INSTRUCTION MANUAL

W-8042

TWO NEEDLE, DOUBLE CHAINSTITCH, FLATBED MACHINE WITH TOP COVER THREAD

THIS MACHINE IS WELL SUITED FOR ATTACHING POCKETS FOR TROUSERS AND JEANS.
INDEX

1. Machine Description
3. Selection of Motor Pulley
4. Lubrication
5. Changing Needles
6. Threading
7. Looper Break Down Mechanism
8. Adjustment of Stitch Length
9. Adjustment of Differential Feed Ratio
10. Adjustment of Feed Dog Height
11. Needle Clamp Alignment
12. Needle Bar Height
13. Needle to Looper Distance
14. Needle to Looper Clearance
15. Looper Avoid Motion
16. Needle Guard
17. Looper Thread Take-Up Adjustment
18. Needle Thread Take-Up
19. Top Covering Looper Adjustment
1. **Machine Description**

**W8042**: Two needle double locked chainstitch machine with top cover thread for pocket attaching.

**W8042-1**: Three needle double chainstitch machine with top cover thread covering the center and right needles. High speed flat bed double locked chainstitch machines with top covering looper, automatic lubrication, double disc rotary take-up and thread tension release mechanism.

2. **Machine Specifications**

<table>
<thead>
<tr>
<th>number of needles</th>
<th>needle gauge</th>
<th>feed mechanism</th>
<th>needle bar height</th>
<th>needle to looper</th>
</tr>
</thead>
<tbody>
<tr>
<td>W8042</td>
<td>2</td>
<td>1/4 differential</td>
<td>10.8</td>
<td>4.0</td>
</tr>
<tr>
<td>W8042-1</td>
<td>3</td>
<td>1/4-3/32 plain</td>
<td>10.8</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Stitch length: 8 to 14 stitches per inch

Needle bar stroke: 31mm

Needle type: UY-128 GAS #70 to #90

Lubrication system: Fully automatic

Maximum speed: 4500 stitches per minute
3. **Selection of Motor Pulley**

<table>
<thead>
<tr>
<th>Machine Speed RPM</th>
<th>Outside Diameter of Motor Pulley 60HZ</th>
<th>50HZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>5000</td>
<td>85mm</td>
<td>100mm</td>
</tr>
<tr>
<td>4500</td>
<td>75mm</td>
<td>90mm</td>
</tr>
<tr>
<td>4000</td>
<td>65mm</td>
<td>80mm</td>
</tr>
</tbody>
</table>

Rotation of the pulley is counter-clockwise  
See Figure #1

4. **Lubrication**

Use a straight mineral oil equivalent to Tellesso # 33

Filling oil reservoir: remove cap A and fill with oil to line B of oil gauge. (Fig. 2)

Draining oil: Remove screw E to drain oil. Drain and refill with fresh oil after the first month of operation and every six months thereafter.

Servicing filter: Inspect the filter after 10 days in operation thereafter at one month intervals. (Fig 2)  
Clean or replace the filter as necessary.
5. Changing needles

Loosen the set screw replace with a fresh needle of the correct size. The scarf of the needle should face the rear of the machine. (Fig. 3)

![Figure 3](image)

0=correct
X=incorrect

6. Threading

Pass both upper and lower threads correctly by referring to Fig. 4. Adjust the tension of thread with the thread tension nut. Adjust so that satisfactory stitching can be obtained at a tension of threads as low as practicable.

![Figure 4](image)
7. **Looper break down mechanism**

This machine is supplied with a looper-take down mechanism to eliminate the difficulty of threading multiple loopers.

![Looper threading diagram](image)

**Figure 5**

Looper threading as follows:

1. Press at point A in fig. 5 to expose the loopers for easy threading.
2. Press up at point B in fig. 5, or push loopers to the left to return the loopers to the operating position.
8. **Adjustment of feed length**

The feed length of this machine is adjusted at 2mm per stitch (12 stitches per inch) when shipped out from the factory. If another stitch length is required, it can be changed, within the limits specified in the specifications on page 2.

![Figure 6](image)

a. Loosen Nut A in Fig.6

b. Turn screw B (in clockwise direction stitch length will be made smaller, and in the counter-clockwise direction the stitch length will be made larger.)

c. Tighten Nut A

d. Run machine, observe stitch length. Repeat adjustment until proper stitch length is achieved.
9. **Adjustment of differential feed ratio**

Loosen the nut I and raise the connecting crank H for increasing the differential ratio, and lower the crank for decreasing the differential ratio.

![Figure 7](image)

10. **Adjustment of feed dog height**

When the feed dog is at its highest position the teeth should be 0.8mm to 1.2 mm above the surface of the needle plate. Fig. 8 With differential feed be sure to set front feeder rear feeder at the same height.

![Figure 8](image)

11. **Needle clamp alignment**

The needles must be centered in the needle plate holes. To adjust loosen screw A in Fig. 9.

![Figure 9](image)
12. **Needle bar height**

Dimension Y in Fig. 9 should be 10.8 mm when the needle bar is at the upper most position. To adjust loosen nut F in Fig. 9 set needle bar to correct height then tighten nut F.

13. **Distance between looper and needle**

The distance between the tip of the looper and the edge of the needle, when the looper is located at its farthest position to the right, must be 4.0mm (approximately 5/32) Fig. 10

![Figure 10](image)

(Ajustment)

a. Loosen nut A (it has a left hand thread) and nut B (it has a right hand thread) on connecting rod C.

b. Turn the connecting rod C forward or backward to obtain the 4.0 dimension. Fig. 11

c. Re-tighten both nuts, first nut A then nut B.

d. Make sure both ball joints are in a vertical position.

14. **Needle to looper clearance**

The clearance from the looper to the needle when the looper reaches the center of the needle, the looper will be dead against the needle with NO needle deflection. Fig. 12

(Ajustment)

a. Loosen screw E in Fig. 12

b. Move the looper holder forwards or backwards to the proper position.

c. Tighten screw E.
15. Looper avoid motion

The looper avoid motion on this looper across the line of feed machine is controlled by the looper avoid eccentric. It is located on the left hand side of the looper thread take up cam. Fig.13

The first screw in the operating direction A should be on the flat of the main shaft.

16. Needle guard

The needle guard of the W-8042 is mounted on the arm bed casting and is stationary. But, on the W-8042-1 it is mounted on the feed rocker so that the position of the needle guard is moving with the feed dog. The synchronization of the needle guard is as follows. When the tip of the looper comes to the middle of the needle scarf, the tip of the needle should be 1.0 mm below the top edge of the needle guard A Fig.14

(Adjustment)
This adjustment is made by loosening screw B and turning screw C. Tighten screw B CHECK alignment, repeat if necessary.
17. **Looper thread take-up adjustment**

   a. Adjust the clearance between the looper thread retaining finger B and the bracket E to 6-7mm by loosening the screw F. Fig. 15

   b. Adjust the position of the looper thread guide by loosening the screw G so that the thread guide hole A shown in Fig. 15 shall be on the center line of the main shaft.

   ![Figure 15](image)

   ![Figure 16](image)

   c. **Timing of looper thread adjusting cam.**

   Adjust the screw B so that the looper thread shall be released from the looper thread adjusting cam when the needle point is on the line A of the looper. Fig. 16
13. Needle thread take-up

When the needle bar is at top dead center point "C" of the needle thread eyelet must be at 3 on the graduated scale. To adjust loosen screw "C" and adjust. The amount of thread take-up can be adjusted by loosening screw "D". Raise to reduce take-up amount or lower to increase take-up amount. (Fig. 17)

19. Top covering looper adjustment

a. Adjust so that the gap between the front hook point of the spreader looper and the front needle shall be 0.5 mm when the looper passes by the front needle, and that the hook point shall be at the point A on the needle line 3 to 3.5 mm apart from the front needle when the looper is at its left dead point. To adjust temporarily tighten the screws L and K. Covering thread guide wire must push the top cover thread behind the right needle just before the needle bar reaches top dead center. (Fig. 18)
b. Adjustment of spreader looper.
Adjust the distance between the top face of the needle plate and the lower surface of the spreader looper to 8 mm. Also adjust the distance between the underside of the spreader thread guide and the top surface of the spreader looper to 0.5 mm. Adjust the distance between the spreader thread guide and the 'L' guide to 1 mm.

Figure 19