

十分感謝你購買本公司的工業用縫紉機

在使用縫紉機之前，請仔細閱讀《為了你的安全使用》和《使用說明書》。

Thank you much for buying a sewing machine, Before using your new machine, Please read the safety instructions below and the explanauons given in instruction manual.

工業用縫紉機的特徵之一，應為要在機針和旋梭運動零部件附件進行操作，而這些零部件很容易引起受傷的危險，所以請在受過培訓的人或熟練的人員的安全操作知識的指導下，正確的使用縫紉機。

With industrial sewing machines, it is normal to carry out work while positioned directly in front of moving parts such as the needle and thread take-up, and consequently there is always a danger of injury that can be caused by these parts, Fol'v the instructions from training personnel and instructors regarding safe and correct operation before operating the machine so that you will know how to use it correctly.

為了你的安全使用 SAFETY INSTRUCTIONS

1. 安全使用的標記及其意義

本使用說明書及產品所使用的標記和圖案機號是為了你的安全而正確的使用產品，防止及其他人受到傷害和損傷，表示方法及意義如下：

1. Safety indications and their meanings

This instruction manual and the indications and symbols are used on the machine itself are provided in order to ensure safe operation of this machine and to prevent accidents and injury to yourself or other people.

標記 Indications



注意

如果忽視此標記而進行了錯誤的操作，有可能會引起人員受傷及造成設備損壞。



CAUTION

The instructions which follow this term indicate situations where to follow the instructions could cause injury when using the machine or physical damage to equipment and surroundings

圖案和符號 Symbols



.....

該符號(△)表示“應注意事項”

三角形的圖案表示必須注意的實質內容

(例如：左邊的圖案表示“當心受傷”)

This symbol(△)indicates something that you should be careful of. The pictuer inside the triangle indicates the nature of the caution that must be taken

(For example, the symbol at left means “beware of injury”)



.....

該符號(⊘)表示“禁止”。

This symbol(⊘)indicates something that you must not do



.....

該符號(●)表示“必須”


















圓圈中的圖案表示必須要做的事情的實質內容

(例如：左邊的圖案表示必須“必須接地”。)

This symbol(●)indicates something that you must do. The picture inside the circle indicates the nature of the thing that must be done.

(For example: the symbol at left means “you must make the ground connection”)

2. 安全注意事項







 注意	
使用環境	
 請不要在有電壓干擾及靜電干擾等有有強電氣干擾源影響的環境下使用 強電氣干擾源可能會影響縫紉機的正常操作。	 環境溫度應在5°C-35°C的範圍內使用， 低溫或高溫會影響縫紉機的正常操作
 電源電壓的波動應該在額定電壓的±10%以內的環境下使用 電壓大幅度波動會影響縫紉機的正常操作。	 相對濕度應在45%-85%的範圍內，並且設備內不會形成結霧的環境下使用，乾燥或多濕的環境和結霧會影響縫紉機的正常操作
 電源容量應大於設備的消耗電量。電源容量不足會影響縫紉機的正常操作	 萬一發生雷電暴雨時，關閉電源開關，並將電源插頭從插座上拔下。雷電可能會影響縫紉機的正常操作。
安 裝	
 請讓受過培訓的技術人員來安裝縫紉機	 所有電纜應固定在距離活動部件至少25mm以外處。  另外，不要過渡彎曲電纜或用卡釘固定得過緊，會引起火災或觸電的危險。
 請委託購買商店或電氣專業人員進行電氣配線	 如果使用帶小腳輪的工作臺，則應該固定小腳輪，使其不能移動。
 縫紉機重量約45Kg，安裝工作必須由兩人以上完成	
 在安裝完成前，請不要連接電源，如果誤按啟動開關，縫紉機動作會導致受傷	 縫紉機頭倒下或豎起時，請用雙手進行操作，單手操作時因縫紉機的重量萬一滑落易導致受傷。
 必須接地 接地線不牢固，是造成觸電或誤動作的原因	 使用潤滑油或黃油時，務必帶好防護眼睛或手套等。以防潤滑油落入眼睛或粘在皮膚上，這是引起發炎的原因。 另外，潤滑油和黃油不能引用，否則或引起嘔吐或腹瀉。 將油放在小孩拿不到的地方。

2. Notes on safety













CAUTION

Environmental requirements











- | | |
|--|--|
|  Use the sewing machine in an area which is free from sources of strong electrical noise such as electrical line strong or static electric noise sources of strong electrical noise may cause problems with correct operation |  The ambient temperature should be within the range of 5°C to 35°C during use. Temperatures whih are lower or higher that this may cause problems with correct operation |
|  Any fluctuations in the power supply voltage should be within $\pm 10\%$ of the rated voltage machine .
Voltage fluctuations whiche are greater than this may cause problems with correct operation |  The relative humidity should be within the rang of 45% to 85% during use, and no dew fonnation should occur in any devices.
Excessively dry or humid environments and dew formation may cause problems with corred operation. |
|  The power supply capacity should be greater than the requirements for the sewing machine's power consumption
Insufficient power supply capacity may cause problems with correct operation |  In the event of an electrical stom, turn off the power and disconnect the power cord from the power cord from the wall outlet lightning may cause problems with correct operation |

INSTALLATION





- | | |
|---|--|
|  Machine installation should only be carried out by a qualifid technician |  All cords should be secured at least 25mm away from any moving parts, Furthermore. do not excessively bend the cords or secure them too firmly with staples ,otherwise there is the danger that fire or electric could occur. |
|  Contact your brother dealer or a qualified electrician for any electrical work that may need to be done |  |
|  The sewing machine weighs approximately 45Kg
The installation should be camed out by two or more people. |  If using a work table which has casters, the casters should be secured in such a way so that they cannot move. |
|  Do not connent the power the cord until installation is complete. the machine may operate if the treadle is depressed by mistake could result in injury. |  Use both hands to hold the machine head whet tilting it back or returning it to its original position. it only one hand is used, the weight of the machine head may cause your hand to slip. and your hand may get caught. |
|  Be sure to connect the ground. if the ground connection is not secure, you run a high risk of receiving a senous electric shock, and problems with with correct operation may also occur. |  Be sure to wear protective goggles and gloves when handing the lubricating oil and grease. so that they do not get into your eyes or onto your skin. otherwise inflammation can result. Furthermore, do not drink the oil or eal the grease under any circumstances. as they can cause vomiting and diarmae.
keep the oil out of the reach of children. |

注意

缝 纫

- | | |
|---|---|
|  本缝纫机仅限于接受过安全操作培训的人员使用。 |  为了安全起见，在使用本缝纫机之前，请安装保护装置，如果为安装这些安全装置就使用缝纫机，会造成人身伤害及缝纫机损害。 |
|  本缝纫机不能用于除缝纫机以外的任何其它用途。 |  缝纫过程中，不要碰触任何运动部件或将物件靠在运动部件上。因为这会造成人员受伤或缝纫机损坏。 |
|  使用缝纫机时必须带上保护眼睛
如果不带保护眼睛，断针时就会有危险，机针折断部分可能会弹入眼睛并造成伤害。 |  缝纫机机头倒下或竖起时，请用双手进行操作，单手操作时因缝纫机的重量万一滑落易导致受伤。 |
|  发生下列情况时，请切断电源。
但在切断电源后，马达在稍后的一段时间内因惯性仍会继续运转，请在马达完全停止后，再进行作业。否则误按启动开关，缝纫机动作会导致受伤。 <ul style="list-style-type: none">。 机针穿线时。 更换机针或梭芯时。 缝纫机不使用，或人离开缝纫机时。 |  如果缝纫机操作中发生误动作，或听到异常的噪音或闻到异常的气味，应立即切断电源，然后请与购买商或受过培训的技术人员联系。 |
|  如果使用带小脚轮的工作台时，则应该固定小脚轮使其不能移动。 |  如果缝纫机出现故障，请与购买商店或受过培训的技术人员联系。 |

清 洁

- | | |
|--|---|
|  在开始清洁作业前，请切断电源
但在切断电源后，马达在稍后的一段时间内因惯性仍会继续转动，请在马达完全停止后，再进行作业。
如果当误按启动开关时，缝纫机动作会导致人受伤。 |  使用润滑油或黄油时，务必带好保护眼睛和保护手套等，以防润滑油落入眼中或皮肤上，这是引起发炎的原因。
另外，润滑油和黄油不能饮用，否则会引起呕吐或腹泻。
将油放在小孩拿不到的地方。 |
|  缝纫机机头倒下或竖起时，请用双手进行操作。
单手操作时因缝纫机重量万一滑落易导致受伤。 |  请使用本公司指定更换的零部件 |

CAUTION

Sewing



This sewing machine should only be used by operators who have received the necessary training in safe use beforehand



The sewing machine should not be used for any applications other than sewing.



Be sure to wear protective goggles when using the machine.
If goggles are not worn, there is the danger that if a needle breaks, parts of the broken needle may enter your eyes and injury may result



Turn off the power switch at the following times, The motor will keep turning even after the power is switched off as a result of the motor's inertia wait until the motor stops fully before starting work. the machine may operate if the treadle is depressed by mistake. which could result in injury.

- . When threading the needle
- . When replacing the bobbin and needle
- . When not using the machine and when leaving the machine unattended



If using a work table which has casters, the casters should be secured in such a way so that they cannot move.



Attach all safety devices before using the sewing machine. if the machine is used without these devices attached, injury may result.



Do not touch any of the moving parts of press any objects against the machine while sewing, as this may result in personal injury or damage to the machine.



Use both hands to hold the machine head when tilting it back or returning it to its original position. if only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.



If an error occurs in machine, or if abnormal noises or smells are noticed, immediately turn off the power switch. then contact your nearest brother dealer or qualified technician.



If the machine has a problem. contact your nearest brother dealer or a qualified technician

Cleaning



Turn off the power switch before carrying out cleaning
The motor will keep turning even after the power is switched off as a result of the motor's inertia wait until the motor stops fully before starting work. the machine may operate if the treadle is depressed by mistake, which could result in injury.



Use both hands to hold the machine head when tilting it back or returning it to its original position. if only one hand is used weight of the machine head may cause your hand to slip, and your hand may get caught.

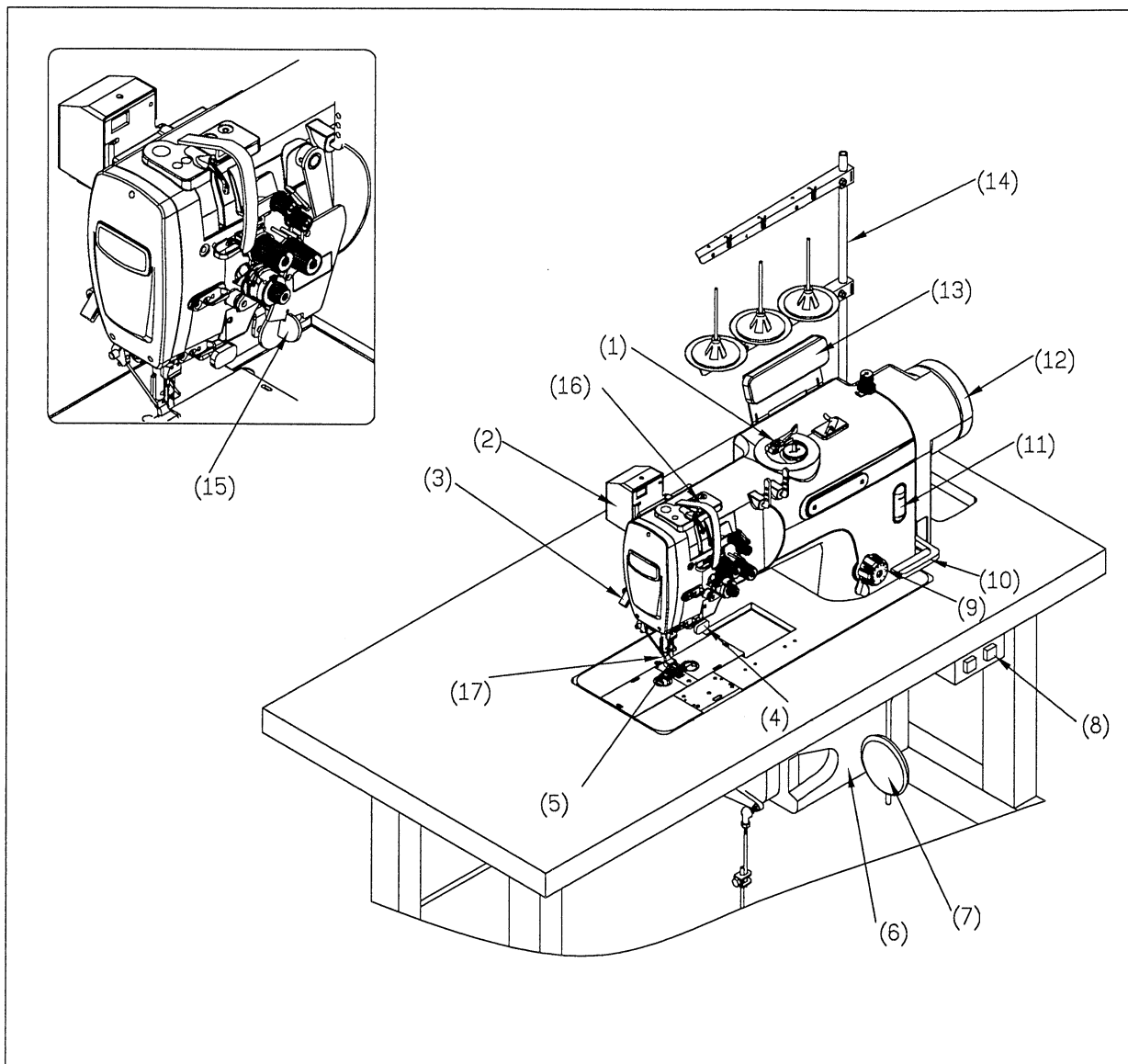


Be sure to wear protective goggles and gloves when handling the lubricating oil and grease. so that they do not get into your eyes or onto your skin otherwise inflammation can result. furthermore. do not drink the or eat the grease under any circumstances, as they can cause vomiting and diarrhea. keep the oil out of the reach of children.



Use only the proper replacement parts as specified by the original.

2. 各部件名稱 Names of major parts













- | | |
|----------------------------------|--|
| (1) 梭芯繞線裝置 Bobbin winder | (2) 掃線裝置 Thread wiper |
| (3) 壓腳扳手 Lifting lever | (4) 倒縫裝置按鈕(調節器) Quick reverse (Actuator) |
| (5) 壓腳 Presser foot | (6) 控制箱 Control box |
| (7) 膝控碰塊 Knee lifter assembly | (8) 電源開關 Power switch |
| (9) 針距旋鈕 Stitch length dial | (10) 倒縫扳手 Reverse lever |
| (11) 油量計視窗 Oil gauge window | (12) 縫紉機手輪 Machine pulley |
| (13) 操作盒 Operation box | (14) 線架 Cotton stand |
| (15) 定位杆 Stop lever (8450, 8750) | |

安全保護裝置 Safely devices

- | | |
|----------------------------------|-----------------------|
| (16) 挑線杆防護罩 Thread take-up cover | (17) 護指器 Finger guard |
|----------------------------------|-----------------------|

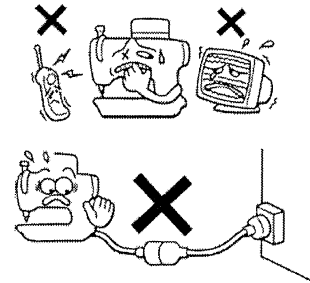
3. 安裝方法 INSTALLATION

注意 CAUTION

- | | |
|---|---|
| <ul style="list-style-type: none">  請讓受過培訓的技術人員來安裝縫紉機  請委託購買商店或電氣專業人員進行電氣配線  縫紉機重量約45Kg, 安裝工作必須由兩人完成。  Machine installation should only be carried out by a qualified technician.  Contact your brother dealer or a qualified electrician for any electrical work that may need to be done  The sewing machine weighs approximately 45Kg, the installation should be carried out by two or more people. | <ul style="list-style-type: none">  在安裝完成前, 請不要連接電源, 如果誤按啟動開關, 縫紉機動作會導致受傷。  縫紉機頭倒下或豎起時, 請用雙手進行操作。單手操作時因縫紉機重量萬一滑落易導致受傷。  Do not connect the power cord until installation is complete. the machine may operate if the treadle is depressed by mistake, which could result in injury  Use both hands to hold the machine head when tilting it back or returning it to its original position, if only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get injured. |
|---|---|

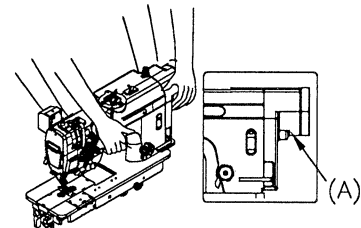
關於縫紉機的安裝位置 About the machine set-up location

- 勿將該縫紉機置於其他設備附近, 如電視機、收音機或無線電話等, 否則這些設備可能會備縫紉機的電子原件干擾所影響。
- 應將縫紉機置於插入AC電源插座。如果使用延長線可能會造成操作故障。
- Do not set up sewing machine near other equipment such as televisions, radios or cordless telephone, otherwise such equipment may be affected by electronic interference from the sewing machine
- The sewing machine should be plugged directly into an AC wall outlet operation problems may result if extension cords are used.



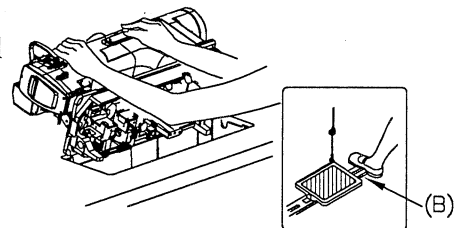
搬運縫紉機 Carrying the machine

- 應按圖示由兩人用手拖住機殼本體進行搬運
- * 還是用手扶住馬達蓋(A)部, 使手輪不能轉動。
- The machine should be carried by the arm by two people as shown in the illustration.
- Hold the motor cover (A) by hand also so that pulley does not rotate



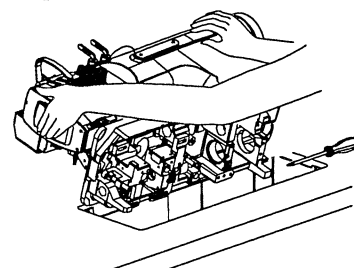
向後傾斜縫紉機頭部 Tilting back the machine head

- 用腳踏住(B)部分, 不讓臺板移動, 然後用雙手推動機殼本體使縫紉機頭部後傾。
- Hold section (B) with your foot so that the table does not move, and then push the arm with both hands to tilt back the machine head.



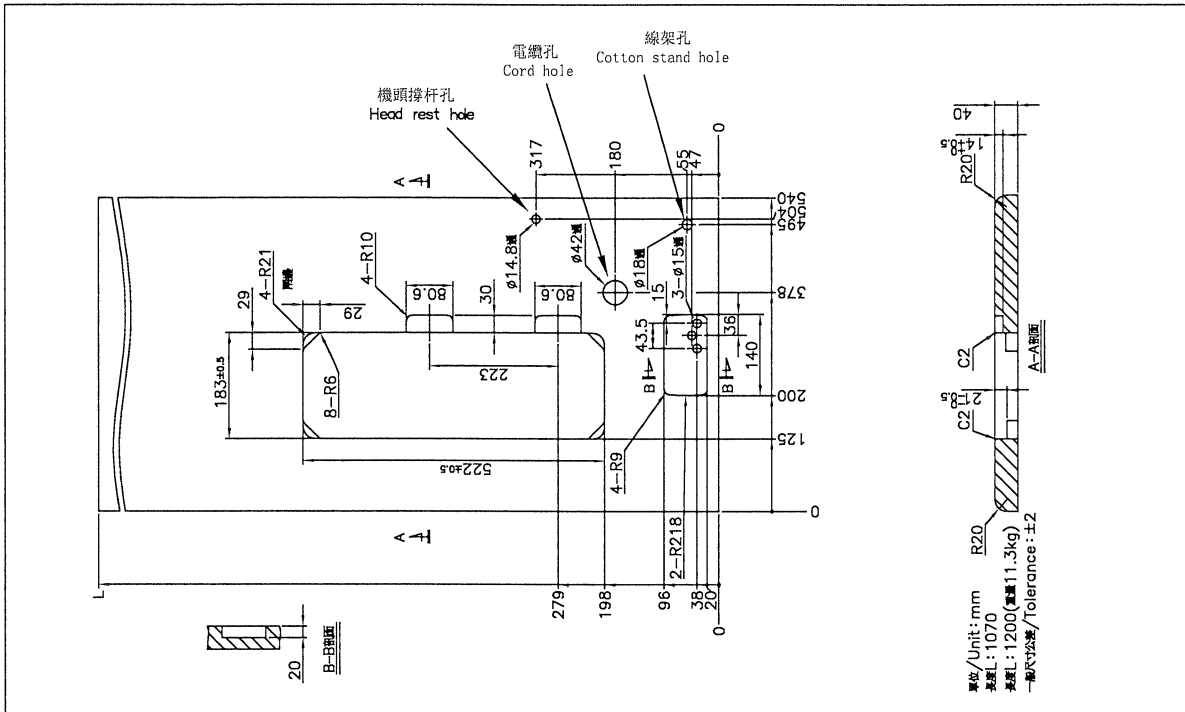
將縫紉機頭部 Returning the machine head to the upright position

1. 清除臺板開孔附件的所有工具等物料。
2. 用左手扶住面板, 用右手輕輕的將縫紉機頭部返回至直立位置。
1. Clear away any tools, etc. which may be near the table holes.
2. While holding the face plate with your left hand, gently return the machine head to the upright position with your right hand.

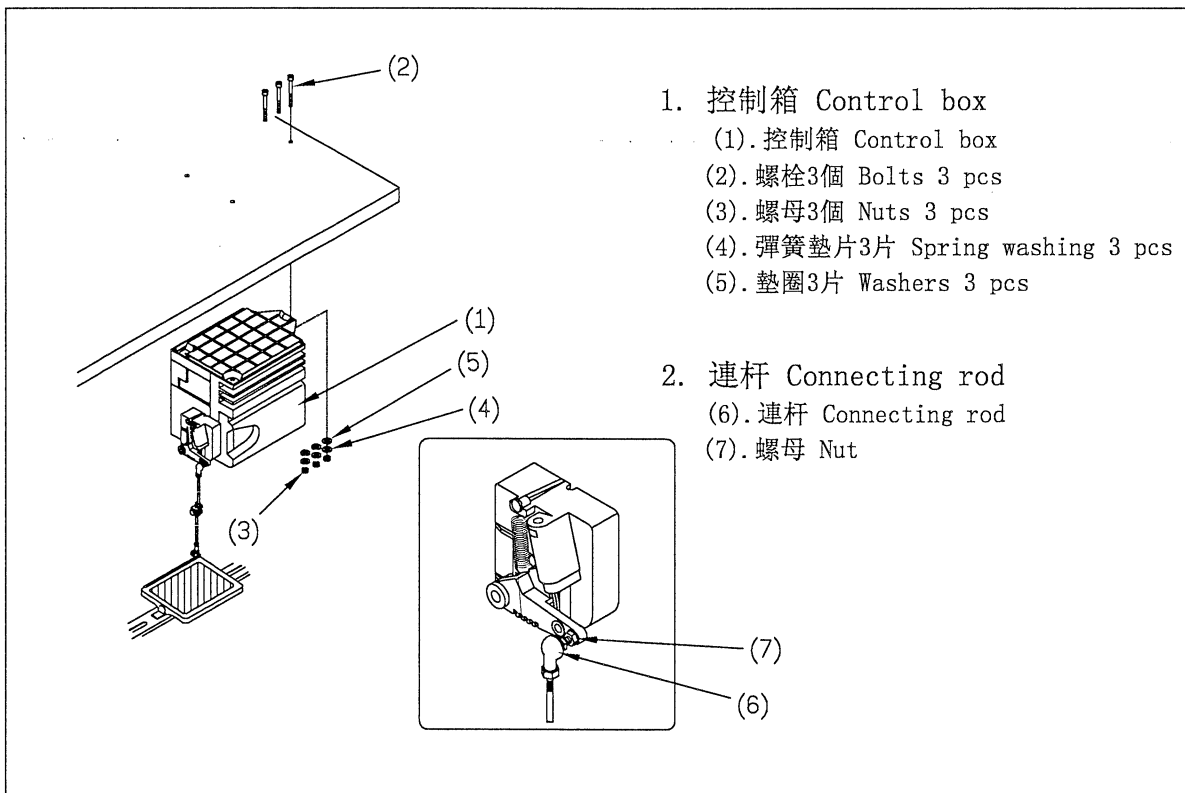


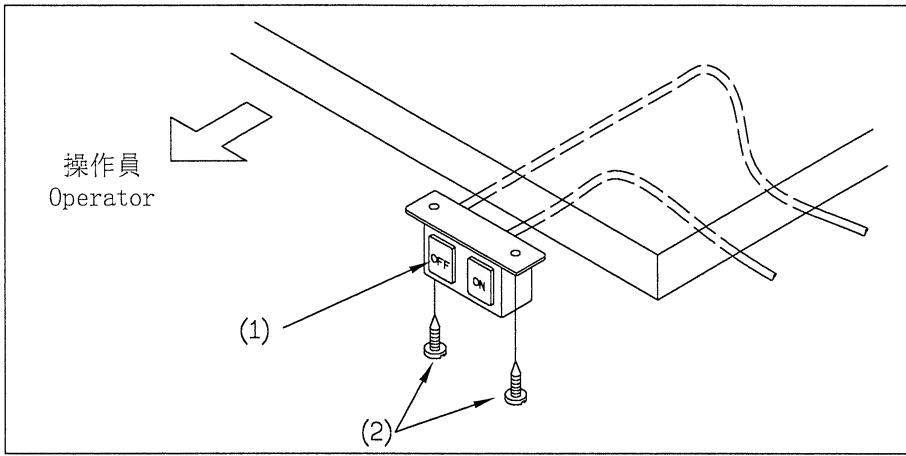
3-1. 臺板加工圖 Table processing diagram

- 臺板的厚度應達到40mm，能夠承受縫紉機的重量，並經得起縫紉機的振動。
- 請在如圖所示的位置上鑽孔
- The top of the table should be 40 mm in thickness and should be strong enough to hold the weight and with-stand the vibration of the sewing machine.
- Drill holes as indicated in the illustration below



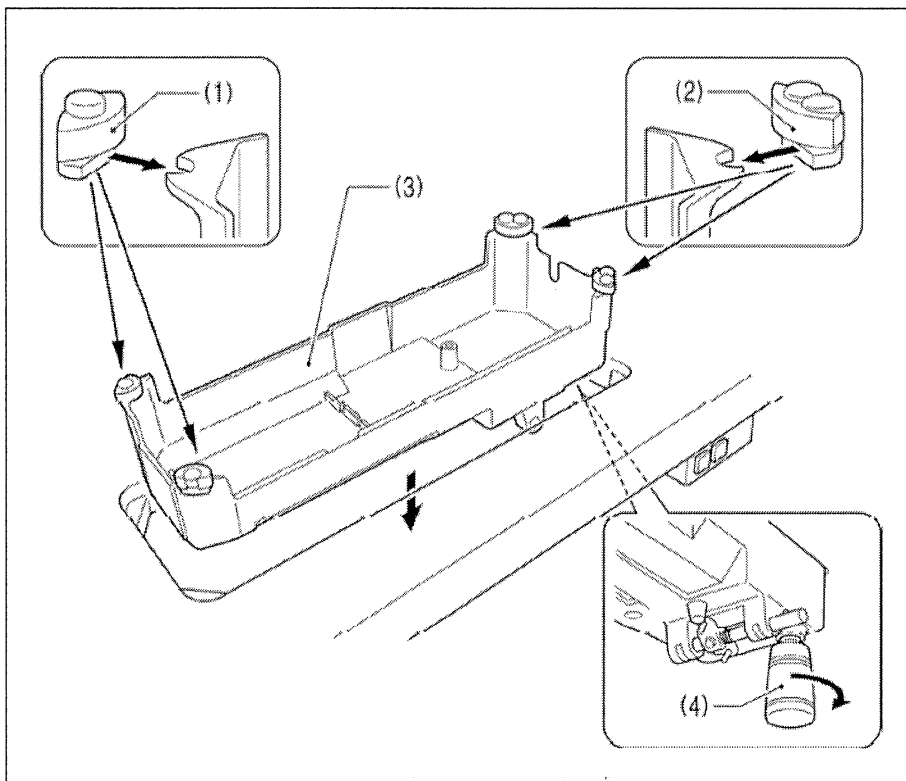
3-2. 安裝方法 Installation





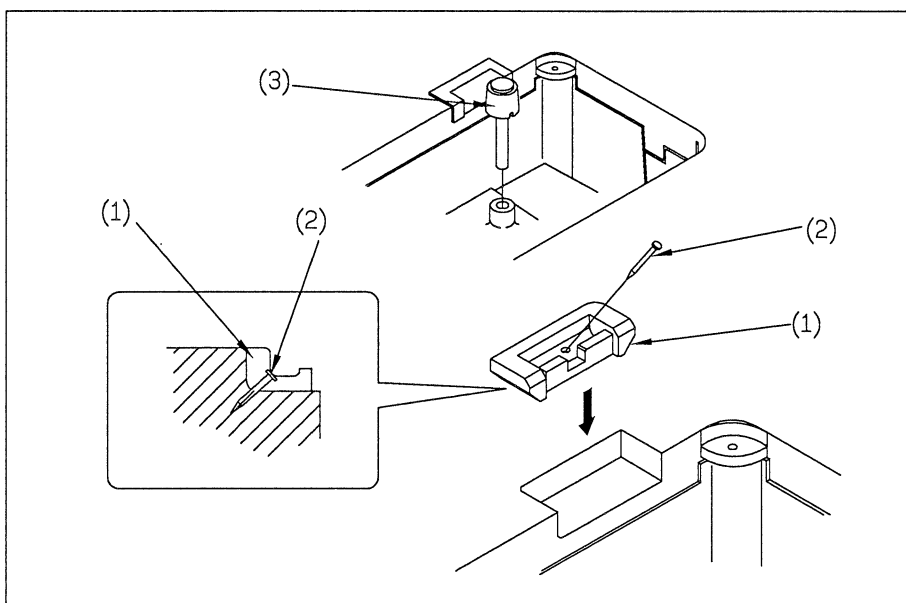
3. 電源開關 Power switch

- (1). 電源開關
- (2). 螺釘2個
- (1). Power switch
- (2). Screws 2 pcs



4. 油盤 Oil pan

- (1). 頭部防震墊塊(左)2個
- (2). 頭部防震墊塊(右)2個
- (3). 油盤
- (4). 注油器
- (1). Head cushions(left) 2 PCS
- (2). Head cushions(right) 2 PCS
- (3). Oil pan
- (4). Oiler



5. 機殼鉸鏈 Rubber cushions

- (1). 機殼鉸鏈套2個
- (2). 釘4個
- (1). Rubber cushions 2 PCS
- (2). Nails 2 PCS

6. 膝控提升杆 Knee lifter complying bar

- (3). 膝控提升杆
- (4). Knee lifter complying bar

7. 縫紉機頭部 Machine head

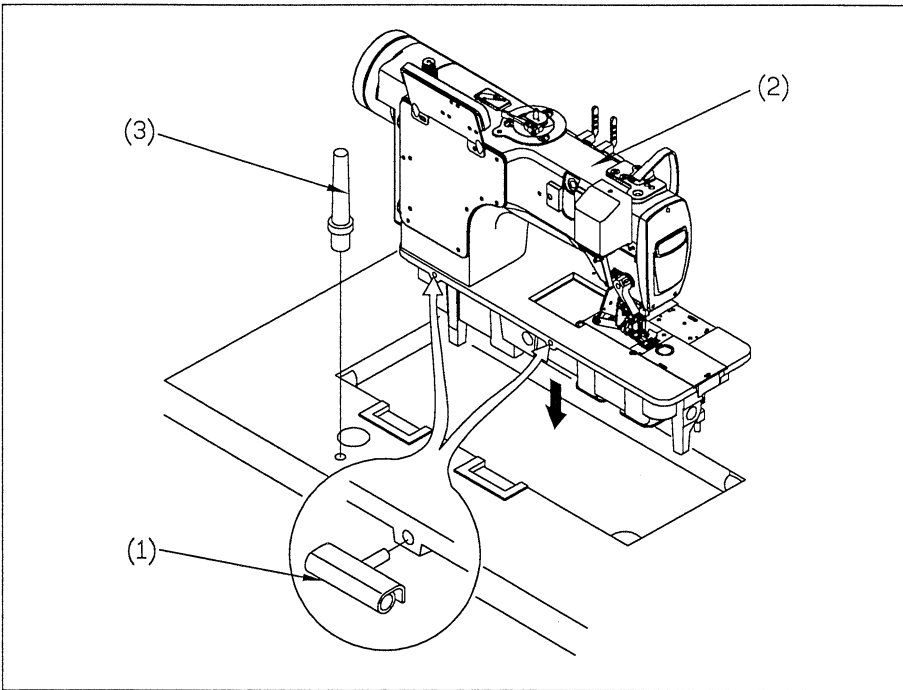
- (1). 機殼鉸鏈2個
- (2). 縫紉機頭部
- (3). 機頭支撐杆
- (1). Hinges 2 pcs
- (2). Machine head
- (3). Head rest

注意:

將機頭支撐杆(3)安全、穩定的插入臺板開孔。如果機頭支撐杆(3)未被插入到位,則縫紉機頭部在向後傾斜時因不夠穩定而發生危險。

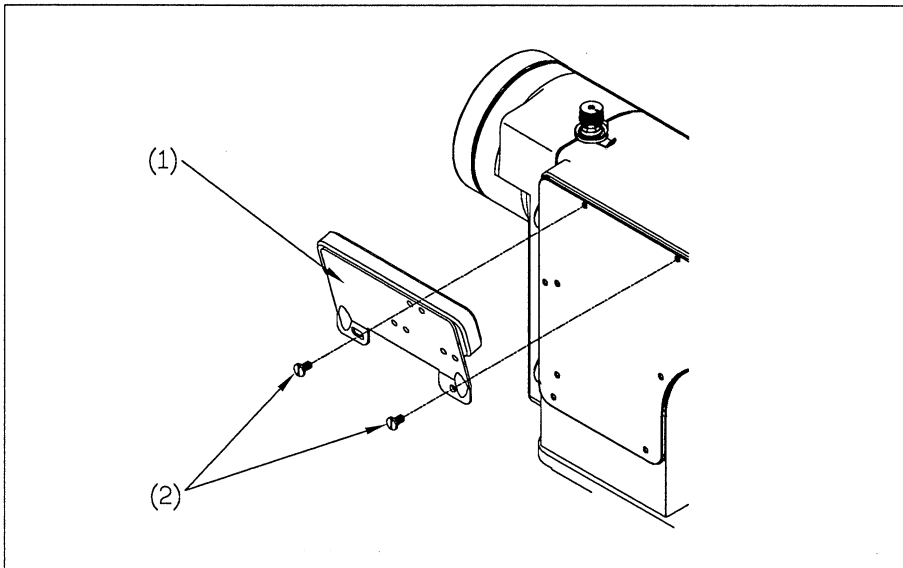
NOTE:

Tap the head rest (3) securely into the table hole, if the head rest (3) is not pushed in as far as it will go, the machine head will not be sufficiently stable when it is tilted back.



8. 操作盒 Operation panel

- (1). 操作盒
- (2). 螺釘2個
- (用螺釘把後蓋擰緊)
- (1). Operation panel
- (2). Screws 2 PCS
- (Use for tightening rear cover)



9. 線架 Cotton stand

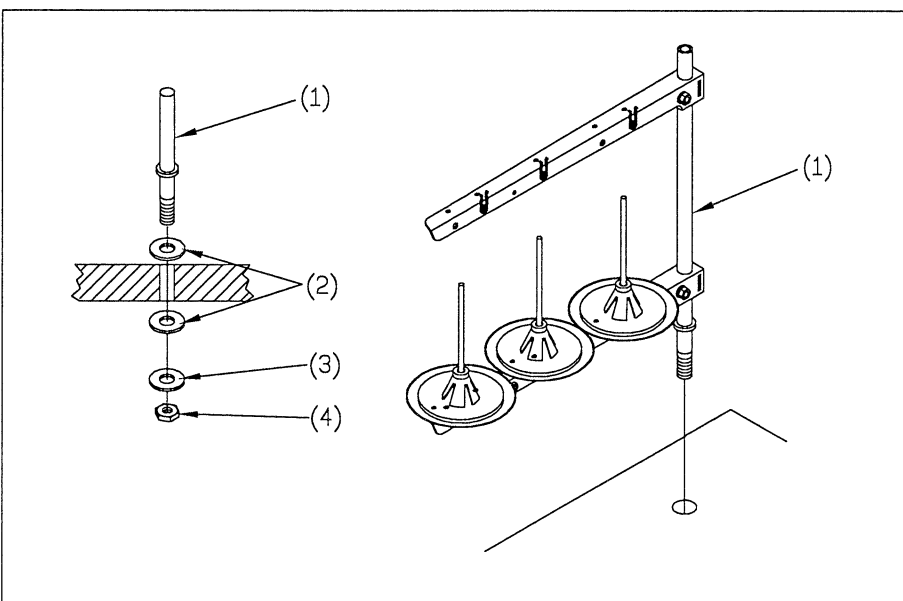
- (1). 線架
- (1). Cotton stand

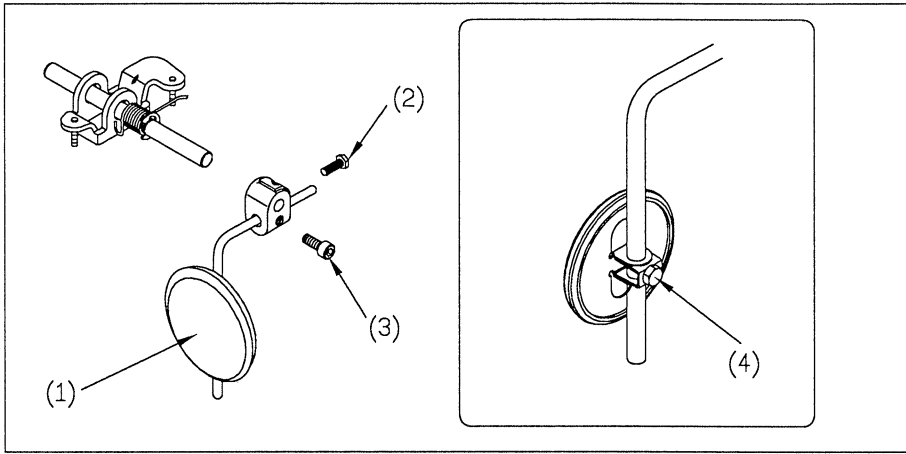
注意:

將螺母(4)擰緊以便將兩個機殼鉸鏈套(2)和墊片(3)加緊,使線架(1)不會活動。

NOTE:

Securely tighten the nut (4) so that the two rubber cushions (2) and the washer (3) are securely clamped and so that the cotton stand (1) does not move.



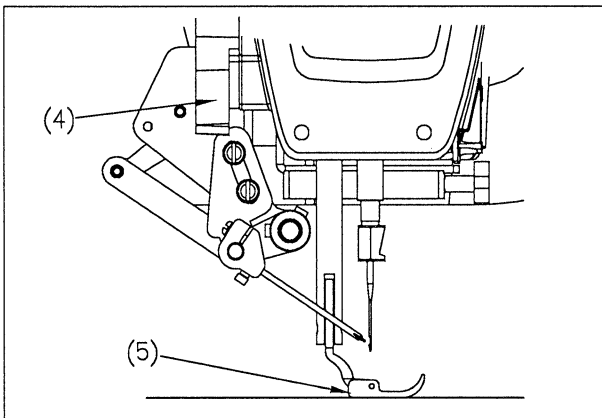


10. 膝控碰块 Knee lifter plate

- (1). 膝控碰块
- (2). 螺栓
- (1). Knee lifter plate
- (2). Bolt

* 鬆開螺栓(3)和螺栓(4), 將膝控碰塊(1)移至易于使用的位置。

* Loosen the bolt (3) and the bolt (4), and move the knee lifter plate (1) to a position where it is easy to use.



<調整抬押杠杆><Knee lifter adjustment>

(1). 轉動手輪以使送布牙處於針板的下方。

(2). 用壓腳扳手(4)放下壓腳(5)

(1). Turn the machine pulley so that feed dog is below the top of the needle plate.

(2). Lower the presser foot (5) by using the lifting lever (4).

(3). 鬆開螺母(6)。

(4). 轉動螺釘(8)進行調節, 以使用手在輕壓膝控碰塊(1)時抬壓杠杆(7)游隙量為2mm。

(5). 擰緊螺母(6)

(6). 鬆開螺母(9)

(7). 轉動螺釘(10)值至螺釘頭與抬壓杠杆(7)的間隙為5mm

(8). 轉動調節螺釘(10)進行調節, 以便在完全壓下膝控碰塊(1)時, 壓腳(5)處在針板上方13mm範圍內的位置

(9). 完成調節後, 將螺母(9)擰緊。

(3). Loosen the nut (6).

(4). Turn the screw (8) to adjust so that amount of play in the knee

lifter (7) is approximately 2mm when the knee lifter plate (1) is gently pressed.

(5). Securely tighten the nut (6)

(6). Loosen the nut (9)

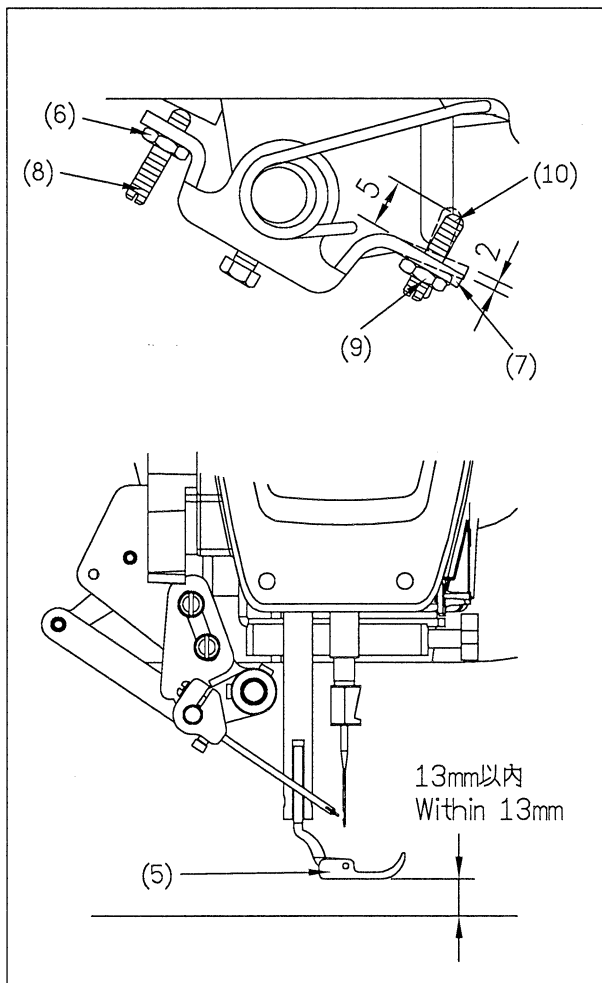
(7). Turn the screw (10) until the distance between the end of the

screw (10) and the knee lifter (7) is approximately 5mm

(8). Turn the adjusting screw (10) to adjust so that the presser foot

(5) is at the desired position within a distance of 13mm of the needle plate when the knee lifter plate (1) is fully pressed.

(9). After adjustment is completed, securely tighten the nut (9).

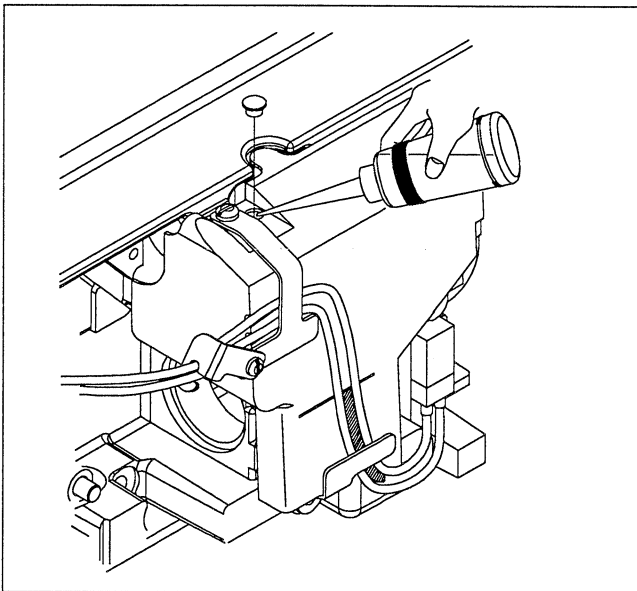


3-3. 加油方式 Lubrication

⚠ 注意 CAUTION

- ⊘ 在加油未完成前，請勿插上電源。
當誤按啟動開關時，縫紉機動作會導致人員受傷。
- ⊘ 使用潤滑油和黃油時，務必帶好保護眼睛和保護手套等，以防潤滑油落入眼睛中或粘在皮膚上，這是引起發炎的原因。
另外，潤滑油和黃油不能飲用，否則會引起嘔吐或腹瀉。
將油放在小孩拿不到的地方。
- ⊘ Do not connect the power cord until lubrication has been completed, otherwise the machine may if the treadle is depressed by mistake, which could result in injury.
- ⊘ be sure to wear protective goggles and gloves when handling the lubtcatng oil and grease, so that they do not get into your eyes or onto your skin. otherwise inflammation can result.
Furthermore, do not drink the oil or eat the grease under any circumstances, as they can cause vomiting and diarrhea.
keep the oil out of the reach of children.

- . 必須經常潤滑縫紉機，第一次使用縫紉機或長時間未使用縫紉機時，要補充機油。
- . 請使用規定的潤滑油。
- . The sewing machine should always be lubricated and the oil supply replenished before it is used for the first time, and also after long periods of non-use.
- . Use only the lubricating oil



〈給油蓋添加機油〉〈Lubricating via the oil cover〉

1. 向後傾斜縫紉機機頭。
2. 拆下橡皮塞(1)。
3. 用隨帶的油壺(2)給油蓋添加(3)添加潤滑油，直至液位達到基準線(4)位置。

注意：

添加潤滑油時請不要超過基準線(4)。否則等縫紉機頭部倒下時，潤滑油可能會溢出。

4. 將橡皮塞(1)裝回原處。
5. 將縫紉機頭部返回至原位。

* 當潤滑油液位下降到油量計視窗(5)的下部(6)以下時，請務必補充潤滑油。

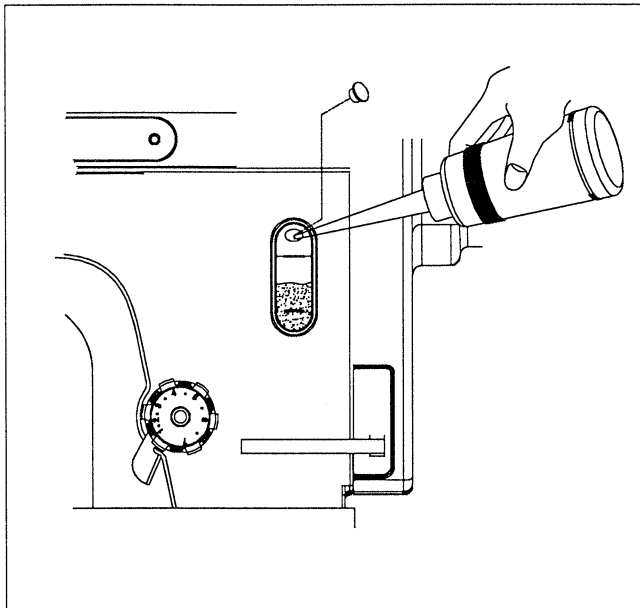
1. Tilt back the machine head
2. Remove the rubber cap (1)
3. Use the accessory oiler (2) to pour lubricating oil into the oil cover (3) until the lever reaches the reference the reference line (4).

NOTE:

Do not fill with lubricating oil past the reference line (4), if you pour in too much lubricating oil, it may spill out when the machine head is tilted back.

4. replace the rubber cap (1)
5. Return the machine head drop to its original position

* If the lubricating oil level drops the bottom (6) of the oil gauge window (5), be sure to add more oil.



<給油箱添加機油><Lubricating via the oil tank>

1. 拆下橡皮塞(1)。
2. 用隨帶的油壺(2)給油蓋添加(3)添加潤滑油，直至液位達到基準線(4)位置。
3. 將橡皮塞(1)裝回原處。

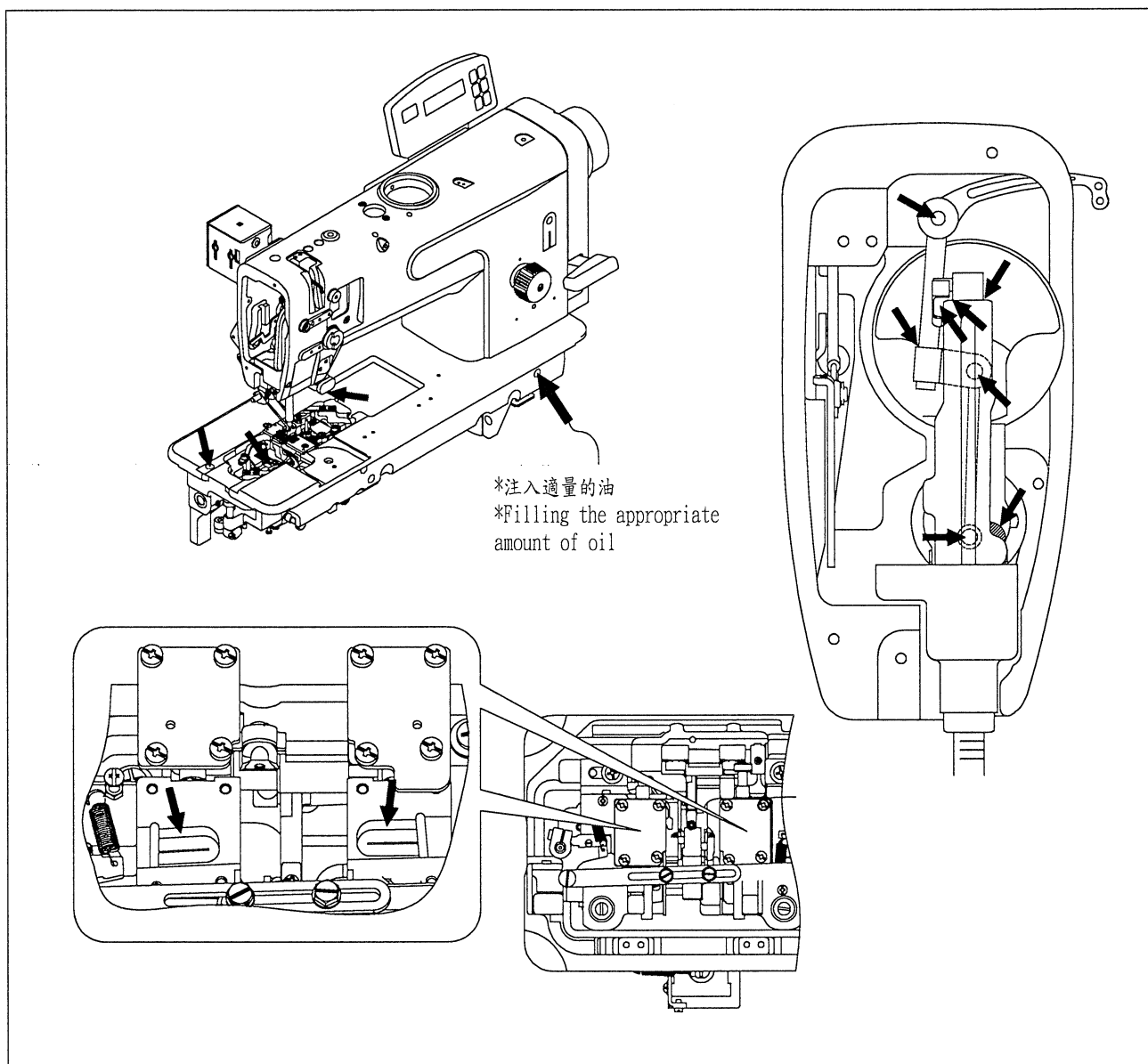
* 當潤滑油液位下降到油量計視窗(5)的下部(6)以下時，請務必補充潤滑油。

1. Remove the rubber cap (1)
2. Use the accessory oiler (2) to pour in lubricating oil until the oil lever reaches the top reference line (4) of the oil gauge window (3)
3. Replace the rubber cap (1)

* If the lubricating oil lever drops below the bottom reference line (5), be sure to add more oil.

■ 注油 Lubrication

在每個箭頭標記處注入1-2滴潤滑油。 Apply 1-2 drops of oil to the places indicated by the arrows



3-4. 連接電纜 Connecting the cords

⚠ 危險 DANGER



打開控制箱蓋時，先關閉電源開關將電源插頭從插座上拔下來，至少等待5分鐘後，再打開控制箱蓋。觸摸帶有高電壓的區域將會造成人員受傷。

Wait at least 5 minutes after turning off the power switch and disconnecting the power cord from the wall outlet before opening the face plate of the control box. touching areas where high voltages are present can result in severe injury.

⚠ 注意 CAUTION



請委託購買商店或電氣專業人員進行電氣配線、



在安裝完成前，請不要連接電源，如果誤按啟動開關。縫紉機動作會導致受傷。



必須接地

接駁地線不牢固，是造成觸電或誤動作的原因。

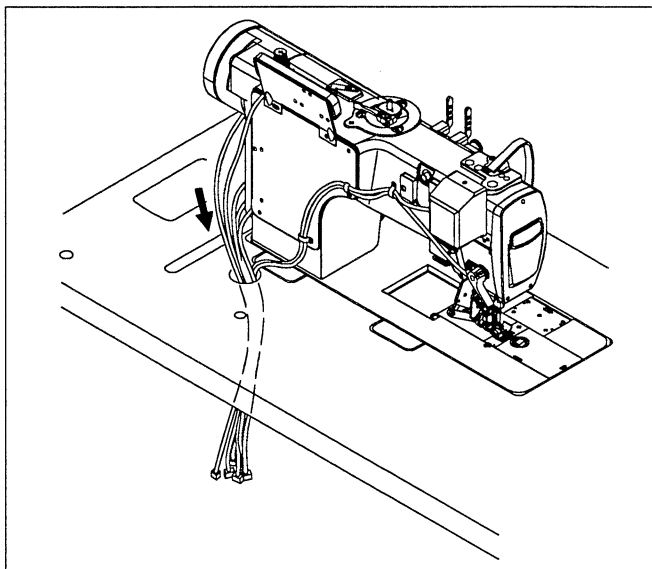
Contact your brother dealer or a qualified electrician for any electrical work that may need to be done

Do not connect the power cord until all cords have been connected

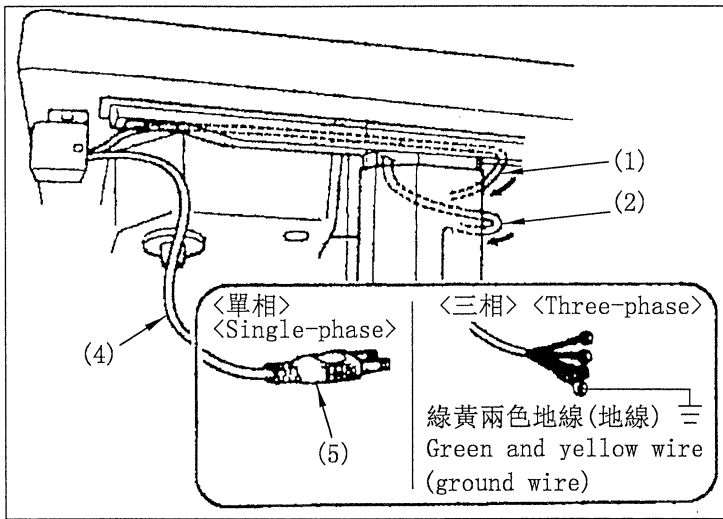
The machine may operate if the treadle is depressed by mistake, which could result in injury

Be sure to connect the ground, if the ground connection is not secure, you run a high risk of receiving a serious electric shock, and problems with correct may also occur.

3-4-1. 連接電纜 Connecting the cords



1. 縫紉機線纜
1. Sewing machine cords



2. 其他線纜 Other cords

- (1). 6針電源插頭
- (2). 4針馬達插頭
- (3). 護線用線夾
- (4). 電源線

<適用於單相規格>

把電源插頭(5)插入插座

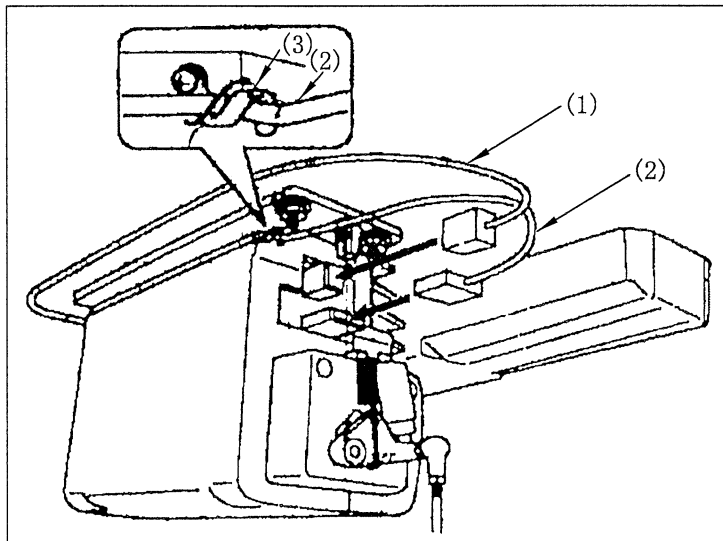
<適用於三相規格>

1. 在電源線(4)上加裝適當的插頭。
(綠黃兩色線為地線)
2. 將插頭正確的插入AC電源插座。

注意:

勿使用延長線, 否則會導致縫紉機故障。

- (1). 6-pin power supply connector
- (2). 4-pin motor connector
- (3). wire clip
- (4). power cord



<For single-phase specifications>

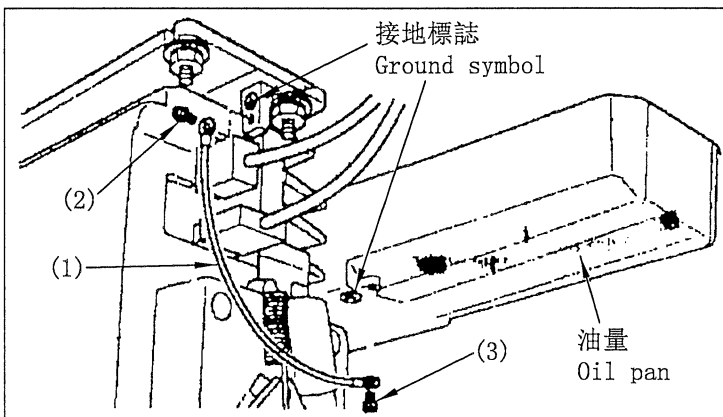
insert the power cord plug (5) into a wall outlet.

<For three-phase specifications>

1. Attach an appropriate plug to the power cord (4). (The green and yellow wire is the ground wire)
2. Insert the plug into a properly-grounded AC power supply

NOTE:

Do not use extension cords otherwise machine operation problems may result.



3. 地線 Ground wire

- (1). 地線
- (2). 螺釘【帶有墊圈】
- (3). 螺釘
- (1). Ground wire
- (2). Screw 【With washer】
- (3). Screw

注意: 請一定要接地線(1), 不接地線是造成縫紉機誤操作的原因。

NOTE: Always be sure to connect the ground wire (1), otherwise problems may occur sewing machine operation.

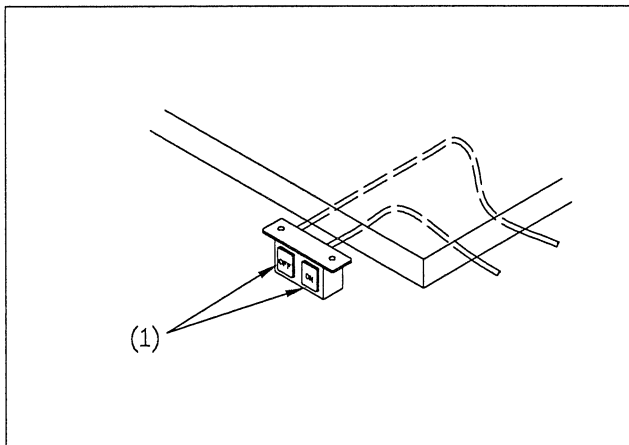
3-5. 操作測試 (腳踏板的操作方法) Test operation (operating the treadle)

注意 CAUTION



縫紉過程中，不要觸碰任何運動部件或將物件靠在運動部件上，因為這會造成人員受傷或縫紉機損壞。

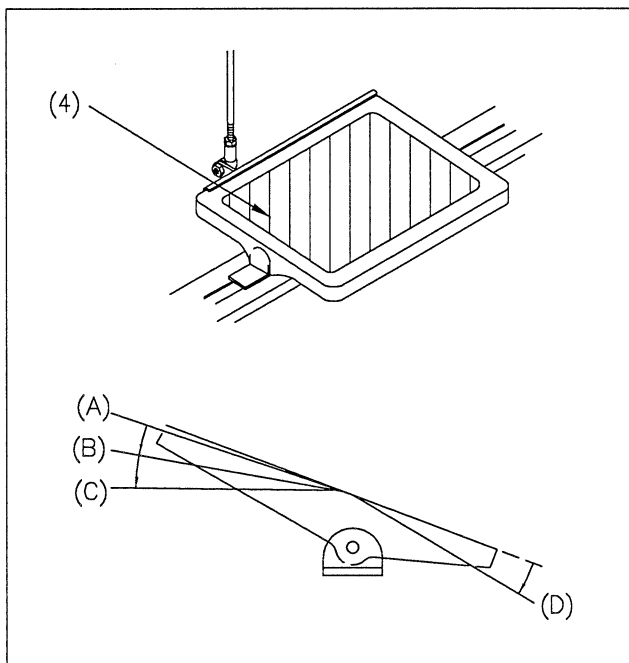
Do not touch any moving parts or press any objects the machine while sewing, as this may result in personal injury or damage to the machine.



<打開電源> <Turning on the power>

按ON(打開)電源開關(1)

Press the ON power switch (1)



<操作測試> <Tset operation>

1. 檢查將腳踏板(4)輕壓到位置(B)時縫紉機的低速縫紉狀態。
 2. 更進一步將腳踏板(4)輕壓到(C)時縫紉機的高速縫紉狀態。
 3. 向前壓下腳踏板(4)後，檢查在腳踏板(4)返回到空檔位置(A)時機針是否降至針板下。(當已設置機針向下位置時)
 4. 如果將腳踏板(4)壓到位置(D) (如果備有剪線功能則在剪線後)，隨後機針升至針板上方並停止。
1. Check that the machine sews at low speed when the treadle (4) is gently pressed to position (B).
2. Then check that it sews at high speed when the treadle (4) is gently pressed to position (C)
3. After pressing the treadle (4) forward, check that the needle (4) lowered to the top of the needle plate when the treadle (4) is returned to the neutral position (A). (when needle down stopping has been set)
4. If the treadle (4) is pressed to position (D). (thread trimming is carried out for models with thread trimmer), and the needle rises above the needle plate and stops.

4. 縫紉前的準備。PREPARATION BEFORE SEWING

4-1. 機針的安裝方法。Installing the needle

⚠ 注意 CAUTION

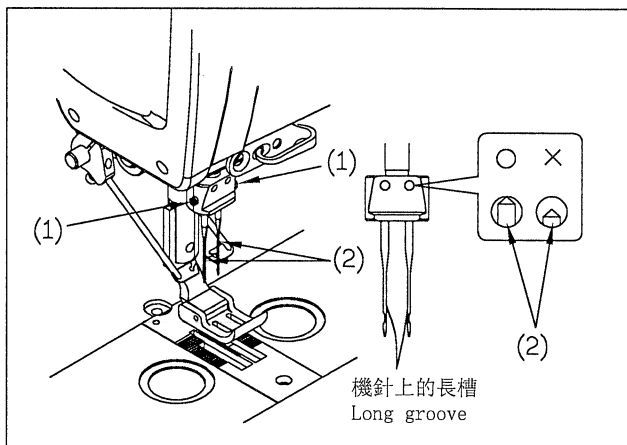


安裝機針前，請切斷電源

當誤按動啟動開關時，縫紉機動作會導致人受傷

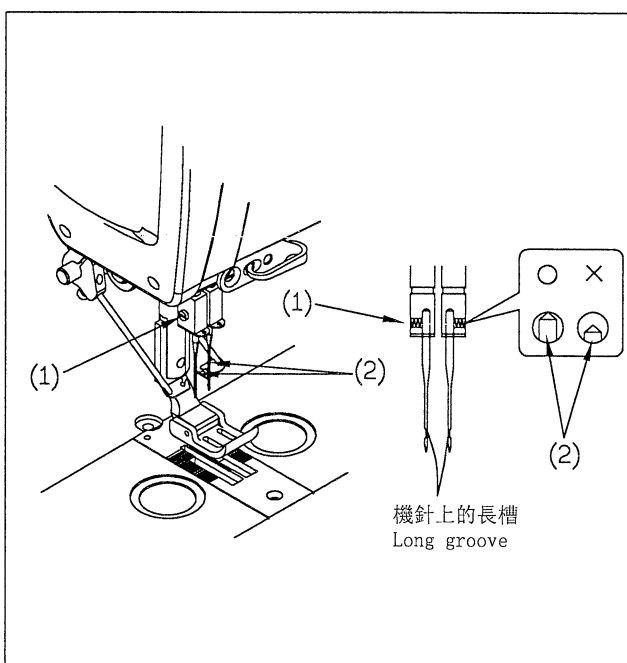
Turn off the power switch before installing the needle

The machine may operate if the treadle is depressed by mistake, which could result in injury.



1. 轉動縫紉機手輪，將針杆移至最高位置
2. 鬆開螺釘(1)
3. 將機針(2)上的長槽朝內側，筆直插到底並擰緊止動螺釘(1)

1. Turn the machine pulley to move bar to its highest position.
2. Loosen the screws (1)
3. Insert the needle (2) straight in as far it will go so that the long groove is facing inward, and then securely tighten the screws (1)



<操作測試> <Test operation>

1. 檢查將腳踏板(4)輕壓到位置(B)時縫紉機的低速縫紉狀態。
 2. 更進一步將腳踏板(4)輕壓到(C)時縫紉機的高速縫紉狀態。
 3. 向前壓下腳踏板(4)後，檢查在腳踏板(4)返回到空槽位置(A)時機針是否降至針板下。(當已設置機針向下位置時)
 4. 如果將腳踏板(4)壓到位置(D) (如果備有剪線功能則在剪線後)，隨後機針升至針板上方並停止。
1. Check that the machine sews at low speed when the treadle (4) is gently pressed to position(B).
 2. Then check that it sews at high speed when the treadle (4) is gently pressed to position(C)
 3. After pressing the treadle (4) forward, check that the needle (4) lowered to the top of the needle plate when the treadle (4) is returned to the neutral position (A). (when needle down stopping has been set)
 4. If the treadle (4) is pressed to position (D). (thread trimming is carried out for models with thread trimmer), and the needle rises above the needle plate and stops.

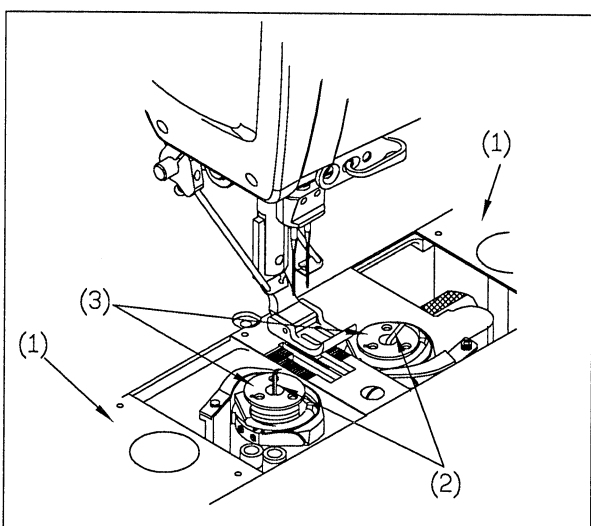
4-2. 梭芯的裝拆方法 Removing the bobbin

⚠ 注意 CAUTION



取出梭芯時，請切斷電源
當誤按動啟動開關時，縫紉機動作會導致人員受傷。

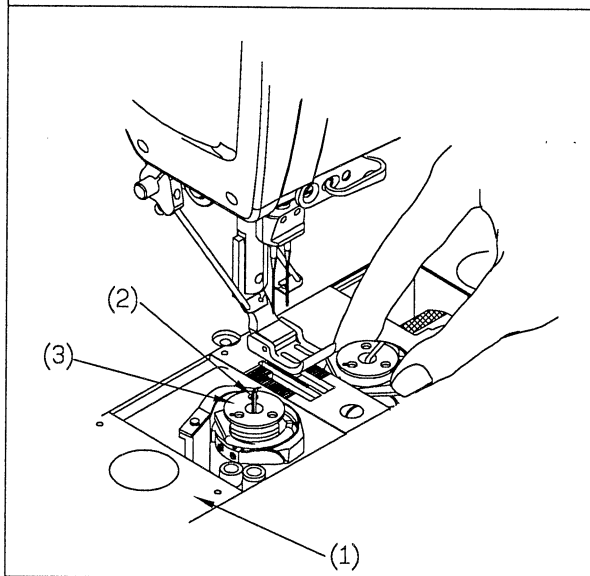
Turn off the power switch before removing the bobbin
The machine may operate if the treadle is depressed by mistake, which could result in injury.



〈掛鉤式〉〈Latch type〉

1. 將滑板(1)左右分開
2. 將旋梭的握手(2)提起之後，取出梭芯(3)

1. Open the slide plate (1) by moving them to the right and left.
2. Pull the rotary hook latches (2) upward then remove the the bobbins (3)



〈梭芯套式〉〈Bobbin case type〉

1. 將滑板(1)左右分開
2. 將旋梭的握手(2)提起之後，取出梭芯套(3)
3. 取出梭芯。

1. Open the slide plate (1) by moving them to the right and left.
2. Lift pull the latch (2) of the rotary hook, and then remove the bobbin case (3)
3. remove the bobbin

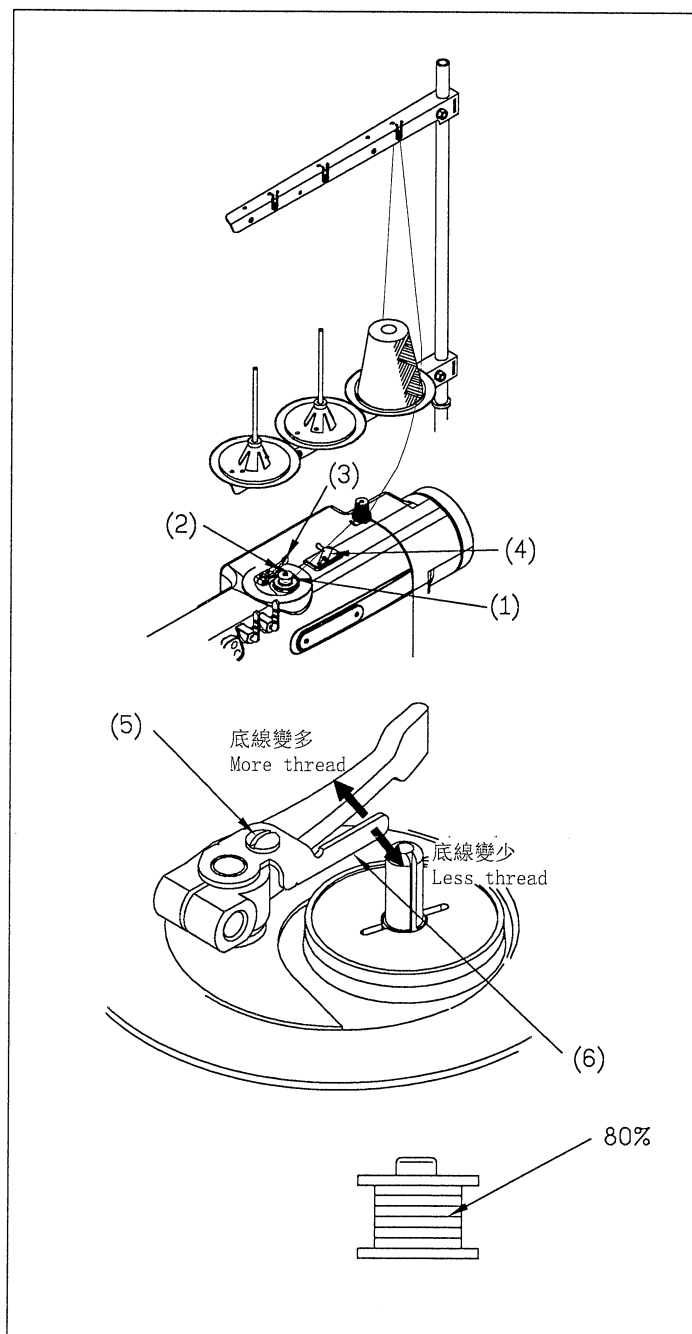
4-3. 底线的绕线方法 Winding the lower thread

⚠ 注意 CAUTION



在卷线过程中，不要触碰任何运动部件或将物件靠在运动部件上，因为这会导致人员受伤或缝纫机损坏。

Do not touch any moving parts or press any objects against the machine while winding the lower, as this may result in personal injury or damage to the machine.



1. 打开电源开关
2. 将梭芯(1)置于梭芯卷线轴(2)上
3. 按箭头所示的方向将线在梭芯(1)上卷绕几次
*请确认各部分的机线应没有鬆動
4. 将梭芯压臂柄(3)推向梭芯(1)
5. 用压脚扳手将压脚抬起
6. 踏下脚踏板，随即开始卷绕底线
7. 地线卷绕一旦完成，梭芯压臂柄(3)将自动返回
8. 底线卷绕之後，将梭芯拆下，用切刀(4)将线剪断

1. Turn on the power switch.
2. Place the bobbin (1) onto the bobbin winder shaft (2)
3. Wind the thread several times around the bobbin (1) in the direction indicated by the arrow
* Check that the thread is not loose anywhere along the thread path
4. Push the bobbin presser arm (3) toward the bobbin (1)
5. Raise the presser foot with the lifting lever
6. Depress the treadle, lower thread winding will then start
7. Once winding of the lower thread is completed, the bobbin presser arm (3) will return automatically.
8. After the thread has been wound on remove the bobbin and cut the thread with the knife (4)

*鬆開螺釘(5)，移動梭芯壓杆(6)調節卷繞在梭芯上的底線量。

注意：

卷繞在梭芯上的底線量最多應為梭芯容量的80%

*Loosen the screw (5) and move the bobbin presser (6) to adjust the amount of thread wound onto the bobbin.

NOTE:

The amount of thread wound onto the bobbin should be a maximum of 80% of the bobbin capacity.

4-4. 梭芯的裝取方法 Installing the bobbin

⚠ 注意 CAUTION

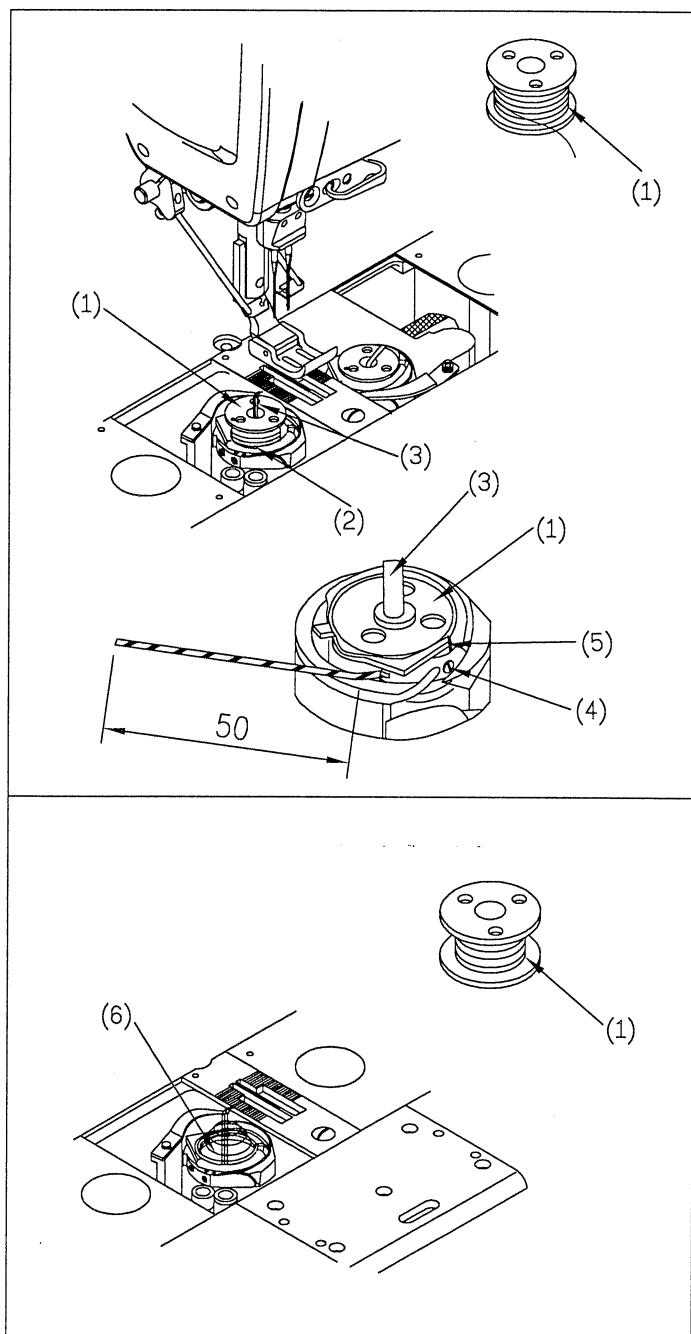


取出梭芯時，請切斷電源

當誤按動啟動開關時，縫紉機動作會導致人員受傷。

Turn off power switch before installing the bobbin

The machine may operate if the treadle is depressed by mistake which could result in injury



〈掛鉤式〉〈Latch type〉

1. 將線的繞向置於如圖所示方向，然後將梭芯(1)放在旋梭(2)內。
2. 將旋梭的捏手(3)倒下。
3. 轉動縫紉機的皮帶輪，使旋梭(2)轉到能見到張力彈簧(4)的位置
4. 將線穿過旋梭的線槽(5)，使它通過張力彈簧(4)的下面
5. 將線拉出約50mm
6. 關閉滑板

1. Insert the bobbin (1) into the rotary hook (2) so that the winder direction is as shown in the illustration
2. Return the rotary hook latch (3) to its original position
3. Turn the machine pulley to rotate the rotary hook (2) until the tension spring (4) is visible.
4. Pass the thread through slit (5) in the rotary hook and then pass it under the thread tensing spring
5. Pull out the thread to a length of approximately 50mm
6. Close the slide plates

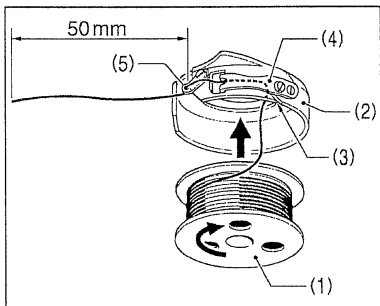
* 旋梭中有旋梭空轉防止簧(6)，旋梭空轉防止簧(6)可防止梭芯在剪線等情況下空轉。

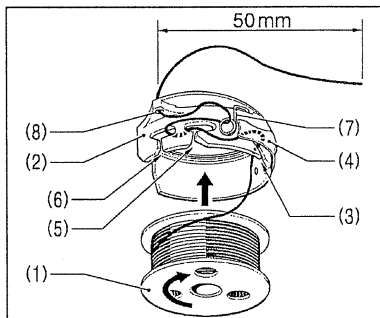
* 使用規格的輕合金製成的梭芯(1)

* There is an anti-spin spring (6) inside the rotary hook, the anti-spin spring (6) prevents the bobbin from racing at times such as during thread trimming.

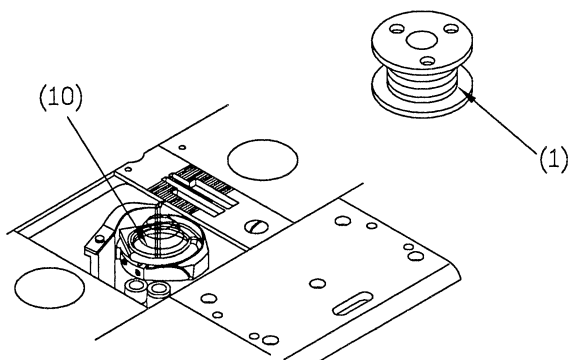
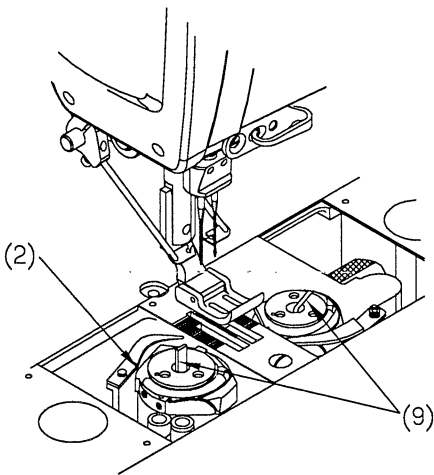
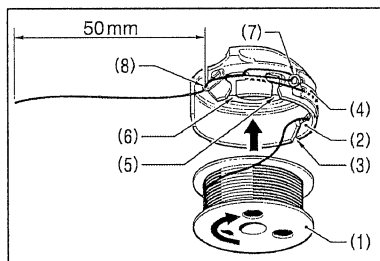
* Use bobbins (1) made of light alloy as specified

<A>





<C>



<梭芯套式> <Bobbin case type>

1. 將線的繞向置於如圖所示方向，然後將梭芯(1)放入梭芯套(2)內。

2. 梭芯套(2)有(A)、(B)、(C)三種

請根據所使用的梭芯套(2)的形狀，按下述進行穿線。

(A):

1). 將線穿過線槽(3)，是它通過張力彈簧(4)的下面

2). 將線穿過線孔(5)，並拉出約50mm

(B)、(C):

1). 將線穿過線槽(3)，是它通過張力彈簧(4)的下面

2). 將線穿過線槽(5)、(6)，使它勾在底線張力彈簧(7)

上

3). 將線穿過線孔(8)，將並拉出約50mm

3. 將梭芯套(2)放入旋梭內

4. 將旋梭的捏手(9)倒下

5. 關閉滑板

1. Insert the bobbin (1) into the bobbin case (2) so that the winder direction is as shown in the illustration

2. There are three of cap (2) (A)、(B) and (C):

Thread the thread by one of the following methods in accordance with the shape of the bobbin case (2) being using.

(A):

1). Pass the thread through slot (3) and under the thread tension spring (4)

2). Pass the thread through the thread hole (5) and pull out about 50mm

(B)、(C):

1). Pass the thread through slot (3) and under the thread tension spring (4)

2). Pass the thread slots (5) and (6), and then through the spring (7)

3). Pass the thread through the thread hole (8) and pull out about 50mm

3. Insert the bobbin (2) into the rotary hook

4. Push latch (9) of the rotary hook flat

5. Close the slide plates

* 旋梭中有旋梭空轉防止簧(10)，旋梭空轉防止簧(10)可防止梭芯在剪線等情況下空轉。

* 使用規格的輕合金製成的梭芯(1)

* There is an anti-spin spring (10) inside the rotary hook, the anti-spin spring (10) prevents the bobbin from racing at times such as during thread trimming.

* Use bobbins (1) made of light alloy as specified

4-5. 面線的穿法 Threading the upper thread



注意 CAUTION



在穿線過程中，請切斷電源

當誤按動啟動開關時，縫紉機動作會導致人員受傷。

Turn off power switch before threading the upper thread

The machine may operate if the treadle is depressed by mistake, which could result in injury

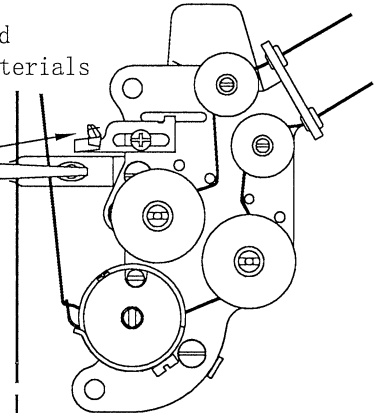
- * 在穿引面線之前轉動手輪，抬高挑線杆(1)，這樣會使穿引更加容易，並防止面線在縫紉開始前脫落。
- * 先穿左側的線。

* Turn the machine pulley and raise the thread take-up (1) before the thread, this will make threading easier and it will prevent the thread from coming out at the sewing start

- * Thread the left-side first.

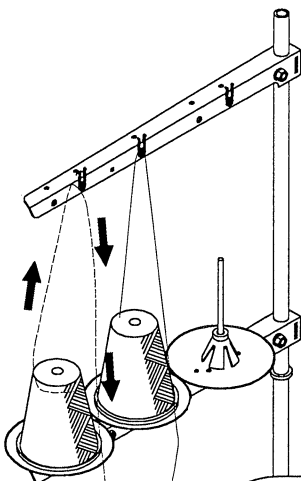
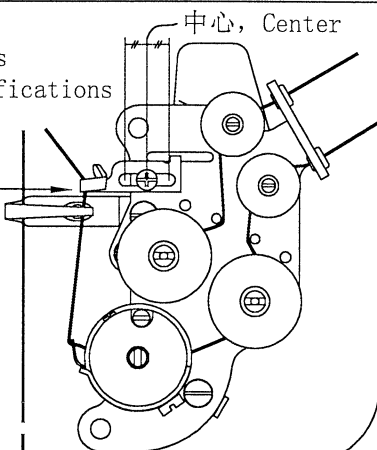
〈中厚料、厚料〉
Light-weight and heavy-weight materials

线不穿过
Do not pass the thread through



〈薄料. 女士内衣〉
Light materials foundation specifications

线穿过
Pass the thread through



如下所述，將張力盤鬆開，線就容易穿過

〈備有剪線功能〉

按下送線板 (2)

〈沒有剪線功能〉

按下松線板 (2)，或者用押腳扳手或膝控將押腳抬起。
If the tension discs are opened as follows, the thread will become easier to thread.

〈Models with thread trimmer〉

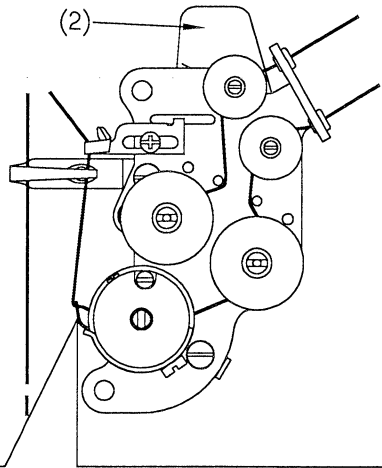
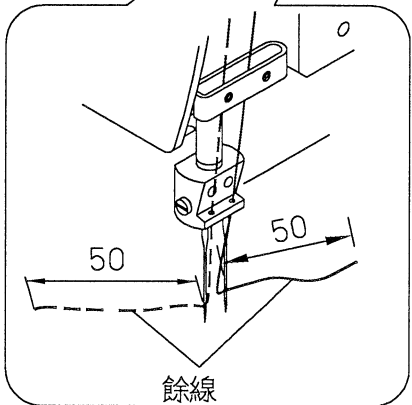
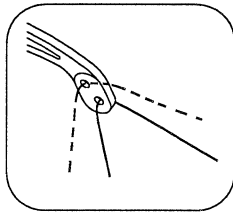
Press the tension release plate (2)

〈Models with thread trimmer〉

Press the tension release plate (2), or operate the lifting lever or the knee lifter the presser foot

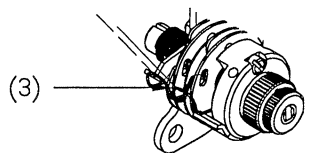
切實使線通過各張力盤之間

The thread can be passed securely in between the tension discs

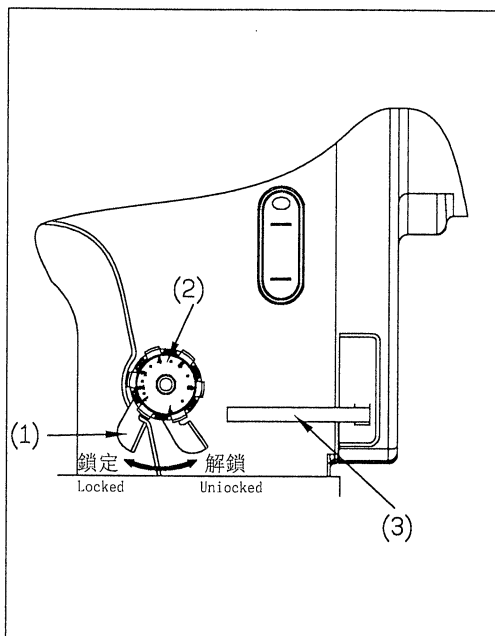


使線穿過鎖爪 (3) 的內側

Pass the thread on the inside of the tab (3)

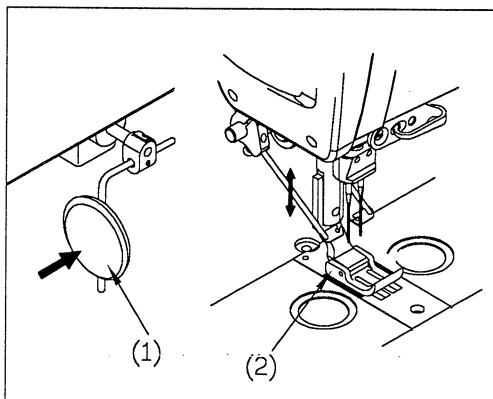


4-6. 針距的調節方法。 Adjusting the stitch length



1. 向右旋轉鎖住旋鈕扳手(1)直至聽到“喀嚓”聲，以解除鎖定。
 2. 順時針或逆時針轉動針距旋鈕(2)，使所需針距處在旋鈕最高的位置。
 - 數字越大，針距越大
 - (旋鈕上的數字用於參考值，實際的針距視縫紉面料的種類和厚度而定，在觀察縫紉好的針距的同時進行調節)
 - 按設定值從大到小的方向轉動針距旋鈕(2)同時，如果將倒縫扳手(1)推至中央位置，會使旋鈕轉動更加容易。
 3. 將鎖住旋鈕扳手(1)向左轉到底予以鎖定。
 - * 確認針距旋鈕(2)不能轉動
- 1.Unlock the stitch length dial (2) by turning the dial lock lever (1) to the right until a click is heard
 - 2.Turn the stitch length dial (2) clockwise or counter clockwise so that the desired stitch is at the uppermost position on the dial
 - The larger the number, the longer the stitch length will be (the numbers on the dial are for use as a guide ,the length of the finished stitches vary depending on the type and thickness of material being sewn, adjust while looking at the finished stitches.)
 - When turning the stitch length dial (2)from a larger setting to a smaller setting,it will be easier to turn the dial, if the reverselever (3) is pushed to the halfwaydown position
 - 3.Turn the dial lock lever (1) firmly to the left to lock the stitch length dial (2)
 - Check that the stitch length dial (2) does not rotate.

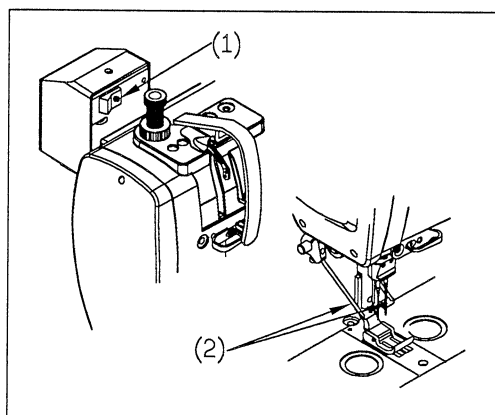
4-7. 膝控碰塊的使用方法 Using the knee lifter



1. 按動膝控碰塊(1). 可抬高押具(2)
- 1.The presser foot (2) can be raised by pressing the knee lifter plate (1)

4-8. 掃線裝置的使用方法 (僅限備有剪線功能)

Using the thread wiper (Models with thread trimmer only)



- 將掃線器開關(1)按至■側
線被剪斷後，用掃線杆(2)將線向上拉起
- Press the thread wiper switch (1) to the ■side
After thread trimming is carried out, the thread wiper (2) will pull up the thread

4-9. 角形縫製方法。Corner sewing method (T-8452, T-8752)

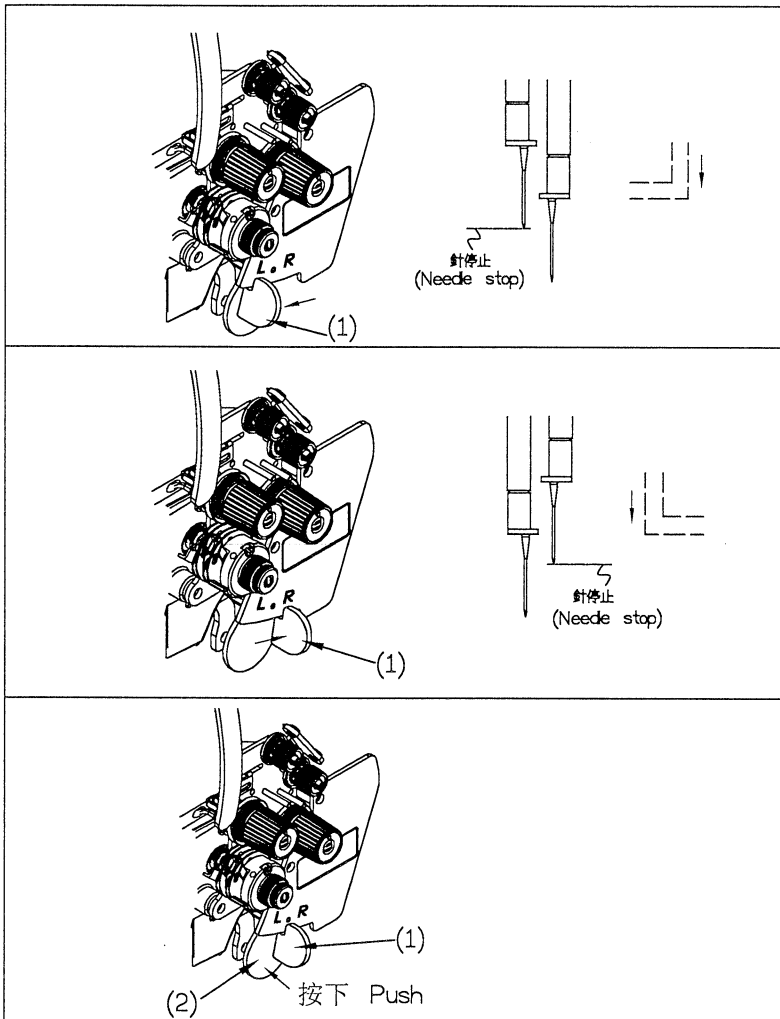
注意：

要想本縫紉機作為單針縫紉機使用時，請把不使用的一側的機針拆掉後再進行縫紉。請不要使用下述的針杆停止方法，否則可能會導致縫紉機損壞。

NOTE:

If using this machine in place of single-needle machine, remove the needle which is not being used. In such cases, do not use the procedures given below to stop the unused needle bar from moving. Otherwise damage to the machine may result.

4-9-1. 針杆(左、右)的停針方法 To stop the needle bars(right and left)



請在機針扎在步上的位置停止後再操作定位杆。
當一側的機針停止時，請將縫紉機速度控制在1000rpm以內。

Operate the stop lever after the needle has penetrated the material and has stopped moving.
Do not sew at speeds of over 1000rpm while one the needle bars been stopped

<左側定位杆的停止操作>

將定位杆(1)置於L位置

<To stop operation of the left needle bar>

Move the stop lever (1) to the "L" position

<右側定位杆的停止操作>

將定位杆(1)置於R位置

<To stop operation of the right needle bar>

Move the stop lever (1) to the "R" position

<要恢復雙針縫紉時>

將壓杆(2)按下

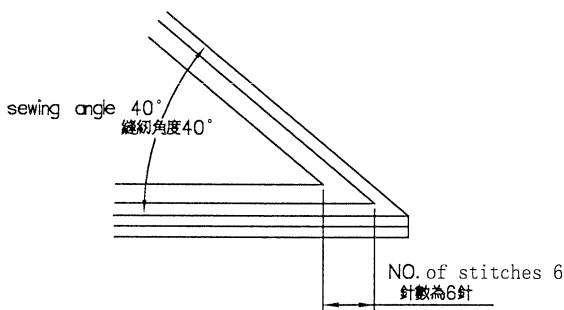
定位杆(1)將自動返回到原來的的位置

<To resume twin-needle sewing>

Press the push lever (2)

The stop lever (1) will then return to its original position automatically

4-9-2. 針數速查表 Lumber of stitches: quick-reference guide



縫紉角度 (Sewing angle) 針數 (NO. of stitches)	30°	40°	50°	60°	70°	80°	90°	100°	110°	120°	130°	140°
2					4.6	3.8	3.2	2.7	2.2	1.8	1.5	1.1
3			4.6	3.5	3.0	2.5	2.1	1.8	1.5	1.2		
4		4.4	3.4	2.8	2.3	1.9	1.6	1.3				
5	4.8	3.5	2.7	2.2	1.8	1.5	1.3					
6	4.0	2.9	2.3	1.9	1.5	1.3						
7	3.7	2.5	2.0	1.6								
8	3.0	2.2	1.7									

<針寬1/4的情況>

為了縫製出美麗的角形，請根據上表決定針跡長度。此外，通過決定縫製角度和針跡長度，就可知道一側1根針縫製的針數。

<For 1/4 needle width>

Determine the stitch length from the chart above to make beautiful corner stitching, the number of stitches of the outer needle varies according to the combination of sewing angle and stitch length. EXAMPLE: For a sewing angle of 40° and a stitch length of 2.9mm, the number of stitches becomes 6.

5. 縫紉 SEWING

! 注意



為了安全起見，在使用本縫紉機之前，請安裝保護裝置
如果為安裝這些安全裝置就使用縫紉機，會造成人身傷害及縫紉機的損壞



發生下列情況時，請切斷電源
否則誤按動啟動開關，縫紉機動作會導致受傷

- . 機針穿線時
- . 更換機針或梭芯時
- . 縫紉機不使用，或人離開縫紉機時



縫紉過程中，不要觸碰任何運動部件或將物件靠在運動部件上，因為這會導致人員受傷或縫紉機損壞



縫紉機頭倒下或豎起時，請用雙手進行操作。單手操作時因縫紉機的重量萬一滑落易導致受傷。

! CAUTION



Attach all safety devices before using the sewing machine, if the machine is used without these devices attached injury may result



Turn off the power switch at the following times
The machine may operate if the treadle is depressed by mistake, which could result in injury

- . When threading the needle
- . When replacing the bobbin and needle
- . When not using the machine and when leaving the machine unattended

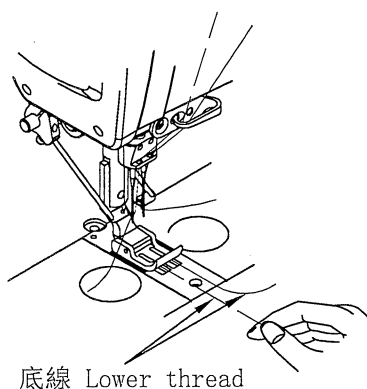


Do not touch any of the moving parts or press any objects against the machine while sewing, as this may result in personal injury or damage to the machine

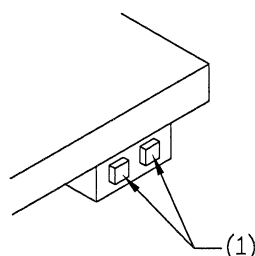


Use both hands to hold the machine head when tilting it back or returning it to its back or returning it to its original. if only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.

5-1. 縫紉 Sewing

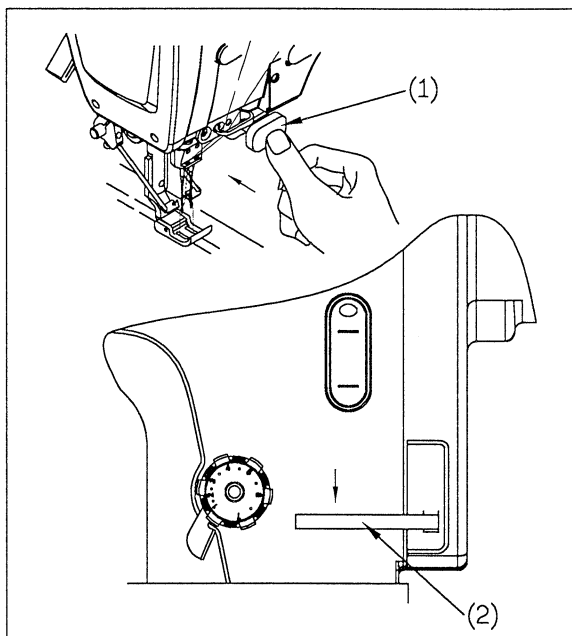


1. 一邊用手指握住面線2根，一邊用手把縫紉機手輪朝自己身邊方向轉動，以將底線拉到送布齒的上面
2. 將底線朝自己身邊方向拉，確認底線應能平穩的拉出。
1. While hold the two upper threads with your fingers, turn the machine pulley by hand toward you until the lower threads come out onto the feed dog.
2. Pull the lower threads toward you and check that they pull out smoothly.



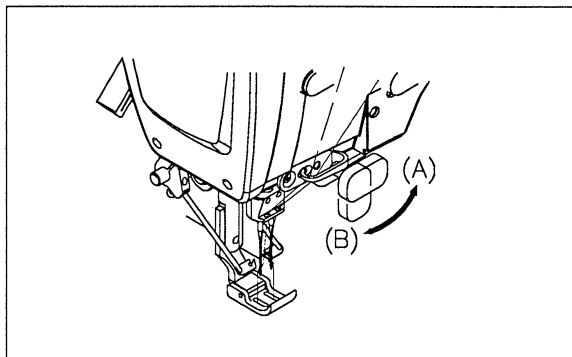
3. 按下ON(打開)電源開關(1)
Press the ON power switch (1)
4. 踏下腳踏板開始縫紉
Depress the treadle to start sewing

5-2. 倒縫加固的方法 Backtacking



按下倒縫裝置按鈕(1)或倒縫扳手(2)時，送料方向將會相反。釋放時，送料方向恢復正常。

When the actuator (1) or the reverse lever (2) is pressed during sewing, the feed direction will be reversed. when it is released, the feed direction will return to normal.



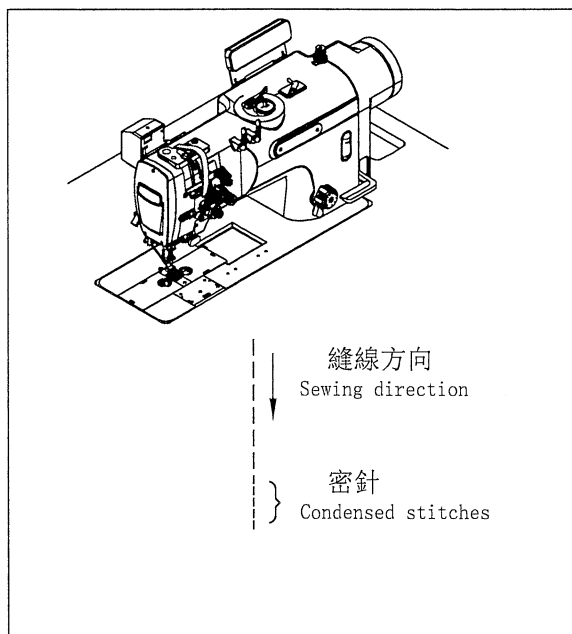
<倒縫裝置按鈕的旋轉功能>

倒縫裝置按鈕可以如圖所示旋轉90°，請將A和B設定在容易操作的位置。

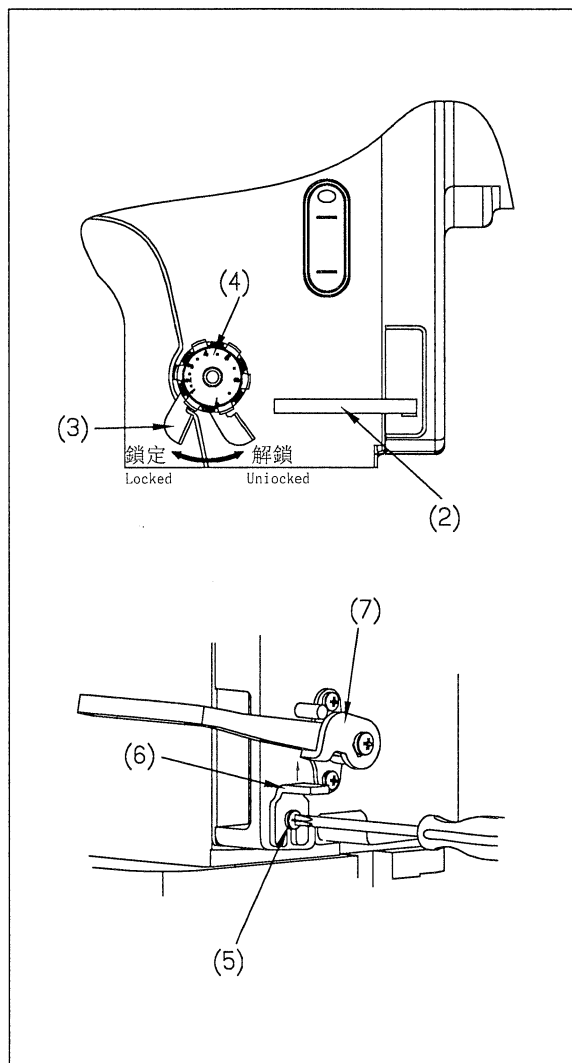
<Actuator rotation function>

The actuator can be rotated 90 degrees as shown in the lustration. select the position <A or B> that is easier to use

5-3. 縫紉密針的方法 Sewing condensed stitches



- . 如果縫紉時按調節器(1)或倒縫扳手(2)，可以用小的針跡長度縫紉針跡(前向)
- . 在縫紉前，如下所述為密針設定針跡長度
- . If you press the actuator (1) or the reverse (2) while sewing is in progress, you can sew stitches (forward direction) with small stitch lengths
- . Before carrying out sewing, set the length for condensed stitches as follows.



<設定>

1. 向右轉動鎖住旋鈕扳手(3)以進行解鎖
2. 把針距旋鈕(4)轉到將用於密針的針跡長度
3. 鬆開固定螺釘(5)，抬起手輪製動器(6)直至碰到倒縫扳手(7)為止
4. 擰緊固定螺釘(5)，並固定手輪製動器(6)

<Setting>

1. Unlock the stitch length dial (4) by turning the dial lock lever (3) to the tight
2. Turn the stitch length dial (4) to the stitch length to be used for condensed stitches
3. Loosen the screw (5) and lift up the stopper (6) until it touches the reverse stitching lever plate (7)
4. Tighten the screw (5) to secure the stopper (6)

<縫紉>

1. 把針距旋鈕(4)恢復到正常縫紉的針跡長度
2. 向左旋轉鎖住旋鈕扳手(3)予以鎖定
3. 開始縫紉
4. 在要開始密針縫紉的位置，按調節器(1)或倒縫扳手(2)，(按住調節器(1)或倒縫扳手(2)時進行密針縫紉)
- * 要停止密針縫紉，返回到倒縫功能時，請降下手輪製動器(6)直至碰不到倒縫扳手(7)為止。

<Sewing>

1. Return the stitch length dial (4) to the stitch length for normal sewing
2. Turn the dial lock lever (3) firmly to the left to lock the stitch length dial (4)
3. Start sewing
4. At the position where you would like to start sewing condensed stitches. press the actuator (1) or the reverse lever (2)

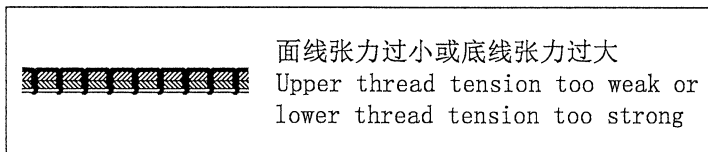
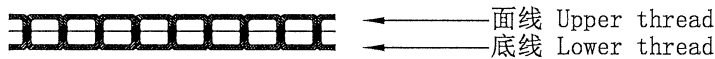
(Condensed stitches are sewn while the actuator (1) or reverse lever (2) is being pressed)

To stop sewing condensed stitches and return to using the backtack function. lower the stopper (6) so that it does not touch the reverse stitching lever plate (7).

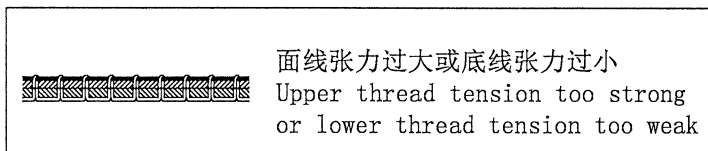
6. 縫紉效果 THREAD TENION

6-1. 调节线张力 Adjusting the thread tension

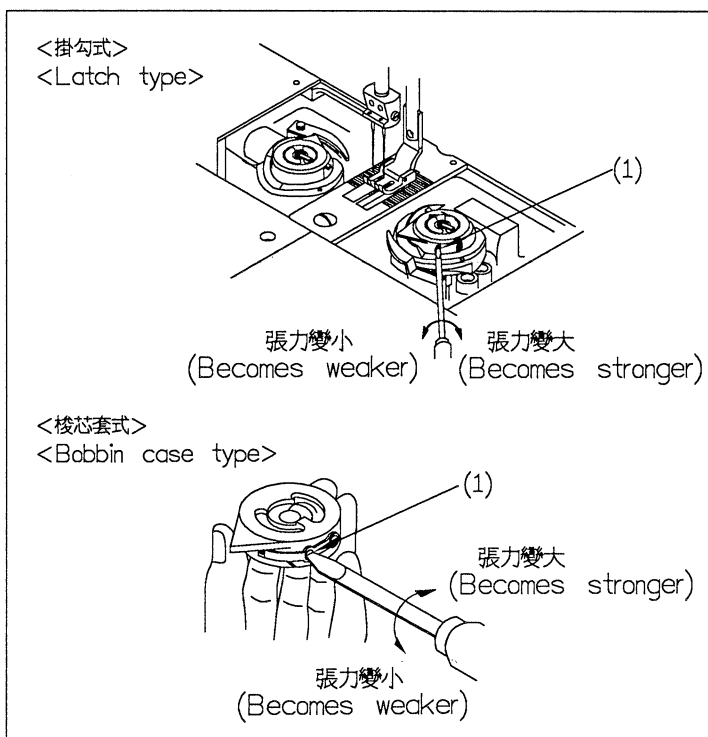
正确的针迹 Good even stitches



增大面线张力, 减少底线张力
Increase the upper thread tension. decrease the lower thread tension



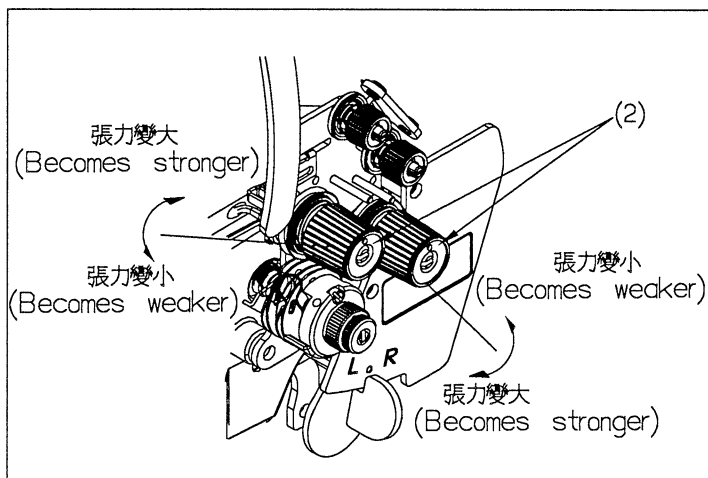
减小面线张力, 增大底线张力
Decrease the upper thread tension. increase the lower thread tension



<底线张力> <Lower thread tension>

注意 CAUTION
 在进行底线的张力调整前先关闭电源开关, 如果误踩下踏板, 缝纫机动作会导致人员受伤
 Turn off the power switch before adjusting the lower thread tension. The machine may operate if the treadle is depressed by mistake, which could result in injury.

转动底线张力螺丝(1)进行调节
Turn the adjusting screw (1) to adjust



<面线张力>

在底线张力调节之后, 调节面线张力以使针脚均匀平整。

1. 降下押具
2. 转动夹线螺母(2)进行调节

<Upper thread tension>

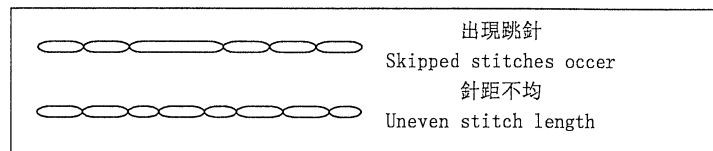
After the thread tension has adjusted, adjust the upper thread tension so that a good, even stitch is obtained

1. Lower the presser foot
2. Adjust by turning the tension nut (2)

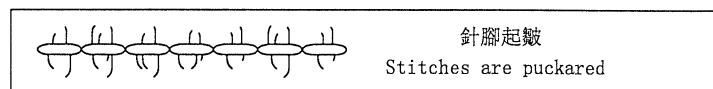
6-2. 调节壓腳壓力 Adjusting the presser foot pressure

正确的针迹 Good even stitches

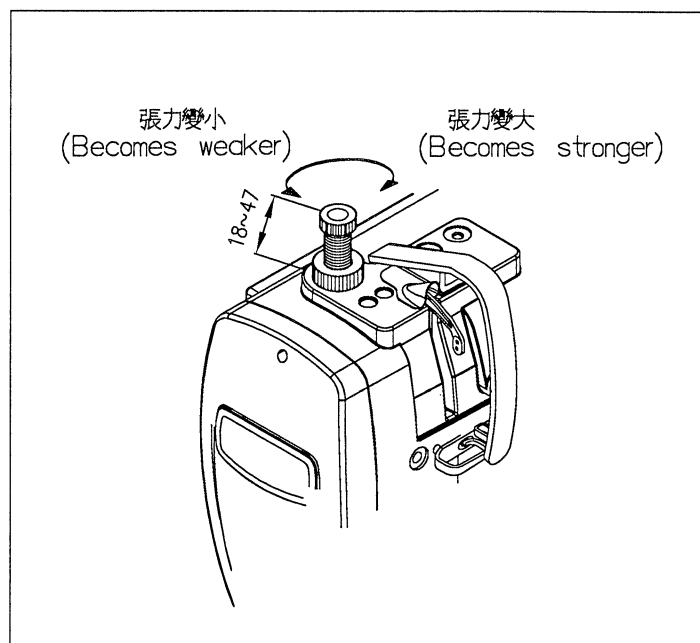
面线 Upper thread



增加壓力 Increase the pressure



減小壓力 Decrease the pressure



盡可能的減少押具壓力，但須有足夠壓力使面料不致滑動。(以下表的“押具調節螺釘高度”為大致標準進行調節)

1. 鬆開調節螺母 (1)
2. 轉動壓力調節螺桿 (2) 以調節押具壓力
3. 擰緊調節螺母 (1)

The presser foot pressure should be as weak as possible, but strong enough so that material does not slip. (Refer to “Adjusting screw height” in the table below as a guide to adjustment)

1. Loosen the adjusting nut (1)
2. Turn the presser adjusting screw (2) to adjust the presser foot pressure
3. Tighten the adjusting nut (1)

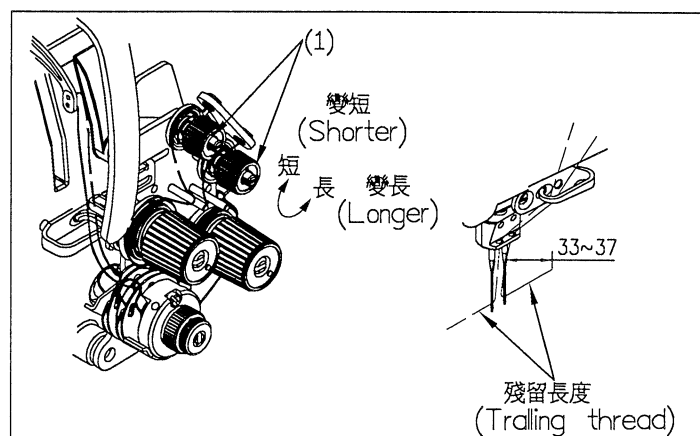
參考值 Reference values

用途	壓腳調節螺釘高度
女士內衣用	約34mm
適用較薄的和中厚的面料	約34mm
適用與較厚的面料	約29mm

Use	Adjusting screw height
For foundation	Approx:34mm
For light-weight and medium-weight materials	Approx:34mm
For heavy-weight materials	Approx:29mm

6-3. 剪線後面線殘留長度的調節 (僅限備有剪線功能)

Adjusting the trailing length after thread trimming (Models with thread trimming only)



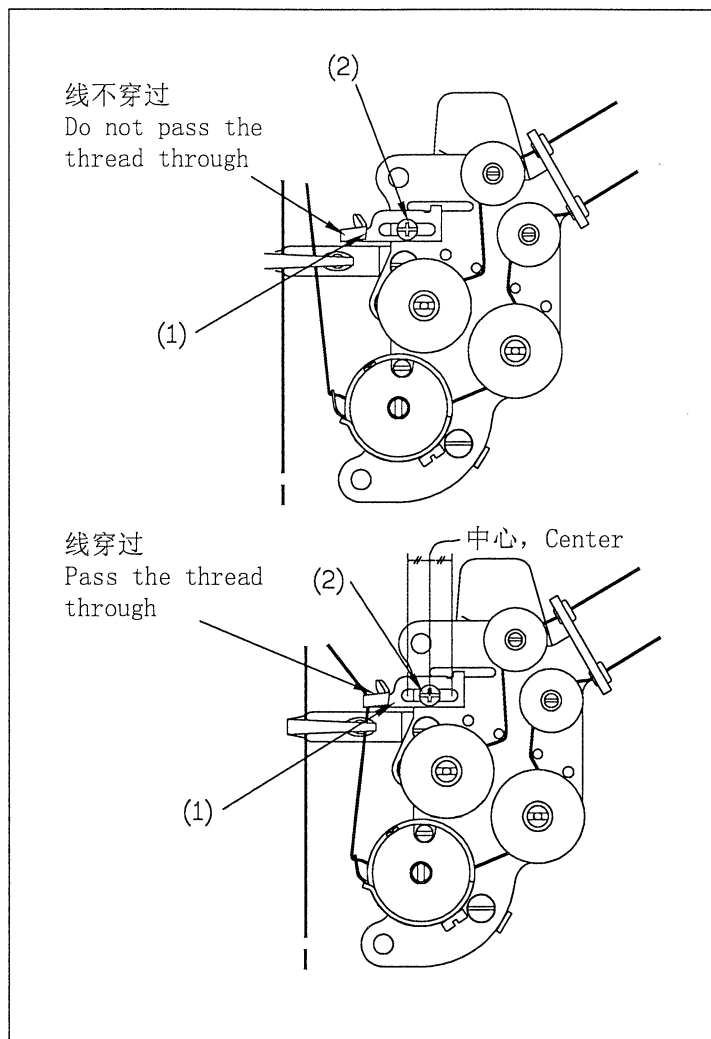
- 剪線時，線張力鬆弛，僅用夾線器 (1) 施加張力
- 面線的標準長度是33-37mm
- 如果增加夾線器 (1) 的張力，切線後面線殘留長度將會減少，減少張力，長度將會增加

轉動夾線器 (1) 進行調節

- At the time of thread trimming, the thread tension is loosened and tension is applied by the pretension (1) only.
- The standard trailing length for the upper thread is 33-37mm
- If the tension of the pretension (1) is increased, the lengths of the threads trailing from the needle tips will be reduced, if the tension is reduced, the lengths will be increased

Adjust by turning the prerension

6-4. 挑線量的調節 Adjusting the thread take-up amount



採用向線量調整器(1)穿過線的方法來調節挑線量

The thread take-up amount is adjusted by how the thread is passed through the thread amount adjuster (1)

〈標準線量調整器(1)的使用方法〉

〈Using the standard thread amount adjuster (1)〉

使線不穿過線量調整器(1)，鬆開固定螺釘(2)，將線量調整器(1)移向右侧

Do not pass the thread through the thread amount adjuster (1), loosen the screw (2) and slide the thread amount adjuster (1) to the right-side position

使線穿過線量調整器(1)

For foundation specifications Pass the thread through the thread amount adjuster (1)

The standard position of the thread amount adjuster (1) is when the screw (2) is in center of the adjustment range.

〈挑線量的調整〉

〈Adjusting the thread take-up amount〉

使線穿過線量調整器(1)進行調節，越將線量調整器(1)向右移則挑線量越少

When the thread has been passed through the thread amount adjuster (1), the thread take-up amount becomes less when the thread amount adjuster (1) is moved to the right

使線不穿過線量調整器(1)為較好的情況

It is better not to pass the thread through the thread amount adjuster (1):

- 用女士內衣規格的縫紉機縫製厚布料時
- 要加長針跡等而挑線量不夠時
- When sewing heavy materials using a sewing machine with foundation specifications
- When the thread take-up amount is not enough, such as, when the stitch length is increased

使線穿過線量調整器(1)為較好的情況

It is better to pass the thread through the thread amount adjuster (1):

- 使用帝特綸等易滑的機線時
- 縫製薄的布料時
- 以2mm以下的針跡長度進行縫紉時
- 在以上述3種條件進行縫紉的情況下，為了防止發生跳線，毛巾針跡等機線鬆緊不良和斷線時
- When sewing with slippery thread such as synthetic yarns
- When sewing light materials
- When sewing with a stitch length of 2mm or less
- When sewing under any of the above three conditions and you would like to prevent skipped stitches, thread tightening problems such as looping, or thread breakages.

7. 保養 CLEANING

⚠ 注意 CAUTION



在開始清潔前，請切斷電源
當誤按動啟動開關時，縫紉機動作會導致人員受傷



使用潤滑油和黃油時，務必戴好保護眼睛和保護手套，以防潤滑油落入眼中或粘在皮膚上。這是引起發炎的原因
另外，潤滑油和黃油不能飲用，否則會引起嘔吐或腹瀉
將油放在小孩拿不到的地方



縫紉機頭倒下或豎起時，請用雙手進行操作
單手操作時因縫紉機的重量萬一滑落易導致受傷
Turn off the power switch before carrying out cleaning
The machine may operate if the thread is depressed by mistake, which could result in injury



Be sure to wear protective goggles when handing the lubricating oil and grease, so that they do not get into your eyes or onto your skin, otherwise inflammation can result



Furthermore, do not drink the oil or eat the grease under any circumstances, as they can cause vomiting and diarrhea
keep the oil out the reach of children



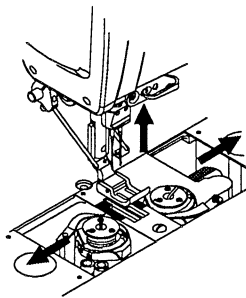
Use both hands to hold the machine head when titing it back or returning it to its original position if only one hand is used, the weight of the machine head may cause to silp. and your hand may get caught.

7-1. 日常清潔程序

為了保持縫紉機的機能，而且能長久的使用，請每天保養。另外，縫紉機如果長時間沒使用，請在進行如下的保養後在使用。

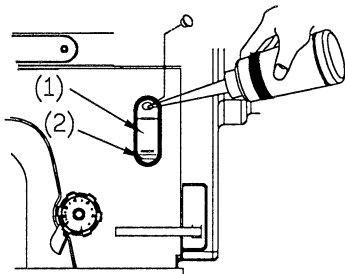
The following cleaning operations should be carried out each day in order to maintain the performance of this machine and to ensure a long service life.

Furthermore if the sewing machine has not been used for a long period of time, carry out the following cleaning procedures before using if again



<保養><Cleaning>

1. 轉動縫紉機的皮帶輪，將機針置於最高位置
 2. 將滑板左右分開
 3. 取出梭芯
 4. 清除旋梭內的線頭
 5. 安裝梭芯和梭芯套
1. Turn the machine pulley to move the needle to the needle up stop position
2. Open the slide plates at the left and right
3. Remove the bobbin
4. Clean the thread scraps from the rotary book
5. Install the bobbin and the bobbin case



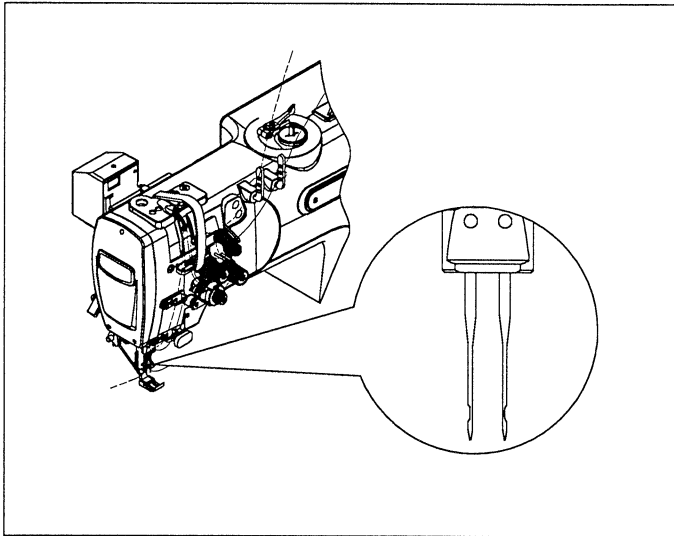
<給油箱添加機油> <Filling the oil tank>

只是用規定的潤滑油

1. 當潤滑油的液位下降到油量計視窗(1)的下基線(2)以下時，應添加潤滑油

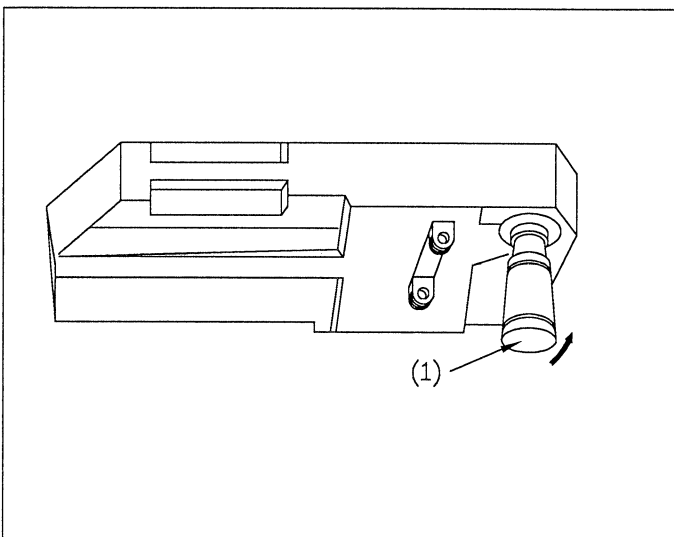
Use only the lubricating oil

1. If the lubricating oil level drops below the bottom reference line (2) of the oil gauge window (1), be sure to add more oil



<檢查> <Checking>

1. 如果機針彎曲或針尖斷裂，應予以更換
 2. 檢查上線是否穿引正確
 3. 進行試縫
1. Replace the needle if it is bent or if the tip is broken
 2. Check that the upper thread have been threaded correctly
 3. Carry out a test sewing

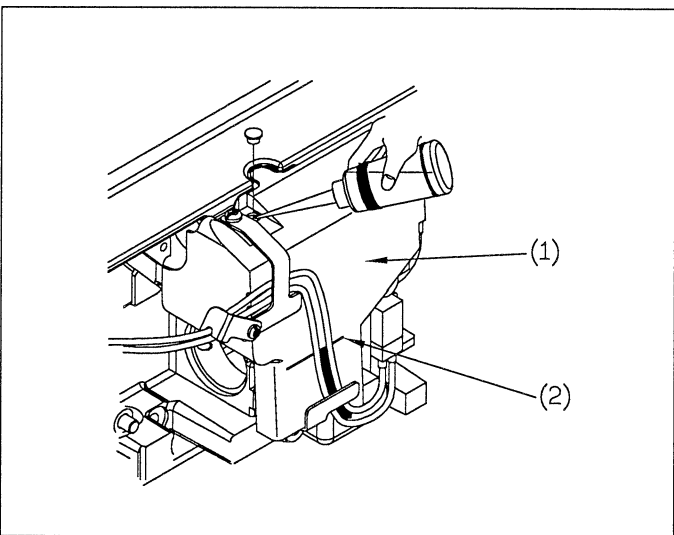


<廢油> <Draining lubricating oil>

1. 當注油器(1)內積滿了潤滑油時，請擰松注油器(1)，將它拆下，倒掉潤滑油。
 2. 將注油器(1)擰入油盤
1. If the oil (1) has filled with oil, unscrew the roller (1) and dispose of the oil inside
 2. Screw the roller (1) back into the oil pan.

7-2 給油盤添加機油（每6個月）

Lubricating via the oil cover (every 6 months)



<微量加油型>

1. 大致每6個月一次，給油蓋(1)補充潤滑油

<針杆無油型>

基本上在補充潤滑油的同時，也應給油蓋(1)補充潤滑油
只使用規定的潤滑油：

1. 將縫紉機頭倒下
2. 給油蓋(1)添加潤滑油，直至液位到達基準線(2)位置
3. 將縫紉機頭部返回原位

<Minimum lubrication specifications>

Pour lubricating oil into the cover (1) about once every six months

<Semi dry specifications>

Pour lubricating oil into cover (1) about as often as grease is applied

Use only the lubricating oil

1. Tilt back the machine head
2. Pour lubricating oil into the oil cover (1) until the oil lever reaches the reference line (2)
3. Return the machine head to its normal position.

8. 旋梭供油量的調整

ADJUSTING THE ROTARY HOOK LUBRICATION AMOUNT

⚠ 注意 CAUTION

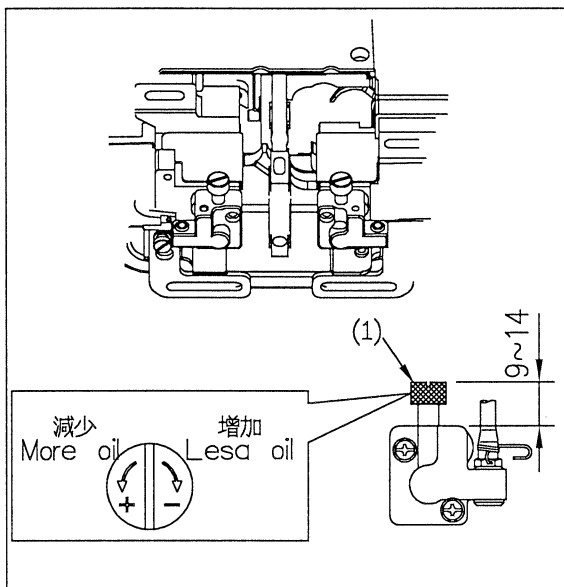


在檢查旋梭供油量時，手指和油量測試紙不能碰到旋梭和送布機構等運動零件，是導致人員受傷的原因。

Be careful not to touch your fingers or the lubrication amount check sheet against moving parts such as the rotary hook or the feed mechanism when checking the amount of oil supplied to the rotary hook, otherwise injury may result.

如更換了旋梭或要變更縫紉速度時，請按照下列步驟調整旋梭的供油量。

Use the following procedure to check the amount of oil being supplied to the rotary hook when replacing the rotary hook or when changing the sewing speed.



<供油量調整的大致標準>

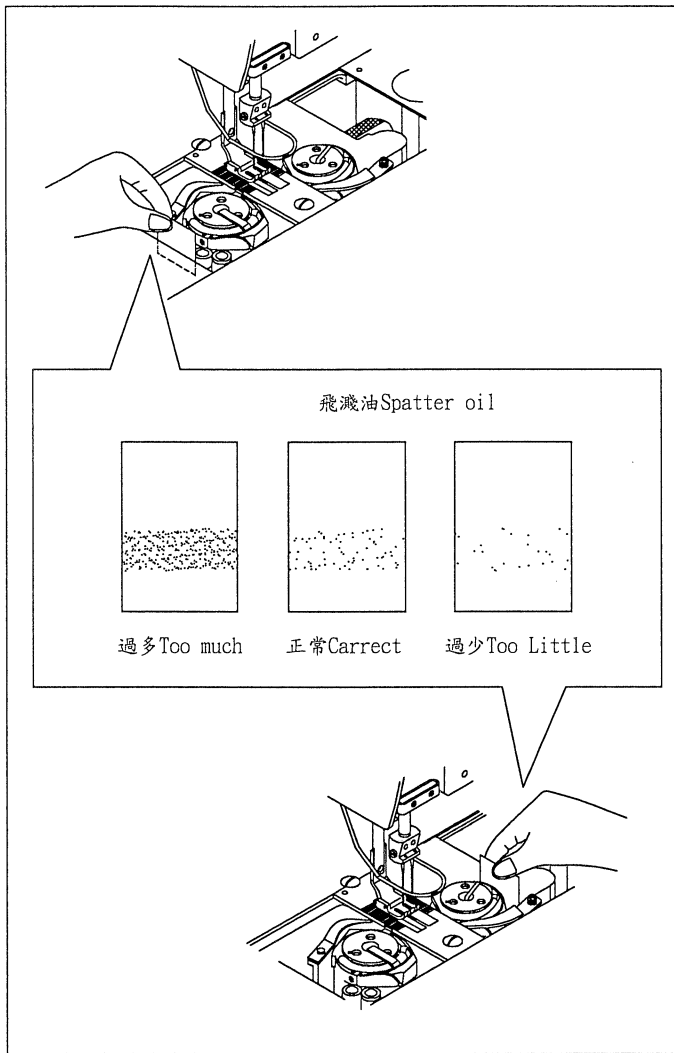
1. 將縫紉機頭部倒下

2. 轉動油量調節螺釘(1)，將其高度調整到9-14mm

<Guide to lubrication adjustment>

1. Tilt back the machine head

2. Turn the oil adjusting screw (1) to adjust the height to within 9-14mm.



<供油量的確認>

1. 切斷電源開關
2. 拆去挑線杆至機針上的線
3. 去下機針和梭芯
4. 用抬押具扳手抬起押具
5. 接通電源開關
6. 以縫紉機實際縫紉時的轉速進行約1分鐘的空轉，適當的斷續運轉
7. 將油量測試紙(2)插入旋梭的左側並握住，以實際縫紉時的縫紉機轉速使縫紉機運轉8秒。(對油量測試紙(2)的紙質沒有什麼要求)。
8. 確認飛濺到紙上的油量

<Checking the lubrication amount>

1. Turn off the power switch
2. Remove the thread from all points from the thread take-up to the needle
3. Remove the needle and the bobbin
4. Use the lifting lever to lift the presser foot
5. Turn on the power switch
6. Run the machine at the normal sewing speed for approximately 1 minute without sewing any material
7. Place the lubrication amount check sheet (2) to the of the rotary hook (the right side of the rotary hook), and hold it in place while running the sewing machine at the normal sewing speed for approximately 8 seconds. (any type of paper can be used as the lubrication amount check sheet) (2)
8. Check the amount of oil which has spattered onto the sheet

<供油量的調整>

1. 將縫紉機頭部倒下
2. 轉動油量調節螺釘(1)，調整供油量。
 - 向左轉動油量調節螺釘(1)，油量增加
 - 向右轉動油量調節螺釘(1)，油量減少
3. 參照上述[供油量的確認]所述來檢查供油量。
*請反復進行油量調整螺釘的調整及供油量的確認，直到獲得適當的供油量為止
4. 在進行了約2小時的縫紉後，請再次檢查供油量。

<Adjusting the lubrication amount>

1. Tilt back the machine head
2. Turn the adjusting screw (1) to adjust the lubrication amount
 - If the rotary hook adjusting screw (1) is turned counterclockwise, the lubrication amount becomes greater.
 - If the rotary hook adjusting screw (1) is turned clockwise, the lubrication amount becomes smaller.
3. Check the lubrication amount again according to the procedure given in checking the lubrication amount above.
 - Turn the adjusting screw (1) and check the lubrication amount repeatedly until the lubrication amount is correct.
4. Check the lubrication again after the sewing machine has been used for approximately two hours.

9. 常見故障與調整

- 你在要求維修或服務前，先檢查以下各點
- 如果以下方法仍然不能解決問題，關閉電源開關，向受過訓練的技術人員或經銷商諮詢。

⚠ 危險



打開控制箱蓋時，先關閉電源開關並將電源插頭從插座上撥下來，至少等待5分鐘，再打開控制箱蓋，觸摸帶有高電壓的區域將會造成人員受傷。



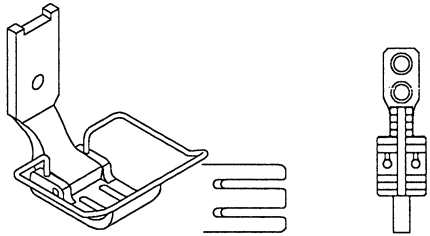

⚠ 注意

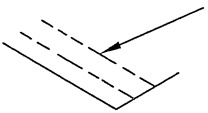
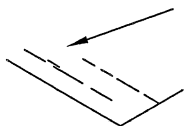
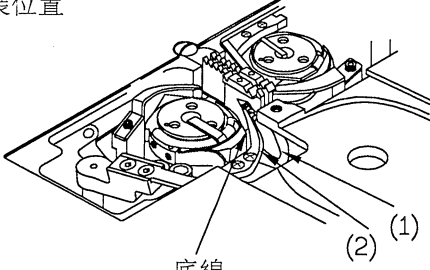
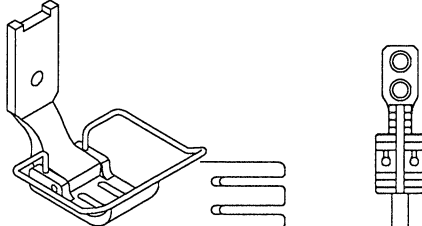


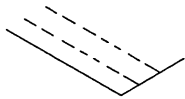


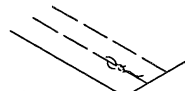

在進行故障查詢之前，請先關閉電源開關並斷開電源線，否則如果誤按啟動開關，縫紉機會動作，導致人身傷害。

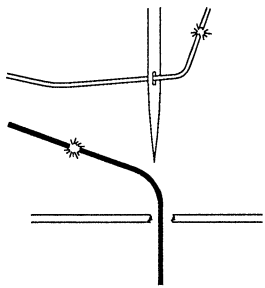

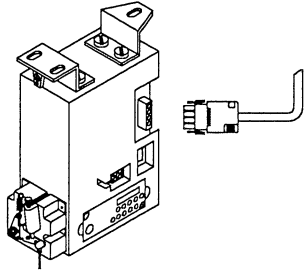
9-1. 縫紉

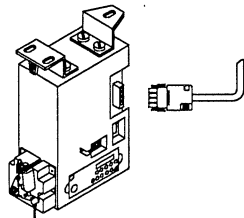
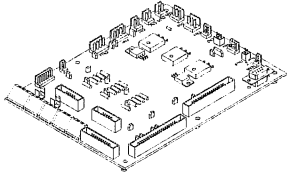
“頁碼”欄目中帶有“*”記號的只能由合格的技術人員進行檢查。

現象	檢查及調整	參照頁
<p>1 面線不夠緊密</p>  <p>底線不夠緊密</p> 	<ul style="list-style-type: none"> · 縫紉機針線是否穿引正確？ 如果穿引不正確，應正確穿引機線 · 面線張力或底線張力是否太弱？ 調節面線張力或底線張力 · 取線彈簧的動作範圍是否太大？ 降低取線彈簧止動器的位置。 <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>當使用中厚布料的縫紉機時，根據布料種類等不同可能會出現縫線不夠緊密的情況。 在此情況下，請換上後面有間隙的押具，或者換上帶溝的送布牙齒。</p>  </div>	<p>15-19</p> <p>25</p> <p>●</p>
<p>2 布料下出現環結等不良</p> 	<ul style="list-style-type: none"> · 線路是否不夠光滑？ 用細粒銼刀或砂紙將線路打磨光滑 · 梭芯是否旋轉流程？ 拉出底線檢查機線張力是否鬆弛，或更換梭芯或梭芯套 · 挑線量是否過多？ 調整挑線量 	<p>27</p>

	現象	檢查及調整	參照頁
3	縫紉時出現跳針 	<ul style="list-style-type: none"> · 機針是否彎曲？針尖是否鈍化？ 如果機針彎曲或斷裂，應予以更換 · 機針是否安裝正確？ 如果機針安裝不正確，應正確加以安裝 · 縫紉機線是否穿引正確？ 如果穿引不正確，應正確穿引機線 · 押具壓力是否過小？ 調整壓腳壓力 · 機針是否太細？ 更換大一號的機針 · 壓腳是否太高？ 調整壓腳高度 · 挑線簧是否太弱？ 調整挑線簧的張力？ · 挑線量是否過多？ 整挑線量 	13 15-19 26 * * 27
4	縫紉開始時出現跳針 縫紉開始時出現脫線 	<ul style="list-style-type: none"> · 挑線簧張力是否過大？ 減小挑線簧張力 · 挑線簧工作範圍是否過大？ 升高取線彈簧製動器的位置 · 剪線後，面線殘留量是否過短？ 調整張力 · 機針是否剪切齊整？ 將定刀磨快，或視需要更換定刀和動刀 · 機針是否過粗？ 使用比現在機針小一號的機針 · 縫紉開始時，縫紉速度是否過快？ 使用慢起動功能 · 機針上升停止位置是否太高？ 調整機針的上升停止位置 · 剪線後，底線是否被底線夾住彈簧(1)壓住了？ 當底線沒有被底線夾住彈簧(1)壓住時，應調整動刀(2)的安裝位置 <div style="text-align: center;">  <p>底線 (1) (2)</p> <p>2947M</p> </div> <ul style="list-style-type: none"> · 在縫製薄的布料、中厚布料時，是否使用了後面有間隙的壓腳或帶溝的送布牙？ 應使用後面無間隙的押具 應使用不帶溝的押具 <div style="text-align: center;">  </div>	* * 26 * *

	現象	檢查及調整	參照頁
5	線跡不平整 	<ul style="list-style-type: none"> · 壓腳壓力是否過小? 調整壓腳壓力 · 送布牙高度是否太低? 調整送布牙高度 · 梭芯是否有劃痕? 如果梭芯受損, 用油磨石打磨光滑, 或予以更換 	26 *
6	大量的皺褶(張力過大) 	<ul style="list-style-type: none"> · 面線張力是否過大? 儘量減少面線張力 · 底線張力是否過大? 儘量減小底線張力 · 挑線簧張力是否過大? 儘量減小挑線簧張力 · 挑線簧工作範圍是否過大? 儘量升高取線彈簧製動器的位置 · 壓腳壓力是否過大? 調整壓腳壓力 · 縫紉速度是否過快? 使用縫紉速度控制鍵逐漸降低縫紉速度 · 挑線量是否過少? 調整挑線量 	25 25 * * 26 27
7	線縫不合 	<ul style="list-style-type: none"> · 壓腳壓力是否過大? 調整壓腳壓力 	26
8	在縫紉開始時底線糾結纏繞, 剪線時梭芯空轉 	<ul style="list-style-type: none"> · 拉出底線時, 梭芯旋轉方向是否正確? 安裝梭芯, 使其朝旋梭相反方向旋轉 · 梭芯上卷繞的機線是否過多? 梭芯卷繞量不應超過80%  · 是否已加裝旋梭空轉防止簧?(僅限備有剪線功能) 加裝旋梭空轉防止簧 · 梭芯轉動是否流暢? 如果梭芯轉動不流暢, 應更換梭芯 · 是否使用了本公司規定的輕合金梭芯以外的其他梭芯? 使用本公司規定的梭芯 	16 15 16-17 16-17

	現象	檢查及調整	參照頁
9	面線和底線的斷裂 	<ul style="list-style-type: none"> · 機針是否彎曲或針尖是否斷裂？ 如果機針彎曲或斷裂，應予以更換 · 機針是否安裝正確？ 如果機針安裝不正確，應正確加以安裝 · 縫紉機線是否穿引正確？ 如果穿引不正確，應正確穿引機線 · 是否已給油箱添加機油？ 如果潤滑油的液位下降到油量計視窗的下基線以下，應添加機油 · 面線和底線張力是否過大或過小？ 調整面線或底線張力 · 旋梭部分是否沾有灰塵和線頭？ 進行旋梭的清潔 · 斷線是否因為挑線簧工作範圍太小而鬆動？ 調整取線彈簧製動器的位置 · 旋梭、送布牙或其他部件是否受損？ 如果這些部件受損，用油磨石打磨光滑，或更換受損部件 · 線路是否受損？ 如果線路受損，用砂紙打磨光滑或更換受損部件 · 挑線量是否適當？ 調整挑線量 	13 15-19 8-9 25 28-29 * * * 27
10	剪線不正確	<ul style="list-style-type: none"> · 動刀端頭是否有傷痕和彎曲？ 更換動刀 	*
11	斷針 	<ul style="list-style-type: none"> · 縫紉過程中是否在送入或拉出面料時用力過度？ · 機針是否彎曲？針尖是否斷裂或針孔是否被堵住？ 更換機針 · 機針是否在送布牙齒的機針孔中心上下運動？ 確認機針的下落情況。如果機針不在送布牙齒的機針孔中心上下運動，應重新安裝送布牙齒 <div style="border: 1px solid black; padding: 5px; margin-top: 10px; text-align: center;"> <p>注意</p> <ul style="list-style-type: none"> · 如果斷針不慎掉入縫紉衣物中，會有很大的危險。 請盡可能找出機針的殘骸，直至找齊整枚機針。 </div>	13 * *
12	打開電源並踩下腳踏板時，縫紉機不工作	<ul style="list-style-type: none"> · 電源插頭是否從控制箱上斷開？ 將插頭插牢 	11

現象		檢查及調整	參照頁
13	縫紉機不能以高速工作	<ul style="list-style-type: none"> 縫紉速度設定和倒縫加固速度設定是否正確？ 使用縫紉速度控制鍵設定高速縫紉速度。 	
14	在縫紉過程中縫紉機停止運轉	<ul style="list-style-type: none"> 定針鍵是否開着？ 按定針鍵關閉指示燈 電源電壓是否太低？ 檢查電源 (如果電線太長，或單一插座接入過多電器，則可能造成電壓下降，從而激活復位功能，使縫紉機停止運轉，即使電源電壓本身正常) 	*
15	操作盤顯示屏上沒有任何顯示圖像	<ul style="list-style-type: none"> 電源插頭是否從控制箱上斷開？ 將插頭插牢  <ul style="list-style-type: none"> 控制箱內的操作盤插頭是否斷開？ 將插頭插牢 	<p>11</p> <p>11</p>

9. TROUBLESHOOTING

.Please check the following before for repairs or service

.Before opening the face plate of the control box, touching areas where high voltages are present can result in severe injury.

DANGER



Wait at least 5 minutes after turning off the power switch and disconnecting the wall outlet before opening the face plate of the control box, touching areas where high voltages are present can result in severe injury



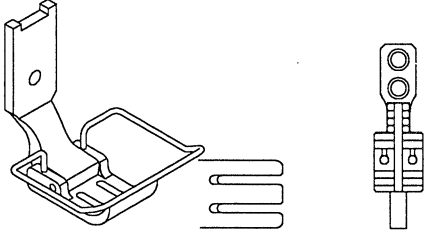

CAUTION

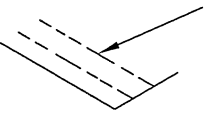
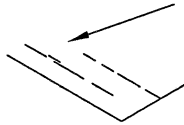
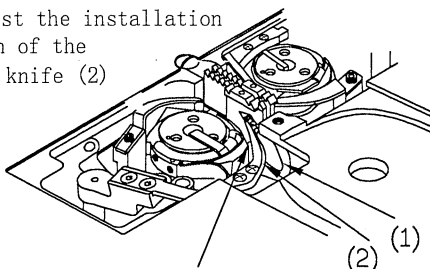
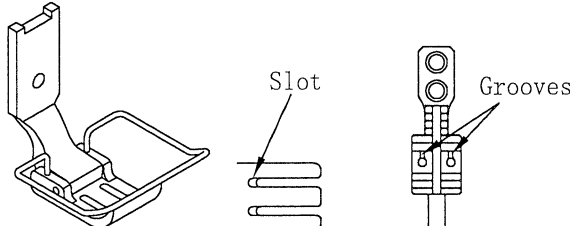


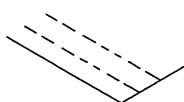
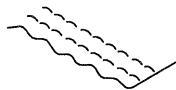

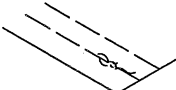

Turn off the power switch and disconnect the power cord before carrying out troubleshooting, the machine may operate if the treadle is depressed by mistake, which could result in injury

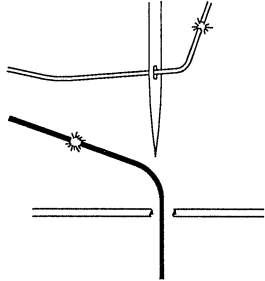

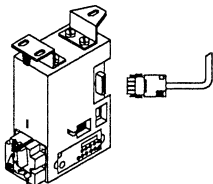
9-1. SEWING

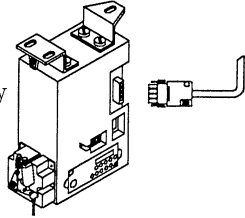
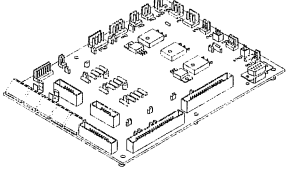
Item with "*" in the "page" column should only be checked by a qualified technician.

	Problem	Possible cause	Page
1	<p>Upper thread is not tight</p>  <p>Lower thread is not tight</p> 	<ul style="list-style-type: none"> . Hes the thread been threaded incorrectly? If the thread is threaded incorrectly, thred it correctly . Is the thread tension or lower thread tension too weak? Adjust the upper thread tension or lower thread tension . Is the thread take-up spring operating range too small? Lower the position of the stopper <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>If using a sewing machine with medlum-weigh material specification, poor thread tightening may occur depending on the type of material being sewn</p>  </div>	<p>15-19</p> <p>25</p> <p style="text-align: center;">●</p>
2	<p>Loops appear in sean</p> 	<ul style="list-style-type: none"> . Is the thread path not smooth enough? Use a file with a fine grain or sandpaper to polish smooth the thread path . Is the bobbin not turning smoothly? Pull out the lower thread to check that there is no slackness in the thread, or replace the bobbin or bobbin case . Is the thread take-up amount too large? Adjust the thread take-up amount 	<p>27</p>

	Problem	Possible cause	Page
3	<p>Skipped stitches occur while sewing</p> 	<ul style="list-style-type: none"> . Is the needle tip bent? is the needle tip blunt? If the needle tip is bent or broken, replace the needle . Is the machine properly threaded? If it is incorrect, thread the thread correctly . Is the machine properly threaded? If it is incorrect, thread the thread correctly . Is the presser foot pressure? Adjust the presser foot pressure . Is the needle too high? Replace the needle with a needle that is one rank thicker . Is the presser foot too high? Adjust the height of the presser foot . Is the thread take-up spring too weak? Adjust the tension of the thread take-up spring? . Is the thread take-up amount too large? Adjust the thread take-up amount 	<p>13</p> <p>15-19</p> <p>26</p> <p>*</p> <p>*</p> <p>27</p>
4	<p>Skipped stitches at sewing start Thread unravelling at sewing start</p> 	<ul style="list-style-type: none"> . Is the thread take-up spring tension too strong? Reduce the tension of the thread take-up spring . Is the thread take-up spring operating range too large? Raise the position of the stopper . Are the trailing lengths of the upper threads too short after thread trimming? Adjust the pretension . Are the threads not being trimmed cleanly? Sharpen the fixed knives, or replace the fixed and movable knives if necessary . Is the needle too wide? Try using a needle with a count that is one lower than the current needle . Is the sewing speed too fast at the sewing start? Use the slow start feature . Is the needle up stop position too high? Adjust the needle up stop position . Is the lower thread pressed by the plate spring (1) after thread trimming? If the lower thread is not pressed by the plate spring (1), adjust the installation position of the movable knife (2)  <p style="text-align: center;">Lower thread 2947M</p> <ul style="list-style-type: none"> . If sewing light of medium-weight materials, is a presser foot with slots on the underside or grooved feed dog being used? Use a presser foot without slots Use a feed dog without grooves 	<p>*</p> <p>*</p> <p>26</p> <p>*</p> <p>*</p>

	Problem	Possible cause	Page
5	Unaven sean 	<ul style="list-style-type: none"> . Is the presser foot pressure too weak? Adjust the presser foot pressure . Is the feed dog too low? Adjust the feed dog height . Is the bobbin scratched? If the bobbin is damaged, smooth it with an oiled grindstone or replace it 	26 *
6	Large degree of puckering(excess tension) 	<ul style="list-style-type: none"> . Is the upper thread tension too strong? Make the upper thread tension as weak as possible . Is the lower thread tension too strong? Make the lower thread tension as weak as possible . Are the thread take-up spring tensions too strong? Make the thread take-up spring tension as weak as possible . Is the thread take-up operating range too large? Move the stopper to as high a position as possible . Is the presser foot pressure too strong? Adjust the presser foot pressure . Is the sewing speed too fast? Use the sewing speed control keys to gradually reduce the sewing speed . Is the thread take-up amount too small? Adjust the thread take-up amount 	25 25 * * 26 27
7	Material allppage 	<ul style="list-style-type: none"> . Is the presser foot pressure too strong? Adjust the presser foot pressure 	26
8	Lower thread is tangled at the sewing start Spinning of bobbin during thread trimming 	<ul style="list-style-type: none"> . Is the bobbin spinning direction correct when the lower is being pulled? Set the bobbin so that it turns in the opposite direction to the rotary hook . Is there too much threda wound onto the bobbin? The bobbin winding amount should bot be more that 80% . Is the anti-spin spring attached? (Models with thread trimmer) Attach the anti-spin spring .Is the bobbin tuming smoothly? If the bobbin is not turning smoothly, replace the bobbin . Is a bobbin other that the light-alloy bobbins specified by our company being used? Use only bobbins which are specfied by our company 	16 15 16-17 16-17

	Problem	Possible cause	Page
9	Upper and lower thread are breaking 	<ul style="list-style-type: none"> . Is the needle bent or is the needle tip broken? Replace the needle if it is bent or broken . Is the needle properly installed? If it is incorrect, install the needle correctly . Is the machine properly thread? If it is incorrect, thread the thread correctly . Is the oil tank filled with lubricating oil? If the level of lubricating oil is below the bottom reference line add more oil . Is the upper or lower thread tension too weak or too strong? Adjust the upper thread or lower thread tension . Is the rotary hook blocked with dust or thread scraps? Clean the rotary hook . Is the upper thread may be loose because the thread take-up spring operating range is too small Adjust the position of the stopper . Is the rotary hook, feed dog or other part damaged? If they are damaged, smooth them with an oiled grindstone or replace the damaged parts . Is the thread path damaged? If the thread path is damaged, smooth it with sandpaper or replace the damaged part . Is the thread take-up amount correct? Adjust the thread take-up amount 	13 15-19 8-9 25 28-29 * * * 27
10	Incorrect thread trimming	<ul style="list-style-type: none"> . Is the movable knife damaged or bent? Replace the movable knife 	*
11	Broken needle 	<ul style="list-style-type: none"> . Is the material being pushed or pulled with excessive force during sewing? . Is the needle bent, is its needle tip broken, or is the needle hole blocked? Replace the needle . Does the needle drop into the center of the needle hole in the feed dog? Check the needle drop position, if the needle does not drop into the center of the needle hole in the feed dog, reinstall the feed dog . If the needle bar has rotated, rotate the needle bar to the correct position <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="text-align: center;">— Caution —</p> <ul style="list-style-type: none"> . It is extremely dangerous to leave any pieces of broken needle sticking in the material, if the needle breaks, search for all pieces until the whole of the needle is found again. </div>	13 * *
12	Machine does not operate when power is turned on and thread is pressed	<ul style="list-style-type: none"> . Is the power supply connector disconnected from the control box? Insert the connector securely 	11

	Problem	Possible cause	Page
13	Machine does not operate at high speed	<ul style="list-style-type: none"> . Is the sewing speed setting or backtack speed setting incorrect? Use the sewing speed control keys to set the high speed. 	
14	Machine stops during sewing	<ul style="list-style-type: none"> . Is the fixed stitch key turned on ? Press the fixed stitch key so that the indicator turns off . Is the power supply voltage too low? Check the power supply (If the power cord is too long or too many appliances are being run from a single outlet, this may cause voltage drops which will in turn cause the reset function to activate and stop the machine, even if the power supply itself is normal) 	*
15	Nothing appears on the operation panel display	<ul style="list-style-type: none"> . Is the power supply connector disconnected from the control box? Insert the connector securely  <ul style="list-style-type: none"> . Is the operation panel connector inside the control box disconnected? Insert the connector securely 	11 11