



INSTRUCTION & MAINTENANCE MANUAL

TYRE CHANGER PRO RUNFLAT

Art. No. 9501006290

TYRE CHANGER INSTRUCTION MANUAL

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Tyre Changer

Warning

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

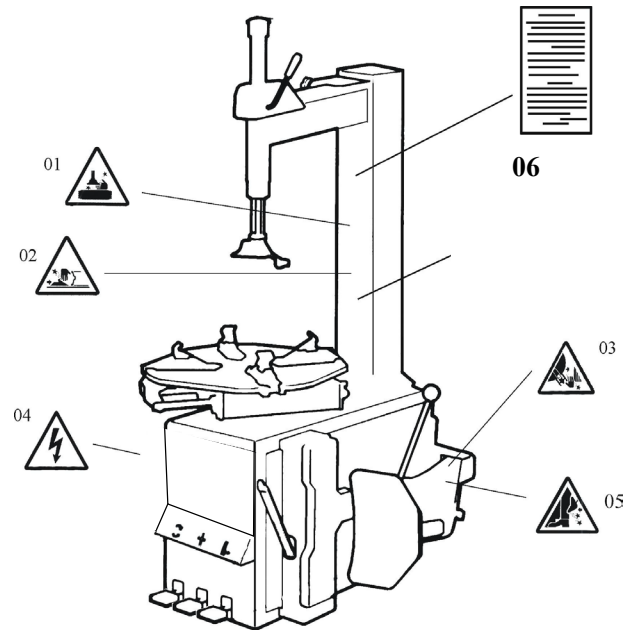
1. Introduction:

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

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

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

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



2. Safety Warnings:

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

Security warning labels

Caution:

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

Do not allow to operate when the security warning labels are missed or imperfect. Do not allow to set any objects to obscure the security warning labels.

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



3. Technical data

External locking rim dimensions	12~26 " (+Jaw's protector for 12")
Internal locking rim dimensions	14~28 "
Max. Wheel diameter	1143mm (45 ")
Max. Wheel width	406mm (16 ")
Working Pressure	8-10bar
Power supply	110V (1ph)/ 220V (1ph)/ 380V (3ph)
Optional Motor power	0.37kw
Max. Rotating Torque (Turntable)	1078 Nm
Overall Dimension	1130*900*1030mm
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.

Here above machine versions can be equipped with Rapid Tire Inflation Device (client optional device), IT-suffix version, accessory details can be found at the IT-suffix version diagram.

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.

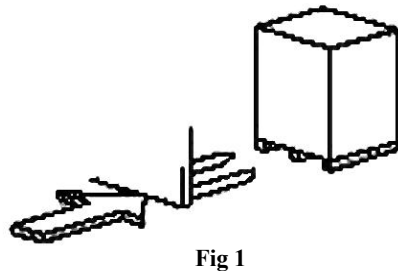


Fig 1

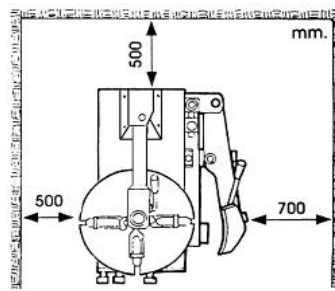


Fig 2

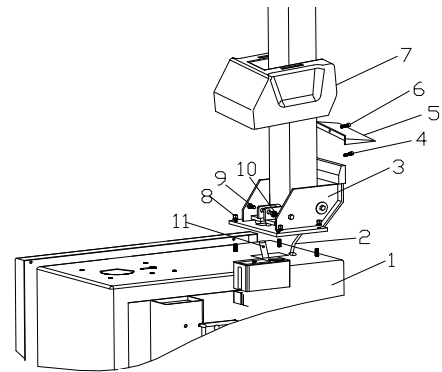


Fig 3

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:

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).



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)

Please note: below operation refer to Fig 4

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

Retread the Turntable Rotation Pedal (Z) to realize the Turntable (Y) rotation rapidly.

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.

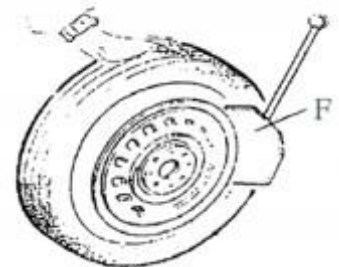


Fig 5

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.

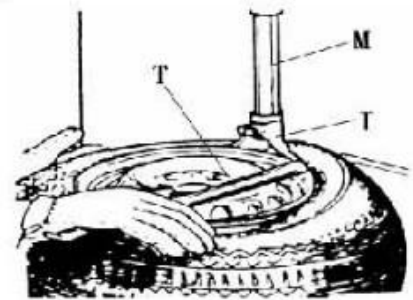


Fig 6

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 Titling pedal (H), the column backward down, take out the tyre.

9.3. Mounting the tyre :

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

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

Put on the tyre and check the situation.

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

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

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

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



F

Fig 7

10. Help Arm S002

The help arm S002 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

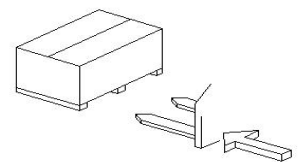


Fig 8

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.

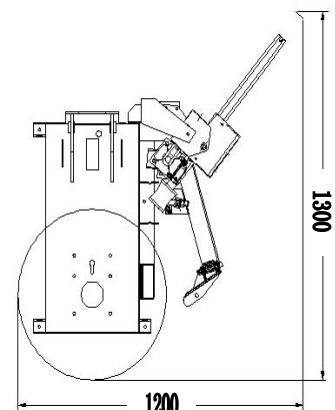


Fig 9

10.3.2. Unpacking

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

10.3.3. Workplace Requirement

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

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.

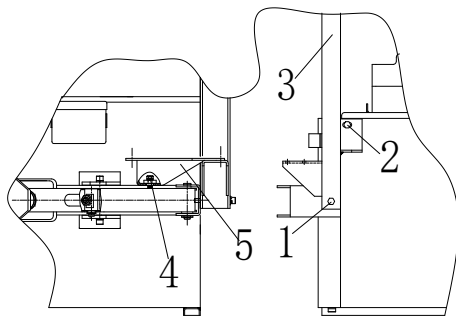


Fig 10

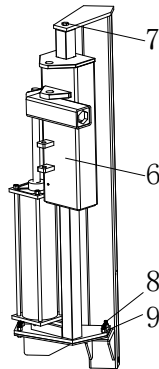


Fig 11

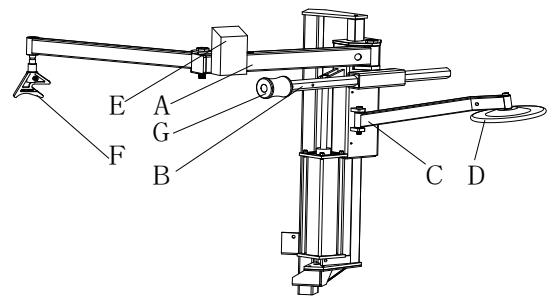


Fig 12

10.4. Functional Parts

Fig 12 shows functional parts to the 036 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 | |

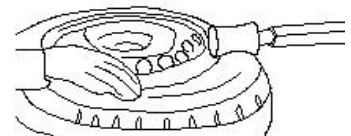


Fig 13

10.5. Trial operation

The 036 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 036 help arm to mount/demount the tire from the tire bead will make the operation easier. It is a good helper for tire changer.

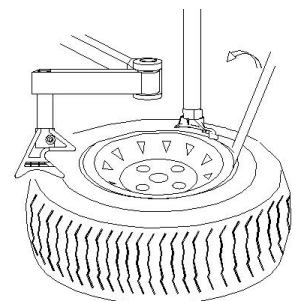


Fig 14

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.

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.

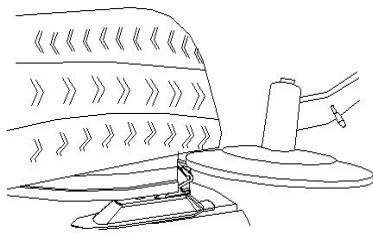


Fig 15

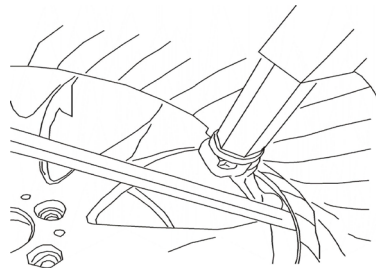


Fig 16

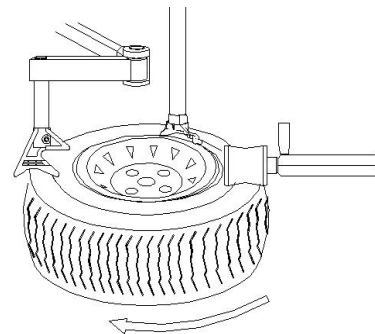


Fig 17

-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. If you thread the power supply pedal again, you can quickly demount the tire upper lip.

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. If you thread the power supply pedal again, you can quickly demount the tire.

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 12); 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. If you thread the power supply pedal again, you can quickly mount the tire. 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;

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;

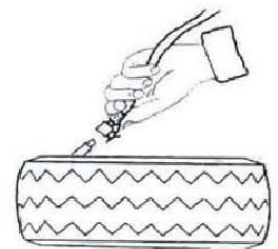


Fig 18

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

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

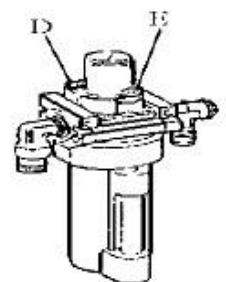


Fig 19

replaced by professional persons with the spare parts provided by manufacturer.

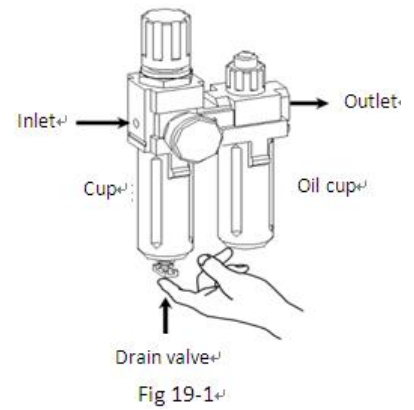
- Clean the machine once every day after work. Clean the dirt on the turntable with diesel oil once per week and lubricate the slides and clamps.

- Following maintenance must be done at least once per month:

Check oil level in Oil Fog Maker, please be filled with SAE30# oil if need.

Unscrew with hex wrench (E). Based on connection of compressed air, first to 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:

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

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

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

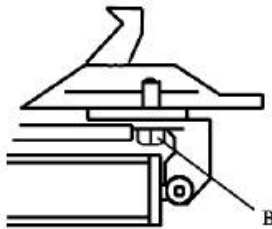


Fig 20

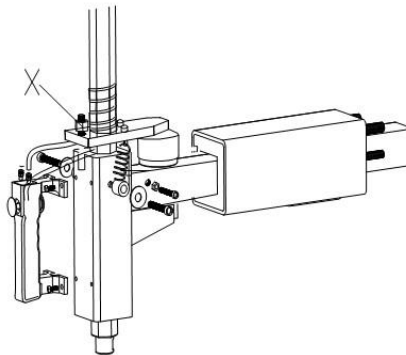


Fig 21

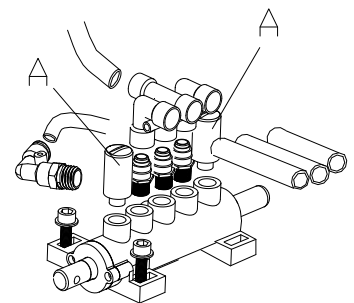
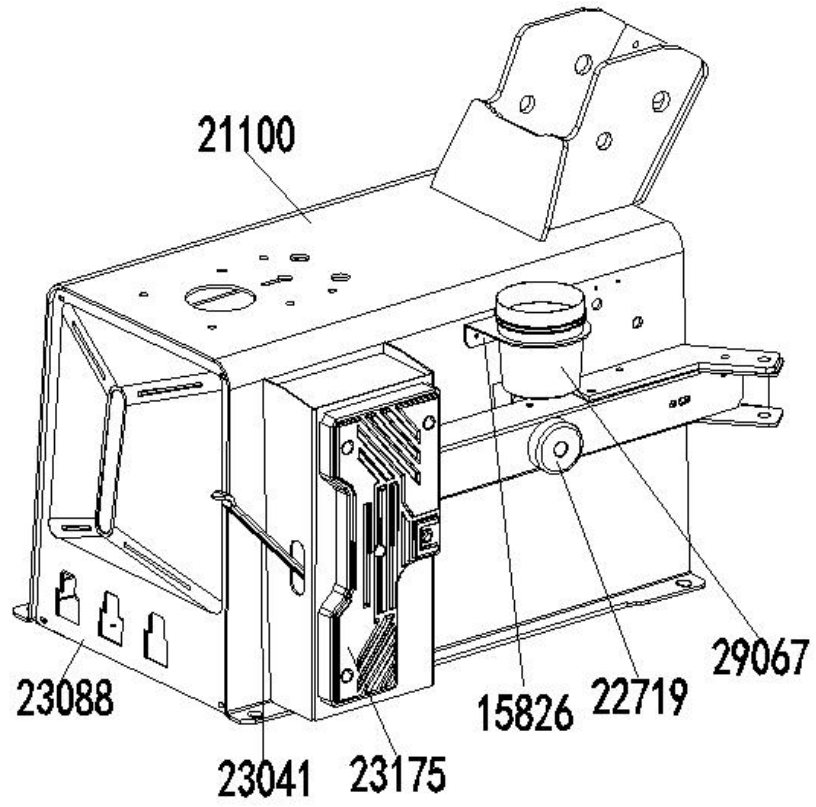


Fig 22

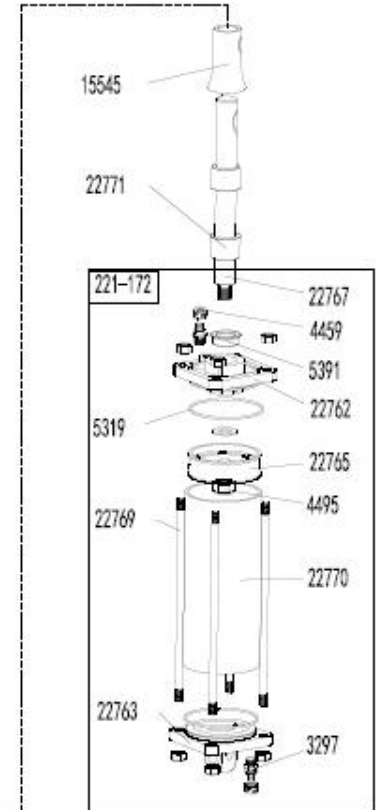
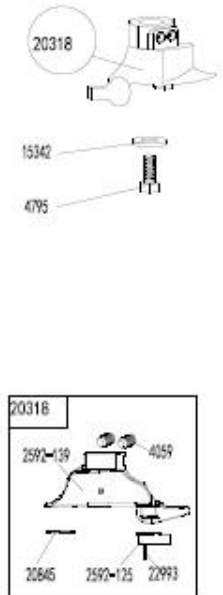
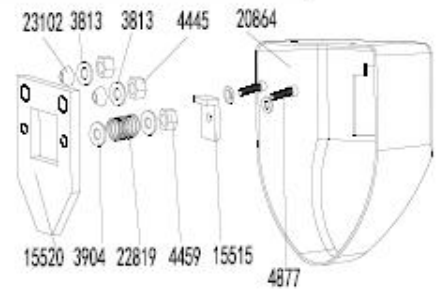
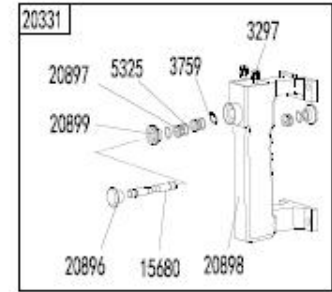
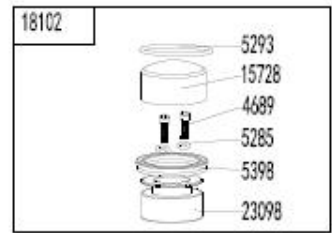
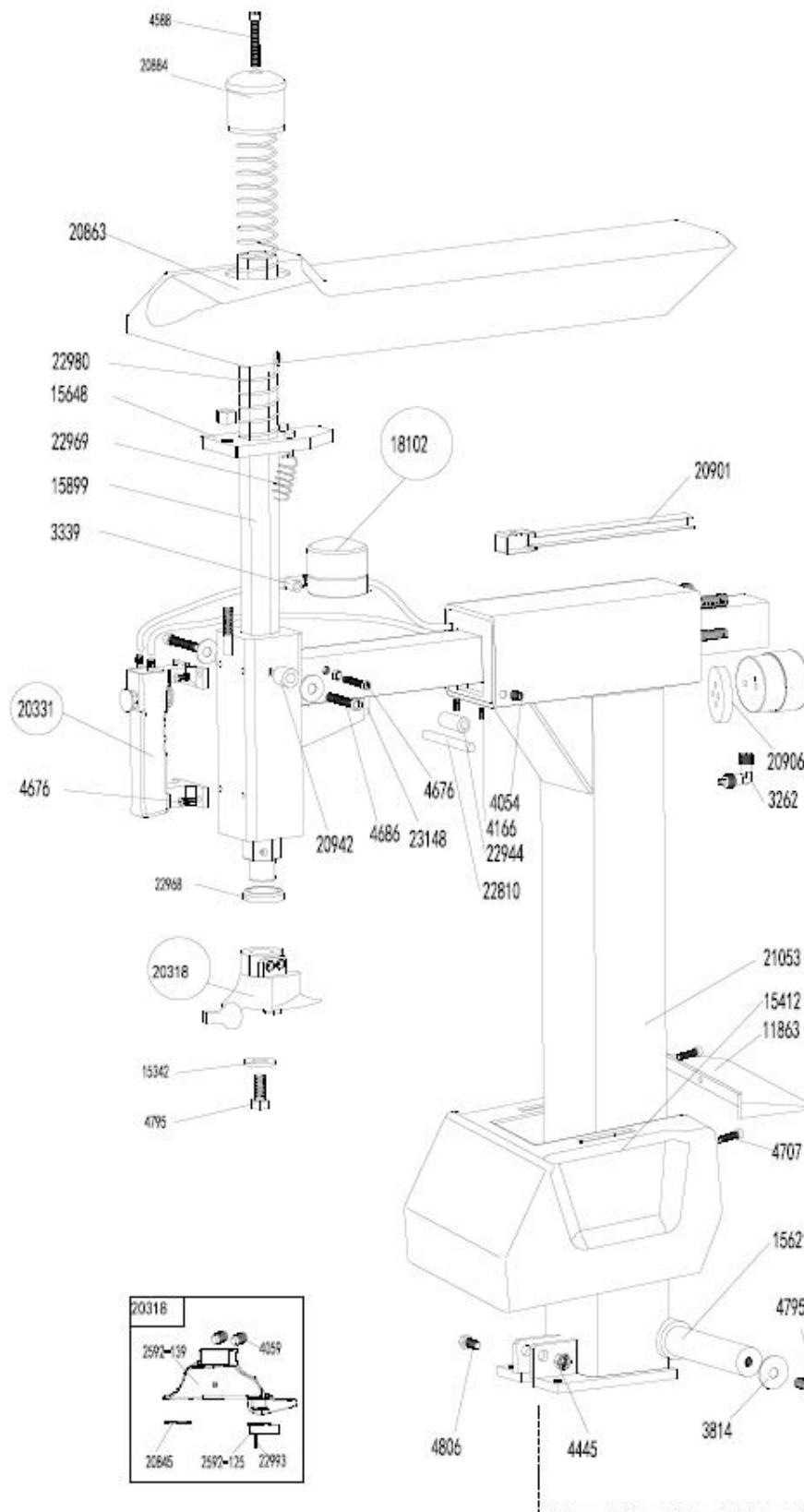
14. Trouble shooting table:

Problem	Reason	Solution
The turntable rotate just in one direction or can't rotate.	Reverse Switch broken	Replace the Reverse Switch
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 difficulty.	Jammed silencer	Clean it or replace it.
	The washer on the Bead Breaker cylinder is broken.	Replace it.

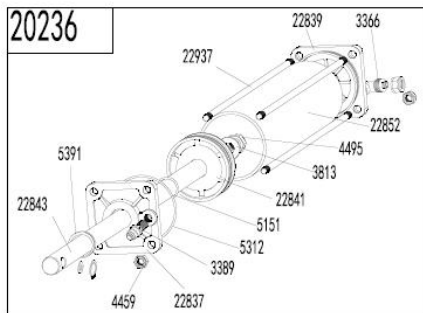
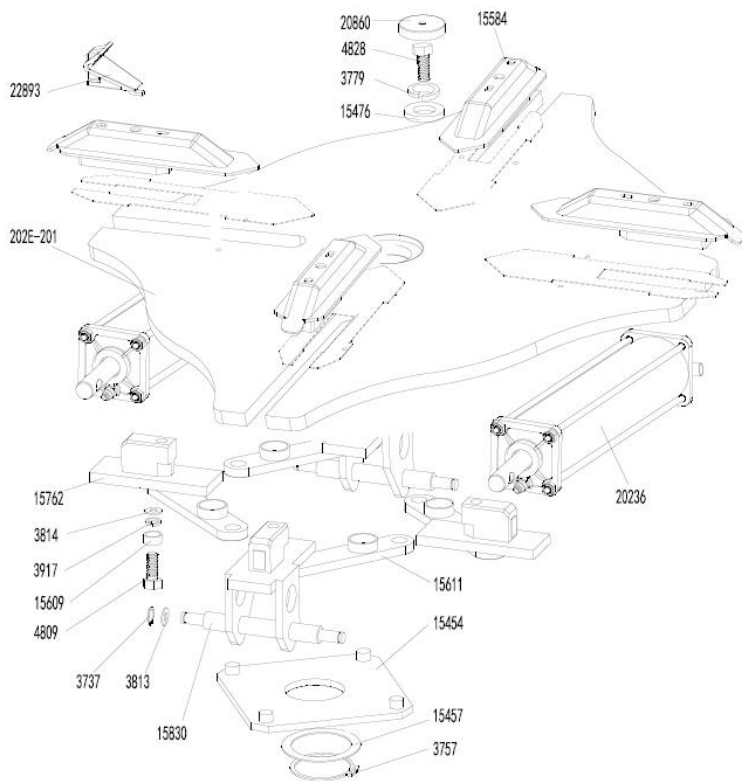
15. Exploded drawing:



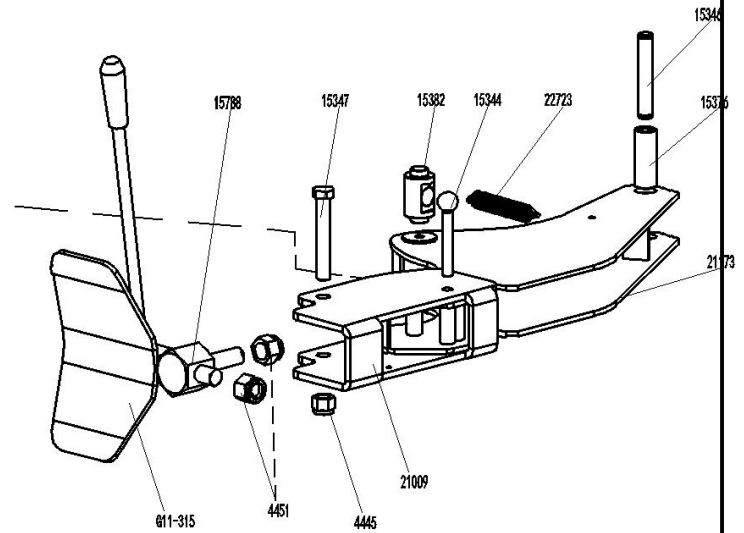
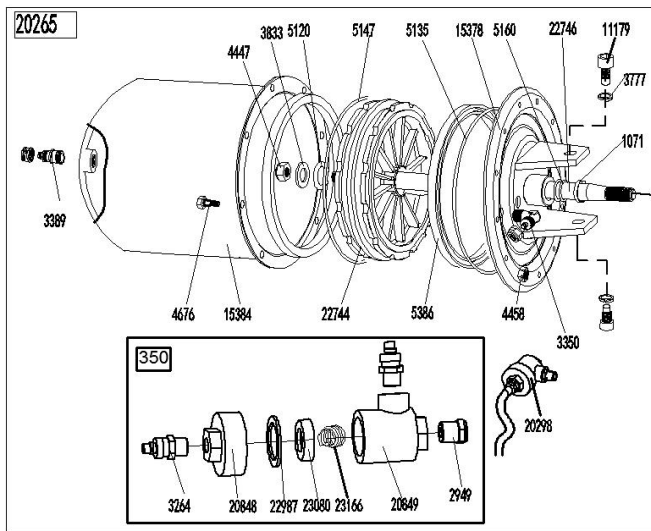
21100	JZ08001021100	Machine body
23175	JZ09001023175	Bead breaker buffer
23041	JZ09001023041	Lifting lever
15826	JZ03001015826	Bracket
22719	JZ09001022719	Bead breaker arm rubber
29067	IY08002029067	Grease
23088	JZ09001023088	Front panel



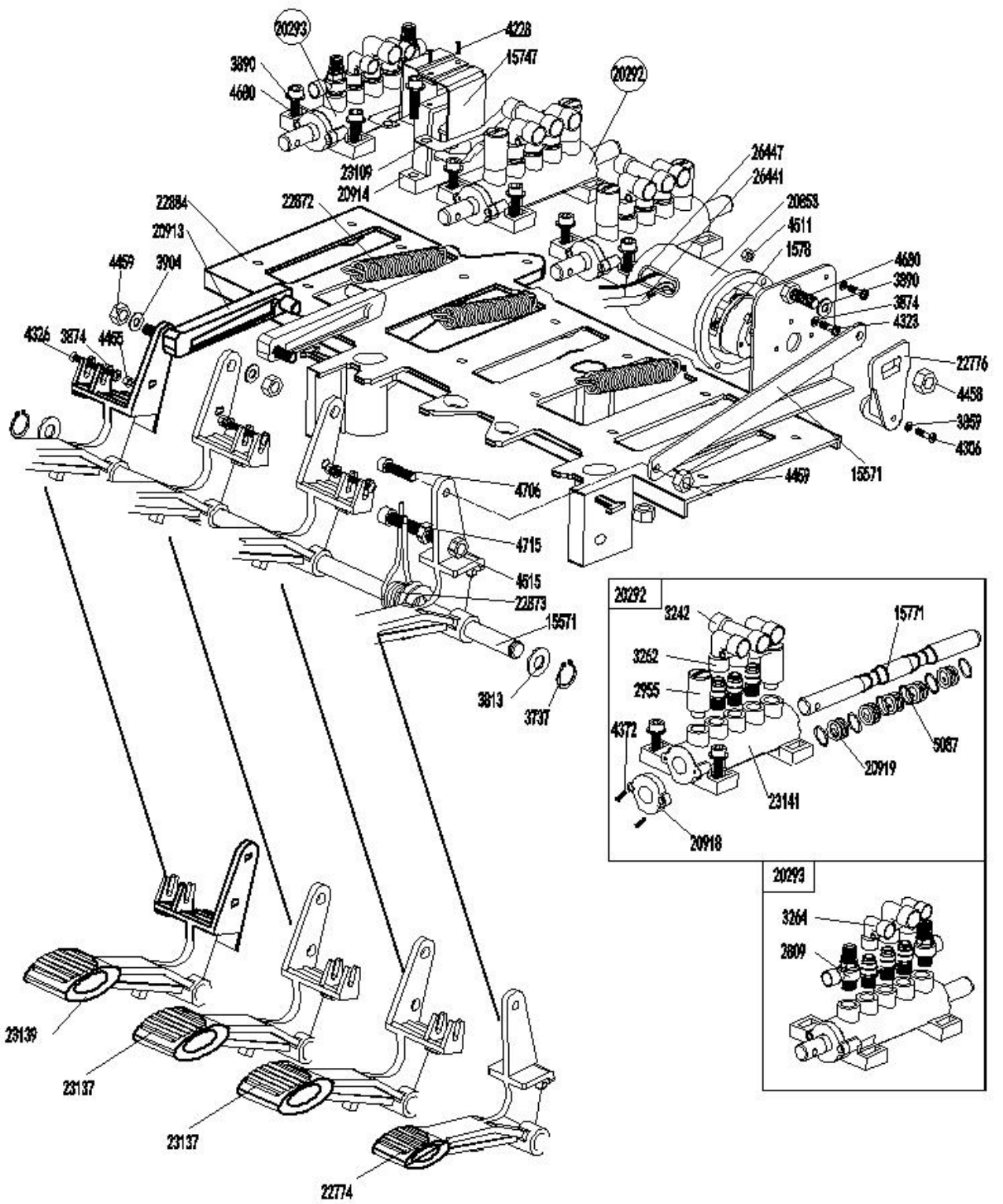
3262	EQ1000400326	Quick union 1/8-Ø6	22769	JZ09001022769	Tilting cylinder threaded
20906	JZ07001020906	Locking cylinder plate	22767	JZ09001022767	Tilting cylinder piston rod
15520	JZ03001015520	Horizontal arm locking plate	4459	FJ04008004459	Self-locking nut M8
3904	FJ04002003904	Flat washer Ø8*17*1.5	22762	JZ09001022762	Tilting cylinder cover without
22819	JZ09001022819	Horizontal arm locking spring	5391	FJ08003005391	V seal Ø20*28*7.5
15515	JZ03001015515	Horizontal arm block	22765	JZ09001022765	Tilting cylinder piston(Al-alloy) φ
4877	FJ04009004877	Outer hex bolt M8*20	4495	FJ04008004495	Nut (silver) M12*1.5*7
4459	FJ04008004459	Self-locking nut M8	22770	JZ09001022770	Tilting cylinder barrel
4445	FJ04008004445	Self-locking nut M12	3297	EQ1000500329	Straight union 1/8-Ø6
3813	FJ04002003813	Flat washer Φ 12*25*2	22763	JZ09001022763	Titling cylinder cover with handle
3813	FJ04002003813	Flat washer Φ 12*25*2	15545	JZ09001015545	Tilting cylinder piston rod cover
23102	JZ09001023102	Locking spacer	22771	JZ09001022771	Titling cylinder rubber sheath 1
20864	JZ07001020864	Horizontal arm protection back	3814	FJ04002003814	Flat washer 12*30*3
4054	FJ04006004054	Hex socket head bolt M10*16	4445	FJ04008004445	Self-locking nut M12
4166	FJ04006004166	Hex socket head bolt M8*16	4806	FJ04009004806	Outer hex bolt M12×65
22944	JZ09001022944	column side pulley	15648	JZ03001015648	Hex locking board 221
22810	JZ09001022810	column side pulley pin	20901	JZ07001020901	hose guide
20863	JZ07001020863	Horizontal arm protection front	20238	JZ06001020238	Complete titling cylinder
4588	FJ04009004588	Hex socket head bolt M10×50	21053	JZ08001021053	Column
20884	JZ07001020884	Vertical arm cap 228	11863	JZ02007011863	Circular friction block
22980	JZ09001022980	Vertical arm spring	15412	JZ03001015412	taper sleeve
23148	JZ09001023148	Shock absorber	4707	FJ04009004707	inner hexagon screw M8×25
4686	FJ04009004686	Hex socket head bolt M6×35	15621	JZ03001015621	Column shaft
20942	JZ07002020942	guide pulley	18102	JZ04001018102	Complete locking cylinder
4676	FJ04009004676	Hex socket head bolt M6×16	23098	JZ09001023098	Complete locking cylinder piston
3339	EQ1100200333	T-union 1/8-2* Ø 6	5389	FJ08003005389	V seal Ø50*60*6.5
15899	JZ03001015899	Vertical arm	5285	FJ08001005285	O seal Ø6X3
22968	JZ09001022968	Vertical arm washer	4689	FJ04009004689	Hex socket head bolt M6×55
20845	JZ07001020845	Mount/demount head flat protector	15728	JZ03001015728	Locking cylinder cover Ø60
20840	JZ07001020840	Mount/demount head Protector	5293	FJ08001005293	O seal Ø52X2
20842	JZ07001020842	Mount/demount head Protector	20898	JZ07001020898	Pneumatic handle switch plate
20318	JZ06001020318	Complete mount/demount head 8#	15680	JZ09001015680	Pneumatic handle valve rod
15342	JZ03001015342	Mount/demount head flat protection	20896	JZ07001020896	Pneumatic valve rod cap
4795	FJ04009004795	Outer hex bolt M12×25	20899	JZ07001020899	Pneumatic handle cover
22993	JZ09001022993	hex round pin	20897	JZ07001020897	Pneumatic handle spacer
4059	FJ04006004059	Hex socket head bolt M12X16	5325	FJ08001005325	O seal 7.5*2.65
20331	JZ06001020331	Complete Pneumatic locking switch	3759	FJ04001003759	Snap ring Ø8
4676	FJ04009004676	Hex socket head bolt M6×16	3297	EQ1000500329	Straight union
5319	FJ08001005319	O seal Ø68*3.53	22969	JZ09001022969	Hex locking board spring
5087	FJ08001005087	O-seal φ 11*1.8	22756	JZ09001022756	Spring pin
5400	FJ08005005400	Y-seal φ 65*75*6	5319	FJ08001005319	O-seal φ 68*3.53
			5317	FJ08001005317	O-seal φ 65*5.3



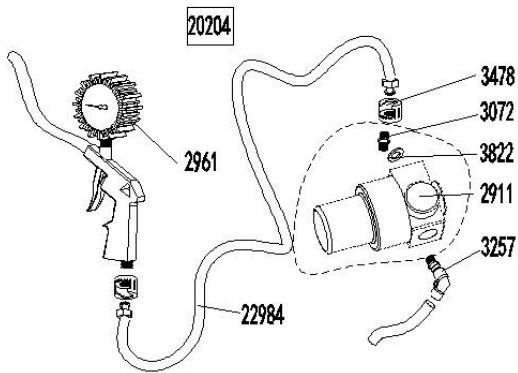
15584	JZ03001015584	Jaw cap assembly
22893	JZ09001022893	Jaw 200
15476	JZ03001015476	Big washer
3779	FJ04002003779	Spring washer Ø16
4828	FJ04009004828	Outer hex bolt M16×40
20860	JZ07001020860	Turntable cap
15611	JZ03001015611	Connection rod assembly 615
15454	JZ03001015454	Square turntable 615
15457	JZ03001015457	Square turntable washer
3757	FJ04001003757	Snap ring Ø65(shaft)
15830	JZ03001015830	Jaw slide guide with pin
3813	FJ04002003813	Flat washer Ø12X25X2
3737	FJ04001003737	Snap ring Ø12(shaft)
4809	FJ04009004809	Hex socket head bolt M12×40
3917	FJ04002003917	Teeth locking washer Ø12*20.5*1
3814	FJ04002003814	Flat washer Ø12X30X3
15609	JZ09001015609	Connection rod nut
15762	JZ03001015762	Jaw slide guide without pin
22937	JZ09001022937	Threaded connection rod
22843	JZ09001022843	Clamping cylinder piston rod
22837	JZ09001022837	Clamping cylinder cover without handle
3389	EQ11006003389	Straight union 1/8"-Ø8
5391	FJ08003005391	V- seal 20*28*7.5
5312	FJ08001005312	O- seal 68.26*3.53
22841	JZ09001022841	Clamping cylinder piston
3813	FJ04002003813	Flat washer Ø12X25X2
4495	FJ04008004495	Nut M12X7X1.75
22852	JZ09001022852	Clamping cylinder barrel 406
5151	FJ08001005151	O- seal Ø19.6X2.62
22839	JZ09001022839	Tilting cylinder cover with handle
3366	EQ11005003366	Quick union 1/8-φ8
4459	FJ04008004459	Self-locking nut M8
20236	JZ06001020236	Complete clamping cylinder



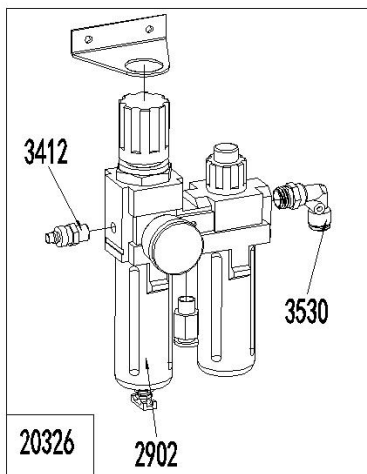
22723	JZ09001022723	Bead breaker arm spring	5135	FJ08001005135	O-seal Ø173.4x5.3
11179	JZ09001011179	Hex socket head boltM14×30	21173	JZ08001021173	Bead breaker arm A
4458	FJ04008004458	Self-locking nut M6	15346	JZ09001015346	Bead breaker pin
3350	EQ11005003350	Union (90°) 1/4-Ø8	15382	JZ03001015382	Bead breaker cylinder rotating pin
4447	FJ04008004447	Self-locking nut M16*1.5	21009	JZ08001021009	Bead breaker arm B
3833	FJ04002003833	Flat washer Ø16*28*2	4445	FJ04008004445	Self-locking nut M12
5120	FJ08001005120	O-seal Ø 16*2.65	4451	FJ04008004451	Self-locking nut M20
5160	FJ08001005160	O-seal Ø 20*2.65	15347	JZ03001015347	Bead breaker pin A
5147	FJ08001005147	O-seal 180x5	15344	JZ09001015344	Bead breaker pin B
15378	JZ03001015378	Bead breaker cylinder cover assembly	3389	EQ11006003389	Straight union 1/8"-Ø8
22746	JZ09001022746	Bead breaker cylinder piston rod	20265	JZ06001020265	Complete bead breaker cylinder
5386	FJ08003005386	V-seal 185X168X11.5	20298	JZ06001020298	Bead breaker cylinder exhaust valve
22744	JZ09001022744	Bead breaker cylinder piston	23166	JZ09001023166	Spring
15384	JZ09001015384	Bead breaker cylinder barrel	3264	EQ10004003264	Elbow union 1/8-Ø8
4676	FJ04009004676	Hex socket head bolt M6×16	20848	JZ07001020848	Bead breaker cylinder exhaust valve cover
15600	JZ03001015600	Bead breaker shovel assembly	22987	JZ09001022987	Seal washer
15788	JZ03001015788	Pin sleeve	23080	JZ09001023080	Bidirectional seal
4447	FJ04008004447	Self-locking nut M16*1.5	20849	JZ07001020849	Bead breaker cylinder exhaust valve barrel
1071	CF03003001071	Guide belt	2949	EQ04001002949	Muffler
3777	FJ04002003777	Spring washer Ø14			



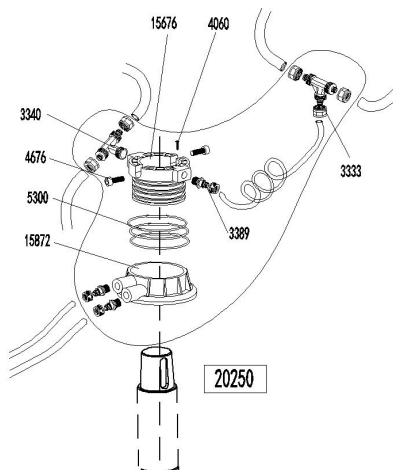
22774	JZ09001022774	Reverse switch pedal	3874	FJ04002003874	Flat washer Ø 4
23137	JZ09001023137	5-way valve pedal(right)	4323	FJ04006004323	Cross head screw M4*16
23139	JZ09001023139	5-way valve pedal(left)	22776	JZ09001022776	Reverse switch handle
3737	FJ04001003737	Snap ring Ø12(shaft)	4458	FJ04008004458	Self-locking nut M6
3813	FJ04002003813	Flat washer Φ 12*24*2	3859	FJ04002003859	Flat washer Ø3
4326	FJ04006004326	Cross head screw M4X30	4306	FJ04006004306	Cross head screw M3X18
3874	FJ04002003874	Flat washer Ø 4	15571	JZ03001015571	Pedal connection rod
4455	FJ04008004455	Self-locking nut M4	4459	FJ04008004459	Self-locking nut M8
3904	FJ04002003904	Flat washer Φ8*17*1.5	15571	JZ03001015571	Pedal front shaft
20913	JZ07001020913	Cam connection rod	4515	FJ04008004515	Nut M8
22884	JZ09001022884	Pedal support board	22873	JZ09001022873	Pedal twist spring
22872	JZ09001022872	Pedal Spring	4715	FJ04009004715	Hex socket head bolt M8×50
20914	JZ07001020914	Cam	4706	FJ04009004706	Hex socket head bolt M8x20
23109	JZ09001023109	Cam washer	3262	EQ10004003262	Quick union 1/8-Ø6
4680	FJ04009004680	Hex socket head bolt M6×20	3264	EQ10004003264	Union 1/8-Ø8
3890	FJ04002003890	Flat washer Ø6	3242	EQ10001003242	Quick T-union1/8-2* Ø 8
4228	FJ04006004228	Cross head self tapping screw 2.9*12	23141	JZ09001023141	5-way valve barrel
15747	JZ03001015747	Cam cover	20918	JZ07001020918	5-way valve cover
20292	JZ06001020292	5-way valve (T-union,without rod) (Aluminum alloy)	4372	FJ04006004372	Cross head ST2.9*14
15771	JZ09001015771	5-way valve rod	2955	EQ04002002955	Muffler 1/8"
20853	JZ07001020853	Reverse switch cover	20919	JZ07001020919	5-way valve rod spacer
4511	FJ04008004511	Nut M4	5087	FJ08001005087	O seal 12*20*4
1578	DD03009001578	Reverse switch	20293	JZ06001020293	Tilting 5-way valve, without rod (Aluminum alloy)
2680	FJ04009004680	Hex socket head bolt M6×20	26441	JZ12001026441	Power supply cable
3890	FJ04002003890	Flat washer Ø6 X12X1	26447	JZ12001026447	Motor cable



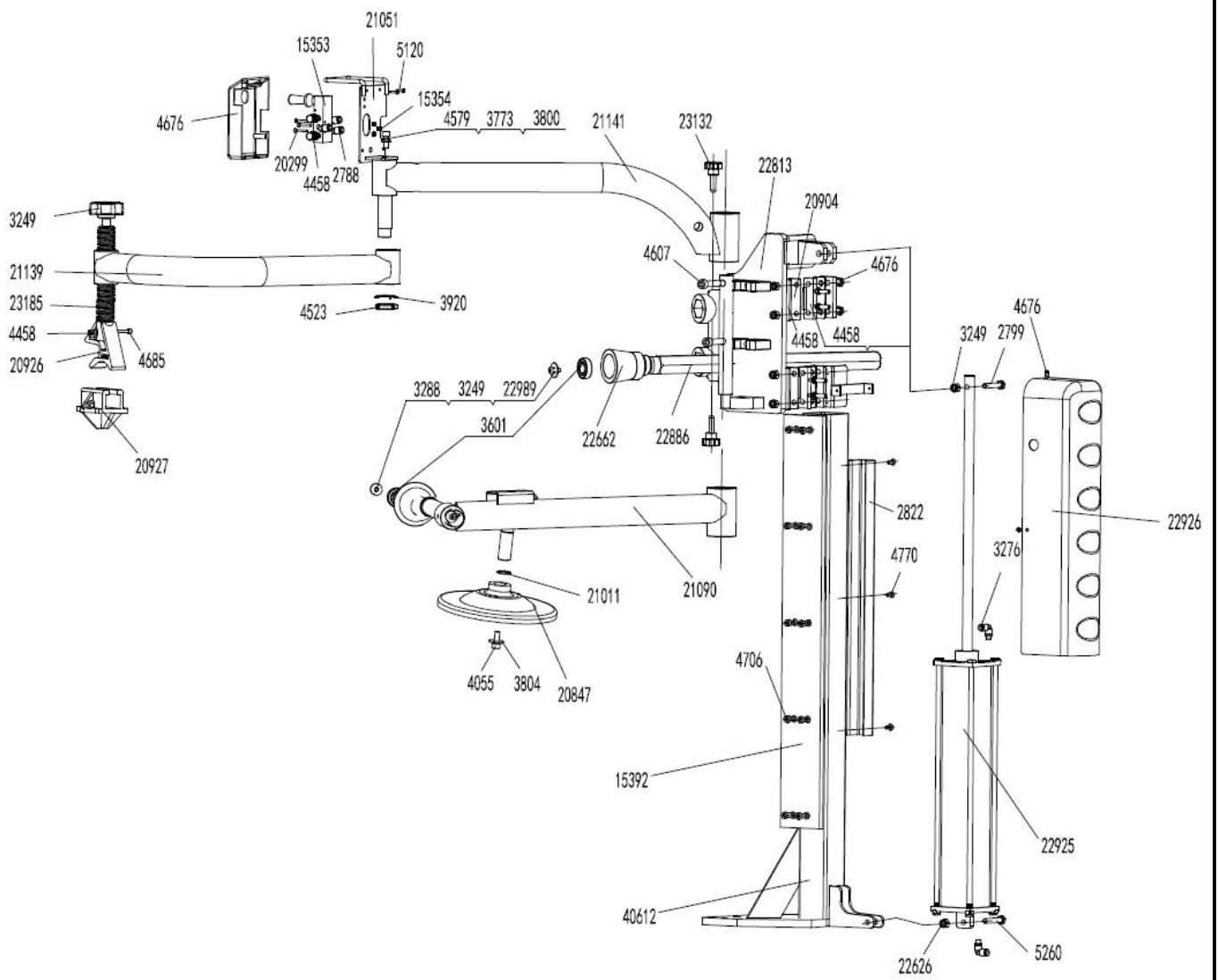
2961	EQ05001002961	Inflating gun indicator
22984	JZ09001022984	Rubber connection hose
3478	EQ14003003478	Notch nut
3072	EQ07005003072	Straight union 1/4-1/4
3822	FJ04002003822	Flat washer Ø13
2911	EQ03003002911	Pressure adjust valve(optional)
3257	EQ10004003257	Quick union 1/4-Ø8
20204	JZ06001020204	Complete inflating gun(without pressure adjust valve)
20203	JZ06001020203	Complete inflating gun(with pressure adjust valve)



3412	EQ12001003412	Quick union PM20
2902	EQ03001002902	oil fog maker 3300
3350	EQ11005003350	Two-way union 1/4- Ø8
20326	JZ06001020326	Complete oil fog maker 3300

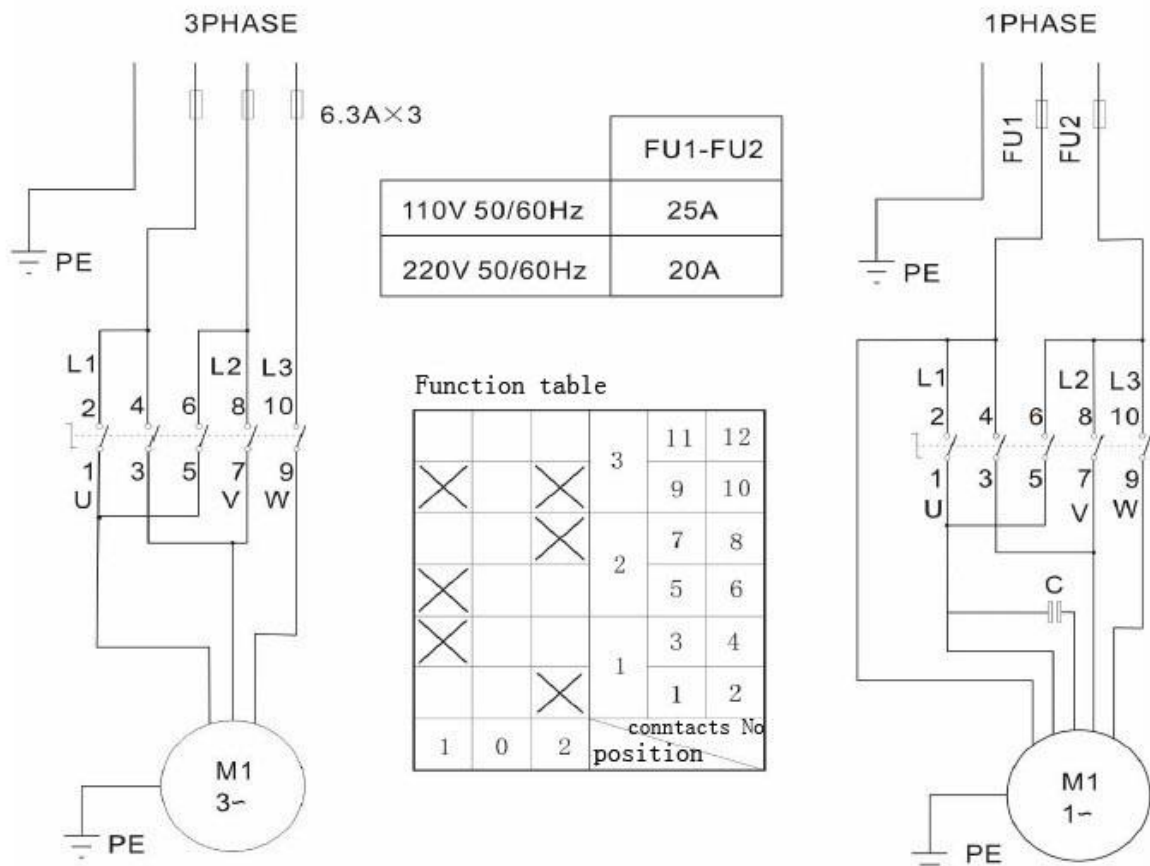


3333	EQ11002003333	T-union 3* Ø 8
4676	FJ04009004676	Hex socket head bolt M6×16
3340	EQ11002003340	Quick T-union
15872	JZ02007015872	Rotating valve casing
5300	FJ08001005300	O-seal 59.9X2.62
15676	JZ02007015676	Rotating valve mandrel
537	CF01002000936	Hose 5.5* Ø 8
3389	EQ11006003389	Straight union 1/8-Ø8
4060	FJ04006004060	Hex socket head bolt M4X6
20250	JZ06001020250	Complete Rotating valve



40612	JZ08001040612	Column module	4458	JZ08001021274	Lift cylinder cover
15392	JZ03001015392	Guide rail	4676	FJ04009004680	Hex socket head bolt M6×20
22813	JZ09001022813	Slide seat casting	2799	FJ04009004744	Outer hex bolt M10*55
23132	JZ09001023132	Hexagonal cover	3249	FJ04008004444	Self-locking nut M10
4607	FJ04009004607	Pentagon handle	3276	EQ10004003262	Quick union
4458	FJ04008004458	Self-locking nut M6	22925	JZ09001023061	Complete rise-fall cylinder
20847	JZ07001020847	Tire lifting roller	5260	FJ04009004744	Outer hex bolt M10*55
4055	FJ04006004055	Hex screw M10*20	22626	FJ04008004444	Self-locking nut M10
3804	FJ04002003804	Washer Ø10*30*3	22926	JZ09001023018	Cylinder cover
21090	JZ08001021090	Straight arm assembly	4676	FJ04006004254	Cross head Screw M5X10
4458	FJ04008004458	nut M6	3601	FJ02010003601	Bearing
4685	FJ04009004685	Hex socket head bolt M6*30	3288	FJ04002003915	Flat washer Ø8*30*3
23185	JZ09001023185	Tire pressing head rotating shaft	3249	FJ04002003792	Spring washer Ø8
20926	JZ07001020926	Tire pressing head (Upper)	22989	FJ04009004706	Hex socket head bolt M8x20
3920	FJ04002003920	lock washer	5120	FJ04006004197	Cross head screw M4*16
4523	FJ04008004523	round nut M27	22662	JZ02007011811	Tyre pressing roller
21141	JZ08001021141	Rotate arm rod components 1	22886	JZ03001015661	Tyre pressing arm
21139	JZ08001021139	Rotate arm rod components 2	2822	JZ08001021074	Column hose hood
4579	FJ04009004579	Hex socket head bolt M10*25	4770	FJ04009004668	Hex socket head bolt M6×10
3773	FJ04002003773	Spring washer Ø10	2788	EQ10004003254	Quick union 1/4-Ø6
3800	FJ04002003800	Flat washer Ø10*20*2	20299	FJ04006004200	cross head screw M4*30
20927	JZ07001020927	Tire pressing head(bottom)	15354	FJ04008004455	Nut M4
21051	JZ08001021051	Controller sets	15353	EQ02011002888	Handle valve
4706	FJ04009004706	Hex socket head bolt M8x20	4458	EQ04002002955	Muffler 1/8"
20904	JZ07001020904	Plastic friction disc	4676	JZ07001020877	Control valve protection cover
3249	JZ07001020911	Adjust handle			

16. Circuit diagram:



17. Pneumatic drawing:

