

# 金輪牌工業用縫紉機

## GOLDEN WHEEL INDUSTRIAL SEWING MACHINE

CS-8910/8911 系列  
CS-8910/8911 Series



操作說明書  
INSTRUCTION MANUAL

啟翔股份有限公司  
CHEE SIANG INDUSTRIAL CO., LTD.

## ■ 重要安全事項 ■

1. 使用此縫紉機之前，所有安全裝置應安裝到規定的位置。沒有安裝規定的安全裝置時禁止使用。
2. 此縫紉機須由接受過培訓的操作人員來操作。
3. 操作縫紉機時，應戴安全防護眼鏡。
4. 在下列情況下，應關閉電源開關或拔下電源線插頭：
  - 穿線或更換梭子時
  - 更換機針、針板、旋梭、壓腳等零件時
  - 保養、調整或修理時
  - 離開工作場所時
5. 使用離合器馬達時，請等待馬達完全停止之後再進行穿線或更換零件等工作。
6. 禁止用手觸摸縫紉機通電的零件或裝置，不論電源開關是否打開。
7. 縫紉機的修理或調整應由受過專門訓練的技術人員來進行。
8. 縫紉機的使用期間應定期清掃及潤滑。
9. 電源插頭應由具有專門知識的技術人員來安裝。電源插頭必須連接到接地插座上。
10. 縫紉機指定用途以外不得使用。
11. 對縫紉機的變更或改造應符合安全規定，並採取有效的安全措施。

## ◆ IMPORTANT SAFETY INSTRUCTION ◆

1. All safety devices must in position when the machine is ready for work. Operation without the specified safety devices is not allowed.
2. This machine should be operated by appropriately trained persons.
3. Wear safety glasses when operating this machine.
4. Under following circumstances, turn off the power switch or disconnect the power plug of the machine from the receptacle:
  - Threading needle(s) or replacing bobbin(s)
  - Replacing needle(s), throat plate, hook(s) or presser foot etc.
  - Maintaining, adjusting or repairing
  - Leaving the working place
5. When using a clutch motor, please wait for the motor stops completely before threading or replacing parts.
6. Do not tampering live parts or devices, regardless of whether the machine is powered.
7. Repair and adjustment works should only be done by appropriately trained technicians.
8. Periodically clean and lubricate the machine throughout the time in use.
9. The power plug should be attached to the machine by electric technicians. The power plug has to be connected to a grounded receptacle.
10. This machine is only allowed to be used for the purpose intended. Other uses are prohibited.
11. Modifying or remodeling the machine should be made in accordance with the safety regulations and should apply effective safety measures.

## ■ 機器安裝

- 接電源線時，請依照電源電壓接線，切勿接錯。
- 本機器的皮帶輪旋轉方向為順時針旋轉(右側視)，接電後如果轉向相反，請變更轉向參數設定(使用伺服馬達時)，或交換電源線位置(使用離合器馬達時)。
- 安裝定位器時，請將針棒上停設定在過最高點之後往下 2mm 的位置，並旋緊定位器的接頭固定螺絲。
- 車針型式建議：CS-8910 使用 DP×5#27 車針。
- 安裝車針時，將其凹槽面稍微轉偏左，勾線效果較佳。
- 安裝自動抬壓腳電磁鐵時，須調整連接於電磁鐵槓桿與抬壓腳槓桿之間的拉桿長度，使電磁鐵的鐵心吸到極限位置時，抬壓腳槓桿不與機頭上的任何零件相碰撞。

## ◆ Machine Setup

- Please connect the power lines according to the specified voltage. Do not connect to a wrong supply voltage.
- In this machine the rotating direction of the pulley is clockwise (viewed from the right side). If the rotating direction is opposite after power on, please change the setting of Direction of Motor Rotation parameter (when using a servo-motor), or exchange the connecting position of power connector (when using a clutch motor).
- In installing the encoder, set the needle-up position at the angle when the needle bar had reached the top dead center and drop 2mm afterward. Then tighten the set screws of the encoder.
- Advised needle type: use needle CPX5#27 for CS-8910
- When installing the needle, turn the recess edge of the needle a little to the left to enhance hook point catching the needle thread.
- When installing the automatic presser foot lifter, make sure to adjust the length of the connecting rod, which connected between the lever of the solenoid and the presser foot raising lever, so as to avoid collision between the raising lever and any part of the machine when the plunger of the solenoid is pull up to its limit position.

## ■ 機器潤滑

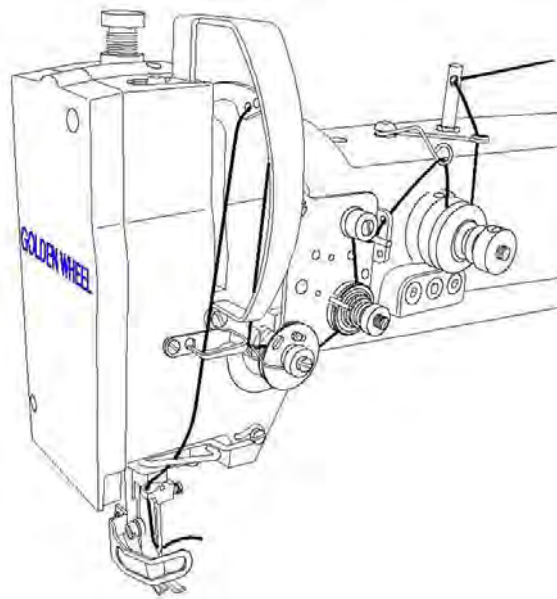
- 各加油孔(紅色漆處)，請每天(或 8 小時)至少加油一次。
- 旋梭的外緣，旋轉摩擦部分，須經常加注清機油，以保持運轉順暢。

## ◆ Machine Lubrication

- Please dispense lubricant oil to each oil hole (painted in red) everyday (or per 8 hours).
- The friction surface of the hook should be lubricated with light-load oil frequently to ensure smooth operation.

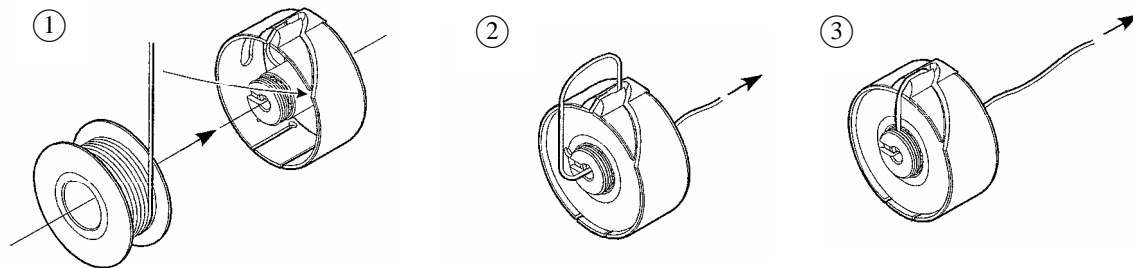
## ■ 針線穿線示意圖

### ◆ Threading Needle thread Illustration



## ■ 梭子與梭殼穿線示意圖

### ◆ Bobbin and Bobbin Case Threading Illustration

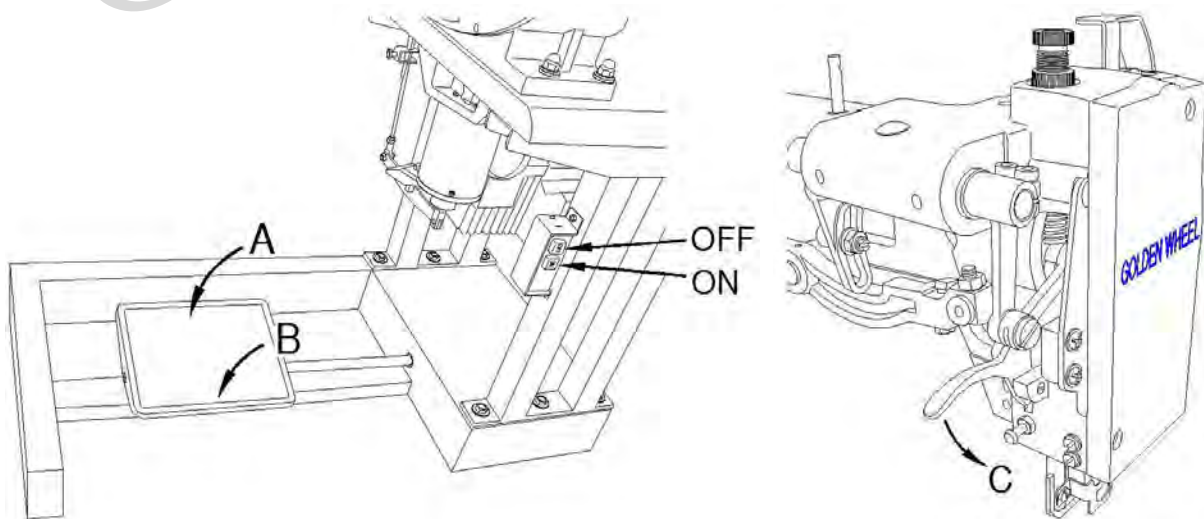


## ■ 機器操作

- 本機器的馬達設有保護裝置，如果阻力超過負荷，或是旋梭卡線時，馬達會自動停止並顯示出錯誤訊息，同時定位器上的紅色 LED 燈會閃爍，此時請先按 **OFF** 按鈕，排除問題，等待紅色 LED 燈熄滅後，再按 **ON** 按鈕，可開始繼續操作。
- 踏板向前踏(A 方向)是啟動，向前踏的角度可控制轉速的快慢；踏板向後踏(B 方向)是自動提升壓腳。
- 在每次起動車縫前，請注意壓腳是否放下，若沒放下，請將壓腳提升桿往下扳(C)，以避免針柱撞斷壓腳。

### ◆ Operation of the Machine

- The motor in this machine is equipped with an overload protective system. When the load exceeds the limit or the hook gets jammed with threads, the motor will stop automatically and displaying error message and the red LED lamp in the encoder will flash simultaneously. At this time please press the OFF button and remove the problem. Wait for the red LED to go off before pressing the ON button to restart the machine.
- Toeing pedal forward (A direction) to start the machine. The forward angle controls the sewing speed. Heeling pedal backward (B direction) to lift the presser foot automatically.
- Pay attention to the position of presser foot before sewing every time. If the presser foot is not at the descend position, please pull the lever (C) to lower down the presser foot, otherwise the presser foot may be broken by the needle bar.

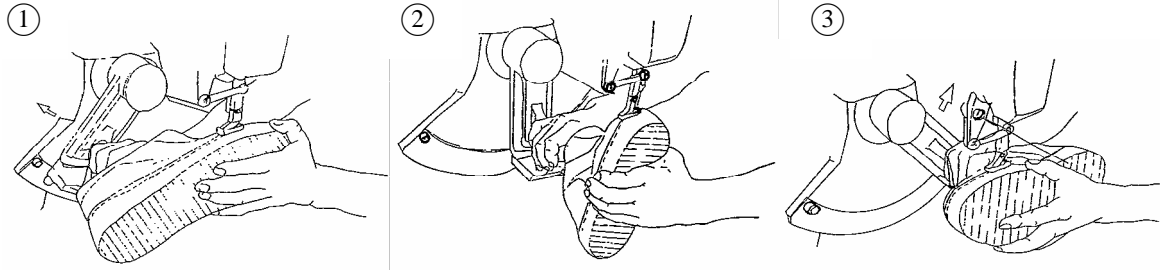


## ■ 正確的操作搖臂方法

當車縫到鞋的周圍各部位，需如圖所示轉動搖臂。

### ◆ The Correct Method for Operating the Swing Arm

Turn the swing arm as shown on the figures when you stitch around the border of the shoe.

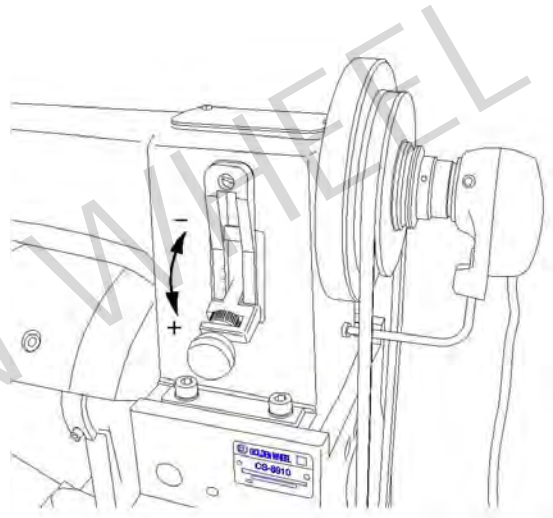


## ■ 調整針距

要將針距調大時，以逆時針旋轉針距控制手柄上的螺母，使針距控制手柄往下降；要將針距調小時，則以順時針旋轉此螺母，使針距控制手柄往上升。

### ◆ Adjusting the Stitch Length

Turn the nut of the control lever counterclockwise to lower down the control knob in order to increase the stitch length; turn the nut clockwise to raise the control knob in order to decrease the stitch length.

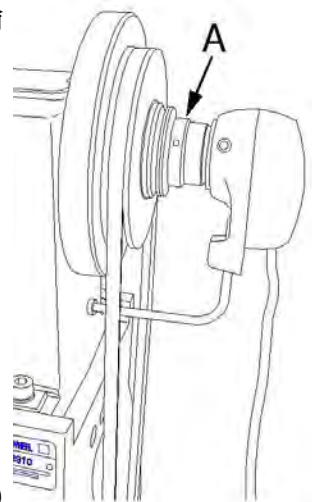


## ■ 調整皮帶輪離合器

- 本機器的皮帶輪設有離合器裝置，當運轉超過負荷時，皮帶輪會脫離主軸，產生空轉。
- 本裝置可依縫製品之條件來調整主軸之出力，若將螺母(A)轉鬆，壓盤與皮帶輪之間的磨擦力減弱，適用於輕負荷之薄料車縫；反之，若將螺母轉緊，磨擦力增強，適用於重負荷之厚料車縫。
- 離合器之調整，以車針可貫穿過加工物勾線，不產生空轉為原則。

### ◆ Adjusting the Clutch of Pulley

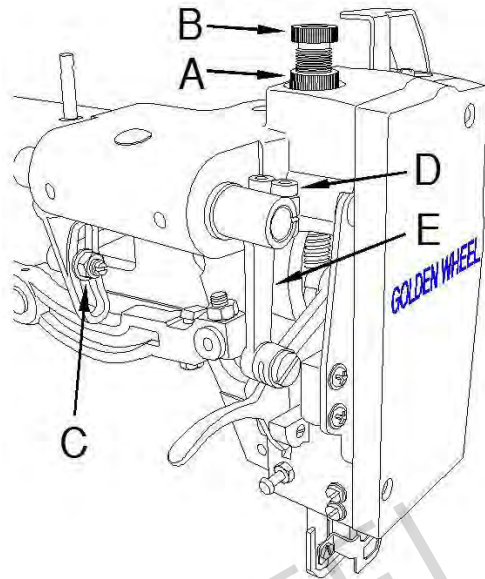
- The pulley in this machine is equipped with a clutch. When overloaded, the pulley will be disengaged from the main shaft and run in slippery.
- The clutch can be adjusted according to the sewing condition. If the nut (A) is loosen, the friction force between the spring and the pulley is decreased (for sewing thin material); if the nut is tighten, the friction force is increased (for sewing thick material).
- The adjustment of the clutch should be made that the needle be just able to penetrate the material and no slip occurs.





## ■ 壓腳的調整

- 需調整壓腳的壓力時，先將固定螺母(A) 旋鬆，再轉動調整螺絲(B) 來調整壓腳的壓力強弱，調整完成時再將固定螺母(A)旋緊。
- 需調整內外壓腳的上下移動量時，將螺帽(C) 旋鬆，將螺帽向上推可使內外壓腳的上下移動量增大，反之，若將螺帽向下推可使內外壓腳的上下移動量減少。
- 需調整內壓腳的相對高度時，先將螺絲(D) 旋鬆，將擺臂(E)向外推可使內壓腳提高，反之，若將擺臂向內推可使內壓腳降低。

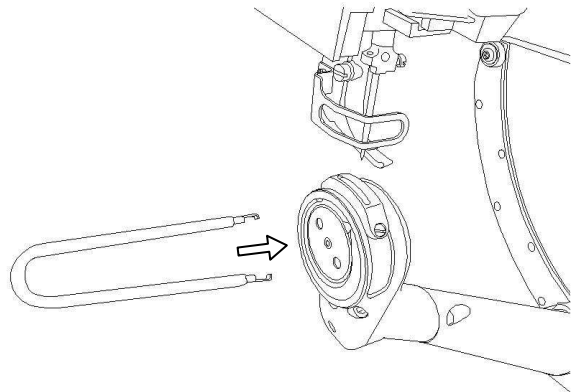


## ◆ Adjusting the presser foot

- When it is needed to adjust the pressure of the presser foot, loosen the locknut (A) and turn the adjusting screw (B) to regulate the pressing force of the presser foot. Tighten the locknut (A) after the adjustment is finish.
- In adjusting the alternating moving height between the inner and out presser foot, loosen the hex-nut (C) and push it upward to increase the amount. Or reversely push it downward to decrease the amount.
- When it is needed to adjust the height of the inner presser foot relative to out presser foot, loosen the screw (D) and push the arm (E) outward to raise the height of the inner presser foot. Or reversely push it inward to lower the inner presser foot.

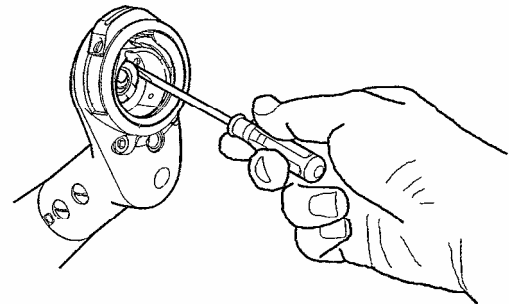
## ■ 旋梭彈片的調整

旋梭內的彈片功能為：①以摩擦力壓住梭子，使梭子不致空轉而造成卡線。②控制底線之鬆緊。需要調整彈片壓制梭子的摩擦力時，請用適當工具將彈片取出，修正折彎角度之後再裝回。嘗試用手拉底線，以達到所需求的拉力，作為彈片修正的原則。如果測試後感覺太緊，則可利用螺絲起子對折彎處稍微壓平。當彈片的邊緣已過度磨損時請更換新品。



## ◆ Adjusting Spring of Hook

The spring inside the hook provides the functions: ①Exert frictional force on the bobbin to prevent it from rotating freely and jamming the thread. ②Subsequently control the tension of bobbin thread. Please use an adequate tool to detach the spring when it is necessary to be bent to adjust the frictional force. Use hand to pull the bobbin thread to judge the tension force. If the tension is too high after adjusting, a screw driver may be applied to flatten the bent line. When the edge of the spring is worn exceptionally, please replace it with a new one.

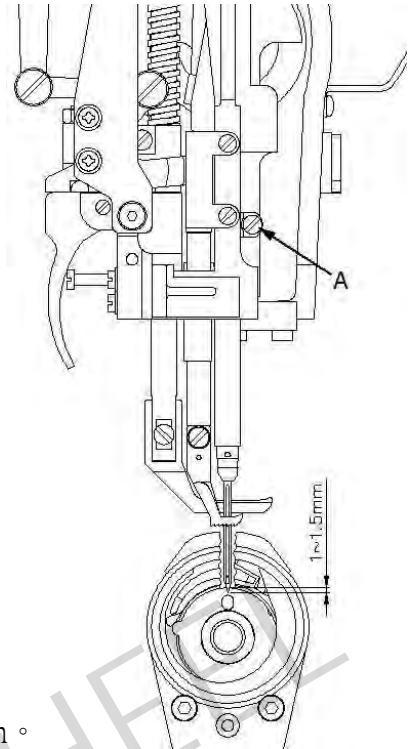


## ■ 針棒高度的調整

- 調整針棒的高度時，先用手轉動皮帶輪，使針棒降至最低點，再將螺絲(A)旋鬆。
- 拉起或壓下針棒作高度調整，使針尖露出旋梭的梭殼孔的長度約 1~1.5mm。如果露出太長則容易插到梭子的底線而產生絞線或卡線等情形。

## ◆ Adjusting the Height of Needle Bar

- When adjusting the height of needle bar, use hand to rotate the pulley to descend the needle bar to its bottom dead center, and then loosen the screw (A).
- Raise up or lower down the needle bar to allow the needle point projected into the bobbin case housing of the hook about 1~1.5mm. If the projected distance is too much, the needle point may tangle with the bobbin thread so as to cause jamming of threads.



## ■ 旋梭與車針相對位置的調整

- 用手順向轉動皮帶輪，使針棒從最低點提高約 3~4mm。
- 此時請觀測底座內的變速齒輪箱上的軸心端面刻線是否與箱蓋的刻線(B)對齊，如果沒有對齊，則需調整上方齒形皮帶相對齒形皮帶輪的嚙合位置，或微調齒形皮帶輪的相對上軸心角度，使刻線對齊。
- 由底座正面的開孔鬆開下軸心的三個固定螺絲，使用一字形螺絲起子旋轉搖臂中心的軸心，使旋梭尖點與車針對齊勾線位置。
- 調整完成時需注意旋梭不可干涉車針凹槽的頂部或底部。

## ◆ Adjusting the Relative Position of Hook and Needle

- Rotate the pulley by hand in forward direction to raise the needle bar 3~4mm from its bottom dead center.
- At this position, observe whether the mark on the end of shaft and the mark (B) on the gearbox inside the base are aligned. If not, it is necessary to adjust the relative position between the timing belt and pulley, or adjust the relative position between the pulley and upper shaft.
- Loosen the three set-screws on the lower shaft through the hole in the base. Use a flat tip screw-driver to rotate the shaft in the center of swing arm so as to align the point of hook with the needle.
- Pay attention that the hook should not interfere with the upper or lower part of the scarf of needle.

