OPERATING INSTRUCTIONS FOR



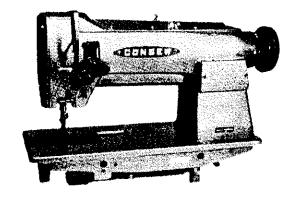
MODELS

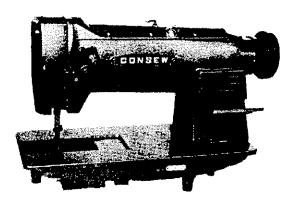
244 and 256

SEWING MACHINES

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Model 244

Model 256

MACHINE SPEED

Maximum operating speed of the machine after a break-in period is 3000 stitches per minute. Of course, speed of machine also depends on type of material being sewn and kind of thread used.

To assure durability and trouble-free operation, it is imperative that for the first several weeks of operation the maximum speed is held to not more than 2500 stitches per minute in order to allow the parts to become properly broken in.

THREADING THE MACHINE

See Fig. (1)

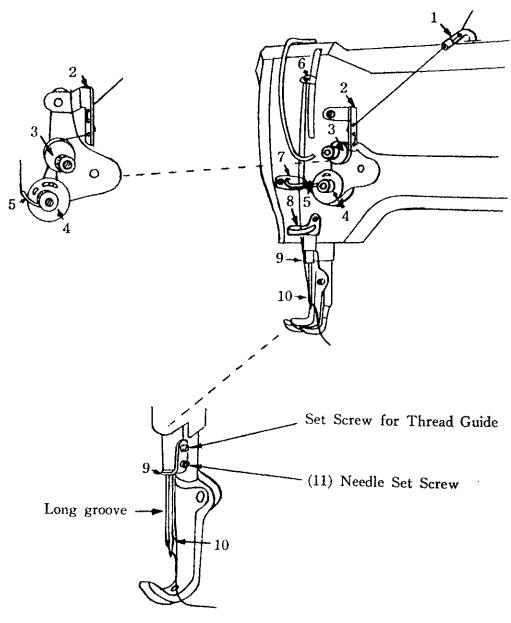


Fig. 1

Turn handwheel toward you until needle (10) Fig. (1) reaches the highest point of its travel. From the thread stand lead the thread from back to front through the first hole in the guide pin (1) on top of the machine arm, and then through the long hole in (1) from right to left, down to the upper guide hole of the thread guide (2) from right to left. Pass thread in weaving fashion through the other two holes in (2) and from right to left over and between the tension discs (3). Now pull thread downward from right to left beneath and around thread controller (4); continue to pull thread upward through the fork in the thread controller and against the pressure of the check spring (5). Guide thread upward through thread guide (7) and from right to left through the eye in take-up lever (6), down through thread guide (7) again and then through the thread guides (8) and (9) and from left to right through the eye of the needle. Pull two to three inches of thread through the eye of the needle.

INSERTING A NEW NEEDLE

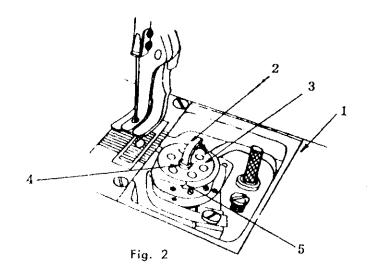
See Fig. (1)

Turn handwheel toward you until needle (10) reaches the highest point of its travel, loosen the needle set screw (11) about one turn, pull out the old needle and insert a new one. Push the needle up into the needle bar as far as it will go, setting its long groove toward the left with the eye of the needle going from left to right. Tighten needle set screw securely. Use standard style 135×17 (Cat. No. 3355) needles in sizes suitable for your particular kind of sewing.

INSERTING AND REMOVING THE BOBBIN

Threading the Bobbin Case

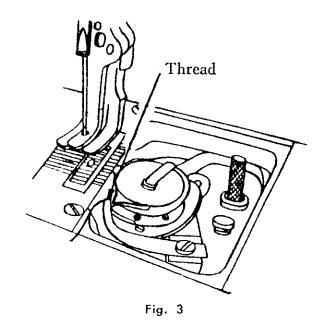
See Fig. (2)



Push open the right hand cover plate (1) Fig. (2) in the bed of the machine. Pull up latch (2) of the bobbin case and lift the bobbin (3) from the bobbin case.

To insert a full bobbin, hold it on one of its sides between thumb and index finger of your right hand. Be sure that the thread draws out from the bobbin left to right. Place bobbin on center post (4) of bobbin case and push down latch (2). Pull thread into slot (5) inside of bobbin case and to the left under tension spring. Draw out about two to three inches of thread. Close cover plate (1).

Fig. (3) illustrates the bobbin case after it is threaded.



WINDING BOBBINS

See Fig. (4)

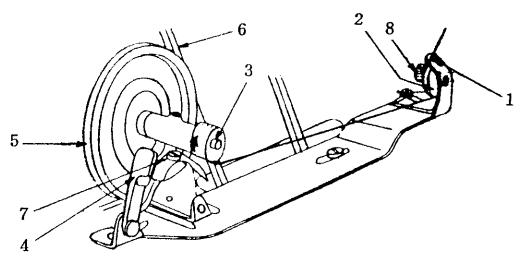


Fig. 4

The bobbin winder is mounted on the table top with its pulley in front of the driving belt so that the pulley will separate from the belt after the bobbin has been wound with sufficient thread.

Push the bobbin on bobbin winder spindle as far as it will go. Pass thread from thread stand downward through eye (1), Fig. (4) in tension bracket; then between and around the back of the tension discs (2) bring thread forward toward bobbin (3) and wind from below in clockwise direction several times around bobbin. Push bobbin winder lever (4) downward until wheel (5) contacts the drive belt (6) and then start machine. After bobbin is filled with thread, release will cause wheel to disengage from belt and winding will stop. Cut thread and remove bobbin from winder spindle.

Adjustment screw (7) can be turned in or out to increase or decrease the amount of thread wound on the bobbin.

When fine thread is wound on bobbins, use light tension. It is regulated by turning the knurled nut (8) on the tension bracket at the rear of the bobbin winder. Bobbin can be wound while the machine is sewing.

REGULATING THE THREAD TENSIONS

For ordinary stitching, the tension of the upper and lower threads should be equal so as to lock both threads in the center of the fabric. If the tension on either thread is stronger than on the other, imperfect stitching will be the result. If the tension on the upper thread is greater than that on the lower thread, it will lie straight along the upper surface of the fabric. If the tension on the lower thread is greater than that on the upper thread, the lower thread will lie straight along the underside of the fabric.

A. TENSION OF THE UPPER (NEEDLE) THREAD

See Fig. (5)

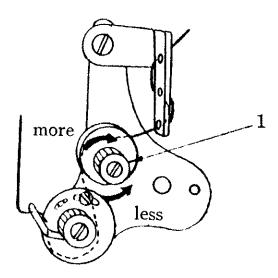
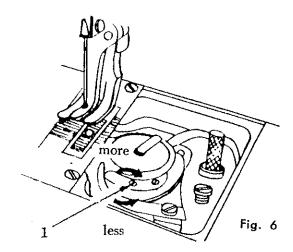


Fig. 5

Before adjusting the tension of the upper (needle) thread, be certain that the presser foot is let down and not in lifted position. Turn serrated nut (1) Fig. (5) on tension device to the right to increase tension and to the left if you desire to decrease it.

B. TENSION OF THE LOWER (BOBBIN) THREAD

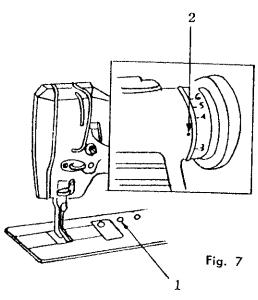
See Fig. (6)



The lower (bobbin) thread tension is controlled by the screw (1), Fig. (6) near the center of the spring at the outside of the bobbin case. Turning this screw clockwise will increase the thread tension, while turning it to the left or counterclockwise will decrease it.

ADJUSTING THE STITCH LENGTH

See Fig. (7)

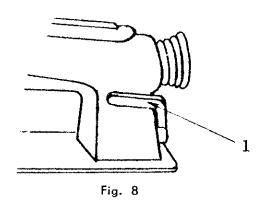


The stitch length is changed by pressing down the button (1), Fig. (7) in the bed plate of the machine and by simultaneously turning the handwheel

slowly toward you. In due course the plunger will enter into a notch in the feeding mechanism. Hold the plunger down and continue to turn the handwheel, either forward or rearward, until the marking with the desired number of stitches on the handwheel coincides with the reference mark (2) on arm.

TO DO TACKING AND TO REVERSE DIRECTION OF FEED (MODEL 256 ONLY)

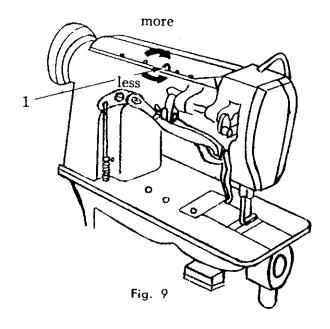
See Fig. (8)



To do tacking for the purpose of locking the ends of seams, rapidly depress and release lever (1), Fig. (8), as the needle approaches the edge of the material. When reversing feed of the machine, keep the lever (1) depressed as long as required. For all other forward sewing, the lever (1) remains in UP position.

ADJUSTING PRESSURE OF THE PRESSER FOOT

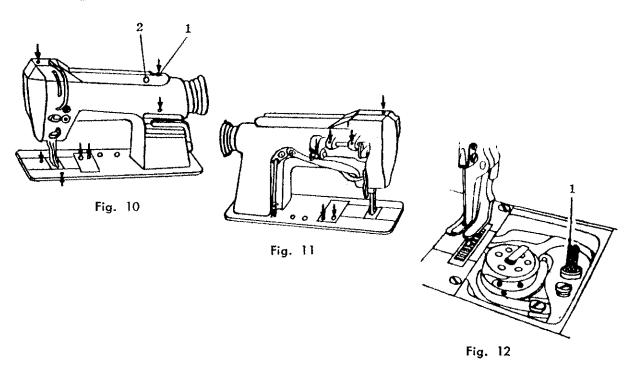
See Fig. (9)



Pressure on the presser foot can be regulated by turning the screw (1) Fig. (9) at the rear of the arm. Turn the screw clockwise to increase pressure, and counterclockwise to decrease pressure. Use lighter pressure for sewing thinner materials, and heavier pressure for sewing thicker fabrics

LUBRICATION

See Fig. (10), (11) and (12)



Do not operate the machine, even if only for testing, unless it has been properly oiled at every spot requiring lubrication. The arrows in Figs. (10) and (11) indicate the spots. Oiling must be done at least twice daily when the machine is in continuous operation to assure free running and durability of the operating parts.

NOTE:

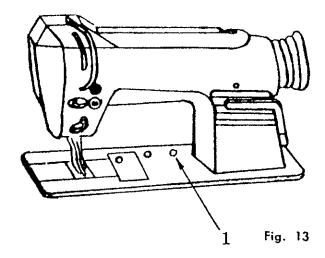
During the breaking-in period, a new machine should be oiled more frequently.

To fill oil reservoir on top of arm, pour oil through the oil filler hole (1), Fig. (10) until oil lever reaches the level marked on the oil gauge (2).

The hook mechanism should receive careful attention when lubricating the machine. Push open the right hand cover plate in the bed and remove the oil dip stick (1), Fig. (12). Fill oil in the reservoir for rotating hook mechanism up to the level marked on the oil dip stick.

SAFETY CLUTCH

See Fig. (13)



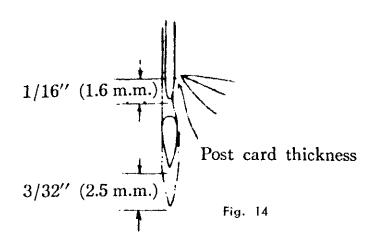
The sewing hook and its mechanism are protected by a safety clutch. In case the hook gets jammed with thread or other foreign matter, the safety device disengages the driving belt, stops sewing, and thus prevents the machine from getting damaged.

If it should become necessary to re-engage the safety clutch, depress button (1) in the bed plate of the machine nearest to the arm, Fig. (13). At the same time, turn handwheel away from you until the locking mechanism re-engages the drive shaft beneath the bed of the machine, open slide plate above hook and rock handwheel back and forth to remove any foreign matter which may have lodged in the hook. Do not use any sharp-edged tools, etc. lest the hook be damaged.

INFORMATION FOR ADJUSTMENT

TIMING SEWING HOOK WITH NEEDLE

See Fig. (14)

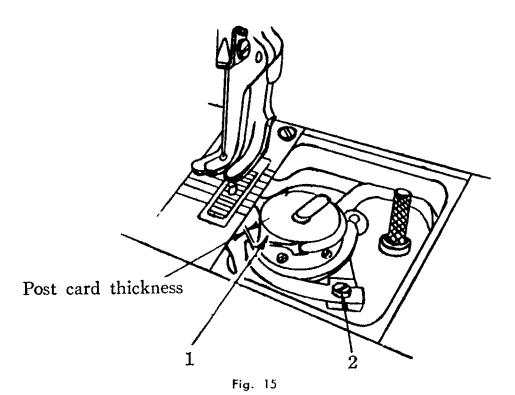


The point of the hook rotates past the needle in a definite timed relationship. The following guidelines are offered to get correct timing between the needle and the hook:

- 1. When the needle is raised 3/32'' (2.5 mm) from the lowest point of its travel, the point of the hook should be at the center of the needle eye.
- 2. In this position, adjust the height of the needle by loosening the set screw of the needle bar bracket so that the point of the hook is 1/16" (1.6 mm) above the upper end of the needle eye.
- 3. Adjust the lateral position of the hook so that the clearance between the needle surface and the point of hook is of the order of the thickness of a post card.

RELATIVE POSITION BETWEEN BOBBIN CASE AND OPENER

See Fig. (15)



The following suggestions are offered to get correct timing between the bobbin case and the opener:

- 1. Turn handwheel until the opener holder is located at the extreme right hand position of its travel.
- 2. In this position, the clearance between the inside edge of the opener and the tab (1) Fig. (15) on the bobbin case holder has to be of the order of the thickness of a post card.
- 3. Adjust the clearance by loosening the opener holder screw (2).

ADJUSTING LIFT OF THE ALTERNATING PRESSER FEET

See Fig. (16)

The thickness of the material sewn should control the height of lift of the alternating presser feet. It should normally be just enough for clearance of the material. With normal adjustment both feet lift to equal height. However, some materials may require unequal height of lift.

To alter lift, loosen wing nut (1) Fig. (16) and move the link and stud assembly (2) along the slot (3)—move up to raise the feeding presser foot and push down to lower this foot.

