

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.

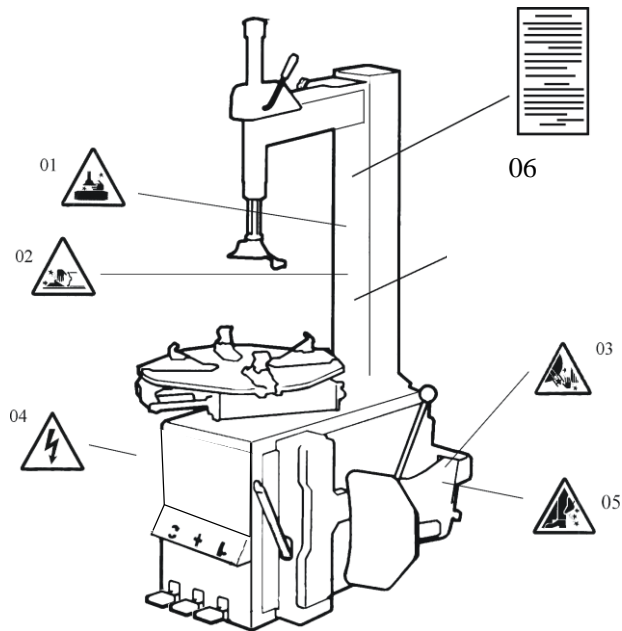
1. Introduction:

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	10~21 "
Internal locking rim dimensions	12~24 "
Max. Wheel diameter	1040mm (41 ")
Max. Wheel width	355mm(14 ")
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	960*760*930 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.

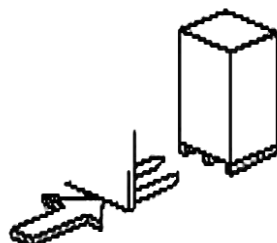


Fig 1

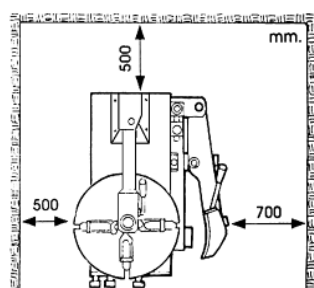


Fig 2

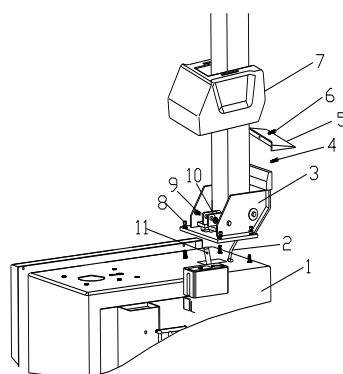


Fig 3

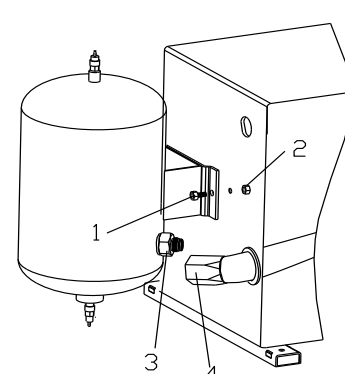


Fig 4

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.

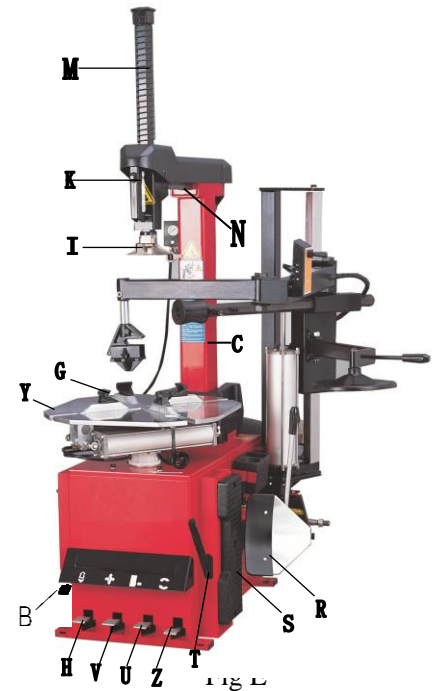
7. Position and installation:

7.1 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).

7.2 Install the air tank assembly

- 1) Unscrew the left cover, fix air tank with machine body by bolt(1) and nut(2)
- 2) Fix metal pipe (4) with connector (3), make sure there is no air leakage, shown as Fig 4.



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**.

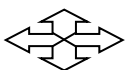
9. Adjusting operation:



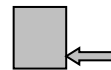
Tilting pedal (H)



Turntable Rotation pedal (Z)



Jaws open and close pedal(V)



Bead Breaker pedal(U)



Rapid Tire Inflation Pedal (B)

Please note: This model is equipped with dual speed motor function!

Mildly tread Turntable Rotation Pedal (Z), Turntable (Y) rotate clockwise at a normal speed.

Deep tread Turntable Rotation Pedal (Z), Turntable (Y) rotates clockwise rapidly.

Please note: below operation refer to **Fig E**

Tread the Turntable Rotation Pedal (Z), Turntable (Y) clockwise rotation;

Lift up the Turntable Rotation Pedal (Z), Turntable (Y) counterclockwise rotation.

Tread Bead Breaker Pedal (U), Bead Breaker shovel (R) compress; release Bead Breaker Pedal (U), Bead Breaker shovel (R) back to original position.

Tread totally down Jaws open and close Pedal (V), four clamps (G) on the turntable open; Tread again, four clamps (G) close. When the pedal is in the middle position, the four clamps stop moving.

Depress pneumatic locking button (K) to lock the Slide arm (N) and Vertical arm (M).

Tread the Bead Breaker pedal (H), the tilting column (C) backwards down; depress again, the tilting column return.

Tyre changer operation is consisted of three parts:

- 1) Demounting 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.

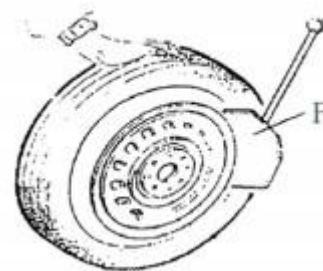


Fig 5

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**.

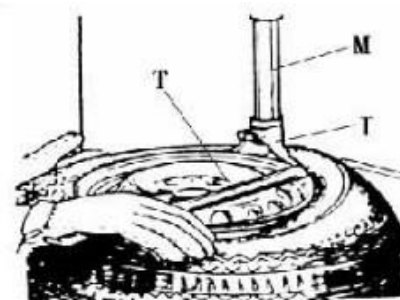


Fig 6

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 Tilting 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 tyre, 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)**

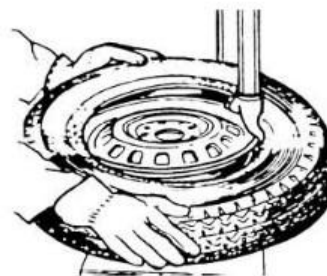


Fig 7

10. Help Arm 006

The help arm 006 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	80kg
Package dimension	1230*450*350mm
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.

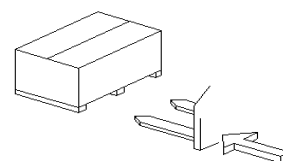


Fig 8

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.

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

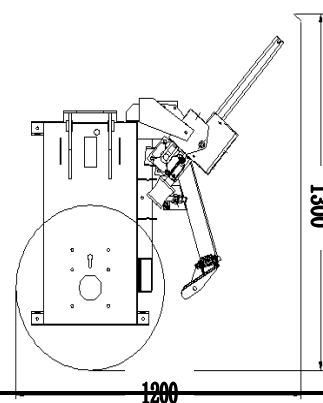


Fig 9

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.

10.3.4 Assembly

- 1) Disconnect the tire changer from power supply and air source.
- 2) Install the column 3 with screw 1 and 2; install the support 5 of the auxiliary arm with screw 4; (Fig 10)
- 3) Install the help arm 6 with nut 7 and screw 9, then tighten 4、7、8、9 (Fig 10 、 Fig 11) ;
- 4) Install the Rotating arm (A)、Hexagonal horizontal arm (B) and Tire lifting roller support (C) separately on the tire changer;(Fig 12)
- 5) Install the tire lifting roller (D)、 the switch (E)、 tire pressing head (F) and tire pressing roller(G) separately on the tire changer;(Fig 12)
- 6) Connect the air hose to the corresponding joint through the rear hole of the body.

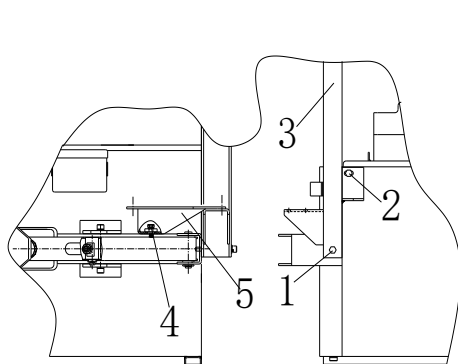


Fig 10

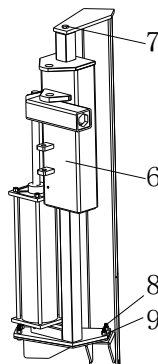


Fig 11

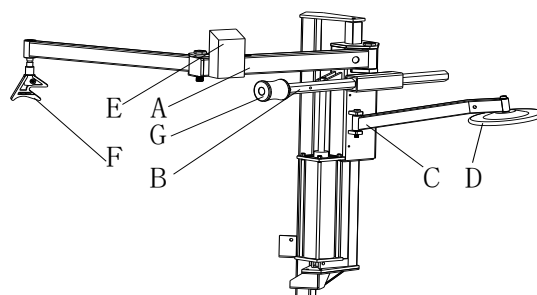


Fig 12

10.4.Functional Parts

Fig 12 shows functional parts to the 006 device:

- | | |
|--------------------------------|-----------------------------|
| A. Rotating arm connector | B. Hexagonal horizontal arm |
| C. Tire lifting roller support | D. Tire lifting roller |
| E. Raise-fall control assembly | |
| G. Tire pressing roller | |

10.5. Trial operation

The 006 device must connect with the air compressor, and the air pressure from 8 bars to 10 bars is desirable.

10.6. Operations

Mounting and demounting big flat tire is difficult work. By the help of 006 help arm to mount/demount the tire from the tire bead will make the operation easier. It is a good helper for tire changer.

10.6.1. Fixing The Tire

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

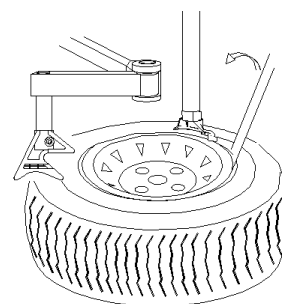


Fig 14

10.6.2. 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 13)**

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

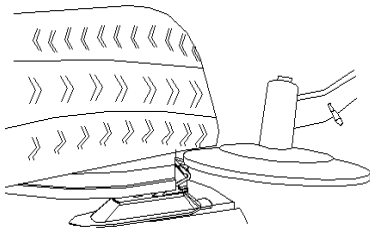


Fig 15

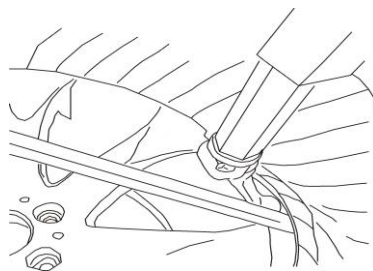


Fig 16

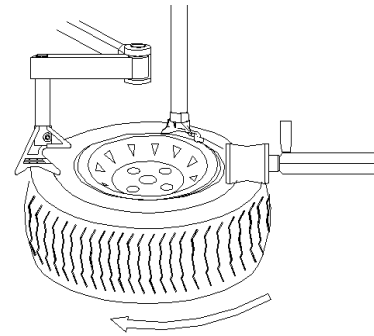


Fig 17

-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. **(Fig 14)**

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 15)** Tread the power supply pedal to rotate the turntable, meanwhile, lift help arm gradually to loosen tire and completely demount the bottom bead.

Caution: The roller support can't be used for all tires, some tires need following operation: Move the mounting head above the rim; Insert the lifting lever in the clearance between the bottom tire bead and the rim, have the tire hung on the mounting head(Fig 16); Tread the power supply pedal to rotate the turntable. With the help of the mounting head, the tire is detached completely.

10.6.3. 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 17)

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.

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;

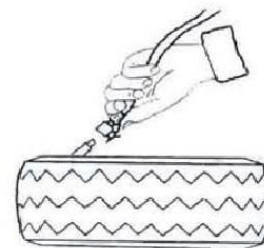


Fig 18

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.

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. 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.

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 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 19

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.

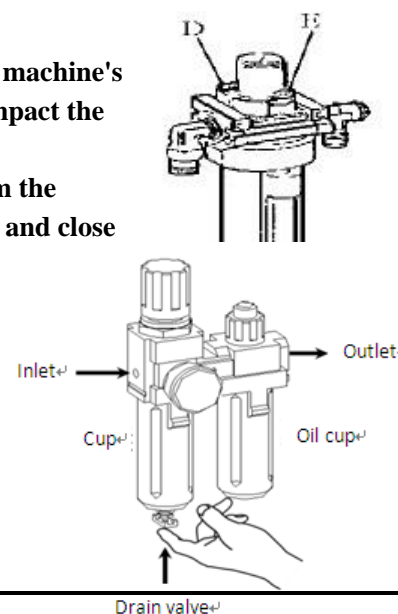


Fig 19-1

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 19)

- As shown in Figure 19-1, 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 20)

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 21)

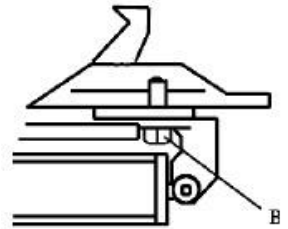


Fig 20

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 22 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; (**Fig 23**)
3. Clean the mufflers with compressed air, please replace it referring to the spare parts list if it is damaged. (**Fig 23**)

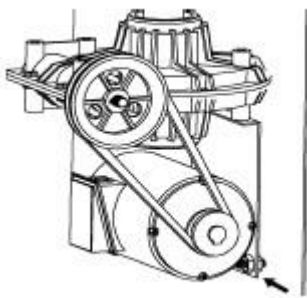


Fig 21

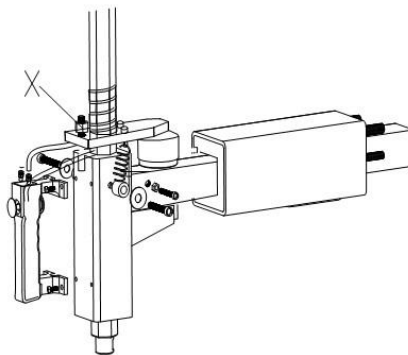


Fig 22

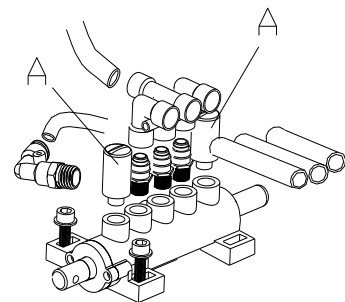


Fig 23

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

14.1. 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 24, position 1), the

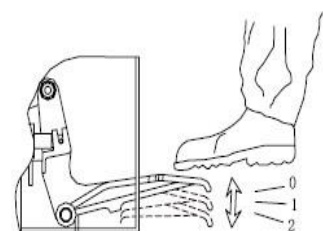


Fig 24

inflating head should give air.

b. Press Rapid Tire Inflation Pedal all the way down (Fig 24, position 2), a strong air blast should come from the holes in the four jaws' locking sliders. **(Fig 25)**

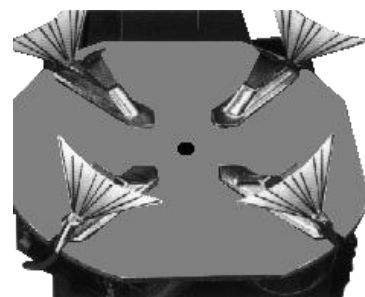


Fig 25

14.2. Wheel rim lock and Tire inflation:

Note: A wheel can explode if:

- 1). the diameter of the rim is not exactly the same as 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.

14.3. 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.

14.4. 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.

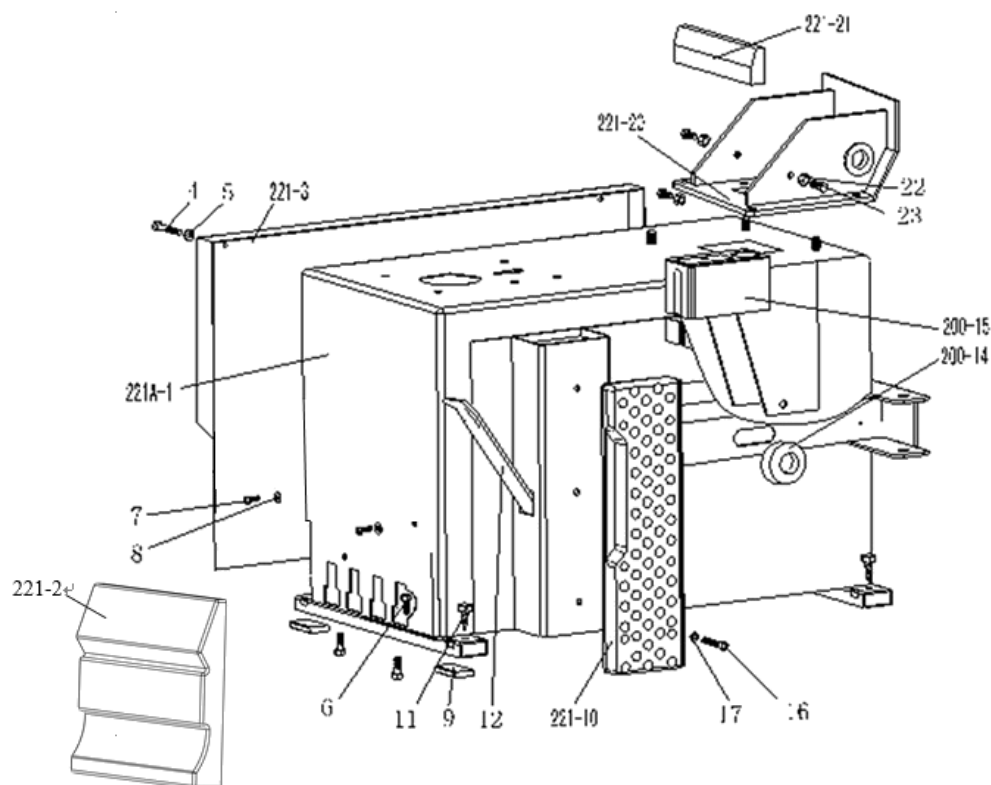
Note:

- 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.

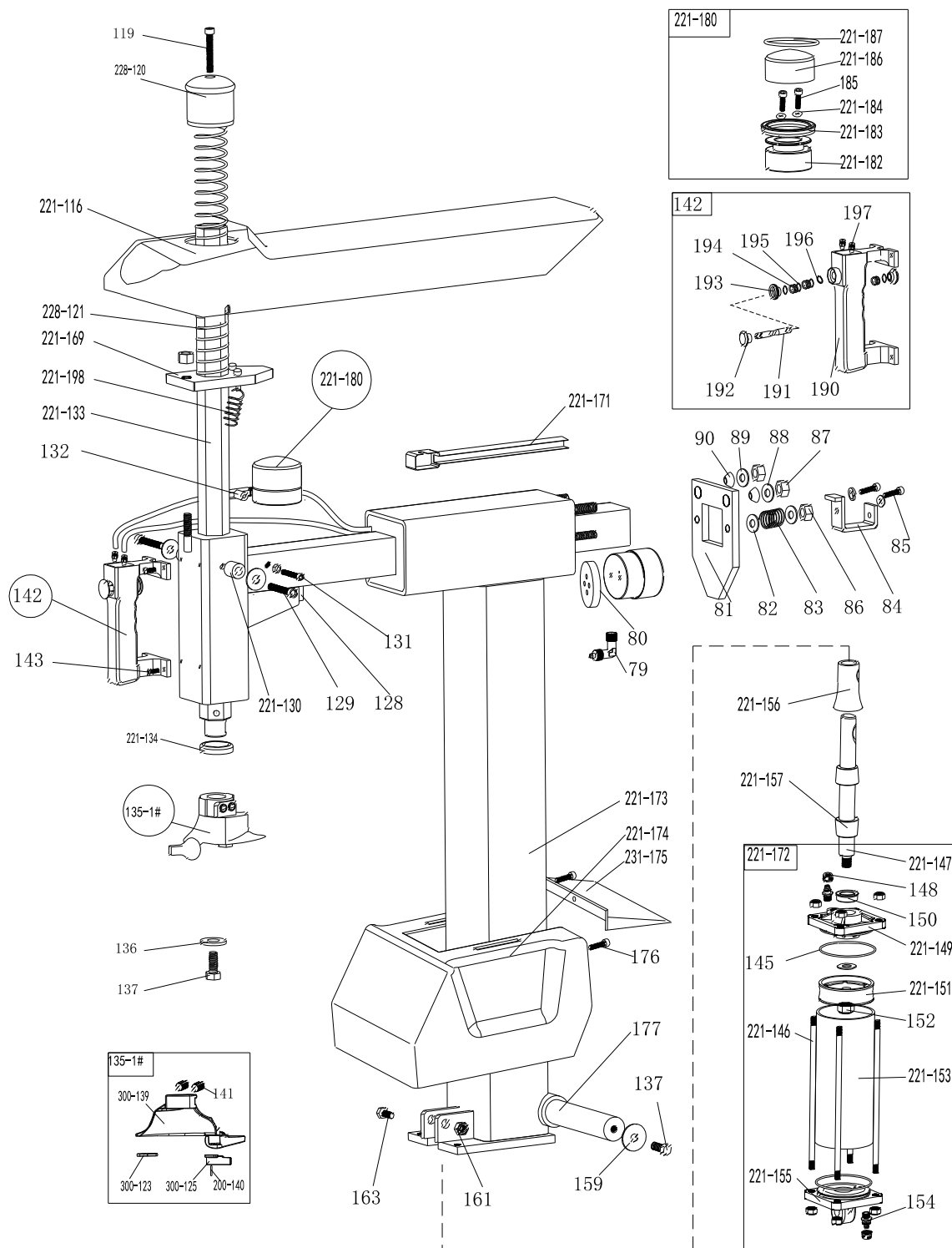
15. Trouble shooting table:

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.

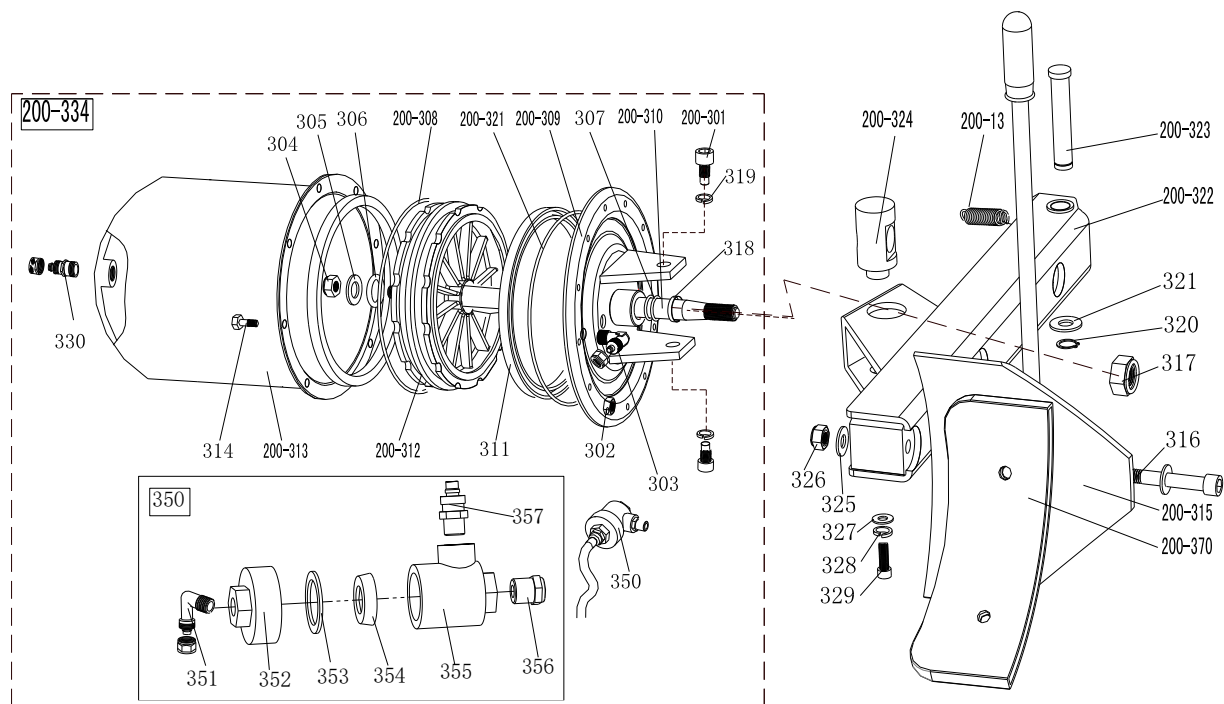
16. Exploded drawing:



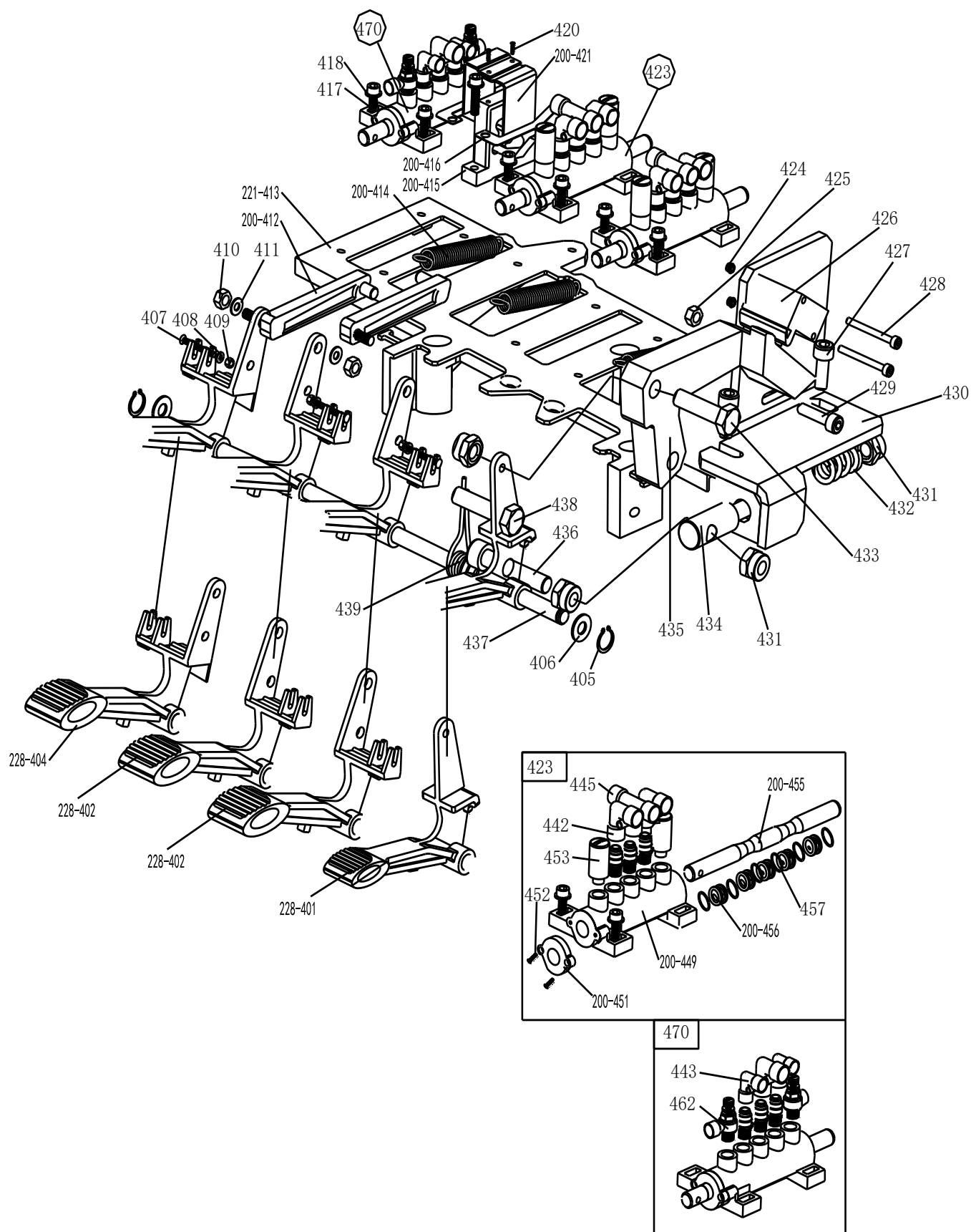
221A-1	JZ08001021112	Machine body 221
221-2	JZ09001022880	Pedal front shroud
221-3	JZ08001021147	Left cover
4	B-010-060101-0	Hex socket head bolt M6×10
5	B-040-061412-1	Flat washer Ø6*14*1.2
6	B-014-080251-0	Outer hex bolt M8x25
7	B-014-08201-0	Hex socket head bolt M8×20
8	B-040-082220-1	Flat washer Ø 8*22*2
9	JZ09001023159	Rubber foot buffer
221-10	JZ09001023181	Bead breaker buffer
11	FJ04006004049	Grounding screw M6x40
12	JZ09001023041	Lifting lever
200-14	JZ09001022719	Bead breaker arm rubber
200-15	JZ07001020929	Oil-water box
16	B-010-080201-0	Hex socket head bolt M8x20
17	B-040-081715-0	Flat washer Ø8*17*1.5
221-20	JZ08001021017	Tilting seat
221-21	JZ09001022761	Tilting protect cover
22	B-001-100001-0	Self-locking nut M10
23	B-014-100251-0	Outer hex bolt M10*25



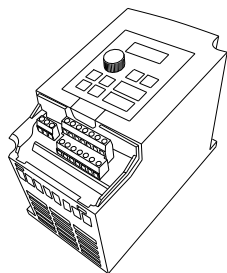
79	EQ10004003262	Quick union 1/8-Ø6	221-149	JZ09001022762	Tilting cylinder cover without handle
80	JZ07001020906	Locking cylinder plate	150	FJ08003005391	V seal Ø20*28*7.5
81	JZ03001015519	Horizontal arm locking plate	221-151 L	JZ09001022765	Tilting cylinder piston(Al-alloy)φ75
82	FJ04002003904	Flat washer Φ8*17*1.5	152	FJ04008004495	Nut (silver) M12*1.5*7
83	JZ09001022819	Horizontal arm locking spring	221-153	JZ09001022770	Tilting cylinder barrel
84	JZ03001015514	Horizontal arm block	154	EQ10005003297	Straight union 1/8-Ø6
85	FJ04009004877	Outer hex bolt M8*20	221-155	JZ09001022763	Titling cylinder cover with handle
86	FJ04008004459	Self-locking nut M8	221-156	JZ09001015545	Tilting cylinder piston rod cover
87	FJ04008004445	Self-locking nut M12	221-157	JZ09001022771	Titling cylinder rubber sheath 1
88	FJ04002003813	Flat washer Φ 12*25*2	137	FJ04009004770	Outer hex bolt M10×25
89	FJ04002003813	Flat washer Φ 12*25*2	159	FJ04002003806	Flat washer 10*40*3
90	JZ09001023102	Locking spacer	161	FJ04008004445	Self-locking nut M12
221-116	JZ09001022816	Horizontal arm protection back cover	163	FJ04009004806	Outer hex bolt M12×65
119	FJ04009004588	Hex socket head bolt M10*50	221-169	JZ03001015648	Hex locking board 221
228-120	JZ07001020884	Vertical arm cap 228	221-171	JZ07001020901	Hose guide
228-121	JZ09001022980	Vertical arm spring	221-172	JZ06001020238	Complete titling cylinder
127	FJ04006004059	Hex socket head bolt M12*16	221-173	JZ08001021066	Column
128	JZ09001023148	Shock absorber	221-174	JZ07001020879	Column protection cover
129	FJ04009004686	Hex socket head bolt M6×35	221-175	JZ07001020880	Titling Column back cover
221-130	JZ07002020942	Guide pulley	176	FJ04006004255	Cross head screw 5*16
131	FJ04009004676	Hex socket head bolt M6×16	177	JZ09001022952	Column shaft
132	EQ11002003339	T-union 1/8-2*O6	221-180		Complete locking cylinder
221-133	JZ03001015899	Vertical arm	221-182	JZ09001023098	Complete locking cylinder piston
221-134	JZ09001022968	Vertical arm washer	221-183	FJ08003005389	V seal Ø60*50*6.5
136	JZ03001015342	Mount/demount head flat washer	221-184	FJ08001005285	O seal Ø6*3
137	FJ04009004770	Outer hex bolt M10×25	185	FJ04009004689	Hex socket head bolt M6×55
300-123	JZ07001020845	Mount/demount head flat protector	221-186	JZ03001015728	Locking cylinder cover Ø60
200-124	JZ09001022993	Hex round pin	221-187	FJ08001005293	O seal 52×2
292-125	JZ07001020840	Mount/demount head protector	190	JZ07001020898	Pneumatic handle switch plate
300-125 B	JZ07001020842	Mount/demount head protector	191	JZ09001015680	Pneumatic handle valve rod
135-1#	JZ06001048884	Complete Mount/demount head 1#	192	JZ07001020896	Pneumatic valve rod cap
300-139	JZ09001022699	Mount/demount head 7#	193	JZ07001020899	Pneumatic handle cover
141	FJ04006004130	Hex socket head bolt M12X16	194	JZ07001020897	Pneumatic handle spacer
142	JZ06001020331	Complete Pneumatic locking switch	195	FJ08001005325	O seal 7.5*2.65
143	FJ04009004676	Hex socket head bolt M6*16	196	FJ04001003759	Snap ring Ø8
145	FJ08001005319	O seal Ø68.26*3.53	197	EQ10005003297	Straight union
221-146	JZ09001022769	Tilting cylinder threaded	221-198	JZ09001022969	Hex locking board spring
221-147	JZ09001022767	Tilting cylinder piston rod	199	FJ04006004053	Hex socket head bolt M10*12
148	FJ04008004459	Self-locking nut M8	221-103	FJ08001005319	O seal φ68*3.53
221-101	FJ08001005078	O seal φ11*1.8	221-104	FJ08001005317	O seal φ65*5.3
221-102	FJ08005005400	Y seal φ65*75*6			



200-13	JZ09001022722	Bead breaker arm spring	320	FJ04001003741	Snap Ring Ø 16
200-301	JZ09001011179	Hex socket head bolt M14*30	200-321	FJ08001005135	O-seal φ180*5
302	FJ04008004458	Self-locking nut M6	200-322	JZ08001021156	Bead breaker arm 200
303	EQ11005003350	2-way Union (90°) 1/4-Ø8	200-323	JZ03001015349	Bead breaker arm pin
304	FJ04008004517	Self-locking nut M16X1.5	200-324	JZ03001015382	Bead breaker cylinder rotating pin
305	FJ04002003833	Flat washer φ16*28*2	325	FJ04002003813	Flat washer Φ 12*24*2
306	FJ08001005120	O- seal φ16*2.65	326	FJ04008004445	Self-locking nut M12
307	FJ08001005160	O-seal φ20*2.65	327	FJ04002003915	Flat washer Ø8*30*3
200-308	FJ08001005147	O-seal 180×5	328	FJ04002003792	Spring washer Ø8
200-309	JZ03001015378	Bead breaker cylinder cover assembly D186	329	FJ04009004877	Outer hex bolt M8*20
200-310	C-200-050100-0	Bead breaker cylinder piston rod	330	EQ11006003389	Straight union 1/8-φ8
311	FJ08003005386	V-seal φ185*168*10.8	331	FJ08001005151	O- seal φ19.6*2.62
200-312	JZ09001022744	Bead breaker cylinder piston	350	JZ06001020298	Bead breaker cylinder exhaust valve
200-313	JZ09001015384	Bead breaker cylinder barrel	351	EQ10004003264	Quick union 1/8- Ø 8
314	FJ04009004676	Hex socket head bolt M6×16	352	JZ07001020848	Bead breaker cylinder exhaust valve cover
200-315	JZ03001015791	Bead breaker shovel assembly	353	JZ09001022987	Seal Washer
316	FJ04009004613	Hex socket head bolt M12*90	354	JZ09001023080	Bidirectional Seal
317	FJ04008004517	Self-locking nut M16X1.5	355	JZ07001020849	Bead breaker cylinder exhaust valve
318	#N/A	Bronze stripes	356	EQ04001002949	Muffler 1/4
200-370	JZ07001020829	Bead breaker shovel protection cover(optional)	357	EQ10005003288	Quick straight union 1/4- Ø8
319	FJ04002003777	Spring washer Ø14	200-334	JZ06001020265	Complete bead breaker cylinder

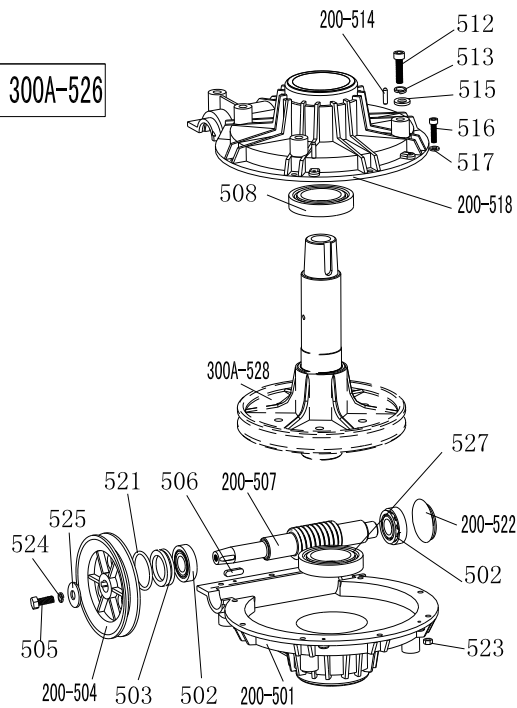


228-401	JZ09001022774	Reverse switch pedal	429	FJ04009004654	Hex socket head bolt M5*20
228-402	JZ09001023137	5-way valve pedal(right)	430	JZ03001021097	Micro switch stand part
228-404	JZ09001023139	5-way valve pedal(left)	431	FJ04008004459	nut M8
405	FJ04001003737	Snap ring Ø12	432	JZ09001022871	Pedal spring
406	FJ04002003813	Flat washer Ø12*24*2	433	FJ04009004881	Screw M8*30
407	FJ04006004200	Cross head screw M4X30	434	JZ03001015388	Spring pressing rod
408	FJ04002003874	Flat washer Ø 4	435	JZ03001015758	Rotation rod of micro switch
409	FJ04008004455	Self-locking nut M4	436	FJ04009004713	Hex socket head bolt M8*40
410	FJ04008004459	Self-locking nut M8	437	JZ03001015571	Pedal front shaft
411	FJ04002003904	Flat washer Ø8*17*1.5	438	FJ04008004515	Nut M8
200-412	JZ07001020913	Cam connection rod	439	JZ09001022873	Pedal twist spring
221-413	JZ09001022883	Pedal support board	440	EQ10004003264	Hex socket head bolt M8×50
200-414	JZ09001022872	Pedal Spring	441	EQ10004003262	Hex socket head bolt M8×20
200-415	JZ07001020914	Cam	442	EQ10001003242	Quick union1/8- Ø 8
200-416	JZ09001023109	Cam washer	443	JZ07001020920	Quick union1/8- Ø 6
417	FJ04009004680	Hex socket head bolt M6×20	445	JZ07001020917	Quick T-union1/8-2* Ø 8
418	FJ04002003890	Flat washer Ø6	200-449	FJ04006004372	5-way valve barrel (right)
420	FJ04006004228	Cross head self tapping screw 2.9*12	200-451	EQ04002002955	5-way valve cover
200-421	JZ03001015747	Cam cover	452	JZ09001015771	Cross head ST2.9*14
423	JZ06001020283	Complete 5-way valve for Bead breaker cylinder	453	JZ07001020919	Muffler 1/8"
			200-455	FJ08001005087	5-way valve rod
424	FJ04008004454	Nut M3	200-456	EQ02005002809	5-way valve rod spacer
425	FJ04008004512	Nut M5	457	FJ08001005087	O seal 12*20*4
426	DD03009001606	Micro switch	462	JZ03001015571	Throttle valve
427	FJ04009004676	Hex socket head bolt M6×16	470	JZ06001020287	Complete tilting 5-way valve
428	FJ04009004628	Hex socket head bolt M3×40	465	CZ-000-103150-0	Power supply cable
231-480	JZ06001020274	Complete 4-pedals assembly 231	616	CZ-000-205150-0	Motor cable

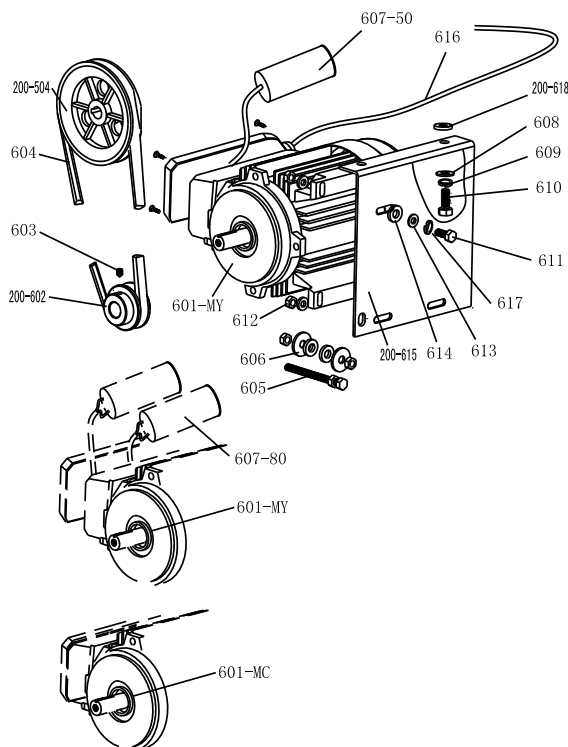


	Please choice the correct voltage for you machine
DD03001001432	220V/1PH/1.5KW/W5M-1.5S2-1B
DD03001001433	220V/3PH/1.5KW/H100M-1.5S3-1B
DD03001001435	380V/3PH/1.5KW/WXM-1.5T4-1B

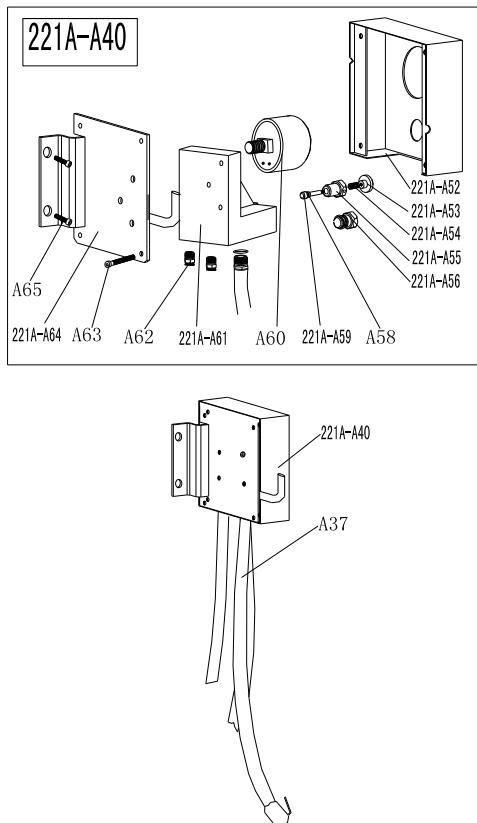
300A-526



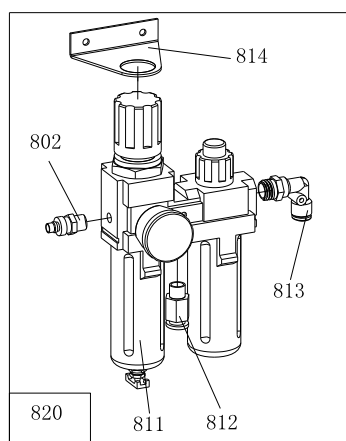
200-501	JZ09001022681	Gear box lower cover
502	FJ02010003613	Bearing 30204
503	FJ08007005413	Gear box seal $\phi 20 \times 35 \times 8$
200-504	JZ09001023119	Gear Belt pulley
505	FJ04009004879	Outer hex bolt M8 \times 25
506	FJ06001004964	Key washer 6 \times 20
200-507	JZ09001023118	Worm rod
508	FJ02010003623	Bearing 6010
512	FJ04009004779	Outer hex bolt M10 \times 55
513	FJ04002003773	Spring washer $\phi 10$
200-514	FJ06002005000	Pin 6X20
515	FJ04002003800	Flat washer $\phi 10 \times 20 \times 2$
516	FJ04009004680	Hex socket head bolt M6 \times 20
517	FJ04002003892	Flat washer $\phi 6 \times 14 \times 1.2$
200-518	JZ09001022679	Gear box upper cover
521	FJ08001005221	O-seal $\phi 30 \times 3.55$
200-522	JZ09001022990	Oil resistant seal
523	FJ04008004458	Self-locking nut M6
524	FJ04002003792	Spring washer $\phi 8$
525	FJ04002003915	Flat washer $\phi 8 \times 30 \times 3$
300A-526	JZ06001020262	Complete gear box
527	FJ02010003626	Bearing 6208
300A-528	JZ09001023123	Worm gear



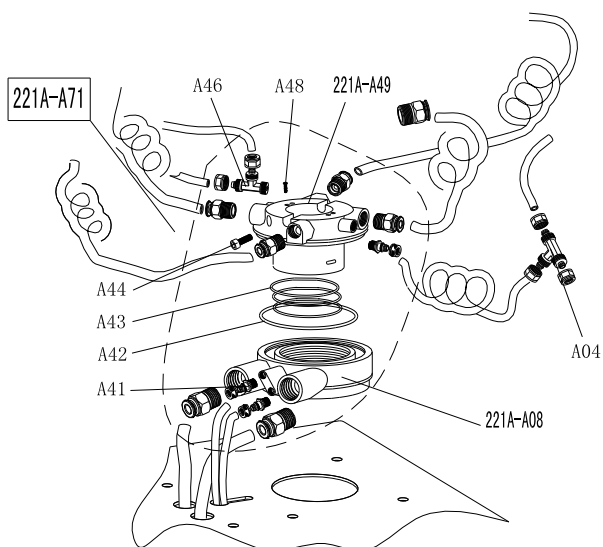
200-504	JZ09001023119	Gear Belt pulley
601-MC	DD01001001180	Motor 220V/50HZ
601-MY	DD01001001194	Motor 220v
200-602	JZ09001015421	Motor Belt pulley
603	FJ04006004178	Hex socket head bolt M8 \times 12
604	FJ02003003545	Tyre changer belt A-28
605	FJ04009004889	Outer hex bolt M8X65
606	FJ04002003915	Flat washer $\phi 8 \times 30 \times 3$
607-80	DD04009001964	Capacitor 80 μ f,110V
607-50	DD04009001883	Capacitor 50 μ f,220V
608	FJ04002003800	Flat washer $\phi 10 \times 20 \times 2$
609	FJ04002003773	Spring washer $\phi 10$
610	FJ04009004770	Outer hex bolt M10X25
611	FJ04009004883	Outer hex bolt M8X35
612	FJ04008004515	Nut M8
613	FJ04002003910	Flat washer $\phi 8 \times 22 \times 2$
614	JZ09001022782	Motor rubber washer
200-615	JZ03001015423	Motor support
616	JZ12001026447	Motor cable 5 \times 1.0
617	FJ04002003792	Spring washer $\phi 8$
200-618	JZ09001022782	Motor rubber buffer



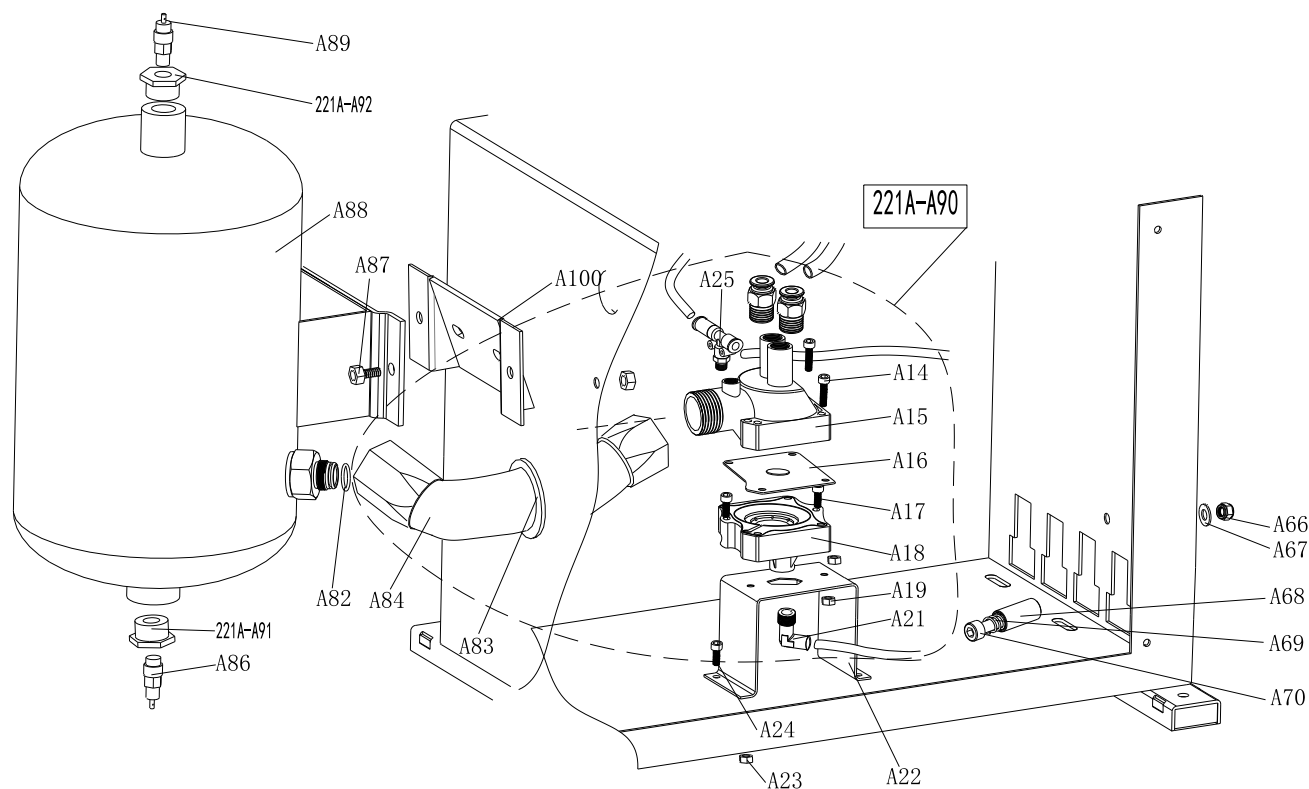
221A-A52	JZ07001020895	Pressure gauge box Φ60
221A-A53	JZ09001023164	Button
221A-A54	JZ09001022793	Button spring
221A-A55	JZ09001022998	Button valve
221A-A56	FJ04006004123	Hex socket head bolt 1/8*8
A58	FJ08001005252	O-seal 4*2
221A-A59	JZ09001023165	Button rod
A60	EQ05003002984	Pressure gauge 10kg
221A-A61	JZ07001020912	Seat with holes
A62	EQ10005003298	Quick straight union 1/8-Ø8
A63	FJ04006004200	cross head screw M4*30
221A-A64	JZ08001021084	Pressure gauge box support
A65	FJ04009004676	Hex socket head bolt M6*16
A37	JZ09001022641	Rubber hose 1.5 with clip
A38		Air tube 12X8
A39		Air tube 12X8
221A-A40	JZ06001020330	Complete pressure gauge box



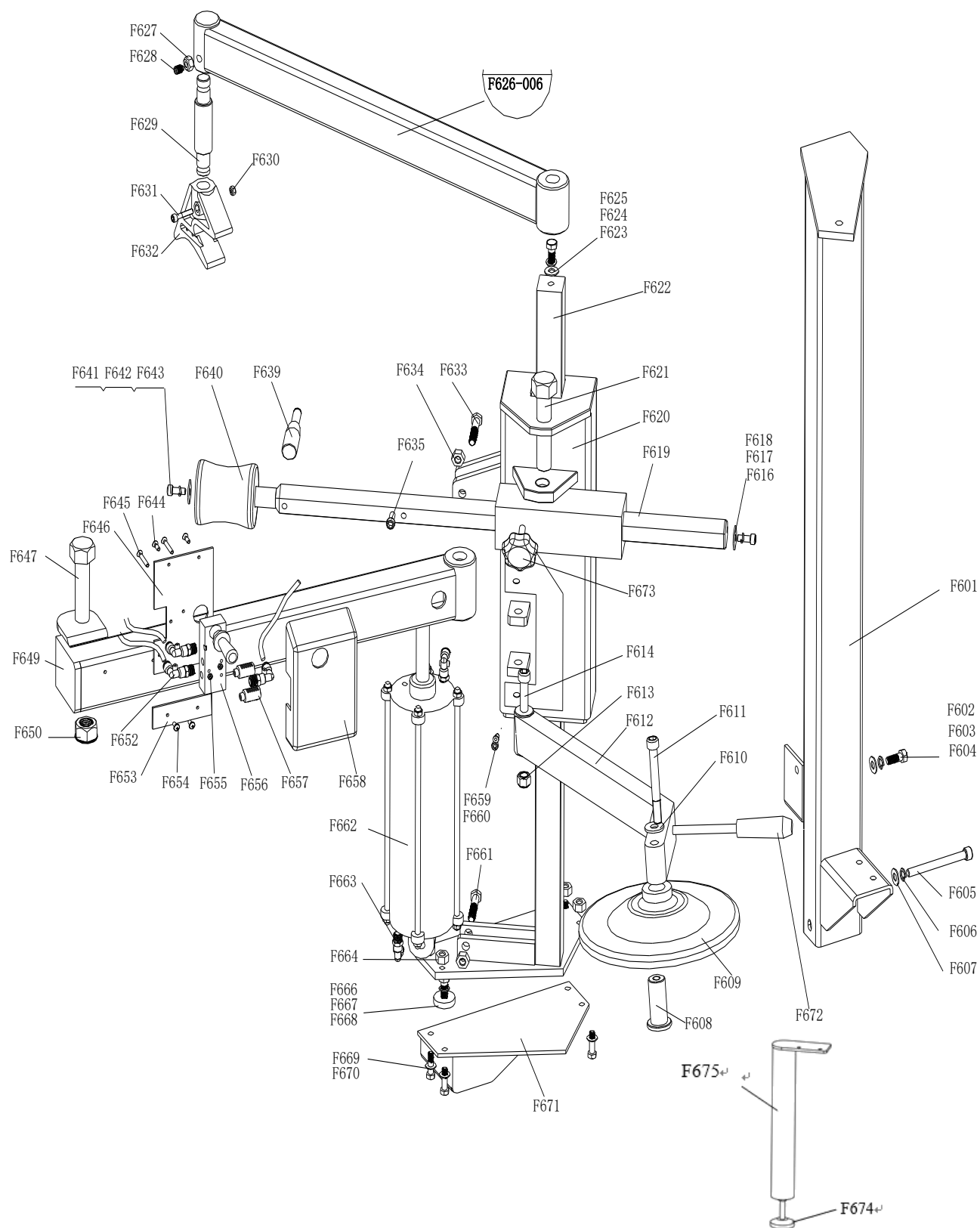
802	EQ12001003412	Quick nozzle PM20
811	EQ03001002903	Oil fog maker 3300
812	EQ10005003297	Quick straight union 1/8-Ø8
813	EQ11005003350	Bend union 1/4- Ø8
814	JZ09001023263	Oil fog maker support
820	JZ06001020327	Complete oil fog maker 3300



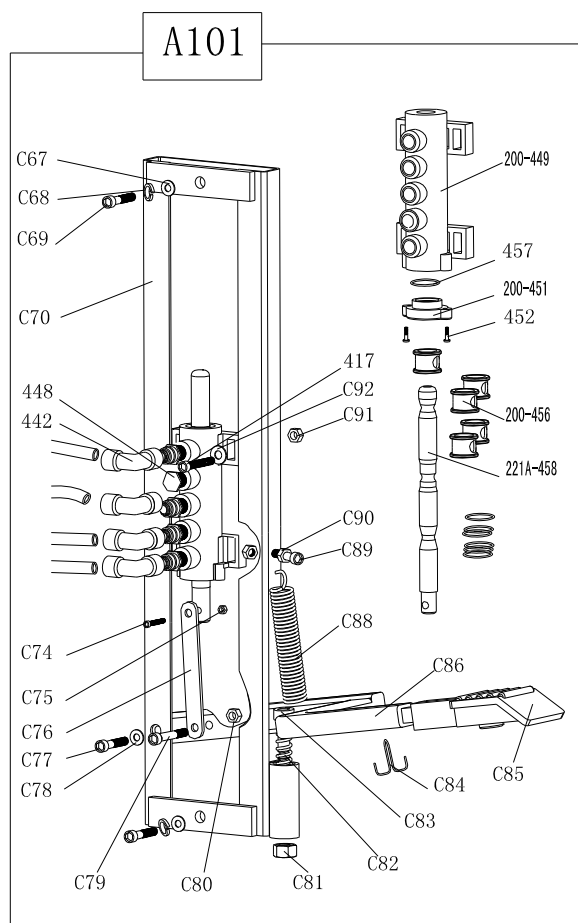
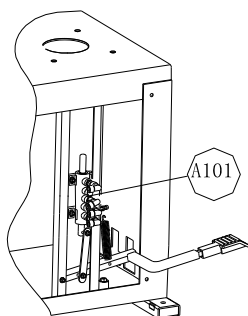
221A-A08	JZ02007011609	Rotating valve casing (A)
A04	EQ11002003333	T-union 3* Ø 8
A41	EQ11006003389	Straight union 1/8-Ø8
A42	FJ08001005347	O-seal Ø89*2
A43	FJ08001005311	O-seal Ø62*2.8
A44	FJ04009004680	Hex socket head bolt M6X20
A46	EQ11002003327	T-union 1/8-2*Ø8
A48	FJ04006004060	Hex socket head bolt M4*6
221A-A49	JZ02007011611	Rotating valve mandrel (A)
221A-A71	JZ06001020252	Complete Rotating valve (A)



A14	FJ04009004685	Hex socket head bolt M6*30	A80	JZ09001022989	Rubber washer Ø18*34*2
A15	JZ07001020889	Exhaust valve barrel	A82	FJ08001005120	O-seal Ø16*2.65
A16	JZ09001022999	Exhaust valve rubber washer	A83	JZ09001022662	Hose protector
A17	FJ04009004685	Hex socket head bolt M6*30	A84	JZ09001022886	Metal hose
A18	JZ07001020888	Exhaust valve cover	A86	EQ02007002822	Water discharge valve
A19	FJ04008004458	Self-locking nut M6	A87	FJ04009004770	Outer hex bolt M10*25
A21	EQ10004003257	Quick union 1/4-Ø8	A88	JZ08001021011	Air-tank assembly
A22	JZ03001015673	Exhaust valve support	A89	EQ02001002788	Safety valve
A23	FJ04008004458	Self-locking nut M6	221A-A90	JZ06001020296	Complete quick exhaust valve
A24	FJ04009004676	Hex socket head bolt M6*16	221A-A91	JZ03001015353	Air-tank down union
A25	EQ02002002799	One way valve (EPCVB8-01)1/8-2*ø8	221A-A92	JZ03001015354	Air-tank upper union
A100	JZ03001047579	Tank Stand			

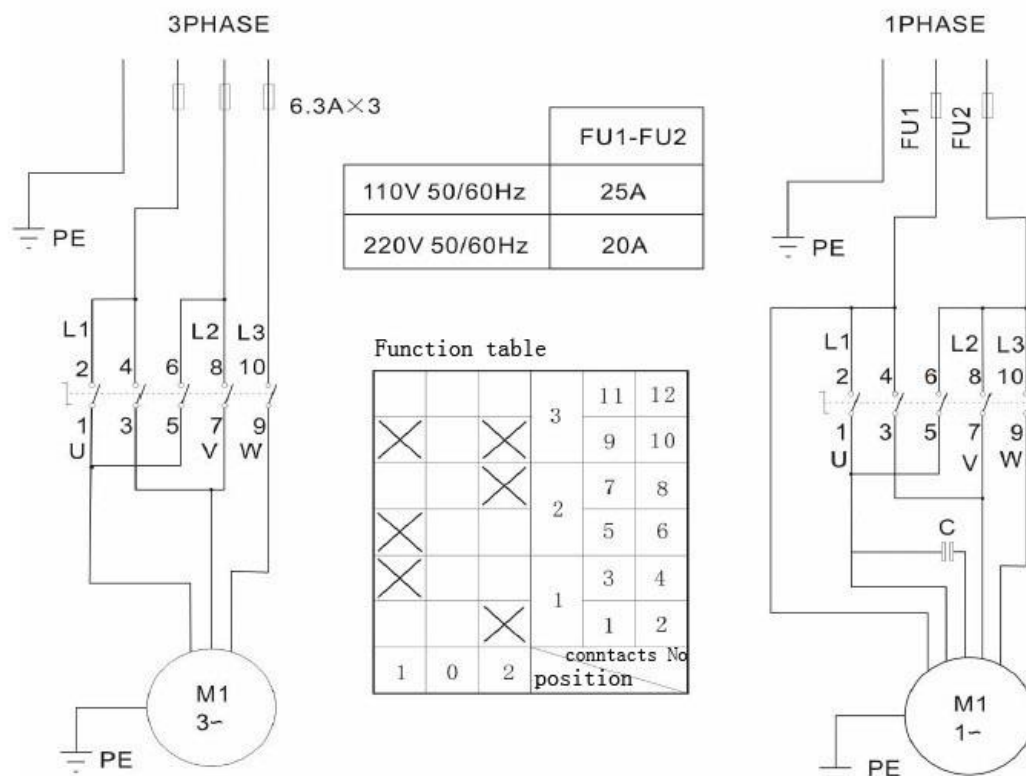


F601	JZ08001021077	Column 036	F640	JZ07002011986	Tire pressing pulley
F602	FJ04002003800	Flat washer Ø10*20*2	F641	FJ04002003915	flat washer Ø8*30*3
F603	FJ04002003773	Spring washer Ø10*20	F642	FJ04002003792	Spring washer Ø8
F604	FJ04009004770	Outer hexagon bolt M10*25	F643	FJ04009004706	Hex socket head bolt M8*20
F605	FJ04009004570	Hexagon socket head bolt M10*100	F644	FJ04006004197	Cross head screw M4*16
F606	FJ04002003773	Spring washer Ø10*20	F645	FJ04006004200	Cross head screw M4*30
F607	FJ04002003800	flat washer Ø10*20*2	F646	JZ08001021026	Raise-fall switch plate
F608	JZ03001015377	Tire lifting roller hud	F647	JZ03001015632	Connection bolt 036
F609	JZ07001020847	Tire lifting roller	F648		Raise-fall inlet pipe Ø6*4
F610	FJ04002003813	flat washer Ø12*25*2	F649	JZ02007011779	Tire pressing arm
F611	FJ04009004596	Hex socket head bolt M12*100	F650	FJ04008004452	Self-locking nut M22
F612	JZ08001021015	Tire lifting roller support 006	F651		Raise-fall exit pipe Ø6*4
F613	FJ04008004445	self-lock nut M12	F652	EQ10004003254	Quick union 1/4-Ø6
F614	FJ04009004596	Hex socket head bolt M12*100	F653	JZ08001021026	Raise-fall switch plate
F616	FJ04002003915	flat washer Ø8*30*3	F654	FJ04006004336	Cross head M5*10
F617	FJ04002003792	Spring washer Ø8	F655	FJ04008004455	Nut M4
F618	FJ04009004706	Hex socket head bolt M8*20	F656	EQ02011002888	Handle valve
F619	JZ03001015508	Horizontal pushing arm	F657	EQ04002002955	Muffle 1/8(plastic)
F620	JZ08001021089	Raise-fall sleeve 036	F658	JZ07001020877	Control valve protection cover
F621	JZ03001015632	Connecting bolt 036	F659	FJ04009004668	Hexagon socket head bolt M6*10
F622	JZ03001015873	Square column assembly 036	F660	FJ04002003890	Flat washer Ø6*12*1
F623	FJ04002003800	flat washer Ø10*20*2	F661	FJ04009004779	Outer hexagon bolt M10*55
F624	FJ04009004770	Outer hex bolt M10*25	F662	JZ09001023063	Raise-fall cylinder 006
F625	FJ04002003773	Spring washer Ø10	F663	EQ10004003262	Quick union 1/8-Ø6
F626-006	JZ08001021120	Rotating arm connector 006	F664	FJ04008004459	Self-locking nut M8
F627	FJ04008004494	Nut M10	F665	FJ04008004444	Self-locking nut M10
F628	FJ04006004055	Hex screw M10*20	F666	FJ04009004770	Outer hex bolt M10*25
F629	JZ03001015815	Pin for tire pressing head	F667	FJ04002003773	Spring washer Ø10*20
F630	FJ04008004458	Self-locking nut M6	F668	JZ03001015342	Mount/demount head flat washer
F631	FJ04009004685	Hexagon socket head bolt M6*30	F669	FJ04002003904	Flat washer Ø8*17*1.2
F632	JZ07001020926	Tire pressing head (Upper)	F670	FJ04009004881	Outer hex bolt M8*30
F633	FJ04009004779	Outer hex bolt M10*55	F671	JZ02007011261	Help arm support plate
F634	FJ04008004444	Self-locking nut M10	F672	JZ07001020907	Locking handle cover
F635	FJ04009004706	Hex socket head bolt M8*20	F673	JZ09001023132	Pentagon handle
F639	JZ07002020947	Handle	F674	JZ09001023207	Supporting leg
			F675	JZ08001046177	Support frame



C67	FJ04002003904	Flat washer Ø8X17X1.2
C67	FJ04002003904	Flat washer Ø8X17X1.2
C68	FJ04002003792	Spring washer Ø8
C69	FJ04009004707	Hex socket head bolt M8*25
C70	JZ03001015362	5th inflating pedal support assembly
448	FJ04006004123	Hex socket head bolt 1/8*8
442	EQ10004003264	Quick union 1/8-Ø8
C74	FJ04009004654	Hex socket head bolt M5*20
C75	FJ04008004456	Self-locking nut M5
C76	JZ03001015365	Inflating 5-way valve rod
C77	FJ04009004682	Hex socket head bolt M6*25
C78	FJ04002003890	Flat washer Ø6*12*1
C79	FJ04009004682	Hex socket head bolt M6*25
C80	FJ04008004513	Nut(black) M6
C81	FJ04008004444	Self-locking nut M10
C82	JZ09001023146	Limit spring
C83	FJ04009004589	Positioning bolt M10X55
C84	FJ06002004996	Splitpin 4X40
C85	FJ06002004996	Pedal rubber
C86	JZ07001020931	Inflating pedal rod
C88	JZ03001015360	Pedal Spring
C89	JZ09001022872	Hex socket head bolt M6*25
C90	FJ04009004682	Nut(silver) M6
417	FJ04008004513	Hex socket head bolt M6×20
C91	FJ04009004680	Self-locking nut M6
C92	FJ04008004458	Flat washer Ø6X12X1
200-449	FJ04002003890	5-way valve barrel
200-451	JZ07001020920	5-way valve cover
452	JZ07001020917	cross head screw ST2.9*16
200-456	FJ04006004372	5-way valve rod spacer
457	FJ08001005087	O-seal 12X20X4
221A-458	JZ09001015769	5-way valve rod A
A101	JZ06001020272	Complete inflating pedal

17. Circuit diagram:



18. Pneumatic drawing:

