



PNEUMATIC STRAPPING MACHINE

MANUAL:7616



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SAFETY INSTRUCTIONS

Please read the Manual carefully before using this packaging machine.

GENERAL SAFETY RULES

1. Bear in mind the "safety-foremost" principle, and operate this pneumatic tool properly:
2. Read the Manual carefully before operation:
3. Don't dismantle the safety parts of the tool;
4. Don't tear or damage the label or mark of the product;
5. Don't put your hands or other body part parts between the packaging belt and the packaging tool.

APPLICATION

This tool is specially designed for binding articles with a PET packaging belt;

The applicable width of the packaging belt is 13-19 mm.

Don't use the packaging belt for lifting.

CORRECT DRESSING

Wear safety glasses, earmuffs, protective gloves, helmet, and protective footwear and long sleeve shirt, fasten all buttons; take care, your necktie, long hair, and cloth shall not be hooked by the packaging machine.

GAS SOURCE

- Ensure the air supply pipe can bear pressure and is resistant to oil:
- Douse the special quick union for air pipe; the air pressure shall not exceed 100 psi/7 bar:
- Use only clean compressed air, rather than a gas source or dynamic source.

VENTILATION

Indoor air is easy to be polluted by lubricating oil; hence, the ventilation should be proper.

NOISE

Operators shall wear earmuffs if the noise exceeds 85 dB (A). Even if the noise is lower than 85 dB (A), it is also recommended to wear earmuffs

SAFETY GLASSES

If the tensing packaging belt breaks suddenly, it may hurt your eyes and result in blindness, so operators shall wear safety glasses.

NOTE:

While cutting the packaging belt, hold its upper part and stand at its side; the upper belt will be cut down. Be careful, there should be no people in the surroundings.

During maintenance and cleaning, the dust brought by the air duster gun is harmful to the eyes.

MOVING PART:

During operation, the moving part (tightening pulley) may clip the glove or other part of your body, so when the take-up pulley is rotating, don't touch it.

MAINTENANCE:

- Conduct daily maintenance to the machine;
- Check regularly, and remove dust with an air duster gun;
- Tighten the screws of the hook:
- Turn off the gas source while replacing parts.

HAZARD WHILE CUTTING:

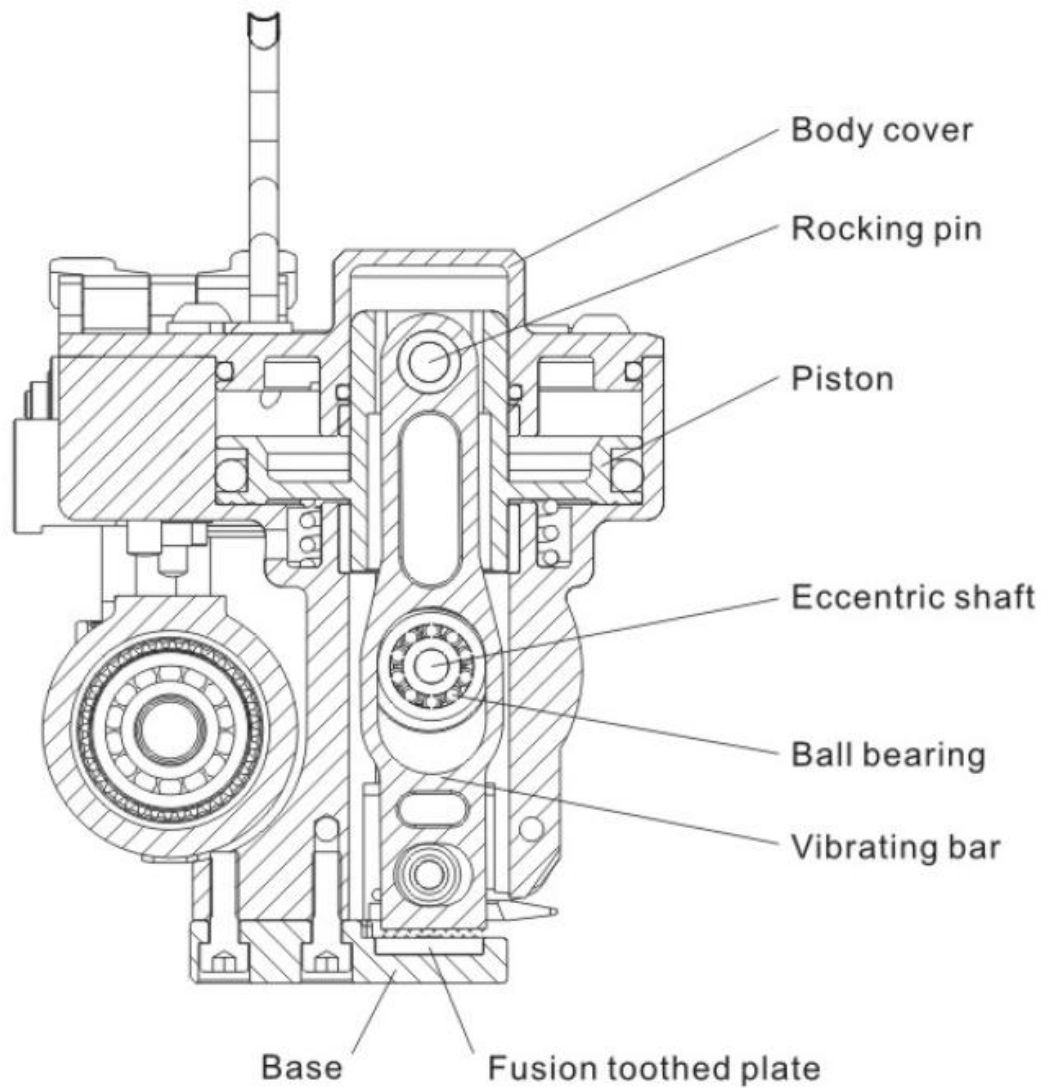
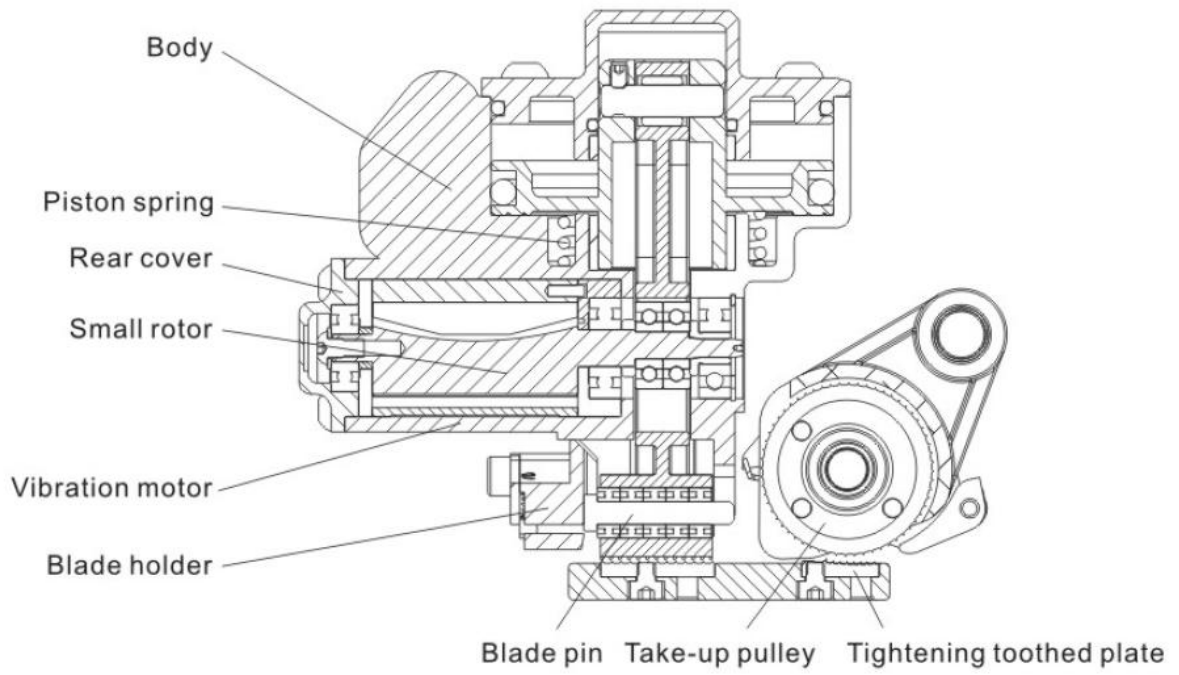
The sharp blade on the blade holder may hurt your hand and finger, so please wear safety gloves.

PRINCIPLE OF FRICTION FUSION

This tool is a friction cushion packaging machine, the lapped thermoplastic packaging belt is fused by the heat produced by friction motion; hence, it is called "friction fusion."

The compressed air will push the piston within the air cylinder. The upper part of the piston and the vibrating bar are connected to the rocking pin, so the vibrating bar will press the lapped part of the packaging belt when moving down.

There is an elliptic hole at the center of the vibrating bar, which is connected to the centric shaft of the pneumatic motor. The pneumatic motor rotates at high speed (10000 rpm), so the vibrating bar conducts reciprocal motion quickly. The lower part is driven by the peg teeth of the vibrator for strenuous friction.



SPECIFICATION AND PARTS

Tension force of the binding band (when input air pressure is 0.63 Mpa): 3500 N

Max. allowable working pressure: 0.8 Mpa

Required scope of the working pressure: 0.5-0.7 Mpa (72-100 psi)

Ideal working pressure: 0.63 Mpa

Weight of the packaging machine: 8.04 lb

Total length: 11.81 inches (base 2.75 inches)

Width: 5.88 inch

Height: 6.81 inch

Suggestable material for the packaging strapping: PET

Width of the PET packaging strapping: 0.51 - 0.74 inch

The thickness of the PET packaging strapping: 0.019 - 0.047 inch

The thickness of the PP packaging strapping: 0.031- 0.047 inch

Allowable lubricating oil: 51#

Consumption of compressed air: 0.3 L/Min

Fusion time: 2~5 s

Parts

(1) Tightener: 3,500 N (when 0.63 Mpa)

(2) Cutting device

GAS SOURCE INSTRUCTION

REQUIREMENT OF AIR PRESSURE

This machine requires this scope of air pressure: 72-1 00 psi (5.0-7.0 bar).

INSTALLATION OF GAS SOURCE

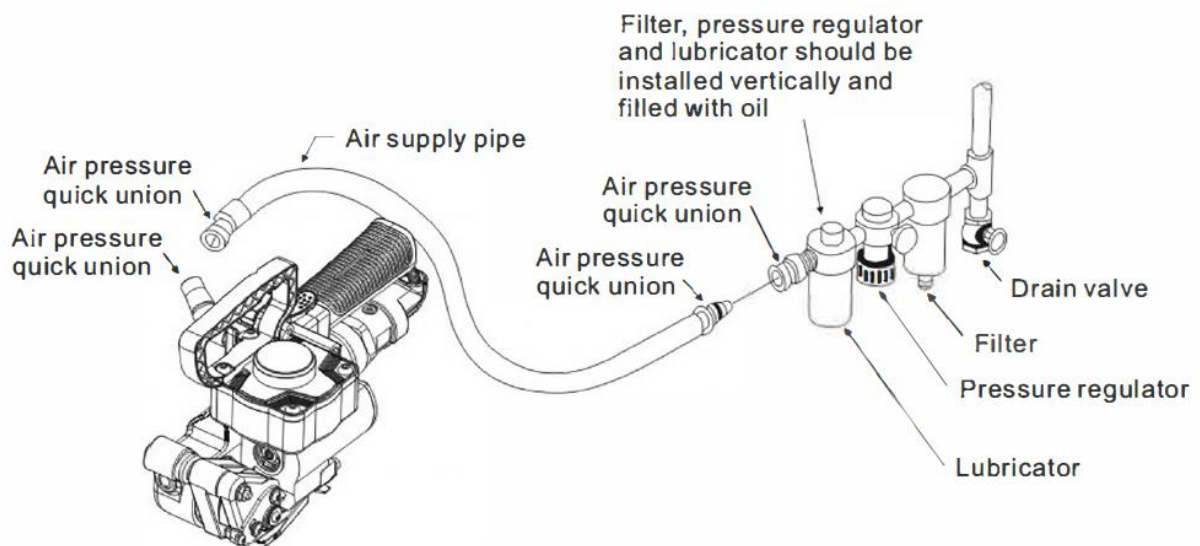
The filter, the pressure regulating valve, and the lubricator assembly, shall be close to the pneumatic tool. The min. inner diameter of the air hose is 6.0 mm (1/4). Both ends of the air supply pipe should be equipped with quick unions.

MOISTURE FILTRATION

A drain valve must be mounted at the bottom of the air supply circuit's bypass to drain once every day.

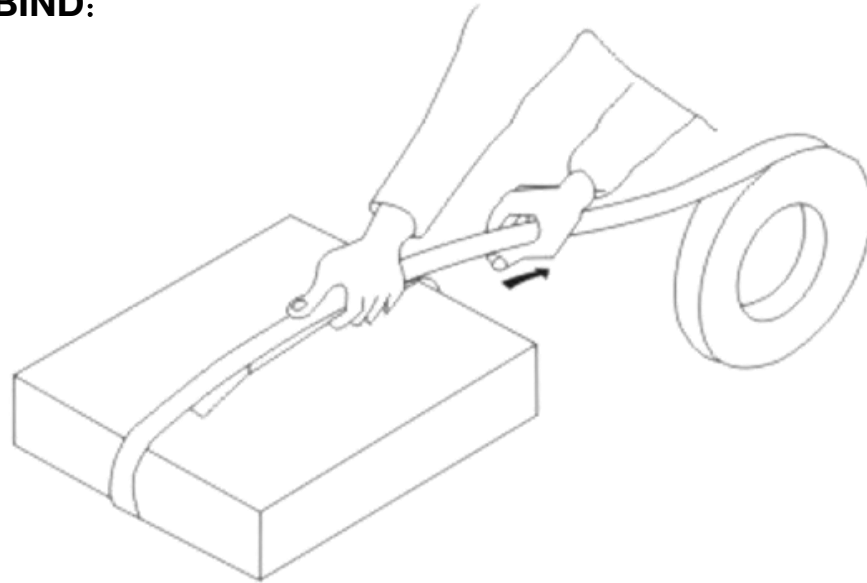
LUBRICATION

The pneumatic motor should be adequately lubricated, and the lubricator should be full and well-regulated (a drop every 2 min).



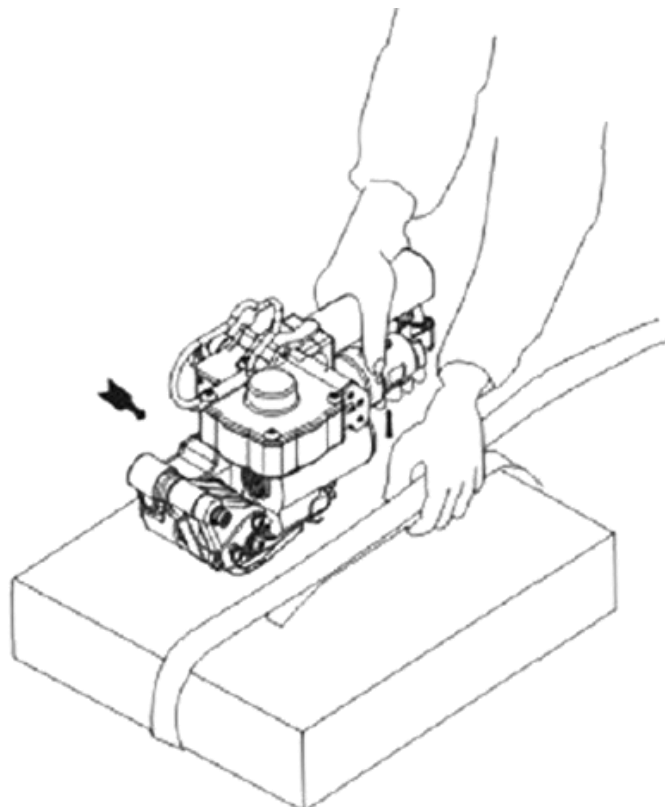
OPERATION INSTRUCTION

(1) HOW TO BIND:



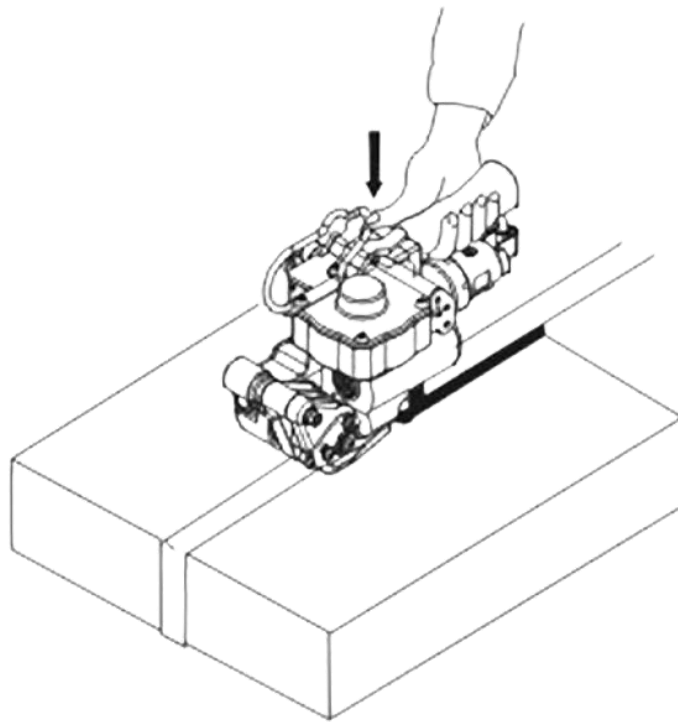
As shown in the upper figure, bundle the article with a packaging belt, hold the lapped part with the left hand, leave about 300 mm tail, and pull the remaining part out with the right hand.

(2) PLACE PACKAGING STRAPPING:



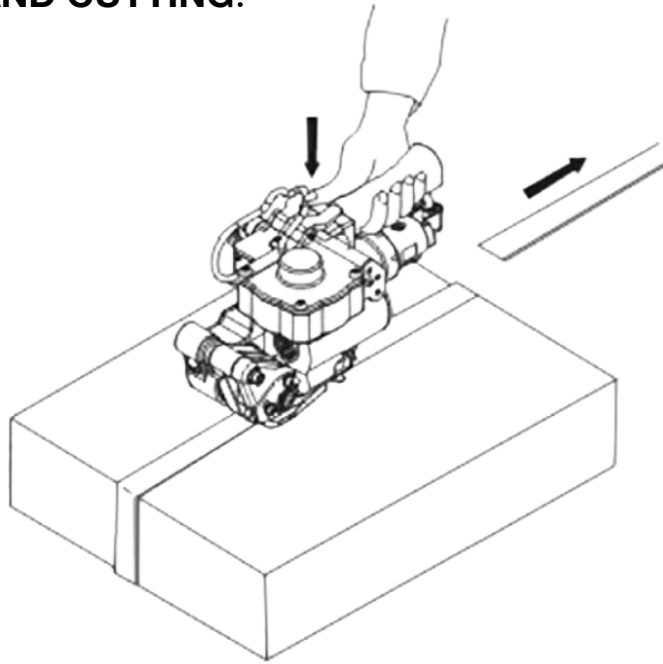
Hold the handle and tighten it with your right hand (to ensure the maximum opening dimension between the take-up pulley and tightening toothed plate), and insert both the upper and lower parts of the packaging belt into the packaging machine. Note: the lapped part of the packaging belt must be separated by the blade of the blade holder; release the tightener (the take-up pulley clips the packaging belt tightly).

(3) TIGHTEN THE PACKAGING BELT:



Press the tightening button (right side) with the thumb of your right hand till the packaging belt is fully tight.

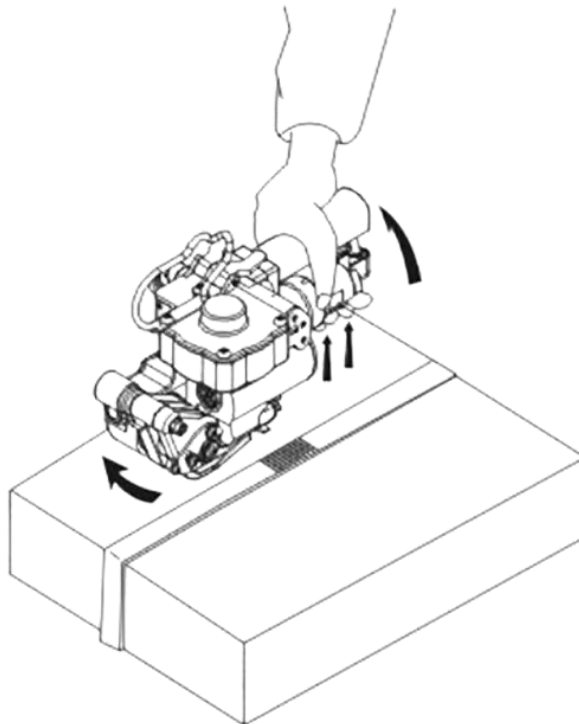
(4) VIBRATION AND CUTTING:



Press the fusion button (red) with the thumb of your right hand till the packaging belt is fused and cut off.

Note: press the fusion button till the vibration timer stops automatically.

(5) TAKE DOWN THE PACKAGING MACHINE:



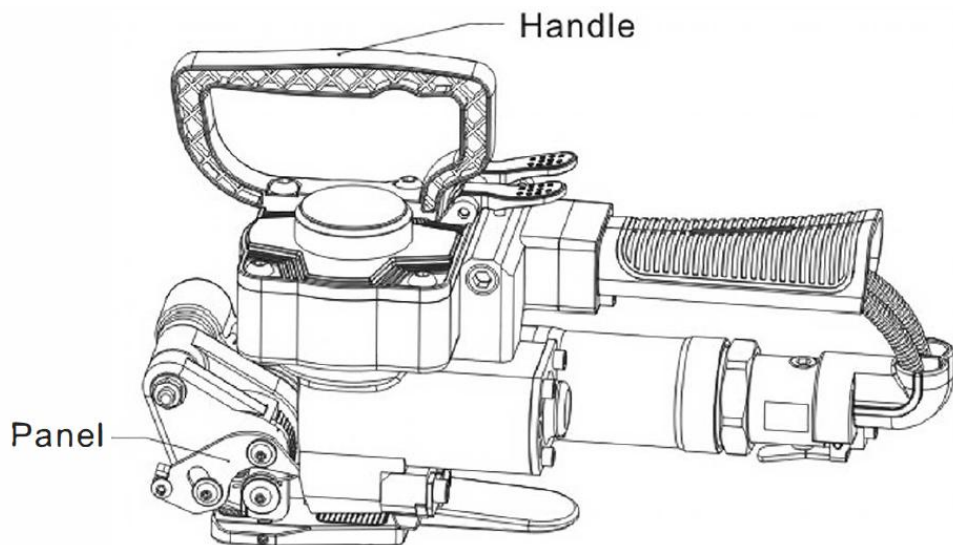
Press the handle and tighten it tightly with your right hand. Press the rewinding button with the little finger of the right hand till the belt is released from the take-up pulley. Press the handle, tighten it, and remove the tool from the packaging belt.

Note: don't remove the packaging machine until the packaging belt is released.

SPECIFICATION ADJUSTMENT

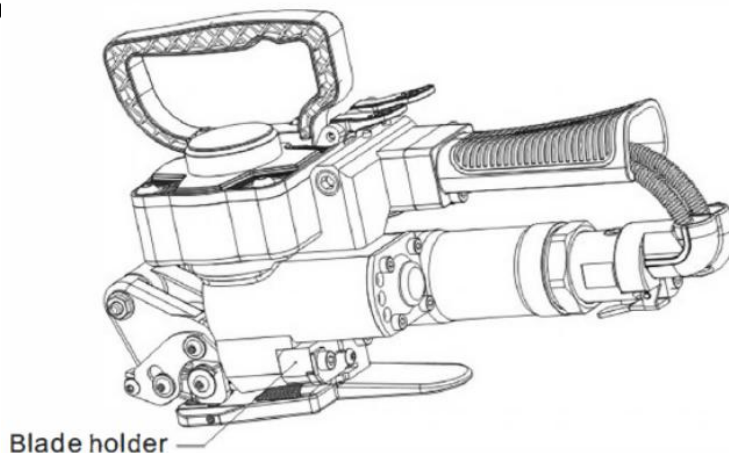
WIDTH OF THE PACKAGING BELT:

The panel can be dismantled from the packaging machine by removing its screws. Replace a new panel according to the dimension of the used packaging belt and the installation method of the last one.



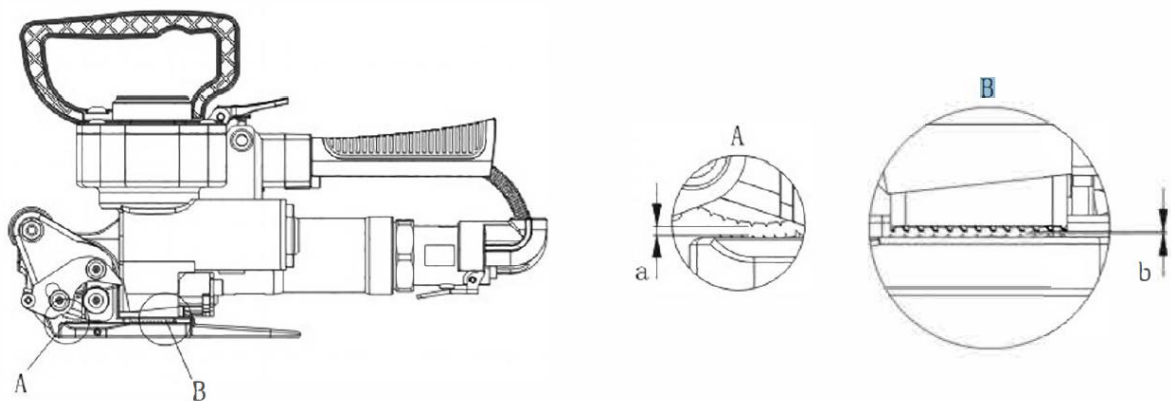
REASSEMBLY:

Choose a hole from the three holes of the blade holder according to the dimension of the packaging belt. The external hole is used for a 19 mm packaging belt, the medium hole is for a 16 mm packaging belt, and the internal hole



DISTANCE (a) BETWEEN THE TIGHTENING PULLEY AND THE TIGHTENING TOOTHED PLATE

The distance between the take-up pulley and the tightening toothed plate should be adjusted according to the dimensions of the used packaging belt. Check the distance (a) between the take-up pulley and the tightening toothed plate with a feeler (as shown in the figure below).



The distance (a) should be no less than the thickness of the packaging belt. While delivery, this distance is set to 1.0 mm more than the thickness of the packaging belt.

- (1) If the thickness of the packaging belt is 0.8 mm, place a 0.2 mm thick gasket under the tightening toothed plate;
- (2) If the thickness is 0.6 mm, place two 0.2 mm thick gaskets under the tightening toothed plate;
- (3) If the thickness exceeds 1.4 mm, insert two 0.2 mm thick gaskets into the middle of the body and bade.

DISTANCE (b) BETWEEN THE BOTTOM OF VIBRATING BAR AND THE FUSION-TOOTHED PLATE:

Measure the distance between the bottom of the vibrating bar and the fusion-toothed plate (see the above figure) with a feeler. While measuring, please follow the following steps:

- (1) Press the fusion button (red) for at least 2 s so that both the piston and vibrating bar will be downward fully.
- (2) Measure the distance (b) with a feeler; if no gasket is used, the distance (b) has been set to 0.5 mm. If the thickness of the packaging belt is less than 0.6 mm, insert a 0.2 mm gasket to the bottom of fusion toothed plate.

Note:

- Don't reduce the distance (b) by inserting too many gaskets;
- The packaging machine may be damaged if there is no clearance between the bottom of the vibrating bar and the fusion-toothed plate;
- If the vibrating bar strikes the fusion-toothed plate, the teeth of the plate will be damaged immediately.

DISASSEMBLY

The following is the disassembly method of parts in daily maintenance. This is the best method of replacing parts. It's hard to assemble the motor body parts, so please send those elements to our service center for replacement.

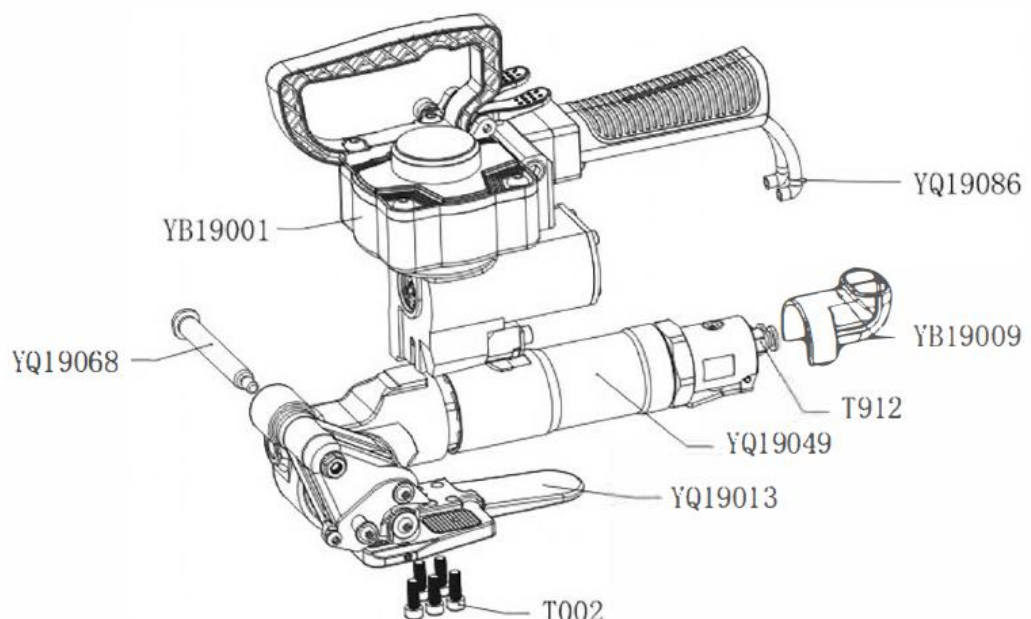
(1) BASE

① Pull out the two hoses (YQ19086) on the PL6-01 m hose plug from the lower end of the rear side of the motor body.

Note: if the steel ring of the joint isn't pressed fully, the hose can't be pulled out.

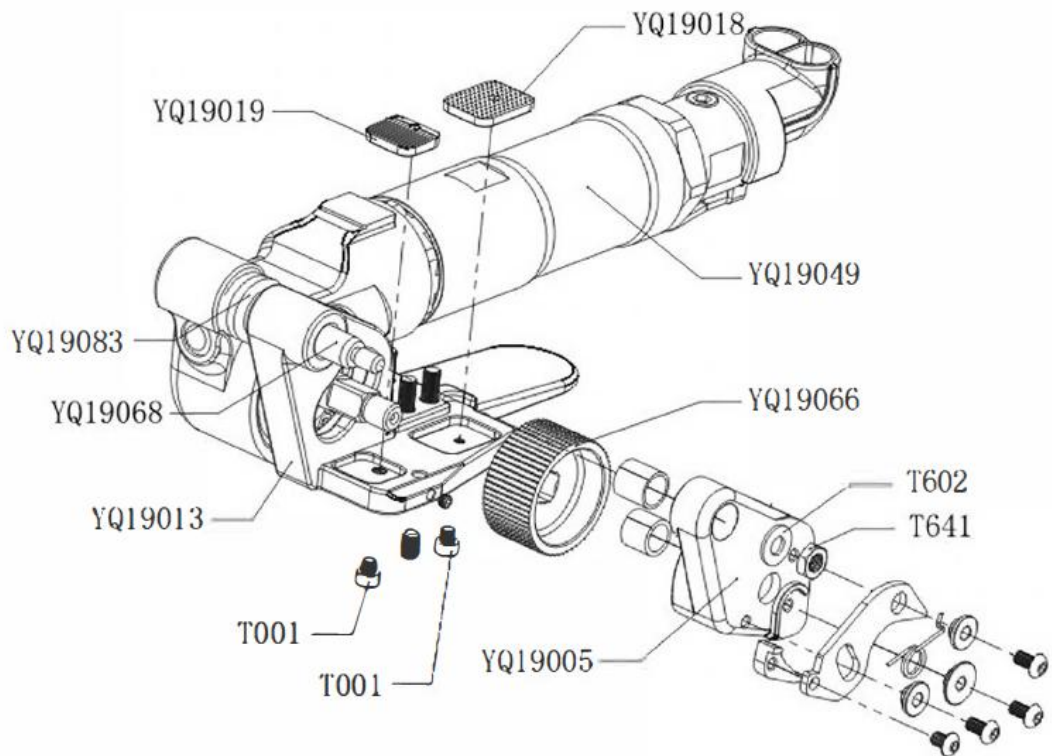
② Remove 5 fillister round-head screws (T002) from the bottom of the base (YQ19013) with a 4 mm hexagonal wrench.

③ Then, the base can be disassembled from the motor body (YQ19049) of the body (YQ19001).



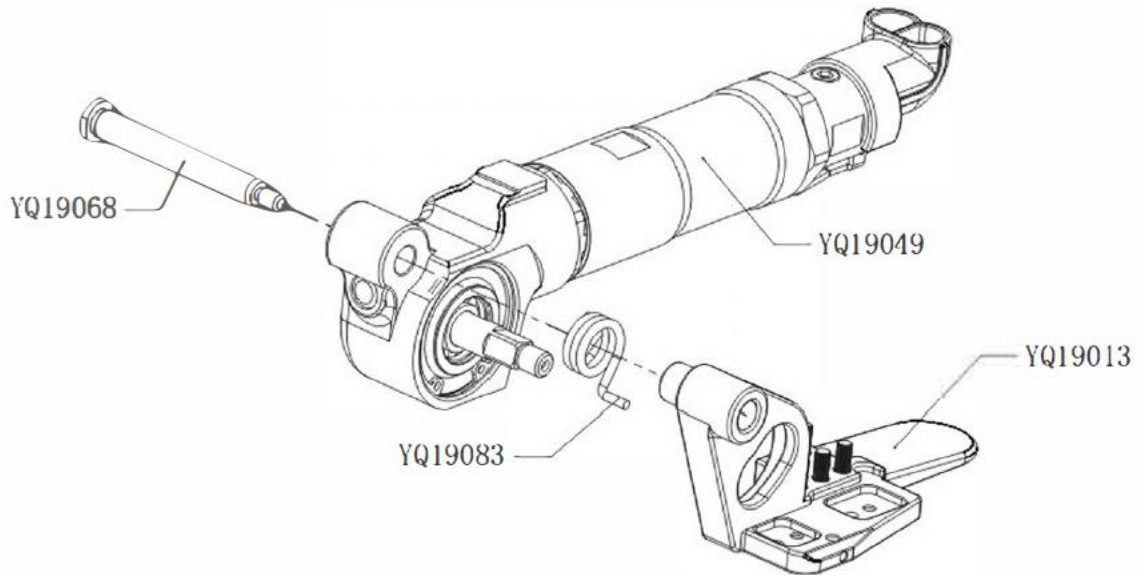
(2) TAKE-UP PULLEY AND TIGHTEN THE TOOTHED-PLATE

- ① Lock the connection pin shaft (YQ 19068) with the attached 13 mm wrench, remove the M6 nut (T641) and gasket (T602) with a 10 mm wrench;
- ② Pull the assembly of the front side plate to the left to separate it from the connection pin shaft and disassemble the take-up pulley (YQ19066);
- ③ Remove the 2 fillister round-head screws M4 x 4 (T001) with a 3 mm hexagonal wrench, then the take-up pulley (YQ 19018) and tightening toothed plate (YQ19019) can be removed.



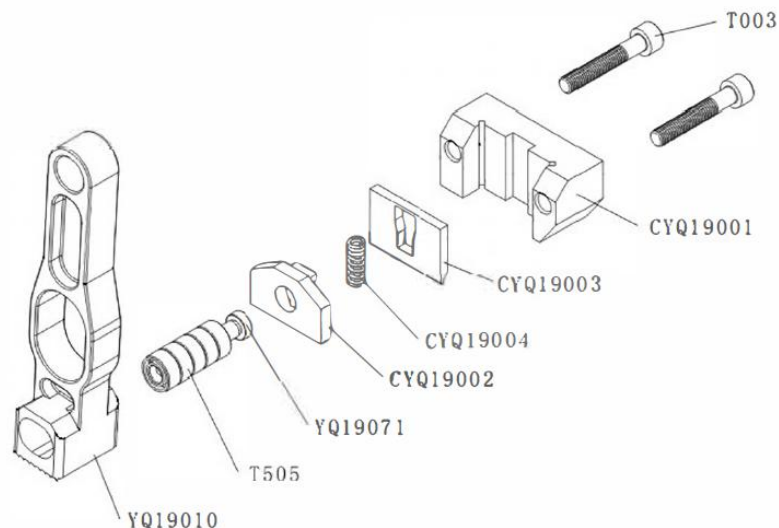
(3) CONNECTION PIN SHAFT

The motor body (YQ19049), base spring (YQ19083), and base (YQ19005) can be disassembled by pulling out the connection pin shaft (YQ19068).



(4) CUTTING DEVICE

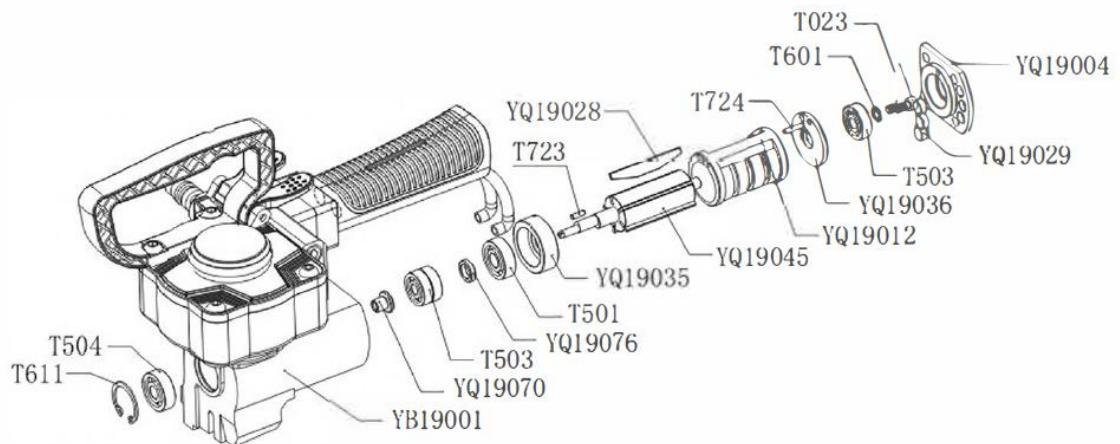
- ① Remove the 2 fillister round-head screws MS x 30(T003) with a 4 mm hexagonal wrench, then the blade holder (CYQ19001) can be disassembled.
- ② Disassemble the blade and its pin (YQ19071).
- ③ Check the blade and replace it with a new one if it is blunt.
- ④ Remove the blade pin and the 5 bearings (TS05) simultaneously.



(5) VIBRATION MOTOR

① Remove 4 MSX 12 half-round head screws (T025) from the rear cover with a 3mm hexagonal wrench, and knock the shaft end of small rotor (YQ19045).

② Bearing liner (YQ19070), ball bearing (T503) and gasket (YQ19076) are disassembled from the bottom of body along with the small rotor.



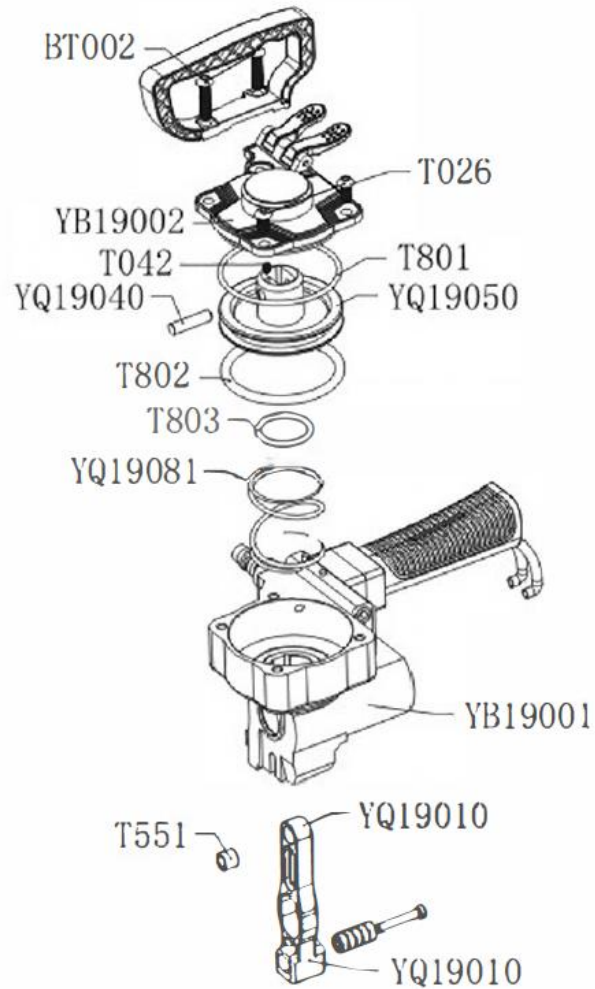
(6) BODY COVER AND PISTON

① Remove the M6 x 16 half-round head screws (T026) from the top of the body cover with a 4 mm hexagonal wrench.

Note: don't lose the small spring or other parts disassembled from the body.

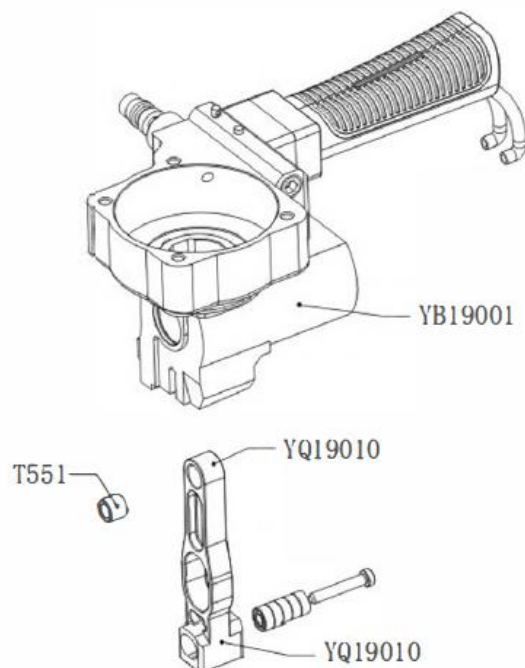
② Take out the rocking pin (YQ19040) with a 4 mm hexagonal wrench.

③ Blow the hole (diameter: 6.5 mm) under the body with an air duster gun, then the piston (YO 19050) and its spring (YQ 19081) can be taken out.



(7) VIBRATING BAR

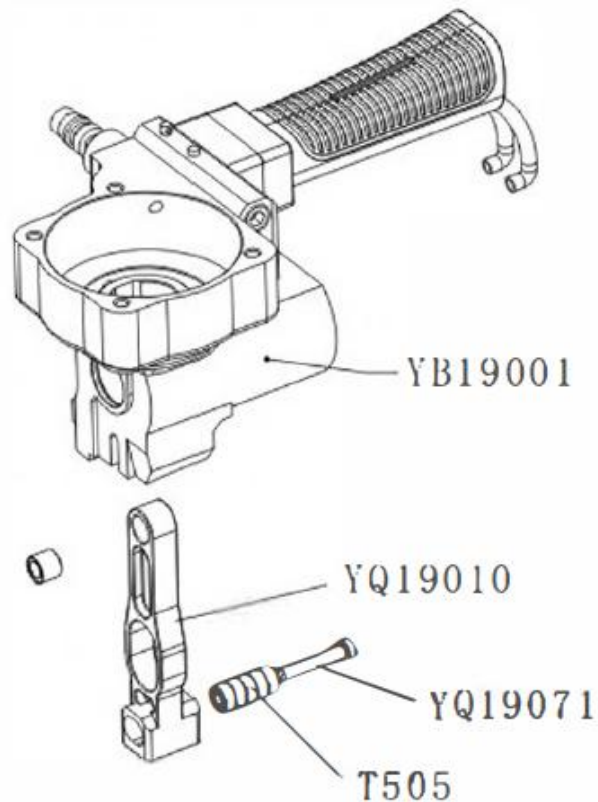
Take out the vibrating bar (YQ19010) from the bottom of the body (YB19001).



REASSEMBLY

(1) VIBRATING BAR

- ① Insert vibrating bar (YQ19010) into the bottom of body (YB19001). Pay attention to the front and rear directions. Don't turn upside down.
- ② Assemble 5 ball bearings (T505) on the blade pin (YQ19071).
- ③ Assemble the blade pin on the vibrating bar by the horizontal hole.

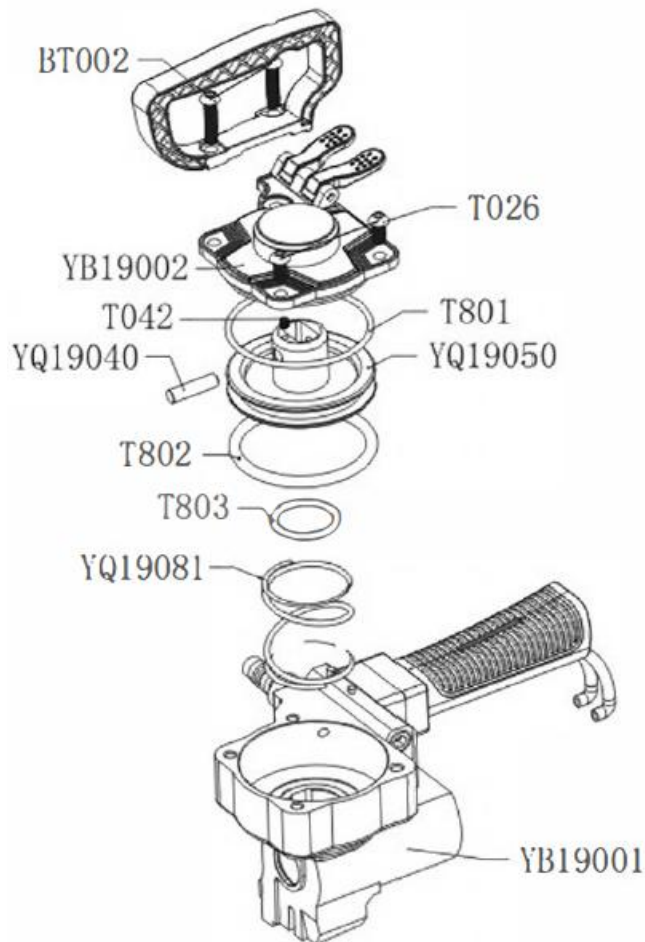


(2) PISTON

- ① Insert the piston spring (YQ19081) into the hole (diameter: 50 mm) after lubricating oil is added to the body's interior.
- ② Assemble O-ring P60 (T802) into piston(YQ19050). add lubricating oil, and then insert this part into the body.

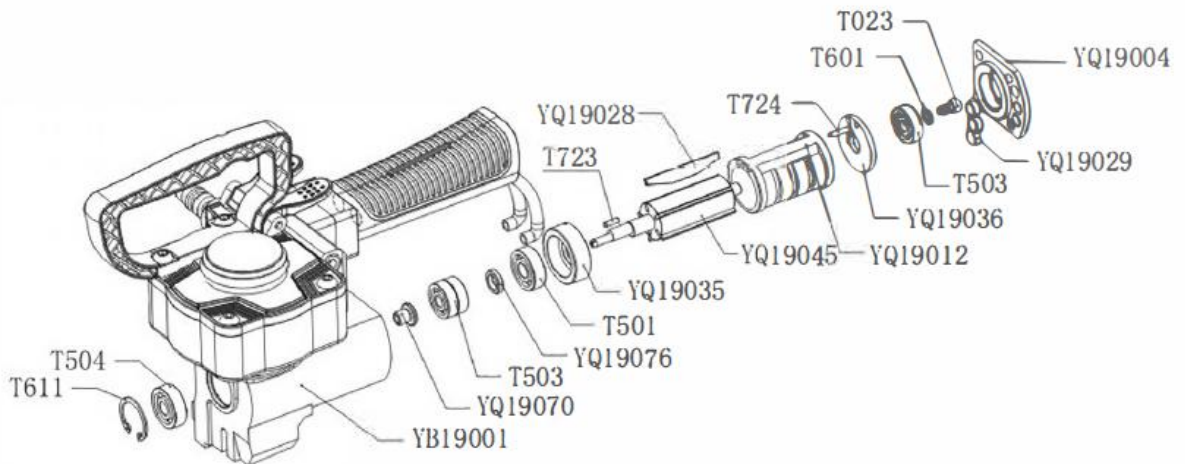
Note: The front face of the rocking pin must face forward.

- ① Insert the rocking pin into the axial pore (YQ19040) of the piston and vibrating bar.
- ② Assemble O-ring P28(T803) and G65(T801) on the body cover (YB19002).
- ③ Assemble the body cover on the above-completed piston and tighten it with 4 cup head screws to complete the assembly with the body.



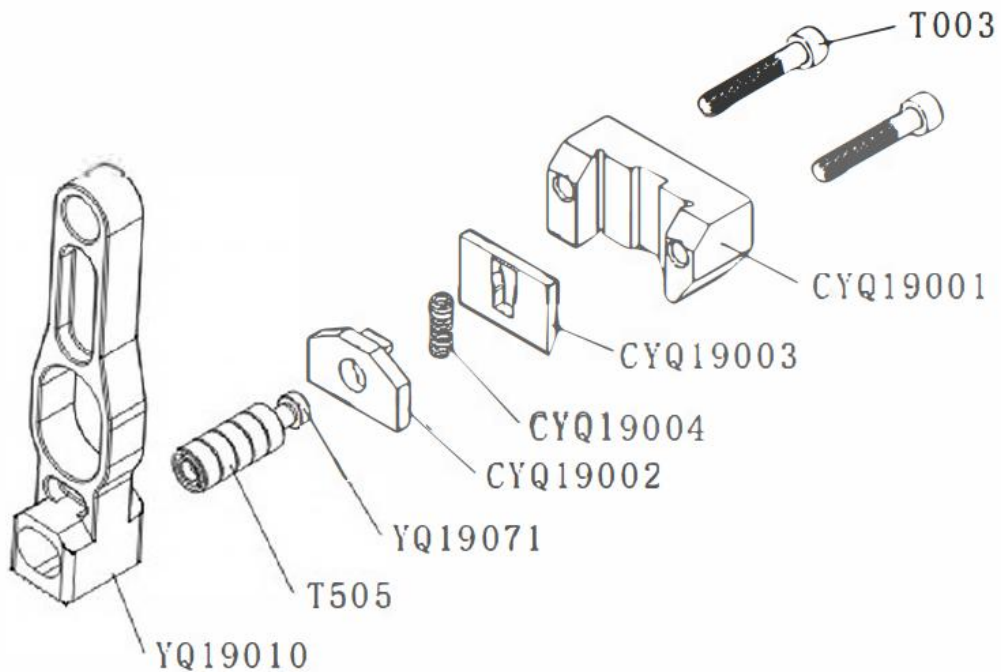
(3) VIBRATION MOTOR

- ① Assemble the gasket (YQ19076), the 2 ball bearings (T503), and the bearing bushing on the small rotor (YQ19045); insert the pneumatic motor into the body from the opening, and assemble the ball bearing (T504) from the opening of the vibrating bar.
- ② Fix 4 MS x 12 half-round head screws (T025) to rear cover (YQ19004).



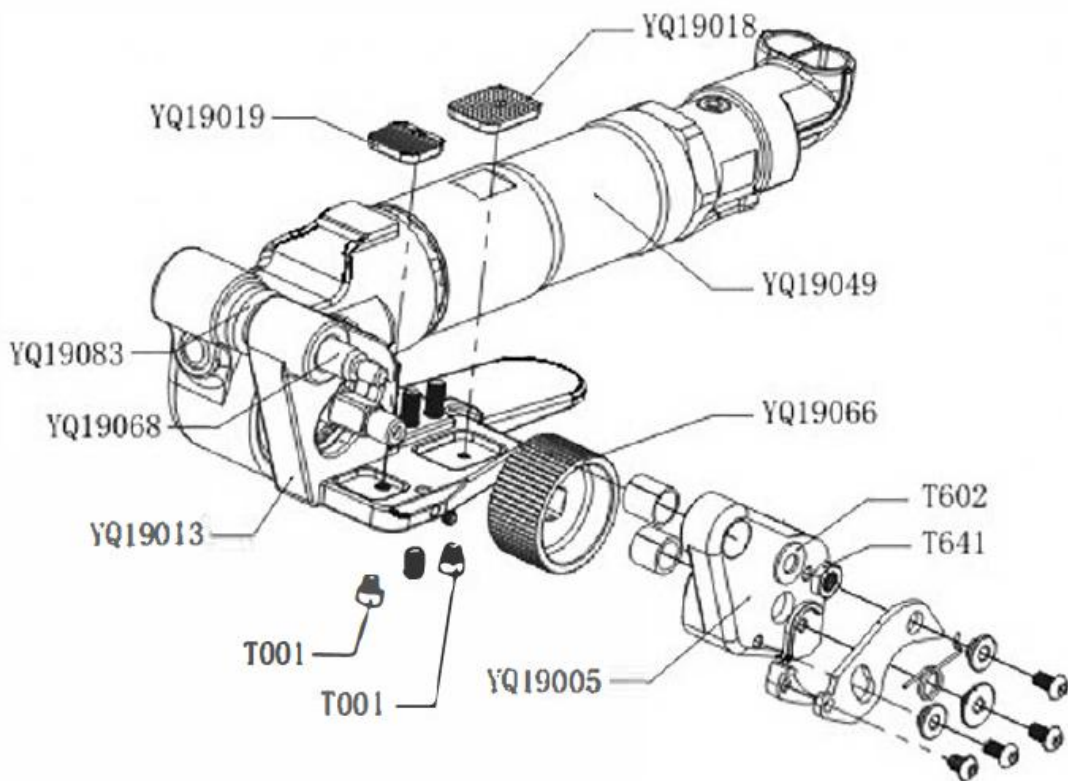
(4) CUTTING DEVICE

- ① Assemble the blade at the head of the blade pin (YQ19071) and confirm the right direction of the blade.
- ② Assemble the blade holder (CYQ19001) on the blade (CYQ19003) and tighten it by 2 MS x 30 cheese head hex socket cap screws (T003).



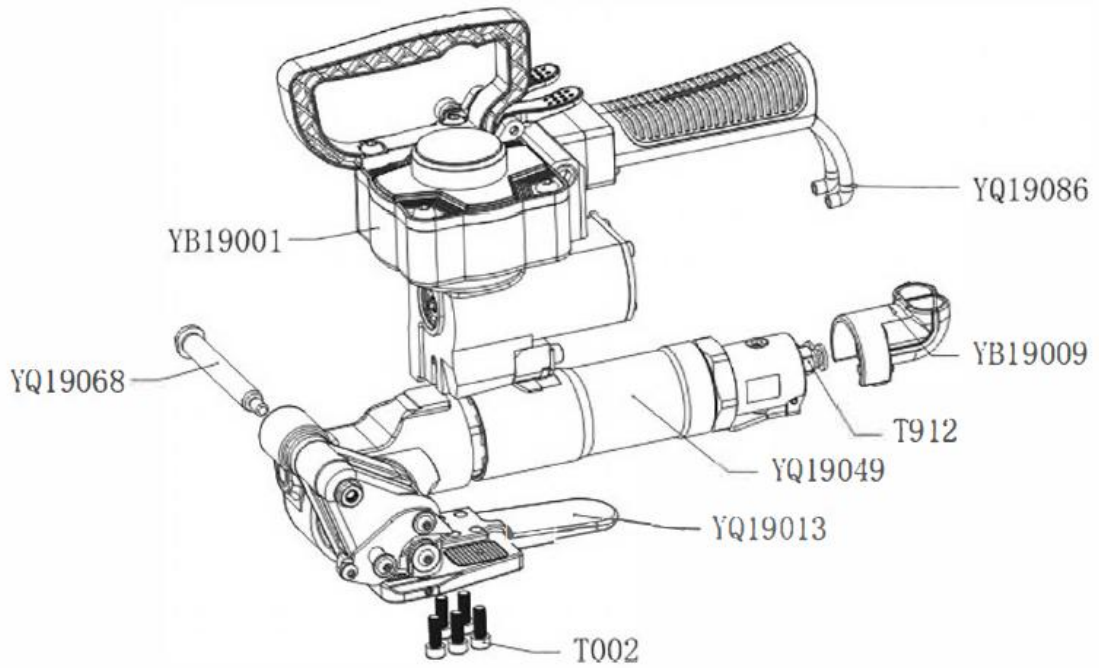
(5) CONNECTION PIN SHAFT

- ① Assemble base torsion spring (YQ19083) at the front of base (YQ19013), and assemble motor body (YQ19049), insert connection pin shaft (YQ19068)
- ② Assemble the take-up pulley (YQ 19066) on the shaft of the turbine (YQ19024);
- ③ Insert the front side plate (YQ19005) assembly into the connection pin shaft and insert the ending of the turbine into the bushing of the front side plate assembly.
- ④ Fix the head of the connection pin shaft with a 13 mm wrench, and tighten flat oasket M6 (T602) and nut M6 (T641) with a 10 mm wrench.



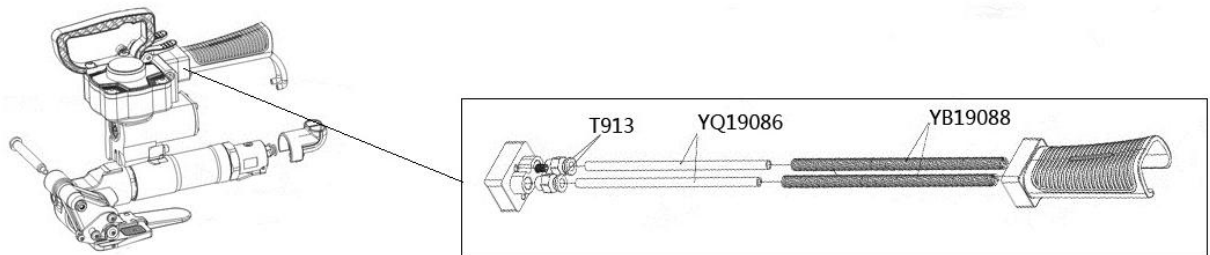
(6) BASE

- ① After the entire base (YQ19013) is assembled, fix the motor body (YQ19049) on the base through the connection pin shaft (YQ 19068).



(7) AIR SUPPLY HOSE

- ① Insert 2 pieces of air hose (YB19088) with stress protection spring (YQ19086) into the pipe joint (T913) at the end of the valve body.



FAILURE AND TROUBLE-SHOOTING

(1) TIGHTENER OPERATION

Phenomenon	Causes	Trouble-shooting
Motor body can't start	1. There is foreign material in the motor 2. The motor is too dry and in need of lubrication	1. Deliver packaging machine to factory for repair 2. Add several drops of lubricating oil to motor from air intake 3. Press inverting button, if can, then press entering button
Tightening pulley presses the upper packaging belt	1. Distance between take-up pulley and toothed plate is too wide 2. In point of thickness of packaging belt, tension force is too strong 3. Take-up pulley is blocked by dust or residue of packaging belt 4. The teeth of taking-up pulley are blunt	1. Increase gasket. Refer to adjustment of machine on the page 12 2. Clean the teeth of taking-up pulley with air blow gun or brush 3. Replace take-up pulley. Refer to replace of parts on the page 13 <div style="text-align: right;">17</div>
When packing, packaging machine moves forward or can't clamp the end of packaging belt	1. Take-up toothed plate is blocked by residue of packaging belt 2. The teeth on the take-up toothed plate are blunt 3. The tension of packaging belt is too strong	1. Clean the teeth of take-up toothed plate, blow off the residue with air blow gun 2. Replace take-up toothed plate, Refer to replacement of parts on the page 13 <div style="text-align: right;">17</div>

Cautions during the tension operation

- ① After the article is tied by the packaging belt, hold the overlapping part with left hand to pull out the redundant part.
- ② Make sure the overlapping part of the packaging belt in the packaging machine is aligned.

(2) FUSION OPERATION

Phenomenon	Causes	Trouble-shooting
Incomplete fusion or no fusion	<ol style="list-style-type: none"> 1. Air pressure is not enough 2. ID of air pipe is too small 3. The teeth of fusion toothed plate or vibrating bar are blocked by residue or worn out. 4. Vibration motor is too dry and in need of lubrication 	<ol style="list-style-type: none"> 1. Use screwdrivers Turn the Slotted Drives at the end of welding motor outside 2. Supply air at the air pressure of 72psi or higher 3. Replace the air pipe to a pipe with an internal diameter of over 6.4mm 4. Clean teeth part or replace vibrating bar and fusion toothed plate 5. Add lubricating oil from air intake
Packaging belt is excessively fused or broken off during the fusion process	<ol style="list-style-type: none"> 1. The thickness of packaging belt is not enough 2. Fusion time is too long 3. The cooling time for friction fusion part is too short 	<ol style="list-style-type: none"> 1. Use the packaging belt which has correct specification 2. Reduce fusion time as required, refer to this manual 3. Keep at least 3 seconds after fusion
Packaging machine can't move off from packaging belt after fusion	<ol style="list-style-type: none"> 1. Take-up pulley can't reverse. Packaging belt can't loosen 2. Vibrating bar fails to rise from packaging belt 	<ol style="list-style-type: none"> 1. Press rewind button to release the tension of packaging belt 2. Hold the handle of tightener to enable tightener to connect with exhaust valve, and then turn on shut-off valve

Cautions during fusion

- ① Sound fusion can ensure smooth and burr-free joints; however, overlong fusion will reduce the adhesive force of the PET packaging belt.
- ② After fusion, keep 3S, otherwise, fusion joint will be deformed or separated.

Contact

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