

Form K6330

(558)

Supplement to Form K6195

SERVICE MANUAL

FOR

SINGER*

SEWING MACHINE

246K21

REVISED DESCRIPTION FOR 246K20 MACHINE

Machine 246K20 has two needles and two loopers and is fitted with a trimmer for simultaneously trimming and overedging bathing suits, house dresses and similar articles. It makes a strong **four-thread** chain stitch consisting of overedge stitching and a single line of reinforcing stitching running parallel and close to the overedging on the upper side of the fabric.

Clearance under presser foot is $\frac{1}{4}$ inch.

Needle gauges are **.109** ($\frac{7}{64}$) inch and **$\frac{1}{16}$** inch. Unless otherwise ordered, the machine will be furnished with needle gauge of **.109** inch.

The machine is equipped with a small "horn" beneath the throat plate to aid in tubular work.

The trimmer can be adjusted to trim from $\frac{3}{32}$ inch to $\frac{7}{32}$ inch from the needles. The knife trims ahead of the needles.

The machine can be fitted for a bight from $\frac{3}{32}$ inch to $\frac{5}{32}$ inch, depending upon the material and the thread in use.

Although the machine is regularly furnished with a foot lifter, a knee lifter will be furnished instead, when specified on order.

The presser foot can be readily thrown out of operating position, to prevent interference when threading the machine or replacing the needles.

The cloth plate can be swung out 170° to the left of the needles, to facilitate adjustment of the machine.

The loopers are independently driven, permitting variations in their adjustment in relation to each other and to the needles, to suit the work being sewn.

The Splash lubricating system automatically and continuously oils the principal bearings, during the operation of the machine. This oiling system also includes an oil sight gauge in the front of the machine, to indicate the oil level to the operator, and an oil cooling tank in the rear of the machine. See X-Ray view of machine on pages 12 and 13 Form K6195.

Thread Unwinder Complete 151163 is regularly furnished with the machine.

Machine Pulley 164231, for 3/8 inch V-belt, furnished with the machine, may also be used for 5/16 inch round belt.

246K21 MACHINE

Machine 246K21 is similar to Machine 246K20 except that it has a greater looper stroke and a straight top knife.

The machine is designed for trimming and overedging medium and medium heavy fabrics.

The distance between the two needles is fixed at .109 inch.

NEEDLES AND THREAD

NOTE : Distance between needles on 246K20 Machine can be .109 inch or 1/16 inch as requested. Machine 246K21 has this distance fixed at .109 inch only.

TO SET THE FEED DOGS AT THE CORRECT HEIGHT

(Page 15)

Gauge 164883 supersedes 164460.**TO SET THE NEEDLE CARRIER AT THE CORRECT HEIGHT**

(Page 16)

Gauge 164883 supersedes 164460**TO SET THE LEFT LOOPER IN RELATION TO THE NEEDLES**

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Gauge 164883 supersedes 164460.**TO SET THE RIGHT LOOPER IN RELATION TO THE NEEDLES**

(Page 19)

Gauge 164883 supersedes 164460

TO ADJUST THE STATIONARY KNIFE FOR WIDTH OF BIGHT

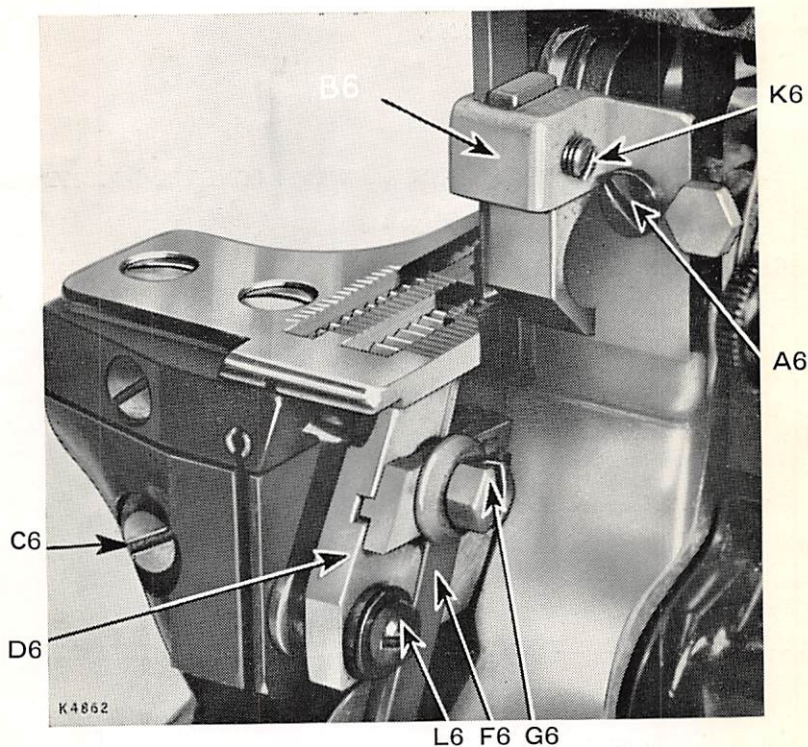


Fig. 29. Adjusting Width of Bight.

The position of the trimmers in relation to the needles determines the width of bight. To adjust, loosen the screw A6, Fig. 29, and move the movable knife holder B6, Fig. 29, to the right. Then loosen the screw C6, Fig. 29, and move the stationary knife holder D6, Fig. 29, to the left or right as required. Securely tighten the screw C6. Now with the cutting edge of the movable knife E6, Fig. 30, at its lowest position, i.e., slightly below the cutting edge of the stationary knife F6, Fig. 29, move the knife holder B6, Fig. 29, to the left against the stationary knife F6. Tighten the screw A6, Fig. 29. Contact pressure between the stationary knife and the movable knife is adjusted under "To Replace the Movable Knife", page 6.

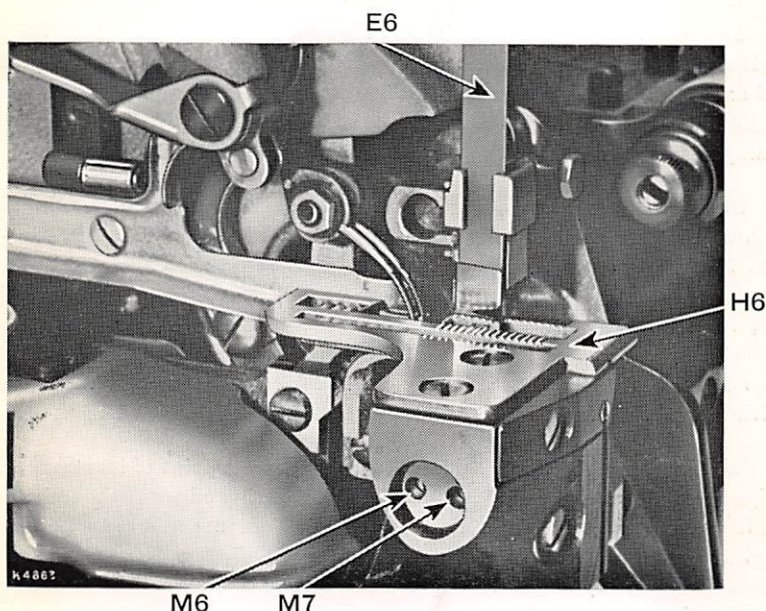


Fig. 30. Adjusting the Trimmer.

TO REMOVE THE STATIONARY KNIFE

To remove the stationary knife F6, Fig. 29, loosen the clamping screw G6, Fig. 29, and draw the knife F6 upward and out.

TO REPLACE THE STATIONARY KNIFE

To replace the stationary knife F6, Fig. 29, push the knife down into the knife holder D6, Fig. 29, until the cutting edge is flush with the top of the throat plate H6, Fig. 30. Tighten Screw G6, Fig. 29.

TO REMOVE THE MOVABLE KNIFE

To remove the movable knife E6, Fig. 30, remove the clamping screw A6, Fig. 29, and the knife holder B6, Fig. 29. Then loosen the screw K6, Fig. 29, and withdraw the knife E6.

TO REPLACE THE MOVABLE KNIFE

To replace the movable knife **E6**, **Fig. 30**, insert the knife into the knife holder **B6**, **Fig. 29**, and tighten screw **K6**, **Fig. 29**. Replace the knife holder **B6** and the clamping screw **A6**, **Fig. 29**, and move the knife holder to the left until the movable knife **E6** contacts the stationary knife **F6**, **Fig. 29**. Tighten clamping screw **A6**.

Turn the machine pulley over from you until the movable knife **E6**, **Fig. 30**, is at the lowest point of its stroke. In this position loosen the screw **K6**, **Fig. 29**, and raise or lower the knife **E6** until the highest point of its bevelled cutting edge is just below the cutting edge of the stationary knife **F6**, **Fig. 29**. Tighten the screw **K6**. Now loosen the screw **C6**, **Fig. 29**, sufficiently to release the spring behind the stationary knife holder **D6**, **Fig. 29**, permitting the stationary knife **F6** to make tight spring contact with the movable knife **E6**. Securely tighten the set screw **C6**.

With the movable knife **E6**, **Fig. 30** at the lowest point of its stroke, check alignment of knives **E6** and **F6**. Should the cutting edges of the knives gape at their forward ends (point nearest operator) loosen the screws **L6** and **C6**, **Fig. 29** and **M6**, **Fig. 30**. Then turn in screw **M7**, **Fig. 30** until the cutting edges are correctly aligned. Tighten the screws **M6**, **L6** and **C6** in this order. Verify alignment of knives.

Should the cutting edges gape at their rear ends (point away from operator) repeat the above instructions but reverse the procedure with screws **M6** and **M7**, **Fig. 30**, i.e., loosen screw **M7** and turn in screw **M6** until correct alignment of knives has been obtained, then tighten screw **M7**.

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