SSH-8BLD-25

High Speed, Single Needle, Lockstitch Machine
For Heavy Weight Material, Vertical Rotary Large Hook, Needle, Upper & Lower Feed, Reverse Feed, 25 inch Long Arm

Operator’s Guide
1. OILING

When starting the machine initially and after kept away for a long time without using at all, oil sufficiently to respective parts and each of the place indicated by allows in Fig 1, 2, 3 & 4.

Oiling for hook mechanism, take off the oil stopper (A, Fig 5), pour oil through the oil filler hole at A, until oil level reaches to the upper reference line (3, Fig 5).

Oiling adjustment to hook mechanism:
Loosen the adjusting nut (1, Fig 5), to decrease the oil flow, turn the oil adjusting screw (2, Fig 5) clockwise and to increase the oil flow, turn the oil adjusting screw (2, Fig 5) counter clockwise.
2. NEEDLE

1. Turn the machine pulley toward you until needle bar moves up to its highest point.
2. Insert the needle up into the needle bar as deeply as it will go, with the long groove of the needle faces the left.
3. Tighten the needle set screw securely.

![Diagram of needle set screw and groove](image)

Fig 6

3. WINDING THE LOWER THREAD ON THE BOBBIN

Place bobbin on spindle of the bobbin winder and lead thread as shown by Fig. 7 and wind several times on bobbin. Push lever (5, Fig. 7) to left and then start the machine. The lever will automatically be released and stopped at the original position after bobbin fills up with thread.

1. ADJUSTMENT OF THE THREAD WINDING VOLUME
Loosen the set screw 6 for the adjusting collar 7 and turn the adjusting collar 7 and adjust so as to wind proper volume. After adjustment, tighten the screw 6 securely.

2. ADJUSTMENT OF THE WINDING STRENGTH
To increase the winding strength, turn the serrated nut 8 clockwise and to decrease the winding strength, turn the serrated nut 8 counter clockwise.

![Diagram of bobbin winder](image)

Fig 7
4. INSERTING AND REMOVING BOBBIN

1. Align the arm-mark (B, Fig. 1) with the pulley-mark (C, Fig. 1).
2. Pull up the latch (1, Fig. 8) of the bobbin case and remove the bobbin case.
3. Hold the threaded bobbin and hook cap between the thumb and forefinger of your hands as shown Fig. 9 and place the threaded bobbin into hook cap, and guide the thread into the slot (2, Fig. 9) and lead the thread under the tension spring (2, Fig. 9) and lead into the delivery eye (4, Fig. 9).
4. Pull out a length of 5cm of the thread and insert the bobbin into the hook shaft as far as it will go.

5. THREADING NEEDLE

Lead the thread as shown Fig. 10 and thread into needle eye from left to right and then pull out the thread about 5cm length.
6. REGULATING THREAD TENSIONS

- NEEDLE THREAD
- MATERIAL
- PERFECT STITCHING
- BOBBIN THREAD

TIGHT TENSION OF NEEDLE THREAD
LOOSE TENSION OF NEEDLE THREAD

Fig 11

7. REGULATING TENSION OF THE UPPER (NEEDLE) THREAD

To adjust tension, turn the serrated nut (1, Fig 12) on tension device clockwise to increase tension and turn it (1, Fig 12) counter-clockwise to decrease tension.

Fig 12

8. REGULATING TENSION OF THE LOWER (BOBBIN) THREAD

The lower thread tension is controlled by the screw (1, Fig 13). Turning this screw clockwise will increase the thread tension, while turning it counter-clockwise will decrease it.

Fig 13
9. ADJUSTMENT OF THE THREAD CONTROLLER SPRING

Normally, the thread controller spring (1, Fig 14) should hold slack of the upper thread until the needle reaches to the materials, and it should pause while raising of the needle and passing of the upper thread through the bobbin case.

1 FOR MORE CONTROLLER ACTION ON THE THREAD:
Loosen the stop screw (2, Fig 14), move the stop (3, Fig 14) to the right for more action.
(For less action, move it to left). Tighten the screw.

2 TO ADJUST THE TENSION OF THE SPRING:
Loosen the serrated nut (4, Fig 14) and the screw (5, Fig 14).
Turn the tension stud (6, Fig 14) clockwise to lighten the tension (to strengthen the tension, turn it counter-clockwise) with screwdriver. Tighten the screw and nut upon completion of adjustment.

10. ADJUSTMENT OF THE PRESSURE ON THE MATERIAL

The pressure of the presser feet is adjusted by the screw in the hole (A, Fig 15) with screwdriver.
To increase the pressure, turn the screw clockwise and turn it counter-clockwise to decrease it.
11. REVERSE STITCHING
To reverse stitching, press down the lever(D, Fig 1) as far as it will go.

12. ADJUSTMENT OF STITCH LENGTH
Turn the stitch length adjustable dial(E, Fig 1), by pressing down the lever(D, Fig 1) slightly, and then set the desired dial number just above.

13. ADJUSTMENT OF THE LIFT OF THE ALTERNATING PRESSER FEET
Loosen the wing nut(1, Fig 16) and move the link and stud assembly along the slot - move up to raise the feeding presser foot and push down to lower this foot. Tighten wing nut upon completion of adjustment.

14. HOW TO RE-SET THE SAFETY CLUTCH MECHANISM
The sewing hook and its mechanism are protected by a safety clutch.
If it should become necessary to re-engage the safety clutch, the following adjustments are required.
1. Depress the button(F, Fig 1) in the bed plate of the machine and turning the machine pulley strongly, a safety clutch will be disengaged.
2. Hold the clutch(Left, 1, Fig 17) by your finger, turning the machine pulley by your hand so as to make a half rotation of the clutch(Right, 2, Fig 17), then, stop screw(4, Fig 17) is visible in the hole (3, Fig 17) of the clutch(Left, 1, Fig 17).
3. To increase the spring tension, turn the stop screw (4, Fig 17) clockwise and to decrease it, turn the stop screw(4, Fig 17) counter-clockwise.
4. After completion of the adjustment, depress the button(F, Fig 1) in the bed plate of the machine, turning the machine pulley by your hand, a safety clutch mechanism will normally be re-engaged.
15. ADJUSTMENT OF THE HEIGHT OF THE FEED DOG

The maximum height of the feed dog from the surface of the needle plate is normally 1mm. To adjust this height:
1. Turn the machine pulley so as to lower the needle to its lowest point.
2. Loosen the bell crank screw (G, Fig 3) and adjust the height of the feeder by raising or lowering the bell crank (H, Fig 3).
3. Securely tighten the screw upon completion of adjustment.

16. RELATIVE POSITION OF THE FEEDER TO THE NEEDLE PLATE

1. Set the stitch length to minimum.
2. Turn the machine pulley so as to raise the feed dog to its highest point.
3. Loosen the screw (J, Fig 3).
4. Adjust to be 32.1mm from the edge of the needle plate to the center of the needle hole on the feed dog.
5. Securely tighten the screw.
17. THE POSITION OF THE NEEDLE AND THE NEEDLE HOLE OF THE FEEDER

1. Loosen the screw(K, Fig 4) and remove the cover(L, Fig 2).
2. Loosen the screw(1, Fig 20).
3. Holding the bottom of the needle bar rock frame(M, Fig 4) move it so as to put the needle to the center of the needle hole on the feed dog and tighten the screw(1, Fig 20).
4. Tighten the screw(K, Fig 2) and close the cover(L, Fig 2).

18. TIMING THE NEEDLE WITH FEED DOG

It is important that the timing between the needle on its downward stroke and the feed dog movement is maintained at all times. When the scarf of the needle on the downward stroke reaches the top surface of the feed dog, the feed dog must start. When adjustment is required, use the following procedure to change the position of the cam(3, Fig 21):

1. Loosen the screw(N, Fig 1) and remove the arm top cover(P, Fig 1).
2. Normally put the reference line(2, Fig 21) of the cam(3, Fig 21) on the V ditch(1, Fig 21) of the arm shaft.
3. Turn the machine pulley to place the needle at 1mm up from its lowest point and moving the reverse stitching lever(D, Fig 1) up and down, turn the cam(3, Fig 21) and set this at the point both the needle and the feeder rest.
19. ADJUSTMENT OF THE CLEARANCE BETWEEN FEED FORKED CONNECTION AND FEED FORK COLLAR

Incorrect clearance between the fork (4, Fig 21) of feed forked connection and feed fork collar (5, Fig 21) will bring irregular stitch length or overheating, etc.

To adjust this:
1. To increase the clearance, loosen the screw (6, Fig 21) and turn the screw (7, Fig 21) clockwise.
   To decrease the clearance, loosen the screw (7, Fig 21) and turn the screw (6, Fig 21) counter-clockwise.
2. This adjustment should be done with turning the machine pulley toward you to get correct clearance.

20. TIMING BETWEEN THE HOOK AND THE NEEDLE

Set the stitch length to minimum, turn the machine pulley toward you and when the needle bar raises about 2mm from its lowest point, the hook point should be at the center of needle.
At this time, normally, the measurement between hook point and upper end of the needle eye should be 2.4mm, further the clearance between the hook point and the needle hollow should be about 0.05 to 0.1mm.

1. If the sewing hook should not be timed correctly, loosen the three set screw (R, Fig 3).
   Turn the hook shaft to align the hook point with the center of the needle. Re-tighten the three set screws and re-check the timing of the sewing hook.
2. To adjust the clearance between the hook point and the needle hollow, loosen the two screws (S, Fig 3) and move the hook to the right or to left as may require.
   Please note one of the two screws is placed on the V ditch of hook shaft.
   Therefore, keep the screw on V ditch during adjustment. Re-tighten the screws.
21. ADJUSTMENT OF BOBBIN CASE OPENER

The bobbin case opener facilitates the passage of the needle thread loop by slightly nudging the bobbin case holder creating a slight rotating movement of same. This movement at that very instant opens a clearance gap between the notch on the bobbin case holder and the tab of the hook retainer permitting the needle thread loop to be drawn easily through the gap.

1. CLEARANCE BETWEEN THE OPENER AND PROJECTION OF HOOK:
   1. Loosen the screw(1, Fig 24).
   2. Adjust the clearance between projection of hook and the opener by means of movement of thread releasing shaft bushing(2, Fig 24) to the right or to the left as may be required. The standard clearance between the two parts is 0.8mm as shown Fig 26
   3. Tighten the screw(1, Fig 24) securely.

2. POSITION OF THE OPENER CAM:
   Place the one of screw(3, Fig 24) which is indicated by "S" on V ditch of the hook shaft.

3. ADJUSTMENT OF OPERATION:
   1. Turn the machine pulley until the opener presses the projection of hook(4, Fig 25) extremely on its travel.
   2. Press the opener to the projection of hook and make the right side clearance between the notch on the bobbin case holder(6, Fig 25) and the tab of the hook retainer(5, Fig 25) 0.2mm as shown Fig 25
   3. This adjustment can be done by loosening the screw(7, Fig 25).
22. TIMING OF THE VIBRATING PRESSER FOOT

This is the normal timing when turn the machine pulley toward you, after lowering the presser foot, the vibrating presser foot should reach the feeder earlier than the needle point comes to, and when the needle raises, the vibrating presser foot should leave the feeder after the needle point has left the feeder.
To adjust this, loosen the two screws(1, Fig 27) and adjust the rotating position of the cam(2, Fig 27) faster or slower as may be desired, and tighten the screws.

Fig 27