

AUTO. L-TYPE SEALING MACHINE
SHRINK TUNNEL OPERATION HANDBOOK

MACHINE NUM :

LSA-504G.CE



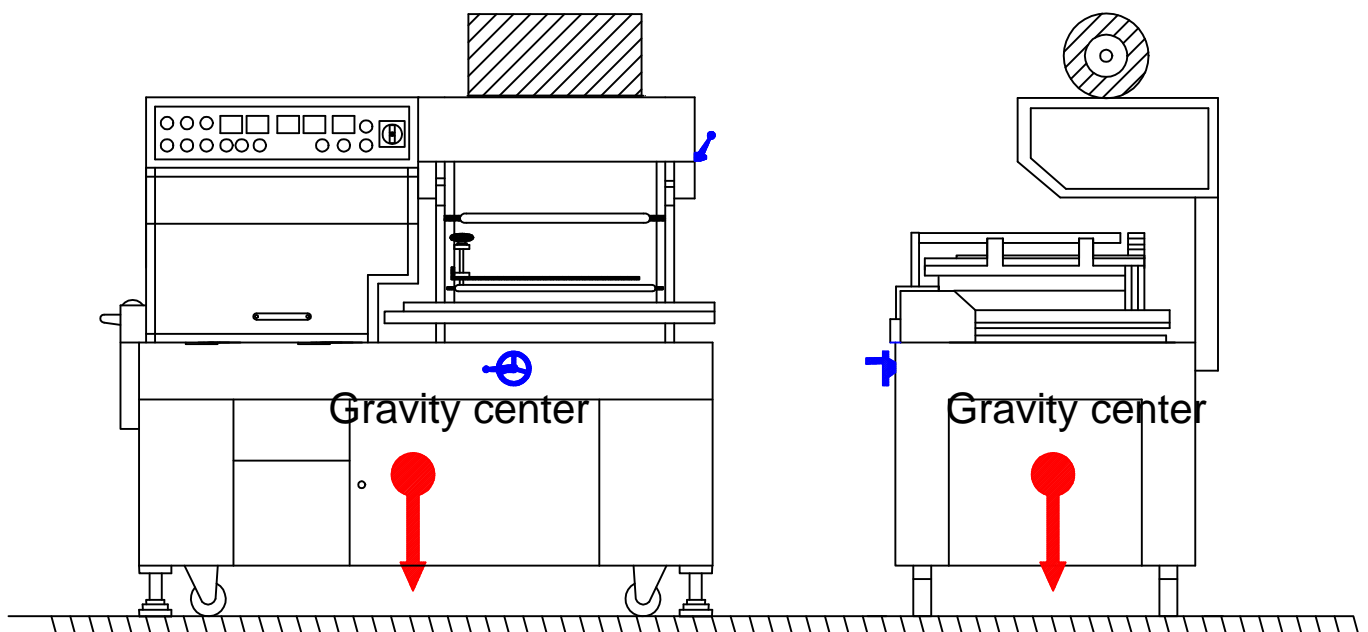
INDEX

	PAGE
1.1 PACKING _____	<u>1</u>
1.2 UNPACKING _____	<u>2</u>
2.THE COMPONENTS OF MACHINE	
2.1 GENERAL IDEAS _____	<u>6</u>
2.1.1 PREFACE	
2.1.2 DIMENSION	
2.2 THE PRE-CAUTION & SAFETY INSTRUCTIONS FOR TURNING ON/OFF _____	<u>8</u>
3.OPERATING INSTRUCTIONS	
3.1 THE PARTS' DETAIL _____	<u>10</u>
3.2 THE FILM SET UP PROCEDURE _____	<u>12</u>
4. THE FILM SET UP PROCEDURES	
4.1 THE FILM SET UP PROCEDURES _____	<u>14</u>
5.TROUBLE SHOOTING	
5.1 HOW TO DEAL WITH THE TROUBLE _____	<u>18</u>
5.2 THE PARTS REPLACEMENT & TECHNOLOGY _____	<u>20</u>
6. MAINTENANCE	
6.1 GREASING _____	<u>21</u>
6.2 OUTWARD CLEANING AND MAINTENANCE _____	<u>22</u>

1. TRANSPORTATION

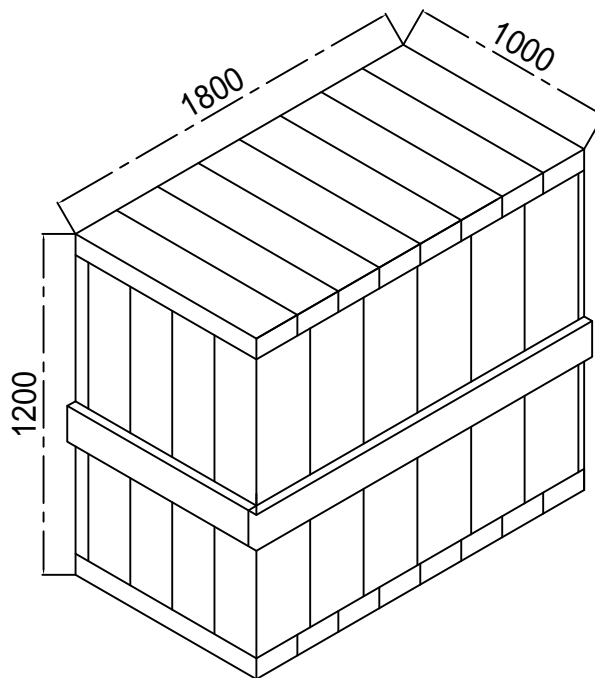
1.1 DOMESTIC

- (1). The auto L-Sealer is wrapped by a plastic film and transported by truck the machine weight is 200kg.
- (2). It is required at least 3 persons to move the machine. (excluding forklift operator)
- (3). All the operator should wear the protecting clothing such as safety helmet, protecting shoes and glove.
- (4). Please note about the gravity center of the machine when moving it.



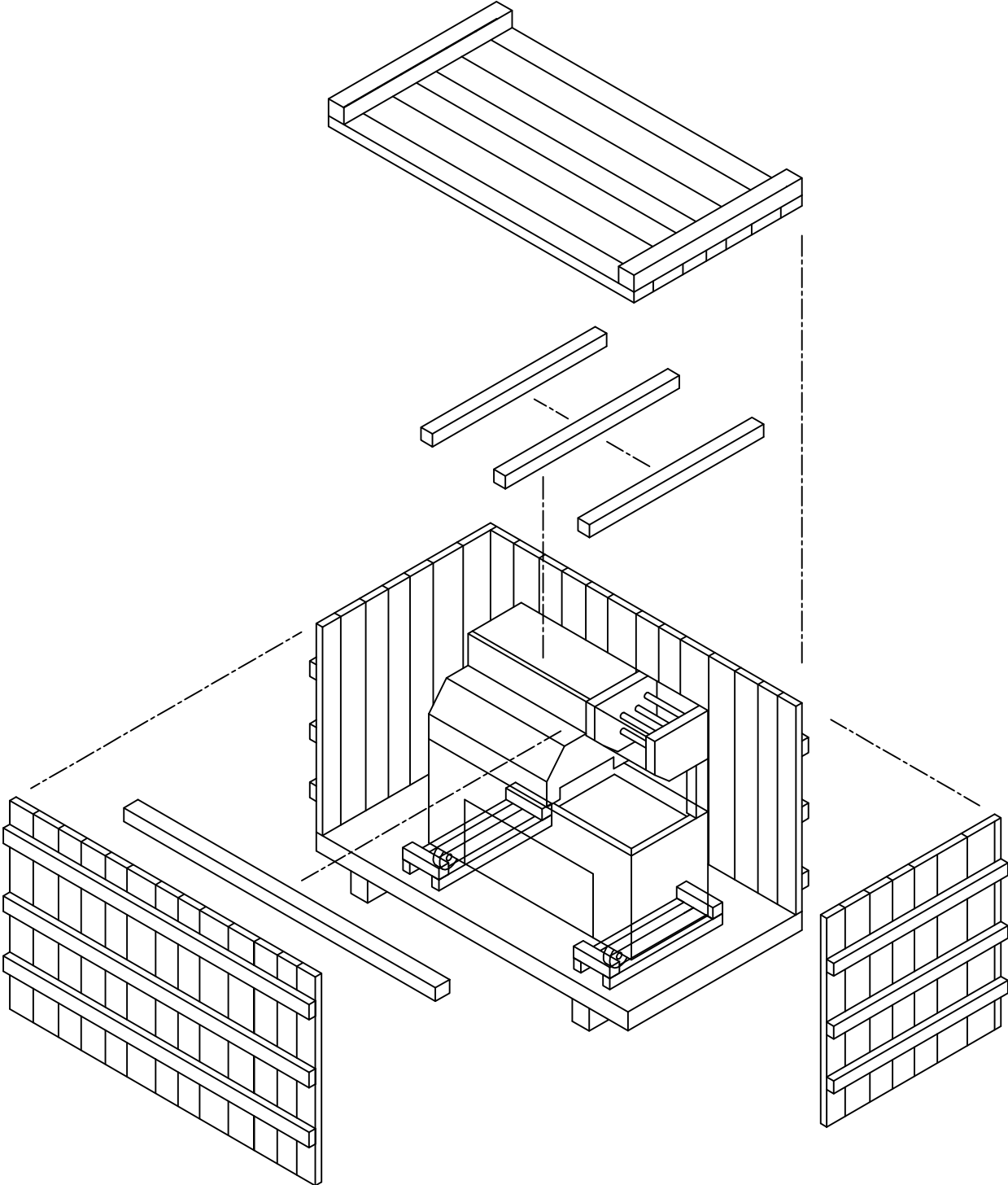
1.2 UNPACKING

- (1). The machine is packed by wooden crate Dimension is 180cm(L), 100cm(W) & 120cm(H). It weight is 200kg . It require at lease 1.25 tons above fifter to move the machine from truck.
- (2). It is required at least 4 operators(excluding the forklift operator)
- (3). The operators should wear safety helmet, protecting shoes & glove etc... for protection.
- (4). Please note about the machine gravity point for machine moving.
- (5). please prepare the saitable tools to unpack the wooden case such as pincer, fammer & ladder... etc.
- (6). The unpacking process should be done from the case top to the bottom,Dispose of the waste of unpacking is necessary for reduction of danger.
- (7). The machine cannot be moved unless all the mess from unpacking which is clean.
- (8). Please refer the under figure for case climension and packing appearance.

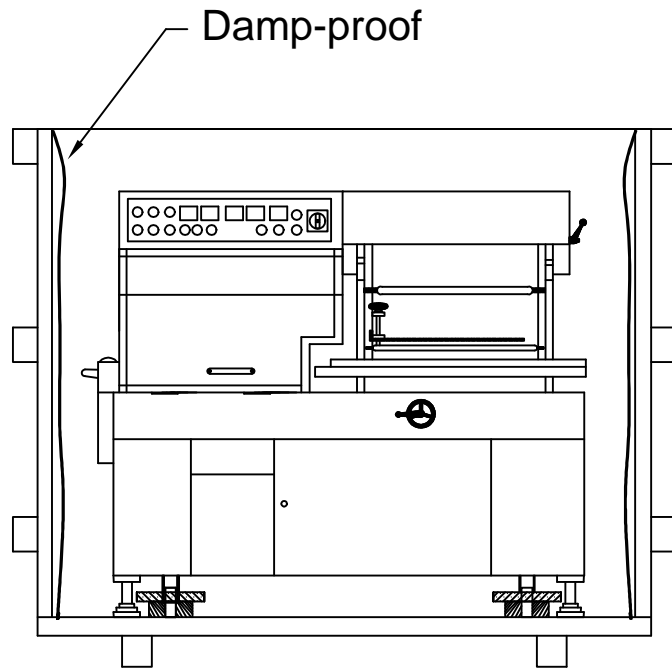
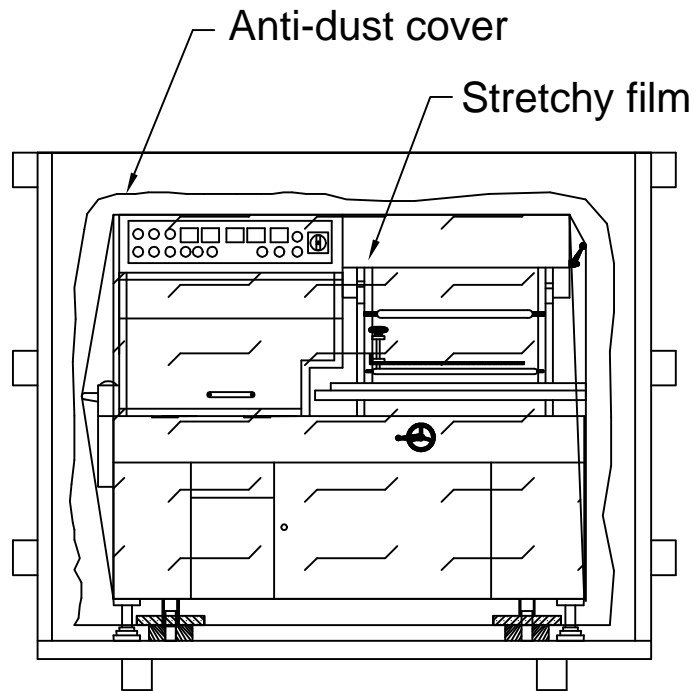


The woodon crate appearance

The packing method for machine in wooden crate



Inside of wooden crate



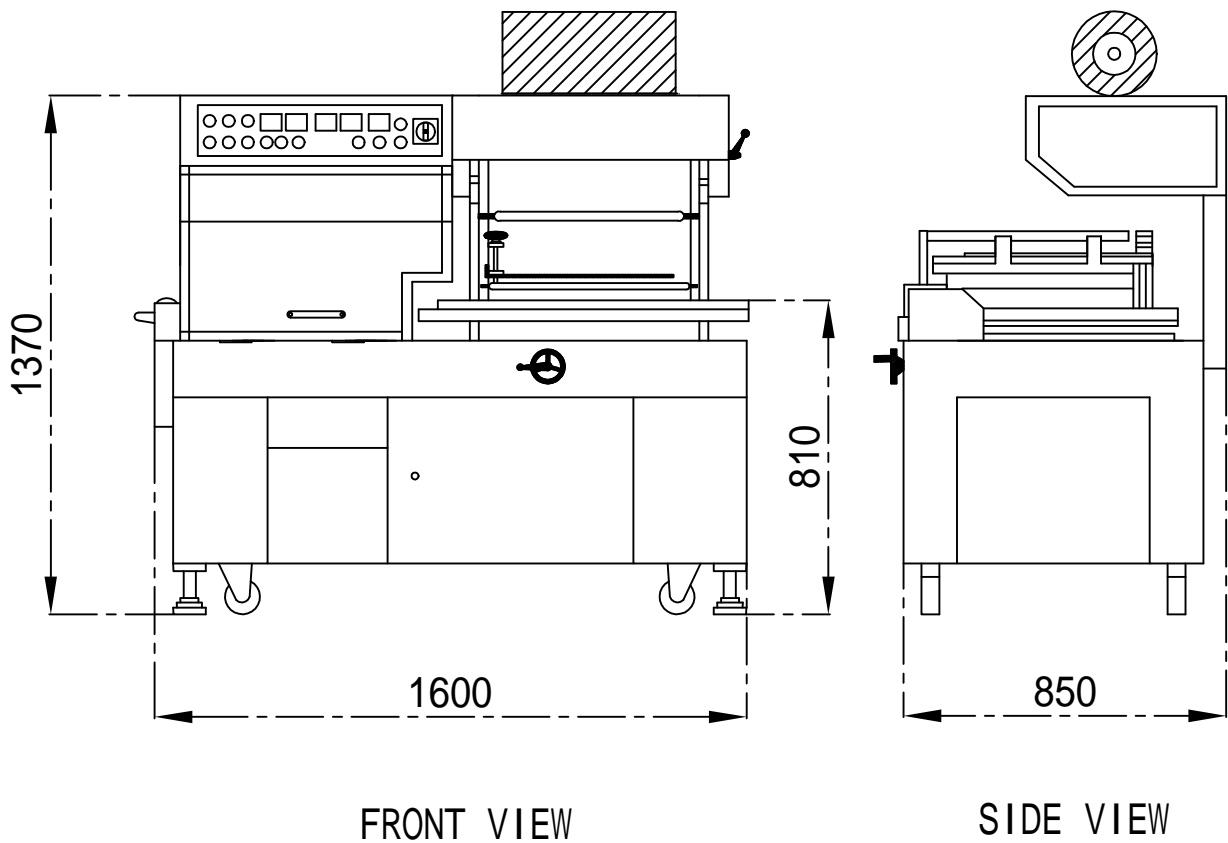
THE REQUIREMENT OF ELECTRICITY & AIR PRESSURE

- (1). POWER : 1 single phase 415V,50/60HZ
- (2). AIR PRESSURE: 5.5kg/SQUARE cm (80 PSI)
- (3). To ensure operating normally, the ground wire must be properly connected.
- (4). to pressing the inching button slowly making sure The motor is running to the right direction once power being supplied.

2. THE COMPONENTS OF MACHINE

2.1 GENERAL IDEAS

(1).DIMENSIONS



(2).SPECIFICATION & CAPACITY

POWER: AC single phase , 415V, 50/60HZ

(1). Infeed conveyor Motor: 60w

(2). Outgoing conveyor Motor: 60w

(3). Film leading Motor: 25w

(4). Film clamp Motor:40w

(5). Winding Motor: 15w

(6). Heater(TD): 450W

(7). Heater(MD): 550W

AIR PRESSURE: 5.5kg/SQUARE cm,80PSI

MACHINE DIMENSION: (L) 1600mm (W) 850mm (H) 1370mm

TABLE HEIGHT : 810mm + 70mm

SEALING SIZE: (W) 450mm X (L) 550mm

CONVEYOR SPEED :Infeed conveyor (MAX SPEED) 21.3 M/min

Outgoing conveyor (MAX SPEED) 20.0 M/min

The running speed for film roll: 17.6 M/min

The pulling speed for film roll: 19.4 M/min

Sealing Temperature: (See remark)

Sealing Time: 0.8 (See remark)

Applied Material: PE, OPP, POF

REMARK

Both sealing line & temperature are adjustable according with the different material, thickness and working condition.

2.2 The notices for machine turning on/off

- (1).All the operators who should study this manual thoroughly before operating the machine
- (2).Please check following items before turning on the machine.
 - 2.1 To check the attaching accessories on the machine.
 - 2.2 Make sure the conveyor table is clear.
 - 2.3 Check the emergency button is on the up-right position in anytime.
 - 2.4 Check the sealing cutter must be clean.
 - 2.5 Do not place tools or things on machine to avoid the danger of rolling in.
- (3).To ensure safety, do not open the machine cover when the machine is running.
- (4).There is a safety device which is set on the machine.When the machine is running, it will stop immediately and start the alarm if open the cover.
- (5).The machine must be stopped running for adjustment & maintenance.
- (6).The operator should pay attention for the caution marks and follow the rules for safe operation.
- (7).The operator has the responsibility to keep the machine clean and running it well.
- (8).Please contact to our technician for any problem of the machine.

WARNING SIGNS



WARNING SIGN, BEWARE OF DANGER.



GROUNDING SIGN, NOTICE HERE IS THE GROUNDING LOCATION.



ELECTRICITY DANGER, MAY HAVE ELECTRICAL DANGER IF TOUCH.



CUT WARNING.



ROLL IN WARNING.



SQUEEZE IN WARNING.



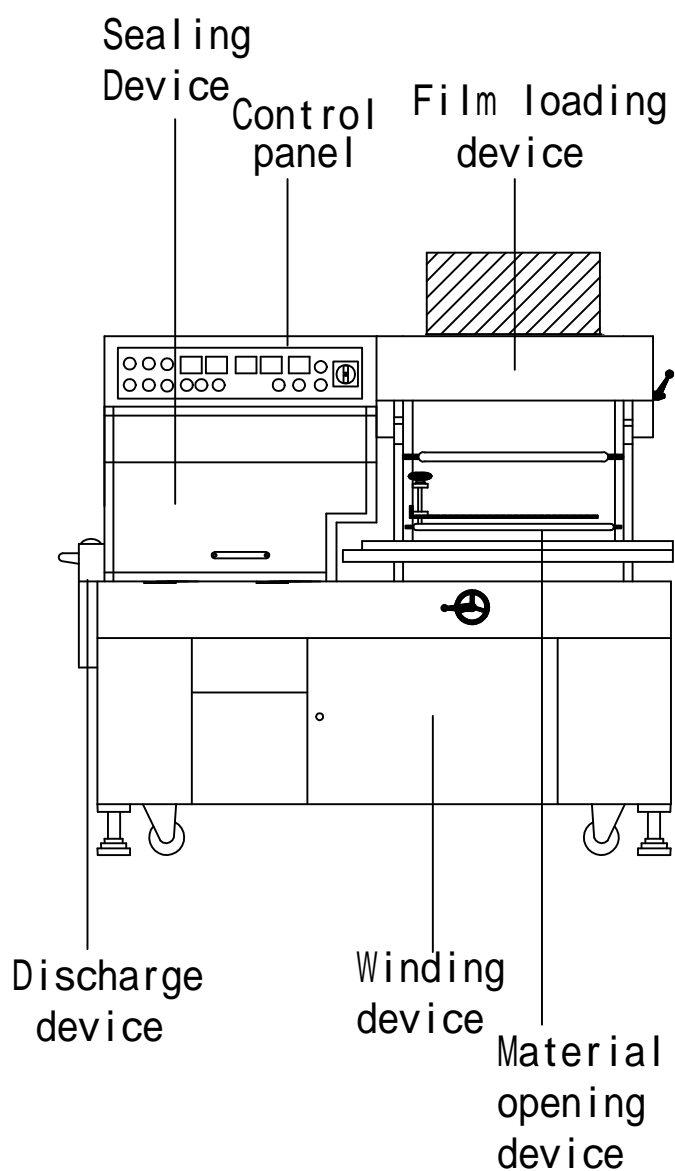
HIGH TEMPERATURE WARNING.



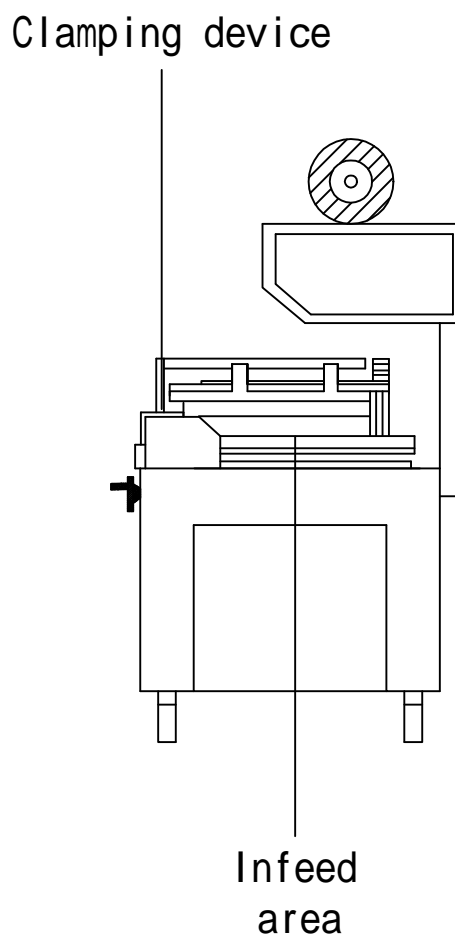
WED WARNING, KEEP DRY AND CLEAN.

3. OPERATION INSTRUCTION

3.1 THE PARTS DETAIL

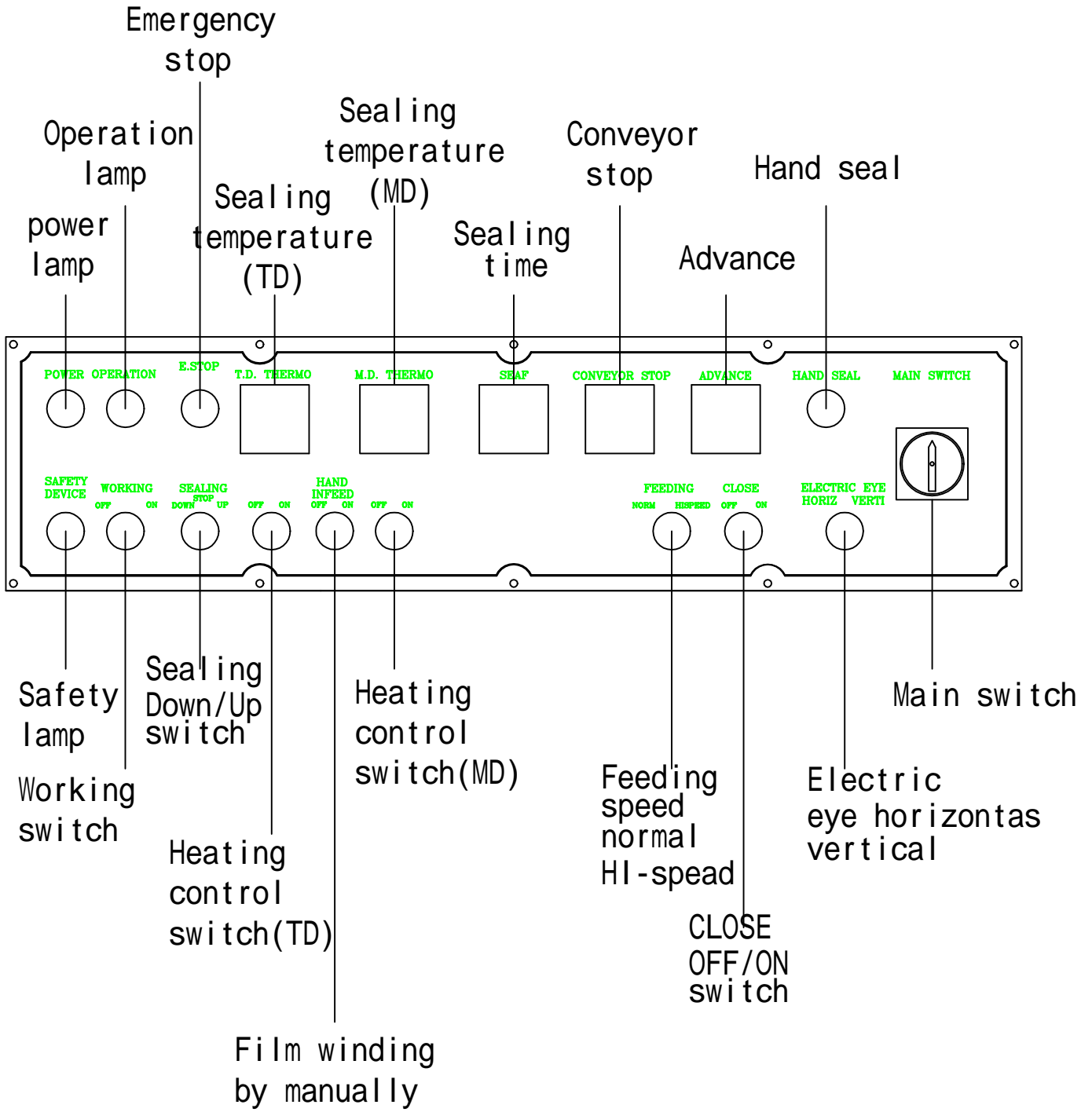


FRONT VIEW



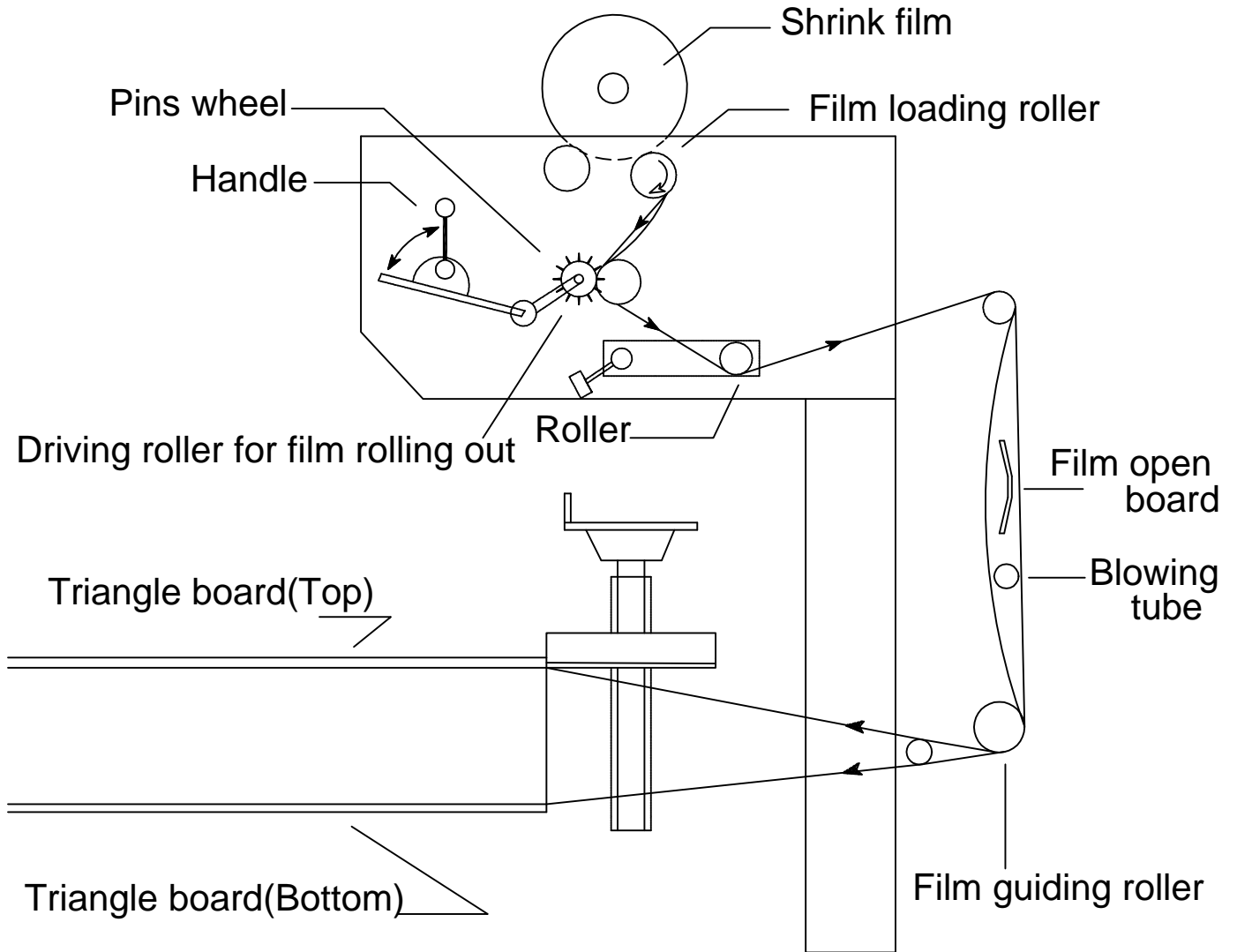
SIDE VIEW

The instruction for control panel

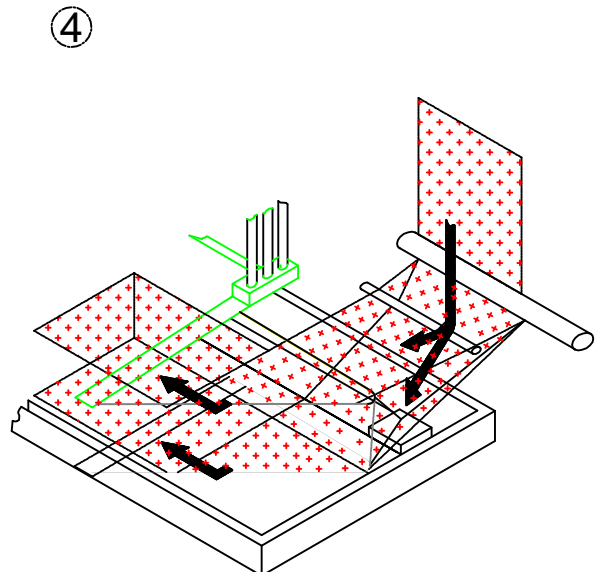
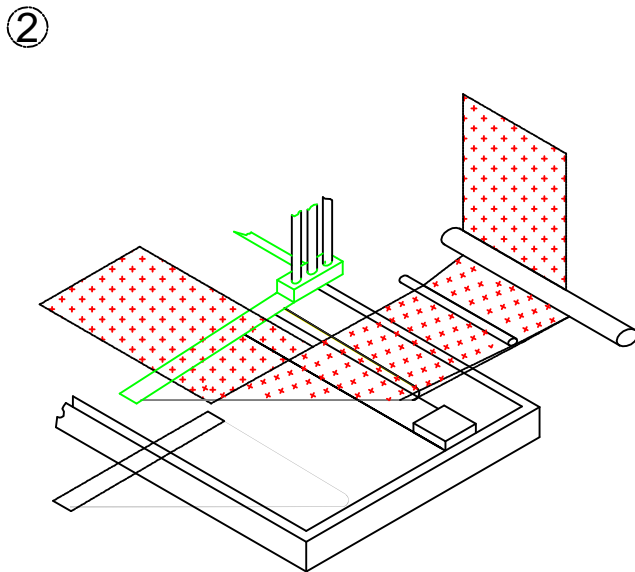
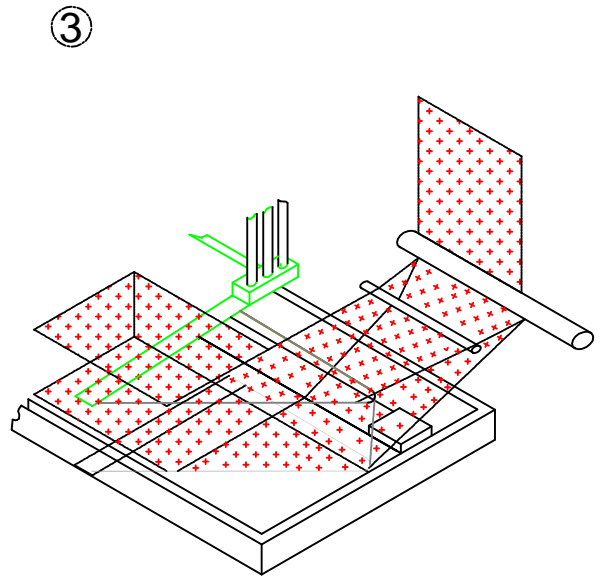
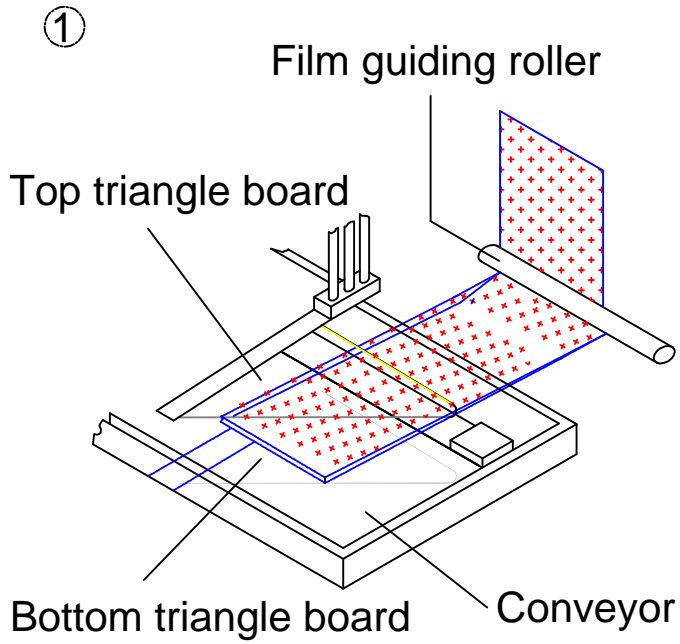


3.2 The Film Set up Procedure

Film Setting Diagram

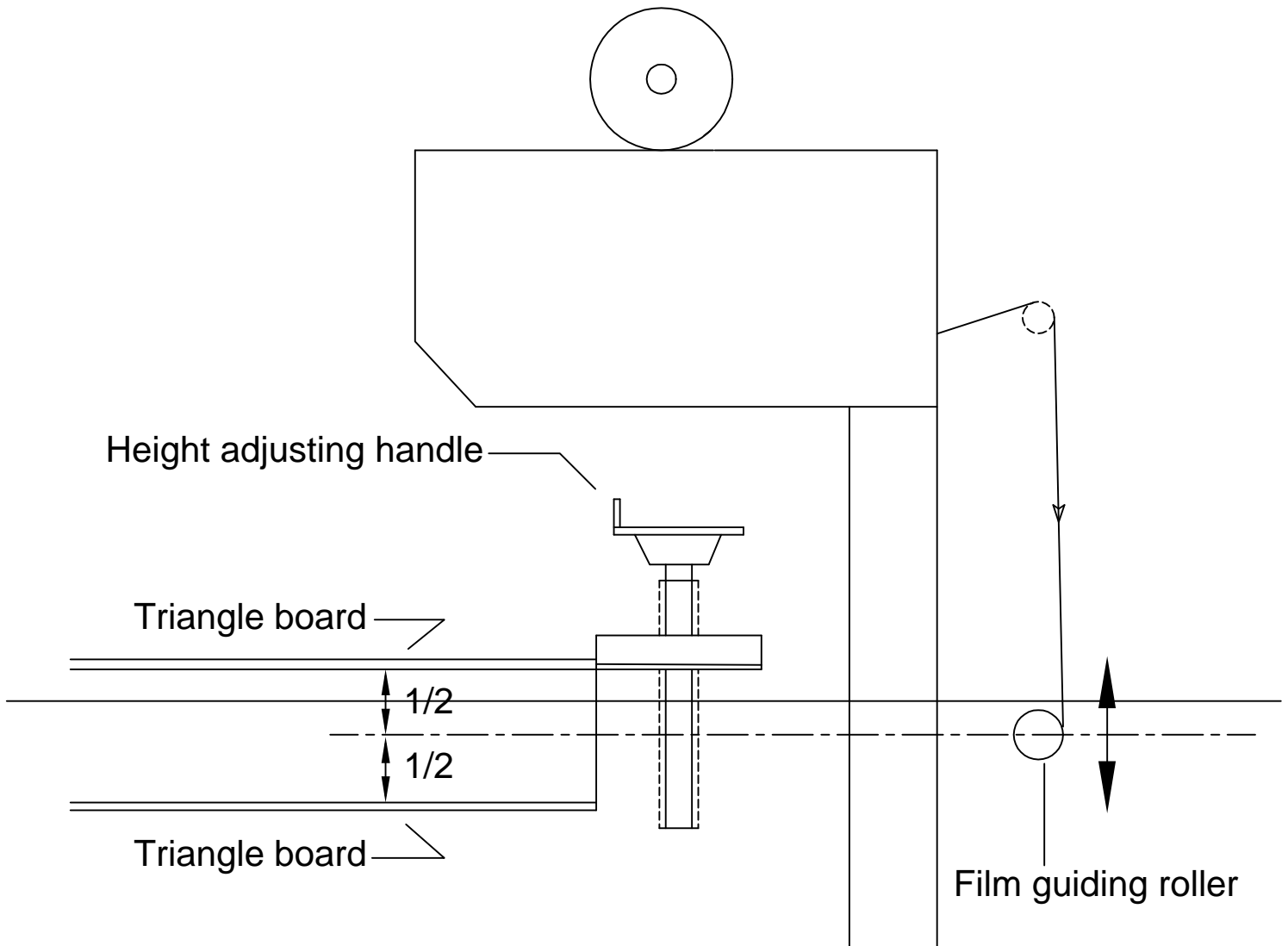


The Film Setting For Triangle



4.1 THE FILM SET UP PROCEDURES

Adjust the film guiding roller setting the roller on the middle position of 2 triangle boards.



1/2 height of object = the space between object with guide stick.

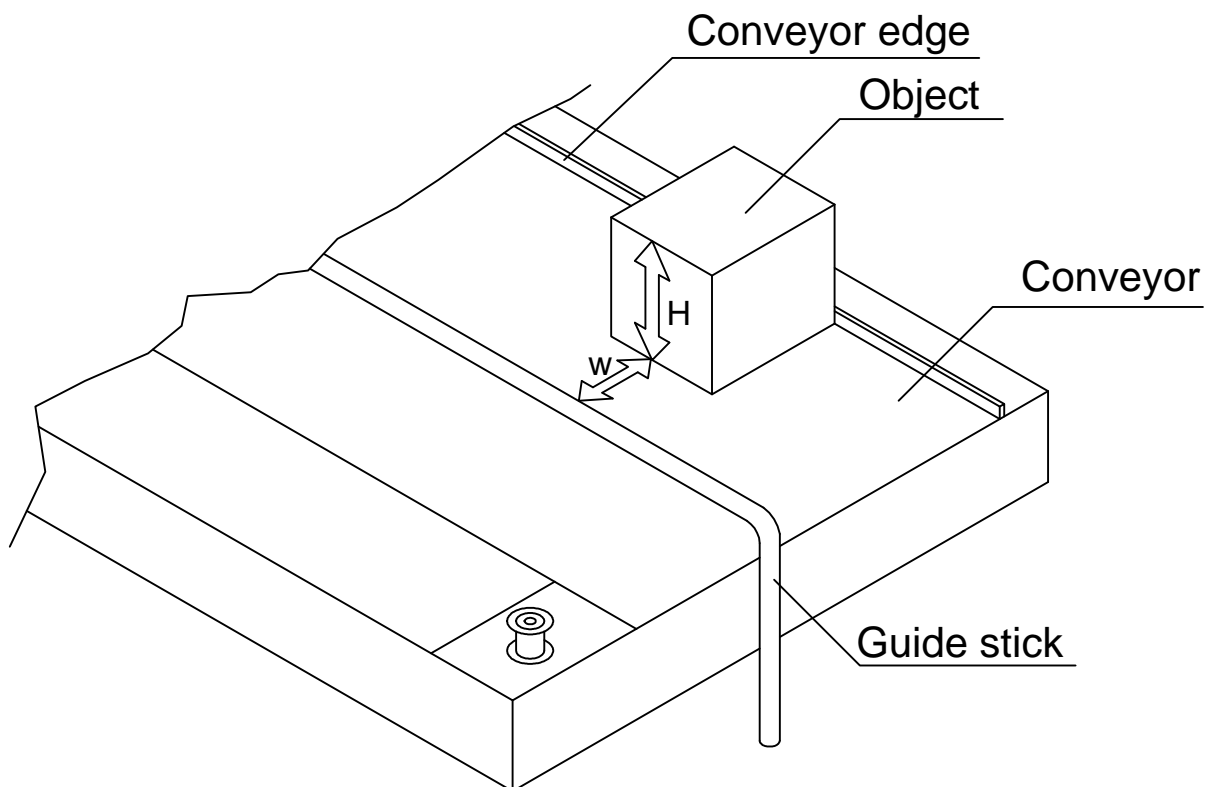
Example : = Object's height =10 cm
The space between object with guide stick.

$$W = 1/2 H$$

space = 5cm

H=Object's height

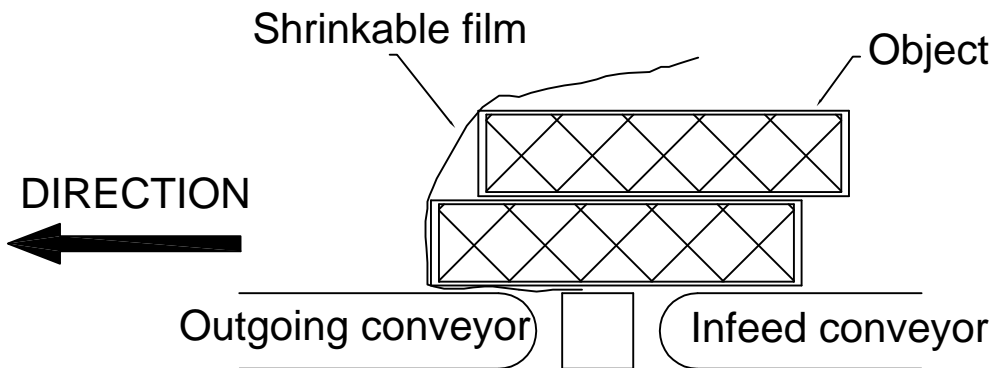
W=The space between object with guide stick.



To adjust the function of conveyor stop & advance.

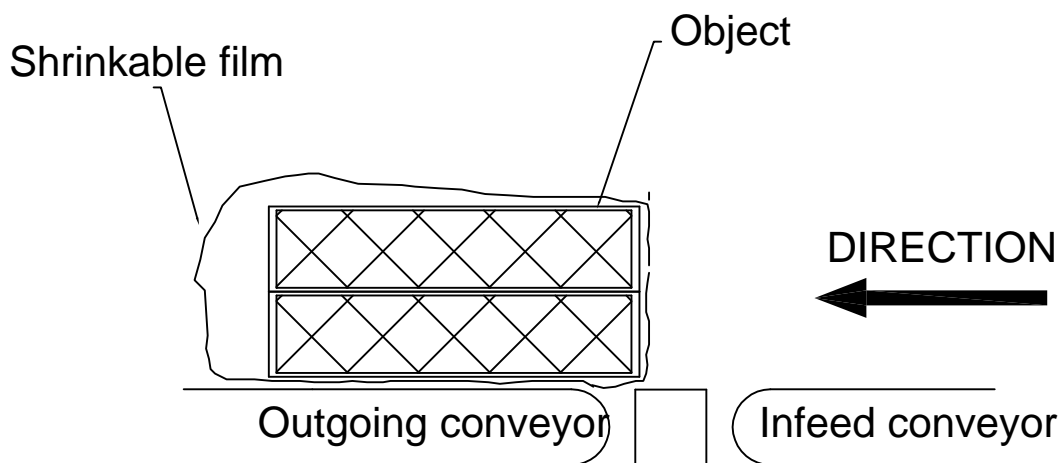
Advance

- (1). If the package height is more than 6 cm, the "Advance speed" must be adjusted. The speed too fast would influence the package.



The advance speed is too fast, make the film bag tighter will move the upper layer object away.

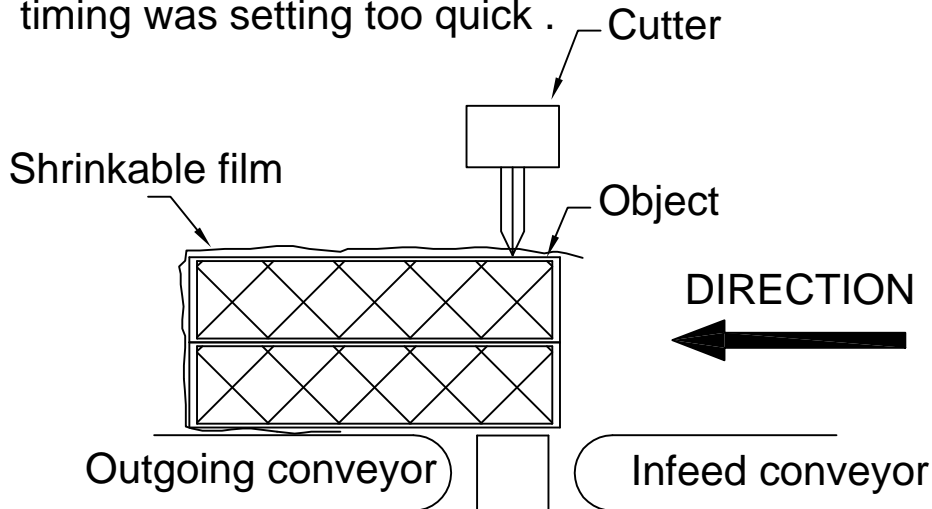
- (2). The advance speed is too slow, make the film bag looser; it will be effected on the quality of backage.



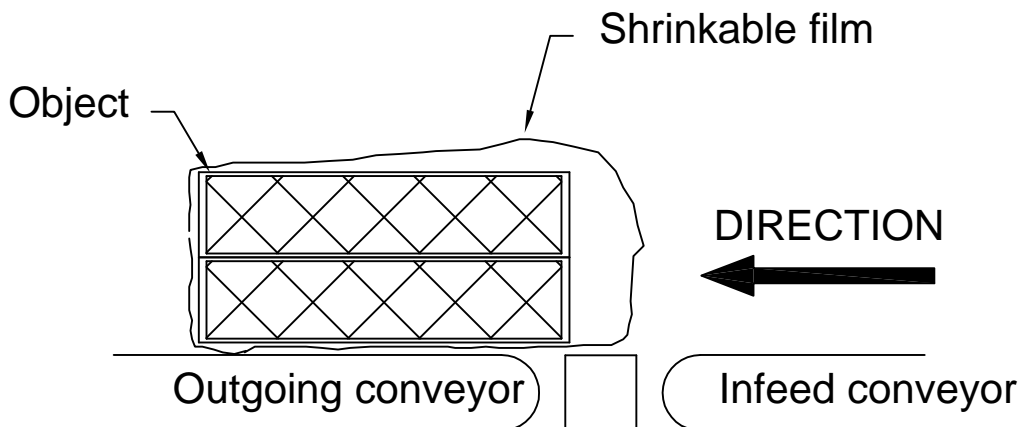
The advance speed is too slow, make the bad package.

Conveyor stop

- (1). If the object's height is more than 6 cm, the function of conveyor stop timer must be started. The object might be cut by sealing cutter because of conveyor stop timing was setting too quick .



- (2). The conveyor stop timing setting too long make the film bag looser; it would effect on the quality of package.



The conveyor stop timing setting too long make the film bag looser.

5. TROUBLE SHOOTING

5.1 HOW TO DEAL WITH THE TROUBLE

TROUBLES	CAUSES	SOLUTION
<p>1. CONTROL POWER LAMP DOES NOT LIGHT</p> <p>NO-FUSE BRAKER TRIPPED</p>	<p>POWER NOT CONNECTED FUSE BURNED. SWITCH DEFECTIVE. DISCONNECTED WIRE.</p> <p>POOR CONNECTION. ELECTRICAL LEAKAGE.</p>	<p>REPLACE PART SWITCH ON POWER</p> <p>CHECK HEATING WIRE CHECK ALL WIRING SECTIONS</p>
<p>2. CONVEYOR BELT BELT CAN BE PUSHED BY HAND</p> <p>BELT CANNOT BE PUSHED BY HAND FAILURE UNDER NORMAL STATUS</p>	<p>BELT TENSION TO LOOSE. BELT TENSION TOO TIGHT.</p> <p>DEFECTIVE MOTOR GEAR HEAD.</p> <p>TOO TIGHT DRIVING CHAIN TENSION. DISCONNECTED WIRE DEFECTIVE MOTOR DEFECTIVE CONTACT PLUG DEFECTIVE RELAY UNIT DEFECTIVE LIMIT SWITCH</p>	<p>ADJUST BELT TENSION SCREW ADJUST BELT TENSION SCREW</p> <p>REPLACE PART ADJUST DRIVING CHAIN REPLACE PART</p>
<p>3. MATERIALS MATERIAL OUTPUT ROLLER FAILURE</p> <p>MATERIAL MOVES</p>	<p>DISCONNECTED WIRE DEFECTIVE DRIVING MOTOR DEFECTIVE RELAY UNIT</p> <p>DEFECTIVE BRAKE BOX WRONG MATERIAL SETTING POSITION</p>	<p>REPLACE PART</p> <p>ADJUST</p>

5.2 Parts replacment & technical support

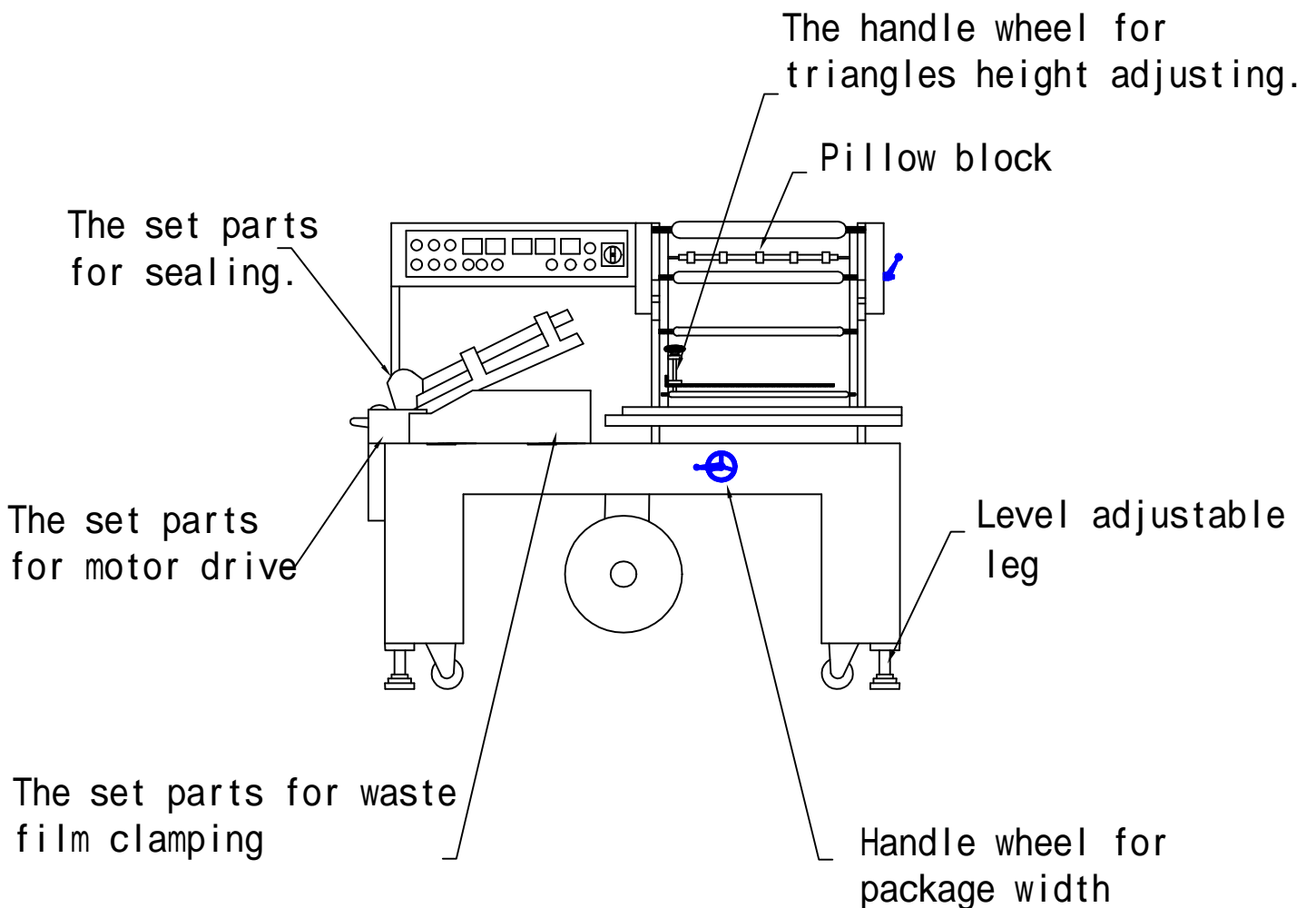
We have a technical service department to offer the service 24 hours a day.

- 1.The technical service engineers stands by for machine installation , customer training & maintenance.
- 2.We offer one year warranty for new machine.
- 3.The machine is prohibited to change the design, or use the parts of different specification. If so we reserve the rights to cancel the warranty.
- 4.However, please inform our engineer for parts replacement
The customer could replace the parts by themselves, but the parts model & brand must be as same as original one.
- 5.All the maintenance process should be followed the instructions in this manuel to prevent danger from maintaining.

6. MAINTENANCE

6.1 greasing

1. Please use the brush, cloth or compressed air to clean the surface of machine.
2. Please grease the machine just follow the arrow head.
3. Don't grease the conveyor belt to avoid the belt sliding.
4. Please use the silicon oil to protect the cutter.



6.2 OUTWARD CLEANING AND MAINTENANCE

1. After daily operation, carefully wipe clean the sealing cutter with a soft cloth.
2. The machine is not built to be waterproof function. Please clean the machine by wet cloth.. It is prohibited to splash water on the machine.
3. The machine has been coated by anti-dust process, but still should avoid to contact with acid liquid or gas.

ATTACHED TOOLS AND SPARE ITEMS

TOOLS NAME	QUANTITY	SPECIFICATION
Tools box	1	red
Cross tip screwdriver	1	
L shape hexagon wrench	1	
Fuse	2	10A
Wrench	1	5.5 - 7
Wrench	1	8-10
Wrench	1	13-17
Silicon oil	1	
Tehon tape	1	
FUSE	2	2A

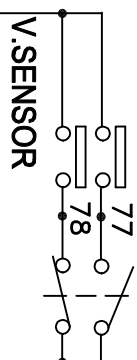
BE CAUTION OF WASTED MACHINE DISPOSAL

When the machine is wasted, please dispose it according to the wastage regulations, must do not dumping it willinly.

Design change note				
Mark	Description	Modifier	Date	Check
△1	-		-	
△2	-		-	

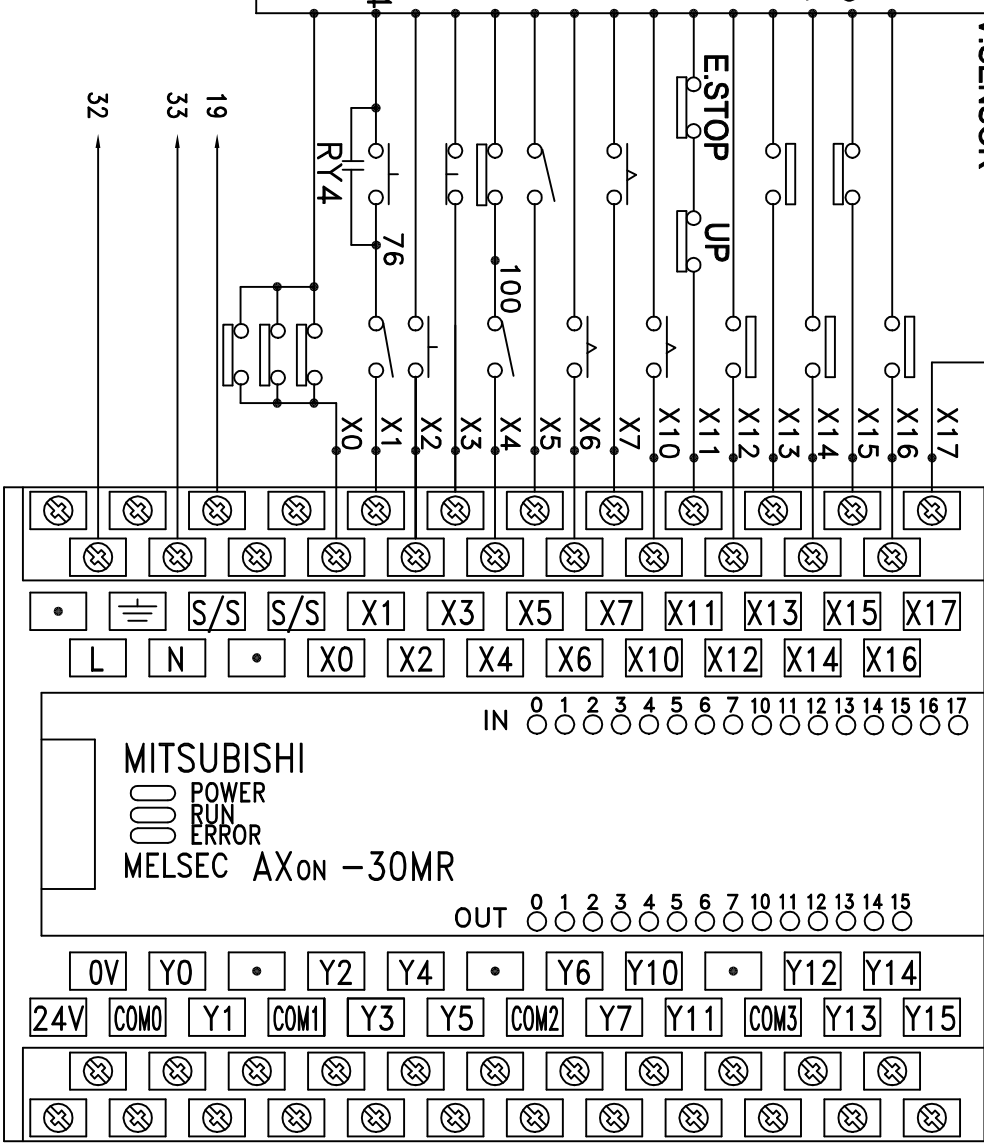
PHOTO SENSOR CONTROLLER'S SWITCH SW3

H.SENSOR SWITCH



Revision: 2004-01

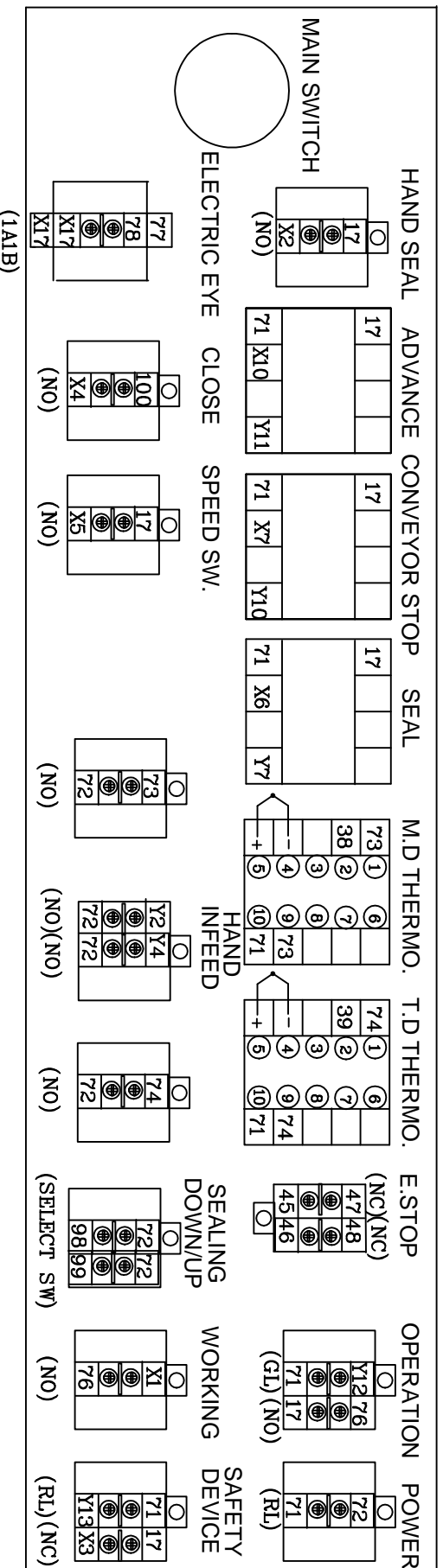
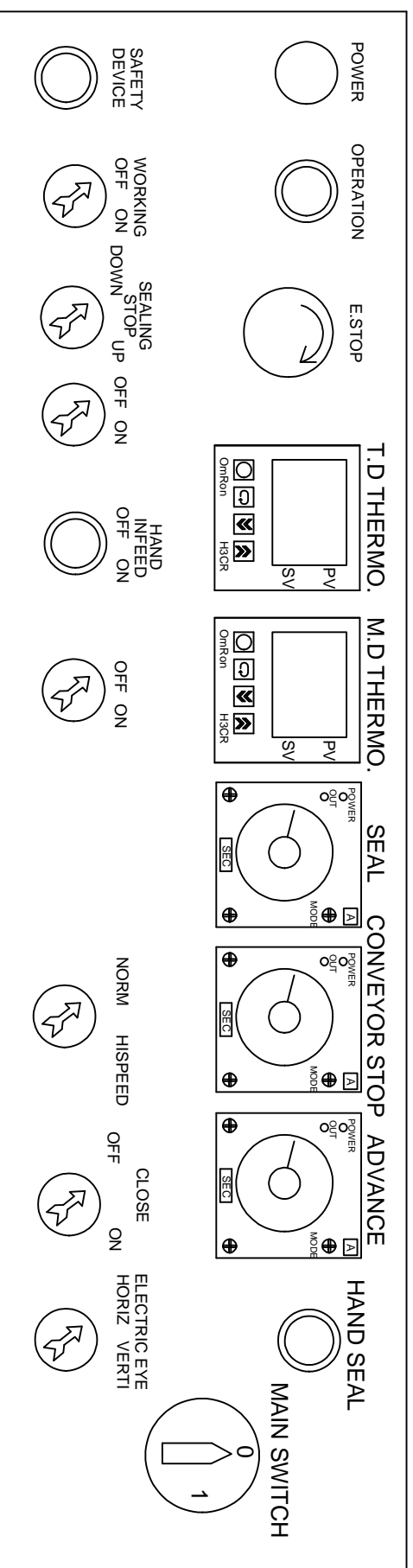
- LIMIT SWITCH FOR FILM PULLING OUT LS6
- LIMIT SWITCH FOR SAFETY <UNDER CONVEYOR> LS5
- LIMIT SWITCH FOR L-BAR UP POSITION <UNDER CONVEYOR> LS4
- OUTFEED CONVEYOR AT BACK POSITION MS2
- OUTFEED CONVEYOR AT BACK POSITION MS1
- EMERGENCY SWITCH PB4
- ADVANCE SWITCH T3
- OUTFEED CONVEYOR T2
- SEALING TIMER T1
- PACKING SPEED SELECTING SWITCH SW2
- CONVEYOR CLOSING SWITCH SW1
- RESET PB3
- MANUAL CONTROLLING SWITCH PB2
- OPERATION SWITCH & WORKING SWITCH PB1&SW4
- LIMIT SWITCH FOR SAFETY<ABOVE OF L-BAR> LS1~3



Drawing name	Electric circuit diagram	Machine codename	ISA-504G-CE	Date	JUN.26.2004	Check	Design	Draw
Drawing No	ISA-504G-CE-J002		ISA-504G-CE					

Design change note				
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△2	-	-	-	-

Revision: 2004-01



Drawing name	Machine codename	Date	Check	Design	Draw
Electric circuit diagram	ISA-504G-CE	JUN.26.2004			
Drawing No	ISA-504G-CE-J005				