

# Automatic tyre changer

Installation

Operation

Maintenance

Manual

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# Preface

Thanks for choosing qualified automatic tyre changer. This manual will guide for correct operation and extending use life of the machine, it is an important part of the machine. Please read it carefully before any operation to ensure correct and safe operation.

## 2. Introduction

### 1.1 Dimension of the machine

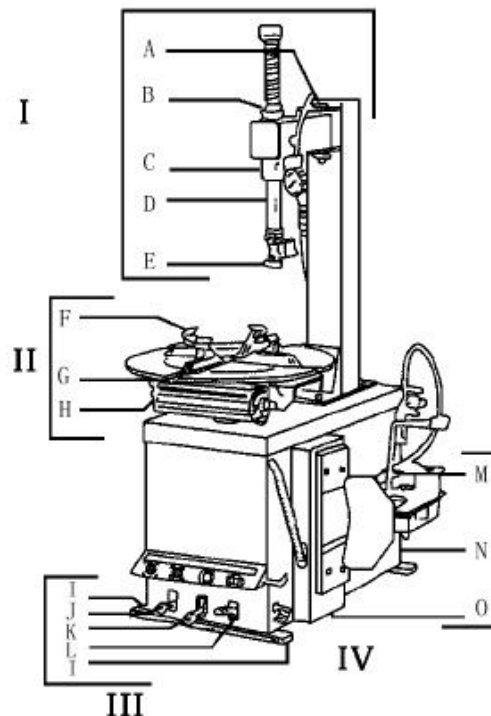
Outside Locking (RIM)	290mm-440mm	
Inside Locking (RIM)	300mm-500mm	
Max Wheel Diameter	950m	
Working Pressure	0.6-1.0mpa	110-147psi
Motor Power	0.75kw (380)	1.1kw (220)
Max turntable torque	110kmg	
Size	990*945*1730	
Weight	180kg-195kg	
Noise	< 70dB	

### 1.2 Warning stickers



### 1.3 Structure

#### 1.2 结构说明



## 1. Arm control system

Bolt A: Adjusting the vertical slide direction and the distance between head and rim.

Locking arm B: Fix the vertical slide

Horizontal arm C: Help the movement of vertical slide

Vertical slide D: use to control the position of mounting/demounting head.

Mounting/demounting head E : Separate the rim and bead.

## 2. Automatic control system

Wheel clamp F: Fix the tire.

Slide clamp G: Turn on or switch off the wheel clamp

Turntable H: Make the tyre clockwise or counterclockwise turning.

## 3. Pedal control system

Turntable turning pedal I: step on it make clockwise turning, lift it to make counterclockwise turning.

Shovel extrusion pedal L: Make the shovel inside movement.

Turn on clamp pedal K: Turn on clamp Switch off clamp pedal J: Switch off clamp

## 4. Tyre remover

Shovel arm M: Movement under the control of cylinder

Shovel N: use to take off bead.

Borad O: Supporting function during the operation.

## 1. Accessories



Tyre stick



Inflating gun

## 3. Installation

### 3.1 Body installation

Place the vertical post on the body. Remove the machine from the wood, and locate it on the ground. Make all the machine is stable on the ground.

**Caution: Locate the machine at least 500mm away from the wall**

**Do not put the machine outside or at any wet place.**

### 3.2 Air installation

Air system connection

Connect the air pump with the right part of the air filter

### 3.3 Electrical system installation

This part should be deal with professional staff.

The pressure Dimension of the machine and the real voltage should be match.

Make sure the machine is connecting with ground.

After installation, Step on the pedal , turntable should be clockwise turning.

### 3.4 Problems and maintenance

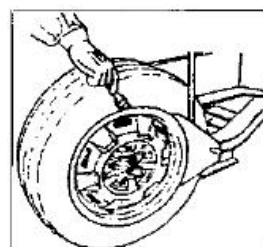
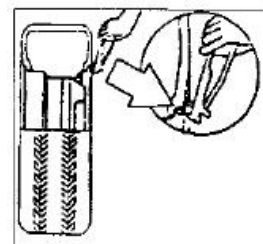
Problems	reason	methods
Turntable doesn't work	<ol style="list-style-type: none"> <li>1. Haven't connected the electric power.</li> <li>2. Incorrectly connect the plug</li> <li>3. Power supply not correct</li> </ol>	Check out the power and connect 2-3
Turntable counterclockwise turning	Polarity not correct	Change the polarity to correct direction
Rotate speed not enough	<ol style="list-style-type: none"> <li>1. Power and pressure supply incorrect</li> <li>2. Belt loosed</li> </ol>	<ol style="list-style-type: none"> <li>1. Check the power and pressure supply</li> <li>2. Adjust the belt</li> </ol>
Turntable can not lock tyre	<ol style="list-style-type: none"> <li>1. Haven't connect the air sytem with the machine</li> <li>2. Pressure not enough</li> <li>3. Pressure reducer is closed</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust the air pump</li> <li>2. Adjust the pressure</li> <li>3. Adjust pressure reducer</li> </ol>
Bead can not be removed	<ol style="list-style-type: none"> <li>3. Haven't connect the air sytem with the machine</li> <li>4. Pressure not enough</li> <li>3. Pressure reducer is closed</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust the air pump</li> <li>2. Adjust the pressure</li> <li>3. Adjust pressure reducer</li> </ol>

## 4. Operation

### 4.1 Demounting tyres

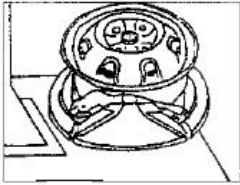
#### 4.1.1 Separate the tire bead from rim

- Preparation
- Deflating tyre
- Remove the balance square on the tyre.
- Put tyre on the ground, make it vertical location.  
Step on the pedal, turning the tyre till the Bead separate
- Change the other side, repeat the action as above.

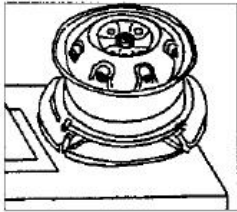


#### 4.1.2 Wrench the locking arm and release vertical slide

#### 4.1.3 Locking tyre on the turntable, use outside or inside clamp



Outside clamp Put the tyre on the turntable, step on opening pedal, till the clamp lock the tyre.

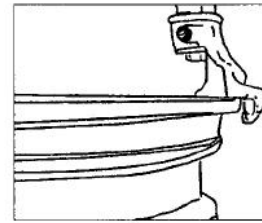


Inside clamp open the clamp, put tyre on the turntable, steps on closing pedal till the clamp lock the tyre.

4.1.4 Set the vertical slide in the working position, so that the mounting/demounting head is near the rim.

Pull the locking handle to lock the vertical slide.

Adjust the screw, make the distance between head and rim



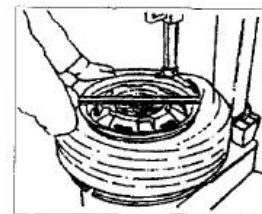
1.

**Caution: The roller in the mounting/demounting head should touch the rim to prevent scratching the rim.**

**Angle of the head has been adjusted. Please readjust the angle depend on different conditions.**

4.1.5 Lift the bead onto the mounting/demounting head, and step on the turntable turning pedal to turn the turntable clockwise till the bead is separated.

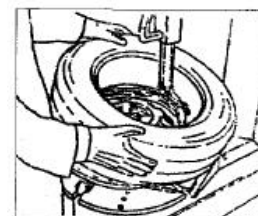
**If the bead can not be separated, please stop it and step on the pedal, make the turntable turn counterclockwise.**



4.1.6 Repeat actions as above

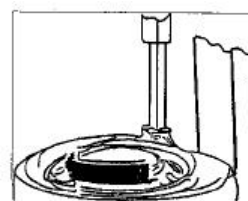
Separate the bead of the other side

**Never place your hand on the tyre or the wheel clamping when the demounting head is on the working position. Please take off necklace, bracelet during the operation.**



## 4.2 Mounting tyre

- Clamp the rim on the turntable
- Lubricate the bead with soap solution



- Place one side of the tyre on the upside

of the tail of the mounting/demounting head, then press the other side of the tyre under the mounting/demounting head, to make the tyre enter the groove of the rim.

- Loose the clamp then inflating the tyre

### 4.3 Inflating

Loose the tyre from the turntable

Connect the inflator with the air valve on the tire

Press the inflating gun slowly for several times. Make sure the reading on the gauge does not exceed the manufacturer's limit.

Keep your hand and body away from the tyre during the operation.

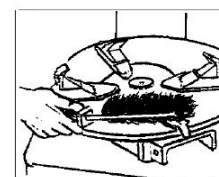
**It is a dangerous step in inflating process; please make sure the pressure is less than 3.5 pa.**

## 5. Tyre changer locking system introduction

1. loose the locking handle in counterclockwise direction.
2. Adjust the head till correct position
3. Clockwise turn in order to lock the handle
4. If the handle can not be locked, please adjust the screw as below:
  1. Take off the lid.
  2. Use wrench (17mm) adjusts the screw, turn it to locking condition.
  3. Use wrench (17mm) adjusts the screw, make a 2mm distance between upper adjust screw and locking board.
  4. Check the locking handle ensures it in good condition.
  5. Install the lid.

## 6. Maintenance

- Check the oil level in the air-compressed cup periodically.
- Check all connecting parts and bolts periodically and tighten them if necessary.
- Keep the horizontal arm clean and lubricate it periodically.
- Clean the oil cup periodically.
- Check out the speed reducer gear,  
if it needs to be oil-filled, please fill AP100 oil.
- Keep the machine and the working area clean to  
avoid the dust entering the moving parts.



## 7. Circuit structure

Make sure these process deals with professional staff.

Keep the voltage in 220V.

## 8. Problems solving

NO.	Problems	Reasons	Methods
1	turntable turn in one direction	Conversion switch damaged	Change conversion switch.
2	turntable does not work	1. Belt is damaged. 2. Conversion switch damaged 3. Motor damaged	1. Change belt 2. Change the conversion switch. 3. Check the power supply of the motor or change motor.
3	turntable locked	belt is not tight	adjust the belt
4	clamp open very slow	air valve	Change air valve
5	turntable can not lock the tyre	1. clamp damaged 2. air valve damaged	1. change clamp damaged 2. change air valve damaged
6	2. mounting/demounting head touch the rim	1. locking problems 2. Screw of clamp is not tight	1. Adjust or change the locking system 2. Tight the screw
7	Pedal are locked.	1. Spring damaged 2. Air pump sealing ring damaged	1. Change spring 2. Change sealing ring
8	3. Bead can not be separated	Cylinder pad damaged	Change cylinder pad