

# **TYRE CHANGER**

## **INSTRUCTION & MAINTENANCE MANUAL**

*We follow the way that wheel moving!*



Read this entire manual carefully and completely  
before installation or operation of the tire changer

**TYRE CHANGER INSTRUCTION MANUAL**

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# Tyre Changer

## Warning

This instruction manual is important for the machine, please read carefully before installation and use; also it is important for safe use and machine maintenance of machine. Please keep this manual properly in order to further maintenance of the machine.

## 1. Introduction:

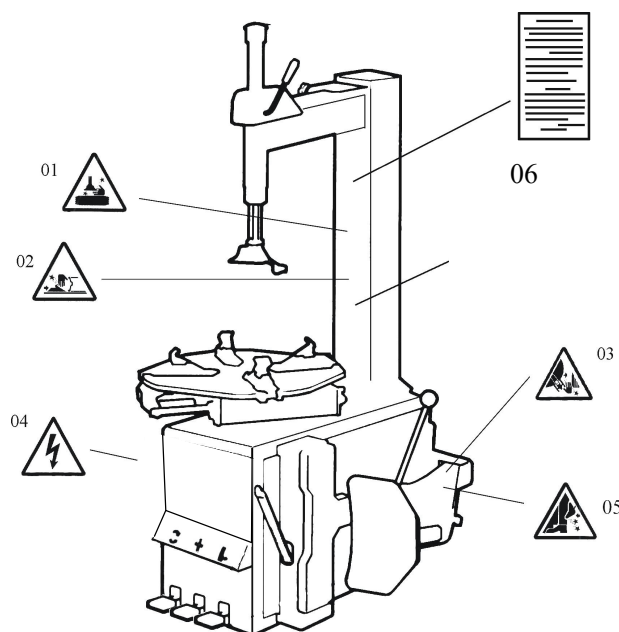
Application Range: The automatic tyre changer is especially designed for demounting / mounting tyres from wheel rims.

**Caution:** Please use the machine only for purpose for which it is designed, don't use it for other purposes.

Manufacturer shall not be liable for any damage or injury caused by failure to comply with these regulations.

**Safety regulation:** Use of this machine is especially reserved to trained and qualified professional persons, those who already read the introduction manual carefully, or someone have the experience for operating similar machinery. Any changes and beyond the scope of use on this machine without manufacturer's permission or do not according to the manual, may cause the malfunction and damage to machine, manufacturer can cancel warranty coverage for above. If some parts are damaged due to some reason, please replace them according to the spare parts list.

**(Attention: warranty is one year after manufactures' delivery date; warranty excludes the easy-broken parts).**



## 2. Safety Warnings:

- 01 Don't put hands under the Mounting head/demounting head during operation;
- 02 Don't put hands between the jaws during operation;
- 03 Don't put hands in the tyre bead when demounting the tyre;
- 04 Make sure and to check the system is equipped with a good grounding circuit;
- 05 Don't put feet between the Bead Breaker shovel and the body during operation;
- 06 Warning instruction

Security warning labels



## Caution:

**When the security warning labels are defaced or off, please recovery them in time!**

**Do not allow to operate when the security warning labels are missed or imperfect.**

**Do not allow to set any objects to obscure the security warning labels.**

**Clients can self-set the warning labels (as right picture show) at any necessary positions.**

### 3. Technical data

External locking rim dimensions	12~26 "
Internal locking rim dimensions	16~28 "
Max. Wheel diameter	1143mm ( 45 " )
Max. Wheel width	457mm(18 " )
Working Pressure	8-10bar
Power supply	110V (1ph)/ 220V (1ph)/ 380V (3ph)
Optional Motor power	0.75/1.1 kw
Max. Rotating Torque (Turntable)	1078 Nm
Overall Dimension	1130*900*1050 mm
Noise Level	<75dB

Remark:

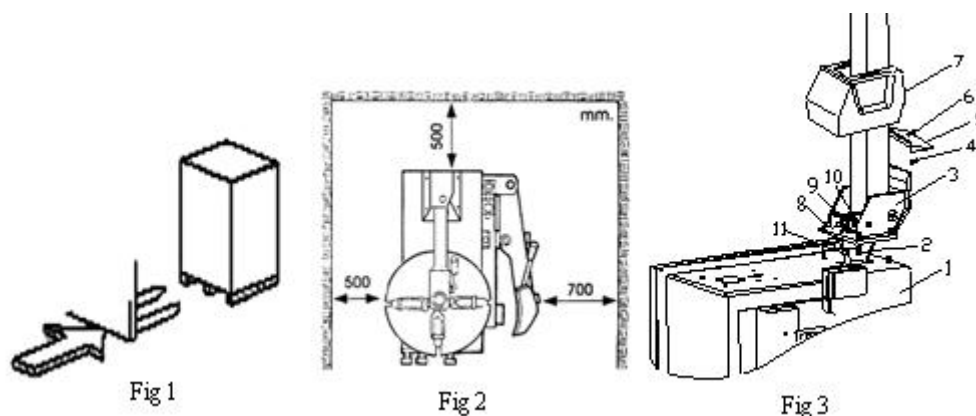
**Rim dimensions defined at above table are based on the iron wheel rims. Aluminum rims are thicker than the iron wheel rims, so here above rim dimensions are just for the reference.**

### 4. Transport:

When transporting, the machine should be with original package and placed according to the mark on the package. For the already packaged machine should be handled with a corresponding tonnage forklift for loading and unloading. The location to insert the fork feet shown as **Fig 1**

### 5. Unpacking & Inspection:

Pull out the nail which is nailed on the plate with tip jaw; unpack the carton and plastic cover. Check and make sure all parts shown on the spare parts list are included. If any parts are missing or broken, please do not use the machine and contact the manufacturer or dealer ASAP.



### 6. Workplace requirements:

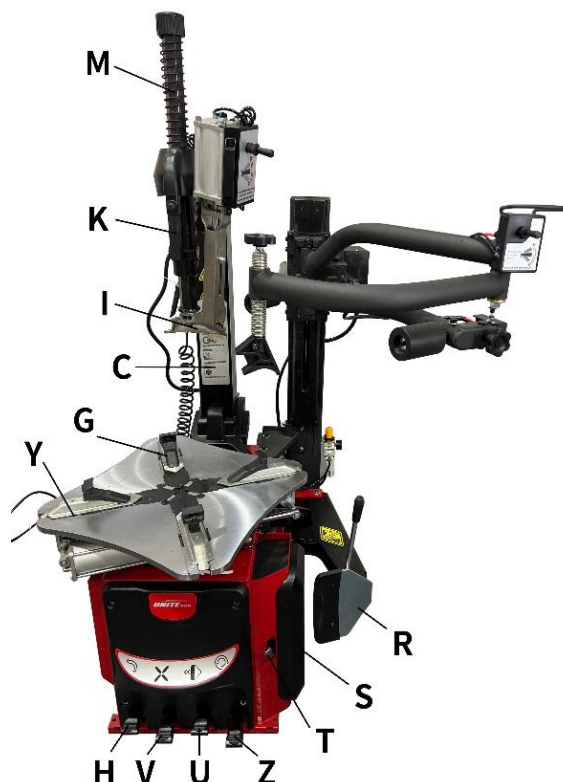
Choose workplace in compliance with safety regulations. Connect power supply and air source according to manual and workplace must have good air condition; in order to make the machine run well, its workplace requires at least clear space from each wall shown as **Fig 2**. If installing it outdoor, it must be protected by roof against rain and sunshine.

**Warning: the machine with motor must not be operated in explosive atmosphere.**

## 7. Position and installation:

**Install the column** (accessories details refer to the exploded drawing)

- 1) Tools preparation
- 2) Place the tilting seat (3, Fig 3) on the body (1, Fig 3) with 4 bolts (M12), push air hose (2, Fig 3) through the hole of the column. Tighten 4 self-locking nut(8, Fig 3).
- 3) Insert screw (9, Fig 3) into the holes of both column and tilting cylinder shaft (11, Fig 3), tighten it with self-locking nut (10, Fig 3).
- 4) Unscrew the two bolts on the left cover and remove the cover, connect air hose (2, Fig 3) previously mentioned to the side holes which control the tilting 5-way valve. Fix the left cover.
- 5) Fix the plastic cover (7, Fig 3) with two bolts (4, Fig 3).
- 6) Mount the plastic back cover (5, Fig 3) on the column with screw (6, Fig 3).



## 8. Electricity and Pneumatic connections:

**Warning:** Before installation and connection, check to be sure that the electricity power supply corresponds to the machine technical data. All the installation of electric and pneumatic devices must be operated by a professional electrician.

Connect the compressed air connector which is on the machine right side with compressed air system. The electric grid that the machine connects to must have fuses protection device and good outer cover grounding protection. Install the leakage automatic air switch on the main power supply, leakage current is set at 30A

**Caution:** No power plug for this machine, the user should self-connect one power plug no less than 16A as well as in line with the machine voltage. Or directly connect with the power supply according to the above requirements.

## 9. Adjusting operation:



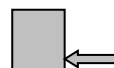
Tilting pedal (H)



Turntable Rotation pedal (Z)



Jaws open and close pedal(V)



Bead Breaker pedal(U)



Rapid Tire Inflation Pedal(B)

- 1) Tread the Turntable Rotation Pedal (Z), Turntable (Y) clockwise rotation; Lift up the Turntable Rotation Pedal (Z), Turntable (Y) counterclockwise rotation.
- 2) Tread Bead Breaker Pedal (U), Bead Breaker shovel (F) close toward inside; release Bead Breaker Pedal (U), Bead Breaker shovel (F) return to original position.
- 3) Tread Jaws open and close Pedal (V), four jaws (G) on the turntable open; tread again, four jaws (G) close. When the pedal is in the middle position, the four jaws stop moving.

4) Tread Rapid Tyre Inflation Pedal (B), air flow out in a flash; release the pedal, the airflow stop. (Please read related warning and note, and be careful for the safety before debugging)

Tyre changer operation is consisted of three parts:

- 1) Breaking the tyre bead
- 2) Demounting the tyre
- 3) Mounting the tyre

**Caution: Before any operations, don't wear loose clothing and wear protective hat, gloves, and skid-proof shoes. Ensure to exhaust the air in the tyre completely, and remove all the wheel weights from the rim.**

### 9.1. Breaking the tyre bead:

Ensure to exhaust the air in the tyre completely, place the tyre against the rubber buffer (S). Bring the shovel (F) against the bead about 10mm from the edge of the rim shown as **Fig 5**. Depress Bead breaker Pedal (U) to push paddle into tyre. Repeat the above operations on different positions around the tyre and both sides of tyre until tyre bead is released completely.

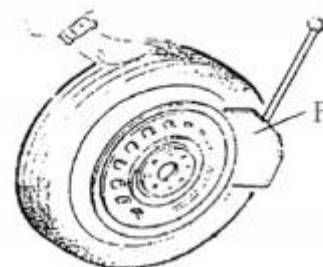


Fig 5

### 9.2. Demounting the tyre :

Ensure to remove all the weights on the wheel rim and to exhaust the air in the tyre completely before this operation. Apply lubricating grease (or similar lubricant) around the tyre bead. Without the lubricant may lead to badly wear and tear on tyre.

Clamp the wheel methods shown as below regarded to the ruled dimension:

a- to clamp the wheel from outside:

Depress the Jaws open and close Pedal (V) halfway down to middle, positioning for the four clamps (G) by reference scale on the Turntable (Y); put the tyre on turntable, hold the rim, and depress the Jaws open and close Pedal (V) until the wheel is secured by the jaws.

b- to clamp the wheel from inside:

Positioning for the four clamps (G) and let them all closed. Put the tyre on the turntable and depress the Jaws open and close Pedal (V) to open the clamps thereby lock the wheel in place.

**Caution: Check to make sure the wheel firmly secured by the four clamps before next step.**

Lower the Vertical Arm (M) until the Mounting head/demounting head (I) rests next to the edge of the rim, flip pneumatic locking button (K) to lock the Vertical Arm (M) and Horizontal arm in position, and control the distance from Mounting head/demounting head to the edge of wheel rim about 2-3 mm. Insert the Lifting Lever (T) between the tyre bead and the front section of the mounting head/demounting head (I), and move the tyre above the mounting head/demounting head as shown as **Fig 6**.

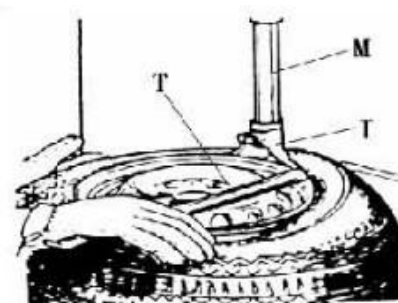


Fig 6

**Caution: Chains, bracelets, loose clothes and anything else close to the rotating parts will bring danger to the operator.**

With the Lifting Lever held in position, depress the Turntable Rotation Pedal (Z), rotate the Turntable (Y) in a clockwise direction until the tyre is completely separated from the wheel rim.

For the other side tyre demounting, keep using the lifting lever to lift the tyre, make the other side tyre separated from the wheel rim. Depress the Tilt pedal (H), the column backward down, take out the tyre.

### 9.3. Mounting the tyre :

**Caution:** Check to make sure that the tyre and the wheel rim are of same size before mounting the tyre.

To avoid any damage on type, lubricate the tyre bead and the wheel rim with the lubrication recommended by manufacturer. Put on the tyre and check the situation.

**Caution:** When clamp the wheel rim, don't put your hands on the wheel rim to avoid injury during this operation.

Lock the Hexagonal Vertical Mounting Arm, put the tyre on the rim, let the Rocker Arm back to place as demounting the tyre.

And let one side of tyre down bead above the rear section of the Mounting head/demounting head, the other side under the front section of the Mounting head/demounting head. Suppress the tyre with hands or help arm, and then spin the turntable for mounting the tyre down bead.

Repeat the above operation for mounting the tyre up bead. (Fig 7)

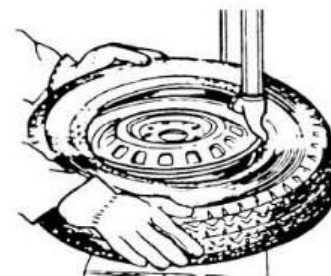


Fig 7

## 10. Help Arm 086

The help arm 086 is an auxiliary device for tire changer, it is used to help to demount and mount tires.

**Before any operation of this machine, the operator is requested to read the manual carefully. Do not attempt any operations that are not stated in it. Manufacturer will not be responsible for any injury or damage caused by improper operation. Please keep the manual handy for consulting.**

### 10.1. Technical Data

Work Pressure	8~10 bar
Weight	100kg
Package dimension	1550*310*550mm
Noise Level	LpA<75dB



### 10.2. Safety Regulations

This device is especially reserved to trained professional personnel or somebody who has experiences on mechanical operation and read this manual carefully. This device must be used together with our tire changers, we are not sure it can work with others. Manufacturer won't be responsible for any unauthorized modification

### 10.3. Installation

#### Notice!

The installation of this auxiliary device should be done by professional personnel. Before assembly, disconnect the device from power supply and air source.

#### 10.3.1. Transport

Move the device with a forklift truck as illustrated in Fig 8.

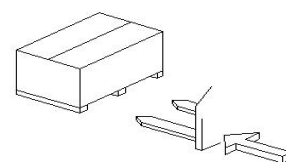


Fig 8

#### 10.3.2. Unpacking

When unpacking, check and make sure all parts shown on the packing list are included. If any parts are missing or broken, please call the manufacturer or the dealer ASAP. Please keep the package out of children's reach.

#### 10.3.3. Workplace Requirement

**Fig 9** shows the minimum distance (cm) from walls after assembly this auxiliary device. Please choose the right place to install it.

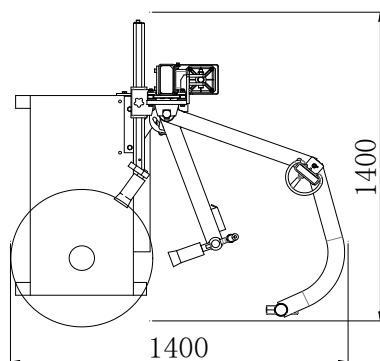


Fig 9

#### 10.3.4 Assembly

- 1) Disconnect the tire changer from power supply and air source.
- 2) Fix the column on the body with four screw1 and adjust the support 2 to a suitable location; (Fig 10)
- 3) Connect the air hose to the corresponding joint through the rear hole of the body.

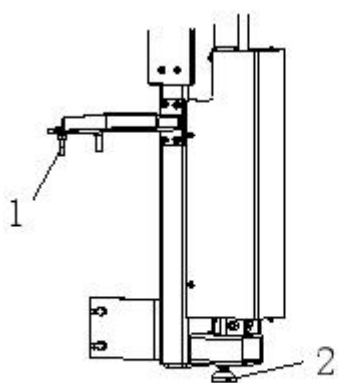


Fig 10

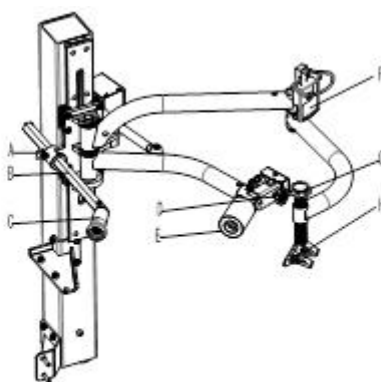


Fig 11

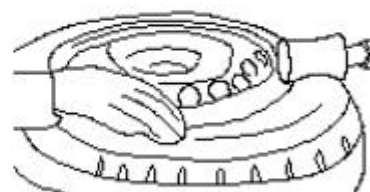


Fig 12

#### 10.4. Functional Parts

Fig 11 shows functional parts to the 086 device:

- |                                |                             |
|--------------------------------|-----------------------------|
| A. Little adjust handle        | B. Hexagonal horizontal arm |
| C. Tire lifting roller         | D. Large adjust handle      |
| E. Tire lifting roller support | F. Lifting switch           |
| H. Adjustable threaded rod     |                             |

#### 10.5. Operations

Mounting and demounting big flat tire is difficult work. By the help of 086 help arm to mount/demount the tire from the tire bead will make the operation easier. It is a good helper for tire changer.

##### 10.5.1. Fixing The Tire

Loosen the bead according to the manual. Clamp the tire from outside, tread the

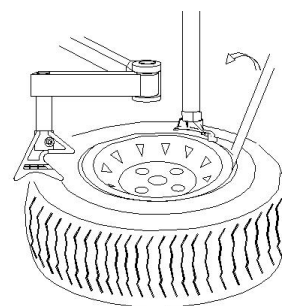


Fig 13



corresponding pedal to open the jaws;

Put the tire on the turntable; Tread the corresponding pedal to close the jaws until they near the rim.

### 10.5.2. Demounting The Tire

-1. Generally speaking, tire is very tight. Loosen the beads with the tire pressing head first (or using the bead breaker if it too tight to loosen).

Pull out the Hexagonal horizontal arm; let the tire pressing roller above the tire without collision.

Lower the tire pressing roller lower with the switch handle to press the tire. Tread the pedal to rotate the turntable. Loosen the bead during this procedure. **(Fig 12)**

**Caution:** Lubricate the tire pressing head (upper) and the bead before the operation.

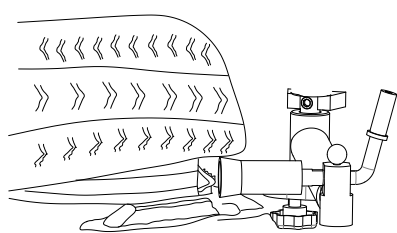


Fig 14

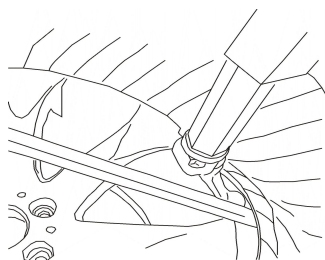


Fig 15

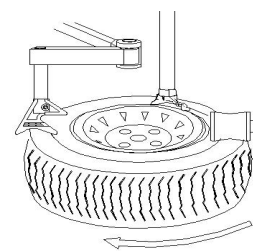


Fig 16

#### -2. Demounting the upper bead

a- Move the mounting head near the edge of the rim, rotate the tire pressing arm to move the tire pressing block above the tire, press the switch handle to depress the tire, and insert the lifting lever in the clearance between the tire and the rim, then hang the bead on the mounting head. (Fig14、 15)

b- Raise the auxiliary arm, rotate the tire pressing head to the opposite. Press the tire with the switch handle to create enough space.

c- Tread the power supply pedal to rotate the turntable. With the help of the tire pressing head, the upper tire bead is detached.

d- Raise the help arm to move the tire pressing block to its non-working position.

#### -3. Demounting the bottom bead

Turn the roller support and move it under the tire, but don't touch it with the rim.; (Fig 14) Tread the power supply pedal to rotate the turntable, meanwhile, lift help arm gradually to loosen tire and completely demount the bottom bead.

### 10.5.3. Mounting the tire

Lubricate the tire bead and rotate the turntable, mount the bottom bead with the mounting head;  
Pull the hex rod out, press the upper bead under the mounting head 5mm with the tire pressing roller, rotate the rotating arm and move the tire pressing block above the tire;  
Don't touch with the rim in the operation, or it causes damage on the rim due to friction.

Tread the power supply pedal to rotate the turntable and the tire pressing block, lower the help arm to press the tire

under the rim. Mount the tire with the mounting head. Please pay attention to the safety in the process of operation. (Fig 16)

### 11. Inflating the tire :

**Importance:** It is very dangerous during inflating operation, take carefully and comply with instruction. When inflating, it will turn to be extremely dangerous if problems happen to tyre or rim. The possible burst force tire goes upward and outward, the big power may cause injury or death of the operator or the people around.

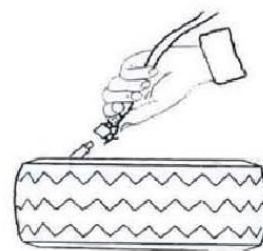


Fig 17

**Tyre may burst caused by following:**

- 1) The wheel rim and the tyre are not of the same size;
- 2) The tyre or the wheel rim is damaged;
- 3) The pressure of tyre inflation is over the max. pressure recommended by manufacturer;
- 4) The operator fail to comply with the safety regulation;

**Please operate as follows:**

- 1) Remove the valve cap from the valve stem;
- 2) Check to make sure the air nozzle is pressed down completely over the threads of the valve stem.
- 3) Check to make sure that the tyre and the wheel rim are of the same size;
- 4) Lubricate both the tyre bead and the wheel rim, additional lubrication is required if needed;
- 5) Inflate the tyre with break, while inflating, check the pressure listed on the pressure gauge, also check whether the bead is fixed or not. Repeat operation above until the bead is secured; you need take special steps when inflating convex rim or double convex rim;
- 6) Continue inflating and check the air pressure frequently until to reach the required pressure. (Fig 17)

**Note:**Never exceed the max. inflation pressure given by the tyre manufacturer.

**Keep hands and your body away from inflating tyres.**

**Only specially trained persons are allowed to perform the operations, do not allow other to operate or be near the tyre changer.**

### 12. Rapid tyre inflation system (only suitable for the IT-suffix version machine)

#### 12.1. Rapid Tire Inflation Device:

**Note:** before inflating operation, please make sure the pneumatic power supply connect well.

Before operation, must check the devices perform well as follow:

- a. Press Rapid Tire Inflation Pedal to the middle position (Fig 36, position 1), the inflating head should give air.
- b. Press Rapid Tire Inflation Pedal all the way down (Fig 36, position 2), a strong air blast should come from the holes in the four jaws' locking sliders. (Fig 37)

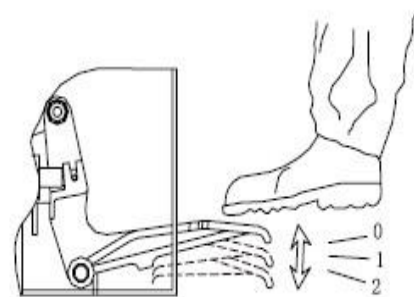


Fig 36

#### 12.2. Wheel rim lock and Tire inflation:

**Note:** A wheel can explode if:

- 1). the diameter of the rim is not exactly the same at the tyre's.
- 2). the rim or tyre are defective.
- 3). the tyre is inflated to a pressure higher than the maximum recommended by the manufacturer.
- 4). the operator does not observe the requisite safety regulations.

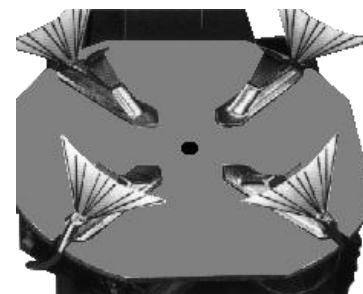


Fig 37

### 12.3. Inflation for tire with inner tube:

- 1). Remove the valve stem.
- 2). Check to be certain that tyre and rim diameter correspond.
- 3). Check to be certain that rim and beads are sufficiently lubricated.
- 4). Press the pedal down to the middle position to start inflation.
- 5). Release frequently the inflating pedal to check pressure on the manometer. If the air pressure is too high, press the button under the manometer for release the rest air until the correct pressure is reached.

### 12.4. Inflation for tubeless tire:

**Note: When inflating tubeless tire using a strong jet of air, the wheel must be clamped from the inside of the rim.**

- 1). Remove the valve stem.
- 2). Check to be certain that tire and rim diameter correspond.
- 3). Check to be certain that rim and beads are sufficiently lubricated.
- 4). Press the pedal down to the middle position to start inflation.
- 5). If the bead of the tyre is not well seated, due to a strong bead, lift tyre manually until the upper bead seals against the rim, then press the pedal all the way down. A strong jet of air will be released through the nozzles in the slides and this will help the bead seal.
- 6). Release the tyre, set the pedal back to the middle position and continue to inflate the tyre to the required pressure. If the air pressure is too high, press the button under the manometer for release the rest air until the correct pressure is reached.

**Note:**

- 1). Failure to follow all warnings and instructions may lead to serious personal injury or death to operator or bystander. NEVER exceed 3.5 bar (50 psi) when seating beads or inflating tyres.
- 2). If a higher tire inflation pressure is required, remove the wheel from the tyre changer and continue the inflation procedure with the wheel inside a special protection cage. NEVER exceed the maximum inflation pressure given by the tyre manufacturer.
- 3). Only specially trained persons are allowed to perform these operations. Do not allow others to operate or be near to the tyre changer.

### 13. Moving machine:

Please use forklift to move the machine. Disconnect the tyre changer from the electricity power supply and pneumatic power supply, lift the base board and insert the feet of forklift. Then mount the tyre changer machine to a new position and fix it tightly.

Note: the place chosen for fixing the tyre changer must meet the safety regulation.

### 14. Maintenance:

**Caution: only the professional persons can do the maintenance. To prolong the machine's life, maintain the machine timely according to the manual. Otherwise, it will impact the reliability of the machine or even cause injury to operator and others nearby.**

**Caution: before performing any maintenance, disconnect the tyre changer from the electric power supply and pneumatic power supply, and depress the Jaws open and close Pedal or Turntable Rotation Pedal for 3~4 times to evacuate all compressed air from the machine. Damaged parts must be replaced by professional persons with the spare parts provided by manufacturer.**

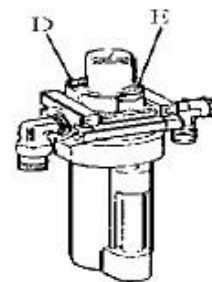
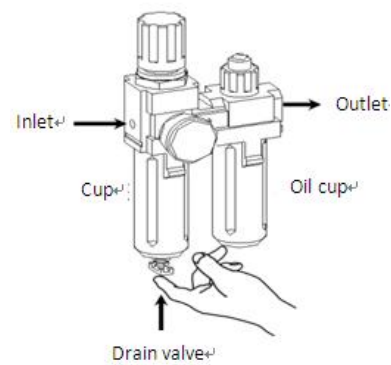


Fig 18

- Clean the machine once every day after work. Clean the dirt on the turntable with diesel oil once per week and lubricate the slides and clamps.

- Following maintenance must be done at least once per month:  
Check oil level in Oil Fog Maker, please be filled with SAE30# oil if need.  
Unscrew with hex wrench (E). Based on connection of compressed air, first to depress Jaws open and close Pedal or Turntable Rotation Pedal 5-6 times, and then check whether oil in Oil Fog Maker drops down a drip of oil. For continuous operation, depress twice every time, drop down a drip of oil, otherwise adjust the screw (D) that controlled oil enter with minus screwdriver. (Fig 18)



- As shown in Figure 18-1, when you found there are some water in the cup, push up the drain valve to drain away water with your fingers; loosen your fingers after drained water, drain valve can be automatic closed under the action of the spring.

**Note:** After the first 20 days of use, retighten the jaws with tightening screws (B) on the Turntable (Fig 19)

**Note:** in the event of turntable lose power, check to see if the belt is tight as follow steps:

Remove the left side cover by unscrewing the screws; adjust two screws located on the motor support, keep a suitable distance between motor support and motor base; tight the screws for the belt tension.(Fig 20)

**Caution:** please disconnect the machine from electric power supply and pneumatic power supply.

**Note:** If Vertical Arm not be locked or not meet the requirement that 2-3mm from the bottom of Mounting head/demounting head to rim, please adjust Hexagonal Locking Plate, refer to Fig 21 and adjust the (X).

**Note:** In order to achieve the reliability of jaws and Bead Breaker shovel, operate as follows to keep their valves clean:

1. Remove the left side cover of the machine body by unscrewing the two screws;
2. Loosen the valve mufflers (A) which belong to Jaws open and close Pedal and Bead Breaker Pedal;
3. Clean the mufflers with compressed air, please replace it referring to the spare parts list if it is damaged. (Fig 22)

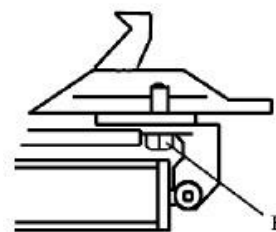


Fig 19

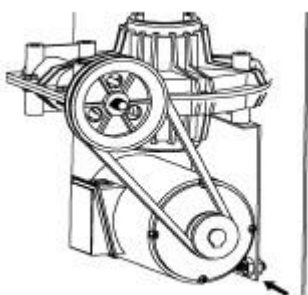


Fig 20

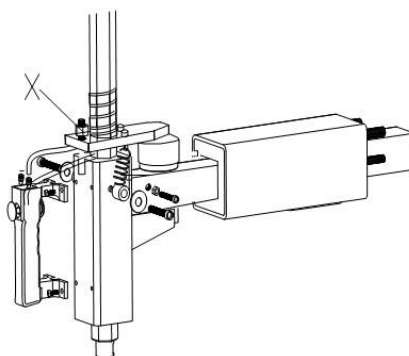


Fig 21

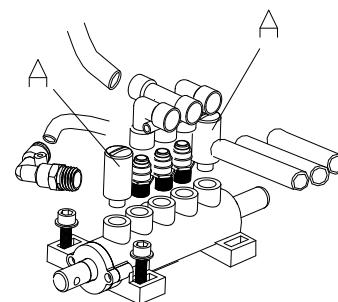


Fig 22

**15. Trouble shooting table:**

Problem	Reason	Solution
The turntable rotate just in one direction or can't rotate.	Reverse Switch broken	Replace the Reverse Switch
	Belt broken	Replace the belt
	The Motor's malfunction	Check the motor cable or terminal block wire; Replace the motor if it was broken.
Demount or fix the wheel, the turntable can't lock (spin with wheel); The jaws delay to open/close; The turntable locks the rim incorrectly.	Leakage of Air network	Check all the parts on the air network.
	The clamping cylinder can't work.	Replace the cylinder piston.
	Worn jaws	Replace the jaws.
	Broken washers of the chuck cylinder	Replace it.
The mounting head/demounting head always touch the rim during operation.	The locking plate incorrectly adjust or unqualified.	Replace or adjust it.
	Screws on the chuck loose; the Vertical Arm can't be locked by Locking Plate	Tighten the screws; replace the Locking Plate.
The Bead Breaker Pedal and Jaw open and close Pedal can't turn back to the original position.	pedal spring broken	Replace it.
The Bead Breaker shovel operates difficultly.	Jammed silencer	Clean it or replace it.
	The washer on the Bead Breaker cylinder is broken.	Replace it.

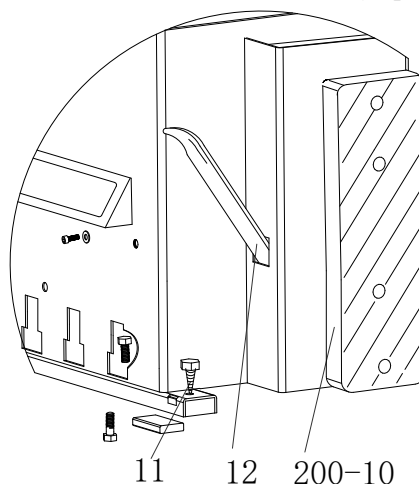
**16.Spare parts ordering guide**

- 1、 First get the damaged or the product samples which have to stock up, and confirm the quantity of parts.
- 2、 In order to avoid the mistakes, confirm the specification of the parts which need to replace.

Confirmation as follows: According to the using range and position of the parts, find the corresponding code from the exploded drawing and record the full code(section 16).For the customers with many models, if the same accessories in

Different models, the ERP information coding shows different serial number, for example, lifting lever: the ERP information coding is C-200-580000-0,the series number in different models,shows12.200-12 or other forms of series number, that belong to the same accessories. So full in the list can be classified into the spare parts category.

For example, we need to buy crow bar, because crow bar always placed in crow bar set inside, so we locate the exploded drawing as below:



See number “12” from the figure, then find all the messages from the list ,and record it.  
As the following figure

11	FJ04006004049	Grounding screw M6x40
12	JZ09001023041	Lifting lever
200-10	JZ09001050330	Bead breaker buffer

Record the information

12	JZ09001023041	Lifting lever
----	---------------	---------------

### 3、Collect the details information of the products

For example

NO.	Order number	Name	Quantity	Buy time
12	JZ09001023041	Lifting lever	2	2009.6.25

4、Contact our spare parts department to confirm the order information.

5、Confirm the order information are correct, then according to the order of supply and demand information delivery to you timely

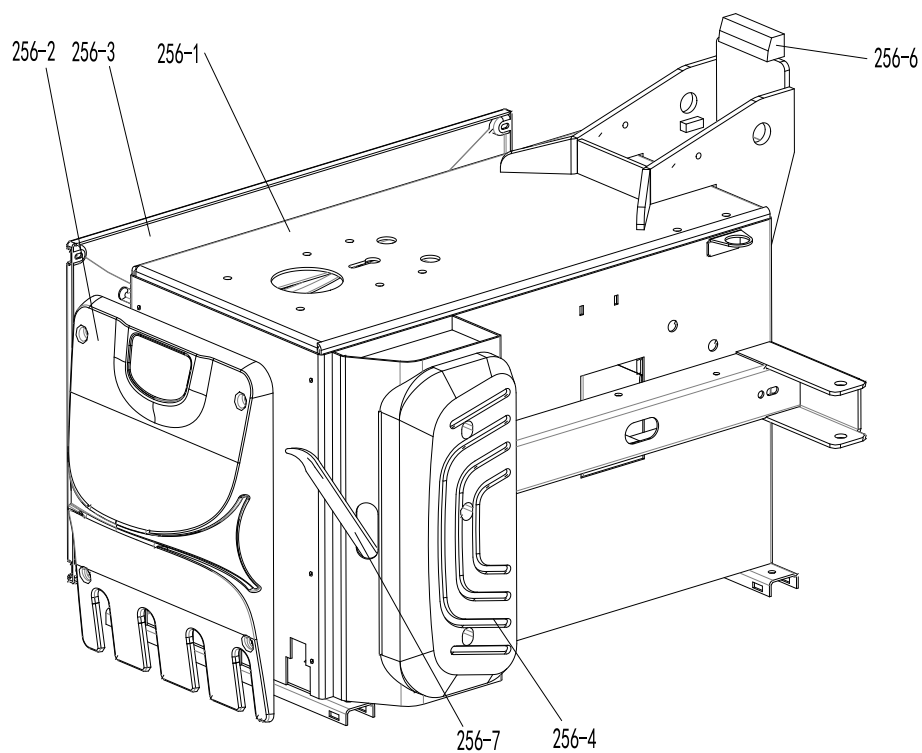
#### Special announcement

- ◆ The company reserves the right to change the parts specifications without prior notice.
- ◆ The company Modified and improved the products, but don't have the obligation to the products which had out of the factory.

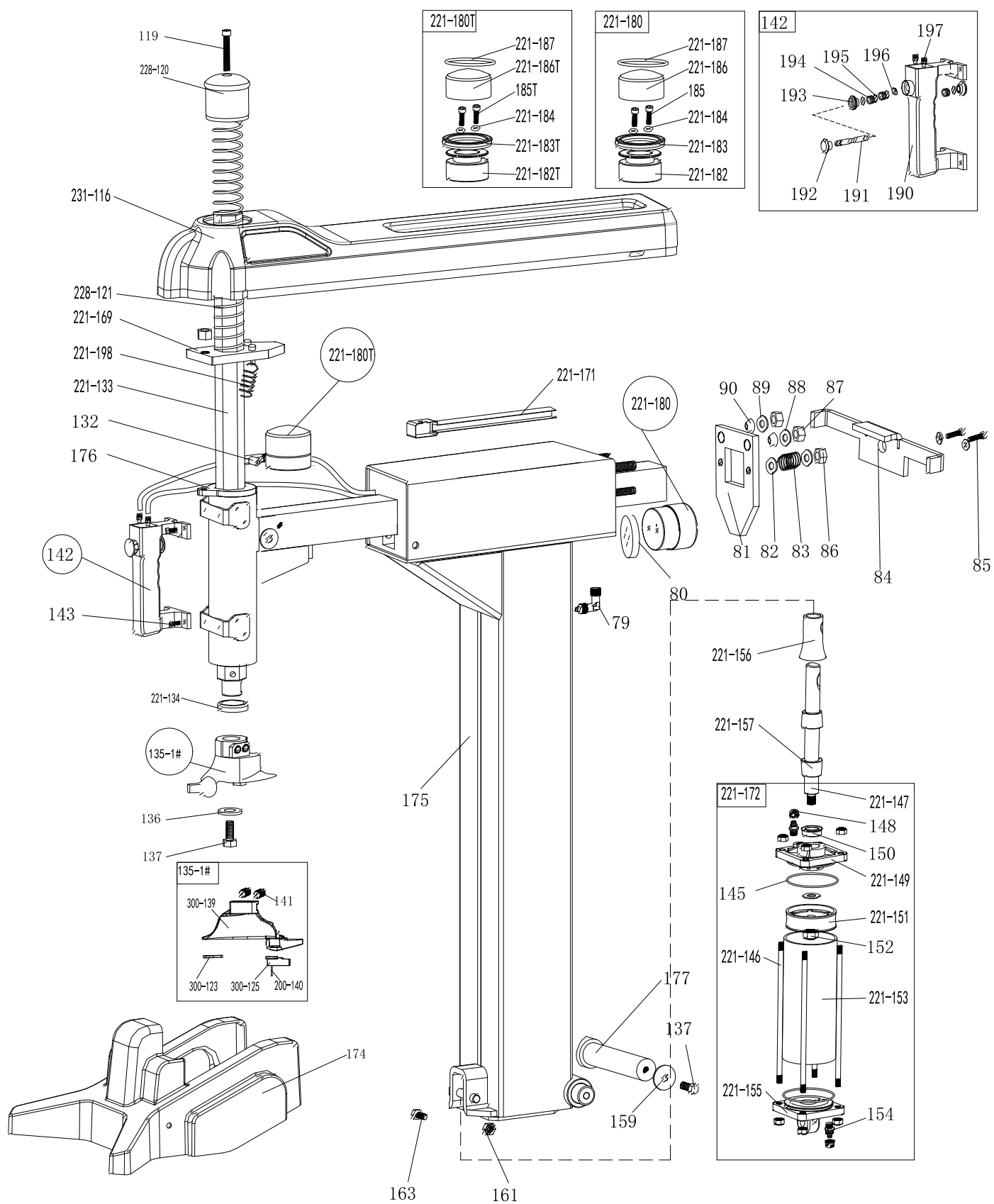
### 17.Vulnerability consumable spare parts list

Query NO.	Order NO.	Parts name	Query NO.	Order NO.	Parts name
256-4	JZ09001050330	Bead breaker buffer U256P	363	FJ08005005395	Y-seal ring Φ184*Φ200*12
226	FJ08003005391	V-seal ring Φ20*Φ28*7.5	228-365	FJ08001005135	O-seal Ø170.8*5.33
227	FJ08001005319	O- seal 68*3.55	200-426	DD03009001577	Reverse switch LW8-25N2/5.5
200-228	JZ09001022765	Clamping cylinder piston Ø75	521	FJ08001005221	O-seal ring Φ30*3.55
232	FJ08001005151	O-seal ring Φ19.6*2.62	200-532	FJ08001005300	O-seal ring Φ59.99*2.62
306	FJ08001005120	O-seal ring Φ16*2.65	604	FJ02003003545	Balancer Belt A-686
307	FJ08001005151	O-seal Ø 19.6*2.62	811	EQ03001002902	Filter AW+AL3300
228-362	FJ08001005153	O-seal ring Φ195*3.1			

Remark: The parts in this list are vulnerability consumable spare parts , if you have other parts order please query the accessories instruction manual.

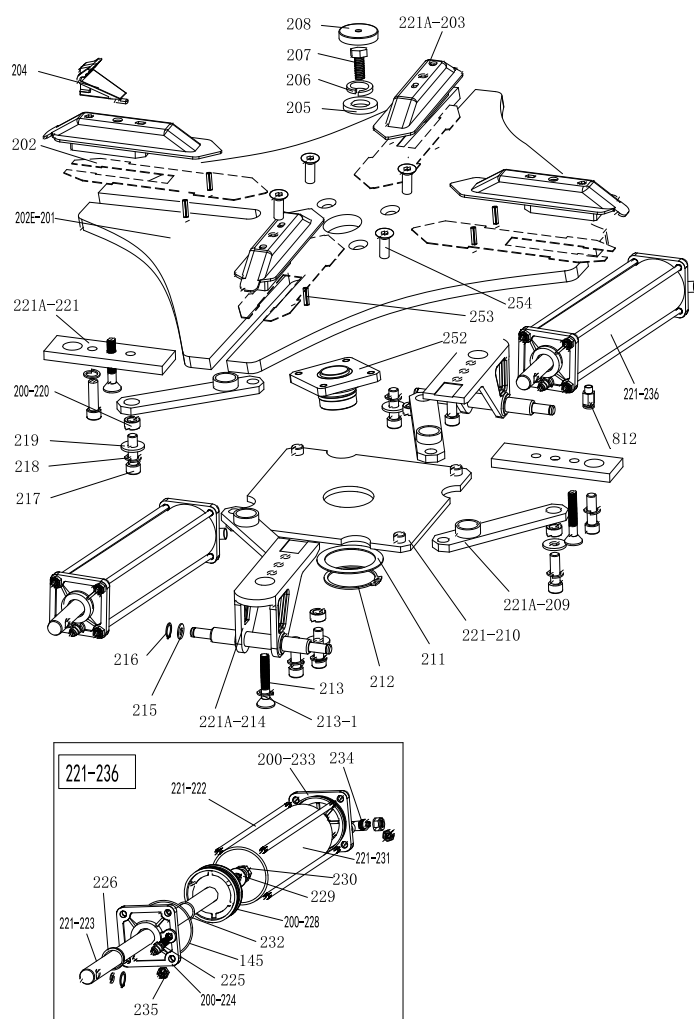
**18. Exploded drawing:**

256-1	JZ08001050302	Machine body 256P
256-2	JZ09001049789	Pedal front cover
256-3	JZ08001021147	Left cover
256-4	JZ09001050330	Bead breaker buffer
256-6	JZ09001022761	Tilting protect cover
256-7	JZ09001023040	Lifting lever

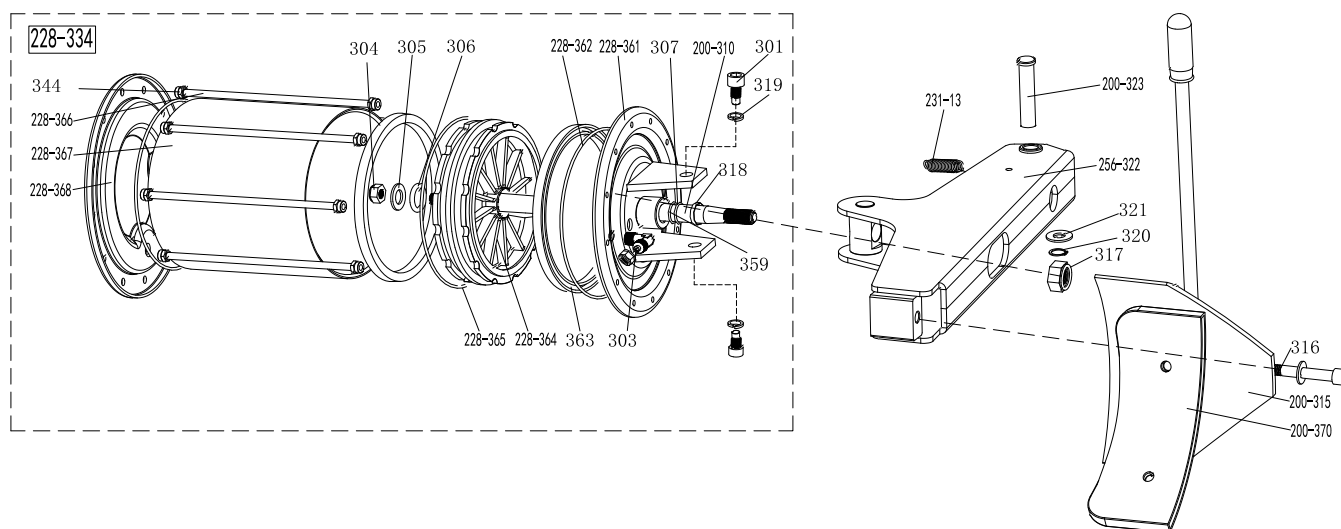




79	EQ10004003262	Quick coupler G1/8-Φ6	221-146	JZ09001022769	Tilting cylinder threaded
80	JZ07001020906	Locking cylinder plate Φ60*10	221-147	JZ09001022767	Tilting cylinder piston rod
81	JZ03001015520	Horizontal arm locking plate	148	FJ04008004459	Nut M8
82	FJ04002003904	Flat washer 8*17*1.5	221-149	JZ09001022762	Tilting cylinder cover without handle
83	JZ09001022819	Horizontal arm locking spring	150	FJ08003005391	V-seal ring Φ20*Φ28*7.5
84	JZ03001040604	Horizontal arm block G23	221-151	JZ09001022765	Tilting cylinder piston ALU Φ75
85	FJ04009004877	Outer hex bolt M8*20	152	FJ04008004495	Nut M12*1.75*T6
86	FJ04008004459	Nut M8	221-153	JZ09001022770	Tilting cylinder barrel φ75*130
87	FJ04008004445	Nut M12	154	EQ10005003297	Quick coupler G1/8-Φ6
88	FJ04002003813	Flat washer 12*24*2	221-155	JZ09001022763	Tilting cylinder cover with handle
89	FJ04002003813	Flat washer 12*24*2	221-156	JZ09001015545	Tilting cylinder piston rod cover U221
90	JZ09001023102	Locking spacer U221	221-157	JZ09001022771	Tilting cylinder rubber sheath 1 40*36*40
231-116	JZ09001040607	Horizontal arm protection cover G23	159	FJ04002003806	Flat washer 10*40*3
119	FJ04009004588	Hex socket head cap screw M10*50	161	FJ04008004445	Nut M12
228-120	JZ07001020884	Vertical arm cap 228 U228	163	FJ04009004806	Outer hex bolt M12*65
228-121	JZ09001022980	Vertical arm spring U228 Φ3*730	221-169	JZ03001015648	Hex locking board 221
128	JZ09001023148	Shock absorber U221	231-171	JZ07001020901	Hose guide U221
129	FJ04009004686	Hex socket head cap screw M6*35	221-172	JZ06001020238	Complete tilting cylinder U-221
221-130	JZ07002020942	Pulley U120	174	JZ09001040608	Column protection cover G23
131	FJ04009004676	Hex socket head cap screw M6*16	175	JZ08001021071	Column U731
132	EQ11002003339	Quick coupler G1/8-2*Φ6	176	FJ04006004255	screw M5*16
221-133	JZ03001015899	Vertical arm S41	177	JZ03001049971	Column shaft U731
221-134	JZ09001022968	Vertical arm washer S41	221-180	JZ06001020239	Complete locking cylinder,L-union
300-123	JZ07001048476	Mount/demount head flat protector 1#	221-180T	JZ06001044758	Complete locking cylinder,T-union
300-125	JZ07001048477	Protector Mount/demount head 1#	221-182	JZ09001023098	Locking cylinder piston U221
135-1#	JZ06001048884	Complete mount/demount head-spec with protector	221-183	FJ08003005389	V-seal ring Φ50*Φ60*6.5
136	JZ03001015342	Mount/demount head flat washer U200	221-184	FJ08001005285	O-seal ring Φ5.5*2.5
137	FJ04009004770	Outer hex bolt M10*25	185	FJ04009004689	hex socket head cap screw M6*55
300-139	JZ09001022699	Mount/demount head-spec. 1#	221-186	JZ03001015728	Locking cylinder cover U221
200-140	JZ09001022993	Hex round pin U200	221-187	FJ08001005293	O-seal ring Φ52*2
141	FJ04006004130	Screw M12*16	190	JZ07001020898	Pneumatic handle switch plate
142	JZ06001020331	Complete Pneumatic locking switch U-221	191	JZ09001015680	Pneumatic handle valve rod
143	FJ04009004676	Hex socket head cap screw M6*16	192	JZ07001020896	Pneumatic valve stem cap
145	FJ08001005319	O-seal ring Φ68*3.53	193	JZ07001020899	Pneumatic handle gland
221-182T	JZ09001036722	Locking cylinder piston U231	194	JZ07001020897	Pneumatic handle spacer U221
221-183T	FJ08003036721	V-seal ring Φ60*Φ70*6	195	FJ08001005325	O-seal ring Φ7.5*2.65
221-184	FJ08001005285	O-seal ring Φ5.5*2.5	196	FJ04001003759	Snap Ring 8
185T	FJ04009004566	Hex socket head cap screw M6*40	197	EQ10005003297	Quick coupler G1/8-Φ6
221-186T	JZ03001036905	Locking cylinder cover	221-198	JZ09001022969	Hex locking board spring Φ1.5*9*54
221-187	FJ08001005293	O-seal ring Φ60*Φ52*2			

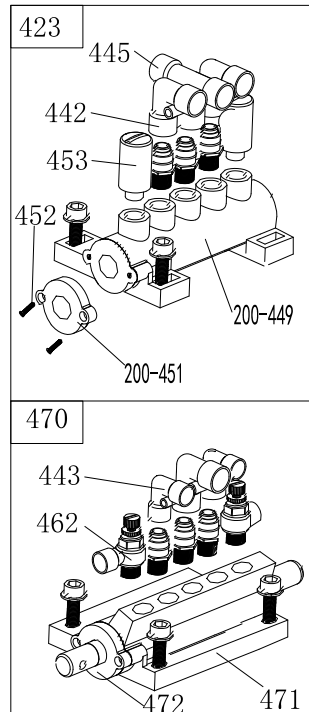
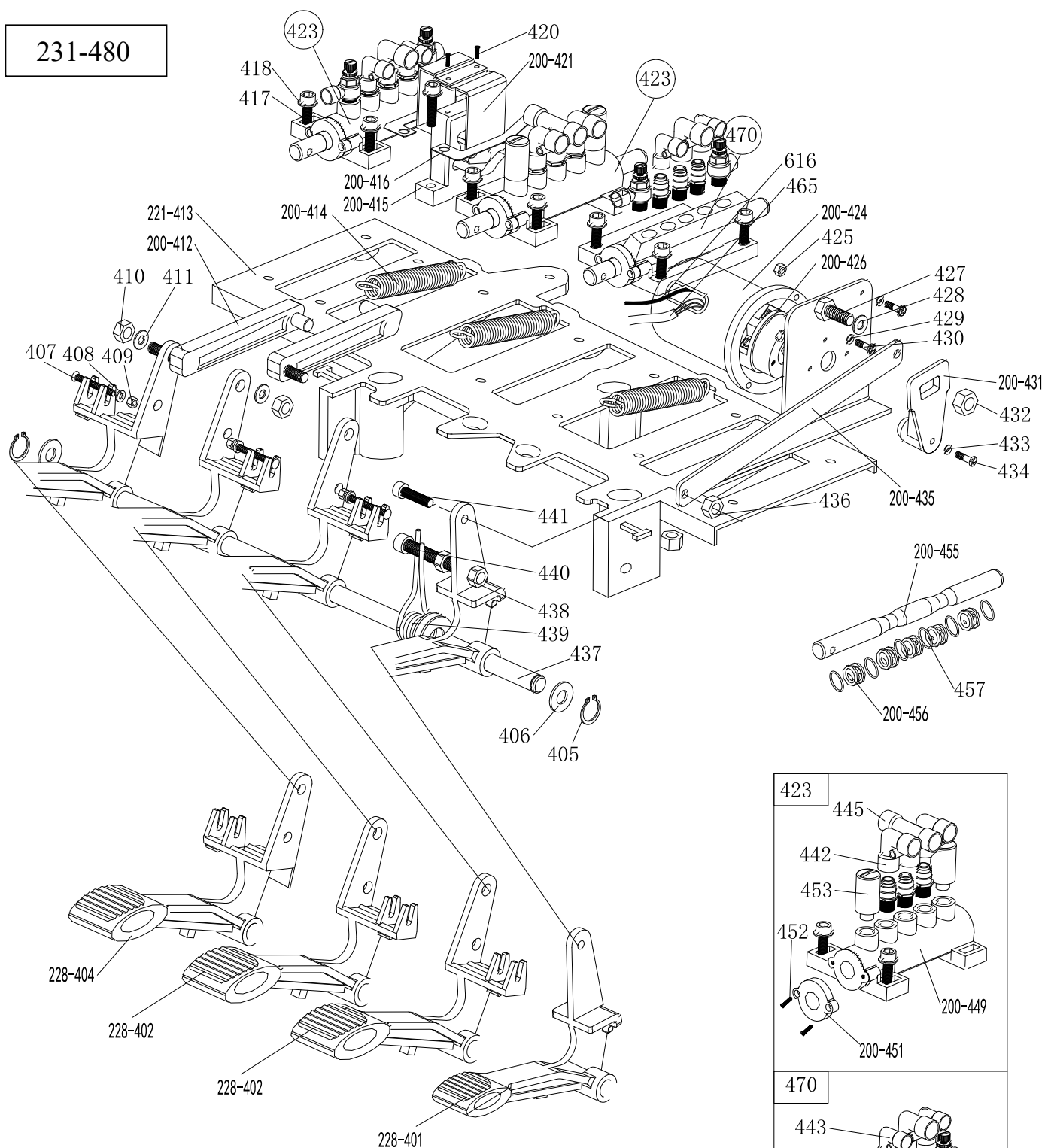


202E-201	JZ03001049370	Turntable 720
202	JZ03001015580	Jaw sliding plate(optional)
221A-203	JZ03001015585	Jaw cap assembly
204	JZ09001022893	Jaw 200
205	JZ03001015476	Big washer
206	FJ04002003779	Spring washer Ø16
207	FJ04009004828	Outer hex bolt M16×40x1.5
208	JZ07001020860	Turntable cap
221A-209	JZ03001015613	Connection rod assembly 615
221-210	JZ03001015456	Square turntable 615
211	JZ03001015457	Square turntable washer
212	FJ04001003757	Snap ring Ø65(shaft)
213	FJ04006004133	Hex socket head bolt
213-1	FJ04002003921	Teeth locking washer 12*23*1
221A-214	JZ03001015835	Jaw slide guide with pin double holes
215	FJ04002003813	Flat washer Ø12X24X2
216	FJ04001003737	Snap ring Ø12(shaft)
217	FJ04009004809	Hex socket head bolt M12×85
218	FJ04002003917	Teeth locking washer Ø12×20.5×1
219	FJ04002003814	Flat washer Ø12X30X3
200-220	JZ09001015609	Connection rod nut
221A-221	JZ03001015767	Jaw slide guide without pin double holes
221-222	JZ09001022936	Threaded connection rod
221-223	JZ09001022847	Clamping cylinder piston rod
200-224	JZ09001022762	Clamping cylinder cover without handle
225	EQ11006003389	Straight union 1/8"-Ø8
226	FJ08003005391	V- seal 20*28*7.5
227	FJ08001005319	O- seal 68*3.55
200-228	JZ09001022765	Clamping cylinder piston Ø75
229	FJ04002003813	Flat washer Ø12X25X2
230	FJ04008004495	Nut M12X7X1.75
221-231	JZ09001022857	Clamping cylinder barrel Ø75*430
232	FJ08001005151	O- seal Ø19.6X2.62
200-233	JZ09001022763	Clamping cylinder cover with handle
234	EQ11005003366	Union 1/8-Ø8
235	FJ04008004459	Self-locking nut M8
221-236	JZ06001020248	Complete clamping cylinder U2098
252	JZ03001015477	Turntable spacer U2098
253	FJ06002004972	Pin Φ5*16
254	FJ04006004132	Screw M12*30
812	EQ10005003281	Quick coupler G1/4-Φ10



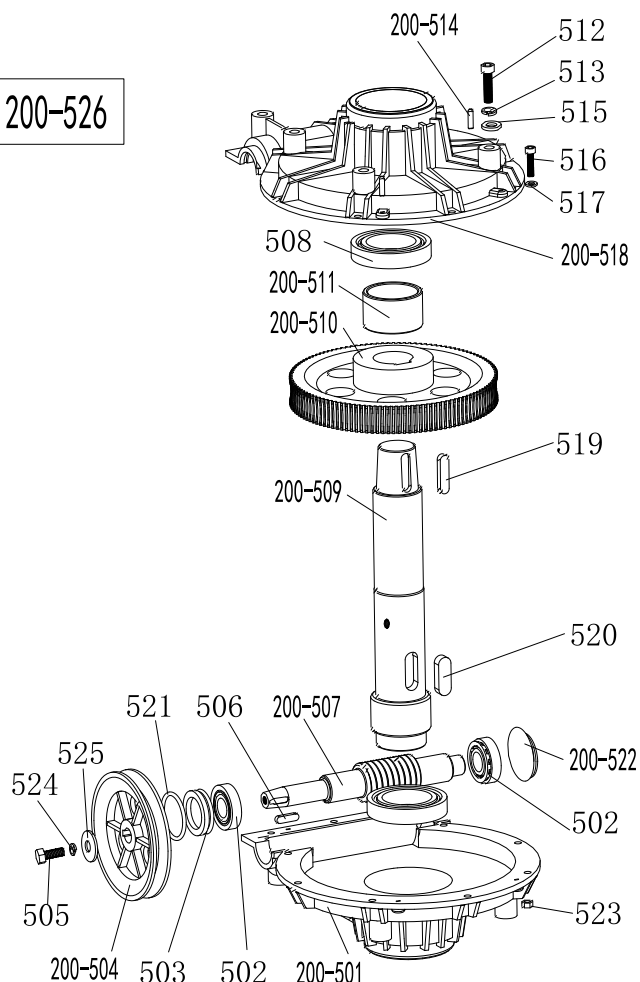
231-13	JZ09001022723	Bead breaker arm spring	359	FJ08003005391	V-seal ring $\Phi 20 \times \Phi 28 \times 7.5$
301	JZ09001011179	Hex socket head bolt M14*30	256-322	JZ08001050333	Enlarge bead breaker arm 256P
303	EQ11005003350	Union (90°) 1/4- $\Phi 8$	200-323	JZ03001015349	Bead breaker pin
304	FJ04008004517	Nut M16*1.5	228-334	JZ06001020266	Complete bead breaker cylinder U2098
305	FJ04002003833	Flat washer $\Phi 16 \times 28 \times 2$	344	FJ04008004459	Self-locking nut
306	FJ08001005120	O-seal $\Phi 16 \times 2.65$	228-361	JZ03001015383	Bead breaker cylinder cover assembly
307	FJ08001005151	O-seal $\Phi 19.6 \times 2.62$	228-362	FJ08001005153	O-seal $\Phi 195 \times 3.1$
200-310	JZ09001022746	Bead breaker cylinder piston rod	363	FJ08005005395	Y-seal $\Phi 184 \times \Phi 200 \times 12$
200-315	JZ03001015790	Bead breaker shovel assembly	228-364	JZ09001022745	Bead breaker cylinder piston U2098
316	FJ04009004613	Hex socket head bolt M12*90	228-365	FJ08001005135	O-seal $\Phi 170.8 \times 5.33$
317	FJ04008004517	Self-locking nut M16*1.5	228-366	JZ09001022935	Threaded connection rod
318	JZ02007039247	Guide belt	228-367	JZ09001022753	Bead breaker cylinder barrel U2098
319	FJ04002003777	Spring washer $\Phi 14$	228-368	JZ03001015380	Bead breaker cylinder rear cover
320	FJ04001003741	Snap ring $\Phi 16$	200-370	JZ07001020829	Bead breaker shovel protection cover(optional)
321	FJ04002003833	Flat washer 16*28*2			

231-480

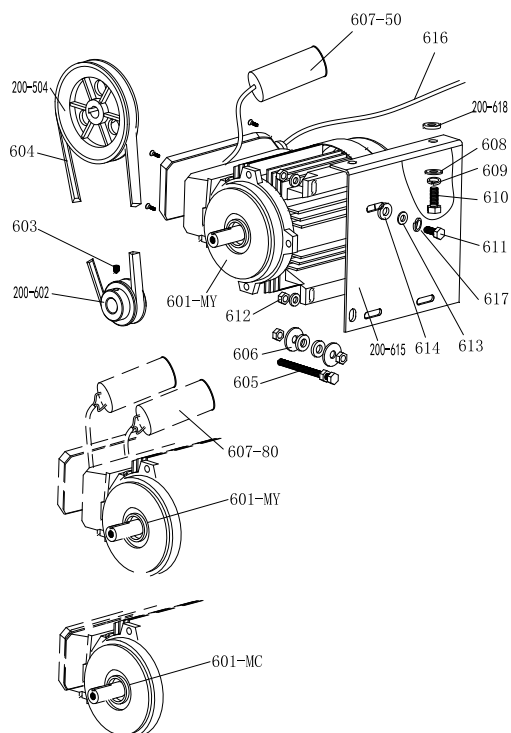


228-401	JZ09001022774	Reverse switch pedal	200-431	JZ07001020856	Reverse switch handle
228-402	JZ09001023137	5-way valve pedal(right)	432	FJ04008004458	Self-locking nut M6
228-404	JZ09001023139	5-way valve pedal(left)	433	FJ04002003859	Flat washer Ø3
405	FJ04001003737	Snap ring Ø12	434	FJ04006004306	Cross head screw M3X18
406	FJ04002003813	Flat washer Ø12*24*2	200-435	JZ03001015560	Pedal connection rod
407	FJ04006004326	Cross head screw M4X30	436	FJ04008004459	Self-locking nut M8
408	FJ04002003874	Flat washer Ø 4	437	JZ03001015570	Pedal front shaft
409	FJ04008004455	Self-locking nut M4	438	FJ04008004515	Nut M8
410	FJ04008004459	Self-locking nut M8	439	JZ09001022873	Pedal twist spring
411	FJ04002003904	Flat washer Ø8*17*1.5	440	FJ04009004715	Hex socket head bolt M8×50
200-412	JZ07001020913	Cam connection rod	441	FJ04009004706	Hex socket head bolt M8×20
221-413	JZ09001022884	Pedal support board	442	EQ10004003264	Quick union1/8- Ø 8
200-414	JZ09001022872	Pedal Spring	443	EQ10004003262	Quick union1/8- Ø 6
200-415	JZ07001020914	Cam	445	EQ10001003242	Quick T-union1/8-2* Ø 8
200-416	JZ09001023109	Cam washer	200-449	JZ07001020920	5-way valve barrel (right)
417	FJ04009004680	Hex socket head bolt M6×20	200-451	JZ07001020918	5-way valve cover
418	FJ04002003890	Flat washer Ø6	452	FJ04006004372	Cross head ST2.9*14
420	FJ04006004228	Cross head self tapping screw 2.9*12	453	EQ04002002955	Muffler 1/8"
200-421	JZ03001015747	Cam cover	200-455	JZ09001015771	5-way valve rod
423	JZ06001020283	Complete 5-way valve	200-456	JZ07001020919	5-way valve rod spacer
200-424	JZ07001020853	Reverse switch cover	457	FJ08001005087	O seal 12*20*4
425	FJ04008004511	Nut M4	462	EQ02005002809	Throttle valve
200-426	DD03009001577	Reverse switch	465	JZ12001026441	Power supply cable
427	FJ04009004680	Hex socket head bolt M6×20	470	JZ06001040161	Complete 5-way valve( tilting )
428	FJ04002003890	Flat washer Ø 6X12X1	471	JZ09001022986	5-way valve barrel
231-480	JZ06001020274	Complete 4-pedals assembly 231	472	JZ07001020918	5-way valve cover
429	FJ04002003874	Flat washer Ø 4	616	JZ12001026447	Motor cable
430	FJ04006004323	Cross head screw M4*16			

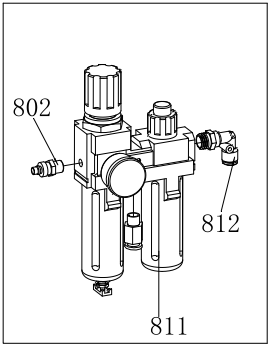
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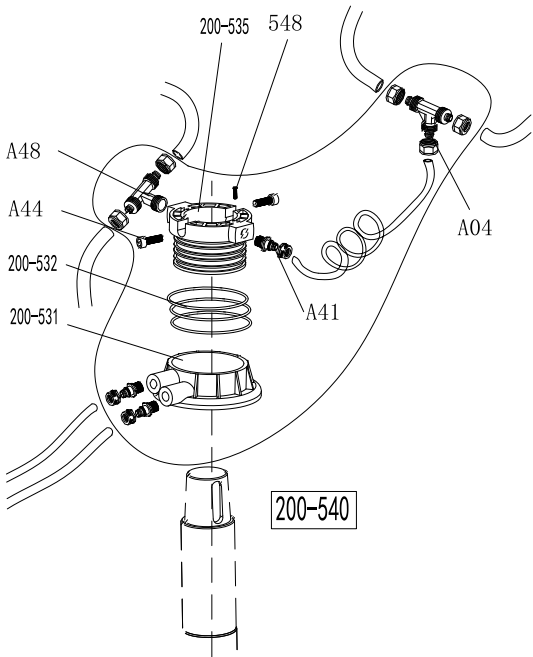
200-501	JZ09001022681	Gear box lower cover
502	FJ02010003613	Bearing
503	FJ08007005413	Gear Seal
200-504	JZ09001023119	Gear Belt pulley U200
505	FJ04009004879	Outer hex bolt
506	FJ06001004964	Key washer
200-507	JZ09001023118	Worm rod
508	FJ02010003623	Bearing
200-509	JZ09001023126	Worm gear shaft
200-510	JZ09001023250	Worm gear U200
200-511	JZ03001015761	spacer
512	FJ04009004779	Outer hex bolt M10*55
513	FJ04002003773	Flat washer 10
200-514	FJ06002005000	Pin
515	FJ04002003800	Flat washer 10*20*2
516	FJ04009004680	hex socket head cap screw M6*20
517	FJ04002003892	Flat washer 6*14*1.2
200-518	JZ09001022679	Gear box upper cover
519	FJ06001004964	Key washer 6*20
520	FJ06001004963	Key washer 14*40
521	FJ08001005221	seal ring
200-522	JZ09001022990	oil resistant seal
523	FJ04008004458	Nut M6
524	FJ04002003792	Flat washer 8
525	FJ04002003915	Flat washer 8*30*3
200-526	JZ06001020255	Complete gear box



200-504	JZ09001023119	Gear Belt pulley
601-MC	Decide order according to customer's requirement: ___V/___HZ/___KW/___PH	
601-MY	For example: 220-240V/50HZ/0.75KW/1PH	
200-602	JZ09001015421	Motor Belt pulley
603	FJ04006004178	Hex socket head bolt M8×12
604	FJ02003003545	Tyre changer belt A-28
605	FJ04009004889	Outer hex bolt M8X65
606	FJ04002003915	Flat washer Ø8X30X3
607-80	DD04009001964	Capacitor 80µf, 110V
607-50	DD04009001883	Capacitor 50µf, 220V
608	FJ04002003800	Flat washer Ø10X20X2
609	FJ04002003773	Spring washer Ø10
610	FJ04009004772	Outer hex bolt M10X30
611	FJ04009004883	Outer hex bolt M8X35
612	FJ04008004515	Nut M8
613	FJ04002003910	Flat washer φ8X22X2
614	JZ09001022782	Motor rubber washer
200-615	JZ03001015423	Motor support
616	JZ12001026447	Motor cable 5×1.0
617	FJ04002003792	Spring washer φ8
200-618	JZ09001022782	Motor rubber buffer



802	Decide by Type of Quick nozzle	Quick nozzle
811	EQ03001002902	Filter AW+AL3300
812	EQ11005003350	Quick coupler G1/4- Ø8



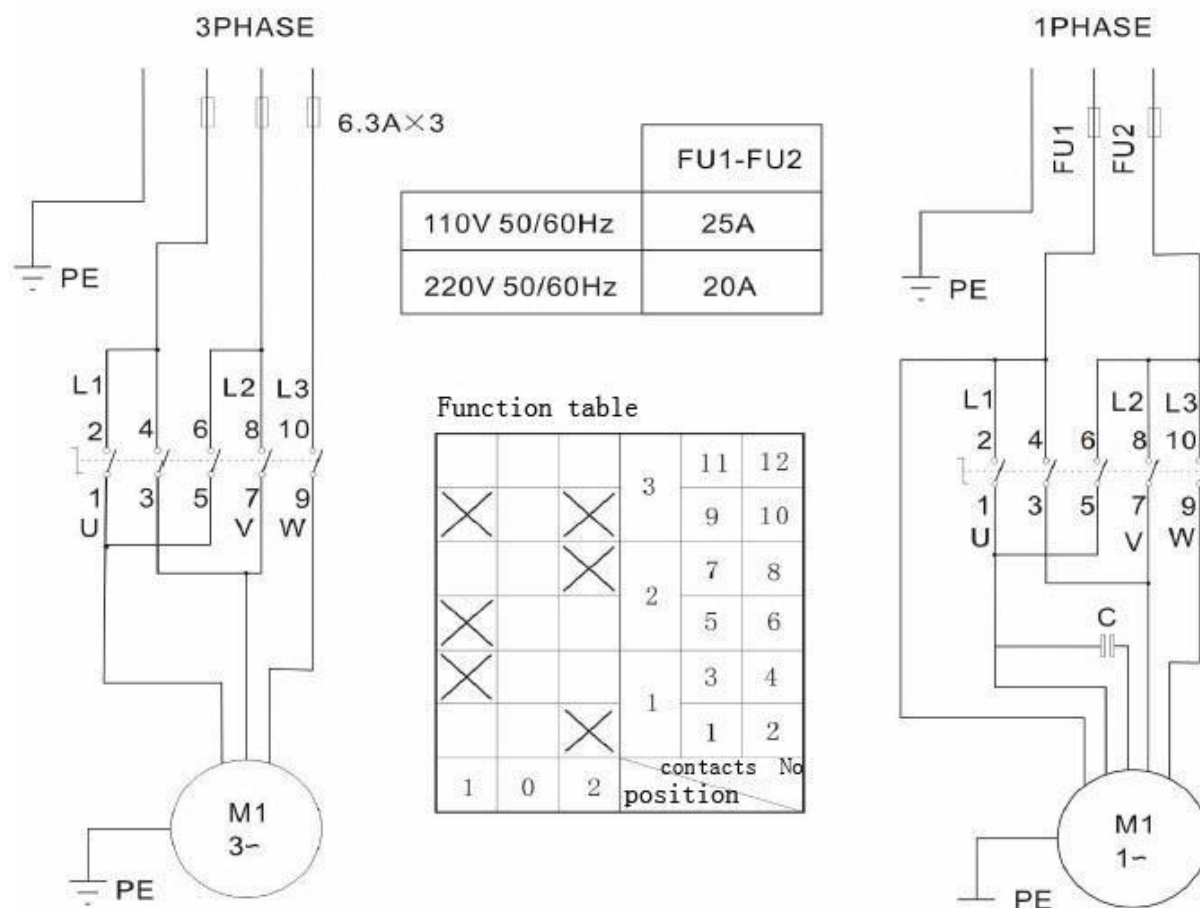
A04	EQ11002003333	Quick coupler
A44	FJ04009004676	hex socket head cap screw
A48	EQ11002003340	Quick coupler
200-531	JZ02007015872	Rotating valve casing 200
200-532	FJ08001005300	seal ring
200-535	JZ02007015676	Rotating valve mandrel
537	CF01002000936	Flexible air hose
A41	EQ11006003389	Quick coupler
548	FJ04006004060	screw
200-540	JZ06001020249	Complete Rotating valve, plastic





086-19	JZ08001048162	Connecting piece	62	EQ10004003254	Quick coupler G1/4-R6
086-20	JZ02007047734	Arm seat assembly	63	JZ07001020927	Tire pressing head(bottom)
086-21	JZ04001018100	Lock cylinder assembly elbow	64	JZ03001015829	Support for Oil fog maker 203
1	FJ04006004408	screw M5*6	F5606	FJ04009004586	hex socket head cap screw M10*40
3	FJ04009047764	hex socket head cap screw M12*160	F5610	JZ09001023066	Raise-fall cylinder 056
4	FJ04008004445	Self-locking nut M12	F5614	JZ09001023207	Support feet
5	FJ04009004706	hex socket head cap screw M8*20	F5615	FJ04009004685	hex socket head cap screw M6*30
7	FJ04002003800	Flat washer 10*20*2	F5616	FJ04008004458	Self-locking nut M6
8	FJ04009004768	Outer hex bolt M10*20	F5617	JZ03001015814	Tire pressing head rotating shaft
10	FJ04009004747	Hexagon bolt half tooth M10*80	F5618	JZ07001020926	Tire pressing head (upper)
12	FJ04008004444	Self-locking nut M10	F5620	FJ04008004448	Self-locking nut M16
12-1	JZ03001015668	Friction sheet top block	F5621	JZ08001021139	Rotating arm assembly 2
13	FJ04006004168	Allen flat end set screw M8*25	F5622	JZ08001021141	Rotating arm rod assembly
14	FJ04008004515	Hex nut M8	F5623	JZ08001049888	Control panel assembly
15	FJ04009004607	hex socket head cap screw M12*40	F5626	EQ02011002888	3-position 5-way manual wrench
16	FJ04009004752	Outer hex bolt M12*60	F5627	JZ07001049894	Control valve protection cover
17	FJ04008004445	Self-locking nut M12	F5628	FJ04009004770	Outer hex bolt M10*25
18	FJ02010048068	Bearing	F5629	FJ04002003773	Flat washer 10
20	FJ04002003792	Spring washer 8	F5633	JZ03001015849	shaft
21	FJ04002003915	Flat washer 8*30*3	F5634	JZ09001023132	Pentagon handle M10*30
22	FJ04009004806	Outer hex bolt M12*65	F5642	FJ04009004706	hex socket head cap screw M8*20
23	FJ04002003775	Spring washer 12	F5645	JZ02007047903	Tire pressing cover
24	FJ04002003814	Flat washer 12*30*3	F5644	FJ02010003601	Bearing
25	FJ04001003747	Snap Ring 25	F5660	JZ07001020911	Adjust handle
26	FJ04008004444	Self-locking nut M10	F727	JZ03001015667	Friction internal compression plate
27	EQ10004003262	Quick coupler	F728	CF03003001071	Guide belt 30*2.5
28	EQ02012002889	Hand valve	F729	JZ03001015669	Friction plate isolation block
29	EQ10005003297	Quick coupler	F750	CF03003001069	Guide belt 11*2.5
30	FJ04006004114	screw	221-182	JZ09001023098	Lock cylinder piston U221
31	FJ04001003743	Snap Ring 20	221-183	FJ08003005389	seal ring 50*60*6.5
31-1	JZ03001015837	Pressing arm pin (right)	221-184	FJ08001005285	seal ring 5.5*2.5
32	JZ03001015476	Big washer	221-186	JZ03001015728	Lock cylinder head U221
33	FJ04008004448	Self-locking nut M16	221-187	FJ08001005293	seal ring 52*2
34	FJ04009004676	hex socket head cap screw M6*20	221-198	JZ09001022969	Hex locking board spring

## 19. Circuit diagram:



## 20. Pneumatic drawing:

