# SINGER 242-2

# USE ONLY **SINGER**\* OILS and LUBRICANTS

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

The following is the correct lubricant for Class 242 Machines:

TYPE G — MANUFACTURING MACHINE OIL, EXTRA-HEAVY 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 or in 55 gallon drums.

#### **GEAR LUBRICANT**

This specially prepared grease is recommended for gear lubrication on manufacturing sewing machines.

#### 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

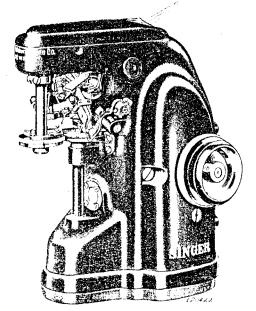
FOR USING

# SINGER\*

# HOSIERY SEAMER

242-2

TWO AND THREE—THREAD OVEREDGE STITCH



Special attention is called to the lubricating instructions on pages 4 and 5.

\*A TRADE MARK OF

THE SINGER MANUFACTURING COMPANY

3 DESCRIPTION

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.

in SINGER Machines
These Needles and their Containers
are marked with the
Company's Trade Mark "SIMANCO.\*"

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

Copyright, U. S. A., 1940, and 1952 by The Singer Manufacturing Company All Rights Reserved for All Countries Machine 242-2 has one needle, two loopers and a horizontal cupped-disc feed. It is designed for seaming hosiery at high speed. All main bearings of the mechanism are splash lubricated.

The machine is regularly equipped to make a three-thread overedge seam, using a Thread Ratio Control. All additional thread handling parts required to convert the machine to make a twothread seam are furnished (see page 11).

The thread ratio control, used only in three-thread seaming, maintains a definite proportion of thread feeding between the three threads, to aid in making a perfect seam.

A built-in 15 candlepower, 7-9 volt lamp throws light where it is most needed, particularly helpful while making adjustments.

A large cover at the rear of the machine facilitates necessary internal adjustments and repairs.

The feed eccentric is adjustable for length of stitch.

The feed cups are intermittently advanced by a positive feed clutch.

The feed cups can be removed and replaced without removing the shafts.

The machine has a foot control for separating the feeding discs to release the work.

It is regularly fitted with two machine pulleys; machine pulley 144438 for 3/8 inch V-belt and machine pulley 144437 for round belt. Either pulley can be used on the right or left hand side of machine.

Special guides for reverse seaming or mock seaming may be obtained on order.

NOTE: Unless otherwise specified when ordering, the machine will be equipped with a needle guide and a fabric guide marked "2.5." Additional guides varying in thickness in steps of .005 inch may be purchased, if desired. These guides are marked "0," "1.5," "2" or "3." Only a needle guide and a fabric guide marked with an identical number should be used at the same time on any one machine.

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

Instructions for Adjusters and Mechanics are included in Form 20602.

#### CAUTION

Do not attempt to run this machine until the oil reservoir has been filled, as instructed on page 4.

#### TO OIL THE MACHINE

See Figs. 2 to 5

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

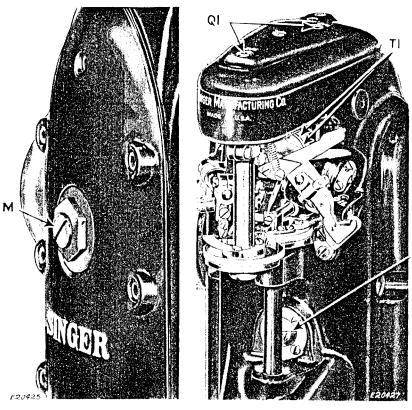


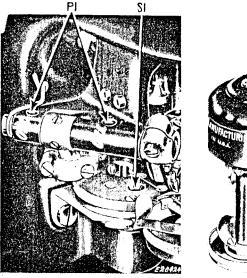
Fig. 2. Oil Reservoir

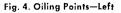
Fig. 3. Oil Sight Gauge

BEFORE STARTING THE MACHINE, remove the screw M, Fig. 2, and pour oil into the reservoir until the oil level is slightly above the center of the oil sight gauge F, Fig. 3, at the front of the machine (about 1-1/4 quarts).

The oil level is in view of the operator, and never should be allowed to fall below the center line, at F, Fig. 3, of the sight gauge.

TWICE EACH DAY, WHEN IN CONTINUOUS USE, apply a few drops of oil to the two oiling points P1, Fig. 4, on the left looper bracket, and to the two oil wicks at Q1, Fig. 5, and three oiling points R1, Fig. 5. Then apply a few drops of oil to oil wick S1, Figs. 4 and 5, in the center of the rear feeding cup shaft.





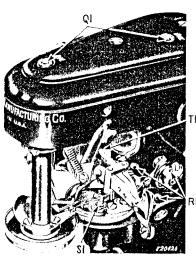


Fig. 5. Oiling Points-Right

ONCE A MONTH apply oil to the edges T1, Figs. 3 and 5, of the uncurler locking discs. Allow oil to seep between the discs and then carefully wipe the outside surfaces clean.

The needle for Machine 242-2 is of class and variety 150  $\times$  1 recommended in size 9. Other sizes will be furnished when specified on order.

The size of the needle to be used is determined by the size of the thread which must pass freely through the needle eye. Rough or uneven thread, or thread which passes with difficulty through the needle eye, will interfere with the proper operation of the machine.

Orders for needles must specify the quantity required, the size number, also the class and variety separated by the letter x.

The following is an example of an intelligible order:

"100 No. 9, 150 x 1 Needles"

The best seaming results will be obtained, when using a needle sold by Singer Sewing Machine Company.

#### TO SET THE NEEDLE See Fig. 6

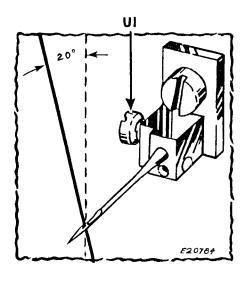


Fig. 6. Needle Setting

Turn the machine pulley until the needle bar is all the way back, to obtain the maximum space available for inserting the needle. Loosen the needle clamp screw **U1** and (using tweezers) insert the needle into the clamp as far as it will go. Set the needle so that the looper clearance scarf near the eye is on **top** of the needle, and the eye of the needle is approximately 20 degrees over toward the left from the vertical, as shown in **Fig. 6**.

# TO THREAD THE UNWINDER FOR THREE-THREAD SEAM See Figs. 7 and 8

7

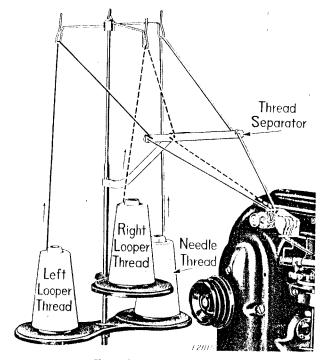


Fig. 7. Threading the Unwinder (Three-Thread Seam)

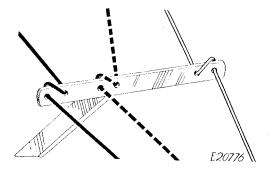


Fig. 8. Detail of Threading the Thread Separator

The white (double) line indicates the needle thread.

The broken line indicates the right looper thread.

The **solid line** indicates the **left** looper thread.

## TO THREAD THE MACHINE FOR THREE-THREAD SEAM See Figs. 9 to 12

#### IMPORTANT:

The needle thread (white line) should be completely threaded first.

The right looper thread (broken line) should be completely threaded next.

The left looper thread (solid line) should always be threaded last.

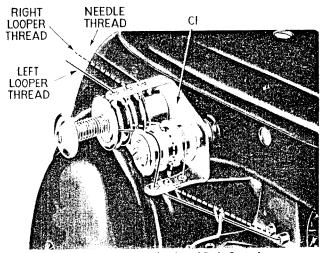


Fig. 9. Threading the Thread Ratio Control

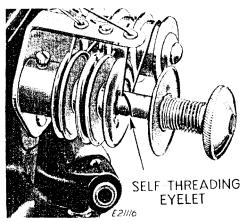


Fig. 10. Threading Tension Discs

There are three hidden self-threading eyelets on the tension stud of the thread ratio control; one for each of the threads. As each thread is passed BETWEEN its pair of tension discs, it should pass through the self-threading eyelet provided for it. Fig. 10 shows the left looper thread in position in its self-threading eyelet.

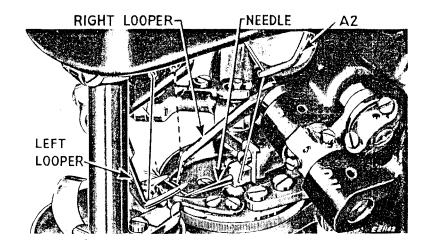


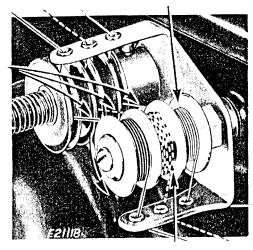
Fig. 11. Machine Threaded for Three-Thread Seaming

After the needle thread is completely threaded, as instructed in Figs. 9, 10 and 11, and before starting to thread the looper threads, pull down on the needle thread between its thread ratio control roller and tension discs; pass the thread down under and then back over its roller counterclockwise, as instructed in Fig. 12, approximately four turns. The right looper thread should be threaded next.

After threading the right looper thread, pull down on that thread between its roller and tension discs and turn it back over its roller counterclockwise, as instructed in Fig. 12, approximately five turns.

#### TURN BACK NEEDLE THREAD BEFORE THREADING LOOPER THREADS

PULL DOWN ON EACH THREAD HERE AND TURN THREAD BACK OVER ROLLER COUNTER CLOCKWISE



TURN BACK RIGHT LOOPER THREAD BEFORE THREADING LEFT LOOPER THREAD

Fig. 12. Turning the Threads Back Over the Thread Ratio Control Rollers

Finally thread the left looper thread, turning it back over its roller, as shown in Fig. 12.

NOTE: The number of turns that each thread should be wound over its roller may vary according to the type of thread in use. Four turns for the needle thread and five turns for each looper thread should produce good results.

Draw about three inches of thread through the eye of the needle and the eye of each of the two loopers with which to commence sewing.

## TO CONVERT THE MACHINE TO MAKE THE TWO-THREAD SEAM

The machine may be converted from three-thread seaming to two-thread seaming in the following manner:

Remove thread ratio control C1, Fig. 9, page 8 and install tension assemblies A1, Fig. 15 and B1, Fig. 16, page 12.

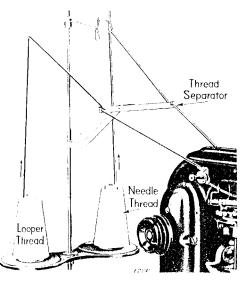
Remove right looper shown in Fig. 11, page 9 and install spreader 144469 (W1, Fig. 15).

Install thread take-up C3, as shown in Fig. 15.

Remove needle thread guide A2, Fig. 11 and install needle thread guide A3, Fig. 15.

#### TO THREAD THE UNWINDER FOR TWO-THREAD SEAM

See Figs. 13 and 14



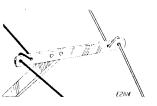


Fig. 14. Detail of Threading the Thread Separator

The white (double) line indicates the needle thread.

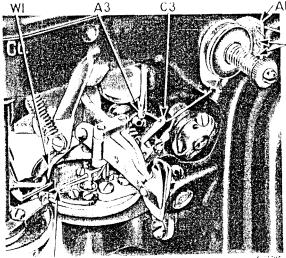
The **solid line** indicates the **looper** thread.

Fig. 13. Threading the Unwinder (Two-Thread Seam)

#### TO THREAD THE MACHINE FOR TWO-THREAD SEAM

See Figs. 15 and 16

NOTE: Figs. 15 and 16, page 12, show the threads threaded through all three eyelets in each of the guides A1 and B1. However, only the first eyelet in either guide needs to be threaded, unless the particular thread kinks between the guide and the thread unwinder.



THREAD
THESE
TWO
EYELETS
ONLY IF
THREAD
KINKS

USE TWEEZERS

Fig. 15. Threading the Needle (Two-Thread Seam)

Use tweezers to pass the thread up through eye of needle.

# THREAD THESE TWO EYELETS ONLY IF THREAD KINKS

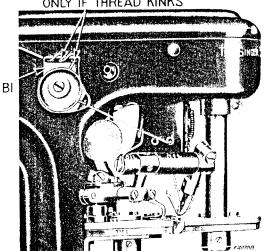


Fig. 16. Threading the Looper (Two-Thread Seam)

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

#### TO REGULATE THE TENSIONS

The tension on each thread must be always as light as conditions will permit.

#### THREE-THREAD SEAMING:

The tensions on the threads are controlled by the thumb nut X1, Fig. 17, at the front of the tension discs stud on the thread ratio control.

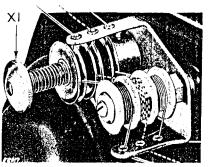


Fig. 17. Regulating the Tensions for Three-Thread Seaming



T W O - T H R E A D
SEAMING: The tensions

on the threads are controlled by the thumb nuts X1, Fig. 18, at the front of each set of tension discs.

Fig. 18. Regulating the Tensions for Two-Thread Seaming

#### TO REGULATE THE PRESSURE OF FEEDING CUPS

See Fig. 19

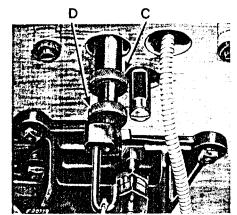


Fig. 19. Regulating Pressure of Feed Cups

The pressure holding the feeding cups closed is regulated by turning the large thumb screw **D**, underneath the table, to the right or left after loosening the lock nut **C**. This pressure should be only heavy enough to insure positive feeding and never so heavy as to damage the stocking material.