SIRUBA

使用說明書與零件圖
INSTRUCTIONS BOOK & PARTS LIST
C007N



CE

溫馨提醒 A WARM REMINDER

請儘快下載 SIRUBA APP，並將您的機器註冊，以便獲得原廠的保固。APP 還提供多項有用的資訊。
please register your Siruba machine online or through Siruba App at once, as to gain the full warranty protection. You may also acquire more useful information through Siruba APP.

APP Apple Store

APP Google Play

安全警示 GENERAL SAFETY INSTRUCTION

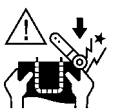
有關於縫紉機，自動化機構，以及其他輔助設備 (以下統稱為機器) ，在工作中無可避免會接近機器移動區域，也就有伴隨著潛在風險。因此，我們強烈要求操作者，維修技師一定要先仔細閱讀並瞭解本操作手冊的內容。
安全指示係包含了某些未載於規格書上的加裝配件。
現場管理者有責任要求所有操作者要閱讀並瞭解機器的操作與注意事項。
未能確實遵守本手冊所記載的事項，將可能導致機器的損害，或是人員的傷亡。

For the sewing machine, automatic mechanic system, and auxiliary devices (hereinafter referred as "machine"), it is inevitable to conduct work near moving parts of the machine. This means that there is always a potential risk from the moving parts. Operators actually operating the machine and service technicians performing maintenance and repair are strongly advised to read and understand fully the following instructions in advance.
The safety instructions include items which are not listed in the specifications of your product. It is the manager/supervisor' s responsibility to have their fellow workers fully understand before operation.
Fail to follow the instructions may cause damage to properties, severe injure or even death.

警告標示說明

Explanation of warning indications and labels.

	高壓電危險 在機器關機後十分鐘內，勿開啟電控箱。 HIGH VOLTAGE DANGER Do not open the power cabinet within 10 minutes after the power off.		零部件移動區 勿接近，以避免人員受傷。 Machine moving area! Stay away and keep clear to avoid injury.
	零部件高速移動區 勿接近，以避免人員受傷。 High speed moving area! Stay away and keep clear to avoid injury.		

標告標示說明 WARNING LABELS		標告標示說明 WARNING LABELS	
	機器零部件移動區，勿接近，以避免人員損傷。 A risk of cut and injury from moving parts. Stay away and keep clear.		請注意，在操作過程中握住縫紉機會傷到您的手。 Be aware that holding the sewing machine during operation can hurt your hands.
	有電，危險。 A risk of electric shock. Stay away and keep clear.		小心被機械捲件受傷！ There is a risk of entanglement in the belt resulting in injury.
	高溫度區！危險，勿靠近。 A risk of burn from the high temperature area. Stay away and keep clear.		如果觸摸按鈕托架，可能會造成人身傷害。 There is a risk of injury if you touch the button carrier.
	強光！勿直視，以避免眼睛受傷。 Avoid direct eye contact with the laser beam or other light source.	一般安全標示 GENERAL SAFETY INDICATIONS	
	小心頭部撞擊！ A risk of injury to head from upper contact. Apply proper protection (helmet) and keep clear.		機器運行方向 The correct direction is indicated.
			電氣接地位置標示 Grounding connection as indicated.

安全須知

危險
意外事件將會導致人員受傷甚至死亡，也會造成財產的損害。
當有必要進行電控系統的檢修時，務必要關閉電源，並等候至少 5 分鐘以上才能打開電控箱 / 操作箱，以避免電擊。

注意
1. 基本預防
(1) 在操作前務必先閱讀操作手冊與其他機器電件的說明書，請妥善保存操作手冊與說明書以便隨時查閱。
(2) 這些注意措施包含了機器上加裝，但未列在規格書上的項目。
(3) 務必要戴護目鏡與手套，以避免破損零件所帶來的傷害。
(4) 有裝戴心臟調節器的人員，請先詢問醫護人員有關注意事項。.

2. 安全裝置與警告標示
(1) 操作前要檢查 , 並確認所有的安全設施有妥善安裝且運作正常。
(2) 若安全設施因維修需要有移動，在機器重新啟動操作前，請確認安全設施有重新安裝回原位，並且運作正常。
(3) 機器上的安全警告標示要保持完整與可辨視。如果有污損或遺失，請儘以更新。
(4) 未能確實遵守安全規範，將會導致人員受傷，甚至影響生命安全。

3. 應用與修改
(1) 嚴格禁止機器使用在非原始設計用途。也禁止以任何不是操作手冊上記載的方式來操作機器 .
(2) 嚴格禁止修改機器。任何未經原廠許可的變動將不在保固範圍內。
(3) 機台一經修改變動，本公司將不擔負財務損失，人員傷亡的責任。

4. 教育與訓練
(1) 工廠主管人員有義務提供機台使用人 (操作者 / 維修者) 相關的教育訓練。良好的教育訓練不僅可以避免造成人員傷害，也可以避免財產的損失。
(2) 操作人員操作機器之前，都必需接受過良好的訓練。
(3) 機器的維修保養必須由合格的技師執行。

5. 必須關閉電源的情況：
如何關閉電源：按壓下緊急停止開關 (如果機器有配置的話)，關閉電源，拔除電源線。
(1) 當機器出現異常時，按下緊急停止開關 (如果有配置)，關閉電源。
(2) 為了避免機器突然起動造成意外，在操作機器前，要先確定機器電源關閉，再行開啟電源。
(3) 當檢查或清潔機器時，關閉電源，並確定機器已完全停止運作。
(4) 當維修機器時 (如更換或調整零件)，要關閉電源，並確定機器已完全停止運作。

6. 拔除電源線時，務必要抓住電源插頭，而非抓住電源線，以避免斷裂，電擊，甚至火災。

7. 當機器停止運作，且無人看管時，要關閉電源。

8. 萬一停電或電力供應出現不穩，關閉電源，以避免意外發生。

SAFETY PRECAUTIONS

Danger
An accident means " to cause personal injury or death, or damage to property. "
When it is necessary to perform service on electrical parts, be sure to turn the power off and wait for 5 minutes or more before opening the power cabinet/box in order to avoid electrical shock.

Caution
1. Basic precaution
(1) Read the manual and other papers supplied with accessories of the machine before operation. Keep the manual and papers at hand for quick reference.
(2) The content of this section includes items which are not listed in the specification of your product.
(3) Always wear safety goggles and gloves to avoid accident caused by parts breakage.
(4) For those who use a heart pacer, please consult the medical specialist first.
2. Safety devices and warning labels
(1) Check to ensure all safety devices are correctly installed in place and properly before operation.
(2) If any of the safety devices is removed for service cause, please be sure to replace it back to position and verify that is works normally before resuming operation.
(3) Always keep the warning labels adhered on the machine clearly visible. If any of the labels missing or contaminated, replace with a new one at soon.
(4) Fail to obey instructions above may cause severe injury or death to the operators.
3. Application and modification
(1) It is prohibited to use the machine for any application other than its original intention, or in any manner other than that prescribed in the instruction manual.
(2) Never modify or alter the machine. Any unauthorized change of the specification will not be covered by the warranty.
(3) Our company assumes no responsibility/liability to damages, injuries, or death resulting from the machine which has been modified or altered.
4. Education and training
(1) The plant managers/supervisors are obliged to provide education and training to operators and service technicians. A good education/training plan not only avoids personal injury but also prevent damage to the property.
(2) Only a well-trained operator is allowed to operate the machine.
(3) Only a certified technician is allowed to perform service to the machine.
5. Situations that you must turn off the power
Turning off the power: press EMG Stop (if there is one), switch off the power, and remove the power plug from the outlet.
(1) When there is a failure or abnormality, press EMG Stop (if there is one), switch off the power.
(2) To prevent accident resulting from abrupt start of the machine, before operating the machine, always turn off the power and switch on again.
(3) When cleaning or inspecting the machine, make sure the machine stops completely after turning off the power.
(4) When performing service (i.e. changing of adjusting any component), make sure the power is off and the machine stops completely.
6. Remove the power plug by holding the plug section instead of the cord to avoid electrical shock, leakage, or fire accident.
7. Turn off the power whenever the machine is left unattended between works.
8. In case of a power failure or black out, turn off the power to avoid damage or accident.

在不同階段的注意事項

1. 運輸

(1) 當搬運或移動機器時，請考量機器重量，選擇安全合適的方式。請參考機器規格。

(2) 採取足夠的安全防護，以避免機台在搬運或移動中掉落。

(3) 為避免意外，運送時不要重覆使用包裝材料。

2. 拆箱

(1) 在拆箱前，檢查機器是否平穩放置，並採用適當的工具維持拆箱過程的穩定。

(2) 進行拆箱時，遵循外箱上的指示，小心外箱上的釘子或碎片。

3. 安裝 :

3A. 桌板與腳架

(1) 採用原廠的桌板以確保機器得到足夠的保護與支撐。如果在安裝或維修時，需要暫時將機器置放於物件上，請確定該物件有足夠的支撐力。

(2) 如果桌板有裝置滾輪，滾輪需要有煞車鎖定機構，而且在操作與維修時，煞車機構必需鎖定。

3B. 電線與管路

(1) 電線與管路的材質必需符合規範與需求。.

(2) 電線與管路不能夠有折彎或壓迫。移動的零配件上，電線與管路需有至少 30mm 以上的預留量 .

(3) 接線時不能有跳火。

(4) 所有接頭都必需要確實固定。當拆除時，務必要抓住接頭本體。

3C. 接地

(1) 接地是必需的。且需由合格的技師來施工。

(2) 在操作前需確認接地有確實。

3D. 馬達

(1) 馬達的選用，必需符合規範與需求。

(2) 如果馬達為皮帶傳動，務必要安裝保護措施以避免捲入危險。

4. 在開始操作前

(1) 在開啟電源前，確認所有接頭，電線，管路都完好無損，確實連結。

(2) 檢查皮帶輪的轉向與標示為同一方向。

(3) 確認腳架滾輪都已鎖定。

(4) 保持作業範圍淨空。

5. 在操作中

PRECAUTIONS TO BE TAKEN IN VARIOUS OPERATION STAGES

1. Transportation

(1) When lift or move the machine, please take the machine weight into consideration and apply a safe manner. Refer to the specification for the information you need for transportation.

(2) Apply sufficient safety measures when lifting or moving the machine to avoid falling or dropping.

(3) To avoid unexpected accident, do not reuse the packing material for transportation.

2. Unpacking

(1) Before proceeding to unpacking, check the balance of the machine and apply necessary tools to hold the proper position.

(2) When unpacking, follow the instruction printed on the cartoon. Be careful of the nails and chips when unpacking from a wooden rack.

3. Installation:

3A. Table and Stand

(1) Only adopt a qualified genuine table and stand to assure the holding support. In case you need to leave the machine on a surface temporarily for service, make sure the surface is strong enough to hold the weight.

(2) If casters are applied to the table stand, adopt casters with a locking mechanism only and lock them well to secure the machine during the operation and service.

3B. Cable and Wire

(1) The cables and wires must comply with the specification and requirement.

(2) The cables and wires shall be free from bending or extra force. Reserve a free space of at least 30mm between cables/wires and the moving parts.

(3) Do not apply starburst connection when wiring.

(4) All connectors must be fixed securely. And always hold the connector body when removing it.

3C. Grounding

(1) Grounding is necessary and must be done by a certified technician. (2) Check and ensure the grounding is secured before operation.

3D. Motor

(1) The motor must comply with the specification and requirement.

(2) If there is a belt in the motor transmission, adopt or apply a proper protector to avoid entangling.

4. Before Operation

(1) Before turning on the power, make sure all the connectors, cables, and wires are free from damage, dropout, or looseness.

(2) Check and make sure the pulley rotation follows the same direction as labels.

(3) Make sure all the stand casters are locked or fixed in position.

(4) Keep the working area clean from obstacles.

5. During Operation

(1) Always keep your fingers, hair, or clothing away from the moving components and moving area. Do not place your personal belongings on the machine.

(1) 注意手，頭髮，衣服不在機件移動範圍。不要將個人物品置放於機器上。

(2) 機器會高速運作。保持雙手遠離移動機件範圍。機器完全停止前不要靠近。

(3) 在移動物件或重新設定機器時，注意不要被機器或零件撞擊。

(4) 避免突然起動造成意外，在檢查或維修馬達或皮帶時，務必關閉電源並確認機器完全停止。

(5) 機器停止時，伺服馬達是無聲的。注意要關閉電源以免突然起動。

(6) 永遠保持電控箱的風扇與氣道淨空。

6. 潤滑

(1) 請依照說明書指示，選用合格的油脂來潤滑機件。

(2) 如果油品接觸到眼睛或身體，立即以清水沖洗。如有不適，立即尋求醫護人員協助。

(3) 如果油品不慎進入身體，立即尋求最近的醫療協助。

7. 維修保養

(1) 只有合格的技師或工程師能夠進行維修服務，包含機器調整與修理。只採用原廠的零件進行更換。如果採用非原廠零件，或是因不當維修 / 調整所造成的傷害，本公司將不負任何責任。

(2) 只有合格的技師或認證的工程師才能對電控系統進行維修或保養。

(3) 當對氣動原件 (如氣缸) 進行維修保養時，務必先拔除風源，並將氣體完全洩除，以避免突然啟動。

(4) 在調整或更換部件後，檢查所有螺絲是否銷固。

(5) 定期清潔是必需的。在清潔前務必先關閉電源，並確認機台完全停止。

(6) 如果運作異常或不良，立即停止操作並關閉電源。聯絡授權經銷商或我們公司以尋求技術協助。

(7) 當保險絲故障，立即關閉電源，找出故障原因並予以排除後，更換同規格的新的保險絲。

(8) 定期檢查與清潔風道，電線與管路。

8. 工作環境

(1) 機器必需不用電磁波干擾。.

(2) 電源供應必需良好且穩定。電壓波動不得超過 10%。

(3) 隨時檢查空壓的壓力與品質。如果氣源不穩定，請安裝合適器材以改善。

(4) 機器操作環境，室溫 5° C ～ 35° C, 相對濕度 35%～85%.

(5) 為了保護電子元件與安全起見，當有劇烈氣溫變化而導致凝水時，立即關閉並拔除電源，並靜候至完全乾燥為止。

(6) 為了安全起見，當有打電或閃電時，請停止操作，關閉並拔除電源。

(7) 勿在機器週遭使用電視或收音機，以避免干擾。

(8) 依當地法令規範，在操作中採取必要的防護。

(9) 關於包裝材料，潤滑油品，以及機器 (含零配件) 的丟棄，請依各地政府法規的規範執行。

(2) The machine is designed to run at high speed. Always keep your hands away from the moving area. Do not resume the work cycle until the machine stops completely.

(3) Be careful not to be caught by the machine or components when removing or resetting the machine.

(4) To avoid accident caused by abrupt start, when performing service on the motor or belt, make sure the power is off and the machine stops completely.

(5) A servo motor is silent as the machine stops. Be sure to turn off the power to avoid an abrupt start. (6) Always keep the fan and airway of the power cabinet clean from any obstacle.

6. Lubrication

(1) Apply only qualified oil and grease onto the parts as instructed in the manual.

(2) If the lubricant contacts your eye or body, wash it off immediately. Consult a medical care if necessary.

(3) If the lubricant goes into your body accidentally, go to the nearby medical care immediately.

7. Service

(1) Only a certified engineer/technician is allowed to perform service to the machine, including adjusting and repairing. Use only genuine parts for replacement. Our company assumes no responsibility/liability for any accident caused by improper repair or adjustment, or the use of any parts other than genuine one.

(2) Only a certified technician or authorized engineer is allowed to repair or maintenance the electric system.

(3) When performing service to air-driven parts, like an air cylinder, first disconnect the air supply and expel the air completely to avoid abrupt start.

(4) Check all screws and nut are fixed well after adjusting and replacement.

(5) A periodical cleaning is necessary. Make sure the power is off and the machine stops completely before cleaning.

(6) If the machine functions poorly or abnormally, stop the operation and turn off the power. Contact the authorized dealers or us to request for a technical service support.

(7) When there is a fuse failure, turn off the power, find out the cause of the failure and apply solution to it, then replace with a new one with the same spec.

(8) Periodically check and clean the fan airway and the cable/wiring.

8. Working Environment

(1) The machine should be free from the affection of electro-magnetic wave.

(2) The power supply should be in good and reliable condition, the fluctuation of rated voltage should be less than 10%.

(3) Always check the air pressure and quality. Some extra device might be needed if the supply is not reliable.

(4) The machine is designed to be used with ambient temperature 5° C ～ 35° C, relative humidity 35%～85%.

(5) To protect the electronic components and for safety cause, when there is a frost resulting from a dramatic temperature rise, disconnect the power and wait until it dry completely.

(6) For safety cause, when there is a thundering or lightening, stop the operation and disconnect the power supply.

(7) Do not use TV or radio nearby the machine as to avoid interference.

(8) Apply necessary protection during operation. Follow applicable regulations set by local administration.

(9) For disposal of packages, lubricant, and product, please follow the applicable regulations set by local administration.

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MODEL		C007N Series	
Net Weight(Kg)	45	Noise Level, dB(A)	82dB(A)/4500rpm
Dimension	Length	Width	Height
	46 cm	25 cm	40 cm

警告標籤 WARNING TAG

・縫紉機上有下列警告標籤。(圖 1、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.



圖 1/Fig.1

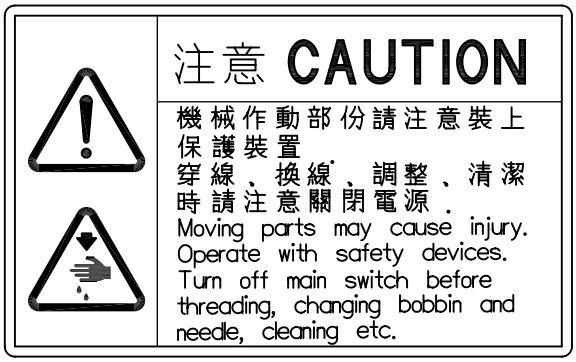


圖 2/Fig.2

② ⏚必須接地

接駁地線不牢固，是造成觸電或錯誤動作的原因。

③ ↘表示轉動方向

② ⏚ must have ground wire.

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

③ ↘ Indicates rotating direction.

安全保護裝置(圖3)
(A) 護指器
(B) 護目鏡

Safety Protection Device (Fig. 3)
(A) Finger protector
(B) Goggle

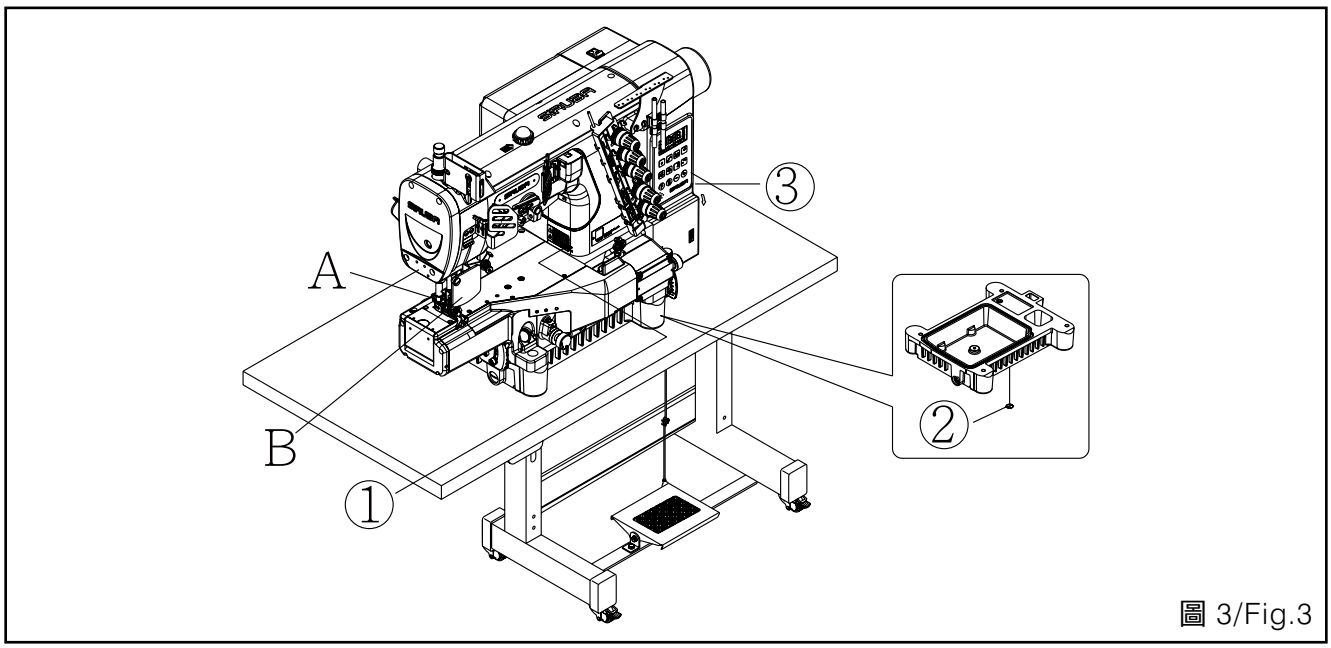


圖 3/Fig.3

護針安全圖說

SAFETY ILLUSTRATION OF NEEDLE GUARD

本縫紉機之壓具防護裝置如圖 4 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 shown as figure 4. For safety of all operators, this device is restricted to disassemble.

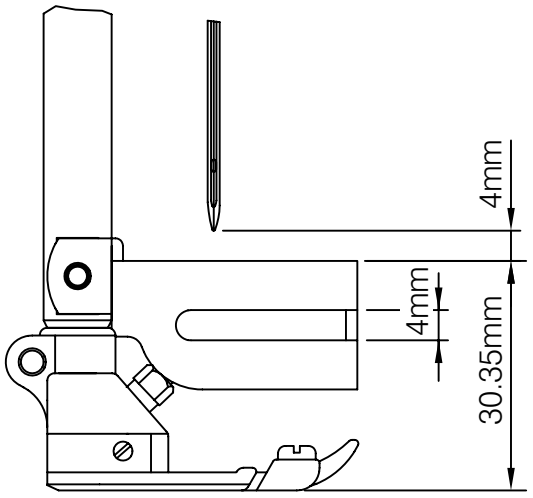


圖 4/Fig.4

搬運縫紉機

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。
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 firmly.
3. Please wear a pair of skidproof shoes while moving the sewing machine. (Fig.5)

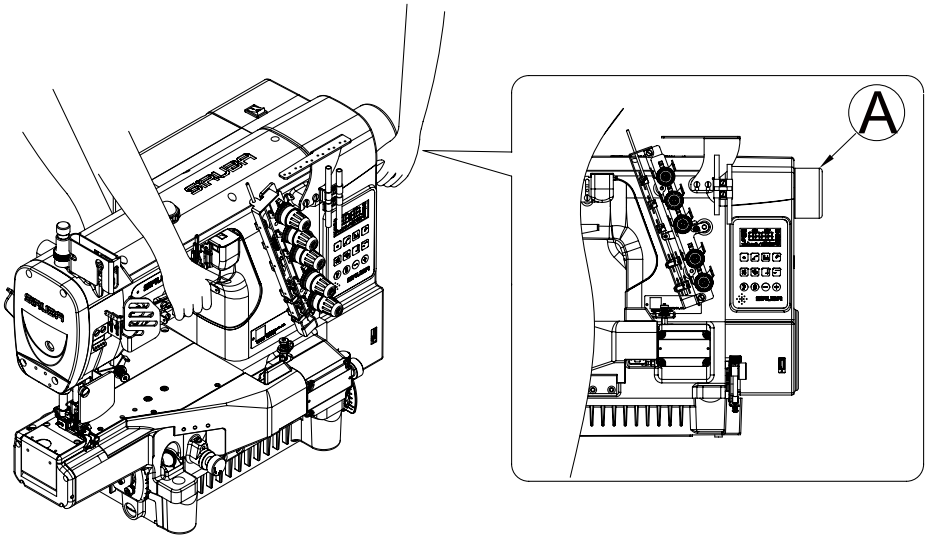


圖 5/Fig.5

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.

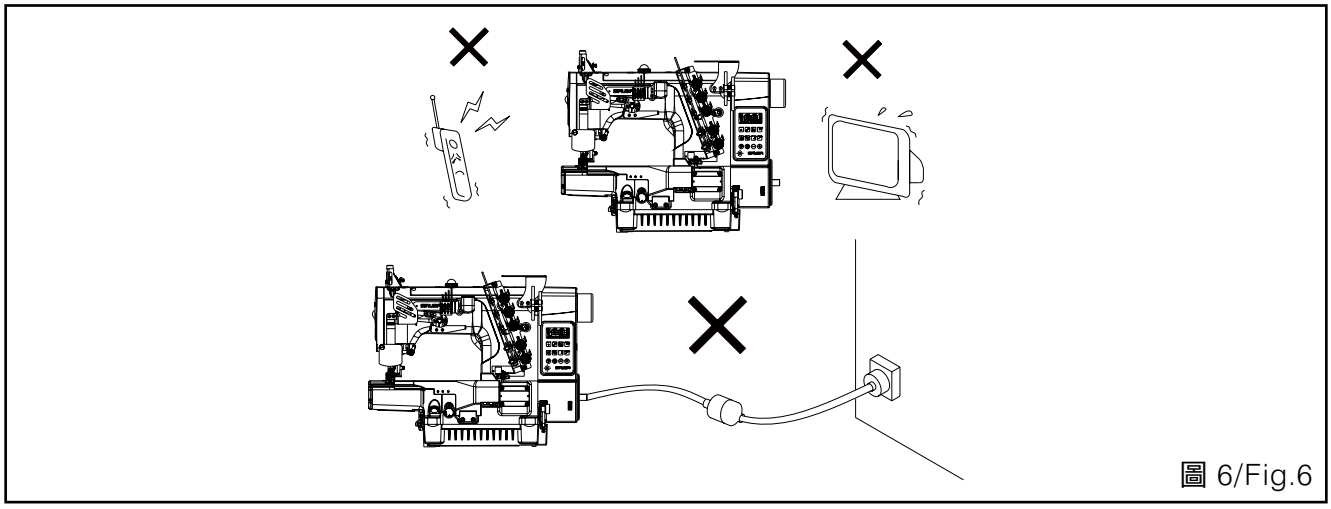


圖 6/Fig.6

規格

SPECIFICATIONS

1.C007N 使用馬達：
(1)SIRUBA DCUxxx（伺服馬達）
2. 使用馬力：550W(伺服馬達)
3. 空壓式：有效空氣壓 3.5kg/cm^2

4. 電磁閥電壓 24V 直流
5. 步進馬達額定電壓 4.3V 直流

註：
(1) 馬達使用之電壓、頻率、相數，於訂貨時規定之。
(2) 馬達之功能調整請參閱馬達使用說明書。

1.C007N Motor types：
(1)SIRUBA DCUxxx（servo motor）
2.Horse power：550W for servo motor.
3.Air pressure type：Minimum required pressure is 3.5kg/cm^2.
4.The voltage of the solenoid is DC 24V.
5.Stepper motor rated voltage: 4.3V DC.
Note：
(1)Motor voltage ,hertz and phases have to be specified clearly while ordering.
(2)All details regarding to the motor adjustment,please refer to the motor operation manual.

安全開關及其功能

1. 氣動式
   a.電磁閥(左側)1：為控制壓具抬放動作之驅動。
   b.電磁閥(中間)2：為控制針線及下勾針線切刀機構之驅動。

   c.電磁閥(右側)3：為控制上裝飾切線切刀機構或空壓吹線吹管之驅動。(以上請參考零件圖)

2. 電動式
   a. 步進馬達 (QXL-40103365)：為控制針線及下勾針線切刀機構驅動 (如零件圖所示)

   b. 電磁鐵 (BS09-EWP-N)：為控制上裝飾線夾線機構之驅動。(如零件圖所示)

   c. 電磁鐵 (UT776AN-A2): 為控制上裝飾線切線機構之驅動。(如零件圖所示)

3. 安全開關為感測針線及下勾針線切線機構，於切線後是否回歸原點，切線機構如未在原點時，馬達將無法運轉 (圖 7)。
   步進馬達無安全開關，由電控強制回歸原點。

注意 :
   (1) 在連接電磁閥線路時，請確記先關掉電源開關，若電源開關未關閉時，請注意勿使紅色及黑色兩線因互相接觸造成短路以致損壞內部電路 (如零件圖所示)。

   (2) 與馬達控制箱連接之插頭，應充分插入，使接觸良好 ; 避免鬆動而產生動作不良或無動作。

   (3) 步進馬達與凸輪應確實鎖固。

SAFETY SWITCH AND ITS FUNCTION

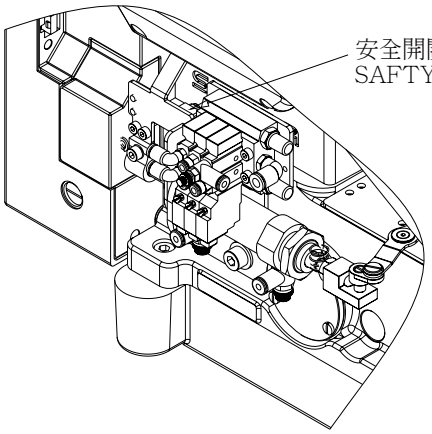
1. Pneumatic
   a. Solenoid valve (left side)1: is used to control the presser foot lift and lower movement.
   b. Solenoid valve (middle)2: is used to control the operation of the lower trimmer. (Including needle thread and lower looper thread.)
   c. Solenoid valve (right side)3: is used to control the operation of the spreader's thread trimmer or to drive the air blower. (Please refer to the parts list for above information.)

2.Electric Type
   a. Stepper Motor (QXL-40103365): is to contol the operation of threads (upper and lower) and the mechanism of thread trimming(as shown in the parts list).
   b. Electromag (BS09-EWP-N): is used to control the operation of the top cover thread pulling system (as shown in the parts list).
   c. Elctromagnet (UT776AN-A2): is used to control the operation of top cover thread trimmer (as shown in the parts list).

3.The major function of the safety switch is to check and confirm the thread trimmer of needle's and lower looper's returning to the origin. If the trimmer is not located on the origin, the motor will not function at all.(fig.7)
   The stepper motor has no safety switch and is forced to return to the home position by the electronic control.

Note:
   (1)Please be sure to turn off the power switch before connetcing the wires on the solenoid valve. If the power switch is not turned off, please notice that the red and black wires do not contact. Otherwise, the contact will cause short circuit and damage the internal circuit(as shown in the parts list).
   (2)The plug connecting with the motor controlling box should be pluged fully so that it contacts well. This will prevent the malfunction resulting form the loose plug.
   (3)The stepper motor and the cam must be securely fastened.

氣動式 Pneumatic



步進式 Stepping

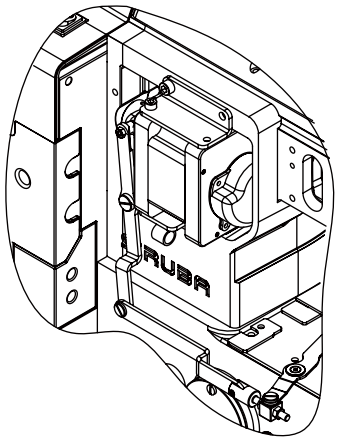


圖 7/Fig.7

操作步驟

1. 當腳往前踩下腳踏板，機器開始運轉和車縫。(圖 10)-1

2. 當腳踏板置於 (圖 10)-2 位置時，機器停止運轉且針棒落於最低位置。

3. 當後踩踏板 (圖 10)-4 時，針棒轉至最高點停住，各切線機構開始操作。

   (1) 針線及下勾針線切線機構將針線及下勾針線拉至上刀切斷，切斷之勾針線由夾線機構夾持。

   (2) UTP 及 UTL 時，上飾線機構將上飾線切斷並將線頭拉至彈片處夾持

OPERATION PROCESS

1. Thread on the pedal to start the machine and sewing. (Fig.10-1)
2. When the pedal stop horizontally (Fig. 10-2), the machine stops running and the needle bar will stop at the lower dead point.
3. When threading the pedal backward and holding (Fig.10-4), the needle bar moves up and stops at the upper dead point, and all trimming system start working.
   (1) When the mechanism of the thread and lower thread trimmer pull the thread and the lower thread to top trimmer to trim, the trimmed thread will be held by the clamping mechanism.
   (2) When under UTP and UTL ,top cover thread trimming mechanism trims and clamps the top cover thread.

（3） UTQ 時，針線以空氣壓力將針線吹至壓具上方。

（4） UTM 時，針線拉線機構將針線拉至彈片挾持。

（5）壓具提升。

4．移開車縫布料進行下一次縫紉。

5．將腳踏板放回至（圖 10)-2 位置壓具即放下。

6．將腳踏板置於（圖 10)-3 或（圖 10)-4 位置可使壓具提升。

注意：

（1）在無空壓源之狀態時，請勿將下切刀置於左側切線之位置，以免誤動機器電源開關，將下切刀碰壞。

（2）電磁式（ UTM 、 UTL ）在無通電之狀態時，請勿將下切刀置於左側切線之位置，以免誤動機器電源開關，將下切刀碰撞。

（3）壓具下方未放置車縫布料時，請勿操作自動切線機構。

(3) When under UTQ , needle's thread will be blown to the upside of the presser foot by air pressure.

(4) When under UTM , needle's thread will be pulled and clamped by needle's thread pulling mechanism.

(5) Presser foot lifter.

4. Remove the material away for the next sewing.

5. Keep the pedal in horizontal position as shown as (Fig. 10-2), the presser foot will put down.

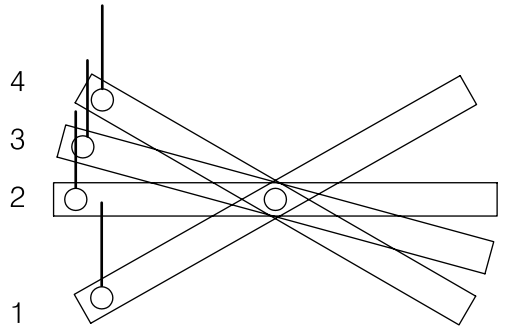
6. Thread the pedal at the backward position of (Fig. 10-3) or (Fig. 10-4) so that the presser foot may lift.

Note:

(1) Do not put the lower trimmer to the left thread trimming location when there is no air pressure source in order to prevent damaging the lower trimmer from turning the power switch on.

(2) Do not put the lower trimmer to the left thread trimming location when the electromagnet types (UTM , UTL) are disconnected lest the power switch should be turned on and the lower trimmer should be damaged.

(3) When there is no fabric under the presser foot, do not operate the auto trimming system.



踏板位置/PEDAL POSITIONS
1. 前壓（開始車縫）
Press forward (start sewing)
2. 中央（壓具下放）
Horizontal (presser foot down)
3. 後半壓（壓具提升）
Press halfbackward (presser foot lifts)
4. 後壓（自動切線裝置）
Press backward (automatic thread trimming)

圖 10/Fig.10

各部件名稱 NAMES OF MAJOR PARTS

（1）過線盒
（2）導線片
（3）壓具
（4）控制箱
（5）油鏡
（6）拉線鬆緊調整組
（7）手輪
（8）線架
（9）壓具調整螺絲
（10）護指器

(1) Thread Guide Box
(2) Thread Guide
(3) Presser Foot
(4) Control Box
(5) Oil Windows
(6) Thread Tension Adjusting Set
(7) Pulley
(8) Thread Stand
(9) Presser Foot Adjusting Screw
(10) Finger Guard

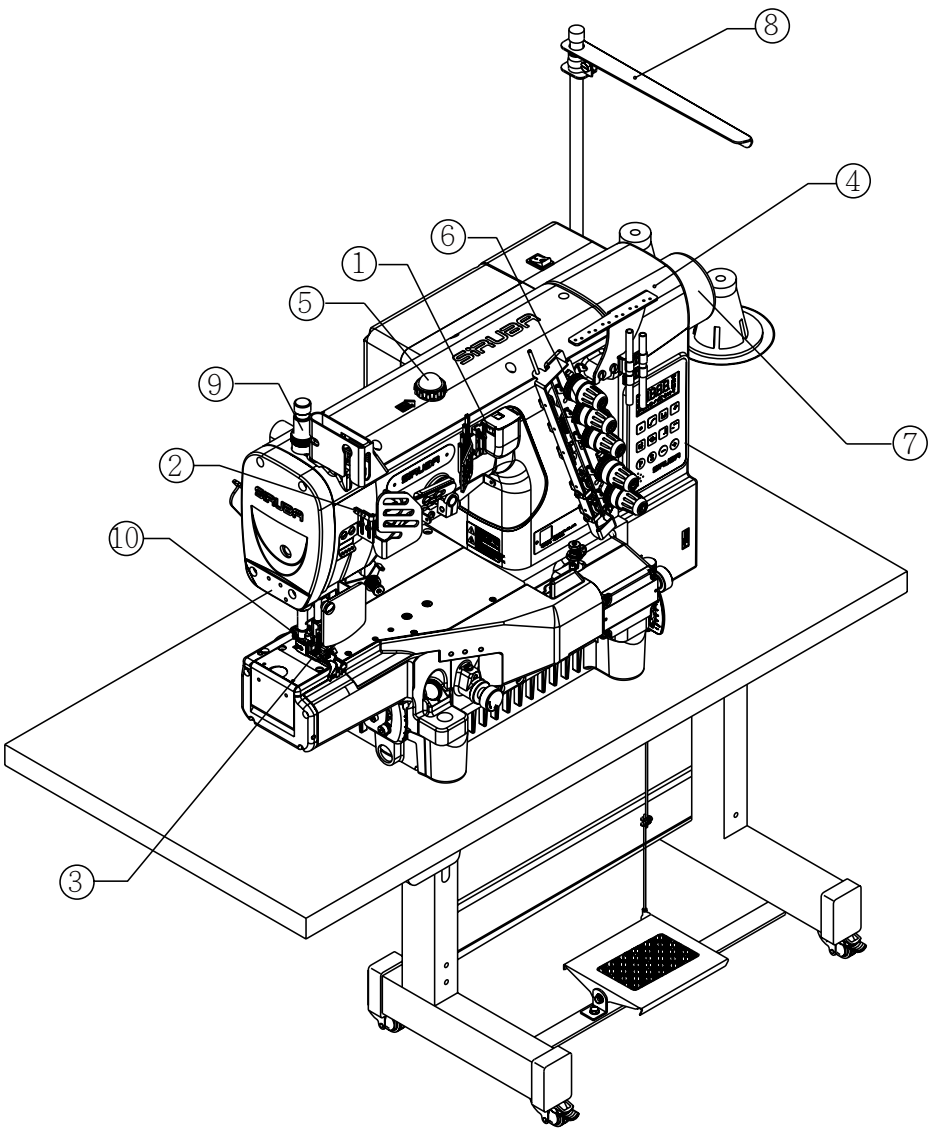


圖 11/Fig.11

機種說明 / THE DESCRIPTION OF THE MODEL

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

C007N - W122 - 240 / CH
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①表示機種別：
C＝ 筒式三針車。

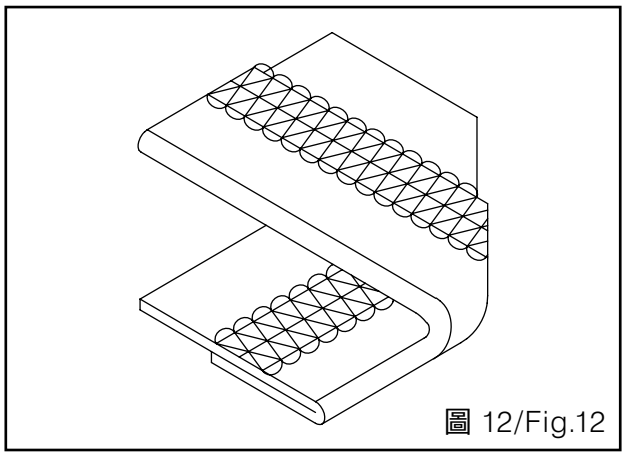
②表示車台外觀改良之區分編碼，由 K 然後 N，以英文字母排列，如 C007N。

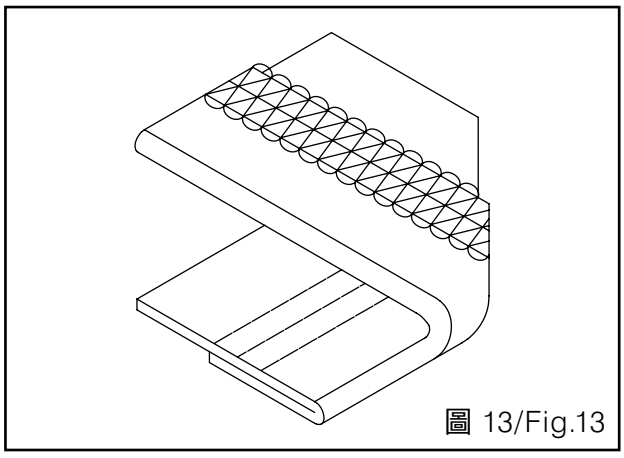
③ W 有上叉縫 (圖 12)。
U 無上叉縫 (圖 13)。

① represents the type of the machine:
C＝ Three needles cylinder bed chainstitch machine

② represents the improved machine appearances that are arranged from letter K. Ex:C007N.

③ W＝ have upper cross stitchery (Fig.12)
U＝Without upper cross stitchery (Fig.13)


圖 12/Fig.12


圖 13/Fig.13

④ 車縫形式：
12= 一般車縫
13= 拷下襬
15= 三角褲、緊身褲、內褲等棉織物伸縮帶上帶縫
16= 一般厚布料之車縫
22= 附車縫包條作業
32= 包飾縫作業
52= 上花邊鬆緊帶
53= 環型平織鬆緊帶上帶車縫
81= 拷下擺附左切刀
82= 鬆緊帶上帶邊縫附左切刀
92= 三針車四針車縫

⑤ 表示針板舌片之形狀(針板舌的功能：打網)(圖9)
1 為薄布用
2 為中厚布用
3 為厚布用

④ is stitching type:
12= general seaming
13= bottom hemming
15= elastic tape feeding for cotton fabric such as underwear, and tights pants
16= general seaming for normal thick materials
22= tape binding
32= seam covering (decorative stitching)
52= elastic or lace seaming
53= elastic tape feed seaming in hooped type lockstitch
81= bottom hemming with left trimmer
82= elastic tape feeding with left trimmer
92=four needles chain seaming

⑤ means the shape of the needle plate tongue, which its function is to knot. (Fig. 9)
1= for thick/heavy materials
2= for midium- thick materials
3= for thin/light materials

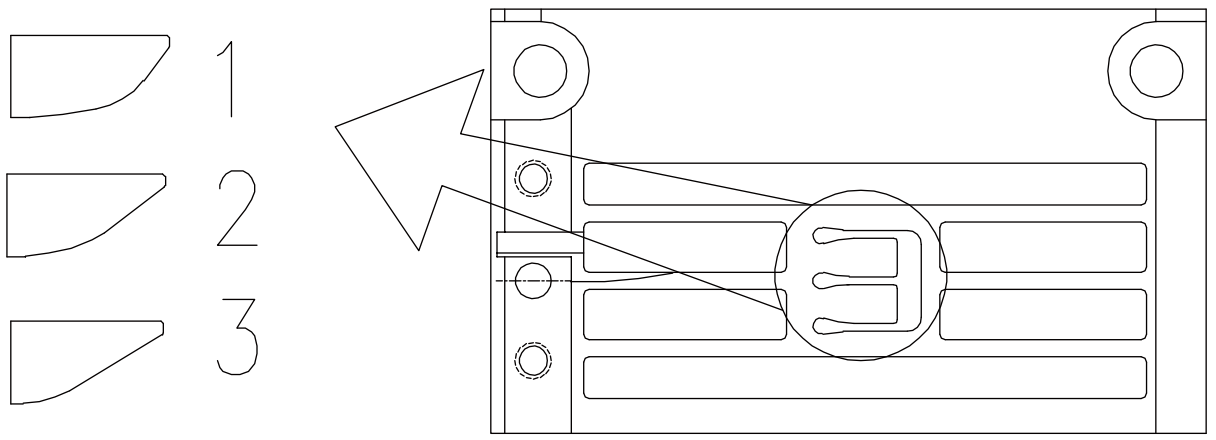


圖 14/Fig.14

⑥表示縫針線數(圖 15)
2為2針車
3為3針車

⑥ is the number of stitches. (Fig.15)
2= 2 needles sewing machine
3= 3 needles sewing machine

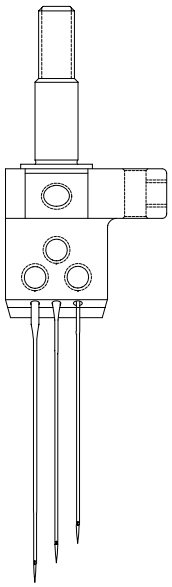


圖 15/Fig.15

⑦針寬(左右縫線針之距離) (圖 16)

3.2mm，4.0mm
4.8mm，5.6mm
6.4mm

⑦ means the needle width (the distance between the left and the right stitch. (Fig.16)

3.2mm，4.0mm
4.8mm，5.6mm
6.4mm

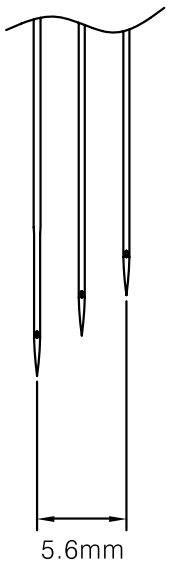


圖 16/Fig.16

⑧輔助機型：如CH、CQ、CZ...等等

⑧ is supportive models, such as CH, CQ, CZ, etc.

2. 用途項目 (表一)

2.Purpose (Table 1)

編號 Code	用途 Application	車縫最高轉速 R.P.M Highest sewing rotational speed	縫距 (mm) Max. Stitch length
		C007N	
L	用於薄布料 For light-weight materials	5500	1.4～3.6
M	用於中厚布料 For medium-weight materials	5500	1.4～3.6
H	用於厚布料 For heavy-weight materials	5500	1.4～3.6

表 1/Table 1

3.規格

3.Specification

機型別 Model / 規格 Specification / 車縫布料 Sewing materials	C007N		
	薄布料 Light material	中厚布料 Medium weight material	厚布料 Heavy weight material
車縫最高轉速 (R.P.M) Max. sewing rotational speed	5000/5000	5000/5000	4000/4000
噪音 Noise	82dB/4500R.P.M		
最大縫距 Max. Stitch Length	3.6mm		
針棒行程 Needle bar stroke	31mm	33mm	35mm
使用針 Needle DB×1-DP×5	SCHMETZ UY128GAS#70 ORGAN UY128GAS #10		
壓具壓力 Presser foot pressure	4-5 KGF	5-7 KGF	
壓具提升量 Presser foot height	6mm		
壓具 Presser foot	可調整性壓具 Adjustable presser foot		
送料具高度 Feed dog height	0.8mm	1mm	1.2mm
重量 Weight	機頭 Head: 45kg 控制箱 Control box: 3kg		
機頭空間尺寸 Machine head	長 Long 550mm× 高 Height 400mm		
桌板尺寸 Table specification	605mm×1200mm 605mm×1070mm		
加油方式 Lubrication	完全自動加油 Automatic lubrication system		
潤滑油 Oil	提供之專用油 SIRUBA sewing machine oil		
機頭驅動 Machine head driving	直接驅動裝置 Directly driving device.		
馬達 Motor	最大輸出 550W Max. Output 550W		
控制電路 Control circuit	單相 Single-phase 220V±15%		
使用電路 Power	單相 Single-phase 220V±15%		
電磁線圈驅動電源 Solenoid driving power	氣動：24V 電動： 24V		

表 2/Table 2

◎以上為出廠值，使用者可依需求做調整，Max 5000 rpm

◎ The above values are factory settings, and users can make adjustments according to their needs, with a maximum of 5000 rpm.

關於本機的重要安全注意事項

IMPORTANT SAFETY INSTRUCTIONS OF THIS MACHINE

1. 搬運作業
   (1) 使用上下二片式的保麗龍將機器包裝防護。

   (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˚C 以上的高溫。

3. 作業中
   機器不要在高於 40˚C 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。

1.Transportation
   (1) The machine packed with two piece - up and lower - 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) Do not storage the machine over 45 ℃ .

3.Working
   The machine doesn't work over 40 ℃ .
4.Warning
   Pay attention to the following warning advices:
   (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) Turn off the power during adjusting, threading, bobbin-changing and needle-cleaning.

C007N 直驅車 馬達安裝方式

安裝步驟：

1. 首先將轉子 (A) 套入大心軸 (B)，再抵緊軸環 (C)，依順時針方向的第一顆螺絲 (1)，固鎖於大心軸 (B) 上之長槽孔 (3)，接著再鎖緊螺絲 (2)。

2. 將馬達定子線朝上 (D)，鎖固於法蘭上 (E)。

注意事項 :

若馬達未依上述位置正確組裝，將會導致針棒停針的位置點不對 ; 馬達組裝正確情形下，當針棒置於上死點時，針棒的左針與針板面距離約 7.8mm。

3. 將編碼器 (F) 線朝上，再以螺絲 (5) 鎖固於馬達 (D) 上。

4. 將編碼盤 (G)，置中光線偵測器 (H)，再以螺絲 (6) 鎖固於大心軸 (B)。

5. 將風扇 (I) 套入大心軸 (B)，再以螺絲 (7) 鎖固於大心軸 (B)。

C007N INSTALL THE MOTOR

INSTALLATION PROCEDURE:

1.First, slide the rotor (A) onto the main shaft (B), then press it firmly against the shaft collar (C). Fasten the first screw (1) clockwise into the long slot (3) on the main shaft (B), and then tighten screw (2).

2.Position the motor stator wires upward (D) and fasten them onto the flange (E).

CAUTION:

Check to be sure that the “motor are installed correctly” as so to prevent needle bar from stopping on wrong position. If motor is installed correctly, the distance between the left needle on needle bar and needle plate will be 7.8mm when needle bar is in its highest dead point.

3. Position the encoder cable (F) upward, then fasten it to the motor (D) with screw (5).

4. Center the encoder disc (G) within the optical sensor (H), then fasten it to the main shaft (B) with screw (6).

5. Slide the fan (I) onto the main shaft (B), then fasten it to the main shaft (B) with screw (7).

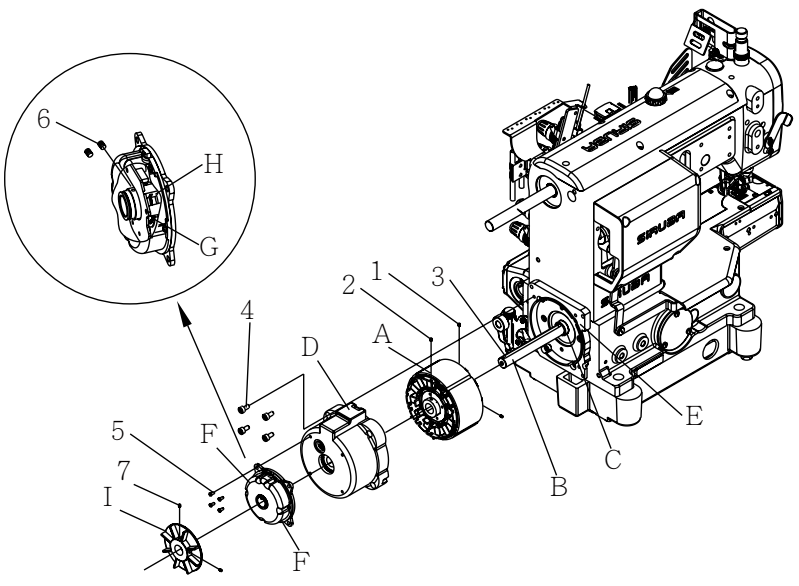


圖 19/Fig.19

穿線方法

請確實按照圖示各種不同縫合情況穿線，錯誤之穿線將引起斷線、跳針及車縫不平坦等現象，請參照穿線圖。

* 薄布料請參考 (圖 20)
* 中厚布料請參考 (圖 21)

THREADING

Please thread truly by different seam types. The fault threading will cause broken lines, skipping stitch, puckering defects. Please refer to threading instructions.

*Fine fabrics are followed to Fig.20

*Medium and heavy fabrics are followed to Fig.21.

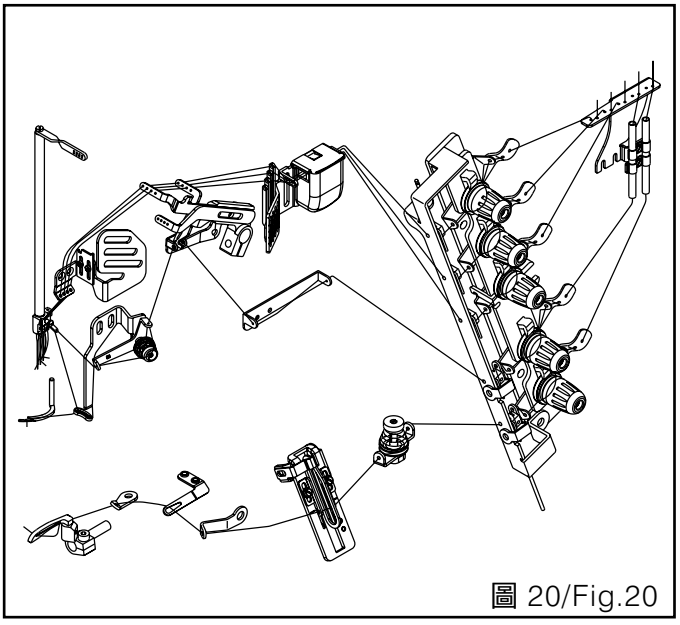


圖 20/Fig.20

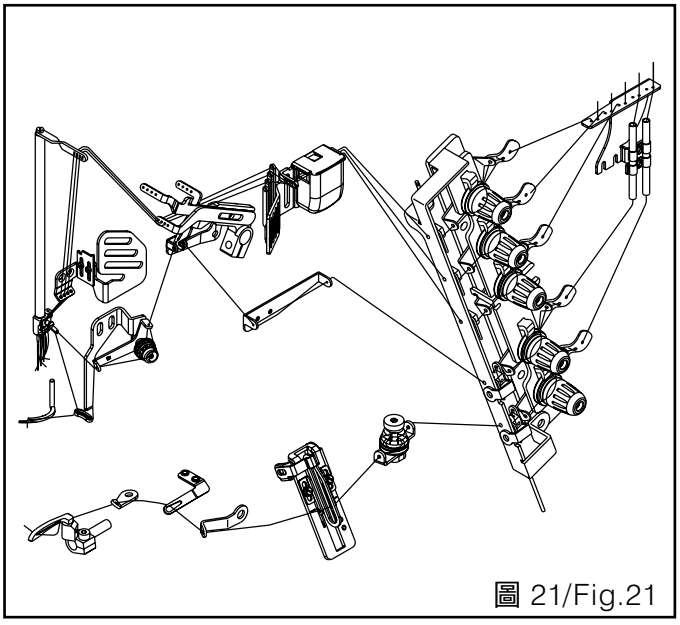


圖 21/Fig.21

拉線鬆緊度調整

拉線強弱必須根據：

1. 車縫布料種類
2. 材質厚薄
3. 線
4. 縫距

等不同而做調整，將控制鈕順時鐘方向旋轉時，線越緊，反之則越鬆。(圖 20、21)

ADJUST THREAD TENSION

The tension of the thread should be adjusted according to：

1.The fabric material type
2.The thickness of the sewed fabric
3.The thread;
4.The stitch length.

Turn the tension button clockwise, and thread becomes tighter. If you turn it counter-clockwise, it becomes looser.(Fig .20.21)

針線挑線桿之調整

ADJUSTING NEEDLE THREAD TAKE-UP

1. 轉動手輪使針棒位於最低位置時，針線控桿搖臂①的上邊必須成水平，必要時放鬆螺絲④調整之。 (圖 22)

1. When turning the pulley and make the needle bar in the lowest position, the top edge of the needle thread take-up ① should remain horizontal. To adjust the position of the take-up if necessary, loosen the screw ④ (Fig.22)

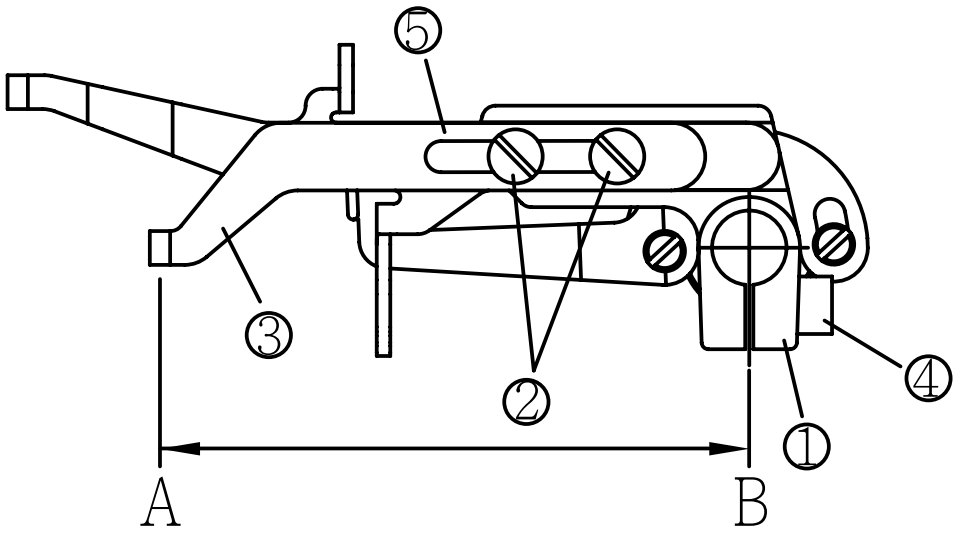


圖 22/Fig.22

2. 將螺絲②鬆開，調整 A ， B 兩點的距離約 75 mm 再鎖緊。

2. Loosen screw ② to adjust the length between point A and B to be about 75 mm, then fasten it tightly.

註：

欲將針線調鬆時，將挑線桿③向左方向移動。

欲將針線調調緊時，將挑線桿③向右方向移動。

Note:

To loosen the needle thread, turn the needle thread take up ③ toward the left. To tighten the needle thread, turn the needle thread take up ③ toward the right.

3. 上叉挑線桿⑤不要調動。

3. Do not move the spreader thread take-up ⑤ when making above adjustments.

壓具之調整

鬆開螺絲①，左右搖擺，調整壓具②，使針尖端剛好位於如圖示之中心點，調整後，再鎖緊螺絲①。 (圖 23)

ADJUSTING PRESSER FOOT

Loosen screw ① and adjust presser foot ② left and right to a proper position to let the needle may get into the center of presser foot's eyelet. After adjusting, tighten screw ① . (Fig.23)

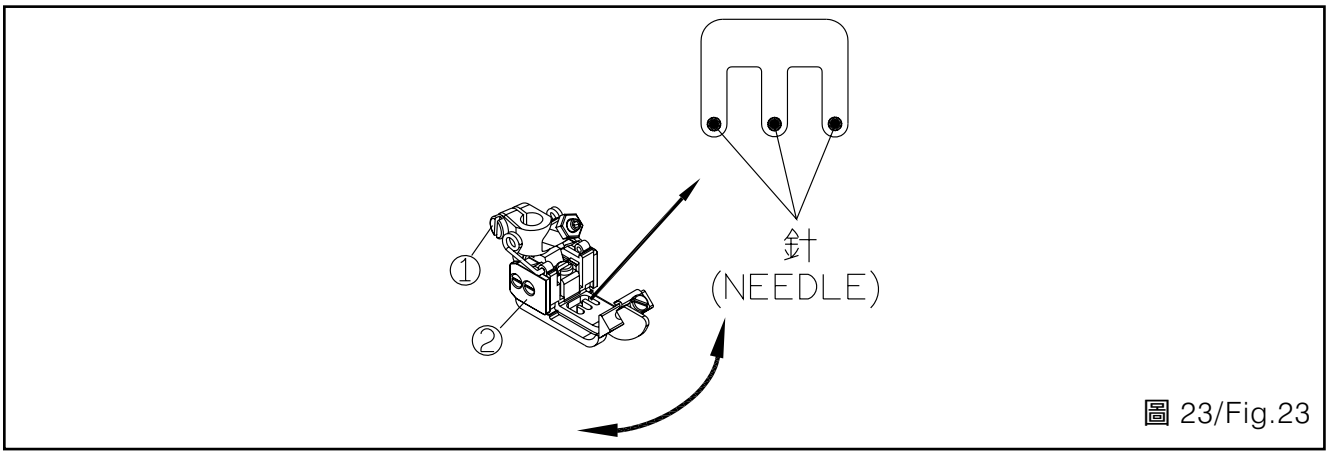


圖 23/Fig.23

差動比調整 1 : 0.6 ～ 1 : 1.1

差動比 = 後送齒送具行程：前送齒送具行程

1. 本機之差動比可從 1:0.6 調整至 1:1.1。

註：
若需調整至 1:1.1 以上，請見下頁說明。

2. 用手調整旋轉旋鈕 ② 即可調整前送齒送具行程，調整範圍 1:0.6～1:1.1mm。(圖 24)

3. 用手調整旋轉旋鈕②，可立即由刻度版③內之指針對應右側刻痕及數字觀看得知目前的前送齒送具行程。

4. 伸縮布料車縫時，將旋鈕②以順時針方向旋轉。
5. 皺縮布料車縫時，將旋鈕②以逆時針方向旋轉。

ADJUSTING DIFFERENTIAL RATIO 1 : 0.6 ～ 1 : 1.1

The differential ratio=rear feed dog stroke:front feed dog stroke

1.The differential ratio can be adjusted from 1:0.6 TO 1:1.1.

Note:
If the adjustment range of differential ratio greater than 1:1.1mm is needed, please go on to next page for further details.

2.Adjust the rotary knob ② by hand to adjust the front feed dog stroke.The adjustable range is 1:0.6～1:1.1mm. (Fig. 24)

3.After manual adjusting the rotary knob ② ,the feed dog stroke can be known by the indicated number on the scale plate ③ .

4.Turnig the knob ② clockwise when sewing the elastic fabric.

5.Turning the knob ② counterclockwise when sewing the shrink fabric.

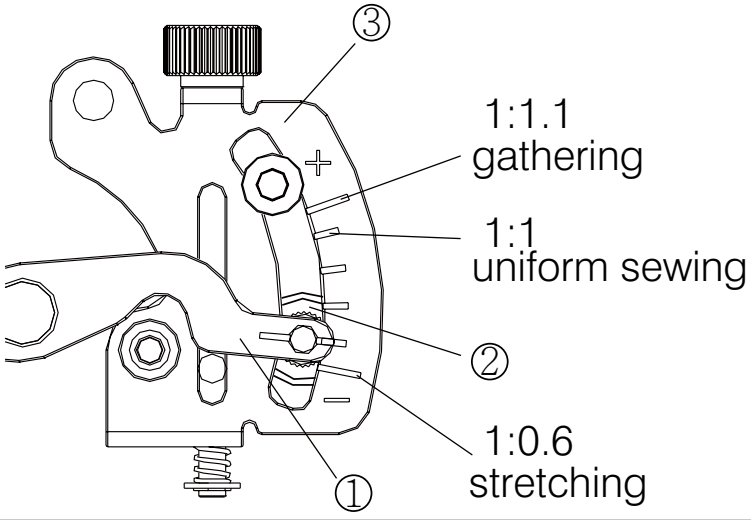


圖 24/Fig.24

差動比調整 1 : 0.9 ～ 1 : 1.4

1. 本機之差動比可從 1:0.9 調整至 1:1.4。(圖 25)
2. 鬆開側蓋①的三顆螺絲並取下側蓋。(圖 26)
3. 鬆開差動連桿②上之螺絲③。(圖 27)
4. 校正差動連桿②中之上螺絲③的位置 , 螺絲須對齊至孔④之處 , 並鎖緊螺絲。(圖 27)

注意：

若差動比要調整至 1:1.4~1:1.8，縫距必須在 2.5mm 以下，超過範圍將會造成機器損壞。

ADJUSTING DIFFERENTIAL RATIO 1 : 0.9 ～ 1 : 1.4

1.The differential ratio can be adjusted from 1:0.9 To 1:1.4.(Fig.25)
2.Remove the side cover ① (three pcs. of screws).(Fig.26)
3.Remove the screw ③ of the differential feed bar connection ② .(Fig.27)
4.Fix the differential feed bar connection ② in the hole ④ with the screw ③ .(Fig.27)

Precaution:

If the differential ratio has the range set from 1:1.4 to 1:1.8, the stitch length must be under 2.5mm. Otherwise, it can result in damage to the machine.

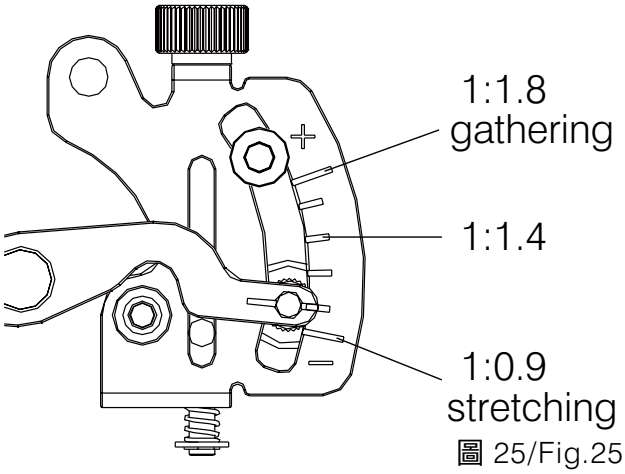


圖 25/Fig.25

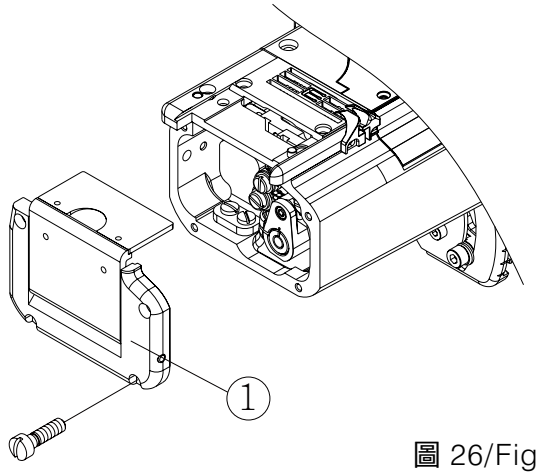


圖 26/Fig.26

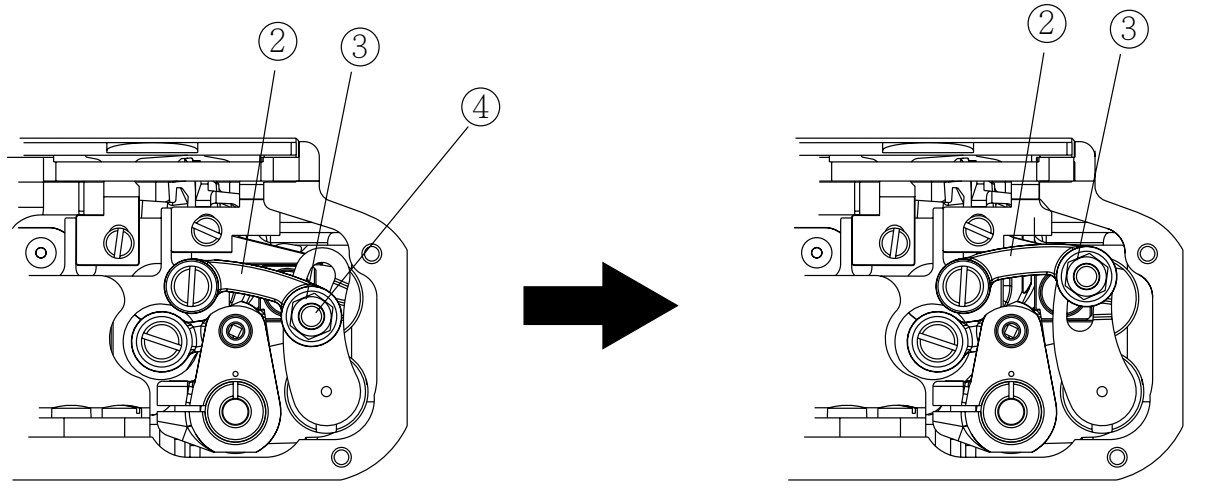


圖 27/Fig.27

差動送布牙的調節

ADJUSTING MOVEMENT OF DIFFERENTIAL FEED DOG

產品出廠時，差動比預設的可調節範圍為 1:0.7 到 1:1.4。

將差動調節桿①對準差動送布刻度盤上的刻度線②時，差動送布牙與主送布牙的動作會一致 (差動比 1:1)，讓縫製動作同步。(圖 28)

(1) 鬆開固定螺帽③。
(2) 旋轉調整螺絲④來調整差動送布牙的動作。
縮短時請順時針旋轉。
伸長時請逆時針旋轉。
(3) 穩固地鎖緊固定螺帽③。

The differential ratio has been set from 1:0.7 to 1:1.4 at shipment.

When aligned the differential feed lever (right) ① with the line② of the differential feed graduations, the movement of the differential feed dog is the same as that of the main feed dog (differential ratio 1:1), resulting in uniform sewing.(Fig. 28)

(1)Loosen the lock nut③.
(2)Turn the adjusting screw④ to adjust the movement of the differential feed dog.
To increase the movement for gathering, turn it clockwise.
To decrease the movement for stretching, turn it counterclockwise.
(3)Tighten the lock nut③ securely.

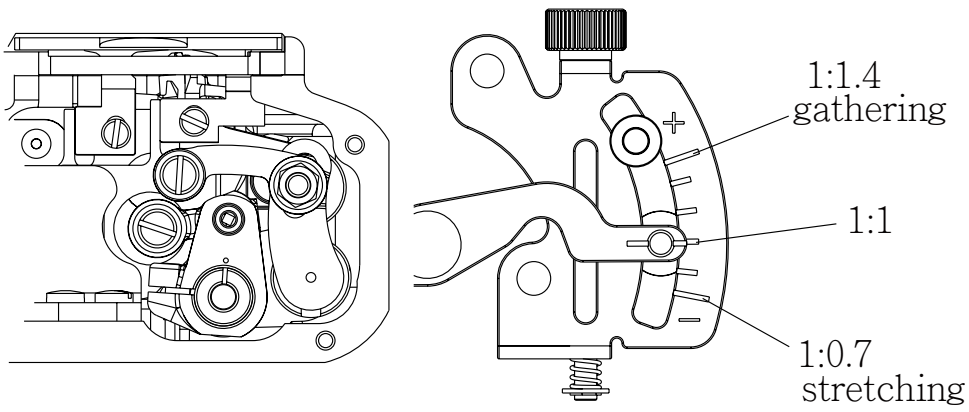


圖 28/Fig.28

縫目長度的調節 ADJUSTING STITCH LENGTH

縫目長度的可調節範圍為 1.4 到 3.6mm。表四有分別顯示每一英寸 (25.4mm) 與每 30mm 時可包含的針數。

主送布桿擋片⑤在產品出廠時已被螺絲⑥固定，最大只能調節到 3.6mm。(圖 30)

調節步驟 :(圖 29)
1. 鬆開固定螺帽①。
2. 將主送布桿④對齊主送布刻度盤③上需求的位置。轉動調節螺絲②進行調節。

(1) 讓縫目長度變小請順時針旋轉。

(2) 讓縫目長度變大請逆時針旋轉。

Stitch length is adjustable from 1.4 to 3.6 mm. Table 4 shows the number of the stitches per inch (25.4 mm) and 30 mm converted to the stitch length.

The main feed lever stopper⑤ has been adjusted so as to stop at maximum 3.6 mm with the screw⑥ at shipment.(Fig.30)

Adjusting procedure:(Fig.29)
1.Loosen the lock nut①.
2.Align the end of the main feed lever④ with the required position on the main feed graduations③. Turn the main feed bar adjusting screw② to adjust it.
(1)To make the stitch length smaller, turn it clockwise.
(2)To make the stitch length larger, turn it counterclockwise.

stitch length (mm)	number of stitch (per 1 inch)	number of stitch (per 30 mm)
1.4	18	21
2.0	13	15
3.0	8.5	10
3.6	7	8

表 4/Table 4

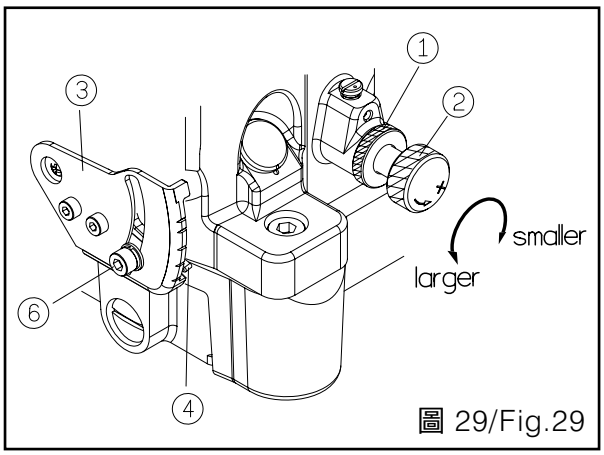


圖 29/Fig.29

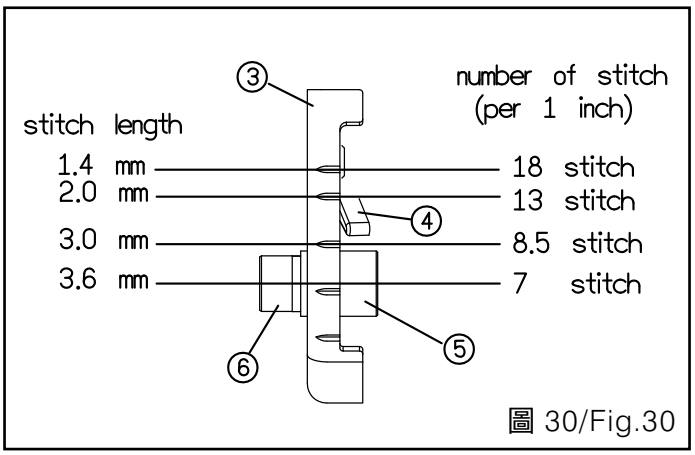


圖 30/Fig.30

壓具壓力強度之調整

ADJUSTING PRESSURE OF THE PRESSER FOOT

在布料推送順暢且縫合完美之情況下，壓具壓力盡量輕些。 (圖 31)

Pressure of the presser foot should be as light as possible, so that cloth can be feed and sewed smoothly. (Fig.31)

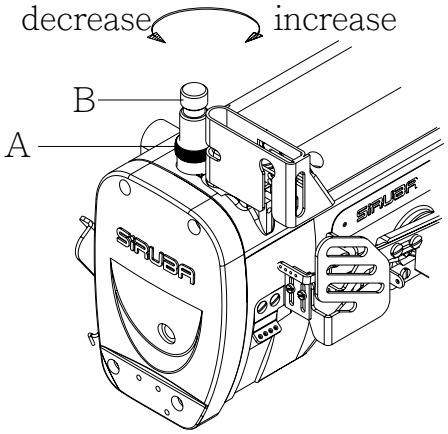


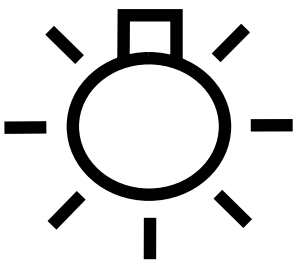
圖 31/Fig.31

操作環境照明

LIGHTENING OF THE OPERATION ENVIRONMENT

工業用縫紉品或是縫紉系統必須在該縫紉區域未啓動照明裝置前，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，當照明裝置設置或移動的時候，警示標誌也應該設置在照明裝置插座上或是附近。警示標示型式如圖 32 所示。

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 installed on or near the lamp socket as shown on Fig.32



額定功率.....100W
Lamp Max.....100W

圖 32/Fig.32

保養 MAINTENANCE

《清潔送料具保養方式》
1.抬起押具
2.將兩個螺絲①拆下，然後拆下針板②。

《Maintain the feed dog》
1.Raise the presser foot.
2.Remove two screws①, and then remove the needle plate②.

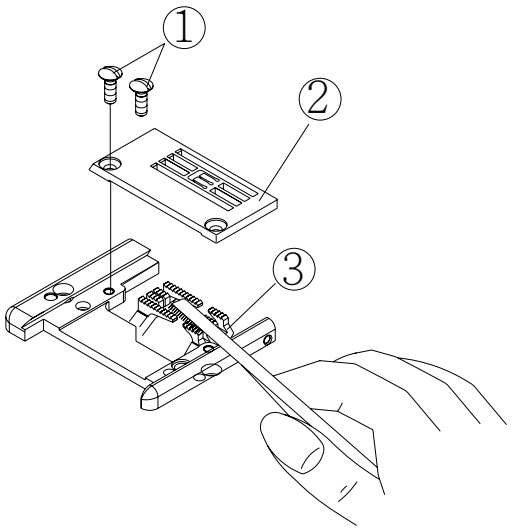


圖 33/Fig.33

3.以軟毛刷清除送布牙③上的布屑。(圖 33)

4.清潔後將針板②裝上。

3.Use a soft brush to clean dust and lints on the feed dog teeth③. (Fig.33)
4.Install the needle plate② after doing the above cleaning.

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。 1. 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) 2. 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。 3. Keep the machine and the operation table clean.
每週 Weekly	1.保持電源外觀乾淨。 1. Keep the power cords looking clean and neat.
	2.保持操作面板乾淨。 2. Keep the operational panel clean.
	3.檢查電源零件是否鬆脫或在正確位置。 3. 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。 1. Replace the liquid oil inside the oil pan.
每年 Annually	1.檢查傳動皮帶是否疲乏或毀損。 1. Check the transmission belt to see if it is weariful or damaged.

表 5/Table 5

潤滑 LUBRICATION

1. 請選用 MOBIL#10 或 ESSO#32 或同級之潤滑油。

2. 由於新機器在裝運前已將油倒盡，因此新機器在使用前必須注入新油，轉開螺絲 A 將油注入機器中，待油量滿至油標指示上下線之間即可。 (圖 34、35)

1.Please use Mobil#10 or ESSO#32 or its Equivalent pil.

2.The lubricating oil has been drained from the machine before delivery. Therefore, before using the new machine, remove screw (A), and fill the oil until the oil level is between the high/low indicate lines of oil level gauge. (Fig.34.35)

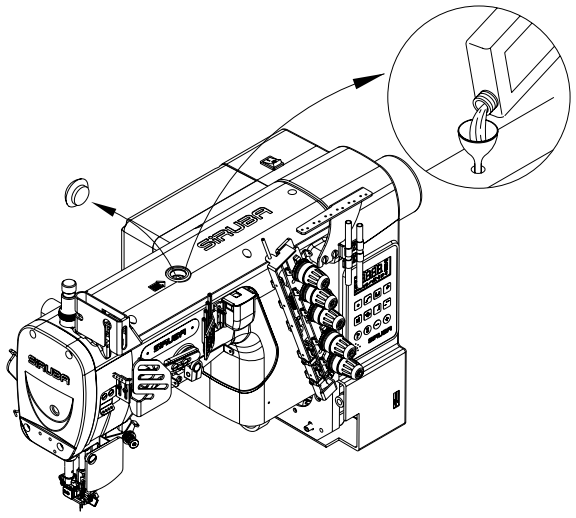


圖 34/Fig.34

3．每天必須檢視，如果油已低於游標指示窗之下限，必須加注新油，當機器開始運轉，操作前，檢示必須整個潤滑系統使否順暢。

* 開箱之新機器或許久未使用而重新要使用時，請在針棒上下部份加油潤滑。

3.Be sure to check every day and refill the oil, if oil level is lower than line L of oil level gauge.

* Before starting a brand new machine or a machine which has not been used for more than a couple of week, oiling the needle bar.

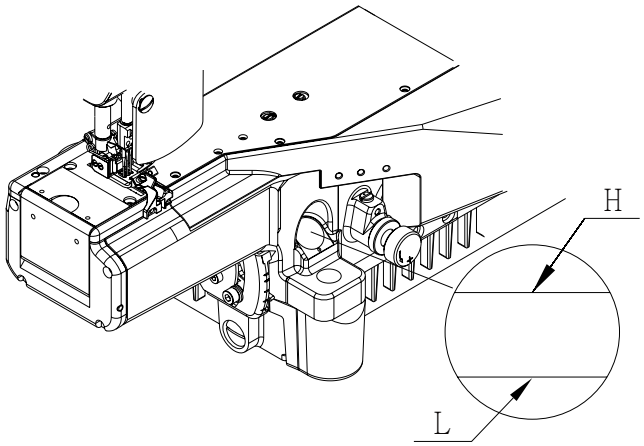


圖 35/Fig.35

針與線之冷卻與潤滑 LUBRICATE AND THE COOLING OF NEEDLE AND THREAD

將矽油注入①及②油槽以防止斷線。(圖 36)

Fill reservoir ① and ② with silicon oil to prevent the thread from breaking. (Fig.36)

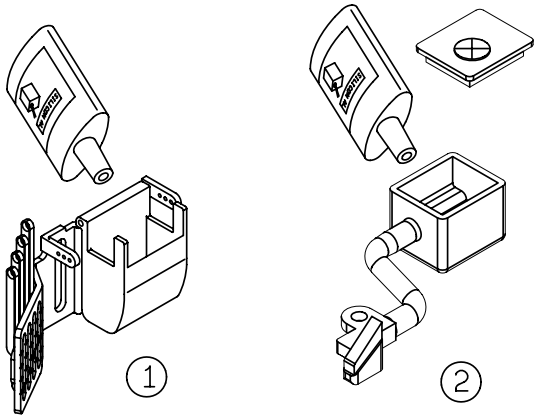


圖 36/Fig.36

潤滑油之更換 CHANGE THE LUBRICATION OIL

1．將螺絲 D 鬆開，使油槽之油完全排出後再鎖緊。(圖 37)

2．為延長本機器壽命，請於開始使用一個月後更換新油，爾後約每四個月更換一次。

1. Loosen screw D and fasten it after drain all the oil from the tank. (Fig.37)
2. For extending the life of the machine, change oil after the first month operation. After that, change oil every four months.

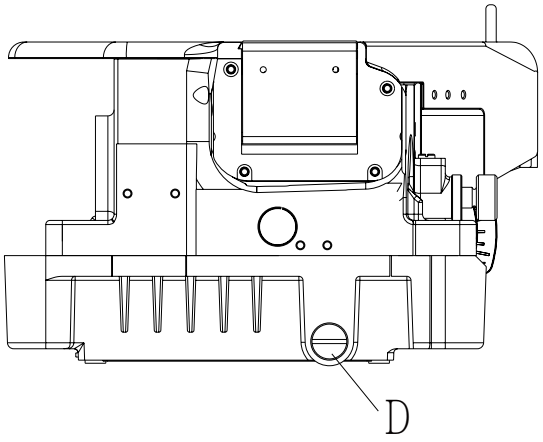


圖 37/Fig.37

濾油器之更換 CHANGE THE OIL FILTER

本機器特別裝有濾油器，約每使用一個月後應卸下清洗，必要時得換新品。 (圖 38)

This machine is equipped with an oil filter, and the filter must be cleaned every month. Replace the filter if necessary. (Fig.38)

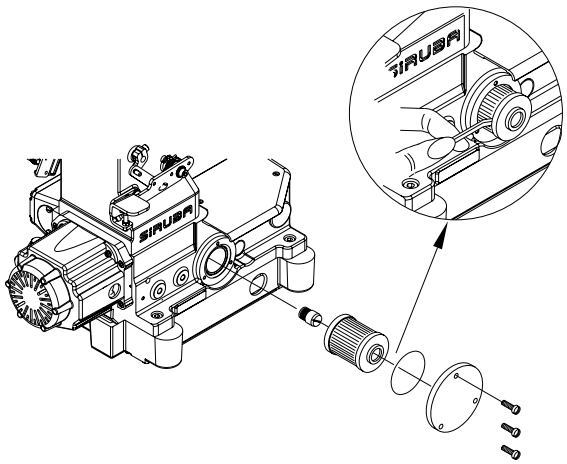


圖 38/Fig.38

針之更換 REPLACE THE NEEDLE

1．選用針之規格與尺寸請參照 (表 6)

2．旋開螺絲①並取下針，將新針插至針座最底端，並使針之長溝面向自己。 (圖 39)

3．重新鎖緊螺絲①。

*特殊機種針之代號請參考規格件表。

1. See Table 6 for the sizes and the specifications of the needles.
2. Loosen screw ① , then pull out the used needles. Insert the new needles into the holder holes as far as they can go, and let the long groove of the needle face you. (Fig.39)
3. Fasten screw ① .

* Needle size of special model, please refer to conversion chart.

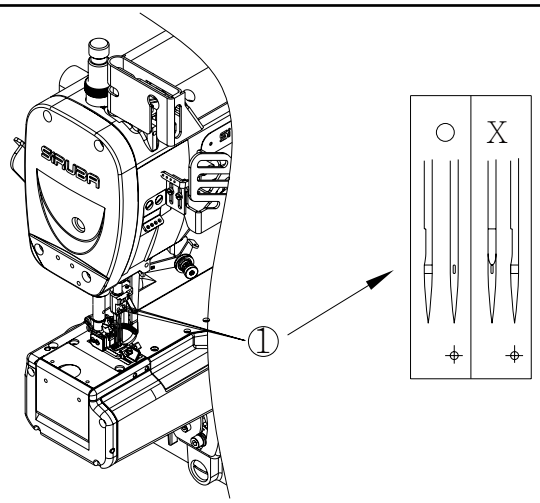


圖 39/Fig.39

針代號 Needle System	針尺寸 Needle Size		
	2針 2 Needles	3針 3 Needles	4針 4 Needles
ORGAN UY128GAS	#10		
ORGAN SM1014B			#10

表 6 / Table 6

結束密縫調整

ADJUSTING END INTENSIVE SEWING

氣動結束密縫說明：結束密縫功能設計，將結束密縫驅動桿①以鍊條②鉤住，以腳動方式將結束密縫驅動桿①往下拉伸，透過結束密縫功能，可使車縫末端線跡更密集，使縫線線跡不易脫落，其標準配備為腳動，亦可選配由電子馬達控制箱動作，進行車縫末端結束密縫。 (圖 40)

The instruction of pneumatic end intensive: End intensive sewing function- hook the end intensive sewing driving lever ① by the chain ② and stretch down the end intensive sewing driving lever ① by foot-action, which enable the end stitch more intensive and strong. The standard equipment of end intensive sewing is foot-action, but the electronic motor control box can be option too. (Fig.40)

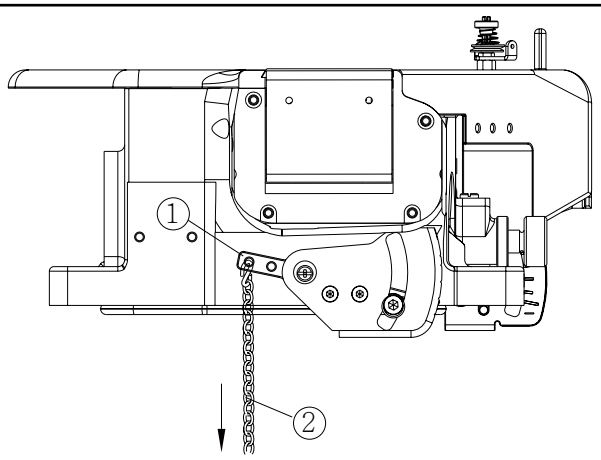


圖 40/Fig.40

故障檢修 TROUBLESHOOTING

注意CAUTION

在進行故障檢修查詢之前，請先關閉電源並拔出電源，否則如果誤觸啓動開關，縫紉機會動作，易導致人身受傷。
Before processing the troubleshooting, please turn off the power switch and unplug the electronic cord. Otherwise, if touching the start switch incautiously, the sewing machine will function and will probably cause injuries happened on operators.

No.	現象 Problem	檢查及調整 Exam and Adjustment
1.	針線太過緊密/疏鬆 Needle thread too tight/ loose	◉針線張力是否過大或過小？ The tension of the needle thread is too loose or too tight? ◉調整針線張力。 Adjust the needle thread tension.
2.	針線的跳線現象 The skipping stitch of needle thread	1.車針的選擇不對？ Choose the wrong needle? ◉選擇配合布料的車針與縫線號碼。 Select the needle and thread number match the fabrics. 2.車針不良？ Bad needle? ◉換新車針。 Change a new needle. 3.穿線方式不正確。 Incorrect threading. ◉按照穿線圖。 Follow the threading diagram. 4.車針安裝不正確。 Incorrect needle installation. ◉重新安裝車針，使車針長槽朝向操作者。 Reinstall the needle to make the long slot of needle face the operator. 5.車針針尖斷或彎曲。 The needle tip is broken or bent. ◉換新車針。 Change a new needle. 6.勾針針尖變鈍。 The looper tip is blunt. ◉使用油石或細砂紙修磨，或換新勾針。 Polish by the oilstone or fine emerypaper. Or replace with new looper. 7.勾針線張力太大或太小。 The looper tension is too loose or too tight. ◉適當調整縫線張力。 Adjust the thread tension properly.

No.	現象 Problem	檢查及調整 Exam and Adjustment
2.	針線的跳線現象。 The skipping stitch of needle thread	8.勾針不能套住右邊車針的線環，造成勾針線的右邊線跡跳針。 The looper can't hook the right needle thread loop and cause the right stitch of looper thread skipped. ◉主因為車針線環太小，增加挑線量。 Because the needle thread loop is too small which increase the thread take-up amount. 9.勾針不能套住左邊車針的線環，造成勾針線的左邊線跡跳針。 The looper can't hook the left needle thread loop and cause the left stitch of looper thread skipped. ◉主因為車針線環太大，減少挑線量。 Because the needle thread loop is too big which decrease the thread take-up amount. 10.勾針無法勾住中間與左邊直針線環，勾針線的中針線與左針線跳針。 The looper can't hook the middle and left straight needle thread loop which cause the middle and left stitch of looper thread skipped. ◉依標準調整車針與勾針的勾線關係，使車針線環大小適當。 According to the standard to adjust the looper thread connection between needle and looper and make proper needle thread loop size. 11.勾針無法勾住中間與右邊直針線環，勾針線的中針線與右針線跳針。 The looper can't hook the middle and right straight needle thread loop and cause the middle and right stitch skipped. ◉檢查縫線是否有穿過夾線器，控線凸輪的同步關係，有問題依標準進行調整。 Check if the thread pass through the thread gripper and the synchronization relationship of thread controlling cam. If there is any problem, adjust it according to the standard. 12.勾針與車針配合不當。 The looper and needle didn't cooperate well. ◉檢查針桿高度，車針與勾針之間的同步。 Check the needle lever height and the synchronization between needle and looper. 13.車針與護針片配合不當。 The needle and the needle guard plate didn't cooperate well.

No.	現象 Problem	檢查及調整 Exam and Adjustment
2.	針線的跳線現象。 The skipping stitch of needle thread	◉檢查車針與護針片位置，如有問題，按標準進行調整。 Check the position of needle and needle guard plate. If there is any problem, adjust it according to the standard. 14.車針與上勾針配合不當，或上勾針位置不對，造成上勾針跳針。 The needle and up looper didn't cooperate well or the incorrect up looper position cause the up looper skipped. ◉檢查車針與上勾針的配合尺寸及上勾針出線量，如有問題，按標準進行調整。 Check the size of needle and up looper and the thread output amount of up looper. If there is any problem, adjust it according to the standard.
3.	縫紉開始時出現跳針或脫線 Skipped stitches or unraveled thread at sewing start	1.機針過粗。 The needle is too thick. ◉使用比現有機針小一號的機針。 Try using a needle with a count that is one lower than the current needle. 2.縫紉開始時，縫紉速度過快。 The sewing speed is too fast at the sewing start. ◉使用慢速起縫。 Use the slow start feature.
4.	斷線 Thread broken	1.穿線方法不正確。 Incorrect threading. ◉按穿線圖重新穿線。 According to the threading diagram to re-threading. 2.車針安裝不正確。 Incorrect needle installation. ◉重新安裝車針，使車針漕朝向操作者。 Reinstall the needle to make the needle slot face the operator. 3.縫線張力過大。 The thread tension is too strong. ◉適當調整縫線張力。 Adjust the thread tension properly. 4.縫線質量太差。 Bad thread quality. ◉改用適當縫線。 Change to use the proper thread. 5.縫線比針孔粗。 The thread is wider than the needle hole. ◉改換適中的縫線或針。 Change to use the proper thread or needle.

No.	現象 Problem	檢查及調整 Exam and Adjustment
4.	斷線 Thread broken	6.車針、勾針、針板、壓具舌、過線孔等過線處有毛次或有刮傷現象。 The needle, looper, needle plate, presser foot tongue and thread crossing hole is blunt or scratching. ◉用油石或細砂紙重新修磨，或更換新零件。 Use oilstone or fine emerypaper to polish or replace the parts. 7.縫線車縫厚布料產生繞線現象。 Sewing the heavy material cause the thread winding. ◉降低車縫轉度，添加矽油降低針及線摩擦溫度。 Decelerate the sewing rotational speed and applying silicon oil to lower the friction temperature between needle and thread.
5.	斷針 Needle broken	1.車針的選擇不對。 Choose the wrong needle. ◉在布料不發生針孔的範圍內，使用粗一點的車針。 Use thick needle within the range that there will be no pinhole occurred on the fabric. 2.壓具安裝不良。 Improper assembling of the presser foot. ◉安裝時必須使用車針會插進壓具落針處中央。 During assembly, make sure the needle can insert to the central point of the presser foot. 3.送具安裝高低位置不對。 The assembling height of feed dog is wrong. ◉調整送具的高度，送齒高於針板0.8~1 mm，同時保持適當壓具壓力。 Adjust the feed dog height to make the feed teeth in 0.8~1 mm higher that the needle plate and keep the appropriate presser foot pressure. 4. 縫線不良。 Bad threading。 ◉縫線有結頭要事先加以處理後，重新穿線。 If there is any connecting part of the thread, it needs to be dealt first. Then, threading. 5. 車針安裝不正確。 Improper needle installing. ◉依說明書正確安裝方式，進行安裝。 Install the needle correctly by following the instruction book. 6.車針彎曲或針尖斷裂起毛或針孔被堵住。 The needle is bent, the needle tip broken, or the needle hole is blocked. ◉更換機針。 Replace the needle.

No.	現象 Problem	檢查及調整 Exam and Adjustment
5.	斷針 Needle broken	7. 壓具壓力過小、送布不良。 The presser foot pressure is small or the fabric feeding is improper. ◉增加壓腳壓力，使送布正常。 Increase the presser foot pressure to adjust the fabric feeding properly. 8. 勾針與車針相碰。 The looper contact the needle. ◉按標準調整勾針與車針位置。 Adjust the position of needle and looper according to the standard. 9. 上勾針與車針相碰。 The up looper contact the needle. ◉按標準調整上勾針與車針位置。 Adjust the position of the upper looper and needle according to the standard. 10.車針與護針片配合不當。 The needle and needle guard plate didn't cooperate well. ◉按標準調整車針與護針片位置。 Adjust the position of the needle and needle guard plate according to the standard. 11.勾針尖鈍。 The looper tip is blunt. ◉更換勾針。 Replace the looper. 12.針桿與針桿套筒磨損過大，使車針與針桿套配合鬆動。 The needle lever and needle lever sleeve is worn out so the needle and needle sleeve become loose. ◉更換針桿或針桿套筒。 Replace the needle rod or needle rod sleeve. 13.針板上容針孔太小。 The needle hole on the needle plate is too small. ◉更換小號車針或更換容針孔較大針板。 Replace the smaller needle or the needle plate with bigger needle hole. 14.零件鬆動過大。 The parts is over-loosing. ◉檢查各機構之間配合與磨損狀況，按標準調整配合尺寸，對於磨損嚴重機件進行更換。 Check cooperation and wear condition among the mechanism and adjust the size according to the standard. Replace the part which is worn out seriously.

No.	現象 Problem	檢查及調整 Exam and Adjustment
5.	斷針 Needle broken	⚠ 注意CAUTION 請儘可能找出斷掉的機針，避免斷針掉入縫製物 造成刺傷人的危險。 In order to prevent the broken needle sticking in the material and stab people so please search for broken needle until the whole of the needle is found.
6.	線跡不規則 Uneven stitch	1.車針太低使車針線環形成太大，使線圈之間相互交織在一起。 The lower needle cause the big thread loop and make the thread loop intertwist together. ◉按標準重新定位車針高度。 Reset the needle height by following the standard. 2.針板舌頭部太窄，使車針圈容易產生併攏而線跡產生不規則。 The needle plate tongue is too narrow which make the needle come close easily and have uneven stitch. ◉更換新針板。 Replace with the new needle plate. 3.車針與勾針配合不良。 The needle and looper didn't cooperate well. ◉按標準調整車針與勾針配合位置。 Adjust the needle and looper position by following the standard.
7.	縫線不平整 Uneven Seam	1.壓具壓力過小？ The presser foot pressure is too weak? ◉調整壓具壓力。 Adjust the presser foot pressure. 2.送具送齒過低。 The feed dog teeth is too low. ◉調整送具送齒高度。 Adjust the feed dog teeth height.
8.	縫布料皺起起 The fabric is puckering	1.差動送布比率不當。 The improper differential fabric feeding ratio. ◉適當調整差動送布比率。 Adjust the differential fabric feeding ratio properly. 2.送具送齒高低前後位置不當。 The improper position of feed dog teeth. ◉按標準調整送具送齒高低。 According to the standard to adjust the feed dog teeth height. 3.縫線張力過大。 The stitch tension is too strong. ◉適當調整縫線張力。 Adjust the stitch tension properly.

No.	現象 Problem	檢查及調整 Exam and Adjustment
8.	縫布料皺起 The fabric is puckering	4.壓具壓力太大或太小。 The presser foot pressure is too strong or too weak. ◉適當調整壓具壓力。 Adjust the presser foot pressure properly. 5. 縫紉速度過快。 The sewing speed is too fast. ◉降低車縫速度。 Decelerate the sewing speed.
9.	縫跡不良 Improper stitch	1.線的粗細不一致。 The thread thickness is different. ◉改用較好的縫線。 Change to use the better thread. 2. 夾線器工作不正常。 The thread gripper is abnormal. ◉清除夾線器雜物，使過線平順。 Clean the thread waste on the thread gripper to make the thread crossing smoothly. 3.過線器定位不正確。 The locating of thread crossing is incorrect. ◉調整針線、勾針線及上勾針線的張力。 Adjust the tension of needle thread, looper thread and up looper thread. 4.過線孔不光滑。 The thread crossing hole is not smooth. ◉用砂紙或挫刀工具拋光過線孔。 Use emerypaper or file to polish the thread crossing hole.
10.	縫布料出現針孔 There is needle hole on the fabric	1.車針針尖變鈍或起毛。 The needle tip is blunt. ◉更換車針。 Replace the needle. 2. 與縫布料比較，車針太粗。 The needle which compares with fabric is too thick. ◉換用較細車針。 Replace with the fine needle. 3.針板上容針孔太小或磨損。 The needle hole on the needle plate is too small or worn out. ◉把針板孔修圓滑。 Rounding and smooth the needle plate hole.

No.	現象 Problem	檢查及調整 Exam and Adjustment
11.	不能噴油 The oil does not splash	1.泵浦不出油。 The oil does not come out from the pump. ◉更換泵浦不良零件 Change the improper parts of pump. 2.上機構不噴油。 The Upper mechanism does not splash the oil. ◉更換濾油器，用鐵絲清通油路。 Change a new filter and use the iron wire to clean through the oil path.
12.	大聲、異聲 Loud noise, strange noise	1.針棒鬆動。 The needle bar is loosing. ◉更換新品或磨合其接觸面使之間隙變小。 Change a new one or to polish the contacting surface so that clearance is smaller. 2.皮帶輪出聲。 The pulley has noise. ◉按基準調整之。 Adjust it based on the standard.
13.	打開電源並踩下腳踏板時，縫紉機不動作。 Machine does not operate when power is turned on and treadle is pressed.	1.電源插頭從控制箱上鬆開。 The power supply connector disconnected from the control box. ◉將插頭插牢。 Insert the connector securely.
14.	縫紉機不能以高速運轉。 Machine does not operate at high speed.	1.縫紉機速度設定過低。 The sewing speed is setting too slow. ◉請重新設定縫紉機轉速。 Please reset the sewing rotational speed.
15.	加裝 CL 如遇抬壓腳力道不足時。 If the strength or the presser foot lifter is insufficient with being equipped with CL.	請依下列實施： A . 參數 64 項，出廠值：40 改為 100 B . 參數 65 項，出廠值：10 改為 28 Please implement the procedure as below: A .Parameter No.64,default: 40 change to 100. B .Parameter No.65,default: 10 change to 28.

報廢流程 DEMOLITION PROCEDURE

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當健康。

2. 所有的機器零件必須依照下列分類來區分開：

   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，回收再利用或熔解為可再使用或再處理而不至於危害環境。
   回

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 reuse or disposed of so that they do not harm the environment.



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

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