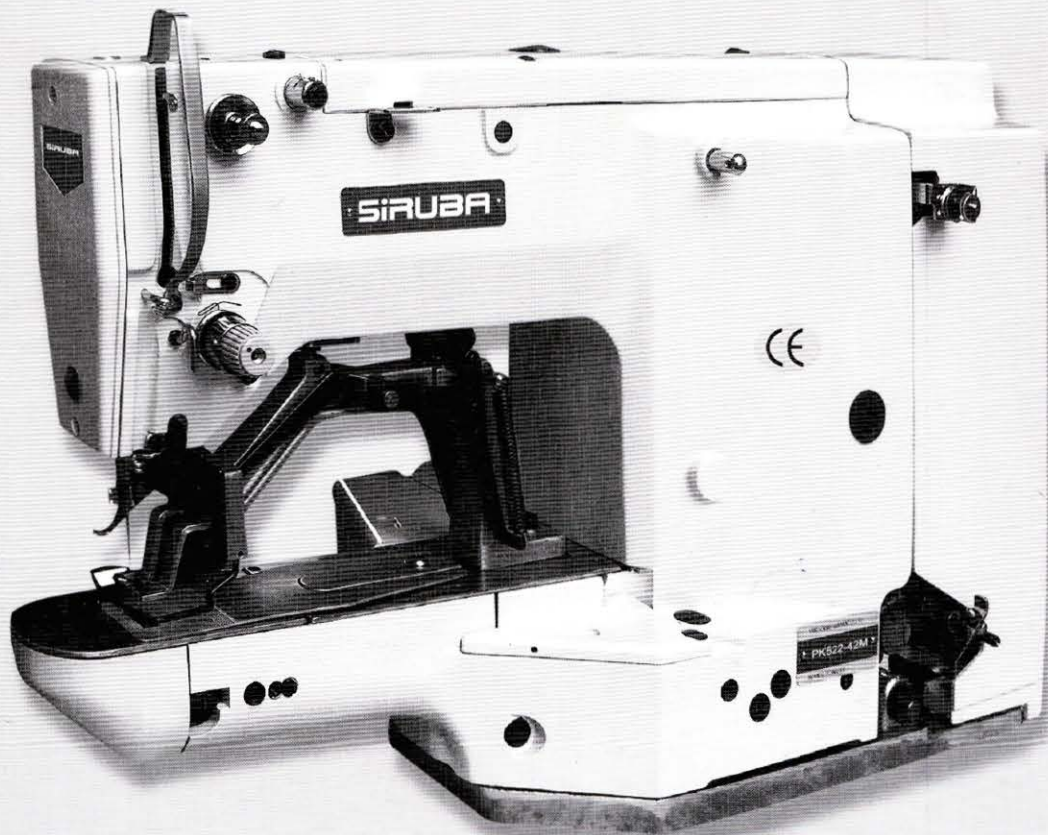


SIRUBA®

銀箭牌工業用縫紉機
INDUSTRIAL SEWING MACHINE

PK522

使用說明與零件圖
INSTRUCTION AND PARTS LIST



CE



高林股份有限公司
KAULIN MFG. CO., LTD.

IMPORTANT SAFETY INSTRUCTIONS

Putting sewing systems into operation is prohibited until it has been ascertained that the sewing systems in which these sewing machines will be built into, have conformed with the safety regulations in your country.
Technical service for those sewing systems is also prohibited.

1. Observe the basic safety measures, including, but not limited to the following ones, whenever you use the machine.
2. Read all the instructions, including, but not limited to this Instruction Manual before you use the machine. In addition, keep this Instruction Manual so that you may read it at anytime when necessary.
3. Use the machine after it has been ascertained that it conforms with safety rules/standards valid in your country.
4. All safety devices must be in position when the machine is ready for work or in operation. The operation without the specified safety devices is not allowed.
5. This machine shall be operated by appropriately-trained operators.
6. For your personal protection, we recommend that you wear safety glasses.
7. For the following, turn off the power switch or disconnect the power plug of the machine from the receptacle.
 - 7-1 For threading needle(s), looper, spreader etc. and replacing bobbin.
 - 7-2 For replacing part(s) of needle, presser foot, throat plate, looper, spreader, feed dog, needle guard, folder, cloth guide etc.
 - 7-3 For repair work.
 - 7-4 When leaving the working place or when the working place is unattended.
 - 7-5 When using clutch motors without applying brake, it has to be waited until the motor stopped totally.
8. If you should allow oil, grease, etc. use with the machine and devices to come in contact with your eyes or skin or swallow any of such liquid by mistake, immediately wash the contacted areas and consult a medical doctor.

9. Tampering with the live parts and devices, regardless of whether the machine is powered, is prohibited.
10. Repair, remodeling and adjustment works must only be done by appropriately trained technicians or specially skilled personnel. Only spare parts designated by JUKI can be used for repairs.
11. General maintenance and inspection works have to be done by appropriately trained personnel.
12. Repair and maintenance works of electrical components shall be conducted by qualified electric technicians or under the audit and guidance of specially skilled personnel.
Whenever you find a failure of any of electrical components, immediately stop the machine.
13. Before making repair and maintenance works on the machine equipped with pneumatic parts such as an air cylinder, the air compressor has to be detached from the machine and the compressed air supply has to be cut off.
Existing residual air pressure after disconnecting the air compressor from the machine has to be expelled.
Exceptions to this are only adjustments and performance checks done by appropriately trained technicians or specially skilled personnel.
14. Periodically clean the machine throughout the period of use.

15. Grounding the machine is always necessary for the normal operation of the machine. The machine has to be operated in an environment that is free from strong noise sources such as high-frequency welder.
16. An appropriate power plug has to be attached to the machine by electric technicians. Power plug has to be connected to a grounded receptacle.

17. The machine is only allowed to be used for the purpose intended. Other used are not allowed.
18. Remodel or modify the machine in accordance with the safety rules/standards while taking all the effective safety measures. JUKI assumes no responsibility for damage caused by remodeling or modification of the machine.

19. Warning hints are marked with the two shown symbols.



Danger of injury to operator or service staff



Items requiring special attention

重要安全事項

此縫紉機在有的國家（設置場所）由於該國的安全規定而被禁止使用。同時，技術服務也同樣被禁止。

1. 使用此縫紉機時，必須遵守包括如下項目的基本安全措施。
2. 使用此縫紉機之前，請閱讀本使用說明書在內的所有指示文件。同時應將此使用說明書妥善保管，以便能夠隨時查閱。
3. 此縫紉機應與貴國的有關安全規定一起使用。
4. 使用此縫紉機和縫紉機動作中，所有的安全裝置應安裝到規定的位置。沒有安裝規定的安全裝置的縫紉機禁止使用。
5. 此縫紉機應由接受過培訓的操作人員來操作。
6. 使用縫紉機時，建議戴安全防護眼鏡。
7. 發生下列情況時，應立即關掉電源開關，或拔下電源綫插頭。
 - 7-1 機針、彎針、分離器等穿綫和更換旋梭時。
 - 7-2 更換機針、壓腳、針板、彎針、分離器、送布牙、護針器、支架、布導向器等時。
 - 7-3 修理時。
 - 7-4 工作場所無人了或離開工作場所時。
 - 7-5 使用離合馬達時，請等待馬達完全停止之後再進行。
8. 縫紉機以及附屬裝置使用的機油、潤滑脂等液體流入眼睛或沾到皮膚上時，或被誤飲時，應立即清洗有關部份并去醫院治療。

9. 禁止用手觸摸打開了縫紉機開關通電的零件或裝置。
10. 有關縫紉機的修理、改造、調整應由受過專門訓練的技術人員或專家來進行。
11. 一般的維修保養應由受過訓練的人員來進行。
12. 有關縫紉機的電氣方面的修理、維修應由有資格的電氣技術人員或專家的監督和指導下進行。
13. 修理、保養有關空氣、氣缸等壓縮空氣的零件時，應切斷空氣壓縮機供氣源後再進行。
如有殘留壓縮空氣時，應放掉壓縮空氣。
但，受過相當訓練的技術人員或專家進行有關調整或確認動作時除外。
14. 縫紉機的使用期間應定期進行清掃。

15. 爲了正常安全運轉，應安裝地綫。同時應在不受高頻焊接機等強噪音影響的環境下作用。
16. 電源插頭應用具有電氣專門知識的人來安裝。電源插頭必須連接到接地插座上。

17. 縫紉機指定用途以外不能使用。
18. 對縫紉機的改造、變更應符合安全規格，并採取有效的安全措施。另外，對於有關改造和變更，本公司概不負責。

19. 本使用說明書上採用以下2個警告符號。



有損傷操作人員、維修人員的危險。



安全上需要特別加以注意的事項。

FOR SAFE OPERATION



1. To avoid immediate rotation of the machine after turning the power on, check to be sure that the cloth feed cam on the machine head is in the stop-motion position.
2. To avoid possible personal injury, never operate the machine with safety devices such as beltcover and eye protecting cover removed.
3. To avoid possible personal injury due to involvement, keep your fingers, head and clothes away from the handwheel, V belt and motor while the machine is in operation. In addition, place nothing near the aforementioned parts.
4. To avoid possible personal injury, never place your fingers near the needle when turning the power on or while the machine is in operation.
5. To avoid possible personal injury, never place your fingers inside the thread take-up cover while the machine is in operation.
6. The hook rotates at a high speed while the machine is in operation. To avoid possible injury to hands, keep your hands away from the hook while the machine is in operation. In addition, be sure to turn the power off when replacing a bobbin.
7. To avoid possible personal injury, exercise care not to allow your fingers to get caught in the machine when tilting the machine or returning it to the home position.
8. To avoid possible accidents due to abrupt start of the machine, turn the power off when tilting the machine head and removing the belt cover and the V belt.
9. To prevent possible accidents because of electric shock, do not operate the machine with the power earth removed.
10. Be sure to turn off the power switch in prior to the connection/disconnection of the power plug.
11. In time of thunder and lightning, stop your work and disconnect the power plug for safety's sake.
12. If the machine is suddenly moved from a cold place to a warm place, dew condensation may be observed. In this case, turn on the power to the machine after you have confirmed that there is no danger of water drops in the machine.



CAUTION:

The safety devices, "eye guard cover", "finger guard", etc., may be omitted in the figures of this manual for easy explanation. Never use the machine with these safety devices removed.

爲了安全地使用1850縫紉機的注意事項



1. 打開電源的同進，縫紉機也轉動，爲了避免事故的發生，打開電源前請一定確認縫紉機機頭的送布凸輪是否在分離位置。
2. 爲了防止人身事故的發生，請不要在卸了皮帶護罩、眼睛防護罩等安全裝置的狀態下運轉縫紉機。
3. 爲了防止被卷入的人身事故的發生，請使用帶馬達皮帶輪護罩的馬達。
4. 爲了防止人身事故，打開電源開關時，請不要把手指入到機針的附近。
5. 爲了防止人身事故，縫紉機運轉中，請不要把手指伸到挑綫杆外罩中。
6. 縫紉機運轉中，旋梭飛速地旋轉。爲了防止弄傷手指，運轉中不要把手指放到旋梭附近。更換旋梭時，請一定要關掉電源。
7. 爲了防止人身事故，放到縫紉機和抬起縫紉機時，請注意不要夾到手指。
8. 爲了防止人身事故，放倒縫紉機或拆卸皮帶外罩、V形皮帶時，請關掉電源并確認停止後再操作。
9. 爲了防止人身事故，請不要在卸下地綫地狀態運轉縫紉機。
10. 爲了防止觸電和損壞零件，插拔電源插銷時請一定關掉電源開關。
11. 爲了防止損壞電氣零件，打雷時，請停止作業，并拔下電源綫。
12. 爲了防止損壞電氣零件，從寒冷的地方移到暖和的地方時，會發生結露，請待水滴完全乾燥後再打開電源。

CONTENTS

IMPORTANT SAFETY INSTRUCTIONS	6
CAUTIONS BEFORE OPERATIONS	6
1. INSTALLING THE MOTOR	8
2. INSTALLING THE THREAD STAND	8
3. REMOVING THE BELT COVER	9
4. RAISING THE MACHINE HEAD	9
5. INSTALLING THE MACHINE HEAD	10
6. ATTACHING THE IDLER PULLEY	10
7. MOTOR PULLEYS AND BELTS	11
8. ATTACHING THE CHAIN	13
9. LUBRICATION	13
10. OPERATING THE SEWING MACHINE	14
11. MATERIALS AND NEEDLES TO BE USED	15
12. ATTACHING THE NEEDLE	15
13. THREADING THE MACHINE	16
14. REMOVING AND INSTALLING THE BOBBIN CASE	16
15. WINDING A BOBBIN	17
16. THREADING THE BOBBIN CASE	17
17. THREAD TENSION	17
18. ADJUSTING THE THREAD TAKE-UP SPRING	18
19. ADJUSTING THE LENGTH AND WIDTH OF BAR-TACKING	18
20. ADJUSTING THE FEED TIMING	19
21. NEEDLE-TO-SHUTTLE RELATION	20
22. ADJUSTING THE THREAD TENSION RELEASE TIMING	21
23. ADJUSTING THE DISK FLOATING TIMING(For S-type only)	21
24. ADJUSTING THE THREAD TRIMMER	22
25. ADJUSTING THE LATERAL POSITION OF THE WORK CLAMP FOOT	22
26. ADJUSTING THE LIFT OF THE WORK CLAMP FOOT	23
27. ADJUSTING THE SAFETY PLATE	23
28. SPECIFICATIONS	24
29. TROUBLES AND CORRECTIVE MEASURES	26
30. HOW TO SUPPLY GREASE TO THE REDUCER	28

目錄

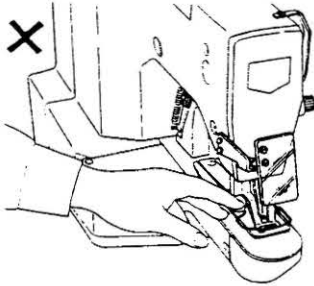
安全注意事項	6
運轉縫紉機的注意事項	6
1. 馬達的安裝方法	8
2. 綫架裝置的安裝	8
3. 皮帶外罩的拆卸方法	9
4. 縫紉機的抬起方法	9
5. 縫紉機的運轉	10
6. 惰輪的安裝	10
7. 馬達皮帶輪和皮帶	11
8. 鏈條的挂法	13
9. 加油	13
10. 縫紉機的運轉	14
11. 機針和布料的選擇方法	15
12. 機針的安裝方法	15
13. 上綫的穿綫方法	16
14. 梭殼的取下插入	16
15. 底綫的卷繞方法	17
16. 旋梭的插入方法	17
17. 綫張力	17
18. 挑綫彈簧的調節	18
19. 縫紉尺寸的調節	18
20. 送布同步的調節	19
21. 機針和旋梭的關係	20
22. 綫浮起同步的調節	21
23. 張力盤浮起同步的調節 (S型)	21
24. 切綫刀的調節	22
25. 布壓腳橫中心位置的調節	22
26. 布壓腳高度的調節	23
27. 安全板的調節	23
28. 規格	25
29. 縫制時的故障、原因和對策	27
30. 減輕裝置加潤滑脂的方法	28

**WARNING:**

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.

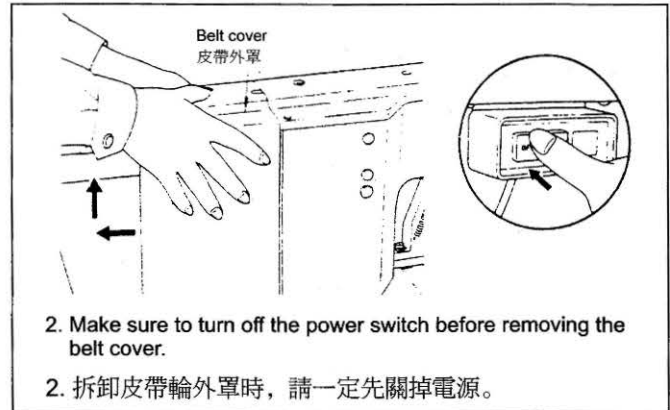
**注意**

爲了防止突然啓動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。

IMPORTANT SAFETY INSTRUCTIONS / 安全注意事項

1. Do not place your fingers near the work clamp foot while the machine is in operation.

1. 縫紉機運轉中，請不要把手指放到布壓腳的附近。

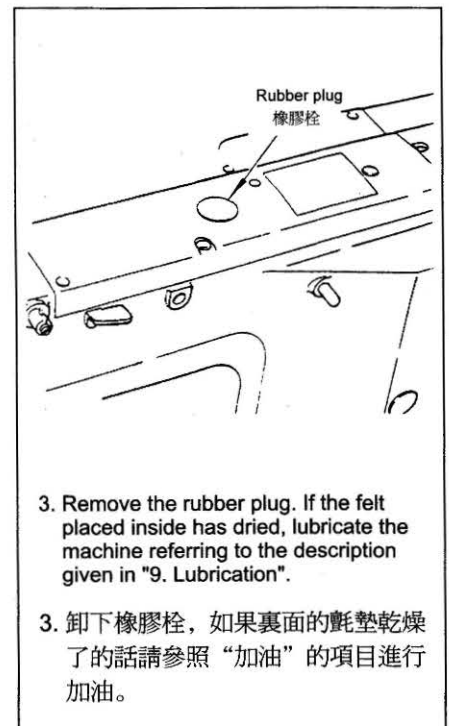
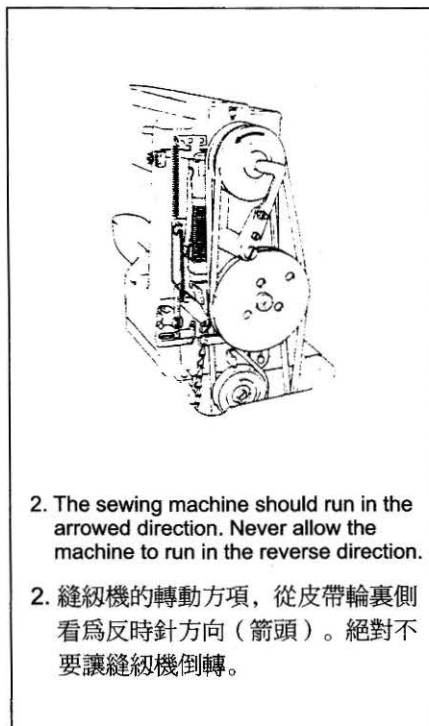
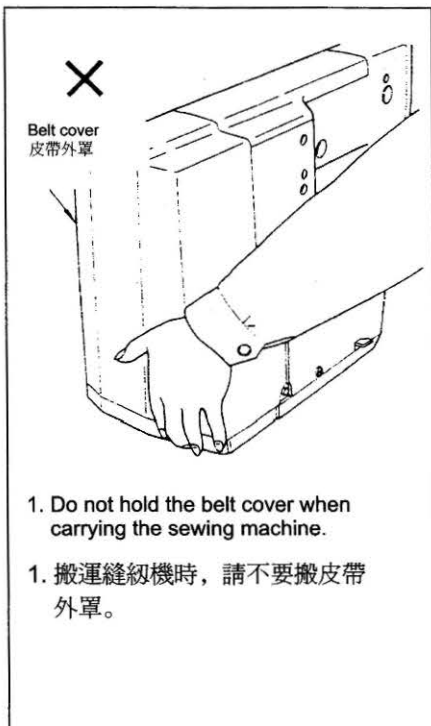


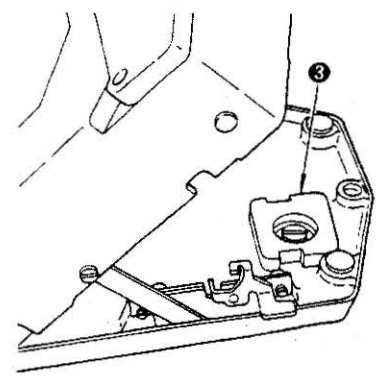
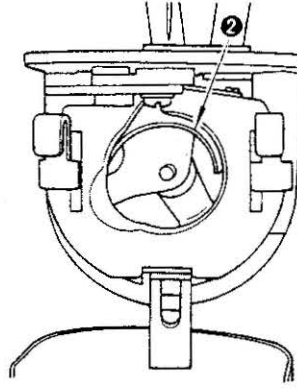
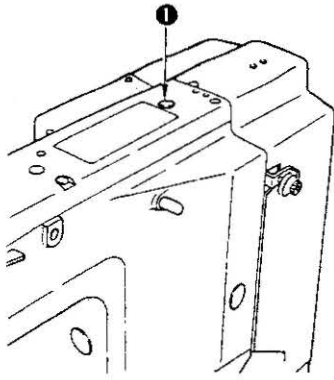
3. Never bring your fingers or hair close to, or place anything on the handwheel, V-belt, bobbin winder wheel or motor during operation. It may lead to serious personal injuries.

3. 縫紉機運轉途中請不要將手指、頭髮、衣服靠近皮帶輪、V形皮帶、成達，也不要將東西放到上面。

4. If your machine is provided with a belt cover, finger guard, and eye guard, never operate your machine with any of them removed.

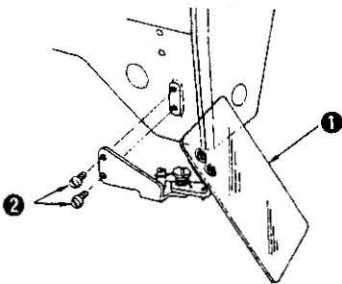
4. 安裝有皮帶輪外罩、護指器、眼睛保護器等時，請不要在卸下它們的狀態下運轉縫紉機。

CAUTIONS BEFORE OPERATIONS / 運轉縫紉機的注意事項



4. Before starting a machine which has been newly set up or has not been used for a long period of time, apply a few drops of the lubricating oil to main shaft components through hole ①, one drop to the racing surface ② of the shuttle race, and infiltrate amount of the lubricating oil to the machine bed oil felt ③.

4. 初次使用縫紉機時，或使用長時間沒有使用的縫紉機時，請向曲軸部①加2~3滴，向旋梭軌道，面②加1滴油，向機座油氈③油濕潤。



5. Be sure to fix eye protecting cover ① with screw ② on machine frame before putting the machine into service.

5. 請一定用螺絲②安裝好眼睛保護罩①後再使用。

**WARNING:**

The machine has to be installed by a serviceman or maintenance personnel in accordance with the Instruction Manual. Set-up of the machine has to be started after turning OFF the power to the machine.

**注意**

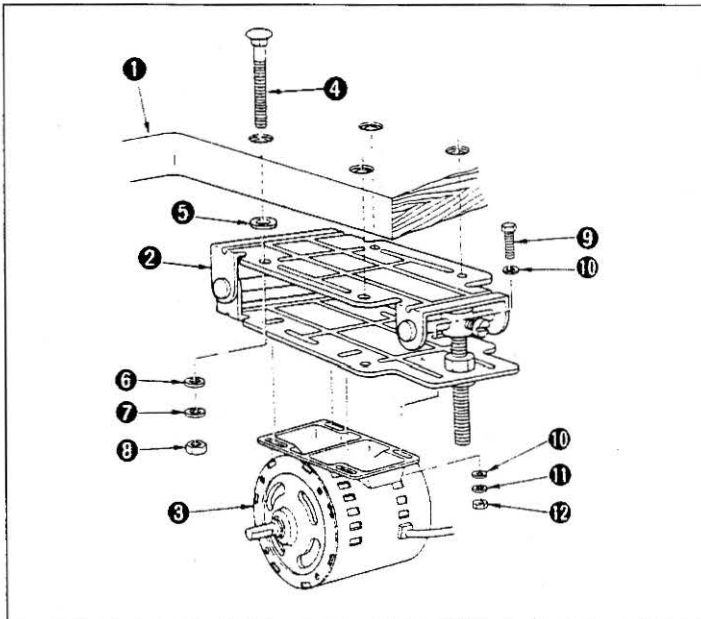
安裝縫紉機時，請讓服務人員或為修人員根據服務手冊來進行。安裝縫紉機時，請關掉電源後進行。

1. INSTALLING THE MOTOR / 馬達的安裝方法**WARNING:**

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.

**注意**

為了防止突然啟動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。

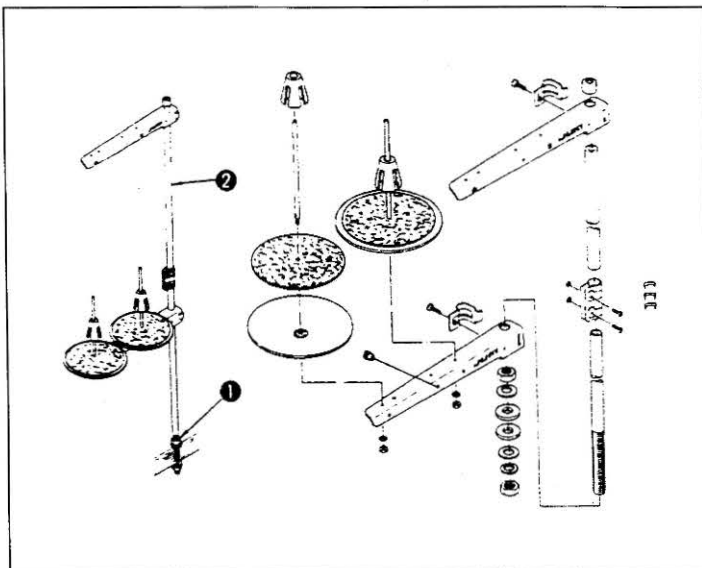


1. Attach motor base ② to table ① using bolt ④, vibration-proof rubber pad ⑤, washer ⑥, spring washer ⑦, and nut ⑧.

2. Using bolt ⑨, washer ⑩, spring washer ⑪, and nut ⑫ install motor ③ to motor base ②

1. 用馬達座安裝螺栓④、防震膠墊⑤、平墊片⑥、彈簧墊片⑦、六角螺母⑧把馬達座②安裝到機台①上。

2. 用六角螺栓⑨、平墊片⑩、彈簧墊片⑪、六角螺母⑫把馬達③安裝到馬達座②上。

2. INSTALLING THE THREAD STAND / 線架裝置的安裝

Assemble the thread stand, and set it in the hole in the table.

Tighten nut ① to fix the thread stand.

If ceiling wiring is made, pass the power cord through spool rest rod ②.

把綫架裝置安裝到機台孔上。

擰緊固定螺母①，固定住綫架裝置。

可以配裝頂綫時，請把電源綫從綫架杆②中穿過。

3. REMOVING THE BELT COVER / 皮帶外罩的拆卸方法



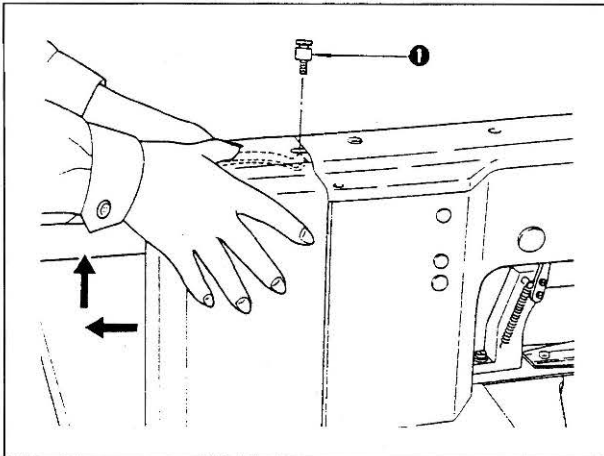
WARNING:

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



注意

為了防止突然啟動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。



To remove the belt cover, loosen screw ❶ and tilt the belt cover away from you until it comes off then lift it.
★ Intall the belt cover by reversing the above proceduce.

拆卸皮帶外罩時，請擰鬆固定螺絲❶，把皮帶外罩向後方放倒再向上抬起。

★安裝皮帶外罩時，按與拆卸時相反的順序進行。

4. RAISING THE MACHINE HEAD / 縫紉機的抬起方法



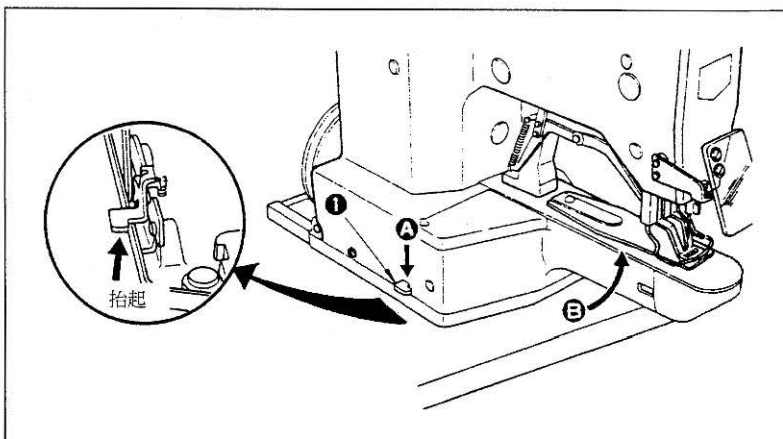
WARNING:

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



注意

為了防止突然啟動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。



1. 卸下皮帶外罩，在縫紉機頭安裝在機台的狀態下，向下（箭頭 A）按機台鎖定器❶，把縫紉機沿箭頭 B 方向抬起。

2. 手離開機台鎖定器，沿箭頭 B 方向繼續往上抬起縫紉機直到固定住為止。

★縫紉機返回原處時，抬起機台固定器，解除鎖定，放下縫紉機。

1. Remove the belt cover. With the machine head set in its installing position on the machine table, raise the machine head in direction B while pushing down (in direction) A bed locker ❶.

2. Releasing the bed locker, further raise the machine head in direction B until it locks.

★To lower the machine head, push up the bed locker to release the lock.

5. INSTALLING THE MACHINE HEAD / 縫紉機機頭的安裝方法



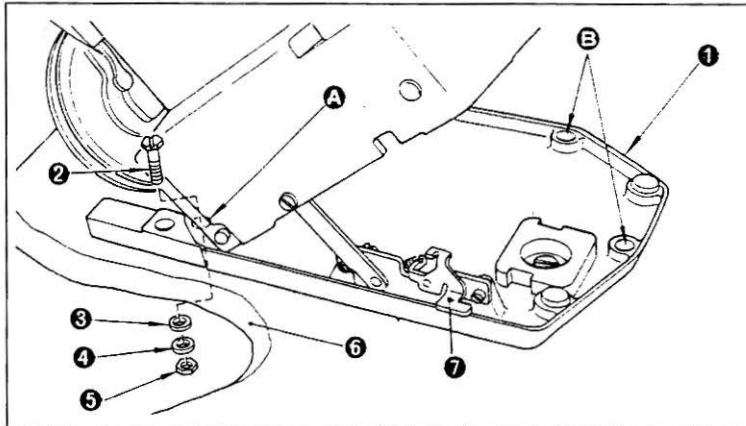
WARNING:

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.
Be sure to raise the machine head with both hands. Move your hands off the machine head after ascertaining that the bed locker has been locked.



注意

爲了防止意外的事故，請關掉電源確認了腳踏縫紉機也不動後再進行。
請用雙手抬起機頭。
確認了鎖定期被鎖定之後再放開雙手。



1. Install bed mounting base ① to machine table ⑥ using bolts ②, flat washers ③ and ④, and nuts ⑤ (each 3 pcs.).
2. Fix point ④ before raising the machine head. Then fix two points ⑤.

1. 用六角螺栓②、平墊片③④、六角螺母⑤各3個，把機頭安裝台①安裝到機台⑥上。

2. 先固定④部，然後抬起機頭，固定⑤部的2個地方。



WARNING:

Keep your hands away from bed locker ⑦ after the machine head has been raised. Do not place your hands or anything between the machine head and the bed.



注意

抬起機頭後，請松開抬機頭鎖定器⑦的手。請不要把手等放到機頭和機座安裝台之間。

6. ATTACHING THE IDLER PULLEY / 惰輪的安裝



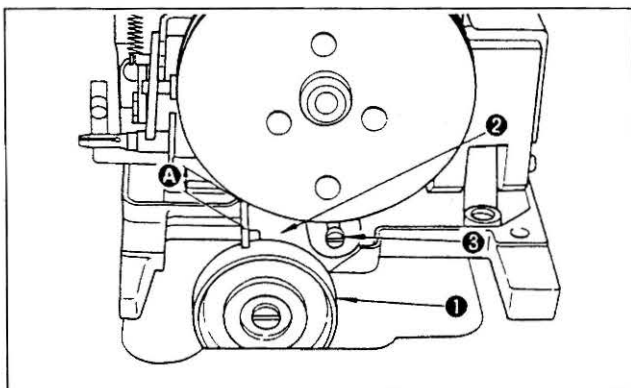
WARNING:

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



注意

爲了防止突然啓動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。



Fix idler pulley ① to mounting plate ② by setscrew ③.
(Caution) Adjust the clearance at ④ to just allow the V belt to pass it through.

把惰輪①用固定螺絲③固定到安裝板②上。

(注意) ④ 部的間隙應能讓V形皮帶通過。

7. MOTOR PULLEYS AND BELTS / 馬達皮帶輪和皮帶

1. M-type V belts are used for this model of sewing machine.
2. This sewing machine users two V belts, one for high-speed sewing, and the other for low-speed sewing.
3. The table below shows the relation between the motor pulleys, V belts, and sewing speeds.



Frequency	Sewing speed	Motor pulley part No.	Engraved mark	High-speed Vbelt (mm)	Low-speed V belt(mm)
50Hz	2300rpm	* 13531108	50-2300	MTJVM005000(1270)	MTJVM004600(1168)
	2000rpm	* 13531207	50-2000	MTJVM004900(1245)	
	1800rpm	13531306	50-1800	MTJVM004800(1219)	
60Hz	2300rpm	* 13531405	60-2300	MTJVM004900(1245)	MTJVM004600(1168)
	2000rpm	* 13531504	60-2000	MTJVM004800(1219)	
	1800rpm	13531603	60-1800	MTJVM004800(1219)	

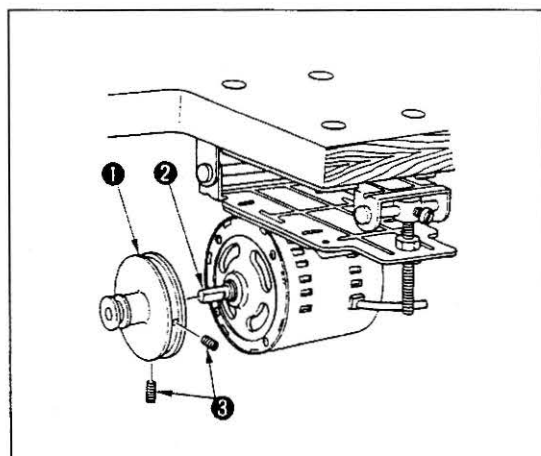
Note: The motor pulleys marked with asterisks are applicable only to cotton thread. Please order the motor pulleys for threads other than cotton thread.

1. 使用M型的V形皮帶。
2. 本縫紉機使用高速用和低速用2條V形皮帶。
3. 馬達皮帶輪和皮帶、縫紉機轉速的關係如下表所示。

頻率	轉速	馬達皮帶輪的貨號	刻印表示	高速V形皮帶 (mm)	低速V形皮帶 (mm)
50Hz	2300rpm	* 13531108	50-2300	MTJVM005000(1270)	MTJVM004600(1168)
	2000rpm	* 13531207	50-2000	MTJVM004900(1245)	
	1800rpm	13531306	50-1800	MTJVM004800(1219)	
60Hz	2300rpm	* 13531405	60-2300	MTJVM004900(1245)	MTJVM004600(1168)
	2000rpm	* 13531504	60-2000	MTJVM004800(1219)	
	1800rpm	13531603	60-1800	MTJVM004800(1219)	

成閩※標記的馬達皮帶輪只能使用於棉線，需要特別訂貨。

	<p>WARNING: To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.</p>
	<p>注意 為了防止突然啟動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。</p>

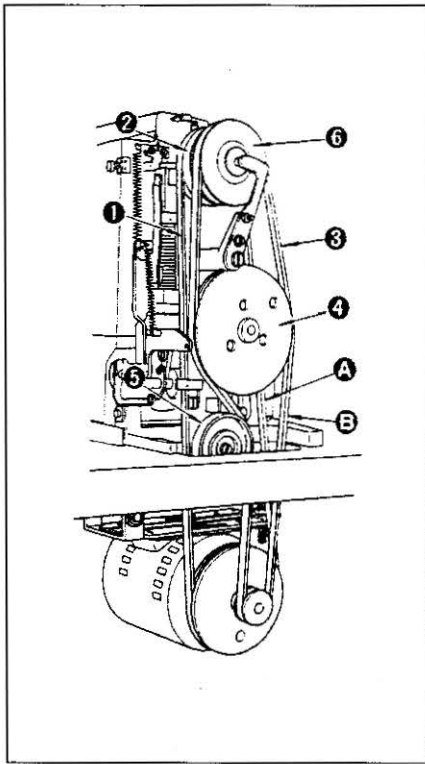


★ Installing the motor pulley

Set motor pulley ① onto motor shaft ② so that one of two setscrews ③ meets the flat part of the motor shaft. Then tighten setscrews ③.

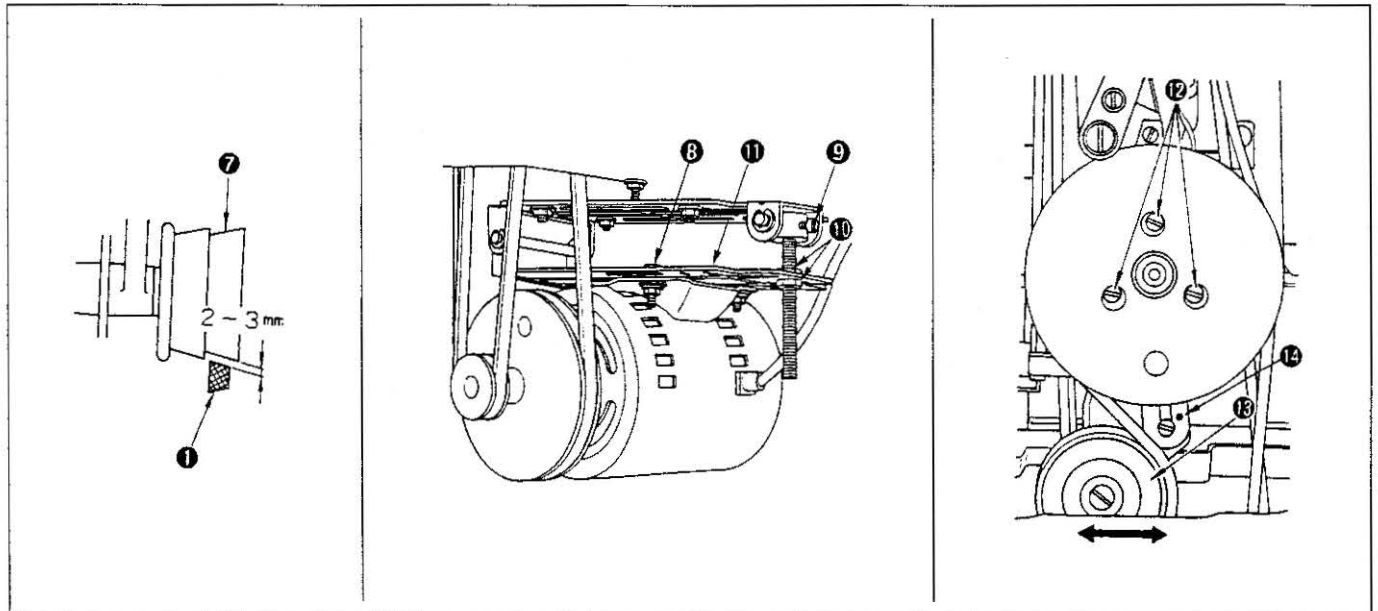
★ 馬達皮帶輪的安裝

把馬達皮帶輪①深深地插進馬達軸②，讓馬達軸②的平坦部和2個固定螺絲③中的1個對齊。把固定螺絲③擰緊。



★ Attaching the belts

1. Set high-speed V belt ① on the large diameters of high-speed pulley ② and the motor pulley.
 2. Set low-speed V belt ③ on the small diameters of low-speed pulley ⑥ and the motor pulley through pressure decreasing pulley ④ and idler pulley ⑤.
 3. Move the motor pulley back or forth to provide a 2 to 3mm clearance between high-speed V belt ① and bobbin winder wheel ⑦.
 4. Loosen setscrew ⑧, and move the motor to the right or left to make adjustment so that the high-speed V belt comes evenly in contact with the bobbin winder wheel when the bobbin winder is used (refer to "15. winding a bobbin").
 5. Loosen setscrew ⑨, and move motor base ⑪ up or down by adjusting nut ⑩ to perform adjustment so that the high-speed V belt slacks about 10mm when you push the belt at middle A.
 6. Loosen setscrew ⑫, and move idler pulley ⑬ in the arrowed direction to perform adjustment so that the low-speed V belt slacks about 10mm when you push the belt middle B.
- (At this time, set the idler pulley so that it is aligned with engraved marker dot ⑭ on the installing plate.)



★ 皮帶的掛法

1. 把高速V形皮帶①掛到高速皮帶輪②和馬達皮帶輪的大直徑輪上。
2. 把低速V形皮帶穿過減輕皮帶輪④和惰輪⑤再掛到低速皮帶輪⑥和馬達皮帶輪的小直徑輪上。
3. 前後移動馬達皮帶輪，把高速皮帶①和卷綫輪⑦之間間隙調整為2~3mm。
4. 把縫紉機設定為使用卷綫裝置的狀態（參照「15. 底綫的卷繞方法」），擰鬆固定螺絲⑧，左右移動皮帶輪，把高速V形皮帶和卷綫輪調整為輕輕接觸。
5. 擰鬆固定螺絲⑨，左右移動馬達，用馬達座調節螺母⑩進行調整，用手壓高速V形皮帶的中央A部時約下垂10mm。
6. 擰鬆固定螺絲⑫，沿箭頭方向移動惰輪⑬進行調整，用手壓低速V形皮帶的中央B部時約下垂10mm。

8. ATTACHING THE CHAIN / 鏈條的掛法



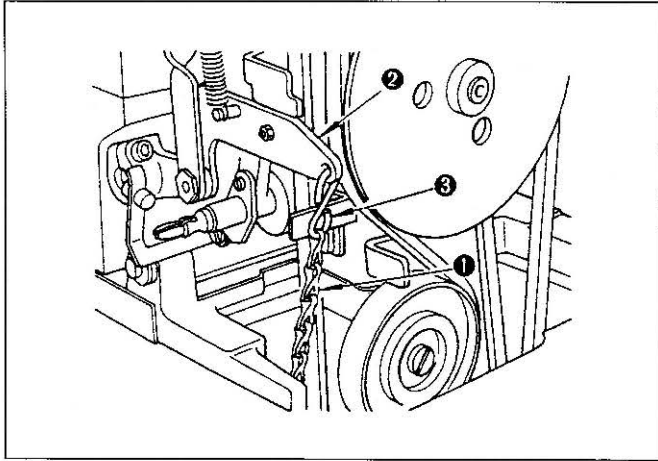
WARNING:

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



注意

爲了防止突然啓動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。



Hook S-shaped hook ③ into the hole in the tip of starting lever ②, and attach chain ① to the S-shaped hook.

拉S形金屬掛勾，把鏈條①掛到起動杆②的前端孔上。

9. LUBRICATION / 加油



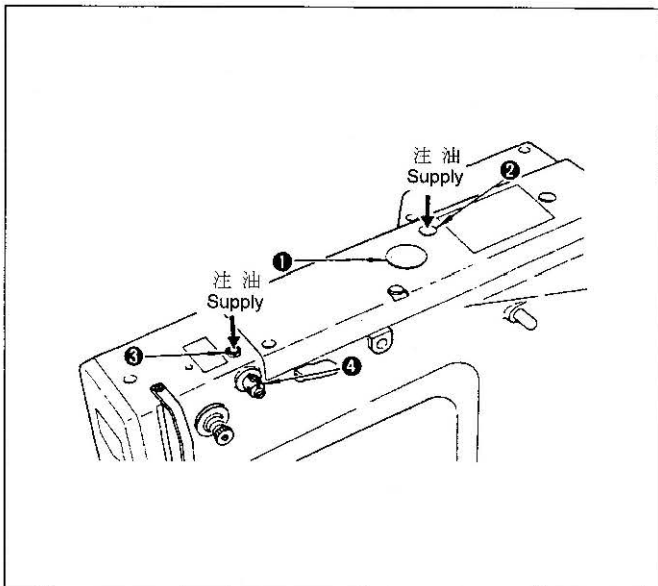
WARNING:

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注意

爲了防止突然啓動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。



1. Lubricate the machine once a day from lubrication hole ②. The machine can also be lubricated by removing rubber plug ①.
2. Use Juki New Defrix Oil No. 2 or spindle oil No. 2 as the lubrication oil.

★ When using the thread guide of silicone oil lubricating unit. (optionally available)

Supply silicone oil through silicone oil lubricating hole ③ when using thread guide ④ of silicone oil lubricating unit.

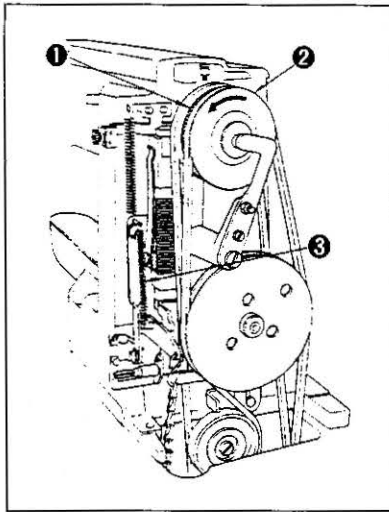
At this time, check that the thread which has passed through thread guide ④ has the silicone oil on it.

1. 卸下加油孔②或橡膠栓①，每天適當地加油1次。
2. 請使用JUKI No.2機油或2號縫紉機油。

★使用機綫導綫器時（選構品）

使用機綫導綫器④時，請從機綫加油孔③加入機綫油（硅油）。此時，通過機綫導綫器④地機綫上沾有硅油。

10. OPERATING THE SEWING MACHINE / 縫紉機的運轉



Operate the sewing machine in the following procedure:

1. Turn on the power switch.
 2. Depress the starting pedal a little, and the work clamp foot will come down. When you want to make the work clamp foot go up, release the pedal.
 3. Further depress the pedal, and the sewing machine starts bar-tacking. Immediately after the sewing machine starts bar-tacking, release the pedal.
 4. When the machine has completed the specified bar-tacking cycle, the work clamp foot will automatically go up, and the needle and bobbin threads are trimmed before the machine stops.
- (Cautions)
1. Be sure to release the pedal as soon as the machine starts bar-tacking, or else the machine will not stop at the predetermined point.
 2. If you fail to depress the pedal sufficiently, the machine may stop at the first stitch. In this case, depress the pedal sufficiently.
 3. If the machine will not start even when you depress it strong enough, turn off the power switch, and remove the belt cover. Then turn changeover pulley ① (Knurled part) in the arrowed direction of low-speed pulley ②.
 4. This sewing machine may run rather unsmoothly on a cold morning because it uses grease for the lubrication of several parts. In such a case, allow the machine to idle for 5 or 6 times before starting the work.

★ To operate the sewing machine manually;



WARNING:

Carry out the following steps of procedure after the power switch has been turned OFF.

Turn off the power switch, remove the upper end spring ③, give low-speed pulley ② two turns in the arrowed direction and the work clamp foot will come down. Then depress the starting pedal, and the machine can be run manually.

請按下列的順序運轉縫紉機。

1. 打開電源開關。
2. 稍稍踩起動踏板，壓腳下降。再次讓壓腳上升時，請把腳離開踏板，壓腳就會上升。
3. 再繼續踩踏板，縫紉機開始起動。縫紉機起動後請迅速離開踏板。
4. 縫紉機進行了所做的動作後，壓腳自動的上升，切斷上綫底綫停止動作。

(注意)

1. 縫紉機起動后，如果還繼續踩踏板的話，縫紉機就不能在規定的位置停止，所以縫紉機起動后請立即離開踏板。
2. 縫紉機踏板踩得不到位置時，有可能第1針后縫紉機停止，這時請用力踩踏板。
3. 用力踩踏板縫紉機也不起動時，請關掉電源開關，卸下皮帶外罩，把轉換皮帶輪 ① (有缺口部的部分) 轉到低速皮帶輪 ② 的箭頭方向。
4. 本縫紉機的各潤滑部均使用了潤滑脂，氣溫低時，縫紉機的轉動會變重，因此請空轉5~6圈后再進行作業。

★ 用手轉動縫紉機時



注意

爲了防止突然的啓動造成人身事故，請關掉電源後再進行。



關掉電源開關，卸下彈簧 ③ 的上端，沿箭頭方向轉動低速皮帶輪 ② 圈左右，壓腳下降之後踩踏板就可以用手轉動縫紉機。

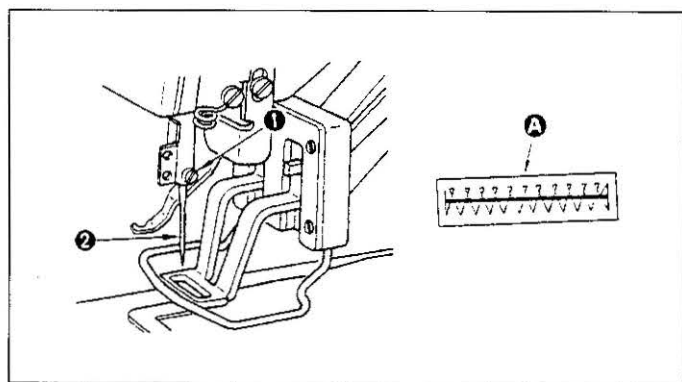
11. MATERIALS AND NEEDLES TO BE USED / 機針和布料的選擇方法

Material	Needle	Needle plate needle hole guide	Class or work
Extra light-weight material	#11 (DP × 5)	D2426282C00	Knit goods, tricot wear
Synthetic fiber material	#14 (DP × 5, SUPER needle)	B2426280000 (standard)	Men's suits, Ladies' wear
Medium-weight material	#16 (DP × 5)	B2426280000 (standard)	Men's suits, Ladies' wear
Heavy-weight material	#18 (DP × 5)	B2426280000 (standard)	Working wear, overcoats

布料	機針	針孔導向器	縫製品
極薄料	#11 (DP × 5)	D2426282C00	針織品、薄料衣物
化纖料	#14 (DP × 5, 超級機針)	B2426280000 (標準)	男裝、女裝
中厚料	#16 (DP × 5)	B2426280000 (標準)	男裝、女裝
厚料	#18 (DP × 5)	B2426280000 (標準)	工作服、大衣類

12. ATTACHING THE NEEDLE / 機針的安裝方法

	<p>WARNING: To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.</p>
	<p>注意 為了防止突然啟動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。</p>



安裝機針時，請擰鬆固定螺絲①，把機針②的長槽朝向前，把機針深深地從針杆孔插入，然後擰緊固定螺絲①。

(注意)

1. 如果縫跡如A那樣時，請把機針稍稍往左轉。
2. 化纖線和化纖料時，請使用化纖專用超級機針。

Loosening setscrew ①, insert needle ② fully into the needle bar hole with the long groove of the needle facing towards you, then tighten setscrew ①.

- (Cautions)
1. If the bar-tacking stitches as A shown above are produced, install the needle so that it slightly faces to the left.
 2. Use a SUPER needle for synthetic fiber when sewing with synthetic fiber thread or material.

13. THREADING THE MACHINE / 上線的穿線方法



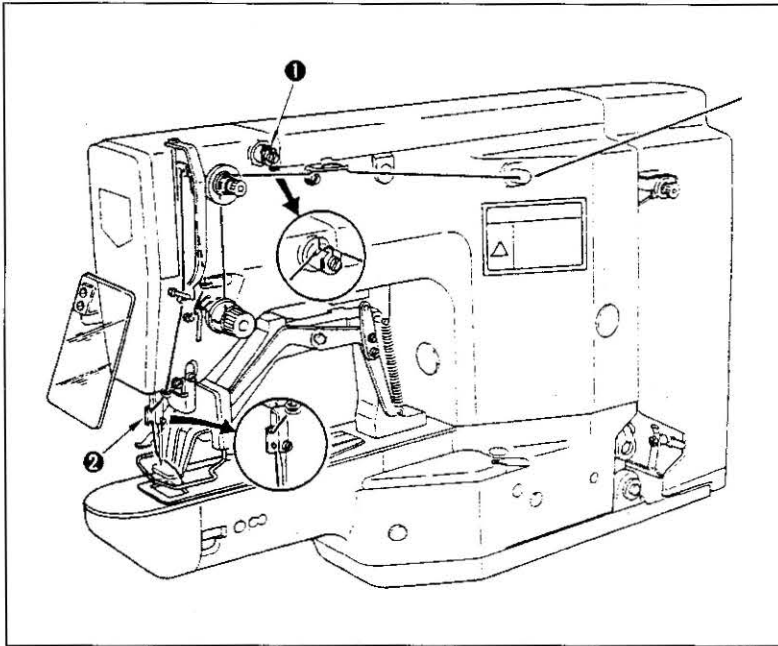
WARNING:

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注意

爲了防止突然啓動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。



Thread the machine in the order as shown above. Leave thread of approx. 4cm on the needle.

- (Cautions) 1. If the machine is equipped with a silicon oil lubricating unit, pass the thread through guide ❶ of the silicon oil lubricating unit. (The silicon oil lubricating unit is optionally available.)
2. For a thick thread, pass the thread through only one of the two holes in needle bar thread guide ❷.

如上圖的順序穿線。穿過機針的綫約有4cm左右。

(注意)

1. 使用硅油時，請穿過機線導線器❶。(選購零件)
2. 粗線時，請只穿針杆線導器❷的一個孔。

14. REMOVING AND INSTALLING THE BOBBIN CASE / 梭殼的取下插入



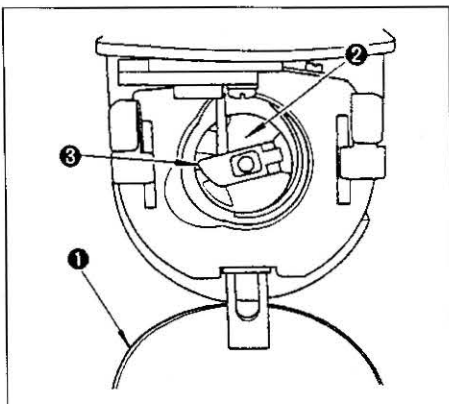
WARNING:

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注意

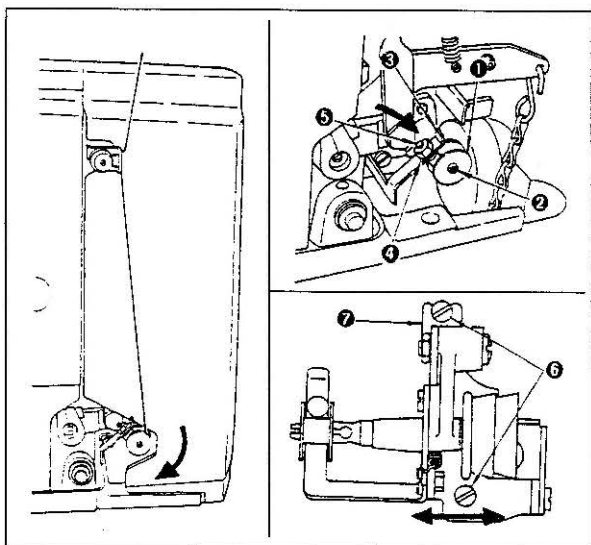
爲了防止突然啓動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。



1. Open cylinder arm cap ❶.
2. Raise and hold the latch lever of bobbin case ❷ to take it out. The bobbin in the bobbin case does not fall as far as latch lever ❸ is raised and held.
3. To load the bobbin case into the shuttle, fit it onto the shaft of the shuttle and snap in the latch lever of the bobbin case.

1. 打開旋梭外罩❶。
2. 拉起梭殼❷的拉手❸取出梭殼。手拿著拉手旋梭就不會掉落。
3. 插入時，把旋梭插到旋梭軸上，然後關閉拉手。

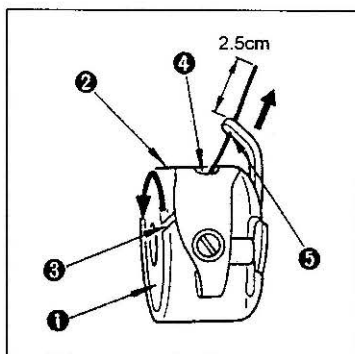
15. WINDING A BOBBIN / 底線的卷繞方法



1. Attach bobbin ❶ to bobbin winder spindle ❷.
2. Thread the winder in the order as illustrated and wind the thread onto the bobbin four or five turns.
3. Push bobbin winder trip latch ❸ towards the bobbin (in the arrowed direction), and the winder starts to wind the bobbin. The winder will automatically stop as soon as it has wound a predetermined amount (80% of the capacity of the bobbin) of thread round the bobbin.
4. To adjust the amount of thread wound round the bobbin, loosen nut ❹ and screw in adjusting screw ❺ to decrease the thread amount.
5. If the thread is not wound evenly round the bobbin, loosen screw ❻ and move bobbin winder base ❼ in the arrowed direction to make adjustment.

1. 把旋梭❶插進卷線軸❷。
2. 如圖所示進行穿線，沿箭頭方向繞4~5圈線。
3. 向旋梭側（箭頭方向）按壓旋梭壓腳❸，就開始繞底線，到達一定量（旋梭外圈的80%）後自動停止。
4. 條節繞線量時，擰鬆繞線量條節螺母❹，緊緊繞線量條節螺絲❺，繞線量變少。
5. 繞線偏時，請擰鬆固定螺絲❻，沿箭頭方向移動繞線安裝板❼進行條節。

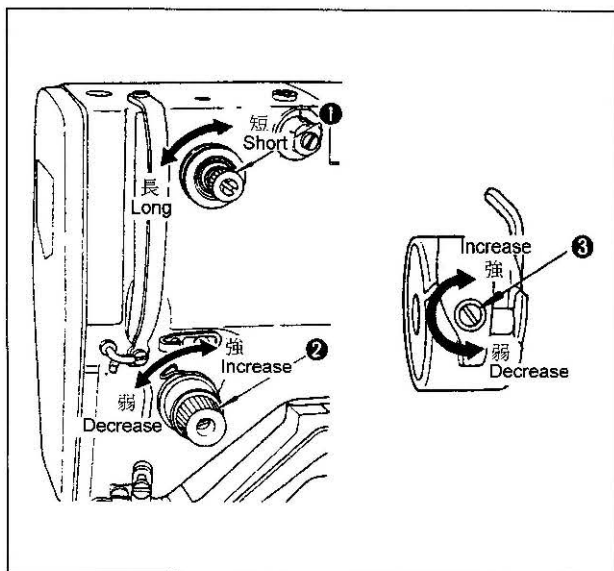
16. THREADING THE BOBBIN CASE / 旋梭的插入方法



1. Hold bobbin ❶ in hand so that it spins counterclockwise and set it in bobbin case ❷.
2. Pass the thread through slot ❸ in the bobbin case. Pull the thread to pass it under the tension spring out to thread exit ❹. At this time, confirm that the bobbin spins in the arrowed direction when the thread is pulled.
3. Pass the thread through hole ❺, and allow the thread to trail about 2.5cm from the hole.

1. 手拿旋梭❶，讓線朝左方卷繞的方向，插入梭殼❷。
2. 把機線穿過梭殼穿線口❸，拉機線，線就可以從線張力彈簧下的穿線口❹中拉出來。
3. 把機線穿過角部的穿線口❺，把線從線口拉出2.5 cm。

17. THREAD TENSION / 線張力



★ Adjusting the needle thread tension

As thread tension controller No. 1 ❶ is turned clockwise, the length of the thread remaining on the needle after thread trimming will decrease, and vice versa. Minimize the length of the thread remaining on the needle as far as the thread does not slip off the needle. As thread tension controller No. 2 ❷ is turned clockwise, the needle thread tension increases, and vice versa.

★ Adjusting the bobbin thread tension

Turning thread tension adjusting screw ❸ clockwise will increase the bobbin thread tension, and vice versa.

★ 上線張力的條節

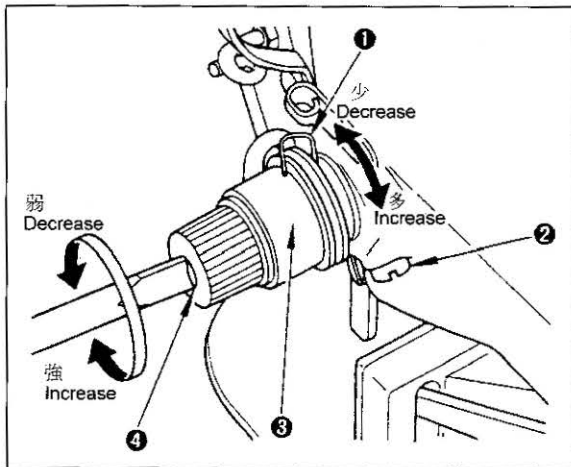
向右轉動第一張力器旋鈕❶，切線後留到針頭的機線變短，向左轉動變長。祇要機線不脫線，線越短越好。

線右轉動第二張力器旋鈕❷，上線張力變強，線左轉變弱。

★ 底線張力第條節

把線張力螺絲❸向右轉，底線張力變強，向左轉變弱。

18. ADJUSTING THE THREAD TAKE-UP SPRING / 挑線彈簧的調節



The normal stroke of thread take-up spring ❶ is 6 to 8 mm, and the tension at the starting point is 0.3 to 0.5N.

★ Adjusting the stroke

Loosen screw ❷, and turn tension controller assembly ❸ clockwise to increase the stroke or counterclockwise to decrease it.

★ Adjusting the tension

Insert the blade of a flat-bit screwdriver into the groove in the tension post ❹, and turn it clockwise to increase the tension or counterclockwise to decrease it.

(Caution) Decrease the tension of the thread take-up spring for a synthetic fiber thread.

挑線彈簧❶的標準移動量為6~8mm，開始挑線時的強度為0.3~0.5N。

★ 移動量的調節

擰鬆固定螺絲❷，向右轉動綫張力結合體❸，移動量變大，向左轉動量變小。

★ 強度的調節

把螺絲刀（一）插進綫力張杆❹的槽中，向右轉動變強，向左轉動變弱。

（注意）化纖線時，請把挑線彈簧調得弱一點。

19. ADJUSTING THE LENGTH AND WIDTH OF BAR-TACKING / 縫紉尺寸的調節



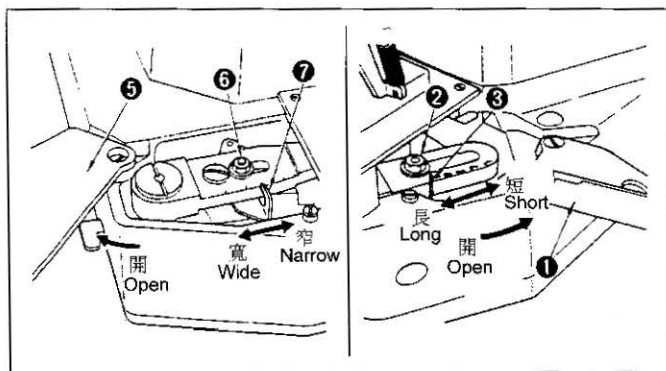
WARNING:

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



注意

為了防止突然啟動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。



★ Adjusting the bartacking length

Push and open bed cover (A) ❶ in the arrowed direction, and loosen nut ❷. Move feed cross regulator ❸ towards you to increase the bartacking length or away from you to decrease it. After adjustment, tighten nut ❷ and close bed cover (A) ❶.

★ Adjusting the bartacking width

Push and open bed cover (B) ❺ in the arrowed direction, and loosen nut ❻. Move feed regulator ❼ to the left to increase the bartacking width or to the right to decrease it. After adjustment, tighten nut ❻ and close bed cover (B) ❺.

★ 加固長度的調節

朝箭頭方向壓開機臺外罩（A）❶，擰鬆橫送螺母❷，向面前移動橫送調節杆❸加固縫長度變長，向裏面按壓則變短。調節後，擰緊橫送調節螺母❷，關閉機臺外罩（A）❶。

★ 加固寬度的調節

朝箭頭方向壓開機臺外罩（B）❺，擰鬆豎送螺母❻，向右移動豎送調節杆❼加固縫寬度變寬，向右按壓則變窄。調節後，擰緊豎送調節螺母❻，關閉機臺外罩（B）❺。

20. ADJUSTING THE FEED TIMING / 送布同步的調節



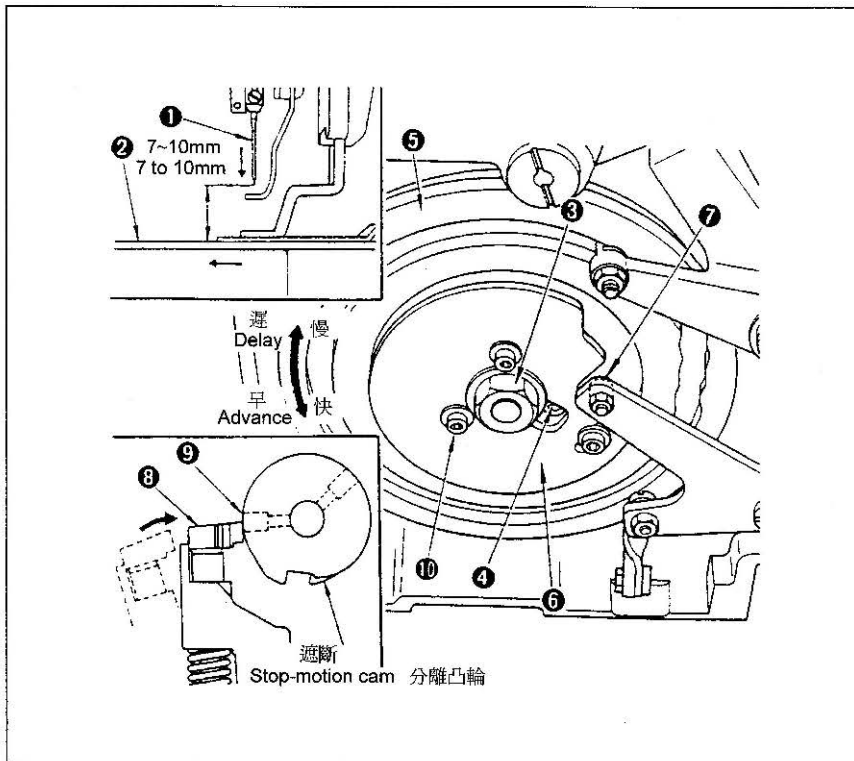
WARNING:

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



注意

為了防止突然啓動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。



1. Raise the machine head. (See "4. Raising the machine head")
 2. Loosening hexagon nut ③ and socket screw ④, turn feed cam ⑤ to perform adjustment so that the material feed is completed at the moment the point of needle ① has lowered to a height of 7 to 10mm above the surface of throat plate ②. Turning the feed cam clockwise will delay the completion of the material feed, and vice versa.
 3. After adjustment, securely tighten socket screw ④ and hexagon nut ③.
 - ☆ Better thread tension is obtained as the above-mentioned height is adjusted to about 7mm.
 - ☆ If starting stitches formed are loose when using a synthetic fiber thread, adjust the above-mentioned height to about 10mm in order to prevent such trouble.
 4. Stop-motion regulating cam ⑥ is turned together with feed cam ⑤. Therefore, loosen setscrew ⑩ and turn the stop-motion regulating cam to make adjustment so that stop-motion regulating cam roller ⑦ enters stop motion from the low-speed revolution when stop-motion hook ⑧ falls onto stop-motion cam screw No. 1 ⑨ at the final stitch.
1. 抬起縫紉機頭。（參照第2頁“4. 縫紉機的抬起方法”）
 2. 機針①的前端下降到針板②上面7~10mm的位置時，擰鬆六角螺母③和六角孔螺栓④，轉動送布凸輪⑤進行調節，讓送布停止。向右轉送布停止變晚，向左轉則變早。
 3. 調整後把六角孔螺栓④和六角螺母③確實擰緊。
 - ☆機針前端下降到離針板上7mm附近時停止的話，緊綫效果好。
 - ☆使用化纖綫時，如果發生綫浮起的話，把機針前端調整到離針板上10mm，緊綫效果好。
 4. 轉動送布凸輪⑤，分離控制凸輪⑥也同時動作，所以請擰鬆固定螺絲，轉動分離控制凸輪，讓分離鉤⑧進入分離凸輪第一螺絲⑨，調節分離控制凸輪⑦從低速轉動進入分離的同步時間。

21. NEEDLE-TO-SHUTTLE RELATION / 機針和旋梭的關係



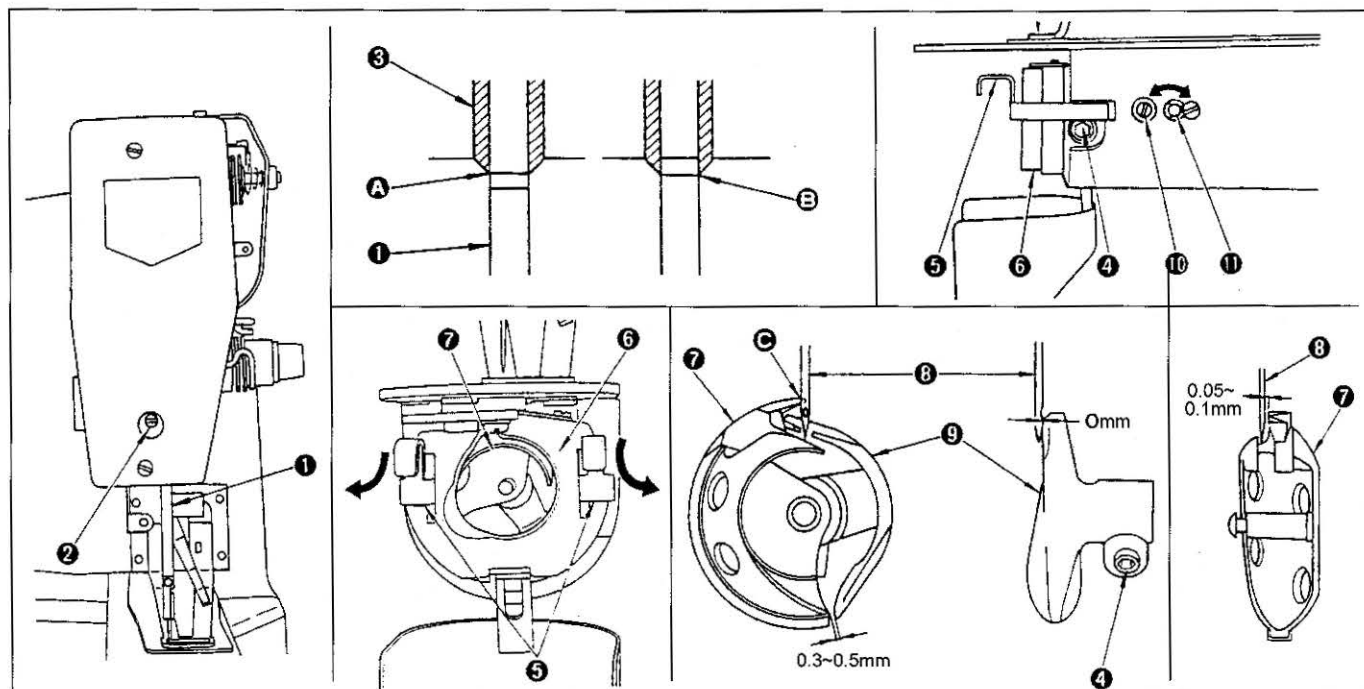
WARNING:

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



注意

為了防止突然啟動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。



(Adjusting the height of the needle bar)

1. Turn the changeover pulley by hand to bring needle bar ① to the lowest position of its stroke (see "To operate the sewing machine manually").
2. Remove the rubber cap, and loosen setscrew ②.
3. Turn the driving pulley by hand to make upper marker line ④ engraved on the needle bar meet the bottom end of lower bushing ③ of the needle bar. Tighten setscrew ②.

(Positioning the shuttle)

4. Further turn the driving pulley until lower marker line ⑤ engraved on needle bar ① meets the bottom end of lower bushing ③ of the needle bar.
5. Loosen shuttle driver setscrew ④, and open shuttle race latches ⑤ to the right and left, respectively while pulling them towards you to remove shuttle race ring ⑥.

(Caution) At this time, be careful not to allow shuttle ⑦ to fall.

6. Perform adjustment so that no clearance is provided between the needle and the front end of shuttle driver ⑨ when the blade point of shuttle ⑦ is aligned with center ① of needle ⑧. Then tighten shuttle driver setscrew ④.

(Caution) At this time, be very careful not to cause the shuttle race to slip in the direction of rotation.

7. Loosening setscrew ⑩, turn shuttle race adjusting shaft ⑪ clockwise or counterclockwise for adjustment to provide a 0.05 to 0.1mm clearance between needle ⑧ and shuttle ⑦, then tighten setscrew ⑩.
8. After adjustment, install shuttle race ring ⑥.

(決定針杆高度)

1. 用手轉動變換皮帶輪，把針杆①設定到最下點。（參照第4頁“*用手轉動縫紉機時”）
2. 卸下面部外罩橡膠蓋，擰鬆針杆緊固螺絲②。
3. 把針杆的上刻綫④對準針杆下檔塊③的下端，擰緊針杆緊固螺絲②。

(決定旋梭的位置)

4. 再繼續轉動驅動皮帶輪，把針杆①的下刻綫⑤對準針杆下擋塊③的下端。
5. 在此狀態，擰鬆固定螺絲④，向前拉中旋壓腳鉤⑤，左右打開，卸下中壓腳⑥。

(注意) 此時，請注意不要讓中旋梭掉落。

6. 把中旋梭⑦的梭尖對準機針⑧的中心①，驅動器的端和機針的間隙調整為0mm，然後擰緊驅動器固定螺絲④。

(注意) 此時，大旋梭的轉動方向一定要正確。

7. 擰鬆大旋梭固定螺絲⑩，左右轉動大旋梭調節軸⑪，把機針⑧和中旋梭⑦梭尖的間隙調整為0.05~0.1mm，然後固定好大旋梭固定螺絲⑩。
8. 調整後，安裝好中旋梭壓腳⑥。

22. ADJUSTING THE THREAD TENSION RELEASE TIMING /

線浮起同步的調節



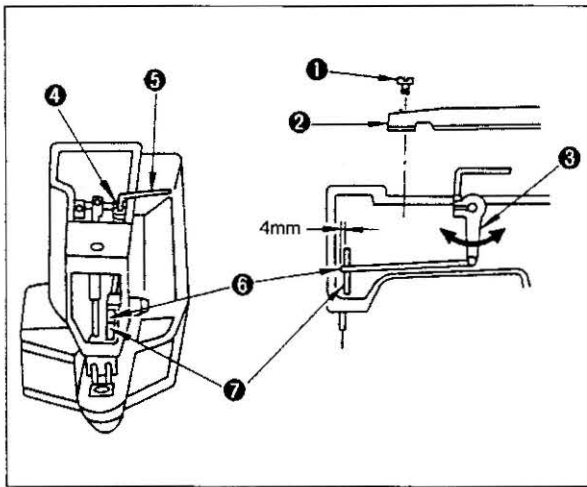
WARNING:

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注意

爲了防止突然啓動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。

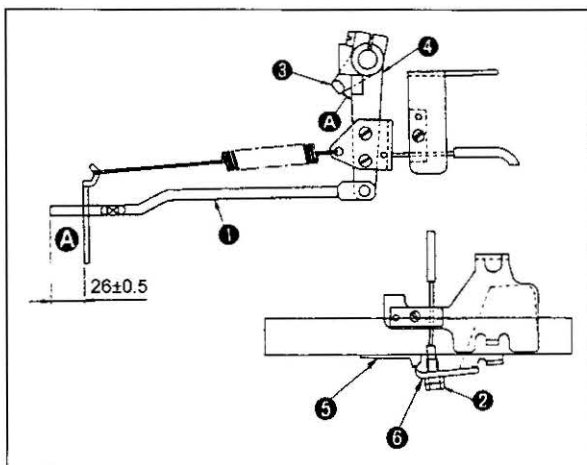


1. Remove five setscrews ① to take off top cover ②.
2. Loosen socket screw ④ of tension arm ③ by L-shaped wrench ⑤, and turn the tension arm to make adjustment so that a 4mm clearance is provided between the end of connecting rod ⑥ and that of tension post support plate ⑦ when the work clamp foot is up (when connecting rod ⑥ is retreated).
3. After adjustment, securely tighten socket screw ④.

1. 卸下5個機架外罩的固定螺絲①，卸下機架外罩②。
2. 用L形扳手擰鬆綫張力曲軸③的六角孔螺栓④，讓布壓腳上升（綫張力連接杆⑥進入到裏面的狀態）轉動綫張力曲軸，把綫張力連接杆前端和綫張力杆座板⑦的端面的距離調整爲4mm。
3. 調節後，六角孔螺栓④確實擰緊。

23. ADJUSTING THE DISK FLOATING TIMING (For S-type only) /

張力盤浮起同步的調節 (S)



1. Confirm that the pawl section of thread release lever ⑥ rides completely the mound section of disk floating notch ⑤ when the machine is in the stop-motion state. At that time, adjust with nut ② of the wire setting screw so that the protruding amount of tension release bar ① becomes 26 ± 0.5 , and tighten it.
(For the disk floating timing, confirm that the disk starts floating from the state that the eyelet of the thread take-up lever has come nearly to the horizontal line when the thread take-up lever goes up at the last stitch.)
2. When the machine is in the stop-motion state (the work clamp feet are in the up-state.), adjust so that the clearance ① between disk floating arm ③ and tension release arm ④ is 0 (zero) mm (lightly contact with each other.), and tighten the setscrew of the disk floating arm.
(However, the adjustment will vary to some extent according to the models.)

1. 請確認分離時鬆綫杆⑥的爪部是否完全到浮盤⑤的上面。
用鋼絲螺母②把綫張力連接杆①的突出量調節到 26 ± 0.5 ，然後擰緊。
(浮盤的同步時間爲，最終針杆上升時，杆孔基本水平起開始浮起。)
2. 分離時（壓腳上升的狀態），把浮盤曲柄③和鬆綫曲柄④的間隙①調整爲0mm（稍稍接觸）對齊，然後擰緊浮盤曲柄固定螺絲。

24. ADJUSTING THE THREAD TRIMMER / 切線刀的調節



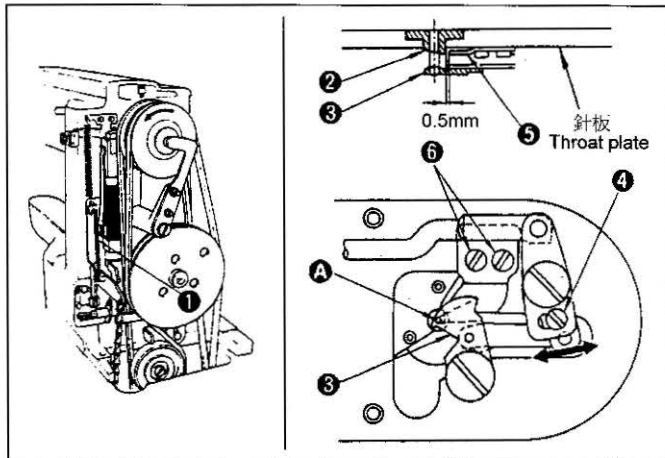
WARNING:

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



注意

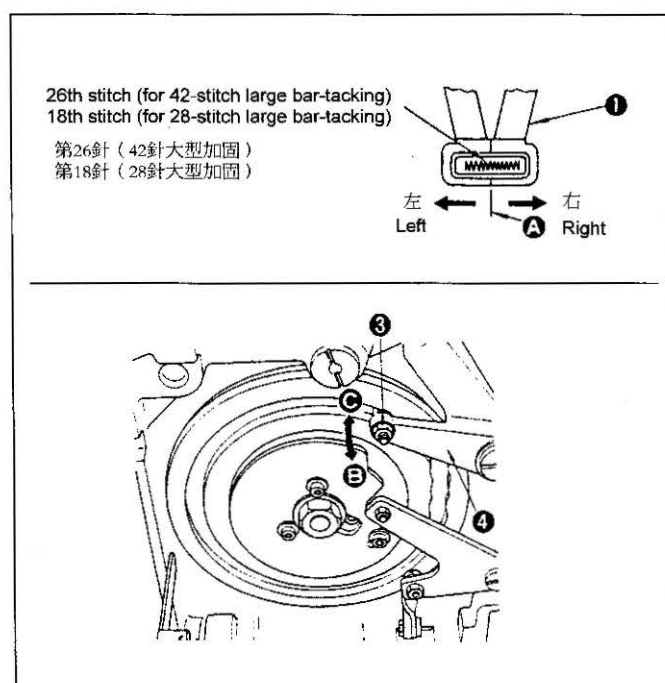
為了防止突然啟動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。



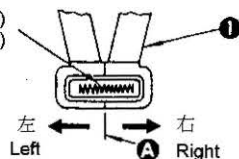
1. Remove starting lever tension spring ①, and start the machine. (The work clamp foot stays down when the machine stops.)
2. Loosen adjusting screw ④ and adjust the position of moving knife ⑤ in the arrowed direction to align hole A of the moving knife with the needle hole in needle hole guide ②.
3. Loosen setscrew ⑥ and adjust the position of counter knife ⑤ to provide a 0.5mm clearance between needle hole guide ② and counter knife ⑤.

1. 卸下起動杆拉簧①，進行起動。（停止時，壓腳下降。）
2. 擰鬆調節螺絲④，把移動刀向箭頭方向移動，把針孔導向器②的針孔和移動刀⑤的孔A對齊進行調節。
3. 擰鬆固定螺絲⑥，移動固定刀，把針孔導向器②和固定刀⑤的間隙調整為0.5mm。

25. ADJUSTING THE LATERAL POSITION OF THE WORK CLAMP FOOT / 布壓腳橫中心位置的調節



26th stitch (for 42-stitch large bar-tacking)
18th stitch (for 28-stitch large bar-tacking)
第26針（42針大型加固）
第18針（28針大型加固）



Loosen nut ②, and move feed across regulator in direction B to shift lateral A center of work clamp foot ① to the right or in direction C to shift it to the left.

- ★ For 42-stitch bar-tacking, adjust the lateral center at the 26th stitch.
- ★ For 28-stitch bar-tacking, adjust the lateral center at the 18th stitch.

(Caution) To correct a slight deviation of the lateral feed center, loosen the nut described in "19. Adjusting the length and width of bar tacking", and push the work clamp foot to the right or left by hand to make adjustment.

擰鬆六角螺母②，向B方向移動橫送杆④後，橫送中心位置向右移動，向A方向移動，則橫送中心位置向左移動，這樣調整布壓腳①的橫中心位置A。

42針時——在第26針進行調節。

28針時——在第18針進行調節。

（注意）如果橫送中心稍稍有偏斜，可以按照“第6頁的19.縫紉尺寸的調節”，擰松橫送螺母，用手左右按壓布壓腳進行調節。

26. ADJUSTING THE LIFT OF THE WORK CLAMP FOOT / 布壓腳高度的調節



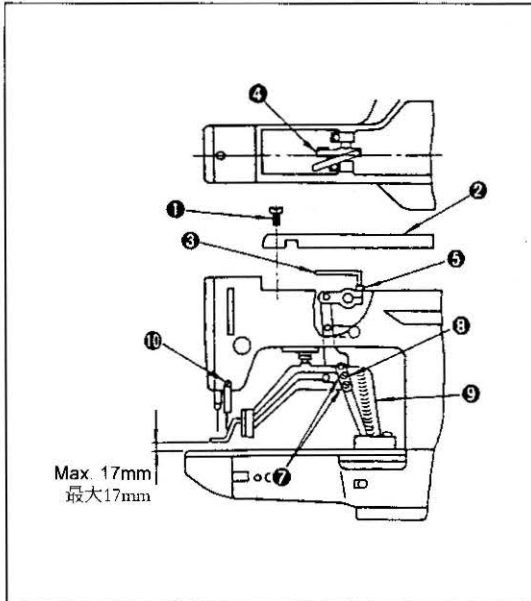
WARNING:

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



注意

爲了防止突然啓動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。



The lift of the work clamp foot can be adjusted up to 17mm.

1. With the machine in stop mode, remove five setscrews ① to take off top cover ②.
2. Apply L-shaped wrench ③ to socket screw ⑤ of clamp ④, and loosen socket screw.
3. Push down L-shaped wrench ③ to increase the lift of the work clamp foot, or pull it up to decrease the lift.
4. Securely tighten socket screw ⑤ after adjustment.
5. If the right and left work clamp feet are not levelled, loosen screw ⑦ and adjust the position of work clamp foot lever support plate ⑥ to level them.

(Caution) Be careful not to cause work clamp foot lever support plate ⑥ to interfere with feed bracket ⑨. If the work clamp foot lever support plate interferes with the wiper, readjust the height of the wiper using setscrew ⑩.

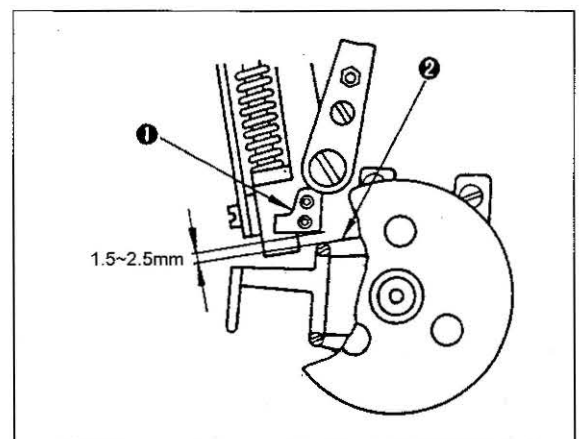
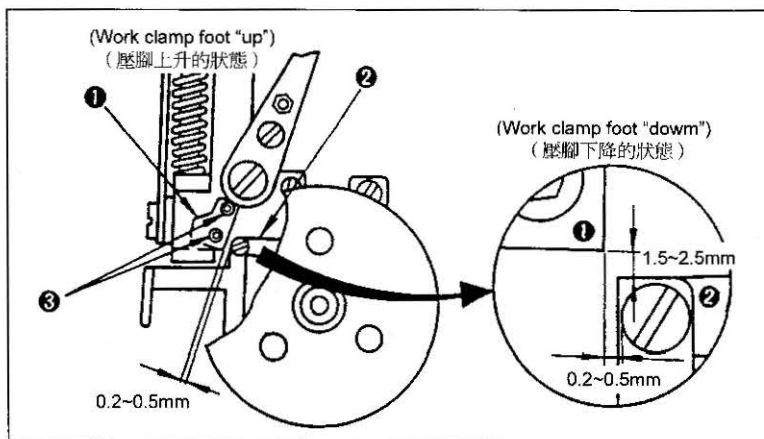
布壓腳上升量最大可以調節到17mm。

1. 在停止狀態，卸下5個基架外罩固定螺絲①，卸下基架外罩②。
2. 把L型扳手③插入中央緊固④的六角孔螺絲⑤，並把它擰鬆。
3. 向下按壓L型扳手③，布壓腳升高，向上拉則變低。
4. 調節後請確實地擰緊六角孔螺絲⑤。
5. 如果左右壓腳對不齊實，請擰鬆固定螺絲⑦，用布壓腳杆擋板⑥調節高度。

(注意) 此時，布壓腳杆擋板⑥和送布台⑨不要相碰。

如果和挑線杆相碰時，請用挑線杆安裝台固定螺絲⑩調節挑線杆的高度。

27. ADJUSTING THE SAFETY PLATE / 安全板的調節



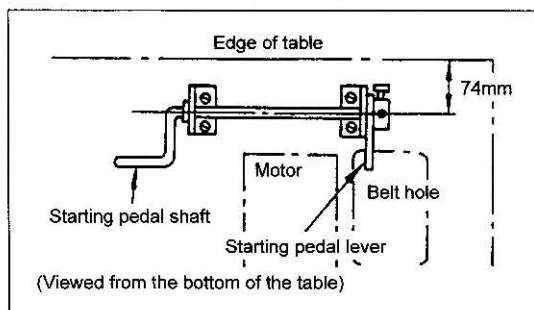
1. Loosening two setscrews ③, perform adjustment so that a 0.2 to 0.5mm lateral clearance is provided between safety plate ① and lifting lever ② when the work clamp foot is up at the time of stop motion, and a 1.5 to 2.5mm longitudinal clearance between them when the work clamp foot is down.
2. Check that the longitudinal clearance between safety plate ① and lifting lever ② is 1.5 to 2.5mm during the high-speed bar tacking (the work clamp foot is down).

1. 分離時，在壓腳上升的狀態，安全板①和壓腳提升杆②橫方向間隙爲0.2~0.5mm，在布壓腳下降的狀態，安全板和壓腳提升杆豎方向間隙爲1.5~2.5mm，請擰鬆2個固定螺絲進行調節。
2. 高速運轉中（布壓腳下降的狀態），安全板①和壓腳提升杆②的豎方向間隙爲1.5~2.5mm。

28. SPECIFICATIONS

Model	Standard	Subclass				
	1850	1852-5	1854-10	1852-20	1852-30	1854-40
Application	Large size bar tacking	←	*1 Attaching band loops	*1 ←	*1 ←	*1 ←
Sewing speed(rpm)	1800	←	←	←	←	←
Stitching pattern						
Number of stitches	42	28	21	28	←	42
Bar tacking width (mm)	1.5~3	←	0	←	←	←
Bar tacking width (mm)	8~16	←	6.5~14 (Standard 14)	6.5~14 (Standard 14)	13~25 (Standard 25)	*2 18~35 (Standard 25)
Needle	DP × 5 #14, #16	←	←	←	←	←
Work clamp foot lift(mm)	Max. 17	←	←	←	←	←
Lubricating oil	Juki New Defrix Oil No. 2	←	←	←	←	←

Model	Subclass					
	1854-6	1852-3	1854-4	1852-1	1854-11	1852-2
Application	Knit goods bar tacking	←	*3 Buttonhole bar tacking	←	Small size bar tacking	←
Sewing speed(rpm)	1800	←	←	←	←	←
Stitching pattern						
Number of stitches	21	28	21	28	21	28
Bar tacking width (mm)	1.3~3 (Standard 2.5)	←	1.5~3 (Standard 2.5)	←	←	←
Bar tacking width (mm)	4~8 (Standard 6.5)	←	4~8 (Standard 6)	←	4~8 (Standard 8)	←
Needle	DP × 5 #11	←	DP × 5 #14, #16	←	←	←
Work clamp foot lift(mm)	Max. 17	←	←	←	←	←
Lubricating oil	Juki New Defrix Oil No. 2	←	←	←	←	←



- *1. The machine head of the band-loop attaching machine is installed sideways. See the figure at left and use the pedal shaft supplied with the machine for easier pedal operation.
- *2. For bar-tacking of 25 to 35mm length, use feed plate (part No. 13547005) and work clamp foot (part No. 13547112).
- *3. This model of bar-tacking machine is designed to make the work clamp feet automatically close from the right and left of an eyelet buttonhole (closing width adjustable from 0 to 4mm), thus preventing the button-hole from opening when bar-tacking the end of the eyelet buttonhole.

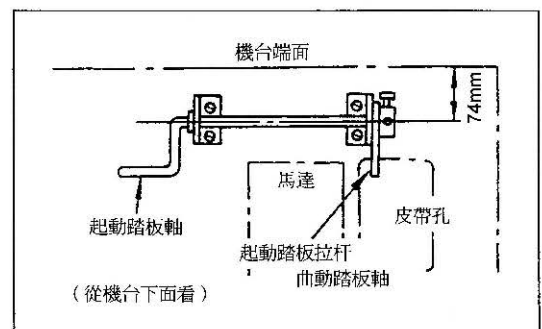
* By replacing the pedal pressure decreasing unit (asm) (part No. 13523188) with the P-type pedal pressure decreasing unit (asm) (part No. 13545959), the work clamp foot lifting operation can be changed from the standard one-pedal system to two-pedal system.

28. 規格

型號	標準	派生機種				
	1850	1852-5	1854-10	1852-20	1852-30	1854-40
用途	大加固縫	←	*1 有帶環	*1 ←	*1 ←	*1 ←
縫紉速度 (rpm)	1800	←	←	←	←	←
縫制花樣						
針數 (針)	42	28	21	28	←	42
加固縫寬度	1.5~3	←	0	←	←	←
加固縫長度	8~16	←	6.5~14 (標準 14)	6.5~14 (標準 14)	13~25 (標準 14)	*2 18~35 (標準 25)
使用機針	DP×5 #14, #16	←	←	←	←	←
外壓腳上升量	最大17mm	←	←	←	←	←
使用機油	No. 2新機油	←	←	←	←	←

型號	派生機種					
	1854-6	1852-3	1854-4	1852-1	1854-11	1852-2
用途	針織物加固縫	←	*4 加固縫	←	小加固縫	←
縫紉速度 (rpm)	1800	←	←	←	←	←
縫制花樣						
針數 (針)	21	28	21	28	21	28
加固縫寬度	1.3~3 (標準2.5)	←	1.5~3 (標準2.5)	←	←	←
加固縫長度	4~8 (標準6.5)	←	4~8 (標準6)	←	4~8 (標準8)	←
使用機針	DP×5 #14, #16	←	DP×5 #11	←	←	←
外壓腳上升量	最大17mm	←	←	←	←	←
使用機油	No. 2新機油	←	←	←	←	←

型號	派生機種		
	1850S	1852-20	1852S-3
用途	針織物加固縫	*1 ←	←
縫紉速度 (rpm)	1800	←	←
縫制花樣			
針數 (針)	42	28	28
加固縫寬度	1.5~3	←	←
加固縫長度	8~16	6.5~14 (標準 14)	←
使用機針	DP×5 #14, #16	←	DP×5 #11
外壓腳上升量	最大17mm	←	←
使用機油	No. 2新機油	←	←



*1. 因為帶環縫紉機橫向使用縫紉機頭，所以請參照上圖使用附屬的踏板壓腳。踏板的操作變得更為簡單。

*2. 加固縫長度為25~35mm時，請使用布壓腳底板（貨號：13547005）和布布壓腳（貨號：13547112）。

*3. 扣眼孔部的加固縫時，布壓腳從鈕扣孔左右自動地合攏（合攏寬度為0~4mm，可以調節）。

減輕裝置（組件）（貨號：13523188）更換為P型（組件）（貨號：13545959），可以進行標準型的單踩踏板方式變為2踏板方式來提升壓腳。

29. TROUBLES AND CORRECTIVE MEASURES

Trouble	Cause	Corrective measures	Page
1. The needle thread slips off the needle at the start of bar-tacking.	① Stitches are skipped at the start.	○ Adjust the clearance between the needle and the shuttle to 0.05 to 0.1mm.	15
	② The needle thread remaining on the needle after thread trimming is too short.	○ Correct the thread tension release timing of the thread tension controller No.2.	16
	③ The bobbin thread is too short.	○ Increase the tension of the thread take-up spring, or decrease the tension of the thread tension controller No.1.	12,13
	④ The feed timing is bad.	○ Decrease the tension of the bobbin thread. ○ Increase the clearance between the needle hole guide and the counter knife. ○ Correct the feed timing.	12 17 14
2. Thread often breaks or synthetic fiber thread splits finely.	① The shuttle or the driver has scratches.	○ Take it out and remove the scratches using a fine whetstone or buff.	18
	② The needle hole guide has scratches.	○ Buff or replace it.	
	③ The needle strikes the work clamp foot.	○ Correct the position of the work clamp foot.	
	④ Fibrous dust is in the groove of the shuttle race.	○ Take out the shuttle and remove the fibrous dust from the shuttle race.	15
	⑤ The needle thread tension is too high.	○ Reduce the needle thread tension.	12
	⑥ The tension of the thread take-up spring is too high.	○ Reduce the tension.	13
	⑦ The synthetic fiber thread melts due to heat generated on the needle.	○ Use silicone oil.	8
3. The needle often breaks.	① The needle is bent.	○ Replace the bent needle.	10
	② The needle hits the work clamp foot.	○ Correct the position of the work clamp foot.	18
	③ The feed timing is bad.	○ Correct the feed timing.	14
	④ The needle is too thin for the material.	○ Replace it with a thicker needle according to the material	10
	⑤ The driver excessively bends the needle.	○ Correctly position the needle and the shuttle.	15
4. Threads are not trimmed.	① The counter knife is dull.	○ Replace the counter knife.	17
	② The difference in level between the needle hole guide and the counter knife is not enough.	○ Increase the bend of the counter knife.	17
	③ The moving knife has been improperly positioned.	○ Correct the position of the moving knife.	17
	④ The last stitch is skipped.	○ Correct the timing between the needle and the shuttle.	15
5. Stitch skipping often occurs.	① The motions of the needle and shuttle are not properly synchronized.	○ Correct the positions of the needle and shuttle.	15
	② The clearance between the needle and shuttle is too large.	○ Correct the positions of the needle and shuttle.	15
	③ The needle is bent.	○ Replace the bent needle.	10
	④ The feed timing is bad.	○ Correct the feed timing.	14
	⑤ The driver excessively bends the needle.	○ Correctly position the driver.	15
6. The needle thread comes out on the wrong side of the material.	① The needle thread tension is not high enough.	○ Increase the needle thread tension.	12
	② The tension release mechanism fails to work properly.	○ Check whether or not the tension disc No.2 is released during bar-tacking.	16
	③ The needle thread after thread trimming is too long.	○ Increase the tension of the thread tension controller No.1.	12
7. Threads break at time of thread trimming.	① The moving knife has been improperly positioned.	○ Correct the position of the moving knife.	17

29.

現象	原因	對策	頁碼
1. 始縫時脫綫。	① 始縫時跳綫。 ② 切綫後上綫長度短。	○ 機針和旋梭的間隙調整為0.05~0.1mm。	15
		○ 調節第二綫張力器綫浮起同步。	16
	③ 底綫過短。 ④ 送布同步時間不正確。	○ 有可能挑綫彈簧過強，減弱第一綫張力器。	12,13
		○ 減弱底綫張力。 ○ 調寬針孔導向器和固定刀之間第間隙。 ○ 調節送步同步。	12 17 14
2. 經常斷綫。 化纖綫散斷。	① 旋梭、驅動器有傷痕。 ② 針孔導向器有傷痕。 ③ 機針碰布壓腳。 ④ 綫屑進入大旋梭槽裏。 ⑤ 上綫張力過強。 ⑥ 挑綫彈簧過強。 ⑦ 化纖綫因熱而熔化。	○ 卸下用磨石或銼刀磨。	18 15 12 13 8
		○ 用差刀磨或更換。	
		○ 調節布壓腳的位置。	
		○ 卸下中旋梭，取出綫屑。	
		○ 減弱上綫張力。	
		○ 減弱挑綫彈簧張力。	
		○ 使用硅膠油。	
3. 經常斷針。	① 針彎曲。 ② 機針碰布壓腳。 ③ 送布同步時間不正確。 ④ 機針過細。 ⑤ 驅動器把機針弄得過彎。	○ 更換機針。	10
		○ 調節布壓腳的位置。	18
		○ 調節送步同步。	14
		○ 根據縫制物使用適當的機針。	10
		○ 調節機針和旋梭的位置。	15
4. 綫切不斷。	① 固定刀切綫不好。 ② 針孔導向器和固定到不平。 ③ 移動刀的位置不正確。 ④ 最終針跳綫。	○ 更換固定刀。	17
		○ 固定刀的彎曲過大。	17
		○ 調節移動刀位置。	17
		○ 調節機針和旋梭的同步。	15
5. 跳綫多。	① 機針與旋梭不配和。 ② 機針和中旋梭的間隙過大。 ③ 機針彎曲。 ④ 送布同步時間不正確。 ⑤ 驅動器把機針弄得過彎。	○ 調節機針和旋梭的位置。	15
		○ 調節機針和旋梭的位置。	15
		○ 更換機針。	10
		○ 調節送布同步。	14
		○ 調節驅動器的位置。	15
6. 布的背面上綫 跑出。	① 上綫緊綫不好。 ② 綫張力盤不浮起。 ③ 切綫後上綫長度過長。	○ 加強上綫張力。	12
		○ 確認縫制中第二綫張力盤是否浮起。	16
		○ 加強第一綫張力器。	12
7. 切綫時斷綫。	① 移動刀的位置不正確。	○ 調節移動刀的位置	17

30. HOW TO SUPPLY GREASE TO THE REDUCER / 減輕裝置加潤滑脂的方法



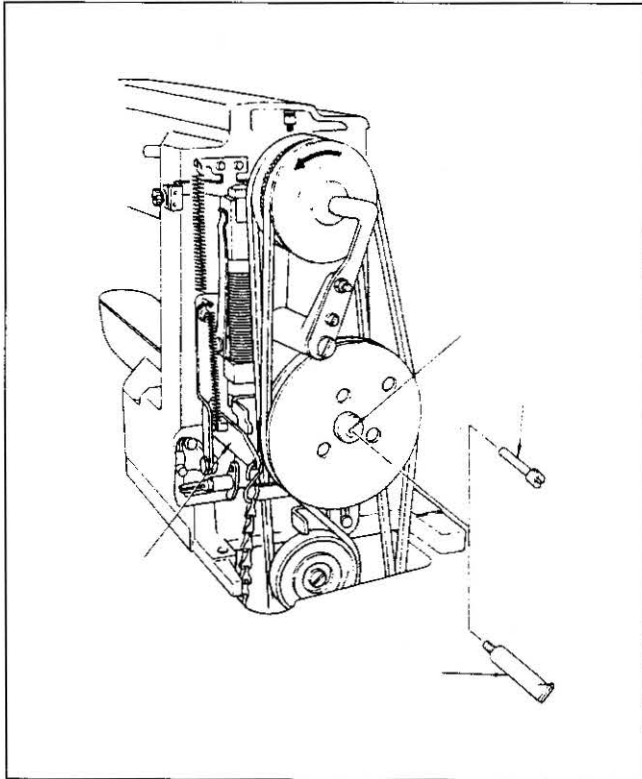
WARNING:

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



注意

爲了防止突然啓動造成人身事故，請關掉電源，確認馬達確實停止轉動后再進行。



{ Supply grease to the reducer in accordance with the following procedure when the machine has been used for more than half year or if it chatters. }

1. Stop the machine and remove screw .
2. Uncap grease tube supplied with the machine, screw the tube into hole , and push the grease out of the tube.
3. Removing grease tube from , push in the grease by screw .
4. Repeat the step of injecting the grease and pushing it in by the screw twice or so.
5. Tighten screw .

(Caution) If the grease will not get into the unit smoothly, screw in grease tube , turn on the motor switch, and move the presser foot up and down two or three times using lever . By doing this, you can make the grease get into the unit easily.

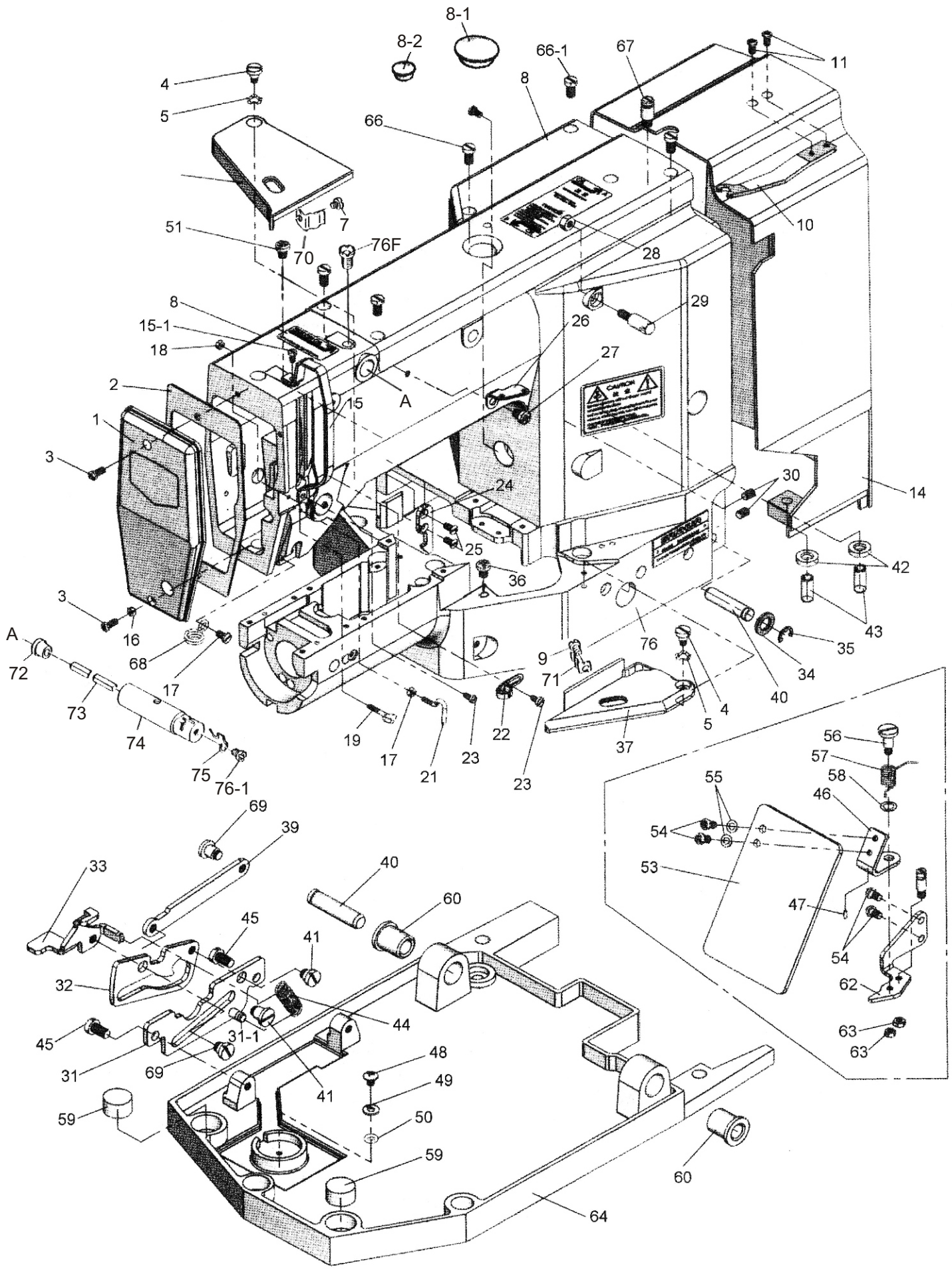
縫紉機使用半年以上後，會發出喀喀的響聲。這說明減輕裝置中的潤滑脂沒有了。請按下列順序進行加油。

1. 停止縫紉機，卸下螺絲 。
2. 拆下附屬品中的潤滑脂管 的蓋子，擰進 部的孔裏，擠出潤滑脂。
3. 取下潤滑脂管 ，用螺絲 把潤滑脂壓進去。
4. 擰潤滑脂管時，請擰2圈左右。
5. 擰緊螺絲 。

(注意) 潤滑脂不容易進入時，擰進特滑脂軟管，打開馬達開關，用發杆上下扳2~3次壓腳，潤滑脂就容易進去了。

CONTENTS 目錄

1.E1-FRAME & MISCELLANEOUS COVER COMPONENTS	1
機頭框架結構	1
2.E2-MAIN SHAFT COMPONENTS	3
主軸結構	3
3.E3-NEEDLE BAR COMPONENTS	5
針棒的結構	5
4.E4-THREAD TENSION RELEASE COMPONENTS	7
緊線的裝置	7
5.E5-SHUTTLE DRIVER SHASFT COMONENTS	9
供給機械裝置結構	9
6.E6-FEED MECHANISM COMPONENTS	11
滑梭傳動桿結構	11
7.E7-THREAD TRIMMING COMOPNENTS	13
線頭修剪結構	13
8.E8-PEDAL PRESSURE DECREASING UNIT COMPONENTS	15
踏板減壓單元結構	15
9.E9-STOP-MOTION MECHANISM COMPONENTS	17
止動機械裝置結構	17
10.E10-LUBRICATION MECHANISM COMPONENTS	19
潤滑油機械裝置結構	19
11.E11-ACCESSORIES	21
平面結構圖	21



FRAME & MISCELLANEOUS COVER COMPONENTS

REF. NO. 部件編號	DESCRIPTION 名稱	QTY 數量
E1-01	FACE PLATE ASM 面板	1
E1-02	FACEPACKING 面板墊圈/襯墊	1
E1-03F	SCREW 11/64-40 螺釘	2
E1-04F	HINGE SCREW 合葉螺絲	2
E1-05	WAVED WASHER 6.4×11×0.3 波形墊圈	2
E1-06	BED COVER B 架蓋B	1
E1-07F	SCREW 11/64-40 螺釘	1
E1-08	TOP COVER 頂蓋	1
E1-08-1	RUBBER PLUG 橡膠塞	1
E1-08-2	RUBBER PLUG 橡膠塞	1
E1-09F	SCREW 9/64-40 螺釘	1
E1-10	BELT COVER FIXING PLATE 帶狀蓋止動金屬板	1
E1-11F	SCREW 11/64-40 螺釘	2
E1-12F	SCREW 9/64-40 螺釘	2
E1-14	BELT COVER 後蓋	1
E1-15	THREAD TAKE-UP LEVER OIL GUARD 緊線器桿防油裝置	1
E1-15-1F	SCREW 9/60-40 螺釘	2
E1-16	WAVED WASHER 4.8×8.4×0.8 墊圈	2
E1-17H	NUT 11/64-40 螺母	1
E1-18H	NUT 9/64-40 螺母	1
E1-19	THREAD GUIDE 緊線器導桿	1
E1-20H	NUT 9/64-40 螺母	1
E1-21	L-SHAPED THREAD GUIDE A 拉線導桿	1
E1-22	ARM THREAD GUIDE A 牽線導桿A	1
E1-23F	SCREW 9/64-40 螺釘	1
E1-24	BED FITTING HOOK 架鈎	1
E1-25F	SCREW 11/64-40 螺釘	2
E1-26	THREAD GUIDE PLATE 牽線導桿板	1
E1-27F	SCREW 15/64-28 螺釘	1
E1-28H	NUT 15/64-28 螺母	1
E1-29F	FIRST THREAD GUIDE 牽扯線導板	1
E1-30F	SCREW 15/64-28 螺釘	2
E1-31	STAY GUIDE ASM 導板	1
E1-31-1	PIN 栓	1
E1-32	DTAY ROCKER 導板扣鎖	1
E1-33	BED ROCKER 架鎖扣	1
E1-34	WASHER 10.5×18×2 墊圈	2
E1-35	E-RING E型扣環	2
E1-36F	SCREW 15/64-28 螺釘	2
E1-37	BED COVER A 架蓋A	1
E1-39	STAY 牽條拉桿	1
E1-40	BASE CONNVTING PIN 底部連接栓	2
E1-41F	HINGE SCREW 合葉螺絲	2
E1-42	RUBBER WASHER 橡皮墊圈	2
E1-43	SPRING PIN 8×20 彈簧栓	2
E1-44	THREADD TENSION SPRING 彈簧	1
E1-45F	SCREW 15/64-28 螺釘	2
E1-46	SAFETY PLATE INSTALLING PLATE 護目鏡安全裝板	1
E1-47	STOPPER PIN 止動栓	1
E1-48F	SCREW 螺釘	1
E1-49	WASHER 墊圈	1
E1-50	RUBBER RING 橡膠墊圈	1
E1-51F	SCREW 11/64-40 螺釘	1
E1-53	SAFETY PLATE 護目鏡	1
E1-54F	SCREW 11/64-40 螺釘	4
E1-55	WASHER 4.5×10×0.8 墊圈	2
E1-56F	HINGE SCREW 合葉螺絲	1
E1-57	DISK SPRING 圓圈彈簧	1
E1-58	WASHER 6.5×13×0.8 墊圈	1
E1-59	VIBRATION-PROOF RUBBER 防震動橡皮墊	2
E1-60	RUBBER BUSH 橡皮油封	2
E1-62	SAFETY PLATE MOUNTING BASE 護目鏡安裝底座	1
E1-63H	NUT 3/16-32 螺母	2
E1-64	BED FITTING BASE 機器底盤	1
E1-66F	SCREW 15/64-28 螺釘	2
EL-66-1F	SCREW 15/64-28 螺釘	3
E1-67F	SPRING RACK 彈簧懸掛螺絲釘	1
E1-68	ARM THREAD GUIDE B 牽線導桿	1
E1-69F	HINGE SCREW 合葉螺絲	2
E1-70	MOLA DA TAMPA "B" DA BASE 彈片勾	1
E1-71	MOLA DA TAMPA "A" DA BASE 彈片勾	1
E1-72	PLUGUE DE BORRACHA 橡膠塞	1
E1-73	FELTRO DO OLEO DE SILICONE 油棉	1
E1-74	CANO DO OLEO DE SILICONE 儲油機構	1
E1-75	GOIA LINHA DO OLEO DE SILICONE 導線勾	1
E1-76	MACHINE FRAME UNIT 機體	1
E1-76F	SCREW 螺釘	1
E1-76-1F	SCREW 11/64-40 螺釘	1

