

BP896 Cougar Manual

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Purpose

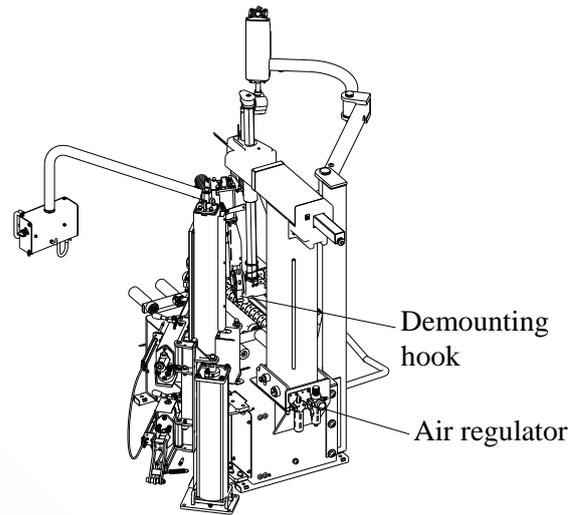
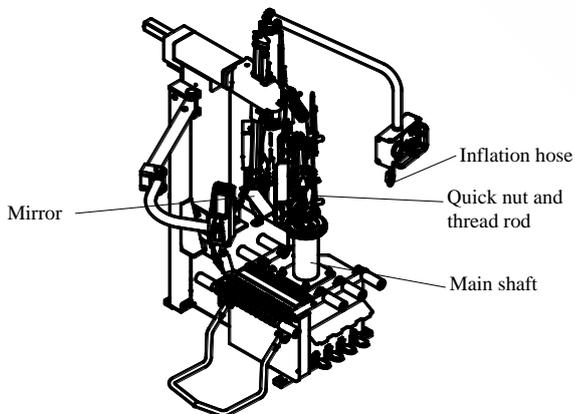
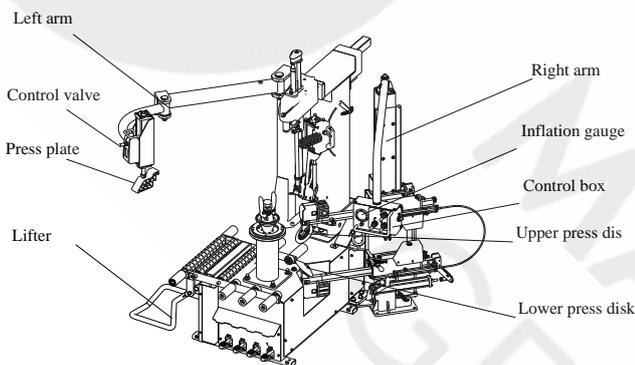
The manual is the part of the product to provide the valid and safe instruction about the debug, safety use and maintain for the owner and the operator.

Keep the manual well for reference to operator.

It is designed to mount and demount the tires of passenger cars and trucks. Not use for others.

Manufacturer is not in charge of the damage caused by the abuse and unreasonable operation.

Components



Warning

- The machine must be used by trained and authorized person. The manufacturer is not charge of the responsibility for any changes of machine and caused damage without permission from the manufacturer. It's against the safety requirement to remove the safe device when operate the machine.
- **The machine only is used in the situation without inflammable and explosive risk.**
- must release all the air before operate the tire
- This machine has inflation function and it must be forbidden to inflate the tire when the tire locks on the machine.
- All electrical components, hydraulic system and pneumatic system installation and debugging, must be conducted by professional people.
- Must be with goggles, gloves and other protective equipment before operating.
- must cut off the power and lock it during machine maintain

Label



Electrical shock!



Note may be out of control and fall suddenly will cause accident harm



Be careful your hand



Wear gloves.



Read the user manual.

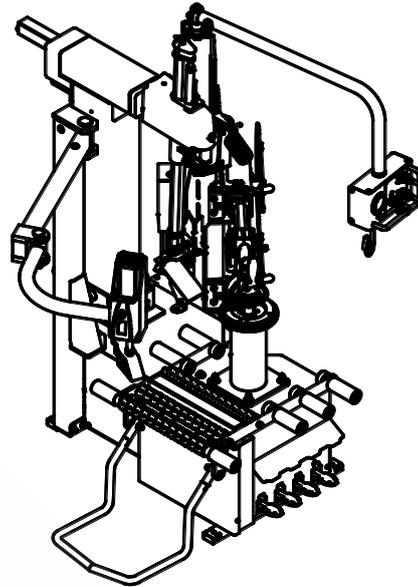


Must cut off the power and lock it during machine maintain

Safety device

- Reasonable layout of the control device can avoid the risk caused by disoperation.

Warning: forbid to damage and dismantle any safe device absolutely.



Move and store the machine

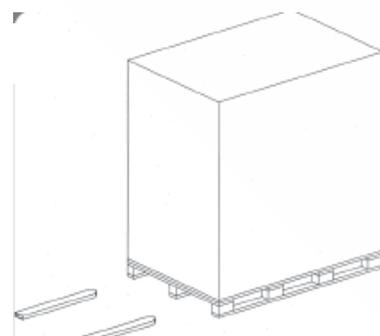
Transport the machine by forklift and trailer when the machine is packing situation and insert into the preformed groove at the bottom of the package. If the machine without package, adopt the following measure:

- coat the sharp parts with proper material like cardboard or polymerization material.

Store the packed machine at dry and ventilated place.

Warning: to avoid damage, do not put other articles on the top of the package.

The store temperature of packed machine: -25°C /+55°C

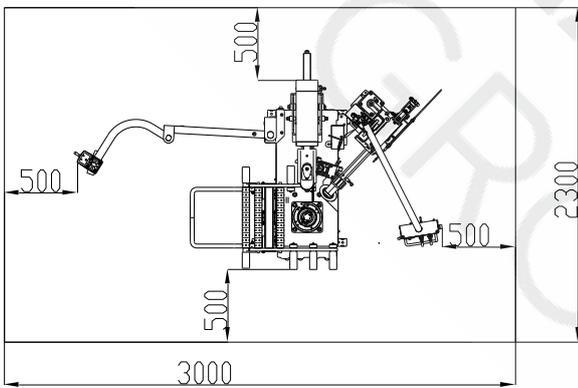


Unpack

By checking if there's visible damage on the parts to examine the machine if it is intact after unpacking the machine. If there's damage or not sure, do not use the machine then contact the professional person or the distributor. Keep the package material like plastic bag, intumescent polystyrene, nails, screws and wood chips far away from the children because they have potential danger. If these materials have pollution or cannot be biodegradable, dispose them at the special collection points.

Installation requirement and assemble

This machine needs to be fixed on the ground which can bear at least 1500 kg.



Connect power and air supply according to the requirements of identification.

Caution: **follow the current safety requirement when choose the installation place. The ground must be hard enough to support the machine and the maximum effective load.** Please remember: the bearing surface need to use the fixture device.

- Flat ground, not tilt;
- Plenty installation space

Caution: if the machine is installed in outdoor, must have the proper protection

- Need isolation with the outside;
- Need to have heat insulation, avoid light, rain measures;
- Far away from flammable and explosive area;
- Need flat ground level, enough space;
- Hard ground bearing for at least 1500 kg, and be fixed at least four M12 bolts

Working environmental conditions:

- environment humidity: 50% @ 40°C - 90% @ 20°C ;
- environment temperature: 5°C - 40°C
- Max working altitude: max 1000M

Technical parameter

Max wheel diameter	1000mm
width	3"-14" (76~356)
rim	13"-30" (330~762)
Working pressure	0.7-0.8Mpa
Main shaft rotation speed(two speed)	6.8 r/min 、 13.6 r/min (non-standard-single speed: 6.8 r/min)
Bead break power	400kg

Motor(two speed) 380V 50Hz 3P 0.85/1.1Kw
(1430、2850)

rate current 2.3/2.8A (non-standard-frequency control)

Main shaft torque: low speed 850N.m; high speed 540N.m

Range: car tire

Max inflation pressure 3.5bar

Machine operation

Operation instruction

Demount tire

1. Exhaust the air in tire and put the tire onto the lifter.
2. Step the air control valve to lift the tire then align the center hole of the tire to the main shaft hole. Step the valve again to down the lifter. use proper cone and quick nut to lock the tire.(some special tire needs more cones)
3. Move both press disc to rim edge around 2mm then lubricate the tire lip and rim edge to reduce the resistance. Step the pedal to rotate the main shaft clockwise and separate the tire from the rim.

1. Bead break disc forth and back

2. Bead break disc up and down



3. Bead break disc up and down

4. Lock and unlock bead break disc



5. Lift the lifter

6. Tilt the arm

7. Inflation

8. Main shaft rotation
Low/high speed
(non-standard-frequency control)

4. Separate the tire and rim using the bead break disc like the below picture.



Pull the control valve downward to insert the hook into the tire.

5. The left assist arm press plate presses the tire at the opposed position then pull the control valve upward to return the hook to lift up the tire to the rim.



6. Rotate the main shaft clockwise to demount the upside of the tire.



7. Lift the tire using the lower press disc.



8. Pull the control valve downward to stretch out the hook.



9. Lift the outside tire and pull the control valve to draw up the tire.



10. Rotate the main shaft clockwise to demount the downside of the tire.



11. Tilt back the arm then take off the tire.



3. Lubricate the tire lip and rim then press the tire lip using the press disc to the below of the rim edge.



12. Finish the demounting.



4. Rotate the main shaft to mount the upside of the tire.



Return the press plate and demounting head. Finish the mounting.

Mount tire

1. Put the repaired tire or new tire onto the rim then return the tilt arm.



2. Rotate the main shaft clockwise to mount the downside of the tire.

5. Step the pneumatic switch to lift the lifer then push the tire away from the main shaft.



6. Step the pneumatic switch again to down the lift and tire.



Inflation

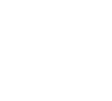
	<p>Must be extremely careful when inflate the tire and strictly follow the below instruction.</p> <p>Because the design and manufacture of the tire changer is not to protect the people around the machine.</p>
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Important reminder: there's pressure sensor in some tires and keep away from it when operate the tire.

	<p>The most important is to check the tire and rim to avoid tire blowout during inflation. Make sure no any damage on tire and tire fiber before inflation. If it is, do not mount the tire. Make sure no pit and embossment on rim and no slight scratch on rim inner side. They are dangerous during inflation.</p>
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	<p>Tire Blowout will lead to the operator serious injury or even death. Carefully check the rim and tire size should be the same. Check there is no defect and wear and tear before inflation. Check the pressure after inflation. All the tire changer limited the maximal pressure at 3.5 bars. The pressure value must not exceed the manufacturer's recommendations all the time and keep your body and hands as far as possible away from the tires.</p>
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Lubricate the tire bead with special grease to avoid tire damage and easy to operate.

	<p>no people behind the tile arm during tile the arm</p>
	<p>No need to unlock the demounting arm. You just need tilt the arm or return it.</p>
	<p>Must not out you r hands on the tire or the tilt arm will hurt your hands (between the rim and demounting head) when it returns.</p>
	<p>When operate the tires, the turntable rotates clockwise.</p>

Inflation step:

- 1) check the tire and rim size if match for each other
- 2) lubricate the tire bead and if necessary, lubricate deeper
- 3) step the pedal to the middle position
- 4) check the inflation gauge value
- 5) keep on inflation and check the pressure value



Maintain

Matters need attention

	<p>Prohibit unauthorized personnel to perform maintenance</p>
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It's necessary for tire changer's correct operation and long life which described in this manual.

If not do the regular maintenance, operation and reliability will be threatened.

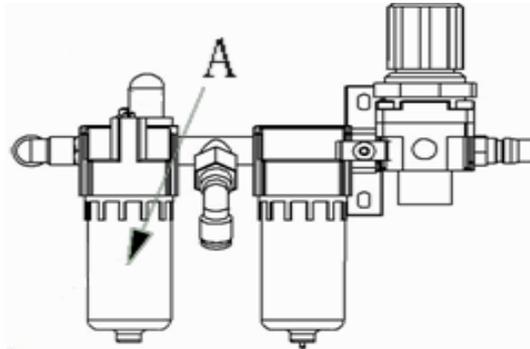
	<p>Before doing any maintenance, disconnect the power supply and air supply.</p>
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Must use the manufacture parts to replace to the faulty parts by professional person and it's forbidden to remove and change the safety device (pressure limit and adjust valve)

	<p>Declare that manufacturers will not be charge of the damage caused by changing using other factory parts or removing safety system</p>
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Maintenance operation

Check the oil in air regulator and if necessary, loosens the screw and fill full the oil cup using ISO VG/ ISO HG oil.

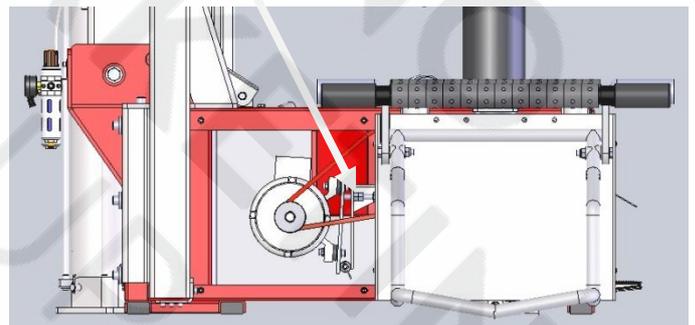


Check if the oil can drop one after step pedal 3 or 4 times and if not, adjust it by the screw at the top.

If less power, check belt tension.

Adjust the belt tension by adjusting the screw on motor bracket.

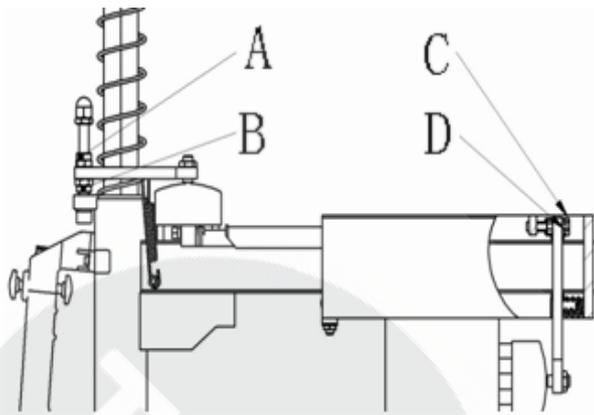
Adjustment screw



Adjust the clearance between demounting head and rim

Up and down clearance: turn off the air supply then remove protective cover, adjust downward A, B screws if big clearance; adjust upward A, B if little clearance.

Connect the air supply to check the lock situation.



Forth and back clearance:

Turn off the air supply, and then remove protective cover. Loosen the nut on M6 screw and adjust this screw like C then push and pull the arm to check till move smoothly. Lock the nut.

Turn off the power and air supply, can take out the pedal assembly then repair the motor and switch.

Trouble shooting

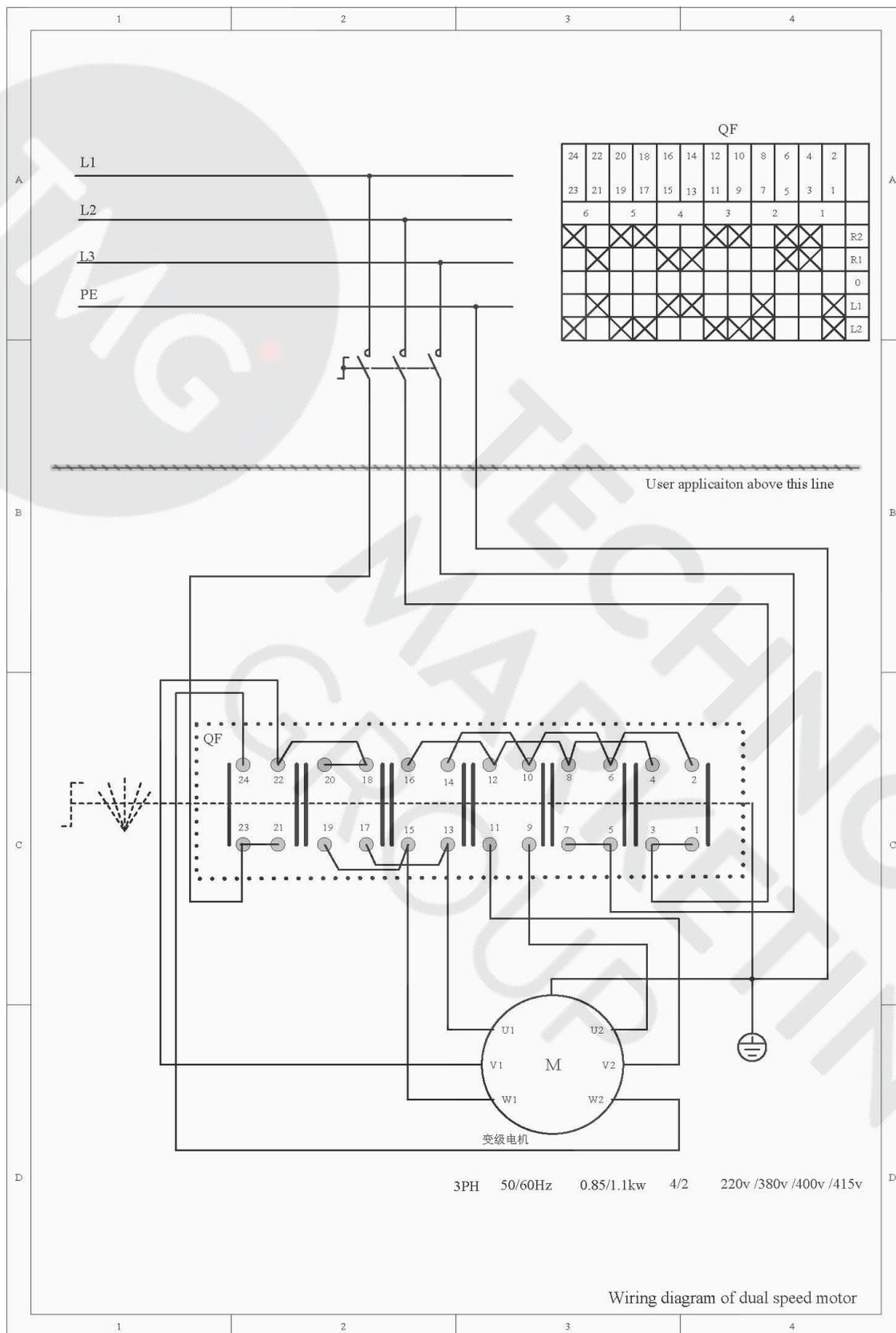
square shaft and hex shaft can't be locked	lock plate not proper lock cylinder leaks	Adjust the screw Change sealing ring
horizontal arm blocks hex shaft not smooth	lock plate position not proper lock plate position not proper	see maintenance adjust the lock plate
tile arm speed fast or slow	tilt cylinder exhaust air fast or slow; low pressure air supply	adjust the throttle vale
pedal not return	torsion spring damaged	change spring
motor not rotate or less power	transmission block capacitor damaged under voltage short circuit	exclude block change capacitor recovery voltage
cylinder low power	leaking air machinery problem low pressure	change sealing rings exclude problem adjust the pressure

trouble	possible reason	trouble shooting
main shaft rotation in one way	switch touch point burnt	change switch
main shaft not rotate	belt damaged belt loosen motor or power supply problem switch damaged	change belt adjust the belt tension Check motor, power supply, connector and wires change motor change switch

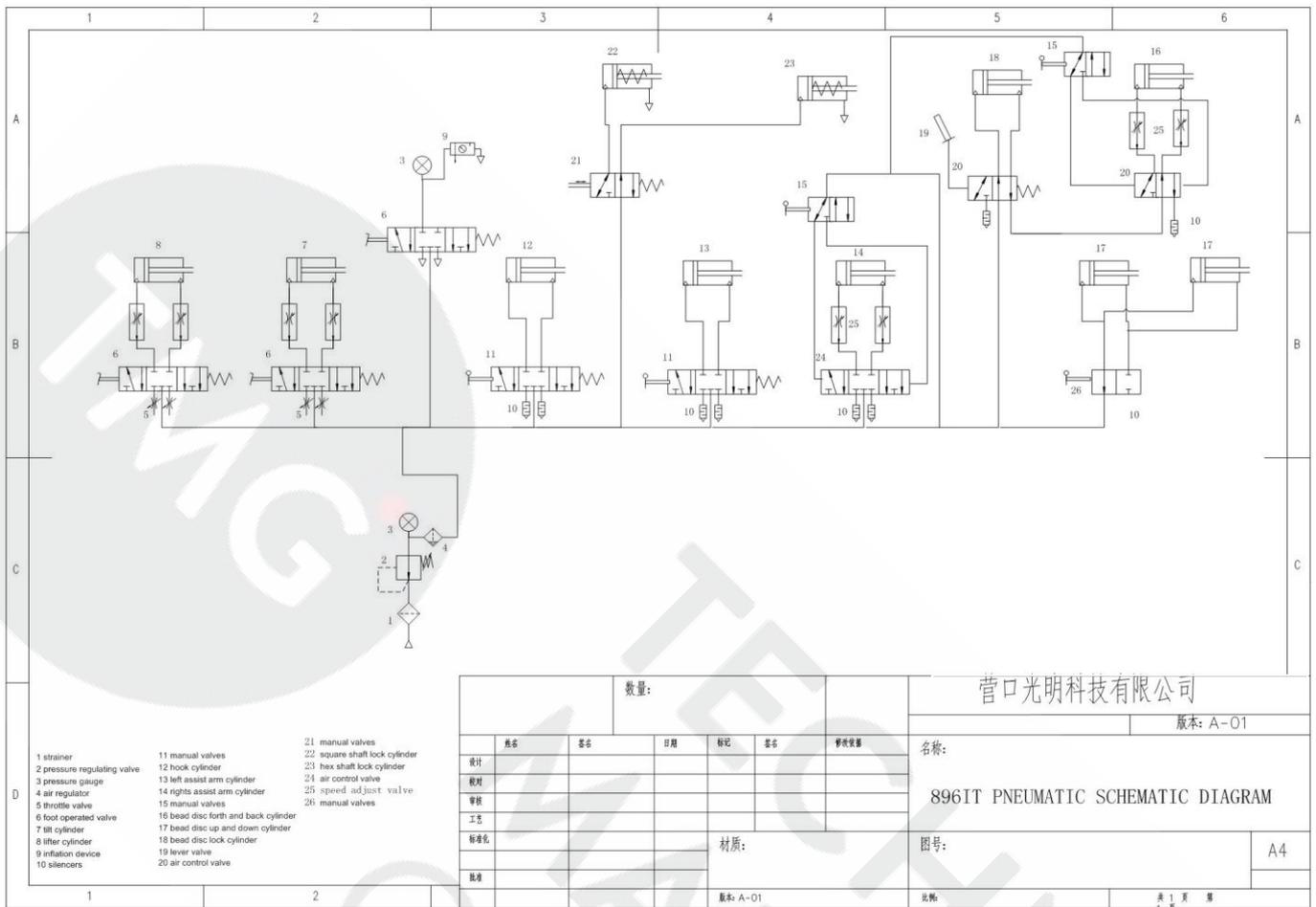
Important

Operator must not change the adjust valve or pressure setting valve. Manufacturer can't be charge of the damage or hurt because of without regard to the rules.

Electrical schematic diagram



Pneumatic schematic diagram



C E R T I F I C A T E



of Conformity
EC Council Directive 2006/42/EC
Machinery

Registration No.: AM 50167655 0001

Report No.: 17702584 002

Holder: Bright Technology Co., Ltd.
Majuanzi Village
Lunan Town, Laobian District
Yingkou, Liaoning 115003
P.R. China

Product: Tyre Mounting Device
(Tyre Changer)

Identification:

Type Designation:	Serial No.:
898IT	CE15898091118
896IT	CE16896091118
806	CE17806091118
LC586	CE18586091118

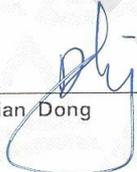
Remark: Refer to test report 17702584 002 for details.

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. This is to certify that the tested sample is in conformity with all provision of Annex I of Council Directive 2006/42/EC, referred to as the Machinery Directive. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex II of the Directive.

Qingdao, 08.02.2010



Certification Body


Huajian Dong

TÜV Rheinland/CCIC (Qingdao) Co., Ltd. - Qingdao 266071 - P.R.China

CE The CE marking may be used if all relevant and effective EC Directives are complied with. CE

C E R T I F I C A T E



of Conformity
Low Voltage Directive 2006/95/EC

Registration No.: AN 50167653 0001

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This certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the Licence Holder's disposal. This is to certify that the tested sample is in conformity with all revision of Annex I of Council Directive 2006/95/EC, in its latest amended version, referred to as the Low Voltage Directive. This certificate does not imply assessment of the series-production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex III of the Directive.



Certification Body

Qingdao, 08.02.2010


Huajian Dong

TÜV Rheinland/CCIC (Qingdao) Co., Ltd. - Qingdao 266071 - P.R.China

CE The CE marking may be used if all relevant and effective EC Directives are complied with. CE



It's forbidden absolutely to inflate the tire on tire changer.

The manufacturer have the right to change product on improvement but not inform the customer in advance.