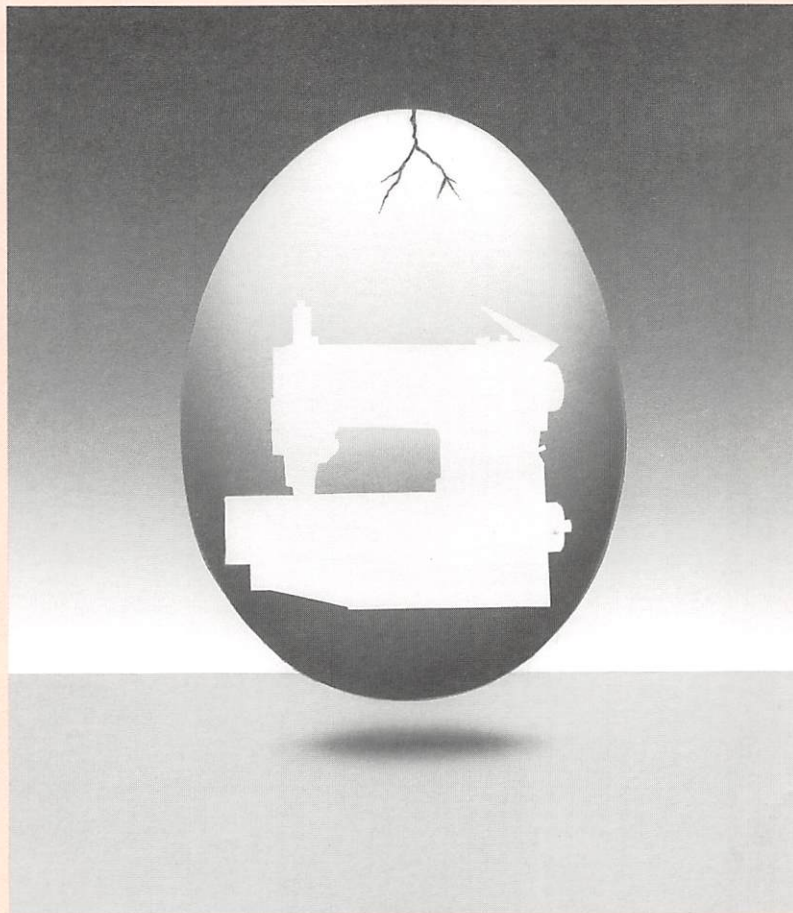


Industrial Sewing Machines

**K**ansai **S**pecial

# WX-8800 SERIES TECHNICAL INSTRUCTION MANUAL



MORIMOTO MFG. CO., LTD.

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# Introduction

Thank you for purchasing a KANSAI SPECIAL WX SERIES MACHINE.

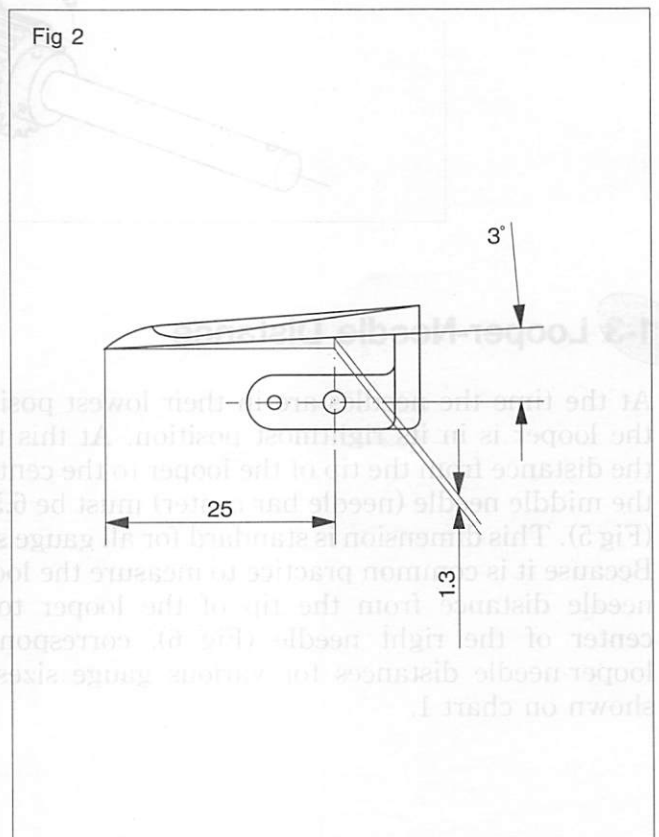
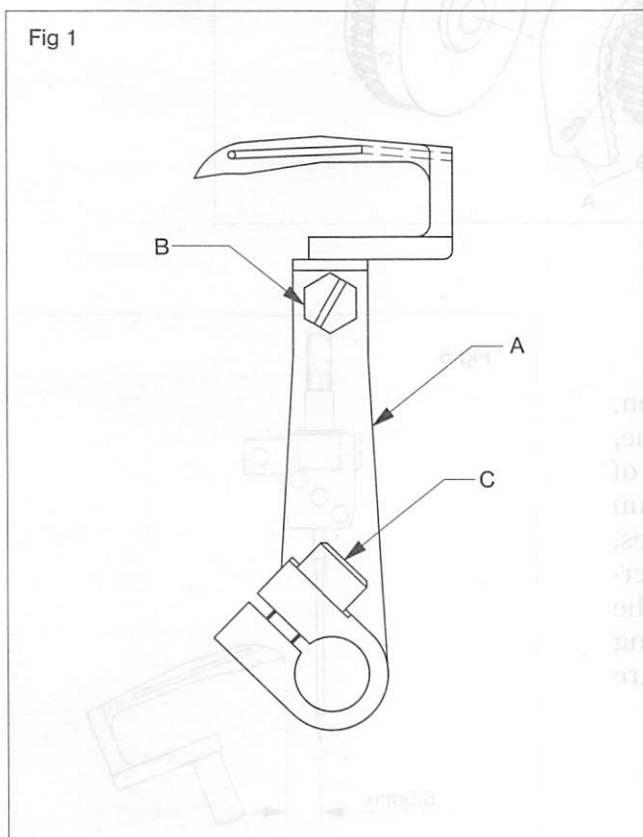
This instruction manual is a technical service manual featuring specific information regarding the adjustments and settings of the machine.

## 1. Looper-Needle Timing

### 1-1 The Looper And The Looper Carrier

The shaft of the looper is set into the top of the looper carrier ("A", Fig 1) and fastened in place with the set screw ("B", Fig 1). The height and the position of the looper are automatically set as long as the looper is set fully into the looper carrier and the set screw is tightened squarely onto the flat on the looper shaft.

By design, the inner surface of the looper is offset three degrees away from the horizontal plane (see Fig 2).



## 1-2 Looper-Needle Synchronization

The timing (synchronization) of the looper and needles are equal for the leftwards movement as for the return movement. As the looper moves to the left, behind the needles: As the tip of the looper reaches the center of left needle, the dimension from the tip of the looper to the top of the eye of the left needle must be 1 to 1.5mm (see Fig 3A). As the looper returns to the right, in front of the needles: As the tip of the looper reaches the center of the left needle, the dimension from the tip of the looper to the top of the eye of the left needle must be 1 to 1.5mm (Fig 3B). Adjustment of the looper-needle timing is done by removing the top housing cover, loosening the set screws ("A") on the top timing pulley, and moving the position of the timing pulley on the top shaft accordingly (see Fig 4).

Fig 3A

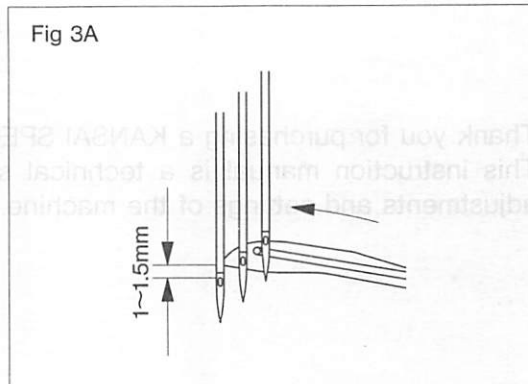


Fig 3B

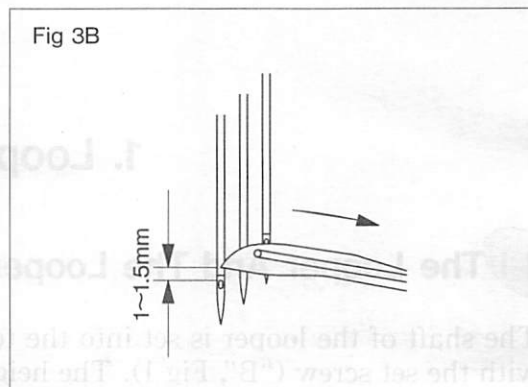
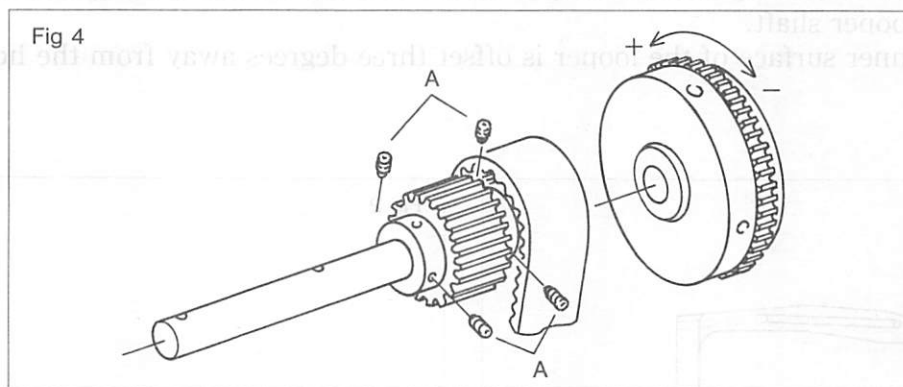


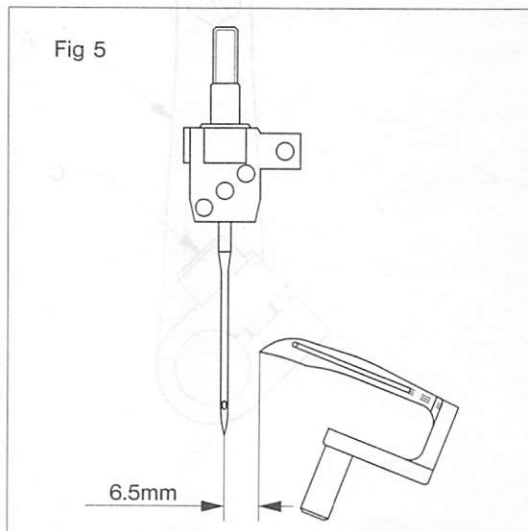
Fig 4



## 1-3 Looper-Needle Distance

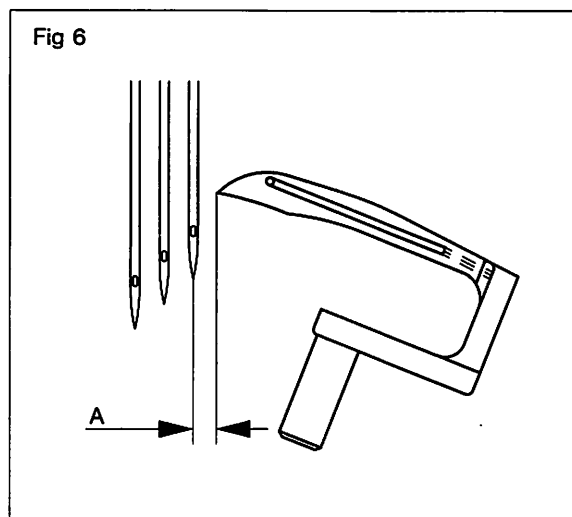
At the time the needles are in their lowest position, the looper is in its rightmost position. At this time, the distance from the tip of the looper to the center of the middle needle (needle bar center) must be 6.5mm (Fig 5). This dimension is standard for all gauge sizes. Because it is common practice to measure the looper-needle distance from the tip of the looper to the center of the right needle (Fig 6), corresponding looper-needle distances for various gauge sizes are shown on chart 1.

Fig 5



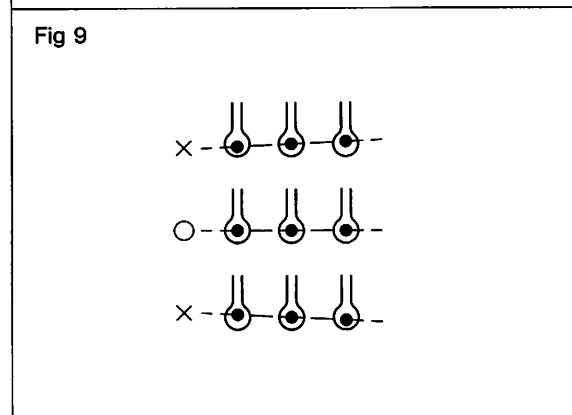
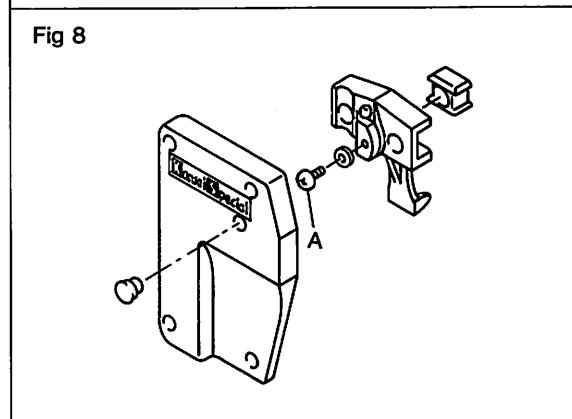
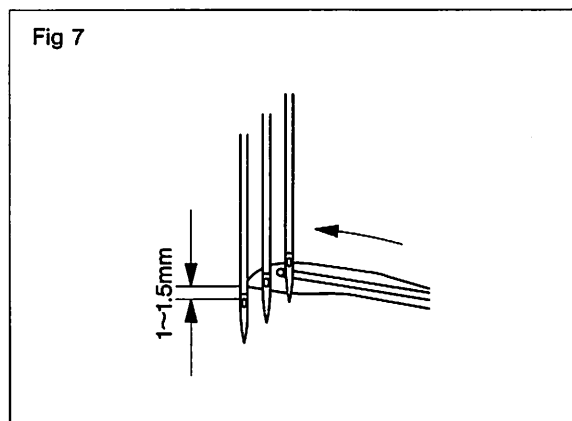
**Chart 1**

Gauge width	"A"
1/8" (3.2mm)	4.9mm
5/32"(4.0mm)	4.5mm
3/16"(4.8mm)	4.1mm
7/32"(5.6mm)	3.7mm
1/4" (6.4mm)	3.3mm



### 1-4 Needle Height

As the looper moves to the left, behind the needles, the tip of the looper reaches the center of the left needle. At this time, the distance from the tip of the looper to the top of the eye of the needle must be 1 to 1.5mm (Fig 7). If the needle height needs adjusting, remove the face plate to gain access to the clamp screw ("A", Fig 8). Loosen the clamp screw by using A 3mm hex key wrench. Adjust the height up or down as needed. Retighten the clamp screw.



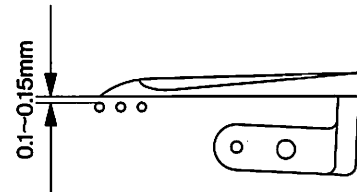
**Note**

1. Do not overtighten the screw more than 3 to 4 ft. lbs. (30 to 35 kgcm) torque.
2. When tightening the clamp screw, be sure the needles are in alignment with the needle holes in the needle plate (Fig 9).

## 1-5 Looper-Needle Clearance

As the looper moves to the left, behind the needles, the tip of the looper will lightly brush against the right needle (zero clearance). As it continues across and passes behind the left needle, the clearance will be 0.1 to 0.15mm. The same conditions apply to both two and three needle models (see Fig 10 and 11).

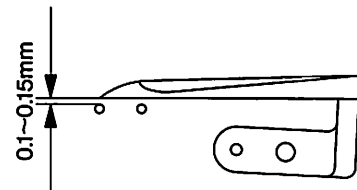
Fig 10



Three Needle Gauge

To make an adjustment, first check to see that the needles are in proper alignment with the needle holes in the needle plate (Fig 9). Next, check to be sure the looper is set so that the set screw is positioned squarely on the flat of the looper shaft (see Fig 1). Next, check to be sure that the looper avoid angle is appropriate (see section 1-6).

Fig 11



Two Needle Gauge

## 1-6 Adjustment Of Looper Avoid Angle

The looper avoid motion, or path, has a standard offset angle such that the tip of the looper just brushes the back surface of the right needle and has a clearance of 0.1 to 0.15mm as it passes behind the left needle. (see Fig 12).

In the WX series of machines, the looper avoid angle is adjustable for obtaining improved results under various sewing conditions.

To adjust, loosen the set screw ("B", Fig 13) on the avoid eccentric ("A", Fig 13), and move the eccentric forward or backward on the shaft as needed. Moving the timing mark forward (in the "X" direction, Fig 14) decreases the avoid angle. Moving the timing mark backward (in the "Y" direction, Fig 14) increases the avoid angle. Standard looper avoid angle is achieved when the timing marks are aligned.

### Caution

The adjustment of the looper avoid angle is intended for slight variations only. Large variations in looper avoid angles in either direction may result in skip stitching.

Fig 12



Fig 13

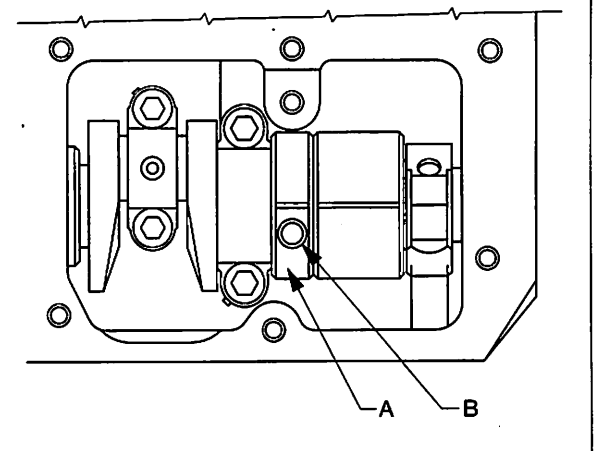
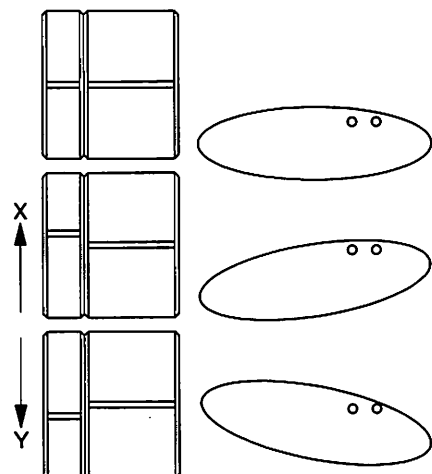


Fig 14





## 1-7 Needle Deflection

As the needles move downward and the looper moves to the right, the left needle must contact the back of the looper 3 to 3.5mm behind the eye of the needle (see Fig 15). The left needle must deflect off the back 1/3 of the looper, approximately 0.3 to 0.6mm (see Fig 16).

If heavier needles are used, the looper position may need to be adjusted. Loosen the nut on the stop pin for the looper avoid rod (Fig 17). Reposition the looper by turning the screw ("A", Fig 17). By turning the screw clockwise, the assembly will move in the "X" direction (see Fig 18). This will decrease the looper avoid motion. By turning the screw counterclockwise, the assembly will move in the "Y" direction. This will increase the looper avoid motion. The standard amount of looper avoid motion should be 2.3 to 3.1mm.

### Note

By decreasing the looper avoid motion, needle breakage may occur because of too much contact between the looper and needles and increased friction. By increasing the looper avoid motion, skip stitching may occur.

Fig 15

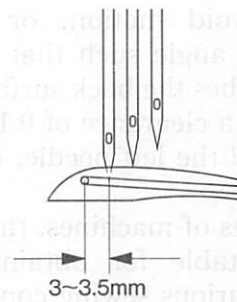


Fig 16

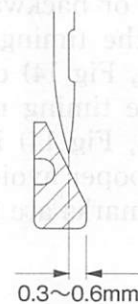


Fig 17

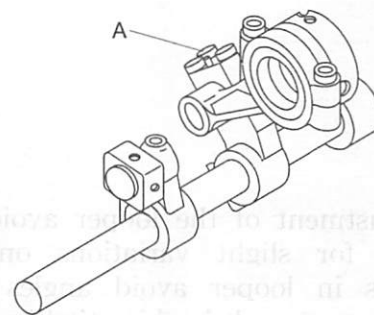
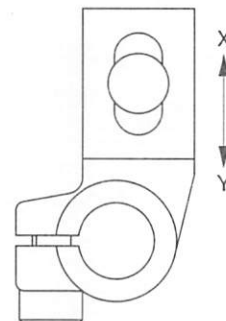


Fig 18



## 2. The Needle Guards

### 2-1 Position Of The Rear Needle Guard

At the time the needles are in the lowest position, the height of the rear needle guard must be arranged so that the contacting edge ("a", Fig 19) lines up with the eye of the right needle (see Fig 19). Also at that time, the clearance and orientation to the needles must be such that there is a 0.3 to 0.4mm clearance to the right needle and a 0.6 to 0.7mm clearance to the left needle (see Fig 19). Adjust by loosening screws "B" and "C" (Fig 22) and position as needed. Retighten all screws.

As the looper moves to the left and the tip of the looper reaches the center of the right needle (see Fig 20), the needle guard must be contacting the right needle to make a "zero clearance" (0 to 0.05mm) between the looper tip and the scarf of the right needle (see Fig 20).

As the looper continues across and the tip of the looper reaches the center of the left needle, there should be a clearance of 0.15 to 0.2mm between the left needle and the rear needle guard (see Fig 21).

#### Note

At this time, the rear needle guard does not contact the needles.

All adjustments to height and position orientation are done with screws "B" and "C" shown in figure 22.

Fig 19

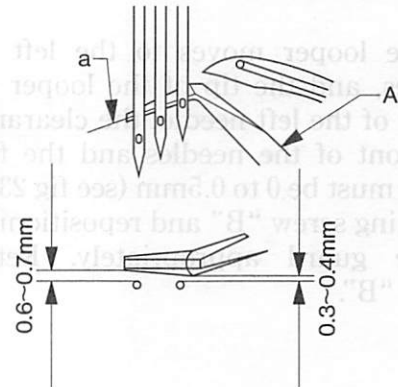


Fig 20

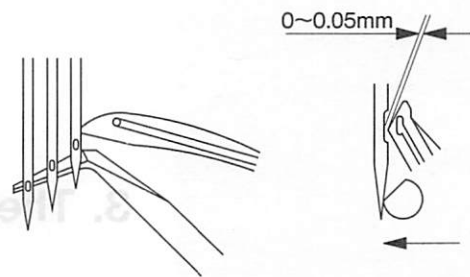


Fig 21

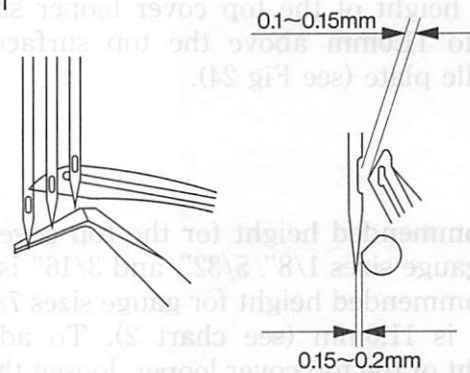
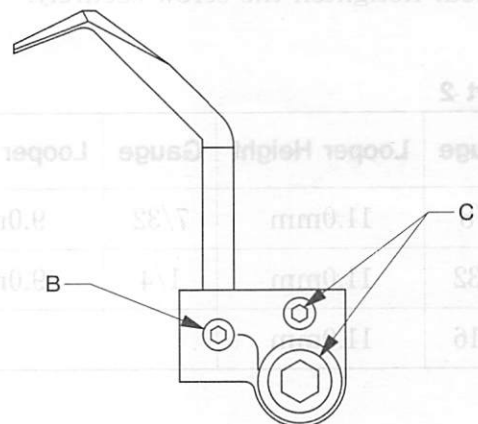
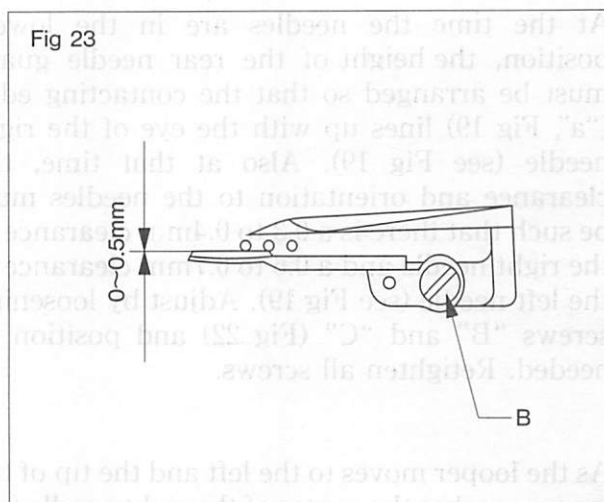


Fig 22



## 2-2 Position Of The Front Needle Guard

As the looper moves to the left behind the needles, and the tip of the looper reaches the center of the left needle, the clearance between the front of the needles and the front needle guard must be 0 to 0.5mm (see fig 23). Adjust by loosening screw "B" and repositioning the front needle guard appropriately. Retighten the screw "B".



## 3. The Top Cover Looper

### 3-1 Position Of The Top Cover Looper

The height of the top cover looper should be 9.0 to 11.0mm above the top surface of the needle plate (see Fig 24).

#### Note

Recommended height for the top cover looper for gauge sizes 1/8", 5/32", and 3/16" is 9.0mm. Recommended height for gauge sizes 7/32" and 1/4" is 11.0mm (see chart 2). To adjust the height of the top cover looper, loosen the clamp screw ("B". Fig 25) and position up or down as needed. Retighten the screw securely.

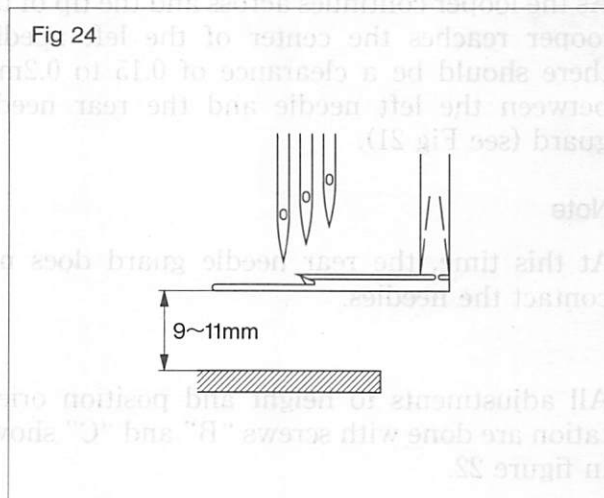
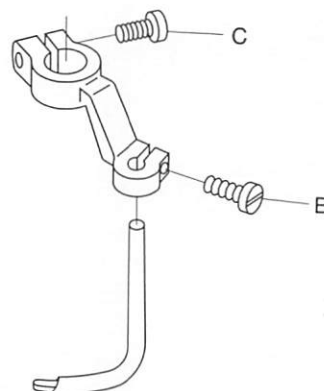


Chart 2

Gauge	Looper Height	Gauge	Looper Height
1/8	11.0mm	7/32	9.0mm
5/32	11.0mm	1/4	9.0mm
3/16	11.0mm		

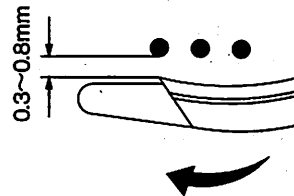
Fig 25



### 3-1 Top Cover Looper Cont'd

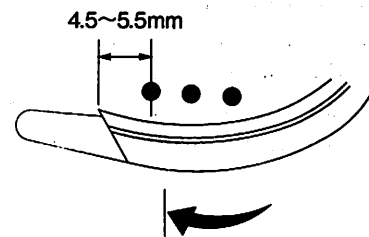
As the top cover looper moves across the front of the needles, the clearance between the front of the left needle and the tip of the thread hook must be 0.3 to 0.8mm (see Fig 26). To adjust, loosen the set screw ("B", Fig 25), reposition as necessary, and retighten the set screw securely.

Fig 26



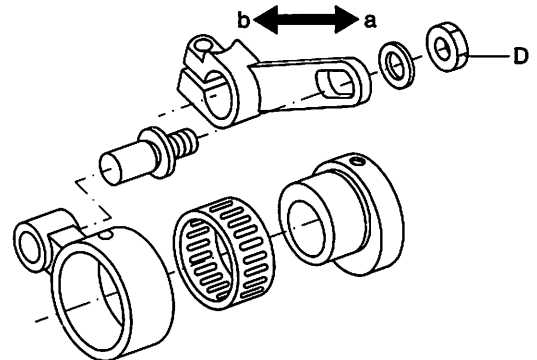
As the top cover looper is in its leftmost position, the tip of the thread hook should be 4.5 to 5.5mm to the left of the center of the left needle (see Fig 27). To adjust the leftmost position, loosen the set screw ("C", Fig 25), move left or right appropriately, and retighten the set screw securely.

Fig 27



To adjust the stroke of the top cover looper, loosen the nut ("D", Fig 28) and move the connecting pin up or down the slot of the lever. Moving the pin in the "b" direction increases the stroke. Moving the pin in the "a" direction decreases the stroke (see Fig 28). Retighten the nut.

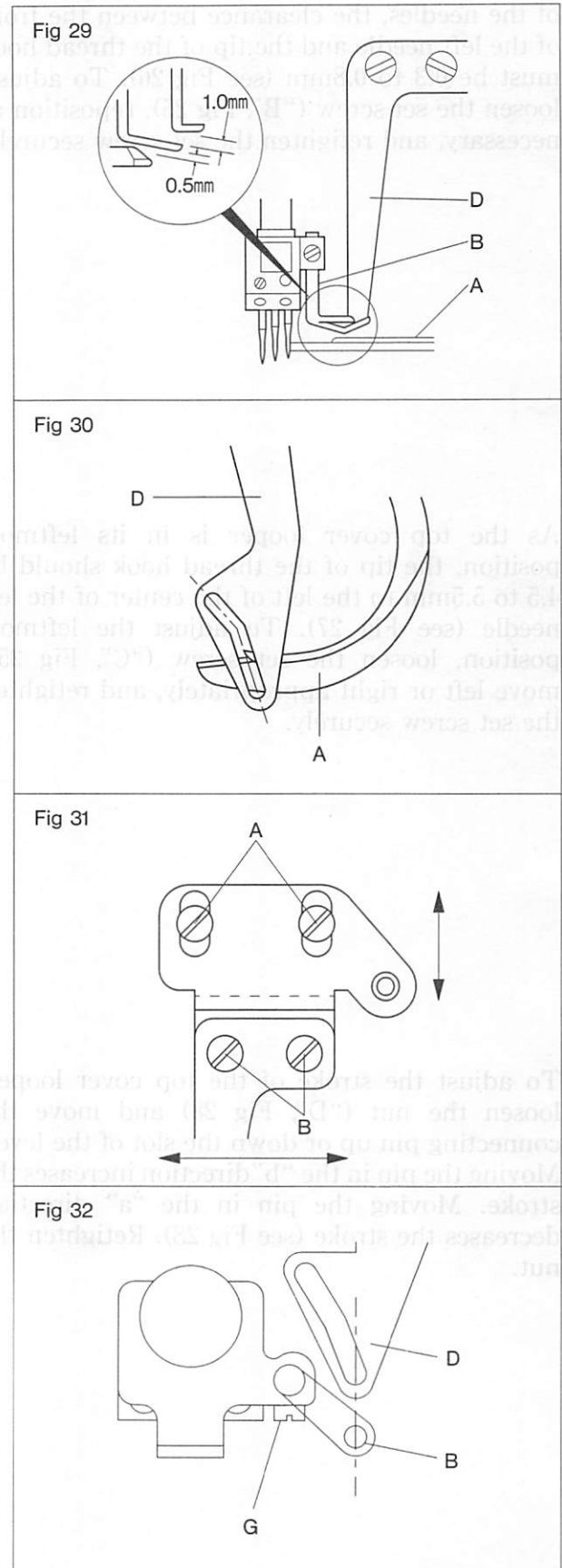
Fig 28



### 3-2 Position Of The Top Cover Thread Guide

The distance from the top of the top cover looper ("A", Fig 29) to the bottom of the top cover thread guide ("D", Fig 29) should be 0.5 to 0.8mm. Also, at the time the top cover looper is in its rightmost position, the tip of the thread hook should be visible in the center of the slot of the top cover thread guide (see Fig 30). To adjust the position of the top cover thread guide, loosen the screws ("A" & "B", Fig 31) and position the thread guide as needed. Screws "A" are used to adjust up or down and screws "B" are used to adjust right or left. Retighten the screws.

At the time the needle bar is in its lowest position, the distance from the top of the top cover thread guide ("D", Fig 29) to the bottom of the top cover thread eyelet ("B", Fig 29) should be 1.0mm (see Fig 29). Also, at that time, the center of the hole in the top cover thread eyelet ("B", Fig 32) and the tip of the slot in the top cover thread guide ("D", Fig 32) must be in alignment (as in Fig 32). To adjust the height and the alignment of the top cover thread eyelet, loosen the set screw ("G", Fig 32) and position accordingly. Retighten the screw.



### 3-3 Top Cover Loper Timing

The timing of the top cover looper may be adjusted to accommodate various sewing conditions according to the type of thread used. To adjust, remove the top cover of the machine, loosen the set screws ("A", Fig 33) on the top cover eccentric, and move forward or backward as necessary. Moving the timing mark in the direction of "E" (see Fig 34) will increase the speed of the timing. Moving the timing mark in the direction of "F" will decrease the speed of the timing of the top cover looper. Retighten the set screws.

Fig 33

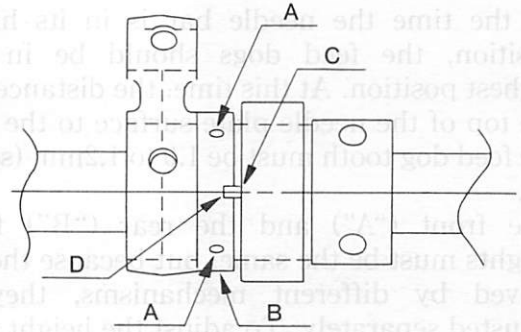
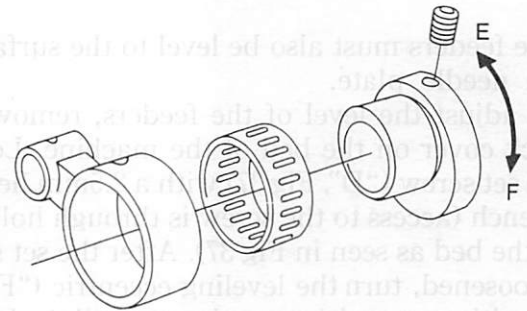


Fig 34



## 4. Front And Rear Feed Dogs And Stich Length Adjustments

### 4-1 Feed Dog Height And Level

At the time the needle bar is in its highest position, the feed dogs should be in their highest position. At this time, the distance from the top of the needle plate surface to the tip of the feed dog tooth must be 1.0 to 1.2mm (see Fig 35).

The front ("A") and the rear ("B") feeder heights must be the same, but because they are moved by different mechanisms, they are adjusted separately. To adjust the height of the front and rear feeders, loosen the screw at the base of each feeder (see Fig 36) and move up or down to the proper height. Retighten the screws.

The feeders must also be level to the surface of the needle plate.

To adjust the level of the feeders, remove the back cover on the bed of the machine. Loosen the set screw ("D", Fig 37) with a 2.5mm hex key wrench (access to the screw is through hole "C" in the bed as seen in Fig 37). After the set screw is loosened, turn the leveling eccentric ("F", Fig 37) with a screwdriver as shown until the level is found. Retighten screw D.

Fig 35

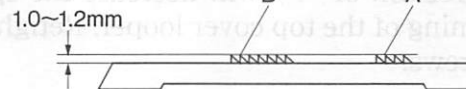


Fig 36

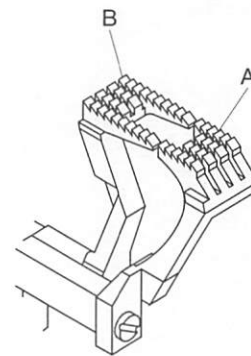
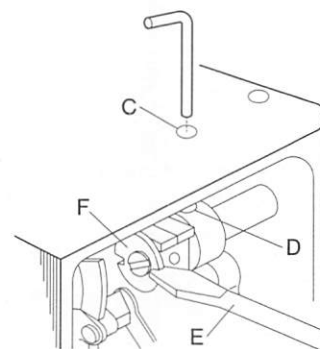


Fig 37



## 4-2 Adjustment Of The Stitch Length

The stitch length may be adjusted from 1.4 to 3.6 mm (stitch density of 7 to 18 stitches/inch). See chart 3 for conversions from stitch length (mm) to stitch density (stitches/inch).

### Note

Before making any adjustments to the stitch length, be sure the motor is switched off !

To change the stitch length, push the button ("A" Fig 38) with the left hand until it contacts the inner mechanism. While maintaining pressure on the button, slowly turn the handwheel clockwise with the right hand. At a certain position the button will drop down further. (The pin on the end of the button has dropped into the notch on the stitch length eccentric). While holding the button down, turn the handwheel to adjust the stitch length. Turning the handwheel clockwise (in the direction of the "S" marked on the handwheel) will make the stitch shorter. Turning the handwheel counter-clockwise (in the "L" direction) will make the stitch longer. The brass stud ("B" Fig 39) is for reference when adjusting and setting the stitch length. Occasionally release the stitch length adjustment button and check to determine if the desired stitch length has been attained.

### Note

Be sure the pushbutton, "A", has been fully released before resuming sewing.

Chart 3

Stitch Length	Stitch Density
3.6mm	7.0 ST/IN
2.4mm	10.5 ST/IN
1.4mm	18.0 ST/IN

Fig 38

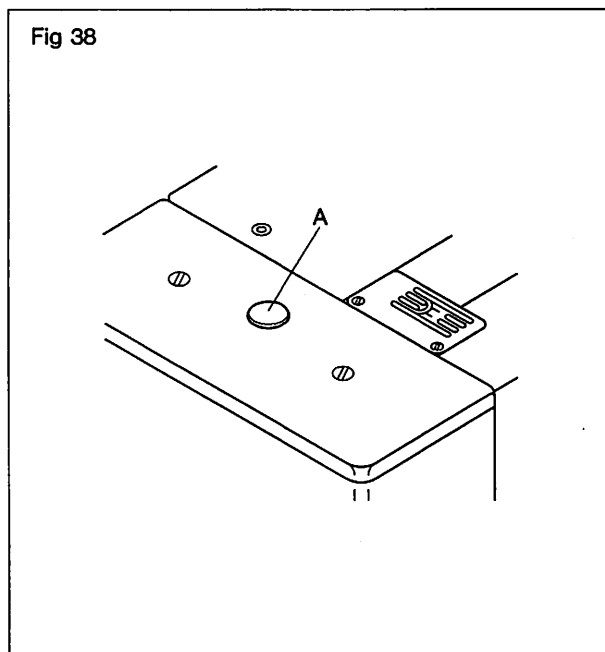
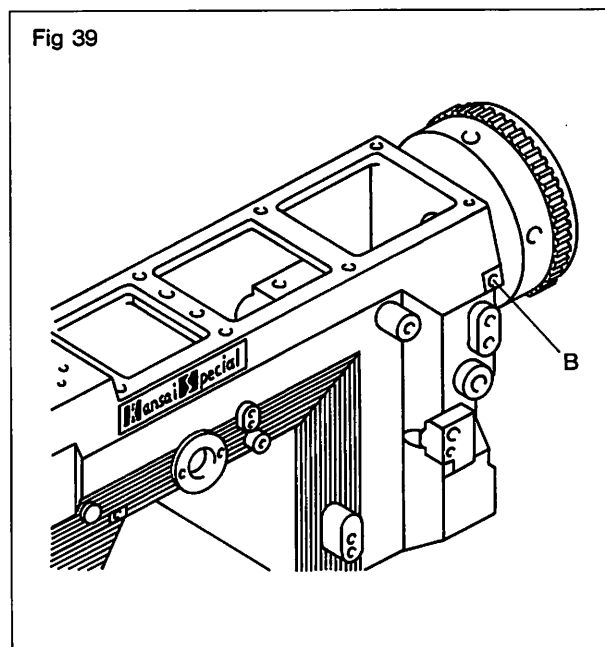


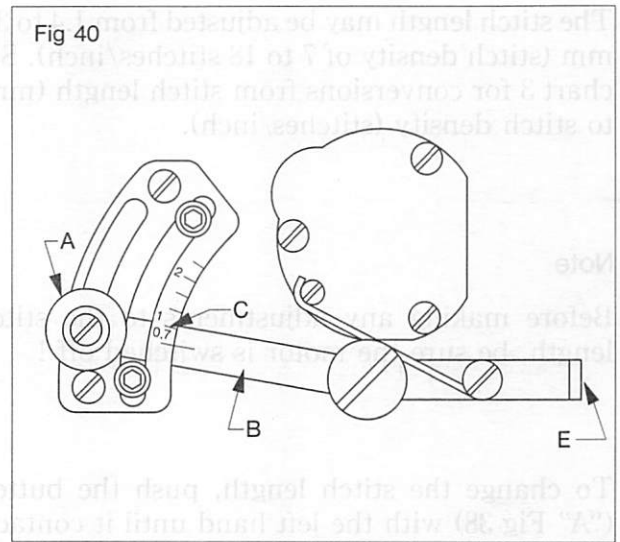
Fig 39



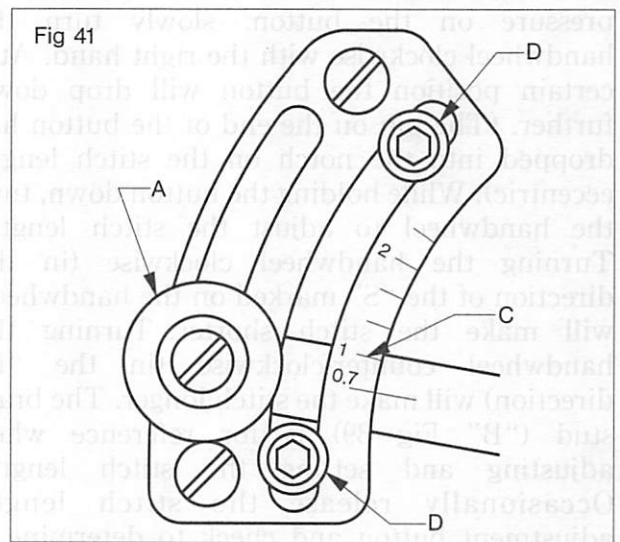


### 4-3 Adjustment Of The Differential Feeding

To obtain the required differential feeding, loosen the hand nut ("A", Figs 40 and 41) and move the lever ("B", Fig 40) up or down as necessary. If the mark on lever "B" is lined up with the "1" mark ("C" Figs 40 and 41) on the gauge plate, the feeding will be the standard 1:1 ratio. By moving the lever up above the "1" mark, the differential feed ratio can be increased to a maximum of 1:2. By moving the lever down below the "1" mark, the differential feed ratio can be decreased to a minimum of 1:0.7. Retighten the hand nut "A".



It is possible to vary the differential feed ratio during the sewing operation. To do this, connect a chain, fastened to a foot pedal, to the front of the lever (point "E", Fig 40). Next, loosen the hand nut, "A". Then set the differential range (maximum up and down positions of the lever) with the stoppers ("D", Fig 41). For this type of operation, do not retighten the hand nut "A".



**Note**

The maximum range of differential feed ratio is limited to the stitch length used. Refer to chart 4.

**Chart 4**

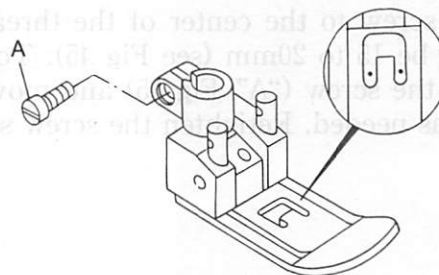
Stitch Length	Max. Ratio	Min. Ratio
3.6mm	1 : 1.2	1 : 0.7
2.5mm	1 : 1.6	1 : 0.7
2.0mm	1 : 1.8	1 : 0.7
1.4mm	1 : 2.0	1 : 0.7

## 5. Presser Foot Adjustments

### 5-1 Position Of The Foot

The presser foot must be set on the presser bar such that the needles pass through the holes in the presser foot with equal clearance on both sides (see Fig 42). To adjust, loosen the clamp screw ("A", Fig 42) and move right or left to attain the correct position. Retighten the clamp screw.

Fig 42



### 5-2 Presser Foot Lift Height

In the case of machines equipped with a top cover looper, the presser should lift no higher than 7mm, measured from the top surface of the needle plate to the bottom of the presser foot. When the presser is at full lift height, it should never exert any pressure against the top looper that may distort its shape. Machines without a top cover looper may have a presser foot lift height of up to 8mm.

To limit the presser lift height, there is a stop screw ("B", Fig 44) positioned below the lifter lever on the back of the machine. Loosen the lock nut ("C", Fig 44) and position the head of the screw up or down to change the lift range. Turning the screw clockwise allows the foot to lift higher. Turning the screw counter-clockwise decreases the amount of foot lift. Retighten the lock nut after the proper foot lift height has been attained.

Fig 43

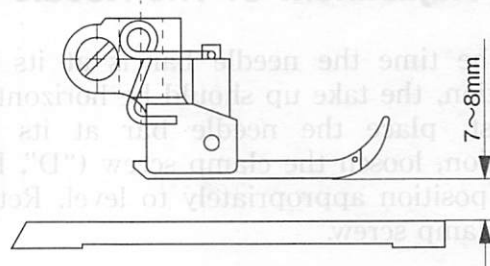
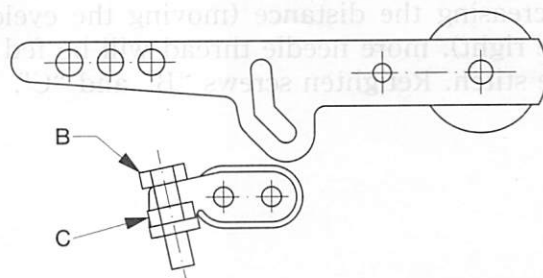


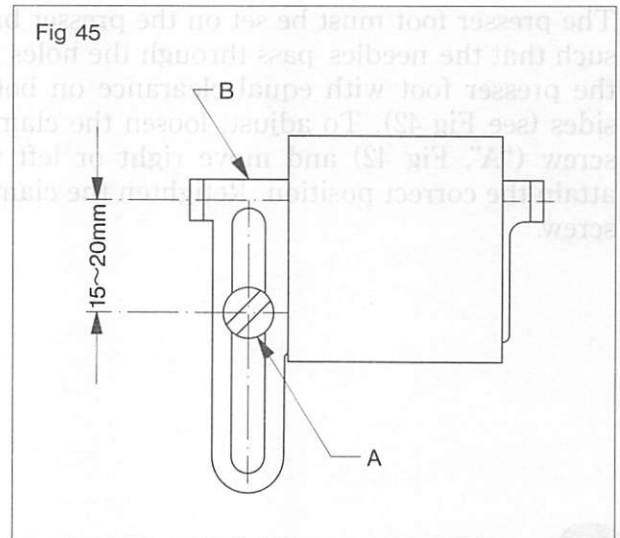
Fig 44



## 6. Stitching Adjustments

### 6-1 Position Of The Silicone Tank Eyelet

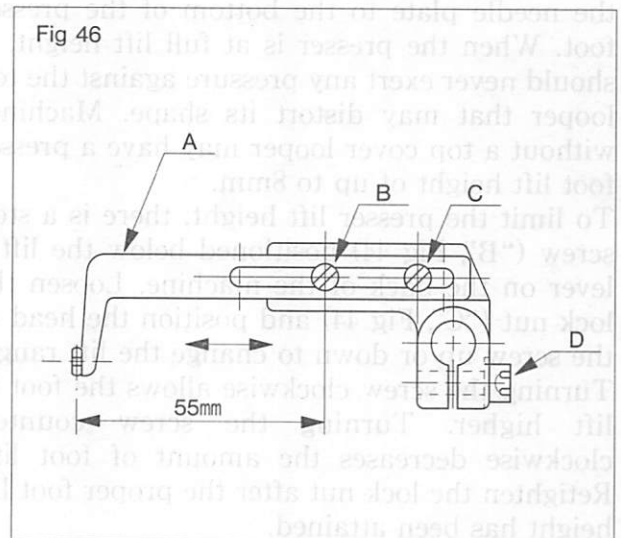
The standard position for the silicone tank eyelet is such that the distance from the center of the screw to the center of the thread holes should be 15 to 20mm (see Fig 45). To adjust, loosen the screw ("A", Fig 45) and move up or down as needed. Retighten the screw securely.



### 6-2 Adjustment Of The Needle Thread Take Up

At the time the needle bar is at its lowest position, the take up should be horizontal. To adjust, place the needle bar at its lowest position, loosen the clamp screw ("D", Fig 46) and position appropriately to level. Retighten the clamp screw.

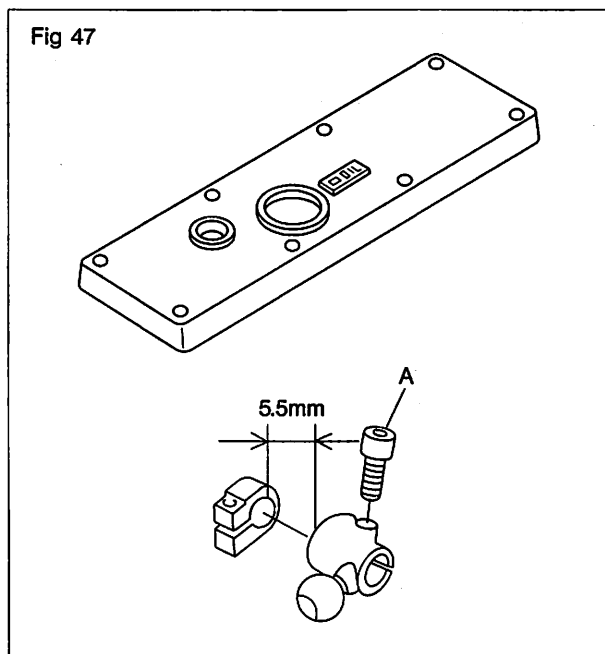
The distance from the eyelets to the first screw ("B", Fig 46) should be 55mm, as shown in Fig 46. To adjust the distance, loosen screws "B" and "C" and move the take up eyelet to the right or left as necessary. By increasing the distance (moving the eyelet to the left), less needle thread will be fed into the stitch. By decreasing the distance (moving the eyelet to the right), more needle thread will be fed into the stitch. Retighten screws "B" and "C".



### 6-3 Needle Thread Take Up Control

The stroke of the needle thread take up is adjustable. This is done by repositioning the drive lever located under the top cover of the machine. The standard position is 5.5mm from the face of the collar as shown in figure 47. To adjust, remove the top cover. Loosen the clamp screw ("A", Fig 47). Moving the drive lever closer to the collar will increase the stroke, resulting in larger needle loops. Moving the drive lever farther away from the collar will decrease the stroke, resulting in smaller needle loops. Retighten the clamp screw securely.

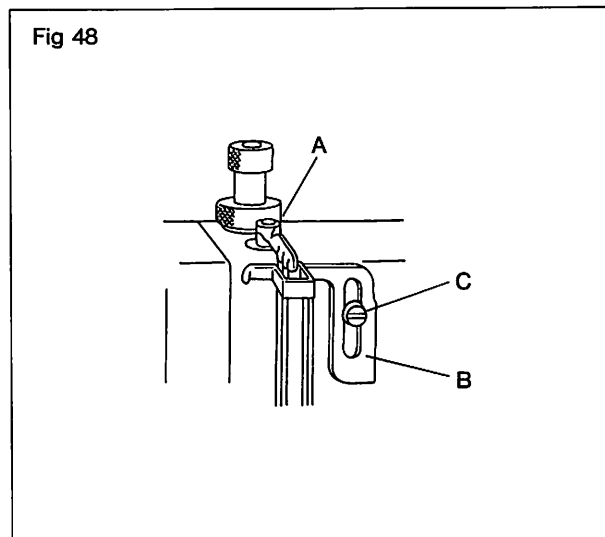
Fig 47



### 6-4 The needle Thread Take Up Wire

The standard position of the needle thread take up wire ("B", Fig 48) is such that the top surface of the wire is in-line with the center of the holes in the needle bar eyelet ("A", Fig 48) when the needle bar is at its lowest position. Height adjustments to the take up wire may be made to accommodate the different characteristics of the various threads used. If a slick, stretchy type of thread such as texturized polyester or nylon is used, the position of the take up wire may be raised to take out more thread and improve the needle thread loop formation. If a stiff, non-stretchy type of thread such as 100% cotton is used, the height of the thread take up wire should be lowered to prevent the formation of needle thread loops that are too large. To adjust the height of the take up wire, loosen the screw ("C", Fig 48) and move the wire up or down as needed. Retighten the screw.

Fig 48



## 6-5 The Thread Nipper Location

The standard placement of the thread nipper is mounted directly on the needle clamp (see Fig 49). This is the position used when using standard sewing threads such as spun polyester, wrapped polyester, or cotton threads. Also, this is the position used for general sewing applications such as sewing medium to heavy weight knits, double knits, or woven materials. If slick, stretchy types of thread such as texturized polyester or nylon is used, or for sewing thin, light materials, the thread nipper should be placed on the stand-off located on the lower front face of the machine head, as shown in Figure 50.

Fig 49

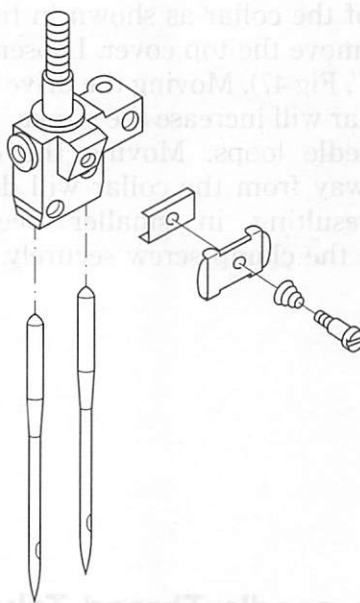
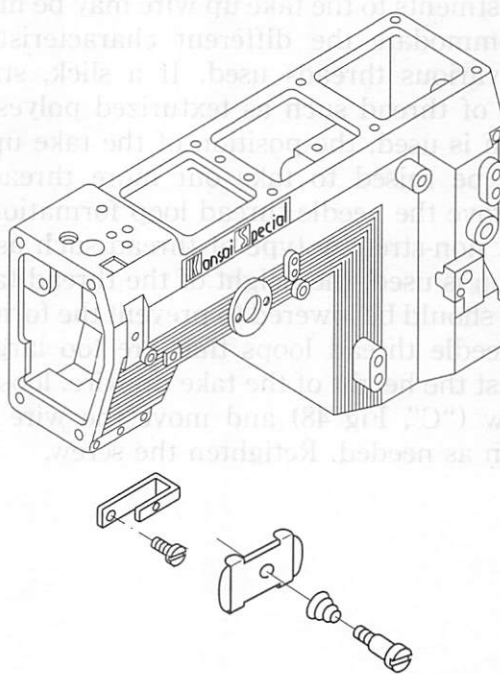


Fig 50

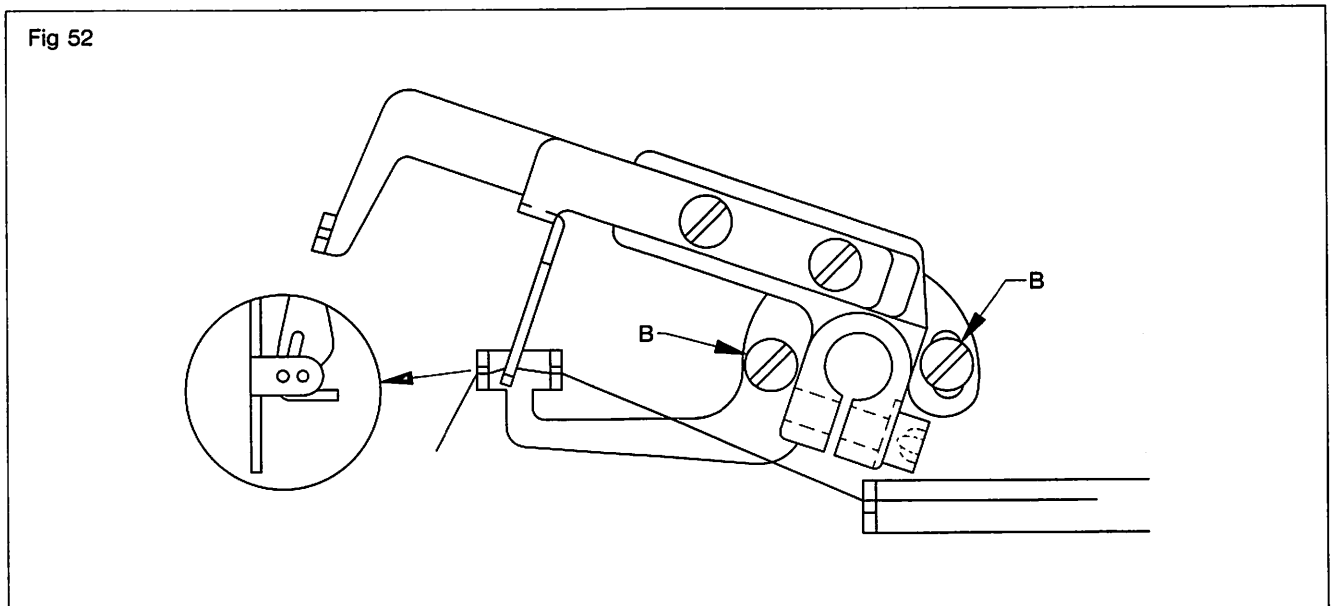
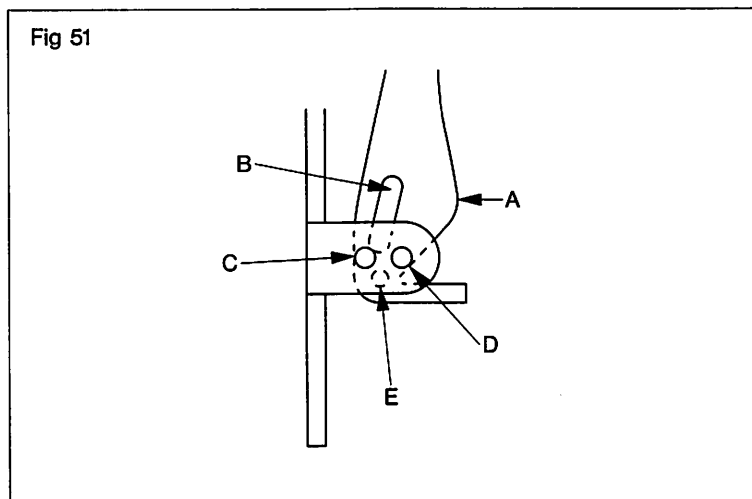


## 6-6 Cover Thread Take Up And Take Up Eyelet

The cover thread take up is attached directly to and travels with the needle thread take up (see Fig 52). Therefore, as the needle bar is in its highest position, the cover thread take up is also in its highest position. At this time, the top holes ("C", "D" Fig 51) of the cover thread eyelet ("A", Fig 52) must be in-line with the bottom of the slot ("B", Fig 51) of the cover thread take up. To adjust, loosen the screws ("B", Fig 52) and move the cover thread take up eyelet up or down until the holes are in-line with the bottom of the slot. Retighten the screws.

### Notes For Threading

If a small stitch length, narrow needle gauge, and standard thread (such as cotton or wrapped thread) is used, pass the cover thread through either of the holes "C" or "D" (see Fig 51) and pass the thread in front of the take up ("A", Fig 51). If a long stitch length, wide needle gauge, and stretchy thread (such as texturized polyester or nylon) is used, pass the cover thread through either hole "C" or "D" and pass the thread through the slot "B" in the take up. If it is necessary to increase the thread take up, pass the thread through the hole "E" (located below the slot on the thread take up as shown in Fig 51)

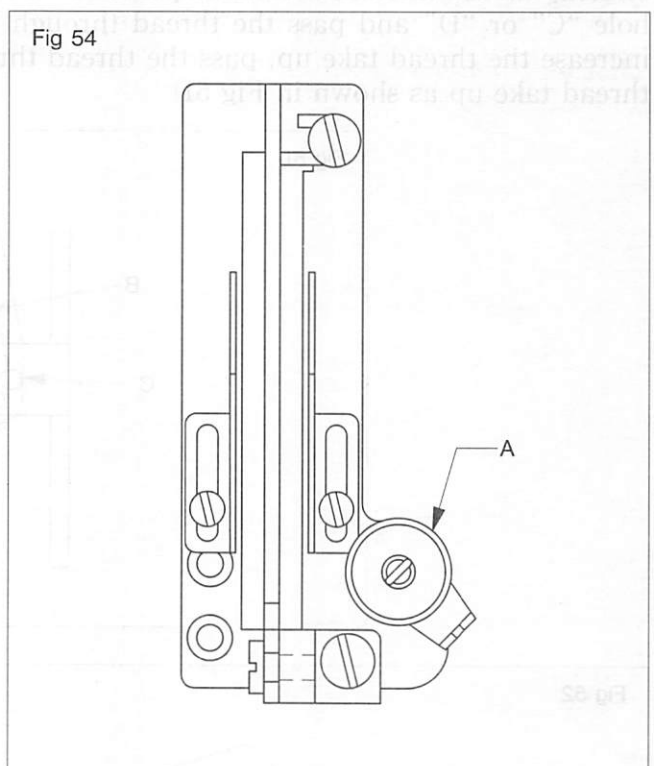
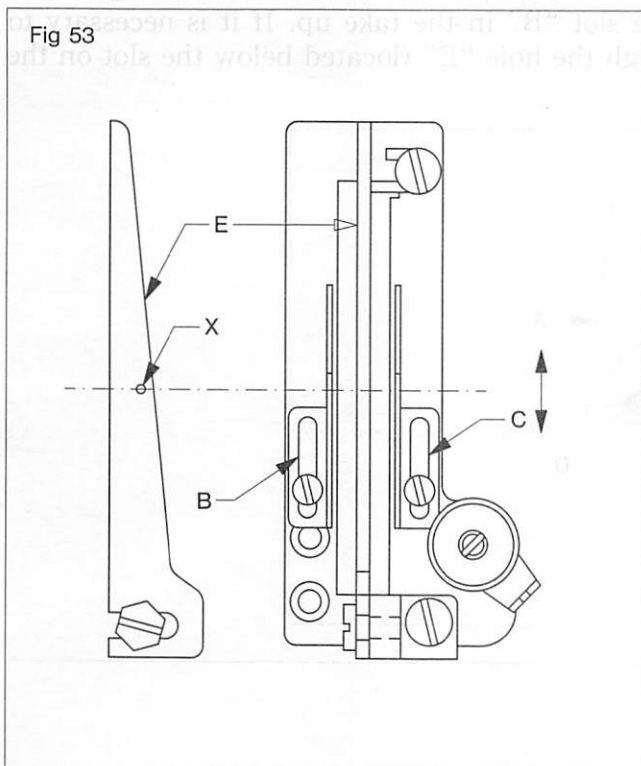


## 6-7 Position Of The Loper Thread Take Up Eyelets

The standard position of the looper thread take up eyelets ("B" and "C", Fig 53) is such that the thread holes of the eyelets must be aligned with the detent mark ("X", Fig 53) on the guide plate ("E", Fig 53). To increase the amount of looper thread fed into the stitch, loosen the screws and move the eyelets "B" and "C" forward. To decrease the amount of looper thread fed into the stitch, move eyelets "B" and "C" backward. Retighten the screws.

### Note On Threading

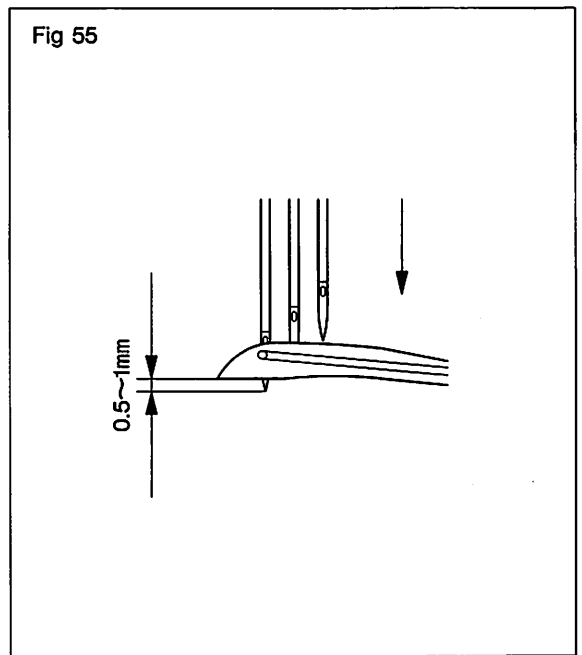
If stretchy thread such as texturized polyester or nylon is used, move the eyelets "B" and "C" forward as far as possible and don't pass the thread through the small tension ("A", Fig 54) on the looper thread take up support plate.



## 6-8 Looper Thread Take Up Cam

As the looper is moving to the right, the needles are moving downward. At the time the tip of the left needle is 0.5 to 1.0mm below the level of the tip of the looper (see Fig 55), the looper thread should be at the highest point on the looper thread take up cam ("B", Fig 56). To adjust the position of the take up cam at this time, loosen the set screws ("A", Fig 56) and move the take up cam forward or backward as necessary. Retighten the set screws securely.

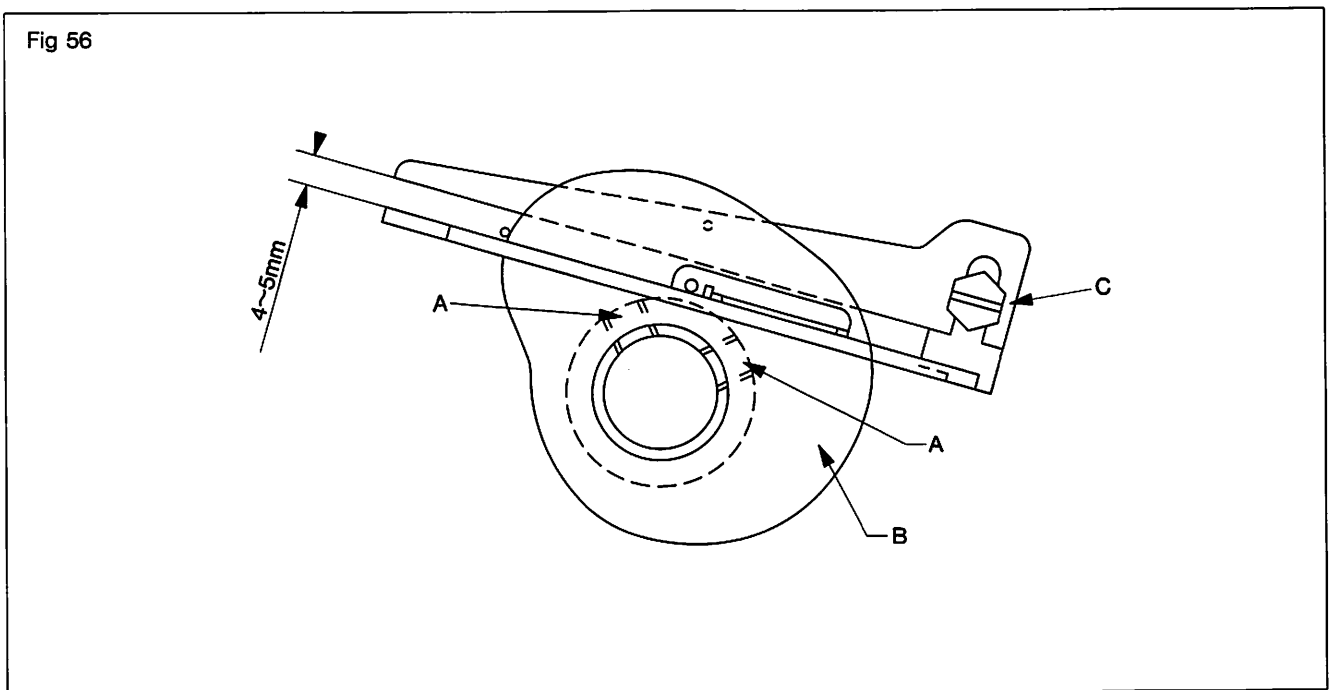
Fig 55



## 6-9 Height Of The Guide Plate

The distance from the top surface of the support plate to the bottom of the guide plate should be 4 to 5mm, as shown in Fig 56. To adjust, loosen the screw ("C", Fig 56) and move the guide plate up or down as needed. Retighten the screw.

Fig 56





## 7. The Timing Belt

### 7-1 Timing Belt Markings

To ensure the best running conditions, there are three different sizes of timing belts available for the WX-8800 Series. Each size is marked accordingly, A, B, or C. Size A is the largest.

### 7-2 Changing The Timing Belt

To remove the timing belt, follow the procedures below :

- 1) Remove all the screws from the top cover plate and the oil pan, as shown in Fig 57.
- 2) Remove the top cover plate.
- 3) Loosen the set screws ("A", Fig 58) from the upper shaft union.
- 4) slowly turn and pull the handwheel out to the right.

Fig 57

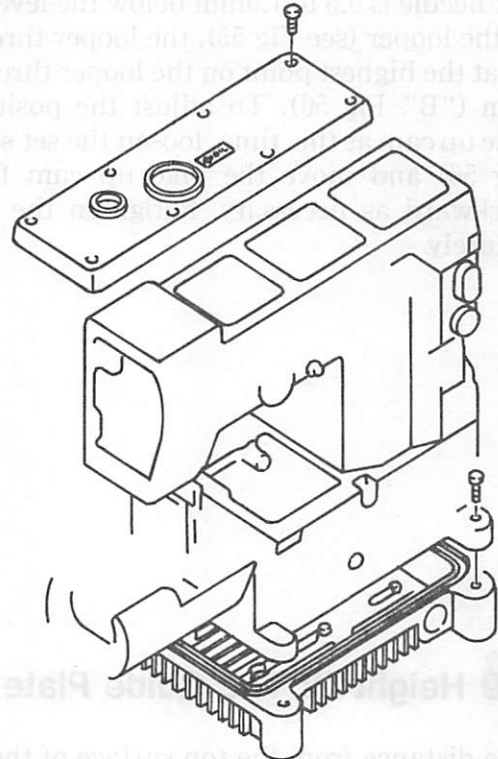
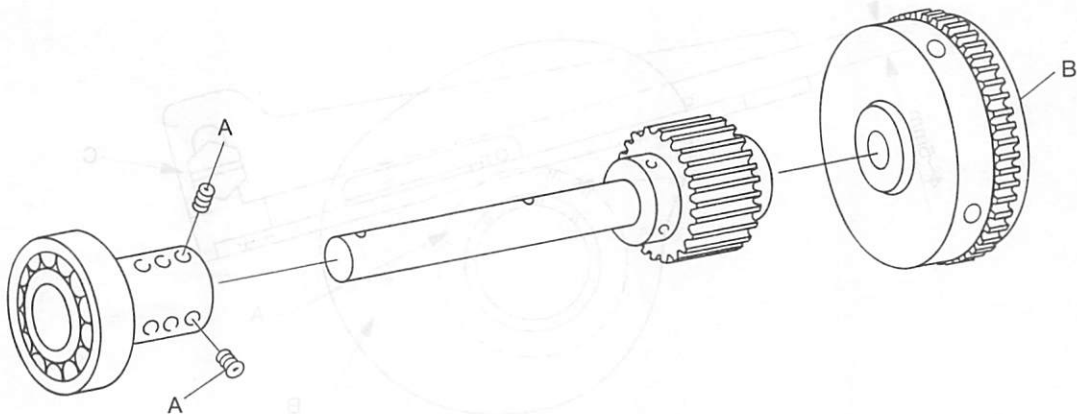


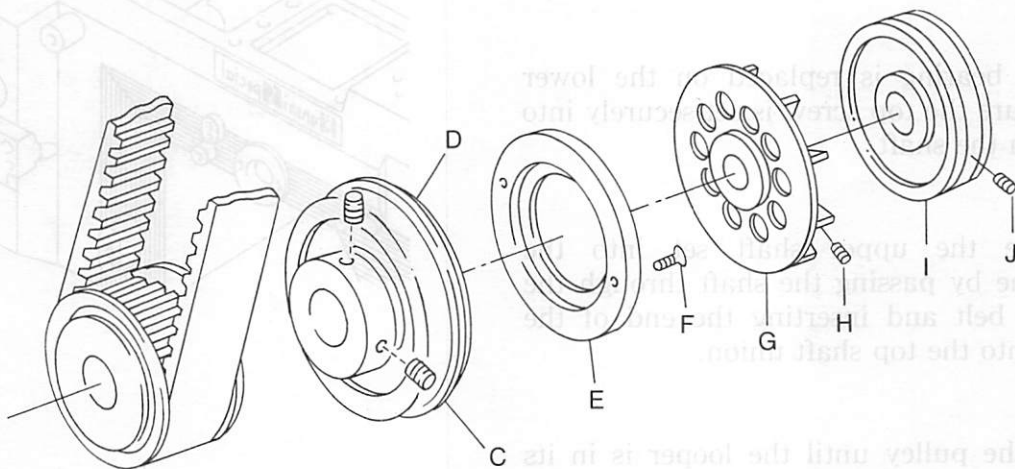
Fig 58



## 7-2 Changing The Timing Belt (Continued)

- 5) Remove the following parts from the lower main shaft, as shown in Figure 59:
- Loosen the set screws "J" and remove the pulley "I".
  - Loosen the set screws "H" and remove the fan "G".
  - Remove the screws "F" and remove the flange "E".
  - Loosen the set screws "C" and remove the bearing "D".

Fig 59

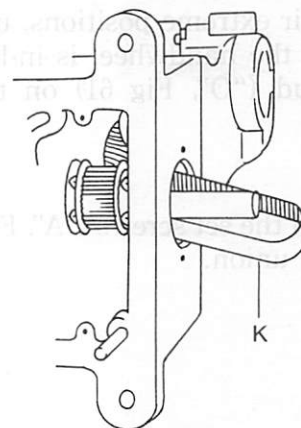


- 6) Remove the timing belt ("K", Fig 60) through the machine bed as shown in figure 60.

### Note

Be careful not to apply torque or stress to the lower shaft at this time.

Fig 60

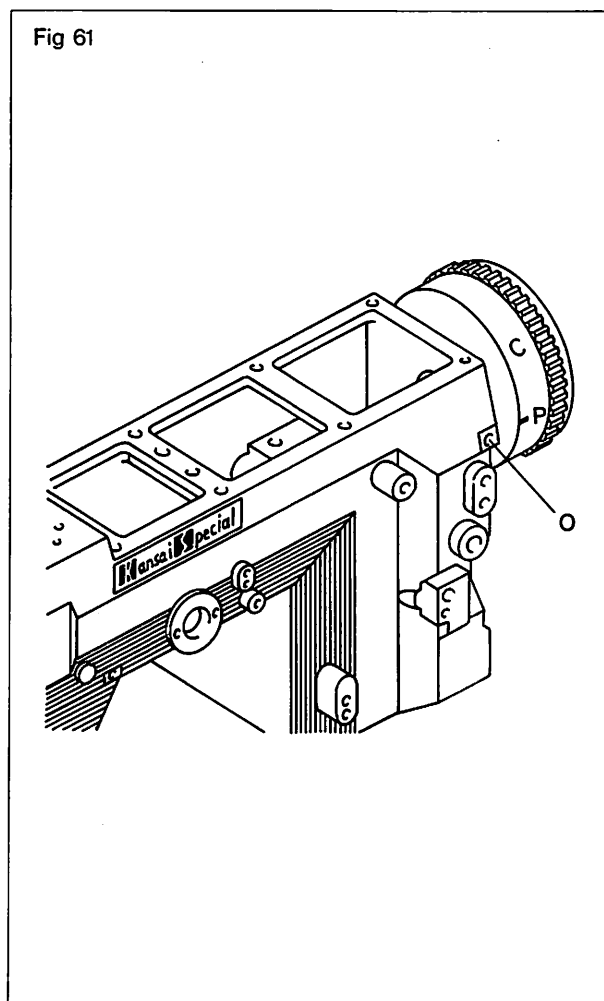


- 7) Place the new timing belt on the timing pulley on the lower shaft.
- 8) Replace following parts, referring to figure 59:
  - a. Replace the bearing, "D".
  - b. Replace the flange, "E".
  - c. Replace the fan, "G".
  - d. Replace the pulley, "I".

**Note**

When the bearing is replaced on the lower shaft, be sure the top screw is set securely into the spot on the shaft.

- 9) Replace the upper shaft set into the machine by passing the shaft through the timing belt and inserting the end of the shaft into the top shaft union.
- 10) Turn the pulley until the looper is in its rightmost position.
- 11) Move the needle bar by hand until it is in its lowest position.
- 12) Turn the handwheel, being sure that neither the looper nor the needle bar move from their extreme positions, until the "P" mark on the handwheel is in-line with the brass stud ("O", Fig 61) on the machine head.
- 13) Retighten the set screws ("A", Fig 58) on the top shaft union.



## 8. Lubrication System

### 8-1 Placing Oil In The Machine

Remove the black rubber cap ("A", Fig 62) from the top cover plate. Insert a funnel into the port. Add appropriate oil (A light grade mineral oil such as mobil VG #32 is recommended) until the level of oil reaches between the "H" and "L" on the oil gauge (see Fig 63). Replace the rubber cap.

#### Note

Test run the machine to be sure the oil is splashing up into the sight window ("B", Fig 62).

Fig 62

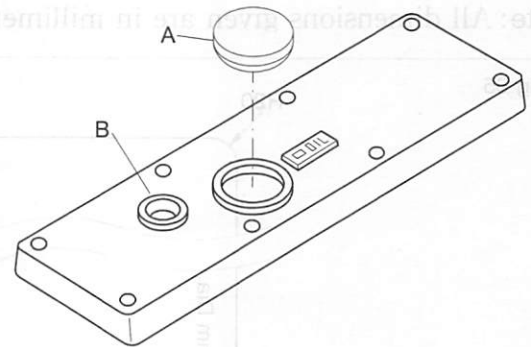
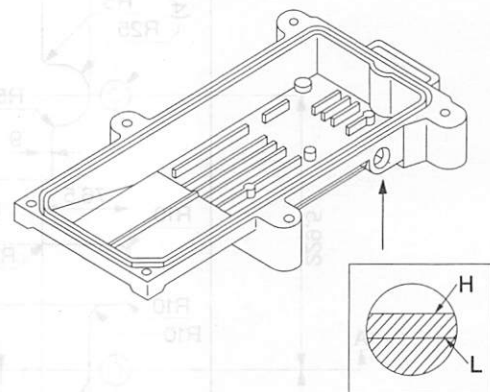


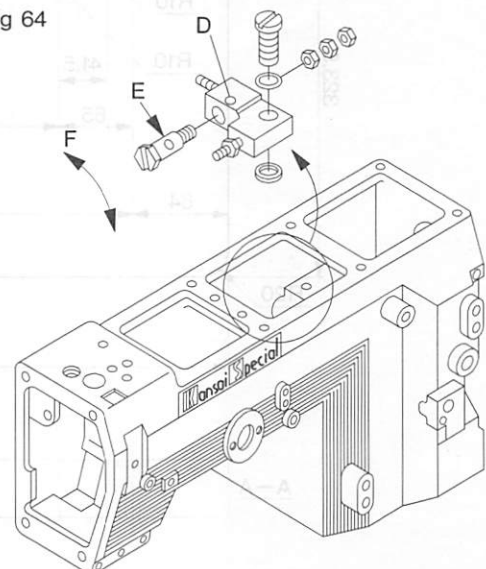
Fig 63



### 8-2 Oil Flow Rate

The amount of oil flow to the front of the machine head (needle drive area) is adjustable. This is done by the flow regulator screw ("E", Fig 64). The standard position of the regulator screw is such that the slot in the head of the screw must be aligned with the "D" mark on the distribution junction, as shown in figure 64. By turning the screw in the "F" direction (see Fig 64), the oil flow is decreased.

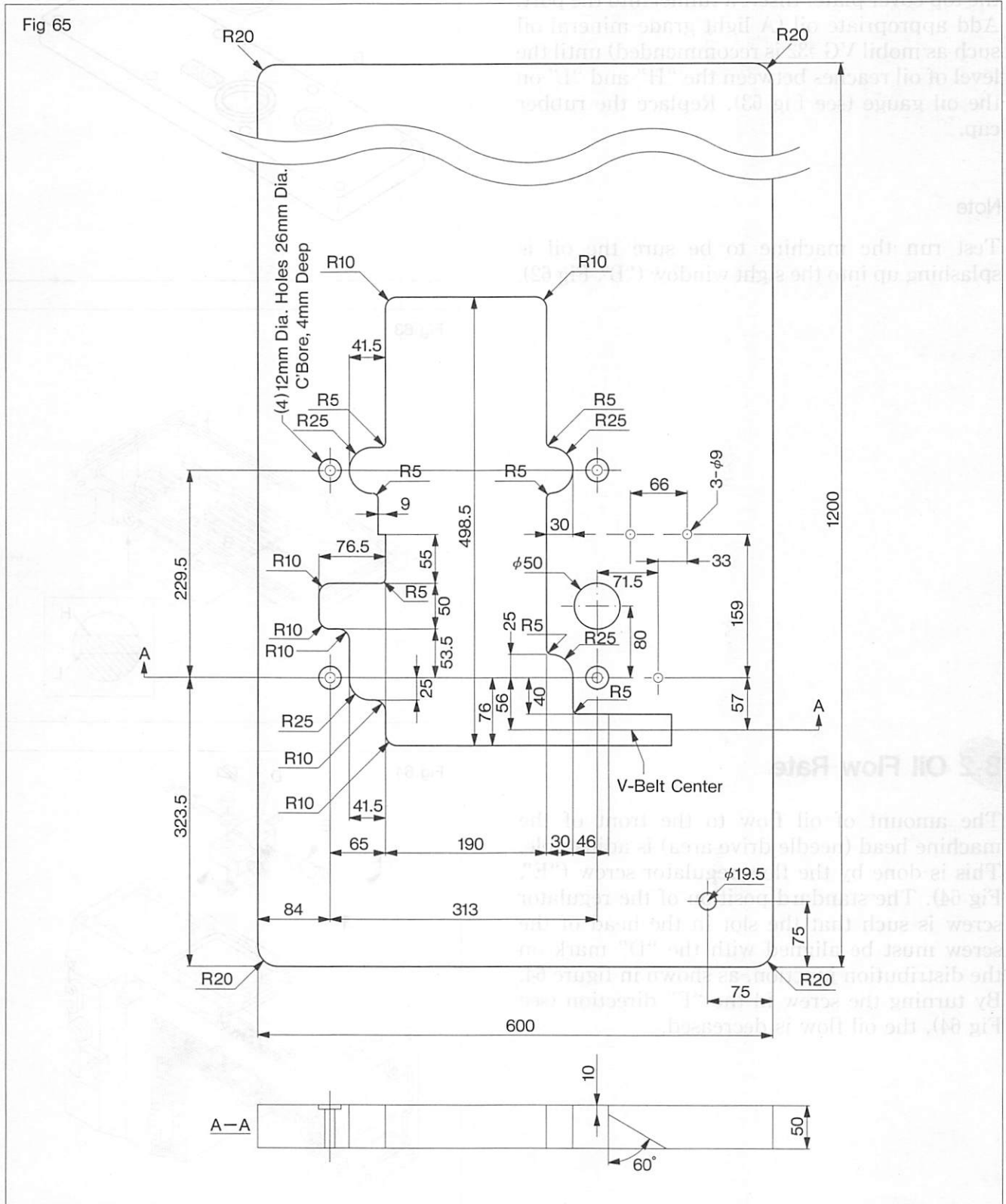
Fig 64



# 9. The Tabletop

## 9-1 Tabletop Cutout Design Specifications (For Top Mounting)

Note: All dimensions given are in millimetres.

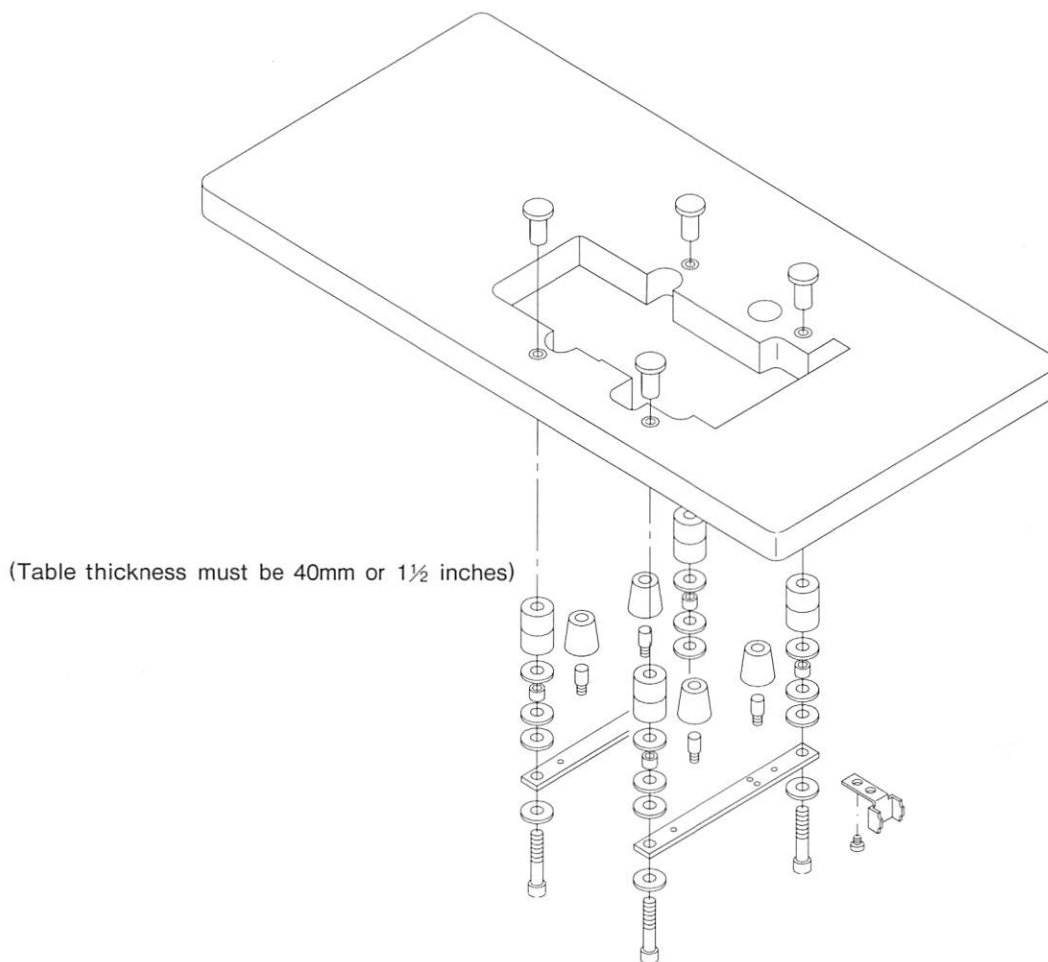


## 9-2 Mounting The Machine

The WX-8800 Series machines may be top mounted using the mounting equipment supplied in the accessory box.

Assemble as shown in figure 66.

Fig 66



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