

Form K4450
(1046)

This Book should be carefully
preserved for reference.

INSTRUCTIONS

FOR USING AND ADJUSTING

SINGER B.R.K. ELECTRIC MOTORS

WITH KNEE CONTROL FOR
FAMILY SEWING MACHINES

DO NOT
Use Sin

Oil,
Parts or Repairs,
for your Machine



Look for the
Red "S"
There are Singer
Shops in every City

THE SINGER MANUFACTURING CO.

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**USE ONLY SINGER
LUBRICANT FOR
ELECTRIC MOTORS**



**THE BEST IS
THE CHEAPEST**



We prepare a specially
compounded lubricant
for use with our motors
SINGER LUBRICANT
is supplied in small tubes



**TO AVOID TROUBLE,
USE SINGER MOTOR
LUBRICANT ONLY**

THE SINGER B.R.K. SEWING MACHINE MOTOR.

THIS efficient motor has been specially designed for the operation of Singer Family Sewing Machines, its speed being at all times under the perfect control of the operator.

Instructions for Attaching the Motor.

The motor is attached to the machine arm, as shown in Fig. 2, after first removing the japan from the edges of the tongue (A, Fig. 1) to allow the bracket to slide up and down freely.

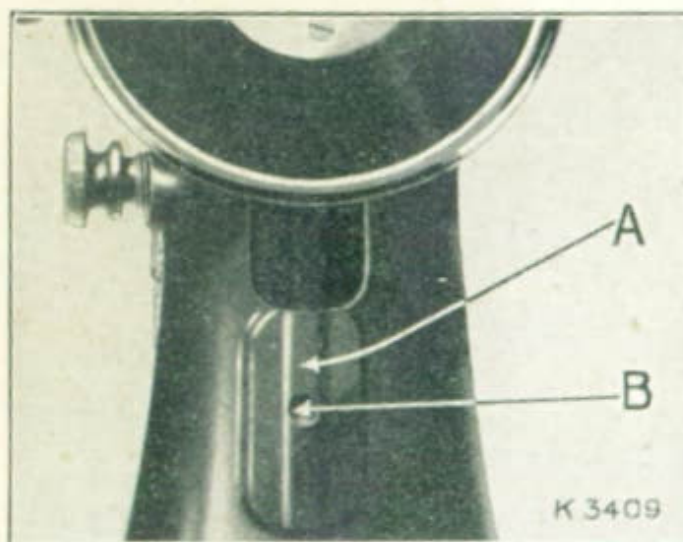


Fig. 1. Removing Japan from Tongue.

Place the motor bracket on the tongue, as shown in Fig. 2, so that the hole (B, Fig. 1) can be seen through the slot (C, Fig. 2). Then insert the screw (D, Fig. 2) and, after moving the motor upwards as far as it will go, tighten the screw.

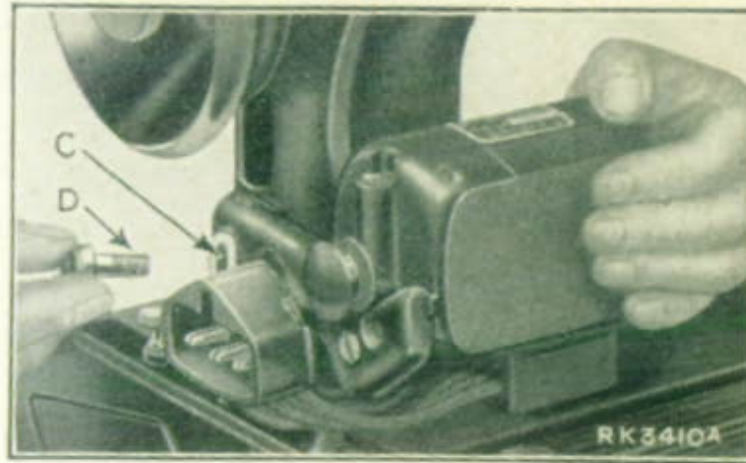


Fig. 2. Placing the Motor in Position.

Putting on Belt.

Place the belt over the top of the balance wheel into the groove at its back, as shown in Fig. 3, and then force the belt into the groove in the motor pulley in the manner shown in Fig. 4.

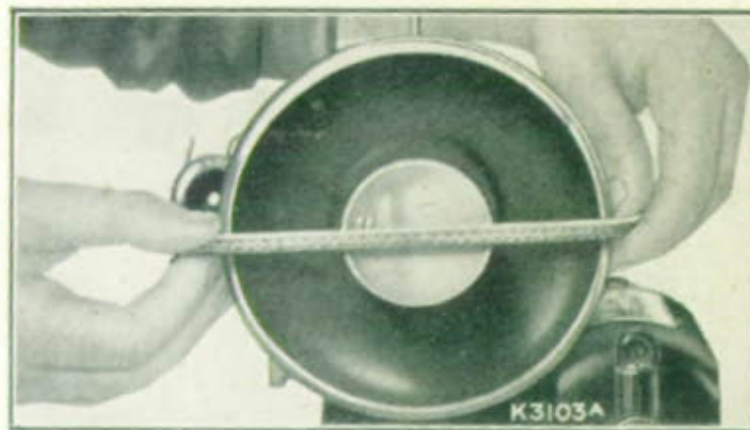


Fig. 3. Putting on Belt.

This is easily accomplished by placing the belt half over the motor pulley (E, Fig. 4) and holding it firmly in position with the thumb and forefinger of the right hand. A slight turn of the balance wheel will then cause it to spring into position.



Fig. 4. Springing Belt into Position.

To Adjust the Belt Tension.

Loosen the screw (D, Fig. 5) to allow the motor to drop downward. Now retighten the screw, and the belt will be found to have the correct tension.

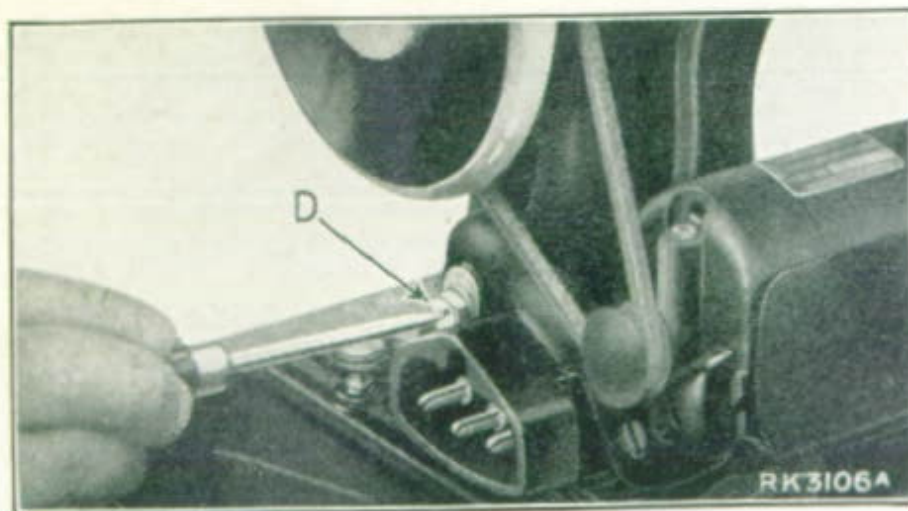


Fig. 5. Regulating the Belt Tension.

Electrical Connections.

The motor with eliminator, controller and Singer-light are supplied fitted with flexible cords for the necessary electrical connections, which are made as follows :—

Remove the terminal block (R, Fig. 6) by taking out the screw (S, Fig. 6). Then remove the three insulated thumb nuts (U, Fig. 7); also the three

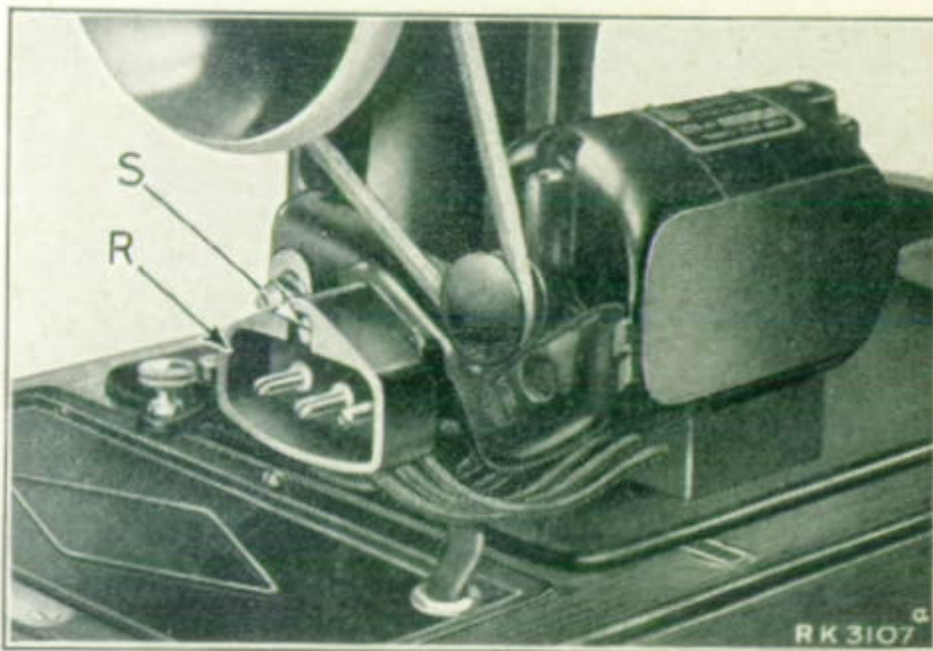


Fig. 6.

brass washers (V, Fig. 7). The terminal block has three pins which are distinguished by the figures 1, 2 and 3, in colour, directly above each pin, and the cords for these pins have either tracer threads or ends of corresponding colours.

The cords with the red markings are to be placed on pin 3 nearest the red spot, those with yellow markings on pin 1 nearest the yellow spot, and the black cords on the centre pin 2.

Replace the three washers (V) and the thumb nuts (U), tightening the latter securely; then, with the screw (S), fasten the terminal block to the motor bracket, as shown in Fig. 6, and insert the socket plug of the supply lead into the three-pin terminal.

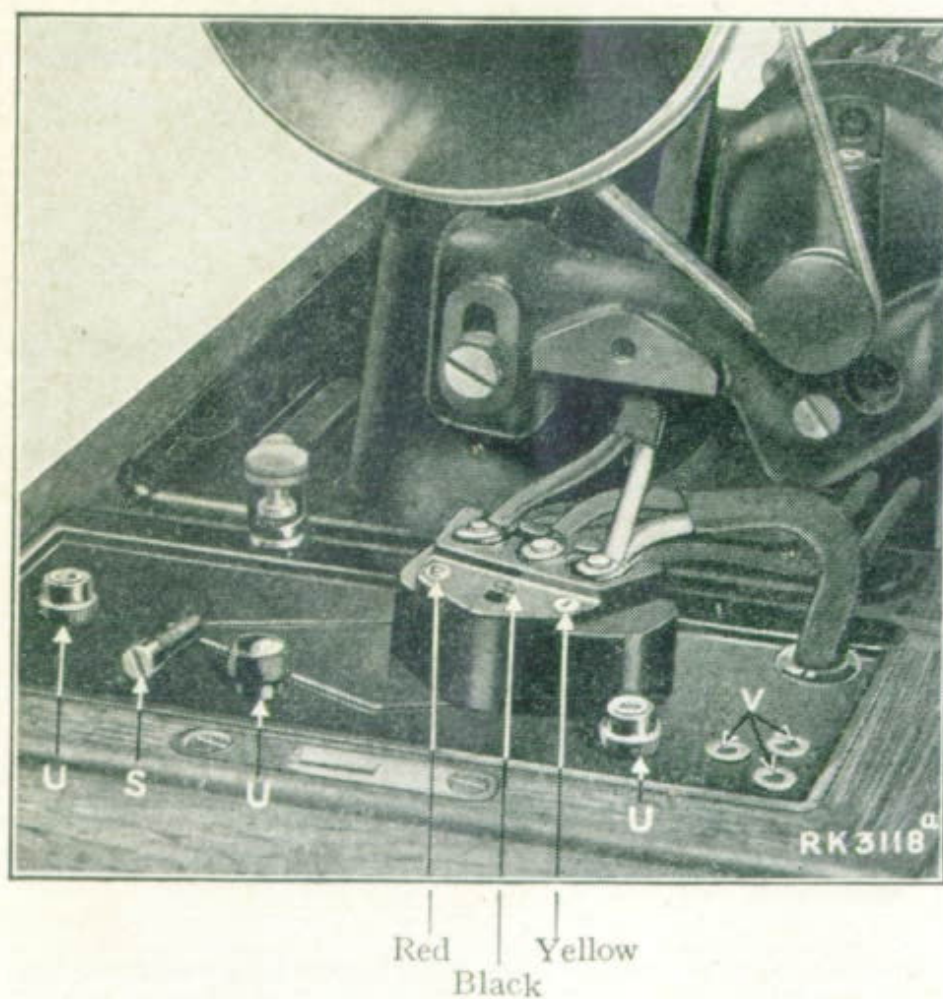


Fig. 7. Attaching the Cords.

The Knee Lever.



Fig. 8.

The knee lever actuates the controller, which, in the case of Singer Portable Machines, is located in the recess in the machine wood base.

To use the lever, hold it lengthwise of the base, as shown in Fig. 8, and insert its end (H, Fig. 8) into the hole (G, Fig. 8).

When not in use, the lever is conveniently housed in the machine cover or carrying case, as shown in Figs. 10 and 11.

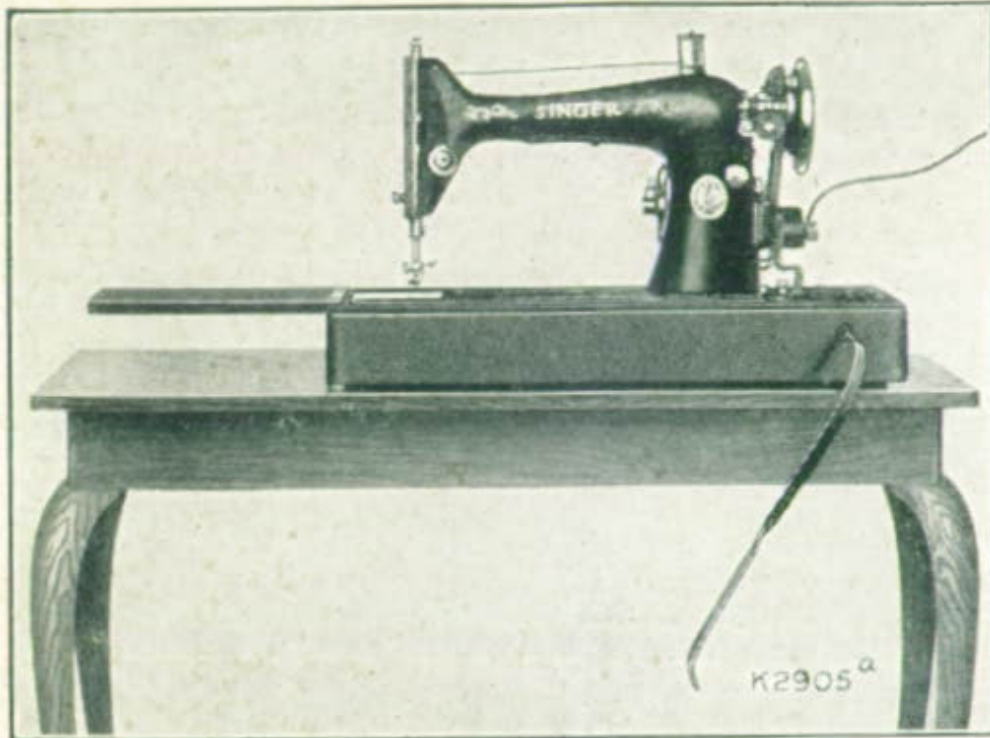


Fig. 9. Portable Machine with Knee Lever in Position.

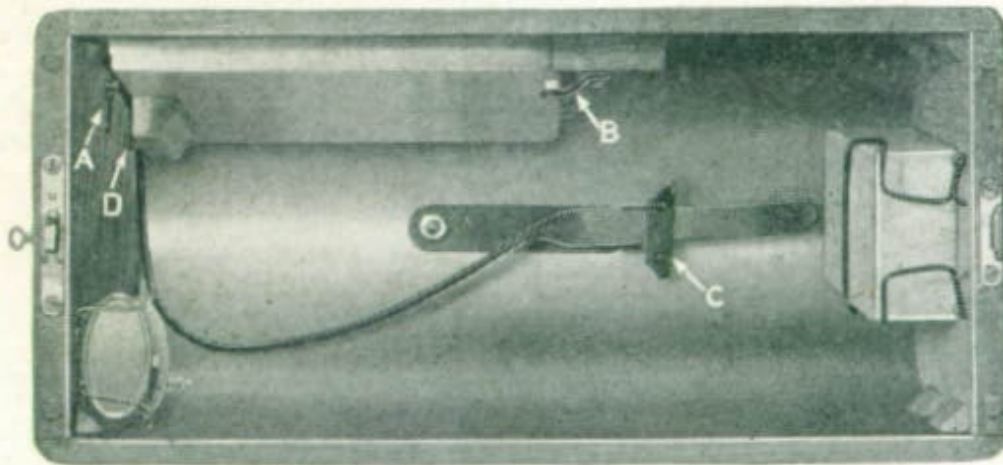


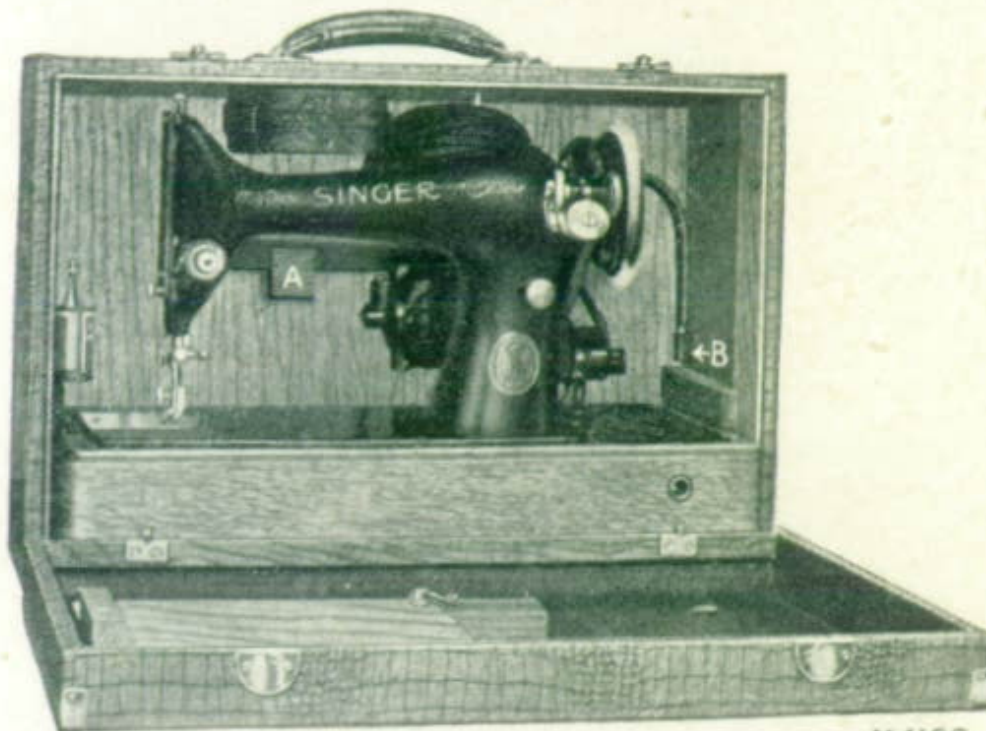
Fig. 10.

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The above illustration shows the correct positions of the Extension Table and Knee Lever in the wood cover for the 99K Machine. The table hook is placed in the holder A, and secured by turning the button B inwards.

The end of the Knee Lever is placed in the holder D, and its knee portion in the fitting C, the latch of which is then turned.

In the cover for the 15K and 66K Machines, the position of the Knee Lever is reversed, the fitting C being attached to the other handle bolt, and fitting D placed at the other end of the cover. Otherwise, the method of attaching the lever is the same.



K4166

Fig. 11.

Fig. 11 shows a machine in correct position in the Carrying Case with its knee lever housed at the back of the case and the wood table fitted inside the lid.

First place the end of the knee lever in the holder B, and its knee portion behind the wood

block A. Then slide the machine, with its balance wheel to the right, into the case and replace the lid as instructed by the tag, Form K5295, which is tied to the handle of the case. This tag should be carefully kept for future reference.

Speed.

Pressure of the knee against the knee lever will set the machine in motion, the balance wheel turning in the right direction, and the speed being perfectly controlled by the amount of pressure **which should be applied gradually.**

Speeds vary from bare movement up to 1000 stitches per minute, as required by the work in hand. **Immediately pressure is withdrawn, the machine will stop. Do not attempt to stop the machine by placing your hand on the balance wheel, as this is likely to cause injury to the controller or motor.**

Embroidery and Darning.

For embroidery and darning operate the machine at a low speed. Light pressure of the knee against the lever will give a speed suitable for handling materials being darned or embroidered.

Examination and Replacement of Brushes.

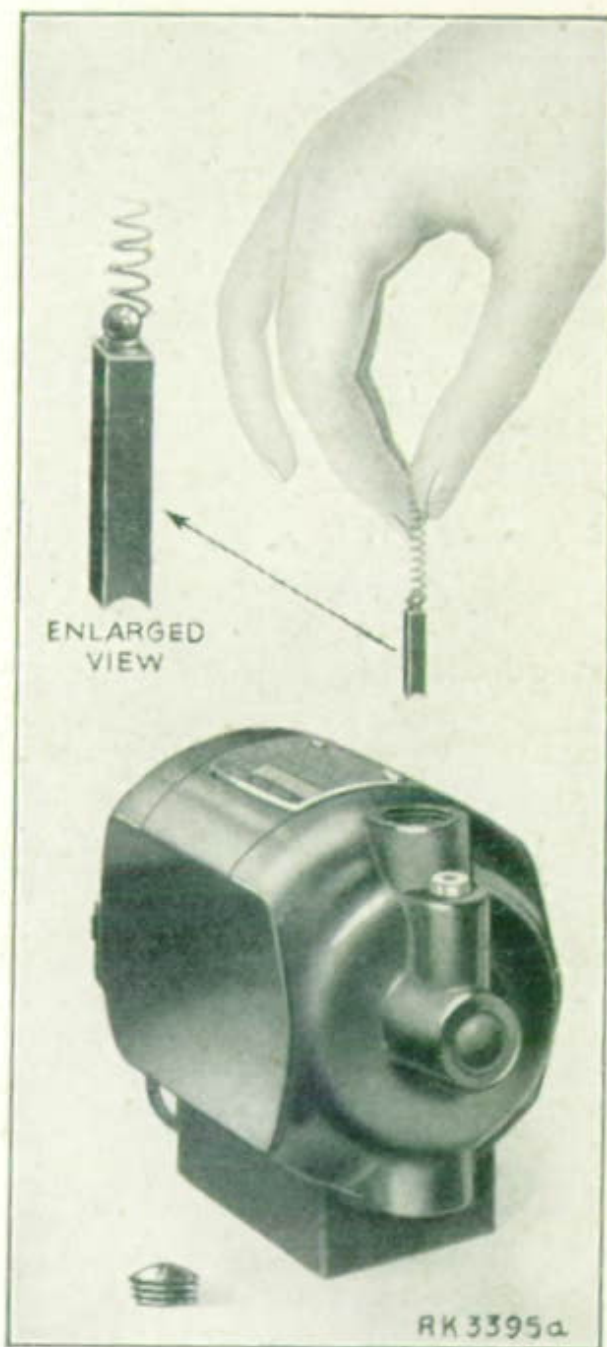


Fig. 12.

sure that they are not wearing excessively and that they move freely in the brush holders. Care should be taken to return the brushes to their holders in the same position that they occupied before removal by seeing that their concave ends are in the position shown in Fig. 12.

If, after long usage, the motor ceases to function, this may be due to the brushes having become worn. To ascertain if this be the case, disconnect the current from the motor by removing the plug from the three-pin terminal. Take out the two screws (Z,Z, Fig. 13), and lift the two brush springs, with which the brushes will usually come away.

Unless the machine is worked continuously, the brushes, which are of the best grade procurable, should last for several years, but it is well to examine them every twelve months to make

To Lubricate the Motor.

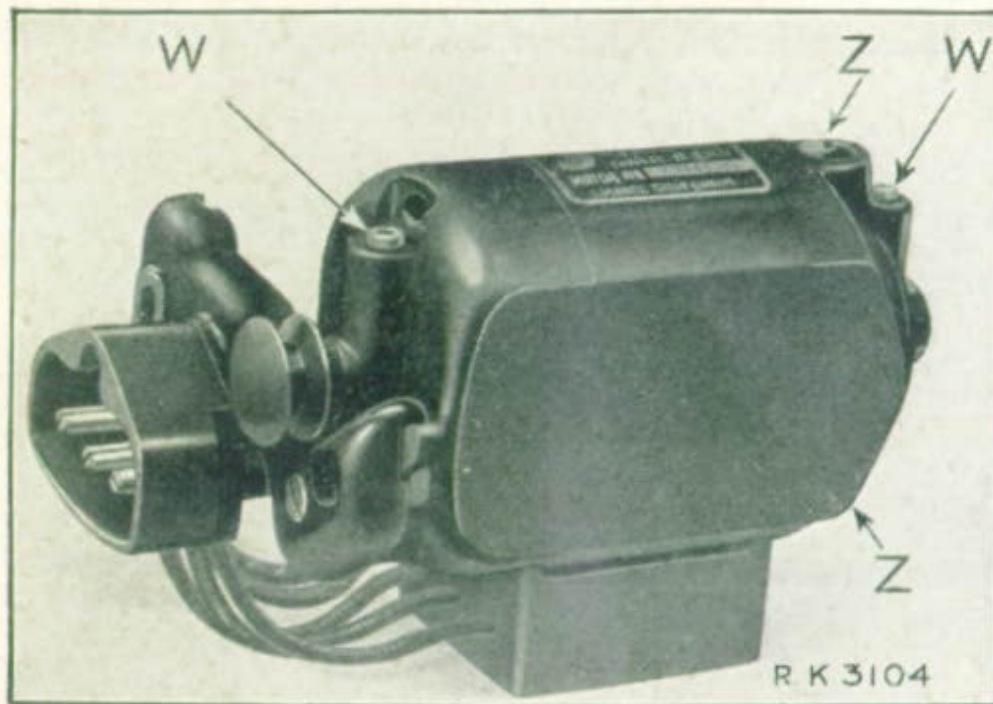


Fig. 13.

When sent from the factory the motor is lubricated sufficiently for approximately six months' use.

A tube of Singer Motor Lubricant is furnished with each outfit. This tube has a tip which fits into the two lubricating holes (W,W, Fig. 13) leading to the motor bearings.

Never under any circumstances apply oil to any part of the motor. Singer Lubricant, specially compounded for Singer Motors, remains just where wanted in the bearings, while oil would work its way into the commutator and brushes, causing much trouble and vexation, such as difficulty in starting, over-heating, smoking, etc.

The Singerlight.

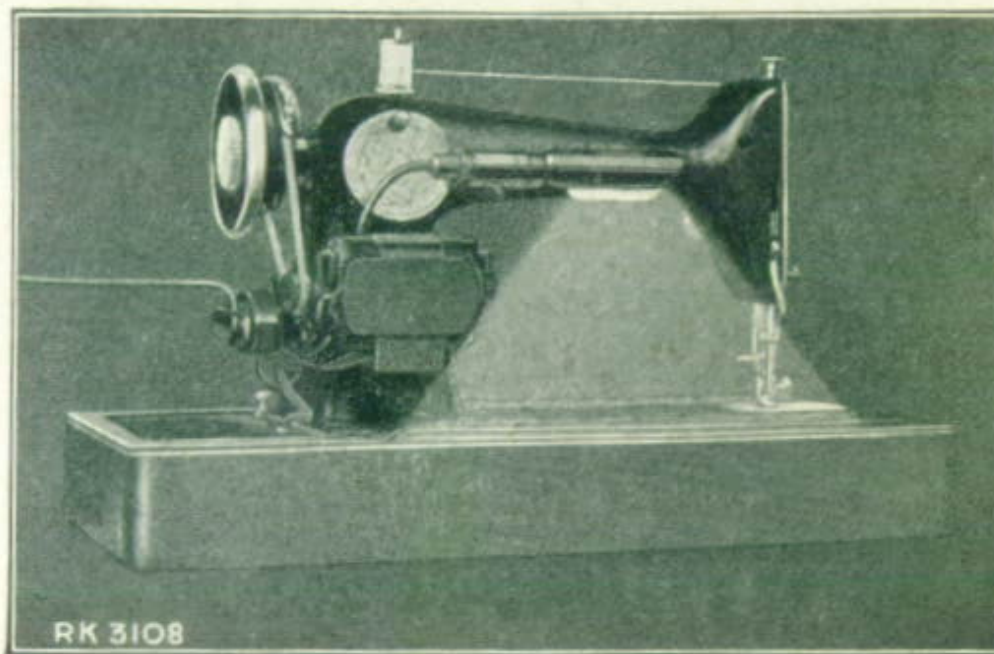


Fig. 14.

This improved light should be fitted to all Singer Sewing Machines where electric current is available.

Its light is thrown just where needed, thus enabling the operator to see the stitching more clearly. It prevents eye strain and fatigue, and the quality of the work performed by its aid is therefore much improved. It also saves time and annoyance when threading the needle—in fact, its many advantages are worth far more than its cost.

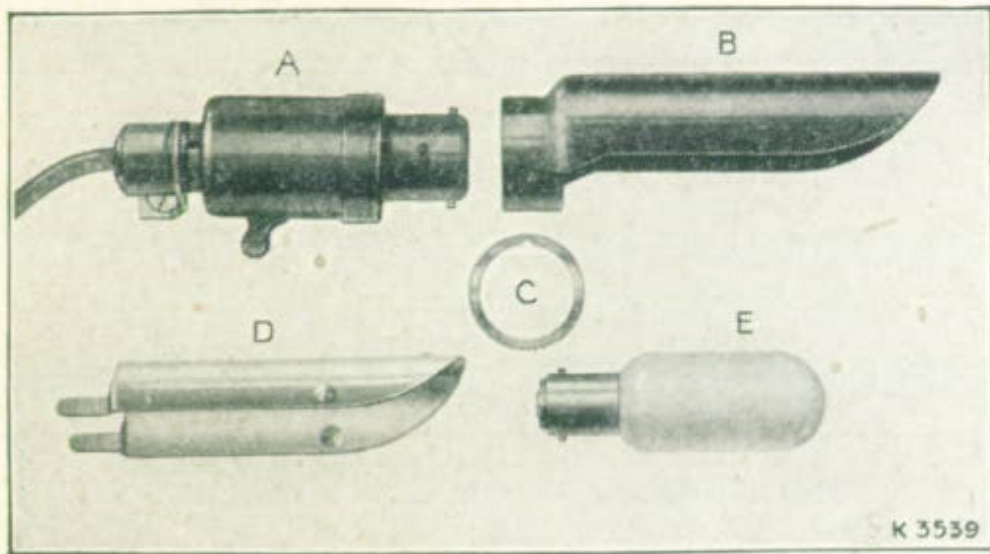


Fig. 15.

The Singerlight is sent from the factory in five parts, as shown in Fig. 15. These are :—

- | | | |
|----|---|-------------------|
| A. | | Singerlight Body. |
| B. | " | Shield. |
| C. | " | Washer. |
| D. | " | Reflector. |
| E. | " | Lamp Bulb. |

and they should be assembled before the Singerlight is attached to the machine.

To Assemble the Singerlight. (See Fig. 16)

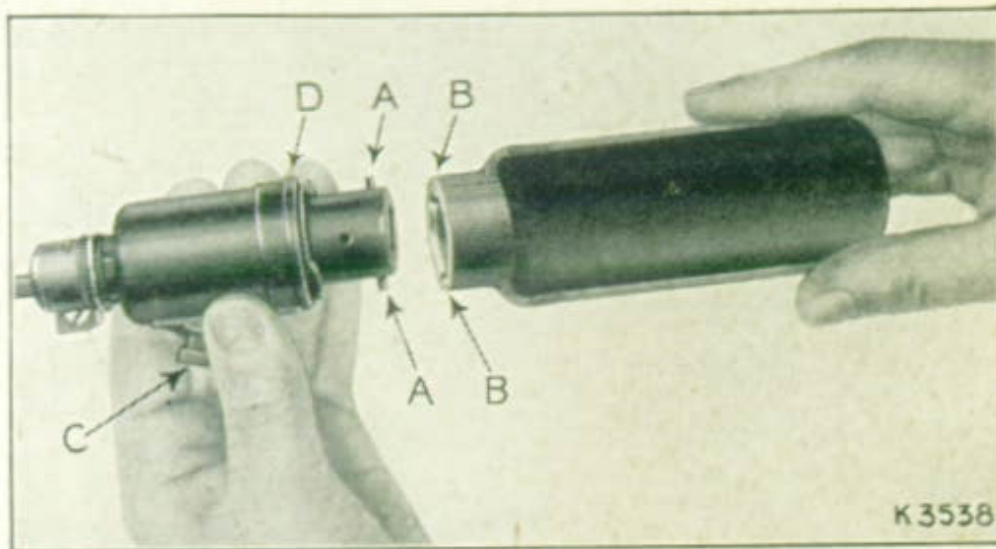


Fig. 16.

Hold the Singerlight body in the left hand, with its two pins (A) in the position shown above, and with the right hand place the spring washer (C, Fig. 15) over these pins and against the shoulder (D). Then, holding the shield (B, Fig. 15), cupped side towards you, as illustrated, pass the two grooves (B) in its collar over the two pins (A), and pressing the shield hard against the washer, give it a quarter turn over towards you so that the name "Singer" is on top and the switch (C) is underneath. Next, holding the Singerlight body with shield, in the left hand, insert the two prongs of the reflector (D, Fig. 15) into the two grooves in the collar of the shield and press the reflector back as far as possible. Now, holding the bulb at its round end, between the thumb and the forefinger of the right hand, insert it by passing its two pins into the two small slots in the socket of the Singerlight body and, pressing the bulb firmly into the socket, give it a slight turn from you so that it is securely held in position.

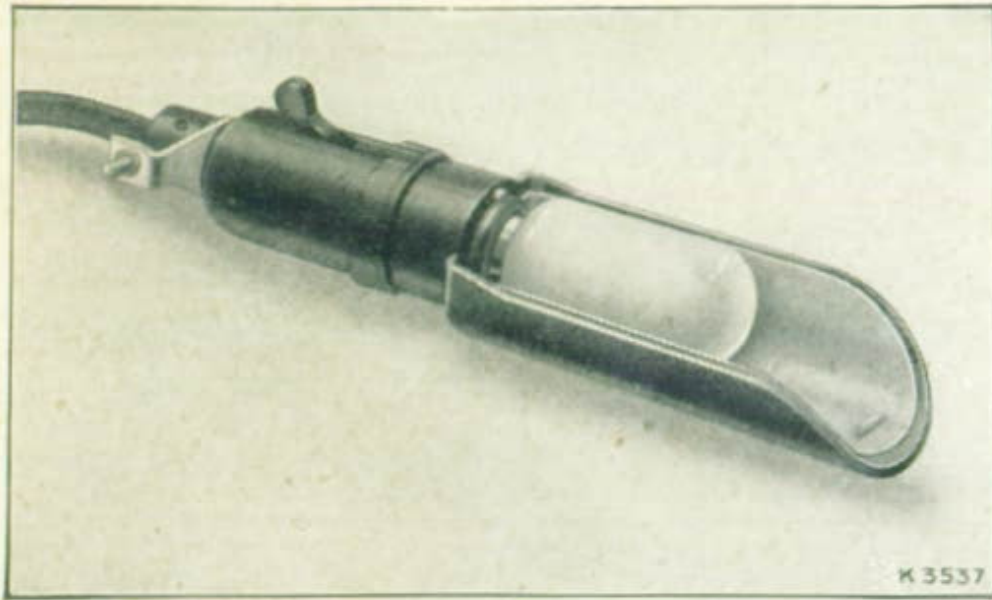


Fig. 17. Singerlight Assembled.

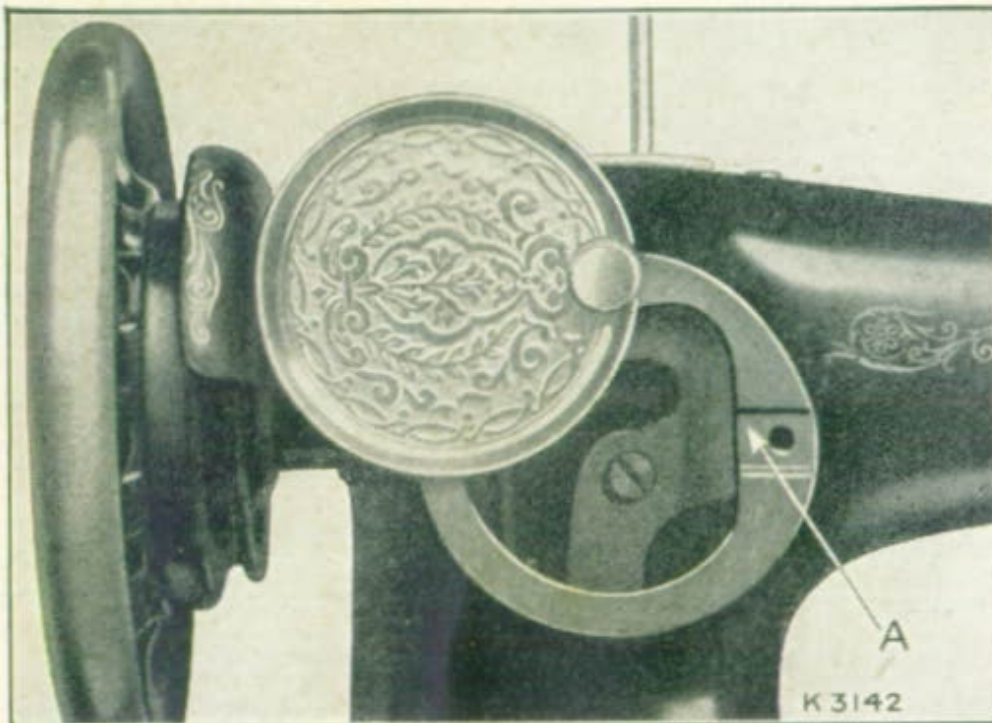


Fig. 18.

The complete lamp should now be screwed to the machine by placing its bracket in the slot (A, Fig. 18), and tightening the screw.

SINGER SERVICE

The true test of all business enterprise is the service it gives. The Singer Organisation is governed by the basic idea that the public is entitled to the best of everything—the best sewing machine it is possible to produce, the best attention, the greatest courtesy, and a service that does not end with the sale of a machine.

Singer Shops are located in every city and in nearly every town. Thus Singer employees are near at hand and easy of communication, always ready to give advice, to supply parts, needles or oil, and to make such machine adjustments as may be required.

THE IMPORTANCE OF USING SINGER NEEDLES FOR YOUR SEWING MACHINE



You will obtain the best stitching results from your sewing machine if it is fitted with a Singer Needle.



Singer Needles can be purchased only from Singer Shops or Singer Salesmen.



Singer Needles are stamped with the Company's trade mark "Simanco" and are contained in Green Packets which bear the famous red letter "S".



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



**This Trade Mark is on the Arm
of every Singer Sewing Machine.**