

Industrial Sewing Machines

Kansai Special

INSTRUCTION MANUAL

DFB 1400 series

DFB 1000 series

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1). MODEL NAME COMPOSITION OF DFB 1400 SERIES & DFB 1000 SERIES.

DFB - 1404 - P

TO INCLUDE USAGE OF ATTACHMENT, BINDER, ETC.
(ALL DFB SERIES HAVE REAR PULLER, EXCEPT FOR MR).

PMD WITH FRONT PULLER MECHANISM.
(METERING DEVICE A 'SSY MD-1).

PL LINE ATTACHING MACHINE.

PQ ELASTIC INSERTION SHIRRING MACHINE.

PS SHIRRING MACHINE.

PSF SHIRT-FRONTING MACHINE.

PTV VARI PIN TUCKING MACHINE.

PTV-I INVISIBLE PIN TUCKING MACHINE.

PSM SMOCKING.

PSSM SHIRRING AND SMOCKING MACHINE.

WB WAIST BANDING MACHINE FOR JEANS.

MR MULTI RUFFLER.

MVP COMPUTERIZED SMOCKING MACHINE.

PSM-MR SMOCKING PLUS MULTI RUFFLER.

PMB MAR-BELT.

TO INDICATE NUMBER OF NEEDLE.

04 4 NEEDLES.

06 6 NEEDLES.

08 8 NEEDLES.

12 12 NEEDLES.

25 25 NEEDLES.

33 33 NEEDLES.

TO INDICATE STITCHING WAY.

14 DOUBLE CHAIN STITCHING.

10 SINGLE CHAIN STITCHING.

SYMBOL OF MACHINE SERIES

(FB : LOOPER MOVEMENT FRONT AND BACK).

2). FEATURES

Model	1404	1412	1433	1012	1033	PSSM
Seam Type	401 Double Chainstitch			101 Single Chainstitch		Smocking
Needles	2-4	6-12	25-33	6-12	25-33	
Needle Bar Stroke	34.5 mm					
Feeding	Non-Differential					
Lubrication	Fully Automatic					
Max.SPM	4500	4000	2000	2500	2000	2000

3). SELECTION OF MOTOR PULLEY

S.P.M.	Diameter Of Motor Pulley (m/m)	
	50 Hz	60Hz
4,500	95	80
4,000	85	70
2,500	55	40
2,000	45	30

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

4). 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 removing screw E. It is recommended that oil change once in first one month & once in every 6 months afterward for stability of machine.

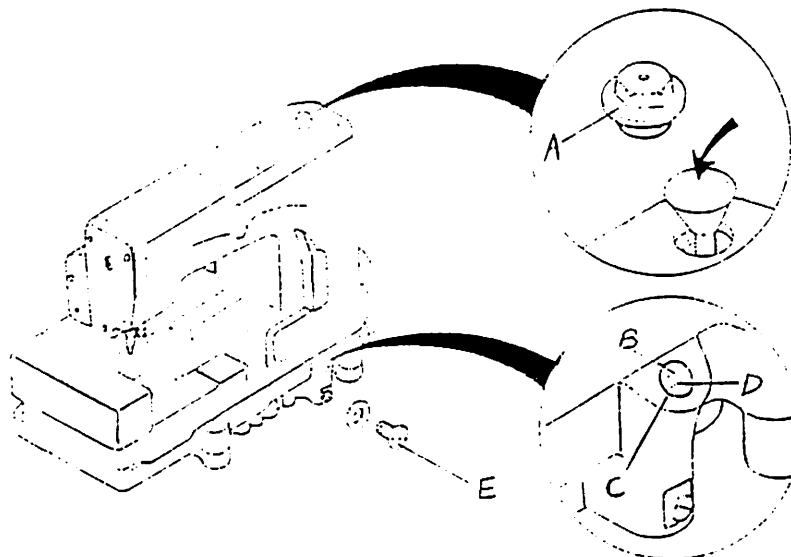
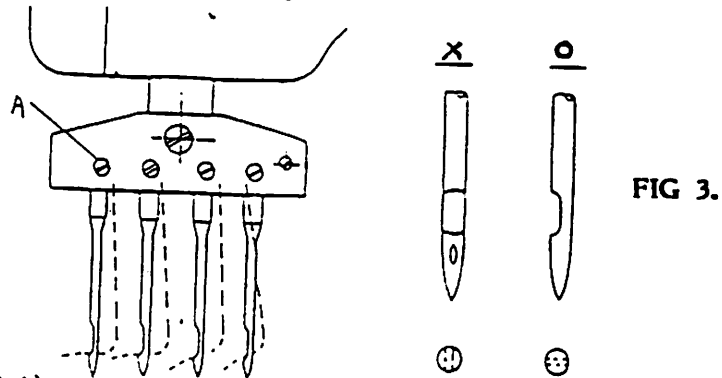


FIG 1.

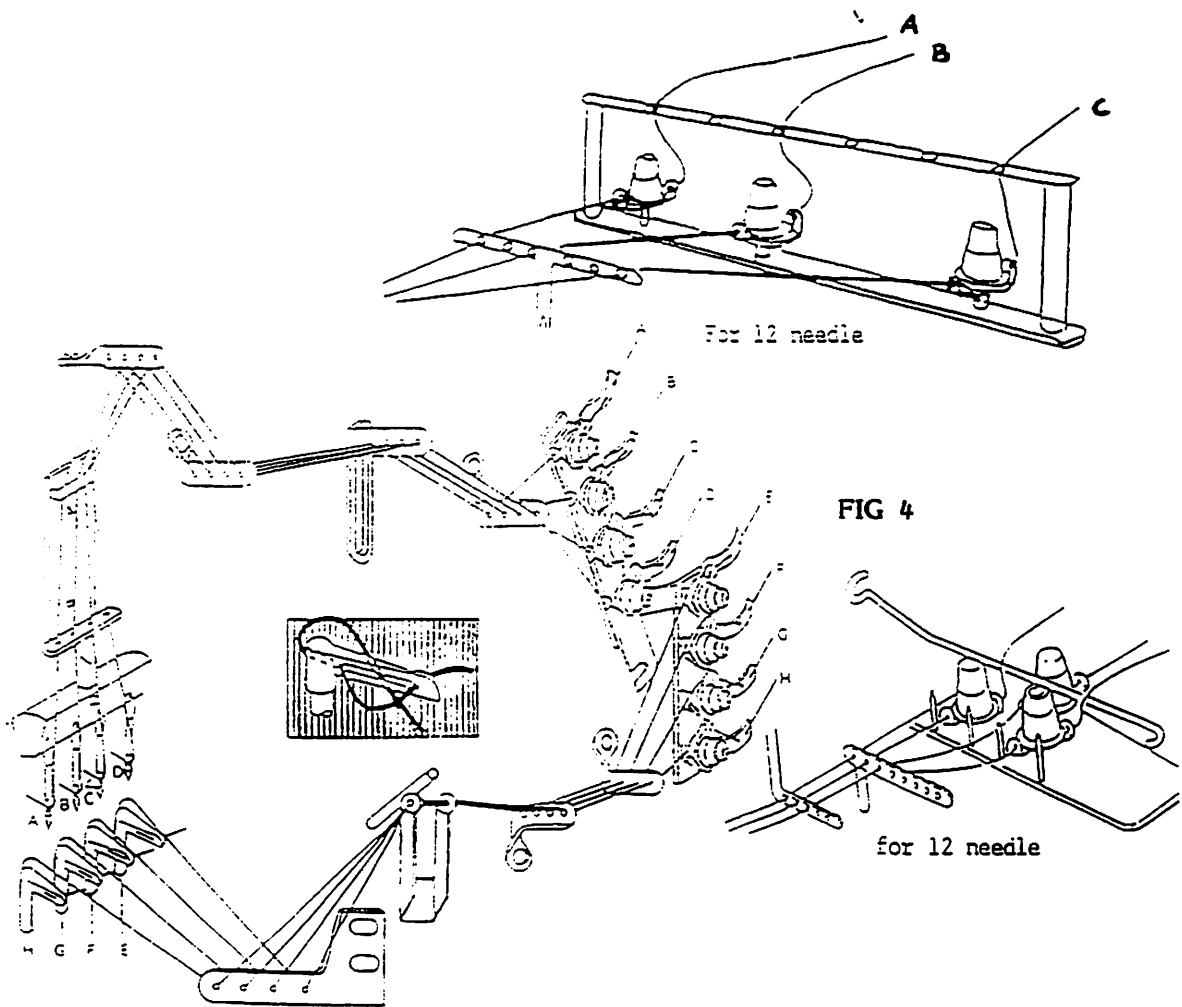
5).SETTING OF NEEDLE (FIG 3)

Loosen screw A and place needle eye securely across the feeding direction with locating scarf of needle toward left shown Fig.3.



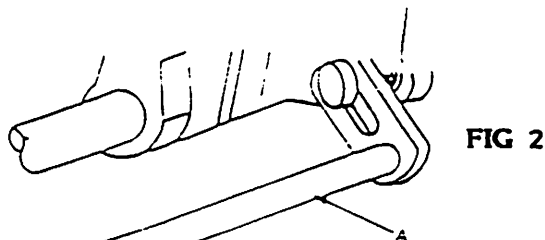
6) THREADING (FIG 4)

Refer Fig.4 for correct threading



6a).THREADING FOR LOOPER (FIG 2)

Pull throw-out bar A towards left as looper holder can be at the throw-out position. (Tilting out toward operator).Push looper holder in after threading.



7). NEEDLE BAR HEIGHT (FIG 5).

When the needle bar is at the highest of its stroke, the point of needle to the surface of needle plate should be 13.5mm. Loosen screw B for this adjustment.

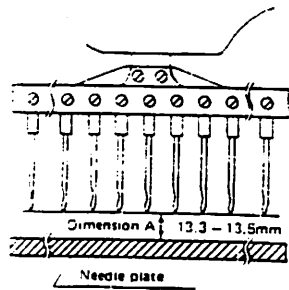
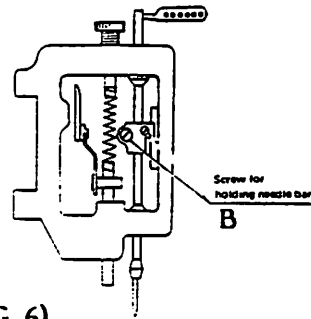


FIG 5



8). DISTANCE OF LOOPER TO THE NEEDLE (FIG 6).

When the needle bar is at the highest of its stroke, the point of looper to the needle should be 3.0mm. Loosen screw A Fig 6 for this adjustment as looper holder can be moved front and backward. Tighten screw A firmly.

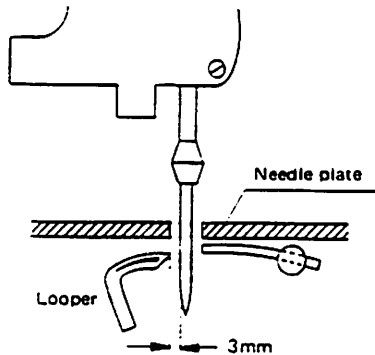
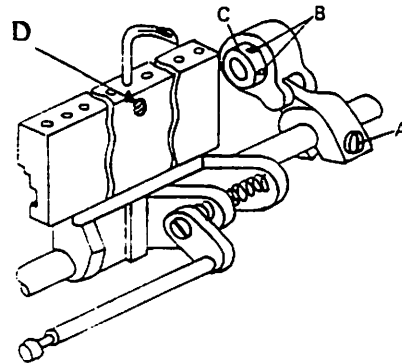


FIG 6



9). SYNCHRONIZATION OF NEEDLE AND LOOPER (FIG 7).

When the needle bar is on its way upward, the point of looper should locate in the middle of needle scarf (1.0mm higher than needle eye).

Also, the needle bar is on its way down, the point of looper should locate 2.5 mm higher than needle eye (needle eye and looper should be in line).

To adjust this, loosen screw B Fig .6 and relocate position of eccentric against main-shaft. Tighten screw A securely.

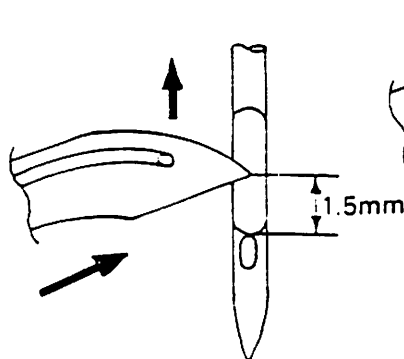
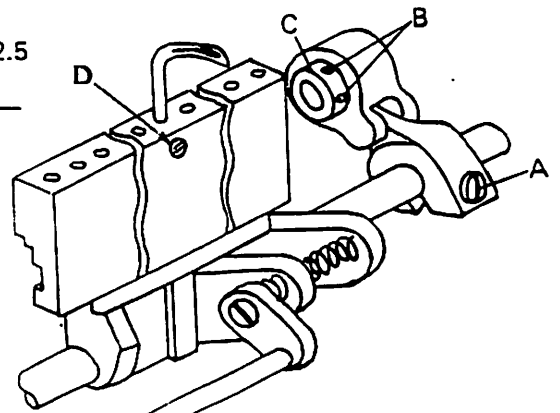


FIG 7



10).CLEARANCE OF NEEDLE AND LOOPER (FIG 8)

When the point of looper passes by scarf of needle,keep clearance between them should be 0-0.1mm.

To adjust this,loosen screw D, Fig 6.



FIG 8.

11).SETTING OF NEEDLE GUARD (FIG.9)

The clearance of needle and needle guard should be 0-0.1mm when needle guard is located at the closest position to the needle.

Loosen screw A for this adjustment.

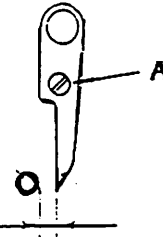


FIG 9

12).SETTING OF SPREADER LOOPER (FIG 10)

a).Flat surface of spreader looper should be parallel with surface of needle plate as shown in Fig 10.

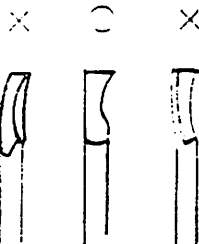


FIG 10

b).Distance of Needle To The Point of Spreader Looper (Fig 11).

Turn hand wheel and locate spreader looper in front of needle then secure the distance of 0.35-0.40mm between them loosening screw A.

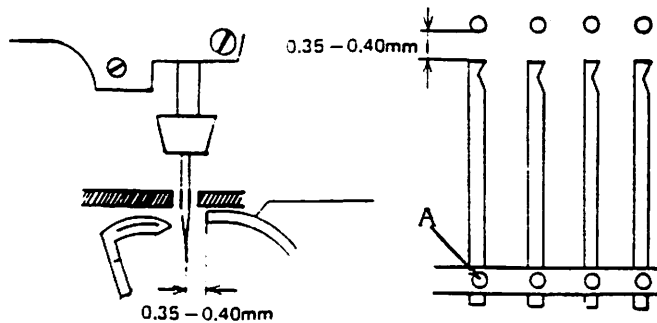


FIG 11.

c).Location of Spreader Looper to Looper(Fig 12)

When spreader bar is at its extreme left end,right side point of spreader looper should be located 0.5mm left of right side surface of looper.

To adjust this,loosen screw A so that spreader bar B can be shifted.

At the same time,keep clearance 0.1mm between top of looper and lower end of spreader looper.

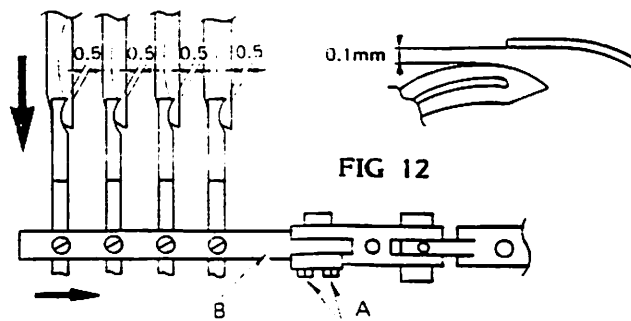


FIG 12

13). ADJUSTMENT OF THREAD RETAINING BAR

a). Synchronization of retaining bar and looper Fig 13. In motion of needle bar downward and point of needle is at the same height of blade of looper, thread retaining bar should start its motion upward. Loosen screw D on eccentric and shift its location.

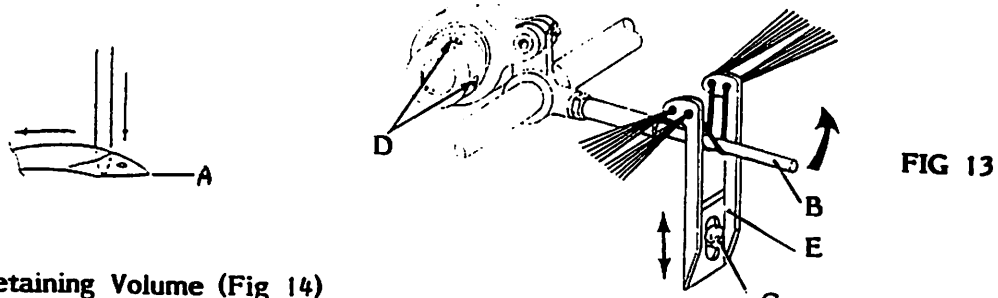


FIG 13

b). Retaining Volume (Fig 14)

When retaining bar is at its lowest position, keep the distance 10mm from eye to the point where thread is being retained. Refer below table for different type of thread.

Thread	Distance A mm
Cotton	8.0
Synthetic	8.0
Spun	10.0
Wooly	10.0

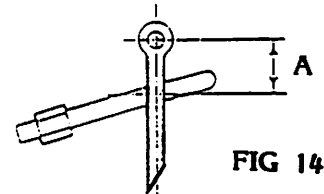


FIG 14

This adjustment can be made with loosening screw C Fig 13 as height of eyelet can be changed.

14). HEIGHT OF FEED DOG (FIG 15)

When the needle bar is at the highest of its stroke, the height of peak of teeth to needle plate surface should be 1.0-1.2mm. Loosen screw C for change of height of feed dog and secure the height with screw D. Teeth should be made parallel with surface of needle plate by adjusting screw X while screw Y is loosened. Tighten screw C and Y after adjustment is done.

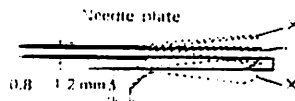
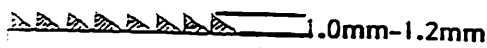
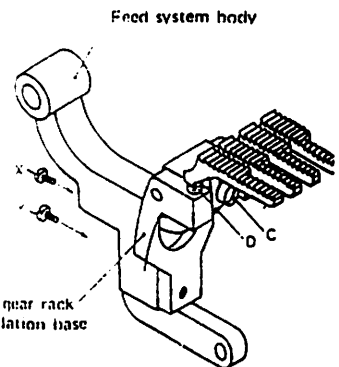


FIG 15



15). ADJUSTMENT OF REAR PULLER

a). Synchronization to needle bar (Fig 16). Inward motion of needle bar and the point of needle is located within the thickness of presser foot (1.5mm 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.

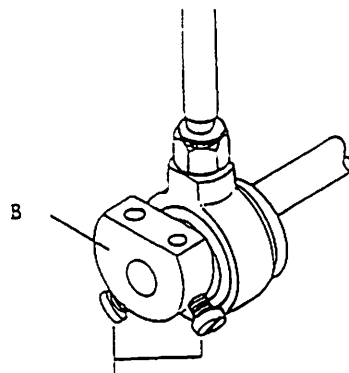


FIG 16

- b).The amount of travel of the puller (Fig 17)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 lever A to acquire more feed action,outwardly acts the reverse.Retighten nut C.

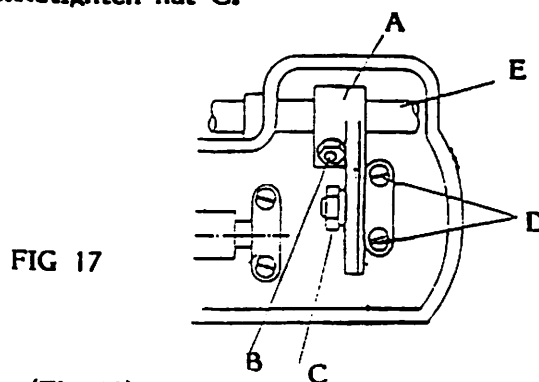


FIG 17

- c).Fine Adjustment Of Travel Of The puller (Fig 18)

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

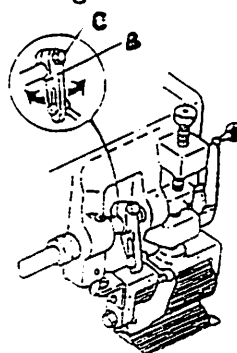


FIG 18

16). ADJUSTMENT OF SINGLE CHAINSTITCH

Applicable model: DFB 1012P, 1025P, 1033P ,1012PSSM , 1033PSSM

A).NEEDLE BAR HEIGHT (FIG 19)

When the needle bar is at the highest of its stroke,the point of needle to the surface of needle plate should be 12.3mm.Loosen screw B for this adjustment.

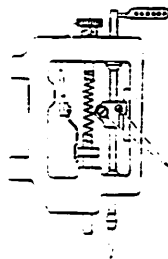
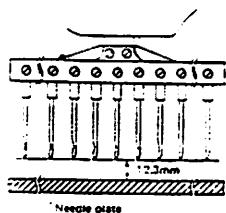


FIG 19

B).HEIGHT OF FEED DOG (FIG 20)

Set feed dog height to 1-1.2mm from the needle plate upper surface.

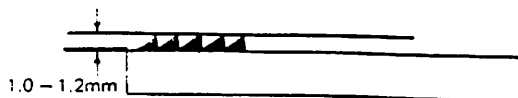


FIG 20

C).DISTANCE OF LOOPER TO THE NEEDLE (FIG 21)

When the needle bar is located at the lowest of its stroke,distance from the needle to the point of looper is 1.8mm.To adjust this,loosen screw A slightly but rigid enough to retain its position,and adjust the distance.Retighten screw A.

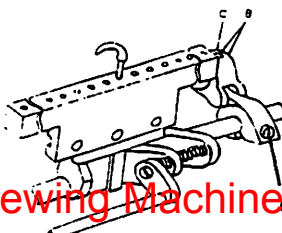
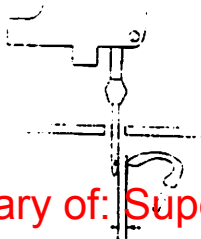


FIG 21

D).NEEDLE BAR AND LOOPER TIMING

Synchronize the timing between the looper and needle,When the timing is proper,the looper passes the same route both in normal and reverse rotations.

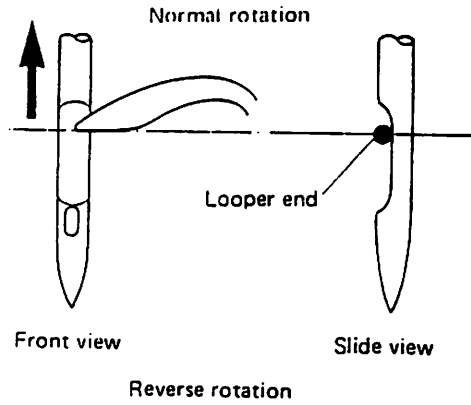


FIG 22

E).LOOPER SETTING ANGLE

Set loopers so that looper center and needle center are on a center line.

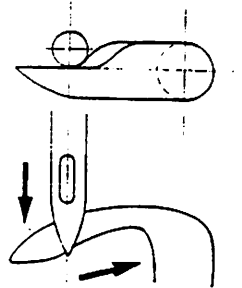


FIG 23

17).REAR PULLER TIMING

Adjust rear puller timing so that the center of puller driving eccentric set screws meets the center of crankshaft when the need bar is at its lowest position.

Note:That puller roller reaches its extreme end when needle just enters the needle plate hole.

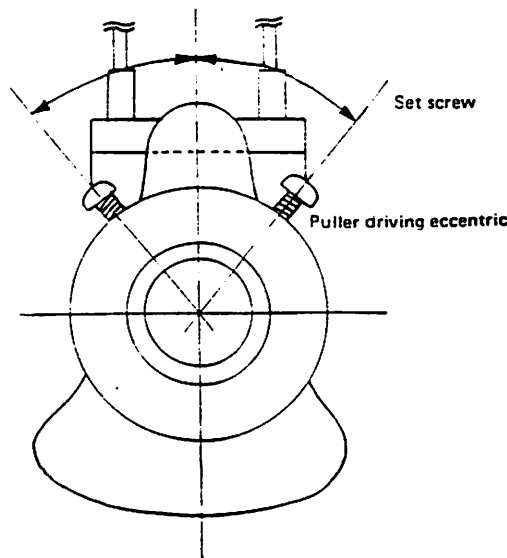


FIG 24