

# TYRE CHANGER

## TC-1291



### INSTRUCTION & MAINTENANCE MANUAL



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

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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.

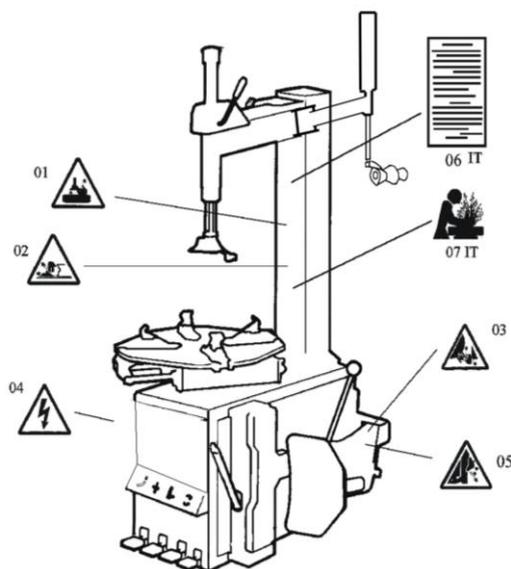
### 1. Introduction:

**Application Range:** The semi-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/demounting head during operation;
- 02 Don't put hands between the jaws during operation;
- 03 Don't put hands inside 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 instructions;
- 07 Pay attention to safety because it is an equipment with strong compressed air device ;

#### 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	12~23 "
Internal locking rim dimensions	14~26 "
Max. Wheel diameter	1143mm (45 " )
Max. Wheel width	406mm (16 " )
Working Pressure	8-10bar
Power supply	110V (1ph)/ 220V (1ph)/ 380V (3ph)
Optional Motor power	0.75/0.55/1.1 kw
Max. Rotating Torque (Turntable)	1078 Nm
Overall Dimension	113X90X103cm
Noise Level	75 Db

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 to make sure all parts shown on the spare parts list are included. If any parts are missing or broken, please 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.**

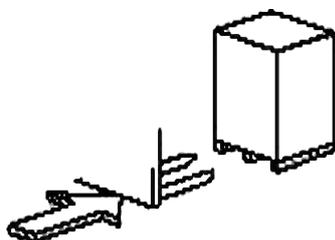


Fig 1

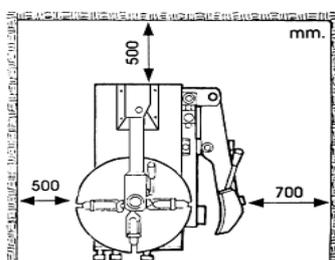


Fig 2

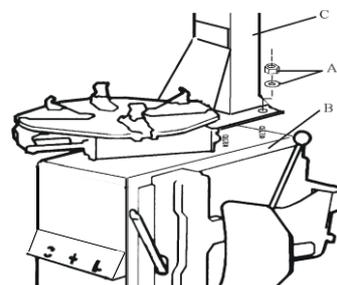


Fig 3

### 7. Position and installation:

1. Unscrew the nuts at the bottom, position the machine and calibrate it with the horizontal rule. Mount the machine with all the screws and to ensure the machine is stable. Make sure the system is equipped with a good grounding circuit for prevent electric leakage. And have operation range of ground for skid prevention.
2. Unscrew the nut A on the machine body B as shown in Fig 3. Lift the column C; mount it on the machine body B by using the nut A through the bolt located on the machine body B. If the column becomes loose after a period of using, tight them immediately. Otherwise the result of damage to the tyre may happen.

## 8. Electric and Pneumatic connections:

**Caution:** 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 control 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.

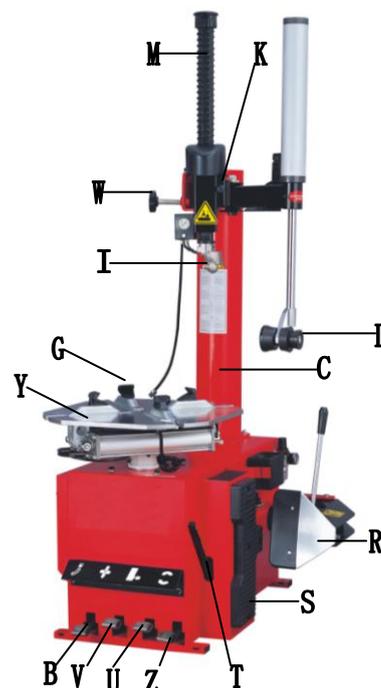
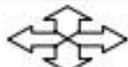


Fig 4

## 9. Adjusting operation:

 <p>Turntable Rotation Pedal (Z)</p>	 <p>Bead Breaker Pedal (U)</p>
 <p>Jaws open and close Pedal (V)</p>	 <p>Rapid Tire Inflation Pedal(B)</p>

1) Tread Turntable Rotation Pedal (Z), turntable(Y) rotates in a clockwise direction; Lift Turntable Rotation Pedal (Y), turntable (Y) rotates in an anticlockwise direction

2) Tread bead breaker pedal (U), bead breaker shovel (R) closing toward inside; Loose bead breaking pedal (U), bead breaking shovel (R) returns to original position.

3) Completely tread Jaws open and close Pedal (V), four jaws on turntable(G) open. Tread again, jaws (G) close. When clamping pedal is at middle level, jaws stop Moving. Shown as Fig 4

Operation of tyre changer consists 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.

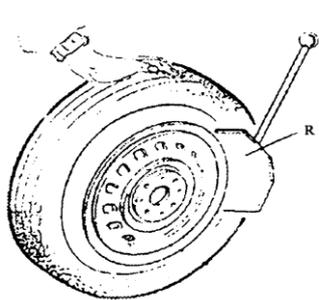


Fig 5

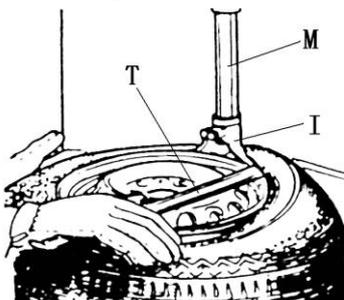


Fig 6

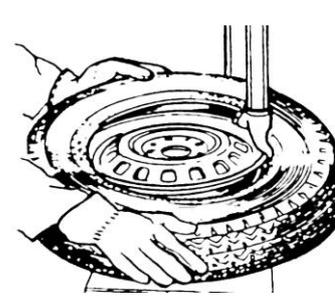


Fig 7

### 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 paddle (R) against the bead about 10mm from the edge of the rim shown as **Fig 5**. Tread 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.

### 9.2 Demounting tyre:

**Caution: 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.**

**Caution: 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::

Tread Jaws open and close Pedal (V) to halfway down to middle, position positioning for the four clamps (G) by reference scale on the Turntable (Y); put the tyre on turntable, hold the rim, and tread 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 tread 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/demounting head (I) rests next to the edge of the rim, flip the Locking Handle (K) to lock the Vertical Arm and Swing Arm in position, and also adjust the Rocker Arm make Mounting/demounting head can raise 2-3mm automatically from the edge of the wheel rim. Insert the Lifting Lever (T) between the tyre bead and the front section of the mounting/demounting head (I), and move the tyre above the mounting/demounting head as shown as **Fig 6**.

With the Lifting Lever held in position, tread the Turntable Rotation Pedal (U), 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.

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

### 9.3 Mounting 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.**

If rim diameter and width are same as that of tyre, it is not necessary to loosen and lock vertical arm. Only put tyre on rim, move swing arm to position when demounting tyre, put one side of tyre bottom bead upon rear of demounting / mounting head, and the other side of tyre bottom bead below front of demounting / mounting head. Press tyre manually or by pressing roller of helping arm, rotate turntable and tyre bottom bead can be mounted. Repeat above operation to mount tyre top bead. ( Fig 7)

## 10. 098 Helping arm application:

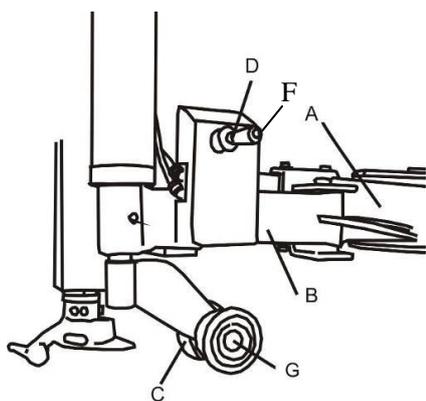


Fig 8

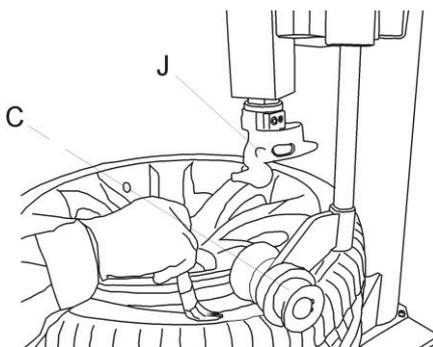


Fig 9

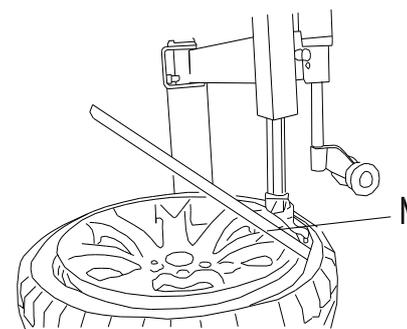


Fig 10

Helping arm at right side is auxiliary device of tyre changer for helping operator to demount and mount tyre.

### 10.1 098 Help Arm Components

Each components of helping arm device are introduced as follows:

A- Swing arm

C- Roller C

F- Locking switch for helping arm

B- Small helping arm

D- Raise-fall roller handle

G- Roller G

The function of helping arm control handle is as follows:

Roller lifting handle (D, Fig 8) is for lifting and lowering roller C、G so as to adjust tyre demounting / mounting vertical height. Operate handle (D, Fig 8 ) up, then roller C、G goes up; Operate handle (D, Fig 8 )down, then roller C、G goes down.

### 10.2 098 Help Arm Operation

It is difficult to demount and mount big low profile tyre. If operation is proper, it is very easy to use helping arm device to demount and mount tyre from rim.

The helping arm device may also be used when demounting and mounting normal tyre with resistance.

#### a. Clamp rim

Firstly, press both side tyre loose as per operation instruction in user's manual. Force of demounting and mounting is big when helping arm device is used. And rim may be damaged easily. It is recommended that to clamp rim from outside ( jaw protector may be installed on jaws ). Tread relevant pedal to make jaws open to clamp edge of rim, move helping arm's rotary arm to far-end. Put on tyre, tread relevant pedal to make jaws close and to approach rim

#### b. Demount tyre

1. Press tyre with right pressing roller C,G to a position 3cm lower than rim edge, lubricate tyre bead, rotate turntable, lift roller C,G. ( Fig 9 )

2. Move demounting/mounting head close to edge of rim, keep a 2-3mm gap

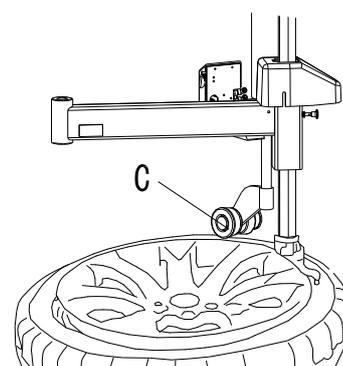


Fig 11

between demounting/mounting head and rim plane, operate locking handle (K, Fig 4) to lock vertical arm, adjust screw bolt in column to position swing arm, make sure 2-3mm gap between demounting/mounting head and rim edge side

3. Nearby demounting/mounting head, insert lift lever N into tyre, use lift lever to lift bead upon knob of demounting / mounting head. Manually rotate roller C to inner side, pull handle D down, make roller C to press rim, keep 3-5mm gap between demounting/mounting head and rim, make sure demounting/mounting head not damage rim, rotate turntable, demount tyre upper bead ( Fig 11)

4. Push handle D up, lift roller C,G, press switch F, loosen right pressing arm, Lift tyre up, insert lifting level into bottom tyre bead nearby demounting/mounting head, lift bead upon knob of demounting / mounting head and rotate turntable to demount down tyre bead

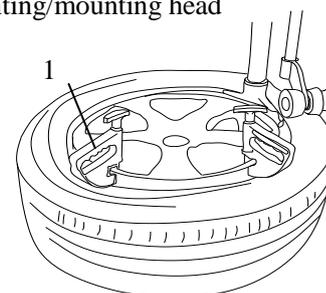


Fig12

### c. Mount tyre

1. Lubricate tyre and rim edge with lubricant to avoid damage of tyre. Adjust height of demounting/mounting head and make tyre bottom bead upon rear of demounting/mounting head and below front of demounting/mounting head. Rotate turntable to mount bottom bead.

2. Make tyre top bead upon rear of demounting/mounting head and below front of demounting/mounting head, move right pressing arm and make sure it is locked, pull handle D down to make roller C,G to press top bead to position below demounting/mounting head, rotate turntable, finish tyre mounting .(Fig 12)

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

### 11.1. 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 13, position 1), the inflating head should give air.

b. Press Rapid Tire Inflation Pedal all the way down (Fig 13, position 2), a strong air blast should come from the holes in the four jaws' locking sliders. (Fig 14)

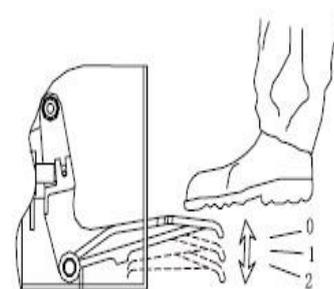


Fig 13

### 11.2. 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.

### 11.3. 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.

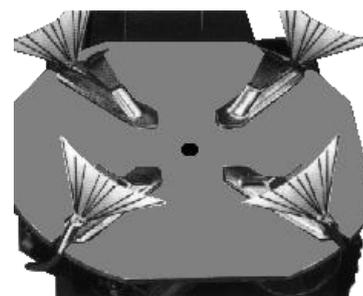


Fig 14

#### 11.4. 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.

#### 12. Moving machine:

A forklift is required to move the tyre changer. Cut off air supply and electricity supply, lift base a little bit, insert lift fork into bottom base, move tyre changer to new position, then fix tightly

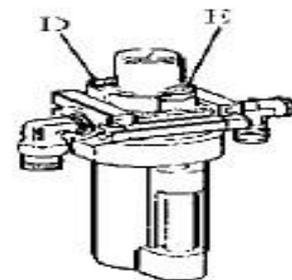


Fig15

**NOTE:** installation position of tyre changer must comply with safety regulation.

#### 13. 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 tread 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.

- 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 tread 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, tread twice every time, drop down a drip of oil, otherwise adjust the screw (D) that controlled oil enters with minus screwdriver. (Fig15)

**Note:** After the first 20 days of use, retighten the jaws with tightening screws (B) on the Turntable (Fig 16)

**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 17

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

**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 18)

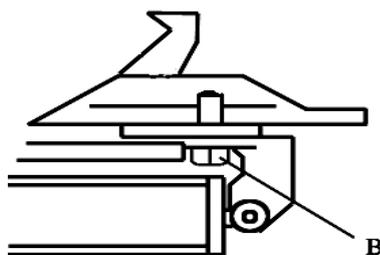


Fig 16

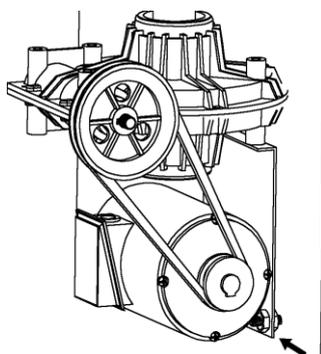


Fig 17

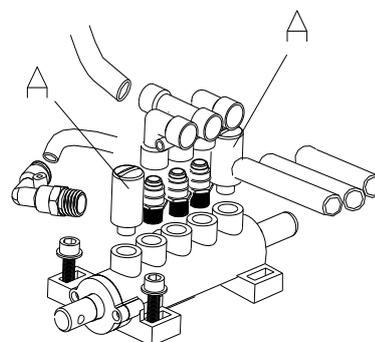
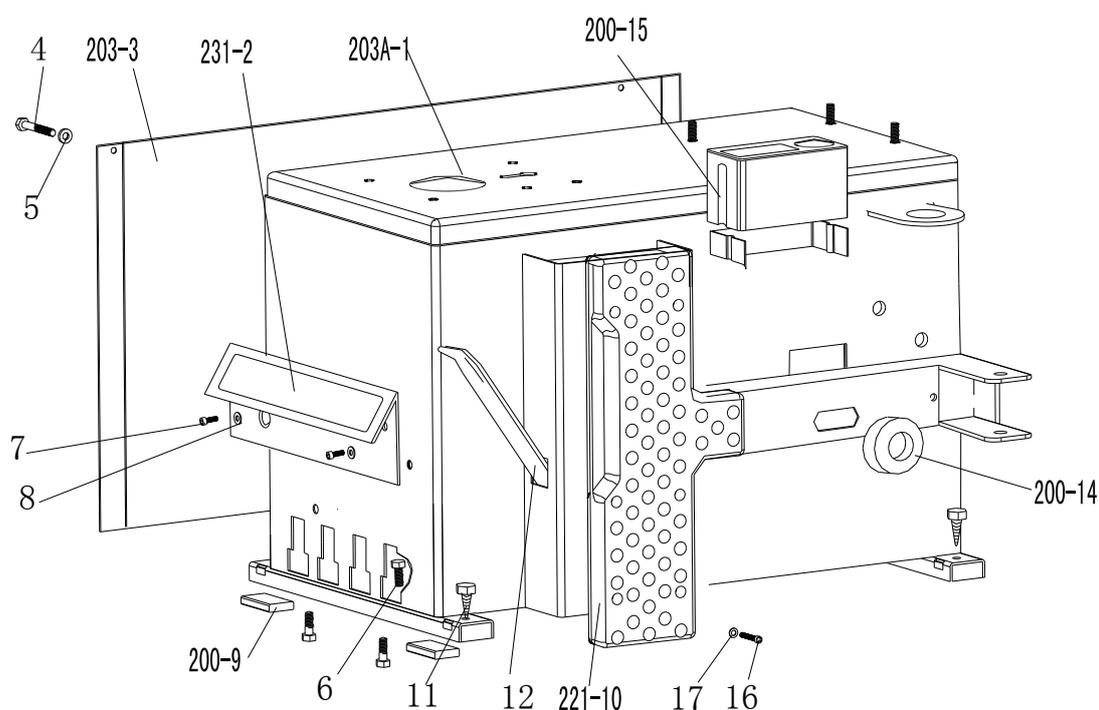


Fig 18

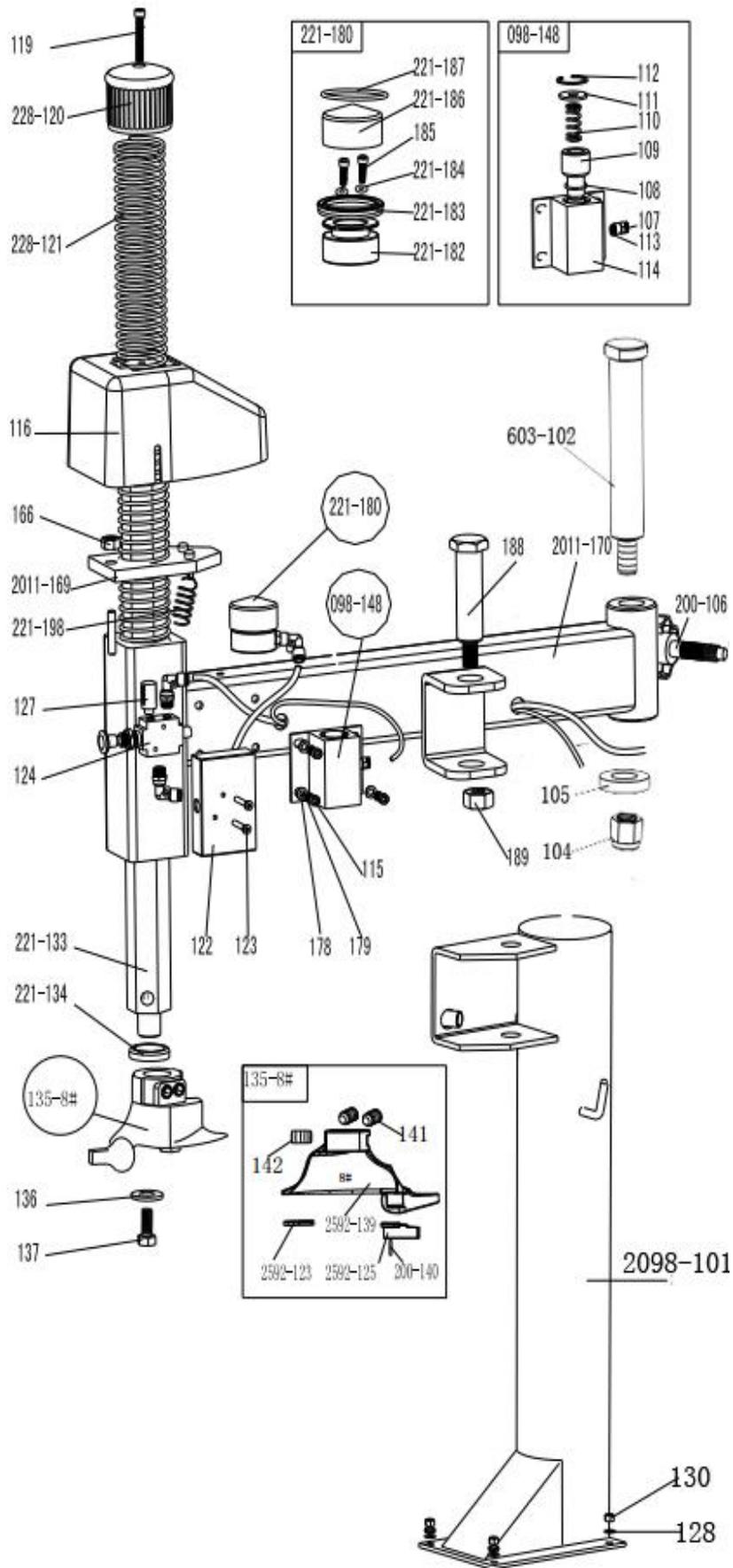
#### 14. Trouble shooting table:

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/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 Hexagonal 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.

## 15. Exploded drawing

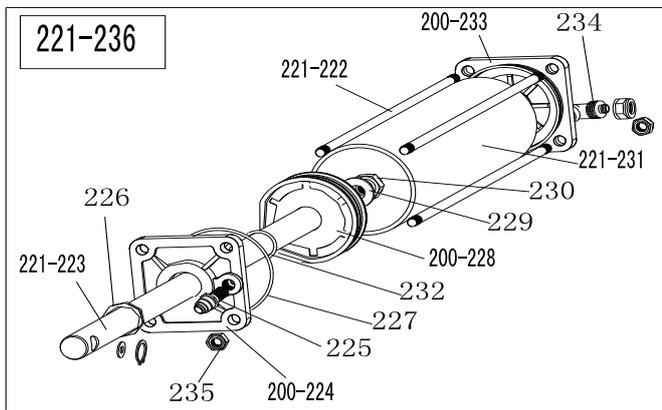
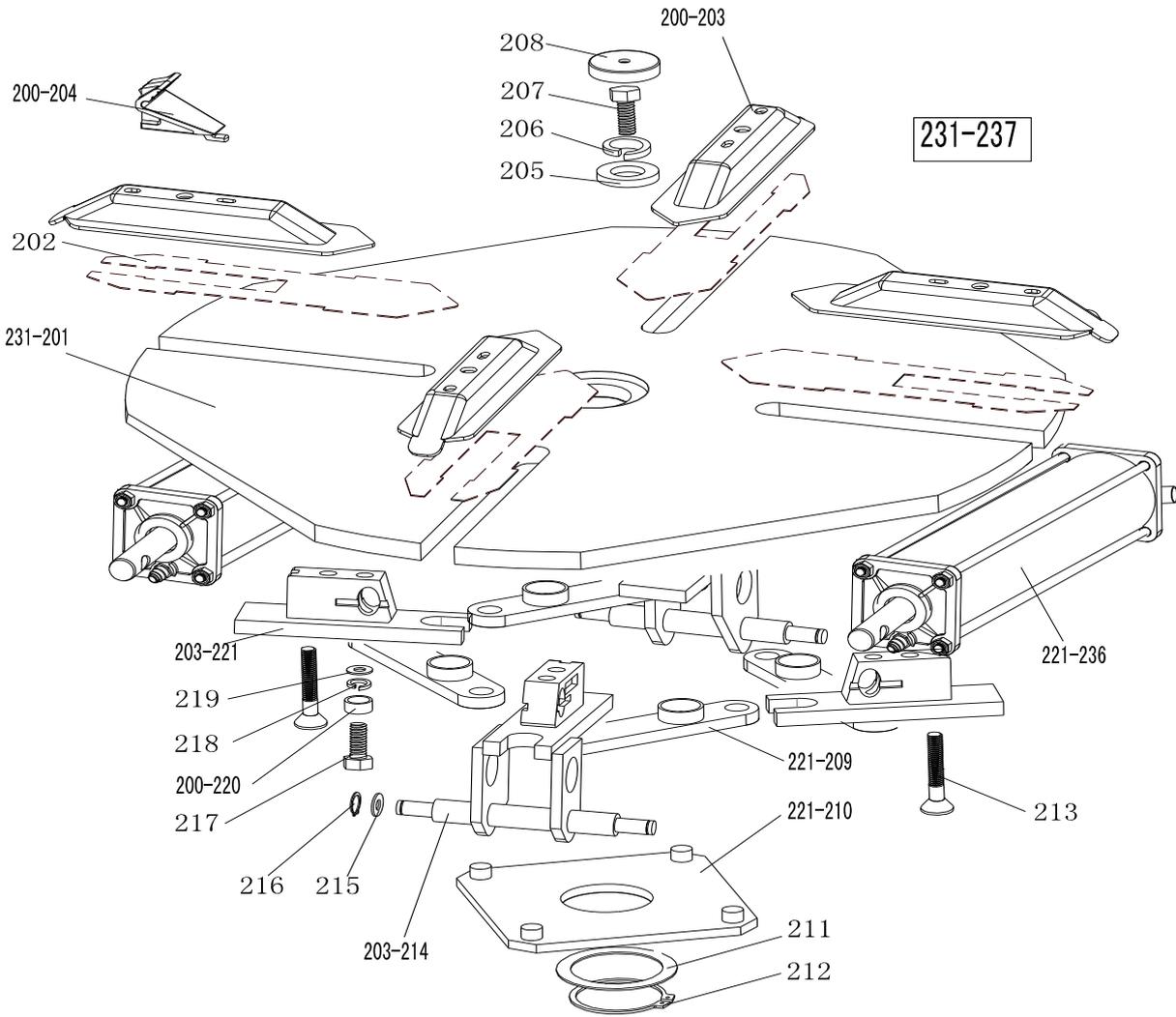


203A-1	CX-203-010000-A	Machine body
231-2	CZ-231-080000-0	Pedal front cover
203-3	CX-231-020000-0	Left cover
4	B-010-060101-0	Hex socket head bolt M6×10
5	B-040-061412-1	Flat washer Ø6*14*1.2
6	B-014-080251-0	Outer hex bolt M8x25
7	B-010-080201-0	Hex socket head bolt M8×20
8	B-040-061412-1	Flat washer Ø 6*14*1.2
200-9	C-000-001020-0	Rubber foot buffer
221-10	C-221-500000-0	Bead breaker buffer
11	B-027-060401-0	Grounding screw M6x40
12	C-200-580000-0	Lifting lever
200-14	C-200-510000-0	Bead breaker arm rubber
200-15	C-200-470000-0	Oil-water box
16	B-010-080201-0	Hex socket head bolt M8x20
17	B-040-081715-1	Flat washer Ø 8*17*1.5

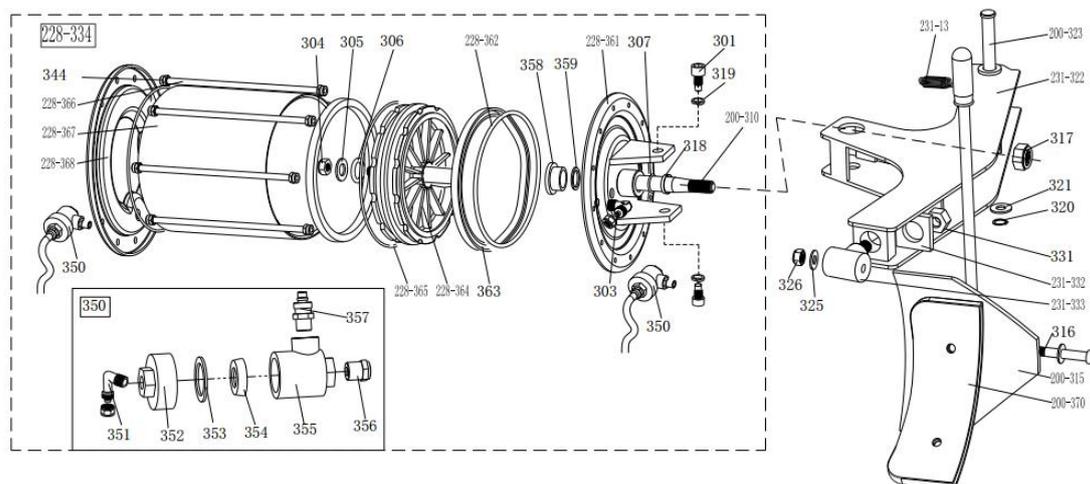


2098-101	CX-298-250000-0	Round column 2098
603-102	CX-6603-190000-0	Swing arm pin
104	B-001-160001-0	Self-locking nut M16*1.75
105	CX-200-140000-0	Big washer
200-106	C-200-350000-0	Column adjust handle
107	S-010-050004-0	Quick straight union M5- Ø 4
108	S-000-030355-0	O-seal 30X3.55
109	CX-007-180600-0	098 Swing arm spring plate
110	C-007-180700-0	098 Swing arm spring
111	CX-007-180800-0	control arm plate washer
112	B-055-300002-0	Snap ring Ø30(hole)
113	S-000-005200-0	O-seal Ø 5.6X2
114	CX-098-080000-0	098 Pneumatic lock barrel
115	B-010-060201-0	Hex socket head bolt M6×20
116	C-298-480000-0	Locking plate cap
119	B-010-100301-0	Hex socket head bolt M10*30
228-120	C-228-490000-0	Vertical arm cap 228
228-121	C-228-390000-0	Vertical arm spring
122	C-098-090000-0	Locking switch box
123	B-017-040301-0	cross head screw M4*30
124	S-030-010414-2	Hand valve
127	S-023-010801-0	Muffler 1/8"
128	B-040-102020-1	Flat washer Ø10*20*2
130	B-001-100001-0	Self-locking nut M10
221-133	CX-221-160000-0	Vertical arm
221-134	C-228-520000-0	Vertical arm washer
136	CX-200-170000-0	3# Mount/demount head protection washer
137	B-014-100251-0	Outer hex bolt M10*25
098-148	CX-098-080000-0	098 Pneumatic lock barrel
166	B-001-100001-0	Self-locking nut M10
2011-169	CX-298-22000-0	Hex locking board 2011
2011-170	CX-211-180000-0	Swing arm 2011
178	B-040-061210-1	Flat washer Ø6
179	B-050-060000-0	Spring washer Ø 6

221-180		Complete locking cylinder	221-198	C-221-400000-0	Hex locking board spring
221-182	C-221-090100-0	Complete locking cylinder piston	135-8#	CW-113-259200-0	Complete Mount/demount head 8#
221-183	S-005-050065-0	V seal Ø60*50*6.5	2592-139	C-2592-150000-0	Mount/demount head 8#
221-184	S-000-005200-0	O- seal Ø 5.6*2	141	B-007-120121-0	Hex socket head bolt M12X12
185	B-010-060551-0	Hex socket head bolt M6×55	142	B-007-100121-0	Hex socket head bolt M10*12
221-186	CX-221-090200-0	Locking cylinder cover Ø 60	2592-123	C-2592-150500-0	Mount/demount head protector
221-187	S-000-052200-0	O-Seal Ø52*2	200-140	C-200-150400-0	hex round pin
188	CX-098-030000-0	Pressing arm pin (right)	2592-125	C-2592-150300-0	Mount/demount head protector
189	B-001-160001-1	Self-locking nut M16*1.5			

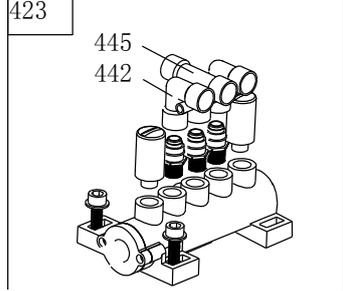
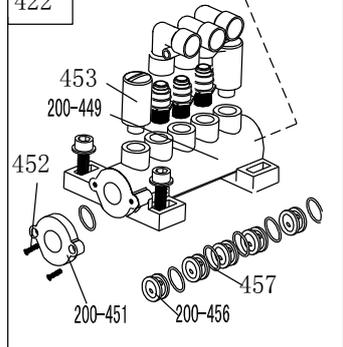
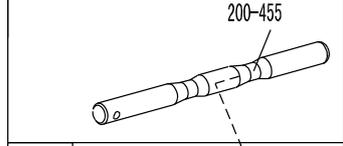
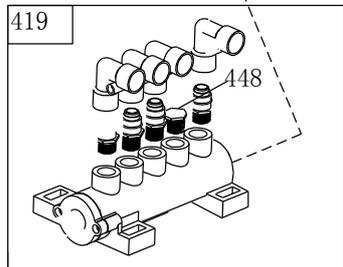
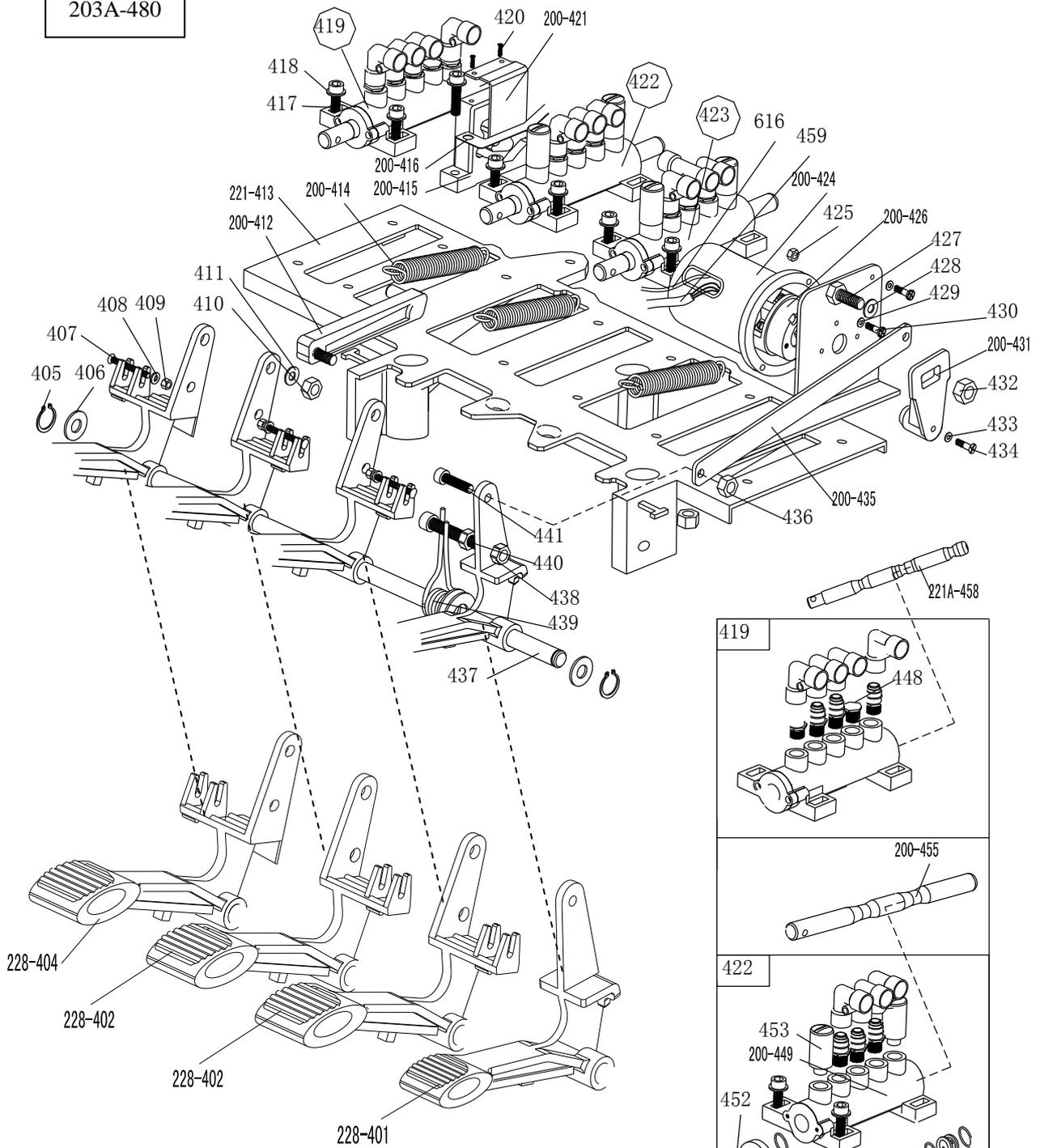


231-201	CX-231-130000-0	Turntable assembly 650
202	CX-221-120300-0	Jaw sliding plate(optional)
200-203	CX-200-120000-0	Jaw cap assembly
204	C-200-570000-0	Jaw
205	CX-200-140000-0	Big washer
206	B-050-160000-0	Spring washer Ø16
207	B-014-160401-0	Outer hex bolt M16×40x1.5
208	C-200-440000-0	Turntable cap
221-209	CX-221-310000-0	Connection rod assembly 615
221-210	CX-221-280000-0	Square turntable 615
211	CX-200-290000-0	Square turntable washer
212	B-055-650001-0	Snap ring Ø65(shaft)
213	B-012-120631-0	Hex socket head bolt
203-214	CX-203-110000-0	Jaw slide guide with pin double holes
215	B-040-122520-1	Flat washer Ø12X25X2
216	B-055-120001-0	Snap ring Ø12(shaft)
217	B-014-120801-0	Outer hex bolt M12×40
218	B-046-122050-1	Teeth locking washer Ø12x20.5x1
219	B-040-123030-1	Flat washer Ø12X30X3
200-220	CX-200-300000-0	Connection rod nut
203-221	CX-203-110100-0	Jaw slide guide without pin double holes
221-222	C-221-100400-0	Threaded connection rod 393
221-223	C-221-100200-0	Clamping cylinder piston rod 400
200-224	C-200-100100-0	Clamping cylinder cover without handle
225	S-011-010808-0	Straight union 1/8"-Ø8
226	S-005-020075-0	V- seal 20*28*7.5
227	S-000-063265-0	O-seal 63*2.65
200-228	C-200-540000-0	Clamping cylinder piston φ 70
229	B-040-122520-1	Flat washer Ø12X25X2
230	B-004-120071-1	Nut M12X7X1.75
221-231	C-221-100500-0	Clamping cylinder barrel 360
232	S-000-019262-0	O-seal 19.6X2.62
200-233	C-200-100300-0	Clamping cylinder cover with handle
234	S-018-010808-0	Union 1/8-Ø8
235	B-001-080001-0	Self-locking nut M8
221-236	CW-105-021100-0	Complete clamping cylinder
231-237	CW-104-023100-0	Complete square turntable 650



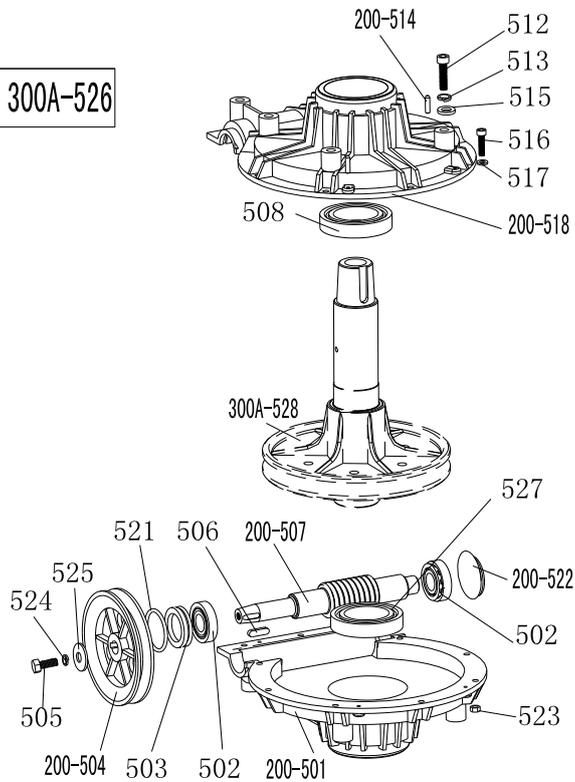
231-13	C-231-360000-0	Bead breaker arm spring	231-332	CX-231-030900-0	Enlarge bead breaker arm rotating washer
301	B-010-140301-0	Hex socket head bolt M14×30	231-333	CX-231-030800-0	Enlarge bead breaker arm rotating shaft
303	S-018-010408-0	Union (90° ) 1/4-Ø8	228-334	CW-108-209800-0	Complete bead breaker cylinder D200
304	B-004-160001-1	Nut M16*1.5	344	B-001-080001-0	Self-locking nut
305	B-040-162820-1	Flat washer Ø16*28*2	350	CW-112-209800-0	Bead breaker cylinder exhaust valve
306	S-000-016265-0	O-seal Ø 16*2.65	351	S-012-010808-0	Union 1/8-Ø8
307	S-000-019262-0	O- seal Ø20X2.65	352	C-098-600200-0	Bead breaker cylinder exhaust valve cover
200-310	C-200-050100-0	Bead breaker cylinder piston rod	353	C-098-600400-0	Seal washer
200-315	CX-200-070000-0	Bead breaker shovel assembly	354	C-098-600300-0	Bidirectional seal
316	B-010-120901-0	Hex socket head bolt M12×90	355	C-098-600100-0	Bead breaker cylinder exhaust valve barrel
317	B-004-160001-1	Self-locking nut M16*1.5	356	S-023-010401-6	Muffler
318	U-006-000001-1	Guide belt	357	S-010-010408-0	Straight union 1/4- Ø8
319	B-050-140000-0	Spring washer Ø14	358	CZ-298-050900-0	Nylon sleeve
320	B-055-160001-0	Snap ring Ø16	359	S-005-0200075-0	V-steal 20*28*7.5
321	B-040-162820-1	Flat washer	228-361	CX-298-050500-0	Bead breaker cylinder cover assembly
231-322	CX-231-030000-0	Enlarge bead breaker arm 231	228-362	S-000-195265-0	O-seal Ø198*3.1
200-323	CX-200-040000-0	Bead breaker pin	363	S-005-200184-0	Y-seal D200*184*12
325	B-040-122520-1	Flat washer Ø12*24*2	228-364	C-298-050200-0	Bead breaker cylinder piston D200
326	B-001-120001-0	Self-locking M12	228-365	S-000-180500-0	O-seal Ø180*5
331	B-001-160001-0	Self-locking nut M16*1.75	228-366	C-298-051000-0	Threaded connection rod
			228-367	C-298-050300-0	Bead breaker cylinder barrel D200
			228-368	C-298-051100-0	Bead breaker cylinder rear cover
			200-370	C-200-070600-0	Bead breaker shovel protection cover(optional)

203A-480



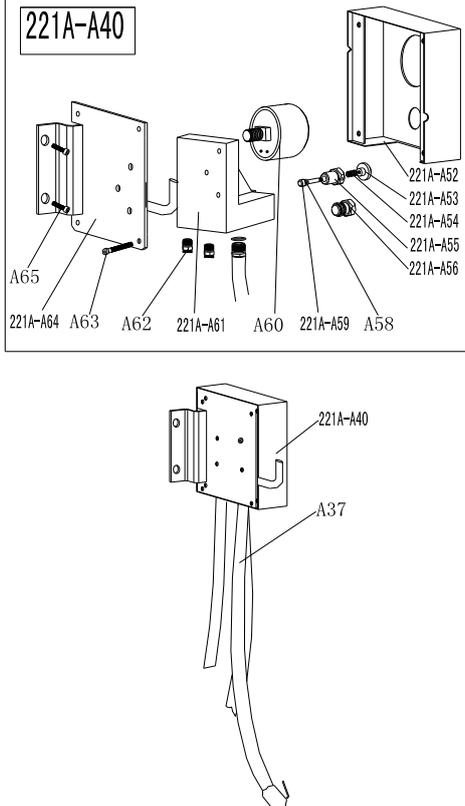
228-401	CX-228-060400-0	Reverse switch pedal	429	B-040-040000-1	Flat washer Ø 4
228-402	CX-228-060300-0	5-way valve pedal(right)	430	B-024-040161-0	Cross-round head screw M4*16
228-404	CX-228-060200-0	5-way valve pedal(left)	200-431	C-200-530000-0	Reverse switch handle
405	B-055-120001-0	Snap ring Ø12	432	B-001-060001-0	Self-locking nut M6
406	B-040-122520-1	Flat washer Ø12*24*2	433	B-040-030000-1	Flat washer Ø3
407	B-024-040301-0	Cross head screw M4X30	434	B-017-030161-0	Cross head screw M3X18
408	B-040-040000-1	Flat washer Ø 4	200-435	CX-200-060600-0	Pedal connection rod
409	B-001-040001-0	Self-locking nut M4	436	B-001-080001-0	Self-locking nut M8
410	B-001-080001-0	Self-locking nut M8	437	CX-221-060700-0	Pedal front shaft
411	B-040-081715-1	Flat washer Ø8*17*1.5	438	B-004-080001-0	Nut M8
200-412	C-200-060100-0	Cam connection rod	439	C-200-370000-0	Pedal twist spring
221-413	C-221-060100-0	Pedal support board	440	B-010-080501-0	Hex socket head bolt M8 x50
200-414	C-200-380000-0	Pedal Spring	441	B-010-080201-0	Hex socket head bolt M8 x20
200-415	C-200-061500-0	Cam	442	S-012-010808-0	Quick Union1/8- Ø 8
200-416	C-200-810000-0	Cam washer	445	S-016-010808-2	Quick T-union1/8-2* Ø 8
417	B-010-060201-0	Hex socket head bolt M6x20	448	B-007-180081-R	Hex socket head bolt 1/8*8
419	CW-110-021100-A	Complete 5-way valve, inflating, without valve rod	200-449	C-200-060901-0	5-way valve barrel
420	B-019-290121-0	Cross head self tapping screw 2.9x12	200-451	C-200-061100-0	5-way valve cover
200-421	CX-200-060500-0	Cam cover	452	B-024-290121-0	cross head screw ST2.9*14
422	CW-110-020000-0	Complete 5-way valve , L-union, without valve rod	453	S-023-010801-0	Muffler 1/8"
423	CW-110-020001-0	Complete 5-way valve-union, without valve rod	200-455	CX-200-061200-0	5-way valve rod
200-424	C-200-061400-0	Reverse switch cover	200-456	C-200-061000-0	5-way valve rod spacer
425	B-004-040001-0	Nut M4	457	S-000-012400-0	O-Seal 12*20*4
200-426	S-060-016000-1	Reverse switch	221A-458	CX-221-650000-A	5-way valve rod for inflating
427	B-010-060201-0	Hex socket head bolt M6x20	459	C2-000-103150-0	Power supply cable
428	B-040-061210-1	Flat washer Ø 6X12X1	616	C2-000-205150-0	Motor cable
429	B-040-040000-1	Flat washer Ø 4	203A-480	CW-109-020300-A	Complete 4-pedals assembly 203A

300A-526

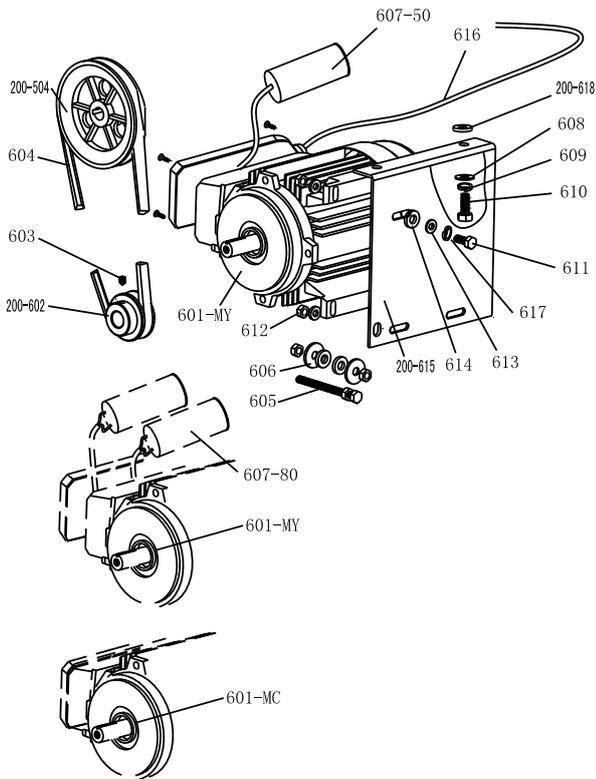


200-501	C-300-320302-0	Gear box lower cover
502	S-040-030204-0	Bearing 30204
503	S-005-020080-1	Gear box seal φ 20*35*8
200-504	C-200-320500-0	Gear Belt pulley
505	B-014-080251-0	Outer hex bolt M8×25
506	B-065-006020-0	Key washer 6×20
200-507	C-200-320400-0	Worm rod
508	S-040-006010-0	Bearing 6010
512	B-014-100551-0	Outer hex bolt M10×55
513	B-050-100000-0	Spring washer Ø10
200-514	B-060-006020-0	Pin 6X20
515	B-040-102020-1	Flat washer Ø10*20*2
516	B-010-060201-0	Hex socket head bolt M6×20
517	B-040-061412-1	Flat washer Ø 6*14*1.2
200-518	C-300-320301-0	Gear box upper cover
521	S-000-030355-0	O-seal Ø30*3.55
200-522	C-200-320700-0	Oil resistant seal
523	B-001-060001-0	Self-locking nut M6
524	B-050-080000-0	Spring washer Ø 8
525	B-040-083030-1	Flat washer Ø 8*30*3
300A-526	CW-107-030001-A	Complete gear box
527	S-040-006028-0	Bearing 6208
300A-528	C-300-320100-0	Worm gear

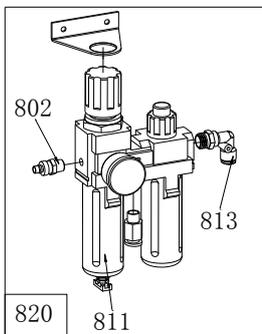
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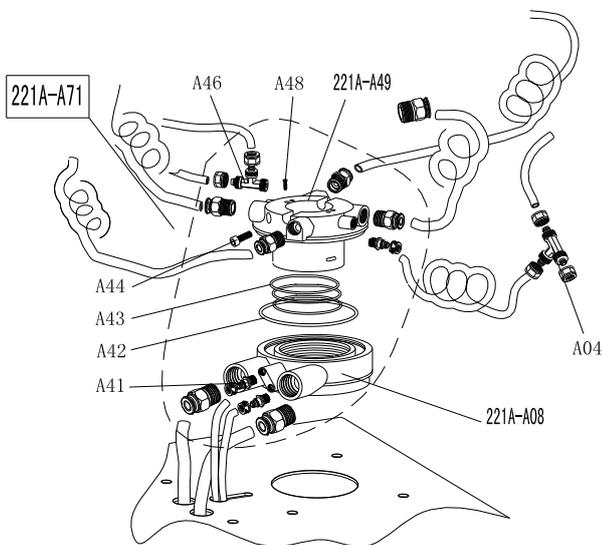
221A-A52	C-221-700000-A	Pressure gauge box Φ 60
221A-A53	C-221-690300-A	Button
221A-A54	C-221-690400-A	Button spring
221A-A55	C-221-690100-A	button valve
221A-A56	B-007-180081-R	Hex socket head bolt 1/8
A58	S-000-004200-0	O seal 4*2
221A-A59	C-221-690200-A	Button shaft
A60	S-038-000020-0	Pressure gauge 10kg
221A-A61	C-221-680000-A	Seat with holes
A62	S-010-010808-0	Straight union 1/8-Φ 8
A63	B-017-040301-0	Cross flat head self-tapping bolt M4*30
221A-A64	CX-221-710000-A	Pressure gauge box support
A65	B-010-060161-0	Hexagon socket head bolt M6*16
A37	S-035-014150-0	Rubber hose 1.5 with clip
221A-A40	CW-118-022100-0	Complete pressure gauge box



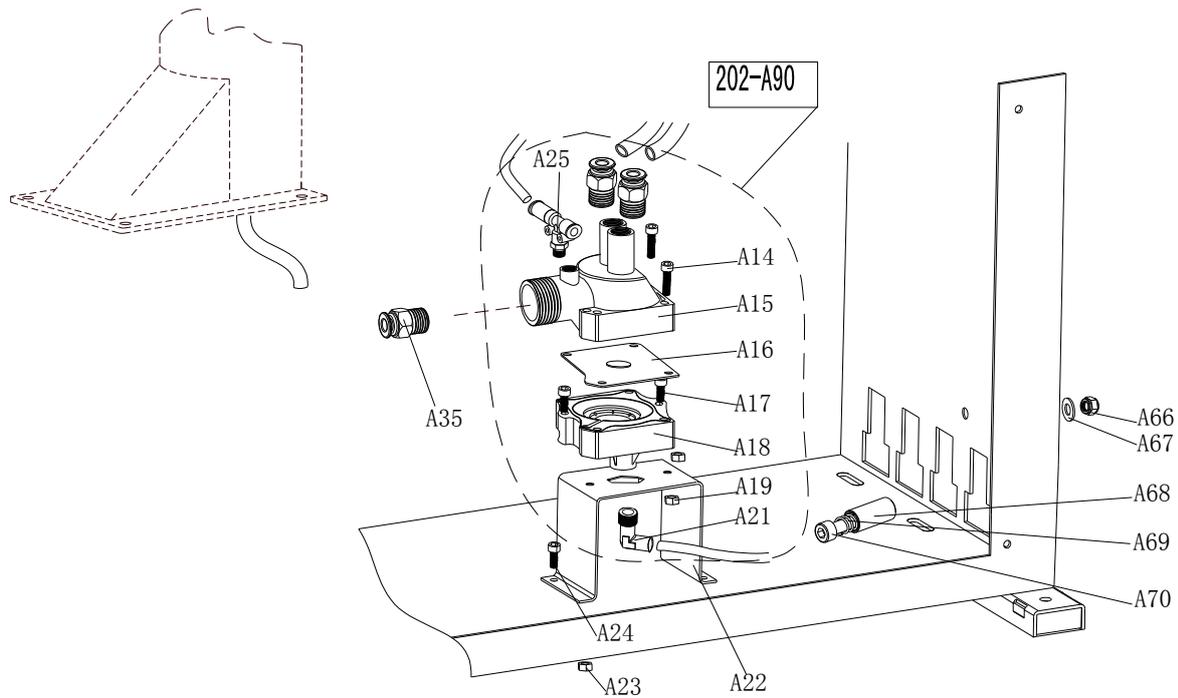
200-504	C-200-320500-0	Gear Belt pulley
601-MC	S-050-220110-5	Motor 220V/50HZ
601-MY	S-050-230075-0	Motor 220v
200-602	CX-200-330000-0	Motor Belt pulley
603	B-007-080121-0	Hex socket head boltM8×12
604	S-042-000686-0	Tyre changer belt A-28
605	B-014-080651-0	Outer hex bolt M8X65
606	B-040-083030-1	Flat washer Ø8X30X3
607-80	S-063-008000-0	Capacitor 80µ f,110V
607-50	S-063-005000-0	Capacitor 50µ f,220V
608	B-040-102020-1	Flat washer Ø10X20X2
609	B-050-100000-0	Spring washer Ø10
610	B-014-100251-0	Outer hex bolt M10X25
611	B-014-080351-0	Outer hex bolt M8X35
612	B-004-080001-0	Nut M8
613	B-040-082220-1	Flat washer φ 8X22X2
614	C-200-560000-0	Motor rubber washer
200-615	CX-200-340000-2	Motor support
616	CZ-000-205150-0	Motor cable 5×1.0
617	B-050-080000-0	Spring washer φ 8
200-618	C-200-560000-0	Motor rubber buffer



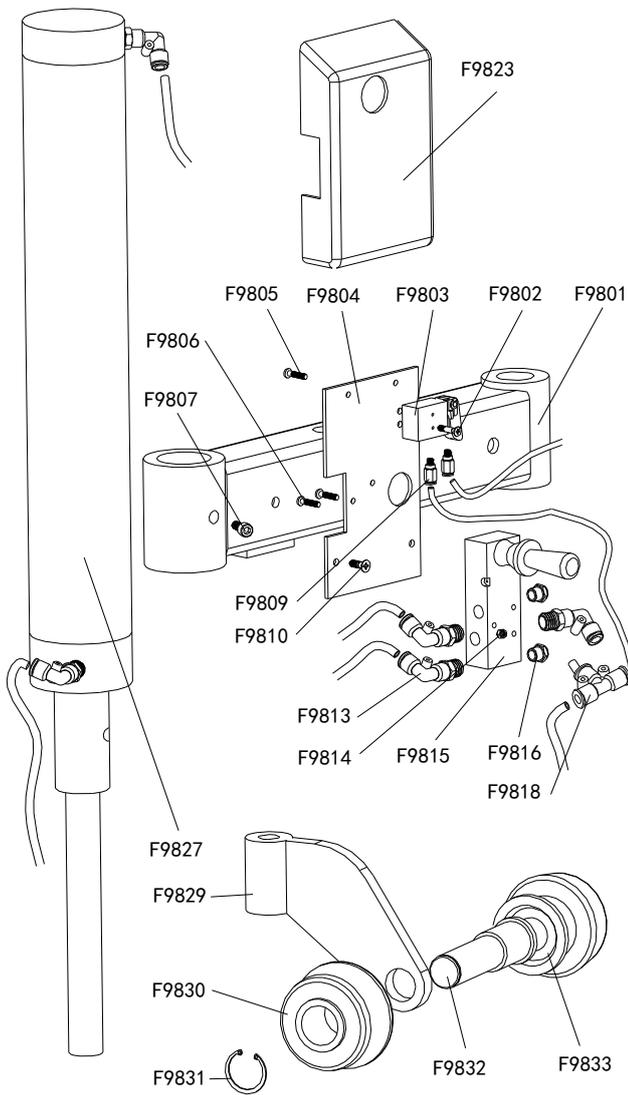
802	S-025-000050-0	快速喷嘴 PM20
811	S-033-330000-0	油雾器 3300
813	S-018-010408-0	二通弯头 1/4- Ø8
820	CW-114-033000-0	油雾器总成 3300



221A-A08	CX-221-430100-A	Rotating valve casing A
A04	S-015-000008-3	T-union 3* Ø 8
A41	S-011-010808-0	Straight union 1/8-Ø8
A42	S-000-089200-0	O-seal Ø89*2
A43	S-000-062280-2	O-seal Ø62*2.8
A44	B-010-060201-0	Hex socket head bolt M6X20
A46	S-015-010808-2	T-union 1/8-2*Ø8
A48	B-007-040061-0	Hex socket head bolt M4*6
221A-A49	CX-221-430200-A	Rotating valve mandrel A
221A-A71	CW-106-022102-A	Complete Rotating valve A

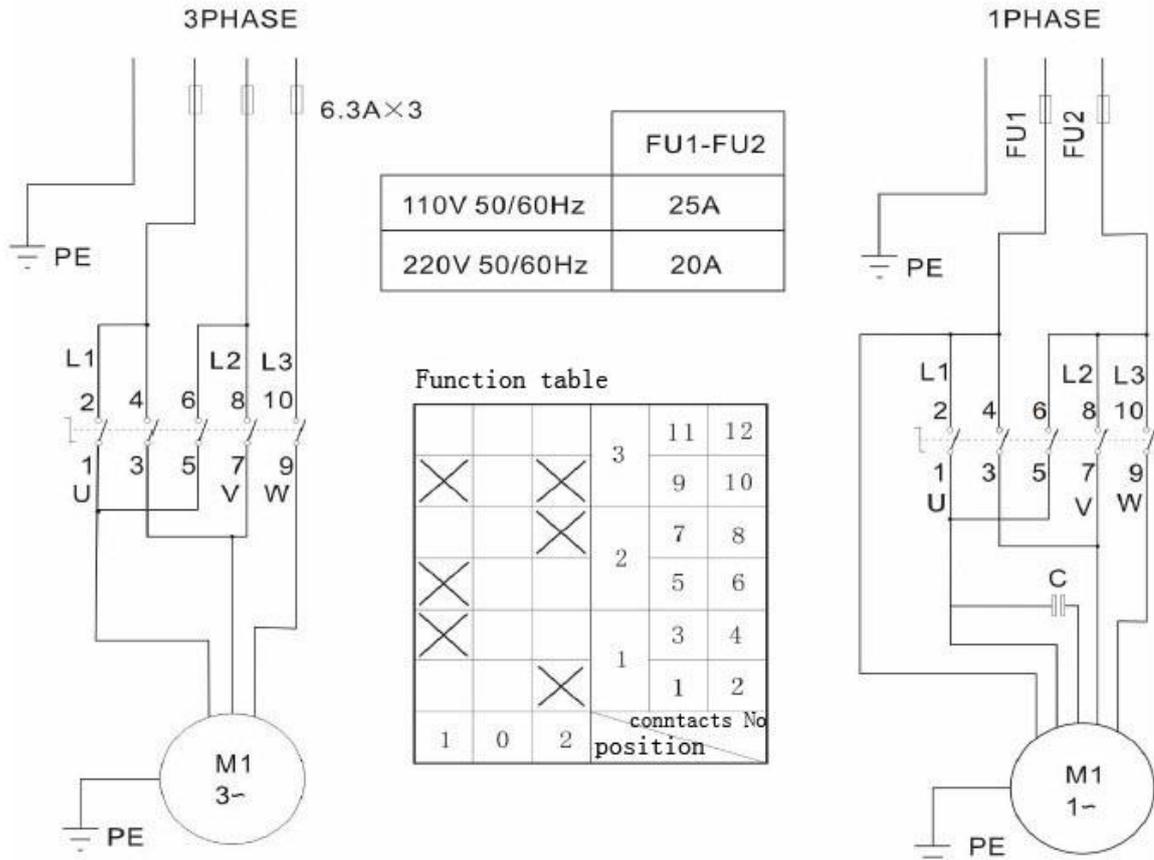


202-A90	CW-112-020201-Y	Complete exhaust valve
A14	B-010-060301-0	Hex socket head bolt M6*30
A15	C-221-600500-A	Exhaust valve barrel
A16	C-221-600700-A	Exhaust valve rubber washer
A17	B-010-060301-0	Hex socket head bolt M6*30
A18	C-221-600600-A	Exhaust valve cover
A19	B-001-060001-0	Self-locking nut M6
A21	S-012-010408-0	Quick union 1/4-Ø8
A22	CX-221-600800-A	Exhaust valve support
A23	B-001-060001-0	Self-locking nut M6
A24	B-010-060161-0	Hex socket head bolt M6×16
A25	S-016-010808-2	Quick T-union 1/8-2* Ø 8
A28	S-012-010212-0	Quick union 1/2-Ø12
A35	S-010-010212-0	Quick straight union 1/2- Ø12
A66	B-001-100001-0	Self-locking nut M10
A67	B-040-102020-1	Flat washer Ø10*20*2
A68	CX-221-620300-A	Limit spring plate
A69	C-201-670000-A	Limit spring
A70	B-010-100601-0	Hex socket head bolt M10*60



F9801	CX-098-020000-0	098 Pressing arm(right)
F9802	B-024-050101-1	Cross head Screw M5X10
F9803	S-030-010414-0	Pneumatic valve
F9804	CX-005-200000-0	Raise-fall switch base plate
F9805	B-017-040161-0	Cross flat head screw M4*16
F9806	B-017-040301-0	Cross flat head screw M4*30
F9807	B-007-100121-0	Hex socket head bolt M10*12
F9809	S-010-050004-0	Quick straight union M5-Ø4
F9810	B-010-050161-0	Hex socket head bolt M5*16
F9813	S-012-010406-0	Quick union 1/4-Ø6
F9814	B-004-040001-1	Nut ( silver ) M4
F9815	S-030-010818-0	Raise-fall control valve
F9816	S-023-010801-6	Muffler (brass)
F9817	S-012-010406-0	L-union 1/4-φ 6
F9818	S-013-104206-0	T-union 2XØ6-Ø4
F9820	S-017-010806-2	T-union 1/8-2*Ø6
F9823	C-007-181000-0	Control valve protect cover
F9827		Complete 098 cylinder
F9828	S-012-010406-0	Quick Union 1/4-Ø6
F9829	CX-098-040000-0	Pressing roller bracket suport
F9830	C-098-060100-0	Tyre pressing roller 1
F9831	B-055-300002-0	Snap ring Ø30(hole)
F9832	CX-098-050000-0	Tyre pressing roller shaft
F9833	C-098-060200-0	Tyre pressing roller 2

16. Circuit diagram



17. Pneumatic drawing

