CYKLOP
GLOBAL PACKAGING SOLUTIONS

STRAPPING
WRAPPING
CODING
TAPING

INSTRUCTION MANUAL

MODEL **M-Pac V**

MACHINE No.: _____



IMPORTANT DONOTDESTROY

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

Thismachineisconformitywiththerequirementofthefollowing EC Directive,

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

CE

M-Pac V (Mar 2018)

ORIGINAL INSTRUCTION

Index

Chapter1 INTRODUCTION

Operating Environment ····· 2

General Information ····· 3

Product Identification Plate Locations ····· 3

Standard Specification ····· 4

Dimensional Outline Drawing ····· 4

Chapter2 SAFETY INSTRUCTION

General Cautions ····· 5

- Warning and Cautions on Power Cord
- Warning and Cautions on Strap
- Warning and Cautions on Package

Movement and Installation ····· 5

Operation ····· 6

Routine Maintenance& Adjustment ····· 6

Safety Alert Labels ····· 7

Chapter3 INSTALLATION

Connect Power Cable (for Outside North America)

Chapter4 MACHINE INFORMATION

Operation Panel ····· 8

Switching of Tension Mode 《Torque/Stroke》 ····· 9

Explanation of tension system How toswitchtorque/stroke

Inner Adjustment Dials and Fuse ····· 10

Wiring Diagram ····· 11

Chapter5 OPERATION

Loading the Strap Coil ····· 12

Strap Threading Procedure ····· 12

Operation ····· 12

Daily Care ····· 13

Chapter6 ADJUSTMENT

Adjustment of 《VR3》 at insufficient tension ····· 13

Adjustment of converting the Strap Width ····· 14

CHAPTER1 INTRODUCTION

Thank you very much for your purchase of a CYKLOP strapping machine.

We are prepared to offer extensive after sales service for our products through our distribution network. To effectively use the strapping machine, daily maintenance and proper handling are important.

You are requested to have a complete understanding of this instruction manual for proper use and maintenance of the machine over a long period of time.

Also, please carefully read the separate leaflet "Check that Seal!", to prevent any accidents during operation.

Operating Environment

Use this machine where the following environmental conditions are met.

- Temperature: Between 0 degrees Celsius and 40 degrees Celsius (do not freeze)
- The humidity: Relative humidity being 0-80% (without condense dew)
- Atmosphere: 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
- This machine is not explosion-proof type.

General Information

Maintenance / care	Contract:	regular maintenance by Cyklop professional staff guarantees the continuous availability of the machine.
	Daily:	the machine must be cleaned after use.

Mechanic needed: tel. +31 38 4675852

Describe the fault as accurately as possible, so that the correct parts can be taken / sent.

Ordering parts: tel. +31 38 4675852

Provide the part number and description of the part with the order.

Important details for ordering

Ordernummer
Machine type
Cyklop ordernummer

Address:

Cyklop Nederland B.V.
Box 551
8000 AN Zwolle

Benjamin Franklinstraat 5
8013 NC Zwolle

tel. : +31 38 4675852
fax : +31 38 4675839
www.cyklop.nl
e-mailaddress: info@cyklop.nl

Product Identification Plate Locations

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

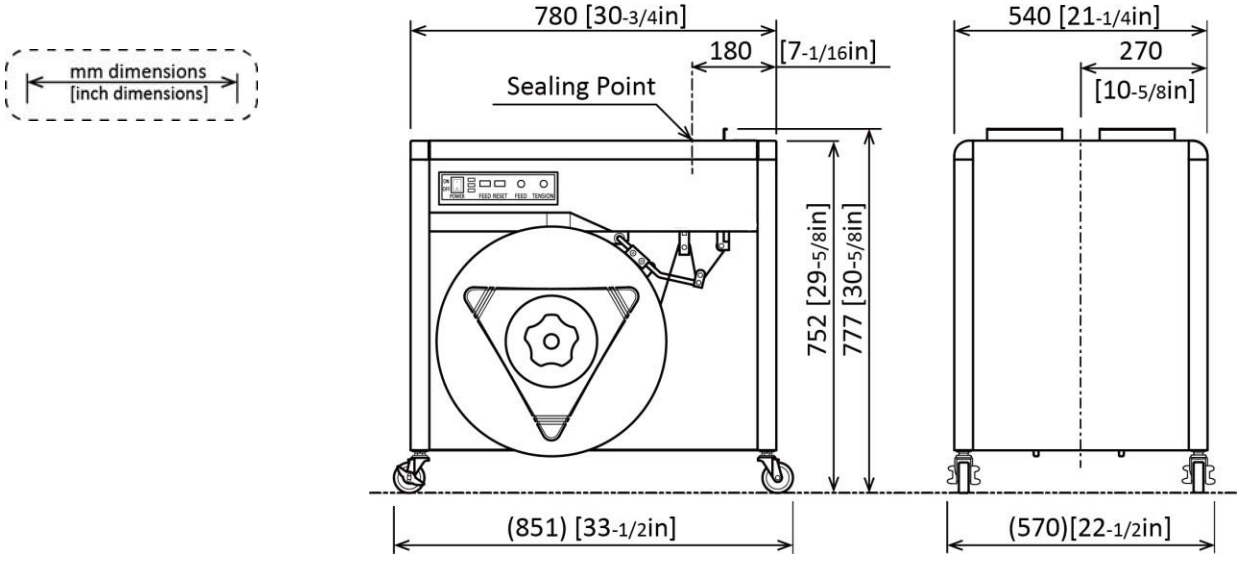
The following information is required

・Model ・Serial Number

Standard Specification

		M-Pac V	
		Outside North America	North America
Joint (Strap Weld)		Heat Seal / polypropylene	
Dimensions	: Width	780mm	30-3/4 in.
	: Height	777 mm	30-5/8 in.
	: Table Height	752 mm	29-5/8 in.
	: Depth	540 mm	22-1/2 in.
Machine Weight		Approx. 56 kg	Approx.123.5 lbs.
Tension	:Torque Mode	Up to 450 N (45.9kgf)	Up to 101 lbf
	:Stroke Mode	150 mm	5-7/8 in.
Electric Power		Single Phase 200-240V 50/60Hz	Single Phase 110-120V50/60Hz
Full Load Current		12 A	14.5 A
SCCR (Sort-Circuit Current Rating)		0.5 kA	0.3 kA
Power Consumption		0.35 kW	
Noise Emissions		57.2 dB (A) Measured according to EN-415-8 Annex A	
Package	: Min. Size	W100×H30mm	W 3-1/8 x H 1-1/8 in.
	: Max. Size	Unlimited	Unlimited
Strap	: Width	5, 6, 9, 12, 15.5 mm	5mm,1/4, 3/8, 1/2, 5/8 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.)

Dimensional Outline Drawing



CHAPTER2 SAFETY INSTRUCTION

This section deals with safety for moving, installing, operating the machine and performing simple maintenance. So please fully understand it before use. Also, keep this manual near the machine so that you can check it immediately when you need it. Make sure that those who received some education should install, repair and adjust the machine.

General Caution

Safety Warning about Power Cord

- Use with the correct voltage.
- Power Plug should be connected to the power outlet of at least 15A.
- Be sure that the Power Cord is plugged all the way into the power outlet.
- Keep the Power Plug free of debris and dusts.
- Do not damage the Power Cord
  （e.g. Do not bend by force, do not place something on top of it, do not tangle）
- Do not use deformed or damaged Power Cord
- Do not plug in and out with wet hands
- Place the power cord away from moving parts or strap reel.

Safety Warning about Strap

- Do not leave the coil or piece of strap on the floor
- Use appropriate type of strap
- Use caution not to drop the strap coil when loading the strap

Safety Warning about Package

- Do not strap the following types of package
  - Explosives
  - Exposed food items (for sanitary reasons)
  - Breakables such as glass
  - Harmful chemicals
  - Live animals
- Do not use strap as handles
- Do not drop the package/bundle on the table and floor

Movement and Installation

- Follow the instructions according to this manual when moving the machine or changing the machine height.
- Install the machine indoor.
- Install the machine on a stable, flat floor.
- Install the machine where there is appropriate ventilation of air.
- Install the machine where there is no splashing of water or oil.
- Push the machine to move it to the desired location.
- To move the machine, unlock the casters first. Once the machine is placed, lock the casters again.

Operation

- Read the Instructionscarefully
- Do not use this machine other than to strap appropriate packages
- Never operate the machine when the table is removed
- Watch your steps around the casters and power cords.
- Dress appropriately to operate the machine.
- Do not touch the strap during the machine 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 when putting the loose strap back onto the reel.
- Do not place liquid on the machine.
- Do not stand or sit on the machine.
- Remove jammed strap appropriately; do not pull by force.
- Do not touch the machine when your body has collected static.

Routine Maintenance & Adjustment

- 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.
- After the power is turned off, wait until the following parts cools off.
    - Heater
    - Motor
    - Control Board
    - Transformer
- When you need to remove the cover to work on the IC Board, make sure that the remaining electricity has been discharged.

**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.
- Use only parts provided or approved by CYKLOP.

Safety 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.

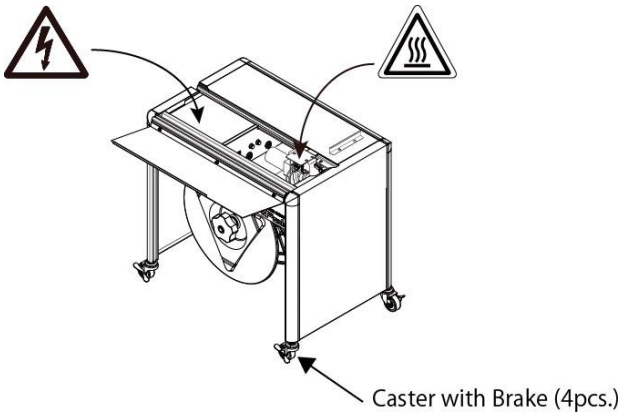
WARNING and CAUTION are defined as follows:

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 : Electric shock. Point with hazardous voltage that can result in electric shock.
	CAUTION : High Temperature Point with high temperature over 65°C that leads to burns.

Placing Warning Labels



CHAPTER 3 INSTALLATION

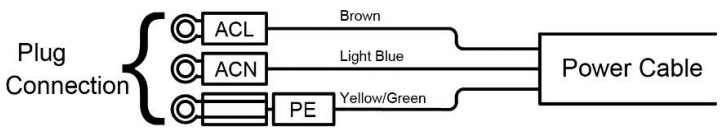
Connect Power Cable (for Outside North America)

1. Connect to appropriate Power Supply

   Current····· 15A

   Voltage····· Single 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 Panel

1 Power Select Switch

This is the Power Supply Switch for the machine.

Green Lamp ⑥ by the switch will be lit when the switch is at ON position. This Lamp ⑥ indicates the connection of power supply. The Green Lamp starts to blink when the Power Select Switch is turned on. The blink turns into a firm light when the heater temperature goes up an appropriate temperature (approx. 45 sec.) and informs the machine is ready for its operation.

2 Reset Switch

By pressing this Reset Switch, the Sealing Unit will cycle one time and stop at Home position. The strap will feed forward according to the setting on the Feed Dial ④

3 Feed Switch

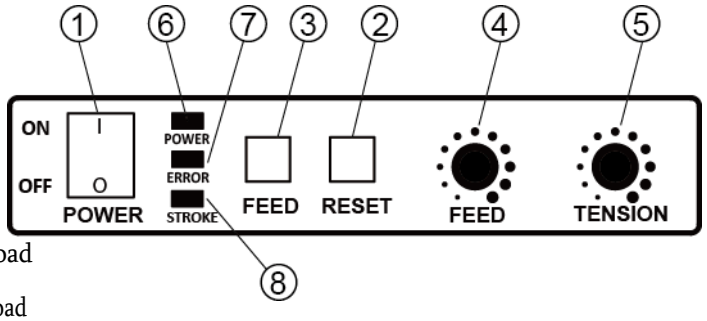
This is a jog switch that feeds the strap forward as long as the switch remains depressed. If the strap length available is insufficient, press this switch to feed more strap until you have the desired amount.

4 Feed Dial

This dial setting determines the length of strap fed off the Reel at the end of each cycle. Adjust this dial to set the length of strap desired. Turning the dial clockwise will increase the length of strap to be forwarded. Turning counterclockwise will shorten the amount of strap fed. Set according your package size.

5 Tension Dial

Turning this dial clockwise makes the strap tension tighter, turning counterclockwise makes the tension softer.



6 Power Indicator Lamp <Green>

Light while energizing

7 Error Indicator Lamp <Red>

Lighting : Sealing Motor (M1) Overload

Flashing : Feed/Reverse Motor (M2) Overload

8 Stroke Lamp <Yellow> ※Factory setting : Torque mode

Light off : Torque mode Lighting up : Stroke Mode

Switching of TENSION MODE (Torque/Stroke)

This model is capable to select "Torque Tension System" or "Stroke Tension System". Following is the explanation of tension system. Select appropriate Tension System according to package.

When shipping from the factory, the torque system is selected, so the "STROKE lamp" is off. The "STROKE lamp" on the operation panel lights up when the stroke system is selected.

● Explanation of tension system

<Features of Torque Tension>

Pull back with "force" set by Tension Dial.

Tighten with the same strength regardless of the hardness and size of the packing.

<Features of Stroke Tension>

Pull back "length" set by Tension Dial.

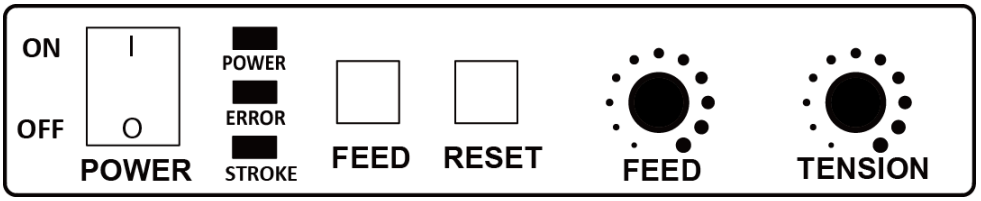
For packages of the same size and different hardness, tension is different.

For packages of the same hardness and different sizes, the tension is different.

● How to switch torque / stroke

1. Turn off the power
2. While pressing both the FEED switch and the RESET switch, turn on the power.
   (Do not release hand from FEED switch and RESET switch even when power is turned ON)
3. The STROKE lamp flashes four times and then goes out.
   After the STROKE lamp goes out, release your hands off the FEED switch and the RESET switch.
4. Each time you press the FEED switch, the STROKE lamp turns on or off.
5. After selecting the tension mode, press the RESET switch until the STROKE lamp blinks.
6. Release the RESET switch when the STROKE lamp flashes blinking.

This completes switching of tension mode.



Inner Adjustment Dials and Fuses

Heater Dial, Seal Prolongation Dial and Fuse are equipped inside of Machine.

1. HEATER

• Heater Temperature Adjustment

- The Heater Temperature has been preset at the factory. However, please note that differing climates or ambient temperatures may require adjusting the temperature.
- The Heater Temperature Dial is located inside the machine. Turning it clockwise will increase the temperature whereas turning counterclockwise will decrease the heater temperature

• Temperature Adjustment according to the Strap Quality

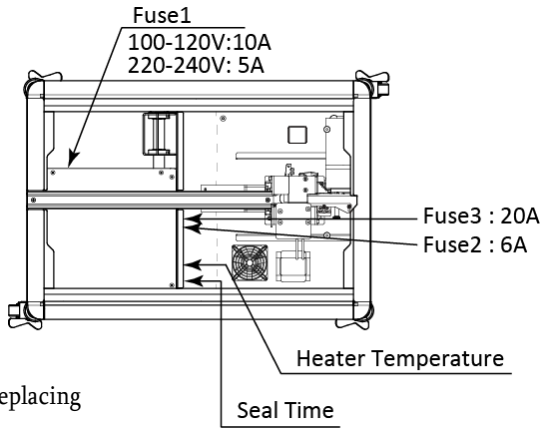
This machine is adjusted to run standard Polypropylene strap. Heater Temperature should be lowered with Formed and Thin strap. Refer to "Check the Seal" and adjust accordingly.

• Long Period of Usage

Heater temperature and effectiveness will decrease after a long period of usage due to a buildup of PP strap residue on the Heater Plate. If the proper heater temperature cannot be reached by adjusting the Heater Dial, turn OFF the Power Switch and wait until the Heater Plate cools down sufficiently. Then, remove the residue build up with a screw driver or wire brush. After removing the residue, the temperature will increase so return the Heater Dial back to its original position.

• Seal Prolongation Dial (SEAL TIME) ※Factory setting :0

This dial prolongs the cooling time before releasing the strap. It would be advisable to turn this dial clockwise slightly when insufficient sealing is found.



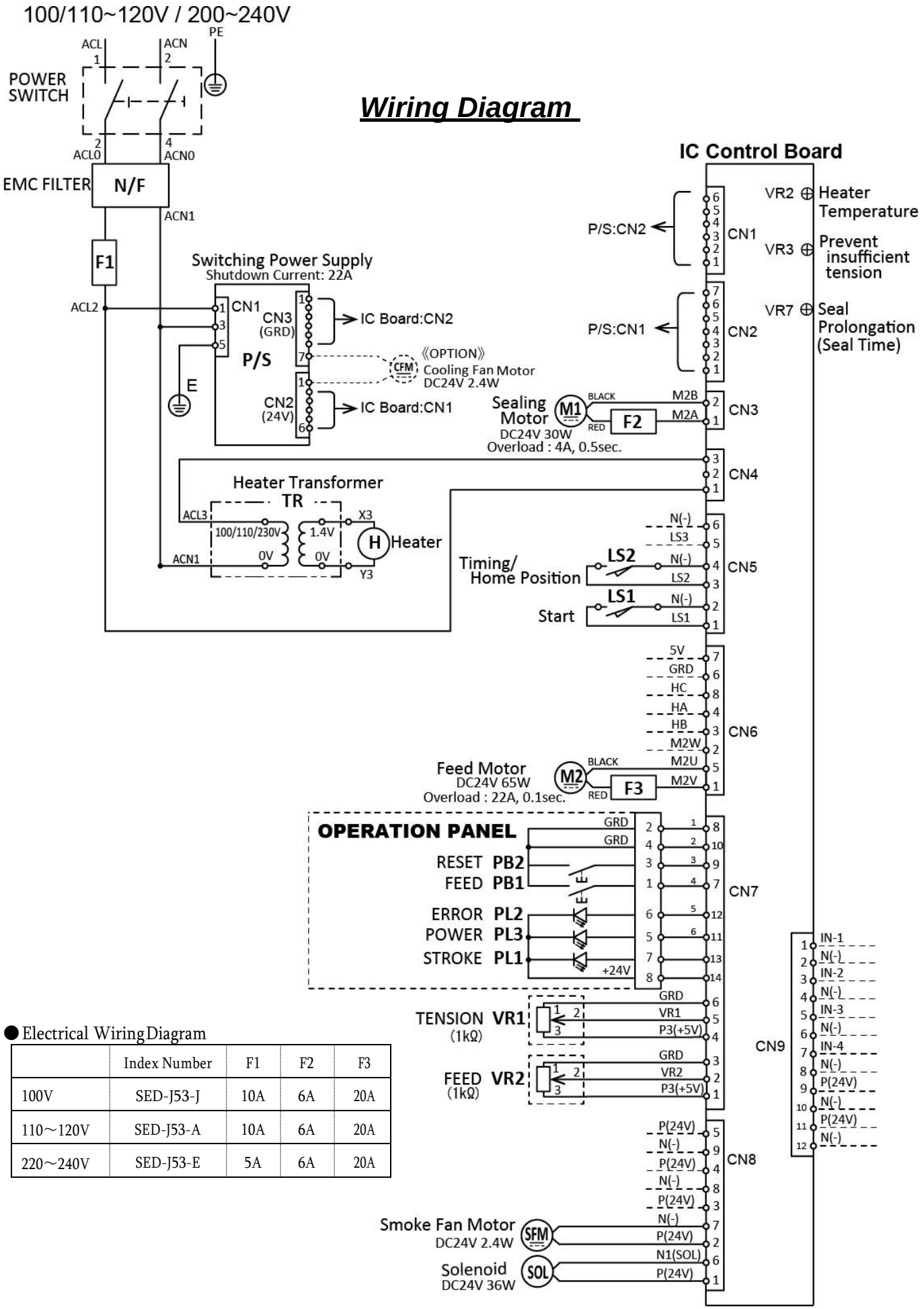
2. FUSE

The Fuses prevent overload accidents.

If a fuse blows out, turn off the power and unplug Power Supply Cable. Replacing the fuse after the case of the fuse break.

	Description	Size	Capacity	Note
Fuse 1	Midget Fuse	Ø 6.4X30	250V 10A 250V 5A	for Primary Voltage: 100～120V for Primary Voltage: 220～240V
Fuse 2	Midget Fuse	Ø 6.4X30	250V 6A	for M1
Fuse 3	Midget Fuse	Ø 6.4X30	250V 20A	for M2

Wiring Diagram



● Electrical Wiring Diagram

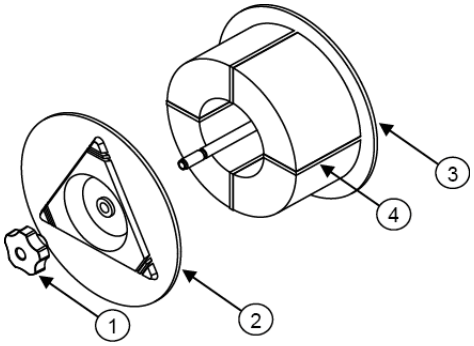
	Index Number	F1	F2	F3
100V	SED-J53-J	10A	6A	20A
110～120V	SED-J53-A	10A	6A	20A
220～240V	SED-J53-E	5A	6A	20A

CHAPTER5 OPERATION

Loading the Strap Coil

Load the strap coil onto the Reel Unit without cutting retaining bands ④ tied around the coil.

1. Remove Reel Out Circular ② by rotating Reel Nut Handle ① clockwise.
2. Mount the strap coil onto the Reel In Circular ③ so that the tip of the strap points in the counterclockwise direction. Position the coil between Reel In Circular ③ and Reel Out Circular ②.
3. Secure it by turning Reel Nut Handle ① counterclockwise to tighten.
4. Cut all of the retaining bands ④



Strap Threading Procedure

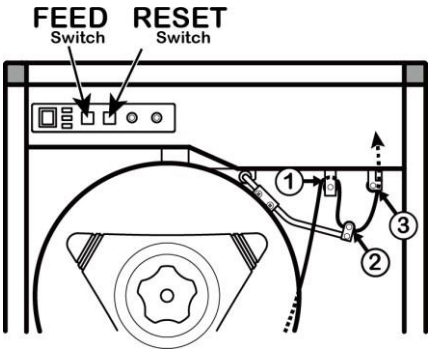
1 Insert the power plug into a suitable power outlet and turn on the Power Select Switch.

2 Press the Reset Switch.

* Machine will start and stop at the Home Position.
* Confirm that the machine has finished cycling.

3 Thread the tip of strap through ① ② and insert to the square hole ③.

4 Keep pushing the insert strap lightly and push strap Feed Switch



Operation

After turning on the Power Select Switch, the heater element will reach operating temperature in approximately 45 seconds.

1. Place the package to be strapped on the Upper Tables and over the sealing point (Slide Table). Insert the free end of the strap into the groove of the band-way.
   This will start the strapping operation and the tensioning of the strap around the package.
2. After one strapping cycle (tensioning, cutting and sealing) is completed, a fixed length of strap will feed forward automatically for the next strapping operation.
   ★Strap length is adjustable by the Feed Dial and Feed Switch.
3. After strapping all of your packages, turn off the Power Select Switch.

Daily Care

【Daily】

• Before work

・Adhesive State・・・・・・・・・・・・ Check the adhesion is good.

・Abnormal Noise ・・・・・・・・・・ Check there is no abnormal noise during machine operation

・Vibration ・・・・・・・・・・・・・・・・ Check there is no abnormal vibration during machine operation.

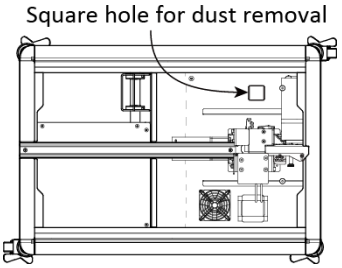
・Power ・・・・・・・・・・・・・・・・・・・・Check there is no abnormality such as deformation / breakage in the power plug / power cord.

• After Work（or Beforework）

・Cleaning the inside of the machine ・・Remove tape powder, dust, paper powder, foreign matters etc. left in the machine with air blow or brush etc.

There are one pitfall for garbage.

To prevent injury, please remove the lid to remove the trash, please be sure to cover the machine from the inside of the machine.



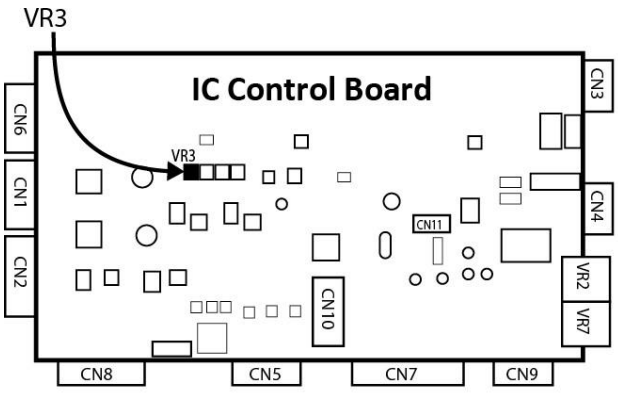
CHAPTER6 ADJUSTMENT

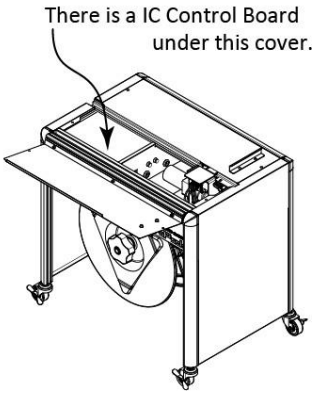
Adjustment of 《VR3》 at insufficient tension

VR 3 is a volume that adjusts the completion of band reversal before tightening. VR3 is on the control board.

● If tightening begins before the reverse rotation is completed, adjust VR3 by turning it clockwise.

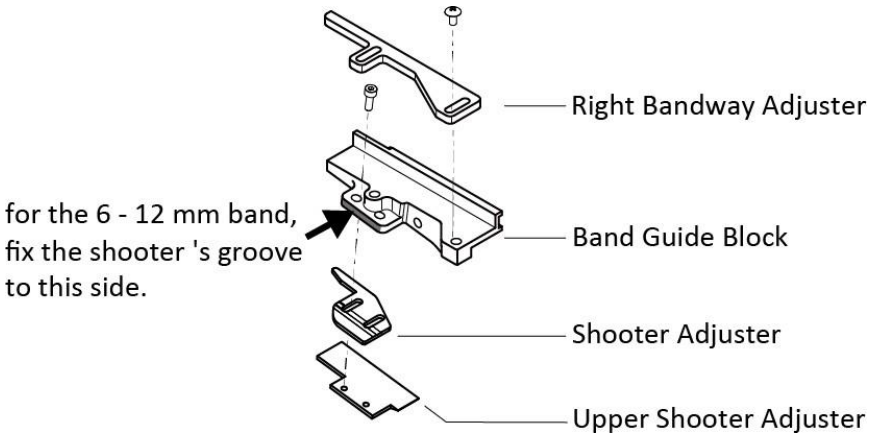
● If reverse rotation is not completed even though the band is wrapped around the packing item, turn VR3 counterclockwise to make adjustment.





Adjustment for converting the strap width

Adjustment of the band width is 3 places.



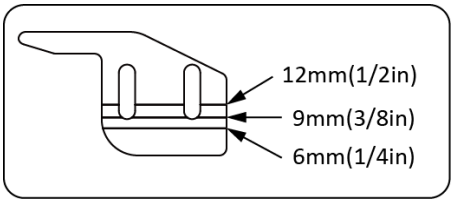
1. Remove the Right Bandway Adjuster.

2. Loosen the bolts with fix the Shooter Adjuster, and adjust the Shooter Adjuster according the strap width.

   Case of 15.5mm (5/8in) : Pull the Shooter Adjuster all the way out.

   Case of 6-12mm (1/4-1/2in) : There are three lines on Shooter Adjuster as guidance.

   The line of Shooter Adjuster should align with the side of Band Guide Block.



   Case of 5mm : Push the Shooter Adjuster to the end.

3. Replace the Right Bandway Adjuster, and adjust the distance “A” as the strap width plus 1mm.

4. Loosen the bolt that fixes Band Width Plate, and adjust the distance “B” as the strap width plus 1mm.

