

**MITSUBISHI  
INDUSTRIAL  
SEWING  
MACHINE**

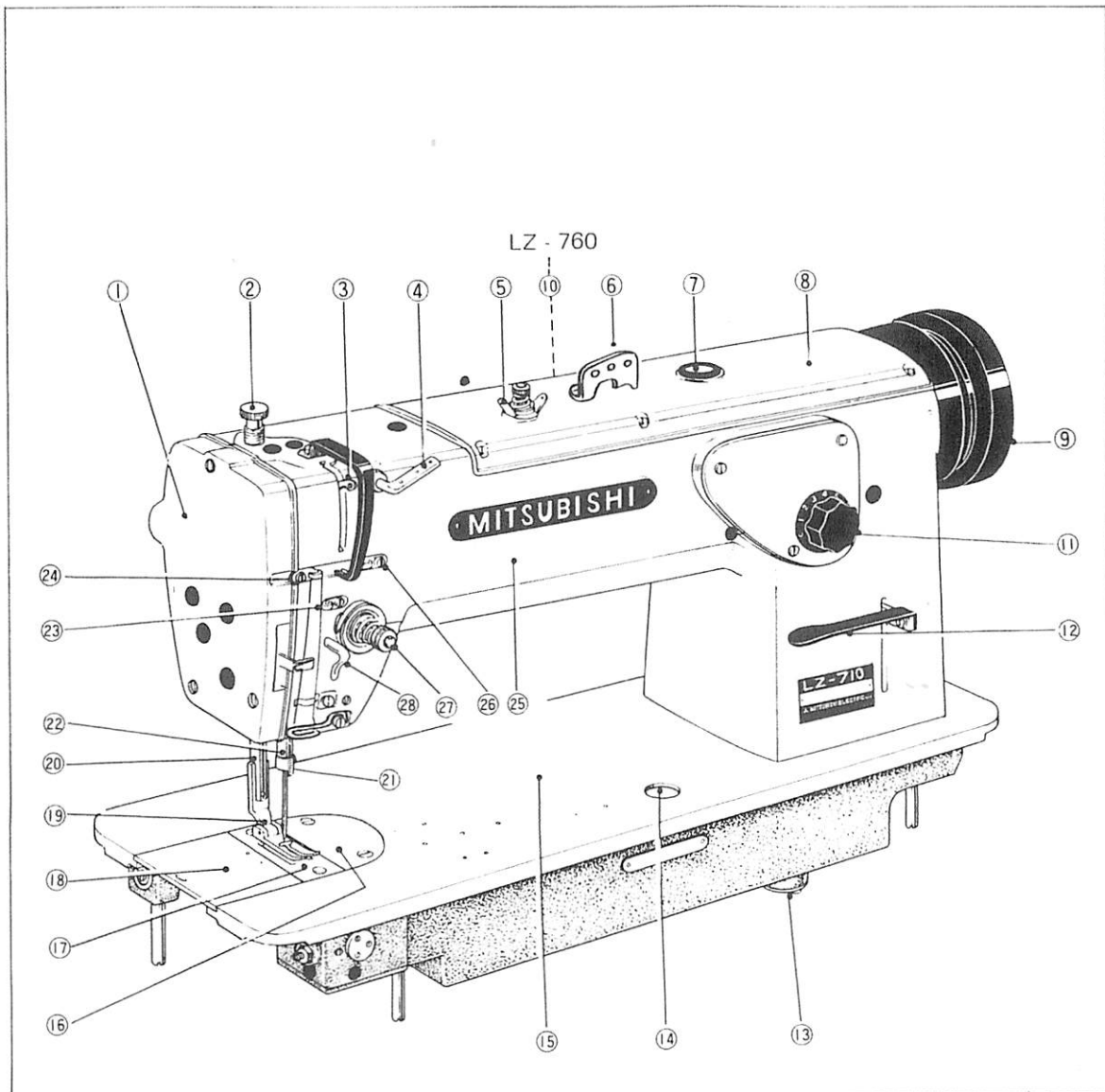
Model

**LZ-710  
LZ-760**

classes

**INSTRUCTION FOR OPERATION MANUAL**

## Main parts name of machine head

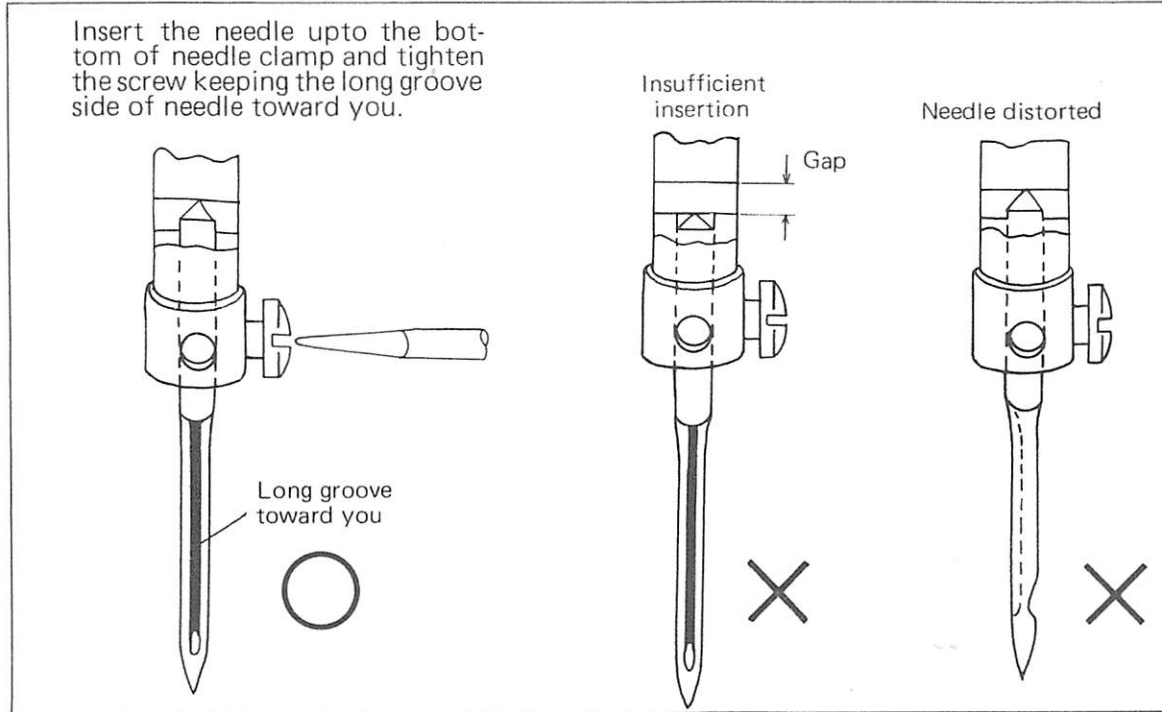


- |                                   |                               |                                    |
|-----------------------------------|-------------------------------|------------------------------------|
| 1. Face plate                     | 10. Zigzag bight adjuster     | 20. Presser bar                    |
| 2. Presser regulating thumb screw | 11. Zigzag bight adjuster     | 21. Needle bar thread guide        |
| 3. Thread take-up lever           | 12. Reverse lever             | 22. Needle bar                     |
| 4. 3-hole thread guide            | 13. Oil pump                  | 23. Thread guide (Arm)             |
| 5. Pre-tension                    | 14. Stitch adjust push button | 24. Thread guide (Arm left)        |
| 6. 3-hole thread guide            | 15. Bed                       | 25. Arm                            |
| 7. Oil check window               | 16. Auxiliary plate           | 26. Thread guide (Arm right)       |
| 8. Top cover                      | 17. Throat plate              | 27. Upper thread tension regulator |
| 9. Balance wheel                  | 18. Slide plate               | 28. Upper thread guide             |
|                                   | 19. Presser foot              |                                    |

# How to use the machine

## 1. How to attach needle

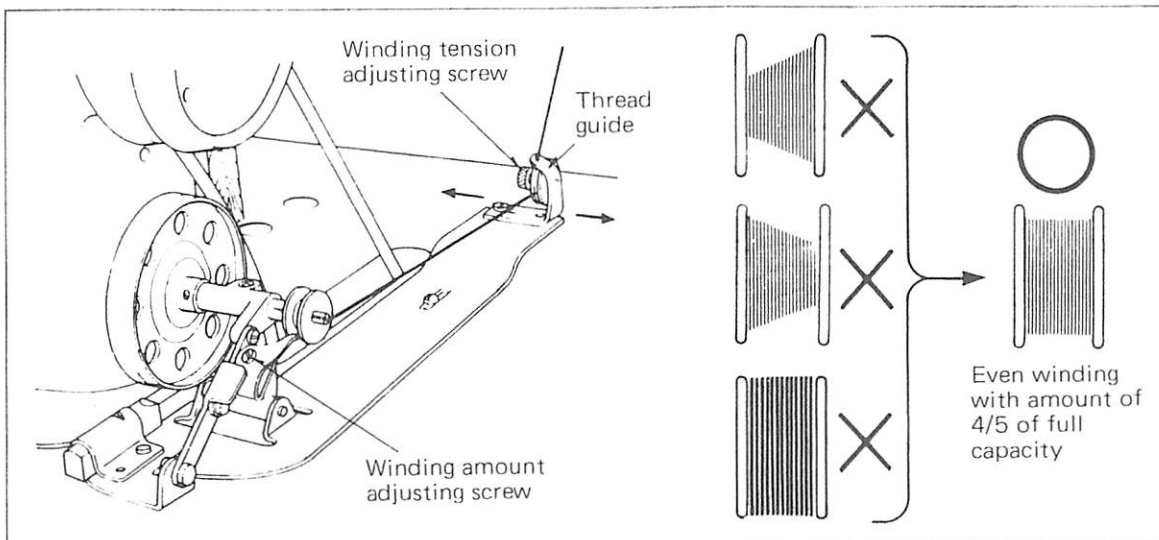
Note: Before making the following adjustment, switch off the power source by all means.



## 2. How to wind the lower thread on the bobbin

Note: In case of rotating the machine without sewing, keep the presser foot raised.

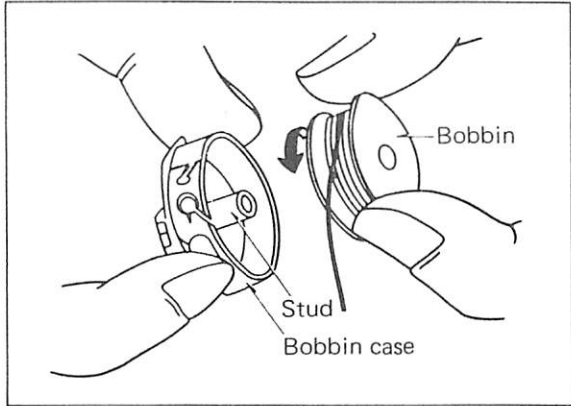
- Adjustment: \*\* Strength of winding: Particularly in case of nylon or tectoron thread, it is desirable that the bobbin is wound enough loose.
- \*\* Uneven winding: In case of uneven winding, adjust the thread guide slightly toward the less wound part of bobbin so that to obtain even winding.
- \*\* Winding amount of thread: When the winding amount of thread is excessive loosen the adjusting screw and tighten when insufficient.



# How to use the machine

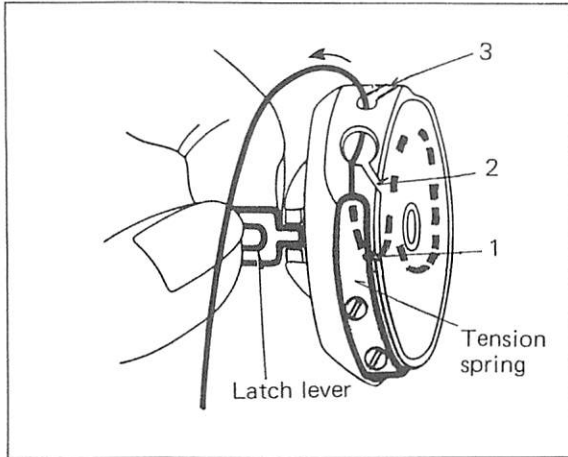
## 3. How to place the bobbin and the bobbin case

1. Insert the bobbin to move in the arrow direction when pull out the thread.



2. Lead the thread through the slit 1, 2 and 3.

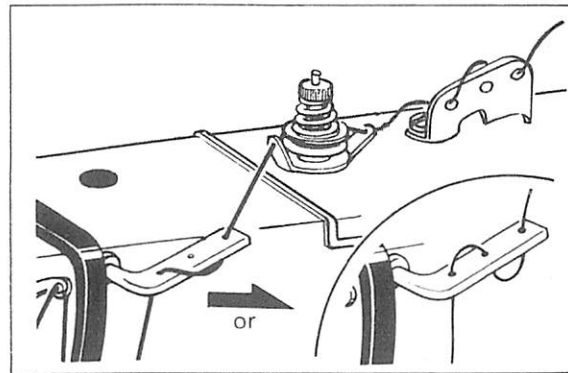
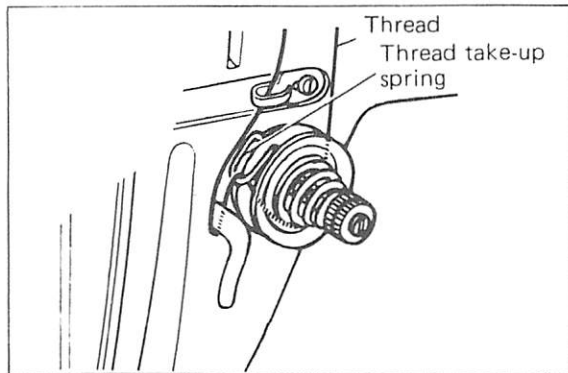
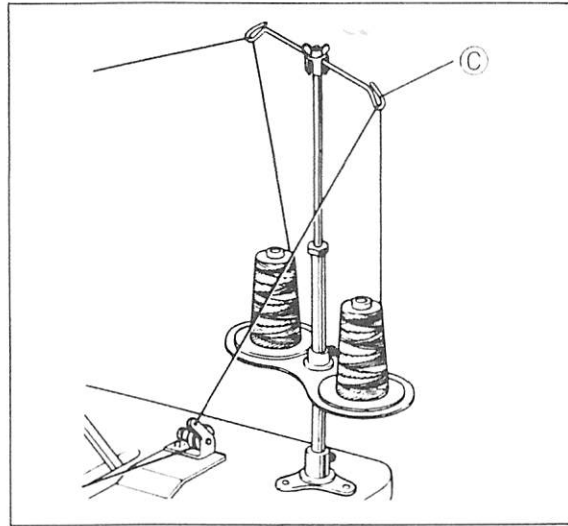
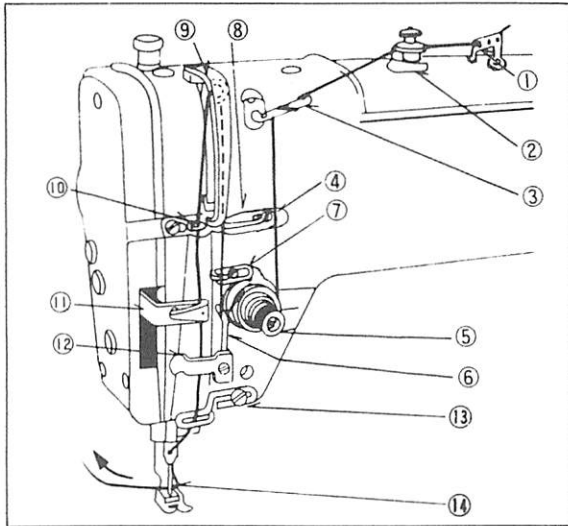
3. Insert the bobbin case into hook holding the latch lever.



## 4. Threading

Raise the thread take-up lever to its highest position and thread the upper thread in the following order.

Note: The thread guide (C) of cotton stand is to be put just above the spool.



# How to use the machine

## 5. Adjustment of zigzag width

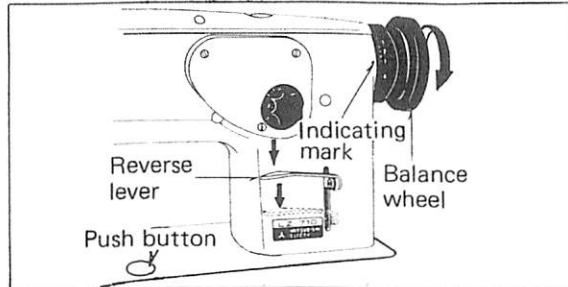
Causion:

- \* No adjustment of zigzag width can be done during operation of machine. Do not touch the dial when LZ-710 machine is operating, for the dial rotates simultaneously.
- \* Adjust the needle to be above the cloth worked. Needle may be damaged or bended if zigzag width is adjusted while the needle is inserted into the cloth.

## 6. Adjustment of stitch length & backstitch

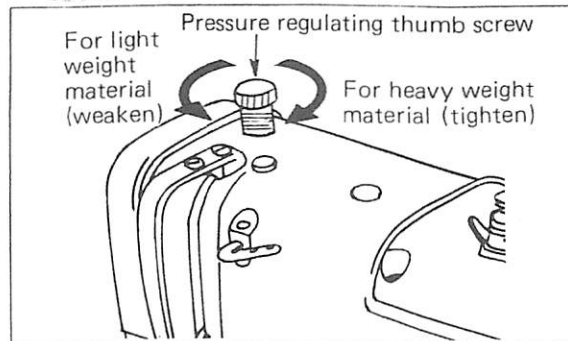
1. Pushing the push button down and turn the balance wheel slowly toward you.
2. So that the push button goes down further and the balance wheel running.  
At this time set the graduation of the dial on the Balance Wheel with the marking on the arm and then release the push button shown in Fig.

Causion: Do not touch the push button when operating the machine. The machine will be broken if the push button is pushed.

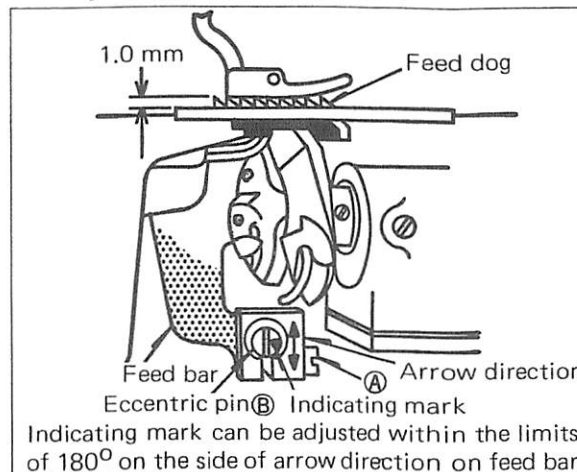


## 7. Adjustment of pressure on presser foot

Pressure on the presser foot is to be adjusted in accordance with materials to be sewn.

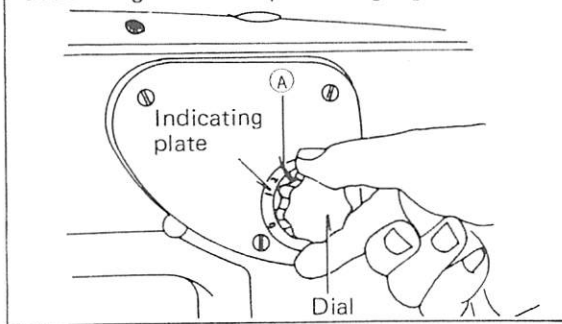


## 8. Adjustment of feed dog height



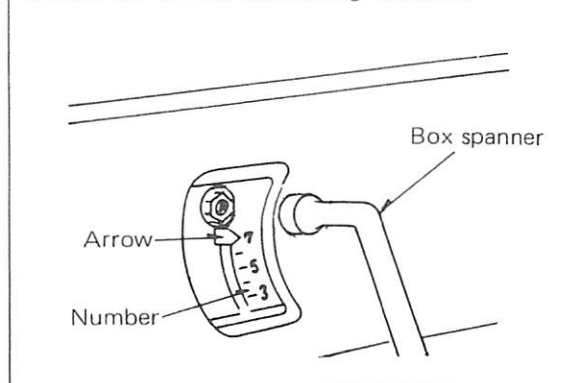
### ◆ LZ-710

Turning the zigzag width adjustable dial and set an indicating line "A" to the scale according to the required zigzag width.



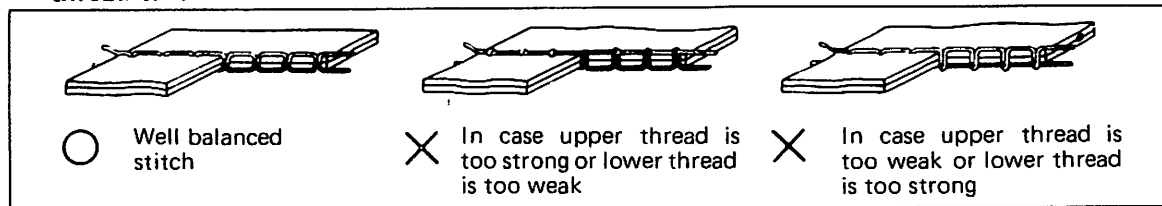
### ◆ LZ-760

Loosen the nut by box spanner and set the arrow to the indicating number.



# How to use the machine

## 9. Adjustment of thread tension

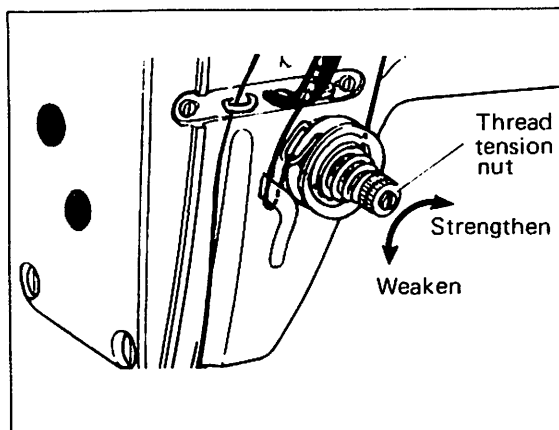


## 10. Upper thread tension

\*\* Upper thread is adjusted according to the lower thread tension.

\*\* Upper thread tension is adjusted by tension regulating thumb nut.

For special fabric sewing with special thread, the desired tension can be obtained by adjusting the strength and operating range of thread take-up spring.



### ◆ Adjustment of the thread take-up spring

\* Adjustment of strength of the thread take-up spring.

1. Loosen the screw "A" of the upper thread tension stud.

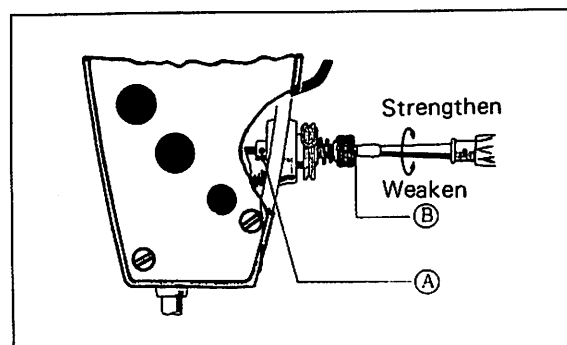
2. It adjusts the strength of the thread take-up spring by turning the upper thread tension stud "B" as shown in the Fig. (It obtained about 25g strength in more 180 degrees turning when the take-up spring fits to stopper from 0 pressure.)

\* Standard tension is as follows.

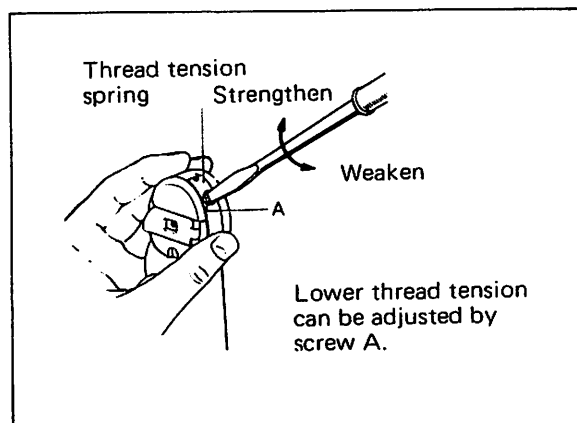
Light material . . . . . about 20g

Medium material . . . . . about 25g

Heavy material. . . . . about 30g



## 11. Lower thread tension



\* Standard of lower thread tension

1. Bobbin case should have a bobbin with regular amount of the cotton thread #60.

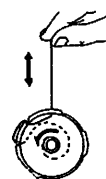
2. It is the standard tension of the thread that the bobbin case will be fallen slowly when holding the end of the thread as shown in the Fig. (10 ~ 15g)

In cases of

light fabrics . . . . . 10 ~ 20g

medium fabrics . . . . . 20 ~ 30g

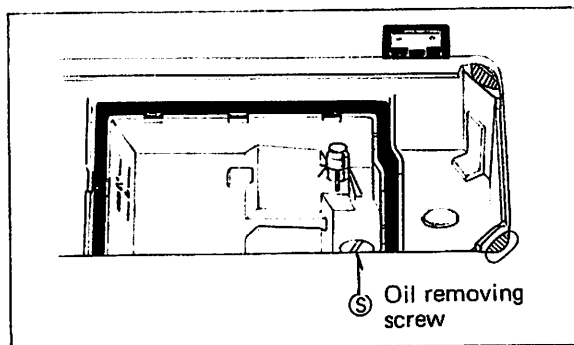
are best provided.



## Precaution before starting to operate

### 1. Lubrication-1

Before starting to operate pour oil upto the position (H) of oil tank. While operating you are requested to check the oil volume periodically, and in case volume would come less than the position (L) replenish oil upto the position (H).

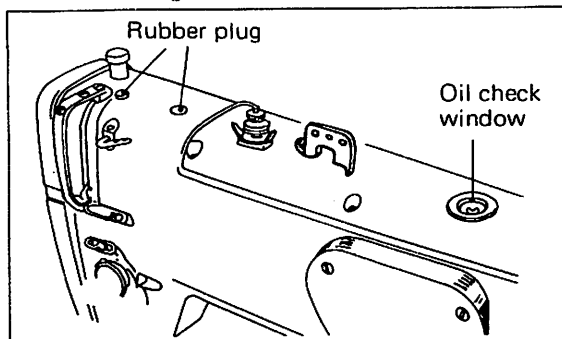


### 2. Lubrication

When starting to sew initially and after kept idle for a long time without using it is essential to oil enough through the oil holes in the red colored rubber plug.

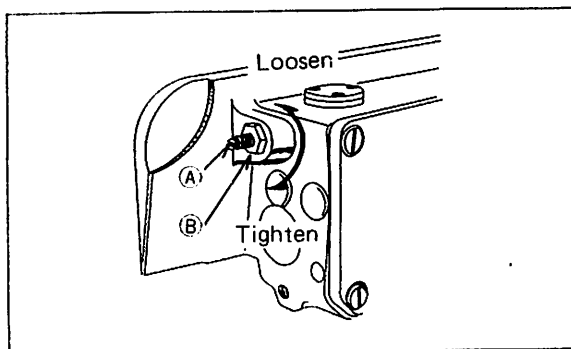
#### Condition of oil lubrication

While operating the machine it is necessary to check the condition of oil lubrication through the oil check window.



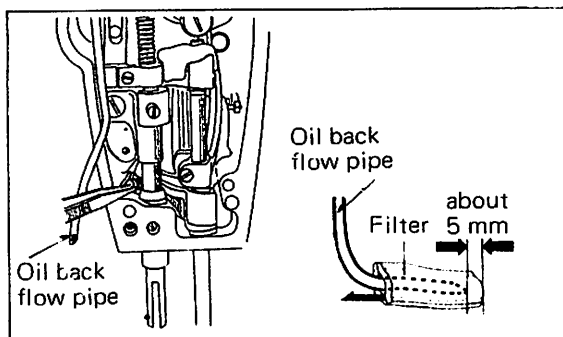
### 3. Adjustment of lubrication to the hook

Loosen the nut (B) and turn the screw (A) to tighten . . . . . more  
to loosen . . . . . less



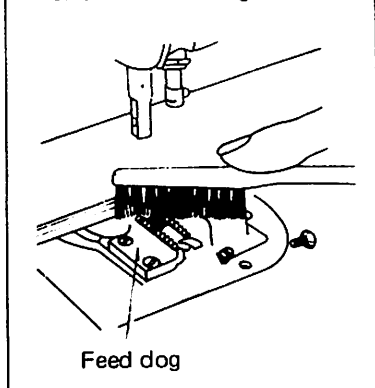
### 4. Replacement of oil filter

In case oil back flow capability becomes out of order due to waste thread, fabric starch, etc., clean or replace the filter fixed on the end of oil back flow pipe.

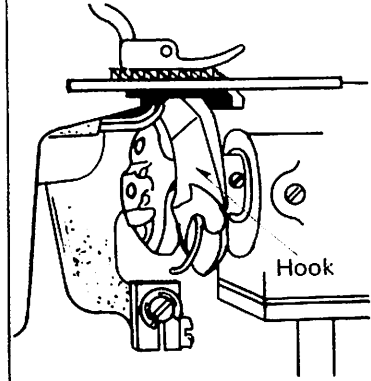


### 5. Periodical cleaning

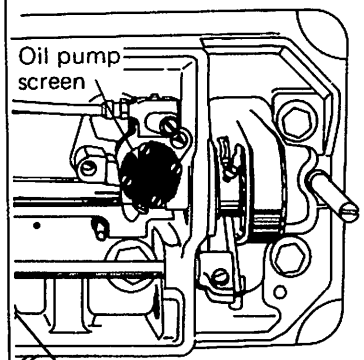
\* Remove the throat plate and clean the feed dog.



\* Lay down the machine head and clean the hook.



\* Lay down the machine head and clean the oil pump screen.



## Specifications

MODEL	LZ-710-11	LZ-760-11	LZ-760-11-D
For	regular zigzag	3-stitch zigzag	Blind stitches zigzag
Speed	4,500 s.p.m.	3,500 s.p.m.	3,000 s.p.m.
Needle bar stroke	32.3 mm (1-9/32")	same	same
Presser foot lift	7 mm (9/32")	same	same
Max. stitch length	4 mm (5/32")	same	same
Space at right of needle	260 mm (10-1/4")	same	same
Hook	DP2-57 (auto-lubrication)	same	same
Zigzag actuator	eccentric	grooved cam	grooved cam
Max. width of bight	0 ~ 5 mm (0 ~ 5/32")	overall 9 mm (11/32")	0 ~ 5 mm (0~5/32")
Needle	Schmetz 19:13 SKF 70	same	same
	Singer 135x7 #11	135x7 #11	135x7 #11
	Organ DPx5 #11	DPx5 #11	DPx5 #11
Reverse lever	equipped	same	same


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