



SHING LING®
星菱牌工業用縫紉機
INDUSTRIAL SEWING MACHINE

FG-797-TF

使用說明書
Instruction



星菱縫機股份有限公司
SHING LING SEWING MACHINE CO., LTD.
TAIWAN EXCELLENCE CE ISO 9001:2008Rev



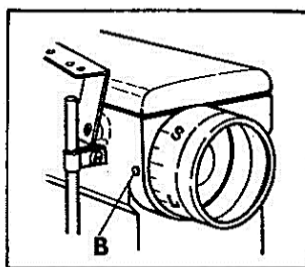
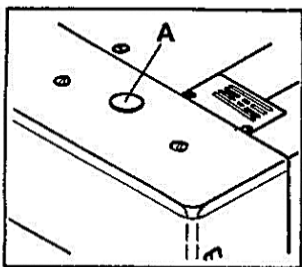
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1 車縫線跡長度之調整

ADJUSTMENT OF STITCH LENGTH



- ※ 調整線跡長度前，務必先將電機馬達關掉。
- ※ 線跡長度可連續調整從1.4mm至3.6mm。
- 1. 左手輕按下按鈕(A)，當感覺(A)輕觸內部零件時，以右手轉動手轉盤直至按鈕(A)陷入，然後用力壓住按鈕(A)並轉動手轉盤至所需之位置。
- 2. 轉盤向右轉動，刻度(L)愈接近(B)點，能取得愈長之線跡。當(L)對準(B)點時，車縫線跡長度約為3.6mm。
- 3. 反之，轉盤向左轉動，刻度(S)愈接近(B)點，線跡愈短。當(S)對準(B)點時，車縫線跡長度約為1.4mm。
- 4. 注意：即使刻度位置相同不變時，線跡長度仍會因使用之布料種類，厚薄不同而相異。因此，適度的調整是必要的。
- 5. 下圖供參考之用：

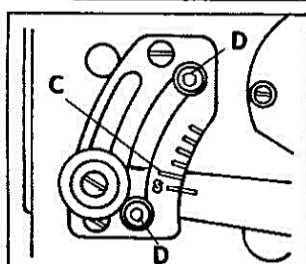
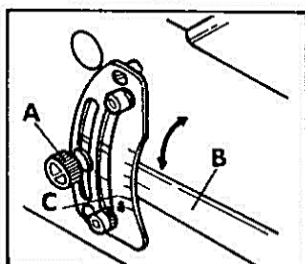
※ WHEN CHANGING STITCH LENGTH, TURN SWITCH OF MOTOR "OFF" WITHOUT FAIL.

※ STITCH LENGTH CAN BE ADJUSTED CONTINUOUSLY FROM 1.4MM TO 3.6MM.

1. PRESS PUSH-BUTTON (A) WITH LEFT HAND LIGHTLY UNTIL ITS TIP CAN BE NOTICED TO TOUCH INNER PARTS. PRESS IT LIGHTLY, TURN HANDWHEEL WITH RIGHT HAND UNTIL THE PUSH-BUTTON DROPS IN, THEN PRESS ON THE PUSH-BUTTON STRONGLY AND TURN THE HANDWHEEL.
2. WHEN GETTING GRADUATION "L" CLOSER TO MARK (B) BY TURNING HANDWHEEL TO THE RIGHT, THE STITCH LENGTH BECOMES LONG. AT THE POSITION "L" - THE STITCH LENGTH IS ABOUT 3.6MM.
3. WHEN GETTING GRADUATION "S" CLOSER TO MARK (B) BY TURNING HANDWHEEL TO THE LEFT, THE STITCH LENGTH BECOMES SHORT. AT THE POSITION "S" - THE STITCH LENGTH IS ABOUT 1.4MM.
4. NOTE: EVEN WITH SAME GRADUATION, THE STITCH LENGTH VARIES ACCORDING TO THE KIND AND THICKNESS OF FABRICS AS WELL AS THE AMOUNT OF DIFFERENTIAL, ETC..
5. THE TABLE BELOW SHOWS THE NUMBER OF STITCHES PER INCH AND PER 30MM.:

線跡長度 Stitch Length (mm.)	針 數 Stitches per-	
	每英寸 inch	每30mm. 30mm.
3.6	7	8
2.4	10.5	12.5
1.4	18	21

2 送布器差動比之調整 ADJUSTMENT OF DIFFERENTIAL FEED



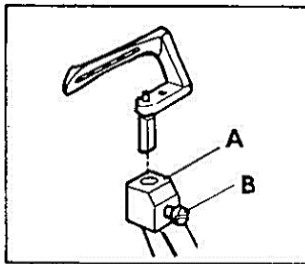
1. 放鬆螺絲(A)，藉由(B)桿之上下移動，可獲得所需之差動比，調整後再旋緊螺絲(A)。
2. 當(B)桿上之刻度調至(C)點時，主送布器與差動送布器比例為1:1。
3. 當(B)桿上之刻度調整至高於(C)點以上之任何一點時，均為正常之送布差動，其比例依次分別為1:1.25, 1:1.50, 1:1.75, 1:2。(均為正常之“縮縫”)
4. 當(B)桿上之刻度調降至(S)點時，可取得“反向差動”(伸縫)，其差動比為1:0.70。

5. 調整2顆螺絲(D)間之距離，可決定所需調整範圍之上下限。
6. 注意：根據不同之車縫線跡長度的調整，送布器之差動比的範圍亦會改變。(請參考左下圖)

1. NORMAL DIFFERENTIAL FEED (SHRINK SEWING): LOOSEN NUT (A), MOVING LEVER (B) UP AND DOWN AND SET IT AT THE DESIRED POSITION BY TIGHTENING NUT (A).
2. WHEN LEVER IS SET AT GRADUATION (LONG ONE) (C), THE RATIO OF MAIN FEED TO DIFFERENTIAL FEED IS 1:1.
3. WHEN LEVER IS RAISED ABOVE GRADUATION (C), IT BECOMES NORMAL DIFFERENTIAL FEED. THE GRADUATION OF UPPER PART REPRESENT 1:1.25, 1:1.50, 1:1.75, 1:2.0 IN ORDER FROM THE BOTTOM.
4. WHEN THE LEVER IS LOWERED BELOW GRADUATION (C), THE FEED BECOMES REVERSE DIFFERENTIAL FEED. WHEN IT IS SET AT "S", THE RATIO OF MAIN FEED TO DIFFERENTIAL FEED IS 1:0.70.
5. FIX STOPPER (D) (2 PCS.) AT THE DESIRED POSITION TO SET UP-PER AND LOWER LIMITS BETWEEN WHICH LEVER IS MOVED UP AND DOWN.
6. NOTE: THE RANGE OF DIFFERENTIAL RATIO VARIES ACCORDING TO THE STITCH LENGTH.

線跡長度 stitch length	(最大) 正常 (縮縫) 之差動比 max. normal differential ratio	(最大) 反間 (伸縫) 之差動比 max. reverse differential ratio
3.6 mm	1:1.2	1:0.7
2.5 mm	1:1.6	1:0.7
2.0 mm	1:1.8	1:0.7
1.4 mm	1:2	1:0.7

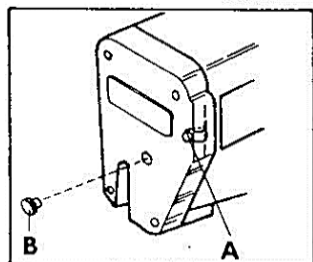
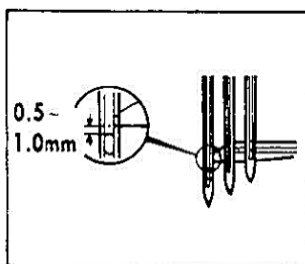
3 彎針的高度及角度之固定 FIXING ANGLE AND HEIGHT OF LOOPER



彎針的標準高度及角度：將彎針置入彎針座(A)孔中（放到底），然後鎖緊螺絲(B)即可。

INSERT LOOPER ALL THE WAY INTO LOOPER HOLDER (A) AND TIGHTEN IT WITH SCREW (B). THEN THE HEIGHT AND FIXING ANGLE (3°) ARE SET ACCORDINGLY.

4 針棒的高度位置調整 HEIGHT OF NEEDLE BAR



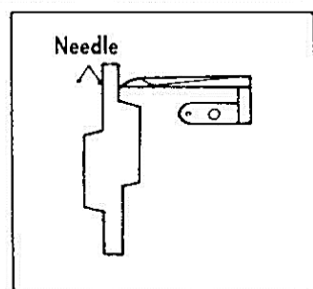
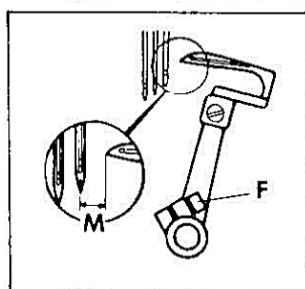
1. 當彎針向左游走至最左邊車針之中心線時，彎針的針尖與該車針孔的上緣距離應為0.5~1.0mm。也就是說車針的標準高度與彎針是息息相關的。
2. 拔開車頭前蓋之橡膠栓(B)，伸入螺絲起子放鬆內部螺絲(A)，便可調整車針之高底。

1. WHEN THE TIP OF LOOPER COMES TO THE CENTER OF LEFT NEEDLE, THE LOOPER MUST PASS 0.5 - 1.0MM. ABOVE THE UPPER END OF EYE, THAT IS, THE HEIGHT OF NEEDLE IS SET ON THE BASIS OF LOOPER.

OF COURSE THE NEEDLE MUST BE INSERTED INTO THE HOLE OF NEEDLE CLAMP PERFECTLY AND LOOPER MUST BE INSERTED ALL THE WAY INTO LOOPER HOLDER.

2. THE ADJUSTMENT OF HEIGHT OF NEEDLE IS MADE BY REMOVING THE RUBBER SCREW (B) AND INSERTING A SCREWDRIVER THROUGH THE HOLE (A) OF HEAD COVER, LOOSENING SCREW.

5 彎針與車針（橫向）的距離關係 MOVEMENT OF LOOPER TO THE RIGHT



(車針之針距) Needle Distance (Mark)	("M"所代表之距離) Movement of Looper to the Right
3.2 mm (A)	4.4 mm
4.0 mm (B)	4.0 mm
4.8 mm (C)	3.6 mm
5.6 mm (D)	3.2 mm
6.4 mm (E)	2.8 mm

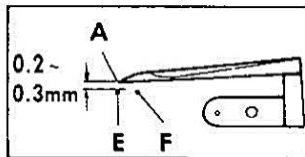
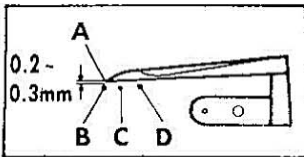
1. 將車針下降到底，彎針調至最右，此時彎針針尖至車針中心線之距離(M)是隨著“車針針距”的不同而異。但彎針針尖至針棒中心線間之距離應保持不變(6mm)。
 2. 上述及右上圖所示之正確距離可藉由放鬆螺絲(F)調整彎針座來取得。
 3. 右上圖所示之各標準距離亦可輕易藉由“量規”而取得。（“量規”非標準配件，請與本公司或當地代理、經銷商洽購）。
1. WHEN NEEDLE IS AT ITS LOWEST POSITION AND LOOPER COMES ALL THE WAY TO THE RIGHT, "MOVEMENT OF

LOOPER TO THE RIGHT" - (M) [DISTANCE BETWEEN THE TIP OF LOOPER AND THE CENTER OF NEEDLE] - IS DIFFERENT ACCORDING TO THE NEEDLE DISTANCE.

NOTE: THE DISTANCE TO THE TIP OF LOOPER FROM THE CENTER OF NEEDLE BAR IS ALWAYS 6MM. REGARDLESS OF NEEDLE DISTANCE.

2. ADJUST THE "MOVEMENT OF LOOPER TO THE RIGHT" AS SHOWN IN THE TABLE ABOVE. THE ADJUSTMENT IS MADE BY LOOSENING SCREW (F) OF LOOPER HOLDER.
3. THE ADJUSTMENT FOR MOVEMENT TO THE RIGHT CAN BE MADE EASILY BY USING TIMING GAUGE. (TIMING GAUGE IS AN EXTRA PART, PLEASE PLACE AN ORDER WITH OUR AGENTS OR DIRECTLY WITH US)

6 彎針與車針之間(縱面)的間隙關係 LONGITUDINAL POSITION OF NEEDLE AND LOOPER



■ 三針繡縫車：

1. 當彎針針尖(A)遊走至最左支車針(B)位置時，(A)與(B)之間的間隙應為0.2mm~0.3mm。
2. 當彎針針尖(A)遊走至車針(C)位置時，(A)與(C)之間的間隙應為0.05mm~0.15mm。
3. 當彎針針尖(A)遊走至車針(D)位置時，(A)與(D)之間的間隙應為0~0.05mm。
4. 當彎針針尖(A)遊走至車針(D)位置，而與(D)相觸時，請調整“(後)針護器”。

以上取得上述第3點之正確間隙〔註：“針護器”一請參閱第7頁第19項〕。

■ 二針繡縫車：

1. 當彎針針尖(A)遊走至最左支車針(E)位置時，(A)與(E)之間的間隙應為0.2mm~0.3mm。
2. 當彎針針尖(A)遊走至車針(F)位置時，(A)與(F)之間的間隙應為0~0.05mm。

※放鬆彎針座上之螺絲以調整出上述(A)與(F)間之

標準間隙。

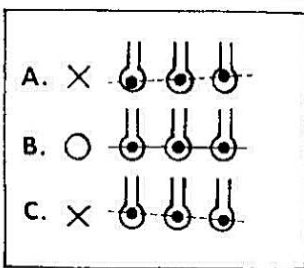
■ IN CASE OF 3-NEEDLE INTERLOCKER:

1. WHEN THE TIP (A) OF LOOPER MEETS THE LEFT NEEDLE (B), THE CLEARANCE BETWEEN THEM MUST BE 0.2 - 0.3MM.
2. WHEN THE TIP (A) OF LOOPER MEETS THE CENTER NEEDLE (C), THE CLEARANCE BETWEEN THEM MUST BE 0.05 - 0.15MM.
3. WHEN THE TIP (A) OF LOOPER MEETS THE RIGHT NEEDLE (D), THEY CONTACT EACH OTHER SLIGHTLY (ABOUT 0.2MM.), IN THIS CASE, GIVE THE CLEARANCE OF 0 - 0.05MM. BETWEEN (A) AND (D).
4. IN ORDER TO GAIN ABOVE (A) AND (D) CORRECT CLEARANCE, YOU MAY PUSH NEEDLE GUARD (REAR) AGAINST NEEDLE (D). THE ADJUSTMENT IS MADE BY LOOSENING SCREW OF LOOPER HOLDER.

■ IN CASE OF 2-NEEDLE INTERLOCKER:

1. WHEN THE TIP (A) OF LOOPER MEETS THE LEFT NEEDLE (E), THE CLEARANCE BETWEEN THEM MUST BE 0.2 - 0.3MM.
 2. WHEN THE TIP (A) OF LOOPER MEETS THE RIGHT NEEDLE (F), THEY CONTACT SLIGHTLY (ABOUT 0.2MM) MAKE THE CLEARANCE OF 0 - 0.05MM. BETWEEN (A) AND (F).
- ※ IN ORDER TO OBTAIN ABOVE (A) AND (F) CORRECT CLEARANCE, YOU MAY PUSH NEEDLE GUARD (REAR) AGAINST NEEDLE (F). THE ADJUSTMENT IS MADE BY LOOSENING SCREW OF LOOPER HOLDER.

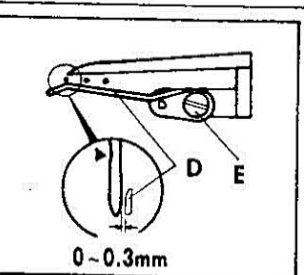
7 車針其針板之間相關位置 RELATION BETWEEN NEEDLE AND STITCH PLATE



在針棒高度等等調整標準完成後，各車針入針板孔時位置應成一直線〔如圖左(B)〕。

AFTER ADJUSTMENT OF HEIGHT OF NEEDLE BAR, ETC., THE NEEDLES MUST BE CORRECTLY ALIGNED (AS SHOWN PICTURE (B))

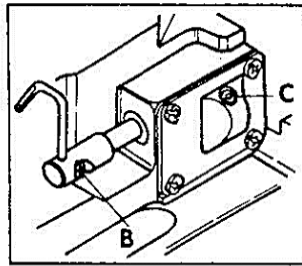
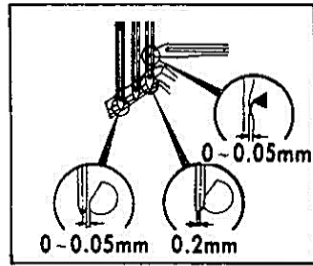
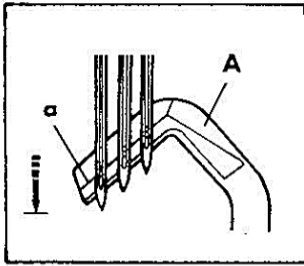
8 車針與(前)針護器的間隙關係 NEEDLE AND NEEDLE GUARD (FRONT)



將彎針針尖上送至左車針和右車針的中央位置，然後調整車針與針護器之間的間隙為0~0.3mm。此調整可藉由放鬆螺絲(E)來取得。

THE TIP OF LOOPER COMES TO THE CENTER OF LEFT AND RIGHT NEEDLE, ADJUST THE CLEARANCE BETWEEN THOSE NEEDLES AND NEEDLE GUARD (FRONT) TO BE 0 - 0.3MM. THE ADJUSTMENTS ARE MADE BY LOOSENING SCREW (E).

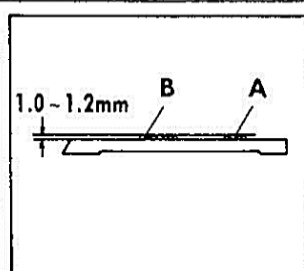
9 車針與(後)針護器之間的關係 NEEDLE AND NEEDLE GUARED (REAR)



1. (後)護針器的正確高度：
當車針下降至最低點時，護針器(A)之(a)直線部份應與車針眼之中心成一直線對應。
2. (後)護針器與車針縱面之正確間隙：
當彎針之針尖遊走至最右車針之中心位置時，可藉由(後)護針器的調整，使彎針與右車針中心位置之間隙為0-0.05mm。同時調整最左車針與(後)護針器之間隙為0-0.05mm。
※上述(後)護針器的調整動作可藉由放鬆螺絲(B)及(C)來取得。

1. THE HEIGHT OF NEEDLE GUARD (REAR):
WHEN THE NEEDLE IS IN ITS LOWEST POSITION, ALIGN THE LINE (A) OF NEEDLE GUARD (REAR) WITH THE CENTER OF EYE OF NEEDLE.
2. LONGITUDINAL POSITION OF NEEDLE GUARD (REAR):
WHEN THE TIP OF LOOPER COMES TO THE CENTER OF THE RIGHT NEEDLE, MAKE THE CLEARANCE BETWEEN NEEDLE AND LOOPER TO BE 0 - 0.05MM. BY ACTUATING NEEDLE GUARD (REAR). AT THIS TIME, ADJUST THE CLEARANCE BETWEEN THE LEFT NEEDLE AND NEEDLE GUARD (REAR) TO BE 0 - 0.05MM.
※ ABOVE ADJUSTMENTS ARE MADE BY LOOSENING SCREW (B) AND (C).

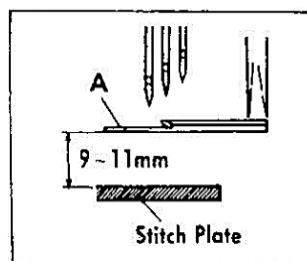
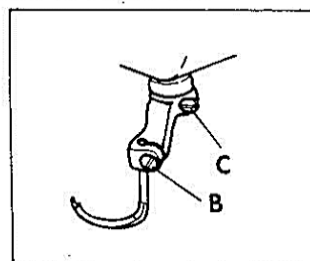
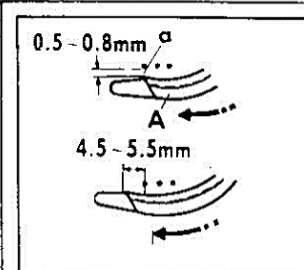
10 送布齒的高度 HEIGHT OF FEED DOGS



1. 當送布齒調至最高點時，其表面應與針板的表面平行(水平)。
2. 同時，將差動齒(A)與主齒(B)調至同高度，並使其表面與針板的表面之間隙為1.0-1.2mm。

1. WHEN FEED DOGS ARE AT THE HIGHEST POSITION, THE SURFACE OF FEED DOGS AND THE SURFACE OF STITCH PLATE BECOMES PARALLEL WITH EACH OTHER.
2. AT THIS TIME, MAKE DIFFERENTIAL FEED DOG (A) AND MAIN FEED DOG (B) TO BE AT THE SAME HEIGHT AND ADJUST THE DISTANCE FROM SURFACE OF STITCH PLATE TO THE SURFACE OF FEED DOGS TO BE 1.0 - 1.2MM.

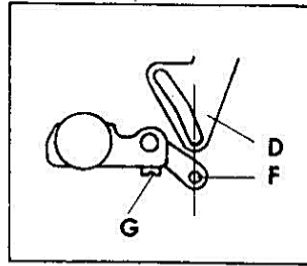
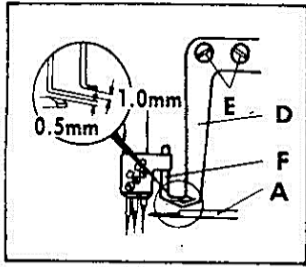
11 車針與勾線針之間的關係 NEEDLE AND SPREADER



1. 如左上圖所示，當勾線針(A)向左游走時，其上(a)點之位置與最左車針間之隙應為0.5mm~0.8mm，且當勾線針(A)游走至最左位置時，其上(a)點與最左邊車針之間隙一定得在4.5mm至5.5mm之間。
2. 勾線針下緣之高度應保持在針板面之上9mm~11mm。
3. 上述之調整動作可藉由放鬆螺絲(B)與(C)來取得。
4. 根據所使用之線的不同，必須將車針其勾線針的間隙作以上正確之調整。

1. FIXING OF SPREADER: WHEN SPREADER (A) MOVES FROM RIGHT TO LEFT, PROVIDE A CLEARANCE OF 0.5 - 0.8MM. BETWEEN LEFT NEEDLE AND THE TIP (a) OF THREAD HOOKING POINT, AND WHEN IT COMES TO THE EXTREME LEFT, THE CLEARANCE BETWEEN THE CENTER OF LEFT NEEDLE AND TIP (a) OF THREAD HOOKING POINT MUST BE 4.5 - 5.5MM.
2. ADJUST THE HEIGHT OF UNDERSURFACE OF SPREADER (A) ABOVE THE TOP SURFACE OF STITCH PLATE TO BE 9 - 11MM.
3. ABOVE ADJUSTMENT IS MADE BY LOOSENING SCREW (B) OF SPREADER AND SCREW (C) OF SPREADER HOLDER.
4. THE ABOVE ADJUSTMENTS SHOULD BE MADE PROPERLY ACCORDING AS THE THREAD TO BE USED.

12 上飾線之導線器的固定 FIXING OF TOP COVER THREAD GUIDE & TOP COVER THREAD EYELET



1. 當勾線針退至最右位置而能平穩的勾住線時，上飾線之導線器(D)的下緣與彎針(A)的上緣之間間隙應為0.5mm。調整完畢後，鎖緊螺絲(E)。
 2. 上飾線導線器(D)之上緣與上飾線穿線孔器(F)之下緣間之間隙應為1.0mm；同時穿線孔器(F)之線孔應與導線器(D)之長形孔延伸部份在一直線上(如上右圖)。
- ※根據所使用之線的不同，而必須將上飾線導線器，穿孔器位置作以上正確之調整。

1. PROVIDE A CLEARANCE OF 0.5MM. BETWEEN UNDERSURFACE TO TOP COVER THREAD GUIDE (D) AND THE TOP SURFACE OF LOOPER (A). AT THE POSITION WHERE THE THREAD IS CAUGHT SMOOTHLY BY THREAD HOOKING PART WHEN SPREADER COMES TO EXTREME RIGHT, TIGHTEN SCREW (E).
 2. PROVIDE A CLEARANCE OF 1.0MM. BETWEEN TOP SURFACE OF TOP COVER THREAD GUIDE (D) AND UNDERSURFACE OF TOP COVER THREAD EYELET (F). SET THE HOLE OF TOP COVER THREAD EYELET ON THE EXTENSION LINE OF SLOT FOR TOP COVER THREAD GUIDE, THEN TIGHTEN SCREW (G).
- ※ THE ABOVE (1), (2) SHOULD BE ADJUSTED PROPERLY ACCORDING AS THE THREAD TO BE USED.



警告

調整前請先將馬達關閉



WARNING

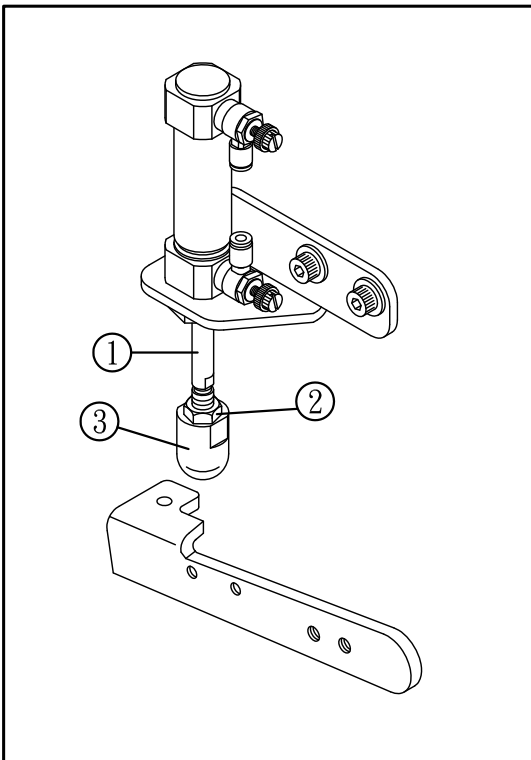
ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

壓腳機構

Presser foot lifter mechanism

- (1) 鬆開固定螺母 ②。
- (2) 轉氣缸桿襯片 ③ 調整氣缸桿移到最下方時，
抬壓腳上升 6 ~ 7.5mm。
- (3) 鎖緊固定螺母 ②。

- (1) Loosen the lock nut ②.
- (2) Turn the cylinder rod chip ③ and adjust so that the presser foot rises by 6 mm(7.5 mm) when the cylinder rod is at its bottom (when the cylinder operates).
- (3) Tighten the lock nut ②.





警告

調整前請先將馬達關閉



WARNING

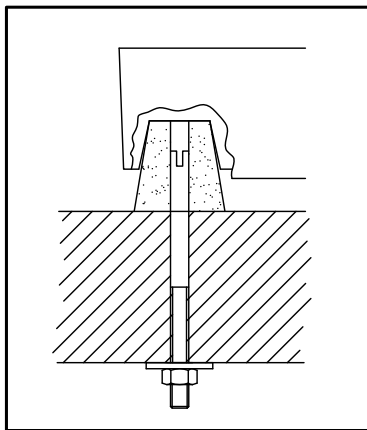
ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

安裝

1. 請依本機器所附之各式桌板裁製圖，根據實際上之需求，裁製正確桌板。
2. 再依序安裝防震膠墊，或支撐架及其他副件。

* 注意:

- (1) 一般桌板 -
請依下圖所示順序安裝膠墊支架及防震膠墊。(圖1)



(Fig. 1)

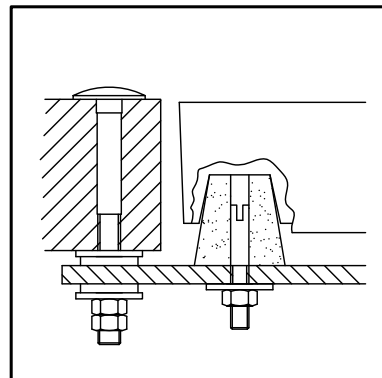
- (2) 下沉式桌板 -
請依下圖所示確實安裝機台支架，在安裝膠墊支架及防震膠墊。(圖2)

INSTALLATION

1. Before installing machine, please refer to table cut-out drawing to cut out table correctly.
2. According to the sequence of installation, fix quake-proof, base-fixed plate and other attachments.

Remarks :

- (1) General table -
According to the sequence of Fig.1, install quake-proof Rubber Cushion and the frame of the Cushion.(Fig. 1)



(Fig. 2)

- (2) Sinking style table -
According to Fig. 2 install the machine frame, and again to install the quake-proof Rubber Cushion and the frame of the Cushion. (Fig. 2)



警告

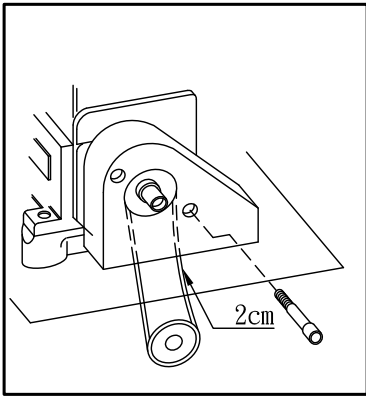
調整前請先將馬達關閉



WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

3. 馬達之轉向為順時鐘方向，皮帶之鬆緊度以用手指向內壓 2cm 為一般標準，同時為了安全起見，請將上、下皮帶蓋蓋上。(圖3)



(Fig. 3)

3. Be sure that the Motor turning direction is clockwise, and the Motor Belt tension can be pressed with finger inward 2 cm. For safety reason, please fasten the Belt Cover. (Fig. 3)

Table 1(表1)

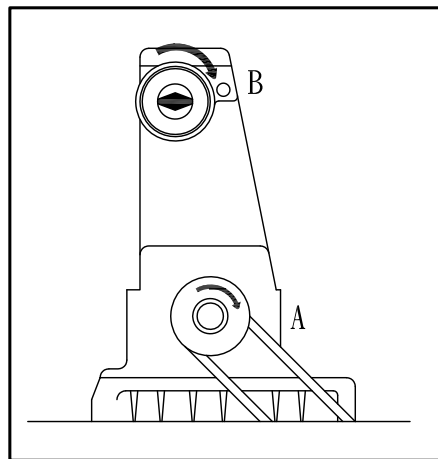
Machine speed (s.p.m.) 轉速/分	Motor pulley Outer Diameter(mm)		Motor Belt V-BELT,M-TYPE (CLUTCH MOTOR)
	60HZ	50HZ	
6,000	105	125	36 "
5,500	95	115	↑
5,000	85	105	35 "
4,500	80	95	↓
4,000	70	85	34 "

4. 皮帶輪相對轉速與皮帶尺寸請參照表1。

本機最高的車縫速度為每分鐘6,000轉，一般轉速為每分鐘5,500轉(於裝上皮帶輪後，最高轉速為4500轉，一般轉速為4000轉)。為了提高機台使用壽命，新機於開始使用的前200小時(約1個月)內，其轉速切勿超過每分鐘5000轉。(圖4)驅動輪與皮帶軸之轉向皆為順時鐘方向。

4. The turning direction of Pulley (A) is clockwise like Handwheel (B). (Fig. 4)

For machine's long-life and durable operation, it is recommended that the maximum speed shouldn't exceed 80% of the speed listed on Table 1. Make sure to choose the correct size of Motor Pulley and Belt.



(Fig. 4)



警告

調整前請先將馬達關閉

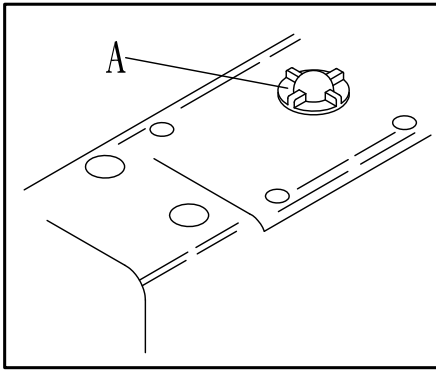


WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

馬達與皮帶

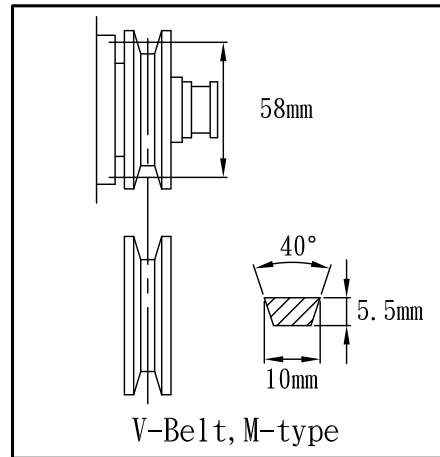
1. 請依照表1所指示之規格安裝馬達，並使用M番之V型皮帶。
安裝馬達時，馬達驅動輪與機器皮帶輪之中心點須呈一直線。而在使用離合器馬達時，所謂馬達驅動輪與機器皮帶輪之中心點呈一直線，是指離合器馬達驅動輪，因起動踏板下踩而向左靠列底的狀態下。(圖5)



(Fig. 6)

MOTOR AND BELT

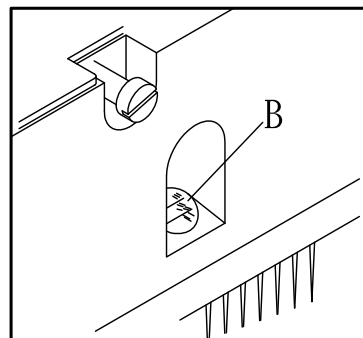
1. Use Clutch Motor and V-Belt of M-type. Position Motor so that its center aligns with the center of machine's Pulley when the Pulley is shifted to the left by treading Pedal. (Fig. 5)



(Fig. 5)

潤滑油

1. 請選用與 Mobil #10或 Esso #32 同級之潤滑油。
2. 在新機使用前請先注入潤滑油。旋開頂蓋上的噴油檢視蓋(A)，將油緩緩注入機器中，待油滿至油量指示窗(B)上下線之間即可。(圖6)



(Fig. 6)

LUBRICATION OIL

1. Please use oil Mobil #10, Esso #32 or its equivalent .
2. As the oil has been completely drained before shipment, please fill lubrication oil first before the new machine to be used.
To remove Oil Sight Window Plug A and fill the oil slowly until the oil level reach between lines H and L of Sight Gauge B. (Fig. 6)



警告

調整前請先將馬達關閉

3. 於每天開機操作時，請先檢查噴油狀態是否正常且注意油量是否低於指示窗之下限，若低於下限請隨時補充新油。



WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

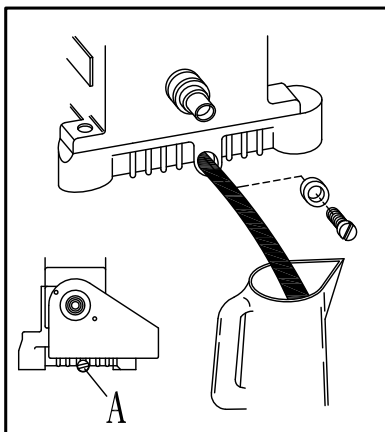
3. When you begin operating the machine everyday, please check whether all the lubricating system is in good condition.

If oil is lower under L line of Oil Sight Gauge B, please supply oil. (Fig. 6)

潤滑油的更換

1. 為延長本機的使用壽命，請於開始使用後的一個月內更換第一次新油，以後約每六個月更換一次。

更換潤滑油時，請先取下V型皮帶，再將機器自工作檯取下。先卸下放油螺絲(A)，並倒乾油槽內之舊油，此時，注意勿污染V型皮帶。待舊油完全排出後，再將放油螺絲鎖緊，再依C-2的步驟注入新油。(圖7)



(Fig. 7)

CHANGE OF LUBRICATING OIL

1. For machine long-life and durable performance, please replenish lubricating oil after one-month operation and it must be completely changed every six months thereafter.

Please remove V-belt from Pulley and remove machine from Table. After removing Screw A and draining all the used oil from the Reservoir.

When you replenish new oil, take care not to smear V-Belt with oil then tighten Screw without fail. (Fig. 7)



警告

調整前請先將馬達關閉

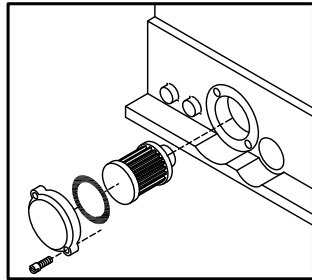


WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

濾油器之更換

本機裝有濾油器，新機使用一個月後必須更換新品。此後，約每6個月更換一次。(圖8)



(Fig. 8)

REPLACING OIL FILTER

The machine is equipped with an Oil Filter as Fig. 8, when Oil Filter gets clogged with dirt, the proper lubrication is impossible.

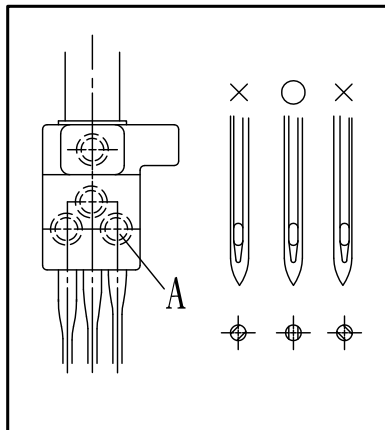
Therefore, please change Oil Filter after one month initial operation and please change Oil Filter every six months thereafter. (Fig. 8)

擊針的選用及更換方式

- 1.本機使用編號UY/128GAS的各式大、小番號擊針或其他相同規格的产品。
- 2.在更換擊針時，請先旋開鎖針螺絲(A)，並取下舊針，再依車縫布料厚薄、質料，選定最合適之擊針，將新針插至針錙之最頂端，且使長溝面背向自己。(圖9)
- 3.重新將鎖針螺絲鎖緊(A)。

HOW TO REPLACE THE NEEDLES

- 1.Please use all kinds of the model number UY/128 GAS of Organ's needle or its equivalent.
- 2.When replacing new needles, loosen Screw A, then pull out the used needles, insert the new ones into the hole of Needle Holder as far as they can go and adjust the Needle Scarf facing rearwards from operator's view. (Fig. 9)
- 3.Fasten screw (A).



(Fig. 9)



警告

調整前請先將馬達關閉



WARNING

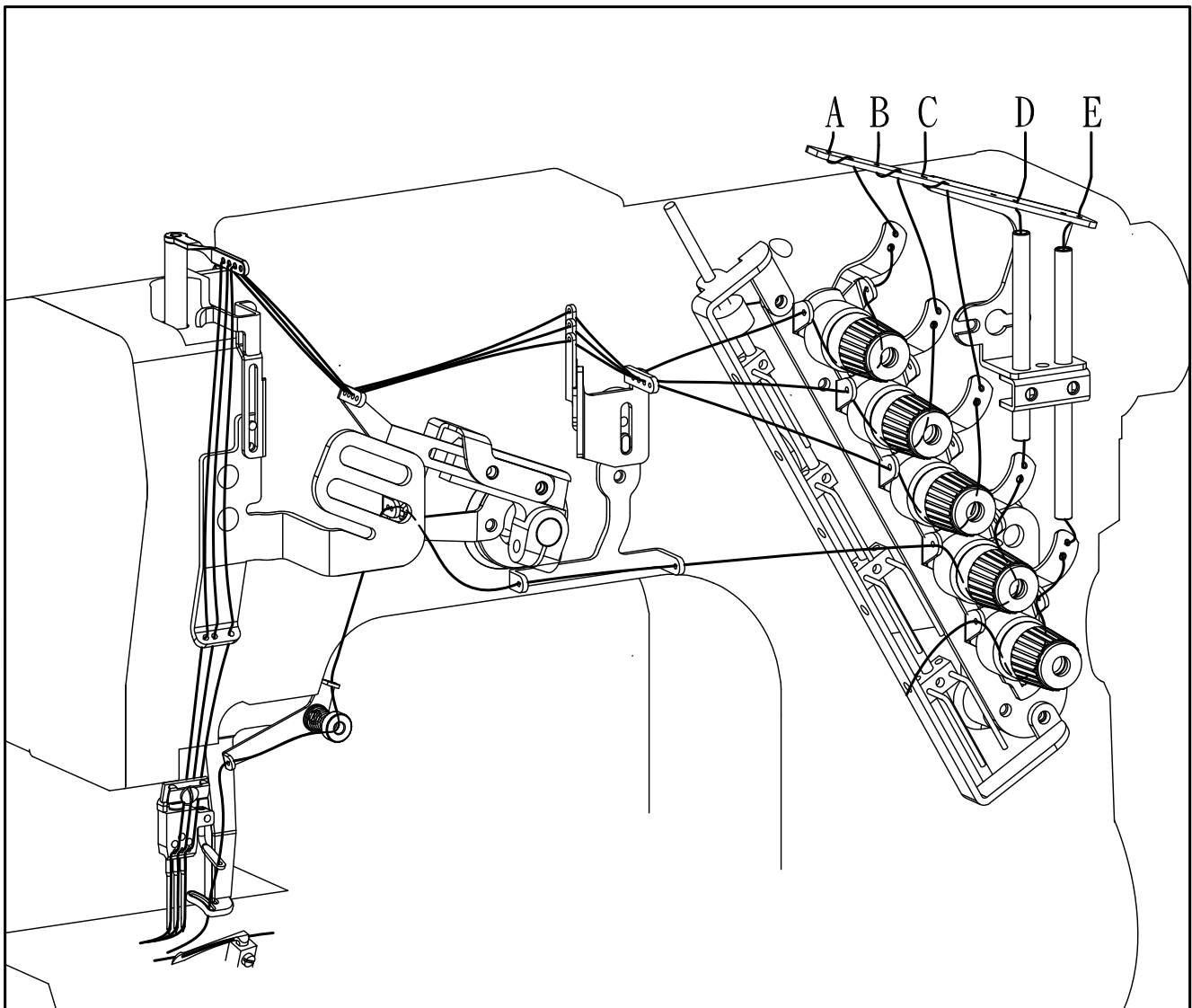
ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

穿線方式

- 1.請按照圖中所指示的穿線方式，正確穿線。若穿線方式錯誤，將會引起斷線，跳針或車縫不平坦等現象。(圖10)
2. A.B.C……擊針線，D……上裝飾線，E……下勾針線。(圖10)

THREADING

1. Please refer to Fig. 10. for threading. Wrong threading may cause thread breakage, stitch skipping, puckering, uneven seam, ect.
2. A.B.C. are needle threads, D is top covering thread, E is looper thread.



(Fig. 10)



警告

調整前請先將馬達關閉



WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

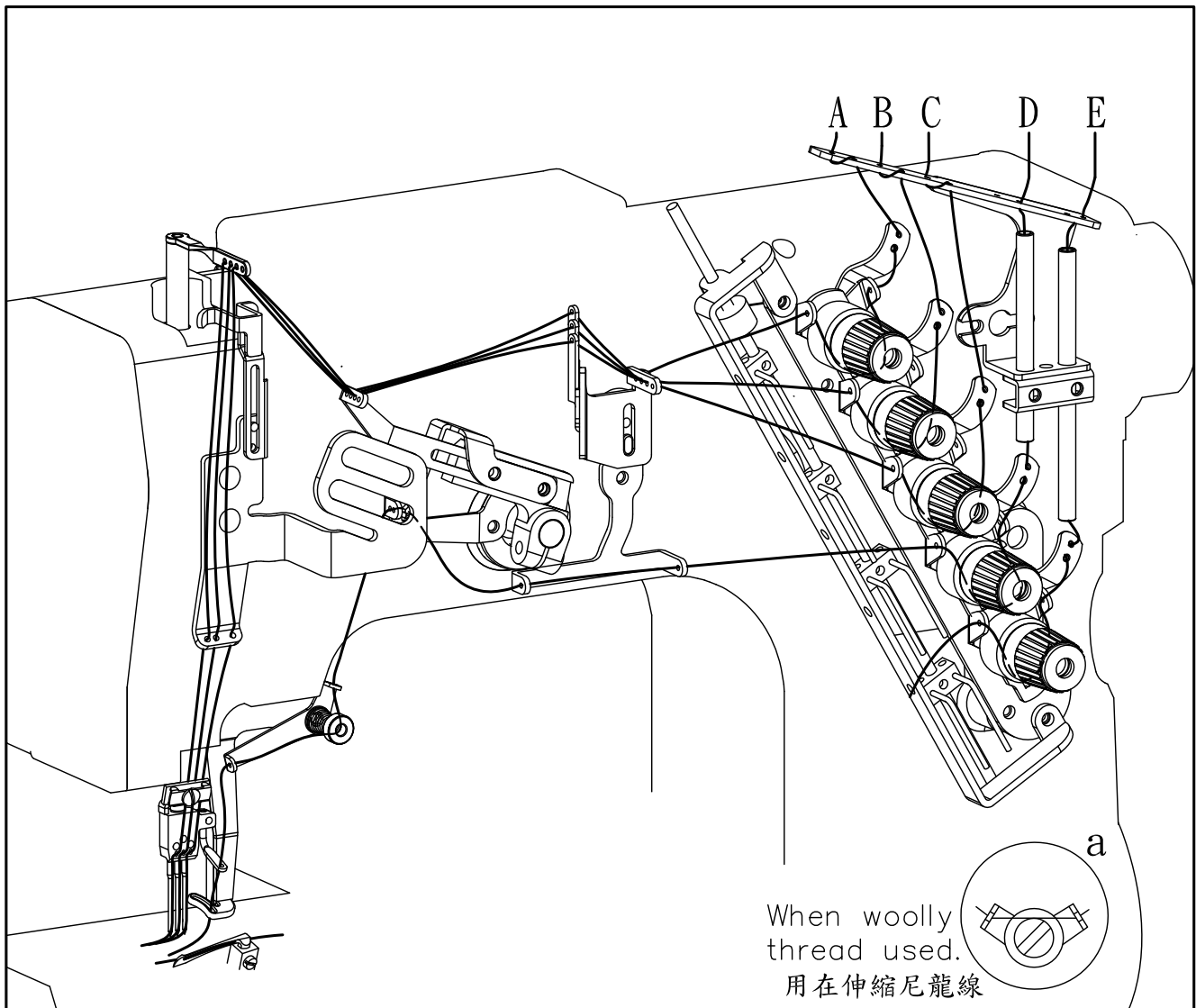
3.若用三針車縫，則穿線方式如圖所示。
。若用二針車縫，穿線方式亦相同，
所不同者，僅是擊針線穿二針而已。
(圖10)

4.當下勾針線使用棉線或伸縮尼龍線時
，其穿線方法並不相同，請參照圖10
a 中的正確方式穿線。

3. The illustration Fig. 10 Shows the
threading for 3-Needle Machine.

When cotton or nylon threads is
used as looper thread, The thread
should go through Fig. 10-a as shown.

4. When wooly, nylon or similar thread
is used as Looper thread, please refer
to Fig 10-a for threading.



(Fig. 10)



警告

調整前請先將馬達關閉

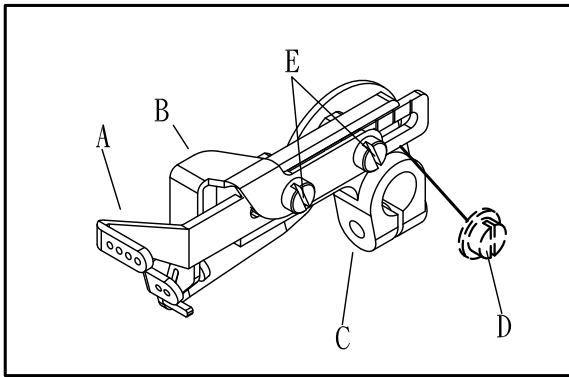


WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

拉線鬆緊度的調整

拉線的強弱必須根據車縫的布料、厚薄及線與針距的不同，而做調整，將針線控制鈕順時鐘方向旋轉時，線愈緊，反之則愈鬆。



(Fig. 11)

ADJUSTING THREAD TENSION

The tension of the thread depends on
1. The material and the thickness of the fabric to be sewn;
2. The threads to be used.
3. The stitch width, stitch length, etc.

If you turn the Thread Tension Spring Cap clockwise, thread will be tighter, on contrary, it will be looser.

Make the thread tension as weak as possible according to the sewing condition as long as stable seam can be obtained.

針線過線桿的調整

1. 當針棒降至最低時，針線提線過線桿 A 向左下方傾斜右端上飾線提線過線桿長溝的中心點 B，對準上飾提線過線桿固定螺絲的中心點，(圖11)必要時可放鬆螺絲調整之。
2. 本機的針線提線過線桿 A 上有六個刻度，本機於出廠時皆將針線提線過線桿上由右至左算起的第四個刻度對準托架 C 右端，再連同上飾線提線過線桿一齊鎖在托架上。
3. 欲將針線調緊些，可將針線提線桿 C 向右方移動，反之則可將針線調鬆些，鬆開2個螺絲 E 做以上調整。

ADJUSTING THE NEEDLE THREAD EYELET

When the Needle Bar down to the lowest position, the center of groove hole B should centralize to the fixing screw of Top Cover Thread Eyelet D.

Or when the Needle Bar is up to the highest position, the top edge of Needle Thread Take-up and Top Cover Thread Take-Up should remain horizontal.

There are six graduations on the Needle Thread Take-Up, the fourth graduation should align with the right end of Bracket. To adjust it by loosening two Screws E. (Fig. 11)



警告

調整前請先將馬達關閉



WARNING

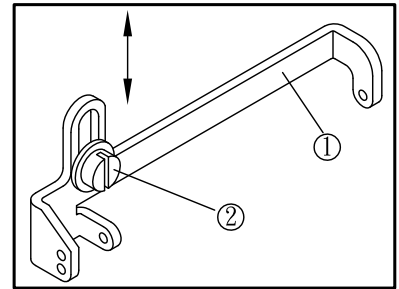
ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

上飾線控線桿的調整

1. 除針線控制鈕可調整上飾線之張力外，上飾線過線桿①亦可調整上飾線之鬆緊(圖12)，鬆開固定螺絲②，將上飾線過線桿往下移，可將上飾線放鬆，反之，則可將上飾線收緊。
2. 當針線控線桿向左下方傾斜大一點，則可將上飾線放鬆，反之則可將上線收緊。

ADJUSTING OF TOP COVER THREAD EYELET

The tension of top cover thread also can be adjusted by loosening Screw ② then moving Top Cover Thread Eyelet upward or downward. (Fig. 12)



(Fig. 12)

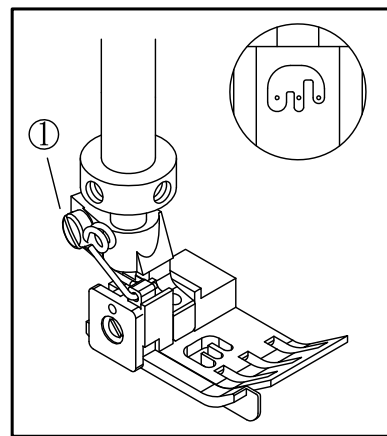
押腳的調整

1. 鬆開押腳固定螺絲①左右搖動，調整押腳，使針尖位於押腳針孔的正中央，調整好後，再將固定螺絲鎖緊。(圖13)

ADJUSTING PRESSER FOOT

1. Loosne Screw 1 . and adjust Presser Foot left and right to a proper position where the needles can get into the center of Presser Foot eyelets.

After adjusting, tighten Screw 1 . (Fig. 13)



三溝押腳 (Fig. 13)



警告

調整前請先將馬達關閉



WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

押腳壓力強度的調整

- 1.若要求布料車縫順暢且縫合完美，押腳壓力應盡量輕些。
- 2.鬆開螺帽(A)，轉動螺絲(B)，待其調整至適當壓力後再將螺帽(A)鎖緊。(圖14)

(C為上送布齒壓力調節)

ADJUSTING PRESSURE OF PRESSER FOOT

- 1.Adjust Presser Foot pressure as weak as possible, so that cloth can be sewn smoothly.
- 2.To adjust, loosen nut A, turn screw B to a proper pressure, then fasten nut A. (Fig. 14)

縫目長度的調整

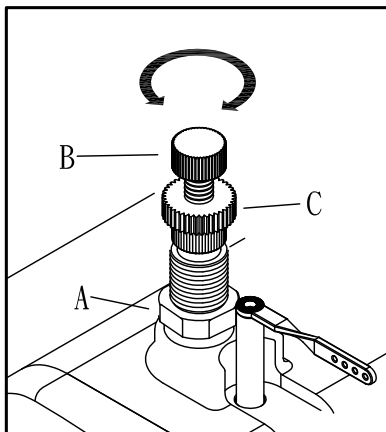
本機的標準縫目為最粗針1英吋約4針半，最細針1英吋約15針，採用無階段式調整。

1. 將針距調整鈕，順時鐘方向旋轉時，則縫目愈密，反之則縫目愈疏。(圖15)
- 2.本機可於機器轉狀態下，旋轉針距調整鈕調整縫目長度，不須停機。

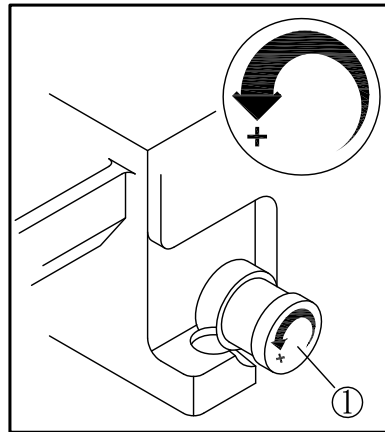
ADJUSTING STITCH LENGTH

Stitch length can be adjusted in any range from 1.2mm~3.6mm or 7-18 stitches per inch.

1. Turn Knob①clockwise, the stitch length becomes short, on contrary, it becomes long. (Fig. 15)
- 2.You can adjust the stitch length at ease when machine is being operated. There is no need to stop the machine.



(Fig. 14)



(Fig. 15)



警告

調整前請先將馬達關閉

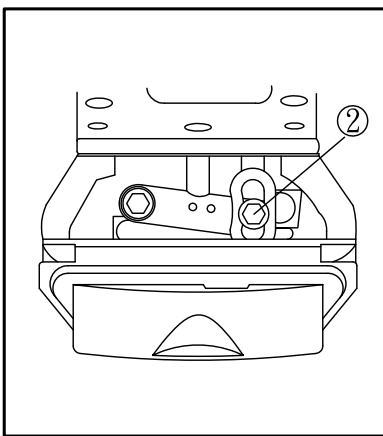


WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

差動比的調整

- 1.本機之差動比可從1:1.7調整至1:5.6。
- 2.將圓筒上側蓋向左打開，用3mm之內六角扳手放鬆螺絲②上下移動即可調整差動比。(圖16)
- 3.將差動驅動連桿往上移動時，則差動齒比主齒傳動速度快，可做摺景車縫，反之，則差動齒比主齒，傳動速度慢，可做伸展布料車縫使用。



(Fig. 16)

ADJUSTING OF TOP COVER THREAD EYELET

- 1.The differential feed ratio of this machine is adjustable from 1:1.7 to 1:5.6
- 2.Open the Upper Cylinder Side Cover and use 3 mm Hexagon Wrench to loosen the Screw②.
- 3.Move the Differential Feed Bar upward, the ratio become large to gather the cloth . Move it downward, the ratio become small to stretch the cloth.



警告

調整前請先將馬達關閉

※根據所使用之線的不同，而必須將上飾線導線器，穿孔器位置作以上正確之調整。



WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

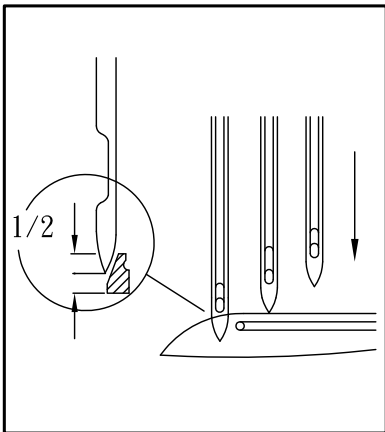
※ The above (1), (2) should be adjusted properly according as the thread to be used.

勾針控制線桿的位置

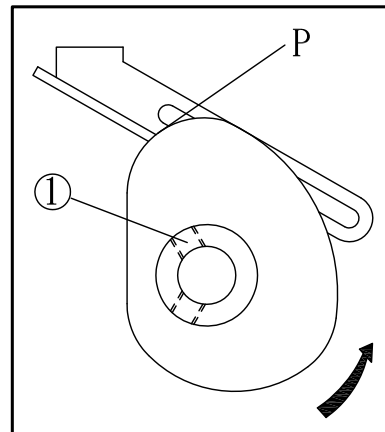
1. (圖40)是從操作員左側觀察勾針控線凸輪。
2. 當針從最高處下降時，左針大約位於勾針後面之一半的位置時 (圖39) 勾針針線必須脫離凸輪之最高位置(P)。(圖40)
3. 調整螺絲 (1) 並調整之。

THE POSITION OF LOOPER THREAD TAKE-UP

1. (Fig. 40) is viewed from left side of operator.
2. When Needle comes down from the highest position and the Left Needle tip reaches around 1/2 position of the looper, (Fig. 39) The looper thread should come over the highest position P of the Cam. (Fig. 40)
3. Turn the screw (1) for above adjustment.



(Fig. 39)



(Fig. 40)

上送機構操作說明

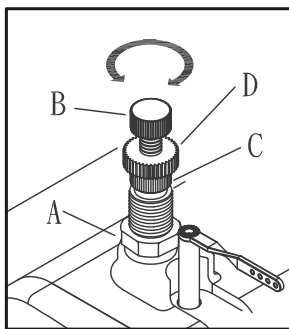
Operation Manual of Top Feeder

上送布齒及押腳的壓力調整

Adjust the Pressure of Top Feeder

先鬆開螺絲(A)，調整上送布齒調整鈕(C)，順時鐘方向旋轉時則越緊，反之則越鬆。螺絲(B)則是調整押腳的壓力，調整前先鬆開螺母(D)。(圖1)

Please loosen screw A. To increase its pressure, turn screw C clockwise. To decrease the pressure, turn screw C counter clockwise. (Fig. 1)



Adjust the Pressure of Presser Foot

Please loosen screw D. To increase its pressure, turn screw B clockwise. To decrease the pressure, turn screw B counter clockwise. (Fig. 1)

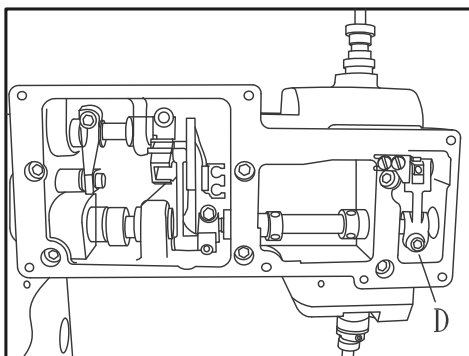
(Fig. 1)

上送齒前後距離

Forward and Backward Movement of Top Feeder against the Feed Dogs

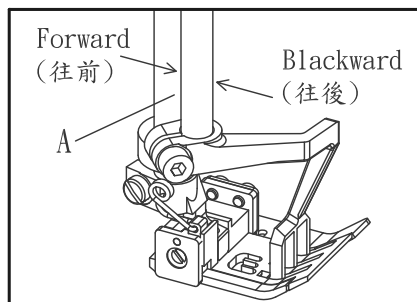
轉動上送布齒調節螺絲(D)，輕敲上送布齒棒A往前或往後，可調整送布齒的前後距離，調整後請鎖緊螺絲(D)。(圖2和圖2-1)

The top feeder can move forward or backward to apply for difficult-to-sew fabrics. Please loosen screw D, then move the Bar A forward or backward for the adjustment. After the adjustment, please fasten the screw D. (Fig. 2 and Fig. 2-1)



The top feeder is already adjusted to be centralized with the feed dogs before shipment.

(Fig. 2)



(Fig. 2-1)



警告

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WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

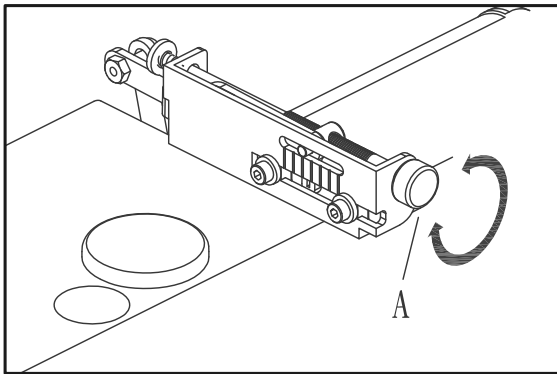
上送布齒調節送布量大小

Adjustment the Feeding Amount of Top Feeder

轉動螺絲(A)可調整上送布齒的送布量，順時鐘方向旋轉時為轉小，逆時鐘則為轉大。(圖3)

To decrease the feeding amount, please turn screw A clockwise. (Fig. 3)

To increase the feeding amount, please turn screw A counter clockwise. (Fig. 3)



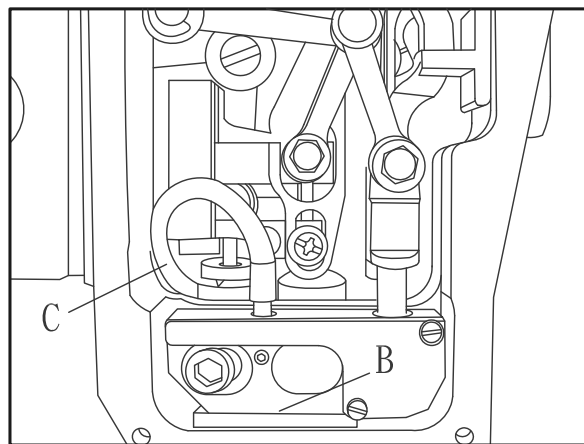
(Fig. 3)

內側油管

Changing the Oil Tube

此圖為內側油管回油圖，若循環不良時油可能會堆積於(B)處而造成漏油，此時請清潔或更換回油管(C)便可改善。(圖4)

Please check oil tube C periodically. In case of any damage, please change it to avoid any oil leakage to area B. (Fig. 4)



(Fig. 4)



警告

調整前請先將馬達關閉

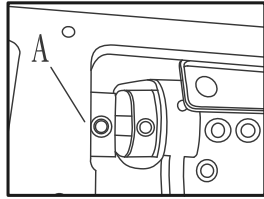


WARNING

ALWAYS turn OFF the motor switch and check that the motor stops before adjustment.

與主軸連結凸輪

圖5中的凸輪螺絲 (A)需對齊平面加工處。



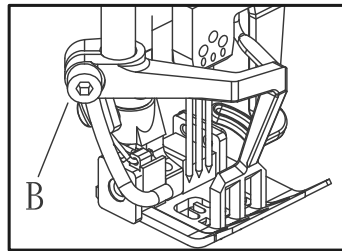
(Fig. 5)

The Stroke of Top Feeder

There are two screws on the Cam A.
The first screw already fitted to align with the flat surface of the main shaft before shipment. This is the benchmark of the stroke of top feeder. (Fig. 5)

上送布齒高低調節

鬆開上送布齒的螺絲 (B)可調整上送布尺的高低，以便配合布料之厚薄。(圖6)



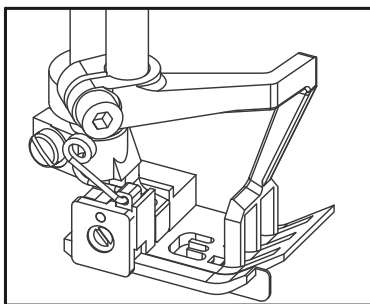
(Fig. 6)

The height of Top Feeder

The height of top feeder can be adjusted for different thickness of sewing fabric by adjusting screw B.(Fig. 6)

3溝上送布齒

3導溝的上送布齒與押腳(寬型)。(圖7)



(Fig. 7)

The Type of Top Feeder and Presser Foot

3-claw top feeder and 3-groove presser foot while