DESCRIPTION

Machines of Class 11 have a cylinder bed and drop feed and are designed for stitching heavy tubular shaped articles in cloth or leather. These machines are used in the manufacture of mail bags, coal bags, nose bags, ore bags, military boots, carriage dashes and a great variety of similar articles. They have one needle and an oscillating shuttle and make the lock stitch.

Machine No. 11-8 has a reversible feed up or off the arm and is designed for work in cloth.

Machine No. 11-11 feeds across the arm and is used for work in leather.

Machine No. 11-12 feeds across the arm and is intended for work in cloth.

Machine No. 11-13 feeds up the arm and is designed for work in leather.

Machine No. 11-14 feeds up the arm and is designed for work in cloth.

Machines Nos. 11-15 and 11-22 feed across the arm and are designed for use in the manufacture of carriage dashes and similar articles in leather.
Machines Nos. 11-16 and 11-26 each have a vibrating needle. They are intended for overseaming long boot legs or other tubular shaped articles while feeding up the arm, and are used for straight stitching while feeding across the arm.

Machine No. 11-17 feeds up or across the arm and is designed for stitching military boot legs and other tubular shaped articles.

Machine No. 11-18 feeds across the arm and has alternating pressers and is used for work in leather.

Machine No. 11-19 feeds across the arm and has a vibrating presser and is used for work in leather.

Machine No. 11-20 feeds across the arm and is designed for quilting bed covers, binding, etc., and is useful for other work in cloth.

Machine No. 11-21 feeds up the arm and is used for work in cloth or leather.

Machine No. 11-23 feeds up the arm and is designed for stitching fine boot legs and other tubular shaped articles in light and medium weight leather.

Machines Nos. 11-24 and 11-25 each have a vibrating needle and are especially designed for making eyelets or grommet holes in sails, tents, canvas bags, tarpaulins, etc. These machines can also be used for straight stitching across the arm.

**Speed**

The maximum speed recommended for machines of Class 11 is 650 stitches per minute, with the exception of Machines Nos. 11-15 and 11-22 for which the maximum speed is 200 stitches per minute. The machines should be run somewhat slower than the maximum speed at first until the parts which are in movable contact have become glazed by their action upon each other.

### Needles

Needles for machines of Class 11 are of the Class and Variety numbers given in the following table:

<table>
<thead>
<tr>
<th>Machines</th>
<th>Class and Variety No. of Needles</th>
<th>Style of Point</th>
<th>New Size No. of Needles</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-8</td>
<td></td>
<td></td>
<td>16, 18, 19, 21, 22, 23, 24, 25, 26, 27</td>
</tr>
<tr>
<td>11-11</td>
<td></td>
<td></td>
<td>16, 18, 19, 21, 22, 23, 24, 25, 26, 27</td>
</tr>
<tr>
<td>11-12</td>
<td>7 x 1</td>
<td>Cloth</td>
<td>16, 18, 19, 21, 22, 23, 24, 25, 26, 27</td>
</tr>
<tr>
<td>11-13</td>
<td>7 x 2</td>
<td>Leather</td>
<td>16, 18, 19, 21, 22, 23, 24, 25, 26, 27</td>
</tr>
<tr>
<td>11-14</td>
<td></td>
<td></td>
<td>16, 18, 19, 21, 22, 23, 24, 25, 26, 27</td>
</tr>
<tr>
<td>11-15</td>
<td>7 x 2</td>
<td>Leather</td>
<td>16, 18, 19, 21, 22, 23, 24, 25, 26, 27</td>
</tr>
<tr>
<td>11-16</td>
<td></td>
<td></td>
<td>16, 18, 19, 21, 22, 23, 24, 25, 26, 27</td>
</tr>
<tr>
<td>11-17</td>
<td></td>
<td></td>
<td>16, 18, 19, 21, 22, 23, 24, 25, 26, 27</td>
</tr>
<tr>
<td>11-18</td>
<td>7 x 2</td>
<td>Leather</td>
<td>11, 13, 14</td>
</tr>
<tr>
<td>11-19</td>
<td></td>
<td></td>
<td>16, 18, 19, 21, 22, 23, 24, 25, 26, 27</td>
</tr>
<tr>
<td>11-20</td>
<td>7 x 1</td>
<td>Cloth</td>
<td>16, 18, 19, 21, 22, 23, 24, 25, 26, 27</td>
</tr>
<tr>
<td>11-21</td>
<td>7 x 2</td>
<td>Leather</td>
<td>28, 29, 30, 31</td>
</tr>
<tr>
<td>11-22</td>
<td>7 x 1</td>
<td>Cloth</td>
<td>16, 18, 19, 21, 22, 23, 24, 25, 26, 27</td>
</tr>
<tr>
<td>11-23</td>
<td>7 x 2</td>
<td>Leather</td>
<td>16, 18, 19, 21, 22, 23, 24, 25, 26, 27</td>
</tr>
<tr>
<td>11-24</td>
<td>7 x 1</td>
<td>Cloth</td>
<td>16, 18, 19, 21, 22, 23, 24, 25, 26, 27</td>
</tr>
<tr>
<td>11-25</td>
<td>7 x 2</td>
<td>Cloth</td>
<td>16, 18, 19, 21, 22, 23, 24, 25, 26, 27</td>
</tr>
</tbody>
</table>

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. If rough or uneven thread is used, or if it passes with difficulty through the eye of the needle the successful use of the machine will be interfered with.

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. 21, 7 x 1 Needles," if for Cloth.
"100 No. 21, 7 x 2 Needles," if for Leather.

No other needles will give as good results as those furnished by the Singer Sewing Machine Company.
Thread

Left twist thread should be used in the needle. Either right or left twist thread can be used in the bobbin.

Fig. 2. How to Determine the Twist

Hold the thread as shown in Fig. 2. Turn the thread over toward you between the thumb and forefinger of the right hand; if left twist, the strands will wind tighter; if right twist, the strands will unwind.

To Remove the Bobbin

Turn the balance wheel, or hand wheel, over toward you until the needle bar moves down to its lowest point; press down on the spring latch underneath the cylinder of the shuttle, then swing the cylinder outward or toward the left as far as it will go and the bobbin will drop out.

To Wind the Bobbin

Fasten the bobbin winder to the front of the bed of the machine at the right, with the smaller pulley at the top and the spindle for the bobbin pointing toward the front.

Place the bobbin on the bobbin winder spindle and push it up closely against the shoulder.

Place the spool of thread on the spool pin on the top of the machine and wind the end of the thread around the bobbin a few times, then with the right hand turn the bobbin winder driving pulley, at the same time guiding the thread with the left hand so that it will wind evenly on the bobbin.

To Thread the Shuttle

Take the bobbin between the thumb and forefinger of the left hand with the thread drawing off from the underside toward the right and place the bobbin into the cylinder as far as it will go. Draw the thread into the slot in the cylinder and into the delivery eye, then push the cylinder back until it is locked by the spring, and allow about three inches of thread to hang free from the shuttle with which to commence sewing.

To Set the Needle

Turn the balance wheel, or hand wheel, over toward you until the needle bar moves up to its highest point; loosen the screw in the needle clamp and put the needle up into the clamp as far as it will go, with the long groove of the needle toward the left and the eye of the needle directly in line with the arm of the machine, then tighten the screw.

To Thread the Needle

Pass the thread from the spool on the spool pin at the top of the machine, through the eyelet at the back and near the top
of the head of the machine, over between the thread retainer discs, down under around the tension wheel, into the hook of the thread take-up spring, up and through the hole in the end of the thread take-up lever, down through the thread guide on the side of the machine, through the hole in the needle clamp and from left to right, or from the long groove side, through the eye of the needle. Draw about three inches of thread through the eye of the needle with which to commence sewing.

On machines of Class 11 fitted with an oil cup, if the thread is to be oiled it should be taken from the spool and led into the eyelet attached to the underside of the cover of the oil cup and from thence as previously instructed.

**To Prepare for Sewing**

With the left hand hold the end of the needle thread, leaving it slack from the hand to the needle, turn the balance wheel, or hand wheel, over toward you until the needle moves down and up again to its highest point, thus catching the bobbin thread; draw up the needle thread and the bobbin thread will come up with it through the hole in the throat plate. Lay both threads back under the roller presser or presser foot.

**To Commence Sewing**

Place the material beneath the needle, lower the roller presser or presser foot upon it and commence to sew, turning the balance wheel, or hand wheel, over toward you.

**To Remove the Work**

Stop the machine with the thread take-up lever resting at its highest point; draw about three inches of thread through the tension discs, raise the presser foot or roller presser, draw the work back and cut the threads close to the goods. Leave the ends of the threads under the roller presser or presser foot.

**To Turn a Corner**

Stop the machine with the needle at its lowest point. Raise the roller presser, or presser foot, and turn the work as desired, using the needle as a pivot.

**Tensions**

For ordinary stitching the needle and bobbin threads should be locked in the centre of the thickness of the material, thus:

![Figure 4: Perfect Stitch](image)

If the tension on the needle thread is too tight, or if that on the bobbin thread is too loose, the needle thread will lie straight along the upper surface of the material, thus:

![Figure 5: Tight Needle Thread Tension](image)

If the tension on the bobbin thread is too tight, or if that on the needle thread is too loose, the bobbin thread will lie straight along the under side of the material, thus:

![Figure 6: Loose Needle Thread Tension](image)

**To Regulate the Tensions**

The tension on the needle thread is regulated by the thumb nut at the front of the thread retainer discs and the thumb nut at the front of the tension wheel. The tension on the thread retainer discs should only be enough to cause the tension wheel to turn when the thread is taken from the spool.

On machines feeding across the arm the tension on the bobbin thread is regulated by the screw which holds the tension spring to the cylinder. To increase the tension turn the screw over to the right. To decrease the tension turn the screw over to the left.

On machines feeding up the arm the tension on the bobbin thread is regulated by the screw in the hole near the point of the cylinder. To increase the tension turn this screw over to the left. To decrease the tension turn this screw over to the right.
To Regulate the Length of Stitch

The length of stitch is regulated by the thumb screw in the slot on the front of the upright part of the arm. To lengthen the stitch loosen the thumb screw and move it downward. To shorten the stitch loosen the thumb screw and move it upward. When the desired length of stitch has been obtained, tighten the thumb screw.

To Regulate the Pressure on the Material

The pressure on the material is regulated by the thumb screw on the top of the head of the machine. To increase the pressure turn the thumb screw over to the right. To decrease the pressure turn the thumb screw over to the left. The pressure should be only heavy enough to enable the feed to move the work along evenly.

To Regulate the Width of Bight

On Machines Nos. 11-16, 11-24, 11-25 and 11-26 the width of bight or extent of the lateral vibrations of the needle is regulated by moving the end of the pitman rod which is fastened by the thumb screw in the slide on the front of the arm of the machine. To increase the width of bight loosen the thumb screw and move the pitman rod downward in the slide. To decrease the width of bight move the pitman rod upward. When the desired width of bight is obtained tighten the thumb screw.

To Oil the Machine

To ensure easy running and prevent unnecessary wear of the parts which are in movable contact the machine requires oiling and when in continuous use it should be oiled frequently. Oil should be applied at all the oil holes and all other places where there are parts in movable contact. Oil should be regularly applied to the shuttle race.

Purchasing of Parts and Needles

Supplies of parts and needles for Singer machines can be purchased at any Singer shop or ordered by mail. If orders are sent by mail, money or a post office order covering their value, including postage, should be enclosed and the order will then be promptly filled and forwarded by mail or express.