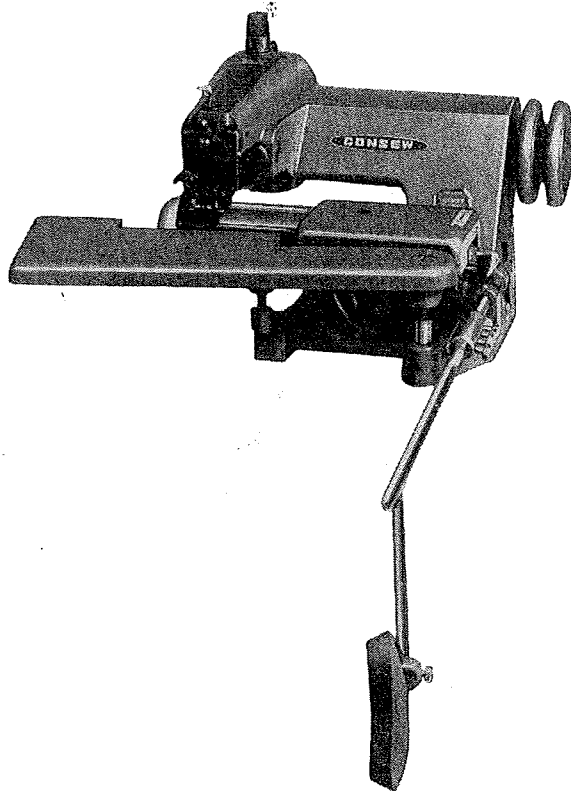


**CONSEW**  
**BLINDSTITCH MACHINE**  
**MODEL 251**  
**INSTRUCTION MANUAL**  
**AND**  
**PARTS LIST**



**CONSOLIDATED SEWING MACHINE CORP.**  
**CONSEW INTERNATIONAL LTD.**

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# OPERATING MANUAL FOR CONSEW BLINDSTITCH MACHINE MODEL 251

## 1. Unpacking Machine

Open packing box by carefully removing its cover so as not to damage the machine nor those of its parts which project from the top, such as the tension parts.

Small accessory parts are packed separately in individual packages. Do not discard any packing materials without prior scrutiny as to contents.

Clean from machine all grease, dirt, or dust. Pay particular attention to area around the looper mechanism and looper.

## 2. Setting up Machine

Assemble knee lifter lever to machine and place on sewing table so that lever is 1/2" distant from front edge of the table. Line up belt groove in belt pulley of handwheel with belt groove of drive mechanism (motor or clutch).

Mark three screw holes for fastening machine to sewing table and place felt pad under machine bed before machine is tightened down.

## 3. Handwheel Rotation and Speed

Turn handwheel only in direction away from operator for clockwise rotation. Be sure motor drive is wired up to obtain the same clockwise rotation.

The recommended operating speed of a brand new machine is 2200 to 2400 stitches per minute. After a breaking-in period of several weeks and after the operator has become skilled in the operation of the machine, the speed can be increased up to 20%.

For the computation of the machine speed, the pitch diameter of the belt groove in the handwheel can be figured as 2-1/2".

## 4. Oiling and Maintenance

It is important not to operate the machine before oil of good quality has been filled in each and every oil hole along the top of the machine. Pay particular attention to oiling the looper yoke bearing and the ball connecting rod. Both are being lubricated through large openings at the rear of the arm side cover.

When breaking in a new machine, oiling should be done sparingly several times a day. Thereafter, one oiling daily will be sufficient. After oiling, wipe machine carefully to avoid soiling of the material.

Do not operate machine without material under the presser foot unless the knee lever is depressed. This will prevent damage to the needle and the feed dog as well as the feed plattens.

Always replace bent or blunt needles. They affect the satisfactory operation of the machine.

### 5. Replacing the Needle

Turn handwheel away from operator (clockwise) until needle reaches the end of its return stroke. Adjust penetration dial (See Par. 8) to least amount

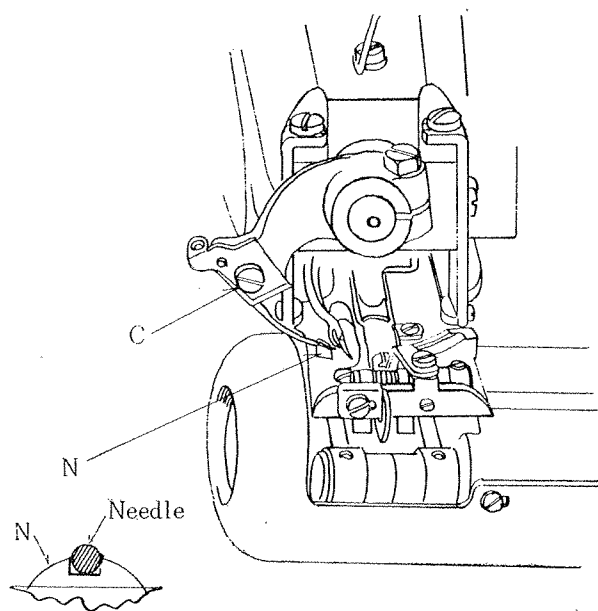


Fig. 1

of penetration (turn counterclockwise towards "1" or depress knee lever to avoid needle damage. Remove old or defective needle by loosening needle clamp screw "C" (Fig. 1). Insert new needle into seat in needle clamp as far as it will go. Tighten needle clamp screw.

Turn handwheel slowly (away from operator) and observe movements of needle. The curved portion of the needle should bear slightly on the needle guide groove

"N" in the left hand part of presser foot (Fig. 1).

See par. 11 concerning needle style to be used in Consew Blindstitch Machine Model 251.

### 6. Threading the Machine

Turn handwheel of machine in clockwise direction away from operator until needle carrier reaches its furthest left hand position. Draw thread from spool on thread stand and pass it through thread eyelet behind tension discs. Place thread between tension discs and lead it forward through thread guide at top of arm near its front. From there pass thread through hole in needle clamp and then through eye of needle from below upward. Pull about 2" of thread through the eye of the needle. (See Fig. 2, page 4).

## 7. Inserting the Work and Starting to Sew

Apply knee pressure to the knee lifter to separate the work arm from the head. Insert the work in the gap just opened in such a manner that the folded or sewn edge of the article is alongside the guide "G" of the presser foot "P" (See Fig. 3, below).

When the article is in proper position, completely release the knee lever. Get the machine started slowly and watch the material pass guide "G" rather than to observe the action of the needle.

## 8. Adjustment of Needle Penetration

### Important Note:

To prevent damage to the needle and possibly other parts which control the needle penetration, the following is strongly recommended as a first step:

A. While keeping knee lifter depressed, turn handwheel (away from operator) until the needle's eye is directly above the oscillating rib "T" mounted in the work arm. (Fig. 4, page 5).

B. Release knee lifter gradually and observe whether and how needle and rib contact.

C. If rib should cause needle to deflect upward, however little, turn adjustment knob "A" (Fig. 4) gradually counter-clockwise (direction "LESS") to eliminate contact.

D. If there should be a gap between the needle and the plunger, turn adjustment knob gradually clockwise (direction "MORE") until needle just about skims over the rib.

The type of material to be blindstitched governs the degree of needle penetration which is required. It is, therefore, recommended to stitch a few inches as a test and make adjustments for penetration depending on the appearance of the trial stitching.

Turn the adjustment

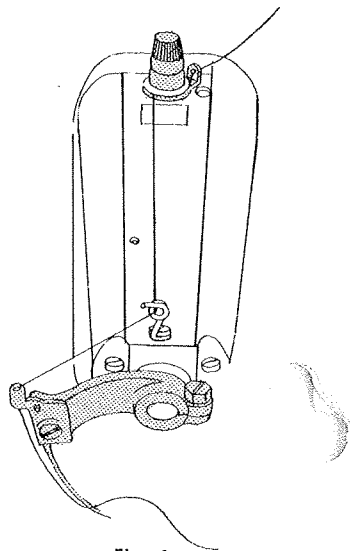


Fig. 2

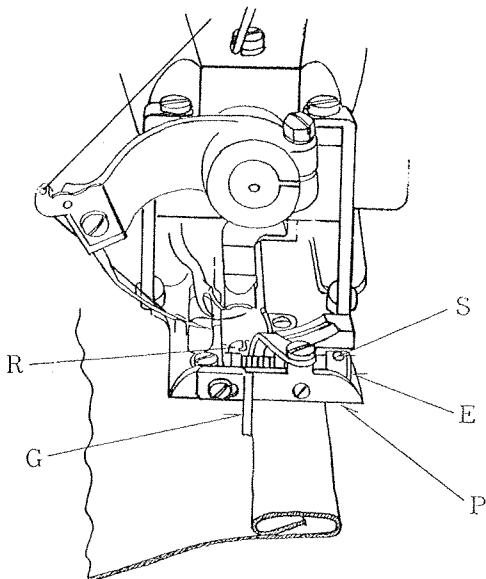


Fig. 3

knob "A" (Fig. 4) clockwise for more penetration and counterclockwise for less penetration. The dial surrounding the adjustment knob shows clearly the direction of turning to obtain the needed degree of needle penetration.

If the needle should fail to catch the fabric, turn the adjustment knob gradually -notch by notch- in clockwise direction as stated above. On the other hand, if the penetration should be too great, and too much of an impression should show on the right side of the material, turn adjustment knob to the left (counterclockwise) until the stitching is as desired.

#### 9. Removal of the Work from the Machine

Stop machine and turn handwheel away from operator until needle is completely out of the material. Press the knee lifter to the right and pull the workpiece rearward out of the machine with a quick stroke. This will lock the last stitch and break the thread.

#### 10. The Skip Stitch Device

The position of lever "L" at the right side of the machine controls the skip stitch device.

When this lever points toward the operator, as shown in Fig.4, the needle catches the material at each stitch. Pushing lever "L" to the rear of the machine so that it points toward the handwheel will activate the skip-stitch device whereby the needle will penetrate the material at every other stitch.

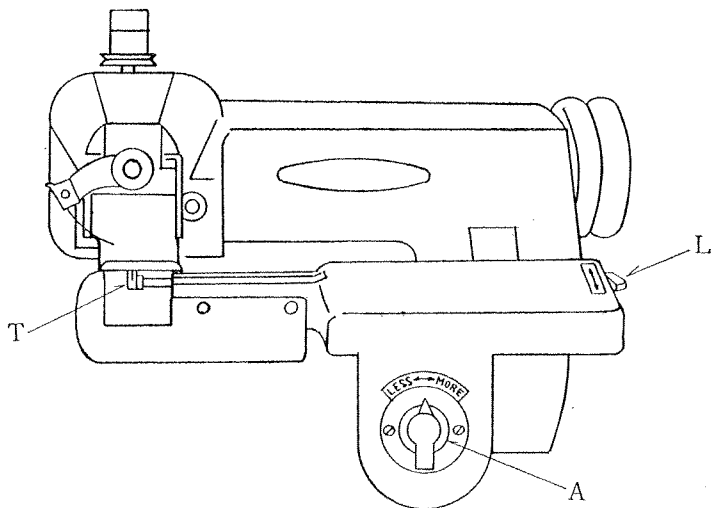


Fig. 4

Be sure that lever "L" is pushed completely in either direction and needle penetration readjusted every time operation is changed from skip to nonskip.

#### 11. Needle and Thread Recommendations

Standard type blindstitch machine needles sizes 29-493 through 29-494-1/2 are the only ones to be used for Consew Blindstitch Machine Model 251. For best results, use only CONSEW needles.

For selection of the correct size needle it is suggested that the following chart be used as a guide:

<u>SIZE</u>	<u>MATERIAL</u>
29-493	Very fine fabrics, nylon, chiffon, georgette, batiste, etc.
29-493-1/2	Cottons, silks, acetates, orlon, dacron and similar types of light weight fabrics.
29-494	Medium weight materials, woollens and others. Also pants cuffs, padding lapels.
29-494-1/2	Thick material for coats, house furnishings.

The Consew Blindstitch Machine Model 251 will operate with any good quality three cord, hard-finish, left twist cotton thread in size 70 to 100. Mercerized thread No. 00 is sometimes preferred. When using silk thread sizes 00 or 000 should be selected.

## 12. Minor Adjustments

a. Thread breakage occurs most frequently when the thread tension is too tight or when the machine is not threaded according to instructions in paragraph 6. Check threading and thread tension which should have an even and uninterrupted pull.

A bent or burred needle can also cause thread breakage. Therefore, always change the needle to eliminate difficulties on account of such damage. (To detect a burred needle point, pass fingernail over tip of needle in two or three places).

b. Feed Plattens should be adjusted in such fashion that they will be depressed approximately 1/32" after having contacted the bottom surface of the presser foot.

To make adjustment of the plattens, remove the arm cover and set the adjustment screws at front of the platten link and be sure to tighten locknuts upon completion of the adjustment.

c. Depth of Feed Dog is to be adjusted when the needle moves from left to right and when the needle point is approximately in line with the left edge of the center slot in the presser foot.

When in this position, the feed dog should be adjusted so that a feeler gauge or a piece of paper .003 thick will be held between it and the feed plattens.

Be sure that the feeding surface of the feed dog is in contact with the feed plattens over its entire area.

Tighten feed dog screws and check for sufficient clearance between feed dog and looper.

d. Presser Foot requires careful attention when being adjusted as follows:

First, set the three screws which attach the presser foot to the head handtight only, then fully tighten the one screw which holds the presser foot to the underside of head.

Then place a new size 3-1/2 needle into the needle clamp and turn handwheel clockwise until point of needle on its travel from left to right is flush with the left edge of the central opening in the presser foot.

Now turn slowly the two vertical screws inserted into the two straps attaching the presser foot to the front of the head, until the needle barely touches the needle guide. This needle guide is found beneath the needle point when same is in the position outlined in the preceding paragraph.

Carefully turn handwheel counter clockwise to back up needle approximately 3/16". There should now be a clearance of about .005", i.e. the thickness of good bond paper, between the needle and the left hand needle guide of the presser foot.

Continue turning the handwheel clockwise same as for sewing until the needle point is at least 5/8" beyond the right edge of the center opening in the presser foot. There should now be a clearance of from .001" to .003" between the needle and the right hand needle guide of the presser foot.

e. Looper Adjustment is of utmost importance for a perfect stitch and in particular after the looper has been replaced. The most important details of this adjustment are:

I. Position of looper must be such that the long prong sweeps across the scarf of the needle approximately 1/16" to 3/32" from the near end of the needle eye.

II. Long prong of looper must just about clear the scarf of the needle.

III. Rotate handwheel in clockwise direction watching movement of looper throughout its full cycle of operation. The short prong of the looper must pass the chaining finger located behind the right hand needle guide in the presser foot, with a maximum clearance of approximately 1/32".

Continuing to rotate the handwheel in clockwise direction the short prong of the looper should enter the looper slot near the left side of the presser foot, but must stay clear of any part of the surrounding areas.

While the looper enters the looper slot in the presser foot, the needle must pass midway between the short and long prongs of the looper. Be sure that the needle does clear comfortably the crotch of the looper between the two prongs.

f. The Cloth Retainer "R" (Fig. 3, page 4) is to be set as close to the needle as possible. To adjust, loosen set screw "S" and turn eccentric "E". Eccentric "E" can be slid in and out for the purpose of centering the retainer above the rib which forms the material in preparation of the stitching.