

SINGER

92-20

USE ONLY SINGER OILS and LUBRICANTS

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

“Singer Oil for High Speed Sewing Machines”

(Cloth and Leather)

For all manufacturing sewing machines except where a stainless oil is desired.

“Singer Stainless Oil for High Speed Sewing Machines”

For all manufacturing sewing machines where a stainless oil is desired.

“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 Gear Lubricant”

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

“Singer Ball Bearing Lubricant”

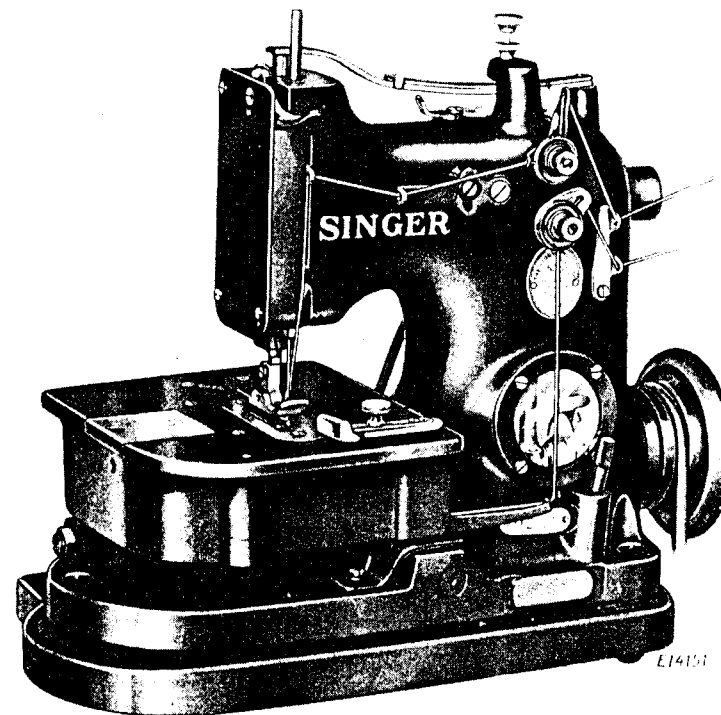
This pure grease is specially designed for the lubrication of ball bearings and ball thrust bearings of motors and electric transmitters, ball bearing hangers of power tables, etc.

NOTE: The above greases are furnished in ¼ lb. tubes and 1 lb. and 4 lb. tins.

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19220

INSTRUCTIONS FOR USING AND ADJUSTING SINGER SEWING MACHINE



92-20

FOR SEWING BAGS

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." 1

Needles in Containers marked
"For Singer Machines"
are not Singer made needles. 2

DESCRIPTION

SINGER 92-20 two thread, chain stitch machine, has one needle and one looper, and is designed for stitching bags of light and medium weight fabrics for packing flour, salt, sugar, seeds, grain, etc.

Refer to the list, on page 4, of equipment available for various types of bags.

The machine is also furnished with a looper and a throat plate to produce the single thread chain stitch.

It is equipped with drop feed, and with a splash oiling system which automatically lubricates all of the principal bearings.

The machine is adjustable for stitches ranging in length from 3 to 6 to the inch.

When the machine is to be mounted upon the top of the table, it is equipped with Cloth Plate Complete 49176, as illustrated on page 1, this being the type of cloth plate most generally used.

When the machine is to be set into the table, with only the top portion of the cloth plate clearing the table top, Cloth Plate Complete 49300 is used.

When the order so specifies, the machine will be equipped, without charge, with Knee Lifter Complete 49163, or with Foot Lifter Complete 49164.

SPEED

The maximum speed of Machine 92-20 is 3500 R.P.M.

The top of the balance wheel should always turn over from the operator.

To Set Up the Machine

Before placing the machine on the iron base, see that the rubber insulating bushings are in place in the three holes in the machine bed and that the three felt pads are over the three studs in the base. Place the machine on these pads, with the three studs through the rubber bushings.

EQUIPMENT FOR MAKING BAGS OF LIGHT AND MEDIUM WEIGHT FABRICS

Medium Weight Bags

Unless otherwise ordered, the machine will be equipped with the following, for making the two-thread chain stitch on medium weight bags:

Looper 49036	Presser Foot 49128
Feed Dog 49025	Throat Plate 49131

Included are Looper 49037 and Throat Plate 49132 for making the single thread chain stitch.

Clay Filled Bags

When so ordered, the machine will be equipped with the following, in place of the regular fittings, for making the two-thread chain stitch on clay filled bags.

Looper 49036	Presser Foot 49070
Feed Dog 49103	Throat Plate 49131

Included are Looper 49037 and Throat Plate 49132 for making the single thread chain stitch.

Light Weight Bags

When so ordered, the machine will be equipped with the following, in place of the regular fittings, for making the two-thread chain stitch on light weight bags:

Looper 49036	Presser Foot 49082
Feed Dog 49153	Throat Plate 49154

Included are Looper 49037 and Throat Plate 49155 for making the single thread chain stitch.

Equipment for Hemming Bags

For hemming bags, Hemmer 36436 is very satisfactory, and will be furnished, on order, at additional charge. A sample of the material to be hemmed must accompany the order for the hemmer. For use with this hemmer, the machine will be furnished with the following, in place of the regular fittings, for making the two-thread chain stitch:

Looper 49036	Presser Foot 49128
Feed Dog 49125	Throat Plate 49272

Included are Looper 49037 and Throat Plate 49273 for making the single thread chain stitch.

To Oil the Machine

When the machine is shipped from the factory THERE IS NO OIL IN THE RESERVOIR; therefore BEFORE OPERATING THE MACHINE, FILL THE OIL RESERVOIR TO THE PROPER LEVEL AS INSTRUCTED BELOW:

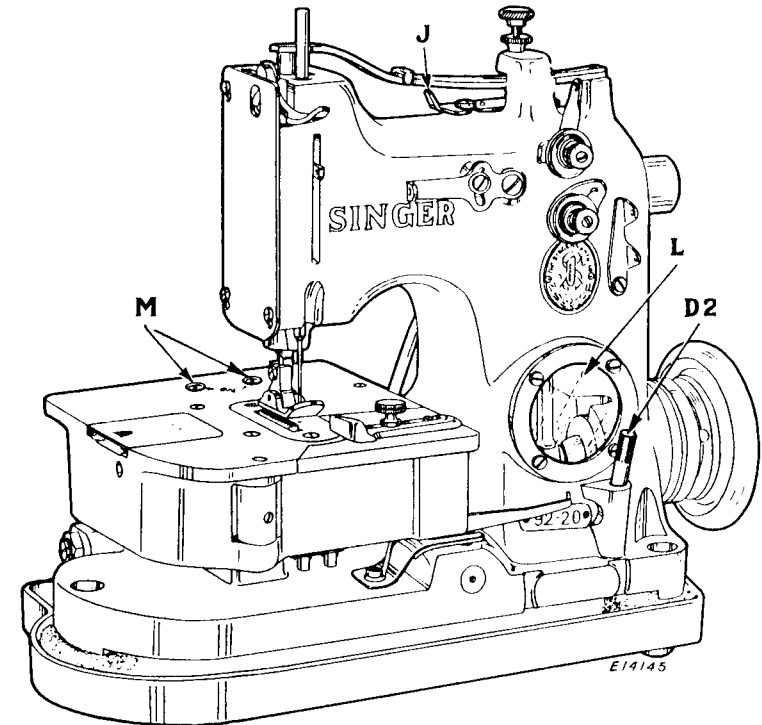


Fig. 2. Front View - Oiling

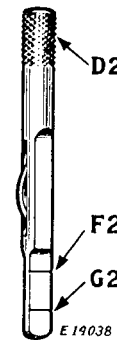


Fig. 3. Oil Gauge
Removed to Show
Oil Level Marks

Turn aside the oiling top cover (J, Figs. 2 and 4) thus uncovering opening (N, Fig. 4) into which pour oil until its level (in the oil reservoir in the machine bed) coincides with the upper mark (F2, Fig. 3) on the oil gauge (D2, Figs. 2 and 3). Wipe the oil gauge (D2) dry and clean so that the oil level will be plainly indicated when the gauge is inserted fully in the oil reservoir as shown in Fig. 2 and then withdrawn for inspection.

NEVER PERMIT THE OIL LEVEL TO FALL BELOW THE LOWER MARK (G2) ON THE OIL GAUGE (D2).

When the correct quantity of oil has been placed in the reservoir, replace the cover (J). NOTE - COVER (J) SHOULD BE KEPT CLOSED AT ALL TIMES EXCEPT WHEN OPENED FOR OILING.

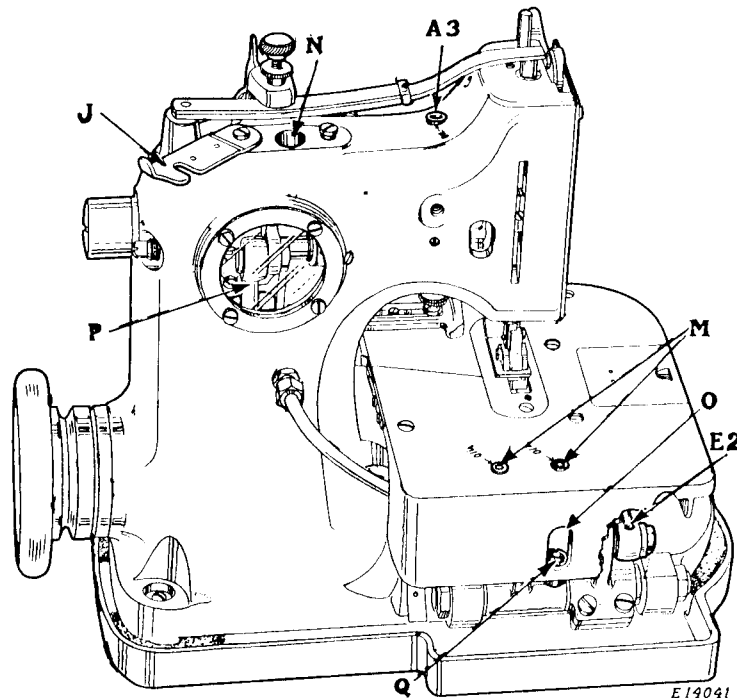


Fig. 4. Rear View - Oiling

Apply a few drops of oil, through the ball oilers at (M, Figs. 2 and 4) for the feed bar. Through the opening (O, Fig. 4) in the rear side of the cloth plate, saturate the wick (Q, Fig. 4) for the feed bar shaft; also apply a drop or two of oil at (E2, Fig. 4) to the end of the feed connecting rod, and saturate the wick at (A3, Fig. 4) for the front bearing of the arm shaft.

Note that the front and rear arm side covers (L, Fig. 2) and (P, Fig. 4) respectively, are transparent, thus enabling the operator to determine at a glance that the oil splash system is functioning. If the oil splash, during operation of machine, is not visible through arm side covers (L) and (P), insufficient oil in the reservoir is indicated. In such case STOP THE MACHINE AND CHECK THE OIL LEVEL by means of the oil gauge (D2) as instructed on the preceding page.

(See following page for oiling points beneath cloth plate).

While Fig. 5 shows the cloth plate removed from the machine, this is done only for purposes of illustration.

To reach the oiling points beneath the cloth plate, remove the throat plate and open the hinged portion of the cloth plate by turning it outward as shown in Fig. 7, page 10.

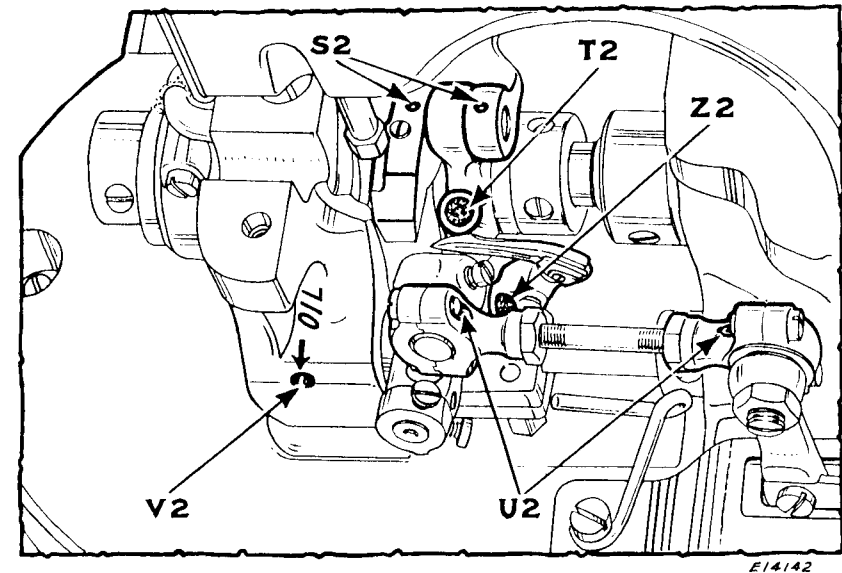


Fig. 5. Oiling Points Beneath the Cloth Plate

Apply a drop or two of oil at (S2, Fig. 5) to the feed bar, and at (U2, Fig. 5) at each end of the looper carrier pitman; also at (V2, Fig. 5) for the left hand end of looper carrier rock shaft. Also saturate wicks (T2, Fig. 5) in the feed lifting eccentric connection, and (Z2, Fig. 5) in the looper carrier.

This machine is provided with a glass oil-drain jar which is connected to the under side of the machine base to catch such oil as drains from the base of the machine during operation.

This oil can be used again by proceeding as follows:

When the drain jar is full, strain the oil into a glass container of any desired capacity; let the oil stand in this container until any dirt, which may have passed through the strainer, settles to the bottom of the container, then pour the oil from the container into the oil reservoir of the machine, being careful not to disturb the sediment at the bottom. Strain this oil again while pouring it back into the oil reservoir of the machine.

Needles

Needles for Machine 92-20 are of Class and Variety 92x1, and are made in the following sizes:

16, 18, 19, 21, 22, 23, 24, 25, 26.

Note - Sizes above 25 have reduced shank.

The size of the needle to be used is determined by the size of the thread which must pass freely through the needle eye. The use of rough or uneven thread, or thread which passes with difficulty through the needle eye, will interfere with the successful use of the machine.

Orders for needles must specify the QUANTITY required, the SIZE number, also the CLASS and VARIETY numbers separated by an "X". The following is an example of an intelligible order:

"100 No.23, 92x1 Needles"

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

Relative Sizes of Needles and Thread

Since bags are made to meet a wide range of requirements, the choice of thread of suitable size and texture must be left to the manufacturer, especially in view of the fact that a two thread stitch may be preferred to a single thread stitch. For a two thread stitch, smaller thread will give the same strength of seam as that produced by larger thread in single thread stitching.

The following sizes of needles are recommended according to the class of material to be sewn:

Classes of Material	Sizes of Needles
Light weight cotton and light weight filled material	21, 22, 23
Medium weight filled material	23, 24
Heavily filled material and burlaps	25

To Set the Needle

Loosen clamping nut (R, Fig. 6, page 9) at lower end of the needle bar and insert the needle up into the needle bar as far as it will go, with the long unbroken groove of the needle toward the operator, then securely tighten the clamping nut (R, Fig. 6).

To Thread the Needle (See Fig. 6)

Pass the thread from the unwinder to the left through the upper eyelet (1) in the guide bracket at the right of the machine arm, then up and from right to left through the upper eyelet (2)

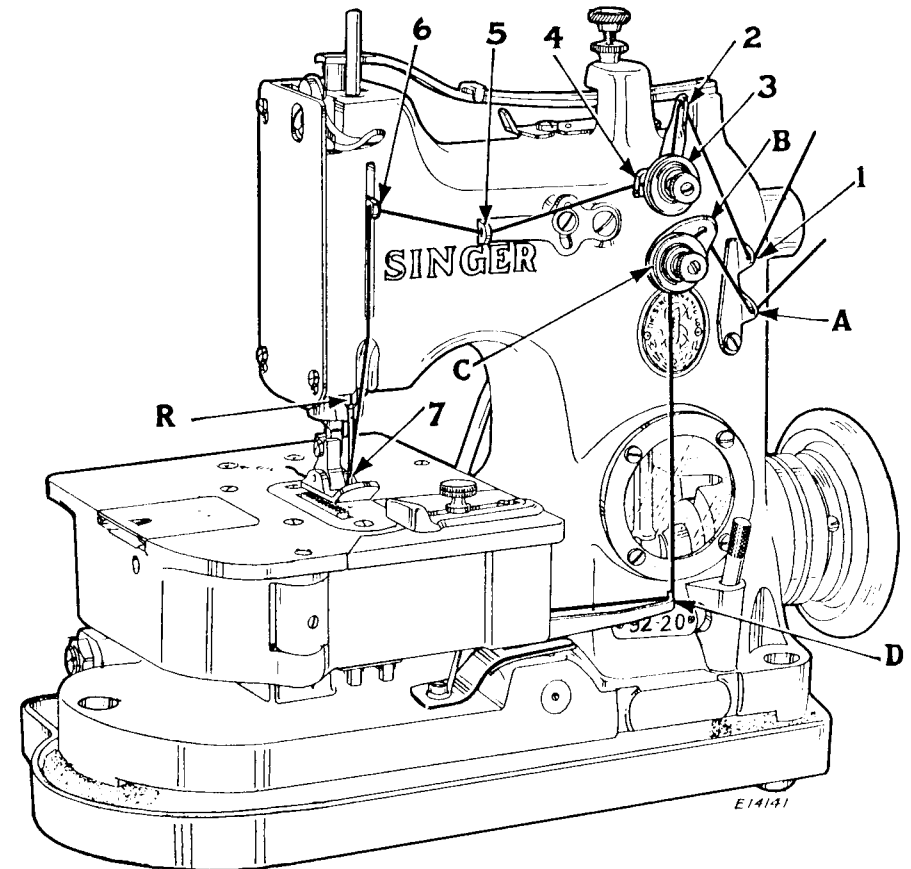


Fig. 6. Threading the Needle and Threading the Looper

of the needle thread tension bracket, under and between tension discs (3), to the left through the lower eyelet (4) of the thread tension bracket, to the left through eyelet (5) in the thread controller, to the left through eyelet (6) of the thread take-up, then down and from front to back (away from the operator) through the eye (7) of the needle. Draw about two inches of thread through the needle eye with which to commence sewing.

To Thread the Loooper (See Figs. 6 and 7)

Open the cloth plate by turning out the hinged portion as shown in Fig.7, then turn the balance wheel over from the operator to bring the looper back (to the right) where it will be easily accessible for threading, as shown in Fig.7.

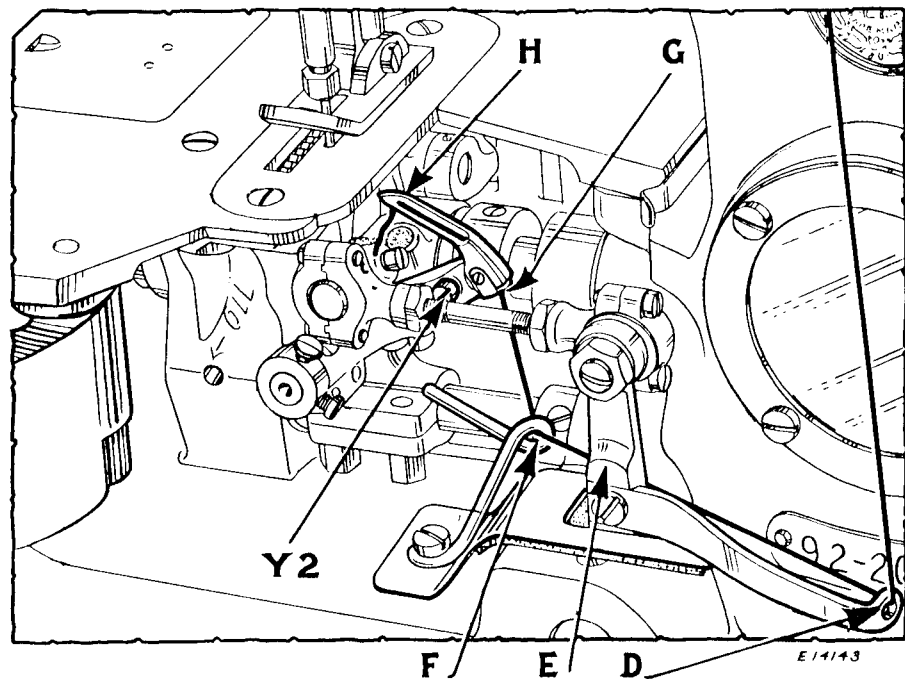


Fig.7. Threading the Loooper

Pass the thread from the unwinder to the left through the lower eyelet (A, Fig.6, page 9) in the guide bracket at the right of the machine arm, then up and from right to left through the eyelet (B, Fig.6) in the looper thread tension bracket, to the left and between the looper tension discs (C, Fig.6), down and from right to left through the eyelet (D, Figs.6 and 7) in the end of the looper thread take-up lever, to the left and back of crank (E, Fig.7) through the guide (F, Fig.7), from right to left through the guide (G, Fig.7) in the heel of the looper, then from front to back (away from the operator) through the eye (H, Fig.7) of the looper. Draw about two inches of thread through the eye of the looper with which to commence sewing.

To Set the Cloth Guide

Loosen the thumb screw (Y, Fig.8) and move the cloth guide (Z, Fig.8) toward or away from the needle, as required, then tighten the thumb screw (Y).

To Change the Machine from Two Thread Chain Stitch To Single Thread Chain Stitch or Vice Versa

Take out the two screws (S, Fig.8) and remove the throat plate, then loosen the looper set screw (Y2, Fig.7, page 10) and remove

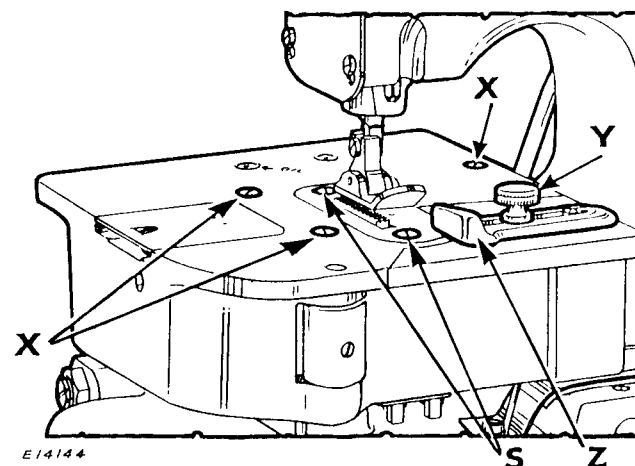


Fig.8. Removing Throat Plate and Cloth Plate
and Setting Cloth Guide

the looper. Having selected the required looper and throat plate according to list on page 4, insert the looper into the looper carrier as far as it will go, then securely tighten the looper set screw (Y2, Fig.7). Attach throat plate (for single thread chain stitch) making certain that the thread retainer, at the under side of this throat plate, is set as close as possible to the looper so the needle will enter the triangle formed by needle thread and looper blade, then tighten the two screws (S, Fig.8).

To Remove and Replace the Cloth Plate

When it becomes necessary to clean accumulated lint, etc., from the machine, remove the needle, open hinged portion of the cloth plate as shown in Fig.7, page 10, raise presser foot, take out the three screws (X, Fig.8), turn balance wheel to bring the feed dog to its lowest position, then remove cloth plate by withdrawing it toward the left (away from the upright part of the machine arm). To replace, reverse the operations for removal.

To Regulate the Tensions

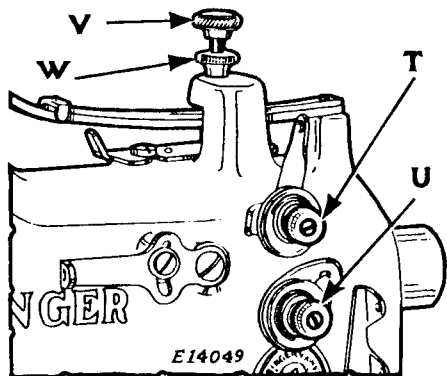


Fig. 9. To Adjust Needle Thread and Loper Thread Tensions

To increase the tension on the needle thread, turn the thumb nut (T, Fig. 9) over to the right, or turn the thumb nut (T) over to the left to decrease the needle thread tension.

To increase the tension on the looper thread, turn the thumb nut (U, Fig. 9) over to the right, or turn the thumb nut (U) over to the left to decrease the looper thread tension.

To Regulate the Pressure on the Material

The pressure of the presser foot on the material is regulated by means of the thumb screw (V, Fig. 9) at the top of the machine.

Loosen lock nut (W, Fig. 9) and, to increase the pressure, turn thumb nut (V) downward, or turn the thumb nut (V) upward to decrease the pressure, then securely tighten the lock nut (W).

The pressure on the material should be just sufficient to hold the work down firmly while the machine is stitching. Too much pressure will cause the machine to run heavily.

To Regulate the Length of Stitch

Loosen clamping nut (A2, Fig. 10) and, to increase the stitch length, move feed connecting rod (C2) downward in slot of feed rock shaft crank (B2), or move connecting rod (C2) upward to shorten the stitch length, then tighten nut (A2).

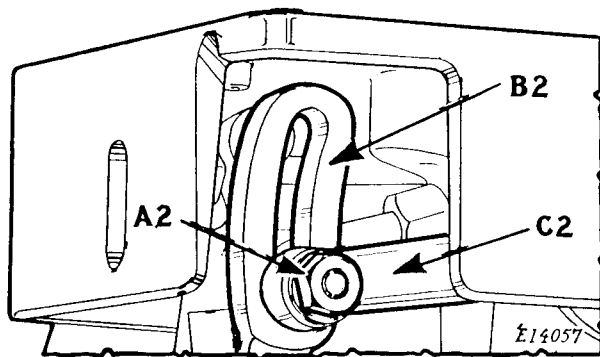


Fig. 10. To Regulate Length of Stitch

INSTRUCTIONS

FOR

ADJUSTERS AND MACHINISTS

To Set the Needle Bar at the Correct Height

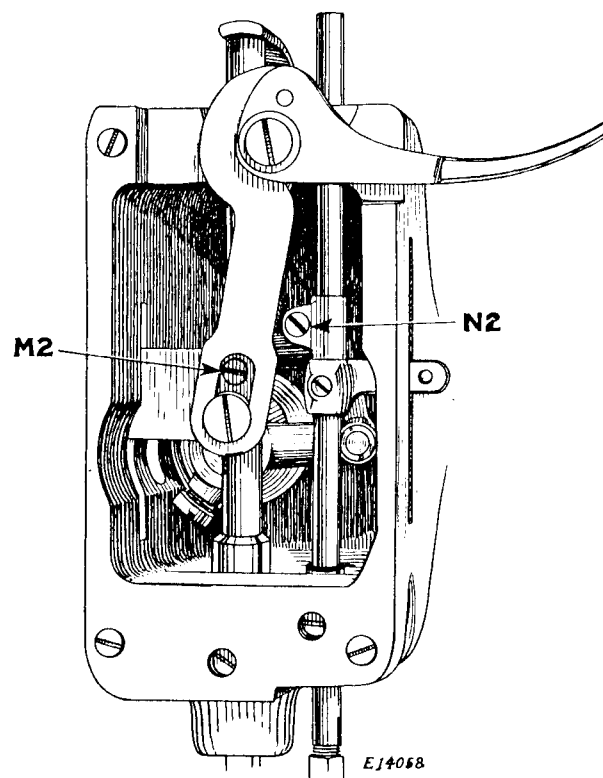


Fig. 11. Setting Needle Bar and Presser Bar

Turn the balance wheel until the point of the looper is at the center of the needle on the upward stroke of the needle bar.

When the looper is in this position, the top of the eye of the needle should be about 1/8 inch below the point of the looper.

When making the two-thread chain stitch, the eye of the looper should be in line with the eye of the needle

when they pass each other. To adjust, loosen the clamping screw (N2, Fig. 11) and move the needle bar up or down, as required, then securely tighten the clamping screw (N2).

To Set the Loooper the Correct Distance From the Needle

When the needle bar is in its lowest position, the distance from the center of the needle to the point of the looper should

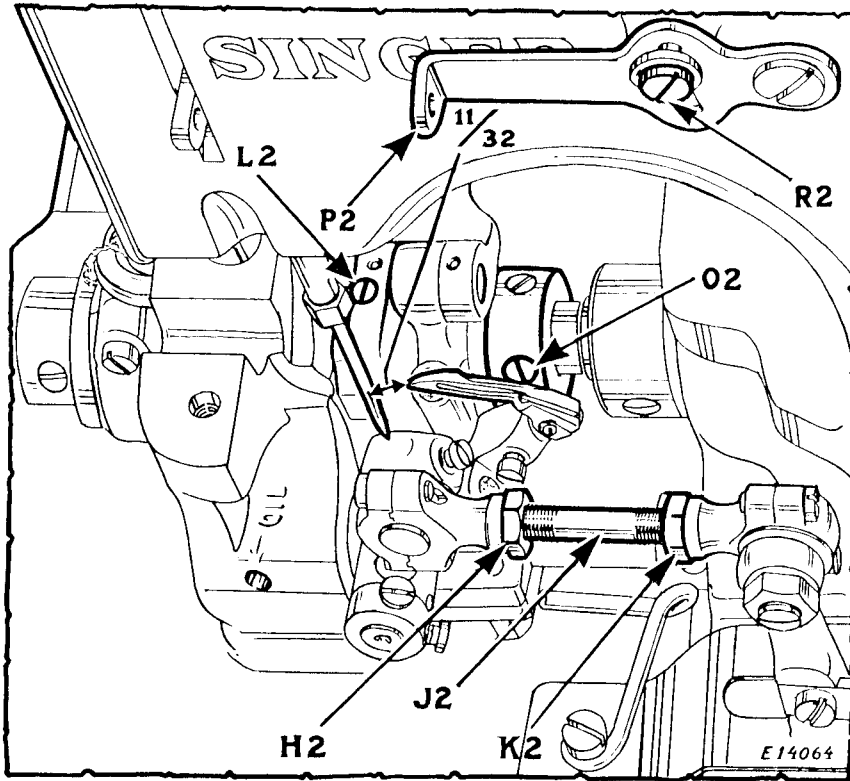


Fig.12. Setting Loooper with Relation to the Needle
Adjusting Feed Dog and Needle Thread Controller
Timing the Feed

be $11/32$ inch, as shown in Fig.12.

To adjust, loosen the two lock nuts (H2, and K2, Fig.12) at the ends of the looper carrier pitman (J2, Fig.12), then turn the pitman until the looper is set correctly with relation to the needle, after which securely tighten the two lock nuts (H2, and K2).

To Set the Feed Dog at the Correct Height

The feed dog is usually set so that when it is raised to its highest position by the feed-lifting eccentric, the full depth of teeth will project above the throat plate. For some thicknesses of materials, it may be necessary to change height of feed dog.

To adjust, remove presser foot and cloth plate; take out the screws which fasten the feed dog, and remove feed dog. When the correct height of feed dog is determined, set stop screw (L2, Fig.12) so that it touches the under side of the feed dog, then securely tighten the set screw which fastens feed dog in place.

To Change the Height of the Presser Foot

Remove the face plate and loosen the set screw (M2, Fig.11, page 13) which holds the presser bar in position. Set the presser bar in the required position, by manipulating the lifting lever, and tighten the set screw (M2, Fig.11).

Note - Make sure that the presser bar is set so that the needle centers in the needle hole in the presser foot.

To Time the Feed

The feed is timed to start its feeding movement just as the needle leaves the goods, and to finish its feeding movement just before the needle enters the goods.

This timing is fixed by tightening the set screw (O2, Fig.12), in the feed eccentric, against the flat surface on the rotary shaft. Note - The set screw (O2) is the lower of the two set screws in the feed eccentric when both screws are visible from the front side of the machine as shown in Fig.12.

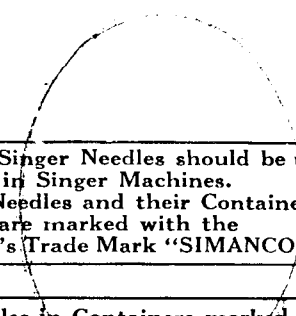
To Adjust the Needle Thread Controller

The purpose of the needle thread controller (P2, Fig.12) is to regulate the amount of thread drawn through the tension at the finish of the upward stroke of the needle bar. The needle thread controller (P2) can be raised or lowered to the required position after loosening the screw (R2, Fig.12).

To Adjust the Throat Plate Thread Retainer

Throat plates for making the single thread chain stitch have a thread retainer attached to the under side. This thread retainer should be set as close as possible to the looper, its function being to hold back the thread in order that the needle may properly enter the triangle formed by the looper blade and the needle loop.

NOTE - When it becomes necessary to remove the bottom cover plate (which forms the bottom of the oil reservoir), be sure to have a replacement gasket available, as the removal of this plate is very likely to injure the gasket already in the machine.



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