SINGER
242-1

USE ONLY SINGER OILS and LUBRICANTS

They insure freedom from lubricating trouble and give longer life to sewing equipment

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Singer Oil for High Speed Sewing Machines
(Cloth and Leather)

For all manufacturing sewing machines.

Singer Motor Oil

For oil-lubricated motors, power tables, transmitters and machinery in general.

Singer Stainless Thread Lubricant

For lubricating the needle thread of sewing machines for stitching fabrics or leather where a stainless thread lubricant is required.

NOTE: All of the above oils are available in 1 quart, 2 quart, 1 gallon and 5 gallon cans or in 55 gallon drums, and can also be supplied in customer's containers.

Singer Ball Bearing Lubricant

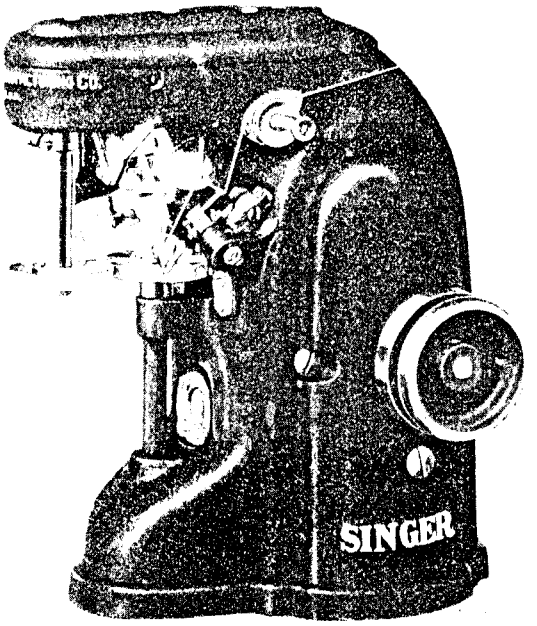
This pure grease is specially designed for the lubrication of ball bearings and ball thrust bearings of motors and electric transmitters, ball bearing hangers of power tables, etc. *Furnished in ¼ lb. tubes and 1 lb. and 4 lb. tins.*

19537

INSTRUCTIONS

For Using and Adjusting

SINGER HOSIERY SEAMER



242-1

TWO OR THREE-THREAD OVEREDGE STITCH

THE SINGER MANUFACTURING CO.

To all whom it may concern:

The placing or renewal of the name "Singer" (Reg. U. S. Pat. Off.) or any of the trade marks of The Singer Manufacturing Company on any machine that has been repaired, rebuilt, reconditioned, or altered in any way whatsoever outside a Singer factory or an authorized Singer agency is forbidden.

THE IMPORTANCE OF USING GENUINE SINGER PARTS AND NEEDLES IN SINGER MACHINES

The successful operation of Singer machines can only be assured if genuine Singer parts and needles are used. Supplies are available at all Singer Shops for the Manufacturing Trade and mail orders will receive prompt attention.

Genuine Singer Needles should be used in Singer Machines.
These Needles and their Containers are marked with the Company's Trade Mark "SIMANCO."

Needles in Containers marked "For Singer Machines" are not Singer made needles.

DESCRIPTION

SINGER MACHINE 242-1 is designed for seaming hosiery at high speed and with the utmost ease for the operator. Its design incorporates both beauty and utility. All main bearings of the mechanism operate in a bath of oil. All necessary adjustments are easily accessible. The machine is regularly equipped for making a two-thread overedge seam, but a three-thread stitch may also be made. A built-in electric lamp throws light where it is most needed.

SPEED

The maximum speed recommended for this machine is 4500 R.P.M. It is usually advisable to start a new machine at about 3000 R.P.M. until the operator becomes accustomed to it and is able to handle a higher speed.

The balance wheel on this machine turns away from the operator. One wheel has a narrow groove for a round belt and the other a flat-bottomed groove for a 3/8 inch "V" belt. The proper driving wheel should be placed at the right side of the machine, the left wheel serving as a hand wheel.

CAUTION

Do not attempt to run this machine until the oil reservoir has been filled as instructed on page 5.

Setting Up the Machine

Carefully unpack the machine, making sure that no parts are left in the packing. Clean the machine carefully, but do not attempt any adjustments until after the machine has been sewing, as it was placed in sewing condition before it left the factory.

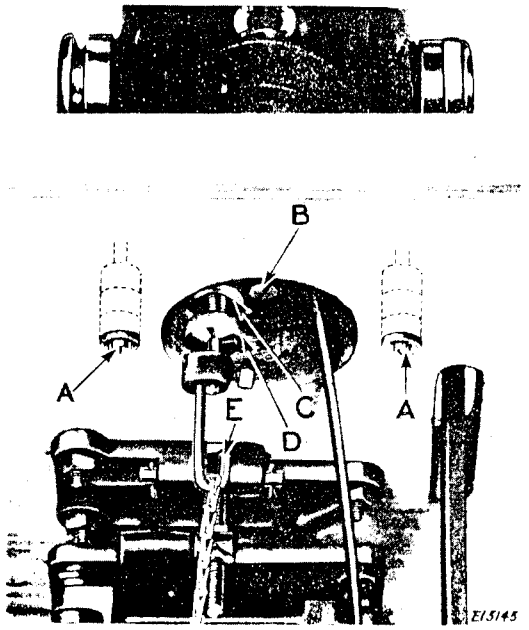


Fig. 2. Machine 242-1 on Individual Table and Stand with Singer Electric Transmitter

Secure the machine-base felt cushion to the bottom of the machine with the two large screws (A) after they have been inserted through the three small felt cushions as shown above. Place the machine in position on the table and attach the hook (E) for the treadle chain to the feeding cup opening lever pull rod. The treadle chain need not be exactly vertical but should pull as nearly straight as possible.

Lubrication

BEFORE STARTING THE MACHINE, remove the plug (M,Fig.10) at the rear of the machine, insert a funnel, and pour "Singer Heavy Grade Oil for High Speed Sewing Machines (Cloth and Leather)" into the reservoir until the oil level is slightly above the center of the gauge (F,Fig.3) at the front of the machine (about 1-1/2 qts.). Replace and tighten the plug.

The oil level is in view of the operator at all times, and should never be allowed to go below the center of the window (F).

OIL DRAIN. Oil may be drained from the reservoir by removing the oil drain plug (B) shown in Fig. 2.

TWICE A DAY (when in continuous use), apply a few drops of oil to each of the eight oil holes indicated in Figs. 3, 6 and 12, then carefully wipe clean.

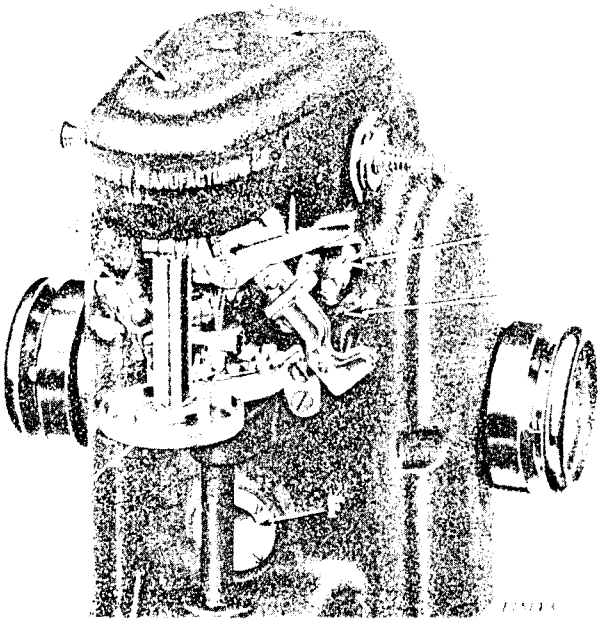


Fig. 3. Oiling the Machine

Needles

Needles for Machine 242-1 are of Class and Variety 150x1 which are made in sizes 8, 9 and 10.

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 machine cannot stitch perfectly.

Orders for needles must specify the QUANTITY required, the SIZE number, and the CLASS and VARIETY numbers separated by the letter x.

The following is an example of an intelligible order:

"100 No.9, 150x1 Needles"

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

To Set the Needle for Two or Three Thread Stitch

Turn the balance wheel until the needle bar is all the way back, as this position will allow the most room for inserting the needle. Loosen the needle clamp screw and insert the needle, with tweezers, into the clamp as far as it will go with the looper clearance scarf (near the eye) at the top and the eye of the needle about 20 degrees from vertical, toward the left.

Three-Thread Stitch

The machine will be furnished to make the three-thread stitch if so ordered, or it may be converted at any time by adding a tension assembly as shown in Fig.6, and substituting a looper for the spreader.

To Thread the Needle

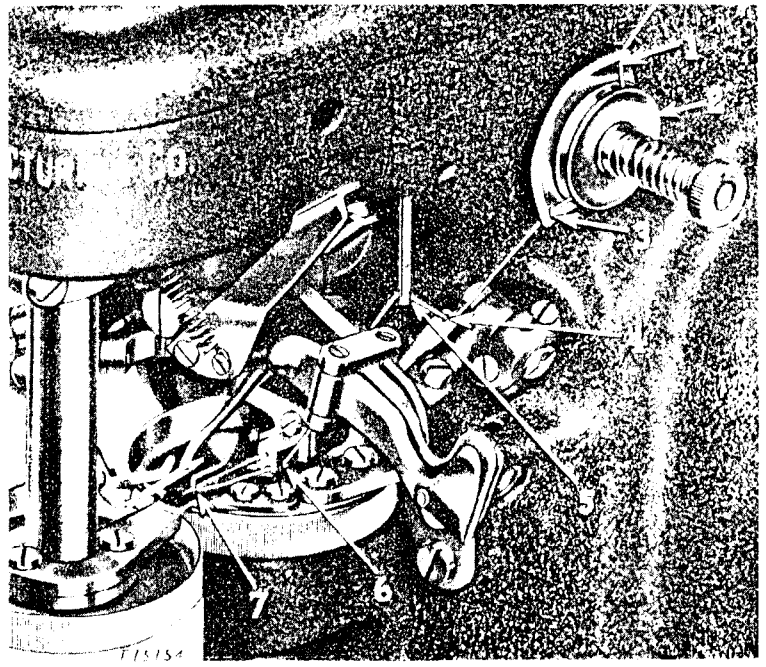


Fig. 4. Threading the Needle

Pass the thread from the unwinder, down through the upper eyelet (1) in the tension bracket, around between the tension discs (2), through the eyelet (3), from back to front through the eyelets in the thread take-up (4) and the thread guide (5), down through the hole (6) in the needle clamp, then up through the eye of the needle (7). Leave about three inches of thread through the eye of the needle with which to commence sewing.

To Thread the Looper

Pass the thread from the unwinder down through the upper eyelet (1) in the tension bracket, around between the tension discs

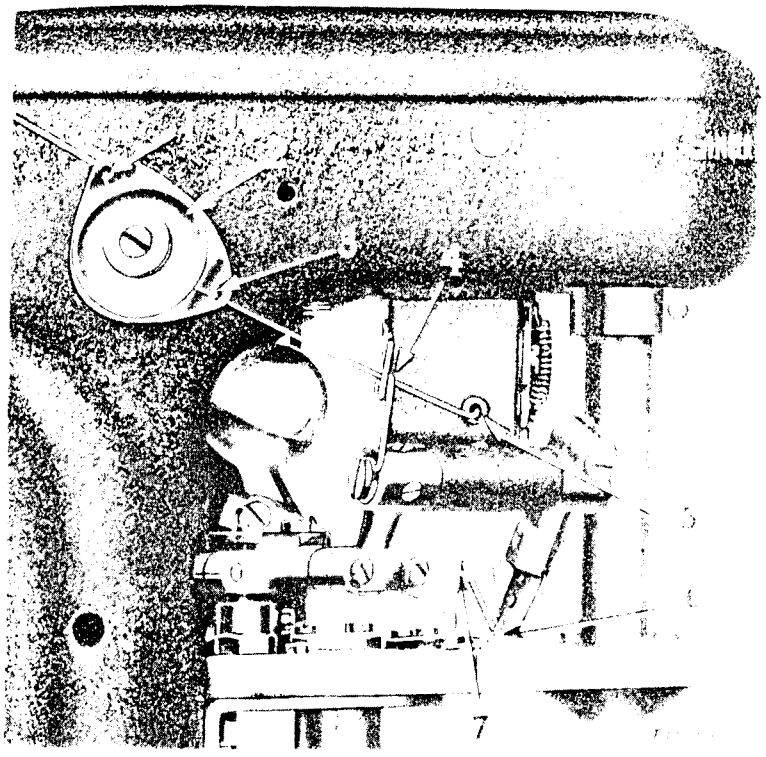


Fig. 5. Threading the Looper

(2), through the eyelet (3), through the wire guide (4), through the hole (5) in the machine bracket, toward you through the hole (6) in the heel of the looper, and away from you through the eye (7) of the looper. Leave about three inches of thread through the eye with which to commence sewing.

To Thread the Right-Hand Looper

(For Three-Thread Chain Stitch)

The machine may be converted to make the three-thread stitch by attaching a thread tension assembly to the left side of the machine and replacing the spreader with a thread carrying looper as shown in Fig. 6. This looper is set in the same manner as the spreader. (See page 15).

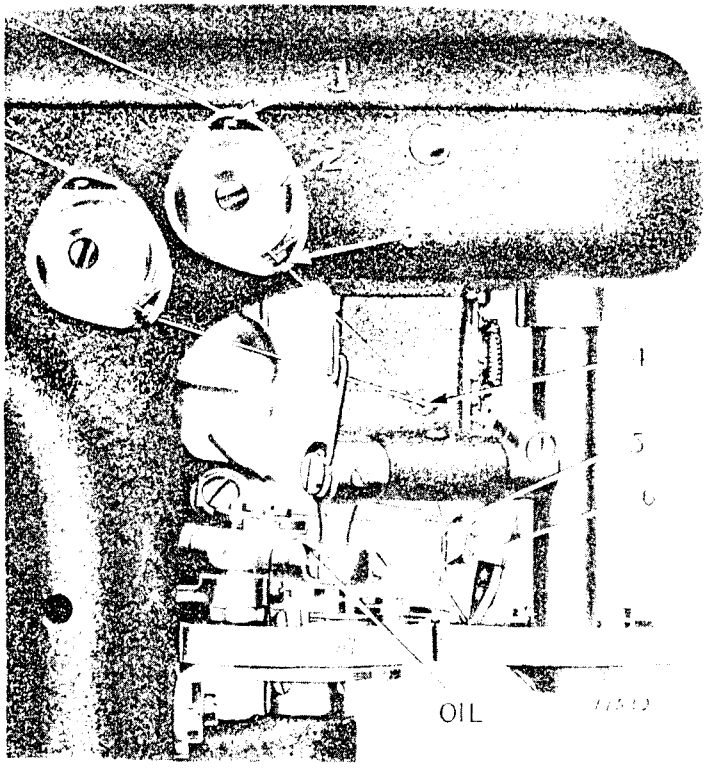


Fig. 6. Right Hand Looper Threaded

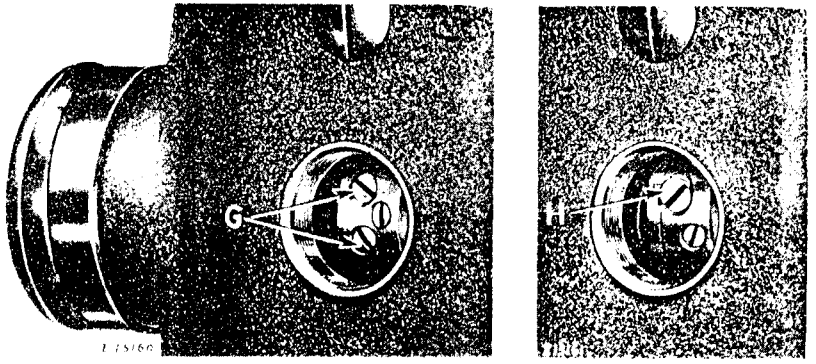
To thread the right hand looper, pass the thread from the unwinder down through the upper eyelet (1,Fig.6) in the tension bracket, around between the tension discs (2), through the eyelet (3), through the hole (4) in the machine bracket, down and to the right through the hole (5) in the heel of the looper, and to the left through the eye (6) of the looper. Leave about three inches of thread through the eye with which to commence sewing.

Tensions

The tension on the threads is controlled by the thumb nuts at the front of each set of tension discs. This tension should always be as light as conditions will permit.

Regulating Length of Stitch

Remove the large plug from the back of the machine and, with a screwdriver, loosen the two locking screws (G,Fig.7) in the



Figs. 7 and 7A. Locking and Adjusting Screws in Feed Eccentric

feed eccentric. Then turn the handwheel until the large adjusting screw (H) comes into view; turn this adjusting screw to the right for a shorter stitch or to the left for a longer stitch. When the desired length of stitch is obtained, securely tighten the two locking screws (G). Do not run the machine except by hand while the plug is out, as oil would be thrown out.

Pressure of Feeding Cups

The pressure holding the feeding cups closed may be regulated by turning the large thumb screw (D,Fig.2), underneath the table, to the right or left after loosening the lock nut (C,Fig.2). This pressure should be only heavy enough to insure positive feeding and not so heavy as to damage the stocking material.

Amount of Opening of Feeding Cups

The amount of opening between the feeding cups is controlled by the two screws (J and K,Fig.8) at the top of the machine. The rear screw (K) controls the maximum amount of opening, which

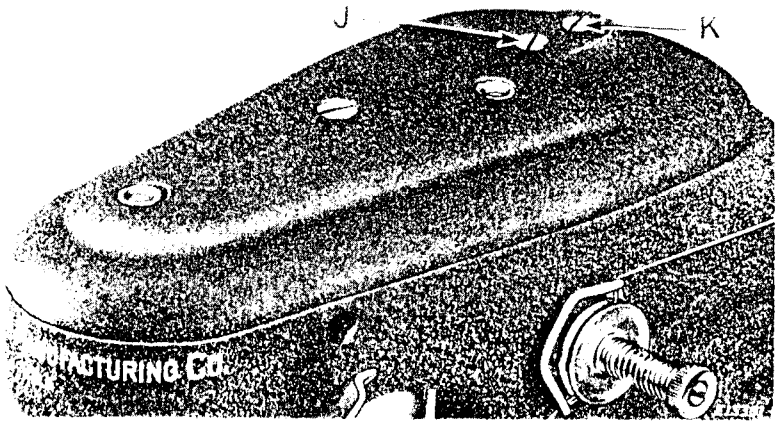


Fig. 8. Adjustment for Opening of Feeding Cups

should ordinarily be about 3/32 inch. Turning this screw to the left will permit the front cup to open further, or turning to the right will decrease the opening. The front screw (J) should ordinarily be turned all the way to the right, allowing the cups to close completely, but if a small clearance is desired between the cups when the feeding cup opening treadle is released, then the front screw may be turned to the left until the desired minimum opening is obtained.

INSTRUCTIONS
FOR
ADJUSTERS AND MECHANICS

To Set the Needle Bar

Remove the needle, take out the two screws (Y,Fig.11) and remove the fabric guide assembly, remove the two screws (S) and take off the needle guide. Now insert the gauge needle (L,Fig.9) into the needle clamp and push it in as far as it will go. When the needle bar is at its extreme backward position, the front end of the gauge needle should be flush with the outside edge of the rear feed cup as shown in Fig. 9.

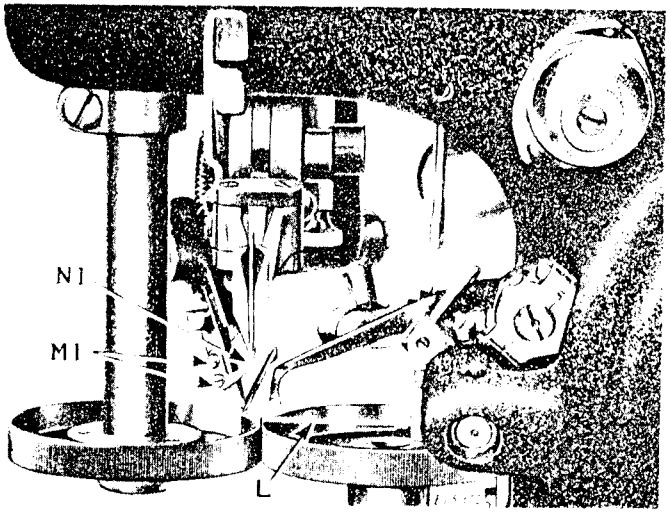


Fig. 9. Correct Setting of Needle Bar

If the needle bar is not set correctly, remove the plug above the left hand wheel and, with the needle bar all the way back, insert a screwdriver and loosen the needle bar set screw (N,Fig. 10). When the needle bar is set as instructed above, securely tighten the set screw and replace the plug, fabric guide, needle guide and needle. (See page 14 for setting the fabric guide.)

To Adjust the Amount of Bight

The amount of bight of the stitch is determined by the height above the needle of the uncurler (A1,Fig.11) and the chaining finger (U). The chaining finger may be raised or lowered by

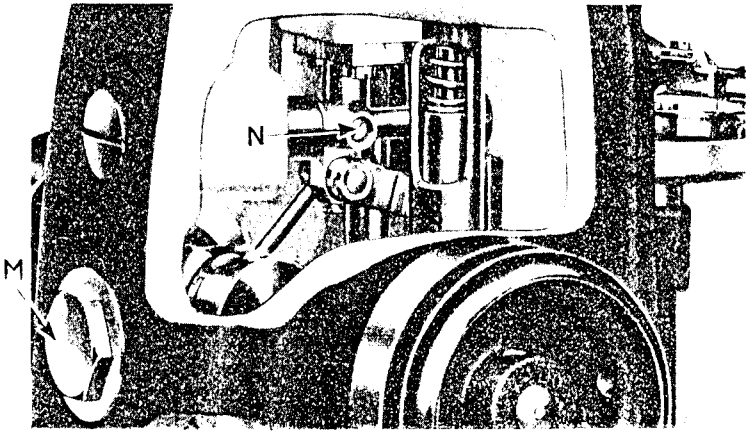


Fig. 10. Needle Bar Set Screw

adding or removing shims (at W). Each shim is .005 inch in thickness. Three shims are used when the machine leaves the factory, and one more is sent with the machine. When replacing the chaining finger, see that its point is centered between the feeding cups before tightening the screws. Various size chaining fingers are available and will be furnished when ordered. (See page 15 for adjusting height of uncurler).

The needle may be raised or lowered after loosening the screw (L1,Fig.11). It should ordinarily be set about .003 inch above the feed cups (the thickness of a sheet of note paper).

To Set the Looper

When the needle bar is all the way forward, the point of the looper (at R,Fig.11) should be about 1/16 inch from the needle. To set the looper, loosen the clamping screw (P,Fig.11) and move it to the correct position. The looper may be raised or lowered so that it barely clears the needle, after loosening the screw (Q,Fig.11). The looper needle guard (N1,Fig.9) prevents the needle from being deflected into the path of the looper. It should be set, after loosening screws (M1,Fig.9), so that it just touches but does not deflect the needle when the looper is in the position shown in Fig.11.

Correct Position of Fabric Guide and Needle Guide, etc.

In case of replacements or accidental loosening of any of the parts around the feeding cups so that correct adjustment of the

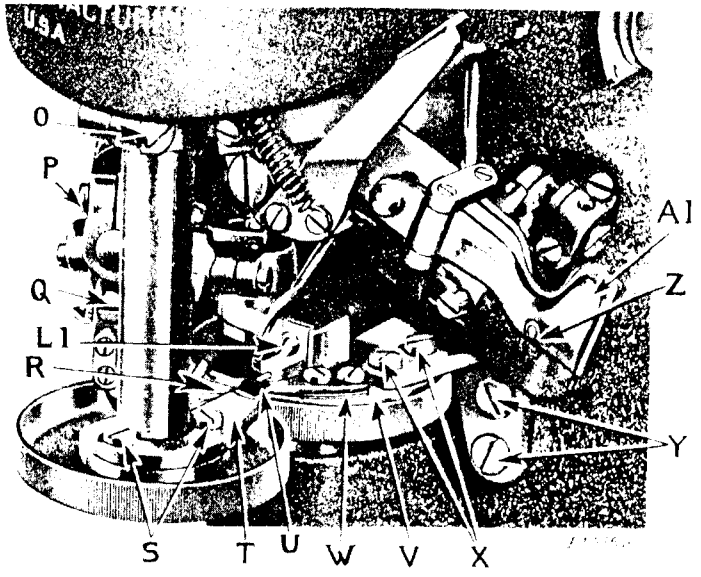


Fig. 11.

needle or looper cannot be obtained, the following relations should be checked in the order given:

The rear feeding cup should rest against the frame casting and should have no end play in its shaft. The top of the front cup should be at the same height as the top of the rear one (loosen bushing clamp screw O, Fig.11 to adjust). The fabric guide (V,Fig.11) should set very close to the top of the feeding cup (loosen screws Y) but neither this guide nor the needle guide (T) should project beyond the bottom of the teeth of their respective feeding cup and both should be aligned with the needle (screws X and S). The top edge of the front feed cup should rest against the recessed face of the needle guide so that there is no play nor undue friction between the two. When replacing the needle guide with a new one, loosen the sprocket screws and clamping screw (O,Fig.11) and set the front feed cup in proper relation to the needle guide and rear feed cup. See Page 13 for setting of chaining finger.

To Set the Spreader or Right-Hand Looper

The spreader (F1,Fig.12) should be set so that its front point just clears the looper and should be far enough down s

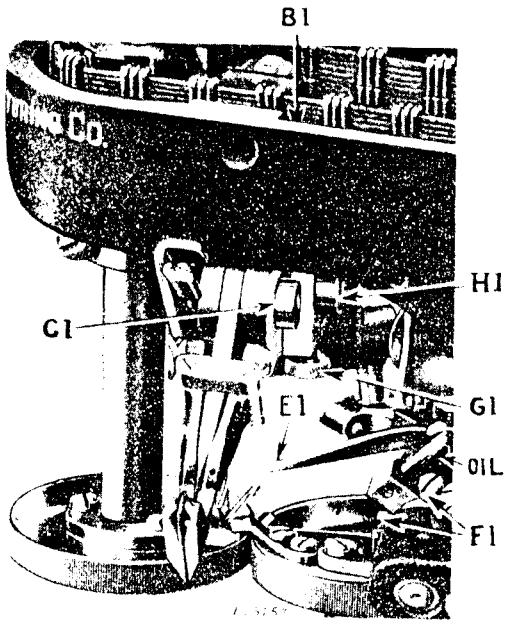


Fig. 12. Spreader and Uncurler Adjustments

that the needle point passes at least 1/32 inch above the triangular notch in the spreader when it passes through the loop of thread on the spreader. Sufficient clearance between the spreader and the needle is important.

The spreader can be correctly set after loosening the screw which holds it to the shaft, and also the two set screws (F1,Fig. 12) in the spreader shaft crank.

Uncurler Adjustments

The uncurler should be centered between the (closed) feeding cups so that the two uncurler plates can open the same amount before striking the cups. To center the uncurler, loosen the large screw (at B1,Fig.12) which holds the uncurler to the frame. The uncurler should also be far enough from the needle so that the