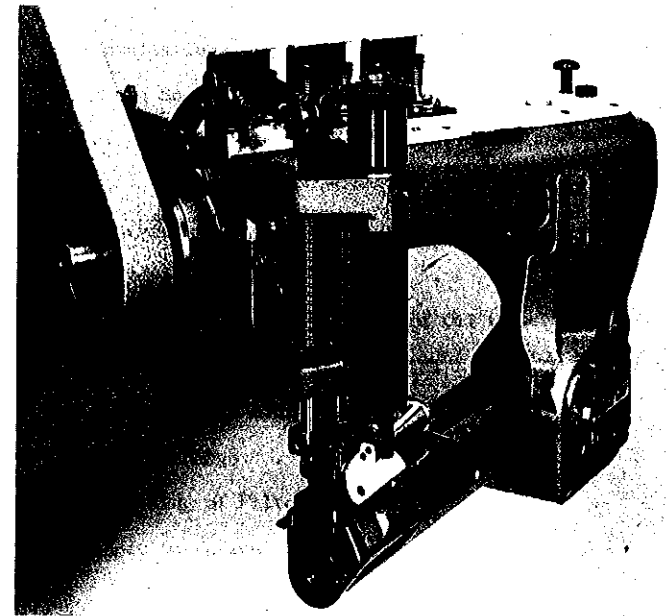


***Yamato***

**INSTRUCTIONS  
FOR  
MODEL DT-30-01E  
FEED-OFF-THE-ARM MACHINE  
FOR  
3 Needle, Double Chainstitch Sewing**



Printed in Japan 83.7.5H®



***YAMATO CORPORATION***

## I N T R O D U C T I O N

This Instruction Book has been prepared for all users of Class DT - 30, 3 Needle, 6 Thread, 3 Lines Double Chainstitch Sewing Machines for Double-lapped Seaming on Heavy or Extra Heavy Fabrics, the production of Yamato Sewing Machine Mfg. Co., Ltd., Japan.

Your garment business will bring a brilliant success when you are versed in the operation and maintenance with the superior quality of our DT - 30 machines by this Instruction Book.

## C O N T E N T S

|   | <u>Page</u> |
|---|-------------|
| 1. Classification of Machine . . . . .                    | 1           |
| 2. Numbering on Model Plate . . . . .                     | 1           |
| 3. Specifications . . . . .                               | 1           |
| 4. Installation . . . . .                                 | 3           |
| 5. Sewing Speed and Turning Direction of Pulley . . . . . | 5           |
| 6. Motor and Belt . . . . .                               | 5           |
| 7. Lubrication  |             |
| 7 - 1 Lubricant . . . . .                                 | 6           |
| 7 - 2 Oil Feeding . . . . .                               | 6           |
| 7 - 3 Oil Gauge and Confirmation of Oil Flow . . . . .    | 6           |
| 7 - 4 Oil Priming . . . . .                               | 7           |
| 7 - 5 Oil Replenishment . . . . .                         | 7           |
| 7 - 6 Oil Exchange . . . . .                              | 8           |
| 7 - 7 Cleaning of Filter Screens . . . . .                | 8           |
| 8. Proper Operation                                       |             |

- - to be continued on the following page - -



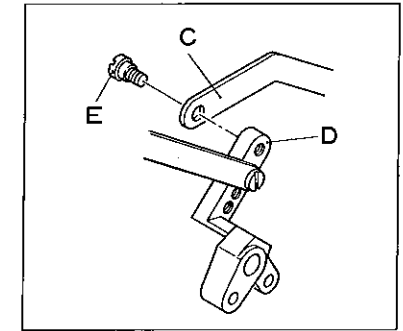
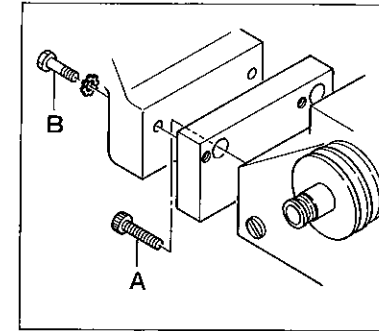
|                        |                       |   |
|------------------------|-----------------------|---|
| 3.                     | <u>Specifications</u> | (Continued)   |
| Sewing Speed:          |                       | Up to 4,500 s.p.m.  |
| Stitch Length:         |                       | 2.1 - 4.2 mm.<br>6 - 12 stitches per inch, 7 - 14 stitches per 30 mm.                                     |
| Use:                   |                       | 3 lines double chainstitch for double-lapped seaming on heavy or extra heavy fabrics                      |
| Needle Distance:       |                       | E - - 6.4 mm. ( $\frac{1}{4}$ inch) (3.2 + 3.2)   |
| Needle to Be Used:     |                       | TV X 3, ORGAN or UY - 128 GAS, SCHMETZ  |
| Needle Stroke:         |                       | 33 mm.  |
| Presser Foot Lifting:  |                       | 8 mm., maximum  |
| Feed Adjustment:       |                       | By Lever  |
| Differential Feeding:  |                       | Dial System   |
| Differential Ratio:    |                       | Normal differential feeding -<br>1.0 : 1.3 maximum<br>Reverse differential feeding -<br>1.0 : 0.7 maximum |
| Feed Roller Operation: |                       | Intermittent feeding by the Clutch Mechanism  |
| Lubrication:           |                       | Automatic feeding by the Gear Pump  |
| Lubricant:             |                       | YAMATO SF OIL #68 or TERESSO #68  |
| Reservoir:             |                       | Capacity -<br>Frame . . . . . 100 c.c., approx.<br>Cylinder . . . . . 100 c.c., approx                    |

4. Installation

The machine must be installed correctly according to the illustrations.

Order of Installation: -

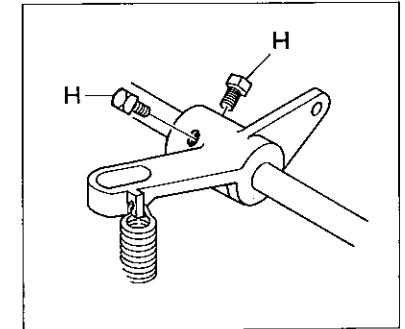
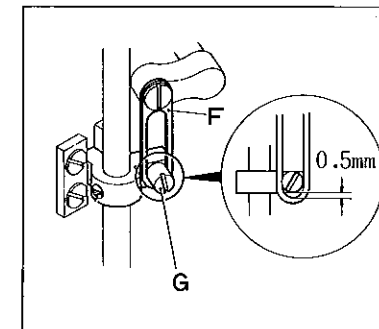
1. Fit Machine Frame Supplementary Plate to the machine with Screw (A).
2. Fix the machine on Pedestal with Bolt (B).
3. By Screw (E), connect Presser Foot Lifting Link (C) on Pedestal with Presser Bar Lifter Lever (Large) (D).



4. Adjusting the lifting amount of Presser Foot -

Apply flush Presser Foot to Stitch Plate and provide the clearance by 5 mm. or so between Presser Bar Connecting Link (F) and Screw (G) of Presser Bar Connecting Bracket without pedalling.

This adjustment is made by moving Presser Bar Lifting Lever (Large) (D) to right or left after loosening Screw (H) of Presser Foot Lifting Shaft Lever.

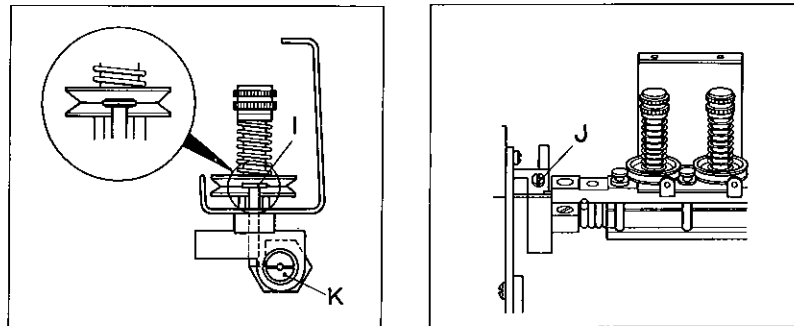


4. Installation (Continued)

5. Adjusting Tension Release Pin -

Without pedalling, adjust the upper part of Tension Release Pin (I) to be in the middle of Thread Tension Disc (Upper) and (Lower).

This adjustment is made by loosening Screw (J) of Presser Bar Lifter Lever (Large) and turning Tension Release Shaft (K) by the screwdriver.



6. Fitting Motor Cover -

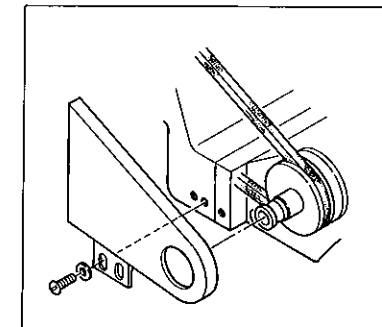
As shown in the sketch, decide the position of Collar (L) so that there is a clearance of 1 mm. between the foot of Motor Cover and the Pin of Pedestal.

**Note:** When there is not the clearance mentioned above, the vibration and/or noise may be caused at Motor Cover by the vibration transferred from the machine.



4. Installation (Continued)

7. Refer to the upper one of illustrations and fit Belt Cover.

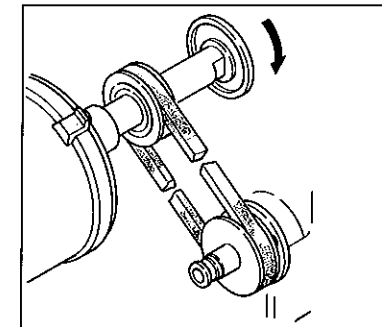


5. Sewing Speed and Turning Direction of Pulley

4,500 s.p.m. is the highest sewing speed of this machine and the economical speed is 4,000 s.p.m..

For keeping the good durability, however, it is desirable to operate at 3,500 s.p.m. for the initial use of about 200 hours, in case of brand-new machine.

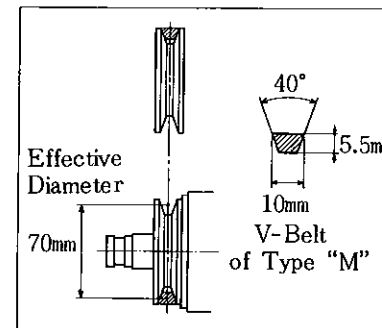
The turning direction of Pulley is clockwise as the middle illustration shows.



6. Motor and Belt

Use the Clutch Motor of 3 phase, bi-polar, 400 watt ( $\frac{1}{2}$  HP) and V-Belt of Type "M".

As the lower illustration shows, the Motor must be positioned to make both center lines of Motor and Machine Pulleys in a line when the Motor comes to left by pedalling.



\* Diameter specified on the table is the nearest mm. to the calculated value, because Pulleys are obtainable in steps of 5 mm. at the market.

| External Diameter of Motor Pulley | S. P. M.  |           |
|-----------------------------------|-----------|-----------|
|                                   | For 50 Hz | For 60 Hz |
| 75 mm.                            | - - -     | 3,500     |
| 85 "                              | - - -     | 4,000     |
| 90 "                              | 3,500     | - - -     |
| 95 "                              | - - -     | 4,500     |
| 100 "                             | 4,000     | - - -     |
| 110 "                             | 4,500     | - - -     |

7. Lubrication

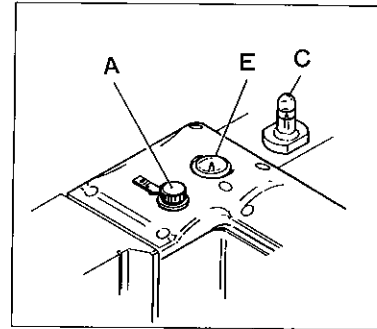
7 - 1 Lubricant

Either YAMATO SF OIL #68 or TERESSO #68 is recommendable as the lubricant.

7 - 2 Oil Feeding

Before operation, remove Oil Caps (A and B) marked "OIL". Then, new oil must be fed there without fail because oil has been completely drained at the shipment.

When feeding at (A), fill oil till the point of Oil Height Indicator comes to the upper one of 2 lines on Oil Gauge (C), and when feeding at (B) fill oil to the upper line of Oil Gauge (D).

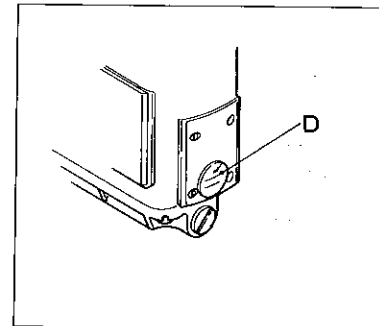
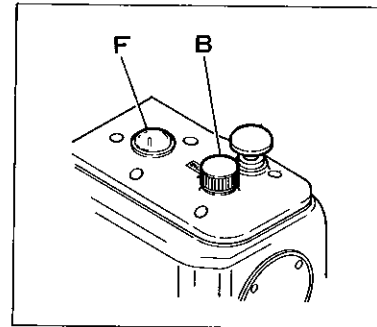


7 - 3 Oil Gauge and Confirmation of Oil Flow

Prior to the operation everyday, check Oil Gauge (C) and (D) then operate the machine with oil kept between 2 lines.

Replenish oil if its amount is below the lower one of 2 lines.

At the start of machine, on the other hand, look into Oil Windows (E and F) and confirm that oil is flowing smoothly out of Oil Pipe.



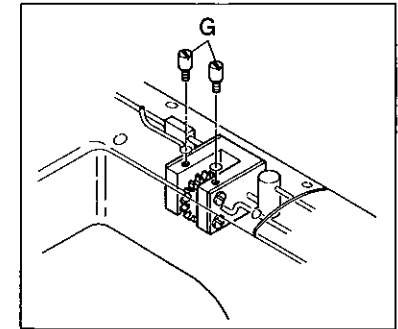
7. Lubrication (Continued)

7 - 4 Oil Priming

In installing a brand-new machine or starting one that has not been in use for some time, priming of oil may be necessary.

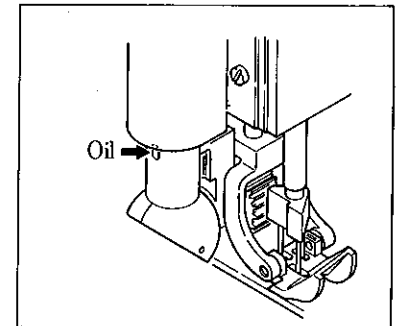
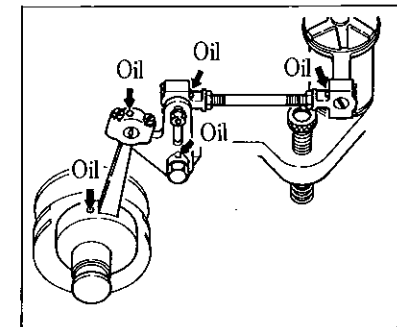
In this case, remove Plug Screw (G) of Gear Pump and feed oil from here.

Operate the machine after the Screw is re-tightened as before.



7 - 5 Oil Replenishment

Now and then, drop a little quantity of oil to the points shown by arrow marks.

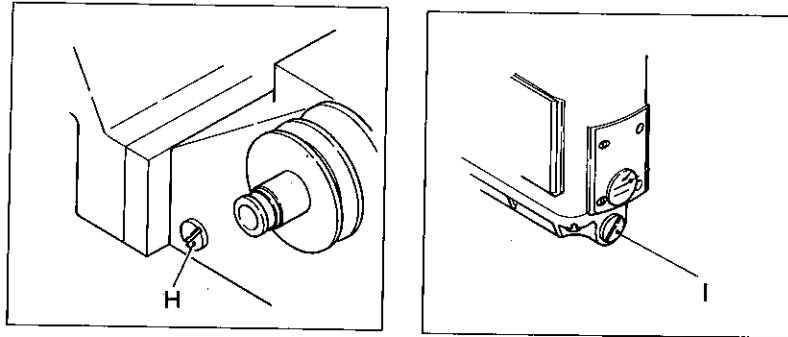


7. Lubrication (Continued)

7 - 6 Oil Exchange

In order to keep long use of the machine, change oil entirely after about 200 hours on the initial use. Then, oil exchange should be done 2 or 3 times in a year.

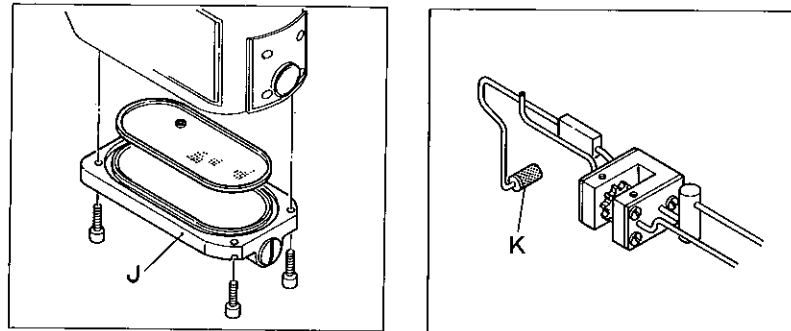
Draining oil shall be made by removing Screws (H) and (I).



7 - 7 Cleaning of Filter Screens

When oil is changed, 2 or 3 times in a year, remove Oil Reservoir (J) and clean the interior of Cylinder and the Reservoir together with the Filter Screens.

Simultaneously, remove Pump and clean its In-take Filter (K).



8. Proper Operation

8 - 1 Needle to Be Used

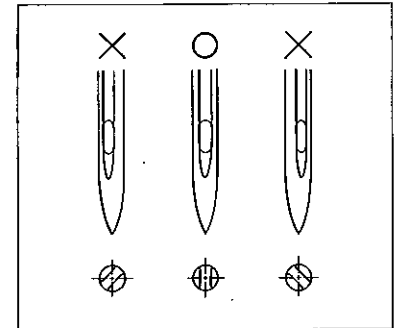
UY 128 GAS, SCHMETZ or TV X 3, ORGAN should be used. But, in case of ORGAN, TV X 43 is used for #18 and less of the needle size.

Needle sizes applicable to this machine are listed on the table hereunder, and suitable size must be selected in accordance with the nature of sewing.

|                           |    |    |     |     |     |     |     |     |     |     |
|---------------------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
| Japanese or Singer System | 14 | 15 | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  |
| Metric System             | 90 | 95 | 100 | 105 | 110 | 120 | 125 | 130 | 140 | 160 |

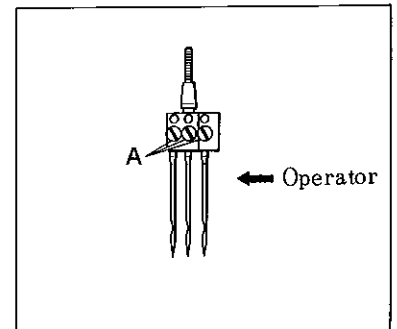
8 - 2 Setting Needles

Needles must be set correctly facing their scarfs against the rear side of machine as shown in the illustration.



Exchange order of Needles: -

1. Turn Handwheel and raise Needles to their highest position.
2. Loosen Screws (A) and pull Needles downwards.
3. Making sure of the facing of their scarfs, insert new needles fully to holes of Needle Clamp and re-tighten Screws (A) respectively.



8 - 3 Threading

The threading should be made without fail according to the illustration shown hereunder.

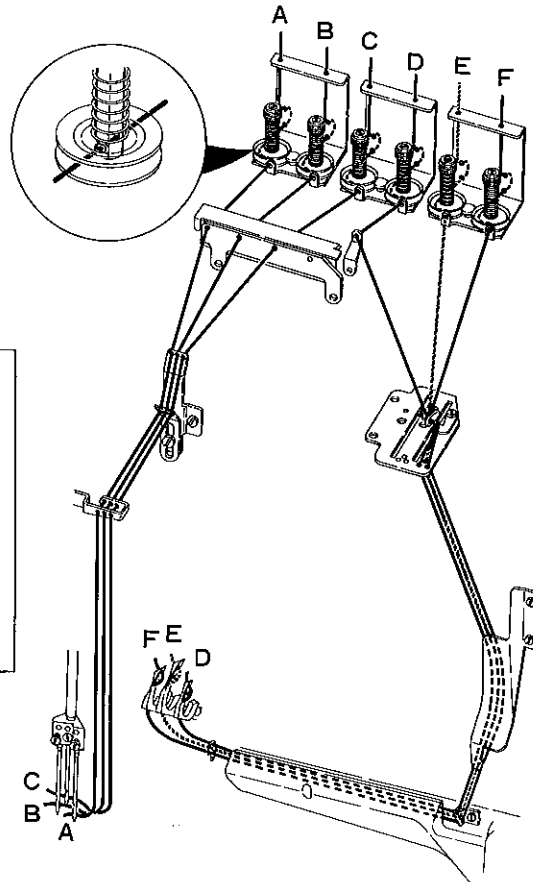
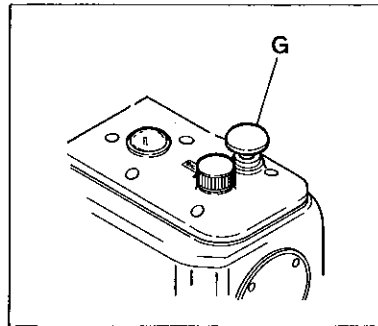
Skip-stitching, thread breakage, lack of seam uniformity and/or other troubles may be occurred by the incorrect threading. Take care, please.

A, B, C - - - - Needle Threads

D, E, F - - - - Looper Threads

\* Threading of Looper Threads

Bring Loopers to left end and press Pushbutton (G), then the threading can be made easily as Loopers come out.



8 - 4 Thread Tension

Tension of thread must be adjusted as weakly as possible unless the good balance is lost in the seaming, because it is varied according to kind of fabric or thread, stitch length and/or other sewing factors.

Note:

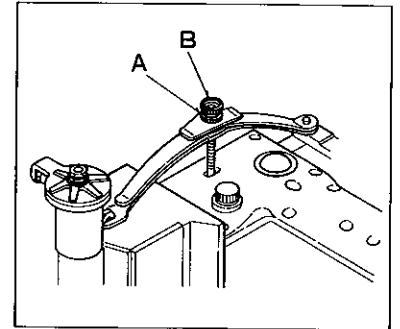
Refer to the item regarding to the thread tension in "Proper Adjustment" on Page 15.

8 - 5 Pressure of Presser Foot

Make the pressure of Presser Foot very weak so far as the Foot can be operated smoothly.

However, when the pressure is weak excessively it often causes uneven feeding, lack of uniformity of the seaming or skip-stitching.

After loosening Lock Nut (A), turning Adjusting Screw (B) to right the pressure of the Foot becomes strong, and to left vice versa.





8 - 6 Adjustment of Stitch Length

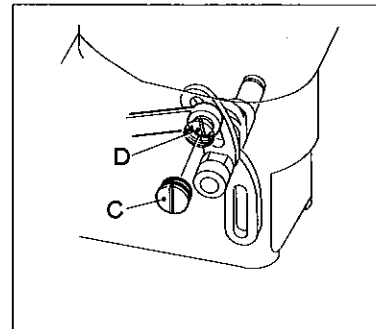
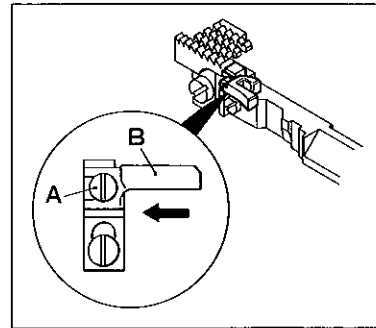
| Stitch Length | Stitches per - |        |
|---------------|----------------|--------|
|               | inch           | 30 mm. |
| 4.2 mm.       | 6              | 7      |
| 3.6 "         | 7              | 8      |
| 3.2 "         | 8              | 9.5    |
| 2.8 "         | 9              | 10.5   |
| 2.5 "         | 10             | 12     |
| 2.3 "         | 11             | 13     |
| 2.1 "         | 12             | 14     |

Stitch length can be adjusted step-  
lessly from 2.1 to 4.2 mm..

The table left side shows stitch  
length and number of stitches per  
inch or 30 mm..

\* Changing Stitch Length: -

1. Loosen Screw (A) of Needle Guard (B) and move the Guard fully to the rear, then tighten (A) temporarily.
2. Remove Plug Screw (C).
3. Loosen Screw (D) and move this Screw upward for lengthening the stitch length, and downward for shortening.
4. After deciding stitch length, tighten Screw (D) firmly and re-attach Plug Screw (C).
5. Referring to "Adjustment of Needle Guard" on Page 20, adjust the Needle Guard (B) and tighten the Screw (A).



8 - 7 Adjustment of Differential Feeding

This adjustment shall be made by moving  
Differential Feed Operating Lever (A)  
to right or left.

When the Lever (A) is set in between "4"  
and "5" of graduations, the differential  
feeding becomes ineffective because both  
Main and Differential Feed Dogs make the  
equal movement.

\* Normal Differential Feeding (Shrink  
Sewing): -

Turning the Lever (A) for "9" of the  
graduations, the normal differential  
feeding is obtainable and its ratio  
becomes 1 : 1.3, maximum at "9".

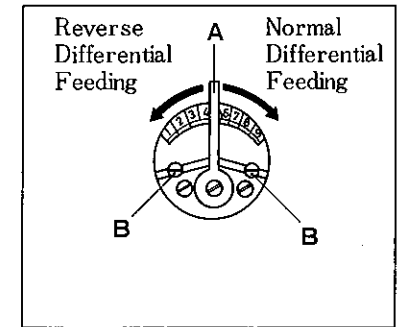
\* Reverse Differential Feeding (Stretch  
Sewing): -

Turning the Lever (A) for "1" of the  
graduations, the reverse differential  
feeding is obtainable and its ratio  
becomes 1 : 0.7, maximum at "1".

At the sewing finish, if the upper  
one of fabrics remains, turn the Lever  
(A) to the direction of "9". To the  
contrary, if the lower one remains,  
turn the Lever (A) against "1".

Note:

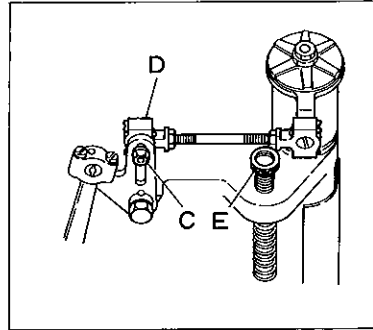
Screws (B) are set to stop the Lever  
(A) and restrict the feeding amount  
within a certain extent.



### 8 - 8 Adjustment of Feed Roller Movement

This adjustment shall be made by loosening Nut (C) and moving Clutch Driving Lever Rod (D) up or down.

To increase the movement move the Rod (D) upward, and move it downward to decrease the movement.



### 8 - 9 Pressure of Feed Roller

Pressure of Feed Roller must be made enough to feed fabrics uniformly.

To strengthen the pressure turn Adjusting Screw (E) to right, and turn it to left to decrease the pressure.

### 8 -10 "SP Unit" for Needle Thread Oiling

In the high speed sewing, Needles might be overheated by the friction with sewing materials causing thread breakage, skip-stitching or enlargement of stitch holes.

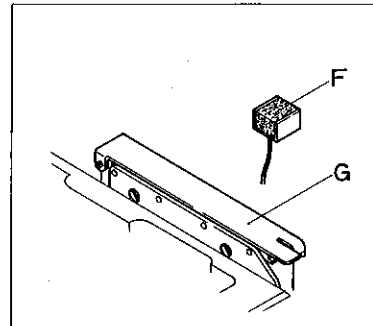
To prevent these troubles, "SP Unit" for needle thread oiling is assembled as the "Standard Equipment".

\* Oil of Silicone Line is most effective for this unit.

\* In using the Unit, take Felt (F) out of Accessories Box and put it in the Tank. In disuse, remove Felt out of the Tank.

#### Note:

Check the quantity of oil occasionally opening Tank Lid (G), and replenish some if insufficient.



## 9. Proper Adjustment

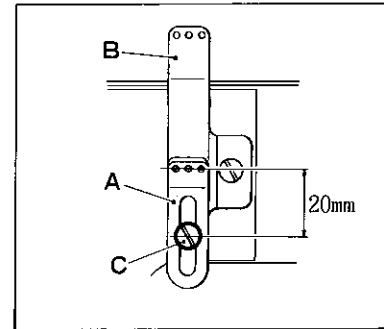
### 9 - 1 Tension of Needle Thread

#### 1) Needle Thread Eyelet (Left): -

Needle Thread Eyelet (Left) (A) shall be tightened with Screw at the fitting hole just under the Eyelet (Right) (B).

The standard position of the Eyelet (A) is 20 mm. to its thread eye from the center of Screw (C).

To tighten the needle thread move the Eyelet (A) downward and move it upward to loosen.

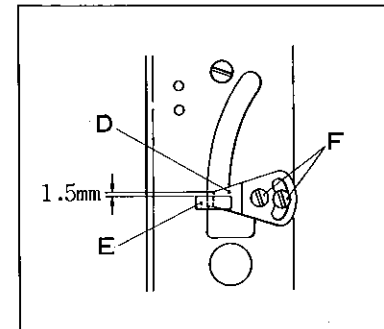


#### 2) Needle Thread Strike-off Pin: -

The Pin will help to keep the tightness of needle threads which come out Looper and also to form loops satisfactorily when Looper hook them.

When Needle Bar is at its lowest position, Needle Thread Strike-off Pin (D) will be at 1.5 mm. above the upper edge of Looper Thread Eyelet (E). This is the standard position of the Pin (D).

After loosening Screw (F), when the Pin (D) is moved upward loops are made large, and downward loops are made small.

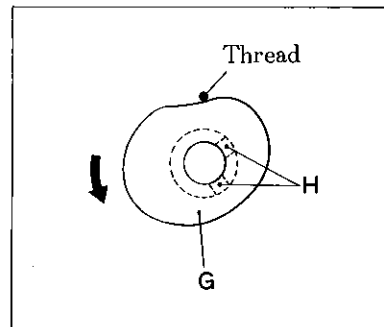


### 9 - 2 Tension of Looper Thread

The illustration shows Looper Thread Take-up seen from operator's side.

Loosen Screw (H) and adjust the position of the Take-up (G) to commence the action just when Looper moves to the left direction from its extreme right end. To obtain looper thread in plenty, make the commencement of the taking-up earlier than the movement of Looper.

Note: In adjusting the Take-up (G), it must not be moved longitudinally.



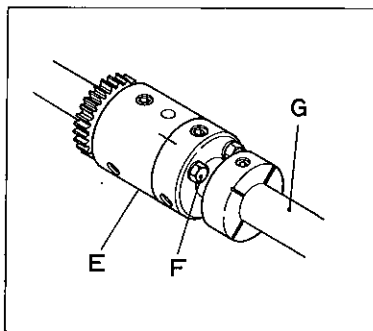
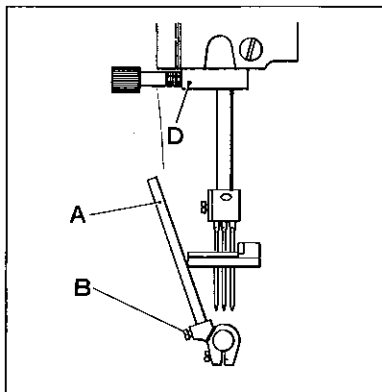
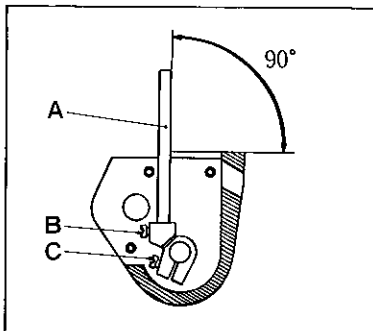
The movement of Needle and Looper have been synchronized most suitably before shipment, but it is necessary to re-adjust when Needle or Looper Mechanism is disassembled or parts are exchanged.

To confirm the correct synchronizing, use Test Bar (No.69201) and Timing Gauge (No.93690) which are supplied on the extra order.

Measurement and adjustment of synchronizing: -

- 1) Remove Needles, Stitch Plate, Main Feed Dog, Differential Feed Dog and Feed Roller.
- 2) Fit Test Bar (A) of 3.97 mm. diameter to the place where the Looper for your side has been removed, and tighten Screw (B).
- 3) When Looper Holder comes to right end, loosen Screw (C) and correct the position of Holder making Test Bar (A) vertical (90°).
- 4) Bring Test Bar (A) to the extreme left and fit Stitch Plate.
- 5) Turn Machine Pulley slowly to the left direction and apply Test Bar to Stitch Plate softly.
- 6) Apply Timing Gauge (D) to the under face of Sewing Head and fix it to Needle Bar.
- 7) Turn Machine Pulley to right slowly until Timing Gauge (D) touches Sewing Head or Test Bar (A) touches Stitch Plate.

At this time, either allowance between Timing Gauge and Sewing Head or Test Bar and Stitch Plate must be less than 0.1 mm., and the synchronization is satisfactory. If the allowance is 0.1 mm. or more, the afollowing adjustment must be made. (to be continued on the following page)



- See the illustrations on the preceding page.

- 8) Remove Crank Chamber Cover and its Gasket and loosen Bolt (F) of Main Shaft Coupling (E). Then, turn Machine Pulley to right slowly.

At this time, if Timing Gauge (D) touches Sewing Head before Test Bar touches Stitch Plate, turn Main Shaft (G) to right as the timing of Looper is early. On the contrary, if Test Bar (A) touches Stitch Plate and there is an allowance between Timing Gauge (D) and Sewing Head, turn Main Shaft (G) to left as the timing of Looper is late in this case.

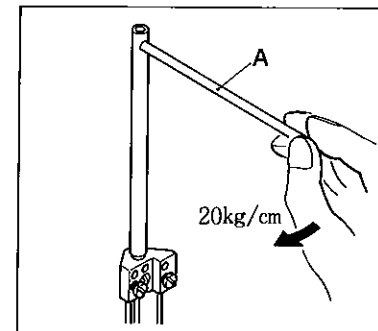
At each adjustment of Main Shaft Coupling (E), process of (6) (7) (8) must be repeated. To facilitate these process, it is favorable to tighten merely Bolt (F) temporarily. After adjustment, tighten firmly 3 pos. of Bolt, and examine the synchronization again following the process mentioned above.

9 - 4 Setting Needle Clamp

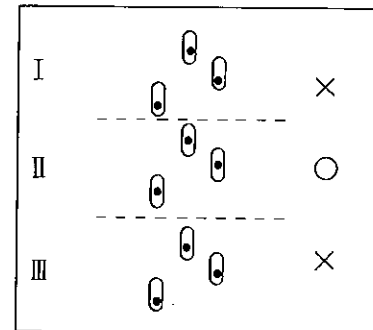
The Clamp is screwed in Needle Bar and tightened with the torque of 20 kg.cm..

\* Moderate tightening is obtainable by means of Torque Bar (#68375 - the extra parts). Insert the Torque Bar (A) to the hole at upper part of Needle Bar and continue the tightening until it begins to bend.

**Note:** Do not tighten Needle Bar with the torque more than 20 kg.cm., otherwise the external diameter of lower edge of Needle Bar becomes swell and unusable. The lower edge of Needle Bar and upper edge of Needle Clamp must not meet each other. Please take care.



9 - 5 Relation between Needles and Stitch Plate

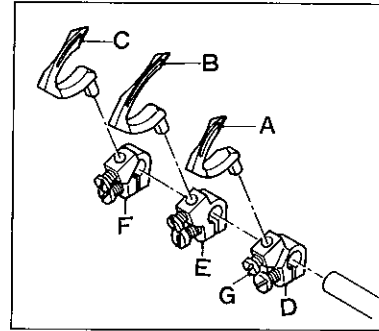


When adjusting the height of Needle Bar or others, Needles must be made to be at the center of dropping point on Stitch Plate as shown Fig. II, and must not be as Fig. I and III.

9 - 6 Height and Setting Angle of Loooper

Loopers (A) (B) and (C) shall be inserted to Loooper Holders (D) (E) and (F) respectively and tightened with Screw (G).

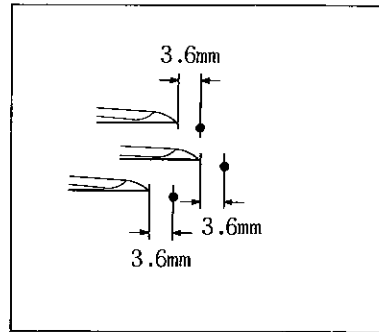
Then, height and setting angle ( $3^{\circ}$ ) of Loooper are decided naturally.



9 - 7 Swing Distance of Loooper

When Loopers come to the extreme left of the swing, distance to the point from center of the needle must be 3.6 mm.

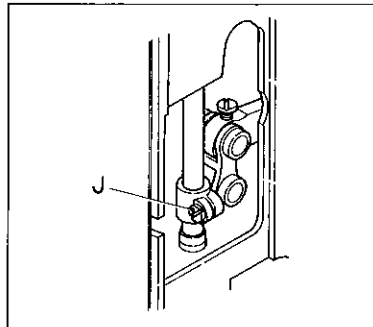
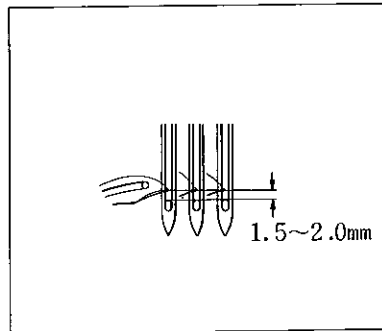
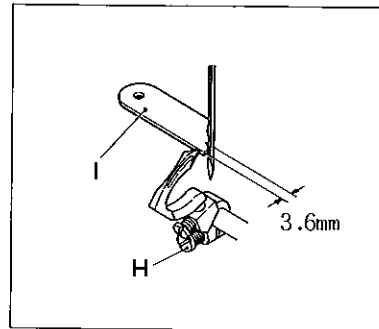
This adjustment is made after loosening Screw (H). With Loooper Gauge (I) #69200 which is supplied on the extra order, the adjustment is accomplished much easier.



9 - 8 Height of Needle Bar

When Loooper comes to the center of Needle after passing its behind, decide the height of Needle Bar with the distance of 1.5 - 2.0 mm. between the point of Loooper and the upper edge of needle eye.

The adjustment is made by moving Needle Bar vertically after loosening Screw (J) of Needle Bar Connecting Bracket.



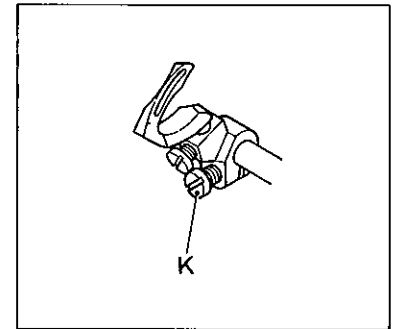
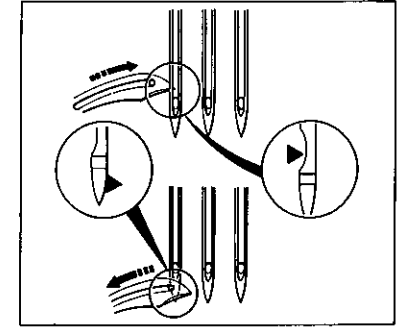
9 - 9 Longitudinal Position of Needle and Loooper

In the movement to right from its extreme left end, when Loooper passes behind Needle and its point comes to the middle part of Needle it must approach as nearly as possible to Needle without touching.

This adjustment is made by loosening Screw (K) of Loooper Holder.

Subsequently, it must be confirmed that Needle must brush the back face of Loooper very lightly when it comes down behind Loooper which is moving to left from the extreme right end.

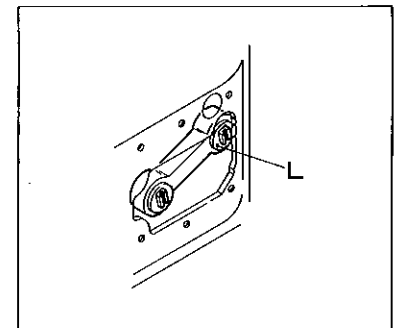
When Needle brushes Loooper so strongly that the Needle will make a curve or when there is an allowance between them, the adjustment for the longitudinal movement of Loooper must be made with reference to the next item.



9 -10 Adjustment of Longitudinal Movement of Loooper

After loosening Screw (L) at the head of Loooper Avoid Connecting Rod, remove Sewing Cylinder Cover (Left) and move the Rod up and down.

Scope of the movement shall be decreased by moving the Rod upward and increased by moving the Rod downward.

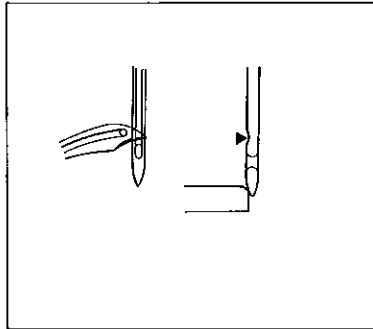
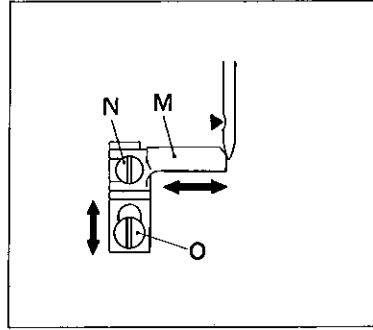


When Loopers move to right from extreme left, they will pass behind Needles. And, when their points reach center of Needles, Needle Guard (M) must be adjusted to push Needles in 0 - 0.5 mm. after loosening Screw (N).

The setting shall be made as low as possible and its face must keep the contact with Needles until points of Loopers come to right end of Needles after passing their back side.

Loosen Screw (O) and make this adjustment.

Note: Re-adjustment must be made when stitch length is changed, because Needle Guard is fitted to Feed Bar and the allowance for Needles will be changed in proportion to the change of stitch length.



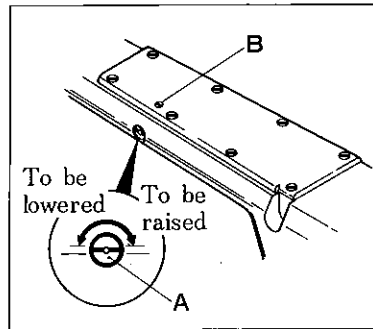
9 -12 Setting and Adjusting Feed Dogs

1. Position of Feed Bar Eccentric Pin: -

The Pin (A) is situated at approximately mid-area of the Cylinder and used for making the fine adjustment of height of Main and Differential Feed Dogs simultaneously.

Before assembling Dogs, make the groove on the Pin (A) horizontal and fix it with Screw (B) to get the same scope of vertical adjustment for both Dogs. The vertical movement scope shall be 2.5 mm. at the rear end of Feed Dogs.

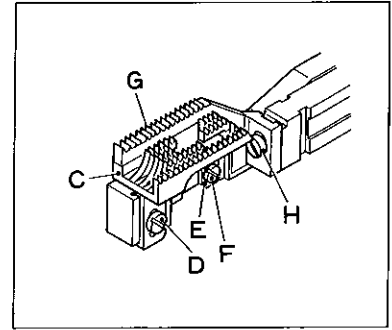
By turning Pin (A) to right Dogs are raised, and to left Dogs are lowered.



-- to be continued on the following page --

2. Setting Feed Dogs: -

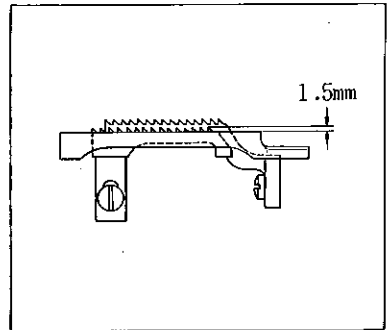
- a) Fit Main Feed Dog (C) with Screw (D).
- b) Apply Main Feed Dog Stay (E) to Main Feed Dog (C) and tighten it with Screw (F).
- c) Apply Differential Feed Dog (G) to Main Feed Dog (C) softly and tighten it with Screw (H).
- d) Turn Machine Pulley with differential effect and confirm Feed Dogs move smoothly.



3. Height of Feed Dogs: -

When Feed Dogs raise to the highest position, set the front first teeth by 1.5 mm. above the top face of Stitch Plate.

This adjustment is made after loosening Screws (D), (F) and (H).

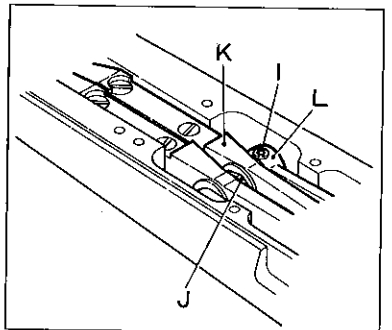


4. Position of Feed Bar: -

In such cases as Feed Dogs contact the front part or rear part of the groove on Stitch Plate, Feed Bar (K) can be moved to front or rear by turning Feed Bar Eccentric Pin (J) after loosening Screw (I).

To turn the Pin (J), knock the notched place on its brim with the tapering tool or similars.

After adjustment, tighten Screw (I) without any play on Feed Bar (K) and Feed Bar Driving Link (L).



9 -13 Removal, Setting and Adjustment of Presser Foot

1. Removal: -

Raise Presser Bar fully by pressing Presser Foot Pedal and remove Presser Foot after loosening Screw (A).

2. Setting: -

Raise Presser Bar fully by pressing Presser Foot Pedal and set Presser Foot, then tighten Screw (A).

Presser Foot can be set at the original position as there is a flat spot on Presser Bar, but confirm the position for caution's sake.

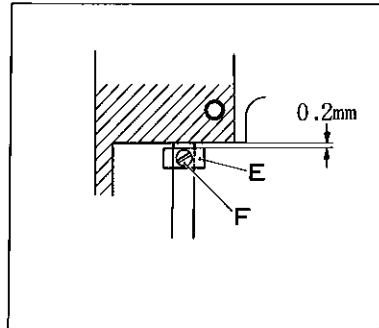
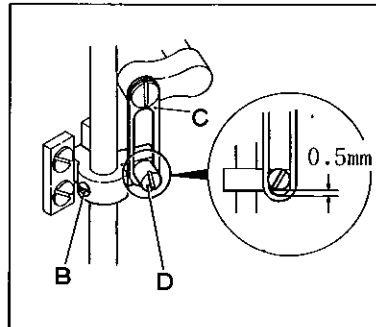
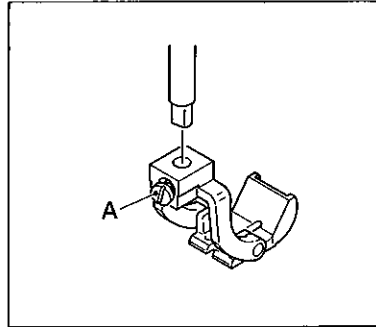
When Needles do not come to the middle of needle drop position on Presser Foot, adjust the Foot by turning Presser Bar after loosening Screw (B) of Connecting Bracket.

3. Adjustment of Presser Bar Connecting Bracket: -

Apply Presser Foot closely on the top face of Stitch Plate and loosen Screw (B) of the Connecting Bracket, then make the allowance of 0.5 mm. approximately between Presser bar Connecting Link (C) and Screw (D).

4. Position of Presser Foot Stopper Collar: -

Make the allowance between Sewing Head and the Collar (E) 0.2 mm. when Presser Foot reaches its highest position (8.0 mm. above the top face of Stitch Plate), then tighten Screw (F) of the Collar.



9 -14 Removal, Setting and Adjustment of Feed Roller

1. Removal: -

a) Remove Screw (A) of Feed Roller Pressing Bar Connection, and loosen Screw (B).

b) Loosen Screw (D) of Feed Roller Bracket (C).

c) Remove the Bracket (C) after raising Feed Roller Pressing Bar at need.

2. Setting and Adjustment: -

a) Through Feed Roller Pressing Spring and Pressing Bar Connection, Feed Roller Pressing Bar shall be inserted to the Bracket.

b) Put the Screw (A) which was removed before (refer to 1 - a), and tighten it at the hollow on the Pressing Bar, then tighten Screw (B).

c) Apply Adjusting Screw (E) of the Pressing Bar Connection to the boss on Sewing Head, then tighten Screw (D) with an allowance of about 0.1 mm. between Feed Roller and Stitch Plate.

This allowance will prevent Feed Roller from wearing caused by contacting with Stitch Plate.

3. Link Motion of Feed Roller and Presser Foot: -

When Presser Foot is raised by treading Presser Foot Pedal, Feed Roller is also raised by the linking mechanism.

At the time of shipment, Feed Roller has been adjusted to be raised a little later for the lifting of Presser Foot.

When it needs to adjust the timing for raising Feed Roller, according to the condition of sewing, the adjustment shall be made as mentioned hereunder.

a) Make Feed Roller free by loosening Screw (D).

b) To make Feed Roller rise early turn Adjusting Screw (E) to left, and to make late turn (E) to right.

Adjusting Screw (E) can be moved by loosening Nut (F).

c) After adjustment, lock Adjusting Screw (E) with Nut (F).

d) Provide an allowance of 0.1 mm. between Feed Roller and Stitch Plate, then tighten Screw (D).

