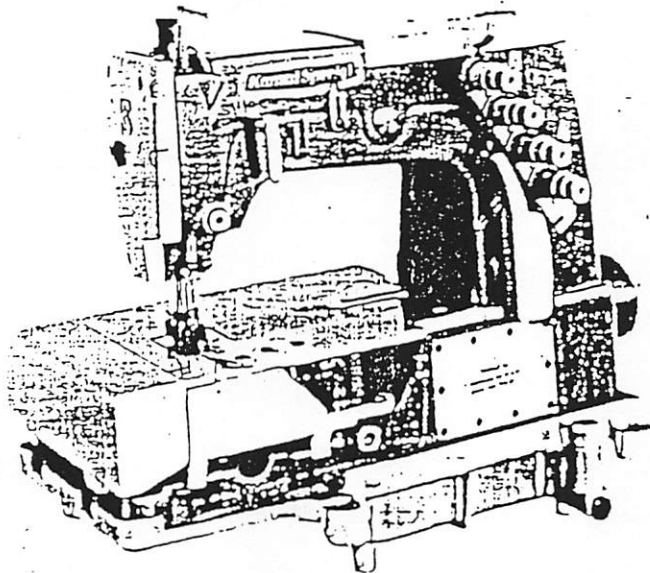
 *Kansai Special*  
Industrial Sewing Machine

# INSTRUCTION MANUAL

DPW-1300 *series*



## INSTRUCTION MANUAL

MODEL : DPW-1300 series

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1) Feature

Seam type	Multi Zig-Zag Picoetta, fagotting
needles	2 or 1
Usable needle	UY x 163 No.65-90
needle bar stroke	31 m/m
feed mechanism	differential
Max. R.P.M.	3500 R.P.M.

2) Selection of motor pulley

Remark: Operational rotation of hand wheel should toward the operator(counter clockwise)

R.P.M.	Diameter of motor pulley m/m	
	50 Hz	60 Hz
3500	75	60
3000	65	55

Table 1

3) Supplying/Draining oil (Fig.1)

Recommended oil is "TELLESSO 33"

- a) Remove oil viewer A and supply oil until oil is being filled up to the line B of oil gauge C. The oil level should be checked and kept between line B and D while machine is in use.
- b) Draining oil can be done with removingscrew E. It is recommended that oil change once in first one month and once in every 6 months afterward.

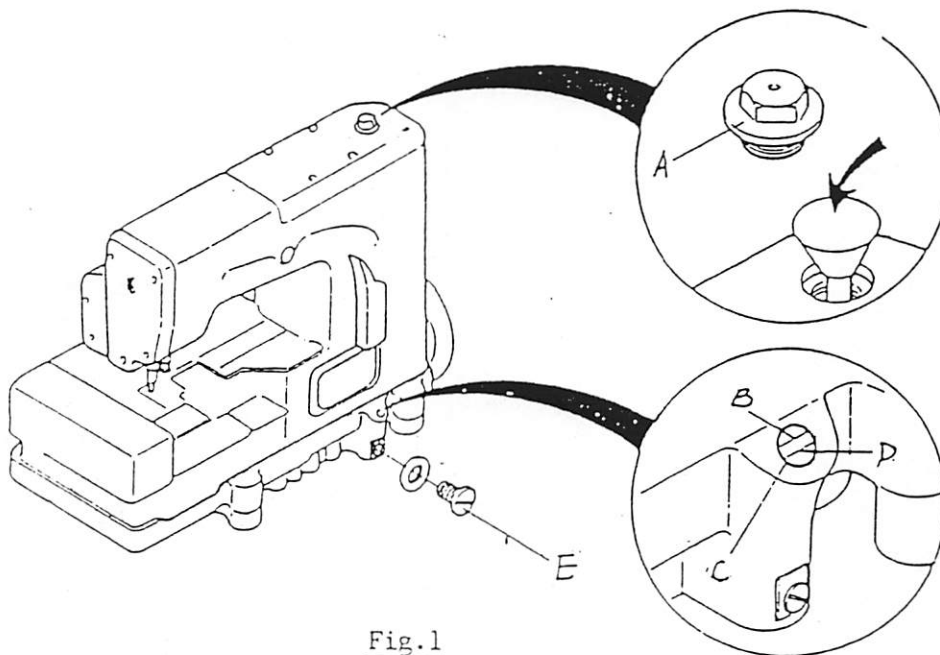


Fig.1

4) Setting needle (Fig.2)

Loosen screw A place needle of which strait groove faces toward the operator so that scarf of the needle can be placed exactly parallel against the looper motion.

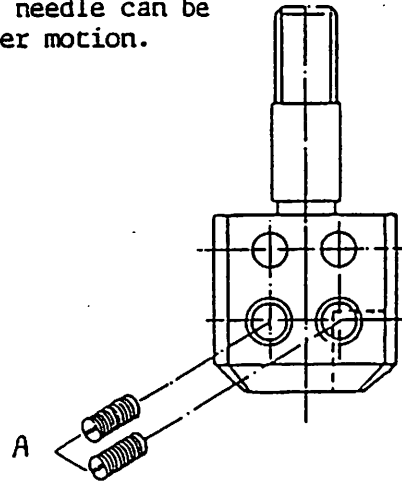
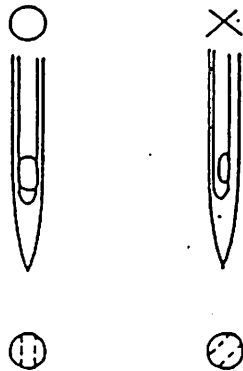


Fig.2

5) Threading (Fig. 3)

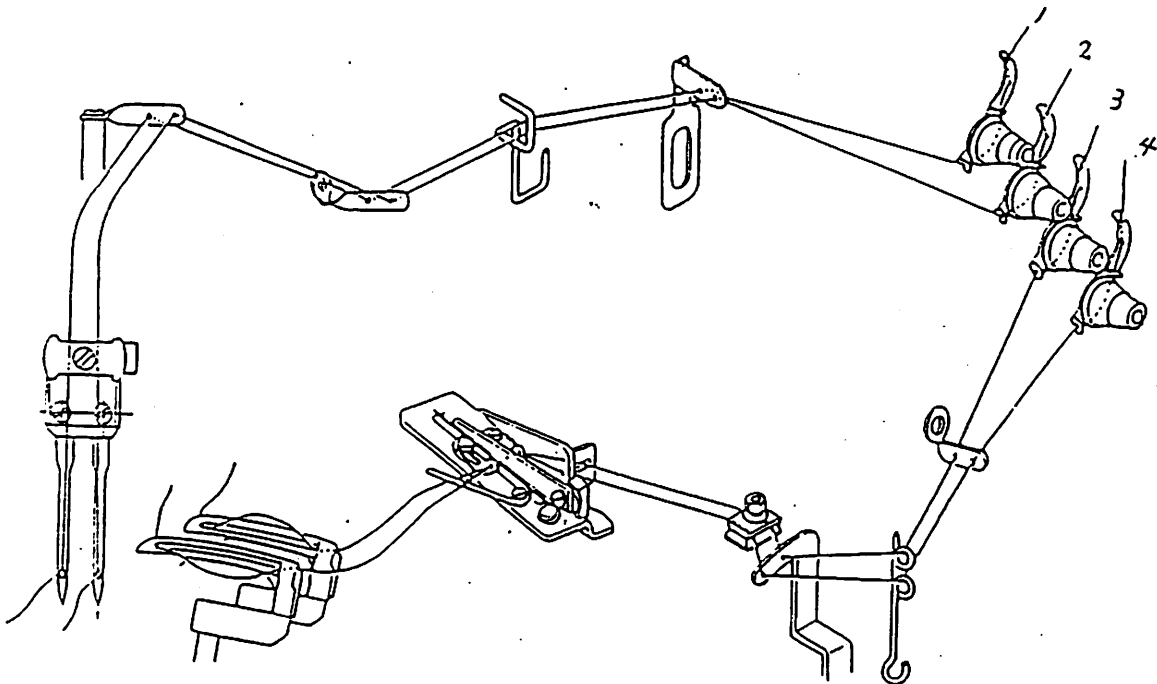


Fig.3

6) Needle bar height (Fig. 4)

The distance A between the point of needle and the surface of needle plate should be 9.5 m/m when the needle bar is at the highest of its stroke.

Loosen screw B very slightly but rigid enough to retain its position while rotating hand wheel and attain 9.5 m/m. Refer Fig. 5.

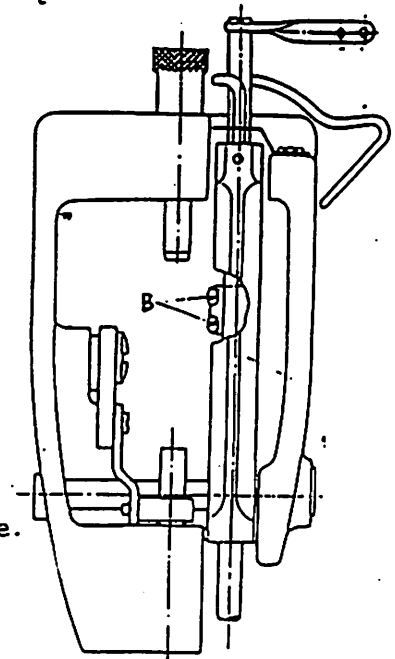
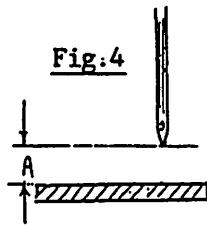


Fig. 5

7) Adjustment of Zig-Zag ratio (Fig. 6)

The proper Zig-Zag width is 5.7 m/m. To adjust Zig-Zag width loosen screw A move connecting link B in the cam bracket C upwardly to acquire more width, downwardly acts the reverse. After proper width is attained check the needle drop.

If needle drop is not correct, loosen screw D on worm gear and turn hand wheel to attain correct needle drop. Retighten screw A, D securely.

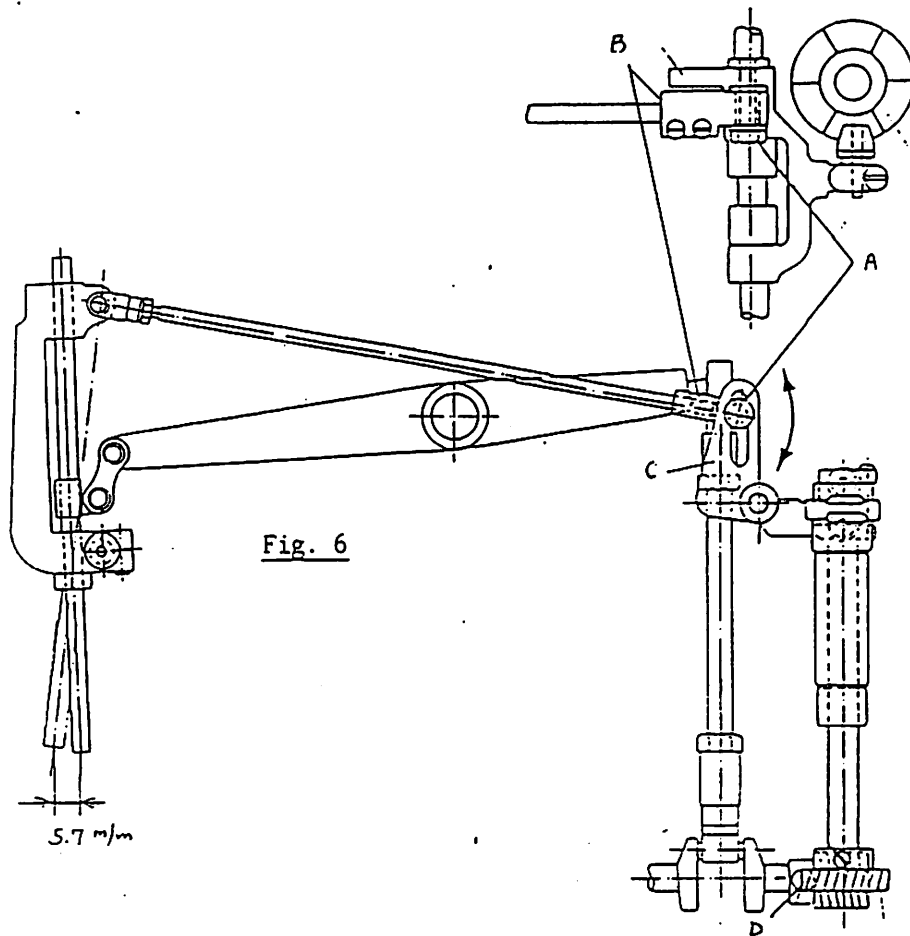


Fig. 6

8) Adjusting retaining spring (Fig.7)

Set the looper so that the polished surface of retaining spring is evenly touched against underside of the looper and gives tension of 30-40g to the thread.

To adjust, loosen screw A move base portion of retaining spring upwardly to acquire more tension.

Retighten screw A

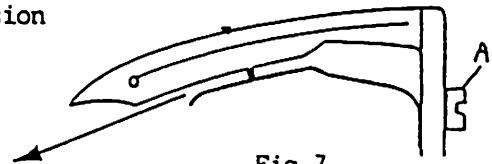


Fig. 7

9) Distance of looper to needle (Fig.8)

Set the looper so that the distance from the point of looper to the needle is 5 m/m.

To adjust, loosen screw A Fig.9 and B slightly, move looper bracket C to attain the distance, while needle is at the bottom position. Check its distance when the needle is in the location of 0 and 2.

Set the looper so that the clearance of 0-0.01 m/m between needle when the point of looper passes back of needle.

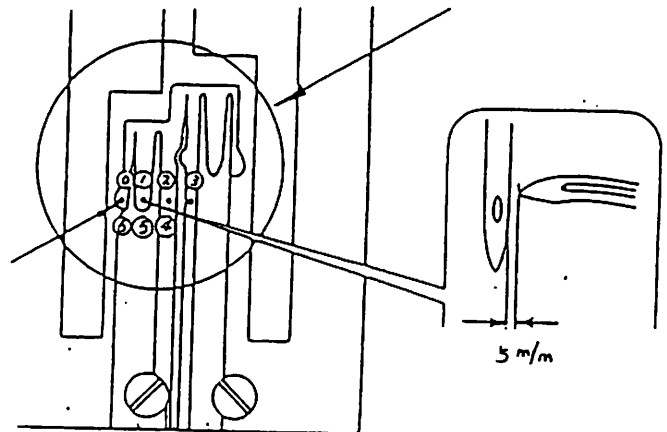


Fig. 9A

10) Synchronizing looper and needle. (Fig. 9A)

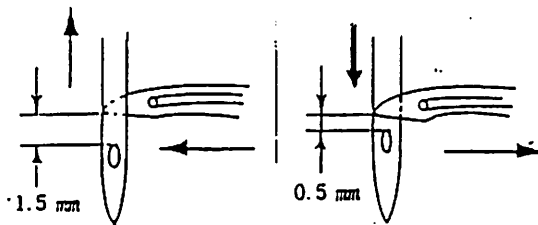


Fig. 9A

When the looper is in leftward motion, the point of looper should locate at the left end of needle with height of 1.5 m/m from upper end of needle eye.

In the reverse direction of looper motion, the point of looper and upper end of needle eye of which distance should be 0.5 m/m at the left side of needle.

To adjust, loosen screw D on eccentric turn hand wheel while holding the eccentric to attain its synchronizing. Retighten screw D securely.

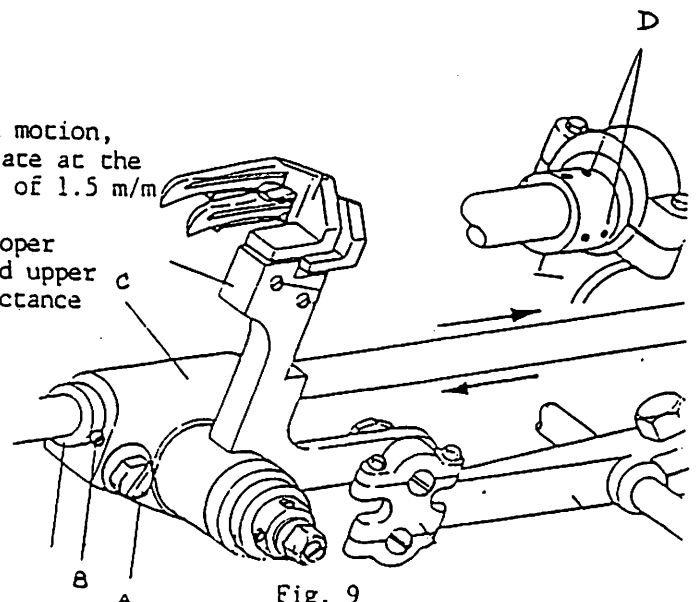


Fig. 9



11) The height of feed dog (Fig.10)

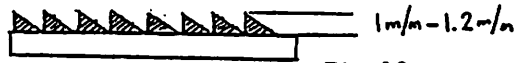


Fig.10

Set the feed dog so that the height of the peak of feed dog from surface of needle plate is 1-1.2 m/m, when the needle bar is at the top of its stroke.

To adjust, loosen screw A, B Fig.10A level front and rear feed dog. Retighten screw A, B securely.

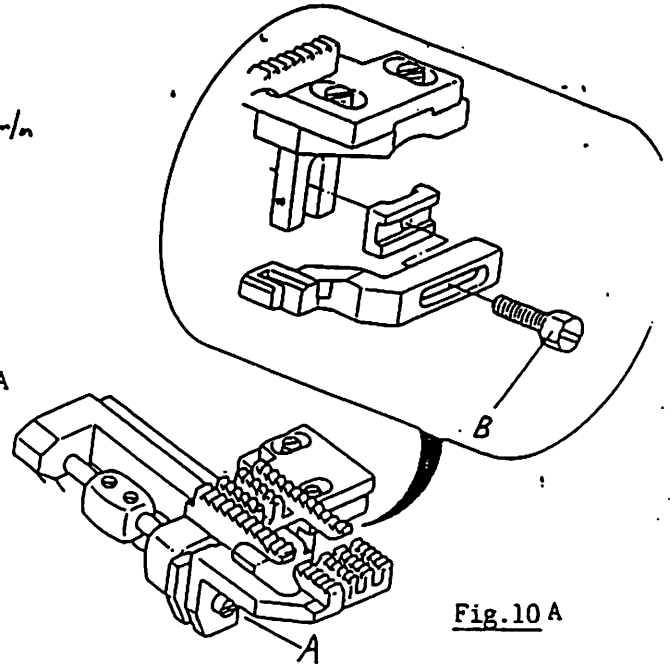


Fig.10A

12) Changing stitch length (Fig. 11)

a) When change in stitch length is required, loosen nut B clockwise and turn adjusting screw C counter-clockwisely to acquire longer stitch length, clockwise acts the reverse.

=CAUTION= Readjust the needle guard whenever stitch length is changed.

b) Differential control

Loosen nut A move crank rod D upwardly to acquire more differential ratio, downwardly acts the reverse. Retighten nut A securely.

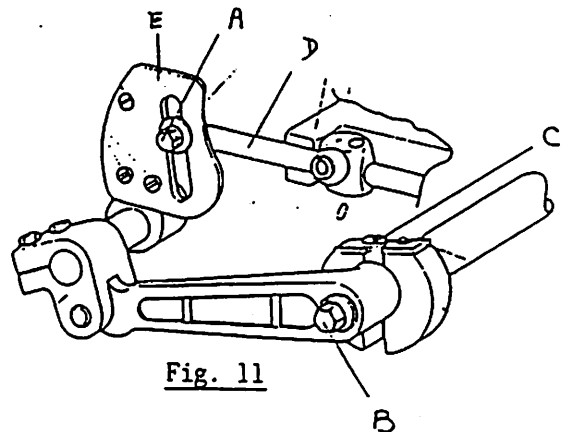


Fig. 11

13) Setting needle guard (Fig. 12)

Set the needle guard horizontally so that it barely contacts the needle when at its extreme forward position. It should be set vertically as low as possible, yet have its top of guarding surface is 0.8-1.0 m/m higher than the point of needle, when the point of looper meets needle on its way of leftward motion.

To adjust loosen screw A to attain proper position. Retighten screw A

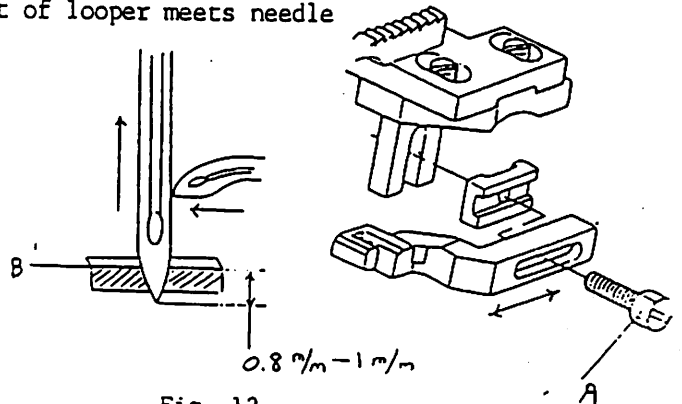


Fig. 12

#### 14) Setting of looper thread take-up

##### a) proper location of thread take-up eyelet D (Fig. 13)

Set the take up eyelet E so that eye is vertically in line with the center of main shaft.  
Loosen set screw A move eyelet to attain its position.  
Retighten set screw A securely.

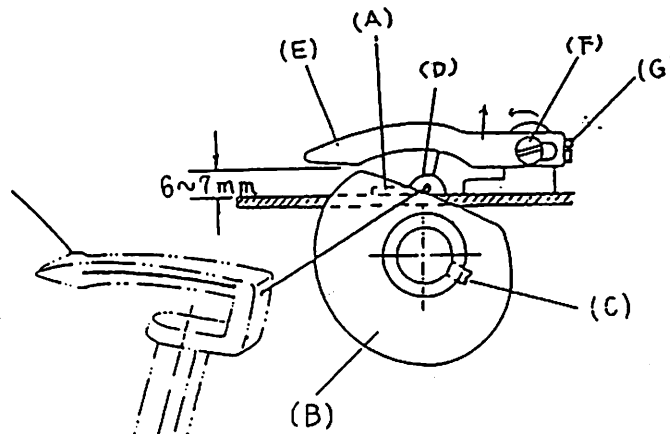


Fig. 13

##### b) Setting looper thread retainer E (Fig. 13)

Set the looper thread retainer E so that the distance from its underside to the surface of needle plate is 6-7 m/m.

To adjust loosen screw G move thread retainer E vertically to attain its height.  
Retighten screw G.

##### c) Amount of thread take-up

It can be done with the location of retainer E, loosen screw F move retainer E horizontally toward left to acquire more thread is being taken, toward right acts reverse.  
Retighten screw F after adjustment is made.

##### d) Adjusting take-up cam (Fig. 14) (Fig.13)

The looper thread should begin to be released when the blade of looper and the point of the needle are at horizontally the same height, in its motion toward right.

To adjust, loosen screw C SLIGHTLY but rigid enough to retain its position, move take-up cam B to attain proper position.  
Retighten screw C securely.

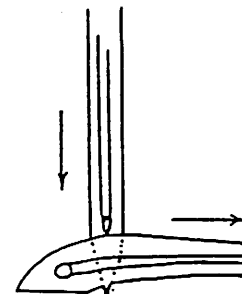


Fig. 14



15) Setting table (Fig.15)

