

TYRE CHANGER

INSTRUCTION & MAINTENANCE MANUAL

We follow the way that wheel moving!



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

TYRE CHANGER INSTRUCTION MANUAL

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Tyre Changer

Warning

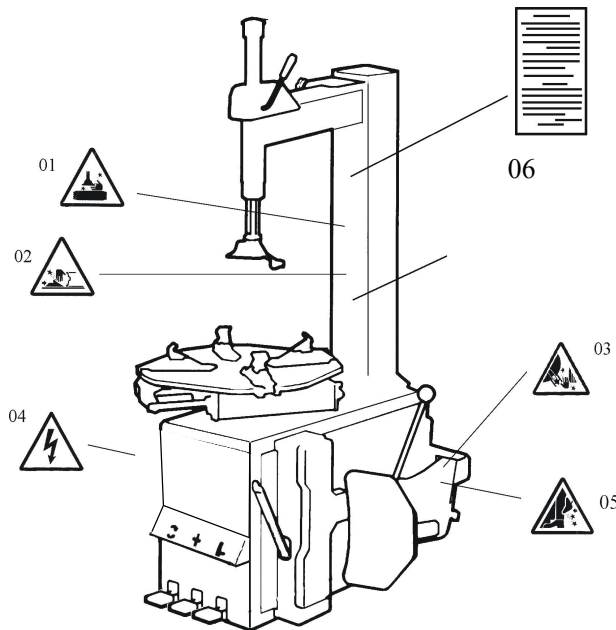
This instruction manual is important for the machine, please read carefully before installation and use; also it is important for safe use and machine maintenance of machine. Please keep this manual properly in order to further maintenance of the machine.

1. Introduction:

Application Range: The automatic tyre changer is especially designed for demounting / mounting tyres from wheel rims.

Caution: Please use the machine 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.

Safety regulation: Use of this machine is especially reserved to trained and qualified professional persons, those who already read the introduction manual carefully, or someone have the experience for operating similar machinery. Any changes and beyond the scope of use on this machine without manufacturer's permission or do not according to the manual, 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).**



2. Safety Warnings:

- 01 Don't put hands under the Mounting head/demounting head during operation;
- 02 Don't put hands between the jaws during operation;
- 03 Don't put hands in the tyre bead when demounting the tyre;
- 04 Make sure and to check the system is equipped with a good grounding circuit;
- 05 Don't put feet between the Bead Breaker shovel and the body during operation;
- 06 Warning instruction

Security warning labels

Caution:

When the security warning labels are defaced or off, please recovery them in time!
Do not allow to operate when the security warning labels are missed or imperfect.
Do not allow to set any objects to obscure the security warning labels.

Clients can self-set the warning labels (as right picture show) at any necessary positions.



3. Technical data

External locking rim dimensions	12~23 "
Internal locking rim dimensions	14~26 "
Max. Wheel diameter	1143mm (45 ")
Max. Wheel width	406mm(16 ")
Working Pressure	8-10bar
Power supply	110V (1ph)/ 220V (1ph)/ 380V (3ph)
Motor power	0.37 kw
Max. Rotating Torque (Turntable)	1078 Nm
Overall Dimension	1130*900*1050 mm
Noise Level	<75dB

Remark:

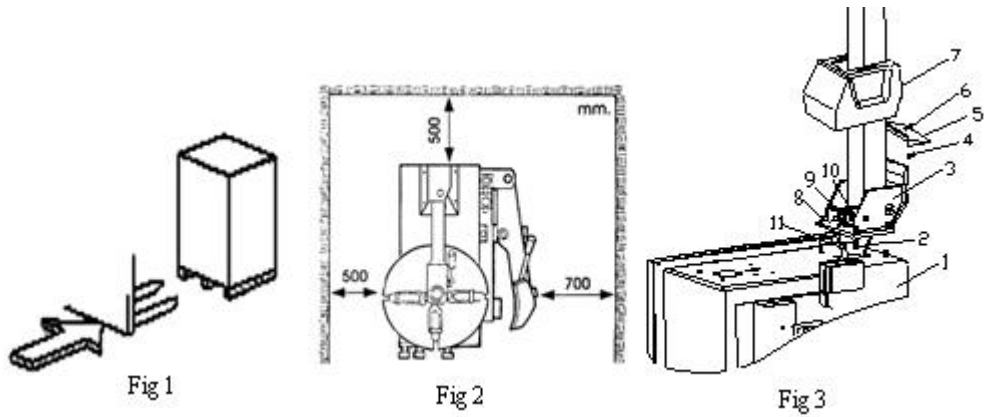
Rim dimensions defined at above table are based on the iron wheel rims. Aluminum rims are thicker than the iron wheel rims, so here above rim dimensions are just for the reference.

4. Transport:

When transporting, the machine should be with original package and placed according to the mark on the package. For the already packaged machine should be handled with a corresponding tonnage forklift for loading and unloading. The location to insert the fork feet shown as **Fig 1**

5. Unpacking & Inspection:

Pull out the nail which is nailed on the plate with tip jaw; unpack the carton and plastic cover. Check and 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 ASAP.



6. Workplace requirements:

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

7. Position and installation:

7.1 Install the column (accessories details refer to the exploded drawing)

- 1) Tools preparation
- 2) Place the tilting seat (3, Fig 3) on the body (1, Fig 3) with 4 bolts (M12), push air hose (2, Fig 3) through the hole of the column. Tighten 4 self-locking nut(8, Fig 3).
- 3) Insert screw (9, Fig 3) into the holes of both column and tilting cylinder shaft (11, Fig 3), tighten it with self-locking nut (10, Fig 3).
- 4) Unscrew the two bolts on the left cover and remove the cover, connect air hose (2, Fig 3) previously mentioned to the side holes which control the tilting 5-way valve. Fix the left cover.
- 5) Fix the plastic cover (7, Fig 3) with two bolts (4, Fig 3).
- 6) Mount the plastic back cover (5, Fig 3) on the column with screw (6, Fig 3).

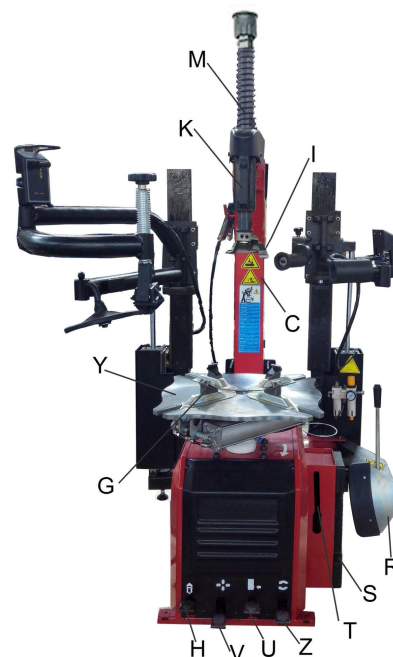


Fig 4

8. Electricity and Pneumatic connections:

Warning: Before installation and connection, check to be sure that the electricity power supply corresponds to the machine technical data. All the installation of electric and pneumatic devices must be operated by a professional electrician.

Connect the compressed air connector which is on the machine right side with compressed air system. The electric grid that the machine connects to must have fuses protection device and good outer cover grounding protection. Install the leakage automatic air switch on the main power supply, leakage current is set at 30mA

Caution: No power plug for this machine, the user should self-connect one power plug no less than 16A as well as in line with the machine voltage. Or directly connect with the power supply according to the above requirements.

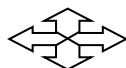
9. Adjusting operation:



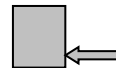
Tilting pedal (H)



Turntable Rotation pedal (Z)



Jaws open and close pedal(V)



Bead Breaker pedal(U)



Rapid Tire Inflation Pedal (B)

Please note: below operation refer to Fig 4

Tread the Turntable Rotation Pedal (Z), Turntable (Y) clockwise rotation;

Lift up the Turntable Rotation Pedal (Z), Turntable (Y) counterclockwise rotation.

Tread Bead Breaker Pedal (U), Bead Breaker shovel (R) compress; release Bead Breaker Pedal (U), Bead Breaker shovel (R) back to original position.

Tread totally down Jaws open and close Pedal (V), four clamps (G) on the turntable open; Tread again, four clamps (G) close. When the pedal is in the middle position, the four clamps stop moving.

Depress pneumatic locking button (K) to lock the Slide arm (N) and Vertical arm (M).

Tread the Bead Breaker pedal (H), the tilting column (C) backwards down; depress again, the tilting column return.

Tyre changer operation is consisted of three parts:

- 1) Breaking 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.

9.1. Breaking the tyre bead:

Ensure to exhaust the air in the tyre completely, place the tyre against the rubber buffer (S). Bring the shovel (F) against the bead about 10mm from the edge of the rim shown as **Fig 5**. Depress Bead breaker Pedal (U) to push paddle into tyre. Repeat the above operations on different positions around the tyre and both sides of tyre until tyre bead is released completely.

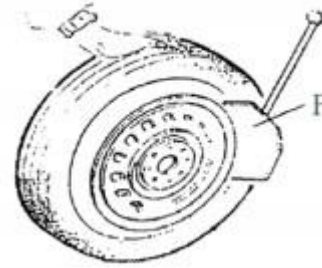


Fig 5

9.2. Demounting the tyre :

Ensure to remove all the weights on the wheel rim and to exhaust the air in the tyre completely before this operation. Apply lubricating grease (or similar lubricant) around the tyre bead. Without the lubricant may lead to badly wear and tear on tyre.

Clamp the wheel methods shown as below regarded to the ruled dimension:

a- to clamp the wheel from outside:

Depress the Jaws open and close Pedal (V) halfway down to middle, positioning for the four clamps (G) by reference scale on the Turntable (Y); put the tyre on turntable, hold the rim, and depress the Jaws open and close Pedal (V) until the wheel is secured by the jaws.

b- to clamp the wheel from inside:

Positioning for the four clamps (G) and let them all closed. Put the tyre on the turntable and depress the Jaws open and close Pedal (V) to open the clamps thereby lock the wheel in place.

Caution: Check to make sure the wheel firmly secured by the four clamps before next step.

Lower the Vertical Arm (M) until the Mounting head/demounting head (I) rests next to the edge of the rim, flip pneumatic locking button (K) to lock the Vertical Arm (M) and Horizontal arm in position, and control the distance from Mounting head/demounting head to the edge of wheel rim about 2-3 mm. Insert the Lifting Lever (T) between the tyre bead and the front section of the mounting head/demounting head (I), and move the tyre above the mounting head/demounting head as shown as **Fig 6**.

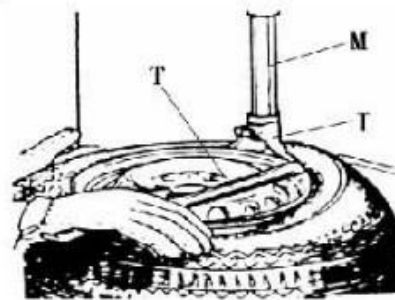


Fig 6

Caution: Chains, bracelets, loose clothes and anything else close to the rotating parts will bring danger to the operator.

With the Lifting Lever held in position, depress the Turntable Rotation Pedal (Z), rotate the Turntable (Y) in a clockwise direction until the tyre is completely separated from the wheel rim.

For the other side tyre demounting, keep using the lifting lever to lift the tyre, make the other side tyre separated from the wheel rim. Depress the Tilting pedal (H), the column backward down, take out the tyre.

9.3. Mounting the tyre :

Caution: Check to make sure that the tyre and the wheel rim are of same size before mounting the tyre.

To avoid any damage on tyre, lubricate the tyre bead and the wheel rim with the lubrication recommended by manufacturer. Put on the tyre and check the situation.

Caution: When clamp the wheel rim, don't put your hands on the wheel rim to avoid injury during this operation.

Lock the Hexagonal Vertical Mounting Arm, put the tyre on the rim, let the Rocker Arm back to place as demounting the tyre.

And let one side of tyre down bead above the rear section of the Mounting head/demounting head, the other side under the front section of the Mounting head/demounting head. Suppress the tyre with hands or help arm, and then spin the turntable for mounting the tyre down bead.

Repeat the above operation for mounting the tyre up bead. (Fig 7)

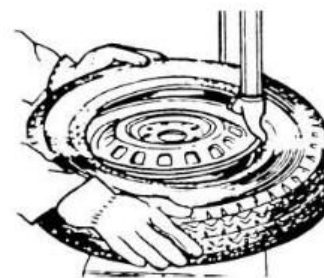


Fig 7

10. Help Arm 056

The help arm 056 is an auxiliary device for tire changer, it is used to help to demount and mount tires.

Before any operation of this machine, the operator is requested to read the manual carefully. Do not attempt any operations that are not stated in it. Manufacturer will not be responsible for any injury or damage caused by improper operation. Please keep the manual handy for consulting.

10.1 Technical Data

Work Pressure	8~10 bar
Weight	100kg
Package dimension	1550*310*550mm
Noise Level	LpA<75dB

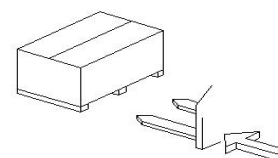


Fig 8

10.2. Safety Regulations

This device is especially reserved to trained professional personnel or somebody who has experiences on mechanical operation and read this manual carefully. This device must be used together with our tire changers, we are not sure it can work with others. Manufacturer won't be responsible for any unauthorized modification

10.3. Installation

Notice!

The installation of this auxiliary device should be done by professional personnel. Before assembly, disconnect the device from power supply and air source.

10.3.1. Transport

Move the device with a forklift truck as illustrated in Fig 8.

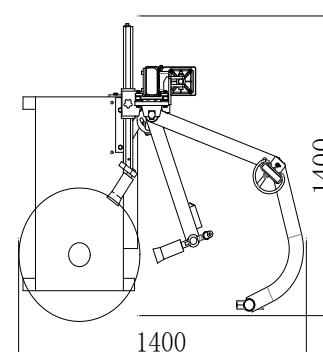


Fig 9

10.3.2. Unpacking

When unpacking, check and make sure all parts shown on the packing list are included. If any parts are missing or broken, please call the manufacturer or the dealer ASAP. Please keep the package out of children's reach.

10.3.3. Workplace Requirement

Fig 9 shows the minimum distance (cm) from walls after assembly this auxiliary device. Please choose the

right place to install it.

10.3.4 Assembly

- 1) Disconnect the tire changer from power supply and air source.
- 2) Fix the column on the body with four screw1 and adjust the support2 to a suitable location; (Fig 10)
- 3) Connect the air hose to the corresponding joint through the rear hole of the body.

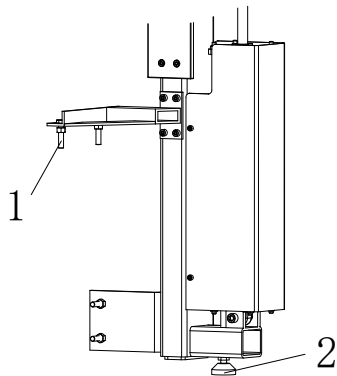


Fig 10

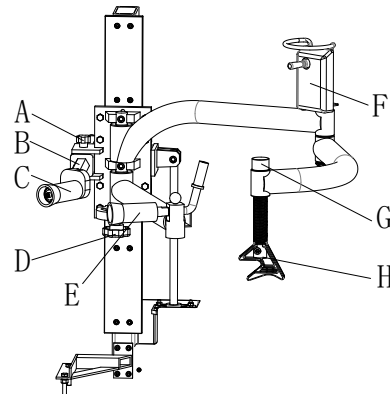


Fig 11



Fig 12

10.4. Functional Parts

Fig 11 shows functional parts to the 056 device:

- | | |
|--------------------------------|-----------------------------|
| A. Little adjust handle | B. Hexagonal horizontal arm |
| C. Tire lifting roller | D. Large adjust handle |
| E. Tire lifting roller support | F. Lifting switch |
| H. Adjustable threaded rod | |

10.5. Operations

Mounting and demounting big flat tire is difficult work. By the help of 056 help arm to mount/demount the tire from the tire bead will make the operation easier. It is a good helper for tire changer.

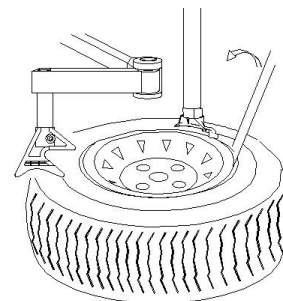


Fig 13

10.5.1. Fixing The Tire

Loosen the bead according to the manual. Clamp the tire from outside, tread the corresponding pedal to open the jaws;

Put the tire on the turntable; Tread the corresponding pedal to close the jaws until they near the rim.

10.5.2. Demounting The Tire

-1. Generally speaking, tire is very tight. Loosen the beads with the tire pressing head first (or using the bead breaker if it too tight to loosen).

Pull out the Hexagonal horizontal arm; let the tire pressing roller above the tire without collision.

Lower the tire pressing roller lower with the switch handle to press the tire. Tread the pedal to rotate the turntable. Loosen the bead during this procedure. (**Fig 12**)

Caution: Lubricate the tire pressing head (upper) and the bead before the operation.

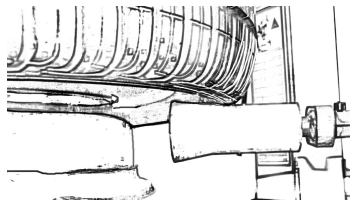


Fig 14

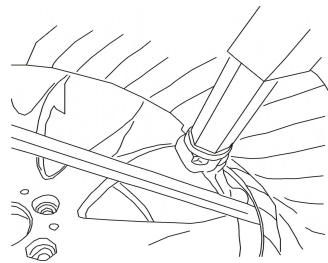


Fig 15

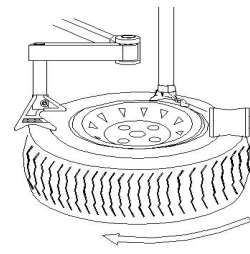


Fig 16

-2. Demounting the upper bead

a- Move the mounting head near the edge of the rim, rotate the tire pressing arm to move the tire pressing block above the tire, press the switch handle to depress the tire, and insert the lifting lever in the clearance between the tire and the rim, then hang the bead on the mounting head. (Fig14、 15)

b- Raise the auxiliary arm, rotate the tire pressing head to the opposite. Press the tire with the switch handle to create enough space.

c- Tread the power supply pedal to rotate the turntable. With the help of the tire pressing head, the upper tire bead is detached.

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

-3. Demounting the bottom bead

Turn the roller support and move it under the tire, but don't touch it with the rim.; (Fig 14) Tread the power supply pedal to rotate the turntable, meanwhile, lift help arm gradually to loosen tire and completely demount the bottom bead.

10.5.3. Mounting the tire

Lubricate the tire bead and rotate the turntable, mount the bottom bead with the mounting head; Pull the hex rod out, press the upper bead under the mounting head 5mm with the tire pressing roller, rotate the rotating arm and move the tire pressing block above the tire; Don't touch with the rim in the operation, or it causes damage on the rim due to friction.

Tread the power supply pedal to rotate the turntable and the tire pressing block, lower the help arm to press the tire under the rim. Mount the tire with the mounting head. Please pay attention to the safety in the process of operation. (Fig 16)

11. Help Arm 057

The help arm 057 is an auxiliary device for tire changer, it is used to help to demount and mount tires.

Before any operation of this machine, the operator is requested to read the manual carefully. Do not attempt any operations that are not stated in it. Manufacturer will not be responsible for any injury or damage caused by improper operation. Please keep the manual handy for consulting.

11.1. Technical Data

Work Pressure	8~10 bar
Weight	100kg
Package dimension	1550*310*550mm
Noise Level	LpA<75dB

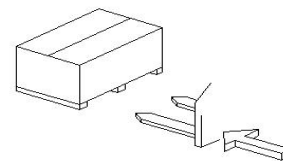


Fig 17

设置格式[微软用户]: 左, 缩进: 首行缩进: 0 毫米

11.2. Safety Regulations

This device is especially reserved to trained professional personnel or somebody who has experiences on mechanical operation and read this manual carefully. This device must be used together with our tire changers, we are not sure it can work with others. Manufacturer won't be responsible for any unauthorized modification

11.3. Installation

Notice!
The installation of this auxiliary device should be done by professional personnel. Before assembly, disconnect the device from power supply and air source.

11.3.1. Transport

Move the device with a forklift truck as illustrated in Fig 17.

11.3.2. Unpacking

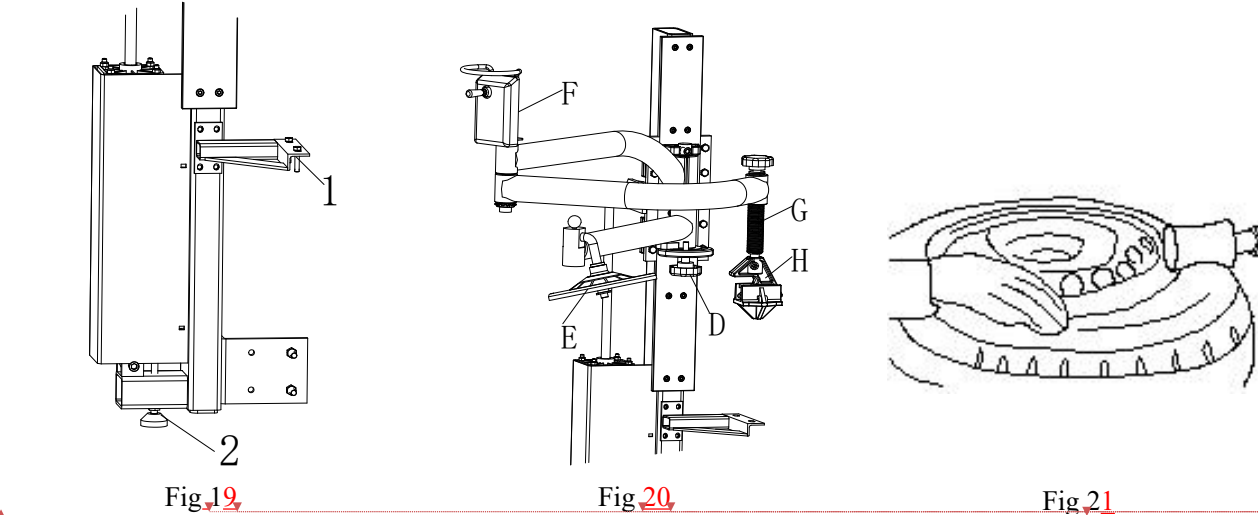
When unpacking, check and make sure all parts shown on the packing list are included. If any parts are missing or broken, please call the manufacturer or the dealer ASAP. Please keep the package out of children's reach.

11.3.3. Workplace Requirement

Fig 18 shows the minimum distance (cm) from walls after assembly this auxiliary device. Please choose the right place to install it.

11.3.4 Assembly

- 1) Disconnect the tire changer from power supply and air source.
- 2) Fix the column on the body with four screw1 and adjust the support2 to a suitable location; (Fig 19)
- 3) Connect the air hose to the corresponding joint through the rear hole of the body.



11.4. Functional Parts

Fig 20 shows functional parts to the 056 device:

- | | |
|--|--------------------------------|
| D. Large adjust handle | E. Tire lifting roller support |
| F. Lifting switch | H. Adjustable threaded rod |
| G. Titling shaft of tire pressing head | |

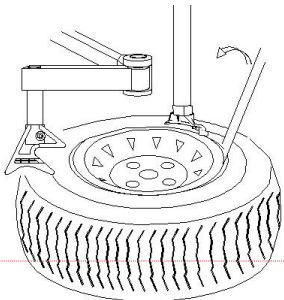


Fig 22

11.5. Operations

Mounting and demounting big flat tire is difficult work. By the help of 057help arm to mount/demount the tire from the tire bead will make the operation easier. It is a good helper for tire changer.

11.5.1. Fixing The Tire

Loosen the bead according to the manual. Clamp the tire from outside, tread the corresponding pedal to open the jaws;

Put the tire on the turntable; Tread the corresponding pedal to close the jaws until they near the rim.

11.5.2. Demounting The Tire

-1. Generally speaking, tire is very tight. Loosen the beads with the tire pressing head first (or using the bead breaker if it too tight to loosen).

Pull out the Hexagonal horizontal arm; let the tire pressing roller above the tire without collision.

Lower the tire pressing roller lower with the switch handle to press the tire. Tread the pedal to rotate the turntable.

Loosen the bead during this procedure. (Fig 21)

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Caution: Lubricate the tire pressing head (upper) and the bead before the operation.

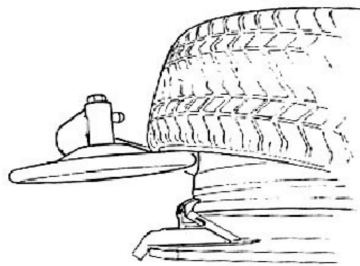


Fig 23

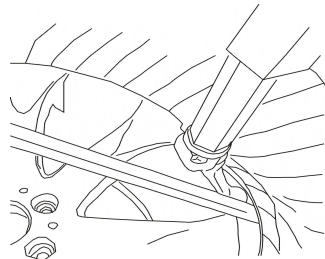


Fig 24

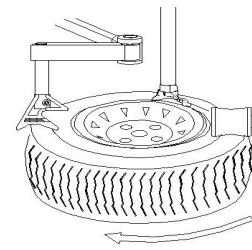


Fig 25

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-2. Demounting the upper bead

a- Move the mounting head near the edge of the rim, rotate the tire pressing arm to move the tire pressing block above the tire, press the switch handle to depress the tire, and insert the lifting lever in the clearance between the tire and the rim, then hang the bead on the mounting head. (Fig 23, 24)

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b- Raise the auxiliary arm, rotate the tire pressing head to the opposite. Press the tire with the switch handle to create enough space.

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c- Tread the power supply pedal to rotate the turntable. With the help of the tire pressing head, the upper tire bead is detached.

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

-3. Demounting the bottom bead

Turn the roller support and move it under the tire, but don't touch it with the rim.; (Fig 23) Tread the power supply pedal to rotate the turntable, meanwhile, lift help arm gradually to loosen tire and completely demount the bottom bead.

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11.5.3. Mounting the tire

Lubricate the tire bead and rotate the turntable, mount the bottom bead with the mounting head; Pull the hex rod out, press the upper bead under the mounting head 5mm with the tire pressing roller, rotate the rotating arm and move the tire pressing block above the tire;

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

Tread the power supply pedal to rotate the turntable and the tire pressing block, lower the help arm to press the tire under the rim. Mount the tire with the mounting head. Please pay attention to the safety in the process of operation.
(Fig 25)

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删除[微软用户]:

12. Automatic mount/demount head (T-shape):

T series automatic head is an assist device of a tyre changer. It frees the machinist from using the conventional lever to mount and demount tyres, greatly reduces labor intensity and the risk of scratching the tyres and rims. Correct and skillful operation can get twice the result with half the effort.

Before using this device, please read carefully the contents in this manual. The manufacturer shall not be held responsibility nor liable for injury or damage caused by any improper use, or operation beyond capacity. Keep this manual in good conditions for future references.

Note: This manual is the important part of the product. Before installing and operating this device, please read the warnings and instructions in this manual since they provide important information on operating safety and maintenance. Please keep this manual in good condition for future maintenance references.

***Note: Use this device to mount and demount 13-inch and above tyres only. When removing the tyre, pay attention to avoid the position of tyre pressure sensor or valve core.**

12.1. Technical parameters

Operating pressure	8~10 bar
Weight	8Kg
Dimensions	750 x 200 x 250 mm
Working noise level	LpA<75dB



12.2. Safety rules

The device must be used by trained personnel or personnel who has read this manual carefully and with experience in mechanical operation.

Please use this device with our tyre changer as it is not guaranteed that the device can be used normally on other tyre changers. Our company shall not be held responsibility nor liable on any unauthorized modification of the product.

12.3. Transfers and installation

Note!

This device must be installed by professional personnel. Before installing this device, please make sure that the electrical and air supply are disconnected.

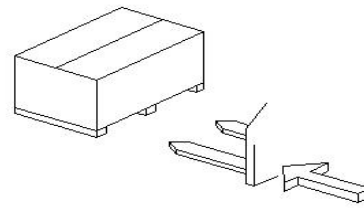


Fig.26

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12.3.1. Transport

Please use the forklift for transportation as shown by the picture Fig.26.

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12.3.2. Unpacking

Check the perfect condition of the product, making sure that no part is damage or missing (refer to packing list), if in doubt, please get in touch with your distributor or manufacturer.

**It is recommended to store the cardboard box and other accessories for future use.
Keep packing elements away from children.**

12.3.3. Installing position

Replace the duck head by the automatic tyre mount/demount head device as showed by the picture Fig.27.

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12.3.4. Assembling (Refer to Fig.28)

- 1) Disconnect the electrical and air supply of tyre changer;
- 2) Use the hex socket set screw with flat end T02-18 and T02-33 to fix the automatic head T03 to the hex rod 1;
- 3) Cut the air hose 13 and connect the hose end with a tee connector (mini)1/8 T02-41, then connect the extension spiral tube T02-40 to the connector;
- 4) Make the other end of the extension spiral tube T02-40 connected with the quick elbow connector T02-07-2 which is on the two position three way hand operated valve T02-3;
- 5) Connect air hoses T02-37 to the quick elbow connector T02-06,T02-07-1,T02-07 and T02-06-1;
- 6) Secure the two position three way hand operated valve T02-03 and the cylinder cover T03-2 with screws and nuts;
- 7) Secure the cylinder cover T03-2 to the air cylinder T03-4 with hex socket head cap screws 9.

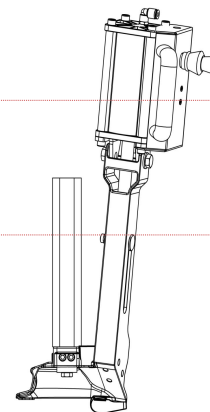


Fig.27

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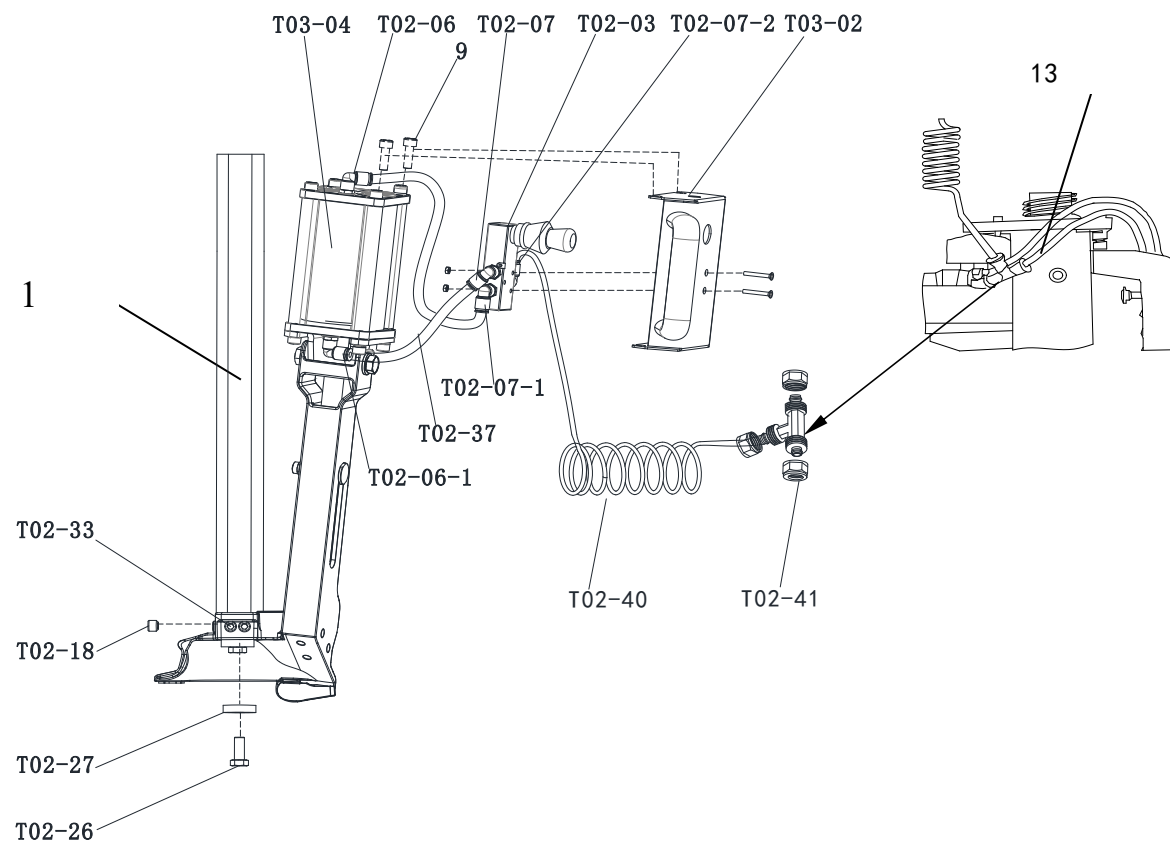


Fig.28

12.4. Main components

Main components of T series tyre mount / demount head system as shown by the picture Fig.19 and the exploded view:

- T03-25 Automatic tyre mount/demount hook
- T03-04 Cylinder of automatic tyre mount/demount head
- T03-15 Automatic tyre mount/demount head body
- T02-03 Two position three way hand operated valve

12.5. Necessary conditions for commissioning

Certain that the tyre changer and air compressor are connected in good condition when operating the T series tyre mount/demount head system. Keep the air pressure at 8~10bar.

12.6. Operation

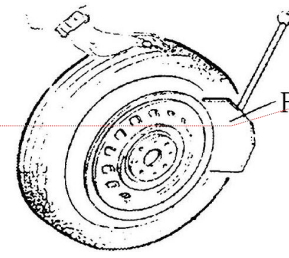
T series mount/demount head is an auxiliary device used to help the operator to mount and demount tyres.

Warning: Before performing any operation, the operator should wear tight sleeve working clothes, working cap and non-slip shoes. Please be really careful that deflate the tyre and remove all balance weights from the rim before operation.

Warning: Irrelevant items like necklaces, bracelets, or loose clothing might be trapped by rotating parts, which would be dangerous to the operator.

12.6.1. Lock the tyre

- 1) Must deflate the tyre first; then lean the tyre against the rubber pad on the right side of the tyre changer. Move the bead breaker (F) against the tyre bead, about 1cm to the rim (Fig. 29). Step on the tyre pressing pedal, and the bead breaker will move inward to press tyre bead. Repeat the process alongside the rim, with different angle to press both sides of the tyre until tyre bead has been completely loosened;



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- 2) Then put the tyre on turntable and clamp the rim. If the tyre is still too tight, please loosen it with a bead breaker according to the above steps, which shows how to loosen a tyre with a tyre changer.

Fig.29

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Warning; Must make sure that the rim has been clamped firmly before proceeding to the next step

Warning: When locking the rim, please never put your hands between the rim and the clamping jaws. Otherwise, the hand will be hurt.

12.6.2. Demount a tyre

Before operating, remove all balance weights from the tyre and check if the tyre has been deflated. Lubricate/grease the tyre bead. Otherwise it may cause severe wear and damage to the tyre.

1. Press and loosen the tyre

- 1) Low profile tyre are always tight. After loosened by bead breaker, clamp the tyre on turntable;

- 2) Adjust the help arm and place the pressing roller on the tyre (Fig. 30-a), without touching the rim;

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- 3) Pull down the control handle of the help arm system (Fig. 30-b) and lower the pressing roller to press the tyre. Step on rotating pedal to loosen the tyre and apply the lubricant (Fig. 30-c);

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2. Demount upper tyre bead

- 1) Adjust the sliding arm to put the mount/demount head close to the rim (Fig. 30-c) and lock the hexagonal rod;

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- 2) Pull down cylinder hand operated valve of mount/demount head (Fig. 30-e), and the hook will go inside the tyre from the rim edge (Fig. 30-d). Then push up the control handle of the help arm system (Fig. 30-b) to set pressing roller back. Rotate the turntable to let the hook go deep inside the tyre. Pull the cylinder operated hand valve up and the moving part of the hook will lift the tyre bead;

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- 3) When demounting run-flat tyres, the help arm system is required (Fig. 30-d). Move the arm to the opposite side against the mount/demount head, and pull the control handle (Fig. 30-b) to press the tyre to drop center of the rim by the pressing block. Move the pressing roller to press the tyre near the hook, which will facilitate the hook sliding inside the tyre (Fig 30-f). Then raise the help arm and put the tyre pressing roller back to standby position;

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- 4) Keep stepping on the rotating pedal to rotate the turntable and stops once the hook has slid inside the tyre. Lift the upper bead as shown by the picture Fig. 30-g.

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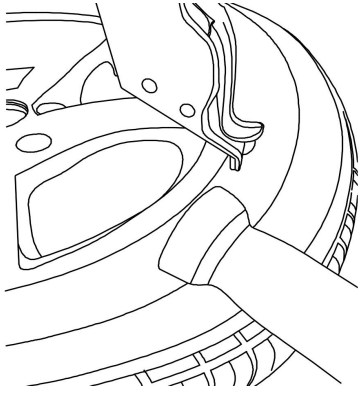


Fig. 30-a

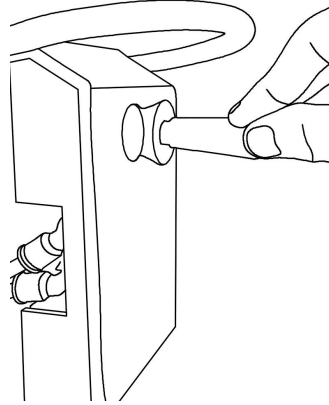


Fig. 30-b

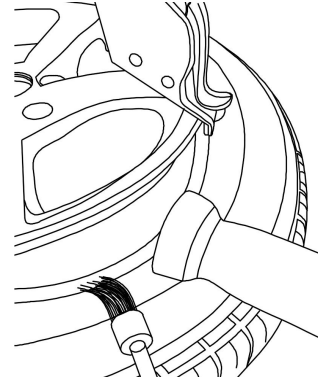


Fig. 30-c

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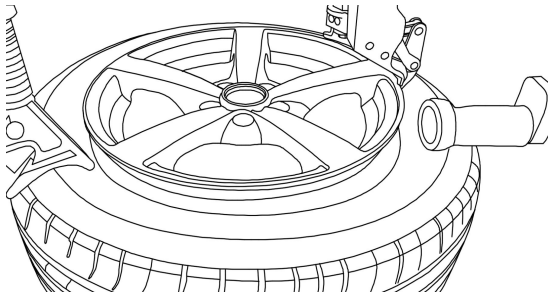


Fig. 30-d

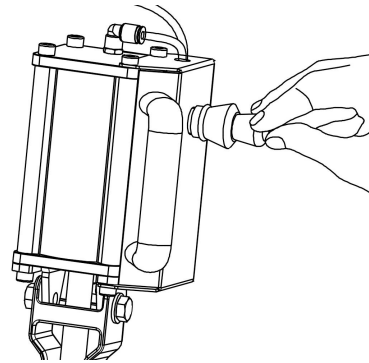


Fig. 30-e

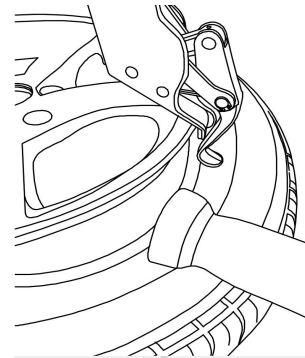


Fig. 30-f

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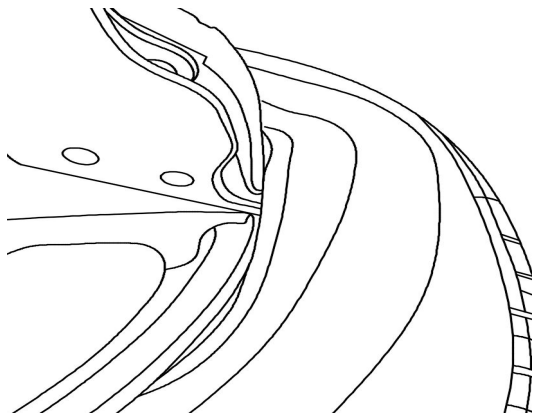


Fig. 30-g

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3. Demount lower tyre bead

- 1) Adjust the help arm and move the pressing roller under the tyre (Fig.22), without touching the rim.
- 2) Pull the control handle of the help system upward to lift the lower bead to a position just above the rim.
- 3) Pull down cylinder hand operated valve of mount/demount head, and the hook will go deep into the tyre from the rim and lift the tyre up slowly. The position of the hook please

refer to the picture Fig.31, Then pull up the cylinder hand operated valve to lift the lower tyre bead off the rim.

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- 4) Hold the tyre with your hand and step on the rotating pedal to turn the turntable, so as to take the lower bead off the rim.
- 5) Reset the help arm and put the tyre pressing roller back to standby position.

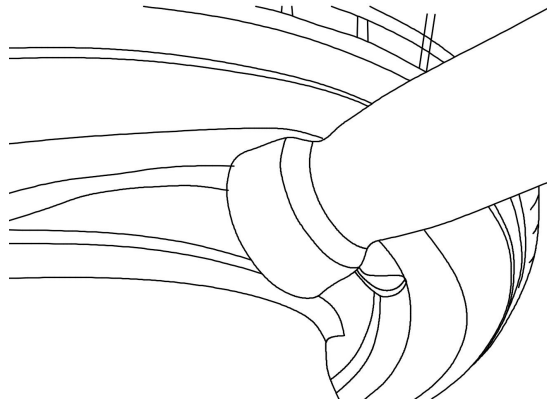


Fig.31,

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11.6.3. Mount a tyre

Warning: Before mounting a tyre, please carefully check whether the tyre matches the rim. Lubricate the tyre bead for smooth operation and protecting the bead. Lay the tyre on the rim and check its condition.

1、Mount the lower tyre bead

Reset the mount/demount hook to the original position by operating hand operated valve and then place the tyre diagonally on the rim; place one side of the lower tyre bead above the tail section of the mount/demount head, and the other side, under the mount/demount hook (Fig.32). Hold the tyre with your hand and turn the turntable to mount the lower bead of the tyre.

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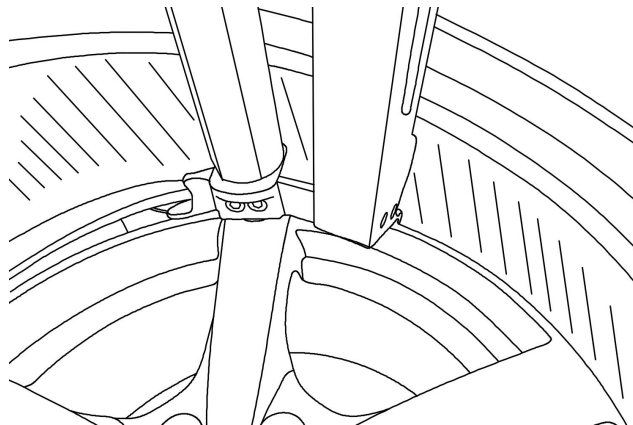


Fig.32

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2、Mount the upper tyre bead

1) Pull out the pressing roller and pull the control handle of the help arm system to lower the roller on to the tyre (Fig.33).

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2) Rotate the arm and raise the pressing block over the tyre; then pull the control handle downward to press the tyre bead in to the drop center by pressing block and roller.

- 3) Stepping on the rotating pedal, the turntable rotates and the pressing block moves accordingly (Fig.33). With the help of the mount/demount head, mount upper tyre bead on the wheel.
- 4) Finally, pull control handle upward to reset the tyre pressing block and roller back to standby position.

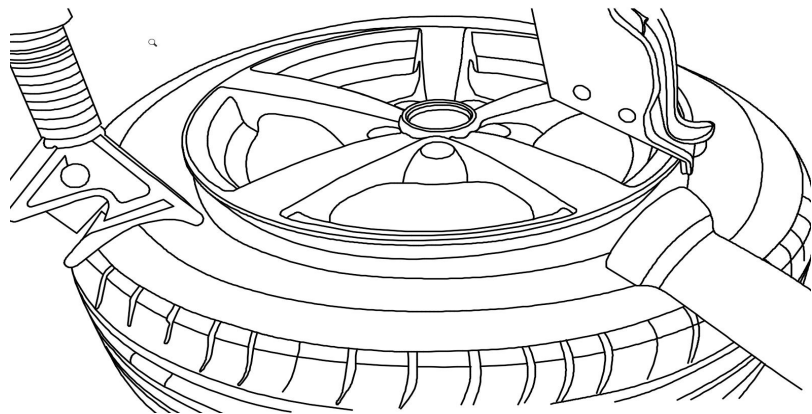


Fig.33

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13. Rapid tyre inflation system (only suitable for the IT-suffix version machine):

- 1)Rapid Tire Inflation Device:
- 2)Note: before inflating operation, please make sure the pneumatic power supply connect well.
- 3)Before operation, must check the devices perform well as follow:
- a. Press Rapid Tire Inflation Pedal to the middle position (Fig 34, position 1), the inflating head should give air.
- b. Press Rapid Tire Inflation Pedal all the way down (Fig 34, position 2), a strong air blast should come from the holes in the four jaws' locking sliders. (Fig 35)

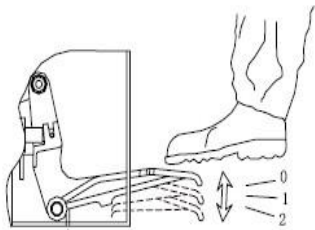


Fig 34

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13.1. Wheel rim lock and Tire inflation:

Note: A wheel can explode if:

- 1). the diameter of the rim is not exactly the same at the tyre's.
- 2). the rim or tyre are defective.
- 3). the tyre is inflated to a pressure higher than the maximum recommended by the manufacturer.
- 4). the operator does not observe the requisite safety regulations.

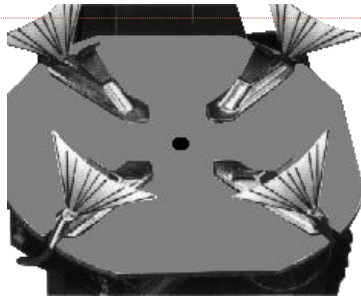


Fig 35

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13.2. Inflation for tire with inner tube:

- 1). Remove the valve stem.
- 2). Check to be certain that tyre and rim diameter correspond.
- 3). Check to be certain that rim and beads are sufficiently lubricated.
- 4). Press the pedal down to the middle position to start inflation.
- 5). Release frequently the inflating pedal to check pressure on the manometer. If the air pressure is too high, press the button under the manometer for release the rest air until the correct pressure is reached.

13.3. Inflation for tubeless tire:

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

- 1). Remove the valve stem.
 - 2). Check to be certain that tire and rim diameter correspond.
 - 3). Check to be certain that rim and beads are sufficiently lubricated.
 - 4). Press the pedal down to the middle position to start inflation.
 - 5). If the bead of the tire 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.
 - 6). Release the tyre, set the pedal back to the middle position and continue to inflate the tyre to the required pressure.
- If the air pressure is too high, press the button under the manometer for release the rest air until the correct pressure is reached.

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

14. Moving machine:

Please use forklift to move the machine. Disconnect the tyre changer from the electricity power supply and pneumatic power supply, lift the base board and insert the feet of forklift. Then mount the tyre changer machine to a new position and fix it tightly.

Note: the place chosen for fixing the tyre changer must meet the safety regulation.

15. Maintenance:

Caution: only the professional persons can do the maintenance. To prolong the machine's life, maintain the machine 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 pneumatic power supply, and depress the Jaws open and close Pedal or Turntable Rotation 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.

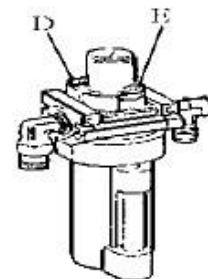


Fig 36

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- Clean the machine once every day after work. Clean the dirt on the turntable with diesel oil once per week and lubricate the slides and clamps.

- Following maintenance must be done at least once per month:

Check oil level in Oil Fog Maker, please be filled with SAE30# oil if need. Unscrew with hex wrench (E). Based on connection of compressed air, first to depress Jaws open and close Pedal or Turntable Rotation Pedal 5-6 times, and then check whether oil in Oil Fog Maker drops down a drip of oil. For continuous operation, depress twice every time, drop down a drip of oil, otherwise adjust the screw (D) that controlled oil enter with minus screwdriver.

(Fig 36)

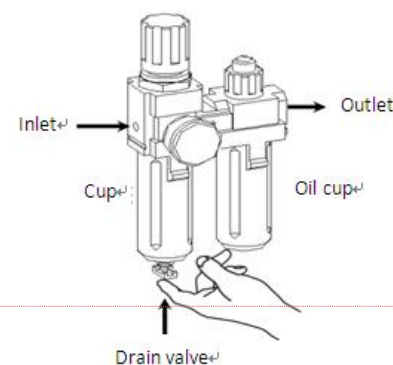


Fig 36-1

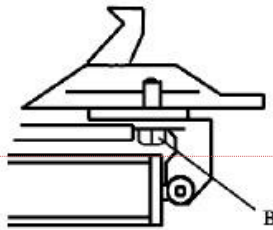
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- As shown in Figure 36-1, when you found there are some water in the cup, push up the drain valve to drain away water with your fingers; loosen your fingers after drained water, drain valve can be automatic closed under the action of the spring.

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Note: After the first 20 days of use, retighten the jaws with tightening screws (B) on the Turntable (Fig 37)



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Caution: please disconnect the machine from electric power supply and pneumatic power supply.

Note: If Vertical Arm not be locked or not meet the requirement that 2-3mm from the bottom of Mounting head/demounting head to rim, please adjust Hexagonal Locking Plate, refer to Fig 38 and adjust the (X).

Fig 37

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Note: In order to achieve the reliability of jaws and Bead Breaker shovel, operate as follows to keep their valves clean:

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1. Remove the left side cover of the machine body by unscrewing the two screws;
2. Loosen the valve mufflers (A) which belong to Jaws open and close Pedal and Bead Breaker Pedal;
3. Clean the mufflers with compressed air, please replace it referring to the spare parts list if it is damaged. (Fig 39)

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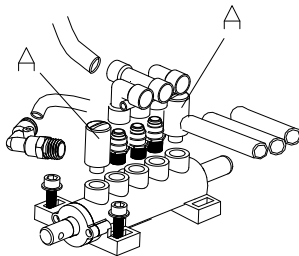
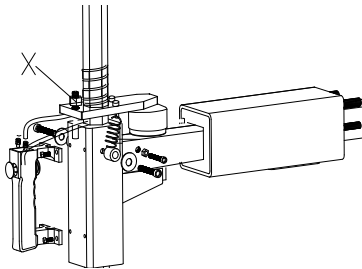


Fig 38

Fig 39

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16. Trouble shooting table:

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Problem	Reason	Solution
<u>The turntable rotate just in one direction or can't rotate.</u>	<u>Reverse Switch broken</u>	<u>Replace the Reverse Switch</u>
	<u>The Motor's malfunction</u>	<u>Check the motor cable or terminal block wire;</u> <u>Replace the motor if it was broken.</u>
<u>Demount or fix the wheel, the turntable can't lock (spin with wheel);</u> <u>The jaws delay to open/close;</u> <u>The turntable locks the rim incorrectly.</u>	<u>Leakage of Air network</u>	<u>Check all the parts on the air network.</u>
	<u>The clamping cylinder can't work.</u>	<u>Replace the cylinder piston.</u>
	<u>Worn jaws</u>	<u>Replace the jaws.</u>
	<u>Broken washers of the chuck cylinder</u>	<u>Replace it.</u>
<u>The mounting head/demounting head always touch the rim during operation.</u>	<u>The locking plate incorrectly adjust or unqualified.</u>	<u>Replace or adjust it.</u>
	<u>Screws on the chuck loose; the Vertical Arm can't be locked by Locking Plate</u>	<u>Tighten the screws; replace the Locking Plate.</u>
<u>The Bead Breaker Pedal and Jaw open and close Pedal can't turn back to the original position.</u>	<u>pedal spring broken</u>	<u>Replace it.</u>
<u>The Bead Breaker shovel operates difficulty.</u>	<u>Jammed silencer</u>	<u>Clean it or replace it.</u>
	<u>The washer on the Bead Breaker cylinder is broken.</u>	<u>Replace it.</u>

删除[微软用户]: **Problem**
Reason
Solution

The turntable rotate just in

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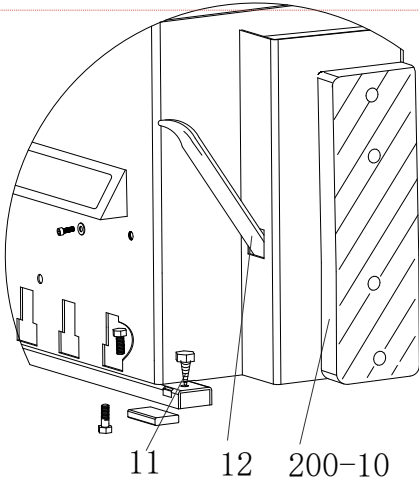
17. Guide for ordering spare parts

Firstly, the damaged or ordered sample should be gained and confirmed the quantity of spare parts
Confirm the replaced parts specification, avoid wrong order.

The confirmed method showed as following:

According to the use range and place position of parts, find out the codes of parts in the exploded drawing (section 17)
from the manual.

For example, if lifting level is needed to be ordered, resulting from the fact that lifting level always placed in the
sleeve, and its exploded drawing position is showed as below:



We can see the code “12” from the picture, then find out all the information of code “12” and record them.

11	B-027-060401-0	Grounding screw M6x40
12	C-200-580000-0	Lifting level
200-14	C-200-510000-0	Bead breaker arm rubber

The recorded information:

12	C-200-580000-0	Lifting level
----	----------------	---------------

Gather the detailed information of parts

Code .	Order code	Name	Qty	Purchase time of machine
12	C-200-580000-0	Lifting level	2	2009.6.25

Please contact the spare parts department and confirm the order.
After confirming the order with any problem, the spare parts department will deliver the goods for you according to
the order.

Special statement

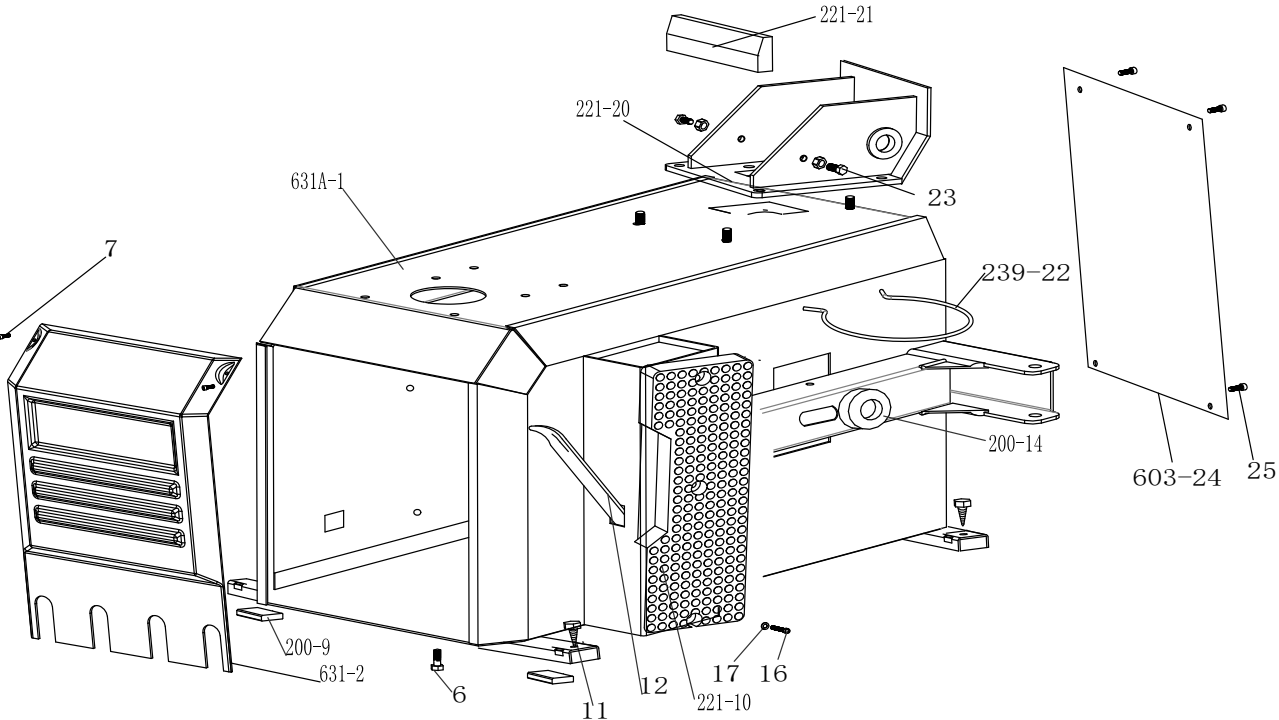
- ◆Manufacturer reserves the rights to change the parts specification without beforehand notice for the users.
- ◆Manufacturer do not liable for the modification and improvement of the products which have been sale

18. Wearing spare parts list

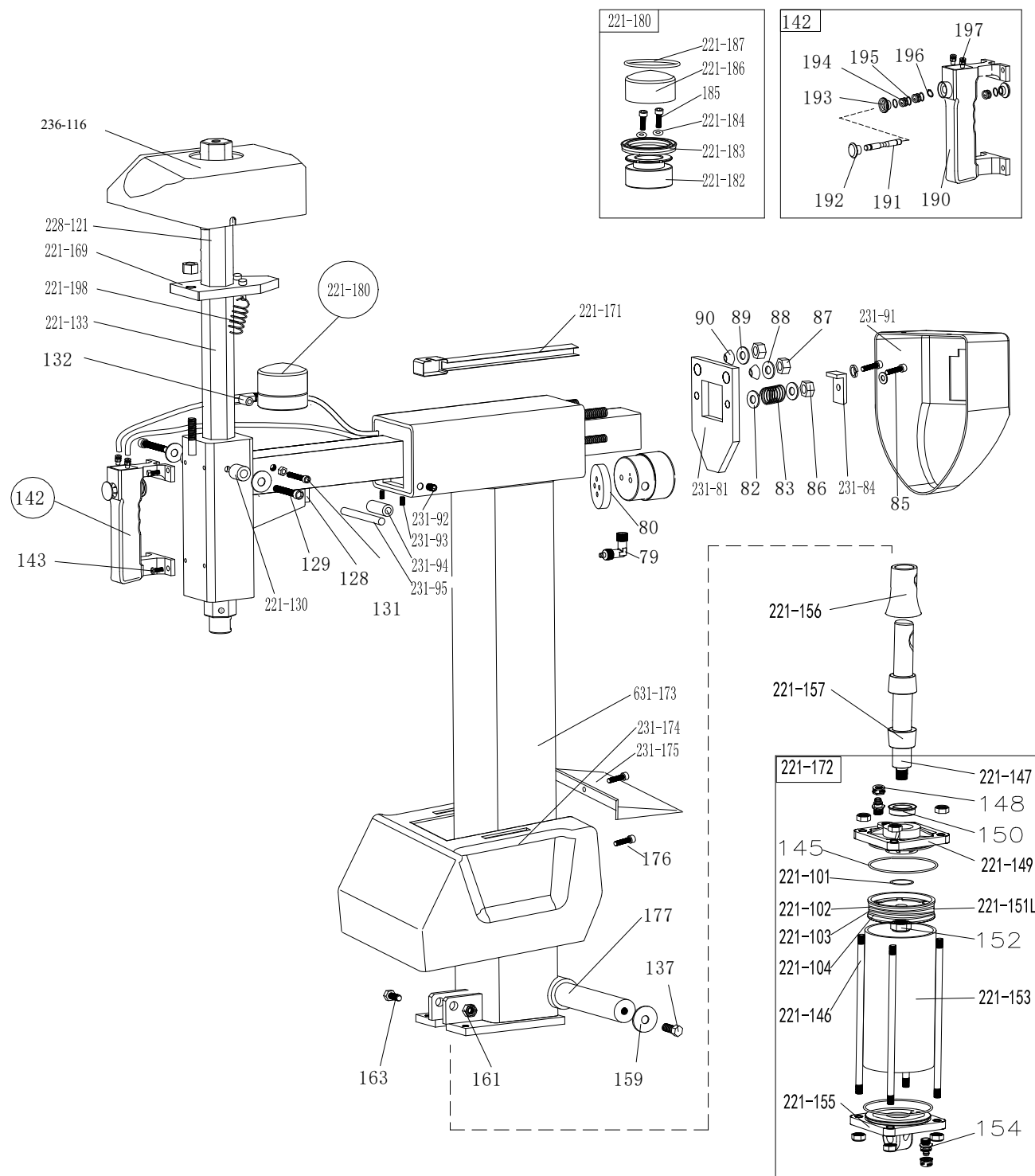
Code	Order code	Name	Code	Order code	Name
221-10	C-221-500000-0	Bead breaker buffer	363	S-005-200184-0	Y-seal D200*184*12
226	S-005-020075-0	V-seal 20*28*7.5	228-365	S-000-180500-0	O-seal Ø180*5
227	S-000-063265-0	O-seal 63*2.65	603-426	S-060-030000-0	Reverse switch
200-228	C-200-540000-0	Clamping cylinder piston Ø70	521	S-000-030355-0	O-seal Ø 30*3.55
232	S-000-019262-0	O-seal Ø19.6*2.62	200-532	S-000-059262-0	O-seal 59.9*2.62
306	S-000-016265-0	O-seal Ø 16*2.65	A86	S-030-010400-0	Water drain valve
307	S-000-020265-0	O-seal Ø 20*2.65	604	S-042-000686-0	Tyre changer belt A-28
228-362	S-000-195265-0	O-seal Ø198*3.1	811	S-033-330000-0	Oil fog maker 3300

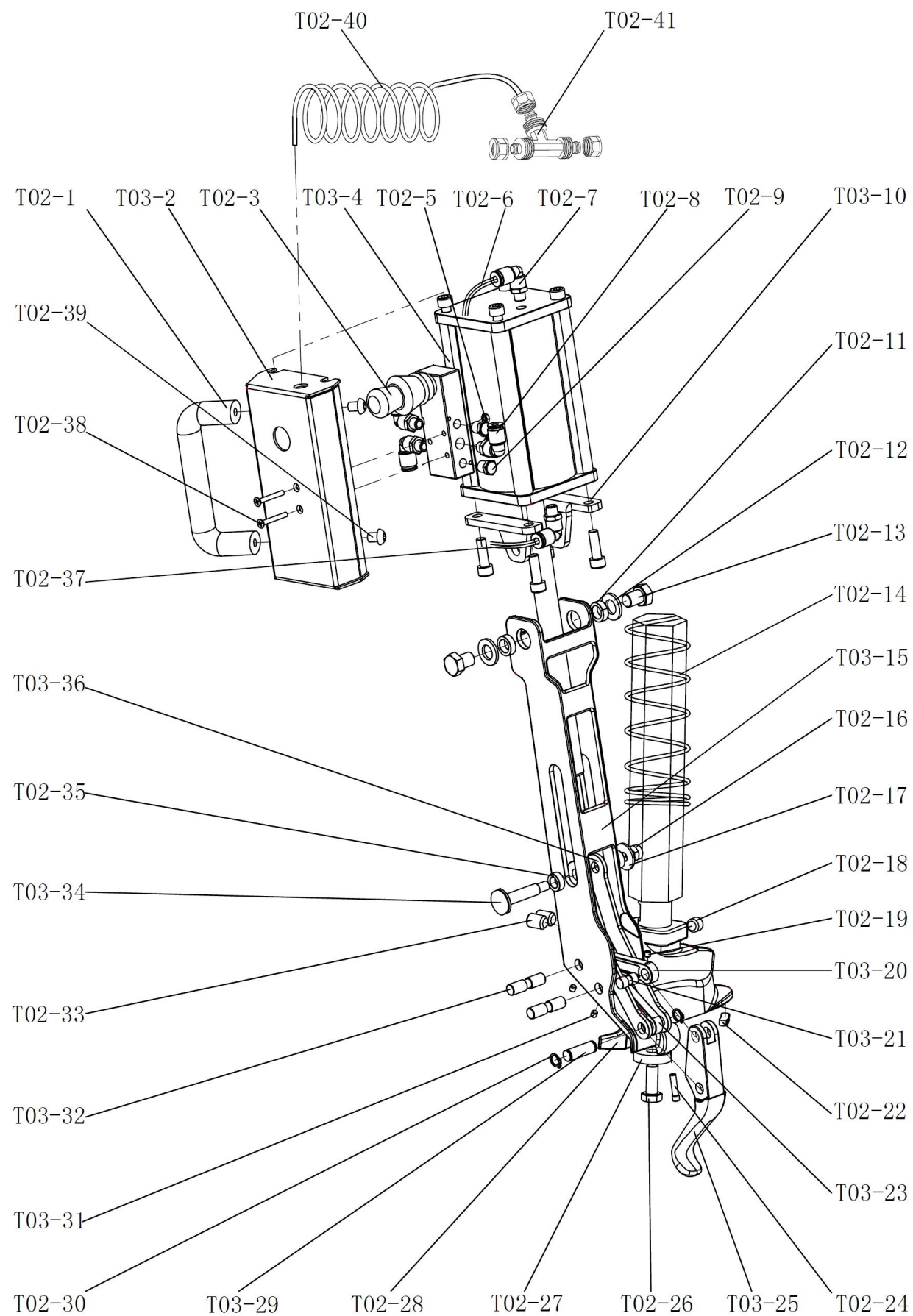
Remark: The parts in the list are easy broken parts, if other parts needed to be ordered, please check the manual.

19. Exploded drawing:



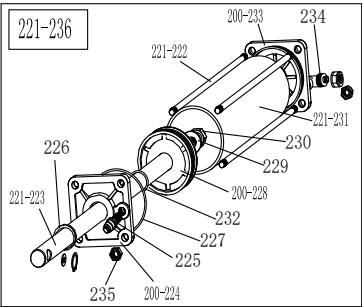
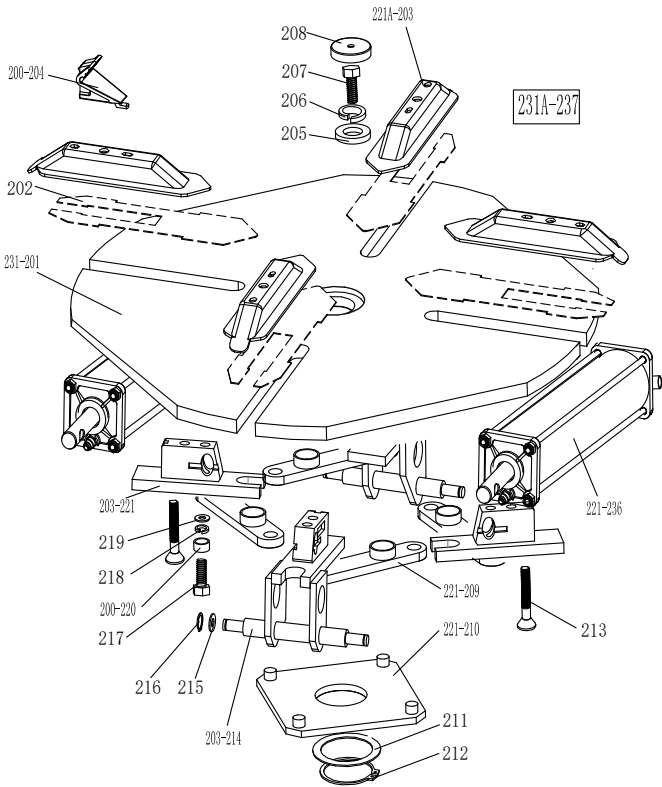
631A-1	JZ08001049248	Machine body 6631A	16	B-010-080201-0	Hex socket head bolt M8x20
631-2	C-6631-080100-0	Pedal front cover	17	B-040-081715-1	Flat washer Ø 8*17*1.5
6	B-014-080251-0	Outer hex bolt M8x25	221-20	CX-221-010106-0	Tilting seat
7	B-024-050101-0	Cross round head screw M5*10	221-21	C-221-820000-0	Tilting protect cover
200-9	C-000-001020-0	Rubber foot buffer	239-22	C-239-333700-0	Oil box support
221-10	C-221-500000-0	Bead breaker buffer	23	B-014-100251-0	Hex socket head bolt M10*25
11	B-027-060401-0	Grounding bolt M6x40	24	CX-6631-020000-A	Rear block plate
12	C-200-580000-0	Lifting level	25	B-010-060201-0	Hex socket head bolt M6x20
221-14	C-221-510000-0	Bead breaker arm buffer			



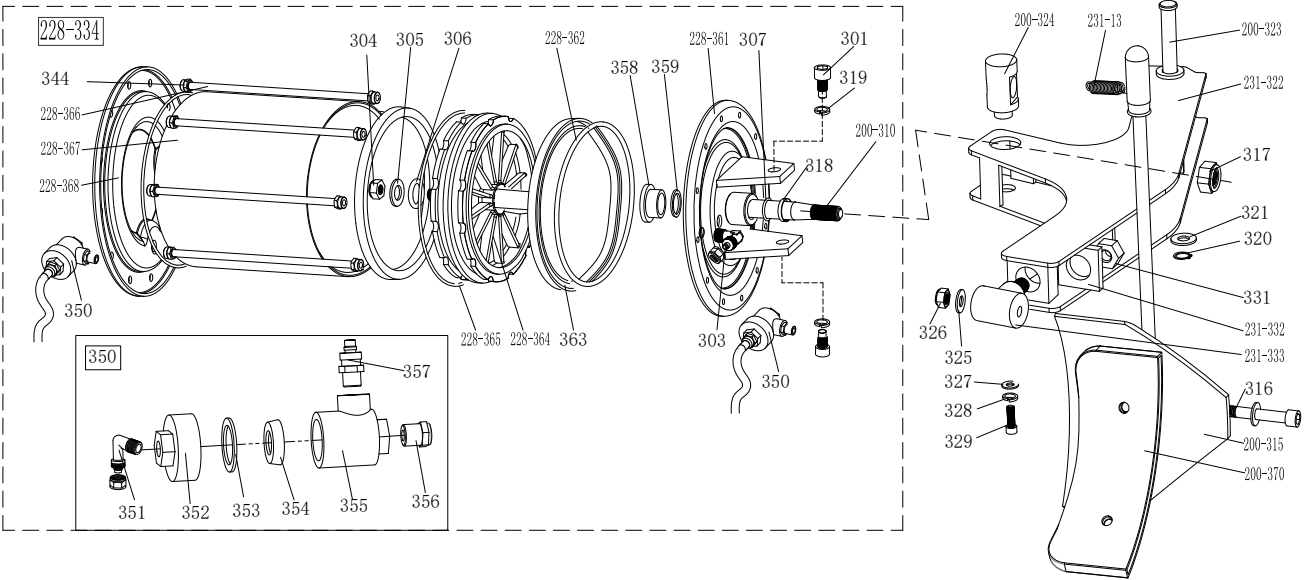


79	S-012-010806-0	Quick union 1/8-Ø6	221-149	C-221-350100-0	Tilting cylinder cover without handle
80	C-221-250600-0	Locking cylinder plate	150	S-005-020075-0	V seal Ø20*28*7.5
81	CX-231-190000-0	Horizontal arm locking plate	221-151L	C-221-550000-L	Tilting cylinder piston(Al-alloy) ϕ 75
82	B-040-081715-1	Flat washer ϕ8*17*1.5	152	B-004-120071-0	Nut (silver) M12*1.5*7
83	C-221-410000-0	Horizontal arm locking spring	221-153	C-221-350500-0	Tilting cylinder barrel
231-84	CX-231-240000-0	Horizontal arm block	154	S-010-010806-0	Straight union 1/8-Ø6
85	B-014-080201-0	Outer hex bolt M8*20	221-155	C-221-350300-0	Titling cylinder cover with handle
86	B-001-080001-0	Self-locking nut M8	221-156	CX-221-351000-0	Tilting cylinder piston rod cover
87	B-001-120001-0	Self-locking nut M12	221-157	C-221-350700-0	Titling cylinder rubber sheath 1
88	B-040-122520-1	Flat washer ϕ 12*25*2	159	B-040-104030-1	Flat washer 10*40*3
89	B-040-122520-1	Flat washer ϕ 12*25*2	161	B-001-120001-0	Self-locking nut M12
90	C-221-230000-0	Locking spacer	163	B-014-120651-0	Outer hex bolt M12×65
231-91	C-231-780000-0	Horizontal arm protection back cover	221-169	CX-221-220000-0	Hex locking board 221
231-92	B-007-100161-0	Hex socket head bolt M10*16	231-171	C-231-790000-0	Hose guide
231-93	B-007-080161-0	Hex socket head boltM8*16	221-172	CW-105-021102-0	Complete titling cylinder
231-94	C-231-251300-0	Column terminal roller	631-173	CX-6631-250000-0	Column
231-95	C-231-251400-0	Roller pin	231-175	C-231-460000-0	Titling Column back cover
221-107	S-005-065075-0	Y-seal 65*75*6	231-174	C-231-450000-0	Column protection cover
221-108	S-000-011180-0	O-seal Ø11X1.8	176	B-024-050161-1	Cross head screw 5*16
221-109	S-000-068353-0	O-seal Ø68X3.53	177	CX-221-260000-0	Column shaft
221-110	S-000-065053-0	O-seal Ø65X5.3	221-180		Complete locking cylinder
231-116	C-231-480000-0	Horizontal arm protection front cover	221-182	C-221-090100-0	Complete locking cylinder piston
128	C-221-200000-0	Shock absorber	221-183	S-005-050065-1	V-seal Ø50*60*6.5
129	B-010-060351-0	Hex socket head bolt M6×35	221-184	S-000-006300-0	O-seal Ø6X3
221-130	P-120-260000-0	Guide pulley	185	B-010-060551-0	Hex socket head bolt M6×55
131	B-010-060161-0	Hex socket head bolt M6×16	221-186	CX-221-090200-0	Locking cylinder cover Ø60
132	S-017-010806-2	T-union 1/8-2* Ø 6	221-187	S-000-052200-0	O seal Ø52X2
221-133	CX-221-160000-0	Vertical arm	190	C-221-210100-0	Pneumatic handle switch plate
221-134	C-228-520000-0	Vertical arm washer	191	C-221-210200-0	Pneumatic handle valve rod
136	CX-200-170000-0	Mount/demount head flat washer	192	C-221-210500-0	Pneumatic valve rod cap
137	B-014-100251-0	Outer hex bolt M10×25	193	C-221-210300-0	Pneumatic handle cover
142	CW-119-021100-0	Complete Pneumatic locking switch	194	C-221-210400-0	Pneumatic handle spacer
143	B-010-060161-0	Hex socket head bolt M6*16	195	S-000-007265-0	O seal 7.5*2.65
145	S-000-068353-0	O seal Ø68.26*3.53	196	B-055-080001-0	Snap ring Ø8
221-146	C-221-350900-0	Tilting cylinder threaded	197	S-010-010806-0	Straight union
221-147	C-221-350200-0	Tilting cylinder piston rod	221-198	C-221-400000-0	Hex locking board spring
148	B-001-080001-0	Self-locking nut M8			
221-101	S-000-011180-0	O-seal ϕ 11*1.8	221-103	S-000-068353-0	O-seal ϕ 68*3.53
221-102	S-005-065075-0	Y-seal ϕ 65*75*6	221-104	S-000-065053-0	O-seal ϕ 65*5.3

T02-1	C-T02-011100-0	Plastic handle	T02-22	C-2592-150500-0	mount/demount head surface protection pad
T03-2	CX-T03-011000-0	Cylinder cover	T03-23	C-T03-010400-0	Short connecting rod
T02-3	S-030-010414-2	Two position three way hand operated valve	T02-24	C-200-150400-0	Hex socket cylindrical pin
T03-4	C-T03-011200-0	Cylinder of automatic tyre mount/demount head	T03-25	C-T03-010200-0	Automatic mount/demount hook
T02-5	B-004-040001-1	Hex nut (white) M4	T02-26	B-014-100251-0	Hex screw M10*25
T02-6	S-035-060040-1	φ6Air hose	T02-27	CX-200-170000-0	Flat washer
T02-7	S-012-010806-0	Quick elbow connector 1/8-φ6	T02-28	C-2592-150300-0	Protection pad
T02-8	S-012-010406-0	Quick elbow connector 1/4-φ6	T03-29	CX-T03-010600-0	Gudgeon pin
T02-9	S-023-010801-6	Silencer (copper)	T02-30	B-055-100001-0	Circlip φ10
T03-10	CX-T03-011300-0	Cylinder support bracket special for T03 ?	T03-31	B-007-050051-0	Hex socket set screw with flat end M5x5
T02-11	CX-T02-010900-0	Sleeve	T03-32	CX-T03-010700-0	Gudgeon pin
T02-12	B-040-122520-1	Flat washer φ12*24*2	T02-33	C-T02-010100-0	Hex socket set screw with flat end M12*16
T02-13	B-014-120161-0	Hex screw M12*16	T03-34	CX-T03-010500-0	Sliding pin
T02-14	C-T01-100000-0	Hexagonal compressed spring	T02-35	CX-T02-010800-0	Sliding sleeve
T03-15	C-T03-010100-0	Automatic tyre mount/demount head body	T03-36	CX-T03-010900-0	Pull rod
T02-16	B-001-080001-1	Self-locking nut M10	T02-37	S-012-010806-0	Quick elbow connector1/8-φ6
T02-17	B-040-082220-1	Flat washer φ8*22*2	T02-38	B-017-040301-0	Cross recessed countersunk head screw M4x30
T02-18	B-007-120121-0	Hex socket set screw with flat end M12*12	T02-39	B-025-080101-0	Hexagon socket flat head screw M8x10
T02-19	B-007-050051-0	Hex socket set screw with flat end M5x5	T02-40	C-T01-120000-0	Extension spiral tube φ6
T03-20	C-T03-010300-0	Long connecting rod	T02-41	S-015-000006-6	Tee connector (mini)1/8-φ6
T03-21	CX-T03-010600-0	Gudgeon pin			

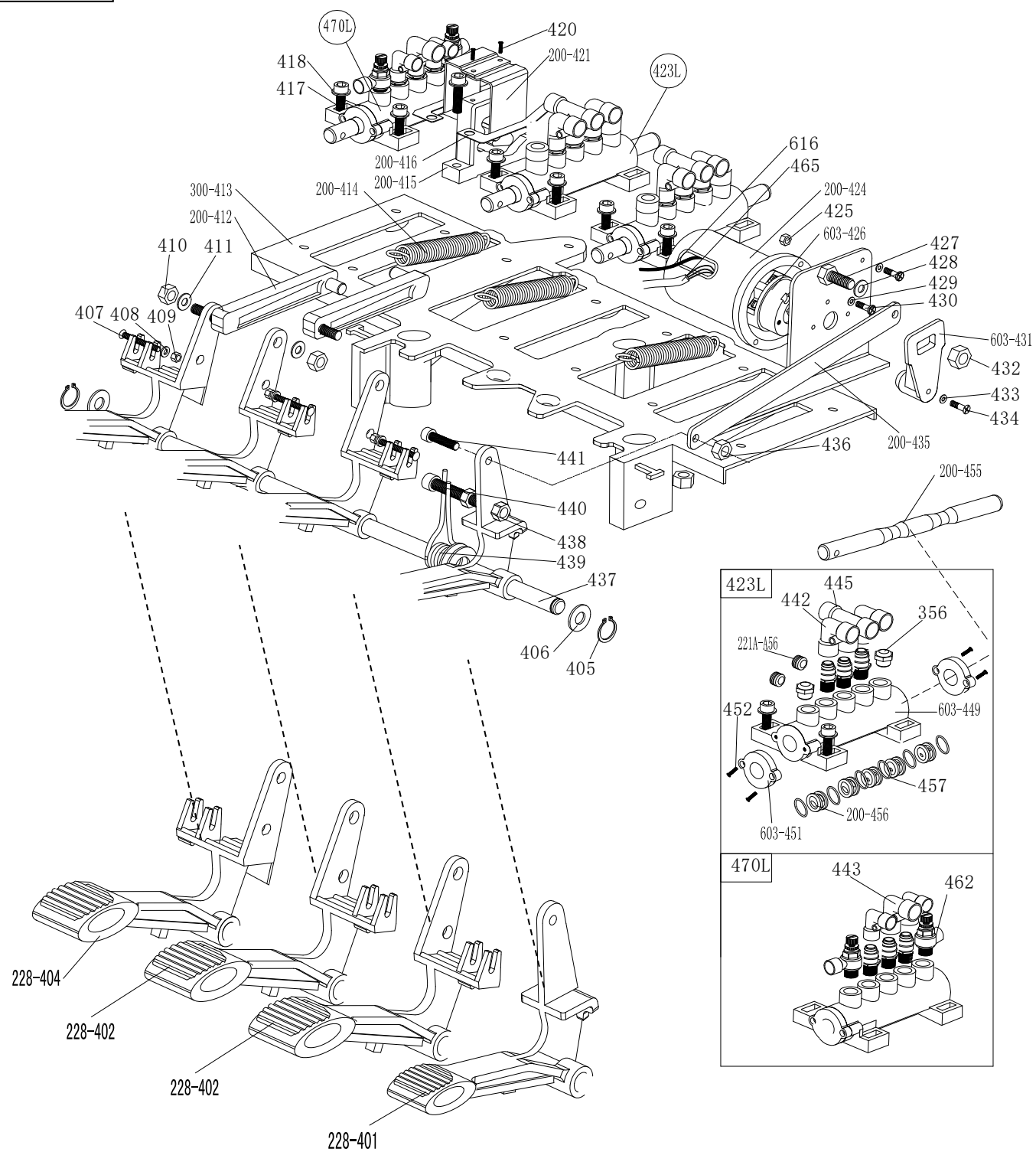


231-201	CX-231-130100-0	Turntable assembly 650
202	CX-221-120300-0	Jaw sliding plate(optional)
221A-203	CX-221-120000-A	Jaw cap assembly
204	C-200-570000-0	Jaw
205	CX-200-140000-0	Big washer
206	B-050-160000-0	Spring washer Ø16
207	B-014-160401-0	Outer hex bolt M16×40x1.5
208	C-200-440000-0	Turntable cap
221-209	CX-221-310000-0	Connection rod assembly 615
221-210	CX-221-280000-0	Square turntable 615
211	CX-200-290000-0	Square turntable washer
212	B-055-650001-0	Snap ring Ø65(shaft)
213	B-012-120631-0	Hex sunk head screw
203-214	CX-203-110000-0	Jaw slide guide with pin
215	B-040-122520-1	Flat washer Ø12X25X2
216	B-055-120001-0	Snap ring Ø12(shaft)
217	B-014-120801-0	Outer hex bolt M12×40
218	B-046-122050-1	Teeth locking washer Ø12×20.5x1
231A-237	CW-104-020300-A	Complete square turntable 650*26#
219	B-040-123030-1	Flat washer Ø12X30X3
200-220	CX-200-300000-0	Connection rod nut
203-221	CX-203-110100-0	Jaw slide guide without pin double holes
221-222	C-221-100400-0	Threaded connection rod 393
221-223	C-221-100200-0	Clamping cylinder piston rod 400
200-224	C-200-100100-0	Clamping cylinder cover without handle
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 φ70
229	B-040-122520-1	Flat washer Ø12X25X2
230	B-004-120071-1	Nut M12X7X1.75
221-231	C-221-100500-0	Clamping cylinder barrel 360
232	S-000-019262-0	O-seal 19.6X2.62
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
221-236	CW-105-021100-0	Complete clamping cylinder

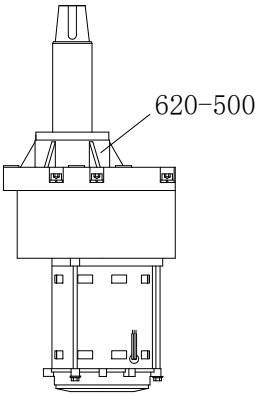


231-13	C-231-360000-0	Bead breaker arm spring	231-332	CX-231-030900-0	Bead breaker rotating pin washer
301	B-010-140301-0	Hex socket head bolt M14×30	231-333	CX-231-030800-0	Bead breaker rotating pin
303	S-018-010408-0	Union (90°)1/4-Ø8	228-334	C-298-050200-0	Complete bead breaker cylinder D200
304	B-001-160001-1	Nut M16*1.5	344	B-001-080001-0	Self-locking nut
305	B-040-162820-1	Flat washer Ø16*28*2	350	CW-112-209800-0	Bead breaker cylinder exhaust valve
306	S-000-016265-0	O-seal Ø 16*2.65	351	S-012-010808-0	Union (90°)1/8-Ø8
307	S-000-019262-0	O-seal Ø19.6*2.62	352	C-098-600200-0	Bead breaker cylinder exhaust valve cover
200-310	C-200-050100-0	Bead breaker cylinder piston rod	353	C-098-600400-0	Seal washer
200-315	CX-200-070000-0	Bead breaker shovel assembly	354	C-098-600300-0	Bidirectional seal
316	B-010-120901-0	Hex socket head bolt M12×90	355	C-098-600100-0	Bead breaker cylinder exhaust valve barrel
317	B-001-160001-1	Self-locking nut M16*1.5	356	S-023-010401-6	Muffler
318	U-006-000001-2	Guide belt	357	S-010-010408-0	Straight union 1/4- Ø8
319	B-050-140000-0	Spring washer Ø14	358	CZ-298-050900-0	Nylon cover
320	B-055-160001-0	Snap ring Ø16	359	S-005-0200075-0	V-seal 20*28*7.5
321		Flat washer	228-361	CX-298-050500-0	Bead breaker cylinder cover assembly
231-322	CX-231-030000-0	Enlarge bead breaker armU23110103	228-362	S-000-195265-0	O-seal Ø198*3.1
200-323	CX-200-040000-0	Bead breaker pin	363	S-005-200184-0	Y-seal D200*184*12
200-324	CX-200-050600-0	Bead breaker cylinder pull rod cover	228-364	C-298-050200-0	Bead breaker cylinder piston D200
325	B-040-122520-1	Flat washer Ø12*24*2	228-365	S-000-180500-0	O-seal Ø180*5
326	B-001-120001-0	Self-locking nut M12	228-366	C-298-051000-0	Threaded connection rod
327	B-040-083030-1	Flat washer Ø8*30*3	228-367	C-298-050300-0	Bead breaker cylinder barrel D200
328	B-050-080000-0	Spring washer Ø8	228-368	C-298-051100-0	Bead breaker cylinder rear cover
329	B-014-080201-0	Outer hex bolt M8×20	200-370	C-200-070600-0	Bead breaker shovel protection cover
331	B-001-160001-0	Self-locking nut M16*1.75			

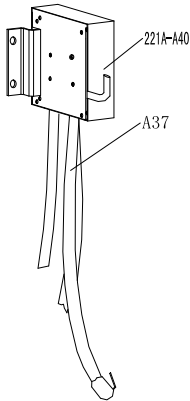
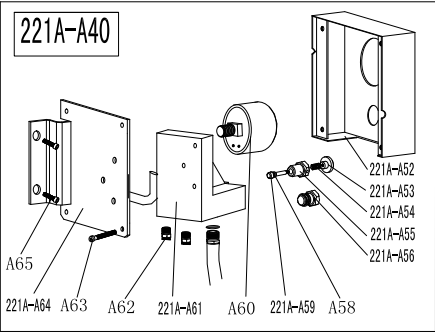
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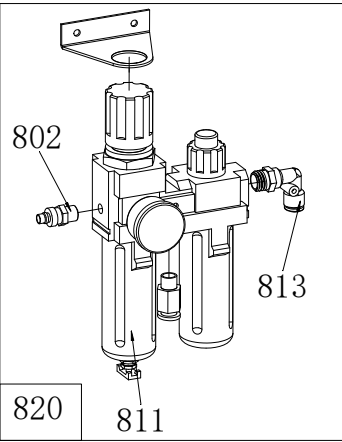
228-401	C-228-060400-0	Reverse switch pedal	429	B-040-040000-1	Flat washer Ø 4
228-402	C-228-060300-0	5-way valve pedal(right)	430	B-024-040161-0	Cross-round head screw M4*16
228-404	C-228-060200-0	5-way valve pedal(left)	603-431	C-200-530000-1	Reverse switch handle
405	B-055-120001-0	Snap ring Ø12	432	B-001-060001-0	Self-locking nut M6
406	B-040-122520-1	Flat washer Ø12*24*2	433	B-040-030000-1	Flat washer Ø3
407	B-024-040301-0	Cross head screw M4X30	434	B-017-030161-0	Cross head screw M3X18
408	B-040-040000-1	Flat washer Ø 4	200-435	CX-200-060600-0	Pedal connection rod
409	B-001-040001-0	Self-locking nut M4	436	B-001-080001-0	Self-locking nut M8
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
300-413	C-300-060100-0	Pedal support 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-012-010806-0	Quick union 1/8- Ø 8
200-416	C-200-810000-0	Cam washer	443	S-012-010808-0	Quick union 1/8- Ø 8
417	B-010-060201-0	Hex socket head bolt M6×20	445	S-016-010808-2	T-union1/8-2* Ø 8
418	B-040-061210-1	Complete inflating 5-way valve	603-449	C-200-060901-2	5-way valve (Aluminum alloy)
420	B-019-290121-0	Cross head self tapping screw 2.9×12	603-451	C-6603-061100-0	5-way valve cover(Aluminum alloy)
200-421	CX-200-060500-0	Cam cover	452	B-024-290-121-0	Cross head screw M4*12
423L	CW-110-660301-0	5-way valve (T-union,without rod) (Aluminum alloy)	453	S-023-010801-0	Muffler 1/8"
			200-455	CX-200-061200-0	5-way valve rod
200-424	C-200-061400-0	Reverse switch cover	200-456	C-200-061000-0	5-way valve rod spacer
425	B-004-040001-0	Nut M4	457	S-000-012400-0	O-seal 12*20*4
603-426	S-060-030000-0	Reverse switch	462	S-030-010806-0	Regulating valve
427	B-010-060201-0	Hex socket head bolt M6×20	470L	CW-110-660302-0	Tilting 5-way valve,without rod (Aluminum alloy)
428	B-040-061210-1	Flat washer Ø 6×12×1	465	CZ-000-103150-0	Power supply cable
631-480		Complete 4-pedals assembly 631	616	CZ-000-205150-0	Motor line



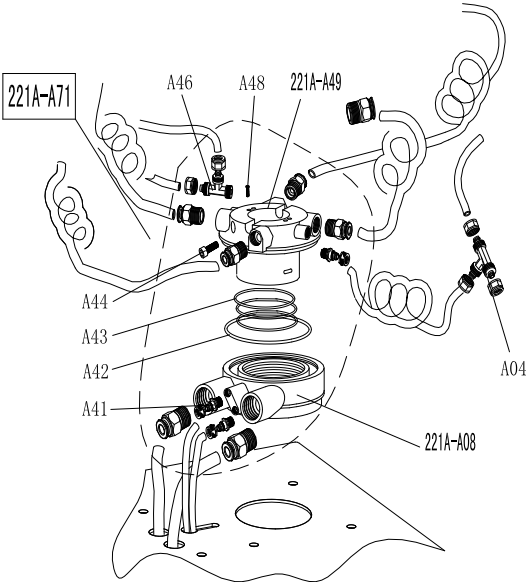
620-500		Combined gear box
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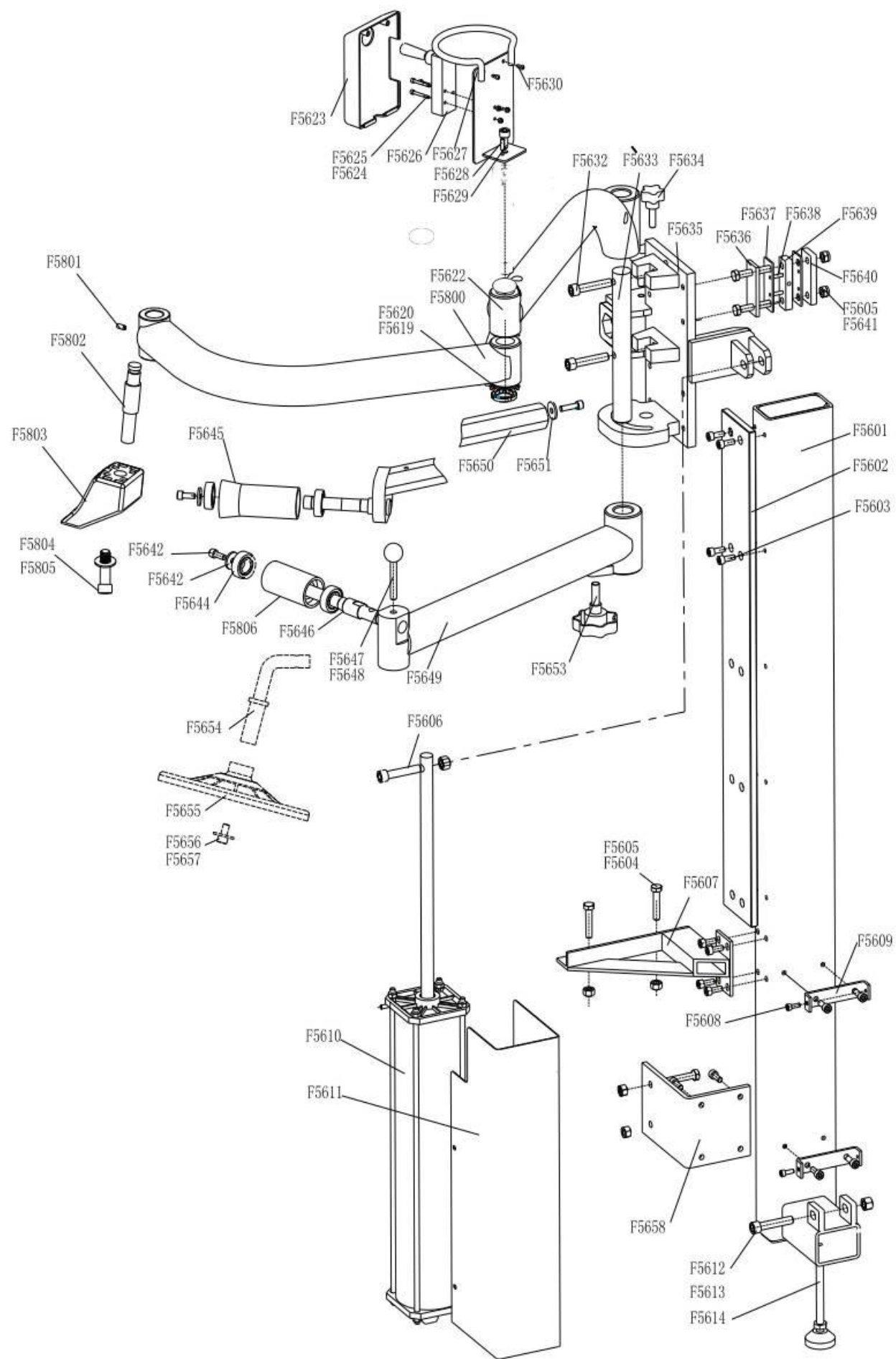
221A-A52	C-221-700000-A	Pressure gauge box Φ60
221A-A53	C-221-690300-A	Button
221A-A54	C-221-690400-A	Button spring
221A-A55	C-221-690100-A	Button valve
221A-A56	B-007-180081-R	Hex socket head bolt 1/8*8
A58	S-000-004200-0	O-seal 4*2
221A-A59	C-221-690200-A	Button rod
A60	S-038-000020-0	Pressure gauge 10kg
221A-A61	C-221-680000-A	Seat with holes
A62	S-010-010808-0	Quick straight union 1/8-Ø8
A63	B-017-040301-0	cross head screw M4*30
221A-A64	CX-221-710000-A	Pressure gauge box support
A65	B-010-060161-0	Hex socket head bolt M6*16
A37	S-035-014150-0	Rubber hose 1.5 with clip
A38		Air hose 12X8
A39		Air hose 12X8
221A-A40	CW-118-022100-0	Complete pressure gauge box



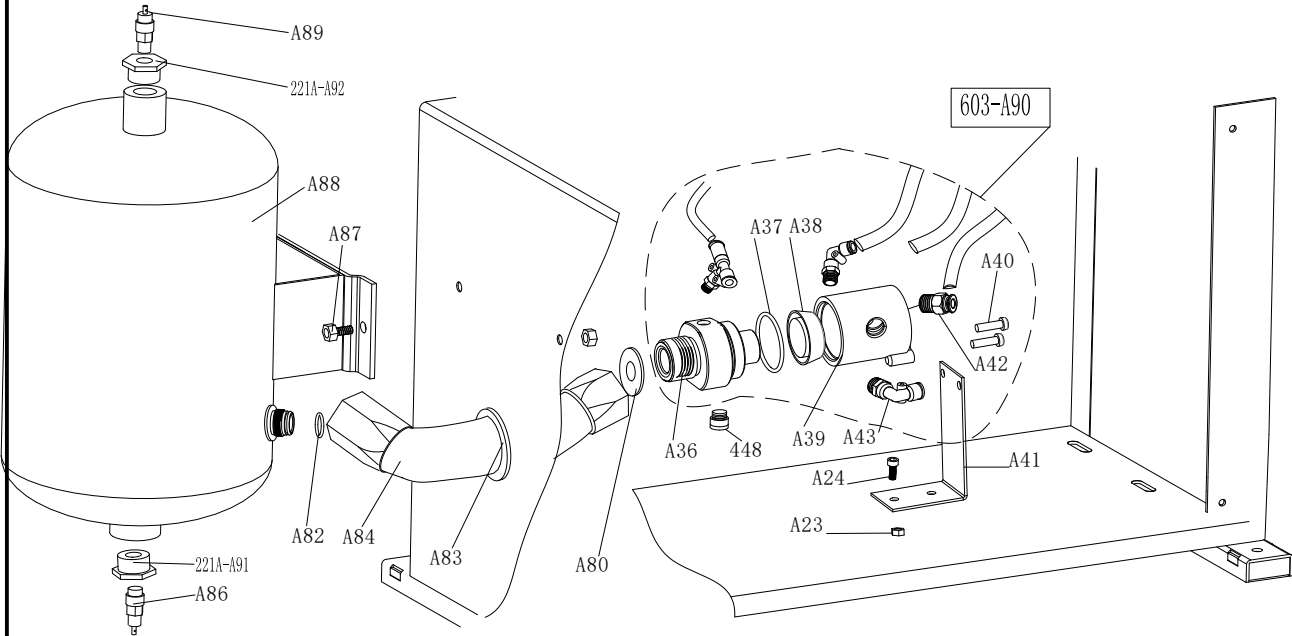
802	S-025-000050-0	Quick spigot joint PM20
811	S-033-330000-0	Oil fog maker 3300
813	S-018-010408-0	Union 1/4-Ø8
820	CW-114-033000-0	Complete oil fog maker 3300



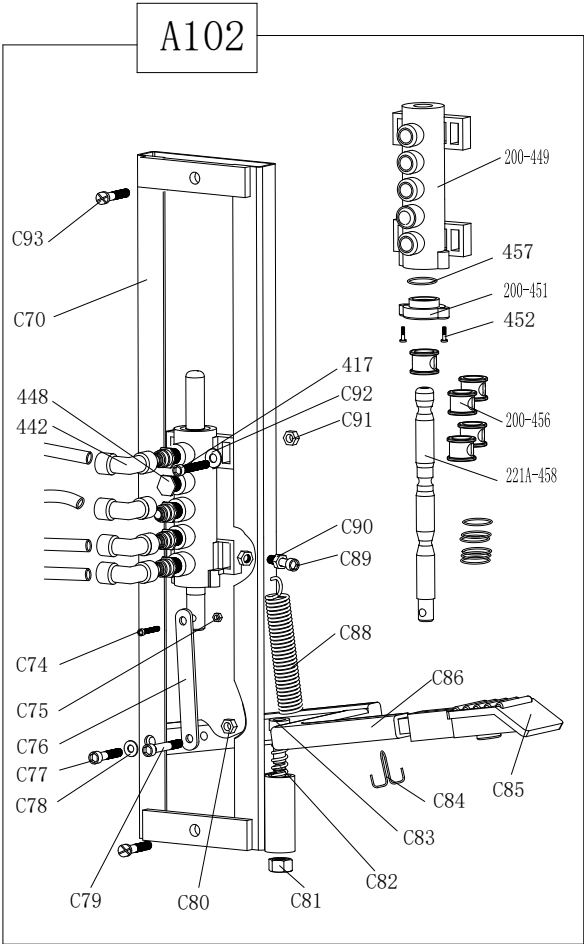
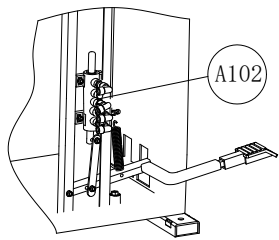
221A-A08	CX-221-430100-A	Rotating valve casing (A)
A04	S-015-000008-3	T-union 3* Ø 8
A41	S-011-010808-0	Straight union 1/8-Ø8
A42	S-000-089200-0	O-seal Ø89*2
A43	S-000-062280-2	O-seal Ø62*2.8
A44	B-010-060201-0	Hex socket head bolt M6X20
A46	S-015-010808-2	T-union 1/8-2*Ø8
A48	B-007-040061-0	Hex socket head bolt M4*6
221A-A49	CX-221-430200-A	Rotating valve mandrel (A)
221A-A71	CW-106-022102-A	Complete Rotating valve (A)



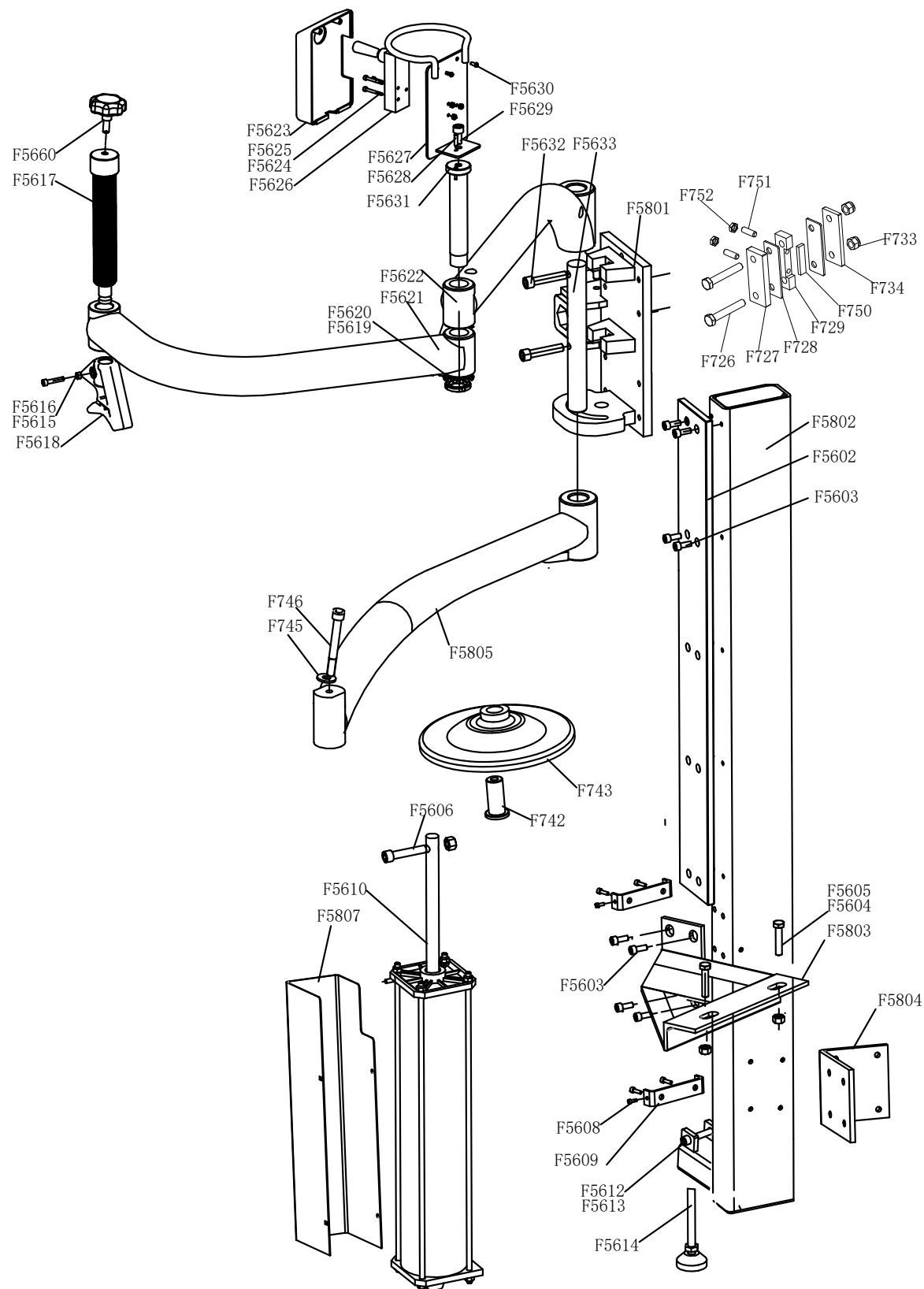
F5601	CX056-010000-0	Column assembly			
F5602	CX-007-020000-0	Guide rail	F5632	B-010-120551-0	Hex socket head screw M12*55
F5603	B-010-080251-0	Hex socket head screw M8*25	F5633	C-056-090000-0	Axle
F5604	B-001-100001-0	Locking nut M10	F5634	C-006-210000-0	Pentagon handle M10
F5605	B-014-100601-0	Hexagon bolt M10*60	F5635	CX-056-030000-0	Arm seat assembly
F5606	B-014-100601-0	Hexagon bolt M10*60	F5636	CX-007-040000-0	Abrasion inner tableting
F5607	CX-056-010500-0	Support assembly	F5637	CX-007-070000-0	Friction plate isolation block
F5608	B-024-060121-0	Cross round head M6*12	F5638	CZ-007-080000-0	Counter vane locating pin
F5609	CX-056-010700-0	Junction plate of cylinder cover	F5639	U-006-000001-2	Guidance tape
F5610	C-056-150000-0	Cylinder	F5640	CX-007-050000-0	Abrasion outer tableting
F5611	CX-056-100000-0	Cylinder cover	F5641	B-001-100001-0	Locking nut M10
F5612	B-010-121201-0	Hex socket head bolt M12*120	F5642	B-010-080201-0	Hex socket head screw M8*20
F5613	B-001-120001-0	Hex nut M12	F5643	B-040-082220-1	Gasket Ø8*22*2
F5614	C-056-170000-0	Supporting leg	F5644	S-040-006004-0	Bearing 6004-Z
F5615	B-001-060001-0	Hex nut M6	F5645	CZ-056-110000-0	Tire pressing cover
F5616	B-010-060301-0	Hex socket head bolt M6*30	F5646	CX-056-130000-0	Tire pressing spindle
F5617	C-056-140000-0	Tire pressing head spindle	F5647	C-206-120800-0	Bolt handle
F5618	C-008-090100-0	Tire pressing head (upper)	F5648	CX-206-120700-0	Bolt
F5619	B-045-000027-0	Lock washer	F5649	CX-056-050000-0	Tire lifting rod assembly
F5620	B-004-270001-1	Round nut M27	F5650	CX-6656-040000-0	Tire pressing rod assembly
F5621	CX-056-070000-0	Rotating arm assembly 2	F5651	B-040-083030-1	Big washer 8*30*3
F5622	CX-056-060000-0	Rotating arm assembly1	F5653	C-238-201501-0	Adjustable handle
F5623	C-007-181000-0	Control valve cover	F5654	CX-056-160000-0	Tire lifting roller assembly
F5624	B-017-040301-0	Cross sunk screw M4*30	F5655	C-005-100000-0	Tire lifting roller
F5625	B-004-040001-0	Nut M4	F5656	B-040-102020-1	Flat washer Ø10
F5626	S-030-010818-0	Pushed knob valve	F5657	B-010-100201-0	Hex socket head screw M10*20
F5627	CX-056-120000-0	Control panel assembly	F5658	CZ-056-010600-0	Connecting board
F5628	B-010-050101-0	Hex socket head screw M5*10	F5660	C-238-201501-0	Adjusting handle
F5629	B-010-100251-0	Hex socket head screw M10*25	F5806	CZ-056-180000-0	Tire pressing cover 2
F5630	B-024-040161-0	Cross round head screw M4*16			



A23	B-001-060001-0	Self-locking nut M6
A24	B-010-060161-0	Hex socket head bolt M6*16
A25	S-016-010808-2	One way valve 1/8-2* Ø8
A28	S-012-010212-0	Quick union 1/2-Ø12
A35	S-010-010212-0	Quick straight union 1/2- Ø12
A36	C-6631-600100-A	Exhaust valve upper cover
A37	S-000-040262-0	O-seal Ø40*2.65
A38	S-005-043000-0	V-seal
A39	C-6631-600200-A	Exhaust valve down cover
A40	B-010-060201-0	Hex socket round bolt M6*20
A41	CX-6631-600400-A	Exhaust valve support
A42	S-010-010408-0	Quick straight union 1/4- Ø8
A43	S-012-010212-0	Quick union 1/2- Ø12
A80	C-221-601000-A	rubber matØ18*34*2
A82	S-000-016265-0	O-seal Ø16*2.65
A83	C-221-720000-A	Hose protector
A84	C-221-601100-A	Metal hose
A86	S-030-010400-0	Water discharge valve
A87	B-014-100251-0	Outer hex bolt M10*25
A88	CX-221-610000-A	Air-tank assembly
A89	S-030-030800-0	Safety valve
603-A90	CW-112-660301-0	Complete exhaust valve
221A-A91	CX-221-610600-A	Air-tank down union
221A-A92	CX-221-610500-A	Air-tank up union

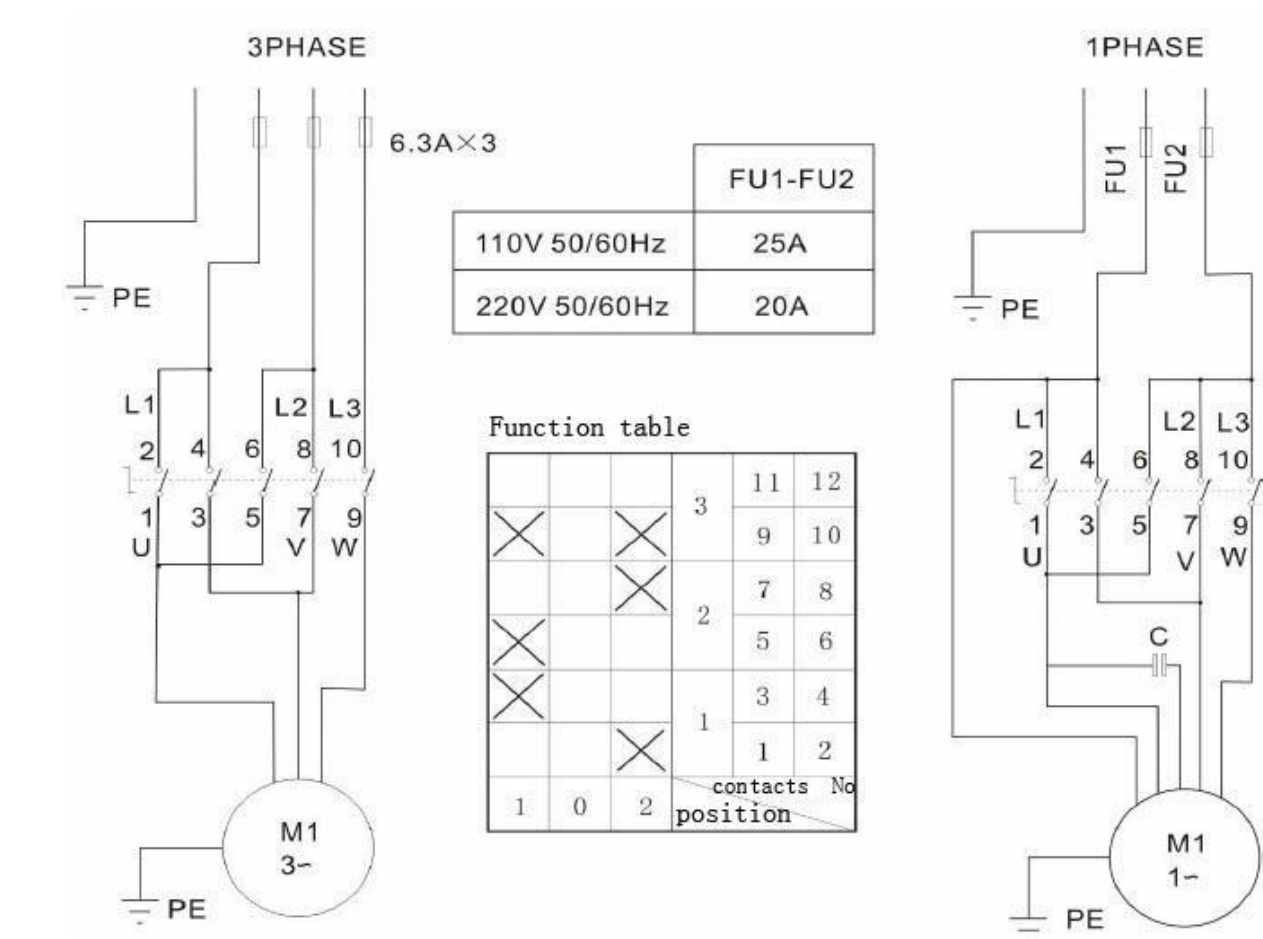


C70	CX-221-620000-A	Inflating pedal support assembly
448	B-007-180081-R	Hex socket head bolt 1/8*8
442	S-012-010808-0	Quick union 1/8-Ø8
C74	B-010-050201-0	Hex socket head bolt M5*20
C75	B-001-050001-0	Self-locking nut M5
C76	CX-221-660000-A	Inflating 5-way valve rod
C77	B-010-060251-0	Hex socket head bolt M6*25
C78	B-040-061210-1	Flat washer Ø6*12*1
C79	B-010-060251-0	Hex socket head bolt M6*25
C80	B-004-060001-1	Nut(black)M6
C81	B-001-100001-0	Self-locking nut M10
C82	C-221-670000-A	Limit spring
C83	CX-221-620400-A	Positioning bolt M10X55
C84	B-070-040040-0	Split pin4X40
C84	B-070-040040-0	Split pin4X40
C85	C-221-640000-A	Pedal rubber
C86	CX-221-630000-A	Inflating pedal rod
C88	C-200-380000-0	Pedal Spring
C89	B-010-060251-0	Hex socket head bolt M6*25
C90	B-004-060001-1	Nut(black)M6
417	B-010-060201-0	Hex socket head bolt M6×20
C91	B-001-060001-0	Self-locking nut M6
C92	B-040-061210-1	Flat washer Ø6*12*1
C93	B-025-080161-0	Flat round head boltM8*16
200-449	C-200-060901-0	5-way valve barrel
200-451	C-200-061100-0	5-way valve cover
452	B-024-290121-0	cross head screw ST2.9*16
200-456	C-200-061000-0	5-way valve rod spacer
457	S-000-012400-0	O-seal 12X20X4
221A-458	CX-221-650000-A	5-way valve rod A
A102		Complete inflating pedal



F5802	CX-057-010000-0	Column assembly057	F5629	B-010-100251-0	Hex socket head screw M10*25
F5602	CX-007-020000-0	Guide rail	F5630	B-024-040161-0	Cross round head screw M4*16
F5603	B-010-080251-0	Hex socket head screw M8*25	F5631	CX-056-080000-0	Connecting pin
F5604	B-001-100001-0	Locking nut M10	F5632	B-010-120551-0	Hex socket head screw M12*55
F5606	B-014-100601-0	Hexagon bolt M10*60	F5633	C-056-090000-0	Axle
F5803	CX-057-010500-0	Support assembly	F5634	C-006-210000-0	Pentagon handle M10
F5608	B-024-060121-0	Cross round head M6*12	F5801	CX-057-030000-0	Arm seat assembly057
F5609	CX-056-010700-0	Junction plate of cylinder cover	F5642	B-010-080201-0	Hex socket head screw M8*20
F5610	C-056-150000-0	Cylinder	F5643	B-040-082220-1	Gasket Ø8*22*2
F5807	CX-057-100000-0	Cylinder cover057	F5644	S-040-006004-0	Bearing 6004-Z
F5612	B-010-121201-0	Hex socket head bolt M12*120	F5645	CZ-056-110000-0	Tire pressing cover
F5613	B-001-120001-0	Hex nut M12	F5646	CX-056-130000-0	Tire pressing spindle
F5614	C-056-170000-0	Supporting leg	F5805	CX-057-050000-0	Bend tube assembly057
F5615	B-001-060001-0	Hex nut M6	F5650	CX-056-040000-0	Tire pressing rod assembly
F5616	B-010-060301-0	Hex socket head bolt M6*30	F5651	B-040-083030-1	Big washer 8*30*3
F5617	C-056-140000-0	Tire pressing head spindle	F742	CX-005-110000-0	Tire lifting roller centre sleeve
F5618	C-008-090100-0	Tire pressing head (upper)	F743	C-005-100000-0	Tire lifting roller
F5619	B-045-000027-0	Lock washer	F745	B-040-123030-1	Flat washer Ø12*30*3
F5620	B-004-270001-1	Round nut M27	F746	B-010-121201-0	Hex socket head bolt M12*120
F5621	CX-056-070000-0	Rotating arm assembly 2	F5804	CZ-057-010600-0	Connecting board
F5622	CX-056-060000-0	Rotating arm assembly1	F5660	C-238-201501-0	Adjusting handle
F5623	C-007-181000-0	Control valve cover	F5806	CZ-056-180000-0	Tire pressing cover 2
F5624	B-017-040301-0	Cross sunk screw M4*30	F734	CX-007-050000-0	Abrasion outer tableting
F5625	B-004-040001-0	Nut M4	F750		Side friction plate
F5626	S-030-010818-0	Pushed knob valve	F751	B-010-080251-0	Hex socket head screw M8*25
F5627	CX-056-120000-0	Control panel assembly	F752	B-004-080001-2	Hex nut M8
F5628	B-010-050101-0	Hex socket head screw M5*10	F728		Guidance tape
F726	B-014-100601-0	Hexagon bolt M10*60	F729	CX-007-070000-0	Friction plate isolation block
F727	CX-007-040000-0	Abrasion inner tableting	F733	B-001-100001-0	Locking nut M10

20. Circuit diagram:



21. Pneumatic drawing:

