

**PALLET STRETCH WRAPPING MACHINE**

**MODEL: TMD-P26B**

**OPERATION MANUAL**

1.16.2016

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## **1. GENERAL**

### **1.1 NOTICE OF INSTALLMENT**

To make sure a safe and correct operation, please check conditions below before install the machine:

- 1) Power source capacity must be equal of the machine need.
- 2) Machine standard power is AC110v/230v (+- 10%)
- 3) Machine standard power Hertz is 50/60 Hz. (+- 2%)
- 4) Machine is workable under the temperature between 0°C - 45°C
- 5) Make sure the wire is tidy on the ground.
- 6) There should not have vibration beside the machine during the installment, and make sure to ground is flat.
- 7) Read and follow the instruction of the installment.

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## **1.2 NOTICE OF OPERATION**

To have good protection for the operator, please make sure the following conditions:

- 1) Before operating, please read the machine operational manual carefully.
- 2) Make sure there is no object put on the power cable.
- 3) Make sure there is no object put on the upper elevator unit.
- 4) Avoid any damp object or water around the electric parts.
- 5) Avoid film winded into the turntable.
- 6) Do not stand on or across the machine during operation.
- 7) When the problem occurs, please check the section of 5 Trouble shooting

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## 2. SPECIFICATION

### 2.1 SPECIFICATION TABLE

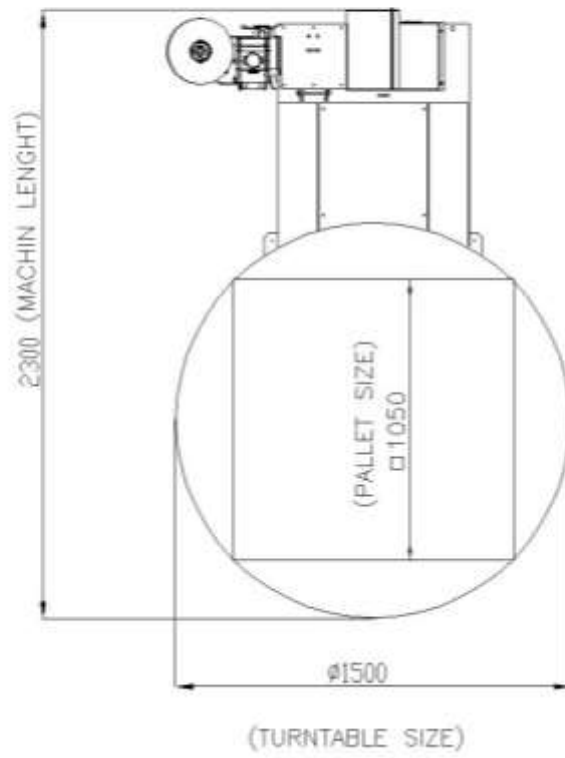
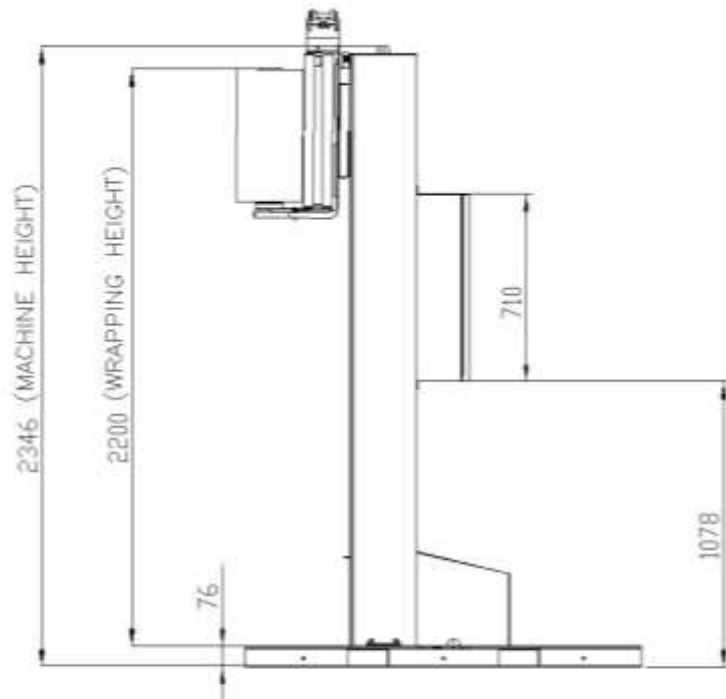
Model	TMD-P26B
Turntable Speed	10 RPM
Turntable dia.	1500mm
Max. Wrapping height	2200mm
Max. Wrapping size	1050x1050mm
Max. Loading weight	1200Kg
Film stretch (%)	Infinite/manual adjust
Max. film spec.	φ 250x500mm
Turntable height	76mm
Ramp (slope) spec.	1165x1000mm
Machine size	2300x1500x2346 mm
Machine net weight	335Kg

#### Standard option:

- 1.65 meters turntable dia. (Max Loading Weight 1650kg).
- 2.6 meters wrapping height
- 3.0 meters wrapping height
- Ramp

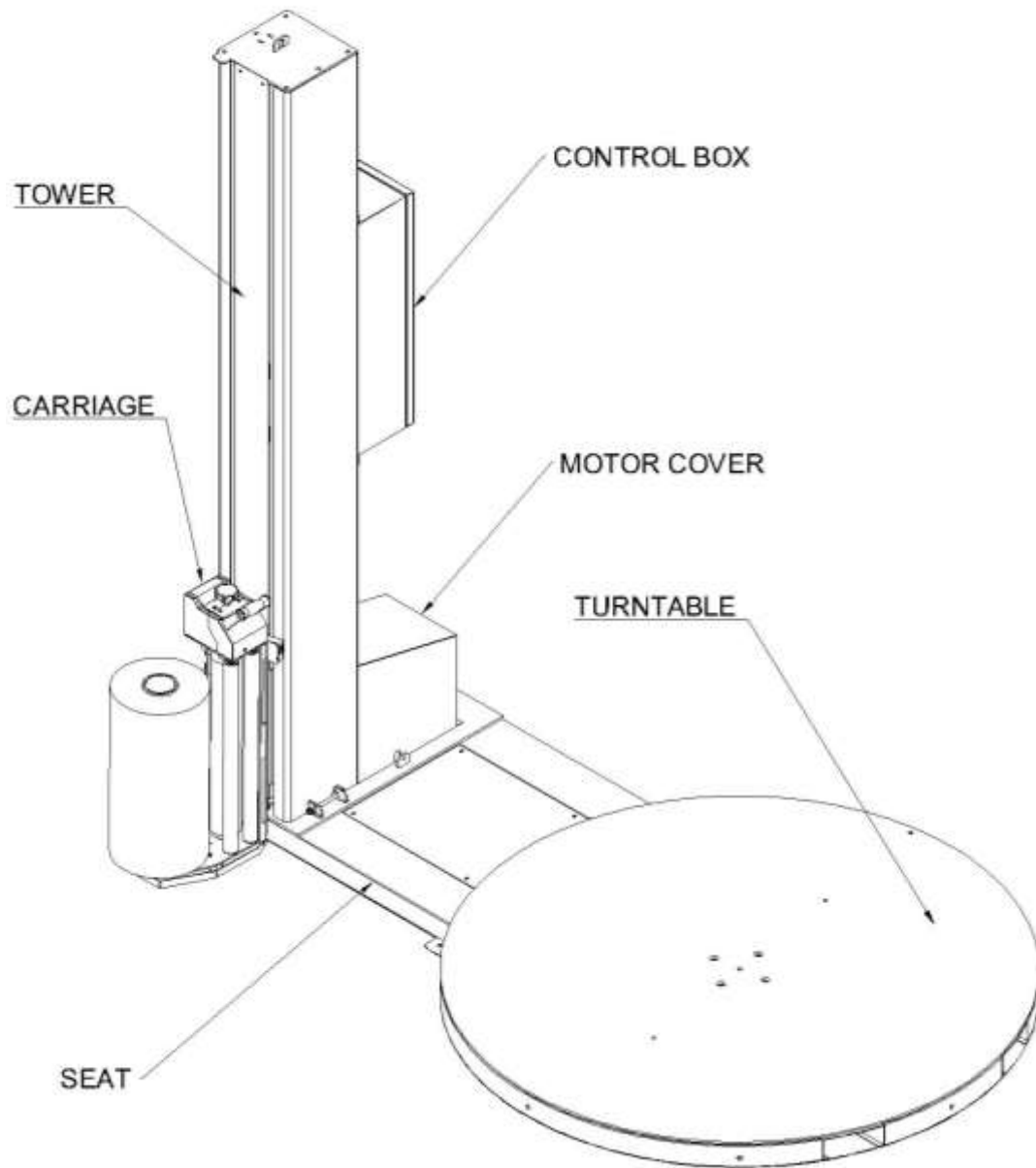
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## 2.2 MACHINE DIMENSION



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## 2.3 Machine Description

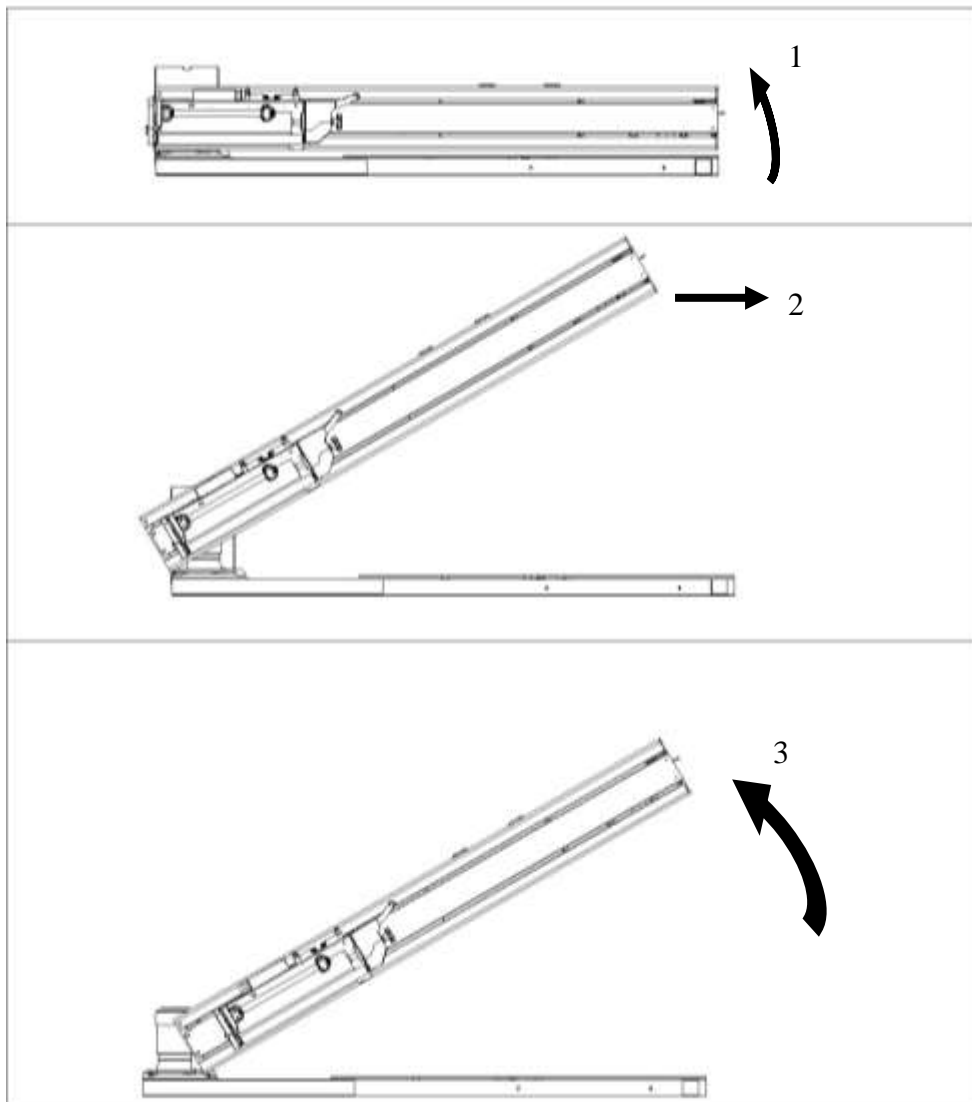


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### 3. OPERATION DESCRIPTION

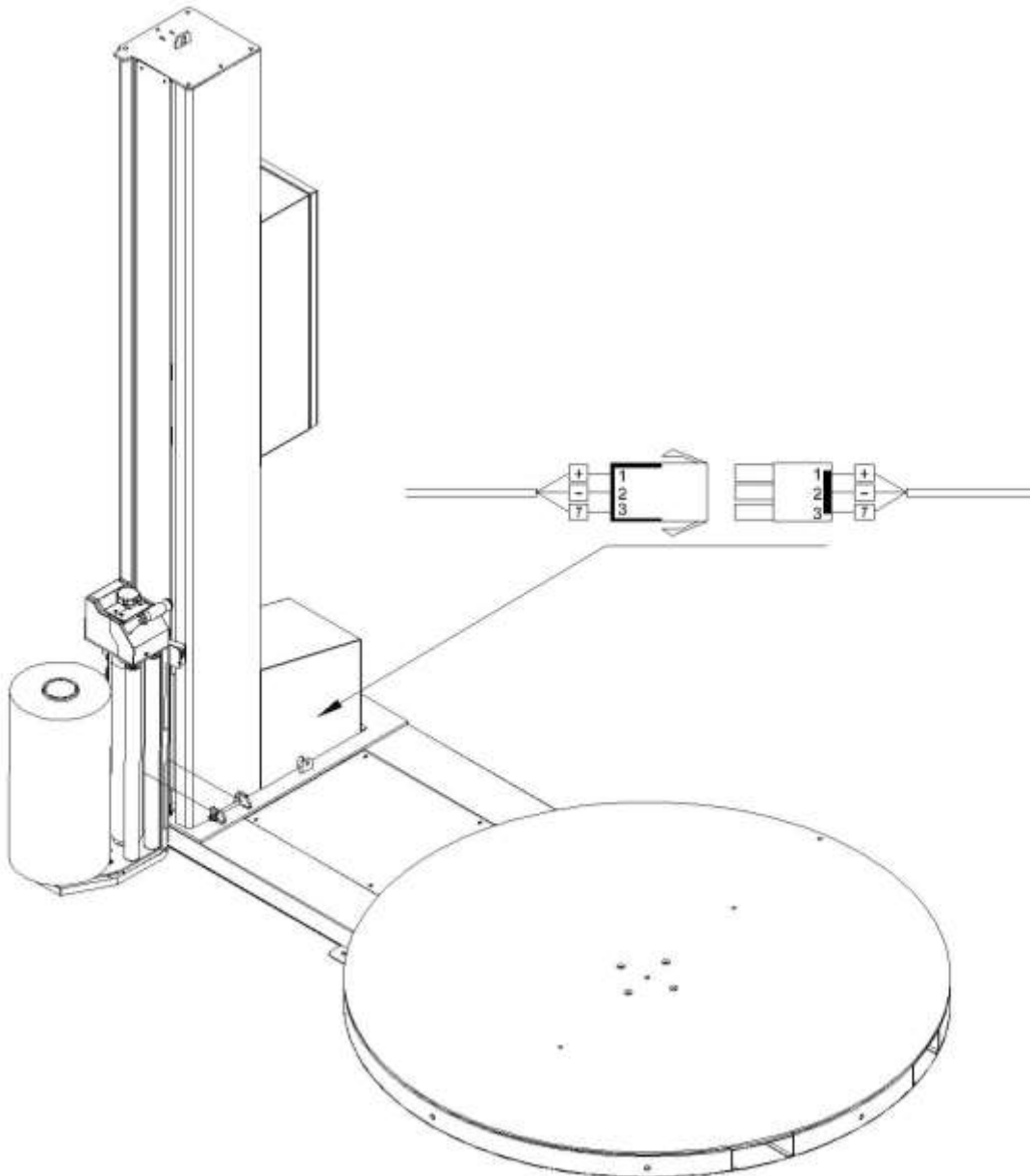
#### 3.1 INSTALLMENT

- 1) Apart the wooden package. Avoid damaging the machine.
- 2) a) Loosing 4 screws at the end of masters ◦ (Do not unscrew the sliding shaft, leave inside the track).  
b) Lift up the master (Step 1).  
c) Sliding the master towards turntable, until the sliding shaft move into locking position (Step 2).  
d) Master is in position to be fully lifted and tighten all screws (Step 3).





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- 3) Connect the motor plug to the main control, by referring to the diagram below. Machine is ready to be connecting to the power cable with the socket by an 110V/230V power.



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## 3.2 REMINDER OF INSTALLATION

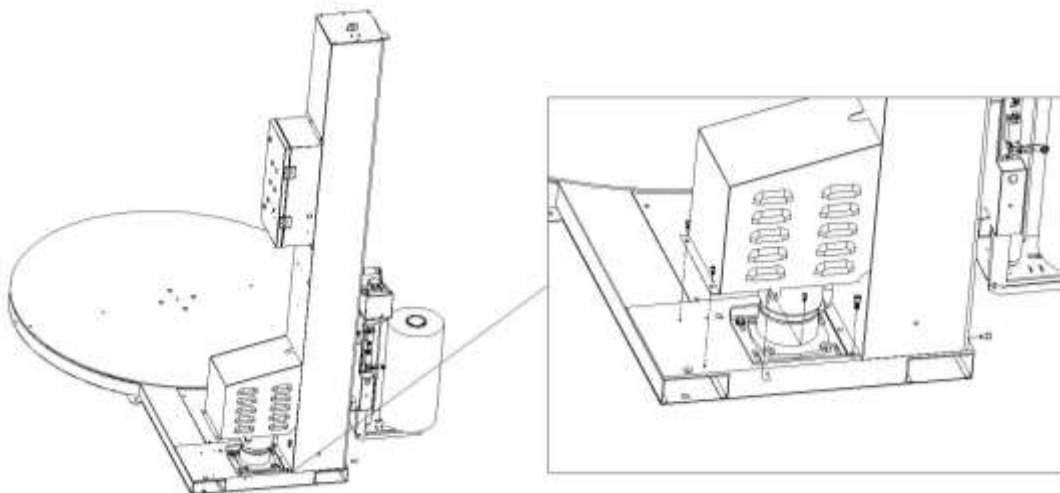
Please pay attention on:

### Tower Installation

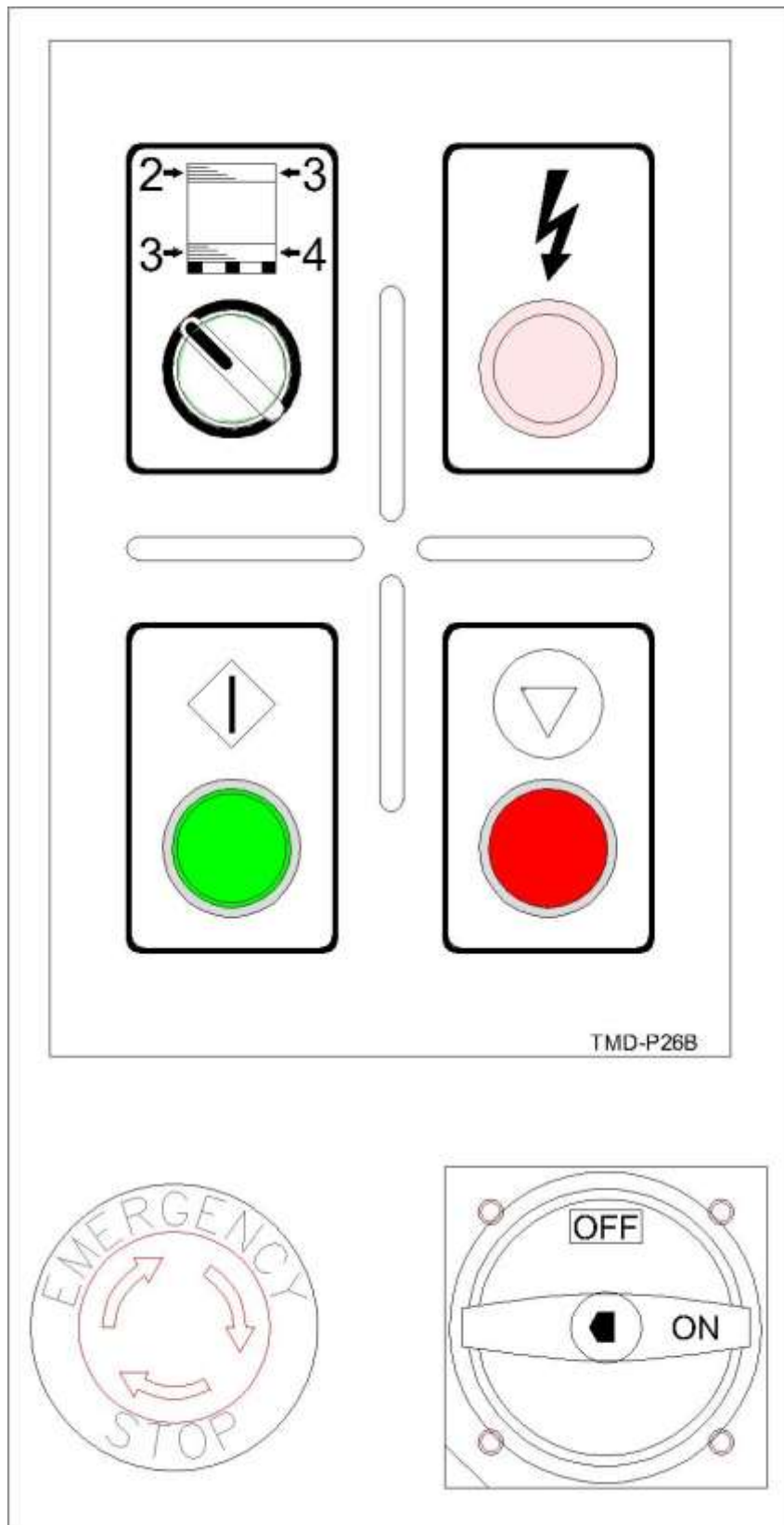
When installing the tower, the engineers must make sure all 4 screws are properly installed underneath the tower. 1 by carriage side, and 3 by the motor sides.

### Motor Cover

After all the connections are complete, please carefully install the motor cover to cover up all the wire connections and the motor on the base of the machines.



### 3.3 OPERATION OF CONTROL PANEL



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## 3.4 OPERATION DESCRIPTION



### A. MAIN POWER

To switch ON and OFF the power



### B. POWER INDICATOR

Show that power is ON when light illuminates.

Machine Running, LED "Continue Flash"

Power Cut circuit (EMG, KEY, ETC) Flash Twice.



### C. MODE SELECTIONS

This selector is to choose the number of top and bottom

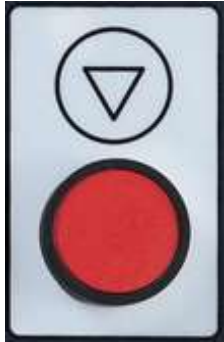
Mode 1: Top 2 wraps, bottom 3 wraps.

Mode 2: Top 3 wraps, bottom 4 wraps.



### D. START

Press the button to get automatic program running.



### **E. PAUSE**

During the wrapping cycle, if the machine is required to be stopped, press **E** button to pause the machine and press **D** button to resume back to operation.



### **F. EMERGENCY STOP**

Press the button for emergency stop. For security consideration, the turntable will not be stopped instantly as the EMG. STOP switch is pressed. As the turntable power is switched off, the brake will be release too. Turntable will be stopped in 10 ° ~ 70°. It depends on the weight load.

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### 3.5 OPERATION CYCLE

1. Please turn the Main Power Switch into **ON** position and check if the **Power Light** illuminates.
2. Select the Button **C** for wrapping cycle.  
  
Mode 1: 3 bottom wraps and 2 top wraps.  
Mode 2: 4 bottom wraps and 3 top wraps.

Please note, during the machine operation, there is no need to stop the machine, for changing wrapping mode.

3. Press the Start (**D**) to wrap the Package.
4. During the wrapping cycle, if the machine is required to be stopped, press **E** button to pause the machine and press **D** button to resume back to operation.
5. When the wrapping cycle is finished, the carriage will return back to the bottom of the machine and the machine will automatically stop.
6. Return to **Operation Cycle** step 2, Start the Button Wrapping Cycle.
7. Please turn off the Main Power Switch (**A**) into **off** position when the machine is no longer in use.

Please press the emergency stop button (**F**) to stop the machine instantly, when any **Emergency** occurs.

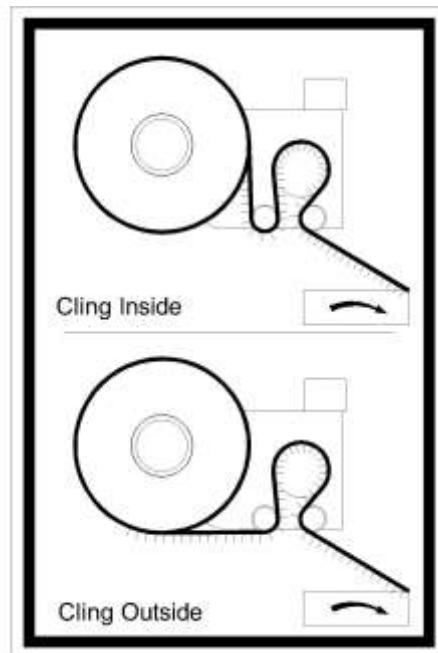
### SECURITY BAR

When this security switch is activated, the main power of motor of the machine will be cut off. Press START button to continue and complete the rest of wrapping cycle.

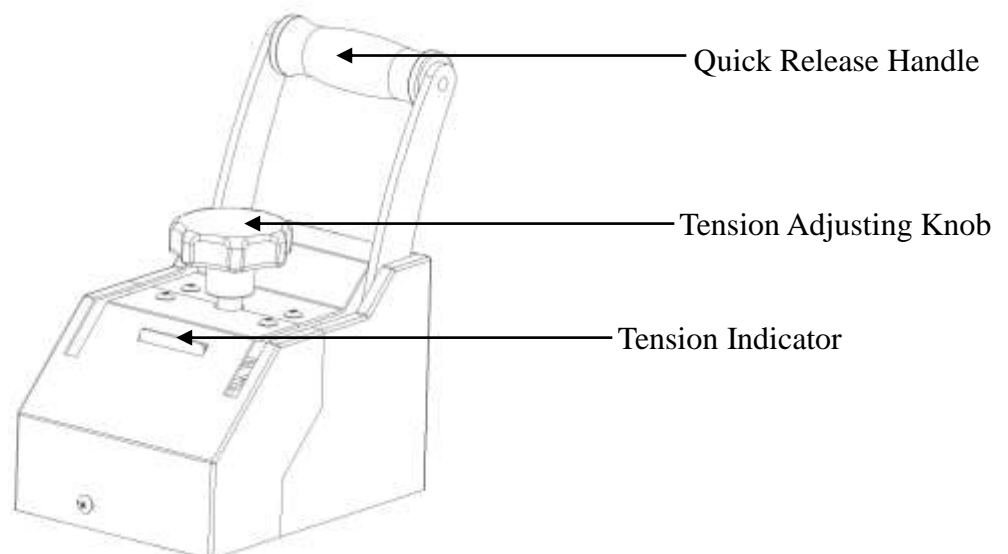
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## ELEVATOR UNIT

1) Illustration for film threading.



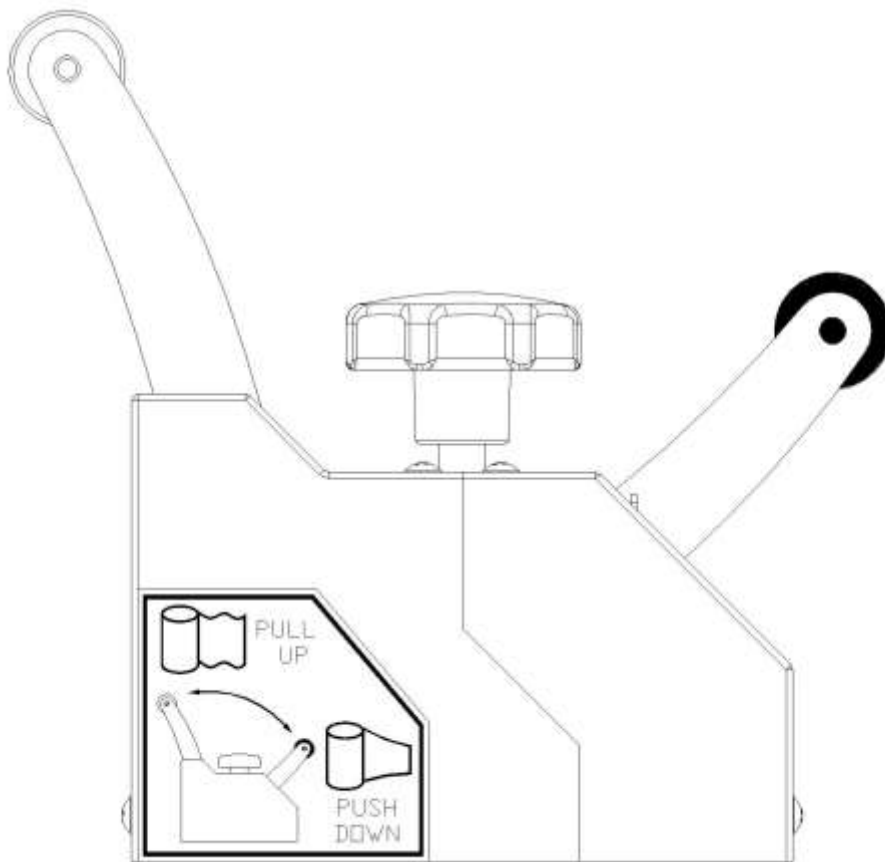
2) Stretch tension adjust knob: Turn the knob clockwise to increase the tension. Counterclockwise to decrease the tension. Adjust and set the indicate needle on the green zone can get the stretch tension is 1 meter Film stretched to be 1.65 meters.



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### 3) Film Quick Release description:

- Pull up the quick release handle upon applying film to the loads.
- Push down the quick release handle to engage the brake during the wrap cycle.





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## 4. ELETRIC

### 4.1 ELECTRIC CAPACITY

#### 1 ) Power Consumption

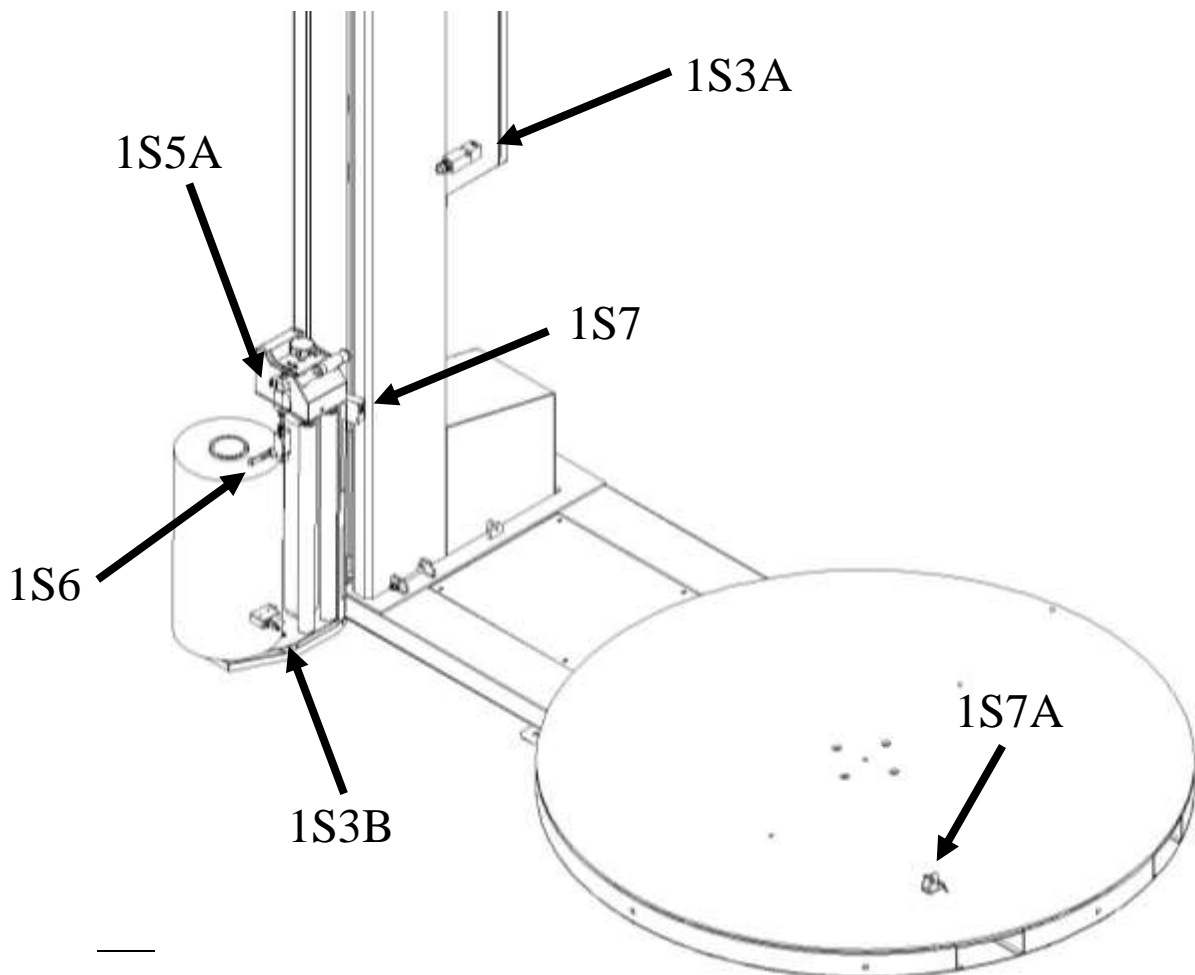
Turntable motor	0.4 KW
Elevator Motor	0.4KW
Control & wiring box	DC 24V
Machine Power Use	0.85 KW
Power Socket need	1 KW

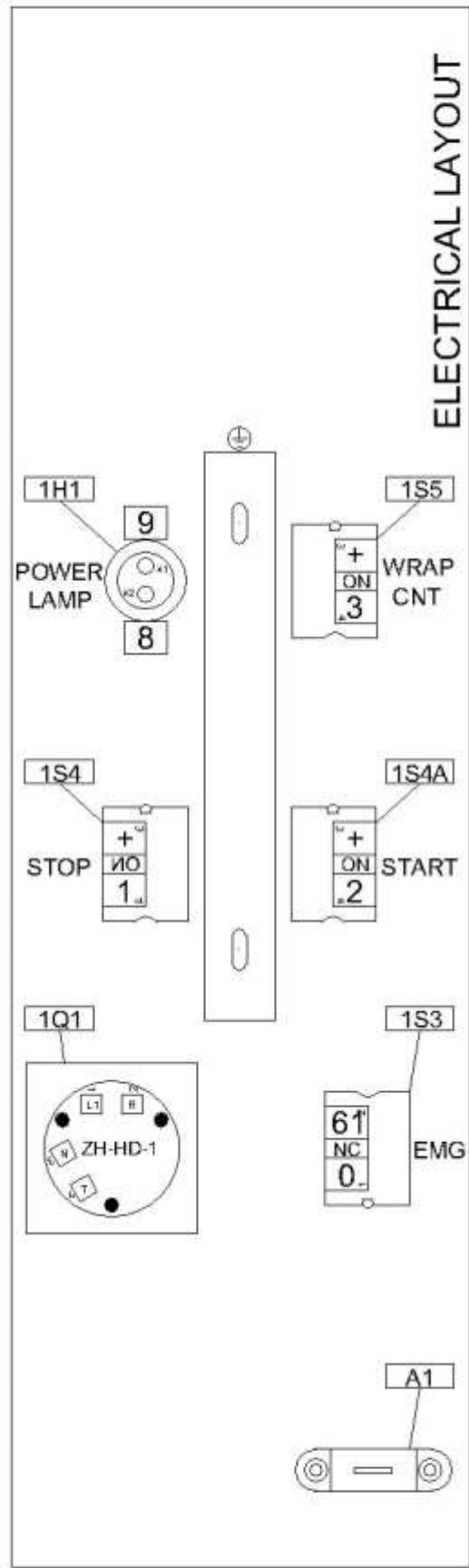
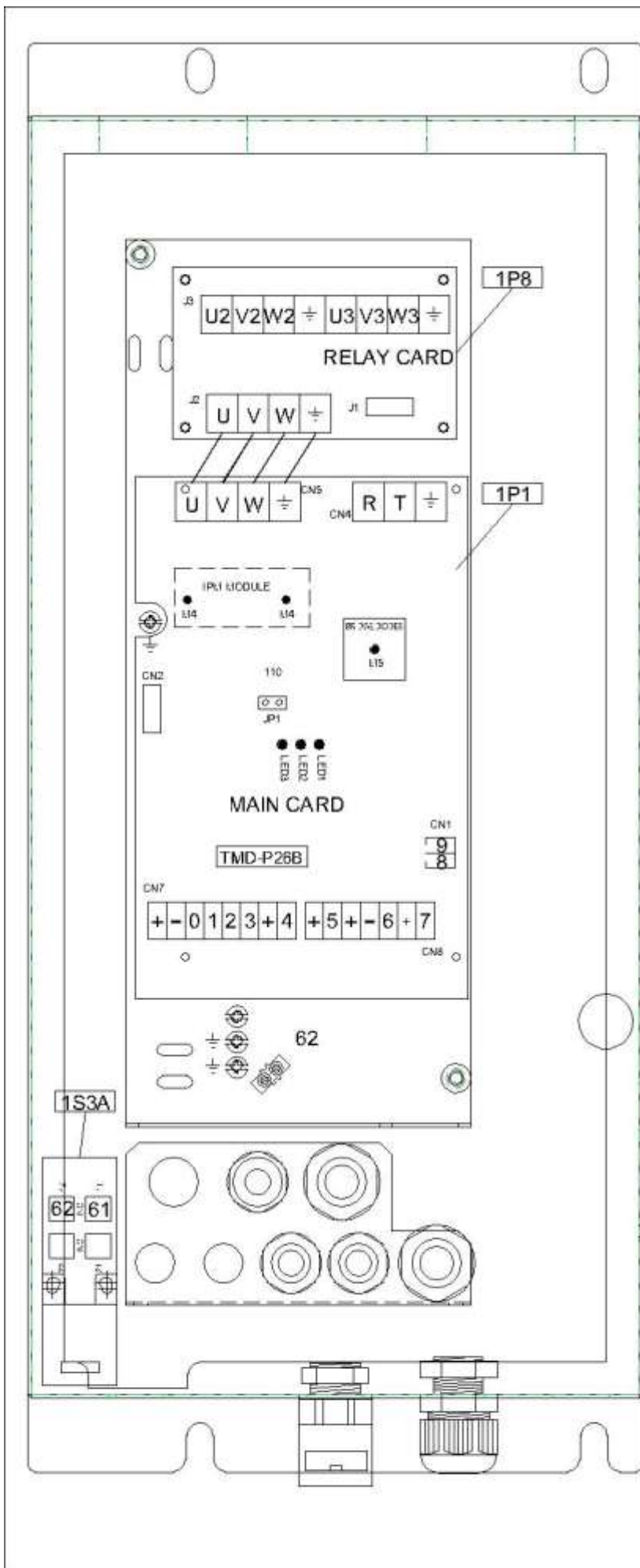
2) Power Cable ----- 1.25 mm<sup>2</sup>

3) Machine input ----- **110V / 230V 1-PHASE**

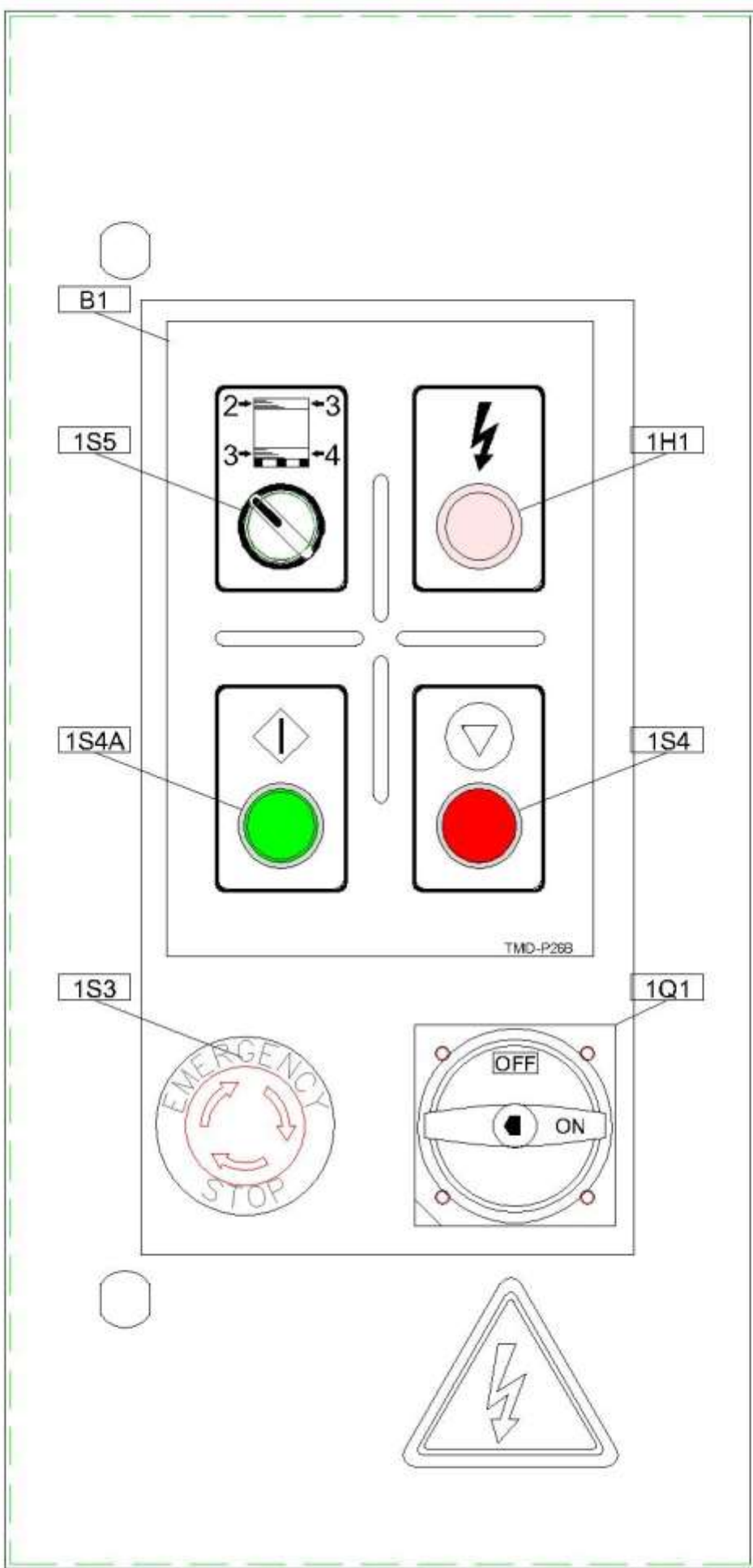
## 4.2 ELECTRIC DIAGRAM

KEY NO	PART NO	DESCRIPTION	Q'TY
1S3A	P0311-020000100	ELECTRIC BOX DOOR <u>SWITCH</u> ( TZ-93BPG)	1
1S3B	P0311-060001400	SAFETY <u>SWITCH</u> FILM CARRIAGE (ML-7312)	1
1S7	P0302-020000200	<u>PHOTO EYE</u> (A3R-2MX)	1
1S7	P0319-10P26B08	<u>PHOTO EYE</u> (A3R-2MX) w/ connector	
1S5A	P0311-060001200	TOP <u>LIMIT</u> (VL-8108)	1
1S6	P0311-060001200	BOTTON <u>LIMT</u> (VL-8108)	1
1S7A	P0302-010002000	TURNTABLE HOME <u>SENSOR</u> (PM12-04P-3M)	1
1S7A	P0319-10P26B15	TURNTABLE HOME <u>SENSOR</u> (PM12-04P-3M) w/ connector	1





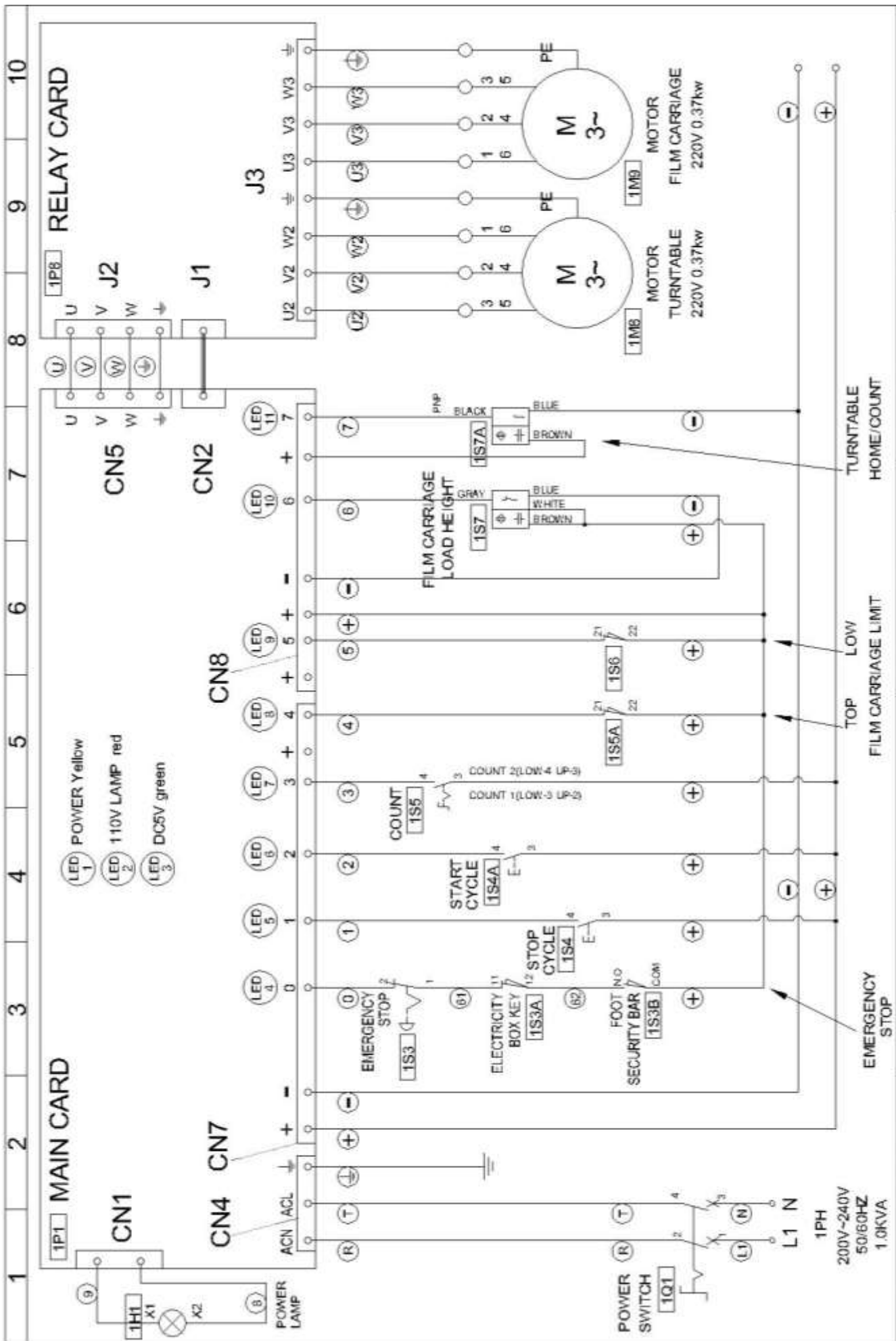
ELECTRICAL LAYOUT



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## ELECTRIC PARTS LIST FOR TMD-P26B

KEY NO	PART NO	DESCRIPTION	Q'T Y
1H1	P0312-010000100	POWER LAMP (XB2BVB1C)	1
1Q1	P0311-010002800	POWER SWITCH (ZH-HD-48-BY)	1
1P1	P0309-010007900	MAIN CARD	1
1S3	P0313-020002800	EMERGENCY.STOP (SKB2ES524-1B R) w/connector	1
1S3A	P0311-020000100	CARRIAGE BOX DOOR SWITCH ( TZ-93BPG)	1
1S4	P0313-020002600	STOP BUTTON COVER+ Contact (SKB2EA42-1A R)	1
1S4A	P0313-020002500	START BUTTON COVER+Contact (SKB2EA31-1A G)	1
1S5	P0313-020002700	COUNT SWITCH(SK B2-ED21-1A)	1
1P8	P0309-010002000	RELAY CARD	1
A1	P0311-030000100	CARRIAGE BOX DOOR KEY (TZ93-K3)	1
B1	P1002-0006700	Panel Stickers	1



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## 5. TROUBLE SHOOTING

### 5.1 GENERAL ADJUSTMENT

#### Turntable belt adjust

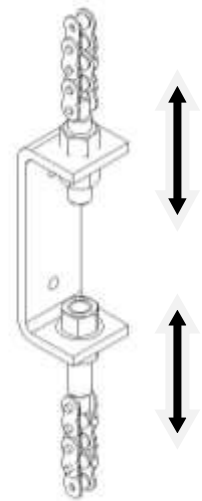
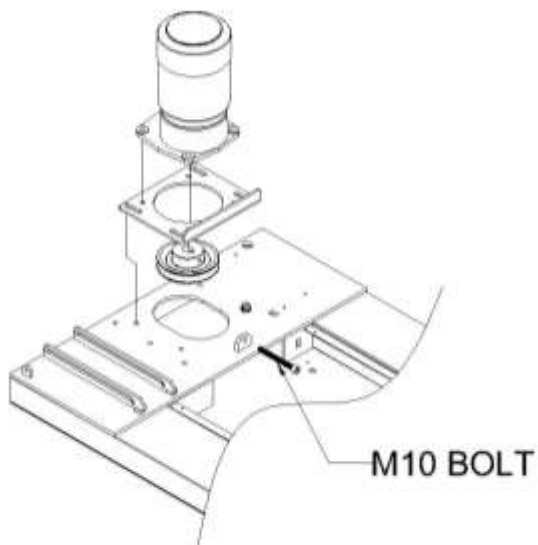
Please see the illustration below and then loosen the motor seat M10 screw 4 pcs.

Turn the (M10) on the seat until get enough tension. Turn and tight the motor seat screw 4 pcs again.

#### **Elevator unit driving chain adjust:**

Adjust the elevator to proper position and take off the cover tower

Adjust the M10 screw (Up and down) to proper tension



## 5.2 TROUBLE SHOOTING

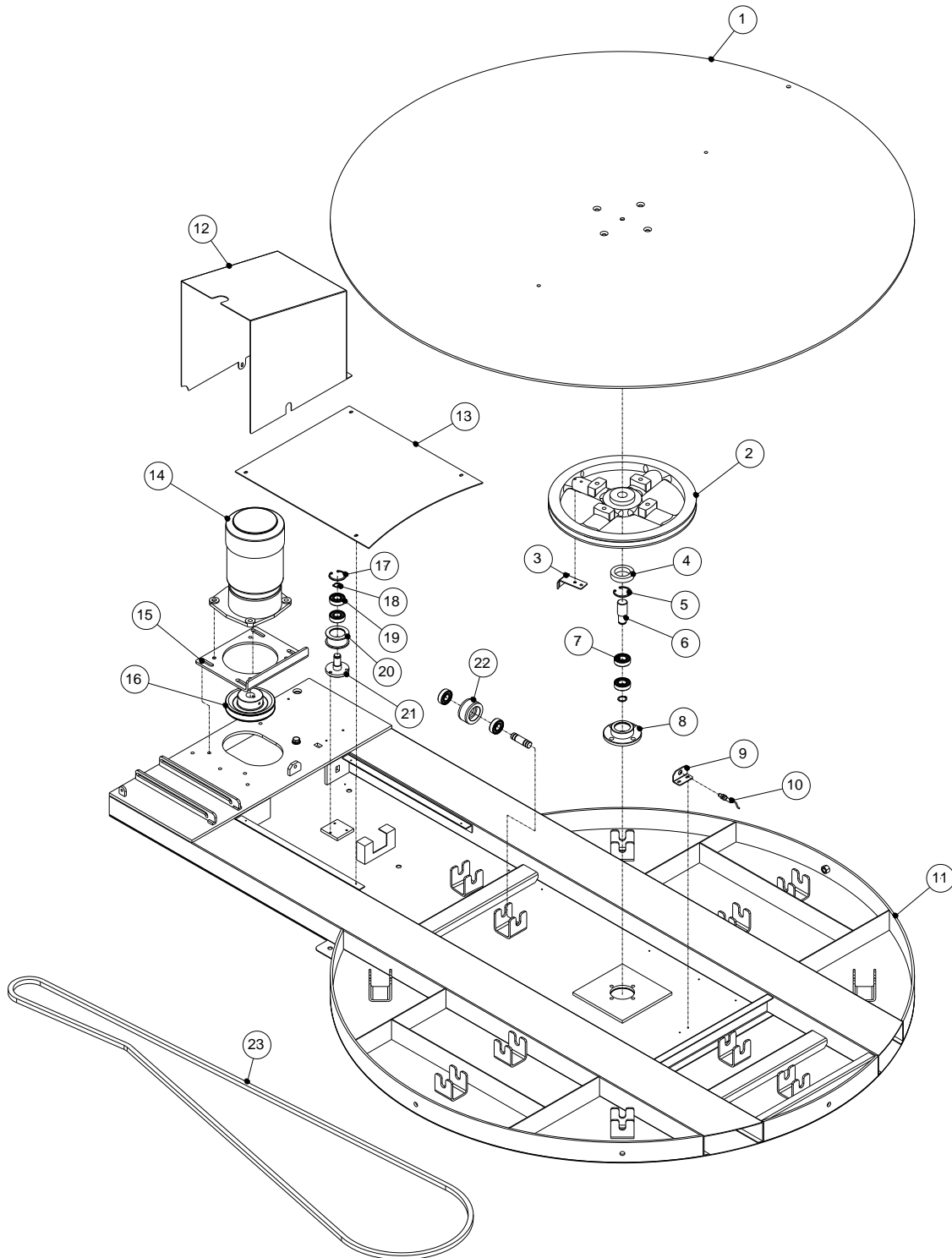
Machine trouble	Cause	Solution
Machine can not work	Power supply for motor is tripped Screen lamp not ON. Foot security is broken.	Activate the power switch. Check micro- processor board. Release the security s/w.
Turntable can not turn	Microprocessor board broken Motor stop turning	Change microprocessor board Check error message from inverter and refer to
Turntable can not Stop at home position.	Turntable proximity S/W is not working.	Check the proximity S/W sense. If it is no problem adjust the sensing plate.
CARRIAGE unit cannot move.	Microprocessor board broken Motor stop turning.	Change microprocessor board 1. Check the proximity S/W sense. If it is no problem adjust the sensing plate. 2. Check the top and bottom limit. 4.2 ELECTRIC DIAGRAM (1S5A).(1S6)
As doing AUTO RUN the CARRIAGE unit goes up and over the package height	Photo eye gets sense from another material except package. Photo sensor gets sense from another light source.	1.Move away other objects Avoid the light source. 2. Check the photo eye 4.2 ELECTRIC DIAGRAM (1S7)
As doing AUTO RUN but CARRIAGE cannot goes up.	1.Photo eye broken Photo eye cannot sense a black color package. 2. Photo eye broken Photo eye cannot sense a package. 3. Turntable proximity sensor is not working	1. Change photo eye. Avoid a black color package or use manual operation. 2. Check the photo eye 4.2 ELECTRIC DIAGRAM (1S7) 3. Check the sensor 4.2 ELECTRIC DIAGRAM (1S7A)



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## 6. PART LIST

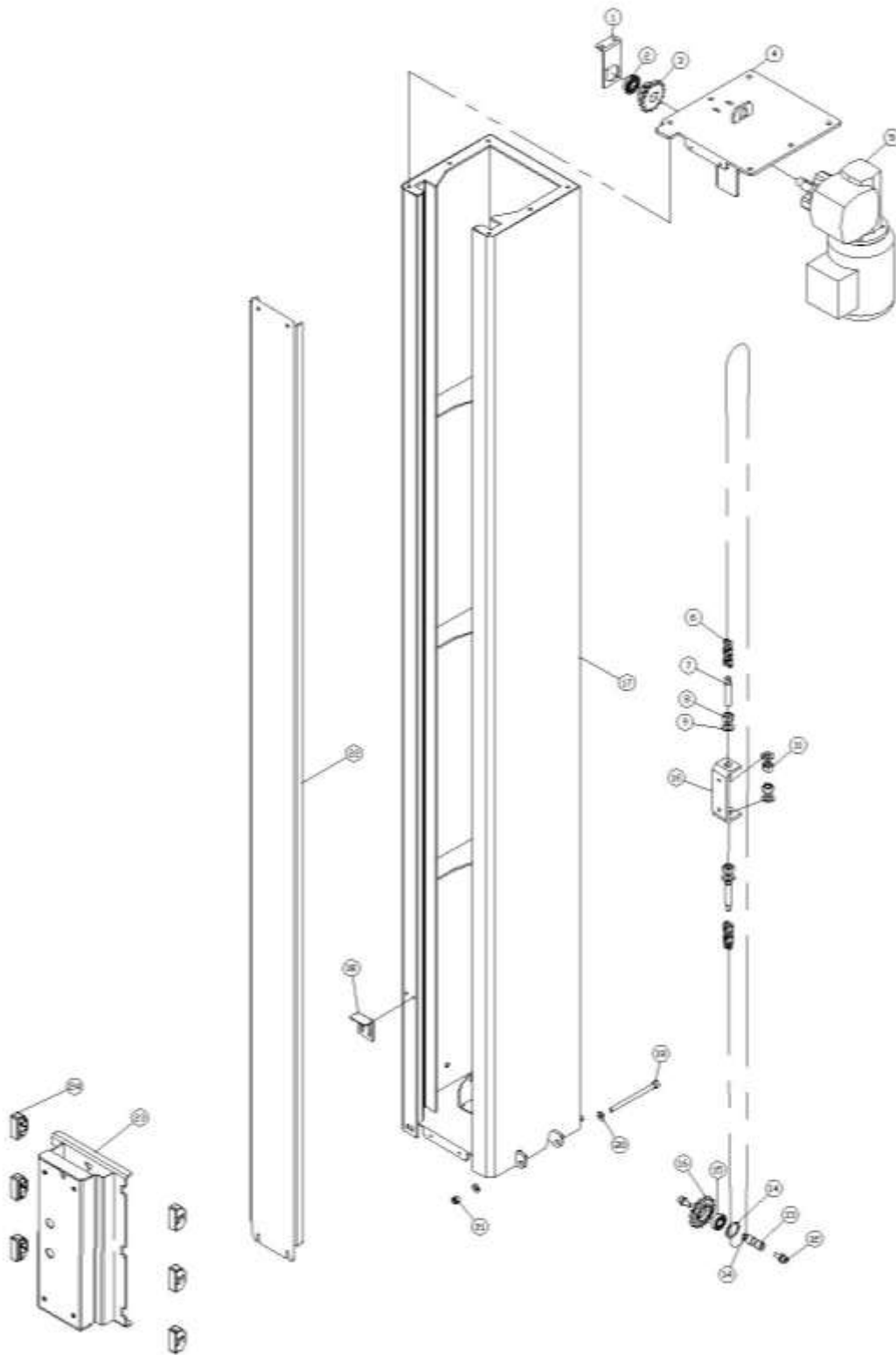
### 6.1 SEAT



## PART LIST FOR TMD-P26B

KEY NO	PART NO	DESCRIPTION	Q'TY
1	P01-001780A	1.5M TURNTABLE	1
	P01-0452000	1.65M TURNTABLE	1
2	PJ10070A	PULLY	1
3	PJ100400	SENSOR PLATE	1
4	30371108	BEARING 51108	1
5	11314200	RING RTW-42	1
6	PD10070A	BELT PULLY SHAFT	1
7	30300040	BEARING 6004ZZ	2
8	PD100900	BELT PULLEY BEARING SEAT	1
9	PJ100300	SENSOR SEAT	1
10	P0302-010002000	PROXIMITY SENSOR(PM12-04P)	1
	P0319-10P26B15	PROXIMITY SENSOR (PM12-04P)w/ connector	1
11	P01-0440300	1.5M TURNTABLE SEAT	1
	P01-0451900	1.65M TURNTABLE SEAT	1
12	P01-0440600	MOTOR COVER	1
13	P01-0440400	COVERING PLATE	1
14	P0501-0014200	GEAR REDUCE MOTOR 1/2HP 3-PH AC200V/380V 1/50	1
15	P01-0440500	MOTOR BASE	1
16	P0703-0007000	MOTOR BELT PULLEY 5"	1
17	11314200	C-CLIP R-42	1
18	11301700	RING STW-17	1
19	30302030	BEARING 6203ZZ	2
20	PJ101000	BELT PULLY BEARING SEAT	1
21	PJ101100	BELT PULLY BEARING SHAFT	1
22	P06-0003410	SUPPORTING WHEEL	12
	P02-0007000	SUPPORTING WHEEL SHAFT	
23	P0902-0007500	BELT B-139 – 1.5M	1
	P0902-0007100	BELT BX-143 – 1.65M	1
24			

## 6.2 TOWER

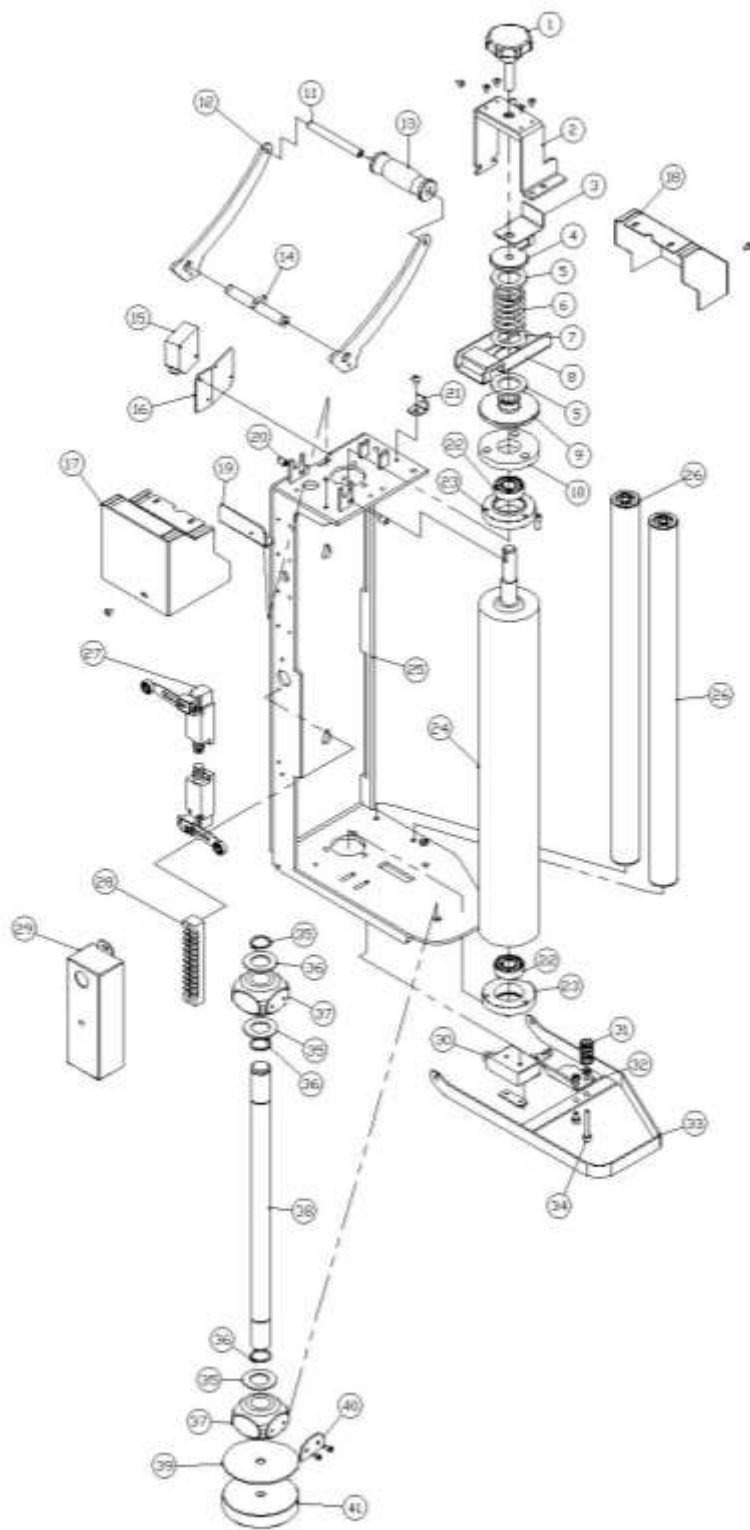


## PART LIST FOR TMD-P26B

KEY NO	PART NO	DESCRIPTION	Q'TY
1	P01-0441100	SPPED REDUCER BEARING SEAT	1
2	3030202N	BEARING 6202-2NR(CWB)	1
3	KA3100150	SPROCKET WHEEL #40,15T (Upper)	1
4	P01-0443200	TOWER COVER	1
5	P0503-0009100	MOTOR GEAR REDUCER 40 90VT M-1/4	1
6	P0901-0010400	CHAIN – 2.2M, #40*326	1
	P0901-0010600	CHAIN – 2.6M, #40x398	1
7	PA312500	CHAIN SCREW SHAFT	2
8	10301200	NUT M12	2
9	10501200	WASHER M12	4
10	PD200800	CHAIN ADJUST SEAT	1
11	10330600	NUT M6	2
12	10250820	SCREW M8x20L	2
13	P02-0289000	SPROCKET WHEEL SHAFT	1
14	11313500	C-CLIP R-35	1
15	30300020	BEARING 6002ZZ(CWB)	1
16	PJ201300	SPROCKET WHEEL (Lower)	1
17	P01-044070A	TOWER – 2.2M	1
	P01-0452100	TOWER – 2.6M	1
18	P01-0441000	LIMIT STOP	1
19	101008A2	SCREW M8x120L	1
20	10500800	WASHER M8	2
21	10330800	NUT M8	1
22	P01-0440800	TOWER COVER – 2.2M	1
	P01-0452200	TOWER COVER – 2.6M	1
23	P01-044090A	SLIDE CART	1
24	P06-0047300	SLIDE BLOCK	6

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## 6.3 ELEVATOR



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**PART LIST FOR TMD-P26B**

KEY NO	PART NO	DESCRIPTION	Q'TY
1	P1113-0003500	ADJUSTING KNOB	1
2	P01-044200A	KNOB FIXING BRACKET	1
3	P01-044210A	TENSION INDICATOR PLATE	1
4	P02-028790A	PRESS WHEEL	1
5	30363047	BEARING	2
	3036AS03	WASHER	4
6	KA0400170	PRE-STRETCH SPRING	1
7	3036AS03	WASHER	1
8	P01-044220A	RELEASE LEVER	1
9	P02-028800A	BRAKE PAD	1
10	KA3000240	BRAKE PAD	1
11	P02-0287800	HANDLE BAR SHAFT	1
12	P01-0441700	HANDLE BAR LEVER	2
13	P06-0047400	HANDLE BAR	1
14	P01-044230A	HANDLE BAR POSITON SHAFT	1
15	73602M02	PHOTO SENSOR A3R-2MX	1
	P0319-10P26B08	PHOTO SENSOR A3R-2MX w/ connector	1
16	P01-0441300	PHOTO SENSOR SEAT	1
17	P01-0441800	CARRIAGE COVER (REAR)	1
18	P01-0441900	CARRIAGE COVER (FRONT)	1
19	P01-0442400	FIXING PLATE (REAR)	1
20	P1122-0000200	FIXING BALL (M8)	2
21	P01-0442600	FIXING PLATE (FRONT)	1
22	30302030	BEARING	2
23	P02-028810A	BEARING SEAT	2
24	P08-000780B	STRETCH ROLLER	1
25	P01-044160B	CARRIAGE BASE	1
26	PJ351500	ROLLER SET	2
27	7350TZ04-M	LIMIT SWITCH VL-8108	2
28	P0304-010005600	CONNECTOR HOUSING, 12P 15A	1
29	P01-0442500	CABLE BRACKET	1
30	7350AZ03	LIMIT SWITCH ML-7312	1
31	P1201-0008400	FOOT SAFETY PEDAL SPRING	1

**PART LIST FOR TMD-P26B**

KEY NO	PART NO	DESCRIPTION	Q'TY
32	P01-0442800	FOOT SAFETY PEDAL PLATE	1
33	P01-0442700	FOOT SAFETY PEAL	1
34	200A06040	SCREW M6X40L	1
35	11312400	C-CLIP R-24	3
36	P01-0441500	WASHER (45x25.5x2t)	3
37	P06-0047500	FILM MANDREL	2
38	P02-0288200	FILM SHAFT SEAT	1
39	P06-0048300	FILM SEAT BASE SHEET	1
40	P01-0441400	FILM STOPPER	1
41	P02-028830A	FILM SEAT	1

**6.4 CONTROL BOX PART LIST FOR TMD-P26B**

KEY NO	PART NO	DESCRIPTION	Q'TY
1	P01-0443000	CONTROL BOX	1
2	P01-0443100	WIRING PLATE	1
3	P01-0442900	CONTROL BOX COVER	1
4	PD400520	HINGE (R)	2
5	PA201810-01	LOCK C-403*1"	2
	PD400610	LOCK PLATE	2
	PA201800-02	KEY	2
6	7365K003	KEY TZ93-K3	1
7	7365P003	SAFETY SWITCH TZ-93BPG	1

