

TYRE CHANGER

INSTRUCTION & MAINTENANCE MANUAL

We follow the way the wheel is moving!



Read this entire manual carefully and completely
before installation or operation of the tire changer

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Tyre Changer

1、Introduction

Automatic tyre changer equipment was designed to mount/demount the tyre from the wheel rim. This series of tyre changers was designed to mount/demount larger and heavier tyre from the wheel rim which diameter from 254mm to 762mm. Different with transitional turntable, the center flange positioning could reduce the harm of the wheel rim, and more efficient. The characteristic of this tyre changer is: operating smooth and efficient with both pneumatic and hydraulic; installing the tyre easier by the automatic lifting system; positioning wheel rim by the center flange positioning design; Moving the wheel by the special working platform; operating by the multifunctional helping arms; special structure of the mount/demount head; observing by the camera and displayer.

2、Safety Regulation:

Please read the manual carefully with fully understanding. Manufacturer shall not be liable for any damage or injury caused by failure to comply with these regulations.

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

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.

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: warranty is one year after manufactures' delivery date; warranty excludes the easy-broken parts). Manufacturer shall not be liable if customers change the equipment without permission. (Especially for the pneumatic and electric parts)

3. Technical data:

Wheel Rim Dimensions	8 " -30 "
Max. Wheel Width	16 "
Max. Wheel Diameter	1250mm (49 ")
Working air pressure	8-10bar
Hydraulic pump pressure	80~120bar
Power supply	220v(1ph)/380v(3ph)
Motor power	1.1kw(1.5hp)
Max. torque	1078N•m(110Kg.m)
Bead breaker force	1400kg
Single package overall dimension	1880×1550×1840mm
Noise	<75dB
Net weight	550kg

4. Transport:

The machine should be transported with original package, and place it according to the label on the package. Machine within package must be transported by the forklift, and positioned as shown as the Fig 1.

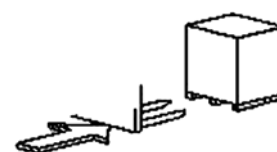


Fig 1

5. 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 do not use the machine and contact the manufacturer or dealer in time.

6. Workplace Requirement:

Choose workplace in compliance with safety regulations. The floor must be smooth and level, this tyre changer required the 2.9m*2.1m working space, the minimal height is 2.4m. 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 0.5m clear space from each wall shown as Fig 2. If installing it outdoor, it must be protected by roof against rain and sunshine.

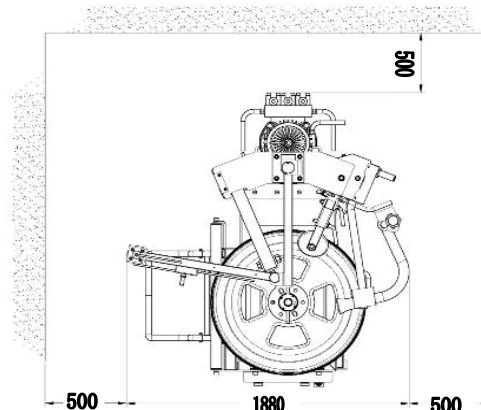


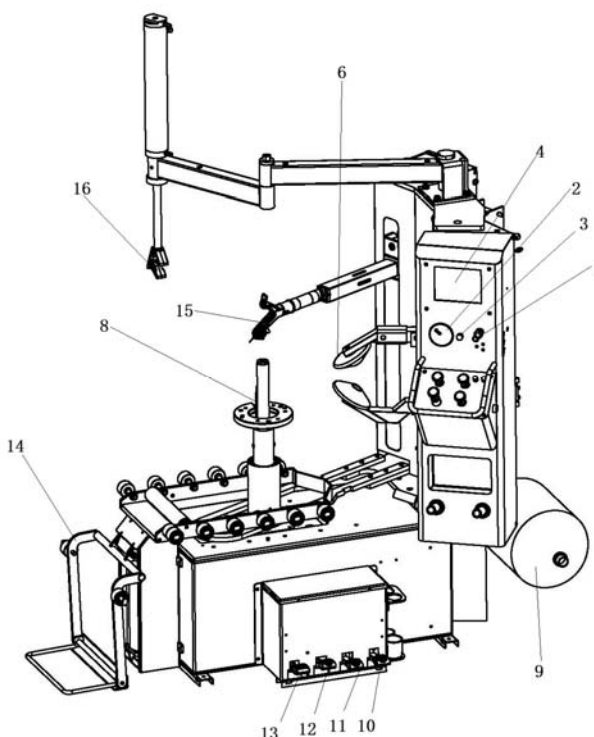
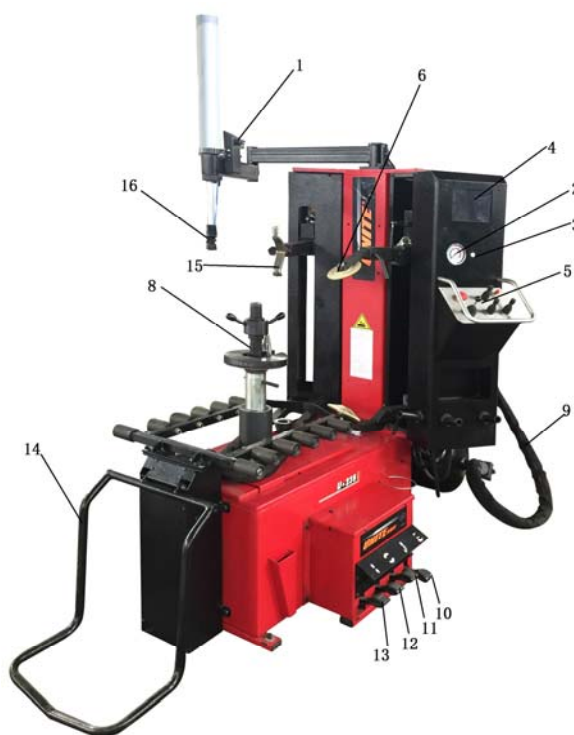
Fig 2

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

Important attention: Confirm the voltage values from the supply are as same as the requirement of the machine before connection. Confirm good grounding of power grid and equipped with overload circuit protector! Check the tank whether the amount of oil is enough before first time startup, the filling up of the oil shall not less than 80%. Change the hydraulic oil after 100 hours since first startup, and change hydraulic oil every 1500 hours.

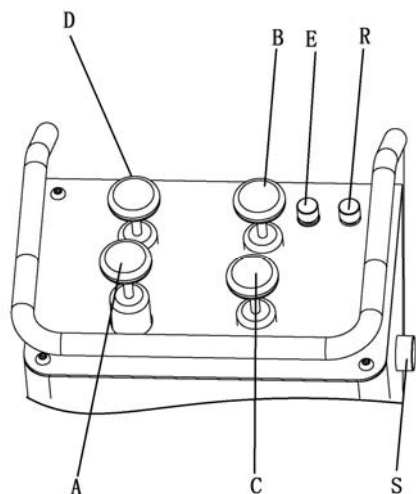
Connect the air circuit system and electrical circuit system. Connect to the air compressor with the air circuit port behind the machine. The electrical system have to has fuse system as protector, good grounding of power grid, and set up the automatic switch on the main power supply for keep from the electric leakage.

7. Machine Operation:



- | | | | |
|-----------------------------|------------------------------|---------------------------------|-------------------------|
| 1. Control valve | 2. Pressure gauge | 3. Overpressure discharge valve | 4. Video monitor |
| 5. Control box | 6. Upper bead breaker roller | 8. Cone | 9. Inflating air faucet |
| 10. Reverse switch pedal | 11. Inflating pedal | 12. Demount hook rotation pedal | |
| 13. Lift/fall control pedal | 14. Tyre support | 15. Demount hook | 16. Mount/demount head |

Warning: Keep the hands and body away from the rotating part of the machine during operation. Wear the tight sleeve and body-hugging clothes, do not wear necklace, bracelets and oversize clothes.



- Key A: Mount/demount hook moves (up, down, left, right) ;
 Key B: Upper bead breaker disk moves (up and down);
 Key C: Lower bead breaker disk moves (up and down) ;
 Key D: Tyre fitting seat moves (front and back) ;
 Key E: Monitor switch;
 Key R: Standby/restart;
 Key S: Emergency cut-off;

Turn on by using the switch behind the body of machine before operating. (Fig

4)
 Hydraulic unit will standby after running for two minutes as default setting. The time setting can be changed by open the electrical cabinet and set by adjust the time relay. (Fig 5)

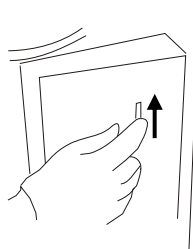


Fig 4

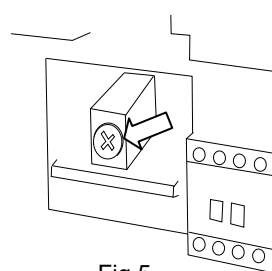


Fig 5

7.1 Demounting the tyre

1. Take out the valve core to deflate the tyre. Roll the tyre onto the wheel lift 14. Depress the lift pedal 13 to raise the tyre up to the full height by the wheel lift 14 until the lift cradle goes to 90 degrees, and then slip the tyre over the turntable 8. Depress the lift pedal 13 to lower the wheel lift to the lowest position and align a lug hole on the rim with the alignment pin on the turntable so that the pin goes into the lug hole. Install the quick locking nut to the central post. Tighten it securely. (Fig 6)
2. Adjust the flange center position by the controller; lower the upper bead breaker disk to within 20mm over the rim until the upper bead is broken away from the wheel rim, lubricate as shown in Fig 7 within depress the rotating pedal. Raise the lower bead breaker disk; by pressing up its controller on the control panel to break the lower bead away from the wheel rim, and then lubricate the tire beads with depress the turntable rotation pedal until full lubrication (Fig 8)
3. Lower the upper bead breaker disk over the rim until the upper bead is broken away from the wheel rim by the controller. Set the tool head hook pointing down by operating the joystick; bring the hook of the tool head to within 10mm over the rim, depress

the rotating pedal, the turntable rotates until the lower bead is broken away from the wheel rim; reset the bead breaker disk by pressing its controller on the control panel.

4. Adjust the lower bead breaker controller; Raise the tool head tab until the lower bead is 10mm – 20mm above the upper lip of the rim. Use the video monitor to observe the distance between the bead breaker and the wheel rim around 5-10mm. Depress the turntable rotation pedal to rotate the turntable clockwise until the lower bead is off the rim. (Fig.9)

Attention: For keeping inner tube from the pressure, please position the valve core at 10mm the right side of the tool head while operating.

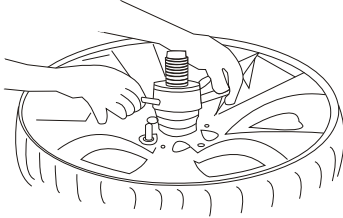


Fig 6

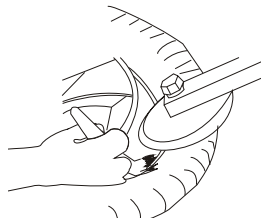


Fig 7

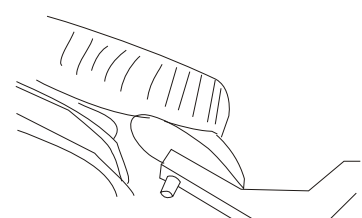


Fig 8

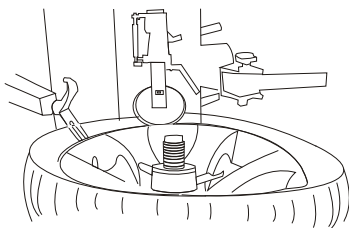


Fig 9

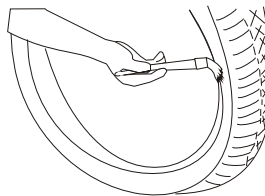


Fig 10

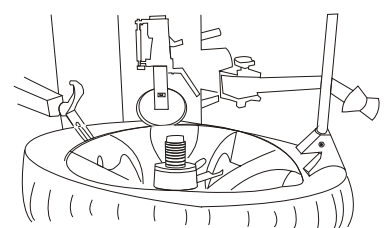


Fig 11

7.2 Mounting the tyre

1. Check the tyre and wheel rim

Warning: It is utmost important to check the tire and rim to prevent tire explosion during the inflating operations. Do not mount if the tyre and the cord fabric are damaged. The internal micro-cracks are not visible to naked eye. This can compromise the rim and can also be a source of danger especially during inflation.

Attention: Make sure the diameter of the rim and tire are exactly the same. Find rim diameter on the tyre and the tyre diameter on the rim; Never try to mount a tire on a rim if you cannot identify the diameters of both.

2. Lubricate the tire beads and wheel rim with the special grease which is suggested by the manufacturer. (If the wheel already be took out from the turntable, please install the wheel again) (Fig 10)

3. Set the tool head tap pointing down by pressing the tool head pedal. Lower the tool head to the position with 10-15mm to the wheel rim; put the tyre on the wheel, position the tyre rim on the straight hook of the tool head, depress the rotating pedal, lower bead mounting complete after turntable rotates one round.

4. Move the lower bead breaker disk upward, lower the tool head tab side down and hook on to the tyre rim by press the tool head control pedal.

5. Move the lower bead breaker disk downward; set the lower bead breaker roller and tubbiness press disk to the position with 40-50mm to the upper plane of the wheel.

6. Press the tyre by the upper pressing head block and then press the turntable rotating pedal, upper bead mounting complete after turntable rotates one round. (Fig 11)

Attention: The turntable rotates only in clockwise during mounting and demounting operations; anticlockwise rotating is used only for correcting the operation mistakes.

7.3 Inflating

 **Caution:** Operation of inflating is extreme dangerous!! Operator should be careful and follow the operation rules. It is extreme dangerous if the tyre and wheel has any problems during the inflating, the explode might cause the tyre flies up or flies out with great power, the operator and people around might be damaged, even dead.

Attention: Tyre exploding might cause by following:

- 1) The diameter of the rim is not as same as the tyre's.
- 2) The rim or the tyre has damaged
- 3) Inflation pressure exceeds the manufacturer's suggestion.
- 4) The operator's non-execution of the safety requirement.

Remove the valve core; Clamp the valve core with the inflating clamping valve (Fig 12), position the blasting nozzle towards to the rim center just under the rim lip, depressing the inflation pedal and inflate discontinuously, check the pressure from the pressure gage and check the wheel rim if the position is right, control the pressure strictly for keeping from exploding.(Fig 13). If the air pressure is too high, press the deflating button and observe the pressure gage until the value of the gage goes to the prescribed limit.

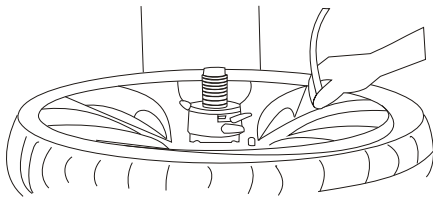


Fig 12

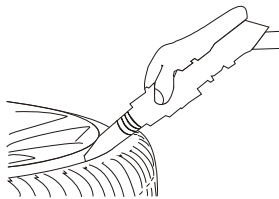


Fig 13

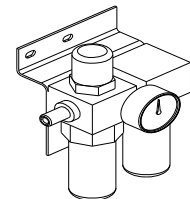


Fig 14

8. Maintenance

Periodical maintenance is necessary for the machine working longer and better; observe the oil line from the oil hydraulic pump, clean and change the oil filter periodically, lubricate the lifting guide rail of the mechanical arm, the lifting guide rail of the tyre lifter and every pin shaft parts, draining the air filter. (Fig 14)

9. Trouble Shooting

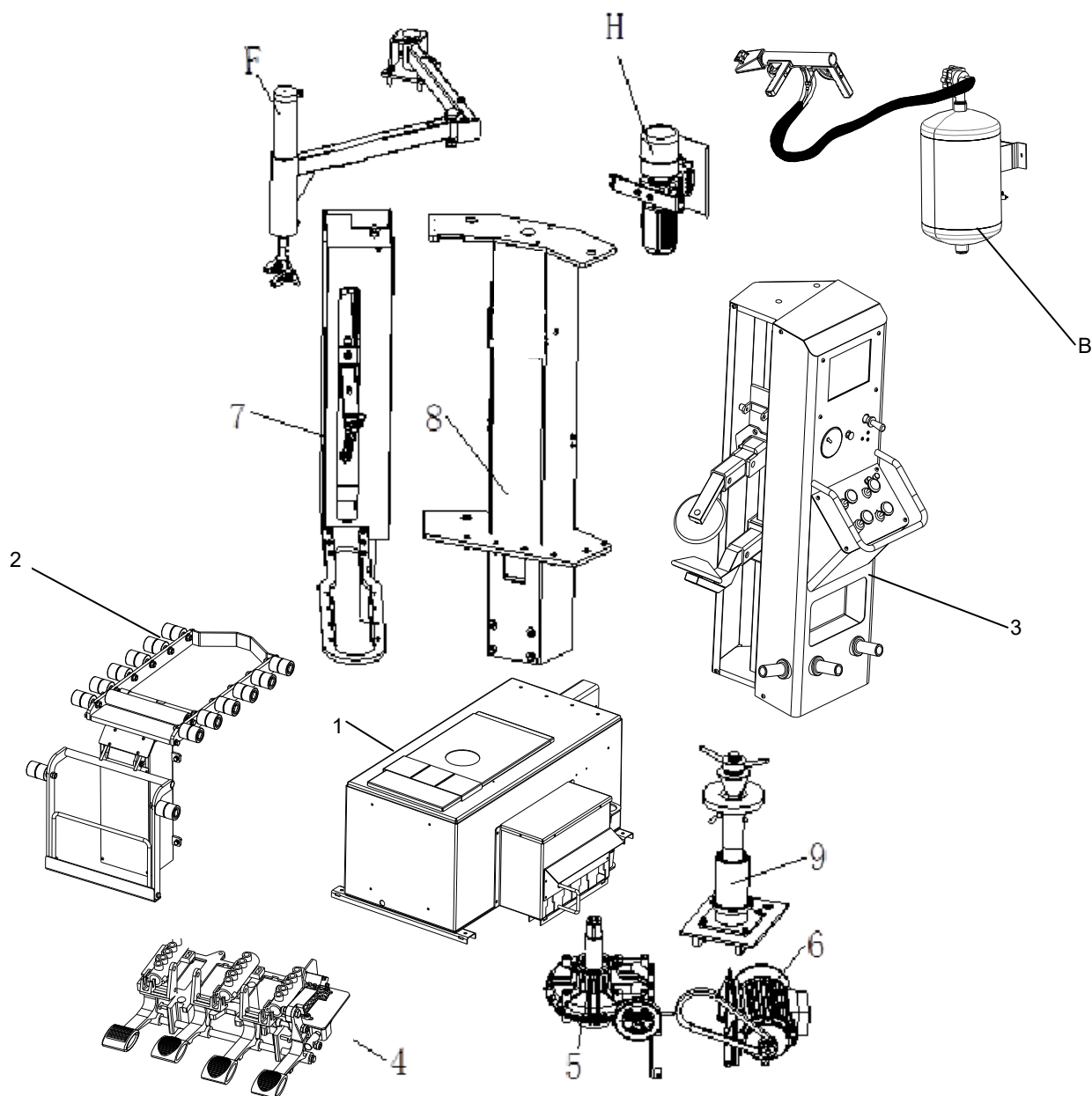
Problem	Reason	Solution
Rotates in one direction or can't rotate	Reverse switch broken	Replace the Reverse Switch
	Belt broken	Replace the belt
	The motor's malfunction	Check the motor cable or terminal block wire; Replace the motor if it was broken.
The jaws delay to open/close; the turntable can't lock or lock incorrectly	Leakage of Air network	Check all the parts on the air network.
	The clamping 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 Hexagonal Vertical Arm can't be locked by Locking Plate	Tighten the screws; replace the Locking Plate.
Tyre lifting support doesn't work	No air source or lacking air pressure	Adjust the air source
Hydraulic power pack doesn't work	Power supply loose connect	Check circuit
	Electromagnetic switch burned out	Replace it
	The motor burned out	Replace it
	Lacking oil in the oil tank	Refill the oil
Machine working no strong strength	Machine working under the improper pressure	Check and adjust the pressure
	Pump motor is broken	Change it
	The machine working without enough oil	Add the oil
Poor pressurize, automatically decline	Dust in the unloading valve or check valve	Clean the unloading valve and check valve
	Screw of the unloading valve's valve plug loose	Tighten the screw of valve plug
Hydro-cylinder running slow or can't decline	Dust in unloading valve and overflow valve or low setting pressure	Clean and adjust the overflow valve; Replace the sealing element and clean the unloading valve
	The motor running reverse	Replace the connection
	Oil-return shutoff valve too small or jammed	Clean and adjust the shutoff valve
	Unloading valve and sealing element doesn't work	Replace the sealing element
	Wrong direction of the solenoid when install the unloading valve and solenoid valve	Adjust the solenoid

If the problem cannot be solved by the information above, please contact our technician.

10. Storage

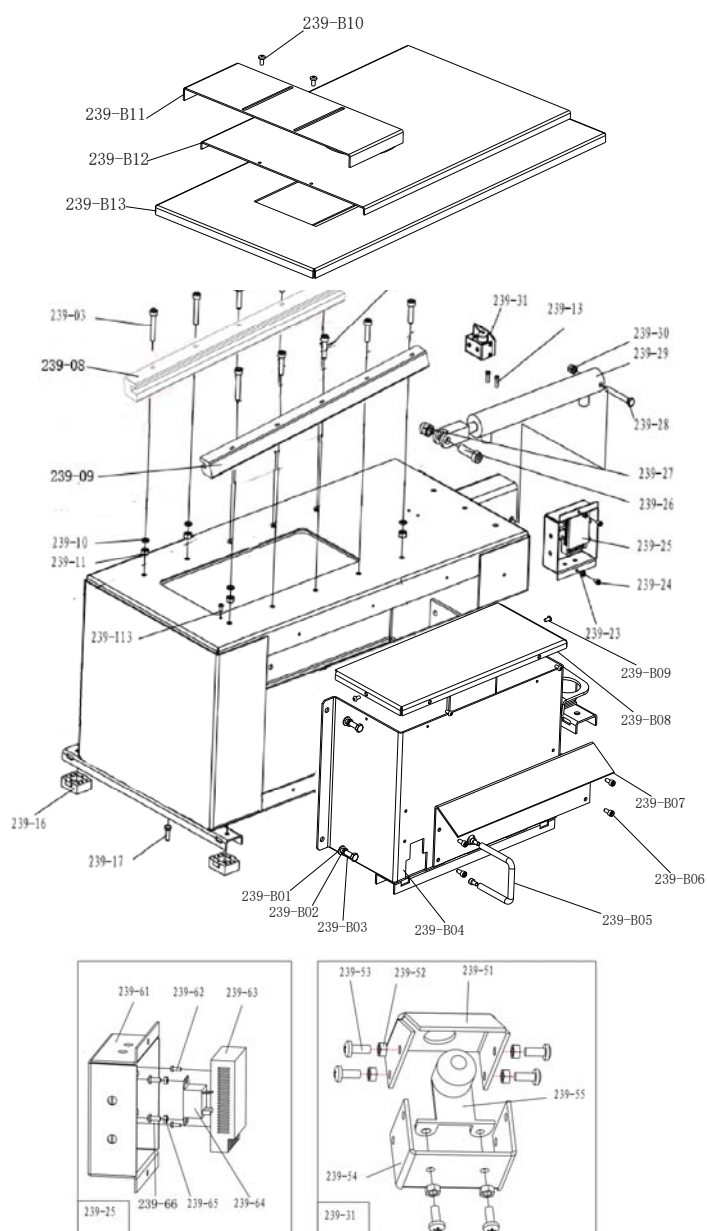
If there has any reason that the machines should be moved to another workplace, arrange the new workplace, disconnect electric supply and air supply, and move the machine to new workplace by using the forklift and lifting system, and place it as the requirement. (This process should be operated with the professional person in there. If the machine is leave unused for three months, please daub the rust preventive oil to each moveable guide rail, empty the oil from the oil hydraulic pump, pack the machine by protective film, and put in the packing case.)

11. Exploded drawing



- | | | | |
|--|--------------------------|----------------------------|---------------------------|
| 1: Machine Body | 2: Lift/fall seat device | 3: Complete right help arm | 4: Complete control pedal |
| 5: Complete gear box | 6: Complete Motor | 7: Complete left help arm | 8: Complete column |
| 9: Complete rotating installation seat | B: Inflating system | F: Helping arm | H: Hydraulic system |

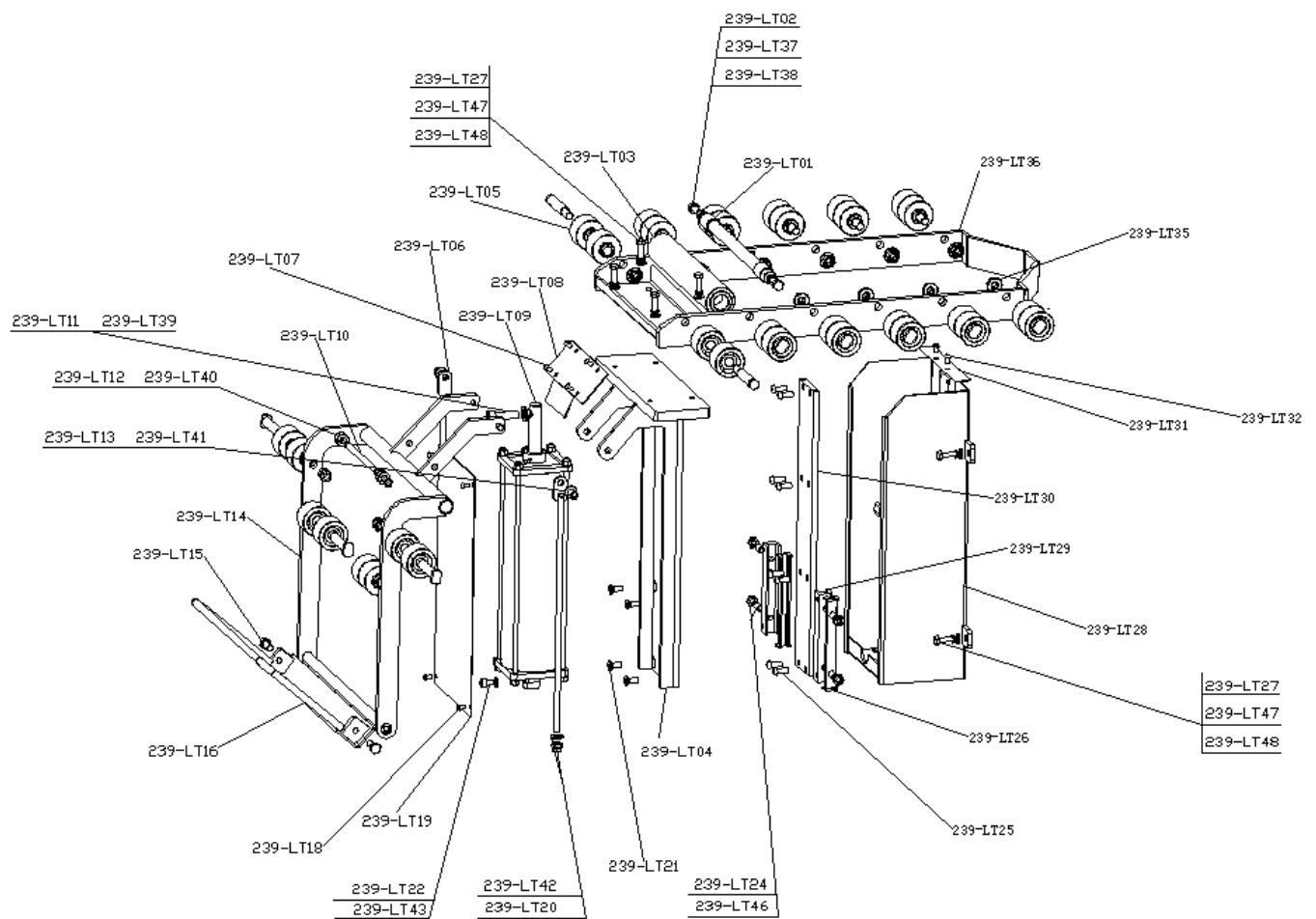
11.1 Complete machine body



239-B06	B-010-060161-0	Hex socket head bolt M6×16
239-B07	CX-238-080000-0	Pedal front cover U2380108
239-B08	CX-239-060700-0	Pedal baffle upper cover
239-B09	B-024-050101-1	Cross head screw M5*10
239-B10	B-024-050061-0	Cross head screw M5*6
239-B11	CX-238-070900-0	Movable cover 3
239-B12	CX-238-070800-0	Movable cover 2
239-B13	CX-238-070700-0	Movable cover 1

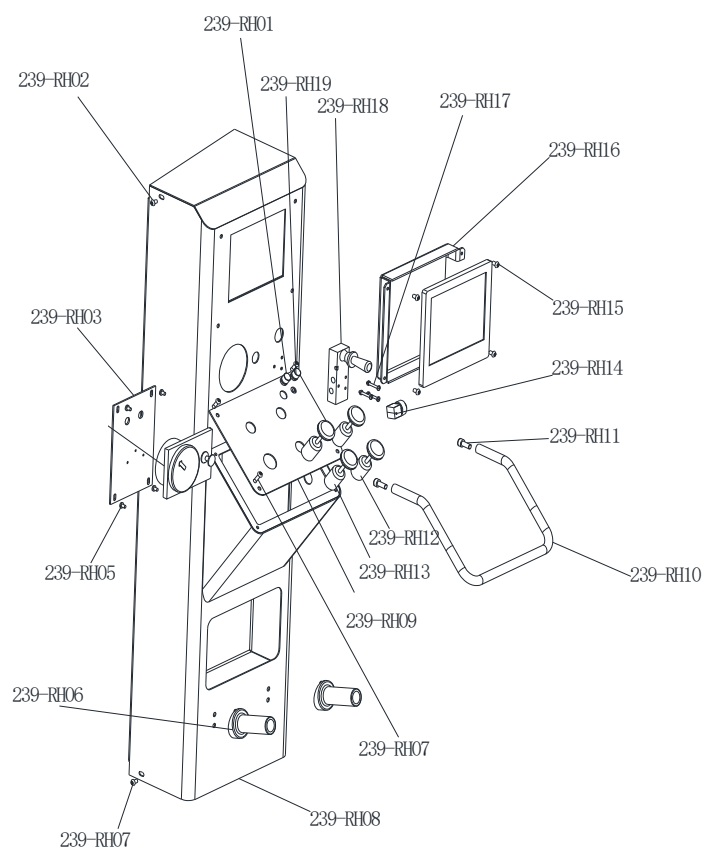
239-03	B-010-100601-0	Hex socket cap screw M10*60
239-08	CX-238-070100-0	Attrition reduce plate (left)
239-09	B-012-080201-0	Inner hex countersunk head screws M8*20
239-10	B-040-102020-1	Flat washer Ø10
239-11	B-004-100001-0	Hex nut M10
239-16	C-000-001020-0	Rubber pedal protection
239-17	B-014-080201-0	Outer hex bolt M8*20
239-23	B-001-060001-0	Self-locking nut M6
239-24	B-007-060101-0	Inner hex counter sunk head screw M6*10
239-25	CX-239-360000-0	Power supply box assembly
239-26	B-010-160501-0	Inner hex countersunk head screws M16*50
239-27	B-001-160001-0	Self-locking nut M16
239-28	B-010-101001-0	Inner hex countersunk head screws M10*100
239-29	C-239-920000-0	Installation of a cylinder
239-30	B-001-100001-0	Self-locking nut M10
239-31		Camera assembly
239-32	B-024-050101-0	The cross slot round head screw M5*10
239-33	CA-014-035000-0	Oil fog maker assembly
239-34	B-010-100401-0	Hex socket cap screw M10*40
239-35	C-200-580000-0	Lifting lever
239-51	CX-239-290200-0	Camera bracket 2
239-52	B-024-040101-0	Cross-round head screw M4X10
239-53	B-004-040001-0	Hex nut M4
239-54	CX-239-290100-0	Camera bracket 1
239-55	S-135-500022-0	Camera 239
239-61	CZ-239-360000-0	Power supply box
239-62	B-024-030081-0	Cross-round head screw M3X8
239-63	D-050-030125-0	Switching power supply
239-64	D-050-000025-0	Integrated relay
239-65	B-001-040001-0	Self-locking nut M4
239-66	B-024-040101-0	Cross-round head screw M4X10
239-B01	B-040-081820-1	flat washer Φ8
239-B02	B-050-080000-0	Spring washer Ø8
239-B03	B-014-080301-0	Outer hex screws
239-B04	CX-239-060000-0	Pedal installation baffle assembly
239-B05	CX-239-060900-0	protective lever

11.2 Rise up & down seat device

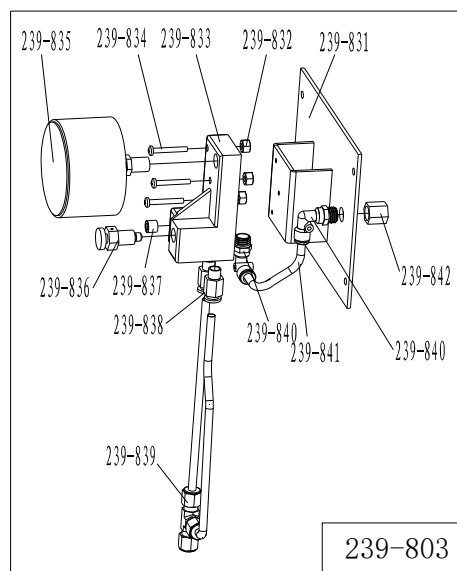


239-LT01	CX-238-031000-N	Center pulley shaft	239-LT19	CX-238-031500-N	Wheel lifter front cover
239-LT02	B-014-121201-0	Outer hex bolt M12*120(GB/T27-1988)	239-LT20	B-001-080001-0	Self-locking nut M8
239-LT37	B-050-120000-0	Washerφ12	239-LT42	B-040-082220-1	Flat washer φ8×22×2
239-LT38	B-040-103030-1	Flat washer φ10*30*3	239-LT21	B-012-080201-0	Hex socket head bolt M8X20
239-LT03	CZ-238-030800-N	Center pulley U238010308N	239-LT22	B-010-080201-0	Hex socket head bolt M8*20
239-LT05	CZ-238-030900-N	Side pulley U238010309N	239-LT43	B-040-081820-1	flat washer Φ8
239-LT06	CX-238-031600-N	Wheel lifter pull rod	239-LT24	B-012-080201-0	Hex socket head bolt M8*20
239-LT07	B-024-050101-1	Cross head screw M5*10	239-LT46	B-004-080001-0	Nut M8
239-LT08	CX-238-031800-N	Wheel lifter upper cover plate	239-LT25	B-025-080201-0	Hex round pin M8X20
239-LT09	C-238-031700-N	Wheel lifter air cylinder	239-LT26	C-238-031900-N	Friction block U238010319N
239-LT10	CX-238-031300-N	Wheel lifter rotating shaft	239-LT27	B-014-080251-0	Outer hex bolt M8*25
239-LT11	B-010-120401-0	SHCS M12 * 40	239-LT47	B-040-081820-1	flat washer Φ8
239-LT12	B-055-100001-0	shaft snap ring	239-LT48	B-050-080000-0	Spring washer Ø8
239-LT40	B-040-102020-1	Washer φ10*20*2	239-LT28	CX-238-030400-N	Wheel lifter cover
239-LT13	B-055-100001-0	shaft snap ring	239-LT29	CX-238-030300-N	Friction block base
239-LT41	B-040-102020-1	Washer φ10*20*2	239-LT30	CX-238-030200-N	Lifting column guide rail
239-LT14	CX-238-031110-N	Wheel lifter main frame	239-LT31	CX-238-031800-N	Wheel lifter upper cover plate A
239-LT15	B-014-100251-0	Outer hex bolt M10×25	239-LT32	B-024-050101-1	Cross head screw M5*10
239-LT16	CX-238-031200-N	Wheel lifter sub rack	239-LT36	CX-238-030500-N	Wheel lifter rack
239-LT18	B-024-050101-1	Cross head screw M5*10	239-LT04	CX-238-030100-N	Lifting column assembly

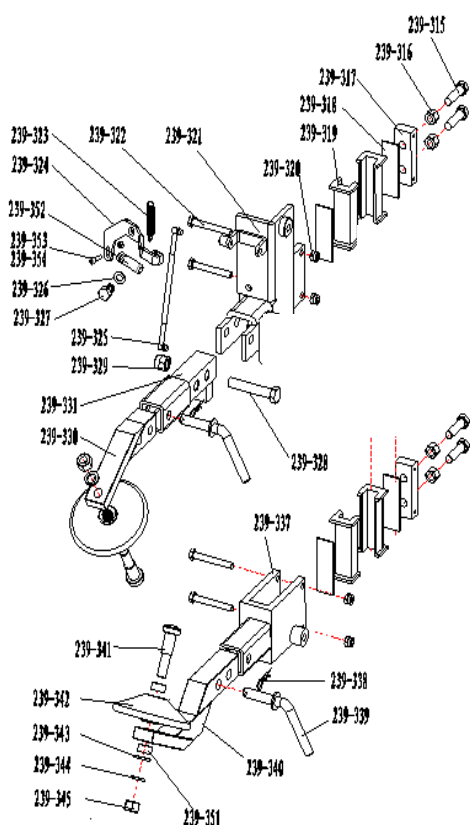
11.3 Complete right help arm



239-RH01	S-060-030030-0	Button switch (Green)
239-RH02	B-024-050101-1	Cross head screw M5*10
239-RH03	CX-238-700000-0	Gas gauge support baseboard
239-RH05	B-024-050101-1	Cross head screw M5*10
239-RH06	P-000-001001-0	Tools hang
239-RH07	B-010-060201-0	Hex Socket Head Bolt M6X20
239-RH08	CX-238-220000-0	Right help arm console
239-RH09	CZ-239-230300-0	Switch panel
239-RH10	CX-239-220800-0	Handle
239-RH11	B-010-080201-0	Hex socket head bolt M8*20
239-RH12	D-044-006002-0	Switch(U239)
239-RH13	S-060-040004-0	Cross four position switch
239-RH14	S-060-040102-0	Emergency switch (Red button)
239-RH15	B-010-060201-0	Hex Socket Head Bolt M6X20
239-RH16	CX-239-280000-0	Video monitor box U239
239-RH17	B-017-040301-0	Cross-round head screw M4X30
239-RH18	S-030-010818-0	Handle valve
239-RH19	D-044-006001-0	Reset switch(U238)

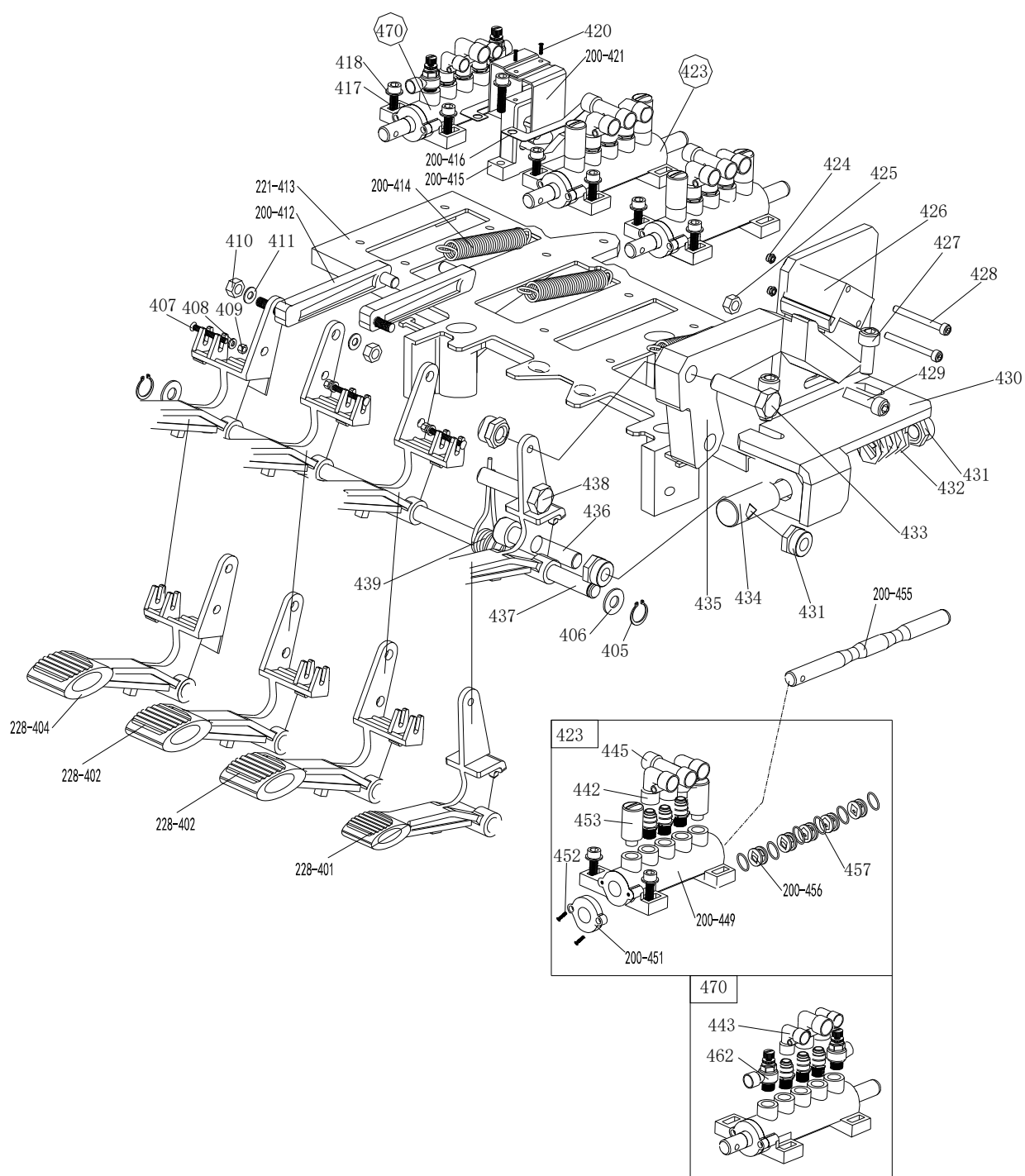


239-831	CX-238-700000-0	Gas gauge support
239-832	B-004-060001-1	Nut M5
239-833	CC-238-700100-0	Through-hole seat
239-834	B-024-040301-0	Cross Head Screw M4X30
239-835	S-038-000030-1	Pressure gauge(outerφ82.5)
239-836		Exhaust valve assembly
239-837	B-007-180081-R	Hex socket head bolt 1/8*8
239-838	S-010-010808-0	1/8-φ8 (ZPCH8-01)
239-839	S-013-000008-3	Quick T-union
239-840	S-012-010808-0	Quick union 1/8- Ø 8
239-841		Tube Ø8
239-842	S-011-010414-0	1/4-1/4 straight union inner thread



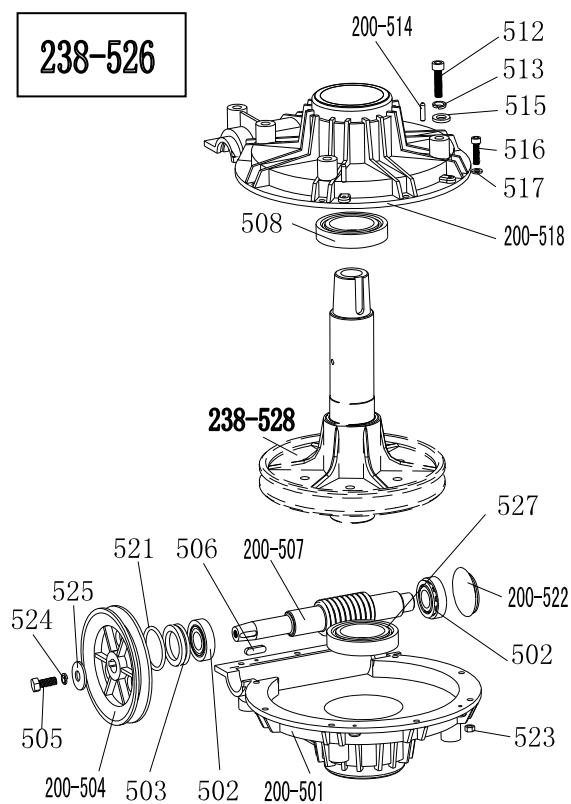
239-315	B-014-140501-0	Outer hex screws M14*50
239-316	B-004-140001-0	Hex nut M14
239-317	CX-238-201100-0	Adjustable iron block
239-318	CX-238-201300-0	Block
239-319	C-238-201200-0	U adjusted block
239-320	B-001-100001-0	Self-locking nut M10
239-321	CX-238-200200-0	Tyre pressing pulley adapting piece
239-322	B-014-100801-0	Outer hex screw M10*80
239-323	C-238-201600-0	Card board hanging spring
239-324	CX-238-201000-0	Card board
239-325	C-000-032004-0	Pneumatic spring 238
239-326	B-040-142820-1	Flat washer Ø14
239-327	B-014-140201-0	Outer hex screw M14*20
239-328	B-014-201101-0	Outer hex screw M20*110
239-329	B-001-200001-0	Self-locking nut 20
239-330	CX-238-200400-0	Roller support A
239-331	CX-238-200300-0	Roller connected sleeve
239-337	CX-238-201700-0	Guide jacket
239-338	C-238-031400-0	Fixing pin
239-339	CX-238-201400-0	Handle assembly
239-340	CX-238-201800-0	Roller bracket B
239-341	CX-238-200600-0	Roller pin
239-342	CZ-238-200500-0	Roller
239-343	B-040-162820-1	Flat washer Ø16
239-344	B-050-160000-0	Spring washer Ø16
239-345	B-004-160001-0	Hex nut M16
239-351	S-040-061904-2	Shaft 61904-2Z
239-352	C-238-202000-0	Locking pin
239-353	B-010-060201-0	Hex socket head screw M6×20
239-354	B-001-060001-0	Self-locking nut M6

11.4 Complete control pedal



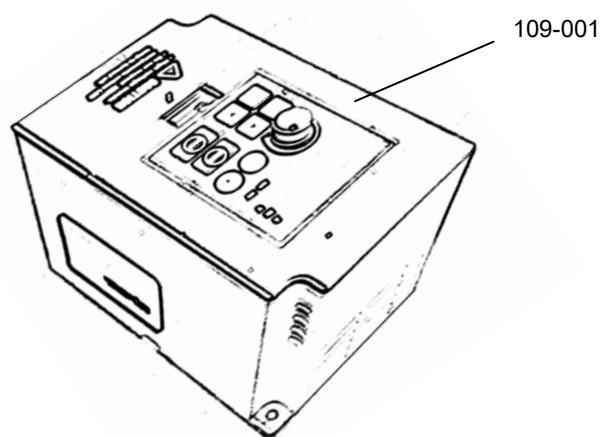
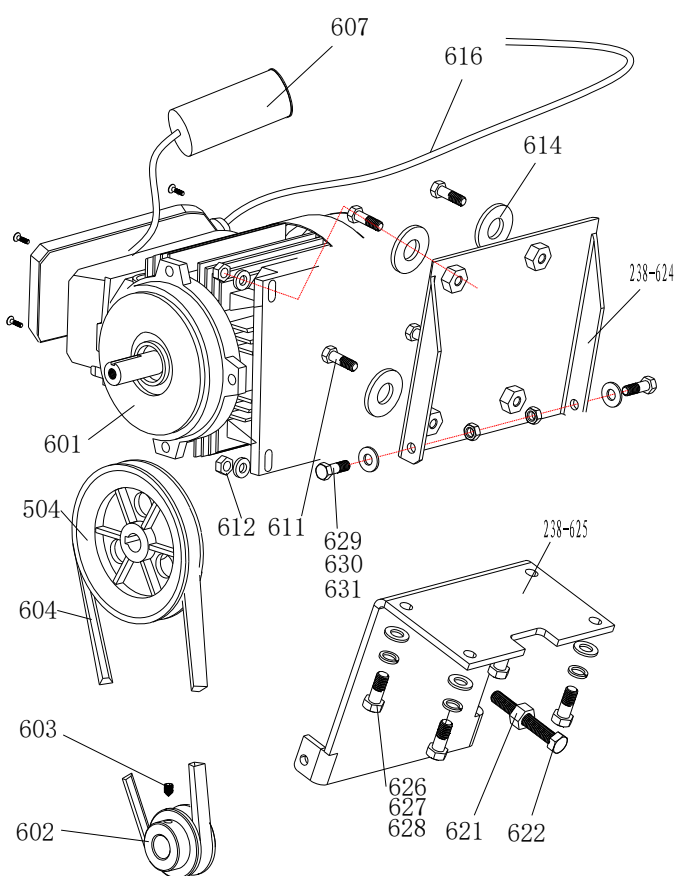
228-401	C-228-060400-0	Reverse switch pedal	429	B-010-050201-0	Hex socket head bolt M5*20
228-402	C-228-060300-0	5-way valve pedal(right)	430	CX-231-060600-0	Micro switch bracket assembly
228-404	C-228-060200-0	5-way valve pedal(left)	431	B-001-080001-0	Self-locking nut M8
405	B-055-120001-0	Snap Ring Ø12	432	C-231-060800-0	Pedal spring
406	B-040-122520-1	Flat washer Φ 12*24*2	433	B-014-080301-0	Outer hex screws
407	B-017-040301-0	Cross-round head screw M4X30	434	CX-231-060700-0	Spring bar
408	B-040-040000-1	Flat Washer Ø4	435	CX-231-060500-0	Micro switch rotating arm
409	B-001-040001-0	Self-locking nut M4	436	B-010-080401-0	Hex socket head bolt M8*40
410	B-001-080001-0	Self-locking nut M8	437	CX-221-060700-0	Pedal Front Shaft
411	B-040-081715-1	Flat washer Φ8*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
221-413	C-221-060100-0	Pedal support board	442	S-012-010808-0	Quick union 1/8- Ø 8
200-414	C-200-380000-0	Pedal Spring	443	S-012-010806-0	Quick union 1/8-Ø6
200-415	C-200-061500-0	Cam	445	S-016-010808-2	Quick T-union 1/8-2* Ø 8
200-416	C-200-810000-0	Cam washer	200-449	C-200-060901-0	5-way valve barrel
417	B-010-060201-0	Hex Socket Head Bolt M6X20	200-451	C-200-061100-0	5-way valve cover
418	B-040-061210-1	Flat washer Ø 6X12X1	452	B-024-290-121-0	Cross head ST2.9*14
420	B-019-290121-0	Cross Head Self Tapping Screw ST2.9*12	453	S-023-010801-0	Muffler 1/8
200-421	CX-200-060500-0	Cam cover	200-455	CX-200-061200-0	5-way valve rod
423	CW-110-020001-0	"5-way valve (T-union, without rod)"	200-456	C-200-061000-0	5-way valve rod spacer
424	B-001-030001-0	Self-locking nut M3	457	S-000-012400-0	O-sealφ12*20*4
425	B-004-050001-1	Nut M5	462	S-030-010806-0	Throttle valve
426	S-060-000500-0	Micro switch	470	CW-110-021102-0	"Tilting 5-way valve, without rod"
427	B-010-060161-0	Hex socket head bolt M6×16	231-480	CW-109-023100-0	Complete 4-pedals assembly 231
428	B-010-030401-0	Hex socket head bolt M3*40			

11.5 Complete gear box



200-501	C-300-320302-0	Gear box lower cover
502	S-040-030204-0	Bearing 30204
503	S-005-020080-1	Gear box seal $\phi 20 \times 35 \times 8$
200-504	C-200-320500-0	Gear Belt pulley
505	B-014-080251-0	Outer hex bolt M8×25
506	B-065-006020-0	Key washer 6×20
200-507	C-200-320400-0	Worm rod
508	S-040-006010-0	Bearing 6010
512	B-014-100551-0	Outer hex bolt M10×55
513	B-050-100000-0	Spring washer $\phi 10$
514	B-060-006020-0	Pin 6X20
516	B-010-060201-0	Hex socket head screw M6×20
517	B-040-061412-1	Flat washer $\phi 6 \times 14 \times 1.2$
200-518	C-300-320301-0	Gear box upper cover
521	S-000-027310-0	O-seal $\phi 27.8 \times 3.1$
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 $\phi 8 \times 30 \times 3$
238-526	CW-107-023801-0	Complete gear box
527	S-040-006028-0	Bearing 6208
238-528	C-238-320100-0	Worm gear/ shaft

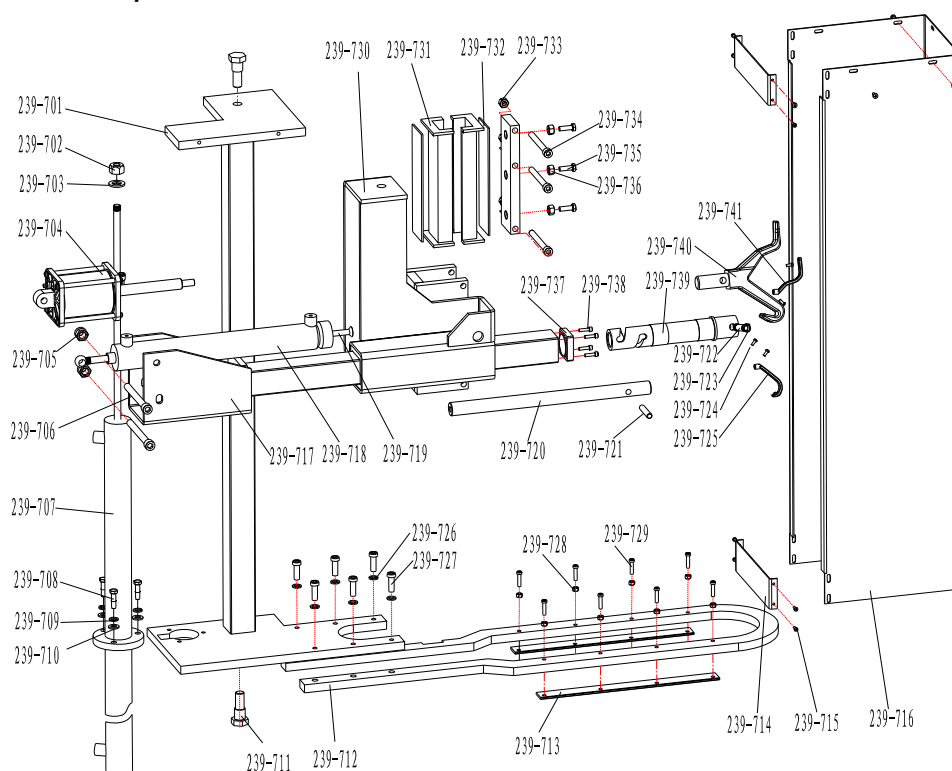
11.6 Complete motor



601	S-050-220110-0W	Tyre changer(WONDER MY)
602	CX-239-330000-0	Motor belt pulleyU2390133(Galvanized)
603	B-007-080121-0	PRISIONERO M8*12 D-1020
604	S-042-000660-0	Tyre changer belt 110V
607-80	S-063-005000-0	"Capacitor 50μf,220V""
608	B-040-102020-1	Washer φ10*20*2
609	B-050-100000-0	Spring washer Ø10
611	B-014-080351-0	Outer hex bolt M8X35
612	B-004-080001-0	Nut M8
613	B-040-082220-1	Flat washer φ8×22×2
614	C-200-560000-0	Motor Rubber Buffer
616	CZ-000-205150-0	Motor Cable 220V RVV5*1.5
618	C-200-560000-0	Motor Rubber Buffer
621	B-004-100001-0	hex nut M10
622	B-014-101001-0	Outer hex bolt M10X100
238-624	CX-238-350000-0	Support board 1 for motor
238-625	CX-238-340000-0	Support board 2 for motor
626	B-014-100301-0	Outer hex screws M10*30
627	B-050-100000-0	Spring washer Ø10
628	B-040-102020-1	Washer φ10*20*2
629	B-014-100251-0	Outer hex bolt M10×25
630	B-001-100001-0	Nut M10
631	B-040-102020-1	Washer φ10*20*2

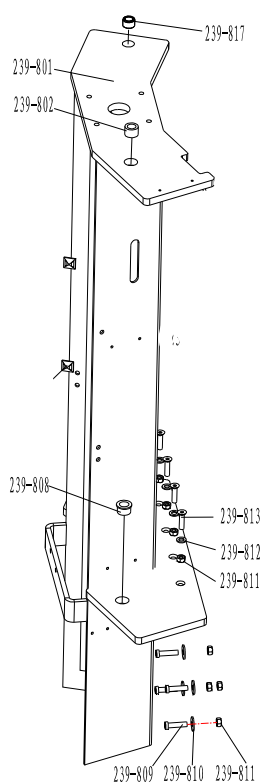
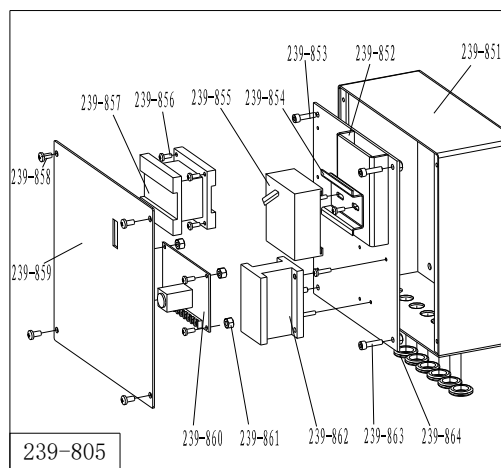
109-001	D-109-001201-0	Frequency controller(220V 1PH 1.5KW)
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11.7 Complete left help arm



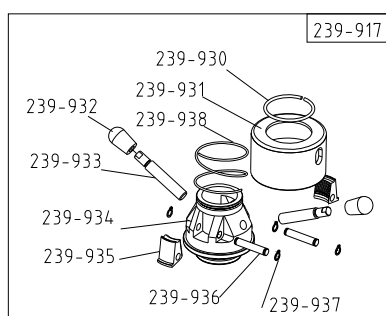
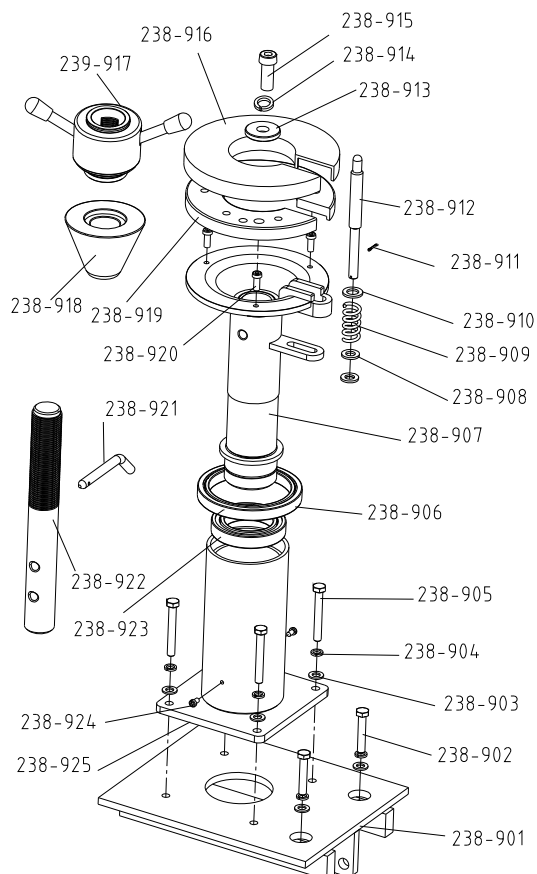
239-701	CX-239-150000-0	Left arm guide rail assembly	239-722	CZ-239-160502-0	Positioning pin 2
239-702	B-001-160001-0	Self-locking nut M16	239-723	B-055-120001-0	Snap ring Ø12 for shaft
239-703	B-040-162820-1	Flat washerØ16	239-724	C-239-300100-0	Demount hook protector pad
239-704	CA-005-023900-0	Demount hook cylinder	239-725	B-050-100000-0	Spring washer Ø10
239-705	B-001-120001-0	Self-locking nut M12	239-726	B-010-121201-0	Hex socket head screw M12*120
239-706	B-010-121201-0	Hex socket head screw M12*120	239-727	B-010-100301-0	Hex socket head screw M10*30
239-707	C-239-900000-0	Rise/fall oil cylinder set	239-728	B-001-060001-0	Self-locking nut M6
239-708	B-014-080301-0	Outer hex screw M8*30	239-729	B-010-060251-0	Hex socket head screw M6*25
239-709	B-050-080000-0	Spring washer Ø8	239-730	CX-036-030000-0	Rise/fall sleeve
239-710	B-040-081820-1	Flat washer Ø8	239-731	C-239-150805-0	U-type slot
239-711	CX-239-150500-0	Guide rail bolt	239-732	CX-239-150807-0	Block
239-712	CX-239-150900-0	Channel plate	239-733	B-001-100001-0	Self-locking nut M10
239-713	CX-239-150900-0	Channel plate damper	239-734	B-010-101001-0	Hex socket head screw M10*100
239-714	CX-239-190200-0	Left help arm protect cover 2	239-735	B-014-140351-0	Outer hex screw M14*35
239-715	B-024-050101-0	Cross-round head screw M5*10	239-736	B-004-140001-0	Hex nut M14
239-716	CX-239-190100-0	Left help arm protect cover 1	239-737	CZ-239-160400-0	Sliding arm back cover
239-717	CX-239-160000-0	Demount hook slide arm assembly	239-738	B-010-050201-0	Hex socket head screw M5*20
239-718	C-239-930000-0	Tyre changer oil cylinder	239-739	C-239-160500-0	Demount hook steering shaft
239-719	B-012-120301-0	Inner hex counter sunk head M12*30	239-740	C-239-160600-0	Demount hook
239-720	C-239-160704-0	Piston rod 239	239-741	C-239-300200-0	Demount hook protector pad 2
239-721	CX-239-160501-0	Positioning pin 1			

11.8 Complete column



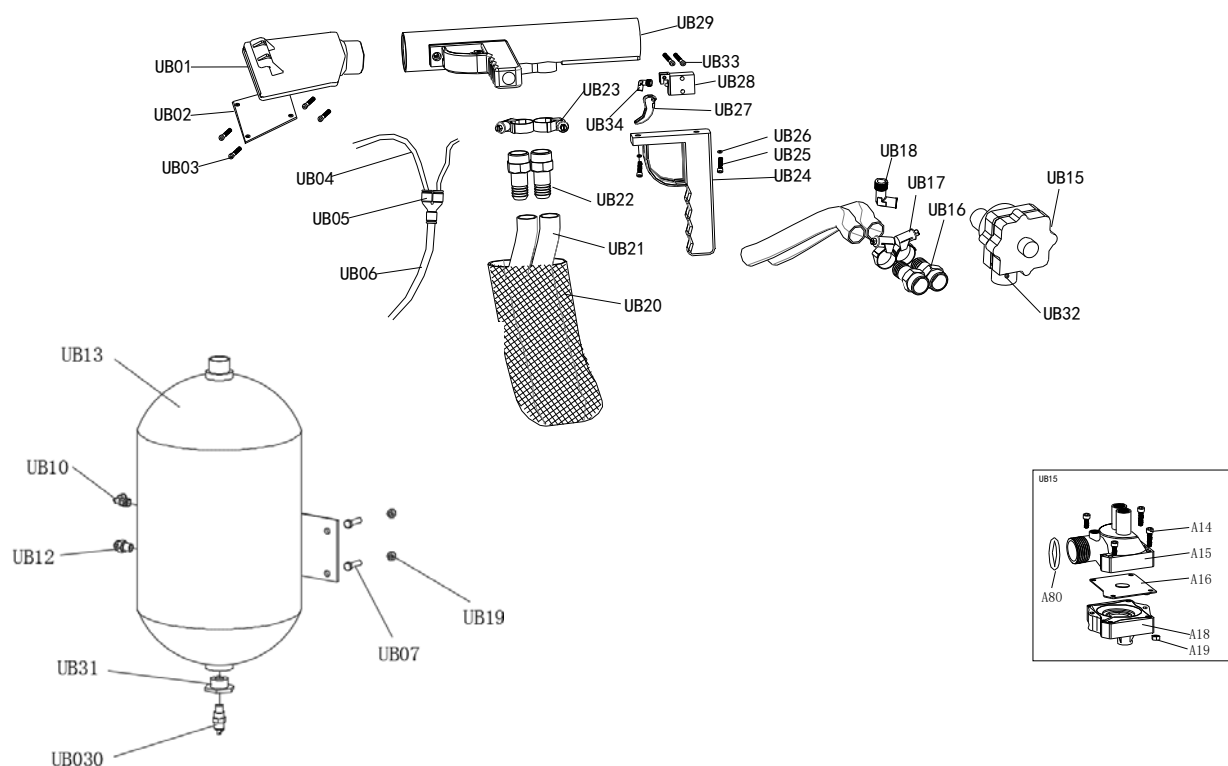
239-801	CX-239-250000-0	V-shape column
239-802	CX-239-150600-0	Rail guide bush(up)
239-808	CZ-239-150700-0	Rail guide bush(down)
239-809	B-010-100401-0	Hex socket head screw M10*40
239-810	B-040-103030-1	Flat washer Ø10
239-811	B-001-100001-0	Self-locking nut M10
239-812	B-040-103030-1	Flat washer Ø10
239-813	B-012-100401-0	Inner hex counter sunk head screw M10*40
239-817	CX-238-260000-0	Rail guide support sleeve
239-831	CX-238-700000-0	Pressure gauge support
239-832	B-004-060001-1	Hex nut M6
239-833	CC-238-700100-0	Seat with holes
239-834	B-024-040301-0	Cross-round head screw M4X30
239-835	S-038-000030-1	Pressure gauge 10KG
239-836		Complete air bleed valve
239-837	B-007-180081-R	Hex tacking 1/8X8
239-838	S-010-010808-0	Quick straight union 1/8-Ø8
239-839	S-013-000008-3	Quick T-union Ø8
239-840	S-012-010808-0	Quick L-union 1/8- Ø8
239-841		Hose Ø8
239-842	S-011-010414-0	Straight union (inner teeth)1/4-1/4
239-851	CZ-238-240000-0	Electrical box
239-852	CX-238-240500-0	Electrical bracket assembly
239-853	B-010-050201-0	Hex round head M5X20
239-854	C-000-030008-0	Card slot 35#
239-855	D-044-003001-0	Air switch 14-20A
239-856	B-024-040101-0	Cross-round head M4X10
239-857	D-038-000400-0	The transformer
239-858	B-024-050101-0	Cross-round head M5X10
239-859	CX-238-240600-0	Electrical box cover
239-860	CZ-239-000239-0	Circuit control board 239
239-861	B-004-060001-1	Nut M6
239-862	D-044-021201-0	Ac contactor
239-863	B-024-040161-0	Cross-round head M4X16
239-864	S-036-201400-0	Rubber protective ring Ø14

11.9 Complete rotating installation seat



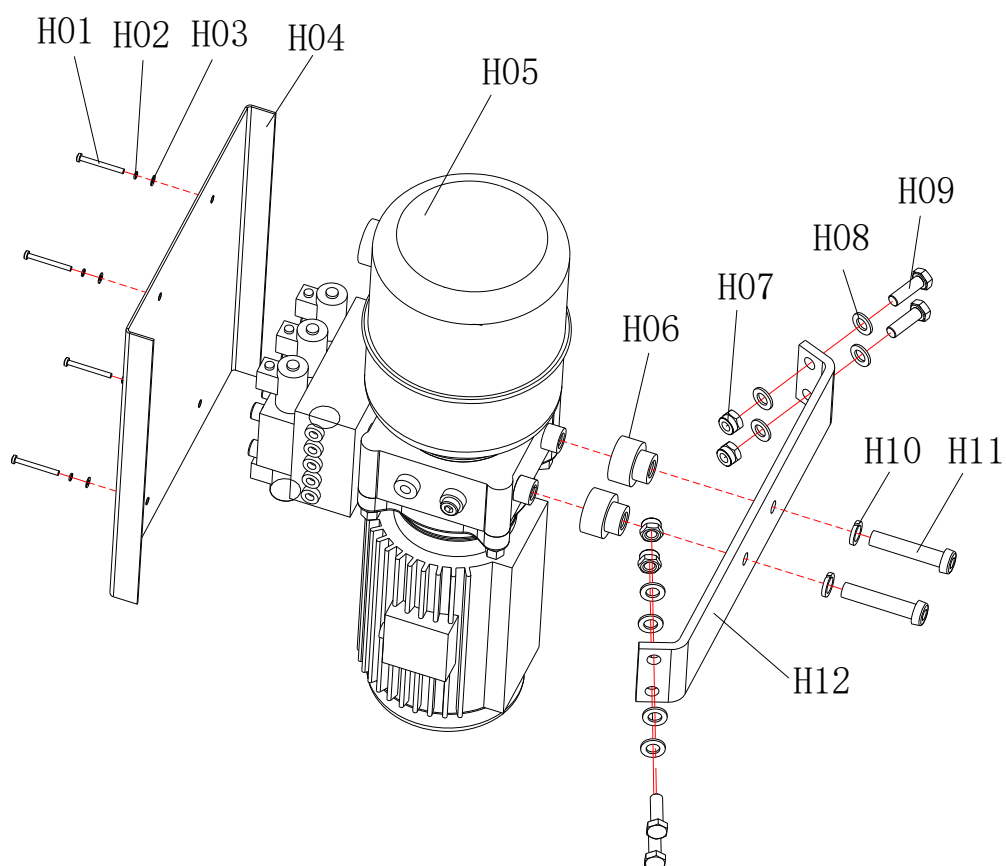
238-901	CX-238-100000-0	Reducer skate board
238-902	B-014-100551-0	Outer hex screw M10*55
238-903	B-040-102020-1	Flat washer Ø10x2
238-904	B-050-100000-0	Spring washer Ø10
238-905	B-014-100751-0	Outer hex screw M10*75
238-906	S-040-061822-2	Bearing 61822-2Z
238-907	CX-238-130100-0	Tyre installation seat
238-908	CX-238-130600-0	Check ring(down)
238-909	C-238-130400-0	Outer spring
238-910	CX-238-130300-0	Check ring(up)
238-911	B-070-032018-0	splintpin3.2*18
238-912	CX-238-130200-0	Rotating help arm rod
238-913	CX-200-140000-0	Big washer
238-914	B-050-160000-0	Spring washer Ø16
238-915	B-010-160401-0	Hex socket cap screw M16*40 M16*40
238-916	C-238-130800-0	Rubber protection pad
238-917	CW-160-000239-0	Quick release nut assembly
238-918	C-239-333801-0	1# CONE
	C-239-333802-0	2# CONE
	C-239-333803-0	3# CONE
	C-239-333804-0	4# CONE
238-919	C-238-130700-0	Cushioning pads of the tire installation disk
238-920	B-010-080201-0	Hex socket cap screw M8*20
238-921	CZ-238-131000-0	Connecting bolt
238-922	CX-238-131100-0	Threaded shaft
238-923	S-040-006013-2	Bearing 6013-2Z
238-924	B-010-060101-0	Hex socket cap screw M6*10
238-925	CX-238-131300-0	Intensive seat
239-930	B-055-080001-0	Steel cable baffle ring for shaft φ 50
239-931	CX-239-170400-0	Quick release nut cover
239-932	C-239-170900-0	Handle lever cover
239-933	CX-239-170800-0	Handle lever
239-934	C-239-170100-0	Quick release nut body
239-935	CX-239-170300-0	Quick release nut
239-936	CX-239-170600-0	Quick release nut fixing pin
239-937	B-055-080001-0	Circlip for shaft
239-938	C-239-170500-0	Compression spring

11.B Inflating System



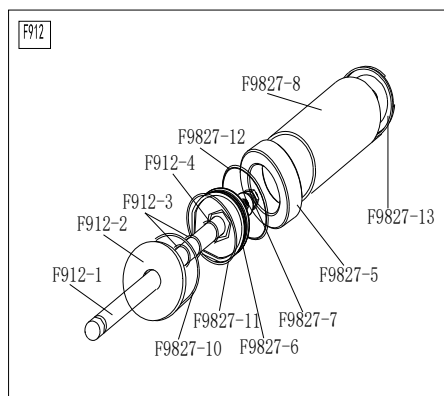
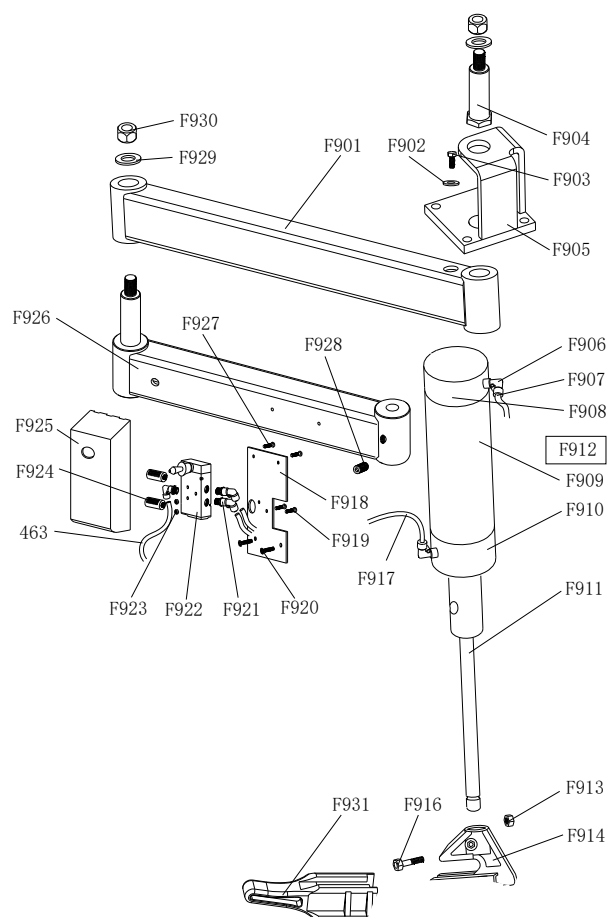
No.	Item code	Parts	No.	Item code	Parts
UB01	C-001-020100-0	Upper inflation blowing nozzle	UB21	S-035-601600-0	High pressure hose 16
UB02	C-001-020200-0	Cover	UB22	S-020-001600-0	Pagoda joint
UB03	B-024-040121-0	Cross head Screw M4*12	UB23	S-039-000025-0	Hose clamp 25
UB04	S-035-040025-0	Air hose 4*2.5	UB24	C-UB04-020000-0	Grip UB0402
UB05	S-013-106204-0	Y-connector 1*φ6-2*φ4	UB25	B-010-060161-0	Hex socket head bolt M6×16
UB06	S-035-060040-1	Air pipe(PU)	UB26	S-000-006300-0	O-ring
UB07	B-014-080301-0	Outer hex bolt M8*30	UB28	CX-UB04-000000-1	Locking trigger UB04
UB10	S-012-010408-0	Jaw's protector(non-central)	UB29	C-UB04-010000-0	Air booster barrel UB0401
UB12	S-030-010400-0	Water discharge valve	UB32	B-007-180081-R	Hex socket head bolt 1/8*8
UB13	CX-238-610000-0	Air tank U2380161(spray painted)	UB33	B-024-050101-1	Cross head screw M5*10
UB19	B-001-080001-0	Self-locking nut M8	UB34	S-012-050004-0	Quick union M5-φ4
UB30	S-030-030800-0	Safety valve	A80	C-221-601000-A	Rubber washer Ø18*34*2
UB31	CX-221-610500-A	Air-tank up union	A14	B-010-060301-0	Hexagon socket head bolt M6*30
UB15	CW-112-022101-0	"Complete exhaust valve, plastic"	A15	C-221-600500-A	Exhaust valve barrel
UB16	S-020-001600-0	Pagoda joint	A16	C-221-600700-A	Exhaust valve rubber washer
UB17	S-039-000025-0	Hose clamp 25	A18	C-221-600600-A	Exhaust valve cover
UB18	S-012-010406-0	Quick union 1/4-φ6	A19	B-001-060001-0	Self-locking nut M6
UB19	B-004-100001-0	hex nut M10			
UB20	S-041-050004-0	Nylon hollow fabric			

11.H Hydraulic system



H01	B-024-030401-0	Cross-round head screw M3*40
H02	B-040-030000-1	Flat washer Ø3
H03	B-050-030000-0	Spring washer Ø3
H04	CX-238-270000-0	Hydraulic pump cover plate
H05	S-049-380150-5	Hydraulic pump station 3ph (239)
H06	CX-007-090000-0	Locating sleeve
H07	B-001-080001-0	Self-locking nut M8
H08	B-040-081820-1	Flat washer Ø8
H09	B-014-080251-0	Outer hex screw M8*25
H10	B-050-100000-0	spring washer Ø10
H11	B-010-100501-0	Hex socket cap screw M10*50
H12	CX-238-140000-0	Hydraulic pump bracket

11.F Complete helping arm

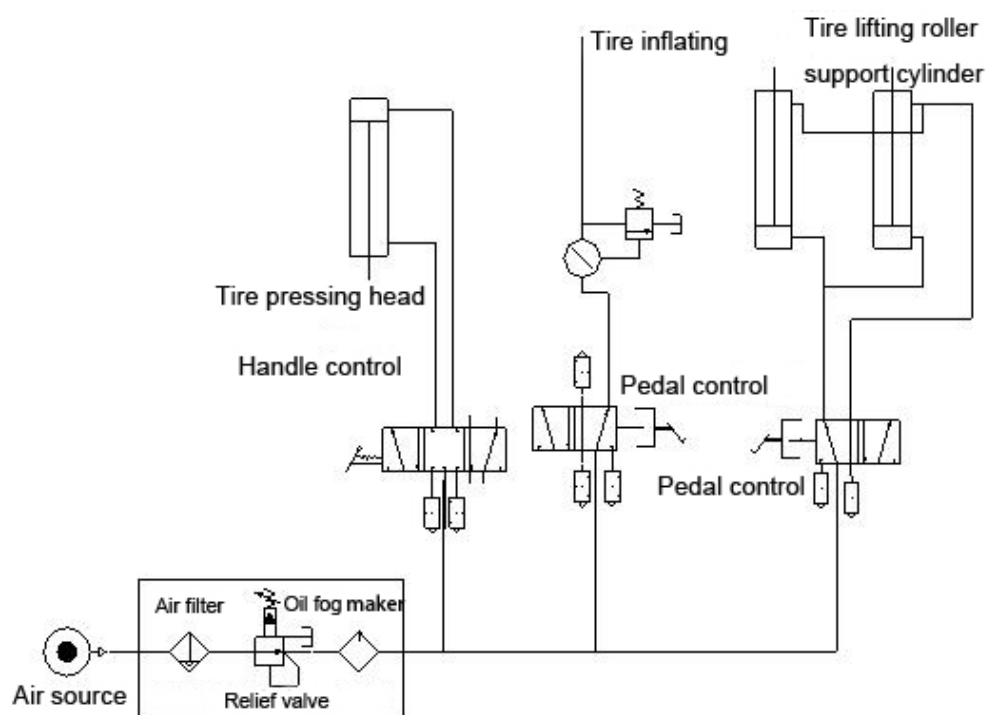


F9827-10	S-000-063265-0	O-seal $\phi 63 \times 2.65$
F9827-11	S-000-063355-0	O-seal $\phi 63 \times 3.55$
F9827-6	C-098-075400-0	009 help arm cylinder piston $\phi 70$
F9827-7	B-001-120001-0	Self-locking nut M12
F9827-5	C-098-070600-0	Cylinder washer $\phi 31 \times 50 \times 15$
F9827-13	CX-098-070200-0	Light cylinder back cover

F901	CX-009-020000-B	Tyre pressing arm
F902	B-050-100000-0	Spring washer $\phi 10$
F903	B-010-100301-0	Hex socket head bolt M10*30
F904	CX-009-050000-0	Pressing arm pin $\phi 28 \times 114$
F905	CX-009-010000-0	Pressing plate
F906	S-012-010806-0	Quick union 1/8- $\phi 6$
F907		Air hose (PU) $\phi 6 \times 4$
F908	C-009-070200-0	Light cylinder back cover
F909	C-009-070300-0	009 cylinder barrel $\phi 70 \times 76 \times 460$
F910	C-009-070100-0	Light cylinder front cover
F911	C-009-070400-2	Cylinder piston rod $\phi 25 \times 750$
F912	CW-105-020900-0	Complete 009 help arm cylinder
F913	B-001-060001-0	Self-locking nut M6
F914	C-008-090100-0	Tire pressing head (upper)
F916	B-010-060301-0	Hexagon socket head bolt M6*30
F917		Air hose (PU) $\phi 6 \times 4$
F918	CX-007-180500-0	Raise-fall switch base plate
F919	B-017-040301-0	Cross-round head screw M4X30
F920	B-024-050161-1	Screw
F921	S-012-010406-0	Quick union 1/4- $\phi 6$
F922	S-030-010818-0	Handle valve
F923	B-004-040001-1	Hex nut M4
F924	S-023-010801-0	Muffler 1/8
F925	C-007-181000-0	Control valve protection cover
F926	CX-238-000300-0	Auxiliary pressing arm U2380103
F927	B-017-040161-0	Cross head screw M4*16
F928	B-007-120161-0	Hex socket head bolt M12X16
F929	CX-200-140000-0	Big washer
F930	B-001-160001-0	Self-locking nut M16
F912	CW-105-020900-0	Complete 009 help arm cylinder
F912-1	C-009-070400-2	Left light cylinder piston rod
F912-2	C-009-070100-2	Left light cylinder front cover
F912-3	S-000-025265-0	O-seal $\phi 25 \times 2.65$
F912-4	S-000-011180-0	O-seal $\phi 11 \times 1.8$
F9827-12	U-006-000001-0	Guide tape
F9827-8	CX-009-070300-0	Light cylinder barrel

12. Schematic diagram

12.1 Pneumatic schematic diagram



12.2 Hydraulic schematic diagram

