CASC6210

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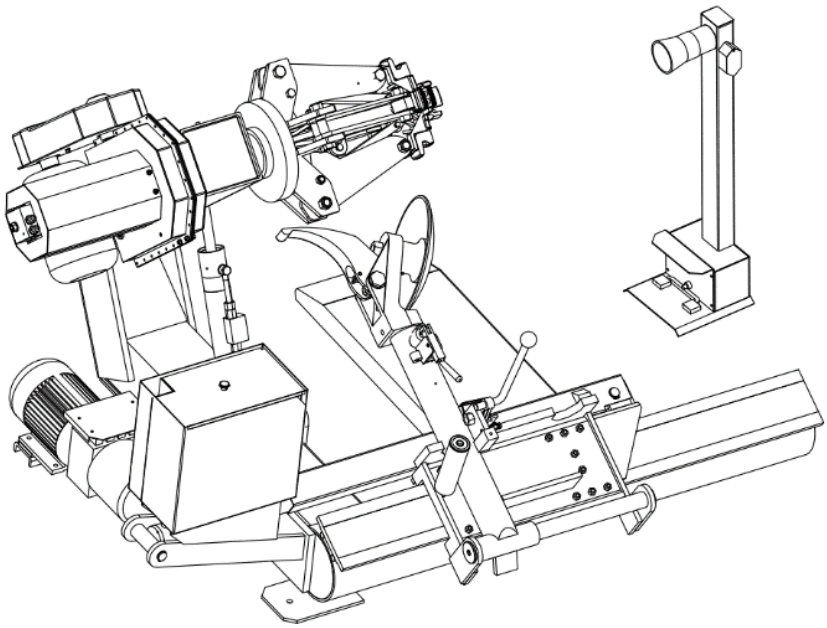
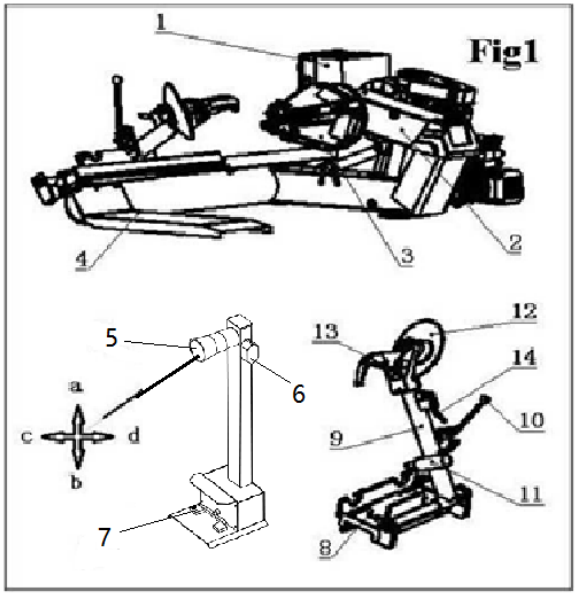


Main Operation parts（Fig.1）

1.Main Switch （See Fig.4）
2.Lifting arm
3.Hydralic Clamping tool
4.Wheel Support Plate
5.Control Operation Switch
6.Clamping Control Switch
7.Wheel Rotation Control （clockwise/counterclockwise）
8. Mobile control center
9.Tool Holder
10.Tool Holder Locking Rod
11.Force Reducing Spring
12.Bead breaker
13.Tip tool
14.Position Handle（control tip tool and bead breaker）

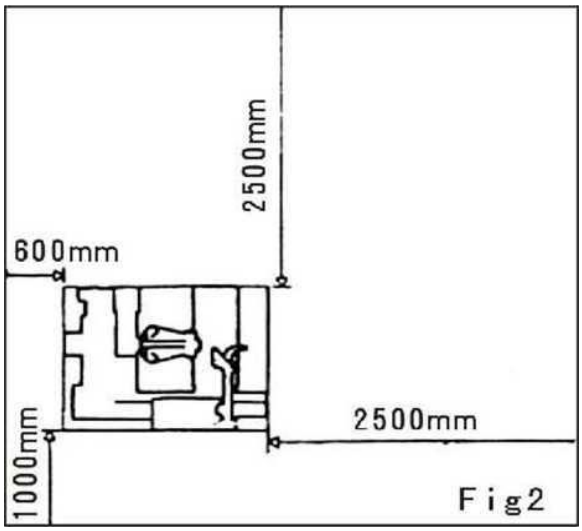


TECHNICAL DATA

Rim Size	14^26"
Max.Wheel Weight	1500Kg
Max.Tire Width	760 mm
Max.Wheel Diameter	1500 mm
Hadralic Pump Motor	**1.0KW-380V-3ph**
Gear-box motor	**1.5KW-380V-3 ph**
Working Presurre	130 bar -150bar
Pulling force on the edge of the tire	1500Kg
Noise	<75db
Net Weight	561Kg

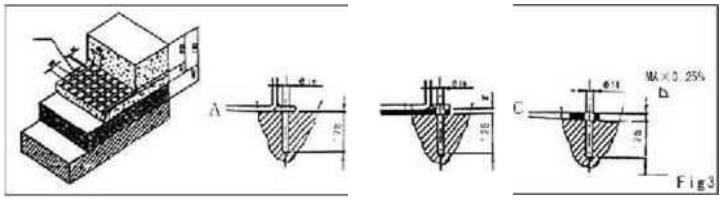
Installation: Installation field：

Choose a safe place in accordance with the relevant labor safety rules,tire changer needs to be connected with power grid,select the place easy for operator to operate （See Fig.2）If the installation is outdoor, it must be protected by some kind of roofing against rain



!No Outdoor Use

The installation base see the below Fig.3 The installation ground must be level，there are installation holes in the base of the tire changer,。Fix it wiht the bolts ,When the tilt relative to the horizontal surface is greater than 2.5%, it should be leveled



Electric Connection;

When the wheel exceeds 1000Kg, the tire chaneger must be secured with strong bolts.

ATTENTION:

! All electrical operations must be carried out by professional technicians

♦The installation field should be equiped with an effective protective ground circuit. Connect the ground wire.

♦ The power system should be equipped with an automatic circuit breaker. Set at 3 0 A

♦The tire changer is connected to the power supply，Switch" ON"， check that the gearbox motor rotation corresponds to the indicating arrow(Fig.5).if you find rotation direction is oppsite,exchange phase wire.

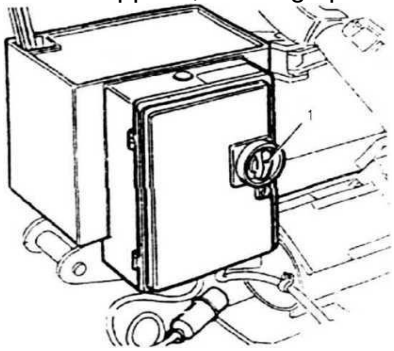


Fig4

!if the motor operation with wrong direction,it may burn

Fig.5

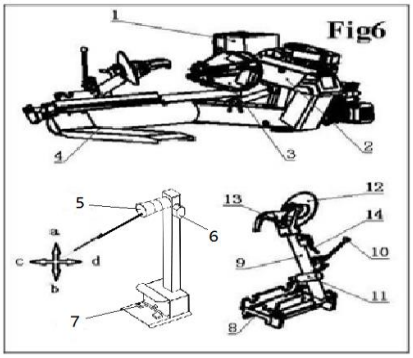
Note：Hadralic pump motor and Gear box motor are equipped with overload protection device,it is in the conrol box see Fig.4

♦ TEST OPERATION

Before using the tire changer, a test operation must be carried out to verify that it is installed correctly and is operating properly，

All of the following operation must put the tool holder (9) in the "not working" positon.

- ♦ Operation test：Place the tool holder (9) in the non-working position. Trigger the tool holder locking rod (1 0) to unlock the tool holder (9)， pull it out and set it in the non working position.
- ♦ Turn on the electric control box（1 ）main switch and Hydralic pump motor at same time，Depress foot pedal（7）: step on the left foot pedal ，clamping tool rotates conunter clockwise.Step on the right foot pedal，clamping tool rotates clockwise.
- ♦ Control Operation Switch（5）：make the handle to **a** and **b** direction ， Lifting arm（2） will rise and down.make the handle to **c** and **d** direction，Lifting arm（2）will move to left and right . Move the clamping control switch to the right（6）Hydralic Clamping tool is opened. move it to the left ,hydralic clamping tool is closed .



Lifting arm up or down ,the hydralic clamnps tool open may cause bruises, so must work outside their movment range

USE

•USE INSTRUCTION

Ignoring guidance and warnings can cause serious injury to the operator or third party. So don't turn it on before reading this manua

All operators must be properly trained before using (other person must not enter the work site) Do not place the material on the tire changer .this tire changer may not be modified or fiddle with without the permission of the factory.Pay attention to safety at work, to pull up long hair, do not wear fat clothes, do not wear ties, necklaces, ring watches. These are easily hung up by moving parts

♦ Emergency parking: Broadcast the main switch to 0 or press the red emergency stop button。

•RIM LOCKING

1 4" 2 6" rims, depending on the type of rim, have different locking methods and positions. (See Figure 7) Place the tire vertically on the tire support plate, move the lever handle, raise the tire slightly and move the clamping force control switch to the right. Clamp the tires and rims and lift them to an easy-to-operate height。

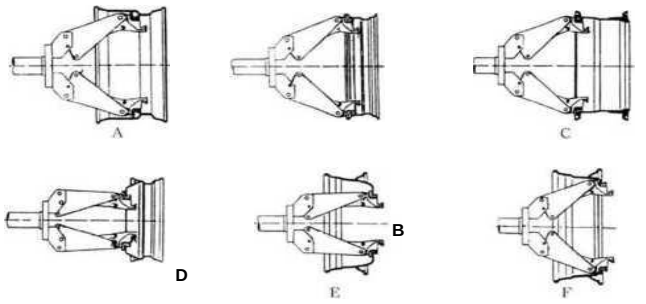


Fig7

•REMOVE THE TUBELESS TIRE

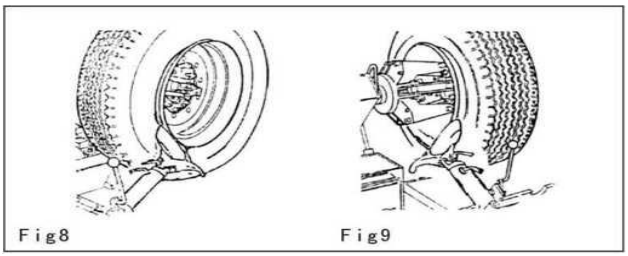
Use bead breaker to separate the tire and the rim

Make sure that the tires are locked and degassed。

2． When working, adjust the tool holder (9). Use the appropriate tools，

Always check that the tool holder locking rod (10) is properly hooked to the Mobile control center (8).

3． Use the control switch (5) to keep the bead breaker (12) close to the edge of the wheel (Figure 8)



4． Turn the tire while moving the bead breaker(12) forward.

5． Continue moving forward until separate the tire and the rim. For easy operation, grease the edges of the tires to avoid damaging the wheels and tires
Be careful! Do not clamp your fingers between the tire and the tool and turn clockwise to prevent any possible hazards when operating the outer edge. Turn counterclockwise when operating the inner edge

6. Remove the bead breaker (12) from the rim, release the tool holder locking rod (10), lift the support arm out of work, and move the bead breaker(12) to the inside.

Fig10

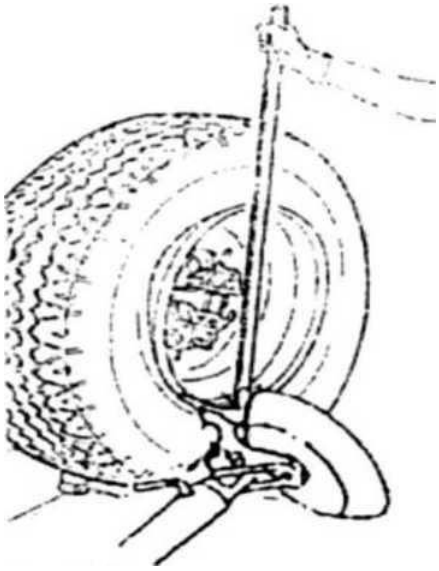


Fig11

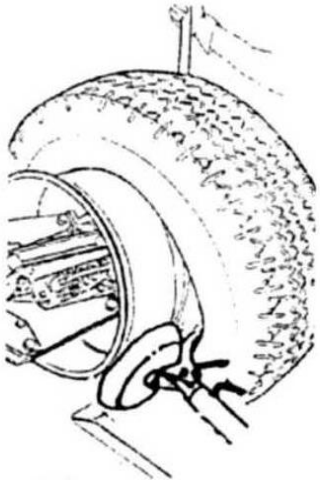
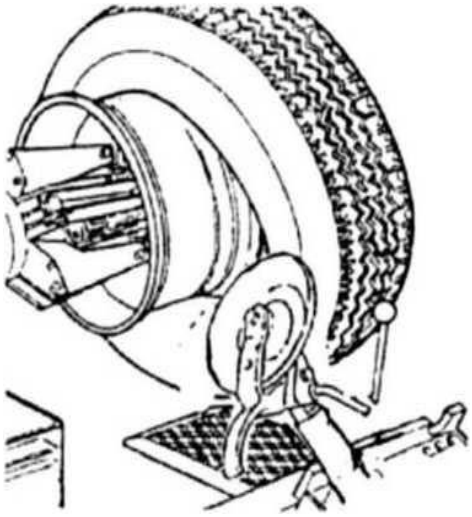


Fig12



7. The process is repeated till the edge of the tire on the other side is completely detached (Figure 9).)

1) Push the tool holder (9) to a non-working position and move it to the outside of the wheel.Make sure that the tip tool is lying on the tire, otherwise remove the positioning handle(14), Rotate the tool head 180 degrees, then lower and hook the Mobile control center.

2) Control the operating switch and adjust the position that between the tip tool (13) and tires Move the tip tool between the tire and the rim，And insert it into the edge of the tire to hook the tire

3) Move the rim down to prevent the edge of the tire from dislodge from the tip tool.

4) Move the tip tool outwards,Until it is on the outside of the rim edge.

5) In the lower part of the tip tool, insert the large crowbar between the rim and the tire edge.

6) Press down on the crowbar and lower the tire until the edge of the rim is 5 mm away from the tip tool (Figure 1 0).

7) Turn the wheel counterclockwise until the edge of the tire is completely off the rim. (Figure 11).

8) Move the tool support arm to the inside of the tire，Use bead breaker close to the edge of the tire, Turn the wheel counterclockwise，remove the inside tire completely from the rim， remove the whole tire(Figure 1 2)

Mounting tire：

1) Make sure that the wheel is clamped by Hydralic Clamping tool

2) Grease the rims and tires.

3) Clamp the pliers at the highest point on the outside of the edge of the rim(Figure 13)

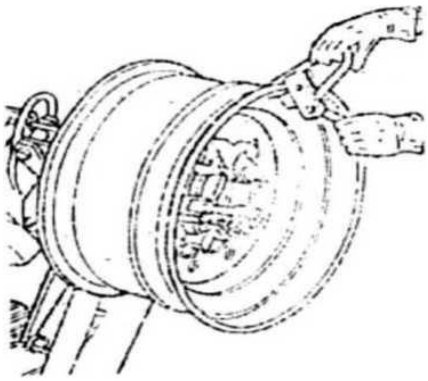


Fig13

For heavy-duty or oversized tires, be sure to use proper lifting to avoid personal injury

4. Place the tire on the wheel support plate，Lower the lifting arm to adjust the position between the tire support plate and the lifting arm，Hang the inside of the tire on the rim of the locked pliers.(Make sure the pliers are at the highest point of the axle)

5. Raise the tire edge and tire and turn 15-20mm clockwise, with the tires and rim crosses against each other.

6. Check that the tip tool is facing the side of the tire，if not ， Remove the lever and turn 180 degrees，fixed it .
7. Use the control switch to align the tip tool with the outer edge and at a distance of 5mm.
8. Turn clockwise until the pliers are at the lowest point，The inside tire edge should be in position at this point.
9. Remove the pliers from the rim and remove the tool from the tire.
10. Move the tool holder to the outside of the tire and secure the position.
11. Clamp the pliers on the outside of the rim，rotate and place it above the tip tool.
12. Turn clockwise until the pliers are at the lowest point，finishe the outside tire monting
13. Remove the pliers
14. Place the tire support plate directly below the wheel and lower the support arm of the hydraulic fixture so that the wheel is placed on top.
15. Loosen the hydralic clamping tool carefully remove the tire ,to prevent the tire from rolling down.must pay attention.

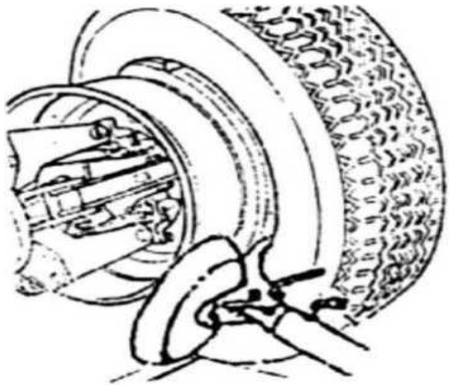


Fig14

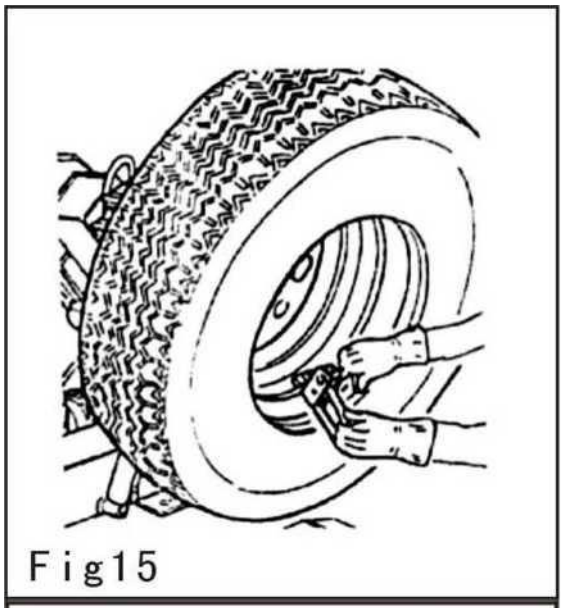


Fig15

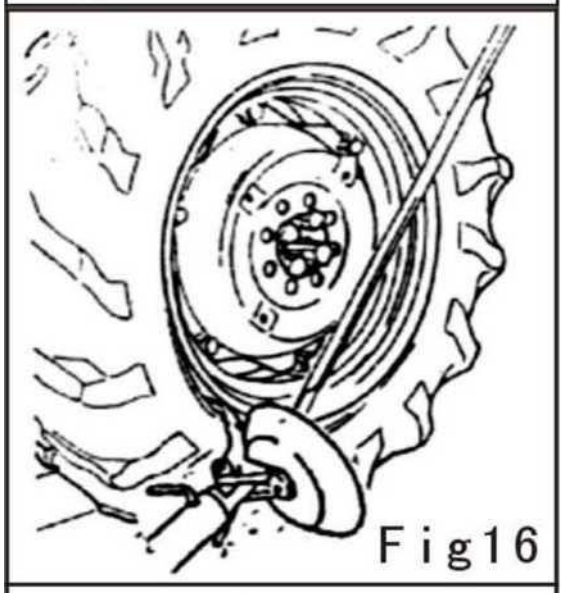


Fig16

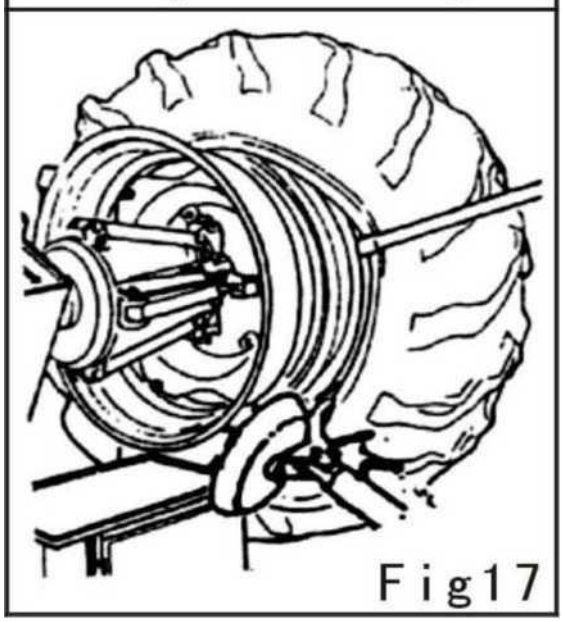


Fig17

Be very careful! When operating, do not put your finger between the tire and the tool to avoid any possible danger.

■demount tire with inner tube

When the tire deflates, open the sleeve fixing the air valve to make the air valve sink into the inner side of the rim, so that there is no obstacle at the edge of the skid tire.

Continue the above steps of prying the edge of the tubeless tire. When the edge of the tubeless tire is loosened, stop the movement of the turntable to avoid damaging the inner tube about inflation valve.

1） Push the tool rack⑨ to the non working position and move it to the outside of the wheel. At this position, hook the tire.

2）Turn the shaft and move the pointed tool between the rim and the edge of the tire until the tire is hooked.

3） Move the rim down 4-5cm to prevent the edge of the tire from detaching from the tool.

4） Move the pointed tool outward until it is on the rim side.

5） On the lower right side of the tool, insert a large crowbar between the rim and the tire edge.

6） Press down the crowbar and lower the wheel until there is a 5mm gap between the rim edge and the pointed tool.

7）Turn the wheel counterclockwise until one edge of the tire is completely separated.

8） Move the tool bracket to the non working position, lower the tire to make it contact with the tire support plate ④, and move the tire support plate outward slightly, so as to leave a place for taking out the inner tube.

9）Take out the inner tube and lift the tire again.

10）Move the tool bracket to the inner side of the tire, turn the sharp tool by 180 degrees, lower the support arm to the working position, insert it between the rim and the tire edge, move the tire edge in front of the rim, and rotate the wheel.

11）Move the rim 4-5cm to prevent the rim from detaching from the tool.

12）Move the sharp tool,make it 3cm inside the tire.

13）On the right side of the pointed tool, insert the crowbar between the rim and the edge of the wheel（see fig.17）

14）Press down the crowbar and lower the wheel until there is a 5mm distance between the rim edge and the pointed tool. Turn the wheel counterclockwise until the tire is completely out of the rim.

When the tire is off the rim, the wheel will come off. So we should ensure that the miscellaneous personnel are not in the workplace.

Install the tire：

1) If the flange has been removed from the hydraulic fixture, lock it as described in the "flange mounting" section.

2) Apply grease to the rim and rim of the tire.

3) Install the clamp at the highest point of the outer edge of the rim。(fig.**18**) Make sure that the clamp are firmly in contact with the rim.

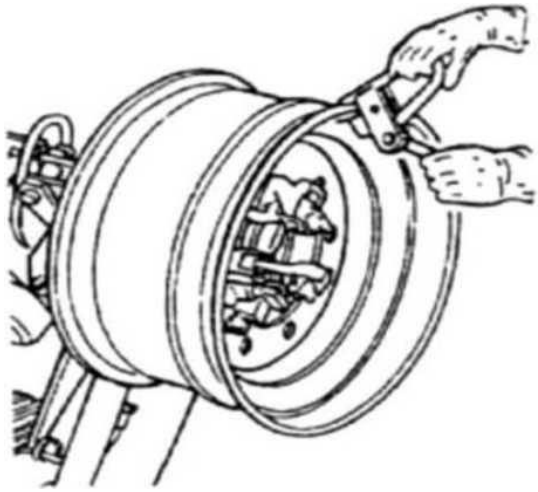


Fig18

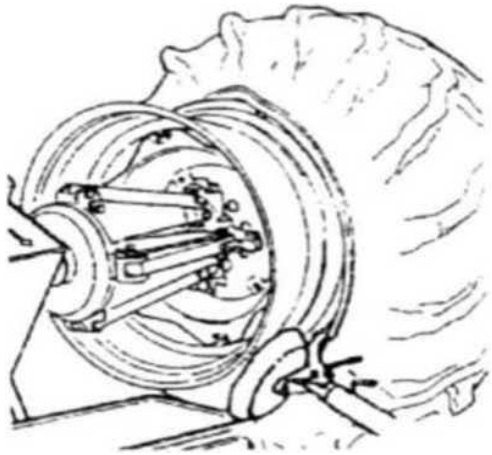


Fig19

4) Lower the lift arm and place the tire on the tire support plate.

5) (keep the pliers at the highest point) to hook the inside edge of the tire.

6) Lift the rim of the hanging tire and turn it counterclockwise for 15-20cm, the tire will tilt automatically.

7) Move the tool support arm to the non working position, move it to the inside of the tire, and re-hook at this position

8) Make sure the pointed tool is on the side of the wheel.

9) If not, turn 180 degrees.

10) Move the pointed tool forward and align it with the outer edge of the rim and keep a distance of 5mm.

11) Visually check from outside of the wheel whether the position is correct. If not, adjust it. Then turn the hydraulic clamp counterclockwise until the clamp is still in the lowest position, then the inner tire edge will be attached. Remove the clamp(see Figure 19), remove the tool from the tire.

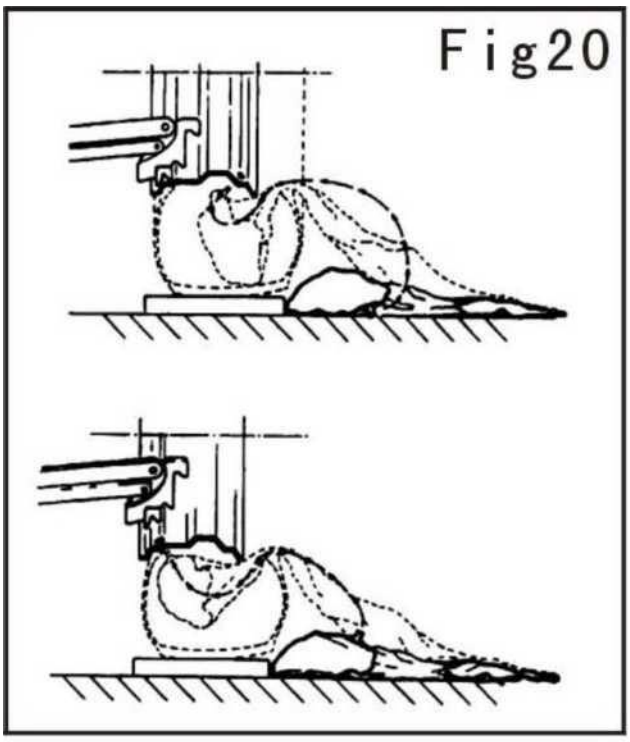
12) Move the tool support arm to the non working position and move it to the outside of the tire.

13) Turn the workpiece 180 degrees.

14) Turn the spindle to make the valve hole is at the bottom of the rim. Place the tire support plate (4) under the wheel, lower the lifting arm to make the tire touch the tire support plate, and move the tire support plate outward slightly, so as to leave a gap to insert into the inner tube.

Note: the air valve hole may be asymmetric with the center of the rim. In this case, install the inner tube according to (FIG. 20), insert the air valve into the hole and lock it with the lock nut.

15） Install the inner tube into the flange groove. (Note: for easy operation, it is recommended to rotate the spindle clockwise at the same time.)



16） Fill the inner tube with a small amount of air until there are not too many wrinkles, so that it will not be removed when installing the edge of the other tire.

17） Install the valve on the extension pipe and remove the locking ring. Note: the purpose of this operation is to allow the air valve to loosen, so as to avoid pulling off the other side of the installation.

18） Lift the tire and clamp the pliers on the outside of the other side, 20cm to the right of the valve.

19）Turn the spindle clockwise until the pliers are at 9 o'clock.

20） Move the tool bracket to the working position.

21） Move the pointed tool forward to 5mm of the outer edge of the rim.

22） Turn the axle clockwise until the tire is fully seated on the rim.

23）Remove the pliers and rotate counterclockwise to separate the pointed tool from the tire and move it outward.

24） Move the tool bracket to the non working position.

25） Place the tire support plate under the tire and lower the lift arm until the tire contacts the tire support plate.

26）Place the wheel on the tire support plate and check whether the air valve is aligned with the leading out hole. If not, slightly rotate the spindle to adjust the position, fix the air valve with the locking ring nut and remove the extension pipe.

27）Carefully loosen the hydraulic clamp and support the wheel to prevent it from slipping.

28） Move the tire support plate to release the tire from the fixture and remove the tire again.

Demount tire with split compression ring

1）As mentioned above, clamp the tire on the clamp and make sure it is deflated.

2） Lower the tool bracket to the working position and lock it with the tool support locking lever.

3）Get the turntable colose to the rim.（fig.21）

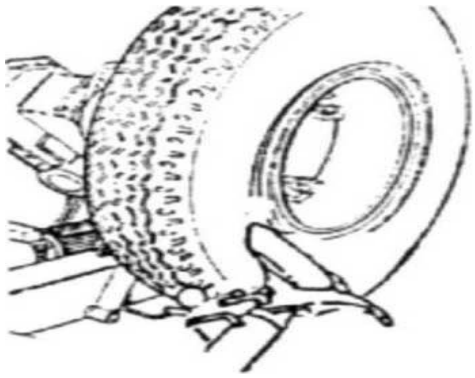


Fig21

4）Rotate the spindle and move the turntable forward along the contour line of the rim. Until the pressure ring is completely separated from the rim (pay attention to add grease)

If there is an inner tube, be careful. Once the edge of the tire is pulled open, stop immediately to avoid damaging the valve and inner tube.

6）As shown in figure 22 with a crowbar pressure ring to rim edge, and then use plate inside pressure, counterclockwise rotation axis.

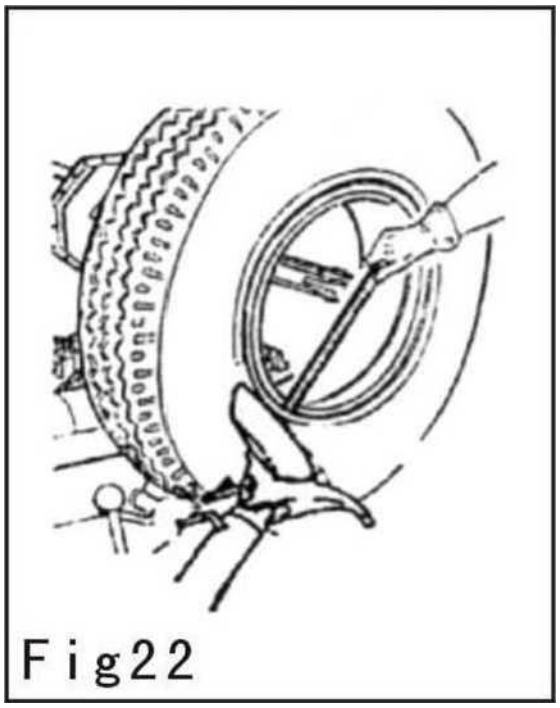


Fig22

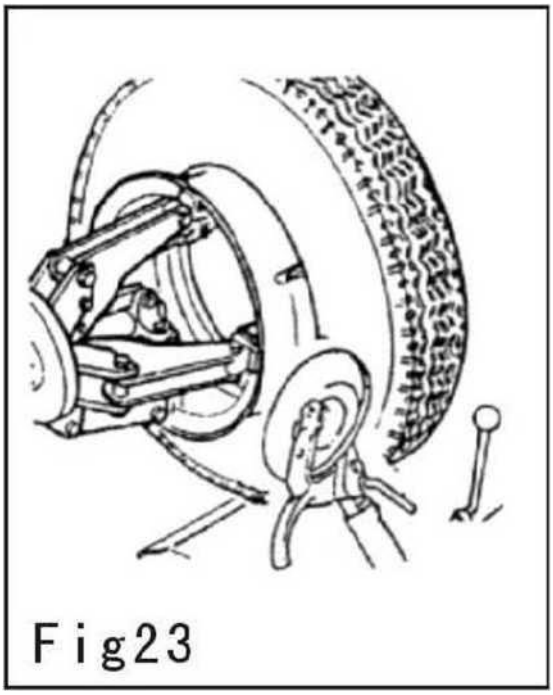


Fig23

- ！Do not engage in maintenance without training

6）Insert the gas valve on the outside of the flange (to avoid tearing the inner tube when unloading).Move the tool holder (9) away from the rim to the non-working position and move the tool holder to the inside of the wheel.

7）Lower the support arm to working position.

8） Hold the tray close to the tire until half of the tire has detached.

9） Move tool holder to non-working position

10）Lower the arm until the wheel is on the wheel support plate so that the tyre is completely off the rim (note the air valve).

Install tire

1） Lock the rim, place the air valve hole on the rim at the bottom, and lubricate

2） Move the tire support plate outward, place the tire, and place the valve hole on the rim at the bottom.

- 3） Move the tire support plate until the rim is completely in the tire.

4）Move the tool holder to the outside so that the round plate faces the wheel and leans against the wheel rim. Turn the spindle while pushing the wheel rim into the tire completely.

5） Place the open pressure ring on the flange and install the ring with the help of the round plate(See Figure 24).

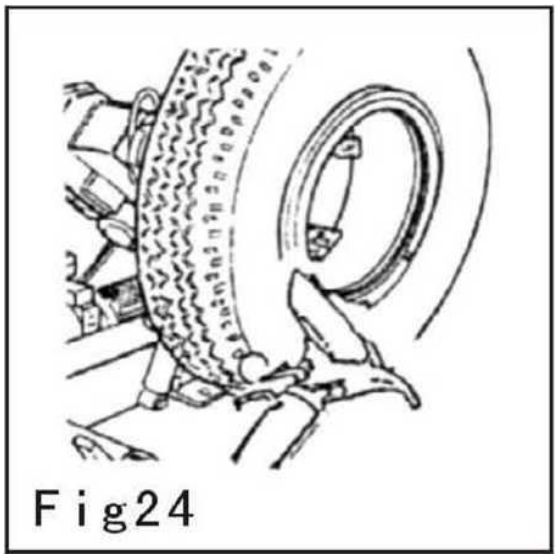


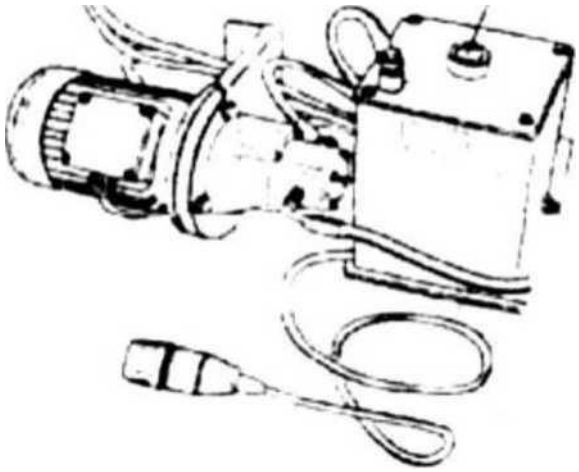
Fig24

6） Move the tool holder to the non-working position, loosen the clamp, move the tire supporting platform, and remove the wheel safely.

maintenance

- According to the manual regular maintenance is the basis of correct use of the tyre changer, and can extend its working life, to ensure the operation of the machine。To ensure safety, pull the plug before performing repairs and maintenance。Original parts must be used and replaced by professionals.
    - Regularly clean the following parts carefully with diesel oil and fill with lubricating grease.(1) trailer guide, (2) tool bracket horizontal axis, (3) lifting oil cylinder. The connecting shaft of double tools is regularly refueled, lubricated in summer, gear oil in winter. Regularly check the hydraulic oil in the tank of the hydraulic pump with the ruler (as shown in FIG. 25) and the quality of the oil (if the oil is insufficient, please add # 30 hydraulic oil). Speed reducer regularly (a quarter) add 320# gear oil, oil level more than half of the round oil window. Check the tension of the motor belt. If it needs to be adjusted, remove the plastic protective cover and adjust the belt with adjusting screw.Safekeeping: if not used for a long time (3 ~ 4 months), keep it properly; ①lower the lifting arm。② make the lifting arm load free。③Unplug the power。④Grease the tracks。⑤Empty the oil tank。⑥Grease the horizontal axis of the tool holder.。

Fig25



Transportation, packaging and 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 able to handle the machine. The location of the fork is shown in Figure 26. After unpacking and removing the packaging, make sure that the tyre changer is in good condition in the transportation process. Take out the standard accessories and packing materials and place them properly.Take care not to bruise the fixed control device during this period. If the machine is temporarily stored, make sure that the storage environment is as follows: maximum relative humidity: 95%, temperature: -5 °C, +40°C.

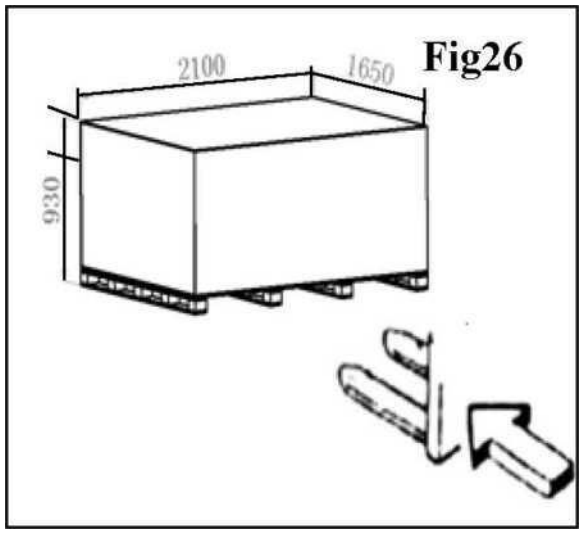
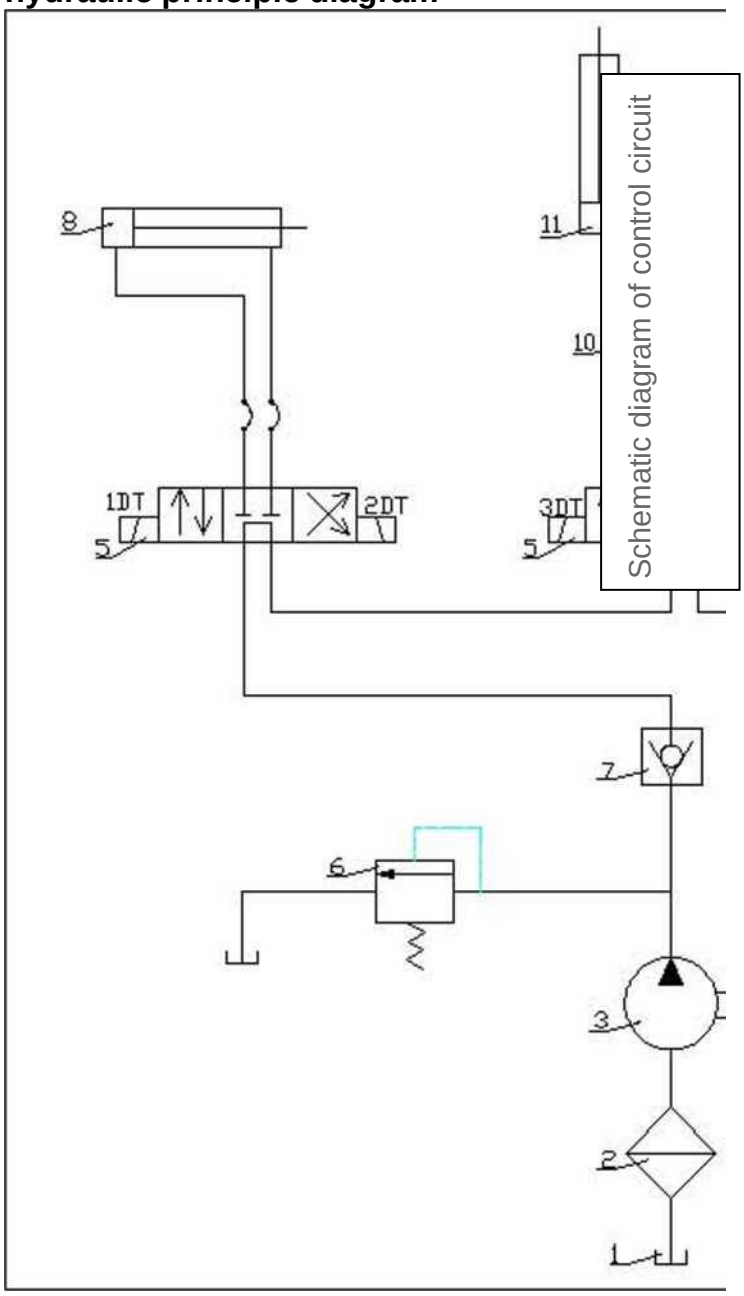


Fig26

hydraulic principle diagram



1.Oil tank 2. Filter 3. Oil pump 4. Motor 5.Solenoid directional valve 6. Relief valve 7. Check valve

8. pallet oil cylinder

9. Oil guide body 10. Hydraulic lock 11 lifting oil cylinder 12 spindle oil cylinder

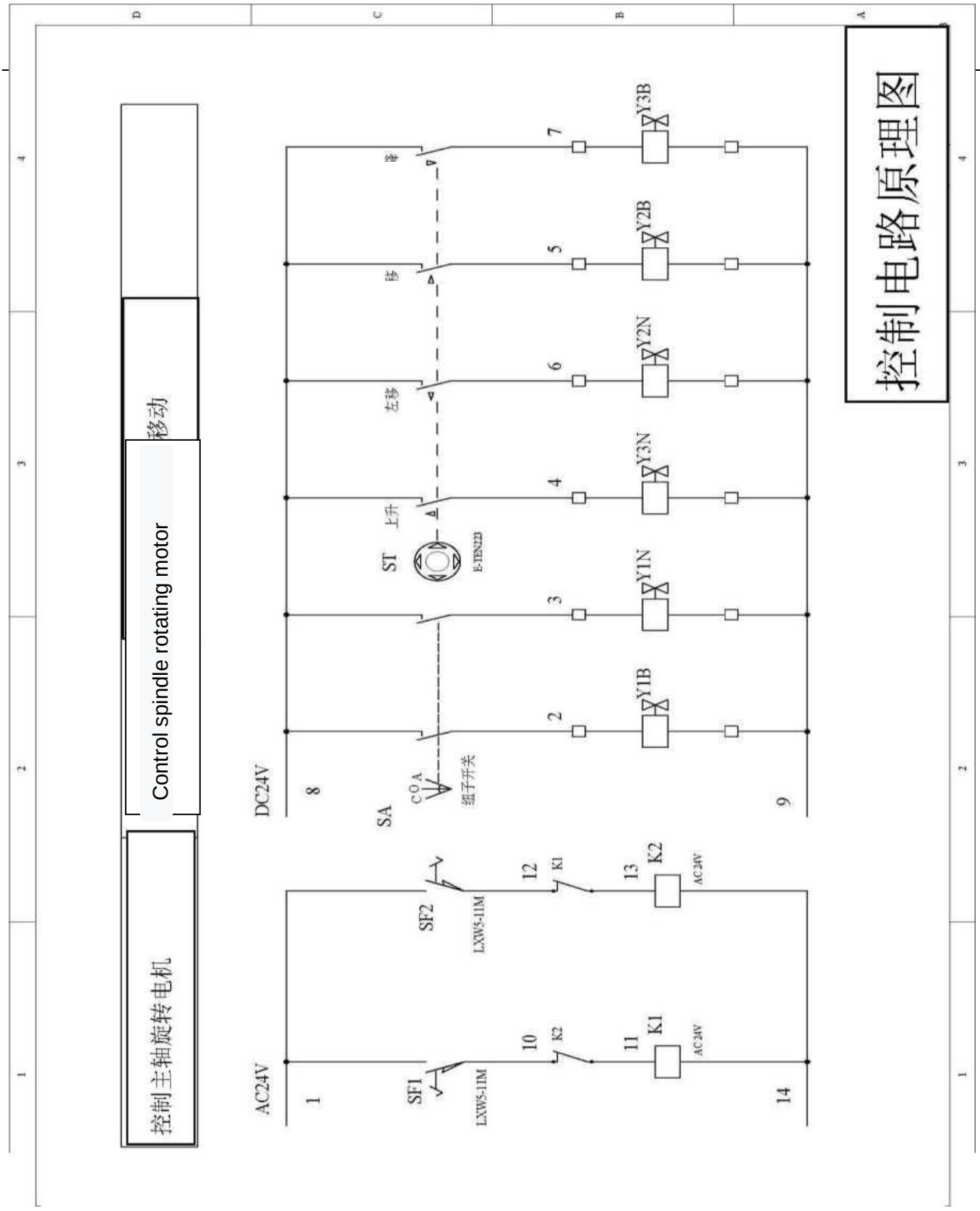
4. Separate design of motor oil pump and valve plate.

technical parameters

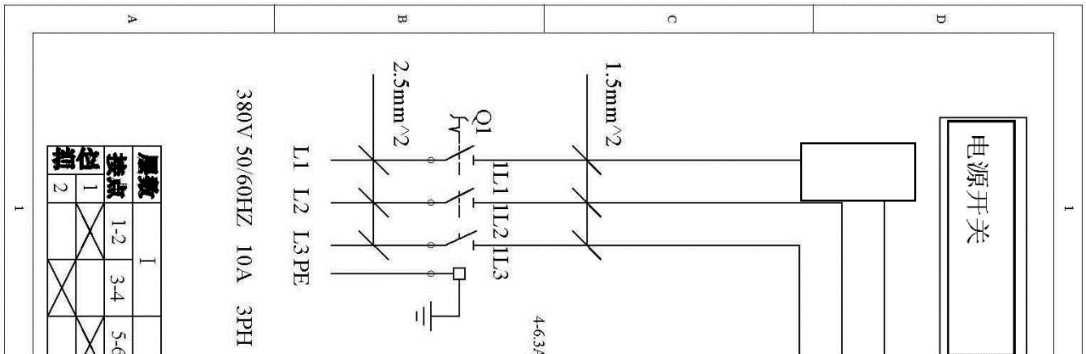
1. Motor: 1.5kw/380V/220V;1400r/m in ;3PH

2.Oil pump: displacement:
3.1ML/r; rated working pressure: 15MPa

3. control voltage :DC24V。


控制电路原理图
移动
Control spindle rotating motor
控制主轴旋转电机
DC24V
AC24V
SA
ST
SF1
SF2
LXW5-11M
K1
K2
AC24V
Y1B
Y1N
Y2N
Y2B
Y3N
Y3B
上升
左移
移
降
组子开关
E-TEN22B

☞电压转换型主电路图


电源开关
1.5mm^2
2.5mm^2
Q1
L1 L2 L3 PE
380V 50/60HZ 10A 3PH
挡位
1
2
1-2
3-4
5-6

Hydraulic pump motor	short circuit protection	spindle motor	Transformer

2.docx

Transfer switch control diagram

CIRCUIT DIAGRAM