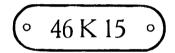
## SINGER 46K15

# FO TO # 1 Machine No. 46K15.

The specific designation of each Singer Sewing Machine consists of two numbers, separated by a letter and stamped upon a number plate which is attached to the machine, usually upon the arm.



The number before the letter designates the Class to which the machine belongs, and the number after the letter the Variety of the machine in its Class.

When supplies for a machine are wanted and there is any uncertainty as to the correct numbers of needles or parts, the Class and Variety numbers of the machine, as shown on the number plate, should be given to ensure a correct understanding of the order.

#### TO OIL THE MACHINE.

Every machine before leaving the factory is properly adjusted and ready for immediate use. Before commencing work, however, the machine should be carefully cleaned and oiled.

As a general rule all parts rubbing against another and producing friction require oiling and oil holes will be found at nearly every place where oil is necessary. A single drop of oil is sufficient at any point. When in use the machine should be carefully oiled every day and care in this matter will prevent the parts becoming rough from friction and save expense for repairs. Before using, the machine should be carefully wiped to remove surplus oil.

If the machine runs hard at any time it is because some place has been overlooked when oiling.

If the machine runs hard after standing idle for some time use a little paraffin oil or benzine and run the machine rapidly; wipe clean and then oil with our extra quality machine oil which should be always used. To make sure of good oil purchase this only at the Company's offices or from their authorised agents.

#### TO OIL THE STAND

The points requiring oil in the stand are the bearings at each end of the band wheel crank, treadle and treadle pitman.

The instructions given for cleaning the machine, and the quantity of oil to be used in oiling, apply also the the stand.

#### TO SET THE NEEDLE

The needles used in these machines are the regular  $46 \times 3$  Round Shank Needles with long points, the sizes of which are 7, 8, 9, 11, 14, 16 and 18. Turn the balance wheel **from** you till the overhanging needle arm is at the nearest point to the operator. Loosen the set screw in the needle clamp and insert the needle as far back in the clamp as it will go with the long groove of the needle uppermost; afterwards fasten with set screw. When in proper position the needle should just clear the feeding discs.

กลากการสุดให้เกาะสุดให้เพื่อ**งการสุด**ให้

When changing to a very fine needle it may be necessary to slightly lower the needle clamp till the needle just clears the feeding discs.

#### TO THREAD THE NEEDLE

Place the bobbin of thread on the spool pin on machine table leading the thread through the wire eyelet in the top left hand corner of the head of the machine, then towards you under the staple and from the left between the tension discs, and up over the staple, through the eyelet in the take-up spring, back and from left to right through the eye in the take-up lever towards you and through the wire guide in the centre of machine head, then over the two small thread pulleys on front of the overhanging arm, care being taken that the thread is to the inside of the safety pin in front of each of these pulleys, then through the hole in the needle clamp and through the eye of the needle from the top. After threading leave about two inches of thread with which to commence sewing.

#### TO REMOVE THE BOBBIN CASE AND BOBBIN

Swing back the shuttle cover to the left so as to expose the shuttle and bobbin case. To remove the latter lift the end of the latch on the top of the bobbin case, remove the small bobbin retaining spring and on releasing the latch the bobbin will drop out.

#### TO WIND THE BOBBIN

Loosen the large knurled clamp stop motion screw on the outside of the balance wheel by turning it towards you, then place the bobbin on the bobbin winder spindle taking care that the notch in the bobbin is engaged by the small driving pin on the spindle. Wind the end of the thread a few times round the barrel of the bobbin by turning the winder pulley by hand, then push the winder frame forward until its pulley comes in contact with the driving belt, and the stop latch drops into its catch. Operate the machine as in sewing, and when the bobbin is full the winder will stop automatically.

#### TO THREAD THE BOBBIN CASE

Turn the open end of the bobbin case upwards, drop the bobbin into it and replace the small bobbin retaining spring in position in the groove around the end of the bobbin sleeve. Now place the fore-finger of the left hand on the bobbin and with the right hand draw the thread into the notch in the bobbin case and to the right under the tension spring and back into the delivery eye in the end of the tension spring, leaving a free end about two inches long. The illustration shows the bobbin in position in the bobbin case and the latter threaded ready to be replaced in the shuttle body. After threading raise the hinged latch of the bobbin case and. while holding, place the bobbin case on the centre pin of the shuttle body. taking care that the bobbin case position finger drops into the notch in the centre of the needle plate, leaving a free end of thread about two inches long with which to commence sewing, then close the shuttle cover. Care must be taken to keep the inside of the bobbin case clean. The inside of the bobbin case should be lightly oiled by wiping it with a small piece of cloth previously moistened with oil. A little oil should be occasionally applied in the same way to the centre pin of the shuttle if in constant use.





#### TO COMMENCE SEWING

With the left hand hold the end of the needle thread quite slack, turn the balance wheel until the needle travels from you and back thus catching the shuttle thread, then pull the end of the thread you are holding and the shuttle thread will be brought through the needle hole in the throat plate. When the needle and shuttle are both threaded place both threads back and under the blued thread retainer on the shuttle cover.

Open the feeding discs by pressing either the foot lifter or knee lifter, then place the material to be sewn between the discs and release the pressure upon the foot lifter or knee lifter. When operating the machine the balance wheel should turn from you.

#### TO REMOVE THE WORK

Draw down about two inches of thread from the thread take-up lever and open the feeding discs by pressing either the foot lifter or knee lifter.

#### TO REGULATE THE FEED

The length of stitch is regulated by the feed regulating wing nut on the bed of the machine at the back of the column supporting the shuttle. Loosen the nut and move from you to lengthen the stitch and towards you to shorten it. When the desired length of stitch is obtained, fasten the wing nut.

### TO REGULATE THE PRESSURE OF THE FEED WHEELS

Turn the machine back on its hinges, loosen the lock nut on the end of the feed rocking lever, turn the slotted screw to the right to increase and to the left to decrease the pressure, then tighten the lock nut.

#### TO REGULATE THE TENSIONS

To regulate the shuttle tension first remove the bobbin case, then using the small screw driver, turn the small screw in the side of the bobbin case over to the right to increase the tension and in the opposite direction to diminish it. When once properly adjusted the shuttle tension will seldom require to be changed for any kind of thread commonly used, as a perfect stitch can usually be obtained by regulating the tension on the needle thread.

To regulate the tension on the needle thread turn the small thumb nut on top of the tension discs over from left to right to increase the tension and in the opposite direction to diminish it. If there are loops or a straight thread on the under side of the fabric the tension on the needle thread should be increased, but if the under thread is drawn up so that the lock in the stitch shows at the top of the fabric the tension should be diminished and so adjusted that the lock will be in the centre of the fabric and the

stitch alike on both sides. If it be found difficult to draw up the under thread sufficiently to leave the lock in the centre of the fabric without requiring so much tension on the upper thread as to cause it to break frequently it is evident that there is too much tension on the shuttle thread, or if it be found necessary to use a very light upper tension to prevent the needle thread from lying straight on the top of the fabric, better results may be obtained by slightly tightening the shuttle tension.

#### HINTS.

Do not run the machine without placing material between the feeding discs.

Do not run the machine with both shuttle and needle threaded except when sewing.

In operating the machine always turn the wheel from you.

If the needle thread breaks it is caused either by the needle being improperly adjusted; the tension being too tight; the eye of the needle being too small for the thread or sometimes when using coarse silk by the point of the needle being bent.

If there be missed stitches these are caused either by the needle not being properly adjusted; by its being bent away from the shuttle point or by its being too small for the thread. Turning the needle slightly to the right or left from its position, as described in "To Set the Needle," will remedy the skipping of stitches when using certain classes of thread or silk.

Do not take the machine apart. All the working parts can be easily reached for cleaning and oiling without the machine being taken to pieces.

The leather belt should be just tight enough not to slip, not so tight as to prevent the easy running of the machine.

The preceding instructions will be found sufficient for the perfect use of the machine; if, after having carefully studied them, difficulties are met with users are requested to apply to the nearest office of the Company for the necessary instruction.