



\* A trademark of  
„THE SINGER MANUFACTURING COMPANY“

#### DIRECTIONS FOR USE OF THE

## SINGER\*

### AUTOMATIC ZIGZAG ATTACHMENT No. 160990

This new SINGER\* automatic zigzag attachment is designed to produce regular zigzag stitches and a wide variety of ornamental automatic stitches. With it you may easily stitch knitted fabric, join fabric and lace, edge-stitch fabric, monogram and do ornamental stitching of many kinds. It is so simple to operate that you will be an expert after a brief study of these directions.

Printed in Switzerland

Courtesy [www.April1930s.com](http://www.April1930s.com)

Parts of the SINGER Automatic Zigzag Attachment:  
Figures 1 and 2

- 1) ACTUATING ARM (To be placed at the needle screw)
- 2) MOUNTING BRACKET (Bracket to be seated on the presser bar in place of the presser foot)
- 3) STITCH LENGTH REGULATOR, controls the length of the zigzag stitch
- 4) BIGHT CONTROL LEVER, controls the width of the zigzag stitch
- 5) ZIGZAG THROW-OUT LEVER, changes the stitching from zigzag to straight
- 6) PRESSER FOOT, figure 2
- 7) LOCKING SCREW for changing cams for automatic stitching
- 8) PATTERN CAMS for automatically making various ornamental stitch patterns
- 9) FEED DOG
- 10) FEED COVER PLATE

2

Courtesy [www.April1930s.com](http://www.April1930s.com)

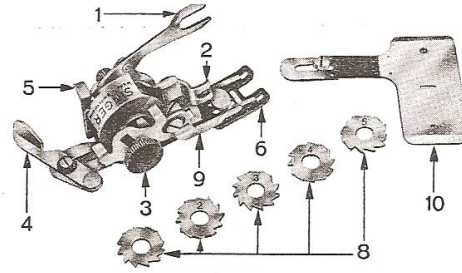


Fig. 1

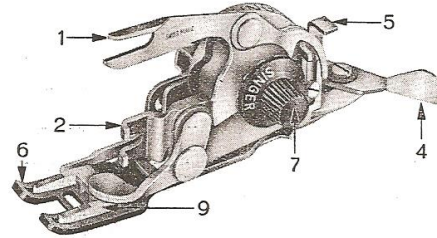


Fig. 2

3

TO FASTEN ATTACHMENT TO THE MACHINE

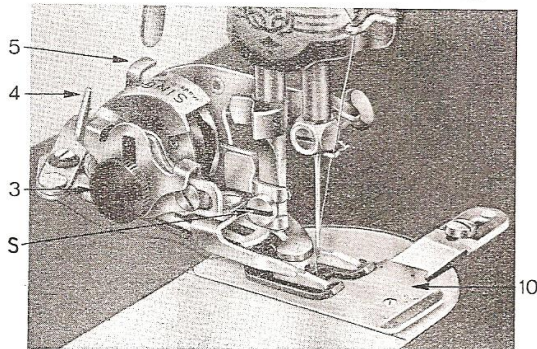


Fig. 3

- 1) Loosen presser foot screw S (Figure 3) and remove presser foot from the machine.
- 2) Attach the feed cover plate to the bed of the machine by inserting the feed cover plate screw into the attachment screw hole to the right of the needle. Before tightening the screw lower the needle so as to center it in the needle hole of the feed cover plate. Hold plate in position and tighten screw in the bed of the machine.

4

Courtesy [www.April1930s.com](http://www.April1930s.com)

NOTE: NEVER USE THE ATTACHMENT WITHOUT THE FEED COVER PLATE AS YOU ARE LIKELY TO DAMAGE BOTH YOUR MACHINE AND YOUR ATTACHMENT.

- 3) Fasten the attachment to the machine with the right hand so that the mounting bracket is seated on the presser bar in place of the presser foot and the actuating arm straddles the needle screw. Retighten the presser foot screw S (Figure 3) and the attachment will be properly placed and ready for sewing.

THREADING

Thread the machine as for ordinary sewing. Draw the lower thread upward and lead both the upper and lower thread away from you toward the back of the machine. The upper thread should pass through the slot in the presser foot of the attachment.

SEWING SPEED

When zigzagging sew slowly. You will find that you can control the material more easily and that the material will be free to zigzag as the attachment swings.

THREAD TENSIONS

Normally it will be unnecessary to vary the thread tensions of your machine. However, you may find it useful at times, particularly when working with materials of different thicknesses, to tighten the upper tension slightly and loosen the lower tension a bit.

5



**ADJUSTING STITCH LENGTH**

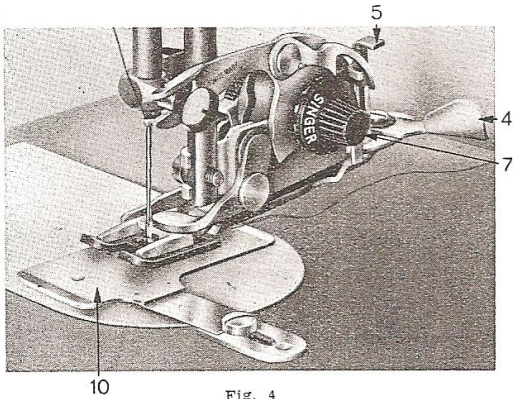


Fig. 4

Release knob 3 (Figure 3) and move it upward for a longer stitch or downward for a shorter stitch and retighten. At its lowest position the feed is eliminated.

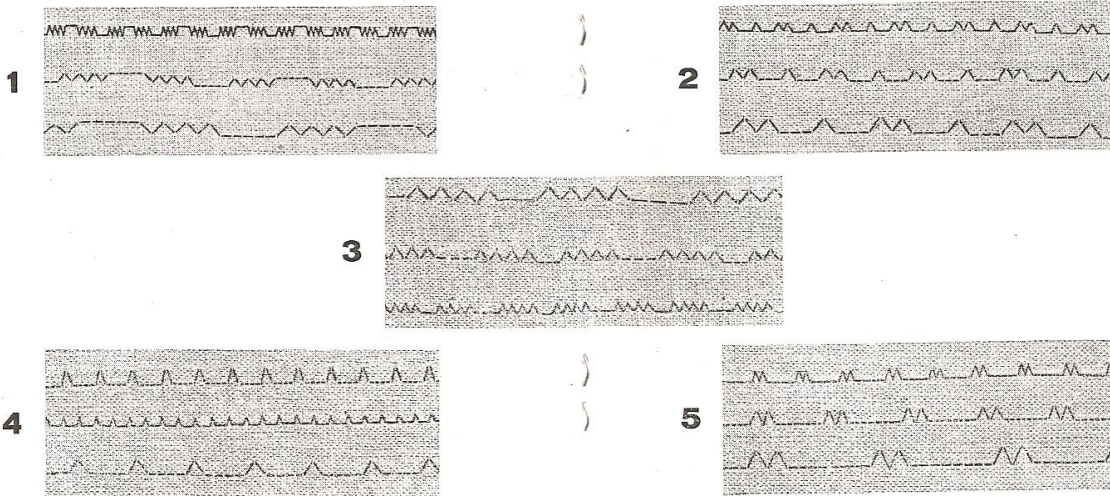
Courtesy [www.April1930s.com](http://www.April1930s.com)

**ADJUSTING THE WIDTH OF THE ZIGZAG STITCH**

Bight control lever 4 (Figure 3-4) at the back of the attachment regulates the width of the zigzag stitches. To obtain a wider stitch move the lever backward. For a narrower stitch move it forward. Throw-out lever 5 (Figure 3-4) serves to eliminate temporarily the zigzag operation of the attachment. Raise the lever as far as it will go and hold it in this position. Straight sewing can then be done. For zigzag stitching again push down the lever. It is possible to fix the throw-out lever 5 in its highest position by pulling the bight control lever 4 as far forward as possible when the throw-out lever is in its highest position. To release the throw-out lever 5 merely move the bight control lever backward and zigzag stitching can again be done.

The SINGER AUTOMATIC ZIGZAG ATTACHMENT is provided with five pattern cams 8 (Figure 1). When the attachment is used without cams it produces a normal zigzag stitch. When used with any of the five cams it produces an ornamental stitch, the pattern of the stitch depending upon which of the five cams is used. The effect of each pattern can be varied by changing the stitch length and the width of bight. Figure 5 shows the stitch patterns of the various cams.

Fig. 5



Courtesy [www.April1930s.com](http://www.April1930s.com)

#### HOW TO SET YOUR ATTACHMENT FOR AUTOMATIC ORNAMENTAL STITCHING

According to Figure 5 choose the desired sample and the corresponding cam. Loosen locking screw 7, (Figure 2-4) and place the cam on the cam shaft making certain to place the cam with the cam number to the outside. Unless the cam number is to the outside it will not function properly. Replace the locking screw 7 and begin to sew. To set the attachment for stitching the ornamental stitch either at the left or right side of the straight stitching line, lift the needle and the attachment to the highest point and turn the black locking screw Singer one notch forward. Interesting effects can be obtained by varying the stitch length and stitch width with each cam. With a little experience you will find that further interesting effects may be obtained with some of the cams by moving the bight control lever 4 backwards and forwards slowly while the machine is stitching.

To eliminate the automatic mechanism of the attachment, remove the pattern cam and replace the locking screw 7. Then proceed normally.

The preceding paragraphs dealt with the operation of the SINGER automatic zigzag attachment. The following paragraphs will describe a few of the many kinds of work that can be accomplished with it.

#### EDGING (Figure 6)

This operation is used frequently to prevent the cut edge of cloth from fraying. Normally a wide stitch is used. The material is placed under the presser foot so that it lies at the left of the machine head. In this position the edge of the material should



Fig. 6

10

Courtesy [www.April1930s.com](http://www.April1930s.com)

11

just reach the middle of the foot and the needle should not touch the material on one stroke but should be as far on the material on the next stroke as possible. For better control of the material sew slowly and lightly lead the material in front of the attachment with the right hand and behind the attachment with the left hand. Cut the material carefully before edging it as this will improve the result.

#### INSERTING LACE (Figure 7)

When attaching lace, place the edge of the lace and the cleanly cut edge of the material so that they overlap each other slightly. Then place the work under the presser foot of the attachment so that the needle throws equally to both sides of the attachment to produce a regular overseam. Guide the material and the lace lightly in front of the needle with the right hand and behind the needle with the left.

#### SEWING KNIT GOODS (Figure 8)

A zigzag stitch is essential for sewing knit goods or any fabric that stretches, as a zigzag stitch stretches with the material without breaking. For stitching knit goods a wide and long stitch is generally used because the seam is contracted by the stitching operation.

Knit goods may also be mended with a zigzag stitch. Cut a piece of knit material slightly larger than damaged spot and



Fig. 7

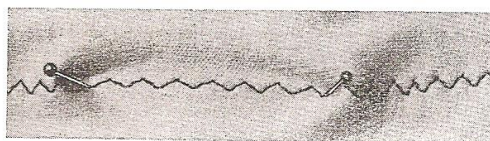


Fig. 8

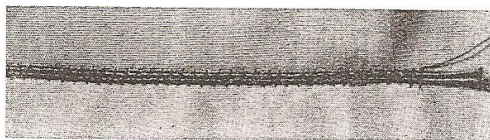


Fig. 9

12

Courtesy [www.April1930s.com](http://www.April1930s.com)

13



put it in position under the presser foot on the piece to be mended. Attach the two sides of the patch and then the two ends. If possible, put in several rows of zigzag stitches in both directions on the patch to hold it firmly to the damaged piece.

#### APPLIQUE WORK

Beautiful effects can be produced by appliqueing monograms or other decorative forms onto garments, linen, curtains, etc. Cut out the monogram or decorative form and place it where it is to be appliqueed, preferably by basting. Select the proper stitch width and length to suit the work and carefully stitch around the applique keeping the work at all times so that the needle stitches first on the applique and then on the fabric to which the applique is to be applied.

#### CORDING (Figure 9)

Effective cording can be done either open or closed. With open cording the feed is set at medium length and the bight such that the needle stitches on each side of the cord without touching it. As you feed the cord under the presser foot be certain that it remains in the center of the slot. Closed cording is the same as open except that the feed is set very low, so low that the stitches lie beside one another and cover the cord entirely. This is sometimes called satin-stitching and is also an effective way of monogramming.

#### CARE OF THE ATTACHMENT

The SINGER automatic zigzag attachment is very simple and needs very little care. As with any precision instrument, however, it will require oil from time to time. Apply one or two drops of SINGER oil to the movable parts at the same time that you oil your machine. Be sure to wipe off any excess oil to prevent soiling your work. With this simple care your SINGER Automatic zigzag attachment will last you many years.