

SIRUBA

電控參數說明書

ELECTRONIC CONTROL PARAMETER MANUAL

■ F007K / FSC



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I. 安裝與調整 / Installation and Adjustment

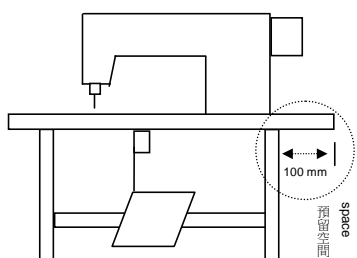
(1).馬達的安裝：請參閱各車頭製造廠之說明書。

Motor installation: Please refer to the machine head's instruction.

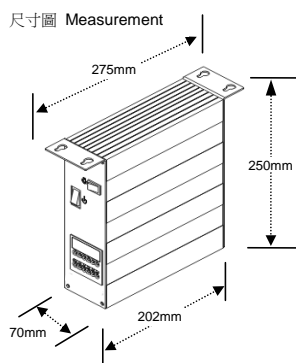
(2).控制箱的安裝：

Control Box Installation:

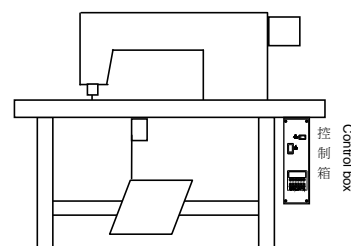
a).車板右側面須預留 100 mm 以上空間
Leave 100 mm space at right



b).將 i 70M 控制箱鎖裝於車板下方
Mounting i 70M under the working table



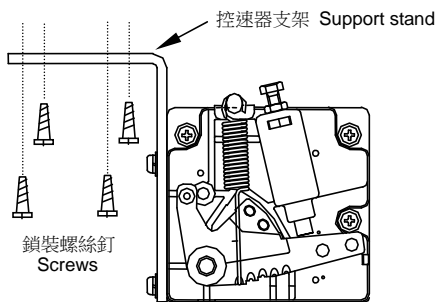
c).安裝後示意圖
Installation layout



(3).控速器的安裝：

Speed Control Unit Installation:

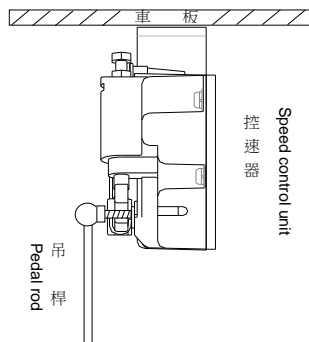
a).控速器與其支架座
Speed Control Unit



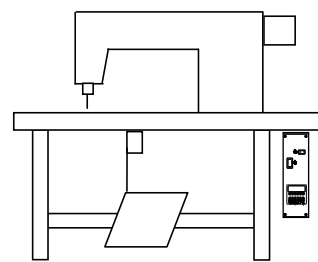
鎖裝螺絲釘時，需以螺絲起子全程鎖裝。

Always use screwdriver to tightly secure screws

b).保持在吊桿成直線下，將控速器連座鎖於車板下方
Keep rod in vertical, secure the unit under the table



c).安裝後示意圖
Installation layout



(4).控速器前/後踏力量的調整：

Adjust the speed control unit:

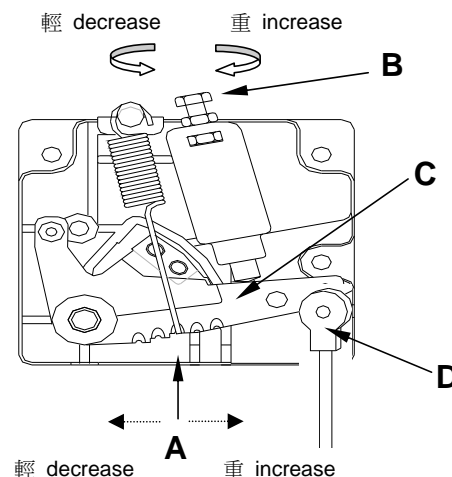
控速器各部位名稱：如右圖示

Components of the speed control unit: see figure

A：前踏力量彈簧 / Spring for toeing forward force adjustment

B：後踏力量的調整螺栓 / Bolt for heeling backward force adjustment

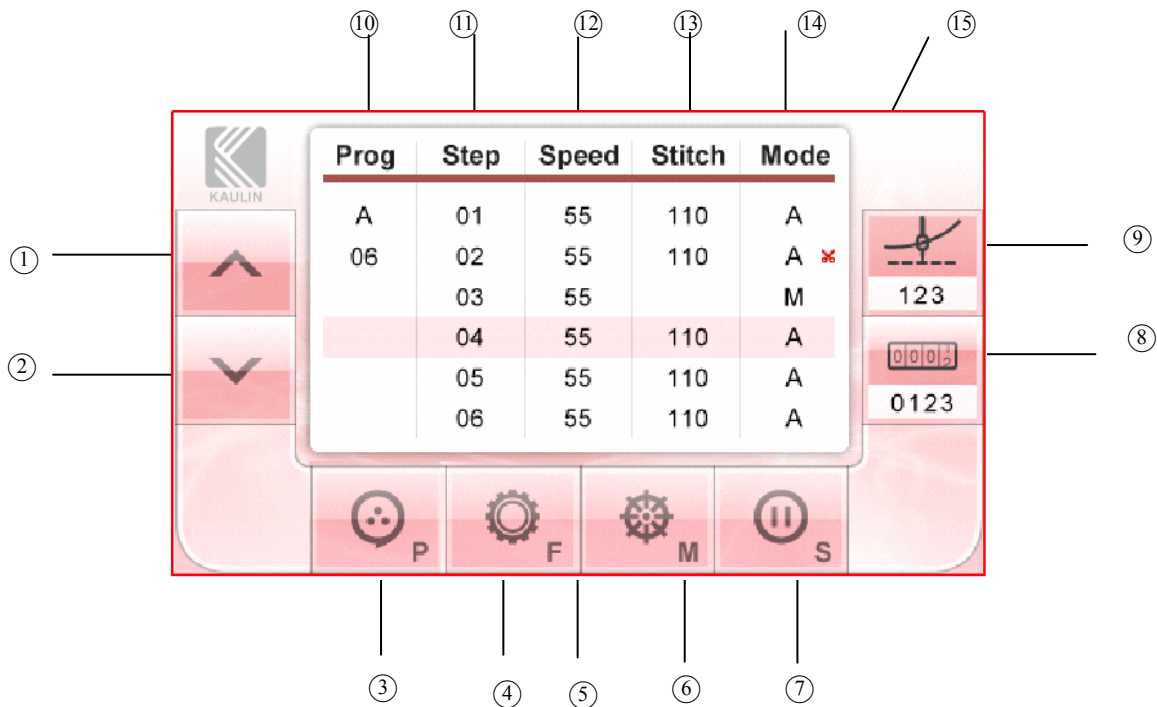
C：踏板旋臂 / Treadle / Pedal arm




D：腳踏板吊桿 / Pitman Rod for Treadle / Pedal


調整需求 Term of adjustment		調整結果 Adjustment result
1	踏板前踏力量的調整 Toeing forward force adjustment	當彈簧 A 愈向右側勾時，表示力量愈重 Spring A move to right = force increased 當彈簧 A 愈向左側勾時，表示力量愈輕 Spring A move to left = force decreased
2	踏板後踏力量的調整 Heeling backward force adjustment	當螺栓 B 愈向上 ↶ 時，則後踏力量愈輕 Bolt B turn ↶ = force decreased 當螺栓 B 愈向下 ↷ 時，則後踏力量愈重 Bolt B turn ↷ = force increased
3	踏板行程長短的調整 Treadle stroke adjustment	當吊桿 D 向右側孔鎖裝時，表示行程較長 Rod D secure at right = stroke is longer 當吊桿 D 向左側孔鎖裝時，表示行程較短 Rod D secure at left = stroke is shorter

II. 縫製畫面功能說明 / function for sewing

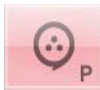


①  銀幕光棒上移鍵 / shift upward


說明：每按一次上移鍵，光棒則上移一階，利用此鍵可以切換工程段數
Description: moves one step upward when press shift upward key.

②  銀幕光棒下移鍵 / shift downward


說明：每按一次下移鍵，光棒則下移一階，利用此鍵可以切換工程段數
Description: moves one step when press shift downward key.

③  進入到編輯畫面鍵 / enter editing

說明：按此鍵，會切換到編輯畫面，進入後則可依實際需求進行相關設定
Description: enter editing when press this key, process related setting after entered.

④  進入到參數設定畫面鍵 / enter parameter setting

說明：按此鍵，會切換到參數設定畫面，進入後則可依實際需求進行相關設定
Description: press the key to enter parameter setting, process related setting after entered.

- ⑤  送料鍵 / forward 說明：按此鍵不放開，正轉送料用步進馬達運轉，按鍵離開後馬達停止運轉。

Description: press the key to forward the tape.

- ⑥  退料鍵 / reverse

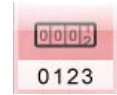
說明：按此鍵不放開，反轉送料用步進馬達運轉，按鍵離開後馬達停止運轉。

Description: press the key to reverse the tape.

- ⑦  暫停鍵 / Stop

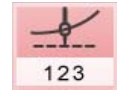
說明：按此鍵後，馬達停止運轉、輸出裝置停止動作。

Description: press the key to stop the motor and device.

- ⑧  計數器顯示與按鍵 / counter

說明：縫製物計數用，按此鍵可重置計數器。

Description: fabric counting. Press the button to reset the counter.

- ⑨  針數顯示器 / stitches counter

說明：運轉時會顯示每一 Step 之實際車縫針數。

Description: the key display the stitches on each step.

- ⑩ **Prog** 縫製資料區表示 / Programming mode

說明：顯示目前選用的工程模式,最多可儲存 27 組(A~Z+[])不同工程內容的資料

Description: display the model is processing, maximum 27 modes (A~Z+[]).

- ⑪ **Step** 縫製段數表示 / Programming segments

說明：每個工程模式各有 19 個工程段數可供設定

Description: 19 programming segments in each programming mode.

- ⑫ **Speed** 送料速度(送布量)表示 / metering of feeding

說明：顯示每針的送料速度，送料速度範圍為 0~180

Description: display the meter of every stitch, the range of meter is 0 ~ 180.

⑬ **Stitch** 針數表示 / stitch

說明：顯示每一工程段數所設定之針數

Description: display the set stitches in every programming segment.

⑭ **Mode** 動作模式表示 / operation mode

說明：顯示每一工程段數的動作模式，動作模式有下列四種：

Description: display operation mode in every program segment, it has 4 modes:

“A”(自動模式):設定針數累計到達時依序進入下一工程段數:

“A”(Auto mode):enter to next segment automatically while the set stitch achieved.

“As”(自動停車模式):設定針數累計到達時停止車縫:

“As”(Auto stop mode):Stop sewing automatically while the set stitch achieved.


“M”(手動模式):用手動開關進入下一工程段數

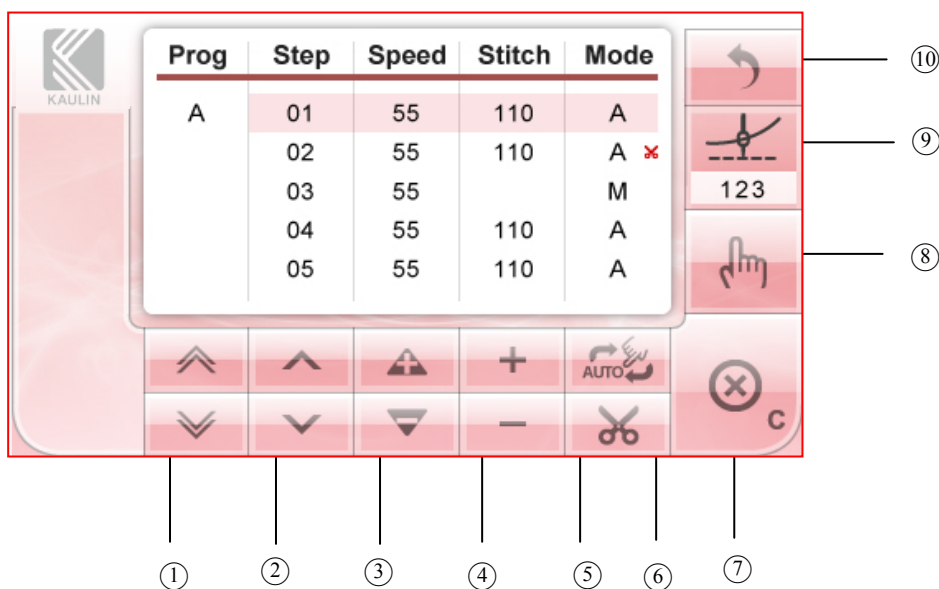
“M”(Manual mode):enter to next segment manually.


“✂”：該工程段數車縫完成後會自動做切線動作

trimming automatically after finished the programming segment.

III. 編輯畫面功能說明 / editing

◎縫製畫面下按  鍵可進入編輯畫面 / press P key to enter editing




①  工程模式切換按鍵 / programming mode switch key

說明：工程模式存放區共 27 組(A ~ Z+[])，依實際需求選擇適當之存放區

Description: total 27 zones(A ~ Z+[]) in programming mode, select the mode you need to store data.


註:工序 [] 為特殊縫製模式，使用方式請參考 VI.操作說明的範例 3

NOTE: [] is special sewing mode, please refer to the example 3 of the VII. operating.

②  工程段數切換按鍵 / programming segment switch key

說明：切換工程段數用，工程段數最多可設定 19 段

Description: for switch programming segment, maximum 19 segments.

③  設定送料速度 / meter feeding setting

說明：每針送料長度的設定，以下是送料量的對照表。

Description: set the feeding meter of every stitch, list below is the reference table.

Speed	送料長度(mm) feeding meter	Speed	送料長度(mm) feeding meter
0	0.00	100	2.44
10	0.24	110	2.69
20	0.49	120	2.93
30	0.73	130	3.17
40	0.98	140	3.42
50	1.22	150	3.66
60	1.46	160	3.91
70	1.71	170	4.15
80	1.95	180	4.39
90	2.20		

④



設定車縫針數 / sewing stitch setting

說明：依需求設定針數，按 "+" 針數往上增加，按 "-" 針數則減少

Description: set the stitch needed, press "+" increment, "-" decrement

⑤



設定該工程段數為自動車縫模式或手動車縫模式 /

Set auto sewing or sewing manually in programming segment

說明：

Description:

“A”(自動):設定針數累計到達時依序進入下一工程段數

“A”(Auto):enter to next segment automatically while the set stitch achieved.

“As”(自動停止):設定針數累計到達時自動停止車縫

“As”(Auto stop):stop sewing automatically while the set stitch achieved.

“M”(手動):用手動開關進入下一工程段數

“M”(Manual):enter to next segment manually.

⑥

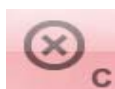


設定切線模式 / trimming mode setting

說明：按下此鍵後，在 Mode 欄會顯示剪刀符號，表示此工程段縫製結束後會自動做切線動作。

Description: press the key to show scissors mark in mode, it process trimming after sewing finished.

⑦



設定工程結束 / programming ending setting

說明：可設定兩種工程結束的模式,如下:

Description: two modes been selected:

End: 工程結束時自動切線

End: trimming after the ending of programming.

End2: 工程結束時不切線.

End2: no trimming after the ending of programming.

Cont: 工程結束時不切線,並自動返回 Step01.

Cont: no trimming after the ending of programming, and automatically return Step01.

⑧



載入針數 / stitch download

說明：在試縫完成後可將計數器內所顯示的數字(針數)載入 Stitch 欄內作為該工程的針數設定(注意!原針數會被覆蓋掉)：

Description: the number of stitch after sewing finished can be download to stitch column been new stitch setting (warning! The original number of stitch will be over written.)

⑨



針數計數器 / stitch counter

說明：顯示目前針數；在執行“載入針數”時按下針數計數器可以將針數清除為零

Description: display the stitch now processing, the stitch will be zero while press stitch counter key in executing stitch download.

⑩



返回鍵 / return

說明：返回縫製畫面

Description: return to sewing

◎goto 功能 / goto function

如果工程段數不敷使用,可設定第 19 段的”goto”功能串接其他工序的段數,最多可串連 459 段,串連的範例如下:

If sections are not enough, you may set goto in section 19 of the desired program to continue using sections of another program up to a maximum of 459 sections.

例 Example.

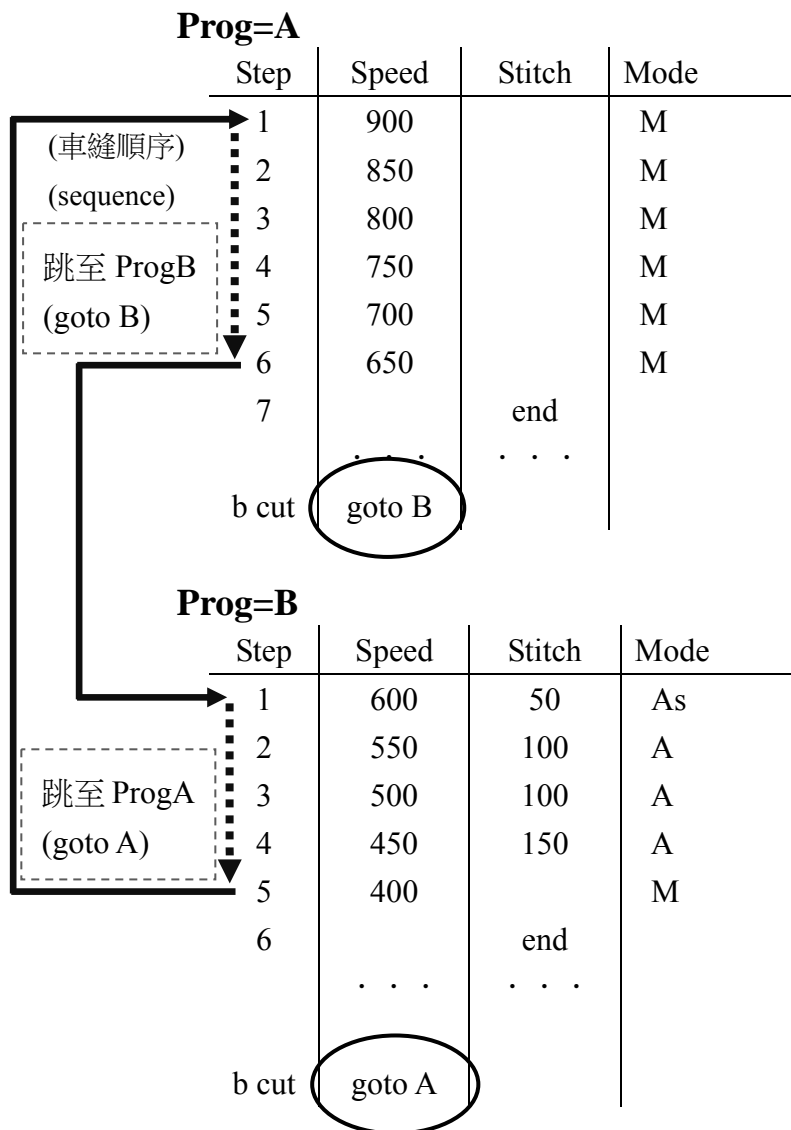
Prog=A 第 1 段 Speed 為 900, M 模式 (Prog=A, Step1, Speed=900, Mode=M)

Prog=A 第 2 段 Speed 為 850, M 模式 (Prog=A, Step2, Speed=850, Mode=M)

Prog=A 第 3 段 Speed 為 800, M 模式 (Prog=A, Step3, Speed=800, Mode=M)

- Prog=A 第 4 段 Speed 為 750, M 模式 (Prog=A, Step4, Speed=750, Mode=M)
- Prog=A 第 5 段 Speed 為 700, M 模式 (Prog=A, Step5, Speed=700, Mode=M)
- Prog=A 第 6 段 Speed 為 650, M 模式 (Prog=A, Step6, Speed=650, Mode=M)
- Prog=B 第 1 段 Speed 為 600, As 模式, 針數 50 針 (Prog=B, Step1, Speed=600, Mode=As, Stitch=50)
- Prog=B 第 2 段 Speed 為 550, A 模式, 針數 100 針 (Prog=B, Step2, Speed=550, Mode=A, Stitch=100)
- Prog=B 第 3 段 Speed 為 500, A 模式, 針數 100 針 (Prog=B, Step3, Speed=500, Mode=A, Stitch=100)
- Prog=B 第 4 段 Speed 為 450, A 模式, 針數 150 針 (Prog=B, Step4, Speed=450, Mode=A, Stitch=150)
- Prog=B 第 5 段 Speed 為 400, M 模式 (Prog=B, Step5, Speed=400, Mode=M)

設定方式參考如下:



◎可各別開啟前切刀功能以及後切刀功能並設定針數

to set number of stitch for front TK or rear TK .

例 / Example

開啟前切刀功能,設定布放入並車縫 10 針後切帶

front TK: set 10 stitches then tape be cut.

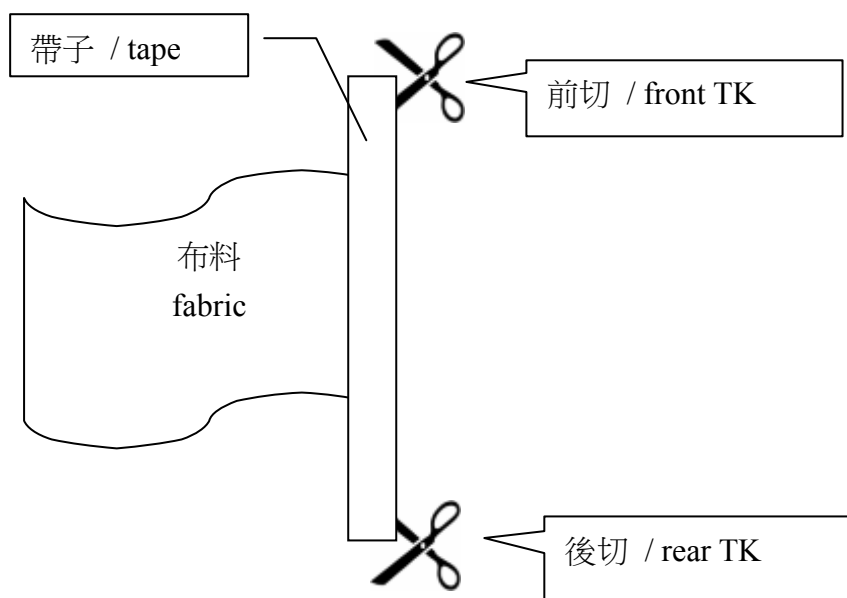
開啟後切刀功能,設定布離開布料檢知器後再車縫 15 針後切帶。

Rear TK: set 15 stitches after the fabric escapes from sensor then tape be cut.


設定畫面參考如下 / setting is display :

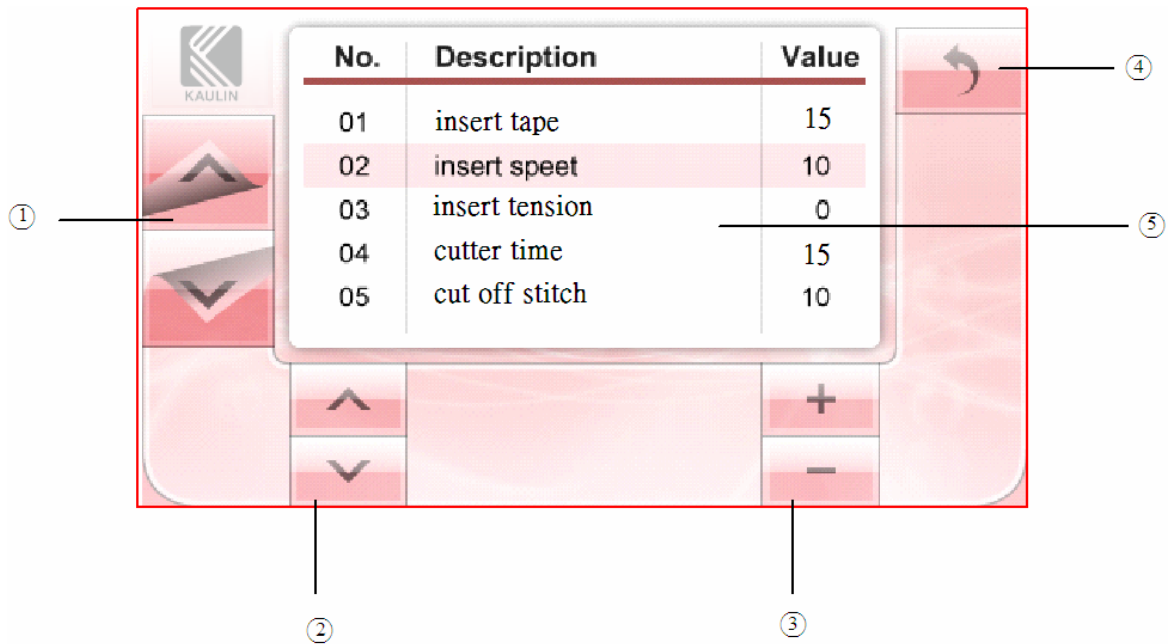
	Prog	Step	Speed	Stitch	Mode
	A	16	end		
		17	end		
前切 / front TK		f cut		10	
後切 / rear TK		b cut	goto A	15	


針數 / stitches



IV. 參數設定畫面功能說明 / parameter setting mode


◎縫製畫面下按  鍵可以進入參數設定畫面 / press  key to enter parameter setting



①  參數資料 "上 / 下 " 翻頁鍵 / flip key for parameter data

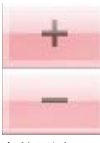
說明：每按一次，光棒 "上 / 下"移動五筆參數

Description: press one time to flip 5 parameter data.

②  參數資料 "上 / 下 " 按鍵 / previous/next parameter data

說明：每按一次，光棒 "上 / 下"移動一筆參數

Description: press one time to move one parameter data.

③  設定參數值 / parameter value setting.

說明：設定參數值用

Description: to set the value of parameter.

④  返回鍵 / return

說明：返回縫製畫面

Description: return to sewing page.

參數內容 1/4 content of parameter 1/5



參數編號 NO.	參數名稱 name of parameter	參數值 value	範圍 range	參數說明 description	備註 remark
01	insert tape			保留/Reserved	
02	insert speed			保留/Reserved	
03	insert tension			保留/Reserved	
04	cutter time	15	0~99	切刀時間設定 00=0.1 秒,每增加 1=0.005 秒,99=0.6 秒 cutter timing , 00=0.1s, increase 1=0.005s,99=0.6s	
05	cut off stitch			保留/Reserved	
06	foot up-down			保留/Reserved	
07	v - off stitch			保留/Reserved	
08	motor speed	4000	50-7000	最高車縫速度的調整(RPM) Maximum speed adjustments(RPM)	
09	cutter2 mode			保留/Reserved	
10	cutter2 start count	0	0~99	保留/Reserved	
11	cutter2 end count	0	0~99	保留/Reserved	
12	reverse	0		保留/Reserved	
13	reverse	0		保留/Reserved	
14	reverse	0		保留/Reserved	
15	reverse	0		保留/Reserved	
16	buzzer on-off	on	on / off	蜂鳴器開關 / buzzer	
17	safety switch	off	no / nc / ol / off	保留/Reserved	
18	restore default	no	no / run	參數切換到 run 時可回復出廠設定值 (需重新開機) return to factory preset value when parameter switch to run (need power on again)	
19	lcd auto pwr off	off	on / off	觸控螢幕 1 分鐘後休眠開關 LCD power off one minute later	
20	lcd brightness	99	0~99	觸控螢幕背光亮度 set brightness of LCD	
21	reverse	0		保留/Reserved	
22	reverse	0		保留/Reserved	
23	reverse	0		保留/Reserved	
24	PL Selection	p	h&p / p / h	H&P:啟用一般踏板和立作業踏板 support standard pedal and twinning pedal P: 啟用一般踏板 support standard pedal H: 啟用立作業踏板 support twinning pedal	





參數內容 2/4 content of parameter 2/5

參數編號 NO.	參數名稱 name of parameter	參數值 value	範圍 range	參數說明 description	備註 remark
25	reverse	0		保留/Reserved	
26	reverse	0		保留/Reserved	
27	reverse	0		保留/Reserved	
28	reverse	0		保留/Reserved	
29	tp sw func	prog	prog / step	銀幕光棒上/下移鍵功能切換: function of shift upward/downward switch prog: 切換工序 change programming mode step: 切換工程段數 change program segment	
30	knee sw func	cut2	off/cut1/cut2/step/ PL	膝蓋開關功能切換: function of knee switch off: 無效 invalid cut1: 保留 reverse cut2: 控制 MK 切刀 control MK cutter step: 切換工程段數 change program segment PL: 抬壓腳 presser foot lift	
31	ext key func	step	off/cut1/cut2/step PL	外部開關功能切換: external key function off: 無效 invalid cut1: 保留 reverse cut2: 控制 MK 切刀 control MK cutter step: 切換工程段數 change program segment PL: 抬壓腳 presser foot lift	
32	cutter2 type	1sol	1sol / 2sol/2sold	MK 切刀用氣壓缸型態: air cylinder for MK 1sol: 單動型 one solenoid 2sol: 雙動型 double solenoids 2sold: 雙動型雙切動作 double cut effected	
33	reverse	0		保留/Reserved	
34	psd on-off	on2	off/on1/on2/on3/ KA	車頭型態: code of sewing machine off: 保留 reverse on1: 有布時才能車縫 sew when fabric been detected on2: 啟縫時不偵測布 sew without fabric been detected on3: 啟縫時不偵測布; 使用'A'自動模式前 必須先安裝光檢知器 sew without fabric been detected; Sensor must be installed before using the Auto Mode('A') KA: 一般三本車模式 for coverstitch	

參數內容 3/4 content of parameter 3/5

參數編號 NO.	參數名稱 name of parameter	參數值 value	範圍 range	參數說明 description	備註 remark
35	psd type	a	a / b	切換不同型態感測器:Sensor selection a:感測器型號 a / type a b:感測器型號 b / type b	
36	reverse	0		保留/Reserved	
37	reverse	0		保留/Reserved	
38	reverse	0		保留/Reserved	
39	reverse	0		保留/Reserved	
40	reverse	0		保留/Reserved	
41	stm dir	cw	cw / ccw	切換送料馬達正反轉(cw/ccw) clockwise/ counter clockwise for feeding motor	
42	stm speed cw	3	0~3	馬達送料速度 / feeding speed	
43	stm speed ccw	3	0~3	馬達退料速度 / the speed of the return	
44	Zigzag	-100%		保留/Reserved	
45	sewing counter	0	0 ~ 9999	縫製計數器 / sewing counter	

依序按 、、 和  之後,就可以看到參數 46~參數 64

Click 、、 and , you can see the parameters 46 to parameter 64

參數編號 NO.	參數名稱 name of parameter	參數值 value	範圍 range	參數說明 description	備註 remark
46	reverse	0		保留/Reserved	
47	reverse	0		保留/Reserved	
48	reverse	0		保留/Reserved	
49	reverse	0		保留/Reserved	
50	reverse	0		保留/Reserved	
51	position pua	0	0~359	伺服馬達上定位角度調整 Servo motor up-position angle adjustment	
52	reverse	0		保留/Reserved	
53	reverse	0		保留/Reserved	
54	reverse	0		保留/Reserved	
55	stop sew after trim	on	off / on	手動切線後，馬達停止運轉功能。 Pause after manual trimming function	
56	mesh counter	0	0 ~ 99	設定通過網眼孔的針數 Set this stitch when sewing mesh fabrics	

參數內容 4/4 content of parameter 4/5

參數 編號 NO.	參數名稱 name of parameter	參數值 value	範圍 range	參數說明 description	備註 remark
57	me fabric protection	off	off / on	偵測到布料時，啟動切刀開關誤動作保護功能 start tape cutter malfunction protection while detected the fabric	
58	Pl duty	40%	5% ~ 60%	壓腳電磁鐵電流調整 adjust the current of presser foot solenoid	
59	me cut sensor	off	no / nc / off	Cutter 安全開關型態: mode of cutter safety switch: no:常開式 normally open nc:常閉式 normally close off:禁用安全開關 disable safety switch	
60	air on time	800	100~3000	每針氣壓閥的持續動作時間(ms) solenoid valve the continuous operation time every stitch.(ms)	
61	me cut blower	800	0~3000	切帶後，輔助送料吹氣裝置持續吹氣時間 (ms) Cutter starts, feed blowing device keep blowing at how many times.(ms)	
62	me start blower	5	0~255	切帶後，輔助送料吹氣裝置吹氣的針數 Cutter starts, feed blowing device stops blowing at how many stitches.	註/NOTE
63	reverse	0		保留/Reserved	
64	save to default	nop	nop / run	將目前的參數值設定為出廠設定值 / the current value of parameters is set to factory settings.	

註:參數 062=255 時全時吹氣

NOTE: When parameter 062 = 255, full-time blowing.

V. 測試畫面功能說明 / Function test mode

◎在縫製畫面下依序按  →  →  後將會進入測試畫面,如下:

◎in sewing mode, press key sequentially to enter function test mode.



- | | | | | | | | |
|---|---|------------|---------------------|---|---|------------|-----------------------|
| ① |  | 押腳功能測試鍵 | presser foot test | ⑧ |  | MK 剪線功能測試鍵 | MK cutter test |
| ② |  | 後吸功能測試鍵 | rear suction test | ⑨ |  | 備用測試鍵 | reserved |
| ③ |  | MC 剪線功能測試鍵 | MC cutter test | ⑩ |  | 備用測試鍵 | reserved |
| ④ |  | 鳴器測試鍵 | buzzer test | ⑪ |  | 備用測試鍵 | reserved |
| ⑤ |  | 鬆線功能測試鍵 | tension test | ⑫ |  | 備用測試鍵 | reserved |
| ⑥ |  | 步進馬達功能測試鍵 | stepping motor test | ⑬ |  | 返回縫製畫面 | return to sewing mode |
| ⑦ |  | 前吸功能測試鍵 | front suction test | | | | |

VI. 操作說明(中文)

◎參數 34(psd on-off)必須設定為 on1 或 on2,以確保裝置能正常運作

PS.選 on1 時有放入布料才能車縫;選 on2 時不管有無布料都可以車縫

範例 1. a.車縫兩個開口的內衣,設定 1 個工程段數,使用手動模式,送料速度 85

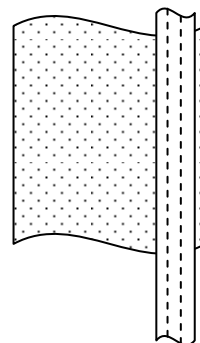
b.布料前端和布料後端自動切帶.


c.布料前端保留較短的鬆緊帶, 啟縫 10 針後切帶; 布料後端保留較長的鬆緊帶,布料縫製結束後 25 針切線

d.有放入布時才能車縫

Step 01	Speed=85	Mode=M
Step 02	Speed=end	
f cut	Stitch=10	
b cut	Stitch=25	

參數 34	on1
-------	-----





步驟 1. 在縫製畫面按下  進入到編輯畫面

步驟 2. 將 Step 01 的 Speed 欄設定為 85,按  鍵將 Step 01 的 Mode 欄設定為”M”


步驟 3. 確認 Step 02 的 Speed 欄設定為”end”,若 Step 02 的 Speed 欄不是”end”,則移動光棒到到 Step 02,

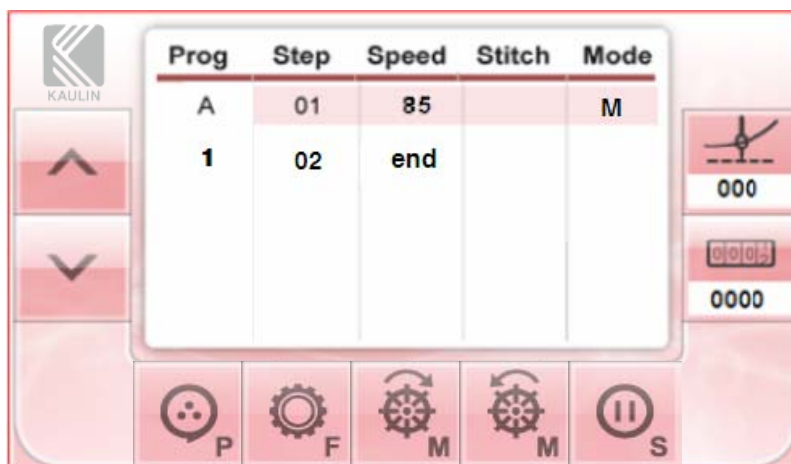
再按  鍵設定 Speed 欄為”end”

步驟 4. f cut 欄設定為 10 針,b cut 欄設定為 25 針

步驟 5. 按返回鍵  回縫製畫面,再按  鍵進入參數設定畫面

步驟 6. 設定參數 34=on1

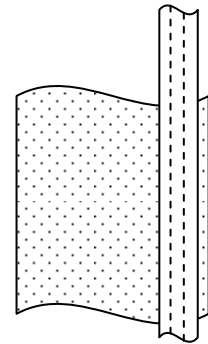
步驟 7. 按返回鍵  回縫製畫面即可,畫面如下圖所示



- 範例 2. a.車縫兩個開口的內衣,設定 1 個工程段數,使用手動模式,送料速度 50
 b.布料前端自動切帶,布料後端手動切帶.
 c.布料前端啟縫 5 針後切帶; 布料後端由操作員手動切帶
 d.不管有沒有放入布都能自由車縫

Step 01	Speed=50 Mode=M
Step 02	Speed=end
f cut	Stitch=5
b cut	Stitch=disable



參數 34	on2
-------	-----




步驟 1. 在縫製畫面按下  P 進入到編輯畫面

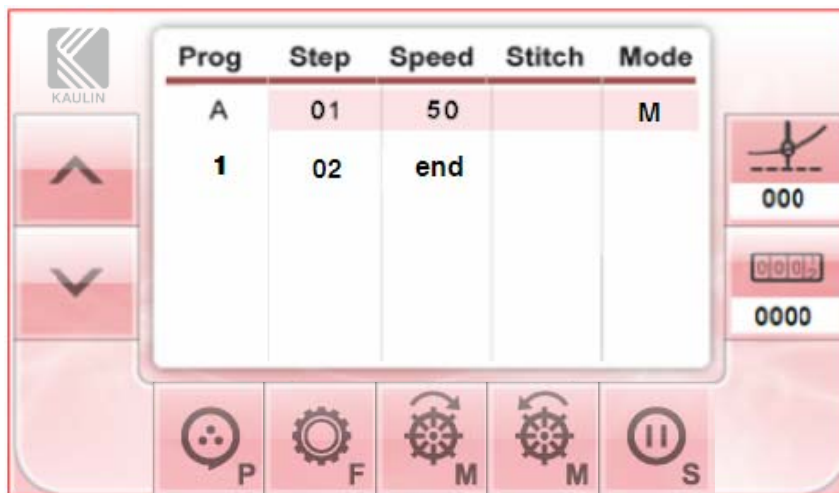
步驟 2. 將 Step 01 的 Speed 欄設定為 50,按  鍵將 Step 01 的 Mode 欄設定為”M”

步驟 3. 確認 Step 02 的 Speed 欄設定為”end”,若 Step 02 的 Speed 欄不是”end”,則移動光棒到到 Step 02,
 再按  C 鍵設定 Speed 欄為”end”

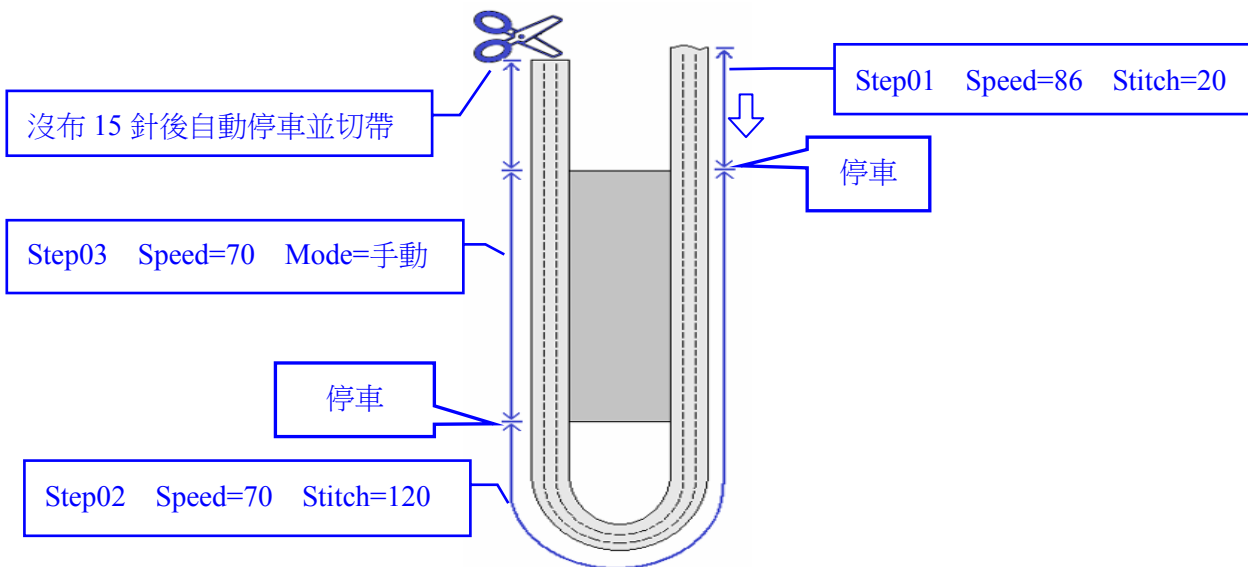
步驟 4. 按返回鍵  回縫製畫面,再按  F 鍵進入參數設定畫面

步驟 5. 設定參數 34=on2

步驟 6. 按返回鍵  回縫製畫面即可, 畫面如下圖所示



- 範例 3. a.縫製物如下圖所示
 b.車縫 20 針後自動停車.
 c.放布料後車縫 120 針後自動停車.
 d.再放入布料後車縫到沒布料後 15 針自動停車並切帶.



一般設定方式:

Prog	Step	Speed	Stitch	Mode
A	01	86	20	As
	02	70	120	As
		End2		
		...		
	f cut			
	b cut	goto B		

Prog	Step	Speed	Stitch	Mode
B	01	70		M
	02	End2		
		...		
	f cut			
	b cut	goto A	15	stop*

注意: 只適用於工序`A`~`Z`

專用工序`[`的設定方式:

Prog	Step	Speed	Stitch	Mode
[	01	86	20	As
	02	70	120	As
	03	70		M
		End		
		...		
	f cut			
	b cut	goto [	15	stop*

注意: 只適用於工序`[`

VII. Operation(English)

◎Please check parameter 34 must set at on1 or on2

PS.on1: sewing when fabric been detected, on2 sewing whenever you need

Example1. a. sewing two opening of underwear, set one program step, manual, feeding speed 85

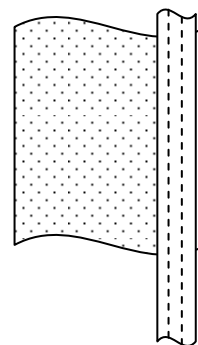
b. Cutter executes at start and end of fabric

c. reserve shorter elastic band at start before sewing, sewing 10 stitches executes cutter;
reserve longer elastic band at end, executes cutter after 25 stitches

d. sewing when fabric been detected

Step 01	Speed=85	Mode=M
Step 02	Speed=end	
f cut	Stitch=10	
b cut	Stitch=25	


parameter 34 on1





procedure 1. in sewing mode press  key to enter editing mode

procedure 2. set 85 at speed column in step 01, press  key to set 'M' at mode column in step 01


procedure 3. please check the speed column in step 02 must set at "end", if not moves to step 02 and

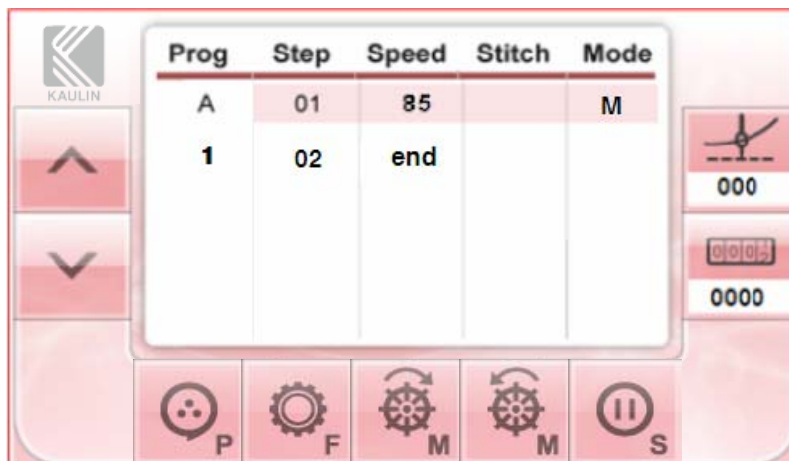
press  key to set speed at "end"

procedure 4. Set f cut column=10stitches; set b cut column=25stitches.

procedure 5. press  key to return back to sewing mode, press  to enter parameter setting mode

procedure 6. set parameter 34=on1

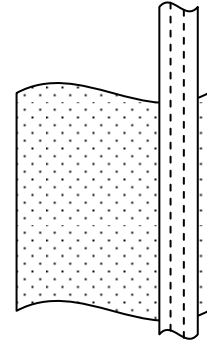
procedure 7. press  key to return back to sewing mode, illustrated as below



- Example 2. a. sewing two opening of underwear, set one program step, manual, feeding speed 50
 b. Executes cutter automatically at start of fabric, executes cutter manually at end of fabric
 c. executes cutter after 5 stitches at start of fabric, executes cutter by operator at end of fabric
 d. sewing whenever you need

Step 01	Speed=50 Mode=M
Step 02	Speed=end
f cut	Stitch=5
b cut	Stitch=disable


parameter 34	on2
--------------	-----






procedure 1. in sewing mode press  key to enter editing mode

procedure 2. set 50 at speed column in step 01, press  key to set 'M' at mode column in step 01


procedure 3. please check the speed column must set at "end" in step 02, if not moves to step 02 and

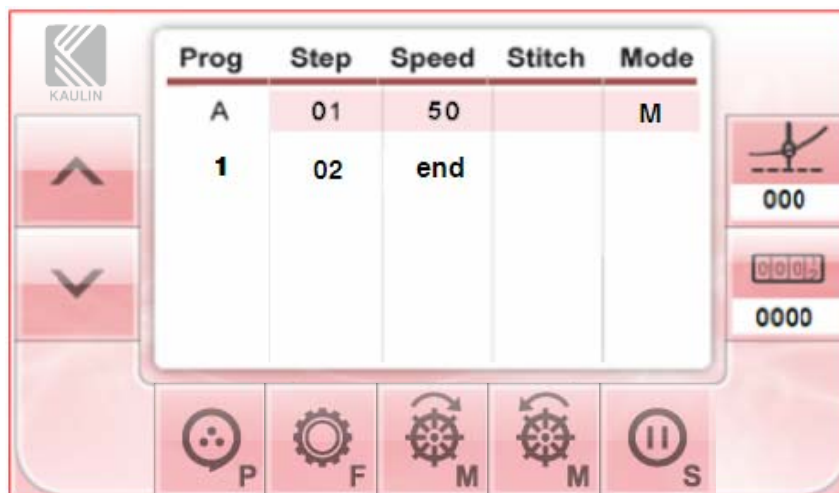
press  key to set "end" at speed column

procedure 4. Set f cut column=5stitches; please move to b cut column and press  to disable b cut function.

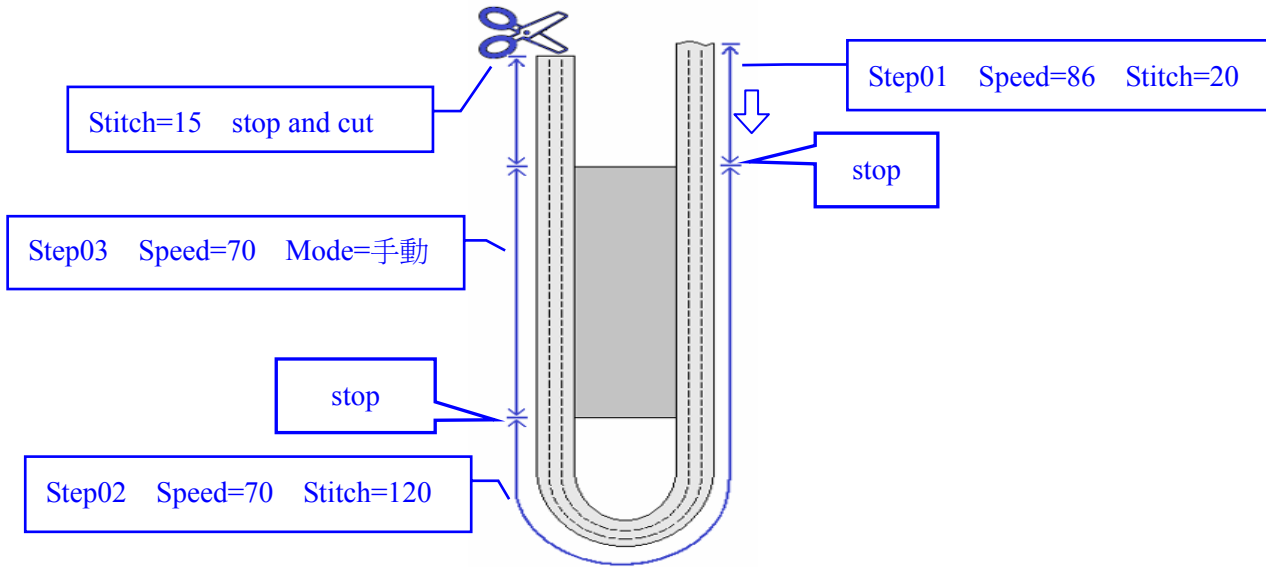
procedure 5. press  key to return back to sewing mode, press  key enter parameter setting mode

procedure 6. set parameter34=on2

procedure 7. press  key to return back to sewing mode, illustrated as below



- Example3. a. The sewn material is shown below.
 b. Automatically stop after sewing 20 needles.
 c. Put the fabric, automatically stop after sewing 120 needles.
 d. And then into the fabric, the sewn to the fabric after sewing 15 needles automatic stop and cut.



General mode setting method:

Prog	Step	Speed	Stitch	Mode
A	01	86	20	As
	02	70	120	As
		End2		
		...		
	f cut			
	b cut	goto B		

Prog	Step	Speed	Stitch	Mode
B	01	70		M
	02	End2		
		...		
	f cut			
	b cut	goto A	15	stop✖

NOTE: Only for Prog='A'~'Z'

Special mode setting method:

Prog	Step	Speed	Stitch	Mode
[	01	86	20	As
	02	70	120	As
	03	70		M
		End		
		...		
	f cut			
	b cut	goto [	15	stop✖

NOTE: Only for Prog='['

VIII. 提示代碼和錯誤代碼 / Tip Code list and Error Code list

操作盒用: / For operation box:

提示代碼 Tip Code	顯示訊息 Message	說明 Comment
E098	successfully saved	出廠參數值儲存成功 factory preset value saved successfully
E099	please reboot	已回復出廠參數值,請重啟電源 Has returned to factory preset value, please restart the power

操作盒用: / For operation box:

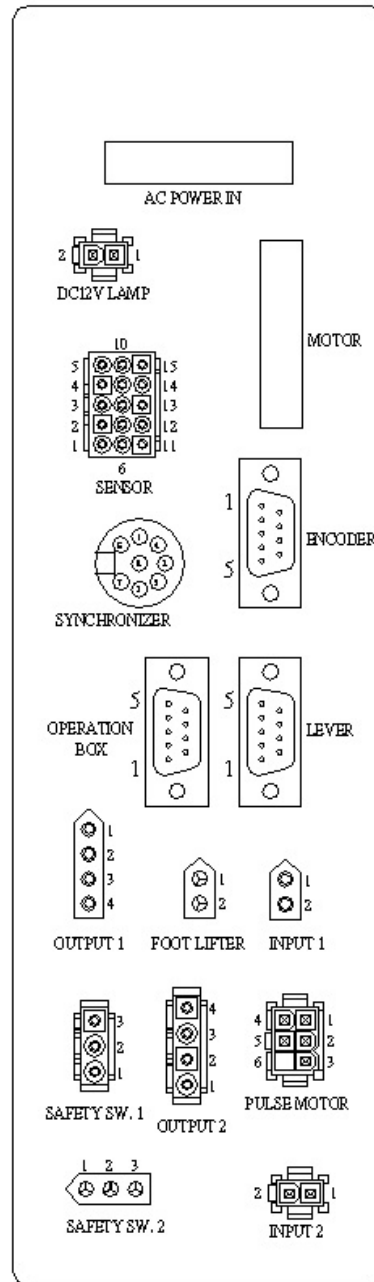
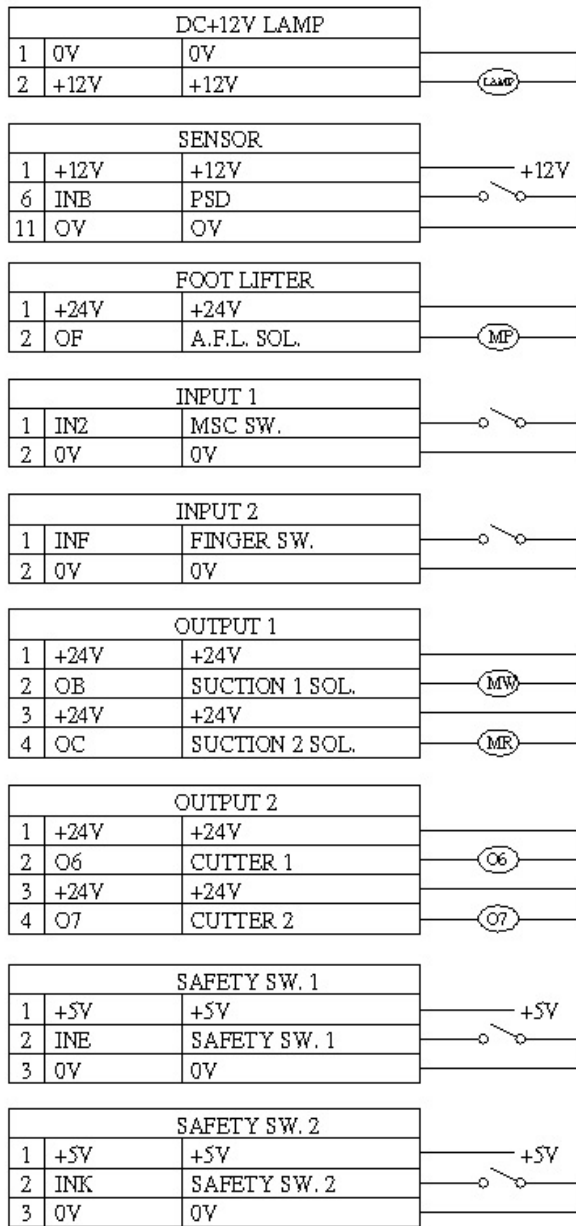
錯誤代碼 Error Code	顯示訊息 Message	說明 Comment
E000	SAFETY LOCK-ON	安全開關安裝錯誤,請檢查安全開關或參數 17 Safety switch installation errors,check the safety switch or parameter 17
E100	No response from front panel	操作盒和控制箱無法互相通信,請檢查操作盒的連接線是否插好或插錯接口。 Operation box can not communicate to control box, please check the operation box cable is plugged in or plugged into the wrong connector.

控制箱用: / For control box:

錯誤代碼 Error Code	故障原因 Cause of the problem	說明 Comment
ER0.4	<p>1.電源 ON 時，主電壓檢知過高時。</p> <p>2.插錯電壓或供應電壓過高時。</p> <p>1. When power on, detected high voltage.</p> <p>2. Connect the wrong voltage, too high.</p>	<p>馬達與車頭出力將全部關閉成無動作狀態。</p> <p>請檢查 AC 電源電壓是否正確或是否超過使用規定的額定電壓。</p> <p>*如控制箱為 AC 220V 系統, 請勿使用 AC 380V 的電源, 否則 LED 於送電 2 秒後出現 ER0. 4 的故障碼。如果持續送入 380V 電源,則主基板上的電解電容(C3,C4) 會在一段時間內爆裂,並造成電源入力的保險絲 (F1、F2) 熔斷。</p> <p>請檢查主基板組控制回路機能是否異常。</p> <p>Motor and machine will be shutting down.</p> <p>Please check the AC power. (Too high)</p> <p>* If control box is AC 220V system, don't use the AC 380V power voltage, otherwise the LED will display ER0. 4 after 2 second of power ON. If continue supply the 380V power, the electrolytic capacitors (C3,C4) of main board will burst open over a period of time and cause the fuses (F1,F2) of power input open circuit.</p> <p>Please check the main pc board.</p>
ER0.7	<p>1.馬達插頭配線接觸不良導致不轉時。</p> <p>2.定位器(傳感器)信號異常時。</p> <p>3.定位器(傳感器)為單一觸發信號型式，而參數設定不符合時。</p> <p>4.車頭機構鎖死或馬達皮帶輪異物捲入卡住。</p> <p>5.加工物過厚，馬達扭力不足無法貫穿時。</p> <p>1. Bad connection at the motor connector.</p> <p>2. Synchronizer (sensor) signal error.</p>	<p>馬達與車頭出力將全部關閉成無動作狀態。</p> <p>請檢查馬達本身或馬達插頭配線等信號是否異常。</p> <p>請檢查定位器(傳感器)信號是否異常。</p> <p>請檢查車頭是否卡住或干涉轉動困難。</p> <p>Motor and machine will be shutting down.</p> <p>Please check the motor or motor connectors' connection.</p> <p>Please check the Synchronizer (sensor) and its signal.</p> <p>Please check machine head to see if objects stuck in the motor pulley, or rotate not smoothly.</p>

	<p>3. Synchronizer is a single position type, and parameter set wrong type.</p> <p>4. Machine locked or object stuck in the motor pulley.</p> <p>5. Sewing material is too thick.</p>	
ER0.9	<p>1.車頭線圈 (或電磁閥) 短路時。</p> <p>2.驅動車頭電磁閥之功率電晶體迴路有故障。</p> <p>1. Machine solenoid shorted.</p> <p>2. Main board's power transistor is faulty.</p>	<p>馬達可正常運轉，但車頭出力與操作盒之定針式樣縫製功能將全部關閉成無效。</p> <p>請檢查車頭電磁閥(或線圈)之迴路是否短路。</p> <p>請檢查主基板組之各功率驅動電晶體是否故障。</p> <p>Motor still can run, but all output signals and Operation box's pattern sewing function will be invalid.</p> <p>Please check machine's solenoids.</p> <p>Please check all the power transistors which related to solenoid.</p>

IX. 控制箱端子座圖 / Control Box Interface Diagram:



ENCODER	
1	+5V
2	UP
3	DOWN
4	A PHASE
5	B PHASE
6	R
7	S
8	T
9	0V

OPERATION BOX	
1	+12V
2	--
3	T1out
4	R1in
5	--
6	--
7	T2out
8	R2in
9	0V











SYNCHRONIZER	
1	--
2	+5V
3	DOWN
4	0V
5	NO SYNC.
6	--
7	UP
8	--

LEVER	
1	+12V
2	START
3	VC
4	FRONT
5	HALF FRONT
6	BACK
7	KNEE SW.
8	TM
9	0V





















七段顯示器字體與實際數值對照表：

7-Segment Display Characters Compare Table

數值字體部份：（Arabic Numerals）

實際數值 Actual	0	1	2	3	4	5	6	7	8	9
七段顯示器 Display										

英文字體部份：（English Alphabet）

英文數字 (Actual)	A	B	C	D	E	F	G	H	I	J
七段顯示器 (Display)										
英文數字 (Actual)	K	L	M	N	O	P	Q	R	S	T
七段顯示器 (Display)										
英文數字 (Actual)	U	V	W	X	Y	Z				
七段顯示器 (Display)										

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The specification and/or the equipment described in the instruction book and parts list
are subject to change because of modification with out previous notice
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