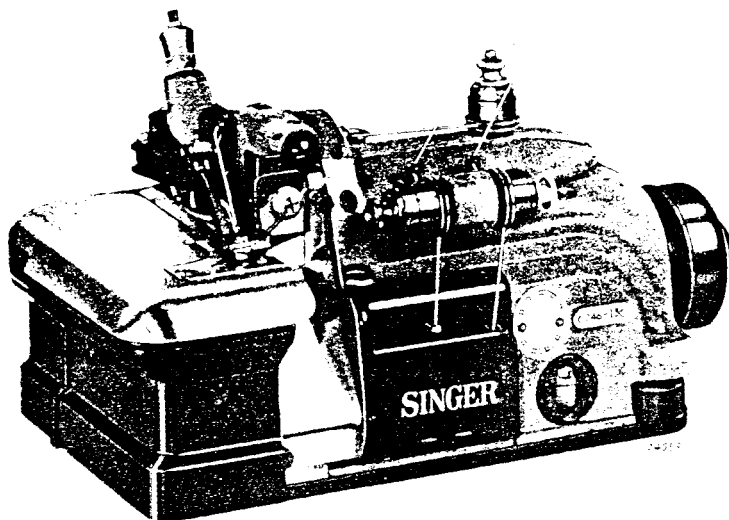


SINGER
246-13 AND 246-15

20741

INSTRUCTIONS
FOR USING
SINGER*
SEWING MACHINES
246-13 AND 246-15

FOR TRIMMING AND OVEREDGING IN ONE OPERATION
AUTOMATIC OILING SYSTEM



Special attention is called to the lubricating instructions on page 4.

THE SINGER MANUFACTURING COMPANY

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DESCRIPTION

Machine 246-13 has a differential feed, trimmer, one needle and two loopers and makes the three-thread over-edge tight needle thread stitch (Federal Stitch Type **504**). It is designed for high speed, simultaneous trimming and stitching of rayon, tricot, silk, muslin, light denim, flannel, balbriggan knit goods, light and medium sweater materials and other fabrics up to $3/16$ inch in thickness according to the material in use.

This machine may be refitted to make the two-thread over-edge stitch (Federal Stitch Type **502**), the two-thread serging stitch (Federal Stitch Type **503**) or the three-thread purl-on-the-edge stitch (Federal Stitch Type **505**).

The machine is equipped with a small horn under the throat plate, for tubular work.

The trimmer can be adjusted to trim from $1/16$ inch to $1/4$ inch from the needle.

The machine can be fitted for a bight from $1/16$ inch to $1/4$ 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 thrown out of operating position when threading the machine or replacing the needle.

With the differential feed, it is possible to either gather or stretch the material, or to feed the material evenly.

The right looper and the left looper are independently driven, permitting variations in their adjustment in relation to each other and to the needle, 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 6 and 7**.

When the machine is in operation, the top of the machine pulley must always turn over away from the operator.

Machine 246-15 is similar to Machine 246-13, except that it has a **longer looper stroke**, a **higher feed lift** and a **higher knife stroke**.

The machine is designed for simultaneous trimming and stitching of fabrics up to $1/4$ inch in thickness, according to the material in use, such as medium heavy and heavy knit goods, sport-jackets, fruit bags and laundry bags.

The trimmer can be adjusted to trim from $1/8$ to $1/4$ inch from the needle.

The machine can be fitted for a bight from $1/8$ inch to $1/4$ inch, depending upon the material and the thread in use.

TO OIL THE MACHINE

Use "TYPE A" OIL, sold by Singer Sewing Machine Company. For description of this oil, see inside front cover of this book.

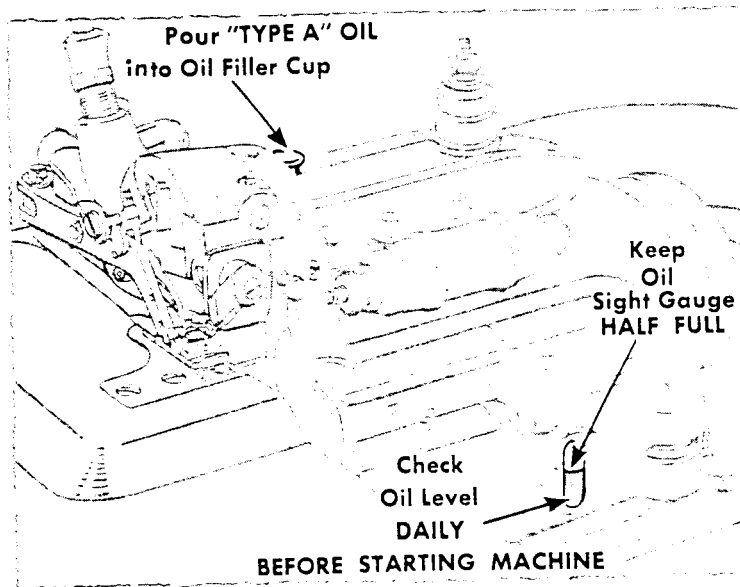


Fig. 2. Oiling

Check the oil sight gauge daily before starting the machine and oil the machine, when necessary, as instructed in Fig. 2.

NEEDLES AND THREAD

Needles for these machines are of curved blade, **Class and Variety** 151 x 1, in sizes 9, 11, 14 and 16. Special sizes or finishes, such as **chrome-plated** needles for nylon materials, will be made on request.

The size of the needle to be used should be determined by the size of the thread, which must pass freely through the eye of the needle. The use of rough or uneven thread, or thread which passes with difficulty through the eye of the needle, will interfere with the proper formation of the stitch.

Orders for needles must specify the **quantity** required, the **size** number, also the **Class** and **Variety** numbers, separated by an **x**.

The following is an example of an intelligible order:

"100 No. 9, 151 x 1 Needles."

The best stitching results will be obtained in using the needles sold by Singer Sewing Machine Company.

TO SET THE NEEDLE Using Socket Wrench #164197

Move needle carrier up to its highest point, then insert needle as instructed in steps 1 to 7 in Fig. 3.

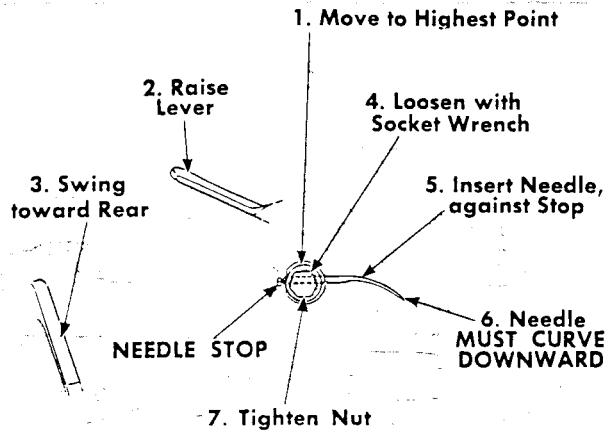


Fig. 3. Setting the Needle

When needle is correctly inserted in needle clamp, securely tighten needle clamping nut.

TO PREPARE FOR THREADING

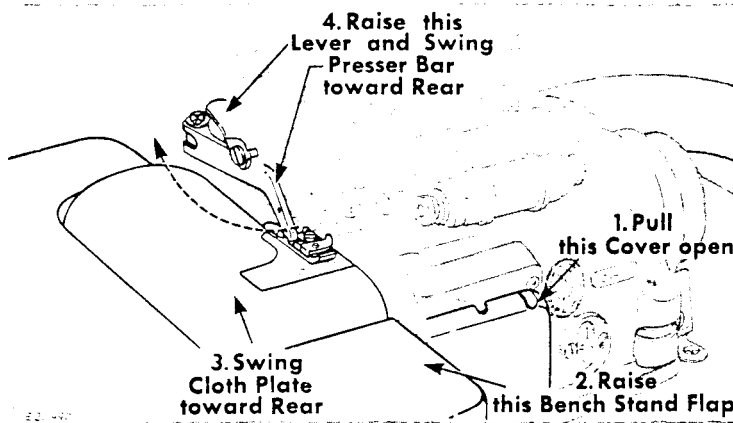


Fig. 4. Preparation for Threading

For convenience in threading, open front cover plate and bench stand flap and then swing presser bar and cloth plate out of position, as instructed in Fig. 4.

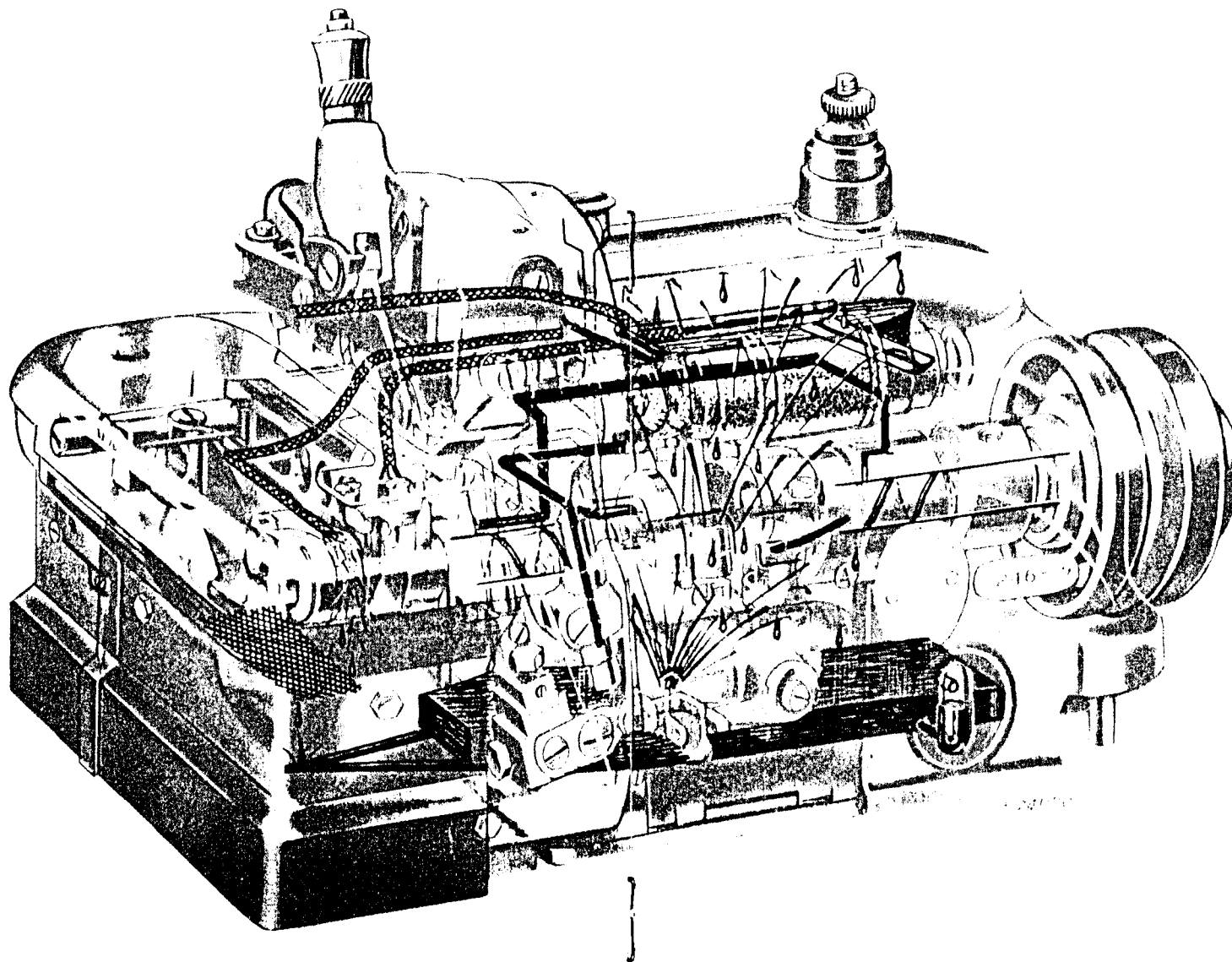


FIG. 5. SHOWING AUTOMATIC LUBRICATION SYSTEM
(Lubrication Shown In Solid Black)

**TO THREAD UNWINDER 151031
For Three-Thread Tight Stitch**

To thread this unwinder, pass each thread through threading points in the order shown in Fig. 6. Dotted line indicates the right looper thread. Solid line indicates the left looper thread. Double line indicates the needle thread.

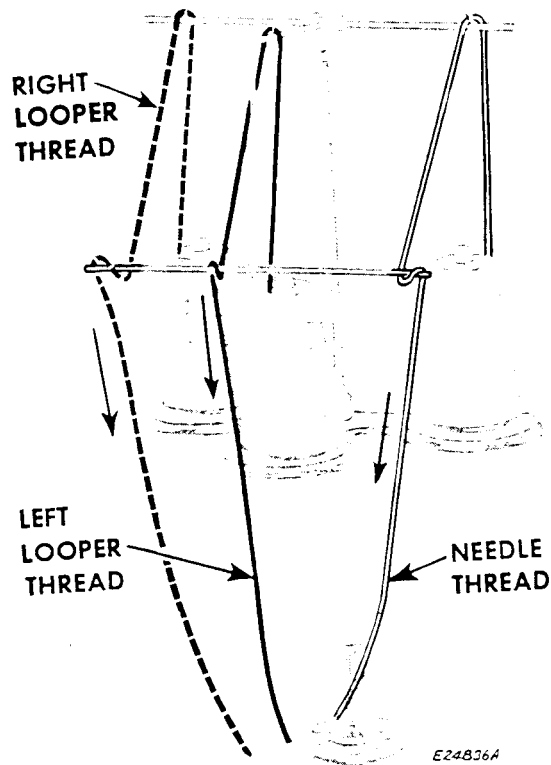


Fig. 6. Threading Unwinder 151031

NOTE: When sewing with nylon thread, thread unwinder 228706 may be ordered if desired.

TO THREAD THE MACHINE For Three-Thread Tight Stitch

To thread the machine, pass each thread through threading points as shown in Figs. 7 through 10. Dotted line indicates the right looper thread. Solid line indicates the left looper thread. Double line indicates needle thread.

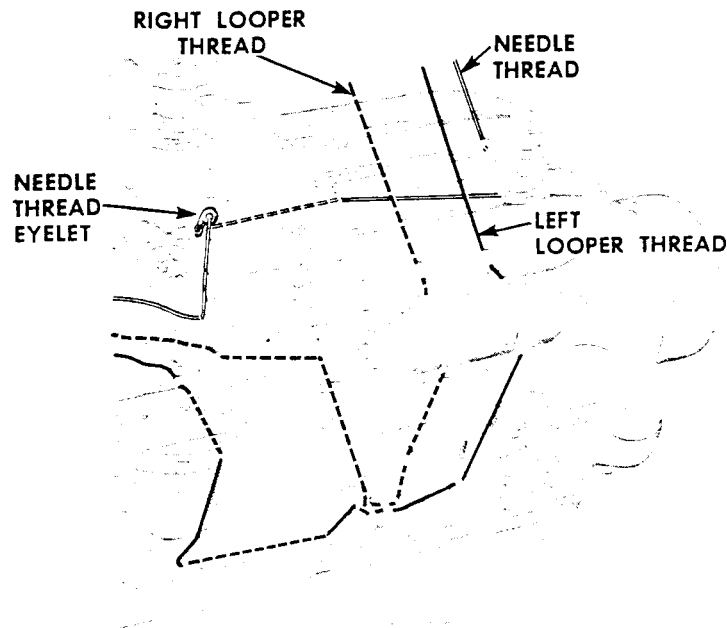


Fig. 7. Threading the Machine
(Three-Thread Tight Stitch)

NOTE: Use Threading Wire 164196, shown in Fig. 8, to pass each thread through its threading tube.



Fig. 8. Threading Wire 164196

IMPORTANT:

The **needle** thread should be completely threaded **first**.
The **right** looper thread should be completely threaded **next**.
The **left** looper thread should always be threaded **last**.

NEEDLE THREAD: Before passing needle thread through its threading tube, turn machine pulley over toward you until needle is at its **lowest position**.

Note particularly the correct method of threading needle eyelet as shown in Fig. 7.

After threading needle thread eyelet, raise needle to its highest position and pass the thread from front to rear through the needle eye.

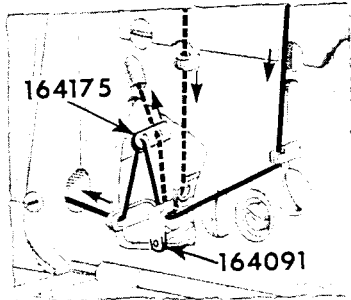
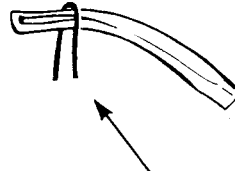


Fig. 9. Threading Looper Take-up
(Three-Thread Tight Stitch)

CAUTION: When threading right looper, be sure that there is **no loose loop of thread** on end of looper (see Fig. 10) to cause thread breakage.

LOOPER THREADS: Turn machine pulley over from you until eye of the looper to be threaded is directly in line with the threading tube.



Remove this Thread
Before Threading

Fig. 10. Right Looper

Draw about two inches of thread through needle eye and through looper eye, with which to commence sewing.

TO THREAD THE MACHINE
For Two-Thread Serging Stitch

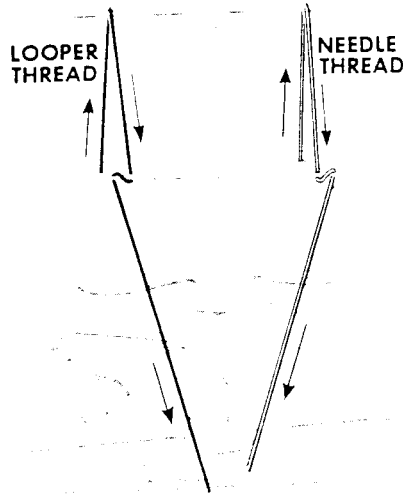


Fig. 11. Threading
Unwinder 151031

To thread the machine, pass each thread through threading points, as shown in Figs. 11 to 14. **Solid line** indicates looper thread. **Double (open) line** indicates needle thread.



Fig. 12. Threading Needle
Thread Eyelet

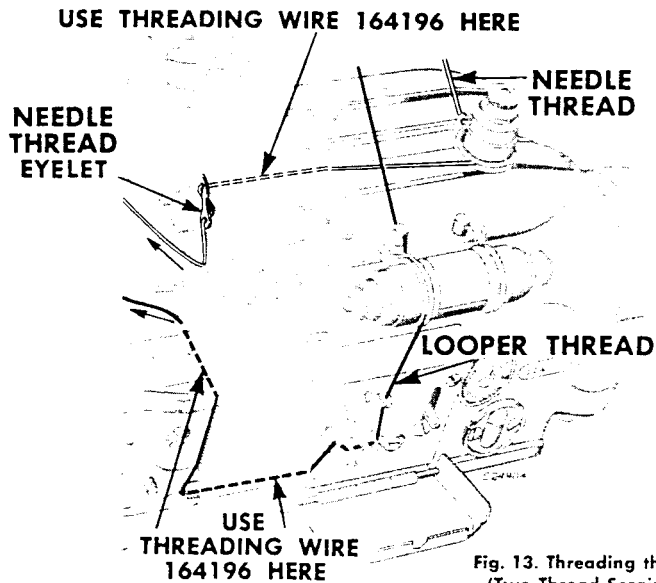


Fig. 13. Threading the Machine (Two-Thread Serging Stitch)

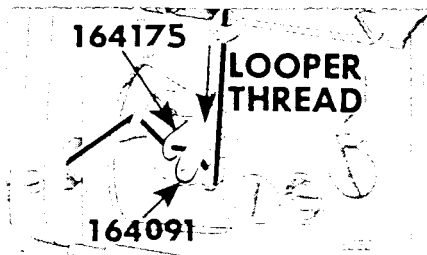


Fig. 14. Threading Looper Take-up (Two-Thread Serging Stitch)

Note particularly the correct position of the needle thread eyelet as shown in Figs. 12 and 13 and of threading the looper take-up as shown in Fig. 14. Otherwise, the threading for two-thread serging stitch is similar to threading for three-thread tight stitch.

**TO THREAD THE MACHINE
For Three-Thread Purl-on-the-Edge Stitch**

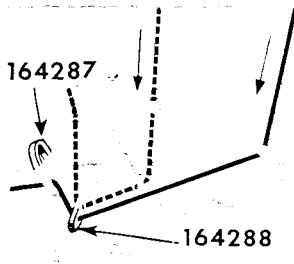


Fig. 15. Threading Looper Take-up (Purl-on-the-Edge Stitch)

The machine and the thread unwinder are threaded for three-thread tight stitch (see Figs. 6 to 10) with the following exceptions:

The needle thread eyelet must be positioned and threaded as shown in Fig. 12, for two-thread serging stitch.

The looper take-up must be fitted and threaded as shown in Fig. 15.

TO REGULATE THE TENSIONS

The tension on the **needle thread** should be **just sufficient to set the stitch** properly in the material.

For average sewing the tension of the **looper threads** should be **very light**.

The thread tensions are regulated as instructed in **Fig. 16**.

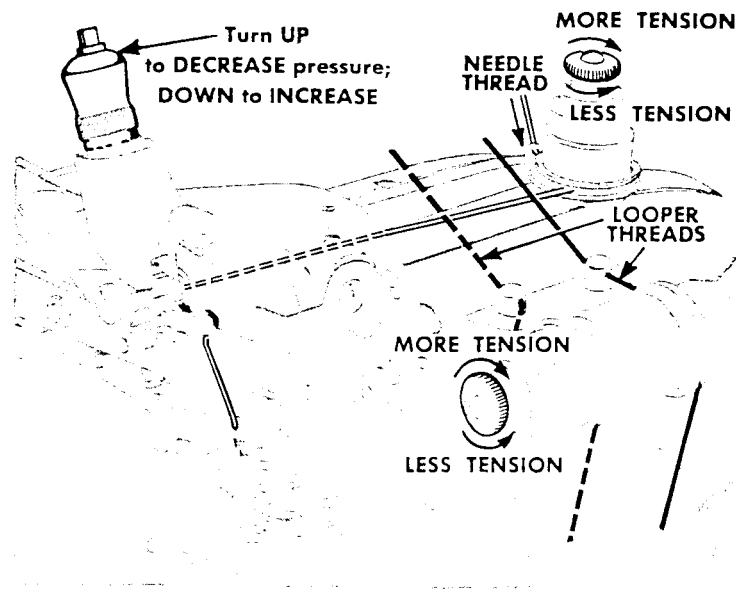


Fig. 16. Regulating Thread Tensions and Pressure on Material

TO REGULATE THE PRESSURE ON THE MATERIAL

Always use the **lightest** pressure possible to permit higher working speeds.

Regulate the pressure on the material as instructed in **Fig. 16**.