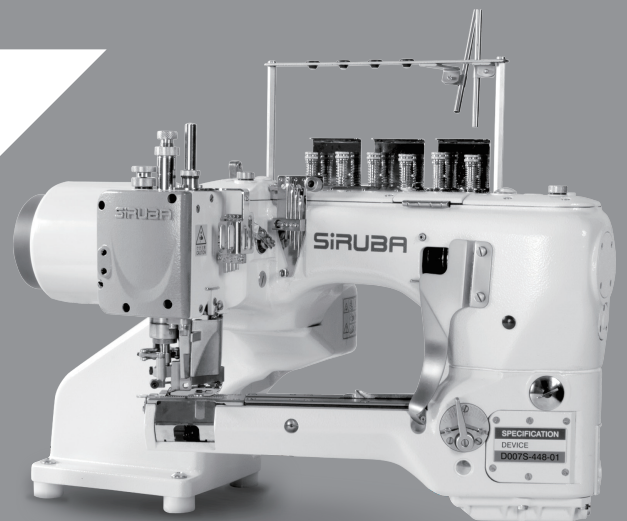


SIRUBA[®] Sew Reach

使用說明書

INSTRUCTION BOOK

■ D007S



CE

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使用前安全注意事項

1. 為了使用的安全

為了工業用縫紉機以及裝置使用上的安全，請注意下列事項。

1-1 用途與目的

此工業用縫紉機是為了提昇縫製作業的生產性為目的而設計，請勿使用在其它的用途與目的。而所安裝的驅動裝置的安全措施，未獲得確認確實執行之前，請勿使用此針車。

1-2 在使用之前

在使用針車之前，應熟讀各相關使用說明書，按照使用說明書來正確使用，並且也應熟讀裝配的驅動裝置的使用說明書。

1-3 使用環境

在下列的環境之下請勿使用：

- 對於針車的性能會有不良影響的環境溫度與濕度的不良場所。
- 屋外或受到日光直射的場所。
- 在粉塵與腐蝕性氣體與可燃性氣體等的環境中。
- 電壓變動而不穩定，或是在超過規格電壓的 $\pm 10\%$ 的場所。
- 在不能達到使用的馬達的規格之必要電源容量的場所。
- 在會受到輸出功率較大的高周波發信機或是高周波熔接機的周邊等，發生強力電波及磁場的場所。

1-4 開箱與搬運

- (1) 由上開始按照順序開箱。
- (2) 把針車機頭從襯墊材料搬出的時候，絕對不要拉抬車針附近或過線相關零件。
- (3) 搬運針車頭部的時候，應和助手兩人共同作業。
- (4) 搬運車台移動的時候，注意不要有過度的撞擊或震動。

SAFETY INSTRUCTIONS

1. For your safety

To ensure your safety while using industrial sewing machine and devices, please follow the safety instructions below.

1-1 Usage and purpose

The sewing machine is designed to improve productive efficiency of sewing work. Do not use for other usage and purpose. Do not use the sewing machine before the installed drive device's safety measures have been confirmed being conducted.

1-2 Before use

Before using the machine, you should read the instruction manuals thoroughly and follow it. Hence, read the installed drive device instruction thoroughly, too.

1-3 Working environment

Do not work in the following environment:

- The environment which its temperature and humidity will cause bad influence to the machine.
- Outdoors or the place which the machine may exposed to sunlight directly.
- Environment contains dust, corrosive gases or flammable gases, etc.
- Place which voltage fluctuation causes unstable, or voltage exceeds $\pm 10\%$ of specification.
- Place where power capacity necessary for the used motor specifications cannot be secured.
- Place where strong electric or magnetic field are generated such as surrounding at large-output high frequency transmitters or high frequency welding machines.

1-4 Unpacking and transportation

- (1) Unpacking boxes from top and follows the sequences.
- (2) Never pull or lift the parts near the needle or threading parts while removing machine head from the washer.
- (3) Find an assistant when carrying machine head.
- (4) Be careful do not have overly impact or shock while moving the machine.

2. 安裝與準備

2-1 教育與訓練

裝置針車的操作人員，以及從事指導保全維修的幹部，必須要有正確知識和操作的技能。管理階層應在事前對於作業人員以及幹部的教育與訓練計畫，做好完整的籌劃以及執行。

2-2 教育與訓練

- (1) 採用能夠承受針車的自重，以及運轉時的反彈應力強度的檯板與腳架。
- (2) 應充分考量配置針車及作業區域的照明，以供能夠順利的從事作業的環境。
- (3) 配置裝置的針車在配裝控制箱以及相關件的時候，要注意到與作業人員作業姿勢的關係。
- (4) 安裝馬達時，應依照馬達廠商所提供的說明書正確安裝。

2-3 電路配線

- (1) 在裝設電路完成之前，請勿接上電源接頭。
- (2) 連接針車頭部和馬達以及電器裝置的電線接頭，務必確實固定。
- (3) 對於連接的電線電纜，勿施加超負荷的壓力。
- (4) 在會有動作的機械部份之附近，對於電線電纜的配置，應考安全距離，不可使其接觸或磨擦。
- (5) 在針車的頭部指定部位確實接受接地線。

2-4 在針車運轉之前的注意事項

- (1) 在注入潤滑油、矽油、黃油的時候，注意不要接觸到眼睛皮膚等。在保管方面，要避開幼童所能取到的位置。
- (2) 針車務必先行注油之後才運轉。
- (3) 要切入電源的時候，勿把手伸入車針下方附近及有動作的機械部位。

2. Installation and preparation

2-1 Instruction and training

Operators who assemble the sewing machine and instructors who responsible for repair and maintenance, need to have correct knowledge and operation skills. The managers should prepare and execute the instructions and training plan for the operators and supervisors beforehand.

2-2 Sewing table and motor

- (1) Apply the table and foot stool which can withstand machine's weight and intensity of rebound stress while operating.
- (2) Should consider sewing machine working area's lighting to provide the environment which operators could work smoothly.
- (3) When installing the control box and the related parts of the sewing machine, pay attention the posture about the workers.
- (4) Please follow the instruction from motor manufacturer to install the motor.

2-3 Wiring

- (1) Before circuit assembly finished, do not connect the plug for power supply.
- (2) Must fix the wire of sewing machine head, motor, and electric device securely.
- (3) For connected electric cable, do not put excessive force on it.
- (4) For electric cord equipment, should keep the safe distance away from moveable mechanic parts to avoid connect or friction.
- (5) Connect the ground wire on assigned position of sewing machine head securely.

2-4 Instructions before operation

- (1) When pour into lubricant, silicone oil, and grease, be careful do not attach on your eyes and skin. And keep these where children cannot reach.
- (2) Before operation, the sewing machine must be lubricated.
- (3) Do not put your hand under the needle or near the moving parts of the machine when turn the power on.

- (4) 起初開始運轉針車的時候，需要確認針車飛輪的旋轉方向，和飛輪的迴轉標示是否一致。

2-5 針車運轉中的注意事項

- (1) 務必在裝妥馬達蓋、護指、護目等的安全保護狀態下運轉針車。
- (2) 針車運轉中，在車針下方附近以及有動作的機械部位附近，勿使手、頭髮接近，更不可把物品放置在旁。
- (3) 附有切刀裝置的針車，在針車運轉中絕不可把手指伸入切刀部位。
- (4) 在不使用針車或作業人員離開針車時，務必關閉電源。
- (5) 在使用中發現錯誤動作、異常的聲音或異味的時候，應即刻關閉電源。

2-6 拆卸

- (1) 拆卸任何零件或更換的時候，以及進行調整作業的時候，務必先關閉電源。
- (2) 要拔掉插頭的時候，不可直接拉扯電線、電纜。
- (3) 控制箱內配有高壓負荷，所以在關閉電源之後要等待 5 分鐘以上才可以開蓋。

2-7 保全、檢查與維修

- (1) 保全、檢查修理作業的時候，應依照使用說明書來作業。
- (2) 執行保全、檢查及維修的作業，應由經過特別訓練的人員來操作。
- (3) 在執行保全、檢查及維修的作業時，務必先關閉電源，在確認針車與馬達完全停止的時候才開始作業。
- (4) 請客戶勿根據獨自判斷來自行改造針車。
- (5) 避免用指定以外的保全維修零件。

- (4) When start to operate the sewing machine at first, make sure the rotating direction of pulley tallies with rotating-direction mark.

2-5 Instructions while operating

- (1) Be sure to operate the sewing machine with the safeguards such as motor cover, finger guard, and eyes guard, etc.
- (2) During operation, do not let your hands or hair near the machine; moreover, put an object beside under the needle or near the moving parts of machine.
- (3) Never puts your hand close to the knives part during operation which sewing machine has trimming device.
- (4) Must turn off the power without operators or using the sewing machine.
- (5) If the machine malfunctions, make abnormal sound or smelling unusual, turn off power immediately.

2-6 Removal

- (1) Must turn off power first if disassembling or removing any parts, or doing adjustment.
- (2) To pull the plug, do not pull or drag its cable or wire.
- (3) A high voltage is applied inside the control box, do not open the cover until wait for five minutes.

2-7 Maintenance, inspection, and repair

- (1) Follow the instruction manual to do maintenance, inspection, and repair.
- (2) Entrust the specially trained workers to do maintenance, inspection, and repair.
- (3) Must turn off the power first and make sure the motor and sewing machine are completely stop, then do the maintenance, inspection, and repair work.
- (4) Do not transform the sewing machine by customer's judgment.
- (5) Use original parts for maintenance and repair.

3. 警告標誌及警告圖示

為了防止對用戶造成危害，本使用說明書上，記載有下列的警告標誌及圖示。

3-1 危險水準的說明



如果忽視此標記而運行了錯誤的機械操作，保養時肯定會引起當事者或第三者人員重傷或死亡。



如果忽視此標記而運行了錯誤的機械操作，保養時有可能會引起當事者或第三者人員受傷及造成設備損壞。

3-2 警告圖案及標誌的說明



運動部位，謹防工傷事故。



高溫部位，謹防燙傷事故。

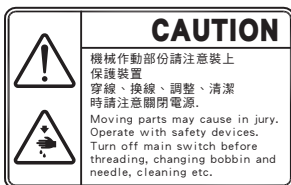


高壓部位，謹防觸電事故。



地線的接線表示。

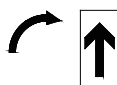
3-3 貼附在針車的警告標示



表示禁止拆卸安全護具，和禁止在投入電源中，另做縫製以外的作業。



貼附在安全護具，但是為了作業性的考量，護指和護目並沒有貼附，但是必要在指定的部位安裝護具備用。



請確認針車飛輪的迴轉方向和標示指向要一致。

3. Caution signs and alert pictorial markings

In order to prevent any danger to customers, this instruction manual contains following alert pictorial markings.

3-1 Illustration of caution signs



It must cause serious injury or death to operator or others, if do not pay attention to the sign and do the wrong operation.



It must cause injury to operator or others or machine damage, if do not pay attention to the sign and do the wrong operation.

3-2 Illustration of alert pictorial markings



Moving part. In case of industrial accident.



High-temperature part. In case of burn accident.

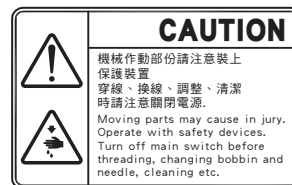


High-voltage part. In case of electric shock.



Indicated earth wire wiring.

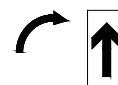
3-3 Warning label on sewing machine



Forbid to remove safeguards, and works except for sewing works while power switch on.



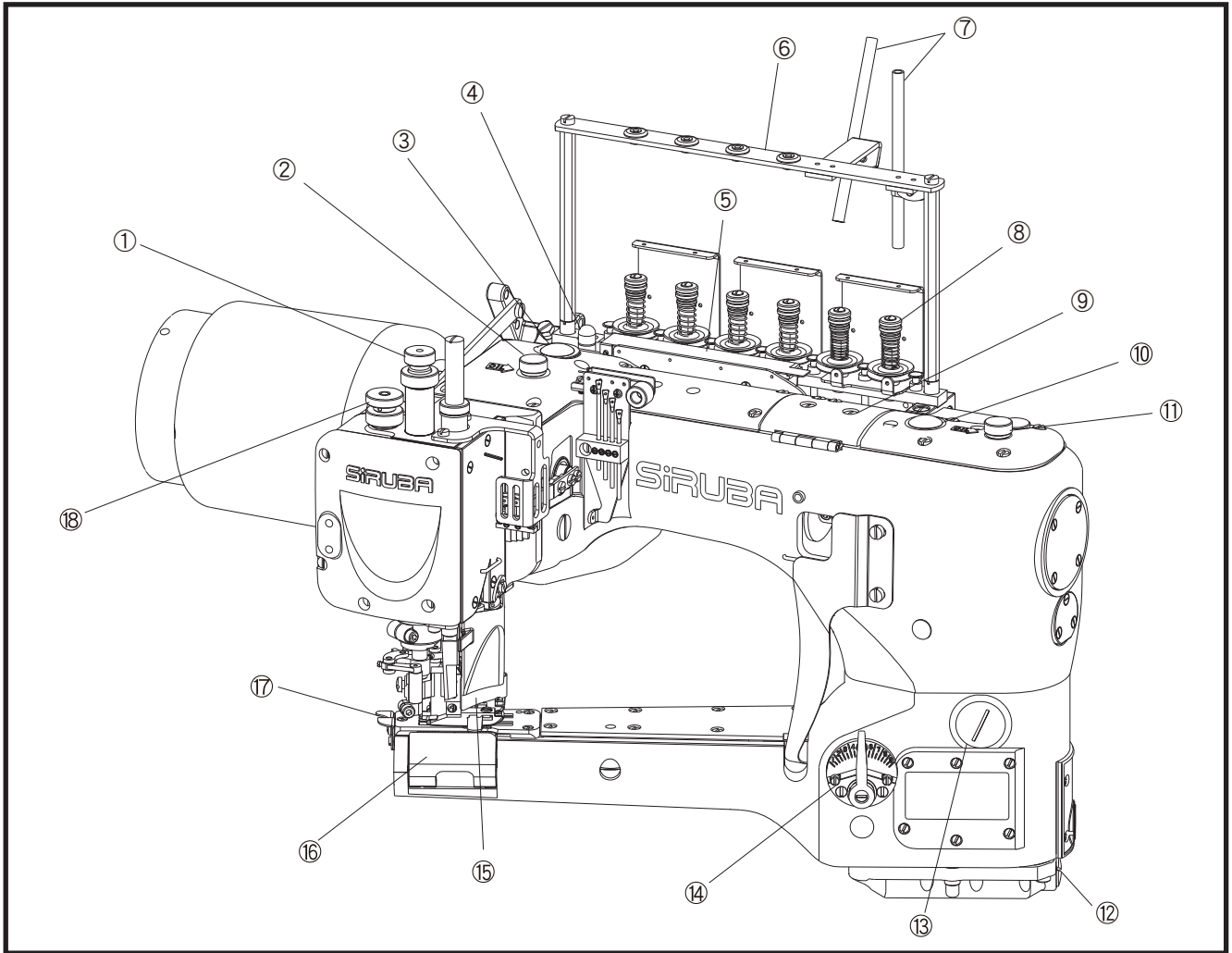
The label is affixed on safeguards. Considering the operation, it is not affixed on the finger guard and eyes guard.



Make sure pulley of sewing machine rotating direction is the same as the sign.

各部位名稱

NAME OF EACH PARTS



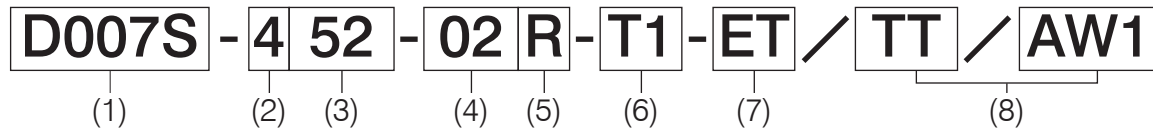
- | | |
|----------------|---|
| ① 調節螺絲 (抬壓腳) | ① Adjust screw (Presser foot lift) |
| ② 栓螺絲 (潤滑) | ② Plug screw (lubrication) |
| ③ 上油鏡 | ③ Oil sight top window |
| ④ 油錶 | ④ Oil sight gauge |
| ⑤ 矽油壺 | ⑤ SP device |
| ⑥ 線架板 | ⑥ Thread guide plate |
| ⑦ 過線架 | ⑦ Thread pipe |
| ⑧ 螺帽 (張力調整) | ⑧ Nut (Thread tension) |
| ⑨ 上蓋 (中) | ⑨ Top cover (middle) |
| ⑩ 上油鏡 | ⑩ Oil sight top window |
| ⑪ 栓螺絲 (潤滑) | ⑪ Plug screw (lubrication) |
| ⑫ 排油螺絲 | ⑫ Drain hole screw |
| ⑬ 栓螺絲 (調節差動勾齒) | ⑬ Plug screw (Adjust differential feed dog) |
| ⑭ 差動送料具操作桿 | ⑭ Differential feed operating lever |
| ⑮ 切角防護片 | ⑮ Chip guard |
| ⑯ 下勾針蓋 | ⑯ Looper cover |
| ⑰ 割刀固定片 | ⑰ Chain-off cutting knife |
| ⑱ 調節螺帽 (壓腳) | ⑱ Adjust nut (Presser foot) |

規格

SPECIFICATION

1. 型號分類表示：

1. Model classification:



- (1) D007S：表示曲臂式鏈縫機
- (2) 針數：4：4針、5：5針
- (3) 針距：
48：4.8 mm、52：5.2 mm
60：6.0 mm、64：6.4 mm
70：7.0 mm、80：8.0 mm
- (4) 切刀：
01：單切、02：雙切
- (5) 特殊規格：
R：弧狀車縫
H：厚類車縫（包縫、過目車縫）
RH：弧狀厚類車縫
註：R（弧狀車縫）、H（厚類車縫）皆不適用於褲襠、潛水衣、織帶系列
- (6) 車縫功能：
S：褲襠
DS：潛水衣
T1：織帶（女用內衣褲）
T2：貼條（男用內衣褲）
4L10：四溝槽厚類包縫過骨（長壓腳 / 壓腳段差 1mm）
4L15：四溝槽厚類包縫過骨（長壓腳 / 壓腳段差 1.5mm）
4L20：四溝槽厚類包縫過骨（長壓腳 / 壓腳段差 2mm）
- (7) ET：電動抬壓腳 AT：氣動抬壓腳
- (8) 選配件
TT：送帶機
AW1：外接式吸布屑組
AW2：密封式吸布屑組
AK：氣動切線裝置
AW7：吸布屑組

- (1) D007S：Feed-off the arm chainstitch sewing machine
- (2) Number of needles：4 needles、5 needles
- (3) Needle gauge：
48：4.8 mm、52：5.2 mm
60：6.0 mm、64：6.4 mm
70：7.0 mm、80：8.0 mm
- (4) Trimmer：
One side trimming、Both side trimming
- (5) Special specification：
R：Curved seaming
H：Heavy-weight material seaming. (overlock seam, crotch seam with folded/ bound tape)
RH：Curved seaming for heavy-weight material
Note：Both R (Curved seaming) and H (Heavy-weight material seaming) can't apply to panty hose, diving suit and woven tape series.
- (6) Seaming function：
S：For panty hose
DS：For diving suit
T1：For attaching woven tape (Women underwear)
T2：For attaching folded tape (Men underwear)
4L10：Four-grooved seam of heavy-weight fabrics covering (long presser foot/ presser foot lag 1mm)
4L15：four-grooved seam of heavy-weight fabrics covering (long presser foot/ presser foot lag 1.5mm)
4L20：four-grooved seam of heavy-weight fabrics covering (long presser foot/ presser foot lag 2mm)
- (7) ET：Electric Lifter AT：Pneumatic Lifter
- (8) Attachment：
TT：Tape feeding device
AW1：The external waste suction set
AW2：The sealed waste suction set
AK：Pneumatic trimming device
AW7：Waste suction set

規格說明：(表 1)

Illustration of specification：(Table1)

體積 Dimension	長 420mm x 寬 300mm x 高 410mm Length 420mm x width 300mm x height 410mm
圓週 Circumference	針棒下線最小圓週 148mm Needle drop minimum circumference 148mm
工作空間 Working space	圓週 210mm Circumference 210mm
重量 Weight	23 公斤 (頭部) 23kg (Head)
車縫速度 Sewing speed	最高 4200 R.P.M. ; 普通 2800 R.P.M. Highest 4200 R.P.M. ; Normal 2800 R.P.M.
縫距 Sewing distance	1.6-2.5mm 每英寸 10-16 針 ; 每 30mm 12-19 針 1.6-2.5mm Each inches 10-16 stitches ; 30mm 12-19 stitches
針型 Needle type	車 針 : Organ FLX118GCS ; Groz-Beckert UY118GKS 定位針 : Organ FLG-1 , FLF-8 ; Groz-Beckert 36211 , 36211A Sewing needle : Organ FLX118GCS ; Groz-Beckert UY118GKS Retainer needle : Organ FLG-1 , FLF-8 ; Groz-Beckert 36211 , 36211A
抬壓腳 Presser foot lift	單切 : 最大 8mm ; 雙切 : 最大 6mm Cut one piece : Max. 8mm ; Cut two pieces : Max. 6mm
送料方式 Feed way	桿槓原理 Law of the lever
差動比 Ratio	一般差動比 Normal ratio : 1.0 : 1.5 反差動比 Reserve ratio : 1.0 : 0.7 Normal ratio : 1.0 : 1.5 Reserve ratio : 1.0 : 0.7
差動送料規則 Differential feed regulation	轉盤 By dial
切布刀 Knife	特殊鋼材製造 Made of special steel
潤滑 Lubrication	自動齒輪幫浦 Automatic by gear pump
潤滑油 Lubricant	TELLUS 32
油槽容量 Capacity of oil reservoir	框 : 約 100cc ; 筒 : 約 100cc Flame : About 100cc ; Cylinder : About 100cc

表 1 / Table1

安裝

INSTALLATION

1. 安裝機器須用兩個螺絲將機器固定於支架上。(圖 1)
2. 將抬壓腳連桿①以螺絲②固定於抬壓腳驅動裝置的 Y 接頭③上。(圖 2)

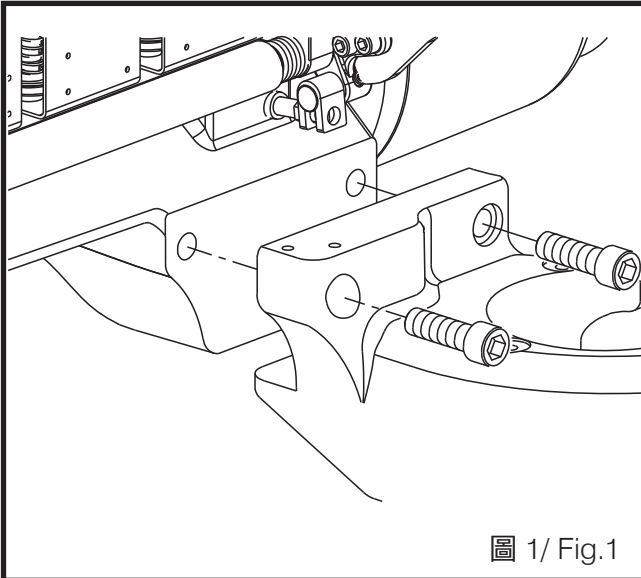


圖 1/ Fig.1

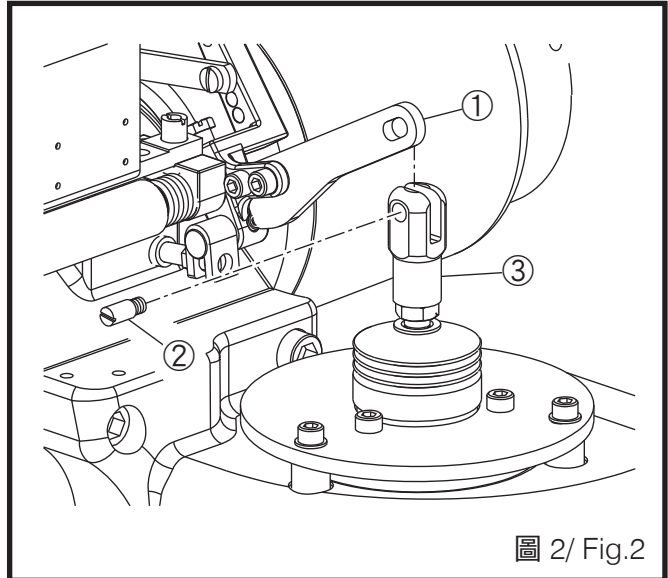


圖 2/ Fig.2

3. 將線架支柱③裝在線架固定座⑦，再將過線架④用螺絲⑤鎖在線架支柱③，調整過線桿⑥，使穿線平順，不致於線會糾結在一起。(圖 3)

3. Let thread guide holder ③ fix on the thread guide seat ⑦, then use screw ⑤ to fix thread guide plate ④ on thread guide holder ③. Adjust thread pipe ⑥ to let thread through smoothly, without intertwining. (Fig. 3)

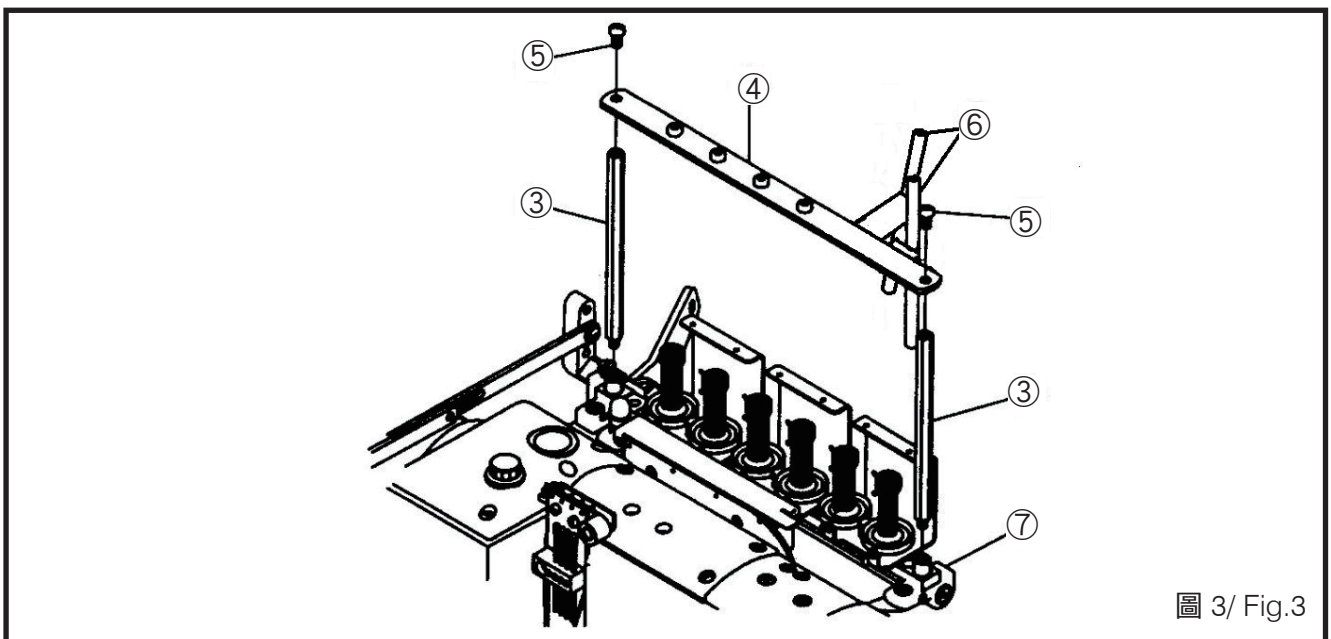


圖 3/ Fig.3

潤滑

LUBRICATION

1. 潤滑油

絕對不要在油內加入任何添加物（劑），否則將惡化油的品質，並損害機器。

2. 潤滑系統

- (1) 旋開油塞螺絲①和②然後加油。（圖 4）
- (2) 從油孔①加油直到油量到③最上方的紅線，從油孔②加油直到油量到④最上面的紅線。（圖 5）
- (3) 使用機器前檢查油水平。如果沒到水平線要加油。
- (4) 當機器在使用中時，從油鏡⑤和⑥檢查油有無供應。

注意：

太多或太少的油會造成機器漏油和機器故障。維持油的水平在 2 條紅線之間。

1. Lubricant

Never add additives into the oil, otherwise, it would deteriorate the quality of oil and machine damage.

2. Lubrication system

- (1) Remove plug screw ①, ②, and lubricate. (Fig. 4)
- (2) From plug screw ①, supply oil until it reach the upper red line ③, from plug screw ② supply oil until it reach the upper red line ④. (Fig. 5)
- (3) Check the oil level before using the machine. Supply oil if didn't reach the level.
- (4) Check whether oil have supplied or not through oil sight top window ⑤, ⑥ during machine operating.

Caution :

Too much oil or not enough oil may cause oil leakage and machine malfunction. Keep the oil level between two red lines.

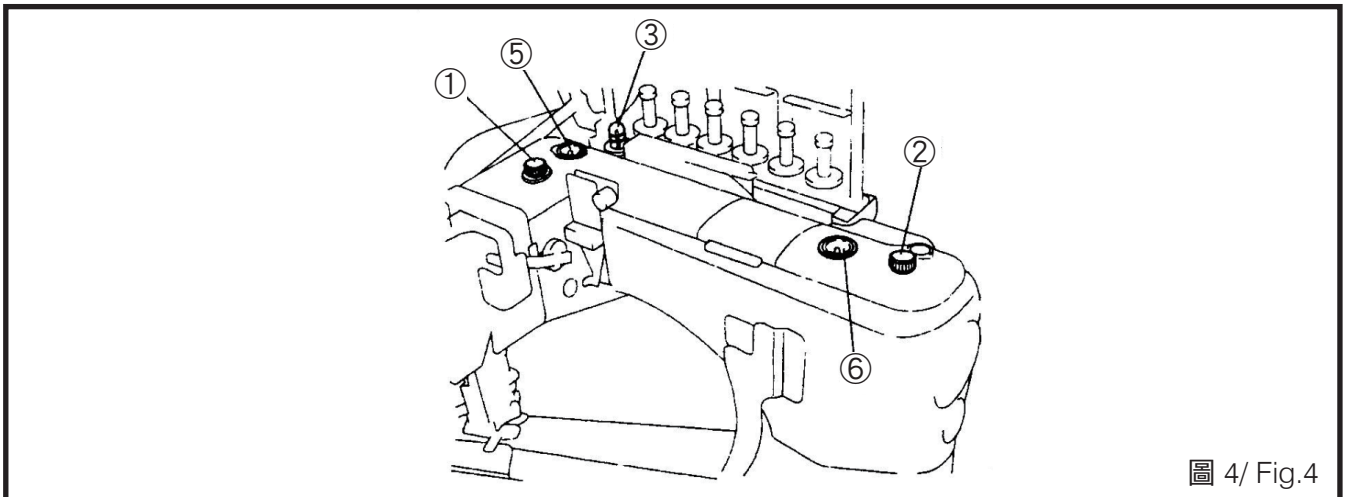


圖 4/ Fig.4

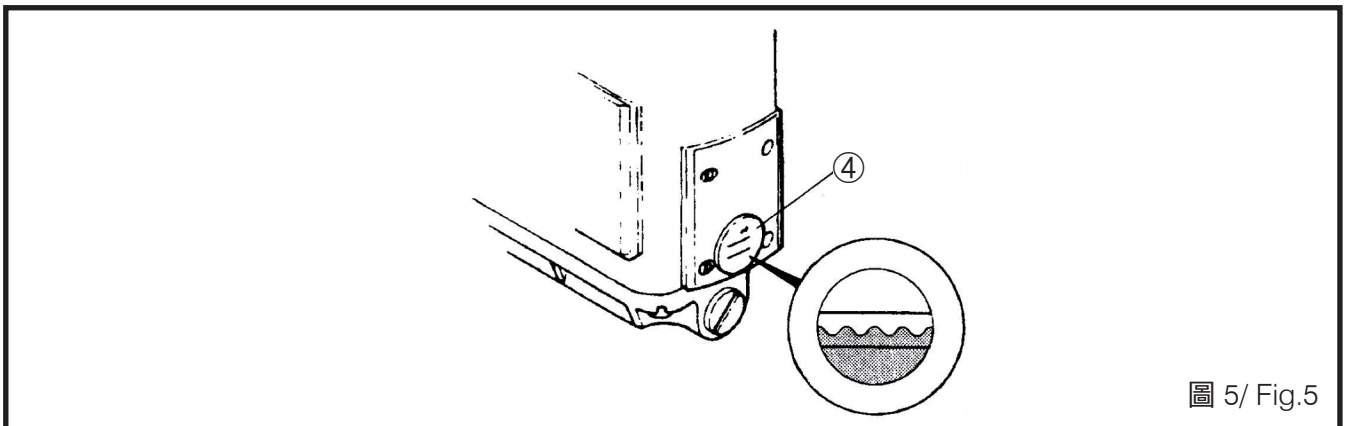


圖 5/ Fig.5

3. 啟動注油

裝新機器或使用久未使用的機器，如果油沒有循環完整，需移除幫浦上的油塞螺絲①，注入油後裝回螺絲再使用機器。（圖 6）

3. Priming oil

Prime oil by removing plug screw ①, if oil does not circulate completely when installing a new machine or running a machine which has not been used for a while. Use the machine after priming oil. (Fig. 6)

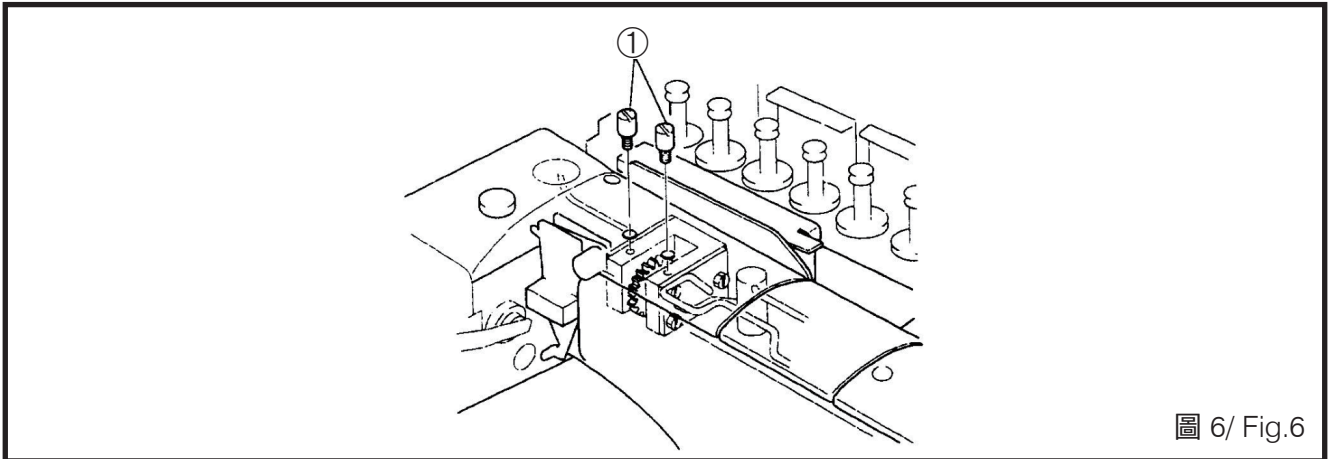


圖 6/ Fig.6

4. 補充油

在箭頭處需滴一些油潤滑。如果油漏在壓腳和上刀周圍會導致沾汙布，要確實的把油擦乾淨。（圖 7、圖 8、圖 9）

4. Replenishing oil

Replenish drops of oil at the arrow direction to lubricate. If oil leaks around the presser foot or upper knife, it can cause oil stain on the material. Be sure to wipe it completely. (Fig. 7、8、9)

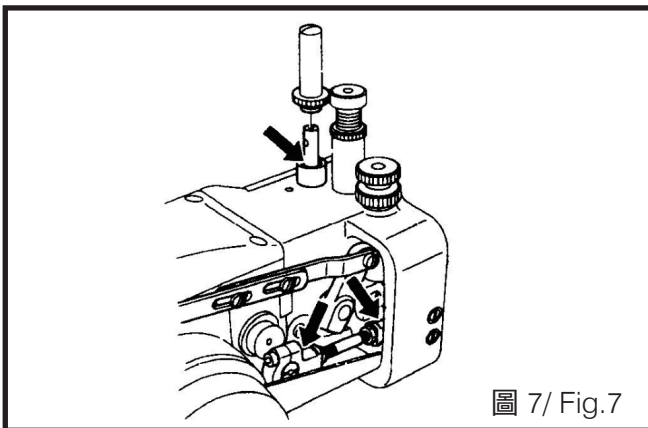


圖 7/ Fig.7

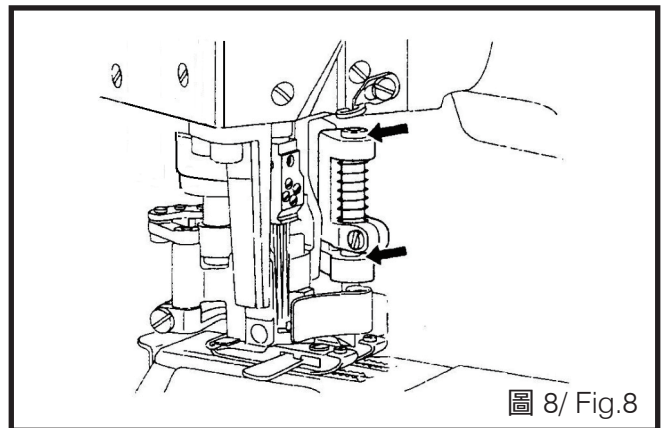


圖 8/ Fig.8

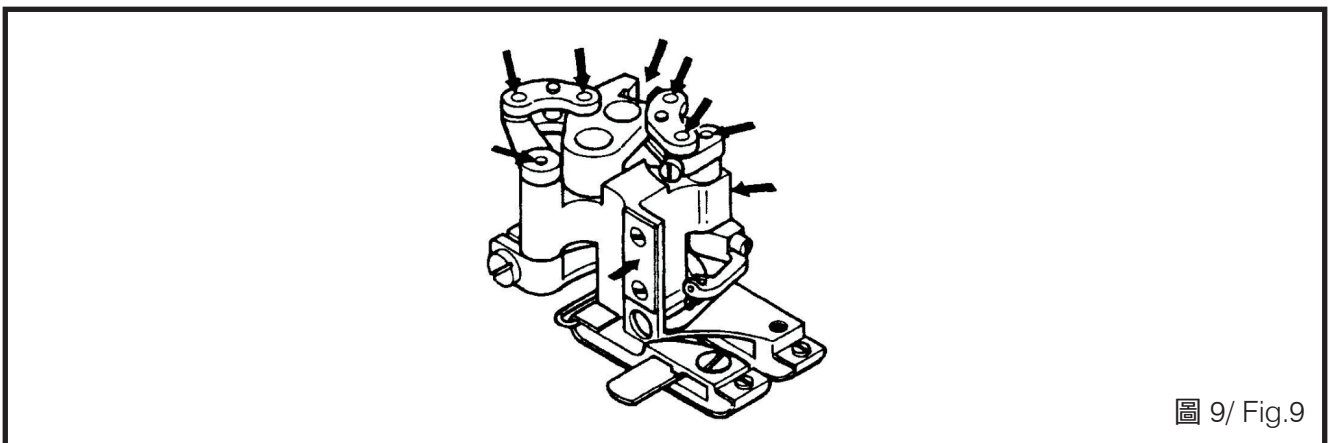


圖 9/ Fig.9

5. 更換油

5.1 換油時機

新機使用 200 小時（約使用一個月）後，要更換新油，之後每年換新油 1-2 次。

5.2 換油程序

- (1) 拆下螺絲①和②後油會自行流出。
（圖 10、圖 11）
- (2) 裝回螺①和②。
- (3) 注入新油。

5.Changing oil

5.1 Timing

Change oil after running new machine for 200 hours. (About a month) After, change oil once or twice each year.

5.2 Procedure

- (1)After removing screws ①,②, the oil will drain automatically. (Fig. 10、11)
- (2)Reset screws ①,②.
- (3)Change the oil.

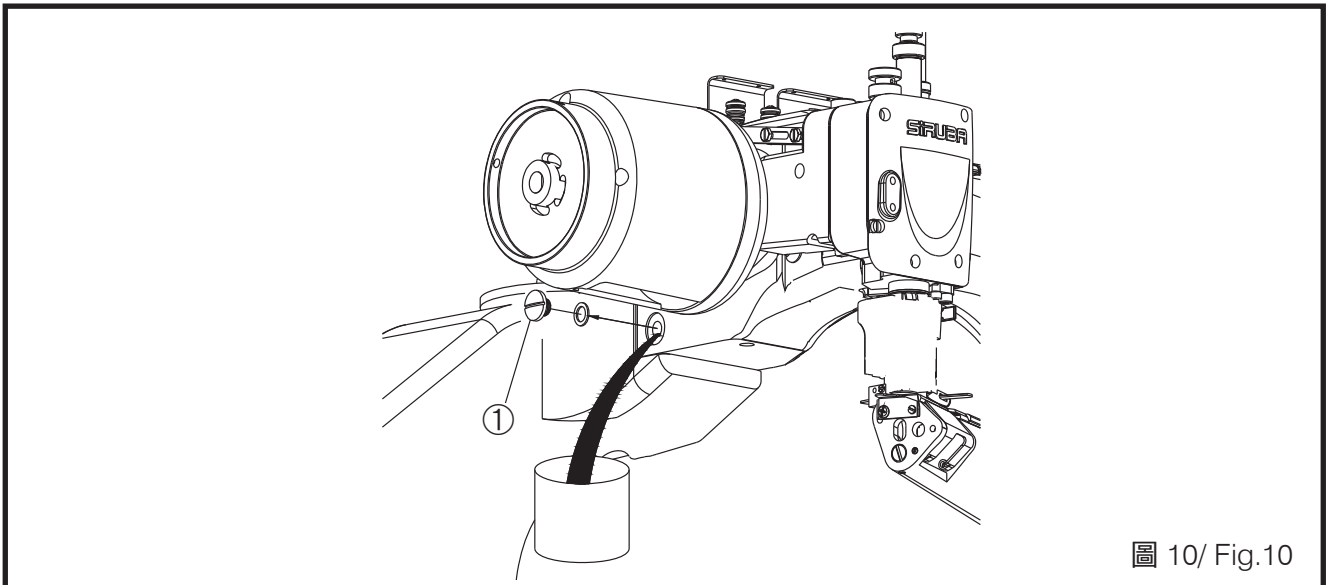


圖 10/ Fig.10

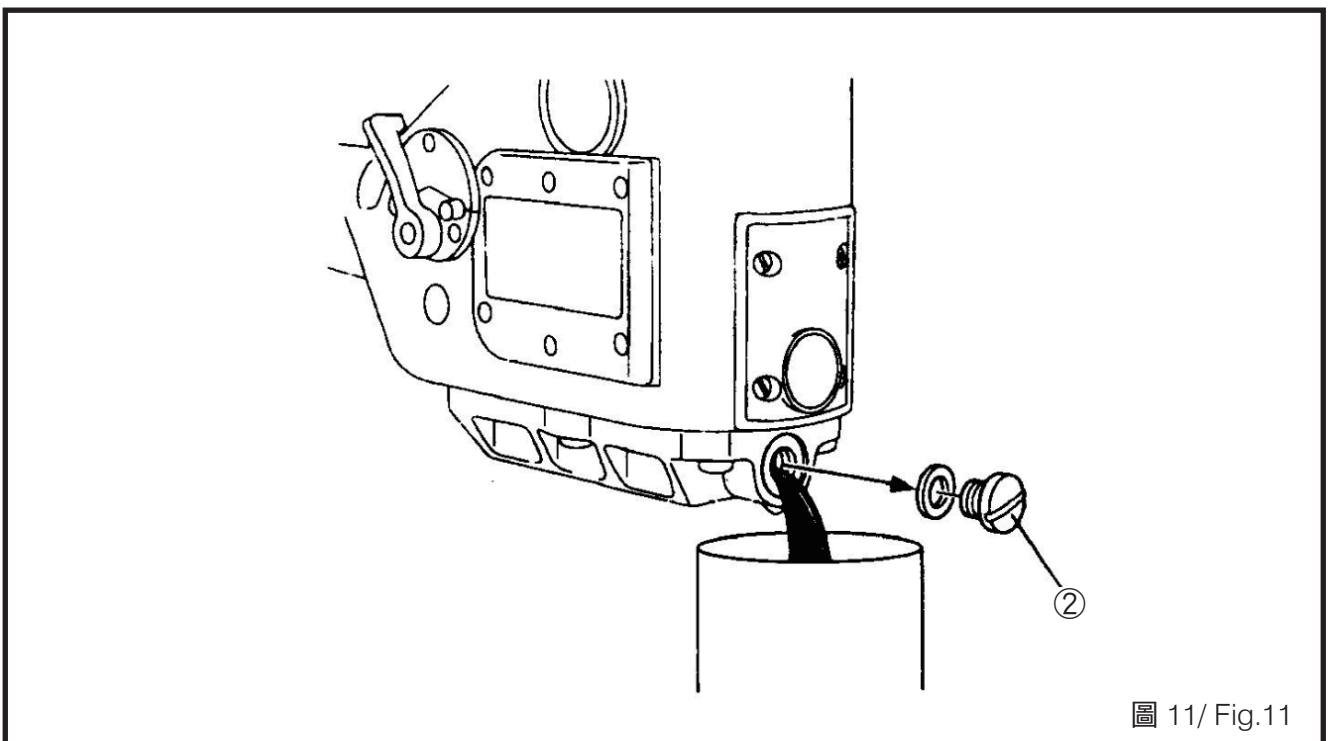


圖 11/ Fig.11

穿線方法

WAY OF THREADING

先用易穿的線從 ABCDEF 孔穿至針鐮前，然後結上要用的線拉到針前，把結剪掉。

線正確位置：(圖 12)

A、B、C、D：針線

E：上飾線

F：下勾針線

提醒：

當抬起壓腳時，線架組會平穩的放開，此時可輕鬆的將線拉過。

穿下鉤針線時不須把針板拆掉。

注意：

穿線前一定要先把電源關掉，並確定馬達完全停止。

Use the thread which easy to get through the needle eyes ABCDEF, then knots the threads and pull the threads in front of needle. Cut off the knots.

Correct position of the thread : (Fig. 12)

A , B , C , D : Needle thread

E : Top cover thread

F : Lower looper thread

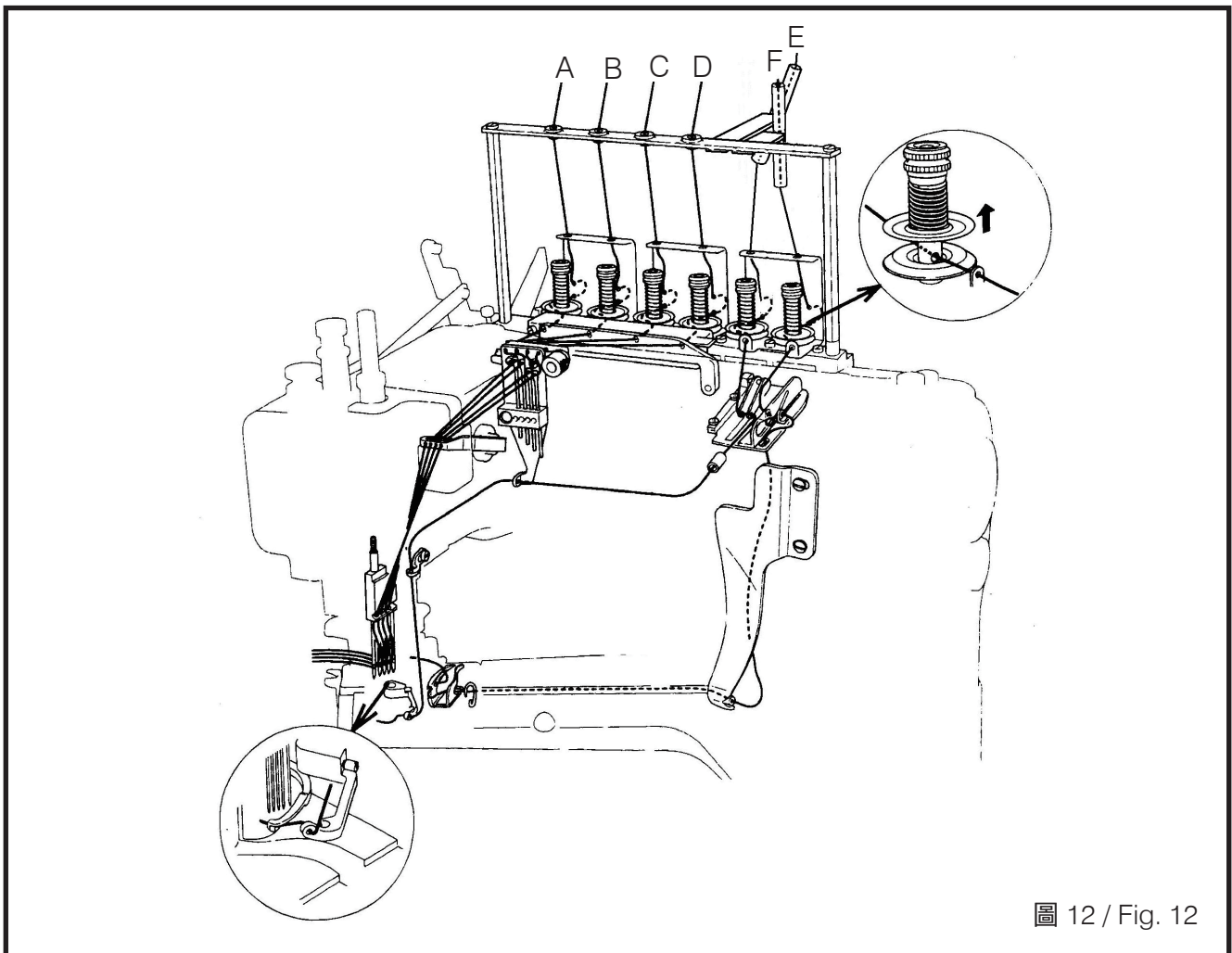
Note :

When raising presser foot, thread guide plate will loose steadily, and could pull out the thread easily.

Do not need to take off needle plate to thread lower looper thread.

Caution :

Before threading, must turn off the power and make sure the motor is stop completely.



控線調整

ADJUST THREAD

- 調整線架上的鬆緊度是靠螺母①～⑥取決於布線寬度和其它狀況。(圖 13)
 - ①～④：針的線 (①：右針，④：左針)
 - ⑤：上飾線
 - ⑥：下勾針線
 - 如果調緊線時，以順時間方向調下①～⑥螺絲。
 - 如果調鬆線時，以逆時間方向調上①～⑥螺絲。

- To adjust the tension thread guide plate depends on nuts ①~⑥, fabric width, thread width, and other situation. (Fig. 13)
 - ①~④：Needle threads (①：Right needle, ④：Left needle)
 - ⑤：Top cover thread
 - ⑥：Lower looper thread
 - To tighten thread tension, turn the nuts ①~⑥ clockwise.
 - To loosen thread tension, turn the nuts counter-clockwise.

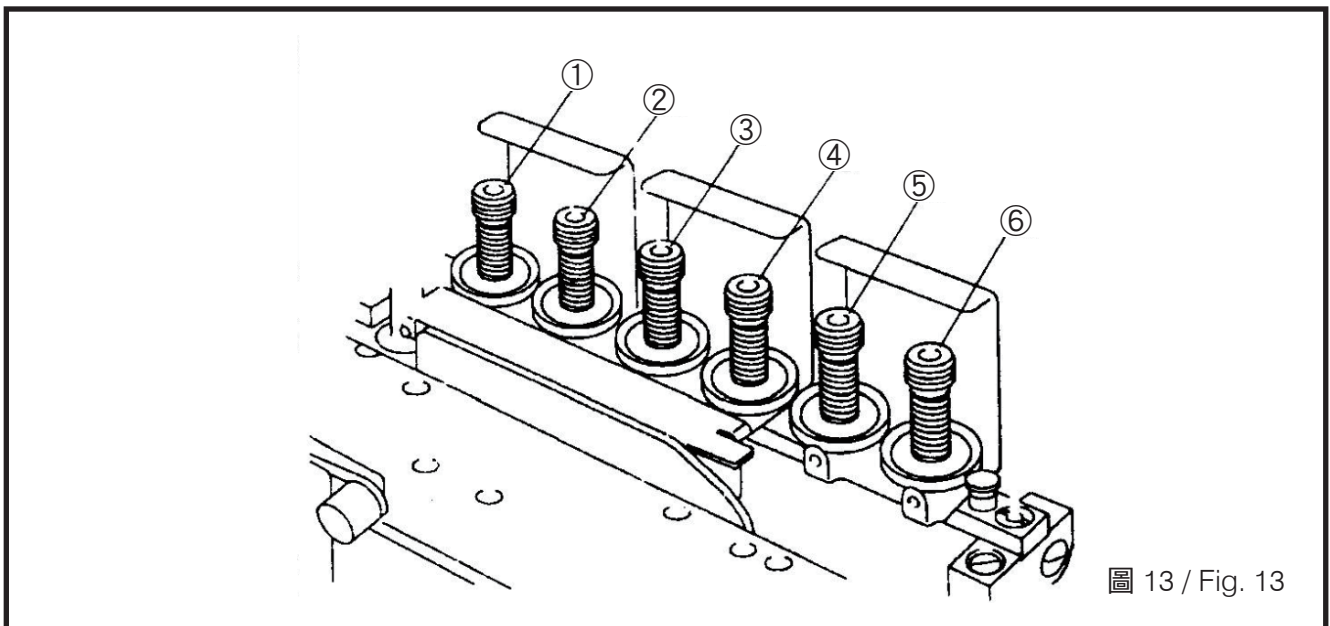


圖 13 / Fig. 13

- 當機器在高速運轉或使用特殊線或特殊纖維時，矽油壺組是標準配備，以防止斷線跳針。(圖 14) 當使用機器時，將毛氈①放入矽油壺②內。
 - 使用乙烷矽油。
 - 打開油壺蓋③，檢查油量。如果不夠，添加油於油壺②。

- When machine is operating in high speed, or using synthetic thread or synthetic fabric, SP device is standard equipment to prevent from thread breaking and skipping stitch. (Fig.14) When using the machine, puts felts ① into SP device ②.
 - Use dimethyl silicone oil.
 - Open SP device's cover ③, check amount of oil. If it's not enough, add oil into SP tank ②.

注意：

- 當不使用矽油壺組時，要取出毛氈①。不然可能在車縫時發生不正常情況。
- 當矽油沾到其他零件時，可能引起機器損傷，故要將油擦乾淨。

Caution：

- If using SP device improperly, take of felts ①, or it may cause machine malfunction while sewing.
- If silicone oil tainted with other parts, it may cause machine damage. Be sure to wipe it away.

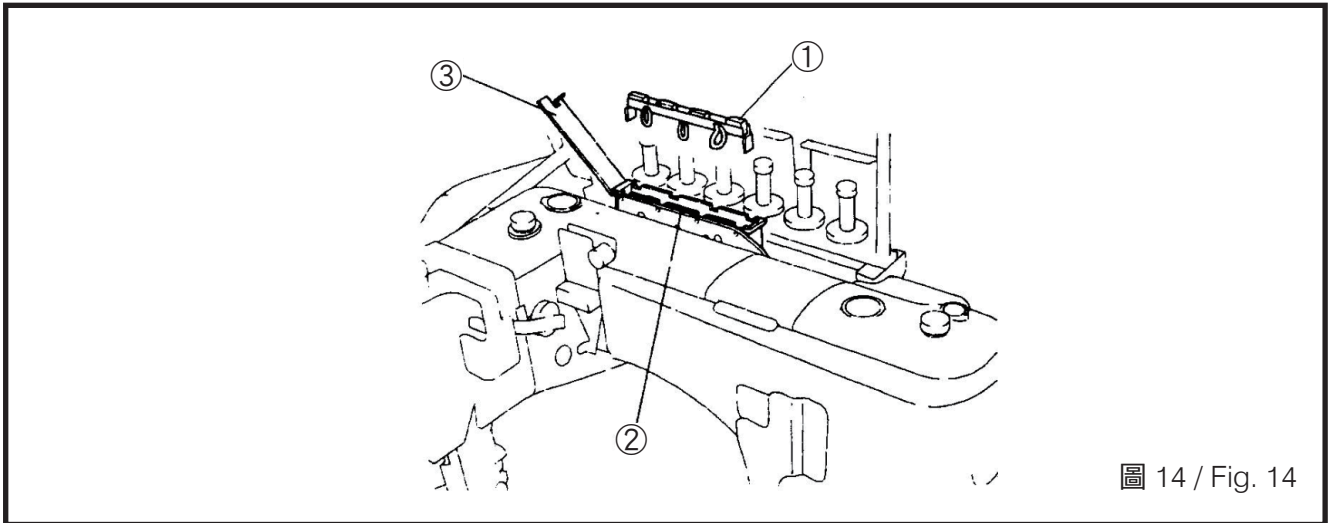


圖 14 / Fig. 14

3.4 支針各有自己的過線片可調整線環的鬆緊。

- (1) 抬線架①轉到最低位置。(圖 15)
- (2) 第一片②要跟右邊第四針的線平齊。(圖 16)
- (3) 設定第四片③距第一片②的高度為 3.2mm。
- (4) 設定第三片④距第一片②的高度為 1.6mm。
- (5) 設定第二片⑤距第一片②的高度為 0.8mm。
- (6) 對準後鎖緊螺絲⑥。

註：檢查最上面那片的水平。

- 要把線環變大就把過線片往上移“L”。
- 要把線環變小就把過線片往下移“S”。

3. Four needles have its own thread guide to adjust thread tension respectively.

- (1) Turn the needle thread take-up ① to lowest point. (Fig. 15)
- (2) Set the top of pin ② aligned with the fourth right needle thread. (Fig. 16)
- (3) Set the fourth pin ③, higher 3.2mm than pin ②.
- (4) Set the third pin ④, higher 1.6mm than pin ②.
- (5) Set the second pin ⑤, higher 0.8mm than pin ②.
- (6) Tighten the screw ⑥ after.

Note : Check the top of the pin is horizontally.

- To make the loop larger, move the pins in the direction “L.”
- To make the loop smaller, move the pins in the direction “S.”

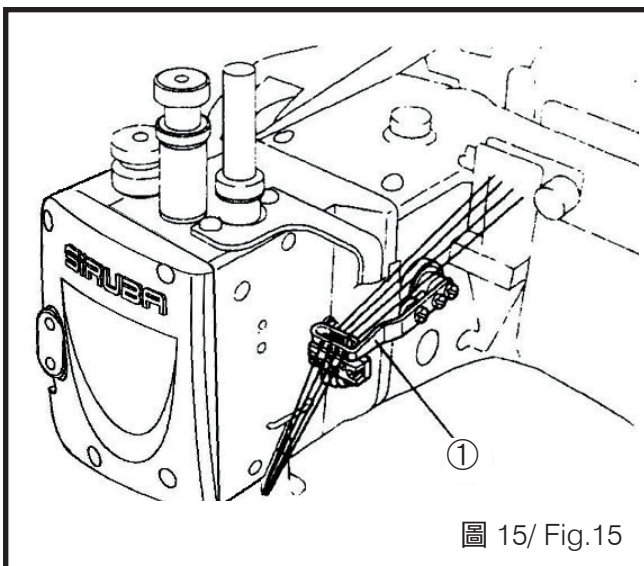


圖 15 / Fig. 15

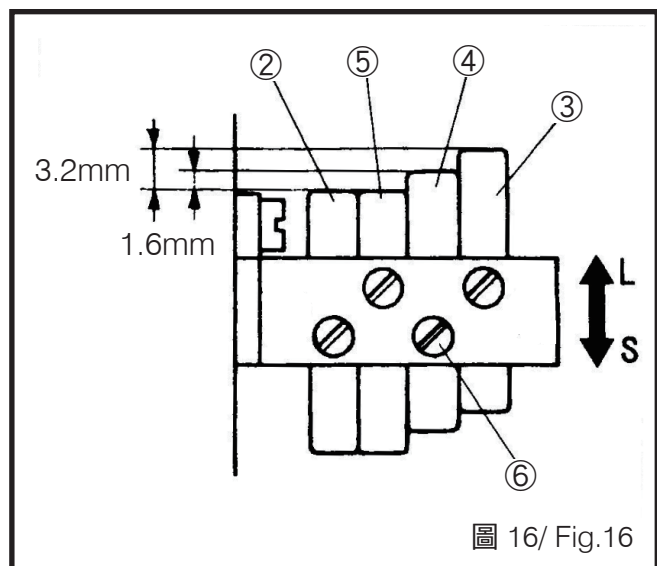
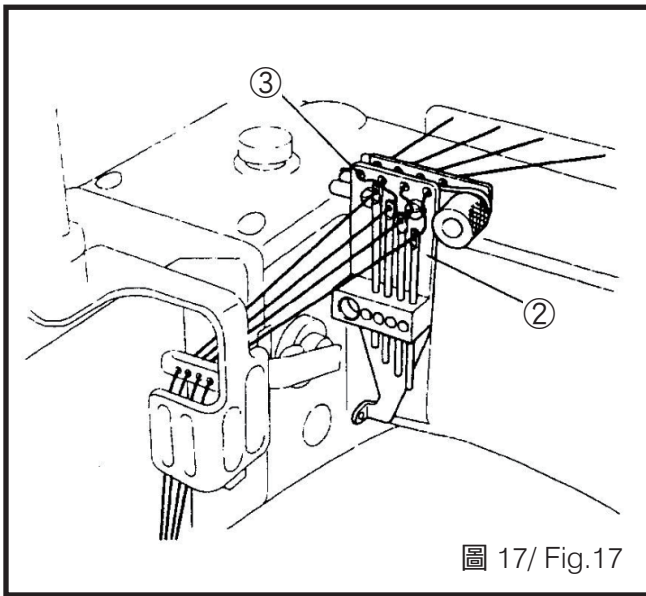


圖 16 / Fig. 16

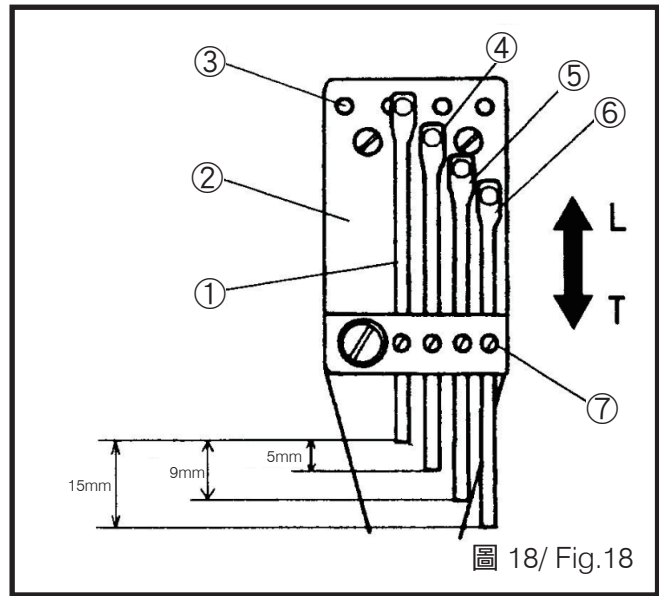
4. 針線孔調整

- (1) 右邊最高的過線孔①要跟線孔③成一直線。(圖 17、圖 18)
- (2) 設定過線孔④比①低 5mm。
- (3) 設定過線孔⑤比①低 9mm。
- (4) 設定過線孔⑥比①低 15mm。
 - 過線片往下移，線就會變緊。
 - 過線片往上移，線就會變鬆。



4. Needle thread eyelet adjustment

- (1) The highest right needle thread eyelet ① has to align with needle thread eyelet ③. (Fig. 17、18)
- (2) Set the eyelet ④ lower 5mm than ①.
- (3) Set the eyelet ⑤ lower 9mm than ①.
- (4) Set the eyelet ⑥ lower 15mm than ①.
 - Thread will be tighten if move down the eyelet.
 - Thread will be loose if move up the eyelet.



5. 下底線

- (1) 底線導板①和支撐②要成一直線。
- (2) 底線收緊時機：

正確的凸輪④位置是當針桿③最高的位置下移 2.8mm 時，線通過 A 點。放鬆⑤去調整。

 - 增加底線的鬆度，把時程調快。
 - 減少底線的鬆度，把時程調慢。

註：當調整凸輪④時，面向凸輪④凸出的地方和上線抬起時不用調整前後位置。

注意：

如果時程調超過會造成跳針。

5. Lower thread

- (1) Align the lower thread guide ① with the eyelet supporting plate ②.
- (2) Timing of lower thread tighten up:

The correct position of cam ④ is when the thread make through point A, and the needle bar ③ lowered 2.8mm from highest point. Adjust for loosen ⑤.

 - To increase the looseness of lower thread, hasten the timing.
 - To decrease the looseness of lower thread, delay the timing.

Note : When adjusting cam ④, face the raised place of cam ④ and when lifted the top cover thread without adjusting front-and-rear position.

Caution :

If the timing of the lower thread exceeds, it may occur skip stitches.

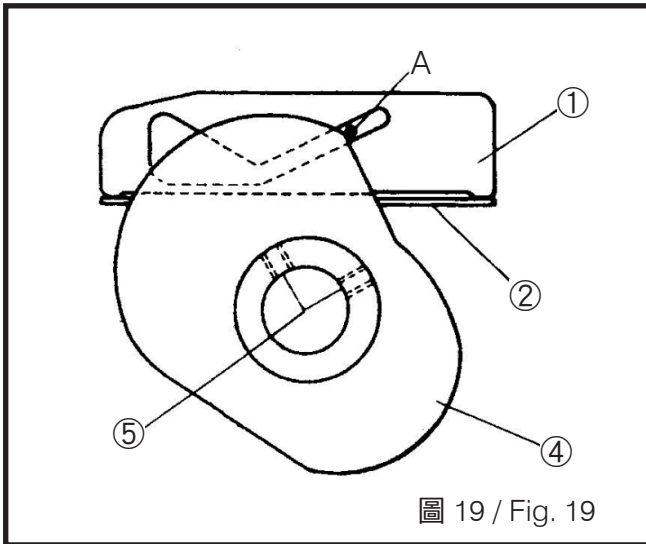


圖 19 / Fig. 19

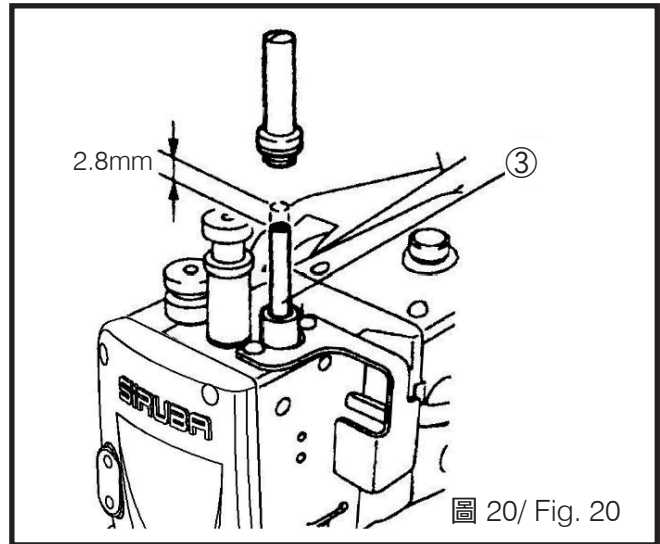


圖 20 / Fig. 20

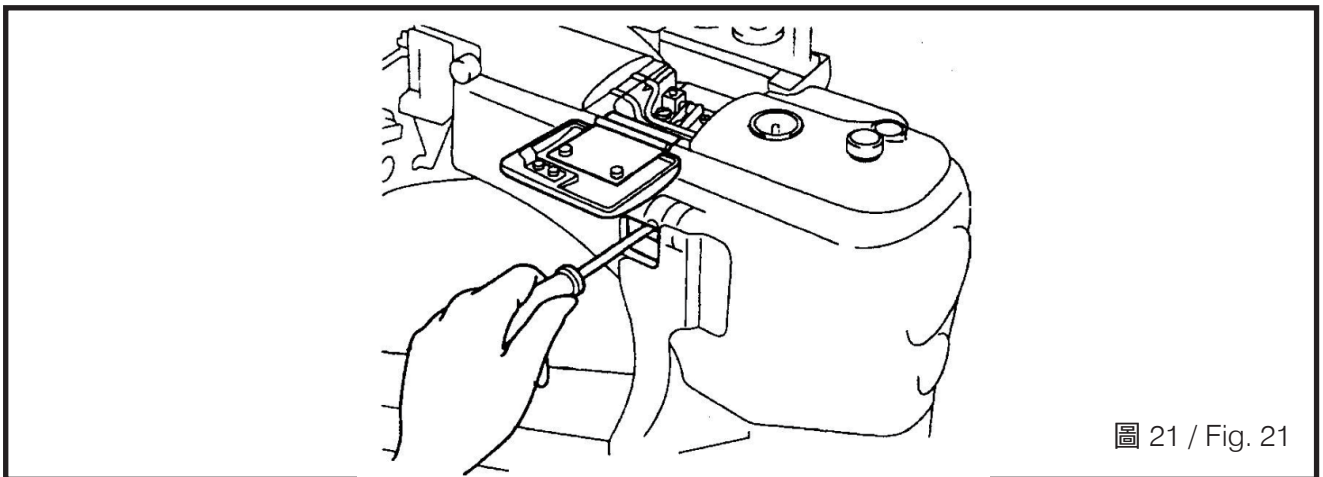


圖 21 / Fig. 21

(3)底線過線片⑥和⑦標準位置為最右邊。放鬆螺絲⑧和⑨左右移動去調整。(圖 22)

- 增加底線的量，將過線片往“L”的方向移動。
- 減少底線的量，將過線片往“S”的方向移動。

(3)The standard position of lower thread eyelet ⑥ and ⑦ are extreme right. Loosen screws ⑧ and ⑨ move left and right to adjust. (Fig. 22)

- Increase amount of lower thread, and move the eyelet to the direction “L.”
- Decrease amount of lower thread, and move the eyelet to the direction “S.”

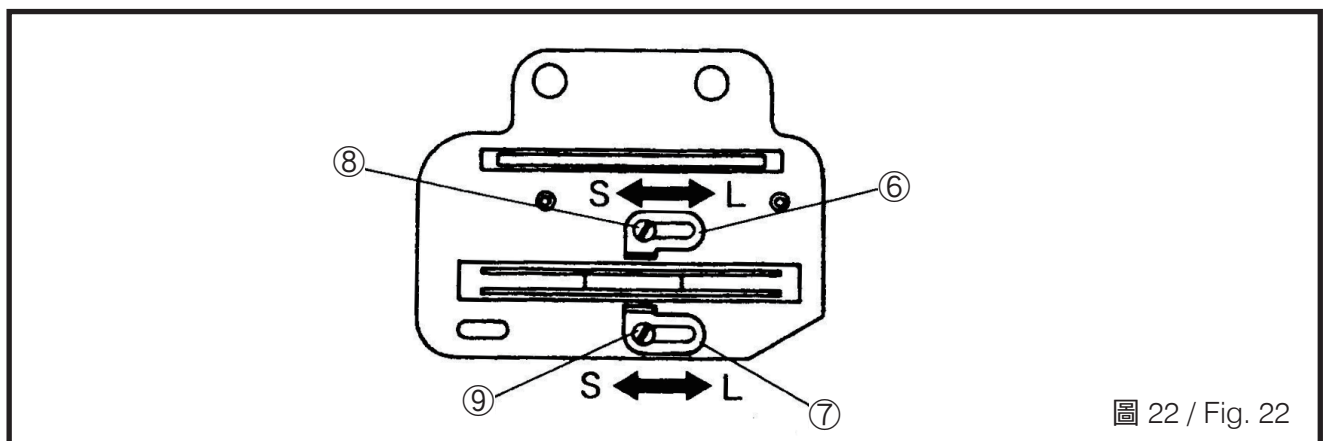


圖 22 / Fig. 22

6. 上網線

(1) 線孔位置

支撐板②和過線片①的標準距離是4.4mm。放鬆螺絲③再上下調整移動線孔。(圖 23)

- 增加線量時，將過線片①往下移。
- 減少線量時，將過線片①往上移。

(2) 調整上網線的時機

當大的上勾針④勾到小勾針上的線時(圖 24)，網線和凸輪的尖端距離為 0-1.0mm 之間，調整凸輪⑤時鬆開螺絲⑥。(圖 23)

註：調整好凸輪⑤時，勾線時間和凸輪⑤時間正確後，不必再前後調整。

6. Top cover thread

(1) Position of eyelet

The standard distance of eyelet supporting plate ② and eyelet ① are 4.4mm. Loosen screw ③ then adjust eyelet up and down. (Fig. 23)

- Move down the eyelet ① when increase the amount of thread.
- Move upward the eyelet ① when decrease the amount of thread.

(2) Timing of adjusting top cover thread

When the bigger upper looper ④ hooked the thread of little looper, (Fig. 24) , the cover thread is held at the point 0-1.0mm apart from the top of cam. Loosen screw ⑥ when adjusting cam ⑤ (Fig. 23)

Note : After finish adjusting cam ⑤, if the timing of the thread take-up and cam ⑤ are correct, do not need to adjust front-and-rear.

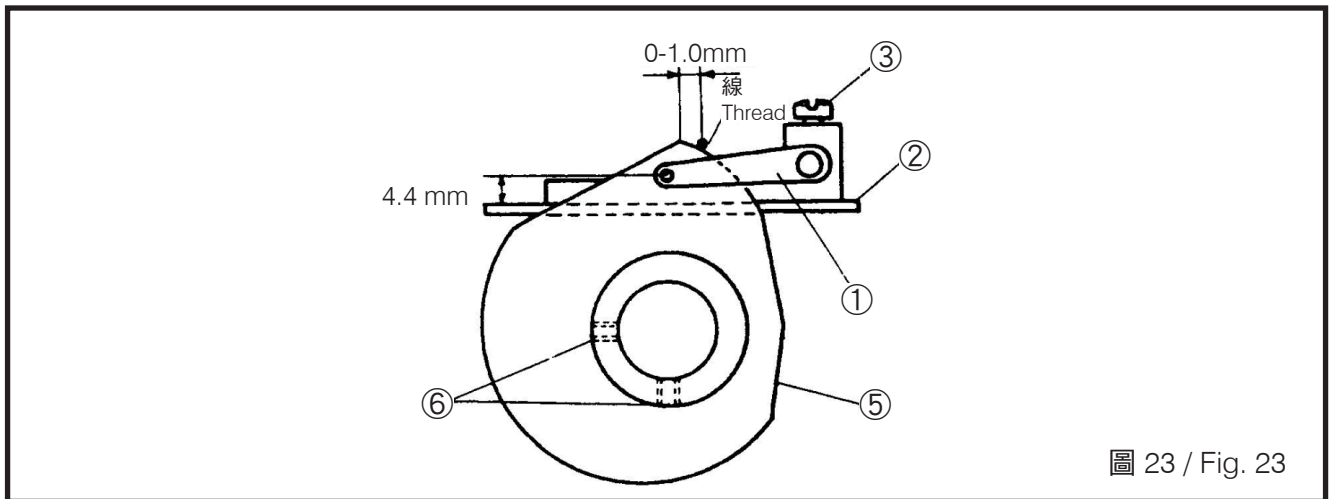


圖 23 / Fig. 23

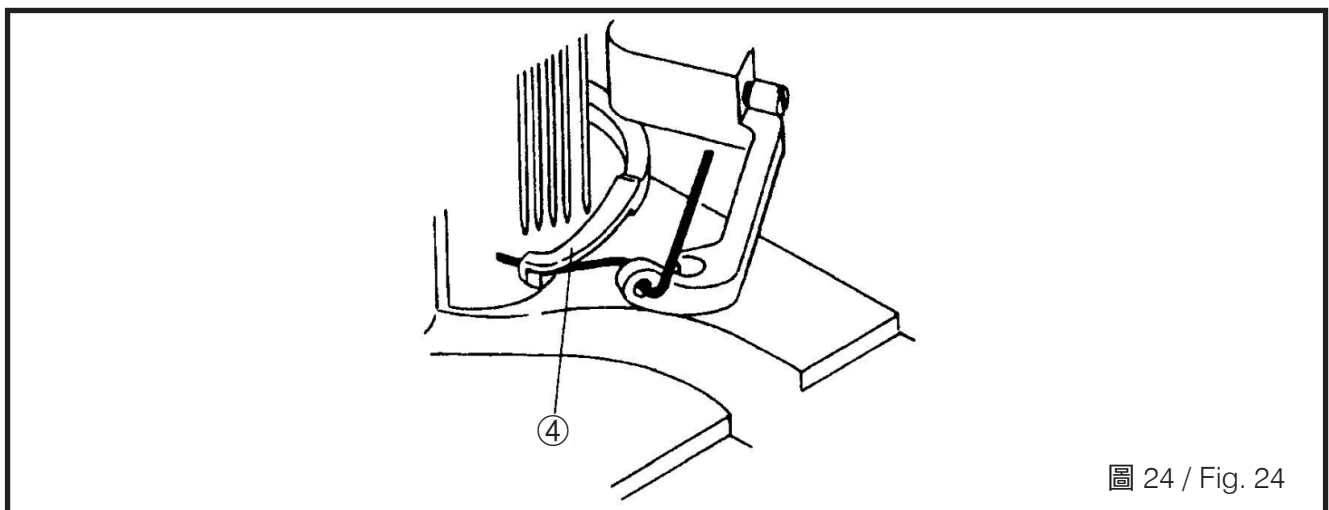
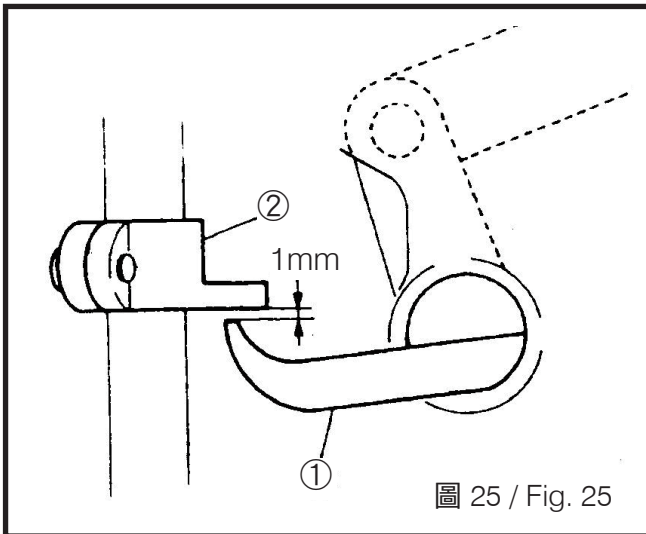


圖 24 / Fig. 24

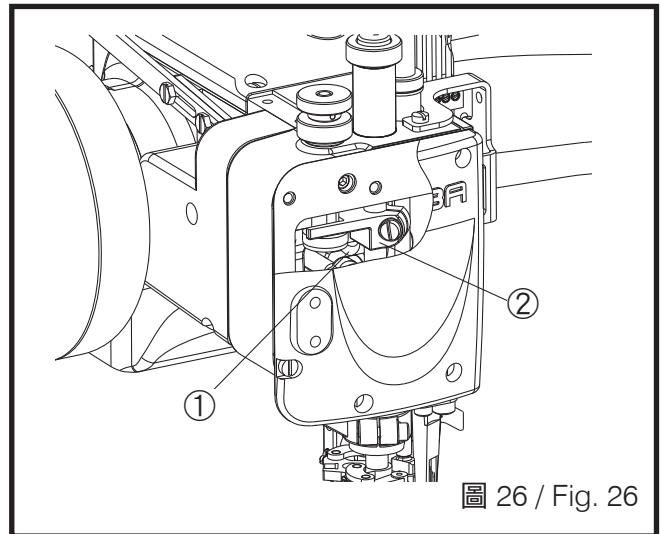
各部位調整說明

ILLUSTRATION OF ADJUSTING EACH PARTS

1. 當壓腳緊貼在針板上時，在抬壓腳連接軸①跟壓腳連接托架②留 1mm 的間隙。（圖 25、圖 26）



1. When presser foot closely touch needle plate, retain 1mm distance between presser foot lifter lever ① and presser foot connecting bracket ②. (Fig. 25、26)



調整：

- (1) 移除前蓋③才可以檢查間隙。（圖 27）
- (2) 放鬆壓腳連接桿螺絲⑤。（圖 28）
- (3) 移開壓腳連接桿（短）⑥右邊或左邊去調整間隙。

注意：

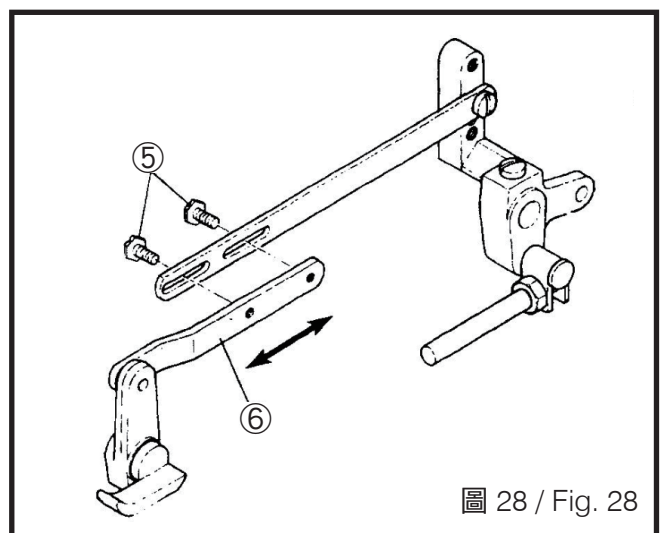
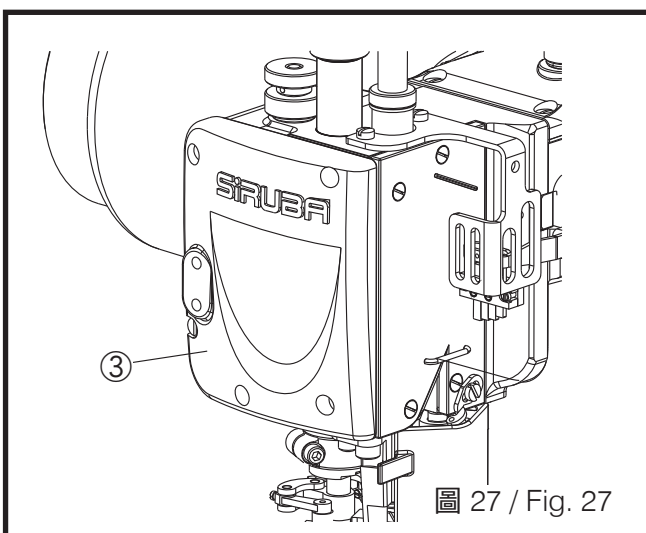
在調整抬壓條連接軸①之後，調整抬壓腳在壓腳的最低位置，如果沒有調整，會導致上網線勾損壞。

Adjustment：

- (1) Remove the front cover ③ then check the clearance. (Fig. 27)
- (2) Loosen screw of presser foot connecting bracket ⑤. (Fig. 28)
- (3) Remove presser foot connecting bracket (short) ⑥, move left and right to adjust the clearance.

Caution：

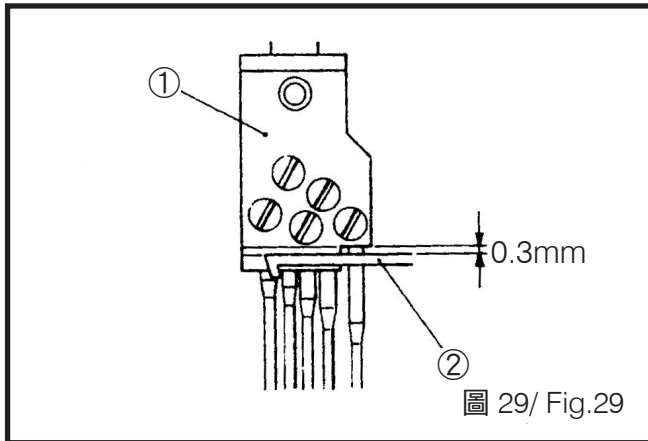
After adjust presser foot lifter lever ①, make the presser foot at lowest position, if did not, it may cause top cover thread damage.



2. 當針柱在最低位置和壓腳完全抬舉時，針鏢①和上網線勾②需留間隙 0.3mm。
(圖 29)

調整：

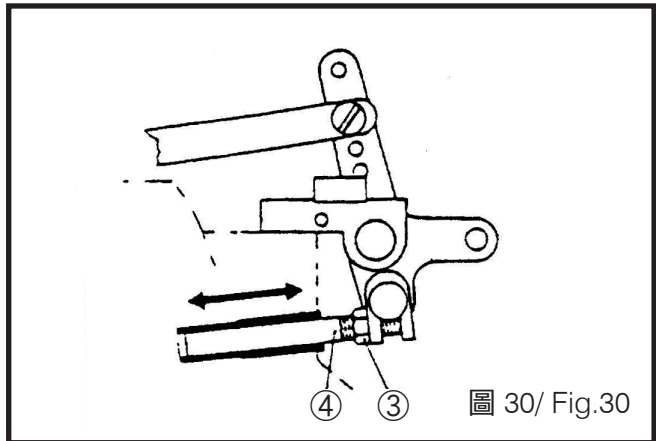
- (1) 放鬆螺母③。(圖 30)
- (2) 移動抬壓腳停止插銷④或再調整外面間隙。



2. Needle clamp ① and top cover thread hook ② need to retain 0.3mm clearance, adjust when needle bar is at the lowest point and presser foot completely lifted.
(Fig.29)

Adjustment :

- (1) Loosen screw nut ③. (Fig.30)
- (2) Move the presser foot lifter stop plunger ④ or adjust the clearance.



3. 不踩踏板時鬆線器①和鬆線器座③之間要有 0.5mm 的間隙。(圖 31)
當踩下踏板時，六個鬆線器①會向上推，之後上夾線片②開始離開下夾線片。

調整：

- (1) 放開提昇擺臂的螺絲④。(圖 32)
- (2) 翻轉鬆線器座③用螺絲起子。(圖 31)

註：

順時針旋轉，減少間隙。
逆時針旋轉，增加間隙。

3. Tension release devices ① and tension release device seat ③ need to have 0.5mm clearance while without stepping presser foot pedal. (Fig.31)

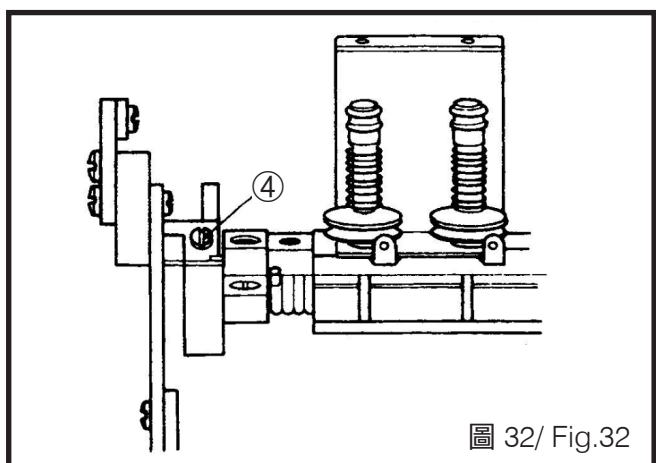
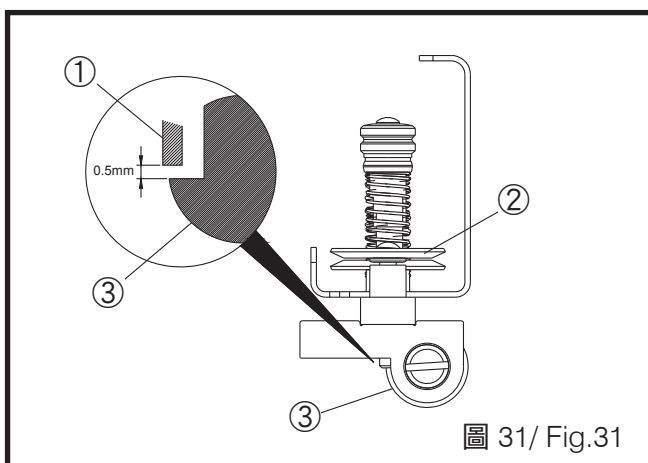
While stepping the pedal, six tension release devices ① will push up, then, the upper thread clamp ② will leaving lower thread clamp.

Adjustment :

- (1) Loosen screw ④. (Fig.32)
- (2) Turn the tension release device seat ③ with a screwdriver. (Fig.31)

Note :

Turn it clockwise to decrease clearance.
Turn it counterclockwise to increase clearance.



4. 調整壓腳壓力

放鬆螺母⑦然後用壓腳柱螺帽⑧來調壓力。
(圖 33)

- 增加壓腳壓力時，順時間調整螺帽⑧。
- 減少壓腳壓力時，逆時間調整螺帽⑧。

提醒：

儘可能保持壓腳壓力在最鬆的狀態，使布在針板上更加平穩。

4. Adjust pressure of presser foot

Loosen screw nut ⑦, then use presser foot screw nut ⑧ to adjust pressure. (Fig.33)

- Adjust screw nut ⑧ clockwise while increase presser foot pressure.
- Adjust screw nut ⑧ counterclockwise while decrease presser foot pressure.

Alert :

Keep the pressure as low as possible for stable stitches.

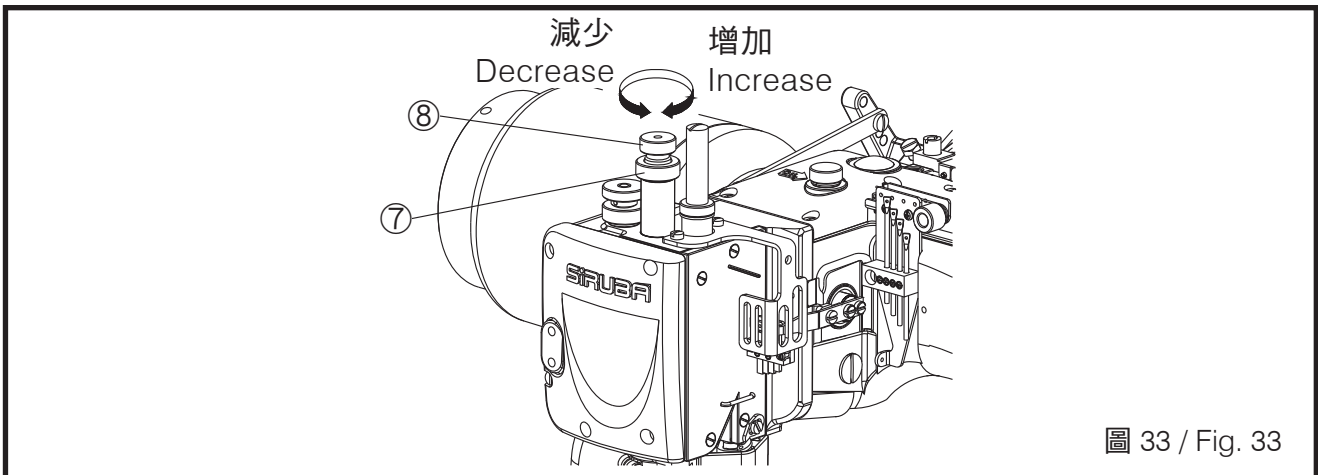


圖 33 / Fig. 33

5. 調整壓腳高低

輕微的調高或降低壓腳都會有明顯的成效。

- 預防勾齒抓痕。
- 改善壓腳彈片的耐久度。
- 增減壓腳彈片的壓力度。
- 減少噪音和振動。
- 可細微的調整針織的寬度。

調整：

- (1) 針在最底點的位置。
- (2) 鬆開螺絲①，然後逆時間旋轉調整螺母②抬起壓腳。(圖 34)

5. Adjust up-and -down position of presser foot

Following effective points will be obtained by slightly raising or lowering presser foot.

- Prevention of feed scratch mark.
- Improvement of durability of presser foot spring plate.
- Increase/decrease pressure of presser foot spring plate.
- Reduction of vibration and noise.
- Slightly adjust width of stitches.

Adjustment :

- (1) Needle is at the lowest point position.
- (2) Loosen screw ①, then turn counterclockwise to adjust screw nut ②. Lifted presser foot. (Fig.34)

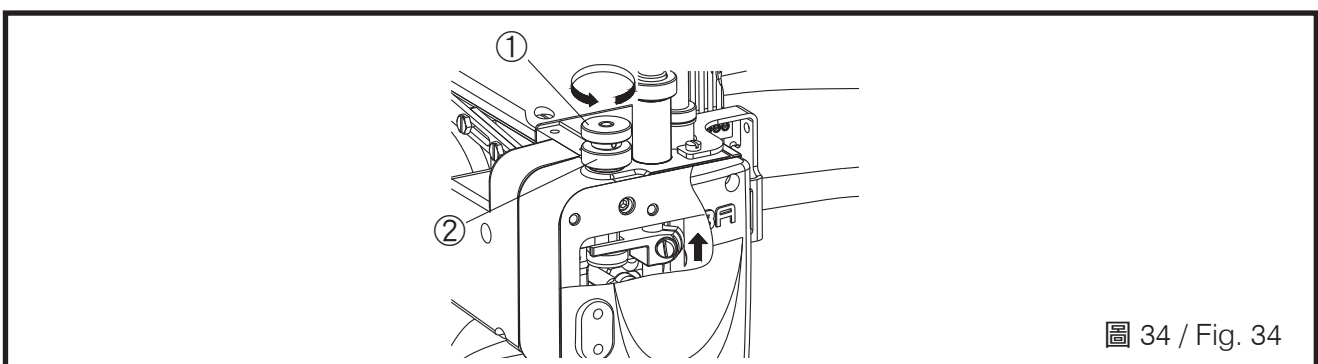


圖 34 / Fig. 34

- (3) 在壓腳④和壓腳彈片③之間調整出 0.3-0.5mm 的間隙。(圖 35)
- (4) 把螺母①鎖回去。

- (3) Adjust 0.3-0.5mm clearance between presser foot ④ and presser foot spring plate. (Fig.35)
- (4) Tighten the screw nut ①.

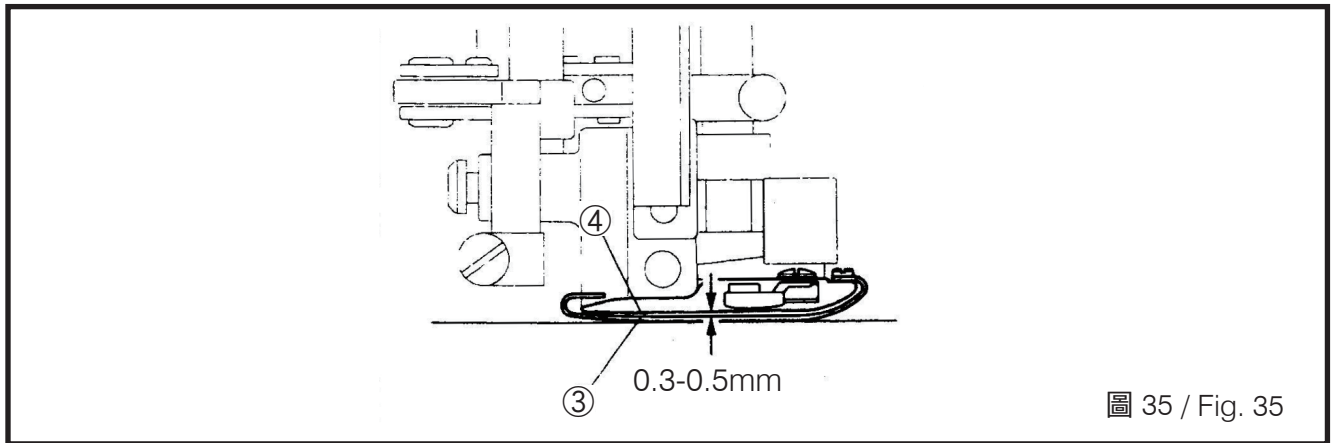


圖 35 / Fig. 35

6. 調整差動

- (1) 移動調整桿向右或左去調整差動桿⑤在刻度“4”和刻度“5”之間是相同的動作和差動。即主牙和差動牙的運作相同。(圖 36)
- (2) 螺絲⑥是用來固定調整桿⑤和保持差動的多或少。
- 一般差動比：調整桿⑤調到刻度“9”的位置。
 - 反差動比：調整桿⑤調到刻度“1”的位置。

6. Adjusting differential feed dog

- (1) Move adjusting lever left and right to adjust adjusting lever ⑤ between graduations “4” and “5,” makes the equal movement and differential. (Fig.36)
- (2) Screw ⑥ is used for fixed adjusting lever ⑤ and keep the differential ratio.
- Normal differential ratio : Move the lever ⑤ to “9.”
 - Reverse differential ratio : Move the lever ⑤ to “1.”

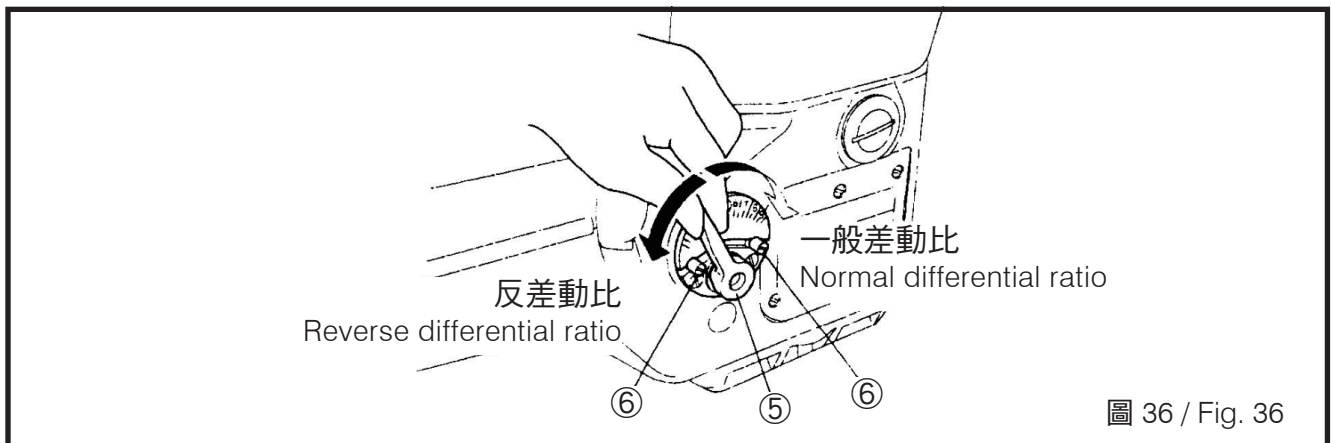


圖 36 / Fig. 36

7. 調整針距

粗細針的範圍標準為 1.6-2.5mm，但可調整更大。

調整：

- (1) 放鬆螺絲①，移動針檔②（後）到最後面。然後稍微鎖緊。減少針寬時可以省略。(圖 37)

7. Adjusting stitch length

Stitch length ranges 1.6-2.5mm as standard, and it could adjust more.

Adjustment :

- (1) Loosen screw ①, and move needle guard ② (rear) to the most rearward, then tighten it slightly. It could skip if decrease stitch length. (Fig.37)

- (2) 退掉油塞螺絲③。(圖 38)
 (3) 放鬆螺絲④去調整粗細針。
 (4) 鎖緊螺絲④和重新裝上油塞螺絲①。

- 增加針距時，將螺絲④向上調整。
- 減少針距時，將螺絲④向下調整。

表格二為針距大小使每英吋或每 30mm 的距離有幾針。

注意：

- 調整針距必須注意後針檔的位置。
- 每次在更換不同的狗齒之後，都要調整粗細針。

- (2) Remove plug screw ③. (Picture 38)
 (3) Loosen screw ④ to adjust stitch length.
 (4) Tighten screw ④ and reset plug screw ①.

- Adjust screw ④ upward if stitch length increase.
- Adjust screw ④ downward if stitch length decrease.

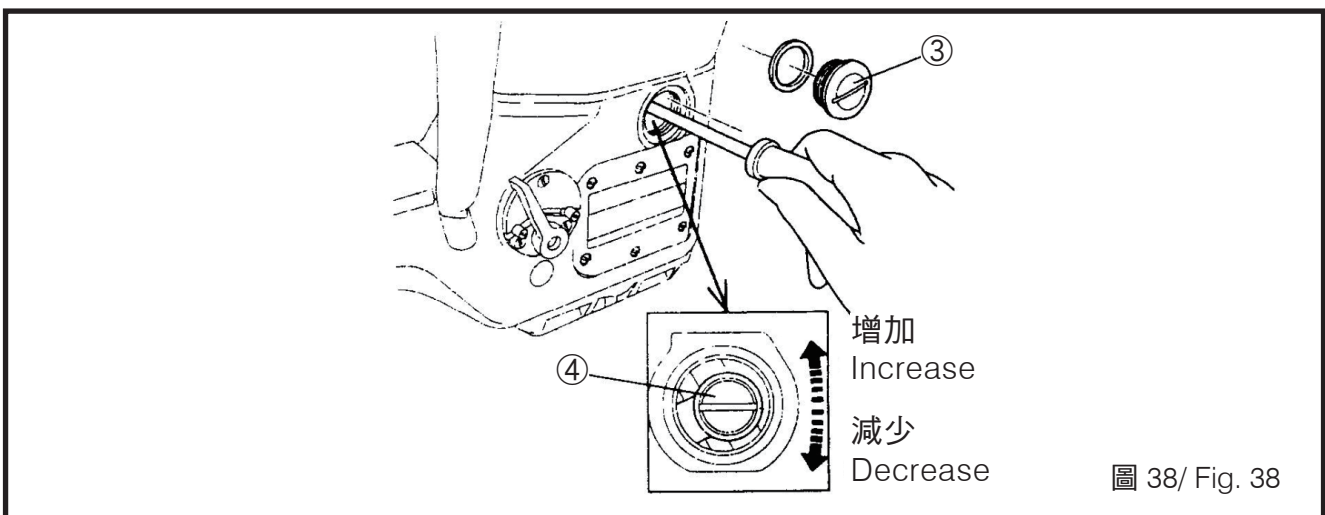
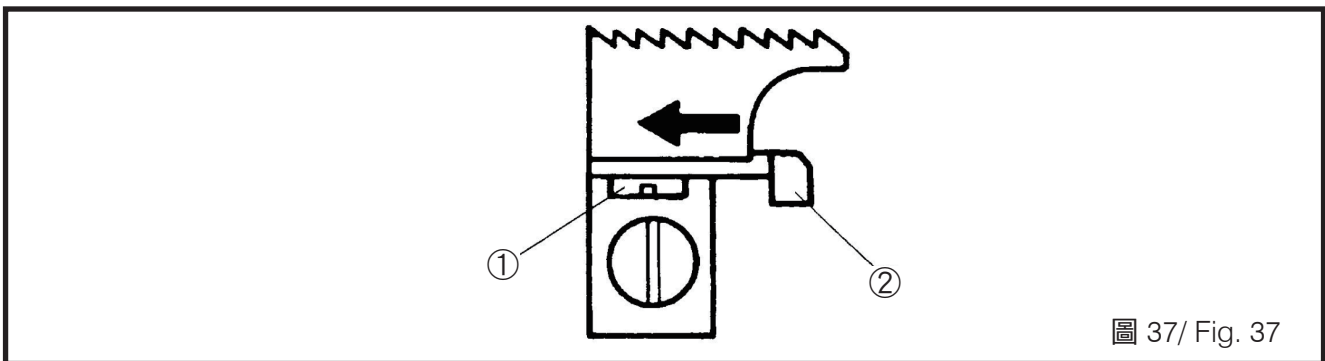
Table 2 shows the stitch length of per inch or stitch numbers of length 30mm.

Caution :

- Be careful the position of rear guard while adjusting stitch length.
- Adjust stitch length each time when replacing different feed dogs.

針距 (mm) Stitch length(mm)	1 英吋針數 Stitch numbers(per inch)	30mm 針數 Stitch numbers (30mm)
2.5	10	12
2.1	12	14
1.8	14	16.5
1.6	16	19
1.2	21	25
1	25	30

表 2 / Table 2

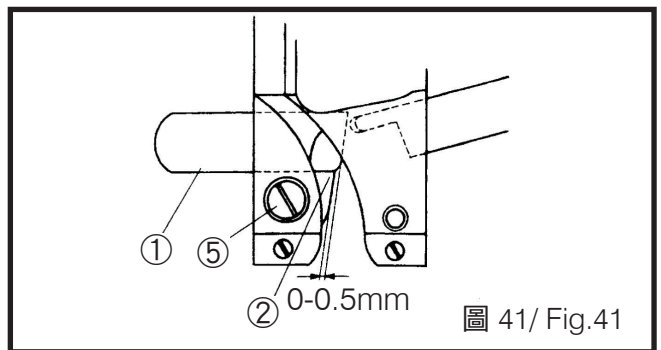
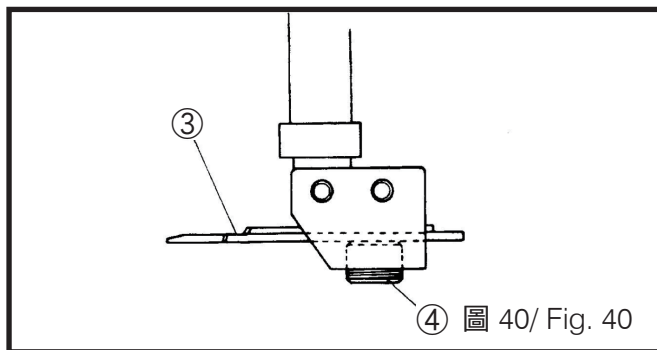
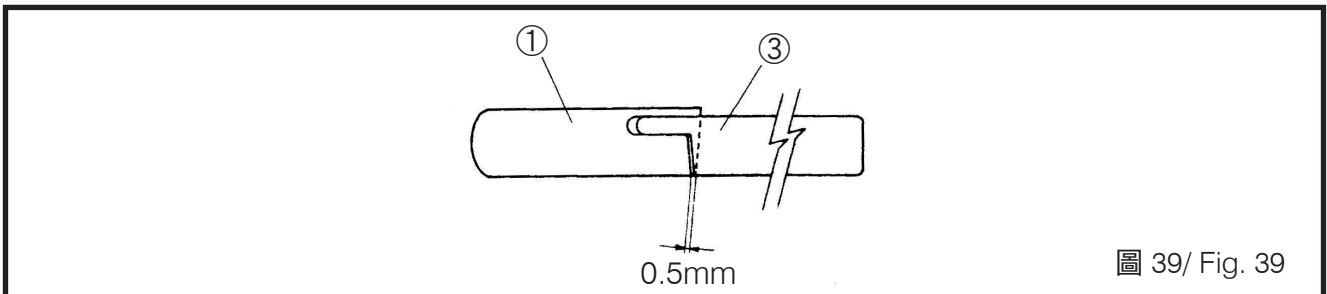


8. 調整切布刀

- (1) 底刀①的標準位置要留距離在底刀①尖端和鎖底刀座②之間 0-0.5mm。
(圖 39)
- (2) 當上刀③在最左邊時，上刀③和底刀①要有 0.5mm 的重疊。
- (3) 放鬆螺絲④和⑤去調整上刀和底刀。
(圖 40、圖 41)

8.Adjust knife

- (1) For the standard position of lower knife ①, make the distance between lower knife ① tip and the lower knife clamp ② to 0-0.5mm distance. (Fig.39)
- (2) When upper knife ③ is at the extreme left position, upper knife ③ and lower knife ① have to be overlapped about 0.5mm.
- (3) Loosen screws ④,⑤ to adjust upper knife and lower knife. (Fig.40、41)

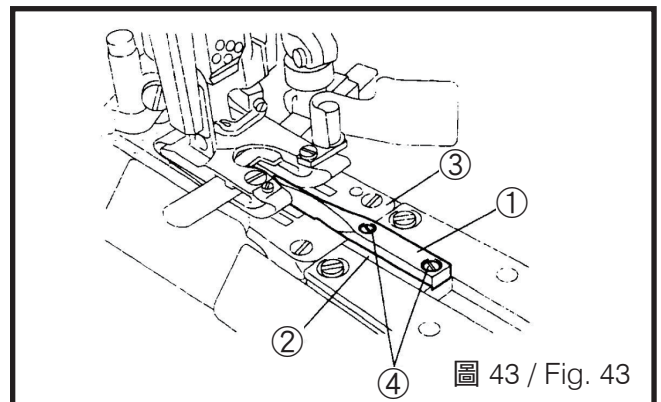
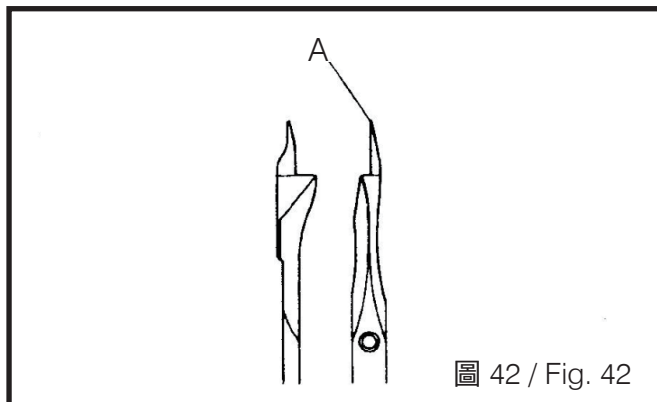


9. 導布器調整

- (1) 鬆開螺絲④調整位置，視刀的邊緣和刀齒去輕微的調整使導布器上的 A 點跟 4 支針的中間成一直線。(圖 42)
- (2) 前後的標準位置，設定滑塊②的停止位置在針板③前，視刀厚去輕微的調整位置。(圖 43)

9.Adjustment of fabric guide

- (1) Loosen screw ④ to adjust position, depend of the edge of the knife and knife teeth and fine adjust point A from the fabric guide and aligned point A with 4 needles in the middle. (Fig.42)
- (2) The fore-and-rear standard position, set slide block ② to stop in front of the needle plate ③, fine adjust the position by the thickness of knife. (Fig.43)



換針方法

WAY OF CHANGING NEEDLE

1. 車針系列

(1) 縫紉機用針

格洛茲貝克牌 UY118GKS
風琴牌 FLX118GCS

1. Sewing needle series

(1) Needle of sewing machine

Groz-Beckert UY118GKS
Organ FLX118GCS

日本規格 Japanese Standard	8	9	10	11	12	14
公制規格 Metric Standard	60	65	70	75	80	90

表 3 / Table 3

(2) 定位針

(四支針配合一支定位針。)

格洛茲貝克牌 36211, 36211A
風琴牌 FLG-1, FLG-8

(2) Retainer needle

(four sewing needle match one retainer needle.)

Groz-Beckert 36211, 36211A
Organ FLG-1, FLG-8

日本規格 Japanese Standard	8	9	10	11	12
公制規格 Metric Standard	60	65	70	75	80

表 4 / Table 4

提醒：

請選用適合的針給不同的材料。有些尺寸並沒有販售，請從目錄上確認尺寸。

Caution：

Please choose proper needle for different material. Please make sure the size from catalogue since some size of needles do not be sold.

2. 針的安裝

- (1) 旋轉轉輪將針抬到最高點。
- (2) 放鬆螺絲①。(圖 44)
- (3) 平面擺在前方將新針放入針鏢內最頂端，然後鎖緊螺絲①。

2. Needle installation

- (1) Rotate the wheel to raise the needle at the highest point.
- (2) Loosen screw ①。(Fig.44)
- (3) Place it flat in front and put the new needle into the top of the needle clamp, then loosen screw ①.

注意：

安裝針之前一定要先把馬達關掉，並確定馬達不會轉動。

Alert：

Must turn of the motor and make sure the motor are totally stopped before installing needle.

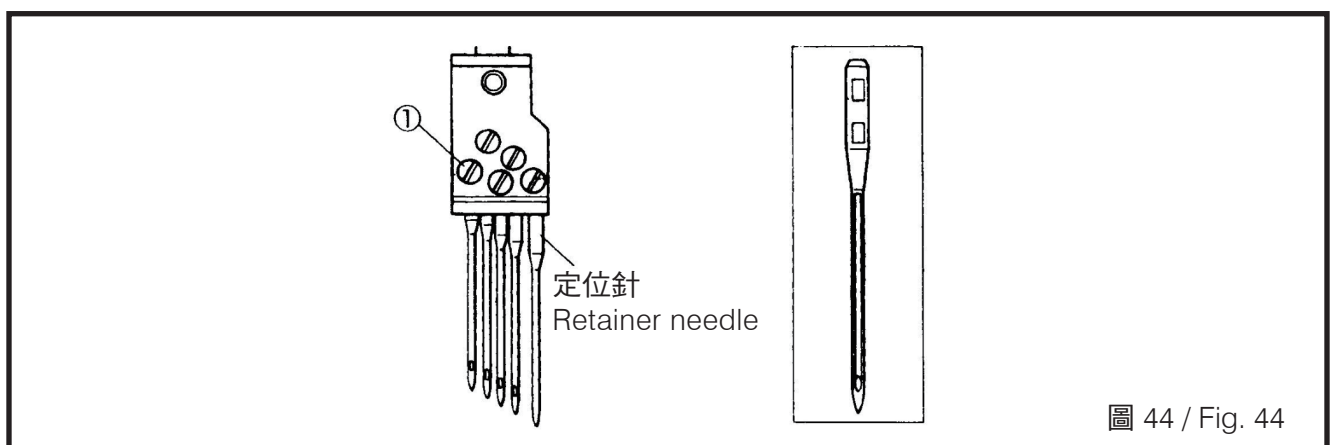


圖 44 / Fig. 44

規格件的更換及調節

REPLACEMENT AND ADJUSTMENT OF THE PARTS

1. 針位高度

第四支針跟針板的距離為“N”的高度，但針距大小不同，高度就不同，如表格五所示。

1. Height of needle

The distance of forth needle and needle plate equal height “N,” however, if the needle distance difference, height will be difference, too. As table 5 below:

針距 Needle distance	高度 (N) Height(N)
R : 5.2mm	13.5mm
S : 6.0mm	12.7mm

表 5 / Table 5

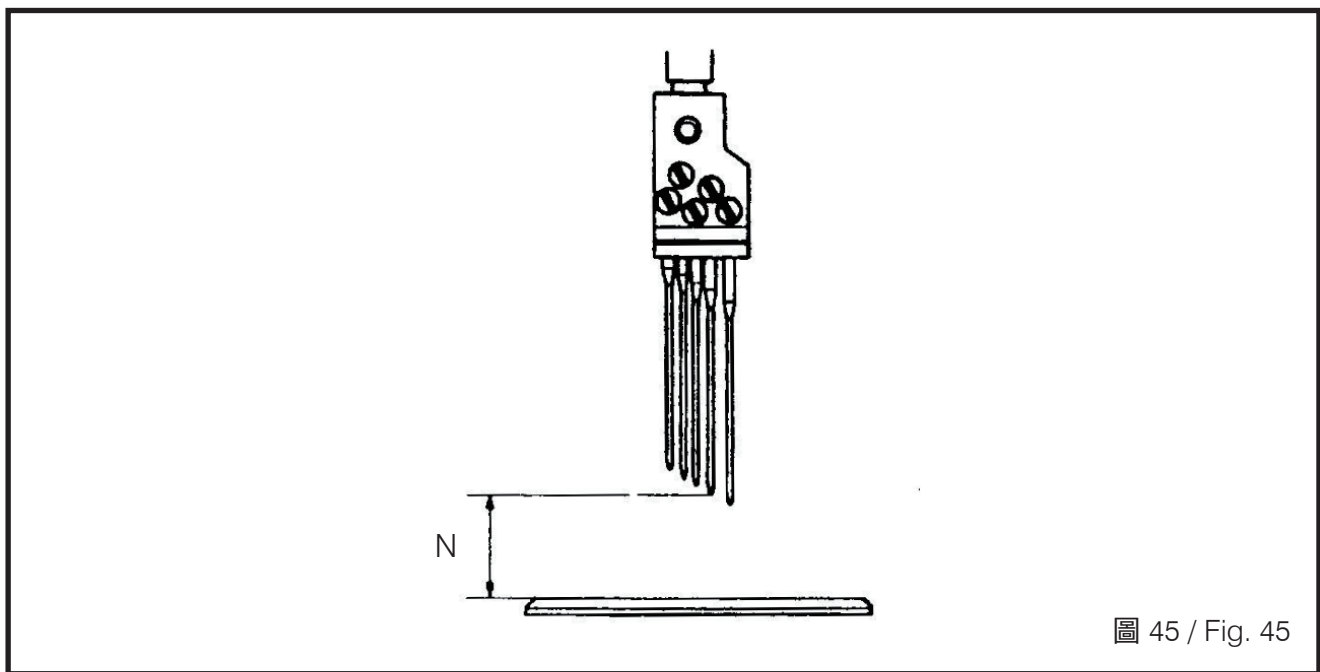


圖 45 / Fig. 45

調整高度：

- (1) 移開外蓋①。
- (2) 鬆開螺絲②。
- (3) 上下移動針柱③去調整，針與針孔須保持平行。
- (4) 鎖緊螺絲②。
- (5) 鎖回外蓋①。

Height adjustment :

- (1) Remove cover ①.
- (2) Loosen screw ②.
- (3) Move needle bar up and down ③ to do adjustment. Needle and needle eye need to keep parallel.
- (4) Tighten screw ②.
- (5) Reset screw ①.

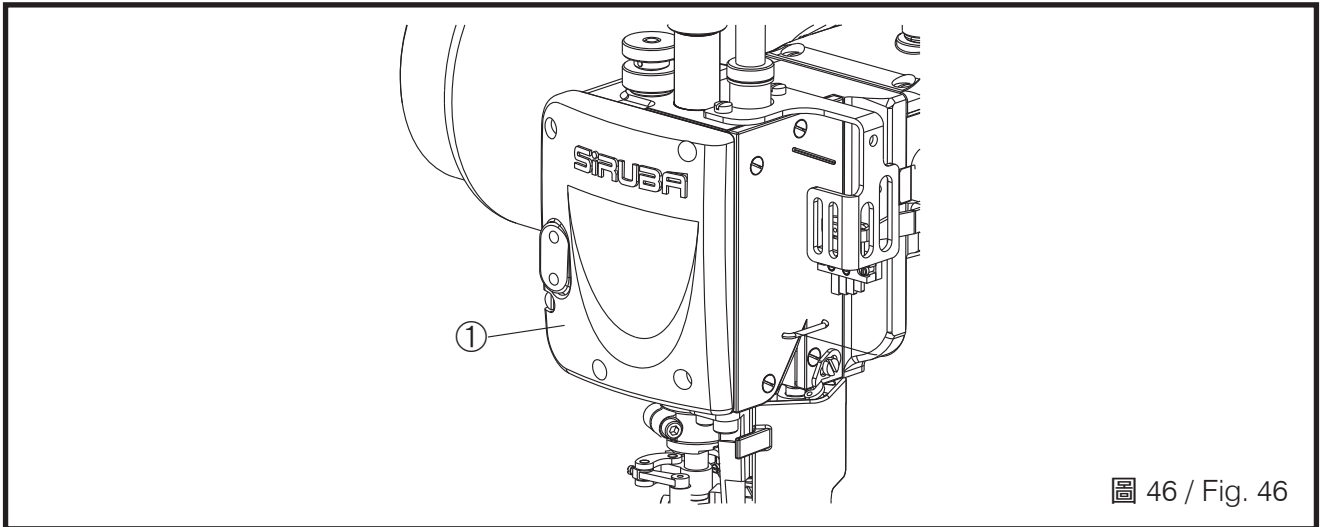


圖 46 / Fig. 46

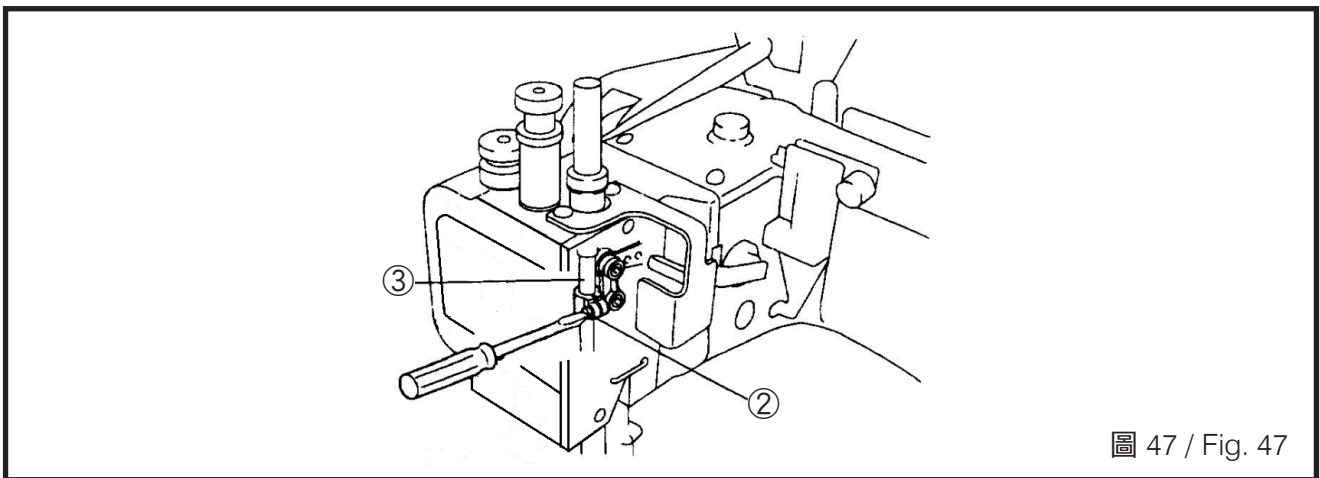


圖 47 / Fig. 47

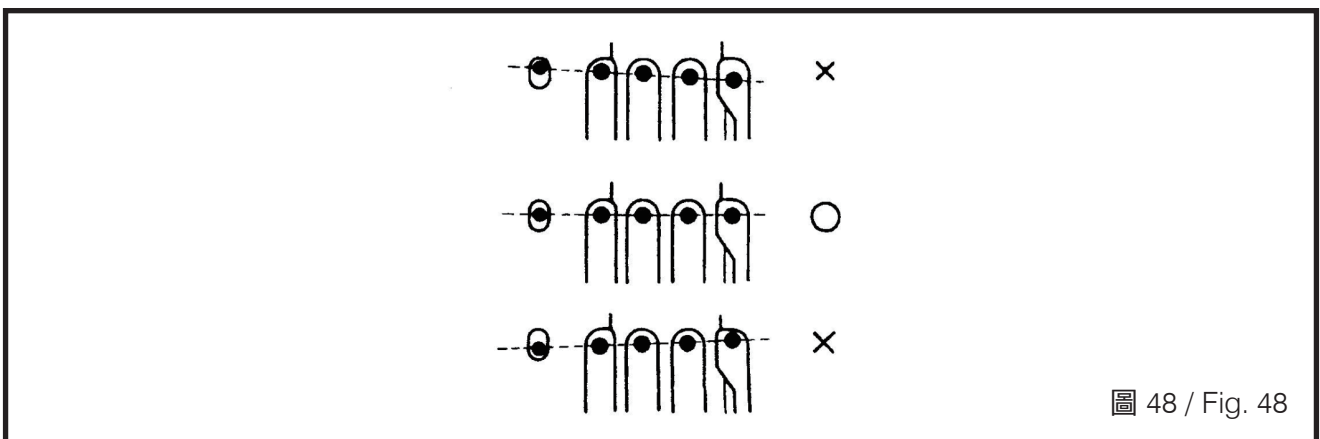


圖 48 / Fig. 48

2. 上勾針

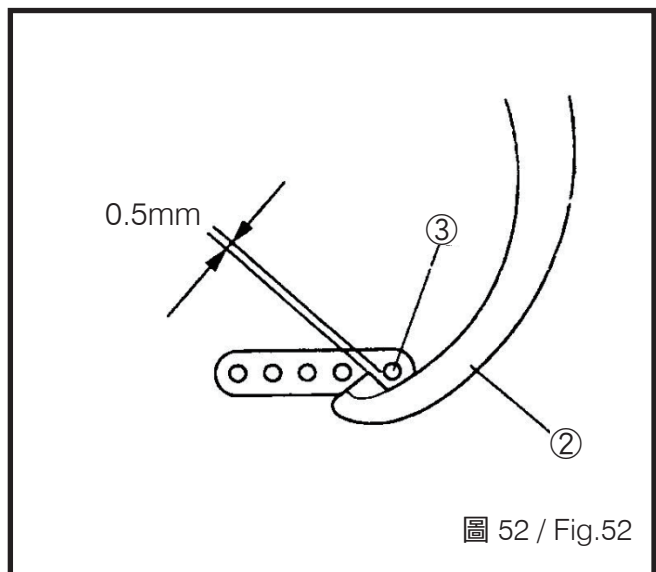
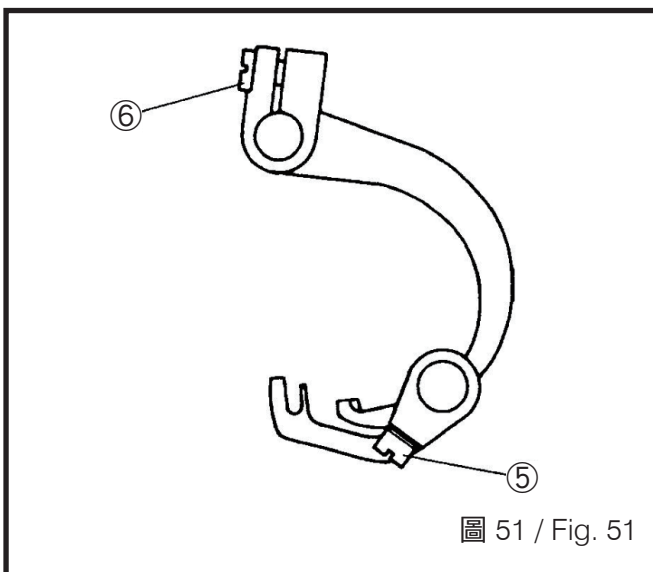
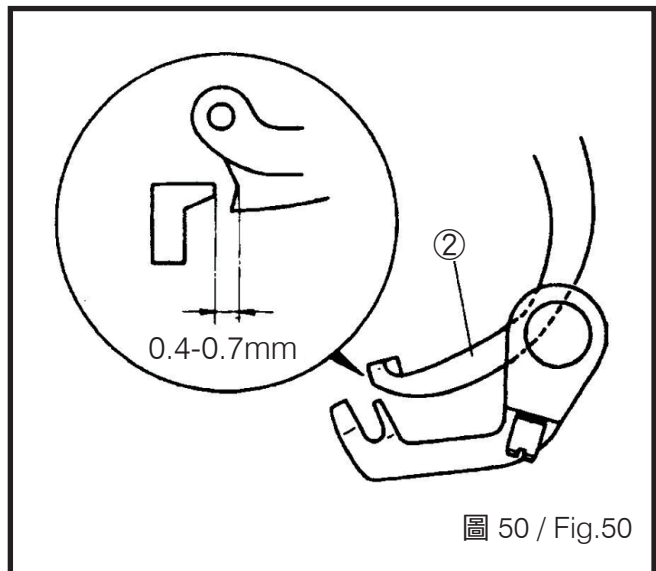
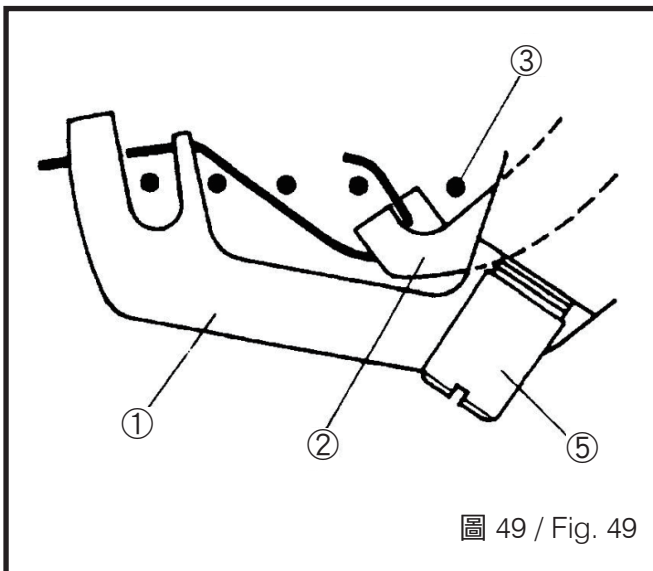
- (1) 上網線的時間點：
調整上勾針的位置形成線圈，使第一針
和第二針插入線圈內，放鬆螺絲⑤調整
上勾針①。
- (2) 當大上勾針②和小上勾針①最接近時的間
隙為 0.4-0.7mm。
- (3) 當大上勾針②停在最右邊時，和定位針③
要有 0.5mm 的間隙。
- (4) 放鬆螺絲⑥去調整。

註：要調整時不要抬壓腳的上下。

2. Upper looper

- (1) The timing of top cover thread :
Adjust the position of upper looper into
a circle, and make the first and second
needle go through into the circle. Loosen
screw ⑤, adjust upper looper ①.
- (2) The closest clearance between big upper
looper②and little upper looper ① is 0.4-
0.7mm.
- (3) When the big upper looper ② stopped
at the extreme right, it should be 0.5mm
clearance between retainer needle ③.
- (4) Loosen screw ⑥ to adjust.

Note : Do not move the presser foot lifter up
and down when does the adjustment.



3. 下勾針

- (1) 高度：
裝下勾針①到下勾針座上⑥然後鎖緊螺絲②。
- (2) 角度：
下勾針固定座平面 A 要和下勾針柱③成 90 度。放鬆螺絲②去調整下勾針。
- (3) 下勾針和針的距離：
當下勾針在最左邊的時候，下勾針和針的標準距離為 4.2-4.8mm。可放鬆螺絲④去調整。
- (4) 下勾針的前後位置：
當下勾針①移動從左到右，會在針的後面。調整其位置使下勾針更接近針，其間隙 0-0.05mm，但不能碰到針，當下勾針的尖端在左針的中間時，放鬆螺絲④轉動螺絲⑤調整前後位置。調整之後檢查間隙和鎖緊螺絲④。

- 順時間旋轉螺絲⑤會往前。
- 逆時間旋轉螺絲⑤會後後。

3. Lower looper

- (1) Height：
Install lower looper ① on lower looper seat ⑥, then tighten screw ②.
- (2) Angle：
Fix the surface A of the looper at 90to the looper ③. Loosen screw ② to adjust lower looper.
- (3) The distance between lower looper and needle:
When lower looper is at the extreme left, the standard distance between lower looper and needle is 4.2-4.8mm. Loosen screw ④ to do adjustment.
- (4) The front-and-rear position of lower looper:
When lower looper ① moves from the left to the right, it passes behind the needle. Adjust its position to make lower looper closer to the needle with the clearance of 0-0.05mm but without touching them when the lower looper tip comes at the center of the left needle. Loosen screw ④ and turn screw ⑤ to adjust front-and-rear position. After adjustment, check the clearance and tighten screw ④.

- (4) The front-and-rear position of lower looper:
When lower looper ① moves from the left to the right, it passes behind the needle. Adjust its position to make lower looper closer to the needle with the clearance of 0-0.05mm but without touching them when the lower looper tip comes at the center of the left needle. Loosen screw ④ and turn screw ⑤ to adjust front-and-rear position. After adjustment, check the clearance and tighten screw ④.
- To move forward, turn the screw ⑤ clockwise.
 - To move backward, turn the screw ⑤ counterclockw

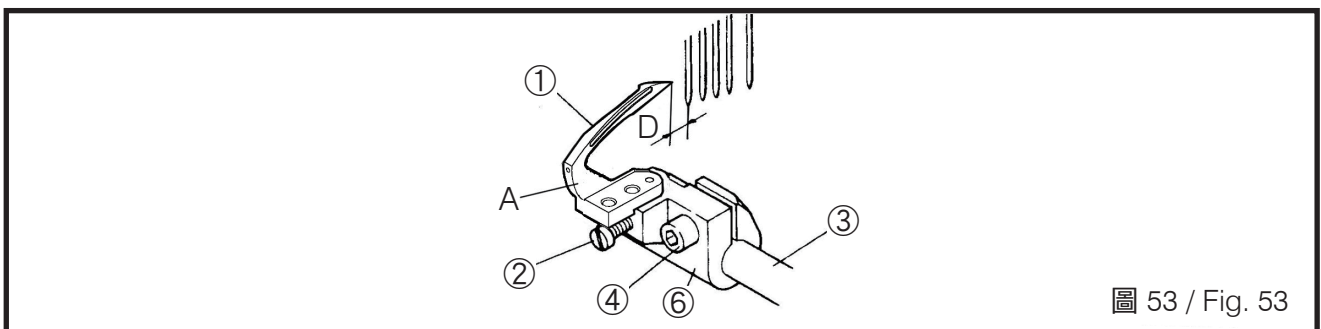


圖 53 / Fig. 53

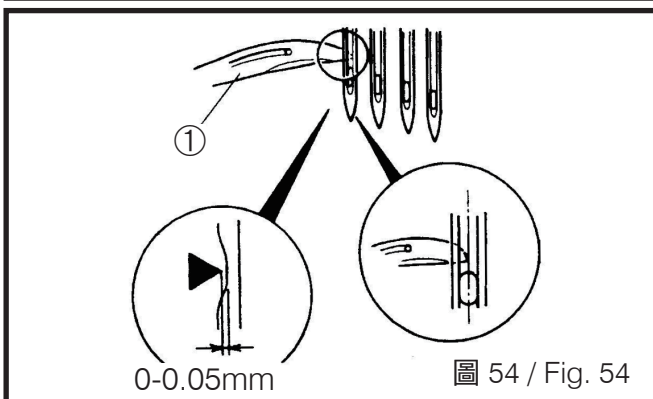


圖 54 / Fig. 54

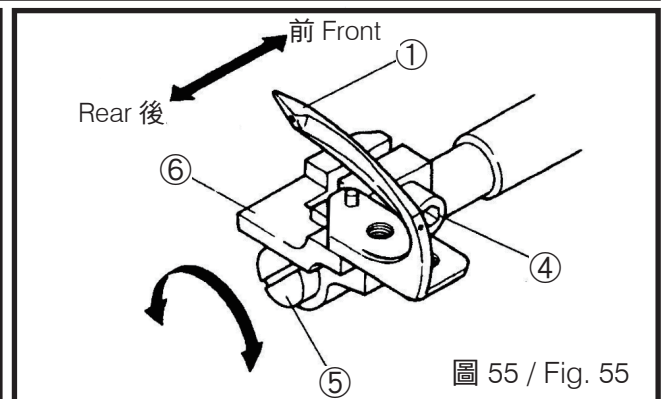


圖 55 / Fig. 55

4. 前護針片

當勾針③在左針中間時，推前護針片①，使針和下勾針的間隙為 0mm。放鬆螺絲②去調整它。當下勾針左移到右時，檢查下勾針③有無碰到針的後面，看針有無左右移動。

4. Front needle guard

Push the front needle guard ① so that the clearance between the needle and the looper is 0mm when the looper ③ comes at the center of the left needle. Loosen screw ② to adjust it. Check whether lower looper ③ touch the back of the needle and needle have moved left and right, while lower looper move left from the right.

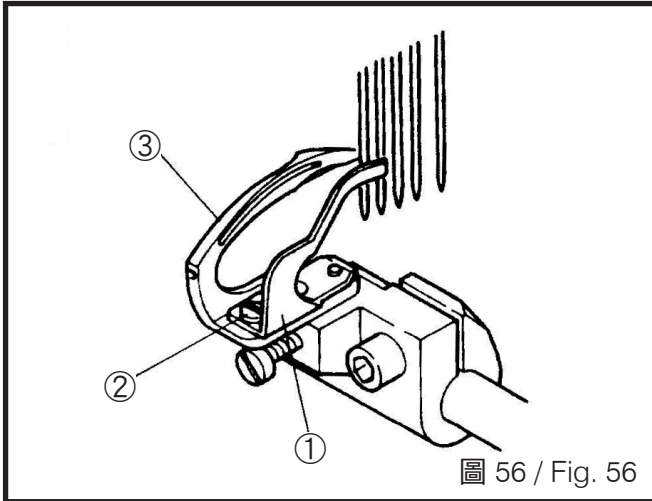


圖 56 / Fig. 56

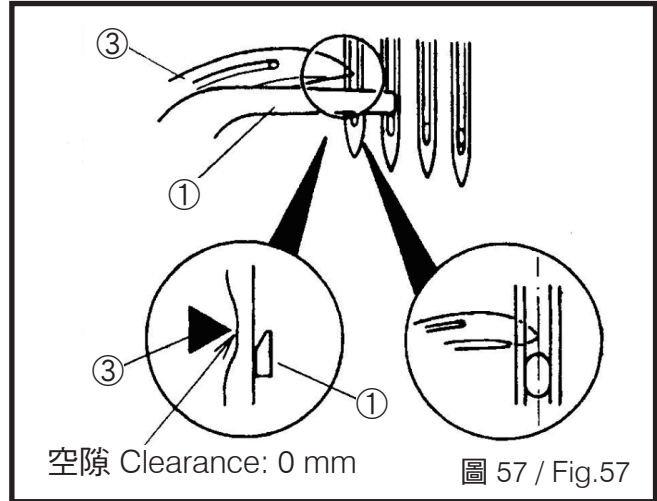


圖 57 / Fig. 57

5. 後護針片

當後護針片④和針最靠近的時候，要有 0.05-0.1mm 的間隙。由螺絲⑤去調整。當下勾針從左移到右時，後護針片不能碰到針。

5. Rear needle guard

Make the clearance between the rear needle guard ④ and the needle to 0.05-0.1mm when they meet most closely. Use screw ⑤ to adjust.

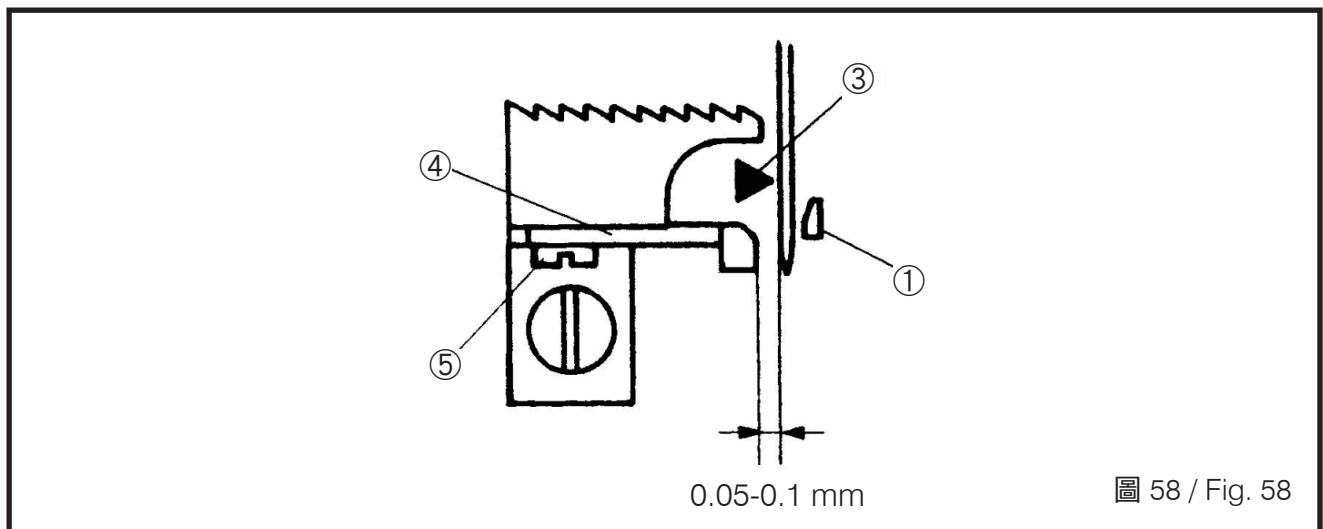
The rear needle guard shall not touch the needle when the lower looper move from the left to right.

注意：

當有調整針距時，注意後護針片要重新整調。

Caution :

Be careful to readjust the rear needle guard when adjust the distance of needle.



0.05-0.1 mm

圖 58 / Fig. 58

6. 送布齒

(1) 安裝：

固定差動的送布齒和主要送布齒③用螺絲②和④固定後，護針片⑤在主送布齒上調整時，鬆開螺絲⑥。

(2) 高度：

當送布齒在最高點時，主送布齒③和針板的高度為 1.2-1.5mm，前後送布齒必須保持一樣的高度。

(3) 高度微調：

送布齒的高度後調要旋轉偏心銷⑧來控制。放鬆螺絲⑦然後調整偏心銷⑧的高低。

- 順時針旋轉偏心銷⑧調高送布齒。
- 逆時針旋轉偏心銷⑧降低送布齒。

6. Feed dog

(1) Installation :

Use screws ②④ to fixed differential feed dog and main feed dog ③. Loosen screw ⑥, when needle guard ⑤ adjust on the main feed dog.

(2) Height :

The main feed dog ③ and needle plate at the height 1.2-1.5m, when the feed dog is at the highest point. Align the differential feed dog with main feed dog at the same height.

(3) Fine adjustment of height :

Turn the pin ⑧ to adjust the height of the feed dog. Loosen screw ⑦, then adjust the height of the pin ⑧.

- To raise the feed dog, turn the pin ⑧ clockwise.
- To lower the feed dog, turn the pin ⑧ counterclockwise.

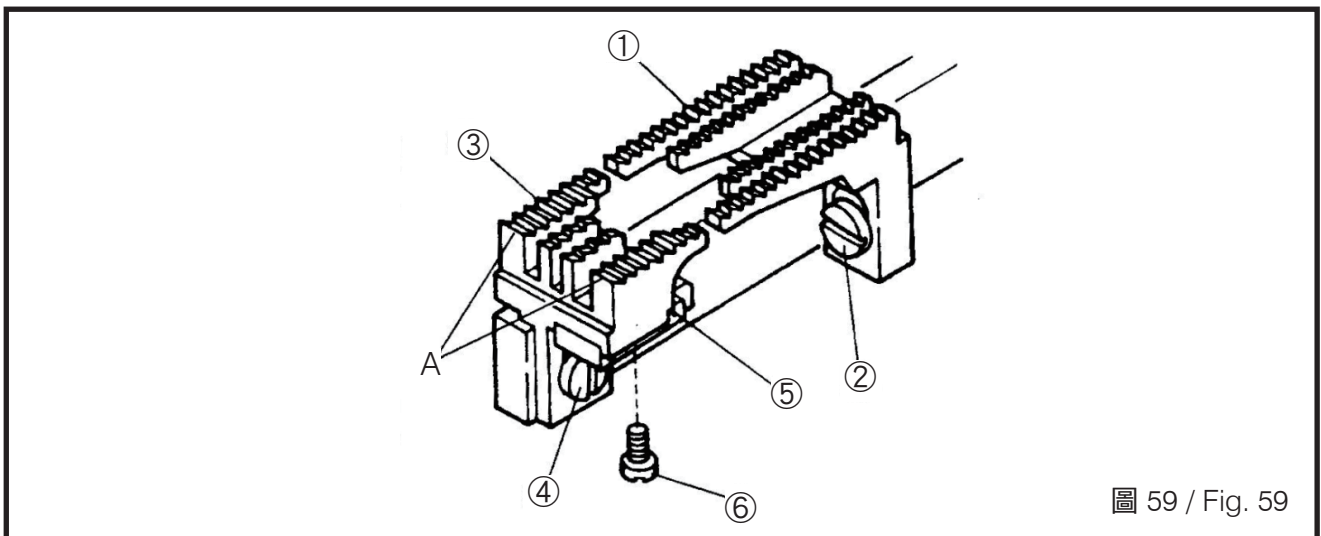


圖 59 / Fig. 59

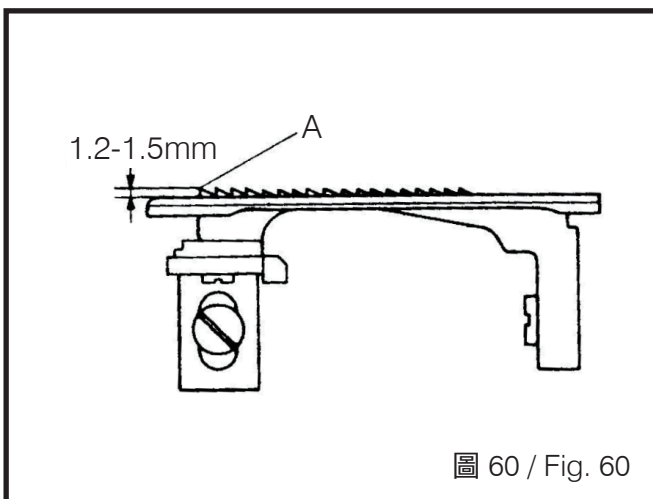


圖 60 / Fig. 60

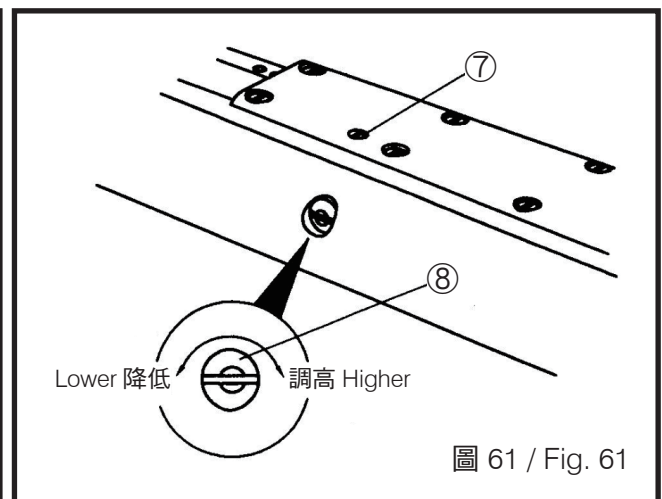


圖 61 / Fig. 61

7. 壓腳

拆除方法：

- (1) 移開前蓋①和所有的針。
- (2) 放鬆調整螺帽②然後才鬆開螺絲③。
- (3) 鬆開刀台的螺絲④讓整組刀架鬆開。
- (4) 鬆開刀座連桿⑥的兩螺絲⑦，移除上刀座⑤和上刀。
- (5) 放鬆壓腳螺絲⑧。
- (6) 將針轉到最高點，然後移除調整螺帽②和抽出壓腳柱⑨和壓腳彈簧⑩。
- (7) 推開上勾針驅動片⑪從帶動桿⑫脫離。
- (8) 向左轉，拆下整組壓腳穿過左邊壓腳檔⑬。

組裝方法：

- (1) 拆掉全部的針重新裝上壓腳在左右壓腳檔之間，向右旋轉，放正壓腳。
- (2) 重新裝上上勾針驅動片⑪到帶動桿⑫裡面。
- (3) 安裝壓腳柱插入上勾針驅動片⑪後鎖上壓腳後面的螺絲⑧。
- (4) 檢查壓腳是否順暢沒有左右晃動，如果有卡住，鬆開左壓腳檔⑬的螺絲⑭去調整。
- (5) 重新裝上刀台⑤固定在刀座⑥支撐架上。
- (6) 調整刀台和上刀的位置，當針在最低點的時候。
- (7) 當壓腳緊貼在針上和針在最低點時，重新裝上壓腳彈簧⑩及調整螺帽②，然後輕輕的壓下螺絲③並鎖上。
- (8) 鎖上外蓋①並裝回所有的針。

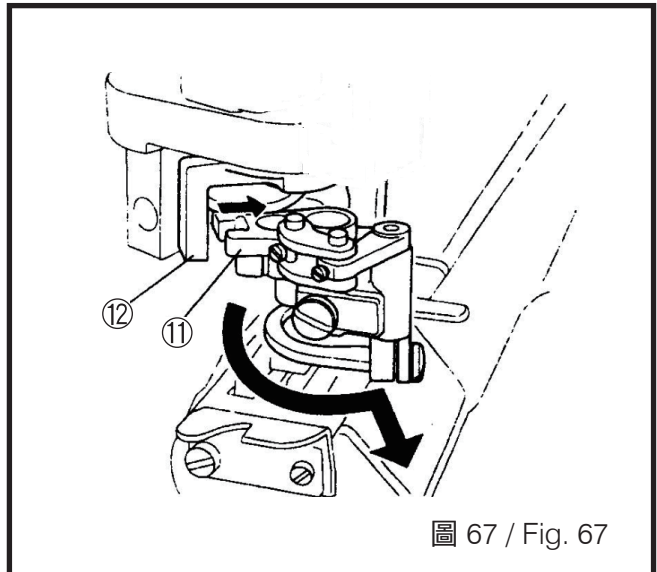
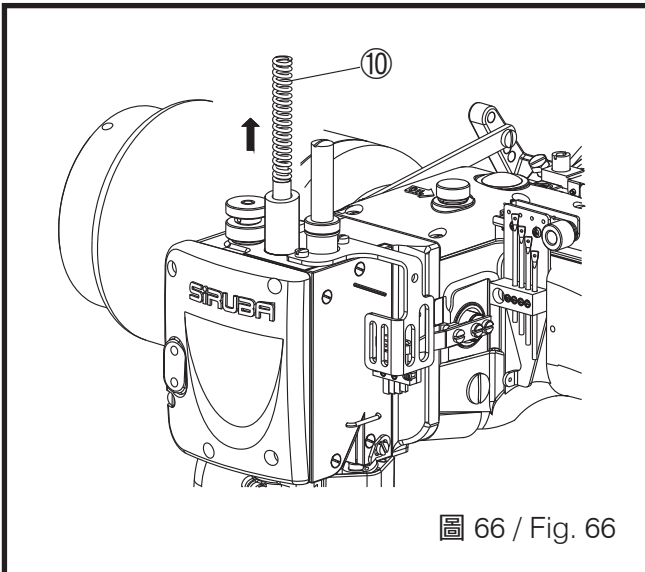
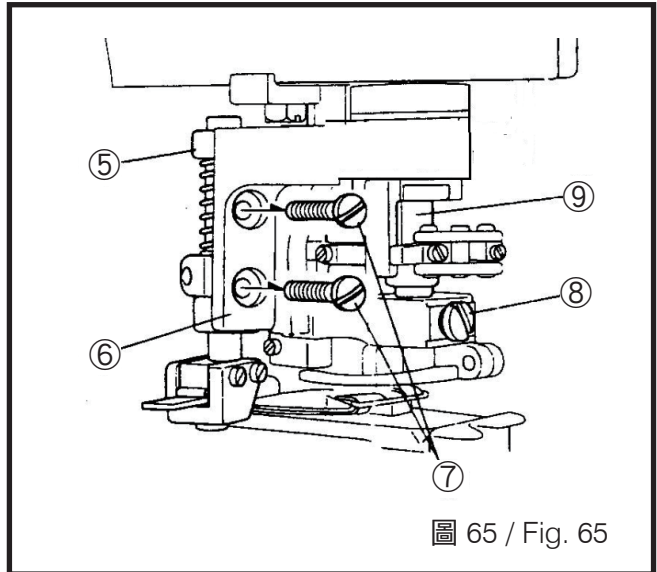
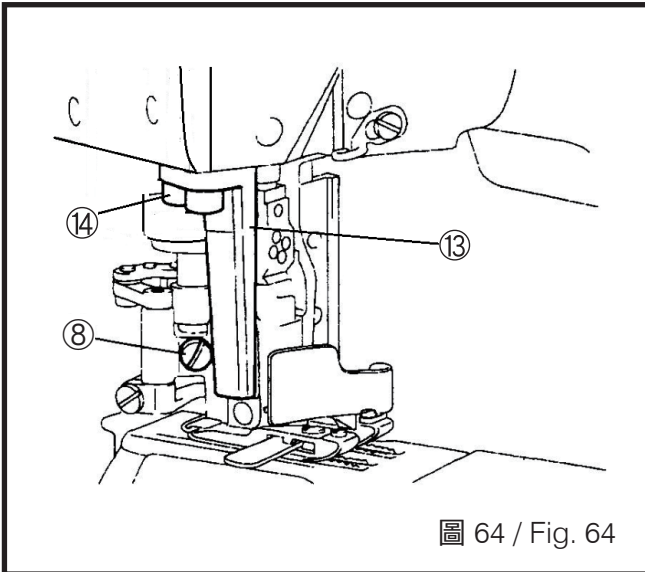
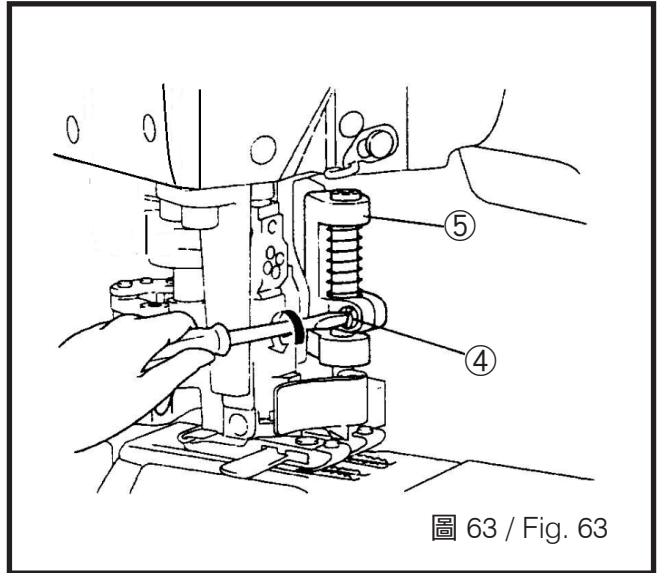
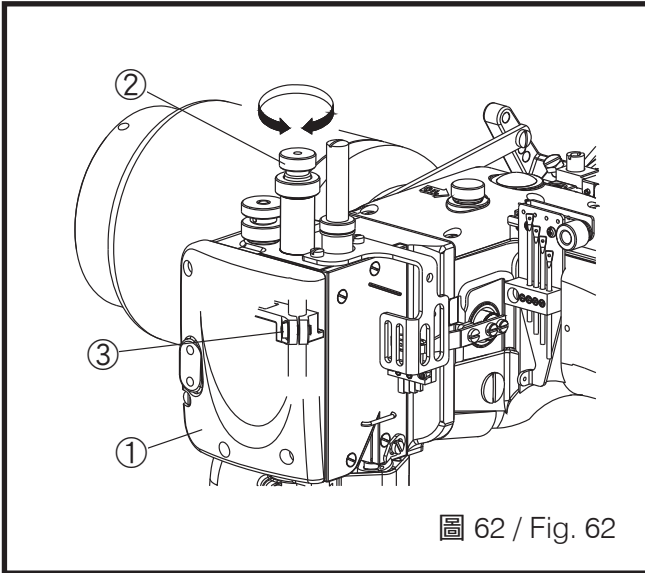
7. Presser foot

Way to remove :

- (1) Remove cover ① and all of the needles.
- (2) Loosen screw nut ②, then loosen screw ③.
- (3) Loosen screw ④ of knife holder, to free the complete of knife set.
- (4) Loosen two screws ⑦ from knife holder bracket ⑥, remove upper knife ⑤ and upper knife.
- (5) Loosen presser foot screw ⑧.
- (6) Turn the needle to the highest point, then remove adjusting screw nut ② and take off presser foot bar ⑨ and presser foot spring ⑩.
- (7) Remove upper looper driving segment ⑪ from lever ⑫.
- (8) Turn it left, and remove the whole set of presser foot through the left presser foot guide ⑬.

Way of assembling :

- (1) Remove all of the needles and reset the presser foot in the middle of the left and right presser foot guard. Turn it right and put the right presser foot.
- (2) Reset the upper looper driving segment ⑪ inside to the lever ⑫.
- (3) Insert the presser foot bar into the upper looper driving segment ⑪, then tighten the screw ⑧ behind the presser foot.
- (4) Check whether presser foot move smoothly without shaking, if it stuck, loosen screw ⑭ of left presser foot guard ⑬ to adjust.
- (5) Reset the knife holder ⑤ and fixed on the knife holder bracket ⑥.
- (6) Adjust position of knife holder and upper knife, while the needle at the lowest point.
- (7) When the needle is at the lowest point and the presser foot closely touch the needle, reset the presser foot spring ⑩ and adjust the screw nut ②, then slightly presser the screw ③ and tighten it.
- (8) Reset the cover ① and all of the needles.



8. 壓腳彈簧片

拆除方法：

- (1) 拆掉螺絲①。
- (2) 拆掉壓腳彈簧片②。
- (3) 移開彈簧片勾③才能拿掉彈簧片②。

組裝方法：

- (1) 重新裝上壓腳彈簧片②和壓腳彈簧片勾③。
- (2) 每片彈簧片②要對齊壓腳座。
- (3) 鎖上螺絲①。

8.Presser foot spring plate

Way to remove :

- (1) Remove screw ①.
- (2) Remove presser foot spring plate ②.
- (3) Remove spring plate holder ③, then remove the spring plate ②.

Way of assembling :

- (1) Reset spring plate ② and spring plate holder ③.
- (2) Each spring plates ② have to align with presser foot seat.
- (3) Tighten screw ①.

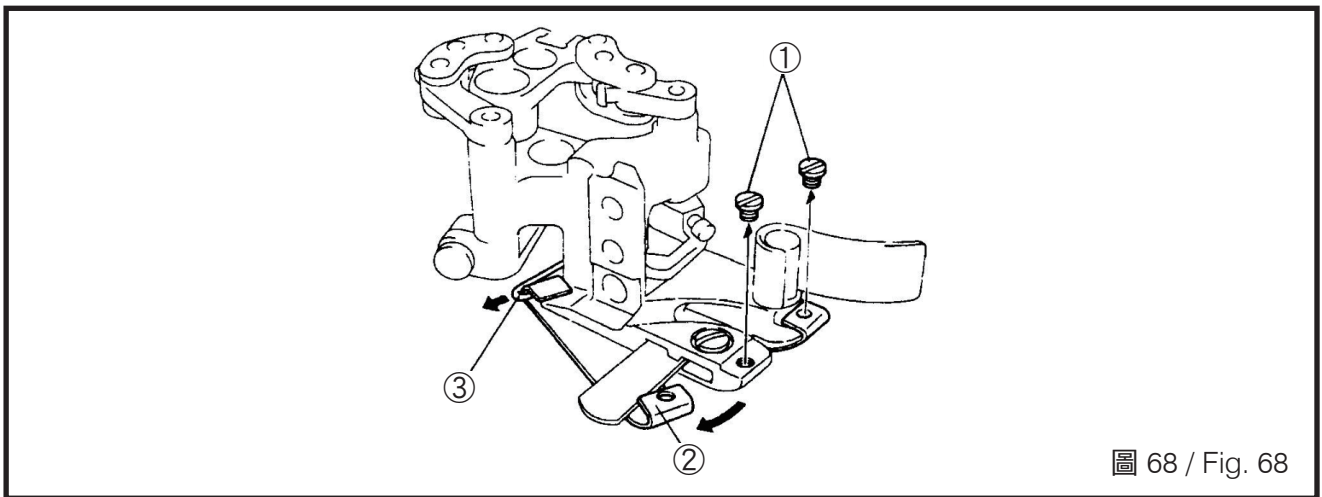


圖 68 / Fig. 68

9. 切刀

上切刀的壓力調整：

- (1) 當針在最高點，上切刀在左邊時壓腳要貼著針板上，上切刀①刀刃要貼合下切刀②的刀刃。
- (2) 刀座③和壓力彈簧軸環④之間的標準間隙為 1.0mm。
- (3) 鬆開螺絲⑤和移動軸環④調整壓力。
 - 增加壓力往上移動彈簧軸環④。
 - 減少壓力往下移動彈簧軸環④。

註：

上刀①和下刀②前方成一直線時，上刀不能碰到壓壁，正確後固定彈簧軸環。

9.Knife

Adjustment of upper knife pressure:

- (1) When the needle is at the highest point, presser foot needs to touch on the needle plate when the upper knife is at the left. The blade of upper knife ① has to touch closely with the blade of lower knife ②.
- (2) The standard clearance between the knife seat ③ and the knife holder guide collar ④ is 1.0mm.
- (3) Loosen screw ⑤ and move the knife holder guide collar ④ to adjust the pressure.
 - To increase the pressure, move the collar ④ upward.
 - To decrease the pressure, move the collar ④ downward.

Note :

Align the front side of the upper knife ① and lower knife ②, without touching the upper knife with the presser foot. After, fixed the knife holder guide collar.

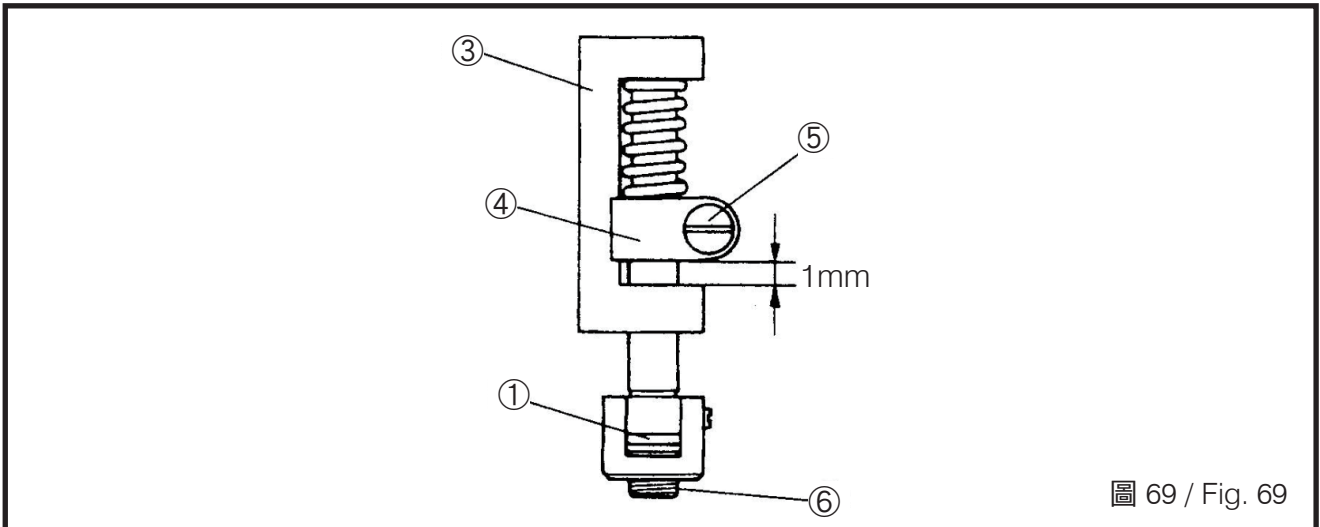


圖 69 / Fig. 69

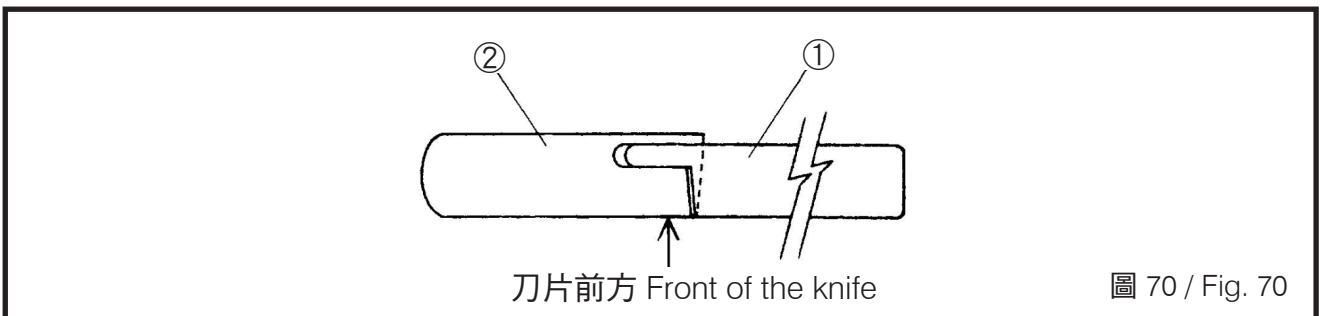


圖 70 / Fig. 70

拆除方法：

- (1) 放鬆螺絲⑤和⑥才能拆掉上切刀①。
- (2) 放鬆螺絲⑦才能拆掉下切刀②。

組裝方法：

- (1) 重新安裝下切刀②要鎖緊螺絲⑦。
- (2) 重新安裝上切刀①要鎖緊螺絲⑥。

上切刀角度之調整：

- (1) 拆掉① - ⑤的部份，以螺絲⑥去調整刀的角度。
- (2) 重新安裝時要注意插銷⑦有無對準刀座⑧上的孔。

Way to remove :

- (1) Loosen screws ⑤⑥, then remove upper knife ①.
- (2) Loosen screws ⑦ then remove lower knife ②.

Way of assembling :

- (1) Reset lower knife ②, tighten screw ⑦.
- (2) Reset upper knife ①, tighten screw ⑥.

Adjustment of upper knife angle:

- (1) Remove parts ①-⑤, use screw ⑥ to adjust angle of the knife.
- (2) Be careful whether the screw ⑦ have insert correctly into the hole of knife seat ⑧.

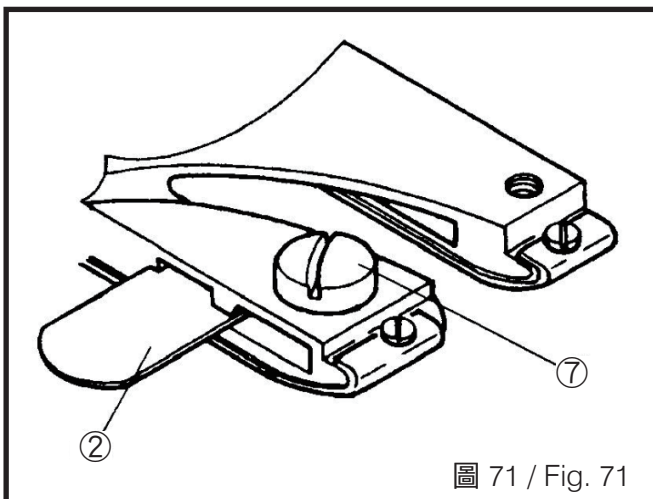


圖 71 / Fig. 71

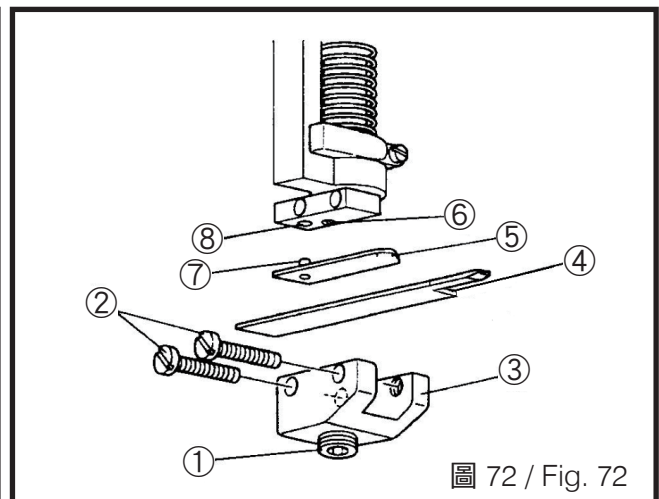
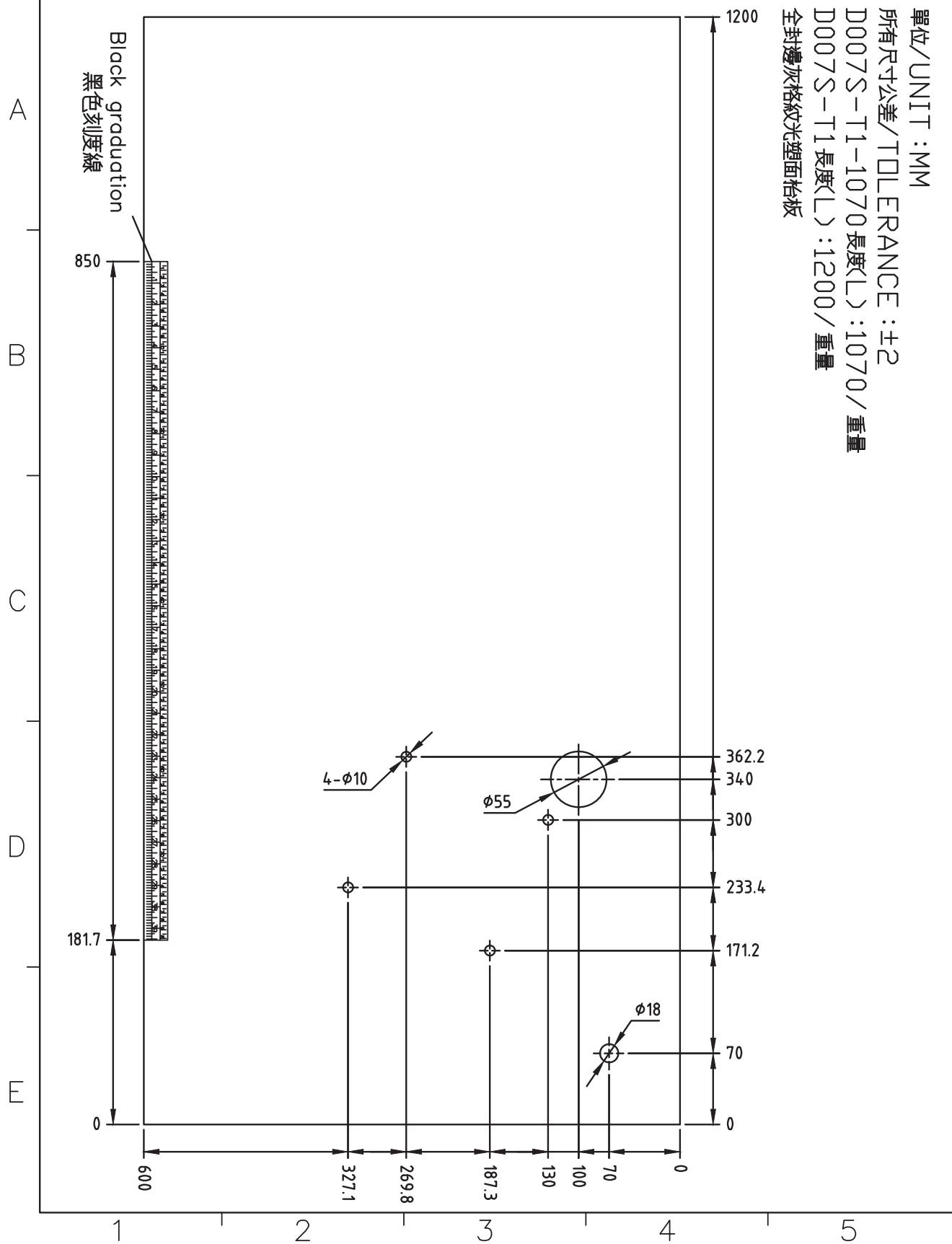
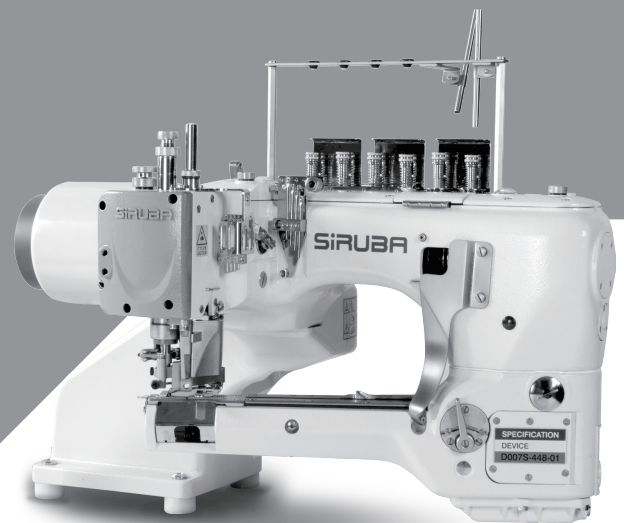


圖 72 / Fig. 72

SIRUBA TABLE CUT-OUT	Series	Parts Group	Subclass / Remark	Page
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				Date
				2015/02/11





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