

TC26A

Tire Changer Manual



WARNING

- This manual is a necessary part of the product. Please read carefully.
- Keep the manual for later use when maintaining the machine.
- This machine can only be used for the designated purposes. Never use it for any other purpose.
- The manufacturer is not responsible for the damage incurred by improper use or use other than the intended purpose.

Precautions

- The equipment can only be operated by qualified personnel with special training. Modification to any components or parts, or use the machine for other purpose without either obtaining the agreement from the producer, or observing the requirement of the instructions may lead to direct or indirect damage to the equipment.
- The equipment should be installed on the stable ground.
- Keep the back panel 0.5M away from the wall for good ventilation. Enough room should be left on both sides for convenient operation.
- Do not put the equipment a place with high temperature or moisture, or near the heating system, water tap, air-humidifier or chimney.
- Do not put the equipment near the window with sunlight. Protect the unit with a curtain or shield if necessary.
- Avoid lots of dust, ammonia, alcohol, thinner or spraying binder.
- People who are not operating the machines should be kept away when it is used.
- Use appropriate equipment and tools, protective and safety equipment, including eyeglasses, earplugs and working boots.
- Pay special attention to the marks on the machine.
- Do not touch or approach the moving parts by hand during operating.
- Do not remove the safety device or keep it from working properly.
- Before moving the tire changer, contact maintenance personnel.

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1. General Information

1.1 Usage

The Machine is used for demounting, mounting and inflating tires of small vehicles. It features simple operation and high reliability. In addition, it can also be a great help in car repair garage and tire dealers.

1.2 Features

- The equipment can be used for different purposes of demounting, mounting and inflating tires.
- The steel mount/demount is cast from excellent alloy material with special shape and durable performance. The optional plastic mount/demount head with the equipment is made from special engineering plastic that has enough intensity and not damage the tire and rim.
- The two clamping cylinder ensures accurate central alignment, so that the tires can be held tightly.
- The layout of the pedals gives convenience to the operating personnel.
- The distance of bead breaker is large enough for standard, low-profile and run-flat tire (bead breaker cylinder diameter=200mm, can be adjustable).
- Tire lever and lubrication box are easy to reach.

1.3 Specifications

Dimensions

Maximum height: 1880 mm

Length: 1100mm

Width: 900 mm

Air supply

Working pressure: 8~10 bar

Electric specifications

Voltage to choose:

NO.	Voltage	Power	Phase
1	AC110V/60Hz	1.1kW	single
2	AC220V/50Hz	1.1kW	single
3	AC220V/60Hz	1.1 or 0.75kw	Single/t hree
4	AC380V/50Hz	0.75kW	three
5	AC200V/50/60HZ	1.1kw	three

RPM of turntable: 6~7 n / min

1.4 Applicable Rang

External Locking Rim diameter: 12"~23"

Internal Locking Rim diameter: 14"~26"

Max. wheel diameter: 45"(1140mm) Max.

rim width: 14"(355mm)

If choose two speed motor for machine:

Voltage:380V~400V 3ph

Power:0.8/1.1kw

RPM of turntable:

6~7 n / min(First gear);

12~14n/min(Second gear)

1.5 Working Conditions

Working temperature: -40℃—45℃

Transport/store temperature: -40℃—55℃

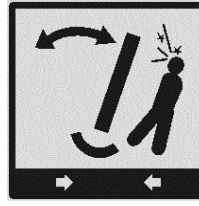
Humidity: 30—95%

Machine with two speed will be more effective!

1.6 Description of Safety Signs



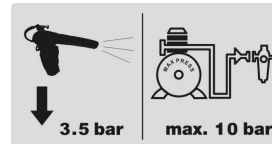
- To prevent accidents from occurring, make sure to keep hands and other body parts away when fastening the mount/demount head or when the turntable is running.



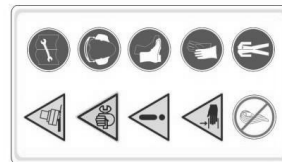
- Be careful in the area of tilting column.



- Caution should be taken when separating the tire from rim. The bead breaker shoe will move rapidly and forcefully when the pedal is depressed. Keep body and materials away from ..

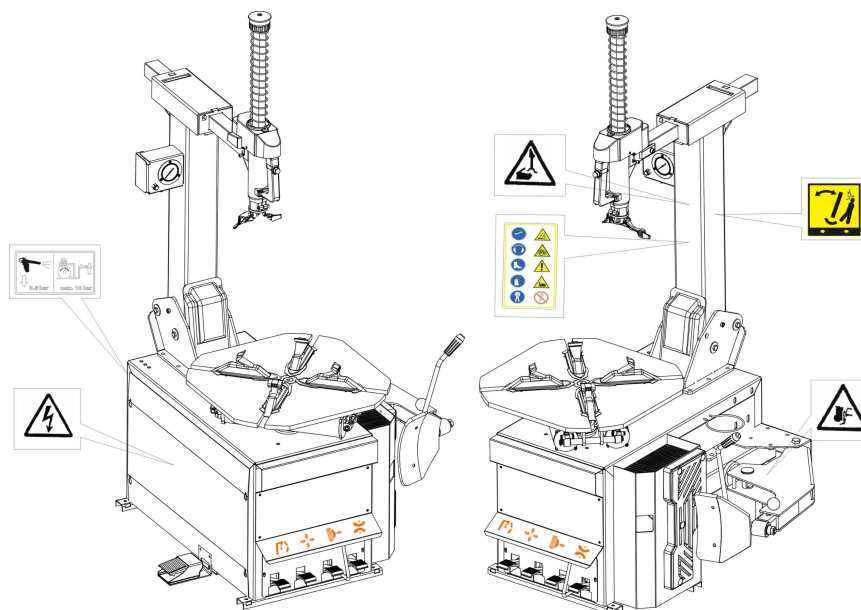


- The pressure of the compressed air should not exceed 10bar. When inflating the tire, The inflating gun pressure value should be 3.5 bar.



- Safety signs

1.7 Position of Safety Signs



- Please change the safety signs if it gets blurred or lost
- When one or more safety signs get lost, don't operate the machine.
- The safety signs must be kept within the sight of the operator.

2. Main Structure

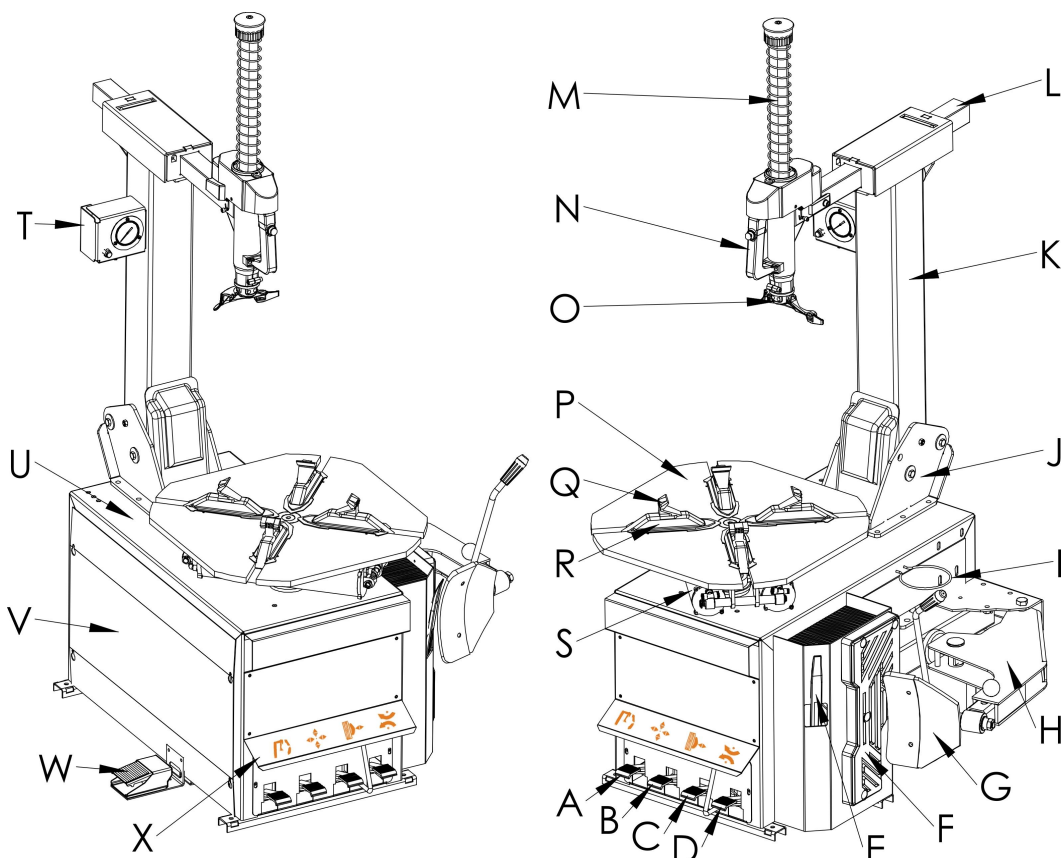


Fig.1

The main operating parts are shown in fig.1

No	Item	No	Item	No.	Item	No	Item
A	Tilting pedal	G	Bead breaker shovel	M	Return spring	S	Clamping cylinder assembly
B	Jaw flex pedal	H	Bead breaker arm	N	Locking handle	T	Barometer
C	Bead breaker pedal	I	Hanger	O	Mount/demount head	U	Frame
D	Turntable control pedal	J	column base	P	Turntable	V	Side cover
E	Tyre lever	K	Post	Q	Clamping jaw	W	Inflating pedal
F	Rubber buffer	L	Arm	R	Slide	X	Sign board



001



002



003

Fig.2

Accessories provided are shown in Fig.2:

001- Inflator hose

002- Tyre lever

003-clamping jaw protector

3. Installation and adjusting

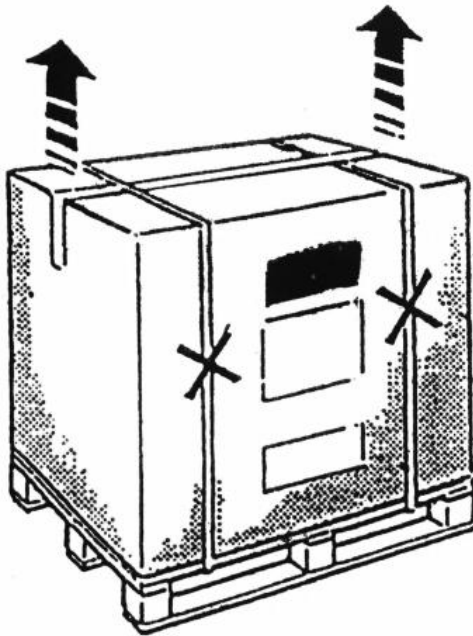


Fig.3

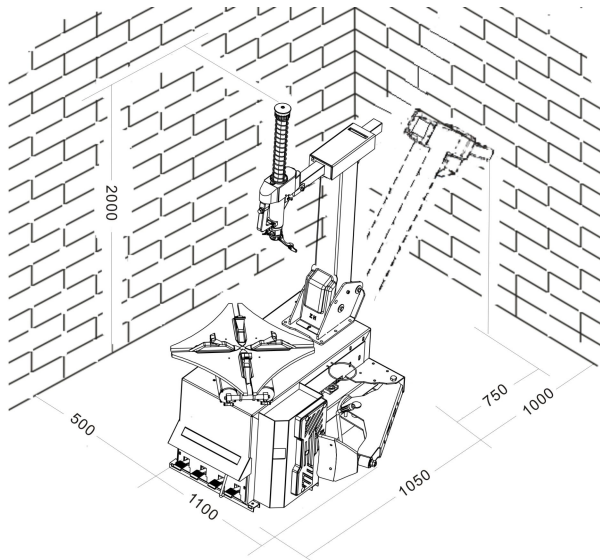


Fig.4

3.1 Unpacking

- Unpack according to the instructions on the package. Remove the packing materials and inspect the machine for possible damage or loss of accessories during transportation. In case of doubt do not use the machine and refer to professionally qualified personnel and/or to the seller.
- Keep the packing materials out of the reach of children. Handle in an appropriate way if the packing material is likely to cause pollution.
- Remove the cabinet, column, swing arm and accessory box fitted on the bottom plate and keep them in safety place.

! NOTE:

One kind of special anti-rust oil applied on the delicate parts may attract dust. Clean it when necessary.

3.2 Location

The place to install the machine should be in accordance with safety regulations:

- The machine should be installed in a place close to the main power source and compressed air system.
- Install the machine on smooth concrete ground or other ground with hard flooring. 4 sets of anchor bolts M10X150 can be used to fasten the machine onto the ground to avoid vibration and noise.
- Leave enough space for the operation and maintenance of the machine. The space should be no less than 1M in front and on the two sides of the machine, 0.5M behind it so that operation on different parts shall not be hindered.
- If the machine has to be installed outdoors, a protective shelter should be built.
- Never operate the machine in a place with flammable gas.

! NOTE:

For safety and proper operation, keep the machine at least 0.5M away from any wall (Fig.4)

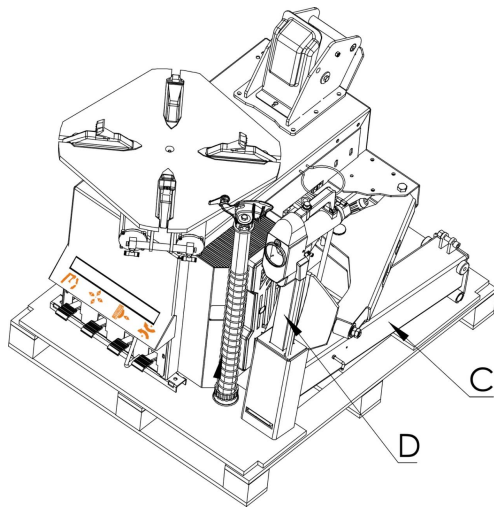


Fig.5

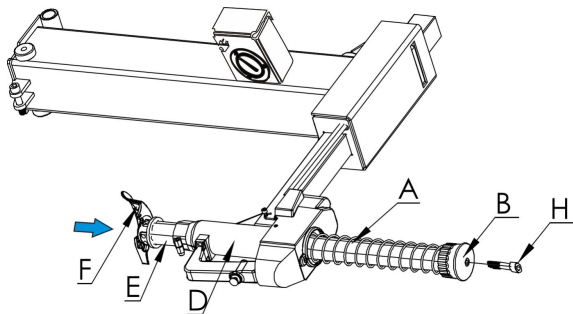


Fig.6

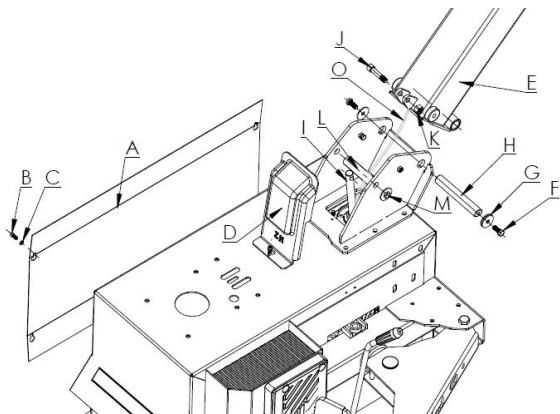


Fig.7

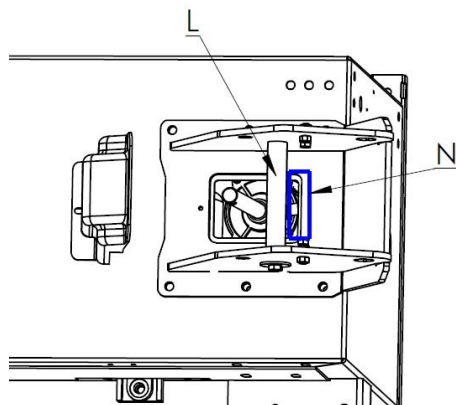


Fig.8-a

3.3 Installation

- Move the column C and arm D, put them on a soft cushion.(Fig.5)



Caution :

When you lift the column, the arm D will fall freely, be careful!

3.3.1 Install return spring

- As Fig.6, Remove screw M10*30 H with Allen key, take out B and return spring A. Install column E as direction marked, install return spring A and B, fasten H.



NOTE:

Pay special attention the direction of mounting head F

3.3.2 Install post

- As. Fig.7, Use 6mm inner hexagon spanner to take off four pieces screw B and washer C, then take off the side cover A and cover D as fig.7.
- Lift column E as fig.7, make the pin hole of column and body in line, insert pin axis H, tighten screw F and washer G (screw M12x25) (If column can not be fixed in, loose screw M, after installation finished, tighten screw M again.) .
- Tilt column, make hose O ($\phi 4$) and P($\phi 8$) through hole N in the body (Fig. 8).



NOTE:

Make sure hose O($\phi 4$) and P($\phi 8$) begin at the back of pin L to avoid hose damaged.

- Lift cylinder rod I at maximal and adjust the direction of column E as Fig.7, make pin hole of column J direction and cylinder rod I direction in line, insert pin axis J, tighten screw K. (screw M12x55, M12).
- Let column stand up, finish column installation.

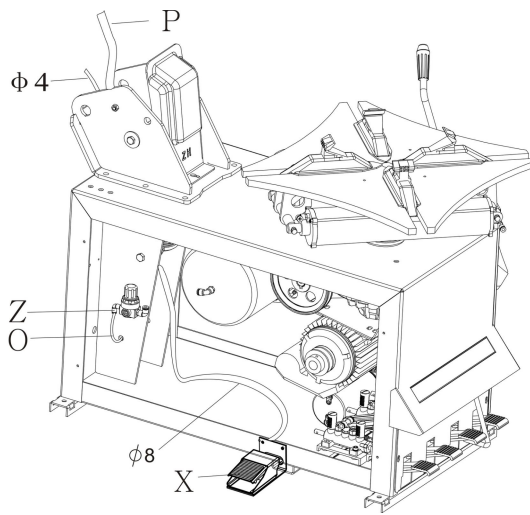


Fig. 8-b

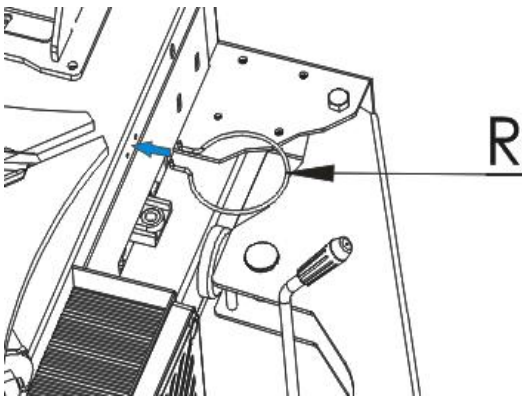


Fig. 9

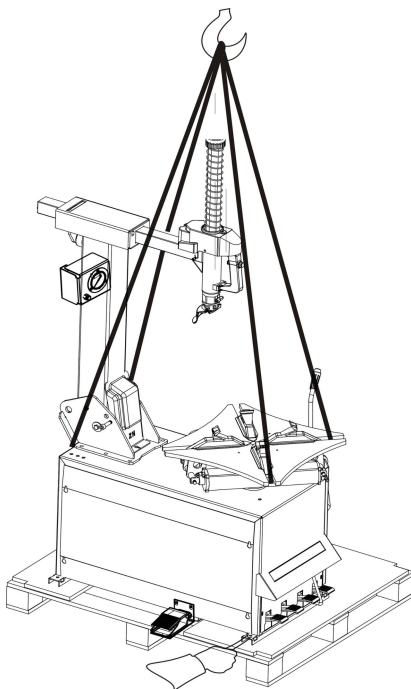


Fig. 10

- Connect hose in the column:

As fig.8-b, connect $\phi 4$ hose O to regulator Z, $\phi 8$ hose P to pedal X



NOTE:

When the machines come out factory, the regulator Z has already been adjusted pressure (4 bar), please do not adjust it by yourself.

3.3.3 Install Hanger

- As fig.9 Insert the two heads into two $\phi 5$ holes in the right side of column, make sure R heads, hook is upward.
- Install side cover A and cover D, fasten with screws as Fig. 7.

3.3.4 Lifting and installation

- Take off two pieces of screws by spanner (Fig. 10). Use hoist to lift the machine, move pallet, locate the machine.

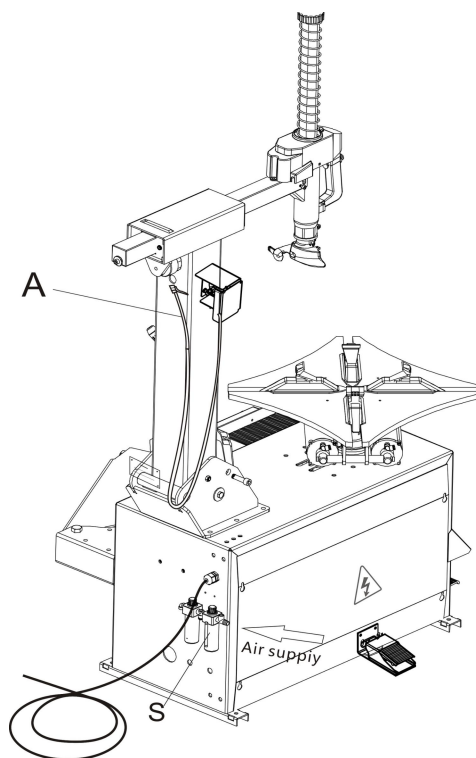


Fig. 12

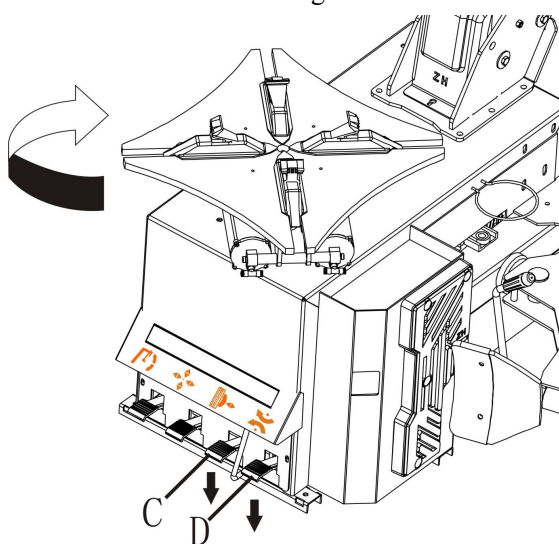


Fig. 13

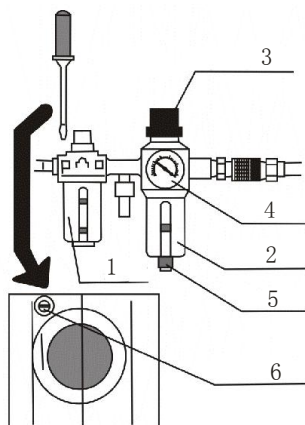


Fig. 14

3.4 Power and Air Connections and Regulator

- Before installation, check if the power source and the compressed air are in accordance with the specifications on the nameplate. Any electrical connection should be done by the specially trained technician.
- The power socket should be at a place within the sight of the operator. The height should be between 24"~67".
- Grounding protection of power is needed for machine shell.
- Air connection: Connect the inflation gun A to Barometer (Fig.12) .
- Connect the compressed air supply to the coupling located between the lubricator and the air filter S(as fig.12, direction of arrow) .

⚠NOTE:

The tire changer is not equipped with overload protection. Please connect power according to the electric diagram included in the User's manual. Otherwise, the manufacturer will not be responsible for any accidents.

- Operation test: after power connected, press pedal D (Fig.13), turntable will turn clockwise. This test is very important.
- F.R.L. :Filter, Regulator, Lubricator Assembly(optional):
 - See Fig. 14: 1- Lubricator; 2- Filter; 3- Regulator
 - Adjust pressure: There is a button for the regulator 3. When pulled up, the pressure can be increased or decreased by turn it clockwise or counter-clockwise (check the 4-Gauge). After adjusting the operation pressure, press the button down to lock it
 - The Filter 2 works to filter the water and impurity in the compressed air. When water and impurities run beyond the red line, turn open the ejection valve 5 to release them.
 - The lubricator 1 is used to add a certain amount of lubricant into gas for the moving parts in the cylinder and regulator. Depress pedal C, 3~5 times, a drop of lubricant will drop into the cup in the regulator. If it doesn't happen, the adjusting screw 6 can be adjusted

4. Operation

NOTE:

- *Do not operate the machine before having completing training and qualified for operating the tire changer. Use appropriate equipment, tools and personal protective equipment, such as eye-glasses, ear-plugs and working boots, when operating the tire changer.*
- *Make sure that the power, air sources and the oil level in the oil cup are in accordance with the requirements.*

4.1 Principles

- To avoid damage when mounting and demounting tire, especially the alloy ones, use the special tire lever.
- For easier demounting and better protection of the tire and rim, lubricate the area between the rim and tire bead, where the bead breaker shoe goes in, with industrial lubricant or thick soap solution.
- Pay special attention to rotary direction marked on some flanges or tires.
- Fit the tire on the rim of matched size.
- Check for damages (distortions, surface damages, excessive run out, erosion or overall wear) before demounting.
- Never ignore the mounting and demounting requirements of the special wheel.
- When inflating the tire, make sure the pressure increases in an even way. Check the rim as often as possible.

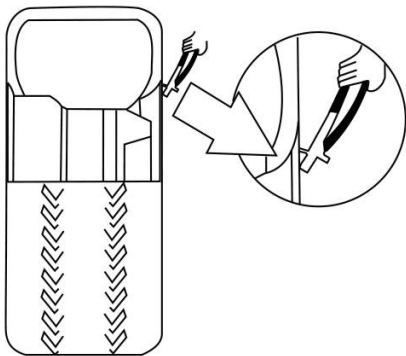


Fig. 15

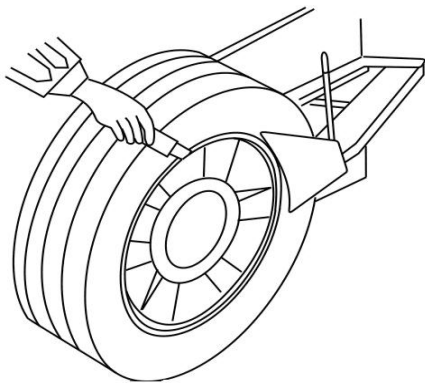


Fig. 16

4.2 Demounting Tire

Preparing

- Deflate the tire thoroughly.
- Remove all the foreign substance and weights from the rim (Fig. 15).

Demounting

NOTE:

Lubricate the bead with a brush with lubricant before the shoe touches the bead. Otherwise the tire bead will be worn (Fig.16).

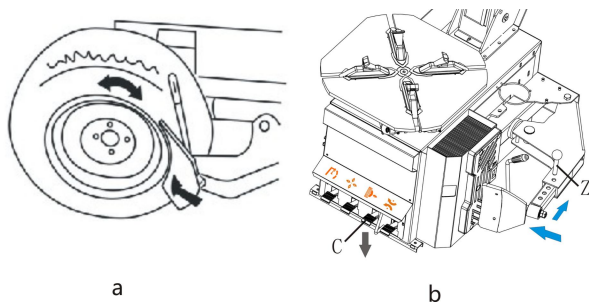


Fig. 17

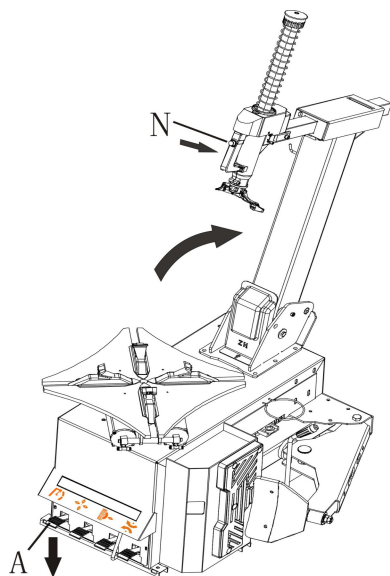


Fig. 18

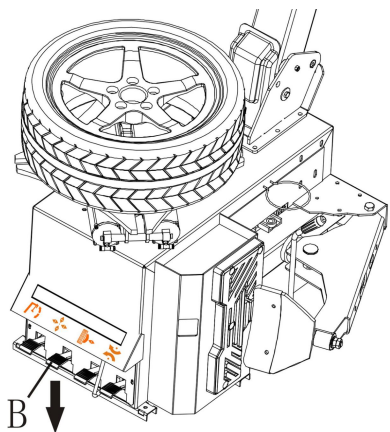


Fig. 19

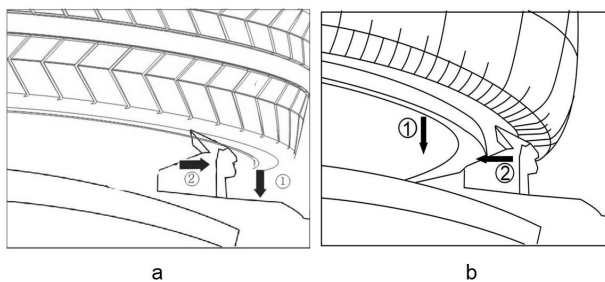


Fig. 20

- Place the tire between the bead breaker shoe and rubber pad and keep the shoe between the bead and rim, about 1cm to the bead (Fig.17-a). Depress pedal C (Fig.17-b) to separate the tire from rim.
- Repeat the above steps on other part of the tire to get the tire separated thoroughly from the rim.
- Bead breaker can be adjustable for different width tire, pull out handle Z and let the moveable part go to its right position, then insert handle Z back.

!NOTE:

When using the bead breaking arm, do not put arms and hands between the tire and the bead breaker

- Press switch handle button N (Fig. 18), fix arm.
- Press pedal A, tilt the column.
- Depress pedal B, Place the wheel on the turntable, and lock rim (Fig. 19) .

!NOTE:

Different types of clamping can be chosen in accordance with different rims.

- In case of inward clamping, shrink the jaws together, place the wheel on the turntable and depress pedal B to clamp (Fig.20-a).
- In case of outward clamping, enlarge the jaws outward (2-3cm away from periphery of the rim) and place the wheel on the turntable. and depress pedal B to clamp it(as fig.20-b) .

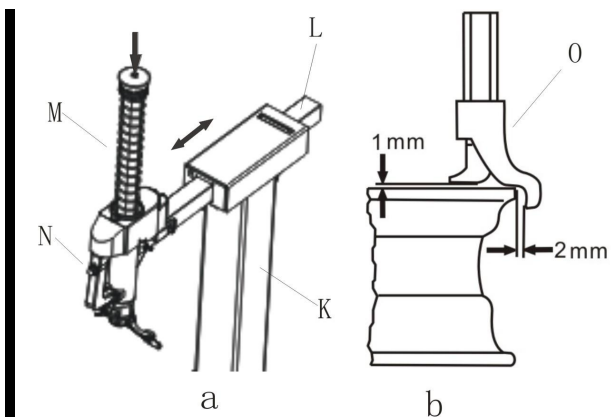


Fig. 21

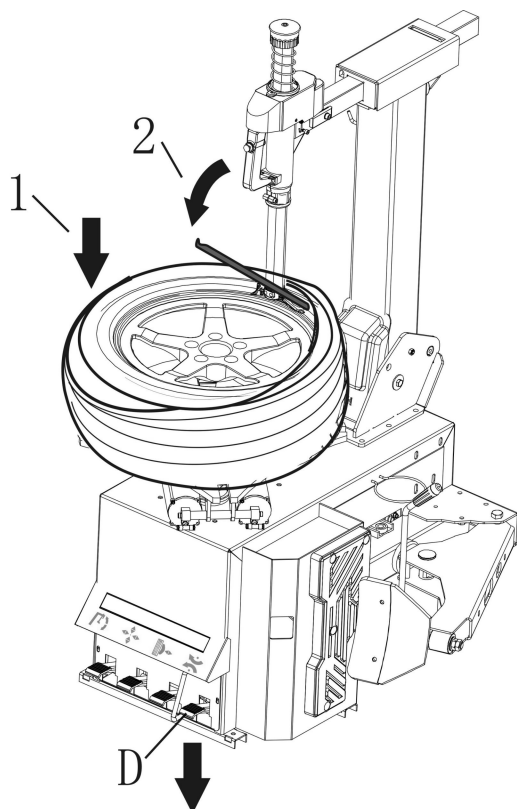


Fig. 22

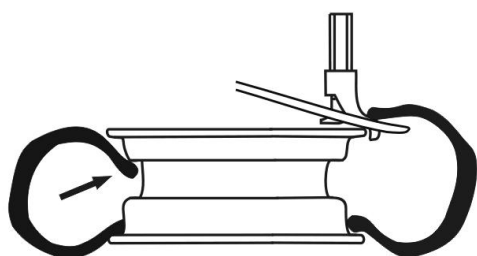


Fig. 23

- Press pedal A (Fig.18), let column back to its working position, pull back switch handle N (Fig. 21-a), let the arm L and hex column M move freely. Push N and press M, make mounting head O against rim (Fig. 21-b), press switch handle N lock arm and hex column. Make sure mounting head keep a distance of 1~2mm from upper edge of rim and 2mm from outer edge of rim to avoid mounting head scratch rim
- Insert lever into wheel near mounting head (Fig. 22).
- Press lever as Fig. 22-2 and press wheel as fig. 22-1, until upper edge of wheel as Fig. 23, press lever slowly, until upper edge of wheel hang on the mounting head.

! NOTE:

If there is inner tube inside, keep the position of air inlet valve and mounting head at distance of 10cm. as Fig. 24

- Press pedal D (Fig. 22), turntable turn clockwise, until edge of wheel fall off

! NOTE:

- *For very tough and low profile wheel, wheel edge is easy to slip off, to avoid this, before turn clockwise of the turntable, may turn anti-clockwise a little to make the turntable back 1-2mm.*
- *If the demounting process is prevented, stop the turntable from turning around, lift pedal D (Fig. 22), let the turntable turn anti-clockwise.*

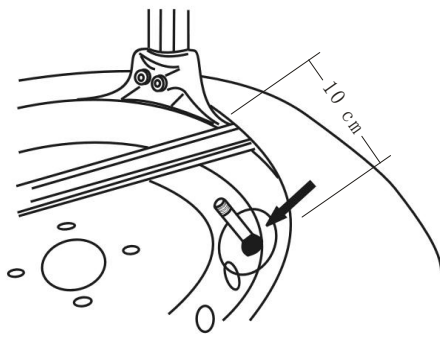


Fig. 24

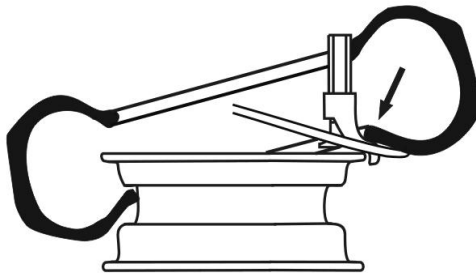


Fig. 25

- If there is tube in the tire, remove it.
- Lift wheel, make the bottom edge of wheel onto mounting head as Fig. 25.
- Press pedal D until bottom edge of wheel fall off.
- Depress pedal A, tilt column, take off wheel, and finish demounting.



Caution:

Keep hands and the rest of human body away from the moving parts of the machine. Never wear necklace, bracelet or loose clothes when operating the machine as it may cause danger!

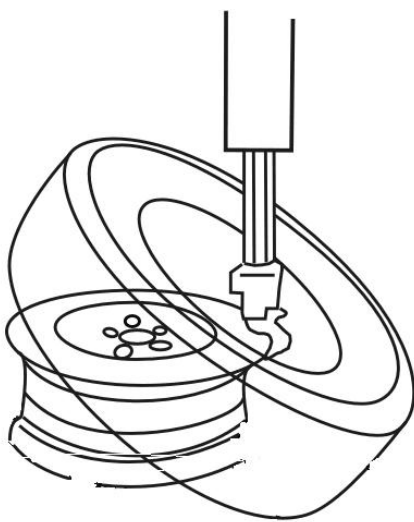


Fig. 26

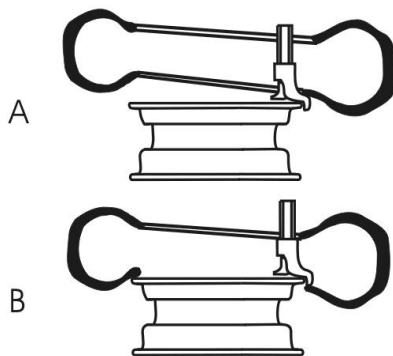


Fig. 27

4.3 Mounting Tire



NOTE:

Check the size of tire and rim to see if they match each other.

- Clamp the rim tightly in the same way as demounting tire.
- Use lubricant such as thick soap solution on the tire and the rim.
- Put the bead on the rim with the left side upward, press pedal A to make column back to its working position (Fig.26).
- Check the coordination of mount/demount head and rim. Readjust if necessary.
- Adjust relative position between the tire and the mount/demount head to make the tire bead cross the mount/demount head. At the end of the mount/demount head, the tire bead should be placed on the mount/demount head (Fig.27-A). At the beginning of the mount/demount head, the tire bead should be placed under the ball protuberance of the mount/demount head (Fig.27-B).
- Press down the central part of the tire. Depress the pedal D (Fig.22) to turn the turntable clockwise, making the lower tire bead fall into the rim groove completely (see fig.28-A).

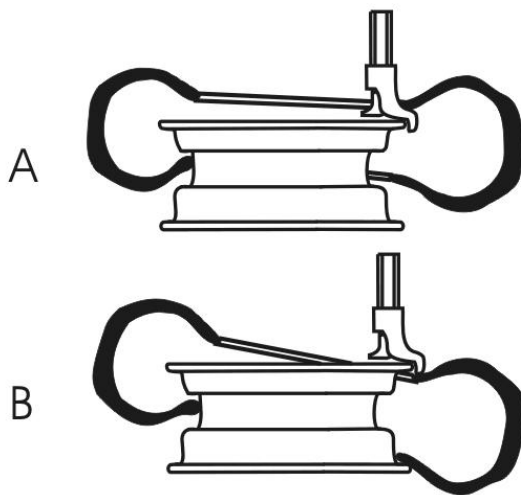


Fig. 28

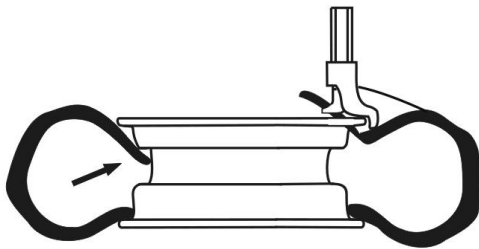


Fig. 29

- If a tube needs to be installed in the tire, check first for the possible damages. Round it onto the rim. Make sure to keep the tube in the right position throughout the mounting process.
- To install the upper tire bead, place the tire well and readjust position of the tire bead (same as mount of the lower tire bead in Fig.28-B). Press down the tire opposite to the mount/demount head to the rim groove (Fig.29)
- Depress the pedal D (Fig.22) to turn the turntable while keeping pressing on the tire. When only 10~15cm is left, slow down to avoid damage of the tire bead. Stop the motor if there is any indication for damage. Lift the pedal D and turn the turntable counter-clockwise. Try again when the tire is back to the original shape.



NOTE:

- *It is not necessary to move the handle of the screw every time if the size of rim matches the tire. Just move the arm.*
- *In the process of operation, keep head and hands away from the area between the tire and the swing arm to avoid injury.*

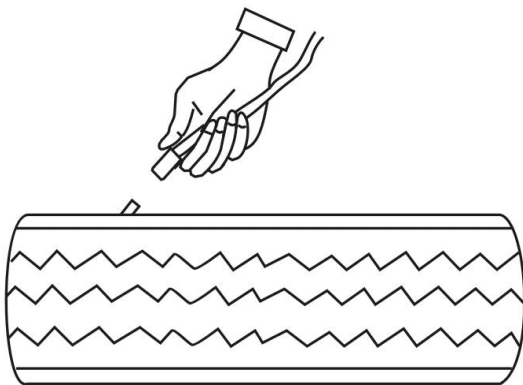


Fig. 30

4.4 Inflating Tire



Danger! !

Inflating can be highly dangerous. Take precautions and pay close attention to the procedures. Check if the compressed air is well connected before inflating.

Inflating procedures are shown in Fig.30. The machine is equipped with a gauge to read the pressure in the tire.

- Connect the outlet of the gun to the air inflation valve
- Slowly press the switch on the inflating gun for several times during inflation to make sure that the reading on pressure gauge meets the manufacturer's specifications. The pressure should not exceed 3.5 bar.
- If the pressure exceeds the limit, press the button on the gun inflator so that the pressure goes down to what is required.



Fig. 31

⚠ Danger ! Danger of explosion !

The safety procedures should be closely followed. Review and abide by the following instructions. Otherwise serious injury or death can be resulted. The manufacturer shall not be held responsible for any possible accident when the safety procedures are not followed.

- *Carefully check the dimensions of rim and tire to see if they match each other. Check and make sure that the tire is not worn or damaged before inflation.*
- *When a high pressure is required, remove the tire from the tire changer and resume the inflation in a special protective hood.*
- *Be careful when inflating the tire. Keep hands and the rest of human body away from tire.*
- *The operator must adopt all the measures necessary in order to guarantee safe conditions*

5. Trouble Shooting

Malfunction	Cause	Solution
The chuck does not rotate in any direction.	1. Power plug not inserted. 2. Incorrect connection in the plug. 3. Electrical supply not suitable.	Check correct plugging and its connection.(see cause 2 and 3)
Pressing the inverter pedal down causes the chuck to turn in an anti-clockwise direction.	Polarity inverted.	Invert the connections in the power plug
The chuck turns with insufficient power.	1. Supply voltage wrong. 2. Driving belt loosen.	1. Check the correspondence between the supply voltage and that on the maker's plate. 2. Tighten the belt.
The bead breaker does not have sufficient power to break the tire bead.	1. The pneumatic supply is not connected to the machine. 2. Insufficient pressure in the pneumatic system. 3. Pressure reducer is closed or badly adjusted (for versions with this device).	1. Connect the pneumatic supply. 2. Correct the supply pressure. 3. Open or correctly adjust the pressure reducer.

Other malfunctions should be checked and fixed by Professionally Qualified Personnel.

6. Maintenance



NOTE:

Only the specialized technician can do the maintenance. Before any maintenance is performed, disconnect the power and keep the plug within the sight of the maintenance personnel. and shut off compressed air, push the air valve switch to “Off” position and depress pedal 16 for 3 or 4 times to bleed the residual compressed air in the machine.

To keep the tire change in good condition and to prolong the work life, it is necessary to do regular maintenance according to the instructions on the user’s manual. Otherwise, the normal operation and reliability of the machine will be affected, or personal injury would be caused.

- Keep the machine and working area clean and prevent dust or foreign matter from entering the moving parts.
- Keep the quadrate column and the moving parts clean and lubricate (clean with diesel as in Fig.32-1 & 2 & 3)
- Keep the swing arm clean and lubricate it periodically so that it can move expectably.
- Weekly lubricate the faying surface between moving parts and rubbing surface with lithium lubricant.
- Check the oil level in the sprayer regularly. If the oil level does not reach the second line, fill hydraulic oil L-HM46 (Fig. 33).
- Clear away the condensed material in the water separator around the sprayer regularly.
- Regularly check and adjust the tension of the belt.
- Check all connecting parts and bolts regularly and tighten them if necessary.
- Check and adjust locker handle periodically, to make sure after locking, mount head and rim keep 2-3m distance.

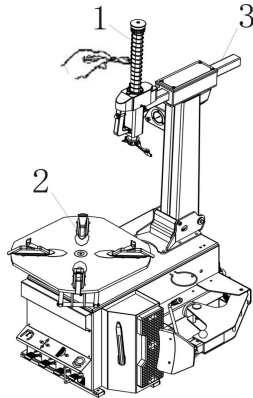


Fig.32

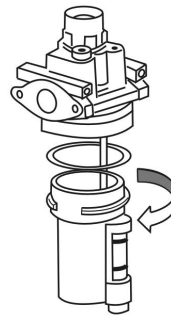


Fig.33

7. Storing and Scrapping

7.1 Storing

When the equipment needs to be stored for a long time:

- Disconnect the power and compressed air.
- Lubricate all the parts: slide block and groove.
- Empty all the oil/liquid cups.
- Cover the equipment with plastic shield.

7. 2 Scrapping

When the equipment can no longer be used, disconnect the power and compressed air and dispose in accordance with the local regulations.

8. Spare parts list

This list is only for the reference of the maintenance personnel. The manufacturer will not be held responsible for any use other than the designed purpose. In case any damage occurs, please contact your dealer or factory with the corresponding codes in the list.

SPARE PARTS LIST								
No.	Code	Description	Qty.		No.	Code	Description	Qty.
2065618 Parts of Column & Arm (Fig. 34)								
101	2065619	Column	1		146	2065643	Rubber block plate	1
102	3005009	Union IPL 4-01	1		147	6000191	Screw M8*30	1
103	6000120	Screw M6*30	4		150	2065668	Tilting cylinder	1
104	2065640	Screw M10*25	2		151	2039701	cylinder rear cover	1
105	6000123	Screw M10	2		152	6000148	Screw M8	8
106	2065638	Locking plate	1		153	6000139	Washer Φ8	8
107	6000126	Screw M12	2		154	3005043	O-seal82×2.6	2
108	2065640	Screw M12*60	2		155	2023701	Cylinder rod	4
109	2065639	Spring	2		156	2023501	Cylinder	1
112	2038801	Bearing	2		157	6000242	Screw M12	1
113	2064379	Bearing pin	1		158	6000135	Washer Φ12	1
114	2065642	Roller seat	1		159	2039801	Piston	1
115	6000335	Screw M8*25	2		160	3001001	Y seal 20×36×8	1
116	6000127	Screw M8	2		161	2039601	cylinder front cover	1
117	6000139	Washer 8	2		162	2065537	Piston rod	1
118	6000103	Screw M8*16	2		163	3005011	Union ISC8-01	2
119	6000424	Screw M12*55	1		165	1011817	Barometer	1
120	6000144	Screw M12	1		166	2064871	Barometer box	1
121	3005274	Protective heel	2		167	6000341	Screw M4	1
122	6000244	Screw M8*20	1		168	6000268	Screw M4*16	1
123	2065644	Washer	1		169	3005002	Union IPB8-02	1
124	2065630	Arm	1		170	2064873	Valve body	1
125	3004201	Sleeve	1		171	2064874	Valve bush	1
126	2045101	Spring	2		172	2064875	Valve handle	1
127	2064804	Locking plate	1		173	3005198	O seal 8(outer)*1.8	1
128	3005039	Cover	1		174	2064876	valve rod knob	1
129	6000138	Washer 6	1		175	2064877	Spring	1
130	6000114	Screw M6*20	3		176	6000393	Screw M4*8	3
131	6000347	Screw M5*12	1		177	4004386	Barometer	1
132	6000143	Screw M10	1		178	3005079	Union IPLF8-02	1
133	6000134	Washer 10	1		180	2039001	Mount /demount head	1
134	3005001	Union IPB 4-01	1		181	2039101	Mount /demount head	1
135	2021301	Locking valve	1		182	3004001	Washer	1
136	6000119	Screw M5*12	4		183	3004201	Mount/demount head protector	1
137	6000121	Screw M8x30	1		184	2004801	Roller pin	1
138	6000387	Screw M10x30	1		185	2004701	Roller	1

139	3005190	Knob	1		186	6000334	Screw M10×10	2
140	2037701	Spring	1		187	6000225	Screw M10×16	2
141	2064803	Column	1		190	2039201	Locking cylinder	2
142	3005188	Washer	1		191	2021201	Cylinder cover	1
143	2052501	Washer φ34*10*5	1		192	3005191	O seal	1
144	6000184	Washer M10*25	1		193	3004101	Cylinder	1
145	3005275	Rubber block	1					
2065661 Parts of Turning Table Assembly (Fig.35)								
201	2015901	Turn table	1		226	6000442	Nut M6	16
202	6000129	Hex nut M16*40	1		227	6000441	Washer 6	8
203	2065256	Cover	4		228	2045801	Front cover	2
204	2017101	Jaw	4		229	2064398	TS bearing23*20*20	2
205	2064923	Slide	4		230	3004701	O seal ring68.3*3.5	4
206	2065951	Slip sheet	2		231	3005311	O seal ring20*2.65	2
207	2065949	Slide support	4		232	3005249	O seal ring 16*2.4	2
208	6000236	Cir clip	4		233	2012001	Piston	2
209	6000135	Flat washer12*20*2	4		234	3005250	O ring75*5.7	4
210	2065932	Washer	4		235	6000144	Nut M12	2
211	2053201	Sleeve	4		236	2017901	Cylinder barrel	2
212	6000213	Spring washer 12	4		237	2067409	Screw M6	8
213	6000449	Screw M12*95	1		238	2045901	Clamping rear cover	2
214	6000196	Cir clip 70	1		239	3005075	Union IPB6-01	2
215	2065947	Slide plate	2		250	2064376	Complete plate	1
					251	2065928	Plate	2
220	2017801	Complete clamping cylinder	2		252	2065931	Plastic sleeve	1
221	6000178	Cir clip 30	1		253	6000112	Screw M6*12	4
222	6000140	Flat washer22*29*0.5			254	2065950	Rod	4
223	3005074	UnionIPL6-01			255	2065930	Shaft	4
224	3005157	Y seal			256	6000233	Nut M6	4
225	2018001	Piston rod						
2053301 Parts of Rotating Valve Assembly (Fig.36)								
300	2053301	Complete rotating valve	1		303	3004601	O-seal 59.5*3.1	3
301	2010901	Rotating valve core	1		304	2011001	Rotating valve casing	1
302	3005004	Union IPC6-01	4		305	6000356	Screw M3*5	4
2064938 Parts of Gearbox Assembly (Fig. 36)								
306	2064938	Complete gearbox	1		320	6000148	Screw M8	5
307	3000801	Oil ruler	1		321	2064158	Oil seal cover	1
308	3000901	Oil ruler casing	1		322	3004501	O seal 35*3.1	1
309	6000121	Screw M8x30	5		323	6000168	Bearing 30205	2
310	2009201	Upper cover	1		324	2009601	Worm screw	1
311	6000166	Bearing 6010	1		325	6000337	Key 6*6*20	1
312	2009401	Gearbox shaft	1		326	3005127	Seal 25*40*8	1

313	6000102	Screw M8x20	1		327	6000170	Key 12*8*50	1
314	6000199	Washer 8	1		328	6000112	Screw M6*12	1
315	2037201	Washer (Pulley)	1		329	6000101	A-key 12*8*40	1
316	2009701	Pulley	1		330	6000204	Pin 8*16	1
317	2009501	Worm Gear	1		331	6000200	Washer 10*30*2	6
318	6000167	Bearing 6208	1		332	6000181	Screw M10*160	6
319	2009301	Worm Gear cover	1					
2012501 Parts of Motor Assembly (Fig.36)								
400	2012501	Motor	1		406	6000192	Screw M8x35	4
401	4003101	Motor 220V 1.2KW 50HZ (standard)	1		407	6000139	Washer 8x22x2	8
	4002801	Motor 380V 0.75KW 50HZ (optional)	0		408	6000134	Washer 10x20x2	3
	4003201	Motor 110V 1.2KW 60HZ (optional)	0		409	6000336	Screw M10	4
402	2012701	Motor Pulley	1		410	3003601	Washer	6
403	6000130	Screw M6*10	2		411	6000199	Washer 8	4
404	6000237	Belt A660	1		412	6000127	Screw M8	4
405	2012601	Motor Support	1		413	4004444	Capacitor	1
2065595 Parts of Body Assembly (Fig. 37)								
501	2065656	Frame	1		518	6000134	Washer 10*22*2	6
502	2064852	Frame front cover	1		519		Regulator base	1
503	3000101	Frame foot rubber	4		520	4000701	Regulator	1
504	3005273	Robber buffer	1		521	3005080	Union IPC 4-02	2
505	6000253	Screw M6*16	5		522	2065615	Side cover	1
506	6000325	Washer 6*18*1.6	6		523	6000325	Washer 6*16*2	4
507	3005277	Robber buffer	1		524	6000198	Washer 6	4
508	2045001	Hanger	1		525	6000431	Screw M6*16	4
509	2065612	Column base	1		526	3005006	Union IPC 8-02	1
510	6000184	Screw M10*25	4		527	4004387	F.R.L.	1
511	2037401	Washer ϕ 38*10*4	4		528	3005026	Union	1
512	2065540	Pin	2		529	3005010	Union IPL 8-02	1
513	6000182	Screw M10*20	2		530	4000901	Union	1
514	6000123	Screw M10	2		531	3005006	Union IPC8-01	2
515	3005272	cover	1		532	4004388	Pedal valve	1
516	6000348	Screw M6*10	1		533	2061401	Pedal valve support	1
517	6000187	Screw M10*55	6					
2064896 Pedal Assembly (Fig. 38)								
531	2065616	Pedal	1		556	2039301	Switch plate base	1
532	6000139	Washer 8*22*2	3		557	6000277	Screw M5*20	2
533	6000295	Screw M8*20	3		558	3005280	Switch handle	1
534	6000148	Screw M8	2		559	6000268	Screw M4*16	1
535	2065617	Switch plate handle	1		560	2065754	Connecting rod	1
536	6000325	Washer 6*12*2	2		561	6000244	Screw M8*20	1

537	6000348	Screw M6*10	2	562	6000349	Screw M3*8	2
540	2065752	Pedal 1	1	563	6000134	Washer Φ10*22*2	3
541	2065750	Pedal 2	2	564	6000369	Pin Φ4*25	3
542	2065751	Pedal 3	1	565	2065748	Pedal support	1
543	2065758	Pedal spring	3	566	2065757	Spring	1
544	6000148	Screw M8	4	567	2065749	Pedal axis	1
545	6000139	Washer Φ8	4	568	6000236	Retainer ring 12	2
546	3005279	Rod	2	570	6000241	Pin Φ4*30	3
547	6000325	Washer Φ6	12	571	2065850	Five way valve rod	3
548	6000114	Screw M6*20	12	572	3005289	Five way valve cover	3
549	3005066	Union IPL8-01	1	573	3005290	Five way valve spacer	15
550	3005278	Sliding union	1	574	3005213	O seal	18
551	2065756	Sliding union cover	1	575	3005288	Five way valve body	3
552	6000375	Screw M3*10	2	576	3005005	Union IPC8-01	4
553	3005031	Switch cover	1	579	3005004	Union IPC6-01	2
554	4000502	Switch	1	577	3005212	Silencer	6
555	2064399	Mounting plate	1	578	3005067	Union IPB8-01	2
2065794 Parts of Bead Breaker Cylinder (Fig. 39)							
600	2065795	Bead breaker cylinder	1	608	6000439	Washer Φ18	1
601	3005308	Union IPL8-01	1	609	2067403	Piston	1
601-1	3005025	Silence	1	610	3005306	Y-sealΦ200*185*12.5	2
601-2	2065987	Exhaust valve	1	611	3004301	O seal Φ20*2.4	1
601-3	3005005	Union IPC8-01	1	612	2067407	Piston ring	1
601-4	3005328	Copper union	1	613	2067402	Cylinder front cover	1
602	3005309	Union IPL8-02	1	614	6000148	Screw M8	24
603	2067406	Rod	12	615	2067405	Piston rod	1
604	2067404	Rear cover	1	616	2064398	Bushing	1
605	3005307	O seal Φ200*5.7	2	617	3003401	Y seal Φ20*30*7	1
606	2067401	Cylinder	1	618	6000178	Retainer ring 30	1
607	6000391	Screw M18*1.5	1	619	2011601	Nut	2
2065662 Breaker Arm Assembly (Fig. 39)							
622	2038401	Spring	1	630	6000318	Screw M16	2
623	6000136	Washer 16*30*2	3	631	3000701	Handle cover	1
624	2064378	Screw M16*110	1	632	2065652	Shovel	1
625	2065654	Pin	1	633	3005134	Shovel cover	1
626	2065663	Arm	1	634	2037401	Washer φ38*10*4	1
627	6000234	Round block M12	1	635	6000226	Screw M10*16	1
628	2064895	Pin	1	636	6000391	Screw M18*1.5	1
629	2065666	Flex arm	1	637	3003801	O-rubber washer	1
1002154 Quick inflating system-optional(Fig 40)							
701	4004001	Safety valve	1	709	2064825	Inflatable tube	1
702	3005090	Copper connection	1	710	3005193	Valve sleeve	1
703	3005006	Union IPC8-02	1	711	3005192	O seal Φ32.5*3.55	2
704	4004348	One-way valve	1	712	2064827	Spring	1

							1.8*37.5*23.4*3	
705	3005036	Copper T-way union	1		713	6000388	Retainer ring Φ32	1
706	2064826	Air tank	1		714	2064828	Valve	1
707	3005202	Elbow G1"-G1"	1		715	2064826	Explosive filling mouth	1
708	3005204	Ring bush G1"-G3/4"	1					

9. Exploded drawings

9.1 Column assembly

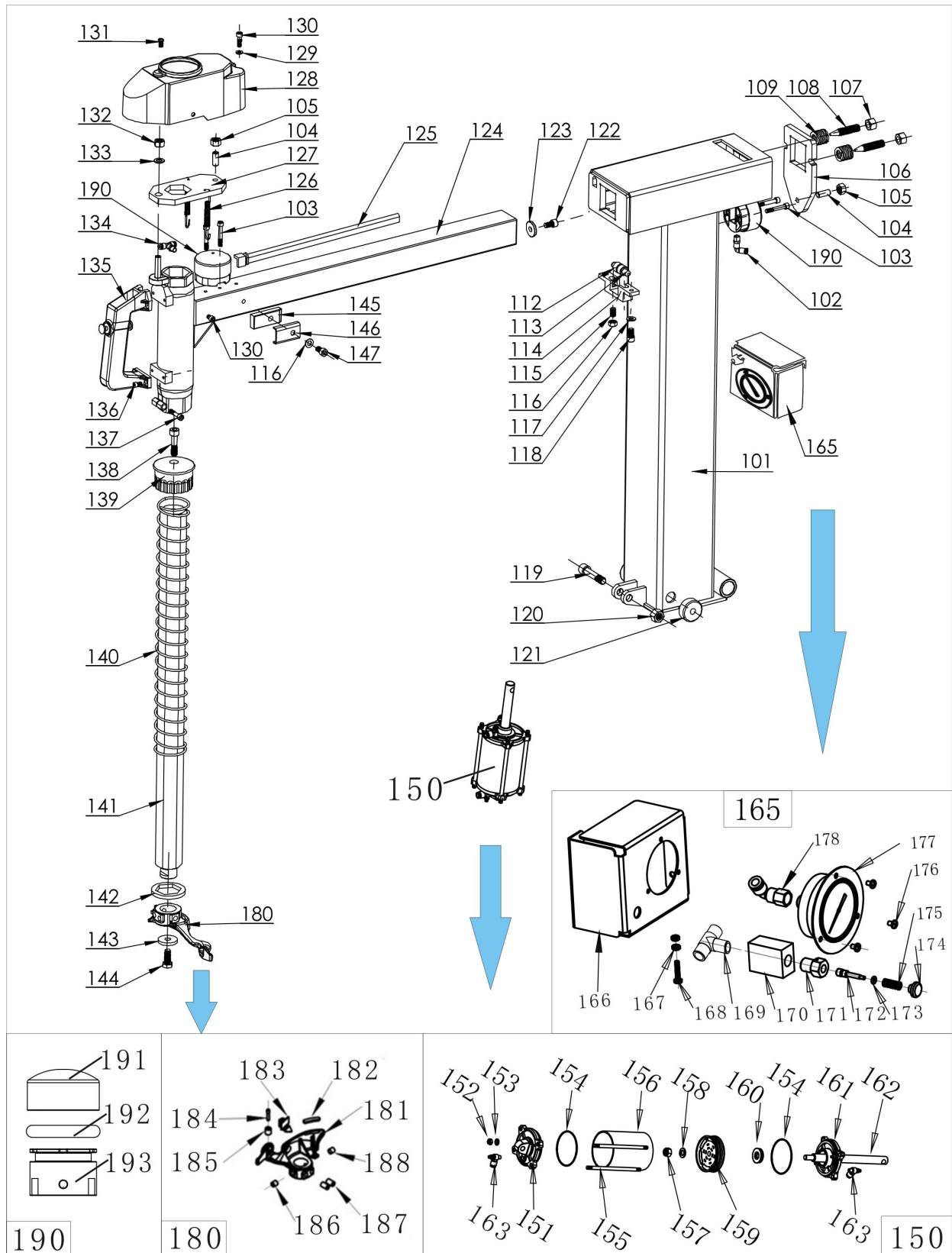


Fig.34

9.2 Turntable assembly

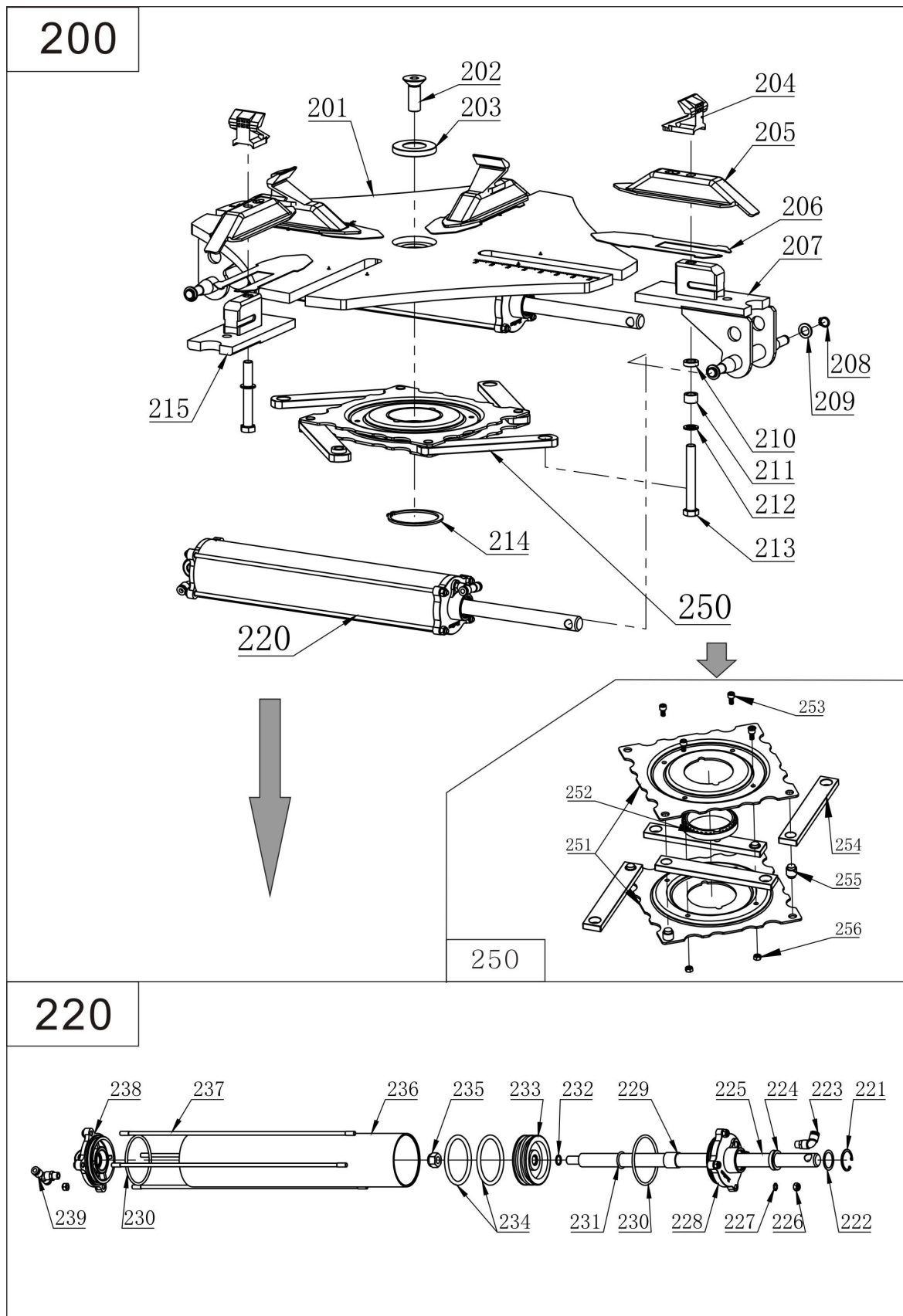


Fig. 35

9.3 Gearbox & motor assembly

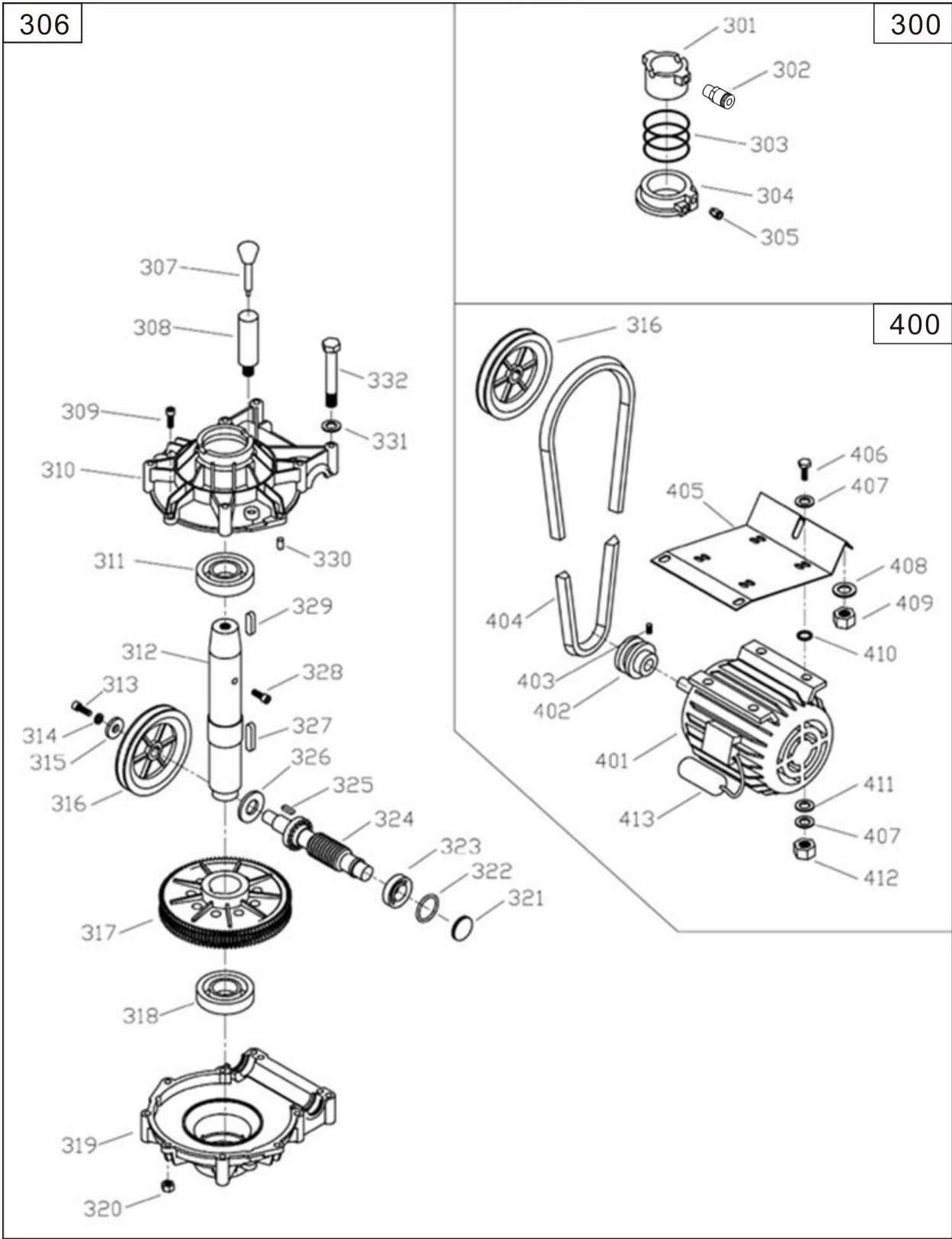


Fig.36

9.4 Body assembly

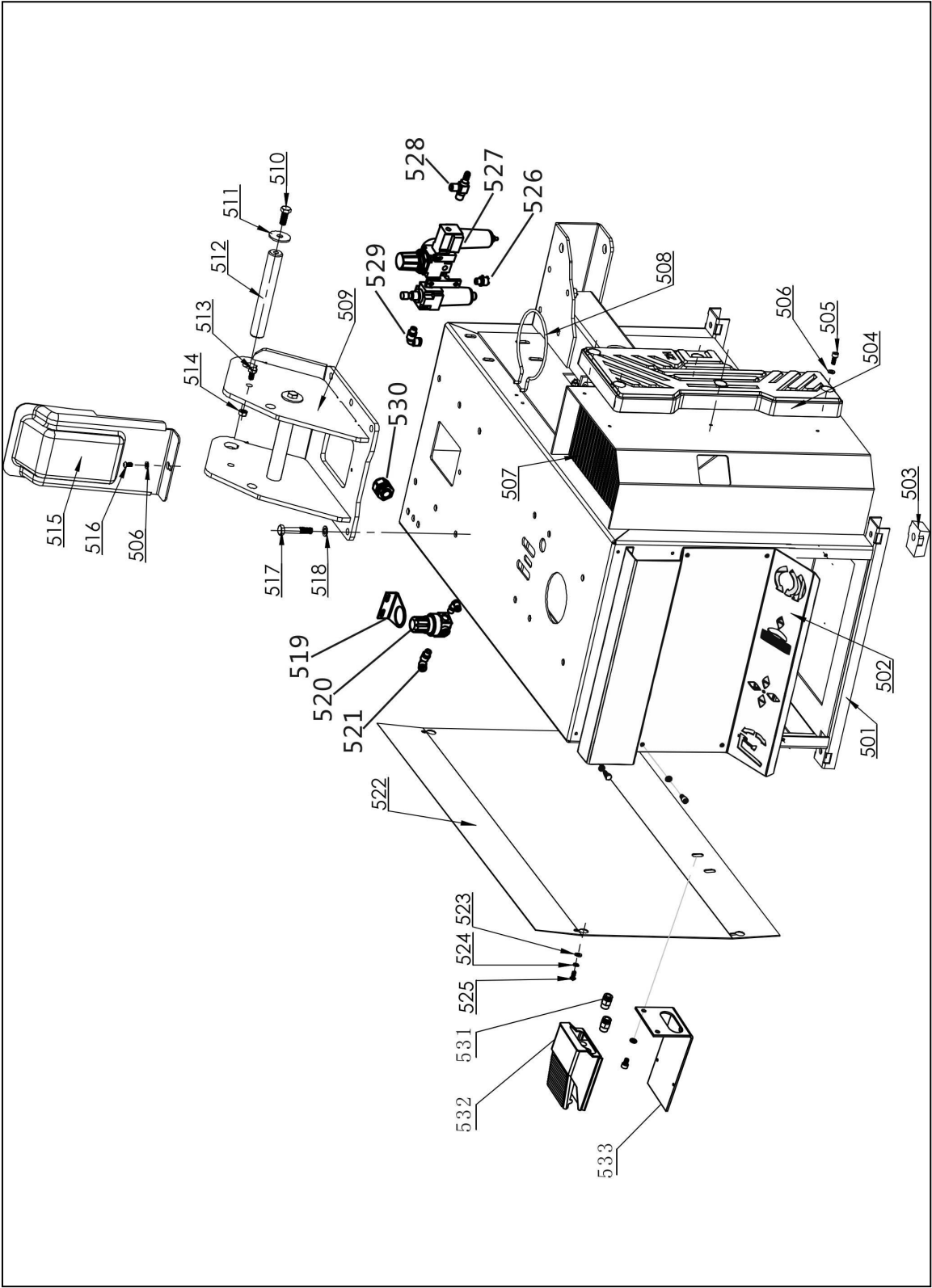


Fig. 37

9.5 Pedal Assembly

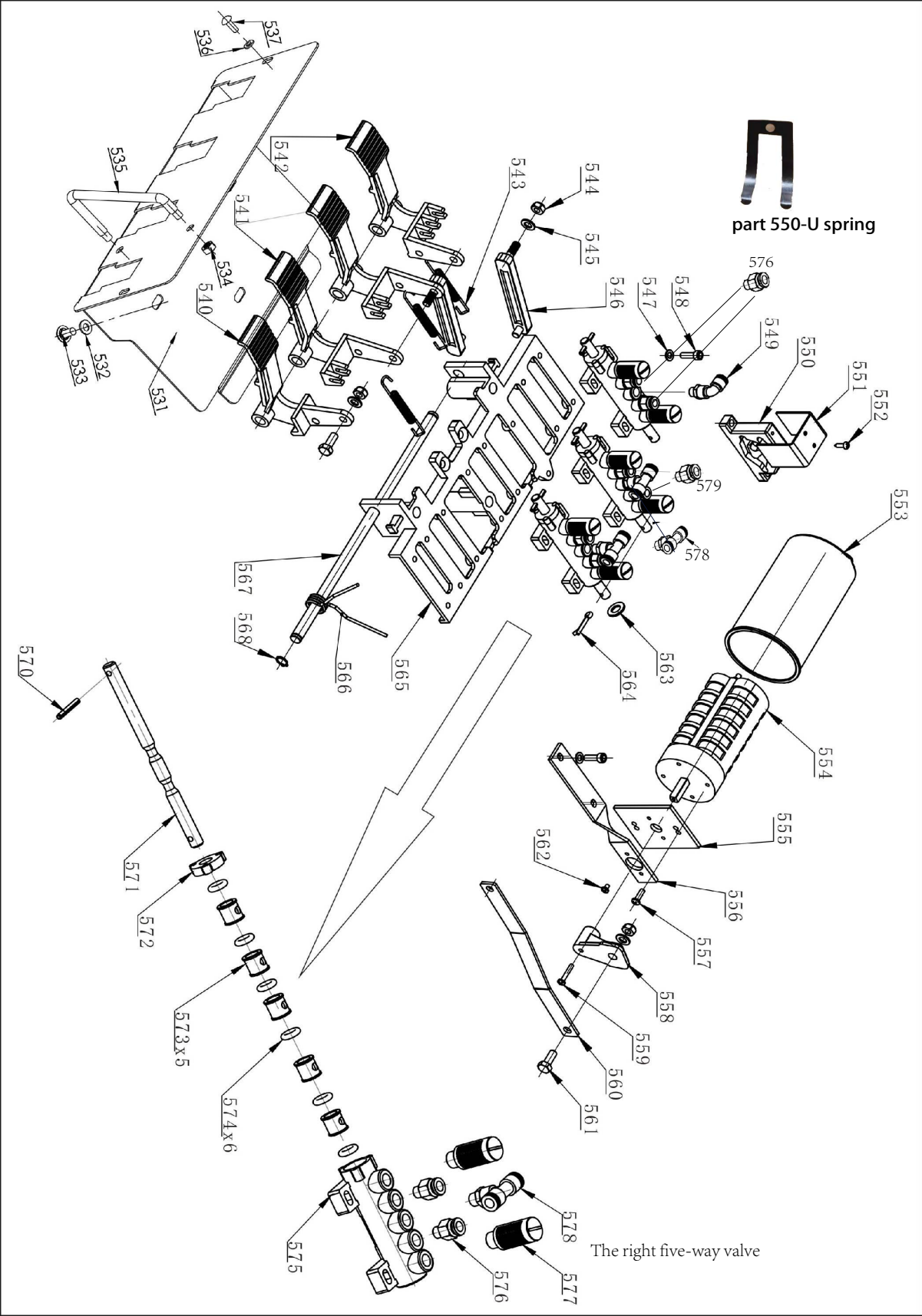


Fig.38

9.6 Bead Breaker Cylinder & Breaker Arm Assembly

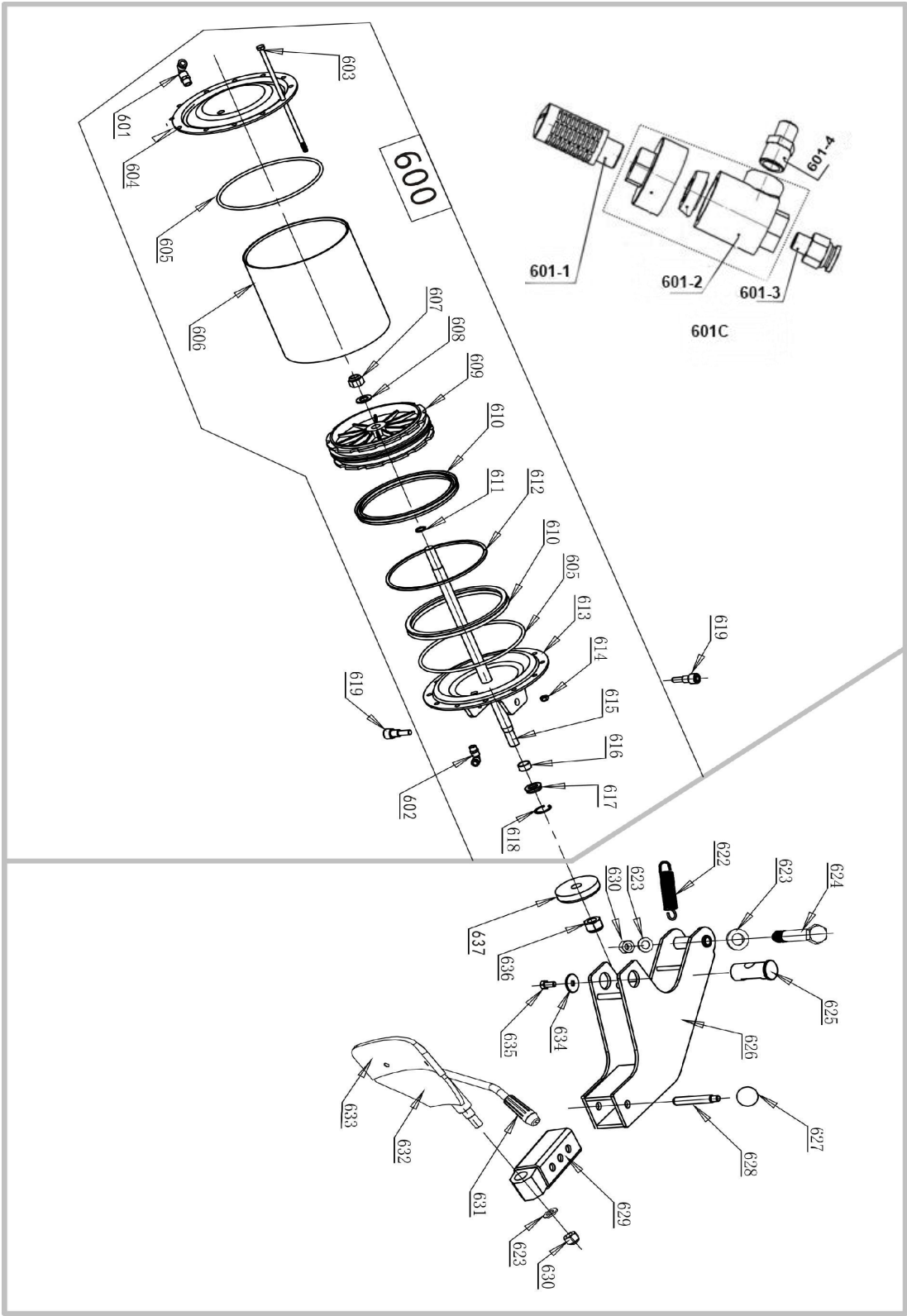


Fig.39

9.7 Quick inflating system(Optional)

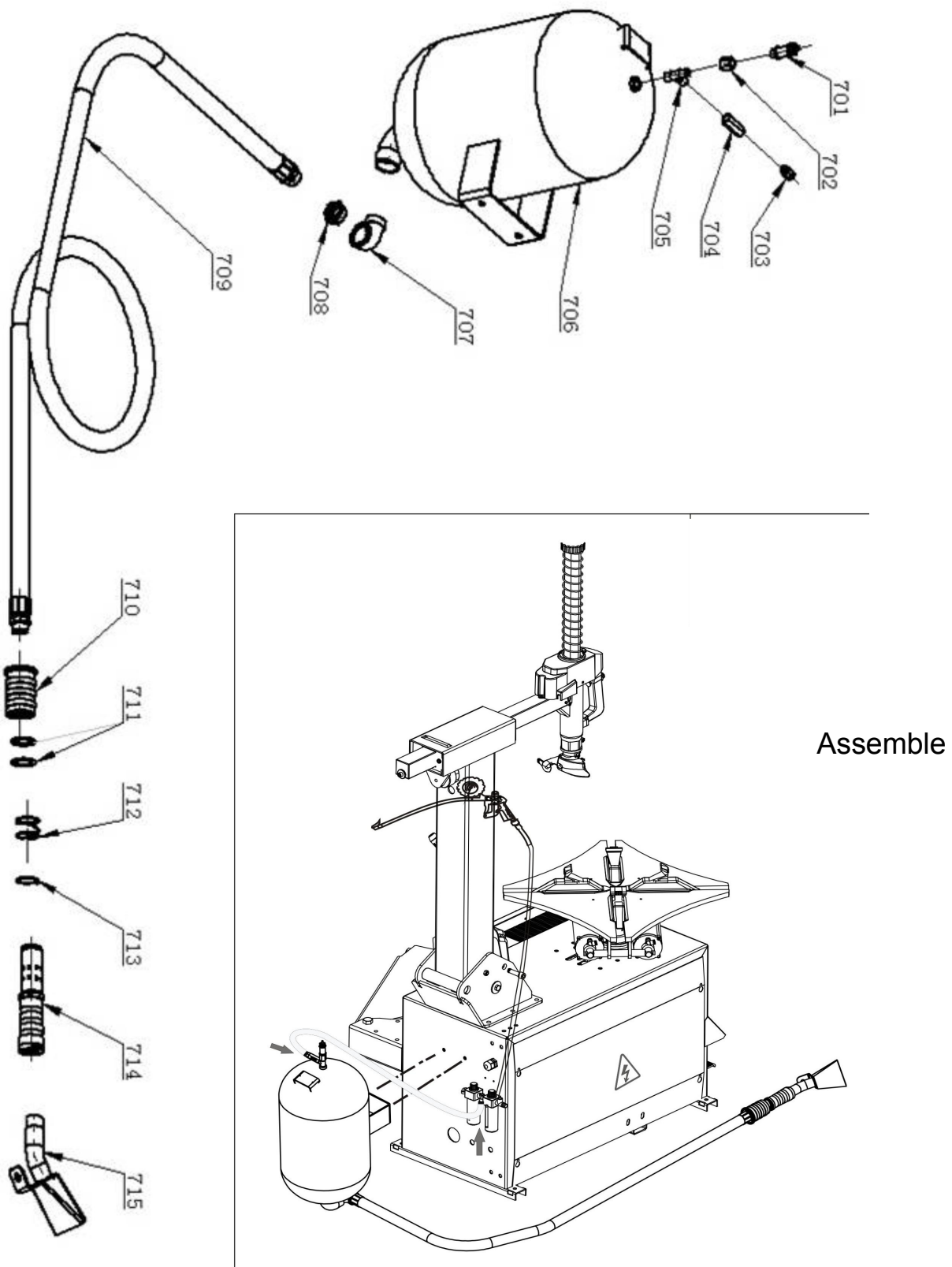


Fig. 40

Appendix 1

Electrical Diagram

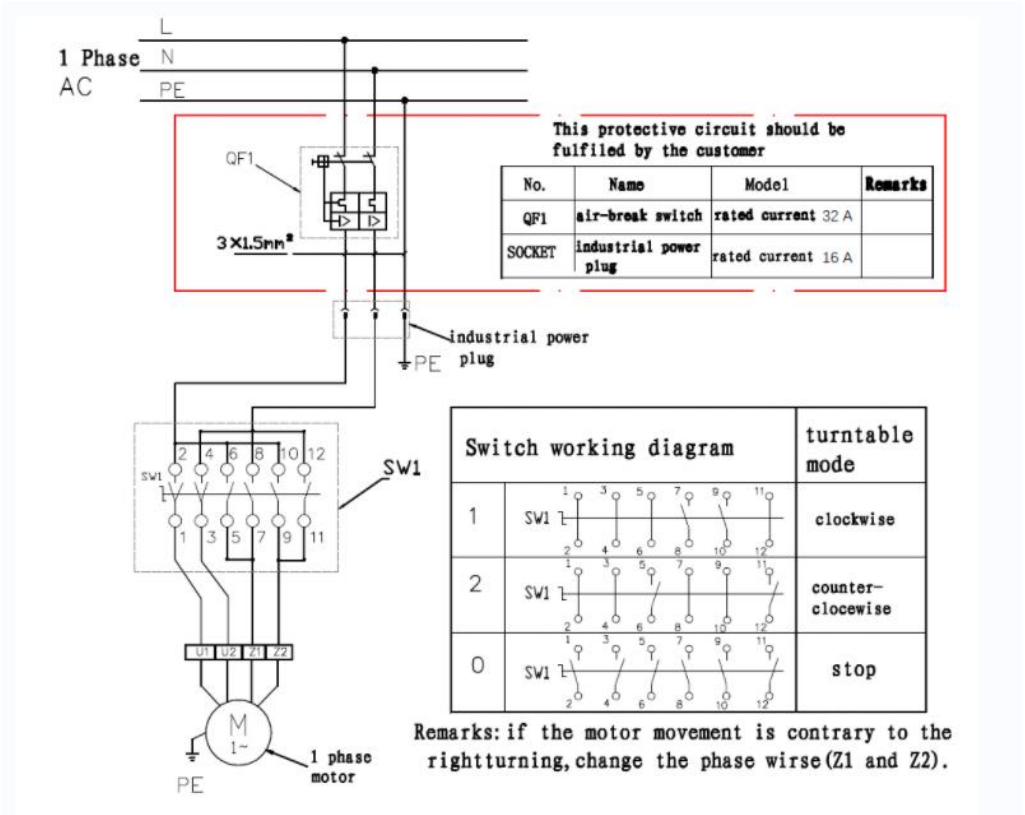


Fig.41

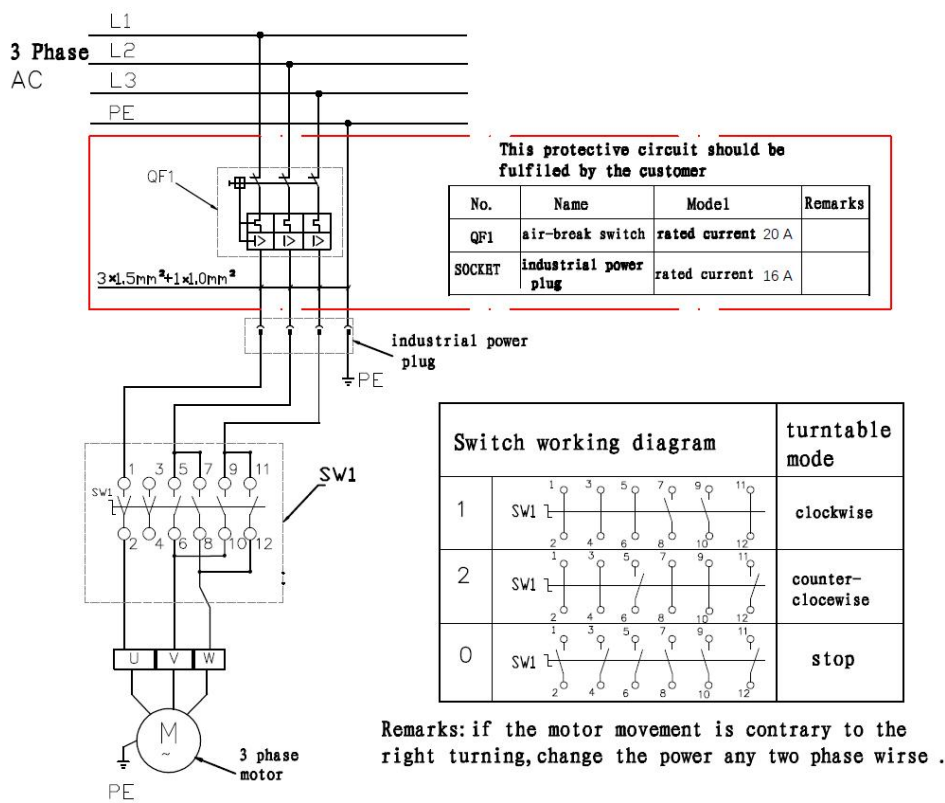
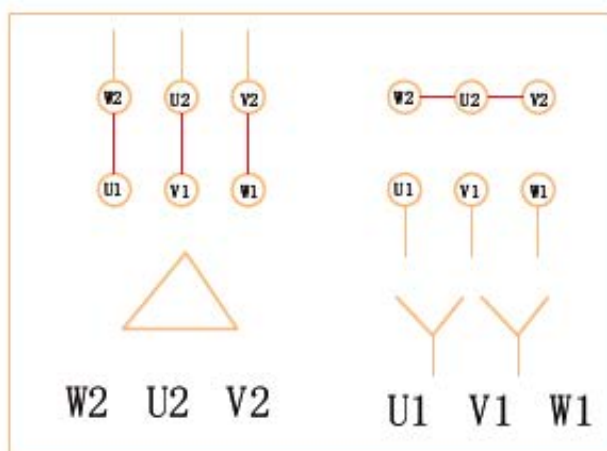
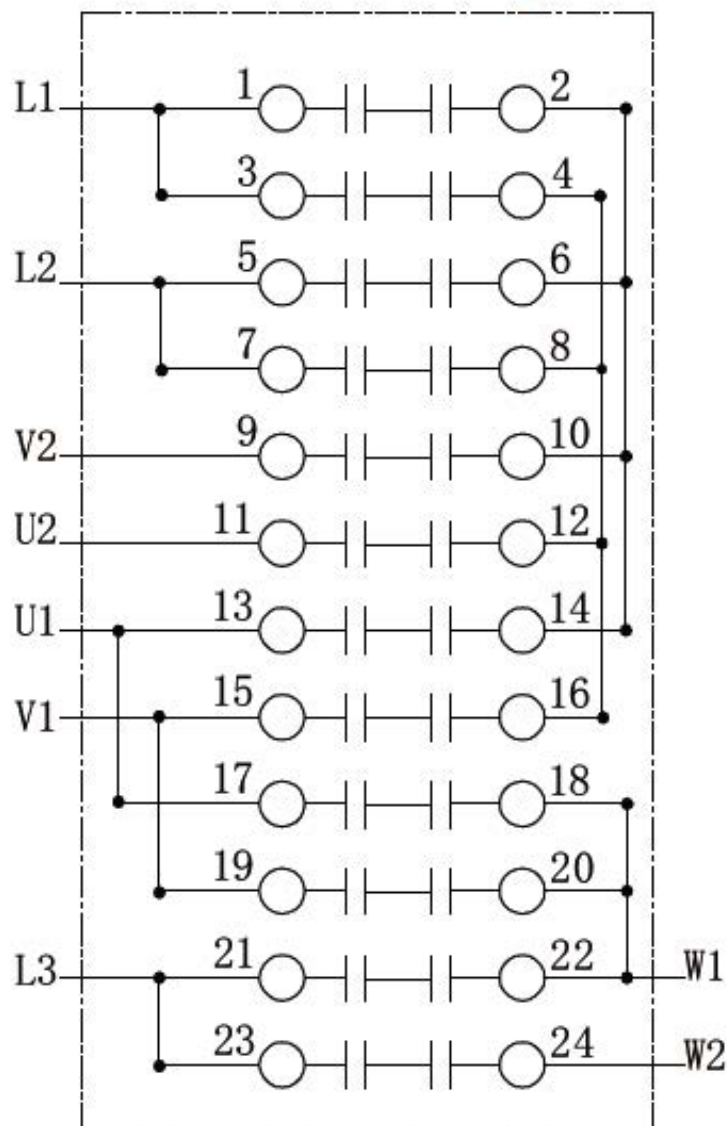


Fig.42

3Phase two speed



WIRE FOR MOTOR



Appendix 2

Air Passage Diagram

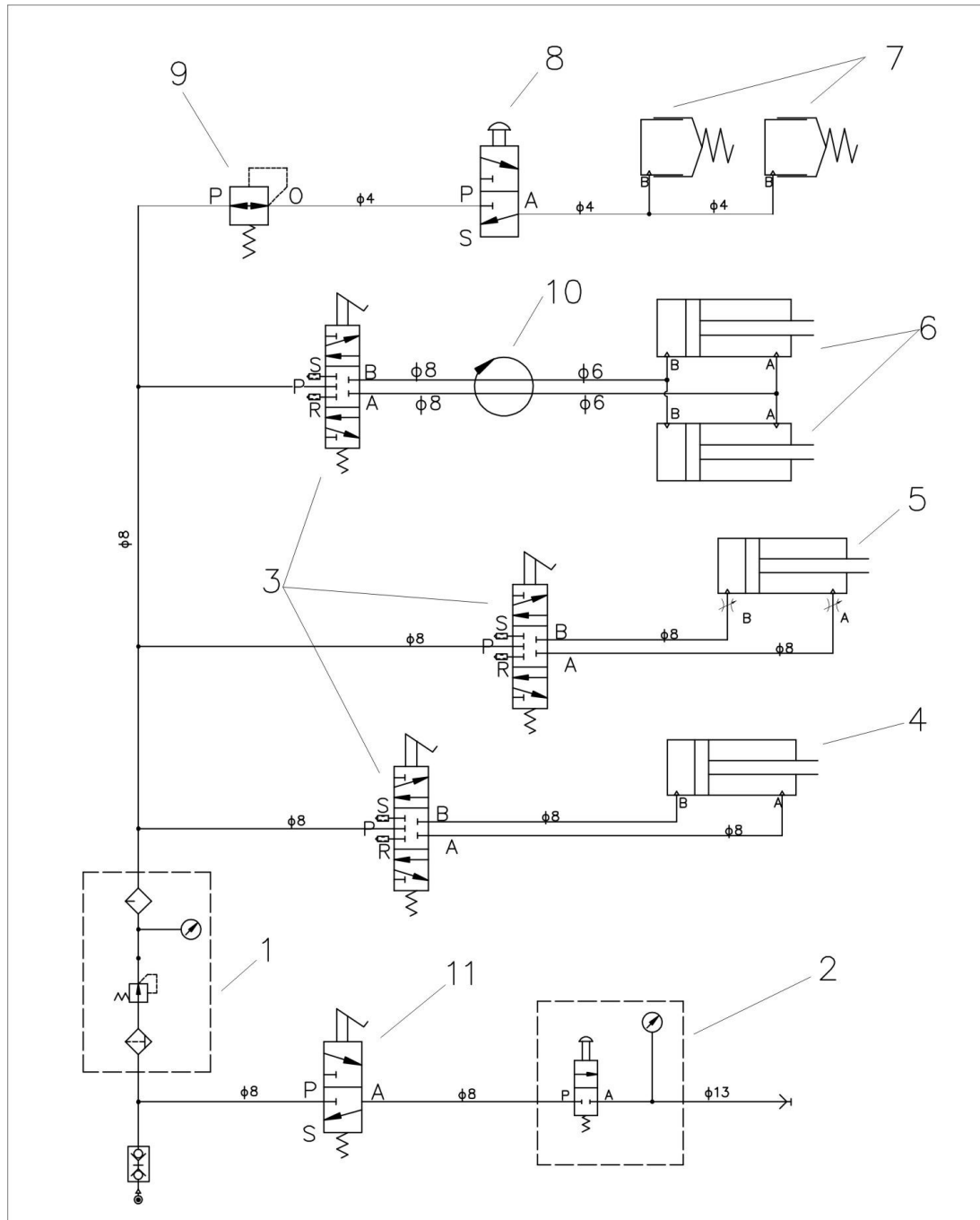


Fig.43

- | | | |
|--------------------------|----------------------|-----------------------------|
| 1. Filter unit FR+L | 5. Tilting cylinder | 9. Pressure valve |
| 2. Inflation gun | 6. Clamping cylinder | 10. Rotating valve assembly |
| 3. Five-way valve | 7. Locking cylinder | 11. Foot valve |
| 4. Bead breaker cylinder | 8. Locking switch | |