

SIRUBA

使用說明書與零件圖

INSTRUCTIONS BOOK & PARTS LIST

■ ASO-STM100



溫馨提醒 A WARM REMINDER

請儘快下載 SIRUBA APP，並將您的機器註冊，以便獲得原廠的保固。APP 還提供多項有用的資訊。

please register your Siruba machine online or through Siruba App at once, as to gain the full warranty protection. You may also acquire more useful information through Siruba APP.



安全警示 GENERAL SAFETY INSTRUCTION

有關於縫紉機，自動化機構，以及其他輔助設備（以下統稱為機器），在工作中無可避免會接近機器移動區域，也就有伴隨著潛在風險。因此，我們強烈要求操作者，維修技師一定要先仔細閱讀並瞭解本操作手冊的內容。安全指示係包含了某些未載於規格書上的加裝配件。現場管理者有責任要求所有操作者要閱讀並瞭解機器的操作與注意事項。未能確實遵守本手冊所記載的事項，將可能導致機器的損害，或是人員的傷亡。

For the sewing machine, automatic mechanic system, and auxiliary devices (hereinafter referred as “machine”), it is inevitable to conduct work near moving parts of the machine. This means that there is always a potential risk from the moving parts. Operators actually operating the machine and service technicians performing maintenance and repair are strongly advised to read and understand fully the following instructions in advance. The safety instructions include items which are not listed in the specifications of your product. It is the manager/supervisor’s responsibility to have their fellow workers fully understand before operation. Fail to follow the instructions may cause damage to properties, severe injury or even death.

警告標示說明

Explanation of warning indications and labels.

	<p>高壓電危險 在機器關機後十分鐘內，勿開啟電控箱。</p> <p>HIGH VOLTAGE DANGER Do not open the power cabinet within 10 minutes after the power off.</p>		<p>零部件移動區 勿接近，以避免人員受傷。</p> <p>Machine moving area! Stay away and keep clear to avoid injury.</p>
	<p>零部件高速移動區 勿接近，以避免人員受傷。</p> <p>High speed moving area! Stay away and keep clear to avoid injury.</p>		

標告標示說明 WARNING LABELS	標告標示說明 WARNING LABELS
<p>機器零部件移動區，勿接近，以避免人員損傷。 A risk of cut and injury from moving parts. Stay away and keep clear.</p>	<p>請注意，在操作過程中握住縫紉機會傷到您的手。 Be aware that holding the sewing machine during operation can hurt your hands.</p>
<p>有電，危險。 A risk of electric shock. Stay away and keep clear.</p>	<p>小心被機械捲件受傷！ There is a risk of entanglement in the belt resulting in injury.</p>
<p>高溫度區！危險，勿靠近。 A risk of burn from the high temperature area. Stay away and keep clear.</p>	<p>如果觸摸按鈕托架，可能會造成人身傷害。 There is a risk of injury if you touch the button carrier.</p>
<p>強光！勿直視，以避免眼睛受傷。 Avoid direct eye contact with the laser beam or other light source.</p>	<p>一般安全標示 GENERAL SAFETY INDICATIONS</p> <p>機器運行方向 The correct direction is indicated.</p>
<p>小心頭部撞擊！ A risk of injury to head from upper contact. Apply proper protection (helmet) and keep clear.</p>	<p>電氣接地位置標示 Grounding connection as indicated.</p>

安全須知

危險

意外事件將會導致人員受傷甚至死亡，也會造成財產的損害。
當有必要進行電控系統的檢修時，務必要關閉電源，並等候至少5分鐘以上才能打開電控箱／操作箱，以避免電擊。

注意

1. 基本預防

- (1) 在操作前務必先閱讀操作手冊與其他機器電件的說明書，請妥善保存操作手冊與說明書以便隨時查閱。
- (2) 這些注意措施包含了機器上加裝，但未列在規格書上的項目。
- (3) 務必要戴護目鏡與手套，以避免破損零件所帶來的傷害。
- (4) 有裝戴心臟調節器的人員，請先詢問醫護人員有關注意事項。

2. 安全裝置與警告標示

- (1) 操作前要檢查，並確認所有的安全設施有妥善安裝且運作正常。
- (2) 若安全設施因維修需要移動，在機器重新啟動操作前，請確認安全設施有重新安裝回原位，並且運作正常。
- (3) 機器上的安全警告標示要保持完整與可辨視。如果有污損或遺失，請儘以更新。
- (4) 未能確實遵守安全規範，將會導致人員受傷，甚至影響生命安全。

3. 應用與修改

- (1) 嚴格禁止機器使用在非原始設計用途。也禁止以任何不是操作手冊上記載的方式來操作機器。
- (2) 嚴格禁止修改機器。任何未經原廠許可的變動將不在保固範圍內。
- (3) 機台一經修改變動，本公司將不擔負財務損失，人員傷亡的責任。

4. 教育與訓練

- (1) 工廠主管人員有義務提供機台使用人（操作者／維修者）相關的教育訓練。良好的教育訓練不僅可以避免造成人員傷害，也可以避免財產的損失。
- (2) 操作人員操作機器之前，都必需接受過良好的訓練。
- (3) 機器的維修保養必須由合格的技師執行。

5. 必須關閉電源的情況：

如何關閉電源：按壓下緊急停止開關（如果機器有配置的話），關閉電源，拔除電源線。

- (1) 當機器出現異常時，按下緊急停止開關（如果有配置），關閉電源。
- (2) 為了避免機器突然啟動造成意外，在操作機器前，要先確定機器電源關閉，再行開啟電源。
- (3) 當檢查或清潔機器時，關閉電源，並確定機器已完全停止運作。
- (4) 當維修機器時（如更換或調整零件），要關閉電源，並確定機器已完全停止運作。

6. 拔除電源線時，務必要抓住電源插頭，而非抓住電源線，以避免斷裂，電擊，甚至火災。

7. 當機器停止運作，且無人看管時，要關閉電源。

8. 萬一停電或電力供應出現不穩，關閉電源，以避免意外發生。

SAFETY PRECAUTIONS

Danger

An accident means "to cause personal injury or death, or damage to property."

When it is necessary to perform service on electrical parts, be sure to turn the power off and wait for 5 minutes or more before opening the power cabinet/box in order to avoid electrical shock.

Caution

1. Basic precaution

- (1) Read the manual and other papers supplied with accessories of the machine before operation. Keep the manual and papers at hand for quick reference.
- (2) The content of this section includes items which are not listed in the specification of your product.
- (3) Always wear safety goggles and gloves to avoid accident caused by parts breakage.
- (4) For those who use a heart pacemaker, please consult the medical specialist first.

2. Safety devices and warning labels

- (1) Check to ensure all safety devices are correctly installed in place and properly before operation.
- (2) If any of the safety devices is removed for service cause, please be sure to replace it back to position and verify that it works normally before resuming operation.
- (3) Always keep the warning labels adhered on the machine clearly visible. If any of the labels missing or contaminated, replace with a new one at soon.
- (4) Fail to obey instructions above may cause severe injury or death to the operators.

3. Application and modification

- (1) It is prohibited to use the machine for any application other than its original intention, or in any manner other than that prescribed in the instruction manual.
- (2) Never modify or alter the machine. Any unauthorized change of the specification will not be covered by the warranty.
- (3) Our company assumes no responsibility/liability to damages, injuries, or death resulting from the machine which has been modified or altered.

4. Education and training

- (1) The plant managers/supervisors are obliged to provide education and training to operators and service technicians. A good education/training plan not only avoids personal injury but also prevent damage to the property.
- (2) Only a well-trained operator is allowed to operate the machine.
- (3) Only a certified technician is allowed to perform service to the machine.

5. Situations that you must turn off the power

Turning off the power: press EMG Stop (if there is one), switch off the power, and remove the power plug from the outlet.

- (1) When there is a failure or abnormality, press EMG Stop (if there is one), switch off the power.
- (2) To prevent accident resulting from abrupt start of the machine, before operating the machine, always turn off the power and switch on again.
- (3) When cleaning or inspecting the machine, make sure the machine stops completely after turning off the power.
- (4) When performing service (i.e. changing or adjusting any component), make sure the power is off and the machine stops completely.

6. Remove the power plug by holding the plug section instead of the cord to avoid electrical shock, leakage, or fire accident.

7. Turn off the power whenever the machine is left unattended between works.

8. In case of a power failure or black out, turn off the power to avoid damage or accident.

在不同階段的注意事項

PRECAUTIONS TO BE TAKEN IN VARIOUS OPERATION STAGES

1. 運輸

- (1) 當搬運或移動機器時，請考量機器重量，選擇安全合適的方式。請參考機器規格。
- (2) 採取足夠的安全防護，以避免機台在搬運或移動中掉落。
- (3) 為避免意外，運送時不要重覆使用包裝材料。

2. 拆箱

- (1) 在拆箱前，檢查機器是否平穩放置，並採用適當的工具維持拆箱過程的穩定。
- (2) 進行拆箱時，遵循外箱上的指示，小心外箱上的釘子或碎片。

3. 安裝：

3A. 桌板與腳架

- (1) 採用原廠的桌板以確保機器得到足夠的保護與支撐。如果在安裝或維修時，需要暫時將機器置放於物件上，請確定該物件有足夠的支撐力。
- (2) 如果桌板有裝置滾輪，滾輪需要有煞車鎖定機構，而且在操作與維修時，煞車機構必需鎖定。

3B. 電線與管路

- (1) 電線與管路的材質必需符合規範與需求。
- (2) 電線與管路不能夠有折彎或壓迫。移動的零配件上，電線與管路需有至少 30mm 以上的預留量。
- (3) 接線時不能有跳火。
- (4) 所有接頭都必需確實固定。當拆除時，務必要抓住接頭本體。

3C. 接地

- (1) 接地是必需的。且需由合格的技師來施工。
- (2) 在操作前需確認接地有確實。

3D. 馬達

- (1) 馬達的選用，必需符合規範與需求。
- (2) 如果馬達為皮帶傳動，務必要安裝保護措施以避免捲入危險。

4. 在開始操作前

- (1) 在開啟電源前，確認所有接頭，電線，管路都完好無損，確實連結。
- (2) 檢查皮帶輪的轉向與標示為同一方向。
- (3) 確認腳架滾輪都已鎖定。
- (4) 保持作業範圍淨空。

5. 在操作中

1. Transportation

- (1) When lift or move the machine, please take the machine weight into consideration and apply a safe manner. Refer to the specification for the information you need for transportation.
- (2) Apply sufficient safety measures when lifting or moving the machine to avoid falling or dropping.
- (3) To avoid unexpected accident, do not reuse the packing material for transportation.

2. Unpacking

- (1) Before proceeding to unpacking, check the balance of the machine and apply necessary tools to hold the proper position.
- (2) When unpacking, follow the instruction printed on the cartoon. Be careful of the nails and chips when unpacking from a wooden rack.

3. Installation:

3A. Table and Stand

- (1) Only adopt a qualified genuine table and stand to assure the holding support. In case you need to leave the machine on a surface temporarily for service, make sure the surface is strong enough to hold the weight.
- (2) If casters are applied to the table stand, adopt casters with a locking mechanism only and lock them well to secure the machine during the operation and service.

3B. Cable and Wire

- (1) The cables and wires must comply with the specification and requirement.
- (2) The cables and wires shall be free from bending or extra force. Reserve a free space of at least 30mm between cables/wires and the moving parts.
- (3) Do not apply starburst connection when wiring.
- (4) All connectors must be fixed securely. And always hold the connector body when removing it.

3C. Grounding

- (1) Grounding is necessary and must be done by a certified technician. (2) Check and ensure the grounding is secured before operation.

3D. Motor

- (1) The motor must comply with the specification and requirement.
- (2) If there is a belt in the motor transmission, adopt or apply a proper protector to avoid entangling.

4. Before Operation

- (1) Before turning on the power, make sure all the connectors, cables, and wires are free from damage, dropout, or looseness.
- (2) Check and make sure the pulley rotation follows the same direction as labels.
- (3) Make sure all the stand casters are locked or fixed in position.
- (4) Keep the working area clean from obstacles.

5. During Operation

- (1) Always keep your fingers, hair, or clothing away from the moving components and moving area. Do not place your personal belongings on the machine.

- (1) 注意手，頭髮，衣服不在機件移動範圍。不要將個人物品置放於機器上。
- (2) 機器會高速運作。保持雙手遠離移動機件範圍。機器完全停止前不要靠近。
- (3) 在移動物件或重新設定機器時，注意不要被機器或零件撞擊。
- (4) 避免突然起動造成意外，在檢查或維修馬達或皮帶時，務必關閉電源並確認機器完全停止。
- (5) 機器停止時，伺服馬達是無聲的。注意要關閉電源以免突然起動。
- (6) 永遠保持電控箱的風扇與氣道淨空。

6. 潤滑

- (1) 請依照說明書指示，選用合格的油脂來潤滑機件。
- (2) 如果油品接觸到眼睛或身體，立即以清水沖洗。如有不適，立即尋求醫護人員協助。
- (3) 如果油品不慎進入身體，立即尋求最近的醫療協助。

7. 維修保養

- (1) 只有合格的技師或工程師能夠進行維修服務，包含機器調整與修理。只採用原廠的零件進行更換。如果採用非原廠零件，或是因不當維修／調整所造成的傷害，本公司將不負任何責任。
- (2) 只有合格的技師或認證的工程師才能對電控系統進行維修或保養。
- (3) 當對氣動原件（如氣缸）進行維修保養時，務必先拔除風源，並將氣體完全洩除，以避免突然啟動。
- (4) 在調整或更換部件後，檢查所有螺絲是否鎖固。
- (5) 定期清潔是必需的。在清潔前務必先關閉電源，並確認機台完全停止。
- (6) 如果運作異常或不良，立即停止操作並關閉電源。聯絡授權經銷商或我們公司以尋求技術協助。
- (7) 當保險絲故障，立即關閉電源，找出故障原因並予以排除後，更換同規格的新的保險絲。
- (8) 定期檢查與清潔風道，電線與管路。

8. 工作環境

- (1) 機器必需不用電磁波干擾。
- (2) 電源供應必需良好且穩定。電壓波動不得超過 10%。
- (3) 隨時檢查空壓的壓力與品質。如果氣源不穩定，請安裝合適器材以改善。
- (4) 機器操作環境，室溫 5° C ~ 35° C，相對濕度 35%~85%。
- (5) 為了保護電子元件與安全起見，當有劇烈氣溫變化而導致凝水時，立即關閉並拔除電源，並靜候至完全乾燥為止。
- (6) 為了安全起見，當有打電或閃電時，請停止操作，關閉並拔除電源。
- (7) 勿在機器週遭使用電視或收音機，以避免干擾。
- (8) 依當地法令規範，在操作中採取必要的防護。
- (9) 關於包裝材料，潤滑油品，以及機器（含零配件）的丟棄，請依各地政府法規的規範執行。

- (2) The machine is designed to run at high speed. Always keep your hands away from the moving area. Do not resume the work cycle until the machine stops completely.
- (3) Be careful not to be caught by the machine or components when removing or resetting the machine.
- (4) To avoid accident caused by abrupt start, when performing service on the motor or belt, make sure the power is off and the machine stops completely.
- (5) A servo motor is silent as the machine stops. Be sure to turn off the power to avoid an abrupt start. (6) Always keep the fan and airway of the power cabinet clean from any obstacle.

6. Lubrication

- (1) Apply only qualified oil and grease onto the parts as instructed in the manual.
- (2) If the lubricant contacts your eye or body, wash it off immediately. Consult a medical care if necessary.
- (3) If the lubricant goes into your body accidentally, go to the nearby medical care immediately.

7. Service

- (1) Only a certified engineer/technician is allowed to perform service to the machine, including adjusting and repairing. Use only genuine parts for replacement. Our company assumes no responsibility/liability for any accident caused by improper repair or adjustment, or the use of any parts other than genuine one.
- (2) Only a certified technician or authorized engineer is allowed to repair or maintenance the electric system.
- (3) When performing service to air-driven parts, like an air cylinder, first disconnect the air supply and expel the air completely to avoid abrupt start.
- (4) Check all screws and nut are fixed well after adjusting and replacement.
- (5) A periodical cleaning is necessary. Make sure the power is off and the machine stops completely before cleaning.
- (6) If the machine functions poorly or abnormally, stop the operation and turn off the power. Contact the authorized dealers or us to request for a technical service support.
- (7) When there is a fuse failure, turn off the power, find out the cause of the failure and apply solution to it, then replace with a new one with the same spec.
- (8) Periodically check and clean the fan airway and the cable/wiring.

8. Working Environment

- (1) The machine should be free from the affection of electro-magnetic wave.
- (2) The power supply should be in good and reliable condition, the fluctuation of rated voltage should be less than 10%.
- (3) Always check the air pressure and quality. Some extra device might be needed if the supply is not reliable.
- (4) The machine is designed to be used with ambient temperature 5° C ~ 35° C, relative humidity 35%~85%.
- (5) To protect the electronic components and for safety cause, when there is a frost resulting from a dramatic temperature rise, disconnect the power and wait until it dry completely.
- (6) For safety cause, when there is a thundering or lightening, stop the operation and disconnect the power supply.
- (7) Do not use TV or radio nearby the machine as to avoid interference.
- (8) Apply necessary protection during operation. Follow applicable regulations set by local administration.
- (9) For disposal of packages, lubricant, and product, please follow the applicable regulations set by local administration.





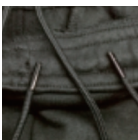

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規格

SPECIFICATION

型號	Model	ASO-STM100		
適用孔眼	Applicable hole	平頭眼 Flat bottom hole 	鳥眼繡 Bird's Eye Embroidery 	金屬氣眼 Metal eyelet 
適用帶繩	Suitable for rope	切口 Incision $\geq 5\text{mm}$ 	直徑 Diameter $\geq 5\text{mm}$ 	直徑 Diameter $\geq 5\text{mm}$ 
噪音	Noise	<79dB		
腰圍	Waistline	80-170cm		
電源電壓	Power Supply	Single Phase 1 Φ AC200~240V 50/60Hz		
消費電力	Power Consumption	700 W (Max)		
重量	Weight	120Kg		
機器尺寸	Machine Dimensions	(W)1180×(D)580×(H)1750mm (含桌板、線架 With table and thread stand)		

※ 選購配件 Options

鋼絲規格 (耗材) Steel wire specification (Consumables)

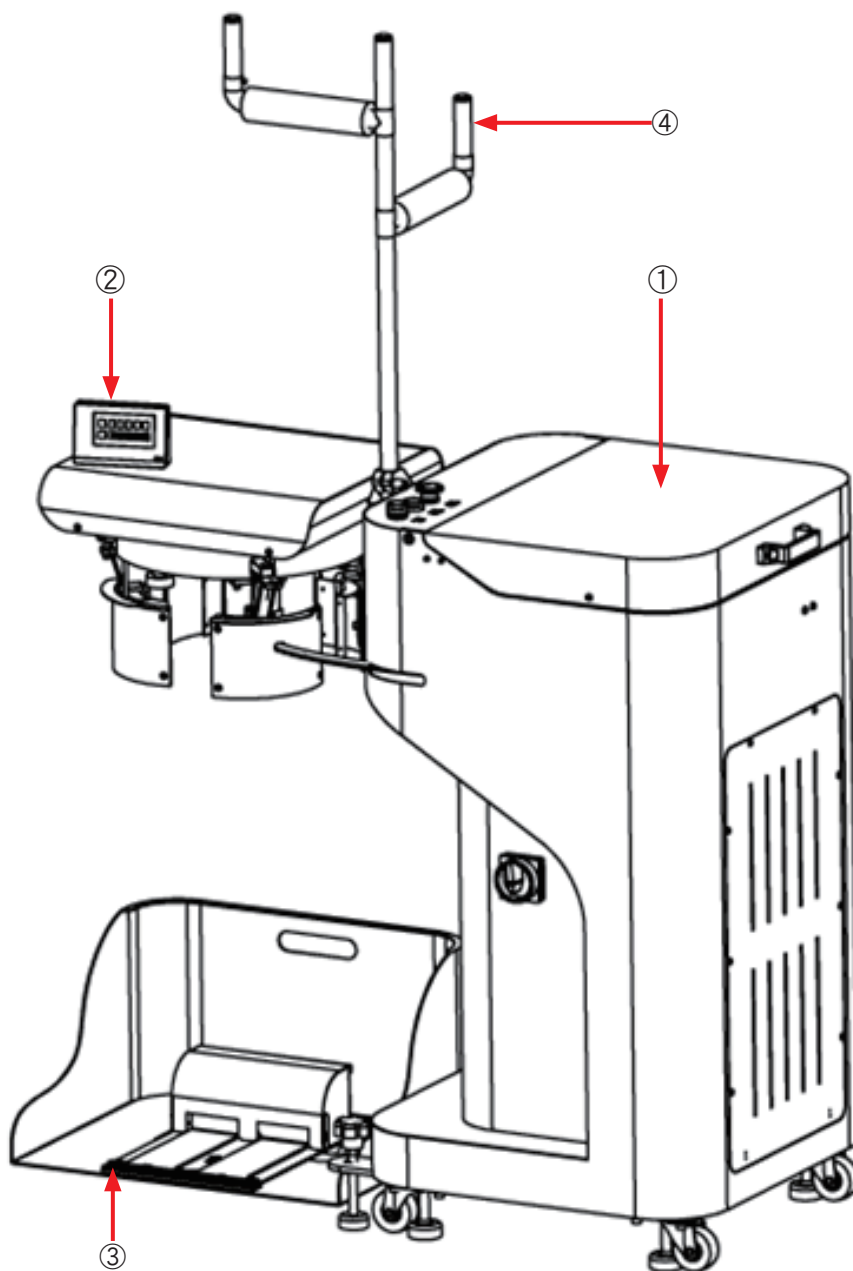
 <p>提供童裝版元件 (選配) TKO1 Provide children's wear edition components (Optional) TKO1</p> <p>適用腰圍尺寸 50~90cm 最小褲腰尺寸 50cm minimum waist size 50cm</p>	 <p>GSO1 標準版彎彎鋼絲 (大頭) 約 7-8mm 孔眼 Standard edition bending steel wire (large head) Coping with 7-8 mm hole.</p>	 <p>GS02 專用版折彎鋼絲 (小頭) 應對 5~6mm 孔眼 Special edition bending steel wire (Small head) Coping with 5-6mm hole.</p>	 <p>GS03 定製版模具鋼絲 應對特殊繩頭 (塑膠、 金屬頭) Custom edition mold steel wire Coping with special rope head (plastic metal head).</p>
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安裝

COMPONENT ASSEMBLY DIAGRAM

- ①主框架
- ②撐褲腰組件
- ③踏板組件
- ④繩架

- ① Main frame
- ② Pantaloons
- ③ Pedal Assembly
- ④ Rope frame



操作說明

OPERATING INSTRUCTIONS

1. 開機啟動：

首先將機器總電源插頭插入插座，然後順時針旋轉開關接通電源。OFF 表示關閉（如圖右），ON 表示打開（如圖左）。

1. Power Up. Start

First, insert the machine's main power plug into the socket, then turn the switch clockwise to turn the power on. Off Means Close (right in figure) , ON means open (left in figure) .



2. 踏板操作：

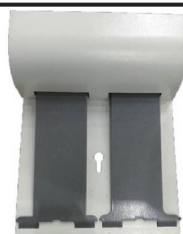
- (1) 電源燈亮表示有電源，滅表示無電源。
- (2) 調試點動：打開維修蓋板時，按住調試點動件的同時踩踏板，可轉動大盤。
- (3) 緊急停止鍵：在緊急情況下可輕按順時針擰動，機器在當前狀態下停止。

2. Pedal operation

- (1) Power light indicates that there is power, no power if it is switched off;
- (2) COMMISSIONING START: When opening the maintenance cover, press and hold the commissioning start moving parts while stepping on the pedal, can rotate the big plate;
- (3) Emergency Stop Button: In an emergency, you can gently press clockwise screw, the machine in the current state of stop.



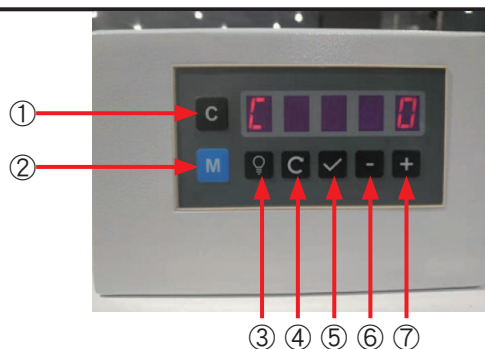
踩踏左踏板鋼絲伸出，踩踏右踏板鋼絲縮回。



Press the left pedal wire out, press the right pedal wire retract.

3. 計數器空轉盒說明：

- ① 計數開關
- ② 模式切換
- ③ 照明燈開關
- ④ 計數清零
- ⑤ 確認
- ⑥ 數值減
- ⑦ 數值加



3. Counter idling box description

- ① Counting switch
- ② Mode switching
- ③ Light switch
- ④ Count to zero
- ⑤ Confirmed
- ⑥ Numerical subtraction
- ⑦ Numerical addition

調試說明

DEBUGGING INSTRUCTIONS

1. 大限位調整

名詞解釋：大限位即瓦片伸開的最大位置。

按 M 鍵調整大限位，數值越大瓦片伸出越大。

2. 小限位的調整

名詞解釋：小限位即瓦片縮回的最小位置。

旋鬆小星型把手①，手動推拉小星型把手，往半徑向外則小，往半徑內則大。

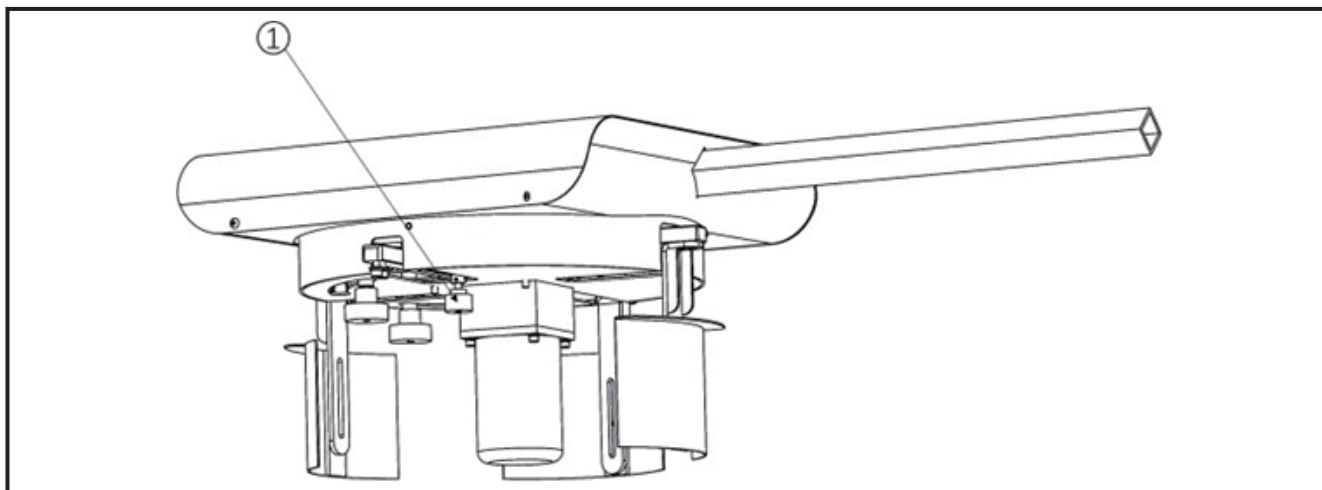
1. Large limit adjustment

The maximum limit is the maximum position in which the tiles extend. Press the M key to adjust the maximum limit, the larger the value, the larger the tile.

2. Small Limit Adjustment

A small limit is the minimum position in which the tile retracts.

Loose small star-shaped handle ①, manual push and pull small star-shaped handle, toward the radius outward is small, toward the radius inside is big.

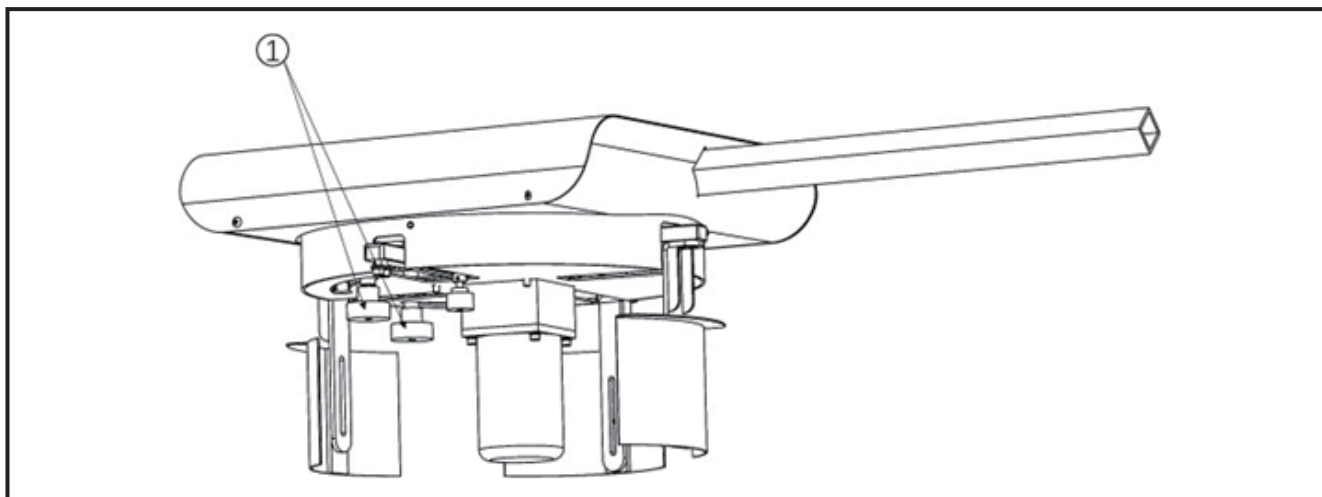


3. 瓦片位置的調整

旋松此圖中兩個大星型把手①，鬆開瓦片與撐褲腰支架的連接，然後左右旋轉底板，根據實際情況調整瓦片位置，調整讓鋼絲順暢進出即可。

3. Adjustment of tile position

Loosen the two big star-shaped handle ① in this picture, loosen the connection between the tile and the brace of the trousers waist, then rotate the bottom plate left and right, adjust the tile position according to the actual situation, adjust to let the steel wire in and out smoothly.

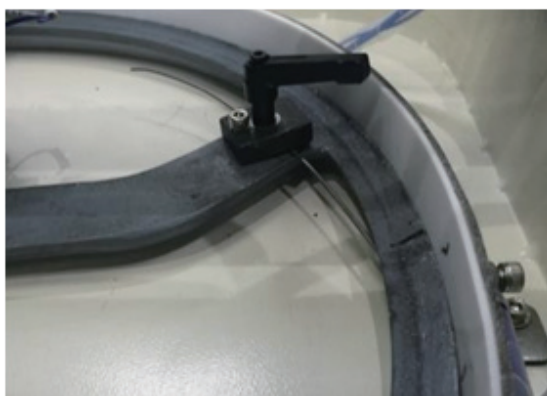
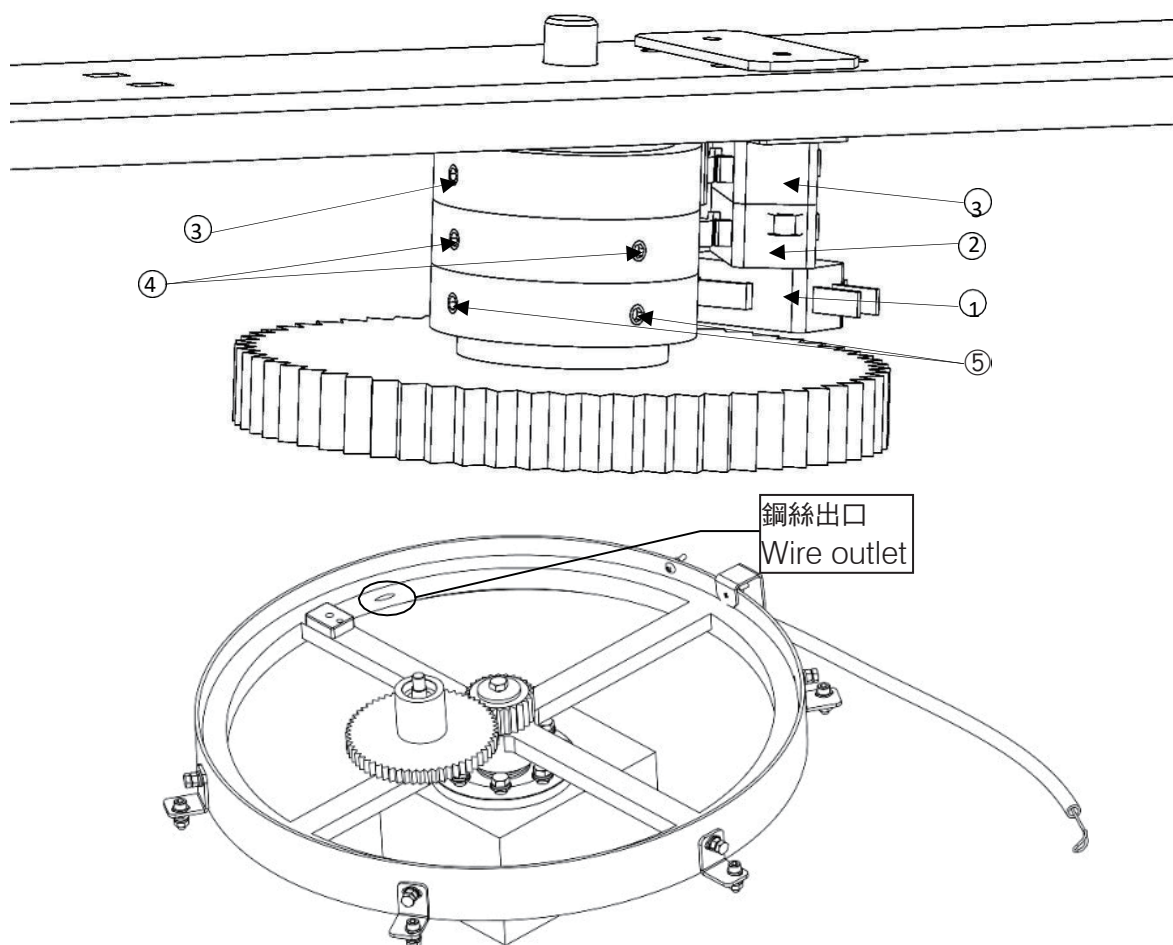


4. 伸縮限位及換鋼絲

微動開關控制說明：伸出限位①，低速限位②，縮回限位③。

4. Retractable limit and wire replacement

Micro switch control instructions: Extend Limit ①, low speed limit ②, Retract Limit ③.



- (1) 旋松感應凸輪⑤固定螺絲，當大盤鋼絲孔運動到鋼絲擋圈 U 型槽 20-25 公分時固定感應凸輪⑤固定螺絲。
- (2) 旋松鋼絲壓板螺絲，將鋼絲從套管——U 型槽 ——大盤鋼絲孔插入，置於鋼絲壓板下固定鋼絲壓板螺絲。
- (3) 旋松感應凸輪③、④固定螺絲，讓大盤逆時針運動鋼絲頭到套管口時⑤固定感應凸輪③、④固定螺絲。
- (1) Loosen the fixing screw of the induction Cam ⑤ and fix the fixing screw of the induction Cam ⑤ when the large wire hole moves to the u-shaped groove of the wire retaining ring 20-25 cm.
- (2) Loosen wire plate screws and place the wire under the wire plate and secure the wire plate screws by inserting the wire from the sleeve to a type of Florida u-shaped groove.
- (3) Loosen the fixing screw of the Induction Cam ③ and ④, and let the big plate move counterclockwise from the wire head to the casing opening. ⑤ fix the fixing screw of the Induction Cam ③ and ④.

計數器盒子參數設置

COUNTER BOX PARAMETER SETTING

按 “ + ” 開機，參數設置		According to +Power on, parameter setting	
NO.1	馬達高速	Motor high speed	2000
NO.2	馬達中速	Motor medium speed	500
NO.3	馬達低速	Motor low speed	150
NO.4	機構皮帶輪	Mechanism pulley	默認 Default
NO.5	馬達皮帶輪	Motor pulley	默認 Default
NO.6	0 雙踏板，1 單踏板	0 Double pedal, 1 Single pedal	0
NO.7	計件確認時間	Counting confirmation time	5
NO.8	OFF 遮罩 E12/E14 報警	OFF Mask E12/E14 Alarm warning	OFF

按 “ M ” 開機，測試輸出		Press ‘M’ to turn on and test the output	
OUT1	撐褲腰伸 Waist extension	按 “ + ” 鍵	Press ‘+’ button
OUT2	撐褲腰縮 Waist shrinkage	按 “ + ” 鍵	Press ‘+’ button
OUT3	指示燈 Indicator light	按 “ + ” 鍵	Press ‘+’ button
OUT4	衣車燈 Sewing lights	按 “ + ” 鍵	Press ‘+’ button
OUT5		按 “ + ” 鍵	Press ‘+’ button
OUT6		按 “ + ” 鍵	Press ‘+’ button

感測器編號 Sensor number	感測器定義	Sensor definition
Sw1/S4	鋼絲縮限位 N.C	Wire shrinkage limit n.C
Sw2/S5	鋼絲縮減速 N.O	Wire reduction deceleration n.O
Sw3/S6	鋼絲伸限位 N.C	Wire extension limit n.C
Sw4/S11	鋼絲伸減速 N.O	Wire extension deceleration n.O
Sw5/S3	撐褲腰伸限位 N.C	Waist extension limit n.C
Sw6/S2	撐褲腰縮限位 N.C	Support pants waist reduction limit n.C
Sw7/S1	踏板反轉開關 N.C	Pedal reverse switch n.C
Sw8/S10	安全門 N.O	Safety door n.O
Sw9/S8	緊急停止 N.C	Emergency stop n.C

按 “ + ” 開機	Press + to turn on	參數設置	Parameter setting
按 “ M ” 開機	Press M to turn on	測試輸出	Test output
按 “ √ ” 開機	Press √ to turn on	啟動程式	Start the program
按 “ LED ” 開機	Press the LED to turn on	檢測踏板電阻	Check the resistance of the pedal
按 “ C ” 開機	Press C to turn on	監測大盤轉速	Monitor the speed of the main disk
Sw8/S10		安全門 N.O	Safety door
Sw9/S8		緊急停止 N.C	Emergency stop

報警說明

ALARM DESCRIPTION

異常原因與對策

Mechanic or finished quality issue

代碼 Code	條件 Condition	說明 Explanation	復位 Reset
E5	設備開啟時，固定出現故障碼 E-5 It shows error code E-5 when machine is switching on	當設備啟動時，系統會先行檢測一次腳踏狀態，若腳踏沒有回饋信號將會報故障碼 E-5。觸發腳踏後自動清除故障碼 協同控制器廠家更新程式，取消開機檢測 When machine is switching on, the system will check pedal control status first, if pedal control system does not work, it will show error code E-5. Press the pedal to eliminate error code. Coordinate with supplier to upgrade the program to cancel the machine switch-on test.	OK 鍵 OK button
E10	撐褲腰縮回時間大於撐開時間 1S The waist retracting time is longer than the opening time by 1S	S2 微動開關故障 / 撐褲腰馬達損壞 S2 micro switch failure / damage to the tubular extending motor	OK 鍵 OK button
E11	S3 OFF	S3 微動開關故障 / 撐褲腰到達極限位置 S3 micro switch failure / tubular extending motor reached the limit position	OK 鍵 OK button
E12	S5 ON + S1 OFF 大盤電機運行狀態累計 0.5S// PS : S5 OFF + S1 ON + 大盤電機運行即清零累計 S5 ON + S1 OFF accumulated operating status of the big plate 0.5S//PS : S5 OFF+ S1 ON + clearing the accumulation when the big plate is running S5 ON + S1 OFF	S4 微動開關故障 S4 micro switch failure	OK 鍵 OK button
E13	S4 OFF + S5 OFF	S5 微動開關故障 S5 micro switch failure	OK 鍵 OK button
E14	S11 ON + S1 ON 大盤電機運行狀態累計 0.5S// PS : S11 OFF + S1 OFF + 大盤電機運行即清零累計 S11 ON + S1 ON accumulated operating status of the big plate 0.5S//PS : S11 OFF+ S1 OFF + clearing the accumulation when the is running S5 ON + S1 OFF	S6 微動開關故障 S6 micro switch failure	OK 鍵 OK button
E15	S6 OFF + S11 OFF	S11 微動開關故障 S11 micro switch failure	OK 鍵 OK button
E16	撐褲腰撐開動作完畢 S2 ON The tubular extending action is completed S2 ON	撐褲腰馬達故障 Tubular extending motor failure	OK 鍵 OK button
E17	S8 OFF	急停按下 Emergency stop press	S8 ON
E18	S10 OFF	安全門打開 Security door open	S10 ON

設備日常檢查

DAILY INSPECTION OF EQUIPMENT

1. 接通電源

首先將機器總電源插頭插入插座，然後順時針旋轉開關接通電源。OFF 表示關閉（如圖左），ON 表示打開（如圖右）。

1. Large limit adjustment

The maximum limit is the maximum position in which the tiles extend. Press the M key to adjust the maximum limit, the larger the value, the larger the tile.



2. 手動按鈕

2. Manual button

計數器
Counter

指示燈
Indicator

急停按鈕
Emergency button

擴張調節
Expansion adjustment



電源開關
Power switch

※1. 平時請儘量使用觸控板操作，當觸控板不靈時方可使用手動按鈕。

※2. 急停鍵僅在緊急情況下使用。

※1. Please use the touchpad to operate as much as possible at ordinary times, and use the manual button only when the touchpad is not working.

※2. The emergency stop button is only used in emergency situations.

3. 常見鋼絲損壞部位

3.Common damaged parts of steel wire



鋼絲頭部 Wire head



橫槽 Transverse groove

4. 鋼絲不同部位損壞的處理方案

鋼絲頭部損壞

常見現象：鋼絲頭部焊接處脫落、鋼絲頭部折斷。

處理方案：按下啟動按鈕，輕踩左踏板將大盤伸至最大限位，擰松內六角螺母，然後從皮管處抽出損壞鋼絲。

橫槽處鋼絲損壞

常見現象：橫槽處鋼絲冒出卡住或折斷。

處理方案：在橫槽處選擇合適位置將鋼絲剪斷，然後從兩端分別取出剪斷的鋼絲。

4. Solution for damage of different parts of steel wire.

Wire head damage

Commonplace: the welding part of the steel wire head falls off, and the steel wire head breaks.

Solution: Press the start button, lightly step on the left pedal to extend the big plate to maximum limit, loosen the inner hexagon nut, and then pull out the damaged wire from the hose.

Damage to the steel wire at the transverse groove .

Commonplace: the steel wire is stuck or broken at the transverse groove.

Solution: choose a suitable position at the transverse groove to cut the steel wire, and take out the cut steel wires from both ends.

5. 更換鋼絲流程

(1) 取下廢鋼絲

按下啟動按鈕，輕踩左踏板將大盤伸至最大限位，擰松內六角螺母，然後從皮管處抽出損壞鋼絲。

(2) 換新鋼絲

①將鋼絲尾部伸入皮管，緩慢轉動鋼絲使其進入橫槽，繼續伸入直至鋼絲穿出大盤圓孔。

②將鋼絲伸出定位板，擰緊螺母初步定位，輕踩右踏板使鋼絲緩慢縮回至最小限位。

③根據鋼絲頭部伸出皮管長度手動調整直至鋼絲頭部剛好在皮管入口處。

具體操作方法：擰松內六角螺母，用尖嘴鉗夾住鋼絲尾部，緩慢移動直至位置剛好合適。

5. Process of replacing steel wire

(1) Remove the scrap steel wire

Press the start button, lightly step on the left pedal to extend the big plate to the maximum limit. Loosen the inner hexagon nut, and pull out the damaged steel wire from the hose.

(2) Renew the steel wire

① Extend the tail of the wire into the hose and slowly turn the wire to enter transverse groove. Continue to extend the transverse groove until the steel wire passes through the round hole of the big plate .

② Extend the steel wire out of the positioning plate, tighten the nut for preliminary positioning, lightly step on right pedal slowly retracts the wire to the minimum limit.

③ According to the length of the wire head extending out of the hose, manually adjust until the wire head is just at the entrance of the hose.

Specific operation method: loosen the hexagonal inner nut and clamp it with needle-nose pliers .Hold the tail of the wire and move slowly until the position is just right.

6. 機械傳動部分

1. 每兩天向傳動部位滴入少量潤滑油。

2. 設備擴張機頭齒輪與齒條的定期加油為了延長齒輪的使用壽命及使設備運行過程中更平穩，我們需定期向齒輪齒條處加油潤滑。

6. Mechanical transmission part

1. Drip a small amount of lubricating oil into the transmission part every two days.

2. Regular refueling of the gear and rack of the equipment expansion head in order to extend the gear .The service life of the equipment and make the equipment more stable during operation, we need to set lubricate the rack and pinion regularly.

SERVICE PARTS POLICY

To ensure the quality and safety of machine, all SIRUBA parts pass the highest quality inspection and test. For any case of adopting non-genuine SIRUBA parts for replacement and service, it may cause not only losing the warranty coverage, but also the unexpected damage to the operator and property.

In some cases, issues such as difficulty of obtaining parts might make it impossible for us to repair or replace malfunctioning items even if the service period has not yet ended. We ask for your understanding on this matter

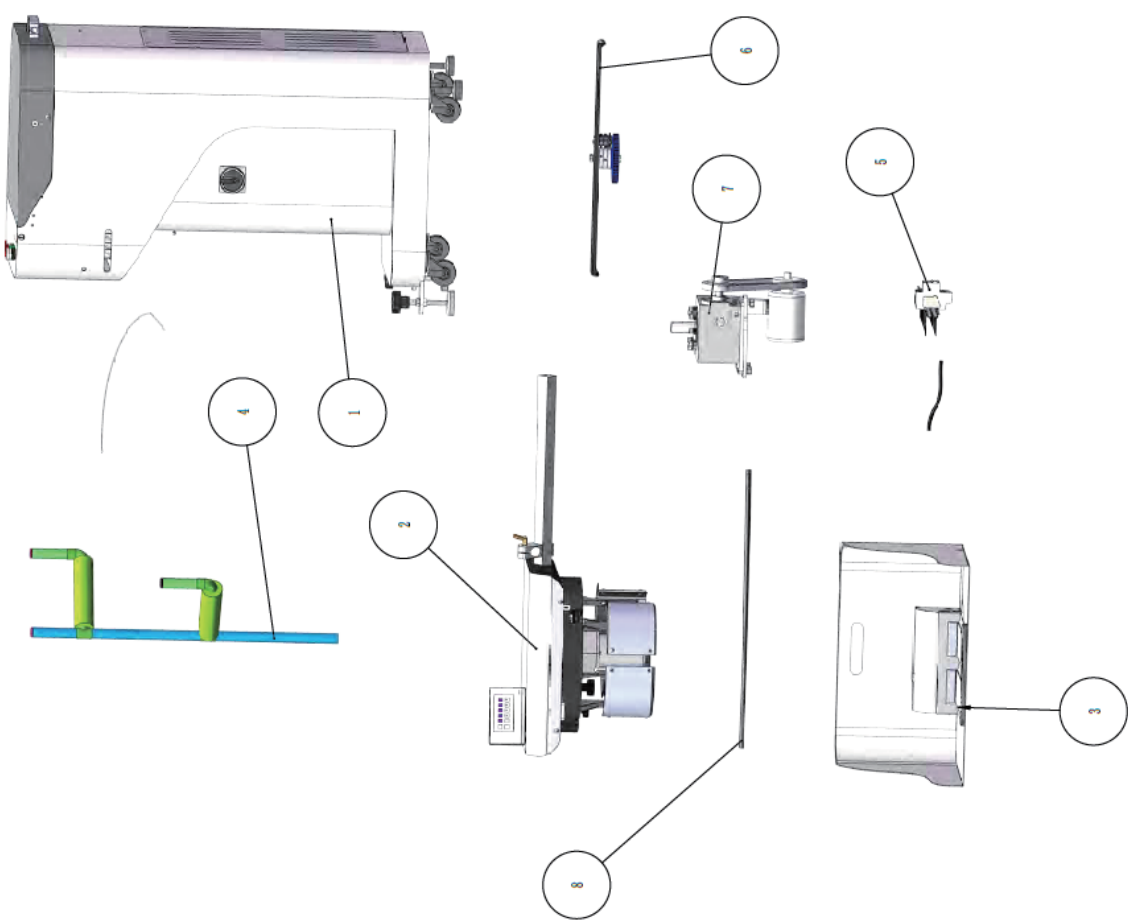
To continuously provide our customers the high quality machines and service, we do not guarantee the parts supply service for the discontinued models after 5 years since the production stops.

服務部分政策

為確保機器的質量和安全，所有 SIRUBA 部件均通過了最高質量的檢驗和測試。對於任何採用非正品 SIRUBA 部件進行更換和維修的情況，不僅可能導致保修範圍的損失，還可能導致對操作員和財產的意外損壞。

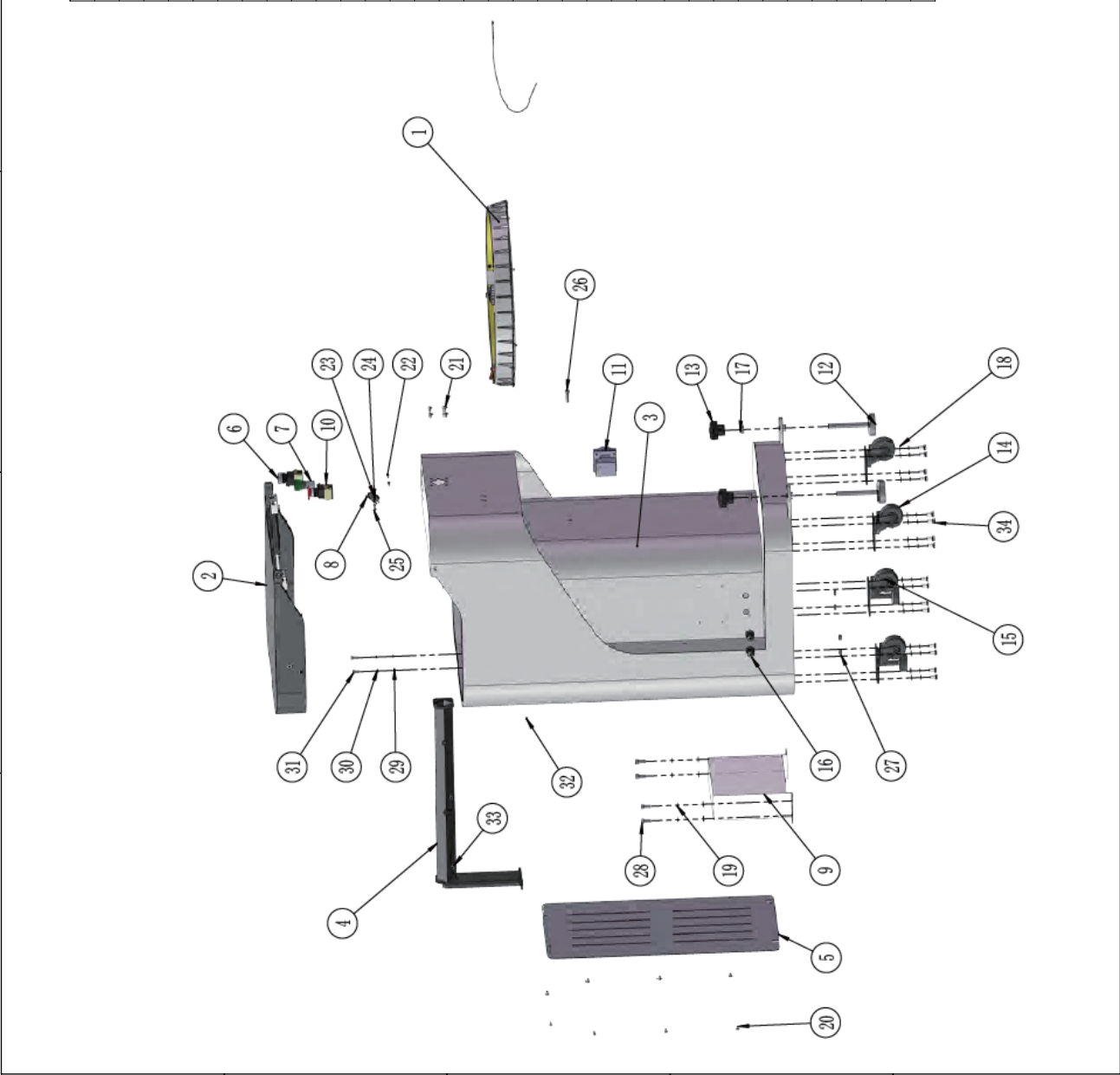
在某些情況下，即使服務期尚未結束，諸如難以獲得零件等問題也可能使我們無法修理或更換故障物品。我們要求您就此事達成諒解

為了不斷為客戶提供高質量的機器和服務，我們不保證自生產停止 5 年後停產的型號的零件供應服務。

SIRUBA PARTS LIST		Series				Parts Group		Subclass Remark		Page
		ASO-STM100				LZL				1 / 1
										Date
										2024/1/26
	8	02.016.0007	PU管組件	1	1	1	1	1	數量	
	7	02.003.0002	穿繩驅動組件	1	1	1	1	1	物料名稱	
	6	02.003.0003	微動開關支架組件	1	1	1	1	1	物料編碼	
	5	02.019.0009	電器組件	1	1	1	1	1	序號	
	4	02.003.0007	繩架組件	1	1	1	1	1		
	3	02.003.0005	踏板組件	1	1	1	1	1		
	2	02.019.0002	撐褲腰組件	1	1	1	1	1		
	1	02.019.0008	穿繩組件	1	1	1	1	1		

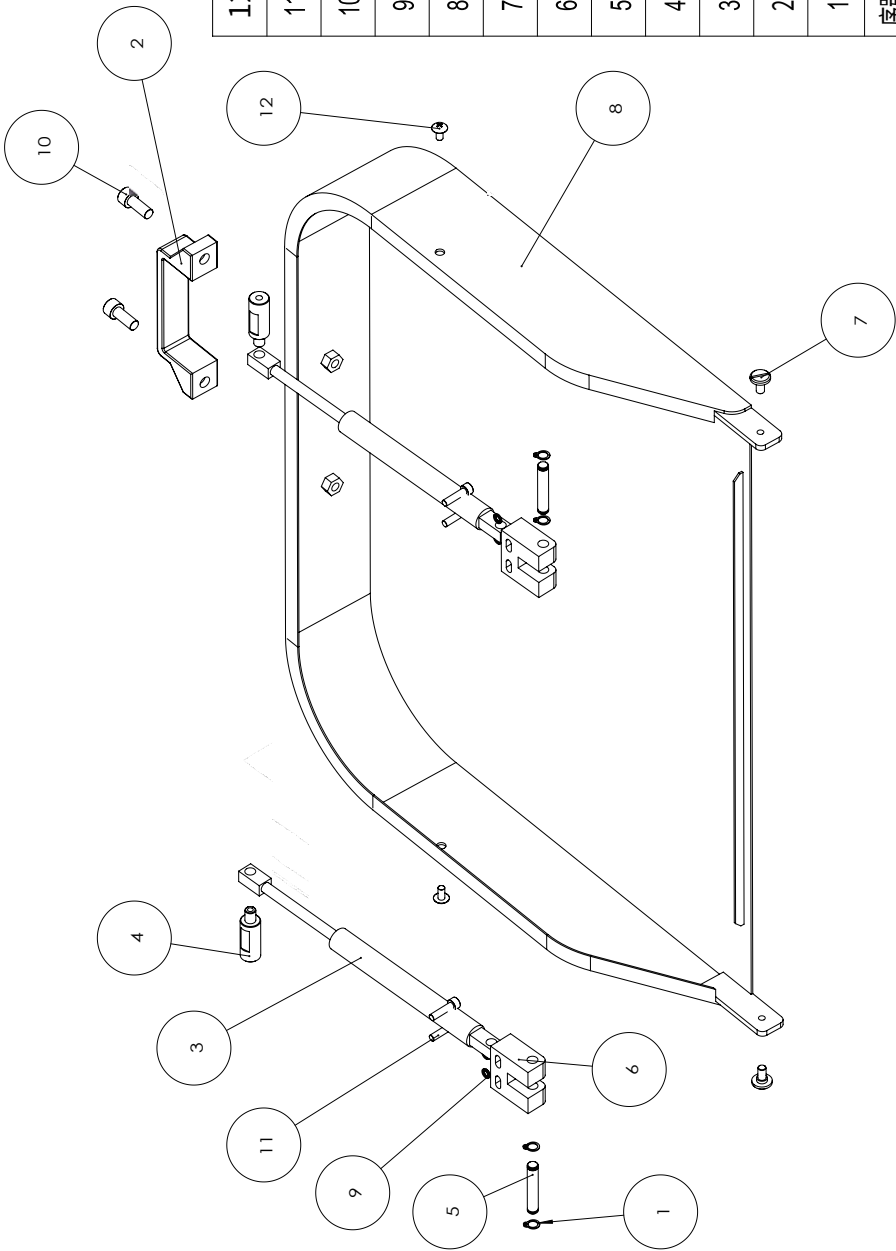
<div>SIRUBA</div> <div>PARTS LIST</div>	Series	Parts Group	Subclass Remark	Page
	ASO-STM100	LZL		1 / 1
				Date
				2024/1/26

34	11.008.0003	外六角螺釘	16
33	11.001.0075	內六角圓柱頭螺釘	2
32	11.009.0005	不鏽鋼螺母	2
31	11.001.0046	內六角圓柱頭螺釘	2
30	11.012.0004	彈墊 (鍍銀)	2
29	11.012.0014	平墊 (鍍銀)	2
28	11.001.0079	內六角圓柱頭螺釘	4
27	11.009.0007	不鏽鋼螺母	4
26	11.001.0064	內六角圓柱頭螺釘	1
25	11.009.0003	不鏽鋼螺母	2
24	11.012.0002	彈墊 (鍍銀)	2
23	11.012.0012	平墊 (鍍銀)	2
22	11.003.0016	大扁頭一字螺釘	2
21	11.003.0046	大扁頭一字螺釘	4
20	11.003.0023	大扁頭一字螺釘	8
19	11.012.0006	彈墊 (鍍銀)	20
18	11.012.0016	平墊 (鍍銀)	20
17	11.009.0009	不鏽鋼螺母	2
16	09.010.0027	防水接頭	2
15	07.008.0001	腳輪	2
14	07.008.0003	腳輪	2
13	07.008.0012	星型把手	2
12	07.008.0005	支撐腳杯	2
11	09.005.0015	總電源開關	1
10	09.005.0016	急停按鈕	1
9	07.012.0023	電控箱	1
8	09.004.0049	微動開關	1
7	09.006.0015	指示燈	1
6	09.005.0007	按鈕線	1
5	04.003.0006	電氣蓋板	1
4	04.019.0004	方管連接杆	1
3	04.019.0015	主框架	1
2	60.019.0006	穿繩組件2	1
1	60.019.0007	穿繩組件1	1
	物料編碼	物料名稱	數量



PARTS LIST	Series		Parts Group	Subclass Remark	Page
	ASO-STM100		LZL		1 / 1
					Date
					2024/1/26
A	22	04.003.0002	齒輪墊片	1	數量
	21	11.001.0037	內六角圓柱頭螺釘	2	
	20	05.043.0002	皮套管固定塊	1	
	19	05.043.0001	鋼絲擋圈	1	
	18	05.003.0009	折彎鋼絲	1	
	17	11.012.0015	平墊 (鍍銀)	6	
	16	11.012.0005	彈墊 (鍍銀)	6	
	15	11.001.0061	內六角圓柱頭螺釘	6	
	14	11.002.0032	內六角沉頭螺釘	2	
	13	11.012.0013	平墊 (鍍銀)	4	
	12	11.009.0004	不鏽鋼螺母	4	
	11	11.012.0003	彈墊 (鍍銀)	4	
	10	11.012.0006	彈墊 (鍍銀)	1	
	9	11.012.0016	平墊 (鍍銀)	1	
	8	11.001.0077	內六角圓柱頭螺釘	1	
	7	11.005.0014	可調位緊定手柄螺絲	1	
	6	03.019.0002	鋼絲壓板	1	
	5	05.003.0001	大盤小齒輪	1	
	4	03.019.0001	大輪盤	1	
	3	04.003.0010	小墊片	1	
	2	11.017.0002	牙棒	1	
	1	07.005.0084	聚四氟乙烯	1	
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12	11.003.0034	大扁頭十字螺釘	2
11	11.001.0048	內六角圓柱頭螺釘	4
10	11.001.0079	內六角圓柱頭螺釘	2
9	11.012.0004	彈墊 (鍍鋅)	4
8	04.019.0003	維修蓋板	1
7	03.003.0006	上罩支點螺絲	2
6	03.003.0003	撐桿固定座	2
5	03.003.0005	撐桿轉銷	2
4	03.019.0003	撐桿懸臂銷	2
3	07.007.0014	液壓撐桿	2
2	07.007.0024	拉手	1
1	11.014.0006	軸用卡簧	4
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A	22	09.001.0038	外挂式顯示面板組	1		默認數量
	21	11.005.0014	可調位緊定手柄螺絲	1		
	20	04.019.0014	銅絲限位條	1		
	19	60.019.0004	撐桿組件4	1		
	18	60.019.0003	撐桿組件3	3		
	17	60.019.0002	撐桿組件2	1		
	16	09.006.0018	衣車燈	1		
	15	11.001.0059	內六角圓柱頭螺釘	2		
	14	11.001.0021	內六角圓柱頭螺釘	2		
	13	11.001.0043	內六角圓柱頭螺釘	2		
	12	11.012.0002	彈墊 (鍍銀)	2		
	11	11.012.0012	平墊 (鍍銀)	4		
	10	11.001.0024	內六角圓柱頭螺釘	2		
	9	11.003.0070	大扁頭十字螺釘	4		
	8	11.003.0022	大扁頭十字螺釘	4		
	7	03.003.0021	繩架固定塊	1		
	6	04.019.0013	計數器盒蓋	1		
	5	04.019.0012	計數器盒子	1		
	4	04.019.0008	吊管	1		
	3	04.019.0010	撐桿蓋子	1		
	2	60.019.0001	撐桿組件1	1		
	1	04.019.0005	撐桿固定架	1		
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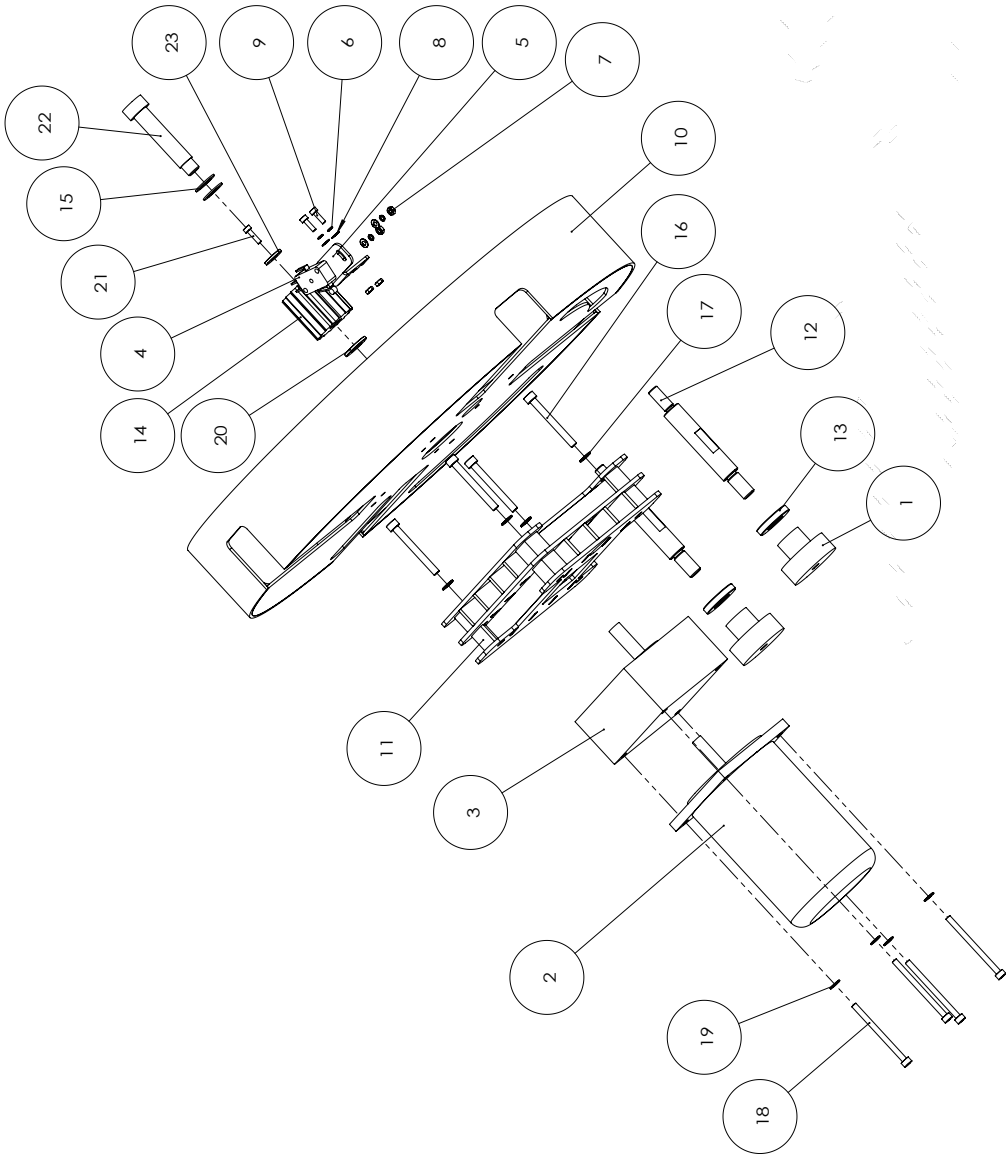
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23	11.013.0016	大墊片	1
22	05.003.0013	塞打螺絲	1
21	11.001.0024	內六角圓柱頭螺釘	1
20	11.012.0017	平墊 (鍍銀)	1
19	11.012.0013	平墊 (鍍銀)	4
18	11.001.0119	內六角圓柱頭螺釘	4
17	11.012.0014	平墊 (鍍銀)	4
16	11.001.0053	內六角圓柱頭螺釘	4
15	11.013.0011	波形墊片	2
14	05.003.0003	撐褲腰齒輪	1
13	03.003.0019	螺絲防丟失圈	2
12	03.019.0004	鉸轉固定螺絲	2
11	04.019.0006	齒條管	1
10	04.003.0014	底板	1
9	11.001.0023	內六角圓柱頭螺釘	2
8	11.012.0012	平墊 (鍍銀)	5
7	11.009.0003	不鏽鋼螺母	4
6	11.012.0002	彈墊 (鍍銀)	4
5	04.019.0007	小微動開關支架	1
4	09.004.0049	微動開關	1
3	07.012.0017	電機馬達	1
2	09.003.0071	電機	1
1	07.008.0009	星型把手	2
序號	物料編碼	物料名稱	數量



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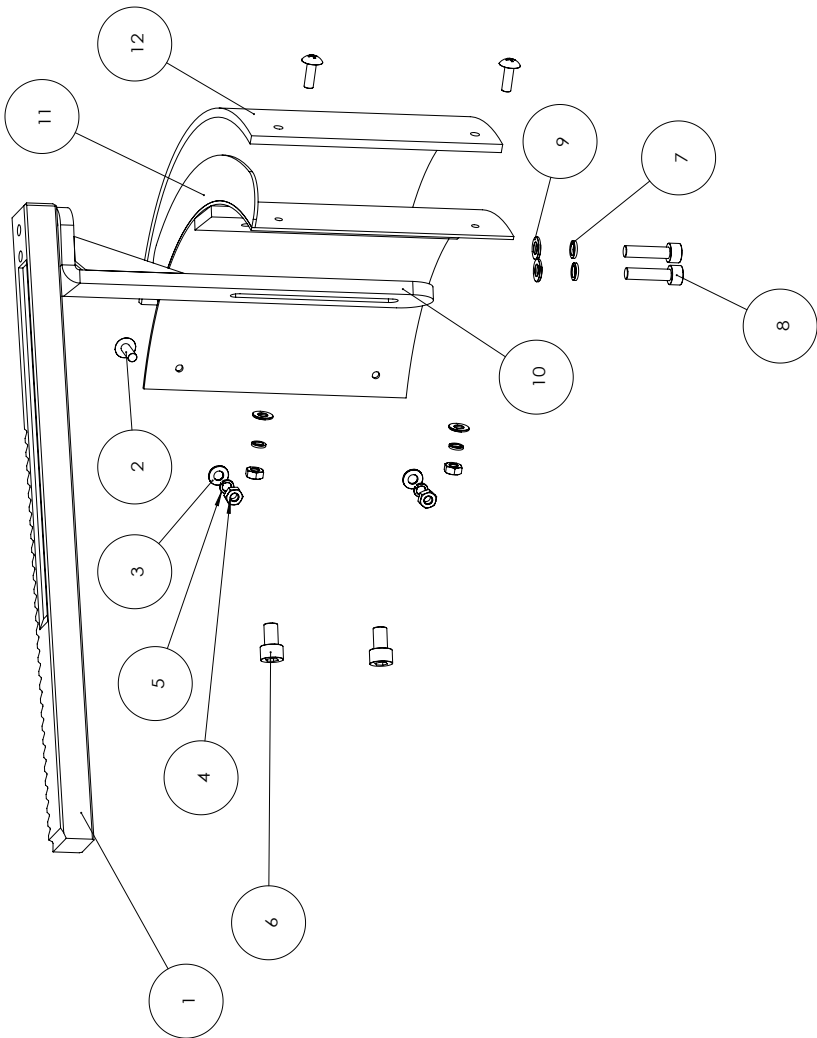
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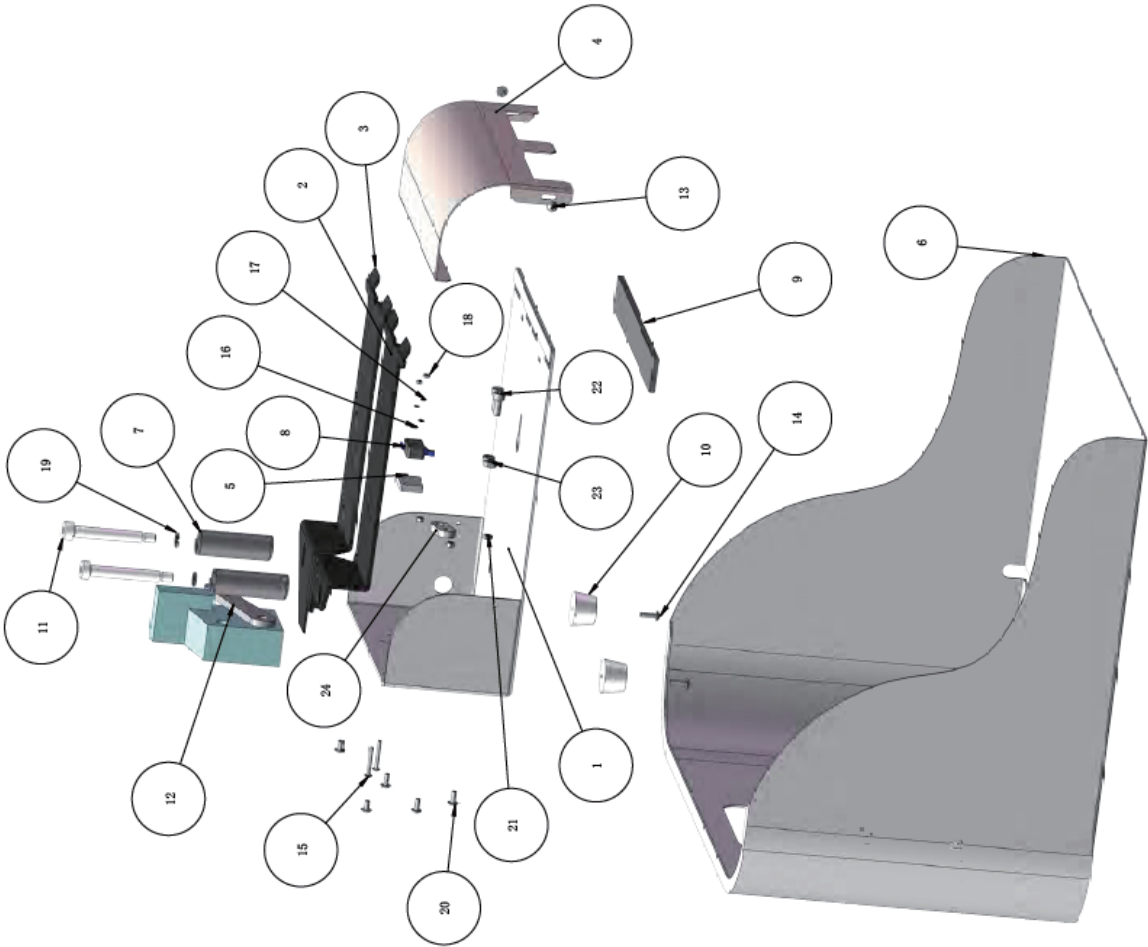
E

12	07.016.0017	EVA泡棉材料	1
11	04.003.0021	撐板零件	1
10	04.003.0016	瓦片連接板	1
9	11.012.0014	平墊 (鍍鋅)	2
8	11.001.0048	內六角圓柱頭螺釘	2
7	11.012.0004	彈墊 (鍍鋅)	2
6	11.001.0059	內六角圓柱頭螺釘	2
5	11.012.0003	彈墊 (鍍鋅)	4
4	11.009.0004	不鏽鋼螺母	4
3	11.012.0013	平墊 (鍍鋅)	4
2	11.003.0025	大扁頭十字螺釘	4
1	05.003.0004	大限位M2齒條	1
序號	物料編碼	物料名稱	數量



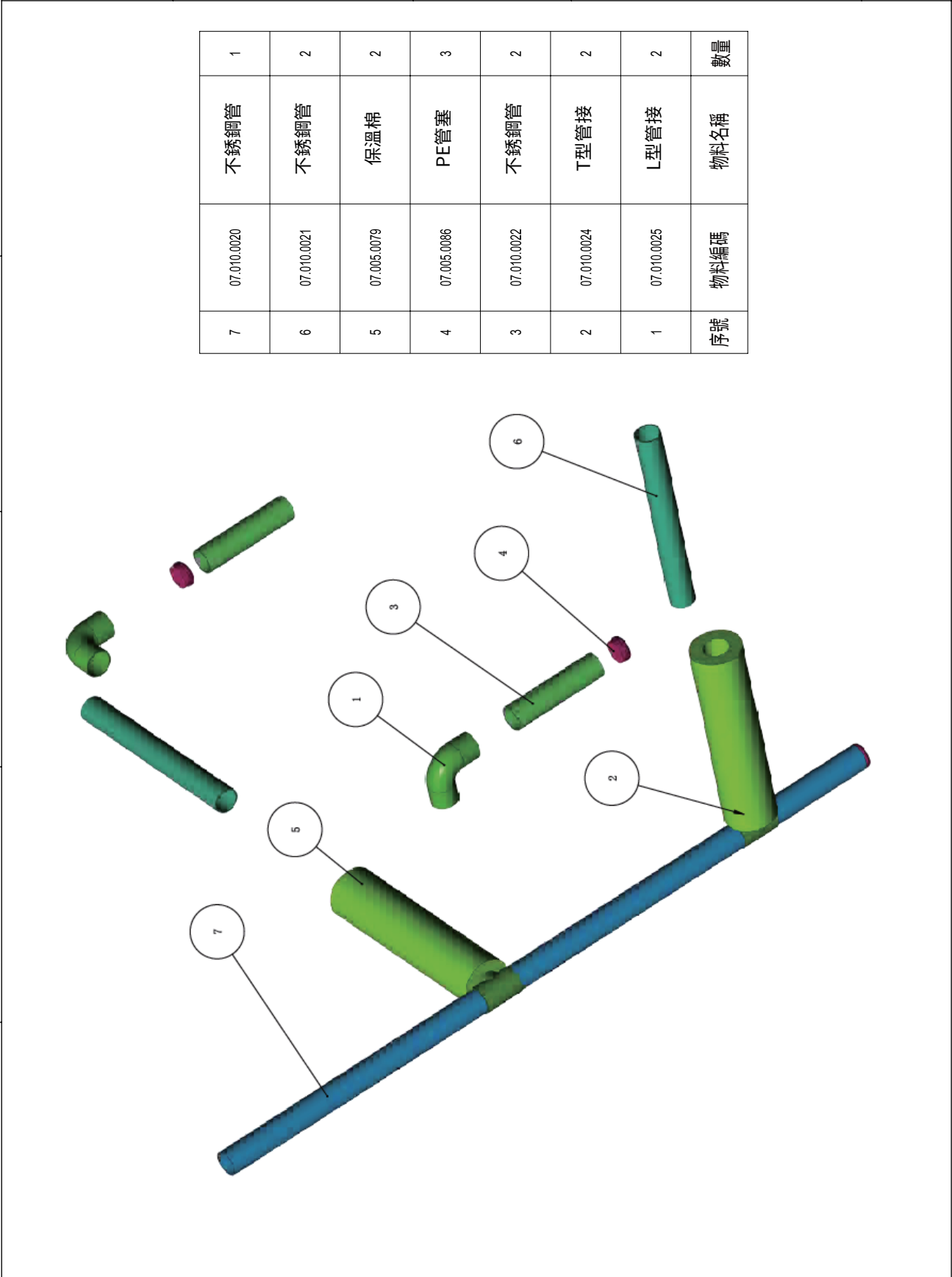
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13	11.001.0023	內六角圓柱頭螺釘	2	12	11.002.0093	內六角沉頭螺釘	4	11	11.012.0012	平墊 (鍍鎳)	4	10	11.009.0003	不鏽鋼螺母	4	9	11.012.0002	彈墊 (鍍鎳)	6	8	11.001.0026	內六角圓柱頭螺釘	2	7	03.003.0018	限位螺絲	1	6	03.003.0020	限位防丟失圈	1	5	03.003.0015	限位滑片	1	4	03.003.0016	微動開關固定板	1	3	04.003.0018	大微動開關支架	1	2	09.004.0049	微動開關	1	1	07.008.0010	星型把手	1			序號	物料編碼	物料名稱	數量

24	04.003.0044	腳踏加強墊塊	1
23	11.009.0006	不銹鋼螺母	2
22	11.001.0061	內六角圓柱頭螺絲	2
21	11.009.0004	不銹鋼螺母	3
20	11.003.0024	大扁頭十字螺絲	3
19	11.012.0006	彈墊 (鍍鋅)	2
18	11.009.0003	不銹鋼螺母	2
17	11.012.0002	彈墊 (鍍鋅)	2
16	11.012.0012	平墊 (鍍鋅)	2
15	11.003.0019	大扁頭十字螺絲	2
14	11.003.0073	大扁頭十字螺絲	2
13	11.003.0023	大扁頭十字螺絲	4
12	07.014.0130	速度底座	1
11	11.008.0007	塞打螺絲	2
10	07.005.0016	橡膠腳墊	2
9	07.005.0153	橡膠條 (不含背膠)	1
8	09.004.0049	微動開關	1
7	07.006.0001	彈簧	2
6	04.003.0033	踏板外罩	1
5	04.003.0027	微動開關墊板	1
4	04.003.0026	踏板座蓋板	1
3	04.003.0025	右邊踏板	1
2	04.003.0024	左踏板	1
1	04.003.0023	踏板座	1
序號	物料編碼	物料名稱	數量



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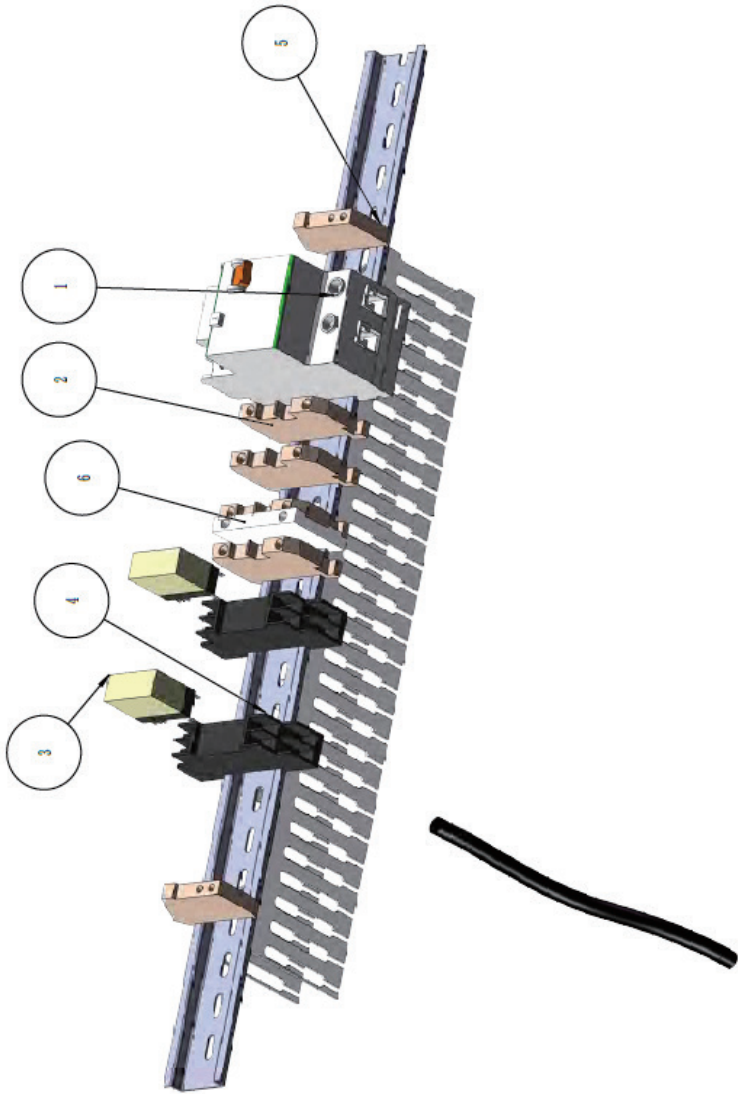
7	07.010.0020	不銹鋼管	1
6	07.010.0021	不銹鋼管	2
5	07.005.0079	保溫棉	2
4	07.005.0086	PE管塞	3
3	07.010.0022	不銹鋼管	2
2	07.010.0024	T型管接	2
1	07.010.0025	L型管接	2
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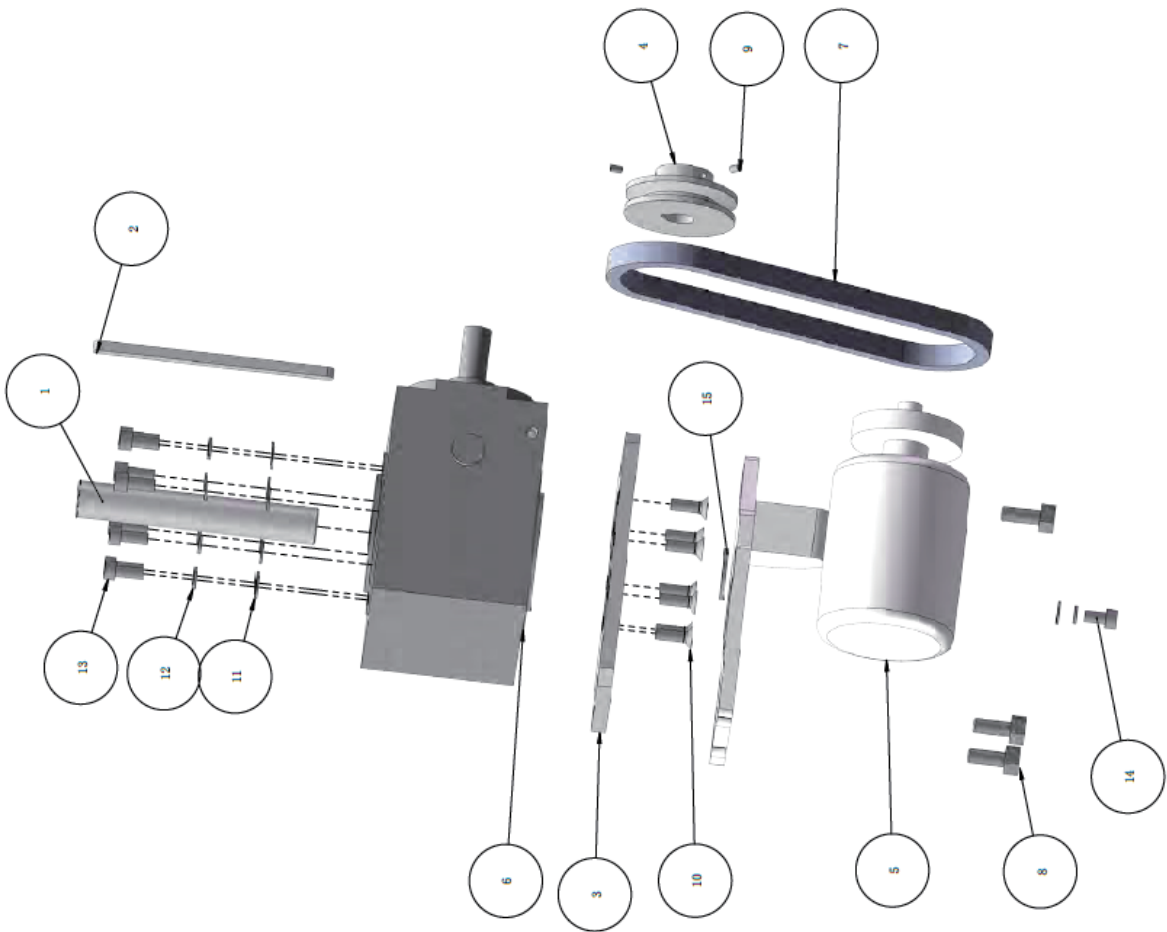
6	09.013.0034	終端隔板	1
5	09.011.0116	終端固定件	2
4	09.002.0023	繼電器插座	2
3	09.002.0020	繼電器	2
2	09.011.0077	端子排	4
1	09.002.0070	斷路器	1
	物料編碼	物料名稱	數量

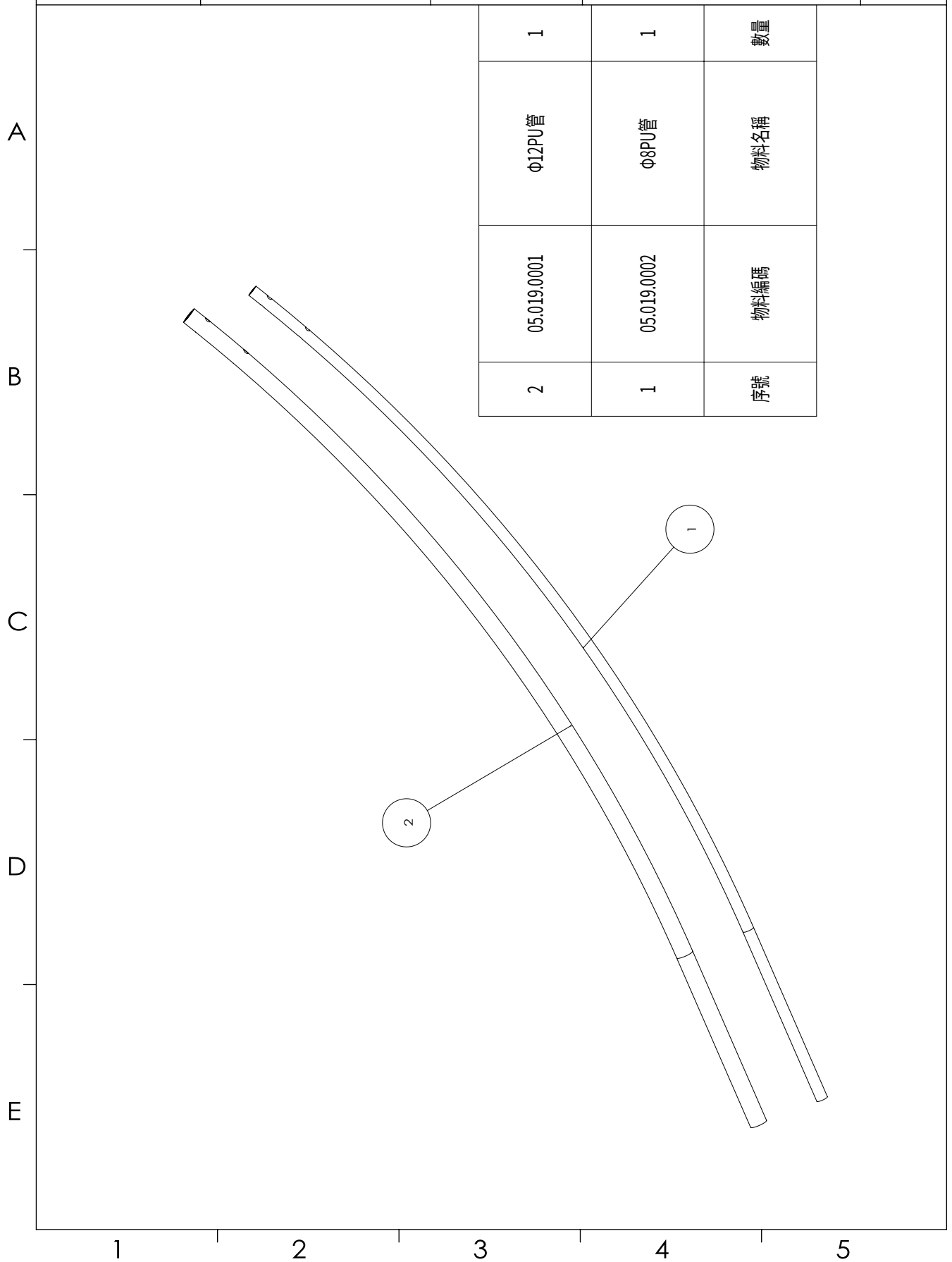


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20	11.012.0001	彈墊 (鍍鍍)	2	19	11.003.0047	大扁頭十字螺釘	4	18	11.001.0014	內六角圓柱頭螺釘	2
17	11.012.0011	平墊 (鍍鍍)	2	16	11.009.0003	不鏽鋼螺母	2	15	11.009.0008	不鏽鋼螺母	1
14	11.012.0007	彈墊 (鍍鍍)	1	13	11.002.0093	內六角沉頭螺釘	1	12	11.004.0024	內六角凹端緊定螺釘	6
11	11.008.0006	塞打螺絲	1	10	07.001.0039	深溝球軸承	2	9	09.004.0049	微動開關	4
8	04.003.0037	伸出限位連接板	1	7	03.003.0023	感應齒輪墊塊	1	6	03.003.0013	感應器墊塊	1
5	03.003.0012	上感應凸輪	1	4	04.003.0012	感應器定位板	1	3	03.003.0011	感應凸輪	2
2	05.003.0002	台階軸齒輪	1	1	04.003.0011	開關支架	1	序號	物料編碼	物料名稱	數量

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15	04.003.0002	齒輪墊片	1	數量
14	11.001.0077	內六角圓柱頭螺絲	1	
13	11.001.0125	內六角圓柱頭螺絲	8	
12	11.012.0006	彈墊 (鍍鋅)	9	
11	11.012.0016	平墊 (鍍鋅)	9	
10	11.002.0061	內六角沉頭螺絲	7	
9	11.004.0025	內六角凹端緊定螺絲	2	
8	11.008.0002	外六角螺絲 (不銹鋼)	3	
7	07.003.0001	V帶	1	
6	07.015.0020	蝸桿減速機	1	
5	09.003.0065	下掛式伺服馬達	1	
4	03.003.0010	減速機皮帶輪	1	
3	03.003.0009	馬達固定板	1	
2	03.003.0008	聯動鍵	1	
1	03.003.0007	聯動軸	1	
		物料名稱		
		物料編碼		
		序號		







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The specification and/or appearances of the equipment described in this instruction book & parts list are subject to change because of modification which will without previous notice.
LZL-18E01.JAN.2024