USE SINGER® OILS and LUBRICANTS

They insure freedom from lubricating trouble and give longer life to sewing equipment.

The following is the correct lubricant for Machines of Class 246:

**TYPE A**—MANUFACTURING MACHINE OIL, LIGHT GRADE

**OTHER SINGER** LUBRICANTS

**TYPE E**—THREAD LUBRICANT
For lubricating the needle thread of sewing machines for stitching fabrics or leather where a thread lubricant is required.

**TYPE F**—MOTOR OIL
For oil lubricated motors and plain bearings in power tables and transmitters.

NOTE: All of the above oils are available in 1 quart, 1 gallon and 5 gallon cans.

**BALL BEARING LUBRICANT**
This pure grease is specially designed for the lubrication of ball bearings and ball thrust bearings of motors and electric transmitters, ball bearing hangers of power tables, etc. Furnished in 1 lb. and 4 lb. tins.

INSTRUCTIONS
FOR USING
SINGER® SEWING MACHINE
246-20
FOR TRIMMING AND OVEREDGING IN ONE OPERATION
TWO NEEDLES AND TWO LOOPERS
AUTOMATIC OILING SYSTEM

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

THE SINGER MANUFACTURING COMPANY

*A Trade mark of THE SINGER MANUFACTURING COMPANY*
TO ALL WHOM IT MAY CONCERN:

The improper placing or renewal of the Trade Mark "SINGER" or any other of the Trade Marks of The Singer Manufacturing Company (all of which are duly Registered Trade Marks) on any machine that has been repaired, rebuilt, reconditioned, or altered in any way whatsoever outside a SINGER factory or an authorized SINGER agency is forbidden.

THE IMPORTANCE OF USING SINGER® PARTS AND NEEDLES IN SINGER MACHINES

The successful operation of SINGER® machines can only be assured if SINGER® parts and needles are used. Supplies are available at all SINGER® Shops for the Manufacturing Trade, and mail orders will receive prompt attention.

SINGER® Needles should be used in SINGER® Machines
These Needles and their Containers are marked with the Company's Trade Mark "SIMANCO." 1

Needles in Containers marked "FOR SINGER MACHINES" are NOT SINGER® made needles. 2

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DESCRIPTION

Machine 246-20, designed for trimming and overedging bathing suits, house dresses and similar articles, has a differential feed, two needles and two loopers. It makes two lines of two-thread chain stitching consisting of a reinforcing stitch running parallel with an overedge stitch.

The machine will stitch material up to 1/4 inch in thickness, depending on the type of material.

Needle gauges are .109 (approximately 7/64) inch and 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 1/8 inch to 1/4 inch from the needles. The knife trims ahead of the needles.

The machine can be fitted for a bight from 3/32 inch to 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 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 at a glance, 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.
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.

APPLY "TYPE A" OIL TO OIL FILLER CUP

KEEP OIL SIGHT GAUGE HALF FULL

CHECK OIL LEVEL DAILY BEFORE STARTING MACHINE

Fig. 2. Oiling

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

NEEDLES AND THREAD

Needles for this machine have a curved blade.

When distance between needles is .109 (approximately 7/64) inch, use needles of Class and Variety 151x7, in sizes 9, 11, 12, 14, 16, 18 and 19.

When distance between needles is 1/16 inch; use needles of Class and Variety 151x9 in sizes 9, 11 and 14.

These needles are made in standard finish in sizes 9 and 11 and in nickel finish for size 14 and up. 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, 151x7 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 needles as instructed in steps 1 to 6 in Fig. 3.

1. MOVE TO HIGHEST POINT
2. RAISE LEVER
3. SWING TOWARD REAR
4. LOOSEN NUT
5. INSERT NEEDLES AGAINST STOP NEEDLES MUST CURVE DOWNWARD
6. TIGHTEN NUT

Fig. 3. Setting the Needle

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

TO PREPARE FOR THREADING

1. RAISE THIS LEVER AND SWING PRESSER BAR TOWARD REAR
2. SWING CLOTH PLATE TOWARD REAR
3. OPEN THIS COVER

Fig. 4. Preparation for Threading

For convenience in threading, swing presser bar and cloth plate toward rear of machine and open front cover plate, as instructed in Fig. 4.
FIG. 5. SHOWING AUTOMATIC LUBRICATION SYSTEM
OF MACHINE 246-20
(Lubrication Shown in Solid Black)
TO THREAD UNWINDER 151163

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

Fig. 6. Threading Unwinder 151163

TO THREAD THE MACHINE

Pass each thread through threading points in the order shown in Figs. 7 to 11.

Thread right needle thread, indicated by broken (dash) line, first.
Thread left needle thread, indicated by double (open) line, second.

Thread right looper thread, indicated by dotted line, next.
Thread left looper thread, indicated by solid line, last.

NOTE: Use threading wire 164196 shown at right, to pass thread through threading tubes, as instructed in Figs. 7 and 8.

THREADING NEEDLE THREADS:

Before passing needle threads through threading tubes, turn machine pulley over away from operator until needles are at their lowest position.

After threading needle thread eyelet, as shown in Fig. 9, raise needles to highest position and pass each needle thread from front to rear through the eye of its respective needle.

Draw about two inches of thread through each needle eye.
THREADING
LOOPER THREADS (see Figs 7, 10 and 11):

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

Before passing each looper thread through its threading tube, turn machine pulley over away from operator until eye of looper to be threaded is directly in line with threading tube.

Draw about two inches of thread from front to rear through eye of each looper.

TO REGULATE THE TENSIONS

Tensions on the needle threads should be just sufficient to set the stitches properly in the material.

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

The thread tensions are regulated as instructed in Fig. 12, below.

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. 12.