# SIRUBA

電控參數說明書

## ELECTRONIC CONTROL PARAMETER MANUAL

# 700LQ-ECM

# SiRUBA

作業環境要求：
1. 請不要在過潮濕環境中作作業
2. 220V 電控：【220V 接入供電時電壓穩定在（AC200V ～ 240V/ 單相）之間 】
   110V 電控：【110V 接入供電時電壓穩定在（AC100V ～ 130V/ 單相）之間 】
3. 用戶使用前必須接地 , 確保人身安全
4. 不要在過熱地方作業
5. 控制系統與電機不要在強磁高輻射環境中作業 , 以免干擾而使系統錯誤

Environmental Requirements:
1. Please do not work at damp place
2. 220V electronic control: [220V access to power supply voltage stability between (200V～240V)]
   110V electronic control: [110V access to power supply voltage stability between (100V～130V)]
3. Must be adequately grounded for safety
4. Do not work at high temperature
5. Do not run motor and control system near to ferromagnetic or high-radiance area

保修服務：
1. 本產品自購買起免費保修 1 年 , 終身維護。保修期內除人為損壞以外出現任何品質問題可免費維修。
2. 在保修期內 , 以下情況出現損壞本公司不給於保修服務。
(1) 未經本公司同意自行拆卸 , 修理 , 改裝造成的故障或損壞。
3. 但凡出現無法解決的問題可以聯繫本公司。

Warranty Service:
1. Our products come with year of quality guarantee,from the ship day.Within guarantee period, service is free of charge, unless man-made damage or misuse
2. During the guarantee period, our free service does not cover below:
(1) Dismantle the motor unit without permission, and cause damage.
3. please contact us whenever have problem.

⚠ 注意CAUTION

清潔作業前，請切斷電源。當誤觸啓動開關時，縫紉機動作易導致人員受傷。
Turn off the power switch before carrying out cleaning. The machine may operate if the treadle is pressed incautiously, which could result in injury.

加潤滑油和黃油時，務必戴好保護眼鏡和手套，以防潤滑油進入眼中或沾在皮膚上，易引起發炎。
Be sure to wear protective goggles and gloves when handling the lubricating oil and grease so that they do not get into your eyes or onto your skin, otherwise inflammation can be resulted.

潤滑油或黃油不能飲用，否則將會引起嘔吐和腹瀉，將油放在小孩拿不到的地方。
Furthermore, do not drink or eat the oil nor the grease for they can cause vomiting and diarrhea.  Keep the oil away of the reach of children.

縫紉機頭倒下或豎起時，請以雙手進行操作。
Use both hands to hold the machine head when tilting or returning it to its original position.

單手操作時，因縫紉機的重量較重，萬一滑落易導致受傷。
If only using one hand to move the machine, the weight of the machine head may cause slipping and you may get hurt.

定期保養項目(表7) 　　　　　　　　　　　　Periodical Maintenance Items(Table7)

| 保養循環<br>Maintenance Cycle | 保養項目<br>Maintenance Items |
|---|---|
| 每天<br>Daily | 1.清潔送料具上之棉絮<br>1. Clean the lint on the feed dog. |
| | 2.檢查油盤是否有足夠之液態油。（油量在油鏡之上、下兩紅漆記號間）<br>2. Check if there has enough liquid oil inside the oil pan. (The amount should be between the red up and down paint mark of the oil level gauge.) |
| | 3.保持機器及操作台清潔<br>3. Keep the machine and the operation table clean. |
| | 4.清潔手輪濾網上之棉絮<br>4. Clean the fiber on the filter net of the hand wheel. |
| 每週<br>Weekly | 1.保持電源外觀乾淨<br>1. Keep the power cords looking clean and neat. |
| | 2.保持操作面板乾淨<br>2. Keep the operational panel clean |
| | 3.檢查電源零件是否鬆脫或在正確位置<br>3. Check if the power parts is loosening or still at the right position |
| 每三個月<br>Quarterly | 1.更換油盤內之液態油<br>1. Change the liquid oil inside the oil pan |

表7/Table7

# SiRUBA

閱讀本說明前以下要求說明請注意：

1. 用戶使用作業前必須可靠接地，保證人生安全！

2. 非專業人士請勿拆卸控制箱

3. 控制箱與電機遠離強磁高輻射環境

4. 不要在過熱環境中作業

5. 不要在過於潮濕環境中作業

6. 220V 電控：【220V 接入供電時電壓穩定在（AC200V～240/ 單相）之間】

| 電源供電電壓 | 220V 單相 |
|---|---|
| 頻率 | 50～60 Hz |
| 電機轉速 | 200-6500 rpm |
| 電機扭矩 | ≤2.2N.m |

110V 電控：【110V 接入供電時電壓穩定在（AC100V～130/ 單相）之間】

| 電源供電電壓 | 110V 單相 |
|---|---|
| 頻率 | 50～60 Hz |
| 電機轉速 | 200-6500 rpm |
| 電機扭矩 | ≤2.2N.m |

安全叮嚀：

1. 電機電控接通電源時（開機狀態）請不要把腳放在腳踏板上

2. 本產品請專業人士安裝調試

3. 嚴禁在通電時打開控制箱與電機端蓋

4. 換針，穿線或更換底線時請關閉電源

5. 安裝，拆卸維修時請拔掉電源插頭

6. 翻抬縫紉機時請關閉電源

7. 使用本產品請遠離高頻電磁波和電波發射器等，以免所產生的電磁波干擾伺服驅動器而發生錯誤動作。

8：禁止在日光直接照射的場所或室外運作

鄭重申明：

1. 不遵守安全使用說明操作規章，發生意外後果自負。

2. 未經本公司授權，請勿擅自改動產品，由此而引起的後果本公司不負任何責任。

保修策略：

1. 本產品自購買起免費保修 2 年，終身維護。保修期內除人為損壞外出現的任何品質問題可免費修。

2. 未經本公司同意自行拆卸，改裝造成損壞將不給於保修。

3. 但凡出現無法解決的問題可以聯繫本公司。

Before reading the manual,please note the following requirements:

1.The user must be grounded before operations to ensure safety.

2.Non-professionals do not disassemble the control box.

3.The control box and motor away from the magnetic high radiation environment.

4.Do not work in hot environment.

5.Do not work in humid environments.

6.220V electronic control: [220V access to power supply voltage stability between (AC200V～240V)]

| Voltage | 220V 1 phase |
|---|---|
| Frequency | 50～60 Hz |
| Speed | 200-6500 rpm |
| Motor torque | ≤2.2N.m |

110V electronic control: [110V access to power supply voltage stability between (AC100V～130V)]

| Voltage | 110V 1 phase |
|---|---|
| Frequency | 50～60 Hz |
| Speed | 200-6500 rpm |
| Motor torque | ≤2.2N.m |

Safety requirement:

1.Do not put your feet on the pedals when the control box and motor is switched on (boot status).

2.Let professionals to install and debug this product.

3.Do not open the control box and the motor cover when energized.

4.Please turn off the power when changing the needle,threading or replacing the bottom line.

5.During installation and removal service,please turn off the power and pull the plug.

6.Please turn off the power when turn lift sewing machine.

7.When use this product, please stay away from high-frequency electromagnetic waves and radio wave transmitters, etc., in case the electromagnetic waves generated interfere with the servo drive to occur wrong action.

8.Do not operate in direct sunlight or outdoors

Solemnly Declare:

1.Do not comply with the manual book operating regulations and the safety requirements, all accidental occurrence should be taken by yourself.

2.Without our authorization, please do not alter our products, our company is not liable for any consequences arising therefrom.

Warranty policy:
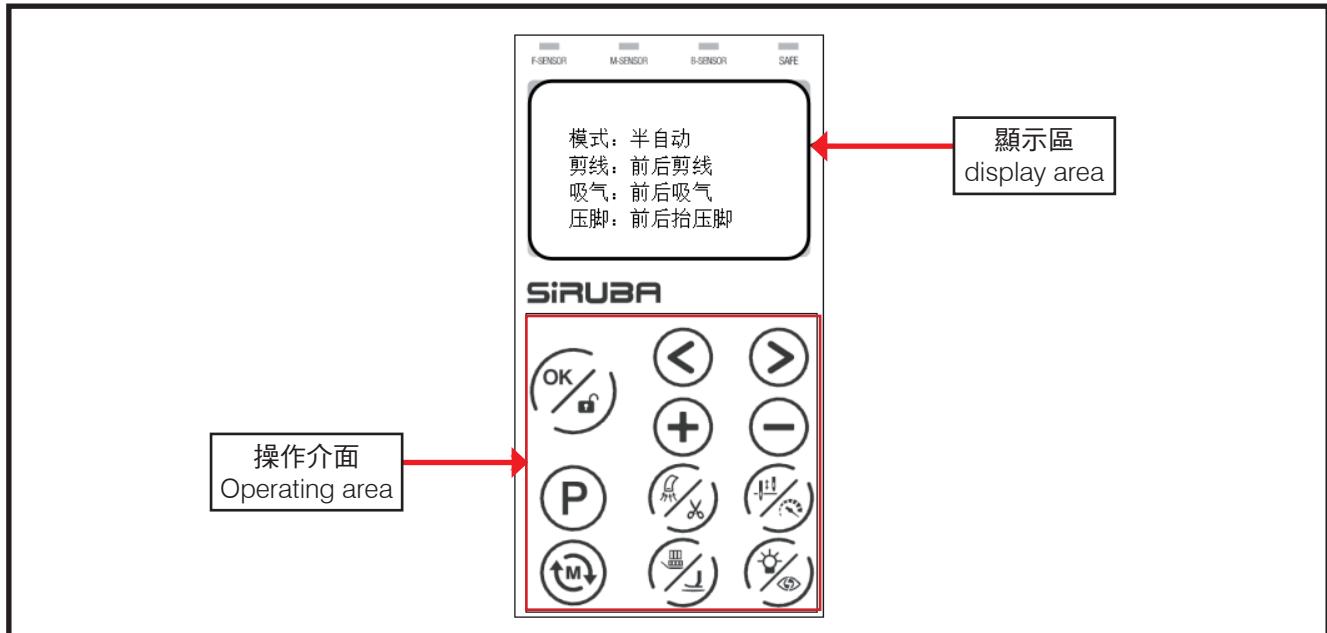
1.Since from the purchase of this product,the free 2-year warranty,lifetime maintenance. During the warranty period,any quality problems the product will be free repaired,except artificial damage.

2.Without our consent disassemble or modify,the damaged will not give in warranty.

3.Whenever find the problem can not be solved,you can contact with our company.

1. 顯示屏介紹：他由來兩大部分組成（操作介面、顯示區域）。

1.Display screen introduction: it has two parts(operate interface、display area)

模式：半自动
剪线：前后剪线
吸气：前后吸气
压脚：前后抬压脚

SiRUBA

F-SENSOR　M-SENSOR　B-SENSOR　SAFE

顯示區
display area

操作介面
Operating area

2. 操作介面功能鍵介紹：
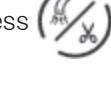
2.Operate interface function introduce:

F-SENSOR　　　M-SENSOR　　　B-SENSOR　　　SAFE
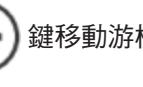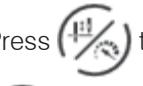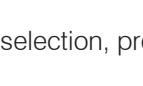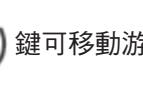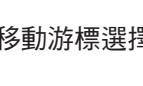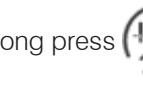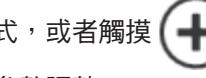
| 序號<br>Serial number | 按鍵圖示<br>Parameters of the code | 功能說明<br>function instruction | |
|---|---|---|---|
| 1 | P<br>菜單鍵<br>Menu button | 觸摸一下進入用戶參數<br>Press to enter the user parameter | 長觸摸進入系統參數（需要密碼）<br>Long press to enter the system parameter(password required) |
| 2 | OK<br>確認鍵<br>Confirm button | 參數確定鍵 parameter confirm key | |
| | | 長按快速鎖屏，單按解鎖 Long press to lock the screen, press to unlock | |
| 3 | (+)(−)<br>數值調整鍵<br>Numerical adjustment key | 參數號向上遞增鍵（修改資料時加）<br>Parameter number upwards key (used as plus when adjusting the value) | |
| 4 | | 參數號向下遞減鍵（修改資料時減）<br>Parameter number downwards key (used as minus when adjusting the value) | |

| 5 | 左移鍵<br>Left key | 向左鍵（在進入參數項時游標向左移）<br>Left key (moving the cursor to left when adjusting the parameter) |
|---|---|---|
| 6 | 右移鍵<br>Right key | 向右鍵（在進入參數數值或選項時游標向右移）<br>Right key (moving the cursor to right when adjusting the parameter) |
| 7 | 模式切換鍵<br>Mode switch key | 觸摸 鍵進入：全自動、半自動、自由縫、全手工等之間切換；<br><br>全自動：當布料蓋住第一光眼時，機器會自動啟動工作不需用腳去踩踏調速器踏板；<br>半自動：布料遮住第一光眼，腳踏調速器才能驅動機器工作；<br>自由縫：無布料遮住第一光眼，腳踏調速器一樣也能驅動機器工作；<br>全手工：剪線、抬壓腳等所有動作需要人工去完成；<br>※: 全自動、半自動、自由縫等安全開關斷開情況下腳踏調速器無法驅動機器工作；<br>全手工：安全開關斷開情況下一樣能使用腳踏調速器啟動機器工作）。<br><br>Press to enter: auto, semi-auto, free stitch, full manual, switch in turn.<br>Auto: The machine starts work without pushing the pedal when the cloth cover the first sensor.<br>Semi-auto: Push the pedal to start the machine when the cloth cover the first sensor.<br>Free stitch: Push the pedal to start the machine no matter the cloth cover the first sensor or not.<br>Full manual: All the functions include trimming and lifting the presser foot should be operated manually .<br>The machine will not work when pushing the pedal if the safety switch is off in the mode of auto, semi-auto or free stitch. But the machine will work when pushing the pedal if the safety switch is off in the mode of full manual. |

<div align="center">

多功能快速鍵介紹
Introduction of multifunctional shortcut keys

</div>

| 8 | 剪線、吸氣模式切換鍵<br>Trimming, air-suction mode switching key | 單觸摸 鍵一下進入"吸氣模式、剪線模式"選擇，觸摸 鍵可移動游標<br>選擇模式，或者觸摸 、 鍵移動游標選擇模式，選擇好模式後觸摸<br>鍵進入參數調整：<br>吸氣模式：前吸氣、後吸後、前後吸氣、吸氣關閉。<br>剪線模式：前剪線、後剪線、前後剪線、剪線關閉。<br>※：移動游標選擇參數同上面方法。<br><br>Press to enter the air-suction parameter or trimming parameter selection,<br>press to select the model with moving the cursor, or move the cursor to select<br>the mode with and , press to enter the parameter adjustment when fixed the mode.<br>Air-suction mode: front suction, rear suction, fro+rear suction, off suction.<br>Trimmer mode: front trimmer, rear trimmer, fro+rear trimmer, off trimmer.<br>Moving the cursor to select the parameter is the same as above. |
|---|---|---|

| | | |
|---|---|---|
| 8 | <br>剪線、吸氣模式<br>切換鍵<br>Trimming,<br>air-suction mode<br>switching key | 直刀：ATK<br><br>長觸摸 (鍵) 鍵進入 "吸氣參數、剪線參數" 選擇；觸摸 (鍵) 鍵可移動游標選擇模式，或者觸摸 (+)、(−) 鍵移動游標選擇模式，選擇好模式後觸摸 (OK) 鍵進入<br><br>參數調整：<br>吸氣參數：<br>　　S05 前吸氣延遲開啟針數 002<br>　　S06 前吸氣關閉針數　　 014<br>　　S07 後吸氣延遲開啟針數 002<br>　　S08 後吸氣延時關閉　　 0200<br>　　S13 中吸氣延遲開啟針數 050<br>　　S14 中吸氣關閉針數　　 020<br>剪線參數：<br>　　S03　前剪線延遲針數　　 022<br>　　S04　後剪線延遲針數　　 000<br>　　S24　手動剪線　　　　 1<br>　　S25　安全開關　　　　 3<br>　　S26　切刀保留時間　　 0025<br><br>Long press (鍵) to enter the air-suction parameter and trimming parameter selection, press (鍵) to select the model with moving the cursor, or move the cursor to select the mode with (+) and (−), press (OK) to enter the parameter adjustment when fixed the mode.<br>Air-suction parameter:<br>S05　Delay stitch number to cut thread after front sensors　002<br>S06　Front suction close stitches　　　　　　　　　014<br>S07　Back suction start stitches no.　　　　　　　002<br>S08　the delay of back suction close　　　　　　　0200<br>S13　middle suction start stitches　　　　　　　050<br>S14　middle suction close stitches no.　　　　　　020<br>Trimmer parameter:<br>S03　Delay stitch number to cut thread after front sensors　022<br>S04　Delay stitch number to cut thread after three sensors　000<br>S24　Operate manual switch action　　　　　　　1<br>S25　Safe switch choice　　　　　　　　　　　3<br>S26　The knife retaining time　　　　　　　　0025 |

| | | |
|---|---|---|
| 8 | <br>剪線、吸氣模式<br>切換鍵<br>Trimming,<br>air-suction mode<br>switching key | 側吸：VTE<br><br>長觸摸 键進入 "吸氣參數、鬆線參數" 選擇；觸摸 键可移動游標選擇模式，或者觸摸 ➕、➖ 鍵移動游標選擇模式，選擇好模式後觸摸 鍵進入<br><br>參數調整：<br>吸氣參數：<br>    S05 前吸氣延遲開啟針數 001<br>    S06 前吸氣關閉針數　　 025<br>    S07 後吸氣延遲開啟針數 008<br>    S08 後吸氣延時關閉　　 0300<br>    S13 中吸氣延遲開啟針數 050<br>    S14 中吸氣關閉針數　　 020<br>剪線參數：<br>    S24　手動剪線　　　 1<br>    S25　安全開關　　　 3<br>    S26　切刀保留時間　 135<br><br>Long press 🔧 to enter the air-suction parameter and trimming parameter selection,<br><br>press 🔧 to select the model with moving the cursor, or move the cursor to select<br><br>the mode with ➕ and ➖, press 🔒 to enter the parameter adjustment<br><br>when fixed the mode.<br>Air-suction parameter:<br>S05　Delay stitch number to cut thread after front sensors　001<br>S06　Front suction close stitches　　　　　　　　　　025<br>S07　Back suction start stitches no.　　　　　　　　008<br>S08　the delay of back suction close　　　　　　　　0300<br>S13　middle suction start stitches　　　　　　　　　050<br>S14　middle suction close stitches no.　　　　　　　020<br>Trimmer parameter:<br>S24　Operate manual switch action　　1<br>S25　Safe switch choice　　　　　　　3<br>S26　The knife retaining time　　　　135 |

| 9 | 速度、停車針位元模式切換鍵 Speed and stop needle position mode switching key | 單觸摸 (⊞) 鍵一下進入"停車針位元、速度調節"選擇，觸摸 (⊞) 鍵可移動游標選擇模式，或者觸摸 (+)、(—) 鍵移動游標選擇模式，選擇好模式後觸摸 (OK) 鍵進入參數調整：<br>停車針位：上針位、下針位、下針位不回針<br><br>Press (⊞) to enter the stop needle position or speed adjustment selection, press (⊞) to select the model with moving the cursor, or move the cursor to select the mode with (+) and (—), press (OK) to enter the parameter adjustment when fixed the mode.<br><br>長觸摸 (⊞) 鍵進入"針位元參數、速度參數"選擇；觸摸 (⊞) 鍵可移動游標選擇模式，或者觸摸 (+)、(—) 鍵移動游標選擇模式，選擇好模式後觸摸 (OK) 鍵進入參數調整：<br><br>針位參數：<br>　　S02 兩感測器間針數　　020<br>　　S12 停車延遲針數　　　002（VTE：135）<br>速度參數：<br>　　S38 最大速度鎖定　　　6500<br>　　S50 加速靈敏度　　　　6<br><br>Long press (⊞) to enter the stop needle position parameter or speed parameter selection, press (⊞) to select the model with moving the cursor, or move the cursor to select the mode with (+) and (—), press (OK) to enter the parameter adjustment when fixed the mode.<br>Needle position parameter:<br>　　S02　Stitch number between two sensors 020<br>　　S12　Machine stop delay stitches no.　　002( VTE : 135 )<br>Speed parameter:<br>　　S38　the max speed locked　6500<br>　　S50　Acceleration sensitivity　6 |
| --- | --- | --- |

| 9 | <br>壓腳、鬆線模式<br>切換鍵<br>Presser foot and<br>thread loosening<br>mode switching<br>key | 單觸摸  鍵一下進入"鬆線模式、壓腳模式"選擇，觸摸  鍵可移動<br>游標選擇模式，或者觸摸 、 鍵移動游標選擇模式，選擇好模式後觸摸<br> 鍵進入參數調整：<br><br>鬆線模式：前鬆線、後鬆線、前後鬆線、鬆線關閉。<br>壓腳模式：前抬壓腳、後抬壓腳、前後踏壓腳、踏壓腳關閉。<br><br>Press  to enter the thread loosening mode or presser foot mode selection, press<br> to select the model with moving the cursor, or move the cursor to select the<br>mode with  and  , press  to enter the parameter adjustment when<br>fixed the mode.<br>Thread loosening mode: front thread loosening, rear thread loosening, fro+rear thread<br>loosening, off thread loosening.<br>Presser foot mode: front lift, rear lift, fro+rear lift, off lift. |
| | | 長觸摸  鍵進入"壓腳參數、鬆線參數"選擇；觸摸  鍵可移動游標選擇模<br>式，或者觸摸 、 鍵移動游標選擇模式，選擇好模式後觸摸  鍵進入<br>參數調整：<br>壓腳參數：<br>　　S19 前抬壓腳保留時間 0400<br>　　S20 後抬壓腳延遲啟動 0000<br>　　S21 抬壓腳保護時間　　006<br>　　S22 放壓腳保護時間　　020<br>　　S31 壓腳全力時間　　　180<br>　　S32 壓腳全力功率　　　100<br>　　S33 壓腳保持功率　　　20<br>　　P22 關閉手動抬壓腳　　0<br>鬆線參數：　　　　　　　　　VTE：<br>　　S09 前鬆線延遲開啟　000　S09 前鬆線延遲關閉　　002<br>　　S10 前鬆線針數　　　012　S10 後鬆線延遲關閉　　028<br>　　S11 前鬆線針數　　　000　S03 前鬆線開啟延遲　　001<br>　　　　　　　　　　　　　　　S04 後鬆線開啟延遲　　022 |

| | | |
|---|---|---|
| 9 |  壓腳、鬆線模式切換鍵 Presser foot and thread loosening mode switching key | Long press (🪡) to enter the presser foot parameter or thread loosening parameter selection, press (🪡) to select the model with moving the cursor, or move the cursor to select the mode with (+) and (−), press (OK) to enter the parameter adjustment when fixed the mode.<br>Presser foot parameter:<br>  S19  Front foot presser lift retaining time  0400<br>  S20  Back foot presser lift start time  0000<br>  S21  Foot presser protection time  006<br>  S22  Release foot presser protection time  020<br>  S31  Foot presser full power time  180<br>  S32  Foot presser full power  100<br>  S33  Foot presser retaining power  20<br>  P22  Close manual foot presser lift  0<br> Thread loosening parameter:      VTE :<br>  S09  Front thread loose delay  000    S09  Front thread close delay  002<br>  S10  Front thread loose stitches  012    S10  Back thread close delay  028<br>  S11  Back thread loose start  000    S03  Front thread loose delay  001<br>                                S04  Back thread loose delay  022 |
| 10 |  電眼開關、機頭燈亮度模式切換鍵 Sensor switch and machine lamp luminance mode switching key | 單觸摸 (👁) 鍵進入布料選擇：厚料、普通、薄料、透明、大網、小網，觸摸 (+)、(−)、(<)、(>) 移動游標選擇布料，選擇好布料後觸摸 (OK) 鍵自動校正光眼靈敏度。<br>Press (👁) to enter the cloth selection: thick material, normal material, thin material, transparent material, big net material, small net material, press (+)、(−)、(<)、(>) to move the cursor to select the cloth, press (OK) to adjust the sensor sensitivity automatic when fixed the cloth.<br><br>長觸摸 (👁) 鍵進入機頭燈亮度調節（1-5 擋），連續觸摸 (👁) 鍵加至 5 擋後再加一次機頭 LED 燈關閉。<br>Long press (👁) to enter the machine lamp luminance adjustment (1-5 step), the lamp will be turned off when press (👁) at the 5 step. |
| 11 | F-SENSOR | 前光眼指示燈<br>Front sensor indicator |

當光眼被擋住時，此燈亮、未擋住時不亮；如未被擋住時，此燈亮起；則需要檢查光眼靈敏度。
When the sensor is blocked, the light will be on, when it is not blocked, the light is not on ; if it is not blocked, the light is on; the sensor sensitivity needs to be checked.

| 12 | M-SENSOR | 中光眼指示燈<br>Medium sensor indicator | 當光眼被擋住時，此燈亮、未擋住時不亮；如未被擋住時，此燈亮起；則需要檢查光眼靈敏度。When the sensor is blocked, the light will be on, when it is not blocked, the light is not on ; if it is not blocked, the light is on; the sensor sensitivity needs to be checked. |
|---|---|---|---|
| 13 | B-SENSOR | 後光眼指示燈<br>Back sensor indicator | 當光眼被擋住時，此燈亮、未擋住時不亮；如未被擋住時，此燈亮起；則需要檢查光眼靈敏度。When the sensor is blocked, the light will be on, when it is not blocked, the light is not on ; if it is not blocked, the light is on; the sensor sensitivity needs to be checked. |
| 14 | SAFE | 安全指示燈<br>Safety switch indicator | 當安全開關斷開時，SAFE 燈亮起時，則檢查一下安全開關是否感應到。<br>When the safety switch is off and the SAFE light is on, check that the safety switch is responsive. |

## 如何進入參數與如何修改參數

技術員系統參數清單：

1、長觸摸 (P) 鍵持續 3 秒鐘進入 "系統 (S) 參數" 清單（需要密碼進入調整）。 (<) (>) 鍵將選取修改的是參數值還是菜單值，觸摸後選取的地方將會出現閃爍。 (+) (−) 鍵將增加或減少閃爍區的數值，修改完畢參數後需要按 (OK/) 鍵保存參數並退出系統參數。

注：以上是進入方法，具體參數號代表的參數意思詳情如表 1：
出廠值密碼：2014

工人參數列表：

2、觸摸 (P) 鍵直接進入參數， (<) (>) 鍵將選取修改的是參數值還是菜單值，觸摸後選取的地方將會出現閃爍。 (+) (−) 鍵將增加或減少閃爍區的數值，修改完畢參數後需要按 (OK/) 鍵保存參數並退出系統參數。

System parameter entering analysis:

1、Long press (P) button for 2seconds to enter "System Parameter" list (requires a password to enter the adjustment). (<) (>) key to select to modify parameter value or menu value. Then,the selected value will be flashing. (+) (−) key to increase or decrease the value.After completing modification,press (OK/) button to save parameters and quit system parameters.

※Above is to enter method,the details of specific parameters describe as followings:
※ Factory default password:2014

User parameter entering analysis:

2、Press (P) to enter the parameter, (<) (>) key to select to modify parameter value or menu value. Then,the selected value will be flashing . (+) (−) key to increase or decrease the value.After completing modification,press (OK/) button to save parameters and quit system parameters.

# SiRUBA

1. 技術員系統參數清單：　　　　　　　　　　1.Technician system parameter list

| 序號 System parameter list | 功能說明 Function description | 參數預設值 Parameter default values | 參數範圍 Parameter Adjustment range | 參數說明 Parameter description |
|---|---|---|---|---|
| S01 | 針跡 Thread track | 3 | 1～4 | |
| S02 | 兩感測器間針數 Stitch number between two sensors | 20 | 1~50 | 設定兩個光眼之間的針數 Set stitch number between two sensors |
| S03 | 前剪線延時針數 Delay stitch number to cut thread after front sensors | 28 | 0~50 | 後面光眼感應到後延遲剪線的針數 Set delay stitch number after passing front sensors.Auto cut thread after stitchs |
| S04 | 雙光眼模式 後剪線延遲針數 Delay stitch number to cut thread after two sensors | 14 | 0~100 | 離開第二光眼離開後延遲剪線的針數 Set delay stitch number after passing two sensors.Auto cut thread after stitchs |
| | 三光眼模式 前剪線延遲針數 Delay stitch number to cut thread after three sensors | 2 | 0~100 | 離開第三光眼離開後延遲剪線的針 Set delay stitch number after passing two sensors.Auto cut thread after stitchs |
| S05 | 前吸延遲氣開啟針數 Delay stitch number for starting front air suction | 2 | 1~50 | 感應到第一個光眼後從第幾針開始吸氣 Set delay stitch number for starting front air suction after triggering first sensor |
| S06 | 前吸氣針數 Front suction close stitches no. | 14 | 1~50 | 打開後，計數幾針後關閉吸氣 Account how many stitches begin to close former suction |
| S07 | 後吸延遲氣開啟針數 back suction start stitches no. | 2 | 1~50 | 離開後光眼後第幾針開始吸氣 After leaving latter photo-eye,how many stitches begin suck |
| S08 | 後吸氣延時關閉 the delay of back suction close | 200 | 100~5000MS | 離開光眼後，計數幾毫秒後關閉吸氣 After leaving latter photo-eyes,count how many milliseconds off suction |
| S09 | 前鬆線延遲開啟針數 front thread loose delay | 00 | | |
| S10 | 前鬆線針數 Front thread loose stitches | 12 | | |
| S11 | 後鬆線延遲開啟針數 Back thread loose start | 00 | | |
| S12 | 停車延遲針數 machine stop delay stitches no. | 2 | 1~99 | 剪完線後多少針自動停車 How much stitches auto parking after trimmer |
| S13 | 中吸氣延遲開啟針數 middle suction start stitches no. | 50 | 1~250 | 中吸氣間隔針數 middle suction interval stitches |

| | | | | |
|---|---|---|---|---|
| S14 | 中吸氣針數<br>middle suction close stitches no. | 20 | 1～100 | 中吸氣針數<br>Middle suction stitches |
| S15 | 後剪光眼（第三光眼）延遲檢測針數<br>the needle no. of the delay of back cutting line | 25 | 1～100 | 三光眼模式：布離開中光眼經過多少針後沒檢測到第三光眼信號就開始剪線<br>Leave in the light eye after much after the needle cannot detect the third eye signal begins to cut the line |
| S16 | 前感測器回應時間<br>front sensor respond time | 40 | 1～100MS | 前面光眼感應到後回應的時間<br>The response time when former photo-eye sense |
| S17 | 前感測器靈敏度<br>front sensor sensitivity degree | 55% | 20～175 | 為適應不同布料設定前光眼的發射強度<br>Setting photo-eye through the fabric strength,to adapt to different fabrics |
| S18 | 後感測器靈敏度<br>Back sensor sensitivity degree | 55% | 20～175 | 為適應不同布料設定後光眼的發射強度<br>Setting photo-eye through the fabric strength,to adapt to different fabrics |
| S19 | 前抬壓腳保留時間<br>front foot presser lift retaining time | 220 | 100～2000MS | 前光眼感應到布時壓腳自動抬起維持時間<br>when front sensor feel the cloth, the foot presser lifter maintain time |
| S20 | 後抬壓腳延遲啟動<br>back foot presser lift start time | 0 | 0～2000MS | 腳踏板後踏壓腳回應的時間（毫秒）<br>The lift foot response time after latter foot pedal(millisecond) |
| S21 | 抬壓腳保護時間<br>foot presser protection time | 6 | 1～120S | 手動抬壓腳持續多少時間後自動關閉壓腳輸出（秒）<br>Lifter the foot presser by hand some time then Auto close foot presser output(second) |
| S22 | 放壓腳保護時間<br>release foot presser protection time | 20 | 20～800MS | 壓腳釋放保護時間（毫秒）<br>the foot presser release protection time (millisecond) |
| S23 | 連續送布吸氣剪線<br>continue feed cloth suction cutting line | 0 | 0～1 | 0：關閉 1：開啟<br>0:Close 1:Open |
| S24 | 運轉中手動開關動作<br>operate manual switch action | 1 | 0～1 | 0：電機運轉時按手動剪線不剪，1：可以剪<br>0:When the motor is running, tuch manual switch no cutting, 1:Have cutting |
| S25 | 安全開關選擇<br>safe switch choice | 3 | 0～3 | 0：關閉安全開關 1：縫台安全開關<br>2：壓腳安全開關 3：縫台＋壓腳安全開關開啟<br>0:off safety switch 1:Seam safety switch<br>2:Foot safety switch 3: Seam & Foot safety switch |
| S26 | 切刀保留時間<br>the knife retaining time | 25 | 1～1000MS | 切刀動作時間（基本不用調整）<br>Cutting action time (basically no adjustment) |
| S27 | 介面恢復時間<br>recover time | 5 | 5～100S | 控制台在進入功能表後多少時間跳回主介面<br>After entering the control panel ,how much time to jump back to the main menu interface |
| S28 | 光眼模式<br>（數量選擇）<br>sensor mode<br>(number choice) | 2 | 1～2 | 1: 單光眼 2: 雙光眼（※: 第三光眼需要單獨開啟 S35）<br>1:single photo-eye 2:double photo-eye |

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|---|---|---|---|---|
| S29 | 前光眼極性選擇<br>front sensor polarity | 0 | 0~1 | 反射光眼用<br>Opposite polarity opposite |
| S30 | 後光眼極性選擇<br>back sensor polarity | 0 | 0~1 | 反射光眼用<br>Opposite polarity opposite |
| S31 | 壓腳全力時間<br>foot presser full power time | 60 | 10~990MS | 壓腳全功率工作時的時間<br>Time of full power operation |
| S32 | 壓腳全力功率<br>foot presser full power | 100 | 20~100% | 壓腳開始動作時，瞬間的輸出功率<br>When the foot starts to move, the instantaneous output power |
| S33 | 壓腳保持功率<br>foot presser retaining power | 16 | 10~90% | 壓腳抬起後維持住後的功率（不能超過50）<br>Pressure foot lift after the maintenance of the power to live (not more than 50) |
| S34 | 後剪光眼靈敏度（剪刀邊上）第三光眼<br>back cutting line sensor sensitivity degree | 55 | 5~99% | 第三光眼發射強度<br>the third sensor Emission intensity |
| S35 | 後剪光眼開啟（剪刀邊上）<br>back cutting line sensor start | 2 | 0~2 | 0：關閉 2：開啟<br>0: closed 2: open |
| S36 | 預留<br>obligate | 01 | | |
| S37 | 語言選擇<br>language choice | 0 | 0~2 | 0：中文 1：英文 2：土耳其 3：越南文<br>0:Chinese 1:English 2:Turkish 3:Vietnamese |
| S38 | 最大速度鎖定<br>the max speed locked | 4800 | 250~6500 | 電機的最大可調速度限制<br>Maximum adjustable speed limit for motor |
| S39 | 參數復位<br>parameter reset | 0 | 0~1 | 調到1長按OK鍵有效<br>Transferred to 1 long-press the OK button to effective |
| S40 | 參數密碼<br>Parameter password | 2014 | | 注：如記不住密碼，切記勿修改；如修改密碼忘記，需寄回廠家從新解密。<br>If you cannot remember the password, please do not modify it; if you change the password and forget it, you will need to send it back to the manufacturer for decryption again. |
| S41 | 預留<br>obligate | 2500 | 250-4500 | |
| S42 | 預留<br>obligate | 008 | 1-100 | |
| S43 | 網孔針數<br>Mesh needle | 06 | 0-15 | |
| S44 | 布料選擇<br>Cloth choose | 1 | 0-7 | 0: 厚料 1: 普通 2: 薄料<br>3: 透明 4: 大網 5: 小網<br>0: Thick material 1: Normal 2: Thin material<br>3: Transparent 4: Large mesh 5: Small mesh |
| S45 | 前光眼動作閥值<br>Front sensor action threshold | 50 | 5-200 | |

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|---|---|---|---|---|
| S46 | 中光眼動作閥值<br>Medium sensor action threshold | 50 | 5-200 | |
| S47 | 後光眼動作閥值<br>Back sensor action threshold | 50 | 5-200 | |
| S48 | 電機運轉方向<br>Motor running direction | 1 | 0-1 | 0：電機反轉　1：電機正傳<br>0:motor inversion<br>1:motor forward transmission |
| S49 | 加速曲線<br>Acceleration curve | 70 | 10-100 | |
| S50 | 加速靈敏度<br>Acceleration sensitivity | 6 | 1-6 | |
| S51 | 光眼粗調啟用<br>Sensor rough tuning enabled | 0 | 0-1 | 0：關閉　　1：開啟<br>0: closed　　1: open |
| S52 | 強自動剪線<br>Strong automatic thread cutting | 4 | 0-4 | 0: 剪線最強保護<br>1: 剪線強保護<br>2: 剪線一般保護<br>3: 剪線弱保護<br>4: 剪線無保護<br>0:strongest thread cutting protection<br>1:strong thread cutting protection<br>2:general thread cutting protection<br>3:weak thread cutting protection<br>4:no thread cutting protection |
| S53 | 光眼感應時間<br>Sensor sensing time | 6 | 3-150 | |
| S54 | 光眼解除感應時間<br>Sensor dis-induction time | 20 | 3-150 | |
| S55 | 步進方向<br>Step into the direction | 0 | 0-1 | 0: 正向　1：反向<br>0：forward　1:reverse |
| S56 | 步進原點偏移量<br>Step origin offset | 010 | | 調整步進電機原點位置<br>Adjust the origin position of stepping motor |
| S57 | 步進原點力矩<br>Step origin moment | 002 | | 步進電機找原點的力量大小<br>Step motor to find the origin of the force size |
| S58 | 步進剪線力矩<br>Step trimming force moment | 075 | | 步進電機剪線的力量（數值越大剪線聲音大、數值越小剪線聲音小）<br>Thread cutting force of stepping motor(the higher the value is,the louder the sound is:the smaller the value is,the smaller the sound is) |

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| S59 | 步進剪線角度<br>Step thread cutting angle | 240 | | 微調步進剪線角度（數值大刀口閉合量越深、數值小刀口閉合量越淺）（數值不能調的過高、達到高度限位的角度值就好、以免步進電機沒動作到位電機失步）<br>Fine tuning of stepping line cutting angle(the deeper the numerical large knife edge closure is,the shallower the numerical small knife edge closure is)(the value cannot be adjusted too high,and the angle value that reaches the height limit is good,so as to avoid the motor losing step if the stepping motor does not move in place) |
| S60 | 步進進刀速度<br>Step forward knife speed | 550 | | 數值越大剪線速度越快、數值越小速度越慢<br>The higher the value,the faster the cutting speed,while the smaller the value,the slower the speed |
| S61 | 步進退刀速度<br>Step backward knife speed | 350 | | 數值越大剪線後退刀速度越快、數值越小速度越慢<br>The higher the value is,the faster the backward knife cutting speed is,while the smaller the value is,the slower the speed is |
| S62 | 步進進刀角度<br>Step motor in the knife angle | 03 | | |
| S63 | 步進退刀角度<br>Step motor out the knife angle | 00 | | |
| S64 | 步進抬壓腳角度<br>Step motor presser foot lift angle | 0390 | | 數值越大抬壓腳越高、數值越小抬壓腳越低（數值不能調的過高、達到高度限位的角度值就好、以免步進電機沒動作到位電機失步）<br>The larger the value,the higher the presser foot,and the smaller the value,the lower the presser foot (the value can not be adjusted too high,and it is good to reach the angle value of the height limit,so as to avoid the stepping motor does not move in place and the motor loses its step) |
| S65 | 步進抬壓腳速度<br>Step motor presser foot lift speed | 520 | | 數值越大剪線速度越快、數值越小速度越慢<br>The higher the value,the faster the cutting speed,while the smaller the value,the slower the speed |
| S66 | 步進放壓腳速度<br>Step motor release presser foot speed | 350 | | 數值越大剪線速度越快、數值越小速度越慢<br>The higher the value,the faster the cutting speed,while the smaller the value,the slower the speed |
| S67 | 步進抬壓腳力度<br>Step motor presser foot lift power | 000 | | |
| S68 | 步進放壓腳力度<br>Step motor release presser foot power | 000 | | |

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|---|---|---|---|---|
| S69 | 步進微抬壓腳<br>Step motor tiny lift presser foot | 3 | 0-3 | |
| S70 | 步進微抬角度<br>Step motor tiny lift presser foot angle | 330 | 1-800 | |
| S71 | 步進微抬速度<br>Step motor tiny lift presser foot speed | 95 | 0-100 | |
| S72 | 步進微放速度<br>Step motor tiny release presser foot speed | 045 | 0-100 | |
| S73 | 步進釋放時間<br>Step motor tiny release presser foot time | 10 | 0-6000 | |
| S74 | 停針信號選擇<br>Needle stop signal selection | 1 | 0-1 | |
| S75 | 上停角度<br>Up needle stop angle | 60 | 0-359 | |
| S76 | 下停角度<br>Down needle stop angle | 180 | 0-359 | |
| S77 | 上下停針角度差<br>Up and down needle stop angle difference | 180 | 90-270 | |
| S78 | 禁止電壓掉電檢測<br>Prohibit voltage power down detection | 0 | 0-3 | |
| S79 | 最大電流<br>Maximum current | 350 | | |
| S80 | 電機編碼器角度檢測<br>Angle detection | 0 | 0-1 | |

# SiRUBA

| 序號<br>System parameter list | 功能說明<br>Function description | 參數預設值<br>Parameter default values | 參數範圍<br>Parameter Adjustment range | 參數說明 Parameter description |
|---|---|---|---|---|
| P-01 | 操作模式<br>Operate mode | 0 | 0～1 | 0：半自動 1：全自動<br>0: semi automatic 1: fully automatic |
| P-02 | 電眼開關<br>sensor switch | 1 | 0～1 | 0：關閉 1：開啟<br>0:Closed 1:Open |
| P-03 | 剪線<br>cutting line | 3 | 0～3 | 0：關閉 1：前剪線 2：後剪線 3：前後剪線<br>0: close<br>1: before the cut line<br>2: after the cut line<br>3: before and after the shear line |
| P-04 | 吸氣<br>suction | 3 | 0～3 | 0：關閉 1：前吸氣 2：後吸氣 3：前後吸氣<br>0: closed<br>1: before the inspiration<br>2: after the inspiration of<br>3: before and after the inspiration |
| P-05 | 後拉布輪<br>back pulley wheel | 0 | 0～2 | 0：關閉 1：縫製中 2：縫製後<br>0: close 1: sewing in 2: after sewing |
| P-06 | 自動壓腳<br>foot presser | 3 | 0～3 | 0：無抬壓腳 1：前抬壓腳<br>2：後抬壓腳 3：前後抬壓腳<br>0: no lifting of the foot<br>1: front lifting foot<br>2: after the lifting of the foot<br>3: before and after the lifting of the foot |
| P-07 | 啟動速度模式<br>start speed mode | 1 | 0～1 | 0：自動 1：腳踏板<br>0: automatic 1: pedal |
| P-08 | 停車針位<br>needle positio | 0 | 0～1 | 0：上針位 1：下針位<br>0:Upper pin position 1: a needle |
| P-09 | 停車自動抬壓腳<br>machine stop auto foot presser lifting | 0 | 0～1 | 0：關閉 1：開啟<br>0:Closed 1:Open |
| P-10 | 手動吸氣<br>suction by hand | 1 | 0～1 | 0：關閉 1：開啟<br>0:Closed 1:Open |
| P-11 | 啟縫速度<br>start sewing speed | 4800 | 200～5500 | |
| P-12 | 最大速度<br>Max speed | 5000 | 200～5500 | |
| P-13 | 工作燈亮度<br>the degree of the working LED light | 4 | 0～5 | |
| P-14 | 背光燈亮度<br>the backlight degree | 1 | 0～1 | 0：關閉 1：開啟<br>0:Closed 1:Open |
| P-15 | 半自動連續縫製<br>semi-auto continue sewing | 0 | 0～1 | 0：關閉 1：開啟<br>0:Closed 1:Open |
| P-16 | 半自動恒速剪線<br>semi-auto constant sewing | 0 | 0～1 | 0：關閉 1：開啟<br>0:Closed 1:Open |

| | | | | |
|---|---|---|---|---|
| P-17 | 前放壓腳<br>front foot presser lift | 0 | 0~1 | 0：自動模式 1：手工模式<br>0: automatic mode 1: manual mode |
| P-18 | 腳控剪線<br>foot controller cutting line | 0 | 0~2 | 0: 關閉 1：全手工 2：自由縫半自動<br>0: closed 1: full manual 2: free stitch semi-automatic |
| P-19 | 中吸氣<br>middle suction | 1 | 0~1 | 0：關閉 1：開啟<br>0:Closed 1:Open |
| P-20 | 半後踏抬壓腳<br>half back foot resser lift | 0 | 0~1 | 0：關閉 1：開啟<br>0:Closed 1:Open |
| P-21 | 剪線後抬壓腳<br>foot presser lift after cutting | 0 | 0~1 | 0：關閉 1：開啟<br>0:Closed 1:Open |
| P-22 | 關閉手動抬壓腳<br>close manual foot presser lift | 0 | 0~1 | 0：關閉 1：開啟<br>0:Closed 1:Open |
| P-23 | 自由縫開啟<br>start free sewing | 0 | 0~1 | 0：關閉 1：開啟<br>0:Closed 1:Open |
| P-24 | 後剪線光眼延遲檢測<br>back cutting line sensor delay check | 1 | 0~1 | 0：關閉 1：開啟<br>0:Closed 1:Open |
| P-25 | 鬆線<br>thread tension releasing | 3 | 0～3 | 0: 關閉 : 1：前鬆線 2：後鬆線 3：前後鬆線<br>0: close<br>1: front thread tension releasing<br>2: back thread tension releasing<br>3: front and back thread tension releasing |
| P-26 | 自動運行<br>auto running | 0 | 0~1 | 0：關閉 1：開啟<br>0:Closed 1:Open |
| P-27 | 自動跑合執行時間<br>auto runningn time | 6 | 3~20 | 時間單位為：秒<br>The time unit is: Second |
| P-28 | 自動跑合運行停止時間<br>auto running stop time | 2 | 2~20 | 時間單位為：秒<br>The time unit is: Second |
| P-29 | 電控版本<br>Electronic Control Version | | | |
| P-30 | 顯示屏版本<br>Panel Version | | | |
| P-31 | 音量調節<br>volume adjustment | 020 | 020 | |
| P-32 | 關閉開機語音<br>close the start voice | 0 | 0～1 | 0：關閉 1：開啟<br>0: close 1: open |
| P-33 | 網布模式<br>Net cloth mode | 0 | 0-1 | 0：關閉 1：開啟<br>0: close 1: open |
| P-34 | 禁止上停車<br>Forbid upper needle stop position | 0 | 0-1 | 0：關閉 1：開啟<br>0: close 1: open |
| P-35 | 剪線計數<br>Count of thread trimming times | 0 | | |

| | | | | |
|---|---|---|---|---|
| P-36 | 止縫速度<br>Stop sewing speed | 5500 | 200-6500 | |
| P-37 | 恒線模式<br>Constant speed<br>thread trimming<br>mode | 1 | 0-3 | |
| P-38 | 自動控制模式<br>Automatic control<br>mode | 0 | 0-1 | |
| P-39 | 開機自動上停針<br>Automatic up needle<br>position after starting | 0 | 0-1 | |
| P-40 | 最低速度<br>Minimum speed | 250 | 250-6500 | |
| P-41 | 光眼版本<br>Sensor version | | | |

1. 電機電控箱安裝 Motor electric control box installation：



A. 裝電機：
用專用定位治具套入機器主軸中，將安裝示意圖上的圖⑦電機卡在治具中，用圖⑧螺釘固定螺釘摏緊後要能輕鬆拔出定位治具。
（注：定子裝入轉子要注意磁鐵吸力，小心夾到手。）

A: installation of motor:
Fix the special positioning tool into the machine principal axis, install the motor ( ⑦ in the installation diagram)onto the tool, fix the motor with the screws ( ⑧ in the installation diagram), and the tool should be pulled out easily.
(noted: take care of the hands when setting the rotor because of the magnet force)

B. 裝轉子：
將安裝示意圖上的圖①墊片（選裝）、圖②風葉和圖③轉子裝入縫紉機軸上，用圖④墊片、圖⑤彈簧墊片和圖⑥螺釘固定住轉子和風葉，再用內六角扳手將固定圖③轉子上三個螺釘鎖緊。

B: installation of rotor:
Install the spacer ( ⑦ ),fan blade ( ② ) and rotor ( ③ ) into the machine principal axis,fix the rotor and fan blade with the spacer ( ④ ), spring washer ( ⑤ ) and crew ( ⑥ ), then tighten the screw to fix the rotor ( ③ ) with the inner hexagon spanner.

檢查１：用右手抓緊轉子，左手轉動風葉要無自轉現象。

Check 1: the fan blade should not run round when holding the rotor.

檢查２：用手轉動縫紉機應無加重。
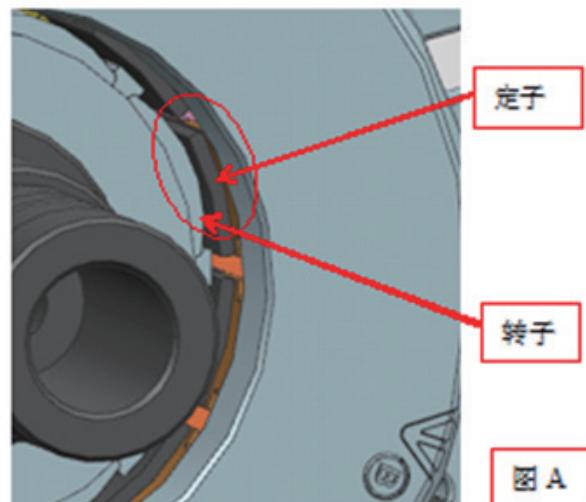
Check 2: the machine should not verweight when turning around the  machine.

C. 檢查轉子和定子是否裝好：
目測轉子平面與定子平面是否相平，兩面相
平度不得超過 1.5mm（看剖視圖 A)，如果
超過 1.5mm 的話，要拆掉電機和轉子用圖
墊片來調整（注：電機兩平面裝的越平越好，
如果兩平面超過 1.5mm 的情況下，電機會
比正常安裝的發熱量大和力矩減小現象。）

C: check the setting of rotor and stator:
Check the plane of the rotor and
stator, the error value should less than
1.5MM(cutaway view A), reset the rotor
and stator and add the spacer to adjust
if the error value more than 1.5MM. (The
calorific calue will higher than normal and
the torque will reduce if the error value is
more than1.5MM)



定子

转子

圖 A
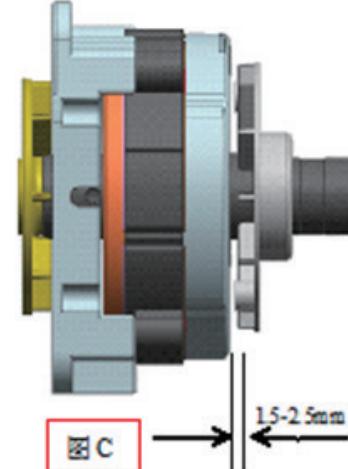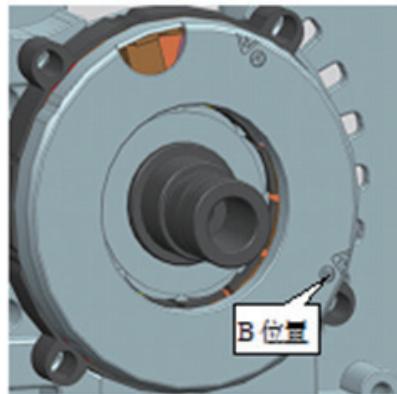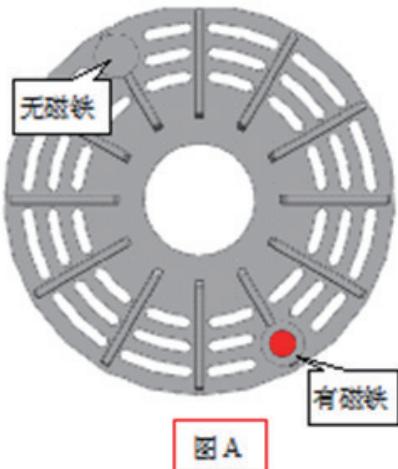
D. 裝風葉：
1. 用手轉動縫紉機，使機針停在最高位

2. 將風葉裝入轉子並將風葉上沒磁鐵的面
對準電機上的"B"箭頭位置（看圖 A、
B）。用內六角扳手擰緊安裝示意圖上的圖
⑨2 個螺釘，並且保證風葉與電機外殼留有
1.5mm--2.5mm 的間隙（看圖 C)。）

D: fan blade installing :
1）Turn the machine to adjust the needle
to the highest position.

2）Set the fan blade onto the rotor and
point the position without magnet(pic A) at
the position B on the motor (pic B). Tighten
the screws (⑨ in the installation diagram）
with the inner hexagon spanner，make
sure the space between the fan blade and
motor is in the range of 1.5MM-2.5MM(pic
C).



无磁铁

有磁铁

圖 A



B 位置

圖 B



1.5-2.5mm

圖 C

E. 裝電控箱：
1. 將安裝示意圖上的圖⑦電機信號線、電源線插入圖⑩電控箱的插座中（看圖 A，注：電機信號線、電源線分方向，切勿強行插入）。

2. 將安裝示意圖上的圖⑩電控箱套入機器上，用圖⑪螺釘對角鎖緊。

檢查 1：安裝電控箱是否將電機信號線、電源線壓住。
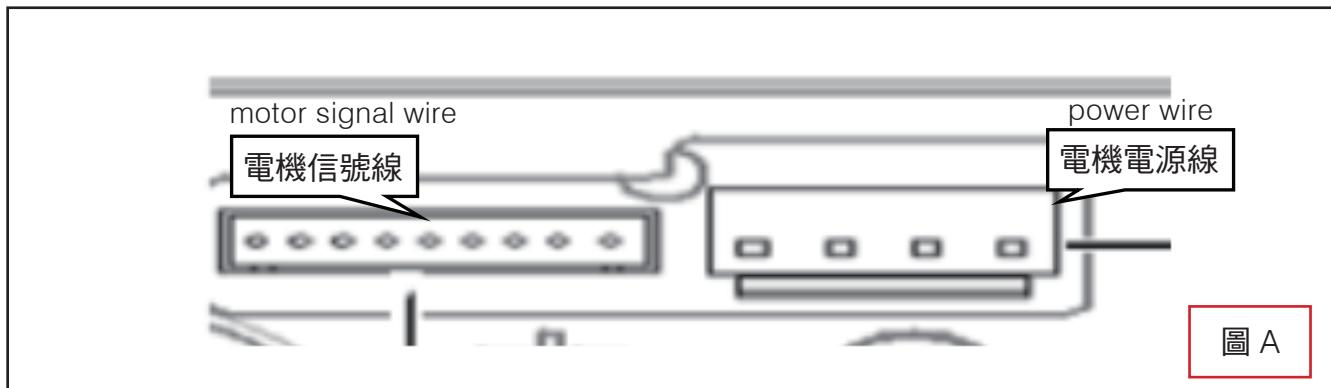
檢查 2：查看電控箱外形是否吻合。

E: controller installing:
1) Connect the motor signal wire and the power wire into the controller plugs( ⑦ in the installation diagram, check the direction of the plugs).

2) Install the controller onto the machine( ⑩ in the installation diagram), fix it with the screws(pic ⑪ ).

Check 1: check if the motor signal wire or the power wire is pinned.

Check 2: check if the controller suits to the machine.



motor signal wire  電機信號線  電機電源線  power wire  圖 A
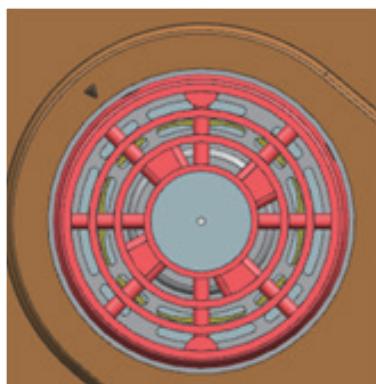
F. 裝手輪：
1. 用手轉動縫紉機，使機針停在最高位。

2. 將安裝示意圖上的圖⑫手輪放入轉子中，將手輪刻度中間的一條對準電控箱三角標識，用內六角扳手擰緊手輪 2 個固定螺釘（看下圖所示）。

Handwheel installing:
1)Turn the machine, adjust the needle to the highest position.

2)Install the handwheel( in the installation diagram) onto the rotor, point the middle mark on the handweel at the triangular sign on the controller, tighten the screws with the inner hexagon spanner(as following pic ⑫ ).

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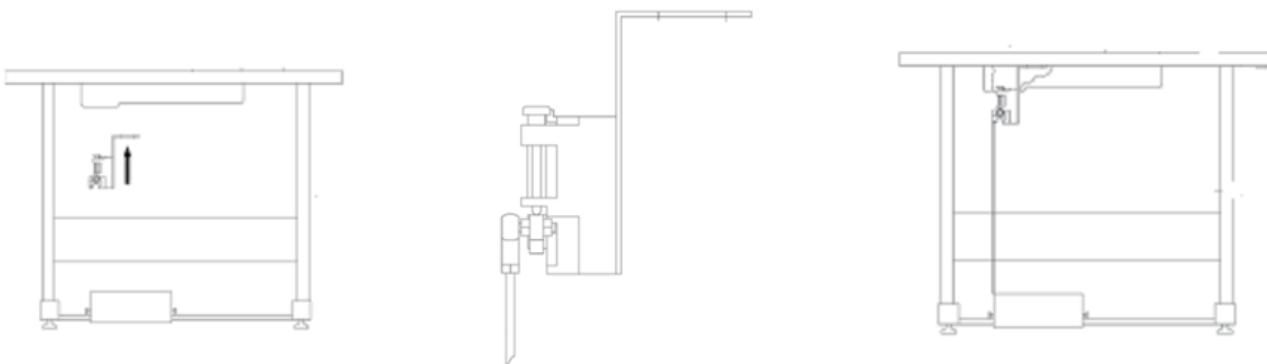
2. 調速器安裝與調整 Installing and adjusting of speed controller:

A. 控速器的安裝：
　　1. 將腳踏控速器安裝於台板下方

　　2. 將踏板與控速器安裝連結
　　3. 安裝後示意圖

A. Installing of the speed controller:
　　1)Install the speed controller under the table
　　2)Fix the pedal and the speed controller
　　3)The installation diagram
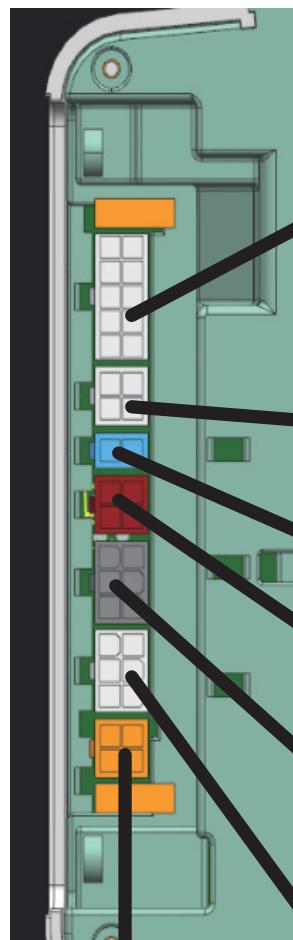


B. 腳踏板後踏力量的調整 Power adjusting of the backward pushing：



| 調整需求<br>Adjustment require | 調整結果<br>Adjustment result |
|---|---|
| 踏板後踏力量的調整<br><br>Adjustment of the pedal backward pushing power | 當螺栓愈向下時，則後踏力量愈重。當螺栓愈向上時，則後踏力量愈輕。<br><br>The power will be stronger when fix the screw downward.<br>The power will be weak stronger when fix the screw upward. |

| 序號<br>Port Number | 端口名稱<br>Port connector name | 端口說明<br>Terminal socket description | | 端口顏色<br>Port color |
|---|---|---|---|---|
| 1 | 上光眼端口<br>Up sensor wire | GND | IR2 發射<br>IR2 transmission | 白色<br>White |
| | | LED "—" | IR1 發射<br>IR1 transmission | |
| | | 5V | 剪線信號<br>thread trimming signal | |
| | | 5V | IR3 發射<br>IR3 transmission | |
| | | GND | 預留<br>reserved | |
| 2 | 下光眼（一、二）端口<br>Down sensor wire | 5V | IR1 接收<br>IR1 transmission | 白色<br>White |
| | | 5V | IR2 接收<br>IR2 transmission | |
| 3 | 下光眼（三）端口<br>The third sensor wire | 5V | IR3 接收<br>IR3 transmission | 藍色<br>Blue |
| 4 | 縫台安全開關端口<br>Sewing plate secure fully open light port | 5V | GND | 紅色<br>Red |
| | | 信號<br>signal | 預留<br>reserved | |
| 5 | 壓腳安全開關／發射感測器端口<br>The foot presser safe switch wire | 5V | GND | 黑色<br>black |
| | | 信號<br>signal | | |
| | | IR3 發射<br>IR3 transmission | 5V | |
| 6 | 步進電機信號端口<br>stepper motor signa wire | | 原點信號<br>origin signal | 白色<br>White |
| | | GND | 信號 A<br>signal A | |
| | | 5V | 信號 B<br>signal B | |
| 7 | 步進電機相線端口<br>stepper motor phase line port | W | V | 白色<br>White |
| | | PE | U | |

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| 故障代碼<br>Error Code | 故障描述<br>Error Descrition | 故障產生原因<br>the reason of the Error | 故障的解決方法<br>the resolution of the error |
|---|---|---|---|
| Er01 | 找不到停針位<br>not find needle position | 電機信號線端子頭接觸不良<br>Poor connection of the motor signal wire | 斷電後檢查電機信號線是否鬆動，然後重新上電，如果還不能解決，請聯繫售後服務人員<br>Turn off the controller and check the motor signal plug if it is poor connected, restart the controller. Contact with the after sales if the problem still occur. |
| Er02 | 調速器信號錯誤<br>Foot controller signal error | 1：開機時沒插調速器<br>2：控速器線接觸不良<br>3：後踩住控速器開機<br>1：The pedal do not connect when boot on<br>2：Poor connection of the pedal wire<br>3：Backward push the pedal when boot on | 斷電後檢查控速器連接或插頭是否接觸不良，然後重新上電，如果還不能解決，請聯繫售後服務人員<br>Turn off the controller and check the connection between the pedal and the controller, restart the controller. Contact with the after sales if the problem still occur. |
| Er03 | 電機相位信號錯誤<br>Motor phase signal error | 電機信號線插頭接觸不良<br>Motor phase signal error | 斷電後檢查電機信號線是否鬆動，然後重新上電，如果還不能解決，請聯繫售後服務人員<br>Turn off the controller and check the connection between the motor and the controller, restart the controller. Contact with the after sales if the problem still occur. |
| Er04 | 電機堵轉保護<br>Motor locked rotor protection | 1：縫紉機過重或堵死<br>2：電機超載<br>3：電機 4 線驅動線沒連接好或插反<br>1：sewing machine is overweight or blocked<br>2：Overload of the motor<br>3：Poor connection of the motor power wire | 斷電後檢查：<br>1、請檢查機頭是否被卡住<br>2、請檢查電機是否被卡住<br>3、電機電源端子脫落或鬆動，然後重新上電，如果還不能解決，請聯繫售後服務人員<br><br>Turn off the controller<br>1、Check the machine if stuck<br>2、Check the motor if stuck<br>3、Poor connection of the motor power plug, restart the controller. Contact with the after sales if the problem still occur. |
| Er05 | 硬體過流保護<br>Hardware overload protection | 1：電機超載<br>2：電機相位信號線沒接好<br>1：Overload of the motor<br>2： Poor connection of the motor signal wire | 斷電後檢查：<br>1、請檢查機頭是否被卡住<br>2、請檢查電機是否被卡住<br>3、電機電源端子脫落或鬆動，然後重新上電，如果還不能解決，請聯繫售後服務人員<br><br>Turn off the controller<br>1、Check the machine if stuck<br>2、Check the motor if stuck<br>3、Poor connection of the motor power plug, restart the controller. Contact with the after sales if the problem still occur. |

| | | | |
|---|---|---|---|
| Er07 | 顯示屏和主機板通訊超時<br>Serial communication timeout | 1：顯示屏連接主機板線連接不良<br>2：主機板晶片損壞<br>1：Poor connection of the display<br>2：Damage of the controller mainchip | 1：檢查顯示屏與控制器連接線<br>2：檢查控制器是否還可運行，如不能運行就是控制器損壞<br>3：檢查機器旁是否有高頻機器干擾<br>4：更換顯示屏<br><br>1：Check the wire between the display and controller<br>2：Check if the pedal is good or not<br>3：Check if there is high frequency machine interference<br>4：Change the display |
| Er09 | 記憶體不良<br>memory error | 主機板記憶體損壞或不良<br>Memory on mainboard damage or error | 控制器損壞，請聯繫售後服務人員<br>Contact with the after sales for the controller problem |
| Er10 | 光眼控制線路故障<br>Sensor control line error | 顯示屏連接光眼線路不良<br>Poor connection between the display and the controller | 1：顯示屏損壞<br>2：顯示屏背部光眼連接線接觸不良，請聯繫售後服務人員<br>1：The damage of the display<br>2： Poor connection of the sensor wire, contact with the after sales. |
| Er15 | 編碼器故障<br>the motor board error | | 請聯繫售後服務人員<br>Contact with the after sales |
| Er16 | 過壓<br>Over load | 電壓超出限制範圍<br>The voltage is higher than limited | 請檢查輸入電源電壓是否在額定範圍內（AC260V），若上述無法解決，請聯繫技術人員<br>Check if the voltage is higher than AV260V, contact with the after sales if the problem can not be solved |
| Er17 | A相電流檢測故障<br>A current checking error | | 請聯繫售後服務人員<br>Contact with the after sales |
| Er18 | B相電流檢測故障<br>B current checking error | | 請聯繫售後服務人員<br>Contact with the after sales |
| Er19 | AB相電流檢測故障<br>A&B current checking error | | 請聯繫售後服務人員<br>Contact with the after sales |
| Er20 | 欠壓故障<br>Less volt error | 電壓低於限制範圍<br>The voltage is lower than limited | 請檢查輸入電源電壓是否在額定範圍內（AC180V），若上述無法解決，請聯繫請聯繫技術人員<br>Check if the voltage is lower than AV180V, contact with the after sales if the problem can not be solved |

# SiRUBA
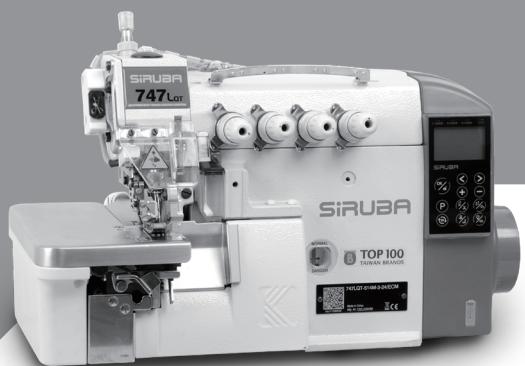
| Er22 | 控速器故障<br>Pedal error | 1. 前踩控速器開機<br>2. 控速器數值不對<br>1.Pushing the pedal when boot on<br>2.The wrong value of the pedal | 1. 重新前踏控速器解除<br>2. 按 P 鍵＋剪刀剪進入維護參數，再按 OK 鍵查看（200±15%），數值大於則更換控速器<br>1.Push the pedal again to disengage<br>2.Press P and trimmer key to enter the maintenance parameters, press OK when on the pedal interface, check the value if it is 200±15% when the pedal do not work, change it if the value is abnormal |
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| ER-35 | 步進電機硬體過流保護<br>Stepping motor hardware overcurrent protection | 1：檢查步進電機信號線是否鬆動；<br>2：檢查步進電機電源線是否鬆動<br>1：Check the connection of the stepper motor signal wire<br>2：Check the connection of the stepper motor power wire | 若不能解決，請聯繫售後服務人員<br>Contact with the afters sales if can not solve the problem |
| ER-37 | 步進電機相 A 電流檢測故障<br>Stepping motor phase A current detection failure | 主機板晶片損壞<br>Damage of the controller mainchip | 請聯繫售後服務人員<br>Contact with the after sales |
| ER-38 | 步進電機相 B 電流檢測故障<br>Stepping motor phase B current detection failure | 主機板晶片損壞<br>Damage of the controller mainchip | 請聯繫售後服務人員<br>Contact with the after sales |
| ER-39 | 步進電機相 AB 電流檢測故障<br>Stepping motor phase A B current detection failure | 主機板晶片損壞<br>Damage of the controller mainchip | 請聯繫售後服務人員<br>Contact with the after sales |
| ER-45 | 步進電機編碼器故障<br>Stepping motor encoder failure | 檢查步進電機信號線是否鬆動<br>Check if the stepper motor signal wire is poor connected | 若不能解決，請聯繫售後服務人員<br>Contact with the afters sales if can not solve the problem |

## 報廢流程

1. 當機器需要被淘汰與報廢時，有一些基本規則必須採納、遵守以保護環境及公眾健康。

2. 所有的機器零組件必須依照下列分類來區分開：
(1) 所有護套、可伸縮軟管及塑膠或非金屬零件。
(2) 電器零件：開關、照明器具等。

(3) 絕緣材料：石棉、彈性／可伸縮橡膠片。

(4) 金屬：含鐵金屬、銅、青銅與黃銅、其他各種金屬。
3. 以此方法，所有材質可以正確的淘汰，回收再利用或鎔解為可再使用或再處理而不至於危害環境。

## DEMOLITION PROCEDURE

1.When the machine needs to be eliminated and demolished, certain basic rules must be observed to protect the environment and public health.
2.All machine componenets must be divided according to categories as the followings:
(1)All sheaths, flexible hosing and plastic or non-metal components.
(2)Electricity components: switches, or lighting components.
(3)Insulation materials: rock wool, and flexible rubber strips.
(4)Metals: ferrous metals, copper, bronze and brass, various.
3.In this way, all materials can be eliminated correctly, recycled, or melted down for reuse or disposed of so that they do not harm the environment.

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