

Industrial Sewing Machines

Kansai Special

INSTRUCTION MANUAL

V 7100 series

W 8100 series

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(A) MODEL NAME COMPOSITION OF W 8000 SERIES (FLAT BED)

W - 8 0 0 2 - D / UTC

UNDER THREAD CUTTER.

TO INCLUDE USAGE OF ATTACHMENT, BINDER, ETC.

D FLAT LOCK.

F COLLARETTE (BINDING).

DE ATTACHING LACE OR ELASTIC W/O CUTTER.

EMK TOP ELASTIC METERING DEVICE WITH EDGE CUTTER.

EMK-E ELECTRONIC CONTROLLED TOP ELASTIC METERING DEVICE WITH EDGE CUTTER.

MC-12A AUTOMATIC REAR TAPE CUTTER.

C-11 CLINTON CHAIN CUTTER.

S SHELL STITCHING.

TO INDICATE NUMBER OF NEEDLES :

01 1 NEEDLE.

02 2 NEEDLES.

03 3 NEEDLES.

04 4 NEEDLES.

42 2 NEEDLES.

42-1 3 NEEDLES.

TO INDICATE STITCHING WAY :

70 BOTTOM COVERING.

30 TOP & BOTTOM COVERING.

71 BOTTOM COVERING. (LATEST MODEL NO).

31 TOP & BOTTOM COVERING. (LATEST MODEL NO).

SYMBOL OF MACHINE SERIES.
(FLAT BED MACHINE)

V : BOTTOM COVERING.

W : TOP & BOTTOM COVERING.

(1) Description of V.W Series Sewing Machines

No. of Needles	Needle gauge	Height of needle bar	Distance between looper and needle
2	1/8	11	4
	5/32	10.3	4
	3/16	9.5	4
	7/32	8.4	4
	1/4	7.6	4
3	7/32	8.4	4
	1/4	7.6	4

Table 1

(2) Specifications

Type : Ultra-high speed flat bed 2 or 3 needle sewing machine

Number of stitches : 8 to 14 per one inch (25.4 mm)

Number of needles : 2 or 3

Type of needle : UY-128 GAS #70 to #90

Needle bar stroke : 31 mm

Feeding Mechanism : Differential feed

Differential ratio adjustment : Lever type

Lubrication System : Fully automatic lubrication system

Maximum speed : 5.500 stitches a minute

(3) Table Stand Assembly Illustration

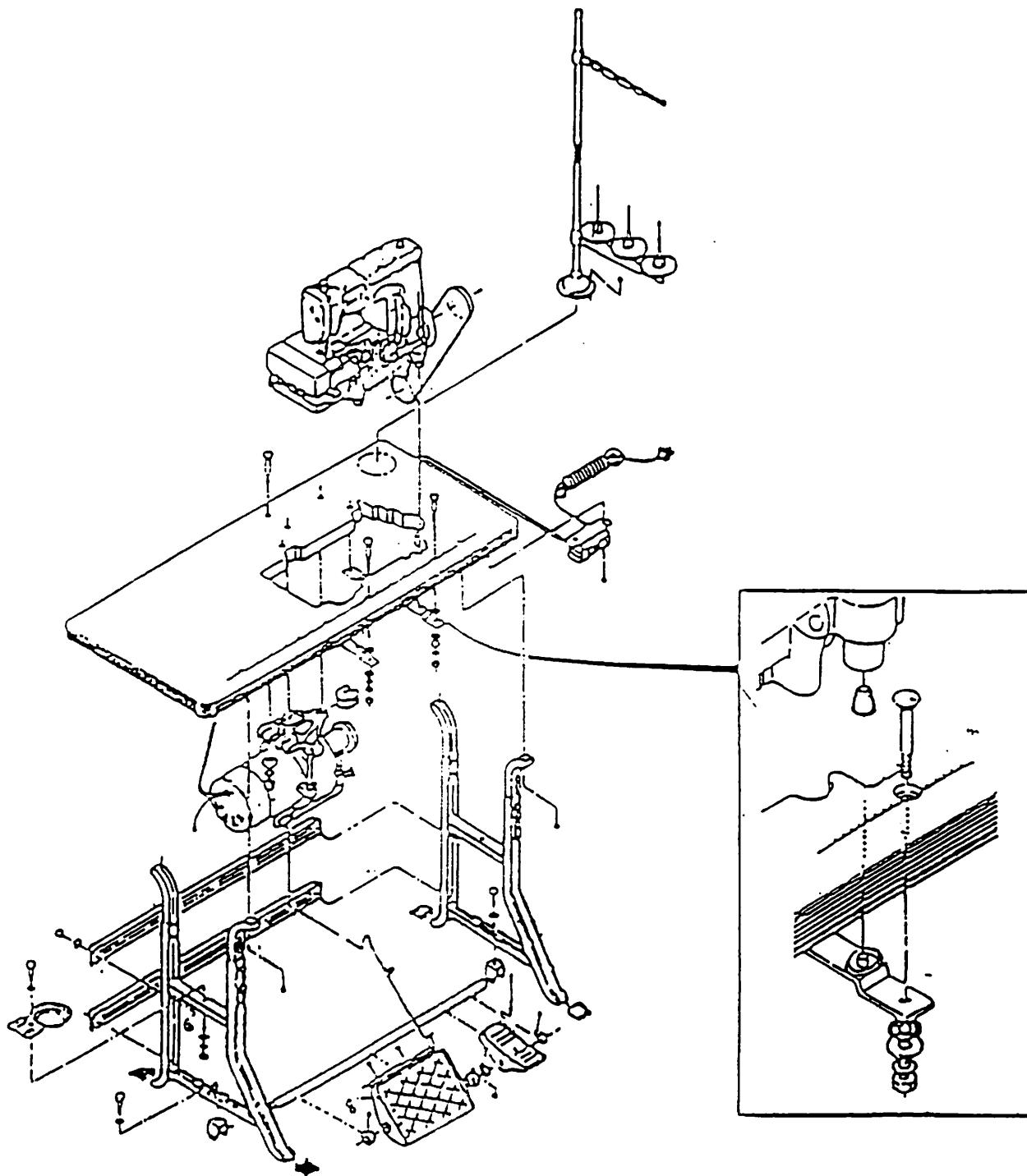


Fig. 1

(4) Dimensions of Motor Pulley

The rotation direction is counterclockwise viewing the pulley. Select a pulley so that the maximum speed shall be 4,500 rpm and operate the machine at speed below 4,500 rpm when polyester spun threads are used for the accuracy of the number of stitches.

Machine speed	Outside diameter of motor pulley	
	60 Hz	50 Hz
5.500	dia 95	dia 110
5,000	85	100
4.500	75	90
4.000	65	80

Table 2

(5) Filling and Draining of Oil, and Replacement of oil filter (Fig 2)

Recommended lubricating oil is "Telleso 33".

- 1) Remove the siphon case A and fill oil from the filler port till the oil level reaches the marking line B of the oil gauge. Be sure that the oil level is between the marking lines B and D, each time before starting operation.
- 2) Draining oil (Fig 2-1)
Remove the screw E and drain oil from the oil pan. Exchange the entire used oil with new oil in one month after the operation of the machine is started, and every six months after that.
- 3) Filter (Fig 2-2)
Check the filter 10 days after the operation of the machine is started, and every one month after that. Blow dirt off the filter with compressed air or replaced the filter if clogged with dirt.

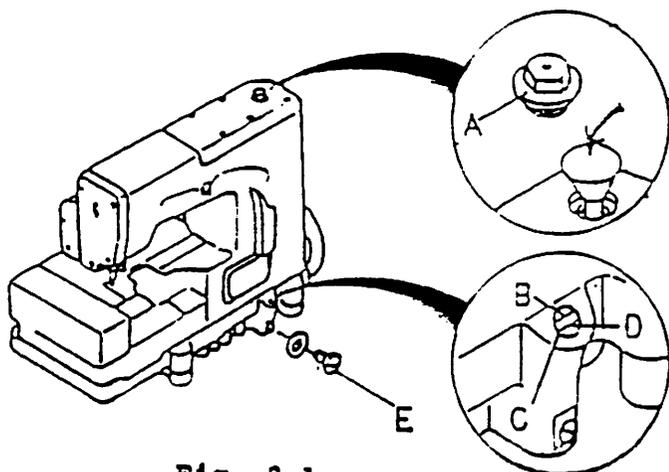


Fig. 2-1

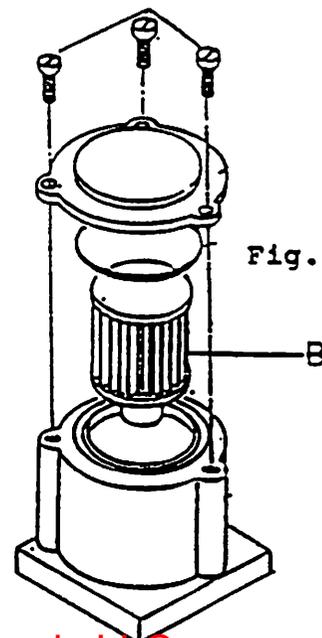


Fig. 2-2

(6) Assembling Method of Needles

Use the needles UY 128 GAS #70 to #90. Loosen the needle fastening screws A and replace the needles. Set the needles so that the grooves of the needles shall be just on the rear side.

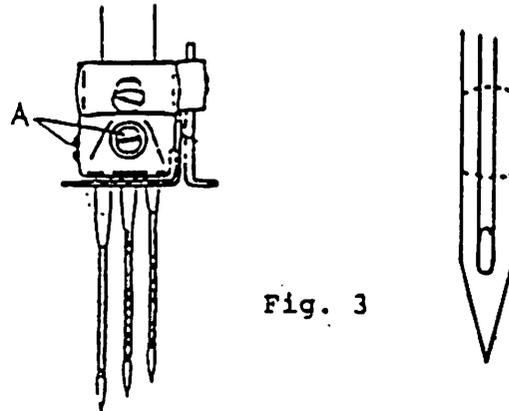


Fig. 3

(7) Threading Method (Fig 4)

Pass through both upper and lower threads correctly by referring to Fig 4. Adjust the tension of thread with the thread tension nut (N). Adjust so that satisfactory stitching can be obtained at a tension of threads as low as practicable.

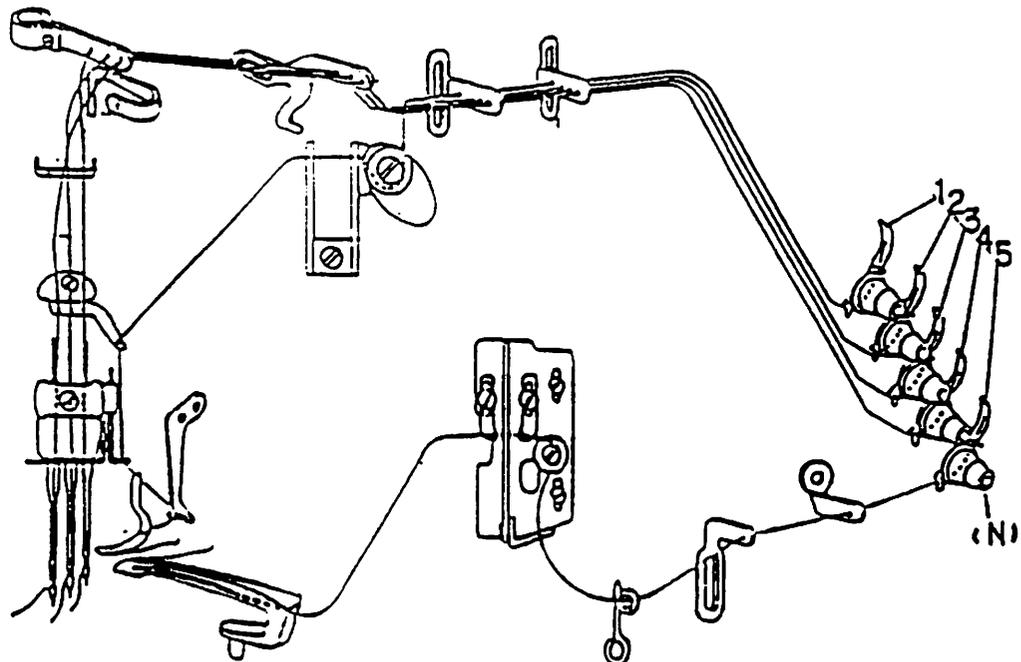


Fig. 4

(8) Adjustment of Feeding Mechanism (Fig 5)

- a) Adjustment of feeding
Loosen the lock C (left-hand threads) and turn the adjusting screw N to an adequate feed. The feed is reduced by turning the screw clockwise and increased by turning counterclockwise.
- b) Adjustment of differential ratio
Loosen the nut I and raise the connecting crank H for increasing the differential ratio, and lower the crank for decreasing the differential ratio.

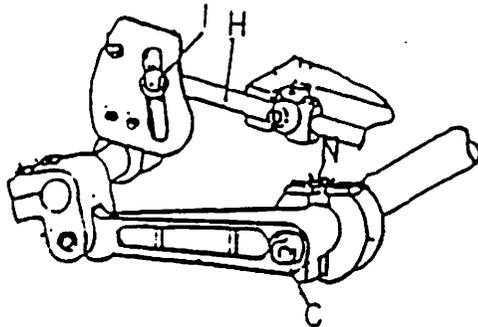


Fig. 5

(Note) Must check the position of the needle guard in relation to the needle when the feeding distance is adjusted.

(9) Height of feed dog (Fig 6)

The standard height of the feed dog is 0.8mm to 1.2mm above the surface of the needle plate when the feed dog is at its highest position. To adjust the height, loosen the screws A and B, and set the heights of the main feed dog and the differential feed dog as shown in g Fig 6.

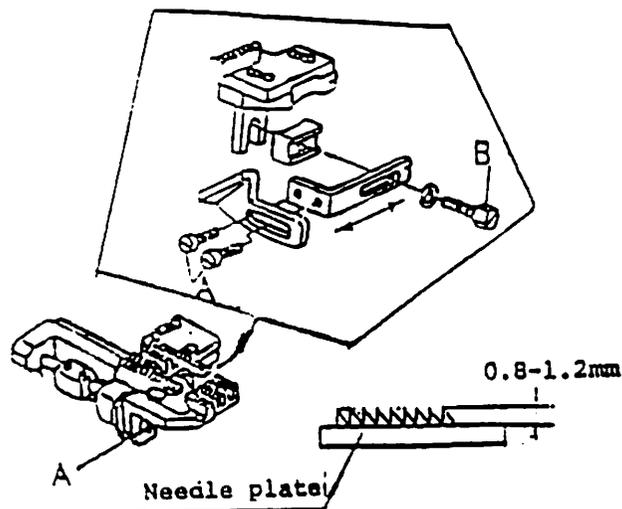


Fig. 6

(10) Height of Needle Bar (Fig 7)

The distance between the needle plate surface and the needle point at the highest position of the needle bar is different according to the needle gauge. (Refer to Table 3) To adjust it, loosen the nut F shown in Fig 7, raise or lower the needle bar to given dimension Y, and tighten the nut F.

Needle gauge	Needle bar height
1/8.....3.17mm	11mm
5/32....3.96mm	10.3mm
3/16....4.76mm	9.5mm
7/32....5.56mm	8.4mm
1/4.....6.35mm	7.6mm

Table 3

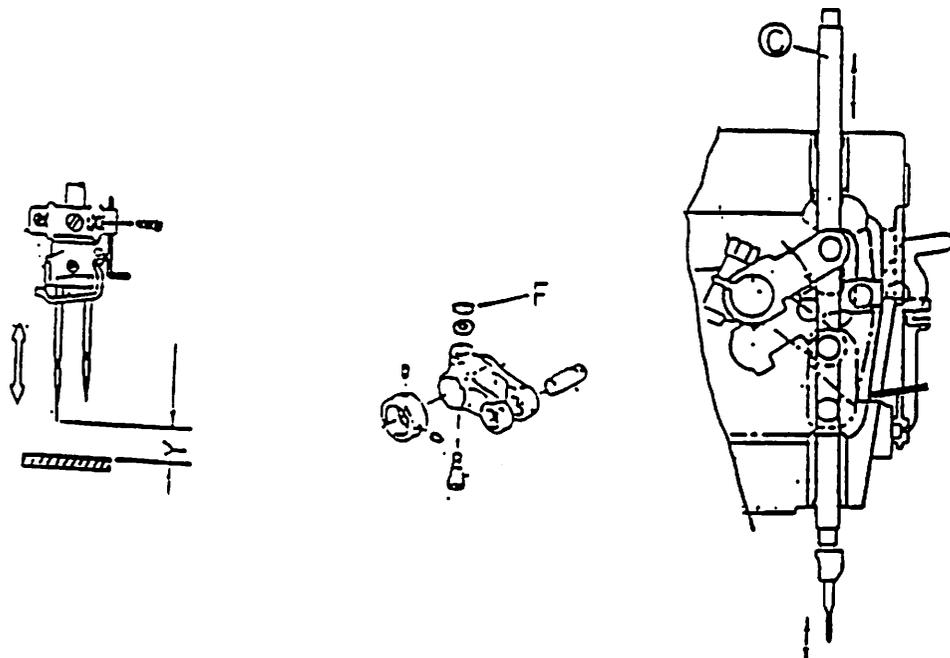


Fig. 7

(11) Distance between Loper and Needle (Fig 8)

When the needle is at its lowest position, loosen the nuts A shown in Fig 8, turn the connecting rod B, to adjust the distance between the looper point and the needle to 4mm, and tighten the nuts A.

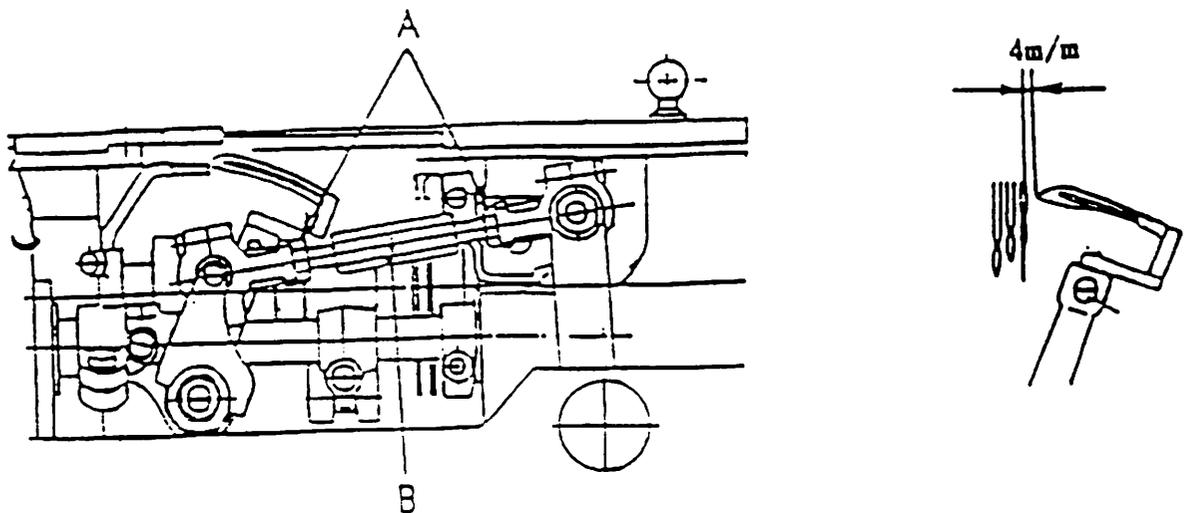


Fig. 8

(12) Adjustment of Clearance from the needle to Loper Point (Fig 9)

Temporarily tighten the back-and-forth lever loosely and move the looper holder back and forth so that the clearance between the needle and the looper point shall be 0 to 0.05mm when the looper passes by the rear of the needle.

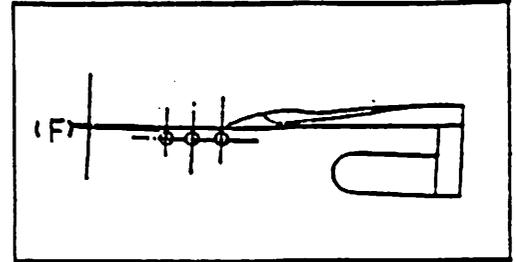
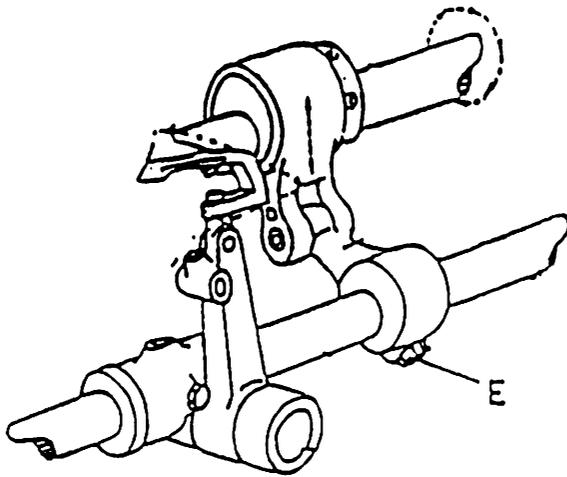


Fig. 9

(13) Adjustment of Needle Guard (Fig 10)

The needle should come into contact lightly with the needle guard at a point of 0.8mm from the point of the needle when the point of the looper is at the rear middle of the right needle. Adjust the back-and-forth position by loosening the fastening screw D in Fig 11 and the height of the needle guard by loosening screws A in Fig 11 so that the dimension shown in Fig 10-b shall be 0.8mm.

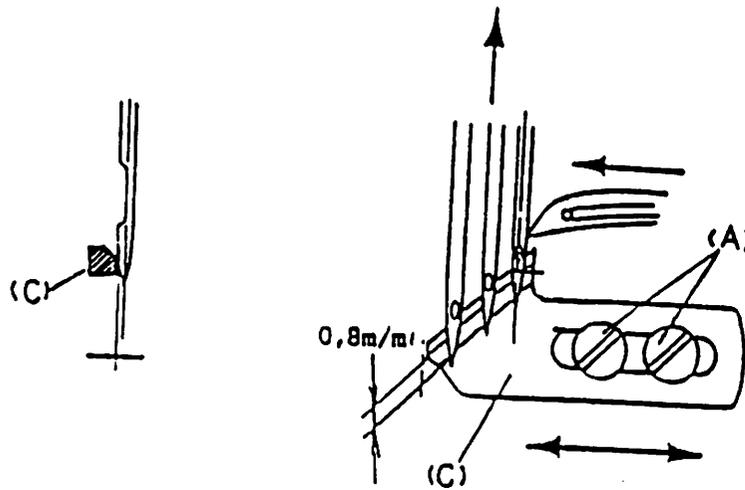


Fig. 10-a

Fig. 10-b

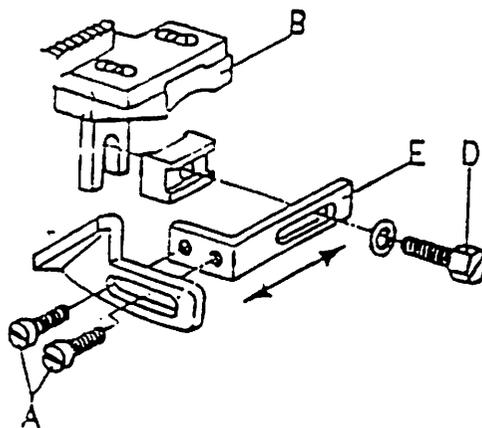


Fig. 11

(14) Adjustment of Needle Guide (Fig 12)

The clearance F between the needle guide and the needles shall be 0.2 to 0.5mm when the looper point is at the rear middle of the right needle. Set the height of the needle guide so that the needle eye shall be in line with the middle of the needle guide. Loosen the screws E and adjust the height, and loosen the screws E and adjust the height, and loosen the screws G. Whereby the clearance F between the needle guide and the needles is adjustable.

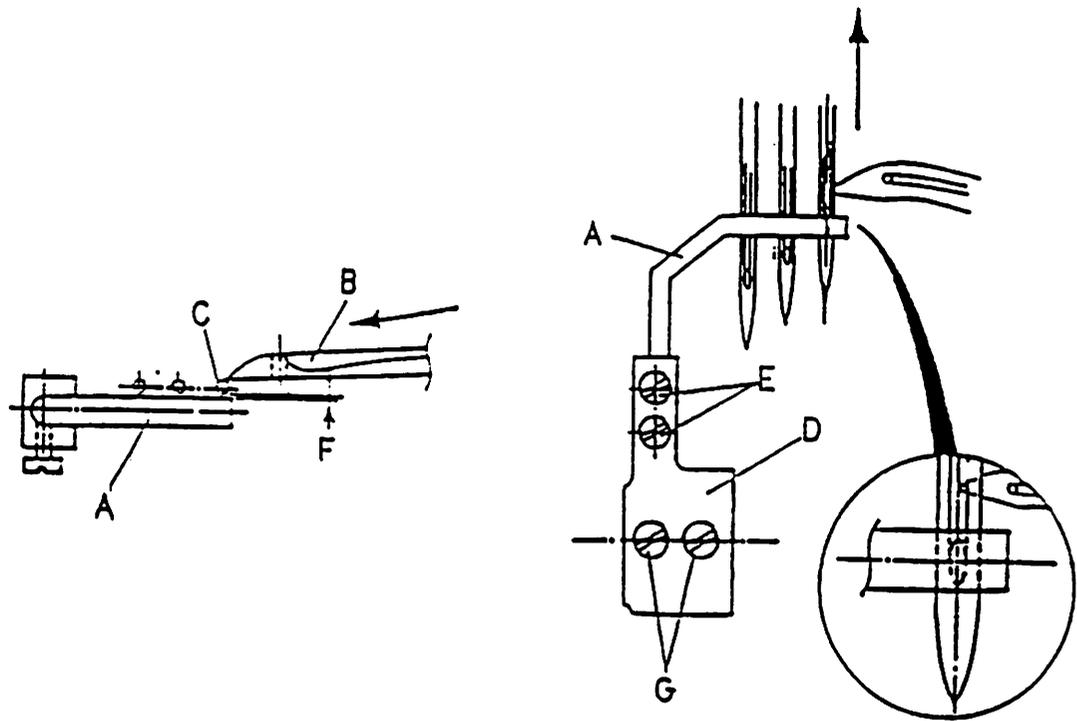


Fig. 12

(15) Adjustment of Looper Thread (Fig 13)

- a) Adjust the clearance between the looper thread retaining finger B and the bracket E to 6 to 7mm (by loosening the screw F)
- b) Adjust the position of the looper thread guide by loosening the screw G so that the thread guide hole A shown in Fig 13 shall be on the center line of the main shaft.

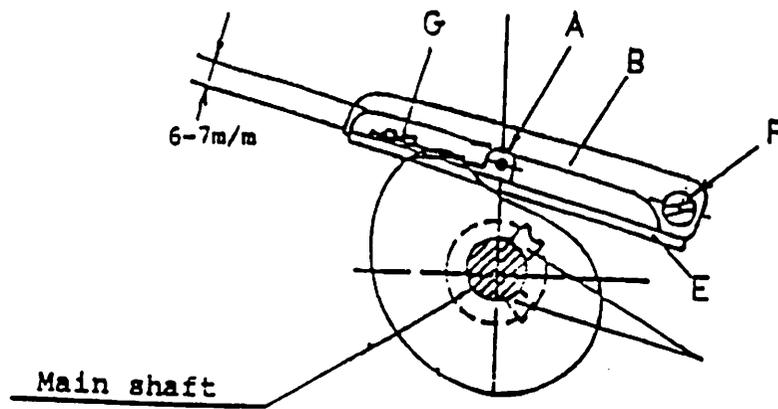


Fig. 13

(16) Timing of Looper Thread Adjusting Cam (Fig 14)

Adjust the screw B so that the looper thread shall be released from the looper thread adjusting cam when needle point is on the line A of the looper.

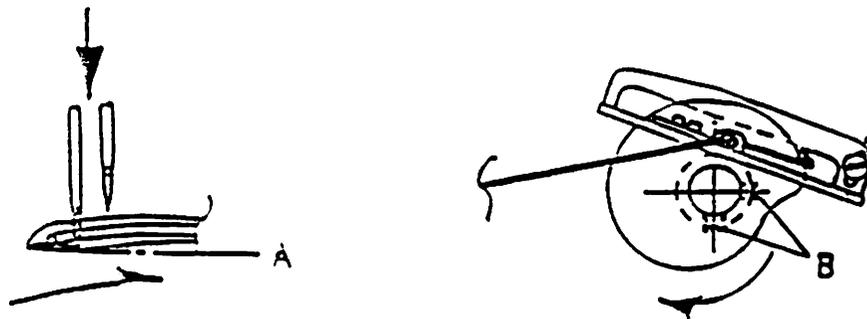


Fig. 14

(17) Position of Needle Thread Guide (Fig 15)

Loosen the screw C shown in Fig 15 and adjust the position of the needle thread guide so that the top face of the thread guide (A) shall be lined with the 'o' graduation of the scale.

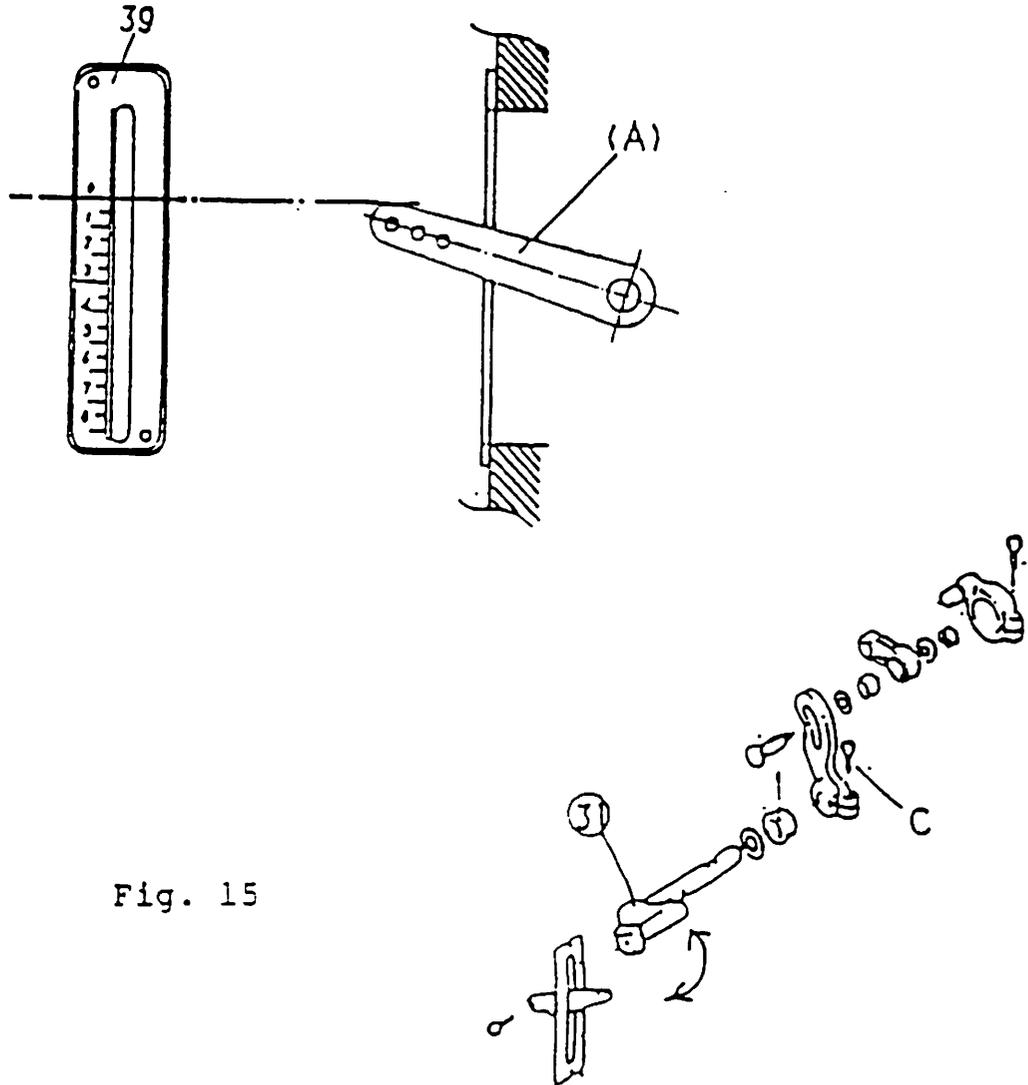


Fig. 15

(18) Adjustment of Spreader Mechanism

a) Loosen the screw D and adjust the position of the spreader thread guide C shown in Fig 16 so that the thread guide hole shall be lined with the graduation '3' of the scale.

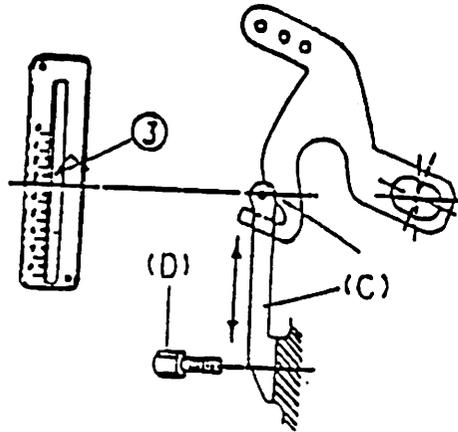


Fig. 16

b) Adjustment of spreader looper (Fig 17)

Adjust the distance between the top face of the needle plate and the lower surface of the spreader looper to 8mm. Also adjust the distance between the underside of the spreader thread guide and the top surface of the spreader looper to 0.5mm.

Adjust the distance between the spreader thread guide and the 'L' guide to 1mm.

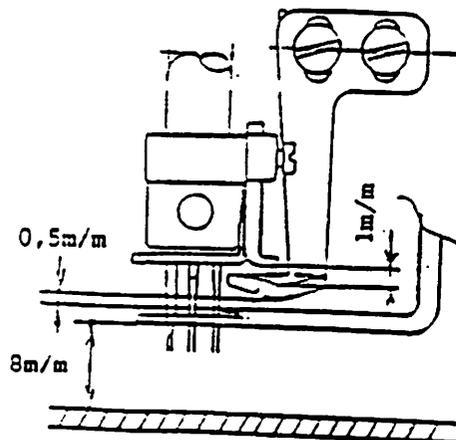


Fig. 17

- c) Position of spreader looper in relation to needles (Fig 18)
Adjust so that the gap between the hook point of the spreader looper and the right needle shall be 0.5mm when the looper passes by the right needle, and the hook point shall be at the point A on the needle line 6 to 6.5mm apart from the left needle when the looper is at its left dead point. To adjust temporarily tighten the screws L and K.

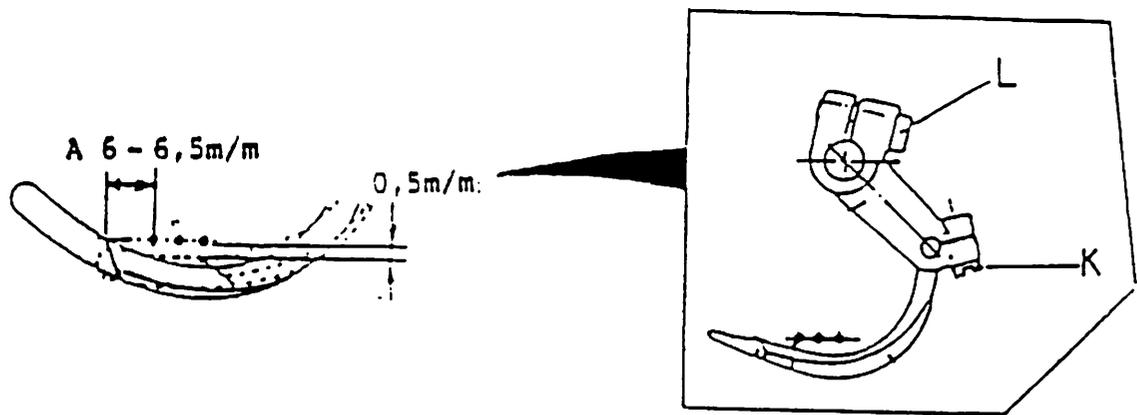


Fig. 18

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