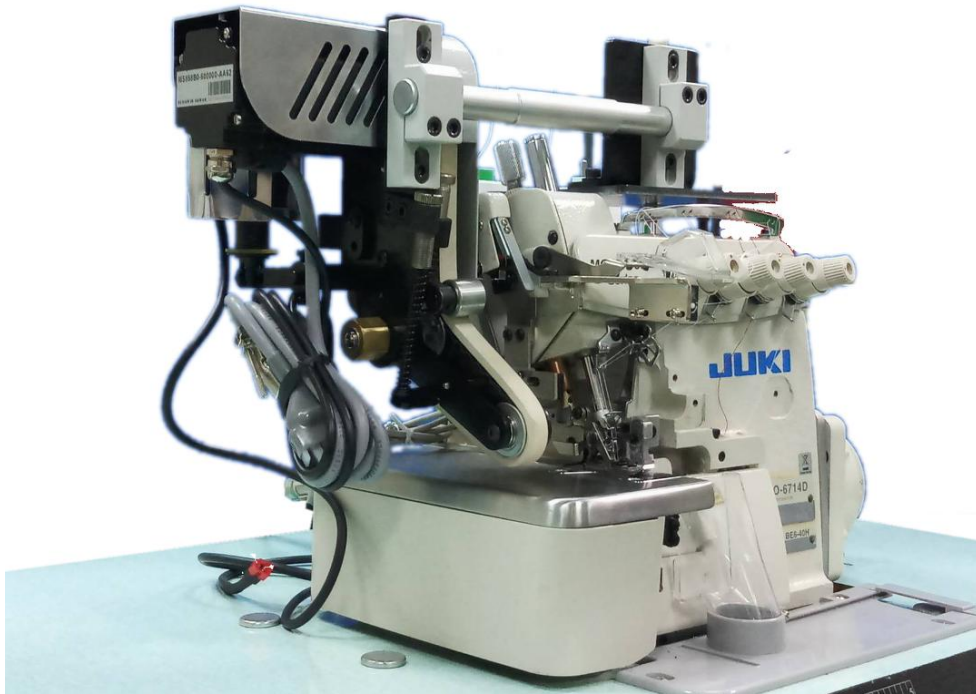# HCP-K 直驅式電子平車拖輪安裝手冊 THE INSTRUCTION GUIDE BOOK FOR HCP-K PULLER

安裝前,請詳細閱讀安裝說明書
PLEASE READ INSTRUCTIONS & ASSOCIATED DRAWINGS BEFORE INSTALLATION
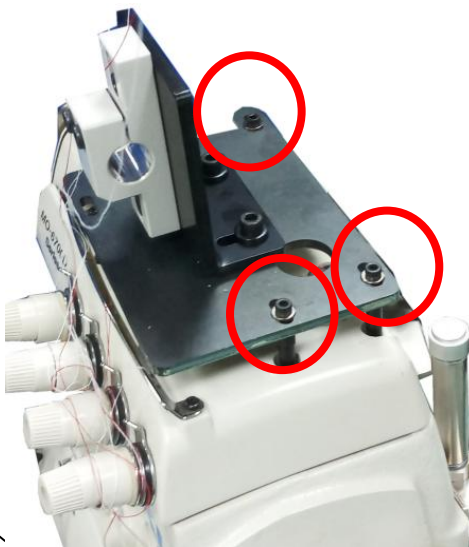
HCP-K 直驅式電子平車拖輪
COMPUTERIZED PULLER WITH DIRECT-DRIVING DEVICE
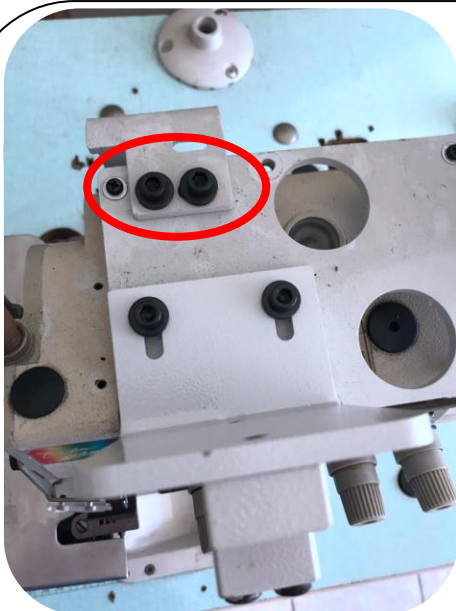## 快速安裝指南 QUICK INSTALL GUIDE

1.更換螺絲並固定

To replace the screws and
fixed screws.

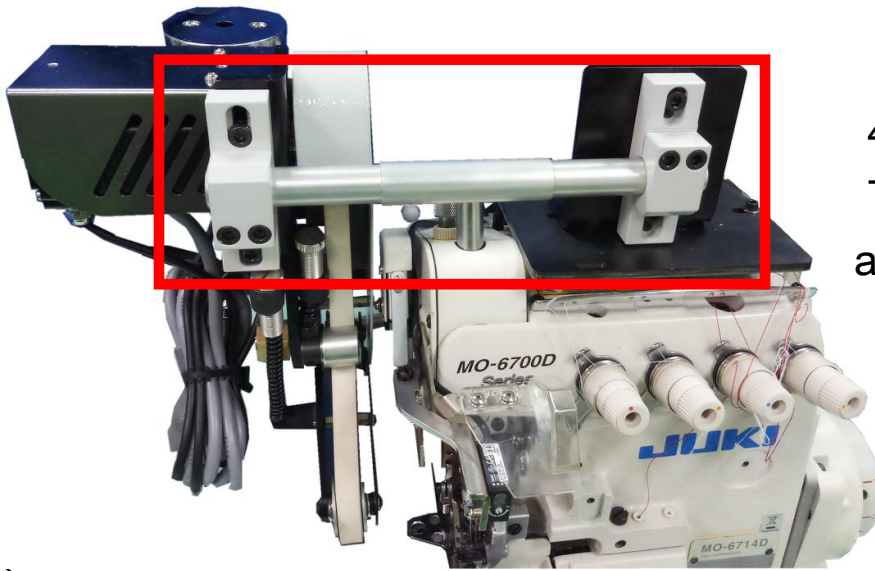
2.放上支撐座並鎖上螺絲

To put the support base
and lock the screws.
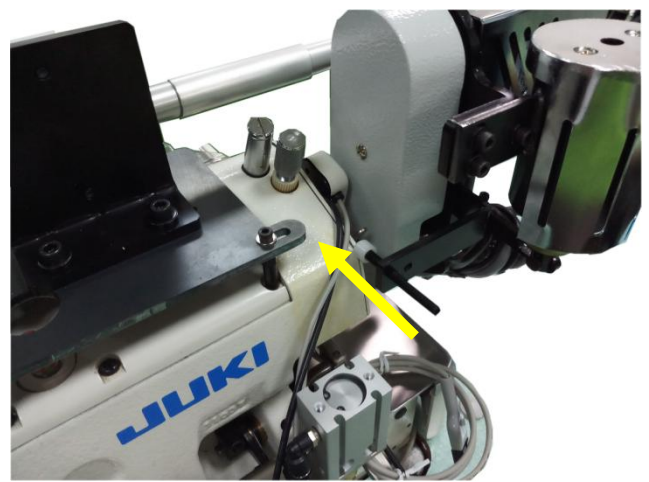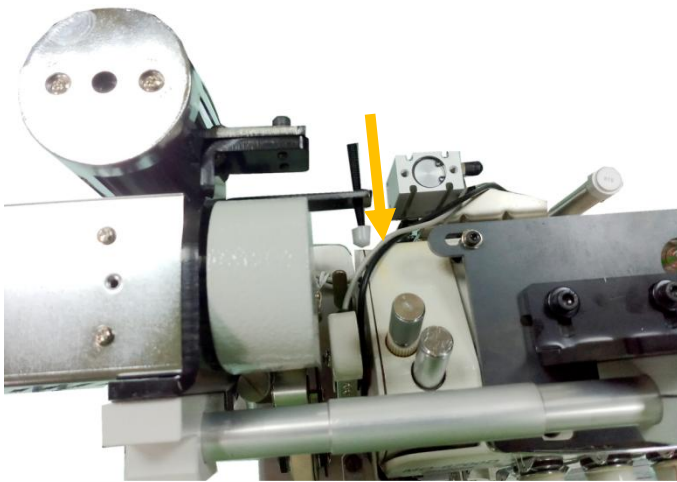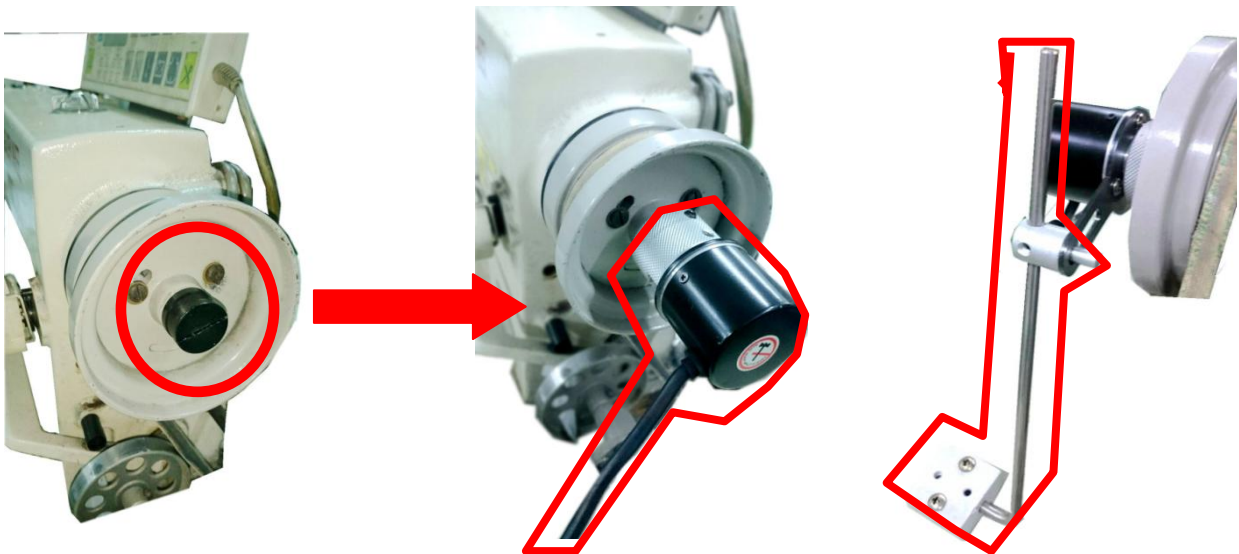

3.鎖上底座及螺絲

To lock the screws
and the base.

4.裝上支撐架與拖輪
To install the support bracket and puller attachment.

5.頂針頂住車頭
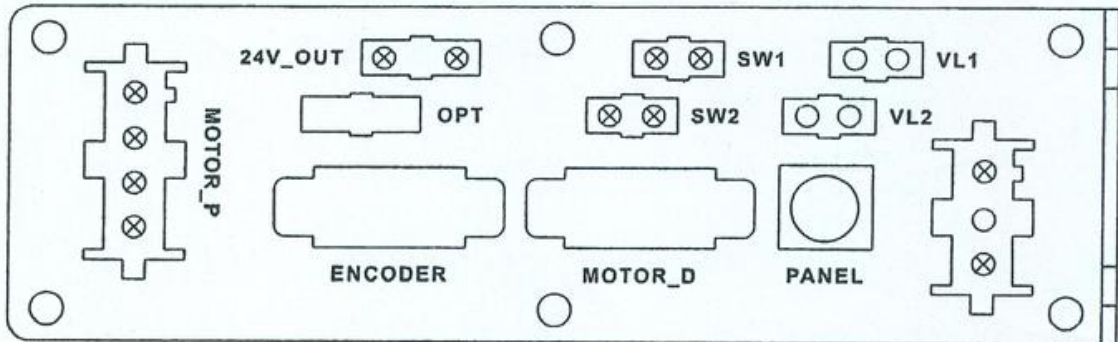Thimble against the machine head.

6.滾軸鎖上螺絲並安裝定位器，固定架固定定位器於桌面上
To lock the screws on the roller and install the synchronizer. And fix the synchronizer on the table with the holder.

安裝說明書
USER INSTRUCTIONS

控制箱端口
PORT FOR CONTROL BOX

MOTOR_P	步進馬達電源 Stitch size
MOTOR_D	步進馬達編碼器 Encoder for stepping motor
ENCODER	主軸編碼器 Encoder for machine shaft
24V_OUT(紅)Red	抬升拖輪電磁鐵 Roller up solenoid
PANEL	控制面板 Control panel

SW_1(白)White	開關信號(倒縫壓桿用) Switch signal for back sewing bar
SW_2(白)White	開關信號 Switch signal
VL_1(黑)Black	倒縫電磁鐵信號24V 24V signal for back sewing solenoid
VL_2(黑)Black	剪線電磁鐵信號24V 24V signal for cutting solenoid

面板功能
PANEL FUNCTION
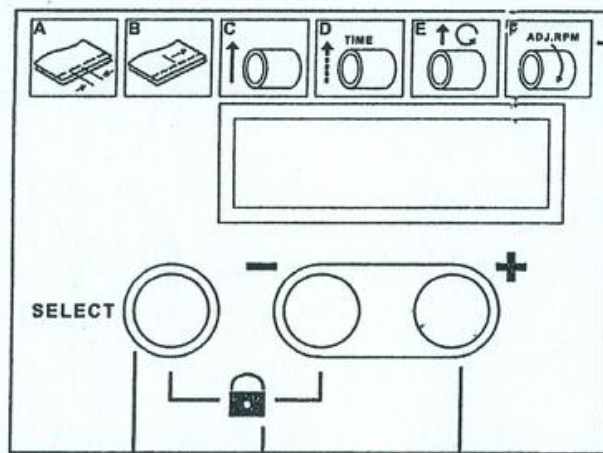
A. 針距設定 (0.1mm ~ 9.9mm)
Stitch size

B. 啟動針數設定 (0 ~ 99)
Start stitches before roller work

C. 停車抬滾輪動作 (0: 關閉 1: 剪線後 2: 停車與剪線後)
Roller up in sewing stop
(0:Close 1:After cutting 2:Stop and after cutting)

D. 停車抬滾輪延時 (0.1s ~ 9.9s)
Delay time for Roller up in sewing stop

E. 倒針滾輪動作 (0: 抬起 1: 倒轉)
Action of roller in back sewing
(0:Roller up 1:Roller reverse)

F. 滾輪速度微調 (0 ~ 9)defaul:5
Adjustment roller speed

增減量調整
Reduce or plus

功能鎖定
Function lock

功能選擇/參數設定
Function select / Parameter

安裝說明書
USER INSTRUCTIONS

定位校正
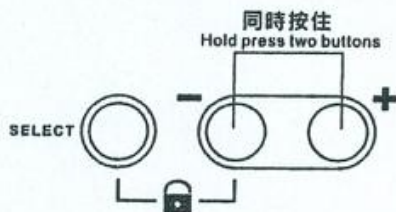### ADJUSTMENT POSITION

❶ 關閉電源。
Power off.

❷ 同時按壓減量鍵和增量鍵後開啟電源。
Hold press reduce and plus then power on.

同時按住
Hold press two buttons

SELECT − +

❸ 固定好主軸編碼器並確認無晃動。
Fasten encoder for shaft then confirm not have sway.

❹ 放鬆手輪與聯軸器之間的螺絲。
Loose screw between hand wheel and coupling.

❺ 轉動手輪使縫紉機處於送料起始狀態。
Rotation hand wheel until feeding mechanical in start position.

❻ 縫紉機維持送料起始狀態下,旋轉主軸編碼器
直到控制面板顯示0000。
Hold feeding mechanical in start position then rotation encoder
,until panel show to "0000".

❼ 鎖緊手輪與聯軸器之間的螺絲。
Lock screw between hand wheel and coupling.

使用前的參數確認
ATTENTION BEFORE USE

❶ 拖輪直徑 (參數01可調整,出廠預設55mm)
Diameter for roller(Adjustment from parameter"01", default value:55mm)

❷ 主軸旋轉方向 (參數04可調整, 出廠預設平縫機方向)
Rotation direction(Adjustment from parameter"04")

❸ 傳動比例 (參數13可調整,出廠預設1:1)
Drive scale(Adjustment from parameter"13", default value: 1:1)

❹ 針距設定 (面板功能A可調整,出廠預設3.5mm)
Sewing stitch(Adjustment from function"A"on panel, default value:3.5mm)

滾輪速度微調
ADJUSTMENT ROLLER SPEED

❶ 使用面板功能 [A],確實調整針距與縫紉機符合。

Use [A] and confirm sewing stitch is correct.

❷ 在拖動效果不理想的情況下,可使用功能 [F ADJ.RPM] 來微調滾輪速度。

If drag effect is not good, use [F ADJ.RPM] to adjustment roller speed.

面板功能鎖定
LOCK FOR PANEL FUNCTION

❶ 關閉電源。
Power off.

❷ 同時按壓功能選擇鍵和減量鍵後開啟電源。
Hold press SELECT and reduce then power on.

同時按住
Hold press two buttons

SELECT − +

❸ 當控制面板顯示ON,代表功能已鎖定。
When panel show to "ON", function already to locked.

❹ 鎖定時,功能BCDE為不可調整狀態。
In lock situation, function BCDE can not adjustment.

鎖定的範圍
Locked range

| A | B | C | D TIME | E ↑C | F ADJ.RPM |

安裝說明書
USER INSTRUCTIONS

參數列表

長按SELECT不放即可進入參數設定，密碼:1234

編 號	說　　　　明	出 廠 值	最 大 值	備　　　註
* 01	拖輪直徑	55	1~999	mm
02	送料角度範圍	180	0~360	度
03	旋轉編碼器精度	360	1~9999	
* 04	主軸旋轉方向	0	0~1	0:平繼機方向 1:繃繼機方向
05	步進馬達旋轉方向	1	0~1	0:左側安裝 1:右側安裝
06	同步係數	2	0~9	
07	電磁鐵全額出力時間	6	1~99	50ms
08	電磁鐵PWM	35	0~99	
09	電磁鐵保護時間	0	0~99	
10	步進馬達限速	200	1~9999	
11	步進馬達細分	8	1~9999	
12	步進馬達速度微調精度	10	1~20	
* 13	傳動比例	100	1~9999	
14	檢測模式 (角度位置)			
15	檢測模式 (速度)			
16	檢測模式 (端口)			
17	檢測模式 (針數)			
18	檢測電流			
19	近接開關極性	1	0~1	
24	鎖定			
25	版本			
26	恢復出廠值	0	0~1	1:恢復出廠值

報警訊息

E-01	步進馬達報警A		E-04	步進馬達MOTOR_P未接
E-02	主軸旋轉方向與設定不符		E-05	步進馬達報警B(TPR-858S)
E-03	感應器報警		E-06	步進馬達規格不符(TPR-588S)

PARAMETER

Hold press "SELECT" can into parameter setting. PASSWORD : 1234

No.	Description	Default	Range	Remark
* 01	Diameter for roller	55	1~999	mm
02	Feeding angle	180	0~360	
03	Degree for encoder	360	1~9999	
* 04	Rotation direction for shaft	0	0~1	0 : Inverse clock 1 : Clockwise clock
05	Rotation direction for stepping motor	1	0~1	0 : Left install 1 : Right install
06	Synchronization	2	0~9	
07	Solenoid full power time	6	1~99	
08	Solenoid duty cycle	35	0~99	
09	Solenoid protection time	0	0~99	
10	Speed limit	200	1~9999	
11	Degree for stepping motor	8	1~9999	
12	Degree for function "F"	10	1~20	
* 13	Drive scale	100	1~9999	
14	Test mode(position)			
15	Test mode(speed)			
16	Test mode(port)			
17	Test mode(number of stitch)			
18	Test mode(current)			
19	Sensor mode	1	0~1	
24	Lock			
25	Version			
26	Rest	0	0~1	1 : Rest

ERROR CODE

E-01	Error for stepping motor A	E-04	MOTOR_P not inert
E-02	Rotation direction error	E-05	Error for stepping motor B (TPR-858S)
E-03	Error for sensor	E-06	Wrong stepping motor (TPR-858S)