

GLOBAL

Sunshine 1100 series

Instruction manual

**Always switch off the electricity when working on
the machine.**

Table of Contents

Page

1.	Setting of machines	1
2.	The oil supplying and putting out	2
3.	the selection of the motor pulley	3
4.	Common setting of machines	3
4-1	Replacement of needles	3
4-2	Presser foot pressure	4
4-3	Threading	5
4-4	Adjustment of feed dog	6
4-5	Adjustment of feed dog and needle plate	7
4-6	Adjustment of feed dog height	7
5.	Adjustment of machines	8
5-1	Regulating thread tension	8
5-2	The adjustment of needle thread take-up	8
5-3	The adjustment of looper thread take-up	9
5-4	Adjustment of needle and looper	10
5-5	Adjustment of needle guard	13
5-6	Setting position of needle and needle guard	14
5-7	Adjustment of puller	15
5-8	Adjustment of belt loop cutter	16

1. Setting the machines

Semi-submerged installation is adopted for the DV-782 series machines.
As for the setting of table and stand, please refer to the Fig 1.

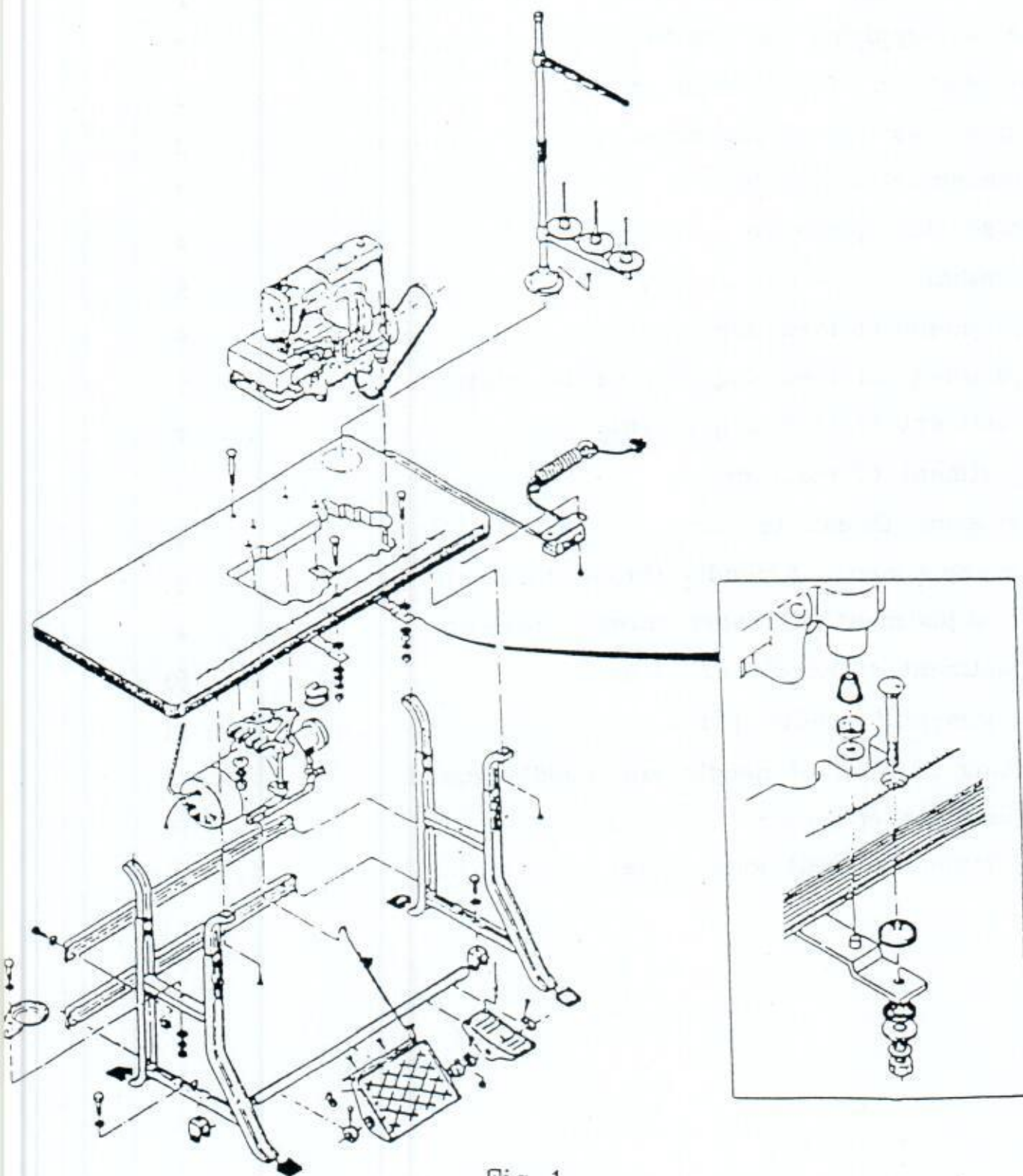


Fig 1.

2. The oil supplying and putting out

The most suitable oil for this machine is the TELLESSO-33 oil. The oil was drained from the machine when shipped. So, fill the machine with oil before starting it for the first time.

To fill oil

- (1) Take out the siphone case and pour fresh oil until the oil level maintains between the red lines on the gauge in Fig 2.
- (2) Be sure to check that oil is splashing inside the siphone case and the lubrication is done completely.

To Drain oil

Take out screw E and drain oil at the bottom of the oil pan in Fig 2.

Notice:

1. To check the oil gauge and maintain the enough oil before starting the machines.
2. Please use the genuine oil and high quality oil for sewing machines.
3. If the oil does not jet to siphone case smoothly and completely in spite of the oil fill much in oil tank, please check the oil pump mesh.

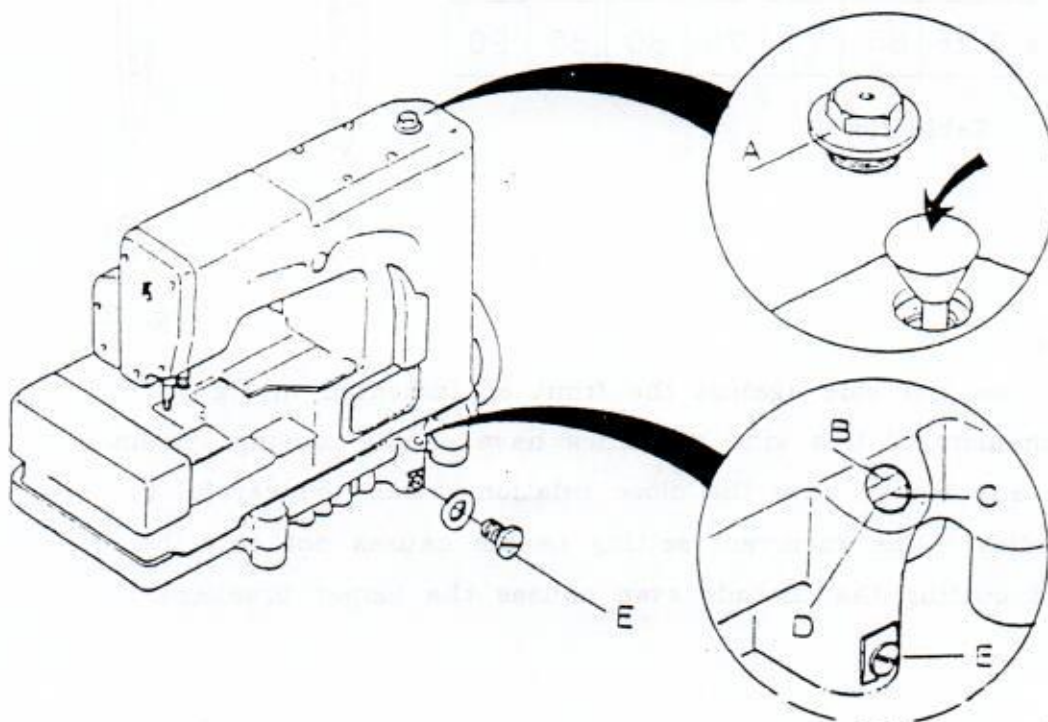


Fig 2.

3. The selection of the motor pulley

Select the proper motor pulley size for the speed of the machine to be used by referring to the table 1. shown below.

R. P. M.	Diameter of motor pulley	
	50 Hz	60 Hz
4500	φ 95	φ 80
4000	φ 85	φ 70
3500	φ 75	φ 60

Table No. 1

4. Replacement of needles

4-1 The needles of Organ and Schmetz are selected in the SUNSHINE product. The number from 9 to 11 are used in general and middle weight fabrics, number 14 is used in heavy weight fabrics. Please note that the needle size depending on the material of fabrics. The standard needle is as shown in Table 2.

Organ Needle Size	9	10	11	12	13	14
Schmetz Needle Size	65	70	75	80	85	90

Table No. 2.



Fig. 3

Replacing needles

Set the needle to be just side against the front as indicated in Fig 3. because the mechanism of this kind machines have a side moving system. Since the needle and looper have the close relation, please be careful in changing the needles. The uncorrect setting needle causes not only the mis-stitching and cutting the threads even causes the looper breakage.

4-2 Presser foot pressure

Presser foot pressure should be as light as possible, while still sufficient to feed fabric and obtain proper stitch formation.

In turning the presser foot screw C in Fig 4. to A direction, presser foot becomes heavier, and get lighter when turn to B direction.

The adjustment is decided correctly, please tighten the adjusting nut D in Fig 4.

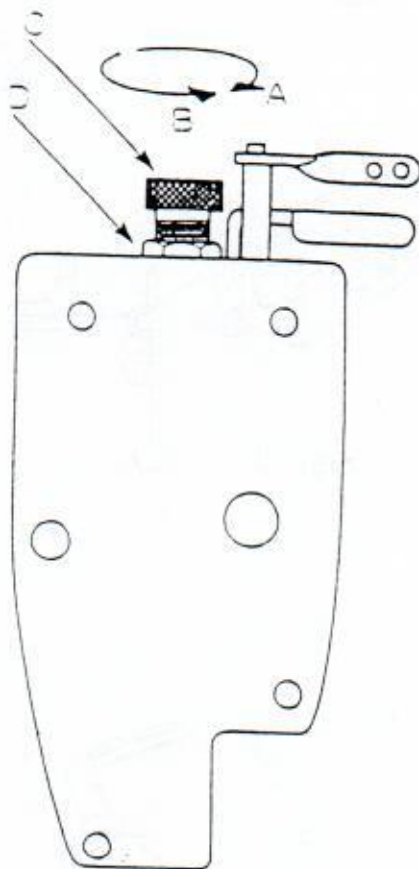


Fig. 4

4-3 Threading and the regulating thread tension

Please threading correctly as following Fig 5.

1. A and B are the threads of needle.
2. C is the thread of looper.
3. In threading to the needle, please thread right to left.
4. Threading the looper after pressing push the looper base crank which looper turns angle for easy to threading.

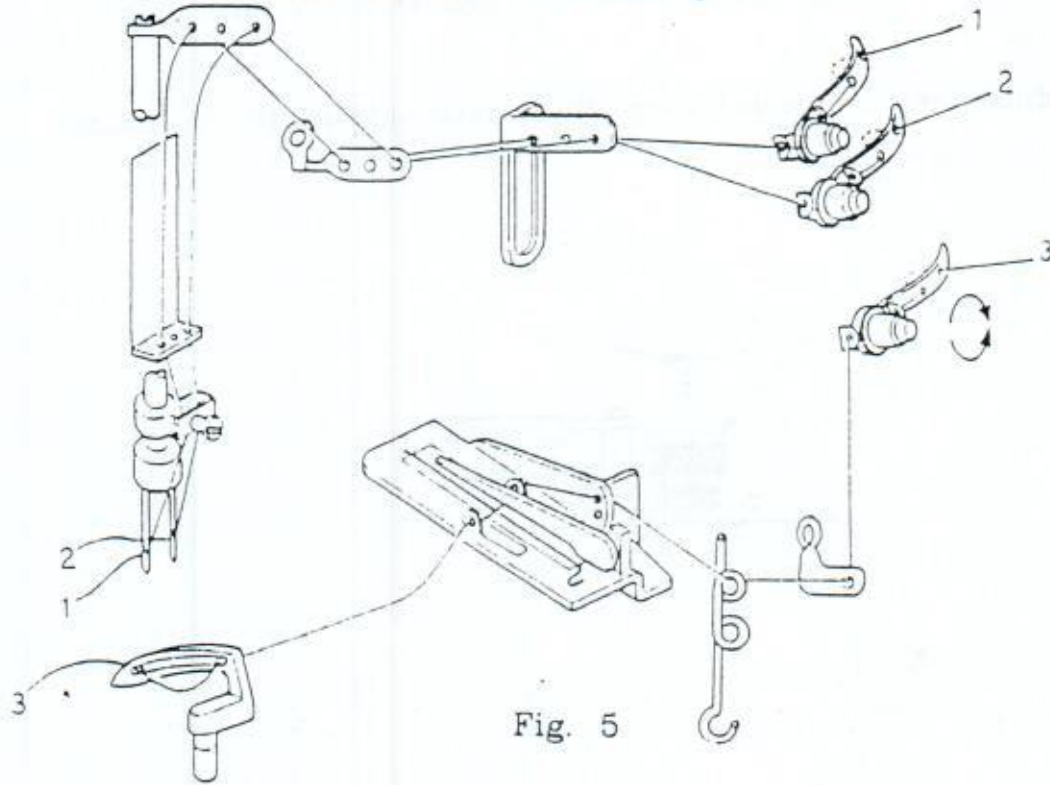


Fig. 5

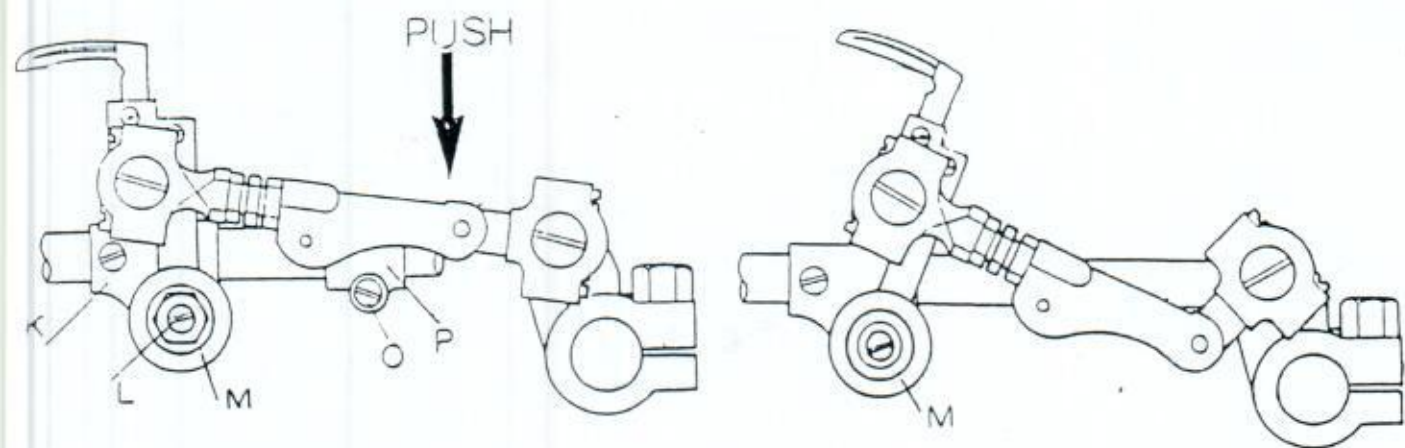


Fig. 6

4-4 Adjustment of feed dog

Referring the adjustment, please do according to the following.

1. Loosen the feed adjusting nut B in Fig 7.
2. Turn the feed adjusting screw A to right, the feeding becomes smaller, and the feed adjusting screw A to left, the feeding becomes bigger.
3. The adjustment is decided correctly, please tighten the feed adjusting nut B.

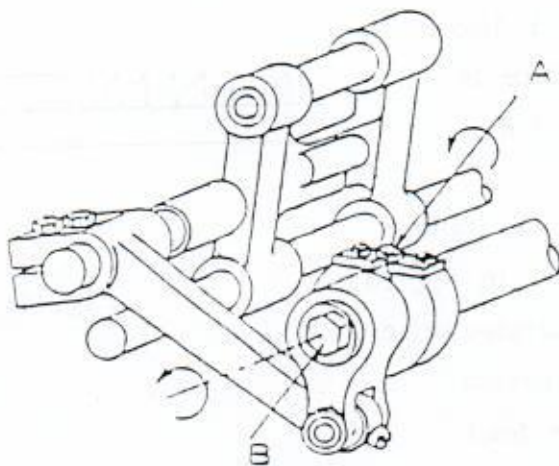


Fig. 7

4-5 Adjustment of feed dog and needle plate

Feed dog should keep horizontal with needle plate in Fig 8.

Loosen the nut A in Fig 10. turn the feed dog screw B to keep the horizontal to needle plate.



Fig. 8

4-6 Adjustment of feed dog height

At the feed dog is at its heoghtest position, set the height of feed dog from the surface of needle plate is 0.8 to 1.0mm as indicated in Fig 9.

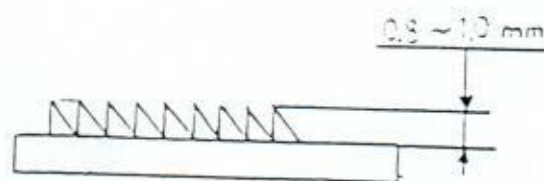


Fig. 9

For the adjustment, please do as follows.

1. Loosen the feed dog screw C in Fig 10
2. Turn the screw .D to counterclockwise, the feed dog height is increased; and turn the clockwise, the feed dog height is decrease.
3. Tighten the serew C after set the correct height of feed dog to needle plate.

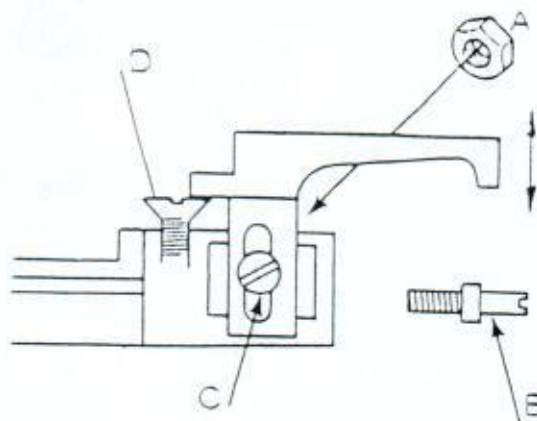


Fig. 10

5. Adjusting sewing machine

5-1 Regulating thread tension

Thread tension should be adjusted according to the kind of using threads, fabrics, stitch length, needle gauge, etc.

As to the adjustment, please refer to the following.

1. In fig 11, turning the tension disc to left, the tension becomes weak, and doing oppositely, it becomes strong.
2. If changes of threads, seams width, stitch length, fabrics, etc. require to re-adjustment of thread tension.

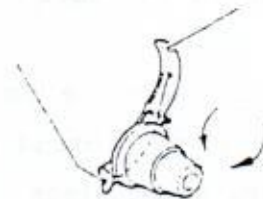


Fig. 11

5-2 The adjustment of needle thread take-up.

The adjustment of needle thread depends on the sewing condition such as the type of threads, especially, when the stretch threads are used.

1. It is adjusted by turning the screw A in Fig 12, and moving the thread support B up or down.
2. Adjustment depends on the sewing condition to tighten the screw A.

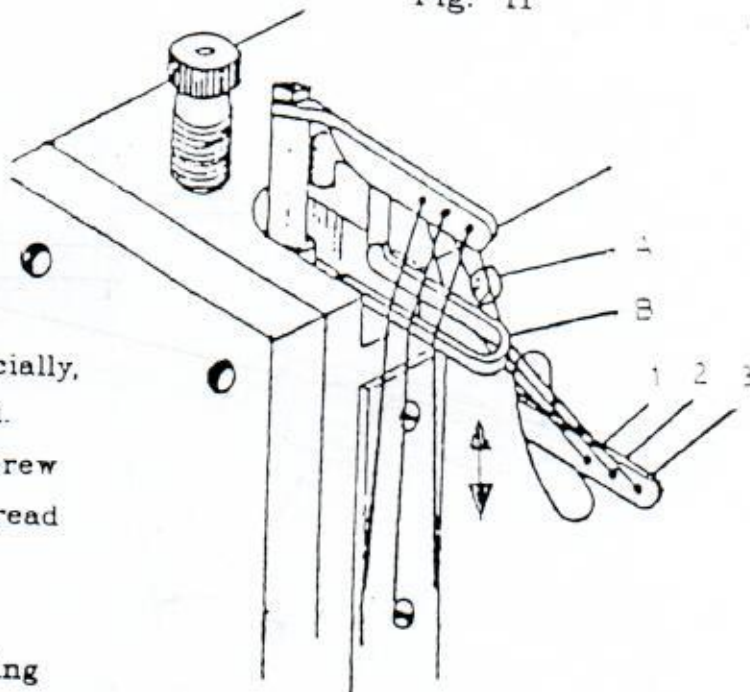


Fig. 12

5-3 Adjustment of looper thread take-up

(1) Setting the looper thread guide

Looper thread guide A in Fig 13. which position should release the front direction of main shaft.

It increases feeding amount when the looper thread guides move to D Direction; and decrease feeding amount when the looper thread guides move to E direction.

(2) Adjustment of looper thread tension and thread double disc take-up

The correct position which looper thread starts to loosen through the thread double disc take-up B when the looper is extreme left position. To set the looper is at its extreme left position, then loosen the screw C to move the thread double disc take-up B rear or front in Fig 13. Tighten the screw C after adjustment is finished.

(3) Adjustment the position of looper thread retainer

The looper thread retainer should be measured for 6 to 7mm distance from the surface of the cast off support plate to the looper thread retainer. The adjustment can be done by loosening the screw G in Fig 13.

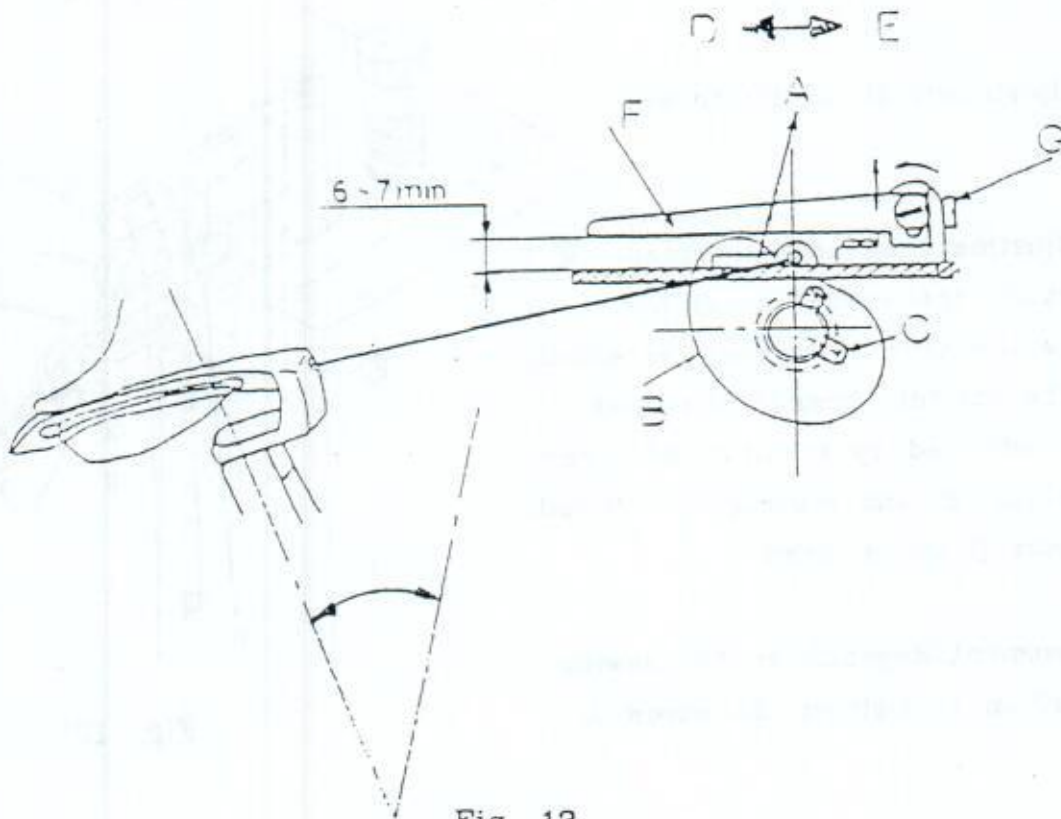


Fig. 13

5-4 Adjustment of needle and looper

(1) Adjustment of the distance of looper working

The position between right needle and looper whose the correct position is that the right needle comes down and its point is flush with the looper blade, the distance between the right needle flank to the top of looper should be 4.0mm at that time when the looper is at its extreme right position in Fig 14.

As to the adjustment, please loosen the two nuts A of crank and adjust them in Fig 15.

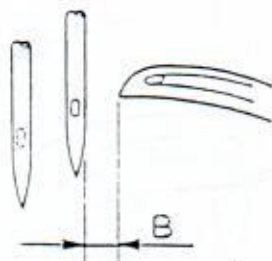


Fig. 14

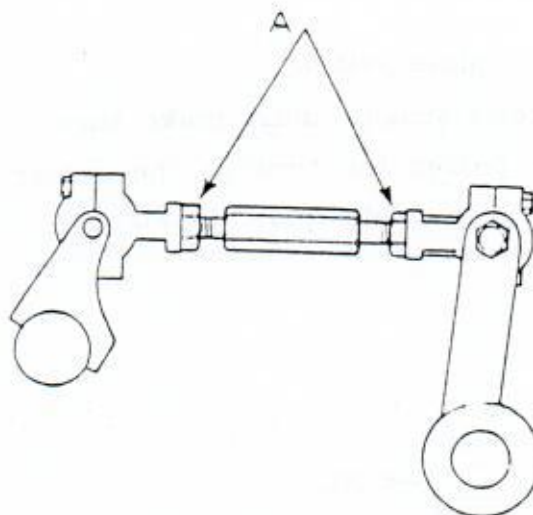


Fig. 15

Model	Needle Gauge	Distance B
762B,BK	.3/16, 7/32, 1/4	4.0mm

Table 3

(2) Synchronization of needle and looper

The synchronization of looper against the needle bar stroke is decided when the working of looper both of going and returning passes the same height of needle hole as indicated in Fig 16.

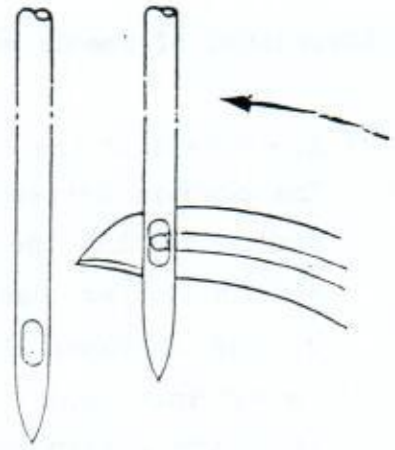


Fig. 16

(3) Needle height setting

The height of needle is decided that synchronization of needle and looper.

As to the adjustment, please loosen screw A and move the needle bar up or down as required in Fig 18.

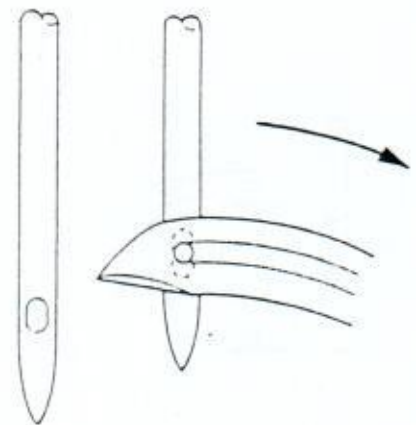


Fig. 17

(4) Needle and needle plate setting

As adjust the needle height, must make sure that each needle passes through the center of needle hole in the needle plate in Fig 19.

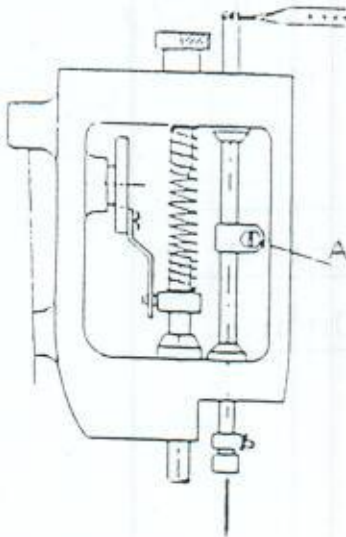


Fig. 18

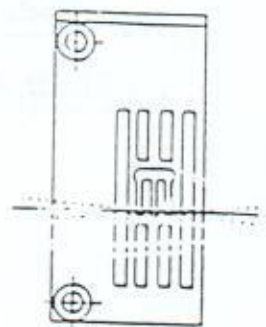


Fig. 19

(5) Synchronization of needle and looper front and rear

Looper passes the needle rear when the looper goes from right pass left. The distance F from right needle to the top of looper should be close to zero but keep no touch. As adjust the distance of needle and looper, loosen the looper driving lever ball bearing screw E in Fig 21 after removing the upper cloth plate and oil reservoir top cover. Turning the looper driving level ball bearing G to counterclockwise or clockwise for current synchronization of needle and looper front and rear. Then tighten the looper driving lever screw E in Fig 21.

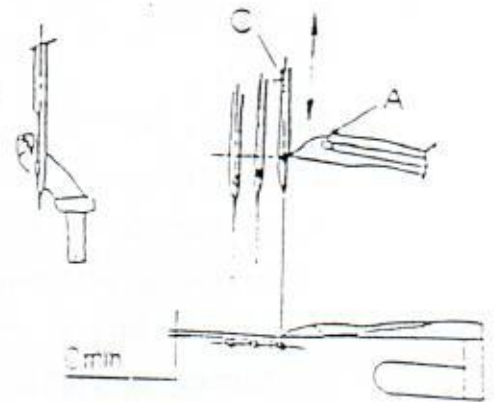


Fig. 20

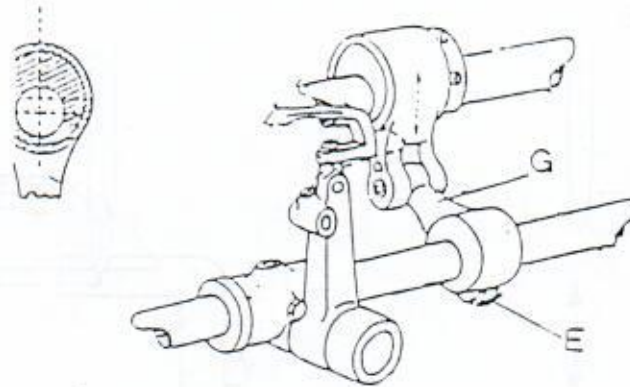


Fig. 21

5-5 Adjustment of needle guard

Needle guard is adjusted clearance for 1.0mm between needle guard to top of needle at the time when the looper moves to needle edge in Fig 23.

Please do adjusting according to the followings.

- (1) Loosen screw A in Fig 22.
- (2) As for the adjustment of up and down, the needle guard will go up if screw B is turned to left, and it will fall down if screw B is turned to right. Also, that the clearance between the needle and the looper point is zero, and needle can not be curved against needle guard in Fig 22.

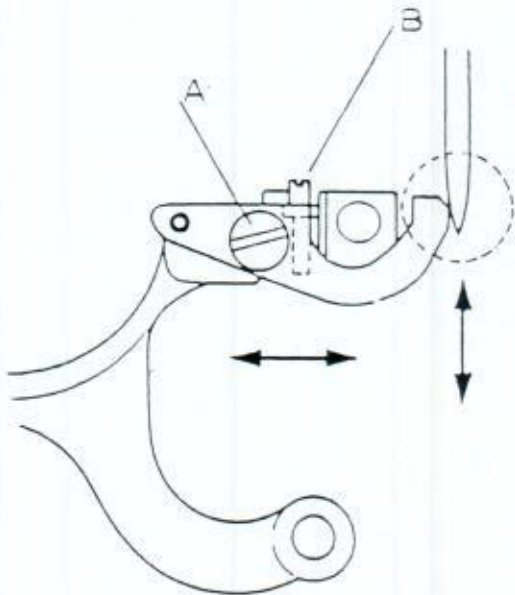


Fig 22

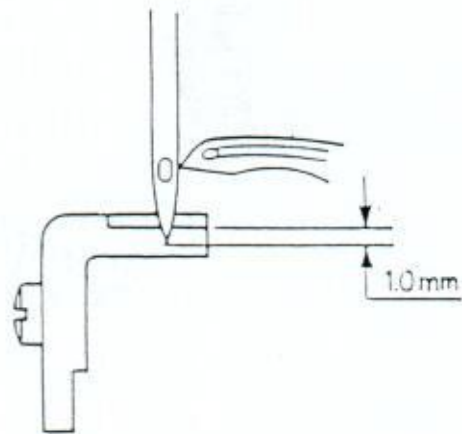


Fig. 23

5-6 Setting position of the needle and needle guard

(1) Synchronization of needle guard

The needle guard A should work so that the clearance between the right needle and the needle guard is a needle's diameter F when the looper point is behind the right needle centerline.

Also that the needle guard must keep horizontal with the needles in Fig 24.

(2) Height of the needle guard

The needle guard A height is the right needle hole center position that looper B point is behind the right needle centerline.

To adjust, loosen the two needle bar guard screw E and move the needle guard up or down as required in Fig 25.

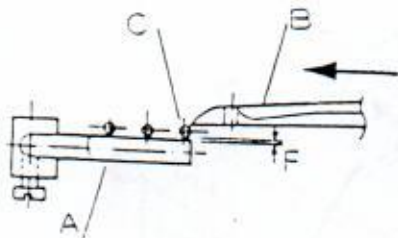


Fig. 24

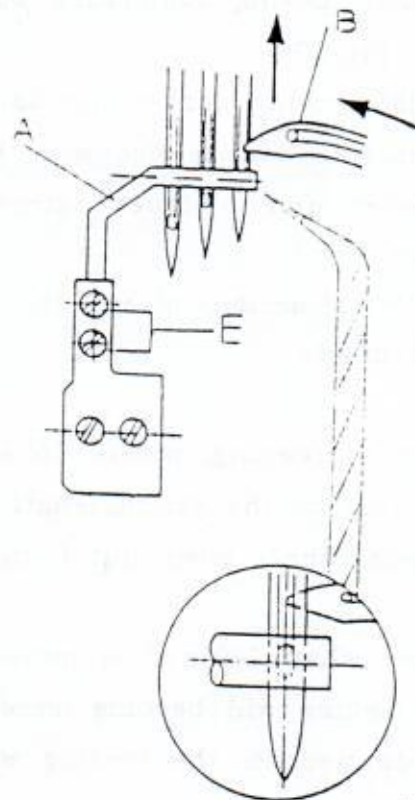


Fig 25

-7 Adjustment of the puller

1) Synchronization of puller

The synchronization of puller is that the needle bar is at rising 24mm from its lower end position. As to the adjustment, please refer to the followings.

1. Loosen the upper shaft eccentric screw B and then tighten this screw provisionally in Fig 26.
2. Turning the pulley, and the correct synchronizing of puller is selected, tighten screw A. This time if turning the upper shaft eccentric to counterclockwise the synchronizing will be faster, and doing oppositely, it will be slower in Fig 26.

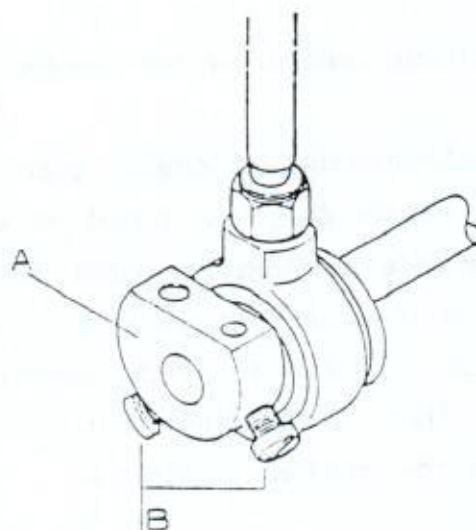


Fig 26

2) As to the puller moving, please adjust it as following turns.

1. Remove the puller driving connecting cover.
2. Loosen the puller driving connecting ball joint nut B in Fig 27.
3. When the puller driving connecting ball joint C is turned to counterclockwise, the moving will lesser, and is done contrarily, it will be more.
4. According to the situation, please do adjusting accordingly.

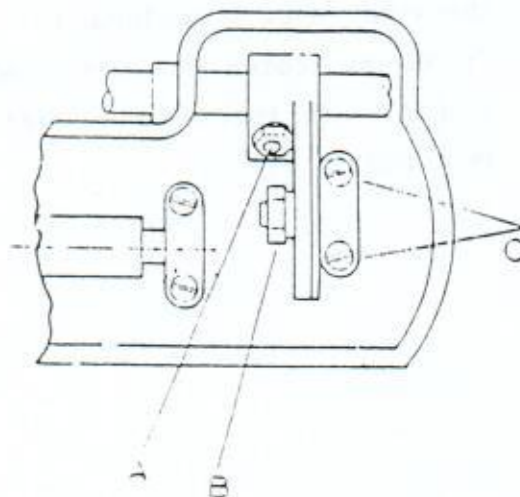


Fig. 27

(3) Adjustment of puller feeding, please do as following, according to the stitch length.

1. Loosen the upper shaft lever nut C in Fig 28.
2. When the upper shaft lever B is moved upwards, the feeding will become lesser, and done to downwards, the feeding will be more.
3. To adjust the feeding according to all stitch lengths.

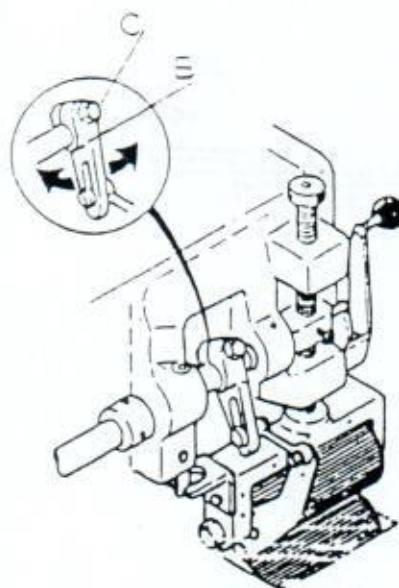


Fig. 28

5-8 Adjustment of the belt looper cutter

This belt looper cutter machine has a reinforced feeding mechanism for more uniform finishing. Belt loop size is adjustable from standard 16 to 40mm tapes can be made, while use of the proper width for sewing.

Adjustment of the auxiliary pressure foot and width of belt looper cutter, please do as followings.

- (1) Adjustment of the auxiliary pressure foot
 1. Adjust pressure foot depends on the sewing fabric. Loosen the screw B of collar A and move it up or down in Fig 29. To increase the tension, move collar A down; and decrease the tension, move collar A up. Tighten the screw B when finish the adjustment of auxiliary pressure foot.

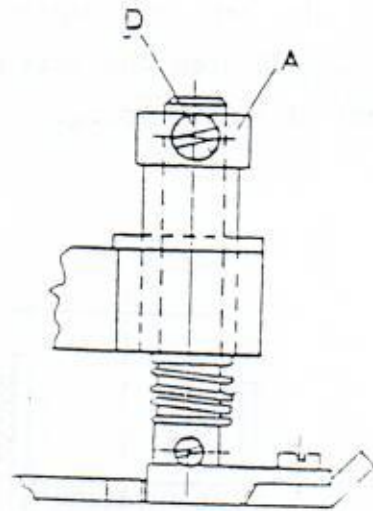


Fig. 29

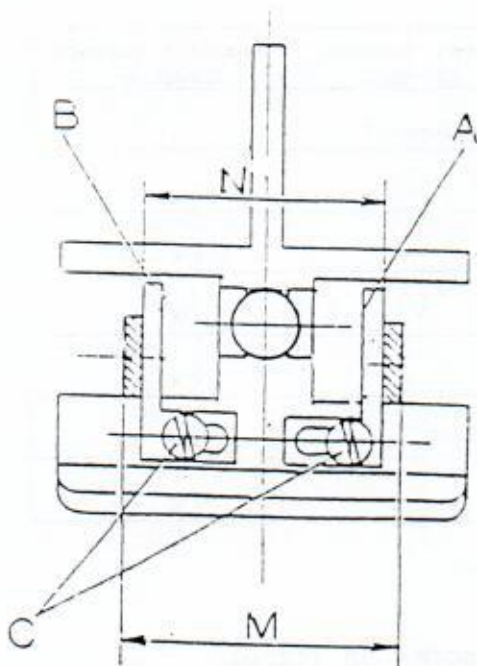


Fig. 30

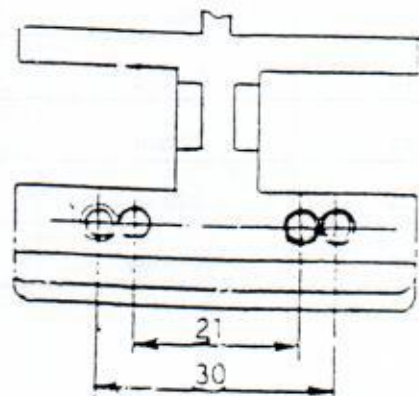


Fig. 31

2. Adjustment of auxiliary support

In auxiliary support installation, the standard settings are shown in Table 4, make sure the necessary to set the auxiliary support direction.

In cutting range adjustment, please loosen the screw C of auxiliary supports A and B in Fig 30, remove the auxiliary supports against to the belt loop cutter in Fig 32, and Fig 33. Tighten the screw C after adjustment of cutting range.

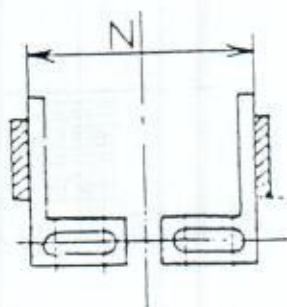


Fig. 32

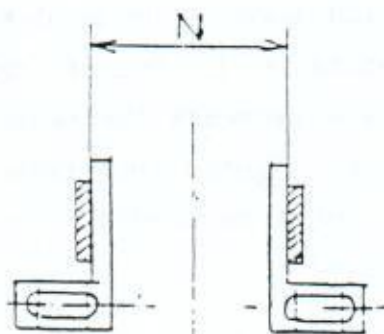


Fig. 33

Cutting Range (M)	Auxiliary Support Width (N)	Screw Position (21mm)	Screw Position (30mm)	Auxiliary Support Direction
18mm	Take Off the Auxiliary Support			
20mm	18mm	/	○	Fig. 33
24mm	20mm	/	○	Fig. 33
28mm	24mm	/	○	Fig. 33
32mm	28mm	/	○	Fig. 33
36mm	32mm	○	/	Fig. 32
40mm	36mm	○	○	Fig. 32

Table 4

Notice: ○ shows the position of auxiliary support screw in Fig 31.

(2) Adjustment of the front knife

The standard cutting range M settings are shown in Table 4, make sure the necessary to adjustment, and refer to the followings.

1. Loosen the screw B of lower front knife holders in Fig 35.
2. Remove the two lower front knife holders and set the standard cutting range M. Make sure that needle bar position is center of the two front knives range.

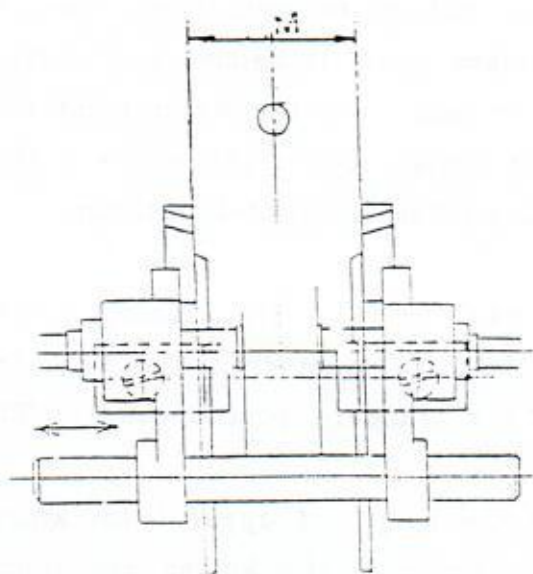


Fig. 34

(3) Adjustment of the auxiliary feed dog height

The standard height of the auxiliary feed dog from the surface of the auxiliary plate is 1.5 to 2.0mm as indicated in Fig 36.

For the adjustment, please do as follows.

1. Loosen the auxiliary feed dog screw A in Fig 36.
2. Remove the auxiliary feed dog to standard height and tighten screw A.

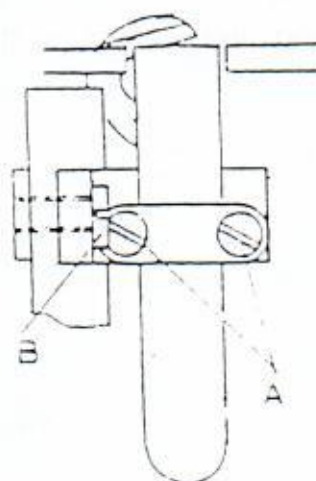


Fig. 35

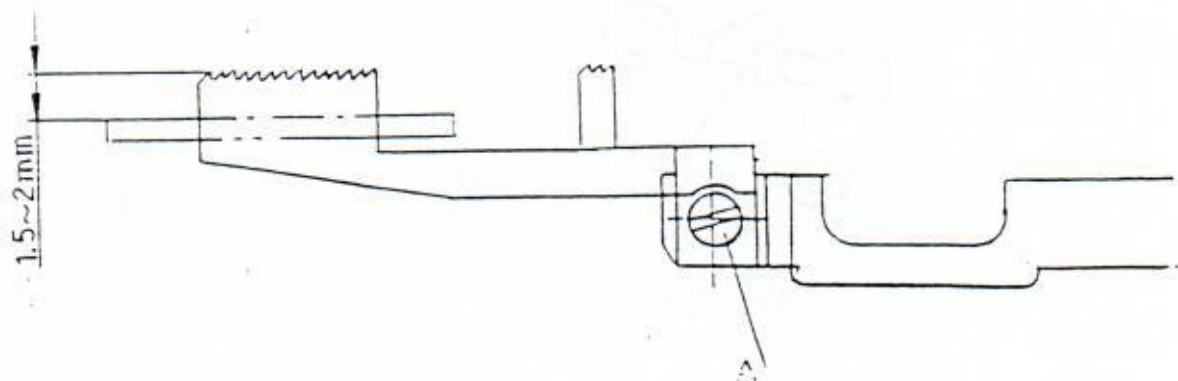


Fig. 36

3. The lower front knife should keep horizontal with auxiliary plate. In Fig. 37 shows the bad condition between lower front knives and auxiliary plate, it causes bad cutting and fabric jam. For the adjustment of lower front knives, loosen the screw A in Fig 35 and set the horizontal position.

4. Tighten the lower front knife screw A and screws B of lower front knife holders after set the standard position in Fig 35.

5. Set the height of upper front knives so that the overlap of the knives are approximately 0.5 to 1.0mm when the upper front knives are at their lowest position.

For adjustment, loosen the two screws A and adjust the shaft B up or down as required when the upper front knives are at the lowest position in Fig 39.

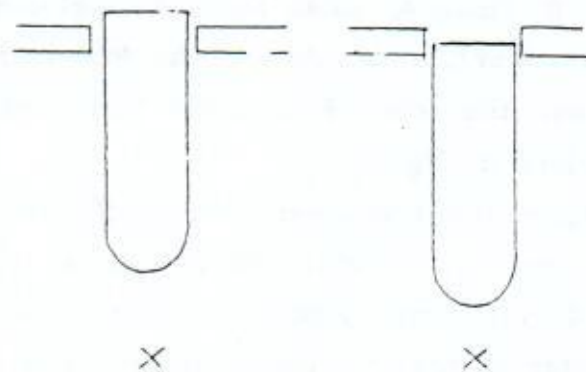


Fig. 37

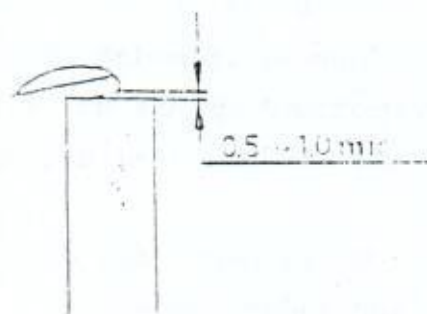


Fig. 38

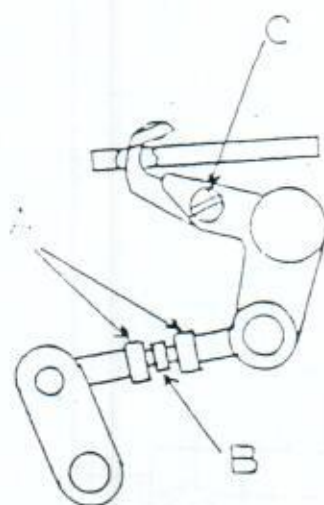


Fig. 39