

Industrial Sewing Machines

Kansai Special

INSTRUCTION MANUAL

DLR 1500 series

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MODEL NAME COMPOSITION OF DLR 1500 SERIES. (FLATBED).

D L R - 1 5 0 2 - P

TO INCLUDE USAGE OF ATTACHMENTS, BINDER, ETC.
'P' MEANS MACHINE EQUIPPED WITH REAR PULLER.

- PMD WITH FRONT PULLER MECHANISM.
(METERING DEVICE ASSY MD-1).
- PHD HEAVY DUTY.
- PHD-C HEAVY DUTY FOR CANVAS.
- PTF EQUIPPED WITH TRACTOR FOOT.
- PR COMPENSATING BOTTOM ROLLER FOR COVERED SEWING OF JEANS WAISTBAND.
- PD DIFFERENTIAL PULLER FOR LEFT & RIGHT CURVE STITCHING OF JEANS WAISTBAND.
- PA-1 FEEDING DONE AUTOMATICALLY BY PULLER.
- PA-2 FEEDING DONE AUTOMATICALLY BY PULLER WITHOUT STITCHING (NO LOOPER MOVEMENT).
- PA-C FEEDING DONE AUTOMATICALLY BY PULLER EQUIPPED WITH REAR CUTTER.
- V LIGHT TO MEDIUM WEIGHT FABRICS WITHOUT REAR PULLER.
- L LINE ATTACHING W/O REAR PULLER.
- VHD FOR HEAVY DUTY W/O REAR PULLER.
- VTF FOR HEAVY DUTY EQUIPPED WITH TRACTOR FOOT, W/O REAR PULLER.
- IS FOR INTERMITTANT SHIRRING W/O REAR PULLER.
- M PLAIN.
- T TANDEM.
- MF METERING FOOT.
- TMF TANDEM WITH METERING FOOT.
- PZC3 ZIPPER SIZE 3.
- PZC5 ZIPPER SIZE 5.

TO INDICATE NUMBER OF NEEDLES :

- 01 1 NEEDLES.
- 02 2 NEEDLES.
- 03 3 NEEDLES.
- 04 4 NEEDLES.
- 07 2 NEEDLES.
- 08 4 NEEDLES. APPLICABLE FOR DLR SERIES.

TO INDICATE STITCHING WAY.

- 15 DOUBLE CHAIN STITCHING.

SYMBOL OF MACHINE SERIES.

(LR : LOOPER MOVEMENT LEFT & RIGHT).

2) Features

Seam type	401 type			double chain stitch		
Model	L-501	1502	1507	1503	1504	1508
Needle	1	2	2	3	4	4
Thread	2	4	4	6	8	8
Looper	1	2	2	3	4	4
Needle type	UY 128	AS # 90 - 100		TVx5 # 21	UY 128 GAS	TVx5 # 21
Needle gauge	-	3/16" 1/4"	7/8" 1 1/2"	9/32 1/4	1	1/4-1-1/4
Needle stroke	31m/m	34m/m	34m/m	34m/m	34m/m	34m/m
R.P.M.	5000	4500	4500	4500	4500	4500

Table 1

3) Motor pulley diameter

CAUTION : Operational rotation of hand wheel is towards operator (counterclockwise)

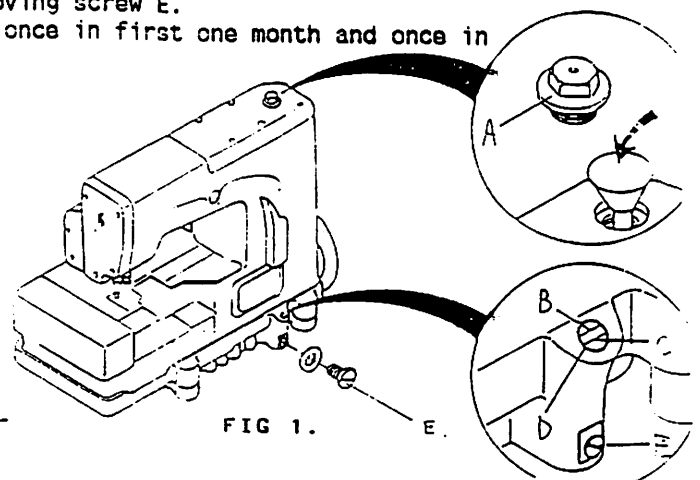
R.P.M.	MOTOR PULLEY DIAMETER M/M	
	50 Hz	60 Hz
5000	105	90
4500	95	80
4000	85	70

Table 2

Supplying / draining oil (Fig.1)

Recommended oil is "TELLESSO 33"

- 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.
- Draining oil can be done with removing screw E. It is recommended that oil change once in first one month and once in every 6 months afterward.



5) Threading (Fig 2)

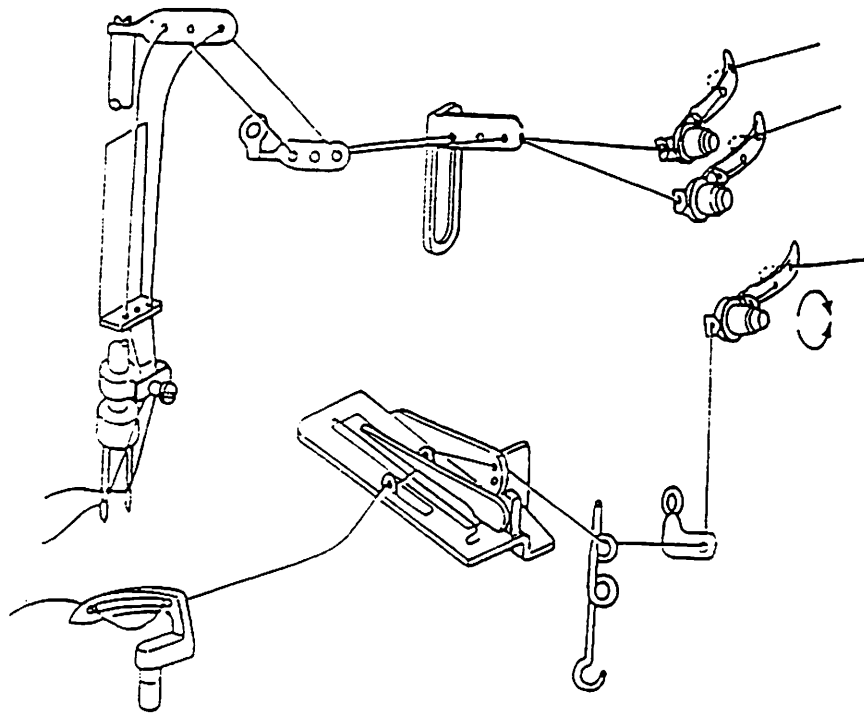


Fig. 2

6) Setting needle (Fig 3)

Place needle so that strait groove and needle eye are exactly facing towards operator.

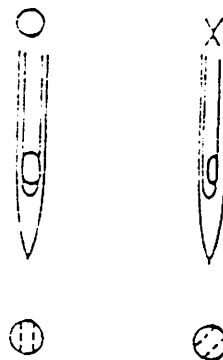


Fig. 3

7) Needle bar height (Fig 4)

Set the needle bar so that the distance from the point of needle to the surface of needle plate is as shown on Table 3, when the needle bar is at the top of its stroke. To adjust, loosen screw A to attain proper height.

Model	Needle bar Height
501	12.7 m/m
1502	7.5 m/m
1503, 1504	11.0 m/m
1508	11.2 m/m

Table 3

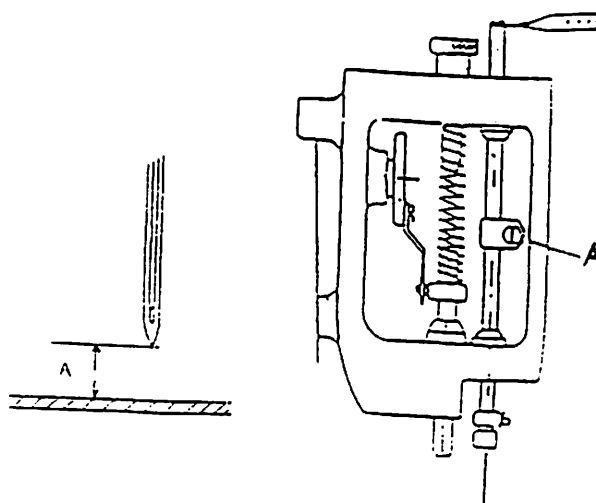


Fig. 4

8) Synchronizing needle and looper (Fig 5)

Turn the handwheel in operating direction until the point of looper, moving to the left (on the back side of needle), is even with the left side of the right needle. Now turn the handwheel in the reverse direction so that meeting point is the same as preceding location. To adjust, loosen screw E Fig 6 SLIGHTLY just enough to retain its position, to attain proper synchronization. Retighten screw E securely.

For Proper SYNCHRONIZATION of
Looper & Needle
these two Dimensions will be the same

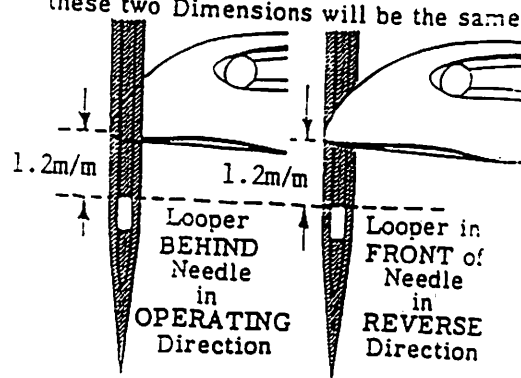


Fig. 5

9) Clearance of looper and needle (Fig 6, 7)

Loosen the looper and turn handwheel in operating direction until the point of the looper, moving to the left (on the back side of the needle), the clearance is 0-0.1 m/m (as close as possible without contacting) To adjust, loosen screw D Fig. 6 move looper holder to attain the proper clearance. Retighten screw D securely.

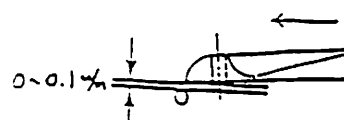


Fig. 7

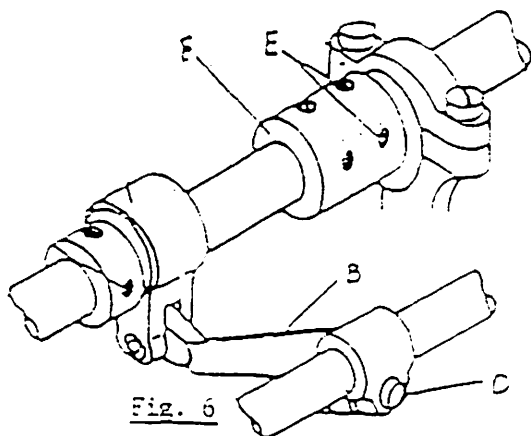
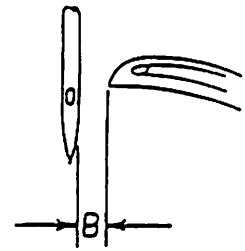


Fig. 6

10) Distance of looper and needle (Fig 8)

When the looper is at its farthest position to the right, the distance from the point of looper and the needle should be 3.5mm. (B)

To adjust, loosen nuts A turn connecting rod so that proper distance is attained. Retighten nuts A securely

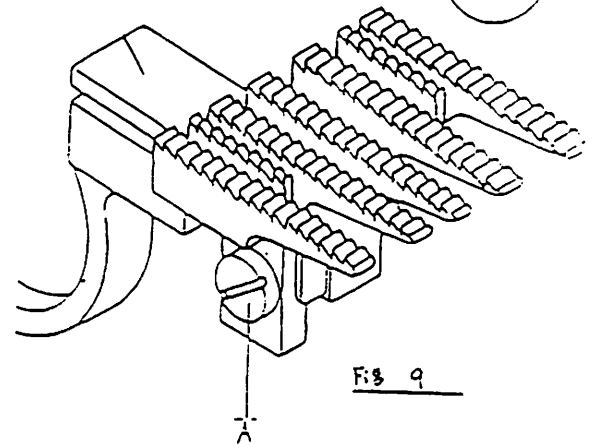
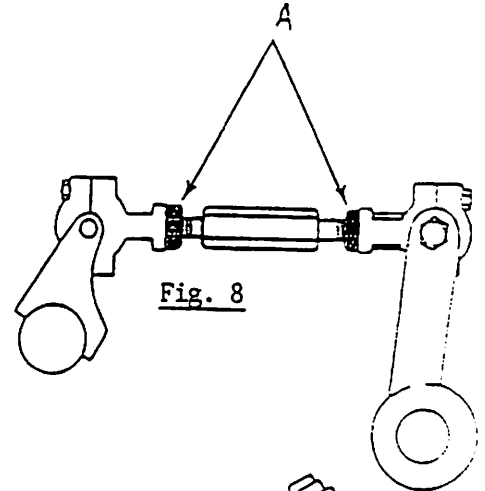


11) Height of feed dog (Fig.9)



When the needle bar is at the top of its stroke, the height of peak of teeth from the surface of the needle plate should be 1.0-1.2 m/m

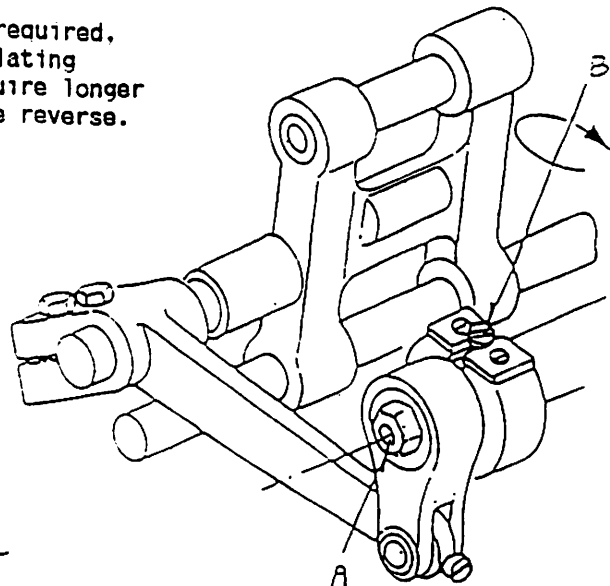
To adjust, loosen screw A move feed dog vertically to attain its proper height. Retighten screw A securely.



12) Changing feed length (Fig 10)

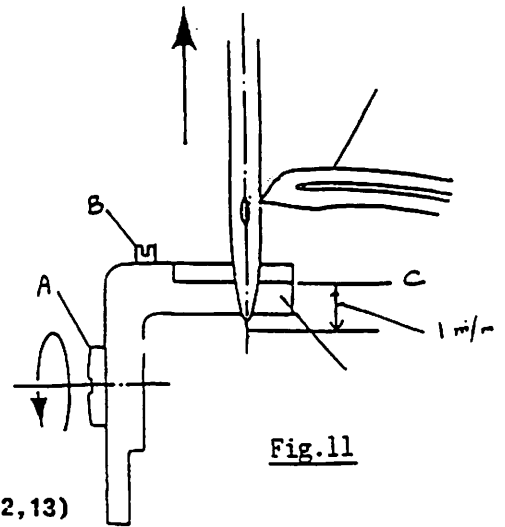
CAUTION: Whenever feed length is changed, be sure to readjust the needle guard.

If the change of feed length is required, loosen nut A clockwise turn regulating screw B counter-clockwise to acquire longer stitch length, clockwise acts the reverse. Retighten nut A securely.



13) Setting needle guard (Fig 11)

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 1.0m/m higher than the point of the needle on its way of leftward motion. To adjust, loosen screw A to attain proper position. Retighten screw A securely.

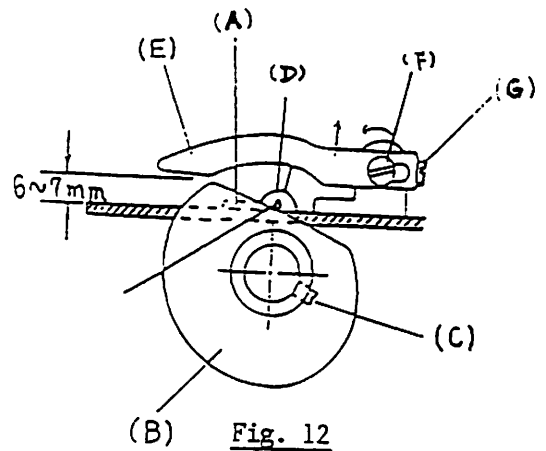


14) Adjustment of looper thread take-up (Fig 12,13)

a) Set the looper thread retainer E so that the distance from its underside to the surface of needle plate is 6-7m/m. To adjust, loosen screw G move thread retainer E vertically to attain its height. Retighten screw G.

b) Setting looper thread take-up eyelet

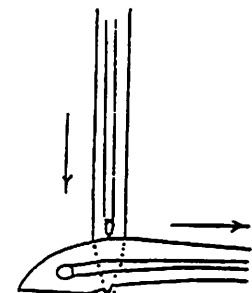
proper location of thread take-up eyelet D should be vertically in line with the center of main shaft. Loosen set screw A move eyelet to attain its position. Retighten set screw A securely.



Adjustment of take-up cam (Fig 13,12)

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.



15) Adjustment of rear puller

- a) Synchronization to needle bar (Fig 14)
In upward motion of needle bar and the point of needle is located within the thickness of presser foot (1.5m/m higher than surface of needle plate.), puller should start to be effective. Loosen screw A and secure the location of eccentric. Tighten screw A after adjustment is done.

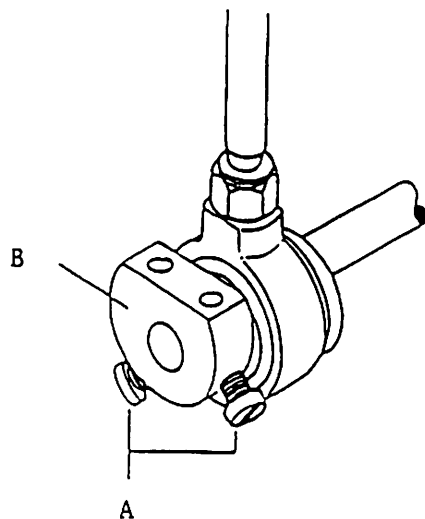


Fig.14

- b) The amount of travel of the puller (Fig 15)
Feed length and the amount of travel of the puller normally be maintained the same. To adjust this, loosen nut C, move ball joint assembly inwardly (towards upper shaft) in connecting layer A to acquire more feed action, outwardly acts the reverse. Retighten nut C.

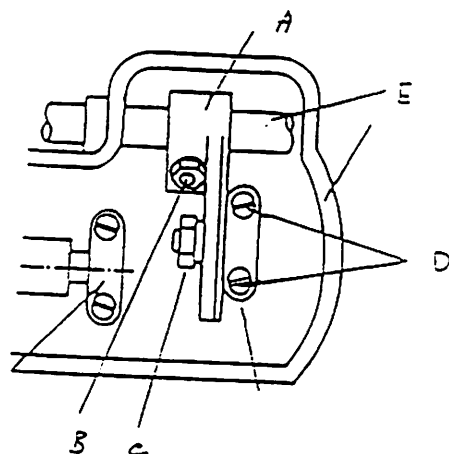


Fig.15

- c) Fine adjustment of travel of the puller (Fig 16)

To adjust this, loosen screw C move puller driving lever B towards operator to acquire more feeding action, outwardly acts reverse. Retighten screw C.

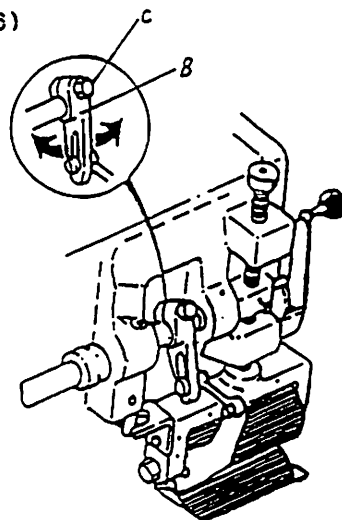


Fig. 16

16) Setting table stand

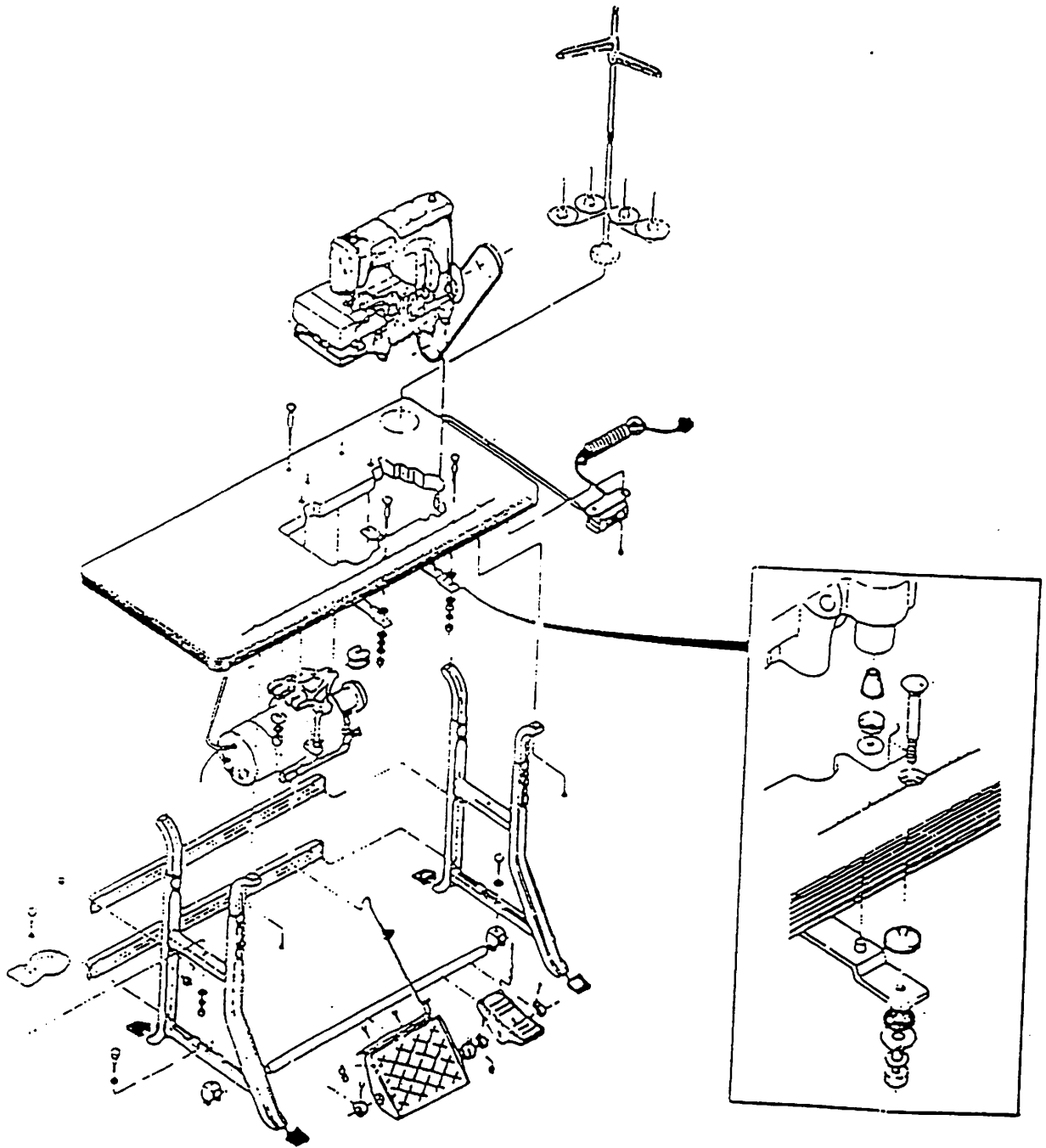


Fig.17