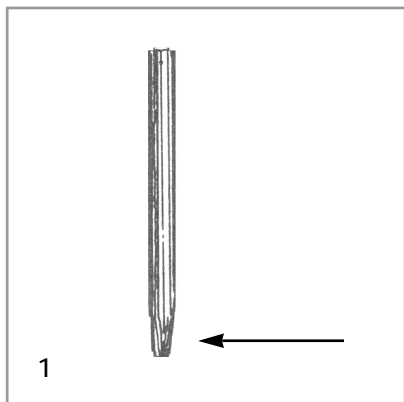


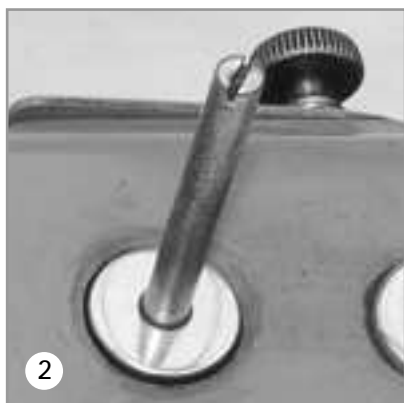
Spool Pin



(1) Make sure the cotton reel holder (or spool pin) is in the correct hole and tight.

With the earlier machines one end of the spool pin is slightly tapered and push-fits into the retaining hole.

They sometimes become loose but a few taps with a light hammer generally solves the problem. If the pin is still loose, roughen up the tapered end with a file to make it stay tight.

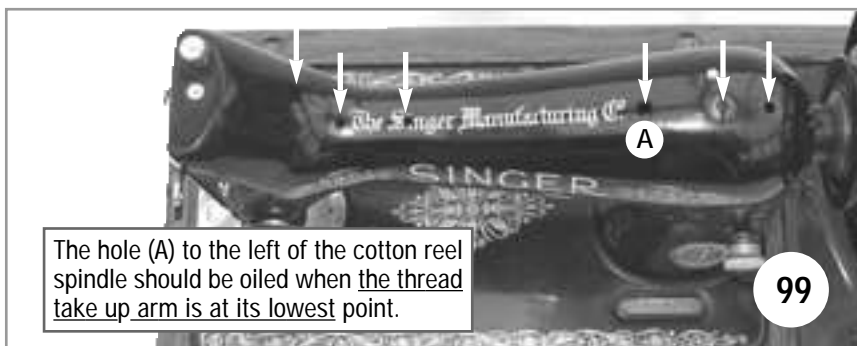


(2) On the later 201s, like the one above, the pin is threaded at one end and has a screwdriver slot at the other.

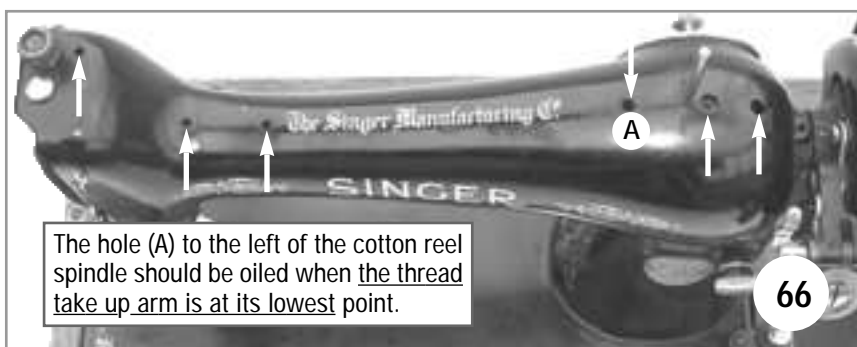
Oiling (Top of Machine)

An elderly sewing machine that has not been properly refurbished and lubricated will run hard.

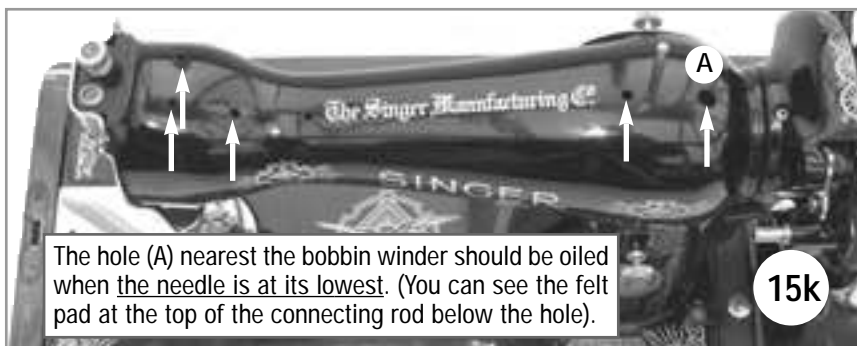
In a hot dry climate, considerable energy will be wasted using a machine that doesn't turn easily - besides shortening its future life and usefulness.



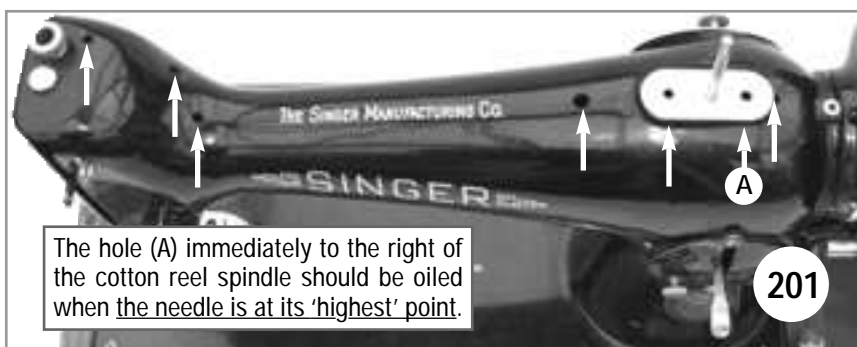
The hole (A) to the left of the cotton reel spindle should be oiled when the thread take up arm is at its lowest point.



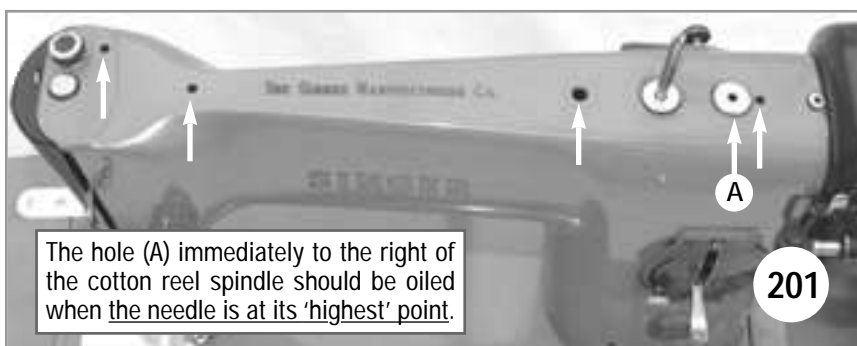
The hole (A) to the left of the cotton reel spindle should be oiled when the thread take up arm is at its lowest point.



The hole (A) nearest the bobbin winder should be oiled when the needle is at its lowest. (You can see the felt pad at the top of the connecting rod below the hole).



The hole (A) immediately to the right of the cotton reel spindle should be oiled when the needle is at its 'highest' point.

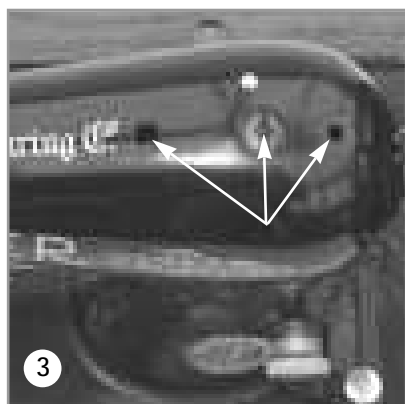


The hole (A) immediately to the right of the cotton reel spindle should be oiled when the needle is at its 'highest' point.

Like all other machinery a sewing machine will not give satisfaction if its working parts have become gummed or dry.

Oiling holes are provided above otherwise inaccessible moving parts where there are bearings and friction. All moving parts in contact must be covered with a film of oil and not allowed to become dry.

You should always use good quality sewing machine oil. Thicker, inferior oil will clog the bearings, prevent efficient working and cause rapid wear of the mechanism.



(3) First make sure all the oiling holes in the top of the machine are clean and not gummed up.

A drop of oil injected properly into each oiling hole is sufficient - do not over oil.

It is most important that each machine should be turned according to the instructions on the previous page - when oil is applied at point 'A'. This allows the oil to drop directly on the mainshaft crank below which might otherwise be missed.



(4) When oiling, insert the oil can spout well into the oil holes.

After oiling run the machine rapidly for a few moments and then wipe the top arm over with a clean cloth.

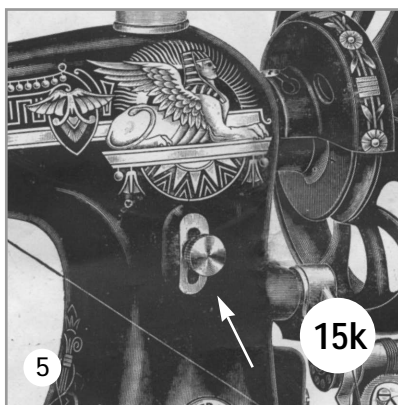
Stitch length setting

The length of the stitch, and its easy regulation, is a crucial part of successful sewing.

Fine material requires a fine needle & thread and a short stitch. Heavy material requires the opposite. About 18 stitches to the inch makes a suitable seam for ordinary sewing.

The visible part of stitch setting is the stitch control knob or lever on the front of the machine.

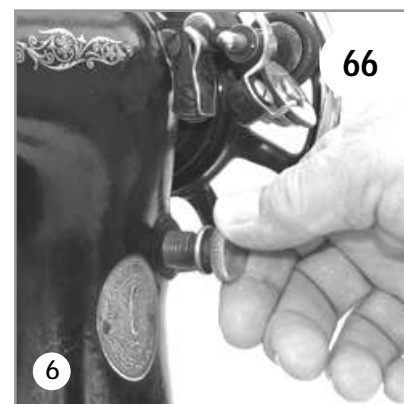
There is also the mechanism inside. These two elements are dealt with here - first the control, then the mechanism model by model.



(5) Check that the knob is free to turn and can easily be moved up and down.

To alter the stitch length on the 15K machine, first loosen the screw then move upwards to increase or downwards to decrease; except on the 15K26 model when it operates in the opposite way.

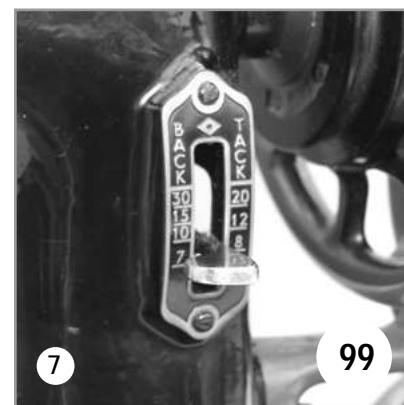
When the required stitch length has been obtained, it can be set by tightening the knob.



(6) Unscrew the knob as far as it will go, clean the knob and the thread. Put a couple of drops of oil on the thread and screw it up again.

The 66 and early 99 models use a screw to control the stitch. Fully screwed in for the longest stitch, unscrewing the knob produces shorter stitches until the fabric remains stationary.

The ability to reverse stitch was introduced on later 99s and gave rise to the following two types of control levers (7 & 8). This allowed the more accurate and faster setting of stitch length.

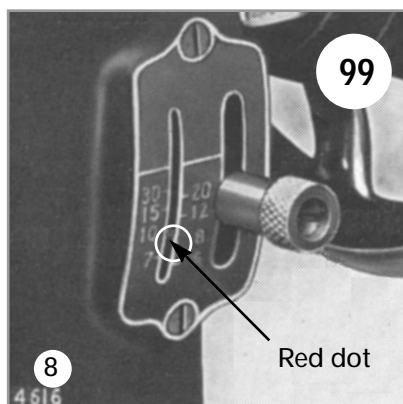


(7) At first this consisted of a simple lever and a scale in stitches per inch.

If the lever is moved above the horizontal line, the machine will 'Back Tack' or stitch backwards.

This is used to 'seal' the end of seams so that they cannot loosen (not for long runs).

This in turn was modified as we show overleaf...



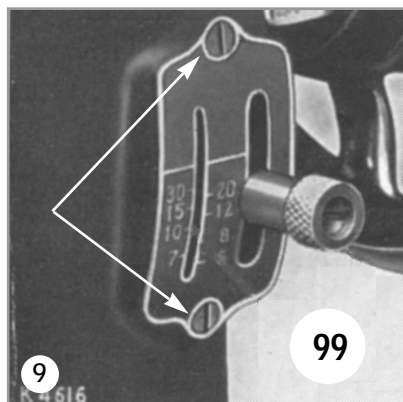
(8) The scale is now on the left, and the red dot in the slot indicates the setting from 6 to 30 stitches per inch. Check that the lever moves freely from top to bottom of the slot.

To regulate the length of the stitch, first turn the thumb nut on the lever anticlockwise away from the stitch indicator plate as far as necessary.

Then move the lever up or down until the red dot is at the desired stitch setting.

Now turn the thumbnut inward until it touches the indicator plate (do not over-tighten as this can cause the setting to change). The machine is now set to stitch the desired number of stitches per inch in a forward direction.

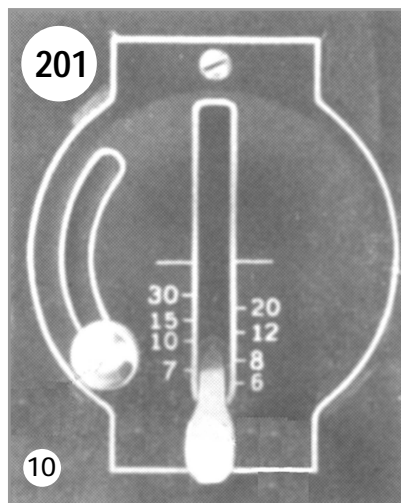
For 'Back Tacking', raise the lever to the upper end of the indicator plate. The machine will now stitch in a reverse direction, making it easy to fasten the ends of the seams.



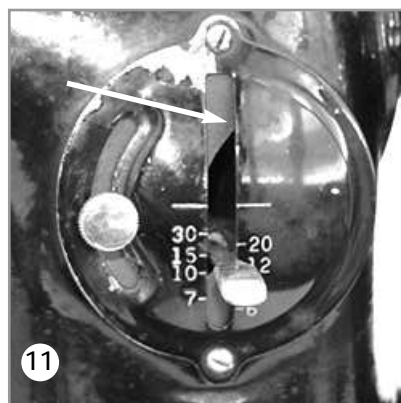
(9) If the indicator plates or levers need cleaning, they can be removed by undoing the two retaining screws.

In the case of the simple lever (7), the indicator plate can be removed by turning it by 90° when it will slide past the lever.

In the second case (8), there is a screw inside the knob. Unscrewing this will remove the knob.



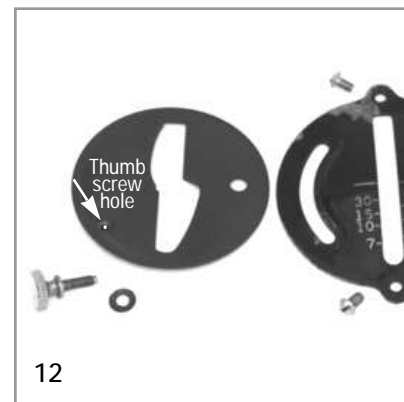
(10) The 201 introduced a further variation. A lever with the stitch length being set by loosening the thumbscrew at the left and sliding it in the curved slot.



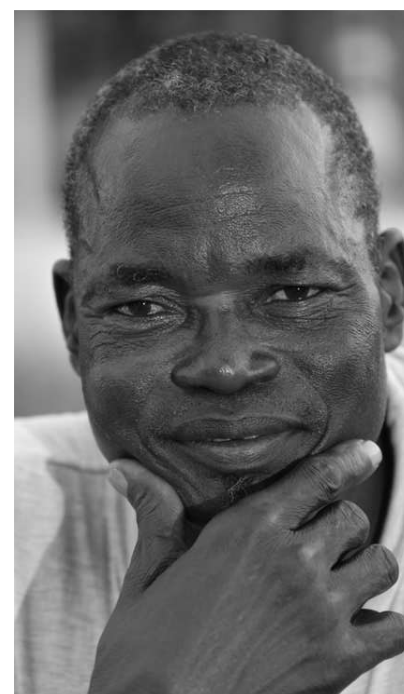
(11) The plate under the indicator scale revolves with it, blocking off the lower part and the upper part of the lever slot as it is lifted.

Tightening the thumbscrew then locks the stitch at that maximum length, while again allowing back stitching to be done at a flick of the lever.

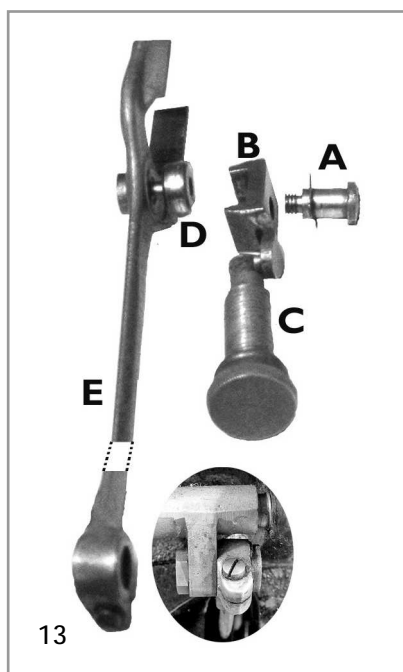
Check that the lever moves freely from top to bottom of the slot. If the indicator plates or levers need cleaning, they can be removed by undoing the two retaining screws.



(12) This picture shows the components of the 201 stitch length setting control.



Stitch Length Mechanism



(13) In all models, the stitch length control levers or screws connect with a mechanism in the base of the machine.

There is very little difference between models in this area, so the 66 is used as an example.

All the internal components of the stitch length control are shown in the above mockup.

Stitch Control Parts:

A: Locating screw and thrust washer - located under balance wheel.

B: Slide. Rotates on A, under the control of C, the Stitch length knob. Note the pin on the slide engaging with the groove on C.

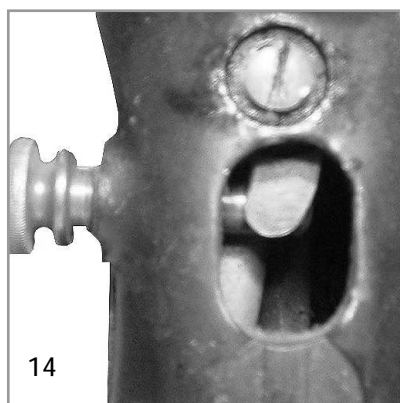
C: Stitch Length Screw or lever on other models.

D: Roller which fits into the slide.

E: Connecting rod. The yoke at the top fits into a crank which 'waggles' the rod. The roller provides a fulcrum. The bottom end is fixed to the feed dog arm as shown in the inset.

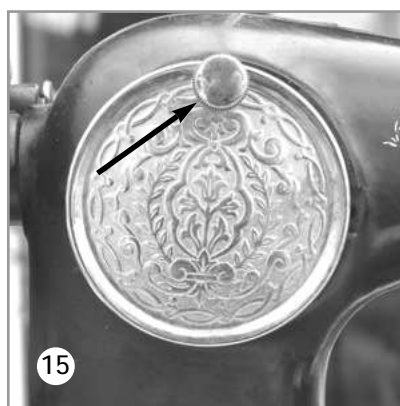
As the stitch control screw or lever is moved, the slide turns, changing the fulcrum point and varying the movement at the base of the rod.

As the whole of this mechanism is enclosed in the machine, it normally needs little cleaning.



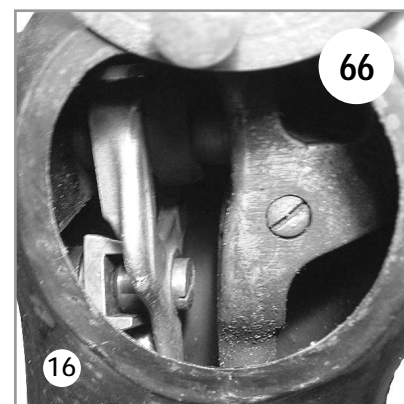
(14) This shows the locating screw and washer under the balance wheel. Check that the washer is intact.

The washer has three projecting lugs. These, with its shape, provide some friction which prevents the stitch length wandering from its setting, particularly with the lever types.

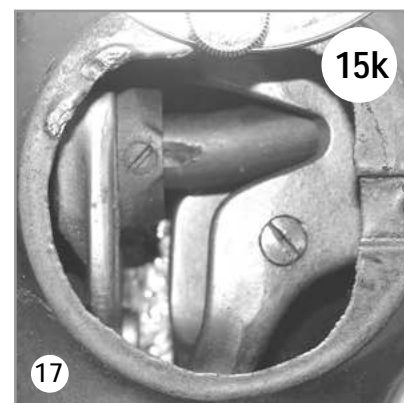


(15) The best view of the mechanism is obtained from the back of the machine. Loosen the screw on the cover plate to make it visible.

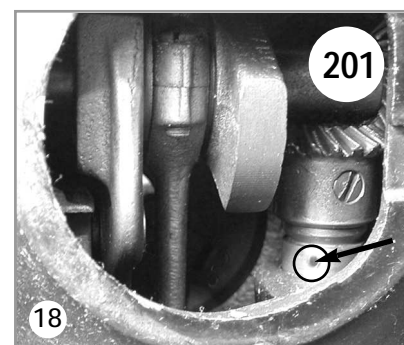
(16) Put a drop of oil on the slide and the locating screw.



Model differences



(17) On the 15K there is an arm projecting into the machine at the bottom of the back opening. The stitch length mechanism is attached to this, instead of the side of the machine.



(18) On some 201's only (the later ones with the brown colouring) there is an oiling hole inside the back inspection cover just below the gear wheel.

Give it a drop of oil and turn the balance wheel a few times to lubricate.

Note: 99 Models do not have a back opening. Oiling must be done from the opening under the balance wheel.