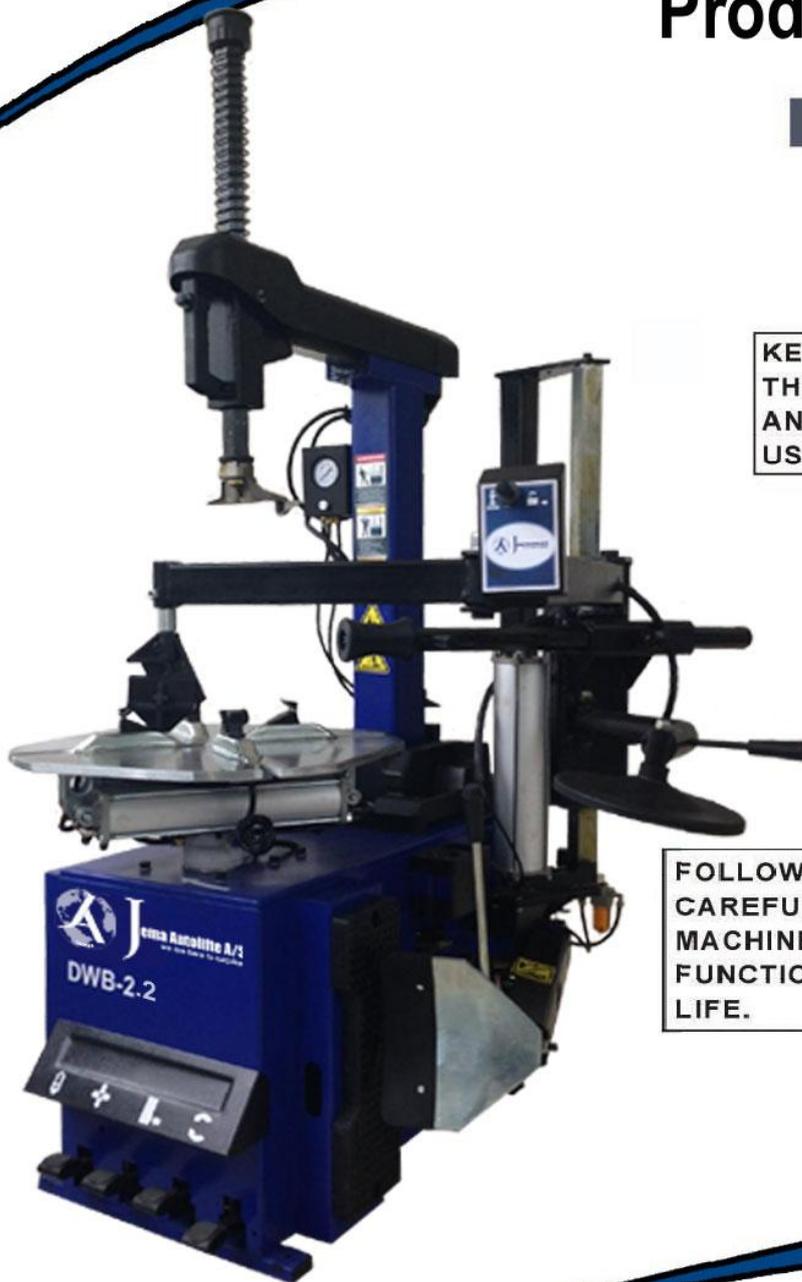




Jema Autolifte A/S
we are here to surprise!

Product no. DWB-2.2

USER MANUAL



KEEP THE MANUAL NEAR
THE MACHINE ALL TIME
AND MAKE SURE ALL
USERS HAVE READ THIS.

FOLLOW THE INSTRUCTIONS
CAREFULLY TO GRANT THE
MACHINE A CORRECT
FUNCTION AND LONG SERVICE
LIFE.

TYRE CHANGER INSTRUCTION MANUAL

DWB-2.2

INDEX	PAGE
Introduction:	2
2. Safety regulation:	2
3. Warning label and sticking position:	2
4. Technical data:	2
5. Transport:	2
6. Unpacking:	2
7. Workplace requirements:	3
8. Product diagram:	3
9. Assembly procedure:	4
10. Pneumatic link up:	4
11. Electric link up:	4
12. Control devices:	4
13. To perform preliminary operation tests:	5
14. Operation instruction:	5
14.1. To loosen the tyre bead:	5
14.2. Clamping the tyre:	5
14.3. Demounting the tyre:	6
14.4. Mounting the tyre:	6
14.4.1 Checking tyre and wheel rim:	6
14.4.2 Mounting the tyre:	6
14.5. Inflating the tyre:	7
14.5.1 Inflation without tubeless tyre inflation device:	7
14.5.2 Inflation with tubeless tyre inflation device:	7
15. Storing:	8
16. Maintenance:	9
17. Instruction for help arm:	9
17.1. Technical data:	9
17.2 Safety regulations:	9
17.3. Installation:	10
17.4. Transport:	10
17.5. Unpacking:	10
17.6. Workplace requirements:	10
17.7. Assembly:	10
17.8. Functional Parts:	10
17.9. Test:	11
17.10. Operation:	11
17.10.1. Clamping the tyre:	11
17.10.2. Demounting the tyre:	11
17.10.3. Mounting the tyre:	12
18. Trouble shooting table:	13
19. Exploded drawing:	14
20. Spare part list:	21
21. Pneumatic drawing:	30
22. Circuit diagram:	31

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 automatic tyre changer is especially designed for demounting / mounting tyres.

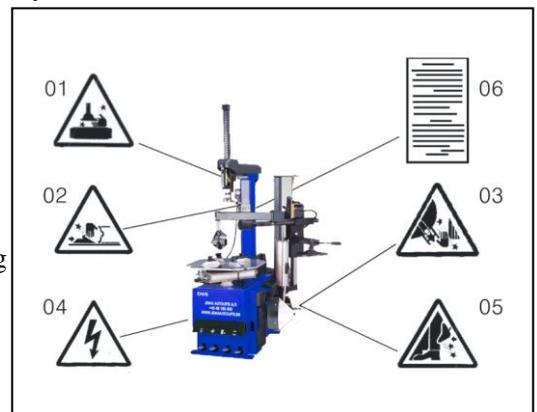
Caution: Use only for purpose for which it is designed, don't use it for other purposes. Manufacturer shall not be liable for any damage or injury caused by failure to comply with these regulations.

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 reason, 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; Z
- 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
- 06 Warning instructions;



4. Technical data:

External Locking Rim Dimensions	12"-23"
Internal Locking Rim Dimensions	14"-26" (Working Pressure is 8~ 10 bar.)
Max. Wheel Diameter	1143mm (45")
Max. Wheel Width	406 mm (16")
Bead breaker force with 1 Mpa air pressure	2500kg
Max. Working Pressure	8-10bar
Power supply	220V (1ph)
Motor power	1.1KW (1.5Hp)
Max. Rotating Torque (Turntable)	1078 Nm (110Kg.m)
Overall Dimension	100×76×103 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.

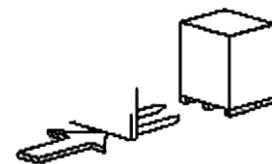


Fig 1

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.

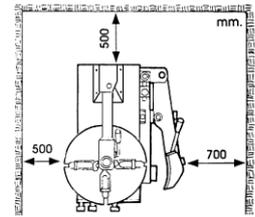
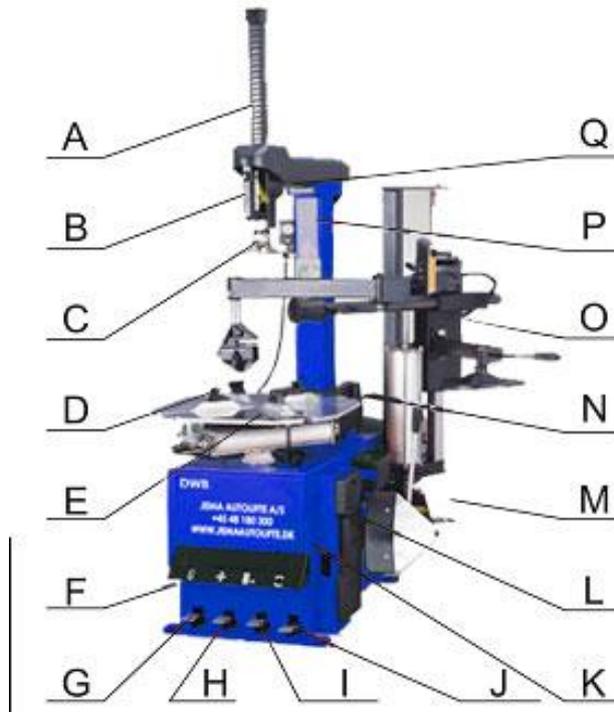


Fig 2

8. Product diagram:



DWB-2.2

A	Vertical arm	I	Bead breaker pedal
B	Locking block handle bar	J	Reverse pedal
C	Mounting head	K	Lifting lever
D	Jaw	L	Rubber buffer
E	Turntable	M	Bead breaker arm
F	Inflation pedal	N	Tank
G	Tilting pedal	O	Help arm 006
H	Jaw Clamping pedal	P	Vertical arm
		Q	Horizontal arm

9. Assembly procedure:

- 1) Tools preparation
- 2) Place the column (1, Fig 4) on the body (9, Fig 4) with 4 bolts, push air hose (6, Fig 4) through the hole of the column. Tighten 4 self-locking nut.
- 3) Insert screw (13, Fig 4) into the hole of column and connect the pin (7, Fig 4) of the tilting cylinder, tighten it with self-locking nut (12, Fig 4).
- 4) Unscrew two screws (11, Fig 4) on the left cover (10, Fig 4) and remove the cover, connect air hose (8, Fig 4) from the column to 5-way valve union.
- 5) Fix the plastic cover (5, Fig 4) with two bolts (4, Fig 4).
- 6) Mount the plastic back cover (3, Fig 4) on the column with screw (2, Fig 4).

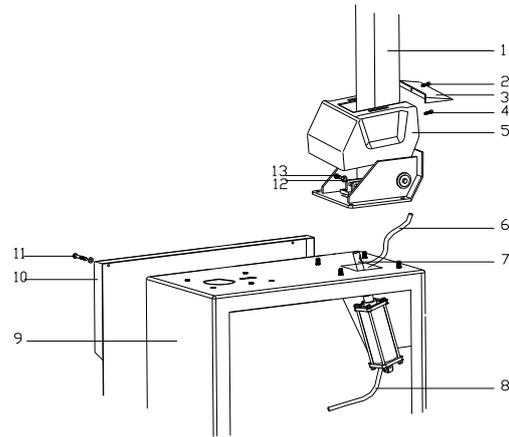


Fig 4

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 corresponds 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 16A.

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.

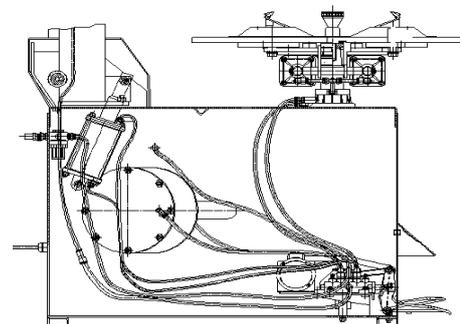


Fig 5

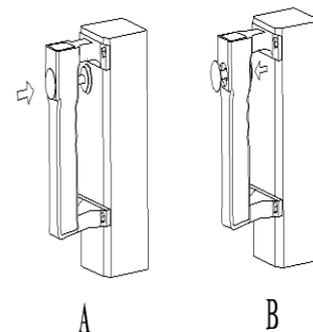


Fig 6

12. Control devices:

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

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

-tilting pedal (G), used to make column (O) tilt backwards.

- jaw clamping pedal (H), used to make four jaws (D) on the turntable open or close.
- bead breaker pedal (I), used to operate bead breaker arm (M).
- reverse pedal (J), 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:

- 1) Depress the reverse pedal down, the turntable should turn in a clockwise direction. Pull the pedal up and the turntable should turn anti-clockwise.
- 2) Pull the bead breaker arm with hands and depress the bead breaker pedal the bead breaker arm will close.
- 3) Depress the jaw clamping pedal completely to open the four jaws; depress it again, jaws are idle; repeat it again and again, the jaws should close.
- 4) Depress the tilting pedal, the column will tilt back to non-working position, repeat it once more, the column will be back to working position.
- 5) Press the button on the locking handle, horizontal arm and vertical arm will be locked in position. Meanwhile, the mounting head is raised about 2-3mm automatically from the edge of wheel rim; repeat it once again, horizontal arm and vertical arm will be released.
- 6) Press the trigger on the air gauge to release air from the nozzle.

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.

- 1) Deflate the tyre completely, take off the core of valve stem;
- 2) 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.
- 3) 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 7.

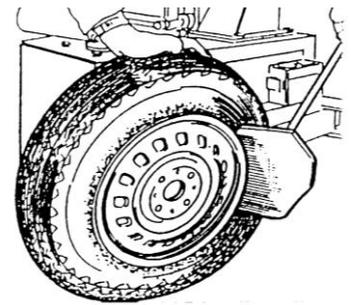


Fig 7

Caution: Place the paddle against the tyre bead.

- 4) 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) Depress the tilting pedal, column will lean 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, 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.

14.3. Demounting the tyre:

- 1) Pull the horizontal 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 bar. 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 shown as Fig 8.

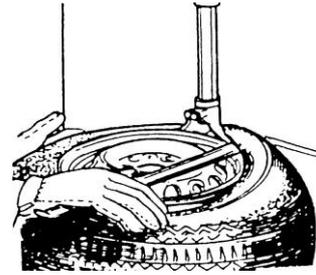


Fig 8

- 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 8, 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 8, 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) Depress the tilting pedal to turn the column 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.

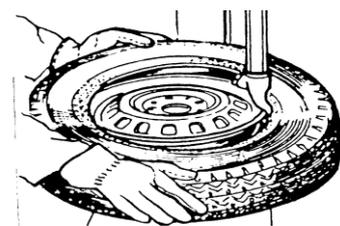


Fig 9

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) Step the tilting pedal make the vertical column to the original 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 "demounting 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.

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.

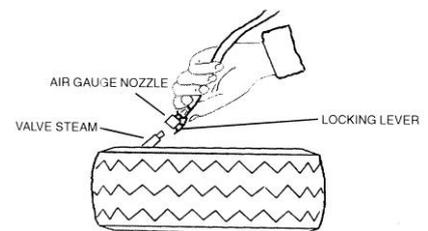


Fig 10

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:

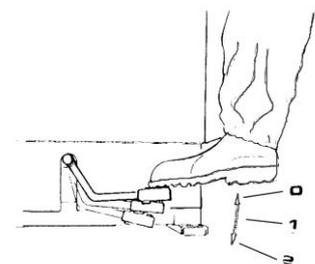


Fig 11

-Press the inflating pedal, which is stretched out from the bottom of the left cover of the box assembly, down to the middle position (1 position Fig 11).the inflating head should give air.

-Press the inflating pedal all the way down (2 position Fig 11).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 as the tyre's.
- b. The rim or tyre is 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) Tube 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.

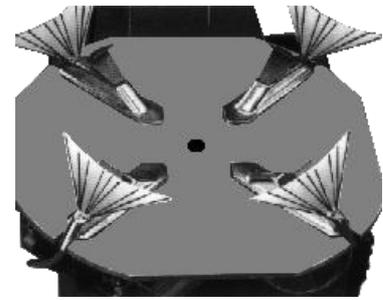


Fig 12

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.

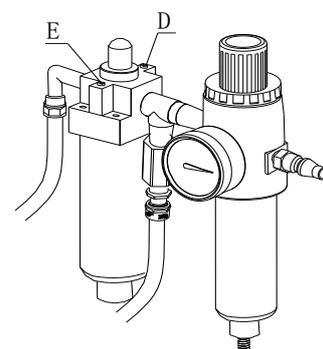


Fig 13

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 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 drip oil, otherwise adjust screw (E) that controlled oil enter with minus screwdriver.

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

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.

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

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.

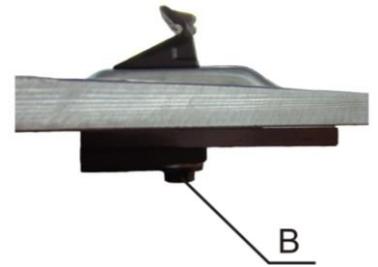


Fig 14

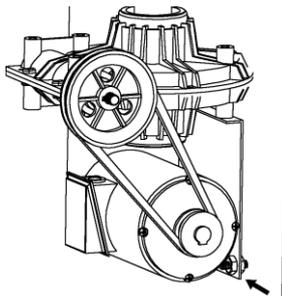


Fig 15

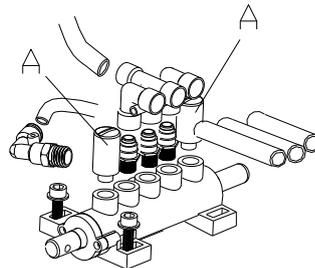


Fig 16

17. Instruction for help arm:

The help arm is auxiliary device for tyre changer, it is used to demount and mount tyres. Since the arm is wider and the linkage is prolonged, it facilitates to demount and mount the larger or thicker tyres.

Read instruction carefully before operation. Manufacturer will not be responsible for any harm or injury due to improper operations.

Please keep the manual handy for consulting.

17.1. Technical data:

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

17.2 Safety regulations:

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

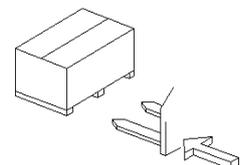


Fig 17

The device is designed to use together with the appointed tyre changers by manufacturer. Manufacturer won't be responsible for any unauthorized modifications.

17.3. Installation:

Caution: install it only by experienced persons.
Before assembly, disconnect the device from power supply and air source.

17.4. Transport:

Remove the machine with a forklift truck shown as Fig 17.

17.5. Unpacking:

Take care to unpack and check the equipment, if any breakage or defect, please contact manufacturer or dealer at once. Check all the parts according to the packing list.
Please keep all the package out of kids' reach

17.6. Workplace requirements:

Fig 18 shows maximum space requirements and minimum distance of 500mm from walls.

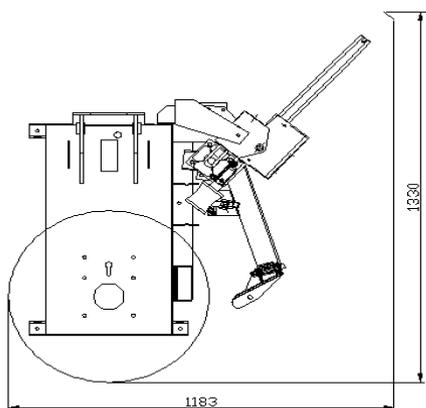


Fig 18

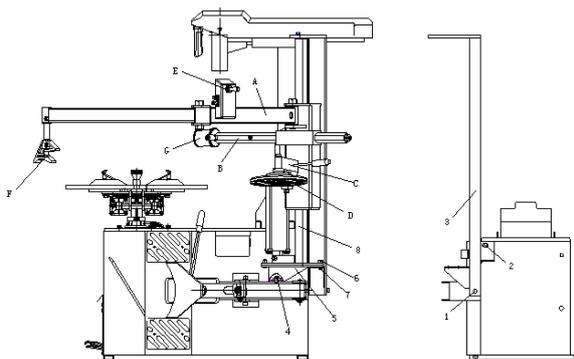


Fig 19

17.7. Assembly:

Assemble the help arm as following steps:

- 1) Disconnect the tyre changer from power supply and air source.
- 2) Install the column 3 with screw 1 and 2; install the support 5 of the auxiliary arm with screw 4; install the help arm 8 with nut 6 and screw 7. (Fig 19)
- 3) Connect the air hose to the corresponding T-joint through the rear hole of the body. (Fig 20)

17.8. Functional Parts:

Parts of help arm are illustrated as Fig 19.

- A. Linkage for tyre pressing arm
- B. Hex rod
- C. Roller support
- D. Lifting roller

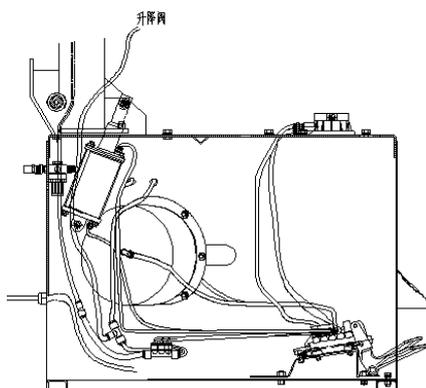


Fig 20

- E. Switch handle
- F. Assembled tyre pressing block
- G. Tyre pressing roller

17.9. Test:

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

17.10. Operation:

The 236 device has been designed to facilitate the operations of mounting and demounting. In any case, the 236 device would make these jobs easier on any type of wheel. It is a good helper for tyre changer.

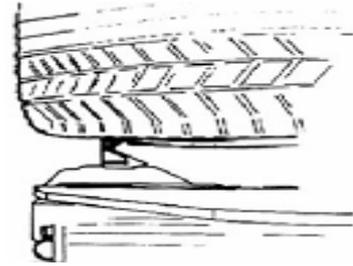


Fig 21

17.10.1. Clamping the tyre:

Loosen the tyre according to the instruction, clamp the tyre from outside. (Fig 21)

Depress the corresponding pedal to open the jaws.

Put the tyre on the turntable, close the jaws by depressing the corresponding pedal to clamp the tyre.

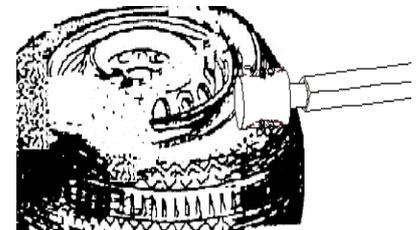


Fig 22

17.10.2. Demounting the tyre:

1. Generally speaking, tyre is very tight. Loosen the tyre at the beginning. Once it is very tight, please loosen it with bead breaker. Push the hex rod out to move the tyre pressing roller over the tyre, but don't touch with the rim.

Push the switch handle down to press the tyre with the tyre pressing roller. Depress the reverse pedal to make the tyre loose. (Fig 22)

Caution: Lubricate the edge of tyre before operation.

2. Demounting the upper bead

a- Move the mounting head near the edge of the rim, rotate the tyre pressing arm to move the tyre pressing block above the tyre, press the switch handle to depress the tyre, and insert the lifting lever in the clearance between the tyre and the rim, then hang the bead on the mounting head. (Fig 23)

b- If the tyre is hard, repeat to do the operation as follows: turn up/down and rotate the rotating arm. Press the tyre with the tyre pressing block, insert the lifting lever and have the upper tyre bead hung on the mounting head.

Depress the reverse pedal to turn the turntable. With the help of the tyre pressing head, the upper tyre bead is detached.

Raise the help arm to move the tyre pressing block to its non-working position.

3. Demounting the bottom bead

a- Turn the roller support and move it under the tyre, but don't touch it with the rim. (Fig 24)

b- Depress the reverse pedal to rotate the turntable, meanwhile, lift help arm gradually to loosen tyre. (Fig 25)

4. Caution:

The roller support can't be used for all tyres, some tyres need following operation.

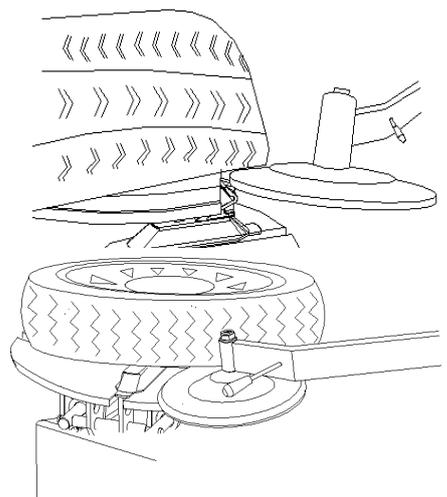


Fig 25

Move the mounting head above the rim.

Insert the lifting lever in the clearance between the bottom tyre bead and the rim, have the tyre hung on the mounting head.

c- Depress the reverse pedal to rotate the turntable. With the help of the mounting head, the tyre is detached completely.

17.10.3. Mounting the tyre:

Lubricate the tyre bead and turn the turntable, mount the bottom bead with the mounting head.

Pull the hex rod out, press the upper bead under the mounting head with the tyre pressing roller, rotate the rotating arm and move the tyre pressing block above the tyre.

Don't touch with the rim in the operation, or it causes damage due to friction.

Depress the reverse pedal to rotate the turntable and the tyre pressing block, lower the help arm to press the tyre under the rim. Mount the tyre with the mounting head. Others keep far away in the course of operation. (Fig 26)

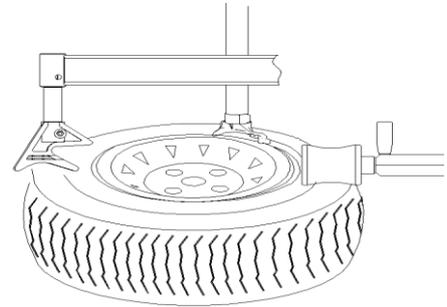
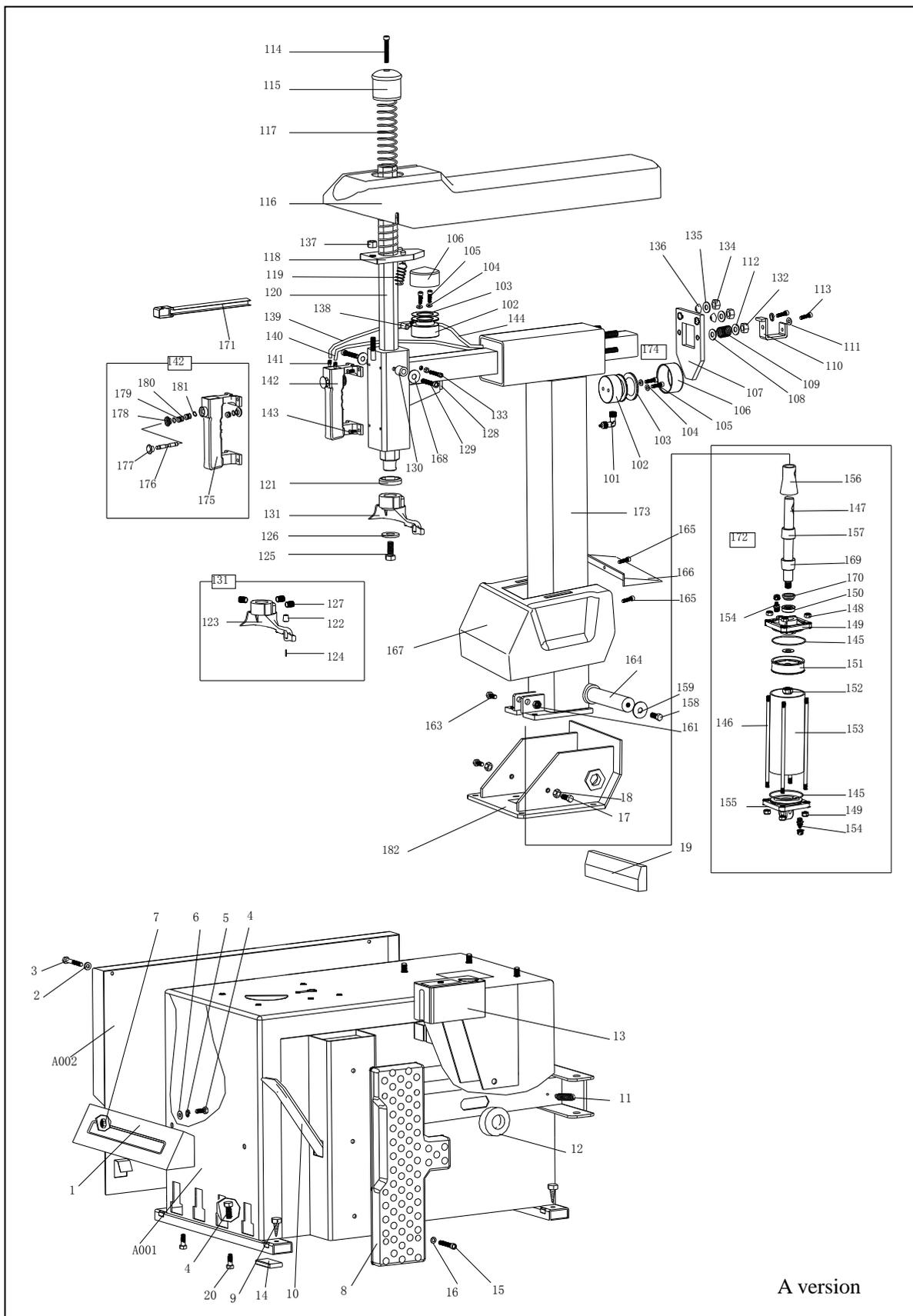


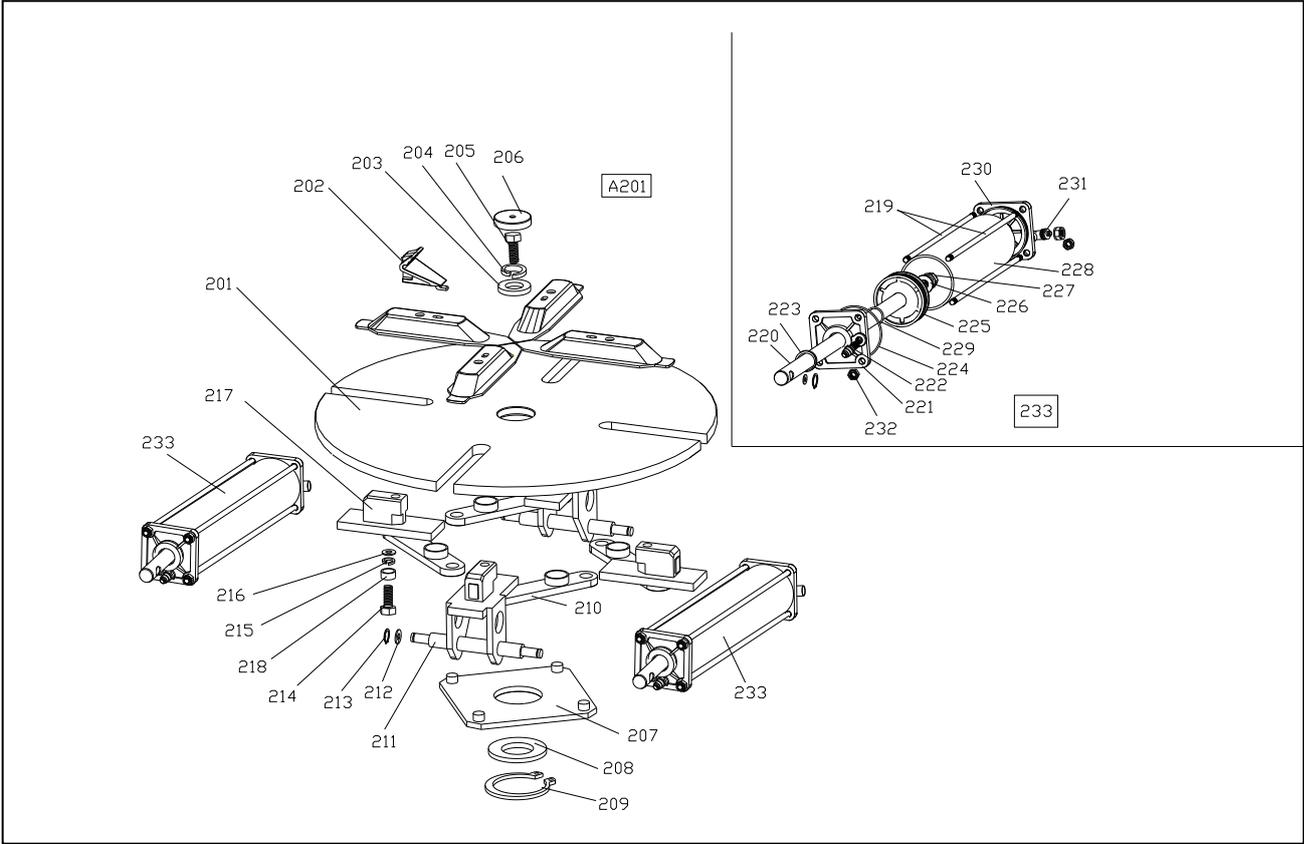
Fig 26

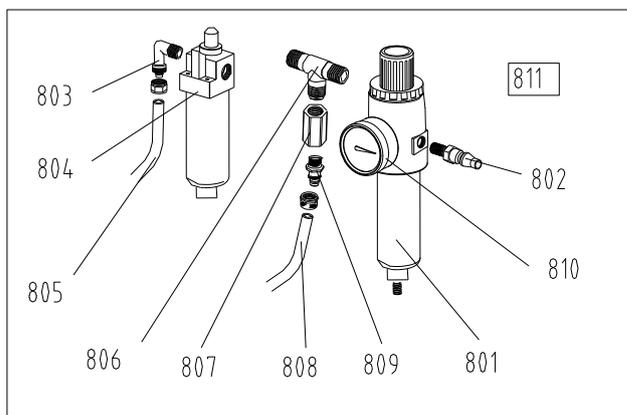
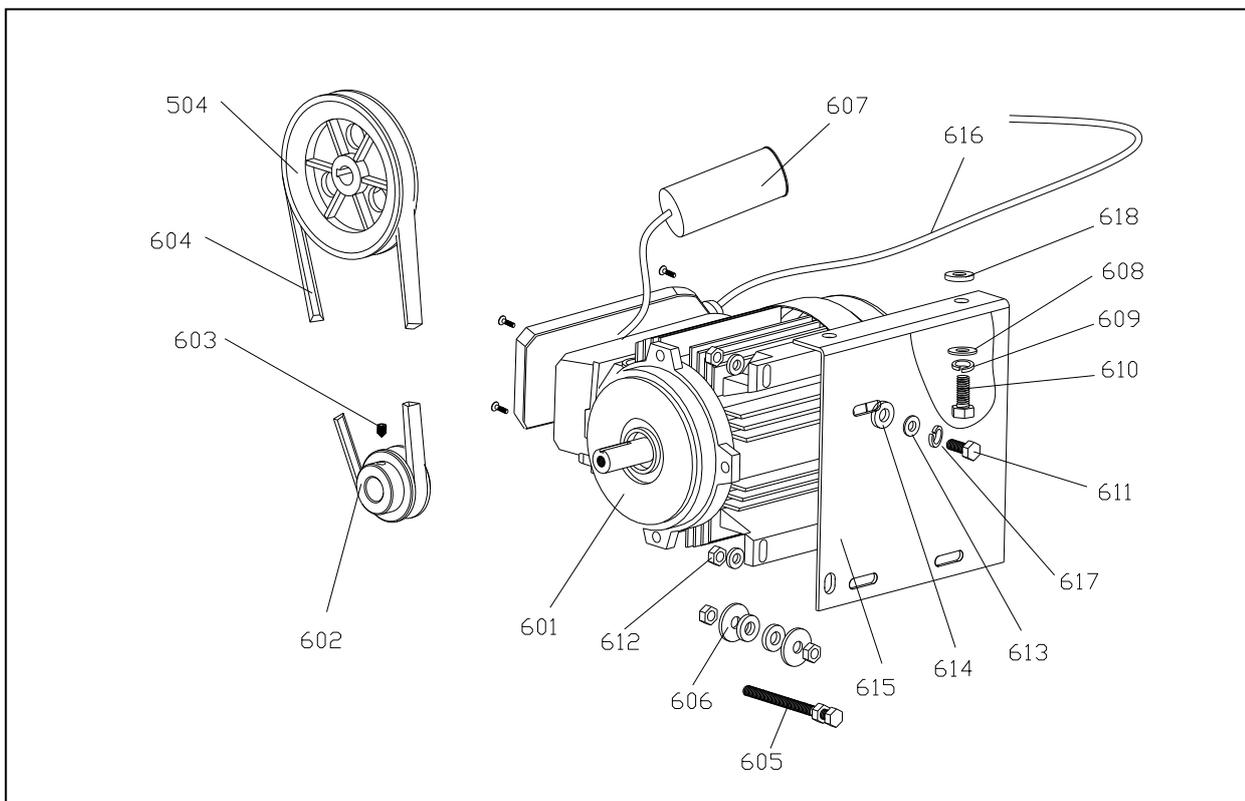
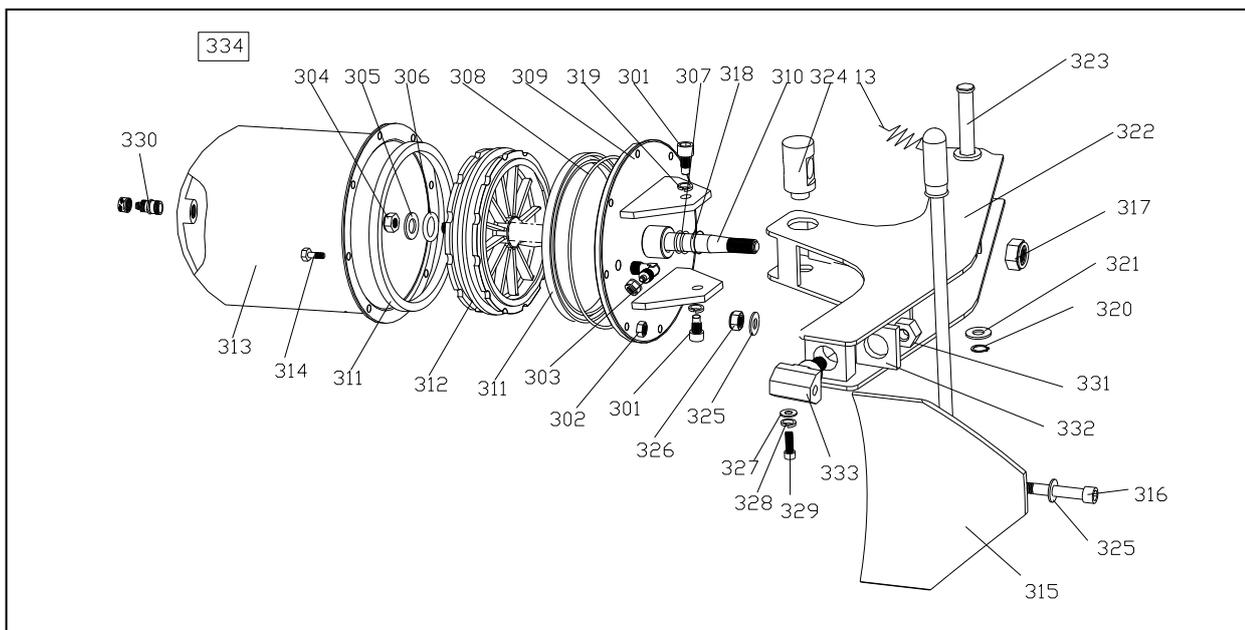
18. Trouble shooting table:

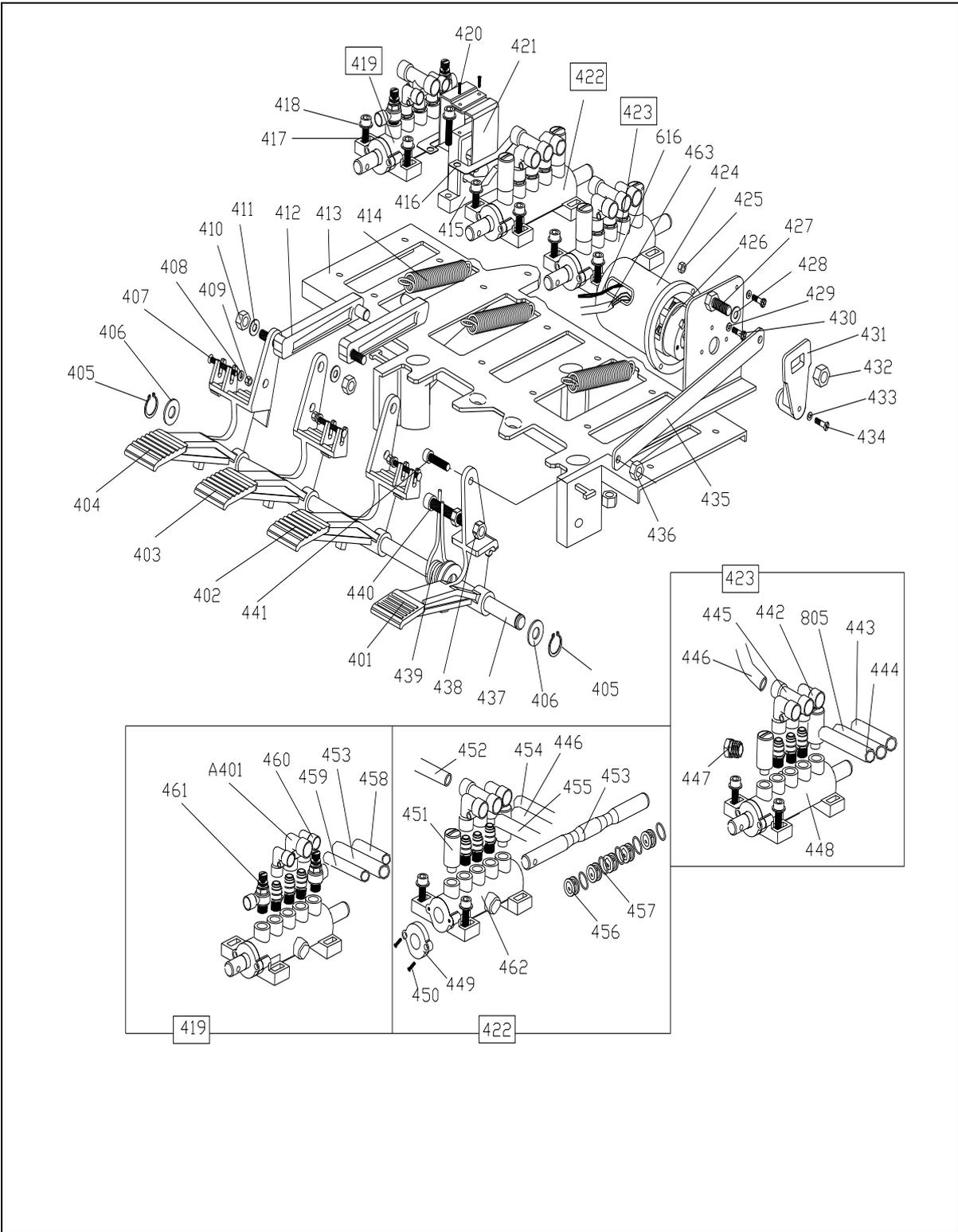
Problem	Reason	Solution
The turntable rotate just in one direction or can't rotate	Damaged switch	Replace it.
	Damaged belt	Replace it.
	The Motor's malfunction	Check the cable or wire; Replace the motor if damaged.
The jaws delay to open/close; the turntable can't lock or lock incorrectly	Leakage of 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.

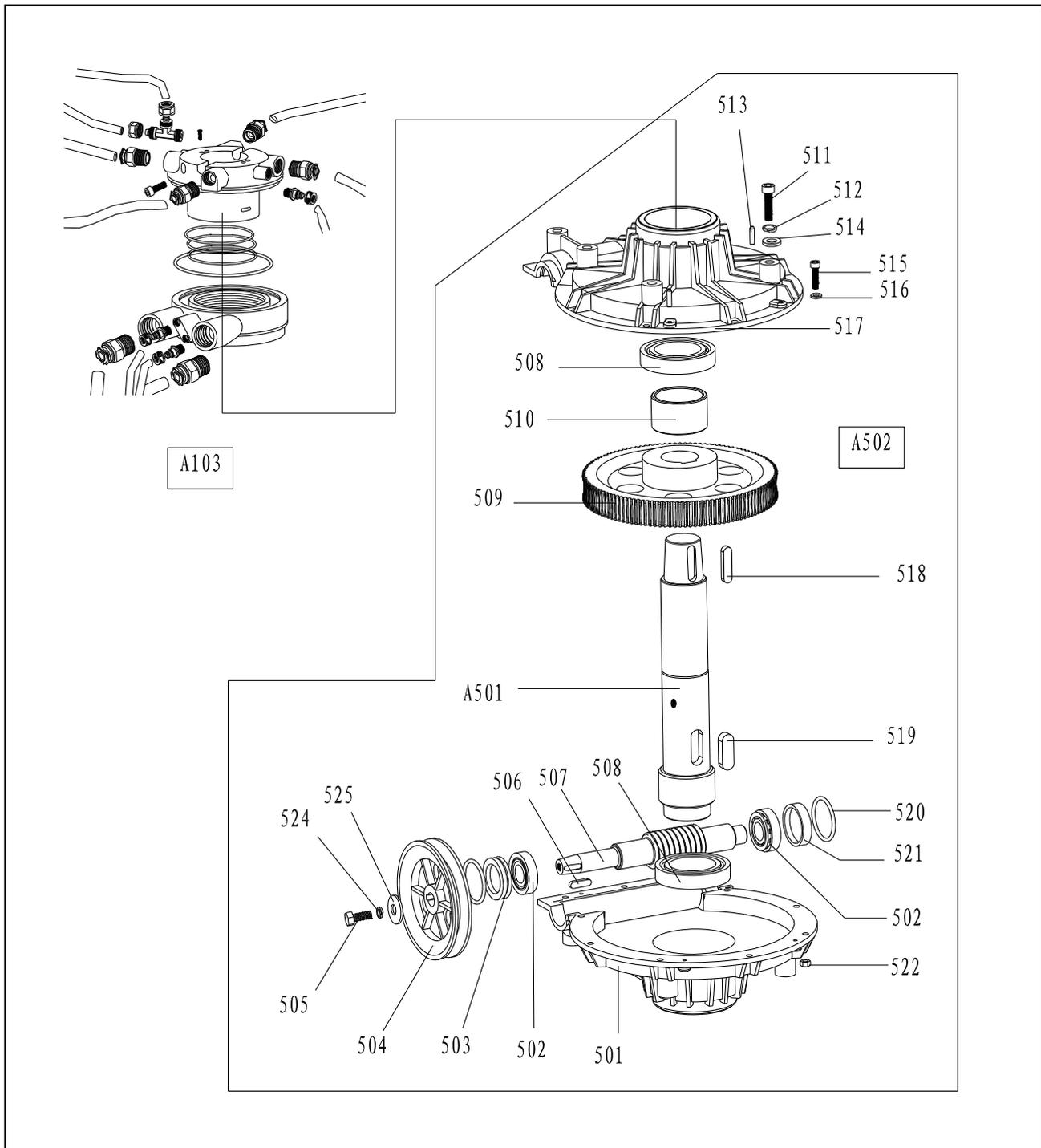
19. Exploded drawing:

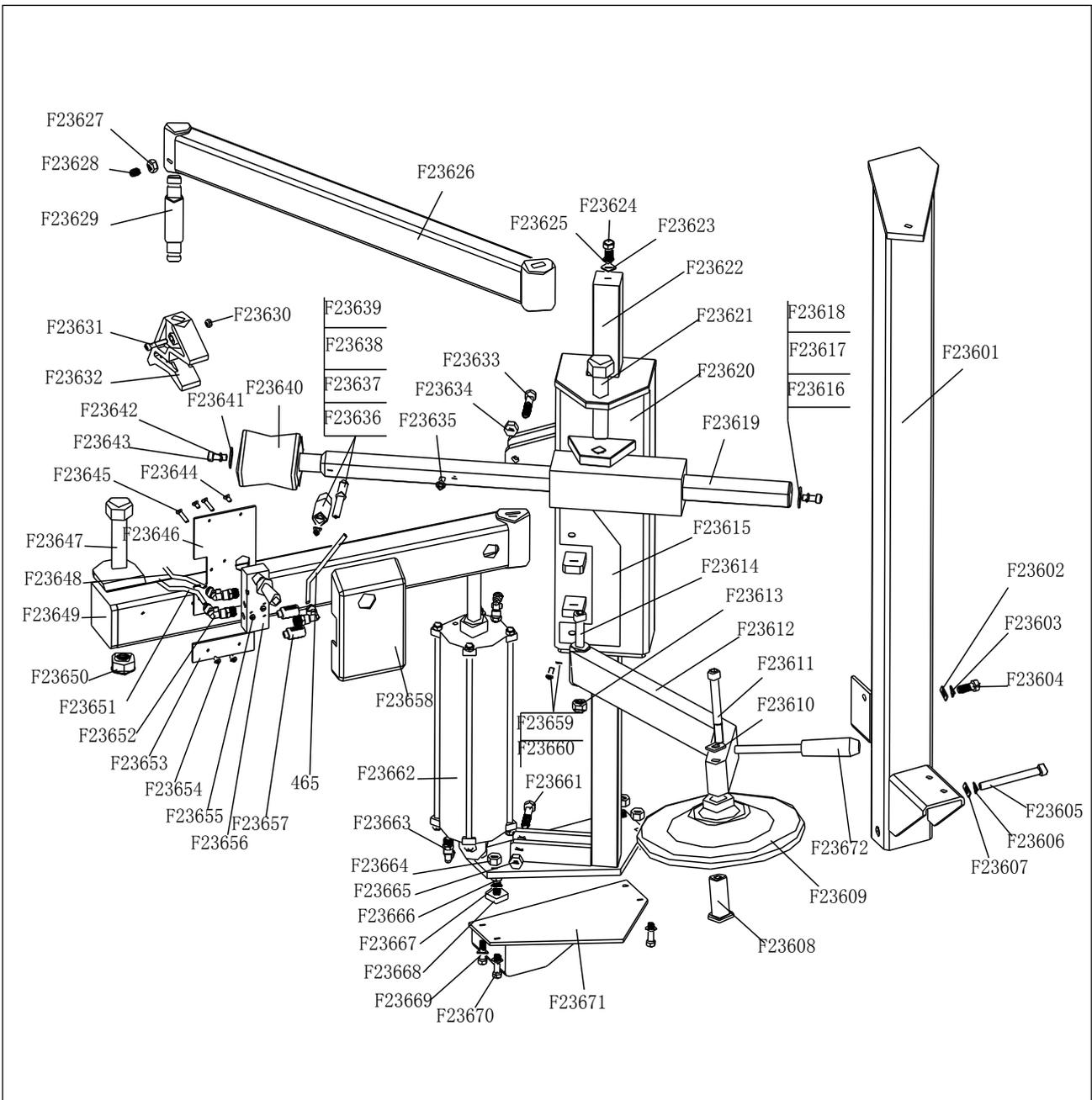


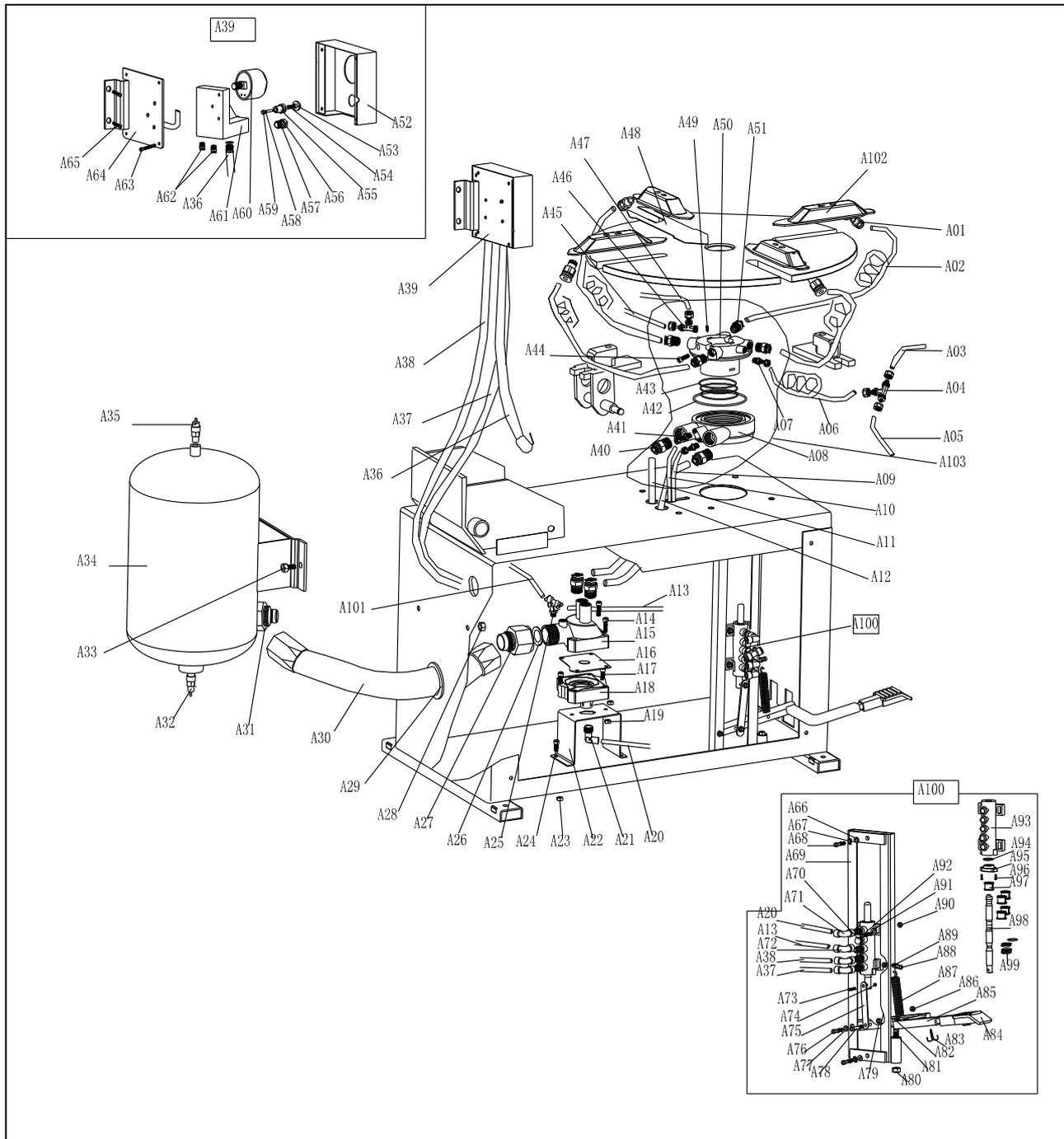












20. Spare part list:

THE SAME SPARE PART LIST OF COMMON&A VERSION				
ID	Item No.	Drawing No.	Qty	Product Name
Parts of total assembly				
1	CX-06-006-001	U221.01.08	1	front cover
2	B-02-001-007	GB/T 95	2	flat washer φ6*14*1.2
3	B-01-007-011	GB/T 70	2	screw M6*55
4	B-01-013-005	GB/T 70	2	screw M8*20
5	B-02-001-009	GB/T 95	2	flat washer φ8*17*1.5
6	B-02-002-003	GB/T 93	2	spring washer φ8
7	B-01-003-001	GB/T 41	2	nut M8
8	C-36-001-002	U221.01.50	1	rubber buffer B type
9	B-01-014-002	GB/T 70	4	screw M6*40
10	Y-10-001-001	U200.01.58	1	lifting lever
11	C-07-005-001	U200.01.36	1	spring
12	C-35-002-001	U200.01.51	1	rubber support
13	C-44-001-001	U200.01.47	1	box
14	C-35-003-001		4	rubber foot
15	B-01-007-016	GB/T 70	4	screw M8*25
16	B-02-001-010	GB/T 95	4	flat washer φ8*22*2
17	B-01-013-014	GB/T 70	2	screw M10*25
18	B-01-003-002	GB/T 41	2	nut M10
19	C-34-002-001	U221.01.82	1	plastic cover
20	B-01-013-006	GB/T 70	2	screw M8*25
Parts of column, horizontal arm& vertical arm				
101	C-03-003-004	U221.03.37	1	L-union 1/8-φ6
102	CZ-40-002-001	U221.01.09.01	2	locking cylinder piston
103	C-01-002-006		2	V-seal 60*50*6.5
104	B-02-001-007	GB/T 95	4	flat washer φ6*14*1.2
105	B-01-007-011	GB/T 70	4	screw M6*55
106	CX-06-015-001	U221.01.09.02	2	locking cylinder cover φ60
107	CX-08-011-001	U221.01.19	1	horizontal locking plate
108	B-02-001-009	GB/T 95	2	flat washer φ8*17*1.5
109	C-07-008-001	U221.01.41	2	horizontal locking spring
110	CX-08-029-001	U221.01.24	1	arm protection support
111	B-02-001-009	GB/T 95	1	flat washer φ8*17*1.5
112	B-02-001-009	GB/T 95	2	flat washer φ8*17*1.5
113	B-01-013-005	GB/T 70	2	screw M8*20
114	B-01-007-018	GB/T 70	1	screw M8*50
115	C-39-001-002	U200.01.49	1	knob
116	C-36-008-002	U221.01.48	1	plastic cover
117	C-07-002-001	U200.01.39	1	spring
118	CX-08-010-001	U221.01.22	1	vertical locking plate
119	C-07-001-003	U221.01.40	2	spring
120	CX-08-009-002	U200.01.16	1	hexagonal vertical arm
121	C-35-001-001	U200.01.52	1	buffer bush
122	CX-08-032-001	U200.01.15.02	1	pulley
123	CX-50-012-002	U200.01.15.01	1	mounting head
124	C-14-001-001	U200.01.15.04	1	pin
125	B-01-013-014	GB/T 78	1	screw M10*25
126	CX-01-010-001	U200.01.17	1	flat washer
127	B-01-004-016	GB/T 80	3	screw M12*16
128		U221.01.18.04	1	shock absorber
129	B-01-007-009	GB/T 950	2	screw M6*35

130	CZ-11-006-001	U221.01.59	2	washer
131	CZ-14-001-002	U200.01.15	1	mounting head
132	B-01-001-004	GB/T 1337	2	self-locking nut M8
133	B-01-007-008	GB/T 950	2	screw M6*30
134	B-01-001-006	GB/T 1337	2	self-locking nut M12
135	B-02-001-019	GB/T 95	2	flat washer $\phi 12*25*2$
136	CX-08-034-001	U221.01.23	2	horizontal locking cone
137	B-01-001-004	GB/T 1337	1	self-locking nut M8
138	C-03-006-010	U221.03.37	1	T-union 1/8-2* $\phi 6$
139	C-06-001-003	C2330360	1	hose 6*4
140	C-06-001-003	C2330360	1	hose 6*4
141	C-03-001-008	C2330342	2	union 1/8- $\phi 6$
142	CZ-14-003-003	U221.01.21	1	complete switch handle
143	B-01-007-005	GB/T 70	4	screw M6*16
144	C-06-001-003	C2330313	1	hose 6*4
145	C-01-001-009	JB 1092	2	O-seal $\phi 68.26*3.53$
146	C-13-001-001	U221.01.35.09	4	tightener
147	C-08-001-001	U221.01.35.02	1	cylinder rod
148	B-01-001-004	GB/T 1337	8	self-locking nut M8
149	C-56-001-001	U221.01.35.01	1	flange without handle
150	C-01-002-007	JB/T 6997	1	V-seal $\phi 20*36*8$
151	C-37-001-002	U200.01.55	1	tilting cylinder piston
152	B-01-002-008	GB/T 1337	1	nut M12*7*1.5
153	C-60-001-003	U221.01.35.05	1	tilting cylinder
154	C-03-002-009	C2110342	2	union 1/8- $\phi 6$
155	C-56-001-002	U221.01.35.03	1	flange with handle
156	CX-01-002-001	U221.01.35.10	1	bell-mouthed sheath
157	C-35-004-002	U221.01.35.07	1	rubber sheath
158	B-01-013-014	GB/T 5781	2	screw M10*25
159	CX-13-040-001	U221.01.27	2	flat washer
161	B-01-001-006	GB/T 1337	1	self-locking nut M12
163	B-01-013-014	GB/T 27	1	screw M10*25
164	CX-08-026-001	U221.01.26	1	tilting pin
165	B-01-011-003	GB/T 5781	3	screw M5*16
166	C-36-008-003	U221.01.46	1	plastic cover
167	C-36-008-001	U221.01.45	1	plastic cover
168	B-02-001-007	GB/T 95	2	flat washer $\phi 6*14*1.2$
169	C-35-004-001	U221.01.35.08	2	flat washer
170	C-35-004-005	U221.01.35.04	1	cover
171	C-47-001-001		1	plastic cover
172	CZ-14-003-002	U221.01.35	1	complete tilting cylinder
173	CX-06-016-002	U221.01.25	1	vertical column
174		U221.01.09	2	complete locking cylinder
175	C-38-001-001	U221.01.21.01	1	switch
176	CX-09-001-001	U221.01.21.02	1	valve pole
177	C-39-002-001	U221.01.21.05	2	button
178	C-42-001-001	U221.01.21.03	1	cover
179	C-33-008-001	U221.01.21.04	3	spacer
180	C-01-001-003	JB 1092	4	O-seal 7.5*2.65
181	B-03-001-021		1	retainer ring $\phi 8$
Parts of turning table assembly				
201	CX-02-001-002	U221.01.13.01	1	turntable
202	CX-18-001-001	U200.01.57	4	jaw
203	CX-09-006-001	U200.01.14	1	turntable washer
204	B-02-002-006	GB/T 95	1	spring washer $\phi 16$

205	B-01-013-022	GB/T 5781	1	screw M16*40
206	C-42-002-001	U200.01.44	1	cap
207	CX-08-001-004	U221.01.28	1	control plate
208	CX-09-003-001	U200.01.29	1	washer
209	B-03-001-009	GB/T 894	1	retainer ring φ65
210	CX-08-001-006	U221.01.31	4	connecting rod
211	CX-01-019-001	U221.01.11	2	slide guide with pin
212	B-02-001-019	GB/T 95	4	flat washer φ12*25*2
213	B-03-001-001	GB/T 894.1	4	retainer ring φ12
214	B-01-013-021	GB/T 80	4	screw M12*80
215	B-02-002-005	GB/T 95	4	spring washer φ12
216	B-02-001-018	GB/T 95	4	flat washer φ12*30*3
217	CX-01-018-001	U221.01.11.01	2	slide guide
218	CX-09-004-001	U200.01.30	4	spacer bush φ20
219	C-13-001-003	U221.01.10.04	8	tightener
220	C-08-001-003	U221.01.10.02	2	cylinder rod
221	C-13-025-001	U200.01.10.01	2	flange without handle
222	C-03-002-010	C2110336	2	union 1/8-φ8
223	C-01-002-004	JB/T 6997	2	V-seal UHS-20*28*7.5
224	C-01-001-011	JB1092	4	O-seal 63*2.65
225	C-37-001-001	U200.01.54	2	piston
226	B-02-001-019	GB/T 95	2	flat washer φ12*25*2
227	B-01-002-008	GB/T 1337	2	nut M12*7*1.5
228	C-60-001-002	U221.01.10.05	2	clamping cylinder
229	C-01-001-007	JB1092	2	O-seal 20*2.65
230	C-13-024-001	U200.01.10.03	2	flange with handle
231	C-03-003-005	U221.03.37	2	L-union 1/8-φ8
232	B-01-001-004	GB/T 1337	16	self-locking nut M8
233	CZ-14-002-001	U221.01.10	2	complete clamping cylinder

Parts of bead breaker cylinder& breaker arm assembly

301	B-01-007-043	U200.01.05.05.03	2	screw M14*30
302	B-01-001-003	GB/T 41	12	self-locking nut M6
303	C-03-005-003	C2110353	1	L-union 1/4-φ8
304	B-01-002-009	GB/T 1337	1	nut M16*1.5
305	B-02-001-021	GB/T 95	2	flat washer φ16*28*2
306	C-01-001-006	JB1092	1	O-seal 16*2.65
307	C-01-001-006	JB1092	2	O-seal 20*2.65
308	C-01-001-014	JB1092	2	O-seal 180*3.5
309	CX-03-005-001	U200.01.05.05	1	bead breaker cylinder lid(front)
310	C-08-002-001	U200.01.05.01	1	bead breaker rod
311	C-01-002-003	JB/T 1091	2	V-seal 185*168*11.5
312	C-11-001-001	U200.01.05.02	1	piston
313	CX-50-015-001	U200.01.05.03	1	bead breaker cylinder
314	B-01-007-006	GB/T 70	12	screw M6*20
315	CX-04-001-001	U200.01.07	1	shovel
316	B-01-007-030	GB/T 70	1	screw M12*100
317	B-01-001-009	GB/T 1337	1	self-locking nut M16
318	C-63-001-005	U200.01.05.08	1	guide belt
319	B-02-002-008	GB/T 95	2	spring washer φ14
320	B-03-001-002	GB/T 894.1	1	retainer ring φ16
321	B-02-001-021	GB/T 96	1	flat washer φ16*28*2
322	CX-06-014-001	U200.01.03	1	bead breaker arm
323	CX-01-011-001	U200.01.04	1	pin
324	CX-01-001-001	U200.01.05.06	1	rotating pin
325	B-02-001-019	GB/T 95	2	flat washer φ12*25*2
326	B-01-001-006	GB/T 1337	1	self-locking nut M12

327	B-02-001-011	GB/T 5287	1	flat washer $\phi 8*30*3$
328	B-02-002-003	GB/T93	1	spring washer $\phi 8$
329	B-01-013-005	GB/T 5783	1	screw M8*20
330	C-03-002-010	C2110353	1	union 1/8- $\phi 8$
331	CZ-14-003-001	U200.01.05	1	complete bead breaker cylinder
Parts of pedals assembly				
401	C-55-002-004	U200.01.06.04	1	pedal
402	C-55-002-003	U200.01.06.03	1	pedal
403	C-55-002-003	U200.01.06.03	1	pedal
404	C-55-002-002	U200.01.06.02	1	pedal
405	B-03-001-001	GB/T 894.1	2	retainer ring $\phi 12$
406	B-02-001-019	GB/T95	2	flat washer $\phi 12*25*2$
407	B-01-008-005	GB/T 973	3	screw M4*30
408	B-02-001-002	GB/T 1337	6	flat washer $\phi 4$
409	B-01-001-001	GB/T95	3	self-locking nut M4
410	B-01-001-004	GB/T 1337	2	self-locking nut M8
411	B-02-001-009	GB/T 5287	2	flat washer $\phi 8*17*1.2$
412	C-41-002-001	U200.01.06.13	2	cam connecting rod
413	C-51-001-002	U221.01.06.01	1	pedal support
414	C-07-003-001	U200.01.38	3	spring
415	C-41-001-001	U200.01.06.15	1	cam
416	C-22-001-001	U200.01.81	2	flat washer
417	B-01-007-006	GB/T 70	14	screw M6*20
418	B-02-001-006	GB/T95	14	flat washer $\phi 6*12*1$
419	CZ-14-006-011		1	complete 5-way valve
420	B-01-009-002	GB/T 845	2	tap screw ST2.9*12
421	CX-03-007-001	U200.01.06.05	2	cam cover
422	CZ-14-006-010		1	complete 5-way valve
423	CZ-14-006-012		1	complete 5-way valve
424	C-33-005-001	U200.01.06.14	1	switch cover
425	B-01-002-002	GB/T 41	2	nut M4
426	C-49-001-002		1	switch
427	B-01-007-006	GB/T 70	1	screw M6*20
428	B-02-001-006	GB/T 95	1	flat washer $\phi 6*12*1$
429	B-02-001-002	GB/T 95	4	flat washer $\phi 4$
430	B-01-010-012	GB/T 70	4	screw M4*16
431	C-38-002-001	U200.01.53	1	switch handle
432	B-01-001-003	GB/T 41	1	self-locking nut M6
433	B-02-001-002	GB/T 95	1	flat washer $\phi 4$
434	B-01-008-005	GB/T 845	1	screw M4*30
435	CX-03-013-001	U200.01.06.06	1	connecting rod
436	B-01-001-004	GB/T 41	1	self-locking nut M8
437	CX-03-010-002	U221.01.06.07	1	pedal shaft
438	B-01-003-001	GB/T 41	2	nut M8
439	C-07-004-001	U200.01.37	1	twist spring
440	B-01-007-018	GB/T 70	1	screw M8*50
441	B-01-007-015	GB/T 70	3	screw M8*20
442	C-03-003-005	1/8- $\phi 8$	4	L-union 1/8- $\phi 8$
443	C-06-001-002	5*8	1	hose 5*8
444	C-06-001-002	5*8	1	hose 5*8
445	C-04-001-007	1/8-2* $\phi 8$	3	T-union 1/8-2* $\phi 8$
446	C-06-001-002	5*8	1	hose 5*8
447	C-03-003-004	1/8- $\phi 6$	1	L-union 1/8- $\phi 6$
448	C-34-001-009	U200.01.06.09.01	2	5-way valve

449	C-34-001-002	U200.01.06.11	3	valve cover
450	B-01-012-005	GB/T 70	6	tap screw ST2.9*16
451	C-15-001-001	C211011221	4	silencer 1/8"
452	C-06-001-002	5*8	1	hose 5*8
453	CX-50-011-001	U200.01.06.12	3	valve pole
454	C-06-001-002	5*8	1	hose 5*8
455	C-06-001-002	5*8	1	hose 5*8
456	C-34-001-001	U200.01.06.10	15	spacer
457	C-01-001-004	JB1092	18	O-seal 12*20*4
458	C-06-001-003	6*4	1	hose 6*4
459	C-06-001-003	6*4	1	hose 6*4
460	C-03-003-004	1/8-φ6	2	L-union 1/8-φ6
461	C-05-002-001	1/8-φ6	2	adjust valve 1/8-φ6
462		U200.01.06.09	2	5-way valve
463	CZ-13-037-002		1	wire 3*1.5
Parts of transmission assembly				
501	CZ-50-001-001	U200.01.32.03B	1	bottom cover
502	C-16-001-001	GB/T 297	2	bearing 30204
503	C-01-003-001	GB/T 10708	1	seal φ20*35*8
504	CZ-50-004-001	U200.01.32.05	1	pulley
505	B-01-013-005	GB/T 70	1	screw M8*20
506	B-04-001-001	GB/T 1096	1	key 6*20
507	CZ-13-020-001	U200.01.32.04	1	worm screw
508	C-16-001-002	GB/T 292	2	bearing 6010
509	C-23-001-001	U200.01.32.01	1	worm gear
510	CZ-01-020-001	U200.01.32.06	1	spacer
511	B-01-013-017	GB/T 5783	6	screw M10*55
512	B-02-002-004	GB/T93	6	spring washer φ10
513	B-06-001-001	GB/T 117	2	pin 6*20
514	B-02-001-014	GB/T95	6	flat washer φ10*20*2
515	B-01-007-006	GB/T 70	10	screw M6*20
516	B-02-001-007	GB/T95	10	flat washer φ6*14*1.2
517	CZ-50-002-001	U200.01.32.03A	1	upper cover
518	B-04-001-002	GB/T 1096	1	key 10*40
519	B-04-001-003	GB/T 1096	1	key 14*40
520	C-01-001-018	JB1092	2	O-seal φ27.8*3.1
521	C-45-001-001	U200.01.32.07	1	seal
522	B-01-001-003	GB/T 1337	10	self-locking nut M6
523	B-02-002-003	GB/T93	1	Spring washer φ 8
524	B-02-001-011	GB/T95	2	Flat washer φ 8*30*3
Parts of motor assembly				
601		C2110201	1	motor MY8024
602	CX-01-012-001	U200.01.33	1	motor pulley
603	B-01-004-010	GB/T 71	1	screw M8*12
604	C-21-001-001	GB/T11544-1997	1	belt A-28
605	B-01-013-011	GB/T 71	1	screw M8*70
606	B-02-001-011	GB/T 71	2	flat washer φ8.5*30*3
607		GB/T 11544	1	capacitor
608	B-02-001-014	GB/T 1337	2	flat washer φ10*20*2
609	B-02-002-004	GB/T93	2	spring washer φ10
610	B-01-013-014	GB/T 70	2	screw M10*25
611	B-01-013-006	GB/T 70	4	screw M8*25
612	B-01-003-001	GB/T95	7	nut M8
613	B-02-001-010	GB/T 1337	8	flat washer φ8*22*1.5
614	C-35-005-001	U200.01.56	6	rubber washer
615	CX-03-008-001	U221.01.34	1	motor support

616	CZ-13-038-002	RVV	1	wire 5*1
617	B-02-002-003	GB/T93	2	spring washer φ8
618	C-35-005-001	U200.01.56	2	rubber washer
Parts of air filter& oil fog maker assembly				
801	C-15-002-021	U2000332	1	relief pressure filter
802	C-17-001-001	U2000333	1	quick nozzle
803	C-03-005-003	U2000343	1	L-union
804	C-15-002-004		1	oil fog maker
805	C-06-001-002	U200033003	1	hose 5*8
806	C-04-002-001		1	big T-joint
807	C-03-002-006		1	union 1/4-1/4
808	C-06-001-002		1	hose 5*8
809	C-03-002-010		1	union 1/8- φ 8
810			1	manometer
811	CZ-14-014-002		1	oil fog maker assembly
Parts of help arm 006				
F23601		U236.01	1	column
F23602	B-02-001-014	GB/T 95	1	flat washer φ10*20*2
F23603	B-02-002-004	GB/T 95	1	spring washer φ10*20
F23604	B-01-013-014	GB/T 70	1	screw M10*25
F23605	B-01-007-051	GB/T 70	1	screw M10*100
F23606	B-02-002-004	GB/T 95	1	spring washer φ10*20
F23607	B-02-001-014	GB/T 95	1	flat washer φ10*20*2
F23608	CX-12-001-001	U005.11	1	Pin for push tyre wheel
F23609	C-43-001-001	U005.10	1	tyre lifting roller
F23610	B-02-001-019	GB/T 95	1	flat washer φ12*25*2
F23611	B-01-007-030	GB/T 70	1	screw M12*100
F23612	CX-12-005-001	U006.06	1	roller support
F23613	B-01-001-006	GB/T 41	1	self-locking nut M12
F23614	B-01-007-030	GB/T 70	1	screw M12*100
F23615	C-36-001-003	U006.16	1	rubber protection support
F23616	B-02-001-011	GB/T 95	1	flat washer φ8*30*2
F23617	B-02-002-003	GB/T 95	1	spring washer φ8
F23618	B-01-007-015	GB/T 70	1	screw M8*20
F23619	CX-13-009-001	U006.07	1	hexagonal horizontal arm
F23620		U236.03	1	complete risefall
F23621		U236.05	1	screw
F23622		U236.02	1	column for risefall
F23623	B-02-001-014	GB/T 95	1	flat washer φ10*20*2
F23624	B-01-013-014	GB/T 70	1	screw M10*25
F23625	B-02-002-004	GB/T 95	1	spring washer φ10
F23626		U236.20	1	rotating arm
F23627	B-01-002-006	GB/T 41	1	nut M10
F23628	B-01-007-042	GB/T 70	1	screw M10*16
F23629	CX-05-024-006	007.B.00.2	1	pin
F23630	B-01-001-003	GB/T 41	1	self-locking nut M6
F23631	B-01-007-008	GB/T 70	1	screw M6*30
F23632	C-31-001-001	U008.09.01	1	tyre pressing head (upper)
F23633	B-01-007-026	GB/T 70	1	screw M10*55
F23634	B-01-001-005	GB/T 41	1	self-locking nut M10
F23635	B-01-007-015	GB/T 70	1	screw M8*20
F23636	CX-08-036-001	U006.12	1	handle bar
F23637	CZ-11-003-001	U006.11	1	handle
F23638	B-01-007-001	GB/T 70	1	screw M5*10
F23639	B-02-001-006	GB/T 95	1	flat washer φ6*12*1
F23640	CZ-13-018-001	U008.08	1	tyre pressing roller
F23641	B-02-001-011	GB/T 95	1	flat washer φ8*30*2

F23642	B-02-002-003	GB/T 95	1	spring washer φ8
F23643	B-01-007-015	GB/T 70	1	screw M8*20
F23644	B-01-008-004	GB/T 70	2	screw M4*16
F23645	B-01-008-005	GB/T 70	2	screw M4*30
F23646	CX-06-008-001	U005.20	1	switch panel
F23647		U236.05	1	screw
F23648	C-06-001-011		1	hose 6*4
F23649		U236.19	1	tyre pressing arm
F23650			1	self-locking nut M22
F23651	C-06-001-011		1	hose 6*4
F23652	C-03-003-001		3	union 1/4-φ6
F23653		U236.08	1	steel plate
F23654	B-01-010-007	GB/T 70	2	screw M5*10
F23655	B-01-002-002	GB/T 41	2	nut M4
F23656	C-05-005-001		1	control valve
F23657	C-15-001-001		2	silencer 1/8"
F23658	C-06-020-001	U007.18.10	1	valve cover
F23659	B-01-007-003	GB/T 70	2	screw M6*10
F23660	B-02-001-006	GB/T 95	2	flat washer φ6*12*1
F23661	B-01-007-026	GB/T 70	1	screw M10*55
F23662	C-61-001-002		1	cylinder 006
F23663	C-03-003-004		2	L-union 1/8-φ6
F23664	B-01-001-004	GB/T 41	4	self-locking nut M8
F23665	B-01-001-005	GB/T 41	1	self-locking nut M10
F23666	B-01-013-014	GB/T 70	1	screw M10*25
F23667	B-02-002-004	GB/T 95	1	spring washer φ10*20
F23668	CX-01-010-001	GB/T 95	1	flat washer
F23669	B-02-001-009	GB/T 95	4	flat washer φ8*17*1.2
F23670	B-01-013-007	GB/T 70	4	screw M8*30
F23671	CX-13-016-001	U006.14	1	support
F23672	C-33-007-001	U200.01.23.02	1	plastic handle

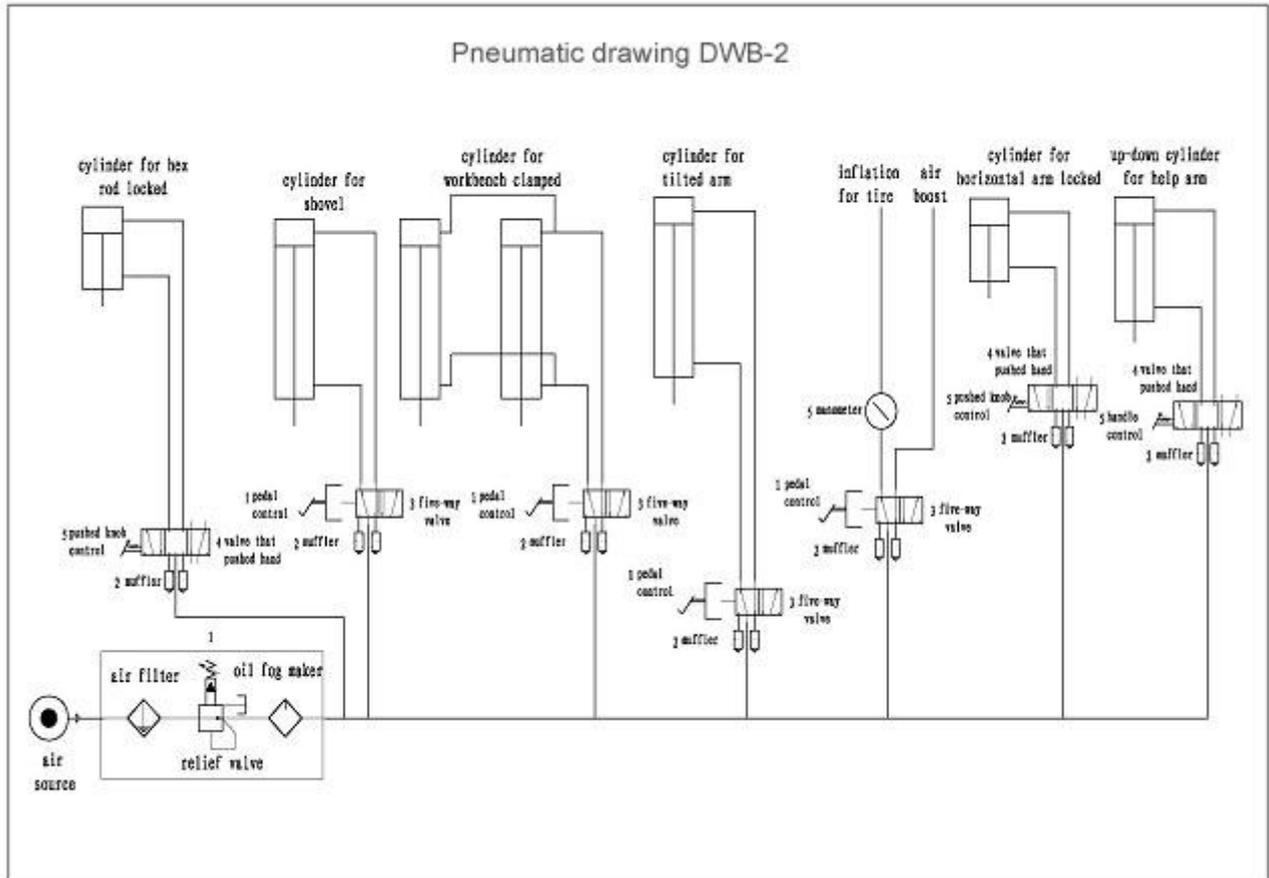
THE SPECIAL SPARE PART LIST DWB-2

A001	CX-06-001-007	U221.01.01A	1	body
A002	CX-06-004-003	U221.01.02A	1	left cover
A201	CZ-14-007-003	U221.01.13A	1	complete turntable Φ615a
A501	CZ-13-021-002	U200.01.32.02A	1	worm gear shaft
A502	CZ-14-004-003	U200.01.43	1	complete gear box
A01	C-03-001-007	1/4-φ10	4	union 1/4-φ10
A02	C-58-001-003	6.5*φ10	4	hose 6.5*φ10
A03	C-06-001-002		1	hose 5*8
A04	C-03-006-007	3*φ8	1	T-union
A05	C-06-001-002		1	hose 5*8
A06	C-58-001-001	5.5*φ8	1	hose 5.5*φ8
A07	C-03-002-010	1/8-φ8	1	union 1/8-φ8
A08	C-40-003-001	U221.01.43.01A	1	rotating valve casing
A09	C-06-001-002		1	hose 5*8
A10	C-06-001-002		1	hose 5*8
A11	C-06-001-005	12*8	1	hose 12*8
A12	C-06-001-005	12*8	1	hose 12*8
A13	C-06-001-002		1	hose 5*8
A14	B-01-007-008	GB/T 70	4	screw M6*30
A15	C-40-005-004	U221.01.60.05A	1	exhaust valve
A16	C-40-005-007	U221.01.60.07A	1	rubber sheet
A17	B-01-007-006	GB/T 70	2	screw M6*20
A18	C-40-005-001	U221.01.60.06A	1	exhaust valve cover
A19	B-01-001-003	GB/T95	6	nut M6
A20	C-06-001-002		1	hose 5*8
A21	C-03-003-002	1/4-φ8	1	L-union 1/4-φ8
A22	CX-03-009-001	U221.01.60.08A	1	exhaust valve support
A23	B-01-001-003	GB/T95	2	nut M6

A24	B-01-007-005	GB/T 70	2	screw M6*16
A25	C-04-001-007	1/8-2*φ8	1	T-union 1/8-2*φ8
A26	C-35-004-011	U221.01.60.10A	1	rubber washer φ24*34*2
A27		U221.01.60.09A	1	tie-in
A28	B-01-001-005	GB/T95	2	self-locking nut M10
A29	C-01-005-001	U221.01.83A	1	rubber casing
A30	C-36-005-002	U221.01.60.11A	1	hose
A31		U221.01.61.14A	1	tie-in
A32	C-05-003-011		1	water discharge valve
A33	B-01-013-014	GB/T 70	2	screw M10*25
A34	CX-27-001-001	U221.01.61A	1	tank
A35	C-05-003-001	GB-TQ-L10	1	safety valve
A36	Y-14-001-001		1	connection hose
A37	C-06-001-002	5X8	1	hose 5*8
A38	C-06-001-002	5X8	1	hose 5*8
A39	CZ-14-018-001		1	complete pressure gauge box
A40	C-03-001-004	1/2-φ12	4	union 1/2-φ12
A41	C-03-002-010	1/8-φ8	2	union 1/8-φ8
A42	C-01-001-017	89*2	1	O-seal
A43	C-01-001-026	62*2.8	3	O-seal φ62*2.8
A44	B-01-007-007	GB/T 70	2	screw M6*25
A45	C-06-001-002	5X8	1	hose 5*8
A46	C-03-006-004	1/8-2*φ8	1	T-union 1/8-2*φ8
A47	C-06-001-002	5X8	1	hose 5*8
A48	CX-01-030-001	221.01.12.03	1	slide plate
A49	B-01-004-001	GB/T 70	2	screw M4*6
A50	C-40-001-001	U221.01.43.02A	1	rotating union mandrel
A51	C-03-001-003		4	union 3/8-φ10
A52	C-06-031-001	221.01.70A	1	pressure gauge box
A53	CX-13-028-001	221.01.69.03A	1	button
A54	C-07-001-001	221.01.69.04A	1	spring
A55	CX-13-019-001	221.01.69.01A	1	valve
A56	C-09-001-002	1/8	1	plug
A57	C-01-001-001	4*1.8	1	O-seal 4*1.8
A58	C-01-001-002	6.9*1.8	1	O-seal 6.9*1.8
A59	CX-13-029-001	221.01.69.02A	1	shaft
A60	P-23-001-001		1	pressure gauge
A61	CZ-13-004-001	221.01.68A	1	seat with holes
A62	C-03-001-009		2	union 1/8-φ8
A63	B-01-008-005	GB/T 70	7	screw M4*30
A64	CX-06-028-001	221.01.71A	1	pressure gauge box support
A65	B-01-007-005	GB/T 70	2	screw M6*16
A66	B-02-001-011	GB/T 5287	2	flat washer φ8*30*3
A67	B-02-002-003	GB/T93	2	spring washer φ8
A68	B-01-013-006	GB/T 70	2	screw M6*25
A69	CX-03-003-002	U221.01.62A	1	inflation pedal support
A70	C-09-001-002		2	plug 1/8
A71	C-03-003-005		3	L-union 1/8-φ8
A72	C-03-003-005		1	L-union 1/8-φ8
A73	B-01-007-002	GB/T 70	1	screw M5*20
A74	B-01-001-002	GB/T 41	1	self-locking nut M5
A75	CX-03-001-001	U221.01.66A	1	valve connecting rod
A76	B-01-007-007	GB/T 70	1	screw M6*25
A77	B-02-001-006	GB/T95	1	flat washer φ6*12*1
A78	B-01-013-006	GB/T 70	1	screw M8*25
A79	B-01-003-001	GB/T 41	1	Nut 8
A80	B-01-001-005	GB/T 41	1	self-locking nut M10
A81	C-07-006-001	U221.01.67A	1	spring
A82	B-01-007-025	GB/T 70	1	screw M10

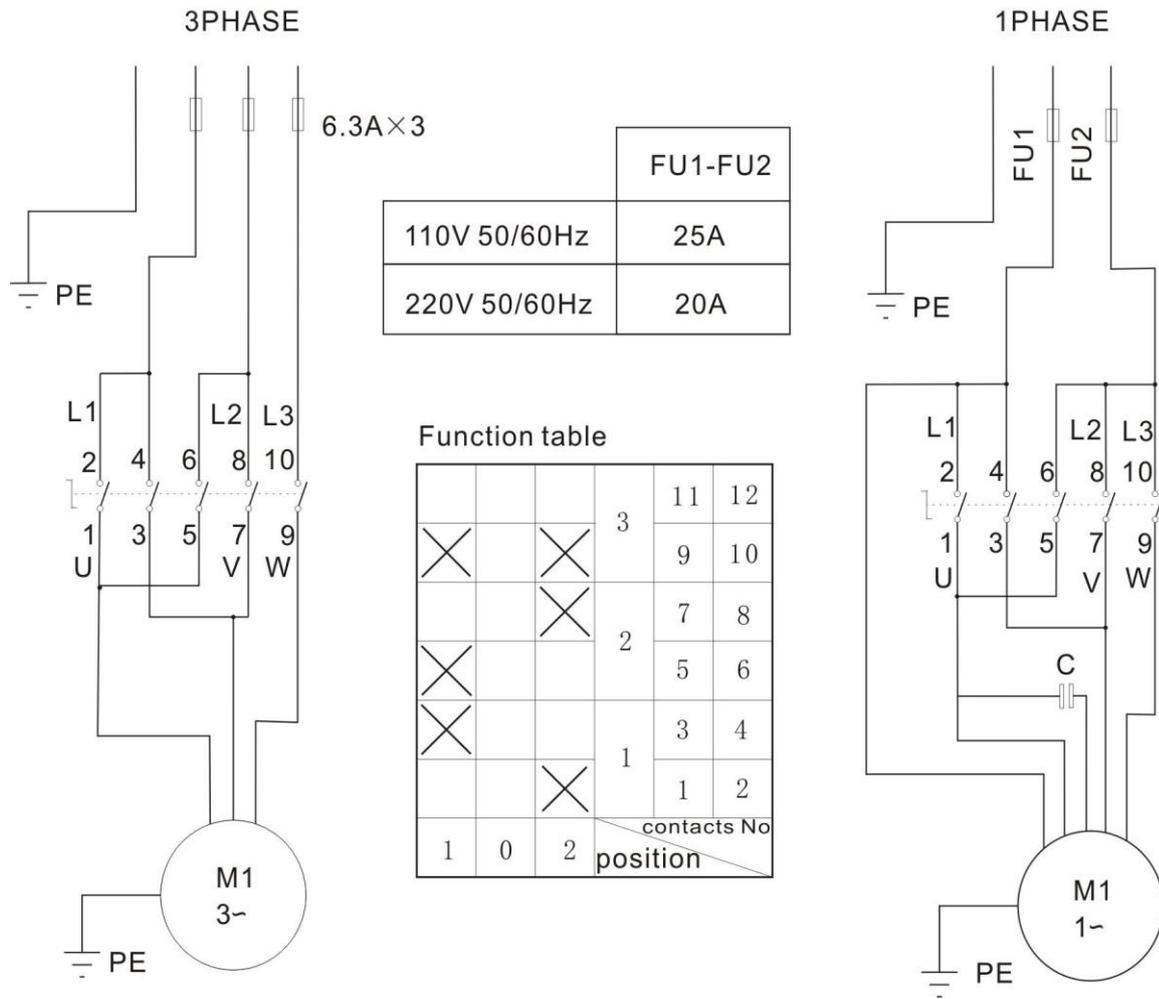
A83	C-12-001-002	4*40	1	pin
A84	C-36-003-001	U221.01.64A	1	rubber cover
A85	CX-03-002-001	U221.01.63A	1	pedal connecting rod
A86	B-01-001-003	GB/T 41	1	nut M6
A87	C-07-003-001	U200.01.38	1	spring
A88	B-01-007-007	GB/T 70	1	screw M6*25
A89	B-01-002-004	GB/T 41	2	nut
A90	B-01-001-003	GB/T 41	4	self-locking nut M6
A91	B-02-001-006	GB/T95	4	flat washer $\phi 6*12*1$
A92	B-01-007-006	GB/T 70	4	screw M6*20
A93		U200.01.06.09	1	5-way valve
A94	C-01-001-004	JB1092	1	O-seal 12*20*4
A95	C-34-001-002	U200.01.06.11	1	valve cover
A96	B-01-012-005	GB/T 70	2	tap screw ST2.9*16
A97	C-34-001-001	U200.01.06.10	5	valve spacer
A98	CX-50-010-001	U221.01.65A	1	valve pole
A99	C-01-001-004	JB1092	12	O-seal 12*20*4
A100	CZ-14-006-003		1	complete inflation pedal
A101	C-06-001-002	5*8	1	hose 5*8
A102		U221.01.12A	4	Locking sliders
A103			1	complete rotating union

21. Pneumatic drawing:



22. Circuit diagram:

Electric Drawings



Certificate No.: CE-C-1208-09-98-01-2A

Date of Issue: 2010.03.12



CERTIFICATE OF CONFORMITY

NAME AND ADDRESS OF THE MANUFACTURER:

PRODUCT DESCRIPTION: Vertical Tyre Changer
TYPE AND MODEL: U-200, U-201, U-202, U-203, U-221, U-226, U-227, U-228, U-231, U-236, U-237, U-238, U-2098, U-221A, U-226A, U-227A, U-229A, U-231A, U-236A, U-237A, U-201A, U-203A, U-209A, U-2091A, U-239, U-600, U-206, U-2091, U-2099

APPLICABLE STANDARD: EN60204-1:2006+A1: 2009
Electrical Equipment of Industrial machines

APPLICABLE EC DIRECTIVE: 2006/42/EC Machinery Directive

TECHNICAL FILE (TCF) REFERENCE NUMBER: CE-C-1208-09-98-01

Based on the voluntary assessment of the product sample and technical file, we certify that the above-mentioned product meets the requirements of the EC directives.

The manufacturer has the responsibility for ensuring that all serial manufacture of the product is in compliance with the specification of the sample submitted for assessment and detailed in the technical file.

CCQS UK Ltd.
Suite B, Regal Court
112 London Road, Headington,
Oxford, OX3 9AW, UK
Tel: +0044 01865 741105
Fax: +0044 01865 423693
Email: info@ccqsuk.com



APPROVED / SIGNED BY PRESIDENT
CCQS UK LTD

DATE OF ISSUE: 12th Mar. 2010

