SINGER 140G2

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.

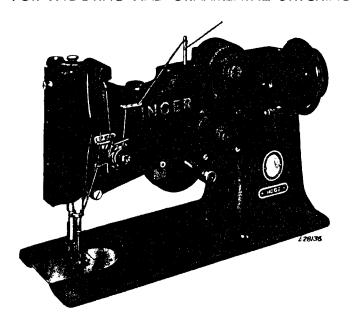
30277G (364) (formerly 2667W)

INSTRUCTIONS

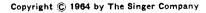
FOR USING AND ADJUSTING

SINGER* SEWING MACHINE 140G2

FOR FAGOTING AND ORNAMENTAL STITCHING



THE SINGER COMPANY



DESCRIPTION

Machine 140G2 makes an ornamental lock stitch. It has a vibrating needle bar and a horizontal axis rotary sewing hook set in a transverse position.

The vibrating needle bar frame is actuated sidewise by a cam, and the feed mechanism moves the work forward and backward to produce fagoting in the material, as shown in Fig. 2.

The machine has ball bearings on the pulley end of the arm shaft and the hook driving shaft.

This machine is intended for open work fagoting and ornamental stitching in women's wear such as slips, brassieres, corsets, dresses and other loosely woven fabrics.

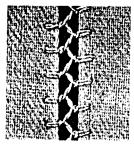


Fig. 2. 140G2 Fagoting (Twice Enlarged)

Throat plates with separator can be furnished as ordered, to make the opening or distance between two edges of material from 3/32" to 3/16", in steps of 1/32". The standard width of opening is 5/32".

A decorative effect can be produced on table covers, scarfs, pajamas etc., by feather stitching with thread of a contrasting color. A plain throat plate is furnished with the machine for this purpose.

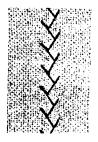


Fig. 3 140G2 Feather Stitching (Actual Size)

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.

Apply oil to the places indicated by the unlettered arrows in Figs. 4 to 7 and as indicated in Fig. 22.

When in continuous use, the machine should be oiled at least twice a day.

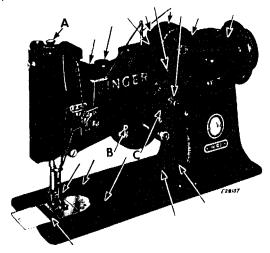


Fig. 4. Oiling Points and Adjustments at Front of Machine

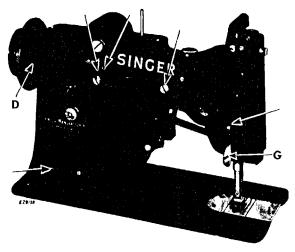


Fig. 5. Oiling Points and Adjustments at Rear of Machine

Remove the face plate and apply oil to the places indicated in **Fig. 6**, then replace the face plate.

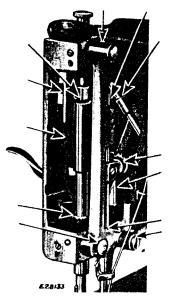


Fig. 6. Face Plate Removed, Showing Oiling Points

Oil the bobbin case bearing in the hook race each time a bobbin is replaced.

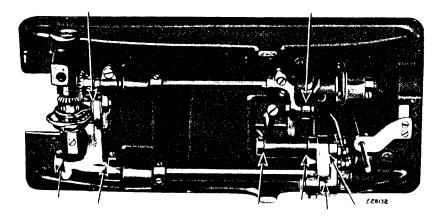


Fig. 7. Oiling Points Underneath the Machine

Slip the belt off the machine pulley, turn the machine back on its hinges and apply oil to the points shown in Fig. 7, then bring the machine forward into place.

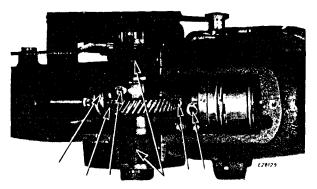


Fig. 8. Showing the Oiling Points Underneath Arm Cap

The maximum speed recommended for Machine 140G2 is 2200 stitches per minute. The machine should be run slower than the maximum speed at first until the parts which are in movable contact have become glazed by their action upon each other. When the machines are in operation, the machine pulley should turn over toward the operator.

NEEDLES

Needles for Machine 140G2 are Catalogue 1901 (135x7) and are made in sizes 7, 8, 9, 10, 12, 14, 16, 18, 20, 22 and 24.

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. Rough or uneven thread, or thread which passes with difficulty through the eye of the needle, will interfere with the successful use of the machine.

Orders for needles must specify the quantity required, the size and also the catalogue number.

The following are details of an intelligible order:

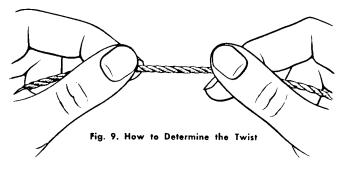
"100 No. 12, Catalogue 1901 Needles"

RELATIVE SIZES OF NEEDLES AND THREAD

Size Numbers of Needles	FOR CLOTH WORK	
	Cotton	Silk
12	70 to 100	OO to A
14	50 to 70	A, B
16	40 to 50	B, C
18	30 to 40	C, D
20	24 to 30	D, E

THREAD

Left twist thread should be used in the needle. Either right or left twist thread can be used in the bobbin.



Hold the thread as shown above. Turn the thread over toward you between the thumb and the forefinger of the right hand; if left twist, the strands will wind tighter; if right twist, the strands will unwind.

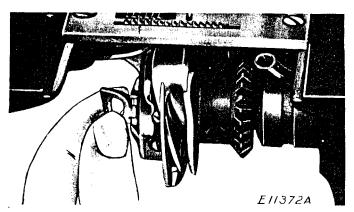


Fig. 10. Removing the Bobbin Case

TO REMOVE THE BOBBIN CASE

Lift the bobbin case latch, as shown in Fig. 10, and take out the bobbin case. Turn its open end down and release the latch and the bobbin will drop out.

TO WIND THE BOBBIN

Fasten the bobbin winder to the table with its driving pulley in front of the machine belt so that the pulley will drop away from the belt when sufficient thread has been wound upon the bobbin.

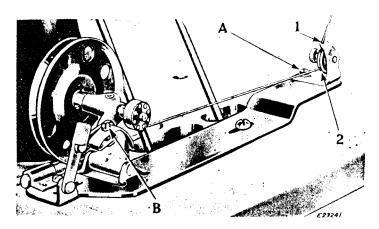


Fig. 11. Winding the Bobbin

Place the bobbin on the bobbin winder spindle and push it on as far as it will go.

Pass the thread down through the thread guide 1 in the tension bracket, around the back and between the tension discs 2. Then wind the end of the thread around the bobbin a few times, push the bobbin winder pulley over against the machine belt and start the machine.

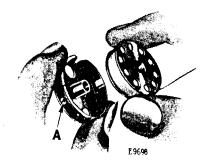
When sufficient thread has been wound upon the bobbin, the bobbin winder will stop automatically.

If the thread does not wind evenly on the bobbin, loosen the screw **A** in the tension bracket and move the bracket to the right or left as may be required, then tighten the screw.

The amount of thread wound on the bobbin is regulated by the screw ${\bf B}$. To wind more thread on the bobbin, turn the screw ${\bf B}$ inwardly. To wind less thread on the bobbin, turn the screw outwardly.

Bobbins can be wound while the machine is stitching.

TO THREAD THE BOBBIN CASE



Hold the bobbin between the thumb and forefinger of the right hand, the thread drawing on the bottom from the left toward the right, as shown in Fig. 12.

Fig. 12

With the left hand, hold the bobbin case as shown in Fig. 12, the tension spring being at the front and place the bobbin into the bobbin case.



Fig. 13



Then pull the thread into the slot in the edge of the bobbin case as shown in Fig. 13, and back under the tension spring into the slot at the end of the tension spring, as shown in Fig. 14.

Fig. 14

TO REPLACE THE BOBBIN CASE

After threading, take the bobbin case by the latch, holding it between the thumb and forefinger of the left hand; place the bobbin case on the centre stud of the bobbin case base, release the latch and press the bobbin case back until the latch catches the groove near the end of the stud. Allow the thread to hang free and replace the slide in the bed of the machine.

TO SET THE NEEDLE

Push the needle up in the needle bar as far as it will go, with the long groove to the front, and secure it firmly with the set screw.

It may be necessary to turn the needle slightly to the right or left for some threads, if stitches are missed.

UPPER THREADING See Fig. 15

Turn machine pulley until thread take-up lever 10 is at its highest point.

Pass thread from unwinder, from back to front through lower hole 1 in pin on top of machine, from right to left through upper hole 2 in pin, downward through hole 3, upward through middle hole 4 and downward through hole 5 of thread straightener, down, under and to left between tension discs 6, up into fork 7, against pressure of controller spring, back of wire guard 8, up through thread guide 9, from right to left through thread take-up eyelet 10, down again through thread guide 9, back of guide 11, through guide 12, down through thread guide 13 at lower end of needle bar and from front to back through eye of needle 14. Draw about two inches of thread through eye of needle with which to start sewing.

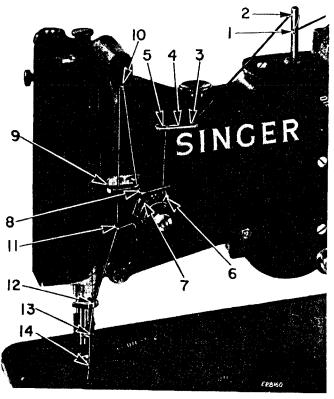


Fig. 15. Upper Threading

TO PREPARE FOR SEWING

With the left hand hold the end of the needle thread, leaving it slack from the hand to the needle. Turn the machine pulley over toward you until the needle moves down and up again to its highest point, catching the bobbin thread. Draw up the needle thread and the bobbin thread will come up with it through the hole in the throat plate. Lay both threads back under the presser foot.

TO START SEWING

Place the material under the presser foot, lower the presser foot and start to sew, turning the machine pulley over toward you.

TO TURN A CORNER

Stop the machine while the needle is rising, but before it is out of the material, raise the presser foot and turn the work, using the needle as a pivot.

TO REMOVE THE WORK

Raise the presser lifter, turn the machine pulley over until the take-up lever 10, Fig. 15 is at its highest point and draw the work from you. If the threads do not draw out easily, the take-up lever is not in the right position, as directed. If the machine is stopped as directed, the needle will-not be unthreaded in starting to sew, even if only a short end of thread is left through the needle.

For convenience in taking out the work, the tension of the upper thread is released by raising the presser foot with the lifter G, Fig. 5; but is not released by thick goods or seams passing under the presser foot. Do not try to adjust the upper tension M, Fig. 20 when the presser lifter is up as the tension is then loose.

TO REGULATE PRESSURE ON THE MATERIAL

To increase pressure on the material, turn up thumb screw A, Fig. 4. To decrease pressure, turn down thumb screw A.

TENSIONS

The needle and bobbin threads should be locked in the centre of the thickness of the material, thus:

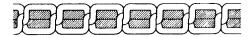


Fig. 16. Perfect Stitch

If the tension on the needle thread is too tight, or if that on the bobbin thread is too loose, the needle thread will lie straight along the upper surface of the material, thus:

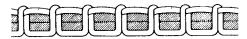


Fig. 17. Tight Needle Thread Tension

If the tension on the bobbin thread is too tight, or if that on the needle thread is too loose, the bobbin thread will lie straight along the under side of the material, thus:

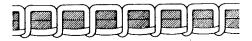


Fig. 18. Loose Needle Thread Tension

TO REGULATE THE TENSIONS

Tension on needle thread should be regulated only when presser foot is down. To increase tension, turn thumb nut M, Fig. 20, over to the right. To decrease tension, turn thumb nut over to the left.

Tension on bobbin thread is regulated by screw **A, Fig. 12**. To increase tension, turn screw over to the right. To decrease tension, turn screw over to the left.

When the tension on the bobbin thread has been once properly adjusted, it is seldom necessary to change it, as a correct stitch can usually be obtained by varying the tension on the needle thread.

TO REGULATE THE DISTANCE BETWEEN STITCHES

The distance between stitches depends on the amount of forward-and-backward feeding motion, and is indicated by a number appearing in the opening shown below.

Press the stitch regulator lever A, Fig. 19 and at the same time turn the machine pulley over toward you until the lever A engages

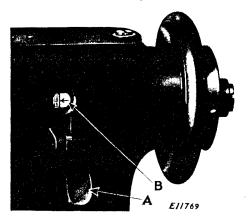


Fig. 19. Stitch Regulator

the notch in the stitch regulator flange B. Continue to hold the lever A in the notch in the flange B and at the same time turn the machine pulley backward or forward, as required, until the desired number is opposite the arrow, then release the lever A.

TO REGULATE WIDTH OF STITCH

The bight or width of stitch is regulated by loosening the nut **B**, **Fig. 4** and raising or lowering the needle bar frame pitman in the segment lever, as required.

The maximum width between outside stitches is 5/16". As the width of vibration is increased, the width of the throat plate guide must also increase, in order to prevent the needle catching in the material on its two inside strokes.

INSTRUCTIONS

FOR

ADJUSTERS AND MECHANICS

THREAD CONTROLLER

The function of the thread controller spring is to hold back the slack of the needle thread until the eye of the needle nearly reaches the goods in its descent, as without this controlling action of the spring, the slack thread or silk (more especially silk) will sometimes be penetrated by the point of the needle as the needle is descending.

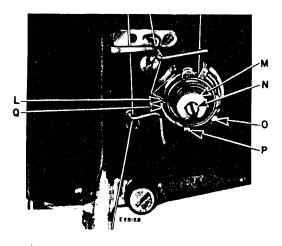


Fig. 20

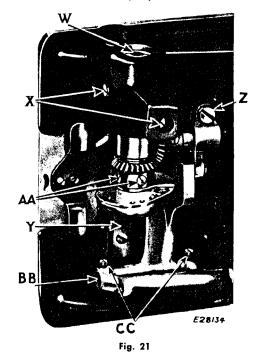
For more controller action on the thread, loosen the stop screw O, Fig. 20 under the controller discs, and set the stop Q lower. For less action, set the stop higher. The position of the controller spring L is the average setting.

To strengthen the action of the controller spring on the thread, loosen the tension stud screw P, and turn the tension stud N slightly to the left with a screwdriver. To lighten the spring action, turn the stud to the right, then tighten the tension stud screw P.

TO TIME THE SEWING HOOK

Remove the throat plate and turn the machine pulley over toward you until the LOWER timing mark V, Fig. 23 on the needle bar is just visible at the end of the needle bar frame (or until the needle has risen 3/32 inch from its lowest position); if the needle and hook are in correct time, the point of the hook will be opposite the centre of the needle.

To time the hook, loosen the set screws in the lower belt pulley R1, Fig. 25 and turn the hook as required. Before tightening the set screws, see that there is no end play in the shaft.



TO SET THE HOOK TO OR FROM THE NEEDLE

The point of the hook should come as close as possible to the needle without touching it. Loosen the four screws X and AA, Fig. 21 and slide the hook to the correct position, then tighten the two screws X. Reset the gear on the hook shaft and tighten screws AA.

TO REMOVE THE HOOK

Remove the bobbin case stop Y, Fig. 21, loosen the hook spindle screw W, a few turns and tap it lightly to loosen the hook. Then remove the screw W and withdraw the hook from its socket.

TO SET THE NEEDLE BAR FRAME

Turn the machine pulley over toward you until the arrow marked "A" on needle vibrator cam C, Fig. 22 is directly opposite the roller on the lever D. In this position, it should be possible to move the pitman stud G upward and downward in the segment F without causing sidewise vibration of the needle. If this is not possible, correct by loosening screw E and repositioning segment F, then retighten screw E.



Fig. 22

To time the needle vibrator cam C, Fig. 22, turn the machine pulley until the timing marks J2 and K2, Fig. 24 are together and the needle bar is at its lowest point, loosen the screws in the gear G2, Fig. 24 and turn the cam to right or left until the arrow B is opposite the roller. Then retighten the screws.

If, for any reason, the intermediate gear which operates the cam C is thrown out of engagement with the other gears, the cam should be turned before reengagement so that after the gears are engaged, the arrow B will be opposite the roller with the timing marks in line, as instructed above.

TO SET THE NEEDLE BAR

See that the needle is up in the needle bar as far as it will go. With the needle bar at its lowest position, the upper timing mark U, Fig. 23 should be just visible at the lower end of the needle bar frame.

If the needle bar is not correctly set, loosen connecting stud set screw \mathbf{R} , \mathbf{Fig} . 23 and move the needle bar to correct position, then tighten set screw \mathbf{R} .

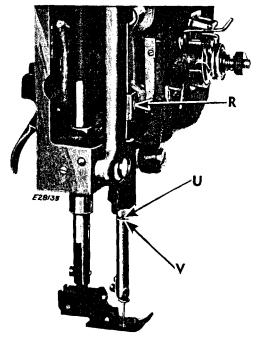


Fig. 23

TO SET A NEEDLE BAR WHICH HAS NO TIMING MARK—Set the needle bar so that when it rises 3/32 inch from its lowest position, the eye of the needle will be about 1/16 inch below the point of the hook as the hook point enters the thread loop.

FEED MECHANISM

To take up lost motion of the feed driving and lifting connections, adjust their pinch screws N2, Fig. 24.

To prevent the feed dog from striking either end of the slots in the throat plate, loosen screw U1, Fig. 25 and move the feed dog forward or backward until the longest stitch can be taken without the feed dog striking, then tighten the screw U1.

TO RAISE OR LOWER THE FEED DOG

Usually when at its highest position, the feed dog should show a full tooth above the throat plate.

Remove the throat plate; clean the lint and dirt from between the feed points and replace the throat plate; tip the machine back and turn the machine pulley toward you until the feed dog is at its highest position; loosen screw **Z**, **Fig. 21** and raise or lower the feed dog as required, then tighten the screw **Z**.

Loosen the two screws CC, Fig. 21 and turn the eccentric stud BB, Fig. 21 to level off the front and back of the feed dog, then tighten the screws CC.

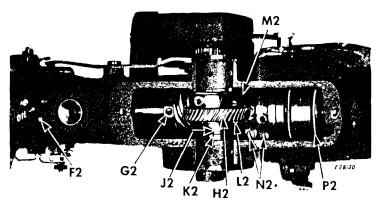


Fig. 24. Arm Cap Removed

TO TIME THE FEED REVERSING ECCENTRIC

Remove arm cap from top of machine. Turn the machine pulley over toward you until the needle bar frame S, Fig. 23 is at its extreme left throw and the needle bar at its lowest position. The timing mark J2, Fig. 24, on the hub of the gear H2, should now be in line with the timing mark K2 on the end of the bushing. If the two timing marks are not in line, loosen the screws in spiral pinion L2, Fig. 24 on the arm shaft and turn pinion L2 to right or left to bring them in line, then tighten the screws in the pinion.

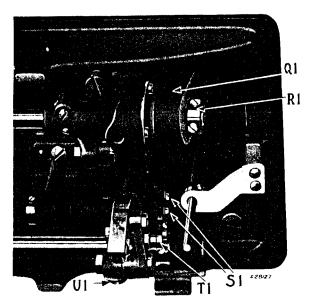


Fig. 25. Return Feed Adjustment

TO ADJUST FOR AMOUNT OF RETURN FEED

After the stitch is made in the edge of the material at the maximum side throw of the needle, the material must be fed backward far enough on the next stitch so that the needle passes behind the last stitch to form the fagoting lock instead of an ordinary zigzag stitch.

Turn the machine pulley over toward you until feed control connection **T1**, **Fig. 25** is at its lowest position; loosen screws **S1** and lengthen connection to get more return feed or shorten the connection for less return feed, then tighten the screws **S1**.

TO REMOVE THE ARM SHAFT

Slide the arm shaft connection belt Q1, Fig. 25 off the lower pulley and lift it off the upper belt pulley P2, Fig. 24. Loosen the set screws and remove the spot screws in the pulley P2, the feed lifting eccentric M2, and the needle bar crank F2. Loosen the screws in the gear pinion L2 and the worm gear G2, then draw the shaft out from the machine pulley end.

TO REMOVE THE BELT FROM WITHIN THE ARM

Slide the arm shaft connection belt **Q1**, **Fig. 25** off the lower pulley, and remove the machine pulley, loosen the arm shaft bushing (back) set screw **D**, **Fig. 5** at the back of the arm, and remove the bushing; lift the belt up through the arm cap hole as far as possible and draw it out through the space formerly occupied by the bushing.

When replacing the belt see that the sewing hook and needle are in correct time before running the belt on the lower pulley and verify the correctness of the timing before commencing to sew.

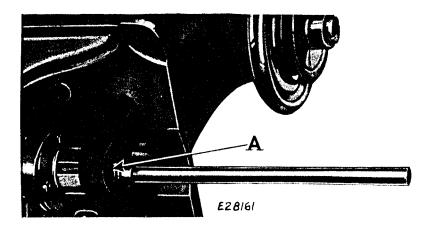


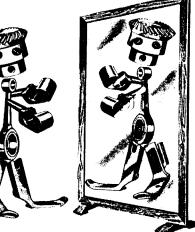
Fig. 26. Putting Belt on Lower Pulley with Belt Replacer 244005

To facilitate the replacing of the belt on the lower pulley, use belt replacer 244005 A, Fig. 26. Rest the replacer in the loop of the belt and slide it over the hub of the pulley, as shown in Fig. 26, having the notches in the replacer engage the two set screws in the hub of the pulley. Turn the machine pulley toward you until the belt is fully over the pulley, then remove the replacer.

NOTE: As belt replacer 244005 will serve for several machines, it is not regularly furnished with the machine, and must be ordered separately.

The Same!

To get replacements that are the <u>same</u> as parts in new machines...



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The improper placing or renewal of the Trademark "SINGER" or any other of the Trademarks of The Singer Company (all of which are duly Registered Trademarks) 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.