

TYRE CHANGER INSTRUCTION MANUAL

INDEX	PAGE
1. Introduction:	1
2. Safety regulation:	1
3. Warning label and sticking position:	1
4. Technical data:	1
5. Transport:	1
6. Unpacking:	2
7. Workplace requirements:	2
8. Product diagram:	2
9. Assembly procedure:	3
10. Pneumatic link up:	3
11. Electric link up:	3
12. Control devices:	3
13. To perform preliminary operation tests:	3
14. Operation instruction:	4
14.1. To loosen the tyre bead:	4
14.2. Clamping the tyre:	4
14.3. Demounting the tyre:	4
14.4. Mounting the tyre:	5
14.4.1 Checking tyre and wheel rim:	5
14.4.2 Mounting the tyre:	5
14.5. Inflating the tyre:	6
14.5.1 Inflation without tubeless tyre inflation device:	6
14.5.2 Inflation with tubeless tyre inflation device:	6
15. Storing:	7
16. Maintenance:	7
16. Information of help arm 005:	9
16.1. Technical data:	9
16.2. Safety regulations:	9
16.3. Installation:	9
16.4. Transport:	9
16.5. Unpacking:	9
16.6. Workplace requirements:	9
16.7. Assembly:	9
16.8. Functional parts:	10
16.9. Trial operation:	10
16.10. Safety warning label:	10
16.11. Operations:	10
17. Trouble shooting table:	13
18. Exploded drawing:	14
19. Pneumatic drawing:	24
20. Circuit diagram:	24

Tyre Changer

Warning

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

1. Introduction:

Application Range: The semi-automatic tyre changer is especially designed for demounting / mounting tyres.

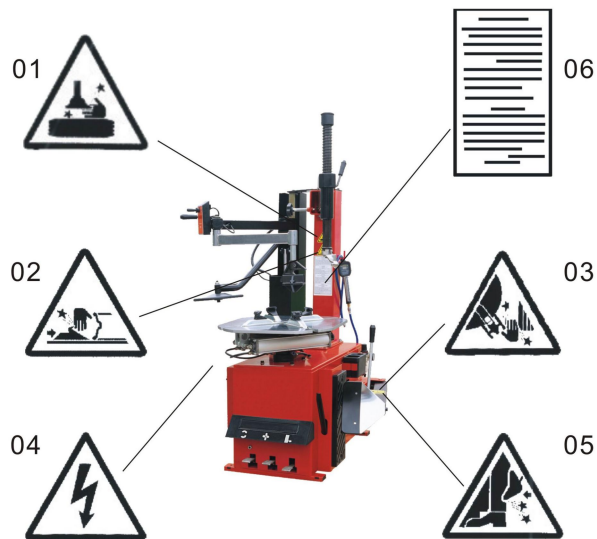
Caution: Use only for purpose for which it is designed, don't use it for other purposes. Manufacturer shall not be liable for any damage or injury caused by failure to comply with these regulations.

2. Safety regulation:

Use of this machine is especially reserved to trained and qualified professional persons. Any changes on this machine without manufacturer's permission may cause the malfunction and damage to machine, manufacturer can cancel warranty coverage for above. If some parts are damaged due to some reasons, please replace them according to the spare parts list. (Attention: deadline of warranty is one year after sale).

3. Warning label and sticking position:

- 01 Don't put hands under the mounting head during operation;
- 02 Don't put hands between the jaws during operation;
- 03 Don't put hands in the tyre bead when demounting;
- 04 Make sure the system is equipped with a good grounding circuit;
- 05 Don't put feet between the bead breaking arm and the body during operation;
- 06 Warning instructions;



4. Technical data:

External Locking Rim	10 " -21 "
Internal Locking Rim Dimensions	12 " -24 " (Working Pressure 8 ~10 bar.)
Max. Wheel Diameter	1040mm (41 ")
Max. Wheel Width	355mm (14 ")
Bead breaker force with 1 Mpa air pressure	2500kg
Max. Working Pressure	8-10bar
Power supply	110V (1ph)/ 220V (1ph)/ 380V (3ph)
Motor power	0.75/0.55/1.1kW
Max. Rotating Torque (Turntable)	1078 Nm (110Kg.m)
Overall Dimension	96×76×93 cm
Noise Level	<75db

5. Transport:

When transporting the machine, it must be handled with a forklift truck with the forks. Positioned as show as in the Fig 1.

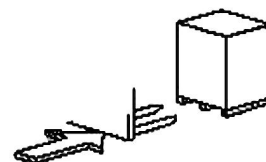


Fig1

6. Unpacking:

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.

7. Workplace requirements:

Choose workplace in compliance with safety regulations. Connect power supply and air source according to manual, 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.

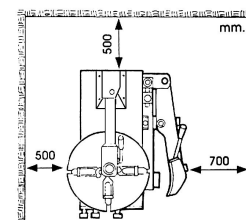
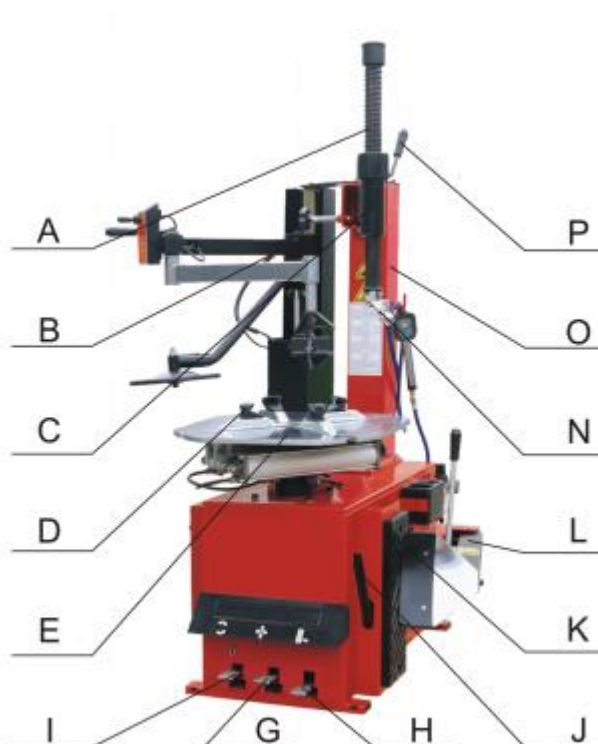


Fig 2

8. Product diagram:



A	Vertical arm	I	Reverse pedal
B	Help arm 005	J	Lift lever
C	Swing arm	K	Rubber buffer
D	Jaw	L	Bead breaker arm
E	Turntable	N	Mounting head
G	Jaw Clamping pedal	O	Column
H	Bead breaker pedal	P	Locking handle

9. Assembly procedure:

1. Prepare the tools and unscrew the nuts at the bottom, position the machine and calibrate it with the horizontal rule. Mount the machine with the screws. Make sure the system is equipped with a good grounding circuit. And have operations for skid prevention.

2. Unscrew the nut A on the body B as shown in Fig 4.

Lift the column C, mount it on the body using the nut A through the bolt located on the body B. If the column becomes loose, screw them immediately. Otherwise damage to the tyre may happen.

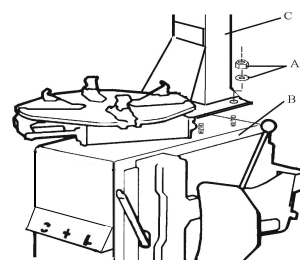


Fig 4

10. Pneumatic link up:

Depress the pedal to ensure that the jaws on the turntable do not open unexpectedly to avoid injury caused by the accident.

2) Connect the inflation gun to its connector if it needs.

3) Connect tyre changer to compressed air network with air hose of inside diameter of 7-8 mm, air pressure of 8~10 bar is recommended.

4) Air pressure is not permitted to surpass 10 bar, otherwise, manufacturer can cancel the warranty coverage.

Caution: the pressure of compressed air network is not permitted to surpass 10 bar. Please install pressure-adjusting valve when it is more than 10 bar.

11. Electric link up:

Before making any electric link up, check to be sure that the main voltage correspond to what is stamped on the voltage tag.

It is essential that the system is equipped with a good grounding circuit.

The machine must be connected to a power supply line circuit bracket set for 30A.

Caution: The rated power supply of tyre changer is given on rear panel, please check the voltage.

However minor, any operations on electrics must be done only by professional persons.

Manufacturer shall not be liable for any damage caused by failure to comply with the regulations.

Warning:

Keep hands and your body away from moving parts of tyre changer.

Do not wear necklace, bracelet or loose clothing.

Unreadable and missing labels must be replaced at once.

Don't use this machine if any warning labels missed.

Keep labels clear for operator.

12. Control devices:

Control devices are shown as Fig 3 and included the following:

-locking handle (P), used to lock or unlock vertical arm (A). Mounting head (N) can be raised about 2-3mm automatically if locking.

-jaw clamping pedal (G), used to make four jaws (D) on the turntable open or close.

-bead breaker pedal (H), used to operate bead breaker arm (L).

-reverse pedal (I), used to make turntable (E) rotate in clockwise /anti-clockwise direction.

-inflation pedal (F) which only A-version equips it, used to inflating tubeless tyre.

13. To perform preliminary operation tests:

Check whether the tyre changer runs well or not after connection finished:

Depress the reverse pedal to turn the turntable in clockwise direction.

Push the reverse pedal up to turn the turntable in anti-clockwise direction.

Depress the bead breaker pedal to open the bead breaker arm. Loosen it to turn the bead breaker arm back.

Depress the jaw clamping pedal completely to open the jaws on the turntable, depress it once again to close the jaws. When the pedal is in the middle position, the jaws are in the static status.

Tyre changer operation is consisted of three parts:

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

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

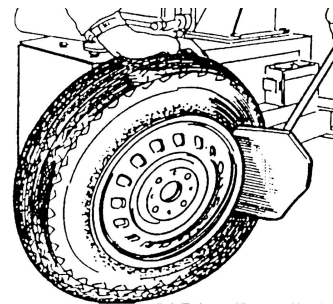


Fig 5

14. Operation instruction:

Caution: Take off all the weights on both sides of wheel rim before operation.

14.1. To loosen the tyre bead:

Be careful when loosening tyre. Bead breaker arm will move rapidly with powerful force when depressing the bead breaker pedal, it may crash things in its working area.

Deflate the tyre completely, take off the core of valve stem;

1) Close the four jaws on the turntable to avoid conflict. If jaws open, it may scratch hands, so don't touch the bead when loosening.

2) Open the bead breaker arm by hands by pushing it towards the outside, place the tyre against the rubber buffer. Bring the paddle against the bead about 10mm from the edge of the rim shown as Fig 5.

Caution: Place the paddle against the tyre bead.

3) Depress Bead breaker pedal to push paddle into tyre. Repeat the above operations on different positions around the tyre and both sides of tyre until tyre is released completely.

14.2. Clamping the tyre:

- 1) Remove all the weights on the wheel rim;
 - 2) Lubricate the tyre bead;
 - 3) Swing the swing arm to non-working position.
 - 4) Secure the wheel rim on the turntable from inside or outside.
- Don't put your hands under the wheel while clamping the wheel rim.
Put the tyre on the center of the turntable.

Check to make sure the wheel firmly secured by the four jaws.

a- to clamp the wheel from outside (Tyre Diameter From 10" To 21"):

Depress the jaw clamping pedal halfway down to position the four jaws, put the tyre on turntable, and depress the jaw clamping pedal until the wheel is secured by the jaws.

b- to clamp the wheel from inside (Tyre Diameter From 12" To 24"):

Depress the jaw clamping pedal to close the four jaws on the turntable. Put the tyre on the turntable and depress the jaw clamping pedal to open the jaws, thereby lock the wheel in place.

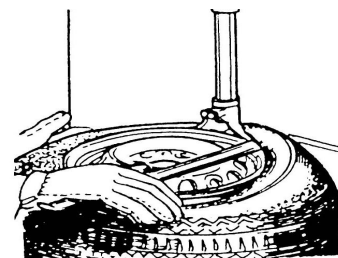


Fig 6

14.3. Demounting the tyre:

- 1) Swing the swing arm on the column to the working position.
- Don't put your hands on the wheel rim to avoid injury during this operation.

2) Lower the vertical arm until the mounting head rests next to the wheel and on the top of tyre. Then lock the vertical arm in position using the locking handle. The mounting head can raise 2mm-3mm automatically from the

edge of the wheel rim.

3) Insert the lifting lever between the tyre bead and the front section of the mounting head, and move the tyre above the mounting head as shown as Fig 6.

Note: In order not to damage the inner tube, it is recommended to perform this step with the inner tube valve stem positioned about 10 cm to the right of the mounting head.

With the lifting lever held in position shown as Fig 6, rotate the turntable in a clockwise direction by fully depressing the reverse pedal. Continue until the tyre is completely separated from the wheel rim.

To prevent accident, keep hands and other parts of your body away from moving devices during operation.

Note: The tyre can be slid out easily from the mounting head due to hardness. In order to prevent it, with the lifting lever held in position shown as Fig 6, rotate the turntable about 1~2 cm in anti-clockwise direction before rotating in clockwise direction.

4) Remove the inner tube if there is one.

5) Repeat the step 3 for the other side of the tyre.

6) Swing the swing arm to the non-working position. Remove the tyre from the wheel rim.

14.4. Mounting the tyre:

14.4.1 Checking tyre and wheel rim:

Caution: Check to make sure that the tyre and the wheel rim are of same size, it can prevent burst of the tyre during inflating and mounting.

Check as follows:

- No damage for tyre and tyre components, don't use it if some defects on the tyre appear.

- No convex and concave defects on the wheel rim.

Note: Especially for alloy wheel rim, it may have some micro inner cracks caused by concave defects, they bring in the danger to operators or the damage to the wheel rim.

The tyre and the wheel rim must be of the same size.

Note: The diameter of the wheel rim is stamped on itself, so is the tyre. If you are not sure, don't mount the tyre.

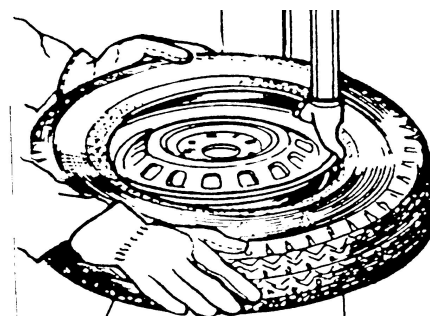


Fig 7

14.4.2 Mounting the tyre:

1) Lubricate the tyre bead and the wheel rim with the lubrication recommended by manufacturer.

2) Clamp the wheel rim according to the section of “clamping the tyre” if the tyre is removed from the turntable.

3) Swing the swing arm on the column to the working position. Don't put your hands on the wheel rim to avoid injury during this operation.

4) Place the mounting head above the edge of the wheel rim with hands. Lock the vertical arm as described as step 2 in the section of “dismounting the tyre”.

5) Move the tyre so that the bead passed below the front section of the mounting head and is brought up against the edge of the rear section of the mounting head. (Fig 7)

Note: if the tyre doesn't have inner tube, make the valve stem and mounting head in the same line. Keep the tyre bead pressed down into the wheel rim channel with hands. Then, depress the pedal to rotate the turntable in clockwise direction. Continue this process throughout the entire circumference of the wheel rim and tyre.

To prevent accident, keep hands and other parts of your body away from moving devices.

6) Insert the inner tube if there is one.

7) Repeat the steps above for the other side of the tyre. Swing the swing arm to non-working position.

8) Depress the pedal, remove the tyre from the turntable.

Note: The turntable is always rotating clockwise during mounting or demounting; anti-clockwise rotating is just for correcting operation.

14.5. Inflating the tyre:

14.5.1 Inflation without tubeless tyre inflation device:

Importance:

It is very dangerous during inflating operation, take carefully and comply with instruction.

A burst of the tyre can cause serious injury or even death to the operator.

There is a decompression valve which restricts pressure not to surpass 3.5bar on the tyre changer, but the possibility of burst still exists. Please don't underestimate the danger.

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) Fail to comply with the safety regulation;

Operate as follows:

- 1) Remove the valve cap from the valve stem;
- 2) Attach the air gauge nozzle to the tyre valve stem with the locking lever in the "UP" position. Check to make sure the 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. Once the proper air pressure has been reached, disconnect the nozzle from the valve stem and screw a valve cap onto the stem.

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 others to operate or be near the tyre changer.

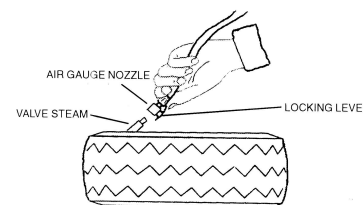


Fig 8

14.5.2 Inflation with tubeless tyre inflation device:

- 1) The tubeless tyre inflation device is used during bead-seating operation and during inflation in place of the airline gauge.
- 2) Disconnected from any power sources.
- 3) Before operating, it should be to check the device correctly:
 - Press the inflating pedal down to the middle position. the inflating head should give air.
 - Press the inflating pedal all the way down. A strong air blast should come from the holes in the four locking sliders.

Bead seating and inflating note: a wheel can explode if:

- a. The diameter of the rim is not exactly the same at the tyre's.
- b. The rim or tyre are defective. NOTE: Before any installation work, check to make sure that the tyre changer is disconnected from any power sources.
- c. If the recommended pressure is exceeded during bead seating.

d. The tyre is inflated to a pressure higher than the maximum recommended by the manufacturer.

e. The operator does not observe the requisite safety regulations.

4) Tubed tyres

a. Remove the valve stem.

b. Clip the valve onto the inflator chuck , making sure it is properly connected.

c. Make a last check to be certain that tyre and rim diameter correspond.

d. Check to be certain that rim and beads are sufficiently lubricated.

If necessary lubricate some more.

e. Press the pedal down to the middle position to start inflation.

f. Release frequently the inflating pedal to check pressure on the manometer. Introduce more air little by little until the correct pressure is reached.

5) Tubeless tyres inflating

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

a. Remove the valve stem.

b. Clip the valve onto the inflator chuck making sure it is properly connected.

c. Make a last check to be certain that tyre and rim diameter correspond.

d. Check to be certain that rim and beads are sufficiently lubricated. If necessary lubricate some more.

e. Press the pedal down to the middle position.

f. 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.

CAUTION: Always keep hands and body back from inflating tyre.

g. Release the tyre , set the pedal back to the middle position and continue to inflate the tyre to the required pressure.

NOTE:

1) 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.

2) If a higher tyre 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.

3) Always keep hands and entire body back from inflating tyre.

4) Only specially trained persons are allowed to perform these operations. do not allow others to operate or be near the tyre changer.

15. Storing:

If the machine needs to be stored for a long time, disconnect power supply and air source. Lubricate all parts what they need. Empty all the oil and water in the box. Put on the plastic cover to prevent dust.

16. Maintenance:

Caution: only the professional persons can do the maintenance.

To prolong the machine's life, maintain it 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

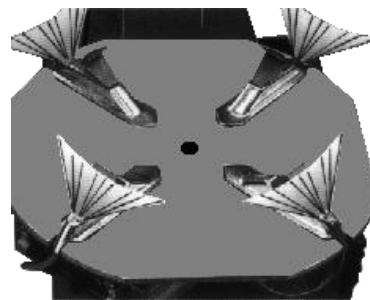


Fig 9

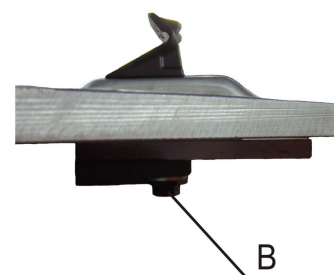
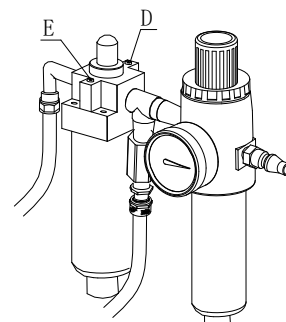


Fig 11

the electric power supply and air source, and depress the bead breaker 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 everyday after work. Clean the dirt on the turntable with diesel oil once per week and lubricate the slides and jaws.

Empty water in the air filter once every day to ensure the performance for the cylinder. following maintenance must be done at least once per month: check oil level in oil fog maker, please top up with SAE30# oil if need, depress pedal for locked tyre 5-6 times. Check whether oil in oil fog maker was leakage, continued operation, depress twice every time, drop down a dripping oil, otherwise adjust screw (E) that controlled oil enter with minus screwdriver. (Fig 10)

Note: After the first 20 days of use, retighten the jaws with tightening screws B. (Fig 11)

Note: in the event of a loss of power, check to see if the belt is tight. To do so, remove the left side of the cover by unscrewing the screws. Tighten the belt, using the adjusting screws located on the motor support. (Fig 12)

Caution: please disconnect the machine from power supply and air source.

Note: Adjust the vertical arm when it can not be locked or it can not be complied with the working requirements on distance of 2mm with the mounting head, please adjust it according to Fig 13.

In order to achieve the reliability of jaws and bead breaker arm, operate as follows to keep their valves clean.

1. Remove the left side of the cover by unscrewing the two screws;
2. Loosen the valve silencers (A) which belong to jaw clamping pedal and bead breaker pedal;
3. Clean the silencers with compressed air, please replace it referring to the spare parts list if it is damaged.

(Fig 14)

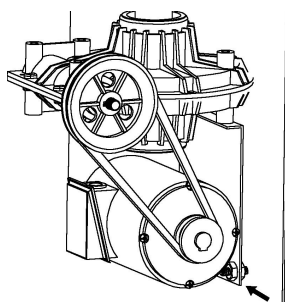


Fig 12

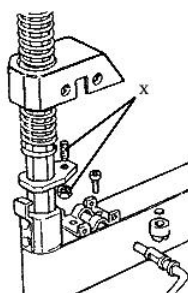


Fig 13

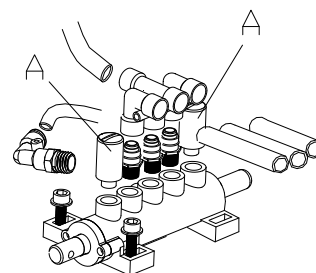


Fig 14

16. Information of help arm 005:

The 005 device has been designed as a tyre changer accessory to help the operator to mount or demount tyres.

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 shall not be liable for any injury or damage caused by improper operation.

Please keep this manual handy for consulting.

16.1. Technical data:

Working pressure	8~10 bar
Noise level	LpA<75dB (A)

16.2. Safety regulations:

This device is especially reserved to trained professional persons or somebody who has experiences on mechanical operation and read this manual carefully.

This device must be used together with our tyre changers, we are not sure it can work with others.

Manufacturer won't be responsible for any unauthorized modification

16.3. Installation:



Notice:

The installation of this auxiliary device should be done by professional persons.

Before assembly, disconnect the device from power supply and air source.

16.4. Transport:

Move the device with a forklift truck as illustrated in Fig 15.

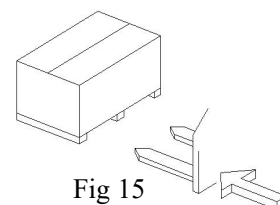


Fig 15

16.5. Unpacking:

When unpacking, check to make sure that all parts shown on the packing list are included. If any parts are missing or broken, please call the manufacturer or the dealer asap.

Please keep the package out of children's reach.

16.6. Workplace requirements:

Fig 16 shows maximum space requirements and minimum distance of 500mm from walls. Please choose the right place to install it.

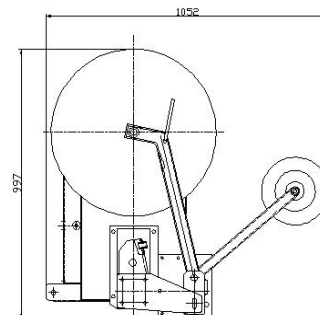


Fig 16

16.7. Assembly:

The following steps show how to install the 005 device.

- 1) Disconnect the tyre changer from power supply and air source.
- 2) Remove the left cover of the body from the tyre changer;
- 3) Mount the linkage (1, Fig 17) on the body; mount the help arm on the tyre changer with screw M10*25 (2/5, Fig 17);

- 4) Fix the linkage (3, Fig 17) on the column with screw M8*25;
- 5) Connect the air hose to the corresponding T-joint through the right hole of the body. (Fig 17)
- 6) Cover the left side plate.

16.8. Functional parts:

Fig 18 shows functional members of the 005 device:

1. Rotating arm
2. Tyre pressing head (upper)
3. Switch handle
4. Tyre lifting roller
5. Tyre pressing head (bottom)

The specification for switch handle:

The switch handle (3, Fig 18) is to adjust the rotating arm 1 during mounting and demounting tyres.

16.9. Trial operation:

The 005 device must connect with the air compressor, and the air pressure from 8 bar to 10 bar is desirable.

Move the switch handle 3 up, the rotating arm 1 should rise. Move the switch handle 3 down, the rotating arm 1 should lower.

16.10. Safety warning label:

Warning: Unreadable and missing warning labels must be replaced immediately.

Do not use the tyre changer if one or more labels are missing.

Do not add any object that could prevent the operator from seeing the labels.

Order the warning labels shown as Fig 19 on the place where you need.



Fig 19

16.11. Operations:

The 005 device has been designed to facilitate the operations of mounting and demounting. In any case, the 005 device would make these jobs easier on any type of wheel. It is a good helper for tyre changer.

A. Clamping the tyre:

Loosen the bead according to the manual. Clamp the tyre from outside (using the protection cover on the jaws).

- 1- Depress the corresponding pedal to open the jaws, and rotate the auxiliary arm to the non-working position
- 2- Put the tyre on the turntable, depress the corresponding pedal to close the jaws until they near the rim. (Fig 20)
- 3- Insert the tyre pressing head (upper) 2 and tyre pressing head (bottom) 5 on the rotating arm 1. (Fig 21)
- 4- Turn the rotating arm 1 to the center of the turntable.
- 5- Lower the help arm to move the tyre pressing head (bottom) 5 near the rim with the switch handle 3, lower it 1-2cm to make the jaws lock the rim easily after it touch the rim.
- 6- Tighten the jaws, and raise the auxiliary arm with the switch handle.

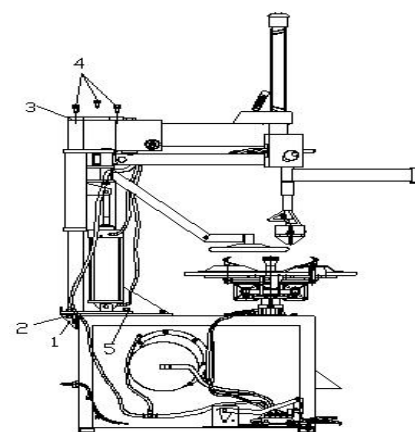


Fig 17

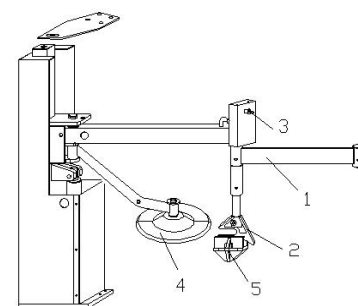


Fig 18

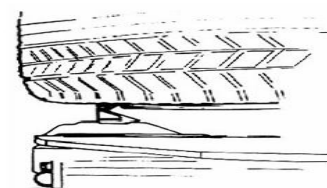


Fig 20

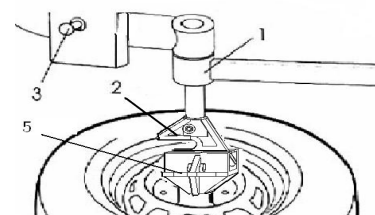


Fig 21

Remove the tyre pressing head, turn the rotating arm 1 to its non-working position.

B. Demounting the tyre:

1. To loosen the tyre bead:

Loosen the beads with the tyre pressing head (upper) again and again if necessary.

Turn the rotating arm 1 to its working position in anti-clockwise direction, insert the bar with the tyre pressing head (upper) to the rotating arm. Move the tyre pressing head (upper) above the tyre. (Fig 22)

Lower the help arm by operating the switch handle 3, press the tyre with the tyre pressing head (upper), depress the pedal to rotate the turntable in clockwise direction. Loosen the bead during this procedure. (Fig23)

Caution: Lubricate the tyre pressing head (upper) and the bead before the operation. Then make the bead loose, raise the help arm and turn the rotating arm to its non-working position.

2. Demounting the upper bead:

a- Move the mounting head from the edge of the rim about 2-3mm, position it by operating the locking handle.

b- Turn the rotating arm 1 to its working position. Move the tyre pressing head (upper) near the mounting head, turn the switch handle to press the bead down with the tyre pressing head (upper). Insert the lifting lever into the clearance between the tyre bead and the rim, lubricate the tyre on the circumference of the tyre.

c- Raise the auxiliary arm, rotate the tyre pressing head (upper) to the opposite of the mounting head. Push the switch handle down to press the tyre with the tyre pressing head (upper) to create enough space.

d- Hang the bead on the mounting head with the help of the lifting lever. (Fig 24)

e- Raise the auxiliary arm and push it to non-working position. Rotate the turntable clockwise until the upper bead is completely detached from the rim.

3. To loosen the bottom bead:

a- Bring the rotating arm to non-working position.

b- Position the tyre lifting roller under the tyre, make sure it is near the edge of the rim but not touch it.

c- Hold the support 6 for the tyre lifting roller to keep the tyre lifting roller 5 pressed against the tyre. (Fig 25)

d-Depress the corresponding pedal to turn the turntable in clockwise direction, operate the switch handle to rise the auxiliary arm until the bottom bead remove from the rim completely.

4. Demounting the bottom bead:

Note: With some tyres, the bottom bead can be removed only by the tyre lifting roller. To do this, continue the bead loosening procedure until the bead detach from the rim completely. (Fig 25)

The tyre lifting roller always facilitate the bead demounting especially for sports tyres with wide tread.

a- Position the tyre lifting roller and lift the bottom bead until it is in the drop center; (Fig 26)

b- Hang the bottom bead on the mounting head using the lifting lever;

c- Remove the tyre lifting roller and depress the corresponding pedal to turn the turntable in clockwise direction until the bottom bead is completely detached from the rim.

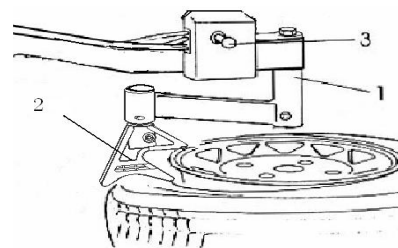


Fig 22

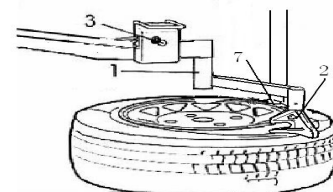


Fig 23

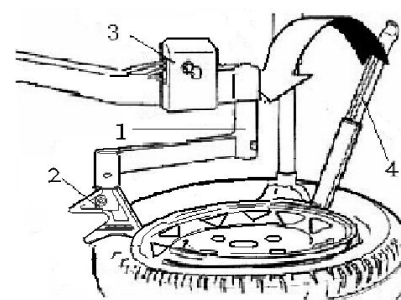


Fig 24

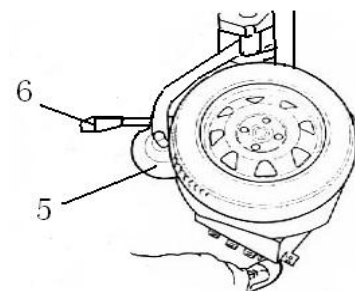


Fig 25

C. Mounting the tyre:

1) Mount the bottom bead on the rim as the instruction of tyre changer and lubricate it;

Warning!

Move the rotating arm to non-working position before operation so as to avoid the danger caused by collision.

Move the tyre pressing head (upper) about 3-4 cm from the mounting head, lower the help arm to depress the tyre until it turn down under the rim about 3cm with the tyre pressing head (upper). (Fig 27)

Note:

Pay special attention to this procedure. Make sure the tyre pressing head (upper) can't touch the rim. Or it will cause damage to the rim caused by friction. Keep hands away from the tyre pressing head (upper).

2) Depress the corresponding pedal to turn the turntable in clockwise direction. Then the tyre pressing head (upper) rotate together with the turntable to mount the tyre. No interference and other help during this procedure.

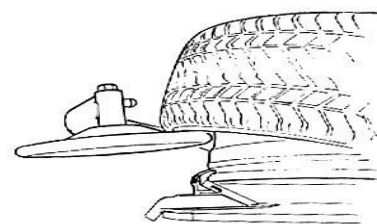


Fig 26

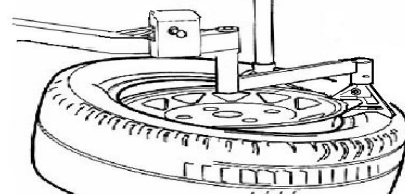
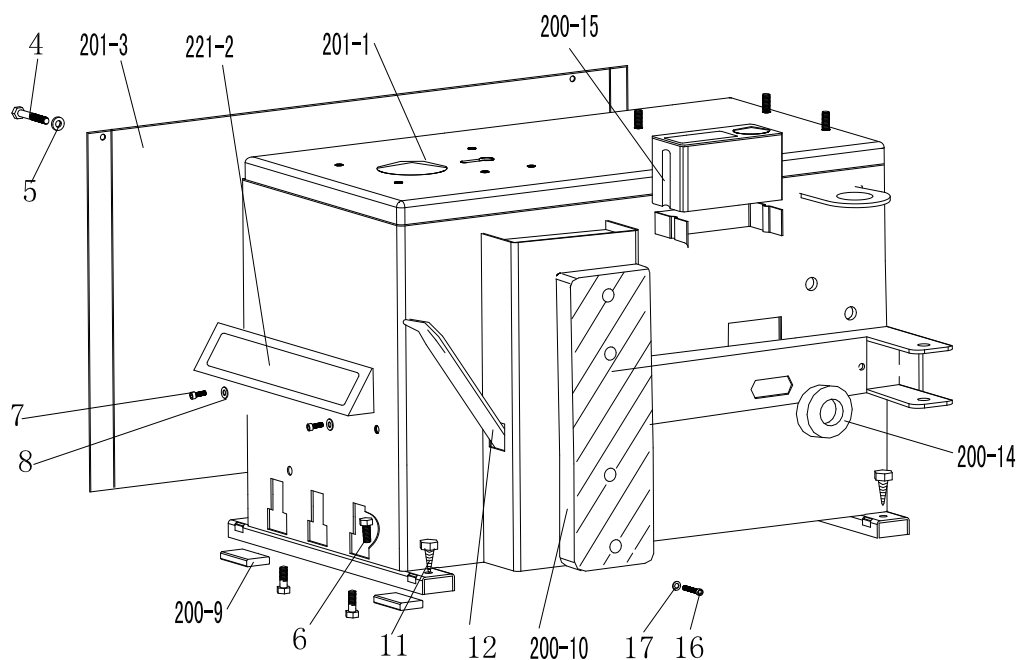


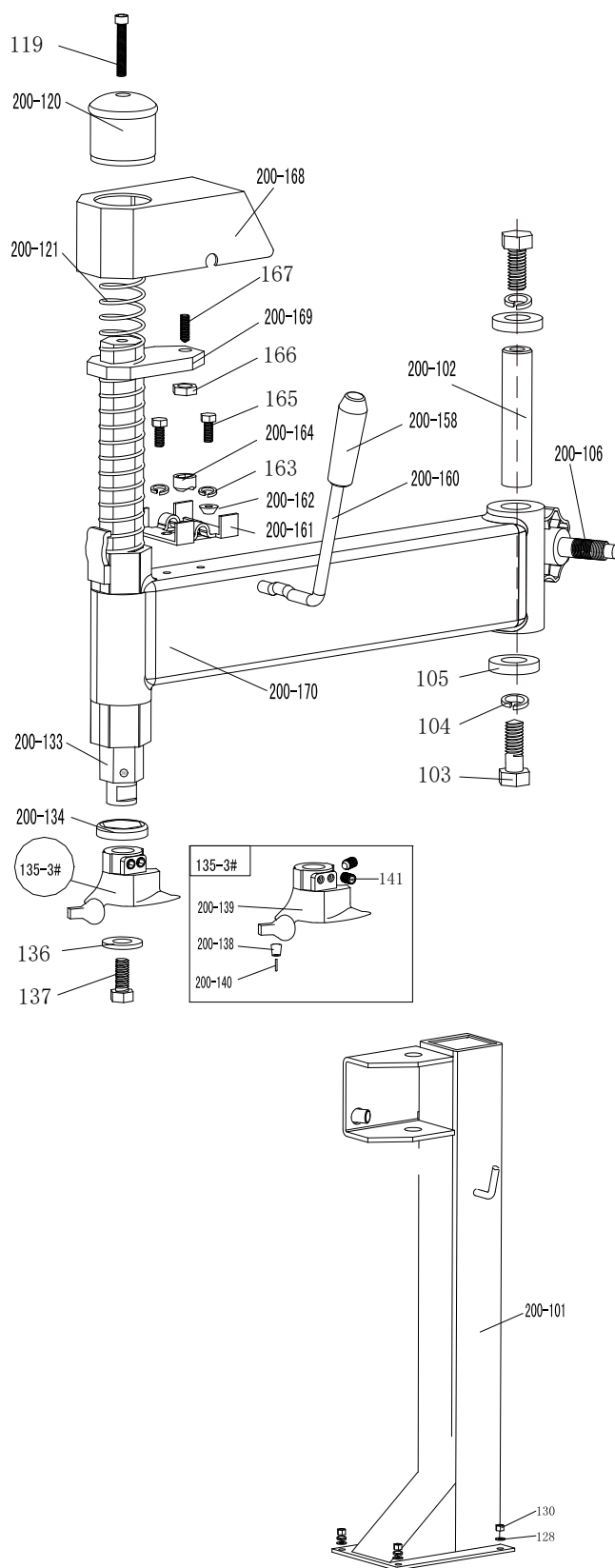
Fig 27

17. Trouble shooting table:

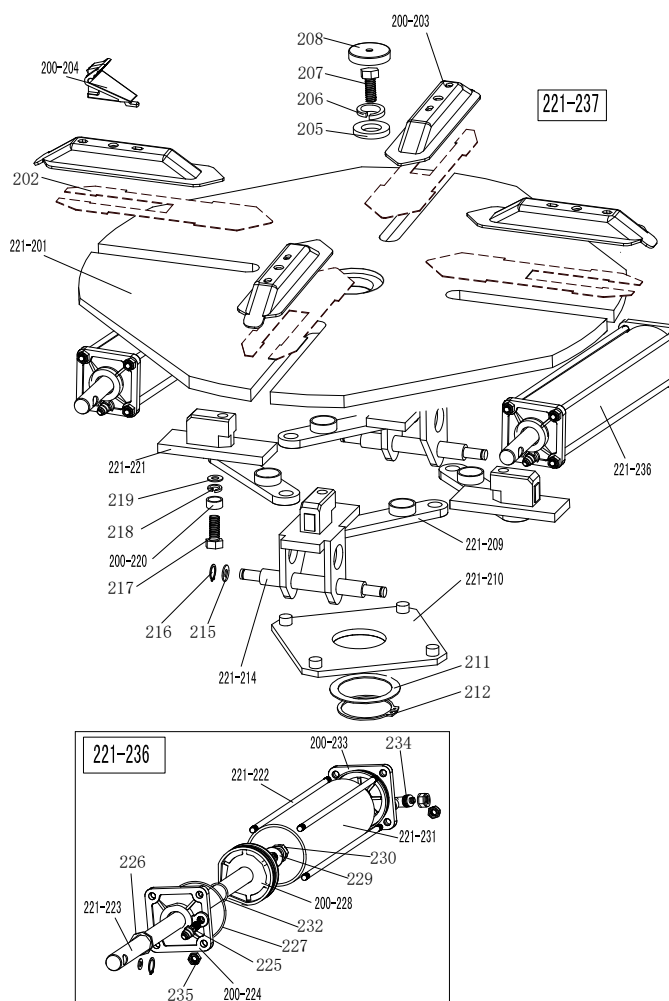
Problem	Reason	Solution
The turntable rotate just in one direction or can't rotate	Damaged switch	Replace it.
	Damaged belt	Replace it.
	The Motor's malfunction	Check the cable or wire; Replace the motor if damaged.
The jaws delay to open/close; the turntable can't lock or lock incorrectly	Leakage of Air network	Check all the parts on the air network.
	The cylinder can't work.	Replace the cylinder piston.
	Worn jaws	Replace the jaws.
	Broken washers of the chuck cylinder	Replace it.
The mounting head always touches the rim during operation.	The locking plate incorrectly adjust or unqualified.	Replace or adjust it.
	Screws on the chuck loose; the locking plate can't be locked	Tighten the screws; replace the plate.
The bead breaker arm and jaw clamping arm can't turn back to the original position.	Bad pedal spring	Replace it.
The bead breaker operates difficultly.	Jammed silencer	Clean it or replace it.
	The washer on the bead breaker cylinder is broken.	Replace it.

18. Exploded drawing:

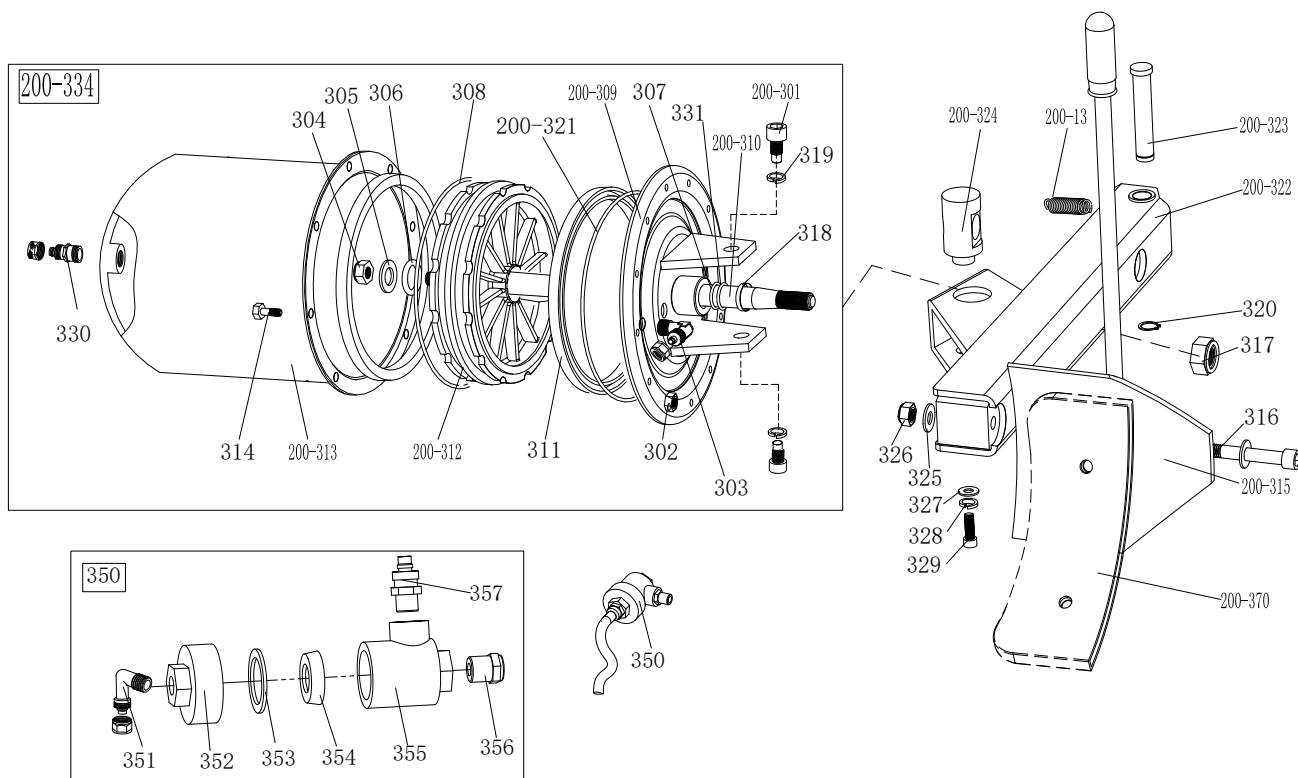
201-1	JZ08001021108	Machine body 201	200-10	JZ09001023178	Bead breaker buffer with pot point U200
221-2	JZ08001021047	Pedal front cover 221	11	FJ04006004049	screw ST6.3*38
201-3	JZ08001021146	Left cover 201	12	JZ09001023041	Lifting lever
4	FJ04009004668	hex socket head cap screw M6*10	200-13	JZ09001022722	Bead breaker arm spring U200
5	FJ04002003892	Flat washer 6*14*1.2	200-14	JZ09001022719	Bead breaker arm rubber U200
6	FJ04009004879	Outer hex bolt M8*25	200-15	JZ07001020929	Oil-water box U200
7	FJ04009004706	hex socket head cap screw M8*20	16	FJ04009004706	hex socket head cap screw M8*20
200-9	JZ09001023159	Rubber foot buffer	17	FJ04002003904	Flat washer 8*17*1.5



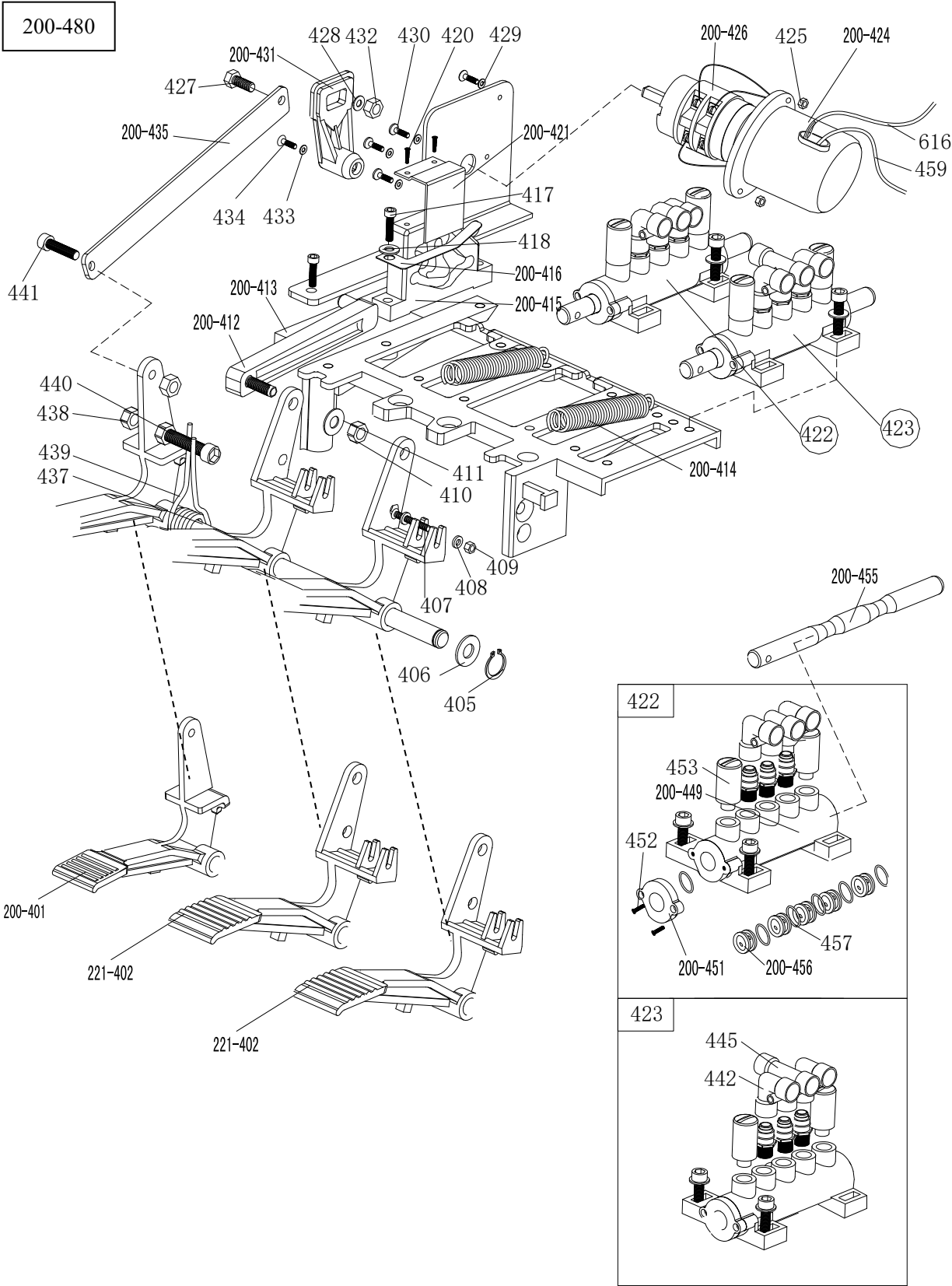
200-101	JZ08001021057	Column U2000125
200-102	JZ09001023188	Swing arm pin U200
103	FJ04009004813	Outer hex bolt M14*30
104	FJ04002003777	Flat washer 14
105	JZ03001015476	Big washer U200
200-106	JZ07001020882	Column adjust handle U200
119	FJ04009004588	hex socket head cap screw M10*50
200-120	JZ07001020885	Vertical arm cap 200
200-121	JZ09001022973	Vertical arm spring U200
128	FJ04002003800	Flat washer 10*20*2
130	FJ04008004444	Nut M10
200-133	JZ03001015654	Vertical arm 200
200-134	JZ09001022967	Vertical arm washer S36
135-3#	JZ06001020303	Complete Mount/demount head B03#(without protectors)
136	JZ03001015342	Mount/demount head flat washer U200
137	FJ04009004770	Outer hex bolt M10*25
200-138	JZ09001015340	Mount/demount head pulley U200
200-139	JZ09001022714	mount/demount head B03
200-140	JZ09001022993	Hex round pin U200
141	FJ04006004129	screw M12*12
200-158	JZ07001020907	Locking handle cover U200
200-160	JZ03001015733	Locking Handle U200
200-161	JZ03001015740	Locking plate U200
200-162	JZ09001023096	Locking block cover U200
163	FJ04002003792	Flat washer 8
200-164	JZ09001023004	Eccentric shaft nut U200
165	FJ04009004879	Outer hex bolt M8*25
166	FJ04008004495	Nut M12*1.75*T6
167	FJ04006004176	screw M12*30
200-168	JZ07001020909	Locking plate cap U200
200-169	JZ03001015645	Hex locking board 200
200-170	JZ08001021123	Swing arm U200



221-201	JZ03001015479	Turntable 630
202	JZ03001015581	Claw seat slide U221011203
200-203	JZ03001015584	Jaw cap assembly U200
200-204	JZ09001022893	Jaw 200
205	JZ03001015476	Big washer U200
206	FJ04002003779	Flat washer 16
207	FJ04009004828	Outer hex bolt M16*40
208	JZ07001020860	Turntable cap U200
221-209	JZ03001015611	Connection rod assembly 615
221-210	JZ03001015454	Square Turntable 615
211	JZ03001015457	Square Turntable Washer U200
212	FJ04001003757	Snap Ring 65
221A-214	JZ03001015834	Jaw slide guide with pin 615
215	FJ04002003813	Flat washer 12*24*2
216	FJ04001003737	Snap Ring 12
217	FJ04009004809	Outer hex bolt M12*85
218	FJ04002003917	Teeth locking washer 12*20.5*1
221-237	JZ06001020219	Complete turntable 630, square 24"*U221
219	FJ04002003814	Flat washer 12*30*3
200-220	JZ09001015609	Connection rod nut U200
221A-221	JZ03001015766	Jaw slide guide without pin 615
221-222	JZ09001022937	Threaded connection rod M8*390
221-223	JZ09001022843	Clamping cylinder piston rod $\Phi 20 \times 400$
200-224	JZ09001022837	Clamping cylinder cover without handle $\Phi 70$
225	EQ11006003389	Quick coupler G1/8- $\Phi 8$
226	FJ08003005391	V - seal ring $\Phi 20 \times \Phi 28 \times 7.5$
227	FJ08001005312	O - seal ring $\Phi 63 \times 2.65$
200-228	JZ09001022841	Complete clamping cylinder piston 70
229	FJ04002003813	Flat washer 12*24*2
230	FJ04008004495	Nut M12*1.75*T6
221-231	JZ09001022852	Clamping cylinder barrel $\Phi 70 \times 360$
232	FJ08001005151	O - seal ring $\Phi 19.6 \times 2.62$
200-233	JZ09001022839	Clamping cylinder cover with handle $\Phi 70$
234	EQ11005003366	Quick coupler G1/8- $\Phi 8$
235	FJ04008004459	Nut M8
221-236	JZ06001020236	Complete clamping cylinder U221

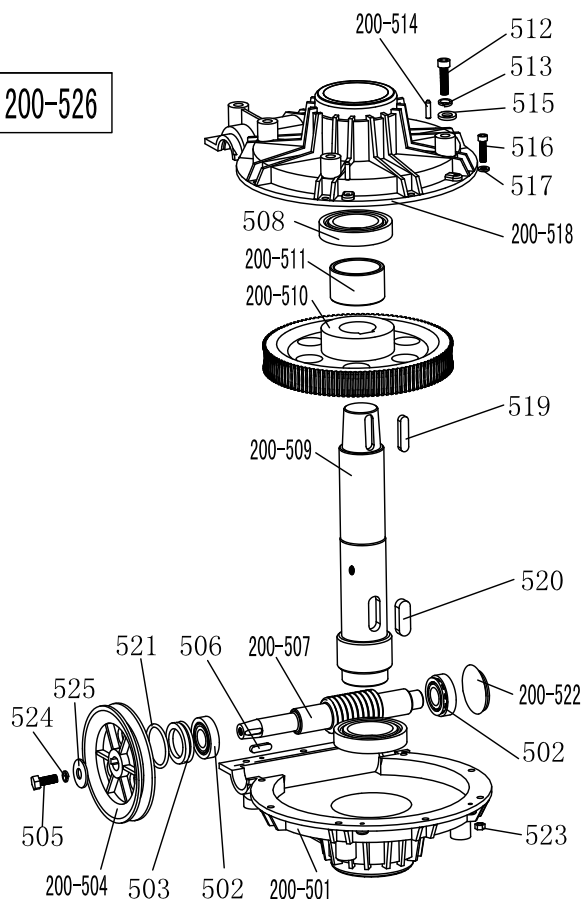


200-13	JZ09001022722	Bead breaker arm spring U200	320	FJ04001003741	Snap Ring 16
200-301	JZ09001011179	Hex socket head bolt M14*30	200-321	FJ08001005135	O - seal ring $\Phi 170.8 \times 5.33$
302	FJ04008004458	Nut M6	200-322	JZ08001021156	Bead breaker arm 200 U200
303	EQ11005003350	Quick coupler G1/4- $\Phi 8$	200-323	JZ03001015349	Bead breaker arm pin U200
304	FJ04008004517	Nut M16*1.5	200-324	JZ03001015382	Bead breaker cylinder rotating pin U200
305	FJ04002003833	Flat washer 16*28*2	325	FJ04002003813	Flat washer 12*24*2
306	FJ08001005120	O - seal ring $\Phi 16 \times 2.65$	326	FJ04008004445	Nut M12
307	FJ08001005160	O - seal ring $\Phi 20 \times 2.65$	327	FJ04002003915	Flat washer 8*30*3
200-308	FJ08001005146	O - seal ring $\Phi 180 \times 4$	328	FJ04002003792	Flat washer 8
200-309	JZ03001015378	Bead breaker cylinder cover assembly D186	329	FJ04009004877	Outer hex bolt M8*20
200-310	JZ09001022746	Bead breaker cylinder piston rod D186	330	EQ11005003357	Quick coupler G1/8- $\Phi 8$
311	FJ08003005386	V -seal ring $\Phi 185 \times \Phi 168 \times 10.8 (+0.1/-0.3)$	331	FJ08001005151	O - seal ring $\Phi 19.6 \times 2.62$
200-312	JZ09001022744	Bead breaker cylinder piston $\Phi 185$	200-334	JZ06001020265	Complete bead breaker cylinder
200-313	JZ09001015384	Bead breaker cylinder barrel U200	350	JZ06001020298	Bead breaker cylinder exhaust valve U-2098
314	FJ04009004676	hex socket head cap screw M6*16	351	EQ10004003264	Quick coupler G1/8- $\Phi 8$
200-315	JZ03001015790	Bead breaker shovel assembly U200	352	JZ07001020848	Bead breaker cylinder exhaust valve cover U2098
316	FJ04009004613	hex socket head cap screw M12*90	353	JZ09001022987	Seal Washer U2098
317	FJ04008004517	Nut M16*1.5	354	JZ09001023080	Bidirectional Seal U2098
318	CF03003001068	Guide belt 10*2	355	JZ07001020849	Bead breaker cylinder exhaust valve barrel U2098
200-370	JZ07001020829	Bead breaker shovel protection cover(optional) U200	356	EQ04001002949	Muffler G1/4
319	FJ04002003777	Flat washer 14	357	EQ10005003288	Quick coupler G1/4- $\Phi 8$

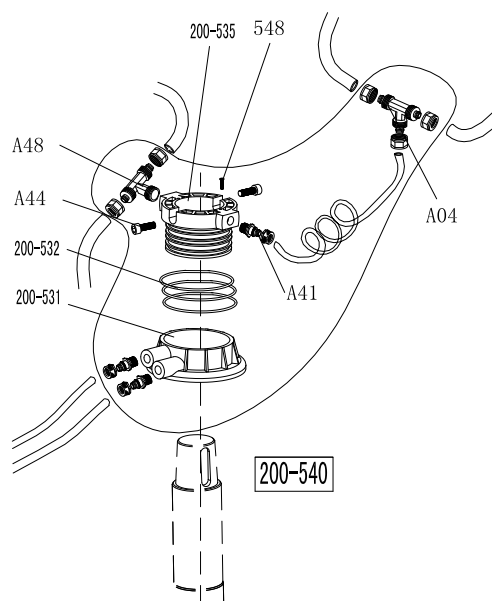


200-401	JZ09001022773	Reverse switch pedal	428	FJ04002003890	Flat washer 6*12*1
221-402	JZ09001023136	5-way valve pedal(right)	429	FJ04002003874	Flat washer 4*8*0.5
405	FJ04001003737	Snap Ring 12	430	FJ04006004323	screw M4*16
406	FJ04002003813	Flat washer 12*24*2	200-431	JZ07001020856	Reverse switch handle U200
407	FJ04006004200	screw M4*30	432	FJ04008004458	Nut M6
408	FJ04002003874	Flat washer 4*8*0.5	433	FJ04002003859	Flat washer 3*6*0.5
409	FJ04008004455	Nut M4	434	FJ04006004306	screw M3*16
410	FJ04008004459	Nut M8	200-435	JZ03001015560	Pedal Connection Rod U200
411	FJ04002003904	Flat washer 8*17*1.5	437	JZ03001015570	Pedal front shaft U200
200-412	JZ07001020913	Cam connection rod U200	438	FJ04008004515	Nut M8
200-413	JZ09001022882	Pedal suport board 3#	439	JZ09001022873	Pedal twist spring U200
200-414	JZ09001022872	Pedal Spring U200	440	FJ04009004715	hex socket head cap screw M8*50
200-415	JZ07001020914	Cam U200	441	FJ04009004706	hex socket head cap screw M8*20
200-416	JZ09001023109	Cam washer 0.5	442	EQ10004003264	Quick coupler G1/8-Φ8
417	FJ04009004680	hex socket head cap screw M6*20	445	EQ10001003242	Quick coupler G1/8-2*Φ8
420	FJ04006004228	screw ST2.9*12	200-449	JZ07001020920	5-way valve barrel U200
200-421	JZ03001015747	Cam cover U200	200-451	JZ07001020917	5-way valve cover U200
422	JZ06001020282	5-way valve (L-union,without rod)	452	FJ04006004372	screw ST2.9*14
423	JZ06001020283	5-way valve (T-union,without rod)	453	EQ04002002955	Muffler G1/8
200-424	JZ07001020853	Reverse Switch Cover U200	200-455	JZ09001015771	5-way valve rod U200
425	FJ04008004510	Nut M4	200-456	JZ07001020919	5-way valve rod spacer U200
200-426	DD03009001577	Reverse switch LW8-25N2/5.5	457	FJ08001005087	O - seal ring Φ12*20*4
427	FJ04009004680	hex socket head cap screw M6*20	200-480	JZ06001020268	Complete 3-pedals assembly 200

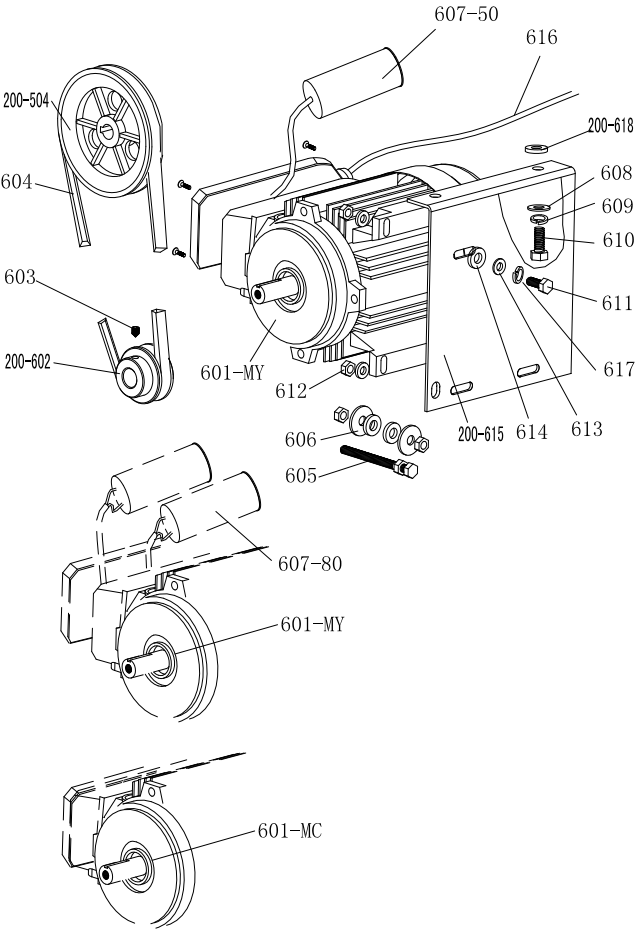
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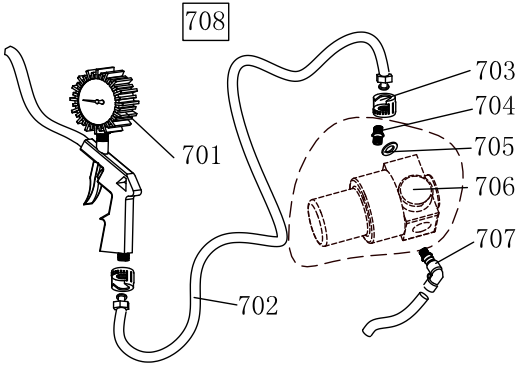
200-501	JZ09001022681	Gear box lower cover U300
502	FJ02010003613	Bearing 30204
503	FJ08007005413	Gear Seal $\Phi 20 \times \Phi 35 \times 8$
200-504	JZ09001023119	Gear Belt pulley U200
505	FJ04009004879	Outer hex bolt M8*25
506	FJ06001004964	Key washer 6*20
200-507	JZ09001023118	Worm rod $\Phi 42 \times 218$
508	FJ02010003623	Bearing 6010-2RS
200-509	JZ09001023126	Worm gear shaft $\Phi 50 \times 280$
200-510	JZ09001023250	Worm gear U200
200-511	JZ02007011727	spacer U200
512	FJ04009004779	Outer hex bolt M10*55
513	FJ04002003773	Flat washer 10
200-514	FJ06002005000	Pin $\Phi 6 \times 20$
515	FJ04002003800	Flat washer 10*20*2
516	FJ04009004680	hex socket head cap screw M6*20
517	FJ04002003892	Flat washer 6*14*1.2
200-518	JZ09001022679	Gear box upper cover U300
519	FJ06001004962	Key washer 10*40
520	FJ06001004963	Key washer 14*40
521	FJ08001005221	O - seal ring $\Phi 30 \times 3.55$
200-522	JZ09001022990	oil resistant seal U200
523	FJ04008004458	Nut M6
524	FJ04002003792	Flat washer 8
525	FJ04002003915	Flat washer 8*30*3
200-526	JZ06001020255	Complete gear box



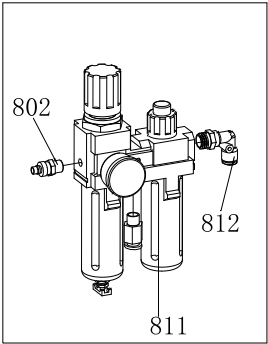
A04	EQ11002003333	Quick coupler 3* $\Phi 8$
A44	FJ04009004676	hex socket head cap screw M6*16
A48	EQ11002003340	Quick coupler G1/8-2* $\Phi 8$
200-531	JZ02007015872	Rotating valve casing 200
200-532	FJ08001005300	O - seal ring $\Phi 59.99 \times 2.62$
200-535	JZ02007015676	Rotating valve mandrel U200
537	CF01002000936	Flexible air hose $\Phi 8 \times \Phi 5 \times 10m$
A41	EQ11006003389	Quick coupler G1/8- $\Phi 8$
548	FJ04006004060	screw M4*6
200-540	JZ06001020249	Complete Rotating valve, plastic U200



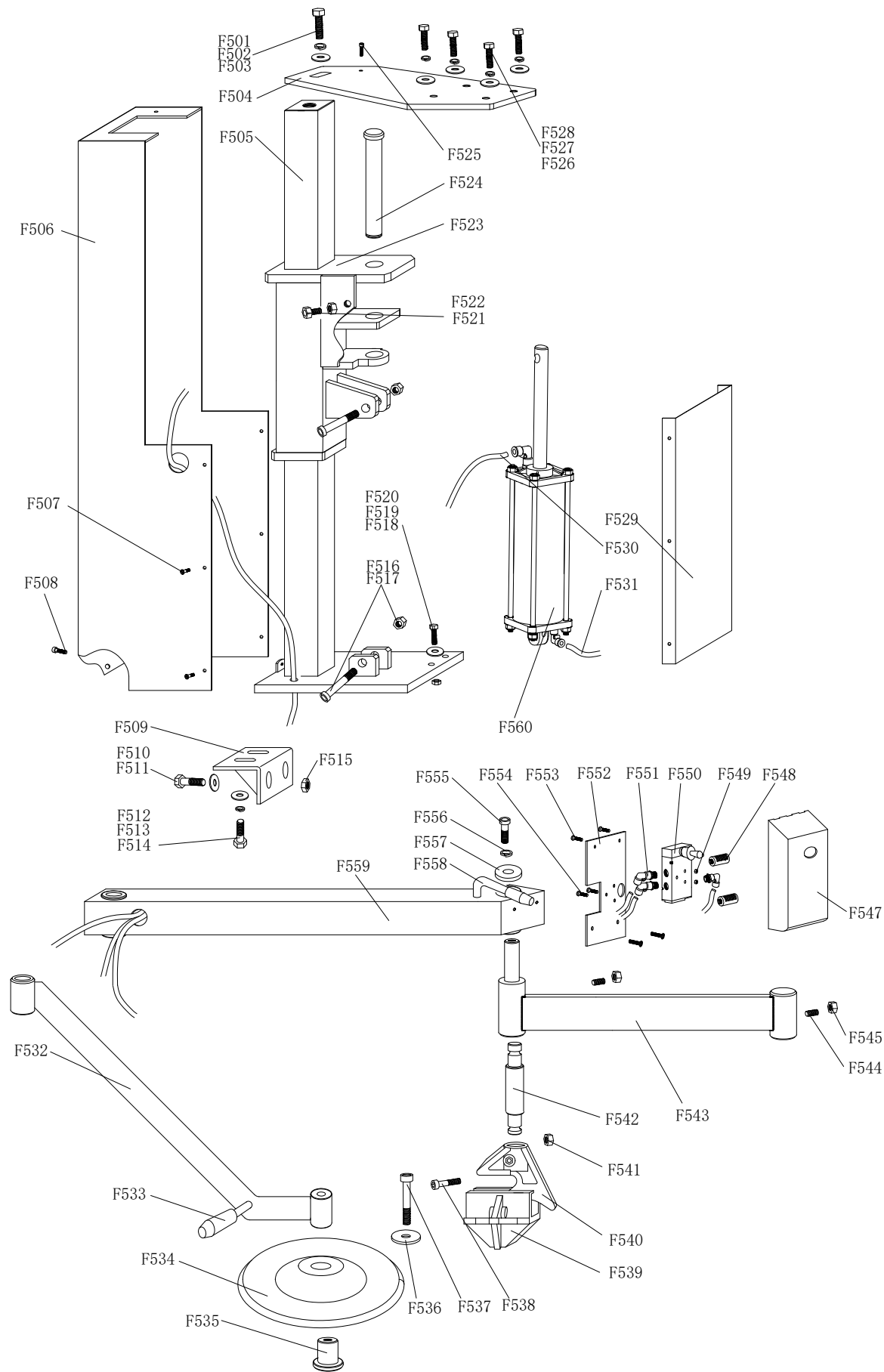
200-504	JZ09001023119	Gear Belt pulley U200
601-MC	Decide order according to customer's requirement: V/ HZ/ KW/ PH For example: 220-240V/50HZ/0.75KW/1PH	
601-MY		
200-602	JZ09001015421	Motor Belt pulley U200
603	FJ04006004178	screw M8*12
604	FJ02003003545	Balancer Belt A-686
605	FJ04009004889	Outer hex bolt M8*65
606	FJ04002003915	Flat washer 8*30*3
607-80	DD04009001964	capacitance 80uF/250V
607-50	DD04009001883	capacitance 50uF/450V
608	FJ04002003800	Flat washer 10*20*2
609	FJ04002003773	Flat washer 10
610	FJ04009004770	Outer hex bolt M10*25
611	FJ04009004883	Outer hex bolt M8*35
612	FJ04008004515	Nut M8
613	FJ04002003910	Flat washer 8*22*2
614	JZ09001022782	Motor Rubber Buffer 10*30*4
200-615	JZ03001015423	Motor support 0.75KW/1.1KW
616	JZ12001026447	Motor Cable 220V RVV5*1.5 ² *0.7m
617	FJ04002003792	Flat washer 8
200-618	JZ09001022782	Motor Rubber Buffer 10*30*4



701	EQ05001002961	Digital inflating gun 0-10Bar/TG-7
702	JZ09001022984	Helical hose 8*5*2500
703	EQ14003003478	Notch nut G1/4/TP-08
704	EQ14003003478	Notch nut G1/4/TP-08
705	FJ04002003822	Flat washer 13*24*1
706	EQ03003002911	Pressure adjust valve AR2000-G1/4
707	EQ10004003257	Quick coupler G1/4-Φ8
708		Complete digital inflating gun

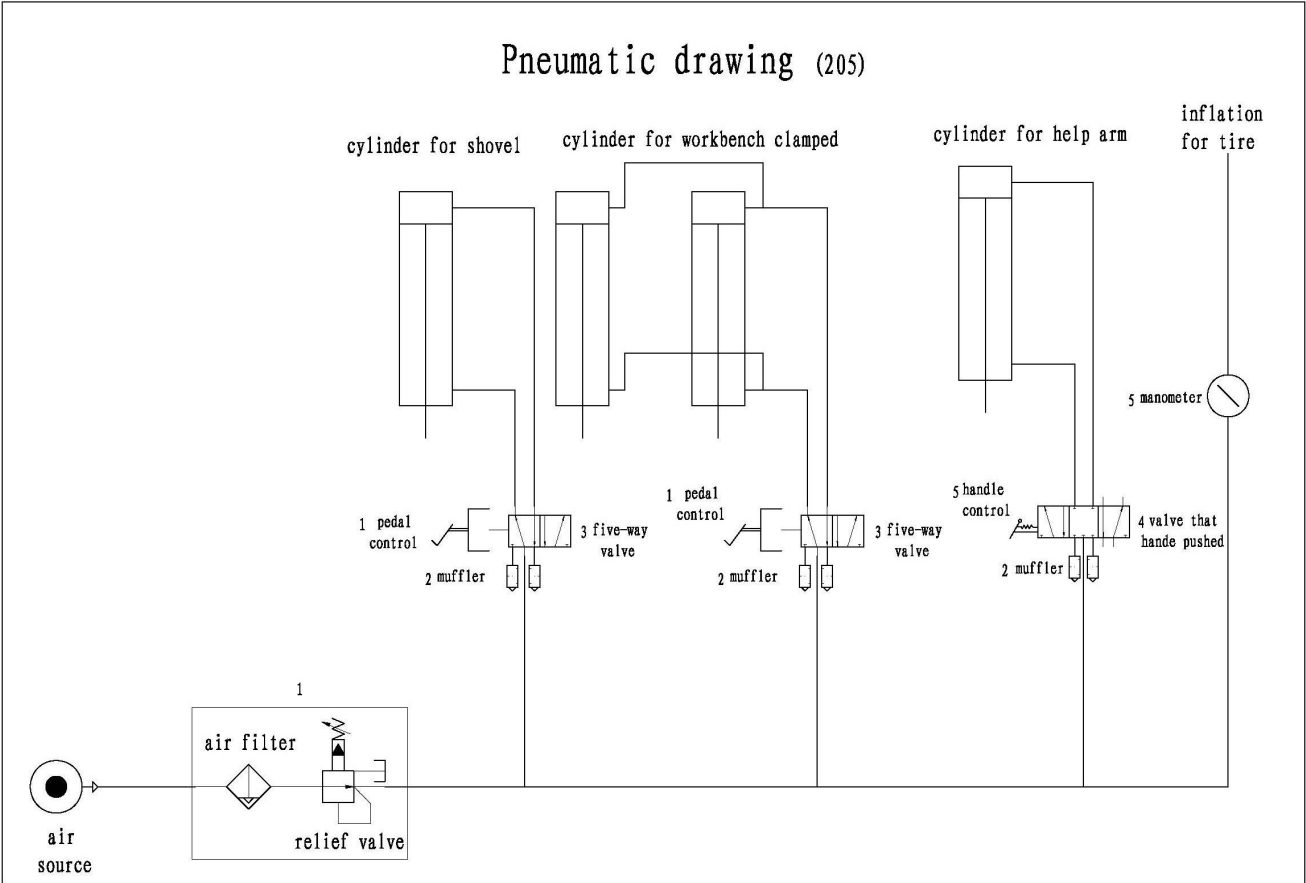


802	Decide by Type of Quick nozzle	Quick nozzle
811	EQ03001002905	Filter AW+AL2000
812	EQ11005003350	Quick coupler G1/4-Φ8



F501	FJ04009004770	Outer hex bolt M10*25	F532	JZ08001021179	Large roller bracket U005
F502	FJ04002003773	Flat washer 10	F533	JZ07001020907	Locking handle cover U200
F503	FJ04002003804	Flat washer 10*30*3	F534	JZ07001020847	Tire lifting roller U005
F504	JZ08001021253	Column connecting plate U00516 (spray paint)	F535	JZ03001015377	Tire lifting roller center hud U005
F505	JZ03001015462	Column 005	F536	FJ04002003814	Flat washer 12*30*3
F506	JZ08001021354	Left help arm rear cover U005	F537	FJ04009004596	hex socket head cap screw M12*100
F507	FJ04006004312	screw M3*40	F538	FJ04009004685	hex socket head cap screw M6*30
F508	FJ04009004646	hex socket head cap screw M5*10	F539	JZ07001020927	Tire pressing head(bottom) U008
F509	JZ08001021254	Column box connecting plate U00518 (spray paint)	F540	JZ07001020926	Tire pressing head (upper) U008
F510	FJ04002003904	Flat washer 8*17*1.5	F541	FJ04008004458	Nut M6
F511	FJ04009004881	Outer hex bolt M8*30	F542	JZ03001015815	Pin of tire pressing head Φ20*135
F512	FJ04002003904	Flat washer 8*17*1.5	F543	JZ03001015817	Tumbler arm U005
F513	FJ04002003792	Flat washer 8	F544	FJ04006004055	screw M10*20
F514	FJ04009004877	Outer hex bolt M8*20	F545	FJ04008004494	Nut M10
F515	FJ04008004459	Nut M8	F547	JZ07001020877	Control valve protection cover U007
F516	FJ04009004779	Outer hex bolt M10*55	F548	EQ04002002955	Muffler G1/8
F517	FJ04008004444	Nut M10	F549	FJ04008004511	Nut M4
F518	FJ04008004459	Nut M8	F550	EQ02011002888	Hand valve 4H230L-08
F519	FJ04002003904	Flat washer 8*17*1.5	F551	EQ10004003254	Quick coupler G1/4-Φ6
F520	FJ04009004881	Outer hex bolt M8*30	F552	JZ08001021026	Raise-fall switch base plate U007
F521	FJ04009004881	Outer hex bolt M8*30	F553	FJ04006004197	screw M4*16
F522	FJ04008004515	Nut M8	F554	FJ04006004200	screw M4*30
F523	JZ08001021277	Raise-fall sleeve 005	F555	FJ04009004770	Outer hex bolt M10*25
F524	JZ03001015869	Left help arm pin U005	F556	FJ04002003773	Flat washer 10
F525	FJ04009004654	hex socket head cap screw M5*20	F557	FJ04002003806	Flat washer 10*40*3
F526	FJ04009004881	Outer hex bolt M8*30	F558	JZ07001020907	Locking handle cover U200
F527	FJ04002003792	Flat washer 8	F559	JZ08001021324	Tire press arm U005
F529	JZ08001021355	front cover 005	F560	JZ09001023062	Raise-fall cylinder 005

19.Pneumatic drawing:



20.Circuit diagram:

Electric Drawings

