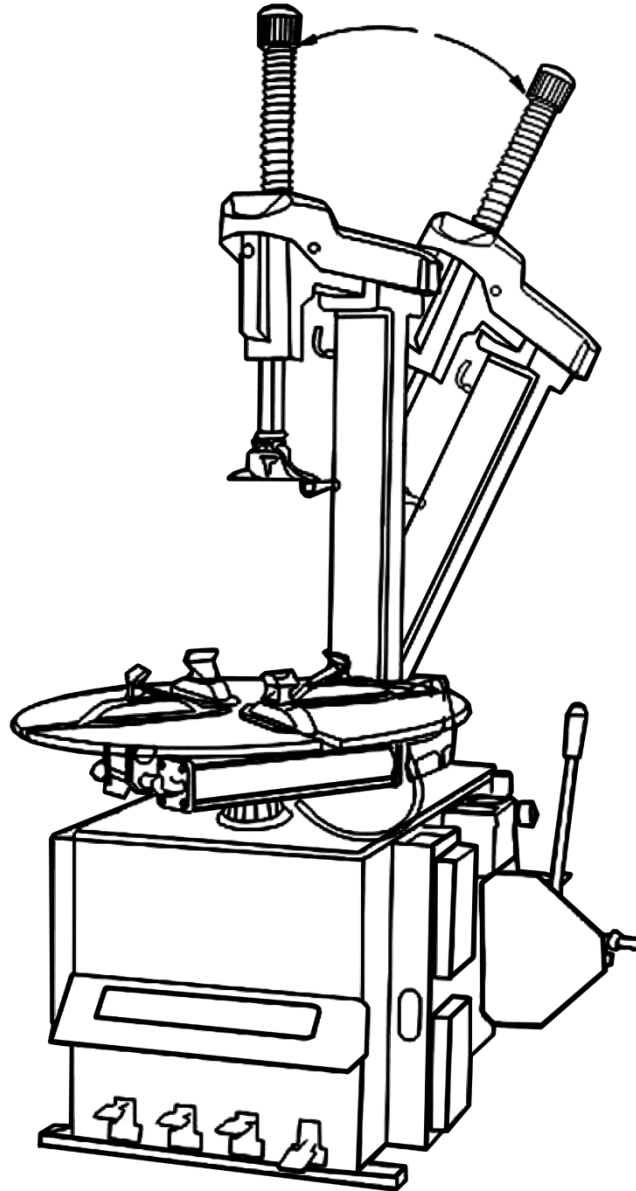


TYRE CHANGER

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.

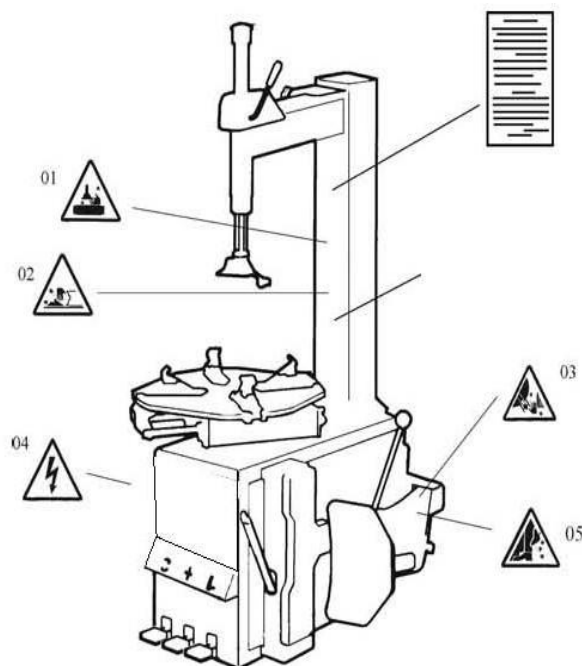
1. Introduction:

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	0.75/0.55/1.1 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.

4. Transport:

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

5. Unpacking & Inspection:

Pull out the nail which is nailed on the plate with tip jaw; unpack the carton and plastic cover. Check and make sure all parts shown on the spare parts list are included. If any parts are missing or broken, please do not use the machine and contact the manufacturer or dealer ASAP.

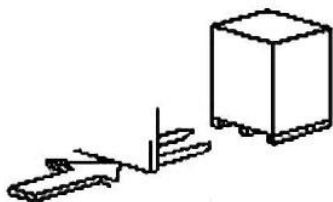


Fig 1

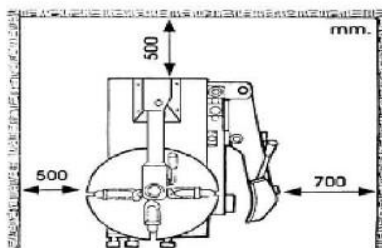


Fig 2

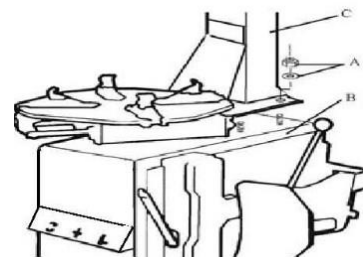


Fig 3

6. Workplace requirements:

Choose workplace in compliance with safety regulations. Connect power supply and air source according to manual and workplace must have good air condition; in order to make the machine run well, its workplace requires at least clear space from each wall shown as **Fig 2**. If installing it outdoor, it must be protected by roof against rain and sunshine.

Warning: the machine with motor must not be operated in explosive atmosphere.

7. Position and installation:

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.


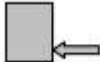


Connect the compressed air connector which is on the machine right side with compressed air system. The electric grid that the machine connects to must have fuses protection device and good outer cover grounding protection. Install the leakage automatic air switch on the main power supply, leakage current 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)	Bead Breaker Pedal (U)
	
Jaws open and close Pedal (V)	Rapid Tire Inflation Pedal(B)

Please note: below operation refer to **Fig 4**

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

Tread Rapid Tyre Inflation Pedal (B), air flow out in a flash; release the pedal, the airflow stop. (Please read related warning and note, and be careful for the safety before debugging)

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.

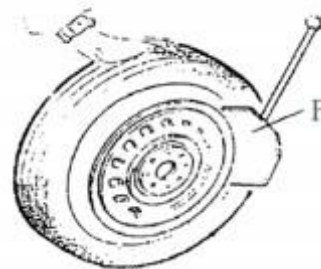


Fig 5

9.2. Demounting the tyre :

Ensure to remove all the weights on the wheel rim and to exhaust the air in the tyre completely before this operation. Apply lubricating grease (or similar lubricant) around the tyre bead. Without the lubricant may lead to badly wear and tear on tyre.

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

a- to clamp the wheel from outside:

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**.

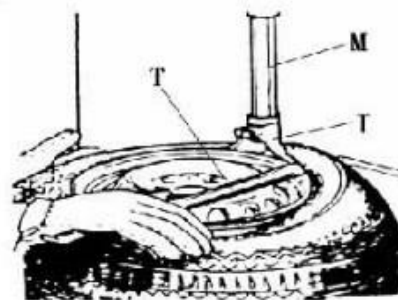


Fig 6

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.



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 tyre with hands or help arm, and then spin the turntable for mounting the tyre down bead.

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

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;

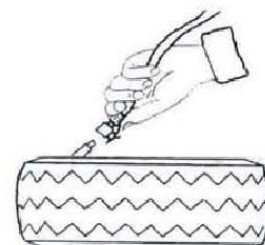


Fig 8

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.

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. (Fig 9)

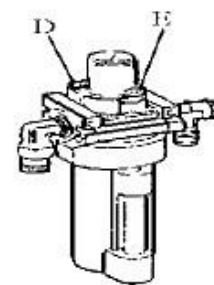


Fig 9

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.

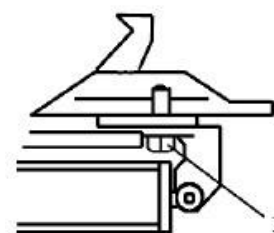


Fig 10

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)

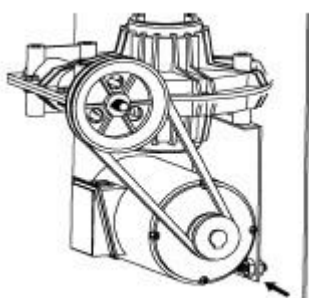


Fig 11

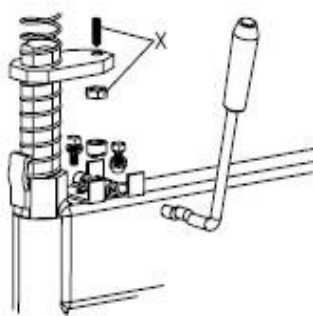


Fig 12

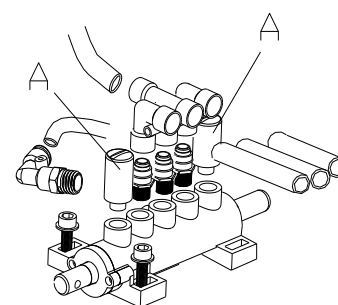


Fig 13

13. 009 Help Arm

009 help arm is auxiliary device of tyre changer for helping operator to demount / mount tyre much easier.

Warning: Before install this help arm to the tyre changer, please make sure which is matched with the tyre changer. This help arm device must be used together with our tire changers, we are not sure it can work with other supplier tyre changers.

Warning: Before any operation of this machine, the operator is requested to read the manual carefully. Do not attempt any operations that are not stated in it. Manufacturer will not be responsible for any injury or damage caused by improper operation. Please keep the manual handy for consulting.

13.1 Technical data

Work Pressure	8~10 bar
Weight	20kg
Package dimension	820*300*260mm
Noise Level	LpA<75dB

13.2 Transport:

Moving the machine with help arm device by using the proper forklift shown as **Fig 14**
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.

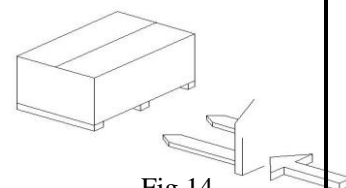


Fig 14

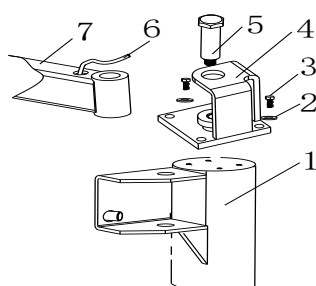


Fig 15

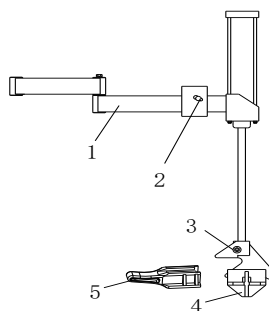


Fig 16



Fig 17

13.3 Installation

NOTE: the help arm device should be assembly by the professional person. Before install this device, please make sure to disconnect the tyre changer from the electricity power supply and pneumatic power supply.

The help arm is auxiliary device of tyre changer, please make sure the working space has been reserved as manual required.

Please install the help arm on the tyre changer(Fig 15):

Disconnect the electricity &pneumatic power supply;

Move the left cover on the tyre changer machine body;

Install the fixing plate (4) of the help arm on the top of tyre changer column (1) with 4 bolts (3)

Inserting bolt M20(5) in to the fixing plate (4) of help arm;

Take 6mm air hose (6) through the hole of tyre changer right side, and connect with the T-union of air source supply.

13.4 components

All the functional parts of the this auxiliary device shown as Fig 16

- | | |
|-------------------------------|--------------------------------|
| 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 16)

The rise-fall switch handle (2, Fig 16) is to control the tyre pressing devices for adjusting the height of tyre dismounted or mounted.

13.5 009 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 18) next to the rim canter, press the rim down to firmly fix the tyre in place, this method can fix the tyre more stable.

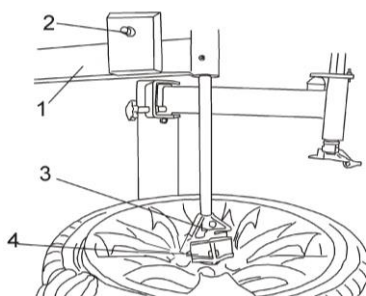


Fig.18

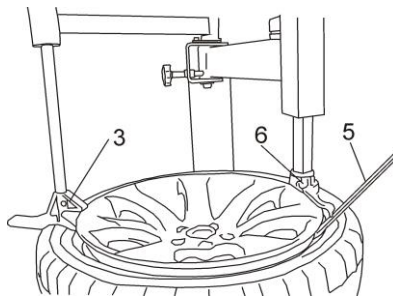


Fig.19

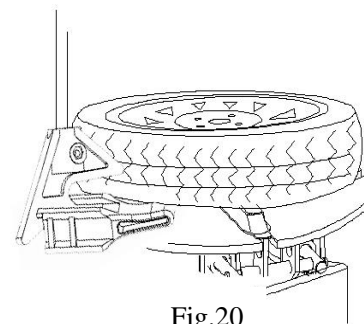


Fig.20

b. Demounting the tire

1) Breaking upper tyre bead

Remove tyre pressing device (down)(4 Fig 18), rotate arm (up) (1, Fig 18) to set tyre pressing device(up) above the tyre, lower tyre pressing device(up) by rise-fall switch handle (2 Fig 18) 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.18)

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 19) 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.19

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 20

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.(Fig 21)

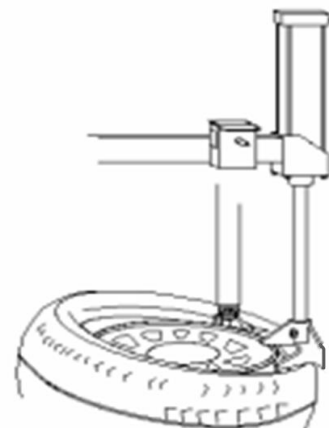


Fig 21

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)!

14. Rapid tyre inflation system (only suitable for the IT-suffix version machine):

14.1. Rapid Tire Inflation Device:

Note: before inflating operation, please make sure the pneumatic power supply connect well.

Before operation, must check the devices perform well as follow:

- Press Rapid Tire Inflation Pedal to the middle position (Fig 22, position 1), the inflating head should give air.
- Press Rapid Tire Inflation Pedal all the way down (Fig 22, position 2), a strong air blast should come from the holes in the four jaws' locking sliders. (Fig 23)

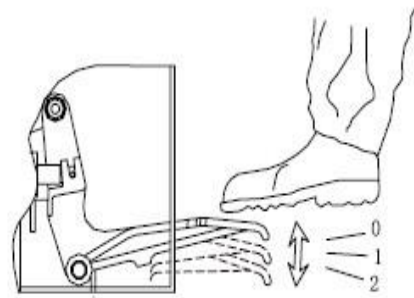


Fig 22

14.2. Wheel rim lock and Tire inflation:

Note: A wheel can explode if:

- the diameter of the rim is not exactly the same at the tyre's.
- the rim or tyre are defective.
- the tyre is inflated to a pressure higher than the maximum recommended by the manufacturer.
- the operator does not observe the requisite safety regulations.

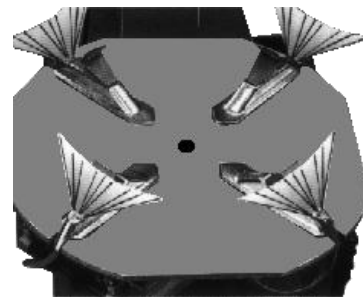


Fig 23

14.3. Inflation for tire with inner tube:

- Remove the valve stem.
- Check to be certain that tyre and rim diameter correspond.
- Check to be certain that rim and beads are sufficiently lubricated.
- Press the pedal down to the middle position to start inflation.
- Release frequently the inflating pedal to check pressure on the manometer. If the air pressure is too high, press the button under the manometer for release the rest air until the correct pressure is reached.

14.4. Inflation for tubeless tire:

Note: When inflating tubeless tire using a strong jet of air, the wheel must be clamped from the inside of the rim.

- Remove the valve stem.
- Check to be certain that tire and rim diameter correspond.
- Check to be certain that rim and beads are sufficiently lubricated.
- Press the pedal down to the middle position to start inflation.
- If the bead of the tyre is not well seated, due to a strong bead, lift tyre manually until the upper bead seals against the rim, then press the pedal all the way down. A strong jet of air will be released through the nozzles in the slides and this will help the bead seal.
- Release the tyre, set the pedal back to the middle position and continue to inflate the tyre to the required pressure. If the air pressure is too high, press the button under the manometer for release the rest air until the correct pressure is reached.

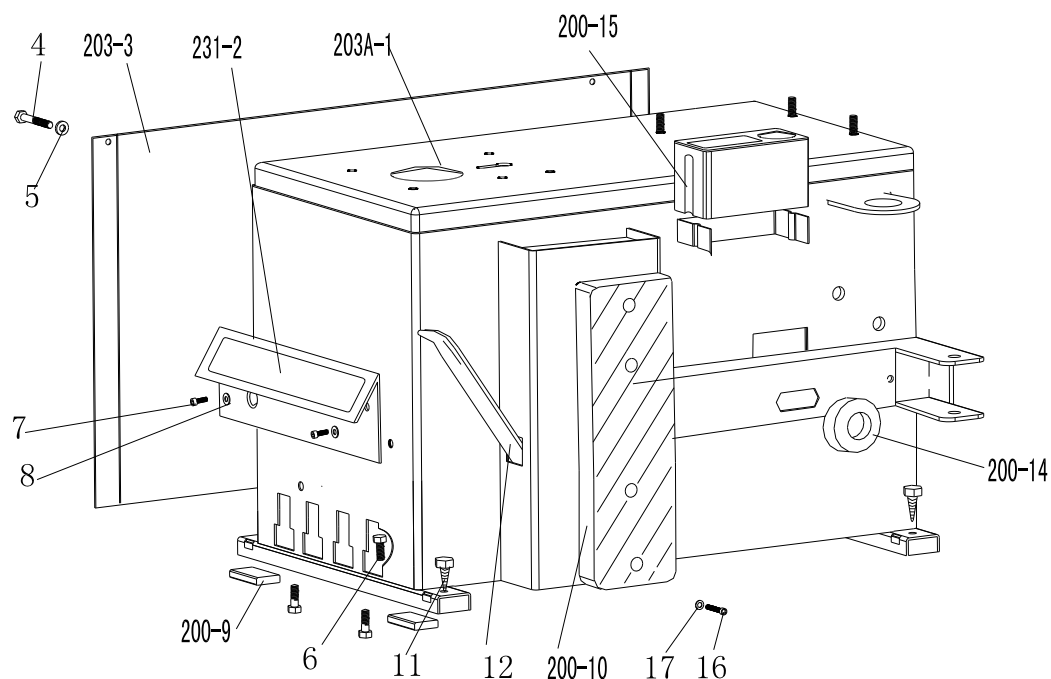
Note:

- Failure to follow all warnings and instructions may lead to serious personal injury or death to operator or bystander. NEVER exceed 3.5 bar (50 psi) when seating beads or inflating tyres.
- If a higher tire inflation pressure is required, remove the wheel from the tyre changer and continue the inflation procedure with the wheel inside a special protection cage. NEVER exceed the maximum inflation pressure given by the tyre manufacturer.
- Only specially trained persons are allowed to perform these operations. Do not allow others to operate or be near to the tyre changer.

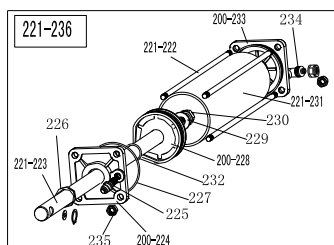
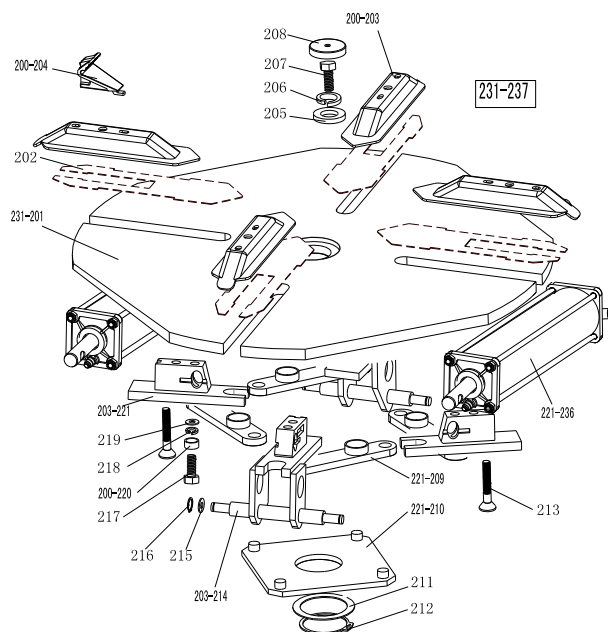
15. Trouble shooting table:

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

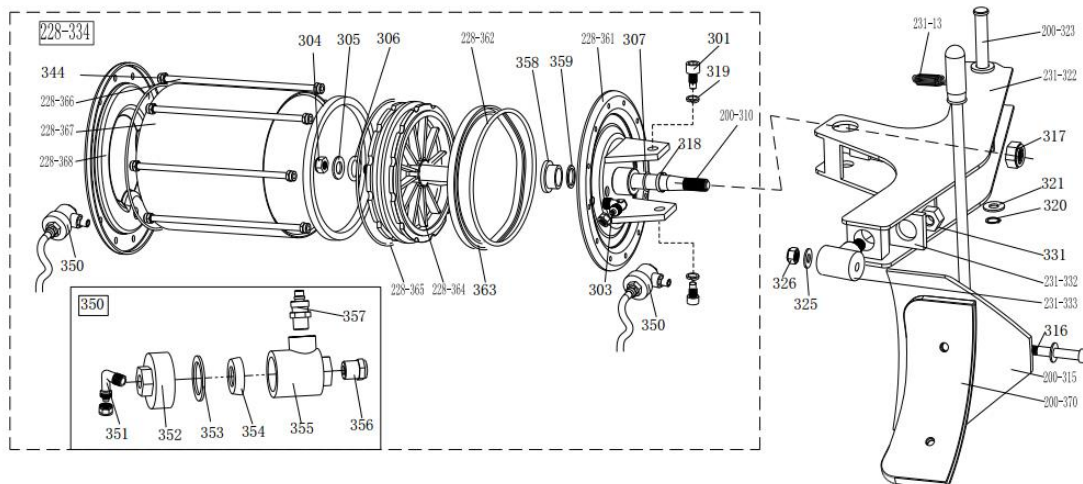
16. Exploded drawing:



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
200-10	JZ09001023181	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 M8×20
17	B-040-081715-1	Flat washer Ø 8*17*1.5

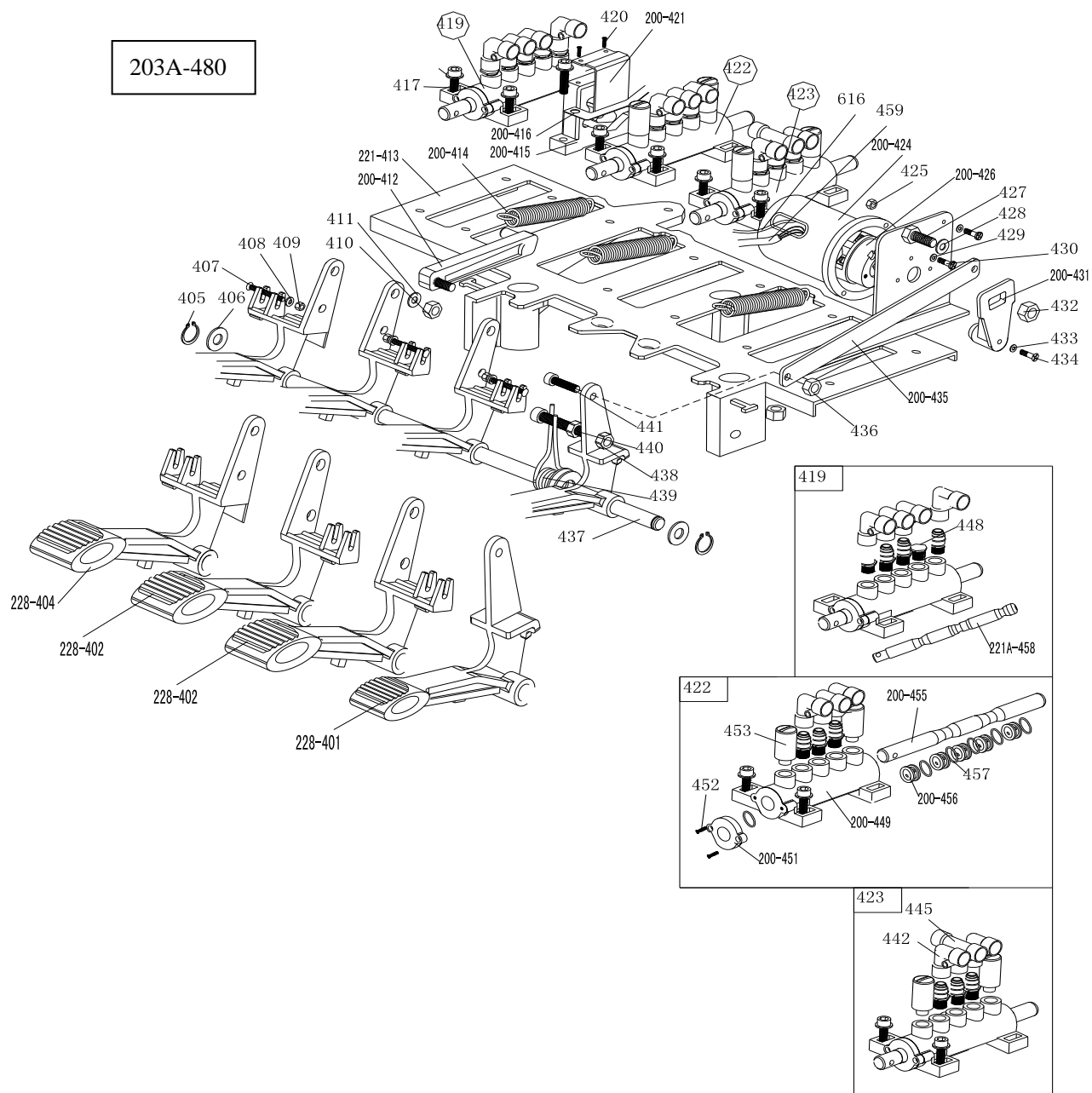


231-201	CX-231-130000-0	Turntable assembly 650
202	CX-221-120300-0	Jaw sliding plate(optional)
200-203	CX-200-120000-0	Jaw cap assembly
204	C-200-570000-0	Jaw
205	CX-200-140000-0	Big washer
206	B-050-160000-0	Spring washer Ø16
207	B-014-160401-0	Outer hex bolt M16×40x1.5
208	C-200-440000-0	Turntable cap
221-209	CX-221-310000-0	Connection rod assembly 615
221-210	CX-221-280000-0	Square turntable 615
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
203-214	CX-203-110000-0	Jaw slide guide with pin double holes
215	B-040-122520-1	Flat washer Ø12X25X2
216	B-055-120001-0	Snap ring Ø12(shaft)
217	B-014-120801-0	Outer hex bolt M12×40
218	B-046-122050-1	Teeth locking washer Ø12x20.5x1
219	B-040-123030-1	Flat washer Ø12X30X3
200-220	CX-200-300000-0	Connection rod nut
203-221	CX-203-110100-0	Jaw slide guide without pin double holes
221-222	C-221-100400-0	Threaded connection rod 393
221-223	C-221-100200-0	Clamping cylinder piston rod 400
200-224	C-200-100100-0	Clamping cylinder cover without handle
225	S-011-010808-0	Straight union 1/8"-Ø8
226	S-005-020075-0	V- seal 20*28*7.5
227	S-000-063265-0	O-seal 63*2.65
200-228	C-200-540000-0	Clamping cylinder piston φ70
229	B-040-122520-1	Flat washer Ø12X25X2
230	B-004-120071-1	Nut M12X7X1.75
221-231	C-221-100500-0	Clamping cylinder barrel 360
232	S-000-019262-0	O-seal 19.6X2.62
200-233	C-200-100300-0	Clamping cylinder cover with handle
234	S-018-010808-0	Union 1/8"-Ø8
235	B-001-080001-0	Self-locking nut M8
221-236	CW-105-021100-0	Complete clamping cylinder
231-237	CW-104-023100-0	Complete square turntable 650



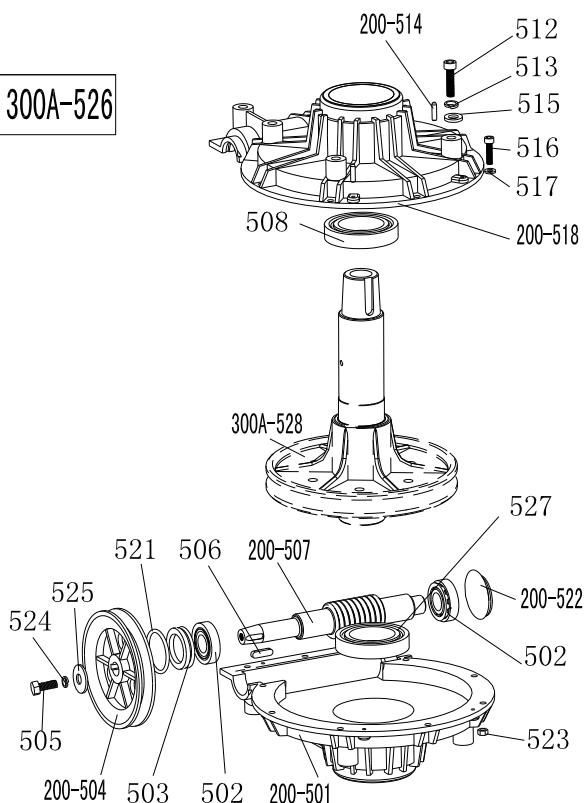
231-13	C-231-360000-0	Bead breaker arm spring	231-332	CX-231-030900-0	Enlarge bead breaker arm rotating washer
301	B-010-140301-0	Hex socket head boltM14×30	231-333	CX-231-030800-0	Enlarge bead breaker arm rotating shaft
303	S-018-010408-0	Union (90°) 1/4-Ø8	228-334	CW-108-209800-0	Complete bead breaker cylinder D200
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 Ø20X2.65	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-006-000001-1	Guide belt	357	S-010-010408-0	Straight 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-steal 20*28*7.5
321	B-040-162820-1	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
325	B-040-122520-1	Flat washer Ø12*24*2	228-364	C-298-050200-0	Bead breaker cylinder piston D200
326	B-001-120001-0	Self-locking M12	228-365	S-000-180500-0	O-seal Ø180*5
331	B-001-160001-0	Self-locking nut M16*1.75	228-366	C-298-051000-0	Threaded connection rod
			228-367	C-298-050300-0	Bead breaker cylinder barrel D200
			228-368	C-298-051100-0	Bead breaker cylinder rear cover
			200-370	C-200-070600-0	Bead breaker shovel protection cover(optional)

203A-480

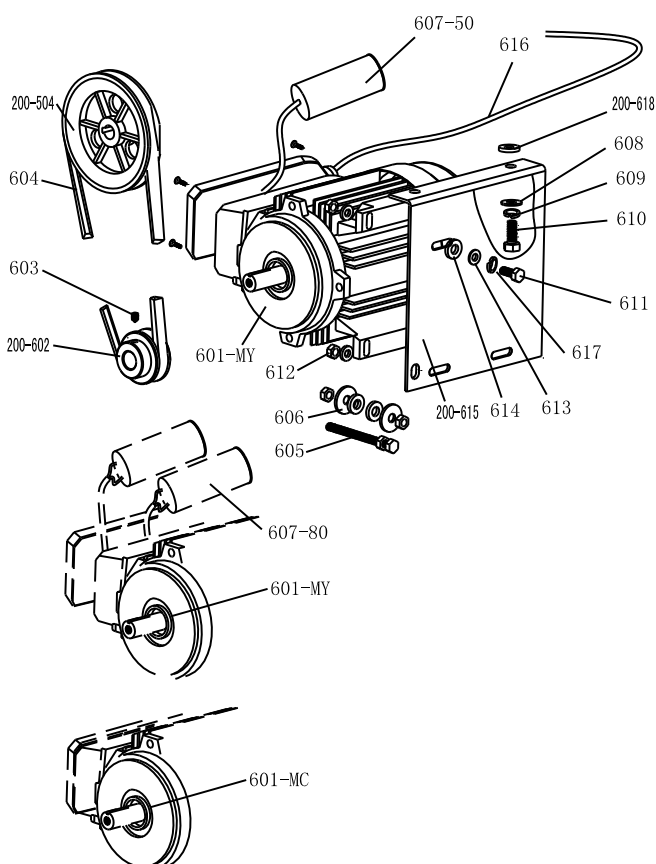


228-401	CX-228-060400-0	Reverse switch pedal	429	B-040-040000-1	Flat washer Ø 4
228-402	CX-228-060300-0	5-way valve pedal(right)	430	B-024-040161-0	Cross-round head screw M4*16
228-404	CX-228-060200-0	5-way valve pedal(left)	200-431	C-200-530000-0	Reverse switch handle
405	B-055-120001-0	Snap ring Ø12	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 union 1/8- 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 inflating 5-way valve	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	Inflating 5-way valve rod
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
			203A-480	CW-109-020300-A	Complete 4-pedals 203A

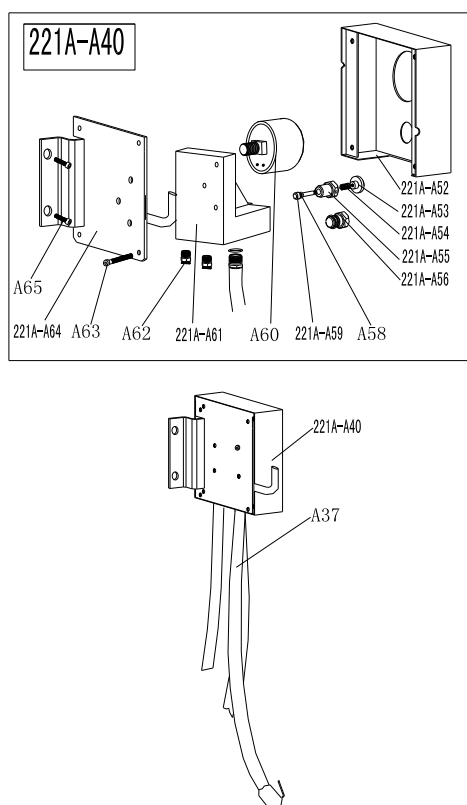
300A-526



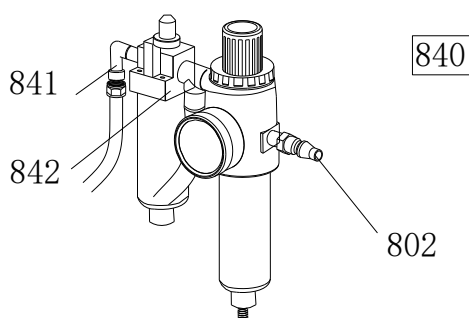
200-501	C-300-320302-0	Gear box lower cover
502	S-040-030204-0	Bearing 30204
503	S-005-020080-1	Gear box seal $\phi 20 \times 35 \times 8$
200-504	C-200-320500-0	Gear Belt pulley
505	B-014-080251-0	Outer hex bolt M8 \times 25
506	B-065-006020-0	Key washer 6 \times 20
200-507	C-200-320400-0	Worm rod
508	S-040-006010-0	Bearing 6010
512	B-014-100551-0	Outer hex bolt M10 \times 55
513	B-050-100000-0	Spring washer $\phi 10$
200-514	B-060-006020-0	Pin 6X20
515	B-040-102020-1	Flat washer $\phi 10 \times 20 \times 2$
516	B-010-060201-0	Hex socket head bolt M6 \times 20
517	B-040-061412-1	Flat washer $\phi 6 \times 14 \times 1.2$
200-518	C-300-320301-0	Gear box upper cover
521	S-000-030355-0	O-seal $\phi 30 \times 3.55$
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 $\phi 8$
525	B-040-083030-1	Flat washer $\phi 8 \times 30 \times 3$
300A-526	CW-107-030001-A	Complete gear box
527	S-040-006028-0	Bearing 6208
300A-528	C-300-320100-0	Worm gear



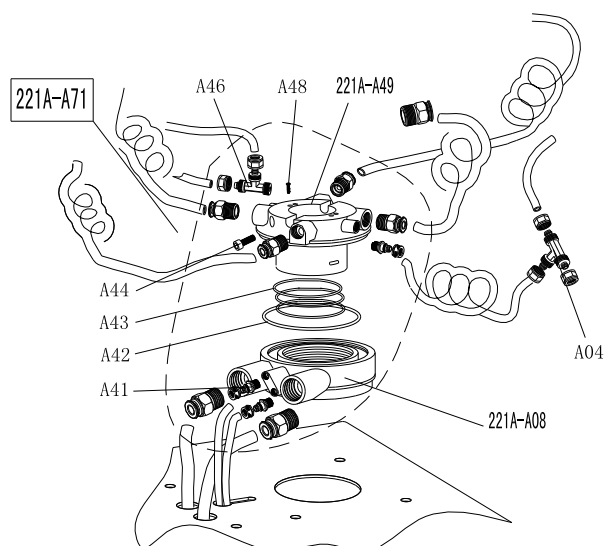
200-504	C-200-320500-0	Gear Belt pulley
601-MC	S-050-220110-5	Motor 220V/50HZ
601-MY	S-050-230075-0	Motor 220v
200-602	CX-200-330000-0	Motor Belt pulley
603	B-007-080121-0	Hex socket head bolt M8 \times 12
604	S-042-000686-0	Tyre changer belt A-28
605	B-014-080651-0	Outer hex bolt M8X65
606	B-040-083030-1	Flat washer $\phi 8 \times 30 \times 3$
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 $\phi 10 \times 20 \times 2$
609	B-050-100000-0	Spring washer $\phi 10$
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 $\phi 8 \times 22 \times 2$
614	C-200-560000-0	Motor rubber washer
200-615	CX-200-340000-2	Motor support
616	CZ-000-205150-0	Motor cable 5 \times 1.0
617	B-050-080000-0	Spring washer $\phi 8$
200-618	C-200-560000-0	Motor rubber buffer



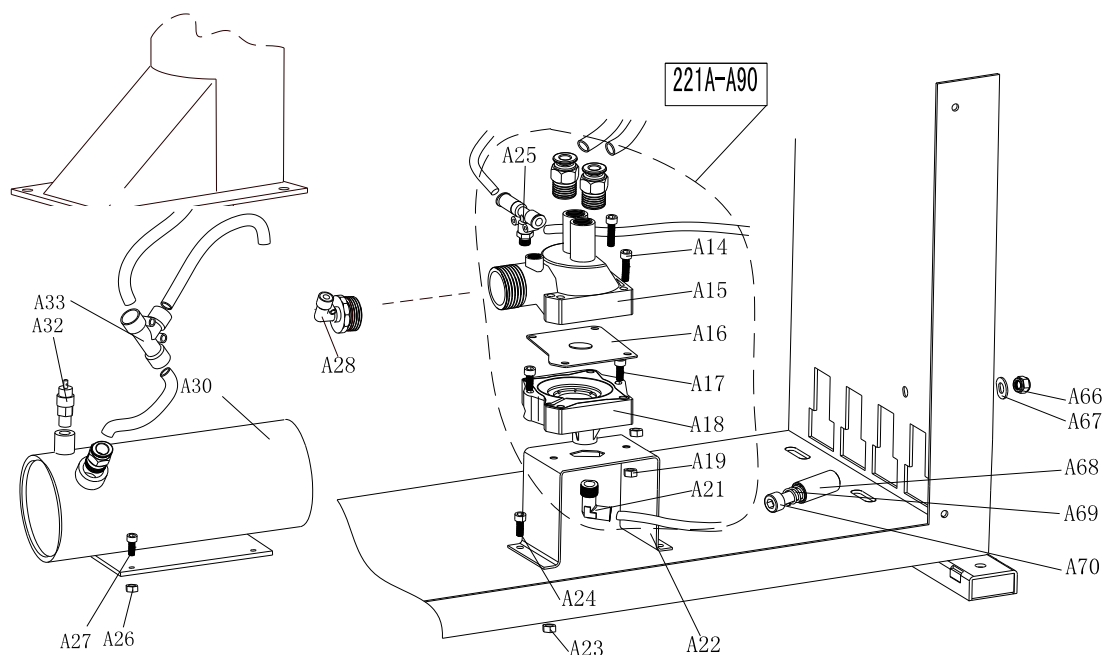
221A-A52	C-221-700000-A	Pressure gauge box Φ60
221A-A53	C-221-690300-A	Button
221A-A54	C-221-690400-A	Button spring
221A-A55	C-221-690100-A	Button valve
221A-A56	B-007-180081-R	Hex socket head bolt 1/8*8
A58	S-000-004200-0	O-seal 4*2
221A-A59	C-221-690200-A	Button rod
A60	S-038-000020-0	Pressure gauge 10kg
221A-A61	C-221-680000-A	Seat with holes
A62	S-010-010808-0	Quick stright union 1/8-Ø8
A63	B-017-040301-0	cross head screw M4*30
221A-A64	CX-221-710000-A	Pressure gauge box support
A65	B-010-060161-0	Hex 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



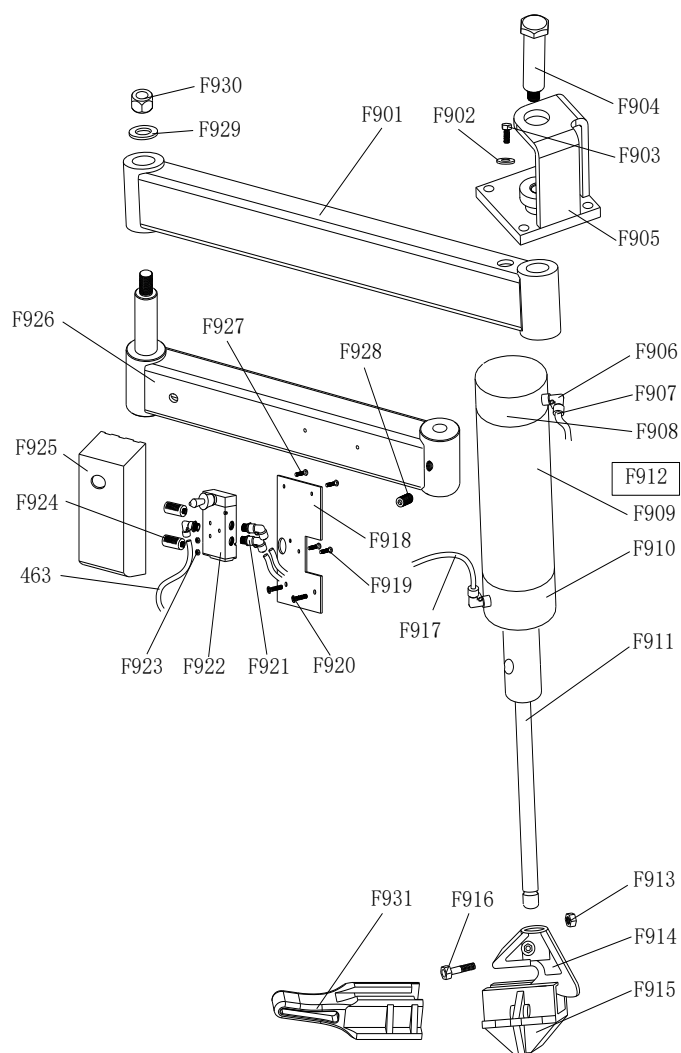
802	Decide by Type of Quick nozzle	Quick nozzle
841	EQ11005003350	Quick coupler G1/4-Φ8
842	JZ06001020326	Filter AW+AL3300
840	Decide by Type of Quick nozzle	Complete oil fog maker 3300



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 mandrel (A)
A71	CW-106-022102-A	Complete Rotating valve (A)

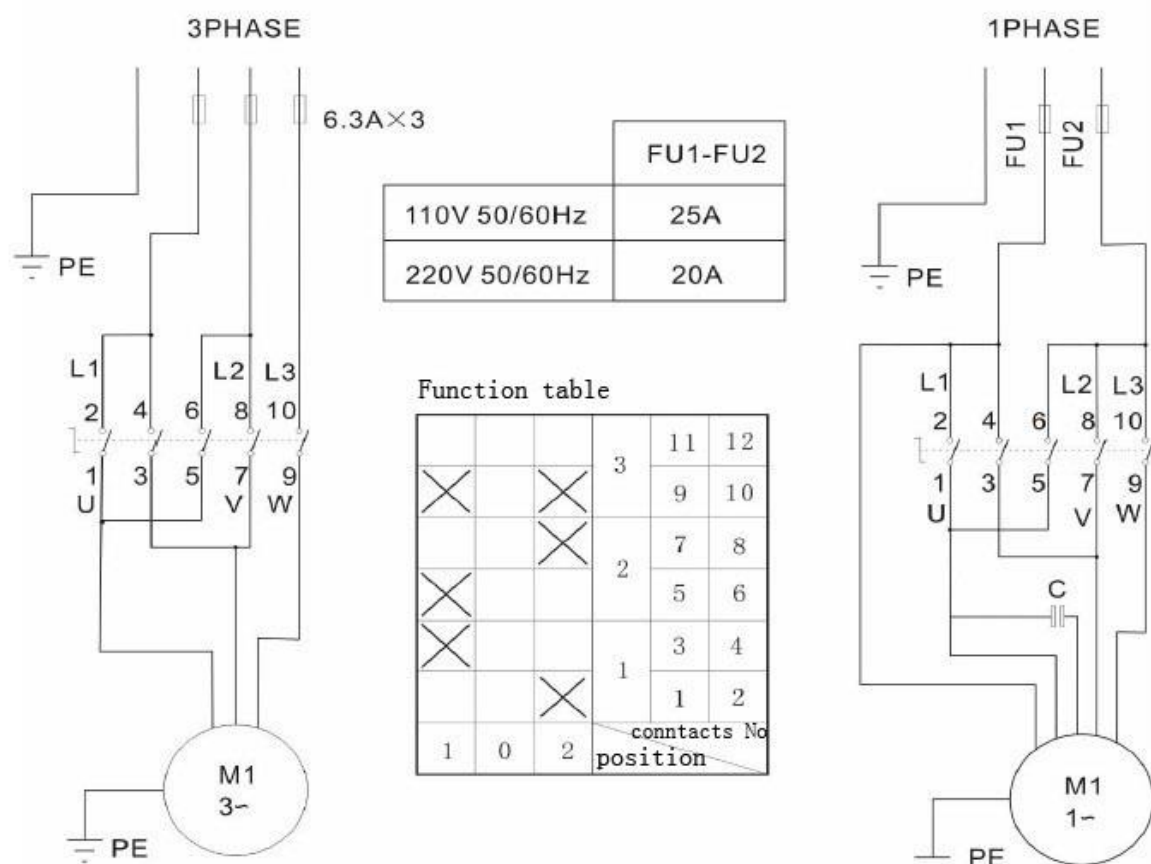


A14	B-010-060301-0	Hex socket head bolt M6*30
A15	C-221-600500-A	Exhaust valve barrel
A16	C-221-600700-A	Exhaust valve rubber washer
A17	B-010-060301-0	Hex socket head bolt M6*30
A18	C-221-600600-A	Exhaust valve cover
A19	B-001-060001-0	Self-locking nut M6
A21	S-012-010408-0	Quick union 1/4-Ø8
A22	CX-221-600800-A	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	CZ-009-020000-0	009 Pressing arm
F902	B-050-100000-0	Spring washer $\phi 10$
F903	B-010-100301-0	Hex socket head bolt M10*30
F904	CZ-009-050000-0	009 Pressing arm pin
F905	CX-009-010000-0	009 Pressing plate
F906	S-012-010806-0	Quick union 1/8- $\phi 6$
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-009-070400-2	009 cylinder piston rod $\phi 25 \times 750$
F912	CA-005-209800-0	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 screw M4*30
F920	B-024-050161-1	Cross round head screw 5*16
F921	S-012-010406-0	Quick Union 1/4- $\phi 6$
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(left)
F926	CX-009-030000-0	009 Auxiliary pressing arm
F927	B-017-040161-0	Cross head screw M4*16
F928	B-007-120161-0	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

17. Circuit diagram:



18. Pneumatic drawing:

