



USER'S MANUAL

KM-340BL

High-Speed Single Needle
Upper and Lower Feed Lock
Stitch Machine

- 1) FOR AT MOST USE WITH EASINESS,
PLEASE CERTAINLY READ THIS MANUAL
BEFORE STARTING USE.
- 2) KEEP THIS MANUAL IN SAFE PLACE
FOR REFERENCE WHEN THE MACHINE
BREAKS DOWN.

SunStar CO., LTD.

MME-090929



1. Thank you for purchasing our product. Based on the rich expertise and experience accumulated in industrial sewing machine production, SUNSTAR will manufacture industrial sewing machines, which deliver more diverse functions, high performance, powerful operation, enhanced durability, and more sophisticated design to meet a number of user's needs.
2. Please read this user's manual thoroughly before using the machine. Make sure to properly use the machine to enjoy its full performance.
3. The specifications of the machine are subject to change, aimed to enhance product performance, without prior notice.
4. This product is designed, manufactured, and sold as an industrial sewing machine. It should not be used for other than industrial purpose.



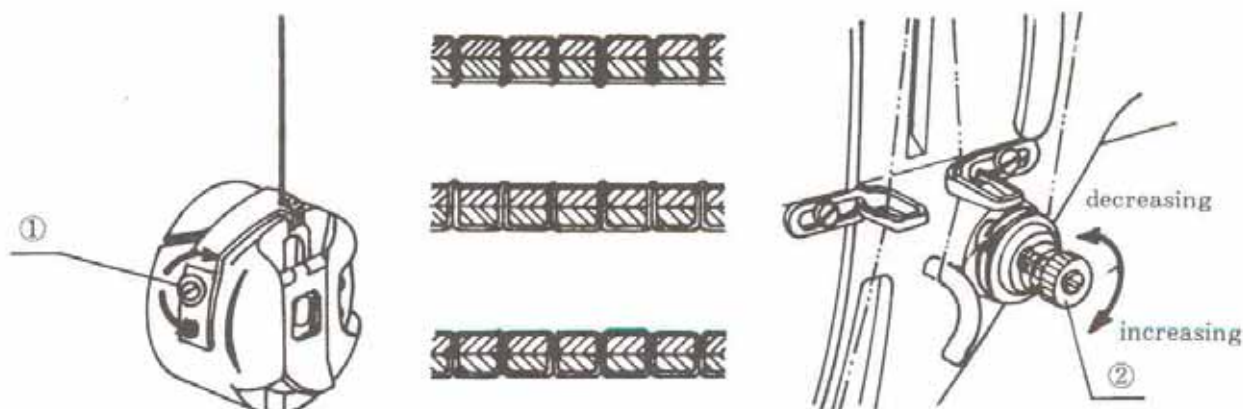
SunStar CO., LTD.

Thank you for purchasing our Sunstar sewing machine.
Please read this manual to make the most of the manifold
functions of this sewing machine.

CONTENTS

1. Adjustment of thread tension	3
2. Adjustment of thread take-up spring	3
3. Adjustment of stitch length	4
4. Adjustment of presser foot pressure	4
5. Adjustment of main and supplementary presser feet	4
5-1 Adjustment of cross up-and-down movement of the main and the supplementary presser feet	4
5-2 Adjustment in height of the main and supplementary presser feet	5
5-3 Adjustment of the front-to-rear position of foot	5
5-4 Adjustment of the feed of the main presser foot	5
6. Adjustment of height of feed dog	6
7. Adjustment of timing between needle and hook	6
7-1 Adjustment of needle bar ascent	6
7-2 Adjustment in height of needle bar	6
8. Installation of knee lifter	7
9. Installation of oil pan	7
10. Installation of machine head	7
11. Lubrication	8
12. Before operating the sewing machine	9
13. Attaching the needle	9
14. Winding the thread onto the bobbin	9
15. Setting the bobbin into bobbin case	10
16. Threading the machine head	10

1. Adjustment of thread tension

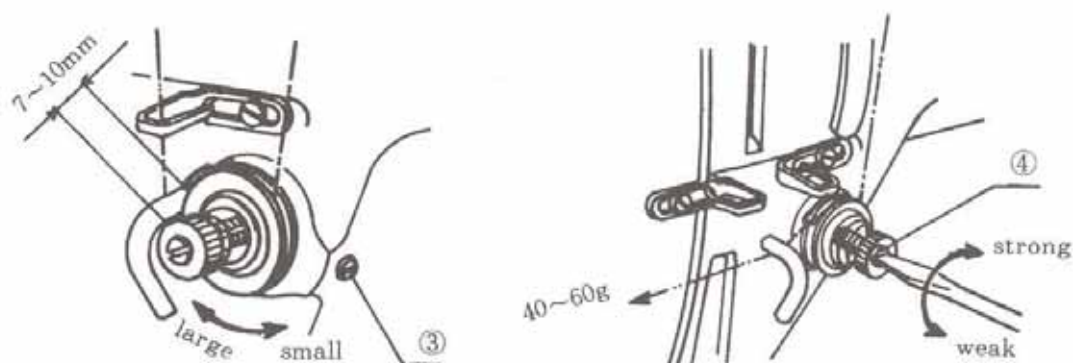


To adjust bobbin thread tension, turn the tension adjusting screw ① to the maximum extent so that the thread is not released by the weight of bobbin case when the bobbin case dangles from the thread.

The standard thread releasing tension ranges from 30g to 50g.

Turn the thread tension adjusting screw ② to adjust the needle thread tension after lowering the presser foot.

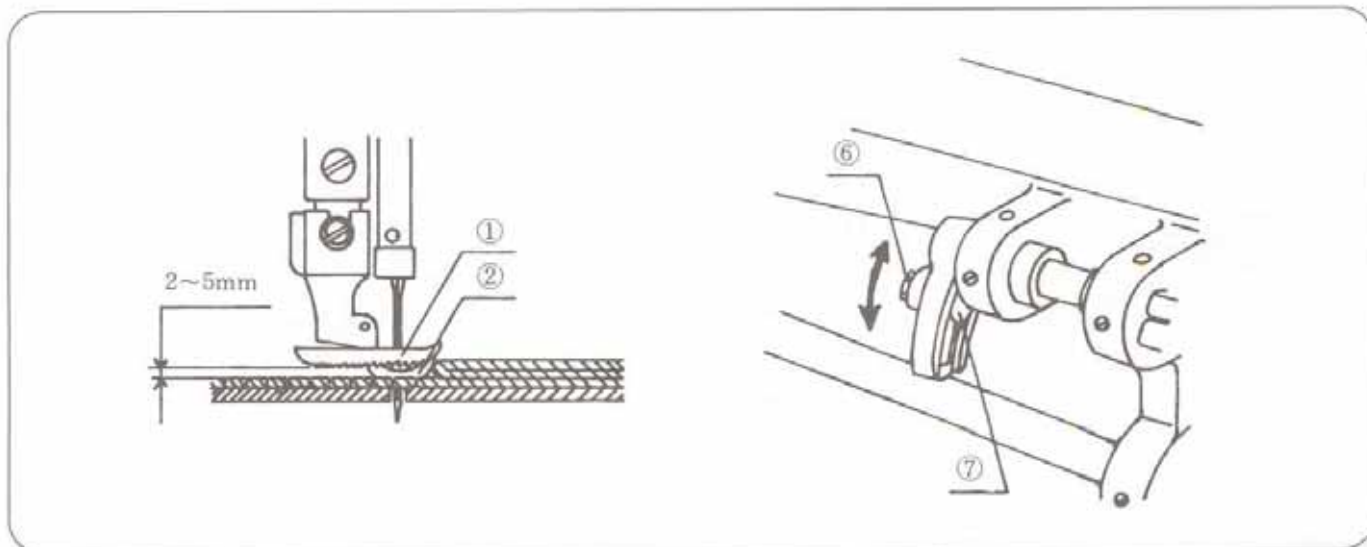
2. Adjustment of thread take-up spring



The standard operating range of the thread take-up spring is 7 to 10mm, and the standard twisting tension of the thread take-up spring to 40 to 60g. To adjust the operating range of the thread take-up spring, loosen the thread take-up spring fixing screw ③ and turn the adjustment device. (Widen the range for thick materials and narrow it for thin materials)

To adjust the tension of thread take-up spring, fit a screw-driver into the groove of the adjusting device pose ④ and turn it left or right. (Increase for thick materials and decrease for thin materials)

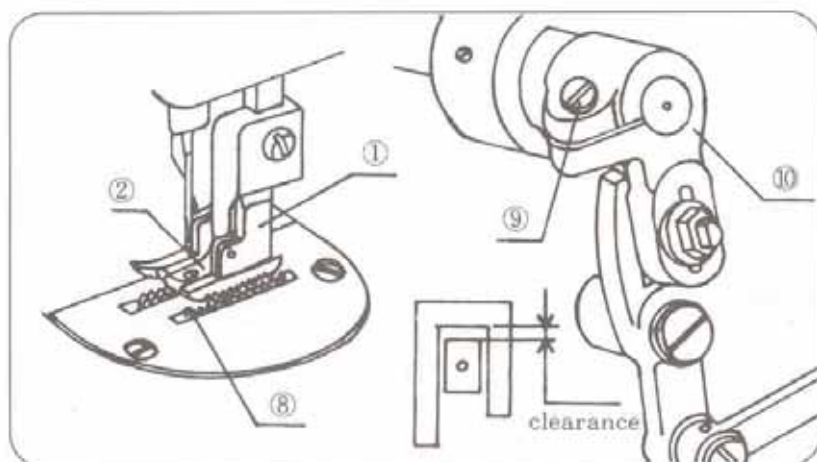
5—2 Adjustment in height of the main and supplementary presser feet



The vertical of the main and the supplementary presser foot and the supplementary is 2 to 5mm. Depending on the material, loosen the nut ⑥ and adjust the adjusting arm ⑦ of the presser foot vertical movement.

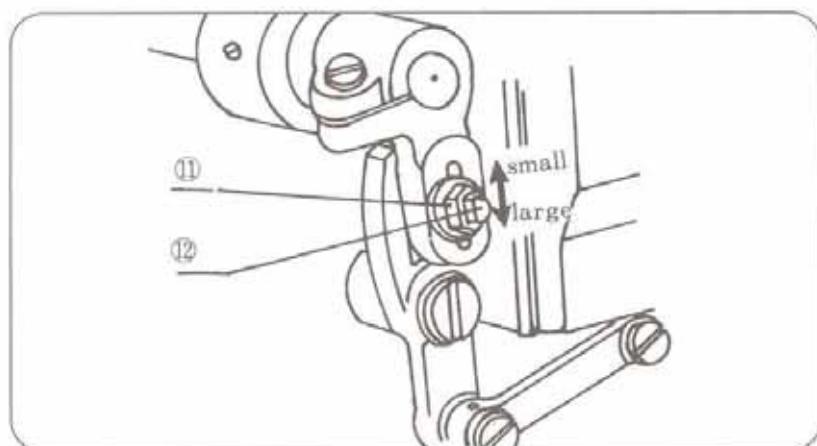
If the height variation between materials is not large, minimize the working range of the presser foot. (Highest position : 5mm, Lowest position : 2mm)

5—3 Adjustment of the front-to-rear position of foot



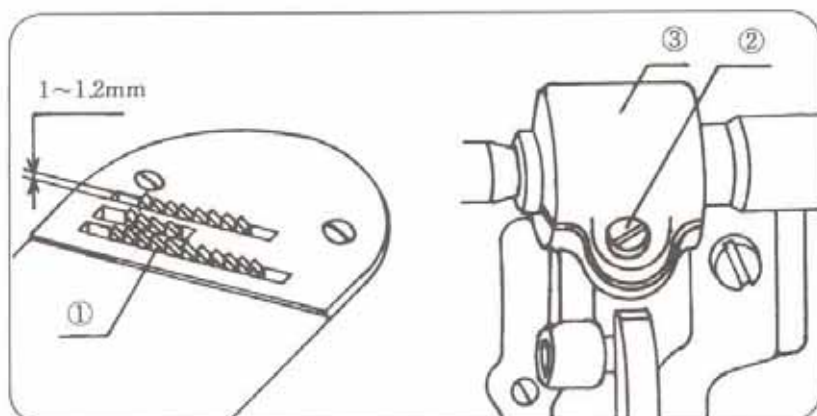
To maximize the stitch length, loosen the screw ⑨ to the extent that the main presser foot ① does not touch the back of the supplementary presser foot ② and ② adjust the horizontal movement adjusting crank ⑩ to the left or right.

5—4 Adjustment of the feed of the main presser foot



The standard feeds of the feed dog and the main presser foot are in the ratio of 1 to 1. According to sewing conditions, the feed of the main presser foot can be changed. Loosen nut ⑪ and move the horizontal movement adjusting lever of the presser foot up or down.

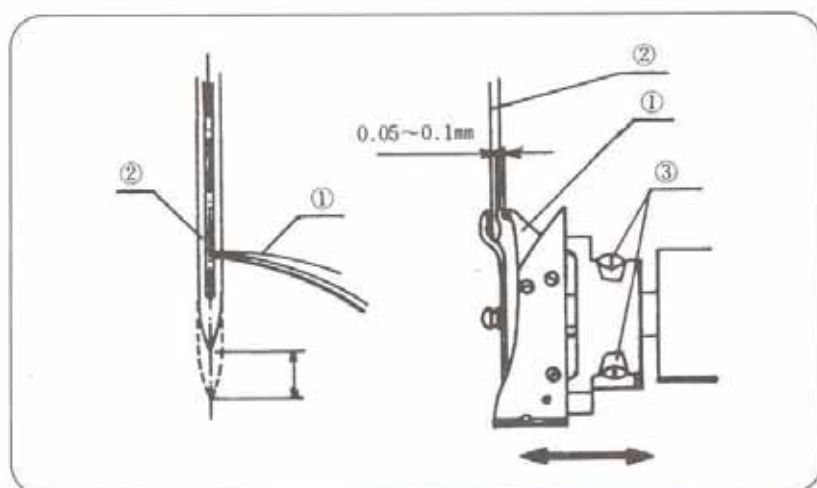
6. Adjustment of height of feed dog



With maximized stitch length, the maximum standard height of the feed dog ① above the table board is 1 to 1.2mm. Loosen the screw ②, and adjust the height of the feed dog by moving the lifter crank up and down.

7. Adjustment of timing between needle and hook

7—1 Adjustment of needle bar ascent

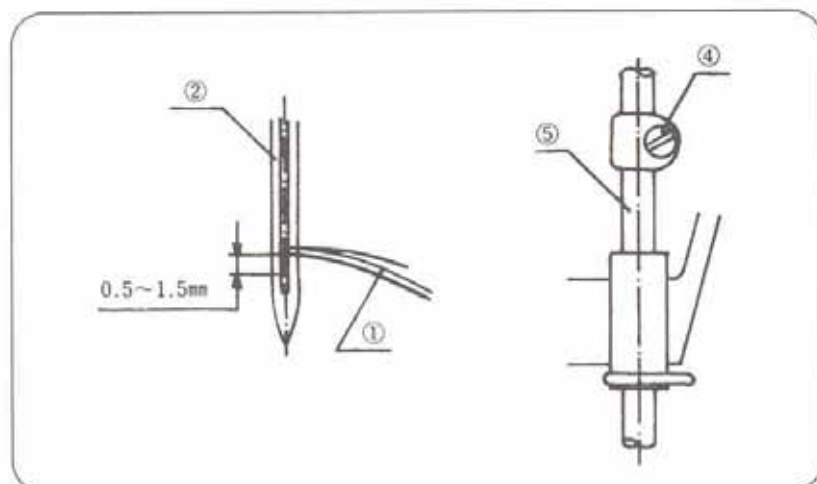


The hook ① should be in line with the center of needle ② when the needle has ascended 2.24mm from the lowest position when turning the machine pulley by hand.

Loosen the fixing screw ③ and fit the hook ① to the center of the needle ②.

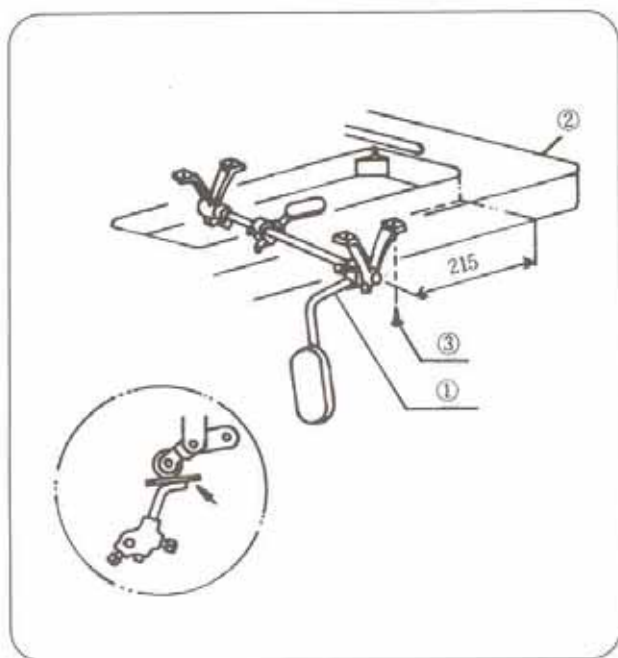
Bring the hook ① to within a distance of 0.05 to 0.1mm.

7—2 Adjustment in height of needle bar



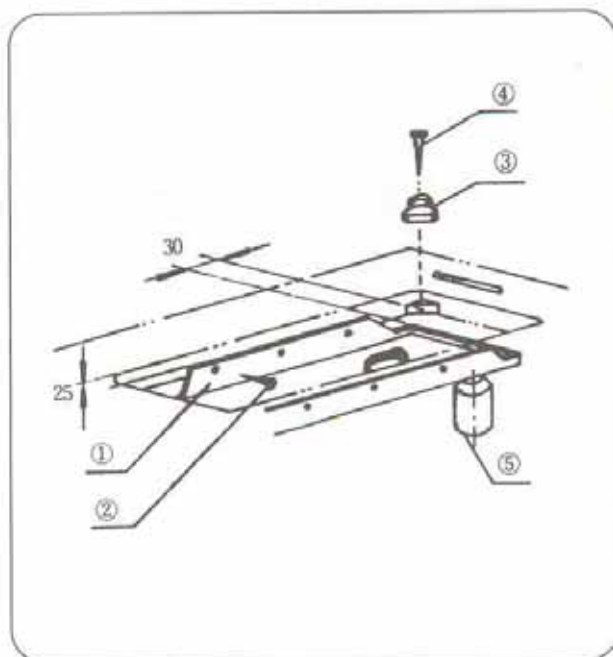
Loosen screw ④ and move the needle bar up or down to adjust the height of the needle bar ⑤ so that the distance between the hook ① and the top of the needle thread hole is 0.5 to 1.5mm when the hook ① is in line with the center of the needle ②. Tighten screw ④ again.

8. Installation of knee lifter



Attach knee lifter set ① under the table ② with four wooden screws ③.

9. Installation of oil pan

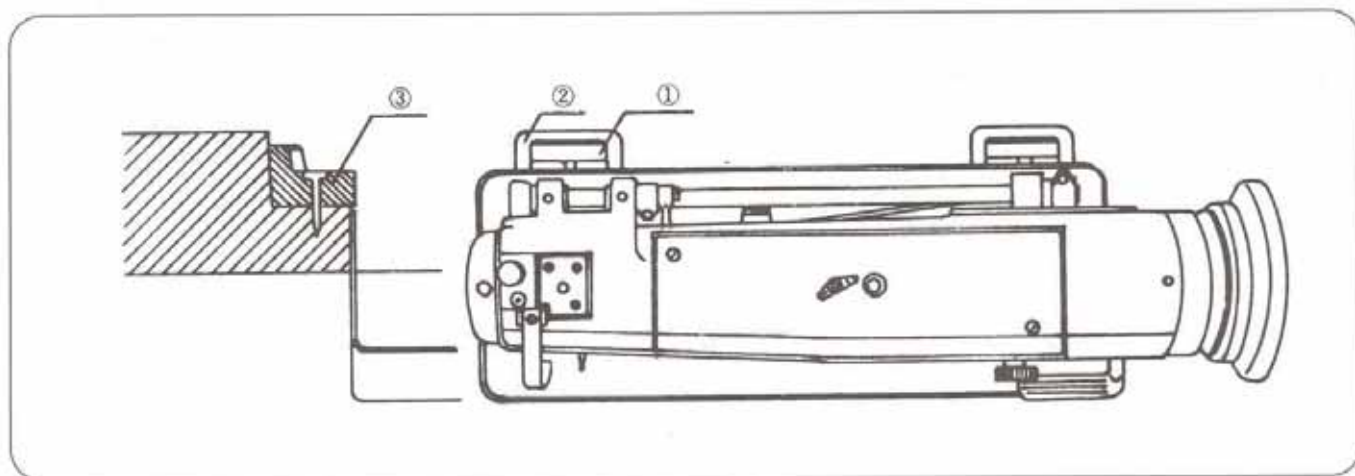


Attach oil pan ① to the table with six screws ②.

Attach the machine head support rubbers ③ to the four table corners with screws ④.

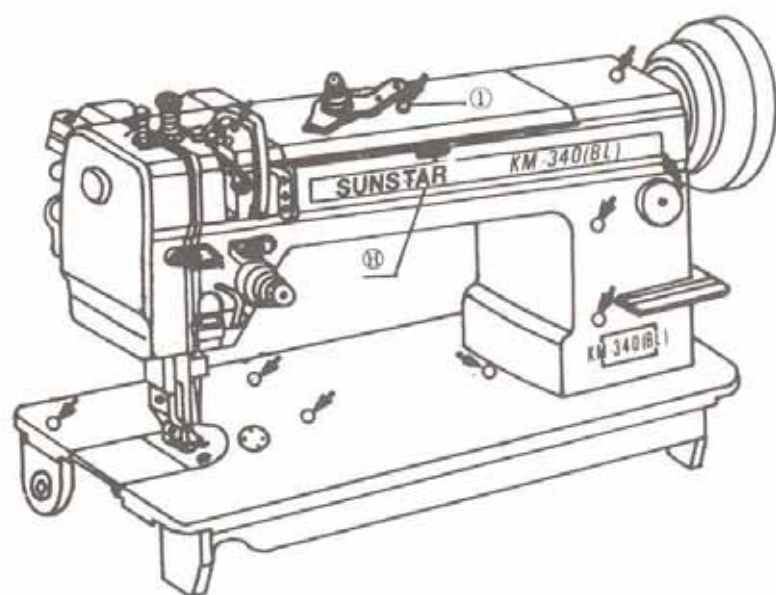
Fit the oil container ⑤ to the oil pan ①.

10. Installation of machine head



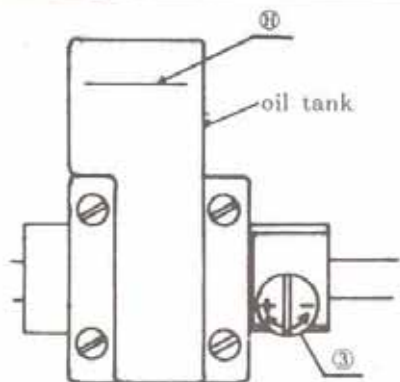
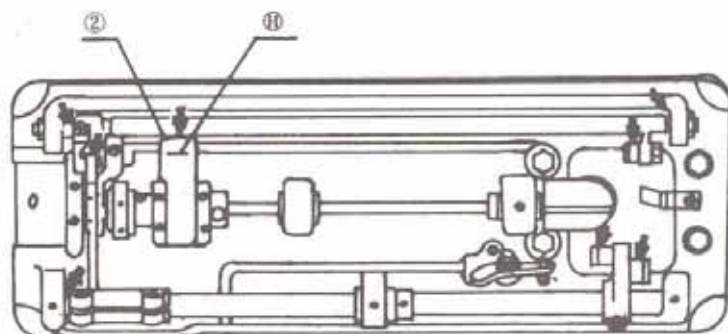
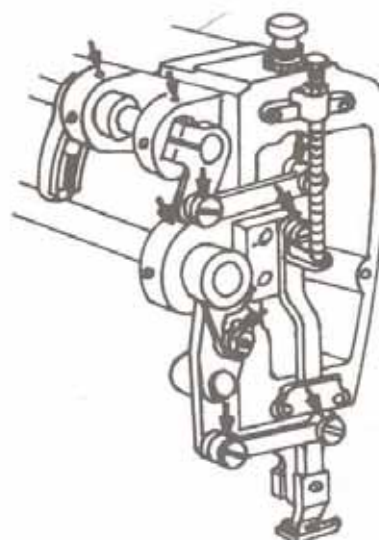
Fit the machine head hinge ① to the head hinge rubber ② of the table by inserting the head hinge into the bed holes and place the machine head down on the machine head support rubber ③.

11. Lubrication



Before operating the machine, lubricate the adequate quantity of oil into the red lubricating holes every day.

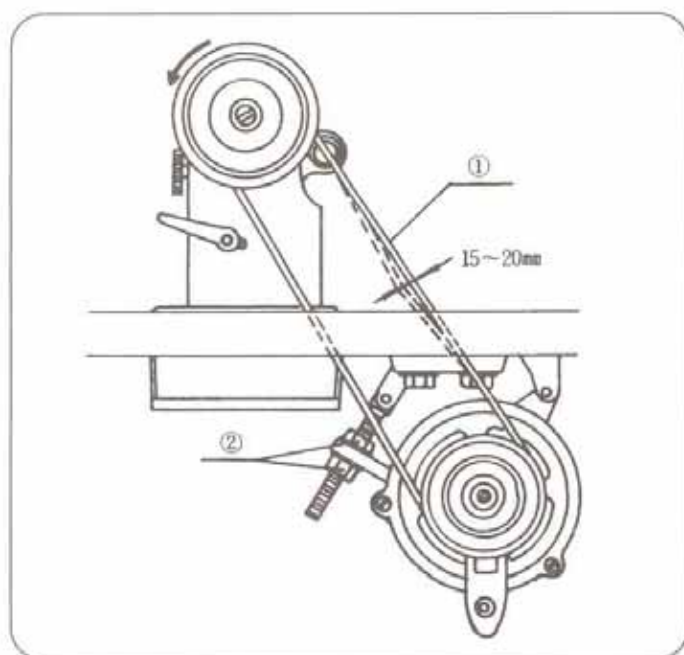
Fill arm oil-tank ① and bed oil tank ② with oil up to red-marked (H) line, Check the oil everyday.



Adjusting quantity of oil supplied to the hook.

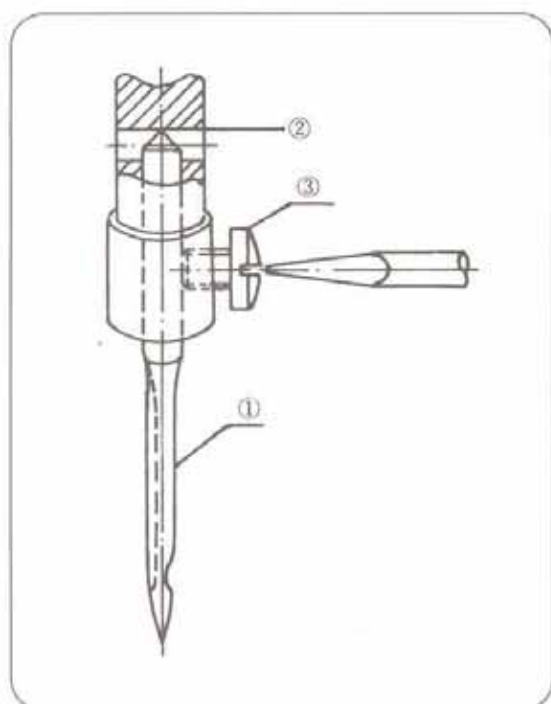
Use the oil adjusting screw ③ at the right side of the bed oil tank ②. As the screw is turned towards (+) direction (clockwise) the oil supply is increased and turning the screw towards (-) direction (counter-clockwise) decreases the oil supply.

12. Before operating the sewing machine



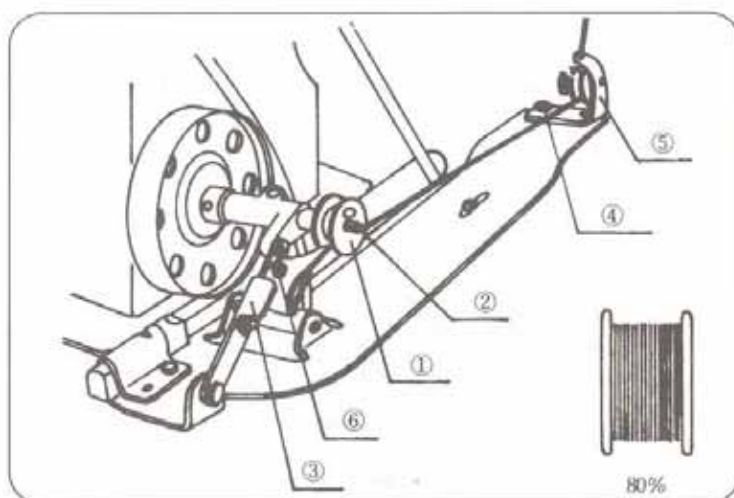
- * The machine revolves to the left as observed from the pulley.
- * To adjust the belt tension, turn nut ② to the extent that the belt ① is distorted by 15 to 20mm when pressed with hand.
- * The presser foot should be lifted when the machine is idling.

13. Attaching the needle



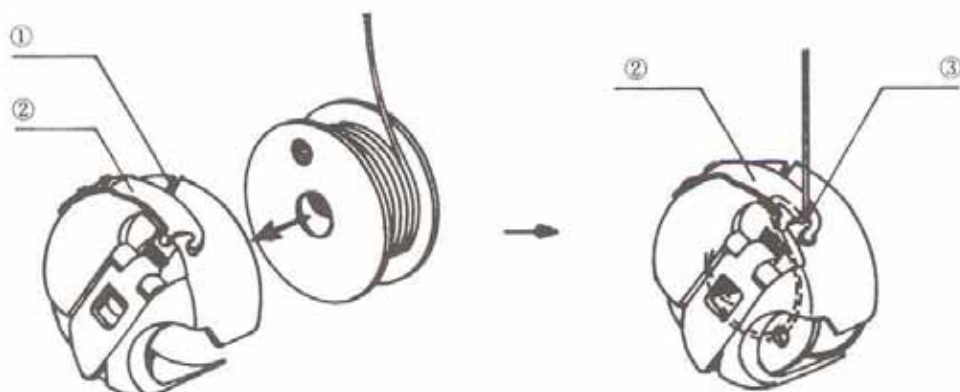
Hold the needle ① with its long groove facing precisely to the left side, put the needle right into the bottom of the needle bar hole ② and tighten the needle fixing screw ③.

14. Winding the thread onto the bobbin



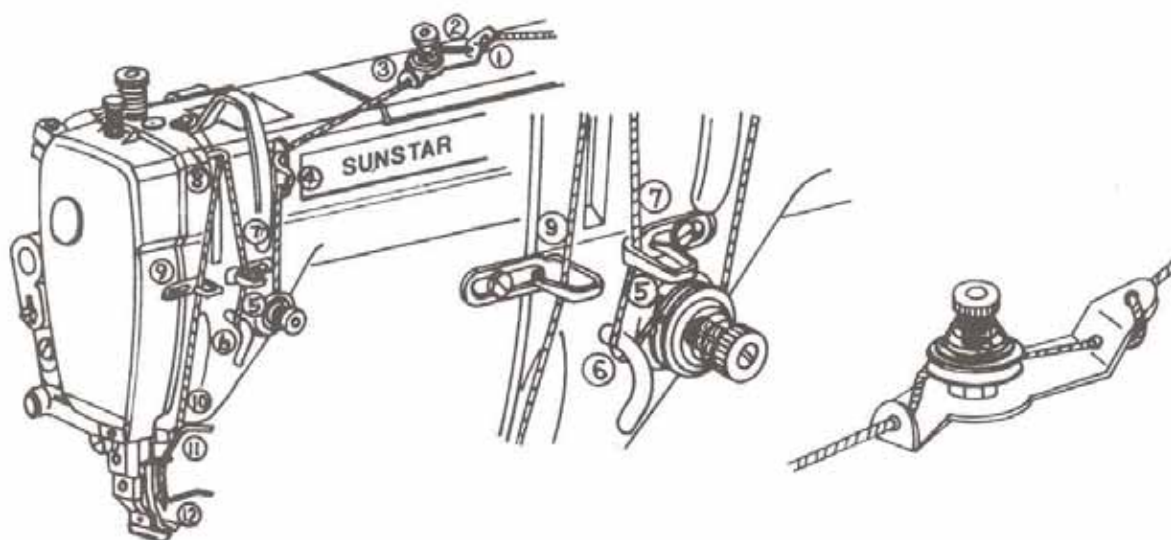
- 1) Fit the bobbin ① onto the thread winding axis ②.
- 2) Push operating lever ③ for thread winding
- 3) Wind the thread onto the bobbin five or six times by hand in the winding direction and operate the machine.
- 4) If the thread is not wound in parallel, loosen the thread guide fixing screw ④ and move the thread guide board ⑤ to the right or left to adjust it.
- 5) When the thread is wound too tightly, loosen the adjusting screw ⑥ and if wound too loosely, tighten the screw.

15. Setting the bobbin into bobbin case



- 1) The bobbin should be set into the bobbin as shown in the above figure.
* If the bobbin is set in the oppsite direction, the thread will be released to loosely and then gets tangled.
- 2) Place the thread under the spring of the bobbin thread tension adjusting board ② through the thread passage ① and pull out the thread from the thread hole ③.

16. Threading the machine head



- * Put the thread take-up device at its top position.
- * Put the thread into the needle from left to right.