SV-82

INSTRUCTION MANUAL

SV-82 系列 操作說明書

Ver – 01

For safe operation

重 要 安 全 事 項

1.Prior the use of this product, please read the instruction Manual. Keep this Instruction Manual and the user may read it at anytime when necessary.
使用本產品前,請先閱讀本說明書;同時應將此說明書妥善保管以便能隨時查閱 .

2.Before turn on the power, be sure to check the power voltage and phase agreeing with the nameplate that indicated in the control box.
電源開啓前,請先確認電源的電壓與相數,是否與控制箱銘牌相符.

3. Grounding the machine is always necessary for safe and normal operation.
爲了正常安全運轉,須安裝地線.

4. Check lubricating oil prior to operation.
操作前,請先確認縫紉機潤滑油充足.

5. Check that rotational direction of the motor is correct prior to operation.
操作前,請先確認馬達轉動方向正確.

6. So as to prevent personal injuries during operation, be careful not to allow your head and hands to come close to the moving parts. Also never try to stop it with external forces.
使用中,切勿將頭,手靠近皮帶輪,皮帶,旋梭,天平等移動部份;同時也不可以用外力,強制停止移動部份.

7. For the following conditions, turn off the power or disconnect the power plug from receptacle.
發生下列情況時,應立即關閉電源開關或者拔下電源插頭:

7.1 For threading needle or replacing bobbin.
穿線和更換旋梭時.

7.2 To plug or unplug any connectors from control box.
插拔控制箱上任何連接線與接頭.

7.3 For maintenance and repairing.
保養與修理時.

7.4 When machine is not at use, inspected or adjusted.
翻抬針車頭,取下皮帶時. 檢查或調整車頭時 或機器不用時

7.5 When lightning and thunder occurs.
打雷閃電時.

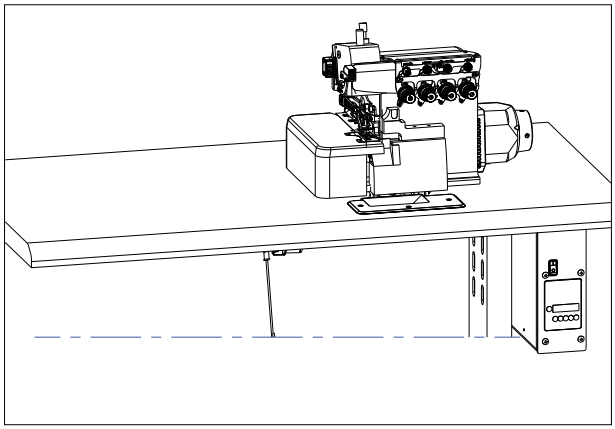
8. Repairing, remodeling and adjusting works must only be done by appropriately trained technicians or specially skilled personnel.
本產品的修理,改造,調整;應由受過專門訓練的技術人員來進行.

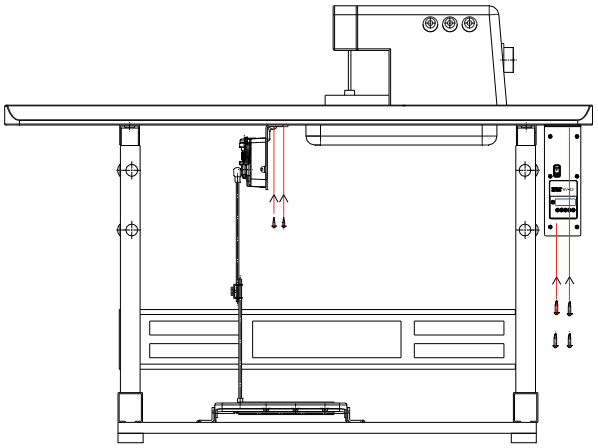
I. Set up

安裝

1.**For control box set up**

控制箱的安裝:





Dimensions of control box as shown in Fig.1

控制箱的外型尺寸如圖(一)所示:

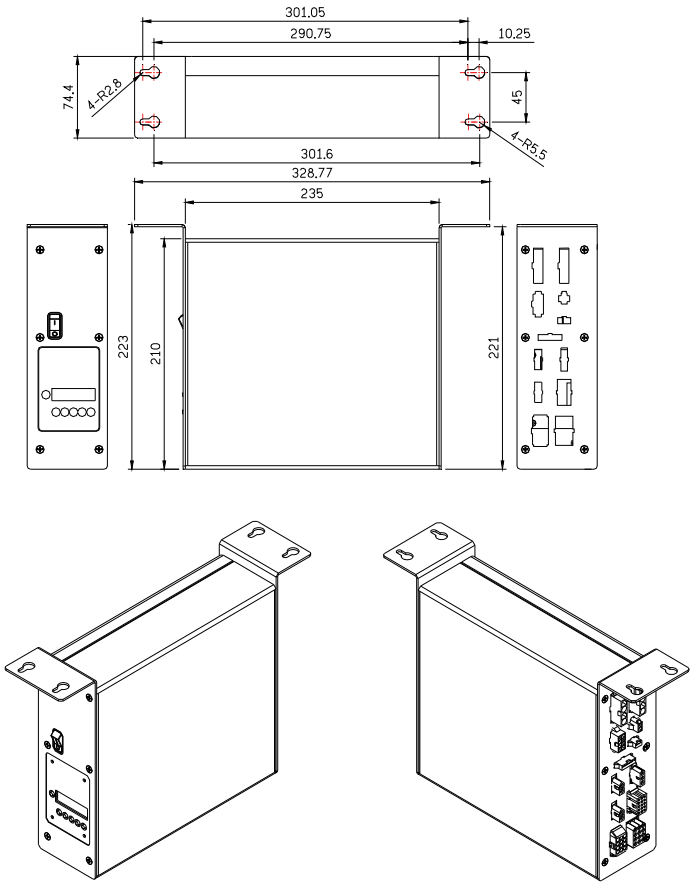


Fig.1 (圖一)

2. How to connect the cord

連接線的接法:

控制箱前蓋打開,電路板上備有下列接頭.如圖(二);表(一)爲接頭說明;控制箱外部接頭如圖(三),再根據縫紉機的裝置,把連接線接到適當位置.

Opening the front cover, you will see the following circuit boards as Fig. 2 . Table1 is the explanation for the connectors. Connectors for control box external output please refer to Fig 3, then according to the machine, connect it to the respective connectors.

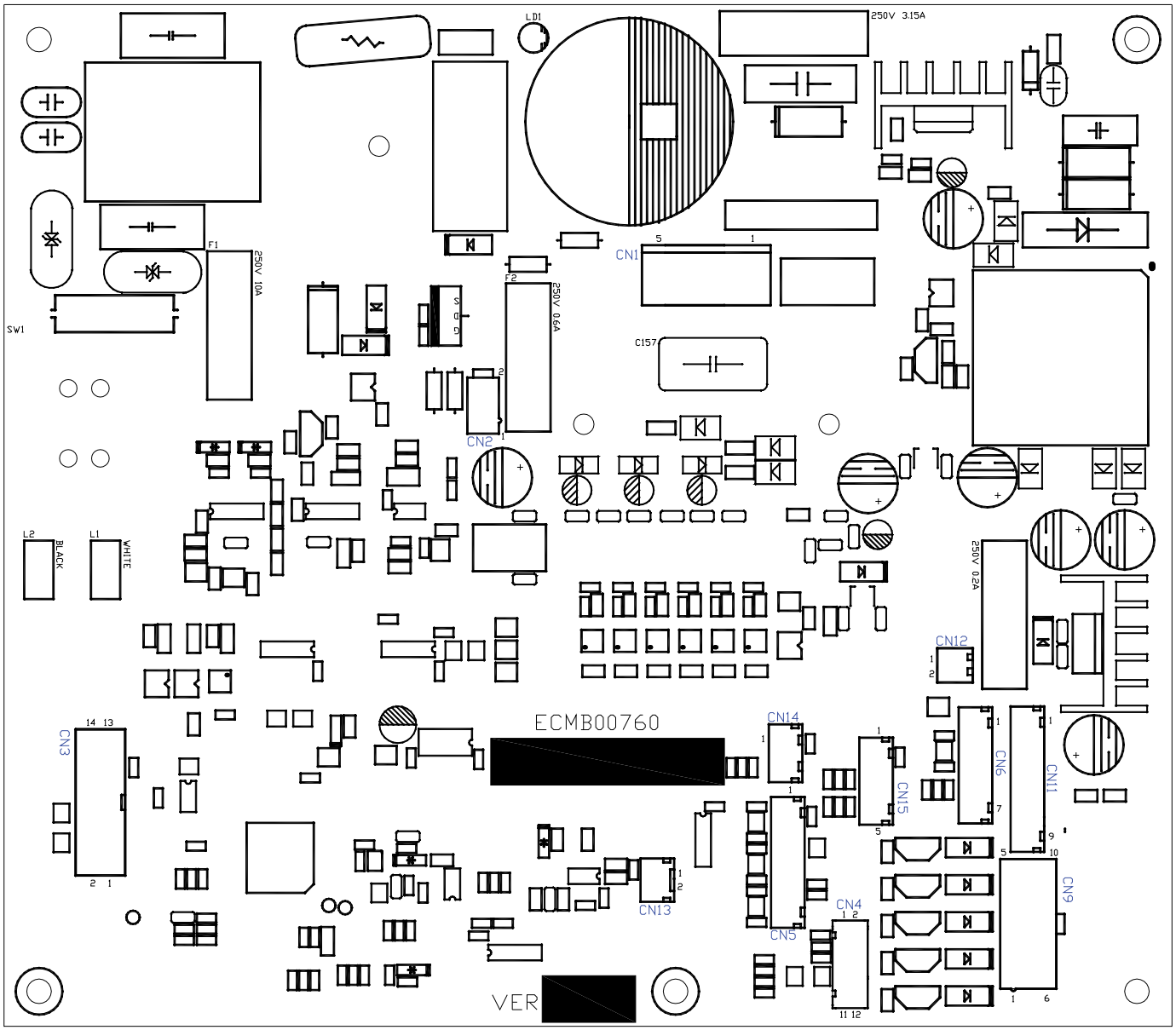
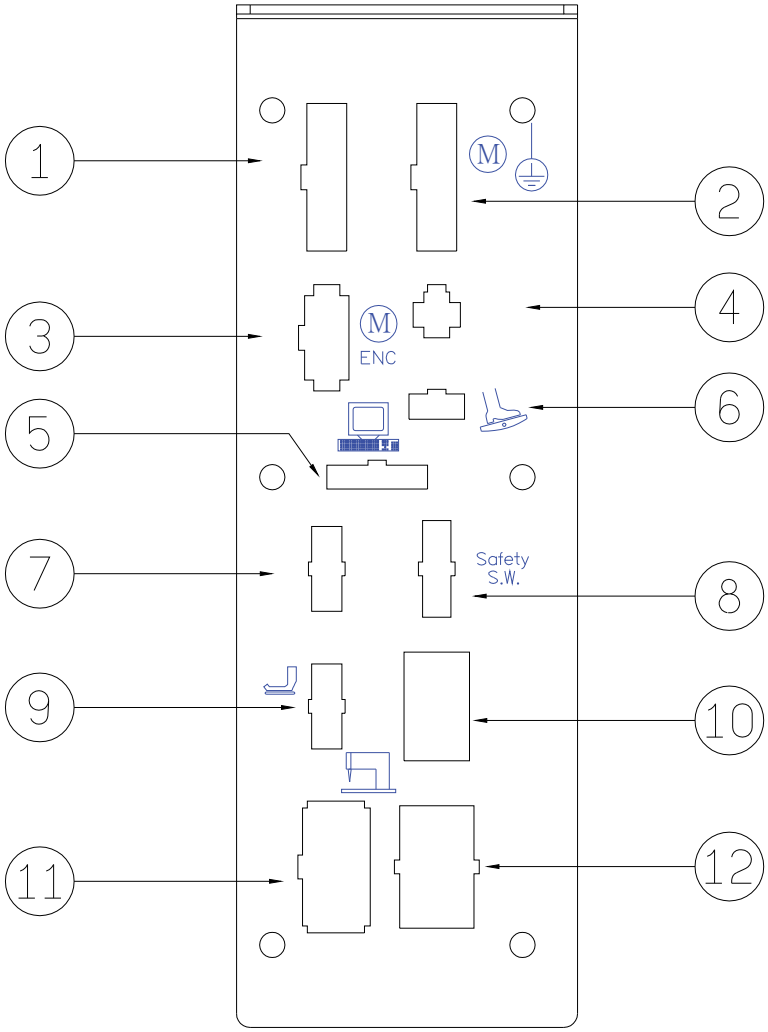


Fig.2 (圖 二)

接頭 Connector	接頭說明 Connectors' description
CN2	水泥電阻接頭 Standing operation pedal connector
CN3	前蓋 C02 接頭. Front cover C02 connector
CN4	立式踏板接頭 Standing operation pedal connector
CN5	馬達編碼器接頭 Motor encoder connector
CN6	程式燒錄接頭 External Panel connector
CN9	車頭功能線圈接頭 Machine functions' connector
CN11	輸入信號接頭 Input port connector
CN12	+12V 電源輸出接頭 +12V Power output connector
CN13	速度基座接頭 Speed unit connector
CN14	安全開關接頭 Safety switch connector
CN15	布端檢出器接頭 Edge sensor connector

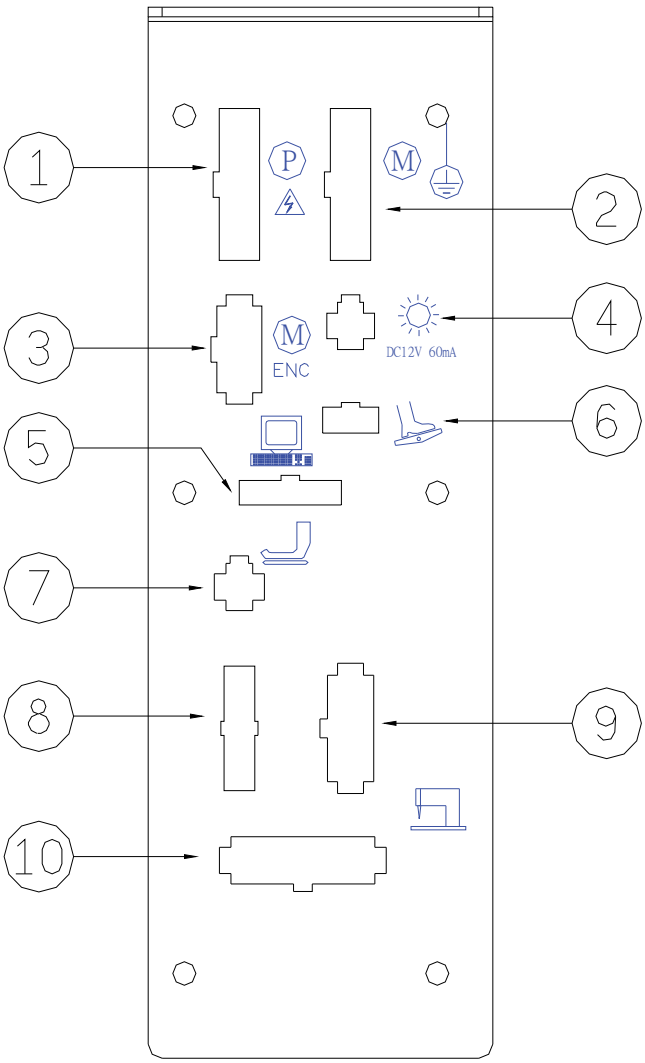
表 一

Table 1



版本 1

Fig.3 (圖 三)



版本 2

Fig.4 (圖 四)

See Fig. 3

如圖(三)所示:

1.Motor power line connector.

1.馬達動力線接頭.

2. Synchronizer connector

2.同步器接頭

3.Operation panel connector

3.選針盒接頭

4. Foot lifter solenoid connector

4.提壓腳線圈接頭

5.Sewing machine function connector

5.車頭功能線圈接頭 1

See Fig. 4

如圖(四)所示:

1.Motor power line connector.

1.馬達動力線接頭.

2. Synchronizer connector

2.同步器接頭

3. Operation panel connector

3.選針盒接頭

4. Foot lifter solenoid connector

4.提壓腳線圈接頭

5.Sewing machine function connector

5.車頭功能線圈接頭 1

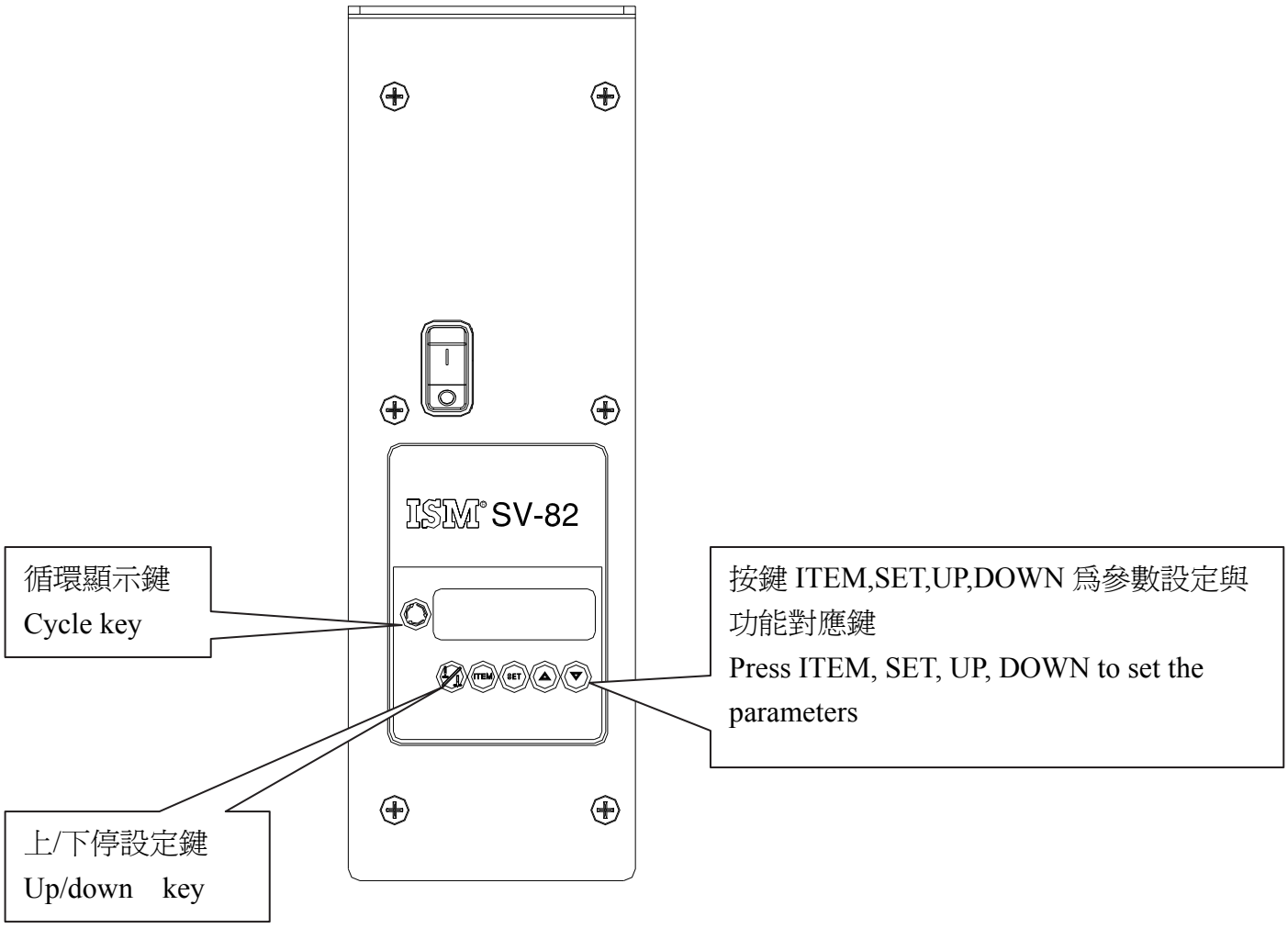
6.Safety switch connector
6.安全開關接頭
7.DC 12V 60mA output connector
7.直流 12V 60mA 輸出接頭
8.Pedal sensor connector
8.速度基座接頭
9.Encoder connector
9.馬達編碼器接頭
10.Sewing machine function connector2
10.車頭功能線圈接頭 2

6.Safety switch connector
6.安全開關接頭
7.DC 12V 60mA output connector
7.直流 12V 60mA 輸出接頭
8.Pedal sensor connector
8.速度基座接頭
9. Encoder connector
9.馬達編碼器接頭
10. Foot lifter switch connector
10.壓腳開關接頭
11. Sewing machine function connector2
11.車頭功能線圈接頭 2

II Operating way

操作方法:

1. For regular operations:(Turning the power switch on without pressing any button)
一般操作:(不按任何鍵下 開機)



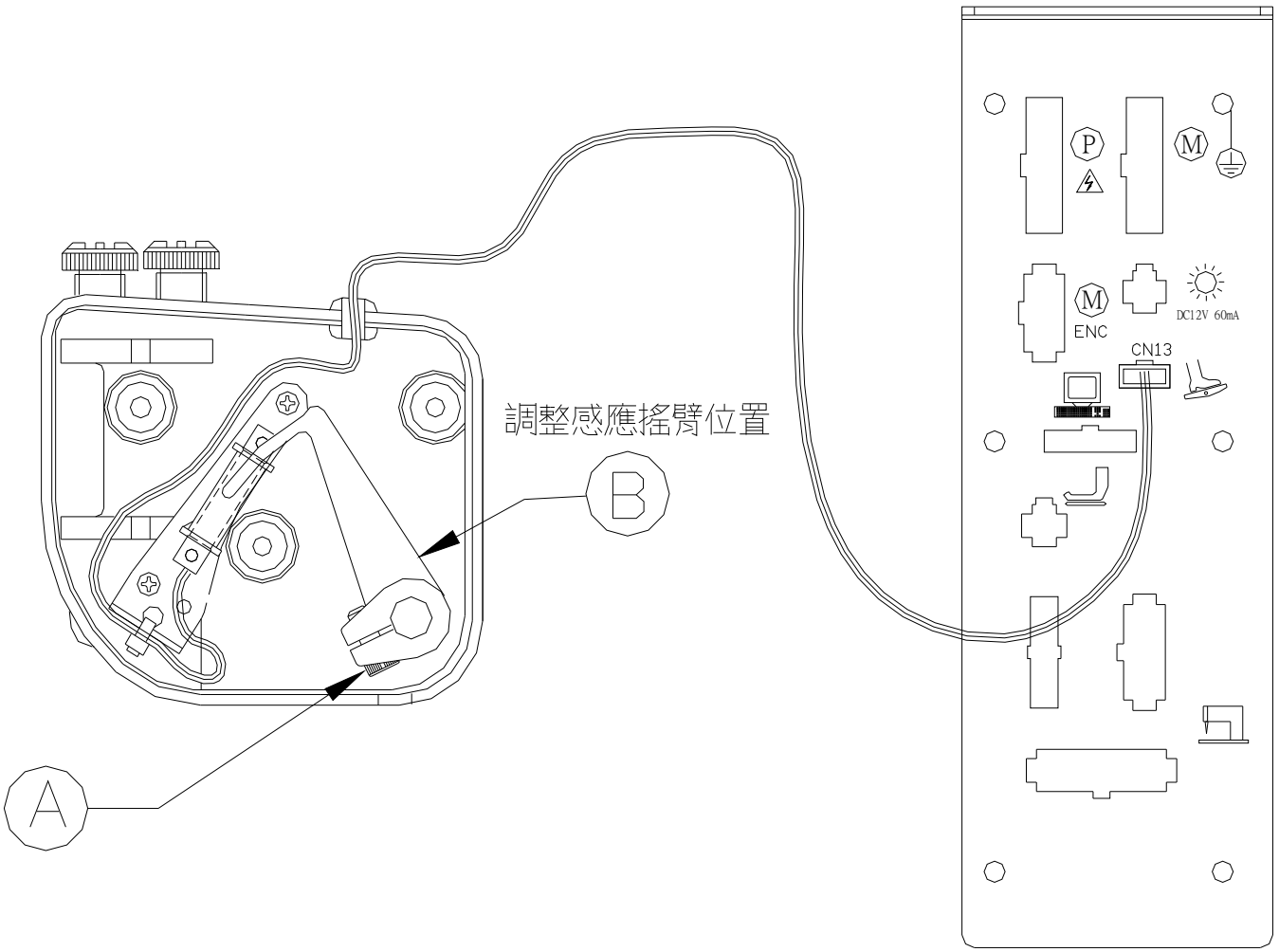
2 Speed unit adjustment
速度基座調整

After replacement of speed unit, Adjust speed unit standard voltage following the below procedures.
更換速度基座之後,速度基座的中立位準必須依下列步驟重新調整.

①Place the pedal sensor inner lever arm to the neutral position .
Loosen the hexagon screw (A) from the speed unit. Adjust the induction arm (B) so that LD2 from the main board turns on.
①速度基座拉臂置於中立點.將速度基座上螺絲(A)轉鬆 ;調整搖臂位置(B)使主機板上 LD2 點亮.

②Tighten the hexagon screw (A).
②將螺絲(A)轉緊.

③ If LD2 keeps on, thus adjustment is completed, otherwise repeat steps 1~2.
③LD2 保持點亮,則調整完成;否則請重覆步驟. 1~2.

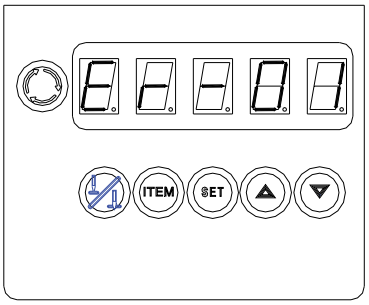


III Error message indicator

錯誤訊息顯示:

When abnormal condition occurs, the error message will display as below figure.

當發生不正常狀況時, 顯示畫面會將檢測出的錯誤訊息顯示出來. 如圖所示:



Error message display:

錯誤訊息顯示:

Error Code	Description of error detected	Items to be checked
Er-1	Synchronizer failure	-Synchronizer connector is loose or line is broken.
Er-2	Motor is not rotating	-Machine head is locked. -Motor is locked. -Motor power line or encoder line. is broken, or connector is loose.
Er-3	Power failure	-Voltage is either too high or too low. -Fuse (F2) is burned out.
Er-4	Safety switch failure(chain stitch machine)	-Failure in safety switch connection. -Safety switch failure -Wrong setting for parameter No.35.
Er-5	Speed unit output failure	-Speed unit connector is loose -Speed unit is broken -Connecting rod installation is incorrect
Er-6	CPU error	-Noise interference (Ex. High frequency machine, welding machine) -Eeprom damaged
Er-7	Material edge sensor function is failed.	-Parameter No.42 wrong setting -Material edge sensor not properly adjusted -Connector for material edge sensor is loose - Material not properly settled through machine
Er-8	Setting speed over the motor maximum speed.	-Parameter No.1 setting value is too large -Motor pulley diameter is too small -Motor pulley ratio setting error
Er-9	Power transistor module is failed.	-Power module overheated -Short circuit or low voltage
Er-10	Solenoid output is overload	-Solenoid resistance is too low

Er-11	Synchronizer down signal failure	-Synchronizer connector is loosen or line is broken. -Setting error for parameter No51 & 52
Er-12	Safety switch failure(overlock machine)	-Failure in safety switch connection. -Safety switch failure -Wrong setting for parameter No.35.

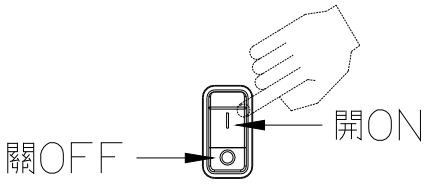
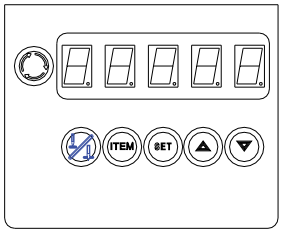
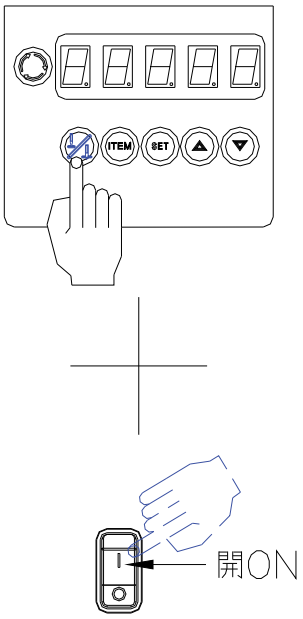
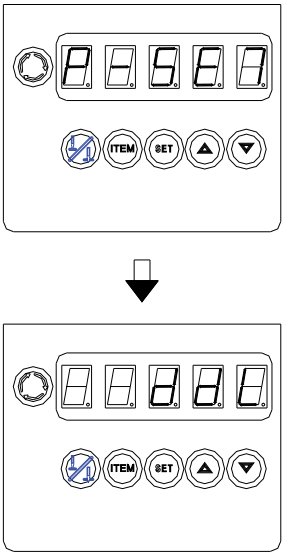
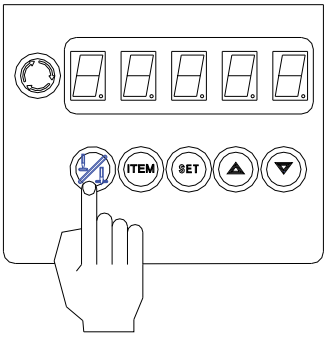
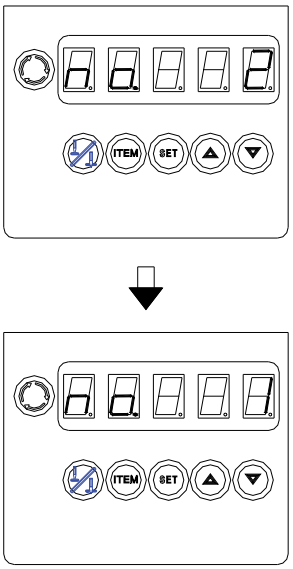
請依下表進行確認:

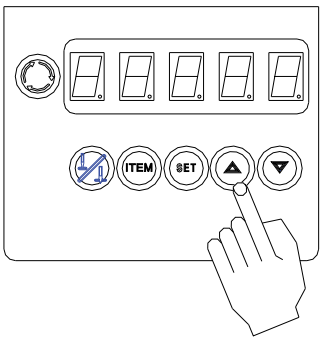
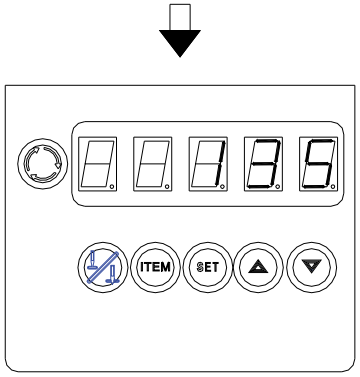
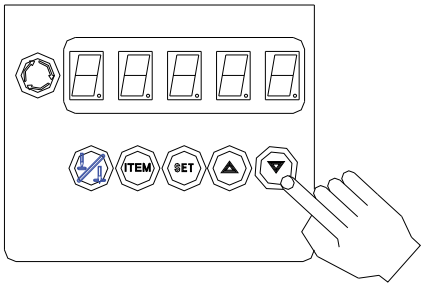
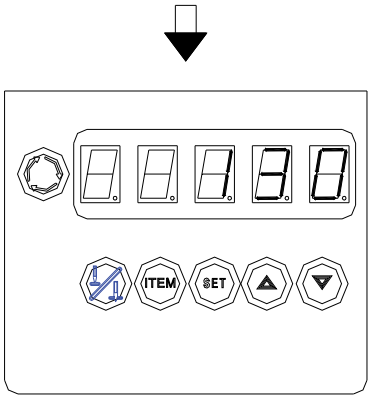
錯誤顯示	錯誤內容	確認項目
Er-1	同步器信號異常	同步器接頭鬆脫,斷線; 皮帶沒有傳動針車頭.
Er-2	馬達不動	針車頭鎖死 馬達鎖死 馬達接頭鬆脫(動力線與編碼器線)
Er-3	電源異常	電壓太高,太低 保險絲(F 2)燒斷.
Er-4	安全開關異常(鏈縫車)	安全開關接點異常, 參數 NO.35 設定錯誤
Er-5	速度基座輸出異常	速度基座接頭鬆脫 連接桿安裝不適當, 速度基座故障
Er-6	當機	雜訊源干擾.(高週波 ,電焊機) EEPROM 故障
Er-7	布端檢出功能異常	參數 NO.42 設定錯誤 布端檢出器調整不良 布端檢出器連接線鬆脫,斷線 待車物料擺放位置不適當
Er-8	最高轉速設定 超過馬達的最快速度	參數 NO.1 設定值太大 馬達皮帶輪尺寸太小 馬達皮帶輪比設定錯誤
Er-9	功率晶體模組故障	功率晶體模組過熱 短路低電壓
Er-10	線圈過載	線圈阻抗太低
Er-11	同步器下停信號異常	同步器接頭鬆脫,斷線; 皮帶沒有傳動針車頭. 參數 No51 & 52 設定錯誤
Er-12	安全開關異常(拷克車)	安全開關接點異常, 參數 NO.35 設定錯誤

Ⅳ Setting way

1.Parameter setting: 設定方式

參數設定方式:

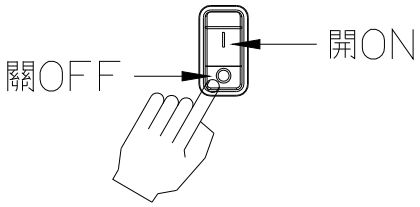
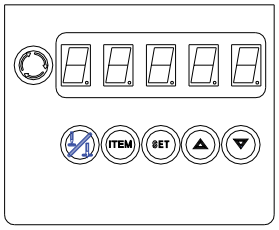
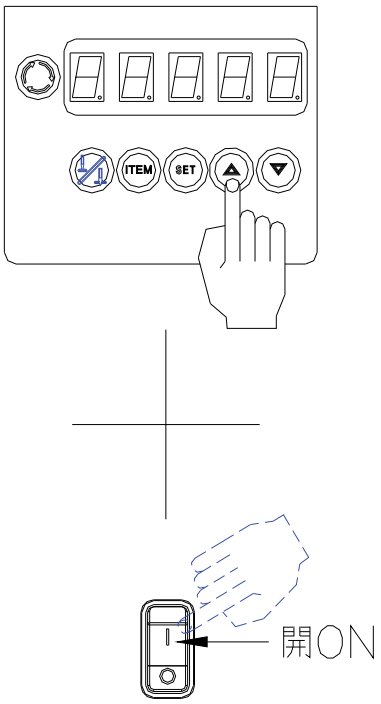
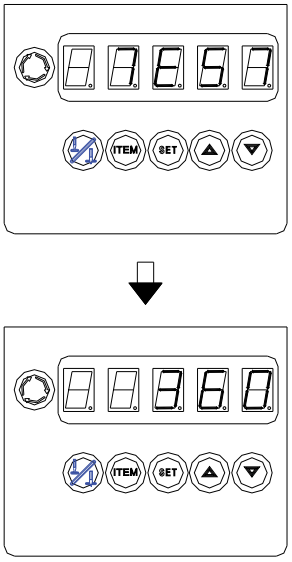
1. Turn ON the power. 1. 開啓電源.		
2.Parameter setting. Press key, then turn ON The power simultaneously. Release key (一)操作參數： 按住 上下停鍵超過 2 秒，出現 P-SET 放開 上下停鍵;所選定的針車頭選項閃爍顯示。		
3. 3.1 Press key, thus parameters no. will be cycled decreased. 按 上下停鍵,則參數號碼循環遞減. 3.2 Press key, thus parameters no. will be cycled increased. 按 鍵,則參數號碼循環遞增.		

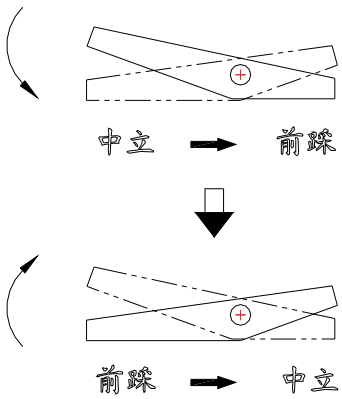
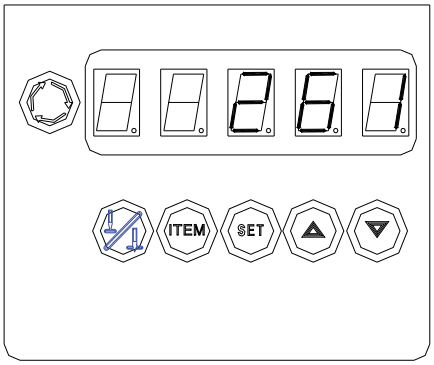
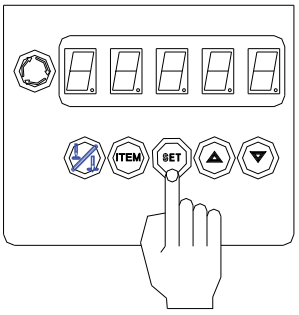
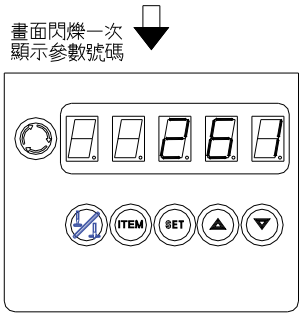
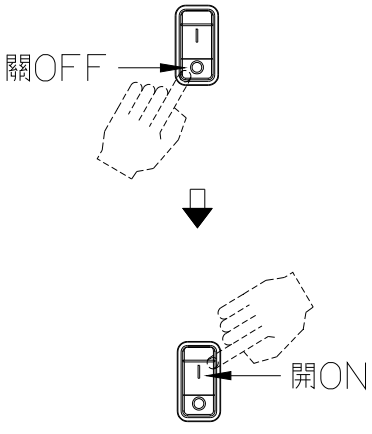
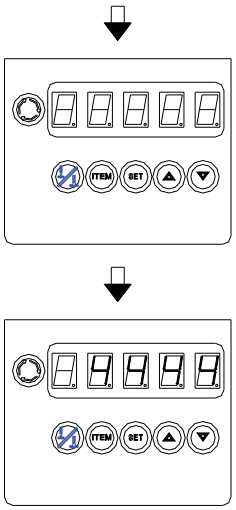
4.Once the modifying parameter has been found, press key, and the relative parameter setting will display accordingly 4 找到想要修改之參數號碼,按 鍵,則顯示該號碼相對應之參數值.		
5.Press key to increase parameter value. Press key to decrease parameter value. If you keep the key pressed, it will be continuously changing for new parameter values. 5. 按 鍵增加參數值 按 鍵減少參數值 持續按住按鍵,連續更新參數值.		
6. Pressing key can select for the next parameter no. repeat steps 3~5 to modify parameter value. 按 鍵可顯示下一組參數號碼，重覆步驟 3~5 選擇下一組要修改之參數。		

7.Once all specified value has been changed, press SET key to save. If this procedure is not performed, the specified value will not be updated. 7.當所有參數修改完畢後按 SET 鍵,會將修改後之參數內容儲存; 回到正常操作畫面. 如果沒有進行參數儲存動作就關閉電源,則無法更新參數.		

2.Motor pulley ratio measurement :

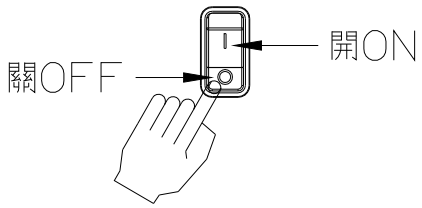
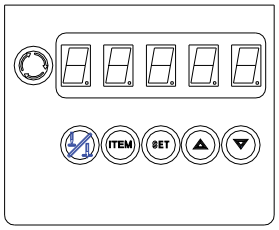
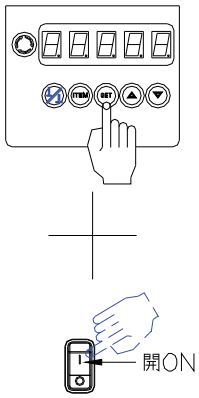
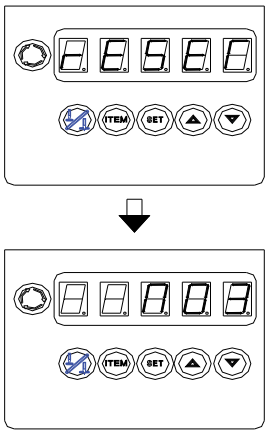
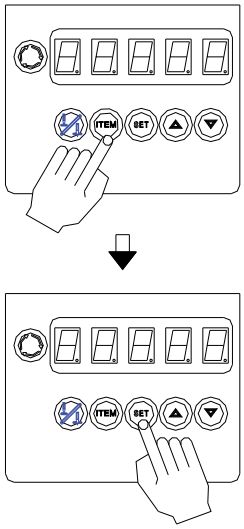
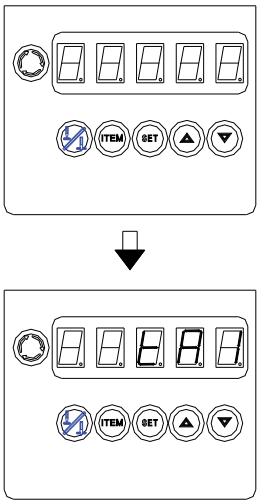
馬達皮帶輪比量測:

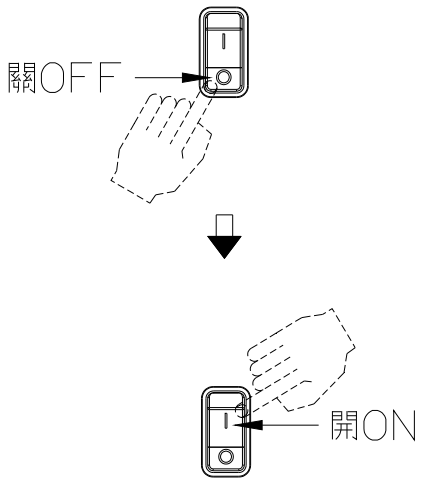
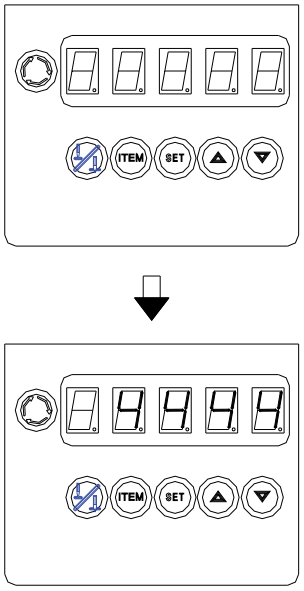
1.Turn OFF the power. 1.關掉電源.		
2. Press key, then turn ON the power. Release key. 2. 按住 鍵,同時打開電源. 畫面出現 TEST 放開 鍵. 畫面出現存在 EEPROM 中的皮帶輪比.		

3. If the display is not as shown above, please repeat steps 1-2. 3.如果顯示畫面與上述不同,請重覆步驟 1~2.		
If the pedal is forwardly pressed, the motor will rotate 7 turns in positioning speed. After the motor stop, the motor pulley ratio will be displayed. (Sewing machine 360°=motor ? degrees). The step 4 can be repeated to confirm. 4.踏板前踩一下,馬達以定位速度運轉 7 圈馬達停止後,畫面會顯示所量測的馬達皮帶輪尺寸比(針車頭一圈 360 度=馬達?度)可以重覆步驟 4 ,再進一步確認.		
5.Press SET key to save. If this procedure is not performed, it will remain as the old values. 5.按 SET 鍵,會將此一皮帶輪比儲存;如不進行此步驟,則無法更新內容 .		
6.Turn OFF the power then re-turn ON the power, It will operate according to new pulley ratio values . 6.關掉電源,再打開電源,將以最新的馬達皮帶輪比設定運作.		

3.Select the machine type :

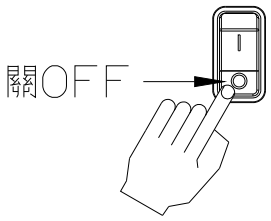
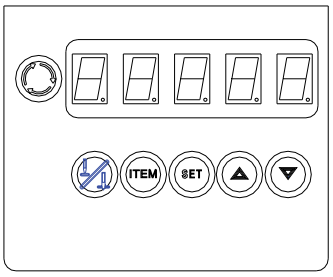
選擇針車頭選項:

1.Turn OFF the power. 1.關掉電源.		
2.Press SET key simultaneously，then turn ON the power， until rESET displayed then release the key。 2.按住 SET 鍵，同時打開電源，直到畫面出現 rESET 才將按鍵放開出現第一個針車選項。		
3.If it is not displayed as shown above，please repeat steps 1-2。 3.如果顯示畫面與上述不同，請重覆步驟 1~2。		
4.Press ITEM key to select machine type ,then press SET key 。 4.按 ITEM 鍵，選擇要設定的針車模式後,按下 SET 鍵。		

5.Turn **OFF** the power， then turn **ON** the power again， It will operate according to the manual's instruction initial value。 5.關掉電源，再打開電源，程式將以所選定的針車選項特性來運作。		

4.Pedal sensor neutral point setting mode

速度基座中立點設定模式:

1.Turn OFF the power 1 關掉電源.		

2.Set pedal sensor in the neutral point.

Press key, then turn ON the power simultaneously and display “OFSET”.

2.將速度基座置於中立點 ，

按住 鍵,同時打開電源. 出現 OFSET

3.Release key, display the pedal sensor value that stored in EEPROM.

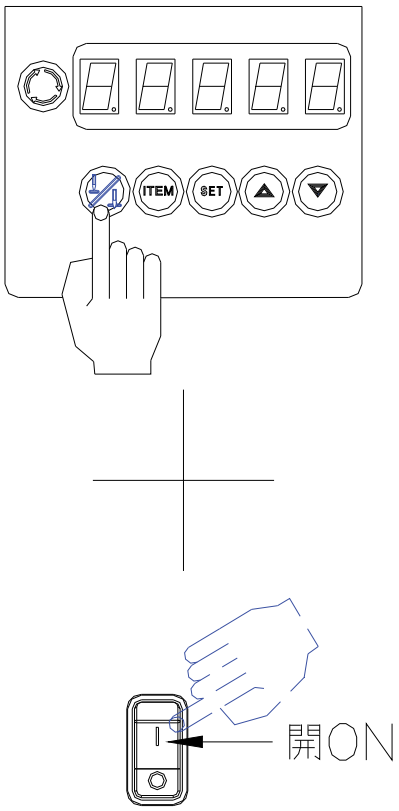
3 放開 鍵 ,會出現儲存於 EEPROM 中速度基座的讀值 ；

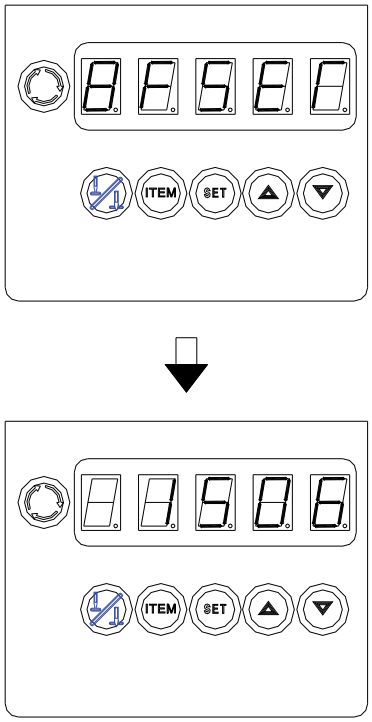
4. Once press key, read the pedal sensor again. If the value between 1340~1790, press is key to store.

4.每按一次 鍵則會重新讀取一次速度基座 ,當出現的值介於 1340~1790 ,則按下 鍵儲存.

5.If always display “ERROR” that means the pedal sensor neutral point offset too much. The pedal sensor mechanical neutral point must be adjusted then repeat step 4.

5.若一直出現 ERROR 表示速度基座中立點的機構位置偏離太多 ,必須先調整速度基座中立點的機構位置 ,再重復上述步驟 4 的動作.





SV-82 Instruction Manual
設定參數表

No 項目	Item 內容	Range 範圍	Remarks 備註
1	Sewing machine maximum speed 針車最高速度	200spm ~ 8000spm	50 rpm/step
2	Sewing machine medium speed 針車中速	200spm ～ 8000spm	50spm / step
3	Sewing machine positioning speed 針車定位速度	100spm ～ 250spm	1spm / step
4	Sewing machine trimming speed 針車切線速度	100spm ～ 250spm	1spm / step
5	**No setting** **未使用**	0	
6	Soft start speed 慢速啓動速度	250spm ～ 2000spm	10spm /step
7	Soft start stitches 慢速啓動針數	0 ～ 19 stitches	
8	Condensed sewing speed / End auto back tack speed 密縫速度 / 結束自動倒縫速度	500 ～ 2500spm	10spm /step
9	End condensed stitches' number 結束密縫針數	0 ～ 99 stitches	
10	Stitches' number that between condensed sewing and trimming 密縫結束後切線執行前車縫針數	0 ～ 19 stitches	
11	**No setting** **未使用**	0	
12	Foot lifter control mode 壓腳控制模式	PFL: Pedal controls foot lifter. 踏板控制壓腳 TAFL: auto foot lifts after trimming 切完線後自動抬壓腳 AFL: Auto foot lifting after positioning 馬達定位停自動壓腳 TFL: Pedal controls foot lifter after trimming 切完線後才可以踏板控制抬壓腳 SFL: Auto foot lifting (Material edge sensor as output control) 自動壓腳(布端檢出器控制輸出) AFL2: Auto foot lifting after trimming. (It's effective even pedal forward) 切完線後自動抬壓腳(踏板保持前踩狀態時仍有效)	
13	Delay time after foot lifter is down 壓腳放下後延遲時間	100 ～ 2500 ms	10 ms / step
14	Confirming time for foot lifter acting level 壓腳動作準位確認時間	10 ～ 1000 ms	10 ms / step
15	**No setting** **未使用**	**0**	

16	**No setting** **未使用**	**0**	
17	Thread trimming mode 切線模式	OFF : No thread trimming 無切線 LOCK : lockstitch thread trimming 平車切線 LU2 : LU2220 thread trimming LU2220 切線 LU1: LU1520 thread trimming LU1520 切線 LU:Other LU machine thread trimming 其他 LU 機型切線 US639 : US63900 thread trimming US63900 切線 UT : Needle up trimming 上停切線（ 上切刀 ） AIR:Needle up trimming (AIR BLOW) 上停切線（ 吹氣式 ） UT2:Needle down trimming (trimming & wiping together) 上停切線(切線與撥線一起動作)	
18	Thread trimming delaying time 切線延遲時間	0 ～ 200 ms	10 ms / step
19	Thread trimming acting time 切線動作時間	0 ～ 1000 ms	10 ms / step
20	Thread wiping delaying time 撥線延遲時間	0 ～ 300 ms	10 ms / step
21	Thread wiping acting time 撥線動作時間	0 ～ 2500 ms	10 ms / step
22	Foot lifter delaying time 壓腳延遲時間	0 ～ 2500 ms	10 ms / step
23	Thread wiping output control 撥線輸出控制	0 : No output thread wiping 不輸出撥線 1 : Output thread wiping 輸出撥線 2 : Output thread wiping when foot lifter active 輸出撥線,切完線後與壓腳同動	
24	Motor rotating direction 馬達轉向	CCW : Counterclockwise 逆時針 CW : Clockwise 順時針	
25	**Needle position mode** **定位器型式**	**OFF: Motor Z signal** **馬達 Z 信號** **ON: For external synchronizer** **外掛式同步器**	
26	**No setting** **未使用**	**0**	
27	**No setting** **未使用**	**0**	
28	The curve slope of pedal stroke vs. motor rotating speed 踏板行程對應馬達速度曲線	0 ～ 4	Bigger value means smaller curve slope 數值越大曲線斜率越小
29	Accelerating slope 加速曲線	1 ～ 8	Bigger value means slowly accelerating 數值越大加速越慢

30	The pedal stroke adjustment for motor start rotating 馬達開始轉動的踏板行程調整	50 ～ 90	(Pedal neutral = 40, LD1 lighting) (中立點參考值 = 40 , LD1 點亮)
31	Pedal stroke adjusts for motor start accelerating 馬達開始加速的踏板行程調整	70 ～ 110	
32	Pedal stroke adjusts for foot lifter start acting 壓腳開始動作的踏板行程調整	10 ～ 35	
33	Pedal stroke adjusts for start thread trimming 切線開始動作的踏板行程調整	3 ～ 30	
34	Standing type pedal operating choice 立式作業選擇	OFF : Normal speed pedal unit 速度基座正常操作 PK70 : For JUKI standing operation PK70 type 配合 JUKI 立式作業 PK70 PKSW : Standing pedal operation, the speed is fixed (low speed & high speed) 立式作業,速度固定(低速&高速) PK71 : For YHH standing operation PK71 type 配合永輝興立式作業 PK71	
35	Safety switch type 安全開關型式	N.O : Normal open switch 常開接點 N.C : Normal close switch 常閉接點	
36	In auto test mode, motor running time adjustment 自動測試模式下,馬達運轉時間調整	100 ～ 20000 ms	100 ms / step
37	In auto test mode, motor stopping time adjustment 自動測試模式下,馬達停止時間調整	100 ～ 20000 ms	100 ms / step

38	Back tacking switch function 回針按鍵功能	BTSW : Control back tacking solenoid 控制回針線圈 NDUP : Control back tacking solenoid when motor runs, and as needle up switch when motor stops 運轉中控制回針,靜止時提針至上停 DSIN : Control back tacking solenoid when motor runs, non-continuously inching during motor stops 運轉中控制回針線圈,靜止時不連續補針 CNIN : Control back tacking solenoid when motor runs, continuously inching during motor stops 運轉中控制回針線圈,靜止時連續補針 RFSS : Reverse feed stitching function is effective both during sewing and stopping 途中倒縫(車縫中&停止時均有效) UPBT : Control back tacking solenoid only in up position 控制回針線圈只在上停點有效 SHOT : Control back tacking solenoid, No.74 decide the output pulse width. 控制回針輸出脈波寬由 NO.74 決定 FLIP : Control back tacking solenoid, by flip-flop type output 以 flip-flop 方式控制回針線圈	
39	Stitches' number in reverse feed stitching 途中倒縫針數	0 ～ 19 stitches	
40	Trimming function in the reverse feed stitching 途中倒縫切線功能	OFF : ineffective 不切線 ON : effective. 有此功能	
41	Execute auto thread trimming after end fixed stitches' number sewing process 定寸縫工程結束後,自動切線功能	OFF : ineffective. 無功能 ON : effective 有此功能	
42	Material edge sensor function 布端檢出器功能	OFF : ineffective 無功能 ON : effective 有此功能	
43	Material edge sensor stitches' number 布端檢出器針數	0 ～ 99 stitches 針	
44	Use material edge sensor to process trimming function 利用布端檢出器進行切線功能	OFF : ineffective 無功能 ON : effective 有此功能	
45	Auto needle up positioning when power on 開機自動上停	OFF : ineffective 無功能 ON : effective 有此功能	
46	Backtack switch protect time 回針按鍵保護時間	0 ～ 30 seconds	

47	To lock the pedal forward function before finish trimming process 切線完成前踏板前踩互鎖功能	OFF : ineffective 無功能 ON : effective 有此功能	
48	Sewing machine reversed revolution function after thread trimming processed 切線完成後車頭反轉功能	OFF : ineffective 無功能 ON : effective 有此功能	
49	Sewing machine reversed revolution angles after thread trimming processed 切線完成後車頭反轉角度	0 ～ 250°	1° / step
50	The delaying time after finished thread trimming but before sewing machine reversed revolution. 切線完成後車頭反轉前延遲時間	0 ～ 2500 ms	10 ms / step
51	Virtual needle down positioning function 虛擬下停功能	OFF : ineffective 無功能 ON : effective 有此功能	
52	The angles between virtual needle down positioning point and needle up signal 虛擬下停點,由上停信號開始點起算	0 ～ 250°	1° / step
53	The needle positioning function of starting sewing 起縫定針功能	OFF : ineffective 無功能 ON : effective 有此功能	
54	The needle positioning angles of starting sewing 起縫定針角度	0 ～ 250°	1° / step
55	The starting angle of trimming action (count from the needle down position and only effective in LU trimming mode) 切線動作開始角度(下停開始起算,只在 LU 切線模式有效)	0 ～ 250°	1° / step
56	The continuous angles of trimming action (count from the needle down position and only effective in LU trimming mode) 切線動作持續角度(只在 LU 切線模式有效)	0 ～ 250°	1° / step

57	The tension release starts acting angles (count from the needle down position and only effective in LU trimming mode) 紗拉組開始動作角度(下停開始起算,只在 LU 切線模式有效)	0 ～ 250°	1° / step
58	The tension release continuous acting angles (only effective in LU trimming mode) 紗拉組動作持續角度(只在 LU 切線模式有效)	0 ～ 250°	1° / step
59	The tension release continuous acting time (count from the needle up position and only effective in LU trimming mode) 紗拉組動作持續時間(上停信號開始動作起算,只在 LU 切線模式有效)	0 ～ 1250 ms	5 ms / step
60 **61** **62**	**No setting** **未使用**	**0**	
63	**No setting** **未使用**	**0**	
64	**No setting** **未使用**	**0**	
65 **66** **67**	Option for edge sensor 1 布端檢出器 1 型式選擇 Edge sensor 1 controlling foot lifter 布端檢出器 1 控制壓腳動作 No setting 未使用	OFF: light on type ON: dark of type **OFF: Ineffective** **無功能** **ON: Effective** **有此功能** **0**	
68	**No setting** **未使用**	**0**	

69	The Option OUT_C acts stitches' number after material edge sensor on 布端檢出器開始動作 Option OUT_C 動作針數	0 ～ 99 stitches	
70	The Option OUT_C delays stitches' number after material edge sensor off 布端檢出器結束動作 Option OUT_C 延遲針數	0 ～ 99 stitches	
71	The acts stitches' number after the Option OUT_C delays stitches' number & material edge sensor off 布端檢出器結束動作 Option OUT_C 延遲後動作針數	0 ～ 99 stitches	
72	The Option OUT_A acts stitches' number after material edge sensor on 布端檢出器開始動作 Option OUT_A 延遲針數	0 ～ 99 stitches	
73	The Option OUT_A delays stitches' number after material edge sensor off 布端檢出器結束動作 Option OUT_A 延遲針數	0 ～ 99 stitches	
74	The Option OUT_A acts time Option OUT_A 動作時間	0 ～ 250 ms	
75	The Option OUT_A acts stitches' number after material edge sensor on 布端檢出器開始動作 Option OUT_A 動作針數	0 ～ 99 stitches	
76	The Option OUT_A delays stitches' number after material edge sensor off 布端檢出器結束動作 Option OUT_A 動作針數	0 ～ 99 stitches	
77	The Option OUT_C acts stitches' number after material edge sensor on 布端檢出器開始動作 Option OUT_C 延遲動作針數	0 ～ 99 stitches	
78	The Option OUT_C delays stitches' number after material edge sensor off 布端檢出器結束動作 Option OUT_C 持續動作針數	0 ～ 99 stitches	
79	The function choice of Option OUT_A Option OUT_C 功能選擇	0 : No output 無輸出 1 : Depend on the setting stitches' number output 根據所設定針數輸出 2 : Depend on the setting stitches' number output when foot lifter acts 根據所設定針數輸出 & 舉壓腳動作時輸出 3: No output when motor stop 馬達停止時無輸出	

80	The function choice of Option OUT_B Option OUT_A 功能選擇	0 : No output 無輸出 1 : Depend on the setting stitches' number output (Pedal control speed) 根據所設定針數輸出(踏板控制速度) 2 :Depend on the setting stitches number output(start of material edge sensor & end of action when motor in medium speed) 根據所設定針數輸出(布端檢出器開始&結束動作時馬達爲中速) 3: Depend on the setting stitches' number output(end of material edge sensor motor at medium speed) 根據所設定針數輸出(布端檢出氣結束動作時馬達爲中速)	
81	The function choice of Option OUT_A Option OUT_A 功能選擇	0 : No output 無輸出 1 : Depend on the setting stitches' number output (Pedal control speed) 根據所設定針數輸出(踏板控制速度) 2 : Depend on the setting stitches' number output (material edge sensor ends & during motor medium speed) 根據所設定針數輸出(布端檢出器結束動作時馬達爲中速) 3 : Auto sewing the setting stitches without pedal press 踏板不需要前踩也可以自動執行所設定的針數	
82	The function choice of Option OUT_C Option OUT_D 功能選擇	0 : No output 無輸出 1 : Depend on the setting stitches' number output 根據所設定針數輸出 2 : Depend on the setting stitches' number output when foot lifter acts 根據所設定針數輸出 &舉壓腳動作時輸出 3 : Depend on the setting stitches' number output (keeps acting even motor stops) 根據所設定針數輸出(馬達停止時仍保持動作)	
83	The control solenoid output cycle choice of material edge sensor 布端檢出器控制線圈輸出週期結束選擇	0 : Option OUT_A 1 : Option OUT_B 2 : Option OUT_C 3 : None	

84	The priority between material edge sensor on & pressing pedal forward 布端檢出器開始動作與踏板前踩優先權選擇	0 : The material edge sensor must be acted before pressing pedal 布端檢出器須在踏板前踩之前動作 1 : Pedal condition is immediate effective when material edge sensor on 布端檢出器開始動作時踏板的狀態立刻有效 2 : Pressing pedal is prior. 踏板前踩優先	
85	Cancel the thread trimming function choice when pedal is heeled. 取消踏板後踩切線功能選擇	OFF : With the thread trimming function when pedal is heeled 有踏板後踩切線功能 ON : Cancel the thread trimming function when pedal is heeled. And just the foot lifting function is effective. 取消踏板後踩切線功能只做舉壓腳動作	
86	Special function choice 特殊功能選擇	0 : No special function 沒有特殊功能 4 : LU1521 function LU1521 功能 6 : SAS1 function SAS1 功能 7 : BASF function BAFS 功能 10 : edge sensor with re-cycle function 布端檢出器有再次循環功能 11: auto sewing when use PKSW PKSW 控制自動車縫功能	
87	No synchronizer operation mode 沒有同步器操作模式	OFF : ineffective . 無功能 ON : effective 有此功能（ 不會顯示 ER-1)	
88	The speed margin of executing needle positioning 執行定位的速度臨界值	80 ～ 160	1 / step
89	Decelerating speed slope choice 減速曲線選擇	1 ～ 8	(The bigger value means the longer time of decelerating.) 設定值越大,減速時間越長

90	Motor static brake function 馬達靜止煞車功能	0 ～ 20	0 : No such function 無功能 1 ～ 20 : (The bigger value means the more powerful braking force.) 1 ～ 20 : 有此功能，設定值越大煞車力量越大
91	Motor rotation signal control 馬達轉動信號控制	OFF : No output 不輸出 TL1 : TL solenoid outputs when motor rotates. 馬達轉動時由 TL 線圈輸出 TL2 : TL solenoid outputs when motor rotates & foot lifter acts. 馬達轉動時和舉壓腳動作時由 TL 線圈輸出	
92	Forward output the motor rotation signal 馬達轉動信號提早輸出時間	0 ～ 1250 ms	5 ms / step
93	Reverse revolution function when machine starts stitching. 起縫反轉功能	OFF : ineffective 無功能 ON : effective 有此功能	
94	Reverse angles when machine starts stitching. 起縫反轉角度	0 ～ 250°	1° / step
95	Check the speed control unit condition function when power on. 開機時檢查速度基座狀態功能	OFF : ineffective 無功能 ON : effective 有此功能	
96	Alarm signal output function. 發生 alarm 時有訊號輸出功能	OFF : ineffective 無功能 ON : effective 有此功能	
97	**No setting** **未使用**	**0**	
98	**No setting** **未使用**	**0**	
99	**No setting** **未使用**	**0**	
100	**No setting** **未使用**	**0**	
101	**No setting** **未使用**	**0**	
102	Material edge sensor begins acting, Option OUT_B delay acting stitches number 布端檢出器開始動作 Option OUT_B 延遲動作針數	0 ～ 99 stitches	

103	Material edge sensor ends acting, Option OUT_B continuously act stitches number 布端檢出器結束動作 Option OUT_B 持續動作針數	0 ～ 99 stitches	
104	Option OUT_B function choice Option OUT_B 功能選擇	OFF : No output 無輸出 ON : Depend on setting stitches' number output 根據所設定針數輸出	
105	Foot lifter protecting time 押腳保護時間	0 ～ 60 seconds	1 seconds / step
106	**No setting** **未使用**	**0**	
107	**No setting** **未使用**	**0**	
108	Motor's braking force when positioning 馬達定位時煞車力	0 ～ 5	
109	Quick Needle positioning function 快速定位停	OFF : ineffective 無功能 ON : effective 有此功能	
110	**Motor positioning stopping force** **馬達定位時煞車力(速度參數)**	0 ～ 5	
111	ER-2 checking time ER-2 檢查時間	0 ～ 5 seconds 秒	
112	ATC auto function setting (Only effective in ATC machine) ATC 自動機能設定(只在 ATC 車頭選項中有效)	OFF : ineffective 無功能 ON : effective 有此功能	
113	Material edge sensor begins acting, Option OUT_B delay acting stitches' number 布端檢出器開始動作 Option OUT_B 延遲動作針數	0 ～ 99 stitches	
114	Material edge sensor ends acting, Option OUT_B continuously act stitches' number 布端檢出器結束動作 Option OUT_B 持續動作針數	0 ～ 99 stitches	
115	Option OUT_B function choice Option OUT_B 功能選擇	OFF : No output 無輸出 ON: Depend on setting stitches' number output 根據所設定針數輸出	
116	Control Option OUT_B solenoid output function by Option IN_C 利用 Option IN_C 控制 Option OUT_B 線圈 輸出功能	OFF : ineffective 無功能 ON : effective 有此功能	
117	Start condensed stitching stitches' number 開始密縫針數	0 ～ 99 stitches	
118	**No setting** **未使用**	**0**	

119	**No setting** **未使用**	**0**	
120	**Breaking time** **煞車臨界值**	130-250	
121	**Slight breaking action time** **微小煞車動作時間**	**10-50ms**	
122	Slight breaking speed 微小煞車動作臨界速度	**200-1700rpm**	
123	Front suction time 前吸風時間	**0-5000ms**	
124	**Interval suction time** **間接吸風時間**	**0-5000ms**	
125	**Rear suction time** **後吸風時間**	**0-5000ms**	
126	**Suction mode** **吸風模式**	**OFF: Control by stitches** **針數控制** **ON: Control by timing** **時間控制**	
127	**No setting** **未使用**	**0**	
128	Option for special function 特殊功能選擇	OFF : ineffective 無功能 **1: If footlifter switch has been activated once, it will automatically change for TFL mode it is switched off** 只要壓腳開關動作過一次,就強制將壓腳控制模式改爲 TFL,直到關機 2: Delay time for option OUT_C to OFF the function Option OUT_C 延遲 OFF 功能 3: After edge sensor is over, stitches can divide in four sections 布端結束後的針數可分爲 4 段 4: Last startback setting change 前倒縫最後一趟修正模式 5: Dino special function DINO 特殊顯示功能 6: After thread suction, material edge sensor is ON 吸線裝置動作完成後，布端檢出器自動有效 (Only for MO3 model)(只在 MO3 機型有效)	
129	Differential control function 微分控制功能	OFF : ineffective 無功能 ON : effective 有此功能	
130	Up position adjustment 上停點位置調整	0 ～ 250 °	1 ° / step
131	Stitch number for one-shot function ONE-SHOT 針數	0 ～ 250	
132	No setting 未使用	**0**	
133	No setting 未使用	**0**	

134	Stop position when material edge sensor active 布端檢出器動作時,馬達停止位置	OFF : Depend on simple control panel setting 由簡易面板上下停決定 UP : Up position 上停點 DOWN : Down position 下停點	
135	No setting 未使用	**0**	
136	No setting 未使用	**0**	
137	Delay time between UTL and condensing stitch UTL 動作輸出後到執行密縫前延遲時間	0 ～ 200 ms	10 ms / step
138	Option OUT_A delay acting stitches (only effective in PT2 machine) 布端檢出器開始動作 Option OUT_A 延遲動作針數(只在 PT2 機型有效)	0 ～ 99 stitches	
139	Option OUT_A acting stitches (only effective in PT2 machine) 布端檢出器動作 Option OUT_A 持續動作針數(只在 PT2 機型有效)	0 ～ 99 stitches	
140	Motor protecting function 馬達運轉時間保護功能	OFF : ineffective 無功能 ON : effective 有此功能	
141	Cumulate times for motor protecting function 馬達發生保護功能時間	100 ～ 5000 hours	50 hours / step
142	Material edge sensor1 detection status 布端檢出器 1 檢出判斷基準	OFF: Timing 時間 ON: Stitches 針數	
143	Material edge sensor1 detects stitches 布端檢出器 1 檢出針數	0-20 stitches	
144	In auto test mode, motor running level adjustment 自動測試模式下,馬達運轉速度準位調整	60 ～ 250	10 / step
145	In auto test mode, motor stop mode selection 自動測試模式下,馬達停止模式選擇	TRIM : trimming active 切線動作 FLON : foot lifter active 舉押腳動作 STOP : motor stop 馬達停止	
146	Material edge sensor2 detection status 布端檢出器 2 檢出判斷基準	OFF: Timing 時間 ON: Stitches 針數	
147	Material edge sensor2 detects stitches 布端檢出器 2 檢出針數	0-20 stitches	
148	Quick needle positioning check level 快速定位停檢查準位	500 ～ 1000 spm	50 / step

149	Option for material edge sensor 2 布端檢出器 2 型式選擇	OFF: light on type ON: dark on type	
150	Motor automatic stop function 馬達自動停止功能	OFF : ineffective 無功能 ON : effective 有此功能	The cumulate time is clear after power turn off 電源關機後累積時間就被清除
151	Times for automatic stop the motor 馬達執行自動停止時間	0 ～ 100 hours	1 hour / step
152	Speed loop gain adjustment 速度迴路增益調整	0 ～ 12	
153	Virtual needle up positioning function 虛擬上停功能	OFF : ineffective 無功能 ON : effective 有此功能	
154	Fixed sewing speed decrease curve option 定寸縫減速曲線選擇	0- 4	
155	The safety range of UP position 上停定位的安全範圍	0 ～ 100	
156-158	No setting 未使用	0	
159	Second stage for material edge sensor's no. of stitches 第二段布端檢出器針數	0 ～ 250 stitches	
160	Third stage for material edge sensor's no. of stitches 第三段布端檢出器針數	0 ～ 250 stitches	
161	Fourth stage for material edge sensor's no. of stitches 第四段布端檢出器針數	0 ～ 250 stitches	
162	When fixed stitches no. of setting is over, footlifter will lift up automatically 固定針數縫製工程結束後, 自動壓腳功能	OFF : Ineffective 無功能 ON : Effective 有此功能	
163	Quick trimming function 快速切刀功能	OFF : Ineffective 無功能 ON : Effective 有此功能	
164	No setting 未使用	0	
165	Delay OFF time for option OUT_C Option OUT_C 延遲 OFF 時間	0 ～ 9000 ms	
166	Controls the speed of material edge sensor's stitching no.'s (Only useful for SAF, YU2F, YU3F) 控制布端檢出器針數執行時的速度 (只在 SAF、YU2F、YU3F 機型有效)	0： Pedal controls speed 踏板控制速度 1： Fixed to medium speed 固定中速 2： Automatic sewing no need to press pedal forward 自動縫製不需踏板前踩	
167	Angle for quick positioning 快速定位停提前減速角度	0 ～ 200 °	

168	No. of interval stitches for middle suction 中途吸風間格針數	0 ～ 250 stitches	
169	No. of stitches at medium speed 中途吸風動作針數	0 ～ 250 stitches	
170	Before footlifter is activated, motor will rotate to the upper position 舉壓腳動作前馬達先轉到上停位置	OFF : Ineffective 無功能 ON : Efffective 有此功能	
171	When switch for manual cutter is activated, the time it takes for thread suction 手動斬刀開關動作時吸線裝置動作時間	0 ～ 9900 ms	100 ms / step