INSTRUCTIONS FOR USING

SINGER*

AUTOMATIC ZIGZAGGER

No. 161102 on SINGER* Sewing Machines of Classes 15, 191, 201, 221, 222 and 1200
and
No. 161103 on Machines of Class 301

This wonderful SINGER fashion aid will enable you to produce an infinite variety of attractive ornamental designs merely through the interchange of the different Stitch Patterns and the adjustment of the bight and stitch length. Such decorative effects as applique, scalloped edges, border designs, as well as blind stitched hems and simple mending can be produced with this attachment on women's and children's clothing, lingerie, linens, draperies and an unlimited array of other garments and household items.

With the flick of a lever, plain sewing may be done without removing the zigzagger from the sewing machine.

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A—Fork Arm—straddles needle clamp and actuates zigzagger.
B—Lever—for straight stitching.
C—Shank—attaches zigzagger to presser bar.
D—Projection—for lifting cover to remove or replace Stitch Patterns.
E—Stitch Pattern—controls basic design produced by zigzagger.
F—Location Mark—for positioning regulator for desired bight.

G—Handle—for adjusting bight regulator.
H—Bight Regulator—controls bight.
J—Lock Screw—retains adjustment of bight regulator.
K—Clamping Screw (non-removable)—for fastening zigzagger shank to presser bar.
L—Foot—presses on material and moves it sidewise to form stitch patterns.
TO FASTEN ZIGZAGGER TO MACHINE

Fig. 2. Zigzag Fastened to Machine

1. Raise presser bar, remove presser foot and thumb screw from machine.
2. Guide zigzag into position from rear of machine so that fork A straddles hub of needle clamp, and securely fasten, with screwdriver, shank C of zigzag to presser bar with clamping screw K.

STITCH PATTERNS

Four Stitch Patterns are furnished with the Zigzag for producing the basic designs shown on pages 4 to 7.

Each design can be greatly varied by changing the bight and stitch settings as indicated in the illustrations.

Combinations of the designs made by the Stitch Patterns may be used to produce many pleasing ornamentations.
ZIGZAG STITCH PATTERN

Zigzag Stitch Pattern 161000 //////////// makes a uniform zigzag stitch for appliqueing, tucking, joining or inserting lace, reinforcing plain or welt seams, making invisible seams in all over lace or embroidery and seam finishes. It is also useful for making border designs by varying bight and stitch settings. Many interesting designs for women's and children's clothing, as well as linens and curtains may be developed by using different adjustments.

(A) To lock the pattern upon completion of the stitching, set attachment in straight stitching position and sew three or four very short stitches.

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<table>
<thead>
<tr>
<th>Narrow Bight</th>
<th>Narrow Bight</th>
<th>Narrow Bight</th>
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<tbody>
<tr>
<td>Almost 0 Stitch Setting</td>
<td>No. 25 Stitch Setting</td>
<td>No. 12 Stitch Setting</td>
</tr>
<tr>
<td>Medium Bight</td>
<td>Medium Bight</td>
<td>Wide Bight</td>
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Fig. 3. Zigzag Stitch patterns made by changing bight and stitch settings as indicated

(B) When sewing on soft, sheer, textured or loosely woven fabrics, use a backing of one or two thicknesses of crisp lawn, tarlatan or organdy and cut away the backing when design is completed.

(C) When a pattern is to be stitched close to the edge of the fabric, a straight line of stitching should be made to stay the fabric. Regulate bight and stitch to produce the most pleasing results. The ornamental stitch may be sewn over the straight stitching.
BLIND STITCH PATTERN

Blind Stitch Pattern 161001 produces a curved line and one long sideward stitch at start and at completion of curve. Width and length of curve depend on bight and length of stitch. This Stitch Pattern is ideal for hems, for overedging very narrow hems, for overedging seam edges, for staying fringed edges and drawn work, and for stitching tucks. The tiny scallops are decorative and, by combining with other Stitch Patterns, many attractive effects can be obtained for borders.

Direction of stitching is left to right.

Follow instructions A and B on page 4 when this pattern is used for decorative stitching.

![Diagram of Blind Stitch patterns made by changing bight and stitch settings as indicated]

Fig. 4. Blind Stitch patterns made by changing bight and stitch settings as indicated
DOMINO STITCH PATTERN

The charming effects obtained with decorative Domino Stitch Pattern 161002 are unlimited. Border designs or motifs on pockets and collars, are especially effective when made with this Stitch Pattern and applied to linens, children's clothes and play clothes. Combine the Domino with Zigzag Stitch Pattern (using Satin Stitch adjustment of approximately No. 30 stitch setting) for monograms made in block letter designs. The spaces and solids of the domino stitch are equally proportioned when the bight is set at M and the stitch regulator at 30.

(A) To lock the pattern upon completion of the stitching, set attachment in straight stitching position and sew three or four very short stitches.

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Narrow Bight

No. 30 Stitch Setting

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No. 25 Stitch Setting

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Medium Bight

---

Wide Bight

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Fig. 5. Domino Stitch patterns made by changing bight and stitch settings as indicated

(B) When sewing on soft, sheer, textured or loosely woven fabrics, use a backing of one or two thicknesses of crisp lawn, taffeta or organdy and cut away the backing when design is completed.

(C) When a pattern is to be stitched close to the edge of the fabric, a straight line of stitching should be made to stay the fabric. Regulate bight to produce the most pleasing results. The ornamental stitch may be sewn over the straight stitching.
ARROWHEAD STITCH PATTERN

Arrowhead Stitch Pattern 161003 produces a design which is ideal for ornamental purposes. The size of Arrowhead is determined by the bight setting and texture of material. Stitch setting should be short (approximately No. 30) for a solid effect. For any desired spacing between Arrowheads, pull lever B, Fig. 10, page 10 forward for straight stitching and count number of stitches for a given space. When desired spacing is attained, push lever B back for zigzag stitching. Arrowhead is most distinct when bight is set at W and stitch regulator at No. 30.

Direction of stitching is left to right.

Follow instructions A, B and C on page 6.

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Narrow Bight

No. 30 Stitch Setting

Narrow Bight

No. 25 Stitch Setting

Medium Bight

Medium Bight

Wide Bight

Wide Bight

Fig. 6. Arrowhead Stitch patterns made by changing bight and stitch settings as indicated
1. **RAISE PRESSER BAR.**

2. Lift and swing back cover as shown in Figs. 7 and 8.

3. Lift out Stitch Pattern.

4. Select desired Stitch Pattern, place it in position and turn it in a clockwise direction until it drops in place.

5. Close cover.

6. Turn stitch pattern so that arrow M, Fig. 9 points to line N on top of cover. This setting denotes the beginning of the Zigzag, Domino and Arrowhead patterns and the central position for all other patterns. It also centers the foot for straight stitching.
TO ADJUST BIGHT OR SIDEWISE MOVEMENT OF PRESSER FOOT

The setting of bight scale O, marked with the letters N (for narrow bight), M (for medium bight) and W (for wide bight), determines the width of the design.

To adjust bight:

1. RAISE PRESSER BAR.
2. Loosen lock screw J.

3. Grasp handle G and slide the regulator forward or backward until desired bight is obtained.

4. Tighten lock screw J.

The length and width of all designs depend on the stitch and bight settings.
TO ADJUST ZIGZAGGER FOR STRAIGHT STITCHING

1. Stop machine when zigzagger foot is in central position with arrow M, Fig. 9 opposite line N.

2. Pull lever B, Fig. 10 toward you. Plain sewing can then be done.

   To resume zigzag stitching, push lever away from you.

   Fig. 10. To Adjust Zigzagger for Straight Stitching

THREADS

No special threading is required. No. 50 mercerized cotton and size A silk threads may be used. For these threads be sure to use size 14 needle. Finer mercerized embroidery cotton threads will produce improved effects.

TENSIONS

When making solid designs, such as zigzag satin stitch, domino or arrowhead, operate machine with a lighter top tension than for ordinary sewing.

PRESSURE ON FOOT OF ZIGZAGGER

Slightly less pressure than for normal sewing will be required to allow for proper sidewise movement of fabric when making intricate stitch patterns. The amount of pressure should be varied according to the surface and texture of the fabric. Pressure is regulated by turning knurled thumb screw on top of machine arm in counter-clockwise direction to reduce pressure, or clockwise to increase pressure.

SEWING SPEED

Operate sewing machine slowly and hold material loosely so that it moves freely with zigzagger foot.

Do not operate sewing machine without material underneath zigzagger foot.
SUITABLE MATERIALS

Firm cotton fabrics such as lawn, organdy, broadcloth, poplin, chambray, Indian Head, denim, polished cotton, cotton taffeta, sateen and gingham are suitable for use with the zigzagger. Linen, sheer woolen, silk, felt and synthetic fabrics of firm weave are also effectively stitched.

TO PREPARE FOR ORNAMENTAL STITCHING

Lay both threads back under presser foot diagonally across the feed to the right or left so that when the presser foot is lowered, the threads will be firmly held between the feed, material and zigzagger foot.

PREPARATION OF MATERIAL

Always test stitch on a scrap piece of the material to which design is to be applied, since the bight may have to be adjusted to suit the weave, the texture or finish of fabric. You may find it more satisfactory to use one or two plies of backing or stay of crisp lawn, taffeta or organdy with some sheer materials or with other materials if the design is on the bias or slightly off grain. The backing is basted to underside of material and then, when design is completed, trimmed away close to design.

For making border designs, mark parallel lines or scallops on fabric with a light brush of the pencil or with chalk. Some basting adjacent to the edge is recommended to avoid creepage of fabric.

TO START STITCH PATTERN

Set Stitch Pattern so that arrow M, Fig. 9 is directly opposite line N on cover of zigzagger. If, for any reason (such as thread breaking or bobbin running out of thread), it is necessary to start in middle of a design, stitch on a scrap of material until that point in design is reached. Then place work under needle at exact point in design. Continue to stitch.
DESIGNS PRODUCED WITH ZIGZAG STITCH PATTERN

Fig. 11. Border Design

For Center Bar—use
Medium Bight
Approximately No. 30 Stitch Setting.

For Next Rows—use
Medium Bight
No. 15 Stitch Setting.

For Side Bars—use
Medium Bight
Approximately No. 30 Stitch Setting.

For Outside Rows—use
Wide Bight
No. 6 Stitch Setting.

Fig. 12. Border Design on Woman's Dress
Fig. 13. Appliqued Table Cloth Border

Fig. 14. Bound Scalloped Edge

Fig. 15. Lace Insert and Lace Edge, using Narrow Bight and No. 18 Stitch Setting
Fig. 16. Blind Stitched Hem in process
Use Medium Bight, No. 10 Stitch Setting

Fig. 17. Underside of Completed Blind Stitched Hem with Seam Tape
Use Medium Bight, No. 10 Stitch Setting
Fig. 18. Luncheon Set Made with Blind Stitch Pattern at Edges of Drawn Work

Fig. 19. Blouse with Blind Stitch Border Design
DESIGNS PRODUCED WITH DOMINO STITCH PATTERN

Fig. 20. Girl's Dress
With Border Design
in Domino Stitch Pattern

Fig. 21. Border Design

Use approximately No. 30 Stitch Setting and alternate rows of Narrow and Medium Bight.
Fig. 22. Child's Coat and Bonnet with Domino Stitch Border

Fig. 23. Scalloped Border Design

For Center Row — use Domino Stitch Pattern.

For Outside Rows — use Zigzag Stitch Pattern.

For All Rows—use Medium Bight and approximately No. 30 Stitch Setting.
DESIGNS PRODUCED WITH ARROWHEAD STITCH PATTERN

Fig. 24. Border Designs

Fig. 25. Luncheon Cloth with Arrowhead Border

Fig. 26. Scalloped Border Design
Fig. 27. Arrowhead Stitch on Bound Edge

Fig. 28. Blouse Ornamented with Arrowhead Stitching
ADDITIONAL STITCH PATTERNS

Additional Stitch Patterns may be purchased at your local SINGER SEWING CENTER. Four of the additional Stitch Patterns are shown below and on the following pages.

SCALLOP STITCH PATTERN 161004

Direction of stitching is from left to right.

Fig. 29. Scallop Stitch Patterns made by changing bight and stitch settings as indicated

SCALLOPED TUCKS

Scalloped tucks are quickly accomplished by folding material right side together, then stitching so that the outer curve of the scallop falls 1/4 inch from the fold. Trim 1/8 inch from stitching and notch seam allowance at frequent intervals. Clip almost to stitching at points between scallops. Turn material to right side on stitching to form scalloped edge. Stitch tuck to desired depth with fine (stitch setting 15 to 20) straight stitching.

Scalloped facings are accomplished in much the same manner.
MULTIPLE STITCH PATTERN 161005

Narrow Bight
No. 20 Stitch Setting
No. 25 Stitch Setting
Narrow Bight
Medium Bight
Medium Bight
Wide Bight
Wide Bight

Fig. 30. Multiple Stitch patterns made by changing bight and stitch settings as indicated

Fig. 31. Border Design
Fig. 32. Bound Edge with Rick Rack Trim
Fig. 33. Simple Mending
WALLS OF TROY STITCH PATTERN 161006

The solid and open portions of the design are equally balanced when bight is set at M and stitch regulator is at No. 30.

Direction of stitching is from left to right.

(A) To lock the pattern, upon completion of the stitching, set attachment in straight stitching position and sew three or four very short stitches.

<table>
<thead>
<tr>
<th>Narrow Bight</th>
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<tr>
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<td>No. 25 Stitch Setting</td>
</tr>
<tr>
<td>Wide Bight</td>
<td></td>
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</table>

Fig. 34. Walls of Troy Stitch patterns made by changing bight and stitch settings as indicated

(B) When sewing on soft, sheer, textured or loosely woven fabrics, use a backing of one or two thicknesses of crisp lawn, tafetta or organdy and cut away the backing when design is completed.

(C) When a pattern is to be stitched close to the edge of the fabric, baste the fabric and backing together to prevent slippage. Remove the basting stitches when the work is completed. Regulate bight to produce the most pleasing results.

Fig. 35. Decorative Bound Edge

Fig. 36. Tucking
ICICLE STITCH PATTERN 161007

The boldest effect is obtained when wide bight is used and stitch regulator is set at No. 30.

Direction of stitching is from left to right.

Follow instructions A, B and C on page 22.

Fig. 37. Icicle Stitch patterns made by changing bight and stitch settings as indicated

Fig. 38. Apron trimmed with Icicle Stitch Pattern

Fig. 39. Enlarged Area of Pocket and Hem
TO LUBRICATE THE ZIGZAGGER

To insure smooth operation, the zigzagger should be lubricated at the start of a project, particularly if it has not been in use for two or more months.

Apply a small amount of SINGER* Motor Lubricant and SINGER* Sewing Machine Oil to the points indicated by arrows in Figs. 40, 41 and 42. To reach the lubricating points inside the attachment, raise the cover as shown in Fig. 7 and lift out the stitch pattern.

Wipe off excess oil and lubricant to prevent soiling of the work. Replace stitch pattern and close cover.

Fig. 40. To Lubricate the Zigzagger
Fig. 41. To Lubricate the Zigzagger

Fig. 42. To Lubricate the Stitch Pattern

One drop of oil is sufficient for the track inside the stitch pattern shown in Fig. 42.
The SINGER Automatic Zigzagger is only one of many attachments available at your SINGER SEWING CENTER. These attachments will enable you to accomplish a great variety of work with a minimum of time and effort. Attachments which can give your home sewing that smart professional look.

Your SINGER SEWING CENTER stands ready to help you with instructions and advice on home dressmaking and home decorations. You will also find a hundred and one other helpful sewing services and supplies. Our finishing services include hemstitching, custom made belts, button and buckle covering, picoting. Here, too, you will also find the widest selection of thread, zippers, buttons and other notions.

Drop in and get acquainted at your SINGER SEWING CENTER.