

HIGHLEAD

GC2268-2BXL

**Two Needle Cylindrical Bed Compound Feed
Lockstitch Sewing Machine
(Rotary)**

Instruction Manual

SHANGHAI BIAOZHUN HAILING SEWING MACHINERY CO., LTD.

CONTENTS

INSTRUCTION MANUAL

一、 PRECAUTIONS BEFORE STARTING OPERATION	1
1、 Safety precautions	1
2、 Precautions before starting operation	1
3、 Precautions for operating conditions	1
二、 SPECIFICATIONS	1
三、 CAUTIONS ON USE	2
1、 Lubrication	2
2、 Winding of bobbin thread	3
3、 Selection of thread	3
4、 Attaching the needle	3
5、 Threading of needle threads	3
6、 Setting of bobbin	4
7、 Threading of bobbin threads	4
8、 Thread tension	5
9、 Thread take-up spring	5
10、 Adjusting the stitch length	6
11、 Timing between rotating hook motion and needle motion	6
12、 Relationship between hook motion and opener motion	7
13、 Adjusting the pressure of the presser foot	7
14、 Adjusting the presser foot and the walking foot	7
15、 Relationship between needle motion and feed dog motion	8
16、 Adjusting the height of the feed dog	8
17、 Regulate the atmospheric pressure	9

一、 PRECAUTIONS BEFORE STARTING OPERATION

1. Safety precautions

- 1) When turning the power on, keep your hands and fingers away from the area around/under the needle and the area around the pulley.
- 2) Power must be turned off when the machine is not in use, or when the operator leaves the seat.
- 3) Power must be turned off when tilting the machine head, installing or removing the “V” belt, adjusting the machine, or when replacing.
- 4) Avoid placing fingers, hairs, bars etc., near the pulley, “V” belt, bobbin winder pulley, or motor when the machine is in operation.
- 5) Do not insert fingers into the thread take-up cover, under/around the needle, or pulley when the machine is in operation.

2. Precautions before starting operation

- 1) Do not operate the machine before lubricating it.
- 2) When a new sewing machine is first turned on, verify the rotational direction of the pulley with the power on (the pulley should rotate counterclockwise when viewed from pulley) .
- 3) Verify the voltage and (single or three) phase with those given on the machine nameplate.

3. Precautions for operating conditions

- 1) Avoid using the machine at abnormally high temperatures (35°C or higher) or low temperatures (5°C or lower) .
- 2) Avoid using the machine in dusty conditions.

二、 SPECIFICATIONS

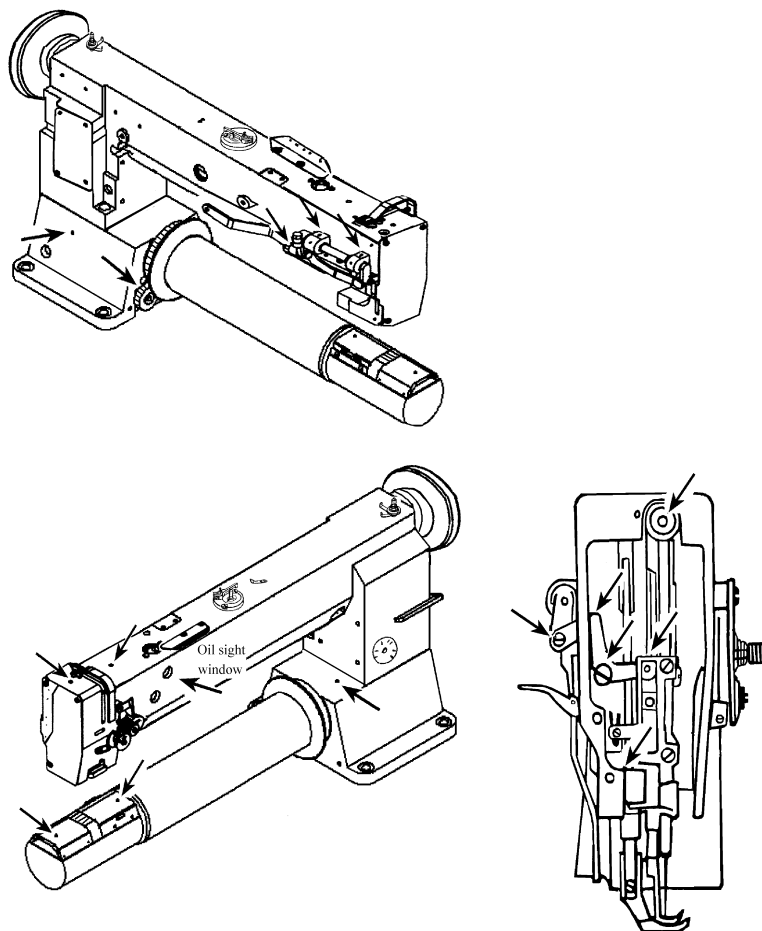
Max. sewing speed	1200 rpm
Stitch length	6 mm
Needle	DP×17 23#
Needle bar stroke	36 mm
Thread take-up lever stroke	74.5 mm
Presser foot stroke	By Hand 8 mm / By Knee 13 mm
Alternating movement	2-5 mm
Bed size In dia / Length	88.5 mm / 930 mm
Lubrication	Manual
Needle gauge	12.7mm

三、 CAUTIONS ON USE

1. Lubrication

- When a new sewing machine is first operated, or when a sewing machine is operated which is out of use for long period of time, it will be necessary to oil through the oil holes after removing the rubber plugs shown below.
- See dripping of oil through the oil sight hole to check oiling condition during operation.

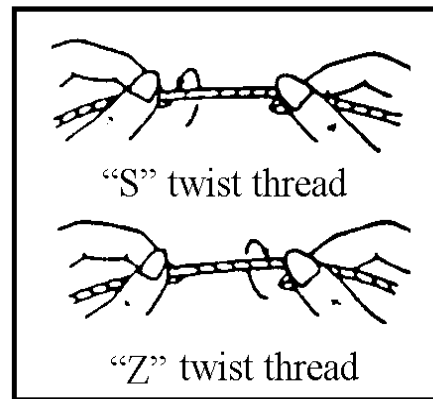
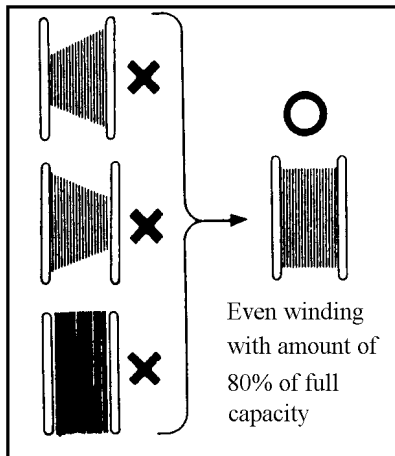
For oil, Use white spindle oil



2. Winding of bobbin thread

Note: When bobbin thread is wound, keep the presser foot lifted.

- **Tension of wound thread** Slack winding is recommended for polyester thread and nylon thread.
- **Conically wound thread** Move the thread guide toward smaller diameter of wound thread layer.
- **Length of wound thread** Loosen the thread length adjusting screw to increase length of thread and tighten the screw to decrease length of thread.



3. Selection of thread

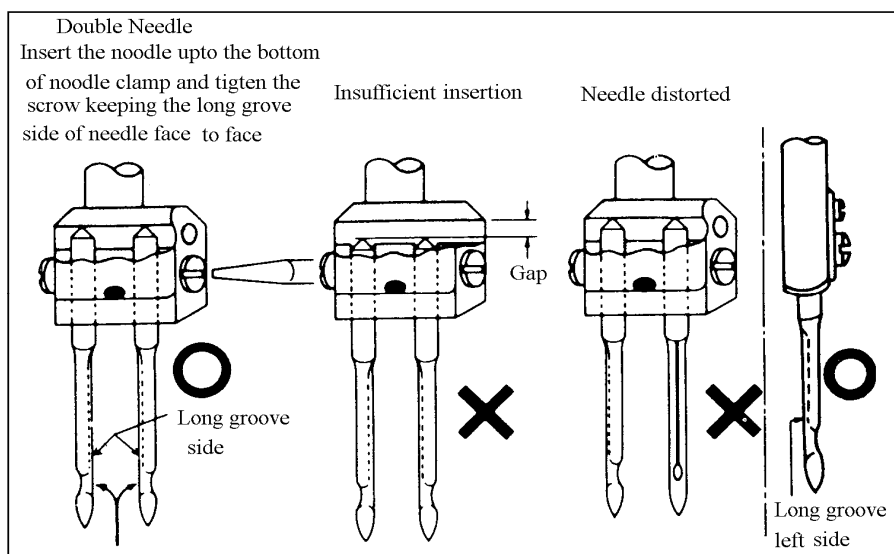
It is recommended to use “S” twist thread in the left needle (viewed from front), and “Z” twist thread in the right needle.

When use of needle threads discriminates is impossible, use “Z” twist thread in both the needles.

For bobbin thread, “S” twist thread as well as “Z” twist thread can be used.

4. Attaching the needle

Note: Before installing the needles, be sure to turn off the power.



5. Threading of needle threads

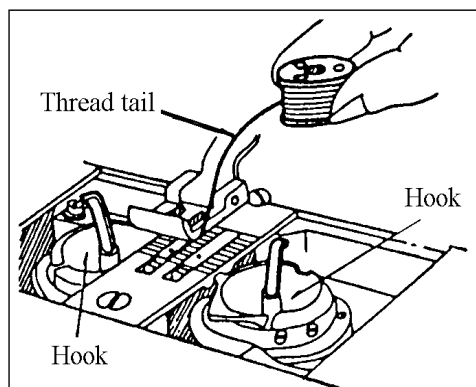
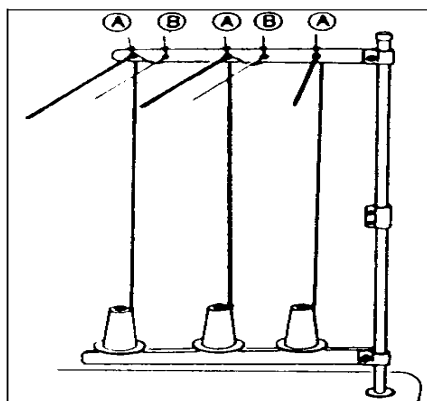
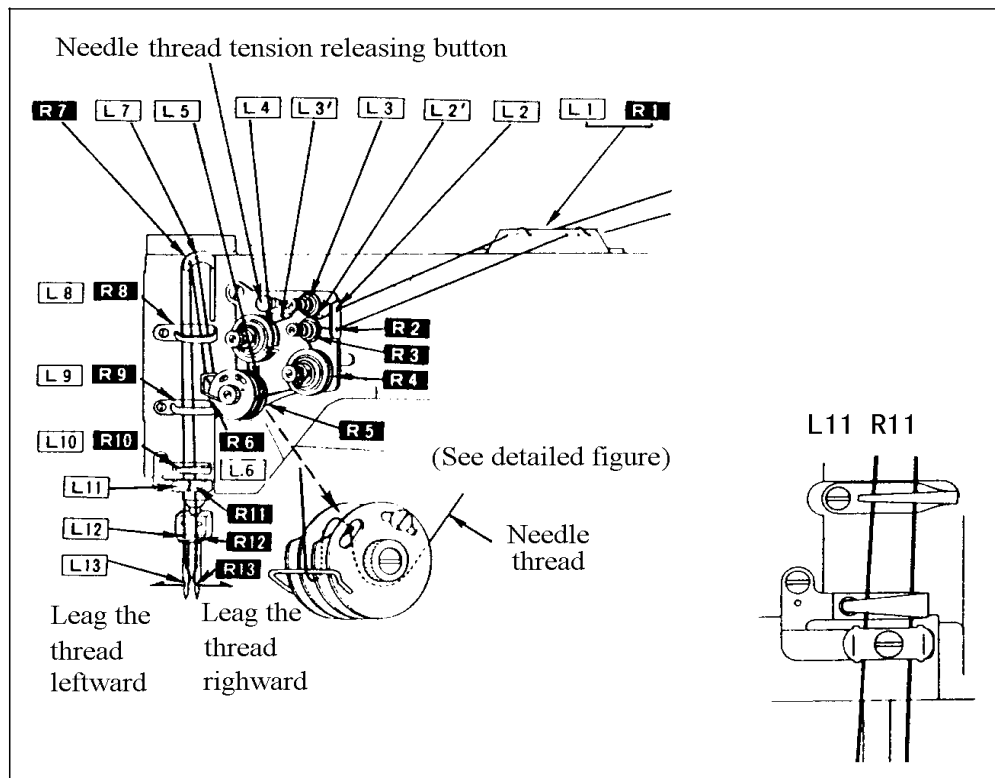
1) Pass each needle thread through thread guide “A” .

Note: When thin slippery thread (polyester thread or filament thread, for example) is used pass the thread through thread guides “B” as wall.

2) With the take-up lever located at the upper most position, pass each needle thread in the order shown in the following figure.

Note: Pressing the upper thread loosening button shown in the figure below opens the saucer of

the upper thread tension adjuster, and the upper thread can easily pulled out

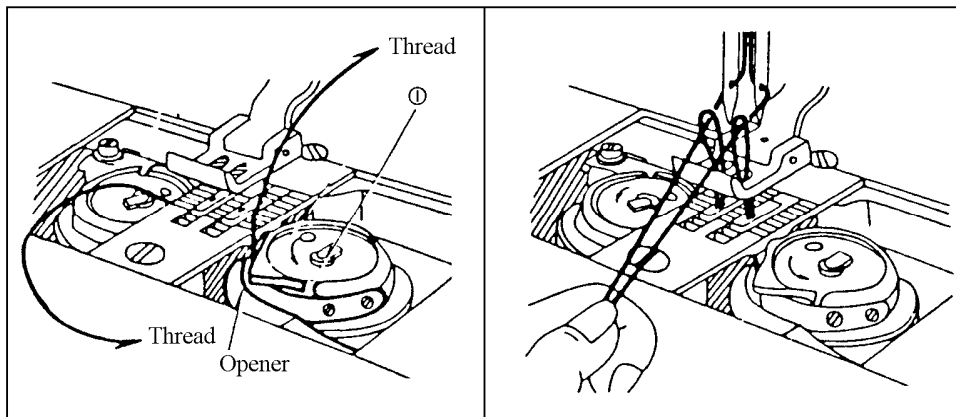


6. Setting of bobbin

- 1) Pulling out 5. cm thread tail from the bobbin.
- 2) Hold the bobbin so that the bobbin thread is would in right direction and put it into the hook.

7. Threading of bobbin threads

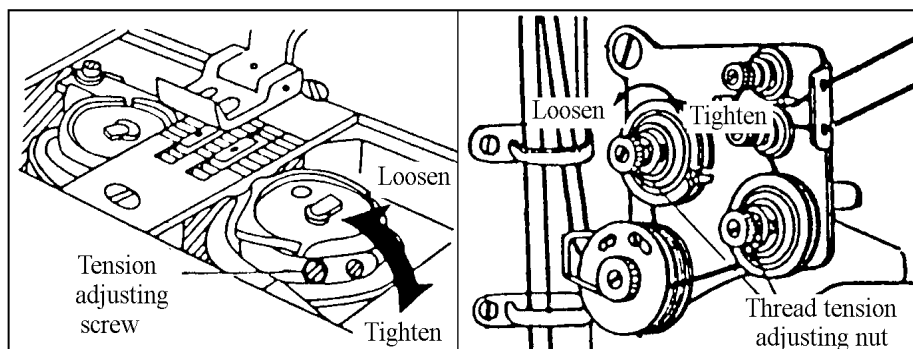
- 1) Put the hook into the bobbin case and press down the latch ①.
- 2) While holding the two needle threads by left hand, rotate the hand-wheel one turn by right hand.
By pulling up the needle threads, as shown in the figure, the bobbin threads will be lifted.
Each combination of bobbin thread and needle thread should be aligned and led backward.



8. Thread tension

1) Adjusting the bobbin thread tension

Turn tension screw, clockwise to increase the bobbin thread tension, or counter clockwise to decrease it.



2) Adjusting the needle thread tension

- Needle thread tension should be adjusted in reference to bobbin thread tension.
- Turn tension nut clockwise to increase the needle thread tension, or counter clocking to decrease it.
- Needle thread tension can be also adjusted for special fabric and thread by changing intensity and movable range of slack thread adjusting spring.

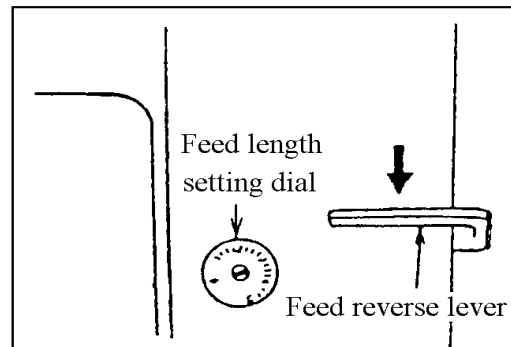
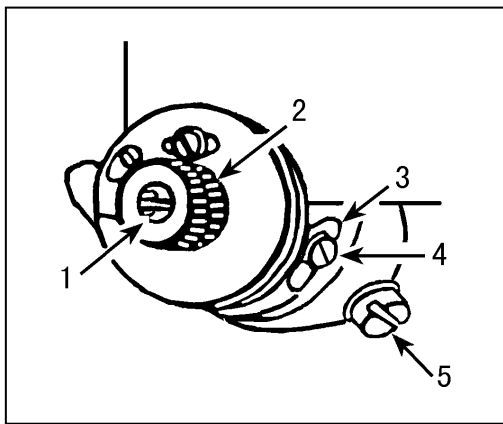
9. Thread take-up spring

1) To change the stroke of thread take-up spring

- Loosen screw “4” in the stopper, and move stopper “3” to the right or left.
- Move the stopper to the right to increase the stroke of the thread take-up spring, or to the left to decrease it.

2) To change the tension of the thread take-up spring

Loosen nut “2” and screw “5”. Turn spring shaft “1” counter clockwise to increase the tension of the spring, or clockwise to decrease it. Fit a screwdriver in the spring shaft and turn it until the desired tension is provided.



10. Adjusting the stitch length

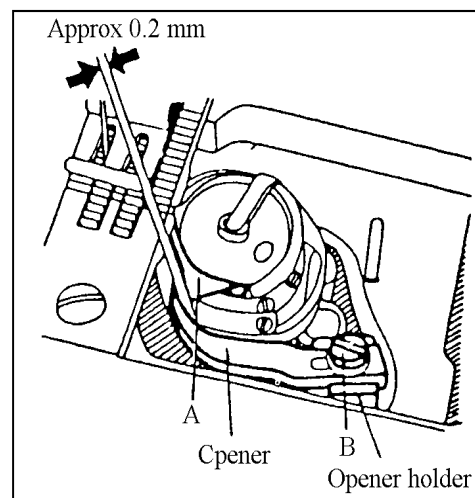
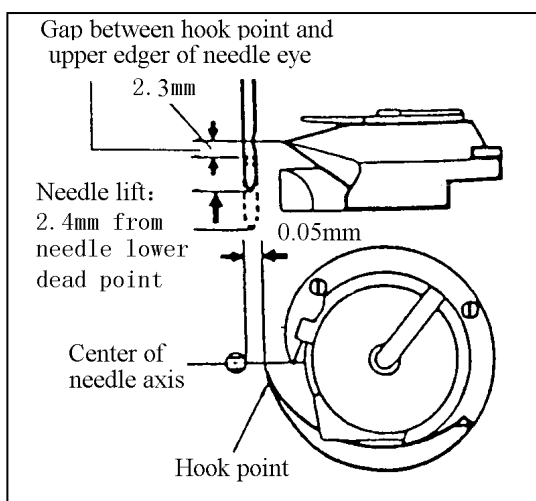
Turn stitch length dial counter-clockwise to bring the desired value to the top of the dial so that the value is aligned with the pin.

Reverse feed stitching

- 1) The machine performs reverse feed stitching as long as the lever is held depressed.
- 2) The moment you release the lever, the machine resumed the normal stitching mode.

11. Timing between rotating hook motion and needle motion

- 1) Set feed length (stitch length) to "6" on the feed setting dial.
- 2) When needle is lifted 2.4mm from the lower dead point, as shown in Figure, the following positional relationship should be maintained.
 - The upper edge of needle eye should be 2.3 mm below the hook point.
 - The hook point should be located at the center of needle axis.
 - Gap between the hook point and the side face of needle should be 0.05mm.

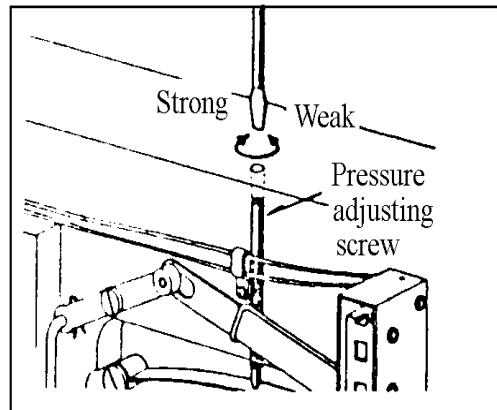


12. Relationship between hook motion and opener motion

- 1) Turn the balance wheel by hand and stop when the opener holder is located most remotely from the throat plate.
- 2) Make sure gap between the bobbin case holder A and the opener is approximately 0.2 mm.
- 3) If the gap is too large or small, loosen the opener holder set screw B and adjust position of the opener.

13. Adjusting the pressure of the presser foot

Pressure to fabric can be adjusted by turning the pressure adjusting screw.



14. Adjusting the presser foot and the walking foot

- 1) Loosen not 1, and change the position of the cam rod boss accordingly.

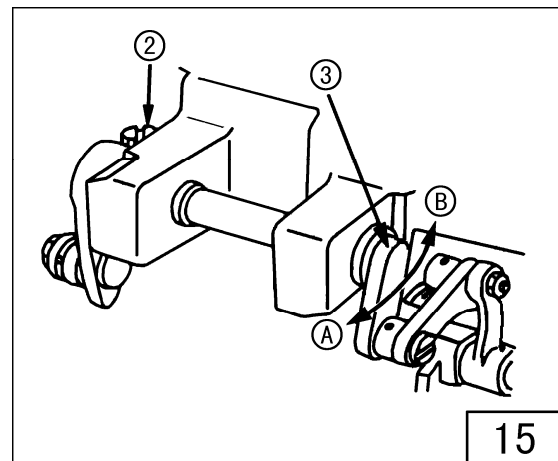
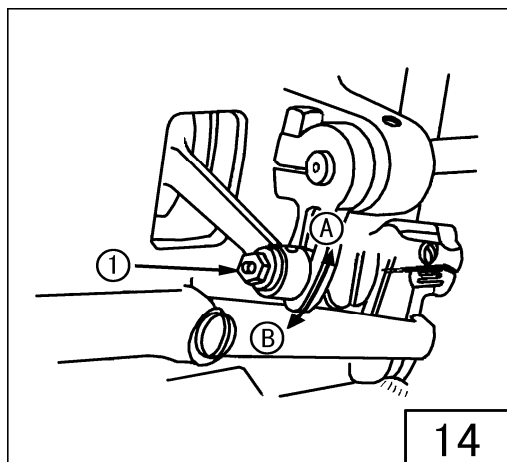
Highest position---The stroke is maximized. "A"

Lowest position--- The stroke is minimized. "B".

- 2) Alternate vertical motions of the walking foot and presser foot

The alternate vertical strokes of the walking foot and presser foot

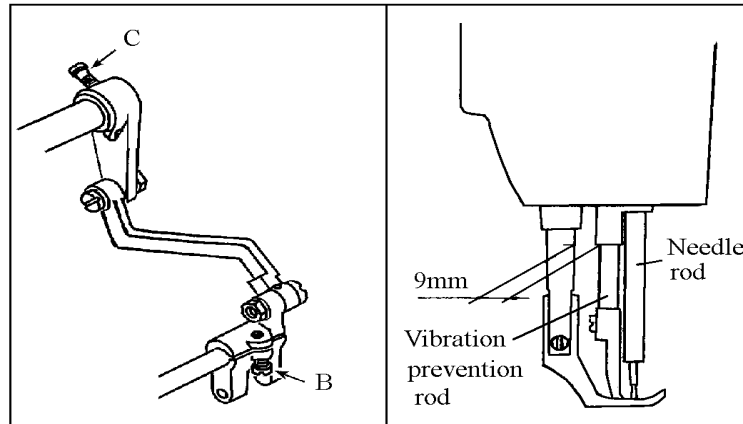
- Loosen screw ② of the top feed crank..
- Bring the thread take-up lever to its highest position, and lower the presser bar lifting lever. Move top feed crank ③ to left "A" to increase the stroke of the presser foot, or to the right "B" to increase it.



15. Relationship between needle motion and feed dog motion

- 1) Set feed length to "0" on the feed setting dial
- 2) Set the needle at the lowest position.
- 3) Lean the machine head backward, remove the back cover, loosen screw B and C.
- 4) Adjust the distance between presser rod and vibration prevention rod to 9 mm.
- 5) After the completion of adjustment, fully tighten the screws B and C.

Note: At this time make certain that needle can enter the feed dog needle hole at the center of the hole.

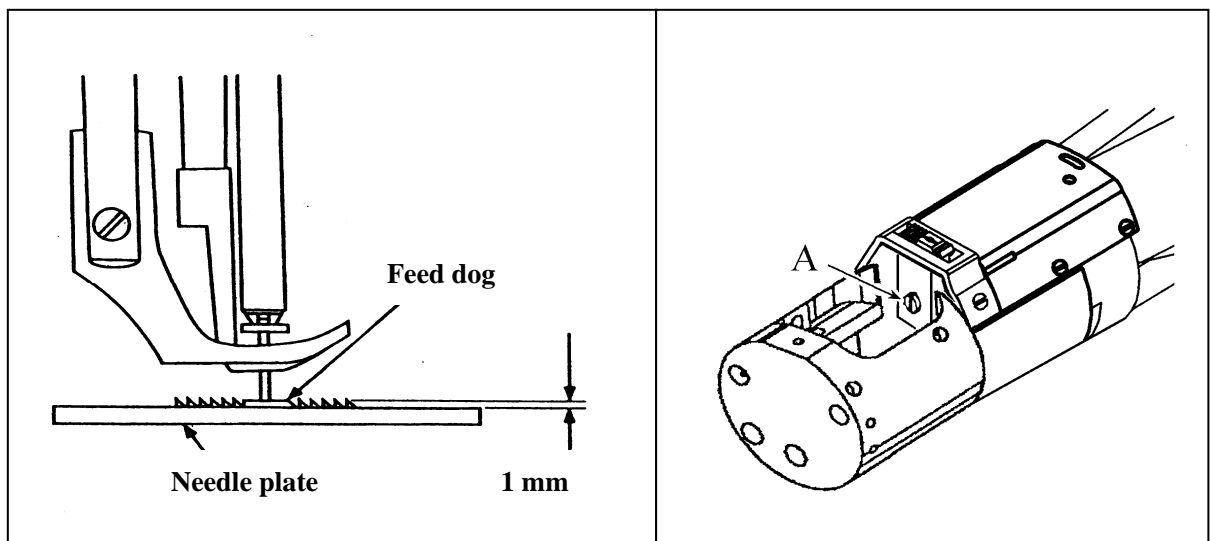


16. Adjusting the height of the feed dog

The max. Height of the feed dog from the surface to the needle plate is normally 1mm.

To adjust this height:

- 1) Set the stitch length at minimum.
- 2) Turn the pulley so as to raise the feed dog to it highest position.
- 3) Loosen the screw "A", adjust the height of the feed dog .
- 4) Tighten the screw "A" after adjustment.



17. Regulate the atmospheric pressure

When the air cylinder works normally, the necessary atmospheric pressure is 5~6bar. Can find out through the dial plate of the filtering.

- 1) Lifting knob 1, clockwise rotation, the pressure increases.
- 2) Lifting knob 1, anticlockwise rotation, the pressure is reduced.

