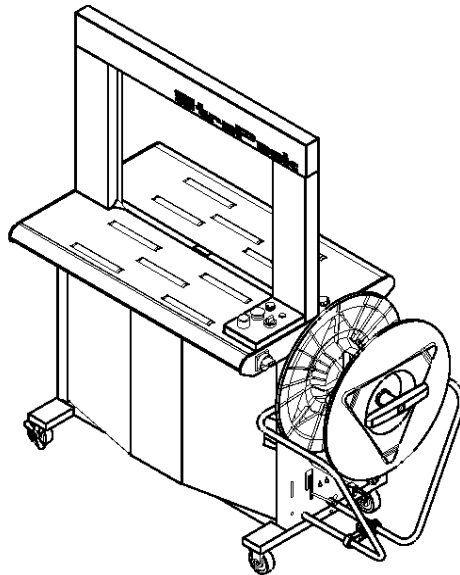


Strapack®

OPERATION, SAFETY & SERVICE MANUAL

MODEL : **SQ-800, SQ-800S, SQ-800SUS**

MACHINE No.:



IMPORTANT DO NOT DESTROY

- Read carefully and understand SAFETY INSTRUCTIONS before operating your Strapack machine.
- Keep this booklet in a convenient location for use at any time.

This machine is conformity with the requirement of the following EC Directive,

- ◇ 2006/42/EC Machinery Directive
- ◇ 2014/30/EU EMC Directive



800-1A-02001-03 (Aug. 2019)

ORIGINAL INSTRUCTION

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Chapter 1 INTRODUCTION

STRAPACK GROUP CONTACT INFORMATION

[Head Office]

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[United Kingdom]

Phone: +44 (0)1256 394400

Fax: +44 (0)1256 394410

Strapack N.V./S.A.

Oilenbaan 200 B-2160 Wormmelgem B-2160 Belgium

[Continental Europe (including Middle East, North Africa, Russia and CIS countries)]

Phone: +32 (0) 3 355 1520


Fax: +32 (0) 3 355 1521

Product Identification Plate Locations

When requesting service, please refer to the identification plate that is found on the machine's left side surface.

The following information is required

- Model
- Serial Number

Strapack [®]		http://www.strapack.com
		e-Mail:info@strapack.com
Type		
Model	Voltage	V
Serial No.	Frequency	Hz
Full Load Current	SCCR	kA
Index # of Electrical Wiring Diagram		
Year of Construction	Made in	
 STRAPACK CORPORATION 8-16-6 Ginza, Chuo-ku, Tokyo 104-0061 JAPAN		

Application Principles

- Automatic strapping machine. For bundle size please see next page.
- Best suited for all types of packages (e.g. printed material, cartons, etc.)

Machine Features

- DC Direct Drive
 - ◇ Using the DC Motor for the Cam Shaft eliminates the need for clutch, brake, V-Belt (A type), FR roller, driven micro belt, and back tension. This means less moving parts and less maintenance cost.
 - ◇ At standard speed, the DC motor allows to run only during feeding and reversing. This reduces strap dust, which in turn, reduces dust build up.
- Programmable IC Box
- Automatic Re-Feed in case of feeding error
- Tension – for CE : Up to 450N (101lbf or 45.9kgf)
for Not CE : Up to 784N (176lbf or 80kgf)
- Eco friendly
- Quiet – 83.2 dB(A)
- Maximum of 55 cycles/minute (1.1 sec/strap) ·····Standard Mode
- Other Advanced Features
 - ◇ Anti-Jam Strap Ejection
 - ◇ Easy Strap Loading
 - ◇ Quick Warm-up Heater
 - ◇ Variable Electric Tension and Lubrication Free Sealing Head

《OPTION》

- For start : Foot Bar, Foot Switch, Table Ball Switch
- Adjustable Table Height (795 - 900mm / 31.3 – 35.4 inch)
- Total Counter (Cycle Counter)

Standard Specification

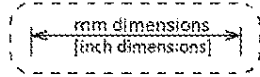
Operating Environment

Use this machine where the following environmental conditions are met.

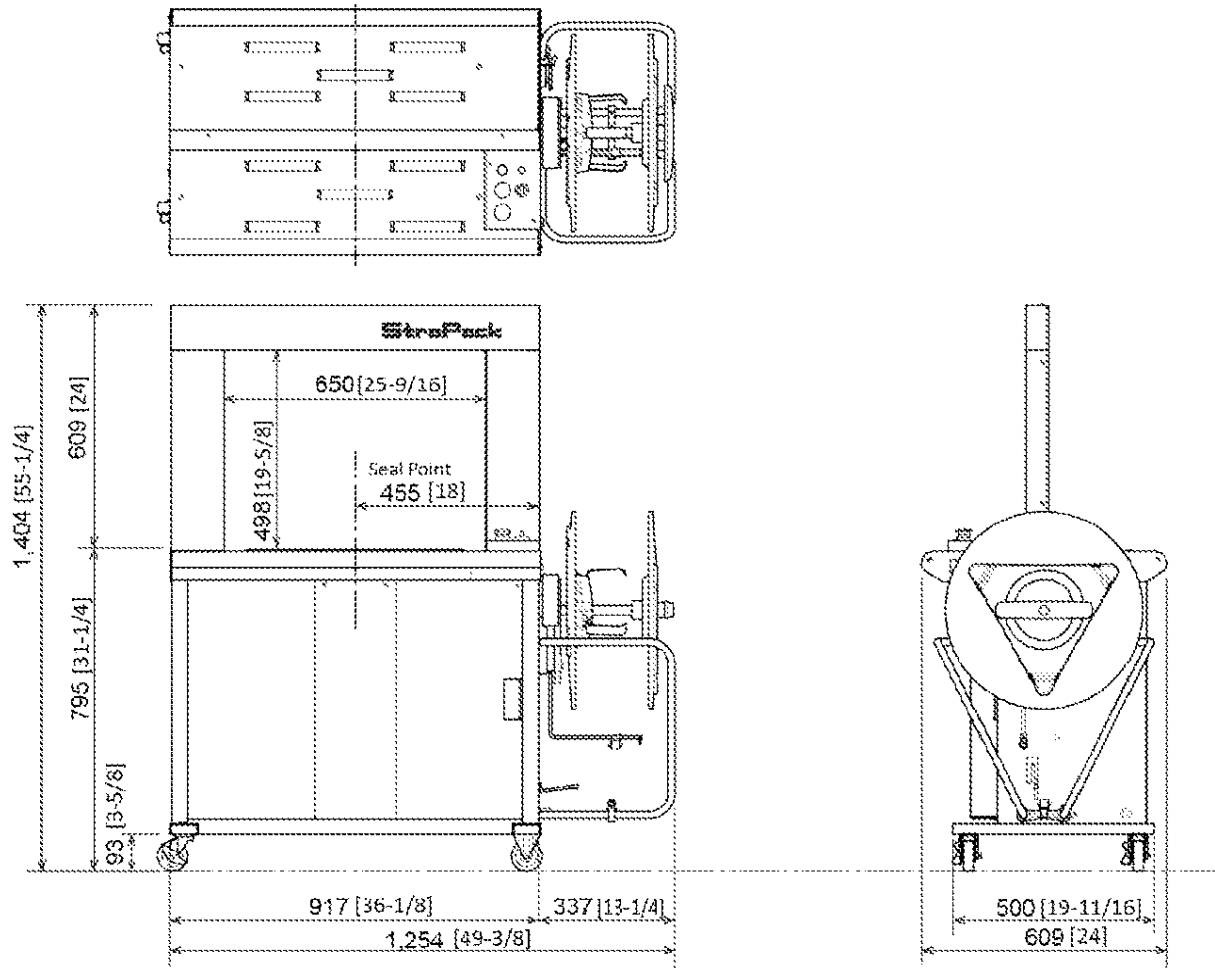
- Temperature: Between 0 degrees Celsius and 40 degrees Celsius
(do not use in a freezing temperature)
- The humidity: Relative humidity being 0-80% (without condense dew)
- Environment: Free from excessive dust, acid fume, corrosive gases and salt.
- The place where water and oil do not congregate or drip.
- A place without the danger of explosion
- Place where vibration, shock, etc. do not occur.
- This machine is not explosion-proof type.

Specification & Dimensional Outline Drawing : SQ-800, SQ-800SUS

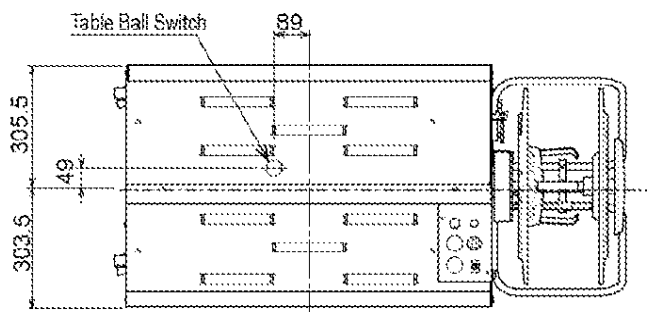
	SQ-800, SQ-800SUS	
	Outside North America	North America
Joint (Strap Weld)	Heat Seal / polypropylene	
Arch Size	W650mm x H500mm	W25 x H20 in.
Dimensions : Width	1,254 mm	49-3/8 in.
: Height	1,404 mm	55-1/4 in.
: Depth	609 mm	24 in.
: Table Height	795 mm	31-1/4 in.
Machine Weight	141 kg : for SQ-800 126 kg : for SQ-800SUS	310 lbs. : for SQ-800 277 lbs. : for SQ-800SUS
Tension	Up to 450 N (45.9kgf): for CE Up to 784N (80kgf): for Not CE	Up to 176 lbf (80kgf)
Electric Power	Single Phase 220,230,240V 50/60Hz	Single Phase 120V 50/60Hz
Full Load Current	10 A	15 A
SCCR (Short-Circuit Current Rating)	2.5 kA	
Power Consumption	0.74 kW	
Noise Emissions	83.2 dB (A) Measured according to EN-415-8 Annex A	
Speed	54 bundles/min (1.1 sec/ strap)	
Package : Min. Size	W80×H30mm	W 3-1/8 x H 1-1/8 in.
: Max. Size	W620×H480mm	W 24-1/2 x 18-7/8 in.
Strap : Width	5, 6, 9, 12, 15.5 mm : for SQ-800 9, 12, 15.5 mm : for SQ-800SUS	1/4, 3/8, 1/2 in. : for SQ-800 3/8, 1/2 in. : for SQ-800SUS
: Thickness	0.4mm to 0.7mm	
: Dispenser	Strap Coil ID 200 x W200mm	Strap Coil ID 200 or 230 x W200mm (8x8in. or 9x8in.)



SQ-800 & SQ-800SUS Outline



《OPTION》

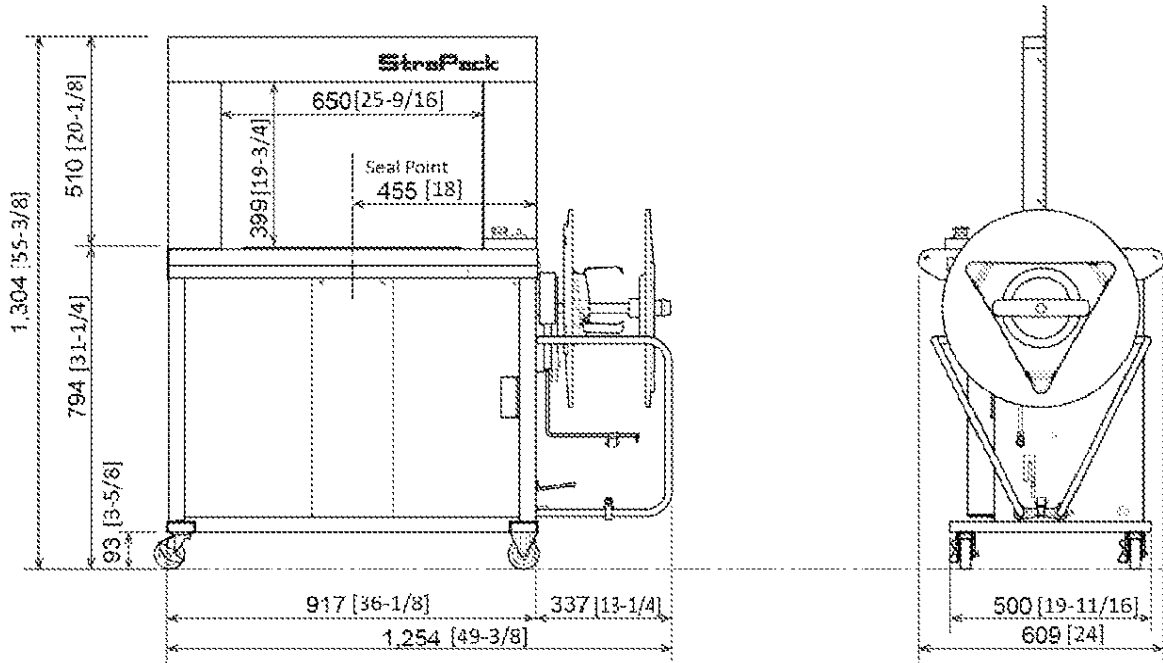
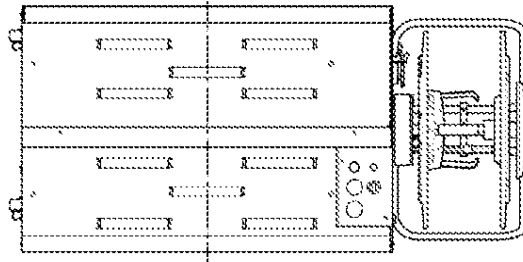


Specification & Dimensional Outline Drawing : SQ-800S

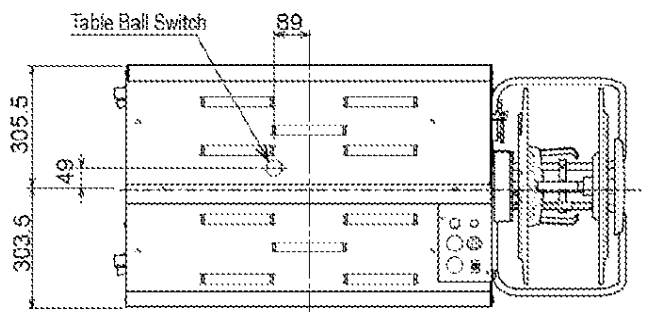
		SQ-800S	
		Outside North America	North America
Joint (Strap Weld)		Heat Seal / polypropylene	
Arch Size		W650mm x H400mm	W25 x H15-3/4 in.
Dimensions	: Width	1,254 mm	49-3/8 in.
	: Height	1,304 mm	51-3/8 in.
	: Depth	609 mm	24 in.
	: Table Height	794 mm	31-1/4 in.
Machine Weight		139 kg	306 lbs.
Tension		Up to 450 N (45.9kgf): for CE Up to 784N (80kgf): for Not CE	Up to 176 lbf (80kgf)
Electric Power		Single Phase 220,230,240V 50/60Hz	Single Phase 120V 50/60Hz
Full Load Current		10 A	15 A
SCCR (Short-Circuit Current Rating)		2.5 kA	
Power Consumption		0.74 kW	
Noise Emissions		83.2 dB (A) Measured according to EN-415-8 Annex A	
Speed		54 bundles/min (1.1 sec/ strap)	
Package	: Min. Size	W60×H30mm	W 2-3/8 x H 1-1/8 in.
	: Max. Size	W620×H380mm	W 24-1/2 x 15 in.
Strap	: Width	9, 12, 15.5 mm	3/8, 1/2 in.
	: Thickness	0.4mm to 0.7mm	
	: Dispenser	Strap Coil ID 200 x W200mm	Strap Coil ID 200 or 230 x W200mm (8x8in. or 9x8in.)

mm dimensions
[inch dimensions]

SQ-800S Outline



《OPTION》



Chapter 2 SAFETY INSTRUCTION

This important manual has been prepared to provide you with instructions for safe operation, easy maintenance and safety information relating to your machine. It is essential that you carefully read the “SAFETY INSTRUCTION” and understand it before you attempt to operate your machine.

Please keep this manual by the machine to refer to it immediately as needed.




Only trained technicians should be allowed to repair and adjust the machine.

Definition of risk level

This machine is designed prioritizing the safety of the operator. However, due to the nature of the system, some unremovable risks exist.

This manual indicates three levels of the risks according to the gravity of the risk: “Danger”, “Warning” and “Caution”. Please carefully read each category and make sure you understand well before operating or maintaining the machine.

The level of risk in the order of the gravity: DANGER > WARNING > CAUTION.




 DANGER	Imminent danger that can cause death or severe injury if not avoided
 WARNING	Potential danger that can cause death or severe injury if not avoided.
 CAUTION	Potential danger that can cause injury of lesser degree if not avoided.

Safety instructions for each process



This machine consists of Parts for Transportation, Parts of Operation, Parts of Electrical Danger, Parts of High Temperature. Mishandling of the machine can cause injury to the operating personnel.


Every personnel including those who may move or install the machine, who may adjust, repair or clean the machine, or who may work with or around the machine, should read and understand the safety instruction of this manual and safely and appropriately handle the machine.

● **Move**


 DANGER	<ul style="list-style-type: none"> ● Maintain the weight balance when using a forklift to avoid dropping the machine.
 WARINIG	<ul style="list-style-type: none"> ● Follow the instructions according to this manual when moving the machine.
 CAUTION	<ul style="list-style-type: none"> ● Push the machine to move it to the desired location. (Do not move pulling the machine.) ● When relocating the machine, be careful not to get yourself caught between the machine and an obstacle in the path.


● **Installation**


 WARINIG	<ul style="list-style-type: none"> ● Install the machine on a stable, flat floor. ● Follow the instructions according to this manual when changing the machine height. ● Do not use deformed or damaged Power Cord. ● Do not plug in and out with wet hands.
 CAUTION	<ul style="list-style-type: none"> ● Install the machine indoor. ● Install the machine where there is appropriate ventilation of air. ● Install the machine where there is no splashing of water or oil. ● To move the machine, unlock the casters first. Once the machine is placed, lock the casters again. ● Use with the correct voltage. ● Power Plug should be connected to the power outlet of at least 10A. ● Be sure that the Power Cord is plugged all the way into the power outlet.

(INSTALLATION)  CAUTION	<ul style="list-style-type: none"> ● Place the power cord away from moving parts or strap reel. ● Do not damage the Power Cord. <ul style="list-style-type: none"> ◇ e.g. Do not bend by force, do not place something on top of it, do not tangle ● Use appropriate type of strap. ● Use caution not to drop the strap coil when loading the strap ● Do not leave the coil or piece of strap on the floor.
---	--


● Operation


 DANGER	<ul style="list-style-type: none"> ● Do not strap the following types of package <table style="width: 100%; border: none;"> <tr> <td style="padding: 0 10px;">◇ Explosives</td> <td>◇ Breakables such as glass</td> </tr> <tr> <td style="padding: 0 10px;">◇ Harmful chemicals</td> <td>◇ Live animals</td> </tr> <tr> <td colspan="2">◇ Exposed food items (for sanitary reasons)</td> </tr> </table> 	◇ Explosives	◇ Breakables such as glass	◇ Harmful chemicals	◇ Live animals	◇ Exposed food items (for sanitary reasons)	
◇ Explosives	◇ Breakables such as glass						
◇ Harmful chemicals	◇ Live animals						
◇ Exposed food items (for sanitary reasons)							

 WARINIG	<ul style="list-style-type: none"> ● Never operate the machine when the table or operation panel is removed ● Never operate the machine when the safety door switch is inactive.
---	--

 CAUTION	<ul style="list-style-type: none"> ● Wear earplugs to prevent your ears from the noise of Max. 83.2dB (A) when operating the machine. ● Read the Instructions carefully ● Do not use this machine other than to strap appropriate packages ● Watch your steps around the foot bar, casters and power cords. ● Dress appropriately to operate the machine. ● Do not touch the strap during the machine operation. ● Never put your hand, head or any part of the body inside the arch during the operation. ● Use caution to keep your body parts from getting caught between package and strap. ● Use caution to keep your body parts from getting caught in the door when the door opens or closes. ● Use caution to keep your body parts from getting caught when putting the loose strap back onto the reel. ● Remove jammed strap appropriately; do not pull by force. ● Do not place liquid on the machine. ● Do not stand or sit on the machine. ● Do not touch the machine when your body has collected static. ● Do not drop the package/bundle on the table and floor. ● Do not use strap as handles.
---	--

● Maintenance, Adjustment, Cleaning



 WARINIG	<ul style="list-style-type: none"> ● Maintenance can only be done by a trained personnel. ● At the time of maintenance, the machine power should be turned off and the power plug should be unplugged. ● Do not touch moving parts such as Rollers, Solenoids, Cam, linking parts, Right/Center/Left Blocks and Slide Table. ● Do not touch the heater when the machine is on. (Max. temperature approx. 400°C / 752°F) ● After the power is turned off, wait until the following parts cools off. <ul style="list-style-type: none"> ◇ Heater (Max.approx.400°C / 752°F) ◇ M2 Motor (Max.approx.100°C / 212°F) ● In order to avoid unintended power activation, lock out the cam switch as needed. (You can provide your own key if you need one.)
---	--

 CAUTION	<ul style="list-style-type: none"> ● Do not touch M2 Motor when the machine is on. (It can get as hot as approx.100°C / 212°F) ● When you need to remove the cover to work on the IC Board, make sure that the remaining electricity has been discharged. <ul style="list-style-type: none"> **Right after the power switch is turned off, there is still some electric charge on the condenser of the IC board. Therefore, handle it very carefully. ● When handling springs, be careful not to hurt yourself with the spring pressure. ● Dispose of the replaced parts appropriately, according to local trash regulations. ● When the maintenance is complete, replace the tables and outer panels and turn the power back on. Confirm the safety switches work normally. ● Keep the Power Plug free of debris and dusts. ● Use only parts provided or approved by STRAPACK.
--	--





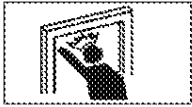

Alert Labels

- Warning labels are seen where there is a potential risk of danger.
 - ◇ Carefully read the instructions on the Safety Alert Labels and follow them.
 - ◇ Replace missing or damaged safety labels with new safety labels immediately.
 - ◇ If safety labels are replaced with new labels, make sure new safety labels are attached in the same location as the replaced labels.

WARNING and CAUTION are defined as follows:

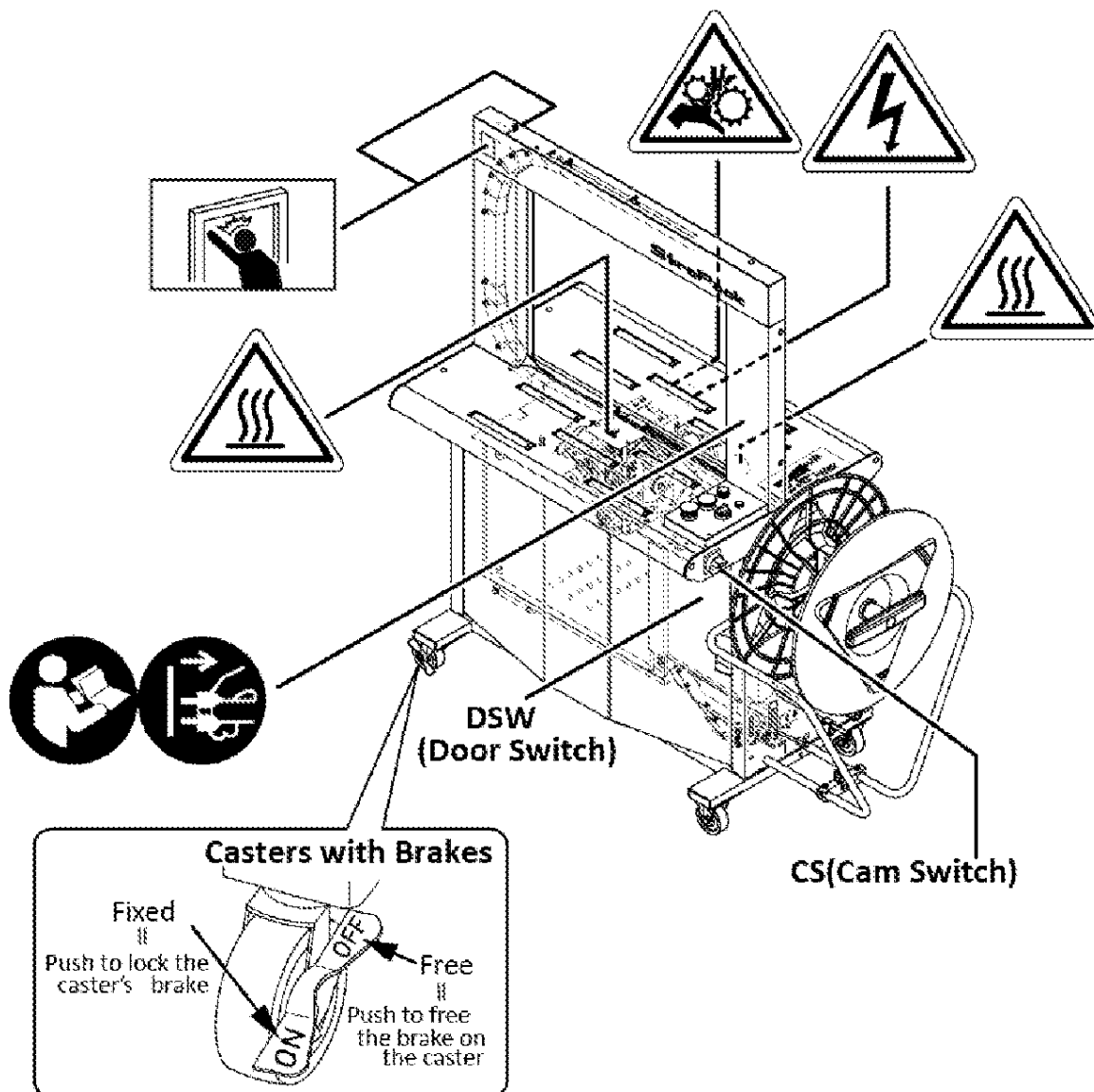
	WARNING	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or severe injury.
	CAUTION	CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

The alert labels shown below are attached to machine:

	WARNING : Disconnect mains plug from electrical outlet When not using for a long time or servicing, unplug the power plug from outlet.
	WARNING : Refer to instruction manual/booklet Read and understand manual before using this machine.
	WARNING : Electric shock. Point with hazardous voltage that can result in electric shock.
	CAUTION : High Temperature Point with high temperature over 65°C(149°F) that leads to burns.
	WARNING : Arch Unit Do not put head, hand and any part of body into arch. Running strap can cause injury.
	WARNING : Entanglement Hazard Entangling of hands or clothes may result in severe injury. Do not remove this cover during operation. Turn off the power before maintenance.

Safety Device

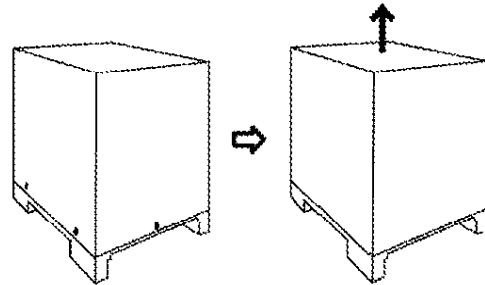
- Two left casters have brakes.
- The Front Door opens, the machine stops automatically.
- All power supplies are disconnected when the power switch (CS) is turned off.



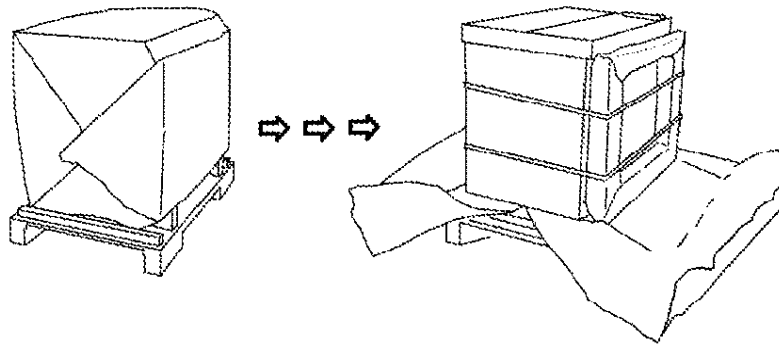
Chapter 3 INSTALLATION

To remove the machine from the wooden crate and pallet

- ① Remove 6 bolts at the lower part of the crate.
Lift up and remove the top (side and top cover)

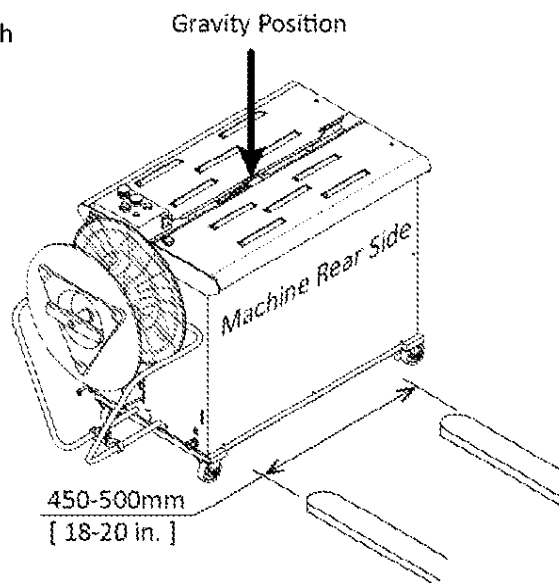


- ② Remove the barrier sheet. Cut the strap and detach the Arch Unit. Check the contents.



◎Contents	Body Unit	.....	1set	: Approx.128kg (Standard Type)
	Arch Unit	.....	1set	: Approx. 13Kg(W650XH500)
	Manual	.....	1set	
	Seal that Check!	.....	1sheet	
	Tools	.....	1set	

- ③ Insert the forks under the body unit and remove the machine body from the pallet.

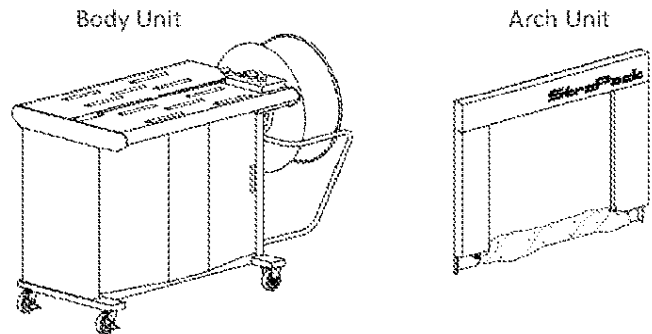


To install the Arch Unit to the Body Unit

- Always have 2 (two) people to do this.
- Body and Arch must be completely parallel.
- Be careful not to pinch your hand between Arch and Body.

Components

- Body Unit : Approx.128kg
- Arch Unit : Approx.13Kg (W650XH500)



Necessary Tools

Phillips Screwdriver, Hex Wrenches (4, 5 and 6mm)



Procedure

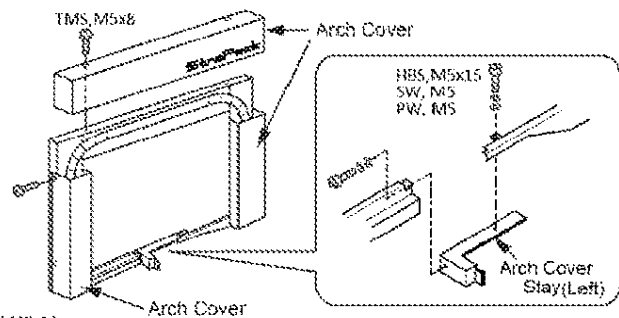
1. Remove Arch Covers. (Upper, Left & Right)

★TMS, M5x8

2. Remove screws and Arch Cover Stay (Left).

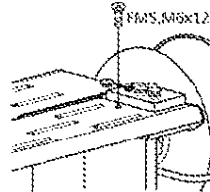
Keep this part and mount it on body frame later.

★HBS, M5x15 (with SW M5, PW M5) : 3sets



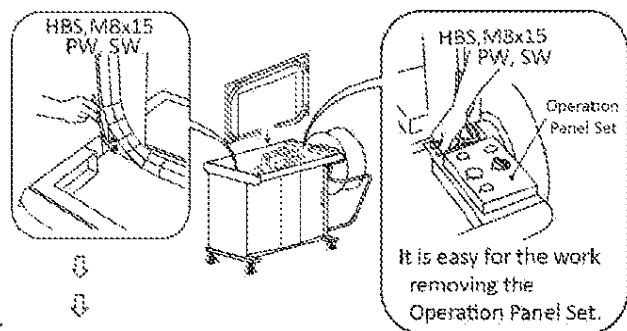
3. Open Upper Tables (Front & Rear).

★FMS, M5x12



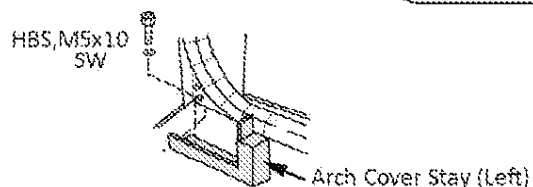
4. Fix Arch Unit to body frame.

★HBS, M8x15 (with SW M8, PW M8)



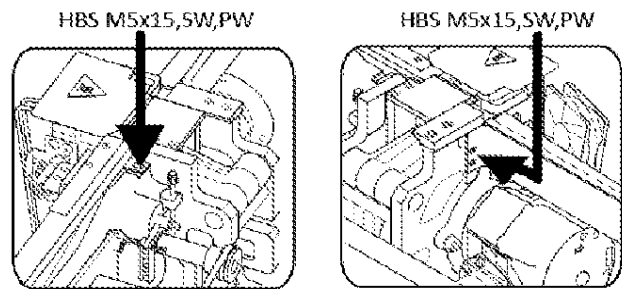
Then, mount Arch Cover Stay Left on body frame.

★HBS, M5x10 (with SW M5)



5. Fix Arch Unit to Sealing Unit

Using the screws removed in step 2, temporarily attach center of lower part of Arch Unit to Sealing Unit installed inside Body Unit.

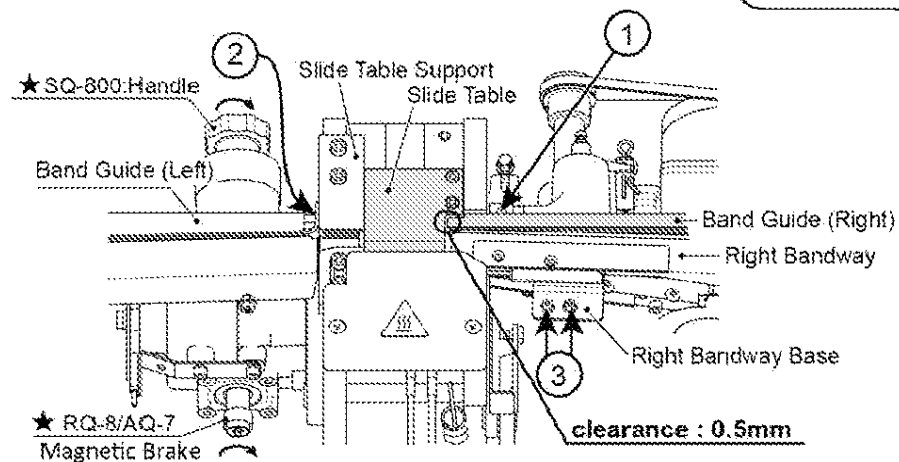
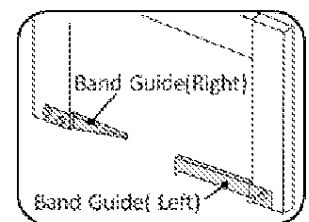


6. Assembly of Bandway.

Confirm 0.5mm clearance between tip of Band Guide (Right) and Slide Table, and align Band Guide (Right), Band Guide (Left) and Slide Table Support.

If alignment and clearance are OK, fix the screw of step 5.

When they are not aligned, loose Band Guide (Right) and Band Guide (Left), and align them. ① ② HBS, M5x15 (with PW M5, SW M5)



7. Position Adjustment of Right Bandway Base

③ HBS, M5x15 (with PW M5, SW M5)

- 1) Turn the handle clockwise 360 degrees (as viewed from the heater side) from the home position.
The ★ different on models : In 5Q-800 turn the handle, In AQ and RQ turn magnetic brake.
- 2) Loose Right Bandway Base.
- 3) Press Right Bandway Base against Band Guide (Right).
Note : There should be no opening at the tip of Right Bandway.
- 4) Fix Bandway Base.
- 5) Return Handle to Home Position.

8. Fix Arch Cover and Upper Tables (Front and Rear).

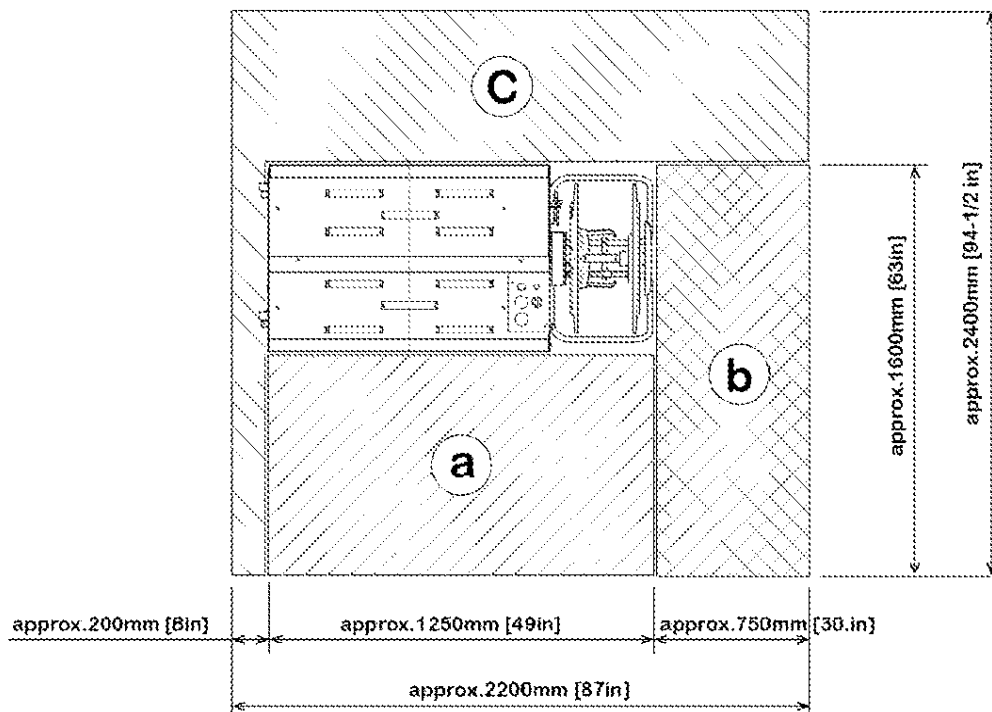
This is the end of the installation of Arch Unit to the Body Unit.

Moving the machine to an appropriate area

This machine requires the space indicated below.

When the machine is used in a production line, the machine must be pulled out of the line to where there is enough space to load the strap or make other adjustments.

- a Space required to operate the machine
- a + b Space required to load/replace strapping material
- a + b + c Space required for maintenance



To adjust the working height 《OPTION》

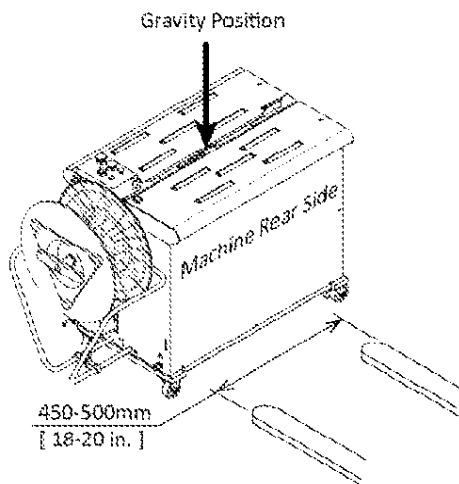
SQ-800 & SQ-800S only, SQ-800SUS in not applicable.

Table height is adjustable from 795mm (31 ¼") to 900mm (35 ½") by making the adjustments (a).

(a) Adjustable to 8 different positions from 795mm (31 ¼") to 900mm (35 ½") with 15mm (0.6") increments.

Procedure

1. Lift the machine by using a forklift.



- Caution : When there is a foot bar under the front side of the machine body, keep the forks away from the foot bar. ※Foot Bar = option
- ◆ The distance between the forks should be 450 ~ 500mm or 18-20 inches.
The height should be at least 50mm or 2 inches from where the wheels contact the floor.
- ◆ Forks should be inserted from the rear part of the machine. The tip of the fork should be flush with the front panel of the machine.
- ◆ The gravity of the machine body should be at the center of the forks.

2. To raise the height by one or two increments (15-30mm)

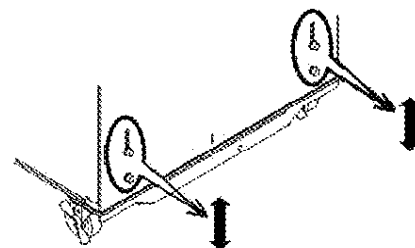
Move the bolts in the long hole to the desired position and fix them temporarily.

Remove the lower bolts, then move the casters and set the bolts.

Fix tightly the 4 bolts on the side of the machine body

To raise the height by more than 3 increments (45mm or more)

Remove the side bolts (4pcs), remove the caster sets and fix them at the desired height.



- Warning: Be careful when loosening the bolts as caster sets will drop when the bolts are removed.

3. Lower the forks slowly. This is the end of the height adjustment.

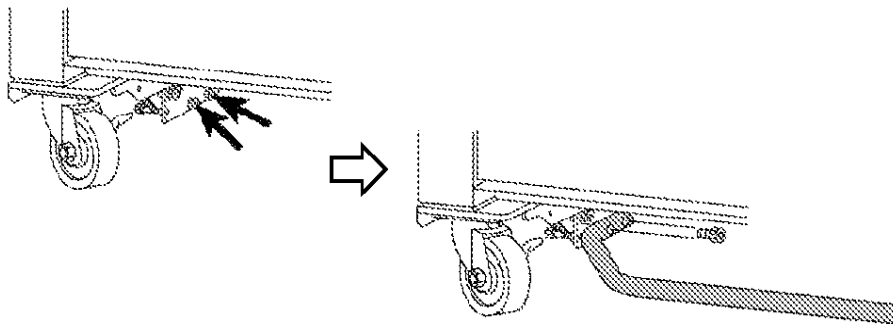
To install the Foot Bar to Body Unit 《OPTION》

SQ-800 & SQ-800S only, SQ-800SUS in not applicable.

When shipped from the factory, foot bar has been removed from the body.

There is a bracket that secures the foot bar to the machine the bottom of the caster base, foot bar fixing screw is attached to the bracket.

Once remove the left and right two screws, please secure the foot bar that was taken out in that position in the screw.



Connect Power Cable (for Outside North America)

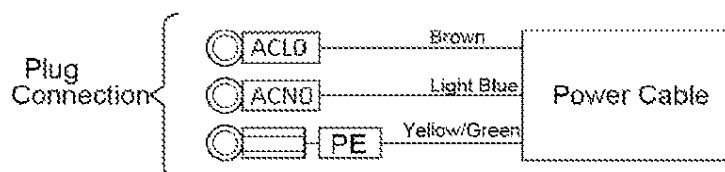
1. Connect to appropriate Power Supply

Current10A

VoltageSingle Phase 230V, 50Hz

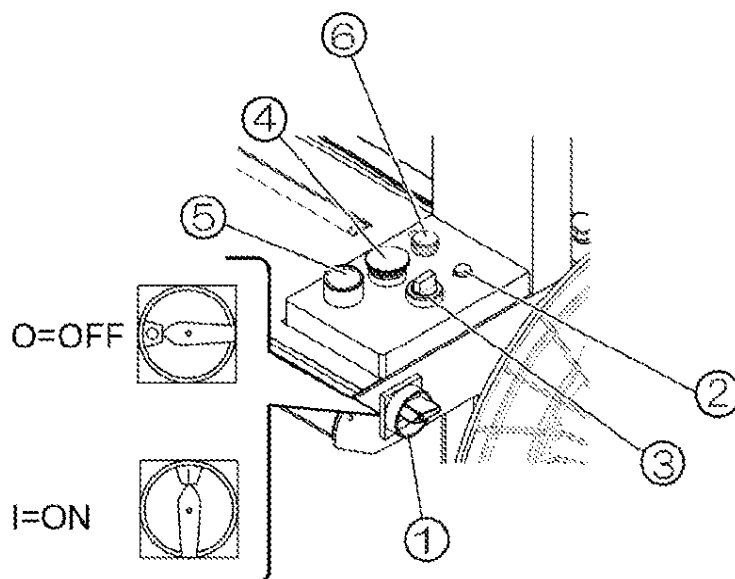
Allowance of Fluctuation..... Voltage 198V~264V Frequency 50±3Hz

2. Use the appropriate plug according to the outlet.



Chapter 4 MACHINE INFORMATION

Operation Switches



① Power Switch 【MAIN SWITCH】

- It is the main power switch.
- Turning this switch on will supply the power to the machine.
- Turn it off in case of emergency. All power will be shut down.
- Turn it off at the end of use.



② Operation Ready Switch & Power Indicator Lamp 【POWER Lamp】

- When the Power Switch ① is turned on, the Power Indicator Lamp ② will flash slowly.
- It will take about 25 seconds after the power is turned on until the heater temperature is ready to operate. When ready, this lamp will turn from slow flashing to a solid light.
Press this Switch once, so that the lamp will change from flashing to a steady light. Initiating a cycle is possible while the lamp is on.
- When the coil of strapping is completely exhausted, the Power Indicator Lamp ② will start to flash slowly and the machine will come to a standstill automatically.
- If this lamp blinks in cases other than preparation for operation, there are the following possible causes.

☆Quick Flashing Light	<ul style="list-style-type: none"> • The stop switch is pressed • Motor overload, damaged wire or Sealing unit runs for more 3 seconds. Push Stop Switch ④ and remove the cause of trouble.
☆Slow Flashing Light	<ul style="list-style-type: none"> • Strap is run out and the motor stops. Remove the remaining strap from Pool Box and set a new coil.

③ Forward/Reverse Switch

<Strap Forward and Reverse>

- Forward  : When this switch is turned counterclockwise, to forward the strap.
- Reverse  : Turn this switch clockwise to reverse the strap.

④ Stop Switch 【STOP】

- Use the stop switch in emergency or whenever you want to stop the strapping cycle before it is complete. Pressing this switch will stop the machine operation immediately even during a cycle. However, unlike Power Switch①, this Switch will not stop the current into the heater.
- This switch will automatically lock when pushed. To release, turn it clockwise.
- To return to the home position, first remove the cause of the stop completely. Then release the lock and press Start Switch⑤.
- When the machine will not be used for a period of time, press this switch for added safety.

⑤ Start Switch 【START】

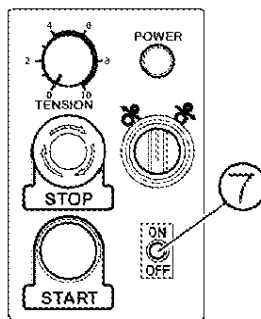
- To start the strapping cycle.
When this switch is pressed, a strapping cycle starts.

⑥ Tension Adjust Dial 【TENSION】 (=T3)

- The Tension Adjust Dial controls the strap tension.
Adjust appropriately according to the package size and type.

⑦ Ball Switch, ON-OFF Selector Switch (Option)

- This is a selector switch of Table Ball Switch.



Volume Adjustments and Function

Volumes are adjusted at the factory.

Use caution when making adjustments, as incorrect adjustments will cause problems.

When any adjustment is required, please follow the directions below.

HEATER (Heater Temperature)

- Heater temperature can be adjusted according to the working temperature, strap type or strap thickness. Once the adjustment is made, there is no further adjustment necessary unless there is a change in the working condition.
- Turn the volume clockwise to increase temperature.
- Start the adjustment around 3-4 of this volume.
Refer to “Check that seal!” to confirm the adequate setting.

T1 (Minimum Package Size Setting) ※Factory Setting: 0

- When the package is so small that the tension is inconsistent, turn this dial clockwise just a little.
- Note that when T1 setting is too high, the loop ejection gets cancelled and strap could jam around the sealing head.

T2 (Forward Timer)

※Factory Setting : According to the Arch Size

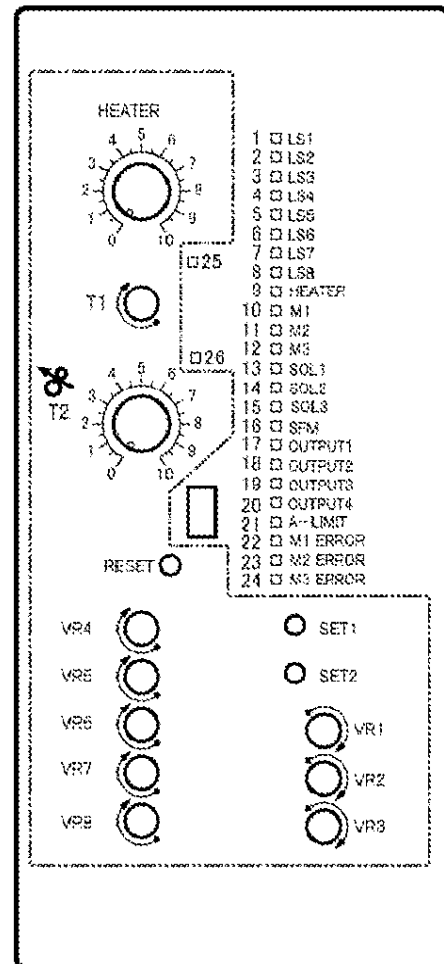
- Timer for adjusting the forwarding time of strap.
- Slightly turn right the knob when the strap does not reach Slide Table during continuous operation. However, appropriate adjustment will be required after investigating the cause. This is because the cause of the reversing strap will not necessarily be this Forward Timer but inappropriate forwarding strength, distorted strap or the resistance of split strap.

T3 (Tension Timer)

*This is a timer for Tension Adjust Dial in Operation Switches. Description is in the previous page.

RESET (Reset Switch)

- To reset the machine when one of the error lamps (22,23,24) on the IC Control Box is lit due to motor overload.
- However when the same motor overload occurs three times in a row, this RESET switch will not work. In such a case, the power switch must be turned off and turned back on again.



SET1, SET2 (Mode Switch)

- To set the stroke length or add options.
- These switches are normally unused.

VR1 (To Reduce noise at the end of tensioning) ※Factory Setting: 0

- This volume alleviates the strap release noise at the end of tensioning.
- Turn the dial clockwise to help reduce the noise.
- Turning this up too much will compromise the tensioning.
- This function is activated by delaying the restart of the cam shaft. Therefore the cycle time will increase by the time added by this timer.

VR2 (Seal Time Extension) ※Factory Setting: 0

- To extend the time to cool off the sealed strap.
- This function can be used when the sealed strap pops open right after the cycle completion.
- This function can also be activated as needed, when one or more of the following conditions exists.
 - ◇ Strapping non-compressible packages with tight tension
 - ◇ Using special types of strap that don't seal well
 - ◇ To get consistent sealing when strapping large, unyielding packages
- This volume will set the stopping time of cam shaft at the sealing position, therefore the cycle time will increase by the time added by this timer.

VR3 (Heater Temperature Supplement) ※Factory Setting: 0

- To supplement the unusual drop in the heater temperature
- This volume can be used during consecutive operation and/or when the working condition affects the heater temperature (e.g. cold environment).
- Unnecessary adjustment of this volume may cause seal problem as the heater melts the strap too much.

VR4 (To Prevent Incomplete Reversing) ※Factory Setting: 0

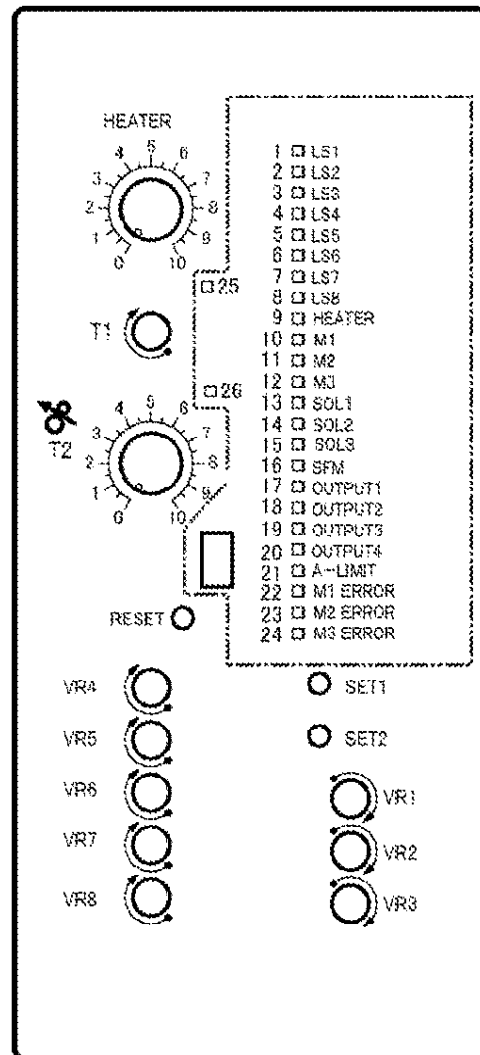
- This volume can be used when incomplete reversing occurs due to high friction surface (such as Styrofoam or rubber) of the package.
- Using this volume, the reversing time can be extended even when LS5 detects the reversing completion. Thus, the incomplete reversing before tensioning can be avoided.

VR5 (Spare) VR6 (Spare) VR7 (Spare) VR8 (Spare)

Lamps on the IC Control Box

1. **LS1 (Timing, Home Position Confirmation)** : Turns on the holes in the timing plate is detected.
2. **LS2** : Spare
3. **LS3 (End of strapping material detected)** : The sensor detects the end of the coil of strapping material.
The LED lights when this sensor is activated.
4. **LS4 (Pool Box Strap Amount Detection)** : Turns on when there is insufficient amount of strap in the pool box and the balance bar moves up.
5. **LS5 (Reverse Pulse Detection)** : Flashes when FR Touch Roller rotates. (reverse side)
: 1 rotation = 1 each of ON/OFF

6. **LS6** : Spare
7. **LS7** : Spare
8. **LS8** : Spare
9. **HEATER** : Turns on when the heater is energized.
10. **M1 (Sealing Motor)** : Turns on when it is to activate
11. **M2 (FR Tension Motor)** : Turns on when it is to activate
12. **M3 (Pool Motor)** : Turns on when it is to activate
13. **SOL1 (Reverse Solenoid)** : Turns on when it is to activate
14. **SOL2 (Tension Solenoid)** : Turns on when it is to activate
15. **SOL3 (Feed Solenoid)** : Turns on when it is to activate
16. **SFM (Smoke Fan)** : Turns on when it is to activate



17. **OUTPUT1** : Spare

18. **OUTPUT2** : Spare

19. **OUTPUT3** : Spare

20. **OUTPUT4** : Spare

21. **A-LIMIT (M2 Limit on Amount of Electric Current)** :

✧ Orange Light: Turns on when the current from Tension Motor reaches the preset limit

22. **M1 ERROR (M1 Motor Error)** :

✧ Red Flash : Flashes when Sealing Motor keeps running for more than the preset amount of time.

23. **M2 ERROR (M2 Motor Error)** :

✧ Red Light : Turns on when there is a continuous overload on FR Motor

24. **M3 ERROR (M3 Motor Error)** :

✧ Red Flash : Flashes when Pool Motor keeps running for more than the preset amount of time while LS4 stays on. (i.e. Pool Error)

25. : Spare

26. optional specification of torque tighten only

When a communication error occurs inside the control board, it lights up together with A-LIMIT and the machine stops. Turn the power off and on again.

<Loop Light>

When the lamps 21, 22, 23, 24 light in a loop, it indicates one of the front door is open.

When this pattern shows even when the door is closed, it means that the 24VDC circuit is broken.

Purpose of the Sensors

LS1 (Timing & Home Position Confirmation Switch)

This Proximity Switch detects the holes in the Timing Plate and initiates the following movements; When LS1 detects a hole, the switch is actuated and the lamp (LS1) on the Control Box will light.

LS3 (End of Strap Detection Switch)

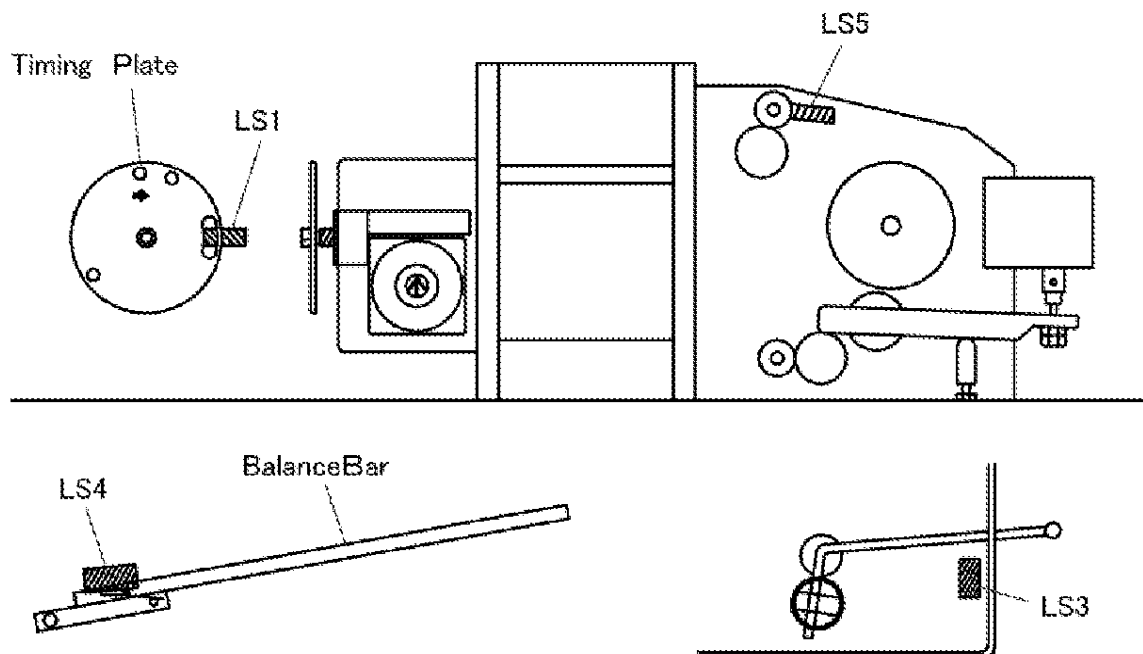
This micro switch detects depletion of the strap. When the switch is actuated, the power indicator lamp flashes and machine stop after another one strapping is made. Strap is not forwarded, sealing motor stops, and the start switch does not activate. To resume operation, thread strap a new coil according to "Loading Strap".

LS4 (Strap Amount in the Pool Box)

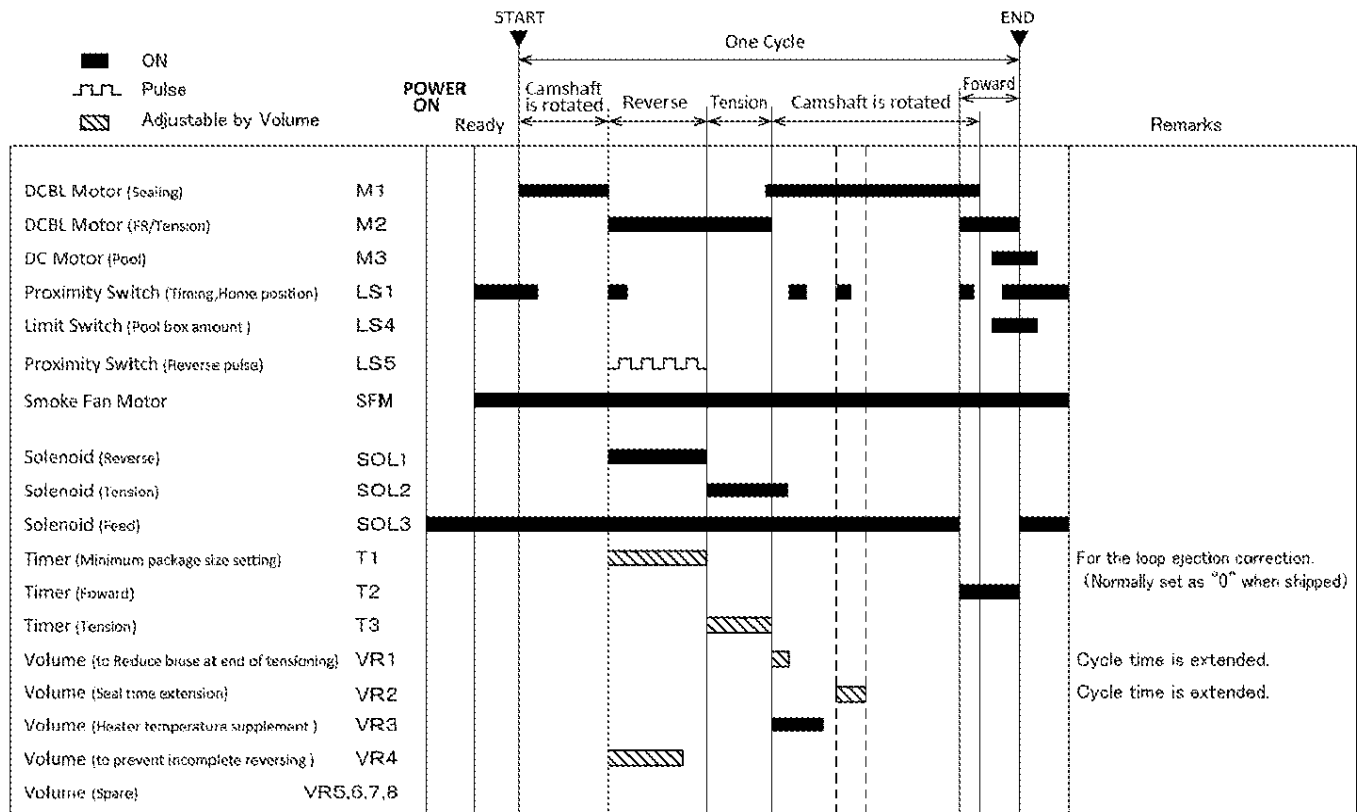
This micro switch detects and sends signal that strap contained in pool box is nearly empty. When LS4 is activated, the lamp (LS4) on the control box lights.

LS5 (Reverse Pulse Sensor)

This proximity switch detects that reversing of strap is completed and initiates tensioning.



Timing Diagram



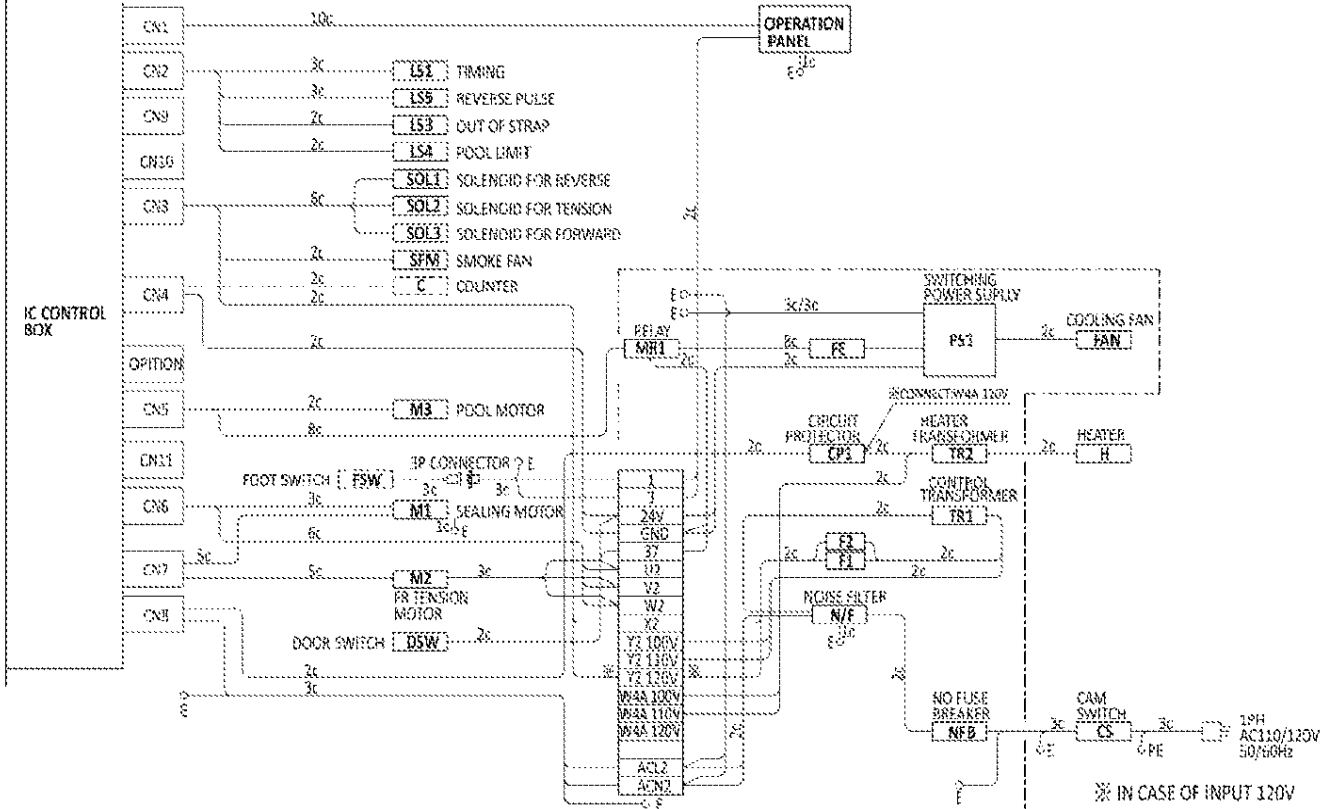
Wiring Diagram & Electrical Diagram

SQ-800 & SQ-800SUS	100-120V	200-240V
Standard (Option: Foot Switch)	SESQ8-1005	SESQ8-1006
Option : Table Ball Switch	SESQ8-1007	SESQ8-1008
Option : Foot Bar Switch	SESQ8-1009	SESQ8-1010

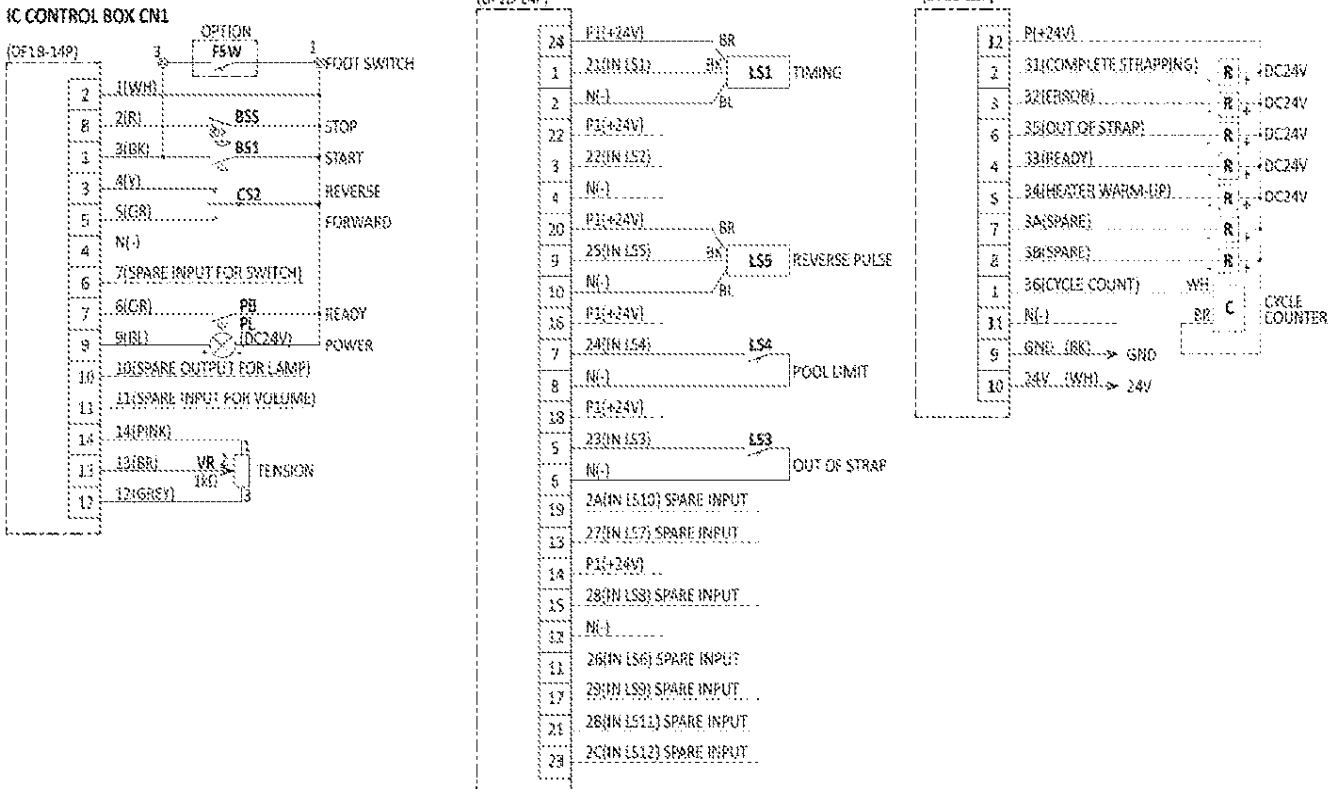
SQ-800S	100-120V	200-240V
Standard (Option: Foot Switch)	SESQ8-1015	SESQ8-1018
Option : Table Ball Switch	SESQ8-1016	SESQ8-1019
Option : Foot Bar Switch	SESQ8-1017	SESQ8-1020

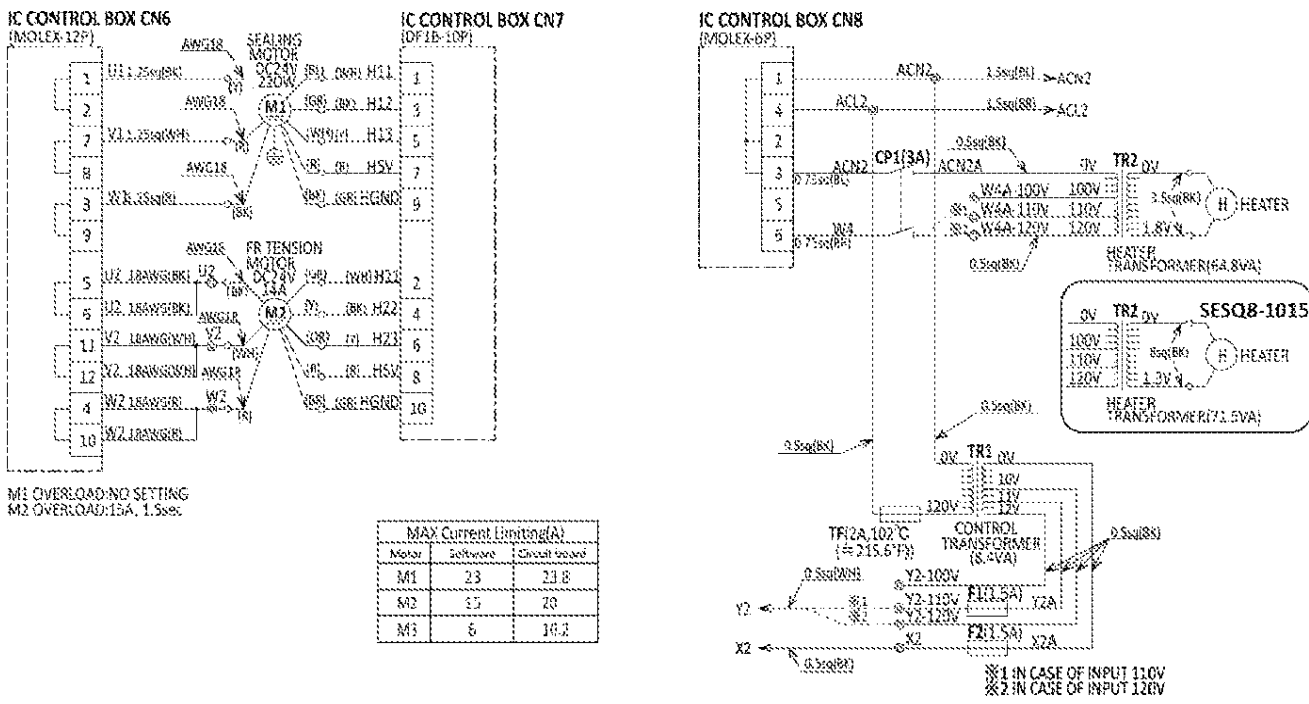
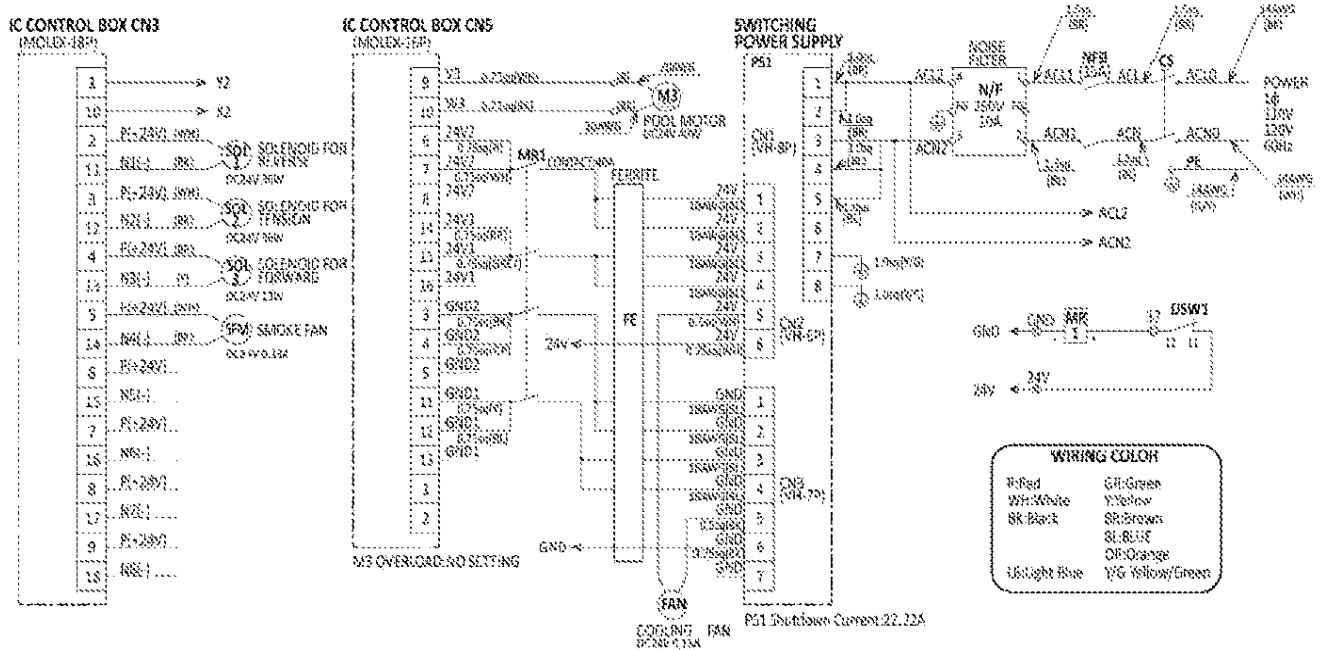
SEQ-1005 & SEQ-1015 (110~120V: Standard)

●Wiring Diagram



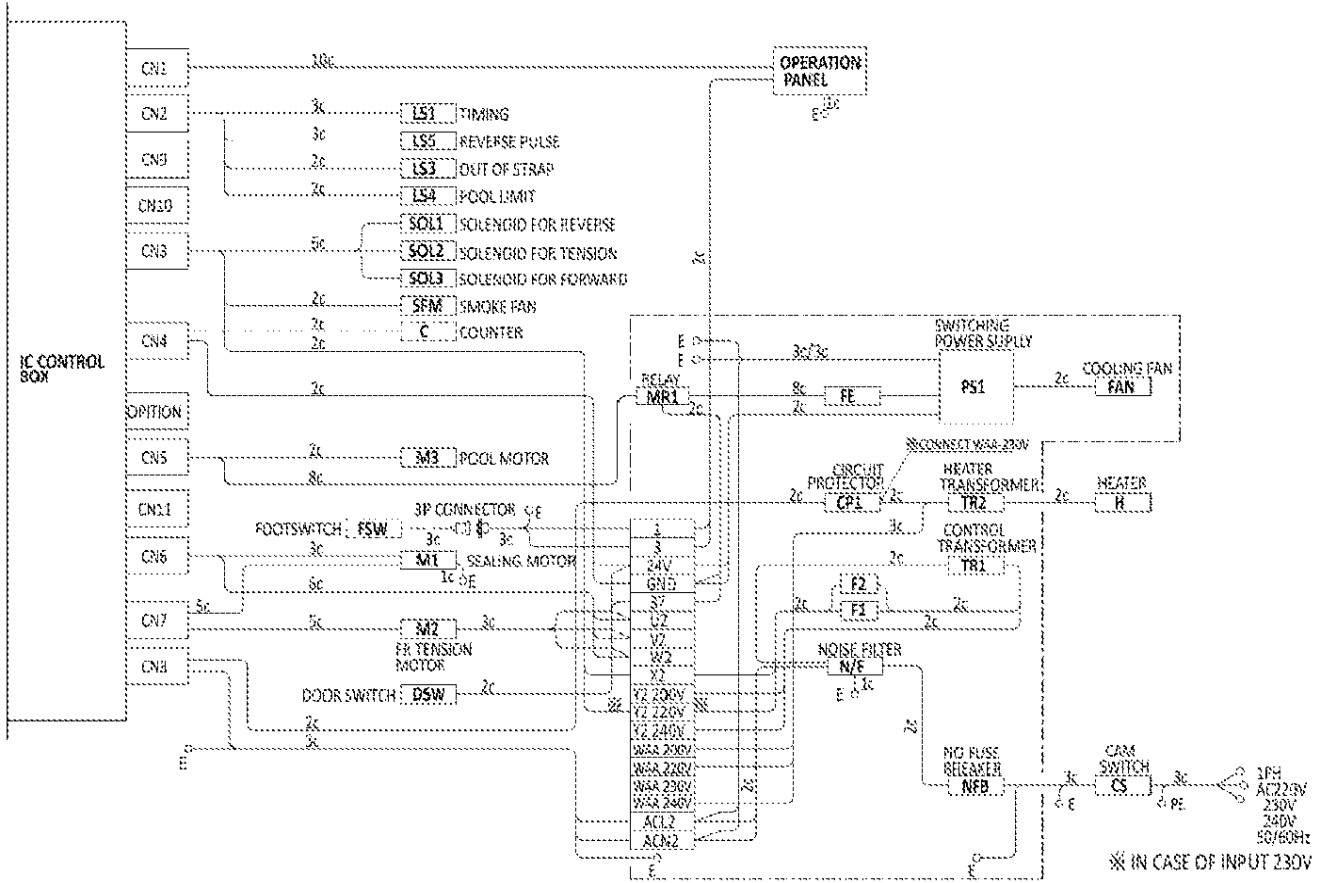
●Electrical Diagram



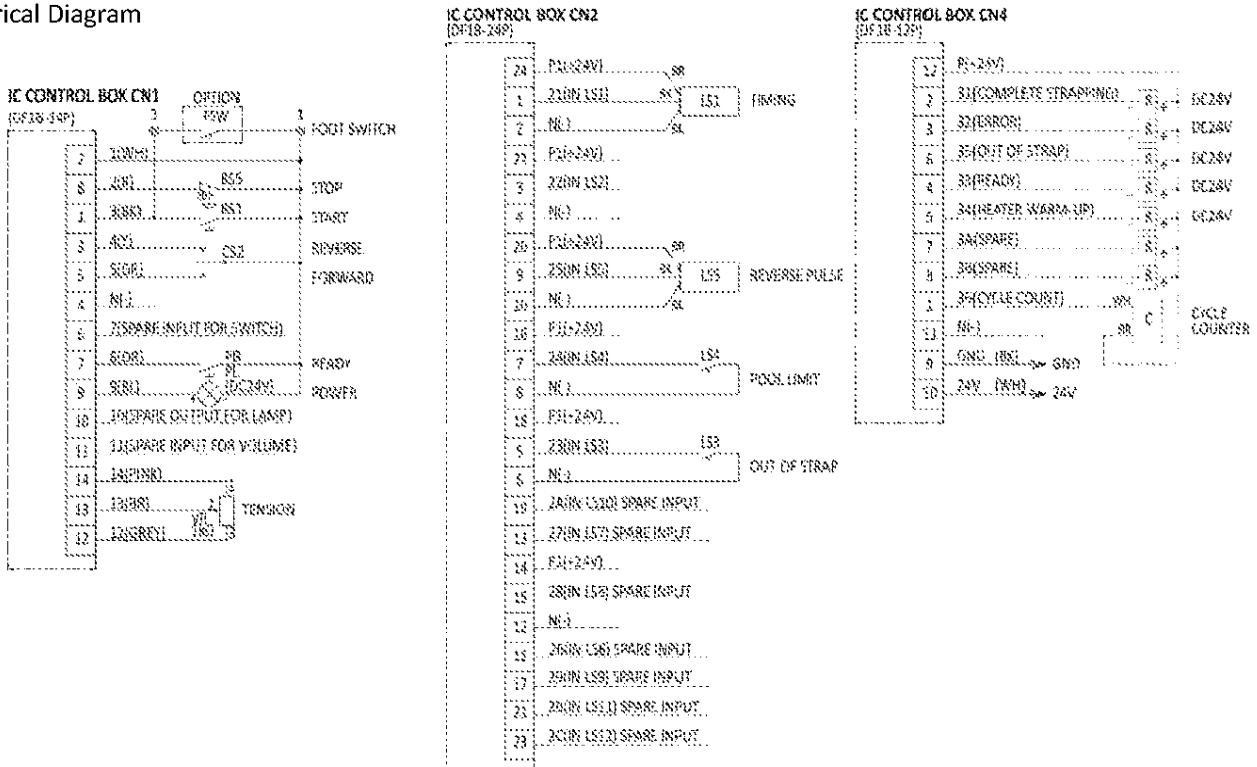


SESQ-1006 & SESQ-1018 (200~240V: Standard)

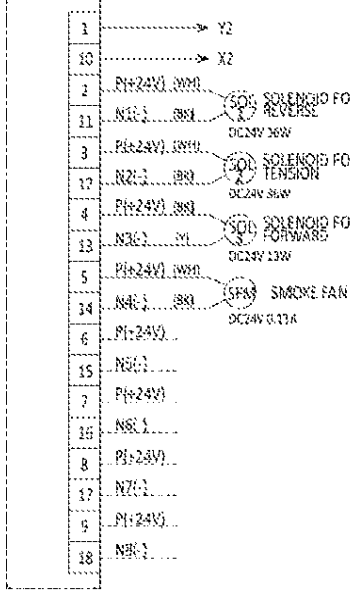
●Wiring Diagram



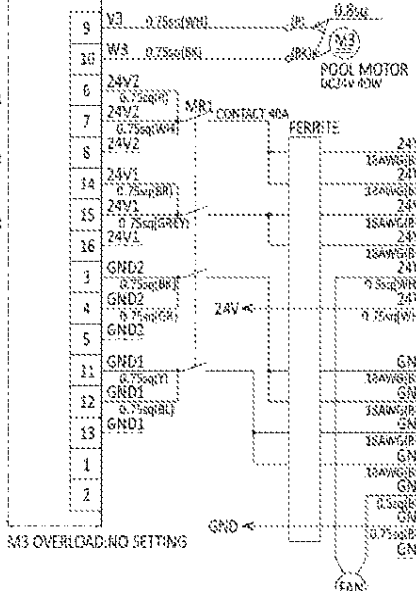
●Electrical Diagram



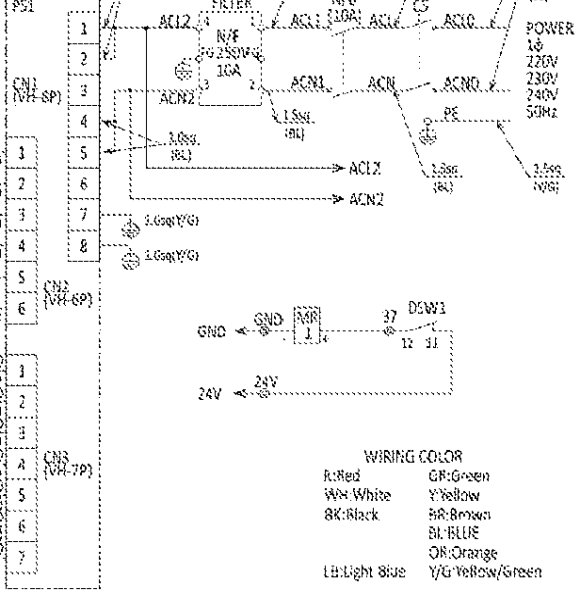
IC CONTROL BOX CN3 (MOLEX-18P)



IC CONTROL BOX CN5 (MOLEX-16P)



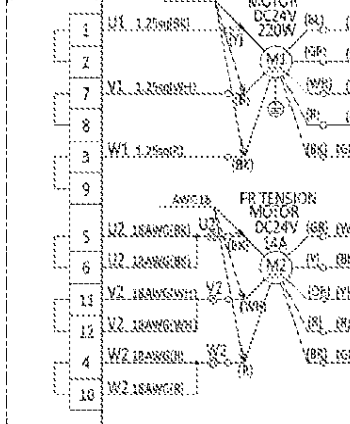
SWITCHING POWER SUPPLY (PS1)



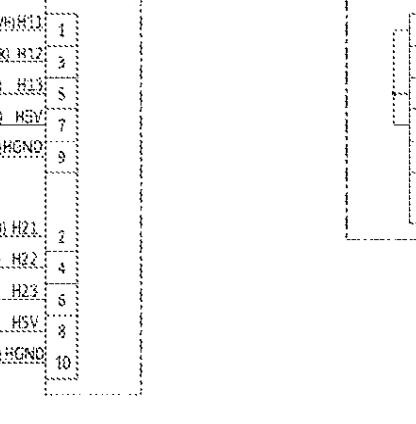
WIRING COLOR

R:Red	GR:Green
WH:White	Y:Yellow
BK:Black	BR:Brown
BL:BLUE	OR:Orange
LB:Light Blue	Y/G:Yellow/Green

IC CONTROL BOX CN6 (MOLEX-12P)



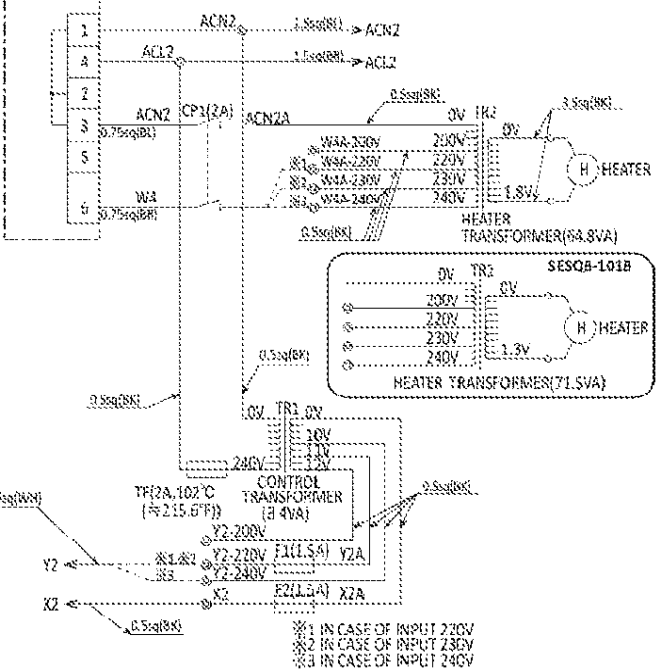
IC CONTROL BOX CN7 (DF1B-10P)



M1 OVERLOAD: NO SETTING
M2 OVERLOAD: 15A, 1.5sec

Motor	Software	Circuit board	MAX Current Limiting(A)
M1	ZS	Z3.8	23.8
M2	ZS	Z6	26
M3	ZS	Z10.2	10.2

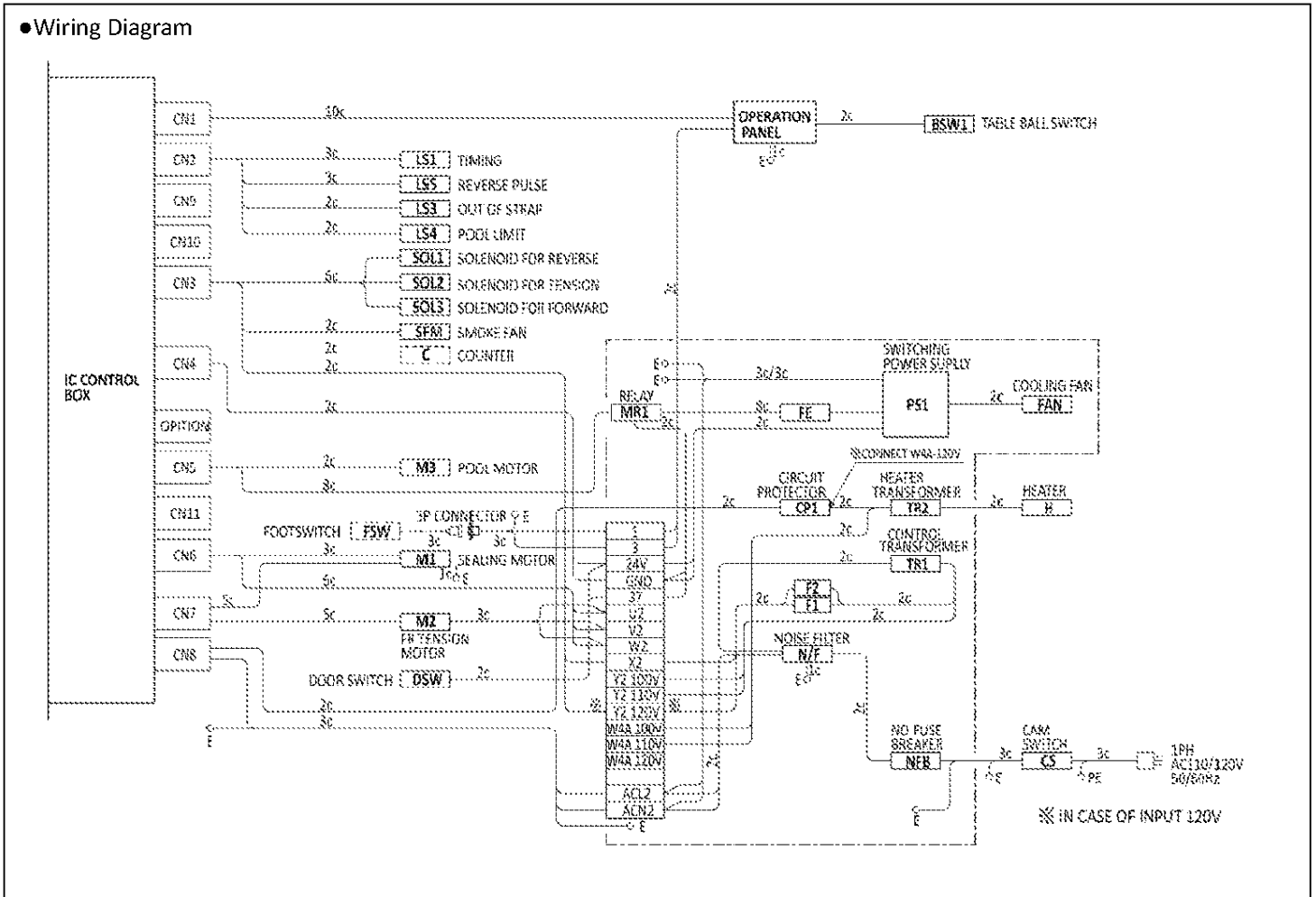
IC CONTROL BOX CN8 (MOLEX-6P)



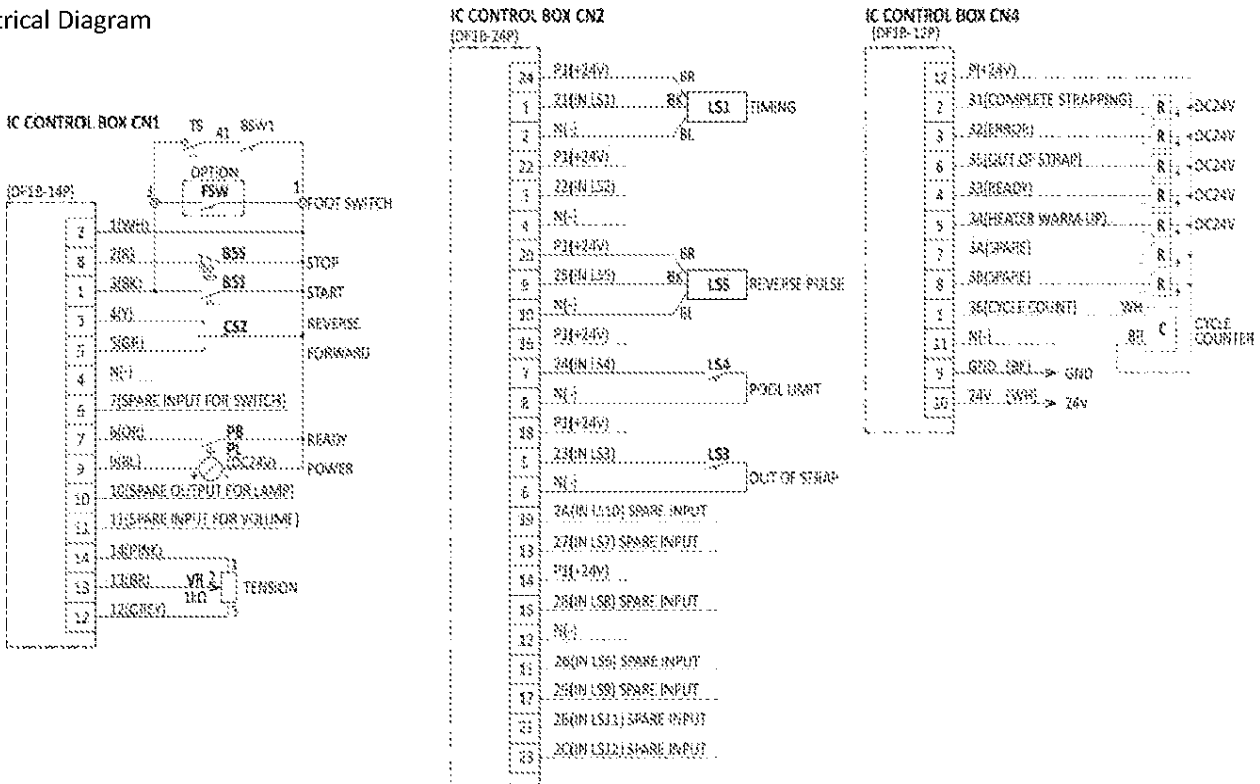
*1 IN CASE OF INPUT 220V
*2 IN CASE OF INPUT 230V
*3 IN CASE OF INPUT 240V

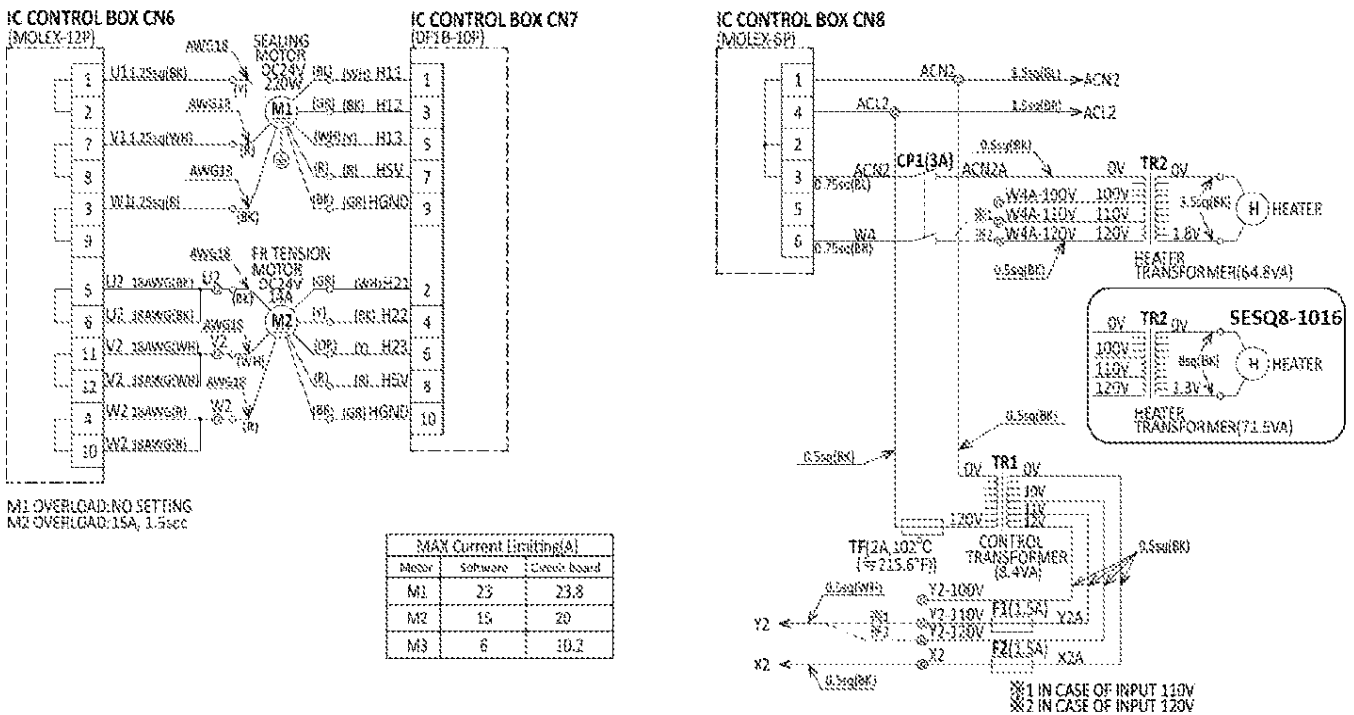
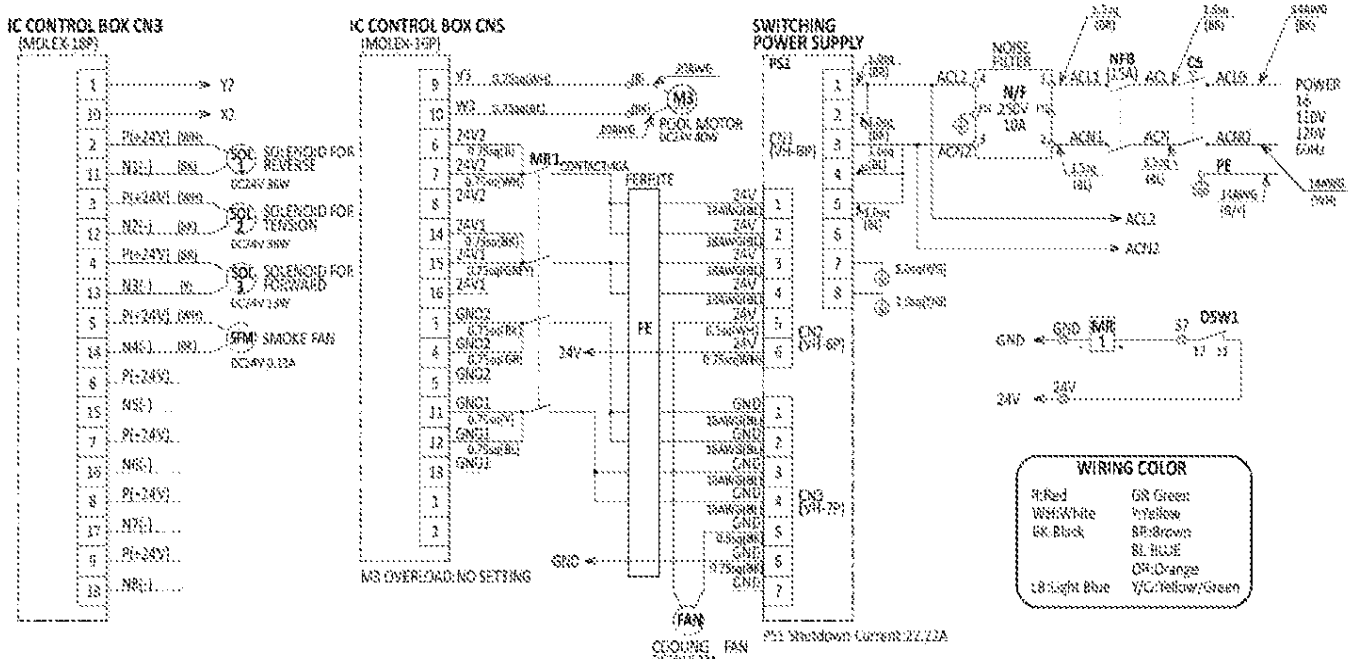
SEQ-1007 & SEQ-1016 (110~120V: Table Ball Switch Option)

●Wiring Diagram



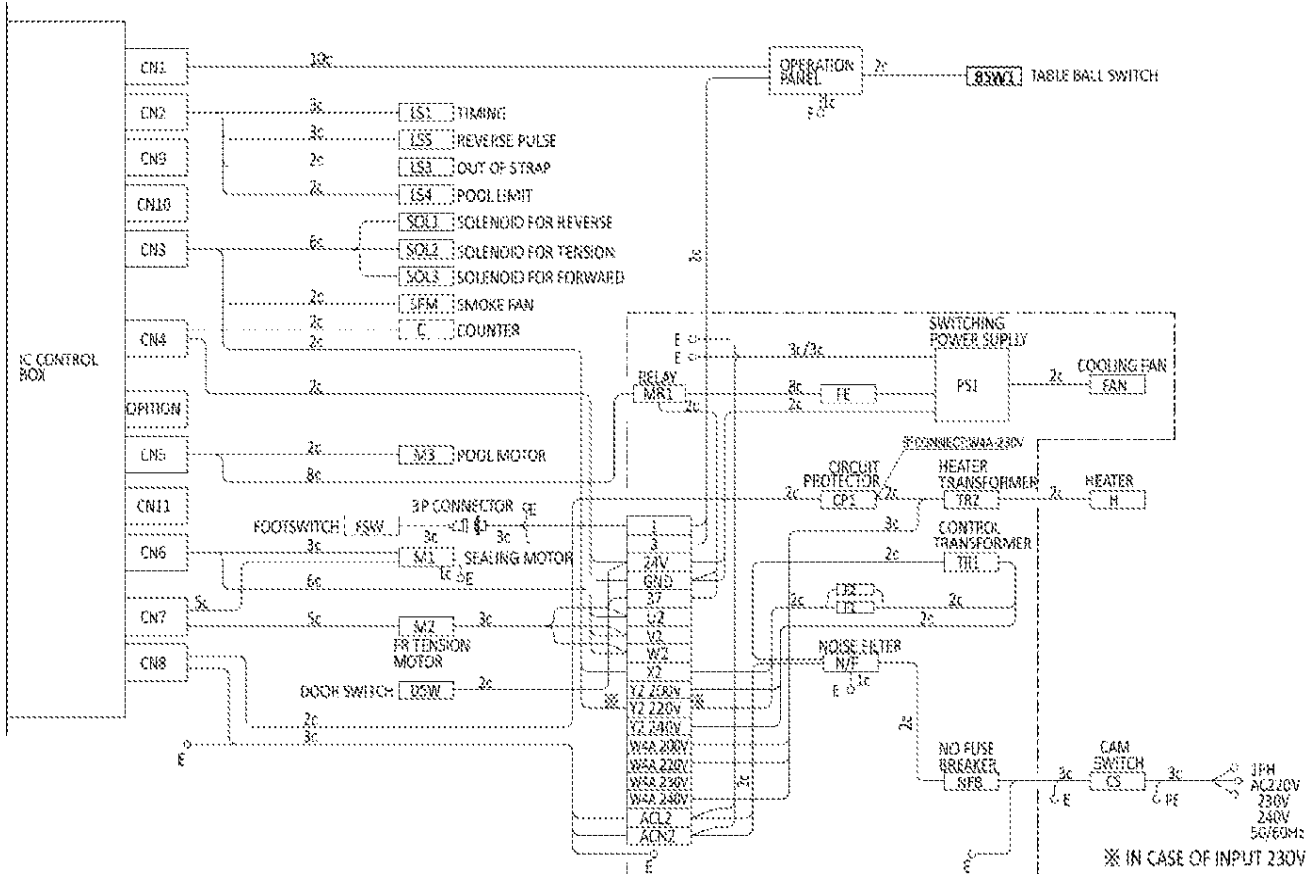
●Electrical Diagram



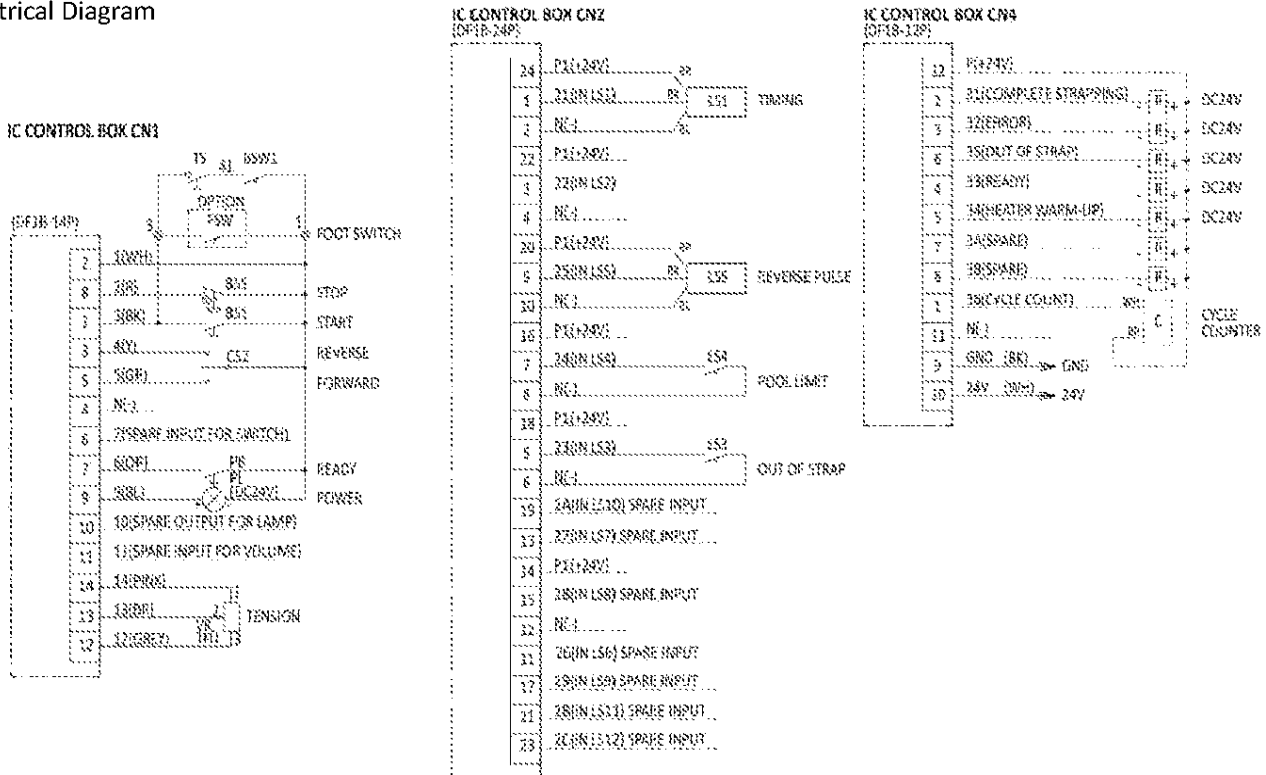


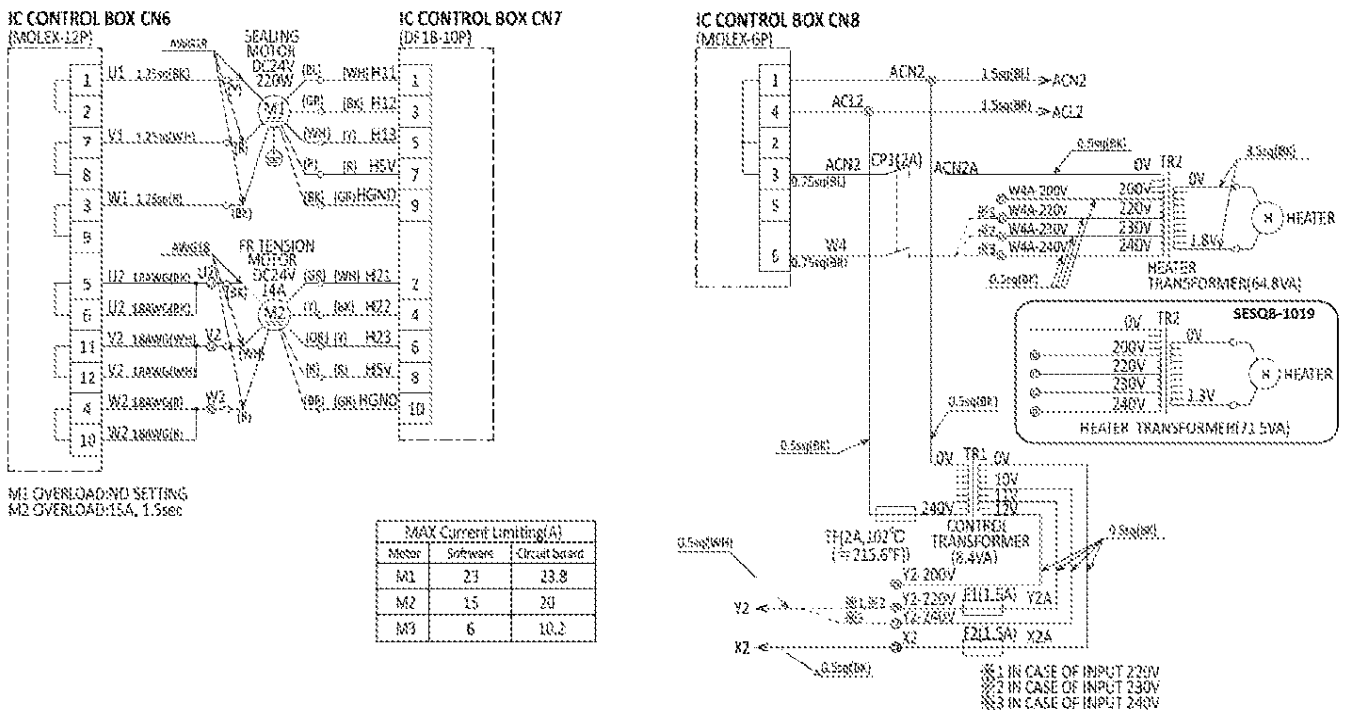
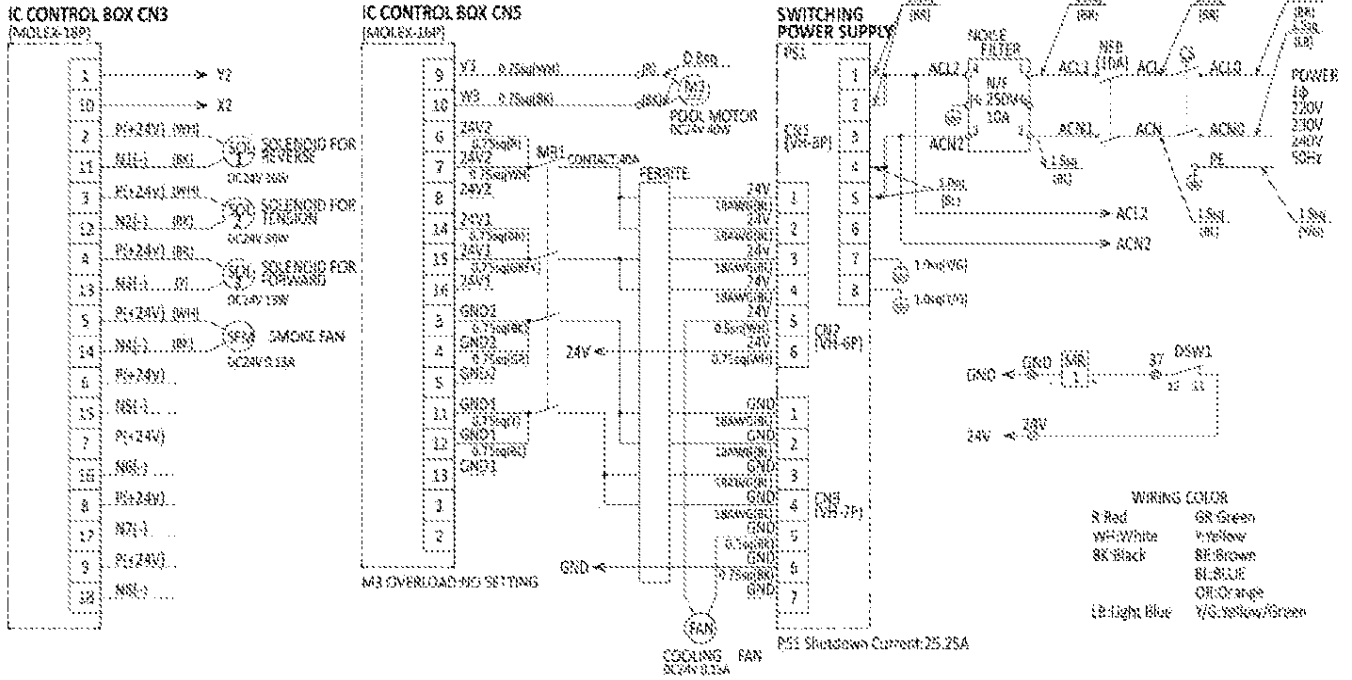
SESQ-1008 & SESQ-1019 (200~240V: Table Ball Switch Option)

●Wiring Diagram



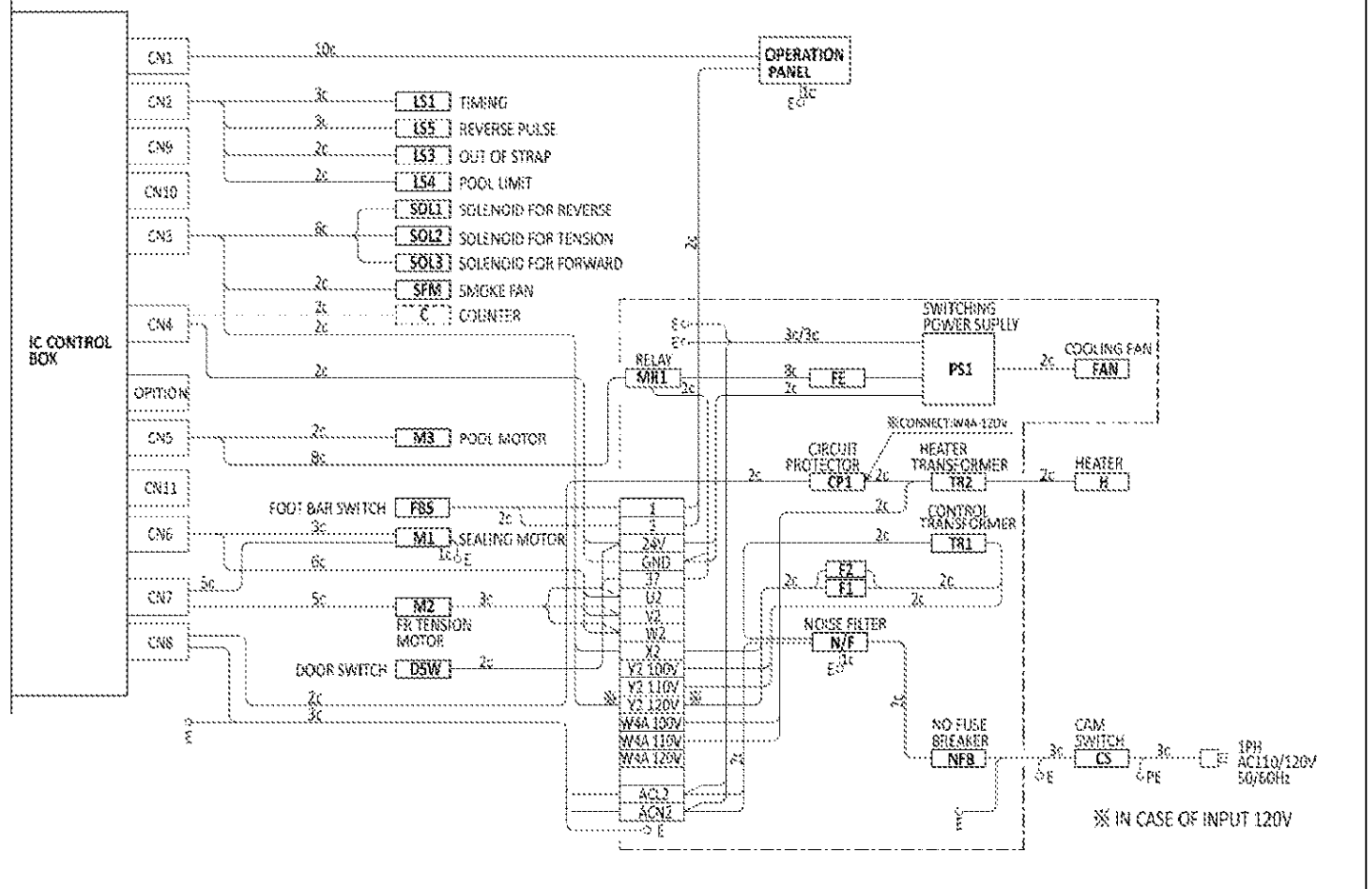
●Electrical Diagram



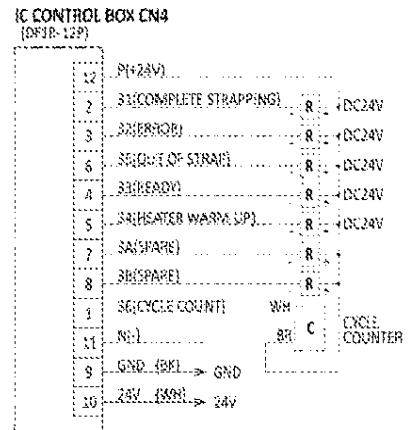
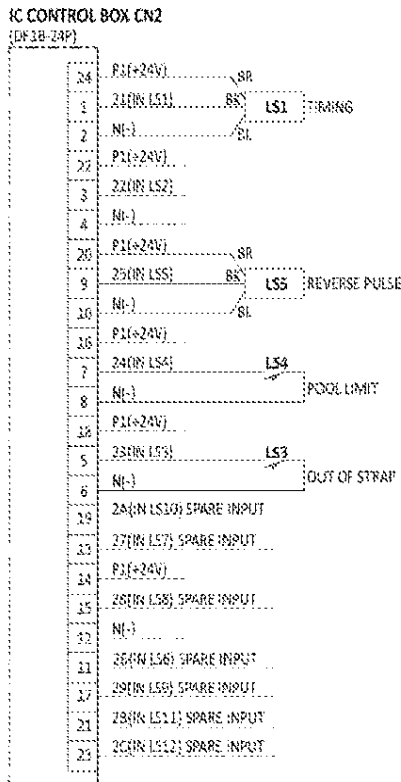
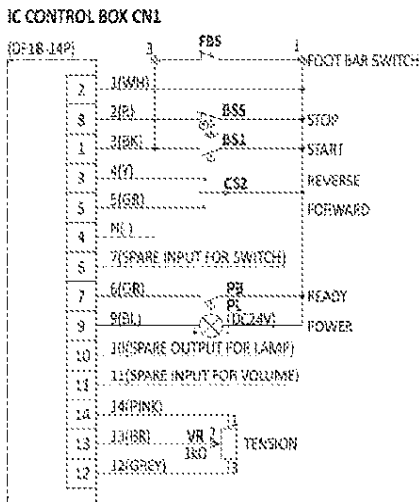


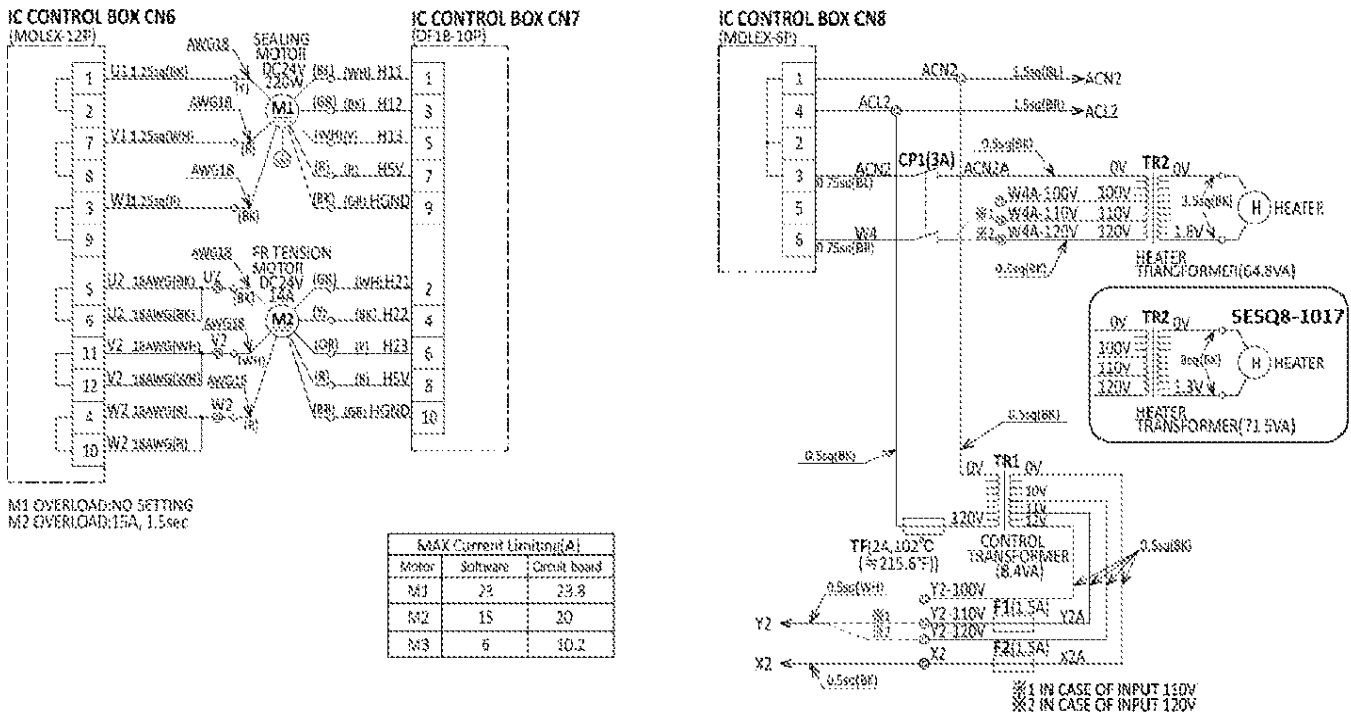
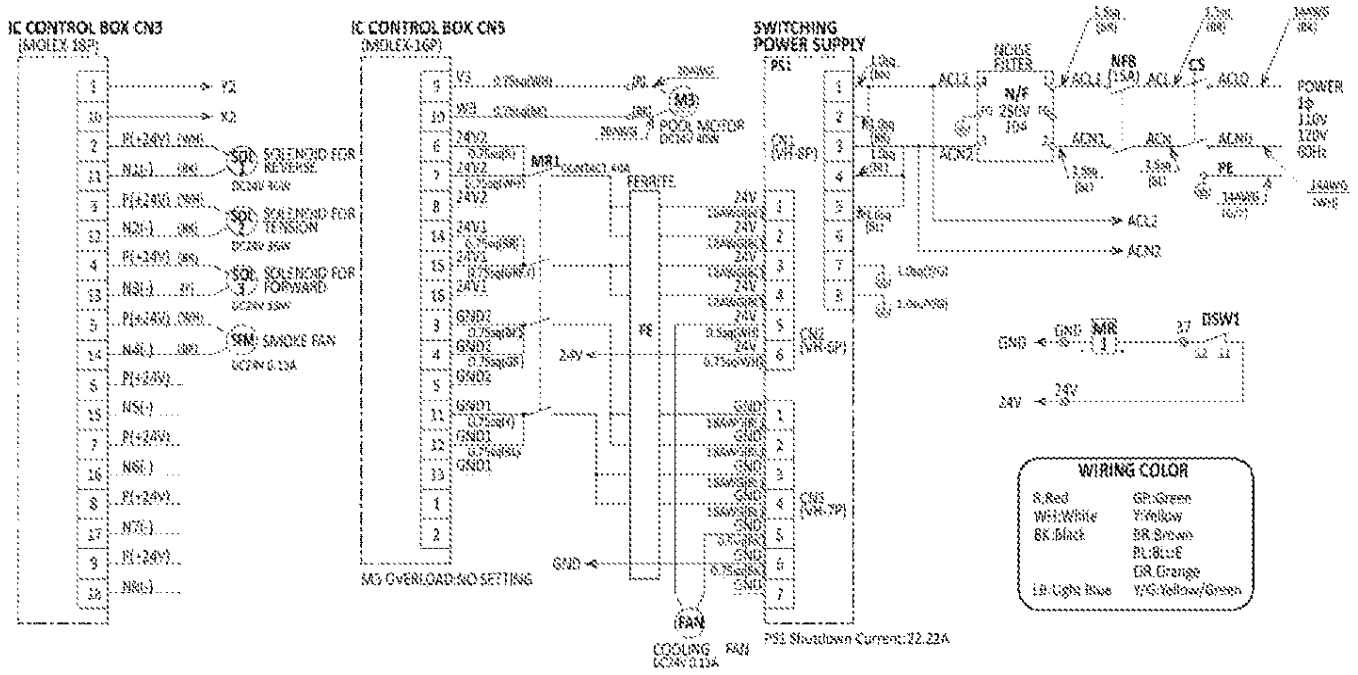
SESQ-1009 & SESQ-1017 (110~120V: Foot Bar Switch Option)

●Wiring Diagram



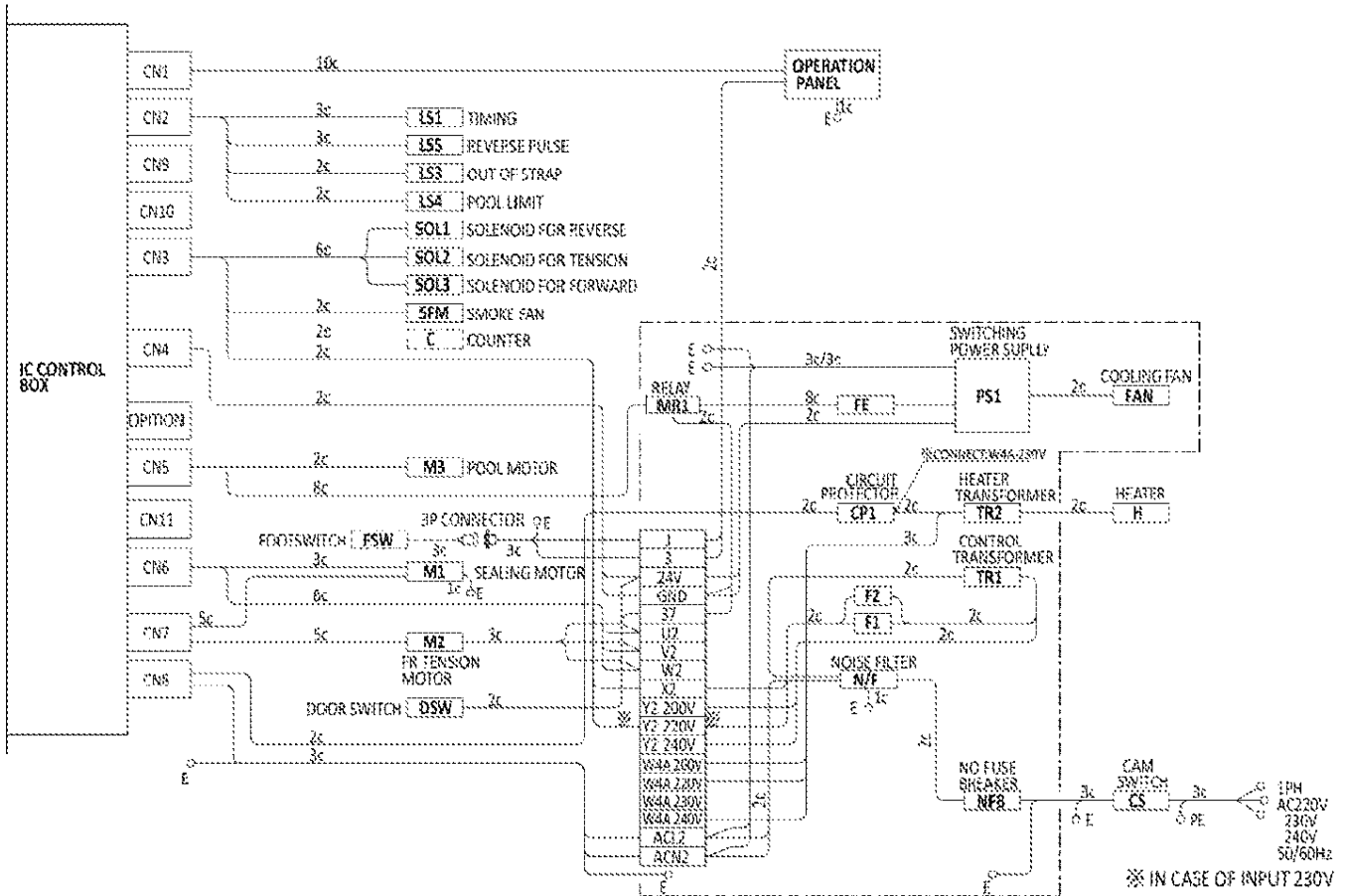
●Electrical Diagram



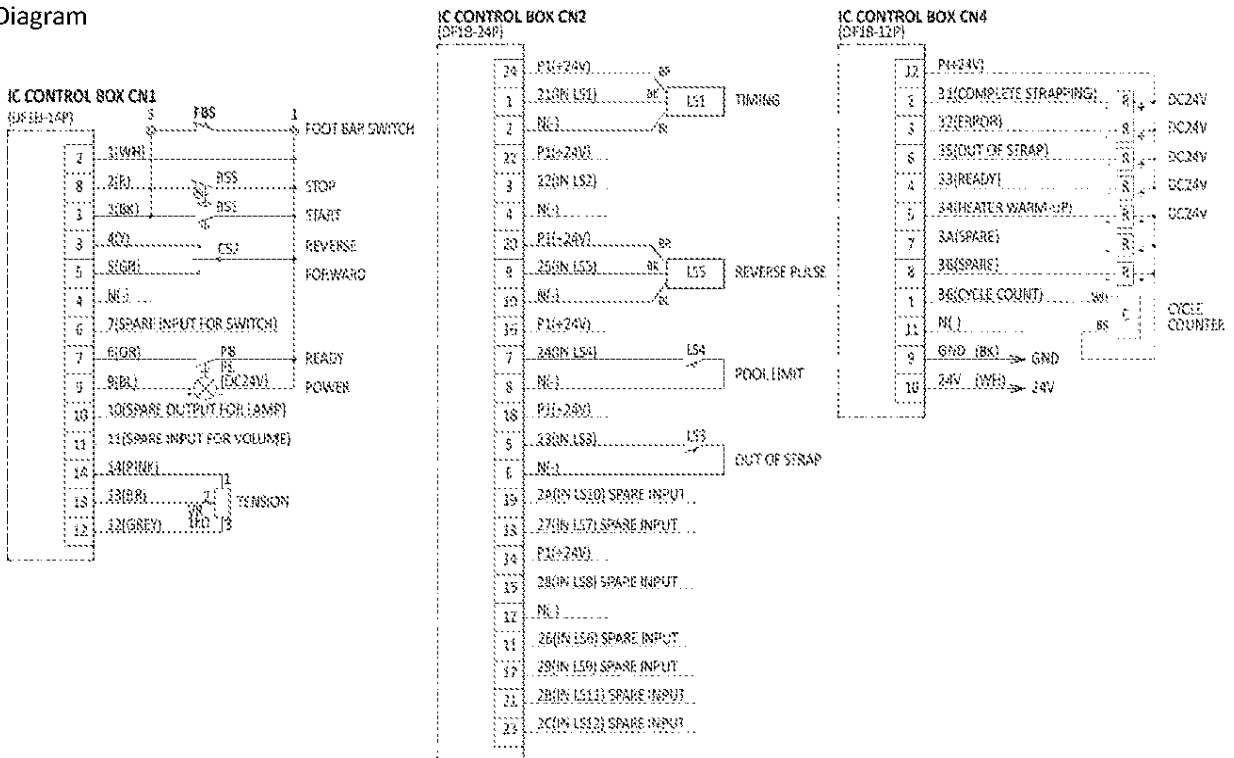


SESQ-1010 & SESQ-1020 (200~240V: Foot Bar Switch Option)

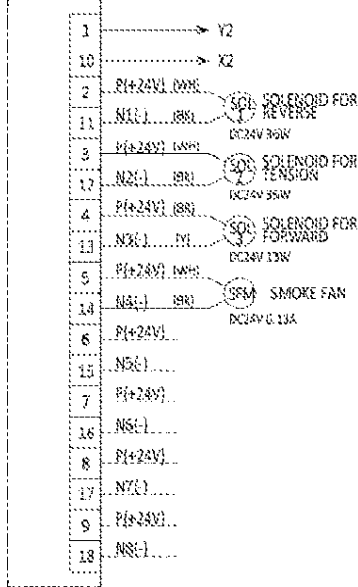
●Wiring Diagram



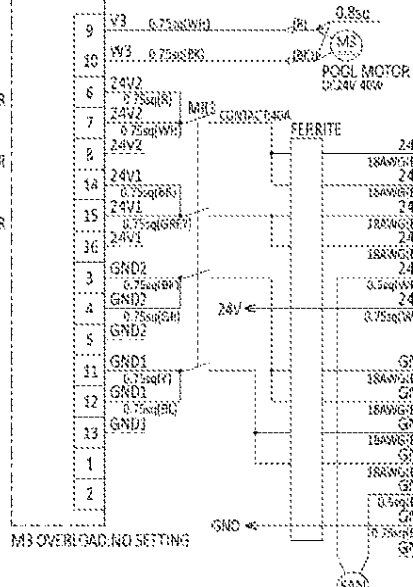
●Electrical Diagram



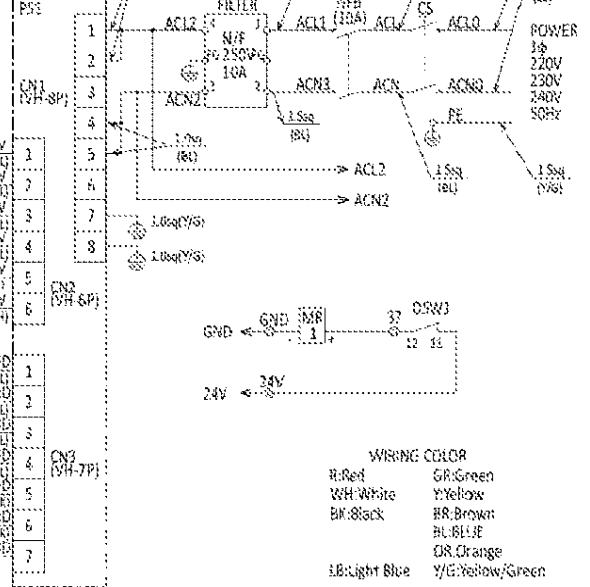
IC CONTROL BOX CN3 (MOLEX-18P)



IC CONTROL BOX CN5 (MOLEX-16P)



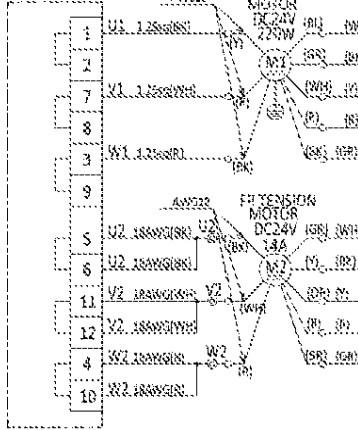
SWITCHING POWER SUPPLY



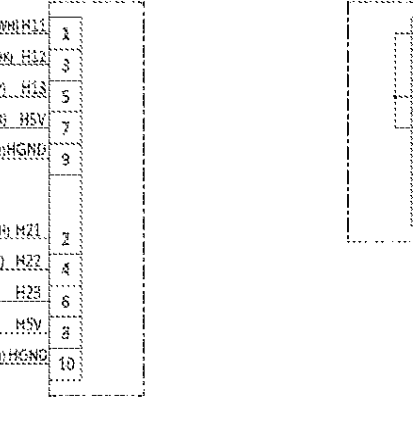
WIRING COLOR

R:Red	GR:Green
WH:White	Y:Yellow
BL:Black	BR:Brown
	BL:BLUE
	OR:Orange
LB:Light Blue	Y/G:Yellow/Green

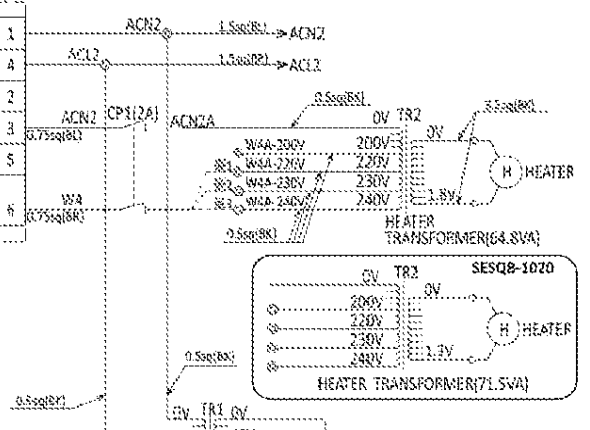
IC CONTROL BOX CN6 (MOLEX-12P)



IC CONTROL BOX CN7 (DF18-10P)



IC CONTROL BOX CN8 (MOLEX-6P)



M1 OVERLOAD: NO SETTING
M2 OVERLOAD: 15A, 1.5sec

Motor	Software	Circuit board
M1	23	21.8
M2	15	20
M3	5	19.2

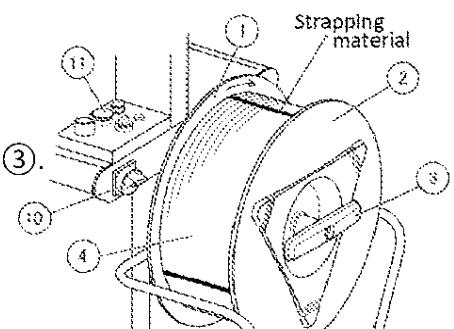
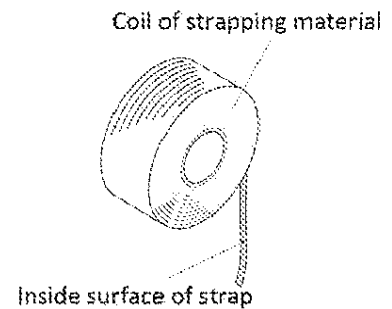
※1 IN CASE OF INPUT 220V
※2 IN CASE OF INPUT 230V
※3 IN CASE OF INPUT 240V

Chapter 5 OPERATION

Loading Strap Coil

- Place a strap coil before removing the strapping material around it.

1. Push and lock the Stop Switch (11) and turn the Power Switch (10) off.
2. Place a strap coil (4) (while it is still secured with strapping material) on the Reel Center Guides according to the direction of the arrow (clockwise) on the Reel In Circular (1).
3. Place the Reel Out Circular (2), and secure with the Reel Nut Handle (3).
4. Cut and remove the strapping material in the coil.



Threading Strap

1. Push and lock the Stop Switch (11) and turn the Power Switch (10) off.
2. Lift and shift the Touch Lever (5) from A to B along the Guide (6) so that the strap path is formed in the Pool Box (12).
3. Thread the tip of strap through Roller (7) while pushing Reel Brake Arm (14) slightly (Brake is released.) And, thread Roller (8) by turning strap 90 degrees.

NOTE : that direction of strap travel turn 90 degrees between rollers, and surface of strap which face outward on the reel.

4. Insert 15-20cm (5.9-7.7/8in.) into Pool Box inlet (9).
NOTE : Excess (more than 30cm/11.8in.) and less (less than 10cm/0.4in.) length of strap causes the trouble of self-loading device.
5. Shift Touch Lever (5) from B to A. And, turn the Power Switch (10) ON. At this time the Power Indicator Lamp (16) on the operation panel flashes slowly (about 25 seconds), then it flashes rapidly.
6. Release the Stop Switch (11) by turning clockwise. Press the blinking Power Indicator Lamp (16). It will be lit from flashing. The strap is automatically threaded into Pool Box (12) and forwarded through arch track.

- Even if the power indicator light comes on, if the strap is not drawn into the pool box, the front door may not be closed.

If the door is open, lock the stop switch, close the door, then unlock the stop switch again.

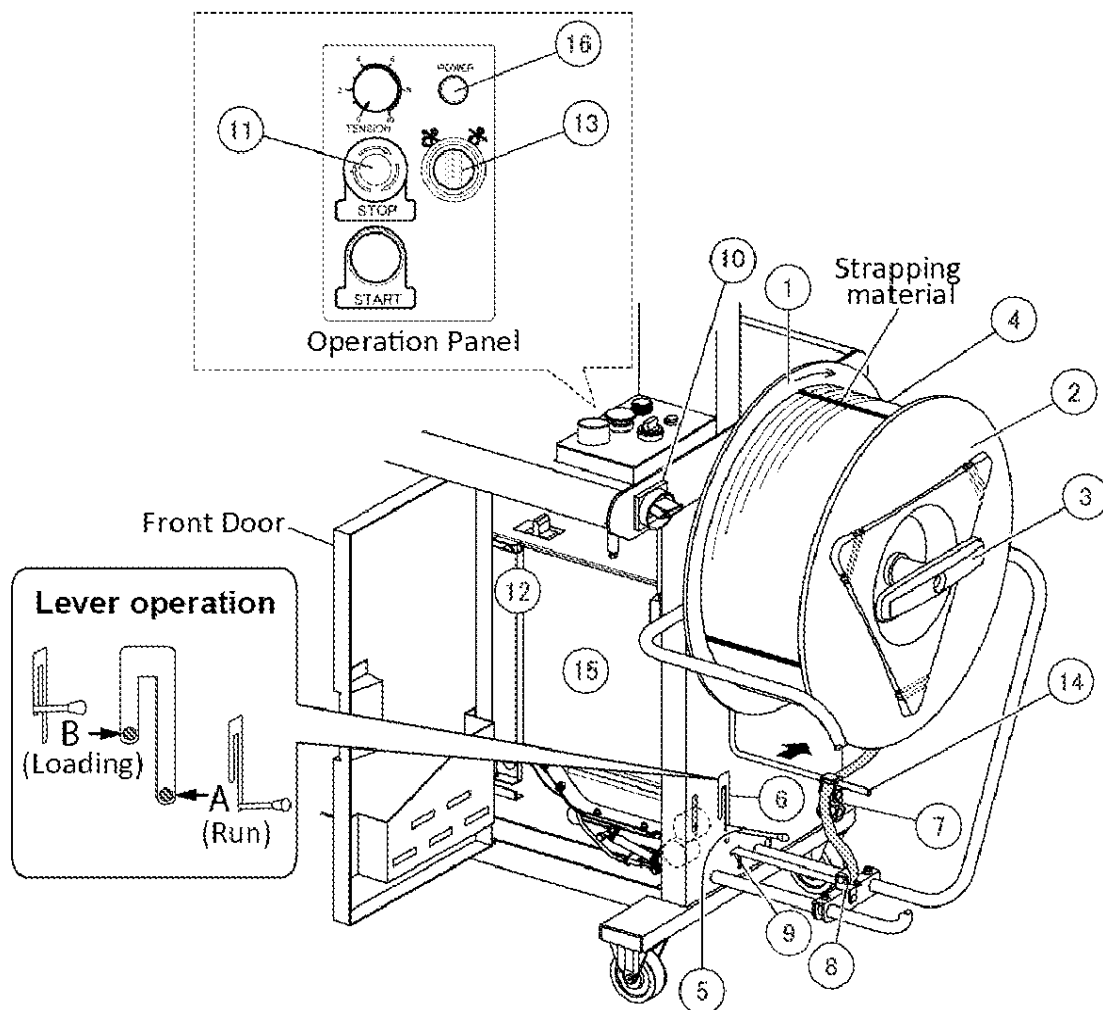
This completes the "Threading Strap".

Removing Strap

1. Turn Feed/Reverse Switch (13) clockwise until the strap comes out from arch unit.
2. Push and lock the Stop Switch (11) and turn the Power Switch (10) off.
3. Lift and shift Lever (5) from A to B along the Guide (6).
4. By turning Reel Unit (1) (2) (3), take the strap out from machine.

Removing Remaining Strap in Pool Box

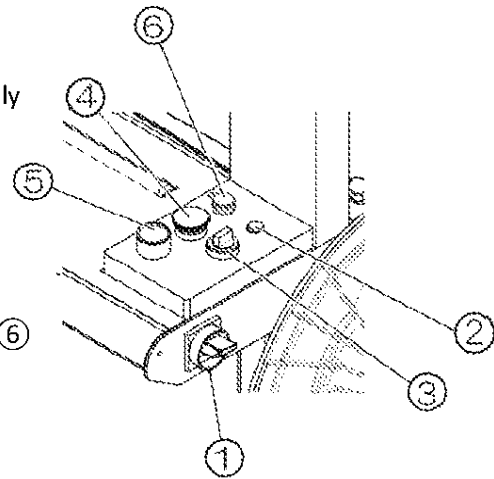
1. Push and lock the Stop Switch (11) and turn the Power Switch (10) off.
2. Open Pool Door (15) and remove the remaining strap from the machine.
3. Close Pool Door (15) and Door.



How to Operate

A. To strap manually

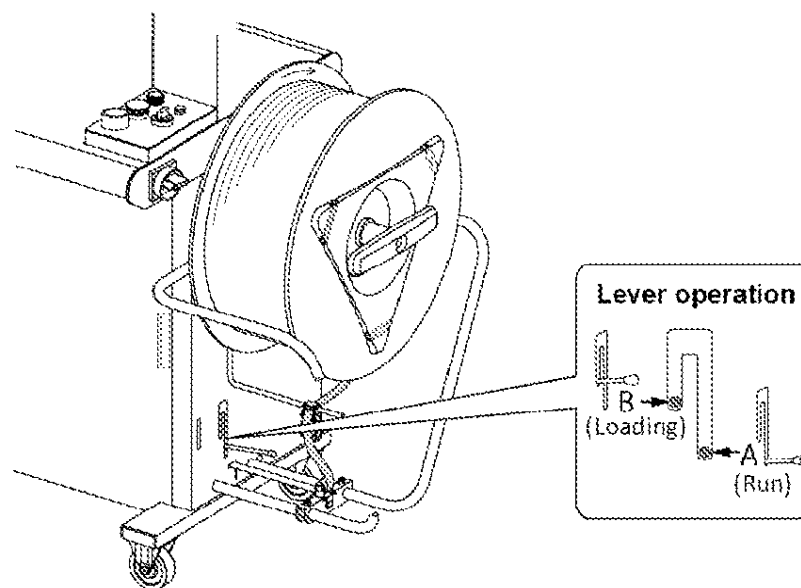
- A-1 Turn on Power Switch ①
- A-2 Wait until Power Indicator Lamp ② will flash rapidly (about 25 seconds).
Press the blinking Power Indicator Lamp ②.
It will be lit from flashing.
- A-3 Place the package over the sealing head.
- A-4 Set the appropriate tension by Tension Adjust Dial ⑥
- A-5 Press Start Switch ⑤ to start the strapping cycle.



B. At the end of operation

It is recommended to remove the remaining strap from inside the machine.

- B-1 Turn Forward/Reverse Switch ③ clockwise and reverse the strap out of the arch track.
- B-2 Switch the Strap Load Lever to Position B.
- B-3 Turn Reel Out Circular towards and rewind the strap from inside the machine around the Reel.
- B-4 Secure the tip of strap onto the strap coil with a tape.
- B-5 Switch Strap Load Lever to Position A.
- B-6 Close the door and turn off Power Switch ①.

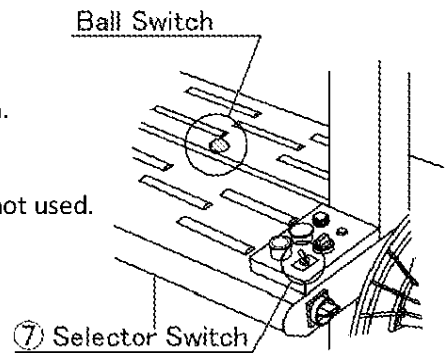


Start Switch Option

● **Table Ball Switch**



The strapping operation starts when pushing the Ball Switch.
Do not place the package on the Ball Switch by mistake.
It causes serious danger. Turn off the Ball Switch when it is not used.



The additional Selector Switch (7) will be mounted on the Operation Panel when optional Ball Switch is ordered.

Turn ON this Selector Switch (7) when the Ball Switch is used.

The Strap will be applied to the package by pushing Ball Switch.

Note: The Ball Switch cannot be used
if the Stop Switch is pushed and locked.

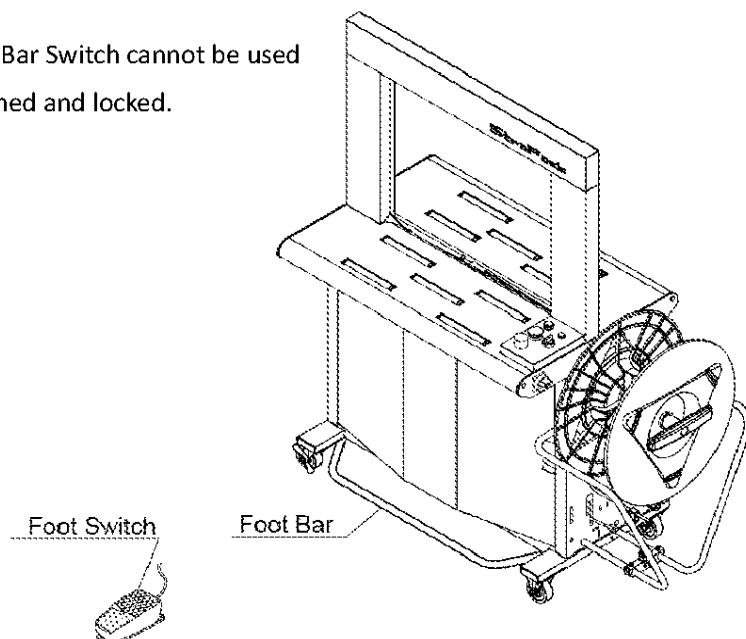
● **Foot Switch / Foot Bar Switch**



The strapping operation starts when pushing the Foot Switch or Foot Bar Switch.
Do not step the Foot Switch or Foot Bar Switch by mistake. It causes serious danger.

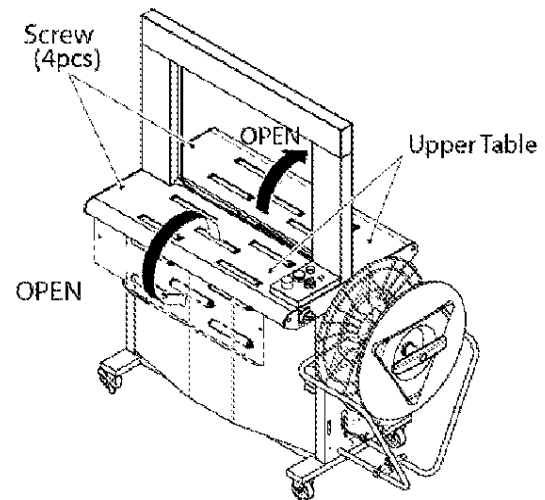
When the optional Foot Switch or Foot Bar Switch ordered, the strap will be applied by pushing Foot Switch or Foot Bar Switch.

Note: The Foot Switch or Foot Bar Switch cannot be used
if the Stop Switch is pushed and locked.



Routine Maintenance

- ✧ Please contact Technical Support when there is an error or problem that needs to be checked or repaired.
- ✧ Push and Lock the Stop Switch and turn off the Power Supply Switch when cleaning the Machine.
- ✧ Heater unit remains hot for a while. Service the machine after confirming that the heater has completely cooled down.
- ✧ It is recommended to clean and remove the dust and debris after daily operation as they could cause improper sealing and/or mechanical trouble.
- ✧ When opening upper tables, make sure to release them after tables are completely opened. (Upper tables are fixed with 2 screws in front and 2 in rear.)



Daily

- Before Operation
 - Seal Condition···Refer to “Check That Seal” and make sure the seal condition is appropriate.
 - Odd Noise·····Make sure there is no odd noise during operation
 - Vibration·····Make sure there is no unusual vibration during operation
 - Power·······Make sure that Power Plug or Cable is not damaged or deformed.
- After Operation (or Before Operation)
 - Clean inside····Use compressed air or soft brush to remove strap dust or debris.

Monthly

- Make sure there is no leak from Gear Box of Sealing Unit or Tension Motor.

Semi Annually

- Check Safety Circuits
 - Power Switch (CS)·····Power is disconnected (Machine stops) at OFF position.
 - Door Switch (DSW1)····Machine will not operate when Door is open

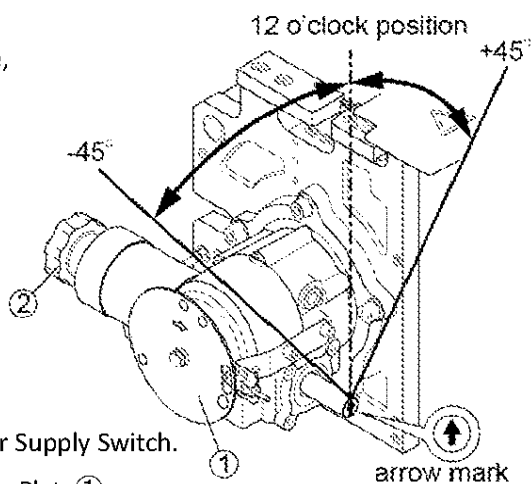
Chapter 6 ADJUSTMENT & PREVENTIVE MAINTENANCE

Home Position

The correct home position is when the arrow mark of the handle's center attached to the worm gear reducer is within ± 45 degrees when looking directly from front side.

When there is insufficient tension, feeding problem or incomplete reversing, the first thing to check is whether the home position is correct.

When the arrow mark is out of ± 45 degrees after one cycle, an adjustment needs to be made.

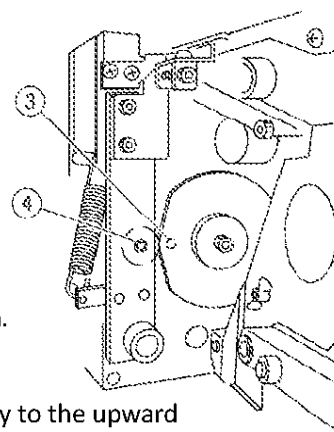


【Adjustment Area】

Open Table (Front)(Rear) and move the Timing Plate

【Adjustment Procedure】

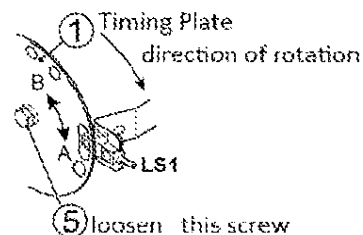
1. Press the Start Switch and make one cycle.
2. Push and Lock the Stop Switch and turn off the Power Supply Switch.
3. Open the Table(front)(Rear) and put a mark on Timing Plate① using a marking pen or like it. Remember the position of this mark.
4. Manually turn Handle② so that the arrow mark on it points overhead, and so that the center of Right Band-way Cam hole③ is aligned with the bearing center④ of the Right Band-way Arm on the same line.
5. The mark on the Timing Plate① will move due to the procedure above. Loosen screw⑤, and move the Timing Plate back to its original position by referring to the mark made on the plate. The securely tighten screw.
6. After closing and fixing the Table (Front)(Rear), turn on the Power Switch, then release the lock on the Stop Switch and then turn on the Start Switch. The machine will stop after one cycle.



After that, make sure that the arrow mark on the Handle② approximately to the upward (at 12 o'clock position or within ± 45 degrees.).

Then check the hole position③ ④ of again in the procedure of 4.

- ◇ The arrow mark stopped at more than $+45$ degrees
= Stopping too late → Move the timing plate in direction A
- ◇ The arrow mark stopped at more than -45 degrees
= Stopping too early → Move the timing plate in direction B



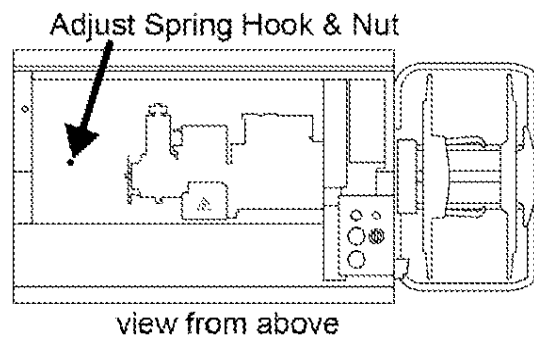
Strap Amount in the Pool Box

Strap amount in the pool box is adjusted at the factory; however, some adjustments may be necessary depending on the condition. Some possible conditions are:

- Type or thickness of the actual strap is non-standard
 - When the package is relatively small or relatively large for the arch size of the machine
 - Packages are strapped consecutively or there is a long time lag between strapping operations.
- Excessive amount of strap in the pool box will cause strap to deform, causing problems.

【Adjustment Area】

Open the Table (Front) and turn the Adjust Spring Hook.

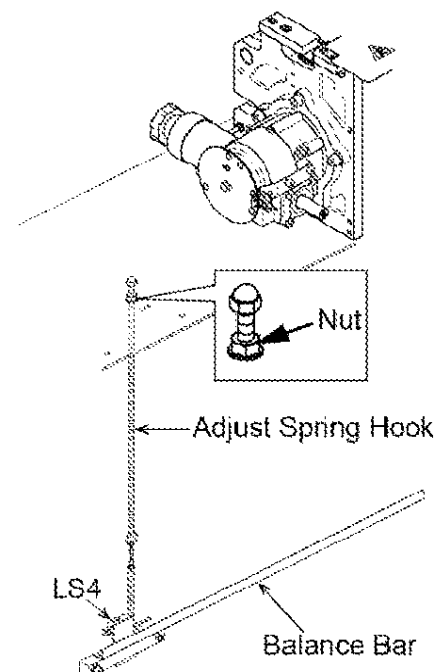


【Adjustment Procedure】

1. Push and Lock the Stop Switch and turn off the Power Supply Switch.
2. Open the Table (Front) and loosen the nut that is fixing Adjust Spring Hook.

Adequate amount of strap in the pool box should be about [2 times + 1.5m/59in.] the circumference of the arch.

- When there is insufficient strap
→ Turn the Adjust Spring Hook counterclockwise.
 - When there is excessive strap
→ Turn the Adjust Spring Hook clockwise
3. After making the adjustment, tighten the nut and fix Adjust Spring Hook.
 4. Close the Table and fix it with screws.



★LS4 (Pool Amount) Micro Switch

- When the sufficient amount of strap is fed into the pool box, the balance bar will descend and LS4 turns off, sending a signal to Pool Motor to stop.
- When there is not enough strap in the pool box, the balance bar will ascend and LS4 turns on, sending a signal to run the Pool Motor to feed more strap.

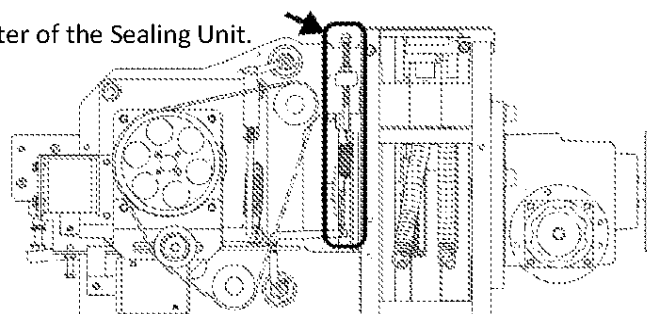
Forward Touch Pressure

Adjustments need to be made when the following symptom occurs.

- Touch Pressure is too low
 - : During the consecutive cycle, the strap comes loose despite the T2 (Forward Timer) adjustments.
 - : Strap feeding is not stable due to strap camber, curl, curve or wave.
- Touch Pressure is too high
 - : Insufficient reversing due to strap nipping during the feeding cycle.

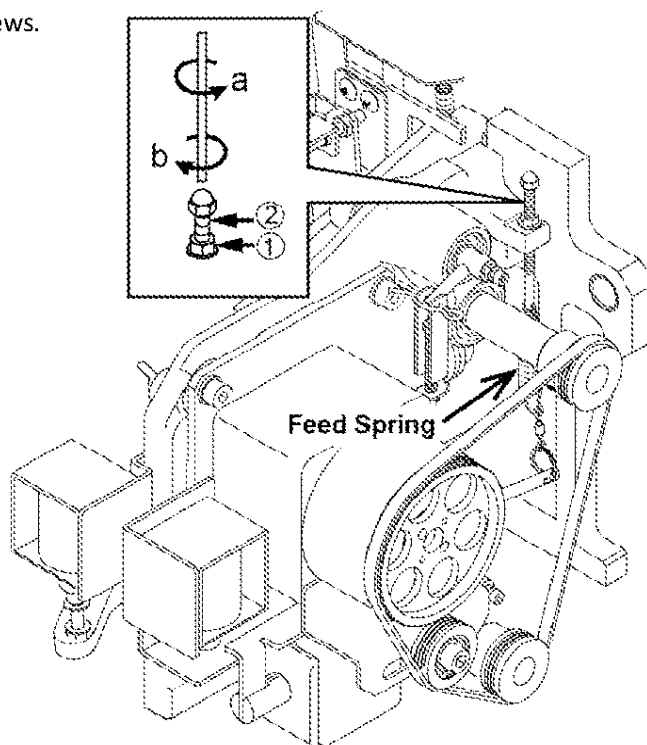
【Adjustment Area】

Open Table (Rear) and turn Feed Spring Adjuster of the Sealing Unit.



【Adjustment Procedure】

1. Push and Lock the Stop Switch and turn off the Power Supply Switch.
2. Open the Table (Rear).
3. Loosen Nut① and turn the Feed Spring Hook②.
 - To increase pressure : Turn Feed Spring Adjuster to the direction of “a” in the drawing to pull up.
(= pull Feed Spring)
 - To reduce pressure : Turn Feed Spring Adjuster to the direction of “b” in the drawing to clench.
(= loosen Feed Spring)
4. After making the adjustment, tighten Nut① and fix Feed Spring Adjuster②.
5. Close the Table and fix it with screws.

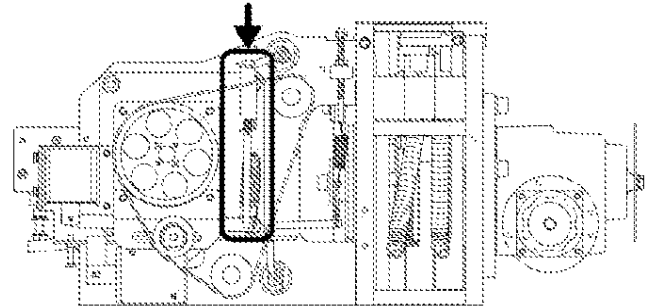


Reverse Touch Pressure

Adjustments need to be made when the following symptom occurs.

- Touch Pressure is too low : No reversing (= strap doesn't go around the package)
- Touch Pressure is too high : Strap is damaging the corners of the package.

Strap is pressed thin, causing incomplete reversing.

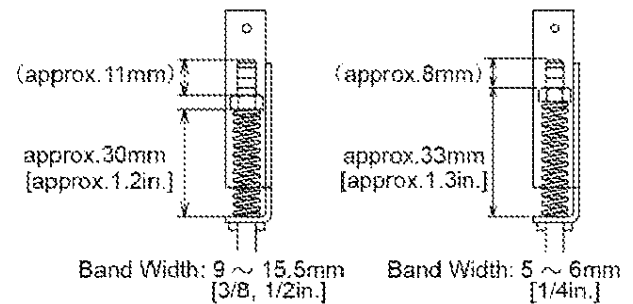


【Adjustment Area】

Open Table (Rear) and turn Reverse Spring Adjuster of the sealing unit.

【Indication of Appropriate Adjustment】

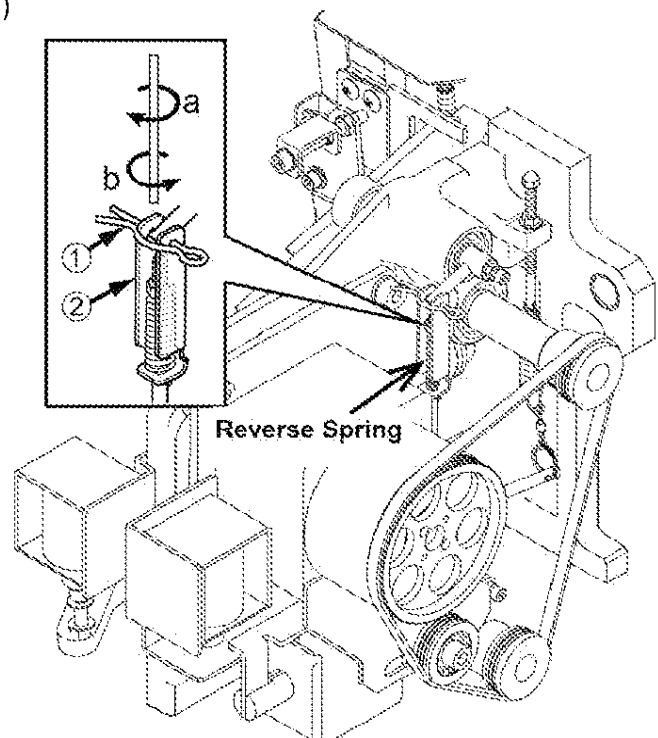
Reverse Spring length is on the right figure.



【Adjustment Procedure】

1. Push and Lock the Stop Switch and turn off the Power Supply Switch. Open the Table (Rear).
2. Pull out Snap Pin and turn Reverse Spring Adjuster.
 - To increase pressure : Turn Spring Adjuster to the direction of "a" in the drawing (clench Reverse Spring)
 - To reduce pressure : Turn Spring Adjuster to the direction of "b" in the drawing. (loosen Reverse Spring)

3. After making the adjustment, insert Snap Pin and fix Reverse Spring Adjuster.
4. Close the Table (Rear) and fix it with screws.



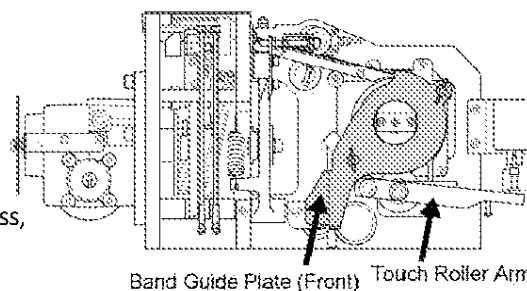
Tension Touch Pressure

Adjustments need to be made when the following symptom occurs.

- Touch Pressure is too low :
 - No tension / insufficient tension
 - Tension doesn't increase when the tension dial is turned up.
- Touch Pressure is too high :
 - When Tension Spring Pressure is too high, the pressure exceeds the capacity of the Tension Solenoid (SOL2). As a result, the solenoid plunger will not be pulled in to the end of the stroke, causing the insufficient touch pressure.

【Adjustment Area】

Open the Table (Front) and fix the plunger of Solenoid 2 in Sealing Unit at the highest position.



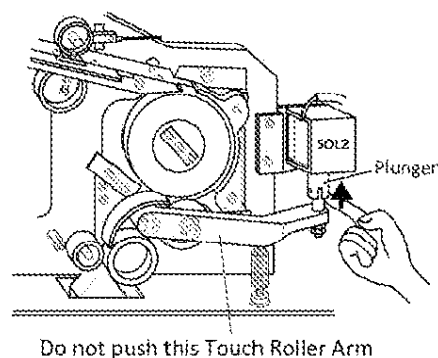
【Adjustment Procedure】

- ⊗ Adjustment is done in a state that the strap does not pass, so remove the strap before adjustment.

1. Push and Lock the Stop Switch and turn off the Power Supply Switch.

2. Open the Table (Front) and remove the Band Guide Plate (Front).

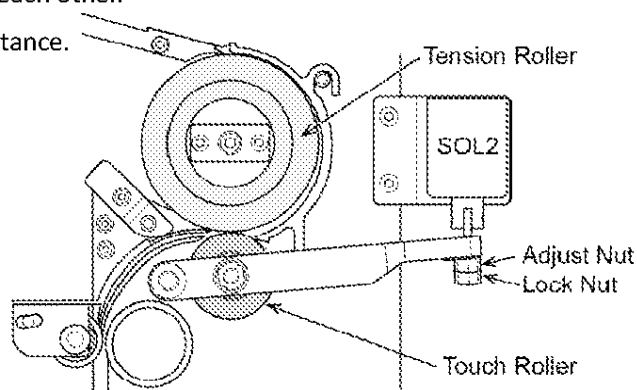
3. When pushing the SOL2 plunger all the way up (without strapping), then do not push the Touch Roller Arm.



4. Adjust Tension Solenoid Adjuster to make no clearance between Tension Roller and Touch Roller and lock it with Lock Nut. At this point, confirm the following.

- a. Tension Roller and Touch Roller contact each other.
- b. Either Roller cannot rotate without resistance.

5. After making the adjustment, reassemble the Band Guide Plate(Front) and fix the Table(Front).



Seal Alignment

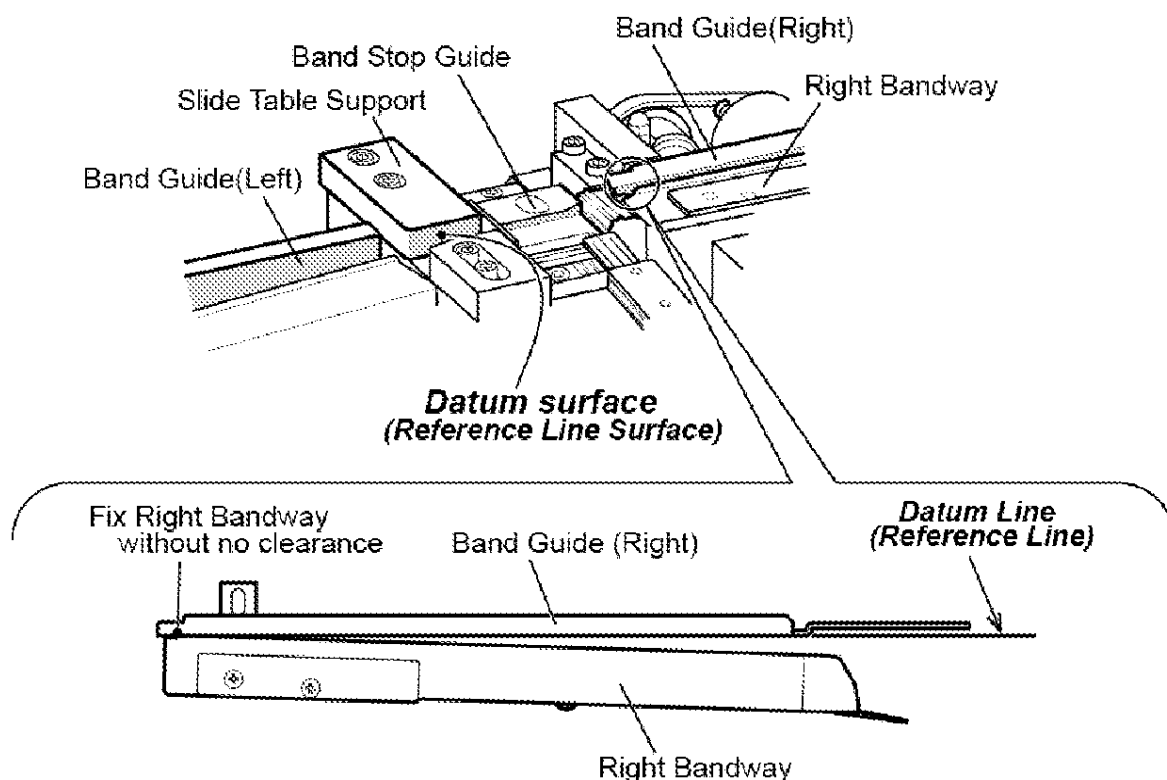
Misaligned strap reduces the seal strength. If the strap is not aligned properly, adjustments need to be made.

【Adjustment Area】

Open Tables (Front and Rear), and align Band Guide Left, Band Guide Right and Band Stop Guide to the front surface of Slide Table Support.

【Adjustment Procedure】

1. Push and Lock the Stop Switch and turn off the Power Supply Switch.
2. Open the Table (Front, Rear) and remove the Heater Cover and Slide Table of the sealing unit.
3. Check the alignment of Band Guide (Right, Left) and Band Stop Guide according to the datum of Slide Table Support.
4. Turn Handle (refer 6-1) of worm gear reducer 360 degrees clockwise from Home Position. And, confirm Strap is pushed against to Band Guide (Right) firmly.
5. Without strapping, there should be no Gap at the tip of Right Bandway and Band Guide (Right).
6. After making the adjustment, rotate the handle counterclockwise 360 degrees to return to the home position, reassemble Heater Cover and Slide Table, and close and fix Tables with screws.



Belt Tension Adjustment

Adjustments need to be made when the following symptom occurs.

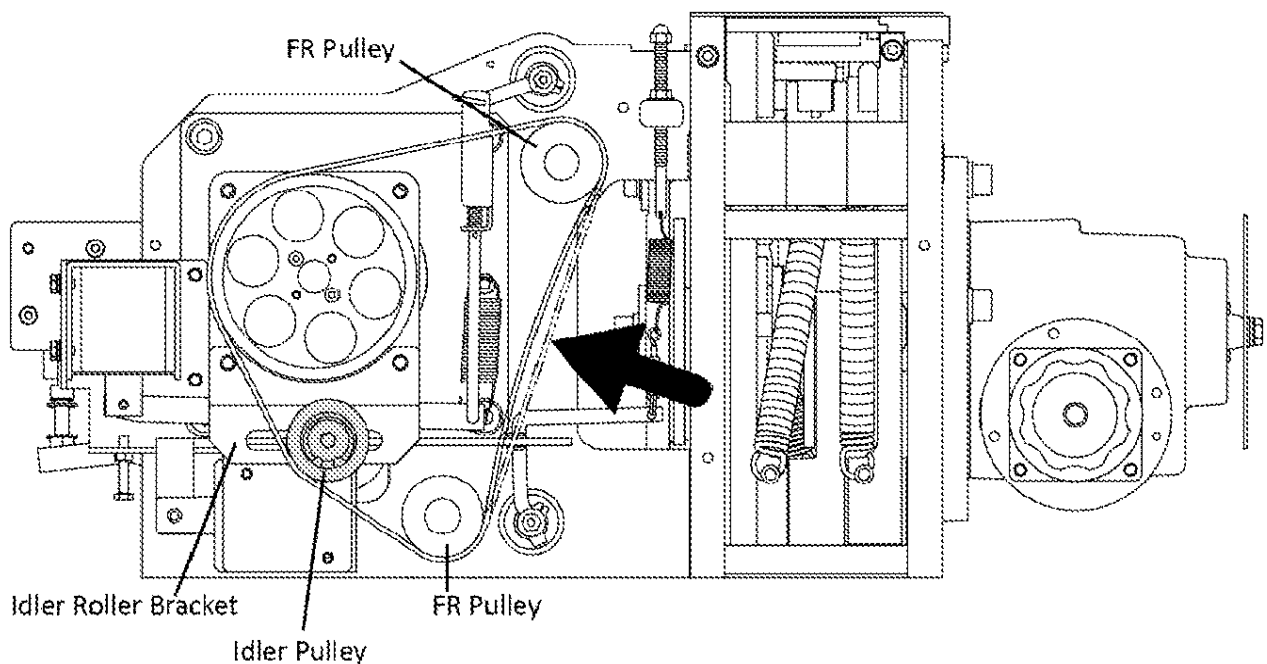
- Belt tension is too low :
 - Short feeding / Short reversing
- Belt tension is too high :
 - High belt tension could damage and break other linked parts.
 - Noise

【Adjustment Area】

Open Table (Rear) and move the Idler Pulley

【Adjustment Procedure】

1. Push and Lock the Stop Switch and turn off the Power Supply Switch.
2. For the Belt tensioning adjustment, open Table (Rear), and loosen a nut of Idler Pulley which fixes Idler Roller Bracket to relocate Idler Pulley.
 - ◇ Belt tensioning is appropriately done if there is approx. 6mm or 1/4" of slack when you push Belt in the middle of 2 FR Rollers with your finger with about 9.8N (1kgf) strength.
3. Close and fix Tables after fixing Idler Pulley at an appropriate position.



Troubleshooting

A. Pressing Start Switch doesn't start the machine

Indicator	Cause	Necessary Action	Refer to
Power Lamp does not light	1. No Power	Check the power supply and Main Power Switch.	Page 4-1
	2. Broken Power Cable	Replace	—
	3. Breaker (NFB) is off.	Turn on NFB. *If it gets immediately turned back off after it was turned on, refrain from using the machine and call service.	See figure on page 6-9
	4. Fuse (F1,F2) is broken *When a fuse is broken, there is no indicator lamp on the IC Box	Replace the broken fuse. *If the fuse blows up again when the new one is installed, refrain from using the machine and call service.	See figure on page 6-9
Power lamp flashes	5. Heater is warming up	The machine will be ready to operate approximately after 25 seconds after the power is turned on	Page 4-1
	6. Strap has run out	Install a new coil of strap	Page 5-1 Page 5-2
Power Lamp is lit (but pressing the start switch doesn't start the machine)	7. Either one of Start Switch, Stop Switch, or Operation Ready Switch has a bad connection or is broken.	Check and replace as needed.	Page 4-1 Page 4-2
	8. Stop Switch is locked.	Release the Stop Switch	Page 4-2
	9. Motor overload / overtime (Either one of Motor Error Indicator Lamp M1,M2,M3 is lit or flash.)	Remove the cause of the overload or overtime then press Reset or turn on the power again.	Page 4-6
Lamps No. 21,22,23,24 on the IC box flash simultaneously	10. Power was turned on when either one of Start Switch, Stop Switch, Forward/Reverse Switch or Operation Ready Switch was pushed.	Turn off the applicable switch. If it doesn't resolve the problem, check and replace the applicable switch.	Page 4-6

Indicator	Cause	Necessary Action	Refer to
Lamps No. 21,22,23,24 on the IC box light alternatively in a loop	11. Safety switches on the door is broken.	Check the safety switch and replace as needed. ※Refrain from using the machine until the safety is confirmed.	Page 2-6
	12. Overload of switching power supply	Automatic restoration will be done if the temperature goes down.	See figure on page 6-9

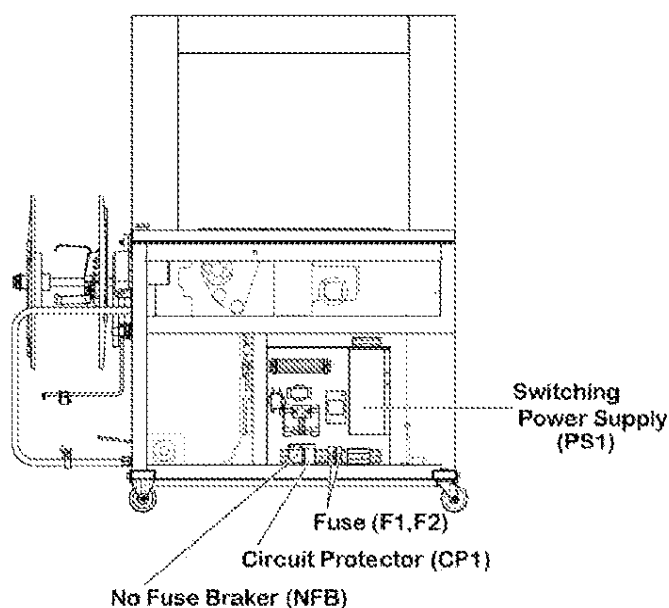
B. Problem with Self-Loading

Symptoms	Cause	Measurement	Refer to
Cannot self-loading	1. Touch Lever is located at its "Loading Position."	Refer to Threading Strap	Page 5-1
	2. The tip of strap does not reach Feed Roller.	Check the tip of strap and cut it if it is bent or split.	Page 5-1

●Location of Fuse, Circuit Protector, Breaker & Switching Power Supply

To replace these parts, make sure to turn the Power off first.

Remove the rear panel of the body.



C. Problem with Strap Forwarding or Reversing

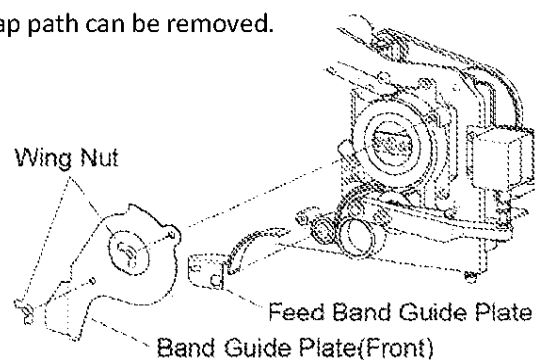
Symptoms	Cause	Measurement	Refer to
Short feeding	1. Strap was threaded wrong	Redo the threading	Page 5-1
	2. Not enough or too much strap in the pool box.	Adjust the strap amount in the pool box	Page 6-2
	3. Dust or debris in the strap path	Remove obstacles and clean	See figure on page 6-11
	4. Strap has too much camber, wave, curb or curl	Pull the strap out and cut the bad part. When the strap is deformed due to excessive strap in the pool box, adjust the strap amount in the pool box.	Page 6-2
Short feeding	5. T2 timer is too short.	Increase the timer	Page 4-3
	6. Forward Touch Pressure is too low	Increase Forward Touch Pressure	Page 6-3
Incomplete reversing	7. Reverse Touch Pressure is too low	Increase Reverse Touch Pressure	Page 6-4
Short feeding/ Incomplete reversing	8. Strap is folded over in the strap path	Remove the bad part of strap and adjust the Forward Touch Pressure or Reverse Touch Pressure.	Page 6-3 Page 6-4
	9. Split strap	Cut off the damaged area of strap and do the following a. Adjust the Home Position b. Upper and Lower Cutter Alignment c. Cutter damage or wear→Replace	Page 6-1 — —
	10. Slips of Belts and Pulley	Belt tension adjustment	Page 6-7

◆ How to Remove Strap Path

To clean or remove obstacles from the strap path, the strap path can be removed.

Take off 2 wing nuts, and take off

Band Guide Plate (Front) and Feed Band Guide Plate.



D. Problem with sealing

Symptoms	Cause	Measurement	Refer to
Does not seal	1. Broken heater cable or loose terminal	Check and replace as needed	—
	2. Circuit Protector (CP1) is off	Turn on CP1	See figure on page 6-9
	3. Inadequate heater temperature (too low or too high)	Adjust the heater temperature	Page 4-3
	4. Heater is not properly inserted between upper strap and lower strap	Replace if Heater Spring is broken Adjust the heater height and angle	—
	5. Too much tension or for the type of package	Adjust the tension. If the tension cannot be compromised, increase the Seal Time Extension Timer (VR2) slightly clockwise.	Page 4-2 Page 4-4
	6. Strap refeeds and does not come around the application.	Reference on page “ Short Feeding”	Page 6-10 “C”

E. Problem with Tension

Symptoms	Cause	Measurement	Refer to
No tension	1. Package is too small	Increase T1 slightly	Page 4-3
	2. Tension Dial is defective.	Check and replace as needed.	Page 4-3
	3. Tension Touch Pressure is too low	Increase Tension Touch Pressure	Page 6-5
Gets loose after tension	4. Strap position is inadequate	Align the center of package and center of the sealing head	Page 6-6
	5. VR1 setting is inadequate	Turn VR1 counterclockwise	Page 4-3
	6. Maladjustment of Home Position	Readjust the home position	Page 6-1

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