

SINGER
147-140

USE SINGER® OILS and LUBRICANTS

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

The following are the correct lubricants for this machine:

TYPE B — MANUFACTURING MACHINE OIL, HEAVY GRADE

When an oil is desired which will produce a minimum of stain on fabrics, even after a long period of storage, use:

TYPE D — MANUFACTURING MACHINE OIL, HEAVY GRADE

OTHER SINGER LUBRICANTS

TYPE E — THREAD LUBRICANT

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

TYPE F — MOTOR OIL

For oil lubricated motors and plain bearings in power tables and transmitters.

NOTE: All of the above oils are available in 1 quart, 1 gallon and 5 gallon cans.

GEAR LUBRICANT

This specially prepared grease is recommended for gear lubrication on manufacturing sewing machines.

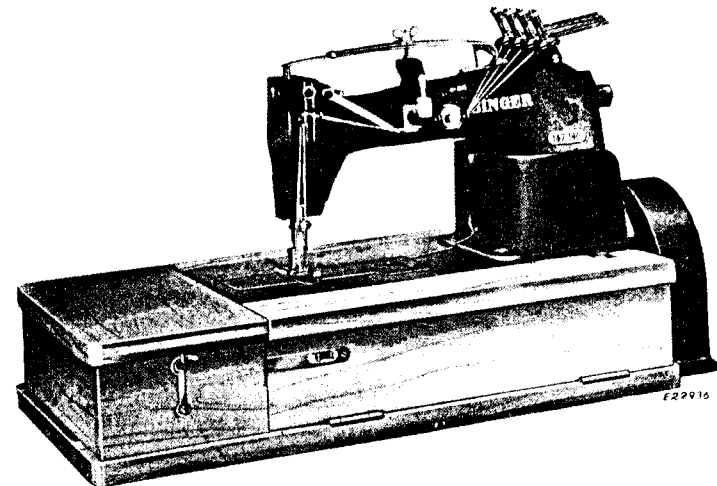
BALL BEARING LUBRICANT

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 1 lb. and 4 lb. tins.

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INSTRUCTIONS FOR USING SINGER® SEWING MACHINE 147-140

FOUR NEEDLES TWO LOOPERS
THREE-THREAD CHAIN STITCH
AUTOMATIC OILING SYSTEM



CAUTION: Special attention is called to the lubricating instructions on pages 4 to 9.

THE SINGER MANUFACTURING COMPANY

*A Trade Mark of THE SINGER MANUFACTURING COMPANY

TO ALL WHOM IT MAY CONCERN:

The improper placing or renewal of the Trade Mark "SINGER" or any other of the Trade Marks of The Singer Manufacturing Company (all of which are duly Registered Trade Marks) 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 SINGER* PARTS AND NEEDLES IN SINGER MACHINES

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

SINGER Needles should be used
in SINGER Machines
These Needles and their Containers
are marked with the
Company's Trade Mark "SIMANCO.*" 1

Needles in Containers marked
"FOR SINGER MACHINES"
are NOT SINGER made needles. 2

DESCRIPTION

Machine 147-140 has four needles, two loopers and a drop feed. Producing two double-rows of three-thread chain stitching, Federal Stitch Type #402, this machine is designed for shoe tipping and ornamental stitching on soft leather.

Upper and under thread nippers are furnished to aid in setting the stitch.

The length of stitch is adjustable from 6 to 16 stitches to the inch.

NEEDLE GAUGES (See chart on page 10):

1/32 to 5/64 inch between first and second needles.

1/8 to 13/32 inch between second and third needles.

1/32 to 5/64 inch between third and fourth needles.

Greatest distance from first to fourth needles **must not exceed 1/2 inch.**

The needle bar stroke is 1-1/8 inches.

Working space at right of needles is 8-1/4 inches.

An automatic oiling system with a central reservoir lubricates, by splash and through tubing, all the principal bearings in the machine. **See pages 4, 8 and 9.**

Arm rotary shaft is **counterbalanced**. This shaft is fitted with **ball bearings** for the intermediate and rear bearings adjacent to machine pulley.

Machine pulley 131914 for 3/8 inch V-belt is regularly furnished.

The machine is regularly supplied with a foot lifter. A knee lifter will be furnished instead of a foot lifter, when specified on order.

Bench stands are furnished only at an additional charge.

Machine base is 16-1/2 inches long.

When the machine is in operation, the top of the machine pulley **must always turn over away from the operator.**

TO OIL THE MACHINE

Use "TYPE B" or "TYPE D" OIL, sold by Singer Sewing Machine Company. For description of these oils, see inside front cover of this book.

Automatic Oiling System: An agitator on the lower end of the connecting rod contacts the oil in the central reservoir, at each revolution of the main shaft, lubricating various bearings **inside** the arm by splash. Pipes and wicks distribute oil to the principal bearings **outside** of the arm. See diagrams on **pages 8 and 9** showing distribution of oil.

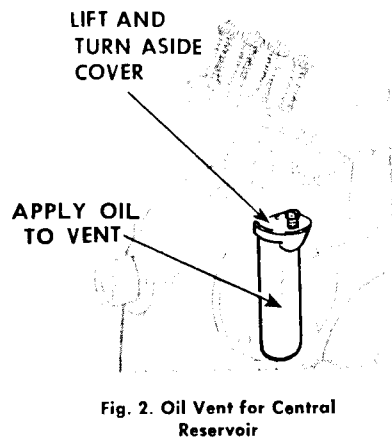


Fig. 2. Oil Vent for Central Reservoir

To insure operation of this system and to avoid serious damage to the machine, the following instructions should be carefully observed.

A new machine, or one that has been idle for some time, must be oiled, as described below and on **pages 5 to 7**.

CAUTION: The cover over the oil vent in **Fig. 2**, must be kept closed at all times, except when oiling.

Never permit oil level to drop more than 1/4 inch below level indicated on gauge in **Fig. 3**, when the machine is at rest.

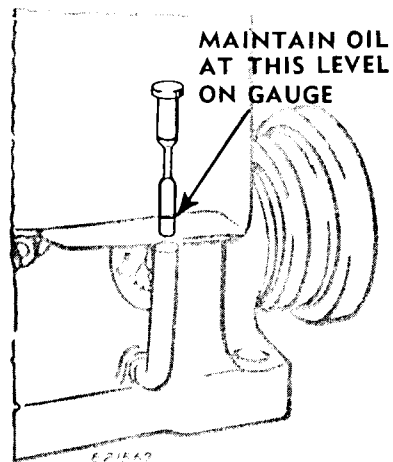


Fig. 3. Oil Gauge

Before further oiling, remove the right hand slide plate and the face plate. The work plate, throat plate and other parts of the machine are removed in **Figs. 5 and 6** for the purpose of illustration only.

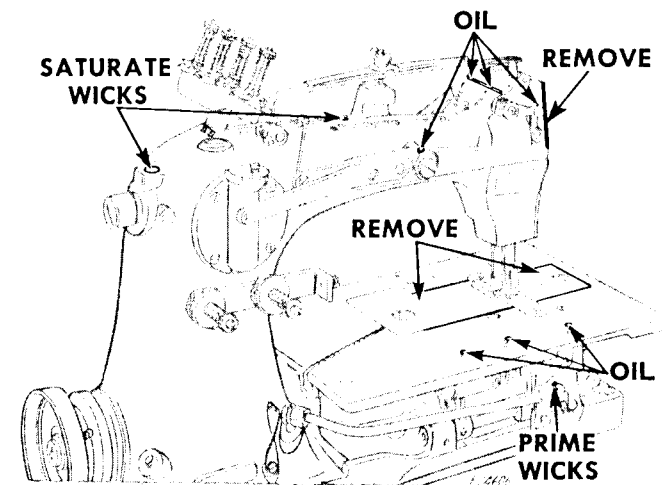


Fig. 4. Priming and Oiling Points in Rear and on Top of Machine

The main oil pipe should be filled to **overflowing**, to aid in priming the various oil wicks.

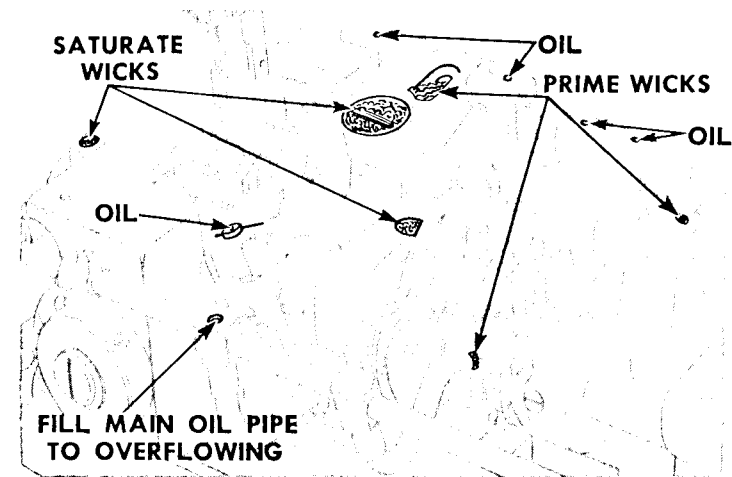


Fig. 5. Main Oil Pipe

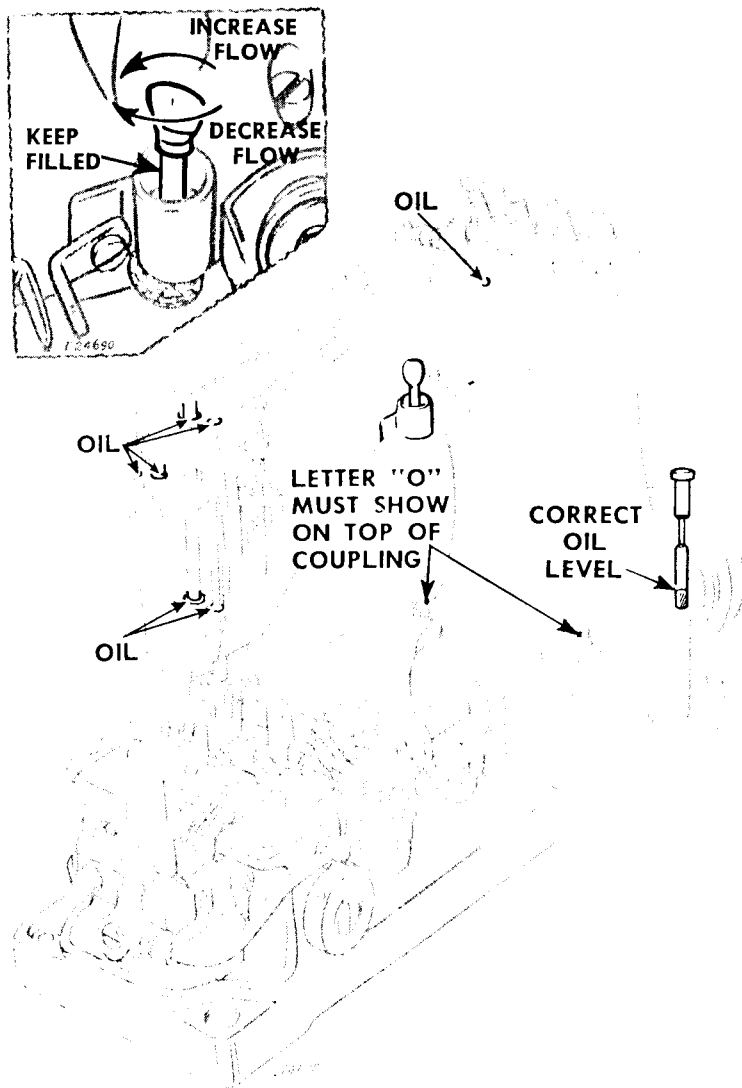


Fig. 6. Showing Position of Oil Couplings

NOTE: The letter "o" marked on the front and rear couplings, see Fig. 6, must always be at the top, to insure that the oil spoon, attached to the inner end of each coupling, is open-side up to receive oil.

Fill oil cup for needle thread lubricator, as instructed in inset at top left of Fig. 6. Use "TYPE E" THREAD LUBRICANT sold by Singer Sewing Machine Company.

Adjust lubricator, (as instructed in inset at top left corner of Fig. 6) to regulate flow of lubricant to needle threads.

IMPORTANT FOR NEW MACHINES (and machines that have been idle for a considerable time): After oil has been applied to all wicks, oil holes and places where parts are in movable contact, as instructed in Figs. 2 to 6, fill the oil cup illustrated in Fig. 7. Then run the machine at a moderate speed for five minutes. Stop the machine. Let it stand idle for a few minutes. Check oil level in reservoir. If necessary, add sufficient oil to bring it to level indicated in Fig. 6, on gauge.

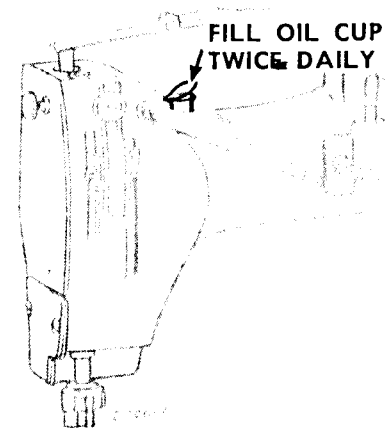


Fig. 7. Oil Cup

A MACHINE IN DAILY USE must be oiled twice each day, in the following manner:

1. Apply oil to all oil holes marked "OIL".
2. Fill oil cup illustrated in Fig. 7.
3. Check oil level in reservoir, as instructed in Fig. 2, and add oil through oil vent, when necessary, as instructed in Fig. 3, page 4.

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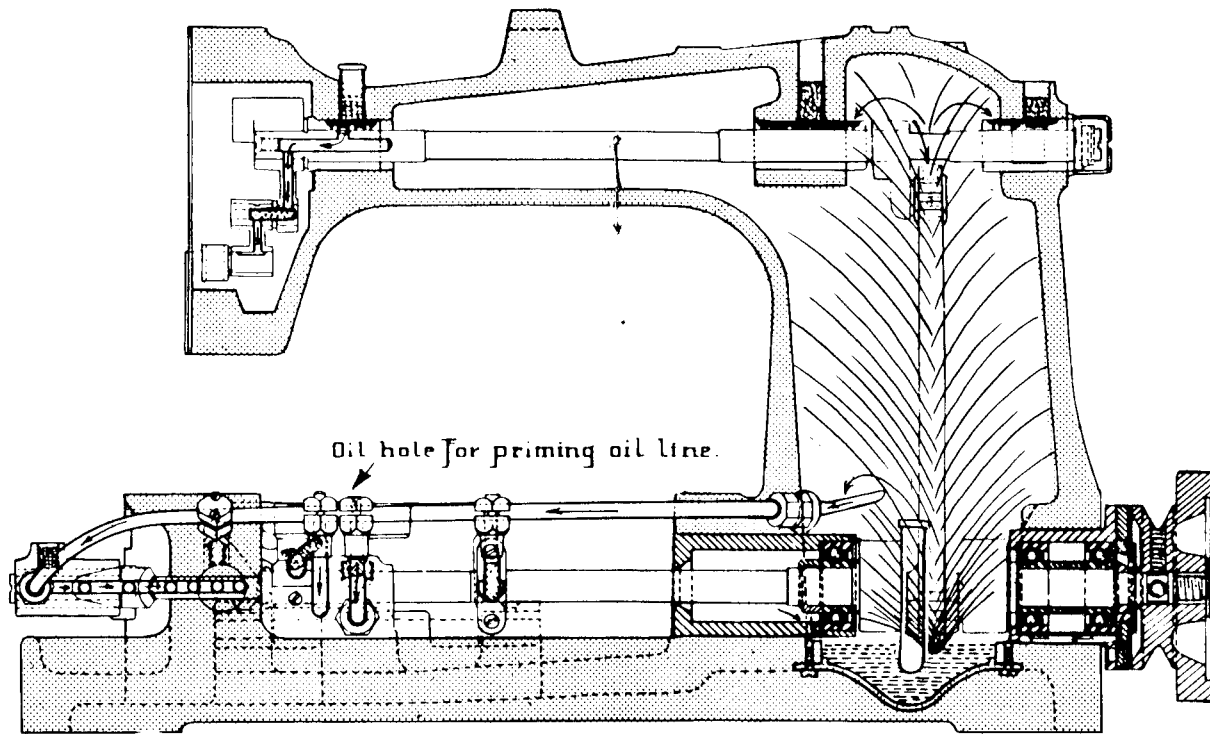
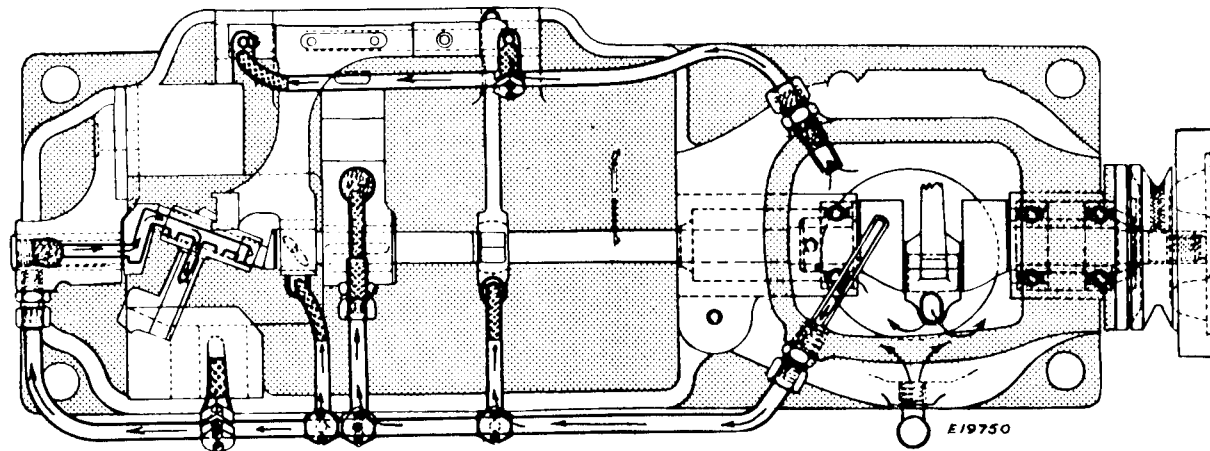


Fig. 8.
Diagrams of Machine
showing wicks and bearings
oiled by automatic splash;
also bearings oiled by
gravity through tubes on
outside of the machine.



NEEDLES recommended for Machine 147-140 according to distance between first and second needles and between third and fourth needles:

GAUGE—DISTANCE Between 1st and 2nd Needles and between 3rd and 4th Needles	CLASS AND VARIETY According to gauge and position of needle from left to right in needle clamp				SIZES AVAILABLE
	1st Needle	2nd Needle	3rd Needle	4th Needle	
1/32 inch	62x22	62x24	62x22	62x24	9, 10, 11, 12, 13, 14 and 16 7, 8, 9, 10, 11, 13, 14 and 16
3/64 inch	62x26	62x28	62x26	62x28	9, 10, 11, 12, 13, 14, 16, 17 and 18 9, 10, 11, 13, 14, 16, 17 and 18
1/16 inch	62x30	62x32	62x30	62x32	9, 11, 12, 13, 14, 16, 17, 18, 19, 20 and 21 9, 10, 11, 12, 13, 14, 16, 17, 18, 20 and 21
5/64 inch	(All needles) 62x20				9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 21 and 22

NOTE: Distance between second and third or between first and fourth needles does not affect type of needle required.

◀ Flat on right side of needle shank

▶ Flat on left side of needle shank

NEEDLES

Needles for Machine 147-140 are recommended in accordance with the needle chart shown on page 10.

The Class and Variety to be used for each needle in this machine is finally determined by the needle gauge and the position, from left to right, of the needle in the needle clamp.

The size of the needle to be used is determined by the size of the thread which must pass freely through the needle eye. Rough or uneven thread, or thread which passes with difficulty through the needle eye, will interfere with the proper formation of the stitch.

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. 17, 62 x 20 Needles"

Best stitching will be obtained with needles sold by Singer Sewing Machine Company.

TO SET THE NEEDLES

(See Fig. 9)

Turn machine pulley over away from the operator until needle bar moves up to its highest point. Loosen set screws A, Fig. 9.

MOVE TO
HIGHEST
POINT

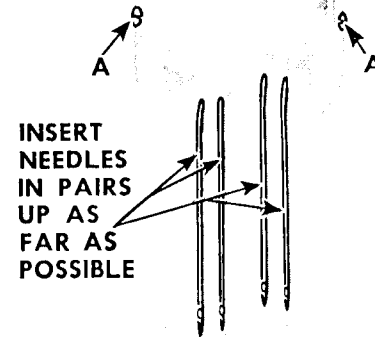


Fig. 9. Setting the Needles

NOTE: Needles are inserted in needle clamp in pairs (See Fig. 9) so that flat on shank of first needle faces flat on shank of second and flat on shank of third needle faces flat on shank of fourth (see footnote under needle chart above).

Insert needles (two on each side) up into needle clamp as far as they will go, as shown in Fig. 9, with single CONTINUOUS groove toward the operator. Then securely tighten the set screw A for each pair of needles.

TO THREAD THE NEEDLES

Turn machine pulley over away from operator until **needle bar** is at its **highest** position.

Pass each thread from unwinder through threading points, in the order shown in **Figs. 10 to 13**.

Solid line indicates thread for **first** (left-hand) needle.

Dotted line indicates thread for **second** needle

Double line indicates thread for **third** needle

Broken (dash) line indicates thread for **fourth** needle

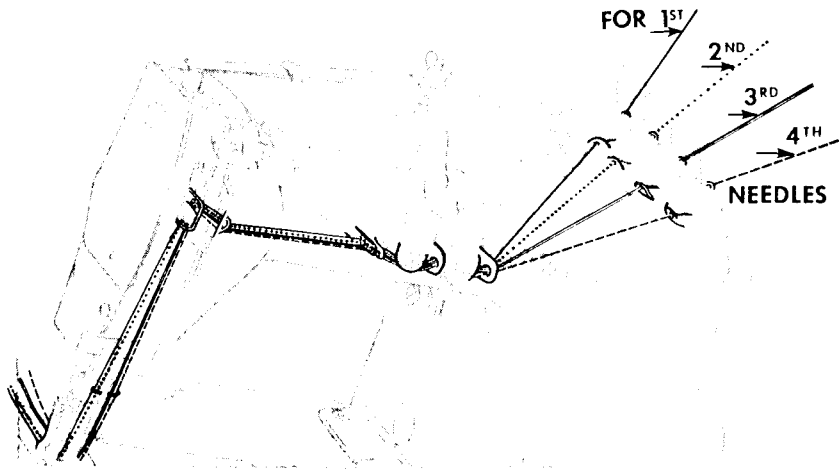


Fig. 10. Complete Upper Threading

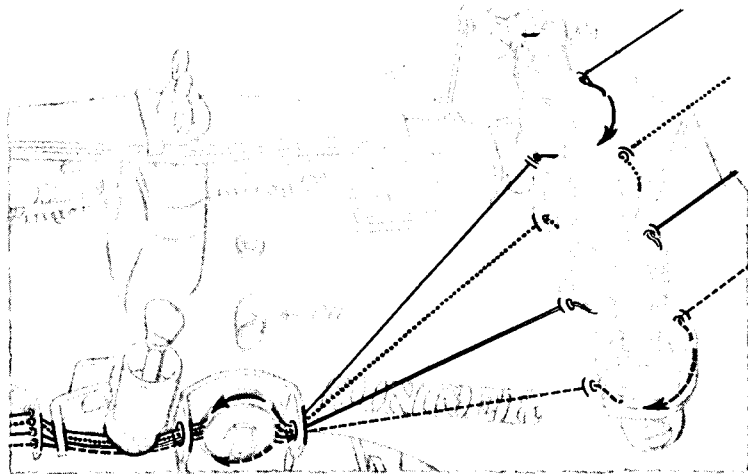


Fig. 11. Threading Needle Tension Assembly

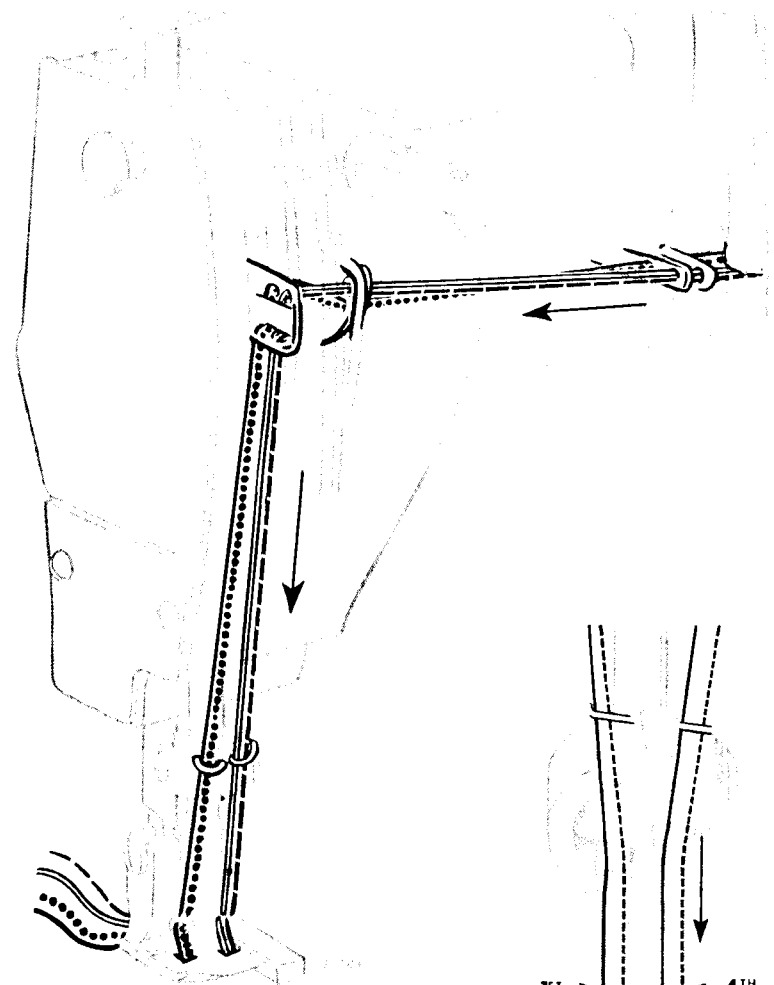


Fig. 12. Threading Needle Thread Take-up.

Draw about two inches of thread through the eye of each needle, with which to commence sewing.

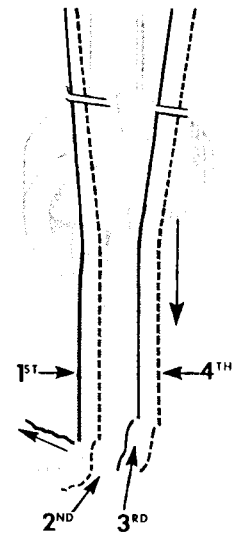


Fig. 13. Threading Needles

TO THREAD THE LOOPERS

Remove the bed slide plate from the machine bed.
 Pass each looper thread from unwinder through threading points, in the order shown in Fig. 14 to 16.
 Dash line indicates thread for rear looper.

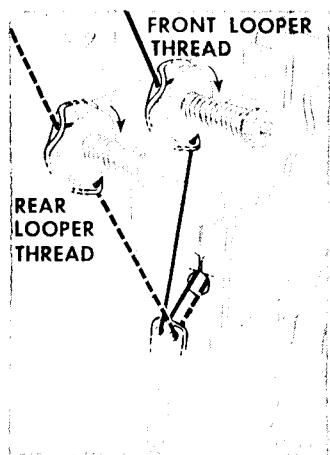


Fig. 14. Threading Looper Tension Discs

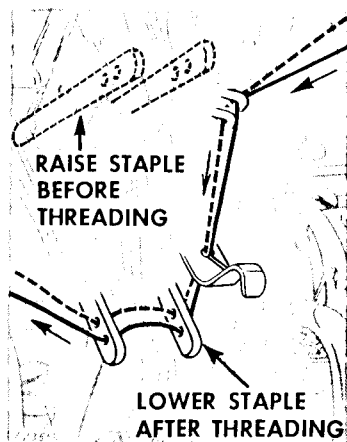


Fig. 15. Threading Looper Take-up

Turn machine pulley over away from operator until loopers are just beginning their backward stroke. Thread looper shank. Move loopers to end of backward stroke (extreme right-hand position) and thread the eye of each looper. Threaded loopers are shown in detail in circular inset at bottom left of Fig. 16.

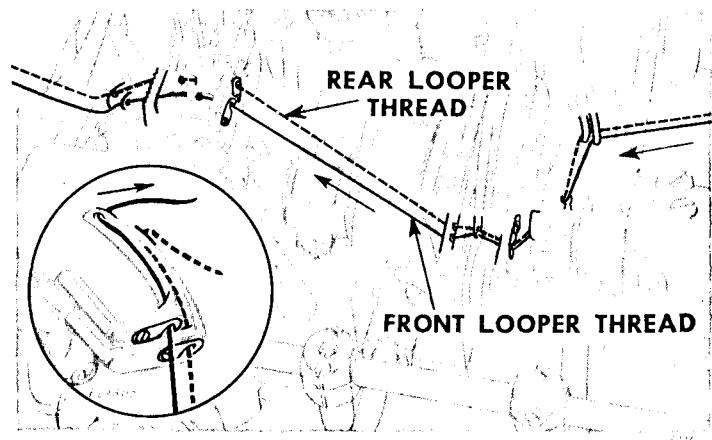


Fig. 16. Threading the Loopers

Draw about two inches of thread through eye of each looper, with which to commence sewing.

TO REGULATE THE TENSIONS

Tension on the needle threads should be just enough to set the stitch properly in the material.

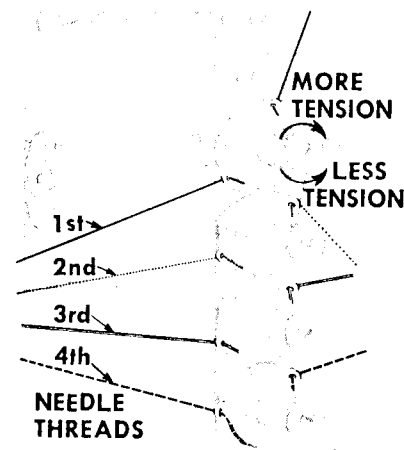


Fig. 17. Regulating Tension on Needle Threads (View on Top of Machine)

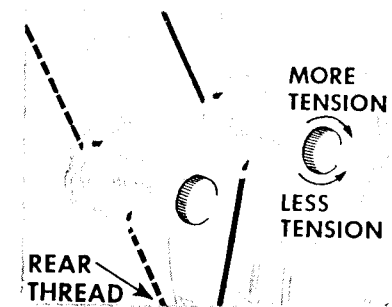


Fig. 18. Regulating Tension on Looper Threads

For average sewing, the tension on the looper threads should be very light.

TO REGULATE THE PRESSURE ON THE MATERIAL

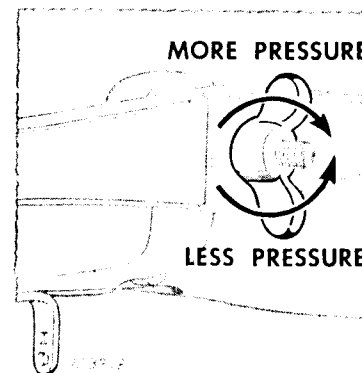


Fig. 19. Regulating Pressure on the Material (View on Top of Machine)

Turn wing nut, shown in Fig. 19, to right or left, as required.

Always use lightest pressure possible to permit higher working speeds.

TO REGULATE THE LENGTH OF STITCH

Loosen the two set screws and turn the regulating screw, in the feed eccentric, as instructed in Fig. 20 below.

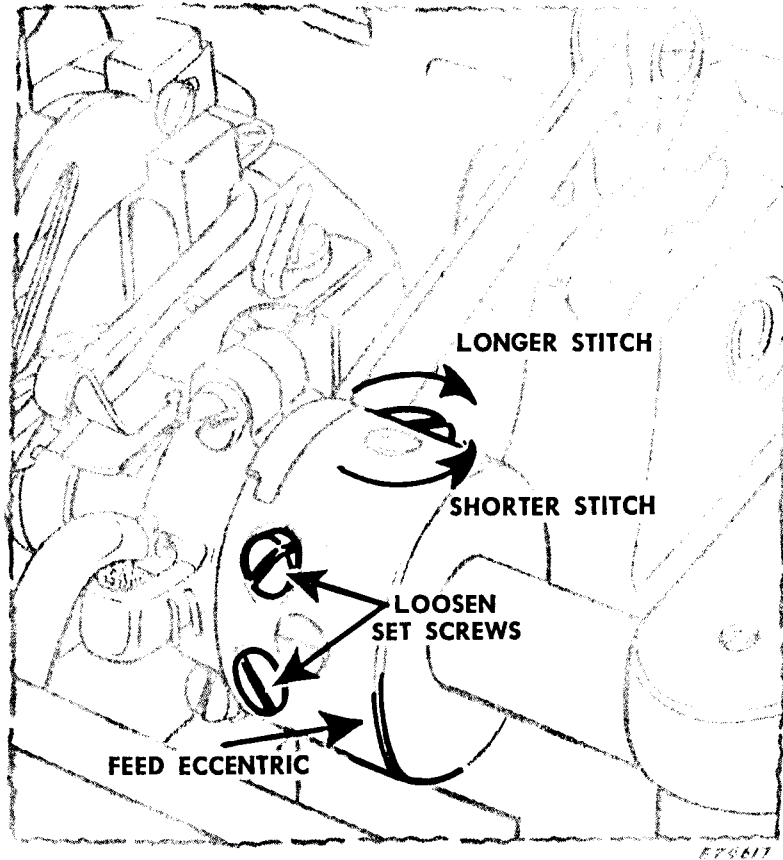


Fig. 20. Regulating the Length of Stitch

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