing machine can be used like a flat bed machine, but easily converts to free arm machine by removing the base.

The free arm enables you to sew tubular types of pieces more easily. Just slip the sleeve or pants leg on the free arm as shown above.

You will find many uses for this free arm feature such as:

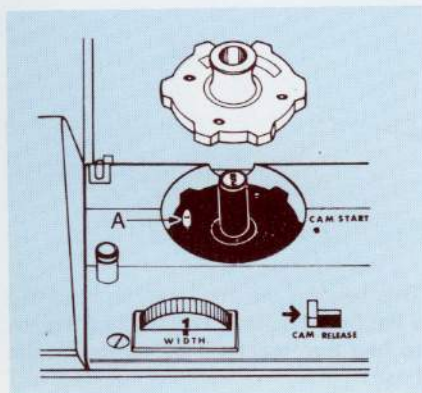
1. Mend elbows and knees of garments more easily.
2. Sew in sleeves more easily. This is especially true when sewing smaller garments.
3. Applique, embroider or hem around edges of cuffs or pants legs.
4. Sewing in elastic casings in skirts or pants at the waistline.



## SPECIAL DESIGN STITCHING

This model sewing machine enables you to sew a variety of decorative embroidery stitches just by the insertion of the different cams supplied with your machine.

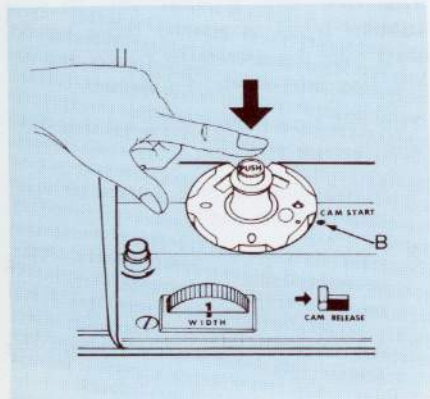
First you will want to know how to insert the cams:



1. Turn handwheel so needle is at its highest position.
2. Raise top cover plate.
3. Grasp cam and slip cam onto the shaft as you push cam release lever to the right.

Make sure the retaining pin A enters the hole in the cam and the cam is seated as far down as it will go.

To start a pattern at its beginning, align the engraved dot on the cam with the cam start indicator (B). To do this slip the cam onto the shaft so the engraved dot is as near the cam start indicator as possible. If the dot is not aligned with the indicator, turn the hand wheel toward you until the dot is aligned. (If the machine is threaded, be sure to place a scrap of fabric under the presser foot).



4. To remove the cam, push cam release lever to the right, push down shaft holding the cam and the cam will pop up for removal.

### THINGS TO REMEMBER WHEN DESIGN STITCHING

1. Always make a practice design on a scrap of the fabric you plan to use.
2. Start with a full bobbin and plenty of thread on the spool to avoid running out of thread in the middle of your design.
3. Reduce the top thread tension slightly.
4. On a very soft fabric you may want to use a tissue paper backing or organdy that can be cut away.
5. Use the clear plastic satin stitch foot in order to see the design you are making.



## SINGLE NEEDLE DESIGNS

### SETTINGS

Special Stitch Selector - CAM  
Stitch Width Control - 1 to 4  
Stitch Length Control - Red Zone  
Special Stitch Modifier - Red Dot  
Use satin stitch foot and zig zag needle plate.

All the designs can be varied by adjusting stitch width or stitch length or by using a double needle. See the illustrations for interesting and attractive uses of the designs. You will soon be combining designs and creating new uses when you become familiar with your machine.

Fig. 1 Design on a collar



Fig. 4 Combination of designs



Fig. 2 Design on bias tape



Fig. 5

Design on narrow hem



Fig. 6

Variation of width of reverse stitch design

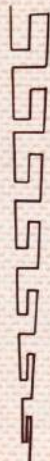


Fig. 3 Variation of widths of designs



## BASIC DECORATIVE DESIGNS

### SETTINGS

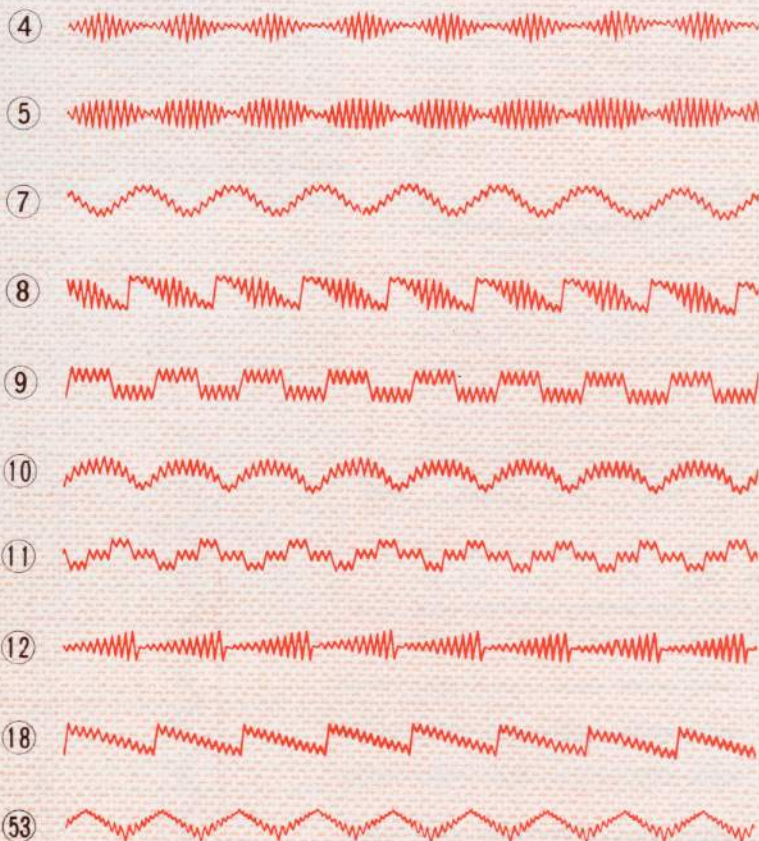
Special Stitch Selector - CAM

Stitch Width Control - 1 to 4

Stitch Length Control - Red Zone

Special Stitch Modifier - Red Dot

Use satin stitch foot and zig zag needle  
plate.





## REVERSE STITCH DESIGNS

### SETTINGS

Special Stitch Selector - CAM

Stitch Width Control - 1 to 4

Stitch Length Control - 6

Special Stitch Modifier - Middle Position  
between S and L

Use satin stitch foot and zig zag needle  
plate.

In addition to the basic designs on the previous page, you can sew the interesting reverse stitch designs shown below. Page 19 shows variations of the same designs.





## REVERSE STITCH DESIGNS (Continued)



## REVERSE STITCH DESIGNS-USING MODIFIER CONTROL

To shorten or lengthen the design as shown in the illustrations below, turn the Modifier Control very slightly toward S or L. To shorten the design, turn the control toward S, to lengthen the design, turn control toward L.

Fig. 1 Shortened design

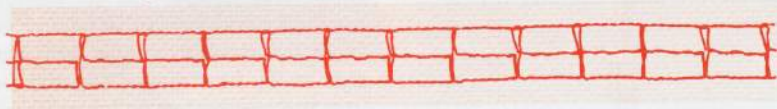


Fig. 2 Middle Setting - Standard size of design

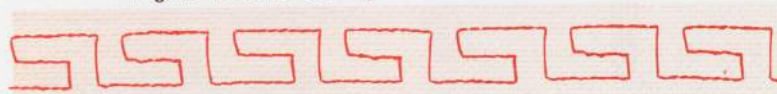


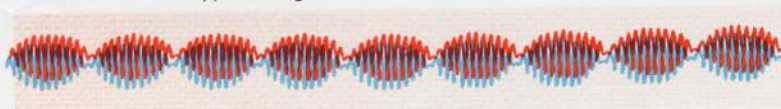
Fig. 3 Lengthened design



### Basic and Reverse Patterns as made with the Double Needle.

Using the double needle and two colors of thread you may create unusual and different designs with both the basic design cams and the reverse stitch cams. See next page for directions for stitching with the double needle.

Basic type design

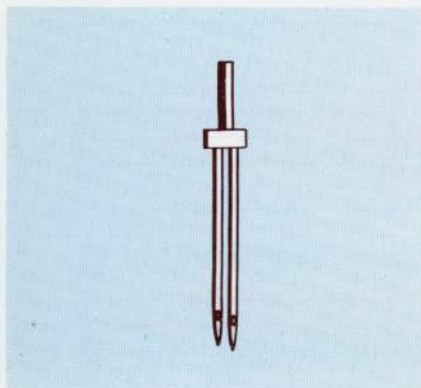


Reverse stitch type design



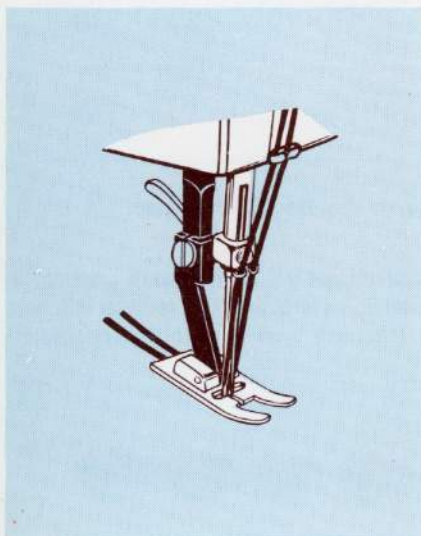
## USING THE DOUBLE NEEDLE

All patterns can be made with the double needle with very striking effects. The machine is set exactly the same as when using the single needle with one important exception. The Stitch Width Control must never be set beyond 3. The double needle will be broken if a wider stitch is used.



### PLACEMENT OF NEEDLE

Raise the needle bar to its highest position and loosen the needle screw. Hold the double needle with the flat side away from you. Slip the needle into the needle bar as far as it will go. Tighten the screw.

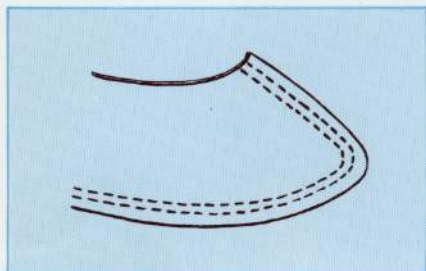


### THREADING THE DOUBLE NEEDLE

Place a spool of thread on each spool pin. Draw both threads through upper threading path. Continue threading as you do for single needle sewing except where double thread guides are provided. Draw one thread through each side of the double thread guides and through each needle from front to back. Turn hand wheel manually once to be sure needle will clear the presser foot. Pick up bobbin thread as for single needle sewing. Pull threads to back of foot and start to sew.

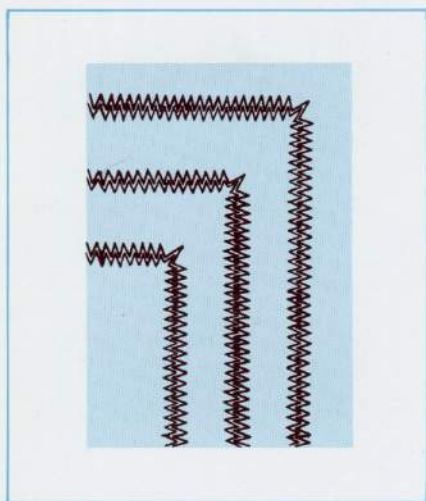


## DOUBLE NEEDLE STITCHING



You may find that you would like to use the double needle for straight stitching as well as for designs. Make decorative top stitching around the collars and other edges with your machine set for straight stitching. Whenever you use the double needle even for straight stitching, be sure to use a zigzag presser foot and needle plate slot.

## TURNING A CORNER WITH DOUBLE NEEDLE



To turn a square corner with a double needle, stop stitching with the longer needle tip just piercing the fabric. Raise the presser foot, shift fabric half the turn, lower presser foot and take one stitch.

Raise the presser foot again, complete the turn, and begin stitching in the new direction.

# Checking Performance Problems WHAT TO DO

PROBLEM	PROBABLE CAUSE	CORRECTION
Irregular Stitches	<p>Incorrect size needle.  Improper threading.  Loose upper thread tension.  Pulling fabric.  Light pressure on presser foot.  Loose presser foot.  Unevenly wound bobbin.  Nicks or burrs on shuttle.  Nicks or burrs at hole of needle plate.</p>	<p>Choose correct size needle for thread and fabric.  Rethread machine.  Tighten upper thread tension.  Do not pull fabric; guide it gently.  Increase pressure on presser foot.  Reset presser foot.  Rewind bobbin.  Replace shuttle, or polish off burrs completely.  Replace needle plate, or polish off burrs completely.</p>
Breaking Needle	<p>Pulling fabric.  Incorrect size needle.  Incorrect setting of needle.  Loose presser foot.</p>	<p>Do not pull fabric; guide it gently.  Choose correct size needle for thread and fabric.  Reset needle.  Reset presser foot.</p>
Bunching of Thread	<p>Upper and lower threads not drawn back under presser foot before starting seam.</p>	<p>When starting a seam be sure to draw both threads under and back of presser foot about 4" and hold until a few stitches are formed.</p>
Puckering	<p>Incorrect thread tension(s).  Light pressure on presser foot.  Using two different sizes or kinds of thread.  Bent or blunt needle.  Loose presser foot.  Fabric too sheer or too soft.</p>	<p>Reset thread tension(s).  Increase pressure on presser foot.  Upper thread and bobbin thread should be same size and kind.  Insert new needle.  Reset presser foot.  Use underlay of tissue paper.</p>



PROBLEM	PROBABLE CAUSE	CORRECTION
Skipping Stitches	<p>Incorrect size needle.            Certain knits and synthetics.            Bent or blunt needle.            Incorrect setting of needle.            Tight upper thread tension.            Light pressure on presser foot.</p>	<p>Choose correct size needle for thread and fabric.            Use "Q NEEDLE"™ and "Q FOOT"™.            Insert new needle.            Reset needle.            Loosen upper thread tension.            Increase pressure on presser foot.</p>
Breaking Upper Thread	<p>Starting to stitch too fast.            Improper threading.            Tight upper thread tension.            Incorrect size needle.            Sharp eye in needle.            Nicks or burrs on shuttle.            Nicks or burrs at hole of needle plate.</p>	<p>Start to stitch at a medium speed.            Rethread machine.            Loosen upper thread tension.            Choose correct size needle for thread and fabric.            Insert new needle.            Replace shuttle, or polish off burrs completely.            Replace needle plate, or polish off burrs completely.</p>
Breaking Bobbin Thread	<p>Improper bobbin case threading.            Tight bobbin thread tension.            Lint in bobbin case or shuttle.</p>	<p>Check bobbin case threading.            Loosen bobbin thread tension.            Clean bobbin case and shuttle.</p>
Fabric not Moving	<p>Feed dog down.            Light pressure on presser foot.            Thread knotted under fabric.</p>	<p>Raise feed dog.            Increase pressure on presser foot.            Place both threads back under presser foot before beginning to stitch.</p>
Machine Jamming Knocking Noise	<p>Thread caught in shuttle.</p>	<p>Disassemble and clean shuttle.</p>
Machine does not sew.	<p>Hand wheel not returned to stitching position.</p>	<p>Push in clutch.</p>



# Hints on sewing on Different Fabrics

Fabric	Special Stitches to Use	Special Notions to Use
Nylon Tricot	Serging Stitch Overcast Stretch Elastic Stretch (for sewing on elastic) Feather stitch Blind Hem	"Q NEEDLE" <sup>™</sup> Polyester, nylon or dacron core thread "Q FOOT" <sup>™</sup>
Terry Cloth Regular Corduroy	Special Overcast Stitch (Use same settings as for Serging Stitch except Stitch Modifier should be set on Red dot)	Mercerized Thread Size 14 Needle
Terry Cloth Stretch	Serging Stitch Overcast Stretch	Mercerized Thread Polyester, nylon or dacron core thread "Q NEEDLE" <sup>™</sup> "Q FOOT" <sup>™</sup>
Leather	Straight or simple zig zag	Mercerized or Silk Thread Size 14 Needle 1/2 Pressure on presser foot

Fabric	Special Stitches to Use	Special Notions to Use
Stretch knits for Swimwear and Ski Wear or Girdles	Serging Stretch Overcast Stretch Elastic Stretch Mending Stitch Feather Stitch Scallop Stitch	Polyester, nylon or dacron core thread "Q NEEDLE" <sup>TM</sup> "Q FOOT" <sup>TM</sup> Lace Seam tape Pre-shrunk zippers

New fabrics are coming on the market all the time. Remember that soft fabrics may need to be stabilized a little. This is especially true when buttonholing, monogramming, or design sewing as the stitches are so close together. A backing of tissue paper or interfacing may assist you in your sewing. The paper may be torn away and the interfacing cut away after sewing. Check your fabric by making samples of the designs, monograms, or buttonholes on a scrap of fabric before sewing on your garment.



## Caring for the Machine

### CLEANING AND OILING

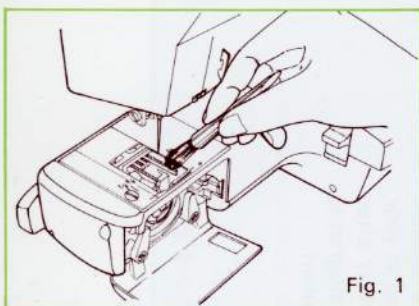


Fig. 1

Fig. 1 Cleaning the feed dogs with a brush.

To insure the best possible operation of your machine, it is necessary to keep the essential parts clean at all times. Using a small brush, remove the lint that accumulates in the shuttle area and around the feed dogs.

Fig. 2 Parts of the Shuttle Assembly

To Clean the Shuttle Area:

1. This area must be kept free of dust, lint and occasional tangled thread. Raise the needle bar to its highest point and remove the bobbin case.
2. Push levers of shuttle race aside and lift shuttle race cover and shuttle out.
3. Clean the shuttle race with small brush.
4. Put a drop of oil on the center pin of the shuttle and shuttle race. (see arrows)

To Replace Shuttle Assembly:

1. Position shuttle race as illustrated so that shuttle driver is forming half moon on the left side of the machine.
2. Hold shuttle by center pin and position shuttle so as to form a half moon on the right side. Pointed hook will be on the bottom.
3. Place shuttle race cover into place over shuttle assembly.

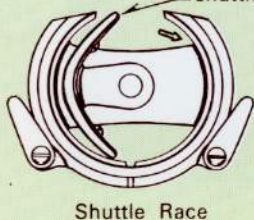
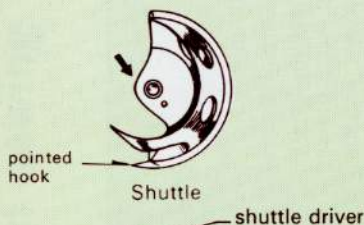
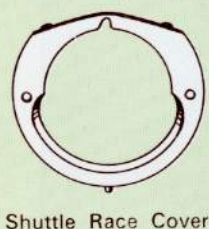
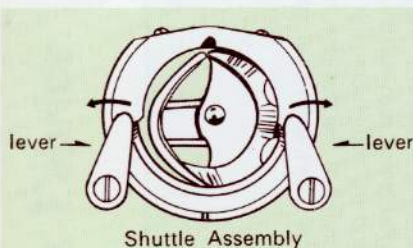
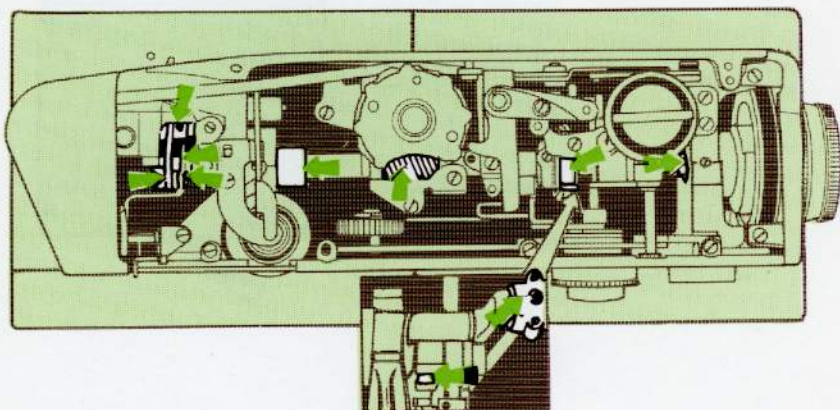
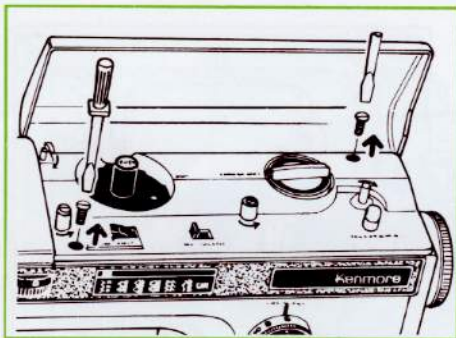


Fig. 2



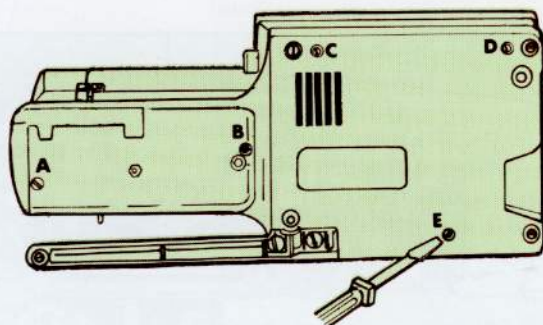
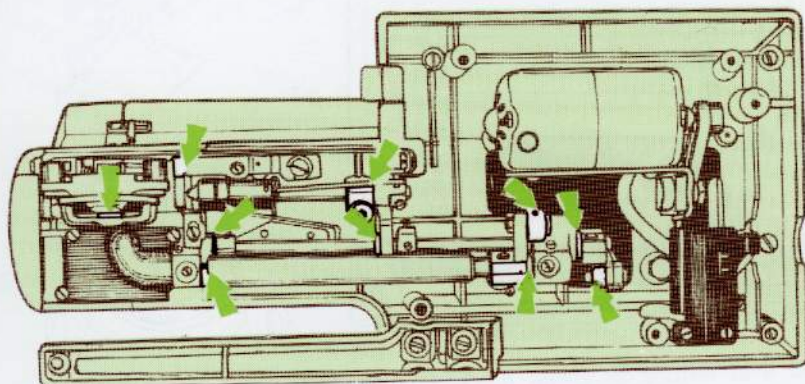
## OILING UNDER ARM COVER PLATE

Remove arm cover to oil points indicated in top of machine head. To remove the cover, lift top cover plate loosening two top screws and lift arm cover as illustrated below.



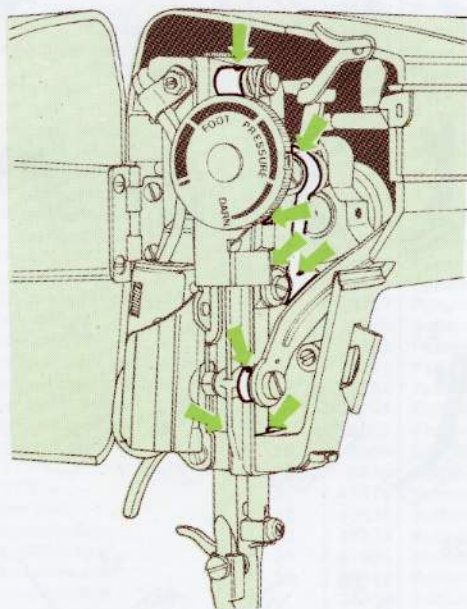
## OILING UNDERSIDE

Tilt machine head back and remove bottom cover to oil points indicated on underside of machine. To remove bottom cover, remove screws (A), (B), (C), (D) and (E) as shown below.



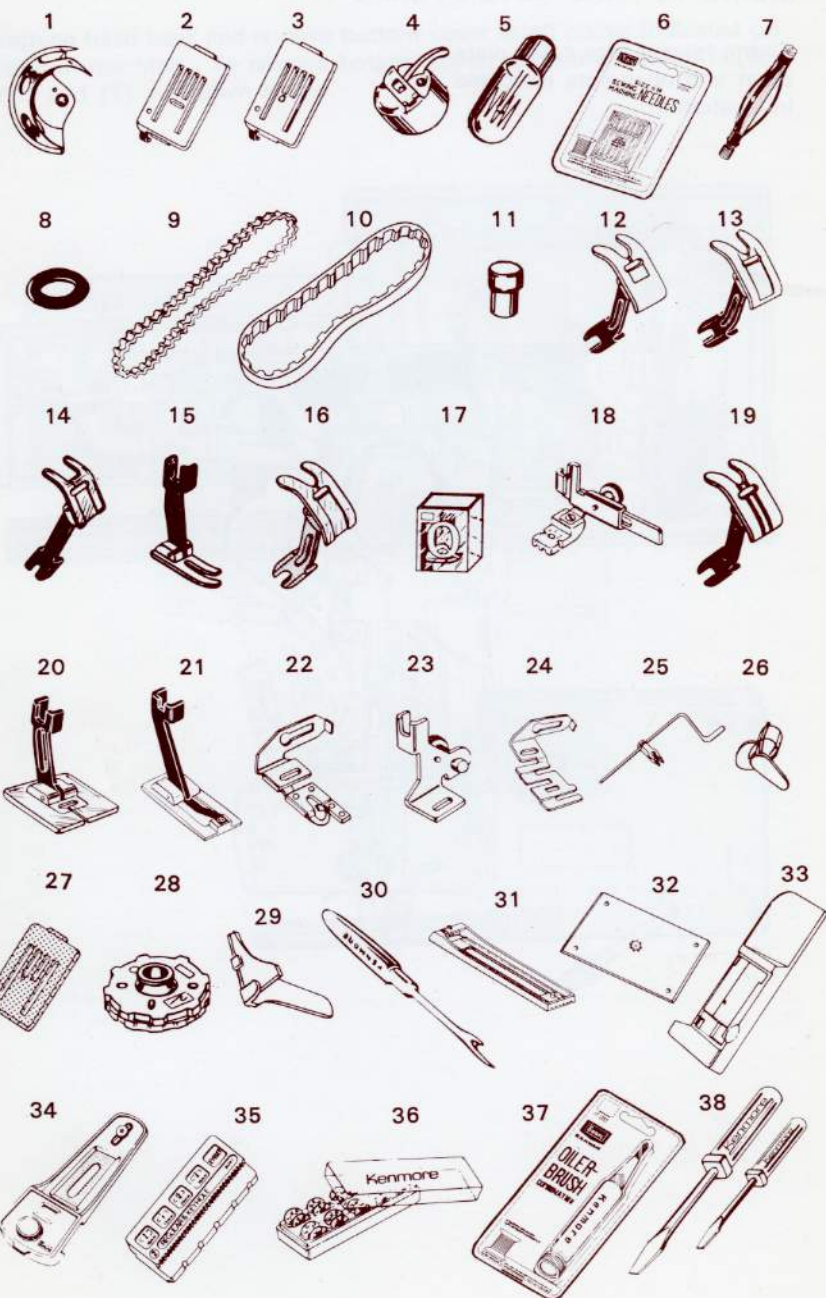
## OILING IN FACE COVER PLATE

Swing hinged face cover plate open and oil points indicated in illustration.





# PARTS LIST



## PARTS LIST

All parts listed herein may be ordered from any Sears, Roebuck and Co. or Simpsons-Sears Limited store or service center.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

1. PART NUMBER
3. MODEL NUMBER

2. PART DESCRIPTION
4. NAME OF ITEM

If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for expedited handling.

REF. #	PART #	DESCRIPTIONS
1	28775	Shuttle
2	40541	Needle plate insert... Zigzag stitch
3	40543	Needle plate insert... Straight stitch
4	6510	Bobbin case
5	6797	Light bulb
6	*6740	#9 single needles
	*6741	#11 single needles
	*6742	#14 single needles
	*6743	#16 single needles
	*6744	#18 single needles
	*6745	Double needles
	*6746	"Q NEEDLES"™
7	41006	Thread spool pin
8	1939	Bobbin winder rubber ring
9	28908	Motor belt
10	33327	Motor belt
11	39619	Bobbin winder tension disc
12	35040	Standard zigzag foot
13	35089	Satin stitch foot
14	35091	Plastic satin stitch foot
15	35092	Straight stitch foot
16	6784	"Q FOOT"™
17	6884	"Q SET"™
18	6759	Zipper foot
19	39712	Buttonhole foot
20	41040	Buttonhole foot
21	35094	Overcasting foot
22	29396	Narrow hemmer
23	29308	Adjustable holder
24	29306	Edgestitcher
25	35105	Quilting guide
26	28776	Chain stitch adapter
27	40708	Chain stitch needle plate
28	26844	Pattern disc #4
	26845	Pattern disc #5
	26847	Pattern disc #7
	26848	Pattern disc #8
	26849	Pattern disc #9
	26850	Pattern disc #10
	26851	Pattern disc #11
	26852	Pattern disc #12

REF. #	PART #	DESCRIPTIONS
28	26858	Pattern disc #18
	26862	Pattern disc #22
	26863	Pattern disc #23
	26864	Pattern disc #24
	26866	Pattern disc #25
	26867	Pattern disc #26
	26868	Pattern disc #27
	26869	Pattern disc #28
	28772	Pattern disc #30
	28762	Pattern disc #31
	28771	Pattern disc #32
	28763	Pattern disc #34
	28766	Pattern disc #36
	34769	Pattern disc #38
	34770	Pattern disc #39
	28767	Pattern disc #40
	28765	Pattern disc #41
	34786	Pattern disc #42
	28769	Pattern disc #43
	28764	Pattern disc #44
	28761	Pattern disc #45
	39000	Pattern disc #53
29	6864	Needle threader
30	6830	Buttonhole opener
31	41619	Buttonhole guide
32	40530	Buttonhole cover plate
33	48274	Buttonhole adapter
34	41664	Buttonhole guide plate
35	35346	Buttonhole template (#1)
	35347	Buttonhole template (#2)
	35348	Buttonhole template (#3)
	35349	Buttonhole template (#4)
	35350	Buttonhole template (#5)
36	*6862	Bobbin box with 10 bobbins
37	*6889	Oil and lint brush
38	41670	Large screw driver
	41669	Small screw driver

\*These items are not furnished with the machine, but may be ordered per instructions above.



## **WARRANTY**

### **FULL 30-YEAR WARRANTY ON SEWING MACHINE HEAD**

For 30 years from the first day of use in your home, Sears will, free of charge, repair defects in material or workmanship which appear in the sewing machine head.

### **FULL TWO YEAR WARRANTY ON ELECTRICAL EQUIPMENT OF SEWING MACHINE**

For two years from the first day of use in your home, Sears will, free of charge, repair defects in material or workmanship which appear in the electrical equipment of the sewing machine, including motor, wiring, switch and speed control.

### **FULL 90-DAY WARRANTY ON ALL PARTS AND MECHANICAL ADJUSTMENTS**

For 90 days from the first day of use in your home, Sears will, free of charge, replace any parts and provide mechanical service necessary for proper operation of the sewing machine, except for normal maintenance.

To obtain warranty service described above, simply contact the nearest Sears store or Service Center throughout the United States or Canada.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**Simpsons-Sears Limited  
Toronto, Ontario, Canada**

**Sears, Roebuck and Co.  
BSC 41-3  
Sears Tower  
Chicago, IL 60684**



## **SEWING MACHINE**

Now that you have purchased your Sewing Machine, should a need ever exist for repair parts or service, simply contact any Sears Service Center and most Sears, Roebuck and Co. or Simpsons-Sears Limited Stores. Be sure to provide all pertinent facts when you call or visit.

The model number of your Sewing Machine will be shown on your nomenclature plate on the right side of your Sewing Machine. See Section 1, page 3 for location.

**WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:**

**\*MODEL NUMBER   \*NAME OF ITEM   \*PART DESCRIPTION**

If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for handling.

**SEARS, ROEBUCK AND CO., Chicago, IL 60684 U.S.A. and  
SIMPSON'S-SEARS LIMITED, Toronto, Ontario, Canada**