



Equipos para la Industria Alimentaria

FR SERIES, DBF SERIES

AUTOMATIC BAND SEALER

OPERATION MANUAL

I. USE:

This sealer is suitable for sealing all kinds of plastic films and for making bags. It can be widely used in fields of food, medicine, cosmetics, daily use, local specialities, chemical products, electronic components, vegetable seeds and the preservation of the cultural relics, etc.. It is the best sealing equipment for packaging in factories, shops and as well as service trades.

II. FUNCTIONS AND FEATURES:

This sealer, adopting the constant temperature control equipment and stepless speed adjusting transmission set, can seal all kinds of plastic film bags and can be equipped with all kinds of packing assembly line. The sealing length is unlimited; it has the characters of efficient continuous sealing, reliable sealing quality, proper structures and convenient operation.

The machine of this series has two models say horizontal, vertical or horizontal, and console model. The horizontal model suit for packing dry goods, while the vertical one suit for packing powder or liquid goods. This sealer can equip with an impressing set, which can print the factories name, brand, date of production, terms of validity, and check number or lot number while sealing. The printing and sealing are one-off finished, but the date and lot number can be changed according to the requirement. It is used conveniently and accord with the law of medical administration and hygienic food. This sealer can equip with a counting set to make producing management easier.

III. SPECIFICATION:

Model	FRB-770			FR-800		
				I	II	III
	FR-880			DBF-900		
	I	II	III	W	LW	LD
Voltage	220V/50HZ (110V/60 HZ)					
Power	500W					
Sealing speed	0-12 m/min					
Sealing width	8, 10mm					
Temperature range	0-300 °C					
Number of print	≤39					
Conveying load	1 kg x 3					
Dimension	800x420x320(mm)	800x380x550 (mm)	800x420x1000(mm)	800x420x320 (mm)	800x380x530(mm)	800x420x1000 (mm)
Weight	32kg	37kg	40kg	30kg	35kg	38kg

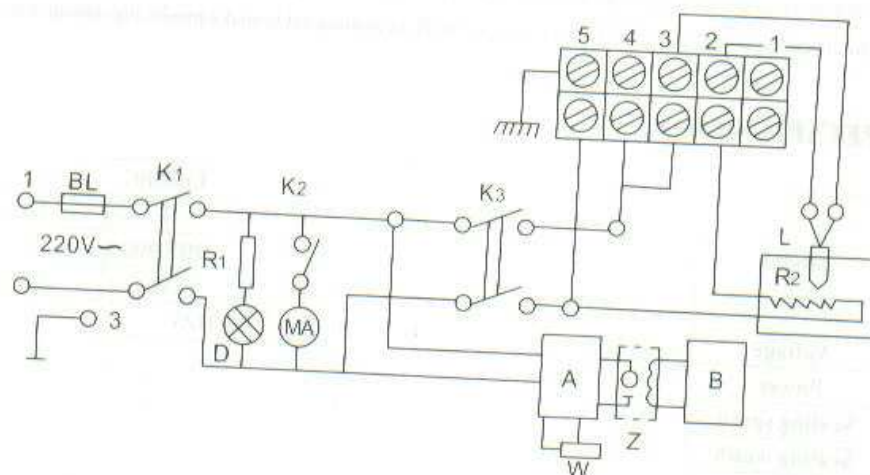
IV. Structures & Working Theory:

This machine is made up of the frame, driving and conveying set, the speed regulator, sealing temperature control system, transmission and conveying system and printing set etc.,

After putting through the power supply, electrothermal elements produce heat that rapidly raise the temperature of both upper and lower heat blocks. And use the temperature controller and speed regulator to adjust the temperature that needed, the plastic packing bag is transmitted by conveying belt, and its sealing part will be conveyed into the middle of two working sealing belts, then it is clamped by the two sealing belt and conveyed into the heating area, sealing belt is pressed by two heating blocks and impressing wheels there, which could make the plastic film fuse and stick together, then it is conveyed into the cooling area to be cooled, and also pressed by printing wheel, which can press stripe, netted pattern and as well as colored label that needed on the sealing part.

The driving part of the sealer is made up of a sealing belt, guiding belt and a conveyor belt driven by a motor, all of them are operating synchronously.

V. Figures of Electrical Theory:



Note:

K1: power switch;

R1: resistance;

D: indicating light;

A: thyatron rectifier;

BL: fuse tube;

W: speed regulation-resistance;

Z: DC motor;

B: diode rectifier

MA: AC fan;

L: thermocouple;

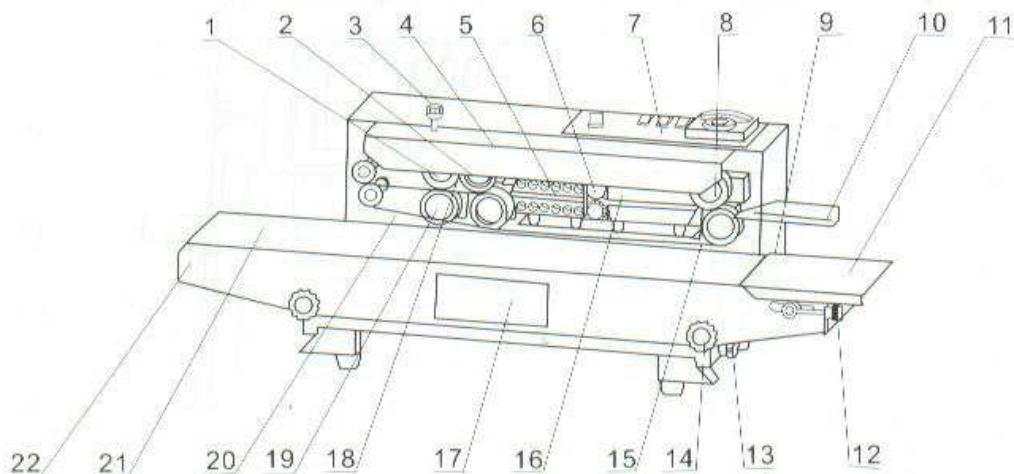
K2: fan switch;

K3: hot seal switch;

R2: heating tube;

VI. Using way:

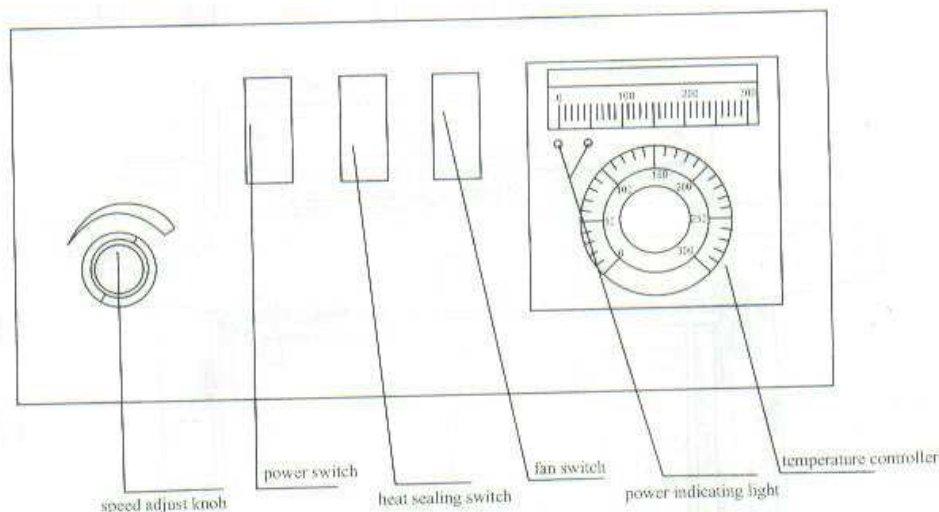
1.The picture and name of the machine



I. HORIZONTAL MODEL

1.pattern printing wheel (printing wheel); 2. driving wheel; 3. adjusting knob for printing wheel pressure;
 4.safety cover; 5.cooling block; 6. middle pressing wheel; 7.control box; 8.driven wheel;
 9. power socket and safety tube; 10. sealing width adjusting site (feed opening); 11. fixed working table;
 12. tight adjustment of conveyor belt; 13.knob for the input and output of the conveyor table;
 14.height regulator of the conveyor table; 15.sealing belt; 16.heating block; 17. trade brand;
 18.printing wheel brace; 19.rubber wheel; 20. guide belt; 21. conveyor belt; 22. conveyor table.

2. CONTROL BOX PANEL



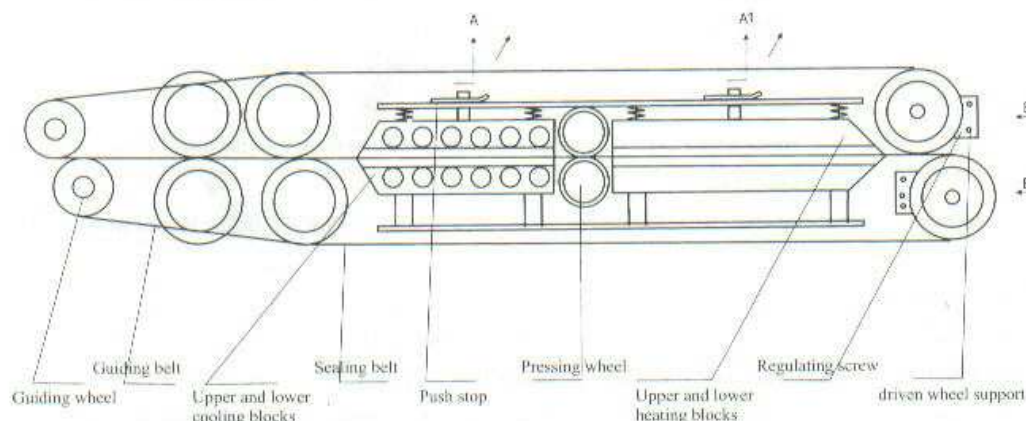
3. PREPARE FOR WORK

- (1). This machine is equipped with three crust grounded socket, and make sure that it is well connected for safe producing.
- (2). Due to the first use or too long intermission, the electronic heating elements will be dampened, several minutes' low-temperature preheating is needed before the normal operation.
- (3). Adjusting the conveyor table's height and position, making it suitable for the overall size and the angle of the bag that to be sealed.
- (4). According to the size from sealing line to bag top, regulate the position of feed opening.
- (5). According to the material and thickness that being sealed, regulate the clearance between both heating and cooling blocks.

4. Starting work operation

- (1). Putting through the power, the indicating light flashes, and adjusts the speed-regulating knob, all conveying parts will work synchronously.
 - (2). Micro-adjusting the pattern printing wheel knob, and make that wheel swivel, then adjust it to a proper pressure.
 - (3). Once turn the heating knob on, the green light of the electronic temperature controller will flash. According to the material and the thickness of the packing bag, and adjust the temperature controller to the temperature that needed. Due to its adjustable speed, it make the adjustment of the temperature flexible.
- After several minutes' heating, the red light of the controller flashed, which means that it has reached the required temperature, then you can use packing bag to do the trial sealing, it's depending on the sealing condition whether

to adjust to temperature, speed and the pressure of the print wheel, to get the perfect sealing result so that you can make it work continuously.



(4). According to the material and thickness that being sealed, and decide whether to turn on the fan to be cooled.

5. Leveling the sealing sides of the packing bag, lining with the regulator the conveying inward (to the feed opening). when it is gripped by the sealing belt, it can move forward automatically. At that moment, please do not push it in or pull it out by force, otherwise irregular sealing or breakdown will happen.

6. When the sealing belt or the heating block seems dirty, you'd better stop the sealer and clear it.

7. Ways of exchanging the sealing belt and adjustment:

(1). After the heating block has cooled, lift the knobs of heating and cooling blocks, printing wheel and impressing wheel' spring, lifting each part and removing guide belt.

(2). Moving the driven wheel's base (adjusting block) toward heating block, and remove the sealing belt.

(3). Exchanging a new sealing and installing a guide belt.

(4). Putting the driven wheel, heating and cooling blocks to the original position.

(5). Putting through the power supply and testing the machine, if irregular sealing appears on the belt, we can make an adjustment through adjusting bolts on the bracket of the driven wheel.

(6). Covering the safety down, the machine can work continuously after being heated.

8. Counting system:

(1). The machine that equipped with the counter, you should press the reset 0 switch before counting, and then count.

(2). Turn off the counting switch while there's no need.

9. Ways of altering horizontal sealer to vertical one (horizontal and vertical dual-purpose sealer):

(1). Lamp the 2 tripod and 2 cross-piece with screw M4, with the concave of the tripod inward and that of the cross bar downward.

(2). Loosening the entrance-exit adjusting knob of the conveyor table. Put out the conveyor table, remove the knob and the clamping screws, and then remove the conveyor table.

- (3). Assembling the conveyor table onto the vertical tripod bracket, and fastening the fixed knob.
- (4). Removing the horizontal short shaft and assemble the vertical long shaft and umbrella base.
- (5). Putting the long shaft into the axis hole of the main body of the sealer, while the horizontal bracket into the vertical bracket, then assembling and fastening the height regulator.
- (6). Vertical place the sealing machine, then the vertical sealer can work.

10. Ways of installing the console sealer:

- (1). Installing the lower frame on the chassis, putting the upper frame into the slot of the lower frame, adjusting the height, and then assembling 4 knobs.
- (2). Removing the back cover of the lower part of the sealer, assembling the sealer on the frames with four M5 screws.

11. Installation of the printing wheel and ways of changing words:

- (1). Removing the safety cover, loosening the pressure knob of knurl wheel.
- (2). Removing the lower and upper guide belts, as well as the clamping screws on the printing shaft.
- (3). Lifting the printing wheel base, separating the printing and the rubber wheel, and pull out the knurl wheel with hands, and then assemble the wheel or do it after changing printing words.
- (4). Assembling the removed spare parts in step (2) and (1), adjusting the pressure of the printing wheel(knurl wheel), and then we can trial start the sealer.

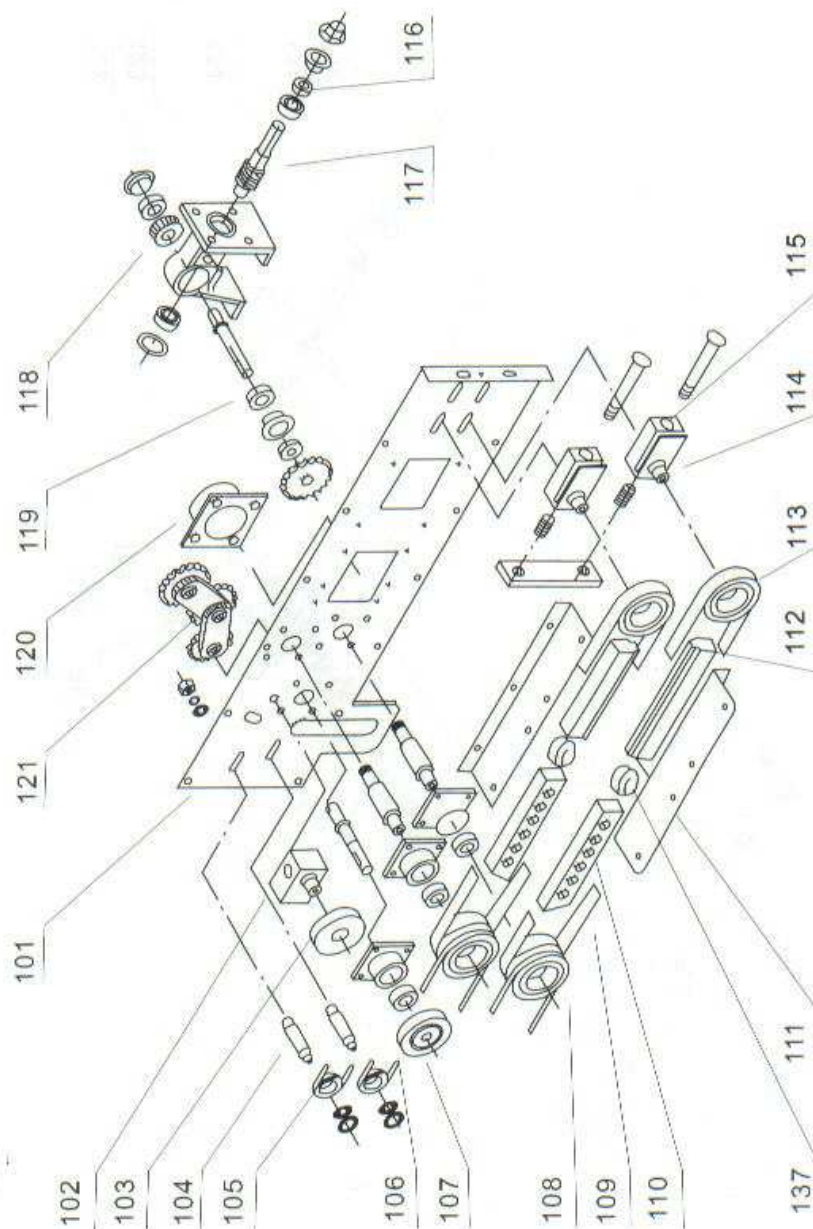
12. Stop operation:

In order to prolong the using life-span of the sealer, we are required to return the temperature regulator to the 0 position and to open the fan before stopping the sealer. At that moment, the temperature on the indicator begins to fall, while the sealing belt is still operating, about several minutes' later, the temperature drops below 100°C. Then we can turn off the switch of the power supply.

VII. SPARE PARTS:

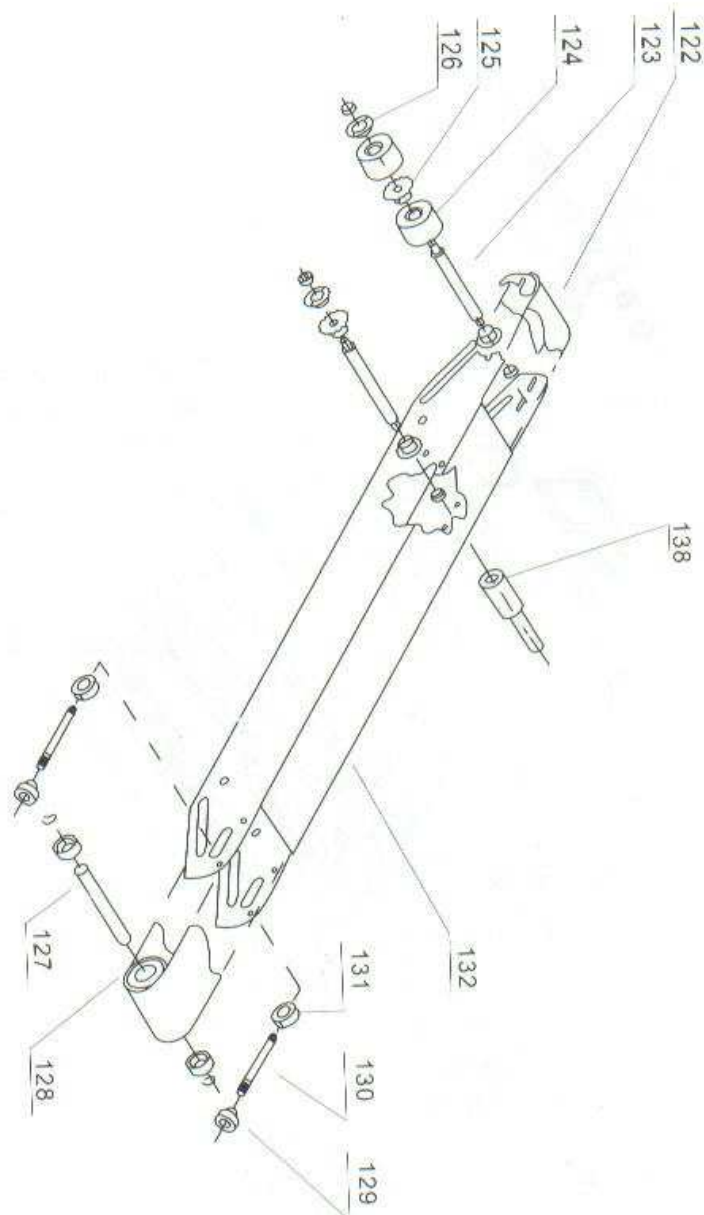
NAME	FRB-770			NAME	FRB-770		
	FR-800	FR-880A	DBF-900		FR-800	FR-880A	DBF-900
Sealing belt	10pcs			Screwdriver (crossed)	1 pc		
Guide belt	2 pcs			Insuring tube	2 pcs		
Wrench	1 pc			Operation Manual	1 pc		

NOTE: The above models' machine, some mechanism has few different, it would not explain and the technology advancement won't inform.

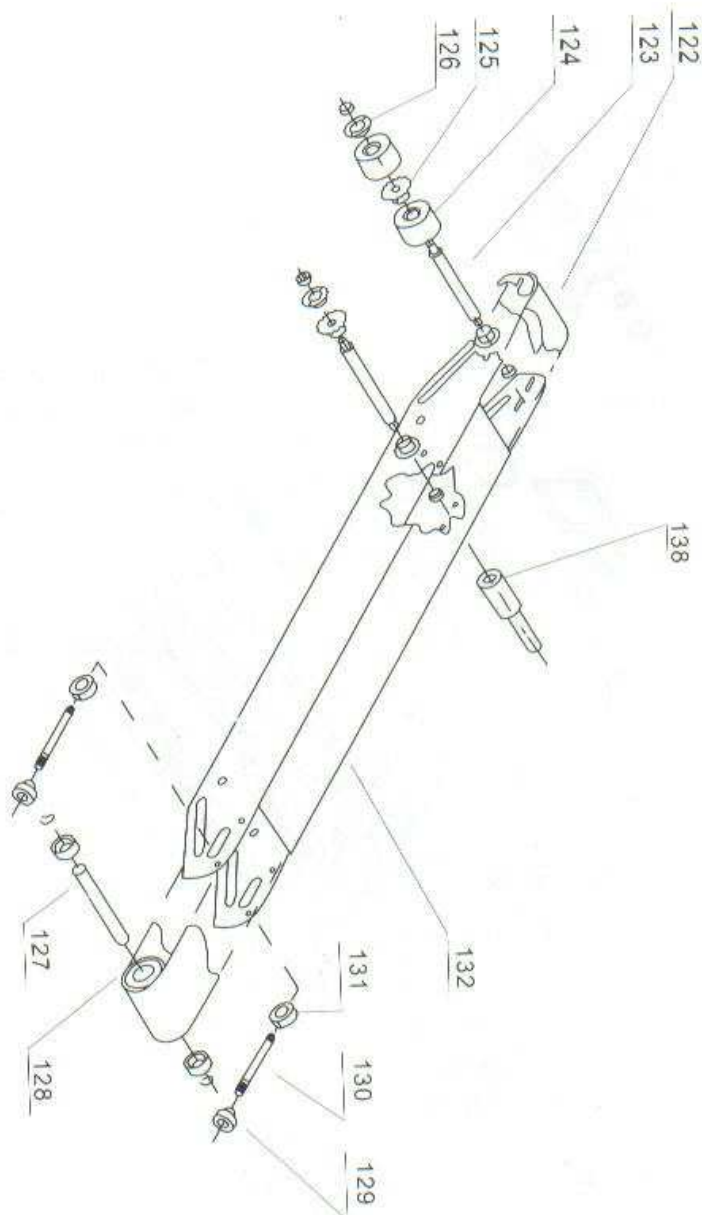


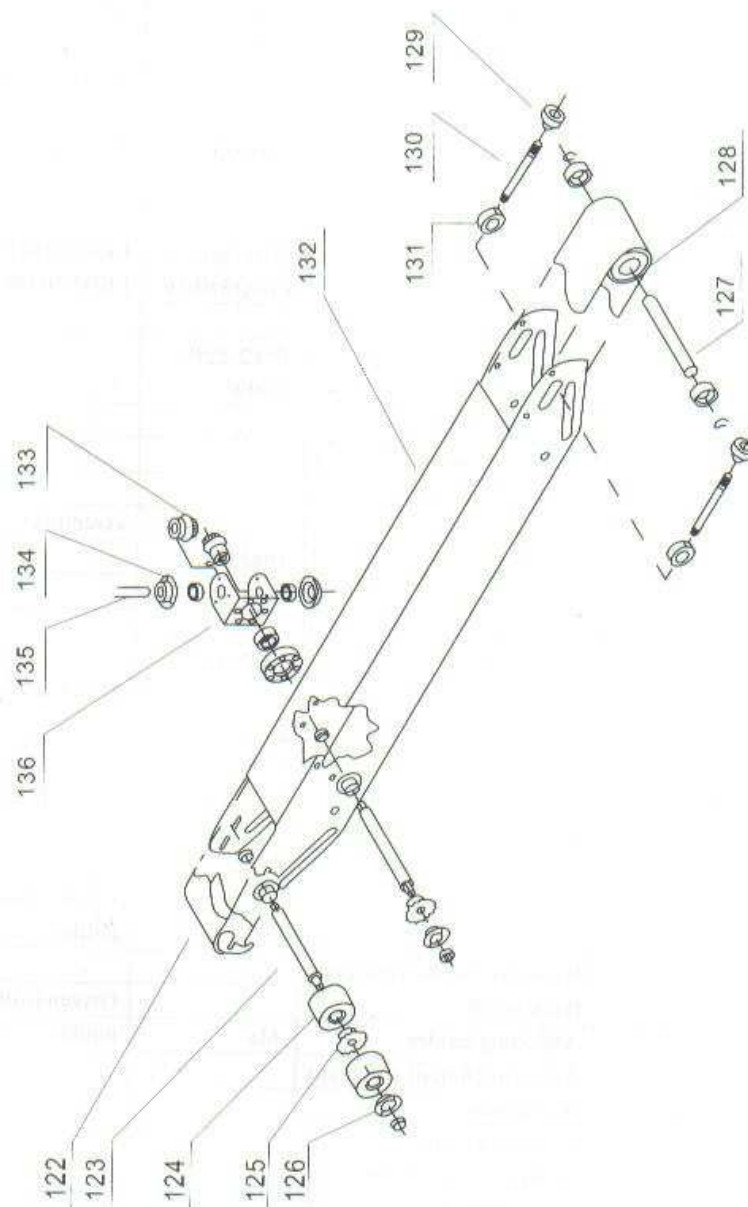
FRB-770II BROKEN DOWN DIAGRAM OF THE SPARE PARTS

FRB-7701 BROKEN DOWN DIAGRAM OF THE CONVEYOR TABLE



FRB-7701 BROKEN DOWN DIAGRAM OF THE CONVEYOR TABLE





FRB-770II BROKEN DOWN DIAGRAM OF THE CONVEYOR TABLE