

INDUSTRIAL SEWING MACHINE

零件分解圖 使用說明書

INSTRUCTION MANUAL AND SPARE PARTS MANUAL

由于對產品的改良及更新，本產品目錄中之產品規格及外觀的修改恕不事先通知！
The specification and/or appearances of the equipment described in this catalogue are subject to change without previous notice because of modification.

操作使用之前先仔細閱讀此說明書

保留此說明書以供將來參考

Read instructions carefully and understand them before using.

Retain this instruction manual for future reference.

目 錄 Contents

第一部分操作說明Operati on dec l aration

1. 技術數據Speci fi cati ons.....	2
2. 安裝Instal lation.....	3
3. 操作件Contro l s.....	8
4. 縫紉操作準備Preparati on.....	12
5. 維護及保養Care and maint ena nce.....	17

第二部分 零件部分Parts list.....21

1. 機身部分Housing secti ons.....	22
2. 機頭部分Needle head parts.....	23
3. 機臂部分Arm parts.....	27
4. 底板部分Bedp late parts.....	31
5. 左旋梭座Hook post, left.....	35
6. 右旋梭座Hook post, right.....	37
7. 左送料輪座Feed whee lpost, left.....	39
8. 送料輪托板Feed whee lmounting plate.....	40
9. 切縫部分Thre ad tri mme.....	41
10. 自動抬壓腳Aut omatic presser foot li fte r.....	43
11. 鎖緊裝置Bac kt ac king mecha ni sm.....	44
12. 縫紉驅動組件Kit for sewing dri vo.....	47
13. 上部機器電纜束Cable tree to sewing head.....	48
14. 控制組件Control component s.....	49
15. 膝鬆綫器零件Pine hub parts of the knee.....	50
16. 用于臺板零件Parts for table top.....	51

第一部分 操作說明

OPERATI ON DEC L ARATION

1.技術數據 Specifications

縫迹形式Stitch type.....	301(鎖式縫迹 Lockstitch)
在滾輪壓脚下通過高度Clearance under roller presser.....	7mm
空間寬度Clearance width.....	245mm
空間高度Clearance height.....	115mm
柱式底板高度Post height.....	180mm

縫紉機機頭尺寸 Sewing head dimensions

長度Length.....	大約/approx.615mm
寬度Width.....	大約/approx.240mm
高度(臺板以上)Height(above table).....	大約/approx.500mm
底板尺度Bedplate dimensions.....	518X177mm

機型分類 Type

單針和雙針 Single needle and double needle

A型 model A.....適用於縫紉輕薄型材料 For sewing lightweight materials

B型 model B.....適用於縫紉中等厚度材料 For sewing medium-weight materials

C型 model C.....適用於縫紉厚材料 For sewing medium-heavy materials

縫紉線規格Nm (最大)Thread thickness Nm(max.synthetic)

A型 model A.....	60/3
B型 model B.....	41/3
C型 model C.....	15/3

機針型號 Needle model

A型單針 Model A single needle.....	70/134
B型單針 Model B single needle.....	90/134
B型雙針 Model B double needle.....	90/134-35
C型單針 Model C single needle.....	120/134
C型雙針 Model C double needle.....	120/134-35

最高速度 Max.speed

A、B 型	3000縫迹/分/spm
C 型	2000縫迹/分/spm

2.安裝 Installation

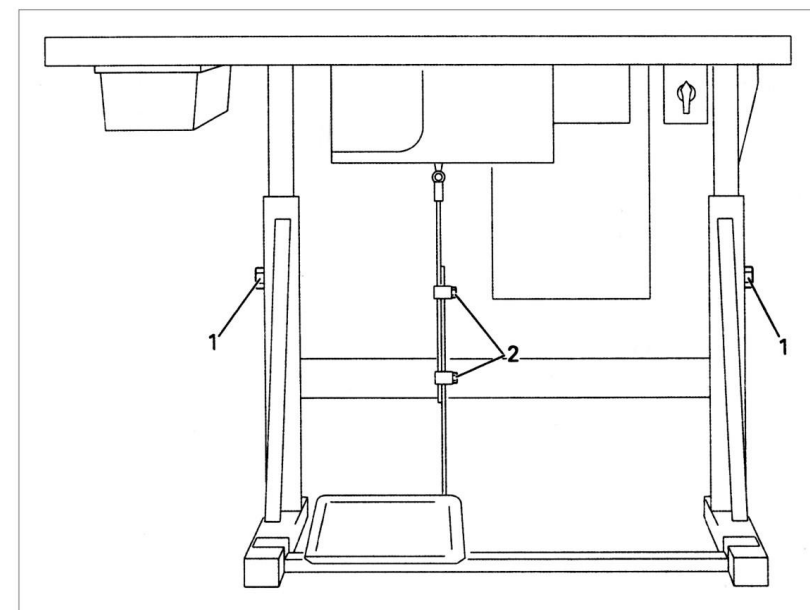
在機器安裝地點，必須有與機器相符的電源接口。

在機器安裝地點，必須有平整、堅固的地面，以及充分的照明。

The site where the machine is installed must be provided with suitable connections for electric current.

It must be ensured that the standing surface of the machine site is firm and horizontal, and that sufficient lighting is provided for.

2.01 臺板高度的調整 Adjust the table height



鬆開螺釘1和2，並將臺板調整至所需的高度；

將螺釘1牢固地擰緊；

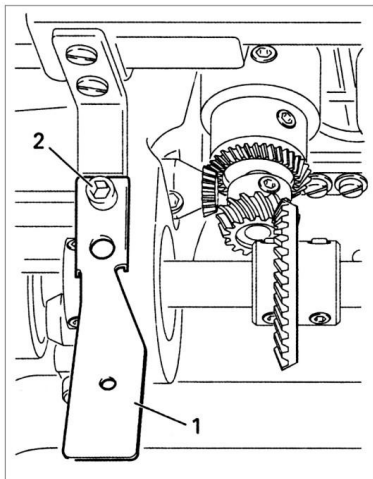
將踏板調至所需的位置，並且將螺釘2擰緊。

Loosen screws 1 and 2, and set the table height as required;

Firmly tighten screw 1;

Set the required pedal position and tighten screw 2.

2.02 安裝翻轉保險 Fitting the tilt lock

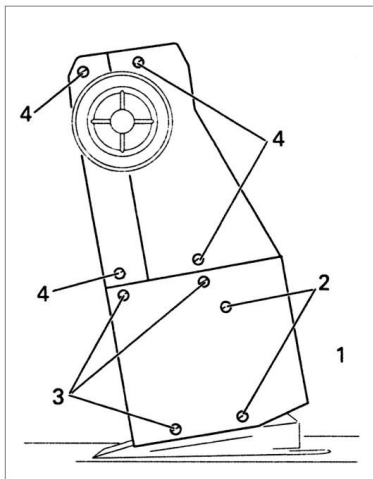


關閉電源總開關；
用螺栓2固定翻轉保險1。
注：不許開動沒有翻轉保險1的機器！
有在機頭和臺板之間被擠傷的危險！

Switch off the machine;
Screw on the tilt lock 1, provided in the accessories, using screw 2.

Note: Do not operate the machine without tilt lock 1! Danger of crushing between sewing head and table top!

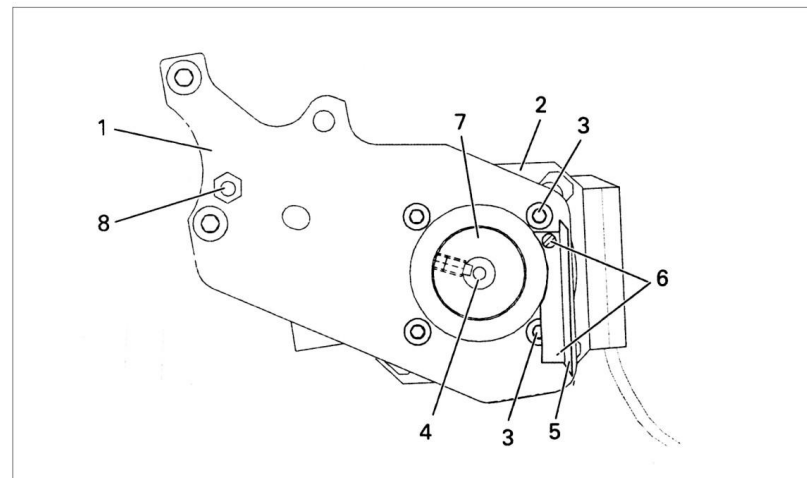
2.03 安裝機器護罩 Fitting the machine cover



在螺釘2的頭部後面(螺釘2預先擰在機殼上)，將護罩1沿下部的槽滑入并用螺釘3固定，然後通過通孔擰緊螺釘2；
用螺釘4固定左右兩部分護罩。

Slide the slots of the lower section of the cover 1 behind the heads of screws 2 and attach with screws 3, then tighten screws 2 through the holes;
Attach right and left cover sections with screws 4.

2.04 將帶法蘭的電機安裝到墊板上 Mounting the flange motor



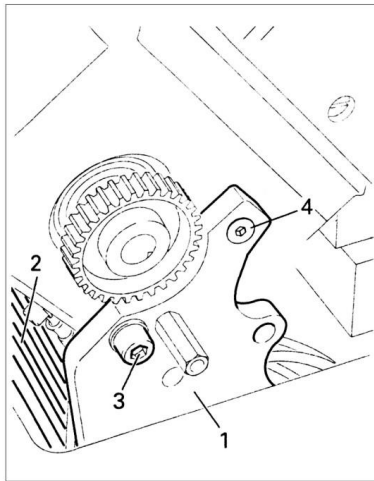
如上圖所示，用螺栓3將墊板1固定到電動機2上；
從電動機軸4上移去楔鍵；
用螺栓6固定角支座5；
安裝帶齒的皮帶輪7到電動機軸4上，螺釘的尖部要定位於電動機軸的凹槽中；
將螺栓8擰入到墊板1中。

Attach bearing plate 2 to motor 2 with screws 3 as shown in Fig.
Remove the wedge from motor shaft 4;
Attach an angle bracket 5 with screws 6;
Fit toothed belt wheel 7 to the motor shaft 4, so that the point of the screw is located in the groove of the motor shaft;
Screw threaded stud 8 into the bearing plate 1.

2.05 安裝帶法蘭的電動機到機器上 Mounting the flange motor to the machine

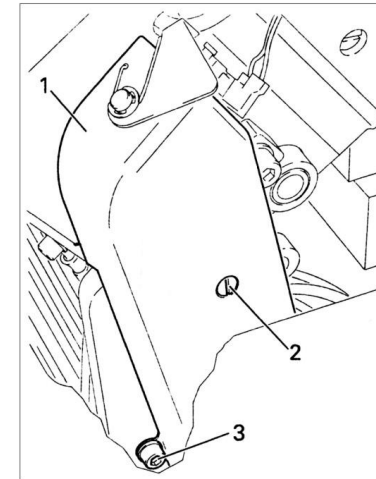
將板1固定到機器外殼上 (祇是輕微地擰緊螺栓3)。

Attach bearing plate 1 of motor 2 to the machine case with screws 3 (only tighten screws 3 slightly)



Swing the bearing plate 2 of the motor ,so that the toothed belt is tensioned;
In this position tighten screws 3.

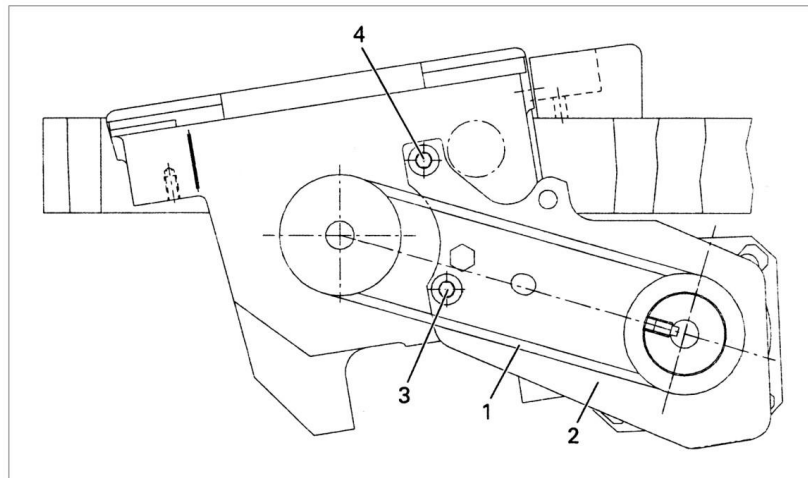
2.07 安裝帶法蘭電動機的皮帶防護罩 Mounting the belt guard of the flange motor



用螺釘2和3固定皮帶防護罩。

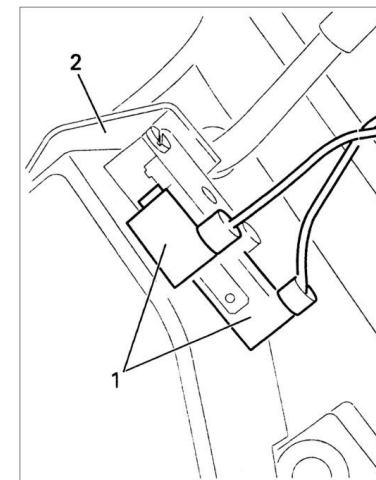
Attach belt guard 1 with screws 2 and 3.

2.06 安裝齒形皮帶并調整皮帶張力 Mounting the toothed belt and adjusting the tension



在這個位置安裝齒形皮帶1;
擺動電動機的墊板2,以張緊齒形皮帶;
在這個位置擰緊螺栓3。
in this position fit toothed belt 1;

2.08 連接安全開關 Connecting the safety switch



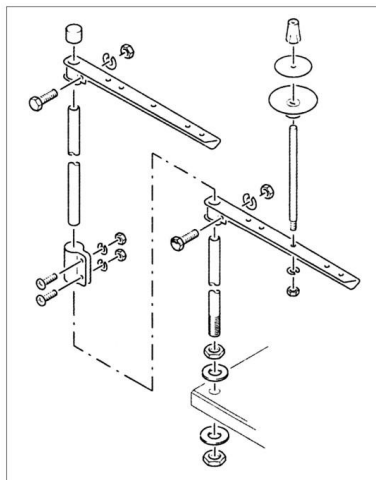
如圖所示,連接安全開關2的插頭1。

Connect plug i of safety switch in Fig..

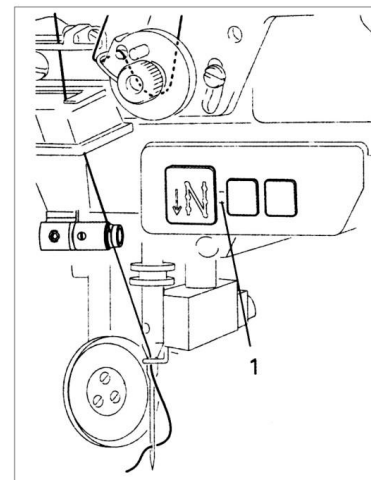
2.09 安裝綫架 Fitting the reel stand

如圖所示安裝綫架：
然後將綫架插入臺板的孔中并用隨帶的螺母可靠地固定。

Fit the reel stand as shown in Fig.
Afterwards insert the stand in the hole of the table top and secure it with the nuts provided.



3.02 有綫迹計數功能的梭芯綫控制器 Bobbin thread monitoring with stitch counting

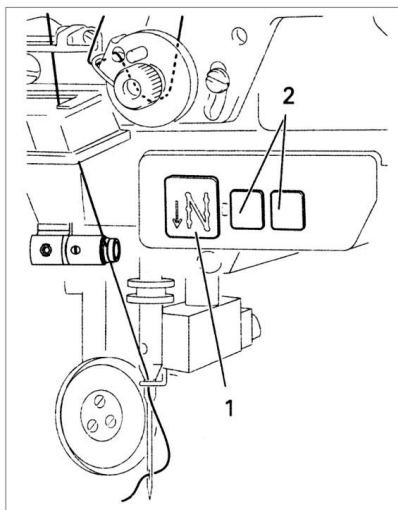


在達到預設綫迹數量前大約100個綫迹，發光二極管1開始閃爍；
在剪綫後和更換梭芯後，綫迹計數器就開始計數。

About 100 stitches before reaching the preset number of stitches, diode 1 flashes;
After the thread has been trimmed and the bobbin changed, the stitch counting begins anew.

3.操作件 Controls

3.01 機頭按鍵 Keys on the machine head

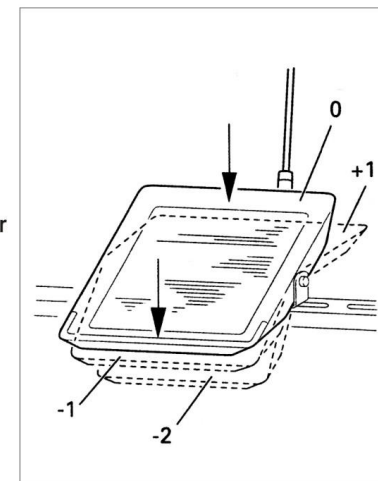


在縫紉過程中，祇要按下按鍵1，機器的縫紉方向就反轉；
按鍵2是用來設置參數的，請詳見電控說明書。

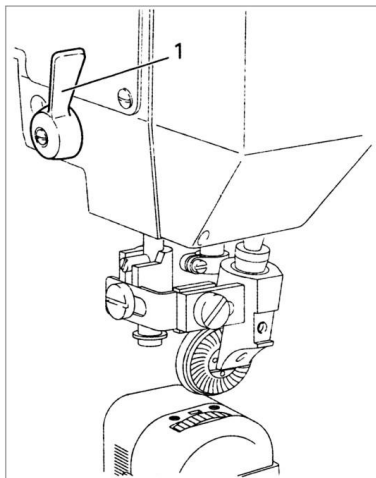
As long as key 1 is pressed during sewing, the machine sews in reverse;
Keys 2 can be used for parameter settings, Instruction Manual of Electronic Control.

3.03 踏板 Pedal

- 0 = 靜止位置 Neutral position
- +1 = 縫紉 Sewing
- 1 = 抬起滾輪壓脚 Raise roller presser
- 2 = 剪綫 Trim sewing threads



3.04 滾輪壓腳扳手 Lever for lifting roller presser



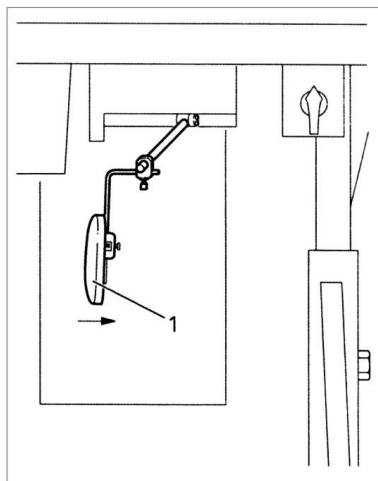
可以通過轉動扳手1抬起滾輪壓腳。

The roller presser can be raised by turning lever 1.

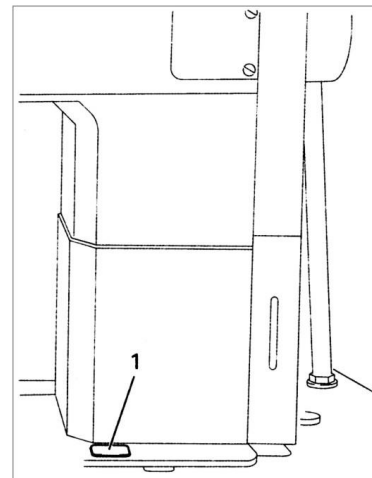
3.05 膝控 Knee lever

可以通過向箭頭所示方向擠壓膝控杆1來抬起滾輪壓腳。

The roller presser can be raised by pressing the knee lever 1 in the direction of the arrow.



3.06 縫迹長度設置按鍵 Key for setting stitch length



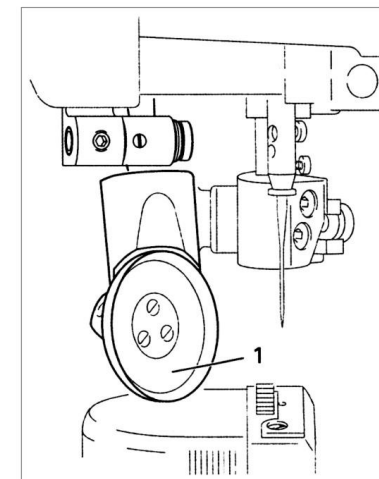
通過按下按鍵1并旋轉手輪來設置縫迹長度。

The stitch length is set by pressing key 2 and turning the balance wheel.

3.07 滾輪壓腳向外擺動 Swing out roller presser

當滾輪壓腳抬起後，可以通過向下輕拉它，使其向外擺動。

When the roller presser is raised, it can be swung out by pulling it lightly down-wards.

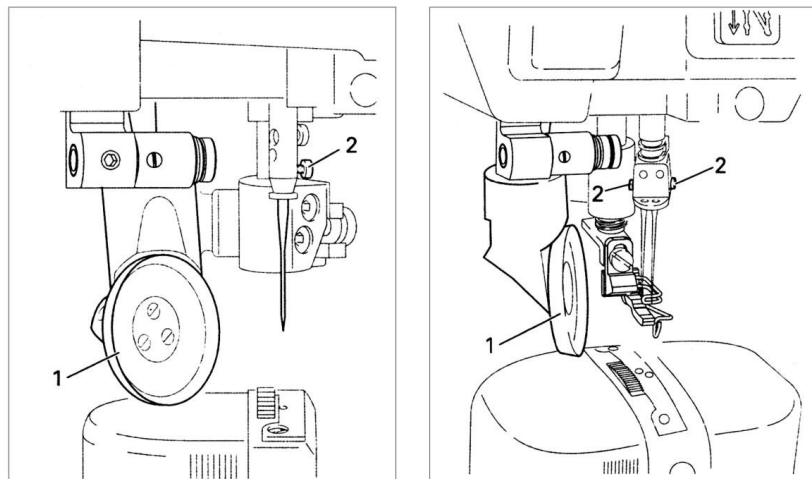


4.縫紉操作準備 Preparation

必須遵守本說明書中所有的規定和提示，特別要注意所有的安全規定；
所有機器準備工作祇允許由受過相應培訓的人員完成；
在所有的機器準備工作時，必須通過關閉總開關或者從電源插座上拔出插頭，以使機器斷電。

All instructions and regulations in this instruction manual must be observed, special attention must be paid to all safety regulations ;
All setting-up work must only be carried out by personnel with the appropriate training ;
For all setting-up work the machine must be disconnected from its power supply by turning off the on/off switch, or removing the plug from the electric power socket.

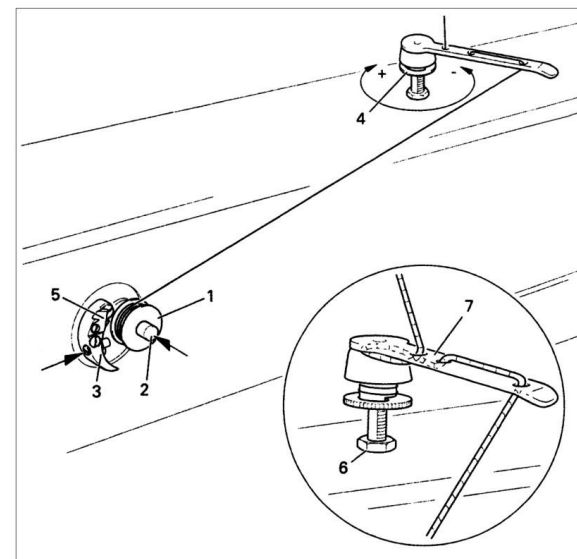
4.01安裝機針 Inserting the needle



抬起滾輪壓腳1並將其向外擺動；
鬆開螺釘 2 並插入機針，使機針的長槽背對着各自勾線的旋梭(即勾線旋梭在左，長槽就向右；勾線旋梭在右，長槽就向左)；
擰緊螺釘 2 並將滾輪壓腳擺回到原位置。

Raise the roller presser 1 and swing it out ;
Loosen screws 2 and insert the needle as far as possible, the long groove must be contrary to the hook (If the hook is on the left, the long groove must be on the right);
Tighten screw 2 and swing roller presser 1 back into position.

4.02 繞梭芯線，調整梭芯線的張力。 Winding the bobbin thread ,adjusting the thread tension.



將一個空的梭芯 1 安裝到繞線器軸 2 上；
如圖所示，給梭芯穿線，並將線順時針方向在梭芯上繞幾圈；
同時壓下繞線器軸 2 和杠杆 3，啟動繞線器。

Place an empty bobbin 1 onto bobbin shaft 2;
Thread the bobbin in accordance with Fig. and wind it anti-clockwise around bobbin 1 a few times;
Switch on the bobbin winder while at the same time pressing bobbin winder spindle 2 and lever 3.

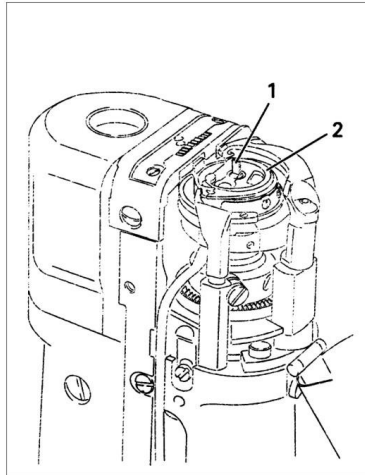
縫紉過程中的梭芯繞線
在梭芯1上的線張力可以用滾花螺母 4 進行調節；
當梭芯繞滿線後，繞線器自動停止；
如果繞線不均勻，可以鬆開螺母 6，相應轉動調整導線板 7 並擰緊螺母 6。

The bobbin fills up during sewing
The tension of the thread on bobbin 1 can be adjusted with knurled nut 4;
The bobbin winder stops automatically when bobbin 1 is full;
If the thread is wound unevenly, loose nut 6 and turn thread guide 7 accordingly .Retighten nut 6 after the adjustment.

4.03 取出/裝入梭殼 Removing/Inserting the bobbin case

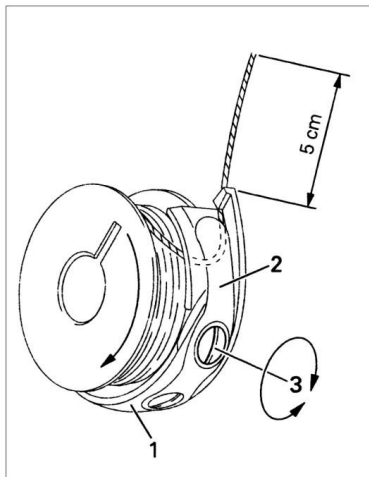
取出梭殼：
打開旋梭蓋；
抬起梭門1并取出梭殼2。
裝入梭殼；
裝入梭殼2；
關閉梭門1并重新合上旋梭蓋。

Removing the bobbin case :
Open the post cap ;
Raise latch 1 and remove bobbin case 2.
Inserting the bobbin case :
Insert bobbin case 2;
Close the latch 1 and close the post cap.



4.04 梭殼穿綫/調節梭芯綫的張力

Threading the bobbin case/Adjusting the bobbin thread tension

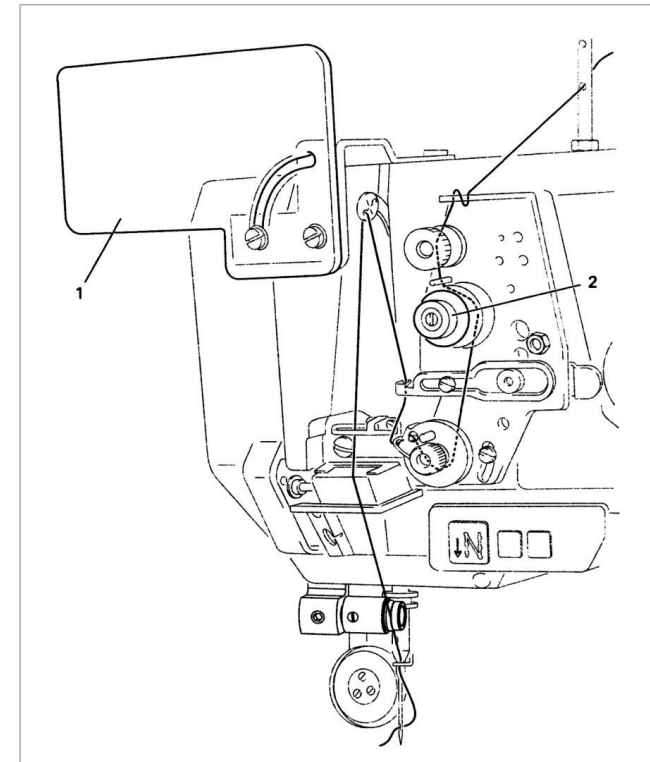


將梭芯裝入梭殼 1 中；
將綫穿過彈性壓板 2 下的狹槽中；
將綫穿過凹口處；
通過旋動螺釘 3 調節梭芯綫張力。

Insert the bobbin into the bobbin case ;
Pass the thread through the slot under spring 2 ;
Pass the thread through the notch ;
Adjust the thread tension by turning screw 3.

4.05 單針機型上穿針綫并調整針綫張力

Threading the needle thread and regulating its tension on the single needle machine on model single needle.

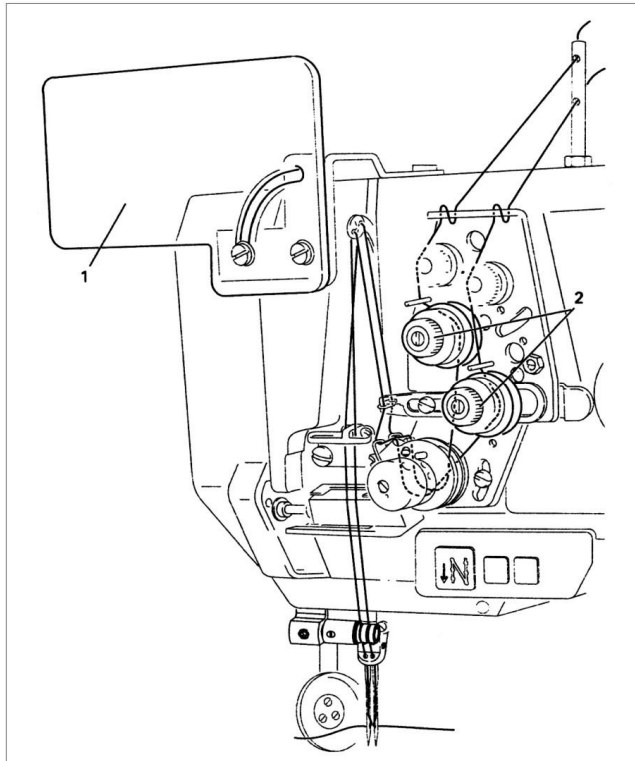


向上擺動護眼罩1；
如圖所示穿針綫；
在左旋梭機型上，針綫是從右向左穿；而在右旋梭機型上，針綫是從左向右穿；
通過轉動滾花螺母 2 調節針綫的張力。

Tilt up the eye guard 1 ;
Thread the needle thread as shown in Fig;
On model left hook the needle is threaded from the right to the left ,and on model right hook from the left to the right,
Adjust the needle thread tension by turning milled nut 2.

4.06 雙針機型上穿針線并調整針線張力

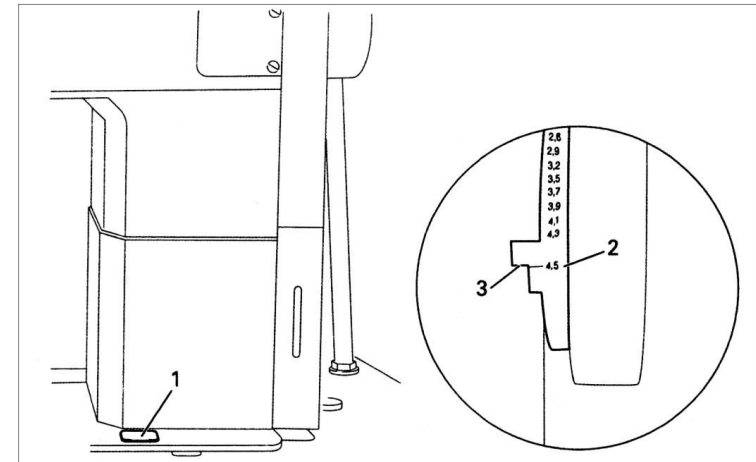
Threading the needle thread and regulating its tension on the single needle machine on model double needle.



向上擺動護眼罩1；
如圖所示穿兩個針線；
在左邊的機針上，針線是從右向左穿；而在右邊的機針上，針線是從左向右穿；
通過轉動滾花螺母2調節針線的張力。

Tilt up the eye guard 1;
Thread the needle thread as shown in Fig;
The left needle is threaded from the right to the left ,and the right needle from the left to the right;
Adjust the needle thread tension by turning milled nut 2.

4.07 設置縫迹長度 Setting the stitch length



按下鍵 1 并同時轉動手輪直到縫迹調節器吻合嵌入定位位置；
保持按下鍵1并來回地轉動手輪，直到在刻度盤 2 上所需要設置的縫迹長度數字
與皮帶護罩凹槽的下邊緣 3 處對齊。

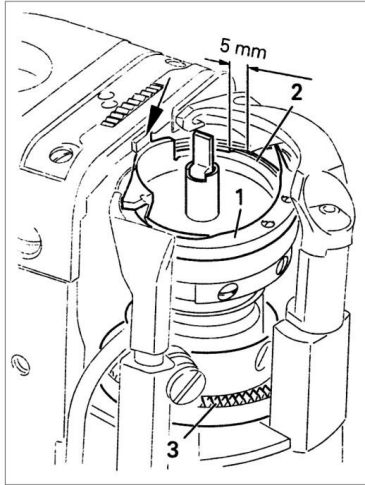
Press key 1 and at the same time turn the balance wheel until the stitch setter clicks into position ;

Hold down key 1 and turn the balance wheel to and fro until the stitch length required is shown on the scale 2 opposite the bottom edge 3 of the belt guard recess.

5.維護與保養 Care and maintenance

清潔.....	每天，如果持續運轉時，每天多次
油量檢查(縫潤滑/旋梭潤滑).....	每天，開機之前
給旋梭加油.....	每天，開機之前
傘齒輪潤滑.....	每年一次
檢查/調節空氣壓力.....	每天，開機之前
清潔空氣濾清器/潤滑器的過濾網.....	在需要時
Clean.....	daily, more frequently if in continuous operation
Oil level (thread lubrication/hook lubrication).....	daily, before use
Oil the hook.....	daily, before use
Lubricate the level gears.....	once a year
Check/adjust air pressure.....	daily, before use
Clean air filter of air filter/lubricator.....	when required

5.01. 清潔 Cleaning



每天清潔旋梭，旋梭腔和齒輪 3，如果持續運行時，每天清潔多次。

Clean the hook ,hook compartment and toothed wheel 3 every day, several times if in continuous use.

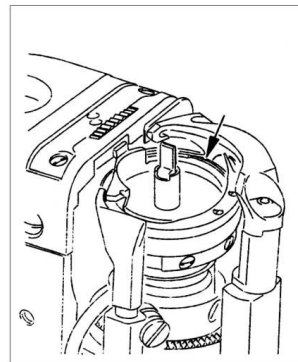
關閉機器電源；
將針杆升到最高位置；
打開旋梭蓋，取出梭殼和梭芯；
擰鬆內梭頭舌 1 的螺釘；
轉動手輪，直到梭殼 2 的尖端進入旋梭的導槽內大約 5mm；
取出梭殼 2；
用石蠟清潔旋梭槽；
當放入梭殼 2 時，要確信梭殼 2 的凸出鼻端部分啮合入針板的凹槽中；
擰緊內梭頭舌 1 的螺釘并蓋上旋梭蓋。

Bring the needle bar to its highest position,
Open the post cap and remove the bobbin case cap and the bobbin ;
Unscrew hook gib 1,
Turn the hand wheel until the point of bobbin case 2 penetrates into the groove of the hook race approx.5mm ;
Remove bobbin case 2,
Clean the hook race with paraffin ;
When inserting the bobbin case 2, ensure that the horn of the bobbin case 2 engages in the groove of the needle plate ;

5.02 給旋梭加油 Oiling the hook

關閉機器電源；
每天注 1-2 滴油到內梭頭舌的孔 1 中；
在機器試車前及在長期停機後，注入幾滴油到旋梭的槽中(參見箭頭所示)。

Switch the machine off ;
Pour 1-2 drops of oil into hole 1 of the hook gib daily;
Before commissioning the machine, and after long periods out of operation, pour a few drops of oil into the hook race (see arrow).



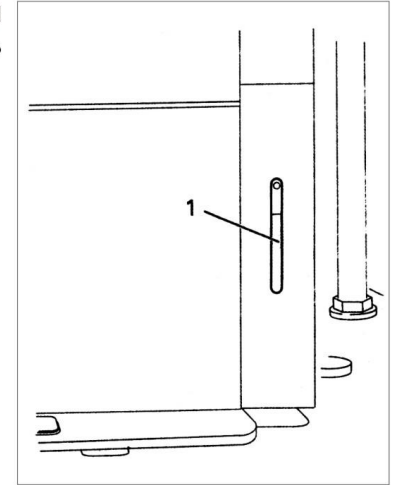
5.03 旋梭潤滑油盒 Oil bowl for hook lubrication

在每次開機前檢查油量，必須始終保持油盒 1 中有油。如果需要可通過加油孔加油。

祇允許使用在 40°C 時平均粘度為 22.0mm²/S 和在 15°C 時密度為 0.865g/cm³ 的潤滑油。

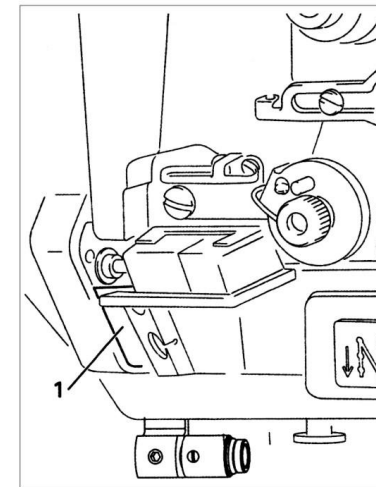
Check the oil level before each use ,there must always be oil in reservoir 1.If required refill oil through hole.

Use only oil with a mean viscosity of 22.0mm²/s at 40°C and a density of 0.865 g/cm³ at 15°C.



5.04 給縫潤滑系統的油盒加油

Filling the oil reservoir of the thread lubrication unit



在每天開機前檢查油量，如有需要，可通過加油孔加油到標記處。
我們推薦使用縫潤滑油。

Control the oil level before each use.
If necessary ,fill oil up to mark through hole.
We recommend thread lubrication oil.

5.05 給傘齒輪副潤滑 Lubricating the bevel gears

關閉機器電源!

所有傘齒輪副每年必須加一次新油脂。

向後翻轉機頭到支撐件上。

Switch the machine off!

All bevel gears must be supplied with new grease once a year.

Tilt the sewing head back onto the support.

如圖所示雙針機型的傘齒輪副。

塗油脂到齒輪的全部齒側面(見箭頭所示)。

在將機頭放回垂直位置時，先向後按翻轉保險1，并用雙手將機頭放回垂直位置。

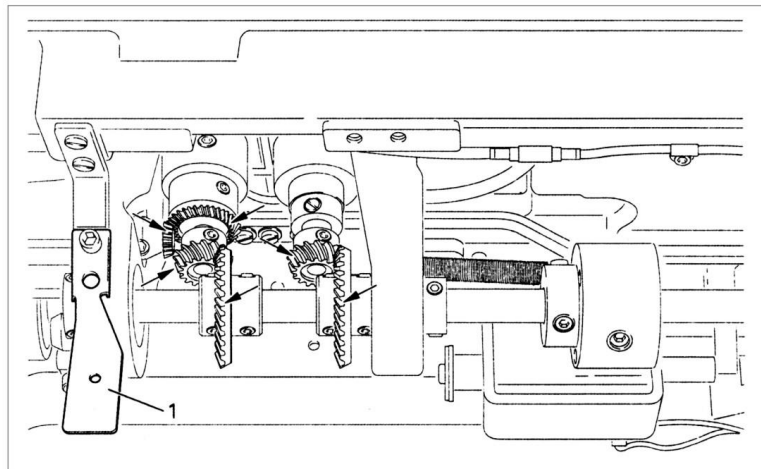
Fig. shows the bevel gears of the double needle machine.

Apply grease to all the tooth flanks and the rack (see arrows).

To set the sewing head upright, press tilt lock 2 backwards and set the sewing head upright using both hands.

我們推薦使用滴點大約為150℃含鈉油脂。

We recommend sodium grease with a dripping point of approx. 150°C.



警告：必須用雙手將機頭放回垂直位置

有在機頭和臺板之間被擠傷的危險!

Warning :Use both hands to set the sewing head upright.

Danger of crushing between the sewing head and the table top !

第二部分 零件部分 PARTS LIST