

SINGER

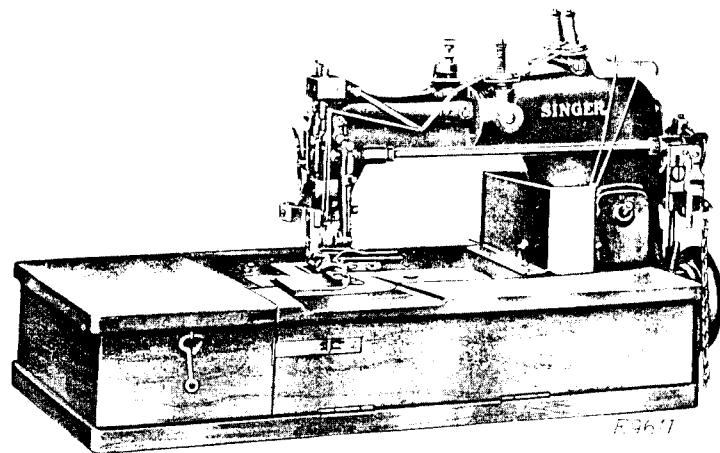
149-5

18571

INSTRUCTIONS

FOR USING AND ADJUSTING

SINGER SEWING MACHINE



149-5

THE SINGER MANUFACTURING CO.

DESCRIPTION

Machine 149-5 has two needles and two loopers and simultaneously makes two parallel lines of two-thread chain stitching. It is fitted with a composite ruffling attachment for making various styles of ruffling, separately or in combination, and is used in the manufacture of curtains, bed spreads, etc.

A knee lever is provided by means of which the operator can control the fullness of the ruffles while the machine is in operation.

When desired, the ruffling blade can be instantly thrown out of operation by means of a conveniently located hand lever. The machine can then be used for plain folding or stitching, as required.

The needles are set abreast and the distance between them may be from $\frac{1}{16}$ to $1\frac{1}{2}$ inches, as ordered.

Speed

The maximum speed recommended for Machine 149-5 is 3200 revolutions per minute, depending upon the nature of the material being sewn. The machine should be run slower than the maximum speed until the parts which are in movable contact have become glazed by their action upon each other. When the machine is in operation, the balance wheel should always turn over from the operator.

Needles and Thread

Needles for Machine 149-5 are of Class and Variety 55 x 5 and are made in sizes Nos. 14, 16, 17, 18 and 19.

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. If rough or uneven thread is used, or if it passes with difficulty through the eye of the needle, the successful use of the machine will be interfered with.

Orders for needles must specify the *quantity* required, the *size* number, also the *class* and *variety* numbers separated by the letter x.

The following is an example of an intelligible order:

“100 No. 16, 55 x 5 Needles.”

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

Purchasing of Parts and Needles

Supplies of parts and needles for Singer machines can be purchased at any Singer shop or ordered by mail. If orders are sent by mail, money or a post office order covering their value, including postage, should be enclosed and the order will then be promptly filled and forwarded by mail or express.

To Oil the Machine

When the machine is received from the factory, it should be thoroughly cleaned and oiled. Apply oil to all places indicated by arrows in Figs. 2, 3 and 6, and all other parts which are in movable contact.

Particular care should be taken to fill all oil reservoirs and oil tubes. Turn up the front cover plate and oil the connecting rod which is thus exposed.

When the machine is in continuous use, it should be thoroughly oiled at least twice each day.

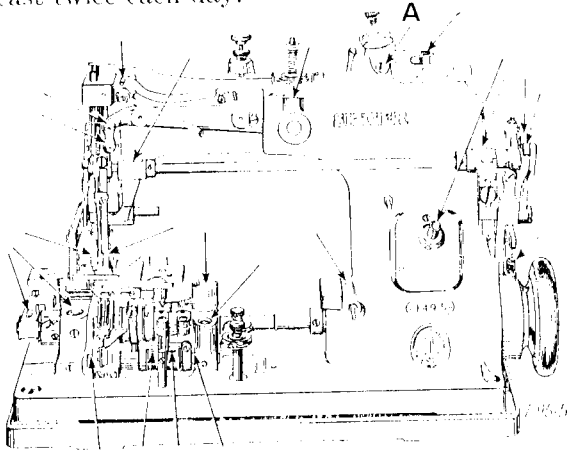


FIG. 2. OILING POINTS AT FRONT OF MACHINE

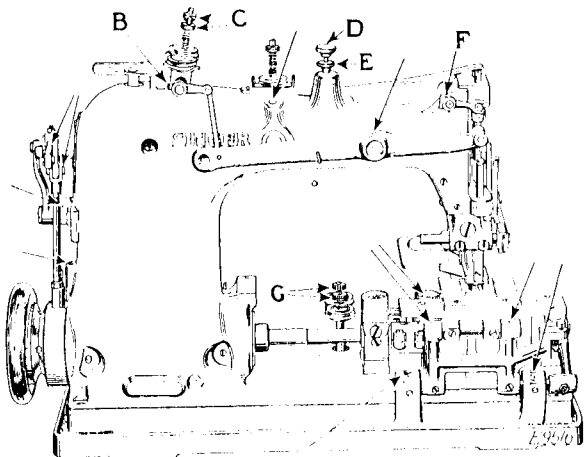


FIG. 3. OILING POINTS AT REAR OF MACHINE
ALSO ADJUSTMENTS ON THE MACHINE

To Set the Needles

Turn the balance wheel over from you until the needle bar moves up to its highest point, loosen the set screws in the needle clamp and put the needles up into the clamp as far as they will go, with the long groove of each needle toward the left and the eye of each needle in line with the bed of the machine, then tighten the set screws.

To Thread the Needles

(SEE FIG. 4)

Pass the threads from the unwinder through the holes (1 and A) in the tension thread guides, around the back between the

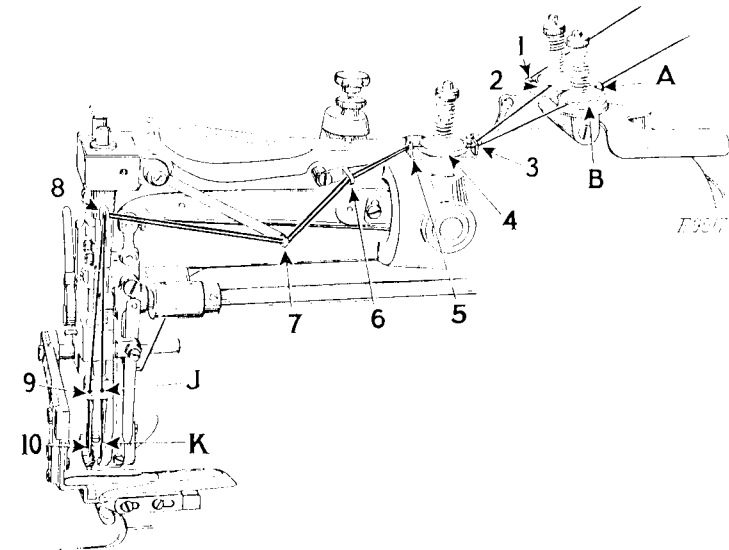


FIG. 4. THREADING THE NEEDLES

tension discs (2 and B), through the notches in the thread nipper bracket (3), around the front between the nipper discs (4), into the notch (5), from right to left through the holes in the thread guide (6) and slack thread regulator (7), through the eyelets in the thread take-up lever (8), down through the holes (9 and J) in the needle clamp and from left to right through the eyes of the needles (10 and K). Draw about two inches of thread through the eye of each needle with which to commence sewing.

To Thread the Loopers

(SEE FIG. 5)

Pass the threads from the unwinder through the holes in the thread guides (1, 2 and 3), through the holes in the tension

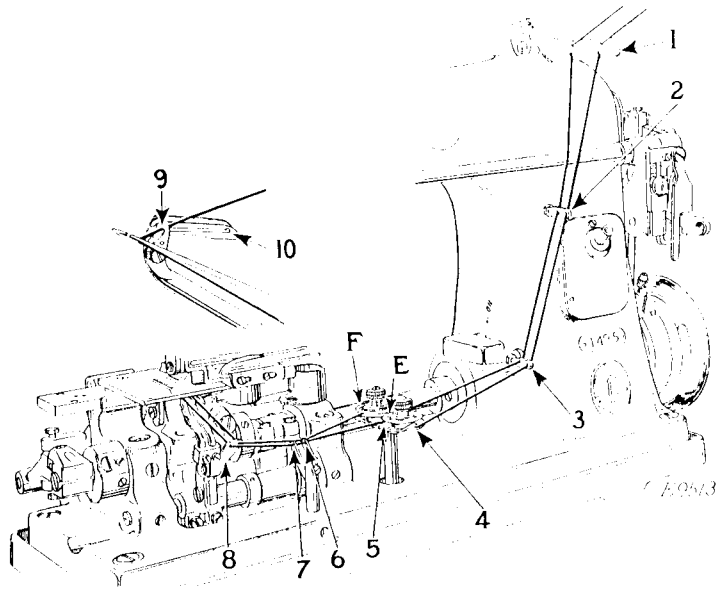


FIG. 5. THREADING THE LOOPERS

thread guides (4 and 5), around the back and between the tension discs (6 and 7), through the holes in the thread guide (8). Pass the thread for the left looper through the thread guide (7), omitting the thread for the right hand looper from this guide. Then pass the threads from you through the holes in the thread guide (8). With the left hand hold the threading wire sent with the machine and with the right hand place the thread in the slot of the threading wire, as shown in Fig. 5. Pass the threading wire under the throat plate and to the left of the looper, keeping the thread taut, and with a backward upward motion bring the thread into the hook (9) at the heel of each looper, as shown in Fig. 5. Then disengage the thread from the threading wire and pass the end of the thread from left to right through the eye (10) of the looper, both loopers being threaded in the same manner. Draw about two inches of thread through the eye of each looper with which to commence sewing.

To Regulate the Length of Stitch

The length of stitch is regulated by the large screw (H, Fig. 6) in the feed eccentric near the left end of the rotary shaft. To lengthen the stitch, turn the adjusting screw (H) over to the right. To shorten the stitch, turn the adjusting screw (H) over to the left.

To Regulate the Pressure on the Material

The pressure of the presser foot on the material is regulated by means of the thumb screw (D, Fig. 3) at the top of the machine. To increase the pressure, loosen the lock nut (E, Fig. 3) and turn the thumb screw (D) downwardly. To decrease the pressure, turn the thumb screw upwardly. When the desired amount of pressure is obtained, securely tighten the lock nut (E).

To Regulate the Tensions

The tension on the needle threads is regulated by the thumb nuts (C, Fig. 3) above the tension discs at the top of the machine. To increase the tension, turn these thumb nuts over to the right. To decrease the tension, turn these thumb nuts over to the left. The needle threads require sufficient tension to set the stitch properly in the goods.

The tension on the looper threads is regulated by the thumb nuts (G, Fig. 3) at the base of the machine. The tension on the looper threads should be very light.

INSTRUCTIONS FOR ADJUSTERS AND MACHINISTS

To Set the Needle Bar in the Correct Position

Turn the balance wheel over from you until the points of the loopers, on their forward stroke, reach the centre of the needles.

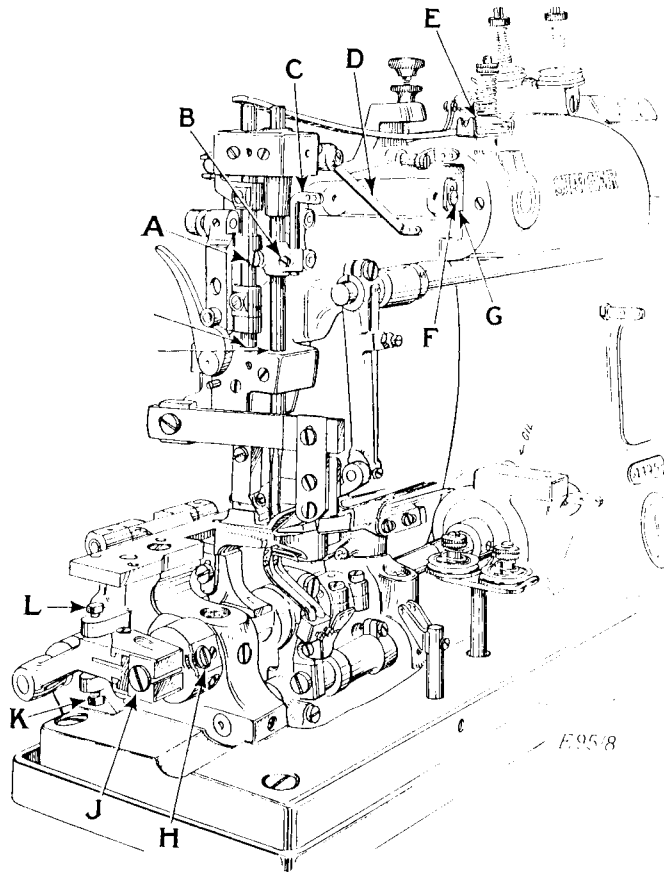


FIG. 6. ADJUSTMENTS AND OILING POINTS ON THE MACHINE

At this position, the eyes of the needles should be about $\frac{1}{8}$ inch below the points of the loopers so that the eyes of the needles and eyes of the loopers will be in perfect alignment when they pass each other on the loop taking stroke. In case the needle bar is not set in the correct position, loosen the set screw (A, Fig. 6) in the needle bar connecting stud and move the needle bar up or down, as required, then securely tighten the set screw (A).

To Adjust the Needle Thread Take-up and Slack Thread Regulator

The needle thread take-up (C, Fig. 6) is usually set so that the bottom of the take-up is flush with the bottom of its holder. The take-up can be raised or lowered after loosening the screw (B, Fig. 6).

The slack thread regulator (D, Fig. 6) should be set so that when the loopers are shedding the needle loops on their backward stroke, the thread will not snap off the points of the loopers nor be drawn through the tension discs. To set the slack thread regulator, it is best to start with the regulator in a low position and then continue raising the regulator until the loopers back out of the needle loops with a little tension on the thread. To make this adjustment, loosen the clamping screw (F, Fig. 3) and raise or lower the slack thread regulator (D), as may be required, then securely tighten the clamping screw (F).

To Adjust the Automatic Thread Nipper

The automatic thread nipper (E, Fig. 6) should be adjusted to lock the threads as the loopers shed the needle threads on their backward stroke and to release the threads during the forward stroke of the loopers and before the loopers tighten the needle threads.

To adjust the automatic thread nipper (E) to release the thread earlier, loosen the screw (F, Fig. 6) and raise the nipper releasing cam (G, Fig. 6). To release the thread later, lower the nipper cam (G). When the automatic thread nipper is correctly adjusted, securely tighten the screw (F).

To Raise or Lower the Feed Dog

The feed dog should be set so that when it is raised to its highest point by the feed rocking frame, practically the full depth of the teeth will project above the top surface of the throat plate. The feed dog can be raised or lowered to the desired height after loosening the screw which holds it in position. When the feed dog is set at the required height, securely tighten the screw.

The height of the feed dog is determined by the stop screw which is located underneath it. Remove the feed dog and turn this stop screw to the right or left as required.

To centre the feed dog in the slots in the throat plate, loosen the upper adjusting screw (L, Fig. 6) and tighten the lower adjusting screw (K, Fig. 6), or vice versa, as may be required.

To Set the Loopers the Correct Distance from Centre of Needles

When the needle bar is at its lowest point, the distance from the centre of each needle to the point of its looper should be about

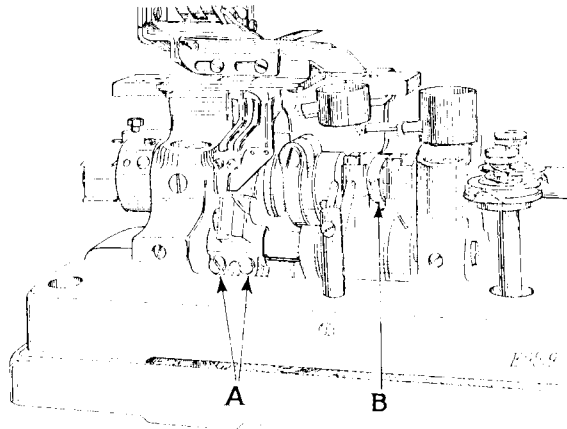


FIG. 7. ADJUSTMENTS ON THE MACHINE

$\frac{3}{16}$ inch. To set the points of the loopers the correct distance from the centre of the needles, loosen the two screws (A, Fig. 7) and move the looper holder bracket as required, then securely tighten the two screws (A).

To Time the Needle Avoiding Motion of the Loopers

The needle avoiding motion of the loopers should be timed so that the loopers will pass as close to the needles as possible, on their forward and backward strokes, without touching the needles. To make this adjustment, loosen the three screws in the needle avoiding eccentric (B, Fig. 7) and turn the eccentric in the required direction, after which securely tighten the three screws.

The Loop Spreader

The purpose of the spreader (A, Fig. 8) on the underside of the throat plate, is to spread and hold the looper threads so as to permit the points of the needles on their downward stroke to enter the triangles as shown in Fig. 8.

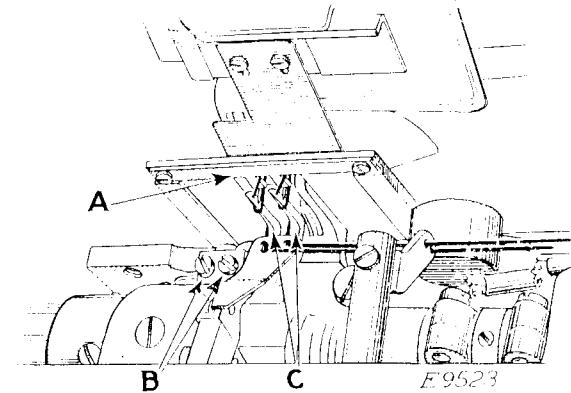


FIG. 8

To Set the Loopers the Correct Distance from the Spreader

The loopers (C, Fig. 8) should be set so that there is a clearance of about .003 to .005 inch between the spreader and the loopers.

The correct distance may be obtained by loosening the two screws (B, Fig. 8) and inserting a piece of ordinary paper between the spreader and the loopers. Raise or lower the loopers until there is a slight tension on the paper, then securely tighten the two screws (B, Fig. 8).

To Adjust the Needle Thread Tension Releaser

The function of the needle thread tension releaser is to release the tension on the needle threads when the presser foot is raised. In case the tension releaser does not properly release the threads, loosen the set screw (B, Fig. 3) and turn the shaft (A, Fig. 2) over to the left until the correct adjustment is obtained, then securely tighten the set screw (B).

INSTRUCTIONS FOR ADJUSTING THE RUFFLING MECHANISM

To Adjust Upper Edge Folder and Heading Guide

The upper edge folder and the heading guide can be moved upwardly or downwardly and to the right or left after loosening

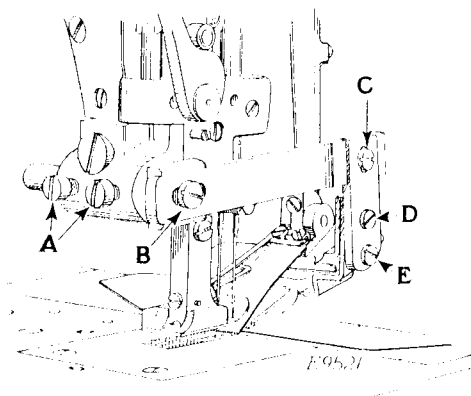


FIG. 9. ADJUSTMENTS OF UPPER FOLDER AND HEADING GUIDE

the two screws (A, Fig. 9) at the rear of the machine. The upper edge folder and the heading guide can also be moved upwardly or downwardly after loosening the screw (C, Fig. 9). The upper edge folder can be moved to the right or left independently of the heading guide after loosening the two screws (J, Fig. 10) underneath the upper folder. The upper edge folder and the heading guide can be moved toward the feed or away from it after loosening the screw (B, Fig. 9).

To Adjust the Lower Edge Folder

The lower edge folder can be moved to the right or left after loosening the two screws (H, Fig. 10).

To Change the Position of the Separating Blade

The point of the separating blade can be raised or lowered after loosening the two screws (D and E, Fig. 9).

The separating blade can be moved toward the feed or away from it after loosening the two screws (G, Fig. 10) on the underside of the blade.

To Regulate the Tension on the Ruffling Blade

The tension on the ruffling blade is regulated by the screw which is locked by the nut at F, Fig. 10. To increase the tension, turn this screw over to the right. To decrease the tension, turn this screw over to the left.

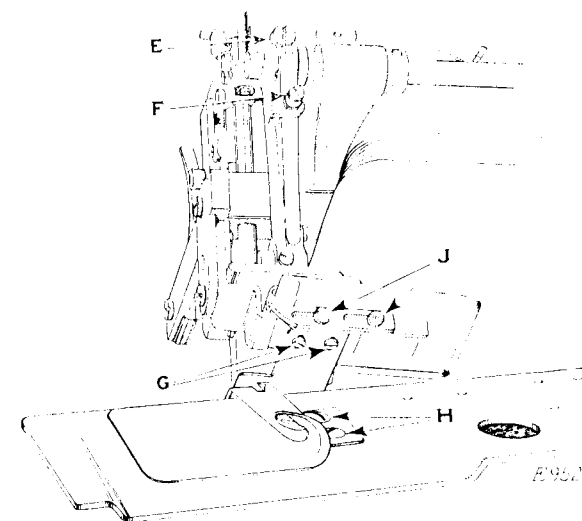


FIG. 10. ADJUSTMENTS OF UPPER AND LOWER FOLDERS, SEPARATING BLADE AND RUFFLING BLADE

To Change the Position of the Ruffling Blade

The ruffling blade can be moved to the right or left and toward the feed or away from it after loosening the screw (E, Fig. 10).

To Regulate the Amount of Fullness of the Ruffles

The length of stroke of the ruffling blade determines the amount of fullness of the ruffles. For more fullness, loosen the screw (K, Fig. 11) and move the regulator stop (L, Fig. 11) downwardly. For less fullness, move the regulator stop (L) upwardly. Having set the regulator stop (L) in the desired position, securely tighten the screw (K).

Additional fullness in the ruffles, when turning corners, is obtained by moving the knee plate (Q, Fig. 12) to the right as far as it will go. The position of the stop (M, Fig. 11) determines the amount of additional fullness. When the stop (M) is at its lowest position, the maximum amount of additional fullness is obtained. When this stop is at its highest position, no additional fullness is obtained. To make this adjustment, loosen the screw which holds the stop in position and raise or lower the stop (M) as desired, then securely tighten the screw.

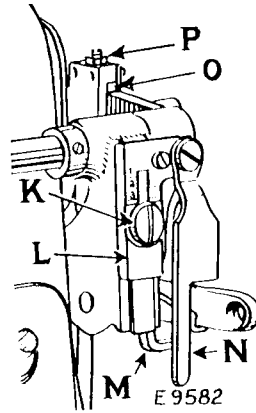


FIG. 11. ADJUSTMENTS
OF RUFFLING
MECHANISM

To Adjust the Ruffling Blade Regulator Wearing Block

The ruffling blade regulator wearing block (O, Fig. 11) should be adjusted by means of the screw and nut (P, Fig. 11) so that the block slides on the ruffling blade regulator segment without play between the block and the segment.

To Throw the Ruffling Blade In and Out of Operation

To throw the ruffling blade out of operation, move the hand lever (N, Fig. 11) to the left. To throw the ruffling blade in operation, press the knee plate (Q, Fig. 12) to the right.

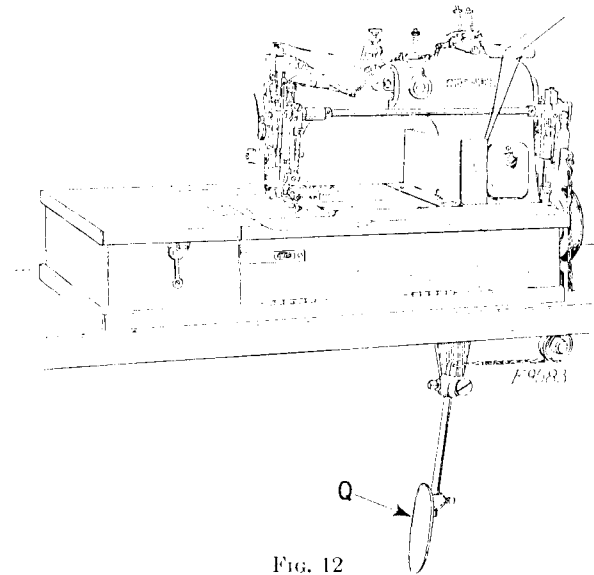


FIG. 12