

We follow the way that wheel moving!

TYRE CHANGER

INSTRUCTION & MAINTENANCE MANUAL



Read this entire manual carefully and completely
before installation or operation of the tire changer

TYRE CHANGER INSTRUCTION MANUAL

INDEX	PAGE
1. Introduction:	2
2. Safety Warnings:	2
3. Technical data:	3
4. Transport:	3
5. Unpacking & Inspection:	3
6. Workplace requirements:	3
7. The illustrations of products	4
8. Position and installation:	4
9. Electric and Pneumatic connections:	5
10. Adjusting operation:	5
11. Helping arm application:	7
12. Inflating the tyre:	8
13. Moving machine:	9
14. Maintenance :	9
15. Trouble shooting table:	11
16. Exploded drawing	12
17. Circuit diagram	23
18. Pneumatic drawing	23

Tyre Changer

Warning:

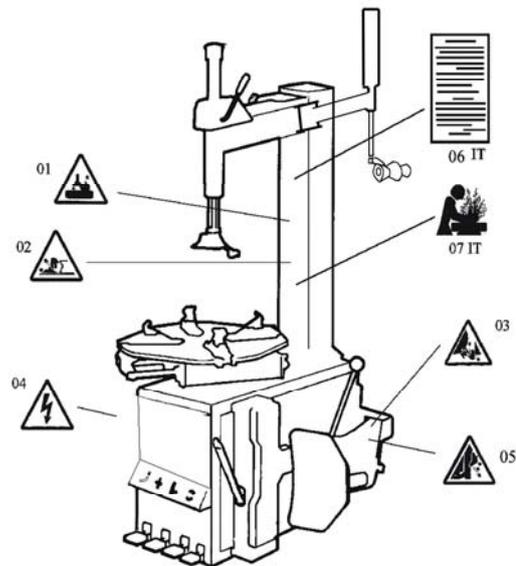
This instruction manual is important for the machine, please read carefully before installation and use; also it is important for safe use and machine maintenance of machine. Please keep this manual properly in order to further maintenance of the machine.

1. Introduction :

Application Range: The semi-automatic tyre changer is especially designed for demounting / mounting tyres from wheel rims. This type of machine can demount/mount bigger and heavier tyres, dimension of tire rims from 254mm to 762mm. The tire installation base is different with the traditional turntable and can fixing the tire with quick release nut which is more efficient & protection. With the tire lifting device rise-fall the tires automatically this can save the labor of manual handling.

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 Demount/mount 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;
- 06 Warning instructions;
- 07 Pay attention to safety because it is an equipment with strong compressed air device ;

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:

rim dimensions	8" -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	0.75/0.55/1.1 kw
Max. Rotating Torque (Turntable)	1078 Nm
Overall Dimension	1130X900X1030mm
Noise Level	<75 dB

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 to make sure all parts shown on the spare parts list are included. If any parts are missing or broken, please contact the manufacturer or dealer ASAP.

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.

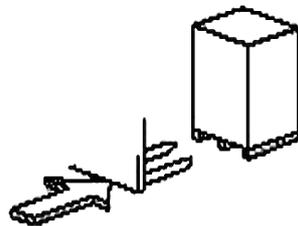


Fig 1

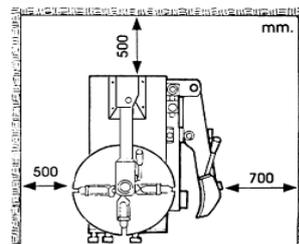


Fig 2

7. The illustrations of products



Fig 3

1. Rotation Pedal	2. Rise-fall Pedal	3. Bead Breaker Pedal
4. Bead breaker buffer	5. Bead Breaker shovel	6. Auxiliary rotating rod
7. Column	8. Demount/mount head	9. Tire pressing roller
10. Raise-fall control valve	11. Vertical arm	12. Adjust handle
13. Inflating gun	14. Quick release nut	15. Cone
16. Rubber protection washer	17. Tire installation base assembly	18. Tire lifting device
19. Tire lifting support		

Caution: Before any operations, please operator keep the hands and human body away from the machine rotating parts. Please wear straitjackets and don't wear loose clothing and wear necklaces, bracelets.

8. 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 machine body B as shown in Fig 4. 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.
3. Fixing the tire lifting device on the side of machine body with bolt set A, shown as Fig 5; after fixing all the bolts, connecting the air hose B&C.
4. Fixing the left help arm on the post and cabinet with 10pcs M10 bolts. Put the 8MM pipe into the cabinet from the right reservation hole (2) of the machine and plug on the three-way connection, show as fig6.
5. Fixing the cylinder T1 on the swing arm with 2 bolts T2; Fixing the tire pressing roller on the piston rod and tighten with the hex screws T3, then make sure that the tire pressing roller can rotate freely; connecting the air hose. Shown as Fig7.

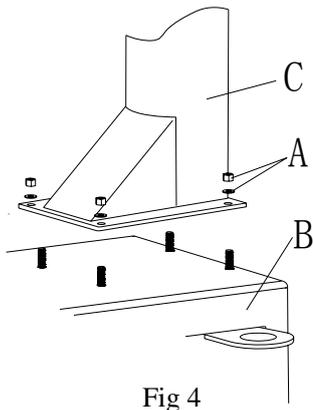


Fig 4

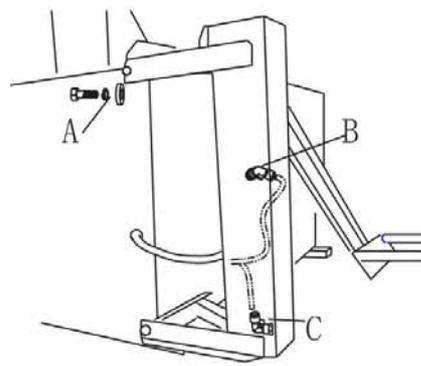


Fig 5

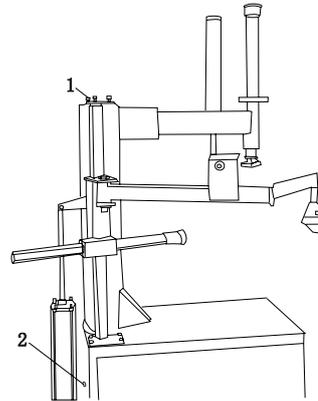


Fig6

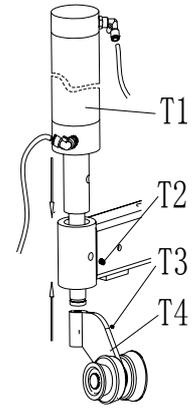


Fig 7

9. Electric 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 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.

10. Adjusting operation :

10.1 Function of Pedal

1) Tread Rotation Pedal (1), Tire installation base (17) rotates in a clockwise direction; Lift Rotation Pedal (1), Tire installation base (17) rotates in an anticlockwise direction

2) Tread bead breaker pedal (3), bead breaker shovel (5) closing toward inside; loose bead breaking pedal (3), bead breaking shovel (5) returns to original position.

3) Tread rise-fall pedal (2), Tire lifting device lifting up; lift the rise-fall pedal (2), Tire lifting device falling down.

10.2 Operation of a the tyre changer

Operation of tyre changer consists of three parts:

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

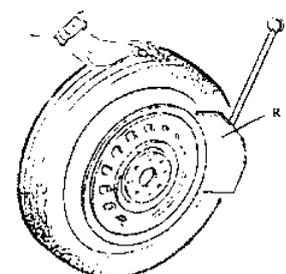


Fig 8

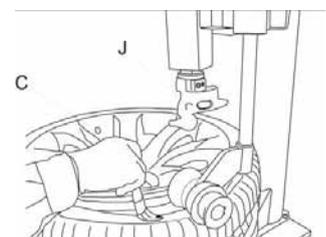


Fig 9

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.

10.2.1. Breaking the tyre bead:

Ensure to exhaust the air in the tyre completely, place the tyre against the rubber buffer (4). Bring the paddle (R) against the bead about 10mm from the edge of the rim shown as **Fig 8**. Tread Bead breaker Pedal (3) 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.

10.2.2. Demounting tyre:

Caution: 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.

Caution: Without the lubricant may lead to badly wear and tear on tyre. (Fig 9)

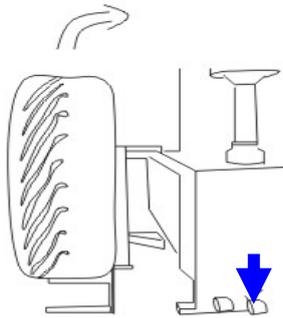


Fig 10

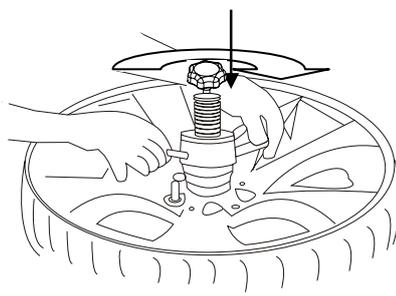


Fig 11

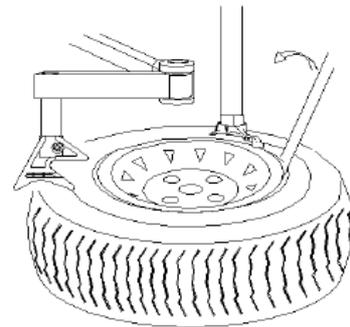


Fig 12

With the tire lifting device to rise/ fall the tire, shown as Fig 10.

Make sure that removing the thread shaft on the tire installation base before lifting the tire.

Exhaust the air in the tyre completely, remove the valve core, put the tire on the tire lifting device, tread the rise-fall pedal, and the tire lifting device will lift up the tire. Push the tire to the tire installation base when the tire lifting support is 90° with the machine body. Tread the rise-fall pedal again down the tire, and adjust the auxiliary rotating rod of tire installation base which should be alignment with the fixing hole of tire rim. Input the tread shaft, positioning the tire with the appropriate cone, and then fixing the tire with the quick release nut shown as the Fig 11.

Caution: Check to make sure the wheel rim firmly secured before next step.

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 12)

With the Lifting Lever held in position, tread the Rotation Pedal (1), rotate the tire installation base in a clockwise direction until the tyre bead 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 beads separated from the wheel rim.

Caution: Chains, bracelets, loose clothes and anything else close to the rotating parts will bring danger to the operator.



Fig 13

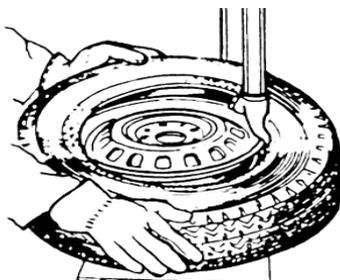


Fig 14

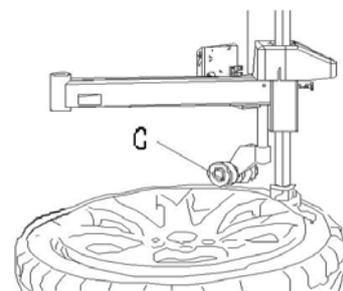


Fig 15

10.2.3. Mounting tyre :

Caution: Before mounting the tyre, please make sure that dimension of tyre bead is in accordance with the tyre rim. To avoid any damage on tyre, lubricate the tyre bead and the wheel rim with the lubrication recommended by manufacturer. Put on the tyre and check the situation.

If rim diameter and width are same as that of tyre, it is not necessary to loosen and lock vertical arm. Only put tyre on rim, move swing arm to position when demounting tyre, put one side of tyre bottom bead upon rear of demount / mount head, and the other side of tyre bottom bead below front of demount/mount head. Press tyre manually or by pressing roller C of helping arm, rotate tire installation base and tyre bottom bead can be mounted. Please use the bead pressing tool(optional device)/left help arm tyre pressing function(Fig 21) for auxiliary operation if necessary.(Fig 13,14,15)

Repeat above operation to mount tyre top bead.

11. Helping arm application:

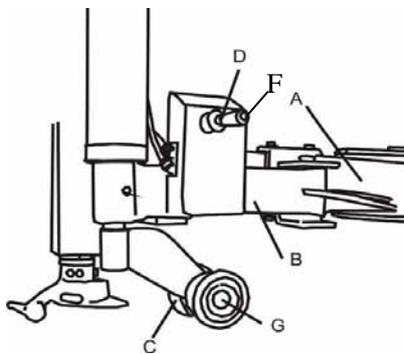


Fig 16

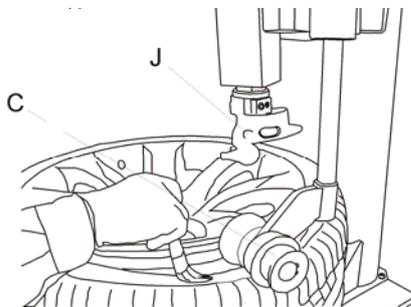


Fig 17

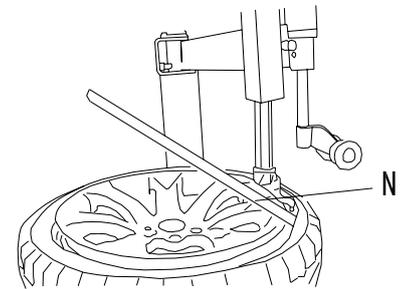


Fig 18

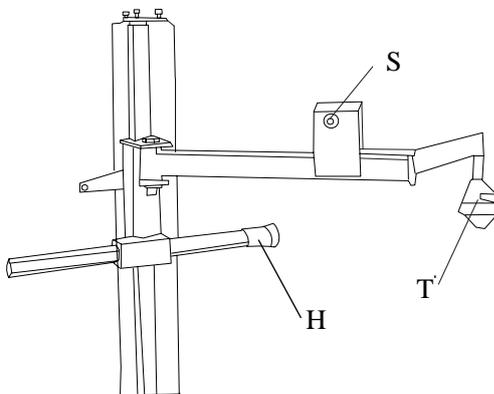


Fig 19

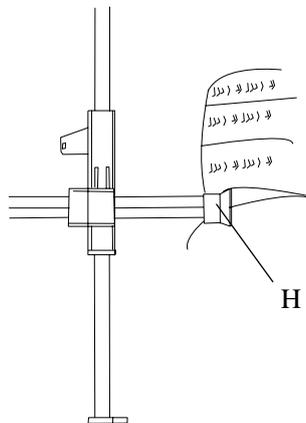


Fig 20

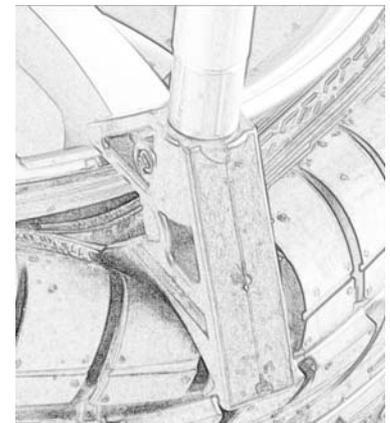


Fig 21

Helping arm at right side is auxiliary device of tyre changer for helping operator to demount and mount tyre.

11.1 help arm Components

Each components of helping arm device are introduced as follows: (Fig 16&19):

- A- Swing arm
- B- Small helping arm
- C- Roller C
- D- Raise-fall roller handle
- F- Locking switch for helping arm
- G- Roller G
- S-Control switch
- T-tire pressing head
- H-tire pressing roller

The function of helping arm's control handle is as follows:

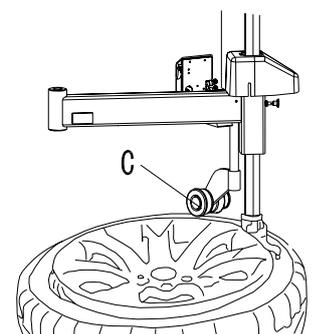


Fig 22

Roller lifting handle (D, Fig 16) is for lifting and lowering roller C、 G so as to adjust tyre demount/mount vertical height. Operate handle (D, Fig 16) up, then roller C、 G goes up; Operate handle (D, Fig 16) down, then roller C、 G goes down.

11.2 Operation

It is difficult to demount and mount big low profile tyre. If operation is proper, it is very easy to use helping arm device to demount and mount tyre from rim. The helping arm device may also be used when demounting and mounting normal tyre with resistance.

a. Clamp rim

Firstly, press both side tyre loose as per operation instruction in user's manual, fixing the tire on the tire installation base.

b. Demount tyre

1. Press tyre with right pressing roller C/G to a position 3cm lower than rim edge, lubricate tyre bead, rotate turntable, lift roller C/G. (Fig 16)

2. Move demount/mount head close to edge of rim, keep a 2-3mm gap between demount/mount head and rim plane, lock vertical arm, adjust screw bolt in column to position swing arm.

3. Nearby demount/mount head, insert lift lever N into tyre, use lift lever to lift bead upon knob of demount / mount head. Manually rotate roller C to inner side, pull handle D down, make roller C to press rim, keep 3-5mm gap between demount/mount head and rim, make sure demount/mount head not damage rim, rotate tire installation base, demount tyre upper bead (Fig 18)

4. Push handle D up, lift roller C,G, press switch F, loosen right pressing arm,

Lift tyre up, insert lifting level into bottom tyre bead nearby demount/mount head, lift bead upon knob of demount/mount head and rotate turntable to demount down tyre bead

During the above operation, the user can use the left help arm to help the working. For example: pressing the wheel hub, flattening or lifting up the tire from the side with the tire pressing, show as Fig20&21.

c. Install the tyre

1. Lubricate tyre and rim edge with lubricant to avoid damage of tyre. Adjust height of demount/mount head and make tyre bottom bead upon rear of demount/mount head and below front of mounting/mounting head. Rotate tire installation base to mount bottom bead.

2. Make tyre top bead upon rear of demount/mount head and below front of demount/mount head, clip the tyre pressing head(up) on the rim. Move the auxiliary tire pressing head (up) near the mounting/demounting head (distance 3~4cm), lower "tire pressing head (up)" to press down the tyre 3-5cm below mounting/demounting head, rotate turntable, tire pressing head (up) will follow in synchrony as to rotate and press the tyre down in tyre rim, no intervention is needed during this process.

NOTE: It should be specially noted for below operation.

- 1) Smear lubricant on tyre bead to protect tyre 2) make hands far away from roller C,G

Attention:

- 1) To prevent collision of help arm and mounting/demounting head, do not excessive rotate the the installing base while using help arm;
- 2) Make sure the tire pressing head (up) never press on the tyre rim, the friction between them will damage the tyre rim! Keep your hands away from the tire pressing head (up)!

12. Inflating the tyre:

WARNING: all operations in this chapter refer to manual of machine equipped with inflating gun.

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.



图 23

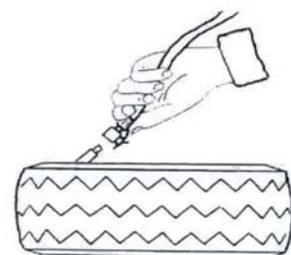


Fig 24

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) Lubricating 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; shown as Fig 24
- 6) Continue inflating and check the air pressure frequently until to reach the required pressure..

NOTE:

- 1) **If not observe following warning and instruction, it may cause serious injury or death to operators or people beside . When inflating tyre or locking rim, air pressure must not exceed 3.5bar (50psi) .**
- 2) **If higher air pressure is required to inflate tyre, take tyre off from tyre changer, and put it into inflating cage, then start inflating. It is strictly forbidden that inflating tyre with pressure higher than that recommended by tyre manufacturer**
- 3) **Only operator who has been specially trained can operate. All other people are not allowed to operate or approach the tyre changer.**

13. Moving machine :

A forklift is required to move the tyre changer. Cut off air supply and electricity supply, lift base a little bit, insert lift fork into bottom base, move tyre changer to new position, then fix tightly

NOTE: installation position of tyre changer must comply with safety regulation.

14. Maintenance :

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

Caution: before performing any maintenance, disconnect the tyre changer from the electric power supply and pneumatic power supply, and tread 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 tire installation base with diesel oil once per week and lubricate the slides and shafts.
- 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 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, and otherwise adjust the screw (D) that controlled oil enters with minus screwdriver. (Fig 25)

Note: in the event of tire installation base 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 26)

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

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;
3. Clean the mufflers with compressed air; please replace it referring to the spare parts list if it is damaged. (Fig 27)

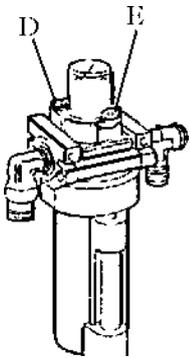


Fig 25

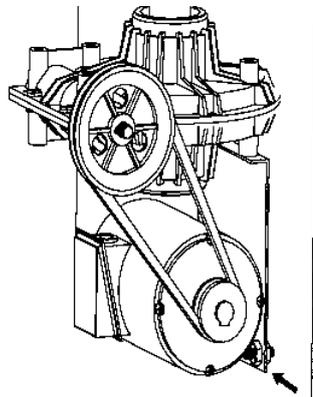


Fig 26

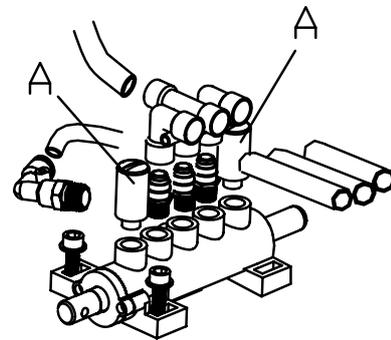
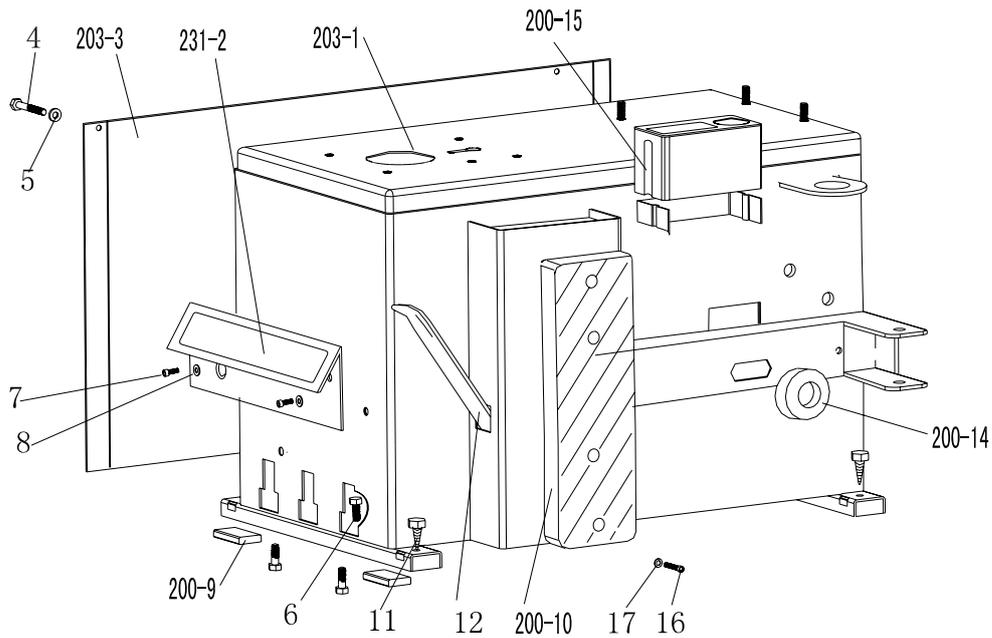


Fig 27

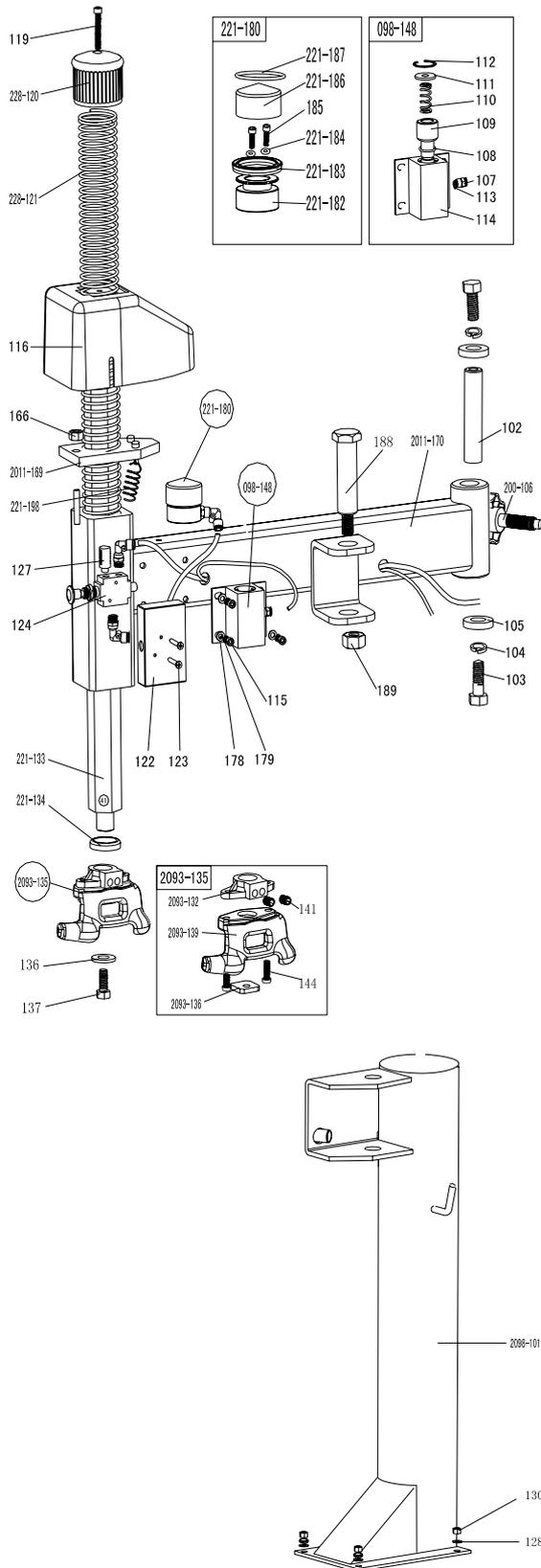
15. Trouble shooting table:

Problem	Reason	Solution
The turntable rotate just in one direction or can't rotate.	Reverse Switch broken	Replace the Reverse Switch
	Belt broken	Replace the belt
	The Motor's malfunction	Check the motor cable or terminal block wire; Replace the motor if it was broken.
Demount or fix the wheel, the turntable can't lock (spin with wheel); The jaws delay to open/close; The turntable locks the rim incorrectly.	Leakage of Air network	Check all the parts on the air network.
	The clamping cylinder can't work.	Replace the cylinder piston.
	Worn jaws	Replace the jaws.
	Broken washers of the chuck cylinder	Replace it.
The demount/mount head always touch the rim during operation.	The locking plate incorrectly adjust or unqualified.	Replace or adjust it.
	Screws on the chuck loose; the Hexagonal Vertical Arm can't be locked by Locking Plate	Tighten the screws; replace the Locking Plate.
The Bead Breaker Pedal and Jaw open and close Pedal can't turn back to the original position.	pedal spring broken	Replace it.
The Bead Breaker shovel operates difficulty.	Jammed silencer	Clean it or replace it.
	The washer on the Bead Breaker cylinder is broken.	Replace it.

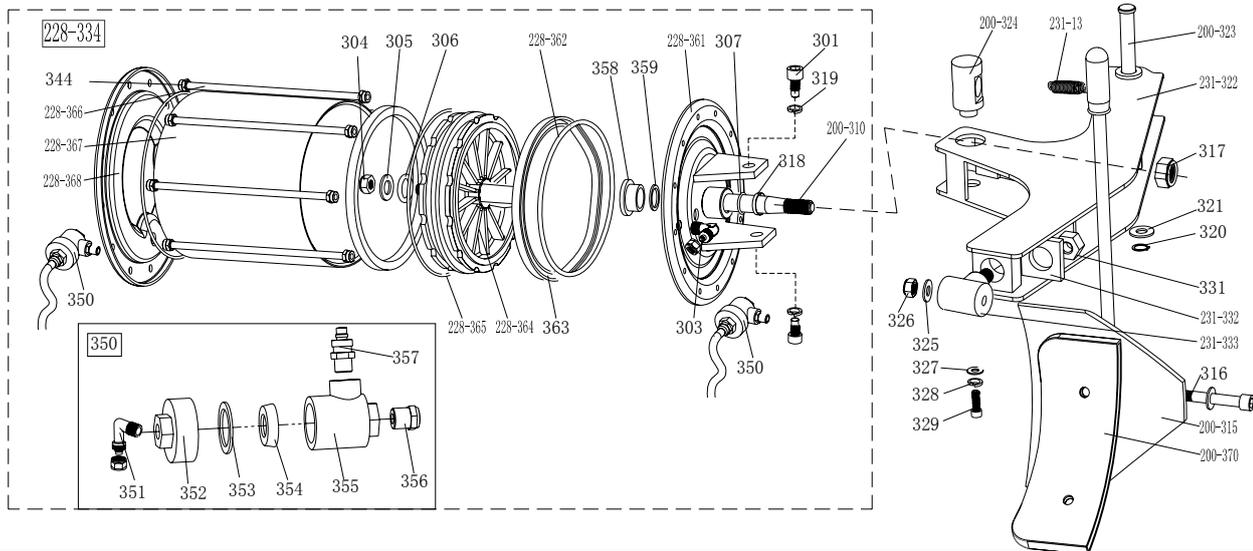
16. Exploded drawing



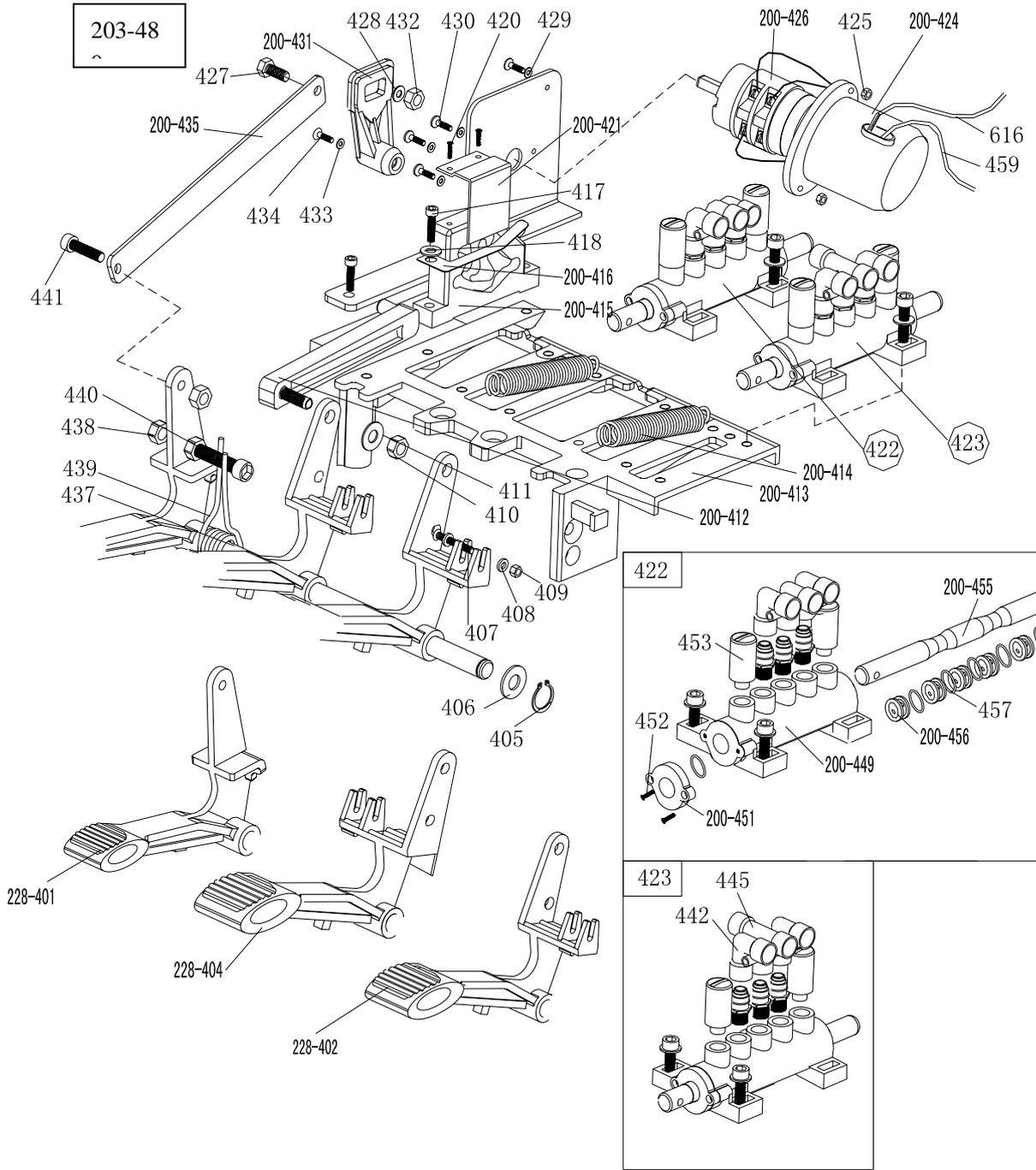
203-1	CX-203-010000-0	Machine body
231-2	CZ-231-080000-0	Pedal front cover
203-3	CX-231-020000-0	Left cover
4	B-010-060101-0	Hex socket head bolt M6×10
5	B-040-061412-1	Flat washer Ø6*14*1.2
6	B-014-080251-0	Outer hex bolt M8x25
7	B-010-080201-0	Hex socket head bolt M8×20
8	B-040-061412-1	Flat washer Ø 6*14*1.2
200-9	C-000-001020-0	Rubber foot buffer
200-10	C-200-500000-0	Bead breaker buffer
11	B-027-060401-0	Grounding screw M6x40
12	C-200-580000-0	Lifting lever
200-14	C-200-510000-0	Bead breaker arm rubber
200-15	C-200-470000-0	Oil-water box
16	B-010-080201-0	Hex socket head bolt M8x20
17	B-040-081715-1	Flat washer Ø 8*17*1.5



203-101	CX-203-250000-0	Round column
200-102	CX-200-190000-0	Swing arm pin
103	B-014-140351-0	Outer hex bolt M14x35
104	B-050-140000-0	Spring washer Ø14
105	CX-200-140000-0	Big washer
200-106	C-200-350000-0	Column adjust handle
107	S-010-050004-0	Quick stright union M5- Ø 4
108	S-000-030355-0	O-seal 30X3.55
109	CX-007-180600-0	098 Swing arm spring plate
110	C-007-180700-0	098 Swing arm spring
111	CX-007-180800-0	098 Swing arm plate washer
112	B-055-300002-0	Snap ring Ø30(hole)
113	S-000-005200-0	O-seal Ø 5.6X2
114	CX-098-080000-0	098 Pneumatic lock barrel
115	B-010-060201-0	Hex socket head bolt M6X20
116	C-298-480000-0	Locking plate cap
119	B-010-100301-0	Hex socket head bolt M10x30
228-120	C-200-490000-0	Vertical arm cap
228-121	C-200-390000-0	Vertical arm spring
122	C-098-090000-0	Locking switch box
123	B-017-040301-0	Cross head screw M4*30
124	S-030-010414-2	Hand valve
127	S-023-010801-0	Muffler 1/8"
221-133	CX-221-160000-0	Vertical arm
221-134	C-228-520000-0	Vertical arm washer
136	CX-200-170000-0	Mount/demount head flat washer
137	B-014-100251-0	Outer hex bolt M10x25
098-148	CX-098-080000-0	098 Pneumatic lock
166	B-001-100001-0	Self-locking nut M10
2011-169	CX-298-22000-0	Hex locking board 2011
2011-170	CX-211-180000-0	Swing arm 2011
178	B-040-061210-1	Flat washer Ø6
179	B-050-060000-0	Spring washer Ø6
221-180		Complete locking cylinder
221-182	C-221-090100-0	Locking cylinder piston
221-183	S-005-050065-0	V-seal 60*50*6.5
221-184	S-000-005200-0	O- seal Ø 5.6*2
185	B-010-060551-0	Hex socket head bolt M6x55
221-186	CX-221-090200-0	Locking cylinder cover Ø 60
221-187	S-000-052200-0	O-Seal Ø52*2
188	CX-098-030000-0	Pressing arm pin (right)
189	B-001-160001-1	Self-locking nut M16*1.5
221-198	C-221-400000-0	Hex locking board spring
2093-135	CW-113-020930-5	Complete plastic mount/demount head
2093-132		Plastic mount/demount head plate
2093-136	CX-293-150300-0	Mount/demount head washer
2093-139	C-000-150100-0	Plastic mount/demount head
141	B-007-120161-0	Hex socket head bolt M12X16
144	B-010-100201-0	Hex socket head bolt M10*20

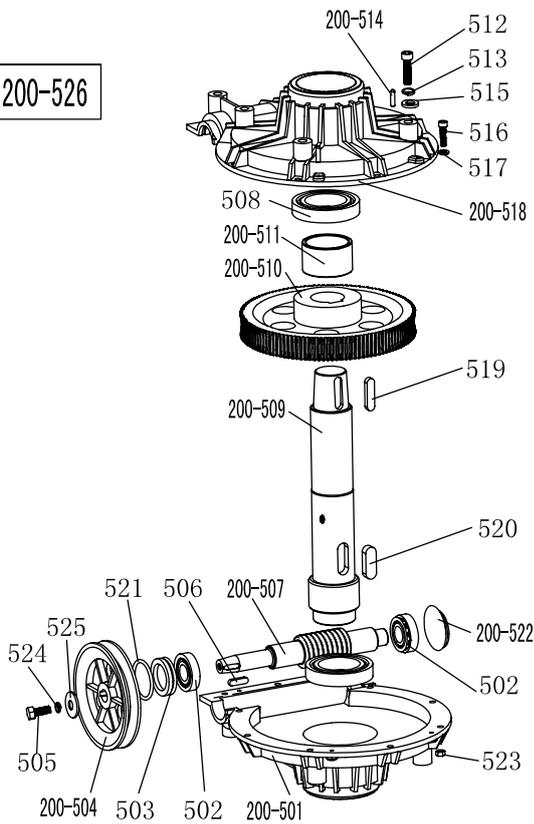


231-13	C-231-360000-0	Bead breaker arm spring	231-332	CX-231-030900-0	Enlarge bead breaker arm rotating washer
301	B-010-140301-0	Hex socket head boltM14×30	231-333	CX-231-030800-0	Enlarge bead breaker arm rotating shaft
303	S-018-010408-0	Union (90°) 1/4-Ø8	228-334		Self-locking nut
304	B-004-160001-1	Nut M16*1.5	344	B-001-080001-0	Self-locking nut
305	B-040-162820-1	Flat washer Ø16*28*2	350	CW-112-209800-0	Bead breaker cylinder exhaust valve
306	S-000-016265-0	O-seal Ø 16*2.65	351	S-012-010808-0	Union 1/8-Ø8
307	S-000-019262-0	O-seal Ø 19.6*2.62	352	C-098-600200-0	Bead breaker cylinder exhaust valve cover
200-310	C-200-050100-0	Bead breaker cylinder piston rod	353	C-098-600400-0	Seal washer
200-315	CX-200-070000-0	Bead breaker shovel assembly	354	C-098-600300-0	Bidirectional seal
316	B-010-120901-0	Hex socket head bolt M12×90	355	C-098-600100-0	Bead breaker cylinder exhaust valve barrel
317	B-004-160001-1	Self-locking nut M16*1.5	356	S-023-010401-6	Muffler
318	U-006-000001-2	Guide belt	357	S-010-010408-0	Stright union 1/4- Ø8
319	B-050-140000-0	Spring washer Ø14	358	CZ-298-050900-0	Nylon sleeve
320	B-055-160001-0	Snap ring Ø16	359	S-005-0200075-0	V-seal 20*28*7.5
321		Flat washer	228-361	CX-298-050500-0	Bead breaker cylinder cover assembly
231-322	CX-231-030000-0	Enlarge bead breaker arm 231	228-362	S-000-195265-0	O-seal Ø198*3.1
200-323	CX-200-040000-0	Bead breaker pin	363	S-005-200184-0	Y-seal D200*184*12
200-324	CX-200-050600-0	Bead breaker cylinder rotating pin	228-364	C-298-050200-0	Bead breaker cylinder piston D200
325	B-040-122520-1	Flat washer Ø12*24*2	228-365	S-000-180500-0	O-seal Ø180*5
326	B-001-120001-0	Self-locking M12	228-366	C-298-051000-0	Threaded connection rod
327	B-040-083030-1	Flat washer Ø8*30*3	228-367	C-298-050300-0	Bead breaker cylinder barrel D200
328	B-050-080000-0	Spring washer Ø8	228-368	C-298-051100-0	Bead breaker cylinder back cover
329	B-014-080201-0	Outer hex bolt M8×20	200-370	C-200-070600-0	Bead breaker shovel protection cover(optional)
331	B-001-160001-0	Self-locking nut M16*1.75			

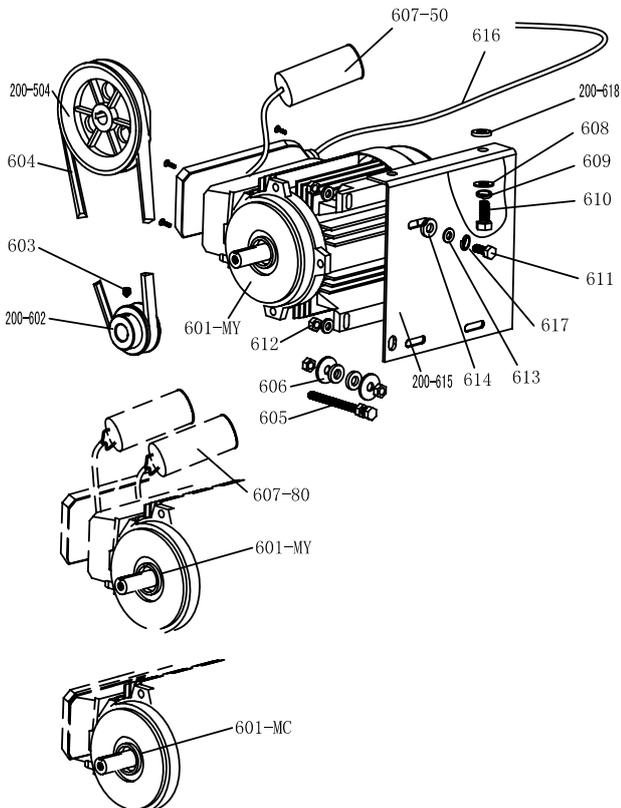


228-401	CX-228-060400-0	Reverse switch pedal	428	B-040-061210-1	Flat washer Ø 6X12X1
228-402	CX-228-060300-0	5-way valve pedal(right)	429	B-040-040000-1	Flat washer Ø 4
228-404	CX-228-060200-0	5-way valve pedal(left)	430	B-024-040161-0	Cross-round head screw M4*16
405	B-055-120001-0	Snap ring Ø12	200-431	C-200-530000-0	Reverse switch handle
406	B-040-122520-1	Flat washer Ø12*24*2	432	B-001-060001-0	Self-locking nut M6
407	B-024-040301-0	Cross head screw M4X30	433	B-040-030000-1	Flat washer Ø3
408	B-040-040000-1	Flat washer Ø 4	434	B-017-030161-0	Cross head screw M3X18
409	B-001-040001-0	Self-locking nut M4	200-435	CX-200-060600-0	Pedal connection rod
410	B-001-080001-0	Self-locking nut M8	437	CX-200-060700-0	Pedal front shaft
411	B-040-081715-1	Flat washer Ø8*17*1.5	438	B-004-080001-0	Nut M8
200-412	C-200-061300-0	Cam connection rod	439	C-200-370000-0	Pedal twist spring
200-413	C-200-060100-0	Pedal suport board	440	B-010-080501-0	Hex socket head bolt M8×50
200-414	C-200-380000-0	Pedal Spring	441	B-010-080201-0	Hex socket head bolt M8×20
200-415	C-200-061500-0	Cam	442	S-012-010808-0	Quick nion 1/8- Ø 8
200-416	C-200-810000-0	Cam washer	445	S-016-010808-2	T-union1/8-2* Ø 8
417	B-010-060201-0	Hex socket head bolt M6×20	200-449	C-200-060901-0	5-way valve (left)
420	B-019-290121-0	Cross head self tapping screw	200-451	C-200-061100-0	5-way valve cover
200-421	CX-200-060500-0	Cam cover	452	B-024-290121-0	Cross head screw ST2.9*14
422	CW-110-020000-0	Complete 5-way valve for clamping cylinder,without valve rod	453	S-023-010801-0	Muffler 1/8"
423	CW-110-020001-0	Complete 5-way valve for bead breaker cylinder,without valve rod	200-455	CX-200-061200-0	5-way valve rod
200-424	C-200-061400-0	Reverse switch cover	200-456	C-200-061000-0	5-way valver rod spacer
425	B-004-040001-0	Nut M4	457	S-000-012400-0	O-seal 12*20*4
200-426	S-060-016000-1	Reverse switch	459	C2-000-103150-0	Power suppler cable
427	B-010-060201-0	Hex socket head bolt M6×20	616	C2-000-205150-0	Motor cable
			203-480	CW-109-020000-0	Complete 3-pedals assembly 203

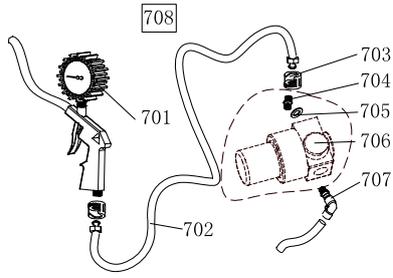
200-526



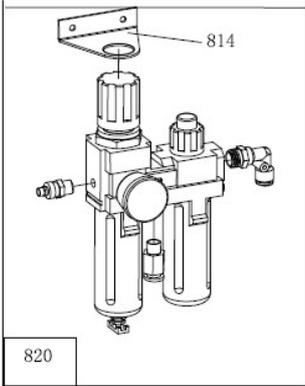
200-501	C-300-320302-0	Gear box lower cover
502	S-040-030204-0	Bearing 30204
503	S-005-020080-1	Gear box seal ϕ 20*35*8
200-504	C-200-320500-0	Gear Belt pulley
505	B-014-080251-0	Outer hex bolt M8x25
506	B-065-006020-0	Key washer 6x20
200-507	C-200-320400-0	Worm rod
508	S-040-006010-0	Bearing 6010
200-509	C-200-320200-0	Worm gear shaft
200-510	C-200-320100-0	Worm gear
200-511	CZ-200-320600-0	Worm gear shaft spacer
512	B-014-100551-0	Outer hex bolt M10x55
513	B-050-100000-0	Spring washer ϕ 10
200-514	B-060-006020-0	Pin 6X20
515	B-040-102020-1	Flat washer ϕ 10*20*2
516	B-010-060201-0	Hex socket head bolt M6x20
517	B-040-061412-1	Flat washer ϕ 6*14*1.2
200-518	C-300-320301-0	Gear box upper cover
519	B-065-010040-0	Key washer 10x40
520	B-065-014040-0	Key washer 14x40
521	S-000-027310-0	O-seal ϕ 27.8*3.1
200-522	C-200-320700-0	Oil resistant seal
523	B-001-060001-0	Self-locking nut M6
524	B-050-080000-0	Spring washer ϕ 8
525	B-040-083030-1	Flat washer ϕ 8*30*3
200-526	CW-107-020001-0	Complete gear box



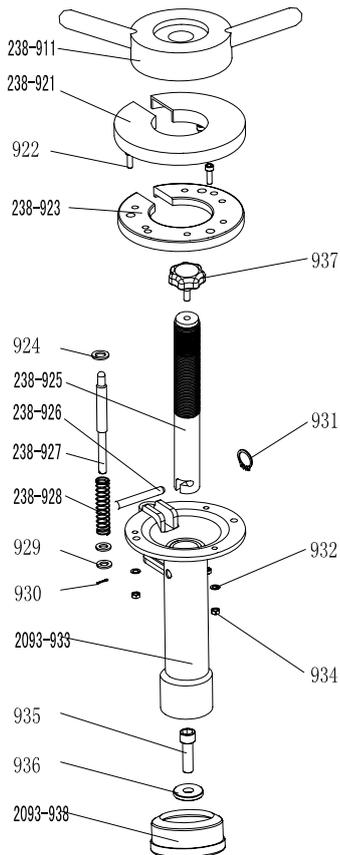
200-504	C-200-320500-0	Gear Belt pulley
601-MC	S-050-220110-5	Motor 220V/50HZ
601-MY	S-050-230075-0	Motor 220v
200-602	CX-200-330000-0	Motor Belt pulley
603	B-007-080121-0	Hex socket head bolt M8x12
604	S-042-000686-0	Tyre changer belt A-28
605	B-014-080651-0	Outer hex bolt M8X65
606	B-040-083030-1	Flat washer ϕ 8X30X3
607-80	S-063-008000-0	Capacitor 80 μ f, 110V
607-50	S-063-005000-0	Capacitor 50 μ f, 220V
608	B-040-102020-1	Flat washer ϕ 10X20X2
609	B-050-100000-0	Spring washer ϕ 10
610	B-014-100251-0	Outer hex bolt M10X25
611	B-014-080351-0	Outer hex bolt M8X35
612	B-004-080001-0	Nut M8
613	B-040-082220-1	Flat washer ϕ 8X22X2
614	C-200-560000-0	Motor rubber washer
200-615	CX-200-340000-2	Motor support
616	CZ-000-205150-0	Motor cable 5x1.0
617	B-050-080000-0	Spring washer ϕ 8
200-618	C-200-560000-0	Motor rubber buffer



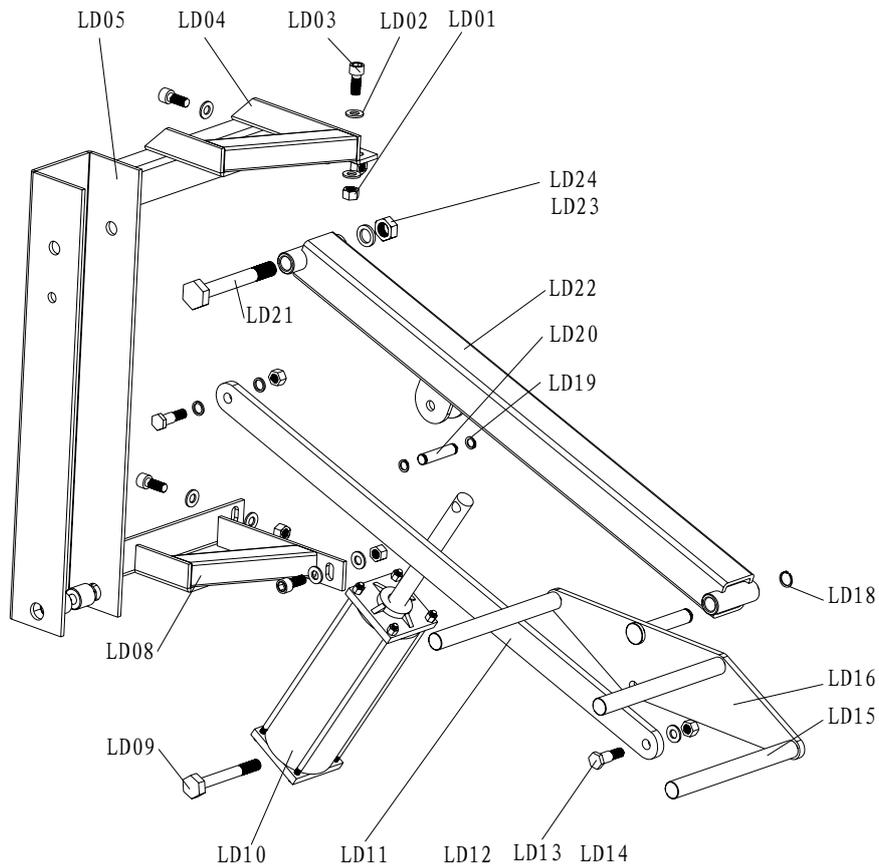
701	S-038-000100-0	Inflating gun indicator
702	S-035-014150-1	Rubber connection hose
703	S-025-104008-0	Notch nut
704	S-011-010414-1	Straight union 1/4-1/4
705	B-040-132420-1	Flat washer Ø13
706	S-030-010400-2	Pressure adjust valve
707	S-012-010408-0	Quick union 1/4-Ø8
708	CW-090-000201-0	Complete inflating gun



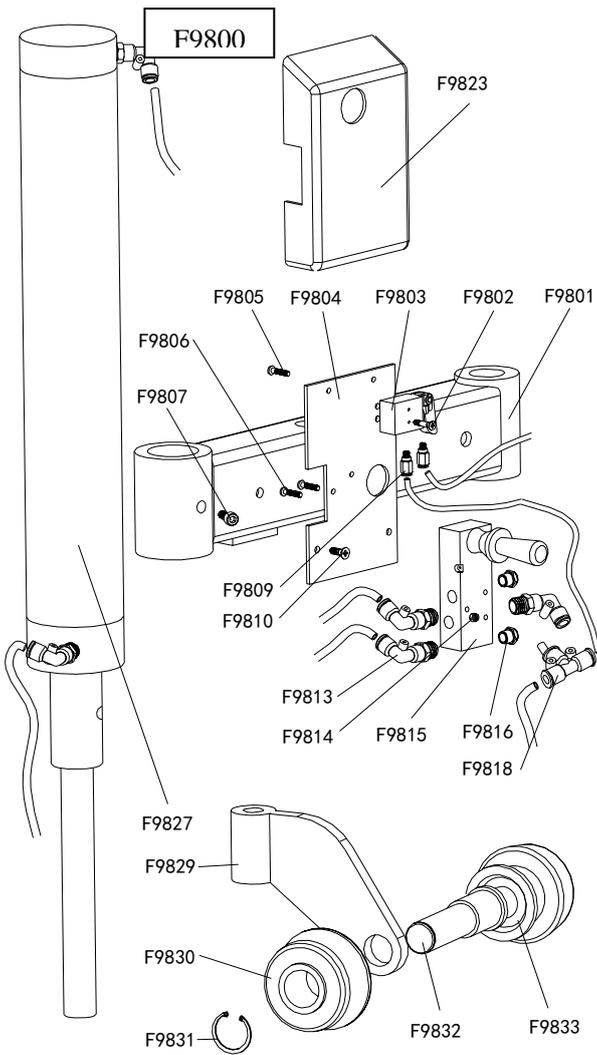
814	C-200-011200-0	Oil fog maker suport
820	CW-114-035000-0	Complete oil fog maker 3500



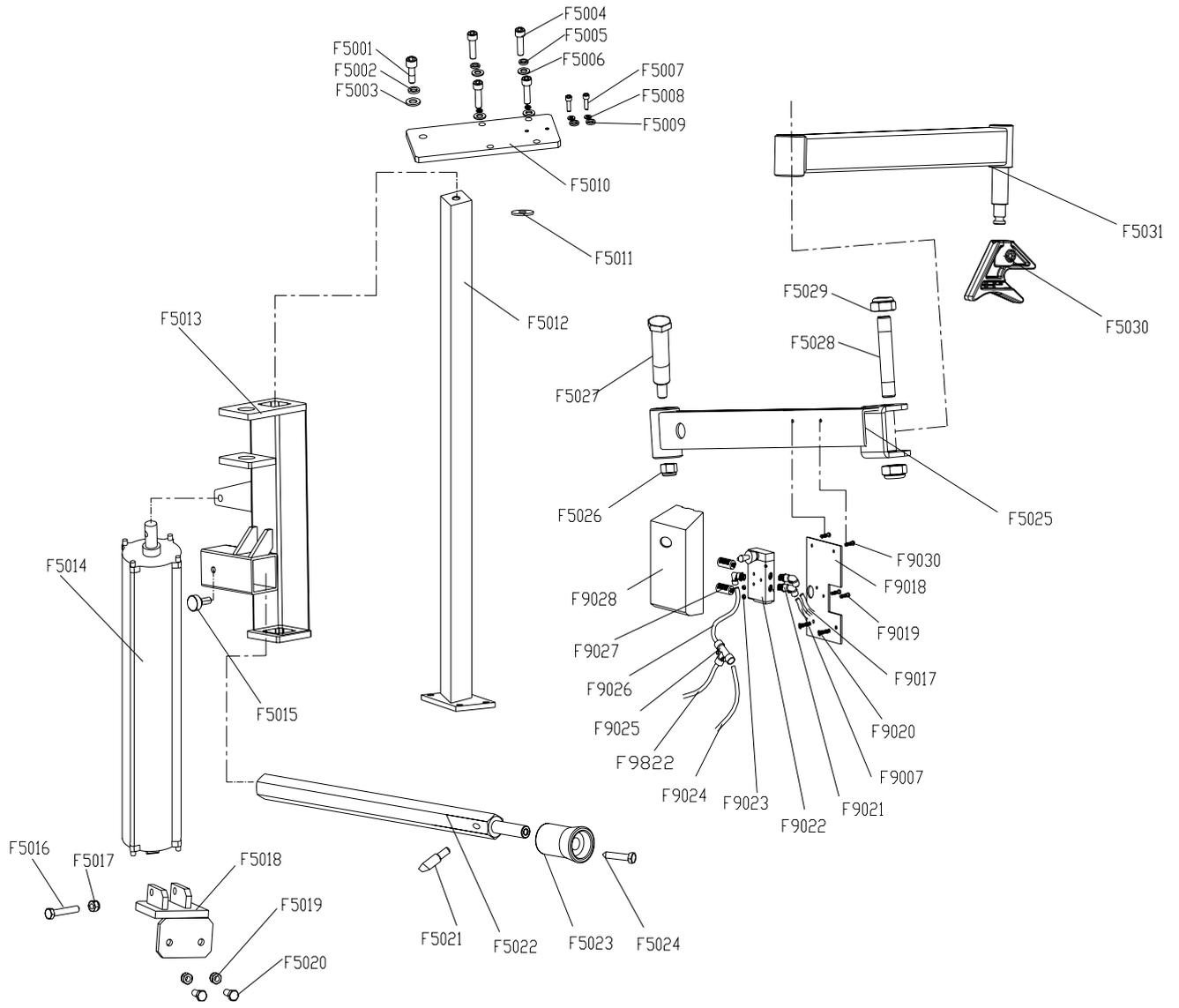
238-911	CA-060-000238-0	Quick release nut 238
238-921	C-238-130800-0	Rubber protection washer
922	B-010-080201-0	Hex socket head bolt M8x20
238-923	C-238-130700-0	Tire installation plate cushion
924	CX-238-130300-0	Retaining ring up
238-925	CX-238-131100-0	Thread shaft
238-926	CX-238-131000-0	Connection pin
238-927	CX-238-130200-0	Auxiliary rotating rod
238-928	C-238-130400-0	Outer spring
929	CX-238-130600-0	Retaining ring down
930	B-070-020025-0	Split pin 2X25
931	B-055-080001-0	Snap ring Ø8
932	B-040-081820-1	Flat washer Ø8
2093-933	CX-238-130100-0	Tire installation base
934	B-004-080001-1	Nut M8
935		Hex socket head bolt(full thread)
936		Flat washer Ø16
937	C-238-201501-0	Adjust handle
2093-938		Protection cover



LD01	B-004-100001-0	Nut M10
LD02	B-040-102020-1	Flat washer Ø10
LD03	B-010-100251-0	Hex socket head bolt M10×25
LD04	CC-0LD-020000-0	Complete up suport
LD05	CX-0LD-010100-0	Tire lifting suport
LD08	CC-0LD-030000-0	Complete down suport
LD09	B-014-121101-0	Outer hex bolt M12×110
LD10	CA-005-000001-D	Complete rise-fall cylinder
LD11	CX-0LD-010500-0	Suport rod
LD12	C-0LD-010406-0	connection bolt
LD13	B-040-102020-1	Flat washer Ø10
LD14	B-004-100001-0	Nut M10
LD15	CC-0LD-060300-0	Tire lifting rod
LD16	CC-0LD-060100-0	Tire lifting suport board
LD18	B-055-160001-0	Snap ring Ø16
LD20	CX-0LD-010405-0	Rise-fall pin
LD21	B-014-161201-0	Outer hex bolt M16×120
LD22	CX-0LD-010400-0	Lifting arm
LD23	B-001-160001-0	Self-locking nut M16
LD24	B-040-162820-1	Flat washer Ø16



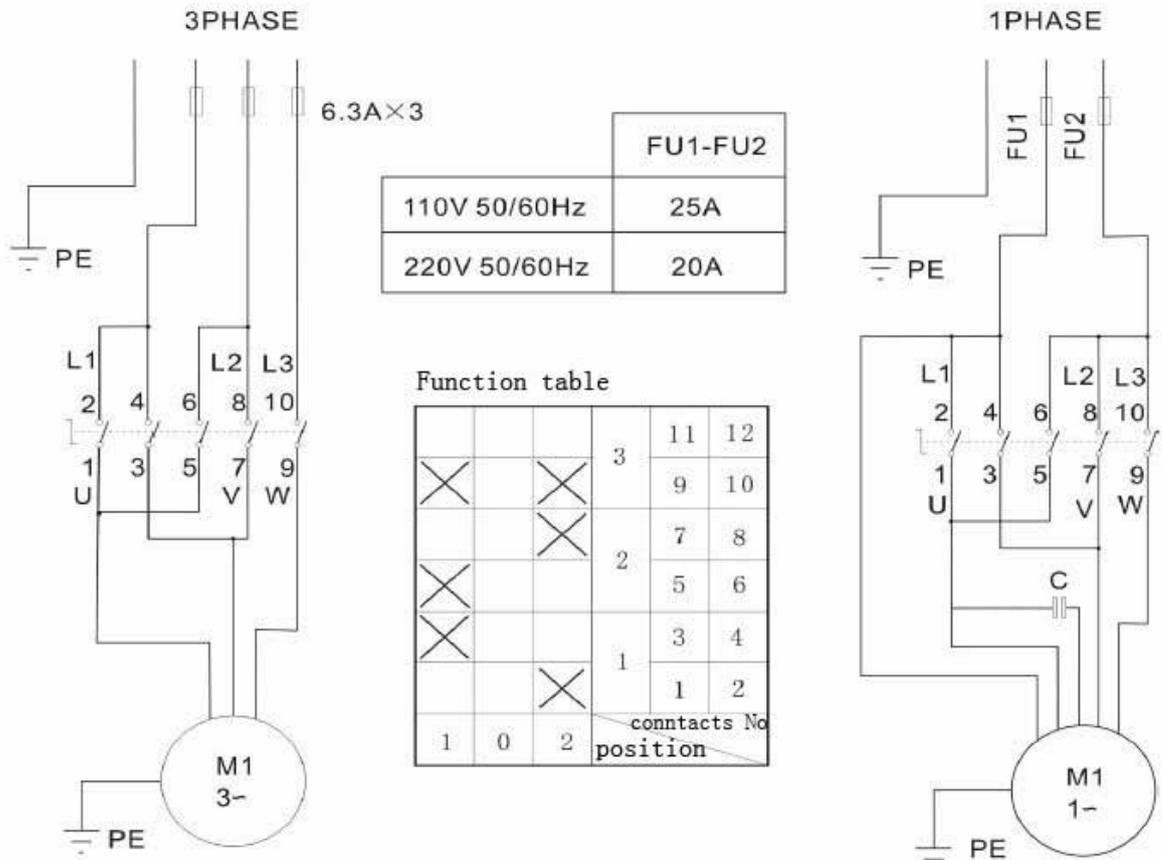
F9801	CX-098-020000-0	098 Pressing arm(right)
F9802	B-024-050101-1	Cross head Screw M5X10
F9803	S-030-010414-0	Pneumatic valve
F9804	CX-005-200000-0	Raise-fall switch base plate
F9805	B-017-040161-0	Cross flat head screw M4*16
F9806	B-017-040301-0	Cross flat head screw M4*30
F9807	B-007-100121-0	Hex socket head bolt M10*12
F9809	S-010-050004-0	Quick straight union M5-Ø4
F9810	B-010-050161-0	Hex socket head bolt M5*16
F9813	S-012-010406-0	Quick union 1/4-Ø6
F9814	B-004-040001-1	Nut (silver) M4
F9815	S-030-010818-0	Raise-fall control valve
F9816	S-023-010801-6	Muffler (brass)
F9817	S-012-010406-0	L-union 1/4-φ 6
F9818	S-013-104206-0	T-union 2XØ6-Ø4
F9820	S-017-010806-2	T-union 1/8-2*Ø6
F9823	C-007-181000-0	Control valve protect cover (right)
F9827	CA-005-209800-2	Complete 098 cylinder
F9828	S-012-010406-0	Quick Union 1/4-Ø6
F9829	CX-098-040000-0	Pressing roller bracket suport
F9830	C-098-060100-0	Tyre pressing roller 1
F9831	B-055-300002-0	Snap ring Ø30(hole)
F9832	CX-098-050000-0	Tyre pressing roller shaft
F9833	C-098-060200-0	Tyre pressing roller 2
F9800		Complete 098 help arm



F5001	B-010-120401-0	Hex socket head bolt M12X40	F5016	B-014-100601-0	Outer hex bolt M10X16
F5002	B-040-122520-1	Flat washer Ø12X24X2	F5017	B-001-100001-0	Self lock nut M10
F5003		Spring washer /Ø12	F5018	CX-099-040102-0	Base
F5004	B-010-100401-0	Hex socket head bolt M10X40	F5019	B-001-100001-0	Self lock nut M10
F5005	B-040-102020-1	Flat washer Ø10	F5020	B-010-100401-0	Hex socket head bolt M10X40
F5006	B-050-100000-0	Spring washer Ø10	F5021		Thrust handle
F5007	B-010-060201-0	Hex socket head bolt M6X20	F5022	C-200-580000-0	Lifting lever
F5008	B-040-061210-1	Flat washer Ø6	F5023	CZ-099-040104-2	Tire pressing ruller
F5009		Spring washer Ø6	F5024	B-010-100251-0	Hex socket head bolt M10X25
F5010	CX-005-020000-B	Tire pressing arm bottom plate	F5025	CX-005-030000-B	Tire pressing arm 005B
F5011		Flat washer Ø12	F5026	B-001-160001-0	Self lock nut M16
F5012	CX-099-040101-0	Column	F5027	CX-005-050000-B	Tire pressing arm pin
F5013	CX-005-010200-B	Raise-fall sleeve	F5028	CX-036-050000-0	Connection bolt
F5014	C-005-120000-0	Raise-fall cylinder	F5029	B-001-160001-0	Self-lock nut M16
F5015	CX-200-230000-0	Locking handle	F5030	C-008-090100-0	Tire pressing head (upper)
			F5031	CX-005-040000-B	Tire pressing arm connector

F9007	S-035-060040-1	Air hose (PU)6*4
F9017	S-035-060040-1	Air hose (PU)6*4
F9018	CX-005-200000-0	Raise-fall switch baseboard
F9019	B-017-040301-0	Cross- flat head screw M4*30
F9020	B-024-050161-1	Cross round head screw M5*16
F9021	S-012-010406-0	Quick union 1/4-φ6
F9022	S-030-010818-0	Handle valve 4H230L-08
F9023	B-004-040001-1	Nut M4
F9024	S-035-060040-1	Air hose (PU)6*4
F9025	S-015-000006-3	T-union 3-φ6
F9026	S-035-060040-1	Air hose (PU)6*4
F9027	S-023-010801-0	Muffle1/8
F9028	C-007-181000-0	Control valve cover
F9030	B-017-040161-0	Cross- flat head screw M4*16

17. Circuit diagram



18. Pneumatic drawing

