

INDEX	PAGE
1. Introduction:	1
2. Safety Warnings:	1
3. Technical data:	2
4. Transport:	2
5. Unpacking & Inspection:	2
6. Workplace requirements:	2
7. Position and installation:	2
8. Electric and Pneumatic connections:	3
9. Adjusting operation:	3
9.1 Breaking the tyre bead:	4
9.2 Demounting tyre:	4
9.3 Mounting tyre :	4
10. Helping arm application:.....	5
10.1 098 Help Arm Components.....	5
10.2 098 Operation.....	5
10.3 009 Help Arm Components.....	6
10.4 009 Help Arm operation:.....	6
11. Inflating the tyre:	7
12. Moving machine:	8
13. Maintenance :	8
14. Trouble shooting table:	9
15. Exploded drawing	10
16. Circuit diagram	21
17. Pneumatic drawing.....	21

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.

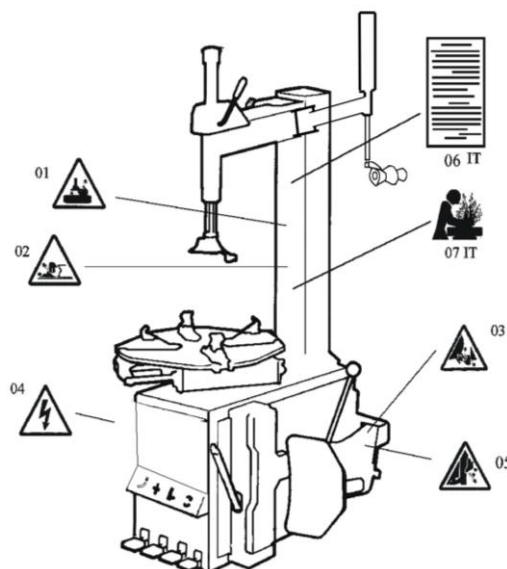
1. Introduction:

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;
- 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:

External locking rim dimensions	12~26 "
Internal locking rim dimensions	14~28 "
Max. Wheel diameter	1143mm (45 ")
Max. Wheel width	406mm (16 ")
Working Pressure	8-10bar
Power supply	110V (1ph)/ 220V (1ph)/ 380V (3ph)
Optional Motor power	0.75/0.55/1.1 kw
Max. Rotating Torque (Turntable)	1078 Nm
Overall Dimension	113X90X103cm
Noise Level	75 Db

Rim dimensions defined at above table are based on the iron wheel rims. Aluminum rims are thicker than the iron wheel rims, so here above rim dimensions are just for the reference.

4. Transport:

When transporting, the machine should be with original package and placed according to the mark on the package. For the already packaged machine should be handled with a corresponding tonnage forklift for loading and unloading. The location to insert the fork feet shown as **Fig 1**

5. Unpacking & Inspection::

Pull out the nail which is nailed on the plate with tip jaw, unpack the carton and plastic cover. Check 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.

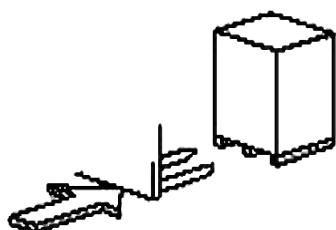


Fig 1

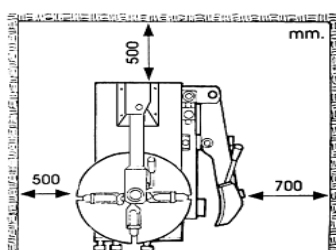


Fig 2

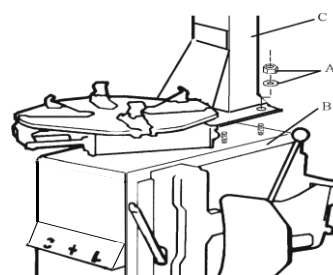


Fig 3

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 machine 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. 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.

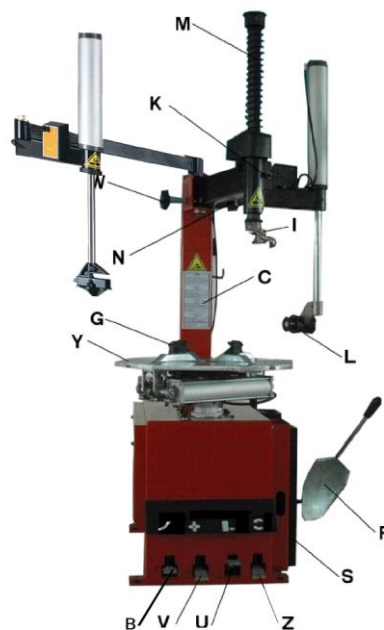


Fig 4

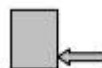
9. Adjusting operation:



Turntable Rotation Pedal (Z)



Jaws open and close Pedal (V)



Bead Breaker Pedal (U)



Rapid Tire Inflation Pedal (B)

1) Tread Turntable Rotation Pedal (Z), turntable(Y) rotates in a clockwise direction; Lift Turntable Rotation Pedal (Y), turntable (Y) rotates in an anticlockwise direction

2) Tread bead breaker pedal (U), bead breaker shovel (R) closing toward inside; Loose bead breaking pedal (U), bead breaking shovel (R) returns to original position.

3) Completely tread Jaws open and close Pedal (V), four jaws on turntable(G) open. Tread again, jaws (G) close. When clamping pedal is at middle level, jaws stop Moving. Shown as Fig 4

Operation of tyre changer consists 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.

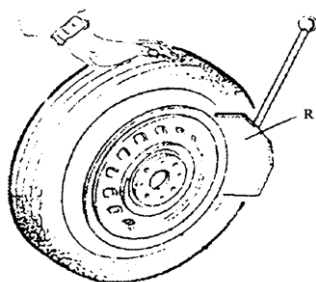


Fig 5

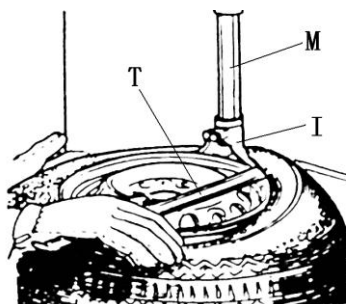


Fig 6



Fig 7

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 (R) 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 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.

Clamp the wheel methods shown as below regarded to the ruled dimension:

a- to clamp the wheel from outside::

Tread Jaws open and close Pedal (V) to halfway down to middle, position positioning for the four clamps (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 clamps (G) and let them all closed. Put the tyre on the turntable and tread 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/demounting head (I) rests next to the edge of the rim, flip the Locking Handle (K) to lock the Vertical Arm and Swing Arm in position, and also adjust the Rocker Arm make Mounting/demounting head can raise 2-3mm 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**.

With the Lifting Lever held in position, tread the Turntable Rotation Pedal (U), 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.

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

9.3 Mounting 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.

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 demounting / mounting head, and the other side of tyre bottom bead below front of demounting / mounting head. Press tyre manually or by pressing roller of helping arm, rotate turntable and tyre bottom bead can be mounted. Repeat above operation to mount tyre top bead. (Fig 7)

10. Helping arm application:

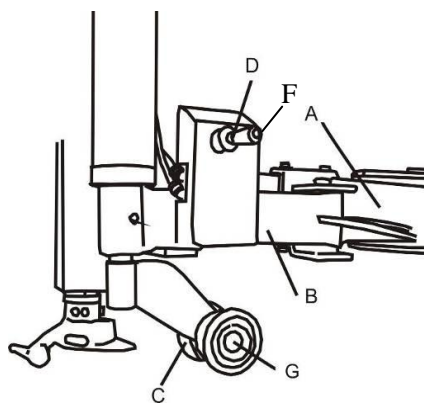


Fig 8

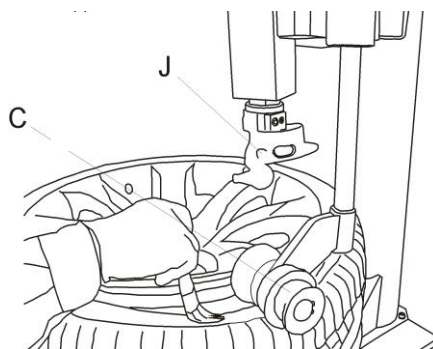


Fig 9

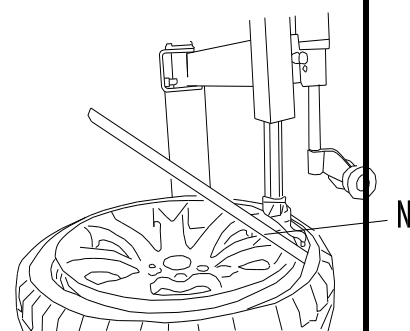


Fig 10

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

10.1 098 help arm Components

Each components of helping arm device are introduced as follows:

- | | |
|-----------------------------------|-----------------------------|
| A- Swing arm | B- Small helping arm |
| C- Roller C | D- Raise-fall roller handle |
| F- Locking switch for helping arm | G- Roller G |

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

Roller lifting handle (D, Fig 8) is for lifting and lowering roller C、G so as to adjust tyre demounting / mounting vertical height. Operate handle (D, Fig 8) up, then roller C、G goes up; Operate handle (D, Fig 8)down, then roller C、G goes down.

10.2 098 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. Force of demounting and mounting is big when helping arm device is used. And rim may be damaged easily. It is recommended that to clamp rim from outside (jaw protector may be installed on jaws). Tread relevant pedal to make jaws open to clamp edge of rim, move helping arm's rotary arm to far-end. Put on tyre, tread relevant pedal to make jaws close and to approach rim

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 9)

2. Move demounting/mounting head close to edge of rim, keep a 2-3mm gap between demounting/mounting head and rim plane, operate locking handle (K, Fig 4) to lock vertical arm, adjust screw bolt in column to position swing arm, make sure 2-3mm gap between demounting/mounting head and rim edge side

3. Nearby demounting/mounting head, insert lift lever N into tyre, use lift lever to lift bead upon knob of demounting / mounting head. Manually rotate roller C to inner side, pull handle D down, make roller C to press rim, keep 3-5mm gap

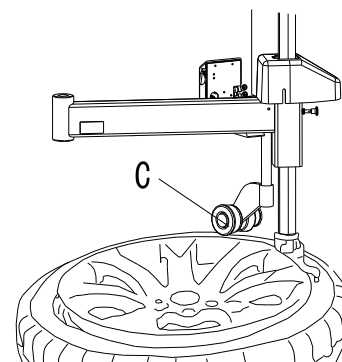


Fig 11

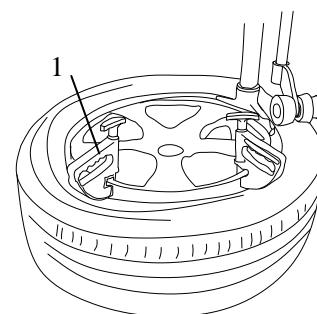


Fig 12

between demounting/mounting head and rim, make sure demounting/mounting head not damage rim, rotate turntable, demount tyre upper bead (Fig 11)

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

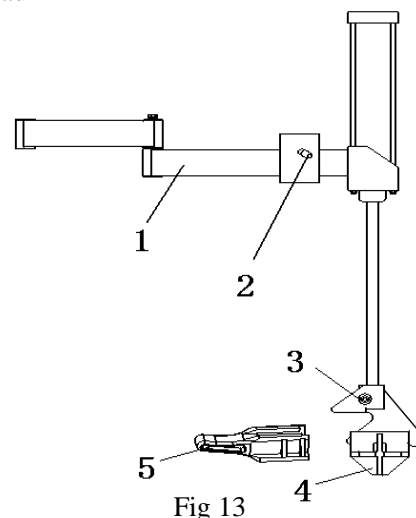
Lift tyre up, insert lifting level into bottom tyre bead nearby demounting/mounting head, lift bead upon knob of demounting / mounting head and rotate turntable to demount down tyre bead

c. Mount tyre

1.Lubricate tyre and rim edge with lubricant to avoid damage of tyre.

Adjust height of demounting/mounting head and make tyre bottom bead upon rear of demounting/mounting head and below front of emounting/mounting head. Rotate turntable to mount bottom bead.

2. Make tyre top bead upon rear of demounting/mounting head and below front of emounting/mounting head, move right pressing arm and make sure it is locked, pull handle D down to make roller C,G to press top bead to position below demounting/mounting head. Lock pressing block 1 on rim edge, rotate turntable, finish tyre mounting . Fig 12



10.3 009 Help Arm Components

All the functional parts of the this auxiliary device

- | | |
|-------------------------------|--------------------------------|
| 1, rotating arm | 2, rise-fall switch handle |
| 3, tire pressing head (upper) | 4, tire pressing head (bottom) |
| 5, tire lifting roller head | |

The specifications for switch handle of help arm 009: (shown as in Fig 13)

The rise-fall switch handle (2, Fig 13) is to control the tyre pressing devices for adjusting the height of tyre dismantled or mounted.

10.4 009 Help Arm operation:

Demount and mounting a wide flat tyre is never that easy, with the proper operation of Auxiliary arm system to demount and mounting tyre from wheel rim makes the job simpler. Auxiliary arm system can be used with normal tyres as well. First of all, follow the instruction manual to fix the tyre in position. During the demounting & mounting process, the advice provides the following miscellaneous function:

a. Fixing the tire

Lower the tyre pressing devices (3, 4 Fig 14) next to the rim canter, press the rim down to firmly fix the tyre in place, this method can fix the tyre more stable.

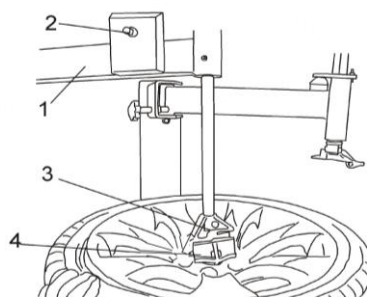


Fig.14

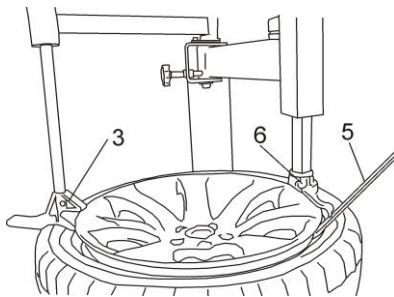


Fig15

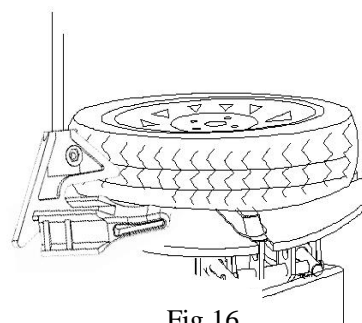


Fig.16

b. Demounting the tire

1) Breaking upper tyre bead

Remove tyre pressing device (down)(4 Fig 14), rotate arm (up) (1, Fig 14) to set tyre pressing device(up) above the tyre, lower tyre pressing device(up) by rise-fall switch handle (2 Fig 14) to fit the arc between tyre and pressing device(up), press down the tyre bead (do not to press the rim). Rotate the turntable; pressing

device (up) will follow in synchrony. This will loosen the upper tyre bead, repeat this process if necessary to achieve the best result. (Fig.14)

Attention: Lubricate the tire pressing device and the bead to prevent scratching the tyre.

2) Demounting upper tire.

Move the pressing device (up) close the mounting/demounting head, press the pressing device on the tyre bead by rise-fall switch handle, lubricate the rim edge, insert bead lifting tool (5, Fig 15) to detach tyre and rim. Raise pressing device (up) to the opposite, press down the rise-fall switch handle to enable pressing head (up) to depress tyre about 4-6cm from the rim which make enough space for the opposite site. Use lift lever to lift the bead out then hang the bead on the mounting/demounting head, lubricate the tire. Rotate the turntable, dismount the upper tyre bead. Fig.15

3) Detach tyre

Use the end of pressing head (up) with tyre pressing device to lift up the tyre from rim; Use bead lifting tool flip up the bottom tyre edge and hang it on the mounting/demounting head. Remove pressing head (up), depress the power supply pedal to rotate the turntable and completely detach the tyre out from tyre rim. Fig.16

c. Mounting the tire

While mounting the tyre, 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.

Attention:

- 1) To prevent collision of help arm and mounting/demounting head, do not excessive rotate turntable 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)!

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

11. 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.

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.

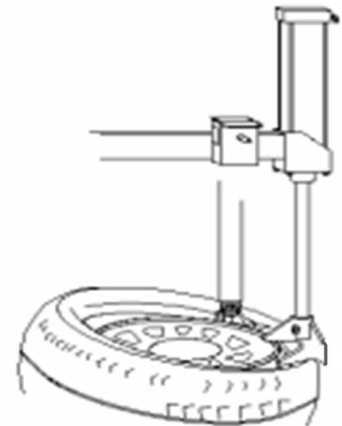


Fig 17

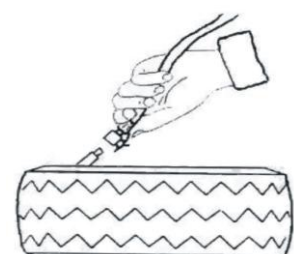


Fig 18

- 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 13
- 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.

12. 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.

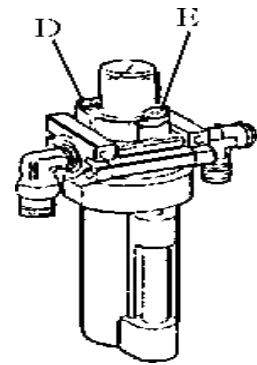


Fig 19

13. Maintenance :

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

Caution: before performing any maintenance, disconnect the tyre changer from the electric power supply and pneumatic power supply, and tread the Jaws open and close Pedal or Turntable Rotation Pedal for 3~4 times to evacuate all compressed air from the machine. Damaged parts must be replaced by professional persons with the spare parts provided by manufacturer.

- Clean the machine once every day after work. Clean the dirt on the turntable with diesel oil once per week and lubricate the slides and 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 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 enters with minus screwdriver. (Fig19)

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:

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 21)

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 22)**

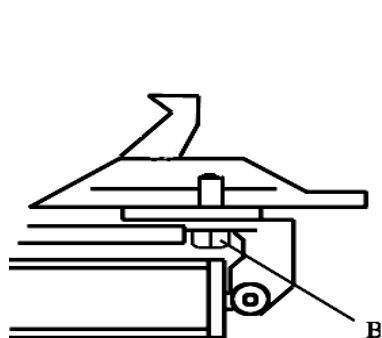


Fig 20

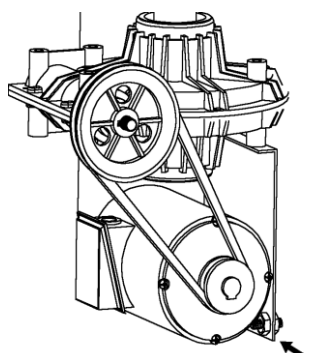


Fig 21

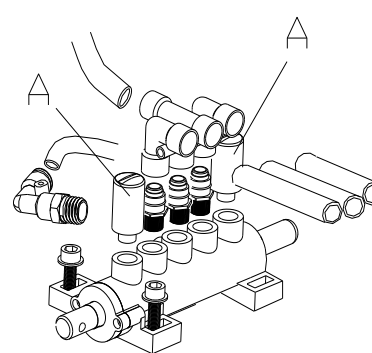
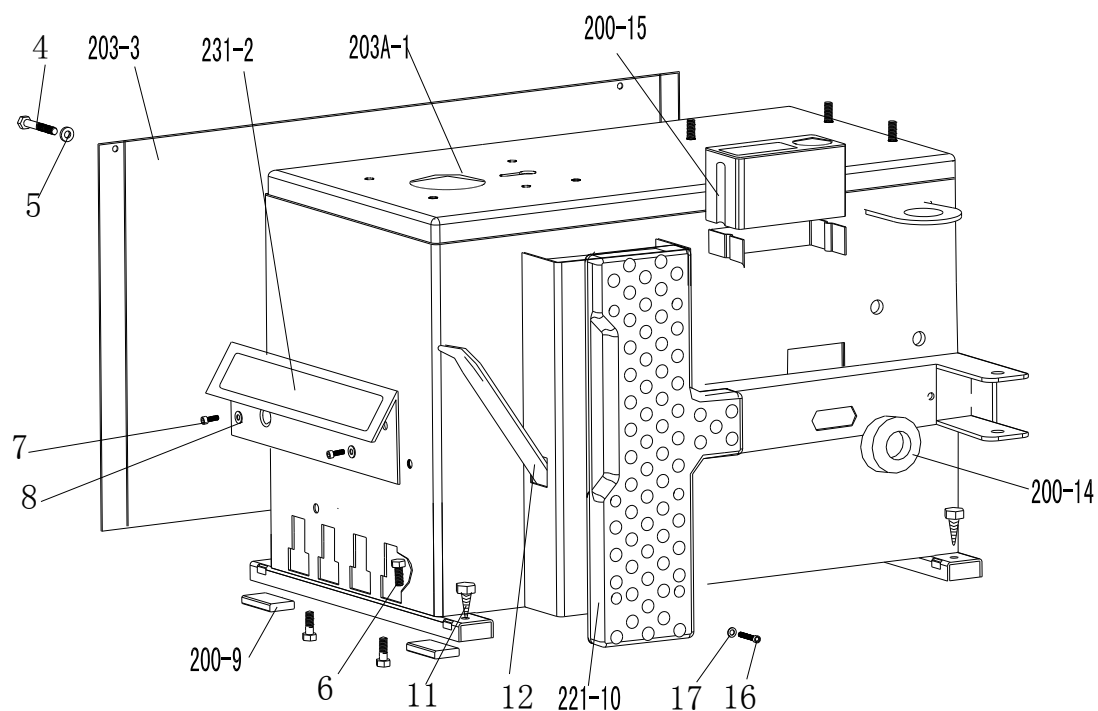


Fig 22

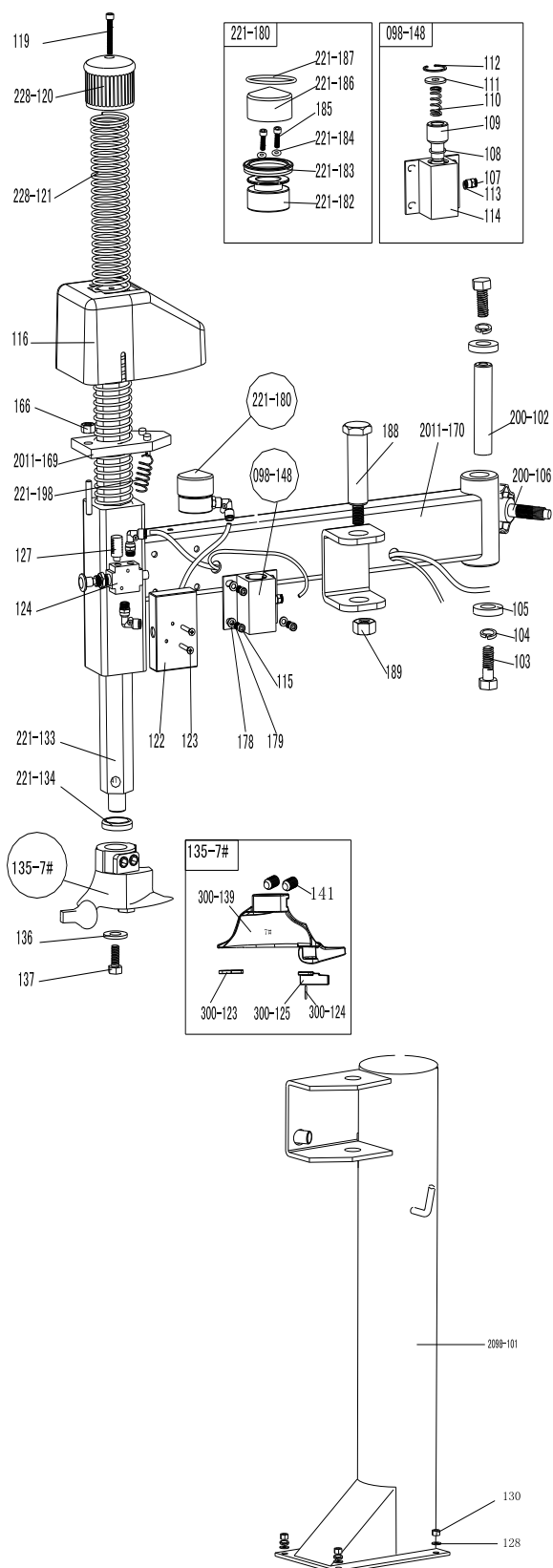
14. Trouble shooting table:

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

15. Exploded drawing

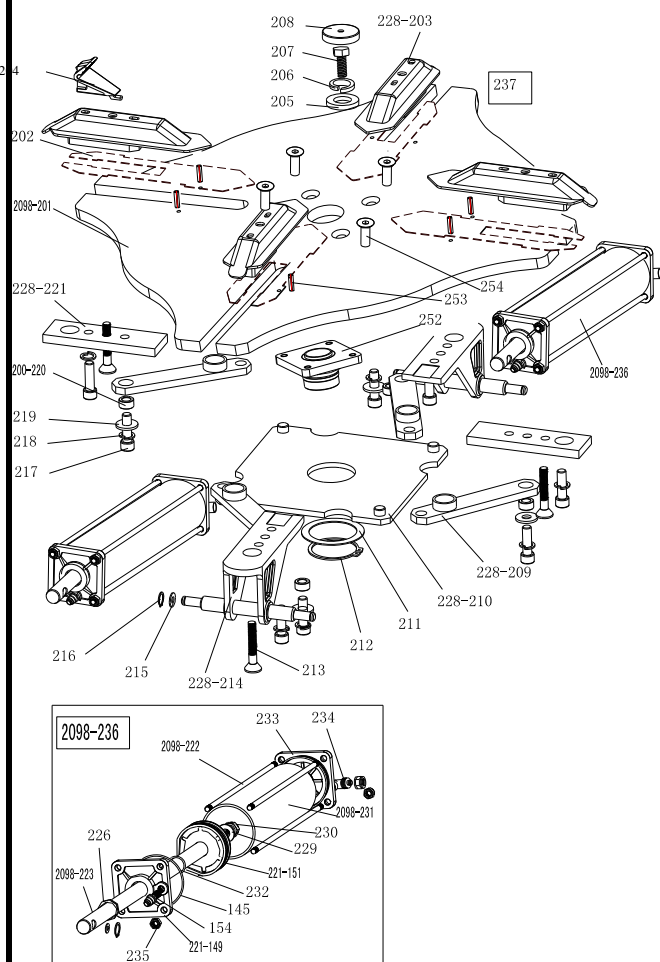


203A-1	CX-203-010000-A	Machine body
231-2	CZ-231-080000-0	Pedal front cover
203-3	CX-231-020000-0	Left cover
4	B-010-060101-0	Hex socket head bolt M6×10
5	B-040-061412-1	Flat washer Ø6*14*1.2
6	B-014-080251-0	Outer hex bolt M8x25
7	B-010-080201-0	Hex socket head bolt M8×20
8	B-040-061412-1	Flat washer Ø 6*14*1.2
200-9	C-000-001020-0	Rubber foot buffer
221-10	C-221-500000-0	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

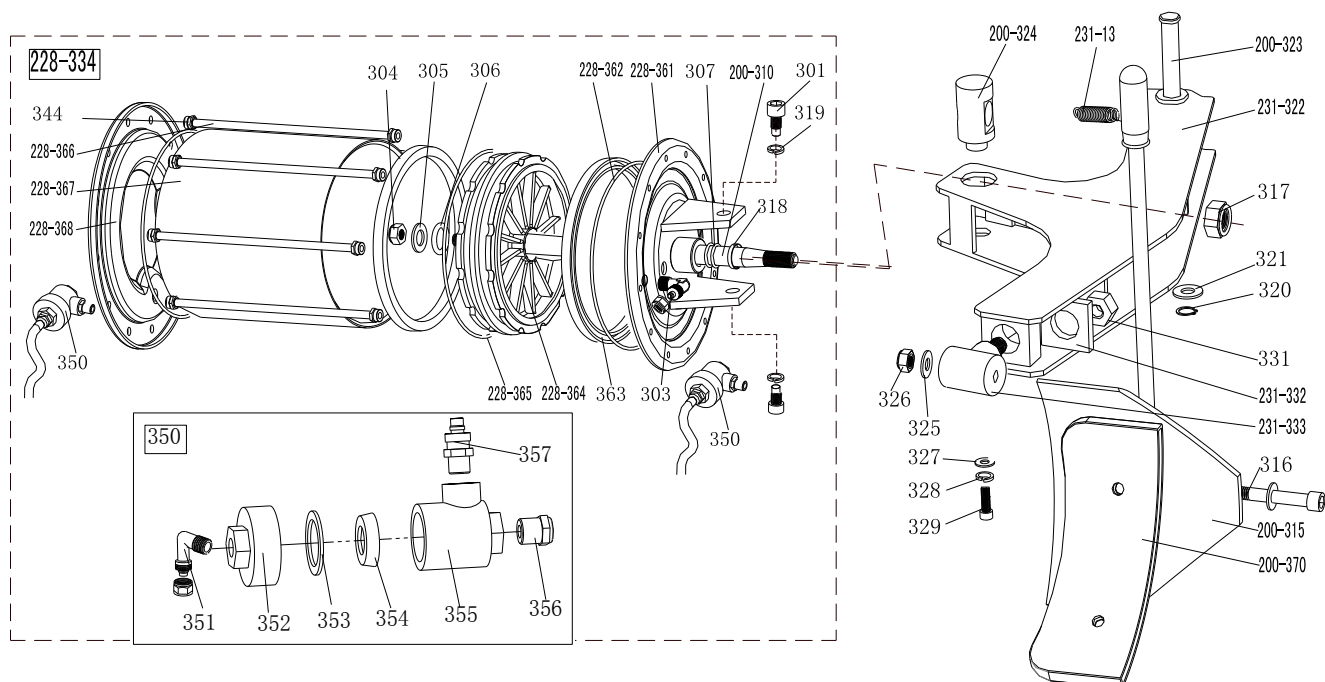


2098-101	CX-298-250000-0	Round column
200-102	CX-200-190000-0	Swing arm pin
103	B-014-140351-0	Outer hex bolt M14x35
104	B-050-140000-0	Spring washer Ø14
105	CX-200-140000-0	Big washer
200-106	C-200-350000-0	Column adjust handle
107	S-010-050004-0	Quick stright union M5- Ø 4
108	S-000-030355-0	O-seal 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 M10×30
228-120	C-228-490000-0	Vertical arm cap
228-121	C-228-390000-0	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 M10×25
098-148		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 M6×55
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
135—7#		Complete mount/demount head 7#
300-139	C-300-150000-0	Mount/demount head 7#
141	B-007-120161-0	Hex socket head bolt M12X16
300-123	C-300-150300-0	Mount/demount head flat protector
300-124	C-200-150400-0	Hex pin
300-125	C-300-150500-0	Mount/demount head protector

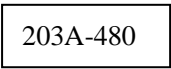
200-24



2098-201	CX-298-130100-0	Turntable assembly 720
202	CX-298-120300-0	Jaw sliding plate
228-203	CX-228-120000-0	Jaw cap assembly
200-204	C-200-570000-0	Jaw 200
205	CX-200-140000-0	Big washer
206	B-050-160000-0	Spring washer Ø16
207	B-014-160401-0	Outer hex bolt M16×40X1.5
208	C-200-440000-0	Turntable cap
228-209	CX-298-310000-0	Connection rod assembly 615
228-210	CX-298-280000-0	Square turntable 660
211	CX-200-290000-0	Square turntable washer
212	B-055-650001-0	Snap ring Ø65(shaft)
213	B-012-120631-0	Hex socket head bolt
228-214	CX-228-110200-0	Jaw slide guide with pin
215	B-040-122520-1	Flat washer Ø12X25X2
216	B-055-120001-0	Snap ring Ø12(shaft)
217	B-014-120801-0	Hex socket head bolt M12×40
218	B-046-122050-1	Teeth locking washer Ø12x1
219	B-040-123030-1	Flat washer Ø12X30X3
200-220	CX-200-300000-0	Connection rod nut
228-221	CX-228-110100-0	Jaw slide guide without pin
2098-222	C-298-100400-0	Threaded connection rod
2098-223	C-298-100200-0	Clamping cylinder piston rod
221-149	C-221-350100-0	Clamping cylinder cover without handle
154	S-011-010808-0	Straight union 1/8"-Ø8
226	S-005-020075-0	V- seal 20*28*7.5
145	S-000-068353-0	O- seal 68.26*3.53
221-151	C-221-550000-0	Tilting cylinder piston
229	B-040-122520-1	Flat washer Ø12X25X2
230	B-004-120071-1	Nut M12X7X1.75
2098-231	C-298-100500-0	Clamping cylinder barrel 406
232	S-000-019262-0	O- seal Ø19.6X2.62
233	C-221-350300-0	Tilting cylinder cover with handle
234	S-018-010808-0	Quick union 1/8-φ 8
235	B-001-080001-0	Self-locking nut M8
2098-236	CW-105-209800-5	Complete clamping cylinder
237	CW-104-209800-0	Complete spe-shape turntable 720
252	CX-298-130200-0	Turntable spacer
253	B-070-050016-0	O- seal Ø19.6X2.62
254	B-012-120301-0	Clamping cylinder cover with handle

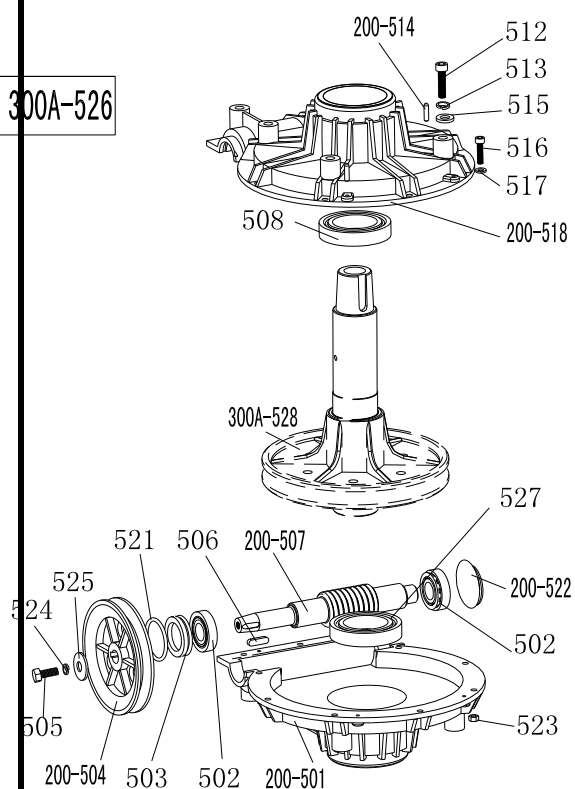


301	B-010-140301-0	Hex socket head bolt M14×30	231-13	C-231-360000-0	Bead breaker arm spring
303	S-018-010408-0	Union (90°) 1/4-Ø8	231-322	CX-231-030000-0	Enlarger bead breaker arm 200
304	B-004-160001-1	Nut M16*1.5	321	B-040-162820-1	Flat washer
305	B-040-162820-1	Flat washer Ø16*28*2	200-323	CX-200-040000-0	Bead breaker pin
306	S-000-016265-0	O-seal 16*2.65	200-324	CX-200-050600-0	Bead breaker cylinder rotating pin
307	S-000-019262-0	O-seal 19.6*2.62	325	B-040-122520-1	Flat washer Ø12*24*2
200-310	C-200-050100-0	Bead breaker cylinder piston rod	326	B-001-120001-0	Self-locking nut M12
200-315	CX-200-070000-0	Bead breaker shovel assembly	327	B-040-083030-1	Flat washer Ø8*30*3
316	B-010-120901-0	Hex socket head bolt M12×90	328	B-050-080000-0	Spring washer Ø8
317	B-004-160001-1	Self-locking nut M16*1.5	329	B-014-080201-0	Hex socket head bolt M8×20
318	U-006-000001-2	Guide belt	331	B-001-160001-0	Self-locking nut M16*1.75
228-334		Complete Bead breaker cylinder D200	231-332	CX-231-030900-0	Bead breaker shaft washer
350	CW-112-209800-0	Bead breaker cylinder exhaust valve	231-333	CX-231-030800-0	Bead breaker shaft
351	S-012-010808-0	Union (90°)1/8-Ø8	344	B-001-080001-0	Self-locking nut
352	C-098-600200-0	Bead breaker cylinder exhaust valve cover	228-361	CX-298-050500-0	Bead breaker cylinder cover assembly
353	C-098-600400-0	Seal washer	228-362	S-000-195265-0	O-seal Ø198*3.1
354	C-098-600300-0	Bidirectional seal	363	S-005-200184-0	Y-seal D200*184*12
355	C-098-600100-0	Bead breaker cylinder exhaust valve barrel	228-364	C-298-050200-0	Bead breaker cylinder piston D200
356	S-023-010401-6	Muffler	228-365	S-000-180500-0	O-seal Ø180*5
357	S-010-010408-0	Stright union 1/4- Ø8	228-366	C-298-051000-0	Threaded connection rod
319	B-050-140000-0	Spring washer Ø14	228-367	C-298-050300-0	Bead breaker cylinder barrel
320	B-055-160001-0	Snap ring Ø16	228-368	C-298-051100-0	Bead breaker cylinder back cover



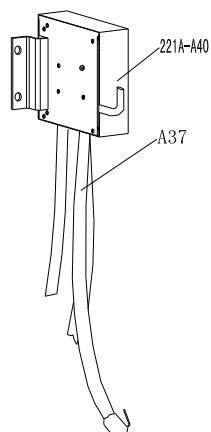
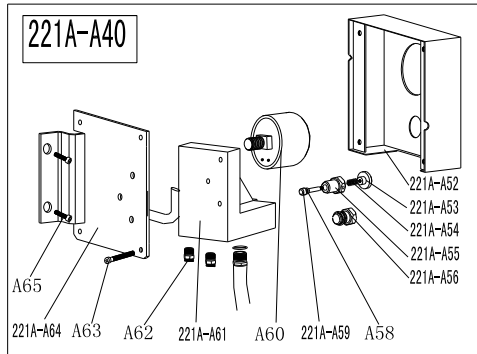
228-401	CX-228-060400-0	Reverse switch pedal	429	B-040-040000-1	Flat washer Ø 4
228-402	CX-228-060300-0	5-way valve pedal(right)	430	B-024-040161-0	Cross-round head screw M4*16
228-404	CX-228-060200-0	5-way valve pedal(left)	200-431	C-200-530000-0	Reverse switch handle
405	B-055-120001-0	Snap ring Ø12	432	B-001-060001-0	Self-locking nut M6
406	B-040-122520-1	Flat washer Ø12*24*2	433	B-040-030000-1	Flat washer Ø3
407	B-024-040301-0	Cross head screw M4X30	434	B-017-030161-0	Cross head screw M3X18
408	B-040-040000-1	Flat washer Ø 4	200-435	CX-200-060600-0	Pedal connection rod
409	B-001-040001-0	Self-locking nut M4	436	B-001-080001-0	Self-locking nut M8
410	B-001-080001-0	Self-locking nut M8	437	CX-221-060700-0	Pedal front shaft
411	B-040-081715-1	Flat washer Ø8*17*1.5	438	B-004-080001-0	Nut M8
200-412	C-200-060100-0	Cam connection rod	439	C-200-370000-0	Pedal twist spring
221-413	C-221-060100-0	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 Union1/8- Ø 8
200-416	C-200-810000-0	Cam washer	445	S-016-010808-2	Quick T-union1/8-2* Ø 8
417	B-010-060201-0	Hex socket head bolt M6×20	448	B-007-180081-R	Hex socket head bolt 1/8*8
419	CW-110-021100-A	Complete 5-way valve for inflating	200-449	C-200-060901-0	5-way valve barrel
420	B-019-290121-0	Cross head self tapping screw 2.9×12	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	453	S-023-010801-0	Muffler 1/8"
423	CW-110-020001-0	Complete 5-way valve for bead breaker cylinder	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 valve 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	221A-458	CX-221-650000-A	5-way valve rod for inflating
427	B-010-060201-0	Hex socket head bolt M6×20	459	C2-000-103150-0	Power supply cable
428	B-040-061210-1	Flat washer Ø 6X12X1	616	C2-000-205150-0	Motor cable
429	B-040-040000-1	Flat washer Ø 4	203A-480	CW-109-020300-A	Complete 4-pedals assembly 203A

300A-526

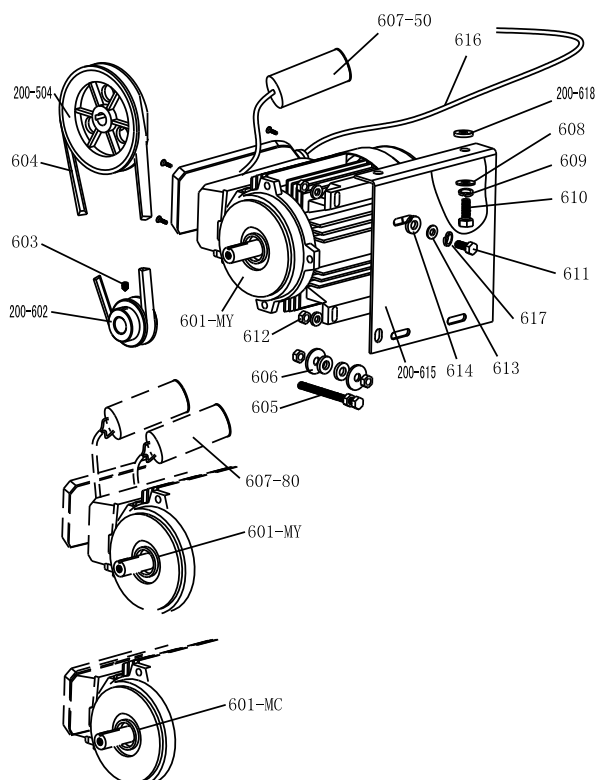


200-501	C-300-320302-0	Gear box lower cover
502	S-040-030204-0	Bearing 30204
503	S-005-020080-1	Gear box seal ϕ 20*35*8
200-504	C-200-320500-0	Gear Belt pulley
505	B-014-080251-0	Outer hex bolt M8×25
506	B-065-006020-0	Key washer 6×20
200-507	C-200-320400-0	Worm rod
508	S-040-006010-0	Bearing 6010
512	B-014-100551-0	Outer hex bolt M10×55
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 M6×20
517	B-040-061412-1	Flat washer ϕ 6*14*1.2
200-518	C-300-320301-0	Gear box upper cover
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
300A-526	CW-107-030001-A	Complete gear box
527	S-040-006028-0	Bearing 6208
300A-528	C-300-320100-0	Worm gear

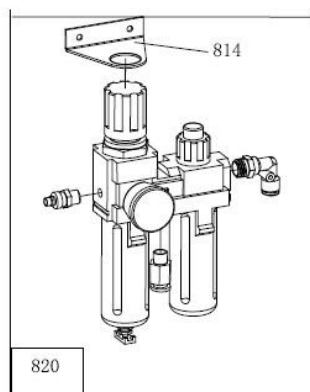
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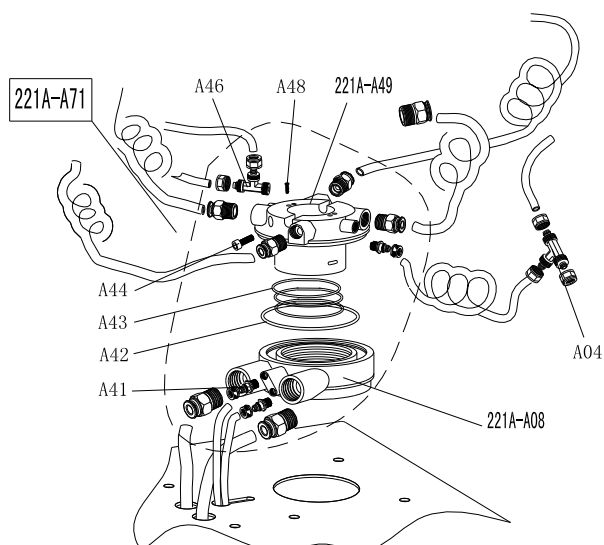
221A-A52	C-221-700000-A	Pressure gauge box ϕ 60
221A-A53	C-221-690300-A	Button
221A-A54	C-221-690400-A	Button spring
221A-A55	C-221-690100-A	button valve
221A-A56	B-007-180081-R	Hex socket head bolt 1/8
A58	S-000-004200-0	O seal 4*2
221A-A59	C-221-690200-A	Button shaft
A60	S-038-000020-0	Pressure gauge 10kg
221A-A61	C-221-680000-A	Seat with holes
A62	S-010-010808-0	Straight union 1/8- ϕ 8
A63	B-017-040301-0	Cross flat head self-tapping bolt M4*30
221A-A64	CX-221-710000-A	Pressure gauge box support
A65	B-010-060161-0	Hexagon socket head bolt M6*16
A37	S-035-014150-0	Rubber hose 1.5 with clip
221A-A40	CW-118-022100-0	Complete pressure gauge box



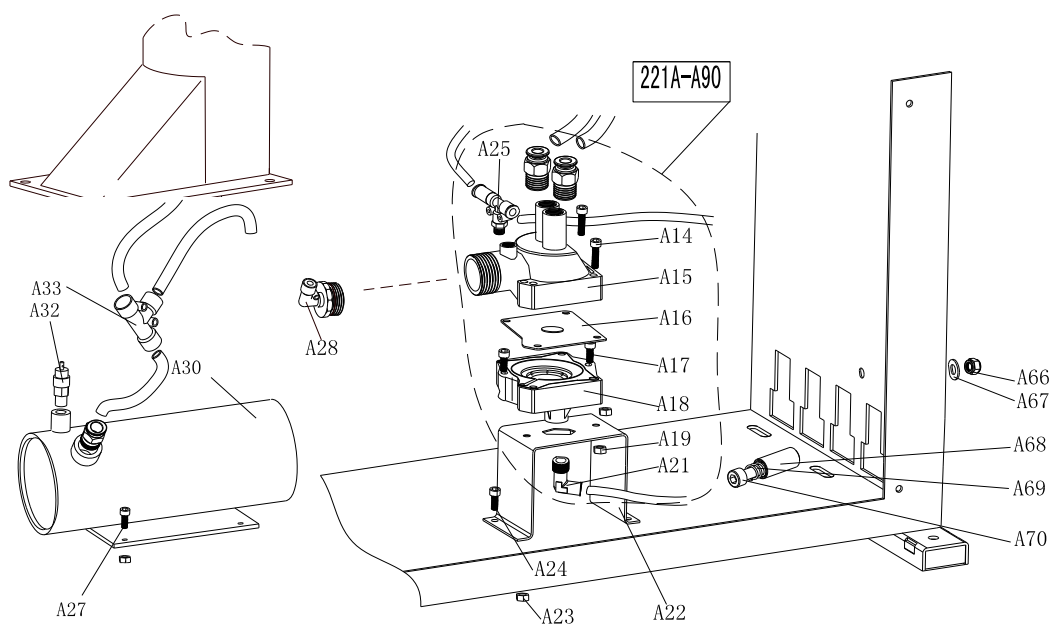
200-504	C-200-320500-0	Gear Belt pulley
601-MC	S-050-220110-5	Motor 220V/50HZ
601-MY	S-050-230075-0	Motor 220v
200-602	CX-200-330000-0	Motor Belt pulley
603	B-007-080121-0	Hex socket head boltM8×12
604	S-042-000686-0	Tyre changer belt A-28
605	B-014-080651-0	Outer hex bolt M8X65
606	B-040-083030-1	Flat washer Ø8X30X3
607-80	S-063-008000-0	Capacitor 80μ f,110V
607-50	S-063-005000-0	Capacitor 50μ f,220V
608	B-040-102020-1	Flat washer Ø10X20X2
609	B-050-100000-0	Spring washer Ø10
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 5×1.0
617	B-050-080000-0	Spring washer φ 8
200-618	C-200-560000-0	Motor rubber buffer



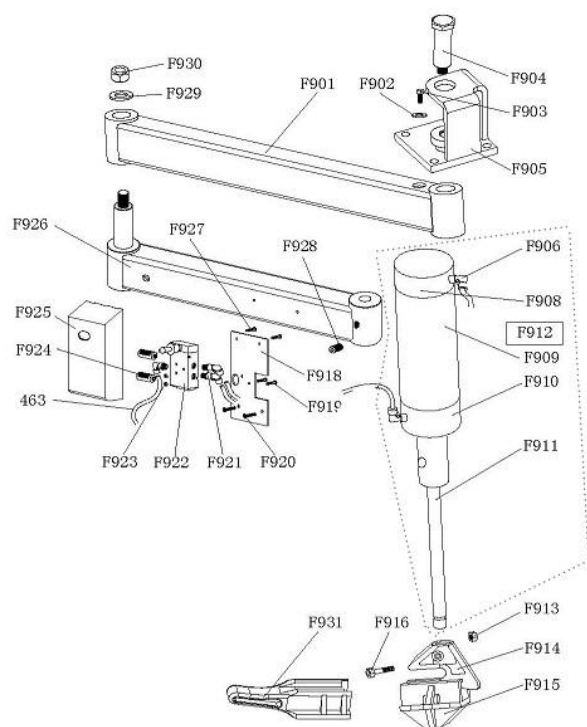
814	C-200-011200-0	Oil fog maker suport
820	CW-114-035000-0	Complete oil fog maker 3500



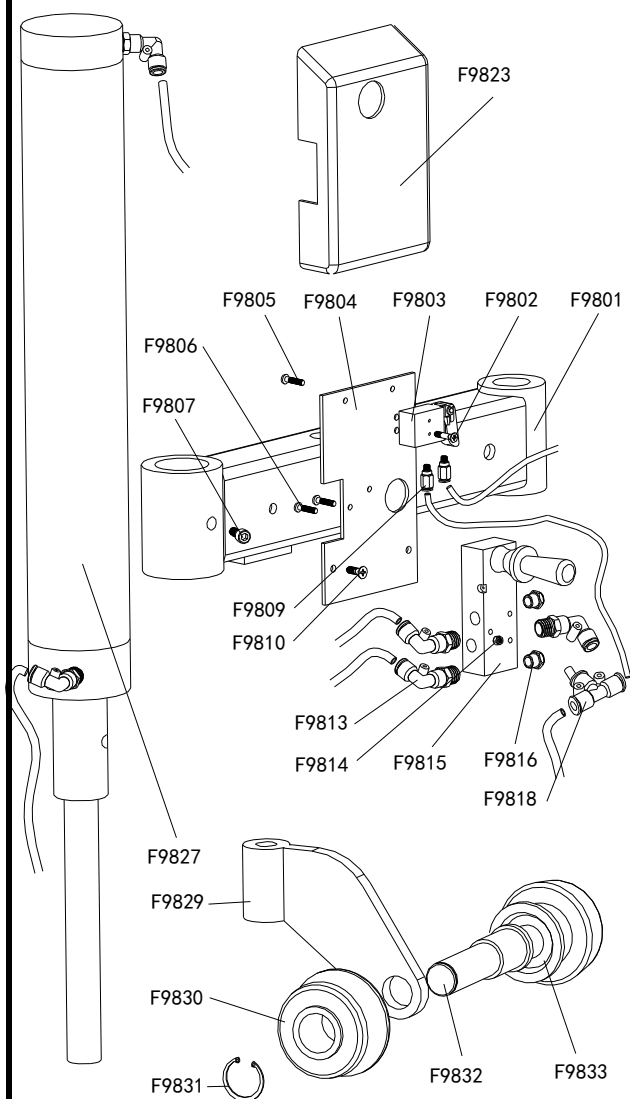
221A-A08	CX-221-430100-A	Rotating valve casing A
A04	S-015-000008-3	T-union 3* Ø 8
A41	S-011-010808-0	Straight union 1/8-Ø8
A42	S-000-089200-0	O-seal Ø89*2
A43	S-000-062280-2	O-seal Ø62*2.8
A44	B-010-060201-0	Hex socket head bolt M6X20
A46	S-015-010808-2	T-union 1/8-2*Ø8
A48	B-007-040061-0	Hex socket head bolt M4*6
221A-A49	CX-221-430200-A	Rotating valve mandrelA
221A-A71	CW-106-022102-A	Complete Rotating valveA



A14	B-010-060301-0	Hex socket head bolt M6*30
A15	C-221-600500-A	Exhaust valve barrel
A16	C-221-600700-A	Exhaust valve rubber washer
A17	B-010-060301-0	Hex socket head bolt M6*30
A18	C-221-600600-A	Exhaust valve cover
A19	B-001-060001-0	Self-locking nut M6
A21	S-012-010408-0	Quick union 1/4-Ø8
A22	CX-221-600800-A	Exhaust valve support
A23	B-001-060001-0	Self-locking nut M6
A24	B-010-060161-0	Hex socket head bolt M6*16
A25	S-016-010808-2	One way valve (CEPCVB8-01)1/8-2*Ø8
A27	B-010-100251-0	Hex socket head bolt M10*25
A28	S-012-010212-0	Quick union 1/2-Ø12
A30	CX-098-100000-0	Small Air-tank assembly
A32	S-030-010400-8	Safety valve
A33	S-015-000012-3	T-union 3XØ12
A66	B-001-100001-0	Self-locking nut M10
A67	B-040-102020-1	Flat washer Ø10*20*2
A68	CX-221-620300-A	Limit spring plate
A69	C-201-670000-A	Limit spring
A70	B-010-100601-0	Hex socket head bolt M10*60
221A-A90	CW-112-020201-Y	Complete exhaust valve

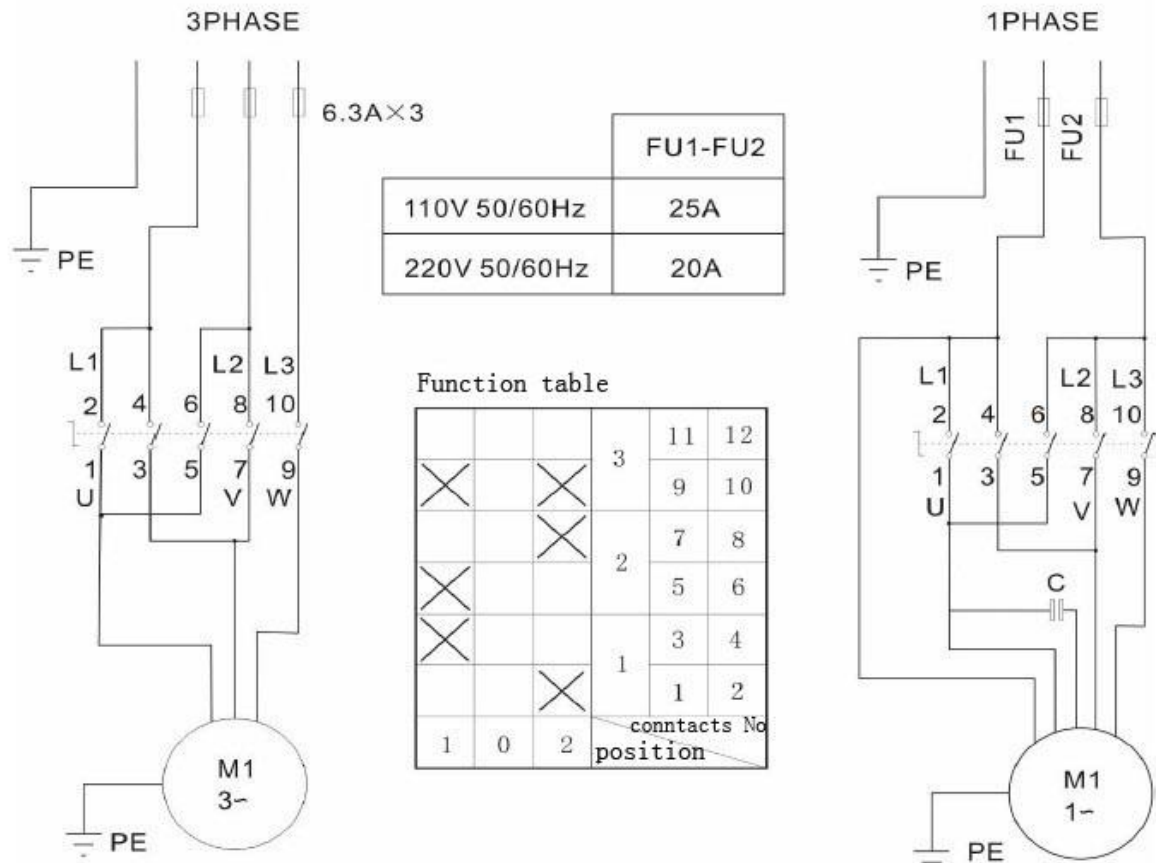


F901	CX-009-020000-0	009 Pressing arm
F902	B-050-100000-0	Spring washer ϕ 10
F903	B-010-100301-0	Hex socket head bolt M10*30
F904	CX-009-050000-0	009 Pressing arm pin
F905	CX-009-010000-0	009 Pressing plate
F906	S-012-010806-0	Quick union 1/8- ϕ 6
F908	C-009-070200-0	009 cylinder upper cover
F909	C-009-070300-0	009 cylinder barrel $\phi 76 \times 460$
F910	C-009-070100-0	009 cylinder down cover
F911	C-009-070400-0	009 cylinder piston rod ϕ 25*750
F912	CW-105-209800-0	Complete 009 help arm cylinder
F913	B-001-060001-0	Self-locking nut M6
F914	C-008-090100-0	Tire pressing head (upper)
F915	C-008-090200-0	Tire pressing head(bottom)
F916	B-010-060301-0	Hex socket head bolt M6*30
F918	CX-005-200000-0	Rise-fall switch base board
F919	B-017-040301-0	Cross head srew M4*30
F920	B-024-050161-1	Cross round head srew 5*16
F921	S-012-010406-0	Quick Union 1/4- ϕ 6
F922	S-030-010818-0	Raise-fall control valve 4H230L-08
F923	B-004-040001-1	Nut(silver) M4
F924	S-023-010801-0	Muffler 1/8
F925	C-007-181000-0	Control valve protect cover
F926	CX-009-030000-0	009 Auxiliary pressing arm
F927	B-017-040161-0	Cross head srew M4*16
F928	B-007-100121-0	Hex socket head bolt M10*12
F929	CX-200-140000-0	Big washer
F930	B-001-160001-0	Self-locking nut M16
F931	C-009-110000-0	Tire lifting roller head



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
F9827		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

16. Circuit diagram



17. Pneumatic drawing

