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

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Tyre Changer

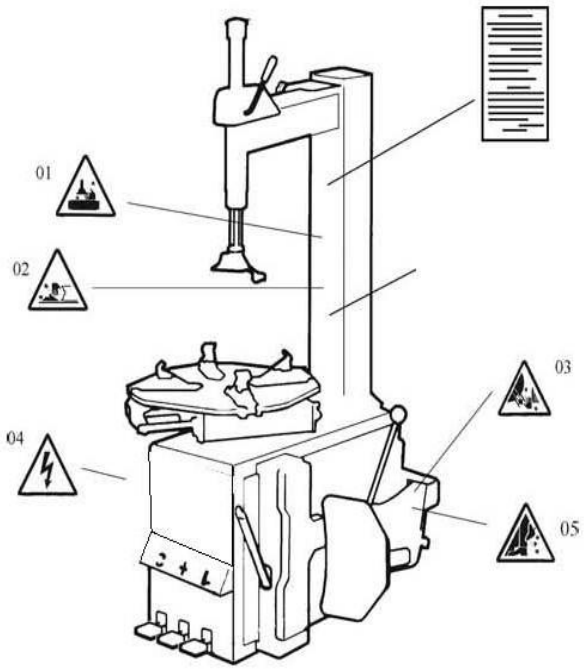
Warning

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;

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	0.75/0.37/1.1 kw
Max. Rotating Torque (Turntable)	1078 Nm
Overall Dimension	960*760*930mm
Noise Level	75 dB

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.

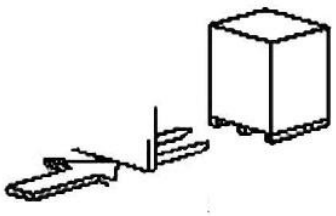


Fig 1

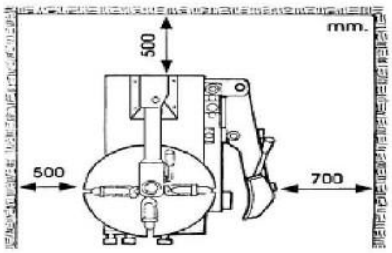


Fig 2

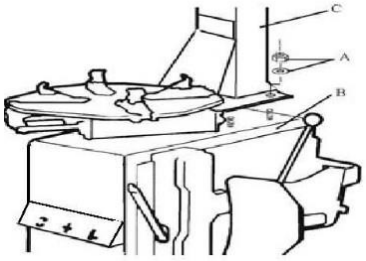


Fig 3

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:

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 cabinet 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.

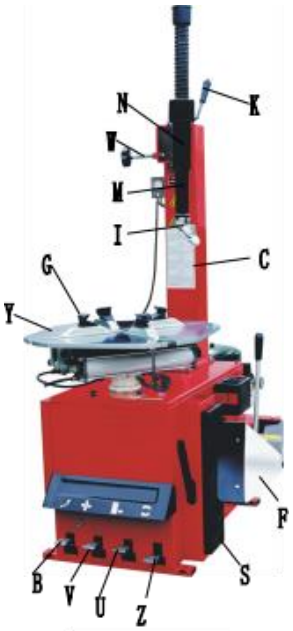


Fig 4

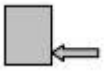
8. Electricity and Pneumatic connections:

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 air switch on the maim 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:

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

Please note: below operation refer to **Fig 4**

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) close toward inside; release Bead Breaker Pedal (U), Bead Breaker shovel (R) return to original position.

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

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

Tyre changer operation is consisted of three parts:

1）Breaking the tyre bead

2）Demounting the tyre

3）Mounting the tyre

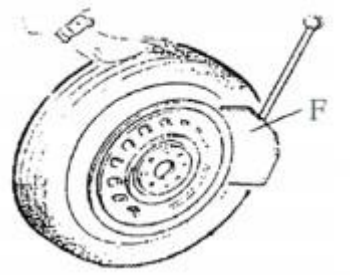


Fig 5

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 paddle 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 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**:

Tread the Jaws open and close Pedal (V) halfway down to middle, positioning for the four jaws (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- t**o clamp the wheel from inside**:

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

Caution: Check to make sure the wheel firmly secured by the four jaws 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 to lock the Vertical Arm and Swing Arm in position, and also adjust the Rocker Arm make Mounting/demounting head can raise 2mm-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**.

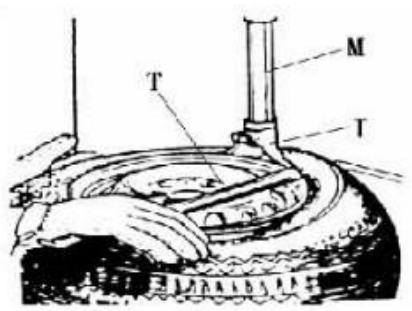


Fig 6

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, tread 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.

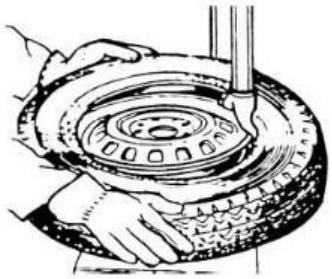


Fig 7

9.3. Mounting the tyre :

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

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

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

Lock the Hexagonal Vertical Mounting Arm, put the tyre on the rim, let the Rocker Arm back to place as demounting the tyre. And let one side of tyre down bead above the rear section of the Mounting/demounting head, the other side

under the front section of the Mounting/demounting head. Suppress the trye 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)**

10. 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;

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;



Fig 8

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.

11. 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.

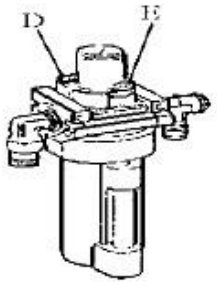


Fig 9

12. 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 jaws.

- 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 enter with minus screwdriver. **(Fig 9)**

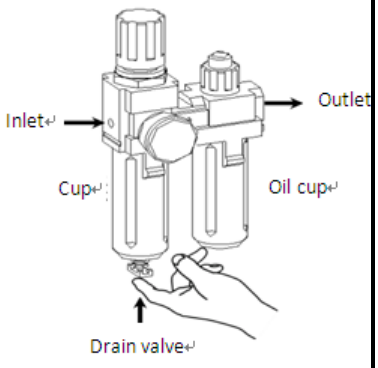


Fig 9-1

- As shown in Figure 9-1, 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 10)

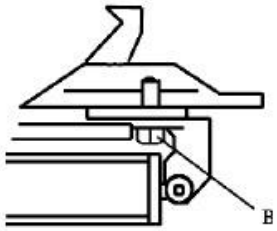


Fig 10

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

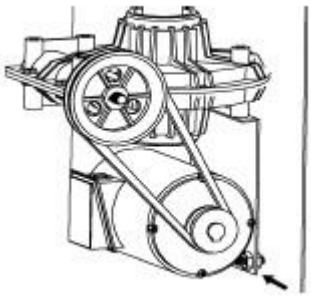
Remove the left side cover by unscrewing the screws; adjust two screws located on the motor support, keep a suitable distance between motor support and motor base; tight the screws for the belt tension.(Fig 11)

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

N**ote: If Hexagonal Vertical Arm not be locked or not meet the requirement that 2-3mm from the bottom of Mounting/demounting head to rim, please adjust Hexagonal Locking Plate, refer to Fig 12 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 Muffler (A) which belong to Jaws open and close Pedal and Bead Breaker Pedal; **(Fig 13)**
3. Clean the mufflers with compressed air, please replace it referring to the spare parts list if it is damaged. **(Fig 13)**


Fig 11

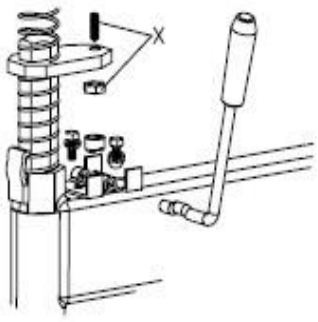


Fig 12

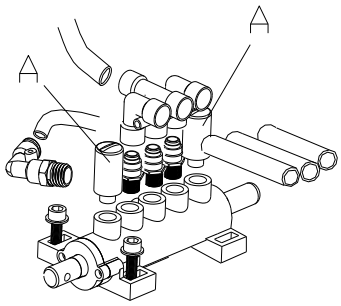


Fig 13

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

13.1. Rapid Tire Inflation Device:

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

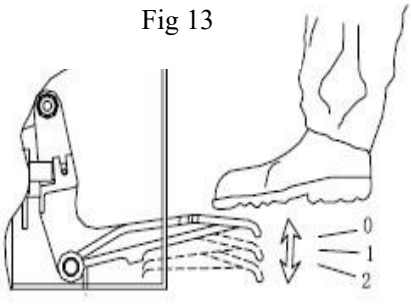


Fig 14

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

a. Press Rapid Tire Inflation Pedal to the middle position (Fig 14, position 1), the inflating head should give air.

b. Press Rapid Tire Inflation Pedal all the way down (Fig 14, position 2), a strong air blast should come from the holes in the four jaws' locking sliders. **(Fig 15)**

13.2. Wheel rim lock and Tire inflation:

Note：A wheel can explode if:

1). the diameter of the rim is not exactly the same at the tyre's.

2). the rim or tyre are defective.

3). the tyre is inflated to a pressure higher than the maximum recommended by the manufacturer.

4). the operator does not observe the requisite safety regulations.

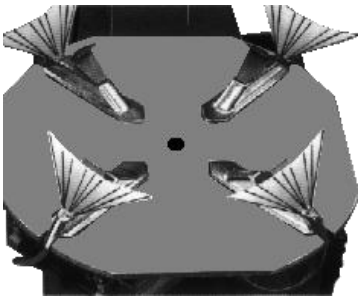


Fig 15

13.3. 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.

13.4. 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.

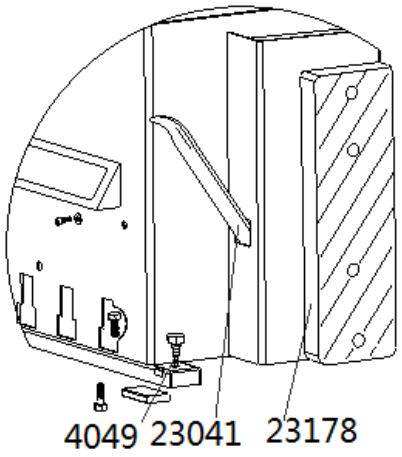
14. Trouble shooting table:

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. Guide for ordering spare parts

1. Firstly, the damaged or ordered sample should be gained and confirmed the quantity of spare parts
2. Confirm the replaced parts specification, avoid wrong order.

The confirmed method showed as following:
According to the use range and place position of parts, find out the codes of parts in the exploded drawing (section 17) from the manual.
For example, if lifting level is needed to be ordered, resulting from the fact that lifting level always placed in the sleeve, and its exploded drawing position is showed as below:



We can see the code “4049” from the picture, then find out all the information of code “4049” and record them.

4049	FJ19004000005	Grounding screw M6x40
23041	JZ11900100004	Lifting level
23178	JZ20200100032	Bead breaker arm spring

The recorded information:

23041	JZ11900100004	Lifting level

3. Gather the detailed information of parts

Code .	Order code	Name	Qty	Purchase time of machine
23041	JZ11900100004	Lifting level	2	2009.6.25

4. Please contact the spare parts department and confirm the order.
5. After confirming the order with any problem, the spare parts department will deliver the goods for you according to the order.

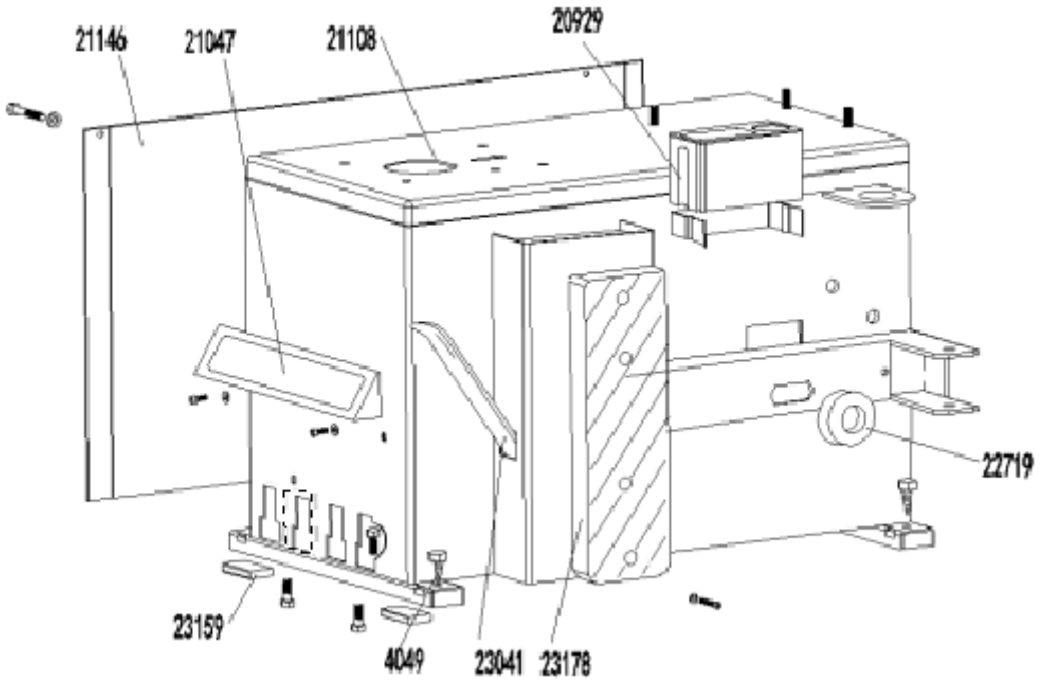
Special statement
◆Manufacturer reserves the rights to change the parts specification without beforehand notice for the users.
◆Manufacturer do not liable for the modification and improvement of the products which have been sale

16. Wearing spare parts list

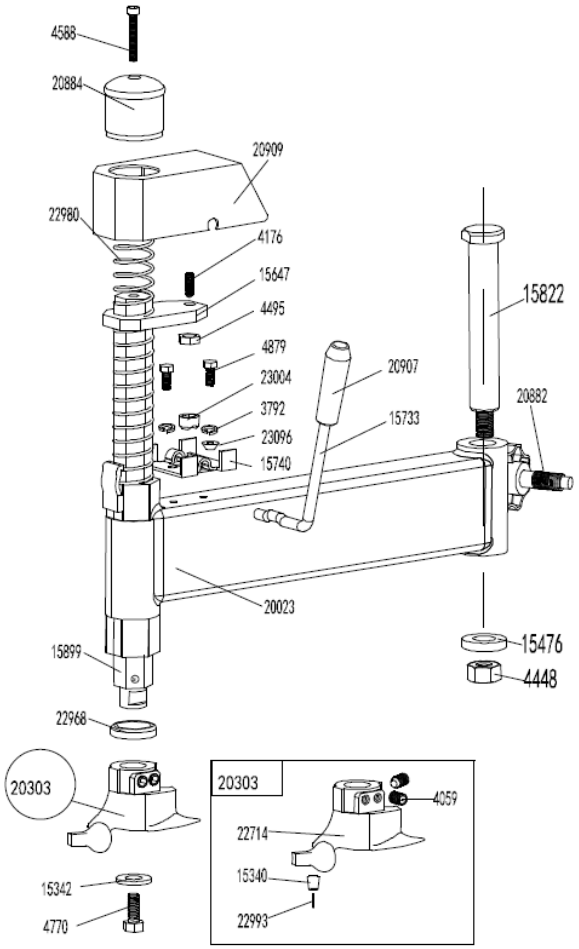
Query NO.	Order NO.	Parts name	Query NO.	Order NO.	Parts name
23178	JZ20200100032	Bead breaker buffer	5386	FJ29004000001	V- seal Ø185×168×10.8
5221	FJ29002000156	O- seal 30×3.55	5135	FJ29002000071	O- seal Ø173.4×5.3
5293	FJ29002000228	O- seal Ø52*2	5151	FJ29002000086	O- seal Ø 19.6*2.62
5391	FJ29005000002	V- seal Ø20*28*7.5	1577	DD12010000001	Reverse switch
5312	FJ29002000247	O- seal Ø63*2.65	5221	FJ29002000156	O- seal Ø 30*3.55
22841	JZ12500700008	clamp cylinder piston Ø70	5300	FJ29002000235	O- seal 59.9*2.62
5151	FJ29002000086	O- seal Ø 19.6×2.62	3545	FJ05002000016	Tyre changer belt A-28
5120	FJ29002000056	O- seal Ø16*2.65	22984	JZ20201700004	Spiral trachea
5160	FJ29002000095	O- seal Ø 20*2.65	2920	EQ03005000002	Pressure reducing filter
5147	FJ29002000376	O- seal 180×5	2941	EQ03011000001	Oil fog maker

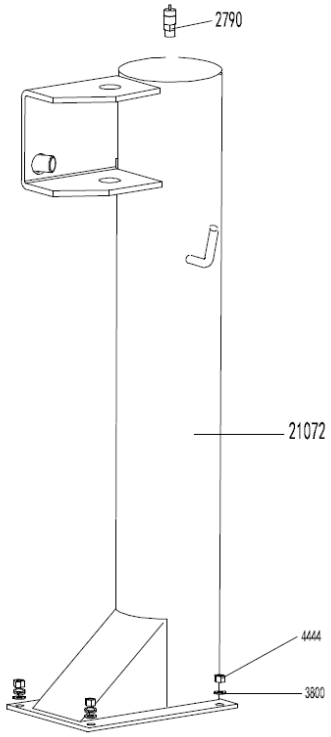
Remark： The parts in the list are easy broken parts, if other parts needed to be ordered, please check the manual.

17. Exploded drawing:

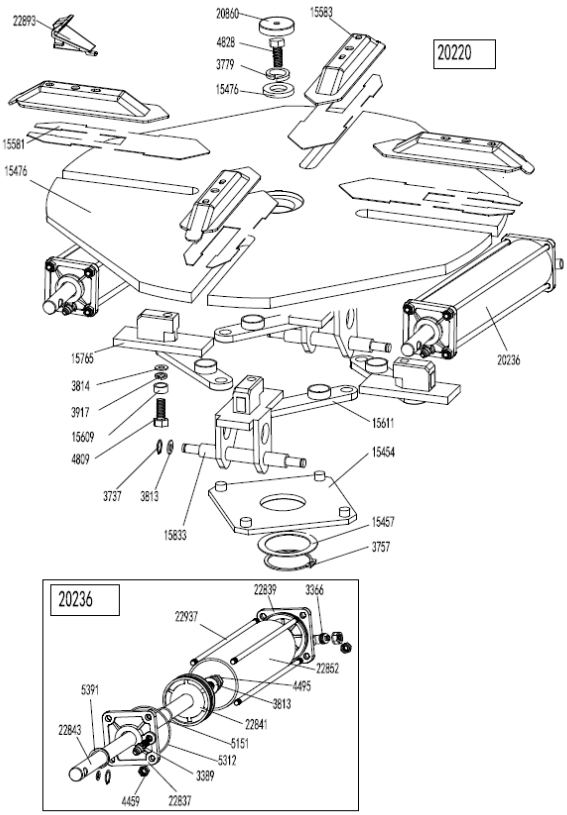


21108	Determine based on the color of the Machine body	Machine body
21047	JZ20200900061	Pedal front cover
21146	JZ20200800018	Left cover
423159	JZ20200100081	Rubber foot buffer
23178	JZ20200100032	Bead breaker buffer
22722	JZ11700200014	Bead breaker arm spring
22719	JZ20200200010	Bead breaker arm rubber
20929	JZ12000200164	Oil-water box
23041	JZ11900100004	Lifting lever

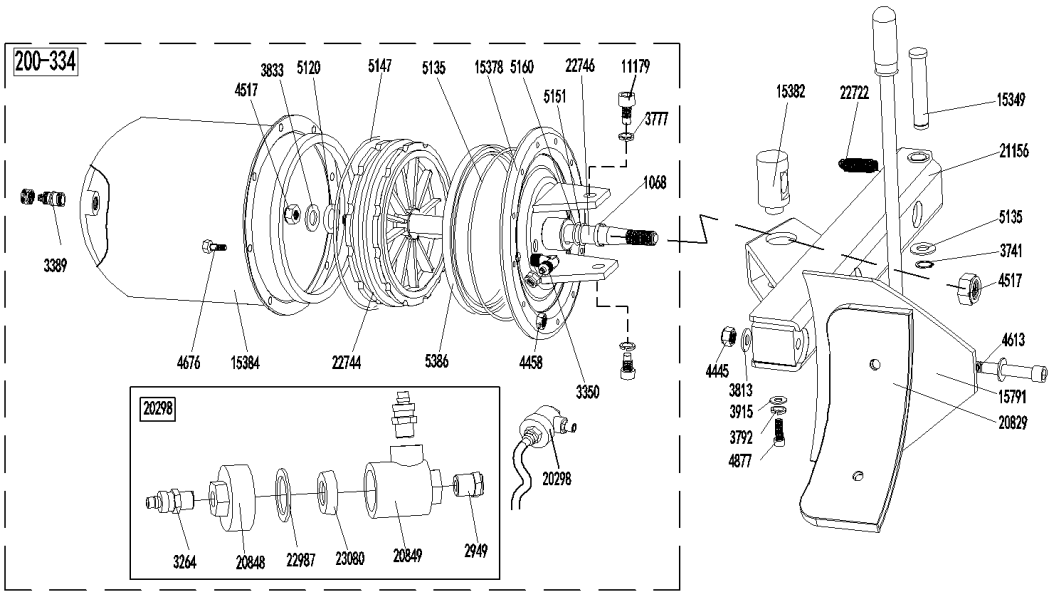




2790	EQ02001000006	safety valve
21072	Determine based on the color of the Round Column	Round column
15822	JZ20200600014	Swing arm pin
4448	FJ21003000004	Self-locking nut M16
15476	JZ20201400046	Flat washer
20882	JZ12001900002	Column adjust handle
4588	FJ22009000016	Hex socket head bolt M10*50
20884	JZ12000200102	Vertical arm cap 228
22980	JZ11700300049	Hexagonal lever spring
3800	FJ15006000006	Flat washer Ø10X2
4444	FJ21003000001	Self-locking nut M10
15899	JZ20200700016	Vertical arm rod
22968	JZ20200700004	Vertical arm washer
20303	JZ30204500039	Complete Mount/demount head B03#
15342	JZ11801300045	Mount/demount head flat washer
228-120	FJ22012000010	Outer hex bolt M10×25
15340	JZ11801300014	Mount/demount head pulley
22714	JZ11801300021	Complete mount/demount head B03#
22993	JZ20201000028	Hex round pin
4059	FJ19006000007	Hex socket head bolt M12X16
20907	JZ12000300002	Locking handle cover
15733	JZ20200600011	Locking Handle
15740	JZ20200600013	Locking seat
23096	JZ20200600006	Locking block cover
3792	FJ15004000021	Spring washer Ø8
23004	JZ20200600005	Eccentric shaft nut
4879	FJ22012000100	Outer hex bolt M8x25
4495	FJ21011000006	Nut M12X1.75X7
4176	FJ19014000004	Hex socket head bolt M12X30
20909	JZ12000200113	Locking seat cap
15647	JZ20200600017	Hexagonal locking plate
21123	JZ20200600001	Swing arm 470

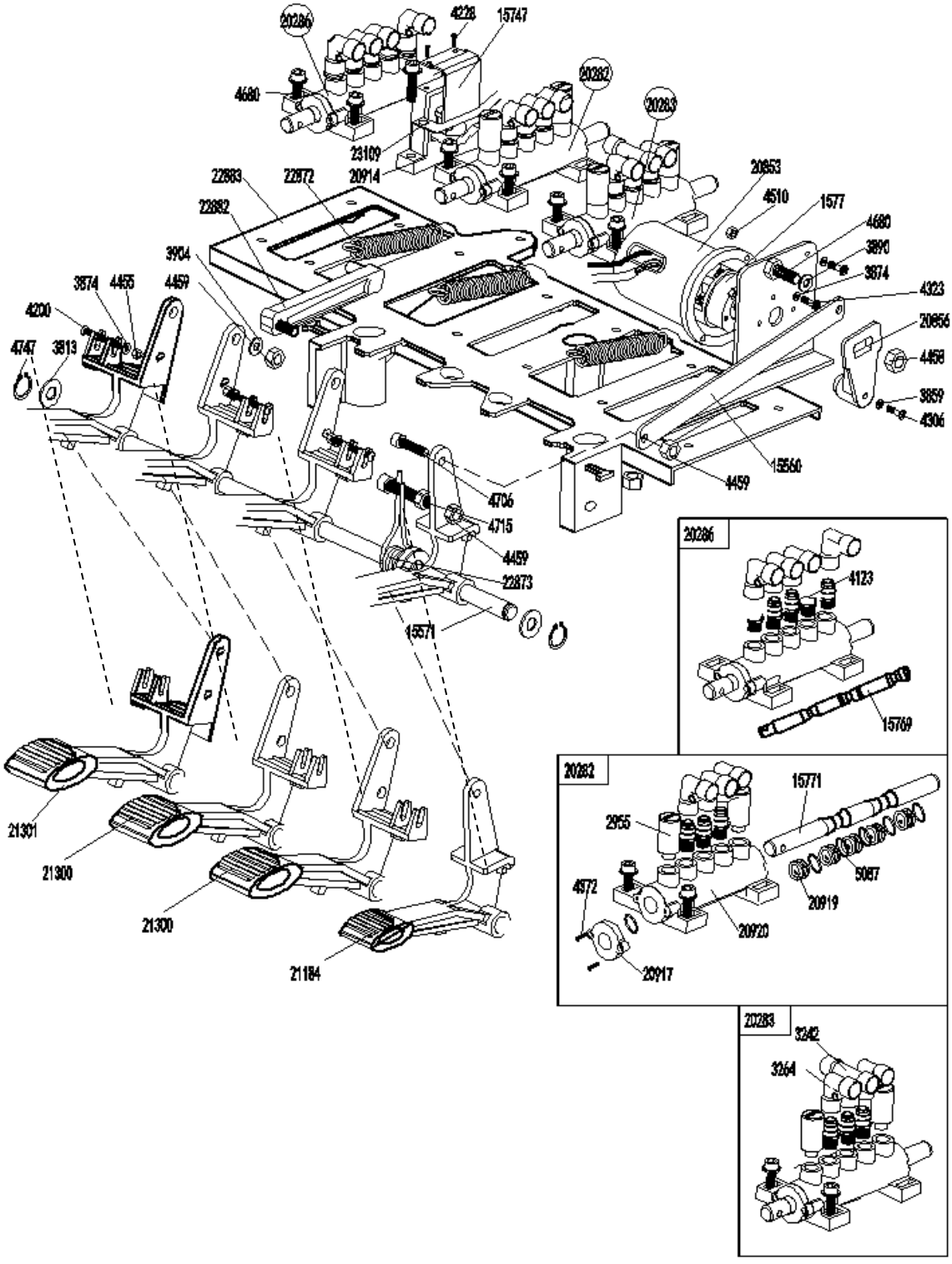


15479	JZ20201400126	Turntable assembly 615
15581	JZ20201400055	Jaw sliding plate(optional)
15583	JZ20201400056	Jaw cap assembly
22893	JZ11801300016	Jaw 200
15476	JZ20201400046	Big washer
3779	FJ15004000008	Spring washer Ø16
4828	FJ22012000058	Outer hex bolt M16×40
20860	JZ12000200083	Turntable cap U200
15611	JZ20201400227	Connection rod assembly 615
15454	JZ20201400073	Square Turntable 615
15457	JZ20201400044	Square Turntable Washer
3757	FJ14004000023	Snap Ring Ø 65(Shaft)
15833	JZ20201400087	Jaw slide guide with pin
3813	FJ15006000019	Flat washer Φ 12*25*2
3737	FJ14004000003	Snap Ring Ø12
4809	FJ22011000027	Outer hex bolt M12*80
3917	FJ15010000002	Teeth locking washer ϕ12*1
20220	JZ30204500193	Complete square turntable 615A
3814	FJ15006000020	Flat washer Ø12X30X3
15609	JZ20201400011	Connection rod nut
15765	JZ20201400079	Jaw slide guide without pin
22937	JZ12500800009	Threaded connection rod 393
22843	JZ12500200011	Clamping cylinder piston rod 400
22837	JZ12500300001	Clamping cylinder cover without handle
3389	EQ11005000023	Straight union 1/8-ϕ8
5391	FJ29005000002	V-seal UHS-20*28*7.5
5312	FJ29002000247	O-seal ϕ63*2.65
22841	JZ12500700008	Complete clamping cylinder piston Φ70
3813	FJ15006000019	Flat washer Φ 12*25*2
4495	FJ21011000006	Nut M12X7X1.75
22852	JZ12500100012	Clamping cylinder barrel 360
5151	FJ29002000086	O-seal ϕ20*2.65
22839	JZ12500300002	Clamping cylinder cover with handle
3366	EQ11004000025	Quick union 1/8-Ø8
4459	FJ21003000014	Self-locking nut M8
20236	JZ30204500082	Complete clamping cylinder



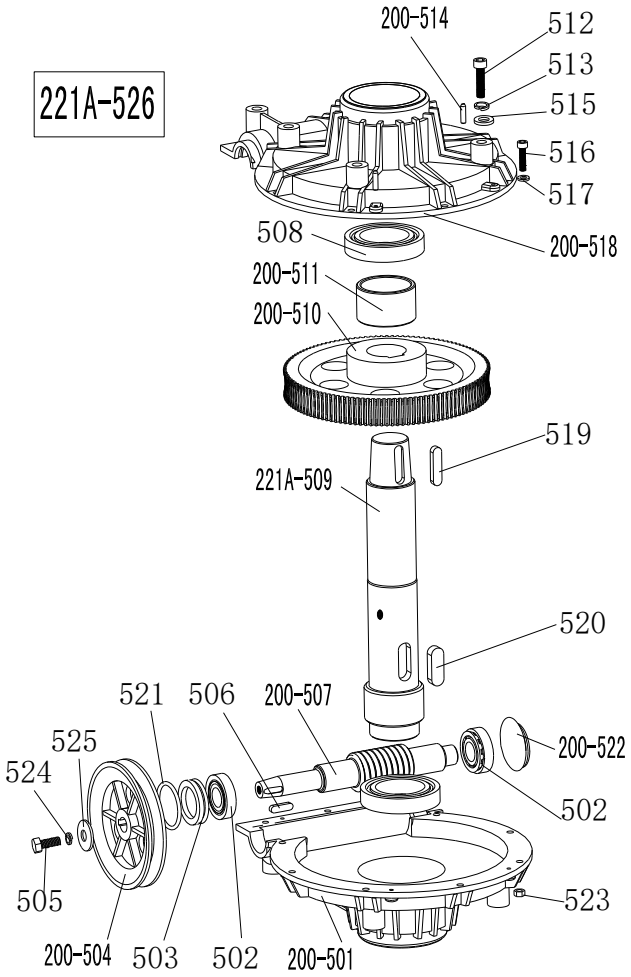
2272	JZ11700200014	Bead breaker arm spring	3741	FJ14004000007	Snap Ring Ø 16
11179	JZ20201900021	Hex socket head bolt M14*30	5135	FJ29002000071	O-seal ϕ170.8×5.33
4458	FJ21003000013	Self-locking nut	21156	JZ20200200008	Bead breaker arm 200
3350	EQ11004000009	2-way Union (90°) 1/4-Ø8	15349	JZ20200200025	Bead breaker pin
4517	FJ21012000002	Nut M16*1.5	15382	JZ20201900031	Bead breaker cylinder rotating pin
3833	FJ15006000039	Flat washer ϕ16*28*2	3813	FJ15006000019	Flat washers Ø12*24*2
5120	FJ29002000056	O- seal ϕ16*2.65	4445	FJ21003000002	Self-locking nut M12
5160	FJ29002000095	O-seal ϕ20*2.65	3915	FJ15006000118	Flat washers Ø8*30*3
5147	FJ29002000376	O-seal 180×5	3792	FJ15004000021	Spring washer Ø8
15378	JZ20201900024	Bead breaker cylinder cover assembly	4877	FJ22012000098	Outer hex bolt M8×20
22746	JZ12500200008	Bead breaker cylinder piston rod	3389	EQ11005000023	Quick straight union 1/8- Ø8
5386	FJ29004000001	V-seal 185×168×10.8	5151	FJ29002000086	O- seal Ø 19.6*2.62
22744	JZ12500700007	Bead breaker cylinder piston	20298	JZ30204500248	Bead breaker cylinder exhaust valve
15384	JZ12500100007	Bead breaker cylinder barrel	3264	EQ10003000016	Two-way elbow (90°) 1/8-Ø8
4676	FJ22009000093	Hex Socket head cap screw M6×16	20848	JZ12000200078	Bead breaker cylinder exhaust valve cover
15791	JZ20200300018	Bead breaker shovel assembly	22987	JZ12100400003	Seal Washer
4613	FJ22008000016	Socket head cap screws M12×80	23080	JZ12100400004	Bidirectional seal
4517	FJ21012000002	Self-locking nut M16X1.5	20849	JZ12000100001	Bead breaker cylinder exhaust valve barrel
1068	CF03003000003	Bronze stripes	2949	EQ04001000007	Muffler
20829	JZ12000200070	Bead breaker shovel protection cover(optional)	3777	FJ15004000006	Seal Washer Ø14

200-334

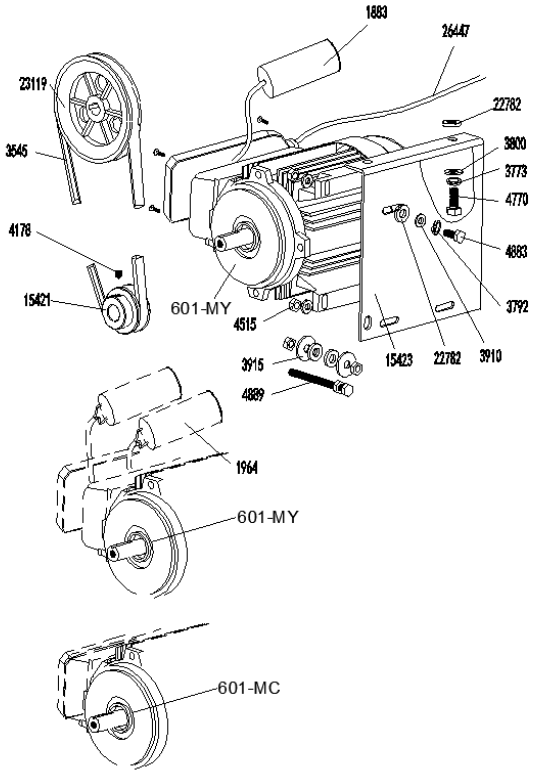

20286
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23109
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22883
22872
22882
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4680
3890
3874
4323
20856
4459
3859
4306
3904
3874
4455
4459
4200
4747
3813
15560
4459
4706
4715
4459
22873
15571
21301
21300
21300
21184
20286
4123
15769
20282
15771
2955
5067
20919
4572
20920
20917
20283
3242
3264

21184	JZ11801100015	Reverse switch pedal	3874	FJ15006000078	Flat Washer Ø4
21300	JZ11801100016	5-way valve pedal(right)	4323	FJ19022000023	Cross Round Head Screw M4X16
21301	JZ11801100017	5-way valve pedal(left)	20856	JZ12001800012	Reverse switch handle
3737	FJ14004000003	Snap Ring Ø12	4458	FJ21003000013	Self-locking nut M6
3813	FJ15006000019	Flat washer Φ 12*24*2	3859	FJ15006000064	Flat Washer Ø3
4200	FJ19016000018	Cross-round head screw M4X30	4306	FJ19016000045	Cross Round Head Screw M3*16
3874	FJ15006000078	Flat Washer Ø4	5560	JZ20201200038	Pedal Connection Rod
4455	FJ21003000010	Self-locking nut M4	4459	FJ21003000014	Self-locking nut M8
4459	FJ21003000014	Self-locking nut M8	15571	JZ20201200057	Pedal Front Shaft
3904	FJ15006000107	Flat washer Φ8*17*1.5	4459	FJ21003000014	Nut M8
22882	JZ11801100001	Cam connection rod	22873	JZ11700100003	Pedal twist spring
22883	JZ11801100003	Pedal support board	4715	FJ22009000132	Hex Socket Head Bolt M8X50
22872	JZ11700200015	Pedal Spring	4706	FJ22009000123	Hex socket head bolt M8*20
20914	JZ12001800070	Cam	3264	EQ10003000016	Quick union 1/8- Ø 8
23109	JZ20201200011	Cam washer	3242	EQ10001000024	Quick T-union 1/8-2* Ø 8
4680	FJ22009000097	Hex Socket Head Bolt M6X20	4123	FJ19013000001	Hex socket head bolt 1/8*8
20286	JZ30204500273	"5-way valve (inflating,without rod)"	20920	JZ12000100007	5-way valve body
4228	FJ19017000003	Cross Head Self Tapping Screw ST2.9*12	20917	JZ12000200193	5-way valve cover
15747	JZ20201200040	Cam cover	4372	FJ19025000002	"Cross Head Screw St2,9X14"
20282	JZ30204500269	"5-way valve (L-union,without rod)"	2955	EQ04002000004	Muffler 1/8
20283	JZ30204500270	"5-way valve (T-union,without rod)"	15771	JZ20201200005	5-way valve rod
20853	JZ12000200080	Reverse Switch Cover	20919	JZ12001800076	5-way valve rod spacer
4510	FJ21011000020	Hex nut M4	5087	FJ29002000023	O-seal ϕ 12*20*4
1577	DD12010000001	Reverse switch	15769	JZ20201200022	5-way valve (Inflation)
4670	FJ22009000097	Hex Socket Head Bolt M6X20	20271	JZ30204500007	Complete 4-pedals assembly 203A
3890	FJ15006000093	Flat washer Ø 6X12X1			

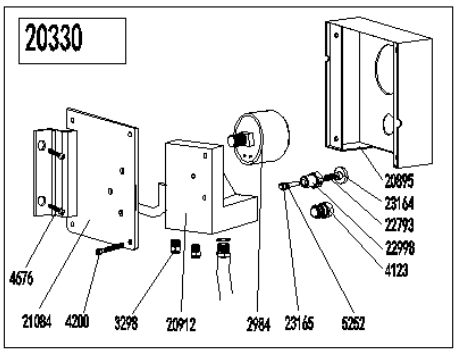
200-501	JZ20202200022	Gear box lower cover

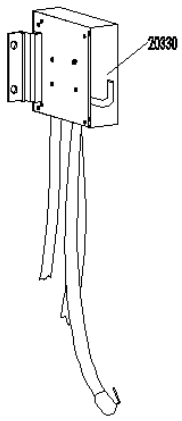


502	FJ10008000001	Bearing 30204
503	FJ29012000001	Gear box seal φ20*35*8
200-504	JZ20202200008	Gear Belt pulley
505	FJ22012000100	Outer hex bolt M8×25
506	FJ25001000003	Key washer 6×20
200-507	JZ20202200007	Worm rod
508	FJ10002000009	Bearing 6010
221A-509	JZ20202200015	Worm gear shaft
200-510	JZ11801400001	Worm gear
200-511	JZ20202200054	Worm gear shaft spacer
512	FJ22012000019	Outer hex bolt M10×55
513	FJ15004000002	Spring washer Ø10
200-514	FJ26006000001	Pin 6X20
515	FJ15006000006	Flat washer Ø10*20*2
516	FJ22009000097	Hex socket head bolt M6×20
517	FJ15006000095	Flat washer Ø 6*14*1.2
200-518	JZ20202200021	Gear box upper cover
519	FJ25001000001	Key washer 10*40
520	FJ25001000002	Key washer 10*40
521	FJ29002000156	O-seal Ø 27.8*3.1
200-522	JZ20202200009	Oil resistant seal
523	FJ21003000013	Self-locking nut M6
524	FJ15004000021	Spring washer Ø 8
525	FJ15006000118	Flat washer Ø 8*30*3
221A-526	JZ30204500060	Complete gear box

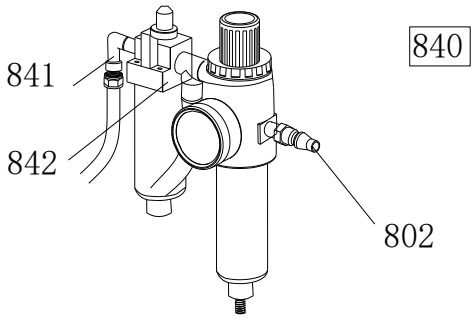


23119	JZ20202200008	Gear Belt pulley U200
601	Based on customer's need	Motor
15421	JZ20202200010	Motor Belt pulley
4178	FJ19014000006	Hex socket head bolt M8×12
3545	FJ05002000016	Tyre changer belt A-28
4889	FJ22012000108	Outer hex bolt M8x65
3915	FJ15006000118	Flat washer Ø8*30*3
1964	DD20001000010	"Capacitor 80UF,110V"
1883	DD20001000007	Capacitor 50uf 450V
3800	FJ15006000006	Washer ϕ10*20*2
3773	FJ15004000002	Spring washer Ø10
4770	FJ22012000010	Hex socket head bolt M10×25
4883	FJ22012000104	Hex socket head bolt M8×35
4515	FJ21011000025	Hex nut M8
3910	FJ15006000113	Flat washer ϕ8×22×2
22782	JZ20201100001	Motor Rubber Buffer
15423	JZ20201100002	Motor support
26447	JZ12400200042	Motor line 5×1.0
3792	FJ15004000021	Seal washer φ8
22782	JZ20201100001	Motor Rubber Buffer

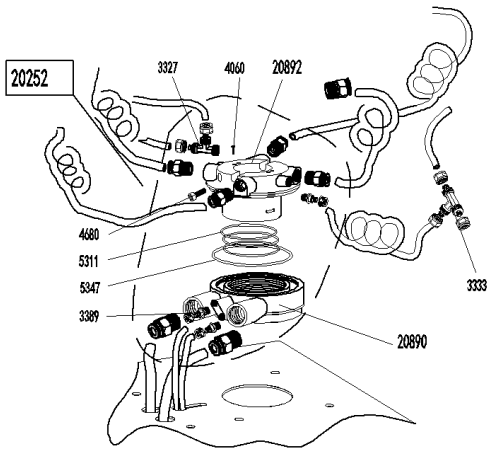




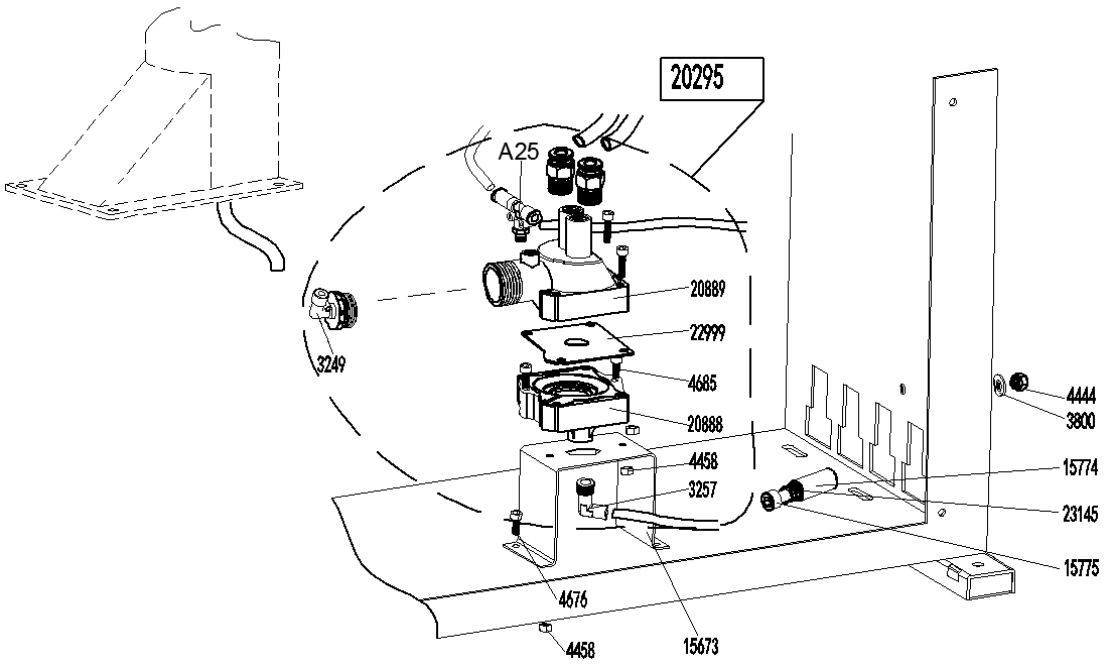
20895	JZ12000200162	Gas meter box assembly Ø60
23164	JZ20201700006	Button
22793	JZ11700300047	Button spring
22998	JZ20201600014	Button valve
4123	FJ19013000001	Hex socket head bolt 1/8*8
5252	FJ29002000187	O seal Ø4*2
23165	JZ20201700005	Button rod
2984	EQ05003000017	Pressure gauge 10kg
20912	JZ12001800032	Seat with holes
3298	EQ10004000026	1/8-φ8 (ZPCH8-01)
4200	FJ19016000018	Cross-round head screw M4X30
21084	JZ20202000006	Pressure gauge box support
4676	FJ22009000093	Hex socket head bolt M6×16
20330	JZ30204500072	Complete pressure gauge box



802	EQ12001000013	Quick union
841	EQ11004000009	Union (90°)1/4Φ8
842	EQ03001000011	Oil fog maker 2000 connection
840	JZ30204500216	Complete oil fog maker

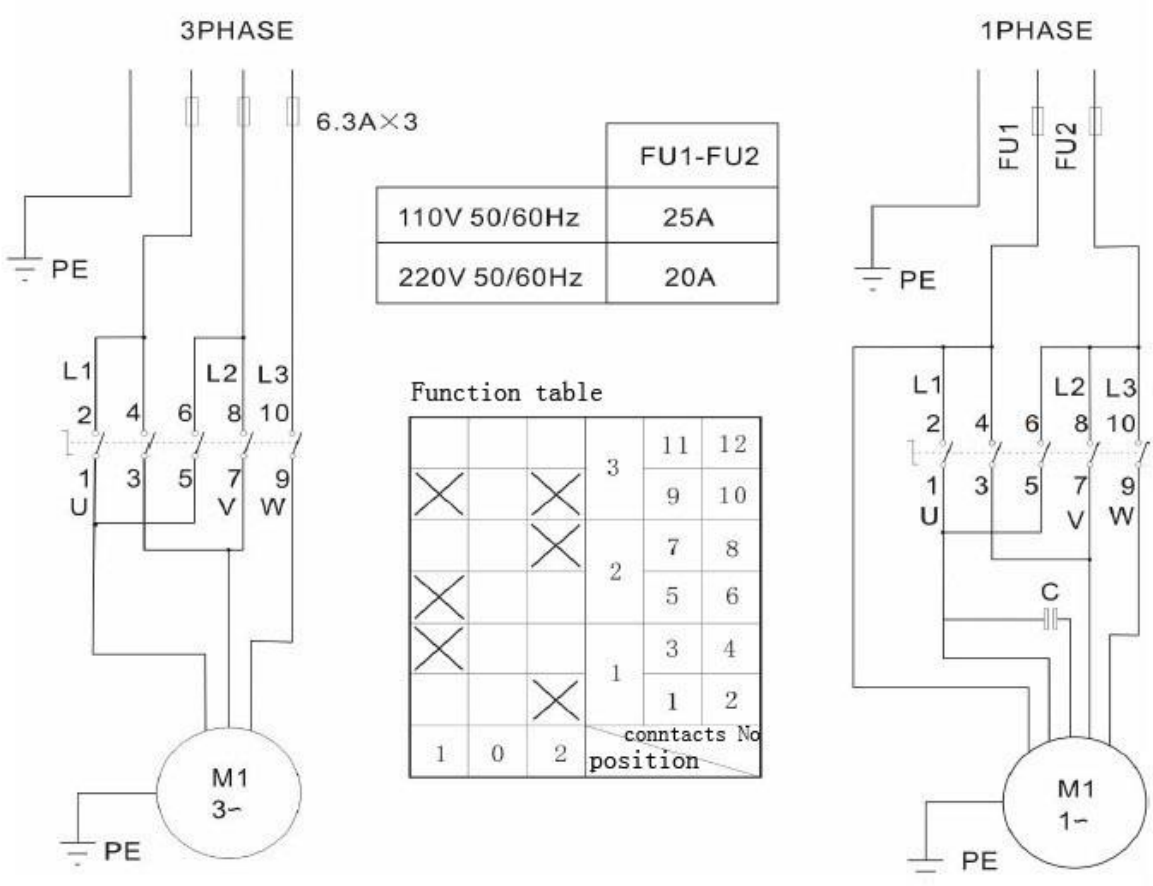


20890	JZ12000200107	Rotating valve casing (A)
3333	EQ11002000011	Quick T-union 3* Ø 8
3389	EQ11005000023	Straight union 1/8-φ8
5374	FJ29002000282	O-seal Ø89*2
5311	FJ29002000246	O-seal Ø62*2.8
4680	FJ22009000097	Hex Socket Head Bolt M6X20
3327	EQ11002000005	T-union 1/8-2*φ8
4060	FJ19006000008	Hex socket head bolt M4*6
20892	JZ12000100003	Rotating valve mandrel (A)
20252	JZ30204500260	"Complete Rotating valve A"



20295	JZ30204500245	"Complete exhaust valve,plastic"
20889	JZ12000100002	Exhaust valve barrel
22999	JZ20201600006	Exhaust valve rubber washer
4685	FJ22009000102	hex socket head cap screw M6*30
20888	JZ12000200106	Exhaust valve cover
4458	FJ21003000013	Locking Nut M6
3257	EQ10003000009	Quick L-union 1/4-Ø8
15673	JZ20201600060	Exhaust valve support
4676	FJ22009000093	Hex socket head bolt M6× 16
3249	EQ10003000002	Quick Union 1/2
4444	FJ21003000001	Self-locking nut M10
3800	FJ15006000006	Washer Ø10*20*2
15774	JZ20201200034	Limit Spring plate
23145	JZ11700300042	Limit Spring
15775	JZ20201200035	Location bolt
4458	FJ21003000013	Locking Nut M6

18. Circuit diagram:

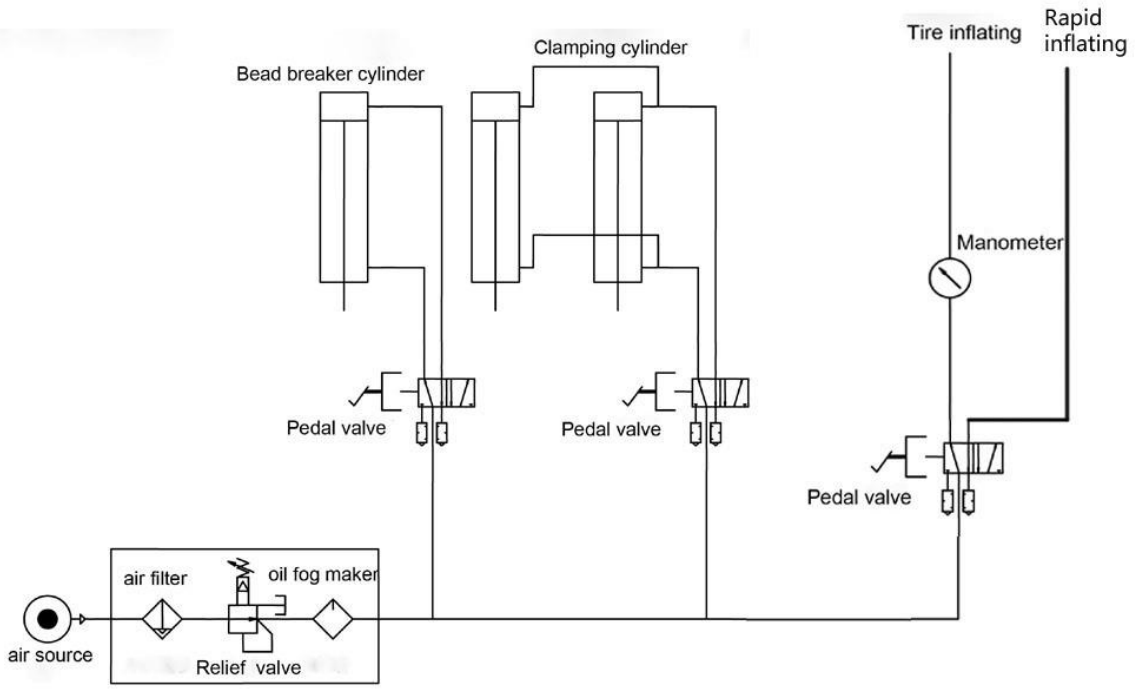


	FU1-FU2
110V 50/60Hz	25A
220V 50/60Hz	20A

Function table

			3	11	12
X		X		9	10
		X	2	7	8
X				5	6
X			1	3	4
		X		1	2
1	0	2	conntacts No position		

19. Pneumatic drawing:



20.Color reference for square columns in the attachmen：

编号	名称	规格
JZ20200400576	Column	Flat light RAL1006
JZ20200400568	Column	Wrinkle RAL5005
JZ20200400535	Column	Flat light RAL9005
JZ20200400531	Column	Wrinkle RAL5010
JZ20200400474	Column	Flat light PT300C
JZ20200400438	Column	Wrinkle RAL2011
JZ20200400433	Column	Wrinkle RAL5002
JZ20200400350	Column	Wrinkle RAL9005
JZ20200400238	Column	Wrinkle RAL5015
JZ20200400230	Column	Wrinkle RAL1028
JZ20200400212	Column	Wrinkle RAL5003
JZ20200400190	Column	Wrinkle RAL3002
JZ20200400009	Column	Flat light RAL3002