

71.CTC-TILT

**HAMMERHEAD PRO FULLY AUTOMATIC
TILT CAR TYRE CHANGER WITH HELP ARM**



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Read this entire manual carefully and completely before installation or operation

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.

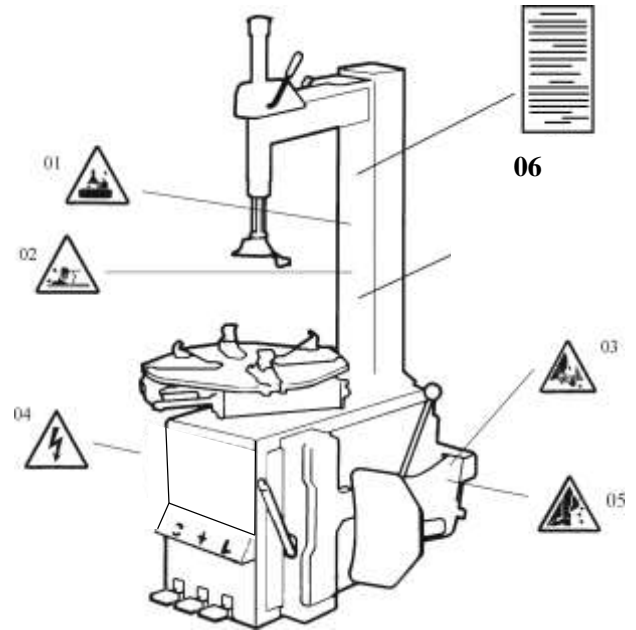
1. Introduction:

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	15~28 "
Max. Wheel diameter	1143mm (45 ")
Max. Wheel width	406mm (16 ")
Working Pressure	8-10bar
Power supply	240V (1ph)
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.

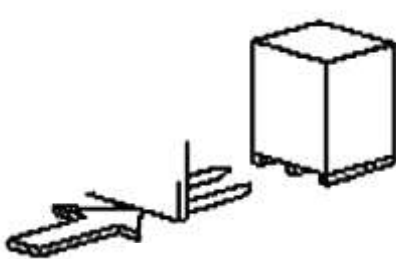


Fig 1

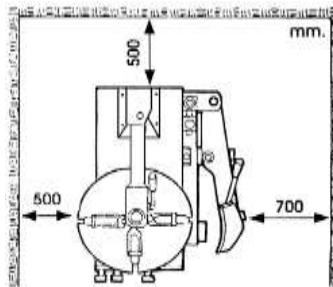


Fig 2

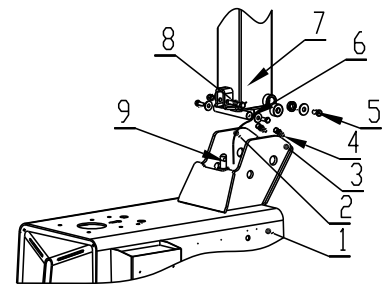


Fig 3

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) As shown in (Figure 3), install the inverted arm 7 into the square hole position on the chassis 1, allowing the air tube 2 to pass through the round hole on the chassis.

3) Insert bolt 8 through the support hole on the column and the hole in the shaft of the inverted arm cylinder 9, then tighten it with a self-locking nut 10.

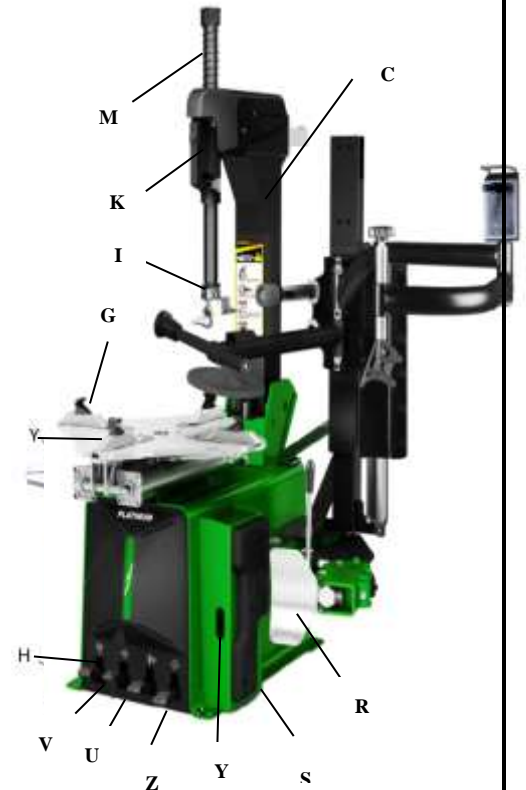
4) Loosen the four bolts on the front cover and remove it. Connect the air tube 2 on the column to the side port of the five-way valve controlling the inverted arm. Then reinstall the front cover.

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.

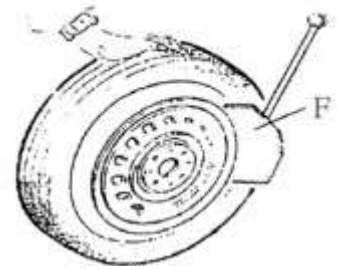


Fig 5

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.

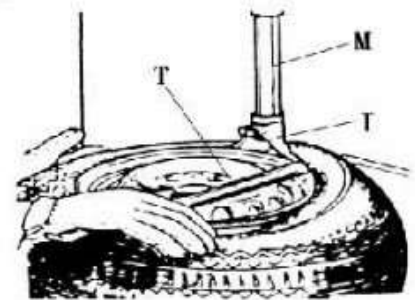


Fig 6

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

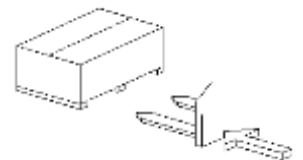


Fig 8

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.

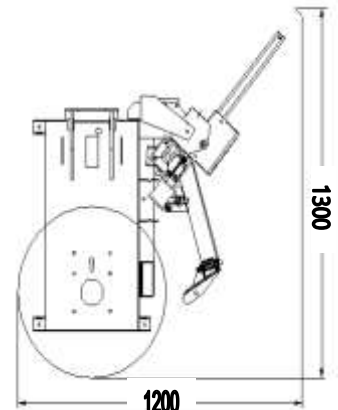


Fig 9

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.

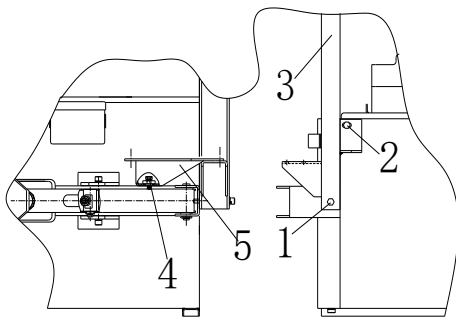


Fig 10

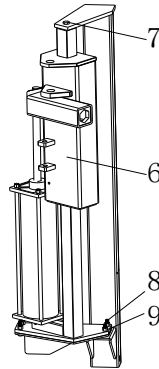


Fig 11

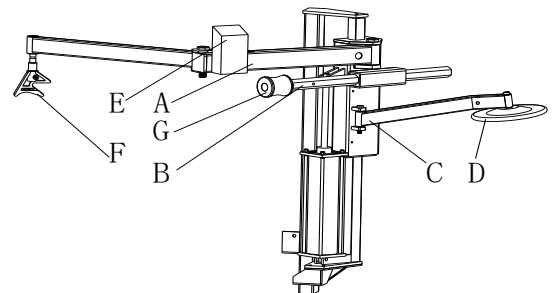


Fig 12

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 | |

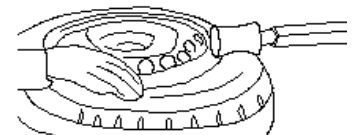


Fig 13

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.

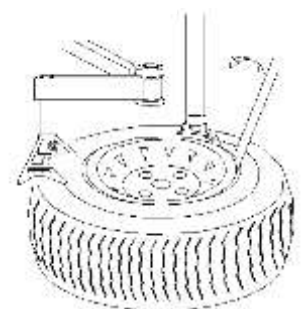


Fig 14

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.

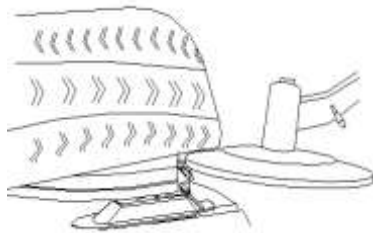


Fig 15

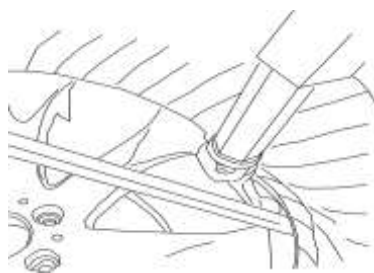


Fig 16

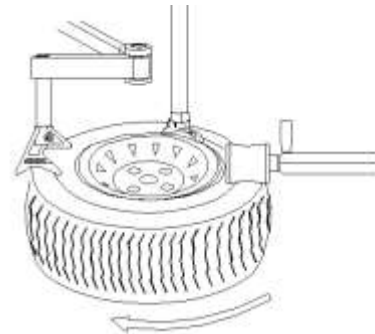


Fig 17

-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;

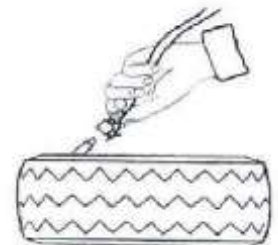


Fig 18

- 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

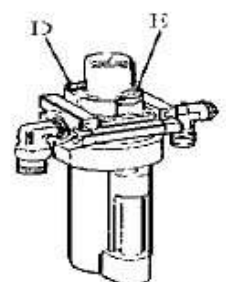


Fig 19

Pedal for 3~4 times to evacuate all compressed air from the machine. Damaged parts must be replaced by professional persons with the spare parts provided by manufacturer.

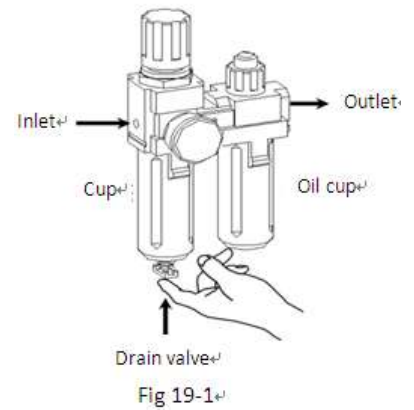
- Clean the machine once every day after work. Clean the dirt on the turntable with diesel oil once per week and lubricate the slides and clamps.
- Following maintenance must be done at least once per month:

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

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

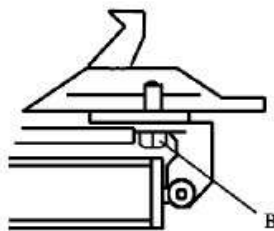


Fig 20

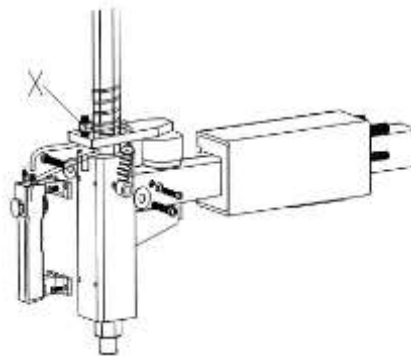


Fig 21

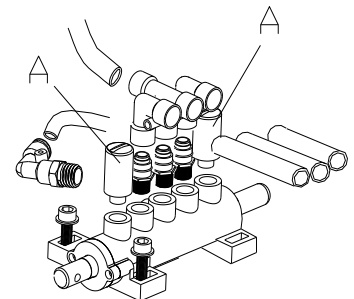
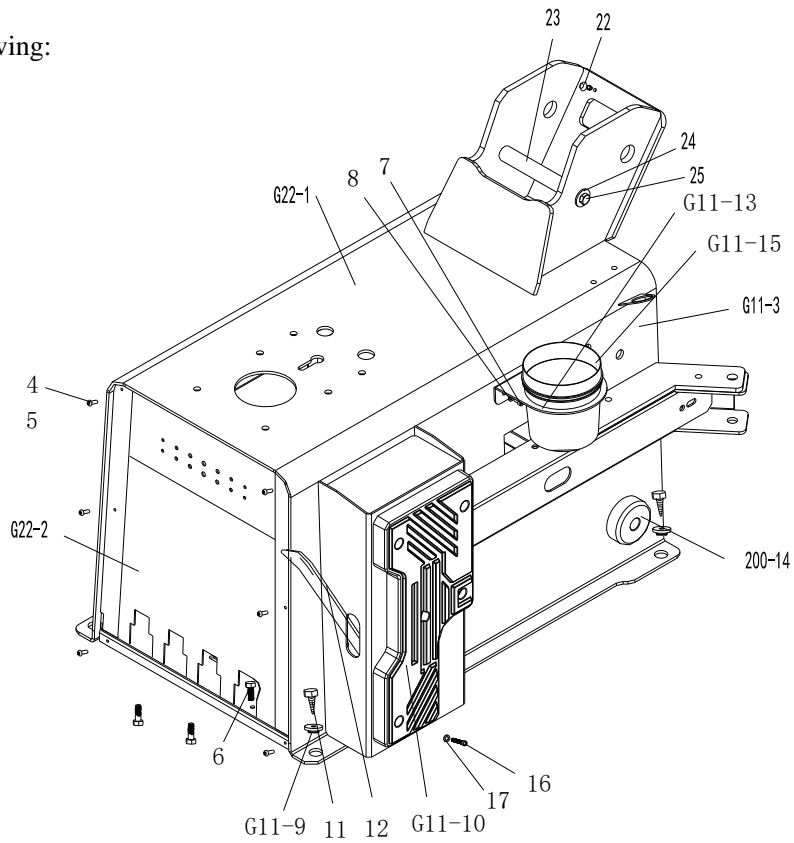


Fig 22

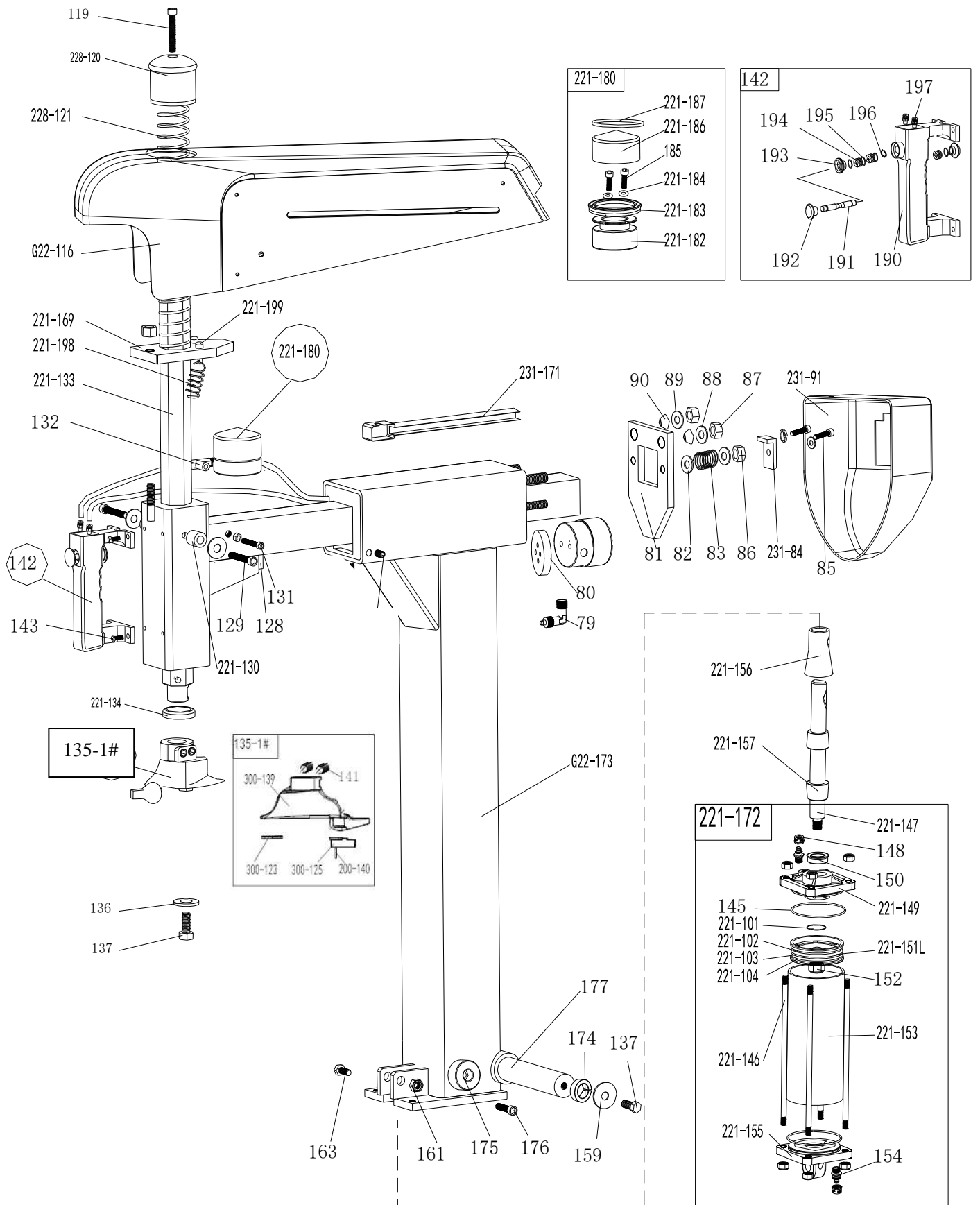
14. Trouble shooting table:

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 difficultly.	Jammed silencer	Clean it or replace it.
	The washer on the Bead Breaker cylinder is broken.	Replace it.

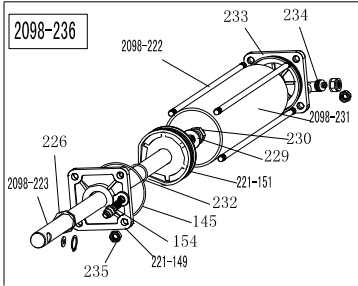
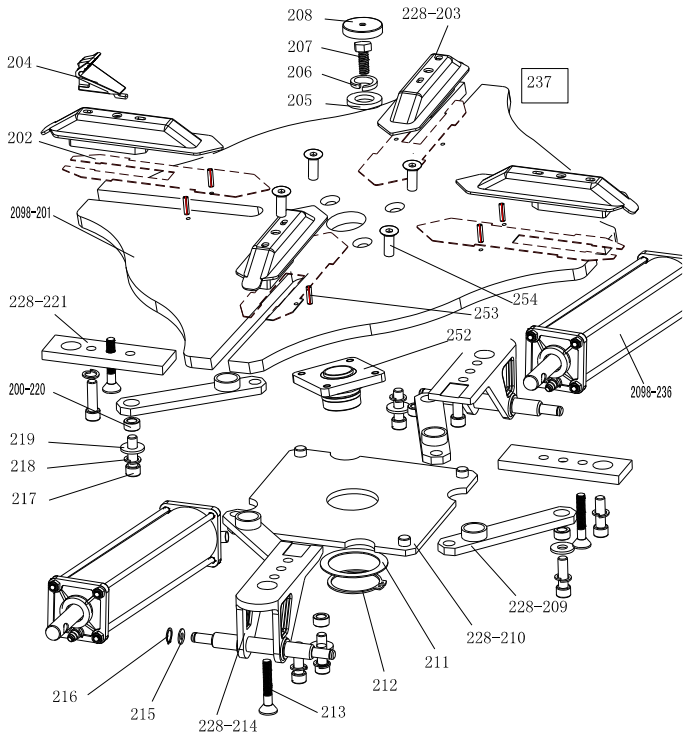
15. Exploded drawing:



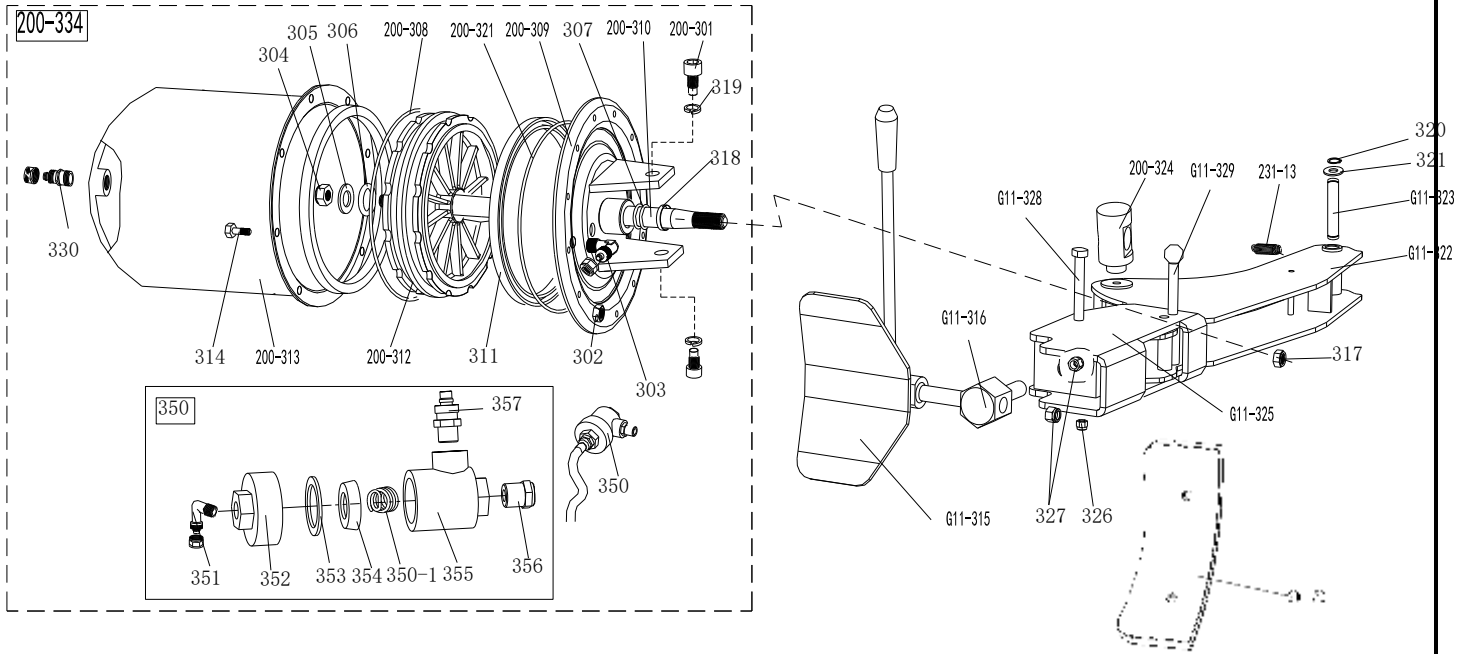
G22-1	Determine based on the color of the machine body	Machine body
G22-2	JZ20200900101	Front panel
G11-3	JZ20200100002	Rear panel
4	FJ19012000011	Hex socket screws with flat round head M5×16
6	FJ22012000100	Outer hex bolt M8x25
7	FJ22009000063	inner hex bolt M5×10
8	FJ15006000095	Flat washer Ø 6*14*1.2
G11-9	JZ20200100080	Rubber foot buffer
G11-10	JZ20200100004	Bead breaker buffer
11	FJ19004000005	Grounding Screw M6x40
12	JZ11900100004	Lifting lever
G11-13	JZ20202000025	Oil-water box support
200-14	JZ20200200010	Bead breaker arm rubber
G11-15	GF30005000003	Grease
16	FJ22009000123	inner hex bolt M8x20
17	FJ15006000107	Flat washer Ø 8*17*1.5
22	JZ12000200104	Bolt plastic cover
23	JZ20200400065	Tilting arm positioning pin
24	FJ15006000010	Flat washer Ø 10*30*3
25	FJ22012000012	Outer hex bolt M10x30



79	EQ1000300001	Quick union 1/8-Ø6	221-146	JZ12500800010	Tilting cylinder threaded
80	JZ12001800031	Locking cylinder plate	221-147	JZ12500200012	Tilting cylinder piston rod
81	JZ20200500022	Horizontal arm locking plate	148	FJ21003000014	Self-locking nut M8
82	FJ15006000107	Flat washer Φ8*17*1.5	221-149	JZ12500300003	Tilting cylinder cover without
83	JZ11700200018	Horizontal arm locking spring	150	FJ29005000002	V seal Ø20*28*7.5
231-84	JZ20200500019	Horizontal arm block	221-151	JZ12500700011	Tilting cylinder piston(Al-alloy) φ
85	FJ22012000098	Outer hex bolt M8*20	152		Nut (silver) M12*1.5*7
86	FJ21003000014	Self-locking nut M8	221-153	JZ12500100013	Tilting cylinder barrel
87	FJ21003000002	Self-locking nut M12	154	EQ10004000025	Straight union 1/8-Ø6
88	FJ15006000019	Flat washer Φ 12*25*2	221-155	JZ12500300004	Titling cylinder cover with handle
89	FJ15006000019	Flat washer Φ 12*25*2	221-156	JZ20201900014	Tilting cylinder piston rod cover
90	JZ20200500005	Locking spacer	221-157	JZ20201900012	Titling cylinder rubber sheath 1
231-91	JZ12000200086	Horizontal arm protection back cover	159	FJ15006000020	Flat washer 12*30*3
231-92	FJ19006000002	Hex socket head bolt M10*16	161	FJ21003000002	Self-locking nut M12
231-93	FJ19013000038	Hex socket head bolt M8*16	163	FJ22011000025	Outer hex bolt M12x65
			221-169	JZ20200500032	Hex locking board 221
			231-171	JZ12000200161	hose guide
231-116	JZ12000200085	Horizontal arm protection front cover	221-172	JZ30204500084	Complete titling cylinder
119	FJ22009000016	Hex socket head bolt M10x50	G22-173	Determine based on the color of the column	Column
228-120	JZ12000200102	Vertical arm cap 228	175	JZ20201300595	Circular friction block
228-121	JZ11700300049	Vertical arm spring	174	JZ20200400067	taper sleeve
128	JZ20201400022	Shock absorber	176	FJ22009000124	inner hexagon screw M8×25
129	FJ22009000103	Hex socket head bolt M6x35	177	JZ20200400068	Column shaft
221-130	JZ12001800071	guide pulley	221-180		Complete locking cylinder
131	FJ22009000093	Hex socket head bolt M6x16	221-182	JZ12500700010	Complete locking cylinder piston
132	EQ11002000001	T-union 1/8-2* Ø 6	221-183	FJ29004000004	V seal Ø50*60*6.5
221-133	JZ20200700016	Vertical arm	221-184	FJ29002000220	O seal Ø6X3
221-134	JZ20200700004	Vertical arm washer	185	FJ22009000106	Hex socket head bolt M6x55
300-123	JZ12000400025	Mount/demount head flat protector	221-186	JZ12500400015	Locking cylinder cover Ø60
300-125	JZ12000400026	Mount/demount head Protector	221-187	FJ29002000228	O seal Ø52X2
300-139	JZ11801300009	Mount/demount head Protector	190	JZ12001800014	Pneumatic handle switch plate
135-8#	JZ30204500056	Complete mount/demount head 1#	191		Pneumatic handle valve rod
136	JZ11801300045	Mount/demount head flat protection	192	JZ12000300001	Pneumatic valve rod cap
137	FJ22012000032	Outer hex bolt M12x25	193	JZ12000200110	Pneumatic handle cover
200-140	JZ20201000028	hex round pin	194	JZ12001800013	Pneumatic handle spacer
141	FJ19013000007	Hex socket head bolt M12X16	195	FJ29002000260	O seal 7.5*2.65
142	JZ30204500115	Complete Pneumatic locking switch	196	FJ14004000025	Snap ring Ø8
143	FJ22009000093	Hex socket head bolt M6x16	197	EQ10004000025	Straight union
145	FJ29002000254	O seal Ø68*3.53	221-198	JZ11700200017	Hex locking board spring
221-101	FJ29002000014	O-seal φ 11*1.8	221-199	JZ20200100048	Spring pin
221-102	FJ29009000006	Y-seal φ 65*75*6	221-103	FJ29002000254	O-seal φ 68*3.53
			221-104	FJ29002000252	O-seal φ 65*5.3

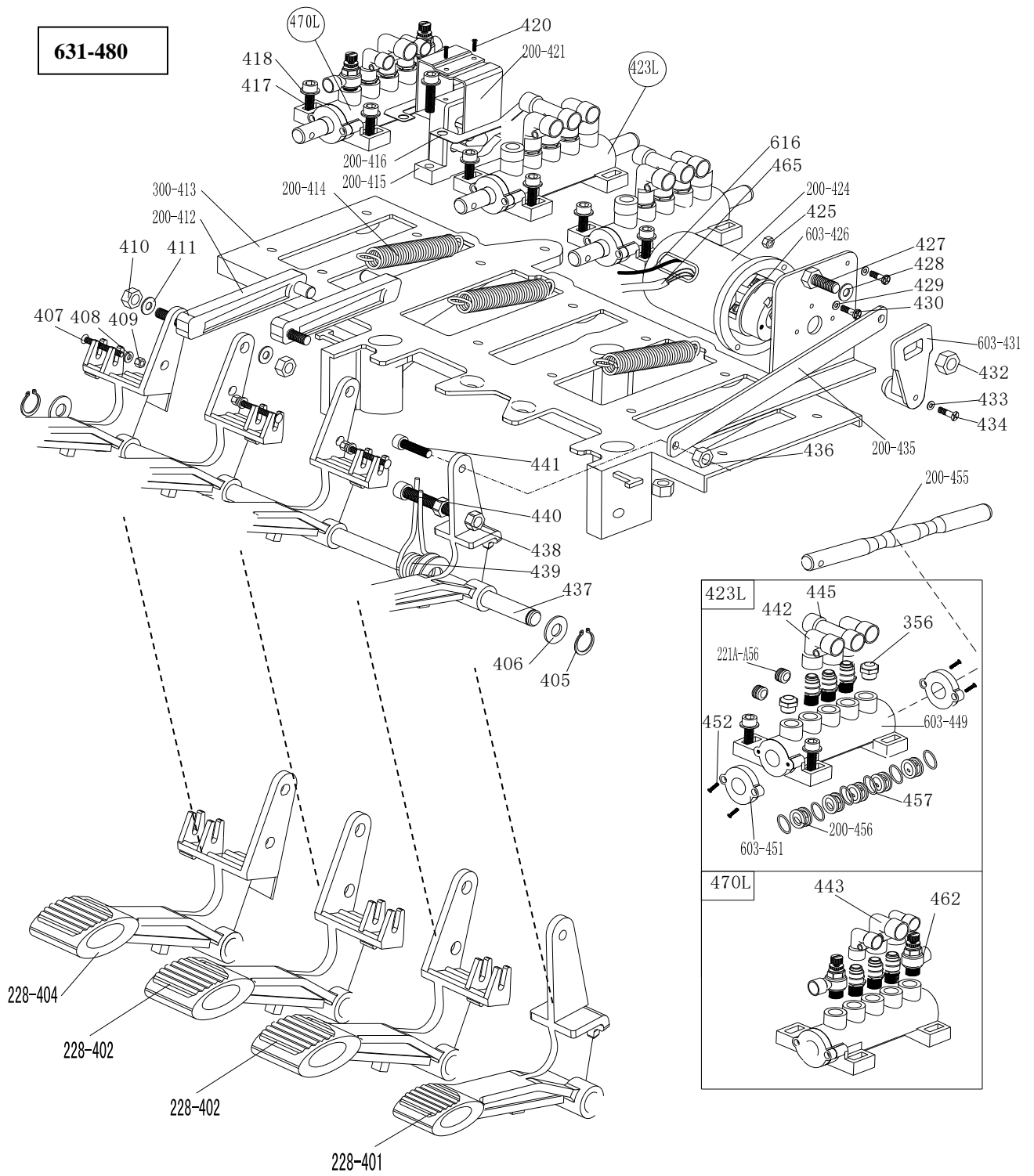


2098-201	JZ20201400124	Turntable assembly 720
202	JZ20201400054	Jaw sliding plate
228-203	JZ20201400091	Jaw cap assembly U228
204	JZ11801300016	Jaw 200
205	JZ20201400046	Big washer
206	FJ15004000008	Flat washer
207	FJ22012000058	Outer hex bolt
208	JZ12000200083	Turntable cap U200
228-209	JZ20201400115	Connection rod assembly 2098
228-210	JZ20201400075	Connection rod assembly
211	JZ20201400044	Square Turntable Washer
212	FJ14004000023	Snap Ring
213	FJ19009000009	screw
228-214	JZ20201400089	Jaw slide guide with pin
215	FJ15006000019	Flat washer
216	FJ14004000003	Snap Ring
217	FJ22011000027	Outer hex bolt
218	FJ15010000002	Teeth locking washer 12*20.5*1
219	FJ15006000020	Flat washer
200-220	JZ20201400011	Connection rod nut
228-221	JZ20201400081	Jaw slide guide without pin
2098-222	JZ12500800008	Threaded connection rod
2098-223	JZ12500200010	Clamping cylinder piston rod
221-149	JZ12500300003	Tilting cylinder cover without handle
154	EQ11005000023	Quick coupler
226	FJ29005000002	seal ring
145	FJ29002000254	seal ring
221-151	JZ12500700012	Tilting cylinder piston
229	FJ15006000019	Flat washer
230	FJ21011000006	Nut
2098-231	JZ12500100011	Clamping cylinder barrel
232	FJ29002000086	seal ring
233	JZ12500300004	Tilting cylinder cover with handle
234	EQ11004000025	Quick coupler
235	FJ21003000014	Nut
2098-236	JZ30204500091	Complete clamping cylinder
237	JZ30204500201	Complete spe-shape turntable 720
252	JZ20201400068	Turntable spacer
253	FJ26002000001	Pin
254	FJ19009000008	screw

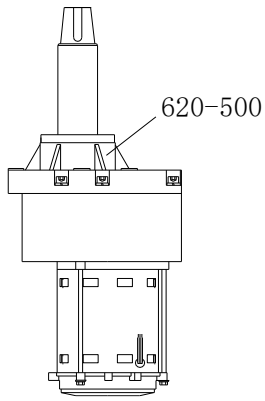


231-13	JZ11700200013	Bead breaker arm spring	321	FJ15006000039	Flat washer
200-301	JZ20201900021	Hex socket head bolt M14*30	200-321	FJ29002000071	O- ring Ø173.4x5.3
302	FJ21003000013	Nut M6	G11-322	JZ20200200001	Shovel arm body A
303	EQ11004000009	Quick coupler 1/4-Ø8	G11-323	JZ20200200004	Shovel arm
304	FJ21004000001	Nut M16*1.5	200-324	JZ20201900031	Bead breaker cylinder rotating pin
305	FJ15006000039	Flat washer Ø16*28*2	G11-325	JZ20200200002	Shovel arm body B
306	FJ29002000056	O- ring Ø 16*2.65	326	FJ21003000002	Nut M12
307	FJ29002000095	O- ring Ø 20*2.65	327	FJ21003000006	Nut M20
200-308	FJ29002000376	O- ring 180x5	G11-328	JZ20200200030	Shovel arm pin A
200-309	JZ20201900024	Bead breaker cylinder cover assembly D186	G11-329	JZ20200200003	Shovel arm pin B
200-310	JZ12500200008	Bead breaker cylinder piston rod D186	330	EQ11005000023	Quick coupler 1/8-Ø8
311	FJ29004000001	V ring 185X168X11.5	200-334	JZ30204500092	Complete bead breaker cylinder
200-312	JZ12500700007	Bead breaker cylinder piston	350	JZ30204500248	Bead breaker cylinder exhaust valve
200-313	JZ12500100007	Bead breaker cylinder barrel	350-1	JZ11700300045	Spring
314	FJ22009000093	hex socket head cap screw M6x16	351	EQ10003000016	Quick coupler (90°) 1/8-Ø8
G11-315	JZ20200300004	Bead breaker shovel assembly	352	JZ12000200078	Bead breaker cylinder exhaust valve cover
G11-316	JZ20200300009	Pin sleeve	353	JZ12100400003	Seal Washer
317	FJ21004000001	Nut M16*1.5	354	JZ12100400004	Bidirectional Seal
318	CF03003000006	Guide belt	355	JZ12000100001	Bead breaker cylinder exhaust barrel
319	FJ15004000006	Flat washer Ø14	356	EQ04001000007	Muffler
320	FJ14004000007	Snap Ring Ø16	357	EQ10004000017	Quick coupler 1/4- Ø8
			200-370	JZ12000200070	Bead breaker shovel protection cover(optional)

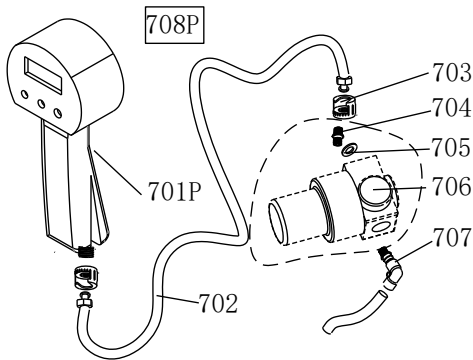
631-480



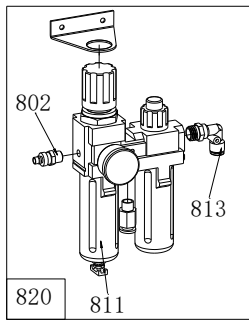
228-401	JZ11801100008	Reverse switch pedal	429	FJ15006000078	Flat washer Ø 4
228-402	JZ11801100007	5-way valve pedal(right)	430	FJ19022000023	Cross head screw M4*16
228-404	JZ11801100006	5-way valve pedal(left)	603-431	JZ20201200010	Reverse switch handle
405	FJ14004000003	Snap ring Ø12(shaft)	432	FJ21003000013	Self-locking nut M6
406	FJ15006000019	Flat washer Ø12X25X2	433	FJ15006000064	Flat washer Ø3
407	FJ19022000026	Cross head screw M4X30	434	FJ19016000045	Cross head screw M3X18
408	FJ15006000078	Flat washer Ø 4	200-435		Pedal Connection Rod
409	FJ21003000010	Self-locking nut M4	436	FJ21003000014	Self-locking nut M8
410	FJ21003000014	Self-locking nut M8	437	JZ20201200057	Pedal connection rod
411	FJ15006000107	Flat washer Ø8*17*1.5	438	FJ21011000025	Nut M8
200-412	JZ12001800016	Cam connection rod	439	JZ11700100003	Pedal twist spring
300-413	JZ11801100010	Pedal support board	440	FJ22009000132	Hex socket head bolt M8×50
200-414	JZ11700200015	Pedal Spring	441	FJ22009000123	Hex socket head bolt M8x20
200-415	JZ12001800070	Cam	442	EQ10003000014	Quick union 1/8-Ø6
200-416	JZ20201200011	Cam washer	443	EQ10003000016	Union 1/8-Ø8
417	FJ22009000097	Hex socket head bolt M6×20	445	EQ10001000024	Quick T-union1/8-2* Ø 8
418	FJ15006000093	Flat washer Ø6	603-449	JZ12000100007	5-way valve barrel
420	FJ19017000003	Cross head self tapping screw 2.9*12	603-451	JZ12000200115	5-way valve cover
200-421	JZ20201200040	Cam cover	452		cross recessed pan head screw
423L	JZ30204500270	5-way valve (T-union,without rod)	453	EQ04002000004	Muffler 1/8"
200-455	JZ20201200005	5-way valve rod	200-456	JZ12001800076	5-way valve rod spacer
200-424	JZ12000200080	Reverse switch cover	457	FJ29002000023	O seal 12*20*4
425	FJ21011000021	Nut M4	462	EQ02005000016	Throttle valve
603-426	DD12010000002	Reverse switch	470L	JZ30204500274	Tilting 5-way valve,without rod
427	FJ22009000097	Hex socket head bolt M6×20	465	JZ12400200038	Power supply cable
428	FJ15006000093	Flat washer Ø6	616	JZ12400200042	Motor cable
631-480		Complete 4-pedals assembly			



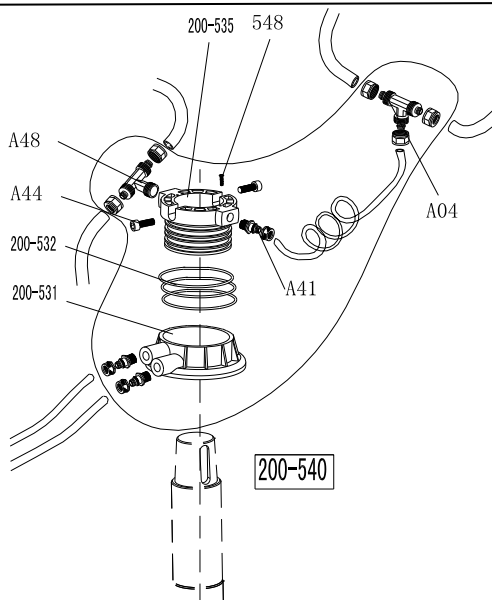
620-500	DD01001000056	Combined gear box
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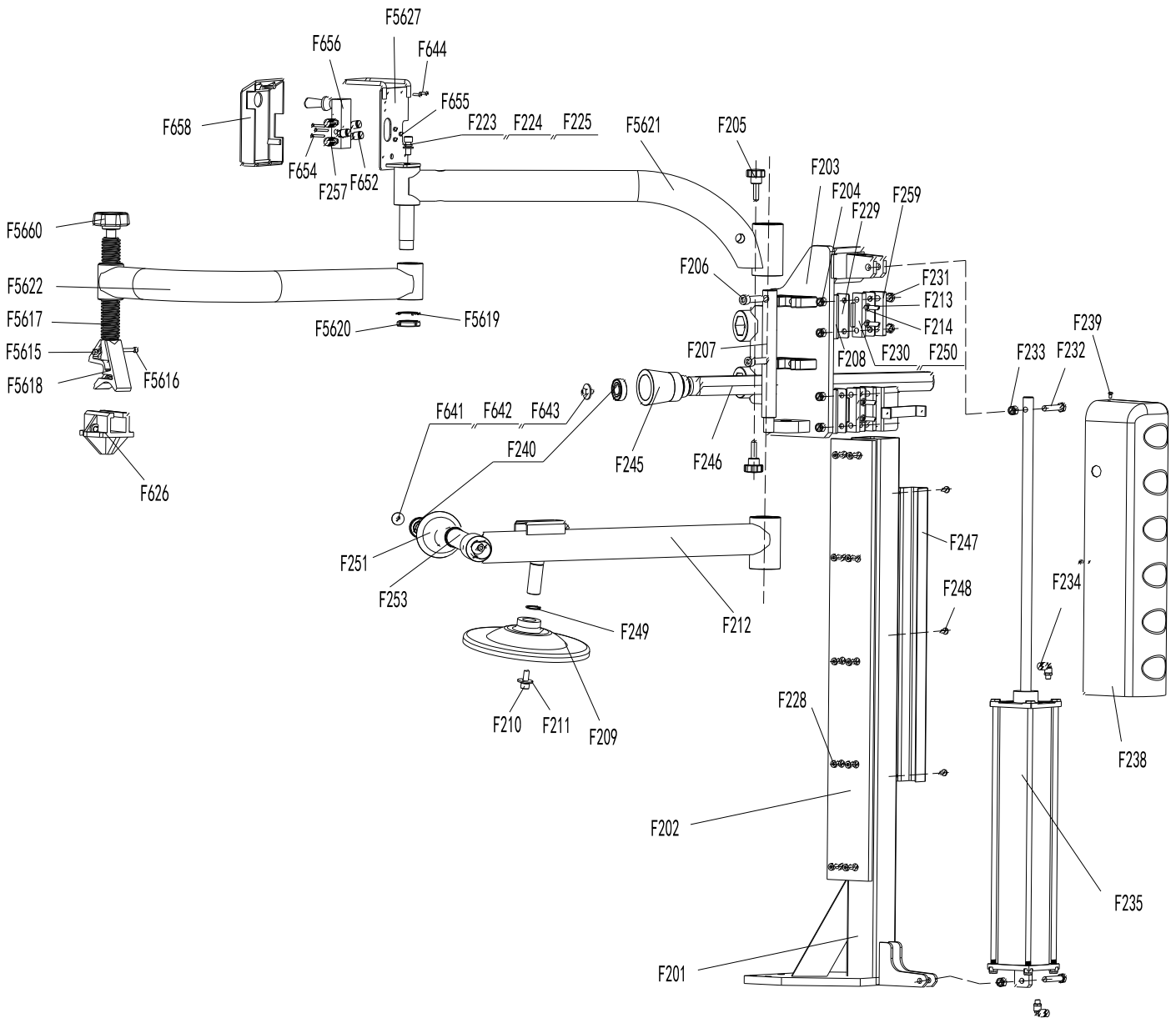
701P	EQ05001000008	Digital Inflating gun
702	JZ30204500070	Complete spiral connecting pipe
703	EQ14003000002	Notch nut
704	EQ07004000022	Straight union 1/4-1/4
705	FJ15006000028	Flat washer Ø13
706	EQ03003000003	Pressure adjust valve
707	EQ10003000009	Quick union 1/4-Ø8



802	EQ12001000013	Quick union PM20
811	EQ03001000008	oil fog maker 3300
813	EQ11004000009	Two-way union 1/4- Ø8
820	JZ30204500222	Complete oil fog maker 3300

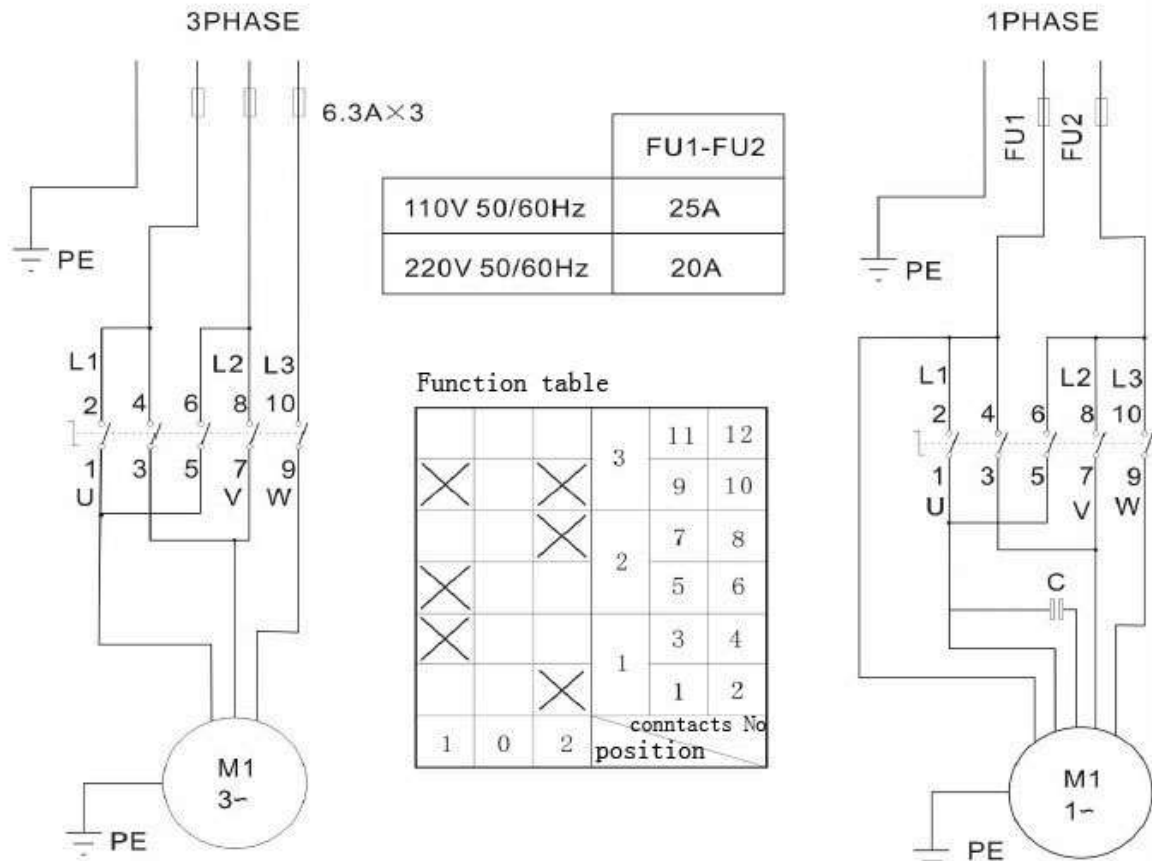


A04	EQ11002000011	T-union 3* Ø 8
A44	FJ22009000093	Hex socket head bolt M6x16
A48	EQ11002000018	Quick T-union
200-531	JZ20201400216	Rotating valve casing
200-532	FJ29002000235	O-seal 59.9X2.62
200-535	JZ20201400215	Rotating valve mandrel
537	CF01002000066	Hose 5.5* Ø 8
A41	EQ11005000023	Straight union 1/8-Ø8
548	FJ19006000008	Hex socket head bolt M4X6
200-540	JZ30204500258	Complete Rotating valve

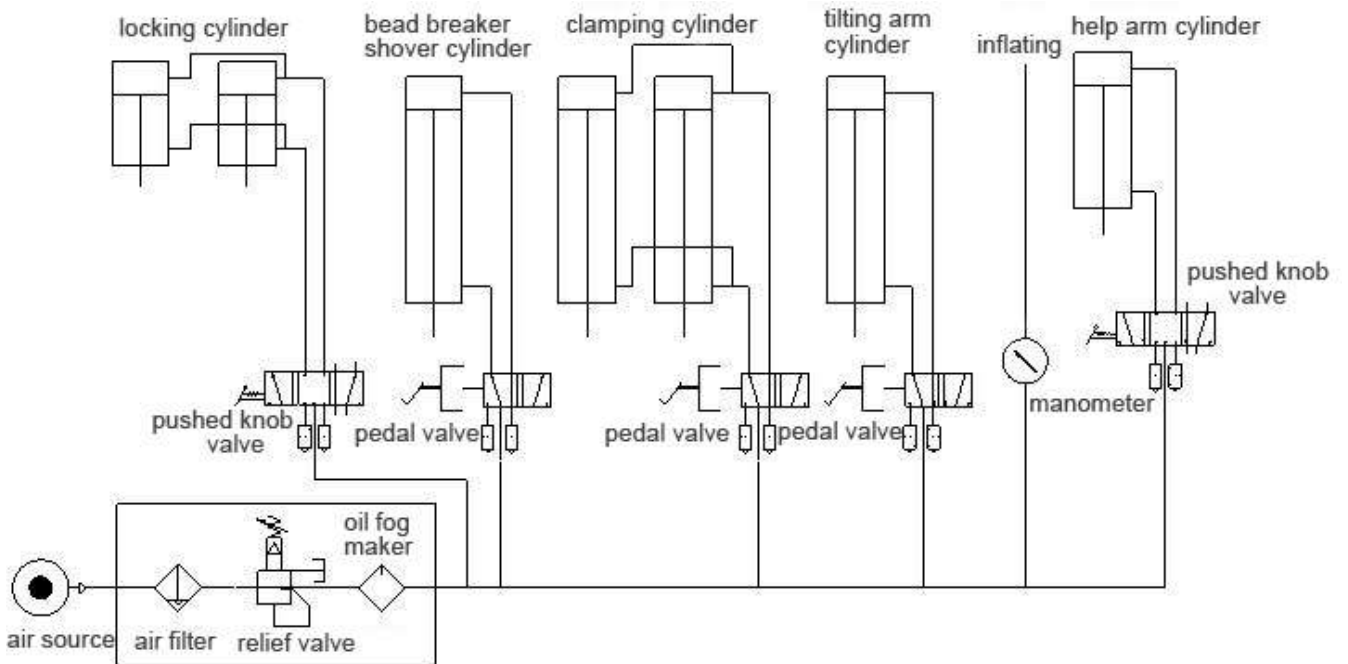


F201	JZ20201300003	Column S002	F246	JZ20200700015	Tyre pressing arm in help arm S002
F202	JZ20201300219	Guide rail U007	F247	JZ20200400008	Column cover S002
F203	JZ20200500017	Skateboard seat assembly welds S002	F248	FJ22009000085	Hex socket head cap screw M6*10
F204	FJ21003000001	Nut M10	F249	FJ14004000012	Snap Ring 24
F205	JZ20201300050	Pentagon handle M10*30	F250	JZ20201300228	Friction plate top block U007
F206	FJ22009000031	Hex socket head cap screw M12*40	F251	JZ20201300443	Roller S002
F207	JZ20201300207	Shaft U056	F253	JZ20201300335	Centring shaft S002
F208	JZ20201300227	Internal friction sheet U007	F257	EQ04002000004	Muffler G1/8
F209	JZ12001800051	Tire lifting roller U005	F259	JZ20201300230	Outer friction sheet U007
F210	FJ22012000010	Outer hex bolt M10*25	F5615	FJ21003000013	Nut M6
F211	FJ15006000012	Flat washer 10*40*3	F5616	FJ22009000102	Hex socket head cap screw M6*30
F212	JZ20201300004	Tire support straight arm assembly S002	F5617	JZ20201300205	Tire pressing head rotating shaft U056
F213	FJ19013000040	Screw M8*25	F5618	JZ12001800056	Tire pressing head (upper) U008
F214	FJ21011000025	Nut M8	F5619	JZ20201400046	Big washer U200
F223	FJ22009000007	Hex socket head cap screw M10*25	F5620	FJ21003000004	Nut M16
F224	FJ15004000002	Flat washer 10	F5621	JZ20201300099	Rotating arm rod assembly U056
F225	FJ15006000006	Flat washer 10*20*2	F5622	JZ20201300100	Rotating arm assembly 2
F228	FJ22009000123	Hex socket head cap screw M8*20	F5627	JZ20201300105	Control panel assembly U056
			F5660	JZ12001800015	Adjust handle U238
F230	JZ20201300229	Friction plate isolation block U007	F626	JZ12001800057	Tire pressing head(bottom) U008
F231	FJ22011000005	Outer hex bolt M10*60	F641	FJ22009000123	Hex socket head cap screw M8*20
F232	FJ22011000004	Outer hex bolt M10*50	F642	FJ15006000118	Flat washer 8*30*3
F233	FJ21003000001	Nut M10	F643	FJ15004000021	Flat washer 8
F234	EQ10003000014	Quick coupler G1/8-Φ6	F644	FJ19017000013	Screw ST4.2*16
F235	JZ30204500381	Raise-fall cylinder S002	F652	EQ10003000007	Quick coupler G1/4-Φ6
F238	JZ20200400008	Column cover S002	F654	FJ19016000018	Screw M4*30
F239	FJ19018000006	Screw M5*10	F655	FJ21011000020	Nut M4
F240	FJ10002000002	Bearing 6004-2Z	F656	EQ02011000002	Hand valve 4H230L-08
F245	JZ20201300568	Tyre pressing roller in help arm S002	F658	JZ12000200096	Control valve protection cover U007

16. Circuit diagram:



17. Pneumatic drawing:



18.Color reference for square columns in the attachmen:

编号	名称	规格
JZ20200400405	Column G22	Flat light RALRAL3002
JZ20200400370	Column G22	Wrinkle RAL7016
JZ20200400002	Column G22	Wrinkle RAL9005
JZ20200400198	Column G22	Wrinkle RAL3002
JZ20200400175	Column G22	Wrinkle RAL7015