

SINGER
44-79,44-81,44-90,44-91

INSTRUCTIONS

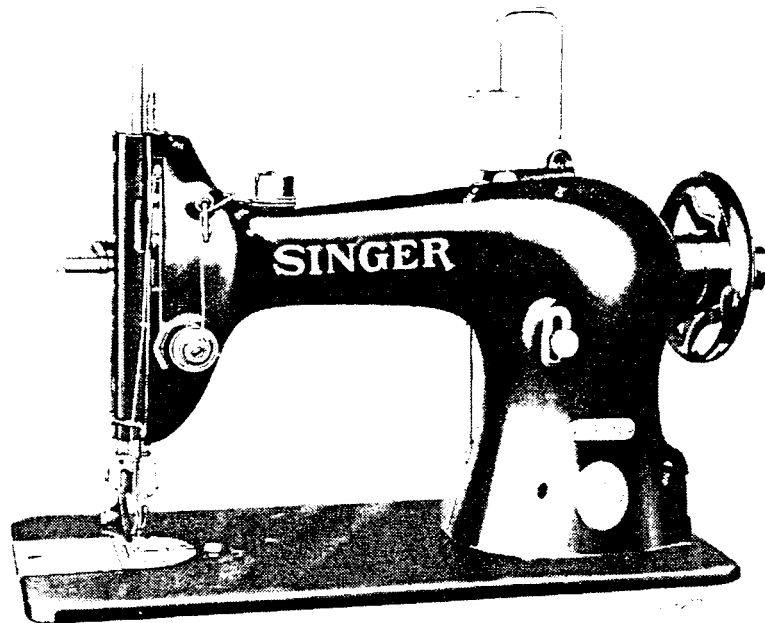
FOR USING

SINGER^{*} SEWING MACHINES

44-79, 44-81, 44-90 and 44-91

ONE NEEDLE

LOCK STITCH



THE SINGER MANUFACTURING COMPANY

DESCRIPTION

Machine 44-79 makes the lock stitch and is equipped with a drop feed, roller edge guide and alternating pressers. It is used for stitching gauge gloves in light and medium weight leather. Maximum stitch length, 5½ stitches to the inch.

Machine 44-81, lock stitch, is equipped with a vertical trimmer for trimming close to the line of stitching. It is used for glove work and has a wheel feed, a roller presser and a sectional shuttle race which permits easy removal of the shuttle for cleaning. Maximum stitch length, 8 stitches to the inch.

Machine 44-90 is similar to Machine 44-79, except that it is equipped with a positive upper and under feeding mechanism and has a maximum stitch length of 5 stitches to the inch. It is used for stitching gauge gloves and other work in light, medium and medium-heavy weight leather.

Machine 44-91 is similar to Machine 44-90, except that it is constructed with a higher lift to enable it to stitch gloves in extra-heavy weight leather.

SPEED	
Machine	Maximum Speed Recommended
44-79	1600
44-81	1800
44-90	2200
44-91	2200

The machine should not be run at maximum speed, however, until the moving parts have become glazed by their action upon each other.

When the machine is in operation, the top of the machine pulley should always turn over toward the operator.

LUBRICATION

The machine must be oiled regularly to prevent unnecessary wear and, when in continuous use, **"TYPE B"** or **"TYPE D" OIL**, sold only by Singer Sewing Machine Company, should be applied at least twice each day to all oil holes and other places where parts are in moving contact. A few drops of oil should be applied occasionally to the shuttle race. For description of oils, see inside front cover of this book.

NEEDLES

Needles for Machine 44-79 are of **Class** and **Variety** 16 x 99 in **Sizes** 9, 10, 11, 13, 14, 16, 17, 18, 19, 21, 22, 23, 24 and 25.

Needles for Machine 44-81 are of **Class** and **Variety** 16 x 97 in **Sizes** 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 21 and 22.

Needles for Machine 44-90 are of **Class** and **Variety** 134 x 1 in **Sizes** 12 and 14.

Needles for Machine 44-91 are of **Class** and **Variety** 16 x 198 and 16 x 199 in **Size** 22.

The size of the needle should be determined by the size of the thread, which must pass freely through the eye of the needle. If rough or uneven thread is used, or if it passes with difficulty through the eye of the needle, the machine may not stitch perfectly.

The following is an example of an intelligible order:

"100 No. 12, 16 x 97 Needles"

The best results will be obtained when using the needles sold by Singer Sewing Machine Company.

THREAD

Left twist thread should be used in the needle. Either right or left twist thread can be used in the bobbin.

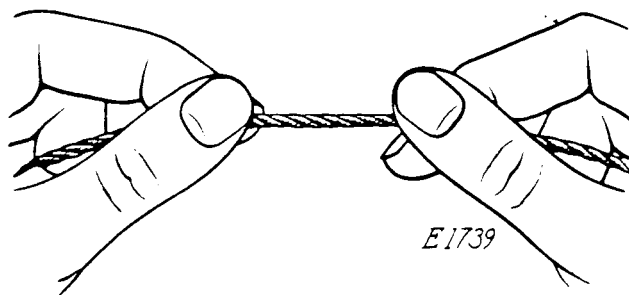


Fig. 1 How to Determine the Twist

Hold the thread as shown above. Turn the thread over toward you between the thumb and forefinger of the right hand; if left twist, the strands will wind tighter; if right twist, the strands will unwind.

TO SET THE NEEDLE

With the needle bar at its highest position, loosen the screw in the lower end of the needle bar and put the needle up into the needle bar as far as it will go, with the long groove of the needle toward the left and the eye of the needle in line with the arm of the machine. Then tighten the screw.

TO REMOVE THE BOBBIN

With the needle at its highest position, draw back the slide at the left of the needle and take hold of the latch of the bobbin case. Remove the bobbin case, release the latch and the bobbin will fall out.

TO THREAD THE BOBBIN CASE

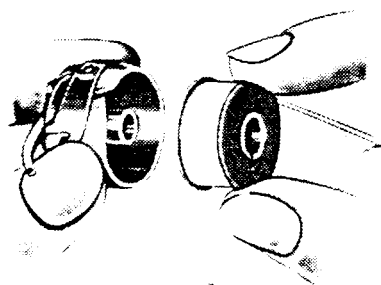


Fig. 2

Hold the bobbin between the thumb and forefinger of the right hand, as shown in **Fig. 2**, the thread drawing off the top from left to right.

With the left hand hold bobbin case as shown above, the slot in the edge being at the top, and place the bobbin into it.

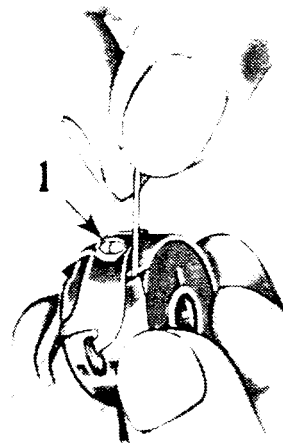


Fig. 3

Pull the thread into the slot in the edge of the bobbin case as shown in **Fig. 3**, then draw the thread under the tension spring and into the eyelet at the end of the spring as shown in **Fig. 4**.



Fig. 4

TO REPLACE THE BOBBIN CASE

Place the bobbin case on the center pin of the shuttle with the position finger uppermost, and press it back until it snaps in place.

TO THREAD THE NEEDLE ON MACHINES 44-79 AND 44-81

(See Fig. 5)

Pass the thread from the spool through the slots and under the spring of the oil cup **1**, through the three eyelets in the thread guide **2** as shown, down between the tension discs **3**, up into the thread take-up spring **4**, under the guide **5**, through the eyelet in the take-up lever **6**, down

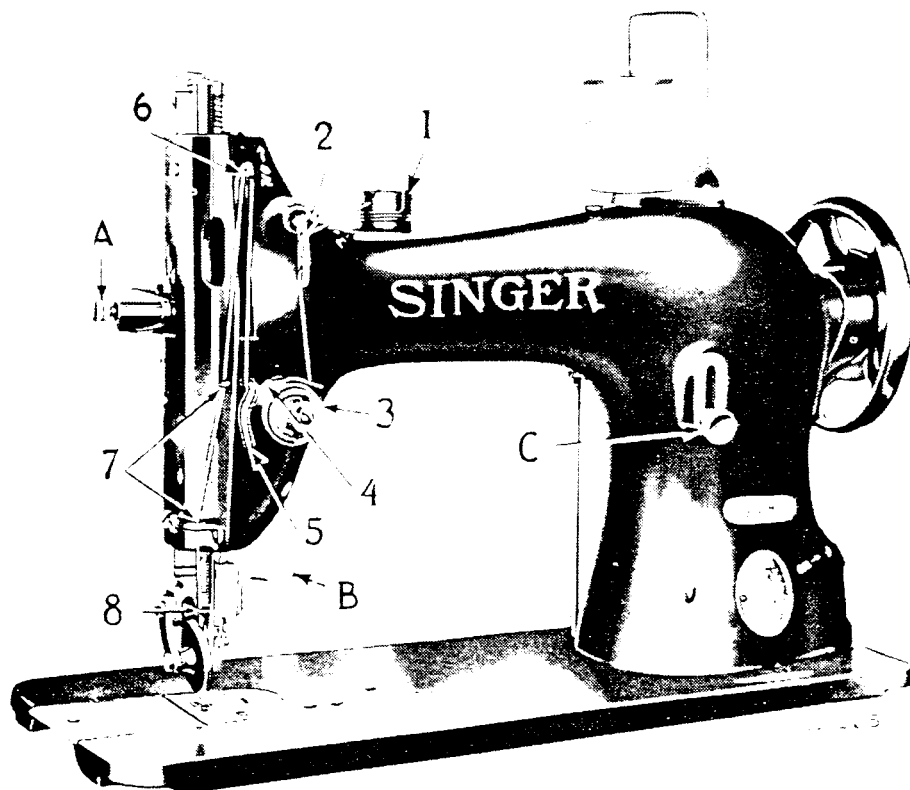


Fig. 5. Upper Threading—Machines 44-79 and 44-81

through the guides **7** on the face plate and the guide **8** on the needle bar, then from left to right through the eye of the needle. Draw about three inches of thread through the eye of the needle with which to commence sewing. The roller presser may be swung to the left for convenience in threading the needle.

TO THREAD THE NEEDLE ON MACHINE 44-90

(See Fig. 5A)

Place the spool of thread on the spool pin, pass the thread through the slots and under the spring of the oil cup **1**, through the three eyelets in the thread guide **2** as shown, down, under from right to left between the tension discs **3**, into the thread take-up spring **4**, under the guide **5**, up and through guide **6**, through the eyelet in the thread take-up lever **7**, down through guides **8** and **9** on the face plate and **10** on the needle bar, then from left to right through the eye **11** of the needle. Allow about three inches of thread to hang free from the eye of the needle with which to commence sewing.

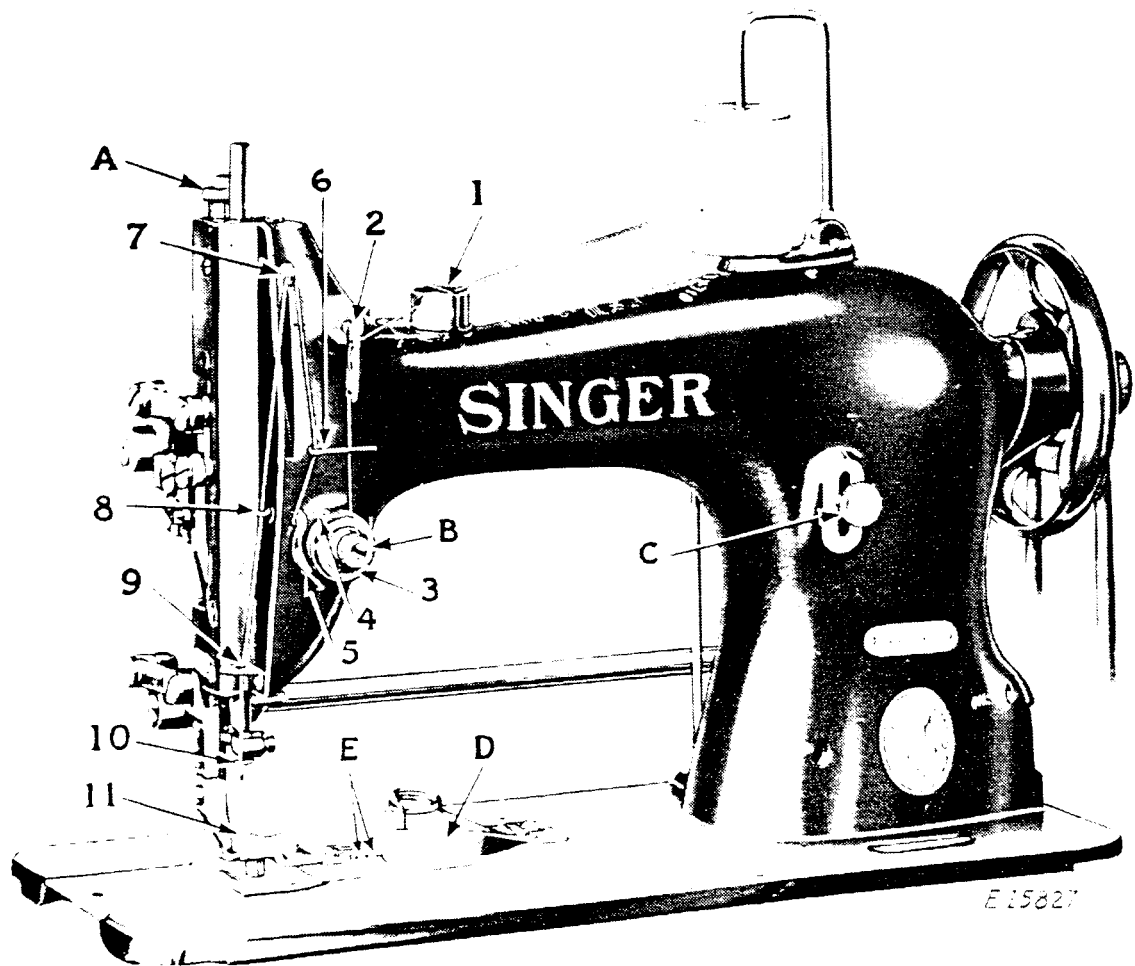


Fig. 5A. Upper Threading—Machine 44-90

TO THREAD THE NEEDLE ON MACHINE 44-91

Machine 44-91 is threaded the same as Machine 44-90, except that the thread is passed from the spool pin through the tension discs on top of the machine arm before it is passed to the oil cup 1.

TO PREPARE FOR SEWING

With the left hand hold the end of the needle thread, leaving it slack from the hand to the needle. Turn the machine pulley over toward you until the needle moves down and up again, thus catching the bobbin thread; draw up the needle thread and the bobbin thread will come with it through the hole in the throat plate. Lay both threads back under the presser.

TENSIONS

For ordinary stitching, the needle and bobbin threads should be locked in the center of the thickness of the material, thus:

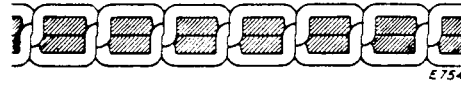


Fig. 6. Perfect Stitch

If the tension on the needle thread is too tight, or if that on the bobbin thread is too loose, the needle thread will lie straight along the upper surface of the material, thus:



Fig. 7. Tight Needle Thread Tension

If the tension on the bobbin thread is too tight, or if that on the needle thread is too loose, the bobbin thread will lie straight along the under surface of the material, thus:

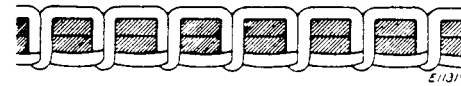


Fig. 8. Loose Needle Thread Tension

TO REGULATE THE TENSIONS

The tension on the needle thread is adjusted by the thumb nut at the front of the tension discs; that on the bobbin thread is adjusted by the small screw **1**, **Fig. 3** on the bobbin case. The latter seldom requires adjustment for ordinary work.

TO REGULATE THE PRESSURE ON THE MATERIAL

The pressure of the roller presser on the material is regulated by the thumb screw at the top of the presser bar. This pressure should be only heavy enough to move the work along evenly.

TO REGULATE THE LENGTH OF STITCH

For a longer stitch, loosen the thumb screw **C**, **Fig. 5** and move it downward in the slot; for a shorter stitch, move it upward. Then tighten the thumb screw.

TO REMOVE THE SHUTTLE ON MACHINE 44-81

Have the needle up, and remove the bobbin case. By turning the two clamps on either side of the shuttle, the shuttle race ring and shuttle body may be easily removed for cleaning. When replacing, be sure that the shuttle properly engages the shuttle driver before replacing the shuttle race ring and turning the clamps to lock it in place.

THE TRIMMER ON MACHINE 44-81

To engage the trimmer, press down on the knife holder handle **B**, Fig. 5. To disengage the trimmer, pull out the stud **A**, Fig. 5 and the trimmer knife will spring up out of the way and will not operate with the machine.

The knife must be kept sharp to ensure a clean cut. To remove the knife, first disengage the trimmer as instructed above, then loosen the two screws at the left of the knife and slip the knife downward out of the holder. SINGER* Knife Grinder 701-2 must be used for sharpening the knife, and one of these grinders should be ordered with the first machine.

Replace the knife in the knife holder and tighten the two screws. Adjust the knife holder from side to side if necessary so that the knife is in line with the throat plate cutting bar when the trimmer is engaged, and presses firmly against it to ensure a shear cut.

TO ADJUST THE ROLLER EDGE GUIDE ON MACHINES 44-79. 44-90 AND 44-91

(See Fig. 5A)

The edge guide (roller) is thrown into action by pushing the lever **D** to the left. To throw the edge guide out of action, push the lever **D** to the right.

The edge guide can be adjusted to the required position on the bed of the machine after loosening the two screws **E**. If desired, the edge guide can be removed from the machine after taking out the two screws **E**.