



**J**ema Autolifte A/S  
we are here to surprise!

**Product no. DWB**

**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

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# 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 for repair in the future.

### 1. Introduction:

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

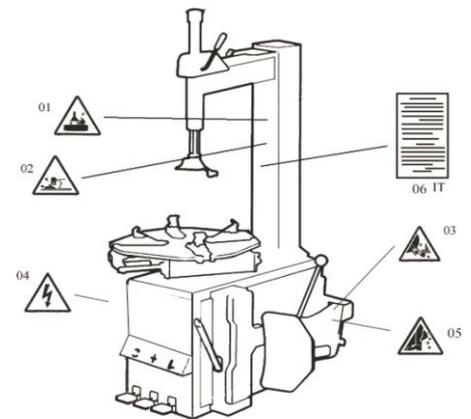
Caution: Use only for purpose for which it is designed, don't use it for other purposes. Manufacturer shall not be liable for any damage or injury caused by failure to comply with these regulations.

### 2. Safety regulation:

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

### 3. Warning label and sticking position:

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



### 4. Technical data:

External Locking Rim Dimensions	10 " -17 "
Internal Locking Rim Dimensions	12 " -20 " (Working Pressure is from 8 to 10 bar.)
Max. Wheel Diameter	960mm (38 " )
Max. Wheel Width	330mm ( 13 " )
Bead breaker force with 1 Mpa air pressure	2500kg
Max. Working Pressure	8-10bar
Power supply	110V (1ph)/ 220V (1ph)/ 380V (3ph)
Motor power	1.1KW (1.5Hp) / 0.75KW (1Hp)
Max. Rotating Torque (Turntable)	1078 Nm (110Kg.m)
Overall Dimension	96×76×88 cm
Noise Level	<70db

### 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.

### 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

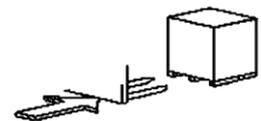


Fig 1

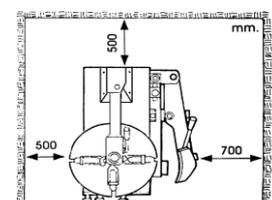
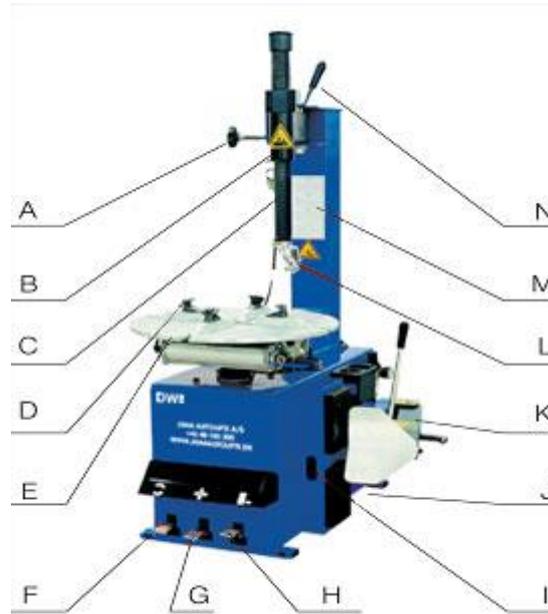


Fig 2

against rain and sunshine.

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

## 8. Product diagram



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

## 9. Assembly procedure:

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

2. Unscrew the nut A on the body B as shown in Fig 4. Lift the column C; mount it on the body using the nut A through the bolt located on the body B. If the column becomes loose, screw them immediately. Otherwise damage to the tyre may happen.

## 10. Pneumatic link up

Depress the pedal (G, Fig 3) to ensure that the jaws on the turntable do not open unexpectedly to avoid injury caused by the accident.

2) Connect the inflating gun to its connector. (Fig 3)

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.

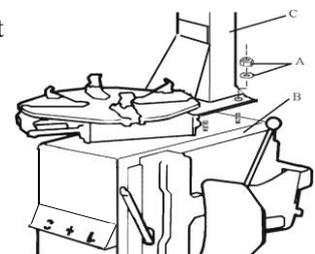


Fig 4

**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 30A.

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

However keep in mind: 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 are missing. Keep labels clear for operator.**

**12. Control devices**

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

-locking handle (N), used to lock and unlock Swing arm (B). Mounting head (L) can be raised about 2-3mm automatically if locking.

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

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

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

**13. To perform preliminary operational tests:**

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

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

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

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

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

Tyre changer operation is consisted of three parts:

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

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

**14. Operation instruction**

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

**14.1. To loosen the tyre bead:**

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

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

2) Close the four jaws on the turntable to avoid conflict. If jaws are 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 5.

Caution: Place the paddle against the tyre bead.

4) Depress pedal (H, Fig 3) to push paddle into tyre. Repeat the above operations on different positions around the tyre and both sides of tyre until tyre is released completely.

**14.2. Clamping the tyre:**

- 1) Remove all the weights on the wheel rim;
- 2) Lubricate the tyre bead;
- 3) Swing the swing arm to non-working position.

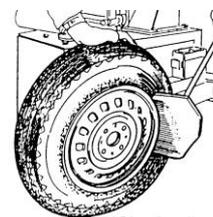


Fig 5

4) Secure the wheel rim on the turntable from inside or outside.

Don't put your hands under the wheel while clamping the wheel rim.

Put the tyre on the center of the turntable.

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

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

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

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

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

### 14.3. Dismounting the tyre:

1) Swing the swing arm on the column to the working position.

Don't put your hands on the wheel rim to avoid injury during this operation.

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

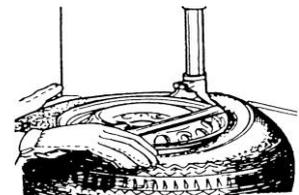


Fig 6

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

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

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

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

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

4) Remove the inner tube if there is one.

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

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

### 14.4. Mounting the tyre:

#### 14.4.1 Checking tyre and wheel rim

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

Check as follows:

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

- No convex and concave defects on the wheel rim.

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

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

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

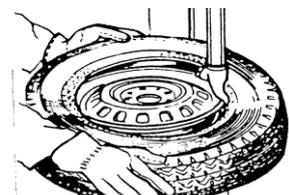


Fig 7

#### 14.4.2 Mounting the tyre

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

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

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

4) Place the mounting head above the edge of the wheel rim with hands. Lock the vertical arm as described as

step 2 in the section of “dismounting the tyre”.

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

Note: if the tyre doesn't have inner tube, make the valve stem and mounting head in the same line. Keep the tyre bead pressed down into the wheel rim channel with hands. Then, depress the pedal to rotate the turntable in clockwise direction. Continue this process throughout the entire circumference of the wheel rim and tyre. To prevent accident, keep hands and other parts of your body away from moving devices.

6) Insert the inner tube if there is one.

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

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

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

## 14.5. Inflating the tyre

### 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, if additional lubrication is required;
- 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.

## 15. Storing:

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

## 16. Maintenance:

Caution: only the professional persons can do the maintenance.

To prolong the machine's life, maintain it timely according to the manual. Otherwise, it will impact the reliability of the machine or even cause injury to operator and others nearby.

Caution: before performing any maintenance, disconnect the tyre changer from 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.

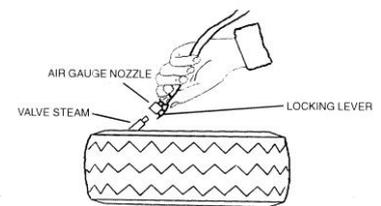


Fig 8

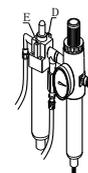


Fig 9

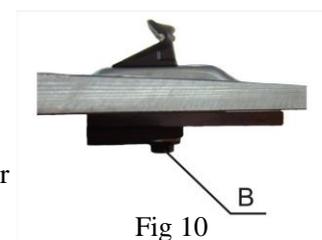


Fig 10

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.8

Empty water in the air filter once every day, to ensure the cylinder performance. Following maintenance must be done at least once per month: check oil level in oil fog maker, please top up with SAE30# oil if need, depress pedal for locked tyre 5-6 times, check whether oil in oil fog maker was leakage, continued operation, depress twice every time, drop down a dripping oil, otherwise adjust screw (E) that controlled oil enter with minus screwdriver. (Fig 9)

Note: After the first 20 days of use, retighten the jaws with tightening screws B. (Fig 10)

Note: in the event of a loss of power, check to see if the belt is tight. To do so, remove the left side of the cover by unscrewing the screws. Tighten the belt, using the adjusting screws located on the motor support. (Fig 11)

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

Note: Adjust the vertical arm when it can not be locked or it can not be complied with the working requirements on distance of 2mm with the mounting head; please adjust it according to Fig 12.

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 13)

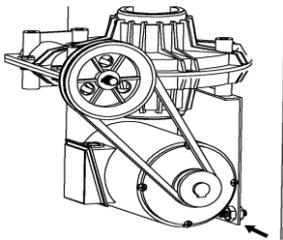


Fig 11

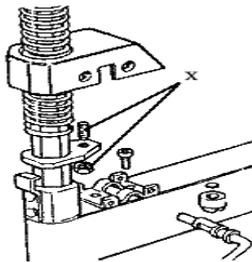


Fig 12

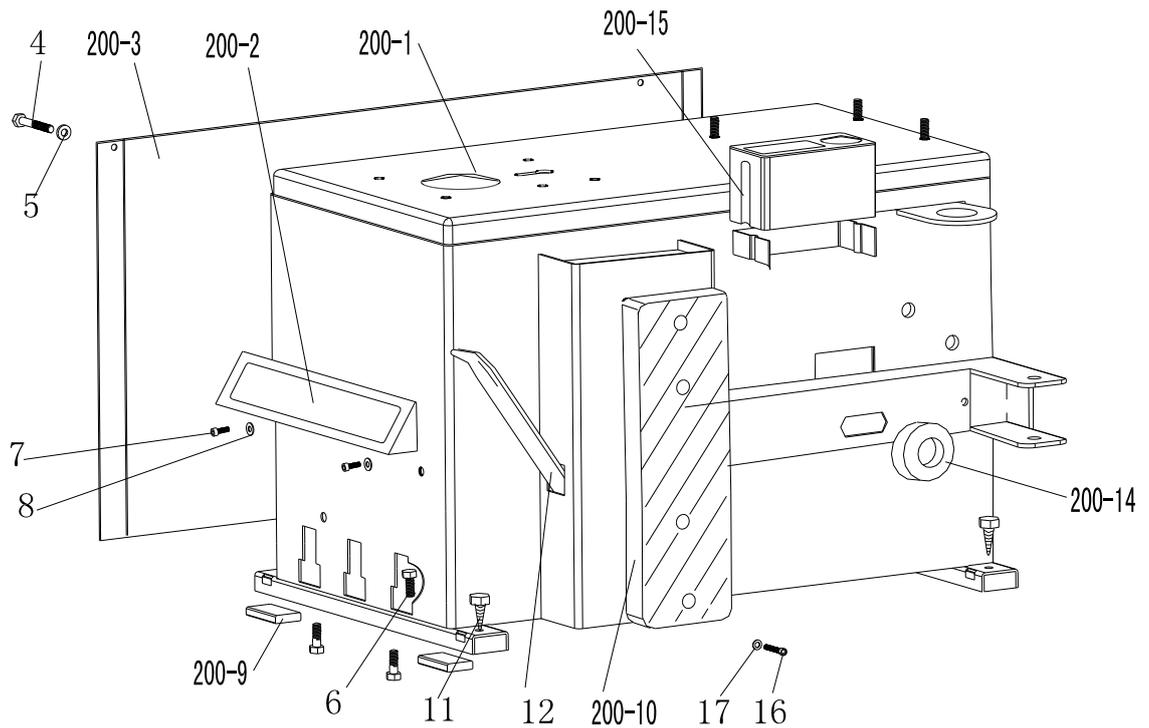


Fig 13

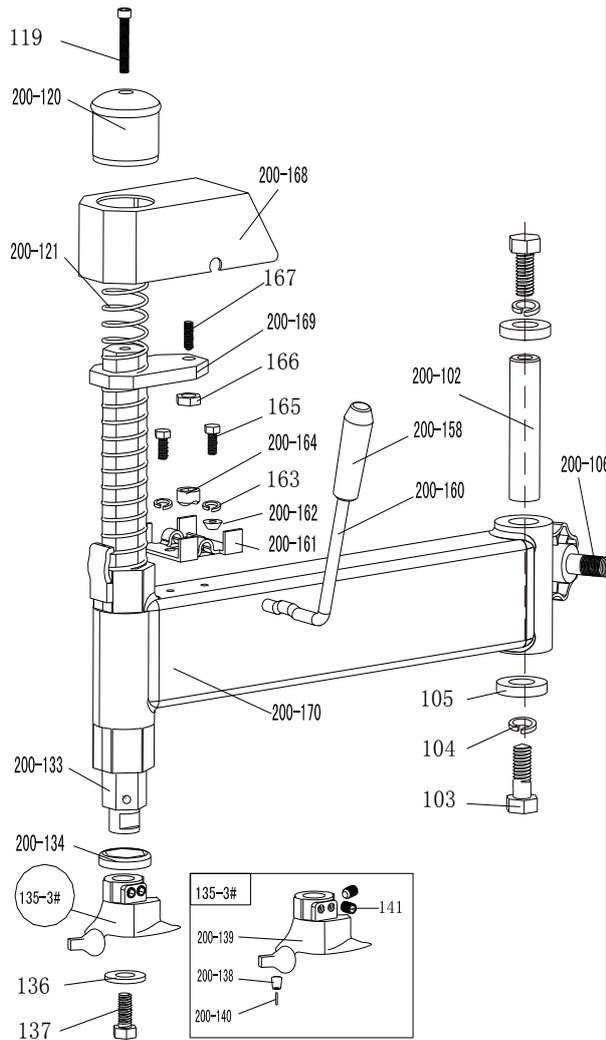
**17. Troubleshooting table:**

<b>Problem</b>	<b>Reason</b>	<b>Solution</b>
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 won'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 adjusted or unqualified.	Replace or adjust it.
	Screws on the chuck lose; 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 difficulty.	Jammed silencer	Clean it or replace it.
	The washer on the bead breaker cylinder is broken.	Replace it.

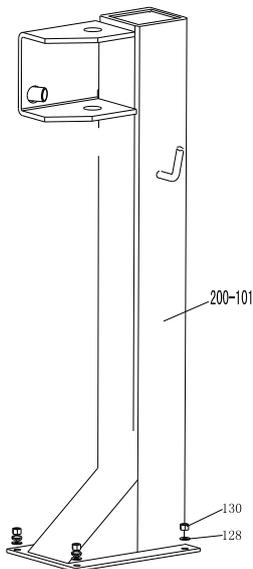
**18-19. Exploded drawing and Spare parts list:**

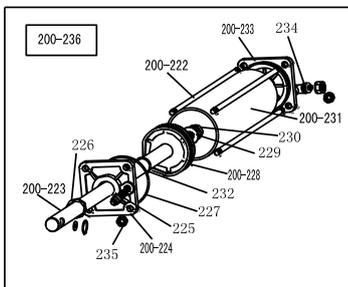
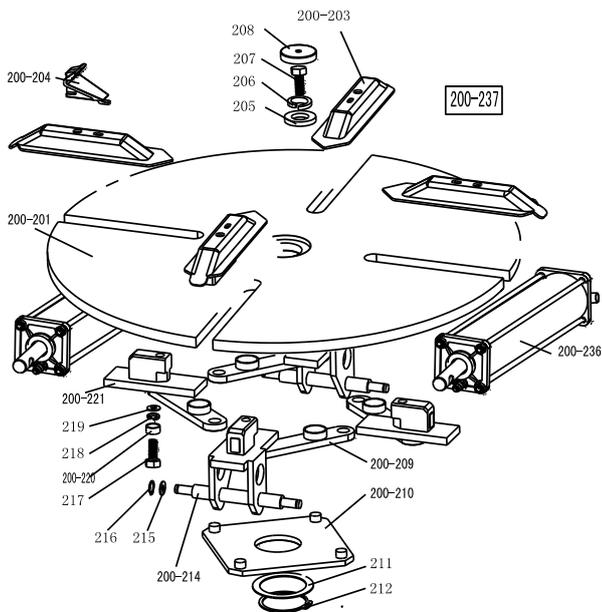


200-1	CX-200-010000-0	Machine body
200-2	CZ-200-080000-0	Pedal front cover
200-3	CX-200-020000-0	Left cover
4	B-010-060101-0	Hex socket head bolt M6×10
5	B-040-061412-1	Flat washer Ø6*14*1.2
6	B-014-080251-0	Outer hex bolt M8x25
7	B-010-080201-0	Hex socket head bolt M8×20
8	B-040-061412-1	Flat washer Ø 6*14*1.2
200-9	C-000-001020-0	Rubber foot buffer
200-10	C-200-500000-0	Bead breaker buffer
11	B-027-060401-0	Grounding screw M6x40
12	C-200-580000-0	Lifting lever
200-14	C-200-510000-0	Bead breaker arm rubber
200-15	C-200-470000-0	Oil-water box
16	B-010-080201-0	Hex socket head bolt M8x20
17	B-040-081715-1	Flat washer Ø 8*17*1.5

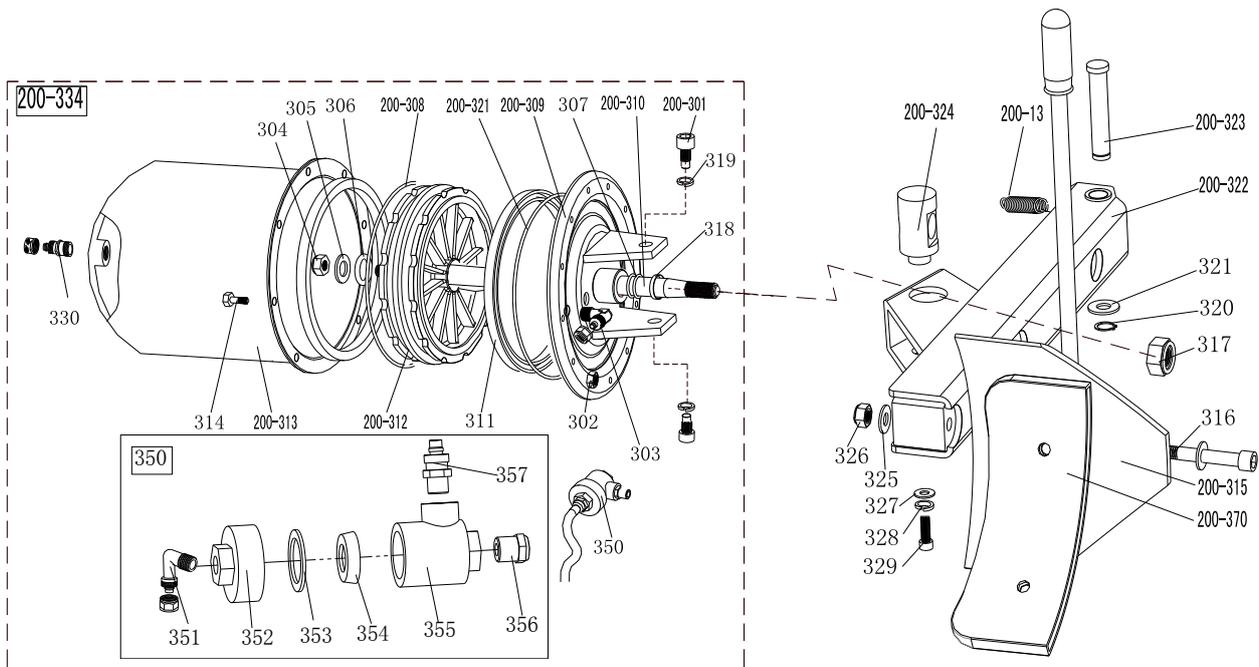


200-101	CX-200-250000-0	Square column
200-102	CX-200-190000-0	Swing arm pin
103	B-014-140301-0	Outer hex bolt M14x30
104	B-050-140000-0	Spring washer Ø14
105	CX-200-140000-0	Big washer
200-106	C-200-350000-0	Column adjust handle
119	B-010-100501-0	Hex socket head bolt M10x50
200-120	C-200-490000-0	Vertical arm cap 200
200-121	C-200-390000-0	Vertical arm spring
128	B-040-102020-1	Flat washer Ø10X2
130	B-001-100001-0	Self-locking nut M10
200-133	CX-200-160000-0	Vertical arm 200
200-134	C-200-520000-0	Vertical arm washer
135-3#	CW-113-020003-0	Complete mount/demount head
136	CX-200-170000-0	Mount/demount head flat washer
137	B-014-100251-0	Outer hex bolt M10x25
200-138	CX-200-150200-0	Mount/demount head pulley
200-139	C-200-150100-3	Mount/demount head 3#
200-140	C-200-150400-0	Hex round pin
141	B-007-120161-0	Hex socket head bolt M12X16
200-158	C-200-230200-0	Locking Handle cover
200-160	CX-200-230000-0	Locking Handle
200-161	CX-200-200000-0	Locking plate
200-162	C-200-240000-0	Locking block cover
163	B-050-080000-0	Spring washer Ø8
200-164	C-200-210000-0	Eccentric shaft nut
165	B-014-080251-0	Outer hex bolt M8x25
166	B-004-120071-1	Nut M12X1.75X7
167	B-007-120301-0	Hex socket head bolt M12X30
200-168	C-200-480000-0	Locking plate cap
200-169	CX-200-220000-0	Hex locking board 200
200-170	CX-200-180000-0	Swing arm 470

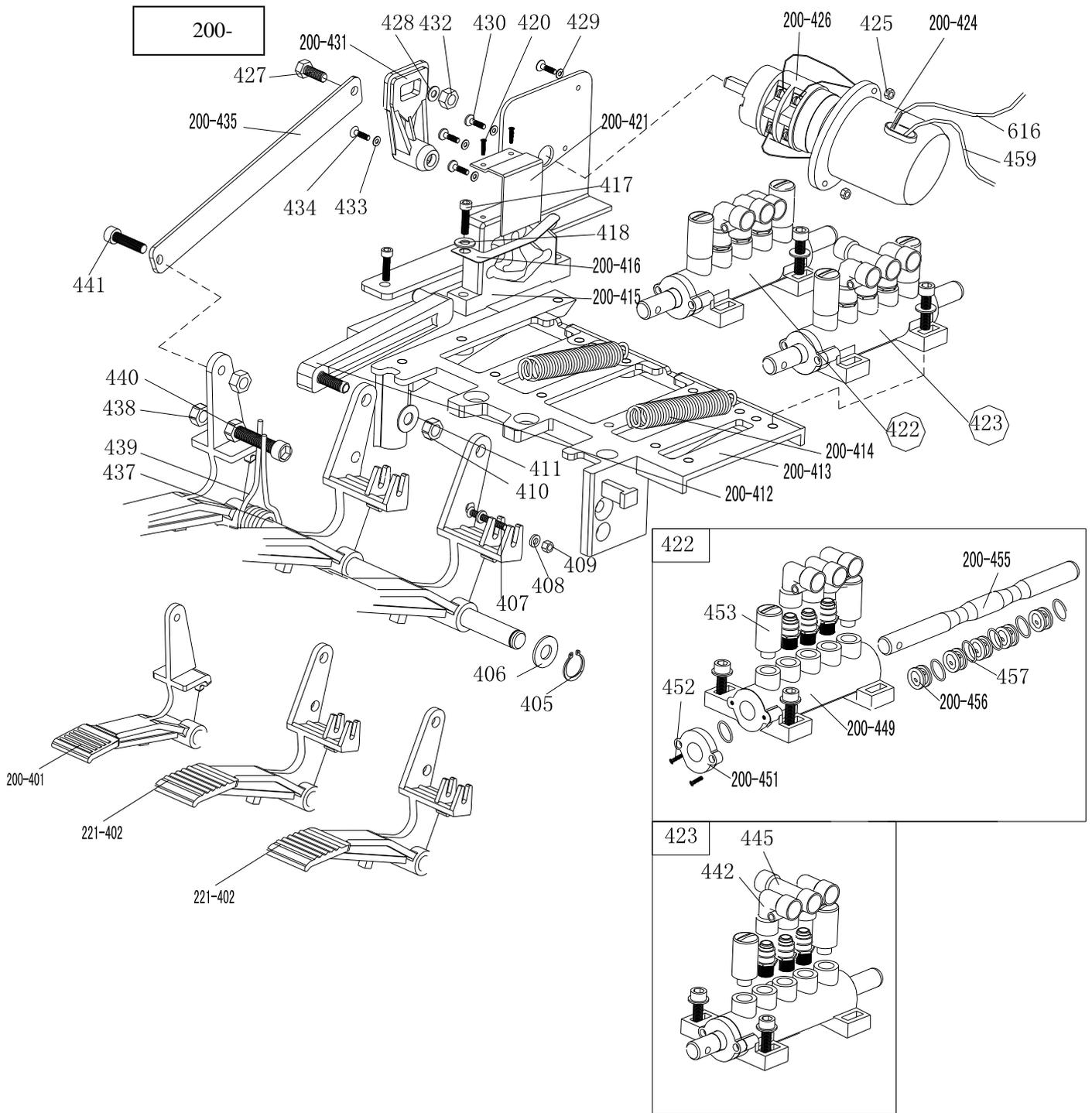




200-201	CX-200-130000-0	Turntable assembly 540
200-203	CX-200-120000-0	Jaw cap 200
200-204	C-200-570000-0	Jaw 200
205	CX-200-140000-0	Big washer
206	B-050-160000-0	Spring washer Ø16
207	B-014-160401-0	Outer hex bolt M16x40
208	C-200-440000-0	Turntable cap
200-209	CX-200-310000-0	Connection rod assembly 540
200-210	CX-200-280000-0	Square turntable washer
211	CX-200-290000-0	Square turntable 540
212	B-055-650001-0	Snap ring Ø65(shaft)
200-214	CX-200-110000-0	Jaw slide guide with pin 540
215	B-040-122520-1	Flat washer Ø12X2
216	B-055-120001-0	Snap ring Ø12(shaft)
217	B-014-120801-0	Outer hex bolt M12x80
218	B-046-122050-1	Teeth locking washer Ø12x20.5x1
219	B-040-123030-1	Flat washer Ø12X30X3
200-220	CX-200-300000-0	Connetcion rod nut
200-221	CX-200-110100-0	Jaw slide guide without pin
200-222	C-200-100400-0	Threaded connection rod 310
200-223	C-200-100200-0	Clamping cylinder piston rod 320
200-224	C-200-100100-0	Clamping cylinder cover withouthandle
225	S-011-010808-0	Straight union 1/8"-Ø8
226	S-005-020075-0	V- seal 20*28*7.5
227	S-000-063265-0	O-seal 63*2.65
200-228	C-200-540000-0	Clamping cylinder piston φ 70
229	B-040-122520-1	Flat washer Ø12X24X2
230	B-004-120071-1	Nut M12X7X1.75
200-231	C-200-100500-0	Clamping cylinder barrel 279
232	S-000-019262-0	O-seal 19.6X2.65
200-233	C-200-100300-0	Clamping cylinder cover with handle
234	S-018-010808-0	Union 1/8-Ø8
235	B-001-080001-0	Self-locking nut M8
200-236	CW-105-020001-0	Complete clamping cylinder 200
200-237	CW-104-020000-0	Complete Turntable 540

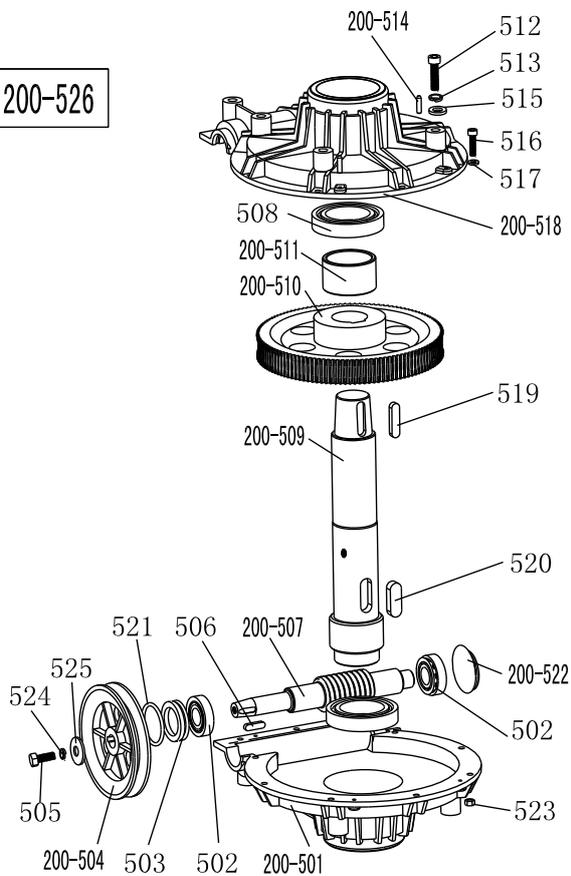


200-301	B-010-140301-0	Hex socket head bolt M14×30	200-13	C-200-360000-0	Bead breaker arm spring
302	B-001-060001-0	Self-locking nut M6	319	B-050-140000-0	Spring washer Ø14
303	S-018-010408-0	Union (90°)1/4-Ø8	320	B-055-160001-0	Snap ring Ø16
304	B-004-160001-1	Nut M16*1.5	321	B-040-162820-1	Flat washer
305	B-040-162820-1	Flat washer Ø16*28*2	200-321	S-000-175500-0	O-seal Ø173.4x5.3
306	S-000-016265-0	O-seal Ø 16*2.65	200-322	CX-200-030000-0	Bead breaker arm 200
307	S-000-020265-0	O-seal Ø 20*2.65	200-323	CX-200-040000-0	Bead breaker pin
200-308	S-000-180500-0	O-seal 180x5	200-324	CX-200-050600-0	Bead breaker cylinder rotating pin
200-309	CX-200-050500-0	Bead breaker cylinder cover assembly	325	B-040-122520-1	Flat washer Ø12*24*2
200-310	C-200-050100-0	Bead breaker cylinder piston rod	326	B-001-120001-0	Self-locking M12
311	S-005-168115-0	V-seal 185X168X11.5	327	B-040-083030-1	Flat washer Ø8*30*3
200-312	C-200-050200-0	Bead breaker cylinder piston	328	B-050-080000-0	Spring washer Ø8
200-313	CX-200-050300-0	Bead breaker cylinder barrel	329	B-014-080201-0	Outer hex bolt M8×20
314	B-010-060161-0	Hex socket head bolt M6×16	330	S-011-010808-0	Straight union 1/8-Ø8
200-315	CX-200-070000-0	Bead breaker shovel assembly	200-334	CW-108-020000-0	Complete bead breaker cylinder
316	B-010-120901-0	Hex socket head bolt M12×90	350	CW-112-209800-0	Bead breaker cylinder exhaust valve
317	B-004-160001-1	Self-locking nut M16*1.5	351	S-012-010808-0	Union (90°)1/8-Ø8
318	U-006-000001-2	Guide belt	352	C-098-600200-0	Bead breaker cylinder exhaust valve cover
200-370	C-200-070600-0	Bead breaker shovel protection cover(optional)	353	C-098-600400-0	Seal washer
			354	C-098-600300-0	Bidirectional seal
			355	C-098-600100-0	Bead breaker cylinder exhaust valve barrel
			356	S-023-010401-6	Muffer
			357	S-010-010408-0	Straight union 1/4- Ø8

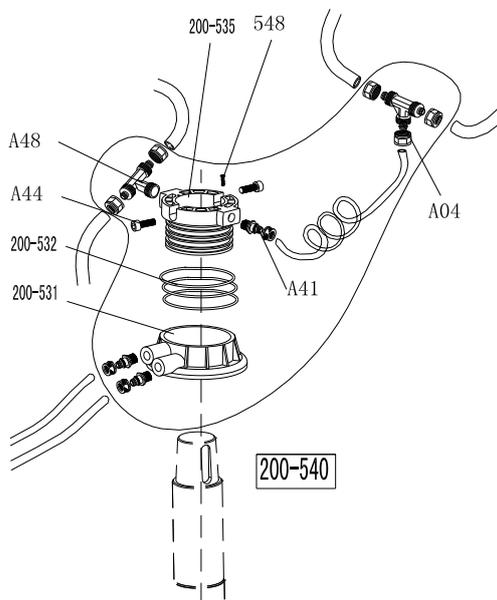


200-401	C-200-060400-0	Reverse switch pedal	429	B-040-040000-1	Flat washer Ø 4
221-402	C-221-060300-0	5-way valve pedal(right)	430	B-024-040161-0	Cross-round head screw M4*16
405	B-055-120001-0	Snap ring Ø12	200-431	C-200-530000-0	Reverse switch handle
406	B-040-122520-1	Flat washer Ø12*24*2	432	B-001-060001-0	Self-locking nut M6
407	B-024-040301-0	Cross head screw M4X30	433	B-040-030000-1	Flat washer Ø3
408	B-040-040000-1	Flat washer Ø 4	434	B-017-030161-0	Cross head screw M3X18
409	B-001-040001-0	Self-locking nut M4	200-435	CX-200-060600-0	Pedal connection rod
410	B-001-080001-0	Self-locking nut M8	437	CX-200-060700-0	Pedal front shaft
411	B-040-081715-1	Flat washer Ø8*17*1.5	438	B-004-080001-0	Nut M8
200-412	C-200-061300-0	Cam connection rod	439	C-200-370000-0	Pedal twist spring
200-413	C-200-060100-0	Pedal suport board	440	B-010-080501-0	Hex socket head bolt M8×50
200-414	C-200-380000-0	Pedal Spring	441	B-010-080201-0	Hex socket head bolt M8×20
200-415	C-200-061500-0	Cam	442	S-012-010808-0	Quick nion 1/8- Ø 8
200-416	C-200-810000-0	Cam washer	445	S-016-010808-2	T-union1/8-2* Ø 8
417	B-010-060201-0	Hex socket head bolt M6×20	200-449	C-200-060901-0	5-way valve (left)
418	B-040-061210-1	Flat washer Ø6*12*1	200-451	C-200-061100-0	5-way valve cover
420	B-019-290121-0	Cross head self tapping screw	452	B-024-290121-0	Cross head screw ST2.9*14
200-421	CX-200-060500-0	Cam cover	453	S-023-010801-0	Muffler 1/8"
422	CW-110-020000-0	Complete 5-way valve for clamping cylinder	200-455	CX-200-061200-0	5-way valve rod
423	CW-110-020001-0	Complete 5-way valve for bead breaker cylinder	200-456	C-200-061000-0	5-way valver rod spacer
200-424	C-200-061400-0	Reverse switch cover	457	S-000-012400-0	O-seal 12*20*4
425	B-004-040001-0	Nut M4	459	C2-000-103150-0	Power suppler cable
200-426	S-060-016000-1	Reverse switch	616	C2-000-205150-0	Motor cable
427	B-010-060201-0	Hex socket head bolt M6×20	200-480	CW-109-020000-0	Complete 3-pedals assembly
428	B-040-061210-1	Flat washer Ø 6X12X1			

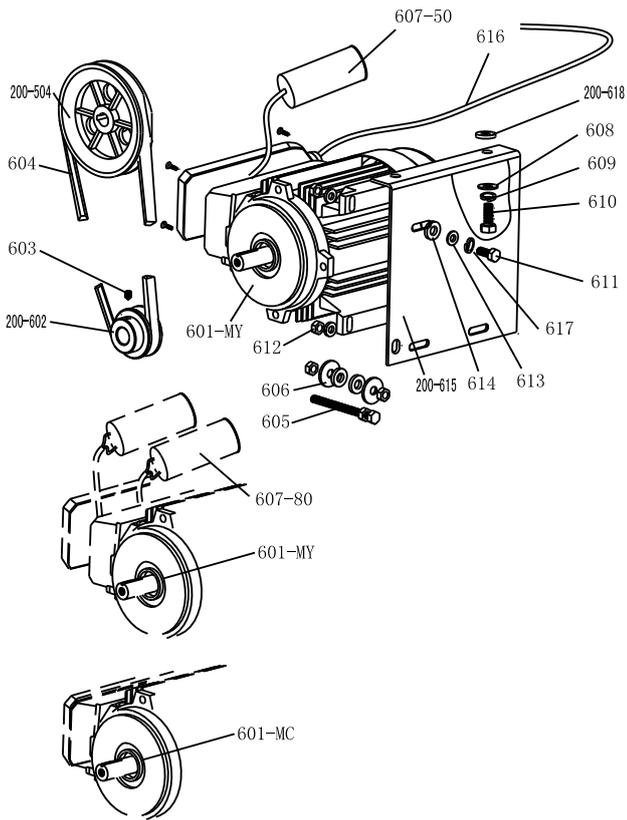
200-526



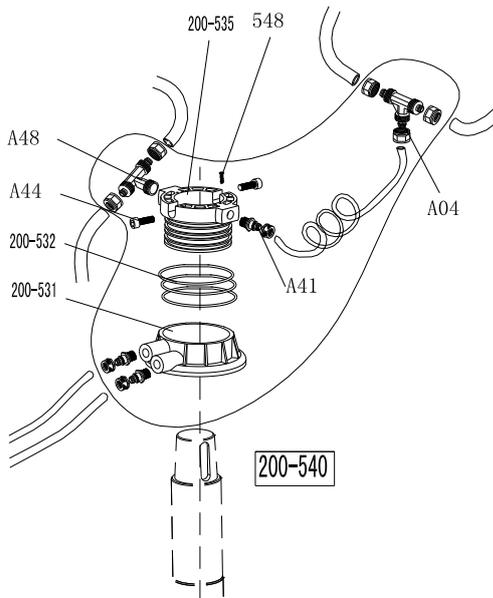
200-501	C-300-320302-0	Gear box lower cover
502	S-040-030204-0	Bearing 30204
503	S-005-020080-1	Gear box seal $\phi$ 20*35*8
200-504	C-200-320500-0	Gear Belt pulley
505	B-014-080251-0	Outer hex bolt M8x25
506	B-065-006020-0	Key washer 6x20
200-507	C-200-320400-0	Worm rod
508	S-040-006010-0	Bearing 6010
200-509	C-200-320200-0	Worm gear shaft
200-510	C-200-320100-0	Worm gear
200-511	CZ-200-320600-0	Worm gear shaft spacer
512	B-014-100551-0	Outer hex bolt M10x55
513	B-050-100000-0	Spring washer $\phi$ 10
200-514	B-060-006020-0	Pin 6X20
515	B-040-102020-1	Flat washer $\phi$ 10*20*2
516	B-010-060201-0	Hex socket head bolt M6x20
517	B-040-061412-1	Flat washer $\phi$ 6*14*1.2
200-518	C-300-320301-0	Gear box upper cover
519	B-065-010040-0	Key washer 10x40
520	B-065-014040-0	Key washer 14x40
521	S-000-027310-0	O-seal $\phi$ 27.8*3.1
200-522	C-200-320700-0	Oil resistant seal
523	B-001-060001-0	Self-locking nut M6
524	B-050-080000-0	Spring washer $\phi$ 8
525	B-040-083030-1	Flat washer $\phi$ 8*30*3
200-526	CW-107-020001-0	Complete gear box

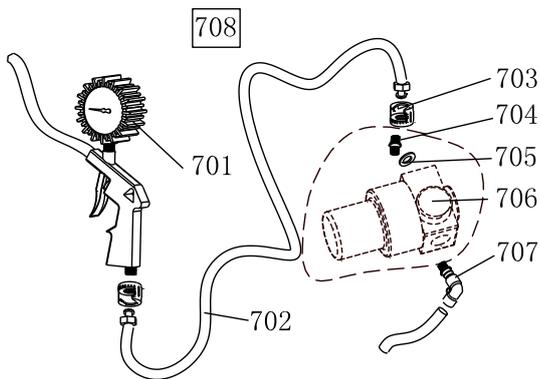


A04	S-015-000008-3	T-union 3* $\phi$ 8
A44	B-010-060161-0	Hex socket head bolt M6x16
A48	S-017-010808-2	T-union
200-531	CZ-200-430100-0	Rotating valve casing
200-532	S-000-059262-0	O-seal 59.9X2.62
200-535	CZ-200-430200-0	Rotating valve mandrel
537	S-035-055080-0	Hose 5.5* $\phi$ 8
A41	S-011-010808-0	Straight union 1/8- $\phi$ 8
548	B-007-040061-0	Hex socket head bolt M4X6
200-540	CW-016-020000-2	Complete Rotating valve

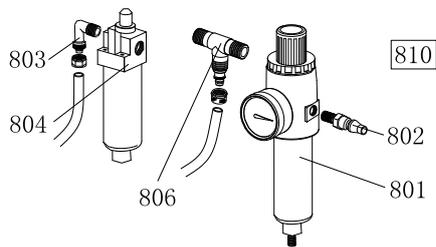


200-504	C-200-320500-0	Gear Belt pulley
601-MC	S-050-220110-5	Motor 220V/50HZ
601-MY	S-050-230075-0	Motor 220v
200-602	CX-200-330000-0	Motor Belt pulley
603	B-007-080121-0	Hex socket head bolt M8×12
604	S-042-000686-0	Tyre changer belt A-28
605	B-014-080651-0	Outer hex bol tM8X65
606	B-040-083030-1	Flat washer Ø8X30X3
607-80	S-063-008000-0	Capacitor 80µ f,110V
607-50	S-063-005000-0	Capacitor 50µ f,220V
608	B-040-102020-1	Flat washer Ø10X20X2
609	B-050-100000-0	Spring washer Ø10
610	B-014-100251-0	Outer hex bolt M10X25
611	B-014-080351-0	Outer hex bolt M8X35
612	B-004-080001-0	Nut M8
613	B-040-082220-1	Flat washer φ 8X22X2
614	C-200-560000-0	Motor rubber washer
200-615	CX-200-340000-2	Motor support
616	CZ-000-205150-0	Motor cable 5×1.0
617	B-050-080000-0	Spring washer φ 8
200-618	C-200-560000-0	Motor rubber buffer

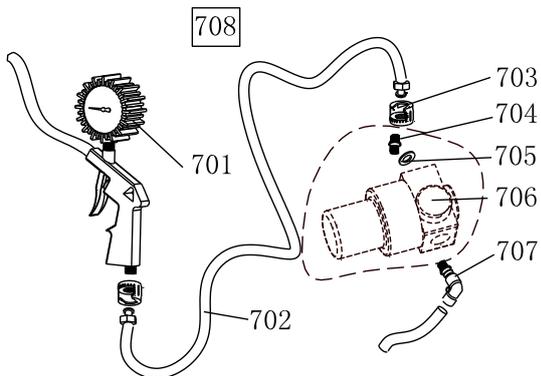




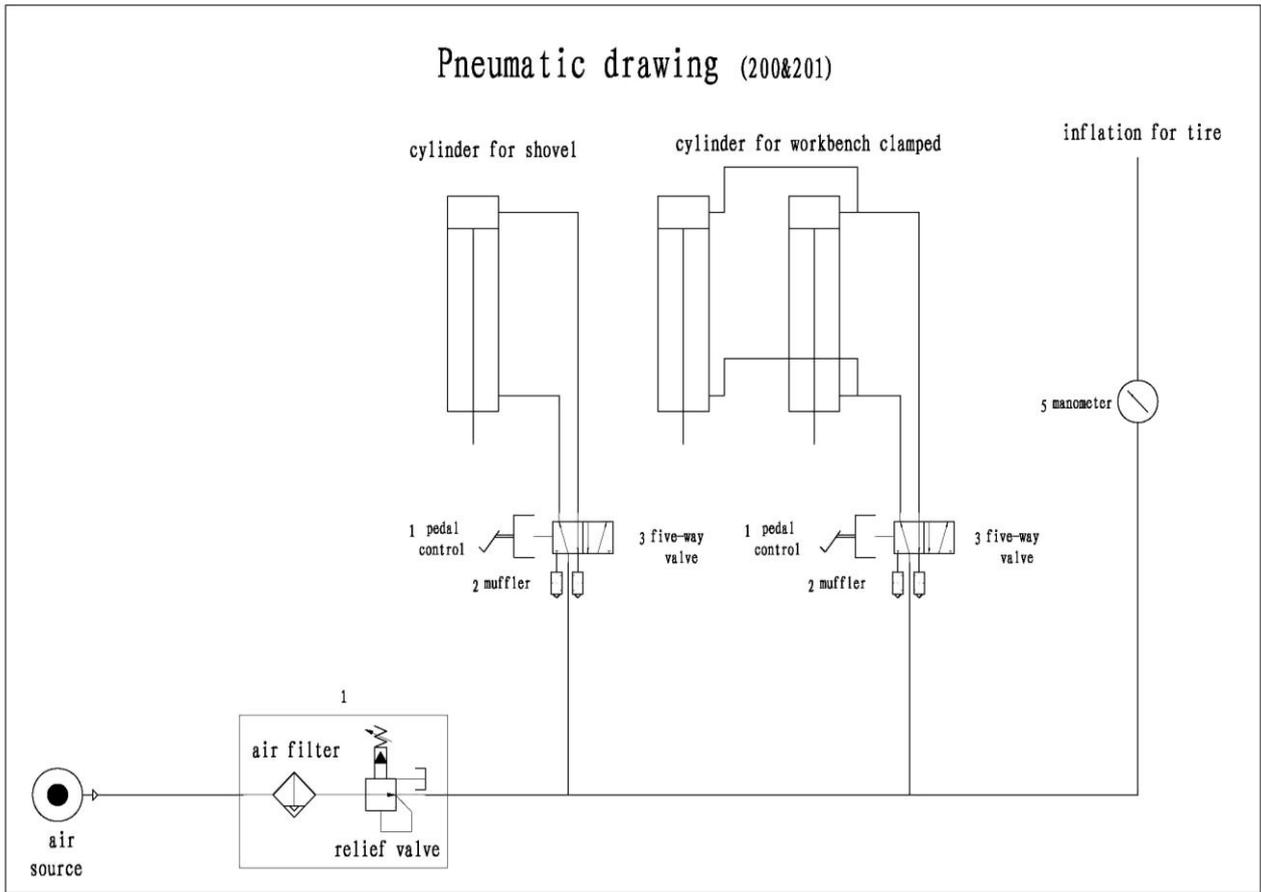
701	S-038-000100-0	Inflating gun indicator
702	S-035-014150-1	Rubber connection hose
703	S-025-104008-0	Notch nut
704	S-011-010414-1	Straight union 1/4-1/4
705	B-040-132420-1	Flat washer Ø13
706	S-030-010400-2	Pressure adjust valve
707	S-012-010408-0	Union 1/4-Ø8
708	CW-090-000201-0	Complete inflating gun



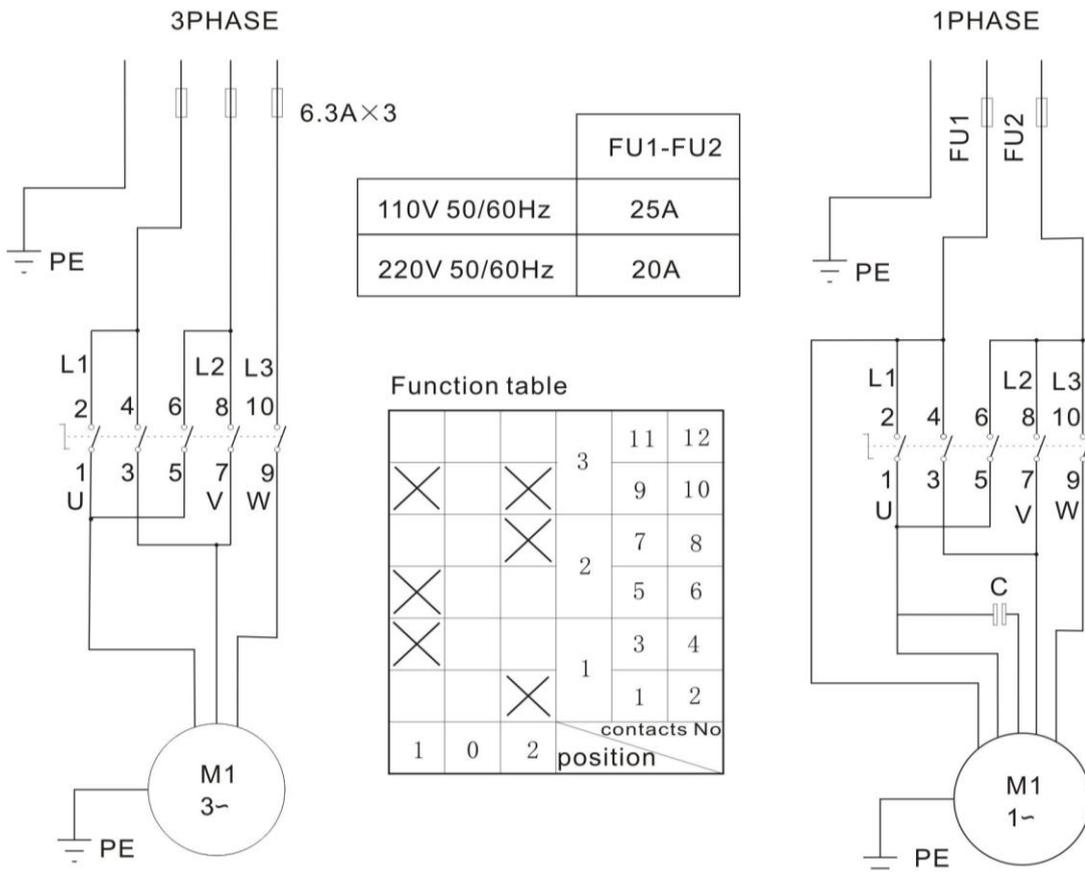
801	S-033-200002-1	Relief pressure filter
802	S-025-000050-0	Quich nozzle
803	S-018-010408-0	Union (90°)
804	S-033-200002-2	Oil fog maker
806	S-015-010408-2	T-union 2X1/4-φ 8
810	CW-114-020005-0	Complete oil fog maker



20. Pneumatic drawing



21. Circuit diagram



**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.*

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\_\_\_\_\_  
APPROVED / SIGNED BY PRESIDENT  
CCQS UK LTD

**DATE OF ISSUE:** 12<sup>th</sup> Mar. 2010

