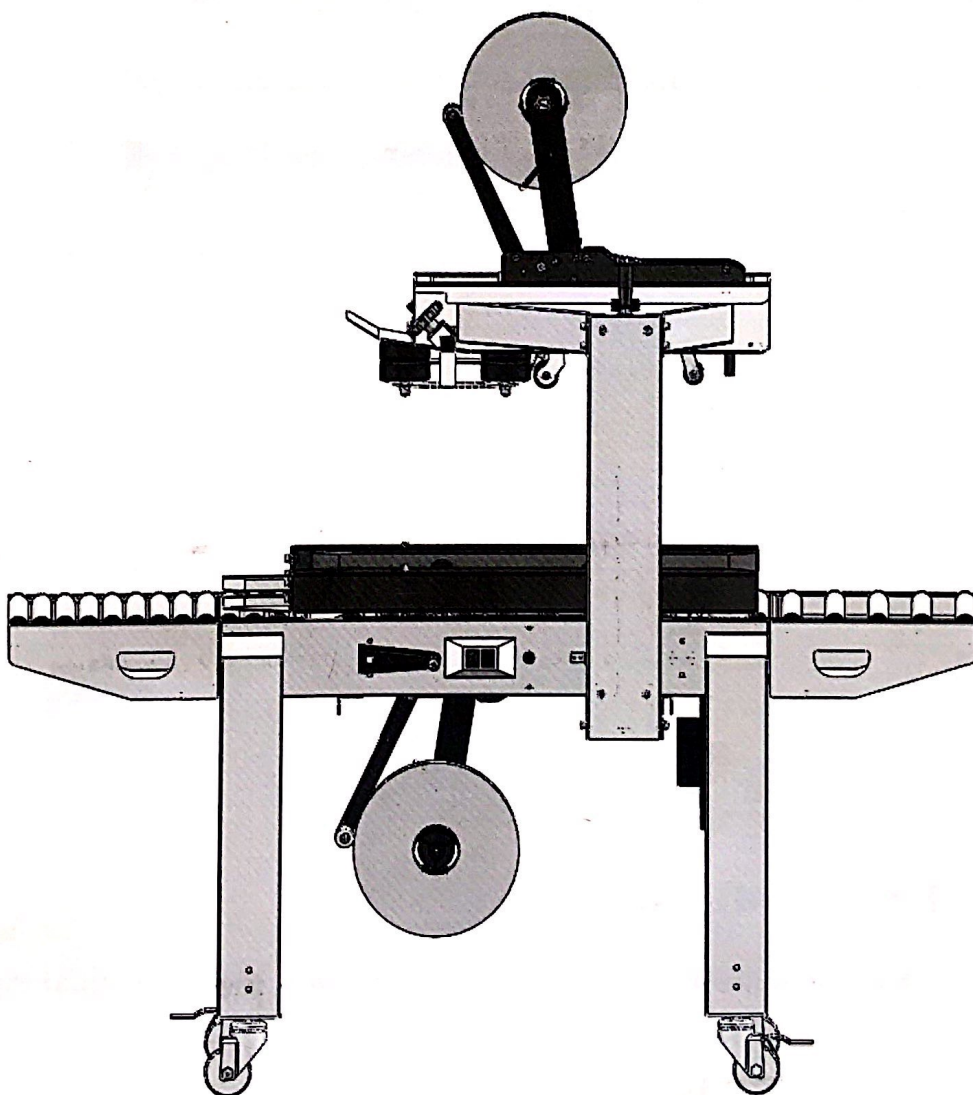


FXC-SMARTK04

Carton Sealer(Side Belt Conveyor)



PREFACE

Thanks for choosing the packaging machines which research and development, manufactured by our company. It helps to improve your products' packaging image, enhance your quality, productivity, and creates more wealth for you.

In order to operation machine properly and utilize its value best, read this operational instruction carefully before utilization. This will help you to grasp the machine's basic mechanical principle, structure, operational process and maintenance method. The malfunction will be reduced if you have proper operational method, and make the life of machine is prolonged.

SPECIAL STATEMENT:

1. As to the all parameters and content in this book, we have final right of interpretation.
2. We remain the right of improving technology of product, and it will not be notified separately.

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I. Use and characteristics

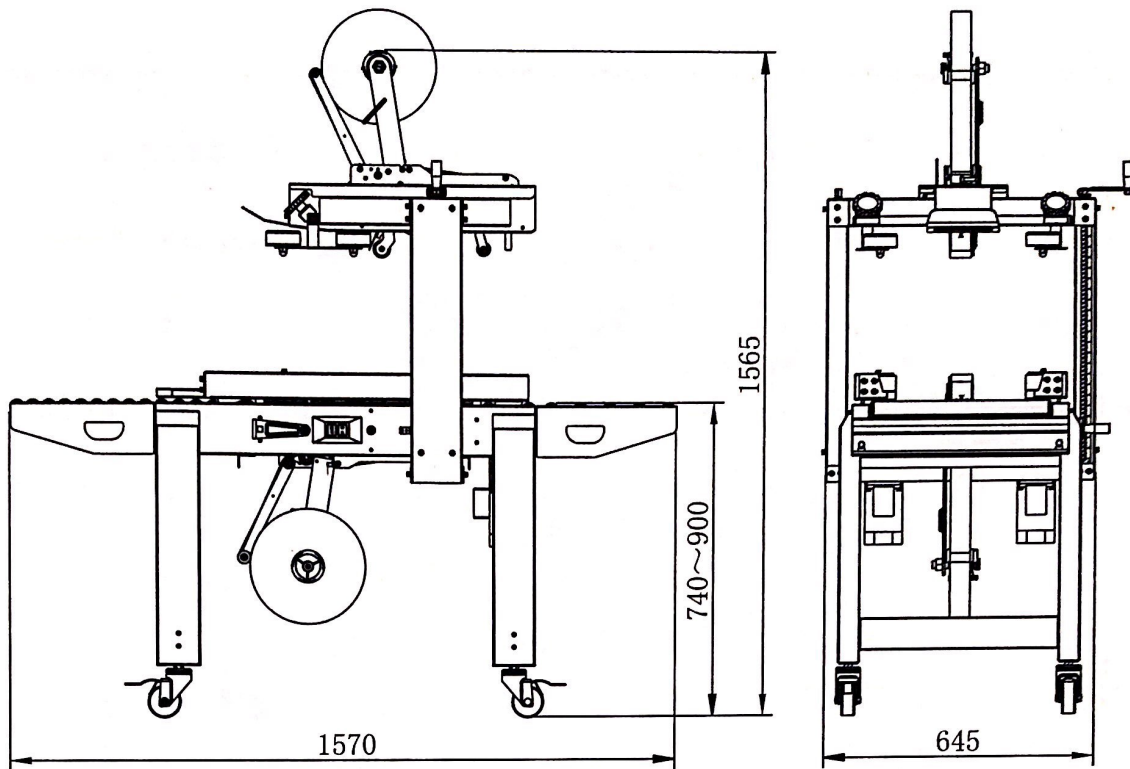
Use:

The semi-auto carton-sealing machine, mainly designed for sealing and packing of cartons, it is economical and easy adjusting equipment, it can finish upper and down sealing at same time. It can be equipped with tape printer to improve appearance of products. it is widely applied in the fields of domestic electrical appliances, textiles, foodstuffs, general merchandise, medicine, chemical products, etc

Characteristics:

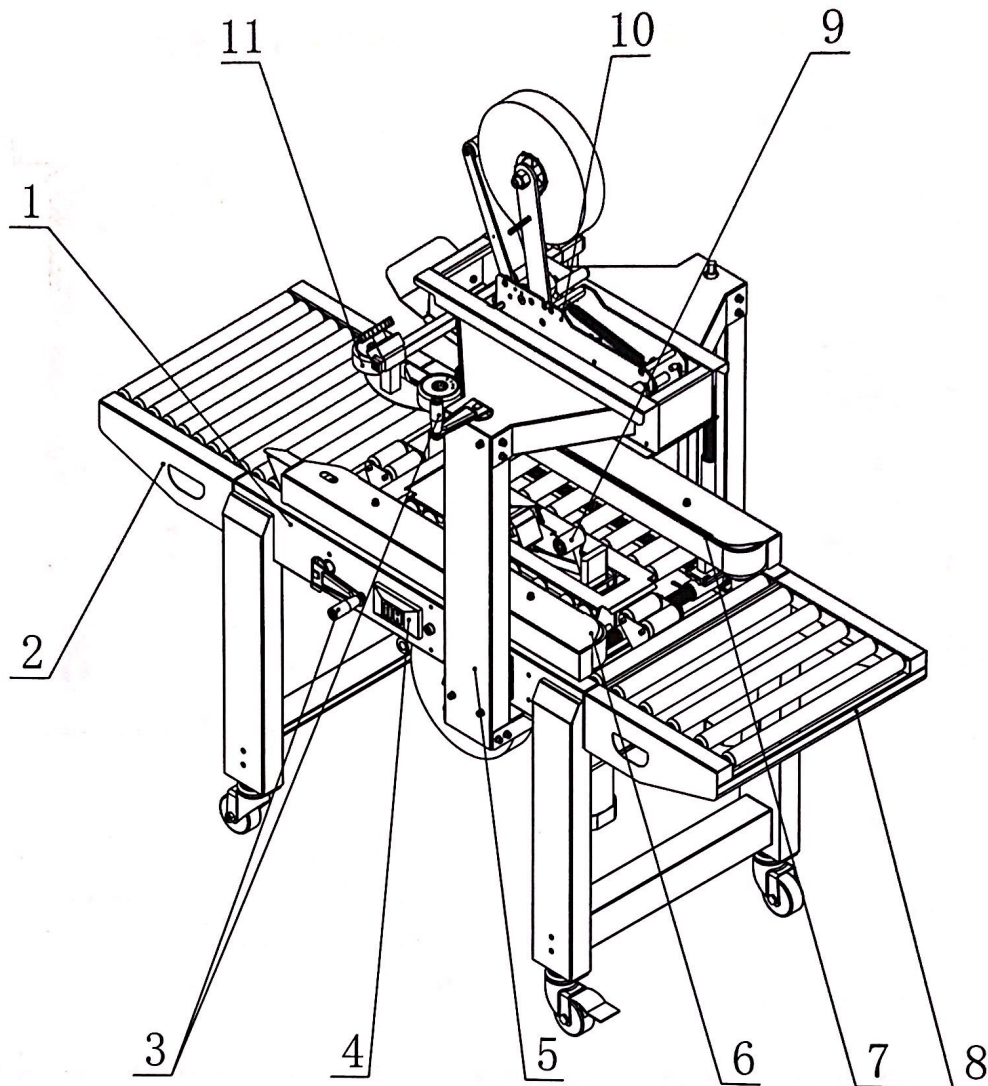
- ◆ Use high quality belt to transfer cartons at upper and down side, moving stable and sealing properly
- ◆ Adhesive tape sealing uniform, strong and beautiful, won't tear carton.
- ◆ In addition, equipped with ink-printer prints manufacture date, lot number or words at side of carton during the sealing process of carton
- ◆ It can be used independently as a single machine, or matched for production line

II. Main technical parameter



Model	SMARTK04
Voltage	AC110V/60HZ
Power	0.32HP
Capacity	0.98FT/S
Tape width	1.42 in 1.77 in
Driving type	Side belt feeding
Max carton size (W*H)	11.81 × 15.75 in
Min carton size (W*H)	3.15 × 3.54 in
Machine dimension(L*W*H)	61.77 × 25.31 × 61.61 in
Machine weight	238 lb

III. Machine structure and parts name

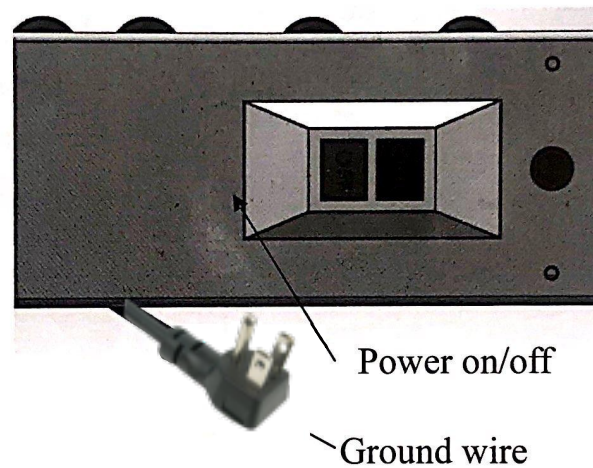


- | | | |
|--------------------------|------------------------|-----------------------------|
| 1. Frame | 2. Carton input table | 3. Up/down adjusting handle |
| 4. Power on/off | 5. Stand column | 6. Left conveyor |
| 7. Right conveyor | 8. Carton output table | 9. Down tapping head seat |
| 10. Up tapping head seat | 11. Carton fix wheel | |

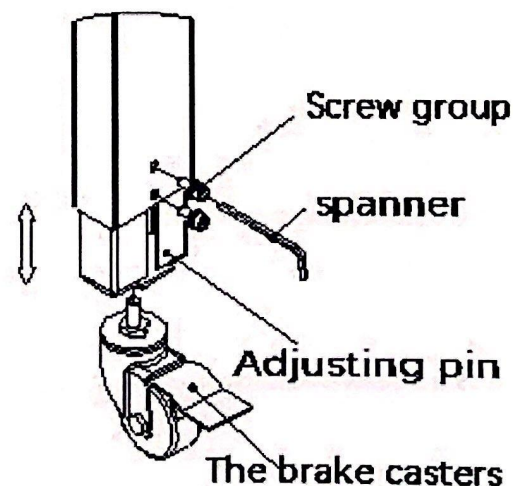
IV. Operation process

4.1 Disassemble the outer packaging box, place the machine on a flat ground, check whether the movable parts of the machine are flexible, whether there is any jamming, and whether the fasteners are loose or not, otherwise adjustment or correction should be given.

4.2 In order to protect the personal safety of the operator, the machine must be well grounded as required before use (good grounding can effectively reduce electric shock damage and protect personal safety).

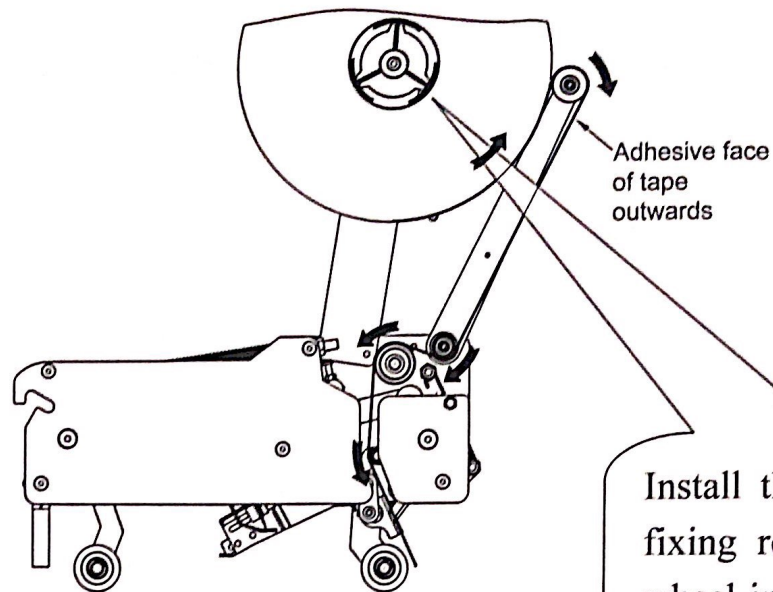


4.3 As shown in the figure below, lock the brake casters, loosen the screws with the spanner and then adjust the adjustment pin so that the machine is at a comfortable operating height or consistent with the height of the production line, and then tighten the screws.



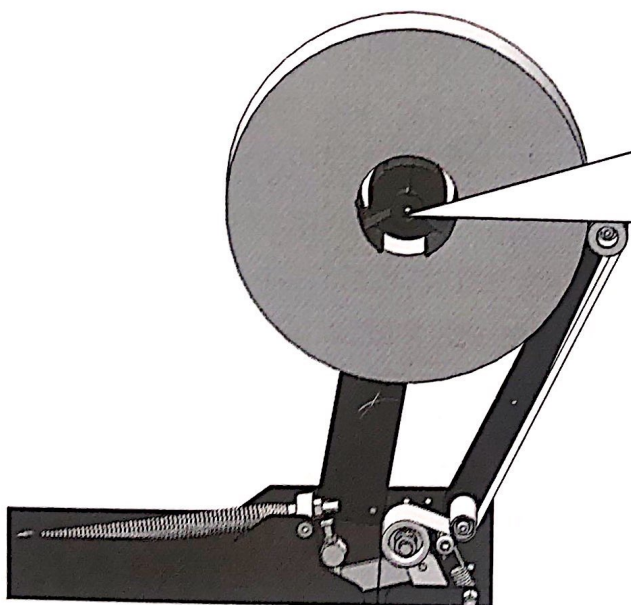
4.4 Adjustment of sealing head

1) Schematic diagram of tape transfer:



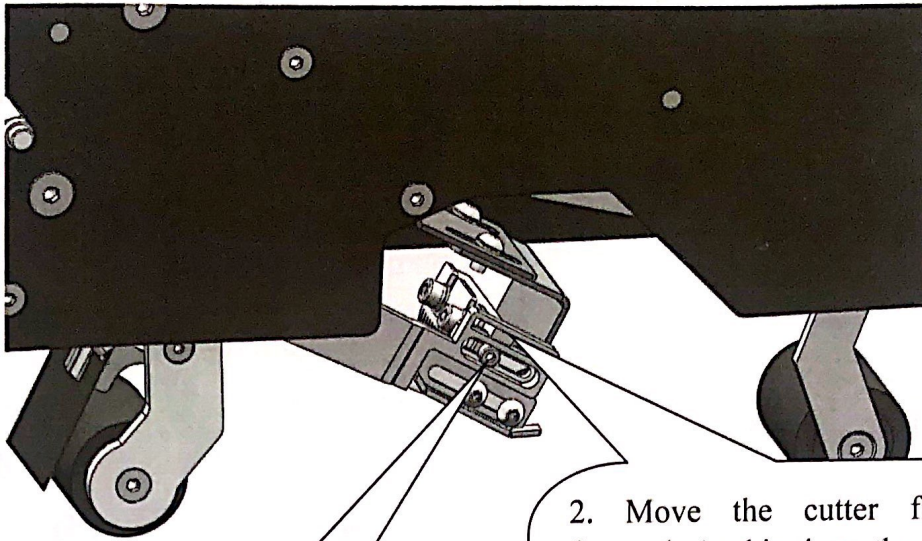
Install the tape on the tape fixing roller and pass each wheel in the direction of the arrow to the rubber wheel.

2) Tape tension adjustment



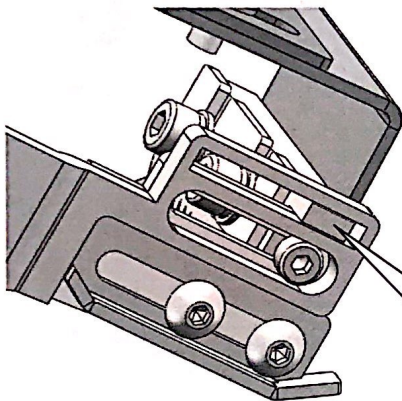
Rotate the tension adjustment knob to rotate clockwise, the friction is increased, and the tape is tensioned (or vice versa).

3) The difference in the length of the tape sealing at both ends of the carton

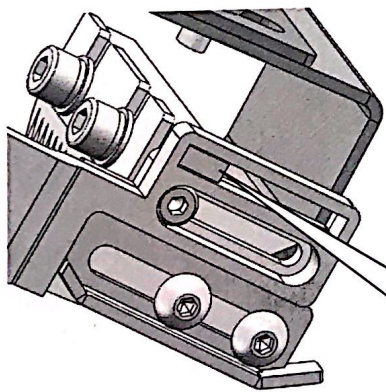
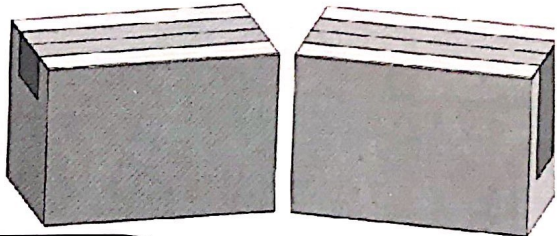


1. Loosen the M4 screw.

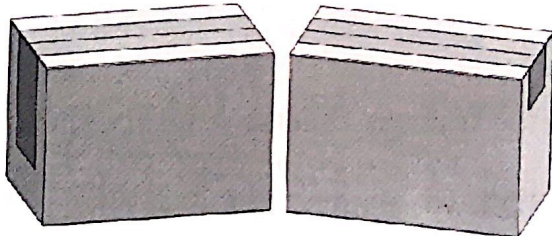
2. Move the cutter fixing plate forward. At this time, the sealing tape length of the carton head becomes longer and the tail becomes shorter. On the contrary, the head becomes shorter and the tail becomes longer until the head and tail sealing length are the same, and the M4 screw is locked.



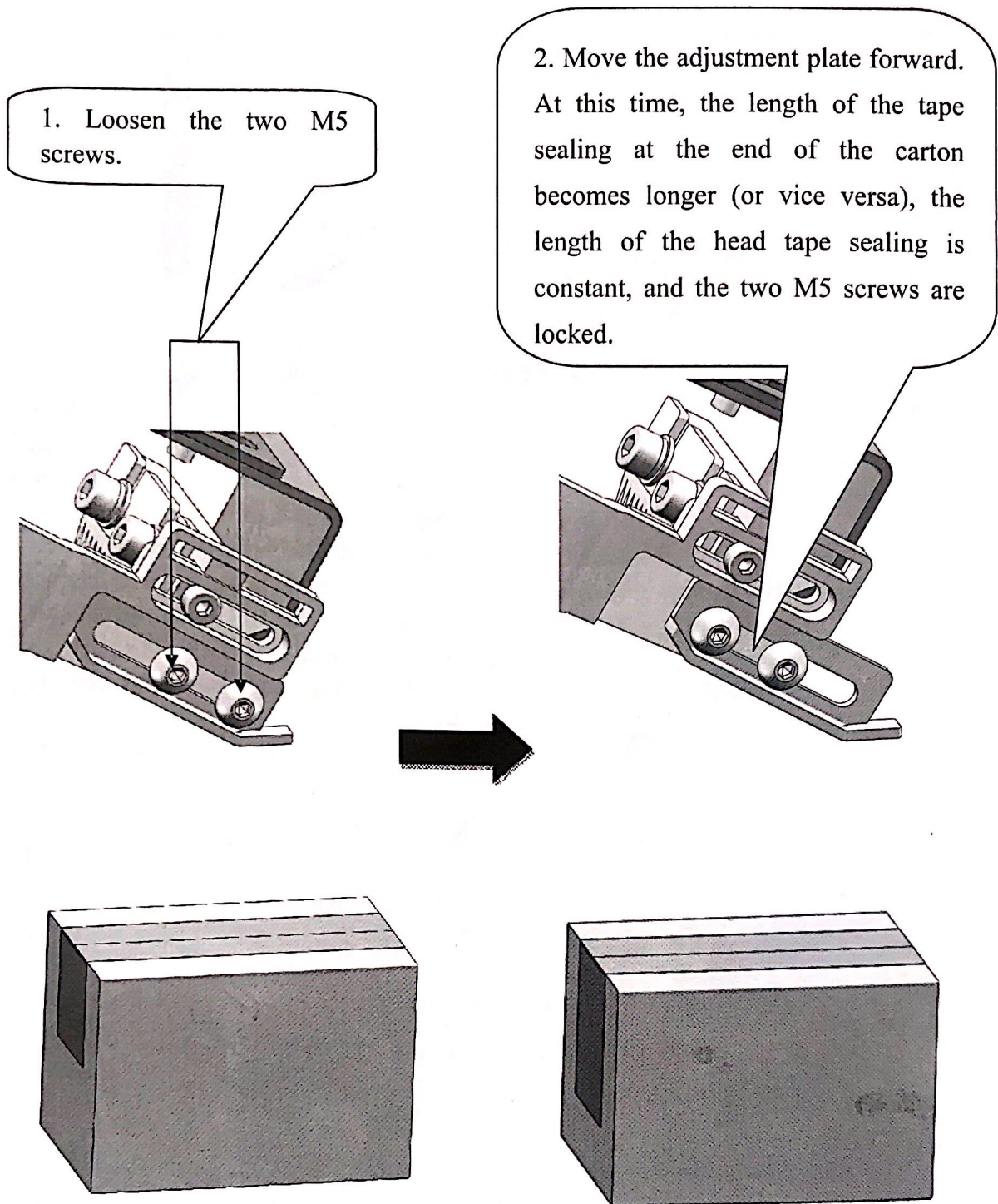
Long head,short tail



Short head,long tail

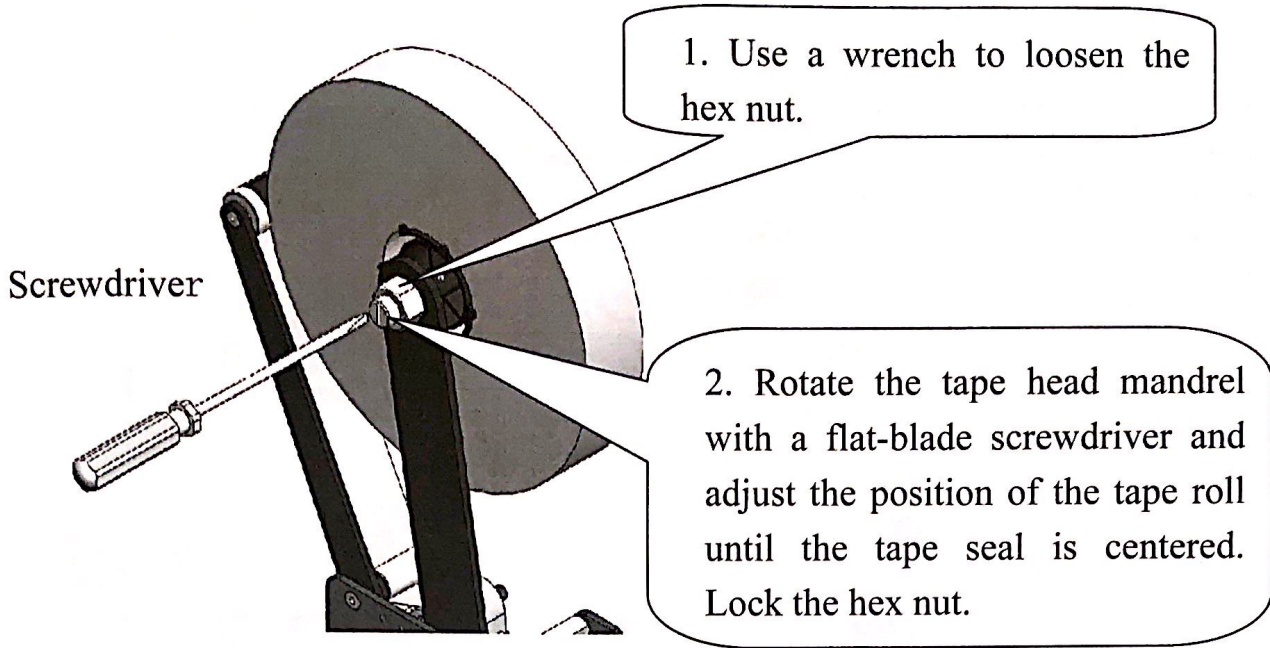


4) Adjustment of tape sealing length at both sides of the carton

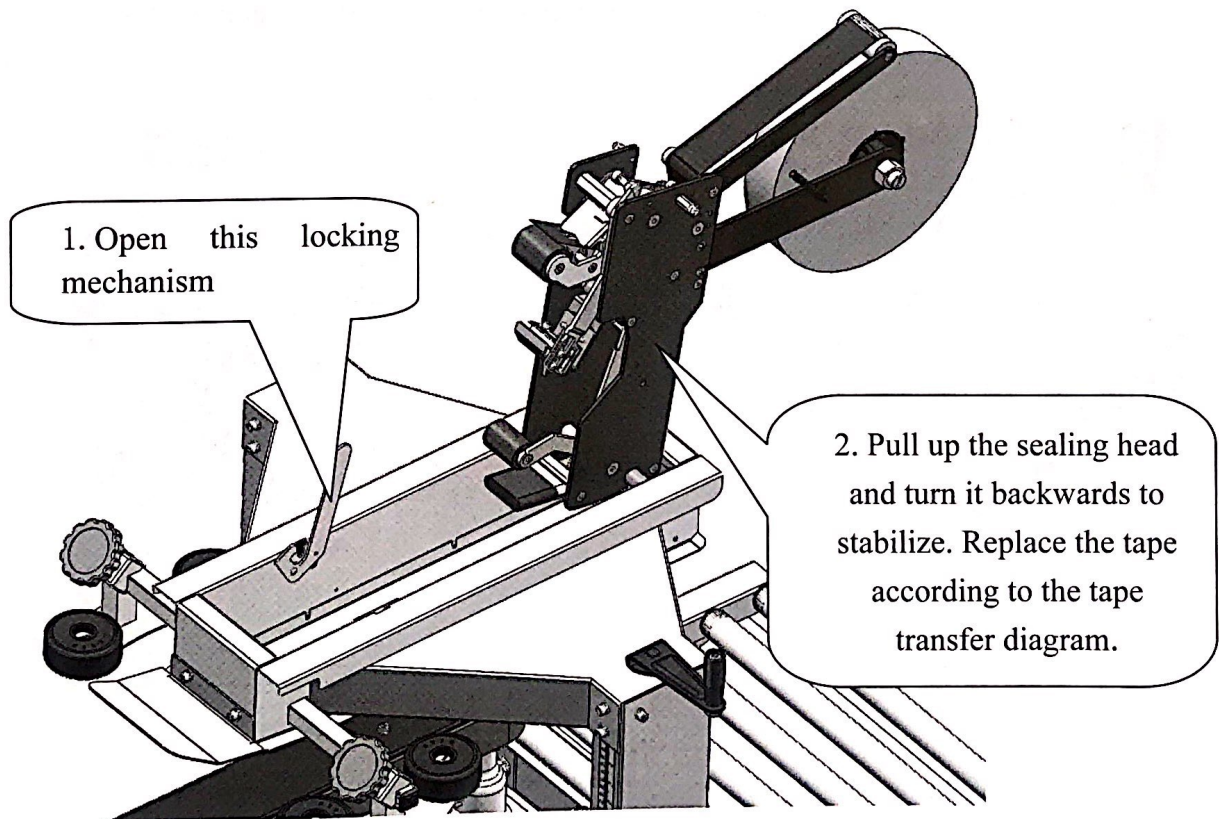


After adjusting the sealing length of the tail tape of the carton, adjust the difference of the sealing length of the tape on both sides of the carton according to [4.4 3)] until the sealing length of the head and tail is the same.

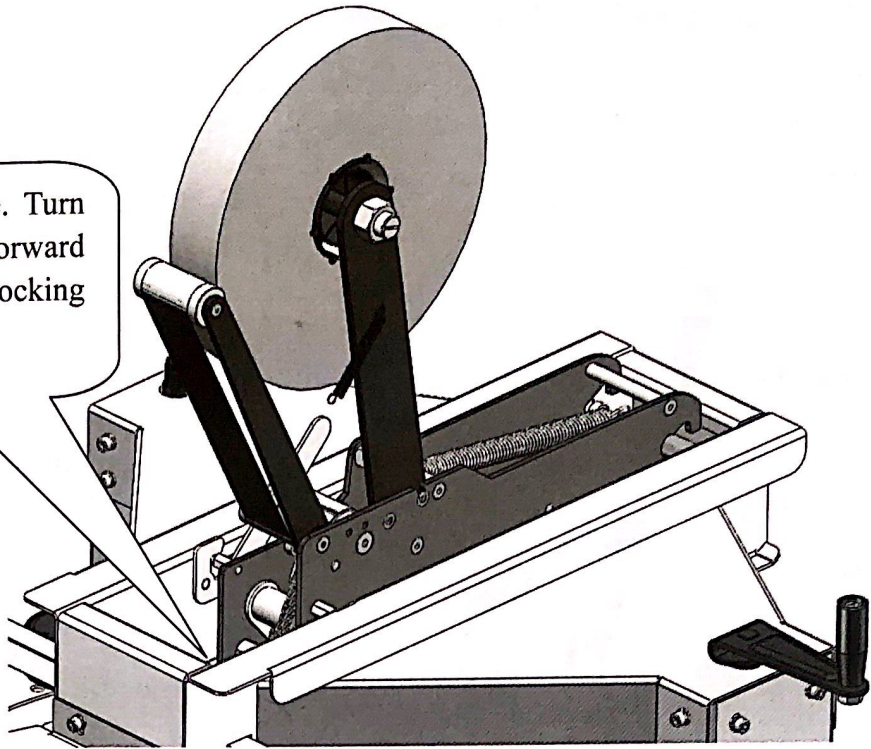
5) Tape position adjustment:



6) Upper sealing head replacement tape:

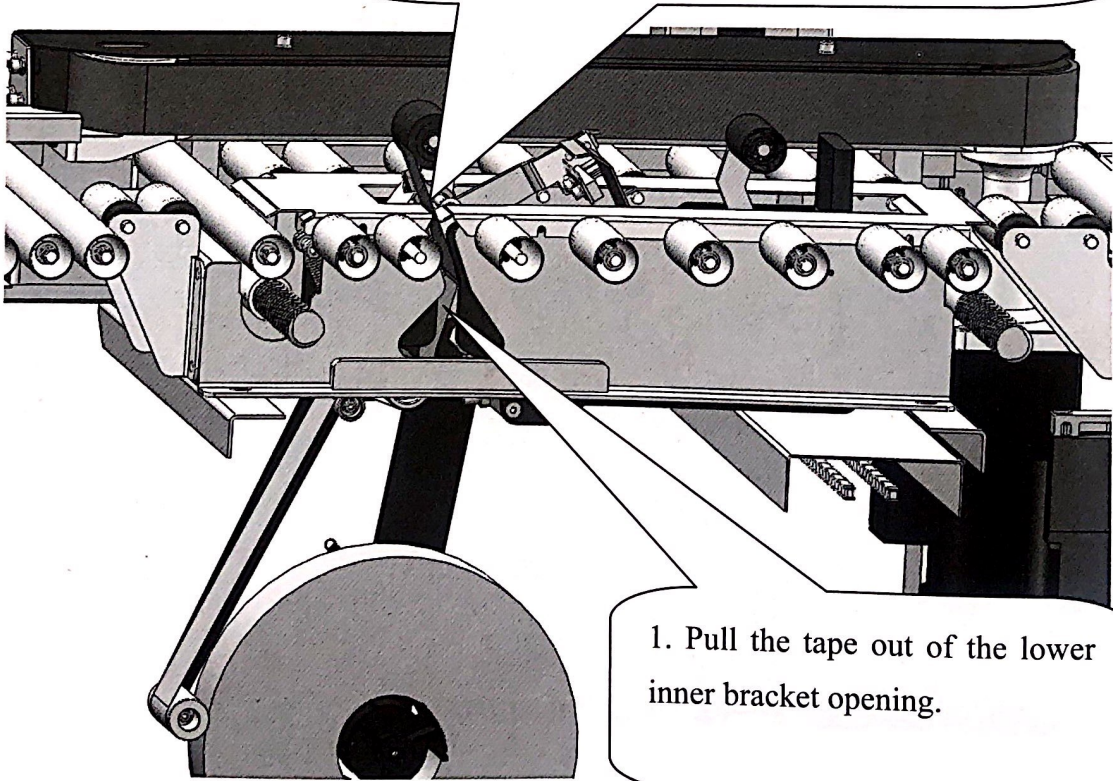


3. Replace the tape. Turn the sealing head forward to reset. Close the locking mechanism



7) Down sealing head replacement tape

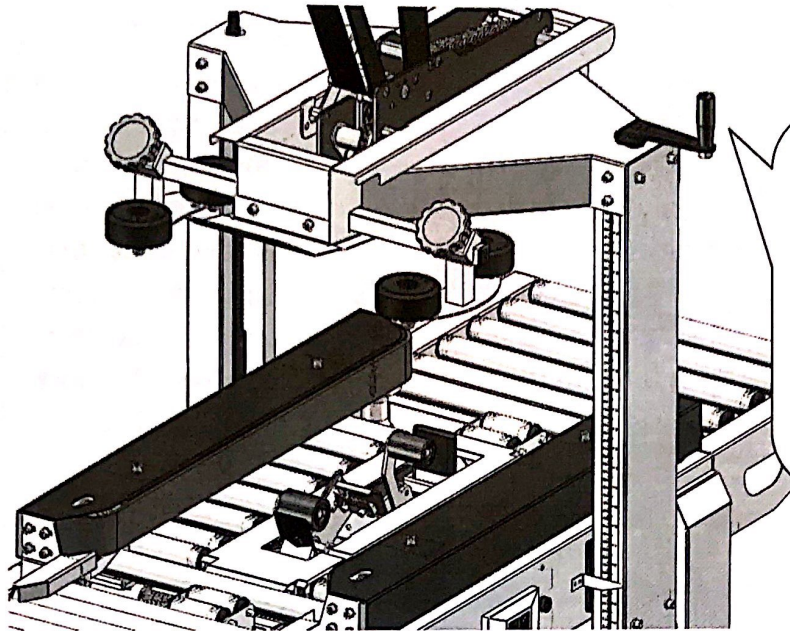
2. Install the tape according to the tape transfer diagram and pull the tape from the opening of the lower guide.



1. Pull the tape out of the lower inner bracket opening.

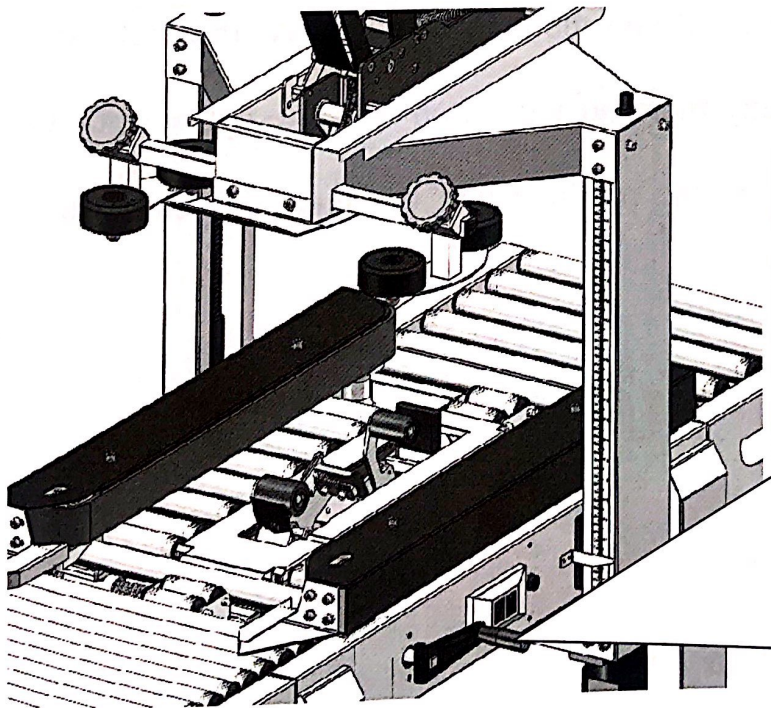
4.5 Put the carton on the feeding table, according the size of carton, adjust the height and width

4.5.1 Height adjustment:



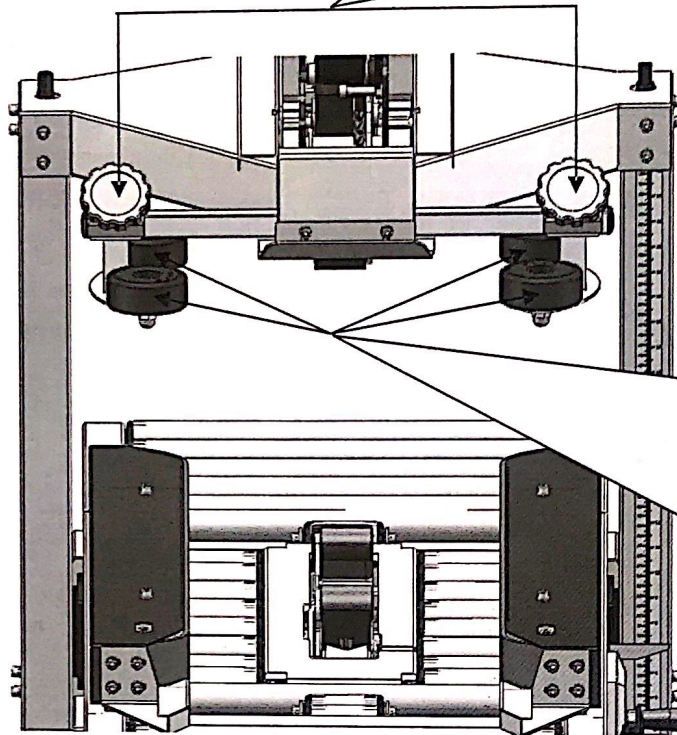
Rotate the handle so that the bottom plane of the upper box head is attached to the upper plane of the carton, and the column is rotated clockwise to descend (and vice versa).

4.5.1 Width adjustment:



1. Rotate the handle to make the surface of the conveyor belts close to the carton. (Note: The friction between the conveyor belt and the package must be mastered. If the friction is too large, the carton will be deformed. If the carton is too small, it may slip and cannot be conveyed.) , rotate the left and right conveyor belt clockwise to close (and vice versa).

2. Loosen the locking handwheel and adjust the left and right carton positioning wheels so that the left and right sides of the carton positioning wheel are tightly attached to the sticker box.

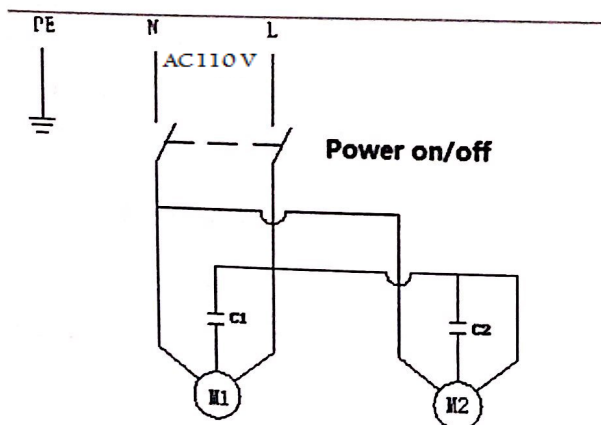


3. Move the left and right carton positioning wheels to the left or right at the same time until the carton tape is centered and locked to lock the handwheel.

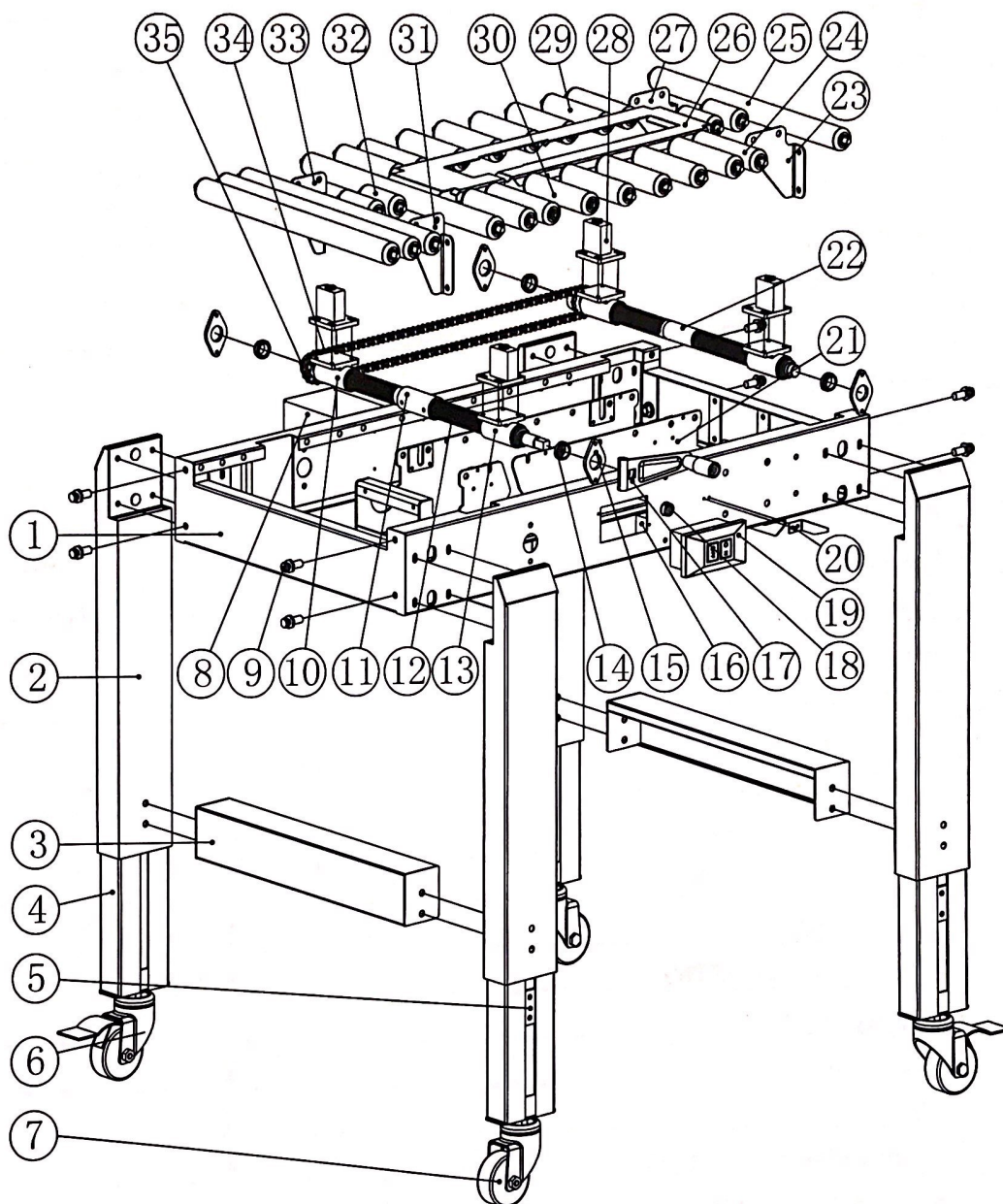
4. 6 Turn on the power switch and the machine enters the working state.

The carton is balanced and pushed into the conveyor belt. At this time, the conveyor belt will automatically transport the carton forward and seal it. As long as the carton is delivered, the machine will continuously seal it and automatically send it out.

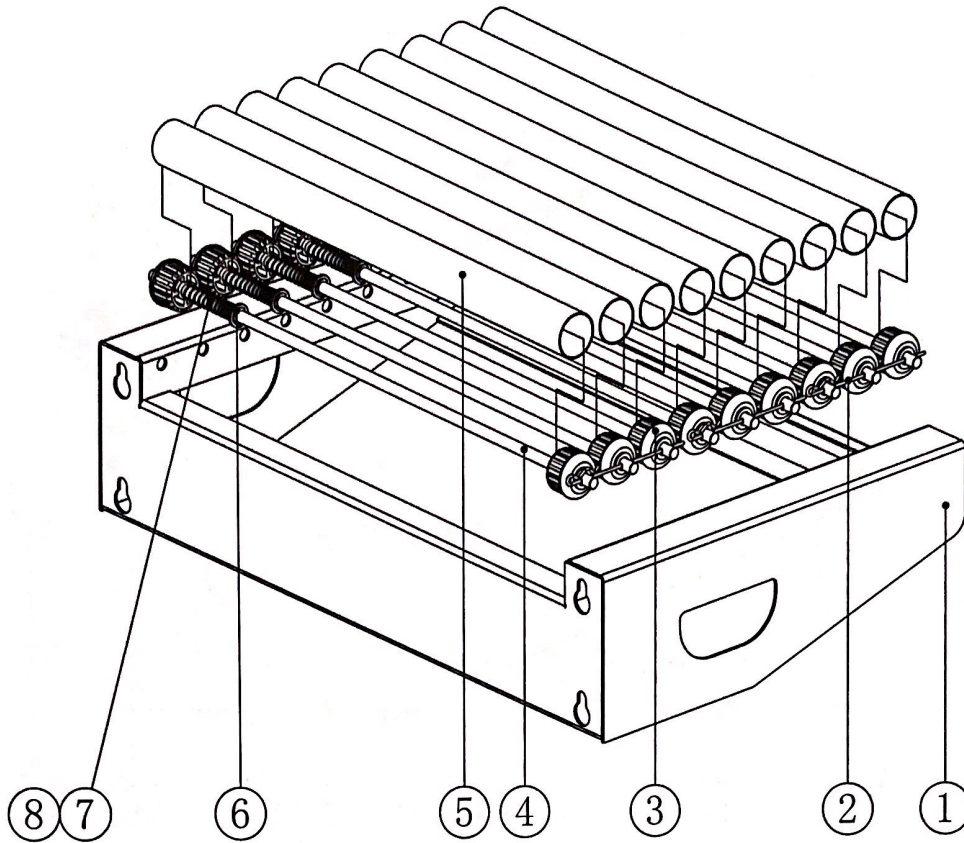
V. Electrical diagram



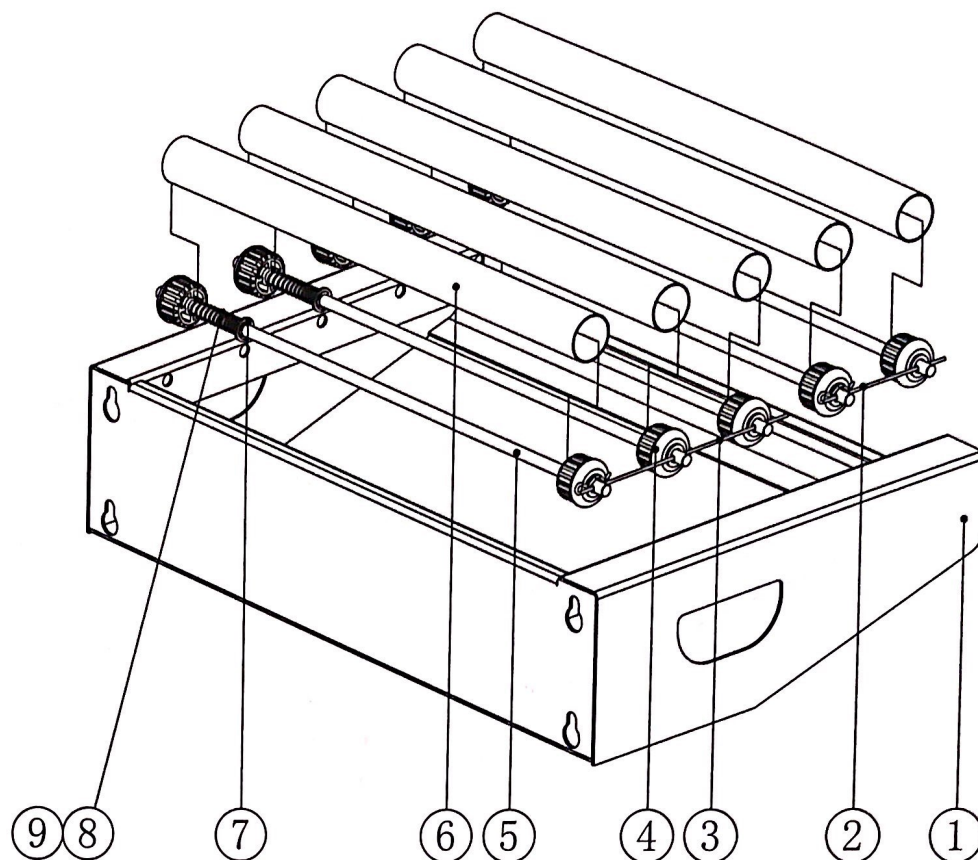
VI. Spare parts explosive view



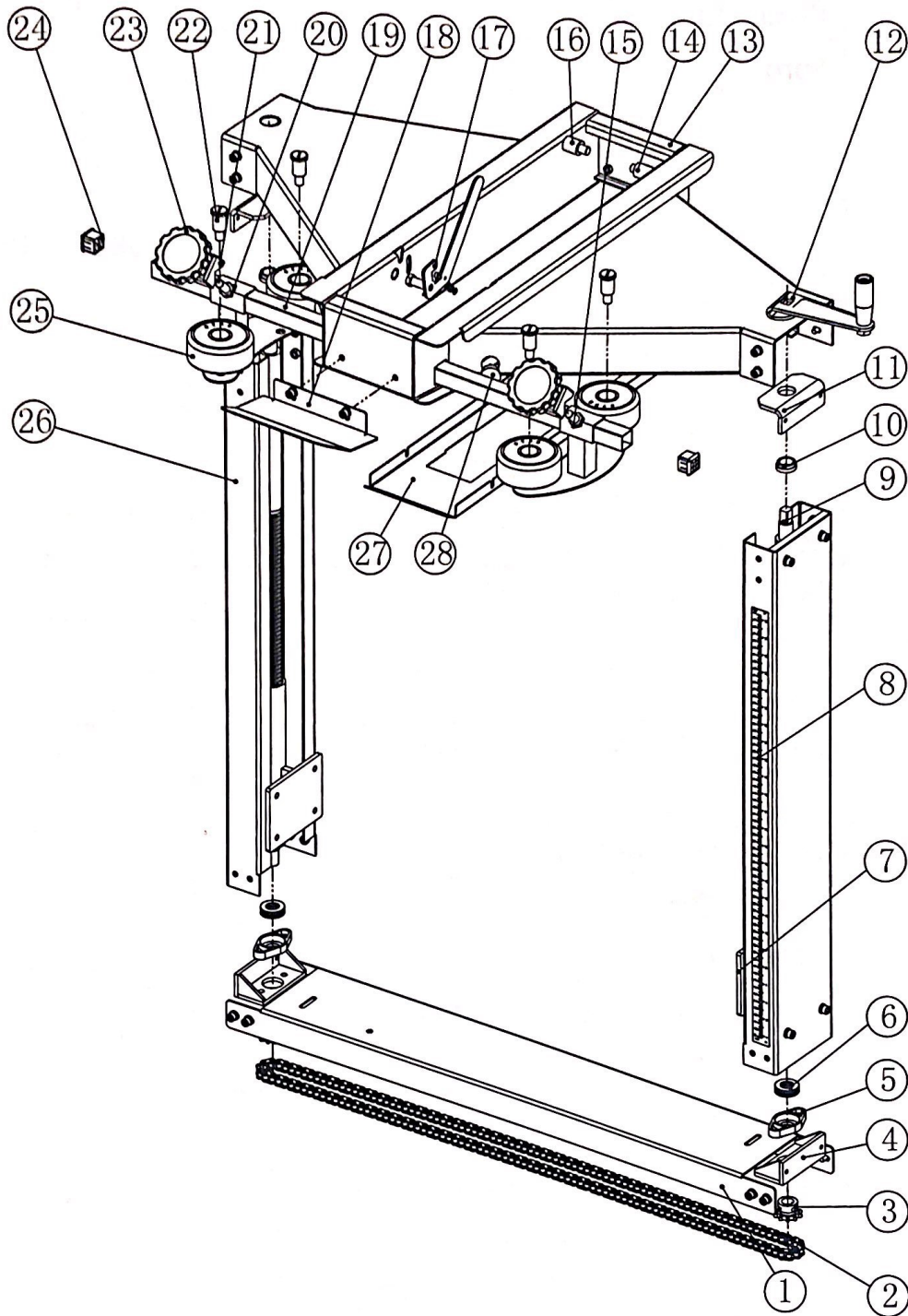
Number	Part Name	Quantity	Specifications
1	Rack mount	1	
2	Foot	4	
3	Foot support rod	2	
4	Adjustment foot	4	
5	Fixed block	4	
6	Casters	2	2.95 × 1.18 in
7	Casters	2	2.95 × 1.18 in
8	Nameplate	1	
9	Coupling screw	8	
10	Left and right adjustment nut (left turn)	2	
11	Limit spacer	1	
12	Active screw	1	
13	Left and right adjustment nut (right-handed)	2	
14	Bearing bushing	4	
15	Bearing housing	4	
16	Starting capacitor CBB6-1	2	6uF 450V AC
17	Rocking handle	1	
18	Insurance seat	1	Φ15
19	Power button switch	1	KEP-215
20	Ruler	1	
21	Lower inner stent	1	
22	Passive screw	1	
23	Rear roller bracket (right)	1	
24	Short drum assembly	6	
25	Long drum assembly	5	
26	Lower guide	1	
27	Rear roller bracket (left)	1	
28	Connector I	4	
29	Short drum assembly	8	
30	Short drum assembly	2	
31	Front roller bracket (right)	1	
32	Short drum assembly	4	
33	Front roller bracket (left)	1	
34	Chain (1 19)	1	06B
35	Active sprocket	2	



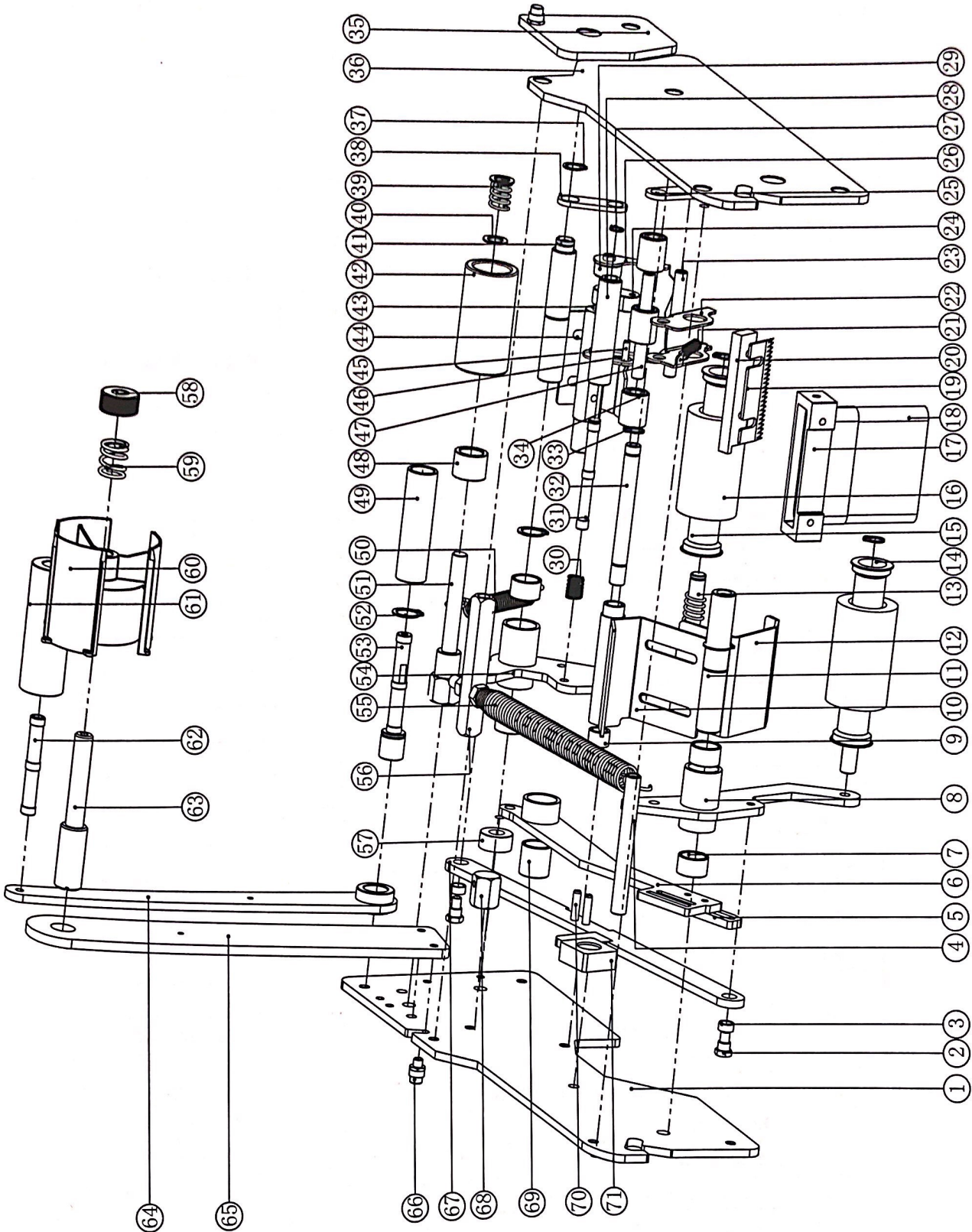
Number	Part Name	Quantity	Models and Specifications	Remarks
1	Conveying workbench	1		
2	Type B cotter pin (short)	3		
3	Roller head	18		
4	Conveyor roller shaft	9		
5	Conveyor table roller	9		
6	Open retaining ring 6	18	GB/T 896-1986	
7	Pressure spring	9		
8	Flat washer 8	18	GB/T 95-2002	



Number	Part Name	Quantity	Models and Specifications	Remarks
1	Conveying workbench	1		
2	Type B cotter pin (short)	1		
3	Type B cotter pin (long)	1		
4	Roller head	12		
5	Conveyor roller shaft	6		
6	Conveyor table roller	6		
7	Open retaining ring 6	12	GB/T 896-1986	
8	Pressure spring	6		
9	Flat washer 8	12	GB/T 95-2002	

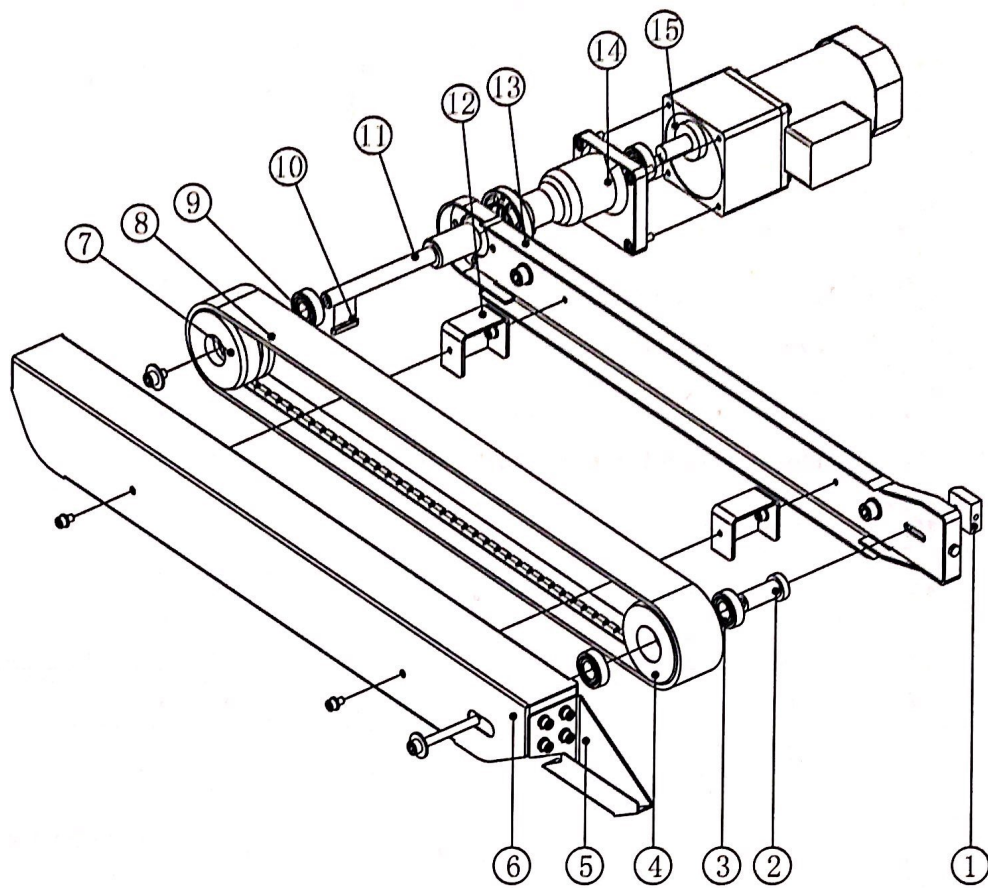


Number	Part Name	Quantity	specifications
1	Lower beam	1	
2	Chain (133)	1	06B
3	Sprocket	2	
4	Lower support	2	
5	Flat bearing	2	
6	One-way thrust ball bearings 51103	2	GB 301-1995
7	Lifting nut	2	
8	Ruler	1	
9	Lifting screw	2	
10	Bearing bushing	2	
11	Upper support	2	
12	Rocking handle	1	
13	Shelf frame	1	
14	Spacer I	1	
15	Carton positioning wheel seat	1	
16	Spacer II	1	
17	Sealing head locking mechanism	1	
18	guide plate	1	
19	Positioning rod	1	
20	Carton positioning wheel seat	1	
21	V-grooved plate	2	
22	Carton positioning wheel spindle	4	
23	Locking handwheel	2	
24	Clamping head	2	
25	Carton positioning wheel	4	
26	Column	2	
27	Upper guide	1	
28	Seal HP-22	2	HP-22

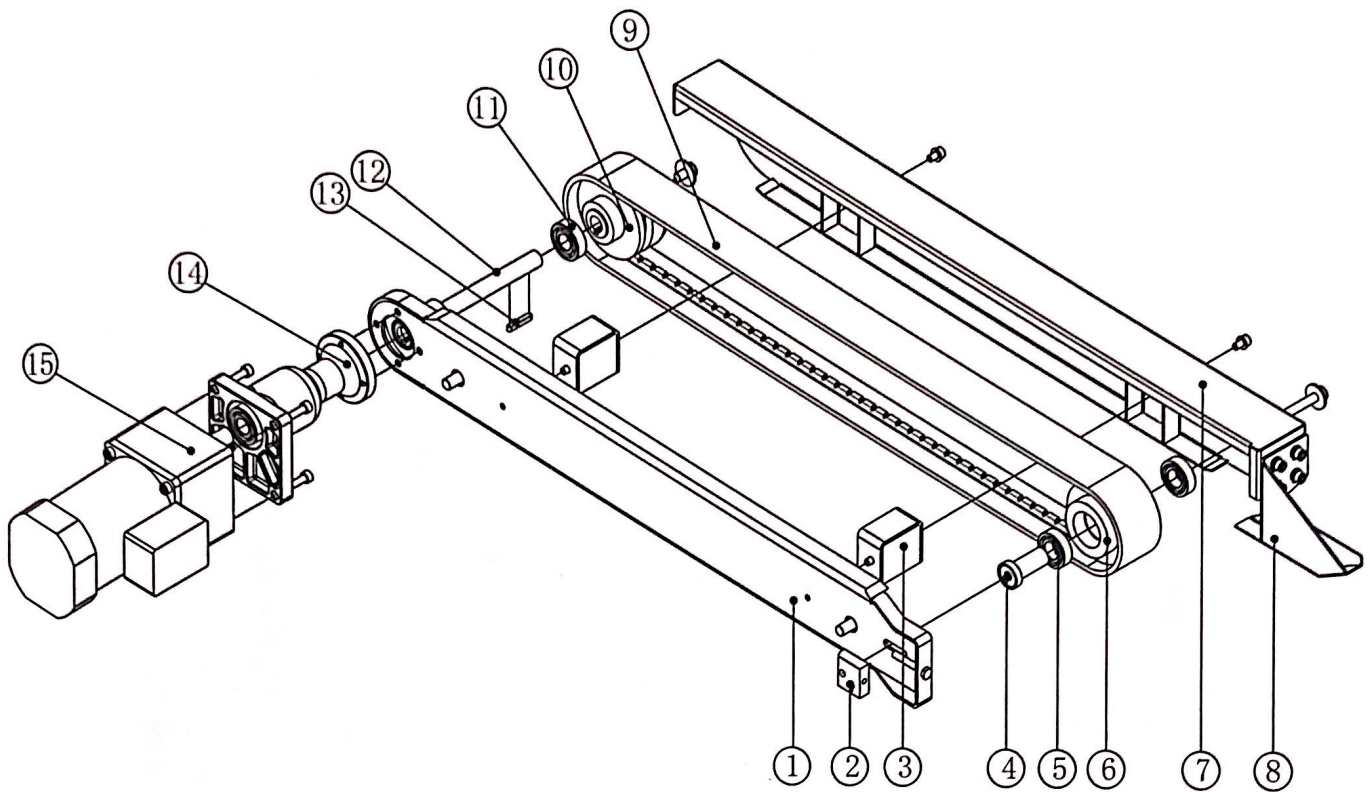


Number	Part Name	Quantity	Remarks
1	Left wall panel	1	
2	Connecting rod locking screw	2	
3	Connecting rod bushing	2	
4	Strengthening rod	1	
5	Adjustment board	1	
6	Cutter link	1	
7	Copper-based oil bearing	4	$\Phi 16 \times \Phi 20 \times 12$
8	Rubber wheel rotating plate I	1	
9	Copper-based oil bearing	2	$\Phi 10 \times \Phi 14 \times 10$
10	Tool holder guard I	1	
11	Rubber wheel connecting rod rotating mandrel II	1	
12	Tool holder guard II	1	
13	Rubber wheel spindle	2	
14	Rubber wheel core I	3	
15	Rubber wheel core II	1	
16	Rubber wheel outer wheel	2	
17	Brush holder	1	
18	brush	1	
19	Cutting blade	1	
20	Cutter fixing plate	1	
21	Small tension spring	1	
22	Carton pressboard	1	
23	Small pull spring fixed shaft	1	
24	Torsion spring fixing block	1	
25	Connection plate II	1	
26	Carton guide	1	
27	Shaft retaining ring 8	1	GB 894.1-86
28	Small knurling wheel	1	
29	Carton guide plate fixing block	1	
30	Knurling wheel spring	1	
31	Knurled wheel spindle	1	
32	Tool holder guard spindle	1	
33	Shaft circlip 10	4	GB 894.1-86
34	Spacer wheel	3	
35	Right small wall panel	1	
36	Right wall panel	1	

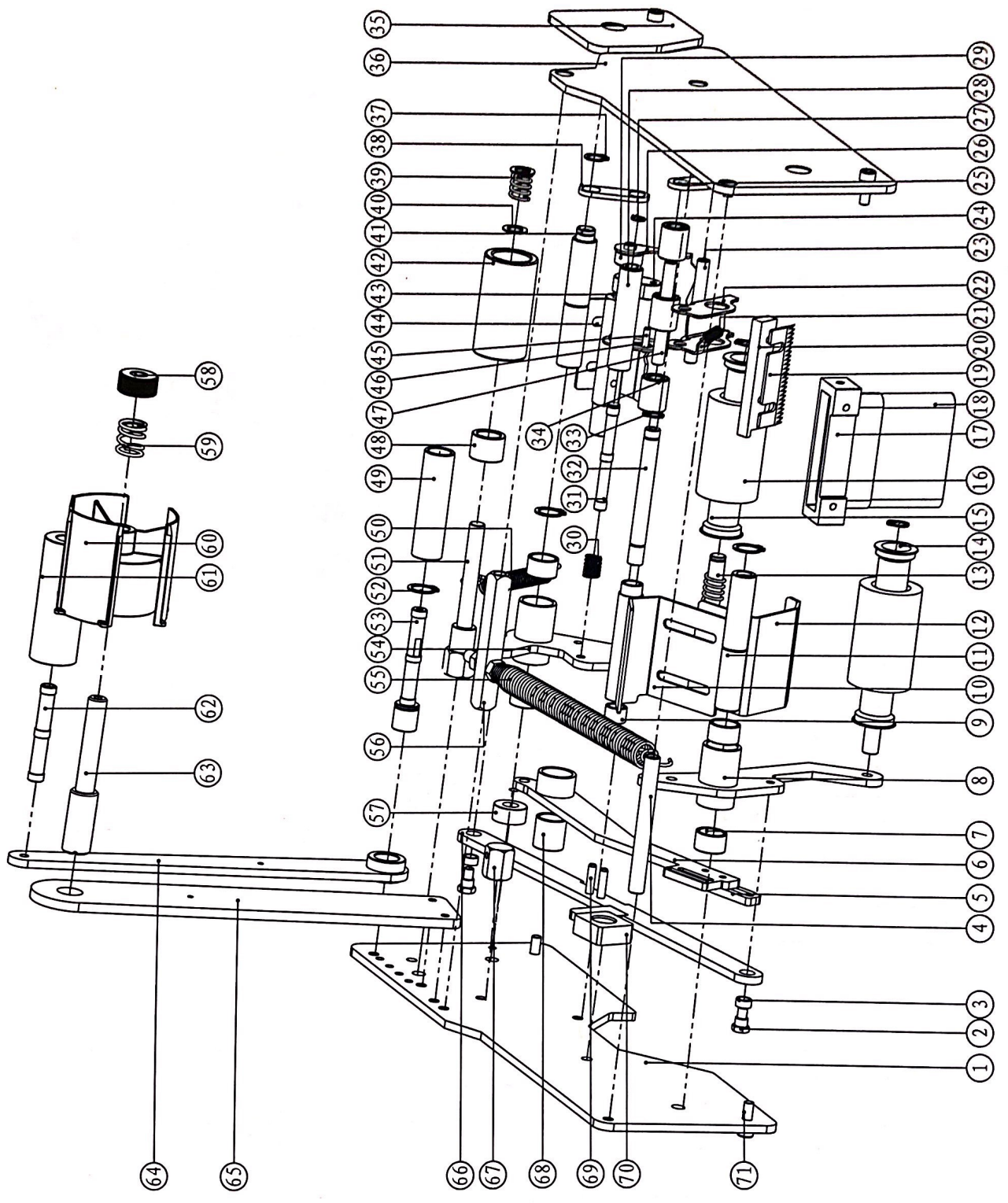
Number	Part Name	Quantity	Remarks
37	Shaft circlip 12	1	GB 894.1-86
38	Connection plate I	1	
39	Large knurling wheel compression spring	2	
40	Rubber wheel washer	2	
41	Rubber wheel connecting rod rotating mandrel I	1	
42	Big knurling wheel	1	
43	Cutter mandrel	1	
44	Pressure box	1	
45	Elastic cylindrical pin $\phi 4 \times 16$	1	GB/T 879.1-2000
46	Torsion spring	1	
47	Pressure roller support shaft	2	
48	One-way bearing	1	HF1616-6HJ
49	Film roll I	1	
50	Blade tension spring	1	
51	Large knurling wheel spindle	1	
52	Shaft circlip 16	3	GB 894.1-86
53	Zhang film core shaft	1	
54	Rubber wheel rotating plate II	1	
55	Rubber roller tension spring	1	
56	Support column	1	
57	Blade swing limit block	1	
58	Tension adjustment knob	1	
59	Tape tube compression spring	1	
60	Tape fixing roller	1	
61	Film roll II	1	
62	Zhang II film roller core shaft	1	
63	Tape cartridge mandrel	1	
64	Film roll I	1	
65	Tape support	1	
66	Support shaft	2	
67	Rubber wheel joint material	1	
68	Link guide pin	1	
69	Copper-based oil bearing	1	$\phi 16 \times \phi 20 \times 20$
70	Elastic cylindrical pin $\phi 5 \times 24$	2	GB/T 879.1-2000
71	Limit plate	1	



Number	Part Name	Quantity	specifications
1	Passive wheel adjustment block	1	
2	Passive wheel spindle	1	
3	Deep groove ball bearing 6003	2	GB 276-94
4	Passive wheel	1	
5	Left feed guide	1	
6	Left shield	1	
7	Driving wheel	1	
8	Rubber conveyor belt	1	5 X50X1520
9	Deep groove ball bearing 6202	2	GB 276-94
10	Flat key 5 × 30	1	GB/T 1096-2003
11	Drive wheel mandrel	1	
12	Shield bracket I	2	
13	Left conveyor belt	1	
14	Motor mount	1	
15	Motor	1	120W 4P



Number	Part Name	Quantity	Specifications
1	Right conveyor belt	1	
2	Passive wheel adjustment block	1	
3	Shield bracket I	2	
4	Passive wheel spindle	1	
5	Deep groove ball bearing 6003	2	GB 276-94
6	Passive wheel	1	
7	Right conveyor belt cover	1	
8	Right feed guide	1	
9	Rubber conveyor belt	1	0.2 × 2 × 59.8 in
10	Driving wheel	1	
11	Deep groove ball bearing 6202	2	GB 276-94
12	Drive wheel mandrel	1	
13	Flat key 5 × 30	1	GB/T 1096-2003
14	Motor mount	1	
15	Motor	1	120W 4P



Number	Part Name	Quantity	
1	Left wall panel	1	
2	Connecting rod locking screw	2	
3	Connecting rod bushing	2	
4	Strengthening rod	1	
5	Adjustment board	1	
6	Cutter link	1	
7	Copper-based oil bearing	4	$\Phi 16 \times \phi 20 \times 12$
8	Rubber wheel rotating plate I	1	
9	Copper-based oil bearing	2	$\Phi 10 \times \phi 14 \times 10$
10	Tool holder guard I	1	
11	Rubber wheel connecting rod rotating mandrel II	1	
12	Tool holder guard II	1	
13	Rubber wheel spindle	2	
14	Rubber wheel core I	3	
15	Rubber wheel core II	1	
16	Rubber wheel outer wheel	2	
17	Brush holder	1	
18	brush	1	
19	Cutting blade	1	
20	Cutter fixing plate	1	
21	Small tension spring	1	
22	Carton pressboard	1	
23	Small pull spring fixed shaft	1	
24	Torsion spring fixing block	1	
25	Connection plate II	1	
26	Carton guide	1	
27	Shaft retaining ring 8	1	
28	Small knurling wheel	1	
29	Carton guide plate fixing block	1	
30	Knurling wheel spring	1	
31	Knurled wheel spindle	1	
32	Tool holder guard spindle	4	GB 894.1-86
33	Shaft circlip 10	3	
34	Spacer wheel	1	
35	Right small wall panel	1	
36	Right wall panel	1	

Number	Part Name	Quantity	Specifications
37	Shaft circlip 12	1	GB 894.1-86
38	Connection plate I	1	
39	Large knurling wheel compression spring	2	
40	Rubber wheel washer	2	
41	Rubber wheel connecting rod rotating mandrel I	1	
42	Big knurling wheel	1	
43	Cutter mandrel	1	
44	Pressure box	1	
45	Elastic cylindrical pin $\phi 4 \times 16$	1	GB/T 879.1-2000
46	Torsion spring	1	
47	Pressure roller support shaft	2	
48	One-way bearing	1	HF1616-6HJ
49	Film roll I	1	
50	Blade tension spring	1	
51	Large knurling wheel spindle	1	
52	Shaft circlip 16	3	GB 894.1-86
53	Zhang film core shaft	1	
54	Rubber wheel rotating plate II	1	
55	Rubber roller tension spring	1	
56	Support column	1	
57	Blade swing limit block	1	
58	Tension adjustment knob	1	
59	Tape tube compression spring	1	
60	Tape fixing roller	1	
61	Film roll II	1	
62	Zhang II film roller core shaft	1	
63	Tape cartridge mandrel	1	
64	Film roll I	1	
65	Tape support	1	
66	Rubber wheel joint material	1	
67	Link guide pin	1	
68	Copper-based oil bearing	1	$\phi 16 \times \phi 20 \times 20$
69	Elastic cylindrical pin $\phi 5 \times 24$	2	GB/T 879.1-2000
70	Limit plate	1	
71	Hexagon socket head cap screw M6 \times 16	4	GB/T 70.1-2000

VII. Faults and solution

Fault	Reason	Method of exclusion
Tape cannot be cut	The blade is not sharp enough or the blade is covered with a tape mucus that causes the cutter to become dull	Replace or clean the blade
The tape is not trimmed after being cut	<ol style="list-style-type: none"> 1. The M4 screw loosening on the cutter fixing plate causes the blade to be non-parallel to the tape. 2. The elasticity of the blade tension spring is insufficient, and the tension of the rubber roller tension spring is too small. 	<ol style="list-style-type: none"> 1. Correct the cutting blade to the edge of the blade parallel to the tape and lock the M4 screw 2. Replace the blade tension spring and tension the rubber roller tension spring
The tape is not completely stuck to the box	<ol style="list-style-type: none"> 1. Rubber wheel rotation is not flexible 2. The tension of the rubber roller tension spring is too small 	<ol style="list-style-type: none"> 1. Lubricate the rubber wheel spindle 2. Tension rubber roller tension spring
Box is stuck	<ol style="list-style-type: none"> 1. improper adjustment of carton sealing height; 2. The width and height of the carton are not uniform 3. The carton becomes soft and damp 4. Rubber roller tension spring tension is too large 	<ol style="list-style-type: none"> 1. Re-adjust the height 2. Replace the carton 3. Replace the carton 4. Re-adjust the tension of the rubber roller
Broken or broken tape when sealing	The blade protrudes too high	Lower blade position
Tape often deviates	The pressure imbalance between the left and right carton positioning wheels on the carton	Adjust the spacing between the left and right carton positioning wheels and correct the left and right carton positioning wheels to the tape seal centered
The tape is too loose in the carton	<ol style="list-style-type: none"> 1. The tension of the rubber roller tension spring is too small 2. The friction of the tape seat is too small 	<ol style="list-style-type: none"> 1. Tensioning rubber roller tension spring 2. Turn the tension adjustment knob clockwise to tension the tape

VIII. Maintenance.

8.1 Keep the inside and outside of the machine clean and dry.

8.2 The blade must be kept clean and free from sticking.

8.3 Regularly lubricate the various transmission parts on the sealing head.

8.4 Check all screw nuts regularly and tighten them if they are loose.

8.5 Requirements for cartons

1) The carton must be kept dry (the wet carton is not strong enough for machine sealing).

2) There should be no dust and debris on the sealing surface of the carton.

3) The size of the carton to be sealed in the same batch must be the same (the inconsistent dimensions will cause the machine to transfer jam or not pass).

8.6 Requirements for tape

1) Deformed tape cannot be used.

2) The paper tape cannot be used.

3) Tape that exceeds the shelf life cannot be used.

Special note: When debugging the machine, no part of the body can be placed in the movable position of the machine to avoid bruises!