DS-906A1

Truck Tyre Changer

User Manual — Australian Edition

Plain-English guide, rewritten for Australian workshops and operators.

This edition rewrites the manufacturer's original manual in clear English and adds Australian electrical-safety guidance. Original diagrams and schematics are reproduced in Appendices A and B.

1. Safety First — Read Before Use

This machine can seriously injure you if it's used incorrectly. Read this whole manual before switching it on, and make sure every operator has read it too. If any instruction is unclear, stop and check with a qualified person rather than guessing.

Key safety rules

- Electrical work only by a licensed electrician. Never wire, rewire or repair the electrics yourself.
- Indoor use only. Do not install or run this machine outdoors unless it's under a permanent, weatherproof roof.
- No loose clothing or jewellery. Tie back long hair and remove ties, necklaces, rings and watches before operating — they can be caught by moving parts.
- Trained operators only. Only people who have been trained on this machine should use it. Keep bystanders out of the work area while it's running.
- Keep hands and fingers clear. Never put your fingers between the tyre and the tools, or inside the clamp or lifting-arm movement range. These can cause serious crush injuries.
- Don't modify the machine or bypass any safety device without written approval from the manufacturer.
- Don't place tools or materials on the machine while it's in use.
- Wheels over 1000 kg must have the machine additionally bolted/secured to the floor before you start.
- Know your emergency stop. Turn the main switch to "0" or hit the red emergency stop button immediately if anything goes wrong.

Throughout this manual, look out for the shaded warning boxes like the one above — they call out the highest-risk steps.

2. About This Manual

This is a rewritten version of the manufacturer's original DS-906A1 truck tyre changer manual. The technical content is the same, but the language has been simplified and put into plain, Australian English, and the steps have been reorganised so they're easier to follow. Where the original manual used non-standard terms or had translation errors, they've been corrected here.

The original diagrams ("Fig." references) are reproduced exactly as the manufacturer supplied them in Appendix A (operating diagrams) and Appendix B (electrical and hydraulic schematics). Where the text below refers to a figure, you'll find it in the matching appendix page.

Note: This machine's data plate lists a 380V 3-phase supply. Australia's standard 3-phase supply is nominally 415V. Before connecting the machine, have a licensed electrician confirm the motors, contactors and control gear are suitable for use on Australian mains and that the installation complies with AS/NZS 3000 (the Australian/New Zealand Wiring Rules).

3. Technical Specifications

Rim size range	14" – 26"
Maximum wheel weight	1500 kg

Maximum tyre width	760 mm
Maximum wheel diameter	1500 mm
Hydraulic pump motor	1.0 kW, 415V, 3-phase
Gearbox (spindle) motor	1.5 kW, 415V, 3-phase, 1400 rpm
Working pressure	130 – 150 bar
Pulling force at tyre edge	1500 kg
Noise level	< 75 dB
Net weight	561 kg
Control circuit voltage	24V DC / 24V AC (low-voltage, isolated by transformer)
Hydraulic pump output	3.1 mL/revolution, rated pressure 15 MPa

Packed dimensions (for transport/freight quoting): approximately 2100 mm (L) × 1650 mm (W) × 930 mm (H). See Appendix A, page 9, for the forklift pick-up points on the crate.

4. Main Components

The numbers below match the exploded diagram in Appendix A, page 2 (Fig. 1).

1	Main switch — the machine's master power switch (see Fig. 4, Appendix A page 3)
2	Lifting arm
3	Hydraulic clamp (holds the wheel/rim)
4	Wheel support tray
5	Control lever — tilt to raise/lower and move the lifting arm left/right
6	Clamp control switch — opens and closes the hydraulic clamp
7	Foot pedal — controls wheel rotation (left pedal = anticlockwise, right pedal = clockwise)
8	Tool arm pivot head
9	Tool holder
10	Tool holder locking rod
11	Force-reducing spring
12	Bead breaker
13	Tip tool (bead-lifting tool)
14	Tool head positioning lever — swings the tip tool/bead breaker 180°

5. Installation

5.1 Choosing a location

Install the machine indoors, on a safe, level site that meets your workplace's labour/safety requirements, with the operator able to move freely around it. Leave clearance of roughly 600 mm on one side and 1000 mm on the other, with about 2500 mm of working space in front and above the machine (see Fig. 2, Appendix A page 2).

No outdoor use

- Do not install or operate this machine outdoors unless it has permanent, weatherproof roof cover.

5.2 Levelling and anchoring

The floor must be level. The base has mounting holes — bolt the machine down through these (see Fig. 3, Appendix A page 2). If the floor's tilt is more than 2.5%, pack and level the base before bolting down. Wheels heavier than 1000 kg require the machine to be bolted down before use — don't skip this if you're changing heavy truck wheels.

5.3 Electrical connection

Electrical work — licensed electricians only

- All wiring, connection and electrical fault-finding must be carried out by a licensed electrician, in accordance with AS/NZS 3000 (Australian/NZ Wiring Rules).

1. The installation site needs an effective, earthed (grounded) protective circuit. Connect the earth wire.
2. Fit an appropriately rated circuit breaker ahead of the machine. The manufacturer specifies 30A — your electrician should confirm the correct rating for your supply and cable run.
3. Have your electrician confirm the 380V 3-phase motors and control gear are compatible with Australia's nominal 400V 3-phase supply before energising the machine.
4. Once connected, switch the main switch "ON" and check that the gearbox motor turns in the direction shown by the arrow on the housing (Fig. 5, Appendix A page 3). If it's turning the wrong way, switch off immediately and have your electrician swap two of the phase wires — running the motor backwards can burn it out.

Note: The hydraulic pump motor and the gearbox motor both have overload protection built into the control box (Fig. 4, Appendix A page 3).

6. Before You Start — Test Run

Before changing your first tyre, run through this test to confirm the machine is installed and working correctly. For every step below, the tool holder (9) must be in its "not working" (parked) position.

1. Release the tool holder locking rod (10) to unlock the tool holder (9), pull it out, and park it in the non-working position.
2. Switch on the main switch (1) and the hydraulic pump motor together.
3. Test the foot pedal (7): press the left side and the clamp should rotate anticlockwise; press the right side and it should rotate clockwise.
4. Test the control lever (5): tilt it in the a/b direction and the lifting arm (2) should rise and lower; tilt it in the c/d direction and the lifting arm should move left and right.

5. Test the clamp control switch (6): move it right and the hydraulic clamp should open; move it left and it should close.

Crush hazard

- The lifting arm and hydraulic clamp can cause serious bruising or crush injuries as they move. Keep your hands, and everyone else, clear of their full range of movement — don't just avoid the areas they happen to be in right now.

7. General Operating Rules

Ignoring the guidance and warnings in this manual can cause serious injury to the operator or bystanders. Don't switch the machine on until everyone operating it has read this manual.

- Only properly trained operators may use the machine. Keep other people out of the work area while it's running.
- Don't place tools, tyres or other materials on the machine when it's not being used for that step.
- Don't modify or interfere with the machine without the manufacturer's written permission.
- Tie back long hair; don't wear loose clothing, ties, necklaces, rings or watches — moving parts can catch and pull them in.

Emergency stop

- Turn the main switch to "0", or press the red emergency stop button, to stop the machine immediately in an emergency.

8. Locking the Wheel onto the Clamp

Rims from 14" to 26" lock in different ways and positions depending on rim type — six common clamp configurations (A–F) are shown in Fig. 7, Appendix A page 4.

1. Stand the wheel vertically on the wheel support tray.
2. Move the control lever to raise the wheel slightly.
3. Move the clamp control switch to the right to clamp the wheel onto the rim.
4. Lift the wheel to a comfortable working height.

9. Working with Tubeless Tyres

9.1 Breaking the bead (separating the tyre from the rim)

Before you start, make sure the wheel is clamped securely and fully deflated.

1. Adjust the tool holder (9) so the correct tool is in position.
2. Check that the tool holder locking rod (10) is properly hooked onto the tool arm pivot head (8).
3. Use the control lever (5) to bring the bead breaker (12) up to the edge of the wheel.
4. Rotate the wheel while moving the bead breaker forward, keeping it against the tyre.

5. Keep moving forward until the tyre separates from the rim. Greasing the tyre edges first makes this easier and helps avoid damage to the wheel and tyre.
6. Turn the wheel clockwise when breaking the outer edge and anticlockwise when breaking the inner edge.
7. Once separated, back the bead breaker off the rim, release the tool holder locking rod, lift the tool arm clear, and repeat on the other side until the tyre is fully detached from both edges.

Watch your fingers

- Never put your fingers between the tyre and the tool while the wheel is turning.

9.2 Lifting the tyre off the rim

1. Push the tool holder to the non-working position and move it to the outside of the wheel. Check the tip tool is resting against the tyre — if not, remove the positioning handle (14), rotate the tool head 180°, then lower and re-hook it onto the pivot head.
2. Using the control lever, position the tip tool (13) between the tyre and the rim and hook it into the tyre's edge.
3. Move the rim down slightly to stop the tyre edge slipping off the tip tool.
4. Move the tip tool outward until it sits on the outside of the rim edge.
5. Insert the large tyre lever (crowbar) between the rim and the tyre edge, below the tip tool.
6. Press down on the lever and lower the wheel until there's about a 5 mm gap between the rim edge and the tip tool (Fig. 10, Appendix A page 4).
7. Turn the wheel anticlockwise until that edge of the tyre is completely off the rim (Fig. 11, Appendix A page 4).
8. Move the tool arm to the inside of the tyre, bring the bead breaker up to the tyre edge, and turn the wheel anticlockwise to work the inner edge off and remove the tyre completely (Fig. 12, Appendix A page 4).

9.3 Fitting a tubeless tyre

1. Make sure the wheel is clamped securely by the hydraulic clamp.
2. Grease both the rim and the tyre bead.
3. Clamp the mounting pliers at the highest point on the outside of the rim edge (Fig. 13, Appendix A page 4).
4. Place the tyre on the wheel support tray. Lower the lifting arm to line up the tray with the tyre, and hook the inside of the tyre onto the rim at the pliers (keep the pliers at the highest point of the wheel).
5. Raise the tyre and turn it clockwise about 15–20 mm so the tyre and rim cross over each other.
6. Check the tip tool faces the correct side of the tyre. If not, remove the lever, turn it 180°, and refit.
7. Use the control lever to bring the tip tool to within 5 mm of the rim's outer edge.
8. Turn the wheel clockwise until the pliers reach their lowest point — the inner tyre edge should now be seated.
9. Remove the pliers from the rim and take the tool off the tyre.
10. Move the tool holder to the outside of the tyre and lock it in position.
11. Clamp the pliers onto the outside of the rim and rotate them above the tip tool.
12. Turn clockwise until the pliers reach their lowest point — this seats the outer tyre edge.
13. Remove the pliers.

14. Position the wheel support tray under the wheel and lower the clamp's support arm so the wheel rests on the tray.
15. Carefully loosen the hydraulic clamp and lift the tyre clear, keeping control of it so it can't roll or fall.

Heavy tyres

- For heavy-duty or oversized tyres, use proper lifting equipment/technique — don't try to muscle them by hand.
- Never put your fingers between the tyre and the tool during fitting.

10. Working with Tube-Type Tyres

10.1 Removing the tyre and inner tube

Once the tyre has deflated, open the sleeve holding the air valve so the valve sits inside the rim, clearing the bead area.

1. Break the bead following the tubeless procedure in section 9.1. Once that edge starts to loosen, stop turning the wheel so you don't damage the inner tube or valve.
2. Push the tool holder (9) to the non-working position and move it to the outside of the wheel. Hook the tip tool into position.
3. Turn the shaft and move the tip tool between the rim and tyre edge until it hooks the tyre.
4. Move the rim down 4–5 cm to stop the tyre edge slipping off the tool.
5. Move the tip tool outward until it sits on the rim side.
6. Insert the large tyre lever between the rim and tyre edge, on the lower side of the tool.
7. Press down on the lever and lower the wheel until there's a 5 mm gap between the rim edge and the tip tool.
8. Turn the wheel anticlockwise until that edge of the tyre is completely free.
9. Move the tool holder to the non-working position, lower the tyre onto the wheel support tray, and ease the tray outward slightly to make room to pull the inner tube out.
10. Remove the inner tube, then lift the tyre back up.
11. Move the tool holder to the inside of the tyre, turn the tip tool 180°, lower the support arm to the working position, and hook it between the rim and the tyre edge in front of the rim. Rotate the wheel.
12. Move the rim 4–5 cm to stop it slipping off the tool.
13. Move the tip tool in so it sits about 3 cm inside the tyre.
14. Insert the tyre lever between the rim and the wheel edge, on the right side of the tip tool (Fig. 17, Appendix A page 5).
15. Press down on the lever and lower the wheel until there's a 5 mm gap between the rim edge and the tip tool. Turn the wheel anticlockwise until the tyre is completely off the rim.

Keep the area clear

- As the tyre comes off the rim, the wheel can drop. Make sure no one is standing in the work area at this point.

10.2 Fitting the tyre and inner tube

If the clamp jaws were removed, refit them first, following the flange-mounting instructions before you begin.

1. Grease the rim and the tyre bead.
2. Clamp the mounting pliers at the highest point on the outer edge of the rim (Fig. 18, Appendix A page 6), making sure they grip firmly.
3. Lower the lifting arm and place the tyre on the wheel support tray.
4. Keeping the pliers at the highest point, hook them onto the inside edge of the tyre.
5. Lift the tyre by the rim and turn it anticlockwise 15–20 cm — the tyre will tilt on its own.
6. Move the tool arm to the non-working position, then to the inside of the tyre, and re-hook it there.
7. Check the tip tool faces the correct side of the wheel — if not, turn it 180°.
8. Move the tip tool forward until it's within 5 mm of the rim's outer edge.
9. From outside the wheel, check the position looks right; adjust if needed. Turn the hydraulic clamp anticlockwise until it reaches its lowest point — this seats the inner tyre edge. Remove the pliers (Fig. 19, Appendix A page 6) and take the tool off the tyre.
10. Move the tool arm to the non-working position and then to the outside of the tyre.
11. Turn the wheel 180°.
12. Turn the spindle so the valve hole sits at the bottom of the rim. Position the wheel support tray under the wheel, lower the lifting arm until the tyre touches the tray, then ease the tray outward slightly to leave a gap for the inner tube.

> **Note:** The valve hole may not sit exactly opposite the rim's centre. If so, fit the inner tube as shown in Fig. 20 (Appendix A page 6) — insert the valve into the hole and secure it with the lock nut.

1. Fit the inner tube into the rim well (it's easier if you rotate the spindle clockwise at the same time).
2. Add a small amount of air to the tube — just enough to remove major wrinkles, so it doesn't get pinched when you fit the other edge of the tyre.
3. Fit the valve extension and remove the locking ring, so the valve can move freely and isn't pulled off while you fit the other side.
4. Lift the tyre and clamp the pliers on the outside of the opposite edge, about 20 cm to the right of the valve.
5. Turn the spindle clockwise until the pliers sit at the 9 o'clock position.
6. Move the tool arm to the working position.
7. Move the tip tool forward to within 5 mm of the rim's outer edge.
8. Turn the axle clockwise until the tyre is fully seated on the rim.
9. Remove the pliers, then rotate anticlockwise to lift the tip tool clear of the tyre and move it outward.
10. Move the tool arm to the non-working position.
11. Position the wheel support tray under the tyre and lower the lifting arm until the tyre touches the tray.
12. Check the air valve lines up with the access hole in the tray. If not, rotate the spindle slightly to adjust it, then secure the valve with the locking ring nut and remove the extension pipe.
13. Carefully loosen the hydraulic clamp, supporting the wheel so it can't slip.
14. Move the wheel support tray to release the tyre from the clamp and lift the finished wheel clear.

11. Working with Split-Rim (Multi-Piece) Wheels

11.1 Removing the tyre

1. Clamp the wheel as described above and make sure it's fully deflated.
2. Lower the tool arm to the working position and lock it with the tool support locking lever.
3. Bring the turntable in close to the rim (Fig. 21, Appendix A page 7).
4. Rotate the spindle and move the turntable forward along the contour of the rim, greasing as you go, until the compression ring separates fully from the rim.

> **Inner tube caution**
>
> - If the wheel has an inner tube, stop turning as soon as the tyre edge pulls open, to avoid damaging the valve and tube.

1. Using a tyre lever, press the compression ring toward the rim edge, then use the flat plate to push from inside while rotating the axle anticlockwise (Fig. 22, Appendix A page 8).
2. Fit the air valve on the outside of the flange (this avoids tearing the inner tube during removal). Move the tool holder away from the rim to the non-working position, then move it to the inside of the wheel.
3. Lower the support arm to the working position.
4. Hold the plate against the tyre until roughly half of the tyre has come free.
5. Move the tool holder to the non-working position.
6. Lower the arm until the wheel rests on the wheel support tray and the tyre is completely off the rim (watch the air valve as you do this).

This procedure requires training — do not attempt split-rim maintenance without it. Split rims store energy under tension and can separate forcefully if handled incorrectly.

11.2 Fitting the tyre

1. Lock the rim with the air valve hole at the bottom, and lubricate it.
2. Move the wheel support tray outward, place the tyre on it, with the valve hole aligned to the bottom of the rim.
3. Move the tray in until the rim is fully inside the tyre.
4. Move the tool holder to the outside so the round plate faces the wheel and rests against the rim. Turn the spindle while pushing the rim fully into the tyre.
5. Fit the open compression ring onto the flange, using the round plate to help seat it (Fig. 24, Appendix A page 8).
6. Move the tool holder to the non-working position, loosen the clamp, move the wheel support tray, and lift the finished wheel away safely.

12. Maintenance

Regular maintenance keeps the machine safe and extends its working life. Follow the manufacturer's schedule below.

> **Before any maintenance**
>
> - Unplug the machine from the power supply before carrying out any repair or maintenance work.

- Use genuine replacement parts, fitted by a qualified technician.

12.1 Regular lubrication

- Clean the trailer guide, tool bracket horizontal axis, and lifting cylinder with diesel and re-grease them regularly.
- Grease the connecting shaft of the twin tools regularly — use grease in summer and gear oil in winter.
- Check the hydraulic oil level in the pump reservoir with the dipstick (Fig. 25, Appendix A page 9) and check the oil condition. Top up with #30 hydraulic oil if the level is low.
- Top up the gearbox with 320# gear oil every quarter, until the level shows above halfway in the sight glass.
- Check the motor belt tension periodically. If it needs adjusting, remove the plastic guard and use the adjusting screw.

12.2 Long-term storage

If the machine won't be used for 3–4 months or more, prepare it as follows:

1. Lower the lifting arm fully.
2. Take all load off the lifting arm.
3. Unplug the machine from the power supply.
4. Grease the tracks/slideways.
5. Empty the hydraulic oil tank.
6. Grease the tool holder's horizontal axis.

While in storage, keep the machine somewhere with a maximum relative humidity of 95% and a temperature between −5°C and +40°C.

13. Transport, Packaging and Storage

Transport the machine in its original packing crate, in the orientation marked on the box. Use a forklift, positioning the forks as shown in Fig. 26 (Appendix A page 9).

- After unpacking, check the machine hasn't been damaged in transit.
- Keep the standard accessories and packing materials together in a safe place.
- Take care not to bump or bruise the control box during unpacking and setup.

14. Quick Troubleshooting Reference

Symptom	What to do
Gearbox motor turns the wrong way	Switch off immediately. Have a licensed electrician swap two phase wires — never run it in reverse, it can burn out the motor.

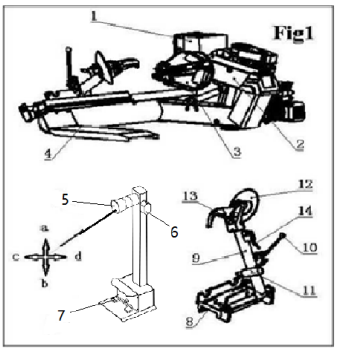
Hydraulic oil level low	Top up with #30 hydraulic oil, checked via the dipstick shown in Fig. 25.
Gearbox oil low (sight glass below half)	Top up with 320# gear oil (check quarterly).
Motor belt feels loose	Remove the plastic guard and tension the belt using the adjusting screw.
Hydraulic pump or gearbox motor cuts out	Both motors have built-in overload protection in the control box (Fig. 4) — check for the cause of overload before resetting.
Machine sitting unused for 3+ months	Follow the long-term storage steps in section 12.2 before shutting it down.

Appendix A — Original Operating Diagrams

These pages are reproduced directly from the manufacturer's original manual and are referenced by figure number throughout this guide (e.g. Fig. 1, Fig. 7).

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）

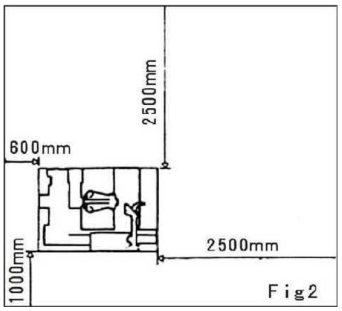


TECHNICAL DATA

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

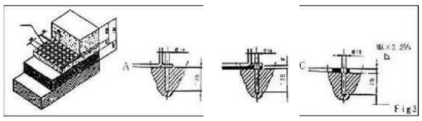
Installation: Installation field：

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

1

Original manual — page 1

♦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.

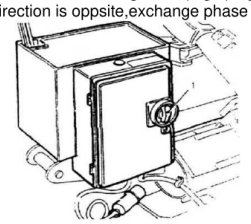


Fig4

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

Fig.5

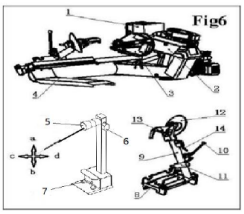
Note：Hadralic pump motor and Gear box motor are equipped with overload protection device,it is in the conrol box see Fig.4

♦ 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。

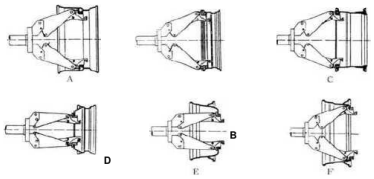
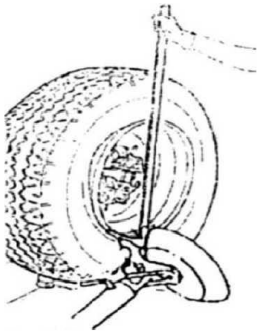


Fig7

Fig10



•REMOVE THE TUBELESS TIRE

Use bead breaker to separate the tire and the rim

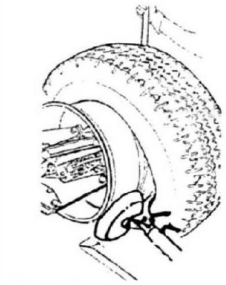
Make sure that the tires are locked and degassed。

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)

Fig11



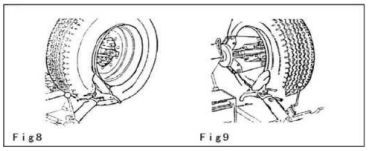
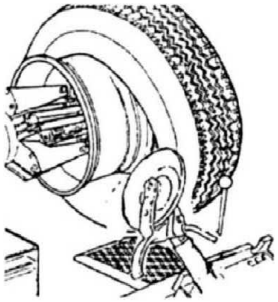


Fig12



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.

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)

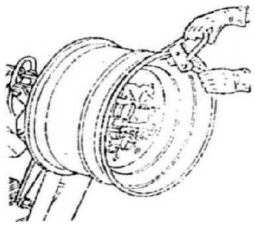


Fig13

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.

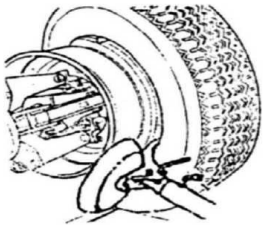


Fig14

4

Original manual — page 4

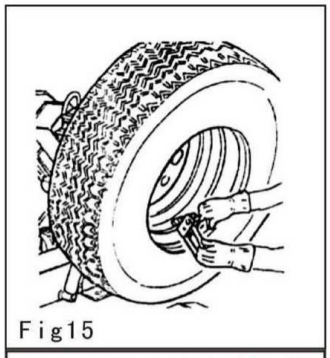


Fig15

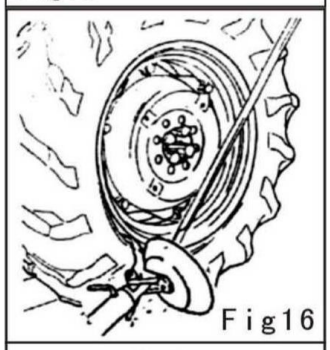


Fig16

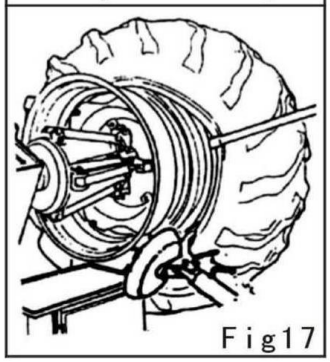


Fig17

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.

Original manual — page 5

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.

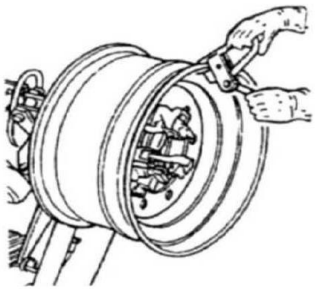


Fig18

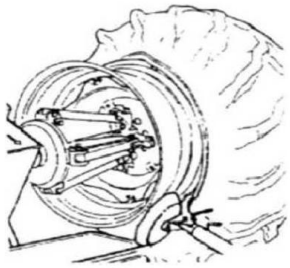


Fig19

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.

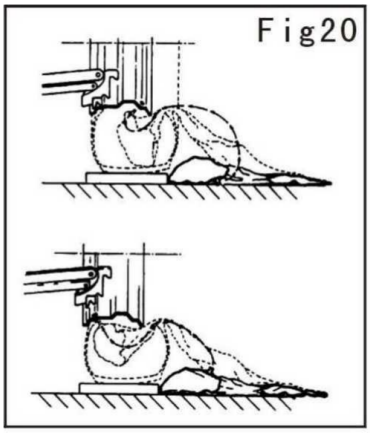
12) Move the tool support arm to the non working position and move it to the outside of the tire.

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）

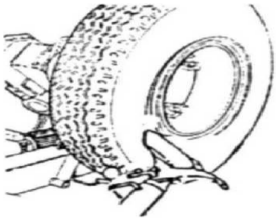


Fig21

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.

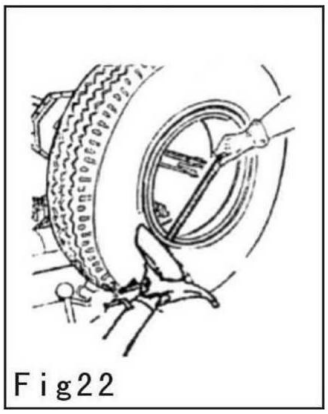


Fig22

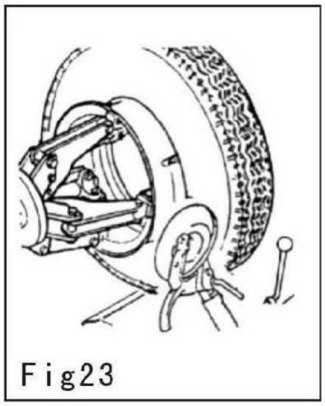


Fig23

- ！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).

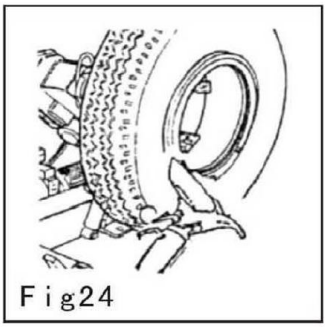


Fig24

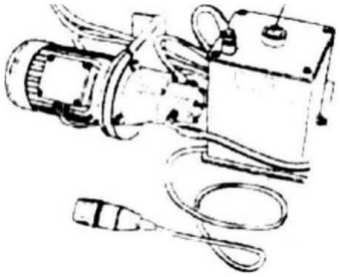
6） Move the tool holder to the non-working position, loosen the clamp, move the tire supporting platform, and remove the wheel safely.

Original manual — page 8

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.

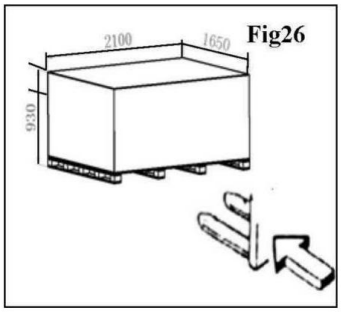


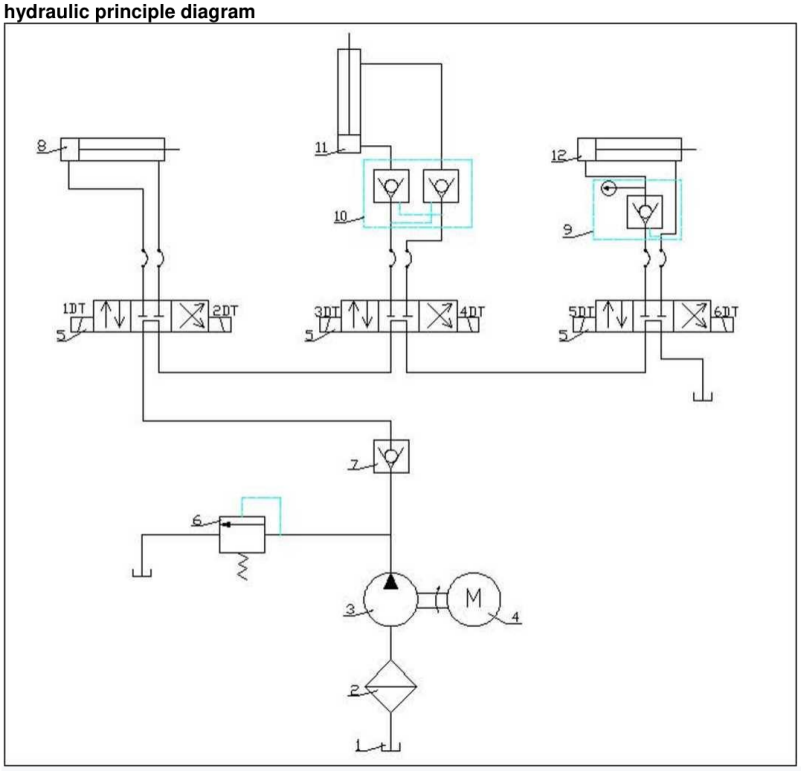
Fig26

Appendix B — Electrical and Hydraulic Schematics

For qualified technicians only

- These schematics are provided for reference during servicing by a licensed electrician or qualified technician. Do not attempt electrical or hydraulic repairs yourself.

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

technical parameters

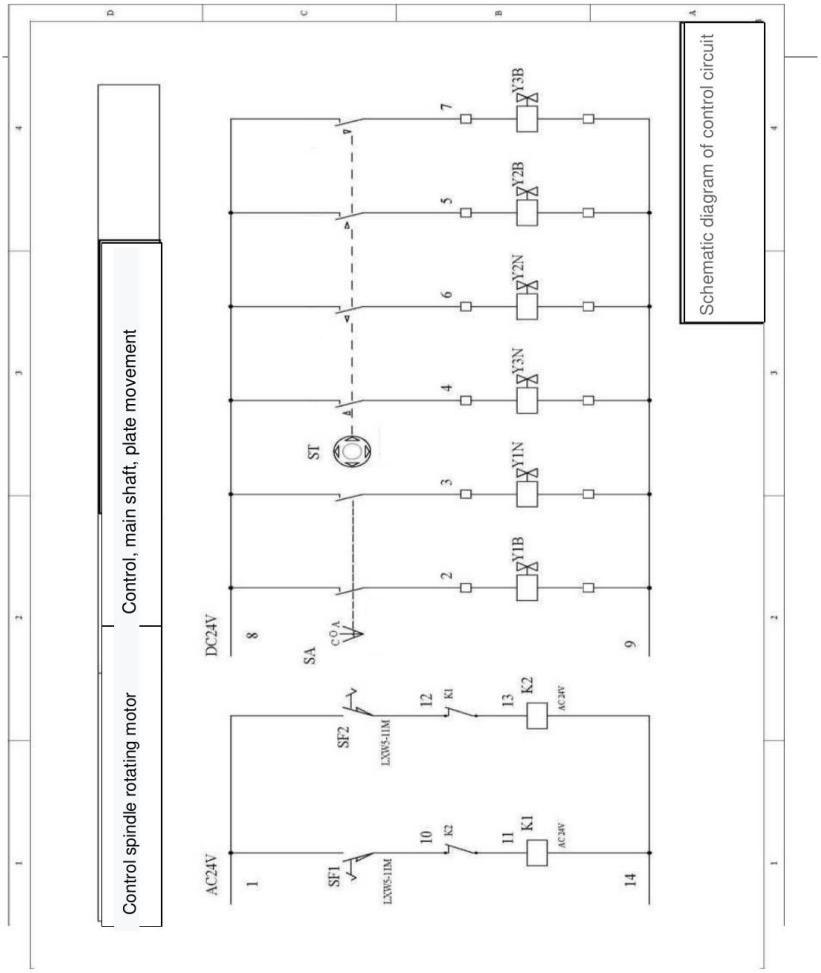
1. Motor: 1.5kw/380V/220V;1400r/m in ;3PH

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

3. control voltage :DC24V。

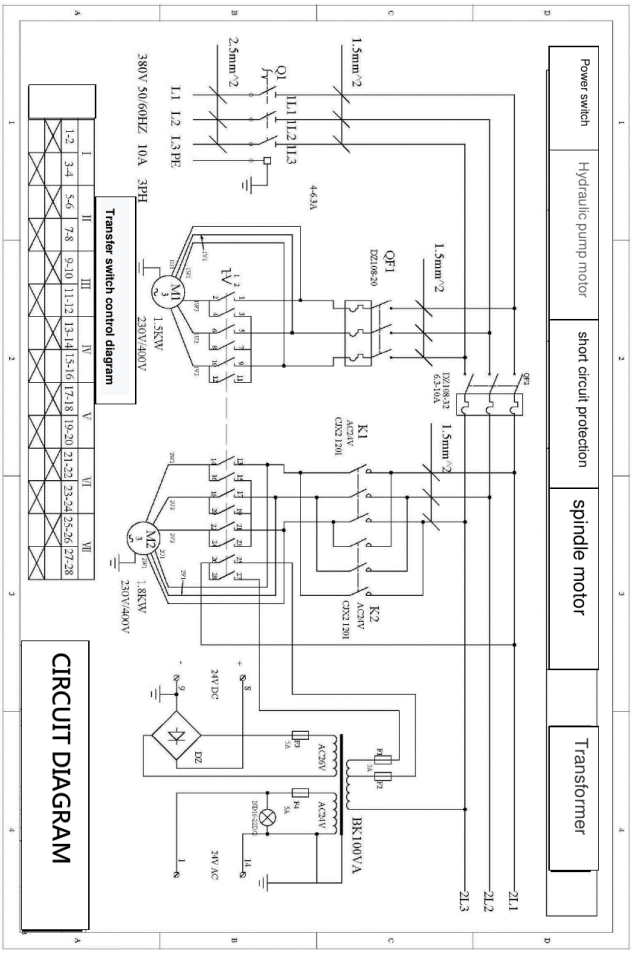
4. Separate design of motor oil pump and valve plate.

Hydraulic principle diagram



Control circuit schematic (spindle rotation, main shaft and plate movement)

Voltage conversion main circuit diagram



Main wiring / circuit diagram