

BRIGHT

PREMIUM TIRE EQUIPMENT AND MAINTENANCE SPECIALIST



Ita Manuale d'uso

Eng User Installation, Operating and Service Manual

Fra Manuel d'utilisation

Deu Betriebsanleitung

Spa Manual de uso

User Installation, Operating and Service Manual



☞ Main components (Refer to FIG.01)

- 1 . Vertical column slider
- 2 . Demounting tool head
- 3 . Bead pressing roller
- 4 . Rotation main shaft
- 5 . Main shaft tilting cylinder
- 6 . Operation console
- 7 . Lube container support ring

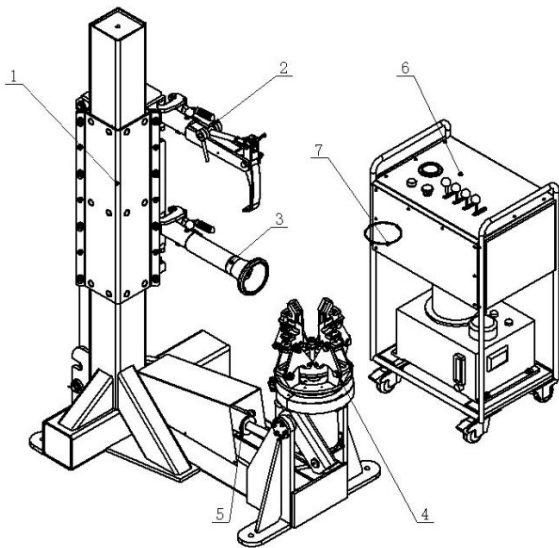


FIG.01

☞ Technical specifications

Suitable truck rim size	17.5" 19.5" 22.5"
Max. wheel weight	1000Kg
Max. wheel width	425 mm
Max. wheel diameter	1300 mm
Hydraulic motor	BMP315 640Nm
Hydraulic pump station motor	3KW-220V-1PH
Operation pressure	130 bar -150bar
Noise level	<75db
Net weight	500Kg

☞ Installation

- To select safe site according to relevant safety rules. The tire changer needs to connect to the power supply. It should choose a place that is convenient for power connection and the installation space that is convenient for operators to operate(Refer to FIG.02 dimension layout) . If installed outdoors, the machine must be provided with a shed from rain.

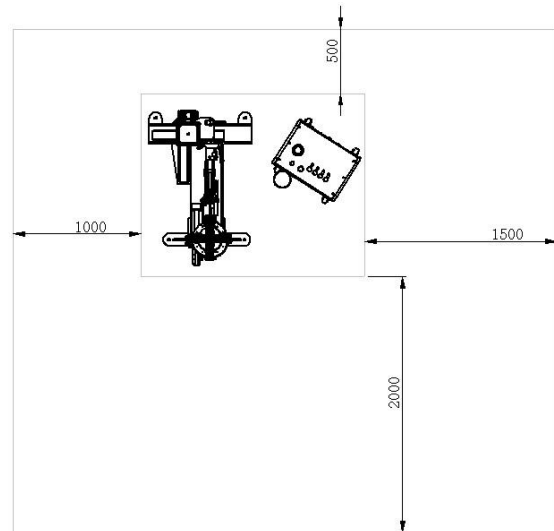


FIG.02

Installation base, refer to FIG.03 , The installation ground must be flat. With through-holes at the base of the machine chassis. Fasten with bolts. When the slope relative to the horizontal level is greater than 2.5‰, it should be levelled to achieve compensation.

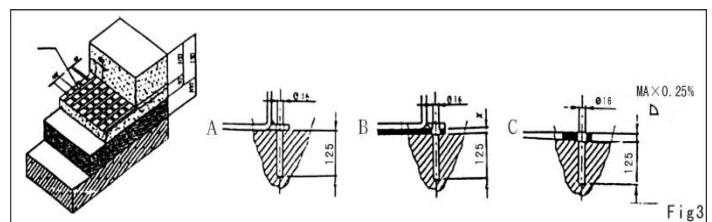


FIG.03

● Power connection;

Pay attention to:

- ◆ The installation site shall be equipped with an effective protective grounding circuit and make the ground connection according to the machine ground mark.
- ◆ The power system should be equipped with automatic circuit breakers. Set it at 30A.
- ◆ Connect the tire changer to the power supply, close the switch and check the motor. Is it running in the same direction as the arrow indication direction? (Refer to FIG.05). If the operation direction is opposite, and the phase line must be switched by professionals.

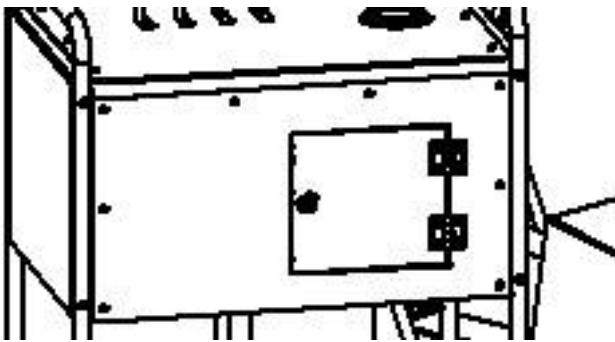


Fig4

If the motor keeps reverse running for several seconds, it may burn out!

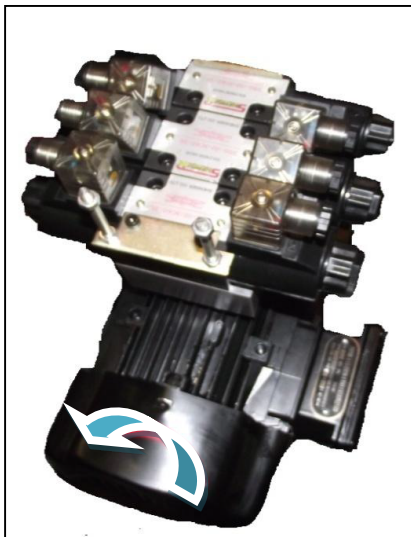


Fig5

Note: Both the main shaft motor and the hydraulic pump station motor are equipped with overload protection device installed in the electric control box in Fig. 4

● Running test

A running test must be carried out before the tire changer is used to check the installation and operation is ok.

All electrical operations must be carried out by professional technicians!

All the following work must keep the bead pressing roller (item No.3) under the condition of being not in work.

- ◆ Connect the power supply to control console(item No.6), turn on the main power switch and the hydraulic pump station motor starts. Pull the joystick B downwards: vertical column slider moves downwards. Pull the joystick B upwards: vertical column slider moves upwards.

Operation control: Pull upwards the joystick switch A that controls the main shaft chuck to run counterclockwise. Pull downwards the joystick switch A that controls the main shaft chuck to run clockwise. Pull the joystick C upwards, the main shaft chuck tilts upwards. Pull the joystick C downwards, the main shaft chuck tilts downwards. Pull the joystick D upwards, and the jaws open. Pull the joystick D downwards, the jaws close.

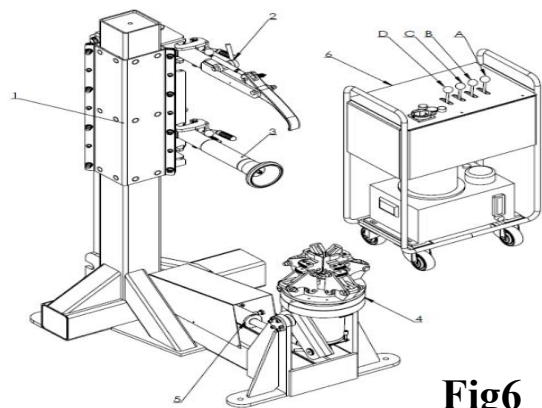


Fig6

When the demounting truck wheel weight exceeds 1000Kg, the machine must be fixed with anchor bolts.

The up-and-down movement of the tire changing tool arm and the opening of the hydraulic clamp can cause bruise, so the operator has to work outside its movement range.

Operation

● Operation instruction

Ignoring instructions and warnings can cause serious trauma to the operator or third party. So don't turn it on until you have read this manual.

All operators must be properly trained before using the machine (other personnel are not allowed to enter the working area). Do not place materials on the tire changer. In order to avoid danger at work. Without the permission of the factory, it is not allowed to modify or fiddle with the tire changer. Pay attention to safety at work, to tie up the long hair, do not wear loose clothes, do not wear ties, necklaces, rings and watches. These are easily caught by moving parts.

◆ **Emergency stop** : Press down emergency button or disconnect the power supply.

● Clamp the rim

Of the 17.5" , 19.5" , 22.5" rims, which have different clamping methods and positions depending on the type of rims. (Refer to FIG. 7)

Adjust the main shaft angle, and operate the joystick to clamp the rim. Operate the main shaft control joystick to lift it to a height convenient for operation of the tire changing.

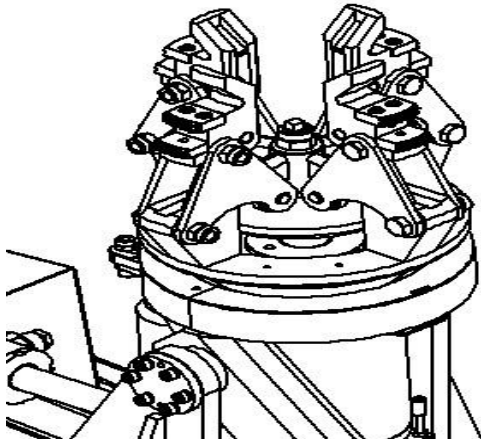


FIG.07

● Tire dismounting and remounting.

Use bead press roller to break the bead.

1. To make sure the rim is clamped and deflate the air.
2. During the operation, to adjust to open the jaws.
3. Operate the joystick to place the bead press roller close to the edge of the tire bead.

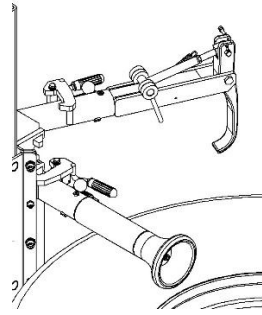


FIG.08

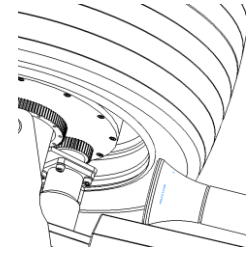


FIG.09

4. Rotate the wheel, and meanwhile operate on the bead press roller to move upwards or downwards.
5. Continue to do the bead breaking until the bead has been completely opened in order to apply the tire lubricant to avoid the damage on rim and tire during the operation.

Be very careful! Do not place your fingers between the tire and the tool. To prevent any possible danger, turn counterclockwise while operating the inner and outer edges.

6. Remove the bead press roller from the rim edge, release the tool holder lock, lift the support arm out of work condition, and move the bead press roller to the inside.

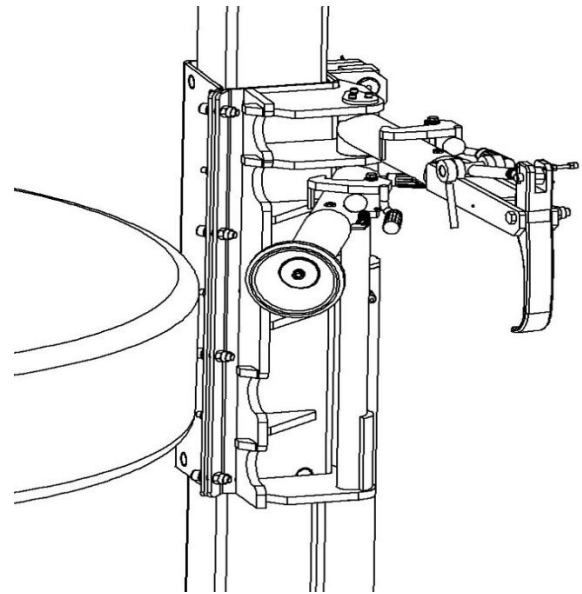


FIG.10

● Tire dismounting:

- 1) Tilt the tire at about 45° , place the bead press roller straight (To use different tire lifting stages according to truck wheel width)

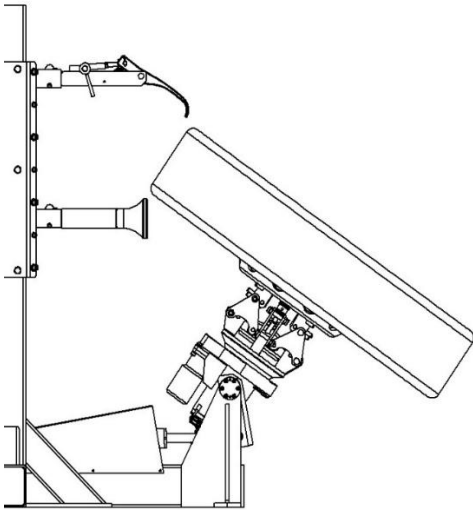


FIG.11

2) Slowly adjust the tire demounting tool head into the back of the tire bead. After the main shaft is adjusted to be horizontal, lift the tire demounting hook and the bead press roller.

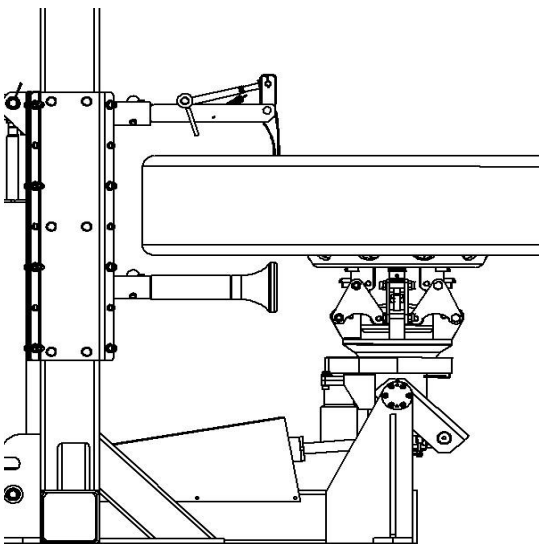


FIG.12

3) When the tire bead is about 5cm above the rim, turn the wheel counterclockwise so that the first bead is removed from the rim.

4) Continue to raise the tire demounting hook upward so that the second bead is completely off the rim
(Note: hold the tire well when the tire falls off completely to avoid slipping off)

When the tire comes off the rim, the tire will fall off. So make sure that the irrelevant people are not in the workplace.

5) Turn the main shaft so that the tire touches the ground to repair the tire and other following work.

●Tire remounting:

- 1) After the following work is completed, use the rim to contact the tire bead, and the spindle is turned to the horizontal position to prepare for the remounting of the tire.
- 2) Use the bead press roller to mount the first bead of the tire.

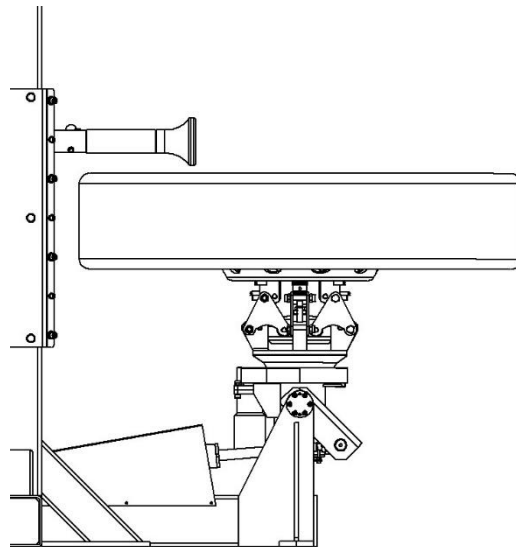


FIG.13

- 3) Lower down the bead press roller continuously to complete the remounting of the second bead. When remounting, If the second bead comes out of the rim, use a tire press assistant to install the tire.



FIG.14

- 4) Raise the bead press roller, turn the spindle over, the tire touches the ground, loosen the jaws, take off the tire, and tire remounting is completed.

Be very careful! Do not place your fingers between the tire and the tool while operating to avoid any possible hazards.

Maintenance

Regular maintenance according to the manual is the basis of correct use of the tire changer, and can extend its working life, to ensure the reliability of the machine operation.

To ensure safety, disconnect the plug before performing repairs and maintenance.

To use the original parts, and ask the professional person to replace the defective parts.

Clean the following parts carefully regularly with diesel oil and fill with grease.

(1) trailer guide, (2) tool bracket horizontal axis, (3) lifting cylinder.

The hydraulic system USES HV type 32# hydraulic oil in winter and HV type 46# hydraulic oil in summer.

For the new machine after running 200 - 300 hours or when the valve is seriously jammed, please replace the hydraulic oil, after the use of 800 hours, check once a week hydraulic pump hydraulic oil within the tank and oil: such as oil amount is insufficient, please add HV 32 # hydraulic oil or HV 46 # hydraulic oil, such as black oily or deterioration, replace the hydraulic oil. The worm gears are cleaned regularly (quarterly) with diesel oil and smeared with lithium-based grease.

Safekeeping: if not used for a long time (3~4 months), keep it properly;

① Lower the lifting arm.

② make the lifting arm free of load

③ Unplug the power.

④ The trailer guide rail is greased.

⑤ Empty the fuel tank.

⑥ To grease tool support vertical shaft grease.

Transportation, Package, Storage

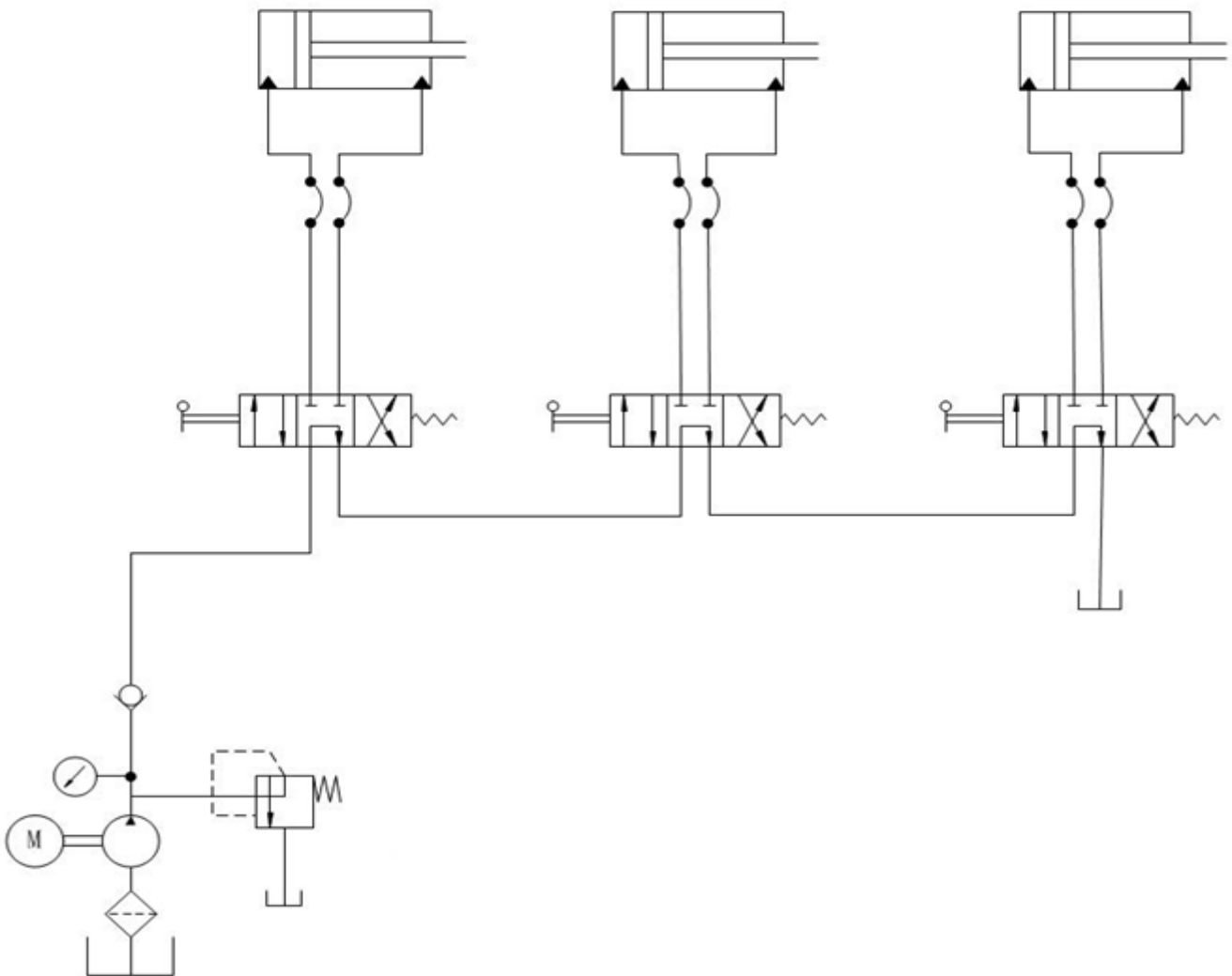
The machine must be transported in the original packing box and placed according to the position shown in the packing box.

The forklift truck should be capable to handle the machine.

The location of the fork is shown in FIG.26

After unpacking and removing the package, it is necessary to ensure that the tire changer is intact in the transportation process, take out the standard accessories, packaging and properly handle; Take care not to bruise the control console during this period. If the machine is temporarily stored, make sure that the storage environment is as follows: maximum relative humidity: 95%, temperature: minimum -5 C, maximum +40 C.

☞ Hydraulic Principle Diagram



Technical parameters

1. Motor: 3KW/380V/220V;

1400 r/m in three phase.

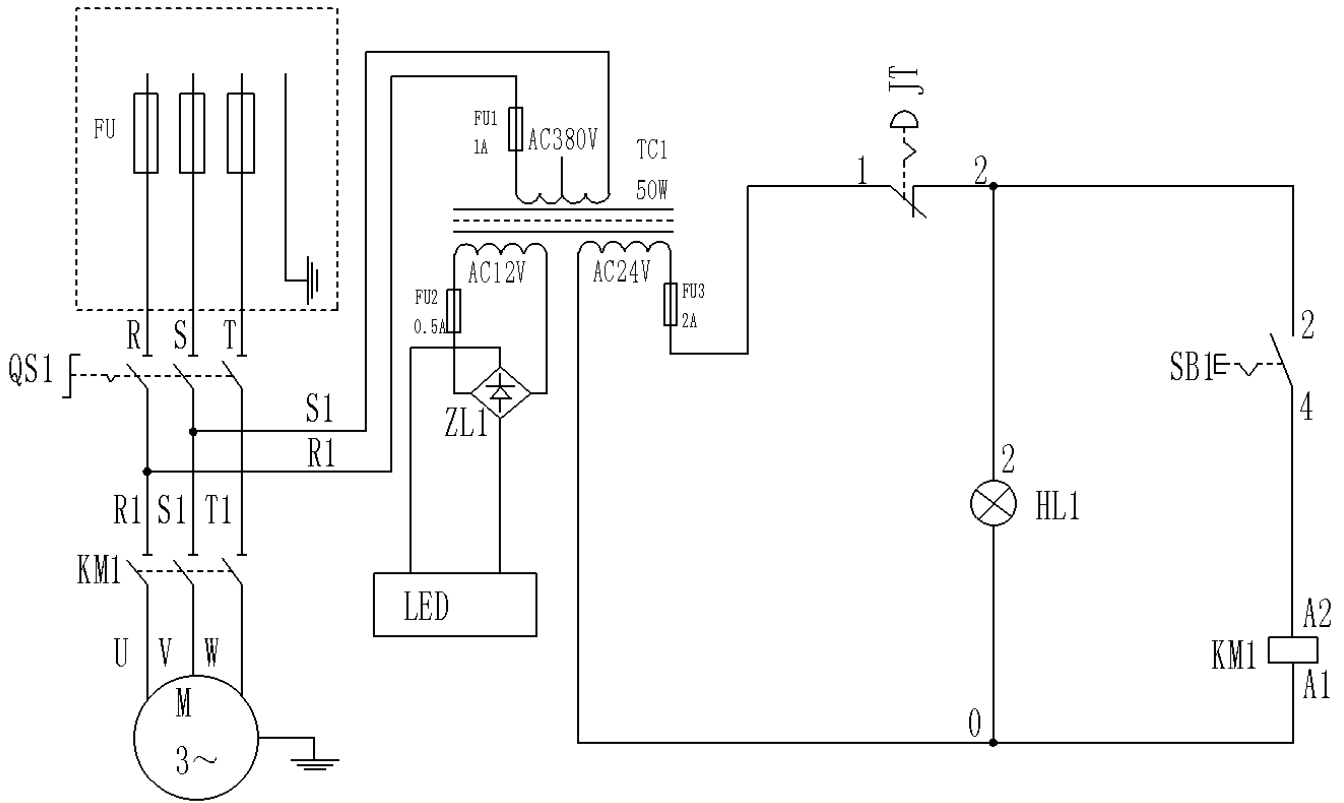
2. Oil pump: displacement;

3.1 ML/r;

Rated working pressure: 15MPa.

3. Separate design of motor oil pump and valve plate.

Electrical Principle Diagram



It is absolutely forbidden to inflate the tire on the tire change!

The manufacturer reserves the right to make changes to the products without prior notice to the Buyer.

