



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

**TAIWAN**  
百分之百台灣製造  
100% Made in Taiwan



**TAIWAN**  
EXCELLENCE 2012

## SL-800 Series

手臂型四針六線併縫機全密封、外置式凸輪、雙差動  
4-needle Feed-off-the-arm Flatseaming Machine Fully oil-sealed、  
built-out looper、Dual differential feed ratio with adjustable mounting base



## 使用說明書 Instruction Book



星菱縫機股份有限公司  
SHING LING SEWING MACHINE CO., LTD.

SINCE 1989

CE ISO 9001/CNS 12681





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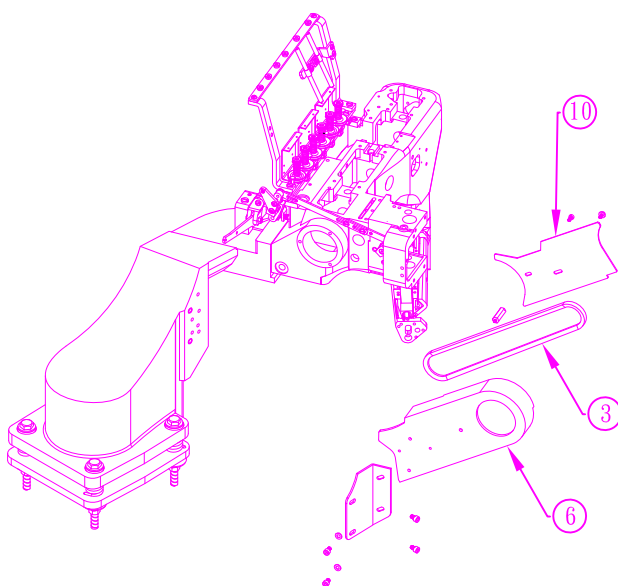
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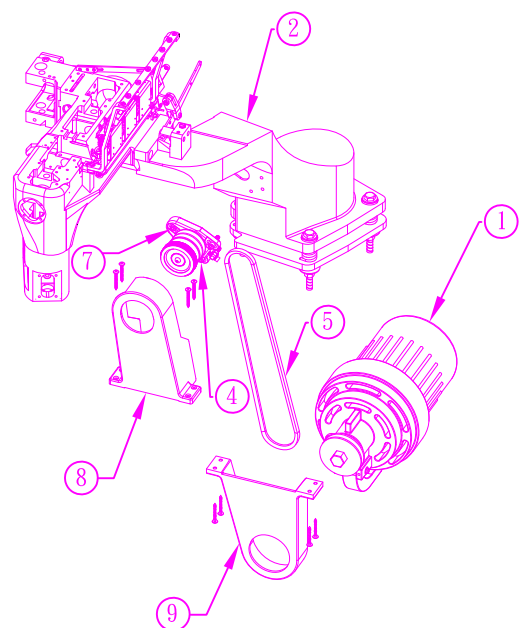
## Installation the machine head with clutch motor servo motor

1. Install clutch motor 1 under the table of the machine.
2. Firmly install the machine head on to the rest bracket.  
Check there is no play and/or clearance after this installation.
3. Place the M27 V belt 3 on the machine hand wheel.
4. Install the front wheel 5 on the rest bracket by fastening the three screws 3.
5. Place the M33 V belt 5 on front wheel 4 and the pulley of clutch motor 1.
6. Adjust the tension of M27 V belt. Approximately 2 mm deflection should be obtained by pressing the middle of the V belt with 9.8 N (1kgf).
7. Fasten the three screws 7 of the front wheel 4.
8. Properly adjust the tension of M33 V belt 5.
9. Properly attach upper belt cover 6 to the rest bracket so that it will not contact with the belt while machine is running.
10. Attach the auxiliary cover 10 on belt cover 6.
11. Attach belt cover 8 on front wheel 4.
12. Attach belt cover 9 on the pulley of clutch motor.



## 普通馬達裝置方法

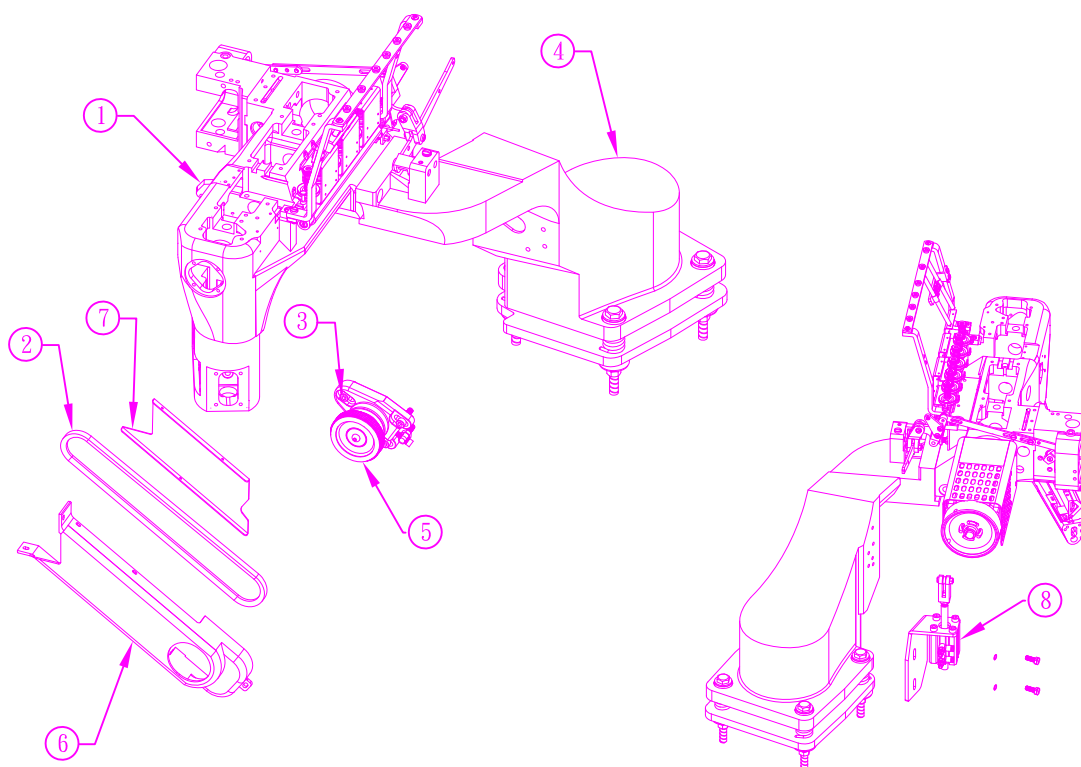
1. 將車板與離合器馬達(1)鎖上
2. 固定好機體固定座(2)
3. 先將M27三角皮帶(3)掛上機體皮帶輪上
4. 將被動輪(4)用三顆螺絲(7)掛上
5. 掛上M33皮帶(5)在離合器馬達(1)和被動輪(4)上
6. 開始調整M27皮帶(3)鬆緊度. 按壓V型傳動皮帶中間. 使皮帶約有2CM左右的彎曲. 為9.8N(1KGF)
7. 鎖上被動輪(4)三顆螺絲(7)固定
8. 調整離合器馬達皮帶(5)為適中
9. 掛上皮帶蓋(6). 調整好適中運轉時不至於碰到兩邊皮帶蓋後鎖緊
10. 鎖上防塵蓋(10)
11. 鎖上被動輪蓋(8)(調好適中)
12. 鎖上馬達防護蓋(9)(調好適中)





## Installation the machine head with pneumatic square cylinder and direct-drive servo motor servo motor

1. Firmly install the machine head on to the rest bracket.  
Check there is no play and/or clearance after this installation.
2. Place the V belt 2 on the machine hand wheel.
3. Install the front wheel 5 on the rest bracket by fastening the three screws 3.
4. Adjust the tension of the V belt. Approximately 2 mm deflection should be obtained by pressing the middle of the V belt with 9.8 mm (1kgf).
5. Fasten the three screws 3 of the front wheel 5.
6. Attach upper belt cover 6 to the rest bracket.
7. Attach the auxiliary cover 7 on belt cover 6.
8. properly install the square cylinder on rest bracket.



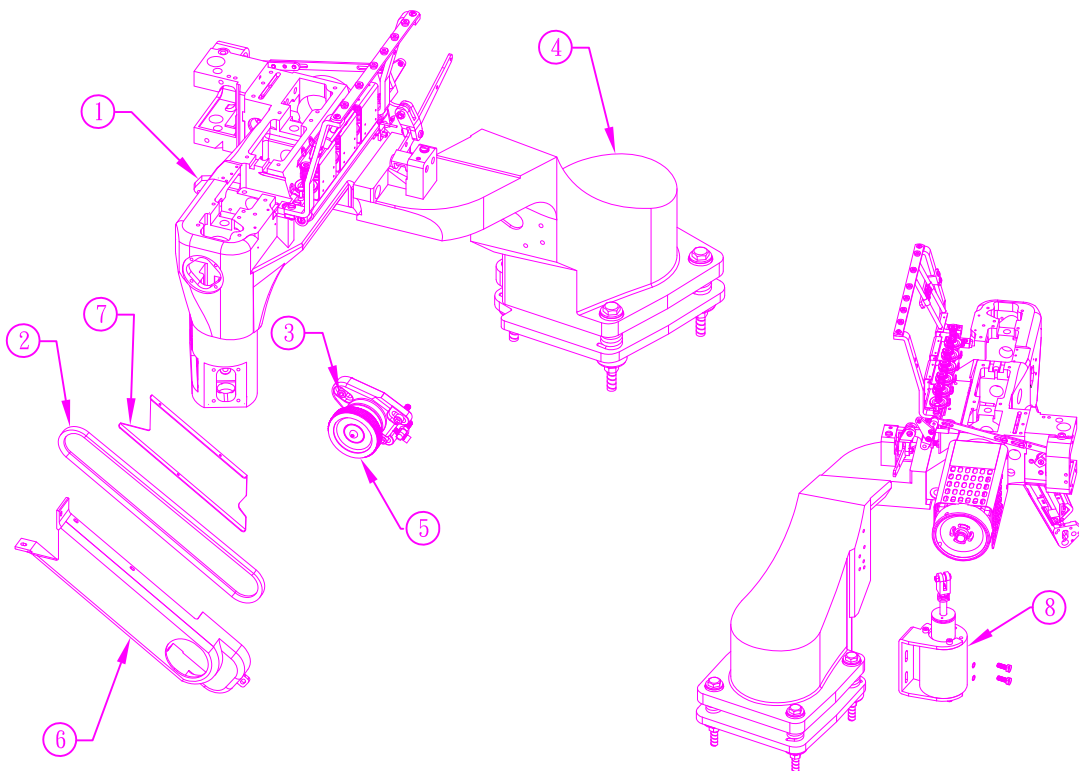
## AC馬達氣壓閥組裝構造

1. 將機體(1)與固定座(4)固定於車板上
2. 先將M27三角皮帶(2)掛上機體皮帶輪上
3. 將被動輪(5)用三顆螺絲(3)掛上
4. 開始調整M27三角皮帶(2)鬆緊度. 按壓V型傳動皮帶中間. 使皮帶約有2CM左右的彎曲. 為9.8N(1KGF)
5. 鎖上被動輪(5)三顆螺絲(3)固定
6. 調整好傳動防護罩(6)適中運轉時不至於碰到兩邊皮帶蓋後鎖緊
7. 鎖上防塵蓋(7)
8. 掛上氣壓閥(8). 調整好位置. 鎖緊



## Installation the machine head with electric solenoid and direct-drive servo motor

1. Firmly install the machine head on to the rest bracket.  
Check there is no play and/or clearance after this installation.
2. Place the V belt 2 on the machine hand wheel.
3. Install the front wheel 5 on the rest bracket by fastening the three screws 3.
4. Adjust the tension of the V belt. Approximately 2 mm deflection should be obtained by pressing the middle of the V belt with 9.8 mm (1kgf).
5. Fasten the three screws 3 of the front wheel 5.
6. Attach upper belt cover 6 to the rest bracket.
7. Attach the auxiliary cover 7 on belt cover 6.
8. properly install the solenoid on rest bracket.



## AC馬達電磁閥組裝構造

1. 將機體(1)與固定座(4)固定於車板上
2. 先將M27三角皮帶(2)掛上機體皮帶輪上
3. 將被動輪(5)用三顆螺絲(3)掛上
4. 開始調整M27三角皮帶(2)鬆緊度. 按壓V型傳動皮帶中間. 使皮帶約有2CM左右的彎曲. 為9.8N(1KGF)
5. 鎖上被動輪(5)三顆螺絲(3)固定
6. 調整好傳動防護罩(6)適中運轉時不至於碰到兩邊皮帶蓋後鎖緊
7. 鎖上防塵蓋(7)
8. 掛上電磁閥(8). 調整好位置. 鎖緊



## Lubrication

### ⚠ CAUTION

※When lubricating the machine and/or replacing the oil, use Shingling recommended oil. Using other oils may damage the machine.

#### 1. Oil

Use Shingling recommended oil (P-68 made by Yanase). (ISO Viscosity Grade 68).

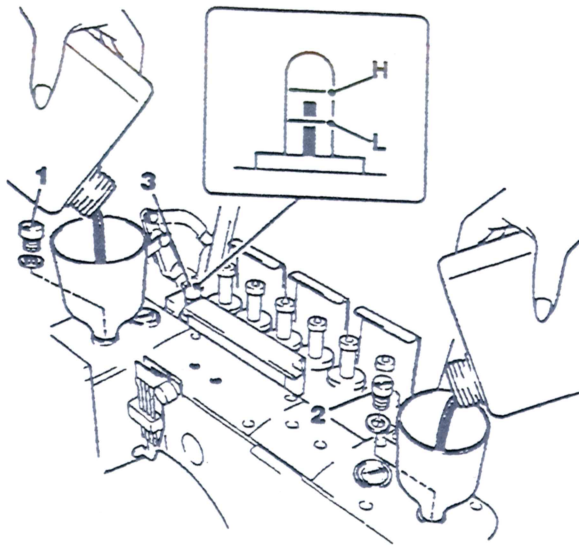
#### 2. To fill the machine with oil

Remove plug screws 1 and 2.  
Fill the machine with oil until the oil level reaches between H and L. After filling the machine replace plug screws 1 and 2.

#### 3. Required amount of oil

(H) on oil gauge 3, 4 : Upper limit  
(L) on oil gauge 3, 4 : Lower limit  
The oil level should always lie between (H) and (L).

#### 4. Manual lubrication



## 關於供油

### ⚠ 注意

※在加機油或換機油時，請務必使用指定的機油，如果使用指定以外的機油，有可能損壞縫紉機。

#### 1. 使用的油類

請使用本公司指定的「P-68」  
(yanase 製造) 機油，(ISO 黏度等級/VG68)

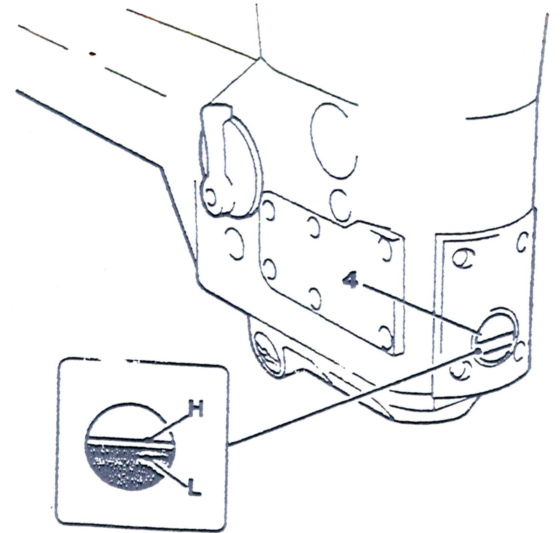
#### 2. 供油的方法

卸開供油口蓋 1、2，注入油使油面到達 H 線和 L 之間，操作完後，請安裝好供油口蓋 1、2。

#### 3. 油的規定量

油標尺 3、4，的 H 線和 L 線表示著油量的上限和下限，為使油面經常保持在 H 線和 L 線之間，請常常檢查注意加油。

#### 4. 用手加油





## ⚠ CAUTION

※Always turn off the power and unplug the machine when you apply oil by hand.

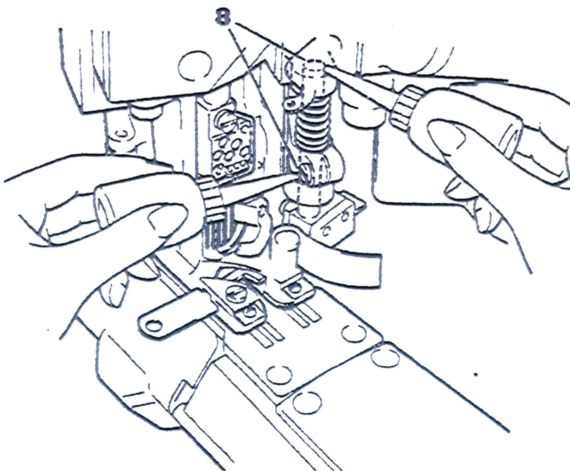
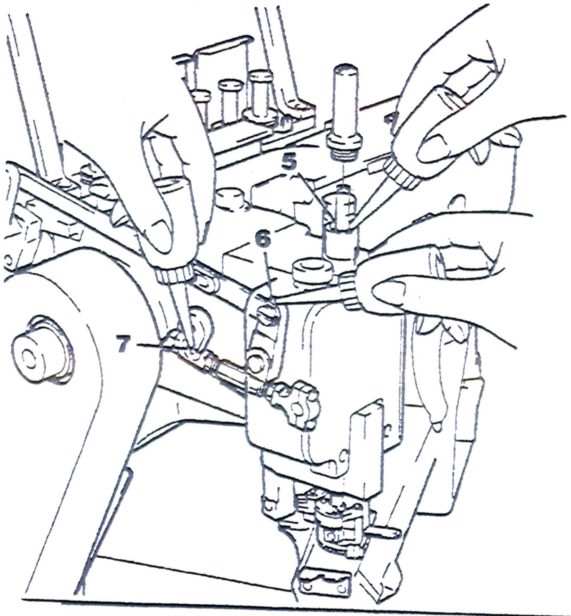
Apply 2 or 3 drops of oil to needle bar 5, presser foot lift link 6, rod 7 and crank 8 by hand when the machine is used for the first time or has been left unused for some time.

### 5. Checking oil circulation

Run the machine and check for the proper oil flow after filling the machine with oil. This can be seen on the oil flow sight windows 1 and 2.

### Silicone oil for H.R. device

If the threads do not move smoothly, fill silicone oil reservoir 3 with silicon oil.



## ⚠ 注意

※在用手加油時，務必將縫紉機的電源關掉，將插頭從電源插銷上拔下來之後再進行。

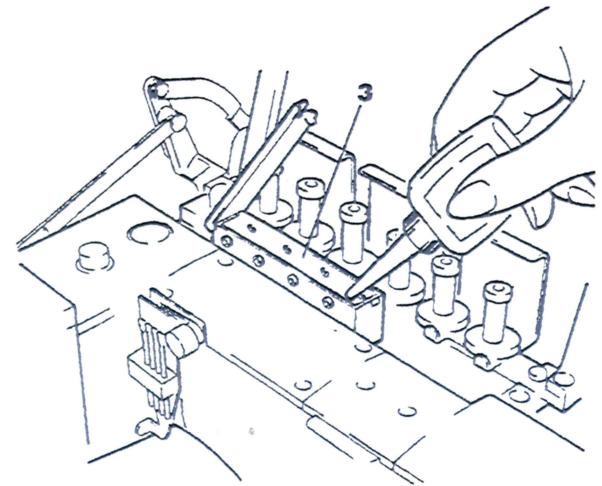
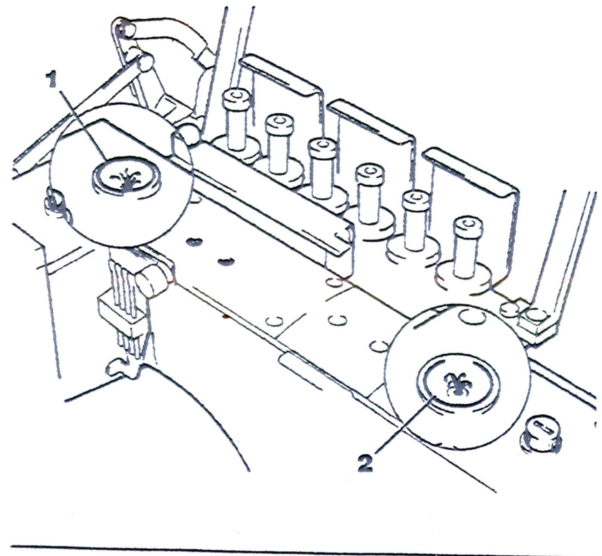
剛開始使用縫紉機時，或者使用長時間沒有使用縫紉機時，請用油壺給針棒 5、抬壓腳連接桿 6、上刀片傳動曲柄 7、上刀片傳動軸 8 每處各滴 2 到 3 滴油

### 5. 檢查機油的循環狀況

加油完成後，踩動縫紉機踏板，使縫紉機轉動，並在油窗 1、2 觀察確認機油的循環情況。

### 給 H R 裝置供油

如果線的滑動不好時，請在矽油盒 3 內加注一些矽油。





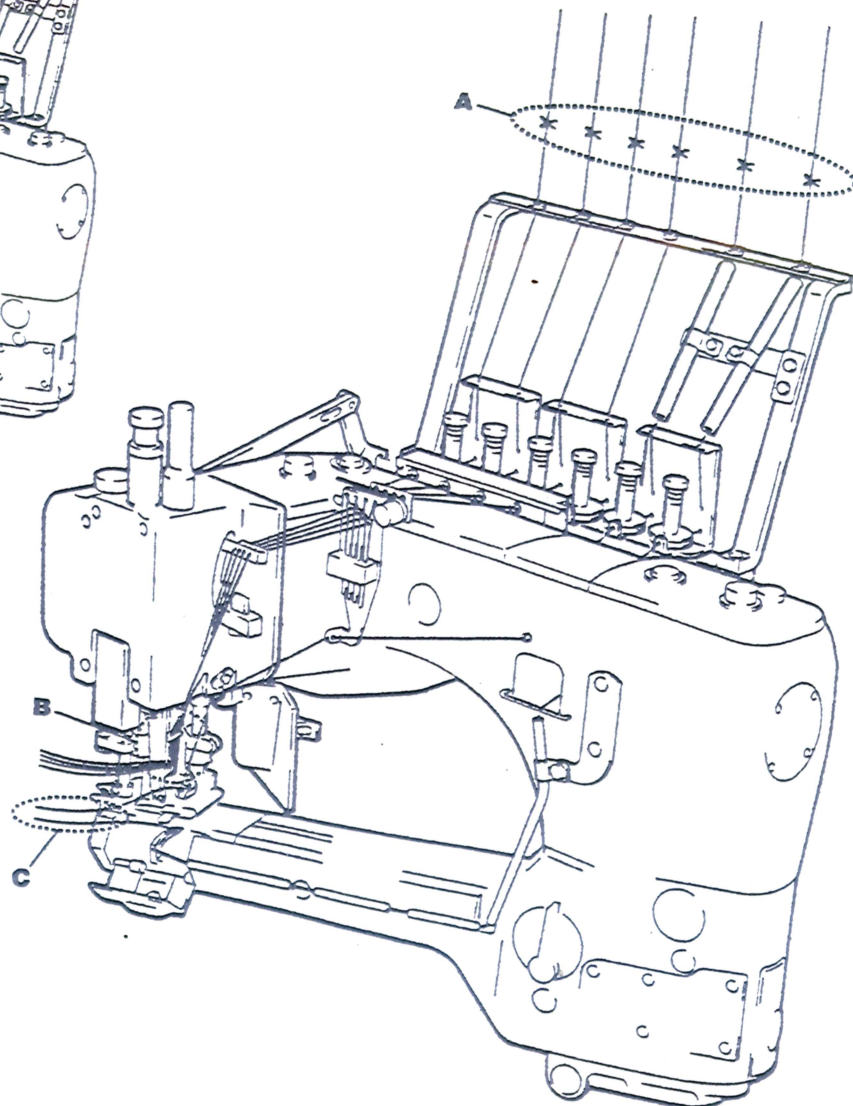
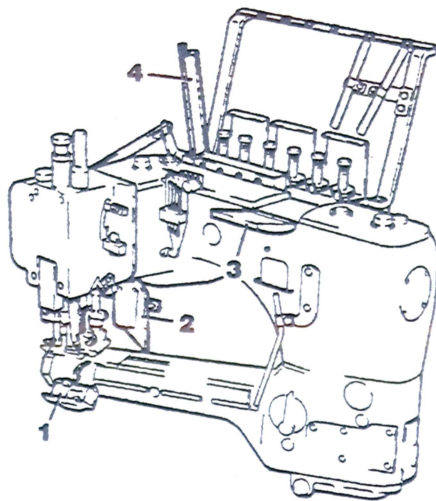
## Threading

### ⚠ CAUTION

※Always turn off the power and unplug the machine when you thread the machine.

1. Open covers 1, 2, 3 and 4.
2. In case the machine is threaded previously
  - A : Knot the preset thread and the thread being used together to thread the machine.
  - B : Needle thread  
Trim the knots off neatly before passing through the eye of the needle to thread.
  - C : Looper thread, Top cover thread  
Trim the knots off neatly after passing through the eye of the looper.

Be sure to thread the machine correctly by referring to the threading diagram. (See page 6)



## 穿線的方法

### ⚠ 注意

※在進行穿線時，務必將縫紉機的電源關掉，將插頭從電源插銷上拔下來之後再進行。

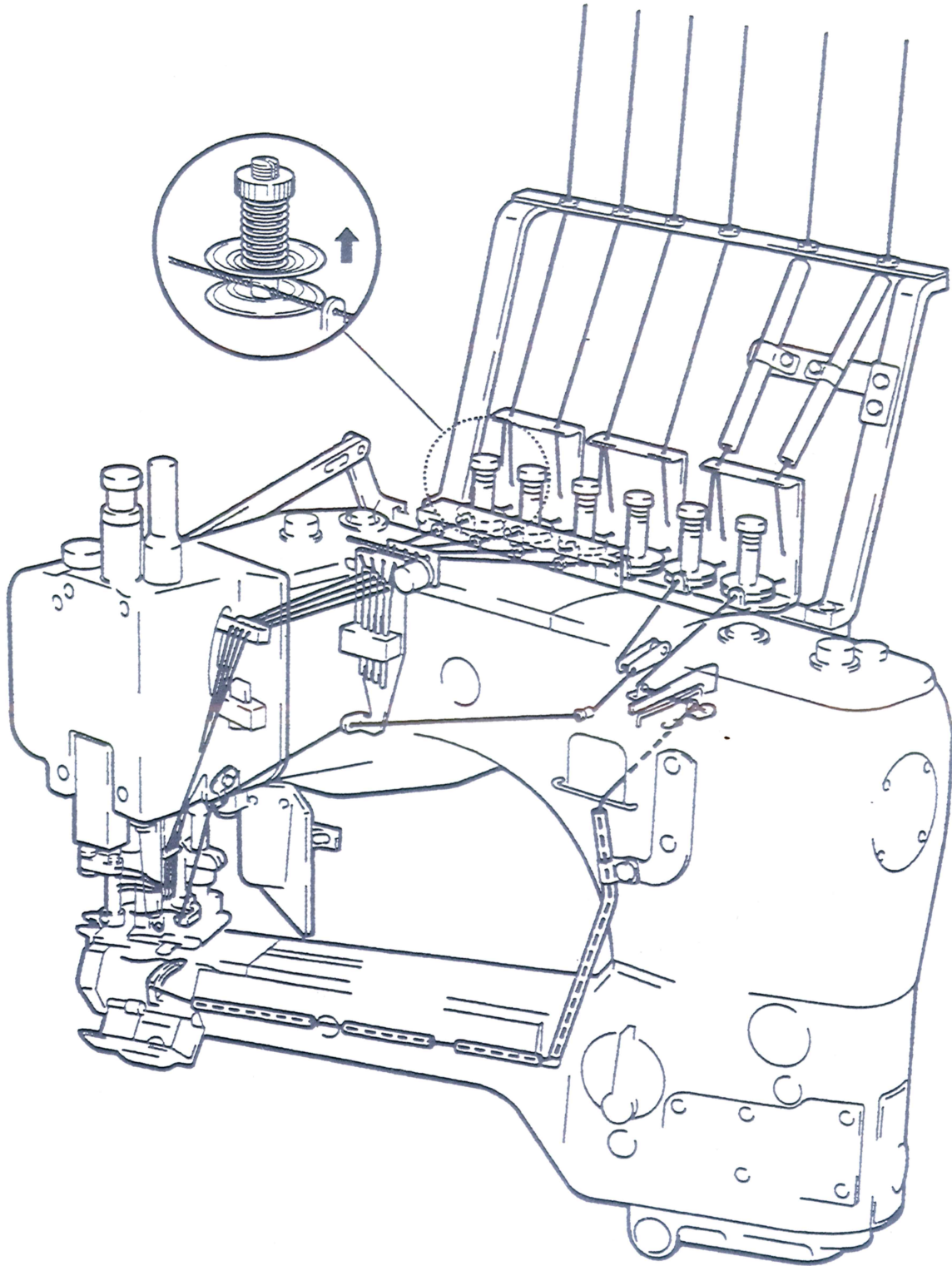
1. 請打開護蓋 1、2、3、4。
2. (如果已穿好線時)
  - A 部：請將已穿好的線與縫紉用線連接起來。
  - B 部：針線  
將連接的針線穿到針眼前後，剪掉接頭，再重新穿針線。
  - C 部：彎針線、上裝飾線  
可一直將連接的線頭穿好後，再用剪刀剪掉線頭整好。

縫紉機如果沒有穿線的話請參見線圖穿好線(6 頁)



Threading diagram

穿線圖





## Adjusting presser foot pressure

The presser foot pressure should be as light as possible, yet be sufficient to feed the fabric and obtain the proper stitch formation. Adjustment is made by loosening nut 1 and turning screw 2 as required. After this adjustment tighten nut 1.

## Adjusting the up-and-down position of the presser foot

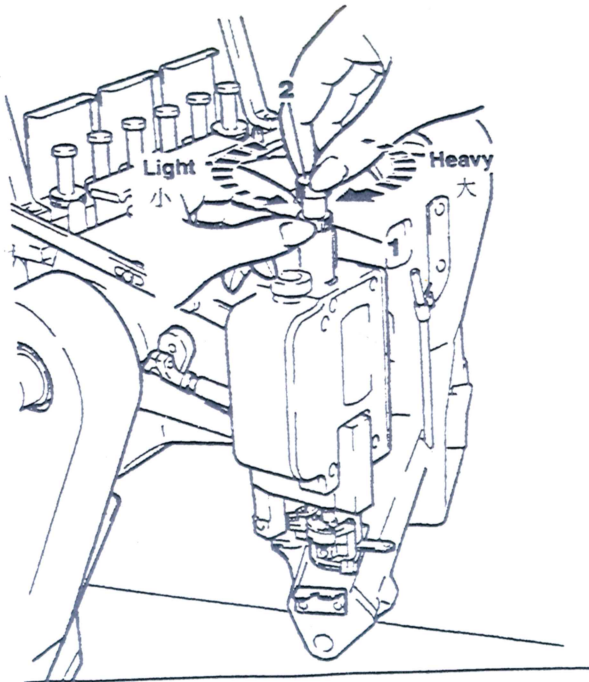
Moving up the presser foot slightly will have the following effects.

- ◎ Prevents seam jamming.
- ◎ Prevents fabric damage.
- ◎ Increases durability of the presser foot shoe.
- ◎ Decreases vibration and noise.
- ◎ Can make a fine adjustment to overlap of the fabric.

Bring the needles to the bottom of their stroke. Loosen screw 3.

Raise the presser foot by turning adjustment screw 4 clockwise.

Create a clearance of 0.3 ~ 0.5mm between presser foot shoe 5 and bottom surface 6 of the presser foot. After this adjustment is made, tighten screw 3.



## 壓腳壓力的調節

壓腳壓力在能正確送布，並能取得穩定的針腳範圍內，請盡量使用弱一點的壓力。請鬆開螺母 1，旋轉螺絲 2 調整到，然後暫時擰緊螺絲 1。

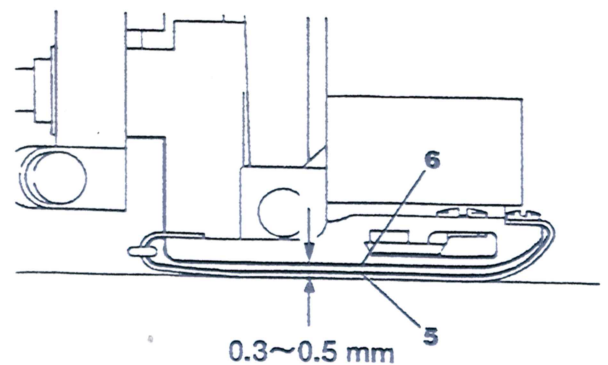
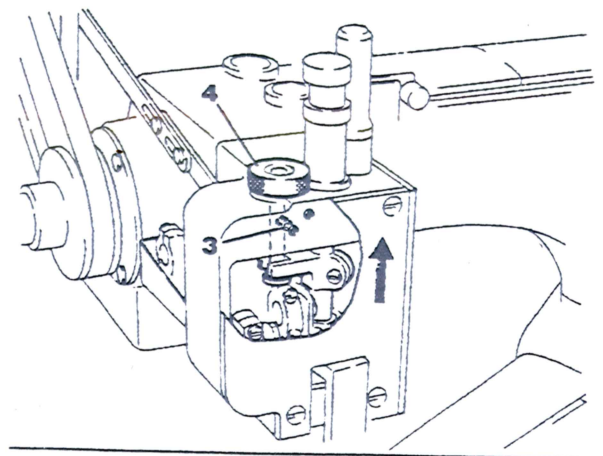
## 壓腳上下位置的調整

壓腳上下調節使壓腳稍微浮起，後將有以下的效果。

- ◎ 可防止縫紉堵塞。
- ◎ 可防止送布造成的傷痕。
- ◎ 可提高壓腳板的壽命。
- ◎ 可減少震動和噪音。
- ◎ 重疊布料可以進行微調整。

請將針下降到最下邊位置

請鬆開螺絲 3，將調整螺絲 4 向右方向旋轉，使壓腳抬起來，調整使壓腳板 5 與壓腳底面 6 的間隙為 0.3~0.5mm，調整好後請擰緊螺絲 3。





## Adjusting the differential feed ratio

To increase the differential feed ratio, turn lever 1 clockwise.  
This will shrink the finished fabric. To decrease the differential feed ratio, turn lever 1 counterclockwise.  
This will stretch the finished fabric.

## Adjusting stitch length

### ⚠ CAUTION

※Always turn off the power and unplug the machine when adjusting the stitch length.

Remove screw 2. Loosen screw 3.  
To produce coarse stitches, move up link 4.  
To produce fine stitches, move down link 4.

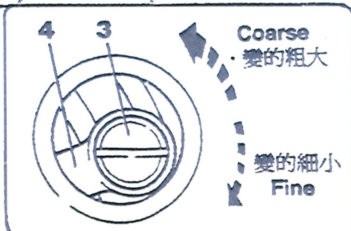
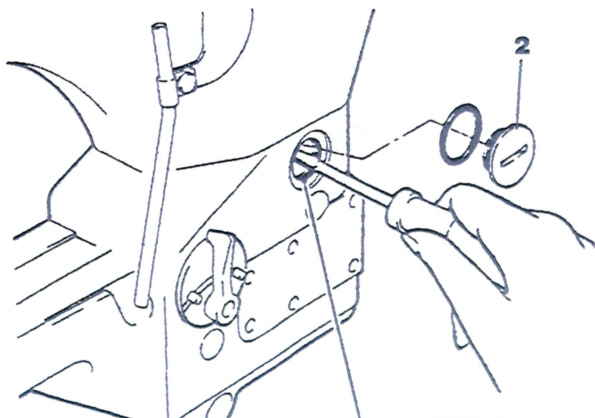
#### Note

Stitch length adjustment must only be made after the differential feed ratio has been changed.

## Adjusting the thread tension

To obtain the proper thread tension, adjust needle thread tension knobs 5, top cover thread tension knobs 6 and looper thread tension knob 7.

To tighten the thread, turn each knob clockwise.  
To loosen the thread, turn each knob counterclockwise.  
Each thread tension should be as light as possible, yet be sufficient to produce balanced and beautiful stitches.



## 差動比的調節

將扳手 1 向右扳動，則差動比變大，縫紉的布料會縮起來，將扳手 1 向左扳動，則差動比變小，縫紉的布料會深展開來。

## 針腳長度的調節

### ⚠ 注意

在調節針腳長度的，務必將縫紉機的電源關掉，並將插頭從電源插銷上拔下來之後，再請專門的技術人員進行操作。

卸下螺絲 2，鬆開螺絲 3，將連桿 4 向上轉則縫紉針腳會變粗大，將連桿 4 向下轉則縫紉針腳會變細密。

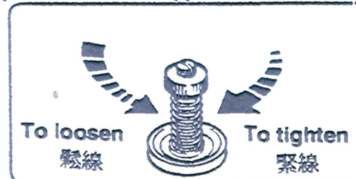
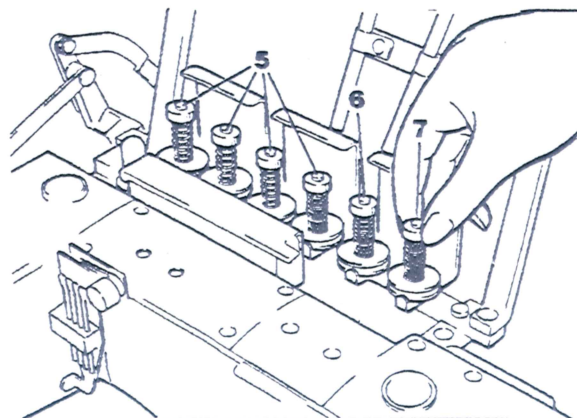
#### 注

縫紉針腳長度的調節，請務必在調節差動比之後進行。

## 線狀態的調節

線狀態的調節請用針線調節旋鈕 5、上裝飾線調節旋鈕 6 和下彎針調節旋鈕 7 進行調節。

想將線拉緊一些時，可將各旋鈕向右旋轉，想鬆一些時可向左旋轉，在能取得均勻且漂亮縫紉效果下，儘量採用較鬆的夾線狀態。





## Replacing the needle

### ⚠ CAUTION

※Always turn off the power and unplug the machine when you replace the needle(s).

1. Loosen screw 1 with the small slotted screwdriver supplied with the machine.
2. Remove the old needle(s) by using a pincette (provided as accessories).
3. Fix the needle so that its scarf faces the rear side of machine.
4. Insert a new needle into the needle hole as far it will go by using a pincette.
5. Tighten screw 1 with the small slotted screwdriver supplied with the machine.

## Replacing the fabric guide (SL-803,813)

### ⚠ CAUTION

When replacing the fabric guide, always turn off the power and unplug the machine.

Fabric guides

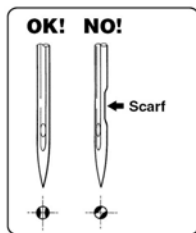
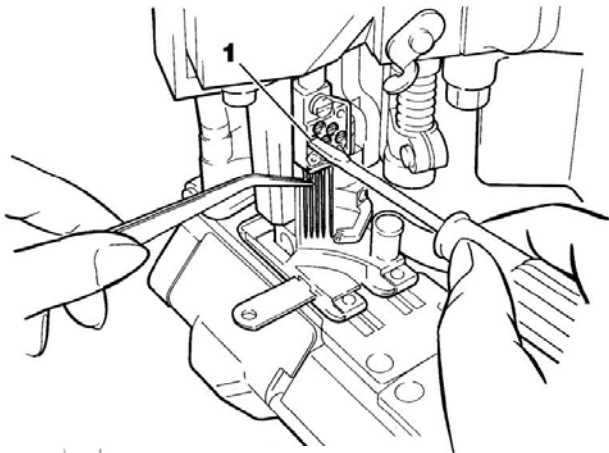
Fabric guide for SL-803: Two types of fabric guides are available.

**A** : for light to medium weight fabrics **B** : for heavy weight fabric Fabric guide designed for SL-813.

Select one according to the fabric to be used.

Remove screws 2 and then replace fabric guide 1.

- ◎If the fabric is sewn unevenly, attach flat spring 3 to fabricguide 1 with screw 4.



## 機針的更換

### ⚠ 注意

※在更換機針時，務必將縫紉機的電源關掉，將插頭從電源插銷上拔下來之後再進行。

1. 請使用附屬工具一字形螺絲刀(小)鬆開固定螺絲 1。
2. 用附帶工具箱的鑷子將舊針取下來。
3. 將機針的凹槽朝著縫紉機後面進行安裝。
4. 用鑷子將新針插入到針箍架孔的最深處。
5. 請使用一字形螺絲刀(小)擰緊固定螺絲 1。

## 布料導向器的更換(SL-803,813)

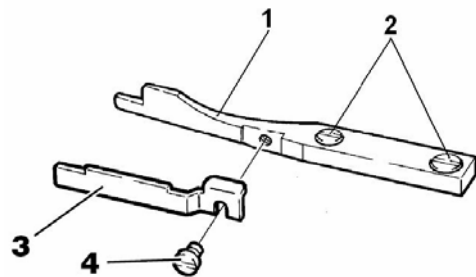
### ⚠ 注意

在更換布料導向器時，務必請將縫紉機的電源開關關掉，將電源插頭從插銷上拔下來。

在布料導向器 1 中，有 SL-803 用的 **A**：薄料~中厚布料專用的、**B**：厚布料專用的兩種，還有 SL-813 專用的導向器。

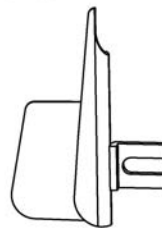
請選擇與縫紉的布料種類相適應的布料導向器 1 進行更換。更換時請卸下螺絲 2，更換布料導向器 1。

◎在縫紉中布料如果晃動的話，請用螺絲 4 將彈簧板 3 安裝在布料導向器上。(SL-813 除外)



### Fabric guide SL-803

A type for light to medium weight fabrics



J023-2

B type for heavy weight fabrics



J2035

### Fabric guide designed for SL-813

for light to heavy weight fabrics



J2039-S

## Replacing the knives

### ⚠ CAUTION

※Always turn off the power and shut down the air compressor first, and then well-qualified technicians should replace the knives.

⚠ Pay close attention to the knife edges not to injure your hands and/or finger.

### Replacing the upper knife

Loosen screw 5. Raise upper knife clamp 6. Then replace the upper knife.

◎There should be a overlap of 0.5 ~1.0mm of upper knife 7 and lower knife 8 with the upper knife at the extreme left end of its travel. Adjustment is made by moving upper knife 7. After this adjustment tighten screw 5.

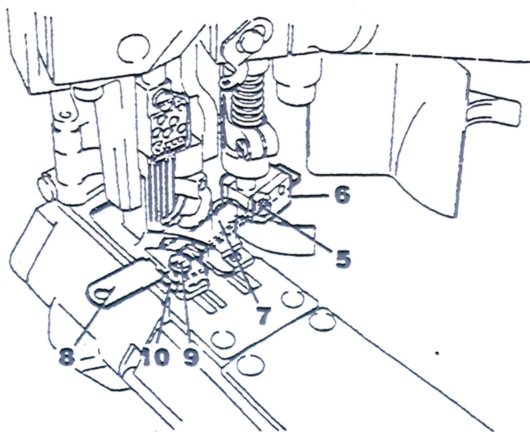
◎To adjust the angle in the horizontal direction when the upper and lower knives overlap. Remove parts 11 to 15 in sequence. Turn screw A as required. When replacing the parts, check to make sure screw B does not protrude from the bottom surface of upper knife presser 15, and then fit screw B into hole C.

### Replacing the lower knife

Loosen screw 9. Raise upper knife clamp 6.

◎Align point a of the lower knife with the center of the second needle by adjusting the position of the lower knife (standard). A fine adjustment should be made according to the fabric to be used.

◎Adjust the position of lower knife clamp 10 so that the distance from point b of lower knife 8 to corner c of lower knife clamp 10 is 0.2mm. After this adjustment tighten screw 9.



## 刀片的更換

### ⚠ 注意

※在進行刀片更換時，請務必將縫紉機的電源開關及空氣壓縮機供給的壓縮空氣關掉之後，請專業的技術人員進行操作。

⚠ 刀片的刃部有劃破手指的危險，操作時特別小心注意。

### 上刀片的更換

鬆開螺絲 5，將上刀固定板 6 推向上方，再更換刀片。

◎請調節上刀片 7 的位置，使上刀片 7 在靠向最左邊位置時，與下刀片 8 的咬合深度為 0.5~1.0mm。調節好後，請擰緊螺絲 5。

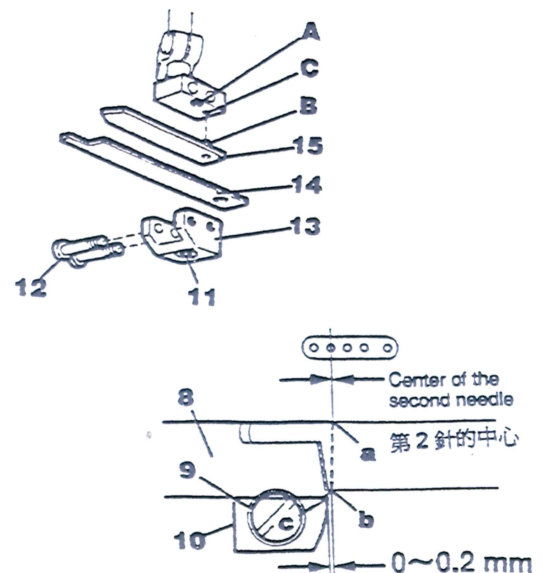
◎相對下刀片上刀片水平方向的咬合角度需要調節時，請按照 11~15 的順序，卸下部件，轉動螺絲 A 進行調節，安裝時請注意確認不要使螺絲 B 露出上刀片壓板 15 的底面，套入托架的孔 C 進行安裝。

### 下刀片的更換

請鬆開螺絲 9，將上刀片固定架 6 向上推壓進行更換。

◎請調節下刀片的位置(標準位置)，使下刀片刀刃的 a 點與第 2 針的中心位置對齊。然後，請根據所使用的布料進行微調節。

◎請調節下刀片固定塊 10 的位置，使從下刀片 8 的刀刃 b 到下刀片固定塊 10 的 c 角的尺寸為 0.2mm。調節完後，請擰緊螺絲 9。



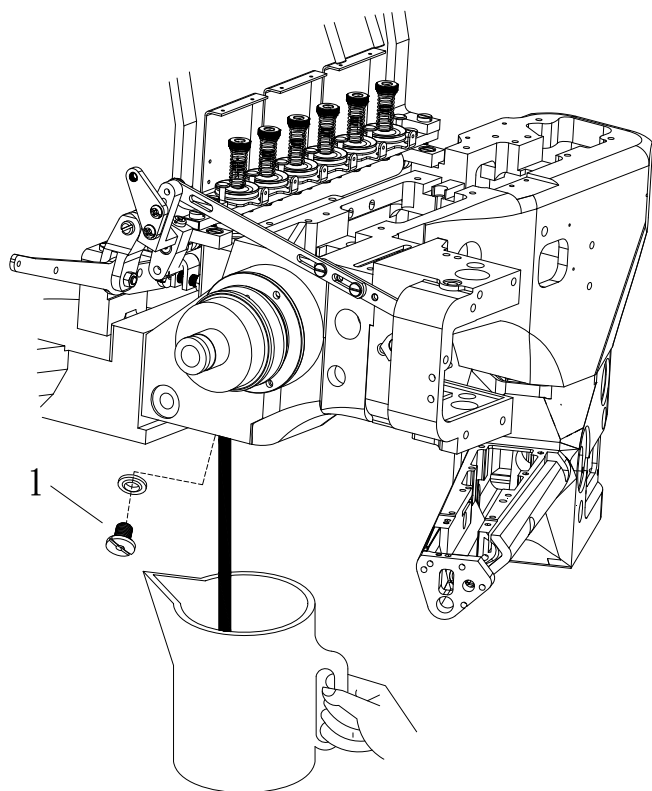


## Oil replacement

Replace the oil one month after the first use and thereafter every six months. If you keep using the old oil, it may cause the damage to the machine.

## To drain the oil

1. Remove plug screws 1 and 2. Drain the oil.
2. After draining the oil replace plug screws 1 and 2.

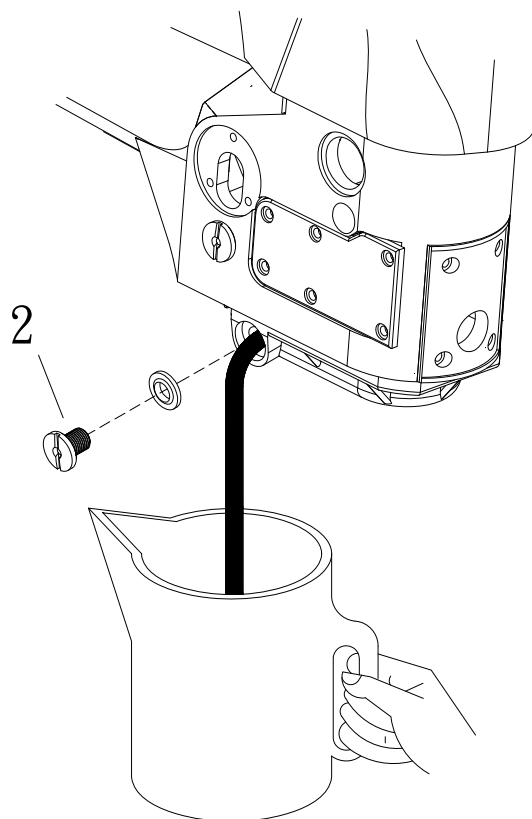


## 機油的更換

縫紉機在開始使用一個月後更換一次機油，然後請每六個月更換一次機油，如果不更換機油繼續使用，縫紉機可能發生故障。

## 排油的方法

1. 請卸開油盤的排油孔蓋螺絲 1、2，將油排出。
2. 操作終了後，請擰緊排油孔蓋螺絲 1、2。



## Adjusting the needle guard

### ⚠ CAUTION

※When adjusting the needle guard, always turn off the power and unplug the machine.

Bring needle thread take-up 1 to the bottom of its travel. Loosen screws 6 and 7. Align the top ends of needle guards 2 and 3 with the centers of eyelets A on needle thread take-up 1 (standard). Tighten screws 6 and 7 temporarily.

Loosen screws 8 and 9. Achieve a distance of 1mm from the top ends of needle thread guards 2 and 3 to those of needle thread guards 4 and 5 by adjusting needle thread guards 4 and 5 (standard). Tighten screws 8 and 9 temporarily.

- ◎To increase the size of the needle thread loop, move up needle guards 2, 3, 4 and 5.
- ◎To decrease the size of the needle thread loop, move down needle guards 2, 3, 4 and 5.

Obtain the proper needle thread loop by moving up or down needle thread guards 2, 3, 4 and 5. After this adjustment tighten screws 6, 7, 8 and 9.

## 針線過線器的調節

### ⚠ 注意

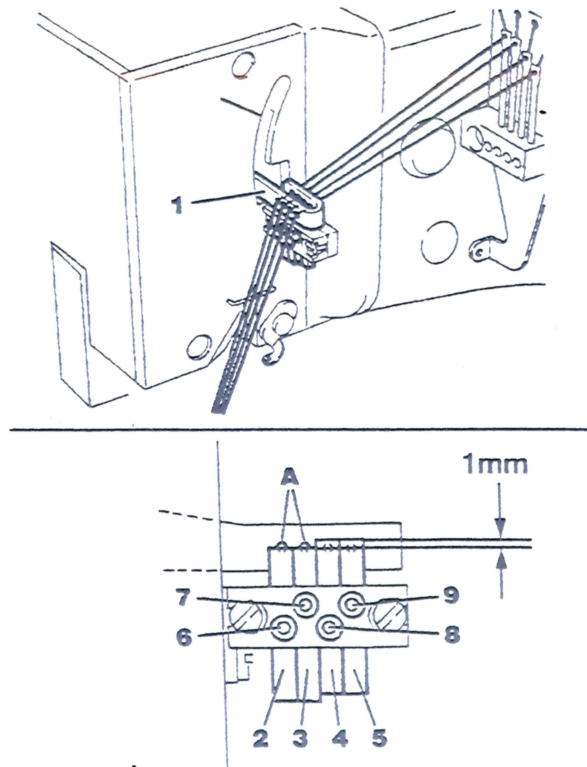
※在進行針線過線器的調節時，請務必將縫紉機的電源開關關掉之後，將電源插頭從插座上拔下來。

請將針線挑線器 1 調到最下邊的位置。

請鬆開螺絲 6、7，將針線過線器 2、3 的頂端調到針線挑線器 1 的線孔 A 的中心，然後請暫時擰緊螺絲 6、7。(標準位置) 請鬆開螺絲 8、9，將針線過線器 4、5 的頂端調到比針線挑線器 2、3 的頂端高出 1mm，然後請暫時擰緊螺絲 8、9。(標準位置)

- ◎如果將針線過線器 2、3、4、5 向上移動，則針線的線環變大。
- ◎如果將針線過線器 2、3、4、5 向下移動，則針線的線環變小。

爲了得到適當大小的針線線環，請將針線過線器 2、3、4、5 上下移動進行調節，調節完後，請擰緊螺絲 6、7、8、9。





## Adjusting the needle thread

There should be a distance of 10mm from the centers of the eyelets on needle thread guides 10 to those on bracket 11.

Adjustment is made by loosening screws 12 and moving up or down needle thread guides 10 (standard). After this adjustment is made, tighten screws 12 temporarily.

◎To loosen the needle thread, move up needle thread guides 10.

◎To tighten the needle thread, move down needle thread guides 10.

After this adjustment is made, tighten screws 12.

## Adjusting the needle thread presser spring.

The end of needle thread presser spring 13 should be 3mm lowered from that in the horizontal position. To make this adjustment, loosen screw 14 and turn knob 15.

After this adjustment is made, tighten screw 14.

※If you want to remove the fabric from the presser foot during sewing, rotate the machine pulley in the reverse direction. Thanks to needle thread presser spring 13, the needle thread loops are not produced on the front of the needles.

## 針線線道的調節

請鬆開螺絲 12，調節針線線道 10，使針線線道 10 的線孔中心到托架 11 的線孔中心尺寸為 10mm 然後暫時擰緊螺絲 12。(標準位置)

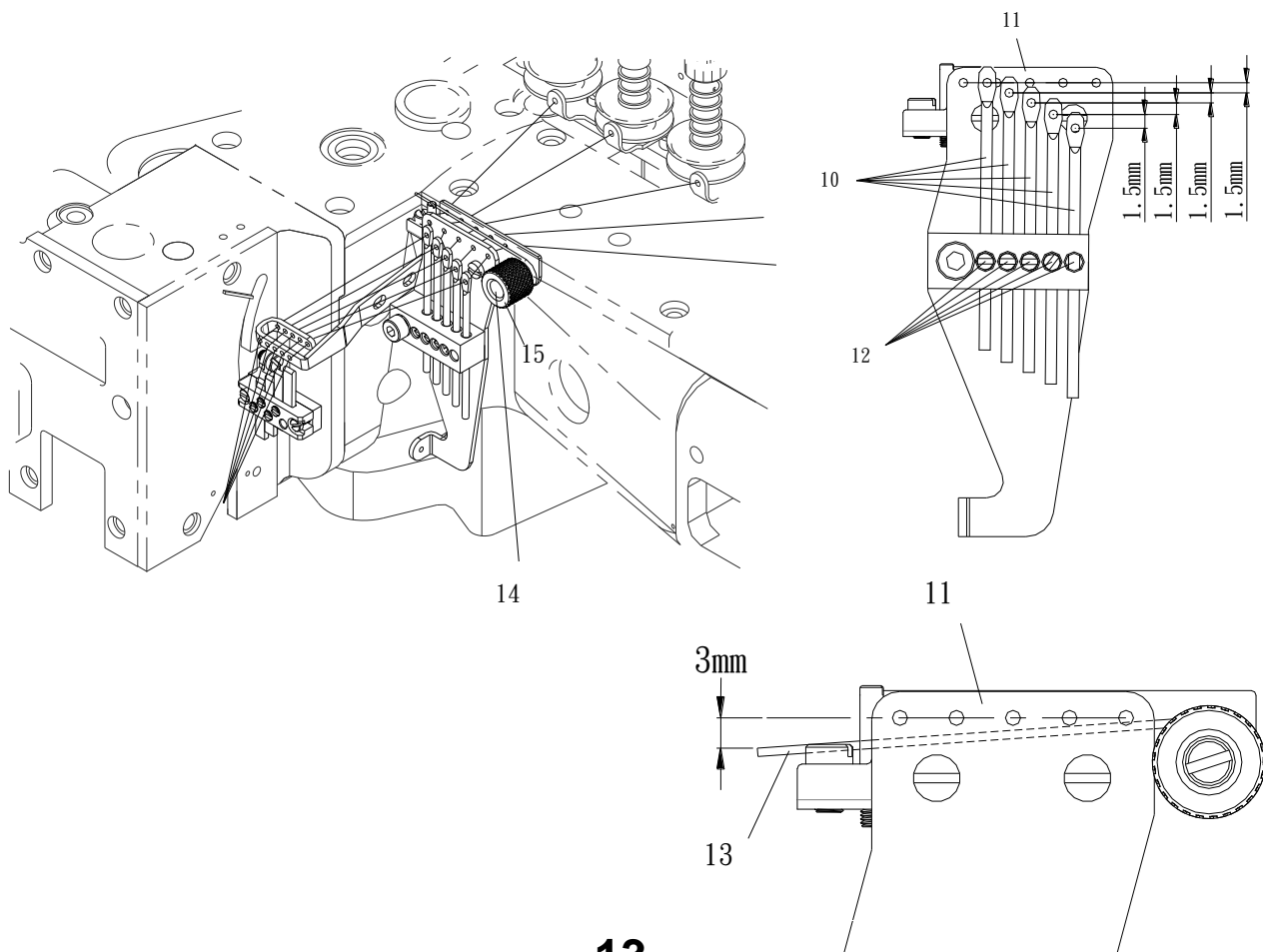
◎如果將針線線道 10 向上移動，則針線變鬆。

◎如果將針線線道 10 向下移動，則針線變緊。調節完後，請擰緊螺絲 12。

## 針線壓線彈簧的調節

請鬆開螺絲 14，旋轉旋鈕 15 進行調節，使針線壓線彈簧 13 的頂部比水平位置還低 3mm。然後擰緊螺絲 14。

※在縫紉中如果要從押腳下取下布料時，可使手輪相反的轉動，這時，針線壓線彈簧 13 會使針的外側不形成線環。



## Adjusting the looper thread take-up

### ⚠ CAUTION

※Always turn off the power, unplug the machine and then well-qualified technicians should adjust the looper thread take-up.

Loosen screws 1. Center screw 2 in slot A.

Tighten screw 1 temporarily.

When retainer 4 descends to the position illustrated on the right while the looper is moving to the left from the extreme right end of its travel, the looper thread should cast off from the looper thread take-up at point B.

To make this adjustment, loosen screws 1 and turn looper thread take-up 3 as required.

After this adjustment is made, tighten screws 1.

## Adjusting the looper thread guide

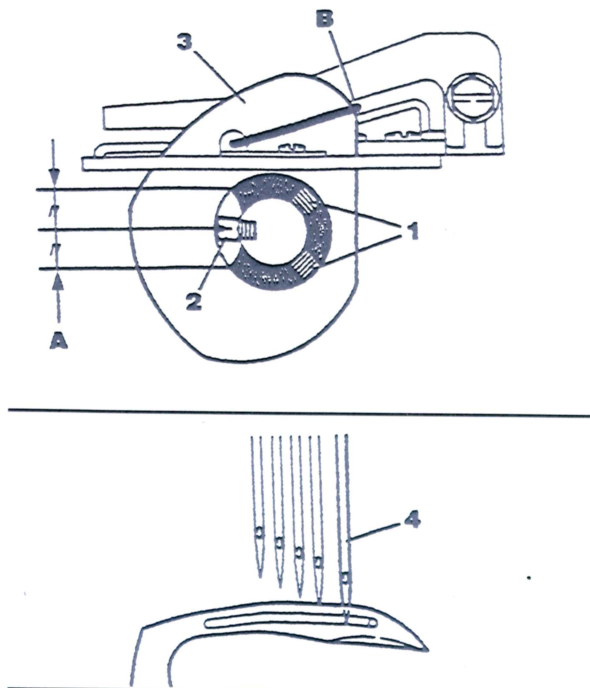
### ⚠ CAUTION

※Always turn off the power, unplug the machine and then well-qualified technicians should adjust the looper thread guide.

There should be a 2.5 mm clearance between looper thread guide 6 and looper thread guard 7 (see the illustration on the right).

Adjustment is made by loosening screw 5 and moving looper thread guide 6 up or down.

After this adjustment is made, tighten screw 5.



## 下線挑線器的調節

### ⚠ 注意

※在調節下線挑線器時，務必將縫紉機的電源關掉，並將插頭從電源插銷上拔下來之後，再請專門的技術人員進行操作。

請鬆開螺絲 1，調節使螺絲 2 到達長孔 A 的中心位置，然後暫時擰緊螺絲 1。

當彎針從最右邊位置向左移動，保護針 4 下降到如圖所示位置時，使下線能離開下線挑線器 B 點。

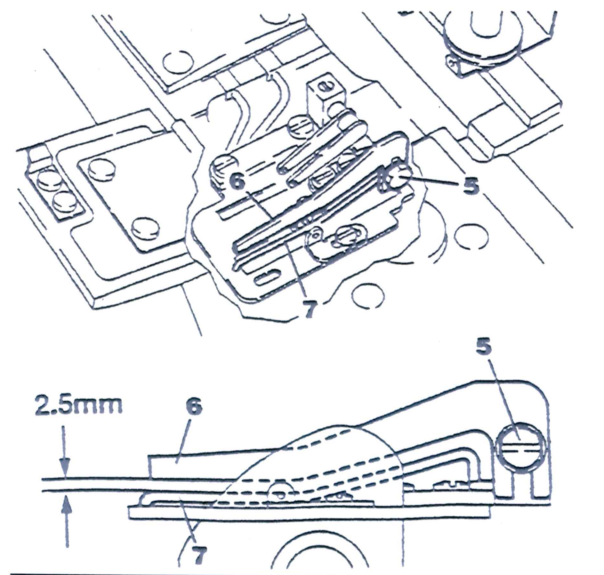
調節時請鬆開螺絲 1，轉動下線挑線器 3 進行調節，調節好後請擰緊螺絲 1。

## 彎針線導向器的調節

### ⚠ 注意

※在進行彎針過線器的調節時，請務必將縫紉機的電源開關關掉，將插頭從電源插銷上拔下來之後，請專門的技術人員進行操作。

請參照下圖，鬆開螺絲 5，將彎針導向器 6 上下移動進行調節，使彎針導向器 6 和彎針線過線器 7 的間隔為 2.5mm，調節完後請擰緊螺絲 5。





## Adjusting the looper thread guides

### ⚠ CAUTION

※Always turn off the power, unplug the machine and then well-qualified technicians should adjust the looper thread guides.

Loosen screws 8 and 9. Move looper thread guides 10 and 11 all the way in the direction of A by referring to the illustration on the right (standard). Tighten screws 8 and 9 temporarily.

- ◎To increase the amount of looper thread to be supplied, move looper thread guides 10 and 11 in the direction of B.
- ◎To decrease the amount of looper thread to be supplied, move looper thread guides 10 and 11 in the direction of A.

After this adjustment is made, tighten screws 8 and 9.

## Adjusting the top cover thread take-up

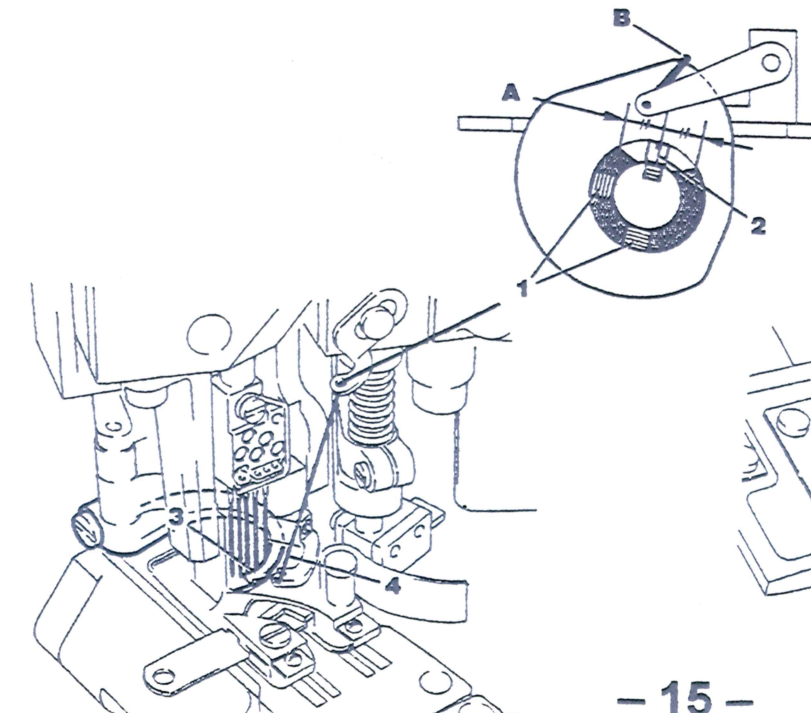
### ⚠ CAUTION

※Always turn off the power, unplug the machine and then well-qualified technicians should adjust the top cover thread take-up.

Loosen screws 1. Center screw 2 in slot A. Tighten screws 1 temporarily.

The top cover thread should cast off from the top cover thread take-up at point B after hook 3 passes over top cover thread 4 while hook 3 travels to the left from the right.

After this adjustment is made, tighten screws 1.



## 下線過線器的調節

### ⚠ 注意

※在調節下線挑線器時，務必將縫紉機的電源關掉，並將插頭從電源插銷上拔下來之後，再請專門的技術人員進行操作。

請參照右圖，鬆開螺絲 8、9，將下線線道 10、11 完全向 A 方向扳，並且暫時擰緊螺絲 8、9。(標準位置)

- ◎如果將下線過線器 10、11 向箭頭 B 方向移動，則下線送出量變多。
  - ◎如果將下線過線器 10、11 向箭頭 A 方向移動，則下線送出量變少。
- 調節好後，請擰緊螺絲 8、9。

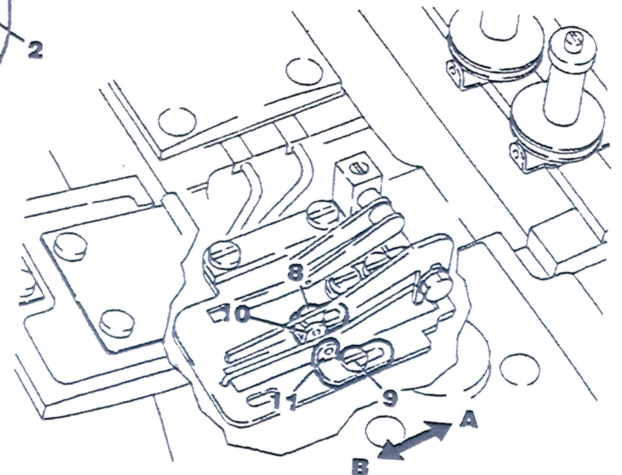
## 上裝飾線挑線器的調節

### ⚠ 注意

※在進行上裝飾線挑線器的調節時，請務必將縫紉機的電源開關關掉，將插頭從電源插銷上拔下來之後，請專門的技術人員進行操作

請鬆開螺絲 1，將螺絲 2 調整到長孔 A 的中心，然後暫時擰緊螺絲 1。

鉤線器 3 從右邊像左邊移動當鉤線器 3 通過上裝飾線 4 的上面後調節使裝飾線能離開上裝飾挑線器 B 點調節好後請擰緊螺絲 1



## Adjusting the top cover thread guide

### ⚠ CAUTION

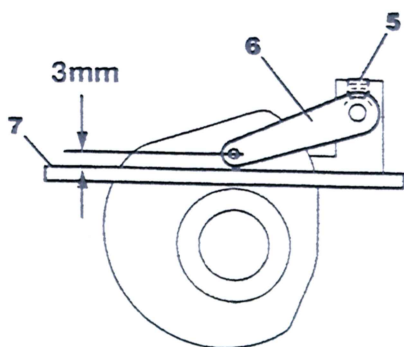
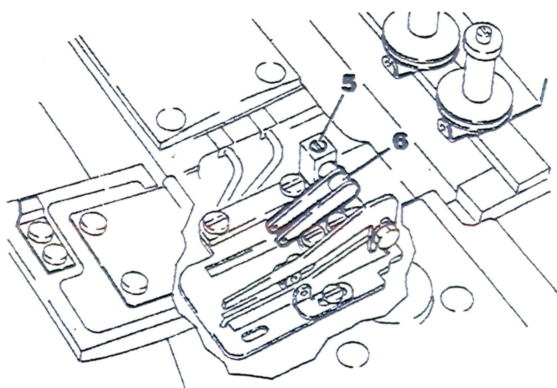
※Always turn off the power, unplug the machine and then well-qualified technicians should adjust the top cover thread guide.

There should be a distance of 3.0mm (standard) from the center of the eyelet on thread guide 6 to the top surface of installation bracket 7.

Adjustment is made by loosening screw 5 and moving thread guide 6. To decrease the amount of top cover thread to be supplied, move up thread guide 6.

After the adjustment tighten screw 5.

※After the above adjustment is made, check to see if each clearance between top cover thread take-up 8 and thread guide 6 is equal.



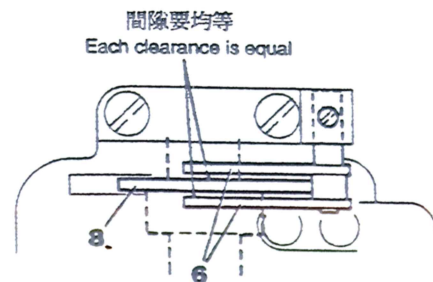
## 上裝飾線過線器的調節

### ⚠ 注意

※在進行上裝飾線過線器的調節時，請務必將縫紉機的電源開關關掉，將插頭從電源插銷上拔下來之後，請專門的技術人員進行操作。

鬆開螺絲 5，將過線器 6 的線孔中心到安裝架 7 的表面的尺寸調節為 3.0mm，然後請暫時擰緊螺絲 5。若將過線器 6 向上移動，則上裝飾線的送出量變少，調節好後，請擰緊螺絲 5。

※這時請注意使上裝飾線挑線器 8 與過線器 6 的間隙要均等。





## Adjusting the hook

### ⚠ CAUTION

※ Always turn off the power, unplug the machine and then well-qualified technicians should adjust the hook.

Bring hook 1 to the extreme right end of its travel. Loosen screw 2.

Achieve a distance of 0.5mm (standard) from hook 1 to retainer 3 (see A in the illustration on the right). After this adjustment is made, tighten screw 2. Check to see during test sewing if top cover thread 4 goes under the hook when the hook moves to the left. If it does not, loosen screw 2 and increase distance A.

After this adjustment is made, slightly press up hook 1. Tighten screw 2.

## Adjusting the carrier

### ⚠ CAUTION

※ Always turn off the power, unplug the machine and then well-qualified technicians should adjust the carrier.

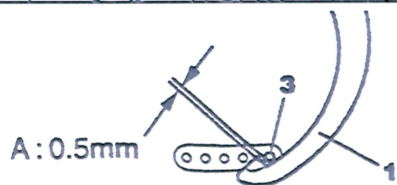
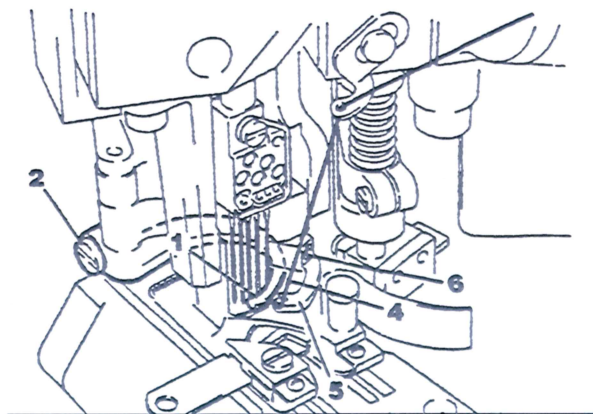
1. There should be a distance of 1mm C from point B of the carrier to the center of the first needle when carrier 5 comes closest to the first needle. Adjustment is made by loosening screw 6 and moving carrier 5. After this adjustment is made, tighten screw 6.

Check to see during test sewing if the top cover thread is at the back of the first and second needles with the carrier closest to the first needle.

If it is not, increase C (be careful that carrier 5 does not contact the first needle).

If the top cover thread reaches the point of the third needle at its back, decrease C.

2. Check to make sure that hook 1 does not contact carrier 5 when they come closest to each other.



## 鈎線器的調節

### ⚠ 注意

※在調節鈎線器時，請務必將縫紉機的電源開關關掉，將電源插頭從插座上拔下來之後，請專門的技術人員進行操作。

請將鈎線器 1 移動到最右邊位置，鬆開螺絲 2，調節使鈎線器 1 與保護針 3 之間的尺寸 A 為 0.5mm，然後擰緊螺絲 2。（標準位置）

在縫紉調整中，請確認當鈎線器向左邊移動時，上裝飾線 4 是否進入鈎線器的下邊，如果沒有進入，請鬆開螺絲 2，將尺寸 A 調大一些。

調節好後，請將鈎線器輕輕向上按，並將螺絲 2 擰緊。

## 載線器的調節

### ⚠ 注意

在進行載線器調節時，請務必將縫紉機的電源開關關掉，將電源插頭從插座上拔下來之後，請專門的技術人員進行操作。

1. 在載線器 5 最接近第一個針時，請鬆開螺絲 6 進行調節，使載線器尖端 B 與第一個針中心的尺寸 C 為 1mm。調整好後，請擰緊螺絲 6。

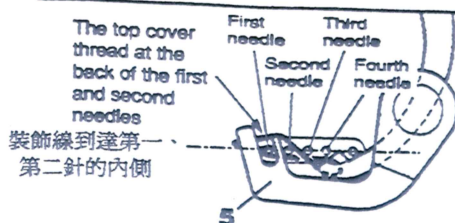
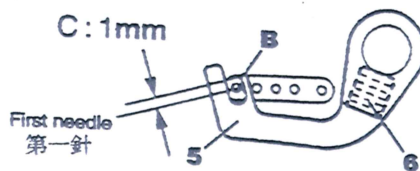
縫紉調整時，在載線器最接近第一針時，請確認上裝飾線是否能到達第一、第二針的內側。

如果上裝飾線不能到達第一、第二針的內側時，將請 C 尺寸調大一點。

（請注意不要讓第一針與載線器 5 接觸）

上裝飾線到達第 3 針尖的內側時，將請 C 尺寸變小一點。

2. 當鈎線器 1 與載線器 5 最接近時，請確認不要讓他們互相接觸。



## Replacing the presser foot

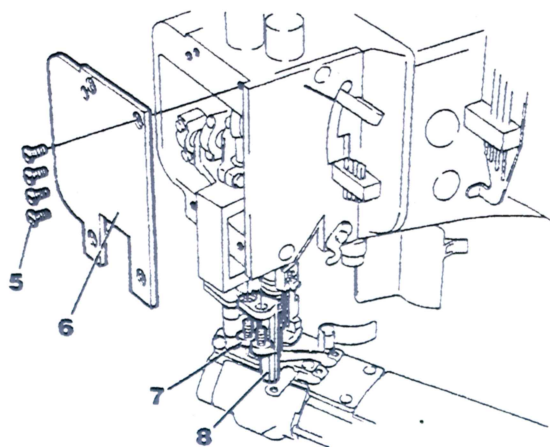
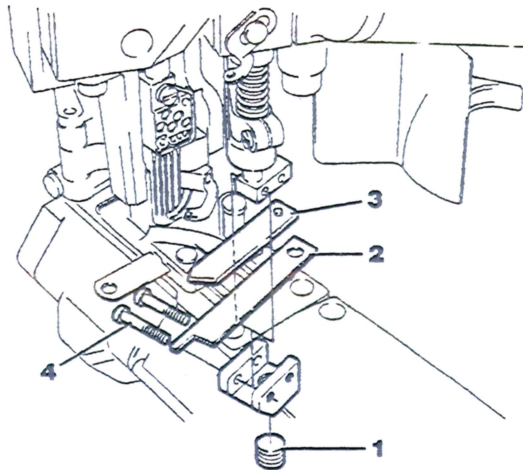
### ⚠ CAUTION

※Always turn off the power, shut down the Compressor and then well-qualified technicians should replace the presser foot.

⚠ Pay close attention to the knife edges not to injure your hands and/or finger.

### Removing the presser foot

1. Bring the needles to the top of their stroke. Loosen screw 1. Remove upper knife 2 and auxiliary plate 3 (if it is difficult to remove auxiliary plate 3, loosen screws 4).
2. Remove screws 5, side cover 6, screws 7 and presser foot guide (left) 8.
3. Loosen nut 9 and remove adjustment screw 10. Loosen screws 11 and 12. Raise presser bar 13 until it is removed from the presser foot.
4. Remove the presser foot.



## 押腳的更換

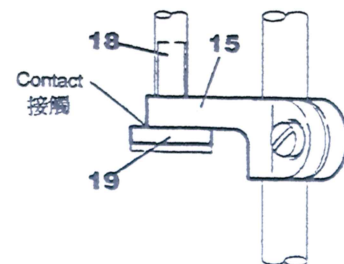
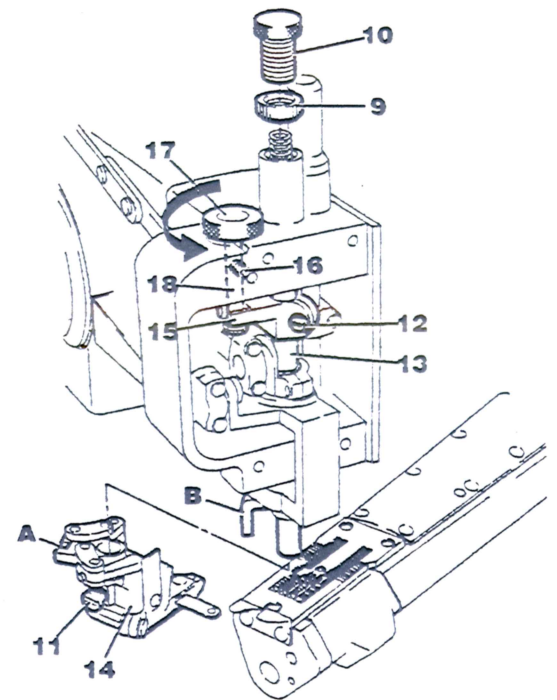
### ⚠ 注意

※在進行押腳更換時，請務必將縫紉機的電源開關及空氣壓縮機供給的壓縮空氣關掉之後，請專業的技術人員進行操作。

⚠ 刀片的刃部有劃破手指的危險，操作時要特別小心注意。

### 押腳的拆卸

1. 請將針升到最高位置，鬆開螺絲 1，將上刀 2、輔助板 3 拆卸下來。  
(輔助板 3 不容易卸下時，請鬆開螺絲 4 並卸下來。)
2. 請拆卸下螺絲 5、機頭擋板 6、螺絲 7、押腳導向器(左) 8。
3. 請鬆開螺母 9，拆卸下調整螺絲 10。再鬆開螺絲 11、12，將押腳棒推向上方直至能卸下來程度。
4. 然後再卸下押腳。





## Reinstalling the presser foot

Reinstall the presser foot by following the removal steps in reverse.

- ⊙ When reinstalling the presser foot, fit crank shaft B into segment A. Check to see if the presser foot is parallel with the feed dogs.
- ⊙ Presser foot guide (left) 8 should not move left to right, but slightly move up and down after it is reinstalled.
- ⊙ To reinstall presser bar guide 15, reinstall adjustment screw 10 and bring the presser foot to its lowest position first. Bring guide pin 18 to its lowest position by loosening screw 16 and turning adjustment screw 17 counterclockwise. Check to see if presser bar guide 15 contacts cushion rubber 19 on the guide pin.

Adjust the knives by referring to "Replacing the knives" (see page 20).

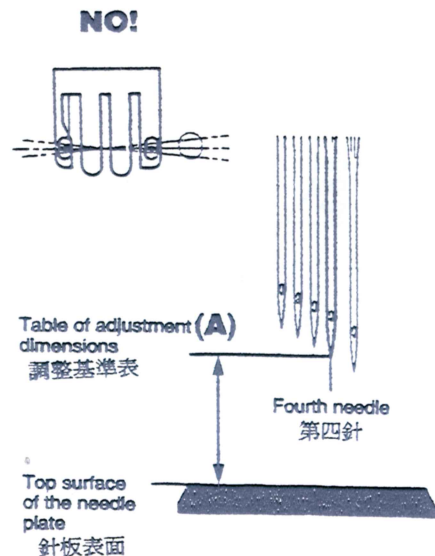
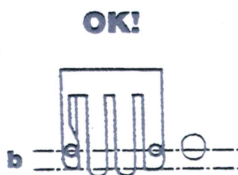
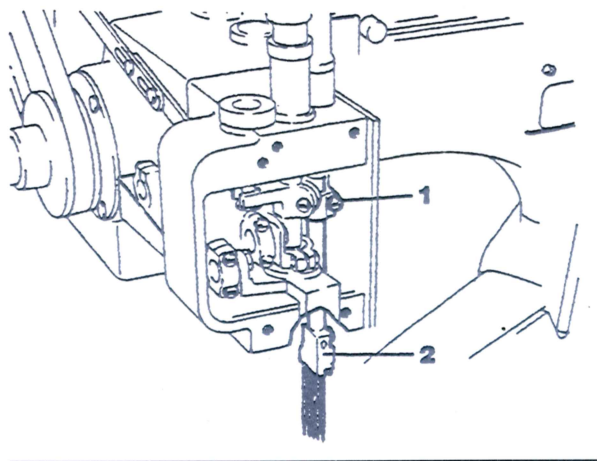
## Adjusting the needle height

### ⚠ CAUTION

※ Always turn off the power, unplug the machine and then well-qualified technicians should adjust the needle

Adjust distance (A) from the point of the fourth needle to the top surface of the needle plate according to the machine to be used (see the table of adjustment dimensions on page 29). Adjust the needle height by loosening screw 1 and moving needle holder 2 up or down.

- ⊙ After adjusting the needle height, check for the relationship between the slots on the needle plate and the needles (see the illustration below). Clearance b should be equal.



## 押腳的安裝

請參照圖，按照拆卸時的逆順序進行安裝。

- ⊙ 將押腳安裝在縫紉機上時，先將軸 B 插入扇形塊 A 中，並將扇形塊與送布牙平行的進行安裝。
- ⊙ 在安裝押腳導向器(左)8 時，請不要使押腳橫向傾斜，但是上下方向可輕輕移動進行安裝。
- ⊙ 在安裝押腳棒導向器 15 時，(在進行此調節前，請安好螺絲 10，並將押腳棒完全降到最下邊位置。)請鬆開螺絲 16，將調節螺絲 17 向左旋轉，並將導向銷 18 下降到最下邊位置。再使押腳棒嚮導器 15 與導向銷的緩衝橡膠 19 接觸。

請參照刀片的更換(20 頁)一節，進行刀片的調節。

## 針高度的調節

### ⚠ 注意

※ 調節機針高度時，務必將縫紉機的電源關掉，並將插頭從電源插銷上拔下來之後，再請專門的技術人員進行操作。

當針在最上邊位置時，請參照調整基準表(29 頁)，將第四針尖端到針板表面的尺寸(A)根據使用的縫紉機調節為相匹配的尺寸。請鬆開螺絲 1，將針鏹 2 向上或向下移動調節針的高度。

- ⊙ 調節完針的高度後，再擰緊螺絲 1 之前，請調整針板的針孔與針之間間隙 b 使之均勻相等。

## Adjusting the looper

### ⚠ CAUTION

※Always turn off the power, unplug the machine and then well-qualified technicians should adjust the looper.

#### 1. To adjust the looper-needle setting distance

When looper 1 is at the extreme left end of its travel, adjust looper-needle setting distance B from the center of the first needle to the point of the looper according to the machine to be used (see the table of adjustment dimensions on page 29). Adjustment is made by loosening screw 2 and moving looper holder 4 to the left or right. After this adjustment is made, tighten screw 2 temporarily.

#### 2. To adjust the looper front to back

When the point of the looper reaches the center of the first needle from the extreme left end of its travel, there should be a front-to-back distance of  $-0.05\sim 0\text{mm}$  from the first needle to the point of the looper. Adjustment is made by turning screw 3 and moving the looper holder front to back. After this adjustment is made, tighten screw 2.

## 彎針的調節

### ⚠ 注意

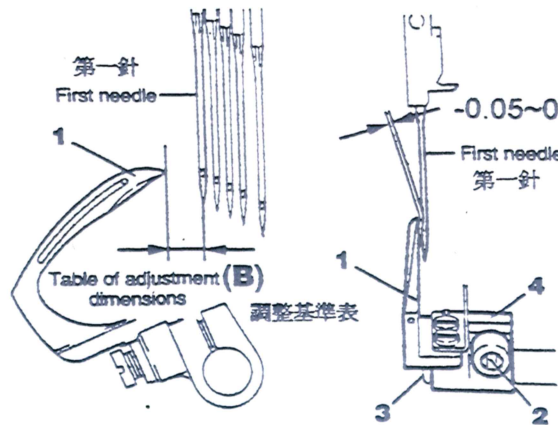
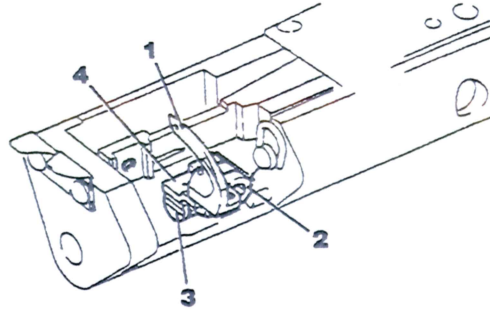
※在調節彎針時，務必將縫紉機的電源關掉，並將插頭從電源插銷上拔下來之後，再請專門的技術人員進行操作。

#### 1. 彎針引伸量的調節

彎針 1 在最左邊位置時，從第一針中心到彎針尖的引伸量(B)，請參照調整基準表(29 頁)，並以與使用的縫紉機相配合的尺寸進行調節。調節時，請鬆開螺絲 2，將彎針架 4 左右移動進行調節。調節好，後請暫時擰緊螺絲 2。

#### 2. 彎針前後位置的調節

當彎針尖從最左邊位置到達第一針的中心時，請將第一針與彎針尖前後間隙調節為  $-0.05\sim 0\text{mm}$ 。調節時，請轉動螺絲 3，將彎針架前後移動進行調節。調節好後，請擰緊螺絲 2。





### Adjusting the needle guard (rear)

#### ⚠ CAUTION

※Always turn off the power, unplug the machine and then well-qualified technicians should adjust the needle guard (rear).

When rear needle guard 1 comes closest to the first needle, there should be a clearance of 0~0.2mm between rear needle guard 1 and the first needle. Adjustment is made by loosening screw 2 and moving the rear needle guard front to back. After this adjustment is made, tighten screw 2.

### Adjusting the looper guard

#### ⚠ CAUTION

※Always turn off the power, unplug the machine and then well-qualified technicians should adjust the looper guard.

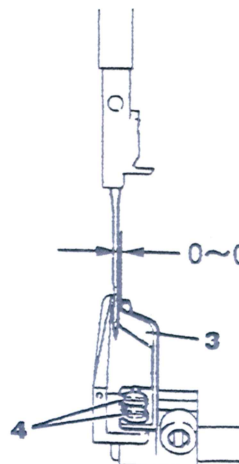
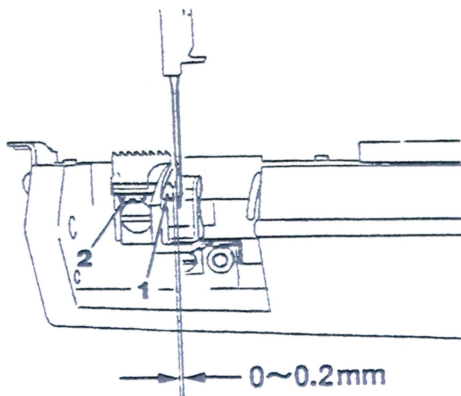
When looper guard 3 comes closest to the first needle, there should be a clearance of 0 ~ 0.05 mm between looper guard 3 and the first needle. Adjustment is made by loosening screws 4 and moving the looper guard front to back. After this adjustment is made, tighten screws 4.

### Adjusting the feed dog height

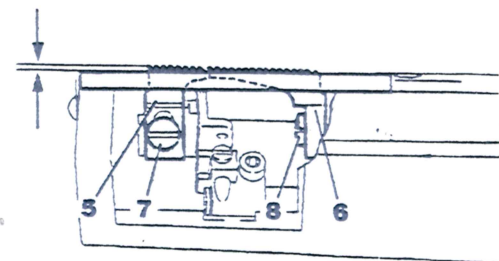
#### ⚠ CAUTION

※Always turn off the power, unplug the machine and then well-qualified technicians should adjust the feed dog height.

When the feed dogs are at their highest point of travel, there should be a distance of 1.2~1.5mm from the top surface of the needle plate to extended line A from the tips of main 5 and differential 6 feed dogs. Adjustment is made by loosening screws 7 and 8, and moving feed dogs 5 and 6 up or down. After the above adjustment, tighten screws 7 and 8.



A: 1.2~1.5 mm



### 送布牙高度的調節

#### ⚠ 注意

※在調節送布牙高度時，務必將縫紉機的電源關掉，並將插頭從電源插銷上拔下來之後，再請專門的技術人員進行操作。

當送布牙抬升到最上部位時，請將針板表面到主送布牙 5 和差動送布牙 6 的牙尖連接的距離 A 調到 1.2~1.5mm。調節時鬆開螺絲 7、8，請將送布牙 5、6 向上或向下移動進行調節。調節後，請擰緊螺絲 7、8。

### 彎針輔助器的調節

#### ⚠ 注意

※進行彎針輔助器的調節時，請務必將縫紉機的電源關掉，將電源插頭從插座上拔下來之後，請專門的技術人員進行操作。

當彎針輔助器 3 最接近第一針時，請鬆開螺絲 4，將彎針輔助器前後移動進行調節，使彎針輔助器 3 與第一針的間隙調節到 0~0.05mm。調節好後，請擰緊螺絲 4。

當護針(後)1 最接近第一針時，請鬆開螺絲 2，將護針(後)前後移動進行調節，使護針(後)1 與第一針的間隙調節到 0~0.2mm。調節好後，請擰緊螺絲 2。

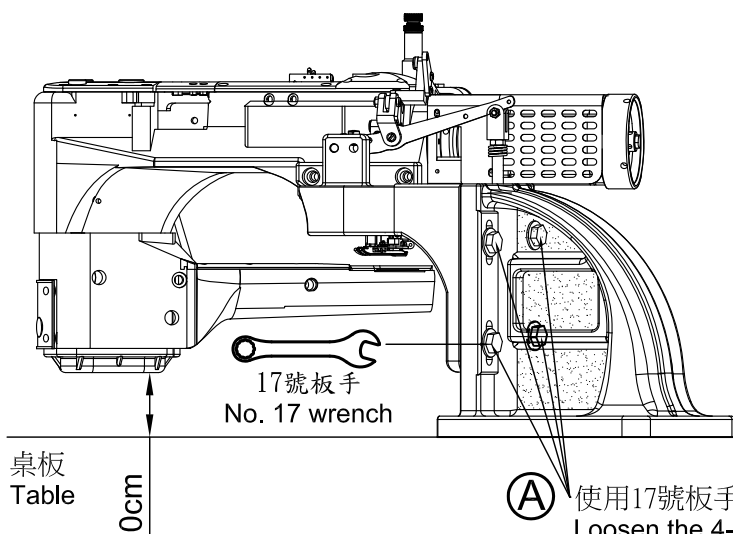
### (後)護針的調節

#### ⚠ 注意

※在調節(後)護針時，務必將縫紉機的電源關掉，並將插頭從電源插銷上拔下來之後，再請專門的技術人員進行操作。

## Redulate method of adjustable mounting base

1. Loosen the screws at A (4 pieces).
2. Adlust the screw at B with no.6 hex wrench.
3. After confirming the height of the machine, please lock the screwsat A (4 pieces).

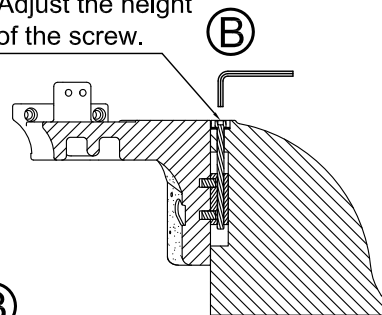


- (A)** 使用17號板手鬆開A處螺絲x4,上下間隙可調整約3cm。  
Loosen the 4-piece screws A by using No. 17 wrench.  
The gap can be adjusted up and down about 3 cm.

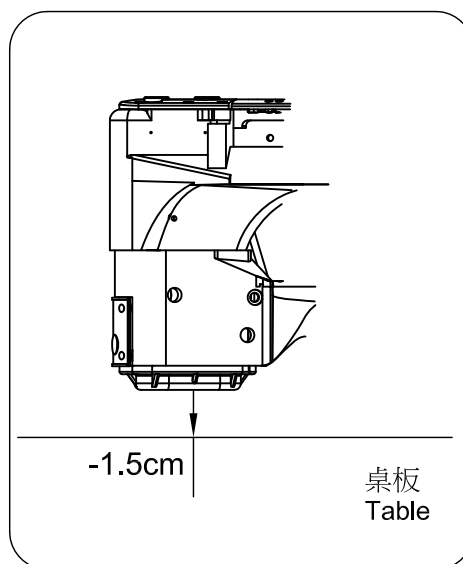
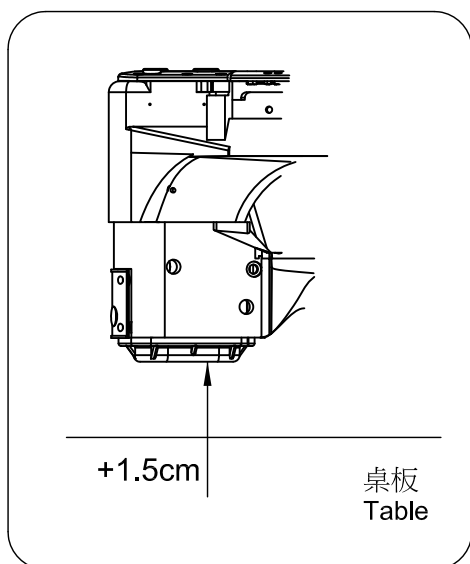
## 升降底座調整方式

1. 鬆開A處螺絲x4
2. 用6號內六角板手調整B處螺絲
3. 確認機器高度後,請鎖緊A處螺絲

調整高低螺絲  
Adjust the height  
of the screw.



- (B)**
- 逆時針轉會下降  
Counterclockwise rotation will go down.
  - 順時針轉會上升  
Clockwise rotation will go up.



可依個人車縫需求調整高度±1.5cm  
Can be adjusted accorading to individualsewing  
needs height ±1.5cm.

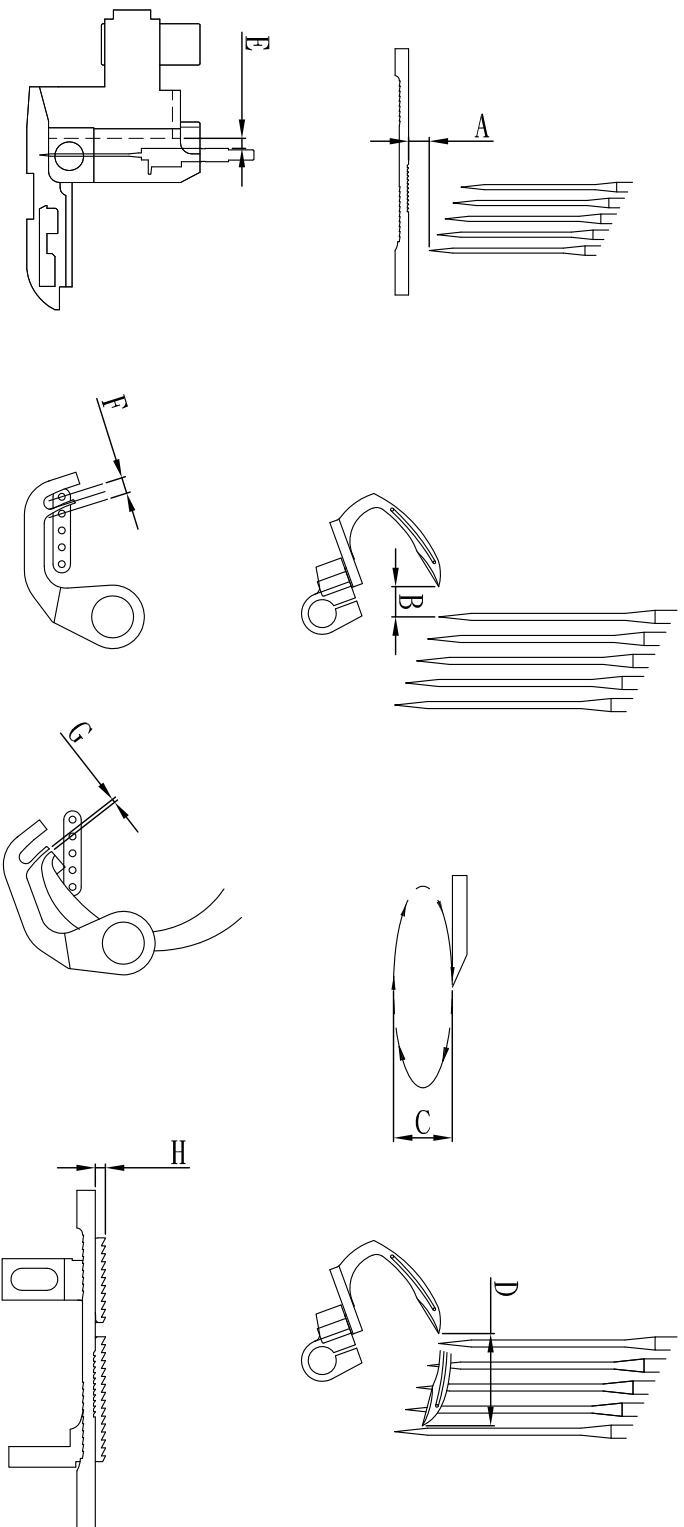


# Adjustment dimentions

## 調整基準表

(mm)

Subclass 輔助機	X□□□	Needle heightg (Fourth needle) 針高度 第四針 (A)	Looper 彎針			Carrier 針擺 (托架)		Main feed dog height 主送布牙高度 (H)	
			Looper-needle setting distance 引伸量 (B)	Front-to-back movement 前後量 (C)	Travel 擺動量 (D)	Distance to the needle holder 與針固的間隔 (E)	Position 位置 (F)		Distance to the hook 與鈎線器的間隔 (G)
SL-801 SL-803 SL-813	452	13.0mm	4.3~4.5mm	2.3~2.4mm	24.9mm	0.4mm	Middle of the first and second needles 第一針和 第二針的中間	0.4~0.7mm	1.2~1.5mm
	460	13.0mm	4.1~4.3mm	2.3~2.4mm	24.9mm	0.4mm		0.4~0.7mm	



# SL-800 Series subclass specifications

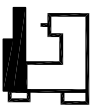
## SL-800 Series



Application	Fabric weight	Subclass	Number of needles	Number of threads	Needle space (mm)	Max. stitch length	Diff. feed ratio	Presser foot lift (mm)	Max. speed (rpm)	Remarks
Platseaming	light-heavy	SL-801A	4	6	5.2~6.0	2.5	0.7~1.5	5.5	4, 200	Single edge trimming, without a groove on the back of the presser foot.
	light-medium	SL-801B	4	6	5.2~6.0	2.5	0.7~1.5	5.5	4, 200	Single edge trimming, with a groove 1.5mm deep on the back of the presser foot.
	light-medium	SL-803	4	6	5.2~6.0	2.5	0.7~1.5	5.5	4, 200	Double edge trimming, with a groove 3.3mm deep on the back of the presser foot.
	light-medium	SL-803A	4	6	5.2~6.0	2.5	0.7~1.5	5.5	4, 200	Double edge trimming, with a groove 4.0mm deep on the back of the presser foot, 1.0mm stepped gauge parts.
	light-medium	SL-803B	4	6	5.2~6.0	2.5	0.7~1.5	5.5	4, 200	Double edge trimming, with a groove 4.0mm deep on the back of the presser foot, 1.5mm stepped gauge parts.
	medium-heavy	SL-813	4	6	5.2	2.5	0.7~1.5	5.5	4, 200	Knives located toward the operator, double edge trimming.

# SL-800 系列子型號規格表

## SL-800 系列



用途	布料厚度	輔助機	針數 (枚)	線數 (只)	針距 (mm)	最大針腳長度	差動比	抬腳量 (mm)	最高轉數 (rpm)	備註
平縫縫紉	薄~厚	SL-801A	4	6	5.2~6.0	2.5	0.7~1.5	5.5	4, 200	單面剪, 沒有抬腳內槽。
	薄~中厚	SL-801B	4	6	5.2~6.0	2.5	0.7~1.5	5.5	4, 200	單面剪, 抬腳內槽: 1.5mm
	薄~中厚	SL-803	4	6	5.2~6.0	2.5	0.7~1.5	5.5	4, 200	雙面剪, 抬腳內槽: 3.3mm
	薄~中厚	SL-803A	4	6	5.2~6.0	2.5	0.7~1.5	5.5	4, 200	雙面剪, 抬腳內槽: 4.0mm, 階梯形 1mm 量規。
	薄~中厚	SL-803B	4	6	5.2~6.0	2.5	0.7~1.5	5.5	4, 200	雙面剪, 抬腳內槽: 4.0mm, 階梯形 1.5mm 量規。
	中厚~厚	SL-813	4	6	5.2	2.5	0.7~1.5	5.5	4, 200	刀片位置在眼前, 雙面剪



J075A 整組

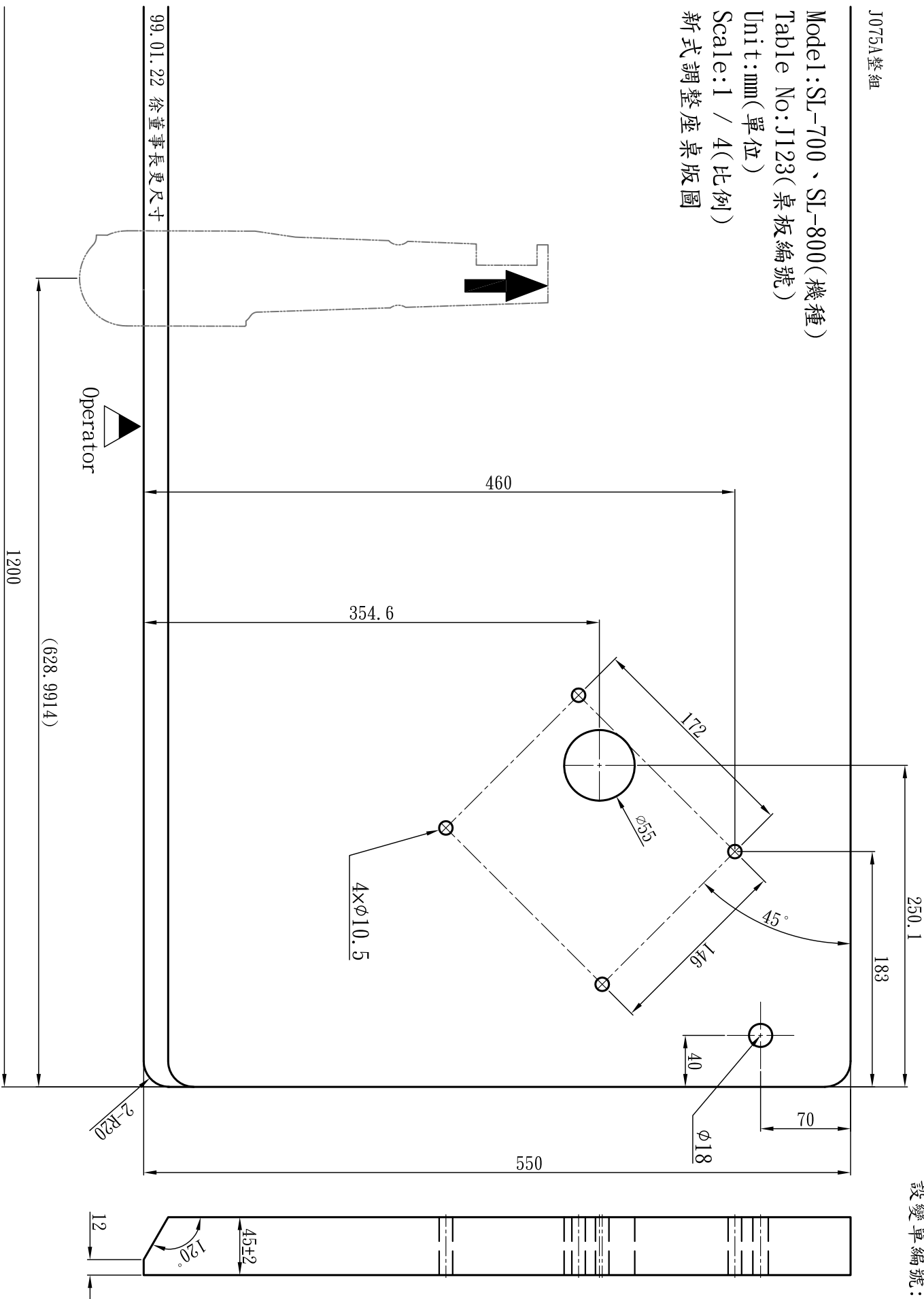
Model: SL-700、SL-800 (機種)

Table No: J123 (桌板編號)

Unit: mm (單位)

Scale: 1 / 4 (比例)

新式調整座桌版圖











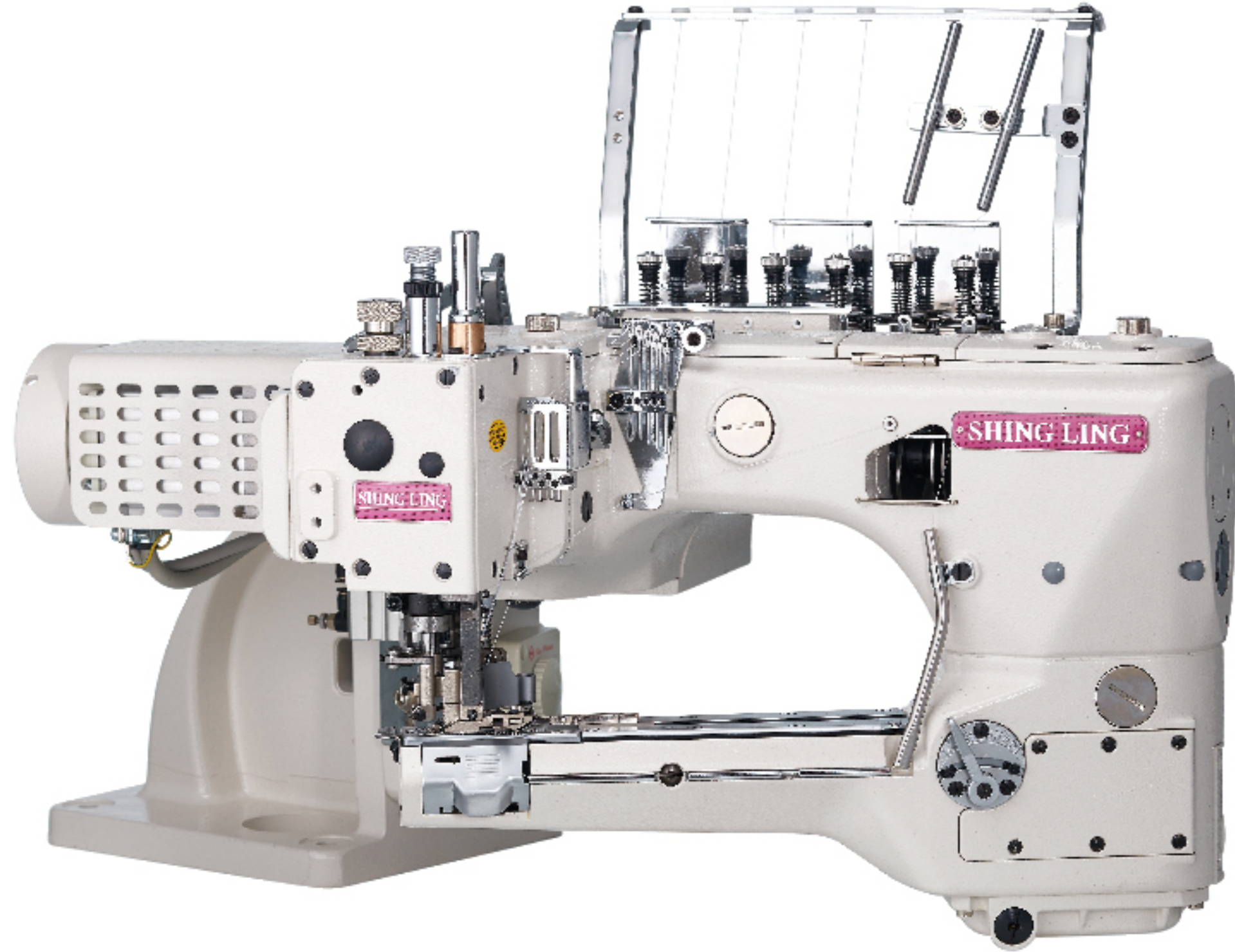


**SHING LING®**  
 星菱牌工業用縫紉機  
 INDUSTRIAL SEWING MACHINE



**SL-703-GX-452/460/DS/PLA/VD**

4-needle 6-thread feed-off-the-arm Interlock Flatseaming Machine with dual differential feed ratio regulator  
 手臂型四針六線併縫機(附雙差動送布齒裝置)



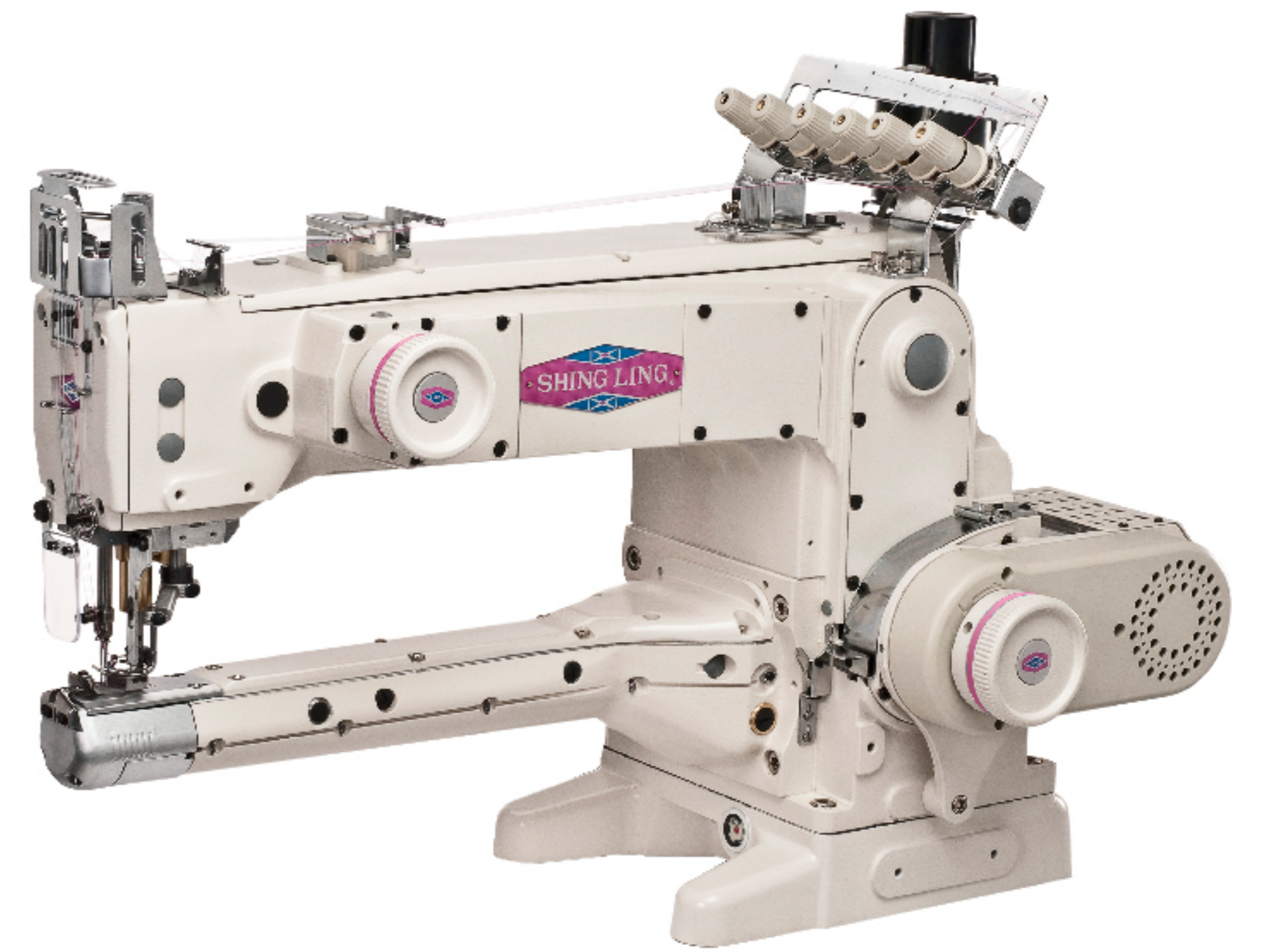
**SL-2700-AST/EST**

Feed-up-the-arm Interlock Machine with Compact Servo Motor and Thread Trimmer  
 縱筒型三針五線雙面飾綳縫機



**SL-2800-356/SM**

Feed-up-the-arm Interlock Machine with Compact Servo Motor and Thread Trimmer  
 縱筒型三針五線雙面飾綳縫機



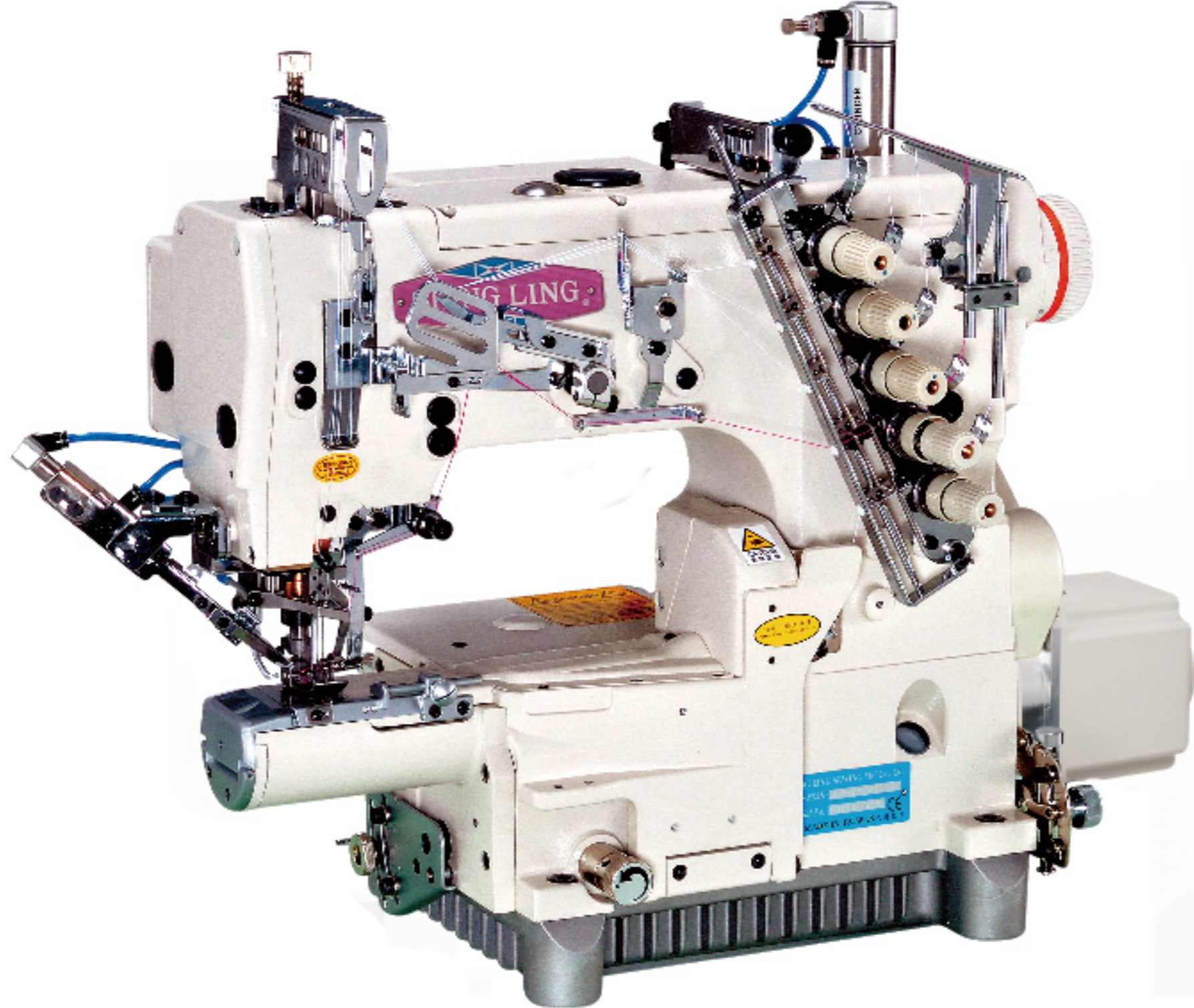
**VG-999ES-AST-TF-DS**

Extremely-Small Cylinder-bed Interlock Machine with Thread Trimmer and Top Feeder  
 超細筒型三針五線雙面飾綳縫機



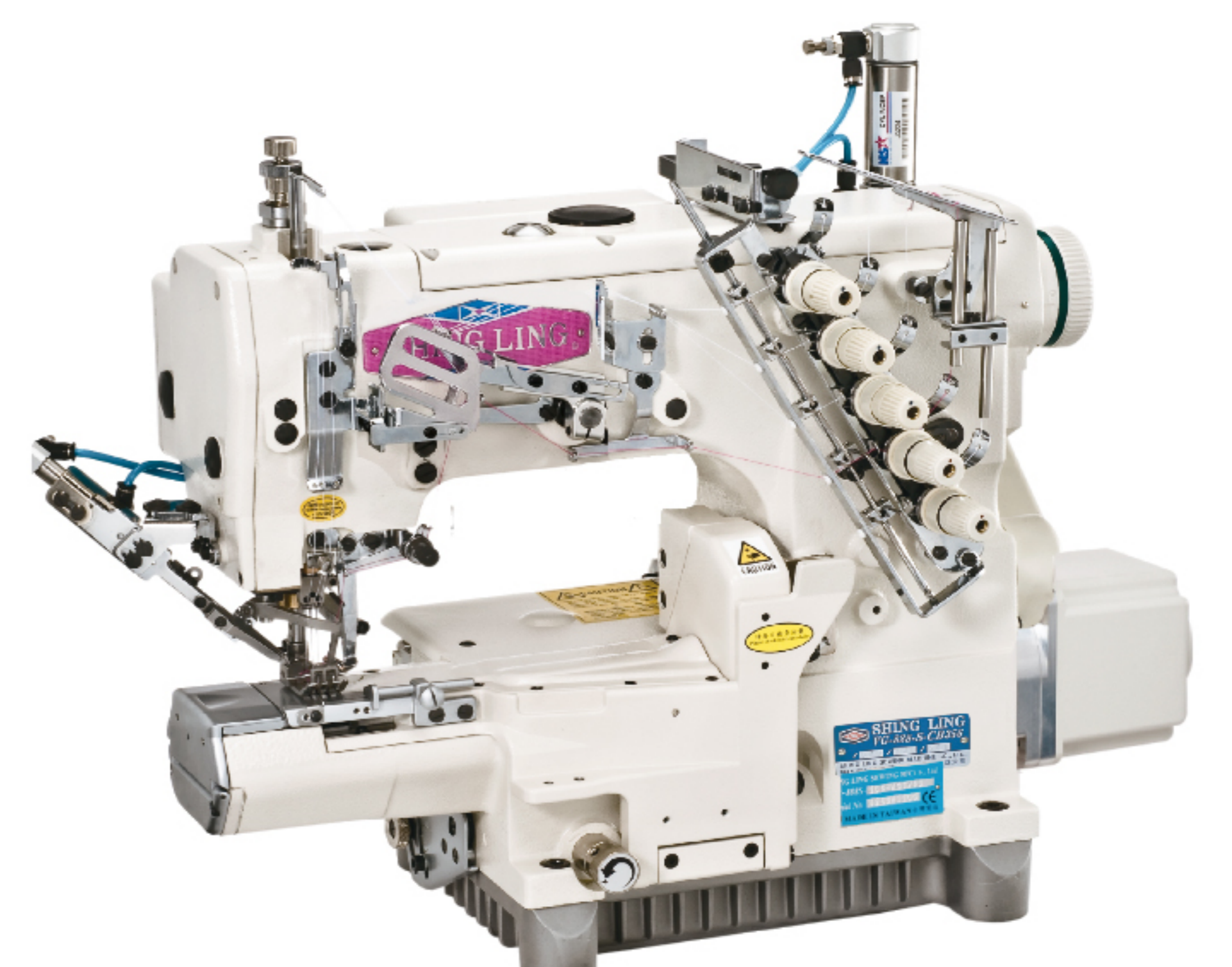
**VG-888S-TF-AST**

Small Cylinder-bed Interlock Machine with Thread Trimmer and Top Feeder  
 細筒型三針五線雙面飾綳縫機(附上送裝置)



**VG-888A-TF/AST**

Top Feeder for 3-needle 5-thread Cylinder-bed Interlock Machine  
 橫筒型三針五線雙面飾綳縫機(附上送裝置)



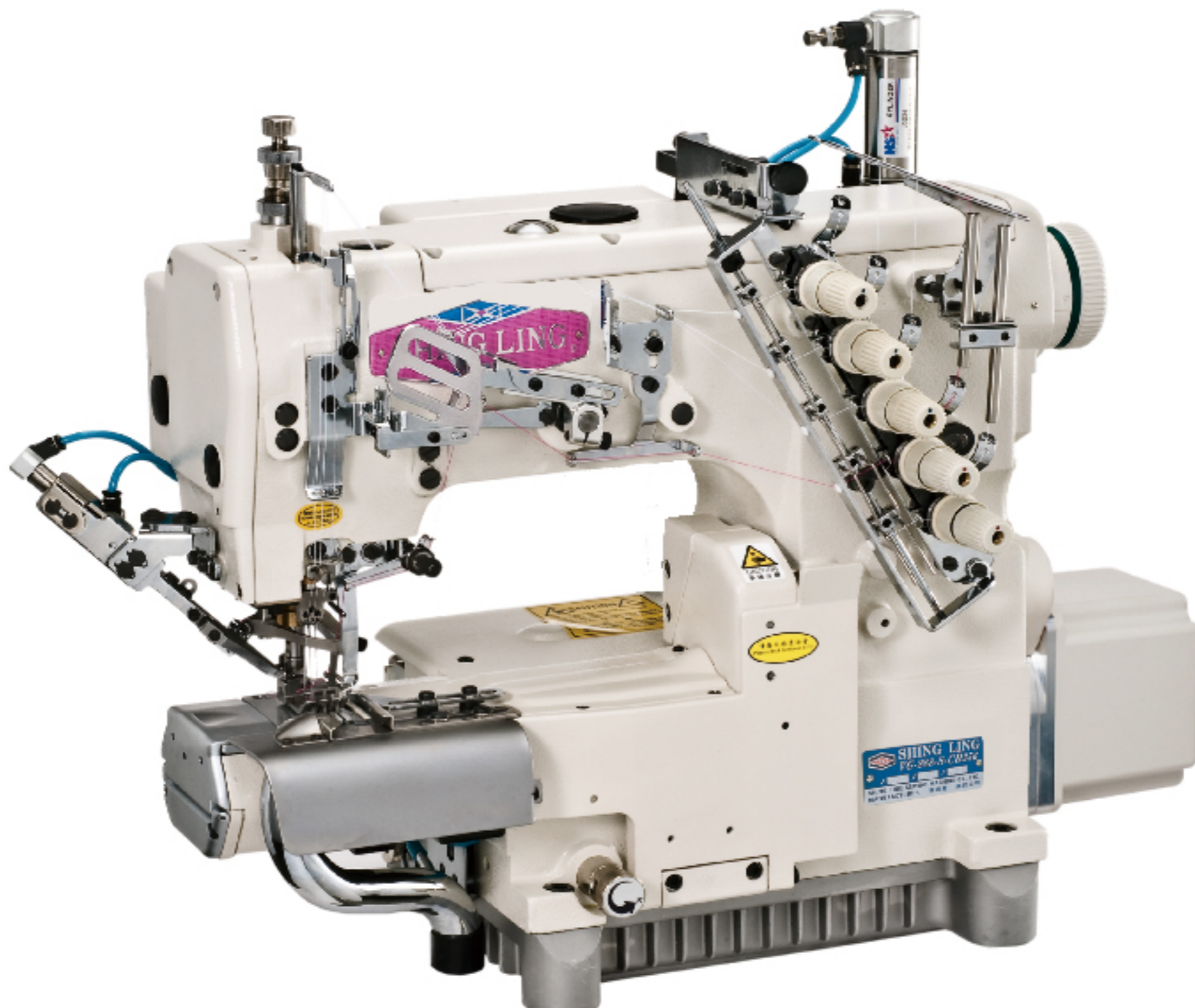
**VG-999S-N700-AST-TF-DS**

Small Cylinder-bed Interlock Machine with Left hand Knife and Top Feeder for Hemming  
 細筒型三針五線雙面飾綳縫機(附左修刀)



**VG-888A-N600-TF/AST**

Interlock Machine with Left-hand Knife and Thread Trimmer for Hemming  
 橫筒型附左修刀雙面飾綳縫機



**SL-1790S**

Computer-controlled High-speed Lockstitch Buttonholing Machine  
 高速電子平頭鎖眼機



**VG-999-SB-AST/EST-DS**

High-speed Short Cylinder-bed Interlock Machine with Thread Trimmer  
 短筒型三針五線雙面飾綳縫機



**VG-999-R500-AST-RP**

Interlock Machine with Right-hand Knife and Rear Puller for Elastic Waistband Attaching  
 高速橫筒型三針五線附右修刀雙面飾綳縫機



**VG-999-356/EST/DS/ZBR**

Dual Colors Decorative Stitches Interlock Machine with Top and Under Thread Trimmer  
 高速橫筒型三針五線雙色上飾綳縫機

