

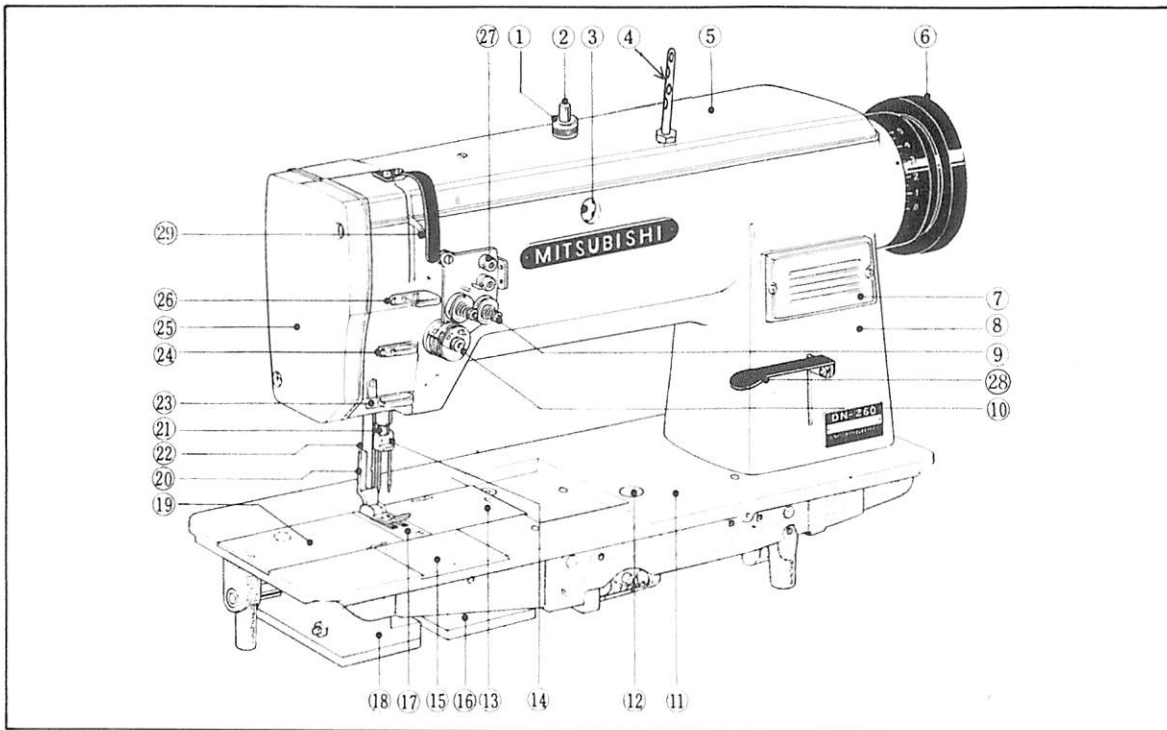
**MITSUBISHI  
INDUSTRIAL  
SEWING  
MACHINE**

Model

**DN-260**  
classes

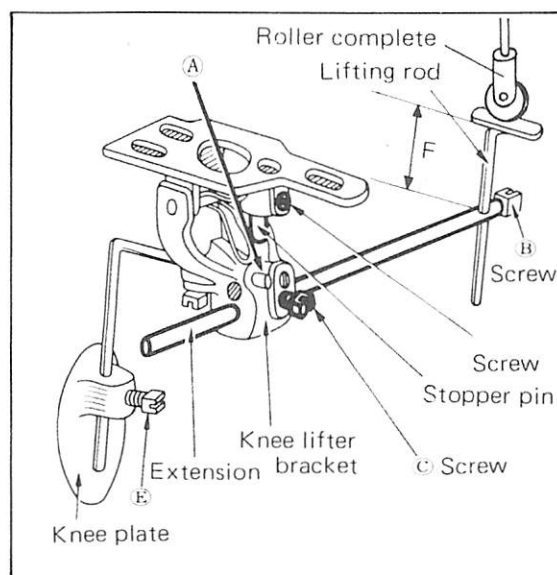
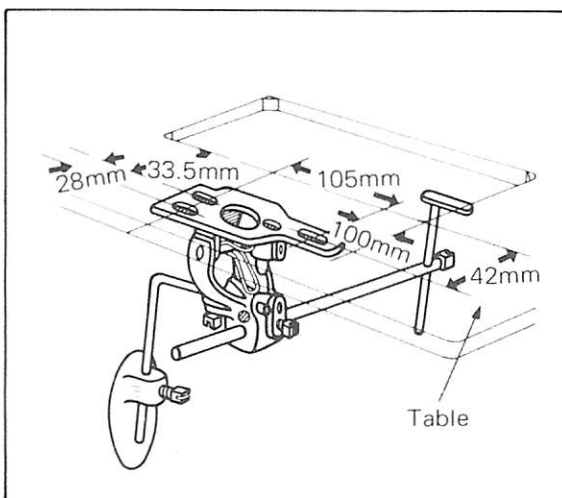
**INSTRUCTION FOR OPERATION MANUAL**

## Main parts name of machine head



- |                                    |                                   |                            |
|------------------------------------|-----------------------------------|----------------------------|
| 1) Press stud for oil plunger.     | 11) Bed.                          | 21) Needle bar.            |
| 2) Press bar for oil plunger.      | 12) Stitch regulator push button. | 22) Presser bar.           |
| 3) Oil level indicator.            | 13) Slide plate (right).          | 23) Thread guide (lower).  |
| 4) Thread guide (top of arm).      | 14) Needle clamp                  | 24) Thread guide (middle). |
| 5) Arm top cover.                  | 15) Slide plate (front).          | 25) Face plate.            |
| 6) Balance wheel.                  | 16) Hook saddle. (right)          | 26) Thread guide (upper).  |
| 7) Front cover.                    | 17) Throat plate.                 | 27) Pre-tension.           |
| 8) Arm                             | 18) Hook saddle. (left)           | 28) Feed reverse lever     |
| 9) Upper thread tension regulator. | 19) Slide plate. (left)           | 29) Thread take-up lever   |
| 10) Thread controller.             | 20) Presser foot.                 |                            |

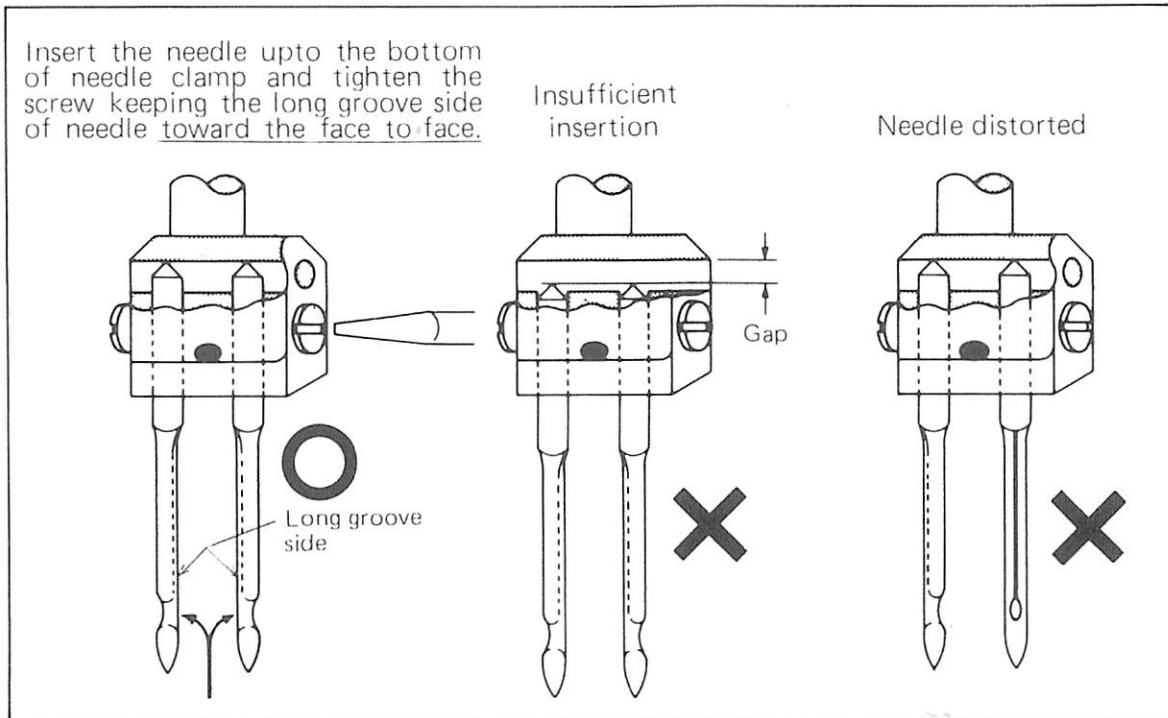
## How to install and adjust the knee lifter



## How to use the machine

### 1. How to attach needle

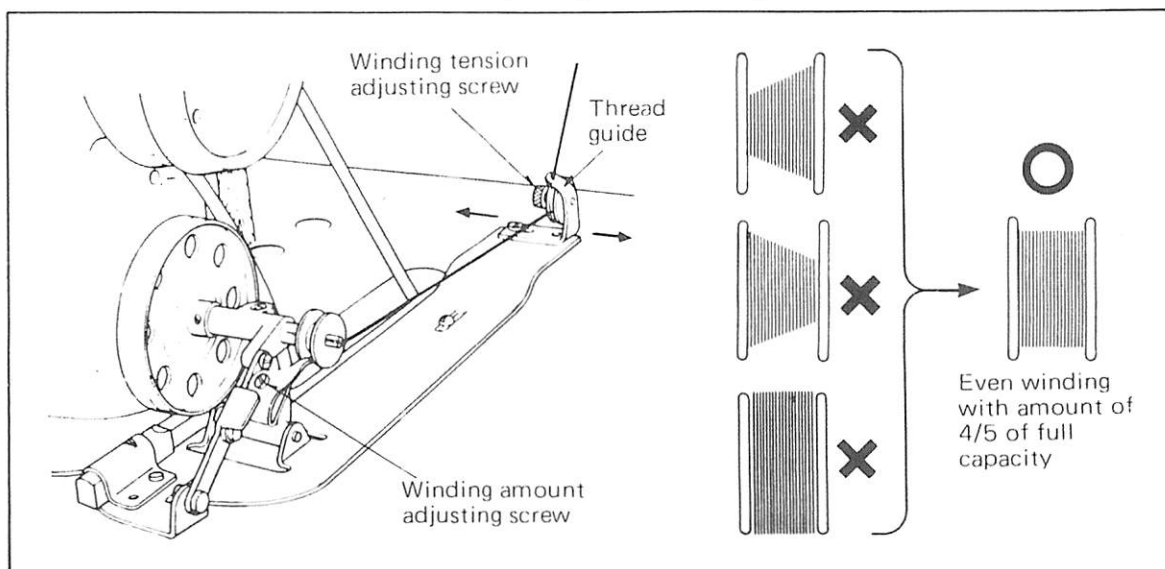
Note: Before making the following adjustment, switch off the power source by all means.



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

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

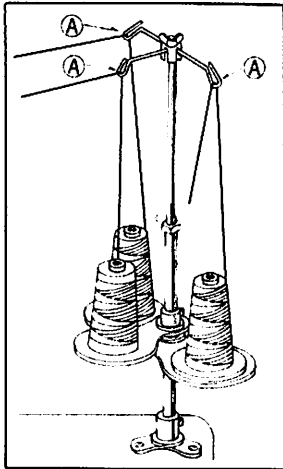
- Adjustment: \*\* Strength of winding: Particularly in case of nylon or tetoron thread. It is desirable that the bobbin is wound enough loose.
- \*\* Uneven winding: In case of uneven winding, adjust the thread guide slightly toward the less wound part of bobbin so that to obtain even winding.
- \*\*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



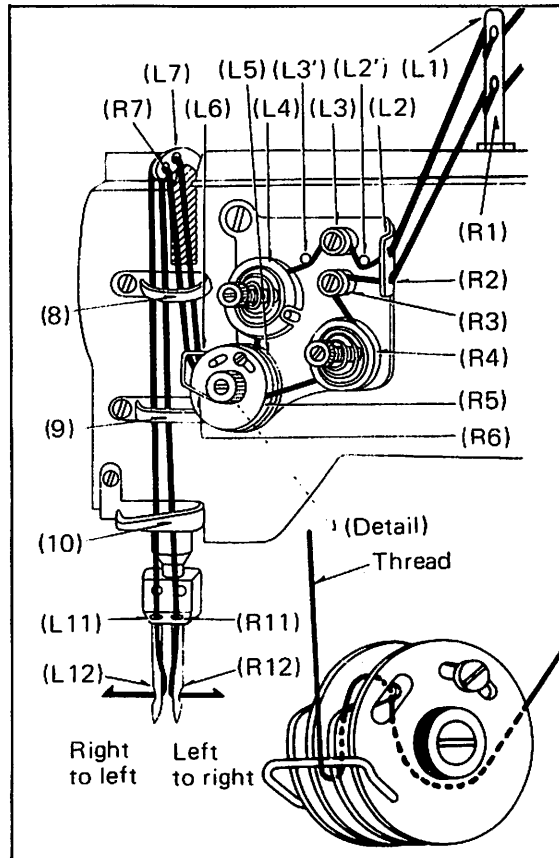
## How to use the machine

### 3. Threading the machine

Note: The thread guide (A) should be positioned just above the thread spool.



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



### 4. Adjustment of stitch length

Stitching length can be adjusted with the stitch regulator push button on the bed and the balance wheel.

- 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.

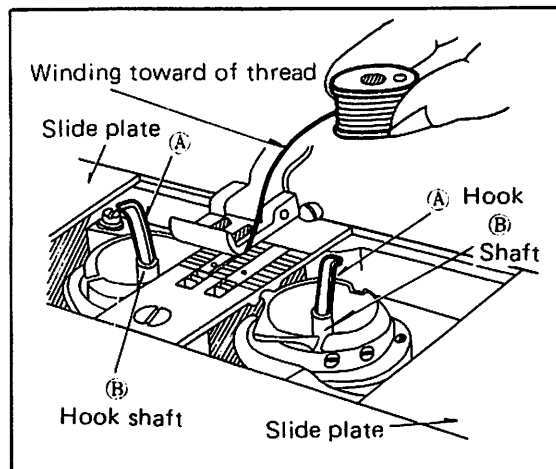
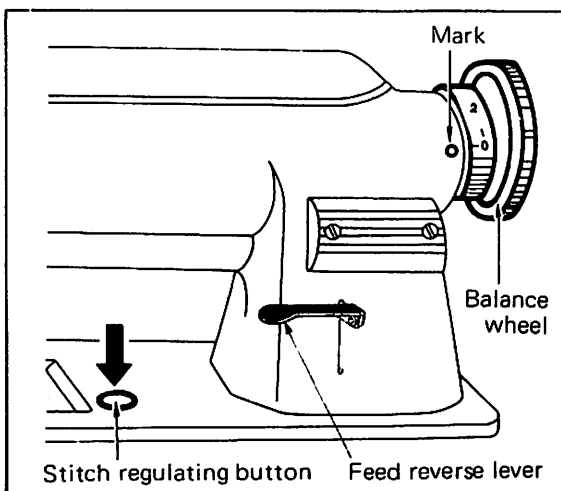
At this time set the graduation of the dial on the Balance Wheel with the marking on the arm and then release the push button shown in Fig.

Caution: NEVER depress the button while the machine is running.

To change the direction of feed for back tacking, depress feed reverse lever to lowest position until back tack is completed.

### 5. How to place the bobbin into the shuttle hook

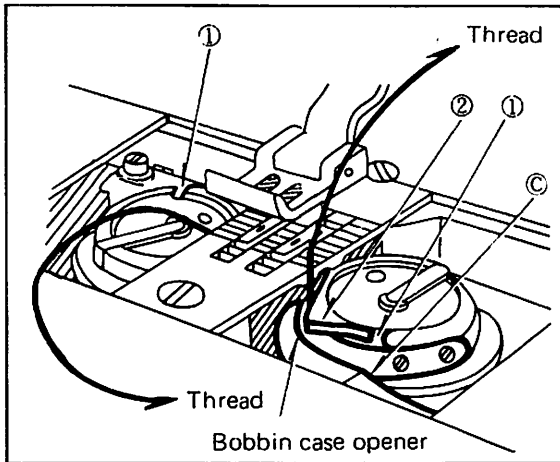
Note: In case of placing the bobbin into the shuttle hook, place the bobbin by making winding toward the thread in correct direction shown in Fig.



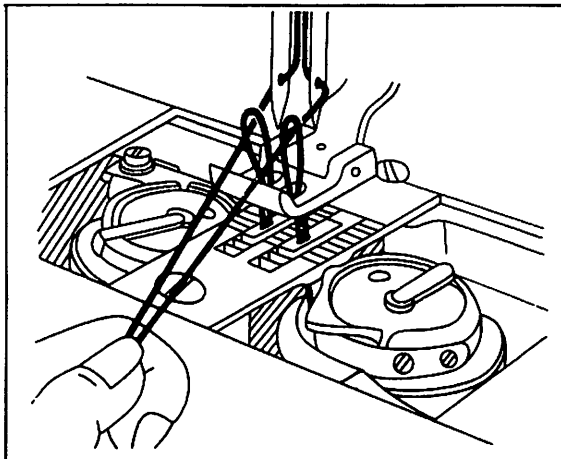
# How to use the machine

## 6. Lower threading

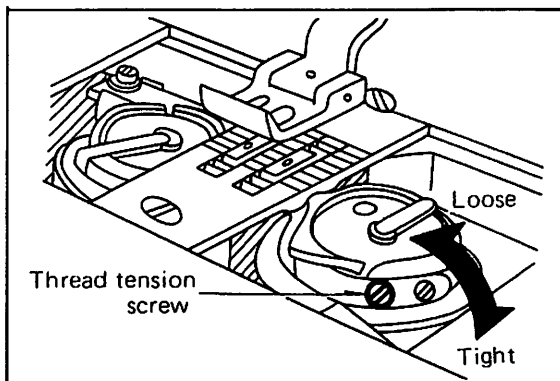
- 1) Lead the end of thread to the groove of the shuttle hook ① shown in Fig. and through the horn ②, pull the thread out.



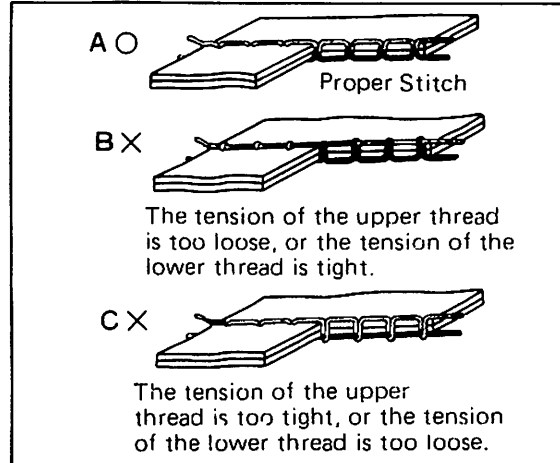
- 2) Holding the end of the upper thread by left hand and turn the balance wheel slowly. Pull out the lower thread and hold it on the other side from the underneath of the presser foot.



## 9. Lower thread tension



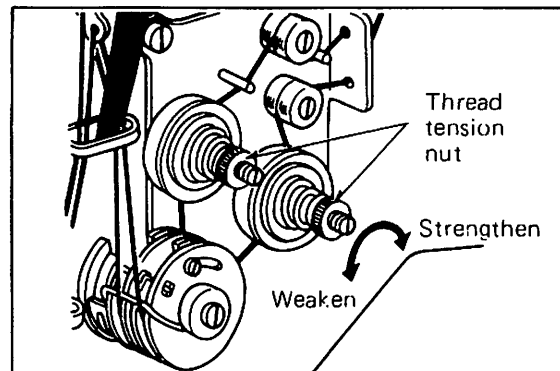
## 7. Adjustment of thread tension



## 8. Upper thread tension

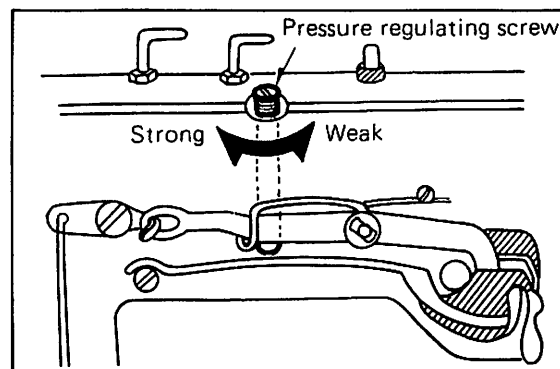
- \*\* Upper thread is adjusted according to the lower thread tension.
- \*\* Upper thread tension is adjusted by tension regulating thumb nut.

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.



## 10. Adjustment of pressure on presser foot

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





## Trouble & Repair

Trouble	Causes	Repairing
<b>Skip stitching</b>	<b>1) Needle</b> * Bent * Not suited with thread	Change the needle with new one. Replace with proper one according to the thickness of thread.
	<b>2) Wrong attached needle</b> * Insertion not enough * Needle distorted	Insert properly as per instruction manual.  Attach the needle as its hole faces side ways. (But, using the nylon or tetoron thread, distance the needle hole somewhat, after checking of loop finish.)
	* Attached with its opposite side	Correct the attaching side, attach the needle keeping its groove side toward the left, and concave side toward the right.
<b>Irregular stitch</b>	<b>1) Upper thread tension too weak</b> <b>2) Thread take-up spring too weak</b> <b>3) Lower thread tension too weak</b>	Turn the upper thread tension regulator thumb nut to the right to strengthen. Turn the tension stud to the right to strengthen.  Turn the bobbin case tension screw to the right to strengthen.
<b>Thread cuts</b>	<b>1) Poor thread</b>	Change the thread with better quality one.
	<b>2) Needle</b> * Needle bent * Wrong attached needle * Thread too big for the needle size	Change the needle with new one. See No. 2 of skip stitching.  Either change with proper size thread or with proper needle.
	<b>3) Upper thread tension too strong</b> * Dust deposit between tension discs. * Excessive or uneven winding of lower thread on the bobbin * Dust deposit in bobbin case * Damaged thread tension on bobbin case * Wrong inserted bobbin into bobbin case	Turn the tension regulator nut to the left to weaken.  Remove the tension discs and clean by brush.  Rewinding correctly with the winding amount of 4/5 of its full capacity.  Remove the bobbin case and clean by brush.  Change with new one.  Replace the bobbin correctly, so that to rotate the bobbin clockwise when the thread is pulled-out.
<b>Puckering</b>	<b>1) Needle &amp; thread too big for fabric</b>	Change with proper size needle and thread for fabric.
	<b>2) Thread tension (upper or lower thread)</b>	Adjust the thread tension by regulators thumb nut, take-up spring, adjusting screw on the bobbin case.
	<b>3) Pressure of presser foot</b>	Weaken by turning the regulating thumb screw to the left.

# Precaution before starting to operate

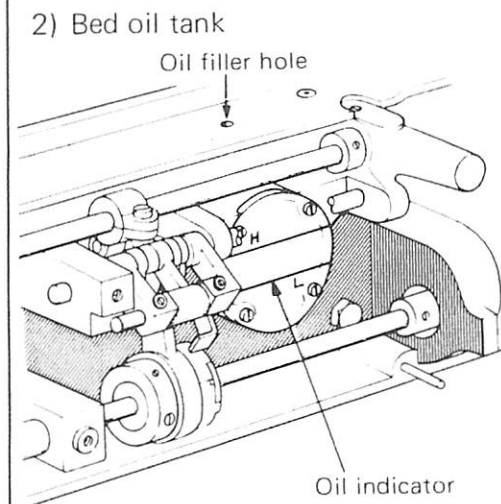
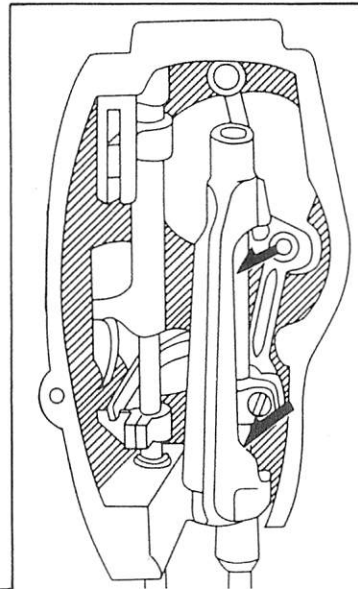
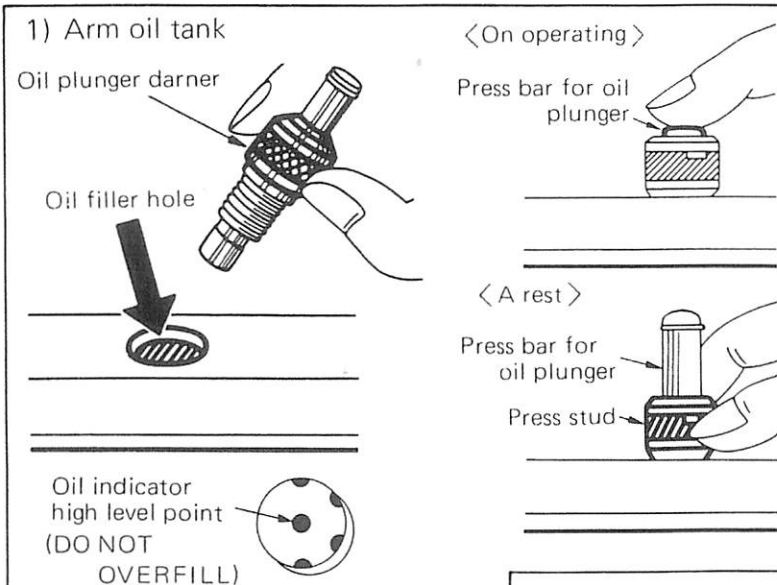
## 1. Lubrication-1

Before starting to operate pour oil upto the position, arm, bed and hook saddle of oil tank.

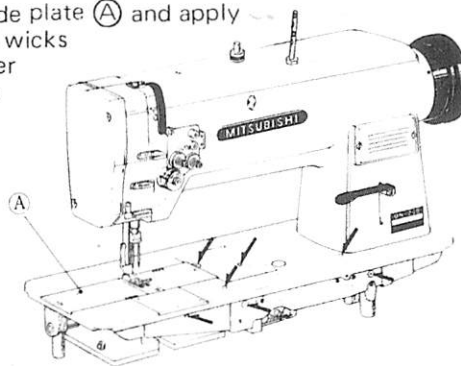
## Lubrication-2

The volume of lubrications

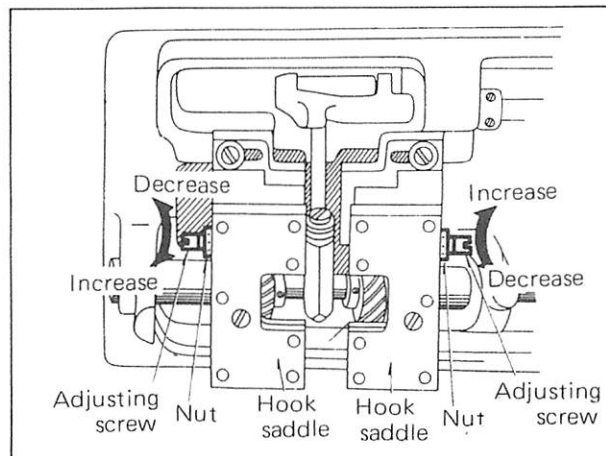
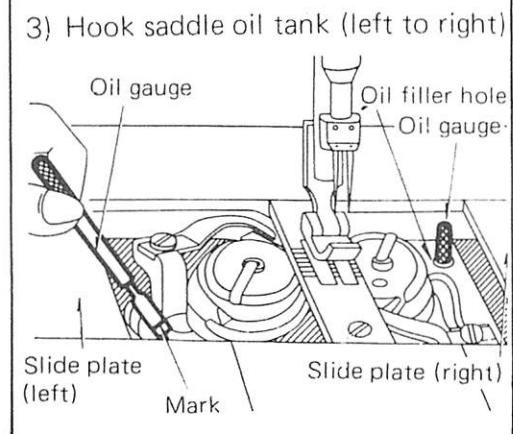
← ..... 5 - 6 drops.



Open slide plate (A) and apply oil to all wicks just under the slide plate.



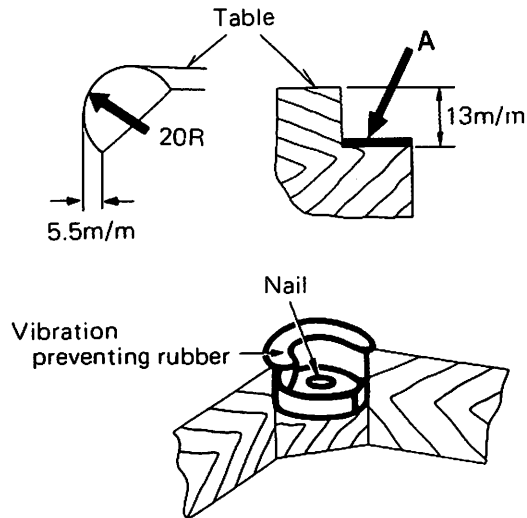
## 2. Adjustment of rotating hook oil flow regulator



### How to mount vibration-preventing rubber with table

The vibration-preventing rubber is used to prevent the machine from vibrating and thereby to provide smooth operation of the machine. Fit these rubber at the four corners of the table as shown in Fig.

- **Achieve spot facing** of 20 mm radius and 13 mm depth at the four corners of the table. Be sure to give smooth facing to the face A where spot facing is achieved.
- **Nail the vibration-preventing rubbers** down at the four corners of the table as shown in Fig.



## Specifications

MODEL	DN-260-10	DN-265-10	DN-260-22	DN-265-22
Number of needle	two	two	two	two
Speed	4,000 s.p.m.	3,500 s.p.m.	3,000 s.p.m.	3,000 s.p.m.
Rotary hook	regular size	regular size	large size	large size
Max. stitch length	5mm(5 s.p.i.)	same	same	same
Needle bar stroke	33.4mm(1-5/16")	33.4mm(1-5/16")	35mm(1-3/8")	35mm(1-3/8")
Presser foot lift	7.2mm(9/32")	same	same	same
Space at right of needle	245mm(9-11/16")	same	same	same
Needle	135x7(DPx7) #14, #16	same	same	same
Reverse lever	—	equipped	—	equipped
Type of table hinges	DN Type	same	same	same
Gauge (Standard)	3.2mm(1/8"), 4.8mm(3/16"), and 6.4mm(1/4")	same	same	same
(Special)	2.4mm(3/32"), 4.0mm(5/32"), 5.6mm(7/32"), 8mm(5/16"), 9.5mm(3/8"), 12.7mm(1/2"), 16.0mm(5/8"), 25.4mm(1"), 28.5mm(1-1/8"), and 38.9mm(1-1/2")	same	same but not available for 38.0mm(1-1/2")	same
Bed dimension	517mmx178mm (20-3/8"x7")	same	same	same

**MITSUBISHI ELECTRIC CORPORATION**  
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