591V

Operator's Guide
Single Needle High Speed Lockstitch Machine

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OILING THE MACHINE

Oil your machine! For best results, use SINGER TYPE "A" or "C" Oil. TYPE "C" Oil is used when an oil is desired which will produce minimum staining of fabrics even after a long period of storage.

NEVER ALLOW OIL TO FALL BELOW LOW MARK

Fill to high mark as illustrated in Fig.1.

If a machine is NEW or has been idle for several weeks, it is advisable to oil the needle bar, take-up bearings, and all other parts which are in movable contact. The automatic lubricating system will function efficiently after running the machine at 2500 to 3000 revolutions per minute for 10 to 15 minutes and continue to lubricate all bearings.

CAUTION: Correct lubrication is indicated by a continuous steam of oil passing the oil flow window while machine is running, as shown in Fig.2.

Should this oil flow become erratic, STOP the machine and check the reservoir oil level. Fill if needed.

At least twice each month, check the oil level in the reservoir. Never allow the oil level to drop below LOW mark, shown in Fig.1.

NEEDLES

The needles you use have a very direct effect on the quality, strength and appearance of the stitching produced by your machine. This is why it is so important to use SINGER needles according to the following chart.

<table>
<thead>
<tr>
<th>CATALOG NO.</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955-01</td>
<td>19, 20, 21, 22, 23 and 24</td>
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</table>

A bent needle will cause your machine to skip stitches and drift away from a desired sewing direction.

A hook or burr on the needle point will result in a blurred finish and may cut the material.

Introducing the NEW SINGER* Sewing Machine Model 591V.

The most dependable, lightest running machines of their kind. This machine will produce top quality straight-line single-needle lock stitching.

With an oil reservoir, a pump and a minimum of wicking, all parts requiring oil are kept constantly lubricated. Oil flow can be checked easily through a “window” on arm top cover.

For best sewing results, we suggest you take a few moments to read through this operator's guide as you sit at your new machine.
INSERTING THE NEEDLE

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

After loosening the needle clamping screw, insert needle up into needle bar as far as it will go, as instructed in Fig.5.

The long groove of the needle must face the left end of the machine, as shown in Fig.5.

Securely tighten the needle clamping screw.

MOVE TO HIGHEST POINT
LOosen SCREW
INSERT NEEDLE UP AS FAR AS POSSIBLE
LONG GROOVE

Fig.5

THREAD

In the Class 591V use only left twist thread in the needle. Either right to left twist thread can be used in the bobbin. To determine the thread twist, hold the thread as shown below. Then roll the thread held by the right hand 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.

HOLD THIS END
ROLL OVER TOWARD YOU

Fig.6

THREADING THE MACHINE

First, turn machine pulley over toward you until needle is at its highest point, then pass the needle thread from the thread stand through the threading points in the order shown in Fig.7 (A)-(B)-(C).

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

REMOVING THE BOBBIN CASE AND BOBBIN

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

Open hook housing cover and remove the bobbin case as shown in Fig.8.

Releasing the latch will allow bobbin removal as shown in Fig.9.

Fig.8

Fig.9

WINDING THE BOBBIN

BUILT-IN BOBBIN WINDER

Place bobbin on spindle A of bobbin winder pushing it on as far as it will go and pass thread from the thread stand through threading points as shown in Fig.10.

Wind end of thread around the bobbin a few times. Press latch B against bobbin, pushing driving pulley over against machine pulley, then start the machine.

The 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, loosen screw C and swing latch B away from you: for less thread on bobbin, swing latch B toward you. Tighten screw C.

When winding a bobbin with fine thread, a light tension should be used. Adjust the knurled nut D, Fig.10, to regulate the tension.

If thread winds unevenly on bobbin, loosen set screw holding pre-tension stud E and move tension bracket up or down, as required. Tighten the set screw.
TABLE TOP BOBBIN WINDER

PRESS DOWN TO PUSH PULLEY AGAINST BELT

Fig. 11

Place bobbin on spindle C of bobbin winder pushing it on as far as it will go and pass thread through threading points as shown in Fig. 11.

Wind end of thread around the bobbin a few times. Press down on thumb latch and start machine.

The bobbin winder will stop automatically. For more thread on the bobbin, turn screw A clockwise; for less thread on the bobbin, turn screw A counterclockwise. When winding a bobbin with fine thread, a light tension should be used. Adjust the knurled nut D to regulate the tension.

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

Bobbins can be wound while the machine is stitching! NOTE: Oil your bobbin winder occasionally. Apply a few drops of oil to the oil well in bobbin winder as shown in Fig. 11.

Thread the bobbin case

PULL THREAD INTO SLOT

SLOT NEAR TOP

DRAW THREAD DOWN AND UNDER SPRING

DRAW THREAD UP AND INTO DELIVERY EYE

Fig. 12

Hold the bobbin so that thread will unwind in the direction shown in Fig. 12. Hold the bobbin case as shown in Fig. 12 and place the bobbin into it and thread as shown in Fig. 13.

Replacing the bobbin case

REPLACE BOBBIN CASE ON STUD

PRESS BOBBIN CASE FIRMLY INTO PLACE

Fig. 14

After threading, take bobbin case by latch in left hand and place bobbin case on center stud of bobbin case holder, as shown in Fig. 14, and release latch. Press bobbin case firmly into place. Allow about two inches of thread to hang free.

PREPARING TO SEW

Hold end of needle thread with left hand very lightly. Then turn the machine pulley over toward you slowly until the needle moves down and up. Pull on the needle thread and the bobbin thread will come up through the hole in the throat plate as shown in Fig. 15. Place both threads under the presser foot prior to sewing.

SEWING

Place the material under the presser foot and lower the presser foot. You are now ready to sew quickly, smoothly and easily.

Stop the machine when the needle bar has just started to come down for best material removal. Raise the presser foot, draw the work behind the presser foot and cut the threads close to the work.

Setting thread tensions

Normally, tension on the needle and bobbin threads should be balanced so that if you were to look at a cross section of a line of stitching, the needle and bobbin threads would be locked in the center of the thickness of the material as shown in Fig. 16-A. Incorrect settings will produce the conditions as shown in Figs. 16-B and 16-C.

Regulate the needle thread tension as shown in Fig. 17. Be sure the presser foot is down when making tension adjustments.

Tension on the needle thread should be just enough to set the stitch properly in the material. See 16-A.

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

Should regulation of the tension on the bobbin thread be necessary, remove the bobbin case and adjust as shown in Fig. 18.

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ADJUSTING THE TAKE-UP SPRING

The tension and the range of movement of the take-up spring A may require different settings depending upon the size of thread and material used. Heavier thread or material require more tension; delicate materials require less tension. Also the movement of take-up spring should be increased to ensure correct thread control.

Using a large screwdriver in slot of stud B turn stud either over toward left to decrease tension, or over to right to increase tension, as shown in Fig. 19.

To set the take-up spring height, loosen screw C (Fig. 20) and turn entire assembly either over toward left to lower take-up spring and decrease its movement, or over toward right to raise take-up spring and increase its movement. Securely tighten screw C.

ADJUSTING THE THREAD GUARD

To obtain perfectly locked stitches depending upon the thickness of material or the length of stitch, it may be necessary to adjust the thread guard D either to the left or to the right, as shown in Fig. 20.

* For heavy material or long stitches, move thread guard to the right.

* For lightweight material or short stitches, move thread guard to the left.

ADJUSTING FEED ROLLER PRESSURE

Correct presser foot pressure helps feed the work properly.

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

ADJUSTING THE PRESSER FOOT PRESSURE

The presser foot pressure exerted on the material in front of the feed roller is regulated with the presser foot tension regulating nut. (Fig. 22)

To increase the pressure, turn tension regulating nut clockwise.

To decrease the pressure, turn tension regulating nut counterclockwise.

ADJUSTING THE NEEDLE THROW

The stitch length is regulated by changing the feed gears for puller feed mechanism. In case of compound feed, the stitch length of needle throw should be adjusted a little shorter than the puller feed stitch length.

To regulate the amount of needle throw, depress the plunger on top of machine arm and turn machine pulley over toward you until the plunger enters the notch in the eccentric on the arm shaft. Then, still depressing the plunger, turn machine pulley until the number indicating the stitch length you want is opposite the mark on the arm. Then release the plunger. The number "5" on the machine pulley indicates the maximum stitch length. (Fig. 23)
ADJUSTING THE STITCH LENGTH

The regular 591V 200/300 machines with feed roller are fitted with feed gears for 8 stitches per inch but can be changed to other stitch lengths by changing the feed gears in accordance with the following chart.

**FEED ROLLER DRIVEN GEAR COMBINATION**

<table>
<thead>
<tr>
<th>Stitch Length</th>
<th>Assembly No.</th>
<th>Upper Gear</th>
<th>Lower Gear</th>
</tr>
</thead>
<tbody>
<tr>
<td>7S.P.I.</td>
<td>415705</td>
<td>415708</td>
<td>415706</td>
</tr>
<tr>
<td>9S.P.I.</td>
<td>415705</td>
<td>415706</td>
<td>415708</td>
</tr>
<tr>
<td>10S.P.I.</td>
<td>415710</td>
<td>415711</td>
<td>415713</td>
</tr>
<tr>
<td>11S.P.I.</td>
<td>415718</td>
<td>415719</td>
<td>415721</td>
</tr>
<tr>
<td>12S.P.I.</td>
<td>415723</td>
<td>415724</td>
<td>415726</td>
</tr>
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**TO ASSEMBLE THE HEMMER FOOT (PART NO. 415701)**

Mount hemmer foot on cylinder bed with two screws making sure the roller on end of hemmer opening lever is engaged in the slot in hemmer actuating bracket. (Fig. 24)
ADJUSTING THE WIDTH OF HEM

The width of hem is adjusted by changing the setting of hemmer on the hemmer slide having many adjusting holes. To adjust, remove hemmer slide screws and move hemmer to the left or right to desired width and retighten hemmer slide screws.

To adjust setting of hemmer guide in relation to the needle location, loosen hemmer guide screws and move hemmer guide to the left or right as required and tighten hemmer guide screws.

To set the material in the hemmer foot, or to remove the material, push hemmer opening knee arm to the right with your knee. To adjust setting of hemmer opening knee arm, adjust hemmer actuating plunger screw nut, as required. Adjust stop bolt to regulate the amount of opening of the hemmer. (Fig. 24)

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Machine</th>
<th>591V</th>
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<tbody>
<tr>
<td></td>
<td>200A</td>
</tr>
<tr>
<td>Type of feed</td>
<td>Needle feed and gear driven puller feed</td>
</tr>
<tr>
<td>Max. Stitch Length</td>
<td>3.2 mm (8 S.P.I.)</td>
</tr>
<tr>
<td>For Sewing</td>
<td>Overcoat, Ladies coat, Jackets, Work clothing, etc</td>
</tr>
<tr>
<td>Needle Bar Stroke</td>
<td>30.5 mm</td>
</tr>
<tr>
<td>Max. Speed *</td>
<td>5,500 s.p.m.</td>
</tr>
<tr>
<td>Presser Bar Lift</td>
<td>11.1 mm</td>
</tr>
<tr>
<td>Hemmer</td>
<td>O</td>
</tr>
</tbody>
</table>

Note: * The machine should be operated at a speed slower than the maximum recommended speed depending on the material being sewn and the type of work being done.