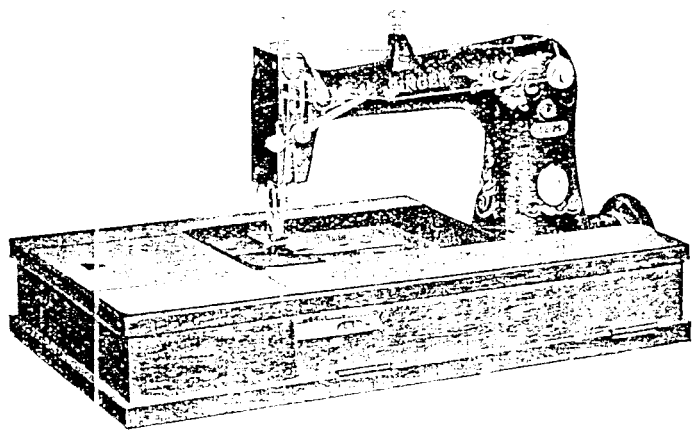


SINGER
CLASS 62

1895

INSTRUCTIONS
FOR TIMING AND ADJUSTING
SINGER SEWING MACHINES



OF

CLASS 62-

THE SINGER MANUFACTURING CO.

INTRODUCTION

The instructions covering Machine 62-25, on pages 1 to 7, inclusive, apply to Machines of Class 62- generally, with the additions given on pages 8 to 30 for the different varieties of machines.

MACHINE 62-25

To Set the Loper the Correct Distance from Centre of Needle

On one needle machines and on two needle machines with two loopers, when the needle bar is at its lowest point,

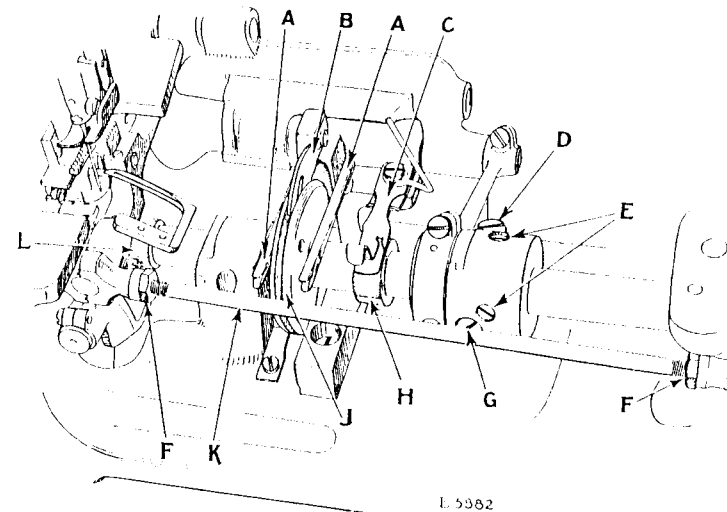


FIG. 1

the distance from the centre of the needle or needles to the point of the looper or loopers should be $\frac{7}{32}$ inch. If the distance is more or less than $\frac{7}{32}$ inch, loosen the two lock nuts (F, Fig. 1) at both ends of the looper carrier pitman (K, Fig. 1) and turn the pitman rod, as required, until the point of the looper is exactly $\frac{7}{32}$ inch from the centre of the needle; be sure to keep the bearings in alignment, then securely tighten the two lock nuts (F').

On two needle machines with one looper and four needle machines with two loopers, having a thread retainer on the underside of the throat plate, the distance from the centre of each pair of needles to the point of the looper should be $\frac{7}{32}$ inch, except on Machines 62-38, 62-54 and 62-55, for which see pages 16 and 23.

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 Set the Needle Bar at the Correct Height

The correct height for the needle bar is best obtained by observing the formation of the needle loops as the needle bar commences its upward stroke.

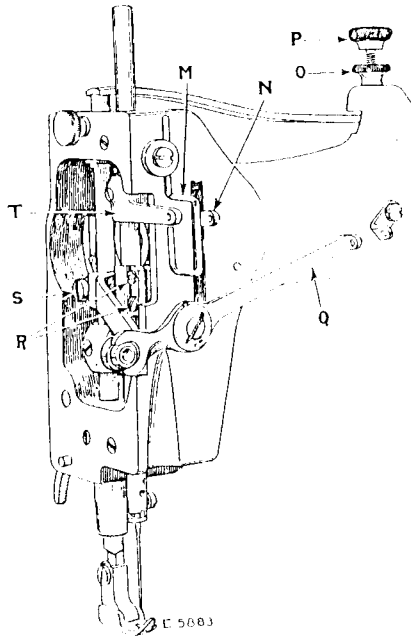


Fig. 2

Turn the balance wheel over from you until the eye of the looper reaches the centre of the needle on the upward stroke of the needle bar. When the looper is in this position, the eye of the needle should be in line with the eye of the looper. By observing the formation of the loops, it can be easily determined whether the needle bar should be raised or lowered so as to have the point of the looper enter the widest part of the loop. It is advisable to have the looper enter the loop while the loop is being formed for the reason that the looper may lose the loop if it enters it too late.

In case the needle bar is not set at the correct height, loosen the two screws (R, Fig. 2) in the needle bar connecting stud and move the needle bar up or down, as may be required, then tighten the two screws (R).

For some threads, it will be necessary to set the needle bar at a height different from that required by others, owing to the differences in finish, twist, elasticity, etc. This is also true of different materials to be sewn.

To Time the Needle Avoiding Motion of the Looper

The side swing or needle avoiding motion of the looper is fixed as regards to the amount of movement, but the timing of the side swing of the looper in relation to the needle can be adjusted as follows:

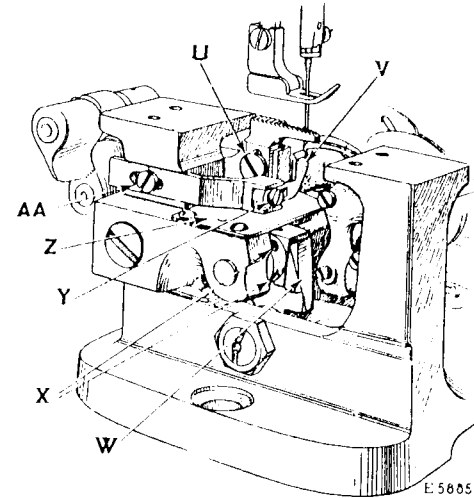


Fig. 3

The timing of the side swing of the looper is controlled by the eccentric and slide block operating in the forked connection next to the bearing at the left hand end of the rotary shaft, as shown at W, in Fig. 3. To change the time of the side swing of the looper, remove the cover (Z, Fig. 3), then loosen the two set screws (X, Fig. 3) and turn the eccentric on the shaft until the desired timing of the side swing of the looper is obtained, after which tighten the two set screws (X) and replace the cover (Z).

To Change the Sidewise Position of the Looper in Relation to the Needle

The looper should be set as close to the needle as possible. To change the sidewise position of the looper in relation to the needle, loosen the clamping screw (V, Fig. 4) in the lower end of the forked connection underneath the bed of the machine and swing the looper carrier to the required position, then securely tighten the clamping screw (V).

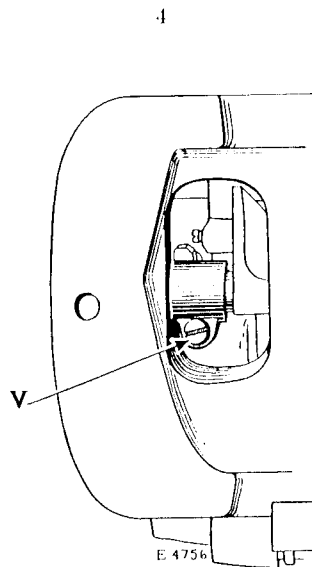


FIG. 4

To Time the Loper Thread Take-up

The looper thread take-up (J, Fig. 1) should be timed when the needle is at its highest point and the looper is just commencing its backward stroke or loop shedding motion, at which time the flat or straight part of the take-up (J) should just touch the thread between the two eyelets in the thread take-up staple (A, Fig. 1). As the needle moves downwardly, the take-up (J) should just take up the slack thread from the looper, keeping the thread straight from the eye of the looper to the last stitch formed. The looper thread take-up (J) can be correctly timed after loosening the screw which holds it in position on the rotary shaft. If the looper thread take-up is timed too early it will strain the looper thread, breaking the thread or causing it to pucker the material. The looper thread take-up should just take the slackness out of the thread when the looper is on its backward stroke.

To Adjust the Loper Thread Take-up Stripper

It is advisable to observe closely how the needle, on its downward stroke, passes the loop which is on the looper. The needle should pass to the left of the loop or in the triangle as shown in Fig. 5.

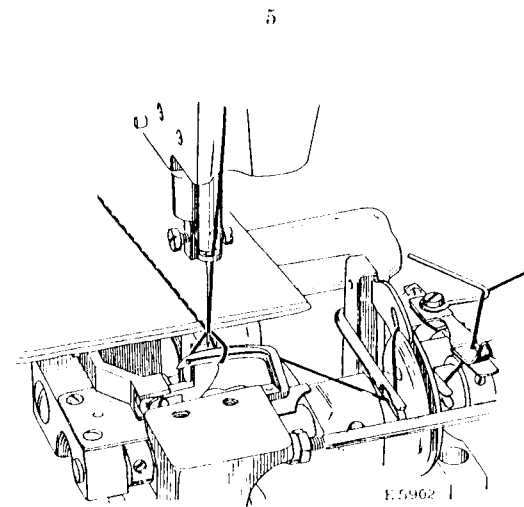


FIG. 5

The purpose of the looper thread take-up stripper (B, Fig. 1) is to cast the thread off the take-up (J, Fig. 1) after the needle has entered the triangle formed by the looper blade, the looper thread and the needle loop, as shown in Fig. 5, and to hold it in position on the take-up until the point of the looper has entered the needle loop on its loop taking stroke. At this point, the stripper should release the thread and allow it to go freely with the looper. To adjust the stripper, loosen the screw at the right of the stripper and move the stripper forward or backward, as required, then tighten the screw.

To Time the Loper Thread Nipper

The function of the looper thread nipper (C, Fig. 1, page 1) is to prevent the take-up (J, Fig. 1) pulling the thread from the supply instead of taking up the slack from the looper.

The nipper cam (H, Fig. 1) should be timed to close the nipper (C) just before the flat portion of the take-up (J) reaches the thread between the take-up eyelets (A, Fig. 1) and before the take-up starts to act. Care should also be taken to see that the thread nipper releases the looper thread before the looper starts its loop taking stroke. The nipper cam (H) can be correctly timed after loosening the set screw which holds it in position on the rotary shaft.

To Adjust the Needle Thread Take-up

The needle thread take-up (T, Fig. 2) is usually set so that its eyelet is about in line with the eyelet in the thread controller (N, Fig. 2) when the needle bar is at its highest point. The needle thread take-up (T) can be adjusted to the required position after loosening the screw which holds it in position on the needle bar.

To Adjust the Slack Thread Regulator

The purpose of the slack thread regulator (Q, Fig. 2) is to regulate the amount of thread drawn through the tension at the finish of the upward stroke of the needle bar, according to the thickness of the material under the presser foot. The slack thread regulator can be adjusted to the required position on the presser bar after loosening the clamping screw (S, Fig. 2) which holds the regulator arm in position on the presser bar. When the desired adjustment of the slack thread regulator is obtained, securely tighten the clamping screw (S).

To Adjust the Slack Thread Controller

The slack thread controller (M, Fig. 2) controls the pulling up of the needle loop as it is cast off by the looper. Care must be taken not to have the slack thread controller too high or it will pull the thread too hard before the loop is off the looper, breaking the thread, or it will pull the thread from the tension when not required, causing imperfect stitching. The slack thread controller can be set at the required height after loosening the screw which holds it in position.

To Set the Needle Guard

The function of the needle guard (V, Fig. 3, page 3) is to prevent the needle springing into the path of the looper when the looper is on its forward stroke. The needle guard should be set as close as possible to the needle without touching it. To set the needle guard in the correct position, loosen the set screw (AA, Fig. 3) and move the guard toward or away from the needle, as may be required, then securely tighten the set screw (AA).

The needle guard can be adjusted sidewise to clear the feed dog after loosening the screw (Y, Fig. 3).

To Regulate the Pressure on the Material

The pressure on the material is regulated by means of the thumb screw (P, Fig. 2) at the top of the machine. To increase the pressure, loosen the lock nut (O, Fig. 2) and turn the thumb screw (P) downwardly. To decrease the pressure, turn the thumb screw (P) upwardly. When the desired amount of pressure has been obtained, firmly tighten the lock nut (O).

To Regulate the Length of Stitch

The length of stitch is regulated by the large screw (D, Fig. 1) which projects beyond the body of the feed eccentric on the rotary shaft at the right of the opening in the cloth plate. To increase the length of stitch, loosen the feed eccentric set screw (G, Fig. 1) and turn the large screw (D) over to the left or outwardly. To shorten the stitch, turn the large screw (D) over to the right or inwardly. When the desired length of stitch is obtained, securely tighten the set screw (G).

To Time the Feed

The feed should be timed so that it starts its feeding movement just before the needle leaves the goods and finishes before the needle reaches the goods on its downward stroke. To time the feed, loosen the two set screws in the feed eccentric (E, Fig. 1, page 1) on the rotary shaft and turn the eccentric on the shaft until the correct timing is obtained, being careful not to move the eccentric sidewise, then securely tighten the two set screws in the eccentric.

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 lifting eccentric (L, Fig. 1), the full depth of the teeth will project above the top surface of the throat plate. The feed dog can be set at the desired height after loosening the screw (U, Fig. 3) which holds it in position. When the feed dog is set at the required height, securely tighten the screw (U).

Important

In all cases of trouble, see that a perfect needle is being used and especially that the point of the needle is not blunt or hooked. Also observe carefully that all other parts which come into contact with the threads are perfectly smooth.

After making adjustments on the machine, always see that all screws and nuts are securely tightened before starting the machine by power.

After adjusting the feed eccentric, a pitman, or any connection which can be moved out of alignment, first turn the machine by hand and be sure the parts work freely before the machine is run at high speed.

MACHINE 62-26

To Adjust the Throat Plate Thread Retainer

The thread retainer (BB, Fig. 6), on the underside of the throat plate, should be set as close as possible to the looper so

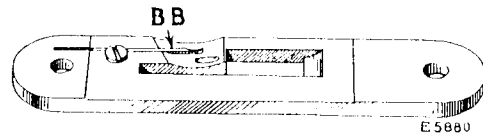


FIG. 6

that when the thread is pulled out of the recess in the looper, the retainer (BB) will hold back the thread to permit the needle to properly enter the triangle formed by the looper blade, the looper thread and needle loop as shown in Fig. 5, page 5.

MACHINE 62-27

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

The needle thread take-up (CC, Fig. 7) should be adjusted to act in conjunction with the slack thread controller (DD, Fig. 7) which is adjusted the same as the slack thread controller (M, Fig. 2) as instructed on page 6.

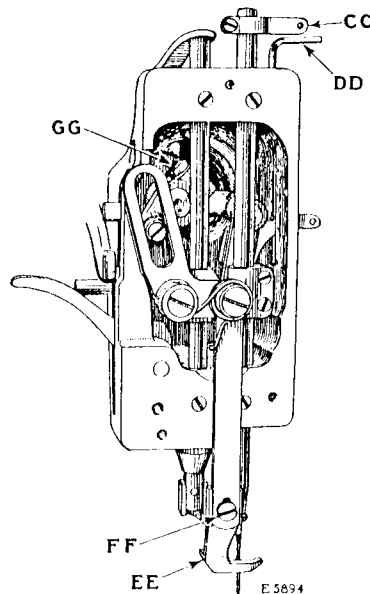


FIG. 7

MACHINE 62-27 (Continued)

To Adjust the Throat Plate Thread Retainer

For adjustment of the throat plate thread retainer, see Machine 62-26 on page 8.

To Adjust the Alternating Pressers

The vibrating presser foot (EE, Fig. 7) should be adjusted so that it does not come in contact with the lifting presser foot. The vibrating presser foot can be adjusted to the required position, after loosening the two screws (FF and GG, Fig. 7).

MACHINE 62-28

To Regulate the Auxiliary Feed

The auxiliary feed is regulated by raising or lowering the front feed connecting rod (KK, Fig. 8) in the slot (HH, Fig. 8)

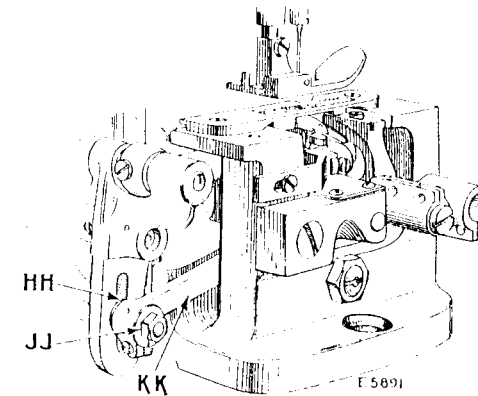


FIG. 8

in the feed rocking frame. To increase the amount of gather of the goods, loosen the nut (JJ, Fig. 8) and move the connecting rod (KK) downwardly in the slot (HH). To decrease the amount of gather of the goods, move the connecting rod upwardly in the slot (HH). When the desired amount of gather of the goods is obtained, firmly tighten the nut (JJ).

To Raise or Lower the Auxiliary Feed Dog

Before adjusting the front or auxiliary feed dog, loosen the nut (JJ, Fig. 8) and move the front feed connecting rod (KK, Fig. 8) up to its highest position in the slot (HH, Fig. 8) of the feed rocking frame. The front feed dog should be set at the same height as the rear feed dog. To make this adjustment,

MACHINE 62-28 (Continued)

loosen the two screws (LL, Fig. 9) in the front feed lifting rock shaft crank and raise or lower the feed dog, as required. Then securely tighten the two screws (LL) and return the front feed connecting rod (KK, Fig. 8) to its original position in the slot (HH, Fig. 8).

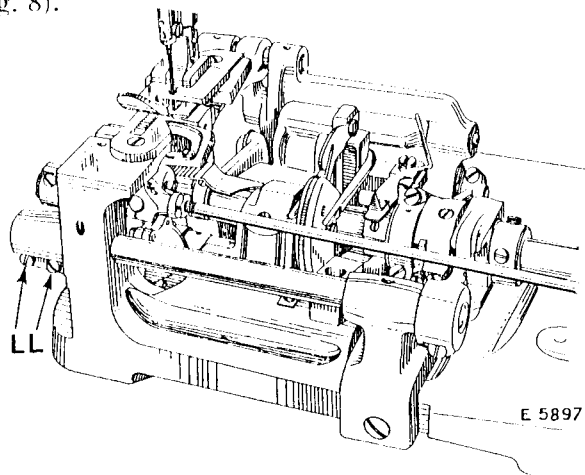


Fig. 9

MACHINE 62-29**To Adjust the Ruffling Mechanism**

The fullness of the ruffles is regulated by the connecting rod (NN, Fig. 10) which controls the movement of the ruffling blade.

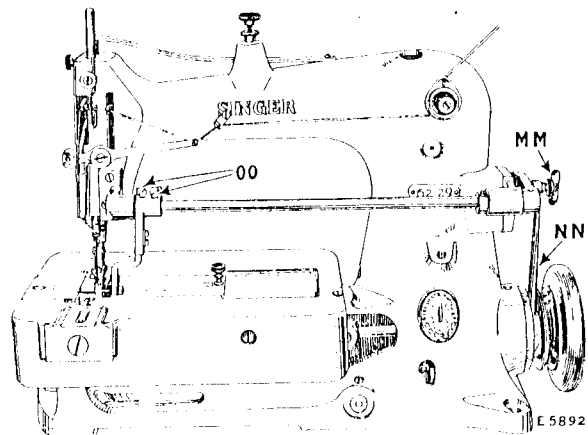


Fig. 10

To make a fuller ruffle, loosen the thumb screw (MM, Fig. 10) and move the upper end of the connecting rod (NN) toward you in the slotted regulator. To make a scant ruffle, move the connecting rod (NN) away from you. When the desired fullness of ruffle is obtained, firmly tighten the thumb screw (MM).

The ruffling blade should be adjusted so that it moves forward as far as possible without striking the needle. It should also be positioned sidewise so that its slot straddles the needle centrally. The ruffling blade can be adjusted to the required position after loosening the two screws (OO, Fig. 10).

MACHINE 62-31**To Sharpen and Adjust the Shear Trimmer**

Draw the slide in the work plate and turn the balance wheel until the looper is as far to the left as it will go. Take out the

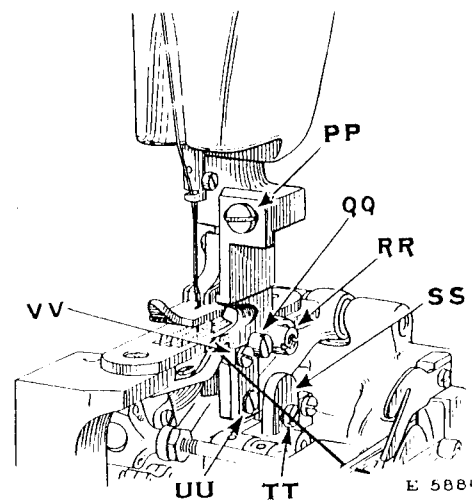


Fig. 11

screw (PP, Fig. 11) and the complete trimming device can then be removed. Remove the nut (RR, Fig. 12) and take out the screw (D3, Fig. 13) and remove the upper knife (XX, Fig. 13). Take out the two screws (B3, Fig. 13) and remove the chip ejector (A3, Fig. 13) from the upper knife. Take out the screw (C3, Fig. 13) and remove the lower knife (YY, Fig. 13).

MACHINE 62-31 (Continued)

Knife Grinder 41721 is recommended for resharpening the knives. As this grinder can be used for several machines, it should be ordered separately.

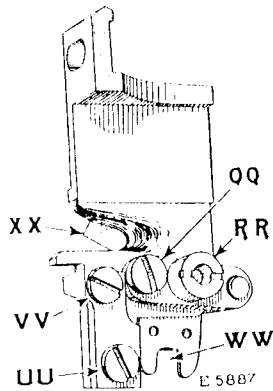


Fig. 12

Sharpen the cutting edge of the knives on the beveled side only. The least possible amount ground off is usually sufficient.

After the knives have been ground, rub the flat sides of the knives on an oil stone to remove any rough edges that may be formed.

When replacing the knives, the movable knife (XX) must be placed over the hole for the screw (D3), the stationary knife

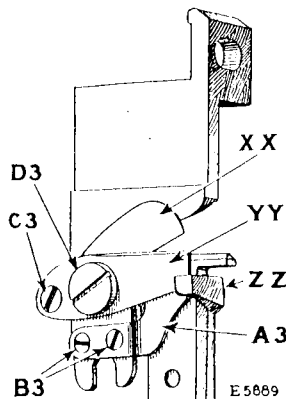


Fig. 13

(YY) then placed over it and behind the stop (ZZ, Fig. 13) and fastened in position by the screw (C3). Pass the screw (D3) through the holes in both knives, into the bracket and tighten

MACHINE 62-31 (Continued)

it just enough to allow the upper knife (XX) to move with reasonable freedom. Now fasten the nut (RR, Fig. 12) securely on the end of the screw (D3).

Replace the trimming device in the machine, having the notch (WW, Fig. 12) in the movable knife (XX) fit over the pin in the movable extension (SS, Fig. 11), and securely fasten the trimming device by means of the screw (TT, Fig. 11).

In operation, the point of the movable knife (XX) should descend just far enough to cover the point of the stationary knife (YY). If the movable knife is not in the correct position, loosen the screw (TT, Fig. 11) and move the extension (SS, Fig. 11) from you or toward you, as may be required, then securely tighten the screw (TT).

The point of the stationary knife (YY) should be level with the upper surface of the throat plate. If it is not, loosen the screw (QQ, Fig. 12) and gently tap the other end of the piece to which the knife (YY) is hinged, then securely tighten the screw (QQ). The stationary knife (YY) is held in contact with the movable knife (XX) by the bracket (ZZ, Fig. 13) and can be adjusted closer by slightly loosening the screw (VV, Fig. 12) and tightening the screw (UU, Fig. 12).

The complete trimmer can be adjusted sidewise so as to trim from $\frac{1}{16}$ to $\frac{3}{16}$ inch from the needle by moving it to the required position, after loosening the screw (PP, Fig. 11). When the trimmer has been correctly adjusted, securely tighten the screw (PP).

MACHINE 62-32

To Engage and Disengage the Trimmer

To engage the trimmer, press down on the cap screw (E3, Fig. 14) until the coupling pin (F3, Fig. 14) enters the notch in the knife bar.

To disengage the trimmer, pull out the coupling pin (F3, Fig. 14).

To Sharpen and Adjust the Shear Trimmer

Loosen the screw (G3, Fig. 14) and swing the knife holder around to the right, then loosen the screw (K3, Fig. 14) and remove the knife.

MACHINE 62-32 (Continued)

Sharpen the cutting edge of the knife on the beveled side only. The least possible amount ground off is usually sufficient. Grind off as much of the projection as the cutting edge so as to maintain their relative proportions.

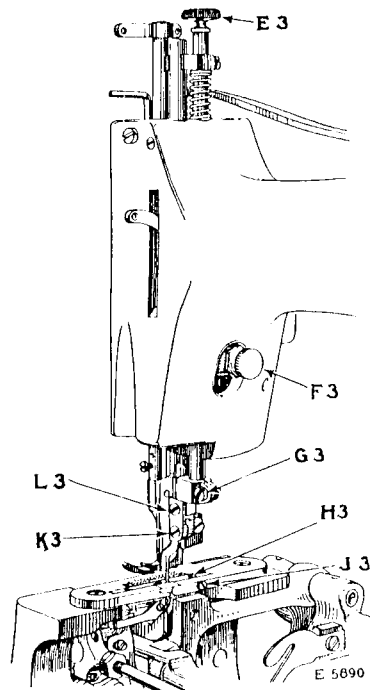


Fig. 14

The distance from the trimmed edge to the line of stitches is governed by the throat plate cutting bar (H3, Fig. 14) which may be from $\frac{1}{32}$ to $\frac{3}{32}$ inch. To change the trimming margin, loosen the screw (J3, Fig. 14) in the small spring and remove the throat plate slide, take out the two screws which fasten the cutting bar (H3) and remove the cutting bar. Fasten the cutting bar of the desired width in position, replace the throat plate slide and tighten the screw (J3) in the small spring.

Fasten the knife in the knife holder by means of the screw (K3, Fig. 14) and set it as close as possible to the cutting bar, then securely tighten the screw (G3, Fig. 14). When the knife descends, its cutting edge should pass slightly below the edge of the cutting bar. The knife can be raised or lowered to the required position after loosening the screw (K3).

MACHINE 62-32 (Continued)

The knife should also be adjusted so that its projection enters centrally in the hole in the throat plate slide. This adjustment can be made after loosening the screws (L3, Fig. 14) and (O3, Fig. 15).

To Adjust the Alternating Presser Feet

The vibrating presser foot (P3, Fig. 15) should be adjusted so that it does not come in contact with the lifting presser foot.

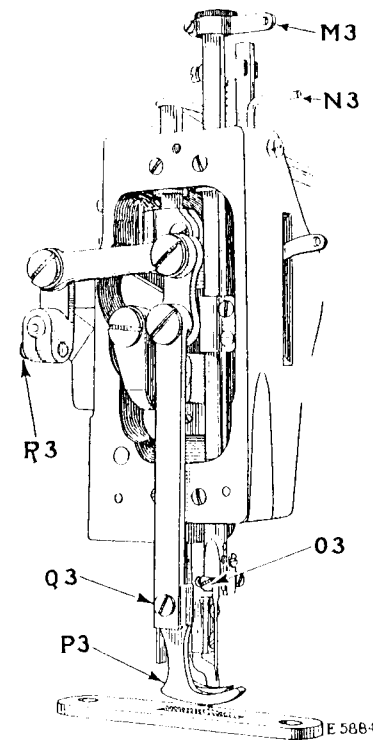


Fig. 15

The vibrating presser foot can be adjusted to the required position after loosening the two screws (Q3 and R3, Fig. 15).

MACHINE 62-32 (Continued)

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

For the adjustment of the needle thread take-up (M3, Fig. 15) and slack thread controller (N3, Fig. 15), see Machine 62-27 on page 8.

MACHINE 62-38

To Set Looper Correct Distance from Right Hand Needle

When the needle bar is at its lowest point, the distance from the centre of the right hand needle to the point of the looper should be as follows for the gauges listed below:

GAUGES	DISTANCE FROM CENTRE OF RIGHT HAND NEEDLE TO POINT OF LOOPER
1/8"	11"
3/8"	27"
1/2"	5"
16"	16"
1 1/4"	9"
1 3/4"	32"

For gauges other than those listed above, the correct distance from the centre of the right hand needle to the point of the looper can be determined as follows:

The needles being equally spaced on either side of the centre of the needle bar and the distance from the centre of the needle bar to the point of the looper being $\frac{1}{2}$ ", the distance from the centre of the right hand needle to the point of the looper, when the needle bar is at its lowest point, should be this distance less one-half of the distance between the needles. To obtain the correct distance from the right hand needle to the point of the looper, loosen the two lock nuts (F, Fig. 1, page 1) at both ends of the looper carrier pitman (K, Fig. 1) and turn the pitman, as required, until the correct position of the looper is obtained, be sure to keep the bearings in alignment, then securely tighten the two lock nuts (F).

To Adjust the Needle Thread Take-up and Loop Controller

As the left hand needle sets lower in the needle bar than the right hand or inside needle and the looper does not reach it as early, there is a tendency for the left hand needle to form too large a loop. If the loop is too large, the looper is liable to swing the loop off its point. Means are provided in the form of a loop controller working in conjunction with a thread take-up to take care of this condition, also to prevent the slack thread from the needles, as they start downwardly, from looping around the needle points.

By loosening the screw (F5, Fig. 21, page 24) in the thread take-up and the screw (F5, Fig. 21) in the loop controller, both can be adjusted by raising or lowering to reduce or increase the size of the loop. The correct adjustment of the thread take-up and the loop controller is determined by the conditions under which the machine has to operate.

MACHINES 62-39 AND 62-40

For adjustment of needle thread take-up and slack thread controller, see Machine 62-27 on page 8.

For adjustment of throat plate thread retainer, see Machine 62-26 on page 8.

MACHINE 62-41

For adjustment of alternating pressers, see Machine 62-27 on page 9.

For adjustment of throat plate thread retainer, see Machine 62-26 on page 8.

MACHINE 62-43

To Time the Ruffling Mechanism

The ruffling blade should be timed to start its ruffling stroke when the feed dog commences its feeding movement. The ruffling

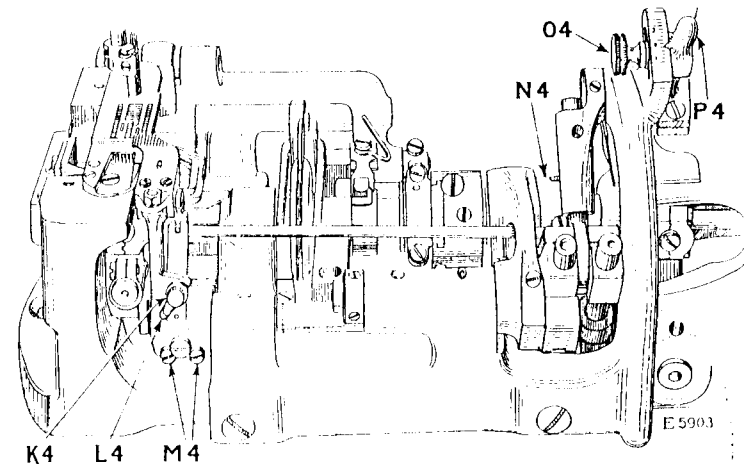


FIG. 16

blade should continue its ruffling stroke until the needles enter the goods. To time the ruffling blade, loosen the two set screws in the eccentric (N4, Fig. 16) and turn the eccentric over toward you or from you, as required, then securely tighten the two set screws.

MACHINE 62-43 (Continued)**To Position the Ruffling Blade**

The ruffling blade should be positioned so that it carries the ruffled material just beyond the edge of the separating blade so that the needle will enter the ruffle. The ruffling blade can be positioned after loosening the two screws (M4, Fig. 16).

To Regulate Tension on Ruffling Blade

The tension on the ruffling blade is regulated by loosening the wing lock nut (L4, Fig. 16) and turning the adjusting screw (K4, Fig. 16) until the required tension is obtained. Light weight fabrics require less tension than heavy fabrics.

To Regulate the Fullness of Ruffles

The fullness of the ruffles is regulated by the lever (P4, Fig. 16). To increase the fullness of the ruffles, loosen the thumb screw (O4, Fig. 16) and move the lever (P4) upwardly. For less fullness of the ruffles, move the lever (P4) downwardly. When the desired fullness of the ruffles is obtained, securely tighten the thumb screw (O4).

MACHINE 62-45

For adjustment of needle thread controller, see Machine 62-50 on pages 21 and 22.

For adjustment of throat plate thread retainers, see Machine 62-26 on page 8.

MACHINE 62-47**To Time and Adjust the Feeding Foot**

The feeding foot (S3, Fig. 17) should start its feeding movement with the feed dog. If it does not, loosen the two set screws

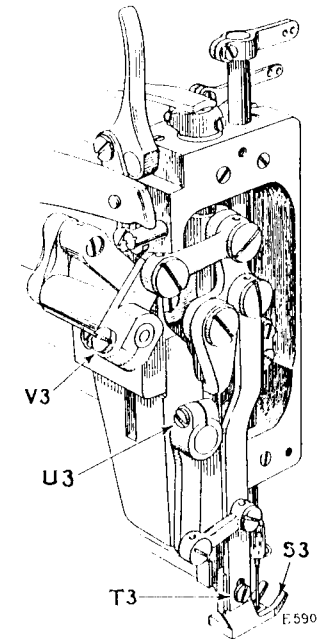


FIG. 17

(Y3, Fig. 18) in the upper feed eccentric, located on the rotary shaft near the base of the upright part of the arm, and turn this

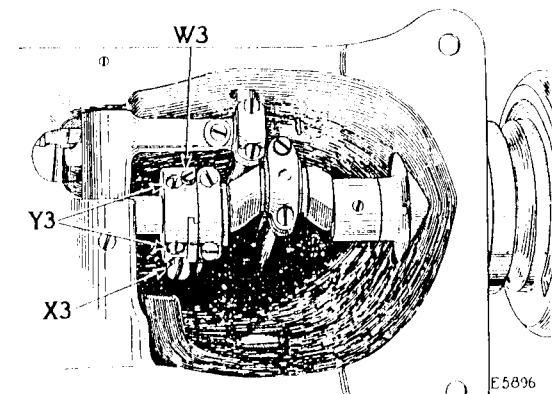


FIG. 18

MACHINE 62-47 (Continued)

eccentric from you or toward you as required, until the feeding foot is correctly timed, then securely tighten the two set screws (Y3).

The feeding foot should be adjusted so that when it descends upon the material, the lifting presser foot will rise just high enough to clear the material. This adjustment can be made after loosening the screws (T3 and V3, Fig. 17).

The feeding foot should also be adjusted to clear the lifting presser foot. This adjustment can be made after loosening the screw (U3, Fig. 17). It is advisable to have the feeding foot come as close as possible to the lifting foot without striking it.

To Regulate the Amount of Travel of the Feeding Foot

The amount of travel of the feeding foot should conform with that of the feed dog. To make this adjustment loosen the set screw (W3, Fig. 18) in the upper feed eccentric and turn the large screw (X3, Fig. 18) inwardly or outwardly, as may be required, then securely tighten the set screw (W3).

To Adjust Needle Thread Take-up

See Machine 62-27 on page 8.

MACHINE 62-48**To Adjust the Trimmer**

To remove the knife, take out the screw which fastens the knife to the left side of the knife support (Z3, Fig. 19).

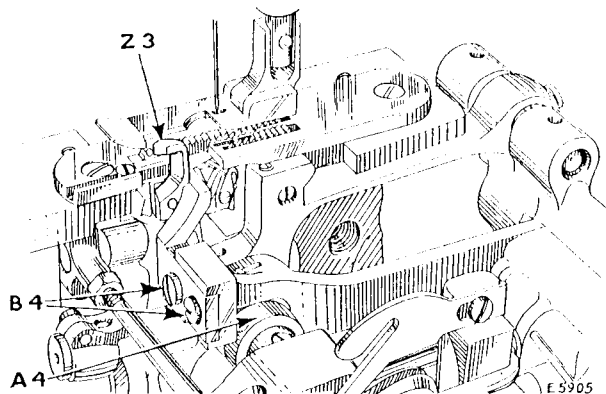


FIG. 19

MACHINE 62-48 (Continued)

After fastening new knife in position on knife support, see that the cutting edge of the knife passes the edge of the throat plate cutting bar as closely as possible. The sidewise adjustment of the knife can be made after loosening the two screws (B4, Fig. 19).

The knife should be timed to start its downward cutting movement when the needle bar commences its downward stroke. To time the knife, loosen the two set screws in the eccentric (A4, Fig. 19) and turn the eccentric over from you or toward you, as required, until the knife is correctly timed, then securely tighten the two set screws.

MACHINE 62-50**To Time the Needle Thread Nipper**

The needle thread nipper at the front of the machine should be timed to release the thread when the take-up reaches the point where the thread controller starts to pull off the thread. To time the thread nipper, loosen the two set screws which hold its cam on the arm shaft and turn the cam, as required, then tighten the two set screws.

To Adjust the Throat Plate Thread Retainer

For adjustment of the throat plate thread retainer, see Machine 62-26 on page 8.

To Adjust the Needle Thread Controller

The needle thread controller (C4, Fig. 20) can be raised or lowered to pull off more or less thread according to the thickness

MACHINE 62-50 (Continued)

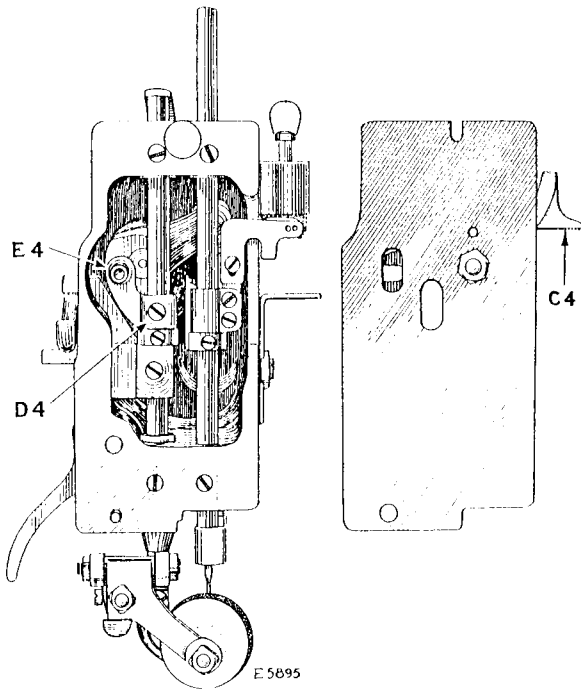


FIG. 20

of the material being stitched. To make this adjustment, loosen the screw (D4, Fig. 20) and move the roller bracket (E4, Fig. 20) up or down, as required, on the presser bar, then securely tighten the screw (D4).

MACHINE 62-53

This machine has an adjustable looper carrier by means of which each looper can be independently adjusted to bring the point of the looper the correct distance from its needle, as instructed on page 1.

MACHINE 62-54

To Set Looper Correct Distance from Right Hand Needle

When the needle bar is at its lowest point, the distance from the right hand or inside needle to the point of the looper should be $\frac{5}{32}$ inch. If the distance is less than $\frac{5}{32}$ inch, loosen the two lock nuts (F, Fig. 1, page 1) at the right and left ends of the looper carrier pitman rod (K, Fig. 1) and turn the pitman rod over from you. If the distance is more than $\frac{5}{32}$ inch, turn this pitman rod over toward you. When the correct distance is obtained, be sure to keep the bearings in alignment, then tighten the two lock nuts (F).

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

See Machine 62-27 on page 8.

To Time the Looper Thread Take-up

It may be necessary to set the looper thread take-up (J, Fig. 1, page 1) slightly earlier than instructed on page 4.

To Time the Looper Thread Nipper

The looper thread nipper (C, Fig. 1, page 1) should be timed to act slightly later than instructed on page 5.

To Adjust the Covering Thread Carrier and Thread Spreader

See Machine 62-55 on page 25.

MACHINE 62-55

To Set Looper Correct Distance from Right Hand Needle

When the needle bar is at its lowest point, the distance from the right hand or inside needle to the point of the looper should be $\frac{7}{32}$ inch. If the distance is more or less than $\frac{7}{32}$ inch, loosen the two lock nuts (F, Fig. 1, page 1) at the right and left ends of the looper carrier pitman rod (K, Fig. 1) and turn the pitman rod to obtain the correct distance. When the correct distance is obtained, be sure to keep the bearings in alignment, then tighten the two lock nuts (F).

MACHINE 62-55 (Continued)

To Adjust the Auxiliary Feed Mechanism

For regulating the auxiliary feed and raising or lowering the auxiliary feed dog, see Machine 62-28 on page 9.

For adjusting the horizontal position of the auxiliary feed dog, see Machine 62-56 on page 28.

To Adjust the Needle Thread Take-up and Loop Controller

As both the left hand needle and the centre needle are set lower in the needle bar than the right hand or inside needle and

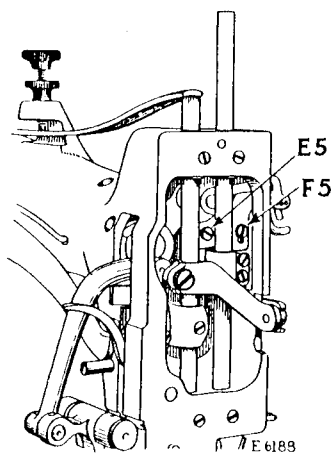


Fig. 21

the looper does not reach them as early, there is a tendency for the centre and outside needles to form too large a loop. If the loop is too large, the looper is liable to swing the loop off its point. Means are provided in the form of a loop controller, working in conjunction with a thread take-up, to take care of this condition, also to prevent the slack thread from the needles as they start downwardly, from looping around the needle points.

By loosening the screw (E5, Fig. 21) in the thread take-up and the screw (F5, Fig. 21) in the loop controller, both can be adjusted by raising or lowering to reduce or increase the size of the loop. The correct adjustment of the thread take-up and the loop controller is determined by the conditions under which the machine has to operate.

MACHINE 62-55 (Continued)

To Adjust the Covering Thread Carrier and Thread Spreader

The covering thread carrier (G5, Fig. 22) and the thread spreader (H5, Fig. 22) should be adjusted so that there will be the proper clearance in passing each other.

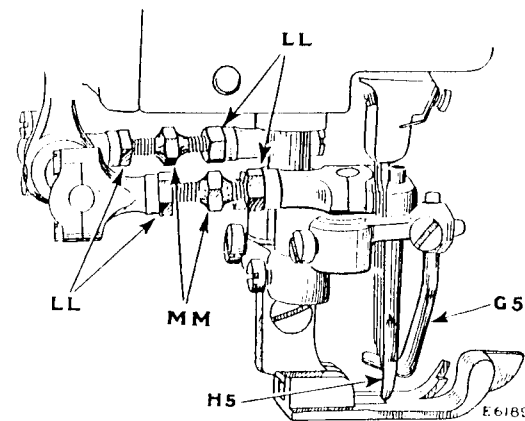


Fig. 22

To raise or lower the covering thread carrier (G5) and the spreader (H5), loosen their set screws and adjust as required, then securely tighten the two set screws.

To increase or decrease the distance of the carrier (G5) and the spreader (H5) in relation to the needles, loosen the four lock nuts (LL, Fig. 22) and turn the two pitman nuts (MM, Fig. 22) over to the left or right until the required distance is obtained, then securely tighten the four lock nuts (LL).

MACHINE 62-56

To Adjust the Trimming Mechanism

To remove the cutting plate (A5, Fig. 24) remove the presser foot and throat plate. Loosen the nut (R4, Fig. 23) and the two

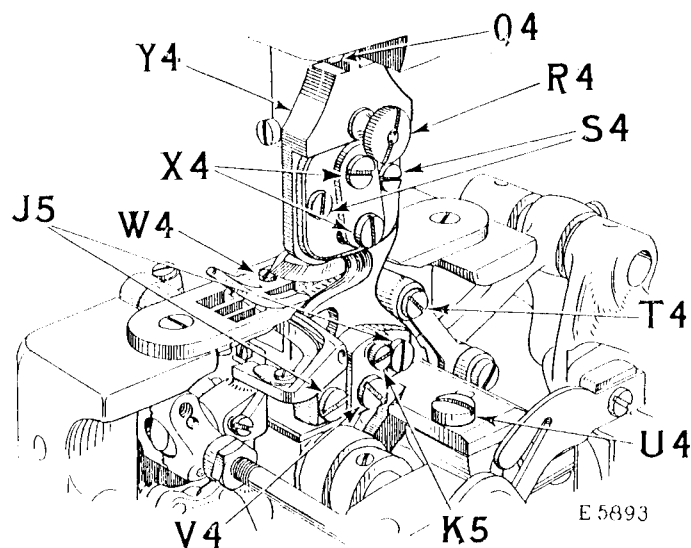


Fig. 23

screws (S4, Fig. 23) and take out the two screws (X4, Fig. 23), and gently tap the nut (R4) to partly drive out the wedge (Z4, Fig. 24), and the cutting plate (A5) can then be removed.

Cutter Grinder 27934 is recommended for resharpening the cutting plate. As the cutting plate trims by compression, care must be taken not to make its cutting edge too sharp.

Replace the cutting plate and fasten it with the two screws (X4, Fig. 23). Before tightening the two screws (S4, Fig. 23), adjust the pressure on the cutting plate (A5) by means of the nut (R4, Fig. 23) so that it will bear lightly on the cutting surface of the cutting lever (B5, Fig. 24), then tighten the two set screws (S4).

MACHINE 62-56 (Continued)

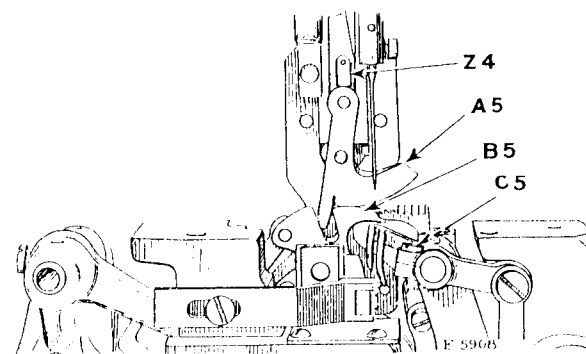


Fig. 24

To remove the cutting lever (B5, Fig. 24), take out the three screws (Q4, T4 and U4, Fig. 23) and by a twisting motion, the

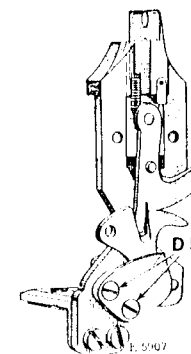


Fig. 25

bracket (Y4, Fig. 23) can then be removed from the machine. Remove the screw (V4, Fig. 23) and the two screws (D5, Fig. 25), and the cutting lever (B5) can then be removed.

The cutting surface of the cutting lever (B5) must be kept perfectly flat to ensure the satisfactory operation of the trimmer. The cutting surface should be occasionally refaced, it being necessary to remove only the impression made by the cutting plate.

The cutting surface of the cutting lever (B5) should be flush with the top surface of the throat plate. To raise or lower the cutting lever (B5), loosen the two screws (J5, Fig. 23) and turn the screw (K5, Fig. 23) in or out until the cutting lever is set at the correct height, then securely tighten the two screws (J5).

MACHINE 62-56 (Continued)**To Adjust the Presser Foot Extension**

The presser foot extension should be adjusted according to the trimming margin so that it will hold the material firmly close to the trimmer. It can be moved to the required position, after loosening the screw (W4, Fig. 23).

To Change the Trimming Margin

The distance from the line of stitching to the trimmed edge can be varied by loosening the two screws (Q4 and U4, Fig. 23) and moving the trimmer to the right or left, as desired.

To Adjust the Auxiliary Feed Mechanism

For regulating the auxiliary feed and raising or lowering the auxiliary feed dog, see Machine 62-28 on pages 9 and 10.

To adjust the horizontal position of the front feed dog so that it will be level with the rear feed dog, loosen the screw (C5, Fig. 24) in the front feed connecting link and with a screw-driver push against the teeth of the feed until this position is obtained, then securely tighten the screw (C5).

MACHINE 62-57

For adjustment of trimmer, see Machine 62-31 on pages 11, 12 and 13.

For adjustment of auxiliary feed mechanism, see Machine 62-28 on page 9, and Machine 62-56 above.

MACHINE 62-58**To Time and Adjust the Reciprocating Feed Slide**

The reciprocating feed slide (G4, Fig. 26) should start its feeding movement with the drop feed. If it does not, loosen

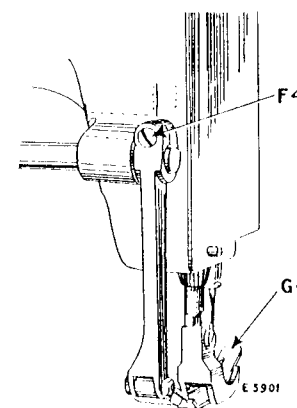


FIG. 26

the two set screws (Y3, Fig. 18) in the eccentric, located on the rotary shaft near the base of the upright part of the arm, and turn this eccentric from you or toward you, as required, until the reciprocating feed slide is correctly timed, then securely tighten the two set screws.

The reciprocating feed slide (G4) should be adjusted so that it moves forward as far as possible without coming into contact with any other part. It can be adjusted to the required position after loosening the screw (F4, Fig. 26).

To Regulate the Amount of Travel of the Reciprocating Feed Slide

The amount of travel of the reciprocating feed slide (G4, Fig. 26) must conform with that of the feed dog. To make this adjustment, loosen the set screw (W3, Fig. 18) in the upper feed eccentric and turn the large screw (X3, Fig. 18) inwardly or outwardly, as may be required, then securely tighten the set screw (W3).

MACHINE 62-58 (Continued)**Adjustment of Needle Thread Take-up
and Slack Thread Controller**

For adjustment of the needle thread take-up (H4, Fig. 27) and the slack thread controller (J4, Fig. 27), see Machine 62-27, on page 8.

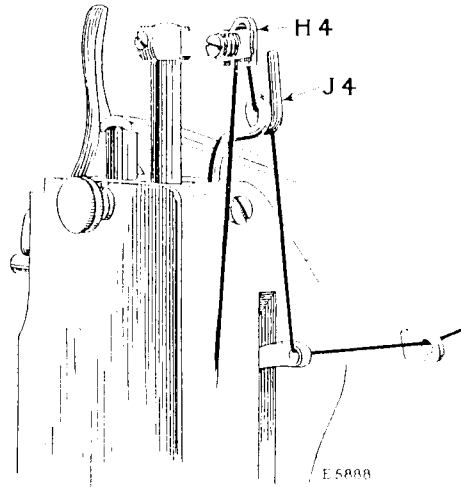


Fig. 27

When threading Machine 62-58, care must be taken to pass the thread back of the thread controller spring which is attached to the needle thread take-up as shown in (Fig. 27).

MACHINE 62-61

This machine has an adjustable looper carrier by means of which each looper can be independently adjusted to bring the point of the looper the correct distance from its needle, as instructed on page 1.