

GLOBAL

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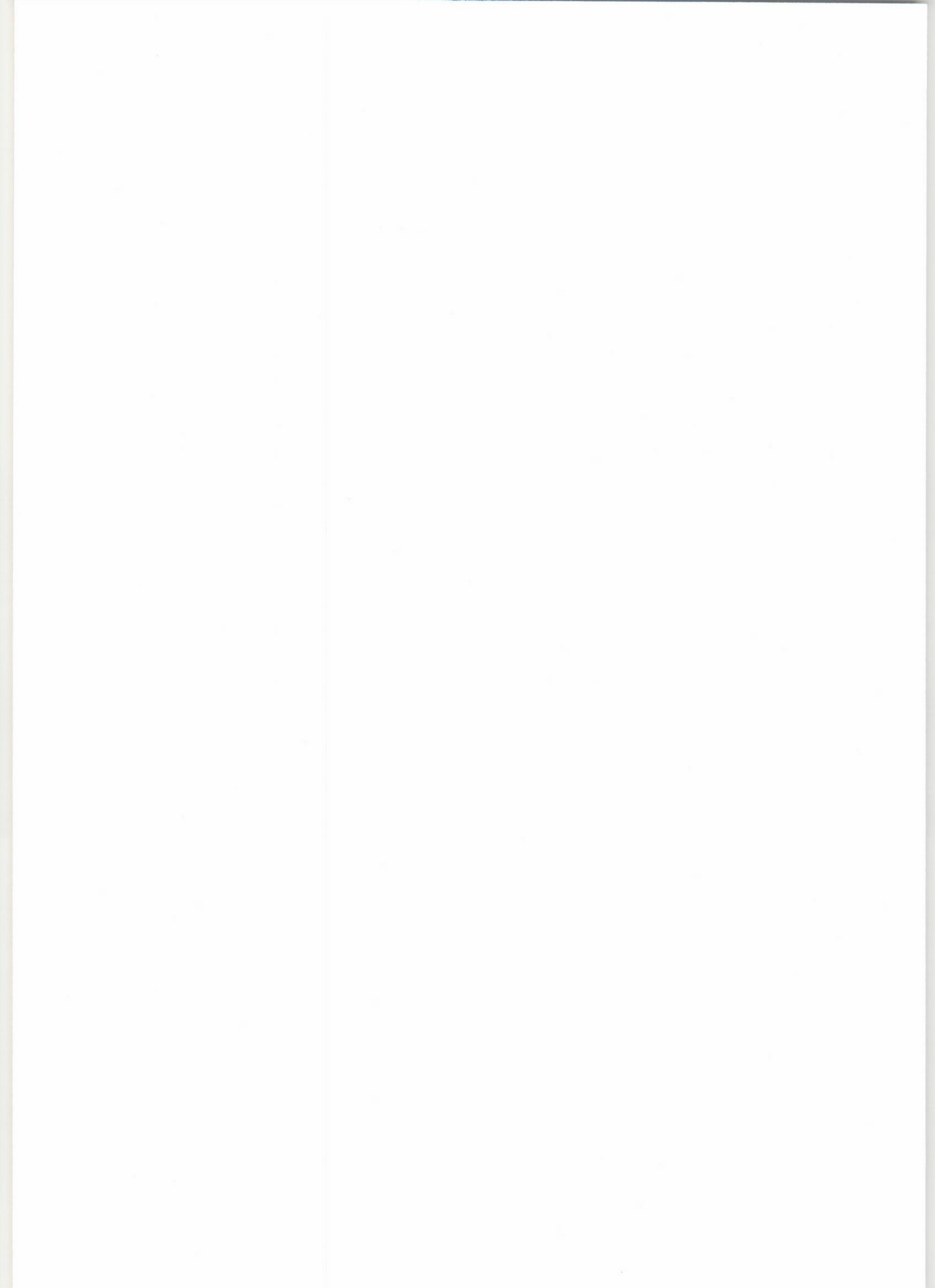
**SINGLE NEEDLE, WALKING FOOT, FLAT BED
SEWING MACHINE**

INSTRUCTION / OPERATING MANUAL

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Operation Instruction

1. Brief introduction

Machine adopts compound feed and special feeding mechanism, which can ensure smooth feeding, low noise, and beautiful stitch seam. It is constructed with slide link thread take-up, horizontal large rotating hook, and synchronized belt driving system, which ensures high speed, but lower noise.

This machine is suitable for sewing the heavy materials of car seat, sofa, tarpaulins, tents, bag, etc.

3. Installation (Fig.1)

1. Installation of the table connecting hook bracket and rubber cushion.

Fix the connecting hook bracket ① and the rubber cushion ② on the table by screw ③.

2. Installing the oil reservoir.

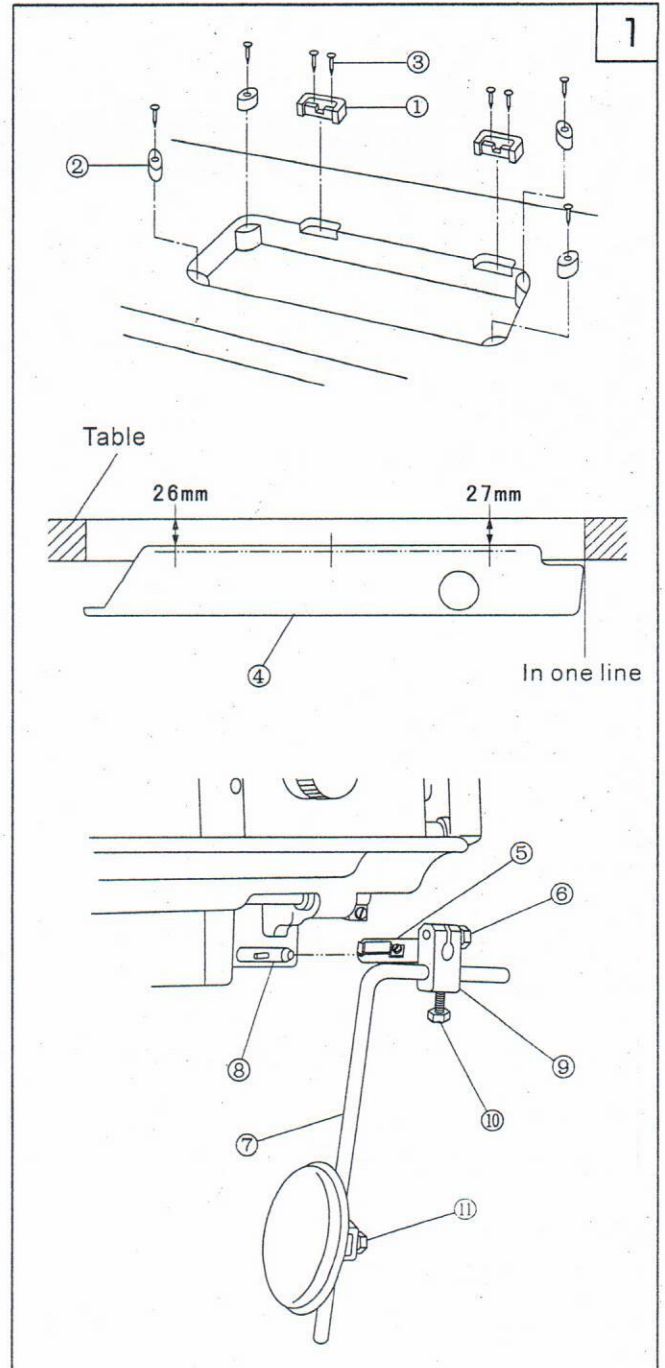
Set the oil reservoir ④ onto the table by six screws as shown in the Fig.1.

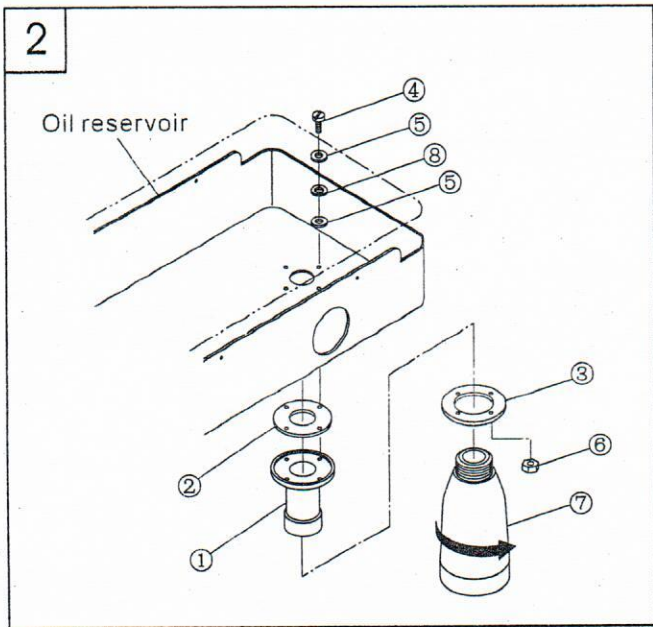
3. Install the knee control connector ⑤, knee control lift crank ⑨ and bent bar ⑦ according to the direction of the knee control lift bar shaft ⑧.

4. Adjust the direction of part ⑥, ⑩, ⑪ by set screw.

2. Main specifications

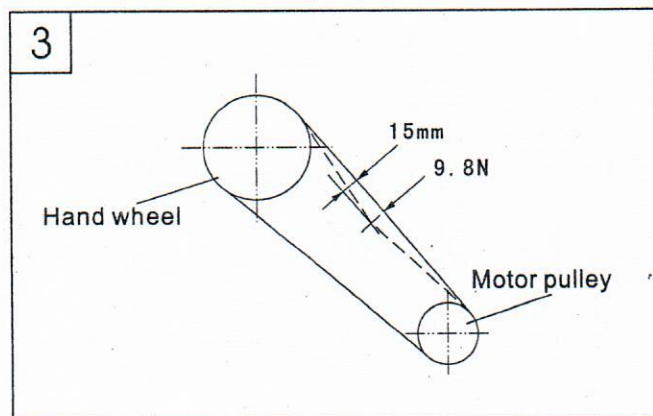
Application	Medium and heavy duty
Max. sewing speed	2000 s.p.m
Max. stitch length	9mm
Needle bar stroke	36mm
Needle	DP*17 (Nm125-Nm180) standard Nm160 (23#)
Lubrication	Semi-lubrication
Hook	Large hook
Height of presser foot lift	9mm by hand, 16mm by knee
Motor	370W clutch motor





4. Installing the oil pot (Fig. 2)

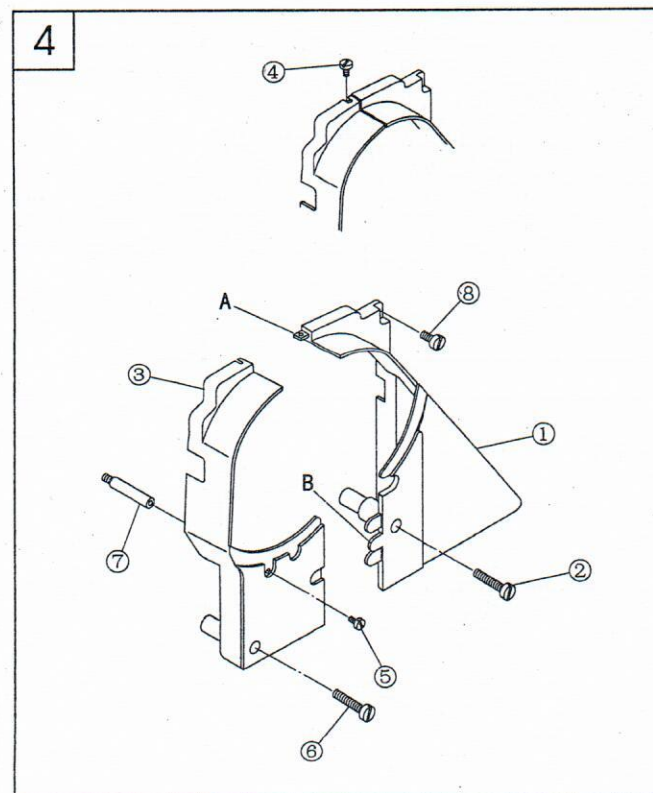
1. Install the bolt ①, oil seal ② and spacer ③ onto the oil reservoir, and then put the cushion ⑤ and spacer ⑧ into the set screw ④, then set it by nut ⑥.
2. Tighten the oil pot ⑦ onto the bolt ①.



5. Adjusting the tension of the belt (Fig.3)

When adjusting the tension of the belt, please adjust the height of the motor, and press down the middle of the belt with the force of 9.8N. There should be a slack of 15mm.

Note: Please turn off the motor before adjustment.



6. Installing the belt cover (Fig.4)

1. Tighten the column ⑦ into the screw hole on the machine head.
2. Install the belt cover (right) ① on the machine head by set screw ② and ⑧.
3. Connect the belt cover (left) ③ to the claw AB of the belt cover (right) ①.
4. Tighten the belt cover (left) ③ by set screws ④, ⑤ and ⑥.

Note: After installing the belt cover, make sure that the belt cover is not touch with the belt and hand wheel.

7. Lubrication (Fig.5)

1.Face plate lubrication

- a.Loosen the face plate screw;
- b.Open the face plate ① in the direction of the arrow;
- c.Lubricate the place as the arrow shows every day;
- d.Close the face plate;
- e.Tighten the screw.

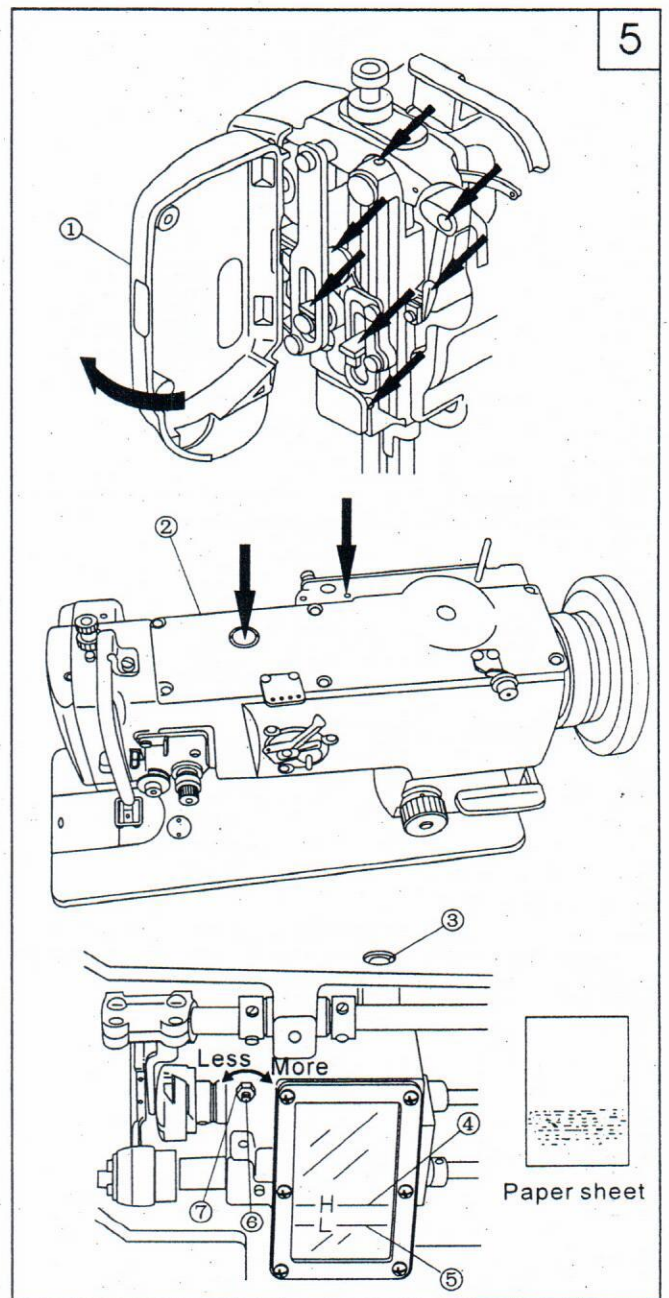
2.Machine body lubrication

- a.Lubricate the place as the arrows indicate every day;
- b.When run the machine for the first time or run it again after a long period of non-use, please oil the place as the arrows indicate. Besides, take down the top cover ②, then oil each felt and oil wick.

3.Rotating hook lubrication

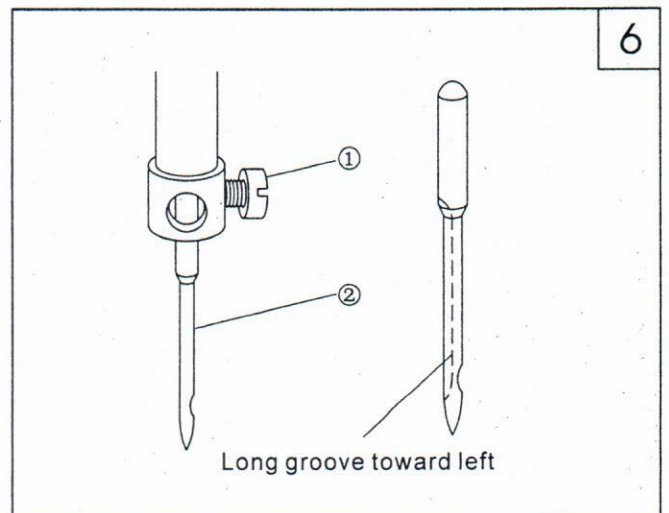
- a.Add the oil from oil hole ③ until it reaches the red line ④. Check it one time a day. If the oil is under the red line ⑤, it should be refilled.
- b.When adjusting the oil amount of the rotating hook, loosen the nut ⑦, and then adjust it by adjusting screw ⑥. Turn it rightward, the amount of the oil can be increased; on the contrary, the amount can be reduced.

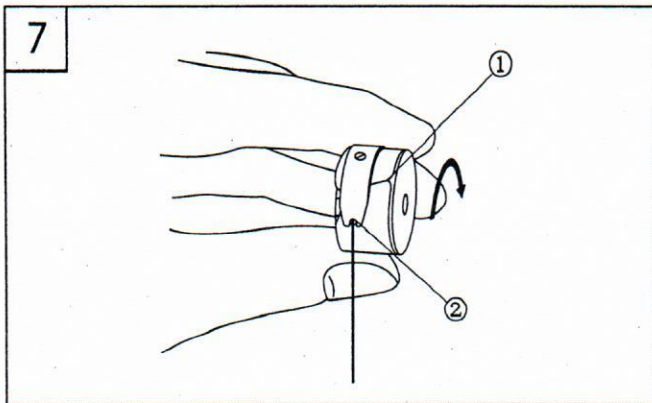
Note: Excess lubrication results in leaking.



8. Installing the needle (Fig.6)

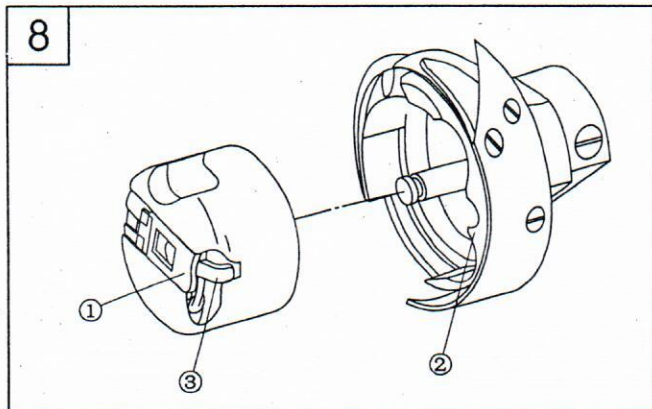
- 1.Turn the balance wheel to raise the needle bar to its highest position;
- 2.Loosen the set screw ② and make the long groove of the needle ① toward leftward;
- 3.Insert the needle into the bottom of the needle bar;
- 4.Tighten the set screw ②.





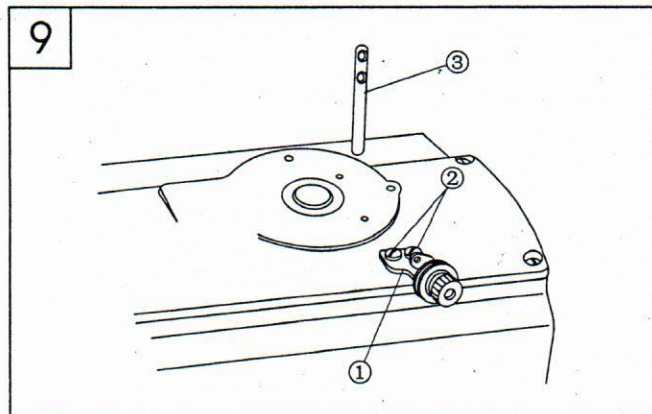
9. Threading the bobbin thread (Fig.7)

1. Insert the bobbin into the hook body, pass the thread through the thread hole ①, then pass down through the thread tension spring ②.
2. Draw the thread downward, then the bobbin will turn in the direction as the figure shows.



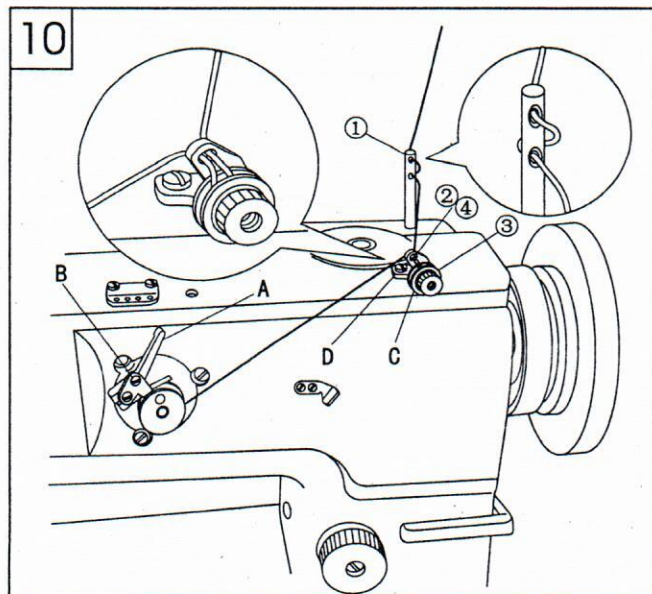
10. Installing the bobbin case (Fig. 8)

1. When taking out the bobbin case, open the gib ① and pull it off.
2. Align the bobbin case with the rotating hook shaft and then insert it. Align the inside of the rotating hook ② and the latch ③, then install the bobbin case by pressing it until "crack" occurs.



11. Installing the winding guider (Fig.9)

1. Set the winding guider ① onto the top cover of the machine head by set screw ②.
2. Insert the bobbin thread guider ③ into the machine head.

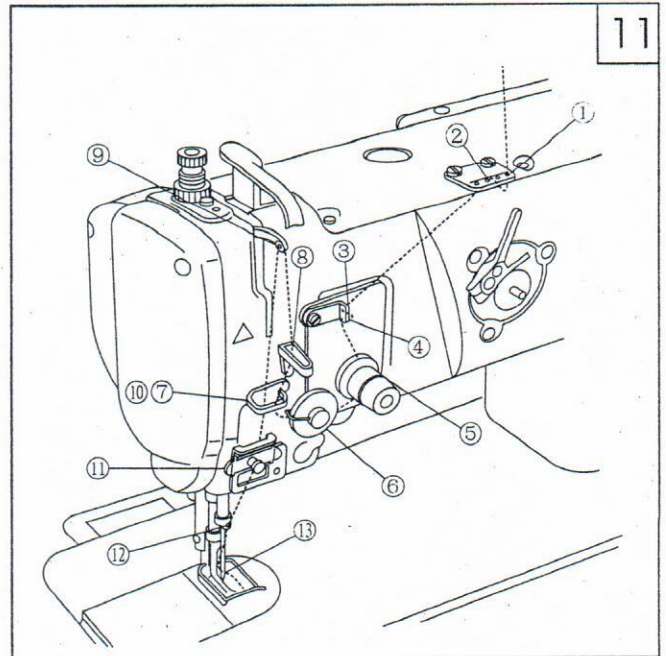


12. Winding the bobbin thread (Fig.10)

1. Thread in numerical order from ① to ④, then wind the bobbin winder.
2. Press down the bar A.
3. Loosen the set screw B and adjust the adjusting plate until the winding amount reaches the 80% of the outside diameter.
4. When the winding is not smooth, move the winding guider C forward and backward, then set it by set screw D.
5. After winding, the winding bar A will separate and stop automatically.

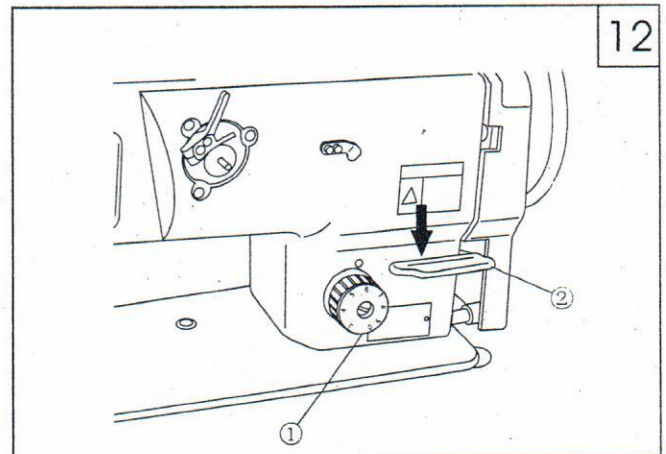
13. Threading (Fig.11)

Thread in the order as shown in Fig.



14. Adjusting the stitch length (Fig.12)

Turn the stitch length dial plate ① leftward and rightward to make the marker align with the required figure. Press down the reverse feed lever ② to start backward sewing, and release it to start normal sewing.



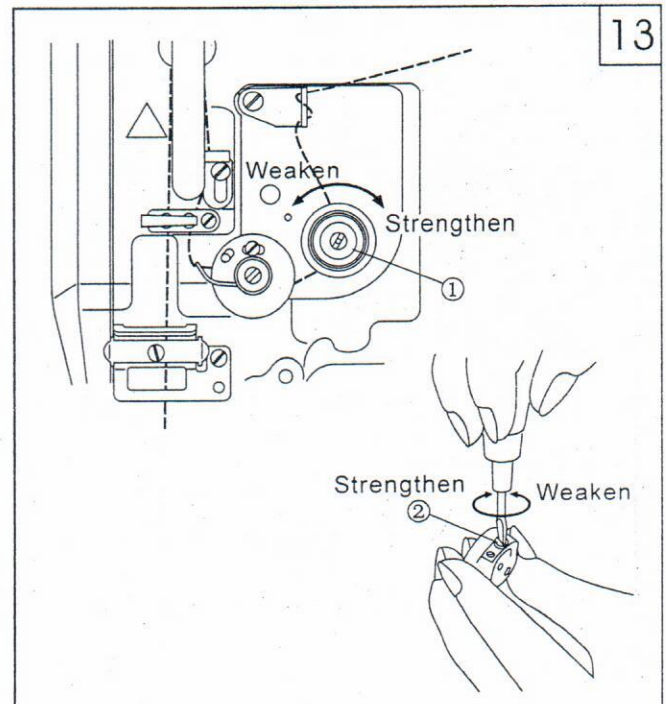
15. Adjusting the thread tension (Fig.13)

1. Adjusting the tension of the needle thread

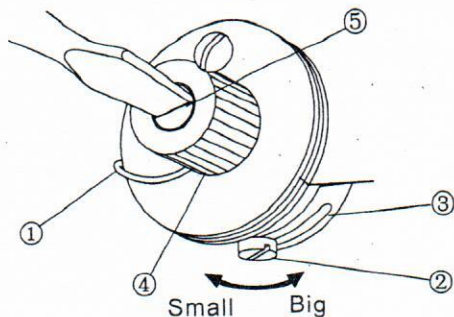
Turn the nut ① clockwise to increase the tension of the needle thread; on the contrary, to reduce the tension of the needle thread.

2. Adjusting the tension of the bobbin thread.

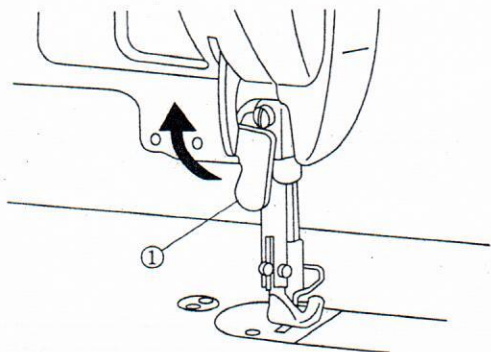
Turn the screw ② clockwise to increase the tension of the bobbin thread, on the contrary, to reduce the tension of the bobbin thread.



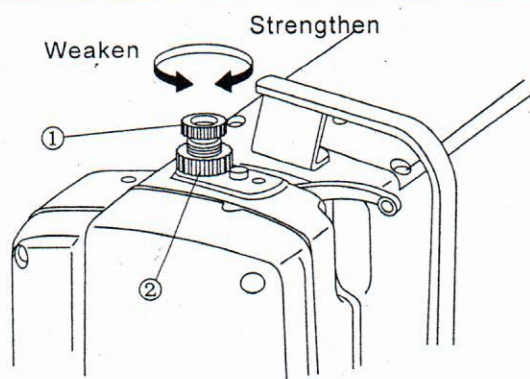
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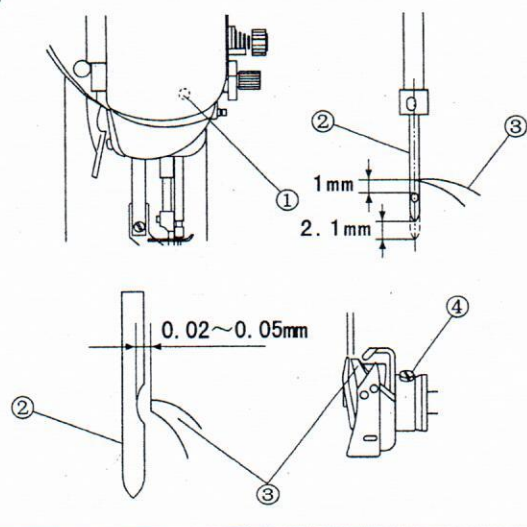
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16. Adjusting the thread take-up spring (Fig.14)

1. Changing the swing range of the thread take-up spring
 - a. Loosen the set screw ②, move the stopper ③ leftward and rightward, then adjust the thread take-up spring ①.
 - b. Move the stopper rightward to increase the swing range of the thread take-up spring; on the contrary, to reduce the swing range of the thread take-up spring.
2. Changing the tension of the thread take-up spring
 - Loosen the nut ④, turn the spring shaft ⑤ counter-clockwise to increase the tension; turn it clockwise to reduce the tension.

17. Presser foot lifter (Fig.15)

1. Stop the presser foot when it is lifted, lift the lifting bar ① in the direction of the arrow. When the presser foot is lifted by 9mm, then stop it.
2. When lowering the presser foot, put down the lifting bar ① to make the presser foot back to its original place.

18. Adjusting the pressure of the presser foot (Fig.16)

- Turn the adjusting screw ① rightward to increase the pressure; turn it leftward to reduce the pressure. After adjustment, tighten the set nut ②.

19. Relationship between needle and rotating hook (Fig.17)

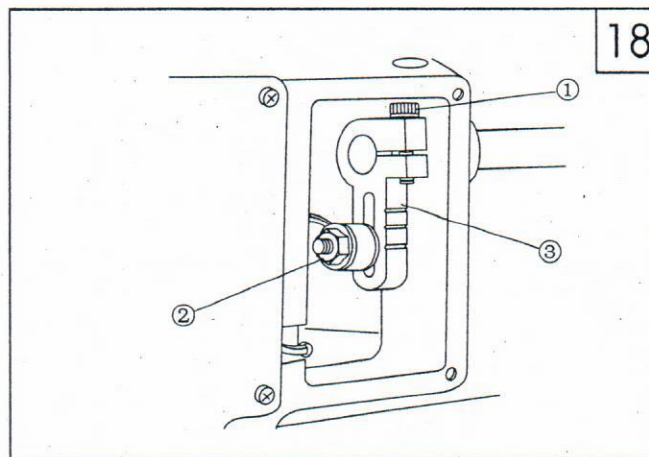
1. Adjust the stitch length dial to 0.
2. Turn the balance wheel to lift the needle bar from its lowest position by 2.1mm. Loosen the screw ①, adjust the distance between up end of the eye of needle ② and rotating hook point ③ to 1mm, then tighten it.
3. Turn the balance wheel to lift the needle bar from its lowest position by 2.1mm. Loosen the two set screws ④, turn the rotating hook, align the rotating hook point ③ with the center of the needle ②, then tighten the two screws ④.
4. Loosen the two set screws ④, move the rotating hook leftward and rightward. Align the rotating hook point ③ and the center of the needle ②, and adjust the clearance between rotating hook point and needle to 0.02-0.05mm, then tighten the screw.

20. Adjusting the alternating amount of presser foot (Fig.18)

When the presser foot is alternating increasingly, adjust it upward in the range of the long hole of the top feed crank ③; when the presser foot is alternating decreasingly, adjust it downward, then tighten the nut ②.

When the lifting amount of the presser and walking foot is different, first align the bottom of the presser foot and walking foot with the surface of the needle plate, then loosen the set screw ①. Turn the balance wheel to the front, the lifting amount of the presser foot is more than that of the walking foot. Turn the balance wheel reversely, the lifting amount of the walking foot is more than that of the presser foot. Finally tighten screw ②.

Remove the right side of the window plate, then the top feed crank ③ can be observed.



21. Sewing speed list

Alternating amount	Stitch less than 6mm	Stitch length between 6mm-9mm
Less than 3mm	2500s.p.m	2000s.p.m
Between 3~4mm	2000s.p.m	2000s.p.m
Between 4~6.5mm	1600s.p.m	1600s.p.m

22. Troubleshooting

Trouble	Possible cause	Remedy
1. Thread breaking (2-3mm thread left on the cloth)	<ol style="list-style-type: none"> 1. Damage on the rotating hook set groove of thread way, needle point, rotating hook point and needle plate. 2. Too strong the needle thread tension 3. Collision between needle and rotating hook. 4. Too little the oil of the rotating hook 5. Too weak the needle thread tension. 6. Too strong the tension of the thread take-up spring 7. Over fast or slow the timing between needle and rotating hook 	<ol style="list-style-type: none"> 1. Polish the damaged part with sand paper; rasp the middle rotating hook set groove with file. 2. Weaken the needle thread tension. 3. Refer to (19. Relationship between needle and rotating hook.) 4. Adjust the oil amount (Refer to 7. Lubrication) 5. Increase the needle thread tension. 6. Weaken the tension of the thread take-up spring. 7. Refer to (19. Relationship between needle and rotating hook)
2. Puckering	<ol style="list-style-type: none"> 1. Over fast or slow the timing between needle and rotating hook. 2. Too weak the pressure of the presser foot. 3. The clearance between the up end of the needle and the rotating hook is not right. 4. Wrong needle. 	<ol style="list-style-type: none"> 1. Refer to (19. Relationship between needle and rotating hook.) 2. Tighten the presser foot adjusting screw. 3. Refer to (19. Relationship between needle and rotating hook.) 4. Replace the needle.
3. Loose stitch	<ol style="list-style-type: none"> 1. Without threading the bobbin thread under the spring of the thread tension of the rotating hook body. 2. Bad work on thread way. 3. No movement of bobbin. 4. Too weak the bobbin thread tension. 5. Too strong the bobbin thread tension. 6. Damage of the needle point. 	<ol style="list-style-type: none"> 1. Refer to (9. Threading the bobbin thread) 2. Rasp with sand paper or file. 3. Replace the bobbin or rotating hook 4. Increase the bobbin thread tension. 5. Reduce the bobbin thread tension. 6. Replace the needle.