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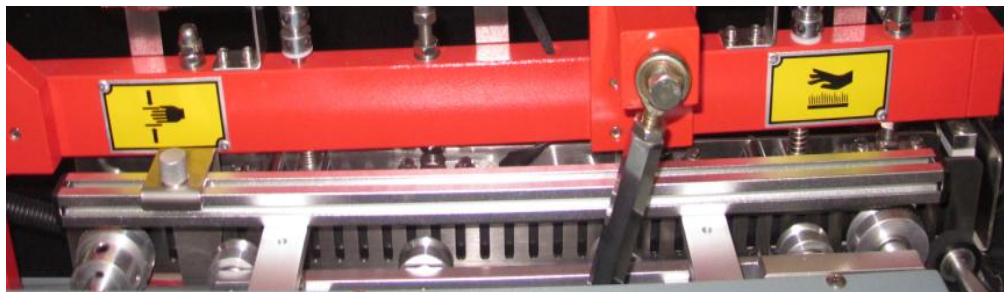
**First .the safety precautions:**

- 1, Please read all the related instruction before operating the machine.
- 2, In order to avoid accidents, please keep the workplace well ventilated, and pay attention to the damage of packaging which may cause liquid or gas leakage.
- 3, maintenance person must read the machine maintenance instructions carefully, before the maintenance work.
- 4, confirm the power has been cut off, before the maintenance work.
- 5, during machine running, if any accident occurs, turn off the power at first place, and then make the appropriate measures.
- 6, the machine is not suitable for packaging explosives products. In addition, if you want to package small items or liquid, powder, should first have them packed in boxes, tanks, bags and other packaging,
- 7, the machine does not apply to the PVC film, because the PVC material is easy to damage the machine's knife , if you must use PVC film, the knife must be a special material. If PVC is used for POF knife, the warranty is automatically invalid.
- 8, If modify the machine without authorization, the occurrence of any accident will not be responsible by manufacturer.
- 9, all air pressure pipes and cylinders can not have oil or water and other contaminated items, if these pollutants found, the warranty become invalid.
- 10, if you have any questions, please contact us free.

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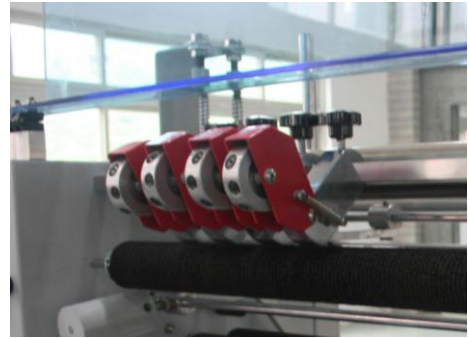
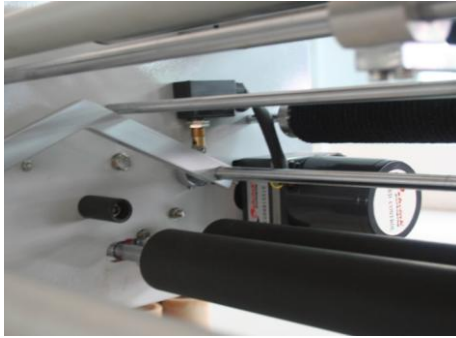
## Second, the safety operation precautions

- 1, None except the operator can operate the machine. When the machine is in automatic operation, the operator can not place the hand under the sealing knife or within the range of the electric eye, so as to avoid the accident.
- 2, When the machine is running, the operator can not stretch out hands to the front and the rear of conveyor rolling part, in case the hand was jammed or caught into the machine.
- 3, When the machine automatically run, should keep the safety door close, to avoid any contact with the sealing device and cause injury by burns, and other hazards.



- 4, When the machine press to the product and alarm, or other failure occurs, should first press the emergency stop switch, the operation mode should change from automatic operation to manual operation. After all the failure being cleared, release of emergency stop switch, turn back to automatic operation.
- 5, pay attention to the film sending rubber roller and the needle roller part, when

the machine running, must keep the safety door close, do not touch by hand, in case any damaged caused.



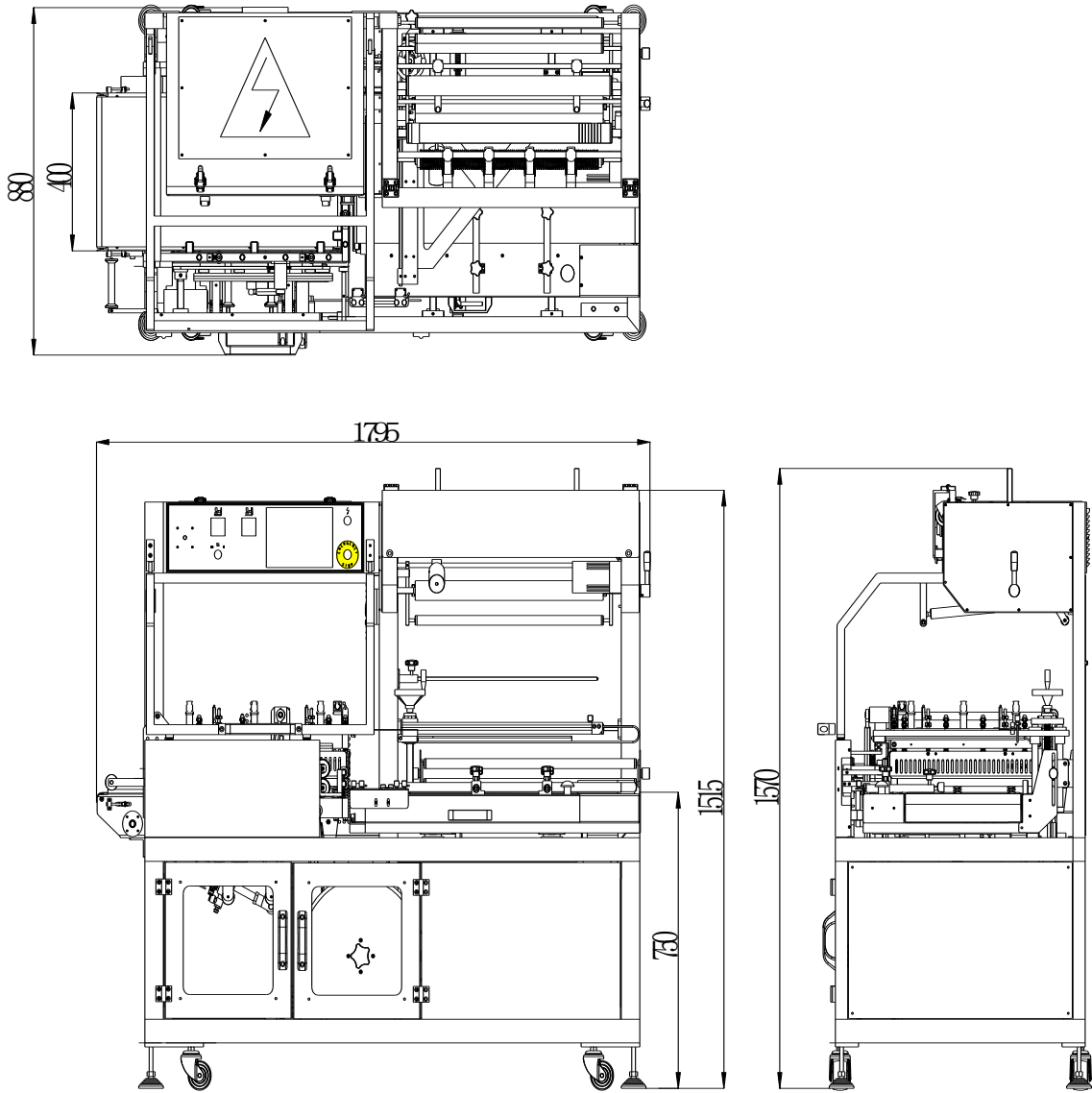
6, if the electronic tape cracked, must be replaced by new one, so as not to affect the quality of sealing and sealing knife life. When there is film on the knife or other debris, need to use cotton towel clean the knife. When cleaning, the emergency stop switch must be pressed and the machine is in manual operation mode. When doing this cleaning, turn off the main power supply to ensure safety.

### Third, the mechanical specifications

#### 1、 Machine Specification

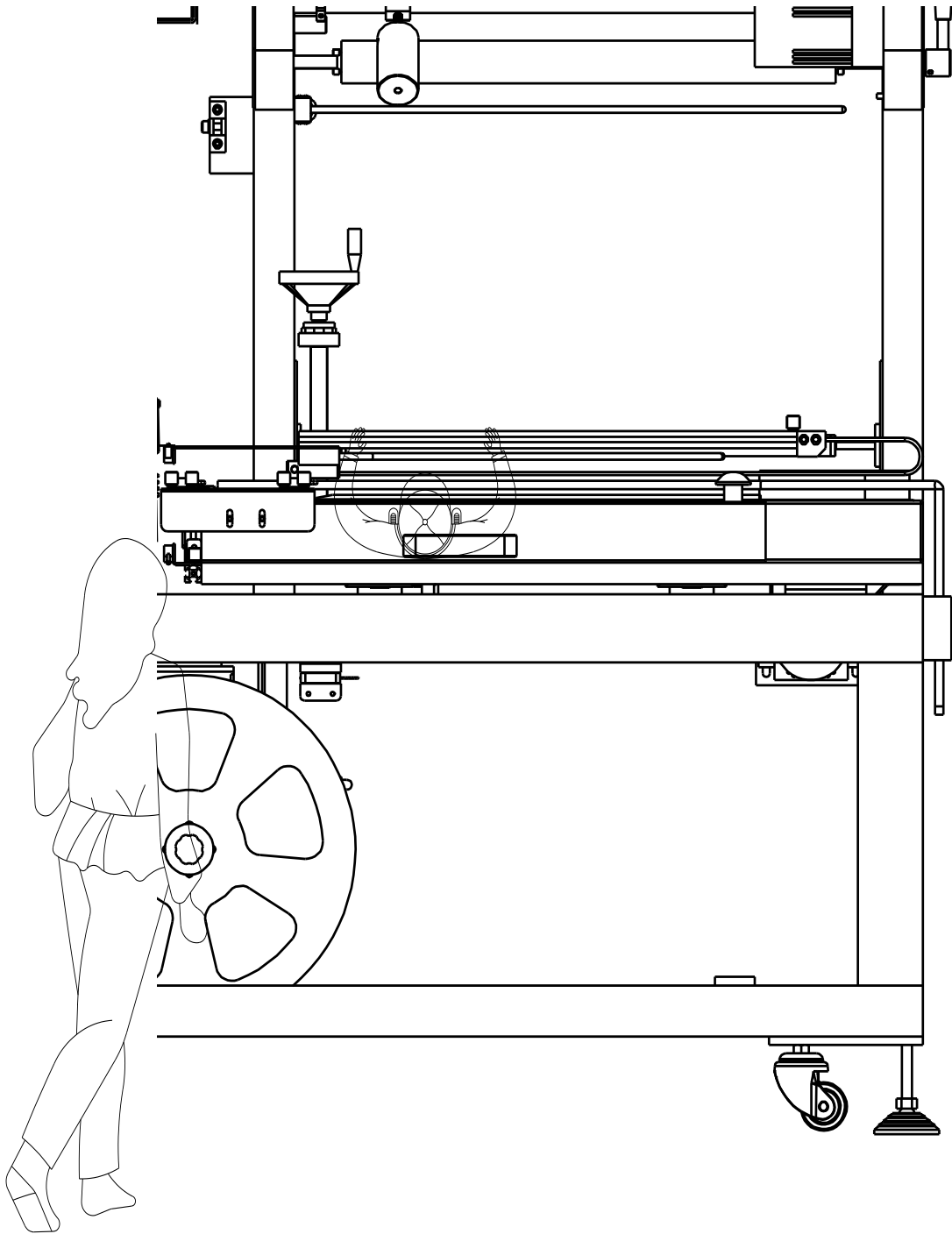
Machine Model:	ZF-A5645
Machine Size L×W×H (mm) :	1795×880×1570mm
Sealing Knife Size mm:	L: 565    W: 460
Packing Products Size L×W×H (mm) :	(100~450) × (60~350) × (5~120)
Max. Packing Width":	23"
Production Capacity:	30Pcs/min
Conveyor speed m/min:	26M/min
Packing Material:	POF、 PE
Sealing Knife Temperature :	180-230℃
Voltage :	220V/1P
Motor Power :	320W
Heating Power :	2.5KW
Total Power :	3KW
Ross Weight Kg:	330Kg
Gas consumption KG:	6kg/sp.cm

## 2、Machine Size



Unit: mm

### 3、Operate Panel



## Forth: Machine Installation

### 1, Installation location:

- (1) The machine should be installed in a bright, dry place.
- (2) The machine should be installed away from environment of dust, explosive and inflammable, corrosive.
- (3) Do not place the machine too close to the ventilation system, which would case sending of unstable.

### 2, installation:

- (1) After the installation site is selected, move the machine to the intended location to match the production line.
- (2) mechanical height adjustment: use the wrench to loosen the lock nut under the rack, and then adjust the height adjustment nut, until the required mechanical height is reached, and finally tighten the lock nut. (Figure 4.1)

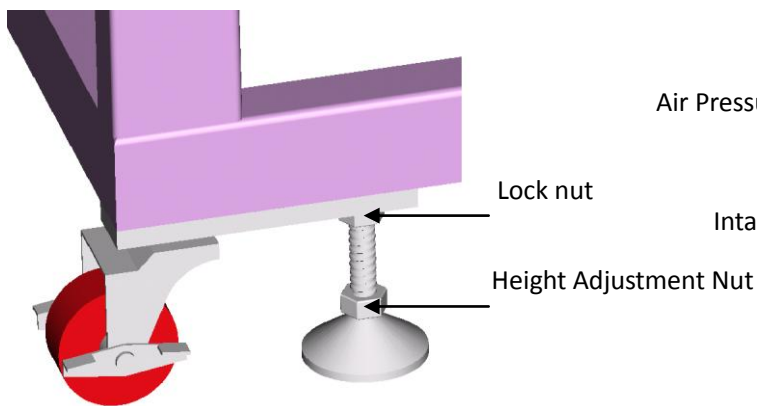


Figure 4.1

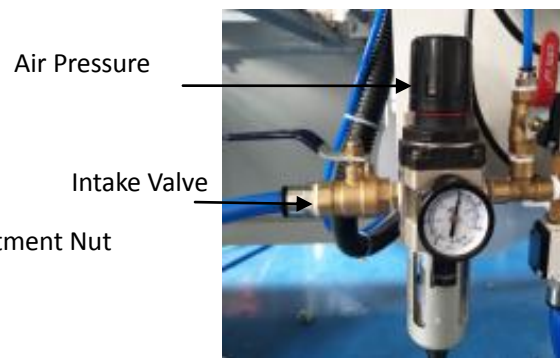


Figure 4.2

### (3) Power Connection:

- A. Turn the machine power switch to OFF.
- B. The main power switch to OFF, confirm the voltage is correct, then have the sealing machine power connected.
- C. Check all the machine part in normal condition, turn the machine power switch



to ON, then the machine into the operating state.

(4) Pneumatic device: As shown in Figure 4.2, the air pressure throat connected to the machine's air pipe, open the intake valve, and then rotate the air adjustment device, so that the air pressure maintained at 6kg / cm<sup>2</sup> or more.

## Fifth, mechanical debugging and operation

### 1、 Machine Installation

#### (1) Sealing Machine Control Function Explanation







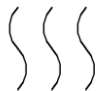
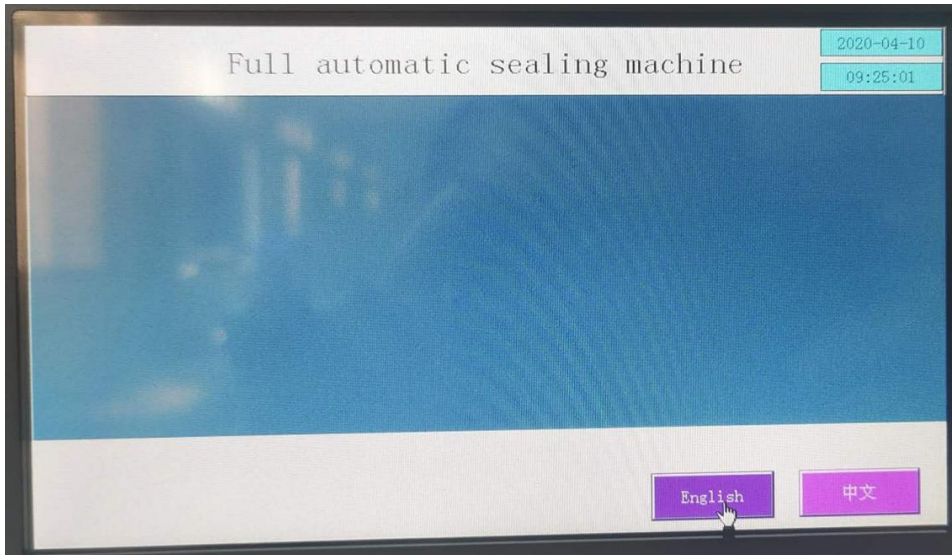
Diagrams	Application Function
	Power Supply on/off
	Set the temperature of heating tube for the side sealing knife, to control the sealing performance.
	Set the temperature of heating tube for the front sealing knife, to control the sealing performance.
	Power supply indicator

Diagram	Application Function
<b>MCGS</b>	Touch Screen, for operation and parameter adjustment, the center control system.
	When select 1 or ON, the sealing knife hearing tubes start working, will heating to the set temperature.
<b>EMERGENCY</b>	Click it down, the machine will stop working immediately. To start the machine again, should loose the button.

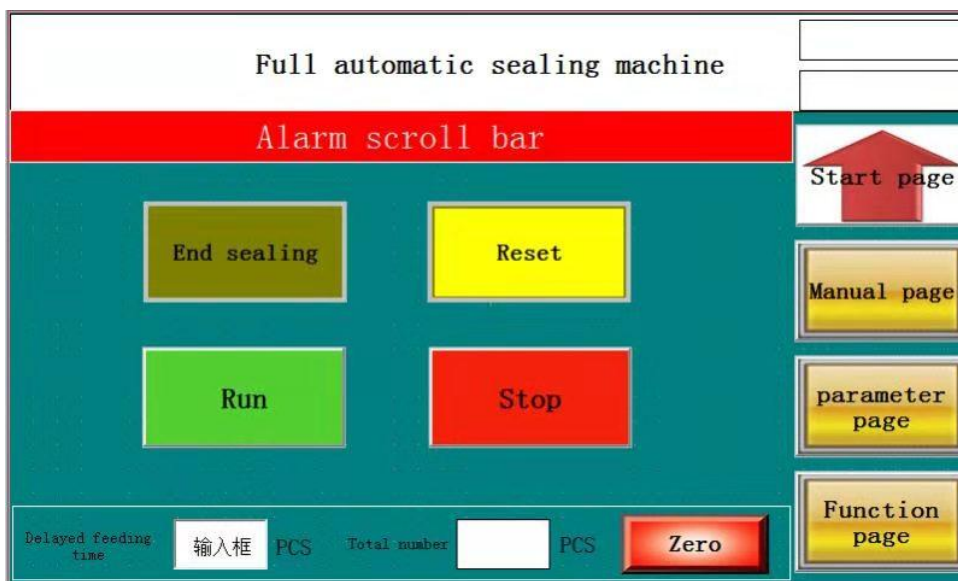
## 2, touch screen operation and its function explanation

(1) to open the main power switch, touch screen display the home page as shown



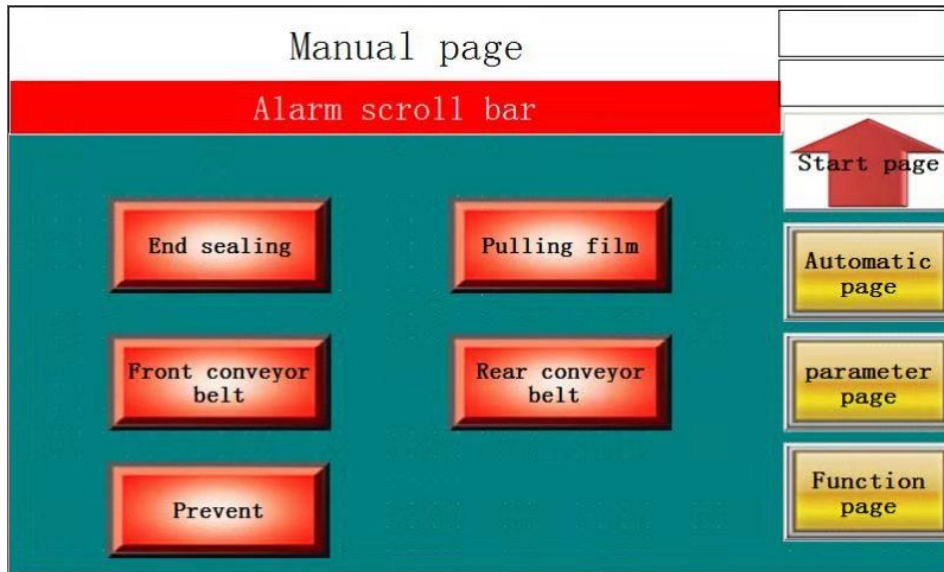
### 5.2

Select the "automatic page" and the submenu appears as shown in Figure 5.3



- A. Run: click the "Run" button, and then the device enters the running state
- B. Stop: click the "stop" button, and the device stops
- C. Reset: when the device alarm, click the "reset" button to clear the alarm and the device enters the normal preparation state.
- D. Manual sealing: click it to manual seal

Select the “manual page” option and the submenu appears as shown in Figure 5.4



A. Manual sealing: click it once to manual seal once

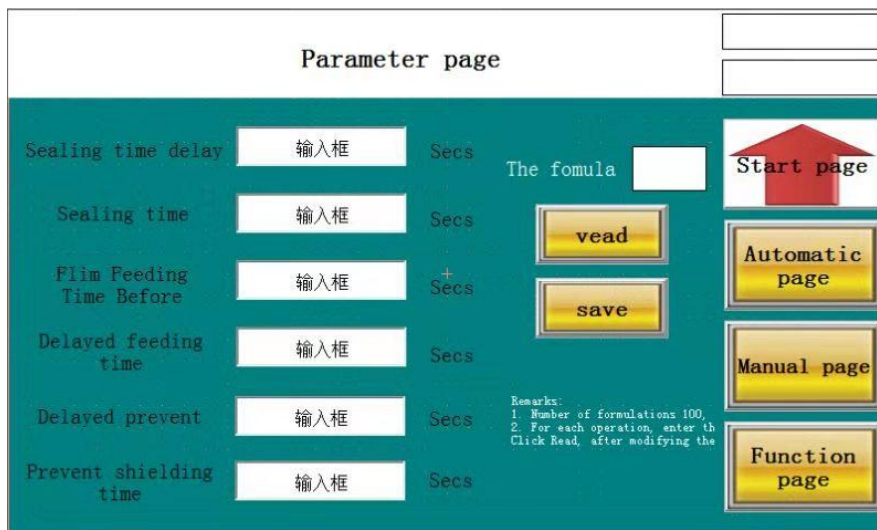
B. Synchronous film pulling: when click” pulling film”, the action of sending film and

pulling film goes; when release, the action stop.

C. Front conveyor: click "front conveyor" and enter manual operation

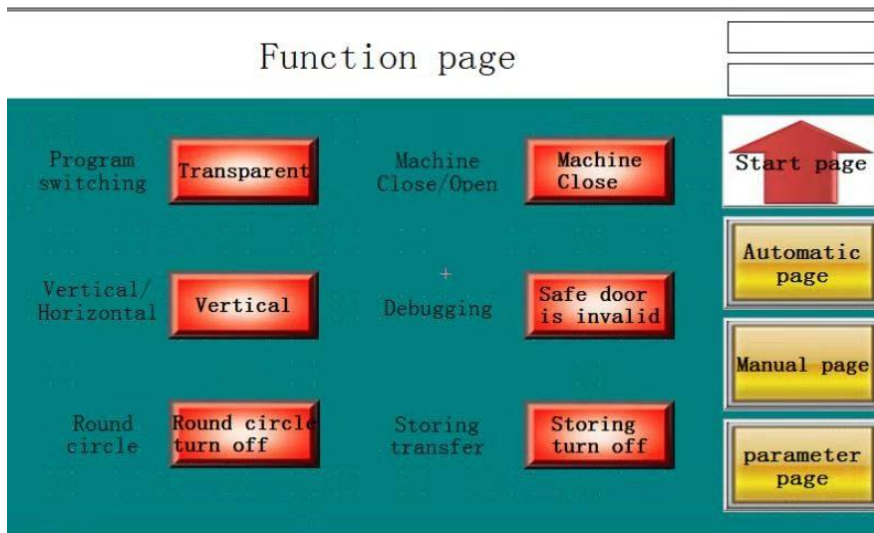
D. Rear conveyor: click "front conveyor" and enter manual operation

Select the parameter page and the submenu appears as shown in Figure 5.5



- A. Sealing time delay: set the time of the film feeding length
- B. Sealing time: the residence time of sealing and cutting film
- C. Film feeding time before: each time of sealing time, the time of film pre-feeding length
- D. Delay pulling time: the time of detect electric eye to see the delayed time of pulling.

Select the function page and the submenu appears as shown in Figure 5.6



- A. Program switching: click it to make switch between "hollow products" and "solid products".
- B. Machine close/open: once click it, the equipment can start automatically.
- C. Vertical / horizontal: click it to make switch between horizontal detection and vertical detection.
- D. Debugging: to switch the safe door between valid and invalid
- E. Connecting conveyor belt: click it to make switch between the start -stop

mode and the continuous mode.

## 2、Function debugging

(1) When the machine is running, switch the operation mode to (STARTUP), check whether the belt is running normally, whether the conveyor surface is in the middle of the wheel, if there is deviation, please refer to the next chapter conveyor belt adjustment, Switch to manual mode.

(2) The width of the package mentioned in this manual is expressed in W, the height is expressed by H, and the length is in L, as shown in Figure 5.1.

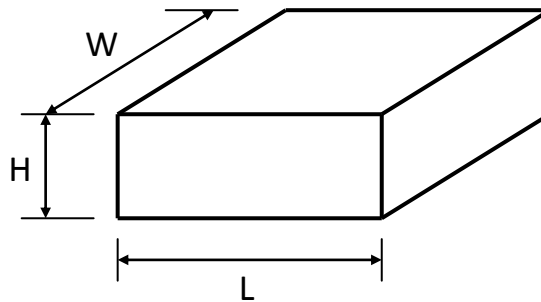


Figure 5.1

(3) shrink film width calculation method: shrink film width = package width W + package high H + 4-6 inches.

(4) tripod and conveyor belt adjustment

- A. Tripod height adjustment: Figure 5.2, turn the hand wheel to adjust the height of the tripod, about (high H + 5-10mm packaging).
- B. Guide rod height adjustment: loosen the screws on the fixed block, you can adjust the height of the guide rod up and down according to the needs of the packaging, adjust and then lock the screws. Adjust the height to  $\frac{1}{2}$  height of the product.
- C. Conveyor belt horizontal position adjustment: hold down the handle, connecting rod jacking-up the locking block, then drag the handle to

adjust the front conveyor belt position. After dragging to the appropriate position, release the handle and lock the block to lock the front conveyor. The adjustment is complete. The distance from the guide rod to the product is  $1 / 3 - 1 / 2$  of the Product height.



Figure 5.2

(5) Load shrink film to the film fixing roller.

A. As shown in Figure 5.3, the shrink film is placed on the film feed roller.

**Note:** that the opening side of the shrink film must face the side of the positioning of rod B.

B. There are 8 positioning-lines on the front film roller, the spacing between

each positioning-lines is 10mm; if the height of the packing product is 20mm or less, the left side of the film should be placed on the rightmost position. If the packing height is more than 20mm, the higher the packaging, the more left should the film be loaded. (Every 10mm higher of the packing product, the film should be moved 5mm in the direction of the positioning rod.)

- C. After adjusting the film position, move the positioning rod on both sides, adjust it to both ends of the film, and then lock the nut to fix.

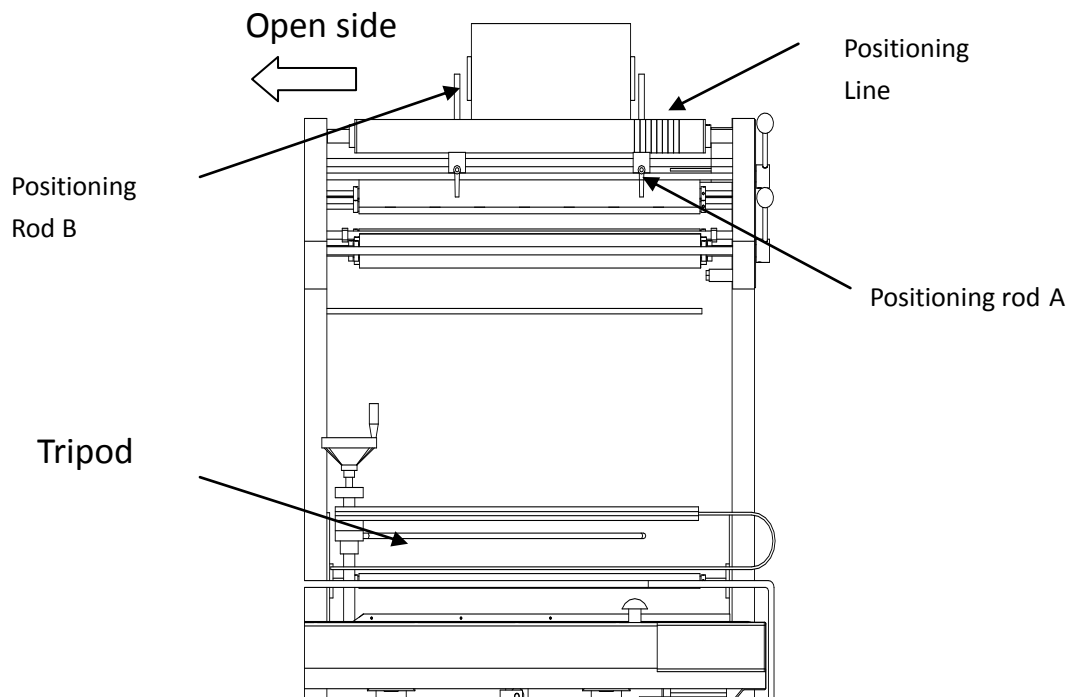





Figure 5.3

(6) Turn on the heating switch to 1 (select ) , and set the front and side seals to the appropriate temperature (select  &  . (See Table 5.2 for temperature adjustment)

Film	Needed Temperature	Film	Needed Temperature
PE Film	200°C~240°C	POF	180°C~220°C



## (7) Method for loading the film (Figure 5.4)

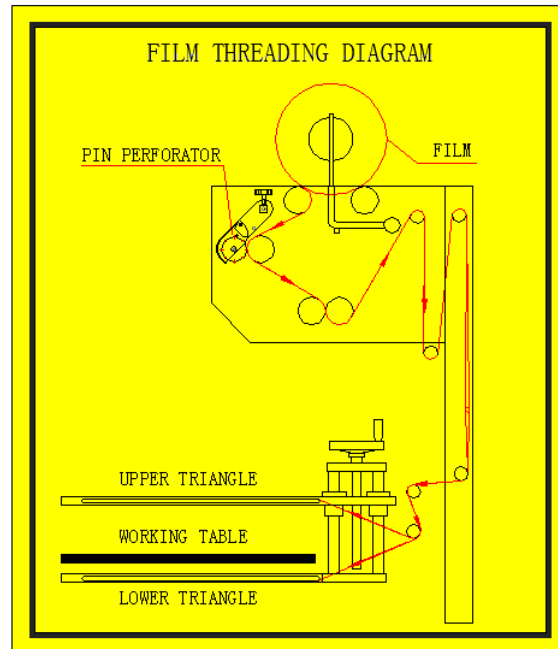
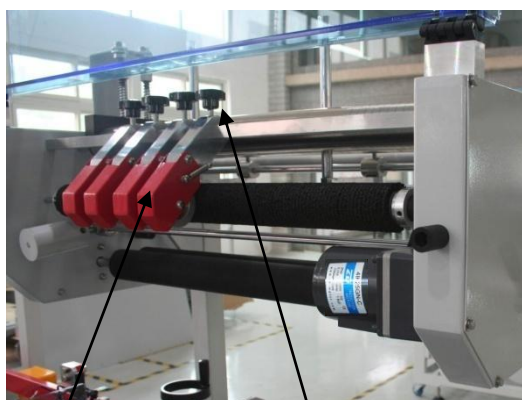


Figure5.4

## (8) Film Threading:

A.As shown in the right figure of Figure 5.5, pull the handle rearward so that the two rubber wheels are separated and the roller device is turned up and then spread through the film as in the diagram of 5.4, then reset the handle and pin roller. Depending on the packaging, the number of needle(pin) roller is different. Loosen the fixing hand-wheel to slide the roller device and increase or decrease the number of needle roller as needed.



Needle Roller

Fixing  
HandwheelHand  
Wheel

Figure5.5

B. After threading the shrink film to the rollers, then lead to the upper and lower triangular plate. The upper and lower triangular plates are shown in Figure 5.6.

C. Finally, pull the shrink film to the middle of clamp-roller and pull-material -belt to clamp it.

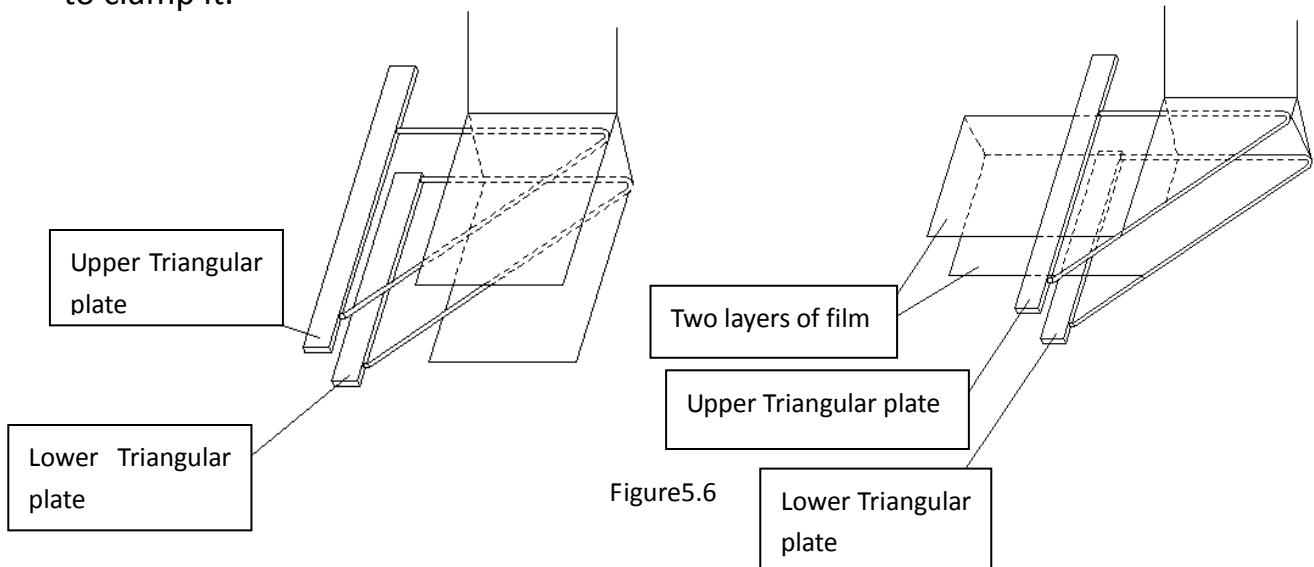




Figure5.6

(10) When the temperature reaches the default degree, press the manual feeding film switch (  ) once, then the pull device will pull the shrink film, if the film is not pulled, please check the film is placed correctly or not.

(11) If the above action is normal, press the manual sealing switch (  ) once, at that time the sealing knife will carry out the sealing action, and complete the sealing and cutting of the shrink film.

(12) Repeat the operation several times as described in (10, 11), until the shrink film scrap can coiled on the scrap-winding roller for 2-3 turns, then the sealing machine can be operated automatically.

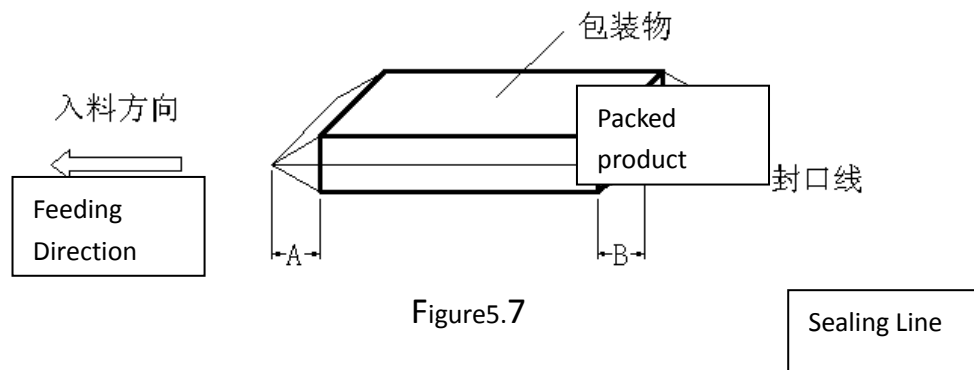
(13) Switch the machine to automatic mode (press STARTUP key) and place the product to be packed on the conveyor.

**Note:** Both hands should be completely away from the conveyor surface to avoid



danger.

(14) adjust the seal to the best condition

A. Adjust the pre-sending (feeding) film: pre-feeding film length is best  $1 / 3H$ , then the best shrink effect. (Figure 5.7 size A)



Adjustment method:

- a. When the length of the reserved film is too long, the distance between the electric eye and the sealing knife L1 (Fig. 5.8) can be adjusted closer.
  - b. If the L1 length is too short, you can adjust the pre-feeding film time to change the length of the film (select  ) , set the longer time, the longer the length of the pre-feeding film.
- B. Adjust the extension of the sealing method: to extend the length of the seal according to the electric eye pattern. If the eye contact mode is in standard mode, extend sealing length would be the size of Figure 5.7 B; if the electric eye sensor mode is of view-compensation-mode, extended seal length would be the size of  $(B + L)$ . However, regardless of which mode adopted adjust the size of B to  $1 / 2H$  can get the best shrink performance. (The extend length of the seal is related to the way and principle of the electric eye sensing, please refer to P13.)

Adjustment method: choose the extend the sealing time switch (🕒 📏), the time up and down, longer the time, longer the length of the extend seal until get the appropriate length.

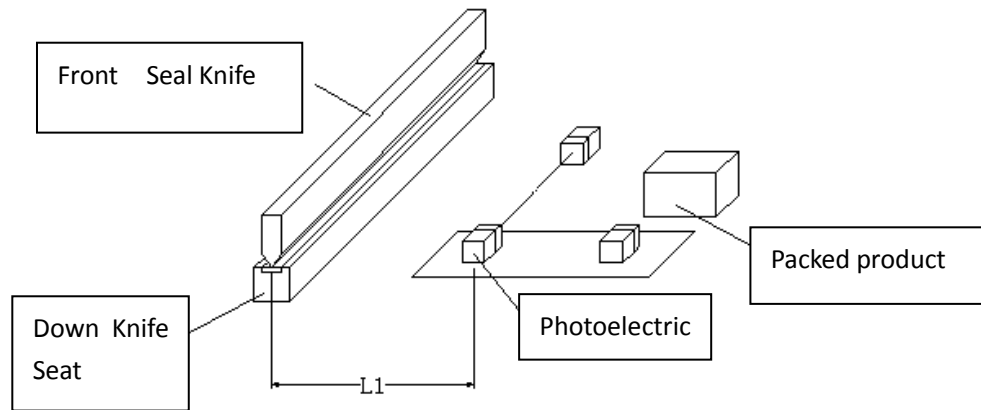


Figure5.8

C. Different shrink film requires a different sealing time, generally about 0.3-0.6 seconds, depending on the sealing situation. Sealing lines should be cut off and no holes, if the cutting off is uneven, may caused by temperature overheating, could adjust the sealing time or sealing temperature. (🕒 📏)

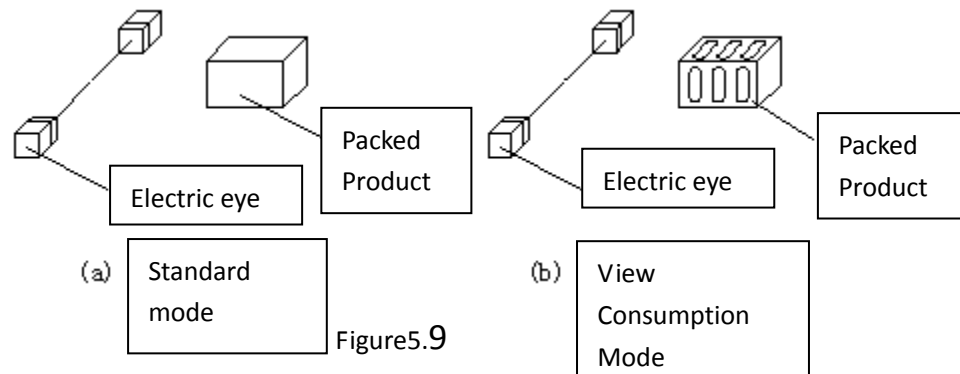
(15) If the sealing line is satisfied, the sealing machine debugging is completed.

2, the machine features

- (1) The machine has a safety protection function and alarm device.
- (2) sealing system can carry out the sealing action continuously.
- (3) simple operation and can be used with different sizes of packaging products.
- (4) The machine adopts PLC and electric eye control.
- (5) electric eye devices including the horizontal eye (PH1, PH2) and vertical electric eye (PH3) two kinds. General products packaging use the horizontal electric eye, thin products packaging use vertical electric eye. In addition,

the horizontal mode has an equal material function, which is controlled by the feed photoelectric (PH1). The vertical mode does not have this function.

(6) According to the physical characteristics of packaging items, select the electric eye sensor mode, there are two kinds of modes, the standard mode and view compensation mode (Figure 5.9).



A. When the packing products is solid and of regular shape, adopt standard mode (Figure 5.9 (a)). In this mode, the electric eye captures the last point of the package, and then sends the instruction to the PLC, which controls the delay relay to start the timing. (Principle: such pack product will shield the electric eye radio, when the last point through, the electric eye restore the shot. Using this transaction of electrical signal to control the relay.

B. When the packaging items are transparent or of irregular shape (especially the objects have holes, can be light), should adopt the view compensation mode (Figure 5.9 (b)). In addition, a plurality of products are packaged side by side, and there is a gap between the products that could allow the light to pass through, at that time the view compensation mode should be adopted too. In this mode, the electric eye captures the first point of the product, and then sends the instruction to the PLC, and controls the delay relay to start timing. (Because before such product complete through the electric area, the electric eyes already restore shot, for there are gap between the products ,or for the

irregular shape. At this condition, the standard mode is not effective. And should adopt view compensation mode, which has longer delay sealing time.)

(7) The machine can be used for the POF and PE shrink film, if you want to use PE film, please use the PE special knife, and affixed with heat-resistant tape, so that the upper sealing knife will not be in direct contact with PE film.

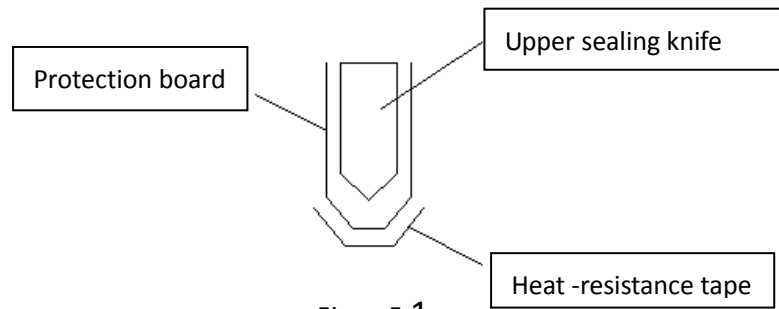


Figure5.1

### 3, normal operation

#### (1) Start procedures

A. Turn on the power. ( ⚡ )

B. Turn on the heater and let the temperature rise to the default. (  )

C. Switch the operating mode to automatic. (Select STARTUP)

D. Put the pack product into the conveyor, sealing action finish automatically.

A The machine is equipped with two emergency stop device, if any abnormal conditions found, press this key, the sealing machine turn into the shutdown state, at that time, the power indicator light from the stability to flash. After the abnormal situation settled, release this Key, the machine will be able to run normally., the power indicator light return steady light. (Button EMERGENCY)

#### (2) shutdown procedures:


A. First turn off the heater, so that the electric tube cooling, but this time there is still more than the heating tube temperature, pay attention to avoid burns.


(Optional)

B. Then turn off the main power OFF. (Optional)

C. To close the air pressure, pay attention to its sealing and cutting part will be due to loss of wind pressure and down, this time should not be close to the machine, so as to avoid danger. But need to first open the air pressure source switch.

(2) shutdown procedures:

A. First turn off the heater, so that the electric tube cooling, but this time heating tube still with high temperature, pay attention to avoid burns. (select  )

B. Then turn off the main power OFF. (select  )

C. To close the air pressure, pay attention to its sealing and cutting part will go down due to loss of air pressure, this time should not be close to the machine, to avoid any danger. But when start the machine should open the air source switch in advance.

## Sixth, mechanical adjustment

Before ex-mill, the machine has been carefully adjusted, if not necessary, please do not arbitrarily modify it, but the professional operators can make adjustment according to different packing products.

### 1, shrink film to feeding part:

This part adopts the limit switch and the eccentric trigger wheel structure. When the swing arm is in the position as shown in Figure 6.1A, the small diameter part of the trigger wheel is slightly in contact with the limit switch, and the feed motor is not running. When the swing arm is in the position as shown in Figure 6.1B, The trigger wheel turns through a certain angle and top the limit switch, the film feed motor starts running. When adjusting the trigger wheel, make the small diameter end contact with the limit switch.

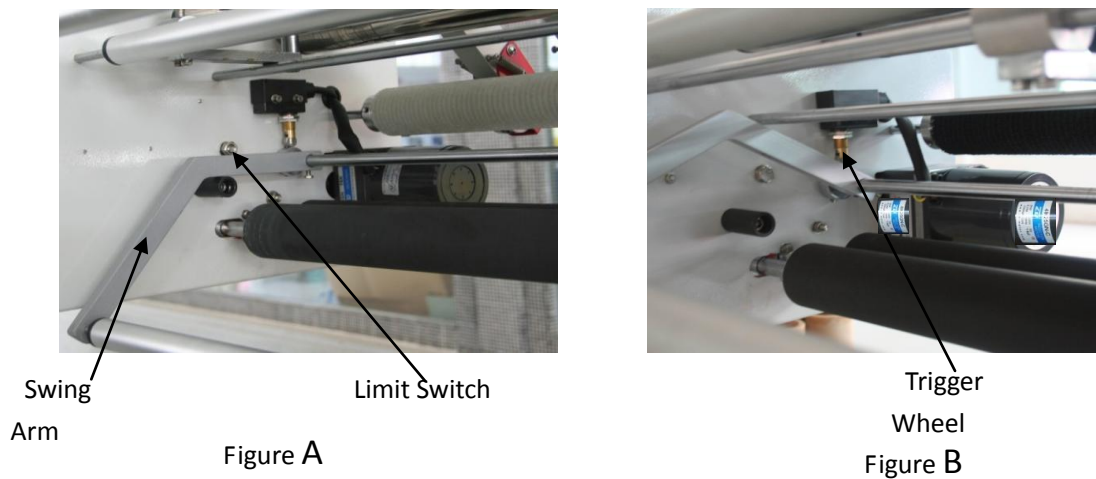


Figure 6.1

### 2, shrink film feeding parallel adjustment. (Figure 6.2)

- (1) Loosen the fixed nut and adjust the scroll wheel position up and down.
- (2) the rolling wheel fixed at about 1 / 2H height position.
- (3) If there is irregular beating in the transport, it may be necessary to adjust the



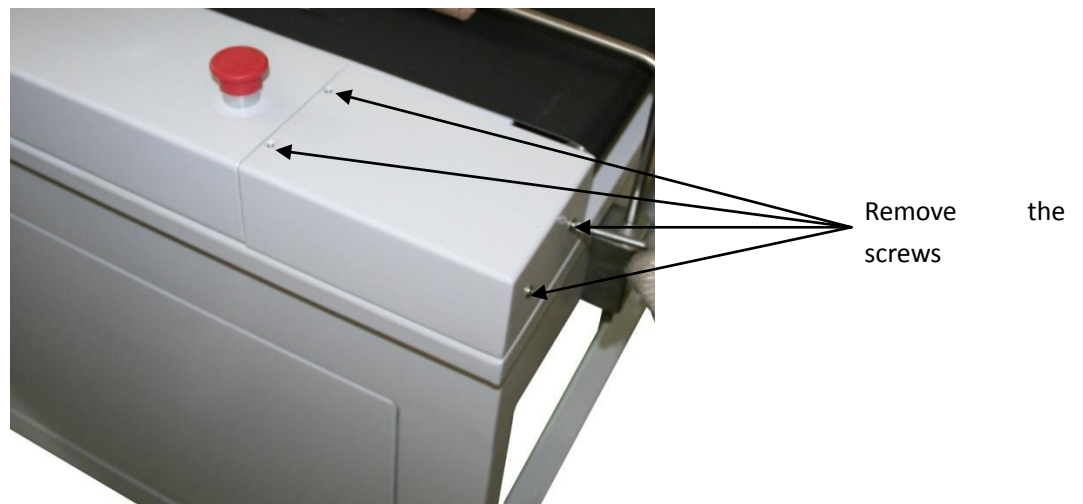
inclination according to the actual situation to stabilize the transportation.



Figure 6.2

3, the front conveyor belt parallelism adjustment: (Figure 6.3A)

(1) Remove the baffle (both sides) of the front conveyor adjustment device.



(2) When the belt is too loose, loosen the screw 1, then turn the screw 2 clockwise, push the rolling axle to the right, and gently press the belt. Fix the screw 1 to the appropriate position. When the belt is too tight, turn the screws on both sides of the machine counterclockwise to adjust the rolling shaft to the belt to the desired tightness.

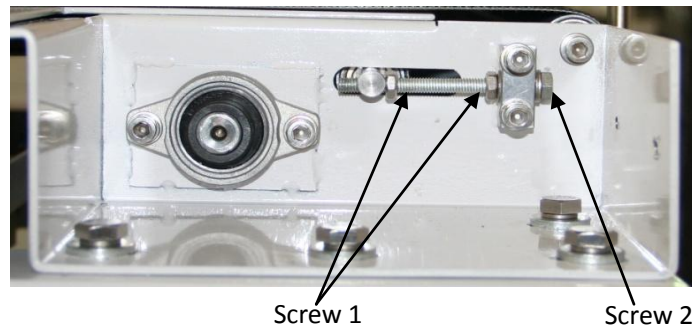


Figure 6.3A

(3) When the conveyor belt is biased toward the side of the screw, gently rotate the screw 2 clockwise to increase the pressure of the rolling shaft and the belt, or turn the screw 2 on the other side of the machine counterclockwise to reduce the pressure of the rolling shaft and the belt. **Note:** After adjusting the screws, let the machine run for about ten minutes. If the conveyor belt is not offset, the adjustment is completed.

(4)

4, Rear conveyor belt part: the same, the rear conveyor belt adjustment method can refer to the adjustment of the front conveyor belt. Screw 4 adjustment direction is opposite to the direction of the front delivery adjustment. (As shown in Figure 6.3B)

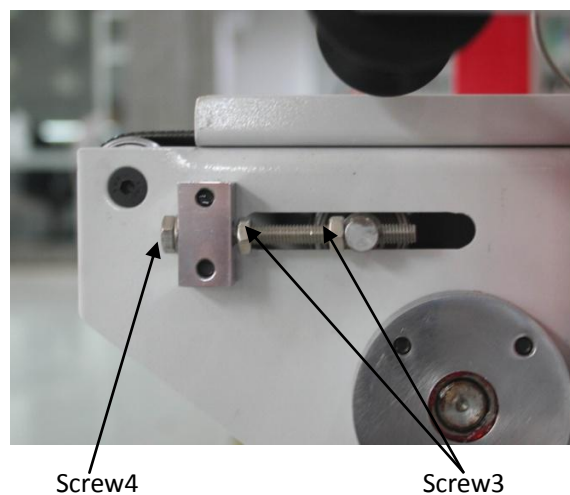


Figure6.3

5, shrink film sealing part: adjust the sealing device' s fitness, pay attention to adjust with the power turn off. And the air pressure source turn off and the electric heat tube cooling down . (As shown in Figure 6.4)

Adjustment method: put a piece of white paper between the sealing knife and sealing seat, select the manual mode for sealing, and then check the sealing knife pressure on the white paper is of average strength or not. Such as the discovery of the inaverage, to relax the knife up and down the fixed nut, adjust to the average speed, then lock the fixed nut, if the knife is damaged, you need to replace the heat seal knife, and then adjust as the above method.

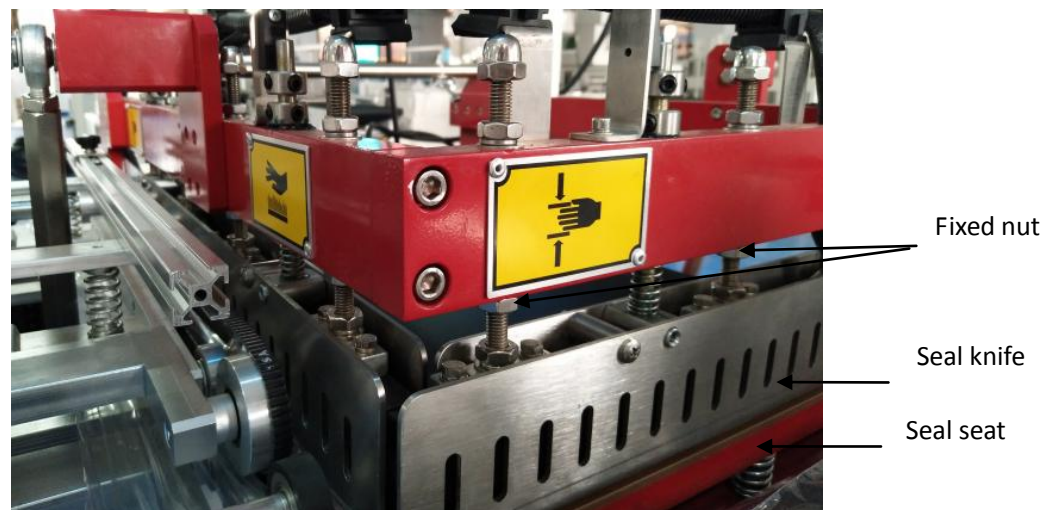


Figure6.4

6, sealing protection device part:

(1) This is the protection device designed in the sealing area of the machine, which can effectively prevent the sealing knife from accidentally cut on the packing products and protect the sealing knife and the packing product. If there is no such device, when the sealing knife down for sealing action, and this time the packing product just staying at the sealing area, the sealing knife cut on the packing product, resulting in sealing knife and packing

products damage.

(2) functional test: take a pack product or a book place under the sealing knife are, press the start sealing key, when the seal knife touch the packing products, will immediately rise, and then alarm, the machine stops running. If this function does not work, adjust the position of the cylinder magnetic switch or adjust the distance between the trigger wheel and the proximity switch.

(See the following principle)

(3) working principle:

A. As shown in Figure 6.5, the cylinder is driven by the connecting mechanism to promote the sealing device to carry out the scissor-type sealing action . The cylinder has a sealing knife to drop the magnetic switch PS2. When the piston of the cylinder reaches the stroke position where the PS2 is located, a safety sealing signal is generated. Allow the piston to continue to run to the cylinder bottom point to complete the sealing action. The sealing time is over and the piston returns.

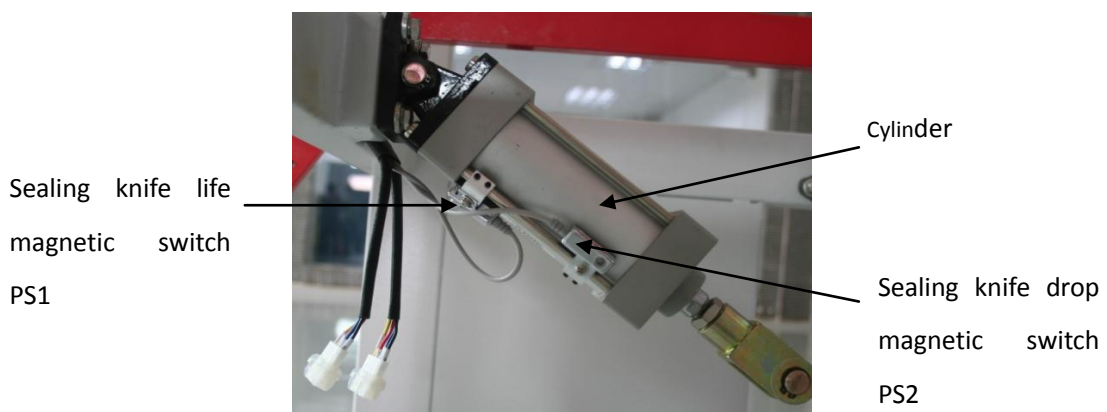


Figure 6.5

B. As shown in Figure 6.6, the proximity switch is fixed to the knife holder.

The trigger wheel is fixed between the knife holder and the guard plate and can move up and down along the positioning hole of the upper knife holder.

When the guard plate is subjected to the upward force, the trigger wheel triggered and moves to a certain height and is detected by the proximity switch, then the proximity switch will issue an abnormal sealing signal, control the cylinder immediately return to prevent the seal knife accidentally cut the packing product.



Figure6.6

- C. Under normal circumstances, the safety seal priority to the abnormal sealing signal, abnormal sealing signal does not work. But when sealing if there is packing product in the sealing area, the guard plate pressure to the packing product and the trigger wheel has triggered an abnormal sealing signal in the product' s height (trigger principle refer to the above point b), and priority to the set security sealing signal. So before the sealing signal send, the cylinder has led the sealing device bounce, and issued an alarm to prevent the sealing knife cut on the packing product and cause damage.
- D. Magnetic switch on the cylinder position adjustment: adjust each time to 2mm unit, the magnetic switch position is more backward, then the security seal signal triggered later, on the contrary, the earlier. **Note:** For non-professionals, please do not adjust privately.

- E. Trigger wheel and proximity switch to adjust the distance: Loosen the screws on the trigger wheel, adjust the height of the trigger wheel up and down, the shorter the sensing distance, the faster the trigger time, and vice versa. **Note:** For non-professionals, please do not adjust yourself.
- F. In addition, if there is obstruction between the trigger wheel and the proximity switch , the device will lose the role of protection.

7, the scrap winding part: the removal of waste film(scrap).

(1) Loose and remove the nut firstly, and then remove the fixed disk. After removing the all the scraps (waste film), install the disk and lock the nut (see Figure 6.7).

(2) When the winding action is skid, the five-star handle can be tightened, or remove the external fixed disk, fasten the middle of the SOCKET SET SCREWS to increase the friction between the winding disk and the driven part, to eliminate slip.

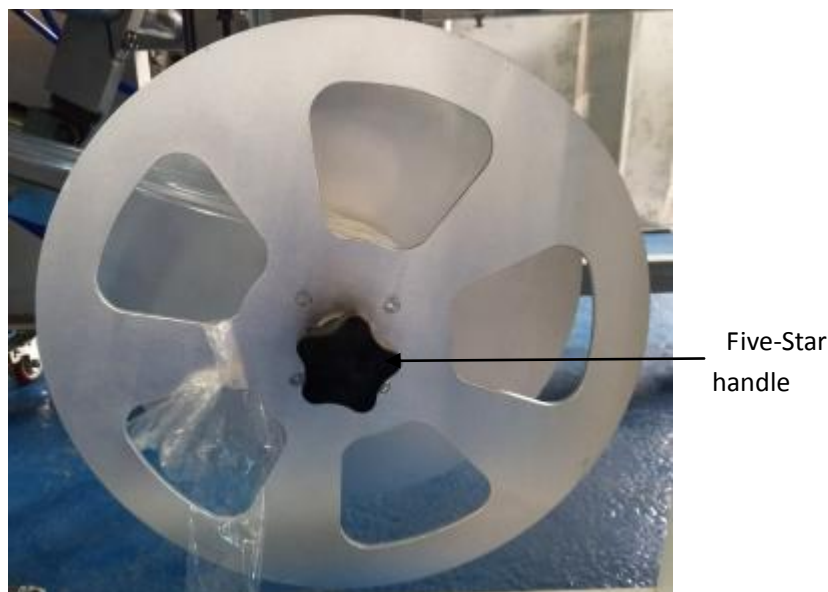


Figure6.7

## Seven, mechanical maintenance

Regular maintenance is the best way to maintain the mechanical life , the following is the general maintenance projects of the machine. In addition to the operators and professional maintenance person, the rest of the staff are prohibited to do the maintenance of the machinery. Make sure the power cut off before maintenance to avoid danger.

1, the pressure adjustment combination maintenance:

Pneumatic control valve maintenance: When the water tank above  $\frac{2}{3}$  of the water level, the tank should be discharged of water.

Discharge Method: Close the intake valve, and then press the bottom of the filter drain switch, you can discharge the water (Figure 7.1)

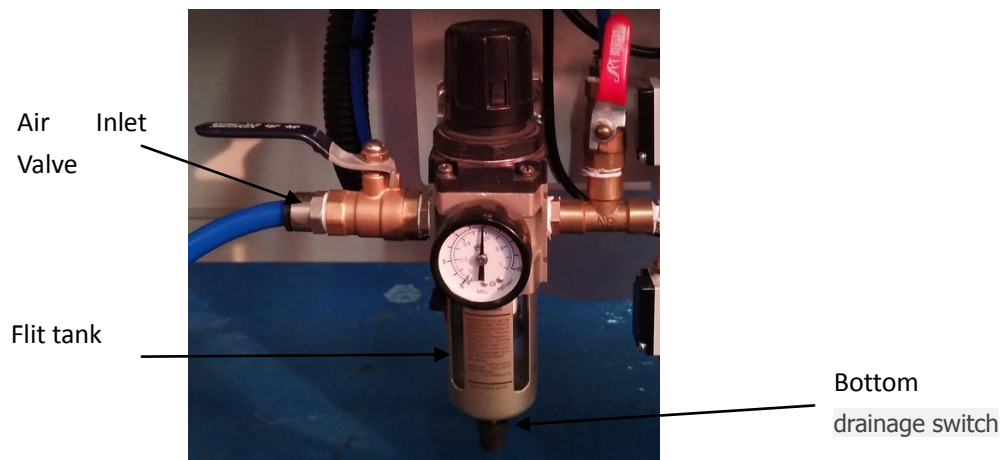


Figure7.1

- 2, Everyday before working, you must use the air pressure blowing the conveyor to keep it clean.
- 3, When there is film stick to the sealing knife, please use a cotton towel gently remove the film (when the knife still warm). Prohibit the use of metal for scrubbing, because the metal friction will damage the protective film on the knife, loss the sealing knife function.
- 4, Scrap winding part maintenance:
  - (1) Maintenance once a month.
  - (2) Remove the fix nut and remove the spring and the collection wheel.
  - (3) Apply butter to the contact surface of the shaft and the winding wheel to keep the collection wheel running smoothly.
  - (4) Install back the collection wheel and spring and fix back the nut.
- 5, chain and sprocket maintenance: about once every three months maintenance, first remove the shield, then apply butter to the chain and sprocket. Install the cover after maintenance.
- 6, bearing and bearing block maintenance: about once every 3 months, the machine parts which are equipped with bearing and bearing block should apply hydraulic oil to the contact gap between the spindle and bearing, to keep the lubrication.
- 7, check if the cutter fixed screw is locked, if loose, please lock tight. (Once a month)
- 8, after a period of running, the machine belt will be loose slightly. When the belt can not be driven tightly, please adjust the belt tightness.
- 9, if the Teflon on the knife come off , which will make the film easily attach to the knife, the knife must be re-Teflon treatment or change the new seal knife.
- 10, check the Teflon tape cover on the sealing silicone strip, if it' s damaged,



need to be replaced.

11, replace the electric tube: When the electric tube burned or damaged and can not be heated, you need to replace the electric tube. **Note:** that the replacement of the electric heating tube must first determine the new heating tube voltage and wattage is appropriate.

Replacement steps:

- (1) Turn off the power and wait for the heating tube to cool.
- (2) Remove the electric tube wires located in the wiring box.
- (3) Loose the fixing screws, remove the electric tube, and then install the new heating tube.
- (4) lock the fixing screw, connect the heating tube line and lock the wiring box.

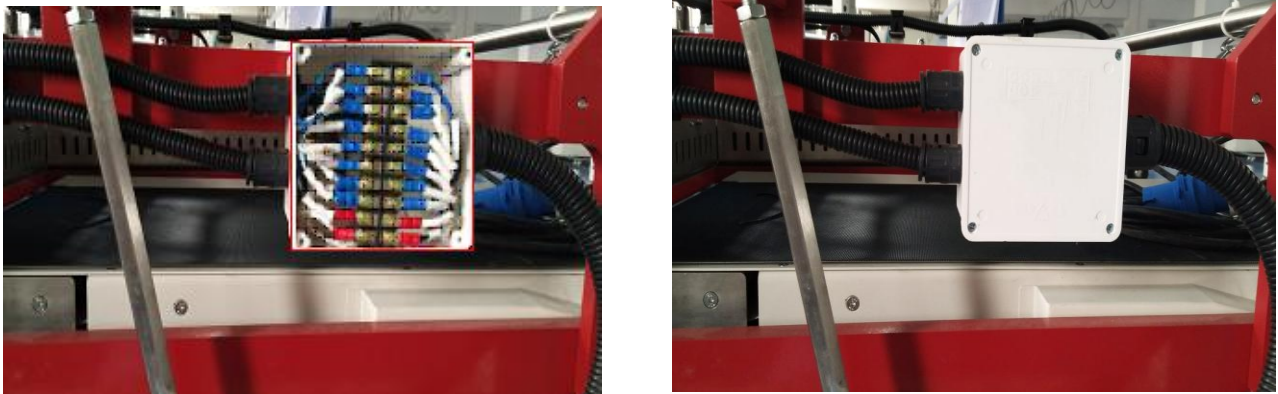


Figure7.2

12, the replacement of heat-resistant rubber:

- (1) turn off the power, until the electric tube cooling, tear off the heat-resistant tape (Figure 7.3).
- (2) Remove the heat-resistant rubber, replace the new one and make it match with the knife seat concave side, to ensure its surface is flat, and then remove the excess part.
- (3) affixed the heat-resistant tape, pay attention to the tape must be flat and

should not have any wrinkle.

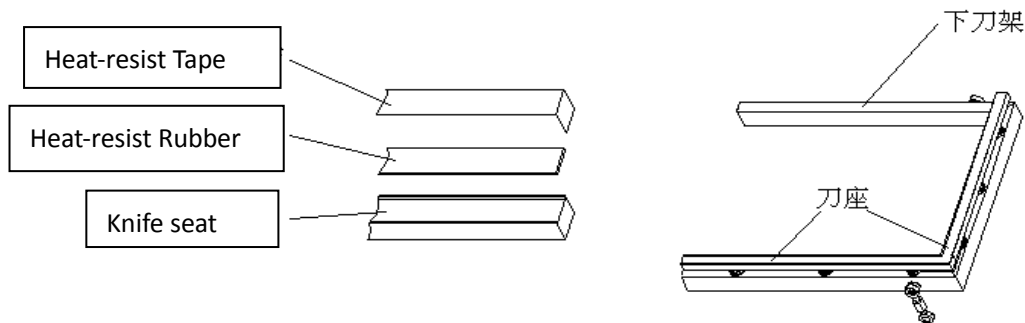


Figure7.3

### 13, sealing knife dis-assembly and maintenance

- (1) Remove the thermocouple from the heating unit, loose the fastening screws on the shield, and remove the shield.
- (2) Loosen the nut as shown in Figure 7.4 and remove the knife from the upper knife holder.
- (3) Loose the screws on the connection block and remove the connection block.
- (4) Remove the heating sub-assembly.
- (5) clean the sealing knife; if the sealing knife wear and can not work anymore, then replace the new sealing knife.
- (6) to complete the above steps and then install all parts back.



Figure7.4

## Eight, troubleshooting

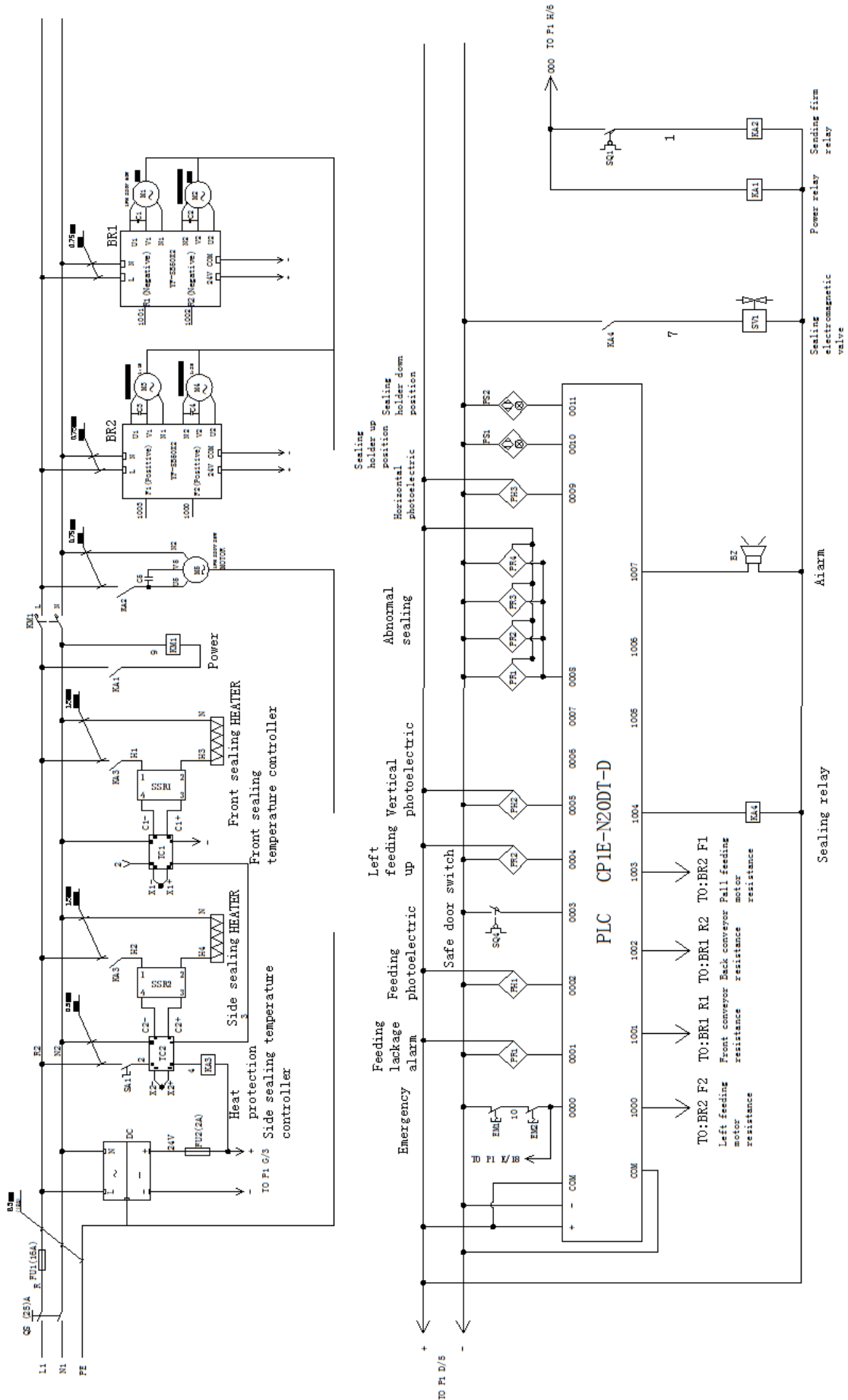
### 1、 troubles shooting instruction

Items	Situation	Cause	Solution
1	Machine has no electric	Power not connected	Connect machine to
		Power Switch close	Start the power switch
		Power switch burned-out	Replace new switch
		Fuse burned-out	Replace new fuse
2	Machine has electric, but machine doesn't work	Emergency switch down	Release the emergency switch
		( PLC ) doesn't work	check ( PLC ) input power
		PLC burned-out	Replace new PLC
		Emergency switch contact burned-out	Replace new emergency switch
3	Heater doesn't heat	Heater Switch turn off	Turn on the heater switch
		Default temperature is too low	Adjust the default temperature higher
		Heater switch contact burned-out	Replace the heater switch
		( TC ) Temperature controller burned-out	Replace TC
		( SSR ) solid state relay burned-out	Replace ( SSR )
		Heating tube broken	Replace heating tube
		Heat protective relay(R3) broken	Replace R3
4	Temperature can't be controller	( SSR ) broken	Replace the( ( SSR )
		Thermocouple loose or broken	Tighten the thermocouple or replace it.
		( TC ) burned-out	Replace TC
		Heat protective relay(R3) broken	Replace R3
5	Feeding-film motor doesn't run	Feeding limit switch broken	Replace feeding limit switch
		Feeding replay broken	Replace relay
		Feeding motor over-load or over-heat	Restart the feeding motor
		Feeding motor broken	Replace motor
6	Front convey motor doesn't work	PLC[1001] contact damaged	Replace contact[1001], or change PLC program or change PLC
		Front convey motor relay broken	Replace front convey motor relay broken

		Front convey motor over-load or over-heat	Restart the front convey motor over-load or over-heat
		Front motor over-load or over-heat broken	Replace front convey motor over-load or over-heat
7	Rear conveyor motor doesn't work	PLC[1002] contact damaged	Replace contact[1002] or change PLC program or change PLC
		Rear convey motor relay broken	Replace rear convey motor relay broken
		Rear convey motor over-load or over-heat	Restart the rear convey motor over-load or over-heat
		Rear motor over-load or over-heat	Replace rear convey motor over-load or over-heat
8	Pulling film motor doesn't work	PLC[1003]contact damaged	Replace contact[1003] or change PLC program or change PLC
		Scraps motor relay broken	Replace the scraps motor relay
		Manual feeding film switch broken	Replace the Manual feeding film switch
		Scraps motor over-load or over-heat	Restart the scrap motor
		Scraps motor broken	Replace the scraps motor
9	Sealing device doesn't work 封	PLC[1004]contact damaged	Replace contact[1004] or change PLC program or change PLC
		Sealing solenoid valve broken	Replace solenoid valve broken
		Manual sealing button broken	Replace manual sealing button broken
		Sealing relayR5 broken	Replace R5
10	Sealing buzzer alarming	The sealing micro switch stuck	Reset the stuck position
		Knife shield press on the pack product	Take out the pack product and press manual sealing button.
		Sealing stop suddenly and the buzzer alarming	Lower the trigger sleeve on the cutter seat slightly to the proper position, or adjust (move forwarder)the sensor on the cylinder to the appropriate position.
11	After sealing, the Film didn't cut off, or sealing is not fastness or sealing line cracking.	Sealing time too short	Adjust sealing time, add 0.1second every time.
		Lifting sealing seat didn't seal tightly	Adjust the sealing seat
		Teflon tape damaged	Replace Teflon tape
		Down seat rubber damaged	Replace rubber
		Knife shield didn't seal tight	Adjust the shield

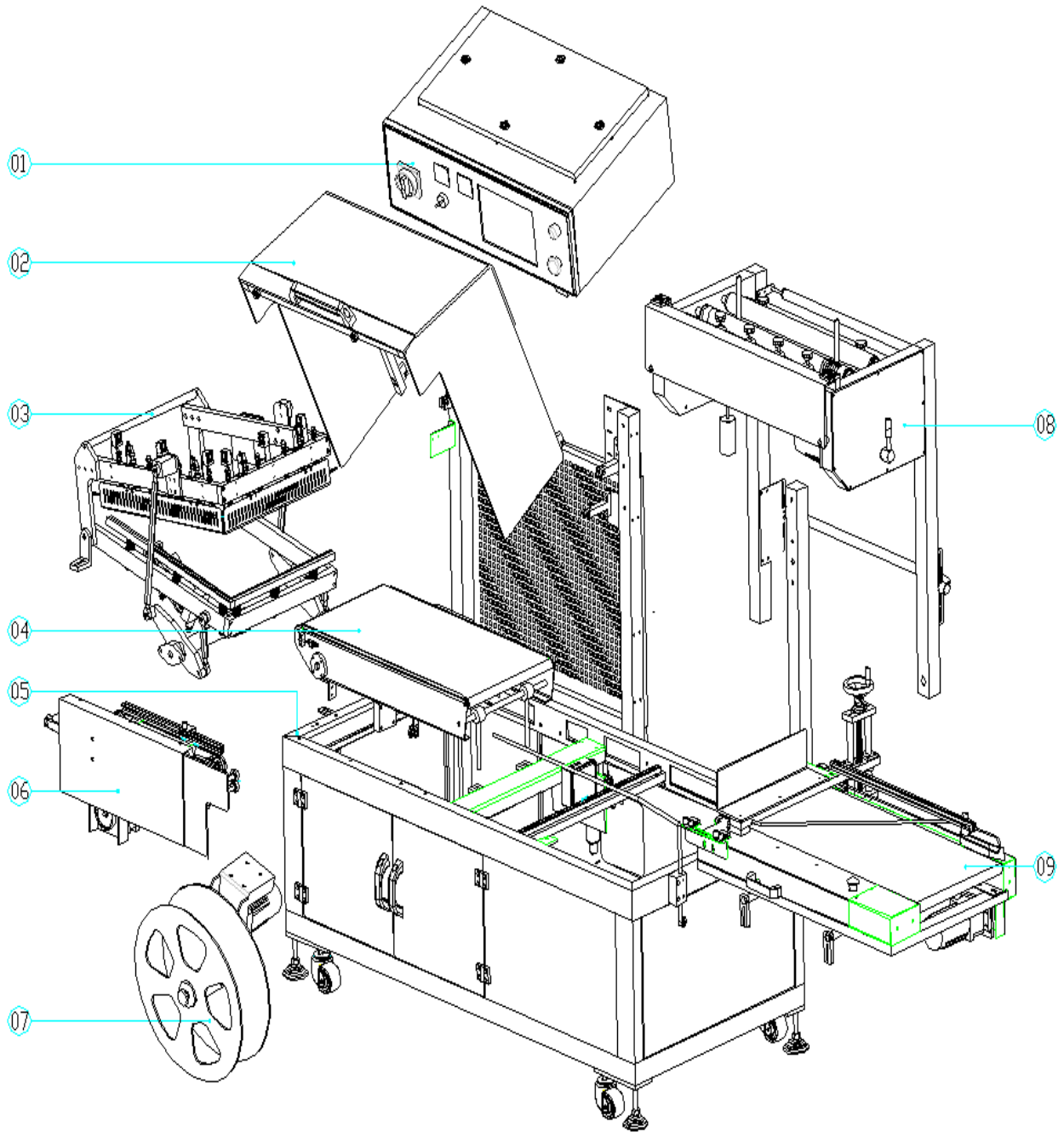
		Scraps attached on the knife, or knife broken	Clean the scraps or replace knife
12	Scraps pull film keep working 转	Electric eyes didn't line-up or broken	Loose the eye's screws and make it line-up. until the eye light up and then tight the screws. Or replace the electric eye.
13	Side knife press on pack product	The product was not driven by the conveyor guide edge.	Place the product to the guide edge correctly.
14	Front knife press on the pack product	Delay sealing time not enough, the machine start sealing when the product still not completely through the seal seat.	Increase the time of seal timer
		Pack product is transparent or has gap	Refer to view compensation operation
15	Front conveyor deviation run	The front driving roller unstable	Adjust the driving roller till the conveyor running normally.
16	Pull film not smooth	Wrong placement of film	Adjust the position, refer to 5.1
17	Pull film doesn't run	Scraps run into the pull roller	Clean scraps
18	Film upper or down layer offset	Balancing pole wrongly adjusted	Adjust balancing pole
		Wrong stability of the film	Replace film
19	Scraps winding roller too tight or too loose	Springs on the winding roller too tight or too loose	Adjust the outside screw of the winding roller spring.

# Nine-Circuit Diagram

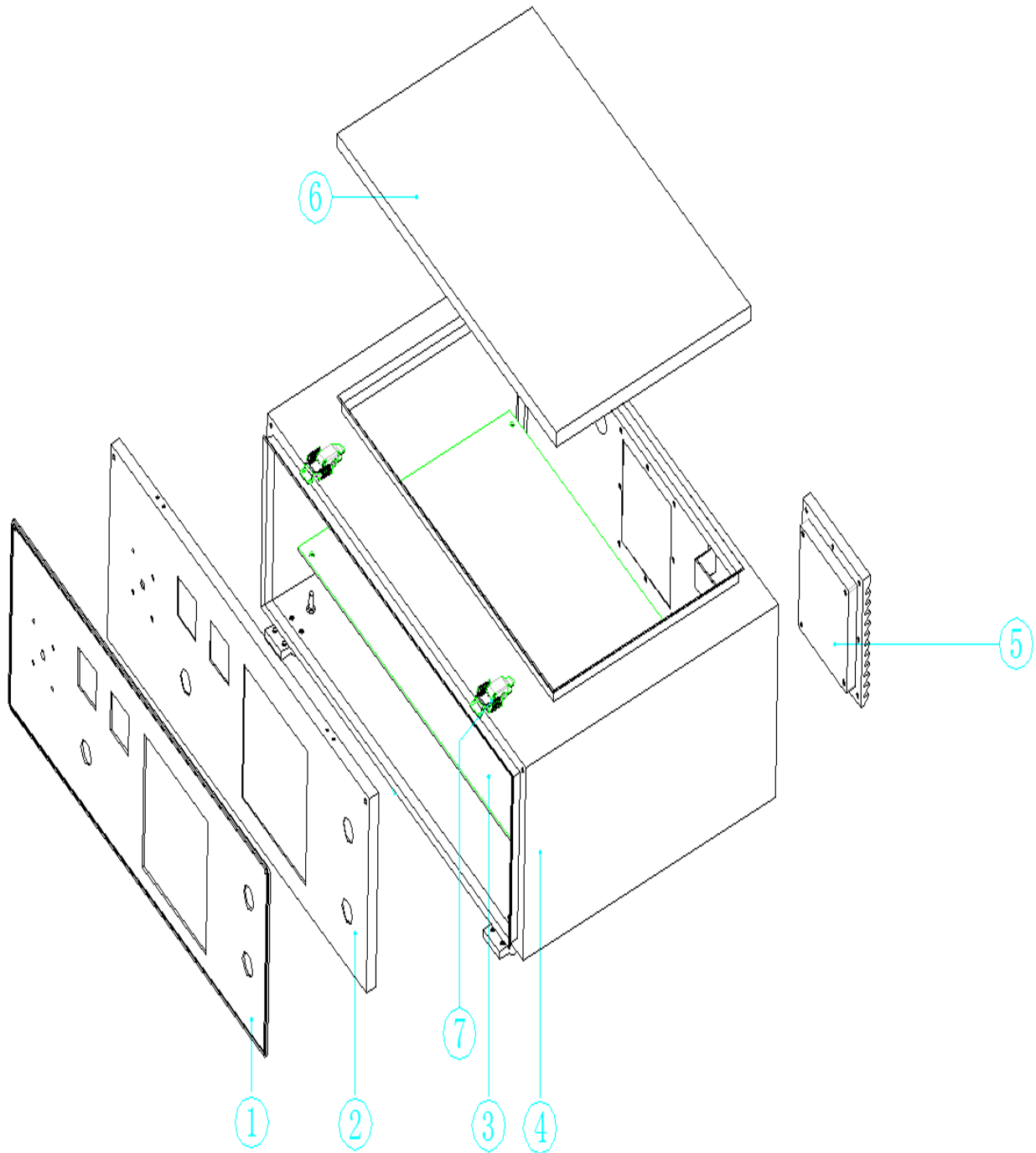


# Ten-The explosion figure

## 1、 Overall part diagram

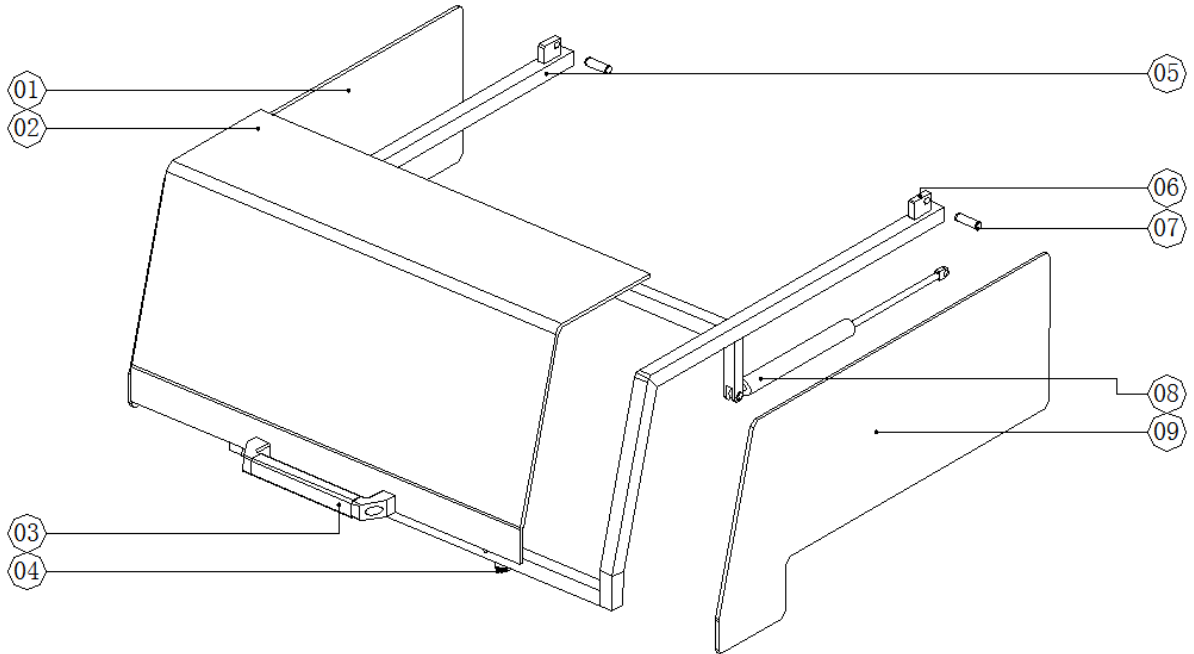


## 2、Control electric box components

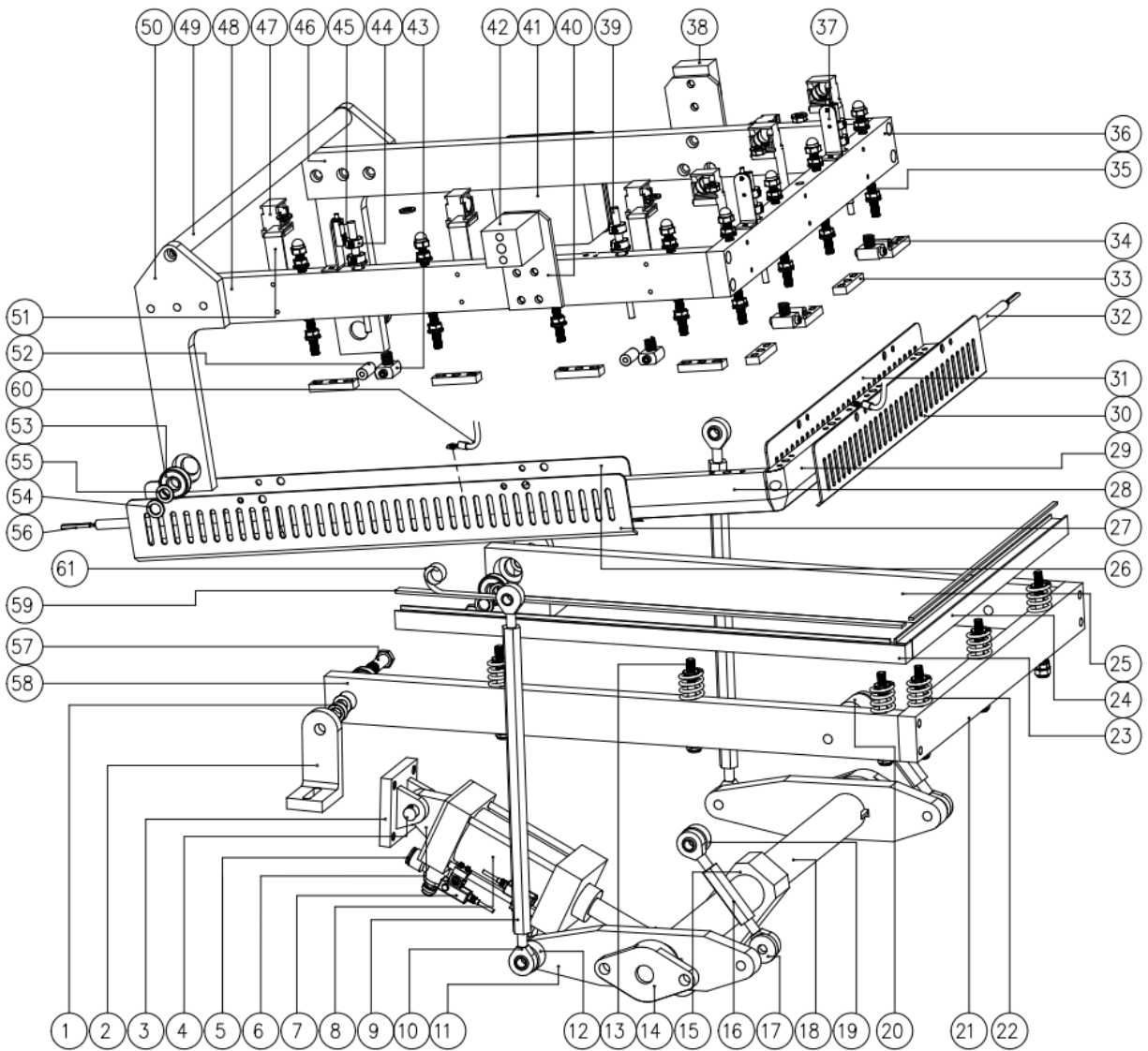




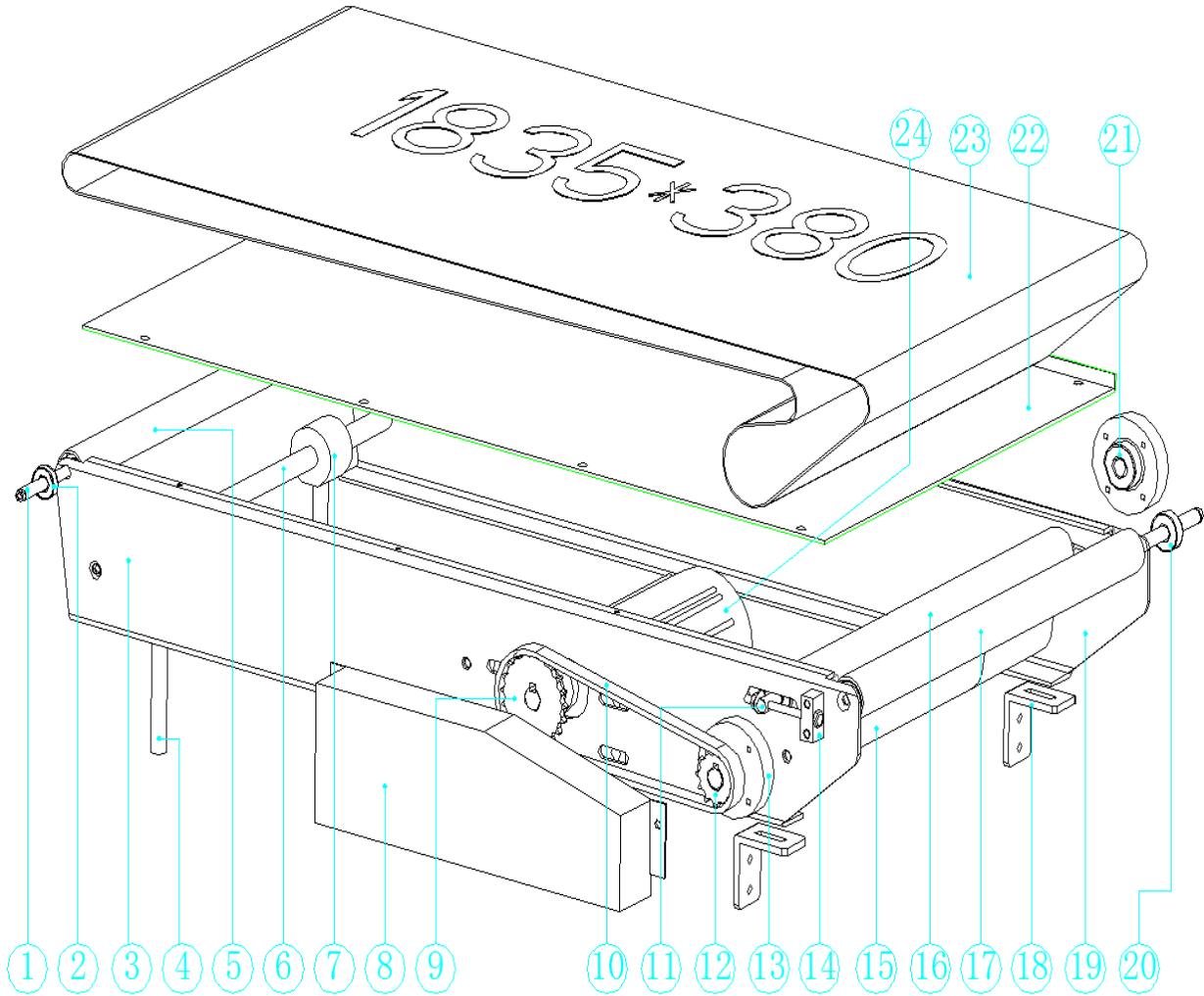
### 3、 Safe cover components



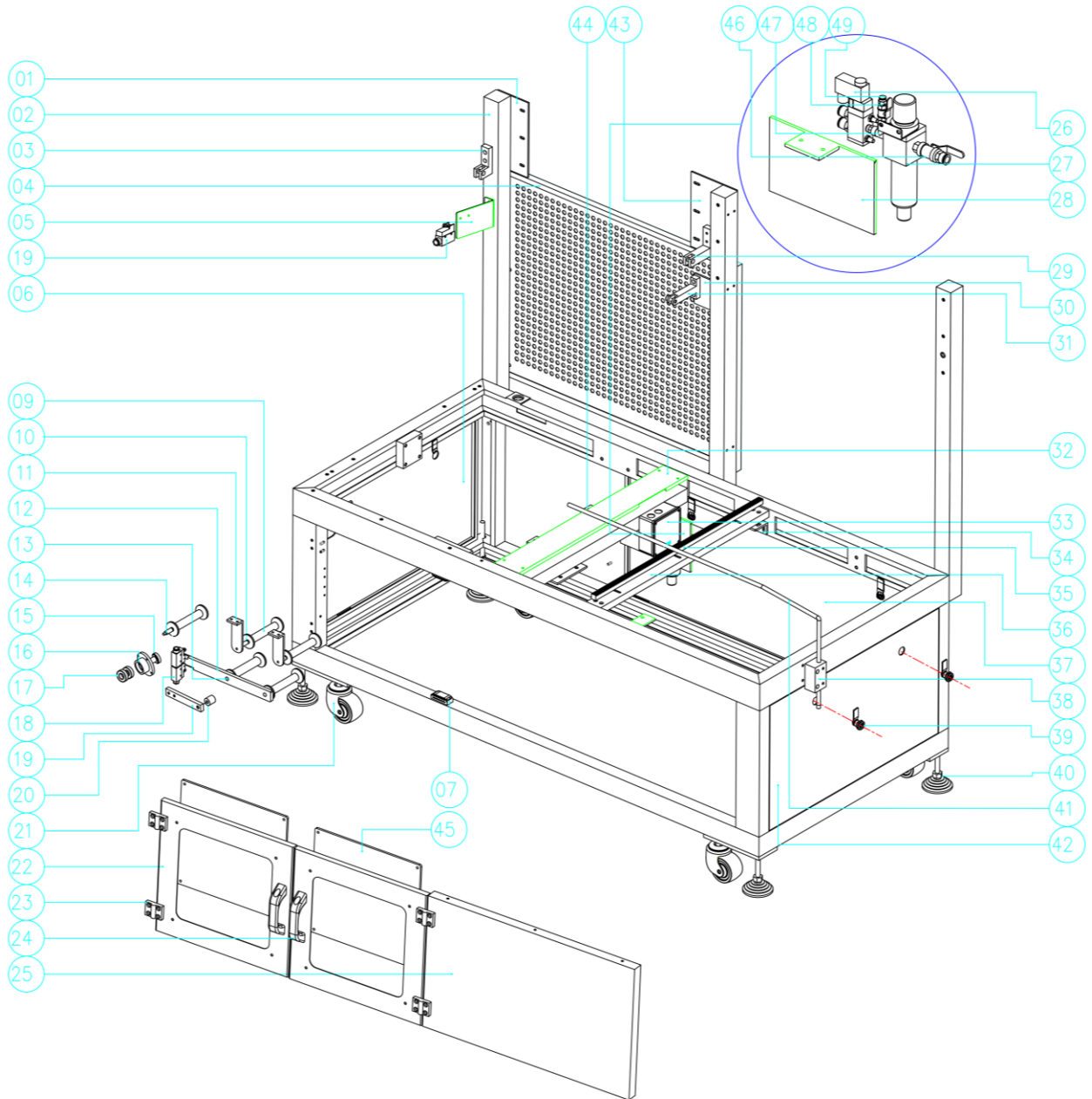
## 4、 Sealing components



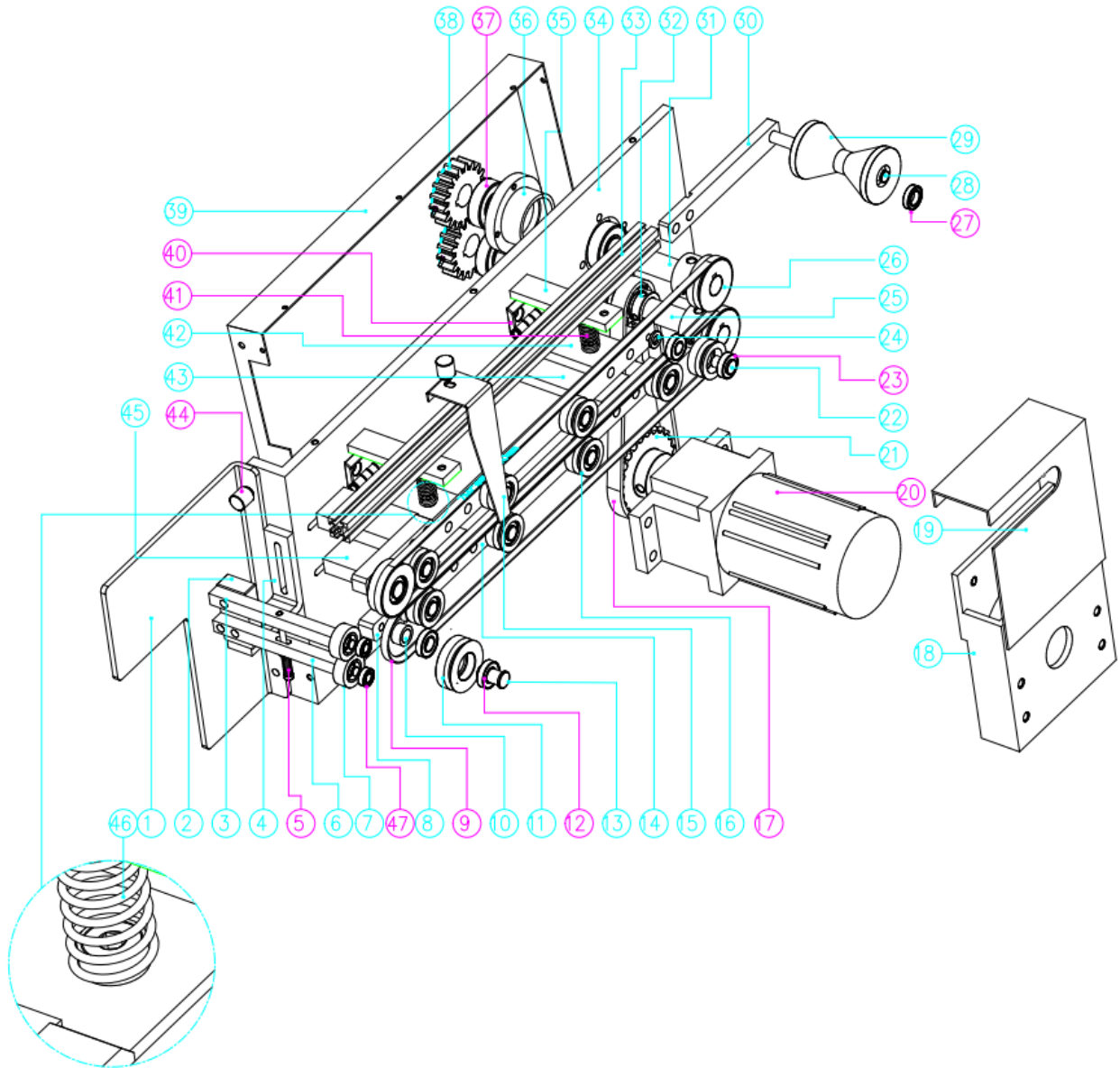
## 5、Behind conveyor components



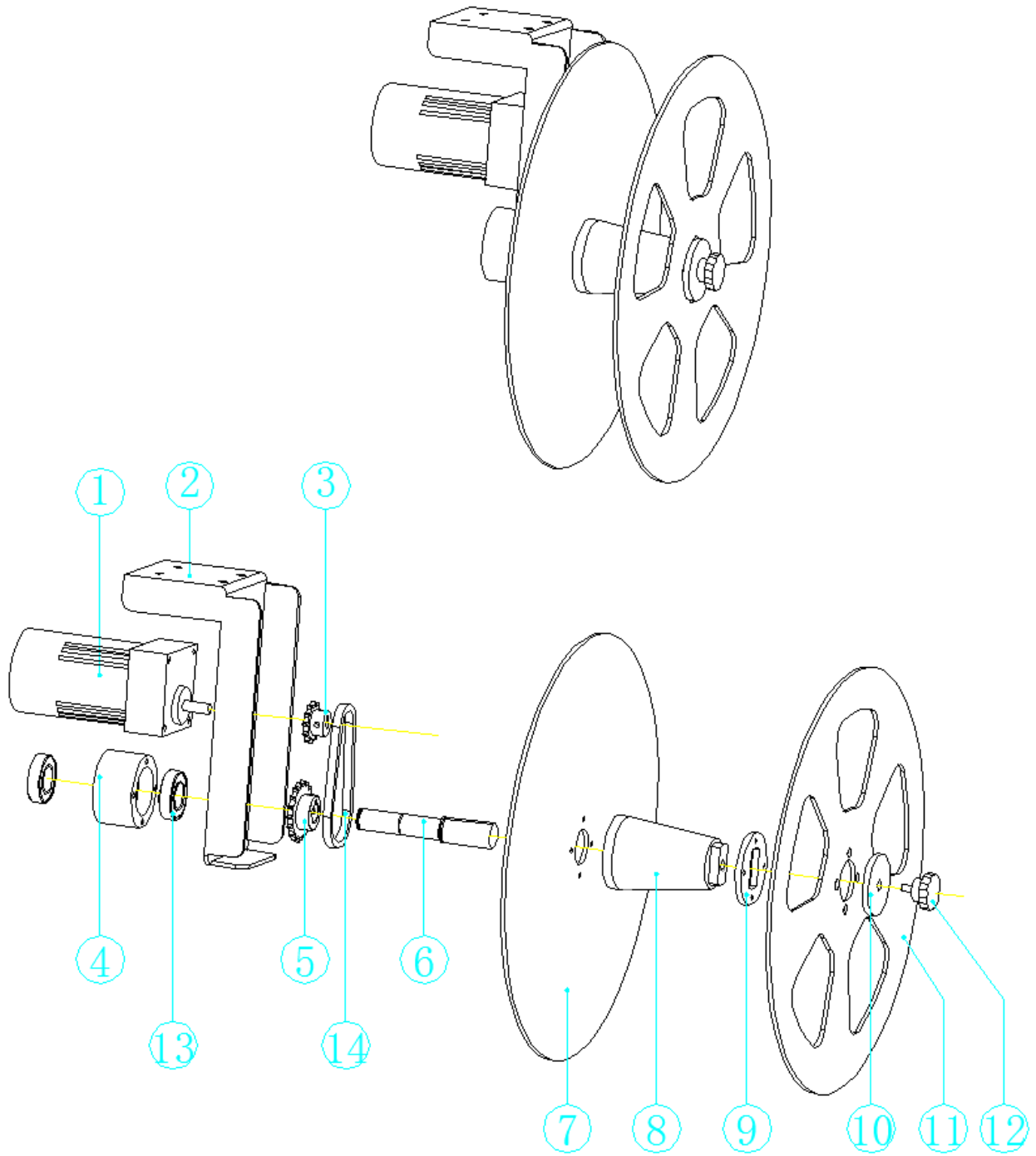
## 6、Frame components



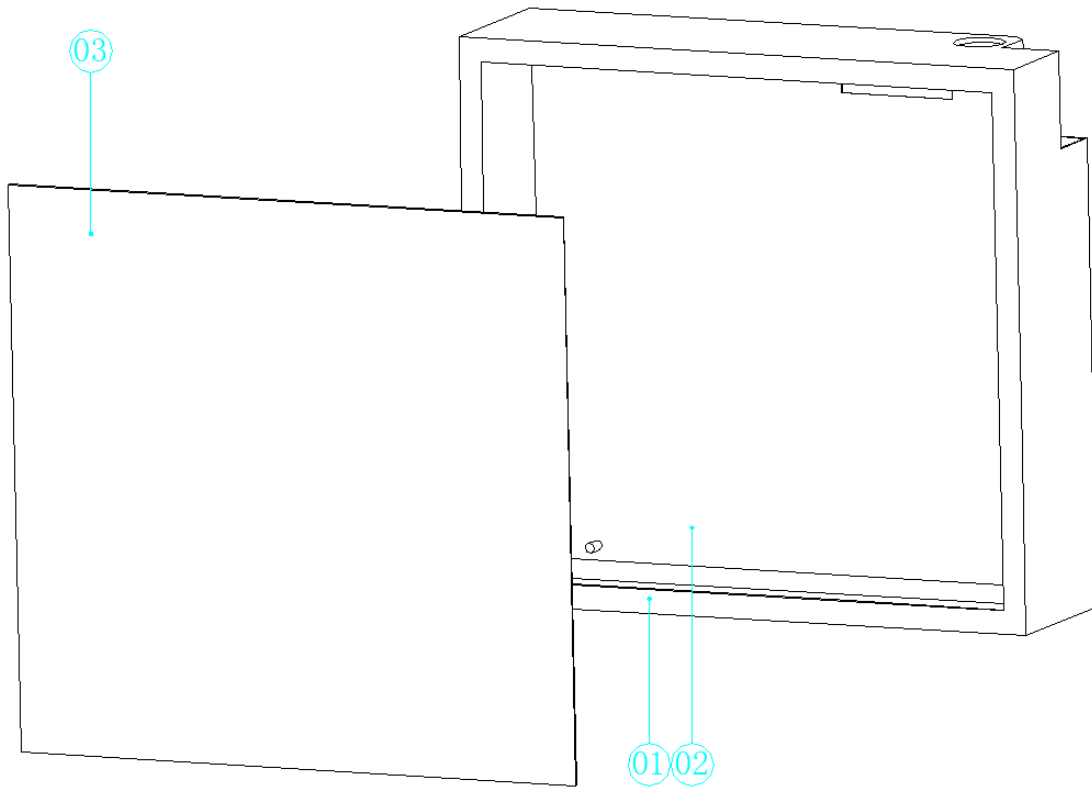
## 7、 Pull film components



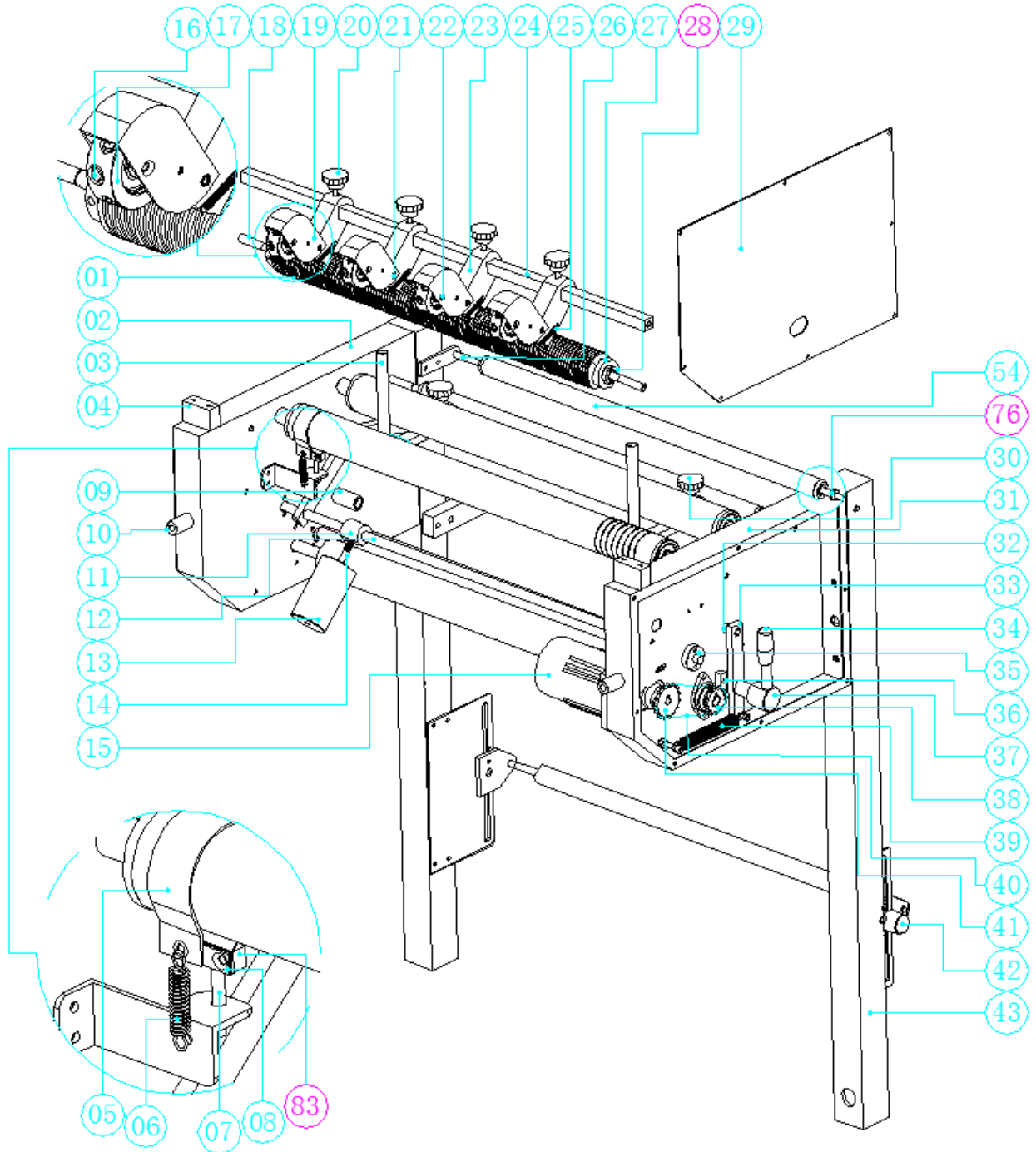
## 8、Recycle feeding components



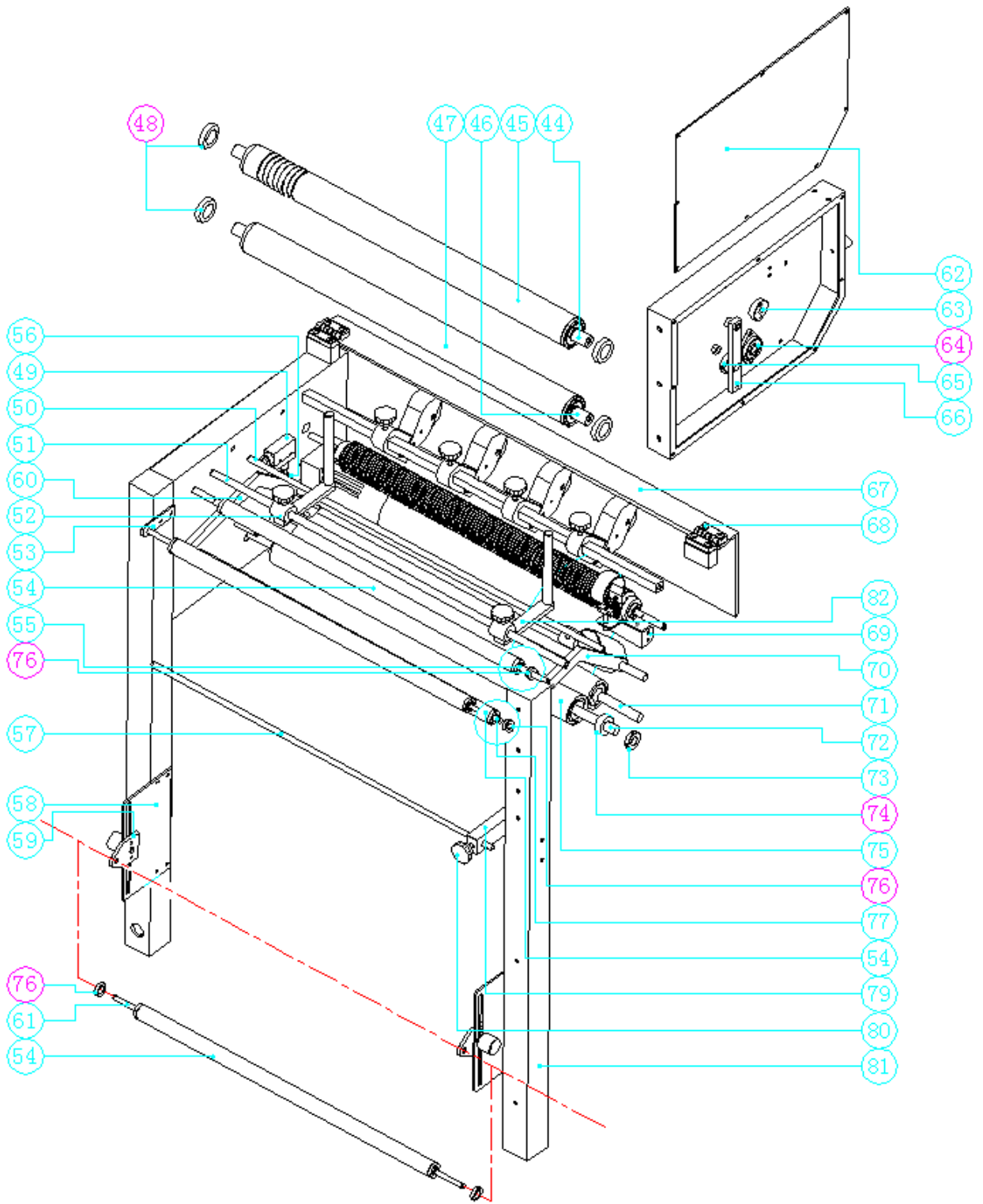
## 9、 Electric box components



## 10、 Sending feeding components







## 11、Front conveyor components

