T	1 2	Ω_2	20	124	6

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

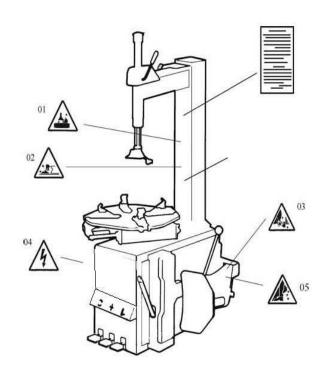
This instruction manual is important for the machine, please read carefully before installation and use; also it is important for safe use and machine maintenance of machine. Please keep this manual properly in order to further maintenance of the machine.

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	12~23 "
Internal locking rim dimensions	14~26 "
Max. Wheel diameter	1143mm(45 ")
Max. Wheel width	406mm(16 ")
Working Pressure	8-10bar
Power supply	110V (1ph)/ 220V (1ph)/ 380V (3ph)
Optional Motor power	0.75/1.1 kw
Max. Rotating Torque (Turntable)	1078 Nm
Overall Dimension	1130*900*1030mm
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.

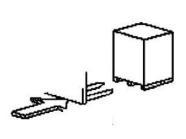
Here **above machine versions can be equipped with** Rapid Tire Inflation Device (client optional device), IT-suffix version, accessory **details** can be found at **the** IT-suffix version **diagram**.

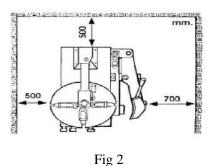
4. Transport:

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.





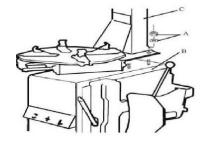


Fig 3

6. Workplace requirements:

Fig 1

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.

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

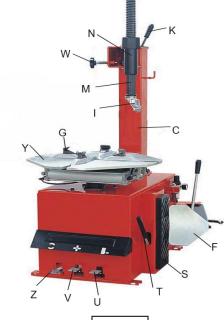


Fig 4

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)	

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 (F) close toward inside; release Bead Breaker Pedal (U), Bead Breaker shovel (F) 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.

Tyre changer operation is consisted of three parts:

- 1) Breaking the tyre bead
- 2) Demounting the tyre
- 3) Mounting the tyre

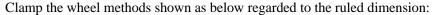
Caution: Before any operations, don't wear loose clothing and wear protective hat, gloves, and skid-proof shoes. Ensure to exhaust the air in the tyre completely, and remove all the wheel weights from the rim.

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.



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- to 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**.

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.

T

Fig 5

Fig 6



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;
- 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.

12. Maintenance:

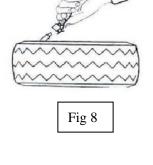
Caution: only the professional persons can do the maintenance. To prolong the machine's life, maintain the machine timely according to the manual. Otherwise, it will impact the reliability of the machine or even cause injury to operator and others nearby.

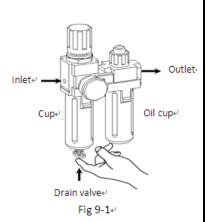
Fig9

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.





- 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) 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.

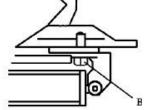


Fig 10

Note: 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)

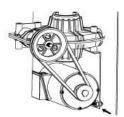


Fig11

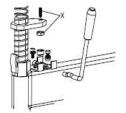


Fig12



Fig 13

13. Trouble shooting table:

Problem	Reason	Solution	
	Reverse Switch broken	Replace the Reverse Switch	
The transtable notets just in	Belt broken	Replace the belt	
The turntable rotate just in one direction or can't rotate.		Check the motor cable or terminal block	
one direction of can trotate.	The Motor's malfunction	wire;	
		Replace the motor if it was broken.	
Demount or fix the wheel, the	Leakage of Air network	Check all the parts on the air network.	
turntable can't lock (spin with	The clamping cylinder can't work.	Replace the cylinder piston.	
wheel);	Worn jaws	Replace the jaws.	
The jaws delay to open/close;			
The turntable locks the rim	Broken washers of the chuck cylinder	Replace it.	
incorrectly.			
The	The locking plate incorrectly adjust or unqualified.	Replace or adjust it.	
The mounting/demounting head always touch the rim during operation.	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 Pead Presider shovel operates	Jammed silencer	Clean it or replace it.	
The Bead Breaker shovel operates difficultly.	The washer on the Bead Breaker cylinder is broken.	Replace it.	

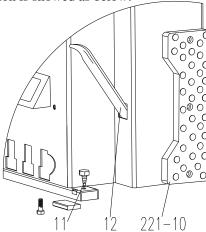
14. Guide for ordering spare parts

- 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 "12" from the picture, then find out all the information of code "12" and record them

11	FJ04006004049	screw ST6.3*38	
12	JZ09001023040	Lifting lever	
200-10	JZ09001023181	Bead breaker buffer	

The recorded information:

12	JZ09001023040	Lifting lever

3. Gather the detailed information of parts

Code .	Order code	Name	Qty	Purchase time of machine
12	JZ09001023040	Lifting lever	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

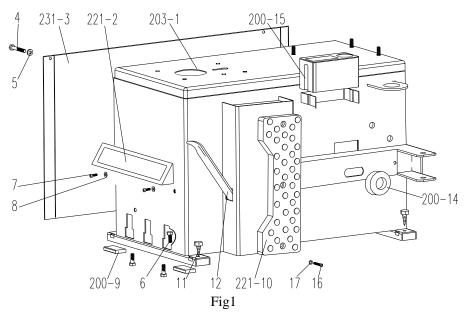
- ◆Manufacturer reserves the rights to change the parts specification without beforehand notice for the users.
- ◆Manufacturer do not liable for the modification and improvement of the products which have been sale

15. Wearing spare parts list

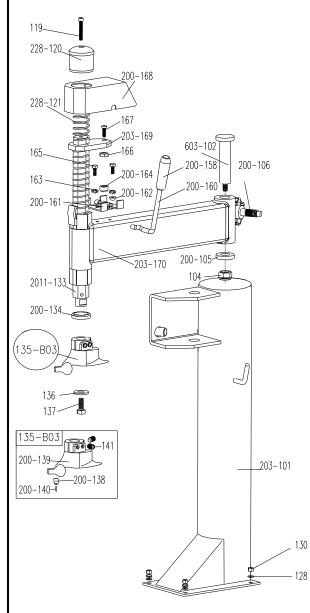
Part location	Location NO	Order NO	Part name
Rubber mar (Fig1)	221-10	JZ09001023159	Rubber floor matU200
Tight-cylinder piston (Fig3)	200-228	JZ09001022841	Tight-cylinder piston U2000154Φ70
Guidance tape (Fig4)	007-318	JZ02007061149	Guidance tapeU007 10*2
Nylon cover (Fig4)	2098-358	JZ02007011606	Nylon coverU2098010509
Reversing switch (Fig6)	200-426	DD03009001577	Reversing switchLW8-25N2/5.5
Triangular belt (Fig8)	604	FJ02003003545	Triangular beltA-686
Distributing valve (Fig9)	200-532	FJ08001005300	O-ring seal 59.9*2.62
Spiral trachea (Fig10)	200-702	JZ09001022984	Spiral trachea U20001908*5*2500
	226	FJ08003005391	Sealing ring for V-shaft Φ20*Φ28*7.5
Tightening cylinder (Fig3)	227	FJ08001005312	O-ring seal Φ63*2.65
	232	FJ08001005151	O-ring seal Φ19.6*2.62
	306	FJ08001005120	O-ring seal Φ16*2.65
	363	FJ08005005395	Y-control seal ring Φ184*Φ200*12
	362	FJ08001005153	O-ring seal Φ195*3.1
larger cylinder (Fig4)	365	FJ08001005135	O-ring seal
larger cylinder (11g1)	359	FJ08003005391	Sealing ring for V-shaft Φ20*Φ28*7.5
	307	FJ08001005151	O-ring seal Φ19.6*2.62

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

16. Exploded drawing:

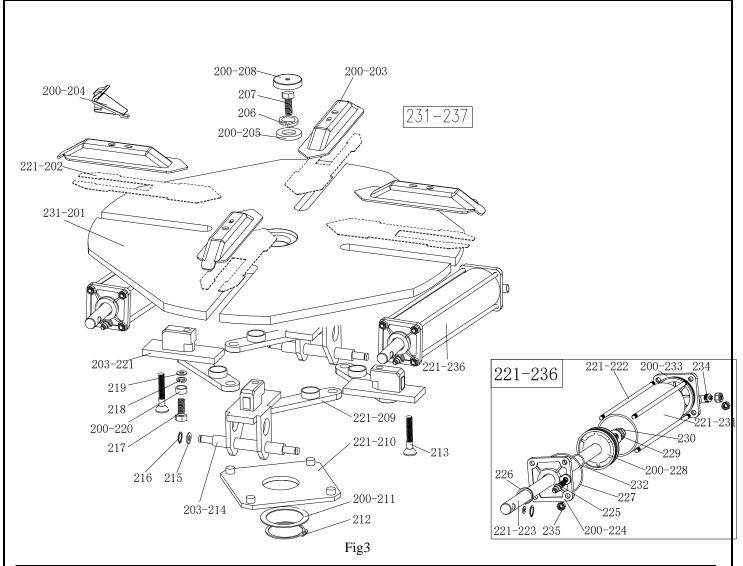


203-1	JZ08001021109	Maching body U2030101	200-9	JZ09001023159	Rubber foot buffer U200
231-2	JZ08001021048	Pedal front cover U2310108	221-10	JZ09001023181	Bead breaker buffer with pot point U2210150
231-3	JZ08001021148	Left cover U2310102	11	FJ04006004049	Hex head tapping screw ST6.3*38
4	FJ04009048872	hex socket head cap screw M6*55	200-12	JZ09001023041	Lifting lever U2000158
5	FJ04002003895	Flat washer 6*18*1.5	200-14	JZ09001022719	Bead breaker arm rubber U2000151
6	FJ04009004877	Outer hex bolt M8*20	200-15	JZ07001020929	Oil-water box U2000147
7	FJ04009004706	hex socket head cap screw M8*20	16	FJ04009004707	hex socket head cap screw M8*25
8	FJ04002003892	Flat washer 6*14*1.2	17	FJ04002003904	Flat washe 8*17*1.5



203-101	JZ08001021060	Square column U2030125
6603-102	JZ03001015822	Swing arm pin U66030119
104	FJ04008004448	Nut M16
200-105	JZ03001015476	Big washer U2000114
200-106	JZ07001020882	Column adjust handle U2000135
119	FJ04009004581	hex socket head cap screw M10*30
228-120	JZ07001020884	Vertical arm cap S41U2280149
228-121	JZ09001022980	Vertical arm spring U2280139Φ3*730
2011-133	JZ03001015899	Vertical arm S41U20110116
200-158	JZ07001020907	Locking handle cover U200012302
200-160	JZ03001015733	Locking Handle U2000123
200-161	JZ03001015740	Locking plate U2000120
200-162	JZ09001023096	Locking block cover U2000124
163	FJ04002003792	Flat washer 8
200-164	JZ09001023004	Eccentric shaft nut U2000121
165	FJ04009004879	Outer hex bolt M8*25
166	FJ04008004495	Nut M12*1.75*T6
167	FJ04006004176	Screw M12*30
200-168	JZ07001020909	Locking plate cap U2000148
203-169	JZ03001015647	Hex locking board U2030122(
203-170	JZ08001021038	Swing arm U2030118
141	FJ04006004130	Screw 6
200-140	JZ09001022993	Hex round pin U200011504
203-139	JZ09001022714	mount/demount head B03 2030115013
200-138	JZ09001015340	Mount/demount head pulley U200011502
141	FJ04006004129	screwM12*12
135-B03	JZ06001020303	Complete Mount/demount head B03

Fig2



231-201	JZ03001015480	Turntable assembly U231 650	219	FJ04002003814	Flat washer 12*30*3
221-202	JZ03001015581	Work disc U221 (option)	200-220	JZ09001015609	Connection rod nut U200
200-203	JZ03001015584	Jaw cap U200	203-221	JZ03001015762	Jaw slide guide without pin U203 26
200-204	JZ09001022893	Jaw U200	221-222	JZ09001022937	Threaded connection rod U221M8*390
205	JZ03001015476	Big washer U200	221-223	JZ09001022843	Clamping cylinder piston rod U221Φ20*400
206	FJ04002003779	Spring washer 16	200-224	JZ09001022837	Clamping cylinder cover without handle U200Φ70
207	FJ04009004828	Outer hex bolt M16*40	225	EQ11006003389	Quick coupler G1/8-Φ8
208	JZ07001020860	Turntable cap U200	226	FJ08003005391	V -seal ring Φ20*Φ28*7.5
221-209	JZ03001015611	Square Turntable 615 U221	227	FJ08001005312	O -seal ring Φ63*2.65
221-210	JZ03001015454	Square Turntable 615 U221	200-228	JZ09001022841	Complete clamping cylinder piston U2000154Φ70
211	JZ03001015457	Square Turntable Washer U200	229	FJ04002003813	Flat washer 12*24*2
212	FJ04001003757	Snap Ring 65	230	FJ04008004495	Nut M12*1.75*T6
213	FJ04006004133	Hex socket countersunk head screwM12*63	221-231	JZ09001022852	Clamping cylinder barrel U221Ф70*360
203-214	JZ03001015830	Jaw slide guide with pin U203 26	232	FJ08001005151	O -seal ring Φ19.6*2.62
215	FJ04002003813	Flat washer 12*24*2	200-233	JZ09001022839	Clamping cylinder cover with handle U200Ф70
216	FJ04001003737	Snap Ring 12	234	EQ11005003366	Quick coupler G1/8-Φ8
217	FJ04009004801	Outer hex bolt M12*40	235	FJ04008004459	Nut M8
218	FJ04002003917	Teeth locking washer Φ12*20.5*1	221-236	JZ06001020236	Complete clamping cylinder U221

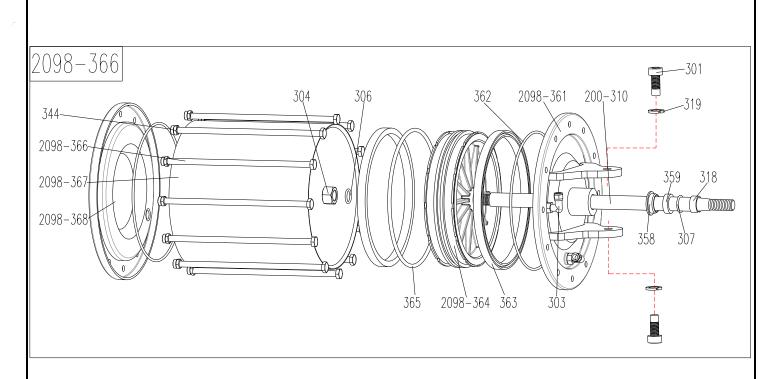


Fig4

304	FJ04008004447	Nut M16*1.5	
200-310	JZ09001022746	Bead breaker cylinder piston rod U200010501 Φ20*423	
306	FJ08001005120	O -seal ring Φ16*2.65	
303	EQ11005003350	Union G1/4-Ф8	
2098-367	JZ09001022753	Bead breaker cylinder barre U2098010503	
2098-361	JZ03001015383	Bead breaker cylinder cover assembly U2098010505	
2098-368	JZ03001015379	Bead breaker cylinder rear cover U2098010511	
2098-366	JZ09001022935	Threaded connection rod U2098010510 M8*235	
344	FJ04008004459	Nut M8	
2098-364	JZ09001022745	Bead breaker cylinder piston U2098010502 Φ200	
363	FJ08005005395	Y- seal ring Φ184*Φ200*12	
362	FJ08001005153	O -seal ring Φ195*3.1	
365	FJ08001005135	O -seal ring Φ170.8*5.33	
2098-358	JZ02007011606	Nylon cover U2098010509	
318	JZ02007039247	Guide belt 10*2	
359	FJ08003005391	V- seal ring	
307	FJ08001005151	O -seal ring Φ19.6*2.62	
301	JZ09001011179	Hex socket head bolt M14*30	
319	FJ04002003777	Spring washer 14	
2098-334	JZ06001020266	Complete bead breaker cylinder u2098	



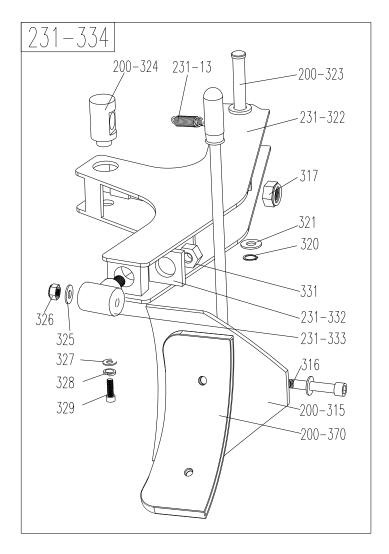


Fig5

231-13	JZ09001022723	Bead breaker arm spring U231
200-315	JZ03001015791	Bead breaker shovel assembly U200 T/8
316	FJ04009004613	Hex socket head bolt M12*90
317	FJ04008004517	Nut M16*1.5
320	FJ04001003741	Snap ring 16
321	FJ04002003833	Flat washer 16*28*2
231-322	JZ08001021036	Bead breaker arm U231
200-323	JZ03001015349	Bead breaker pin U200
325	FJ04002003813	Flat washer 12*24*2
326	FJ04008004445	Nut M12
331	FJ04008004448	Nut M16
231-332	JZ03001015351	Gasket U231 Ф16.5*40*8
231-333	JZ03001015350	Rotating shalf U231
200-370	JZ07001020829	ead breaker shovel protection cover(option)

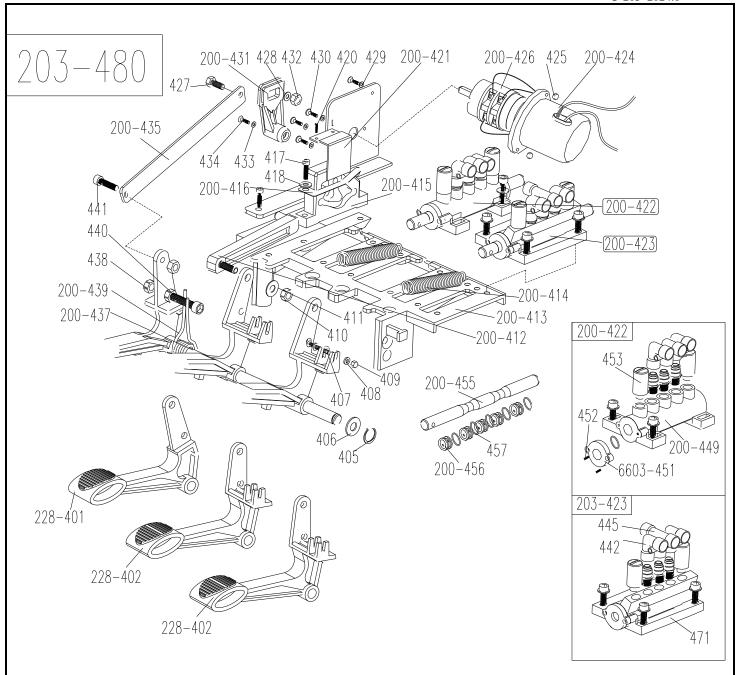


Fig6

228-401	JZ03001021184	Reverse switch pedal U228	428	FJ04002003890	Flat washer 6*12*1
228-402	JZ03001021300	5-way valve pedal(right)U228	429	FJ04002003874	Flat washer 4*8*0.5
405	FJ04001003737	Snap Ring 12	430	FJ04006004323	Screw M4*16
406	FJ04002003813	Flat washer 12*24*2	200-431	JZ07001020856	Reverse switch handle U2000153
407	FJ04006004200	ScrewM4*30	432	FJ04008004458	Nut M6
408	FJ04002003874	Flat washer 4*8*0.5	433	FJ04002003859	Flat washer 3*6*0.5
409	FJ04008004455	Nut M4	434	FJ04006004306	Screw M3*16
410	FJ04008004459	Nut M8	200-435	JZ03001015560	Pedal Connection Rod U200
411	FJ04002003904	Flat washer 8*17*1.5	200-437	JZ03001015570	Pedal front shaft U200010607
200-412	JZ07001020913	Cam connection rod U200010613	438	FJ04008004515	Nut M8
200-413	JZ09001022882	Pedal suport board U2000106013#	200-439	JZ09001022873	Pedal twist spring U2000137
200-414	JZ09001022872	Pedal Spring U2000138	440	FJ04009004715	Hx socket head cap screw M8*50
200-415	JZ07001020914	Cam U200010615	441	FJ04009004706	Hx socket head cap screw M8*20
200-416	JZ09001023109	Cam washerU20001810.5	442	EQ10004003264	Union (90°)G1/8- Φ8
417	FJ04009004680	Hex socket head cap screw M6*20	445	EQ10001003242	T-union G1/8-2* Φ8
418	FJ04002003790	Flat washer 6	200-449	JZ07001020920	5-way valve barrel U200
420	FJ04006004228	Screw ST2.9*12	6603-451	JZ07001020918	5-way valve cover U6603010611
200-421	JZ03001015747	Cam cover U200010605	452	FJ04006004372	Screw ST2.9*14
200-422	JZ06001020282	Complete 5-way valve for clamping cylinder U200	453	EQ04002002955	Muffler G1/8
203-423	JZ06001066665	5-way valve (T-union,without rod) (Aluminum alloy)	200-455	JZ09001015771	5-way valve rod U200010612
200-424	JZ07001020853	Reverse Switch Cover U200010614X	200-456	JZ07001020919	5-way valve rod spacer U200010610
425	FJ04008004510	Nut M4	457	FJ08001005087	5-way valve rod spacer Φ12*20*4
200-426	DD03009001577	Reverse switch LW8-25N2/5.5	203-480	JZ06001042866	Complete 3-pedals assembly U-203
427	FJ04009004680	Hex socket head cap screw M6*20			

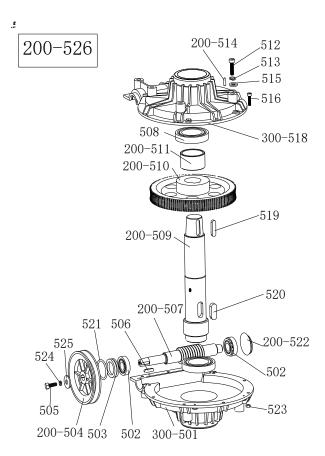


Fig7

300-501	JZ09001022681	Gear box lower cover U300
502	FJ02010003613	Bearing 30204
503	FJ08007005413	Gear Seal Φ20*Φ35*8
200-504	JZ09001023119	Gear Belt pulley U200
505	FJ04009004879	Outer hex bolt M8*25
506	FJ06001004964	Key washer 6*20
200-507	JZ09001023118	Worm rod U200 Ф 42*218
508	FJ02010003623	Bearing 6010-2RS
200-509	JZ09001023126	Worm gear shaft U200
200-510	JZ09001023250	Worm gear U200
200-511	JZ02007011727	Spacer U200
512	FJ04009004779	Outer hex bolt M10*55
513	FJ04002003773	Flat washer 10
200-514	FJ06002005000	Pin Φ6*20
515	FJ04002003800	Flat washer 10*20*2
516	FJ04009004680	hex socket head cap screw M6*20
517	FJ04002003892	Flat washer 6*14*1.2
300-518	JZ09001022679	Gear box upper cover U300
519	FJ06001004962	Key washer 10*40
520	FJ06001004963	Key washer 14*40
521	FJ08001005221	O-seal \$\Phi 30*3.55\$
200-522	JZ09001022990	oil resistant seal U200013207U200
200-526	JZ06001020255	Complete gear box U200

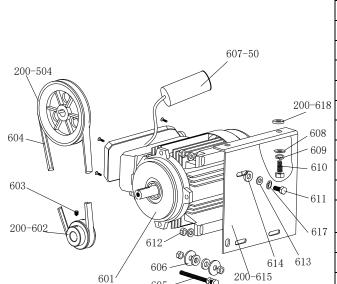
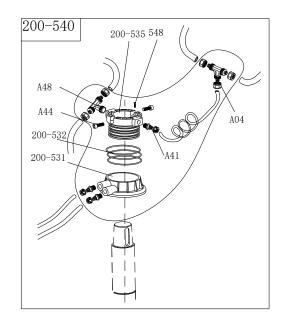


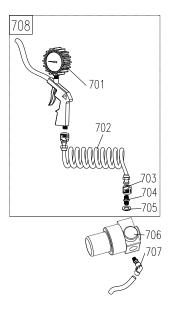
Fig8

601	DD01001001181	Decide order according to customer's requirement:V/HZ/KW/PH For example: 220-240V/50HZ/0.75KW/1PH
200-602	JZ09001015421	Motor Belt pulley U200
603	FJ04006004178	screw M8*12
604	FJ02003003545	Balancer Belt A-686
605	FJ04009004889	Outer hex bolt M8*65
606	FJ04002003915	Flat washer 8*30*3
607-50	DD04009001883	Capacitance 50uF/450V(option)
608	FJ04002003800	Flat washer 10*20*2
609	FJ04002003773	Sring washer 10
610	FJ04009004770	Outer hex bolt M10*25
611	FJ04009004883	Outer hex bolt M8*35
612	FJ04008004515	Nut M8
613	FJ04002003910	Flat washer 8*22*2
614	JZ09001022782	Motor Rubber Buffer U200015610*30*4
200-615	JZ03001015423	Motor support 0.75KW/1.1KW
617	FJ04002003792	Flat washer 8
200-618	JZ09001022782	Motor Rubber Buffer U200015610*30*4
200-504	JZ09001023119	Gear Belt pulley U200013205



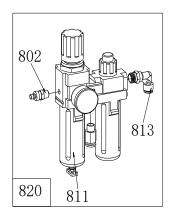
A04	EQ11002003333	T-union 3* Ø 8
A44	FJ04009004676	hex socket head cap screw $M6 \times 16$
A48	EQ11002003340	T-union 1/8-2*Ø 8
200-531	JZ02007015872	Rotating valve casing
200-532	FJ08001005300	O - seal Φ59.99*2.62
200-535	JZ02007015676	Rotating valve mandrel U200
537	CF01002000936	Flexible air hose Φ8*Φ5*10m
A41	EQ11006003389	Straight union G1/8-Φ8
548	FJ04006004060	screw M4*6
200-540	JZ06001020249	Complete Rotating valve, plastic U200

Fig9



701	EQ05001002961	Digital inflating gun 0-10Bar/TG-7
702	JZ09001022984	Helical hose 8*5*2500
703	EQ14003003478	Notch nut G1/4
704	EQ07005003072	Straight union 2*G1/4 external thread
705	FJ04002003822	Flat washer 13*24*1
706	EQ10004003258	Pressure adjust valve
707	EQ10004003257	Quick coupler
708	JZ06001020204	Complete inflating gun, with pressure adjust valve

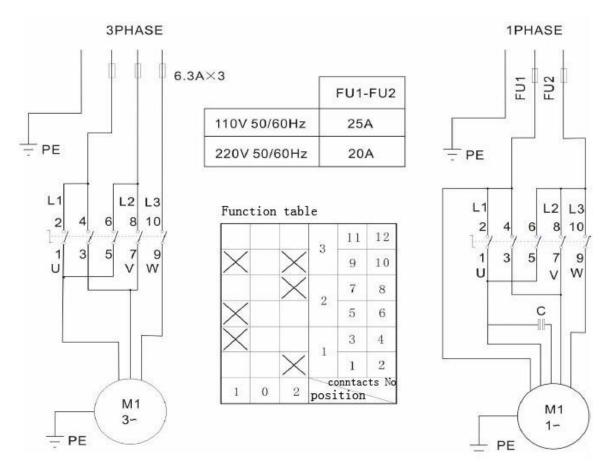
Fig10



811	EQ03001002902	oil fog maker 3300
813	EQ11005003350	Union (90°)1/4- Ø8
820	JZ06001020326	Complete oil fog maker 3300
802	EQ12001003412	Quick nozzle PM20

Fig11

17. Circuit diagram:



18. Pneumatic drawing:

