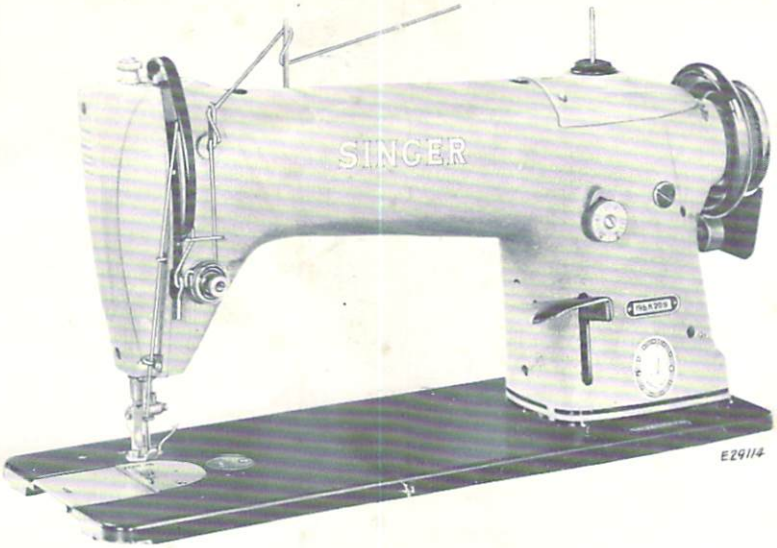
Operator's guidebook

SINGER

196K

THE SINGER MANUFACTURING COMPANY



Introducing the New SINGER* 196K

The most reliable, quick-reversible feed machine on the line. This machine will produce top quality back tacking and straight line single needle lock stitching in medium and heavy cloaks, overalls and other clothing.

196K has the ease of handling you want — the reversible feed lever permitting the operator to feed the work backward and forward at will.

196K starts fast and will maintain speeds up to 3500 revolutions per minute for 196K5 and 4000 revolutions per minute for 196K205.

Its modern styling - in pleasing grey and black colour combination — and its quiet, smooth operation were planned to make sewing easier, more pleasant and more comfortable for you.

With knee lifter action — easy to reach oiling points — pressure-filled grease lubricated gear cases and a safety V-belt pulley, this machine was designed to insure profits for you.

We think you will find your new 196K a pleasure to operate.

*A Trademark of THE SINGER MANUFACTURING COMPANY

Form K6341
(160)

Printed in Great Britain

BEFORE YOU DO ANYTHING ELSE

Oil your machine!

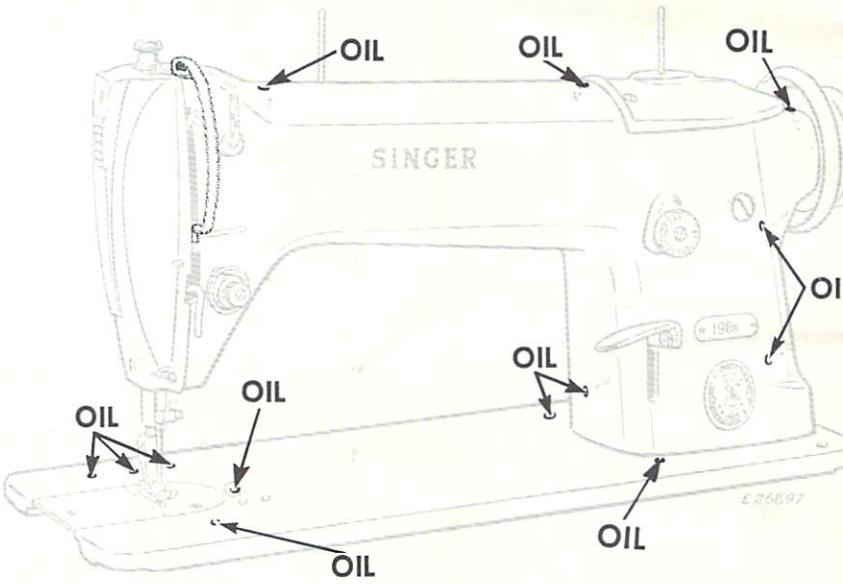


Fig. 2. Front View of Machine 196K5, Showing Oiling Points

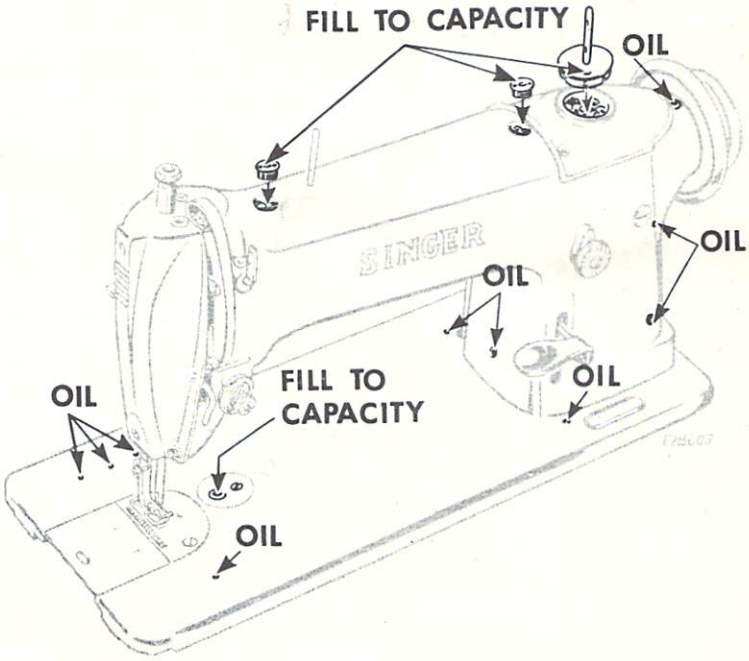


Fig. 3. Front View of Machine 196K205 Showing Oiling Points

For best results, use SINGER "TYPE B" or "TYPE D" OIL for 196K5 Machine and "TYPE A" or "TYPE C" for 196K205. "TYPE C" or "TYPE D" is used when an oil is desired which will produce a minimum of stain on fabrics even after a long period of storage.

Apply a few drops of oil to each of the oil holes indicated by the word "OIL" on the machine and shown in Figs. 2 to 8.

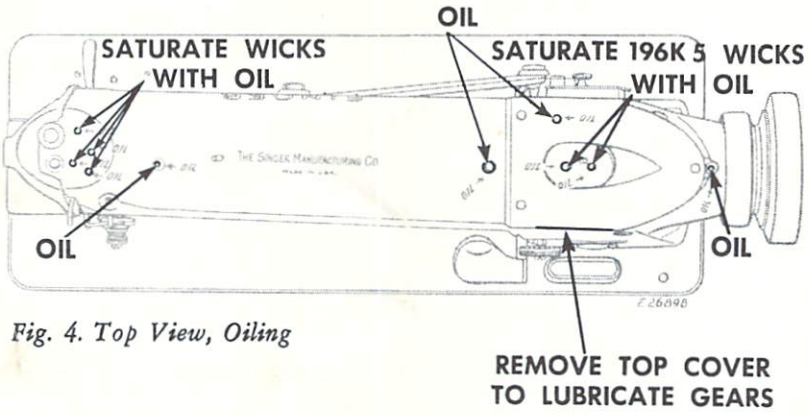


Fig. 4. Top View, Oiling

Keep all wicking saturated with oil.

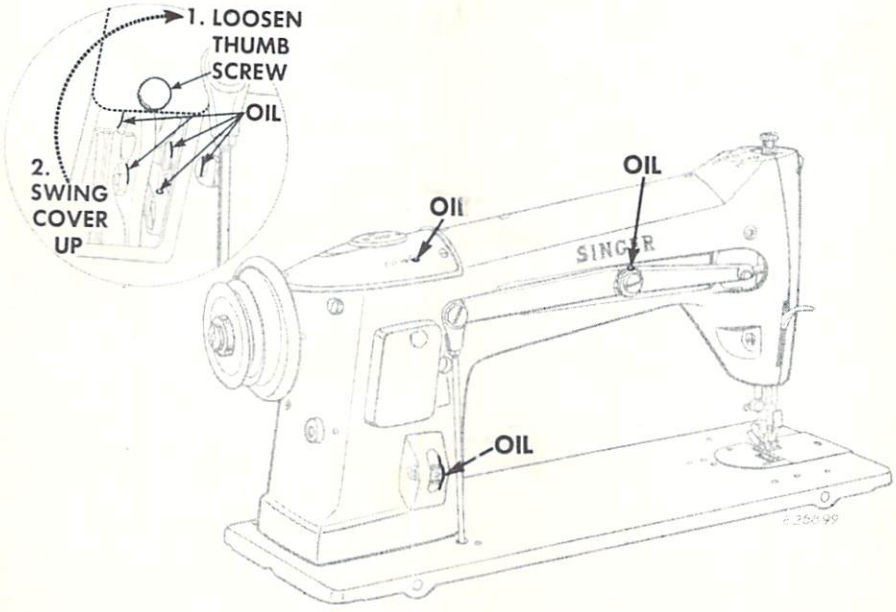


Fig. 5. Rear View, Oiling

When machine leaves factory, gear cases shown in Figs. 6 and 7 are packed with sufficient lubricant for approximately 160 hours of operation.

Replenish gear cases every 160 hours of operation with GEAR LUBRICANT sold by Singer Sewing Machine Company.

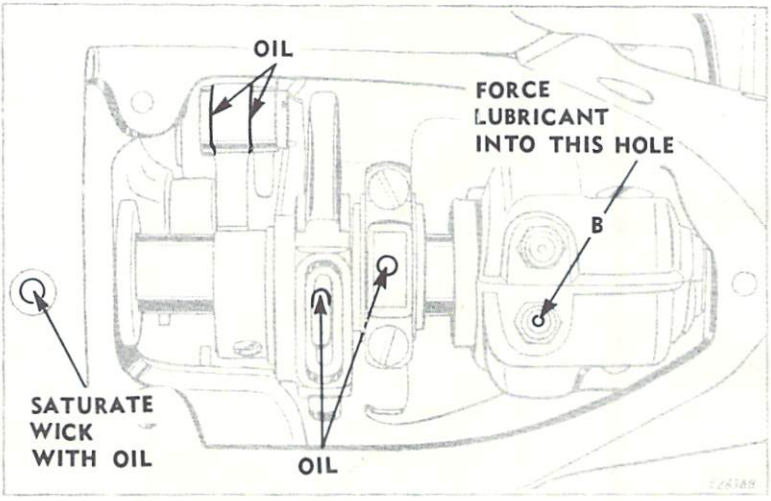


Fig. 6. Lubrication of Upper Gears

Alemite Grease Gun 160907 provides most convenient means of applying lubricant to these gears. Force lubricant into each fitting B until each gear case is full.

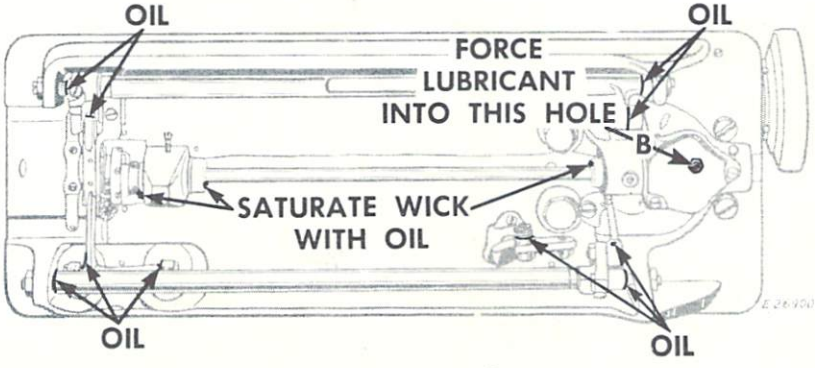


Fig. 7. Bottom View, Showing Oiling Points and Lubrication of Lower Gears

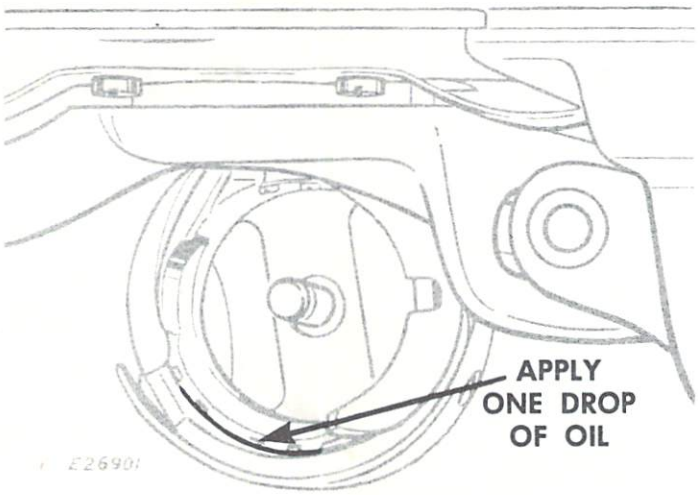


Fig. 8. Oiling Sewing Hook Race on Machine 196K5

Machine 196K5 only:

Apply one drop of oil to bobbin case holder bearing in sewing hook race, as shown in Fig. 8.

CAUTION: Never oil sewing hook race through holes in throat plate. Never flood hook with oil.

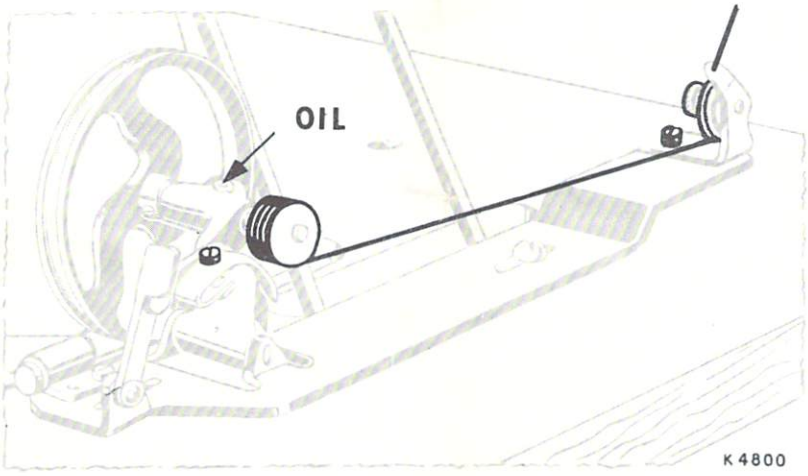


Fig. 9. Oiling the Bobbin Winder

Oil your bobbin winder occasionally

Apply a few drops of oil to the oil well in bobbin winder frame, as shown in Fig. 9.

NEEDLES . . .

The correct type—

As you know, the needles you use have a very direct effect on the quality, strength and appearance of the stitching produced by your machine. From the standpoint of efficient machine performance, the correct needle is just as necessary as many of the parts inside your machine.

That's why it's so important—for best sewing results and for trouble free operation—to use only the SINGER needles recommended here:

Class and Variety 16 x 231.

And the correct size—

In selecting a needle of the right size among sizes shown—whether in standard or chromium finish—the eye must be large enough to allow the thread you are using to pass through freely without binding or chafing. A simple test is to thread a short length of sewing thread through the needle eye, hold the thread taut in a vertical position and twirl the needle about the thread. If the size is correct, the needle should slip down the thread easily.

Available Sizes: 14, 16, 17, 18, 19, 21, 22 and 23.

Check for damaged needle—

To avoid poor stitching and possible damage to your machine, check your needles frequently:

Bent needle—may cause skipped stitches.

Hook or burr on needle point—may cause picking or fraying of the material.

Clogged needle eye and grooves—will also cause skipped stitches.

THREAD . . .

In the Class 196K use only left twist thread in the needle. Either right or left twist thread can be used in the bobbin. To determine the thread twist, hold the thread as shown below. Then roll the thread over toward you — if the strands of the thread wind tighter, the thread is left twist; if the strands unwind or separate, the thread is right twist.

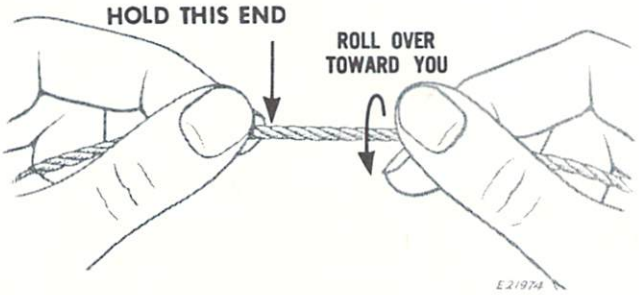


Fig. 10. Determining Thread Twist

HERE'S HOW TO . . .

Set the Needle

Turn the machine pulley over toward you until the needle bar moves to its highest point.

After loosening needle set screw, insert needle UP into needle bar AS FAR AS IT WILL GO, as instructed in **Fig. 11.**

The single continuous groove of the needle MUST face the left end of the machine, as shown in **Fig. 11,** with eye of the needle directly in line with the arm of the machine.

Securely tighten needle set screw.

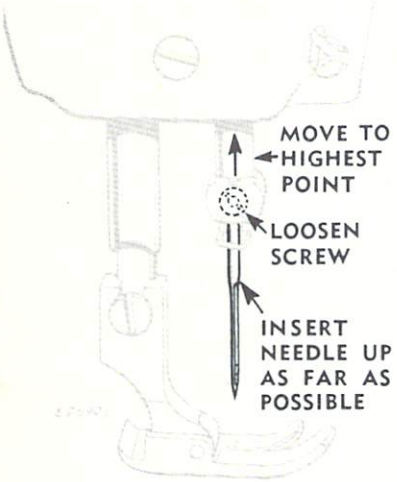


Fig. 11. Setting the Needle

Do

Oil the machine frequently.

When turning the machine pulley, always turn it over toward you.

Reduce speed of machine when sewing closely woven or treated fabrics to avoid overheating needle.

Always keep the bed slide closed when the machine is in operation.

Clean out any lint or other waste around the hook and between the feed rows on the under side of the throat plate.

Use SINGER parts and needles for all replacements.

Don't

Don't apply oil through holes in throat plate.

Don't try to "help" machine by pulling fabric. Machine will feed the work itself. Pulling fabric may break needles.

Don't use rough or uneven thread or thread which does not correspond, in size, to size of eye in needle.

Thread the machine

First, turn the machine pulley over toward you until needle is at its highest point, then pass the needle thread from the unwinder through the threading points in the order shown in Figs. 12 and 13.

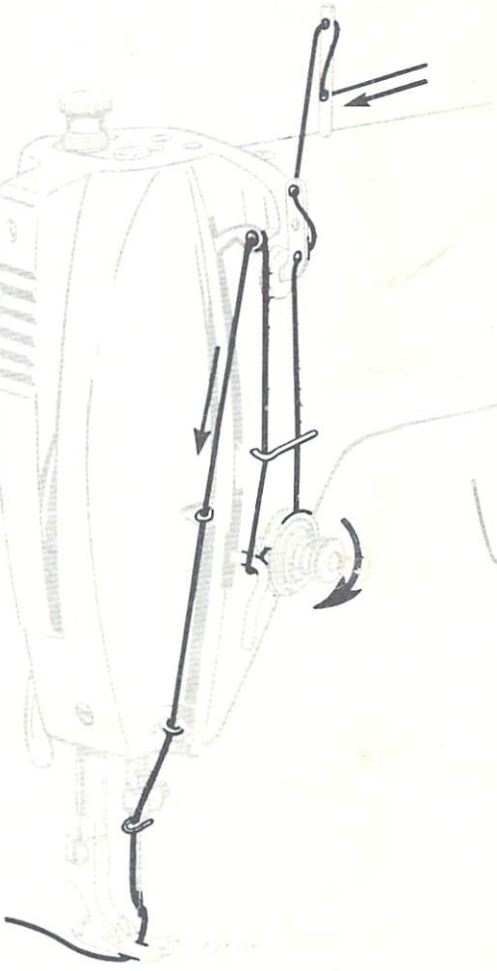


Fig. 12. Upper Threading

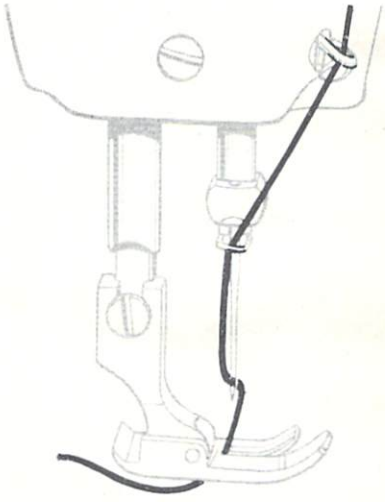


Fig. 13. Threading the Needle

Draw about two inches of thread through the eye of the needle with which to start sewing.

NOTE: A Thread Unwinder is recommended for use with this machine.

LEARN HOW TO . . .
Take out the bobbin

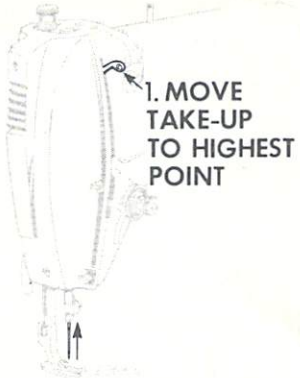


Fig. 14. Preparing for Removal of Bobbin

Turn the machine pulley over toward you, until the needle thread take-up lever is at its highest point as shown in **Fig. 14.**

Reach beneath the bed of the machine with the left hand and remove the bobbin, as instructed in **Figs. 15** and **16.**

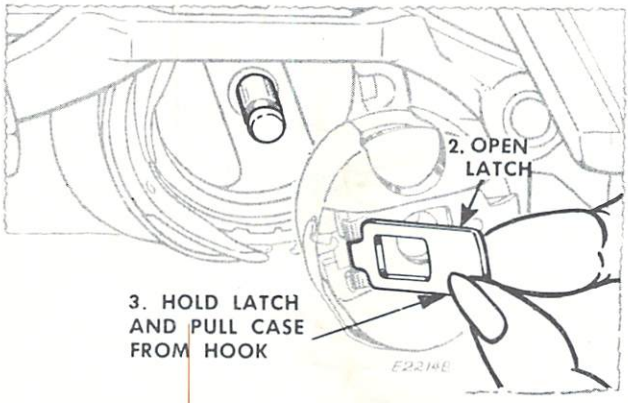


Fig. 15. Removing Bobbin Case from Sewing Hook

Release the bobbin

NOTE: While the latch is kept open the bobbin will be retained in the bobbin case.

To remove the bobbin from the bobbin case, release the latch, turn the open end of the bobbin case downward and the bobbin will drop out, as shown in **Fig. 16.**

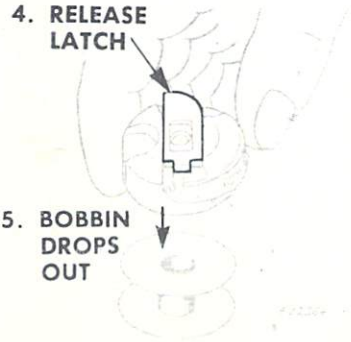


Fig. 16. Removing the Bobbin

Wind the bobbin

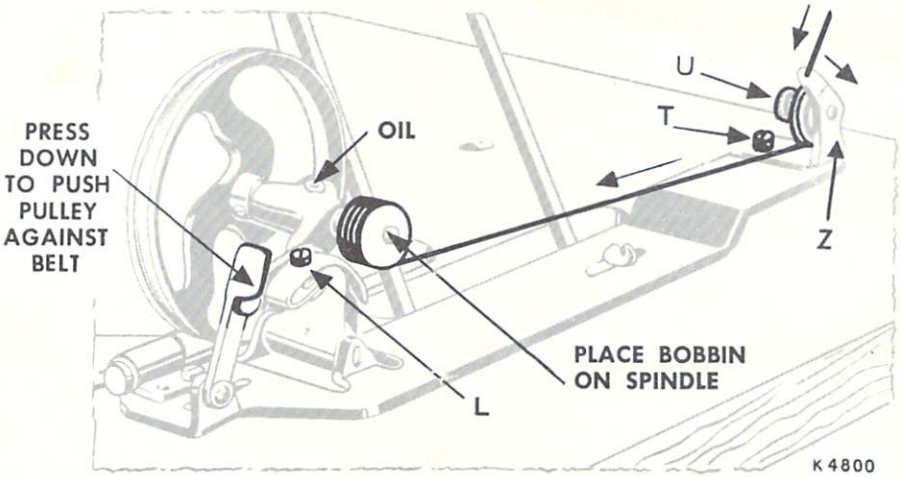


Fig. 17. Winding the Bobbin

Place bobbin on spindle, pushing it on as far as it will go and pass thread through threading points, as shown.

Wind end of thread around the bobbin a few times. Press down on thumb latch, pushing driving pulley over against belt, as shown in **Fig. 17.**

Start the machine.

Bobbin winder will stop automatically when the amount of thread for which it is regulated is wound upon the bobbin. For more thread on bobbin, turn screw **L** inward; for less thread on bobbin, turn screw **L** outward.

When winding a bobbin with fine thread, a light tension should be used. Adjust the knurled nut **U, Fig. 17,** to regulate the tension.

If thread winds unevenly on bobbin, loosen screw **T** and move tension bracket **Z** to the left or right, as required. Tighten screw **T.**

Bobbins can be wound while the machine is stitching.

You are now ready to thread the bobbin case

as instructed on page 11.

IT IS EASY TO . . .

Thread the bobbin case

Hold the bobbin so that the thread will unwind in the direction shown in Fig. 18.

Hold the bobbin case as shown in Fig. 18 and place the bobbin into it.

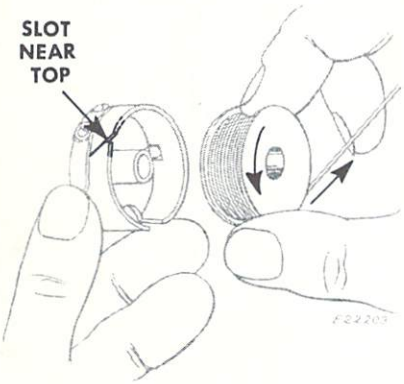


Fig. 18. Placing Bobbin in Bobbin Case

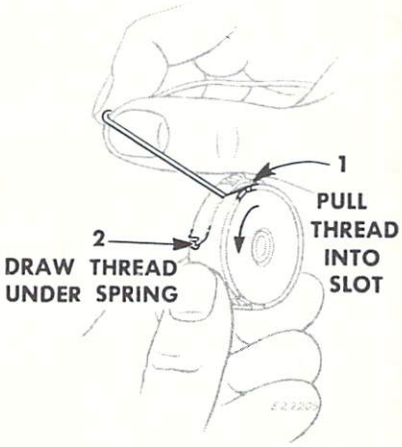


Fig. 19. Pulling the Thread into the Slot

Pull the thread into the slot 1 and under the tension spring 2, Fig. 19.

Draw the thread into the delivery eye at the end of the tension spring, as shown in Fig. 20.

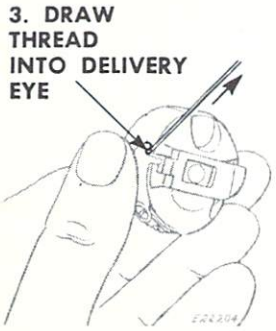


Fig. 20. Drawing the Thread Under the Tension Spring

Replace the bobbin case

After threading, take bobbin case by latch in the left hand and place bobbin case on center stud of bobbin case holder, as instructed in **Fig. 21.** Release latch. Press bobbin case back until latch catches groove near end of stud. Allow about two inches of thread to hang free.

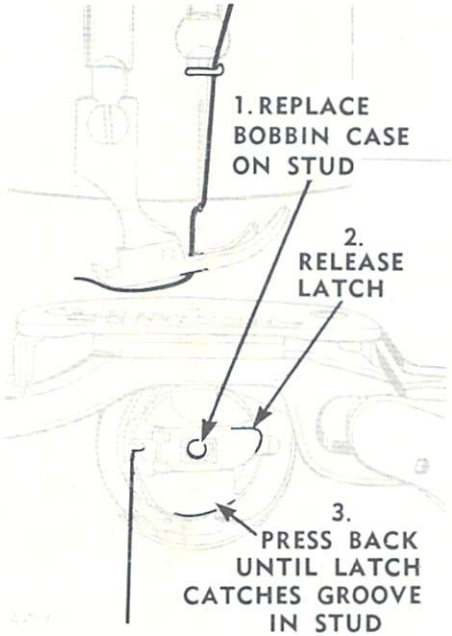


Fig. 21. Bobbin Case Threaded and Replaced

Get set

Hold the end of the needle thread with the left hand, leaving the thread slack from the hand to the needle. Then turn the machine pulley over toward you slowly until the needle moves down and up again to its highest point. Pull on the needle thread and the bobbin thread will come up through the hole in the throat plate (as shown in **Fig. 22**). Draw both threads back away from you and under the presser foot.

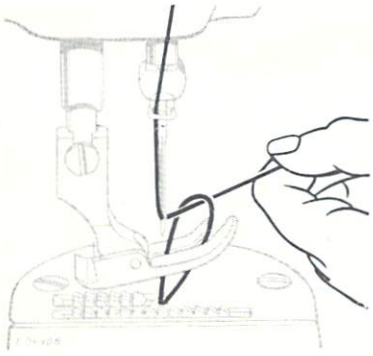


Fig. 22. Drawing Up the Bobbin Thread

Go

You're now ready to sew — quickly, smoothly, easily. Just place the material under the presser foot, lower the foot, turn machine pulley over toward you — and go!

To remove the work—

Turn the machine pulley over toward you, until the needle thread take-up lever is at its highest point.

Raise the presser foot, draw the work back behind the presser foot and cut the threads close to the work.

WATCH YOUR TENSIONS

Normally — and probably for all the sewing you will do — tension on the needle and bobbin threads should be balanced so that if you cut straight down through the center of a line of stitching and then look at it from the side it would appear with the **needle and bobbin threads locked in the center** of the thickness of the material like this:

RIGHT

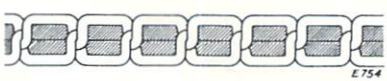


Fig. 23. Perfect Stitch

If there is too much tension on the needle thread or not enough on the bobbin thread, the needle thread will not be pulled down into the material and poor stitching will result with the **needle thread lying on top** of the material like this:

WRONG

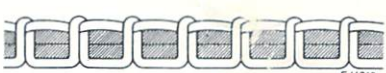


Fig. 24. Too Tight Needle Thread Tension

If there is too much tension on the bobbin thread and not enough on the needle thread, you will get the reverse of the condition shown in Fig. 24, but the stitching is just as poor. The **bobbin thread will lie on the bottom** of the material like this:

WRONG

Fig. 25. Too Loose Needle Thread Tension

WHAT TO DO ABOUT TENSIONS . . .

Needle Thread—

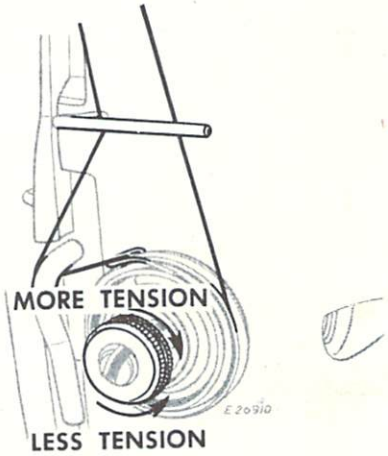


Fig. 26. Regulating Needle Thread Tension

First, regulate the needle thread tension only when the presser foot is down.

Tension on the needle thread should be just enough to set the stitch correctly in the material.

Having lowered the presser foot, turn the thumb nut at the front of the tension discs to regulate the needle thread tension, as instructed in Fig. 26.

Bobbin Thread—

Once the tension on the bobbin thread has been correctly adjusted, the required stitch can usually be obtained by varying the tension on the needle thread only.

For average sewing the tension on the bobbin thread should be very light.

To regulate the tension on the bobbin thread, remove the bobbin case and turn the screw in the tension spring, as instructed in Fig. 27.

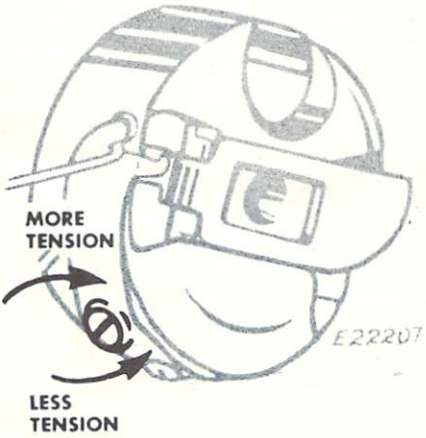


Fig. 27. Regulating Bobbin Thread Tension

WHEN YOU WANT TO CHANGE THE STITCH LENGTH . . .

Depress the feed-reversing lever E **slightly** and turn thumb screw F over to left (counterclockwise) to lengthen stitch or over to right (clockwise) to shorten stitch, as shown in Fig. 28. Release lever E.

The thumb screw F is marked with numerals from "0" to "5."

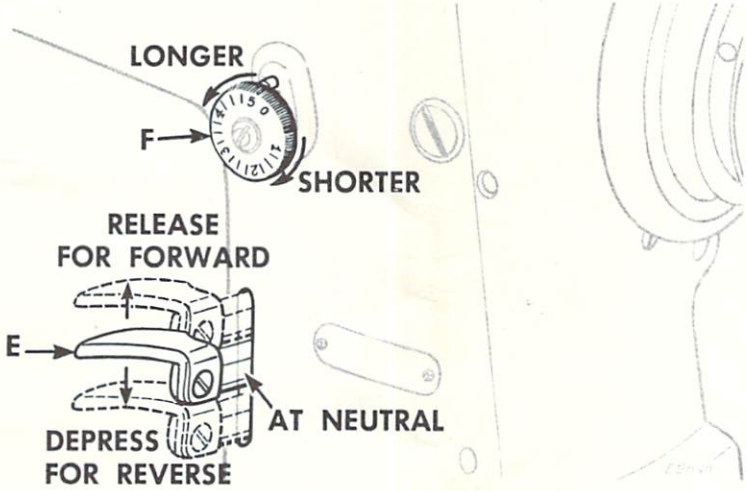


Fig. 28. Regulating Stitch Length

When stitch-regulating thumb screw F is **set at** "0", the feed-reversing lever will be **fixed** at central position in its slot and there can be **no forward or backward movement of feed.**

When thumb screw F is set at numeral "5", machine will feed at the maximum stitch length.

TO REVERSE THE DIRECTION OF FEED

simply depress feed-reversing lever E as far as it will go.

Feeding in reverse will continue only as long as lever E is held in depressed position. Normal feeding is resumed upon release of lever E.

The range of movement of the feed-reversing lever is limited by the setting of the stitch-regulating thumb screw F.

When the lever E is released, it will rise to the highest point permitted by the setting of the thumb screw F and **the machine will feed forward** at the set stitch length.

When the lever is depressed as far as permitted by the thumb screw setting, **the machine will feed backward** at the set stitch length.

LEARN HOW TO . . .

Regulate presser foot pressure

Correct presser foot pressure helps feed the work efficiently. You can regulate the amount of pressure by means of the thumb screw, as shown in Fig. 29.

The pressure on the material should be as light as possible, while still sufficient to insure correct feeding.

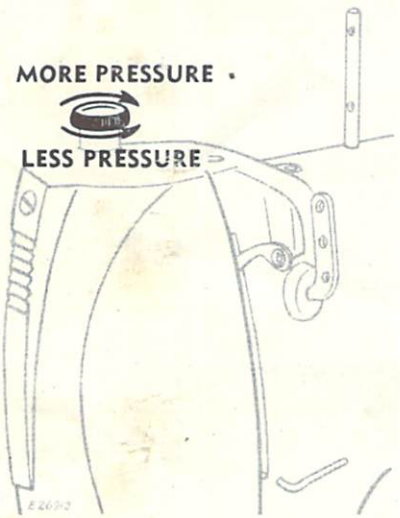


Fig. 29. Regulating the Pressure on the Material

To increase the pressure, turn the thumb screw downward (clockwise). To reduce the pressure, turn this screw upward (counterclockwise). Your pressure is correct when the work moves steadily and smoothly without stalling.

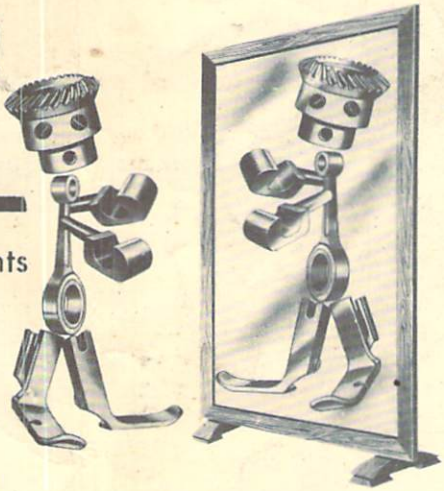
Turn a Corner

Stop machine when needle is rising but before it is out of the material. Raise presser foot. Turn material for next line of stitching, using needle as a pivot. Lower presser foot and resume sewing.

Sew Flannel or Bias Seams

Use a short stitch and a light tension on needle thread. No other change is required.

The Same!



To get replacements that are the <u>same</u> as parts in new machines...

BUY PARTS AND NEEDLES MADE BY SINGER*

TO BE <u>DOUBLY</u> SURE...

of new machine performance, make sure that all replacement parts and needles are precisely identical to those in new SINGER machines.

Look for the trademark

SINGER* or SIMANCO*

1. on every package or container
2. on the needle or numbered part

Needles in containers marked "For Singer Machines" are NOT made by SINGER.