DL7200-NF

高林股份有限公司 KAULIN MFG. CO., LTD.

The specification and/or appearances of the equipment described in this instruction book are subject to change because of modification without previous notice.

LY1504

SiRUBA®

銀箭牌工業用縫紉機

INDUSTRIAL SEWING MACHINE

DL7200-NF

使用說明書
INSTRUCTION BOOK

CE

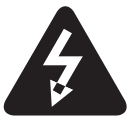
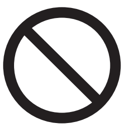
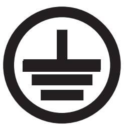
高林股份有限公司
KAULIN MFG. CO., LTD.

本使用說明書內容適用於以下機型：
The content of this instruction book is for the models:
DL7200-NM1/NH1/XX

危險水準的說明
Explanation of Dangerous Level

 危險 Dangerous	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 Don't ignore the warning sign and don’t proceed incorrect operation. Or it will cause the person or the third party seriously injured or dead during maintenance.
 注意 Caution	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 Ignoring this warning sign and proceed incorrect operation will cause the person involved or the third party wounded and equipment damaged during maintenance.

警告圖案表示及表示標誌的說明
Explanation of Warning Signs and Labels

警告圖案表示 Warning Sign		運動部位, 謹防工傷事故 Moving part, beware of industrial accident
		高壓部位, 謹防觸電事故 High voltage, beware of electric shock
		高溫部位, 謹防燙傷事故 High temperature, beware of burns
指示標幟 Instruction Label		禁止 Prohibited
		地線的接線表示 Indication of ground wiring

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一般安全事項說明

GENERAL SAFETY INSTRUCTIONS

警告！

當使用這台機器，基本安全預防應恆被遵守，以減輕火災、電擊、或是個人傷害的風險。包含以下注意事項。
在操作這台機器之前，請閱讀所有說明並且謹記於心。

1. **保持工作場所清潔**
   雜亂的環境與椅子會招引危害。

2. **考量工作場所環境**
   勿暴露電源於雨水之中、勿在濕氣重的地方或潮濕的場所使用機械器具。保持工作場所良好整齊。當有引發火災或爆炸危險時，勿使用電源工具。

3. **免於電擊危害**
   避免身體接觸地線或是接地表面。(即：管線，發熱物體，以及冷凍庫)

4. **勿使孩童接近**
   不要讓訪客碰觸工具或是延伸管線

5. **適當的穿著**
   不要穿著寬鬆衣物或穿戴珠寶，這可能被活動零件拉扯而導致危險。穿戴護髮套以包含住長髮。

6. **不要任意拉扯電線**
   絕不要用電線端拉扯機器，或是從插座猛拉電線來拔掉電線。使電線遠離熱源、油類或是尖銳邊緣。

7. **謹慎保養機器**
   遵從指示來添加潤滑油或是更換附件。定期檢測工具用線，如果有所損害，請使用合格的維修器具來修復。

Warning!

When using this machine, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury, including the followings.
Read all these instructions before operating this product and save these instructions.

1. **Keep work area clean**
   Cluttered areas and benches invite injuries.
2. **Consider work area environment**
   Do not expose power to rain. Do not use machine tools in damp or wet locations. Keep work area well lit.
   Do not use power tools where there is risk to cause any fire or explosion.
3. **Guard against electric shock**
   Avoid body contact with earthed or grounded surfaces (e.g. Pipes, radiators, ranges refrigerators.)
4. **Keep children away**
   Do not let visitors touch the tool or extension code.
5. **Dress properly**
   Do not wear loose clothing or jewelry, they can be caught in moving parts. Wear protecting hair covering to contain long hair.
6. **Do not abuse the cord**
   Never carry the machine by cord or yank it to disconnect it from the socket. Keep the cord away from heat, oil, and sharp edges.
7. **Maintain machine with care**
   Follow instructions for lubrication and changing accessories. Inspect tool cord periodically. If damaged, have it repaired by an authorized service facility.

8. **分開機器**
當不使用機器時、維修前、以及更換配件時。

9. **避免誤啟動**
不要以手指置於啟動開關上之後，搬運一個已插入電源的工具。確定在插電之前，電源開關是關閉的。

10. **檢查損害零件**
在進一步使用器具之前，應該小心檢查並確認損傷的零件或是穿戴保護器具來確認零件會正確運轉並且呈現應有功能。

11. **警告**
除了在這本使用說明手冊中建議的功能之外，任何附件或是配件的使用，都可能會導致個人傷害的危險。

12. **由合格人員來修理器具**
所以的修理工作應該由合格的人員使用原始個別零件來作修理。

連接電源的特別警示

1. 只可與有"CE"認證的按壓啟動裝置連接這台機器。
2. 遵守此使用說明手冊來安裝控制裝置。
3. 在操作過程中，永遠保持機器適當的接地。
4. 在調整、更換零件、或是維修保養之前，必須確定將插頭由插座拔出，以預防任何機器意料之外的啟動而造成危害。

8. **Disconnect machine**
When not in use, before servicing and when changing accessories.

9. **Avoid unintentional starting**
Do not carry a plug-in tool with a finger on the switch. Ensure the power switch is off when plugging in.

10. **Check damaged parts**
Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function.

11. **Warning**
The use of any accessory or attachment, otherthan those recommended in this instruction manual, may present a risk of personal injury.

12. **Have your tool repaired by a qualified person**
Repairs should only be carried out by qualified persons using original spare parts.

SPECIAL WARNING FOR ELECTRIC CONNECTION!

1. Incorporate this machine only with “CE” certificate hold-to-run control device.
2. Follow the instruction manual device to install control device.
3. Always earth machine appropriately during operation.
4. Before adjustment, parts change or servicing must be sure to pull out the plug from socket to prevent the hazard of unintentionally start of machine.

重要安全事項說明

恭喜您購買本機器, 為了使這台機器能獲得最佳功能以及安全的操作，務必請正確的使用這台機器，使用前請仔細閱讀使用說明書，希望您能長期使用它。請記得將此說明書放在容易取得的地方。

1. 當您使用機器時，除了以下事項外，請注意其他基本安全措施。
2. 使用機器前，除了這本使用說明書外，請詳細閱讀其他有關說明書。此外，請妥為保存這本使用說明書，以便需要時可以隨時取閱。
3. 先確認機器是符合貴國安全規定及標準後，再使用機器。
4. 當機器完成操作準備時，所有安全配備必需安裝就緒，在缺少所述安全配備下操作是不被允許的，以免導致人員受傷。
5. 此機器應由受過適當訓練之操作員操作。
6. 為了安全，我們建議您配戴安全眼鏡。
7. 以下情形，請先關閉電源或拔掉插頭：

   (1) 穿針線、線導片、 天平等以及更換梭子時，

   (2) 更換針、押具、針板、送具、頂針片、喇叭、車布導板，以及其他附屬配件時。

IMPORTANT SAFETY INSTRUCTIONS

For operating safely and getting the best functions of this machine, you must operate it correctly. Please read and follow the instructions of this manual, and keep it at hand for future references. We are confident that you will enjoy this machine as much as we enjoy manufacturing it.

1. Instead of the following instructions, when you use this machine, please pay attention to the basic safety measures.
2. Before using this machine, please read this manual and all related instructions. In addition, please keep this manual for future needs.
3. Before using this machine, please ascertain that it conforms with safety standards and regulations of your country.
4. When the machine is ready for operation, all the safety equipments must be ready. Operate this machine without the specified safety devices is not allowed.
5. This machine must be operated by a properly trained operator.
6. For your own safety, we suggest you wearing goggles.
7. Please turn off the power switch or disconnect it for any one of the circumstances of the followings :

   (1) When threading needle(s), adjusting thread Take-up(s), thread guide(s), and / or replacing bobbin(s),

   (2) When replacing needles, presser feet, needle plates, feed dogs, needle guards, horns, cloth guides and other parts or accessories,

(3) 維修工作時。
(4) 離開工作場所或工作場所無人看顧時。

(5) 若使用離合器馬達而無煞車片裝置時，必需待馬達完全停止。

8. 假如不慎讓機器及配件使用之油或油脂, 接觸到眼睛、皮膚或誤食時，請立刻以水清洗接觸部位及就診。

9. 請勿擅自碰觸運轉中之零件或配件及注意機器電源是否已開啟，以免導致人員受傷。

10. 維修、修改及調整等工作，需由受過適當訓練的技師或熟手為之。維修時只許使用指定之零件。

11. 一般維修及檢查工作必須由受過適當訓練的人員為之。

12. 電子零件維修及保養工作必須由資深的電子技師為之，或由非常熟練的人員檢查及指導，當發現零件損壞時，請立刻停止機器運轉。

13. 在做裝有氣動式零件(例如氣缸)機器的維修及保養工作前，機器連接空壓機及高壓空氣必須予以關閉及卸除，機器中殘存高壓氣體必需予以消除，此外調整及性能檢查只能由受過適當訓練的技師或熟手為之。

14. 機器使用一段時間，必需定期清理。

(3) When repairing,
(4) When the operator leaves the working place or leaves the machine unattended.
(5) If clutch motors without brake pads are used, must wait until the motor stops completely.

8. If grease, oil, or any fluid contacts your skin or eyes by any chance, please wash the contacted area completely with clean water and consult a doctor. Or, swallow any fluid mistakenly, consult a doctor immediately.

9. Do not touch any functioning parts and devices. Always attend to whether power switch is on or off before operating in order to prevent anyone from getting hurts.

10. Qualified technicians are required for adjustment, modification, and repair. Only use assigned parts for replacement.

11. Routine maintenance and service must be performed by well trained persons , or qualified technicians.

12. Maintain and check the electronic parts must be done by qualified electrician or well-trained persons. If any electronic part damaged or malfunctioned, stop the machine immediately.

13. The air hose has to be detached from the machine and the compressor or air supply has to be cut off before repairing and servicing the machine equipped with pneumatic parts such as an air cylinder. Qualified technicians or well-trained persons are required for adjustment and repairs.

14. To ensure the best performance, periodically clean the machine is necessary.

15. 為使機器能正常操作及減少噪音，機台務必平放地上，機器避免在強烈噪音的環境下操作。

16. 選用適當的電源插頭，並由電子技師將其按裝在機器上，且插頭必需插在接地線之插座上。

17. 機器只允許被使用於指定用途上，其他用途是不允許的。

18. 修改或變更機器必需依照安全規定及標準，同時採取有效的安全措施，本公司不承擔任何私自因修改或變更機器所引起損壞之責。

19. 警告提示以兩種符號標示：

(1) 對操作員或服務人員之傷害危險，也為了避免觸電之危險，請勿打開馬達電器箱之外蓋，也不要觸摸電器箱裡面之零件。

(2) 必需特別注意事項

a. 絕對不可在移開皮帶蓋，手指保護蓋或安全配件後，進行機器操作，以免導致人員受傷。

b. 為了避免被機器纏住，當機器運轉中，您的手、頭髮及衣服，需遠離手輪，皮帶及馬達；此外這些部位周圍不可放置任何物品，以免導致人員受傷。

15. In order to operate properly and to reduce the noise, please place the machine flat and level on the ground. Avoid operating the sewing machine at a noisy surrounding.

16. Select a proper power plug and install it by an electrician. Please connect the power plug to a grounded receptacle.

17. This machine can only be used for the designed purpose. Other uses of this machine are not allowed.

18. Any modification or conversion made on this machine must be conformed with the safety standards and regulations. Precaution is necessary. No responsibility will our company take for damages caused by any modification or conversion of this machine without permission.

19. Two safety warning signs are applied as warning signs:

(1) For the safety of operators and service persons, please don't open the cover of any electronic control boxes of motor or other devices and don’t touch any components inside to avoid electrical shock hazards.

(2) Always keep in mind :

a. Please never operate this machine without belt cover, finger guard or any safety device to avoid physical injury.

b. Please keep your hair, fingers and cloths away from the hand wheel, V belt and motor while the machine is in operation, as well as never put anything near these parts, to prevent the risk of injuries by tangled into them.

c. 當您打開電源開關後或機器已在運轉中，絕不可將您的手放在針的下方或針線挍線桿外蓋中，以免導致人員受傷。

d. 當機器運轉中，梭頭高速轉動，為了避免對手可能引起之傷害，必需確定您的手保持遠離梭頭附近。此外，當更換梭子時，確定電源開關已關閉，以免導致人員受傷。

e. 當放置或抬起機頭時，小心勿將手置於機器中，以免導致人員受傷。

f. 為了避免機器突然啟動而引起可能意外，當機頭傾斜或移開皮帶蓋及皮帶時，請關掉機器電源，以免導致人員受傷。

g. 如果您的機器是配置伺服馬達，機器於靜止狀態時，馬達是不會產生噪音的，為了避免機器突然啟動而引起可能意外，故請關掉機器電源。

h. 為了避免觸電之危險，請絕不要在移開電源接地線後操作機器。

c. Please never put your fingers under the needle(s) or in the thread take-up cover to prevent physical injuries when you turn on the power switch or operate the machine.

d. While the machine is in operation, the hook rotates at a high speed. Please keep your hands away from the area of hook to prevent any potential injury to your hands. In addition, please make sure to turn off the power of the machine while changing bobbins.

e. Be careful and do not place your fingers inside the machine when placing or lifting the machine head to avoid possible physical injuries.

f. Please turn off the power before tilting the machine head or removing the belt cover and the V belt to avoid possible accidents due to abrupt start of this machine.

g. For machines equipped servo motors, the motors do not produce noise while the machines are at rest. Therefore, please turn off the power of this machine to avoid possible accidents due to abrupt start of the machine.

h. Never operate the sewing machine after the ground wire is removed to avoid electrical shock hazards.

i. 為了避免觸電或電子零件損壞而引起之可能意外，請先切斷電源，再插上或拔掉插頭。

i. Please turn the power switch off before connecting or disconnecting the power plug to prevent possible accidents due to electric shock or damaged electronic components.

特別事項

WARNING

為了避免機器故障及損壞，請先確定以下事項：

1. 當您安裝好機器後，做第一次機器操作前，請徹底清潔機器。
2. 清除運送途中累積之灰塵及溢出之油脂。
3. 確定電壓及馬達相數(單相或三相)安裝正確。
4. 確定電源插頭正確地接上電源。
5. 當使用電壓與標示電壓不同時，請勿使用機器。
6. 確定機器轉動方向是否正確。

警告：

在操作或調整本書中所提到之各步驟前，請先將電源關掉，以免因為機器突然啟動造成之意外。

Please confirm the followings to avoid malfunction or damage to this machine.

1. After installing the machine, and before the first operation, please clean it completely.
2. Clean all dust and overflowed oil during transportation.
3. Confirm that the voltage and the phase (single or 3 phase) of motor are set correctly.
4. Confirm that the power plug is correctly connected to the power supply.
5. Never use the machine when the local voltage type is different from the marked voltage on the nametag attached on the machine.
6. Confirm that the rotating direction of the machine pulley is correct.

Warning :

Before doing any operation or any adjustment described later in this manual, please turn the power off to prevent accidents caused by abrupt start of the sewing machine.

警告標籤

WARNING TAG

- 縫紉機上有下列警告標籤。(圖1, 圖2)
- 當使用縫紉機時，請遵守標籤上的說明。如果標籤脫落或模糊不清，請和購買商店聯繫。

- The following warning tags will be attached on the sewing machine. (Fig. 1, Fig. 2)
- When using the sewing machine, please follow the instructions of the tags. Please contact the dealer if any of the tags is fallen off or fuzzy.

① 

圖1/Fig. 1

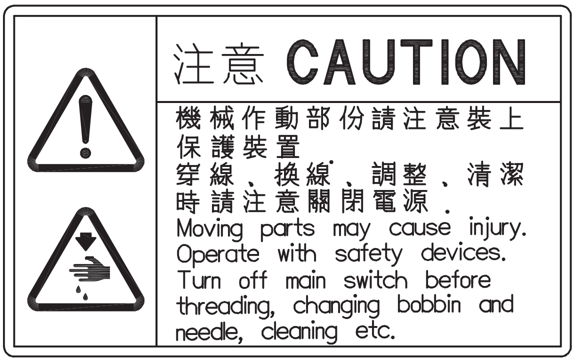
② 

圖2/Fig. 2

③ 必須接地

接駁地線不牢固，是造成觸電或誤動作的原因。

④ 表示轉動方向

安全保護裝置(圖3)
(A) 護指器

③ Must have ground wire.

A loosen or a did not connect well ground wire is the reason causing electronic shock or malfunction.

④ Indicates rotating direction.

Safety Protection Device (Fig. 3)
(A) Finger Protector

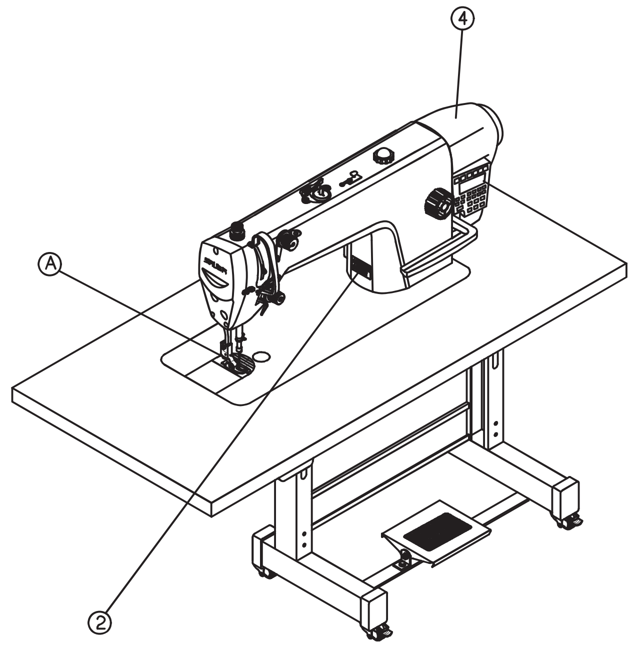


圖3/Fig. 3

護針安全圖說

SAFETY ILLUSTRATION OF NEEDLE GUARD

本縫紉機之押具防護裝置如圖所示，為保護操作者之操作安全，嚴禁將此裝置拆卸。

The presser foot protection device is as shown as the figure 4. For safety of all operators, this device is restricted to disassemble.

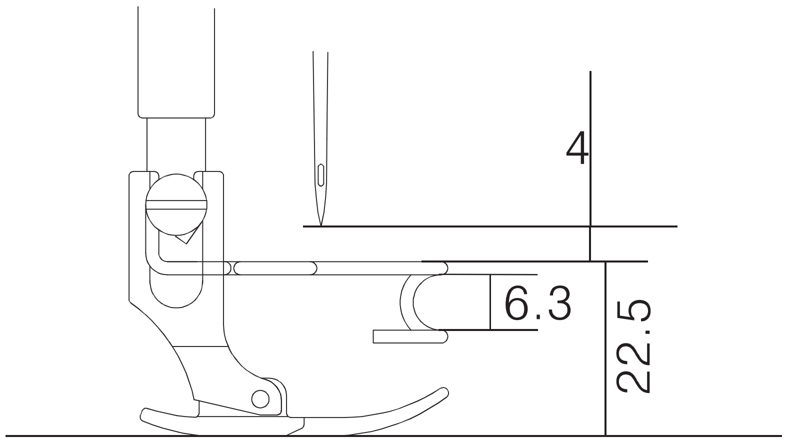


圖4/Fig. 4

搬運

MOVING THE SEWING MACHINE

1. 請由兩人用手托住機殼本體進行搬運。
2. 用手扶住馬達蓋A部，使手輪不能轉動。
3. 搬運時，請穿著安全鞋。(圖5)

1. The machine should be carried by two people as shown in the figure.
2. Hold the motor cover A by hand, so that the pulley will not rotate.
3. Please wear a pair of skidproof shoes while moving the sewing machine. (Fig. 5)

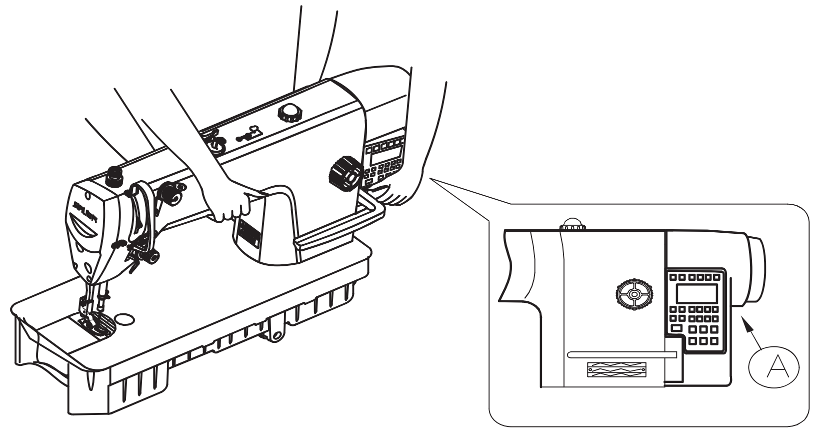


圖5/Fig. 5

關於縫紉機的安裝位置

THE INSTALLATION POSITION OF THE SEWING MACHINE

1. 勿將該縫紉機置於設備附近，如電視機、收音機或無線電話等，否則這些設備可能被縫紉機的電子干擾所影響。(圖6)
2. 應將縫紉機直接插入AC電源插座，如果使用延長線，可能會造成操作故障。

1. Please do not install the sewing machine near the equipments, such as Television, Radio, or Wireless Telephone. Or these equipments will experience electronic interference. (Fig. 6)
2. The wire should insert to the AC power socket directly. If using the extension wire, this might cause malfunction.

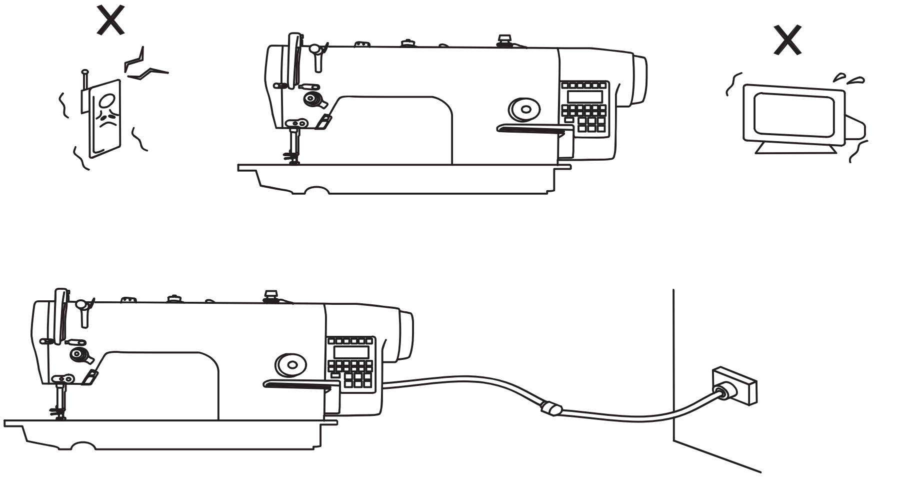


圖6/Fig. 6

各部件名稱 NAMES OF MAJOR PARTS

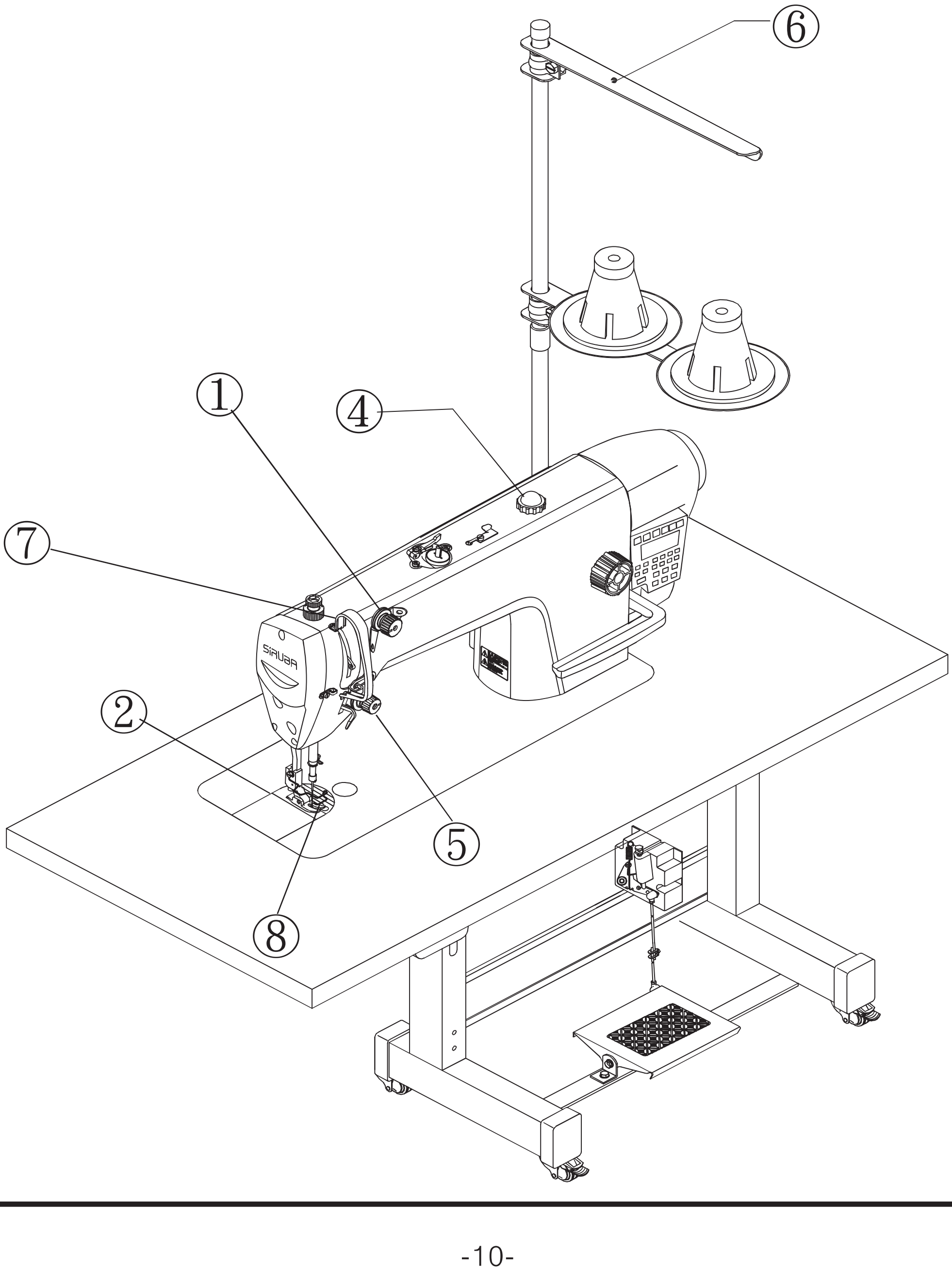


圖7/Fig. 7

① 導線片
② 押具
③ 控制箱
④ 油鏡
⑤ 拉線鬆緊調整組
⑥ 線架
安全保護裝置
⑦ 挑線桿防護罩
⑧ 護指器

① Thread Guide
② Presser Foot
③ Control Box
④ Oil Windows
⑤ Thread Tension Adjusting Set
⑥ Thread Stand
Safety Protection Devices
⑦ Thread Take-up Cover
⑧ Finger Guard

規格 SPECIFICATIONS

種類及規格說明

1. 型號及分類表示

Specifications of machine category

1. Description of the machine name

DL7200□ - N M 1 - 0 0

①　②　③ ④ ⑤　⑥ ⑦

① 表示機種別：
DL＝直驅高速單針下送布平縫車

② 表示車台外觀改良之區分編碼，由F然後G，以英文字母排列如DL7000F 。

③ N：表示針送，D：表示無油式，R：表示右切刀

④ 用途項目：(表1，表2)

① represents the type of the machine:
DL＝Direct Drive High Speed One-needle Bottom Feed Lockstitch Machine

② represents the improved machine appearances that are arranged from letter F. Ex: DL7000F 。

③ N indicates the needle feed, D indicates oil-free, R indicates the right trimmer

④ Purposes: (Table 1, Table 2)

編號Code	用途 Application	車縫速度 r.p.m Max Sewing Speed	縫距(mm) Max Stitch Length
M	用於中厚布料 For medium-weight materials	Max： 4000 一般：4000	0~4
H	用於中厚布料至厚布料 For medium to heavy-weight materials	Max：4000 一般：3500	0~5

表1/Table 1

針棒行程(mm) Needle Bar Stroke		押具揚程(mm) Presser Foot Lift		使用針 Needle
		手動By hand lifter	膝動By knee lifter	
M	30.7	5.5	最大：13 Max：13 一般：10 Normal：10	DBX1 #14
H	35			DBX1 #20~23

表2/Table 2

⑤ 梭頭代碼：
1：表示高速縫梭頭
2：表示2倍速梭頭
3：表示免加油梭頭
4：表示特殊梭頭

⑥ 操作盒代碼：
0：表示SIRUBA一般型，無操作盒。

1：表示SIRUBA高級型，有按鍵式操作盒。

⑦ 操作盒之功能碼代碼(表3)：

⑤ Code of the hook:
1： High Speed Hook
2：2-capacity Large Hook
3：Oil-Free Hook
4：Special Hook, Vertical Type

⑥ Code of operation box：
0：SIRUBA normal model without key type operation box
1：SIRUBA advanced model with key type operation box

⑦ Function code of the operation box (Table 3)：

操作盒代碼及形式 Code of the operation box & its functions	功能碼 Function Code	自動切線 Automatically Thread Trimming	快速倒縫 Rapidly Backstitch	1 撥線 Thread Wiping	2 自動抬押腳 Auto Presser Foot Lifting	操作盒 Operation Box
適用 SIRUBA 高級型有按鍵操作盒(1)之代碼 Suitable for SIRUBA advanced model with operation box (1)	0	○	○	—	—	与电控整体式
	1	○	○	○	—	
	2	○	○	—	○	
	3	○	○	○	○	

表3/Table 3

2. 規格（表4）

2. Specification: (Table 4)

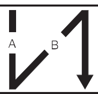
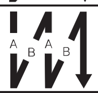
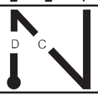
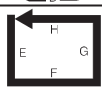
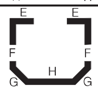
機型Model			DL7200	
車縫布料 Materials			NM-中厚布料 Medium-weight	NH-厚布料 Heavy-weight
1	車縫速度 (r.p.m.) Sewing speed		Max: 4000 Normal: 4000	Max: 4000 Normal: 3500
2	縫距 Stitch length		0~4	0~5
3	針棒行程 (mm) Needle bar stroke		30.7	35
4	使用針 Needle		DBx1 #14	DBx1 #20~23
5	押腳壓力 (kgs) Presser foot pressure		5~7	5~7
6	押具提升量 Presser lifter	膝動 Knee-drive	標準10 mm (最大13 mm) Standard: 10 mm (Max.: 13 mm)	
		手動 Hand-drive	5.5 mm	
7	押具Presser foot		可調整性押具Adjustable presser foot	

8	送具Feed dog	3排齒或4排齒 3 teeth rows or 4 teeth rows	
		可調整送具斜度feed dog slope is adjustable	
9	送料具高度(mm) Presser foot height	0.85~0.95	1.0~1.2
10	送布方式Feeding	上下前後搖擺底送方式 Up/down and front/rear rocking bottom feeding	
11	挑線桿Thread take-up lever	連桿方式Connecting rod	
12	挑線桿行程(mm) Thread take-up lever stroke	59.2±1	59.5±1
13	加油方式Lubrication	完全自動加油Fully automatic lubricating	
14	回油方式Oil recycle	柱塞泵方式Pillar plug pump	
15	潤滑油Lubricant	提供之專用油Provided specified lubricant	
16	撥線裝置Thread wiping device	選擇配置(Optional Device)	
17	自動回針裝置Auto-stitch back device	標準配置(Standard Device)	
18	馬達輸送Motor	額定輸出 400W (1/2 HP) 最大輸出 550W (3/4 HP) Regulated output: 400W (1/2HP), Max. output: 550W (3/4 HP)	
19	使用電源Power	3相/單相 3 Phases/single phase	
20	電磁線圈驅動電源 Electromagnetic drive power	DC-24V	
21	切線方式Trimming type	平面咬合式 Horizontal engaged trimming type	

表4/Table 4

3. LU277-A電控操作盒功能說明：(表5)

3. Description of the functions of LU277-A operation box: (Table 5)

功能 Applicatons	圖樣與說明 Figures & Descriptions	
起縫/縫畢選擇鍵 Start/End Tacking Selection		起縫單趟自動回針鍵 Start Tacking 1 Time Setting
		起縫雙趟自動回針鍵 Start Tacking 2 Times Setting
		縫畢單趟自動回針鍵 End Tacking 1 Time Setting
		縫畢雙趟自動回針鍵 End Tacking 2 Times Setting
車縫樣式選擇鍵 Pattern Selection		自由縫 Free Stitching Setting
		定針車縫 Stitching Number Setting
		重複縫樣式 Overlapped Stitching
		四角縫樣式 Rectangular Stitching
		V 型縫樣式 V Type Stitching
		U 型縫樣式 U Type Stitching

功能選擇鍵 Optional Functions Selection		單觸發自動車縫鍵 One Shot Automatic Stitching
		自動切線鍵 Automatic Thread Trimming
		車縫順序選擇鍵 Stitching Sequence
		提補針縫 Needle UP/DOWN

表5/Table 5

關於本機的重要安全注意事項

1. 搬運作業
   (1). 使用全罩二片式的保力龍將機器包裝防護。
   (2). 放入紙箱內。
   (3). 用手推車或二人用雙手抬動搬運。

2. 儲存作業
   (1). 機器不使用時，應用防塵套將其罩上。
   (2). 避免儲存於高於45℃以上的高溫。

3. 作業中
   機器不要在高於40℃以上的溫度工作。

4.警告
   請注意以下警示建議事項。

   (1). 工作區域是危險的。
   (2). 當機器還在運作的時候絕對不要去碰觸針。
   (3). 當在送布料的時候要多加小心。
   (4). 不要把手指放在針與傳送布料的轉具之間。

   在貼有警告標示之處請注意。
   (1). 機械動作部分，請注意裝上保護裝置。
   (2). 穿線、換線、調整、清潔時，請注意關閉電源。

IMPORTANT SAFETY INSTRUCTIONS OF THIS MACHINE

1. Transportation
   (1). The machine packed with two piece covers that made of expanded polystyrene to protect it.
   (2). Put the machine into a carton.
   (3). Use a cart or by two men's hands to move it.
2. Storage
   (1). The machine must use duster cover to cover it when it did not work.
   (2). The machine avoid to storage in the temperature more than 45℃.
3. Working
   The machine doesn't work over 40℃.
4. Warning
   Pay attention to this warning advice as the followings:
   (1). Working area is dangerous.
   (2). Never touch the needle if the machine is still running.
   (3). Be careful if you infeed fabric.
   (4). Do not insert your finger between needle and roller for transportation on fabric.
   Pay attention to the warning sticker.
   (1). Movable parts must be enclosed with guard when you operate.
   (2). Pull out the plug from socket when you adjust, thread, change bobbin and needle clean.

注意CAUTION

請讓受過培訓的技術人員來安裝縫紉機。
Machine installation should only be carried out by a qualified technician.

請委託購買商店電氣專業人員進行電氣配線。
Contact your dealer or a qualified electrician for any electrical work that may need to be done.

縫紉機重36公斤, 安裝工作必須由兩人以上來完成。
The sewing machine weighs 36kg. The installation should be carried out by two or more people.

在安裝完成前，請不要連接電源, 如果誤按啟動開關, 縫紉機動作會導致受傷。
Do not connect the power cord until installation is complete. The machine may operate if the treadle is depressed by mistake, which could result in injury.

縫紉機頭倒下豎起時, 請用雙手進行操作。單手操作時因縫紉機的重量萬一滑落易導致受傷。
Use both hands to hold the machine head when tilting it back or returning it to its original position. If only using one hand, the weight of the machine head may be too heavy to hold, and may cause human physical injuries.

1. 依本機器所附桌板裁製圖及零件組合圖所列之配件，依序安裝防震機座，線架。

1. Please refer to table cut-out drawing and parts lists to install the anti-shock base and the thread stand.

注意：

(1) 使用新機器，最初一個月的運轉速度約為最高轉速的80%。

(2) 桌板厚度約40 mm

ATTENTION:

(1) The operating speed is about 80 % of the max. speed for a newly machine during the first month.

(2) The standard thickness of the table is about 40 mm.

油盤安裝 OIL PAN INSTALLATION

1. 油盤必需放置於桌板凹槽中之四角。(圖9)

1. The corners of the oil reservoir has to be placed on the four corners at the cut out groove of the machine table. (Fig. 9)

圖9/Fig. 9

2. 用下圖所示之釘子②，將兩個橡皮墊①固定於 A 邊(操作員方向)，再用底質為橡膠之膠帶將兩個緩衝墊③固定於 B 邊(有鉸鍊的方向)，然後再將油盤④放上。(圖10)

2. Use nails ② as illustrated to fix two rubber seats ① on side A (the operator's side). Use rubber based adhesive to fix two cushion seats ③ on the hinge side (side B). Place oil reservoir ④ on the fixed seats. (Fig. 10)

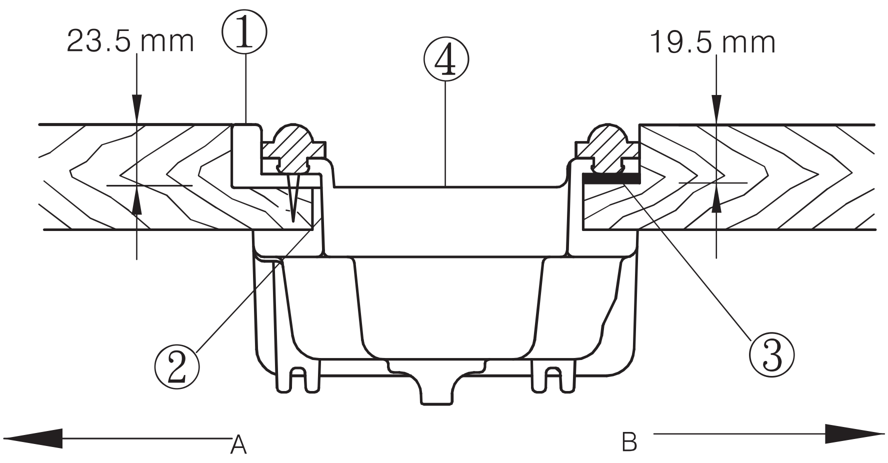


圖10/Fig. 10

3. 在將機頭放進四個角的緩衝墊③之前，先將鉸鍊①裝進機座兩個固定孔中，再將機頭安裝於桌板相對裝有橡膠墊②之二個開口中。(圖11，12)

3. Place the hinge ① into the two fixing holes before placing the machine head onto the four cushions ③ of the desk. Then, install the machine head onto the machine bed that has two openings with rubber cushion② of each. (Fig. 11, 12)

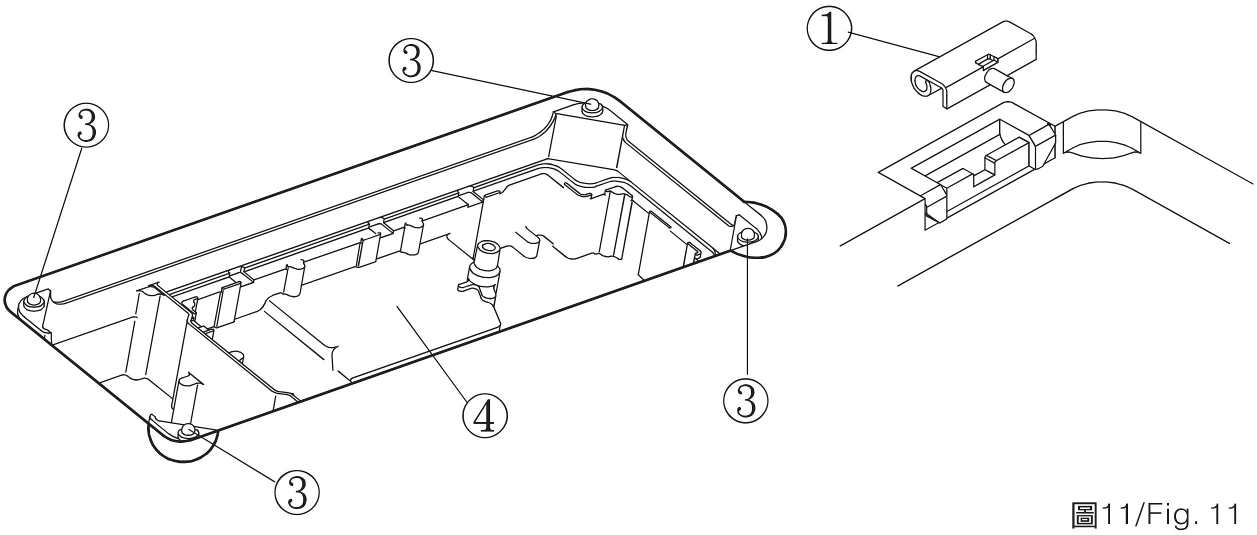


圖11/Fig. 11

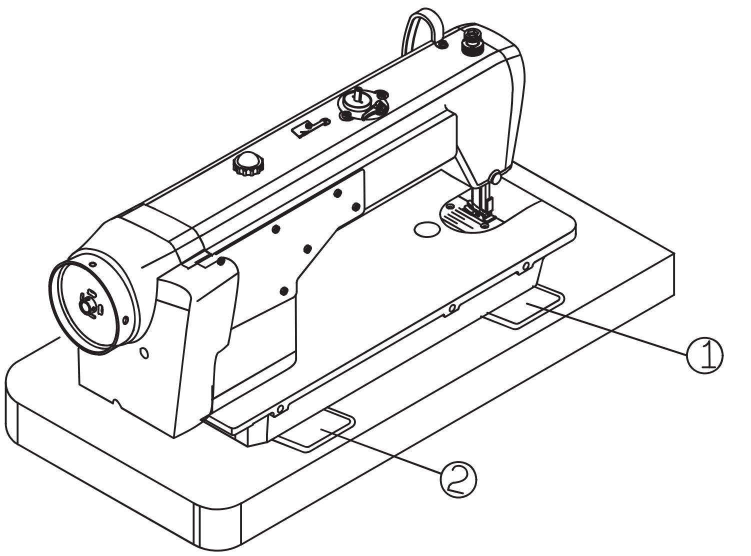


圖12/Fig. 12

潤滑　OIL LUBRICATION

1・潤滑訊息(圖13)，使用專用油注入油盤中，液面到高點A
b・當液面低於低點B時，再添加所指定之潤滑油。
c・如果潤滑正常，當機器操作中，你可以從油鏡(2)中看到噴油現象。
d・當新機器第一次運轉，或經過一段時間未使用，前10分鐘試車之轉速，請保持在3,000到3,500 S.P.M.之間。

1・Oil lubrication instruction (Fig.13)
a・Fill oil pan with specified oil up to high mark A.
b・Refill the oil pan with the specified oil if the oil level lowers below low mark B.
c・You will see oil splashing at oil sight window (3) if the lubrication is adequate when machine running.
d・When the machine is operated the first time after being setup or being idle for a period of time, please run your machine at 3,000 S.P.M. to 3,500 S.P.M. for about 10 minutes for the purpose of break -in.

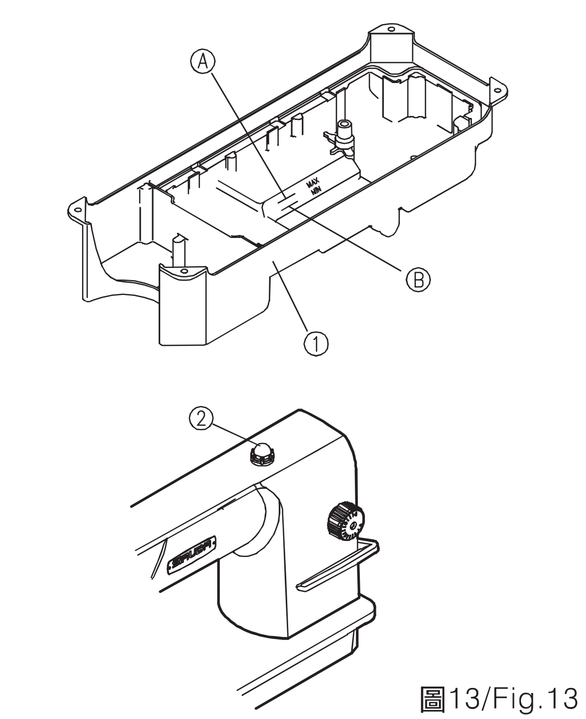


圖13/Fig.13

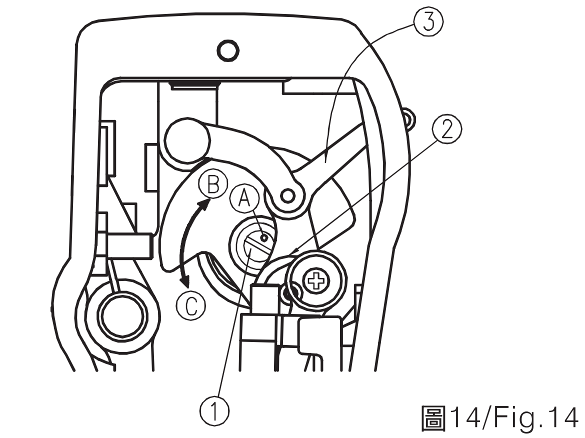


圖14/Fig.14

2・針棒/挑線桿供油量之調整。(圖14)
a・由調整栓(1)調整針棒曲柄(2)/挑線桿(3)之供油量。
b・將調整栓(1)順著B方向調整使A點靠近針棒曲柄(2)則供油量減少。
c・將調整栓順著C方向調整使A點離開針棒曲柄(2)，則供油量增加。

2・Face plate parts oil supply adjustment (Fig.14)
a・Turning adjust pin (1) to increase or reduce the amount of oil supplied to the needle bar crank (2) and the thread take up (3)
b・To reduce the amount of oil supplied, turn the adjust pin (1) in direction B to bring mark dot A close to the needle bar crank (2).
c・To increase the amount of oil supplied turn the adjust pin (1) in direction C to bring mark dot A away from the needle bar crank (2).

3. 梭頭油量(噴油量)之調整紙。(圖15)

a・油量確認試紙，約25mm x 70mm可使用任何材質之試

B・確認油量位置，將試紙靠緊油盤壁將油量確認試紙置於梭頭下方。(圖16)

(1)梭頭(2)紙(3)油盤(4)接觸點(5)底座(6)襯套
當進行第b步驟時，移開滑板並非常小心，勿使手指觸及梭頭。

4・注意事項

a・如機器尚未充份熱機，請先將機器空轉3 分鐘暖車。

b・在機器運轉中，將油量確認試紙置於梭頭下方。(圖16)

c・確認油盤油量(油面)介於 "高" 與 "低" 刻度間。

d・必需在5秒鐘內完成確認油量之動作(用手錶測時間)。

3. Test and observation of the amount of oil in the hook.

a・Oil splashing test paper. Approximate 25mm x 70 mm any kind of paper can be used. Paper material will not affect results. (Fig.15)

b・Position of the testing paper, place the testing paper under the hook and fit the edge of the paper closely against the wall surface of the oil reservoir. (Fig.16)

(1)HOOK (2)PAPER (3)OIL RESERVOI
(4)TOUCHING (5)BASE (6)BUSHING
When doing the test (2), carefully remove the sliding plate and do not touch the hook with fingers.

4・Attentions :

a・Turn the machine on and warm it up by running, it idle for 3 minutes at moderate speed if the machine has not been operated right before doing the test.

b・While the machine is running, place the oil splashing test paper under the hook as instructed in (3) b. (Fig. 16)

c・confirm that the height of the oil level in the oil reservoir falls within “ HI “ and “ LOW “.

d・Oil splashing observation test should be completed in 5 seconds. (Use a watch to check the time used.)

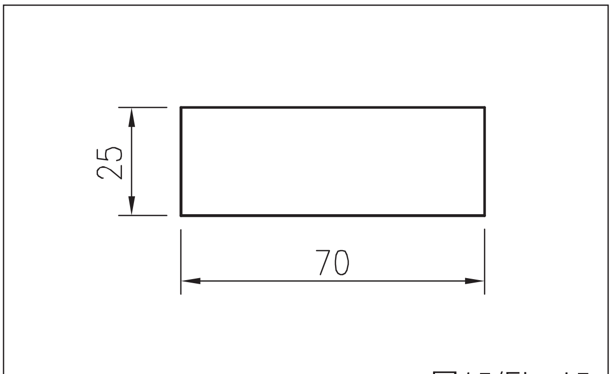


圖15/Fig.15

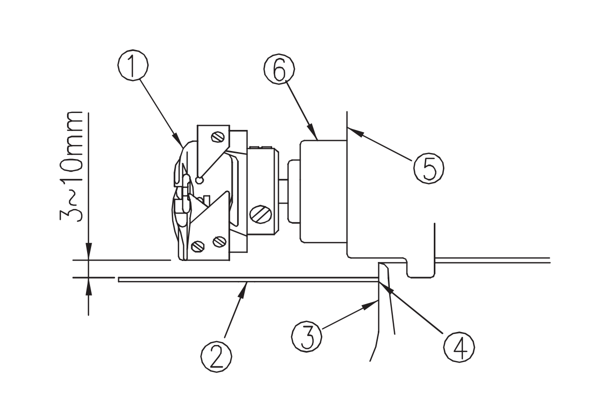


圖16/Fig.16

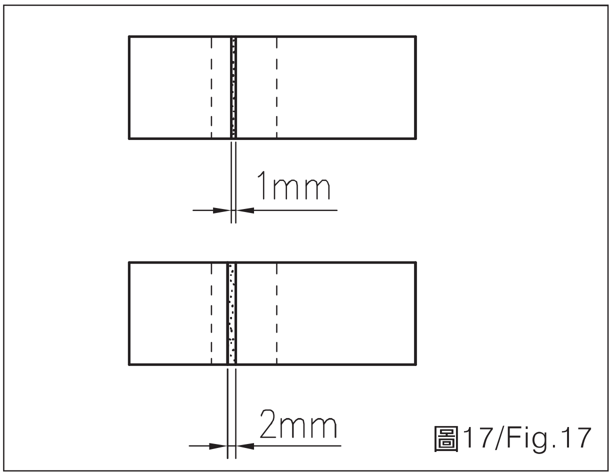


圖17/Fig.17

5・適當油量顯示範例(圖17)

梭頭噴油量約1mm適當油量(小)

DL7200-NM : 1.5mm
DL7200-NH : 3mm

梭頭噴油量約2mm適當油量(大)

DL7200-NM : 3mm
DL7200-NH : 6mm

a・油量顯示範例必需根據車縫布料與程序加以調整，切勿使梭頭油量過多或過少，油量過少，梭頭將卡住梭頭將發)，油量過多，車縫物將可能沾染油污。

b・調整梭頭油量，油量必需達到3次測試都相同(在3張試紙上)。

5・Samples of observations indicate the appropriate amount of oil (Fig.17).

Oil amount in the hook (small) as shown is approximated 1 mm.

DL7200-NM : 1.5mm
DL7200-NH : 3mm

Oil amount in the hook (large) as shown is approximated 2 mm.

DL7200-NM : 3mm
DL7200-NH : 6mm

a・The amount of oil in the hook (ref. to be adequately adjusted in accordance with sewing materials and processes. Insufficient amount of oil will cause the hook to cease and overheat. Excess amount of oil may cause the sewing product stained with oil.

b・Adequate adjustment should be reached in the way that same oil splashing observation will be collected in 3 times on separate paper. The sample shown on (Fig.17) should.

針的安裝 / INSTALLING THE NEEDLE

請依線規格及布料選用正確型號的針。先關掉電源，再開始安裝針。(圖18)

Choose a right needle size according to the type of the thread and the type of the material used. Turn the power off before placing the needle. (Fig.18)

請依線規格及布料選用正確型號的針。先關掉電源，再開始安裝針。(圖18)

Choose a right needle size according to the type of the thread and the type of the material used. Turn the power off before placing the needle. (Fig.18)

1. 轉動手輪使針棒位於行程最高點。
2. 放鬆螺絲②並握住針①，使其針頸內弧部份A正確面向右方B 。並檢視針之長溝C確實面向左D 。

1. Turn the hand wheel to raise the needle bar to its highest position.
2. Loosen screw ②, and hold the needle ① with its indented side A facing exactly to right in direction B, and make sure that long groove C of the needle is facing exactly to the left in direction D.

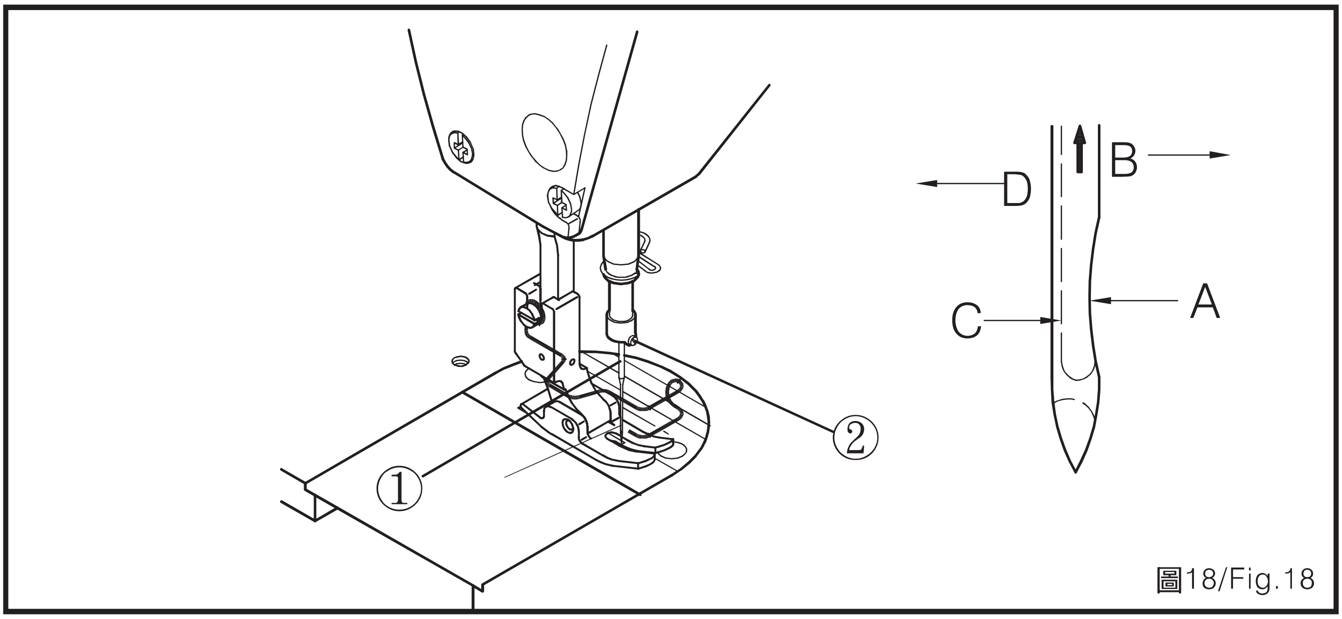


圖18/Fig.18

梭子之安裝　SETTING THE BOBBIN

1. 安裝梭子於梭殼中，使捲線方向為如圖示方向。(圖19)

2. 將針線穿過縫隙A處，並朝C方向拉線，如此，針線將穿過壓力彈簧①，並由B處缺口穿出。

3. 當向C拉線時，梭子是順著箭頭所指方向轉動。

1. Set the bobbin in the bobbin case in the way that the thread wound direction is clockwise. (Fig. 19)

2. Pass the thread through thread slit A, and pull the thread in direction C. The thread will be pulled under the tension spring ① and will be pulled out from notch B.

3. Be sure the bobbin rotates in the direction as the arrow shows when thread is pulled toward C.

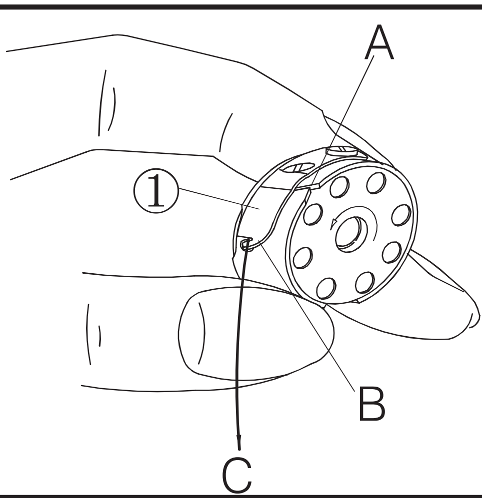


圖19/Fig.19

線架安裝 THREAD STAND ASSEMBLY

1. 安裝線架組，並將其插入桌板孔。(圖20)

2. 鎖緊螺帽①，以固定線架。

1. Assemble the thread stand set before installing. Place the thread stand set onto the hole on the table top. (Fig. 20)
2. Fix the thread stand with a nut ① locked under the table top.

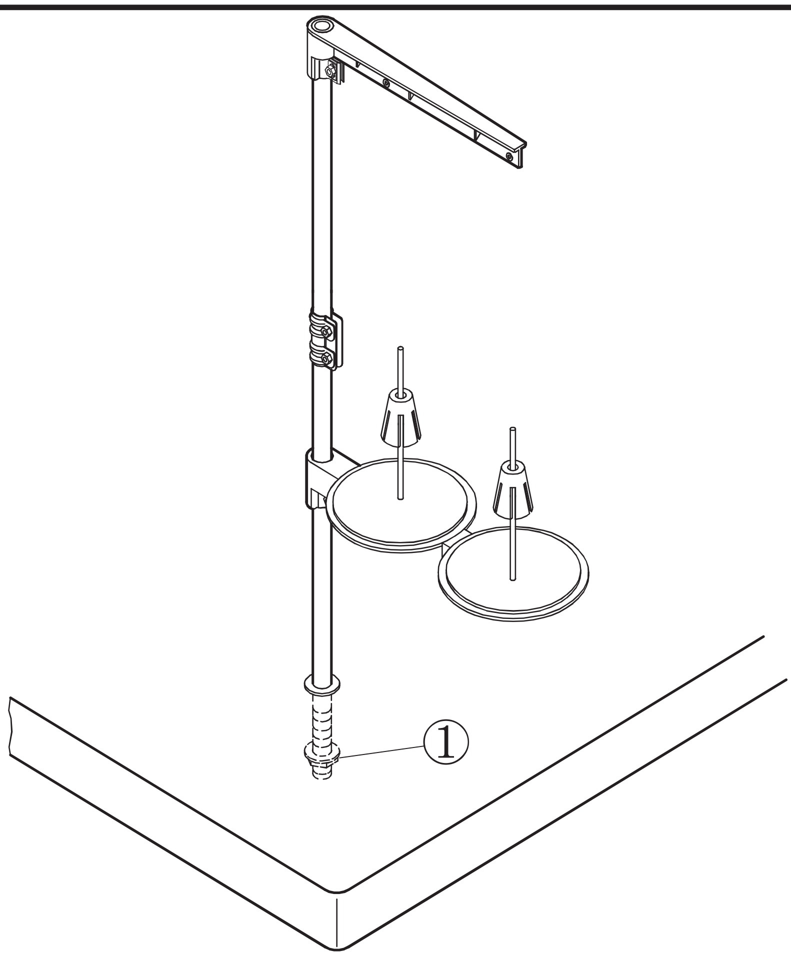


圖20/Fig.20

機頭穿線　　THREADING THE MACHINE

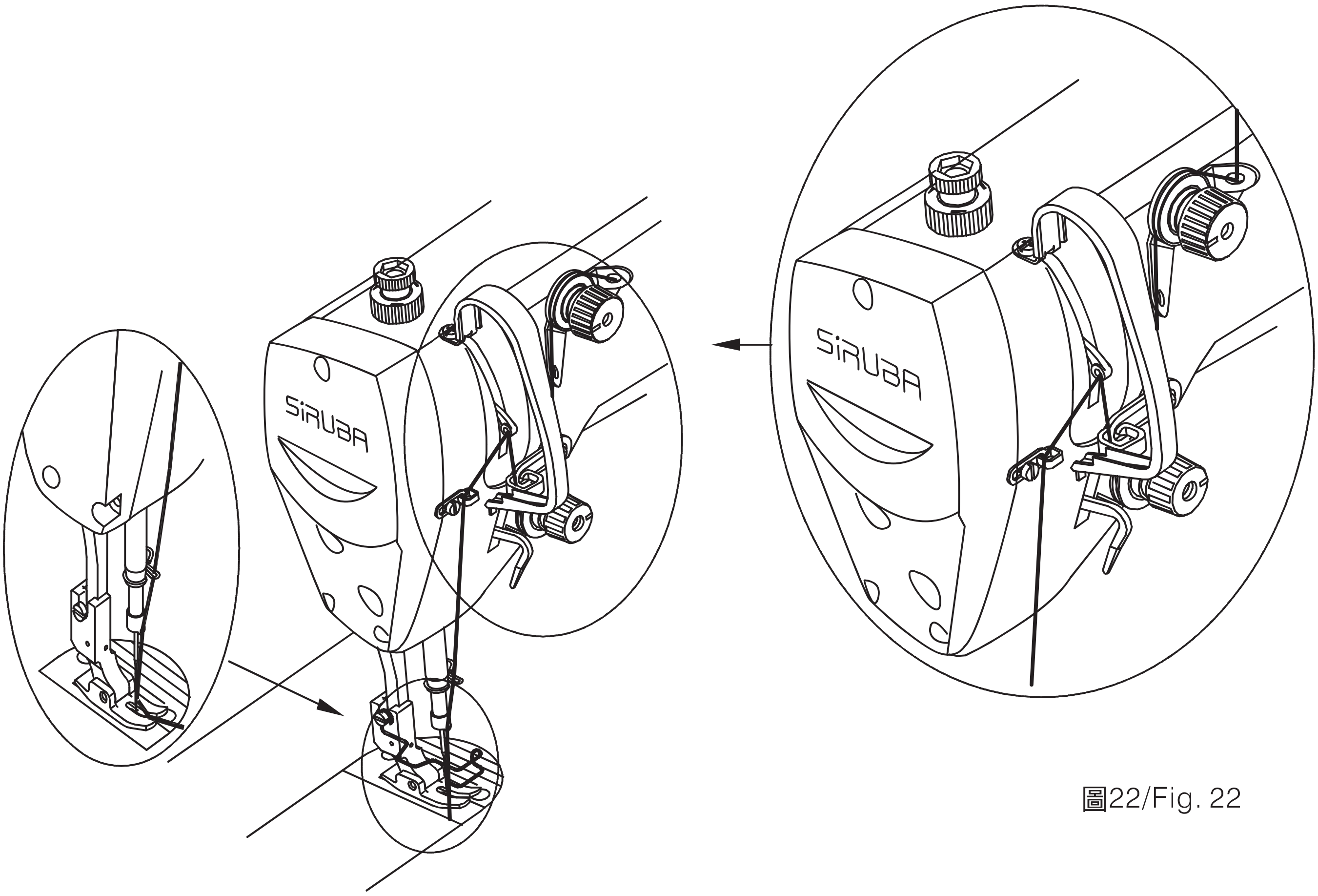


圖22/Fig. 22

針距調整　　STITCH LENGTH ADJUSTMENT

1. 依箭頭指示方向轉動縫距調整鈕①，並將所需數字對準標點Ａ。(圖23)
2. 調整鈕上刻度單位是公釐。
3. 當要調整縫距時，轉動縫距調整鈕①，同時將搖桿②往下壓。

1. Turn stitch length dial ① as the arrow indicates to have the desired number align with mark Ａ on the machine. (Fig.23)
2. The calibration on the dial is millimeters.
3. Press the feed lever ② down and turn the stitch length adjustment dial ① to change stitch length.

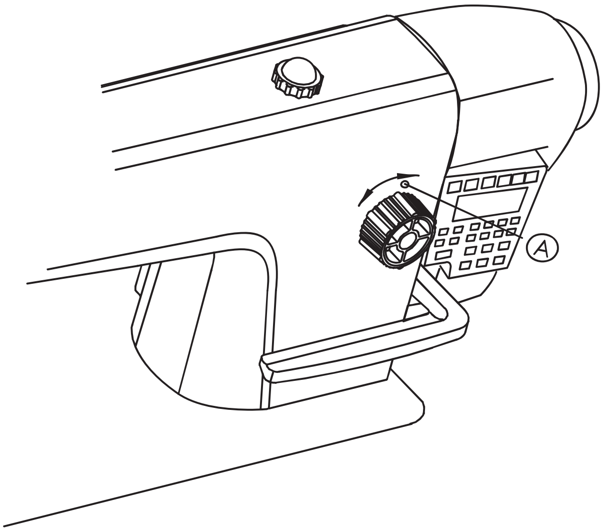


圖23/Fig.23

膝控押具提升器之調整

ADJUSTMENT OF KNEE-CONTROL PRESSER FOOT LIFTER

1. 使用膝控押具提升器，標準的押具提升高度是10mm。(圖24，圖25)
2. 可以使用膝控押具提升器調整螺絲①，將押具提高至13mm。
3. 當押具調整高度超過10mm時，請確認針棒最底部②是否會觸及押具③上部。

1. The standard lifting height is 10 mm by using knee-control presser foot lifter. (Fig. 24, Fig. 25)
2. By adjusting the screw ① at the knee controller, the presser foot can be lifted up to 13mm.
3. When the presser foot is adjusted to be lifted over 10mm, assure the bottom end of the needle bar ② in its lower position③ does not hit the presser foot.

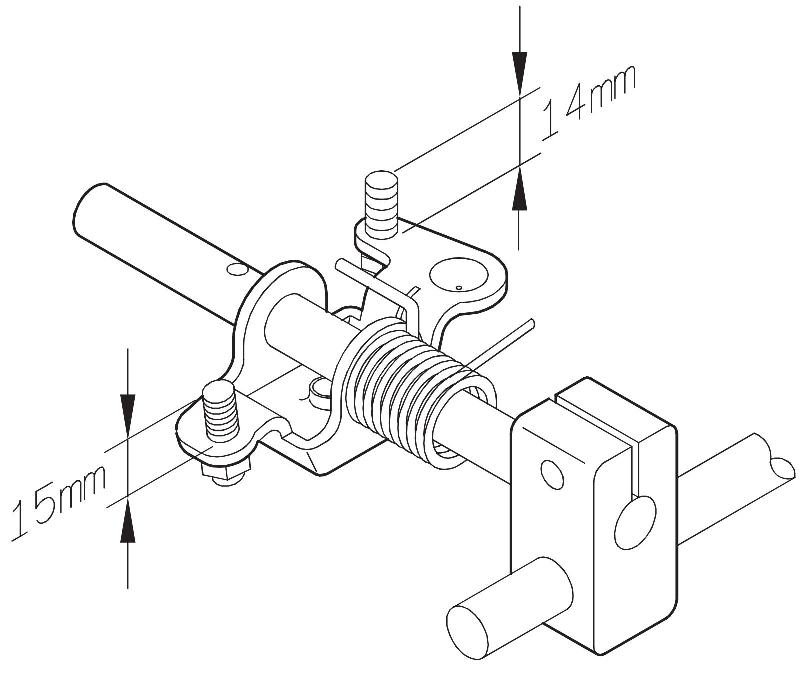


圖24/Fig.24

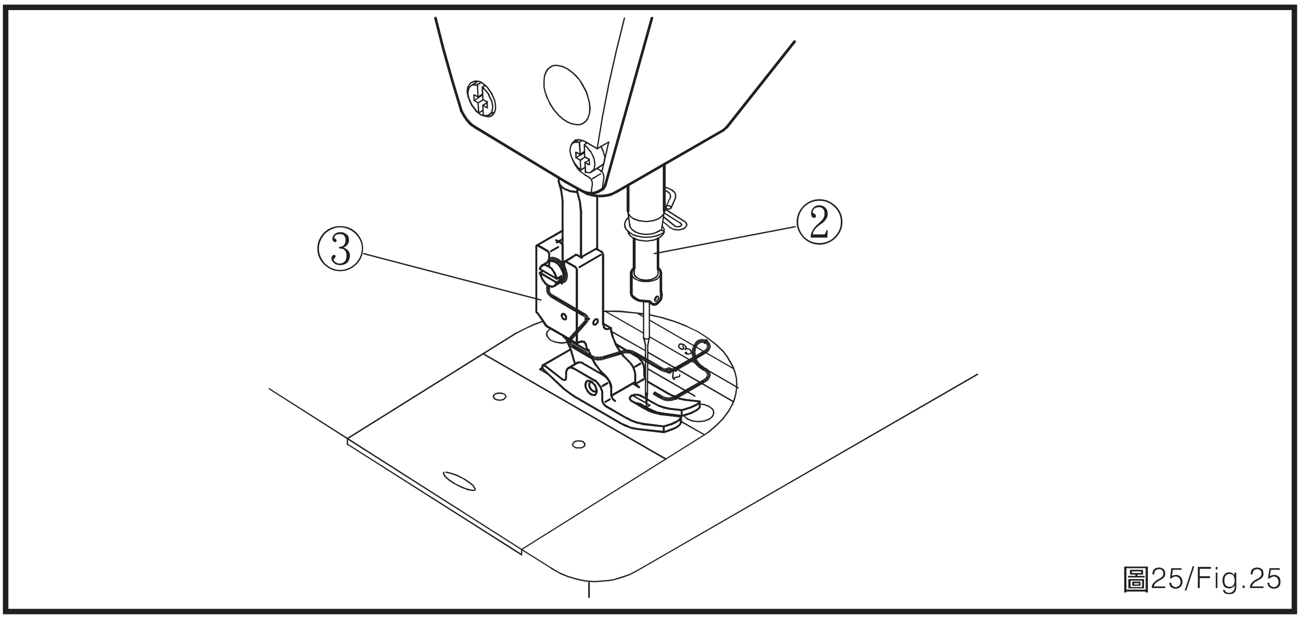


圖25/Fig.25

針線梭線鬆緊度調整

NEEDLE THREAD/BOBBIN THREAD TENSION ADJUSTMENT

1. 針線鬆緊度調整(圖26)

(1) 依順時鐘方向(A方向)轉動針線鬆緊控制鈕①，切線後留在針頭之線量變短。

(2) 依逆時鐘方向(B方向)轉動針線鬆緊控制鈕①，線量變長。

(3) 依順時鐘方向(C方向)轉動針線鬆緊控制鈕②，針線鬆緊度變緊。

(4) 依逆時鐘方向(D方向)轉動針線鬆緊控制鈕②，針線鬆緊度變鬆。

2. 梭線(底線)鬆緊度調整

(1) 依順時鐘方向(E方向)轉動鬆緊控制螺絲③，底線鬆緊度變緊。

(2) 依逆時鐘方向(F方向)轉動鬆緊控制螺絲③，底線鬆緊度變鬆。

1. Needle thread tension adjustment (Fig. 26)
   (1) The left thread tail on the needle will be shorter after thread trimmed as you turn thread tension nut ①clockwise. (in A direction)
   (2) The left thread tail will be longer, as thread tension nut ① is turned counter clockwise (in B direction).
   (3) Increase the tension on needle thread by turning thread tension nut ② clockwise (in C direction).
   (4) Reduce the tension on needle thread by turning thread tension nut ② counter clockwise (in D direction).
2. Bobbin thread tension adjustment
   (1) The bobbin thread tension will be increased as tension adjust screw ③ is turned clockwise (in E direction).
   (2) The bobbin thread tension will be reduced as screw ③ is turned counter-clockwise (in F direction).

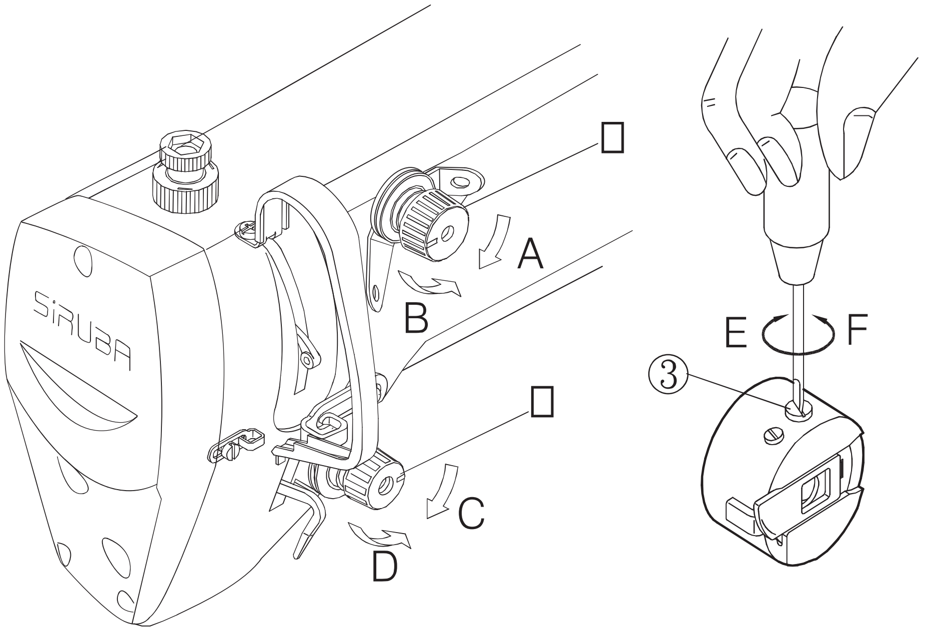


圖26/Fig.26

停針位置調整

NEEDLE STOP POSITION ADJUSTMENT

1. 切線後，車針上定位(圖27)

(1) 標準定針位置：針標準停止位置，將機頭上之標記 A 與手輪上之標記 B 對齊即可。

(2)停針時間調整：在電控箱參數內調整，詳見電控參數說明書。

1. Needle “UPPER” stop position after trimming. (Fig. 27)

(1) Standard Stop Position: the standard needle stop point is simply to align the mark A on the machine head with the mark B on the hand wheel.

(2)Timing Adjustment of Needle Stop：
Adjust the parameters in the control box. For the details, please refer to the parameter illustration.

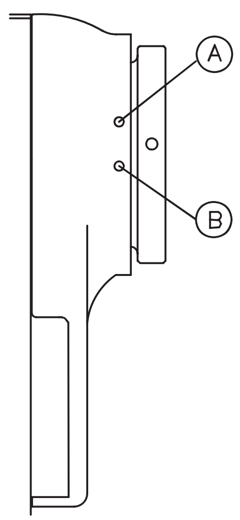


圖27/Fig.27

控線組彈簧調整

THE THREAD TAKE UP SPRING ADJUSTMENT

1. 控線組彈簧①行程調整(圖29)

(1) 放鬆螺絲②。

(2) 依順時鐘方向(A 方向)轉動鬆緊控線鈕③，控線組彈簧行程將增加。

(3) 依逆時鐘方向(B 方向)轉動鬆緊控線鈕③，控線組彈簧行程將減少。

2. 控線組彈簧①拉力調整

(1) 放鬆螺絲②，同時將控線彈簧組⑤拆下。

(2) 放鬆螺絲④。

(3) 依順時鐘方向(A 方向)轉動鬆緊控線鈕③，控線組彈簧拉力將增加。

(4) 依逆時鐘方向(B 方向)轉動鬆緊控線鈕③，控線組彈簧拉力將減少。

1. Adjusting the stroke of thread take up spring①. (Fig. 29)

(1) Loosen screw②.

(2) The stroke of the thread take-up spring will be increased as the tension knob ③ is turned clockwise (in A direction).

(3) The stroke will be decreased as the the knob ③is turned counter-clockwise (in B direction).

2. Adjusting the pressure of thread take up spring ①.

(1) Loosen screw ②, and remove thread tension disks ⑤.

(2) Loosen screw ④.

(3) The pressure will be increased as tension knob ③ is turned clockwise (in A direction).

(4) The pressure will be reduced as tension knob ③ is turned counter clockwise (in B direction).

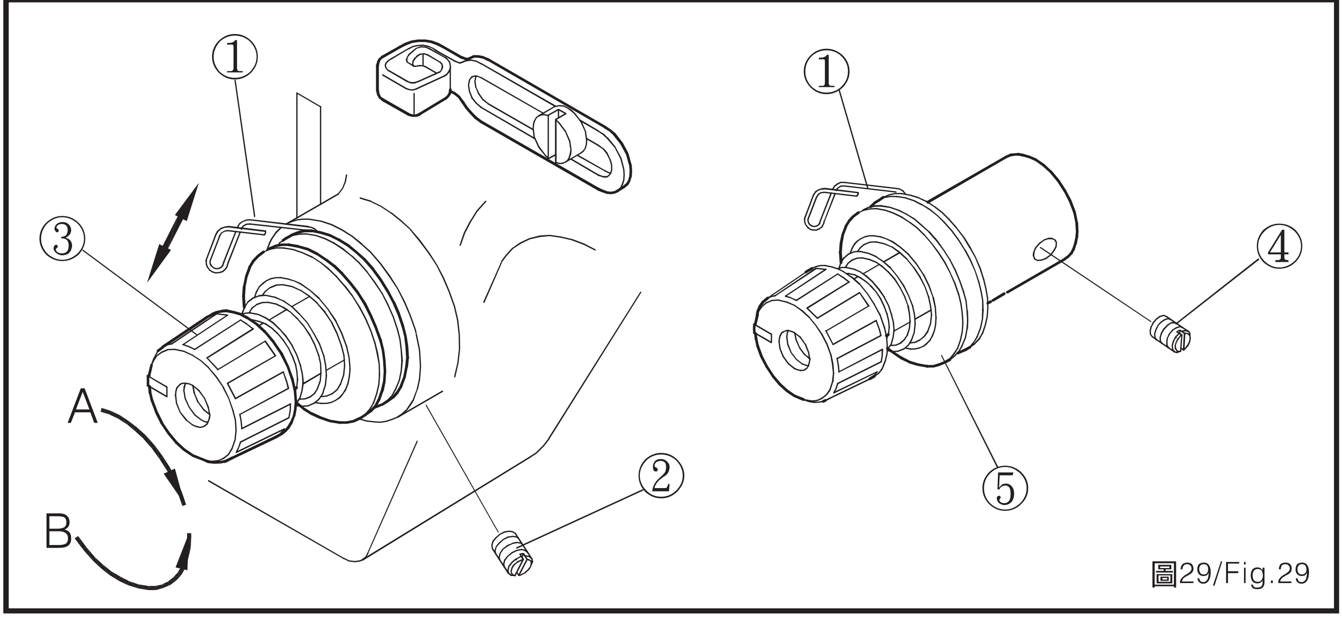


圖29/Fig.29

押具提升桿

MANUAL PRESSER FOOT LIFTING LEVER

1. 將機器停止，順著A方向轉動押具提升桿①。(圖30)

2. 押具將上提升約5.5 mm，並固定之。當順著B方向往下轉動押具提升桿①時，押具將降回至原位置。

1. Stop the machine and turn the presser foot lifting lever①up (in A direction) to Keep it up. (Fig. 30)

2. The presser foot will be lifted up to about 5.5 mm and will remain at that position. Turn hand lifter lever ① down (in B direction) to release presser foot to its original position.

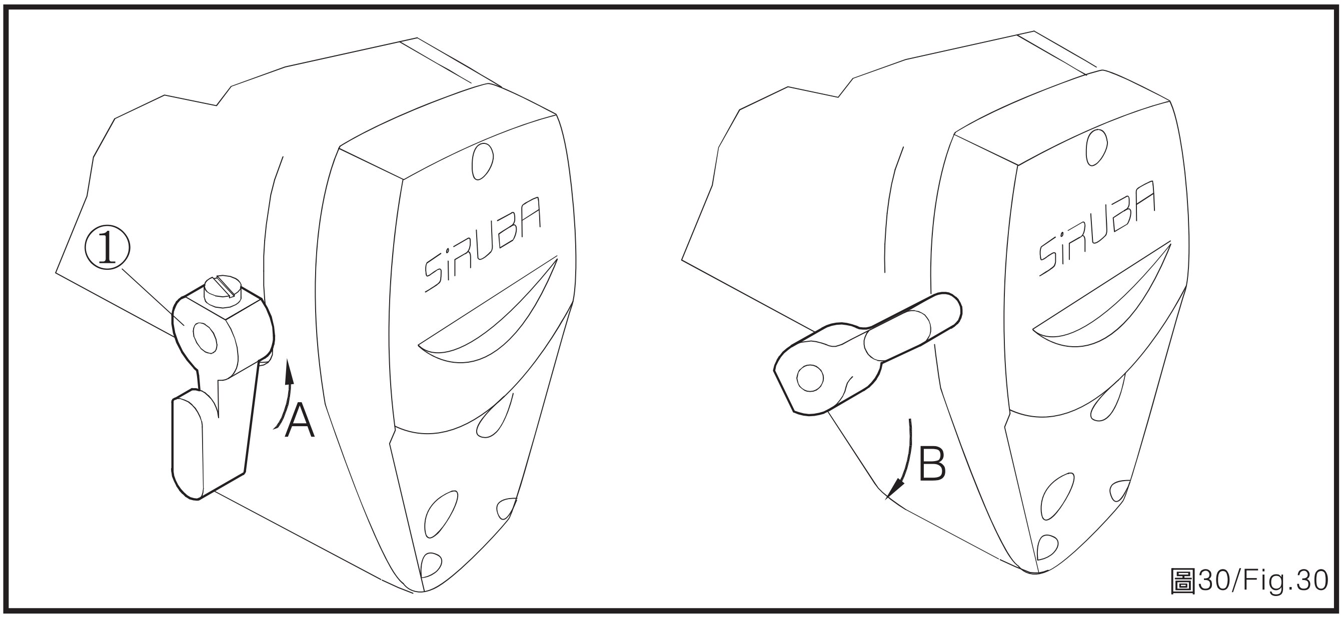


圖30/Fig.30

押具壓力調整

ADJUSTING PRESSER FOOT PRESSURE

1. 放鬆螺母②，依順時鐘方向(A方向)轉動押具壓力調整鈕①時，壓力增加。(圖31)

2. 依逆時鐘方向(B方向)轉動押具彈力調整鈕①時，壓力減少。

3. 調整完畢，鎖緊螺母②。一般布料押具壓力調整鈕之調整壓力為5 kg，厚布料為7 kg。(依布料之厚薄，適當調整押具之壓力，才能得到最佳之車縫效果)

1. Loosen nut ②, Turn presser spring regulator ① clockwise (in A direction) to increase the presser foot pressure. (Fig. 31)

2. Turn presser spring regulator ① counter clockwise (in B direction) to reduce the presser foot pressure.

3. Lock nut ② after adjustment is done. For regular fabric, the normal pressure of the presser foot should be set at 5kg, for heavy fabric is 7kg. (To have the best sewing result, please adjust the proper presser foot pressure according to the material.)

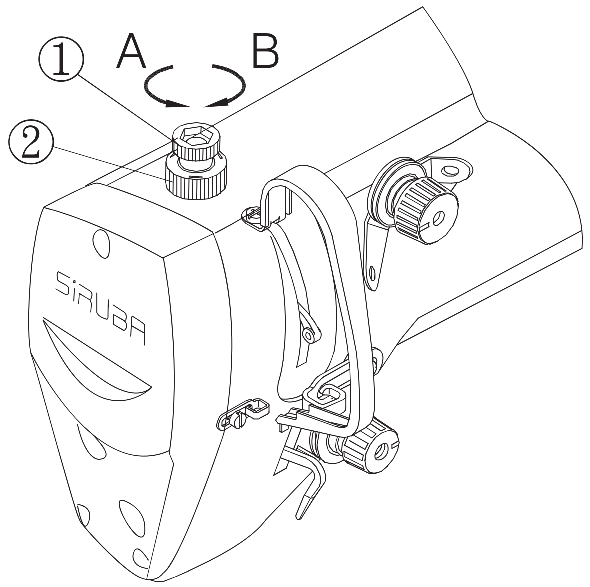


圖31/Fig.31

針與送具時位調整

ADJUST THE TIMING BETWEEN NEEDLE AND FEED DOG

1. 放鬆偏心凸輪①上之②及③螺絲，然後依箭頭方向或反箭頭方向轉動偏心凸輪①來確認齒尖位置後，再鎖緊螺絲。(圖32-a/b/c)
2. 一般標準時位調整：當針孔上緣上升至針板面時，將送具齒端上緣及針之針孔上緣調整與針板上緣成一直線。(圖32-a)
3. 提前送具時位調整：如果為了防止送料偏斜，將偏心凸輪①依箭頭方向轉動調整，把送具時位提前。(圖32-b)
4. 延遲送具時位調整：如欲增加車縫緊度，則將偏心凸輪①依反箭頭方向轉動調整，把送具時位延後。(圖32-c)

注意:
不可將偏心凸輪①移動過大，以免可能引起斷針。

1. Loosen screws ② and ③ on the feed eccentric cam ①, move the feed eccentric cam ① in the direction of the arrow or the opposite direction of the arrow, and lock the screws firmly. (Fig. 32-a/b/c)
2. Standard timing adjustment: when the upper side of the needle hole travels up to the needle plate surface, adjust the upper sides of the feed dog teeth and the needle hole to be at the same level of the needle plate upper surface. (Fig. 32-a)
3. Antedated timing adjustment: to prevent the fabric deflected from feeding, turn the eccentric cam ① by the arrow direction to antedate the feed timing. (Fig. 32-b)
4. Delayed timing adjustment: to increase the stitch tension, extend the feed timing by turning the feed eccentric cam ① in the opposite direction of the arrow. (Fig. 32-c)

Attention:
Please do not move the feed eccentric cam ① too far to avoid needle breakage.

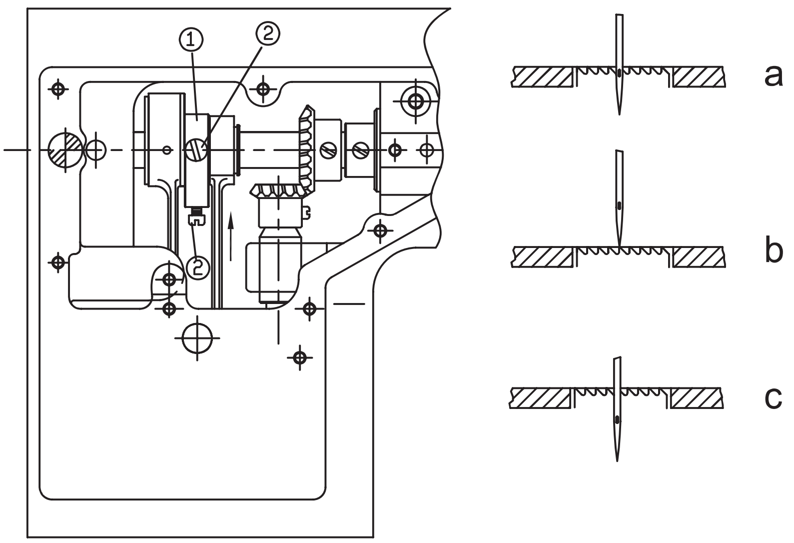


圖32/Fig.32

送具傾斜度

ADJUSTING THE ANGLE OF TILT OF THE FEED DOG

1. 當在送具偏心軸②上的記號A與稜線B成一直線時，送具之傾斜度呈水平狀態。(圖33-a)

2. 為了避免車縫起皺，用螺絲起子放鬆螺絲①，將送具偏心軸②依箭頭a的方向轉動90度，可抬高送具後緣，呈前傾 狀態。(圖33-b)

3. 為了避免布料送料不足，用螺絲起子放鬆螺絲①，將送具偏心軸②依箭頭b的方向轉動90度，可使送具前緣抬高，呈後傾狀態。(厚布 料調整時) (圖33-c)

4. 送具傾斜度調整過後，送具高度將會改變，所以送具傾斜度調整後需再檢查其高度。

1. When mark A on the feed dog eccentric shaft ② is aligned with the crest line B, the gradient becomes horizontal. (Fig. 33-a)
2. To prevent the fabric puckering, loosen the screw ① by a screw driver and turn the feed dog eccentric shaft ② 90˚ toward the arrow direction to reduce the front gradient of the feed dog and to form a tilting-front status. (Fig. 33-b)
3. To prevent uneven fabric feeding, please turn the feed dog eccentric shaft ② 90 degree opposite to the arrow direction. This could decrease the backward tilt angle of the feed dog and to form a tilting - back status. (For adjusting the thick materials). (Fig. 33-c)
4. After adjusting the title angle of the feed dog, this will change the height of the feed dog. Therefore, please recheck its height after adjusting the tilt angle of the feed dog.

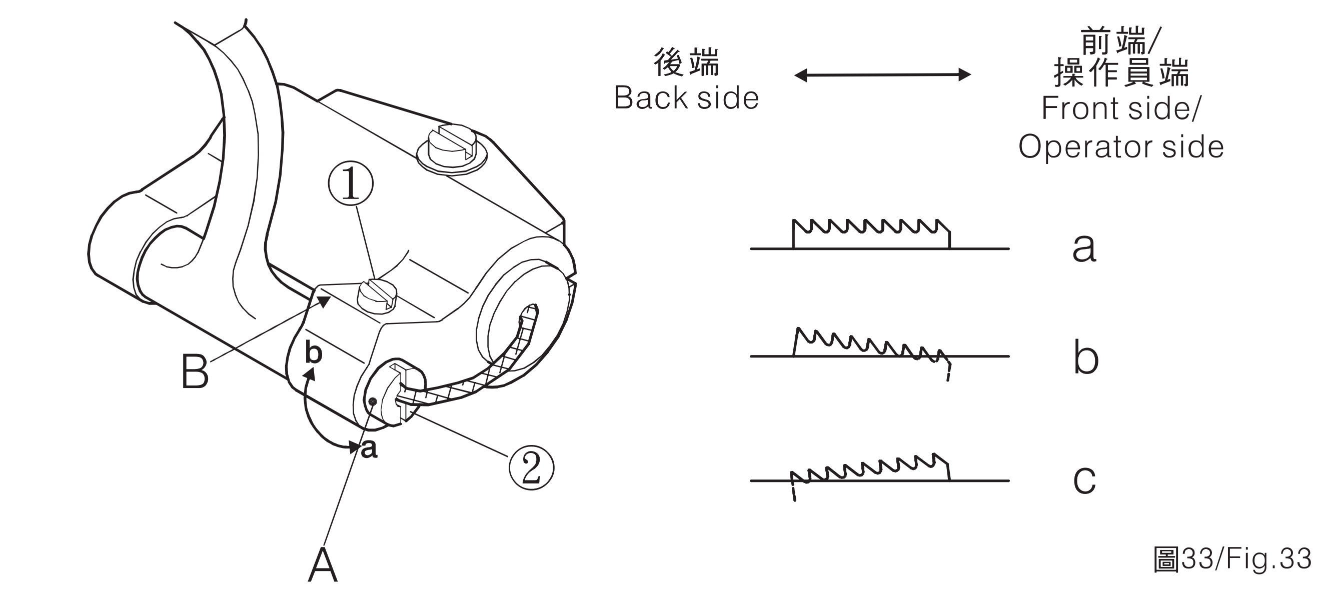


圖33/Fig.33

送具高度

ADJUSTING THE HEIGHT OF THE FEED DOG

1. 送具高度(送具超出針板面的高度)在出廠時依照布料厚薄調整如下：(圖34-a/b)

   中厚布料：0.85～0.95 mm (圖34-a)
   厚布料： 1.0～1.2 mm (圖34-b)
2. 如果送具太過突出，車縫薄布料時容易引起褶皺。
3. 送具高度調整：
   (1) 放鬆曲柄①螺絲②。
   (2) 上下移動曲柄①使送具座升高或下降來加以調整。
   (3) 調整好之後再鎖緊螺絲②。
4. 滑塊③的端面應該靠緊曲柄①，並避免鬆動，否則曲柄①之開口部份容易因此磨損。

1. The feed dog height (the height the feed dog emerged from the needle plate surface) is set by the fabric thickness as the followings: (Fig. 34-a/b)
   Normal fabric: 0.85～0.95mm (Fig. 34-a)
   heavy fabric: 1.0～1.2mm (Fig. 34-b)
2. If the feed dog is emerged too much, it is very easily to form the puckers when sewing thin fabrics.
3. To adjust the feed dog height：
   (1) Loosen screw ② on crank ①.
   (2) Move the crank ① up and down to move the feed bracket up and down to adjust.
   (3) Lock the screw ② securely after the adjustments.
4. There should be no space between the plain surface of the roller ③ and the crank ①. Also, avoid the situation of parts loosening happening. Otherwise, the opening part of the crank ① will get worn easily

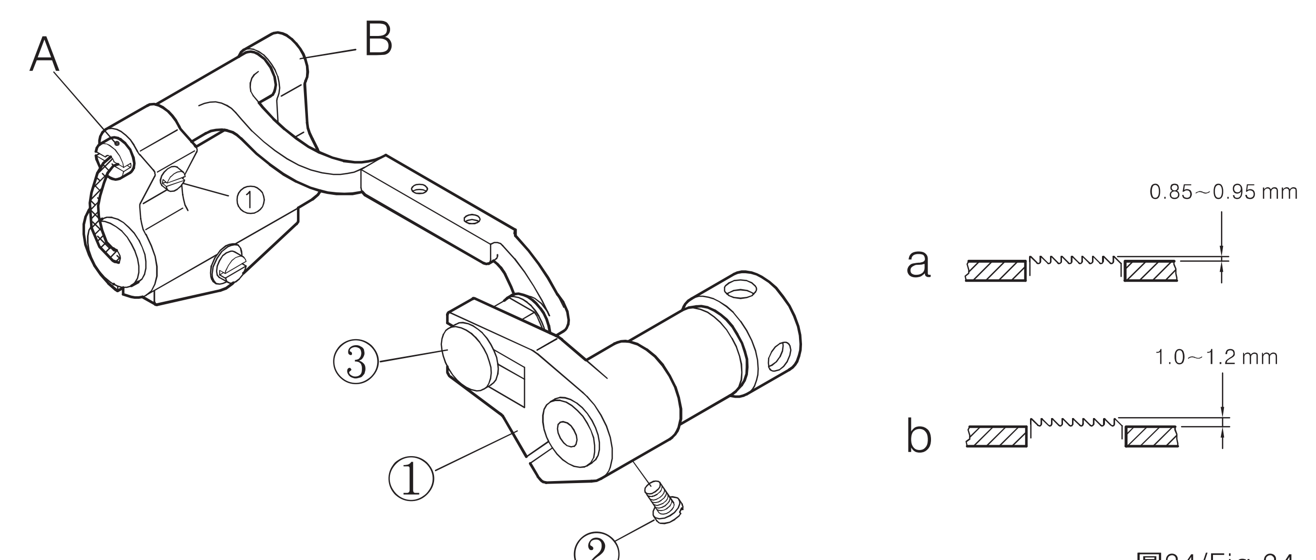


圖34/Fig.34

針與梭頭時位關係

CORRELATION BETWEEN NEEDLE AND HOOK

1. 針與梭頭時位調整如下：轉動手輪使針棒降至最低點(下死點)，並放鬆螺絲①。(圖35)

   (1) 調整針棒高度：
   - (DB針)將針棒②上之標線A對齊針棒下襯套③底部，然後鎖緊固定螺絲①。
   - (DA針)將針棒②上之標線C對齊針棒下襯套③底部，然後鎖緊固定螺絲①。

   (2) 調整梭頭之位置：
   - (DB針)放鬆梭頭之3個固定螺絲，轉動手輪將針棒②上之標線B對齊針棒下襯套③底部。

1. The timing adjustment between needle and hook is: turn the hand wheel to lower the needle bar down to the lower dead point of its stroke, and loosen the screw①. (Fig. 35)

   (1) Adjusting the height of needle bar：
   - (DB needle) Align the mark line A on needle bar ② with the bottom edge of needle bar lower bushing ③, and then tighten the setscrew① .
   - (DA needle) Align the mark line C on needle bar ② with the bottom edge of needle bar lower bushing ③, and then tighten the setscrew ①.

   (2) Adjusting the position of the hook：
   - (DB needle) Loosen the three setscrews on the hook, and turn the hand wheel to align the mark line B on ascending needle bar ② with the bottom edge of needle bar lower bushing ③.

·(DA針)放鬆梭頭之3個固定螺絲，轉動手輪將針棒②上之標線D對齊針棒下襯套③底部。

· When a DA needle is used loosen the three setscrews on the hook, turn the hand wheel, and align marker line D on ascending needle bar ② with the bottom edge of needle bar lower bushing ③.

(3) 經上述調整步驟後，將梭頭尖⑤與針中心④對齊，且車針與梭頭尖之間隙應為0～0.05 mm最為適當。

(3) After the adjustments mentioned above are done, align hook blade point ⑤ with the needle center ④. Keep it at the ideal clearance of 0～0.05mm between the needle and the hook.

2. 更換梭頭時，先確認其零件代號再更換。

onfirm the part number is correct before replacing hooks.

注意：

如果梭尖與針之間隙太短使得梭尖碰觸針，則梭尖將會容易受損；如果間隙過大，將容易引起跳針。

Attention：

If the clearance between the hook tip and the needle is less than the identified value, the hook tip will touch the needle and cause the damage of the hook tip happened easily. If the clearance is too wide, stitch skipping will occur easily.

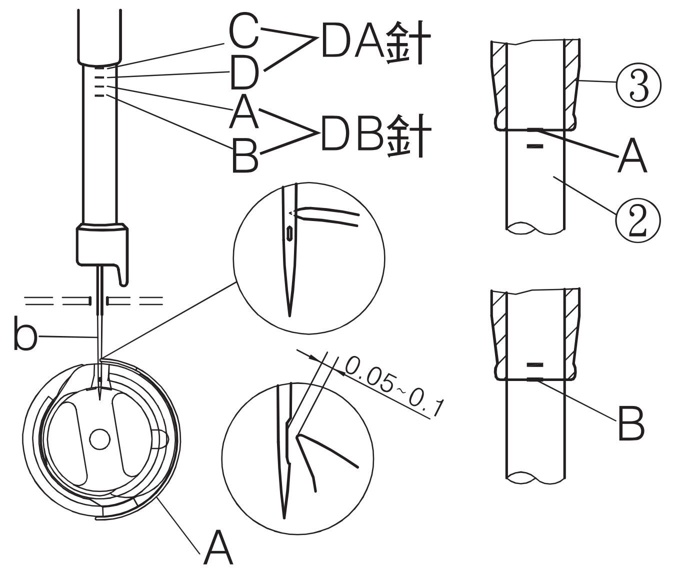


圖35/Fig.35

押具高度調整

PRESSER FOOT HEIGHT ADJUSTMENT

1・放鬆固定螺絲(1)，並調整押具高度及角度(圖36)。

2・調整後，確實鎖緊固定螺絲。

1・Loosen screw , and adjust the height of presser foot and its orientation. (Fig.36)

2・After adjustment , tighten the screw (1) securely.

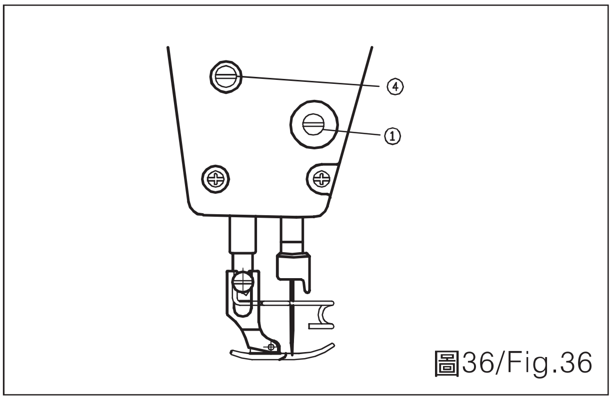


圖36/Fig.36

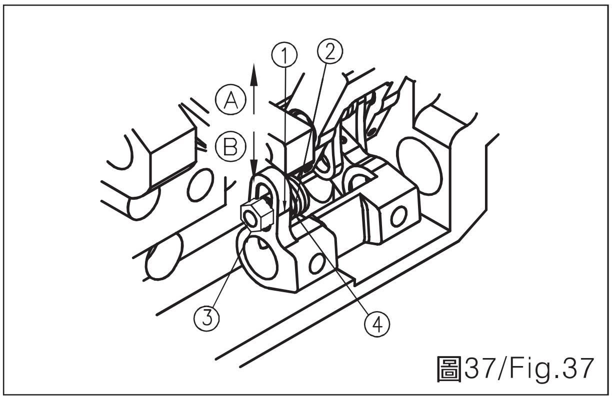


圖37/Fig.37

導線片之調整

THE THREAD TAKE UP STROKE ADJUSTMENT

1. 當車縫厚布料時，將導線片①往左(A方向)移動，以增加挑線桿之拉線量。(圖38)

2. 當車縫薄布料時，將導線片①往右(B方向)移動，以減少挑線桿之拉線量。

3. 一般導線片①是放在其標線C與螺絲中心對齊位置。

1. Move thread guide ① to the left (in direction A) to increase the amount of thread pulled out by the thread take-up when sewing heavy fabric. (Fig. 38)

2. Move thread guide① to the right (in direction B) to decrease the amount of thread pulled out by the thread take-up when sewing light-weight materials.

3. In general, thread guide ① is positioned to have the marker line C aligned with the center of the screw.

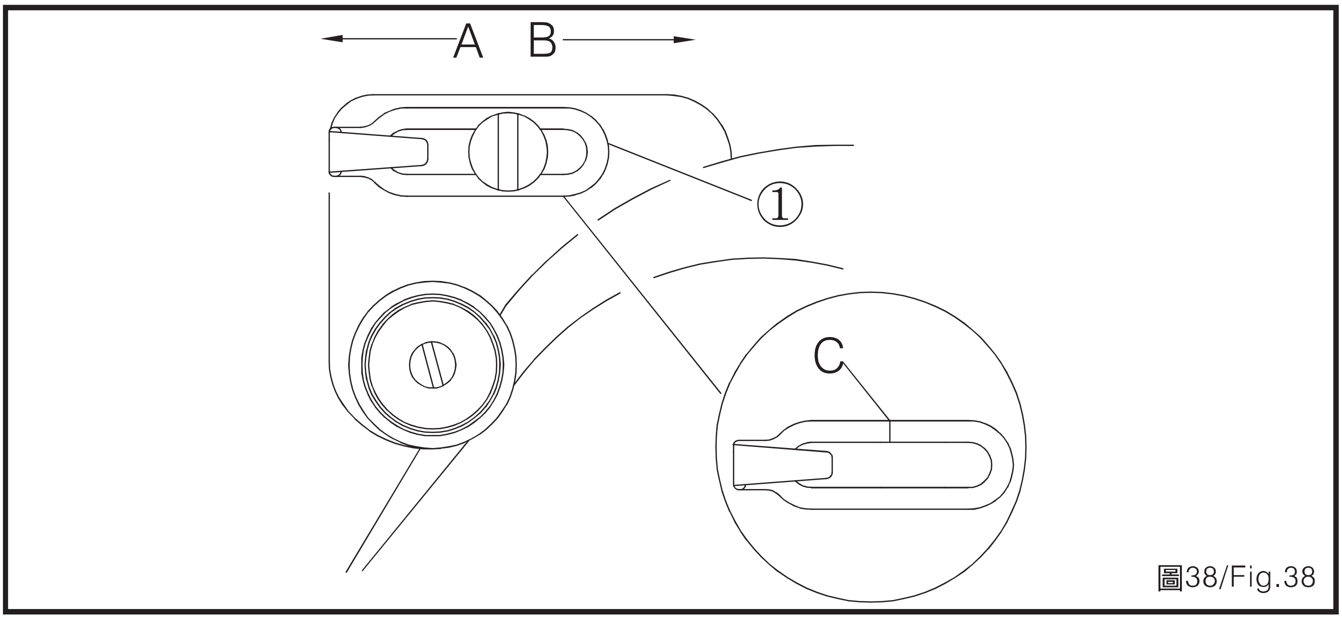


圖38/Fig.38

腳踏板壓力及行程

ADJUSTING THE TENSION ON PEDAL AND PEDAL STROKE

1. 腳踏板前踩位置的壓力調整。(圖39)

   (1) 腳踏板壓力可經由改變腳踏板壓力調整彈簧①之安裝位置而改變。

   (2) 將彈簧勾移往左邊，壓力減少。

   (3) 將彈簧勾移往右邊，壓力增加。

2. 腳踏板後踩位置的壓力調整。

   (1) 壓力可經由調整螺絲②調整。

   (2) 將調整螺絲依箭頭方向，壓力增加。

   (3) 將調整螺絲反箭頭方向，壓力減少。

3. 腳踏板行程調整
   當將連接桿③移往左邊孔方向時，腳踏板行程減少。

1. Adjusting the front part treading pressure of the pedal. (Fig. 39)
   (1) The pressure of the pedal can be adjusted by changing the mounting position of pedaling pressure adjust spring ①.
   (2) The pressure is reduced when moving the spring hook to left side.
   (3) The pressure is increased when moving the spring hook to right side.
2. Adjusting the rear part treading pressure of the pedal.
   (1) The rear part treading pressure of the pedal can be adjusted by driving the regulator screw ②.
   (2) The pressure is increased when you follow the direction on the screw to drive it.
   (3) The pressure is decreased when you drive the screw by the opposite direction of the arrow on the screw.
3. Adjusting the pedal stroke.
   The pedal stroke is shorter as connecting rod ③ moved to the left holes.

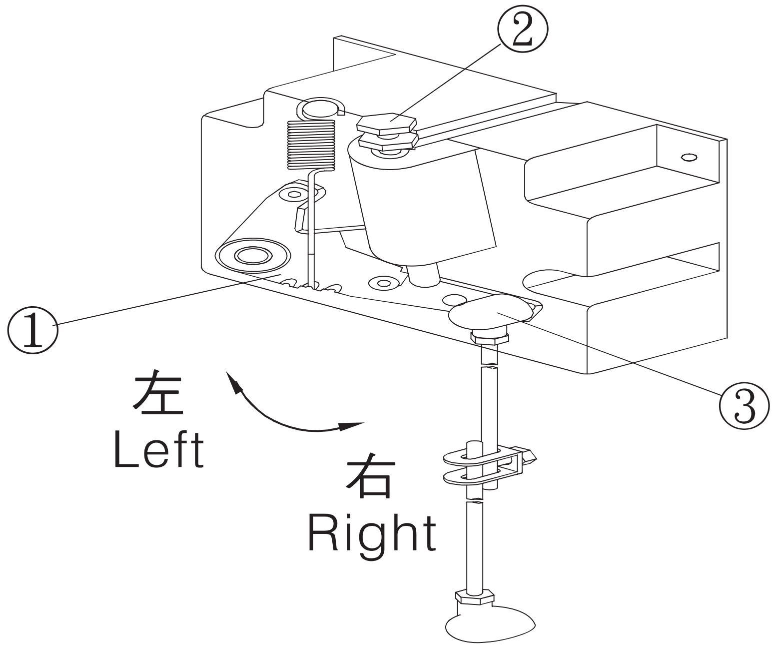


圖39/Fig.39

腳踏板調整　　ADJUSTING THE PEDAL

1. 連接桿安裝(圖40)
   依圖箭頭方向所示，左右移動腳踏板③，使馬達控制桿與連接桿②成一直線。

2. 腳踏板傾斜度調整
   (1) 腳踏板斜度可藉著改變連接桿長度而自由調整。

   (2) 放鬆調整螺絲④調整連接桿②長度。

1. Install the connecting rod. (Fig. 40)
   Move the pedal③ left and right as the arrow shows in the figure in order to align the motor control lover ① with the connecting rod ②.
2. Adjusting the slope of the pedal.
   (1) The tilt degree can be changed and adjusted freely by changing the length of the connecting rod.
   (2) The length of the connecting rod ② is adjusted by loosening the adjusting screw ④.

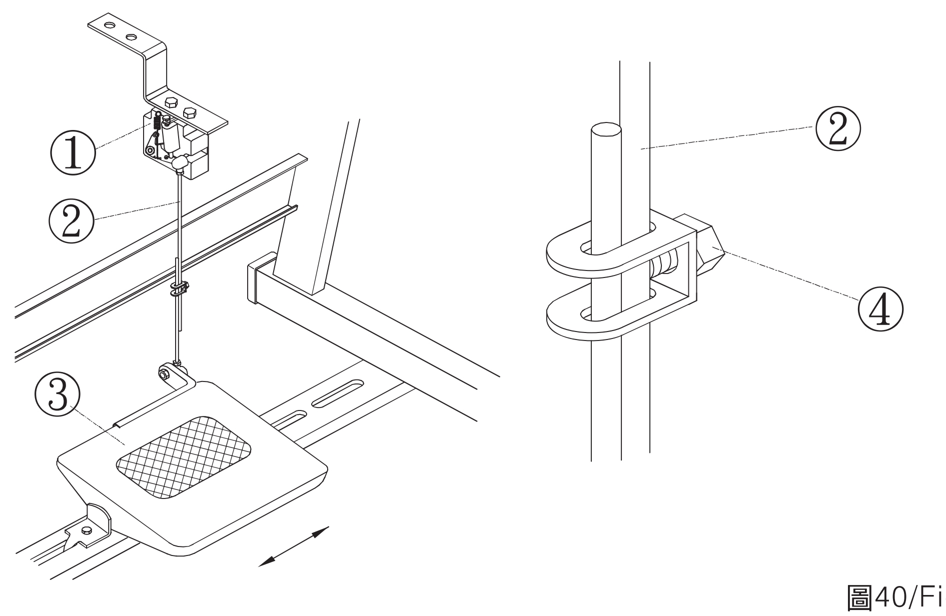


圖40/Fig.40

撥線桿　　ADJUSTING THE THREAD WIPER

1. 撥線桿位置(圖41，42，43)
   請依車縫布料厚薄，調整撥線桿位置。

1. The thread wiper location (Fig. 41, 42, 43)
   Please adjust the thread wiper according the the thickness of the materials.

(2) 調整撥線桿平坦部位與針中心距離1 mm，鎖緊撥線桿調整螺絲⑤，使撥線桿被其鎖圈⑥壓住及固定。

(3) 不用撥線桿時，請將其開關⑦切掉。

(2) Adjust the flat straight part of the thread wiper in a distance of 1 mm from the center of the needle. Lock the adjust screw ⑤ of the thread wiper, so that the thread wiper can be fixed and firmly pressed by its collar ⑥.

(3) Please turn off the thread wiper switch ⑦, when there is not necessary to use the thread wiper.

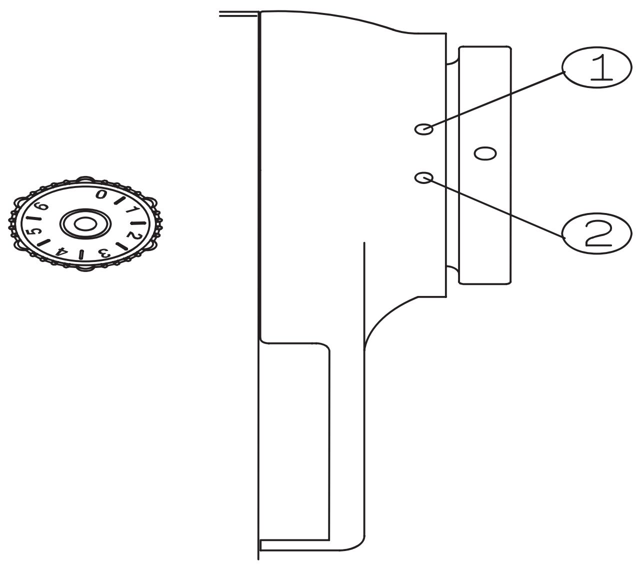


圖41/Fig.41

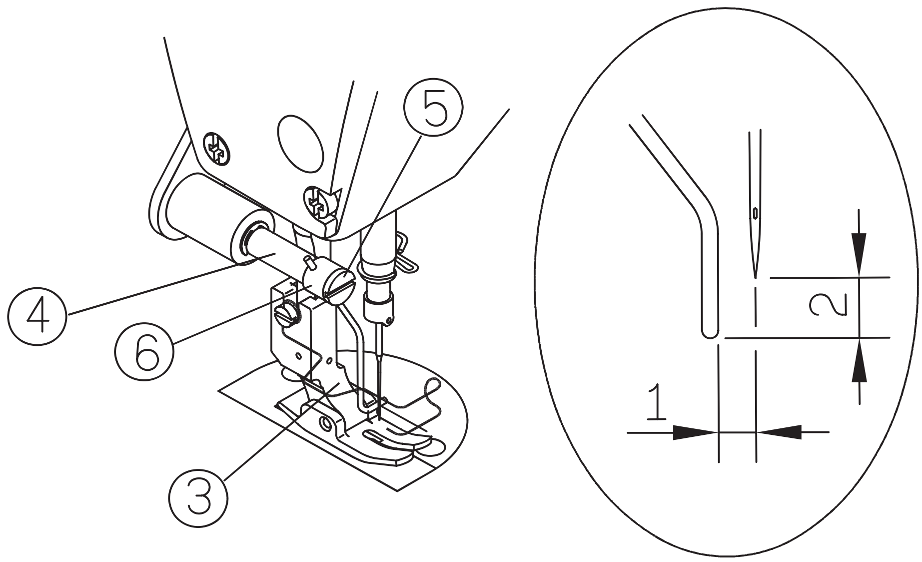


圖42/Fig.42

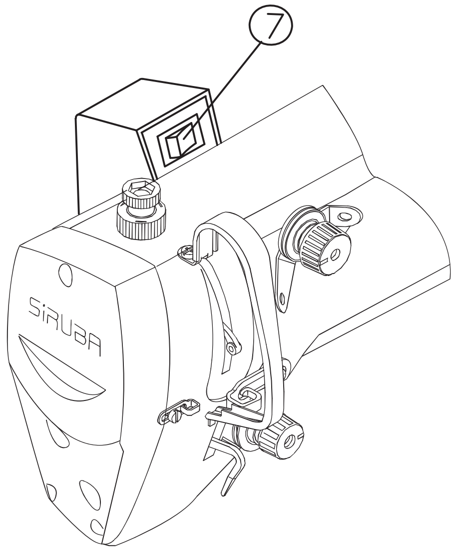


圖43/Fig.43

梭頭油量調整

ADJUSTING THE AMOUNT OF OIL IN THE HOOK

1. 轉動裝在梭頭傳動大心上之油量調整螺絲，轉向"＋"號方向(順著Ａ方向)油量增加；轉向"－"號方向(順著B方向)油量減少。(圖44)

2. 梭頭油量適當調整後，將機器空轉30秒，以重新檢查確認梭頭油量。

1. The oil amount adjustment screw is mounted on the hook driving shaft. Turn the screw counter clockwise toward "＋" direction (A direction) to increase the amount of oil supplied in the hook. Turn the screw clockwise toward "－" direction (B direction) to reduce the amount of oil supplied in the hook. (Fig. 44)

2. After the amount of oil in the hook is properly adjusted, run the machine idly for 30 seconds to do oil splashing observation test to reconfirm the amount of oil in the hook.

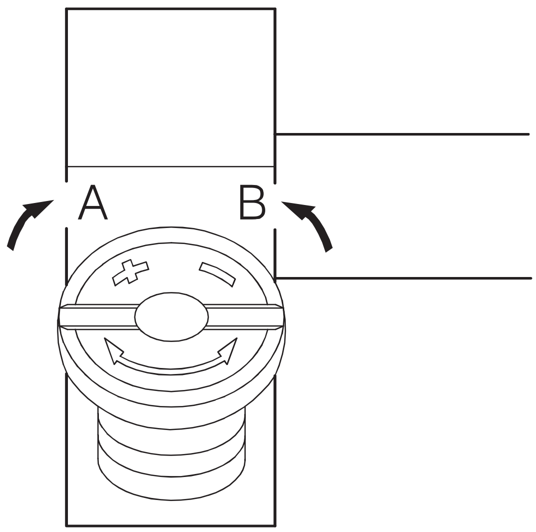


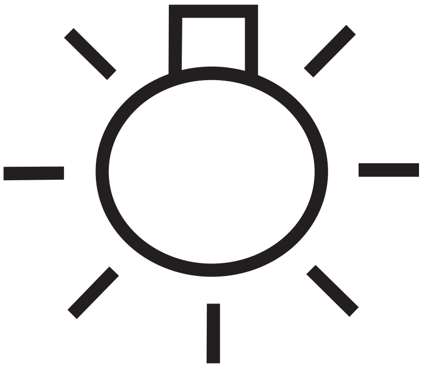
圖44/Fig.44

操作環境照明

LIGHTENING OF THE OPERATION ENVIRONMENT

提供一個警示標誌，告知使用者：工業用縫紉品或是縫紉系統必須在該縫紉區域未啟動照明裝置前，禁止插電或通電；照明裝置的最大輸入功率應該能夠輕易辨識，當照明裝置被重置或移動的時候，警示標誌也應設置在照明裝置插座上或是附近。警示標示如圖45所示

Provide a warning that an industrial sewing unit or sewing system must always be unplugged from the local lighting of the sewing area before relamping, the marking of maximum rated input of a lamp shall be easily discernible while the lamp is being replaced indicated on or near the lamp socket as shown on Fig. 45.



最大流明…… 510 流明
Maximum…… 510 Lum
最小流明……430 流明
Minimum …… 430 Lum

圖45/Fig.45

操作者條件

CONDITIONS OF ALL OPERATORS

1. 熟讀並了解使用說明書內容。
2. 認識機器各部功能及注意事項。
3. 了解各警告標籤之意義。
4. 了解熟悉機器之操作方式。
5. 操作者須保持精神狀態良好。
6. 操作者須穿著合宜適當之工作服。
7. 視需要培養操作者使用機器之熟練度。

1. Read and understand well the content of this instruction book.
2. Know the functions of major parts and understand the notices.
3. Truely realize the meanings of all warning tags.
4. Realize and be familiar with how to operate this machine.
5. Operators have to keep well mental status.
6. Operators shall wear appropiate and proper working suits.
7. Develop the familiarity of how to operate the machine if needed.

腳踏板之操作

腳踏板依以下四步驟操作：(圖46)

1. 輕踩踏板，如B，機器將以低速運轉。
2. 進一步重踩踏板前方時，如A，機器以較高速運轉(如果預先設定有自動倒縫功能，機器將在完成倒縫後再高速運轉)。
3. 踏板恢復至原位置，如C，機器暫停轉動(針在上或下)。
4. 將踏板完全向後踩，如E，機器進行切線動作。
5. 注意事項：
   (1) 如果你的機器附有押具自動提升器，機器停止與切線動作之間會多了一個步驟，即當你輕輕後踩腳踏板，如D，押具向上提升，再往下踩，執行切線動作。
   (2) 當倒縫動作執行時，如果將腳踏板回復到原位置，機器會在倒縫動作完成後才停止。
   (3) 即使機器在高速或低速中，只要立刻將腳踏板往後踩，它都會執行正常的切線動作。
   (4) 如果在機器執行切線動作後，即便立刻將腳踏板恢復原位置C，機器仍將完成切線動作。

OPERATING THE PEDAL

The foot pedal is operated as the following 4 Steps. (Fig. 46)

1. Lightly tread the front part of the foot pedal shown as B in Fig. 46, machine runs at low sewing speed.
2. Further, tread the front part of the foot pedal shown as A, Machine runs at high sewing speed. (The machine runs at high speed after it completes the backstitch if the automatic backstitch has been preset.)
3. Reset the pedal to its original position, shown as C. Machine will stop (with the needle up or down.)
4. Fully depress the back part of the pedal shown as E, so that machine trims threads.
5. Attentions：
   (1) One extra step is given between the machine stop and thread trimming steps if your machine is equipped with the auto presser foot lifter. When you lightly depress the back part of the pedal, shown as D, the presser foot goes up. The thread trimmer actuates if you further tread the back part of the pedal.
   (2) Machine will stop after completing the backstitch if you relocate the pedal to its neutral position during executing the automatic backstitch.
   (3) Whether the machine is under high speed or low speed sewing, you can make the machine doing thread trimming any time by tread down the back part of the pedal to do so.
   (4) Even if you reset the foot pedal to its neutral position C immediately after the machine started thread trimming action, the machine will completely perform thread trimming.

(5) 當針停在下定位時，如果要將針上提，則將腳踏板後踩一次至D位置即可。

(5) When the machine stops and makes the needle located at the lower dead end, tread the back part of the foot pedal once to D if you want to bring the needle up.

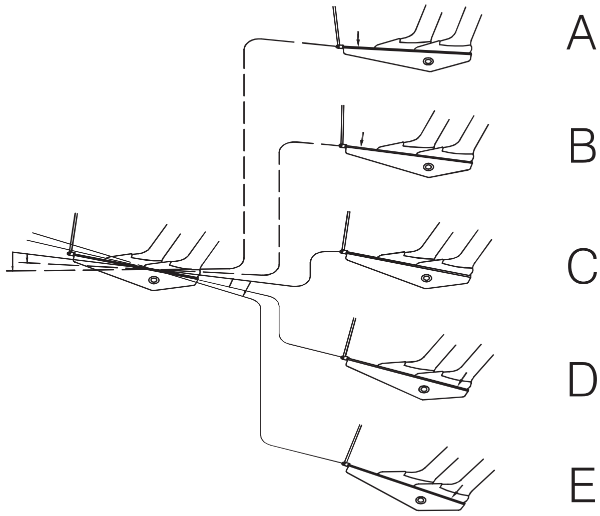


圖46/Fig.46

單觸式倒縫機構

OPERATING THE ONE TOUCH TYPE REVERSE FEED STITCHING MECHANISM

1. 按下開關①，機器啟動倒縫功能(圖47)。
2. 只要開關持續被按著，機器繼續執行倒縫功能。
3. 開關放鬆，機器即恢復一般車縫功能。

1. Press the switch lever ① to start the back stitch function. (Fig. 47)
2. As long as the switch lever is pressed, the sewing machine will continue doing back stitch.
3. Release the switch lever, and the sewing machine will resume the normal sewing function.

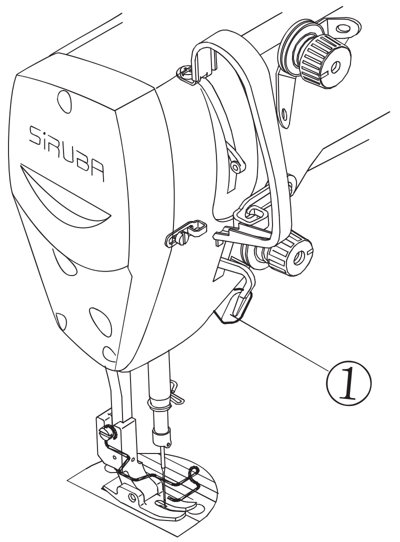


圖47/Fig.47

注意CAUTION

清潔作業前，請切斷電源。當誤觸起動開關時，縫紉機動作易導致人員受傷。
Turn off the power switch before carrying out cleaning. The machine may operate if the treadle is pressed incautiously, which could result in injury.

加潤滑油和黃油時，務必戴好保護眼鏡和手套，以防潤滑油進入眼中或沾在皮膚上，易引起發炎。
Be sure to wear protective goggles and gloves when handling the lubricating oil and grease so that they do not get into your eyes or onto your skin, otherwise inflammation can be resulted.

潤滑油或黃油不能飲用，否則將會引起嘔吐和腹瀉，將油放在小孩拿不到的地方。
Furthermore, do not drink or eat the oil nor the grease for they can cause vomiting and diarrhea. Keep the oil away of the reach of children.

縫紉機頭倒下或豎起時，請以雙手進行操作。
Use both hands to hold the machine head when tilting or returning it to its original position.

單手操作時，因縫紉機的重量較重，萬一滑落易導致受傷。
If only using one hand to move the machine, the weight of the machine head may cause slipping and you may get hurt.

為了保持縫紉機的機能, 且能長久的使用, 請每日加以保養。另外, 縫紉機如果長時間未使用, 請進行以下的保養後再使用。

《 保養 》
1. 抬起押具
2. 將兩個螺絲①拆下，然後拆下針板②。
3. 以軟毛刷清除送布牙③上的布屑。 (圖48)
4. 清潔後將針板②裝上。
5. 後傾斜縫紉機頭部
6. 定期保養項目(表7)

For keeping the machine quality and lengthening the usage term of this sewing machine, please maintain it everyday. In addition, before first use after a long idling time, please follow the following steps to maintain.

《 CLEANING 》
1. Raise the presser foot.
2. Remove the two screws ①, and then remove the needle plate ②.
3. Use a soft brush to clean dust and lints on the feed dog teeth③.(Fig. 48)
4. Install the needle plate ② after doing the above cleaning.
5. Tilt back the machine head.
6. Periodical Maintenance Items(Table 7)

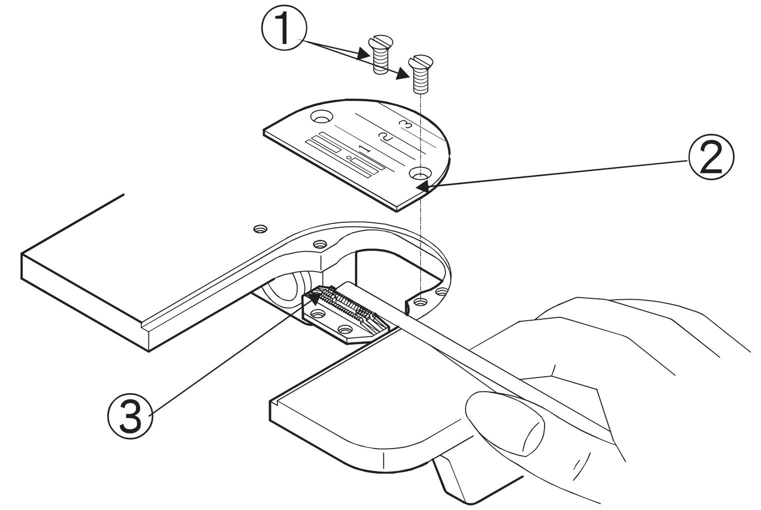


圖48/Fig.48

保養循環 Maintenance Cycle	保養項目Maintenance Items
每天 Daily	1. 清潔送料具上之棉絮 Clean the lint on the feed dog.
	2. 檢查油盤是否有足夠之液態油。(油量在油鏡之上、下兩紅漆記號間) Check if there has enough liquid oil inside the oil pan. (The amount should be between the red up and down paint mark of the oil level gauge.)
	3. 保持機器及操作台清潔 Keep the machine and the operation table clean.
每週 Weekly	1. 保持電源外觀乾淨 Keep the power cords looking clean and neat.
	2. 保持操作面板乾淨 Keep the operational panel clean.
	3. 檢查電源零件是否鬆脫或在正確位置 Check if the power parts is loosening or still at the right position.
每三個月 Quarterly	1. 更換油盤內之液態油 Replace the liquid oil inside the oil pan.

表7/Table 7

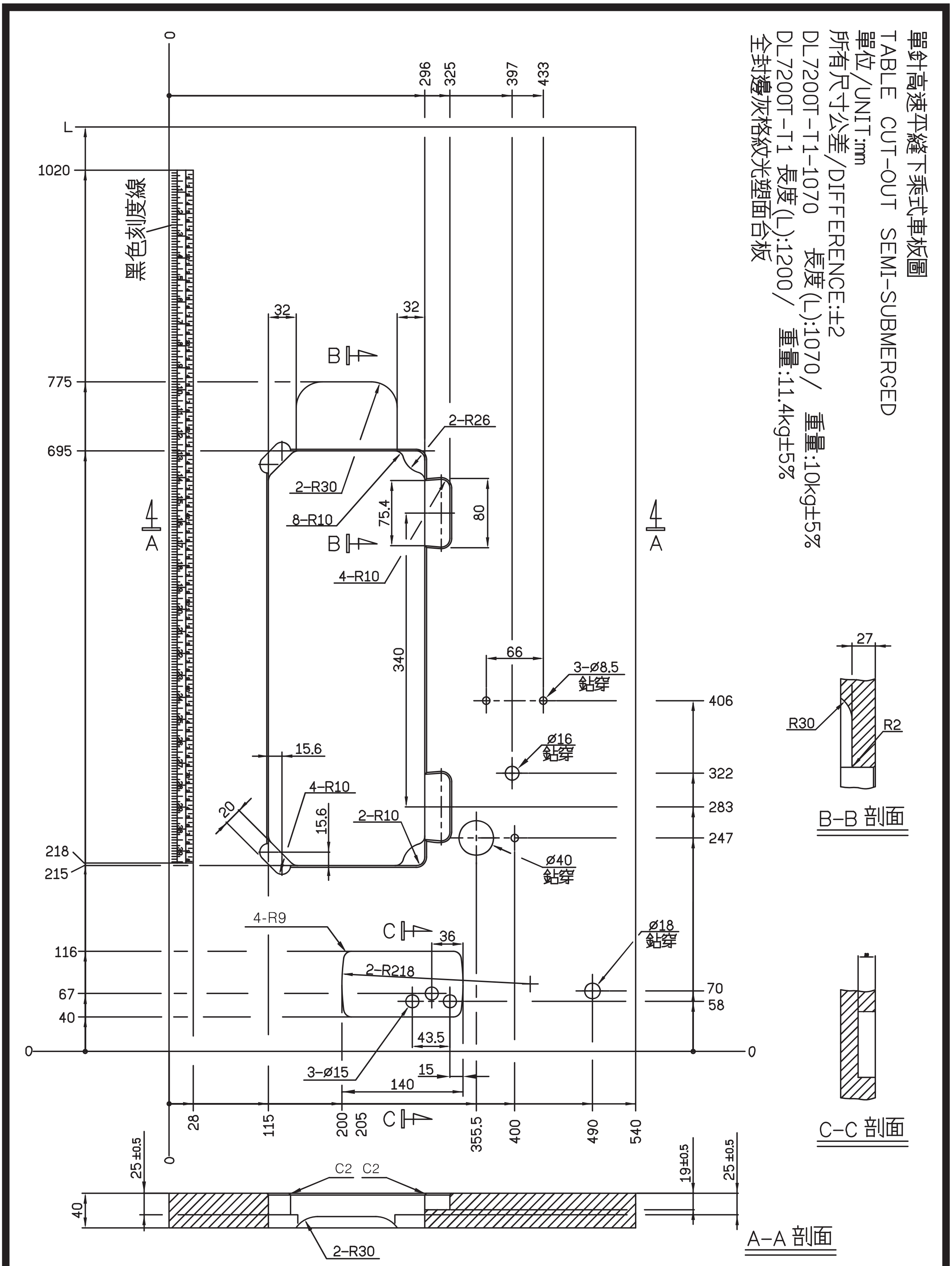

單針高速平縫下乘式車板圖
TABLE CUT-OUT SEMI-SUBMERGED
單位/UNIT:mm
所有尺寸公差/DIFFERENCE:±2
DL7200T-T1-1070 長度(L):1070/ 重量:10kg±5%
DL7200T-T1 長度(L):1200/ 重量:11.4kg±5%
全封邊灰格紋光塑面合板
黑色刻度線
3-Ø8.5 鉆穿
Ø16 鉆穿
Ø40 鉆穿
Ø18 鉆穿
B-B 剖面
C-C 剖面
A-A 剖面

圖50/Fig.50

報廢流程

1. 當機器需要被淘汰與報廢時，有一些基本規則必須採納、遵守以保護環境及公眾健康。

2. 所有的機器零組件必須依照下列分類來區分開：

   (1) 所有護套、可伸縮軟管及塑膠或非金屬零件。

   (2) 電器零件：開關、照明器具等。

   (3) 絕緣材料：石棉、彈性/可伸縮橡膠片。

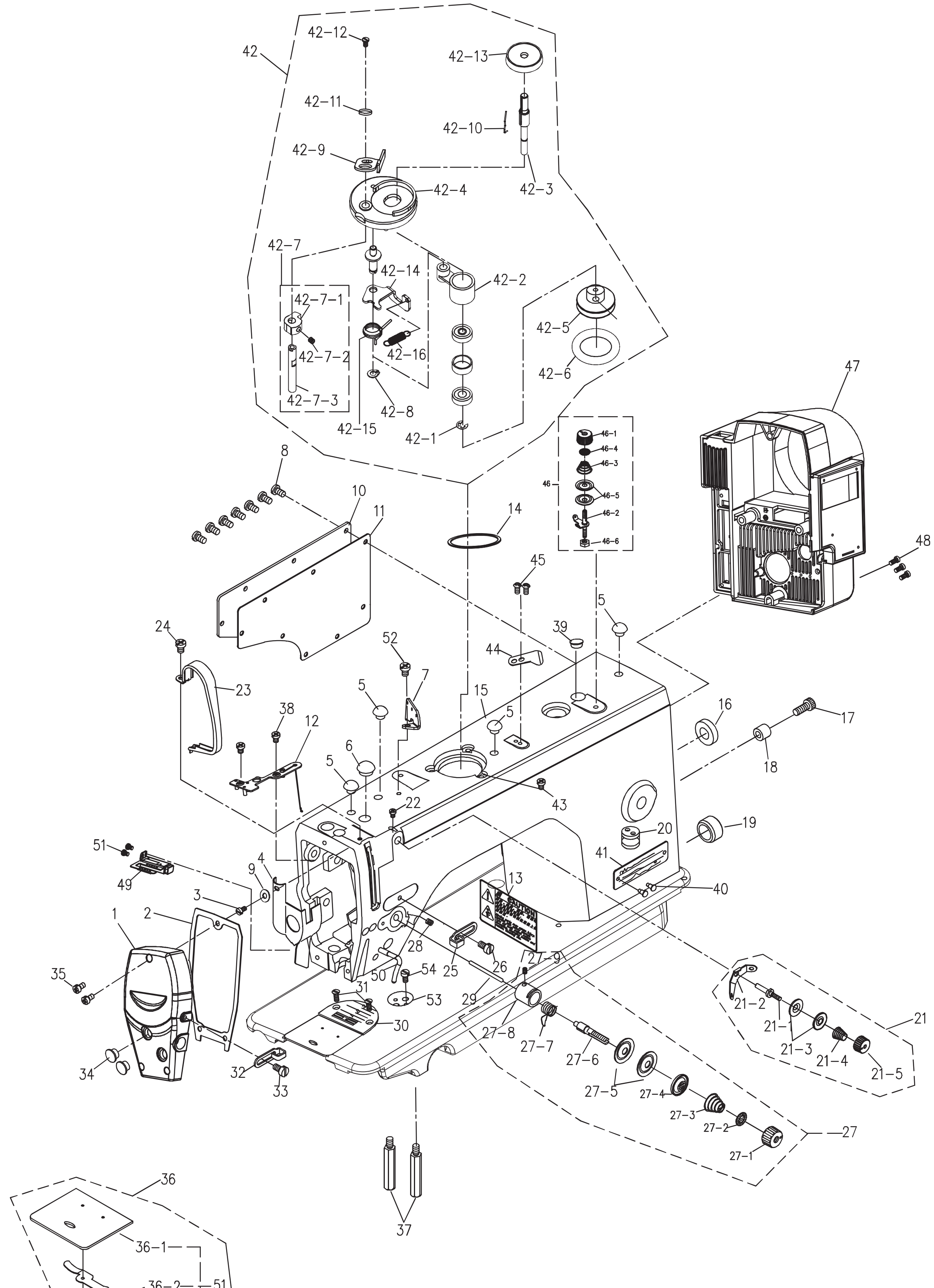
   (4) 金屬：含鐵金屬、銅、青銅與黃銅、其他各種金屬。

3. 以此方法，所有材質可以正確的淘汰，回收再利用或鎔解為可再使用或再處理而不至於危害環境。

DEMOLITION PROCEDURE

1. When the machine needs to be eliminated and demolished, certain basic rules must be observed to protect the environment and public health.
2. ALL machine components must be divided according to categories as the followings:
   (1) All sheathes, flexible hosing and plastic or non-metal components.
   (2) Electricity components: switches, or lighting components.
   (3) Insulation materials: rock wool, and flexible rubber strips.
   (4) Metals: ferrous metals, copper, bronze and brass, various.
3. In this way, all materials can be eliminated correctly, recycled, or melted down for re-use or disposed of so that they do not harm the environment.

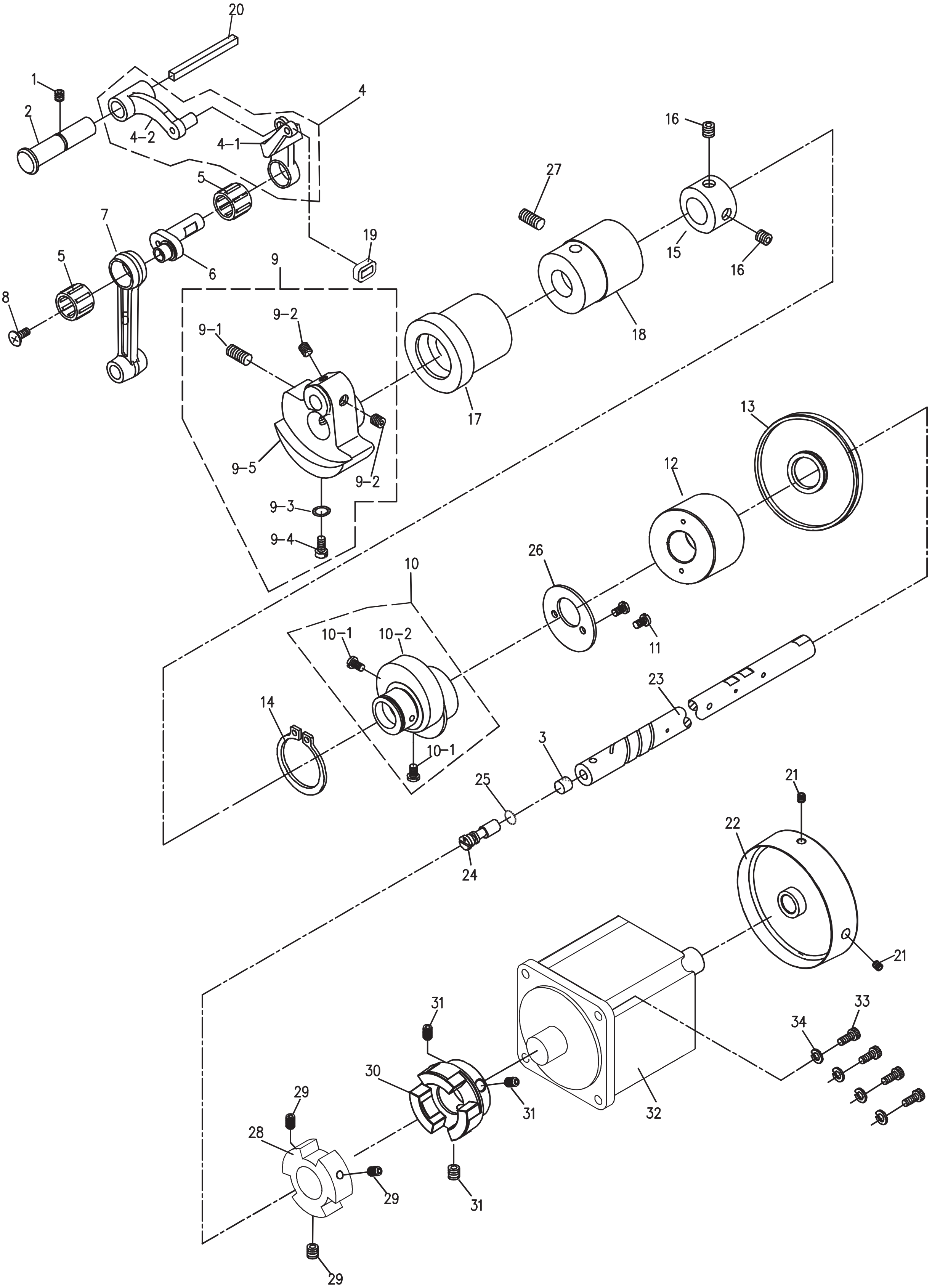
1.機殼部件
MACHINE FRAME&MISCELLANEOUS COVER COMPONENTS



1.機殼部分/MACHINE FRAME&MISCELLANEOUS COVER COMPONENTS					
序號 Ref.No.	新圖號 new part No.	名 稱 Part name	Name of parts	數量 Qty	備注 Note
1	996001001	面板	Face plate	1	
2	996001002	面板墊	Face plate agsket	1	
3	S073184404	防油板螺釘	Screw 1/8 × 44 L=4	1	
4	991001004	面部防油板	Arm oil shifld	1	
5	991001005	挑綫連杆銷孔塞	Rubber plug	4	
6	991001006	針杆曲柄螺孔塞		1	
7	991001007	三眼過綫板	Thread guide rod	1	
8	S094762809	後窗板螺釘	Screw 3/16 × 28 L=9	11	
9	991001057	防油板墊片	Grease plate gasket	1	
10	996001009	後窗板	Side plate	1	
11	996001010	後窗板墊	Gasker	1	
12	991001052	油线板组件	Oil plate assembly	1	
13	991001012	安全指示牌	Safety lable	1	
14	991001056	繞綫器墊片	Bobbin Washer	1	
15	996001015	機殼	Machine cover	1	
16	991001014	送料調節器孔塞	Rubber plug	1	
17	S184762818	倒縫限位套緊固螺釘	Screw 3/16 × 28 L=18	1	
18	991001016	倒縫限位套	Reverse feed lever stopper	1	
19	991001017	下軸盲孔塞	Rubber plug	1	
20	991001018	導綫過綫套	Magnet cord rubber	1	
	991001018-1	導綫過綫套		1	
21	991001019	小夾綫器組件	Thread tension asm	1	
21-1	991001019-1	小夾綫螺釘	Thread tension post	1	
21-2	991001019-2	小夾綫過綫板	Thread tension guide	1	
21-3	991001019-3	小夾綫板	Thread tension disk	2	
21-4	991001019-4	小夾綫簧	Thread tension spring	1	
21-5	991001019-5	小夾綫螺母	Thread tension nut	1	
22	S144374006	小夾綫組件支架螺釘	Screw 3/16 × 28 L=6	1	
23	991001021	挑綫防護罩	Pick up shield	1	
24	S094762806	挑綫防護罩螺釘	Screw 3/16 × 28 L=6	1	
25	991001023	右綫鈎	Arm thread guide right	1	
26	S074374006	右綫鈎螺釘	Screw 11/64 × 40 L=6	1	
27	991001025	夾綫器組件	Thread tension asm	1	
27-1	991001025-1	夾綫螺母	Tension nut	1	
27-2	991001025-2	夾綫止動板	Rotating stopper	1	
27-3	991001025-3	夾綫簧		1	
27-4	991001025-4	夾綫壓板	Thread tension disk presser	1	
27-5	991001025-5	夾綫板	Thread tension disk	2	
27-6	991001025-6	夾綫螺釘	Tension post	1	
27-7	991001025-7	挑綫簧	Take-up spring	1	
27-8	991001025-8	調綫簧調節座	Tension post socket	1	
27-9	S143574005	夾綫螺絲緊固螺釘	Screw 9/64 × 40 L=5.5	1	
28	S115952807	夾綫器支緊螺釘	Screw 15/64 × 28 L=7	1	
29	991001027	鬆綫釘	Tension releasing	1	
30	996001030	針板	Throat plate	1	
31	S044374006	針板螺釘	Screw 11/64 × 40 L=6	2	
32	991001031	左綫鈎	Arm thread guide left	1	
33	S074374006	左綫鈎螺釘	Screw 9/64 × 40 L=6	1	
34	991001033	面板調節孔塞	Rubber plug	2	

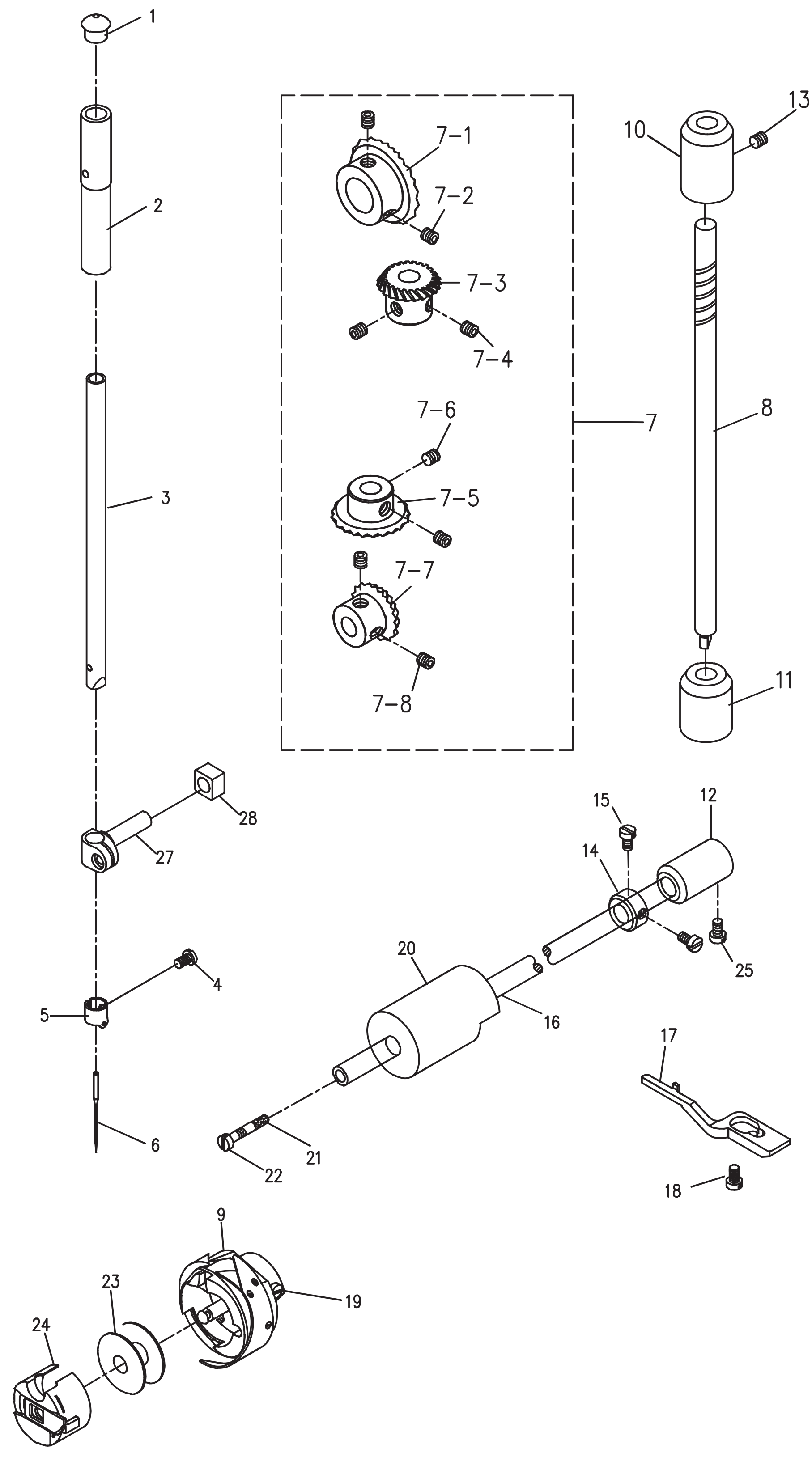
35	S094762808	面板螺釘	Screw 3/16 × 28 L=8	3	
36	991001035	推板組件	Slide plate asm	1	
36–1	991001035–1	推板	Slide plate	1	
36–2	991001035–2	推板簧	Bed slide spring	1	
36–3	S082385602	推板簧螺釘	Screw 3/32 × 56 L=2.2	2	
37	991001036	底板支柱	Bed slide spring	4	
38	S073574011	油綫板固定螺釘	Screw	2	
39	991001058	橡膠塞	Rubber plug	3	
40	991001039	型號牌鉚釘	Pole	2	
41	996001041	型號牌	Modle plate	1	
42	LA1524	繞綫器組件	Bobbin base	1	
42–1	EM040	擋圈E4	Retaining ring E4	2	
42–2	LA1521	繞綫軸基座	Bobbin base	1	
42–3	LA1524	繞綫軸	Bobbin	1	
42–4	LA1520	O型圈P9	O ring P9	1	
42–5	LA1523	繞綫輪	Winding wheel	1	
42–6	OR257	橡皮墊圈29	Rubber washer 29	1	
42–7	LA1518A	梭芯夾凸輪組件	Bobbin clip cam assembly	1	
42–7–1	LA1518	梭芯夾凸輪	Shuttle cam	1	
42–7–2	SM502	螺釘	Screw	1	
42–7–3	LA1519	梭芯夾軸	Shaft	1	
42–8	EM057	卡簧	Jump ring	1	
42–9	LA1513	梭芯壓臂柄	Shuttle arm handle	1	
42–10	LA1535	卡簧	Jump ring	1	
42–11	WM40H	平墊圈	Flat washer	1	
42–12	SM4071	螺釘	Screw	1	
42–13	LA1526	梭芯座	Spindle seat	1	
42–14	LA1522	繞綫杠杆	Winding lever	1	
42–15	LA1530	彈簧	Spring	1	
42–16	LA1534	拉簧	Spring	1	
43	M080500810	繞綫器螺釘	Screw	3	
44	991001043	割綫刀	Knife	1	
45	S093574005	割綫刀螺釘	Knife screw	2	
46	991001045	繞綫夾綫器組件	Thread tension asm.	1	
46–1	991001045–1	夾綫螺母	Tension nut	1	
46–2	991001045–2	夾綫螺釘	Tension post	1	
46–3	991001045–3	夾綫彈簧	Tension spring	1	
46–4	991001045–4	夾綫板	Thread tension disk presser	2	
46–5	991001045–5	過綫板	Thread tension guide	1	
46–6	991001045–6	夾綫螺母（下）	Tension nut	1	
47	LA1515E	電控組件	Electronics control asm	1	
48	M180500835	電機罩殼緊固螺釘	screw	4	
49	991001048	倒縫燈開關組件	Protects the switch	1	
50	991001049	大綫勾	Big wire hook	1	
51	S094762806	倒縫燈開關固定螺釘	Screw	1	
52	S074374007	三眼綫勾螺釘	Screw	1	
53	991001037	卷邊器	Ruler stopper	1	
54	S074374006	卷邊器螺釘	Screw 11/64 × 40 L=6	2	

2. 上軸/挑綫部件
MAIN SHAFT&THREAD-UP LEVER COMPONENTS



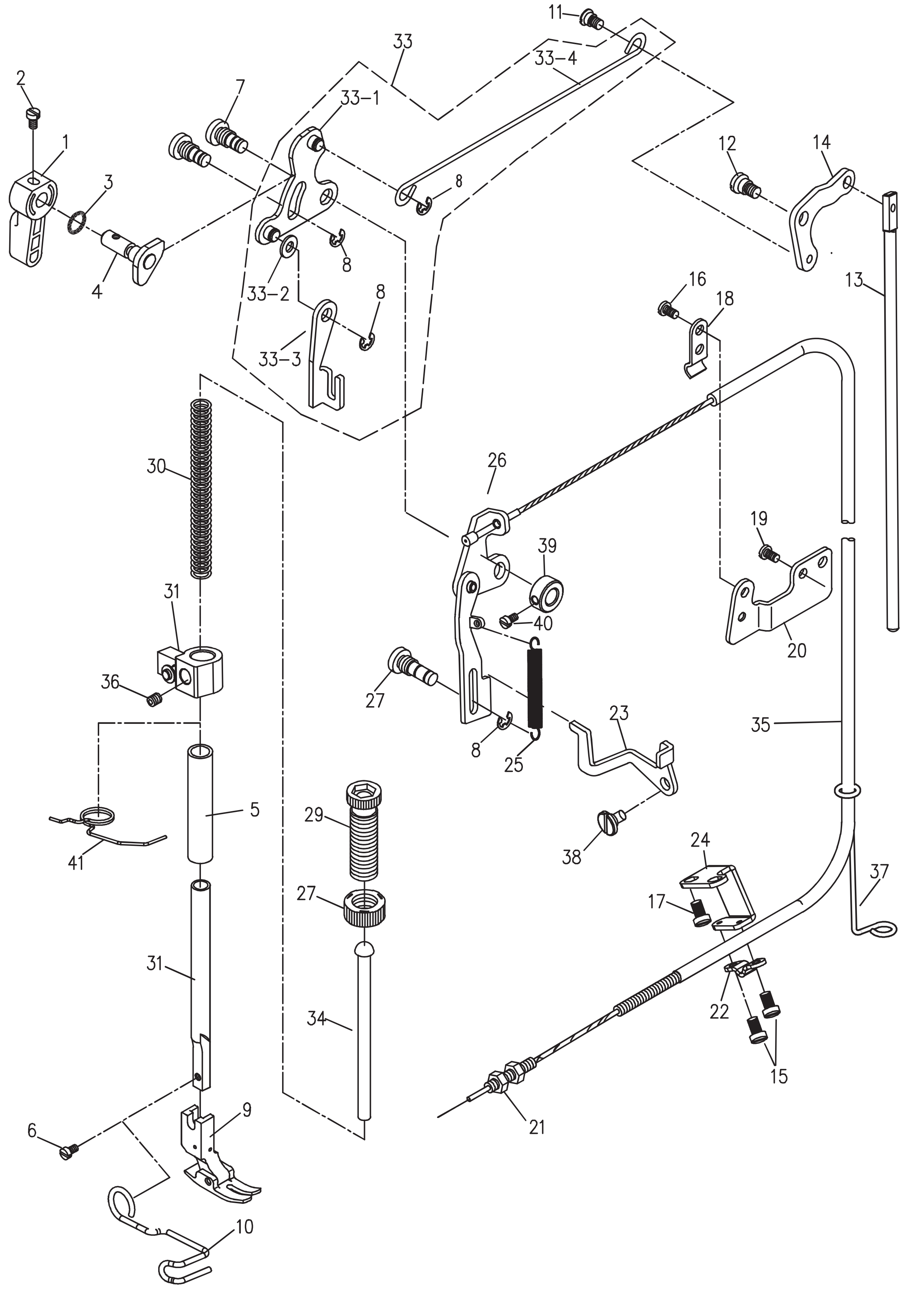
2.上軸/挑綫部件/MAIN SHAFT&THREAD-UP LEVER COMPONENTS					
序號 Ref.No.	新圖號 new part No.	名 稱 Part name	Name of parts	數量 Qty	備注 Note
1	991002001	挑綫連杆銷螺釘	Screw 15/64 × 28 L=10.5	1	
2	991002002	挑綫連杆銷	thread take-up crank shaft	1	
3	991002003	曲柄油量限制氈	Roller felt	1	
4	991002004	挑綫連杆	thread take-up lever	1	
4-1	991002004-1	挑綫杆	take-up lever	1	
4-2	991002004-2	挑綫連杆	Pick line connecting rod	1	
5	991002005	挑綫杆滚針軸承	Needle bearing	2	
6	991002006	挑綫曲柄	Needle bar crank	1	
7	991002007	針杆連杆	Needle bar crank rod	1	
8	991002008	挑綫曲柄左旋螺釘	Left screw 9/64 × 40 L=4.8	1	
9	991002009	針杆曲柄組件	Counter weight	1	
9-1	S127142816	針杆曲柄緊固螺釘	Screw 9/32 × 28 L=16	1	
9-2	S116354006	挑綫曲柄定位螺釘	Screw 1/4 × 40 L=6	2	
9-3	991002009-3	定位螺絲O型圈	Rubber ring	1	
9-4	S077142815	針杆曲柄定位螺釘	Screw 9/32 × 28 L=15.5	1	
9-5	991002009-5	針杆曲柄	Counter weight	1	
10	991002010	送料偏心輪組件	Feed drive eccentric cam asm.	1	
10-1	S076354011	送料偏心輪螺釘	Screw 1/4 × 40 L=11	2	
10-2	991002010-2	送料偏心輪	Feed drive eccentric cam	1	
11	S113574006	送料偏心輪蓋板螺釘	Screw 9/64 × 40 L=6	2	
12	991002012	上軸後套	Upper axle sleeve	1	
13	991002013	上軸後套油封	Upper shaft rear sleeve oil seal	1	
14	991002014	抬牙連杆軸擋圈	Snap ring	1	
15	991002015	上軸擋圈	Thrust collar asm	1	
16	S126354006	上軸擋圈螺釘	Screw 1/4x40 L=6	2	
17	996002017	上軸前軸套	Main shaft front bushing asm.	1	
18	996002018	上軸中軸套	Bushing intermediate	1	
19	991002019	挑綫杆橡皮套	Rubber	1	
20	991002020	挑綫連杆銷供油綫	Thread take-up crank shaft felt	1	
21	M140500806	手輪螺釘	Screw	2	
22	991002022	手輪	Hand wheel	1	
	991002022-C	手輪（帶磁鋼）	Hand wheel（Magnetic steel）	1	
23	991002023	上軸	Main shaft	1	
24	991002024	上軸油量調節銷	Oil amount adjusting pin	1	
25	991002025	上軸油量調節銷O型圈	Rubber ring	1	
26	991002026	送料偏心輪蓋板	Thrust collar	1	
27	S145952808	上軸中軸套螺釘	Screw	1	
28	991002028	聯軸器(A)	Connect block A	1	
29	M140601008	連軸器螺釘	Screw M6 × 6	3	
30	991002030	聯軸器(B)	Connect block B	1	
31	M140601006	聯軸器(B)固定螺釘	Screw	3	
32	T50D8S11	直驅電機組件	Motor asm.	1	
33	M180500822	電機安裝螺釘M5X22	Screw	4	
34	991002046	電機安裝螺釘墊片	Washer	4	

3. 針杆/竪軸/下軸部件
NEEDLE BAR, UPRIGHT SHAFT&HOOK DRIVING SHAFT COMPONENTS



3.針杆/竪軸/下軸部件/NEEDLE BAR, UPRIGHT SHAFT&HOOK DRIVING SHAFT COMPONENTS					
序號 Ref.No.	新圖號 new part No.	名 稱 Part name	Name of parts	數量 Qty	備注 Note
1	991003001	針杆上孔塞	Cap	1	
2	991003002	針杆上套	Needle bar bushing upper	1	
3	996003003	針杆	Needle bar	1	
4	S083184405	機針螺釘	Screw 1/8 × 44 L=4.8	1	
5	991003010	針杆過綫勾	Needle bar thread guide	1	
6	991003011	機針	Needle DBX1 #14	1	
7	991003012	傘齒輪組件	Gear pinion asm.	1	
7–1	991003014	上軸傘齒輪	Gear asm.	1	
7–2	S116354008	傘齒輪螺釘	Screw 1/4 × 40 L=8	2	
7–3	991003016	竪軸上傘齒輪	Pinion asm.	1	
7–4	S116354008	傘齒輪螺釘	Screw 1/4 × 40 L=8	2	
7–5	991003019	竪軸下齒輪	Gear asm.	1	
7–6	S116354008	傘齒輪螺釘	Screw 1/4 × 40 L=8	2	
7–7	991003021	下軸傘齒輪	Pinion asm.	1	
7–8	S116354008	傘齒輪螺釘	Screw 1/4 × 40 L=8	2	
8	991003014	竪軸	Upright shaft	1	
9	996003015	旋梭	Hook asm.	1	
10	991003016	竪軸上軸套	Upright shaft bushing,upper	1	
11	991003017	竪軸下軸套	Upright shaft bushing,lower	1	
12	991003018	下軸後軸套	Bushing rear	1	
13	S145952808	竪軸上套緊固螺釘	Screw	1	
14	991003020	下軸擋圈	Thrust collar asm.	1	
15	S074374005	下軸擋圈螺釘	Screw 11/64 × 40 L=5	2	
16	991003022	下軸	Lower shaft	1	
17	991003023	旋梭定位勾	Bobbin case holder	1	
18	S084374011	旋梭定位勾螺釘	Screw SM11/64 × 40 L=11	1	
19	991003032	旋梭螺釘	Screw	3	
20	991003026	下軸前軸套	Lower shaft front metal	1	
21	991003027	下軸限油芯	Oil wick	1	
22	991003028	下軸限油螺釘	Oil seal screw	1	
23	991003029	梭芯	Bobbin	1	
24	991003030	梭殼	Bobbin case	1	
25	S145952808	下軸後軸套螺釘	Screw	1	
26	991003032	旋梭螺釘	Screw	2	
27	996003027	針杆連接柱	Needle rod holder asm.	1	
28	996003028	針杆連接柱滑塊	Slide block	1	

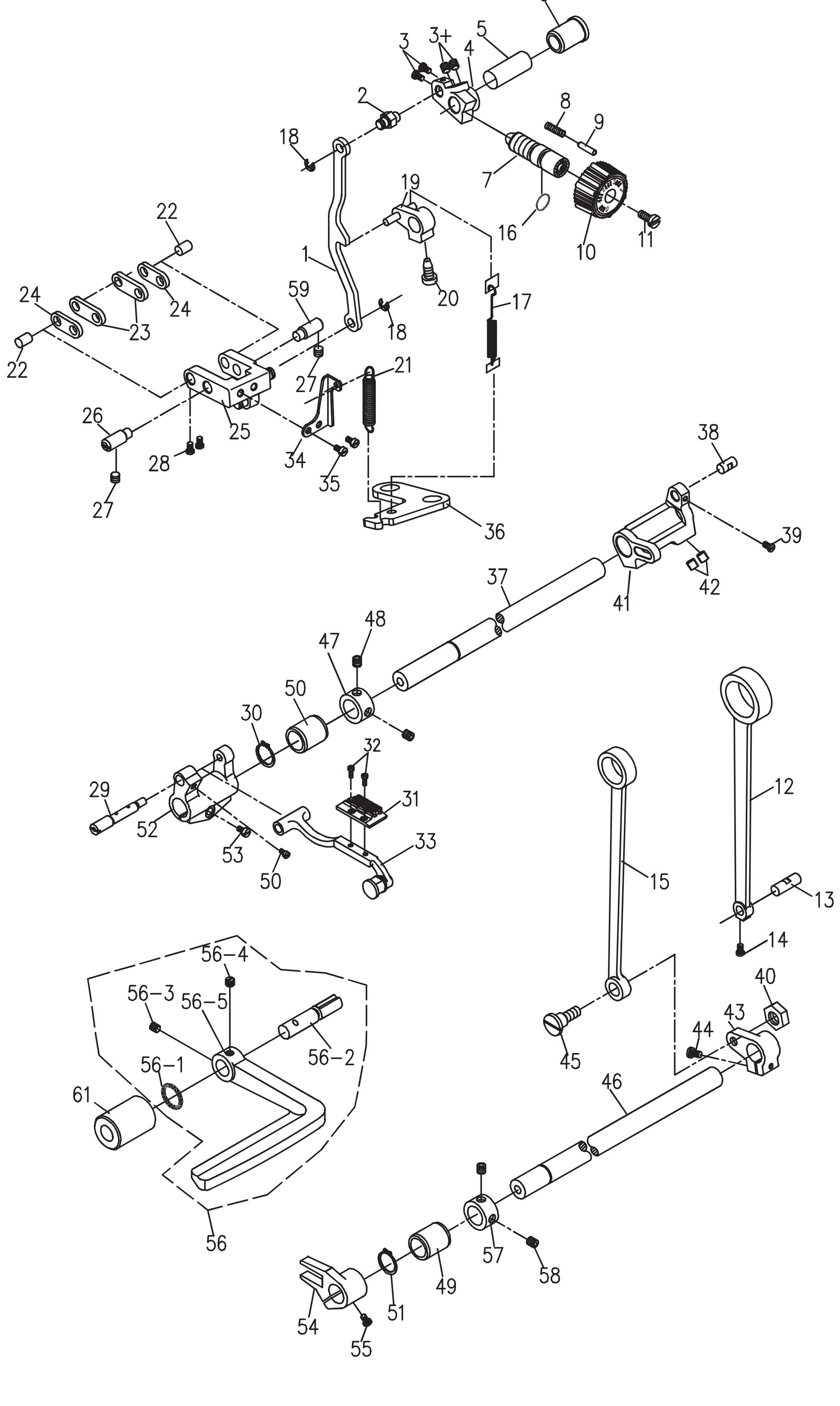
4. 壓杆部件
HAND LIFTER COMPONENTS



4.壓杆部件/HAND LIFTER COMPONENTS

序號 Ref.No.	新圖號 new part No.	名 稱 Part name	Name of parts	數量 Qty	備注 Note
1	991004001	壓脚扳手	Hand lifter	1	
2	991004002	壓脚扳手螺釘	Screw 9/64 × 40 L=10	1	
3	991004003	壓脚扳手軸O型圈	Rubber ring	1	
4	991004004	壓脚扳手凸輪部件	hand lifter cam asm	1	
5	991004005	壓杆軸套	Presser bar bushing lower	1	
6	S073574011	壓脚螺釘	Screw 9/64 × 40 L=11	1	
7	991004007	前杠杆螺紋銷	Link shaft	2	
8	991004008	擋圈	E–ring 5	7	
9	996004009	壓脚部件	Presser foot asm	1	
10	991004036	壓脚保護架	Presser foot protection frame	1	
11	991004010	抬壓脚拉杆螺釘	Hinge screw	1	
12	991004011	後杠杆軸拉螺釘		1	
13	996004013	抬壓脚頂杆	Knee lifter connecting rod	1	
14	996004014	抬壓脚後杠杆	Lifting lever link	1	
15	S073574007	下壓板緊固螺釘	Screw 9/64 × 40 L=7	2	
16	S084374008	上壓板緊固螺釘	Screw 11/64 × 40 L=8	2	
17	S075952810	下支架緊固螺釘	Screw 15/64 × 28 L=8	2	
18	991004017	拉綫壓板	Guy plate	1	
19	S094762808	上壓板組件緊固螺釘	Screw 3/16 × 28 L=8	1	
20	991004019	上壓綫底板	Wire holder bracket upper	1	
21	991004020	拉綫調節螺母	Nut 3/16 × 32	2	
22	910004021	下拉綫壓板	Pull down pressure plate	1	
23	996004023	鬆綫頂板	Loose roof	1	
24	991004023	鬆綫鋼繩下支架	Lower bracket of loose wire rope	1	
25	996004025	彈簧	Spring	1	
26	996004026	鬆綫頂板	Thread tension relerse wire	1	
27	991004026	鬆綫頂板螺紋銷	Tension release shaft	1	
28	991004027	調壓螺母	Presser adjurting screw nut	1	
29	991004028	調壓螺釘	Presser spring regulator	1	
30	991004029	調壓簧	Presser adjurting spring	1	
31	996004031	壓杆導架	Presser bar guide bracket	1	
32	991004031	壓杆	Presser bar	1	
33	996004033	前杠杆組件	Knee lifting cross rod asm	1	
33–1	991004032–1	抬壓脚前杠杆	Hand lifter link	1	
33–2	996004033–2	墊片	Shim	1	
33–3	996004033–3	壓脚升降板	Lifting lever	1	
33–4	991004032–3	抬壓脚拉杆	Knee lifting cross rod	1	
34	991004033	調壓導杆	Presser guide bar	1	
35	991004034	拉綫（長）	Pull wire (length)	1	
	991004034–D	拉綫（短）	Pull wire (short)	1	
36	S156354004	螺釘	Screw	1	
37	996004037	拉簧	Drag spring	1	
38	996004038	軸位螺釘	Axial screw	1	
39	996004039	擋圈	Ring	1	
40	S073574007	螺釘	Screw	1	
41	996004041	壓杆套油氈固定簧	Spring	1	

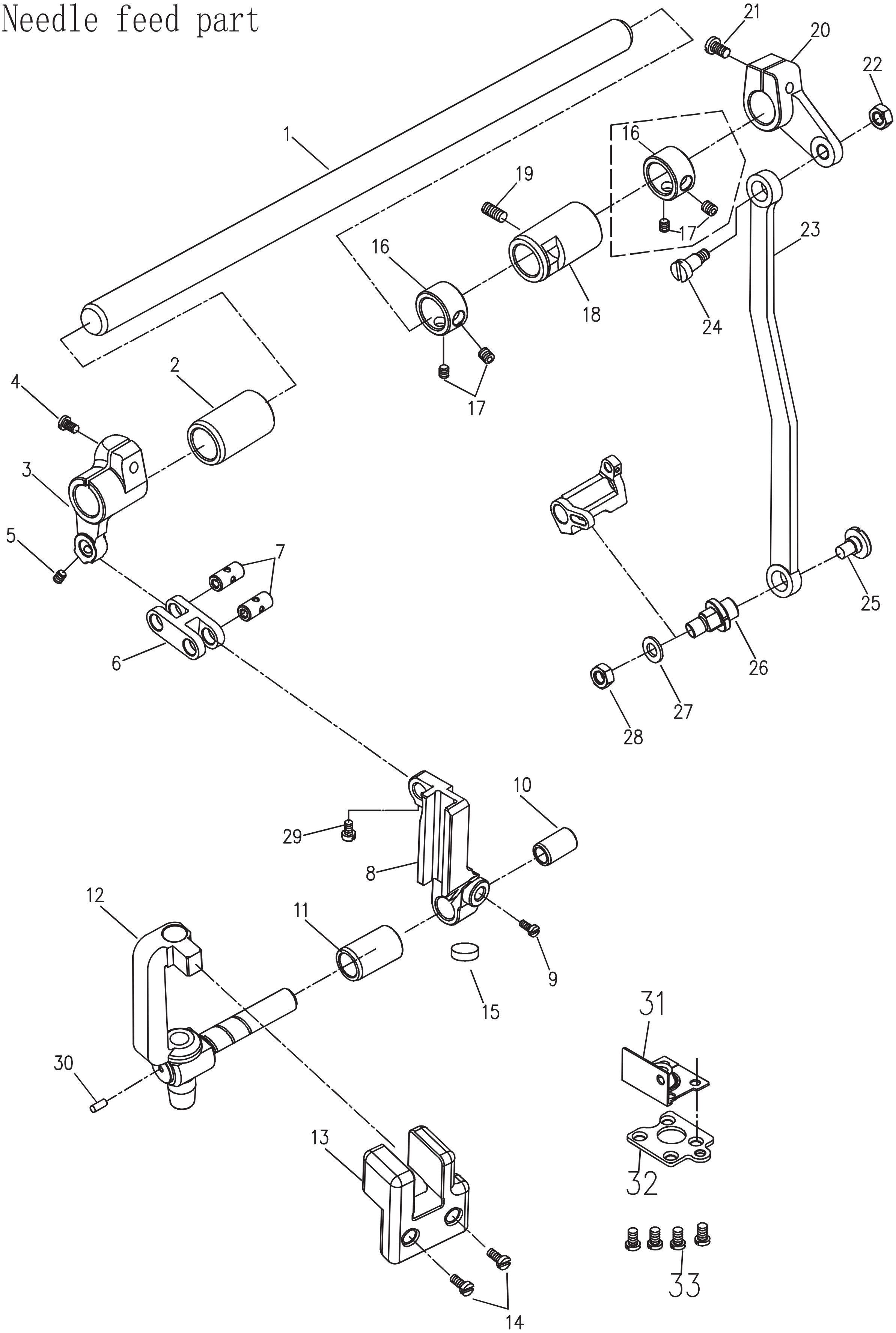
5.送料部件
FEED MECHANISM COMPONENTS



5.送料部件/FEED MECHANISM COMPONENTS					
序號 Ref.No.	新圖號 new part No.	名 稱 Part name	Name of parts	數量 Qty	備注 Note
1	996005001	倒送料連杆	Feed adjust rod	1	更改
2	991005002	倒送料連杆銷	Feed regulator pin	1	
3	S073574006	倒送料連杆銷螺釘	Screw	1	
3+	M090500806	送料調節器緊固螺釘		2	
4	991005004	送料調節器	Feed regulator screw	2	
5	991005005	送料調節器軸套		1	
6	991005006	送料調節器軸	Feed adjuster sleeve	1	
7	991005007	針距調節螺杆	Screw 9/64 × 40 L=6	1	
8	991005008	止動銷彈簧	Spring	1	
9	991005009	止動銷	Feed adjustpin	1	
10	991005010	針距旋鈕（0–5）	Feed dial	1	
	991005010–4	針距旋鈕（0–4）		1	
	991005010–7	針距旋鈕（0–7）		1	
11	S074762818	針距旋鈕螺釘	Screw 3/16 × 28 L=18	1	
12	991005012	送料連杆	Rocker shaft connecting rod	1	
13	991005013	送料連杆銷	Walking foot long pin	1	
14	S083574004	送料連杆銷螺釘	Screw 9/64 × 40 L=4	1	
15	991005015	抬牙連杆	Connecting rod	1	
16	991005016	針距調節螺杆O型圈	Rubber ring	1	
17	991005017	擺動板座復位簧	Feed reverse spring	1	
18	991005018	擋圈E5	E–ring 5	2	
19	991005019	倒送料曲柄組件	Feed reverse arm asm	1	
20	S074762815	倒送料曲柄螺釘	Screw 3/16 × 28 L=14	1	
21	991005021	倒送料拉簧	Spring	1	
22	991005022	短擺動板連接銷	Walking foot short pin	2	
23	991005023	長擺動板	Connecting link long pin	2	
24	991005024	短擺動板	Connecting link short pin	2	
25	996005025	擺動座	Feed adjust link asm	1	
26	991005026	擺動板座左銷	Adjusting link fulcrum shaft	1	
27	991002001	左右銷螺釘	Screw 15/64 × 28 L=7	2	
28	S123574005	連杆銷螺釘	Screw 9/64 × 40 L=5	2	
29	991005029	牙架偏心銷	Feed bar shaft	1	
30	991005030	送布軸軸用擋圈	Retaining ring	1	
31	996005031	送布牙	Fedd dog I	1	
	996005031–D	送布牙(大針距)		1	
32	S083184406	送布牙螺釘	Screw 1/8 × 44 L=6	2	
33	991005033	牙架部件	Feed bar asm	1	
34	991005034	擺動板座復位板	Adjusting link spring guide	1	
35	S074374007	復位板緊固螺釘	Screw 11/64 × 40 L=7	2	
36	991005036	拉簧固定板	Feed spring hood	1	
37	991005037	送布軸	Feed rocker shaft	1	
38	991005038	送布曲柄銷	Walking foot middle pin	1	
39	S073574008	曲柄銷螺釘	Screw 9/64 × 40 L=8	1	
40	N217142805	抬牙連杆軸位螺母	Nut 9/32 × 28	1	
41	996005042	送布曲柄	Feed rocker shaft crank asm.	1	
	996005043–D	送布曲柄（大針距）		1	
42	S074762815	送布曲柄螺釘	Screw 3/16 × 28 L=15.5	1	
43	991005043	抬牙後曲柄	Lifting rocker asm.	1	
44	S074762815	抬牙後曲柄螺釘	Screw 3/16 × 28 L=14	1	

45	991005045	抬牙連杆軸位螺釘	Hinge screw	1	
46	991005046	抬牙軸	Feed driving shaft	1	
47	991005047	送布軸擋圈	Thrust collar asm.	1	
48	S126354004	送布軸擋圈螺釘	Screw 1/4 × 40 L=4	2	
49	996005049	送布軸前軸套	Feed rocker shaft bushing	2	
50	S084374007	牙架銷螺釘	Screw 11/64 × 40 L=7	2	
51	991005051	抬牙軸軸用擋圈	Retaining ring	1	
52	991005052	牙架座（牙架曲柄）	Feed bar crank asm.	1	
53	S074762812	牙架座螺釘	Screw 3/16 × 28 L=12	1	
54	991005054	抬牙叉	Driving shaft crank asm.	1	
55	S084374012	抬牙叉螺釘	Screw 11/64 × 40 L=12	1	
56	991005056	倒送料扳手組件	Reverse feed control lever asm.	1	
56-1	991005056-1	倒送料軸O型圈	Rubber ring	1	
56-2	991005056-2	倒送料軸	Feed reverse shaft	1	
56-3	S145952808	倒送料扳手螺釘	Screw	1	
56-4	S145952810	倒送料扳手定位螺釘		1	
56-5	991005056-5	倒送料扳手	Reverse frrd control lever	1	
57	991005057	抬牙軸擋圈	Thrust collar	1	
58	S126354004	抬牙軸擋圈螺釘	Screw 1/4x40 L=6	2	
59	991005059	擺動軸板座右銷	Swing shaft plate seat right pin	1	
61	991005061	倒送料軸軸套	Feed lever metal	1	

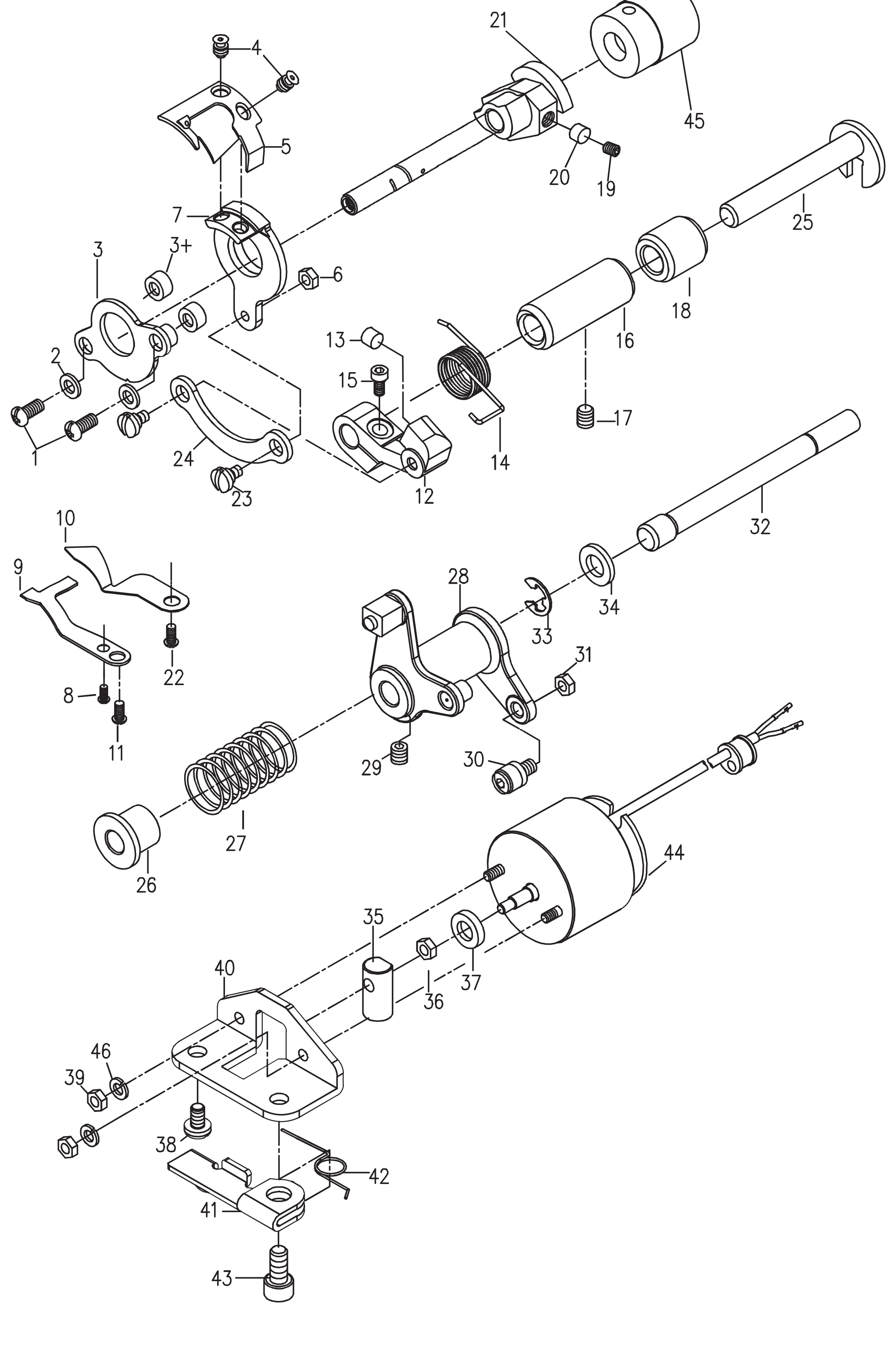
6.針送料部分
Needle feed part



6.針送料部分/Needle feed part					
序號 Ref.No.	新圖號 new part No.	名 稱 Part name	Name of parts	數量 Qty	備注 Note
1	996006001	擺軸	The swing	1	
2	996006002	擺軸左套	Swing left sleeve	1	
3	996096003	驅動曲柄	Driving crank	1	
4	S074762814	螺釘	Screw	1	
5	S153574004	螺釘		1	
6	996006006	支架連杆	Bracket connecting rod	1	
7	996006007	銷	Pin	2	
8	996006008	針杆滑塊座	Needle bar slide block seat	1	
9	S074762818	螺釘	Screw	1	
10	996006010	滾針軸承	Needle bearing	1	
11	996006011	銅套	The copper sleeve	1	
12	996006012	針杆擺動組件	Pin swing assembly	1	
13	996006013	針杆導軌	Needle bar guide	1	
14	S073574010	螺釘	Screw	2	
15	996006015	橡膠塞	Rubber stopper	1	
16	996006016	緊圈	Ring	2	
17	S156354004	螺釘	Screw	4	
18	996006018	擺軸右套	The swing set right	1	
19	996006019	螺釘	Screw	1	
20	996006020	曲柄	Crank	1	
21	S074762815	螺釘	Screw	1	
22	996006022	螺母	Nut	1	
23	996006023	連杆	Connecting rod	1	
24	996006024	軸位螺釘	Axial screw	1	
25	996006025	軸位螺釘		1	
26	996006026	連接柱	Connecting post	1	
27	996006027	墊片	Shim	1	
28	996006028	螺母	Nut	1	
29	S073574005	螺釘	Screw	1	
30	996006030	堵頭	Plug	1	
31	996006031	密封墊		1	
32	996006032	擋板		1	
33	S074762808	螺釘		4	

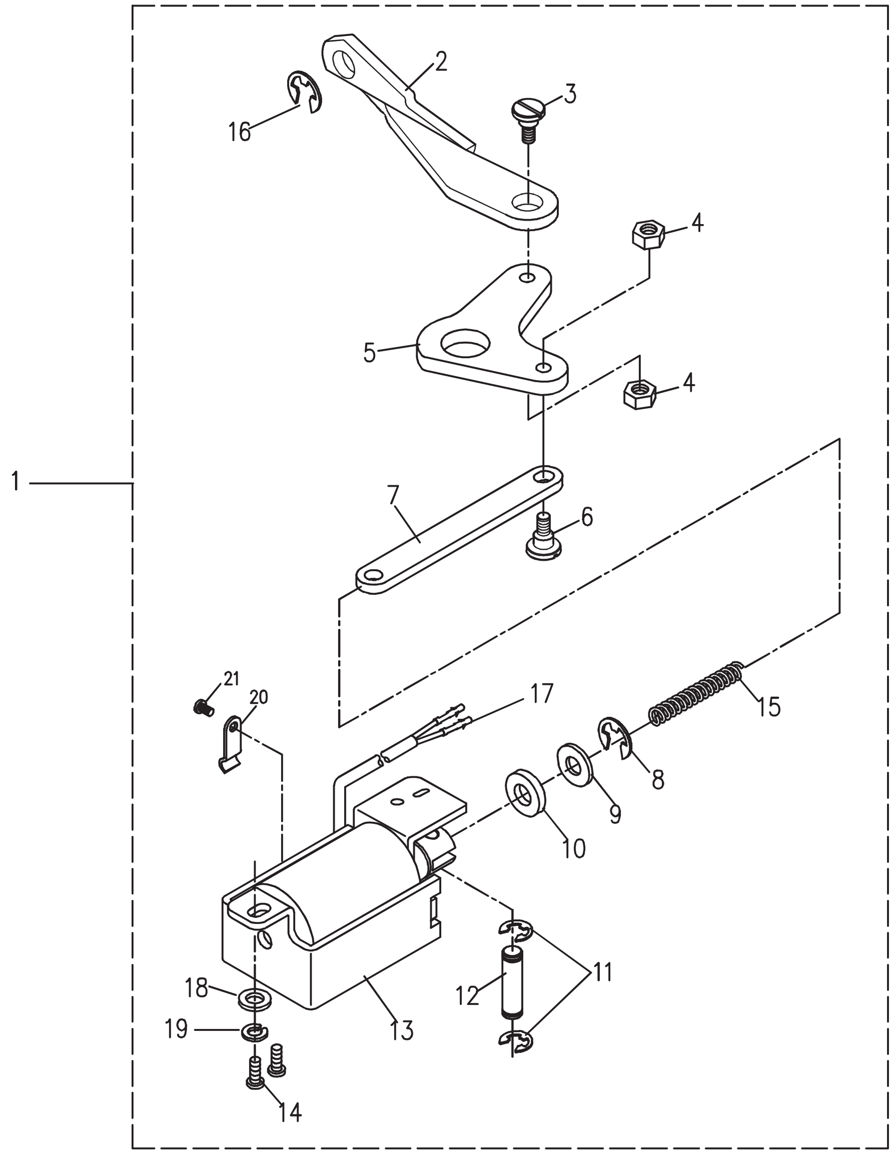
7.自動切綫部件

THREAD TRIMMER COMPONENTS



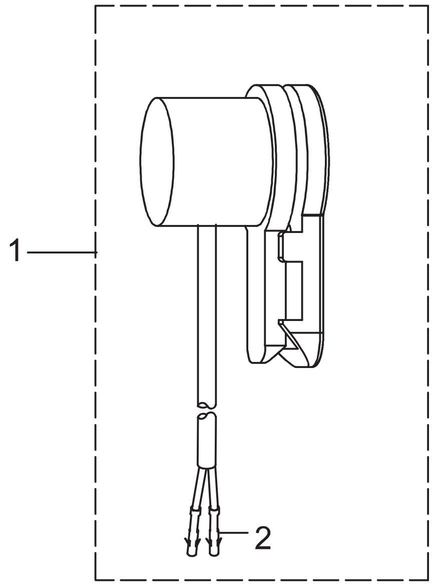
7.自動切綫部件/THREAD TRIMMER COMPONENTS					
序號 Ref.No.	新圖號 new part No.	名 稱 Part name	Name of parts	數量 Qty	備注 Note
1	S094374012	螺釘11/64”x40 L=12	Screw SM11/64x40 L=12	2	
2	991006002	刀架壓板螺釘墊圈	Washer	2	
3	991006003	刀架壓板組件	Partiality shank asm.	1	
3+	991006003+	刀架壓板墊圈	Partiality shank washer	2	
4	991006004	動刀固定螺釘	Screw	2	
5	159541-001	動刀（中厚料)	Motorial knife	1	
	159915-001	動刀（厚料)		1	
6	991006006	螺母SM11/64”x40	Nut SM11/64x40	1	
7	991006007	刀架	Knife bracket	1	
8	S04357406	定刀調節螺釘	Screw	1	
9	159540-001	定刀（中厚料)	Secant knife	1	
	S45900-101	定刀（厚料)		1	
10	991006010	分綫片	Protect needle patch	1	
11	S083574004	螺釘SM9/64”x40 L=4	Screw SM9/64x40 L=4	1	
12	991006012	切刀驅動曲柄	Thread shear rock arm	1	
13	991006013	驅動曲柄止動塊	Positioning block	1	
14	991006014	彈簧	Spring	1	
15	S094763214	螺釘	Screw SM3/16x32 L=14	2	
16	991006016	切綫軸套	Thread shear cam rock arm assy	1	
17	S145952806	螺釘	Screw	1	
18	991006018	驅動曲柄軸襯套	Short bush	1	
19	S126354010	螺釘SM1/4”x40 1=10	Screw	1	
20	991006020	切綫凸輪墊	Pole	2	
21	991006021	凸輪	Thread shear cam	1	
22	S073574006	螺釘SM9/64”x40 L=6	Screw SM9/64x40 L=5	1	
23	991006023	連杆螺釘SM11/64”x40 L=5.5	Screw SM11/64x40 L=5.5	2	
24	991006024	連杆	Knife shaft connecting rod	1	
25	991006025	切刀驅動曲柄軸	Thread shear rock arm shaft	1	
26	991006026	扭簧端蓋	Spring cover	1	
27	991006027	切綫凸輪復位彈簧	Spring	1	
28	991006028	切綫凸輪曲柄組件	Thread shear rock arm shaft	1	
29	S116354006	螺釘SM11/64”x40	Screw SM11/64x40	1	
30	991006030	滾柱	Rool shaft assy	1	
31	991006031	螺母	Nut	1	
32	991006032	切刀驅動軸	Thread shear shaft	1	
33	991006033	擋圈E6	Retaining ring	1	
34	991006034	電磁鐵緩衝墊	Magnetic plug cushion mat	1	
35	991006035	切綫電磁鐵頂銷	Magnetic plug pin	1	
36	991006036	螺母SM1/4”x40	Nut SM1/4x40	1	
37	991006037	墊圈	Washer	1	
38	S075952810	螺釘	Screw	1	
39	991006039	螺母M4	Nut M4	2	
40	991006040	切綫電磁鐵支架	Magnetic plug cushion mat	1	
41	991006041	鬆綫座	Thread loose seat	1	
42	991006042	彈簧	Spring	1	
43	991006043	螺釘	Screw SM1/4x28 L=13	1	
44	991006044	剪綫電磁鐵組件	Magnetic plug	1	
45	991006047	下軸中套	Bushing,lower shaft	1	
46	991006048	墊圈4.5x8x0.5	Washer 4.5x8x0.5	2	

8.自動倒縫部件
AUTOMATIC REVERSE
FEED COMPONENTS



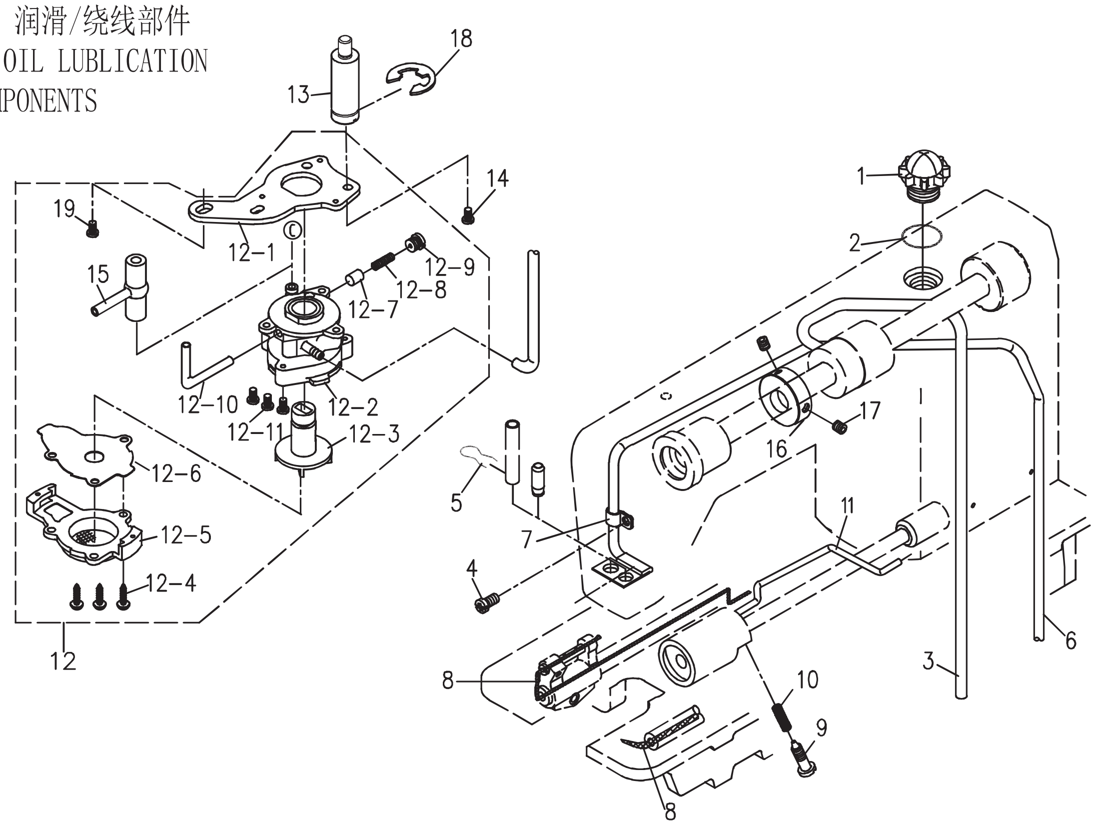
8.自動倒縫部件/AUTOMATIC REVERSE FEED COMPONENTS					
序號 Ref.No.	新圖號 new part No.	名 稱 Part name	Name of parts	數量 Qty	備注 Note
1	991007001	自動倒縫開關組件	Reverse feed switch asm.	1	
2	991007002	拉杆	Reverse feed connecting shaft	1	
3	991007003	自動倒縫拉杆螺釘		1	
4	991007004	螺母	Nut	2	
5	991007005	倒縫曲柄	Connecting arm asm.	1	
6	991007006	倒縫曲柄螺釘	Screw	1	
7	991007007	倒縫鐵芯連杆	Reverse feed connecting link	1	
8	991007008	倒縫鐵芯擋圈	E–ring 20	1	
9	991007009	墊片	Washer 16x24x2.6	1	
10	991007010	橡膠墊片	Rubber plunger	1	
11	991007011	連接銷卡簧	E–ring 4	2	
12	991007012	倒縫鐵芯連接銷	Plunger arm pin	1	
13	991007013	倒縫電磁鐵	Reverse feed magnet asm.	1	
14	S075952812	電磁鐵緊固螺釘	Screw 15/64x28 L=12	2	
15	991007015	連杆定位簧	Plunger spring	1	
16	991007016	卡簧	E–ring	1	
17	991007018	導綫插針	Pin contact	2	
18	991007019	平墊片	Washer	2	
19	991007020	彈簧墊片	Spring washer	2	
20	991007021	油管壓板	Tubing clamp	1	
21	S094762806	油管壓板螺釘	Screw	1	

9.电子夹线器组件 ELECTRONIC CONDUSTOR COMPONENTS



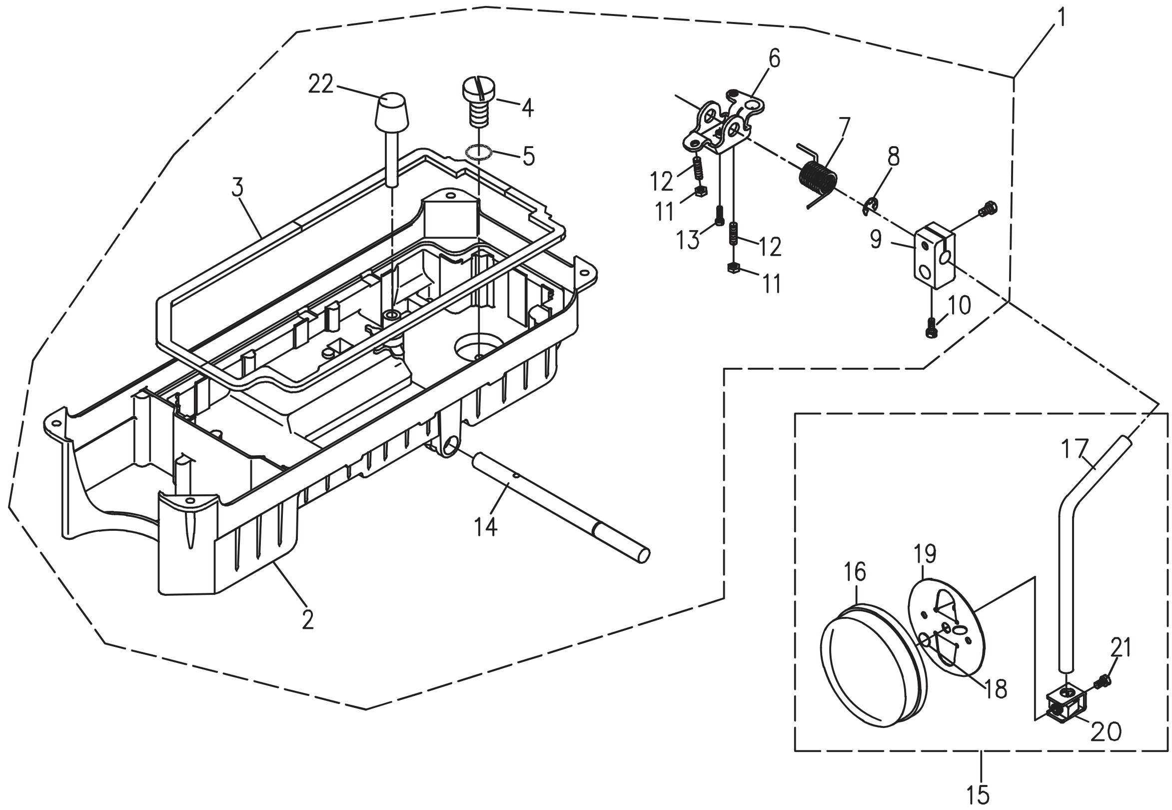
9.電子夾綫器部件/ELECTRONIC CONDUSTOR HOLDER COMPONENTS					
序號 Ref.No.	新圖號 new part No.	名 稱 Part name	Name of parts	數量 Qty	備注 Note
1	996009001	電子夾綫器組件	Electroni conductor holder asm.	1	
2	991008006	插針	Contact pin	1	

10、润滑/绕线部件 OIL LUBLICATION COMPONENTS



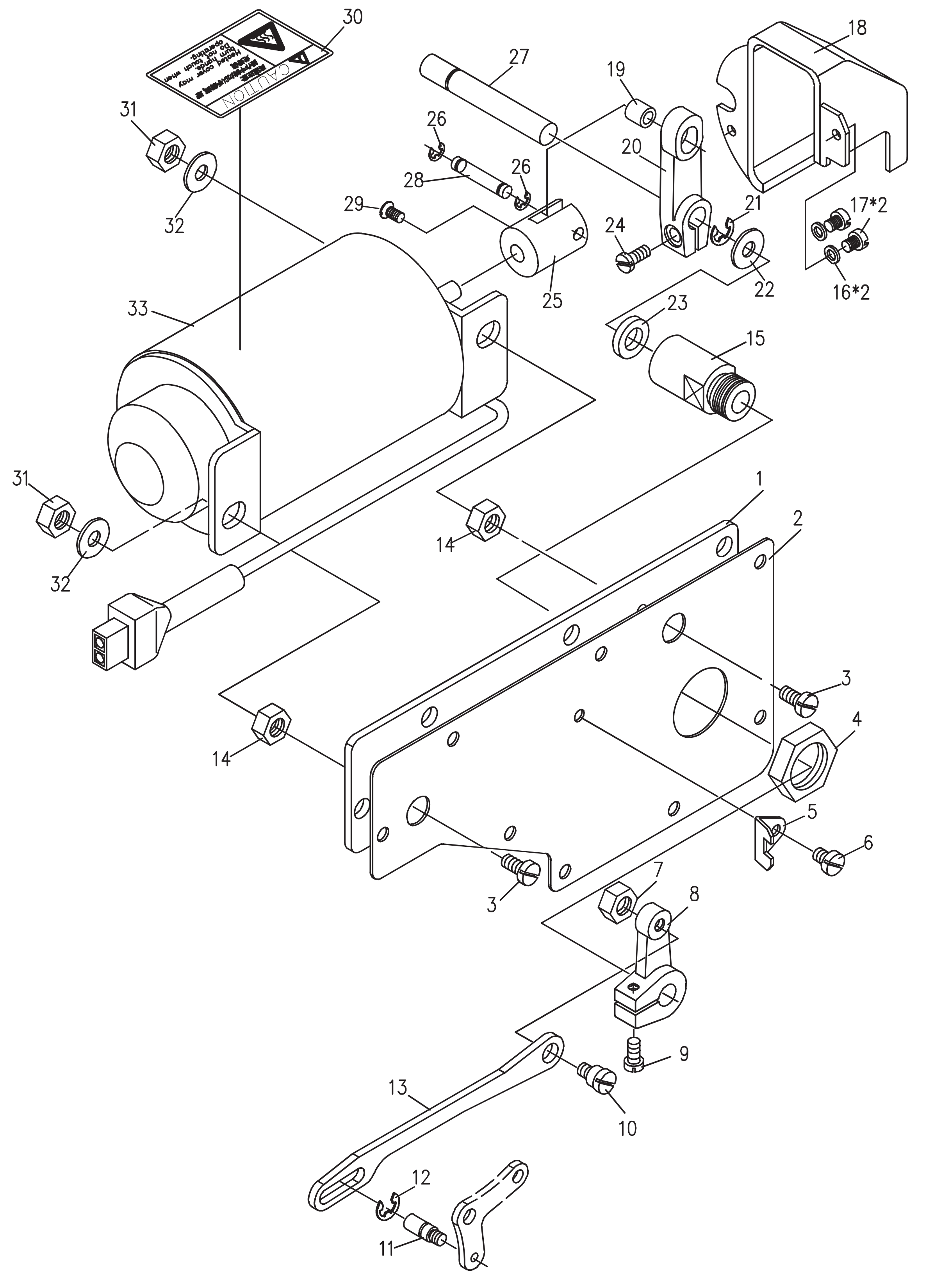
10.润滑/绕线部件/OIL LUBLICATION COMPONENTS					
序號 Ref.No.	新圖號 new part No.	名 稱 Part name	Name of parts	數量 Qty	備注 Note
1	991009001	油窗	Oil sight window	1	
2	991009002	油窗O型圈	Rubber ring	1	
3	991009003	上轴供油管	Main shaft oil tube	1	
	991009003B	上轴供油管B	Main shaft oil tube	1	
4	S094762806	回油管夹螺钉	Screw 3/16x28 L=6	1	
5	991009005	回油毡夹	Oil felt presser	1	
6	991009006	回油管	Oil return tube asm	1	
7	991009007	回油管夹	Holder	1	
8	991009008	送料轴油线	Oil wick	1	
9	991009009	旋梭油量调节螺钉	Oil adjusting screw	1	
10	991009010	旋梭油量调节簧	Spring	1	
11	991009011	旋梭供油管	Oil tube	1	
12	991009012	油泵部件	Lubricating oil pump asm	1	
12-1	991009012-1	油泵安装板	Oil pump installing base	1	
12-2	991009012-2	油泵体	Oil pump	1	
12-3	991009012-3	油泵叶轮	Oil pump impeller	1	
12-4	991009012-4	油泵盖螺钉	Screw D=3 1=10	3	
12-5	991009012-5	油泵盖	Lubricating oil pump cover	1	
12-6	991009012-6	油泵叶轮托板	Oil pump impeller cover	1	
12-7	991009012-7	回油柱塞	Plunger	1	
12-8	991009012-8	柱塞簧	Plunger spring	1	
12-9	991009012-9	柱塞螺钉	Plunger screw	1	
12-10	991009012-10	下轴供油管	Hook driving shaft oil tube	1	
	991009012-10+	下轴供油管(四自动)	Hook driving shaft oil tube	1	
12-11	M070300508	油泵安装螺钉	Screw M3 L=8	3	
13	991009013	油泵连接螺柱	Oil pump support, large	1	
14	S074374010	油泵螺钉	Screw	1	
15	991009015	供油管接头	Rubber joint	1	
16	991009016	绕线器驱动轮	Bobbin pulley	1	
17	S144374006	绕线器驱动轮螺钉	Screw	2	
18	991009017	卡簧	Circlip	1	
19	S075952810	油泵螺钉	Screw	1	

11. 油盤部件
OIL RESERVOIR COMPONENES



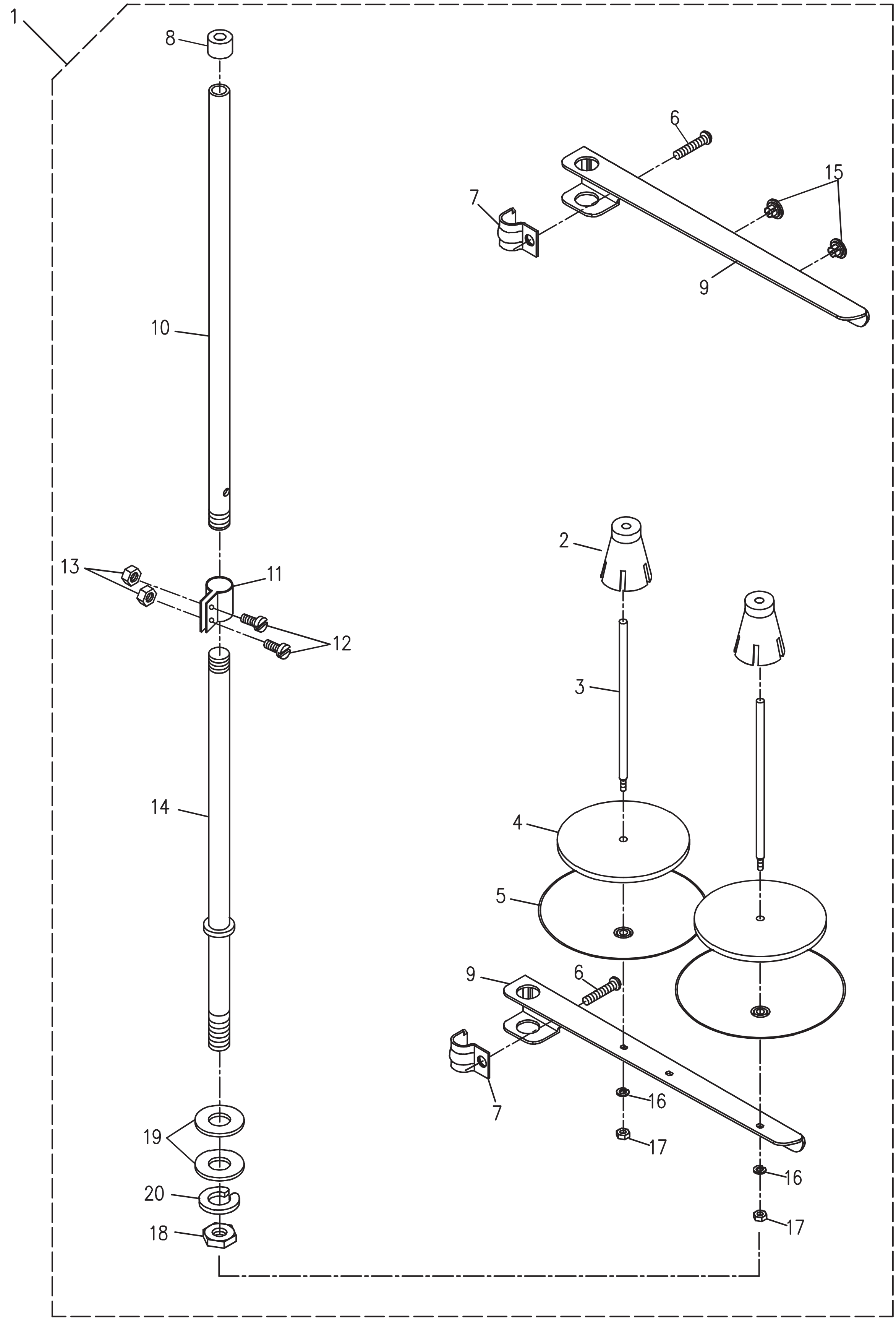
11.油盤部件/OIL RESERVOIR COMPONENES					
序號 Ref.No.	新圖號 new part No.	名 稱 Part name	Name of parts	數量 Qty	備注 Note
1	991010001	油盤部件	Oil reservoir asm	1	
2	991010002	油盤	Oil reservoir	1	
3	991010003	油盤墊	Oil reservoir gasket	1	
4	S077942407	排油孔螺釘	Screw 5/16x24 L=7	1	
5	991010005	排油孔螺釘0型圈	Rubber ring	1	
6	991010006	抬壓脚雙向曲柄	Knee lifting rotating arm	1	
7	991010007	雙向曲柄扭簧	Spring	1	
8	991010008	抬壓脚軸開口擋圈	E-ring 10	1	
9	991010009	抬壓脚操縱杆接頭	Vertical shaft fitting arm	1	
10	991010010	操縱杆接頭螺釘	Screw	2	
11	N210601006	雙向曲柄限位調節螺母	Nut M6	2	
12	M120601030	雙向曲柄限位調節螺釘	Screw M6 L=30	2	
13	M190601018	雙向曲柄螺釘	Screw M6 L=17.5	1	
14	991010014	抬壓脚軸	Knee press cross shaft	1	
15	991010015	操縱杆部件	Knee pan plate asm	1	
16	991010016	操縱杆軟墊	Knee pan plate cover	1	
17	991010017	操縱杆	Knee pan upright shaft	1	
18	991010018	操縱杆墊	Knee pan plate rubber	1	
19	991010019	操縱板	Knee pan plate	1	
20	991010020	操縱杆接頭	Knee pan plate support	1	
21	M190601012	接頭螺釘	Screw M6 L=12	1	
22	991010022	抬壓脚頂杆	Knee lifter push rod	1	

12. 自動抬壓脚組件(外置式）
AUTO LIFTER COMPONENTS(External)



12.自動抬壓脚組件/AUTO LIFTER COMPONENTS(External)					
序號 Ref.No.	新圖號 new part No.	名 稱 Part name	Name of parts	數量 Qty	備注 Note
1	996012001	後窗板	After the shutters	1	
2	996011002	後窗板墊	The shutters pad	1	
3	S095952812	後窗板螺釘	Screw	8	
4	N210161504	抬壓脚軸套螺母	Nut	1	
5	991011005	抬壓脚杠杆限位板	Lifting lever limit plate	1	
6	991011006	抬壓脚杠杆限位板螺釘	Screw	1	
7	N215952803	螺母	Nut	1	
8	991011008	抬壓脚杠杆後曲柄	Lift the lever to drive the crank	1	
9	S184762812	螺釘	Screw	1	
10	991011010	軸位螺釘	Screw	1	
11	991011011	抬壓脚後杠杆連接銷	Pink	1	
12	E320501008	卡簧	Circlip	1	
13	991011013	抬壓脚後杠杆連接杆	Lever lever after lifting the foot	1	
14	991011014	螺母	Nutrition	2	
15	991011015	抬壓脚軸套	Presser foot collar	1	
16	N220450805	墊片	Washer	2	
17	M070400705	螺釘	Screw	2	
18	991011018	防護罩	shield	1	
19	991011019	滑塊	The slider	1	
20	991011020	抬壓脚杠杆前曲柄	The crank	1	
21	E320801610	卡簧	Circlip	1	
22	W220951810	墊片	Washer	1	
23	991011023	油封	Oil seal	1	
24	991011024	螺釘	Screw	1	
25	991011025	電磁鐵接頭	Fork type connector	1	
26	E320400908	卡簧	Circlip	2	
27	991011027	抬壓脚後杠杆驅動軸	Lift the pin drive shaft	1	
28	991011028	銷	Pin	1	
29	991011029	螺釘	Screw	1	
30	991011030	警示標簽	Security label	1	
31	991011031	螺母	Nut	2	
32	W220681910	墊片	Wasker	2	
33	991011033	抬壓脚電磁鐵	electromagnet	1	

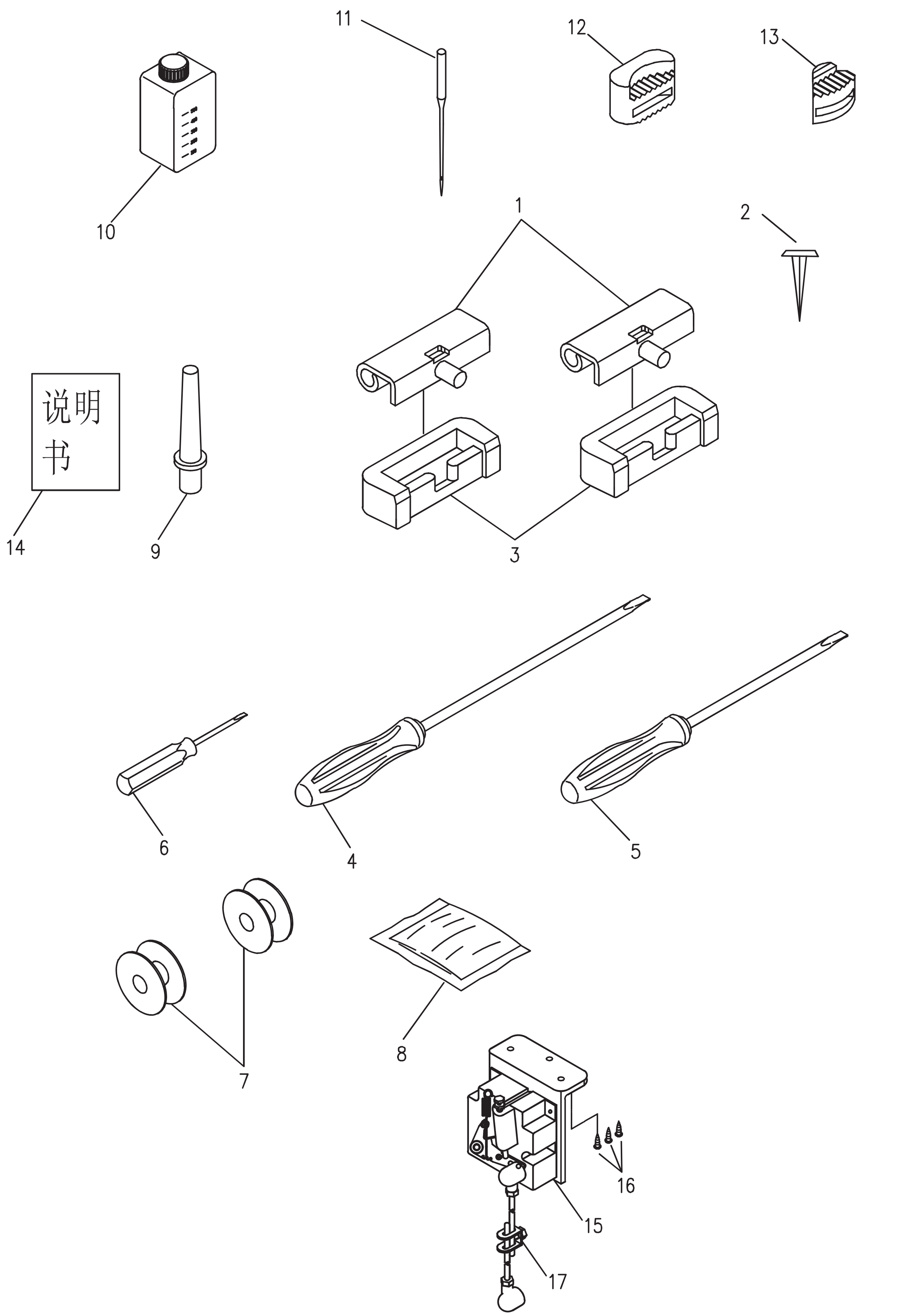
13. 過綫架部件 THREAD STAND COMPONENTS



13.過綫架部件/THREAD STAND COMPONENTS					
序號 Ref.No.	新圖號 new part No.	名 稱 Part name	Name of parts	數量 Qty	備注 Note
1	991013001	過綫架部件	Thread stand asm	1	
2	991013002	綫團防鬆墊	Spool retainer	2	
3	991013003	綫盤釘	Spool pin	2	
4	991013004	綫盤輪墊	Spool rest cushion	2	
5	991013005	綫盤	Spool rest	2	
6	M090601016	綫架過綫夾螺釘	Screw M6 × 16	2	
7	991013007	綫架過綫夾	Thread guide arm joint	2	
8	991013008	綫架杆頂防護橡皮	Spool rest rod rubber cap	1	
9	991013009	綫架過綫杆	Spool rest arm	2	
10	991013010	綫架杆上節	Spool rest rod upper	1	
11	991013011	接架杆接頭	Spool rest rod joint	1	
12	M090500814	接架杆接頭螺釘	Screw M5 × 14	2	
13	N210500805	接架杆接頭螺母	Nut M5	2	
14	991013014	綫架杆下節	Spool rest rod lower	1	
15	991013015	過綫圈	Thread guide	2	
16	991013016	綫盤釘彈簧墊	Spring washer	2	
17	991013017	綫盤釘螺母	Nut M5	2	
18	991013018	綫架杆緊固螺母	Nut M6 × 1.5	1	
19	991013019	綫架杆緊固螺母墊圈	Washer 16 × 30 × 2.6	2	
20	991013020	緊固螺母彈簧墊圈	Spring washer	1	

14.附件

ACCESSORIES



14.附件/ACCESSORIES					
序號 Ref.No.	新圖號 new part No.	名 稱 Part name	Name of parts	數量 Qty	備注 Note
1	991014001	機頭連接鈎組件	Machine hinge plate asm.	2	
2	991014002	機頭連接鈎座釘	Nail	4	
3	991014003	機頭連接鈎座	Machine hinge plate	2	
4	991014004	螺絲刀（大）	Screw driver,large	1	
5	991014005	螺絲刀（中）	Screw driver.mendium	1	
6	991014006	螺絲刀（小）	Screw driver.small	1	
7	991014007	梭心	Bobbin	2	
8	991014008	機頭罩	Macgube head cover	1	
9	991014009	機頭支柱	Macgube rest cover	1	
10	991014010	油箱部件	Oil reservoir asm.	1	
11	991014011	機針 DBxl #14	Needle DBxl #14	4	
	991014011H	機針 DPx5 #21	Needle DPx5 #21	4	
12	991014012	防震墊(A)	quakeproof washer A	2	
13	991014013	防震墊(B)	quakeproof washer B	2	
14	991014014	説明書	Instruction book	1	
15	991014017	控速器	speed controller	1	
16	991014018	控速器安裝螺釘	speed controller screw	3	
17	991014019	控速器拉杆	speed controller pull rod	1	