SINGER 46K33

No. 46K33 MACHINE.

When it is necessary to re-adjust any part of the actuating mechanism of the 46K33 Machine, it is desirable that the setting should be checked from the foundation, which should be according to the following:—

- 1. When the needle bar is at its lowest point, i.e. towards the operator, there should be exactly $\frac{1}{8}$ " clearance from the end of the needle bar to the edge of the rear feed disc.
- 2. Insert a needle in the clamp and set the bar so that the needle is exactly central in the slot of the needle guide.
 - 3. Set the needle with the eye in line with the mark on needle guide.
- 4. Adjust back feed disc so that the needle at the eye just touches the edge of the disc.

The needle should have a dip or inclination of 1½ degrees in relation to the needle bar. This can be checked by inserting a new needle and observing that the needle at the eye is just touching the cup disc, as previously stated. Bring the needle bar to its lowest or forward position, and test the distance between the needle and the top of the cup disc by Feeler Gauge No. Sk.15600.

- 5. Adjust front feed disc to exactly the same height as the back feed disc.
- 6. Insert looper into looper holder, taking care that position pin is in contact with looper holder, and tighten adjusting screws.
- 7. Set the looper cam in approximate time. This is accomplished by setting so that when the needle has risen $\frac{3}{52}$ " the looper is about to take the loop at a point $\frac{1}{16}$ " above the eye.

The looper should pass over the needle guide, touching same very lightly, and dip into the back feed disc behind the needle until the heel is \mathcal{E}_4 " below the needle. This setting is made at the factory, and should the looper in the machine not conform to this, it is due to the looper shank having become bent, which should be corrected, or a new looper inserted.

- 9. Now set the looper holder eccentric. The correct time is that when the looper has completed its forward movement (that is towards the operator) it should commence to make its loop-taking movement, and it should be observed that the looper clears the needle when rising or descending into position in the back feed disc.
- 10. Now check the setting of the machine, so that when the point of the looper is just about to take the loop the distance from the point to the edge of feed disc should be $\frac{5}{16}$ ", check with Looper Point Position Gauge, No. SK.15598; also point of looper should be about $\frac{1}{16}$ " above the eye of the needle, check with Needle Eye Position Gauge, No. 15599.
- 11. Set the thread nipper to release the thread when the eye of the needle is just passing the outside edge (or nearest the operator) of the looper.
- 12. Sufficient pressure should be put upon the feed discs so that the skins are in close contact while being sewn to ensure even—feeding and a tighter seam.
- 13. The needles should be $46 \times \times$ 9, of size sufficiently large for the work in hand; needle 46×5 should not be used with the 46 K 33.
- 14. Thread. It is very essential that a cotton or thread should be employed suitable for the machine and the work in hand. In fur stitching the cost of the cotton is of no account compared with the value of the complete article, and it is a dead loss to a manufacturer to use any cotton but the best for this class of work. It is obvious that a tight seam cannot be obtained in a tough or hard skin when a cotton is employed which is insufficiently strong to overcome the natural resistance of the hide.

If the above directions are carried out, no trouble should ensue upon regular work for which these machines are designed.

The maximum thickness that may be handled satisfactorily on the 46K33, and with the standard setting, is approximately ½", but this is governed somewhat by the finish of the skin. Attempts should not be made to handle work beyond the capacity of the machine, which is limited by the movements of the looper and for which sufficient clearance should always be allowed.

No. 46K34 MACHINE.

When it is necessary to re-adjust any part of the actuating mechanism of the 46K34 Machine, it is desirable that the setting should be checked from the foundation, which should be according to the following:—

- 1. When the needle bar is at its lowest point, i.e. towards the operator, there should be exactly $\frac{1}{8}''$ clearance from the end of the needle bar to the edge of the rear feed disc.
- 2. Insert a needle in the clamp and set the bar so that the needle is exactly central in the slot of the needle guide.
 - 3. Set the needle with the eye in line with the mark on needle guide.
- 4. Adjust back feed disc, so that the needle at the eye just touches the edge of the disc.

The needle should have a dip or inclination of 14 degrees in relation to the needle bar. This can be checked by inserting a new needle and observing that the needle at the eye is just touching the cup, as previously stated. Bring the needle bar to its lowest or forward position, and test the distance between the needle and the top of the cup by Feeler Gauge, No. SK.15600.

- 5. Adjust front feed disc to exactly the same height as the back feed disc.
- 6. Insert looper into looper holder, taking care that position pin is in contact with looper holder, and tighten adjusting screws.
- 7. Set the looper cam in approximate time. This is accomplished by setting the cam so that when the needle has risen $\frac{3}{32}''$ the looper is about to take the loop at a point $\frac{1}{42}''$ above the eye.

The looper should pass over the needle guide, touching same very lightly, and dip into the back feed disc behind the needle until the heel is "t" below the needle. This setting is made at the factory, and should the looper in the machine not conform to this, it is due to the looper shank having become bent, which should be corrected, or a new looper inserted.

8. The looper should be adjusted so that the needle is just clear of the looper in the recess at the heel. This is accomplished by loosening the set screws in the looper cam, and adjusting the cam to the right or left until the correct position is obtained.

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- 9. Now set the looper holder eccentric. The correct time is that when the looper has completed its forward movement (that is towards the operator) it should commence to make its loop-taking movement, and it should be observed that the looper clears the needle when rising or descending into position in the back feed disc.
- 10. Now check the setting of the machine, and note that when the point of the looper is just about to take the loop the distance from the point to the edge of the feed disc should be $\frac{9}{2}$ "; check with Looper Point Position Gauge, No. SK.15636; also point of looper should be about $\frac{1}{16}$ " above the eye of the needle, check with Needle Eye Position Gauge, No. 15637.
- 11. Set the thread nipper to release the thread when the eye of the needle is just passing the outside edge (or nearest the operator) of the looper.
- 12. Sufficient pressure should be put upon the feed discs, so that the skins are in close contact while being sewn to ensure even—feeding and a tighter seam.
- 13. The needles should be 46×5 , of size sufficiently large for the work in hand; needle 46×9 should not be used with the 46 K 34.
- 14. Thread. It is very essential that a cotton or thread should be employed suitable for the machine and the work in hand. In fur stitching the cost of the cotton is of no account compared with the value of the complete article, and it is a dead loss to a manufacturer to use any cotton but the best for this class of work.

If the above directions are carried out, no trouble should ensue upon regular work for which these machines are designed.

NOTE.—The 46K34 Machines should be employed only upon light Fur. For general work the 46K33 should always be supplied.