

PALLET STRETCH WRAPPING MACHINE

MODEL: TMD-P26B

OPERATION MANUAL

2023-02

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1. GENERAL

1.1 NOTICE OF INSTALLATION

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 installation, and make sure to ground is flat.
- 7) Read and follow the instruction of the installation.

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 carriage 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 Troubleshooting

2. SPECIFICATION

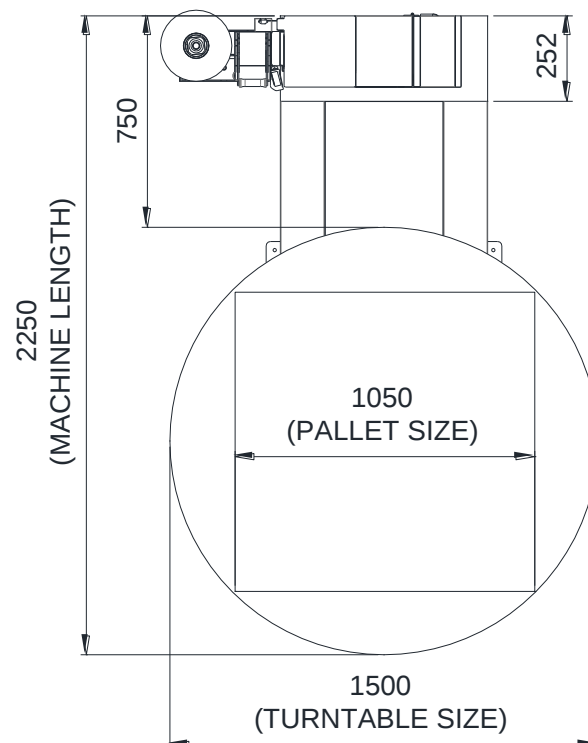
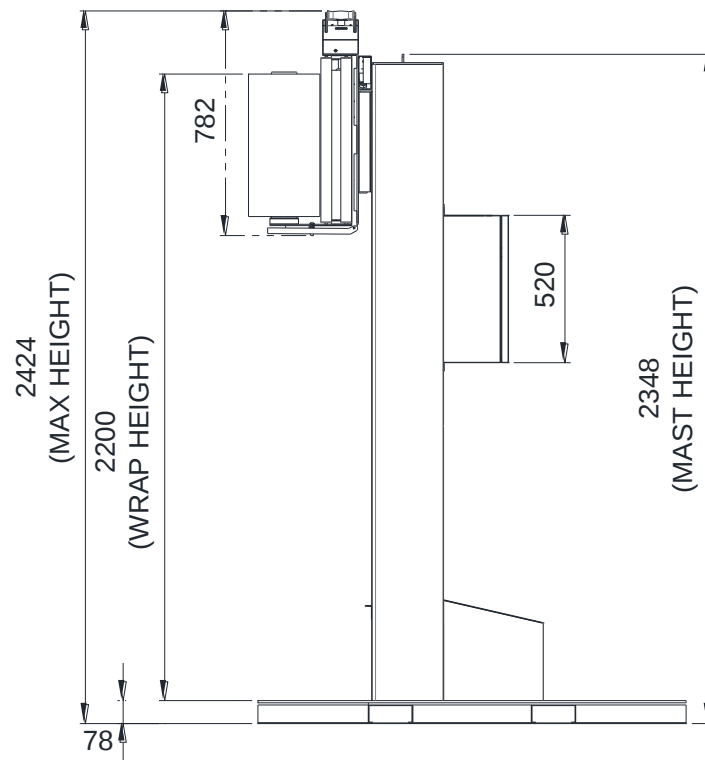
2.1 SPECIFICATION TABLE

Model	TMD-P26B
Turntable Speed	10 RPM
Turntable dia.	1500mm
Max. Wrapping height	2200mm
Max. Wrapping size	1050x1050mm
Max. Loading weight	1200Kg
Film stretch (%)	Manual free adjustment
Max. film spec.	φ250x500mm
Turntable height	76mm
Ramp (slope) spec.	1165x1000mm
Machine size	2300x1500x2346 mm
Machine net weight	335Kg

Standard option:

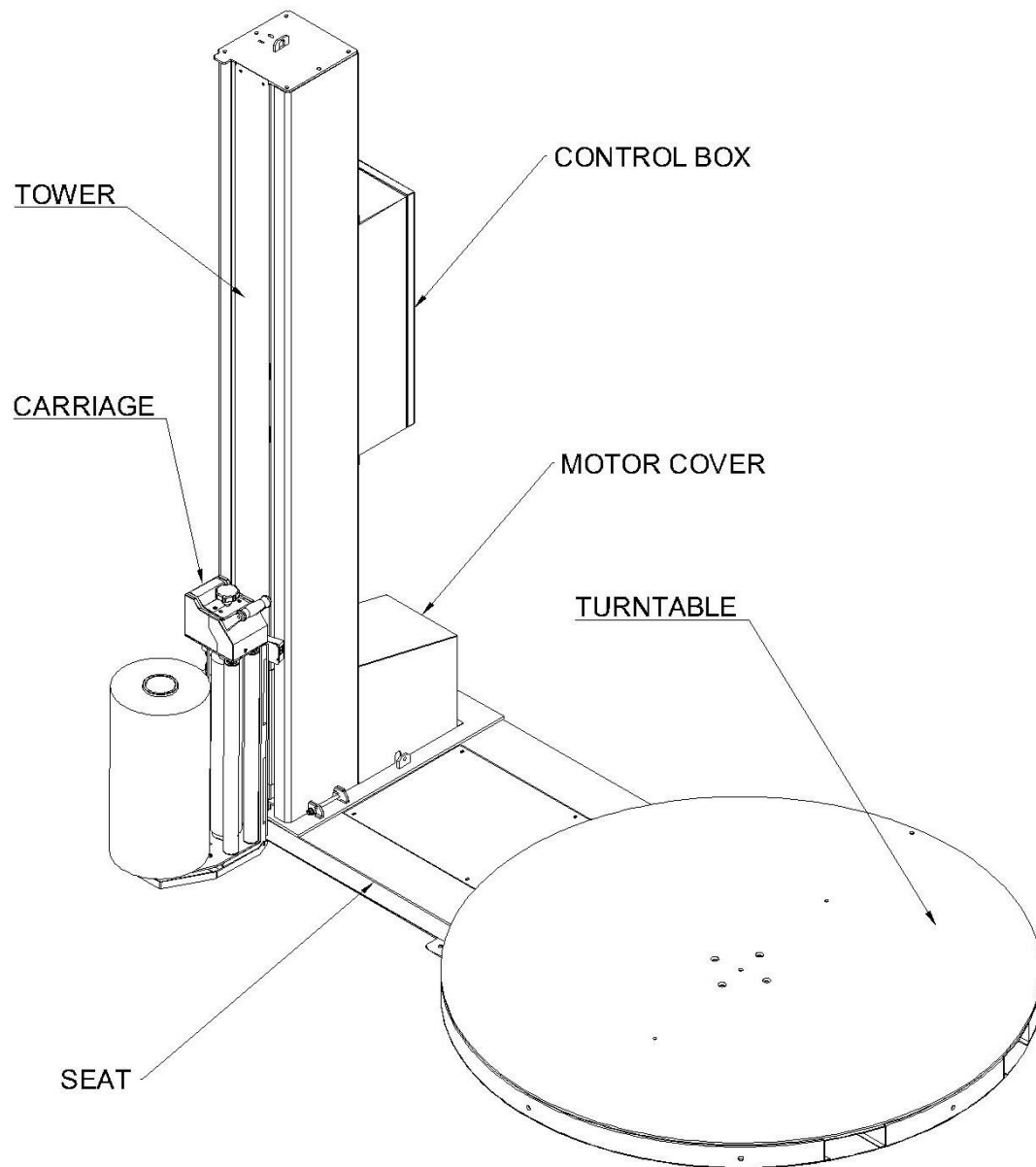
- 1.65 meters turntable dia. (Max Loading Weight 1650kg).
- 2.6 meters wrapping height
- 3.0 meters wrapping height
- Ramp

2.2 MACHINE DIMENSION



TMD-P26B
1.5M/2.2M

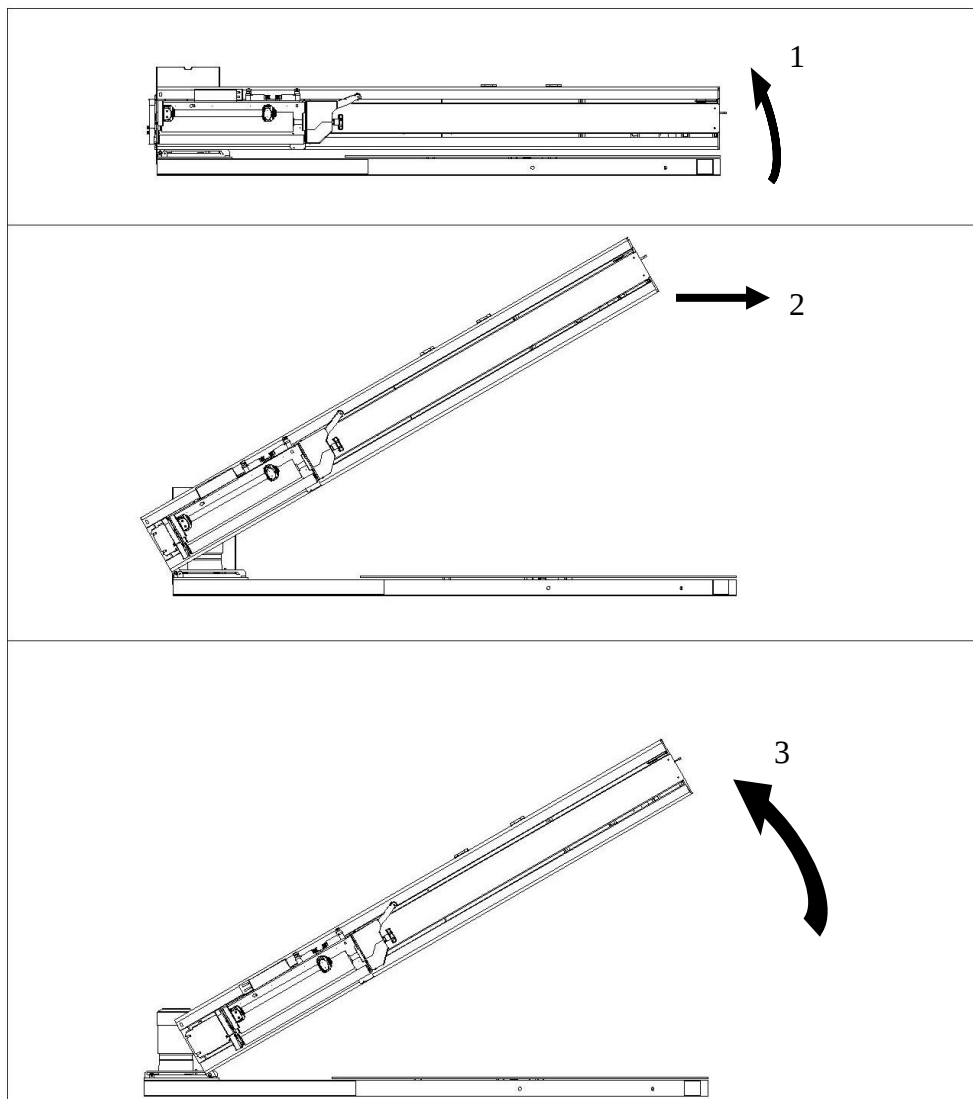
2.3 MACHINE DESCRIPTION



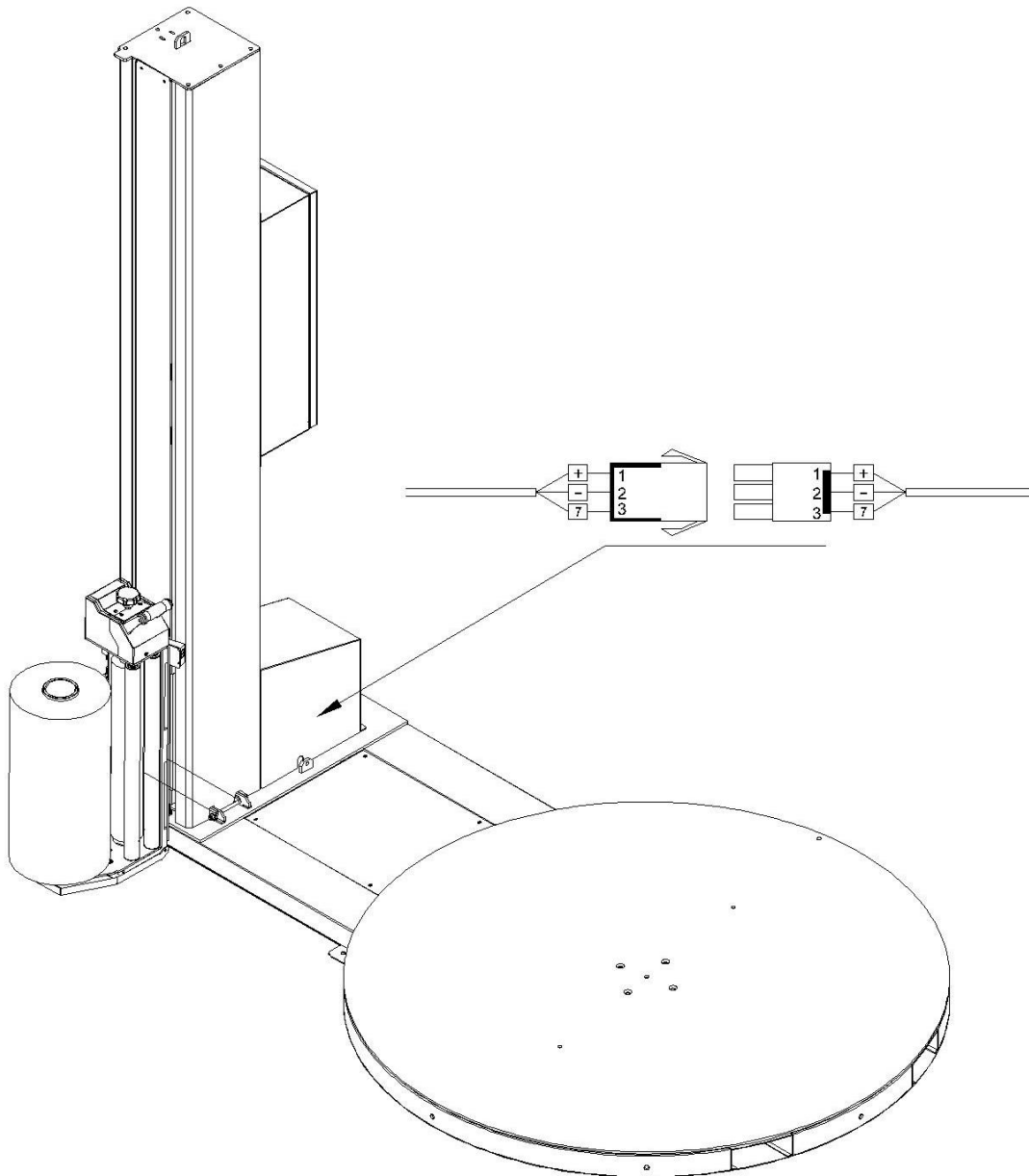
3. OPERATION DESCRIPTION

3.1 INSTALLATION

- 1) Apart the wooden package. Avoid damaging the machine.
- 2) a) Loosing 4 screws at the end of masts (Do not unscrew the sliding shaft, leave inside the track).
b) Lift up the mast (Step 1).
c) Sliding the mast towards turntable, until the sliding shaft move into locking position (Step 2).
d) Mast 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.



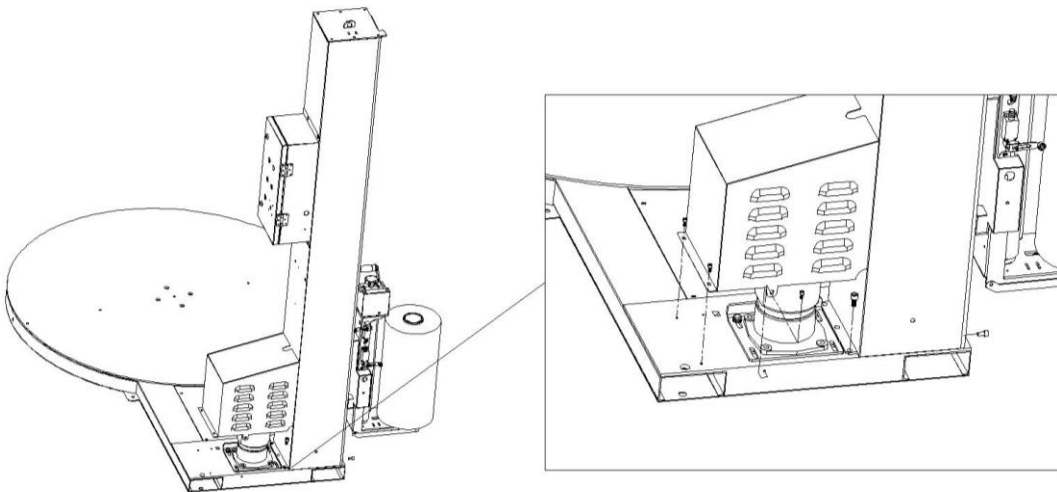
3.2 REMINDER OF INSTALLATION

Tower Installation

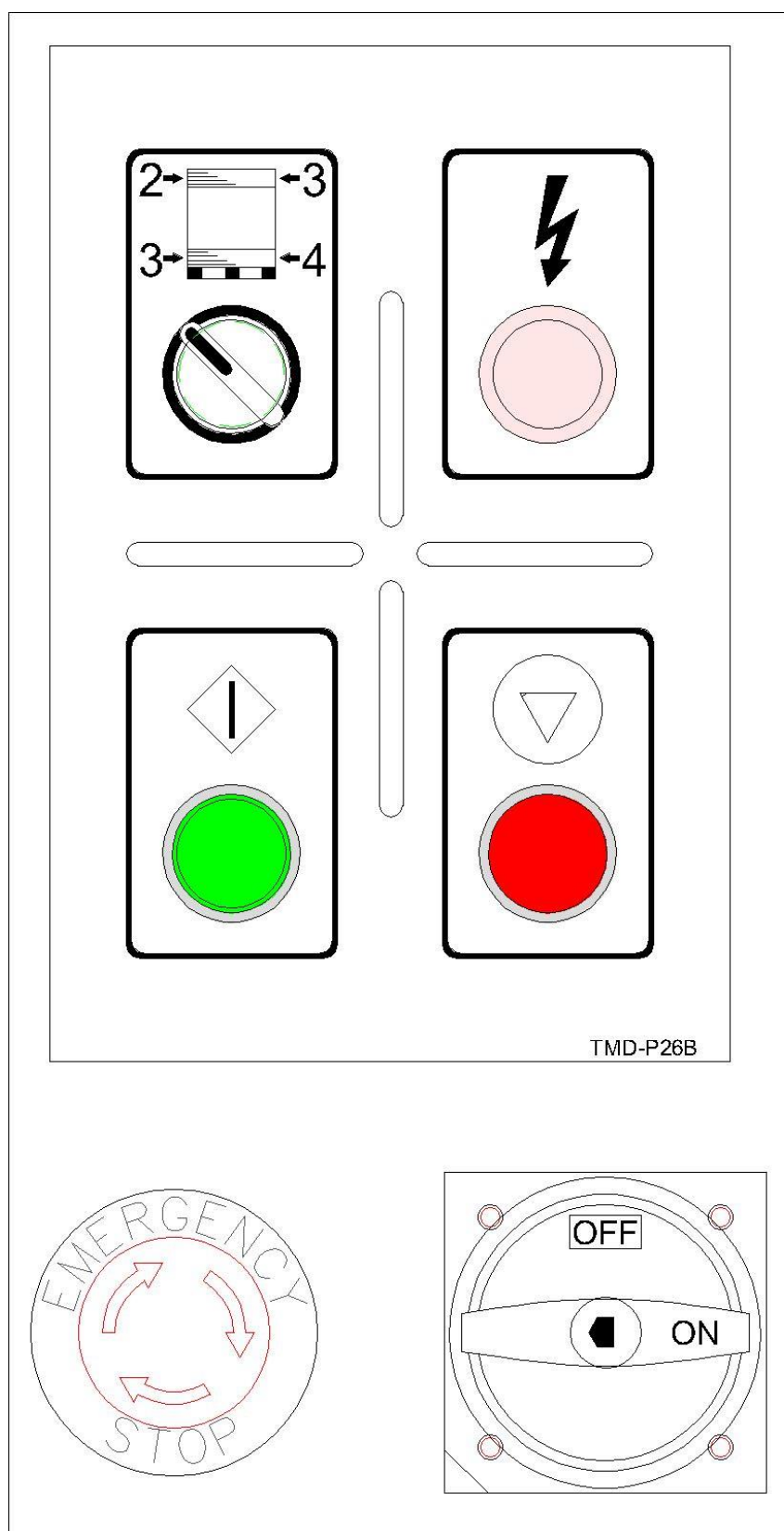
When installing the tower, the engineers must make sure all 4 screws are properly installed underneath the tower. 1 by carriage side, and 3 by the motor sides.

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



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 safety consideration, the turntable will not be stopped instantly as the EMG. STOP switch is pressed. As the turntable power is switched off, the break will be release too. Turntable will be stopped in $10^{\circ} \sim 70^{\circ}$. It depends on the weight load.

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.

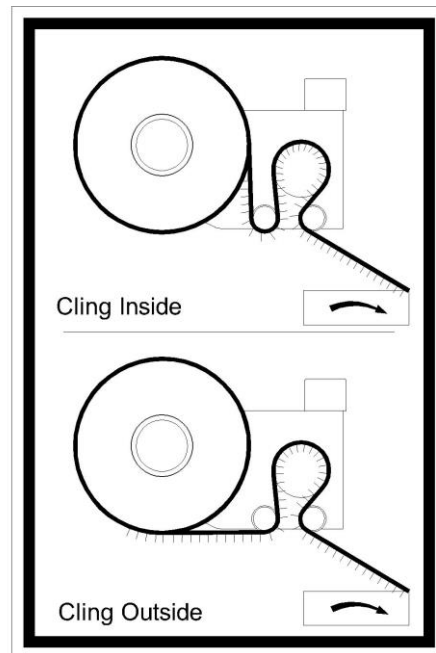
Please press the emergency stop button (**F**) to stop the machine instantly, when any **Emergency** occurs.

SAFETY BAR

When this safety 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.

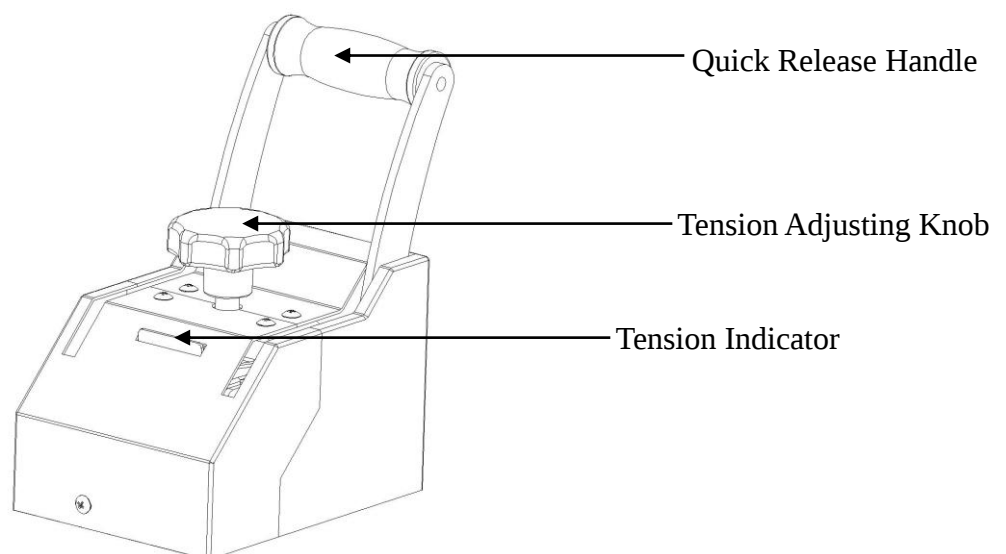
CARRIAGE UNIT

1) Illustration for film threading



2) Brake Stretch tension adjust knob

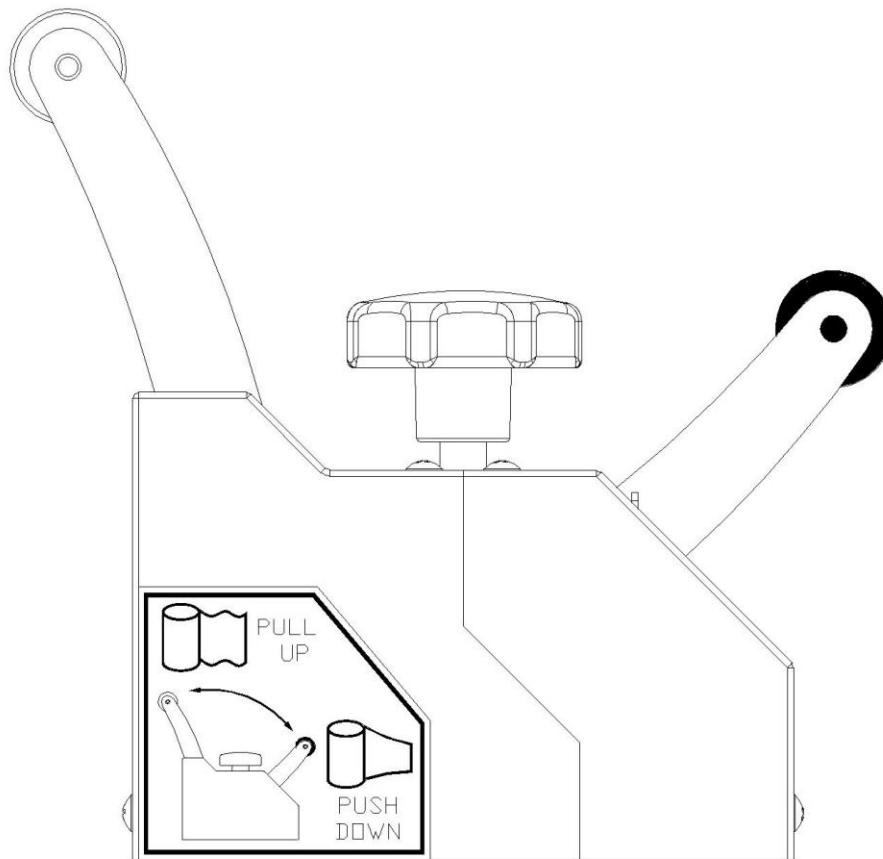
Turn the knob clockwise to increase the tension. Counterclockwise to decrease the tension. Adjust and set the indicate needle on the green zone can get the stretch tension is 1 meter Film stretched to be 1.65 meters.



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.



4. ELETRICAL

4.1 ELECTRIC CAPACITY

1) Power Consumption

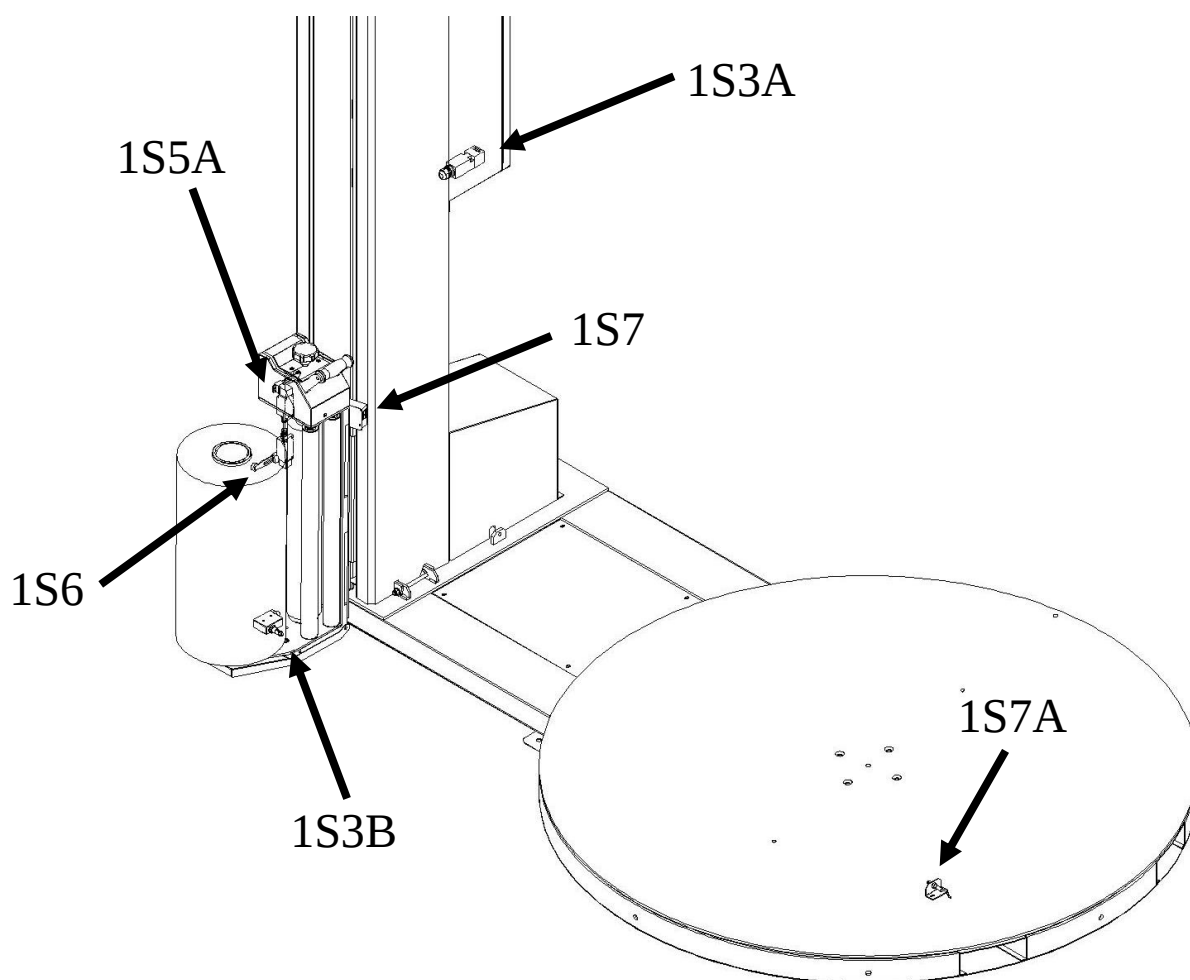
Turntable motor	0.4 KW
Carriage Motor	0.4KW
Control & wiring box	DC 24V
Power consumption	0.85 KW
Power requirement	1 KW

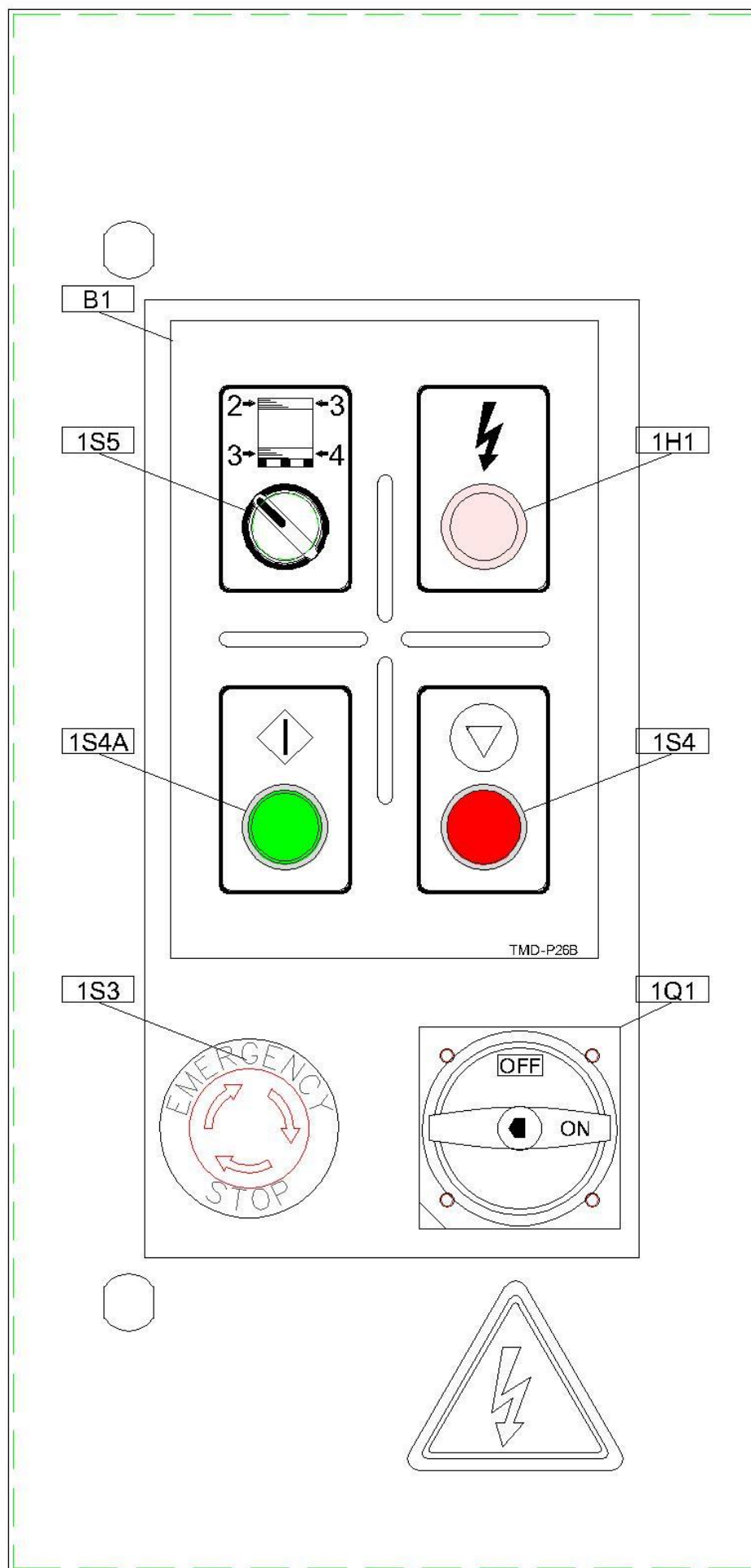
2) Power Cable ----- 1.25 mm²

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

4.2 ELECTRIC DIAGRAM

KEY NO	PART NO	DESCRIPTION	Q'TY
1S3A	P0311-020000100	ELECTRIC BOX DOOR SWITCH (TZ-93BPG)	1
1S3B	P0311-060001400	SAFETY SWITCH FILM CARRIAGE (ML-7312)	1
1S7	P0302-020000200	PHOTO EYE (A3R-2MX)	1
1S7	P0319-10P26B08	PHOTO EYE (A3R-2MX) w/ connector	1
1S5A	P0311-060001210	TOP LIMIT (TZ-8108)	1
1S6	P0311-060001210	BOTTOM LIMIT (TZ-8108)	1
1S7A	P0302-010002000	TURNTABLE HOME SENSOR (PM12-04P-3M)	1
1S7A	P0319-10P26B15	TURNTABLE HOME SENSOR (PM12-04P-3M) w/ connector	1





ELECTRICAL LAYOUT

DRAW 2

PAGE 01 OF 02

DATE:2014.Sep.21

FILM:TMD-P26B-01-A

MODEL:TMD-P26B

ELECTRIC PARTS LIST FOR TMD-P26B

KEY NO	PART NO	DESCRIPTION	Q'TY
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(SKB2-ED21-1A)	1
1P8	P0309-010002000	RELAY CARD	1
A1	P0311-030000100	CARRIAGE BOX DOOR KEY (TZ93-K3)	1
B1	P1002-0006700	PANEL STICKER	1

5. TROUBLE SHOOTING

5.1 GENERAL ADJUSTMENT

Turntable belt adjust

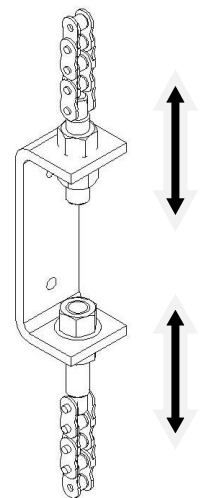
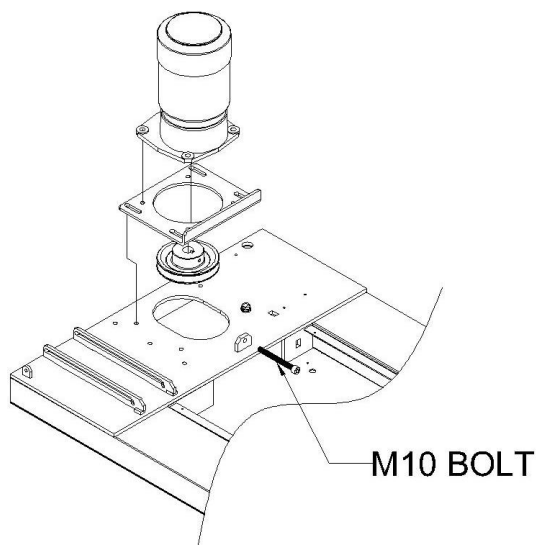
Please see the illustration below and then loosen the motor seat M10 screw 4 pcs.

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

Carriage unit driving chain adjust

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

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

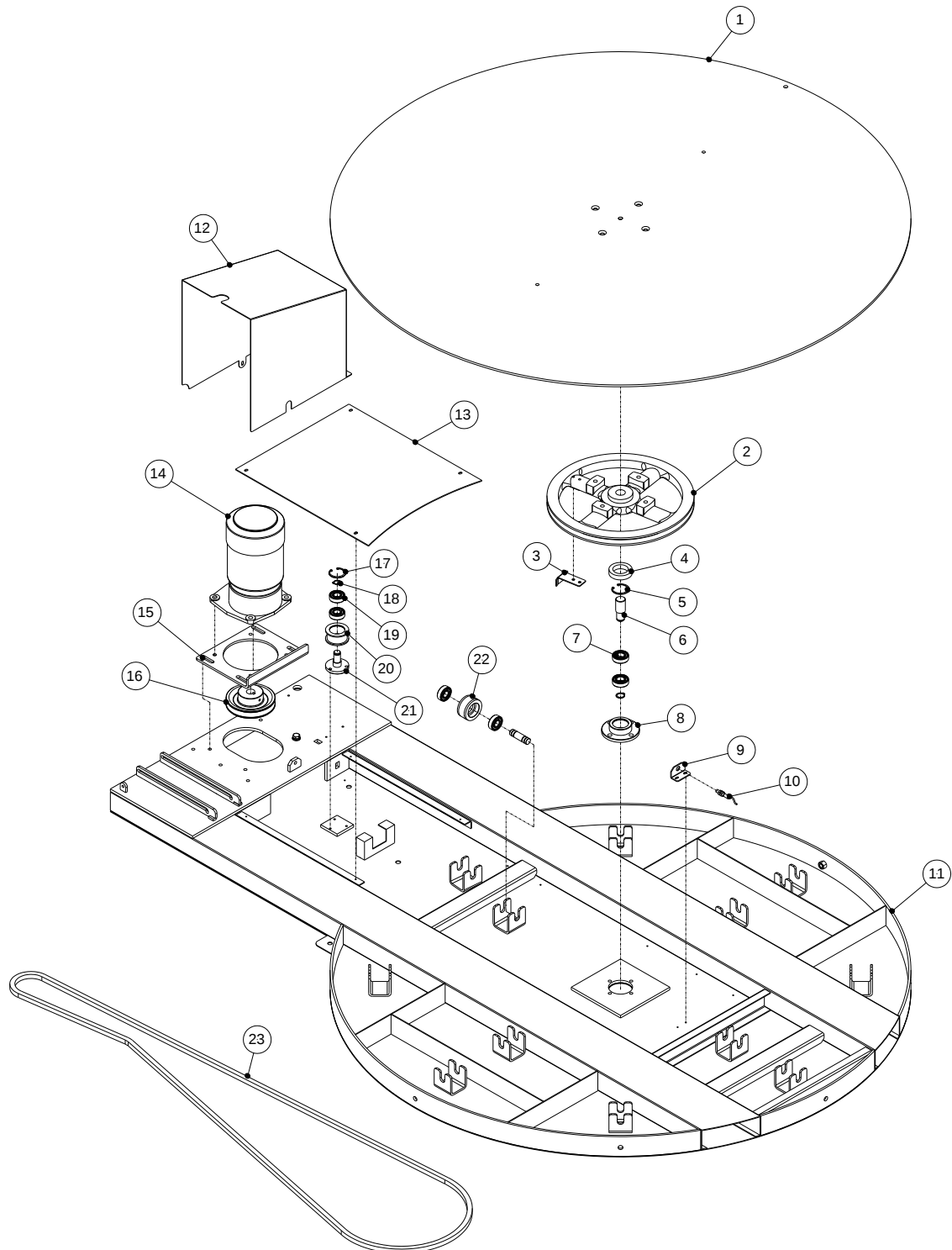


5.2 TROUBLE SHOOTING

Machine trouble	Cause	Solution
Machine cannot work	Power supply for motor is tripped Screen lamp not ON. Foot safety is broken.	Activate the power switch. Check micro- processor board. Release the safety s/w.
TURNTABLE cannot 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 detects 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 go up.	1.Photo eye broken Photo eye cannot detect a black color package. 2. Photo eye broken Photo eye cannot detect 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)

6. PART LIST

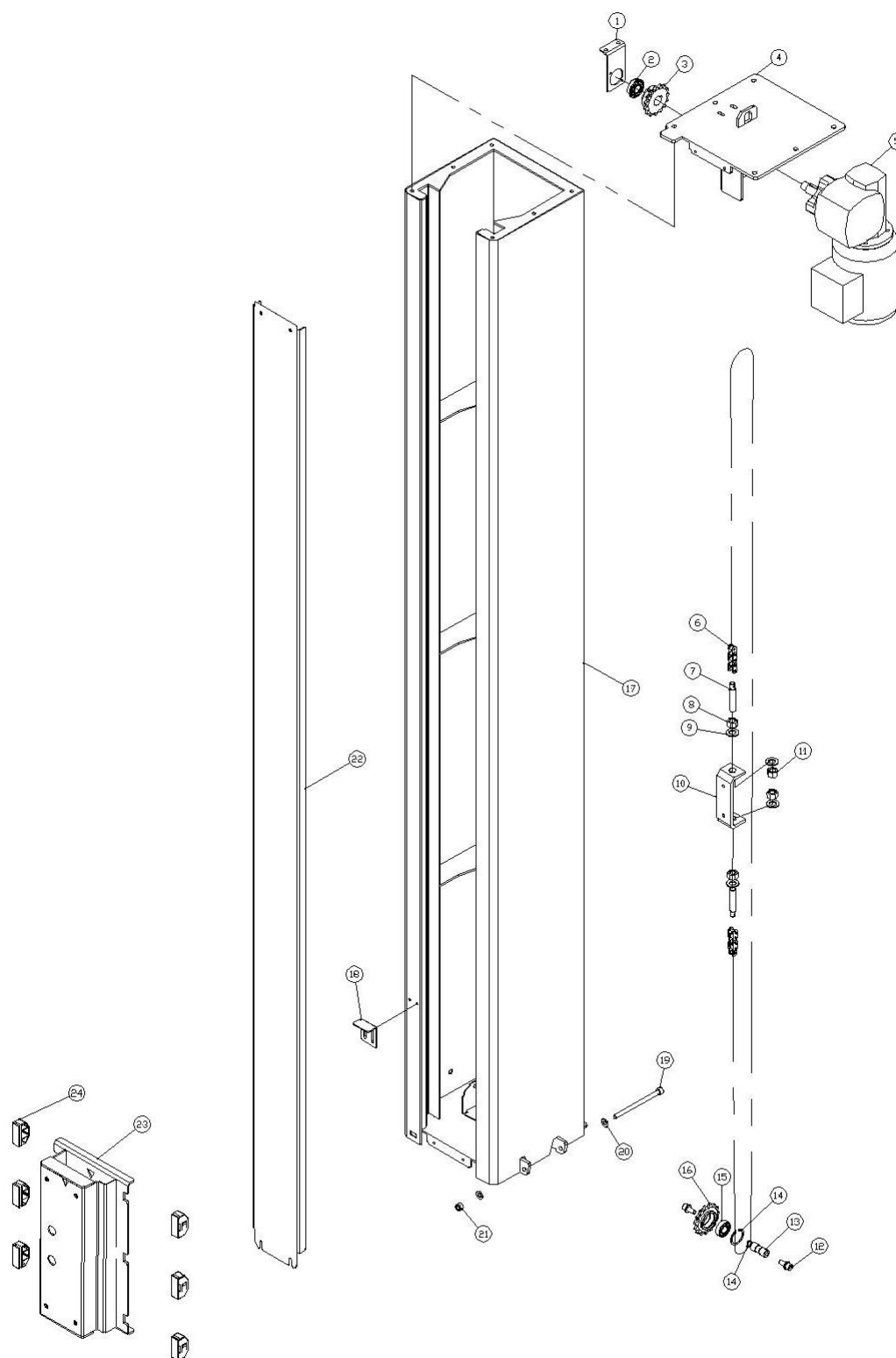
6.1 SEAT



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	P0703-000020A	PULLEY	1
3	P01-000040A	SENSOR PLATE	1
4	P1104-11511080	BEARING 51108	1
5	P1105-0242B	RING RTW-42	1
6	P02-000790A	BELT PULLEY SHAFT	1
7	P1104-026004ZZ0	BEARING 6004ZZ	2
8	P02-0008100	BELT PULLEY BEARING SEAT	1
9	P01-0000300	SENSOR SEAT	1
10	P0302-010002000	PROXIMITY SENSOR(PM12-04P)	1
	P0319-10P26B15	PROXIMITY SENSOR(PM12-04P) w/ connector	1
11	P01-044030A	1.5M TURNTABLE SEAT	1
	P01-045190A	1.65M TURNTABLE SEAT	1
12	P01-0440600	MOTOR COVER	1
13	P01-0440400	COVERING PLATE	1
14	P0501-0014200	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	P1105-0242B	C-CLIP R-42	1
18	P1105-0117B	RING STW-17	1
19	P1104-026203ZZ0	BEARING 6203ZZ	2
20	P06-0000600	BELT PULLEY BEARING SEAT	1
21	P02-0000100	BELT PULLEY 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

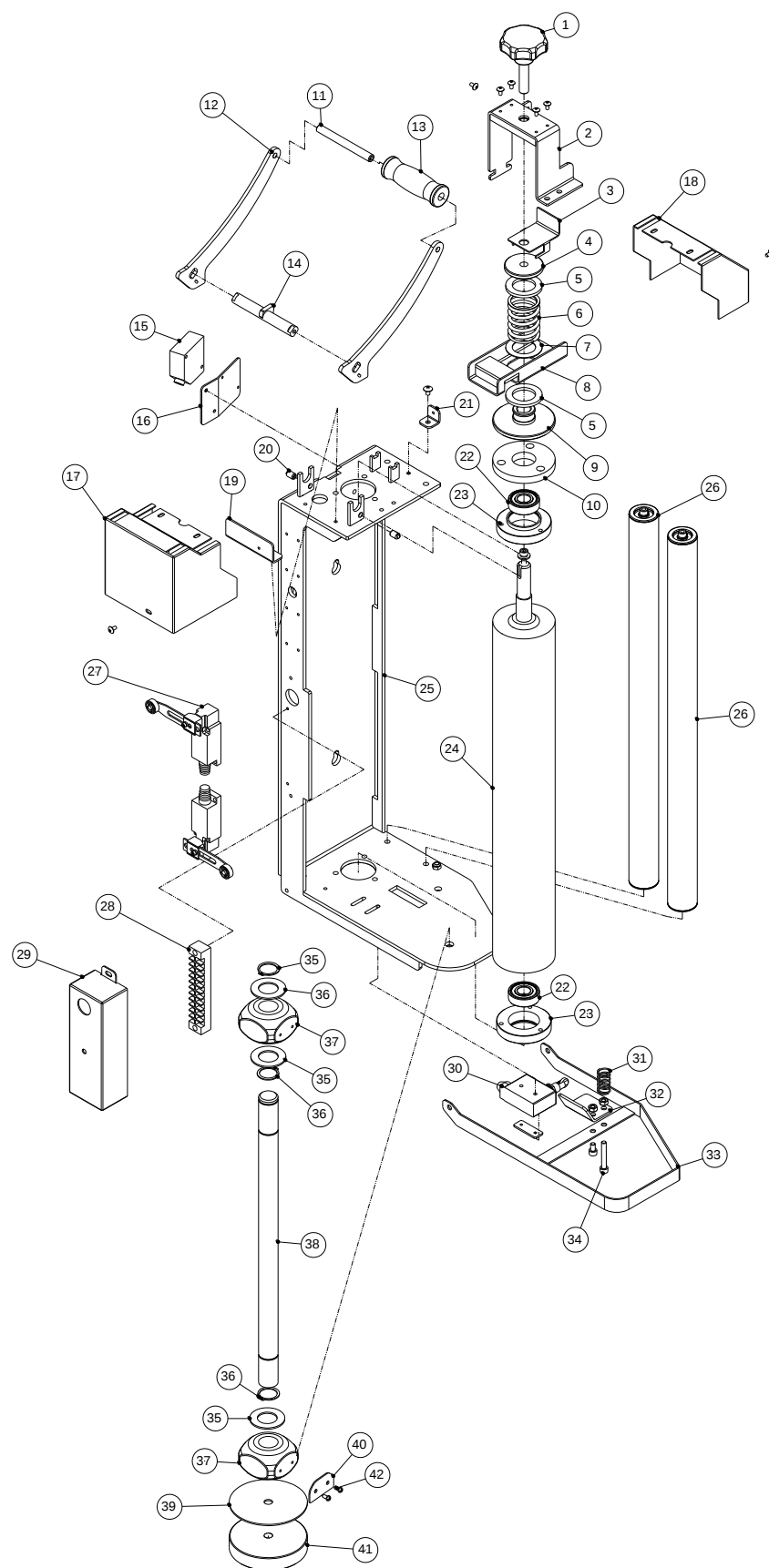
6.2 TOWER



PART LIST FOR TMD-P26B

KEY NO	PART NO	DESCRIPTION	Q'TY
1	P01-0441100	SPPED REDUCER BEARING SEAT	1
2	P1104-076202ZZ0	BEARING 6202-2NR(CWB)	1
3	P0702-0003200	SPROCKET WHEEL #40,15T (UPPER)	1
4	P01-0443200	TOWER COVER	1
5	P0503-0009400	MOTOR GEAR REDUCER 40 90VTM	1
6	P0901-0010400	CHAIN – 2.2M, #40*326	1
	P0901-0010600	CHAIN – 2.6M, #40x398	1
7	P02-0007500	CHAIN SCREW SHAFT	2
8	P1102-0112AZ	NUT M12	2
9	P1103-011224D5Z	WASHER M12	4
10	P01-0018700	CHAIN ADJUST SEAT	1
11	P1102-0106BZ	NUT M6	2
12	P1101-0908020AN	SCREW M8x20L	2
13	P02-0289000	SPROCKET WHEEL SHAFT	1
14	P1105-0235B	C-CLIP R-35	1
15	P1104-026002ZZ0	BEARING 6002ZZ(CWB)	1
16	P0702-0000200	SPROCKET WHEEL (LOWER)	1
17	P01-044070A	TOWER – 2.2M	1
	P01-0452100	TOWER – 2.6M	1
18	P01-0441000	LIMIT STOP	1
19	P1101-0508120AN	SCREW M8x120L	1
20	P1103-010816C5Z	WASHER M8	2
21	P1102-0108BZ	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

6.3 CARRIAGE



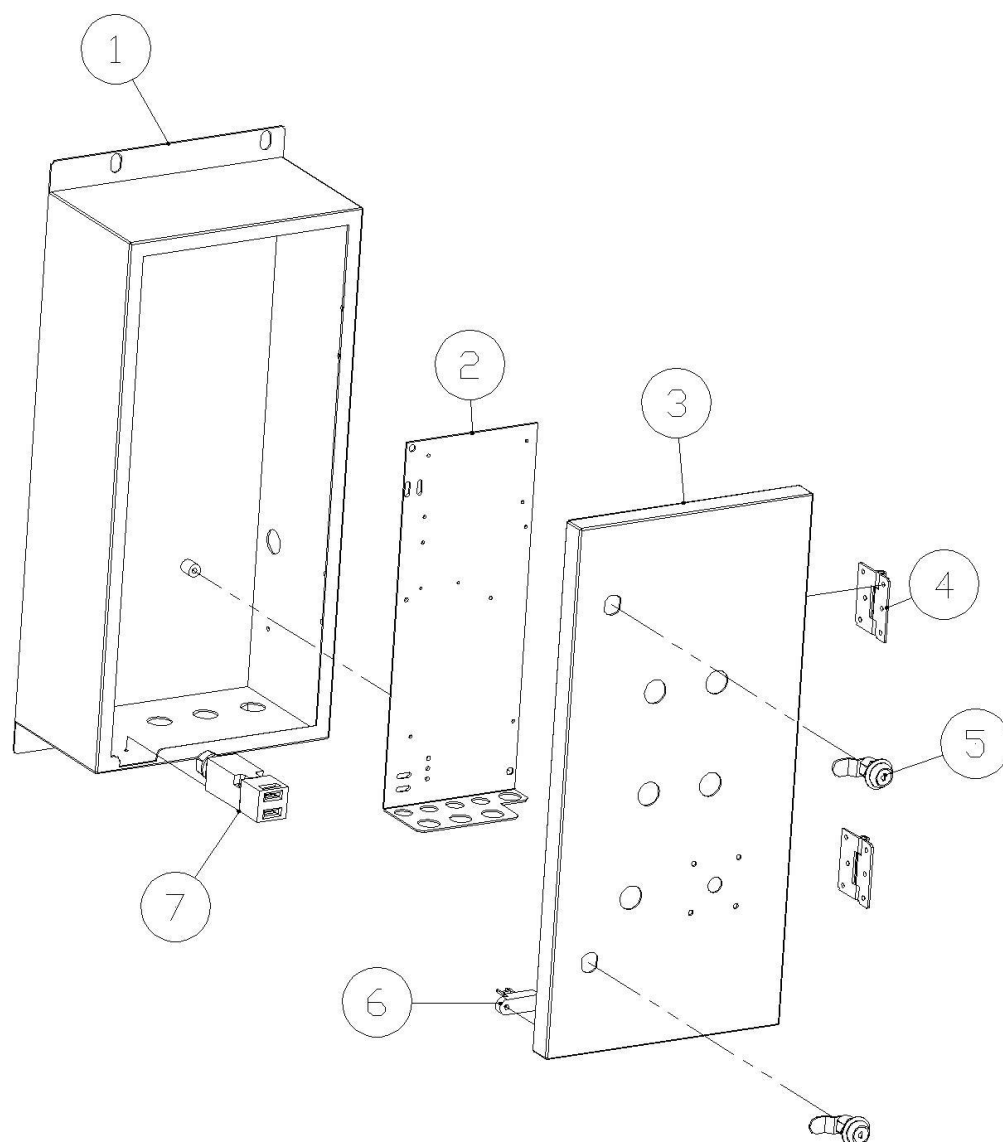
PART LIST FOR TMD-P26B

KEY NO	PART NO	DESCRIPTION	Q'TY
1	P1113-0003500	ADJUSTING KNOB	1
2	P01-044200A	KNOB FIXING BRACKET	1
3	P01-044210B	TENSION INDICATOR PLATE	1
4	P02-028790B	PRESS WHEEL	1
5	P1104-18AXK30470	BEARING	2
	P1104-19AS30470	WASHER	4
6	P1201-0001700	PRE-STRETCH SPRING	1
7	P1104-19AS30470	WASHER	1
8	P01-044220A	RELEASE LEVER	1
9	P02-028800A	BRAKE PAD	1
10	P06-0011900	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	P0302-020000200	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	P1104-026203ZZ0	BEARING	2
23	P02-028810A	BEARING SEAT	2
24	P08-000780B	STRETCH ROLLER	1
25	P01-044160B	CARRIAGE BASE	1
26	P08-0001000	ROLLER SET	2
27	P0311-060001200	LIMIT SWITCH VL-8108	2
28	P0304-010005600	CONNECTOR HOUSING 12P 15A	1
29	P01-0442500	CABLE BRACKET	1
30	P0311-060001400	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	P1101-0506040AN	SCREW M6X40L	1
35	P1105-0224B	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
42	P1101-0104006AZ	SCREW M4X6L	2

6.4 CONTROL BOX



PART LIST FOR TMD-P26B

KEY NO	PART NO	DESCRIPTION	Q'TY
1	P01-044300A	CONTROL BOX	1
2	P01-006580A	WIRING PLATE	1
3	P01-0442900	CONTROL BOX COVER	1
4	P01-0021600	HINGE (R)	2
5	P1118-010000200	LOCK C-403*1"	2
	P1118-030000100	LOCK PLATE	2
	P1118-020000100	KEY	2
6	P0311-030000100	KEY TZ93-K3	1
7	P0311-020000100	SAFETY SWITCH TZ-93BPG	1