SINGER No. 20-2
ELECTRIC SEWING MACHINE

INSTRUCTION MANUAL
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THE SINGER ELECTRIC No. 20-2 machine is a practical, convenient sewing machine made especially for children. It is simple and safe to operate and will do real sewing on dolly’s wardrobe, or even on repairs to the grown-ups’ clothing and other household articles.

All the electrical parts of the motor are completely inclosed in the bakelite shell, so that there is no danger of electrical shock. The motor requires no attention, except occasional oiling. It must be used only on 110 volt, 60 cycle, alternating current (A.C.).
Main Parts

A. STITCH REGULATOR  
B. LOOPER  
C. MOTOR PLUG  
D. CLOTH PLATE  
E. PRESSER FOOT  
F. NEEDLE  
G. NEEDLE SET SCREW  
H. CLOTH GUIDE  
J. CLOTH GUIDE SCREW  
K. PRESSER BAR LIFTER  
I. PRESSER BAR  
M. NEEDLE BAR  
N. TENSION DISCS  
O. TENSION REGULATING THUMB NUT  
P. SPOOL  
Q. HAND WHEEL  
R. SWITCH BUTTON  
S. FRICITION PULLEY RELEASING LEVER  
T. CLAMP  
U. CLAMP SCREW

Accessories

The clamp (T, Fig. 2) is furnished for fastening the machine to a table or desk, if desired. The wooden handle and the two screws also furnished with the machine, are not used unless the motor is removed, for operation by hand.
To Start the Motor

Place the plug on the rubber-covered cord into a wall outlet or light socket. (Be sure that your currently is 110 volt, 60 cycle).

Press down on the switch (R, Fig. 2) and the lever (S) at the same time; this will start the motor. Release the lever, and the rubber roller back of the hand wheel will touch the rim of the wheel and drive the machine.

To Stop the Motor

Push down on the switch (R), the same as for starting. When through sewing, pull the plug out of the electric outlet, and wrap the cord around the machine.

Do not run the machine or motor except when sewing.

To Change the Speed

Two sewing speeds are provided; a slower speed for careful work, or for young children, and a faster speed for ordinary straight work.

To change to a different speed, remove the guard (X, Fig. 3) over the motor pulley by pressing it downward and sliding it back.

For the slow speed, move the belt to the outside grooves (V) in the two pulleys, as shown in Fig. 3. For the faster speed, move the belt to the inner grooves (W) in the pulleys. Be careful not to stretch the belt.

Then replace the guard with it two slots over the metal tabs in the base, press it down and forward into place.

If the motor stalls or the rubber roller slips on the hand wheel, it is because the work being sewn is too heavy for the machine.

If the rubber roller or the rubber belt should slip when doing ordinary sewing, they may have become hard and brittle with age and should be replaced.
Needles and Thread

Needles for the Machine No. 20-2 are of Class and Variety 21x1 and four of these needles of size 14 are furnished with each machine. Finer or coarser needles, as shown below, can be purchased from any Singer shop or Singer salesman.

The size of the needle to be used should be determined by the size of the thread, which must pass freely through the eye of the needle to ensure the successful use of the machine.

Relative Sizes of Needles and Thread

<table>
<thead>
<tr>
<th>CLASSES OF WORK</th>
<th>SIZES OF NEEDLES</th>
<th>COTTON</th>
<th>SILK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very fine silks, chiffons, lawns, batiste, etc.</td>
<td>9, 11</td>
<td>200, 150, 120</td>
<td>OOO, OOO, OOO</td>
</tr>
<tr>
<td>Fine silk goods, lawns, linens, cambrics, muslins, etc.</td>
<td>14, 16</td>
<td>80, 70, 60</td>
<td>OO, O, A</td>
</tr>
<tr>
<td>Shirting, sheetings, muslins, dressmaking, etc.</td>
<td>50, 40, 30</td>
<td></td>
<td>B, C, D</td>
</tr>
<tr>
<td>Light woolen goods, flannels, heavy silk, etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
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To Insert a Needle

Turn the hand wheel (Q, Fig. 2) over from you until the needle bar (M, Fig. 2) moves up to its highest point. With the screwdriver, loosen the set screw (G, Fig. 2) in the lower end of the needle bar, take out the old needle and put the new needle up into the bar as far as it will go, with its flat side toward the right and the long groove in the needle at the left, then firmly tighten the set screw (G).

To Thread the Needle

(SEE FIG. 4)

Turn the hand wheel over from you until the needle moves up to its highest point. Place the spool of thread on the spool pin, pass the thread from the spool toward you through the two holes (1 and 2) in the thread pull-off, to the left and down through the hole (3) in the nipper lever. Draw the thread to the left under the end of the nipper lever and pass it over between the tension discs (4), up through the hole (5) in the machine, from right to left through the hole (6) near the upper end of the needle bar, down and from left to right through the eye of the needle. Draw about two inches of thread through the eye of the needle with which to commence sewing.

To Commence Sewing

Raise the presser foot (E, Fig 2) by turning up the presser bar lifter (K, Fig 2). Place the material beneath the presser foot and lower the presser foot. Lay the forefinger of the left hand gently on the end of the thread and turn the hand wheel (Q, Fig 2) over from you in the direction indicated by the two arrows on the hand wheel, until the first stitch is made. Then place the end of the thread back under the presser foot and commence to sew.
To Remove the Work

Sew two stitches past the end of the seam and stop the machine with the needle bar at its highest point, then with the left hand draw a finger length of thread to the left through the hole near the upper end of the needle bar as shown in Fig. 5. With the right hand, using a pair of scissors, draw the slack thread to the right through the eye of the needle, as shown in Fig. 6, then pull the thread upward from the work, the presser foot being down, and cut the thread close to the goods, as shown in Fig. 7. Raise the presser foot, pull the work from you and the end of the thread will be draw through the loop, as shown in Fig. 8.
To Fasten Off the Stitching in the Work

When it is necessary to fasten off the last stitch in the work, stop the machine with the needle in the work, place the fingers on the material close to the presser foot to prevent the work from moving, raise the presser foot and take one more stitch in the last hole made and stop the machine with needle bar at its highest point; then with the left hand draw a finger length of thread to the left through the hole near the upper end of the needle bar as shown in Fig. 5. With the right hand, using a pair of scissors, draw the slack thread to the right through the eye of the needle as shown in Fig. 6; then pull the thread upward from the work and cut the thread close to the goods as shown in Fig. 7. Pull the work from you and the end of the thread will be drawn through the loop as shown in Fig. 9.

To Change the Length of Stitch

The length of stitch is regulated by the same lever (A, Fig. 2) under the cloth plate. To make a longer stitch, move this lever away from you. To make a shorter stitch, move the lever toward you.

To Regulate the Tension on the Thread

The tension on the thread is automatic and seldom requires changing. When the needle is at its highest point, the nipper lever (3, Fig. 4) is raised and the tension on the thread is released so as to allow the needle bar to draw off sufficient thread for the next stitch. If the stitches are so tight that they pucker the material, loosen the tension by turning to the left the thumb nut (O, Fig. 2) at the front of the tension discs. If the stitch is too loose, tighten the tension by turning the thumb nut to the right.
To Use the Cloth Guide

To guide the work accurately when sewing close to the edge of the goods, the cloth guide (H, Fig. 2) should be used. Fasten the cloth guide to the cloth plate of the machine by means of the clamping thumb screw (J, Fig. 2), inserting the thumb screw into the screw hole in the cloth plate. The cloth guide can be adjusted to bring the edge of the goods as close to the line of stitching as desired. If desired, the cloth guide can be removed from the machine.

To Oil the Machine

The machine should be oiled occasionally with the sewing machine oil especially prepare by the Singer Sewing Machine Company. This oil can be purchased from any Singer shop or Singer salesman. Apply one drop of oil at each of the places where a part of the machine moves against another part.

About every six months, put a drop or two of

CAUTION

Do not run the machine or motor except when sewing.

When the machine is not in use, always remove the plug from the electric outlet or light socket.

Further Instructions

for the use of this machine or any other Singer Machine, will be cheerfully given at your local Singer Shop.