

SV-250 (SV-260)

INSTRUCTION MANUAL

使用說明書

Ver - 11.0

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。機器休息不用時。
 - 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。

ISM

TYPE-SV-250

SERIAL N.O

540064

I. Set up

安裝

1. For motor set up

馬達的安裝:

Dimensions of motor as shown in Fig.1

馬達的外型尺寸如圖(一)所示:

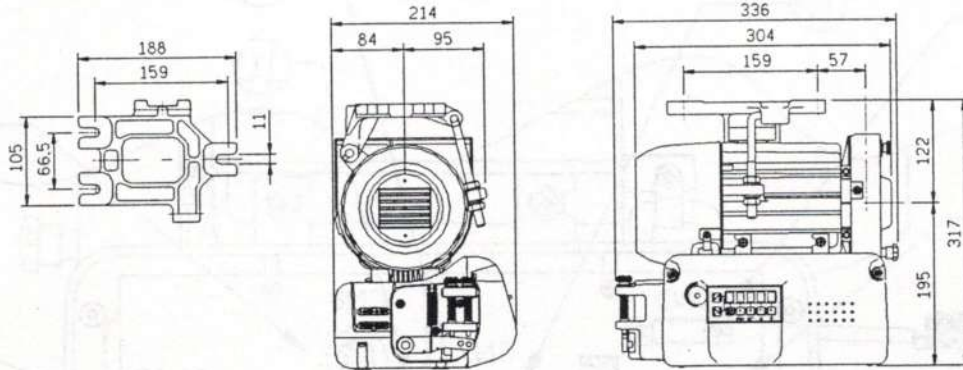


Fig.1 (圖一)

Drill three holes of 9 mm on the machine table, fixed the motor under the table; be sure that both pulleys of machine and motor should be parallel.

在車板上鑽 3 個 9 mm 的孔,將馬達固定於車板下;要注意縫紉機皮帶輪和馬達皮帶輪必須平行

Up-down shift tension adjust nuts. Adjust belt tension force.

上下移動調整螺帽, 調整皮帶張力。

Adjust belt tension force ranging from 16-18mm/1kgf located in the center position as shown in Fig.2.

皮帶張力請調整在皮帶中央部份 16~18 mm/1Kgf 的範圍內,如圖(二)所示:

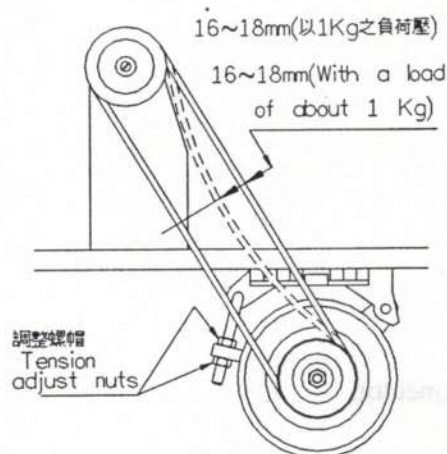


Fig.2 (圖二)

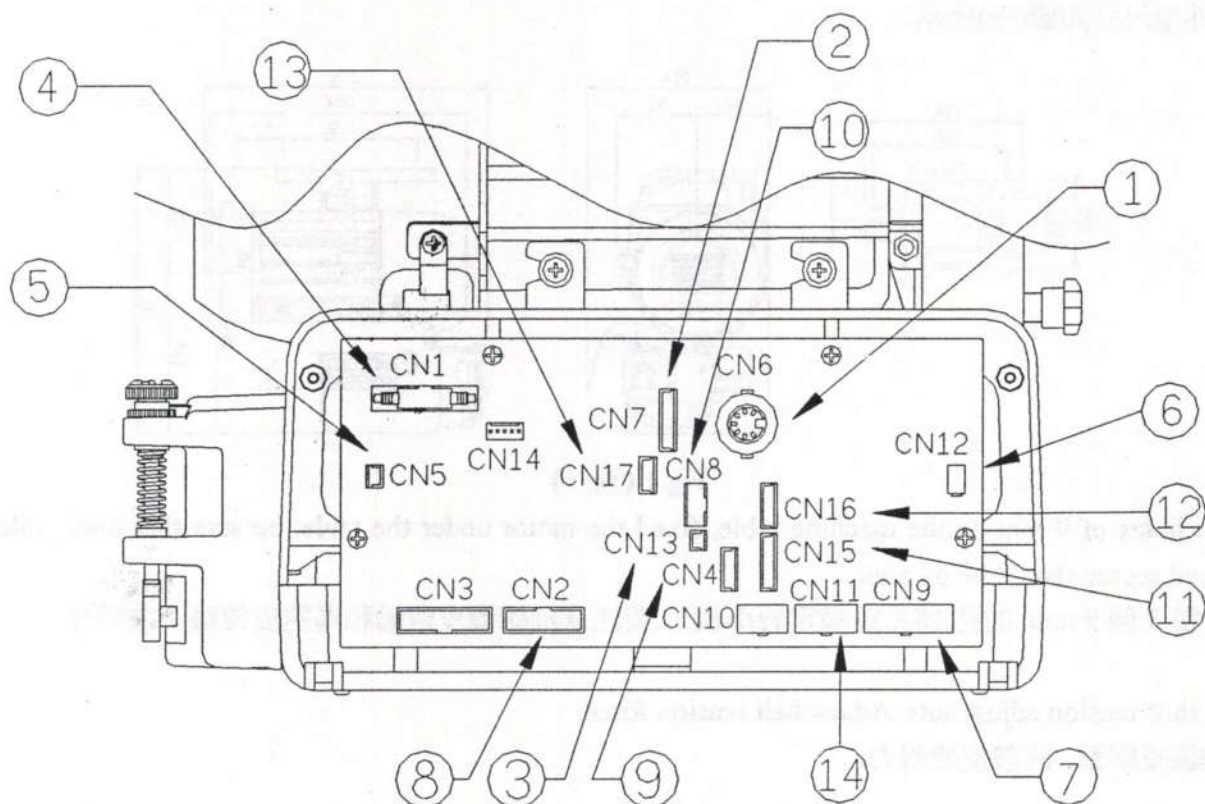
2. How to connect the cord

連接線的接法:

1). Open the front cover of the control box, the following connectors of the P.C.B are shown in Fig.3.

According to the sewing machine model, connect the connecting lines to the appropriate position.

控制箱前蓋打開,電路板上備有下列接頭.如圖(三);根據縫紉機的裝置,把連接線接到適當位置.



See Fig.3

圖 Fig.3 (圖 三)

1) CN6: Synchronizer connector.

① CN6 :同步器接頭.

2) CN7: Encoder connector.

② CN7:馬達編碼器接頭.

3) CN13: Safety switch connector.

③ CN13:安全開關接頭.

4) CN1: Pattern setting switch box connector.

④ CN1: 選針盒接頭.

5) CN5: Speed control unit connector.

⑤ CN5: 速度基座接頭.

6) CN12: Presser foot lifter solenoid connector.

⑥ CN12:提壓腳線圈接頭.

7) CN9: Sewing machine head connector.

⑦ CN9 :車頭功能線圈接頭.



1,8	Trimming solenoid	切線線圈
2,9	Wiping solenoid	撥線線圈
5,12	Backack switch	回針開關
6,13	Backack solenoid	回針線圈
7,14	Reserved solenoid	備用線圈
10	Ground.	接地

Option OUT_B : pin 6 & 13

Option OUT_E : pin 2 & 9

Option OUT_F : pin 1 & 8

8) CN2: Front cover counter (CO2) connector.

⑧ CN2:前蓋 CO2 接頭.

9) CN4: Material edge sensor connector.

⑨ CN4:布端檢出器插頭.

10) CN8: Standing pedal operation connector.

⑩ CN8:立式作業踏板接頭.

Option IN_A : pin 7 & 8

Option IN_B : pin 9 & 10

Option IN_C : pin 11 & 12

11) CN15:option B.

⑪ CN15: option B 接頭.

Option IN_F : pin 2 & 7

Option IN_G : pin 3 & 7

Option IN_H : pin 5 & 7

12) CN16:option C.

⑫ CN16: option C 接頭.

Option IN_D : pin 2 & 6

Option IN_E : pin 3 & 6

13) CN17:option D.

⑬ CN17: option D 接頭.

14) CN11:option A.

⑭ CN11: option A 接頭.

Option OUT_A : pin 2 & 7

Option OUT_C : pin 1 & 6

Option OUT_D : pin 3 & 8

2). See Fig.4

如圖(四)所示:

1) Power source line connector.

①電源線接頭.

2) Motor power line connector.

②馬達動力線接頭.

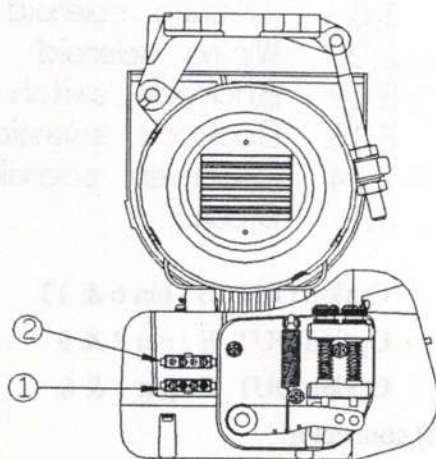
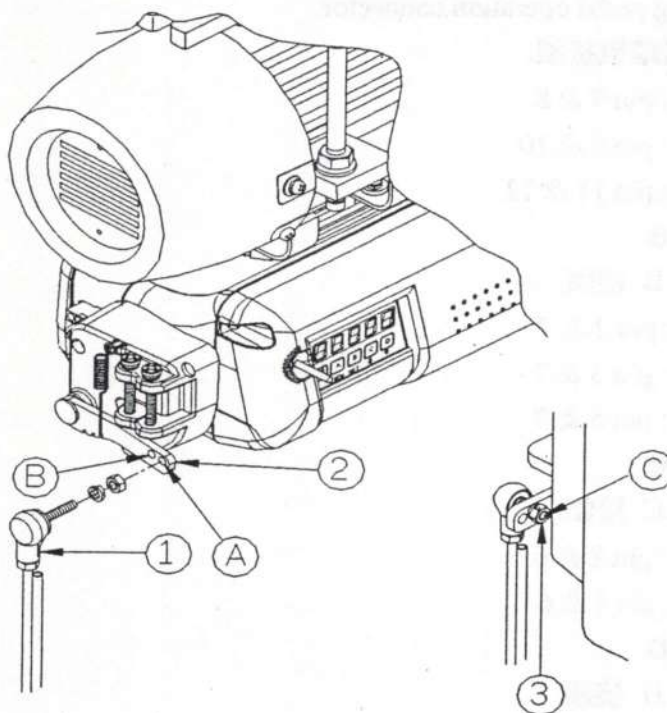


Fig.4 (圖 四)

3. Attaching the connecting rod

連接桿的安裝



Fix connecting rod① to installing hole A or B of pedal lever② with nut③.

連接桿① 用螺帽③ 固定到踏板撥桿② 的 A 孔,或 B 孔.

If connecting rod① are installed in hole A, lengthen the pedal depressing stroke, and the pedal operation at medium speed will be easier to control

若將連接桿① 固定到 A 孔,踏板行程較長;踏板的中間速度操作變得較容易

If connecting rod① are installed in hole B, shorten the pedal depressing stroke, and the pedal operation will have quicker response.

若將連接桿① 固定到 B 孔,踏板行程變短,踏板的操作反應變快.

4. Adjusting the belt slip-off preventing bracket

皮帶止落板

Loosen screw① and adjust so that belt slip-off preventing bracket② is positioned at the location indicated in the figure. (The distance between belt top③ and slip-off preventing bracket② should be less than 3mm).

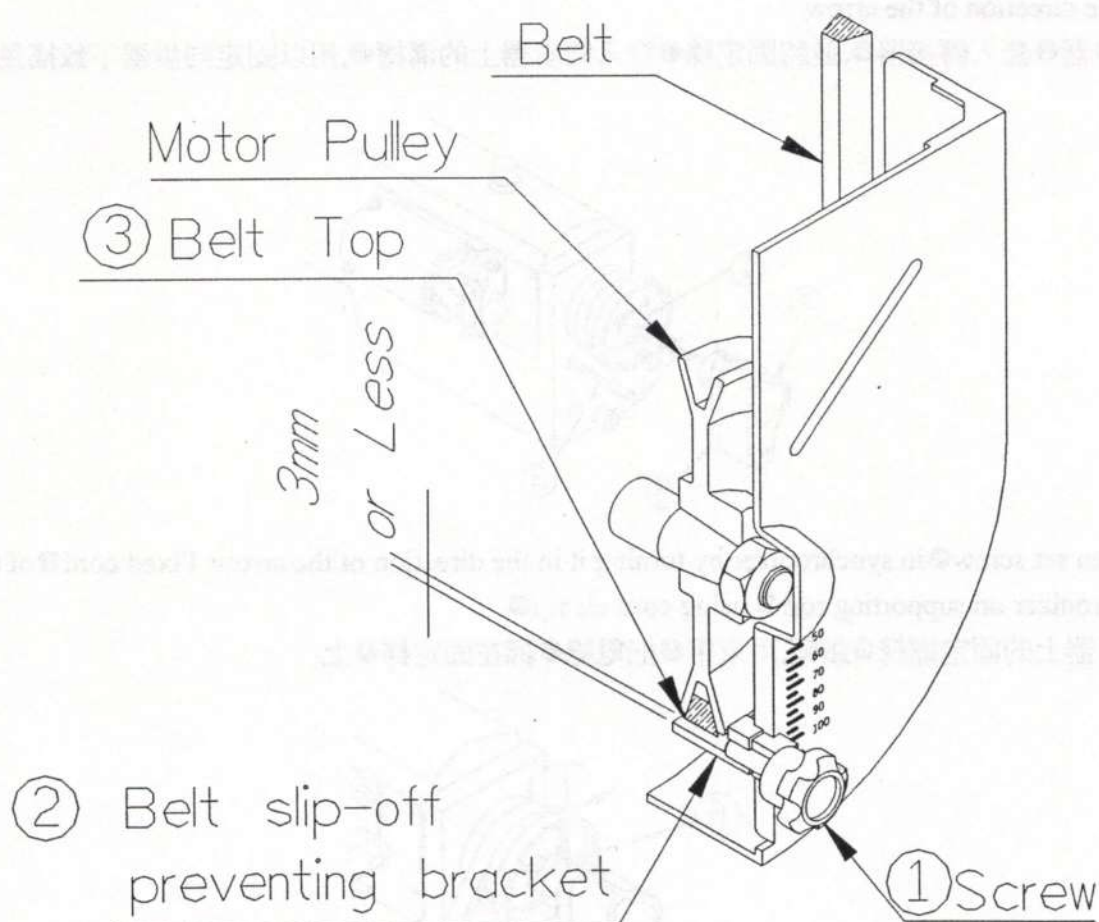
轉鬆螺絲①把皮帶止落板②調到圖示的位置。(皮帶③之外緣距離止落板②少於 3mm)

After the adjustment, tighten the screws① and be sure that before operating the sewing machine, the belt slip-off preventing bracket does not come in contact with the belt.

將螺絲①鎖緊,縫紉機運轉前請確認皮帶止落板與皮帶沒有接觸。

Note: If belt slip-off preventing bracket is not properly adjusted, it is possible to let the belt to slip-off causing safety hazard

注意:如果皮帶止落板調整不當,致使皮帶脫落;會造成意外傷害。



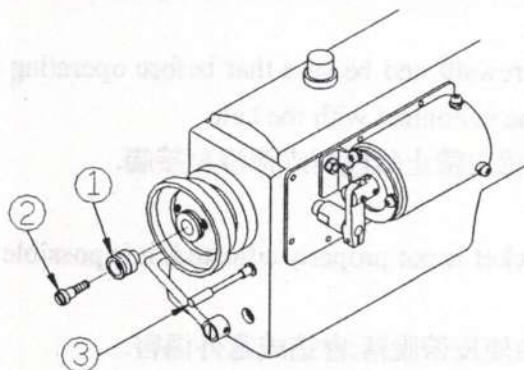
5. Fixing the synchronizer

同步器的安裝

- 1) Securely fix adapter ① in the tapped hole in the main shaft of sewing machine using screw ②.

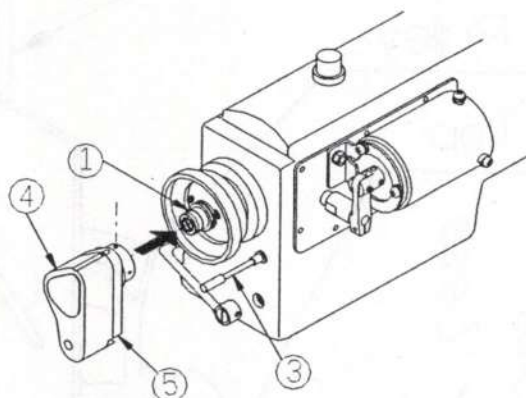
Fix supporting rod ③ on the machine head as figure.

將轉接器①用螺絲②鎖緊固定在針車頭軸心或是皮帶輪上,將固定棒③固定在針車頭上;如圖所示:



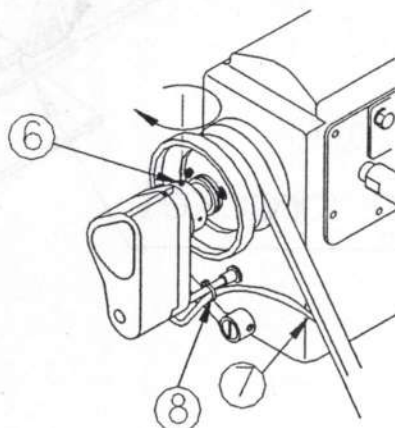
- 2) Then insert supporting rod ③ into slit ⑤ on the synchronizer stopper. Fit synchronizer ④ to adapter ① in the direction of the arrow.

將同步器④套入轉接器①,並將固定棒③穿入同步器上的溝槽⑤,用以固定同步器不致搖晃.如圖所示:



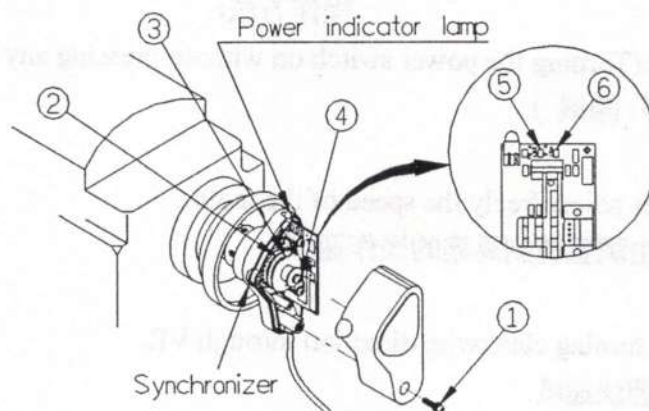
- 3) Tighten set screw ⑥ in synchronizer by turning it in the direction of the arrow. Fixed cord ⑦ of the synchronizer on supporting rod ③ using cord clamp ⑧.

將同步器上的固定螺絲⑥鎖緊,用束帶⑧把電線⑦綁在固定棒③上.



6. Adjusting the synchronizer

同步器的調整



- 1) Loosen screw ① and remove the cover. Then loosen screw ④ located at the top of the shaft.
鬆開螺絲①取下外蓋,轉鬆螺絲④.
- 2) Adjust the machine's pulley manually to needle down position. (the same direction as the machine rotates.)
手轉針車頭皮帶輪,使針停在下停點位置。(順著針車正常運轉方向)
- 3) Adjust the photo disc ② till LED ⑤ is on. (the same direction as the machine rotates.)
調整遮光片②,使得 LED⑤ 點亮。(順著針車正常運轉方向)
- 4) Repeat step 2. Then adjust the sewing machine's pulley manually till needle remains in needle up position.
重覆步驟(2),手轉針車頭皮帶輪,使針停在上停點位置.
- 5) Adjust the photo disc ③ till LED ⑥ is on. Note: Prior the execution of this procedure, never rotate pulley and photo disc ②.
調整遮光片③,使 LED⑥ 點亮. 注意:執行此步驟時,皮帶輪及遮光片②不可被轉動.
- 6) Tighten the screw ④.
將螺絲④鎖緊.
- 7) Confirm the needle up / down positions of the needle by operating the pedal. In case of error, please repeat steps (2) through (5).
用踏板操作來確定 上/下 停位置是否正確. 不正確的話,請重覆 (2)~(5)步驟.
- 8) Set the cover and tighten it with screw ①.
蓋上外蓋,將螺絲①鎖緊.

II Operating way

操作方法:

1. For regular operations:(Turning the power switch on without pressing any button)

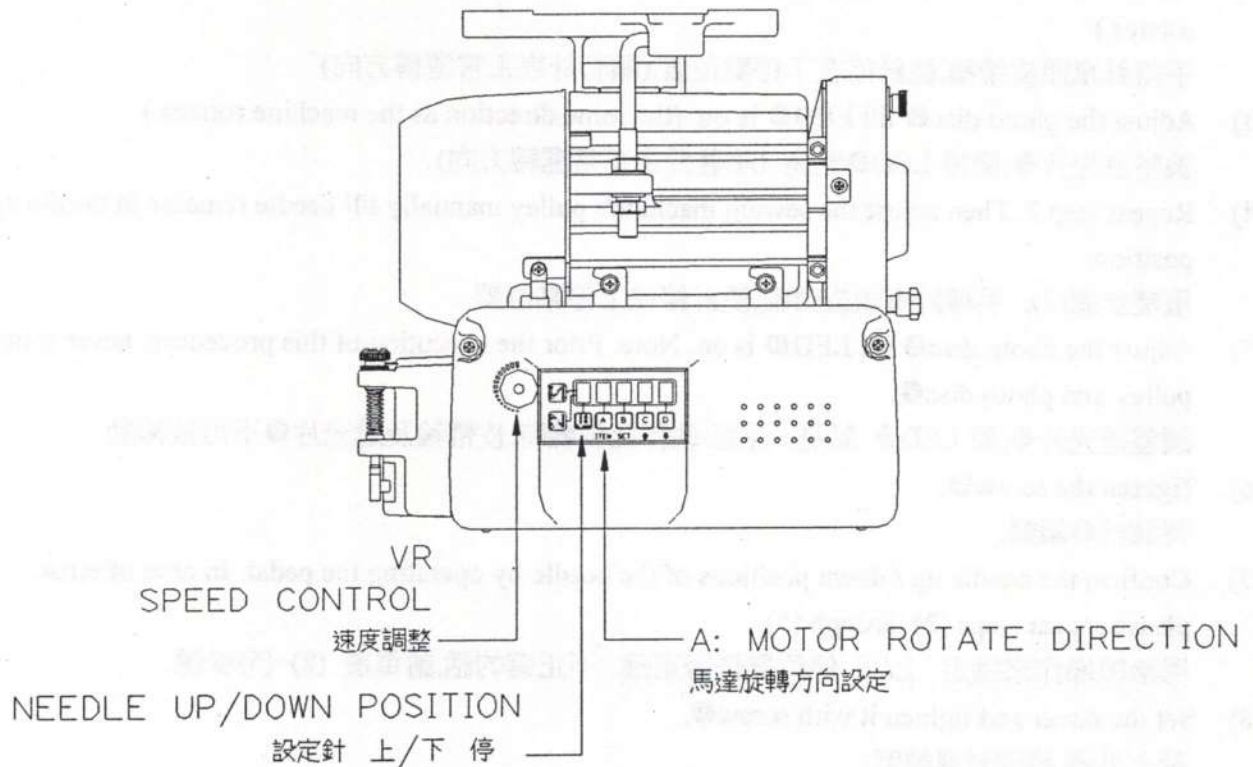
一般操作:(不按任何鍵下 開機)

The external VR let the user adjust freely the speed of the motor.

外部 VR 可供使用者自由調整控制馬達的操作速度.

Adjust speed intensity by turning clockwise direction through VR.

順時針方向旋轉 VR 可調快速度.



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 LD1 from the main board turns on.

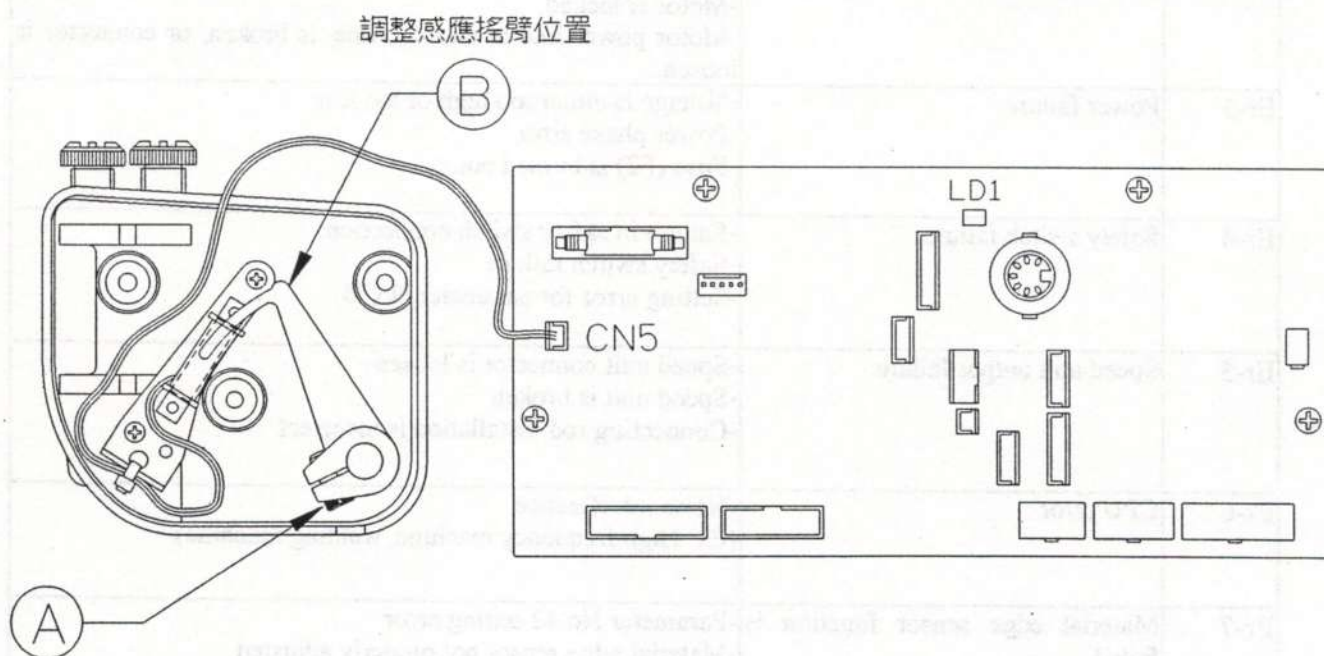
①速度基座拉臂置於中立點.將速度基座上螺絲(A)轉鬆 ;調整搖臂位置(B)使主機板上 LD1 點亮.

②Tighten the hexagon screw (A).

②將螺絲(A)轉緊.

③ If LD1 keeps on, thus adjustment is completed, otherwise repeat steps 1~2.

③LD1 保持點亮,則調整完成;否則請重複步驟. 1~2.

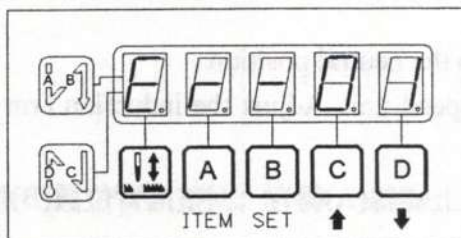


III Error message indicator

錯誤訊息顯示:

When abnormal condition occurs, the error message will displayed 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:

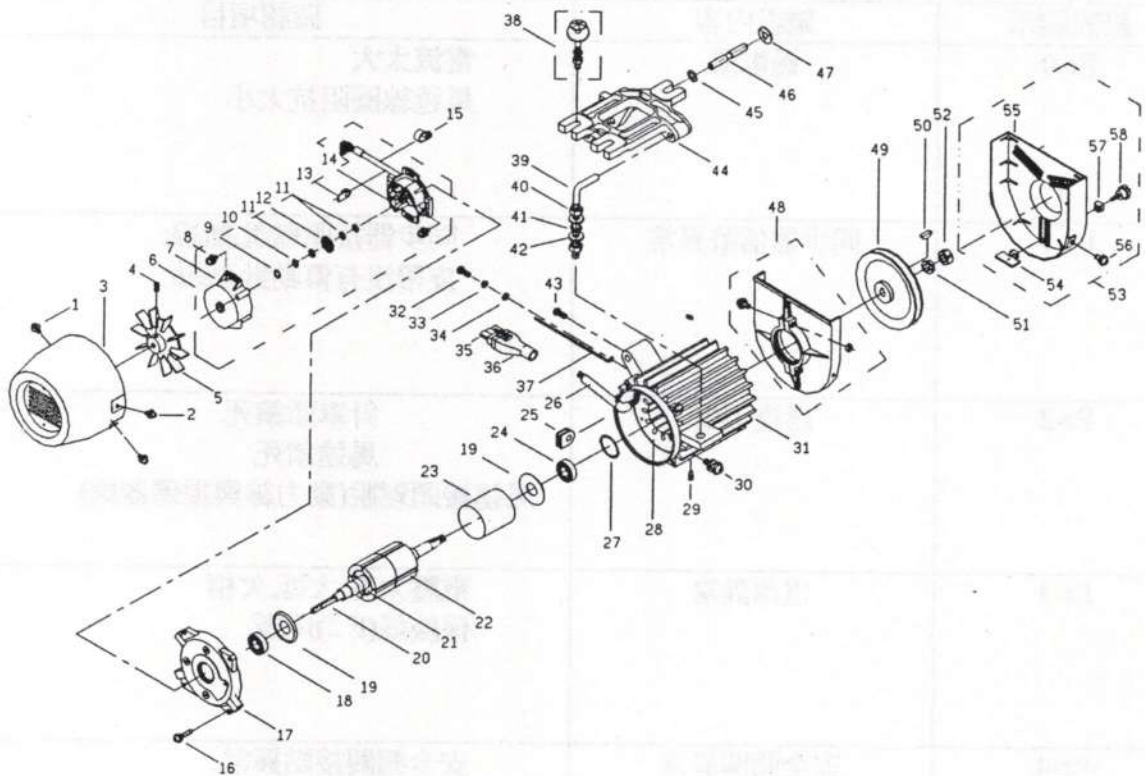
錯誤訊息顯示:

Error Code	Description of error detected	Items to be checked
Er-0	Over current	-Current is too high.
Er-1	Synchronizer failure	-Synchronizer connector is loosen 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 loosen.
Er-3	Power failure	-Voltage is either too high or too low. -Power phase error. -Fuse (F2) is burned out.
Er-4	Safety switch failure	-Failure in safety switch connection. -Safety switch failure -Setting error for parameter No.35.
Er-5	Speed unit output failure	-Speed unit connector is loosen -Speed unit is broken -Connecting rod installation is incorrect
Er-6	CPU error	-Noise interference (Ex. High frequency machine, welding machine)
Er-7	Material edge sensor function is failed.	-Parameter No.42 setting error -Material edge sensor not properly adjusted -Connector for material edge sensor is loosen - 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

請依下表進行確認:

錯誤顯示	錯誤內容	確認項目
Er-0	過電流	電流太大 馬達線圈阻抗太小
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,欠相 保險絲(F 2)燒斷.
Er-4	安全開關異常	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

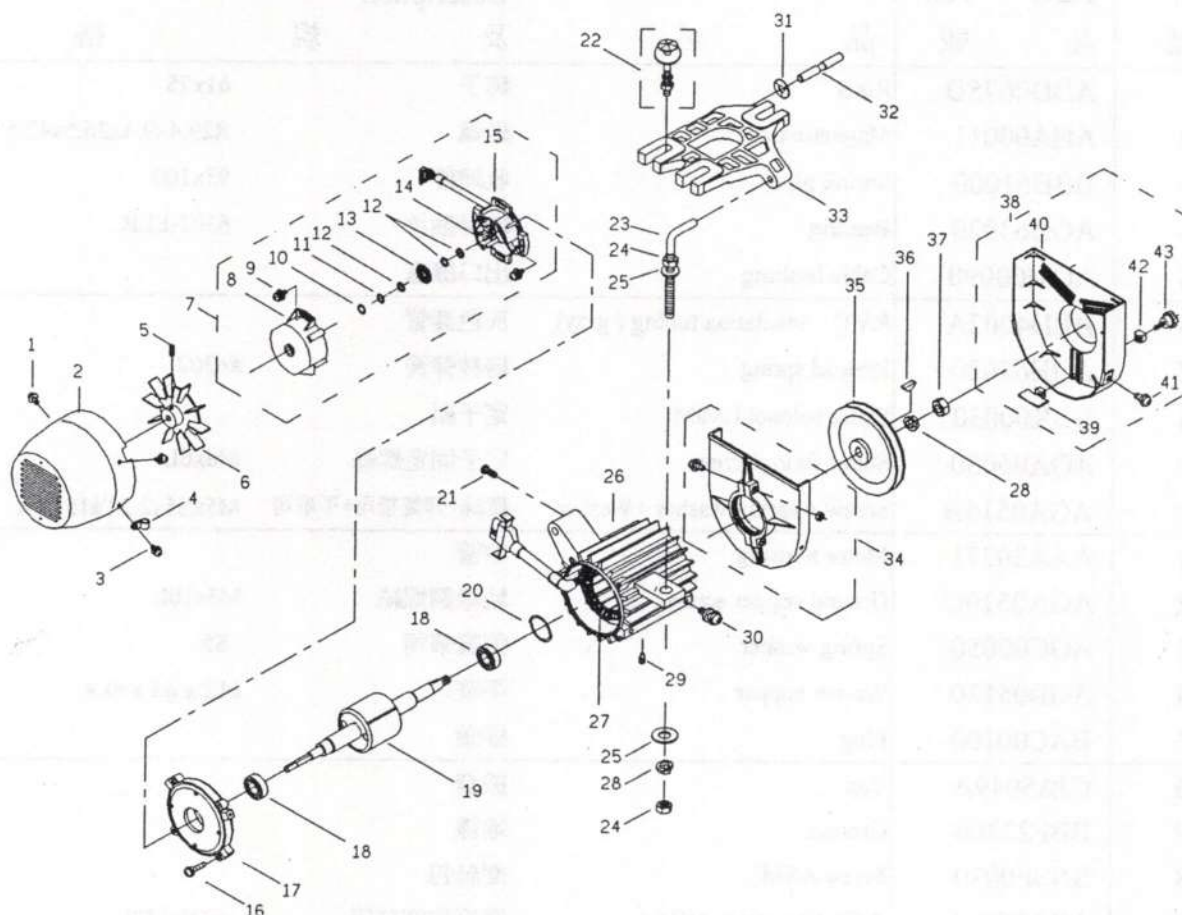
SV-250 MOTOR PARTS LIST 馬達零件表



No. 編號	Parts 品	No. 號	Description 品 名	規 格	AMT 數量
1	AGA0410F		Screw +Spring washer +Washer	螺絲+彈簧華司+平華司 M4xS4xφ10x10L	2
2	AGA0416C		Screw +Spring washer +Washer	螺絲+彈簧華司+平華司 M4xS4xφ10x16L	1
3	ACB00220		End Cover	後蓋	1
4	AGA0510D		Headless screw	無頭螺絲 M5x10L	1
5	AAB00072		Fan	風扇	1
6	SNSA006B		Encoder ASM. (SV-250)	編碼器組 (SV-250)	1
7	ACD00020		Encoder Cover	編碼器上蓋	1
8	AGA0416A		Screw +Spring washer +Washer	螺絲+彈簧華司+平華司 M4xS4xφ10x16L	4
9	AGFCS02A		CS ring	CS 環 φ7.8xφ10x0.25T	1
10	ADA0057A		Bended Washer	弓型彈簧華司 φ8.5xφ12.5x0.3T	1
11	ADA00540		Washer	遮光片壓墊片 φ8.1xφ12.5x0.5T	3
12	AHB00010		Encoder disk	編碼器遮光片	1
13	ACM00120		Encoder cable guard	編碼器出線護套	1
14	CME00051		Encoder P.C.B ASM	編碼器電路板組	1
15	ACK0002A		Cord clamp	電線固定扣	1
16	AGA05250		Screw +Spring washer	螺絲+彈簧華司 M5xS5x25L	4
17	AAA30262		Back cover	後殼	1
18	AGG62030		Bearing	培林軸承 6203-LLB	1
19	ADB00040		Rotor protective Al. plate	轉子保護鋁片	2
20	ABA00160		Rotor shaft	轉子心軸 φ20x275L	1

No. 編號	Parts 品	No. 號	品 名	Description 及	規 格	AMT 數量
21	ADD0075D		Rotor	轉子	61x75	1
22	AHA00011		Magnetic iron	磁鐵	R29.4x9.4x36.5x42.5	8
23	BBD51000		Shrink pipe	收縮帶	95x100	1
24	AGG63020		Bearing	培林軸承	6302-LLB	1
25	ACM00090		Cable bushing	出口線塞		1
26	BBD4002A		P.V.C Insulation tubing (gray)	灰色套管		1
27	AGH63020		Preload spring	培林彈簧	#6302	1
28	BBK00030		Stator solenoid ASM.	定子組		1
29	AGA06080		Stator fixing screw	定子固定螺絲	M6x6L	1
30	AGA0515B		Screw +Spring washer +Washer	螺絲+彈簧華司+平華司	M5xS5x2.5Tφ15x15L	4
31	AAA30271		Motor housing	中管		1
32	AGA0510C		Ground copper screw	地線銅螺絲	M5x10L	1
33	AGC00050		Spring washer	彈簧華司	S5	1
34	AGB05120		Washer copper	平華司	φ12 x φ5 x t0.8	1
35	BAC00100		Plug	插頭		1
36	CJA5049A		Cap	披套		1
37	BBF22306		Ground	地線		1
38	SNSP0030		Screw ASM.	螺絲包		1
39	ABA00031		Adjusting screw ASM.	底座鉤螺絲組	φ8.9x130L	1
40	AGE10080		Nut	螺帽	M10x t8	2
41	AGC00100		Spring washer	彈簧華司	S10	1
42	AGB10020		Washer	平華司	φ21 x φ10 x t1.5	2
43	AGA0512D		Screw	圓頭螺絲	M5x12L	1
44	AAA00110		Slide base	底座		1
45	AGB10018		Washer	平華司	φ21 x φ10 x t1.8	1
46	ABA00180		Lateral pin	底座橫心	φ10x70L	1
47	ADA00290		Wave ring	三波彈簧墊片	Bww608	1
48	SNSA003B		Inside pulley cover ASM.	皮帶輪內蓋組		1
49	AAAP100B		Motor pulleyφ100	皮帶輪φ100	φ100	1
50	AGM04130		Key	半圓鍵	φ13xH5xW4x12.6L	1
51	AGC0010B		Spring washer	彈簧華司	S10x t2.5	1
52	AGE1008C		Nut	螺帽	M10xP1	1
53	SNSA003E		Outside pulley cover ASM.	皮帶輪外蓋組		1
54	ACA0010A		Dropping Plate	皮帶輪止落板		1
55	ACA00380		Outside pulley cover	皮帶輪外蓋		1
56	AGA05080		Screw +Spring washer	螺絲+彈簧華司	M5xS5x8L	2
57	ACA00090		Dropping Pad	皮帶輪止落墊		1
58	ACB0012A		Dropping bolt (big)	皮帶輪止落螺栓(大)		1

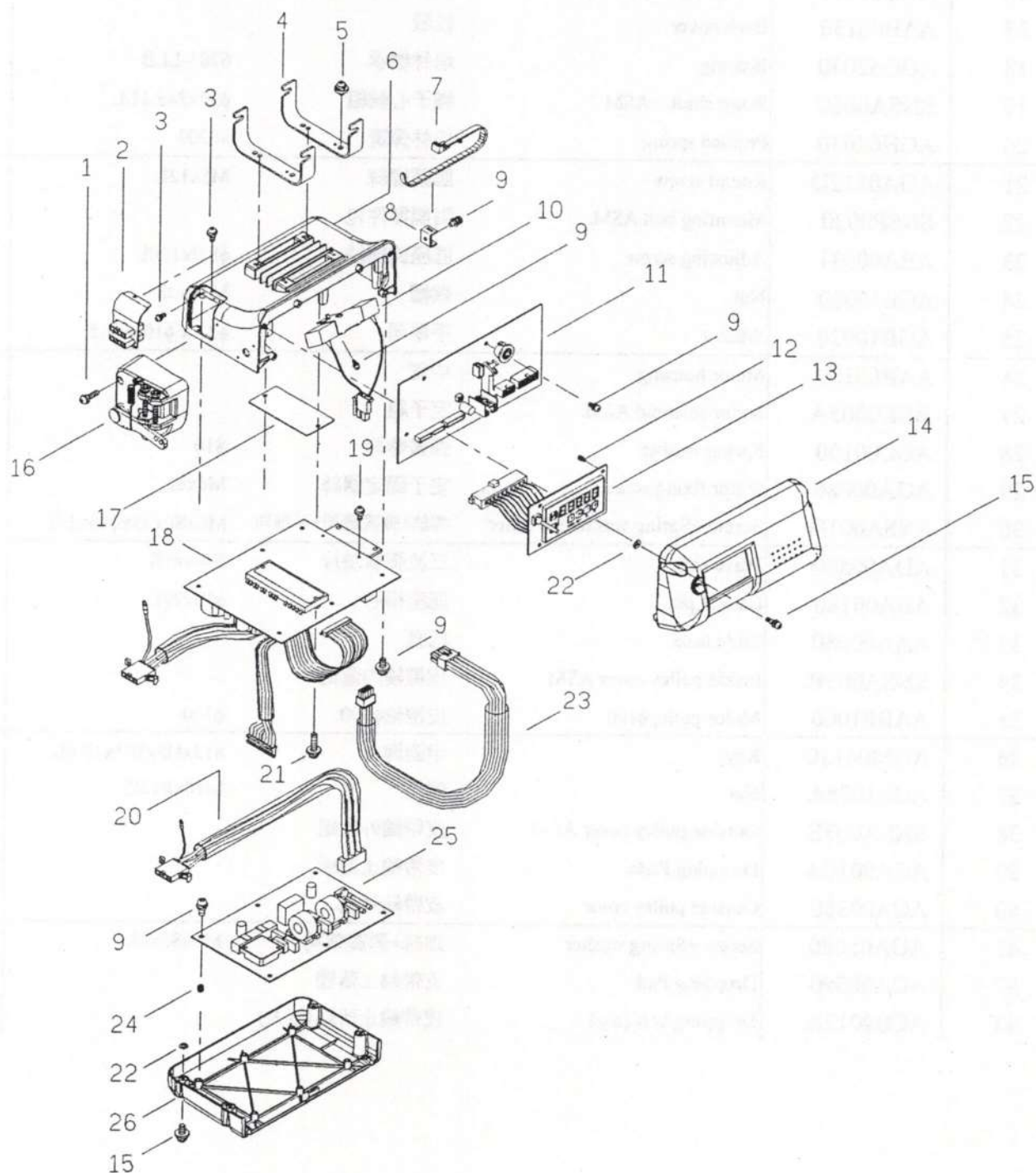
SV-260 MOTOR PARTS LIST 馬達零件表 (1HP)



No. 編號	Parts 品	No. 號	品 名	Description 及 規 格	AMT 數量
1	AGA0410F		Screw +Spring washer +Washer	螺絲+彈簧華司+平華司 M4xS4xφ10x10L	2
2	ACB00200		End Cover	後蓋	1
3	AGA0416C		Screw +Spring washer +Washer	螺絲+彈簧華司+平華司 M4xS4xφ10x16L	1
4	ACK0002A		Cord clamp	電線固定扣	1
5	AGA0510D		Headless screw	無頭螺絲 M5x10L	1
6	AAB00072		Fan	風扇	1
7	SNSA006D		Encoder ASM. (SV-260)	編碼器組 (SV-260)	1
8	ACD00020		Encoder Cover	編碼器上蓋	1
9	AGA0416A		Screw +Spring washer +Washer	螺絲+彈簧華司+平華司 M4xS4xφ10x16L	4
10	AGFCS02A		CS ring	CS 環 φ7.8xφ10x0.25T	1
11	ADA0057A		Bended Washer	弓型彈簧華司 φ8.5xφ12.5x0.3T	1
12	ADA00540		Washer	遮光片壓墊片 φ8.1xφ12.5x0.5T	3
13	AHB00010		Encoder disk	編碼器遮光片	1
14	CME00051		Encoder P.C.B ASM	編碼器電路板組	1
15	ACD00030		Encoder base ASM	編碼器下蓋底座	1

No. 編號	Parts 品	No. 號	Description 品 名	及 規 格	AMT 數量
16	AGA05250		Screw +Spring washer	螺絲+彈簧華司 M5xS5x25L	4
17	AAB00130		Back cover	後殼	1
18	AGG62030		Bearing	培林軸承 6203-LLB	2
19	SNSA006C		Rotor shaft ASM	轉子心軸組 $\phi 20 \times 245.1 \text{LL}$	1
20	AGH62030		Preload spring	培林彈簧 #6203	1
21	AGA0512D		Round screw	圓頭螺絲 M5x12L	1
22	SNSP0020		Mounting bolt ASM.	附屬零件包	1
23	ABA00031		Adjusting screw	底座鉤螺絲 $\phi 8.9 \times 130 \text{L}$	1
24	AGE10080		Nut	螺帽 M10x t8	2
25	AGB10020		Washer	平華司 $\phi 21 \times \phi 10 \times t1.5$	2
26	AAB00100		Motor housing	中管	1
27	BBK0005A		Stator solenoid ASM.	定子組	1
28	AGC00100		Spring washer	彈簧華司 S10	2
29	AGA06080		Stator fixing screw	定子固定螺絲 M6x6L	1
30	SNSA001G		Screw +Spring washer +Washer	螺絲+彈簧華司+平華司 M6xS6x t3x $\phi 15 \times 15 \text{L}$	1
31	ADA00560		Wave ring	三波彈簧墊片 Bww608	1
32	ABA00180		Lateral pin	底座橫心 $\phi 10 \times 70 \text{L}$	1
33	AAA00080		Slide base	底座	1
34	SNSA003B		Inside pulley cover ASM.	皮帶輪內蓋組	1
35	AABP1000		Motor pulley $\phi 100$	皮帶輪 $\phi 100$ $\phi 100$	1
36	AGM04130		Key	半圓鍵 $\phi 13 \times H5 \times W4 \times 12.6 \text{L}$	1
37	AGE1008A		Nut	螺帽 M10xP1.25	1
38	SNSA003E		Outside pulley cover ASM.	皮帶輪外蓋組	1
39	ACA0010A		Dropping Plate	皮帶輪止落板	1
40	ACA00380		Outside pulley cover	皮帶輪外蓋	1
41	AGA05080		Screw +Spring washer	螺絲+彈簧華司 M5xS5x8L	2
42	ACA00090		Dropping Pad	皮帶輪止落墊	1
43	ACB0012A		Dropping bolt (big)	皮帶輪止落螺栓(大)	1

SV-250 CONTROL BOX PARTS LIST 控制箱零件表

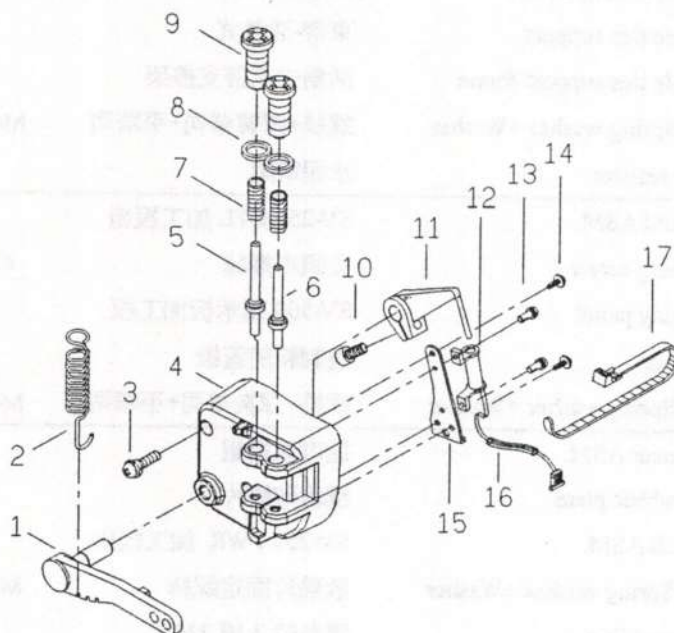


No. 序號	Parts No. 品 號	Description	品名	Specification 規格	AMT 數量
1	AGA0416A	Screw +Spring washer +Washer	螺絲+彈簧華司+平華司	M4xS4xφ10x16L	3
2	ADA01120	Power I/O fixing plate	新側邊電源 I/O 插線鐵板		1
3	AGA0408B	Screw +Spring washer +Washer	螺絲+彈簧華司+平華司	M4xS4xφ9x8L	4
4	ADA01140	Box suspended frame	馬達固定腳架		2
5	AGA0515B	Screw +Spring washer +Washer	螺絲+彈簧華司+平華司	M5xS5xφ15x15L	4

No. 序號	Parts No. 品 號	Description	品名	Specification 規格	AMT 數量
6	AAB00400	Main case of control box	控制箱本體		1
7	BBH0150A	Releasable ties support	束帶-活動式		1
8	ADA00860	Releasable ties support frame	活動式束帶支撐架		1
9	AGA0410A	Screw +Spring washer +Washer	螺絲+彈簧華司+平華司	M4xS4xφ8x10L	20
10	CAA02017	Radiator resistor	水泥電阻		1
11	CMA00501	Main board ASM.	SV-250 CTL 加工板組		1
12	AGA0306E	Self tapping screw	尖頭木螺絲	#3x6L	4
13	CMA00311	C02 display panel	SV-500 顯示板加工板		1
14	ACA00560	Front cover	控制箱前蓋板		1
15	AGA0416D	Screw +Spring washer +Washer	螺絲+彈簧華司+平華司	M4xS4xφ9x16L	6
16	SNSC0005	Pedal sensor ASM.	速度基座組		1
17	CXA00240	Silicon rubber plate	模組矽膠片		1
18	CMB00151	PWR PCB ASM.	SV-250 PWR 加工板組		1
19	AGA0308A	Screw +Spring washer +Washer	散熱片固定螺絲	M3xS3xφ6x8L	2
20	CKN00230	Power input line	電源輸入線 220V		1
21	AGA0416G	Screw +Spring washer +Washer	模組固定螺絲	M4xS4xφ8x16L	2
22	ADE00010	Cushion sheet	控制箱鎖合防震墊		6
23	CKN00250	CTL & PWR wiring connector	直流低壓電源線		1
24	ABD00090	Hexagon copper net	六角銅螺帽	M4x6L	6
25	CMB00161	FLT-T PCB ASM.	濾波板組		1
26	ACA00570	Control box lower cover	控制箱下蓋		1

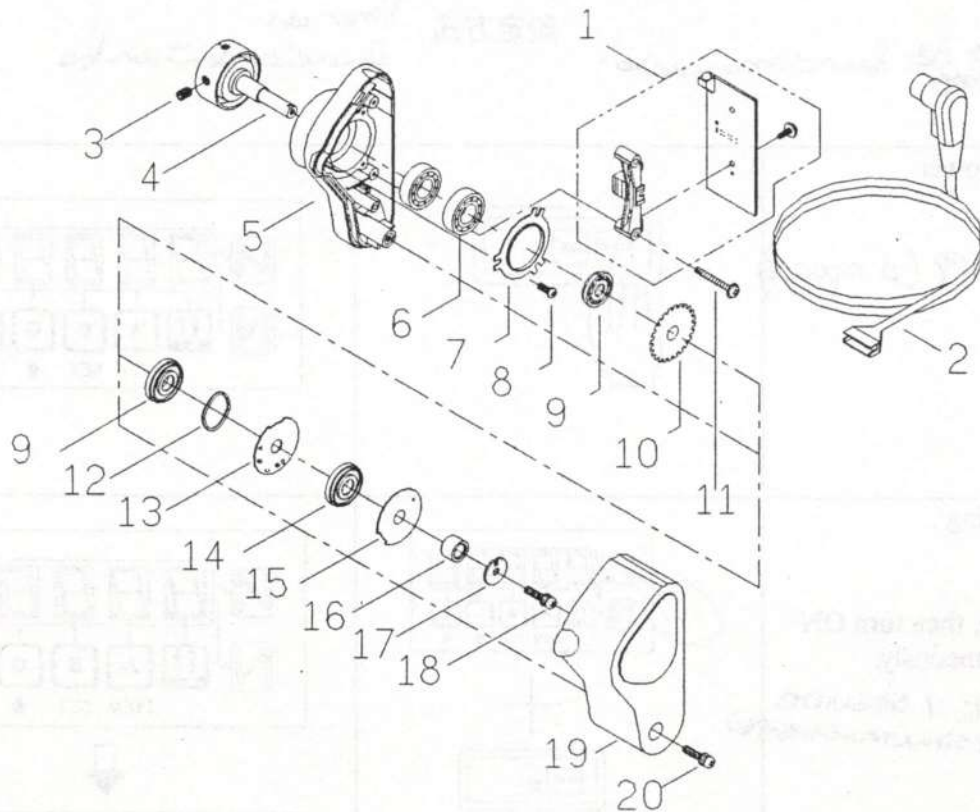
PEDAL SENSOR BASE PARTS LIST

速度基座零件表



No. 編號	Parts No. 品 號	品 名	Description 及 規 格	AMT 數量
1	AAB00410	Pedal sensor lever arm	速度基座拉臂	1
2	AGK00010	Pedal sensor lever arm spring	速度基座拉臂彈簧 $\phi 1.6 \times 74.5L$	1
3	AGA0416A	Screw +Spring washer +Washer	螺絲+彈簧華司+平華司 $M4 \times S4 \times \phi 10 \times 1.5T \times 16L$	3
4	ACE00050	Pedal sensor side cover	速度基座側蓋板	1
5	ABD00240	Pedal sensor control pin (1)	速度基座制動銷 (一)	1
6	ABD00250	Pedal sensor control pin (2)	速度基座制動銷 (二)	1
7	AGK00030	Pedal sensor adjusting spring	速度基座調整彈簧 $\phi 1.0 \times 44L$	2
8	ABD00050	Pedal sensor adjusting nut	速度基座調整螺帽 $M12 \times P1.0 \times \phi 15 \times T2.5$	2
9	ACF00010	Pedal sensor plastic adjusting screw	速度基座塑膠調整螺絲 $M12 \times P1.0 \times 21L$	2
10	AGA0512G	Hexagon screw	螺絲(六角承窩頭) $M5 \times 12L$	1
11	AAC00010	Induction arm	速度基座感應臂	1
12	BDA00010	Coil saddle	速度基座線圈座組	1
13	AGQ00040	Nylon pin	尼龍鉚釘	2
14	AGA0306E	Self tapping screw	尖頭木螺絲 $\#3 \times 6L$	2
15	ADA01110	Coil saddle fixing piece	線圈座固定片	1
16	BBH01200	Ties Support	束帶	1

SYNCHRONIZER PARTS LIST 同步器零件表



No. 編號	Parts 品	No. 號	品 名	Description 及 規 格	AMT 數量
1	CMA00232	98	Synchronizer P. C. B.	98 同步器基板	1
2	CKD00010	98	Synchronizer cable	98 同步器線	1
3	AGA0608A		Headless screw	無頭螺絲 M6x8L	2
4	AAB00200		Synchronizer shaft	同步器心軸	1
5	ACA00630		Synchronizer base	同步器座	1
6	AGG6200Z		Bearing 6200-Z	培林軸承 6200-Z	2
7	ADE00300		Bearing pressed plate	軸承壓板	1
8	AGA0312A		Screw	圓頭木螺絲 M3x12L	3
9	ACF00030		Fixing packing (black)	固定墊 (黑)	2
10	ADE00310		TG Disc	TG 遮光片	1
11	AGA0310A		Self tapping screw	割尾螺絲 #3x24.5L	2
12	AGH00030		Preload spring	培林彈簧(WW-14) $\phi 8 \times \phi 15 \times 0.3T$	1
13	ADE00360		Needle down disc (word)	下停遮光片(刻文字)	1
14	ACF00070		Fixing packing (white)	固定墊 (白)	1
15	ADE00320		Needle up disc	上停遮光片	1
16	ACF00060		Protective casing	護套	1
17	ADE00330		Fixing piece for protective casing	護套固定片	1
18	AGA0510A		Ovalhead screw	圓頭螺絲 M5x10L	1
19	ACA00620		Synchronizer upper cover	同步器上蓋	1
20	AGA0412B		Screw +Spring washer +Washer	螺絲+彈簧華司+平華司 M4xS4x $\phi 8 \times 12L$	1

IV Setting way

Parámetro de funcionamiento:
1. Parameter setting:

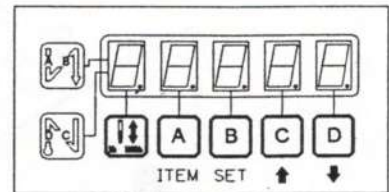
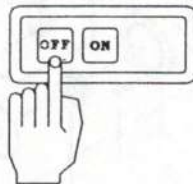
設定方式 Poner en funcionamiento

參數設定方式:


1. Turn OFF the power


1 關掉電源.

1- Pulsar OFF (o apagar)



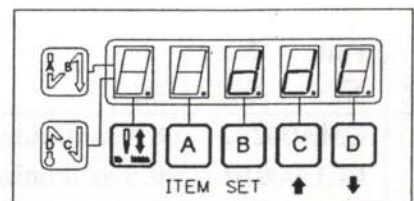
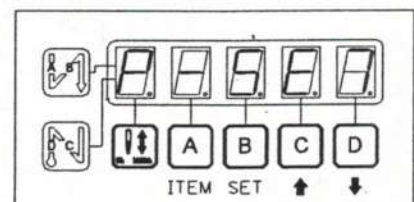
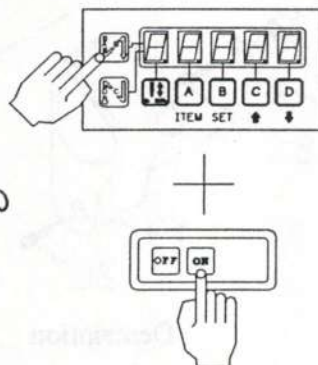
2. Parameters setting .

Press  key, then turn ON the power simultaneously.


Pulsar  BOTON, Y SEGUIDO EL DE ON (SIMULTANEAMENTE)

Release  key

Volver a pulsar este botón



(一)操作參數:

按住  鍵,同時打開電源.

出現 P-SET

放開  鍵.


所選定的針車頭選項閃爍顯示.


3. If it is not displayed as shown above, please repeat steps 1-2.

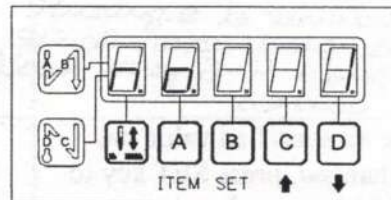
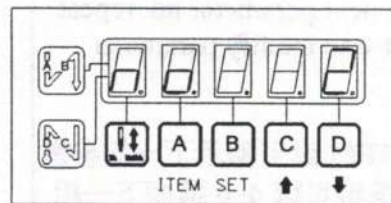
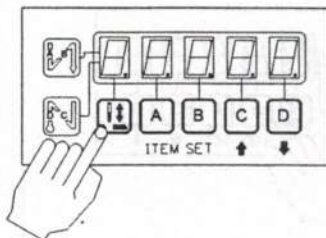
3. 如果顯示畫面與上述不同,請重覆步驟 1~2.

3- Si no se enciende como se muestra arriba, repetir pasos 1 y 2.

4.
4.1 Press  key, thus

parameters no. will be cycled decreased. 4.1. Pulsar  de tal forma que los números se bajen de forma gradual

按  鍵,則參數號碼循環遞減。



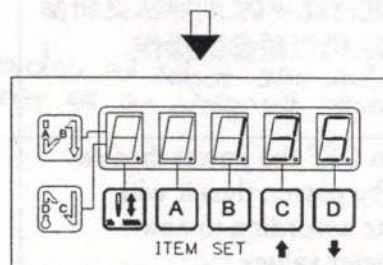
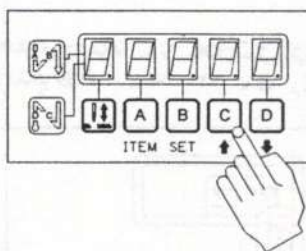
4.2 Press ITEM key, thus

parameters no. will be cycled increased. 4.2. Pulsar el botón ITEM para ir aumentando los números.

按 ITEM 鍵,則參數號碼循環遞增。

5. Once the modifying parameter has been found, press \uparrow key, and the relative parameter setting will display accordingly

5 找到想要修改之參數號碼,按 \uparrow 鍵,則顯示該號碼相對應之參數值. 5 - Una vez hallado el parámetro de modificación, pulsar \uparrow para establecer el parámetro relativo de normalización



6. Press \uparrow key to increase parameter value.
Press \downarrow key to decrease parameter value.

If you keep the key pressed, it will be continuously changing for new parameter values.

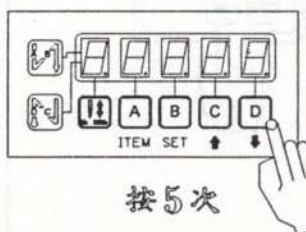
(Ex. If you want to change parameter No.3 from 135 to 130. Press \downarrow key 5 times, and 130 will be displayed on the screen.

6. 按 \uparrow 鍵增加參數值

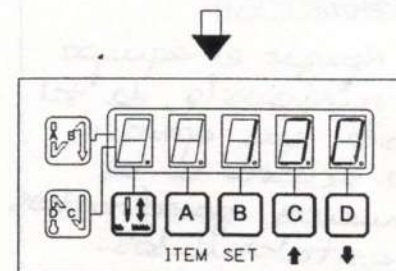
按 \downarrow 鍵減少參數值

持續按住按鍵,可連續更新參數值。

(例:要將參數 No.3 的值由 135 修改為 130.操作方法為按 \downarrow 鍵 5 次,使畫面顯示出 130)



按 5 次

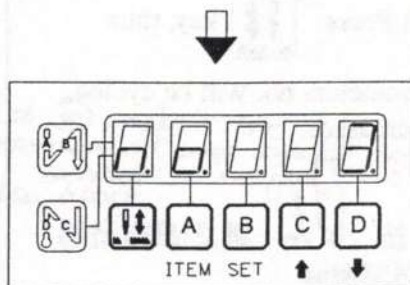
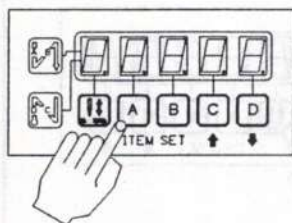


6: Pulsar \uparrow para incrementar los valores. Pulsar \downarrow para reducir valores. Si mantienes el botón pulsado, estará cambiando constantemente para establecer nuevos valores (Ejemplo: Si quieres cambiar el parámetro No. 3 de 135 a 130; Pula \downarrow 5 veces, y el número 130 aparecerá reflejado en la pantalla).

7. Pressing ITEM key can select for the next parameter no. repeat steps 4-6 to modify parameter value.

7. 按 ITEM 鍵可顯示下一組參數號碼, 重複步驟 4-6 選擇下一組要修改之參數。

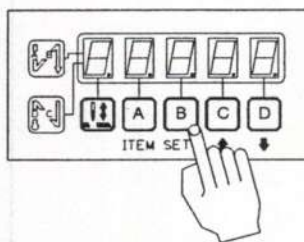
7. Pulsando ITEM puedes seleccionar el siguiente no de parámetro. Repite los pasos 4-6 para modificar los valores.



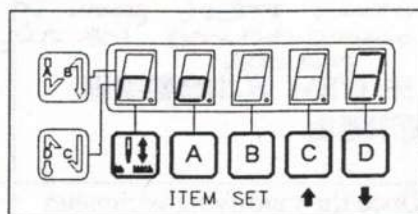
8. Once all specified value has been changed, press SET key to save. If this procedure is not performed, the specified value will not be updated.

8. 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; 如不進行此步驟, 則無法更新參數內容, 仍以舊參數操作。

8. - Una vez todos los valores específicos se han cambiado, pulsa SET para memorizarlos. Si esta función no se realiza, el valor específico no será actualizado.



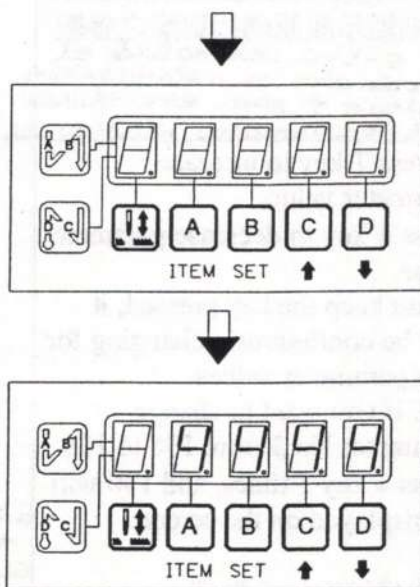
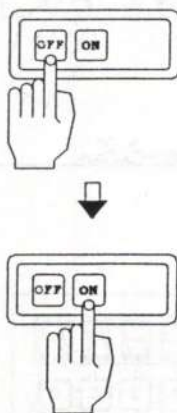
畫面閃爍一次
顯示參數號碼



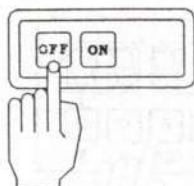
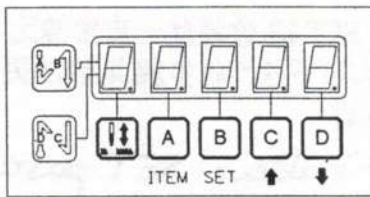
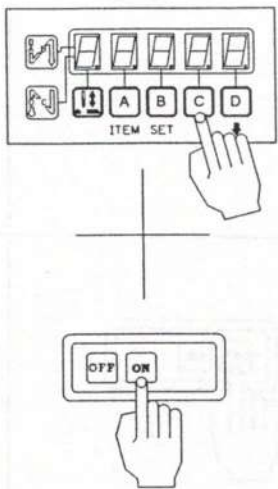
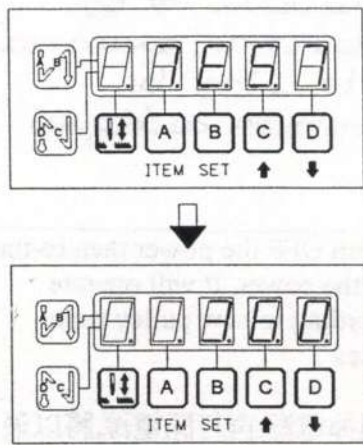
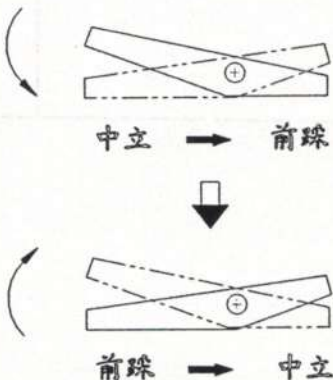
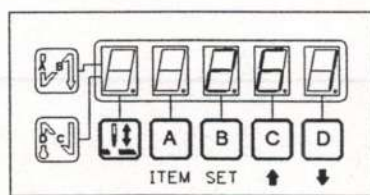
9. Turn OFF the power then re-start the power, thus it will operate according to new parameter values

9. 關掉電源, 再打開電源, 將以最新的參數設定運作。

9. - Apagar el equipo y reiniciarlo, de tal modo que operará de acuerdo a los nuevos parámetros establecidos.



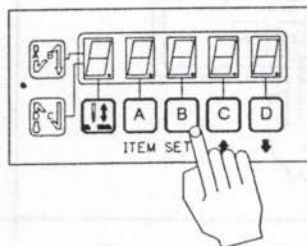
2. Motor pulley ratio measurement : Medición del ~~pedal~~ la polea del motor 馬達皮帶輪比量測:

<p>1. Turn OFF the power. 1. 關掉電源。 1.- Apagar el equipo.</p>		
<p>2. Press C key, then turn ON the power. Pulsar C, y seguidamente pulsar ON. Release C key. Volver a pulsar C 2. 按住 C 鍵,同時打開電源。 畫面出現 TEST 放開 C 鍵。 畫面出現存在 EEPROM 中的皮帶輪比</p>		
<p>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.</p>	<p>3.- Si la pantalla no se muestra como arriba, repetir pasos 1 y 2.</p>	
<p>4. 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。</p>	 <p>4.- Si se presiona el pedal hacia delante, el motor rotará 7 vueltas en velocidad. Tras pasar el motor, la el radio de la polea se activará (Máquina de coser 360° = grados del motor). El paso 4 se puede repetir para confirmar.</p>	

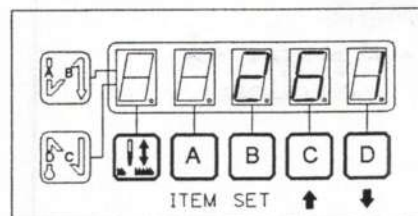
5. Press SET key to save. If this procedure is not performed, it will remain as the old values.

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。

5.- Pulsar SET para memorizar. Si esta función no se realiza, quedarán retenidos los valores antiguos.



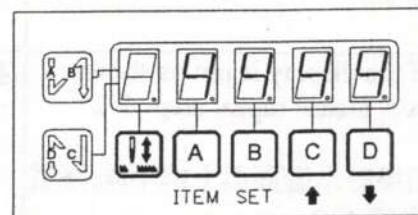
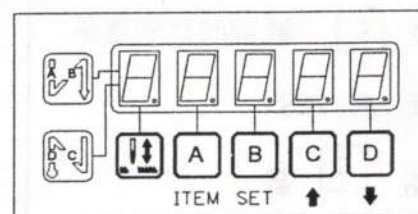
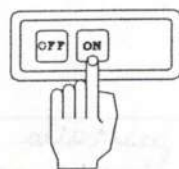
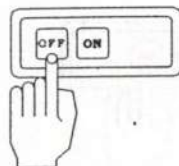
畫面閃爍一次
顯示參數號碼



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。

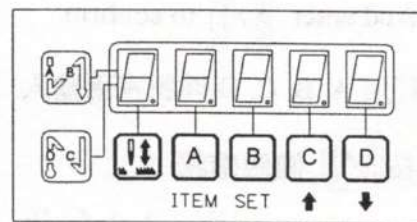
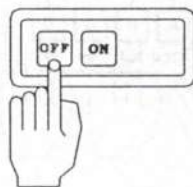
6.- Apagar y volver a encender la máquina. Operará de acuerdo a los nuevos valores del radio de polea establecidos.



3. Select the machine type : *Seleccionar el tipo de máquina*
 選擇針車頭選項:

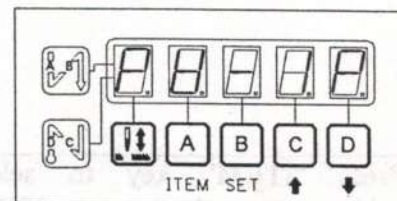
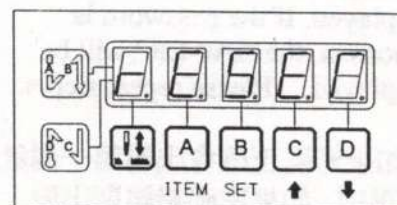
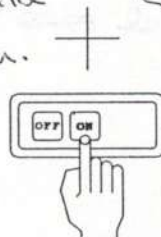
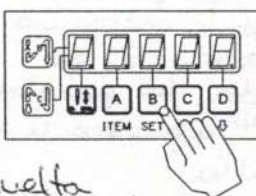
1. Turn OFF the power.

Apagar la máquina.
 1. 關掉電源。



2. Press SET key simultaneously, then turn ON the power, until rESET displayed then release the key.

2. Pula SET a la vez que ON, hasta que aparezca rESET en la pantalla y entonces suelta el botón.
 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 PW-IP 畫面。



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, 請重複步驟 1~2.

3. Si no se muestra la pantalla como se exhibe arriba, por favor repite los pasos 1 y 2.

4. Use A, B, C, D key to key in the password.

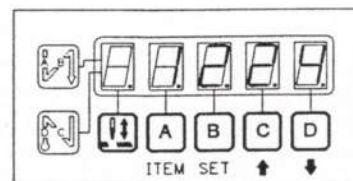
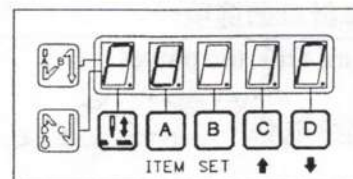
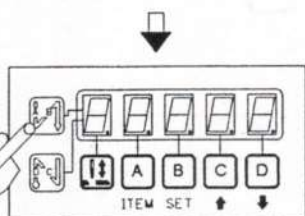
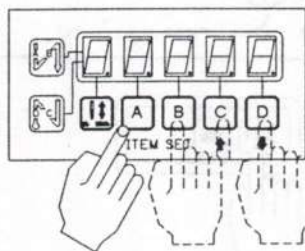
And enter  to confirm.

4. 利用 A, B, C, D 鍵將密碼輸入

再按  鍵做確認。

4. Use las teclas A, B, C, D para introducir la contraseña.

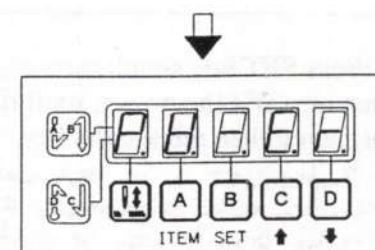
Presiona  para confirmar.



5. If the password is correct, the 1st sewing machine head choice will be displayed. If the password is incorrect, the "PW-ER" will be displayed. Please repeat step 4.

5. 如果密碼正確會出現第一個針車頭選項，如果密碼錯誤則出現 PW-ER 請重覆步驟 4.

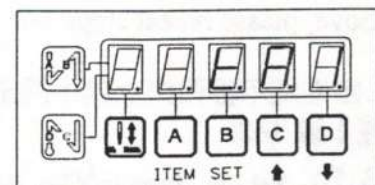
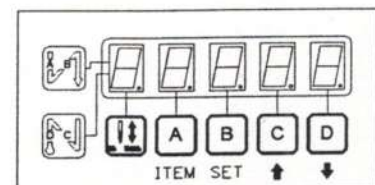
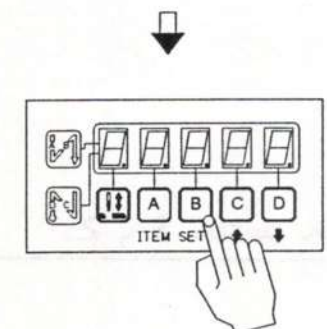
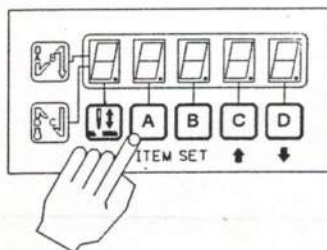
5. Si la contraseña es correcta, el primer cabezal de la máquina se mostrará. Si es incorrecta, la palabra "PW-ER" aparecerá en pantalla. Repetir el paso 4.



6. Press "ITEM" key to select machine type, then press "SET" key.

6. 按 ITEM 鍵，選擇要設定的針車模式後，按下 SET 鍵。

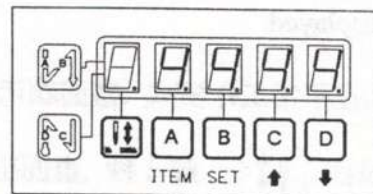
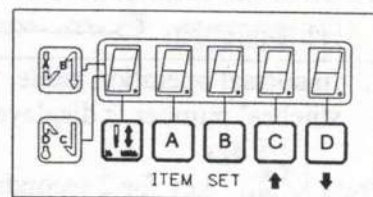
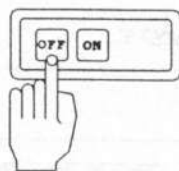
6. Pulsar la tecla "ITEM" para seleccionar el tipo de máquina, y pulsar la tecla "SET".



7. Turn OFF the power, then turn ON the power again. It will operate according to the manual's instruction initial value.

7. 關掉電源,再打開電源,將以說明書上參數的初始值來運作。


7. Apaga y vuelve a encender. Funcionará de acuerdo a los valores iniciales del manual de instrucción.




4. Switch the counter screen

計件畫面切換: Encender el contador

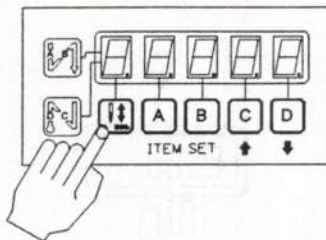
1. In normal operation mode, the stitches' number is displayed


Press  key for 2 seconds, the "COUNT" is displayed. Release "UP/DOWN" key, the counter is displayed.

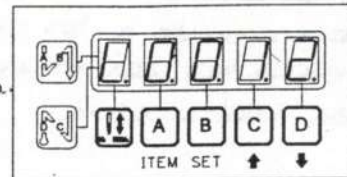
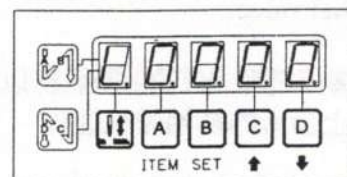
- 1.在平常工作模式,畫面顯示針數

按住  鍵 2 秒,畫面出現

COUNT,放開 UP/DOWN 鍵,畫面顯示計件值。



1. En modo normal, el número de puntadas aparece en pantalla. Pulsa  durante 2 segundos, y la palabra "COUNT" aparece. Suelta la tecla "UP/DOWN", y el contador será mostrado.



2. In counter displayed screen.

Press "C" key → counter +1

Press "D" key → counter -1

Press "ITEM" key for 2 seconds


→ counter → 0

2) En la pantalla del contador:


Pulsa 'C' → contar +1

Pulsa 'D' → contar -1

Pulsa 'ITEM' 2 segundos → contador → 0

Press  key for 2 seconds, display "STIT", release

"UP/DOWN" key, display the stitches' number.

1 Pulsa  2 segundos hasta que aparezca "STIT" (Puntadas), suelta la tecla

2.在顯示計件值畫面: "UP/DOWN" para

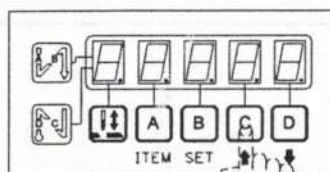
按 C 鍵 → 計件值增加 1

按 D 鍵 → 計件值減少 1

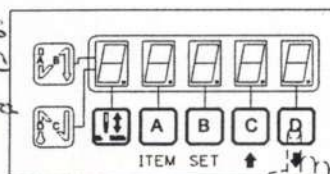
按 ITEM 鍵 2 秒 → 計件值歸零

再按住  鍵 2 秒,畫面出

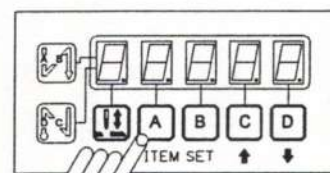
現 STIT,放開 UP/DOWN 鍵後,畫面則恢復顯示針數。



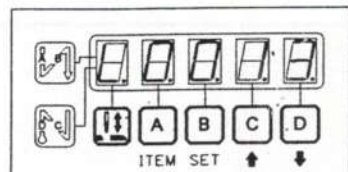
按C鍵



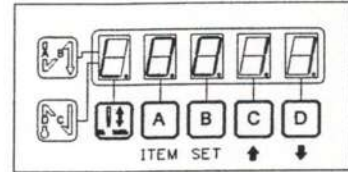
按D鍵



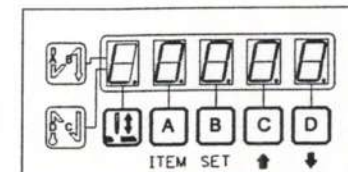
按ITEM鍵2秒



計件值+1



計件值減-1



計件值歸零

- 3 Repeat above step, the screen will be switched between the stitches' number screen & the counter value screen.

3.重複上述步驟,可以在針數畫面與計件值畫面之間作切換。

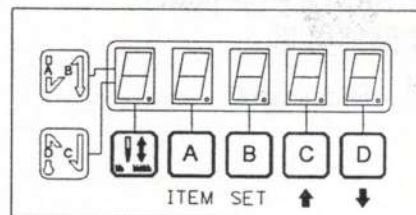
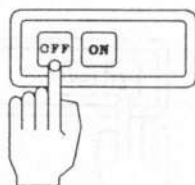
3. Si repites el paso de arriba, la pantalla se encenderá entre el número de puntadas de la pantalla y el valor del contador de la pantalla.

5. Historical error message display = histórico de mensajes erróneos.
錯誤歷史顯示:

1. Turn OFF the power.

1. 關掉電源.

1. A pagar



2. Press **D** key, then turn ON the power simultaneously and display "ERROR"

2 按住 **D** 鍵, 同時打開電源. 出現 ERROR

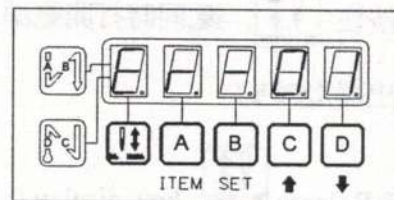
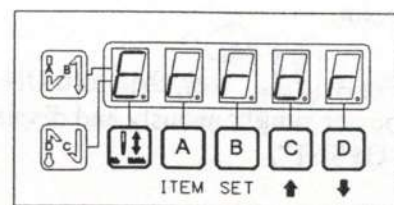
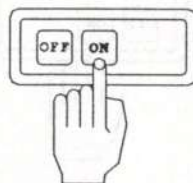
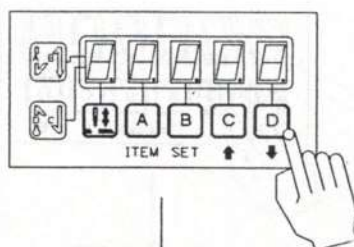
3. Release **D** key and display recently error message.

3 放開 **D** 鍵.

顯示畫面出現最近出現的錯誤訊息代碼

2. Pulsa **D** a la vez que ON hasta que se muestre "ERROR"

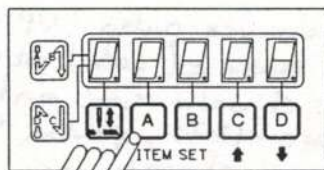
3. Suelta **D** y se muestran los mensajes de error más recientes.



4 Press "ITEM" key to cyclic display recent 6 error messages.

4 按 ITEM 鍵最近所發生的 6 個錯誤 error 循環顯示.

4. Pulsa "ITEM" para mostrar de forma cíclica los últimos 6 mensajes erróneos.



按ITEM鍵

6.

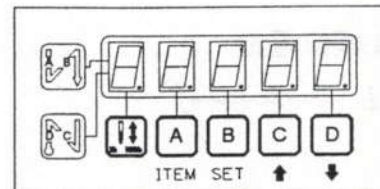
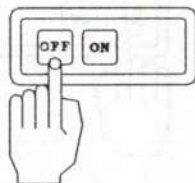
6. Pedal sensor neutral point setting mode

速度基座中立點設定模式:


1. Turn OFF the power

1 關掉電源.

1. Apagar



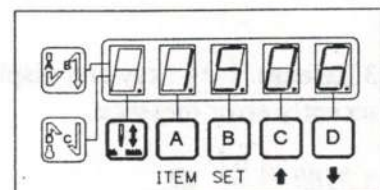
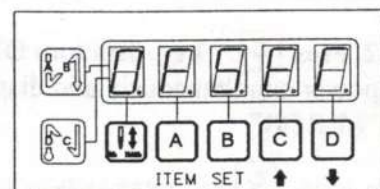
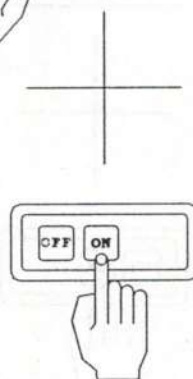
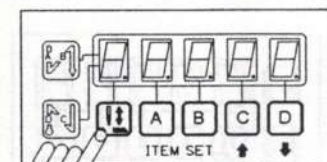
2. Set pedal sensor in the neutral point.


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 "UP" key, read the pedal sensor again. If the value between 1340~1790, press is "B" key to store.


4. 每按一次 UP 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 B 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，再重複上述步驟 4 的動作。

2. Pon el pedal en punto neutro.

Pulsa  junto a ON hasta que aparezca "OFSET"


3. Suelta , y se muestra el valor de sensor del pedal que se almacenó en EEPROM.

4. Una vez pulsa "UP", y lee el sensor del pedal de nuevo. Si el valor está entre 1340-1790, pulsa "B" para almacenar.

5. Si siempre se muestra la palabra "ERROR" significa que el punto neutro del sensor del pedal se contra-resta mucho. El punto neutro del sensor mecánico del pedal deberá ajustarse, por tanto, repetir el paso 4.

V SV-250 (SV-260) Control box parameter list:

SV-250(SV-260) 參數一覽表

Press A  then turn ON the power

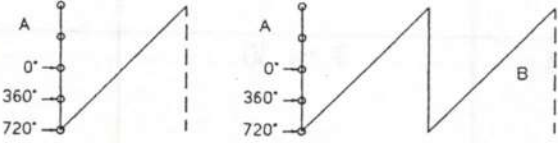
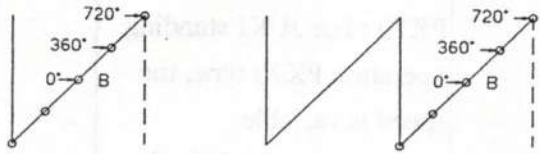
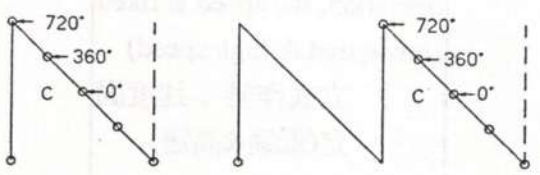
按住 A  後 開電源

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	The speed of start auto back tack 開始自動倒縫速度	500spm ~ 2500spm	10spm /step
6	Soft start speed 慢速啟動速度	250spm ~ 2000spm	10spm /step
7	Soft start stitches 慢速啟動針數	0 ~ 19 stitches 針	
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 針	
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 針	

11	Foot lifter type 壓腳型式	<p>SOL: Solenoid type SOL: 線圈式 (使用降壓控制 duty)</p> <p>AIR: Pneumatic type (Output voltage is 24V, without 60 seconds protection function)</p> <p>AIR: 汽閥式(輸出電壓 固定為 24V,沒有 60 秒保護功能)</p> <p>SOL2: Solenoid type (with chopping duty control)</p> <p>SOL2: 線圈式 (使用斬波控制 duty)</p>	
12	Foot lifter control mode 壓腳控制模式	<p>PFL: Pedal controls foot lifter. (PFL) 踏板控制壓腳 (PFL)</p> <p>T AFL: PFL & auto foot lifts after trimming PFL & 切完線後自 動抬壓腳</p> <p>AFL: Auto foot lifting after needle positioning 馬達定位停自動壓腳</p> <p>TFL: Pedal controls foot lifter after trimming 切完線後才可以踏 板控制抬壓腳</p> <p>SFL: Auto foot lifting (Material edge sensor as output control) 自動壓腳(布端檢出 器控制輸出)</p>	

12	Foot lifter control mode 壓腳控制模式	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	Foot lifter duty 壓腳 DUTY	0 ~ 99 %	1 % / step
16	Foot lifter full duty output time 壓腳 FULL DUTY 輸出時間	100 ~ 1000 ms	10 ms / step
17	Thread trimming mode 切線模式	OFF : No thread trimming 無切線 LOCK : lockstitch machine 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	

17	Thread trimming mode 切線模式	US639 : US63900 special thread trimming US63900 特殊切 線 UT : Needle up trimming 上停切線 AIR : Needle up trimming (AIR BLOW) 上停切線 (AIR BLOW) 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	OFF : No output thread wiping 不輸出撥線 ON : Output thread wiping 輸出撥線	

24	Motor rotating direction 馬達轉向	CCW : Counterclockwise 逆時針 CW : Clockwise 順時針	
25	A_code back tacking compensation A_CODE 回針動作補正 Single SBT Double SBT 	0 ~ 720°	5°/step
26	B_code back tacking compensation B_CODE 回針動作補正 Single SBT Double SBT 	0 ~ 720°	5°/step
27	C_code back tacking compensation C_CODE 回針動作補正 Single EBT Double EBT 	0 ~ 720°	5°/step
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 reference point = 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	20 ~ 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	<p>OFF : Normal operation of speed pedal unit 速度基座正常操作</p> <p>PK70 : For JUKI standing operation PK70 type, the speed is variable 配合 JUKI 立式作業 PK70 , 速度可變</p> <p>PKSW : Standing pedal operation, the speed is fixed (low speed & high speed) 立式作業 , 速度固定(低速&高速)</p> <p>PK71 : Speed pedal unit normal control and with foot lifting switch & thread trimming switch function 速度基座正常操作, 另外有壓腳開關及切線開關的功能</p>	

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	2000 ~ 8000 ms	100 ms / step When set K_ON, motor will continuous to run, without stop. (設定 K_ON 時, 馬 達只會運轉,不會停 止)
37	In auto test mode, motor stopping time adjustment 自動測試模式下,馬達停止時間調整	2000 ~ 8000 ms	100 ms / step
38	Back tacking switch function 回針按鍵功能	BT SW : 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 線圈,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 INCHING	

38	<p>Back tacking switch function 回針按鍵功能</p>	<p>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 INCHING</p> <p>RFS : Reverse feed stitching function is effective during sewing 途中倒縫功能 (車縫中有效)</p> <p>RFSS : Reverse feed stitching function is effective both during sewing and stopping 途中倒縫功能 (車縫中&停止時均有效)</p> <p>SHOT : Control back tacking solenoid, No.74 decide the output pulse width. 控制回針線圈 , 輸出脈波寬度由 NO.74 決定</p> <p>UPBT : Control back tacking solenoid, it is effective only in needle up position 控制回針線圈 , 只在上停位置有效</p>	
39	<p>Stitches' number in reverse feed stitching 途中倒縫針數</p>	<p>0 ~ 19 stitches 針</p>	

40	Trimming function in the reverse feed stitching 途中倒縫切線功能	OFF : No thread trimming function 不切線 ON : Execute auto thread trimming after reverse feed stitching. 途中倒縫針數結束後,進行自動切線	
41	Execute auto thread trimming after end fixed stitches' number sewing process 固定針數縫製工程結束後,自動切線功能	OFF : No such function. 無功能 ON : With the function 有此功能	
42	Material edge sensor function 布端檢出器功能	OFF : No such function. 無功能 ON : With the function 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 : No such function. 無功能 ON : Auto back tacking & trimming after execute the material edge sensor stitches' number. 布端檢出器針數執行完畢,自動接著做後倒縫及切線	
45	Auto needle up positioning when power on 開機自動上停	OFF : No such function. 無功能 ON : With the function 有此功能	

46	The counter number displays on the simple panel when power on 開機簡易面板顯示計件值	0 : Display the value of stitches' number 顯示針數 1 : Display the value of materials' number 顯示計件值 2 : Display the trimming , wiper , foot lifter function 顯示切線, 撥線, 壓腳功能	Counter value: 0~9999 計件值 : 0 ~ 9999
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 : No such function. 無功能 ON : With the function 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 : No such function. 無功能 ON : With the function 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 : No such function. 無功能 ON : With the function 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 : No such function. 無功能 ON : With the function 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	The function choice of Option IN_A Option IN_A 功能選擇	<p>OFF : No such function 無功能</p> <p>DSCT: Cancel thread trimming for one time 單次取消切線</p> <p>DSBT: Cancel auto back tacking for one time 單次取消自動 回針</p> <p>DSCN : Cancel condensed stitching for single time 單次取消密縫</p> <p>NDUP : Needle up switch 提針到上停</p> <p>HALF : Half stitch inching 半針補針</p> <p>ONE : One stitch inching 一針補針</p>	<p>(it's only effective when No.34=OFF) No.34 = OFF 時才有 效</p>
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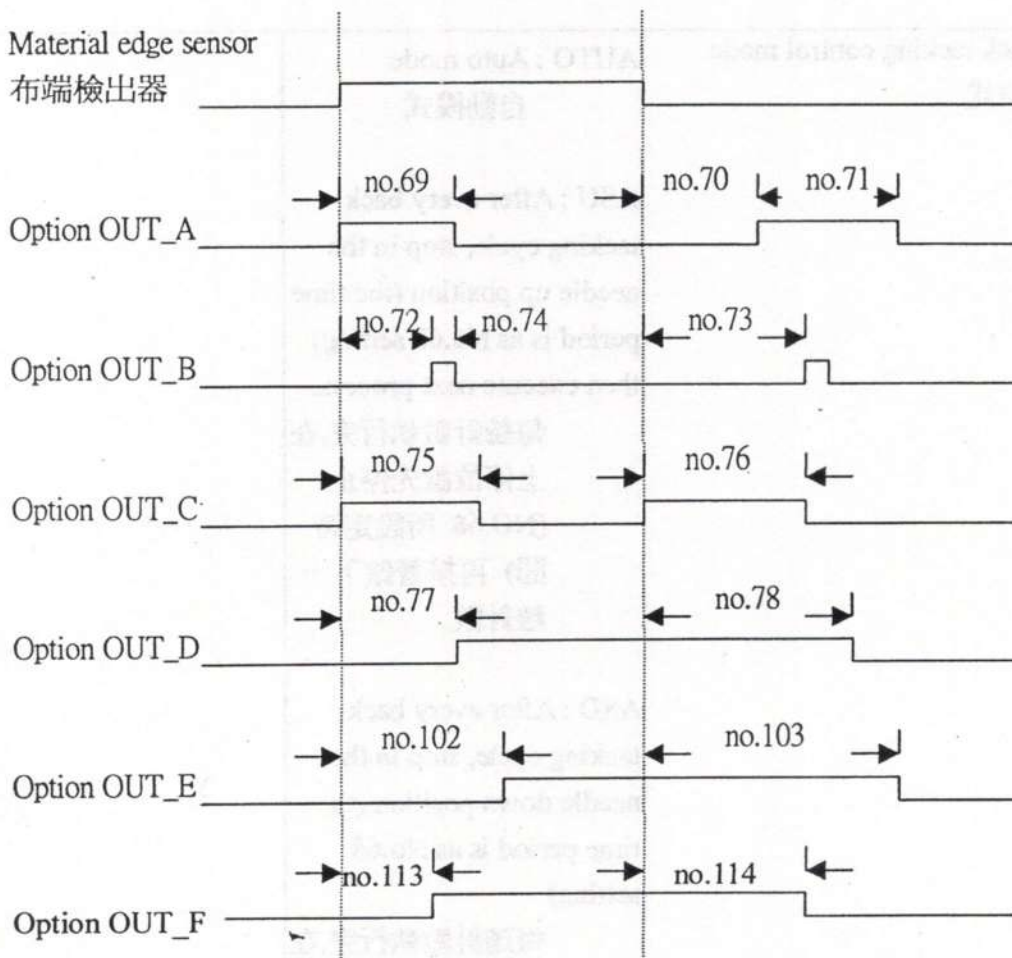
61	The function selection for Option IN_B Option IN_B 功能選擇	<p>OFF : No such function 無功能</p> <p>DSCT: Cancel thread trimming for single time 單次取消切線</p> <p>DSBT: Cancel auto back tacking for single time 單次取消自動 回針</p> <p>DSCN : Cancel condensed stitching for single time 單次取消密縫</p> <p>NDUP : Needle up switch 提針到上停</p> <p>HALF : Half stitch inching 半針補針</p> <p>ONE : One stitch inching 一針補針</p>	(it's only effective when No.34=OFF) No.34 = OFF 時才有 效
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62	The function selection for Option IN_C Option IN_C 功能選擇	<p>OFF : No such function 無功能</p> <p>DSCT: Cancel thread trimming for single time 單次取消切線</p> <p>DSBT: Cancel auto back tacking for single time 單次取消自動回針</p> <p>DSCN : Cancel condensed stitching for single time 單次取消密縫</p> <p>NDUP : Needle up switch 提針到上停</p> <p>HALF : Half stitch inching 半針補針</p> <p>ONE : One stitch inching 一針補針</p>	(it's only effective when No.34=OFF) No.34 = OFF 時才有 效
63	Whether motor stops or not before executes EBT 執行 EBT 之前馬達是否停止	<p>OFF : Motor will not stop, directly executes EBT 馬達不會停止,直接作 EBT</p> <p>ON : Motor will stop for A period time (set by No.64) then executes EBT 馬達會停止一段時間(參數 NO.64 設定)再接 EBT</p>	
64	Motor stops time before executes EBT (only effective when No.63=ON) 執行 EBT 之前馬達停止時間 (只在 NO.63=ON 時有效)	20 ~ 1500 ms	10 ms / step

65	<p>Start auto back tacking control mode 開始自動倒縫控制模式</p>	<p>AUTO : Auto mode 自動模式</p> <p>ASU : After every back tacking cycle, firstly stop in the needle up position (the time period is as No.68 setting) then execute next process.</p> <p>每趟針數執行完, 在上停位置先停止(NO.68 所設定時間) 再接著做下一趟針數</p> <p>ASD : After every back tacking cycle, firstly stop in the needle down position (the time period is as No.68 setting) then execute next process.</p> <p>每趟針數執行完, 在下停位置先停止(NO.68 所設定時間) 再接著做下一趟針數</p>	
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66	<p>End auto back tacking control mode 結束自動倒縫控制模式</p>	<p>AUTO : Auto mode 自動模式</p> <p>ASU : After every back tacking cycle, stop in the needle up position (the time period is as No.68 setting) then execute next process. 每趟針數執行完, 在上停位置先停止(NO.68 所設定時間) 再接著做下一趟針數</p> <p>ASD : After every back tacking cycle, stop in the needle down position (the time period is as No.68 setting) then execute next process. 每趟針數執行完, 在下停位置先停止(NO.68 所設定時間) 再接著做下一趟針數</p>	
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67	<p>Continuously auto back tacking control mode 連續自動倒縫控制模式</p>	<p>AUTO : Auto mode 自動模式</p> <p>ASU : After every back tacking cycle, stop in the needle up position (the time period is as No.68 setting) then execute next process. 每趟針數執行完,在上停位置先停止 (NO.68 所設定時間) 再接著做下一趟針數</p> <p>ASD : After every back tacking cycle, stop in the needle down position (the time period is as No.68 setting) 每趟針數執行完,在下停位置先停止 (NO.68 所設定時間) 再接著做下一趟針數</p>	
68	<p>Auto back tacking section stopping time 自動倒縫段落停止時間</p>	20 ~ 1500 ms	10 ms / step



69	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 針	
70	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 針	
71	The acts stitches' number after the Option OUT_A delays stitches' number & material edge sensor off 布端檢出器結束動作 Option OUT_A 延遲後動作針數	0 ~ 99 stitches 針	
72	The Option OUT_B acts stitches' number after material edge sensor on 布端檢出器開始動作 Option OUT_B 延遲針數	0 ~ 99 stitches 針	
73	The Option OUT_B delays stitches' number after material edge sensor off 布端檢出器結束動作 Option OUT_B 延遲針數	0 ~ 99 stitches 針	

74	The Option OUT_B acts time Option OUT_B 動作時間	0 ~ 250 ms	
75	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 針	
76	The Option OUT_C delays stitches' number after material edge sensor off 布端檢出器結束動作 Option OUT_C 動作針數	0 ~ 99 stitches 針	
77	The Option OUT_D acts stitches' number after material edge sensor on 布端檢出器開始動作 Option OUT_D 延遲動作針數	0 ~ 99 stitches 針	
78	The Option OUT_D delays stitches' number after material edge sensor off 布端檢出器結束動作 Option OUT_D 持續動作針數	0 ~ 99 stitches 針	
79	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 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	<p>The function choice of Option OUT_B</p> <p>Option OUT_B 功能選擇</p>	<p>0 : No output 無輸出</p> <p>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)</p> <p>2 : Depend on the setting stitches' number output (material edge sensor starts & during motor medium speed) 根據所設定針數輸出 (布端檢出器開始& 結束動作時馬達為中 速)</p> <p>3 : 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 作時馬達為中速)</p>	
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81	The function choice of Option OUT_C Option OUT_C 功能選擇	<p>0 : No output 無輸出</p> <p>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)</p> <p>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 時馬達為中速)</p>	
82	The function choice of Option OUT_D Option OUT_D 功能選擇	<p>0 : No output 無輸出</p> <p>1 : Depend on the setting stitches' number output 根據所設定針數輸出</p> <p>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</p> <p>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)</p>	

83	<p>The control solenoid output cycle choice of material edge sensor</p> <p>布端檢出器控制輸出線圈循環週期結束選擇</p>	<p>0 : Option OUT_A 1 : Option OUT_B 2 : Option OUT_C</p>	
84	<p>The priority between material edge sensor on & pressing pedal forward</p> <p>布端檢出器開始動作與踏板前踩優先權選擇</p>	<p>0 : The material edge sensor must be acted before pressing pedal 布端檢出器必須在踏板前踩之前動作</p> <p>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</p> <p>2 : Pressing pedal is prior. 踏板前踩優先</p>	
85	<p>Cancel the thread trimming function choice when pedal is heeled.</p> <p>取消踏板後踩切線功能選擇</p>	<p>OFF : With the thread trimming function when pedal is heeled 有踏板後踩切線功能</p> <p>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</p>	

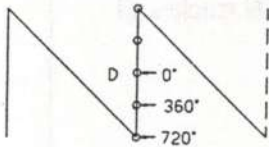
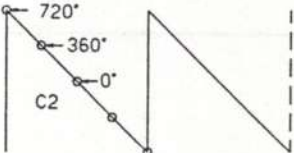
86	Special function choice 特殊功能選擇	0 : No special function 沒有特殊功能 1 : LB2 enable, MTJ=OFF LB2 致能 , MTJ = OFF 2 : LB2 enable, MTJ=ON LB2 致能 , MTJ = ON 3 : BAF function BAF 功能 4 : LU1521 function LU1521 功能 5 : CA1 function CA1 功能 6 : SAS1 function SAS1 功能 7 : BASF function BAFS 功能 8 : Manual one- shot function 踏板控制 one-shot 針 數車縫功能 9 : Automatic one-shot function 自動 one-shot 針數車縫 功能 10 : edge sensor with re-cycle function 布端檢出器有再次 循環功能	
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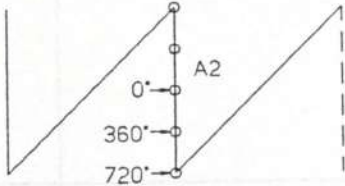
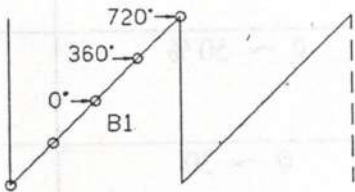
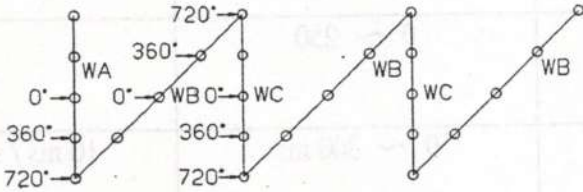
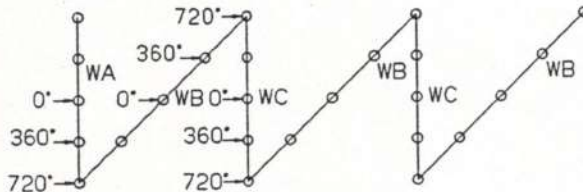
87	No synchronizer operation mode 沒有同步器操作模式	<p>OFF : With synchronizer operation mode. 有同步器操作模式</p> <p>ON : Without synchronizer operation mode. (ER-1 is not displayed.) 沒有同步器操作模式 (不會顯示 ER-1)</p>	
88	The speed margin of executing needle positioning 執行定位的速度臨界值	80 ~ 160	1 / step
89	Decelerating speed slope choice 減速曲線選擇	1 ~ 8	<p>(The bigger value means the longer time of decelerating.) 設定值越大,減速時間越長</p>
90	Motor static brake function 馬達靜止煞車功能	1 ~ 20	<p>0 : No such function 無功能</p> <p>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</p>

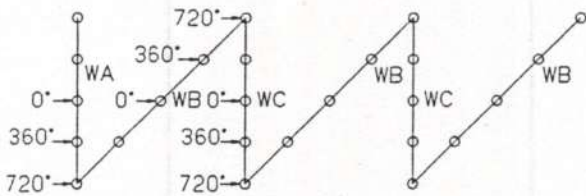
91	Motor rotation signal control 馬達轉動信號控制	<p>OFF : No output 不輸出</p> <p>TL1 : TL solenoid outputs when motor rotates. 馬達轉動時由 TL 線圈輸出</p> <p>TL2 : TL solenoid outputs when motor rotates & foot lifter acts. 馬達轉動時和舉壓 腳動作時由 TL 線 圈輸出</p>	
92	Forward output the motor rotation signal 馬達轉動信號提早輸出時間	0 ~ 1250 ms	5 ms / step
93	Reverse revolution function when machine starts stitching. 起縫反轉功能	<p>OFF : No such function 無功能</p> <p>ON : With this function 有此功能</p>	
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	<p>OFF : No such function 無功能</p> <p>ON : With this function 有此功能</p>	
96	The crossly locked time of speed control unit 速度基座互鎖時間	0 ~ 2500ms	10ms/ step
97	Auto function setting. (Only effective in BAFS machine) 自動機能設定 (只在 BAFS 車頭選項中有效)	<p>OFF : No such function 無功能</p> <p>ON : With this function 有此功能</p>	

98	Motor delays starting time. (Only effective in BAFS machine) 馬達延遲啟動時間 (只在 BAFS 車頭選項中有效)	0 ~ 9900 ms	100 ms / step
99	BLOWER-B delays output time. (Only effective in BAFS machine) BLOWER- B 輸出延遲時間 (只在 BAFS 車頭選項中有效)	0 ~ 9900 ms	100 ms / step
100	BLOWER-B output time. (Only effective in BAFS machine) BLOWER- B 輸出動作時間 (只在 BAFS 車頭選項中有效)	0 ~ 9900 ms	100 ms / step
101	In motor running, FLSW key input to control FLL output acted stitches' number 馬達運轉中 option IN_G 按鍵輸入控制 option OUT_D 輸出動作針數	0 ~ 500 stitches 針	2 stitches 針/ step
102	Material edge sensor begins acting, Option OUT_E delay acting stitches number 布端檢出器開始動作 Option OUT_E 延遲動作 針數	0 ~ 99 stitches 針	
103	Material edge sensor ends acting, Option OUT_E continuously act stitches number 布端檢出器結束動作 Option OUT_E 持續動作 針數	0 ~ 99 stitches 針	
104	Option OUT_E function choice Option OUT_E 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 秒	1 seconds 秒 / step
106	Folder auto function setting (Only effective in TCF machine) Folder 自動機能設定 (只在 TCF 車頭選項中有效)	OFF : No such function 無功能 ON : With this function 有此功能	

107	Folder auto function delays stitches' number (Only effective in TCF machine) Folder 自動機能延遲針數 (只在 TCF 車頭選項中有效)	0 ~ 99 stitches 針	
108	Motor's braking force when positioning 馬達定位時煞車力	0 ~ 3	
109	Dial type choice Dial 型式選擇	0 : Dial is switch type 為開關視 1 : Dial is VR type 為 VR 型式 2 : Dial is not connected 未接	
110	Needle thread winding device released time (LU-1521 is effective) 勾線裝置釋放時間 (LU-1521 車頭有效)	0 ~ 600 ms	5 ms / step
111	ER-2 checking time ER-2 檢查時間	0 ~ 5 seconds 秒	1 seconds 秒 / step
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 : No such function 無功能 ON : With this function 有此功能	
113	Material edge sensor begins acting, Option OUT_F delay acting stitches' number 布端檢出器開始動作 Option OUT_F 延遲 動作針數	0 ~ 99 stitches 針	
114	Material edge sensor ends acting, Option OUT_F continuously act stitches' number 布端檢出器結束動作 Option OUT_F 持續 動作針數	0 ~ 99 stitches 針	

115	Option OUT_F function choice Option OUT_F 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_C solenoid output function by Option IN_D 利用 Option IN_D 控制 Option OUT_C 線圈 輸出功能	OFF : No such function 無功能 ON : With this function 有此功能	
117	Start condensed stitching stitches' number 開始密縫針數	0 ~ 99 stitches 針	
118	During motor rotates, auto FOLDER stitches' number (YU2F & YU3F machine is effective) 馬達運轉中,自動 FOLDER 針數 (YU2F & YU3F 車頭有效)	0 ~ 99 stitches 針	
119	Auto FOLDER function (YU2F & YU3F machine is effective) 自動 FOLDER 功能 (YU2F & YU3F 車頭有效)	OFF : No such function 無功能 ON : With this function 有此功能	
120	D_code back tacking compensation D_CODE 回針動作補正 Double EBT 	0 ~ 720°	5°/step
121	C2_code back tacking compensation C2_CODE 回針動作補正 Double EBT 	0 ~ 720°	5°/step

122	<p>A2_code back tacking compensation A2_CODE 回針動作補正</p> <p>Double SBT</p> 	0 ~ 720°	5°/step
123	<p>B1_code back tacking compensation B1_CODE 回針動作補正</p> <p>Double SBT</p> 	0 ~ 720°	5°/step
124	<p>WA_code back tacking compensation WA_CODE 回針動作補正</p> 	0 ~ 720°	5°/step
125	<p>WB_code back tacking compensation WB_CODE 回針動作補正</p> 	0 ~ 720°	5°/step

126	WC_code back tacking compensation WC_CODE 回針動作補正 	0 ~ 720°	5° /step
127	Delay positioning function 延遲定位功能	OFF : No such function 無功能 ON : With this function 有此功能	
128	Speed boosting 速度提升	0 ~ 50 %	1 % / step
129	Torque boosting when motor lock 馬達鎖死扭力提升	0 ~ 30	1 / step
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	The delay time for DST function DST 延遲時間	0 ~ 300 ms	10 ms / step
133	The acting time for DST function DST 動作時間	0 ~ 2500 ms	10 ms / step