

# **TYRE CHANGER**

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# **USER MANUAL**

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■ Pls read this manual before operation

# Content

Chapter 1 safety .....	1
Chapter 2 summary .....	2
● 1 General instruction .....	2
● 2 Technical parameter .....	2
● 3 Working environment requirement .....	2
Chapter 3 basic structure of 390H right helper and combination mode .....	2
Chapter 4 installation and debugging .....	3
● 1 open box .....	3
● 2 assemble and debug .....	3
● 3 connect to the tire changer .....	4
Chapter 5 operation .....	5
● 1 demounting operation .....	5
● 2 mounting operation .....	6
Chapter 6 Maintenance .....	7
Chapter 7 Troubleshooting .....	8
Chapter 8 dispose device .....	8

## Chapter 1 safety

Safety precautions must be completely understood and read by all the operators.

This device only be used by the qualified operator who trained by authorized dealer.

We hereby state that the manufacturer will not hold any responsibility to the damage arising from the use of the spare parts supplied by the other manufacturers or modification of the safety device.

It violate the safety regulations to detach or leave unused the safety device or dangerous warning label.

This device only use without danger of explosion and fire.

The unauthorized personnel is prohibited to execute the maintenance.

This device only be allowed to use original spare parts and accessories.

Pay special attention that 390H helper should work in a given working pressure.

There may be dangerous to check the machine during operation. Please stop the operation immediately if there's a danger.

If a function failure, stop the machine running at the same time calling authorized dealer for help.

At the time of using and maintenance of machine, forced to follow the accident prevention with all the laws and regulations.

Cut off the power supply and pneumatic source before any maintenance.

At the time of use, maintenance or repair the machine don't wear a tie, necklace or other loose clothing. Long hair is one of the factors lead to dangerous, should wear a hat.

User must wear safety appliance like gloves, safety shoe and glassed. Keep safety appliance order.

Keep work area tidy and messy area will cause accident.

Prevent dangerous environment.

Do not use the machine in the moisture and corrosive gas and also do not make the device to be rain.

Keep nice light of work environment.

All the service must be done by the authorized service technician.

### Safety device

This machine has several plastic cover to prevent press damage and crushed damage.

#### 1.1 format of manual

The pictures in manual can attract your extra attention.

Attention: suggestion or explanation.

Caution: emphasis on the following activities will lead to the damage of the machine or parts attached on machine.

Warning: emphasis on the following activities will cause the operator or other person serious damage.

Unordered list: point out the necessary activity before enter the next step.

### 1.2 data

The following data is attached on the marking plate of the pressing device:

- manufacture name and address
- CE conformity mark
- manufacture date
- Model
- Serial number
- Weight
- required air pressure

## Chapter 2 summary

### 1. General instruction

390H right assist device: during practical work, if operate the hard and flat tires, use this assist device can easily achieve the difficult work by human power to increase efficiency.

- a. Suitable for wide scope, which adapt to various models tire changers from this factory, also to similar models from other factories.
- b. excellent performance; matching with other accessories can change wide, flat and hard tire.
- c. Convenient and flexible operation; positioning accuracy; demounting tires with high efficiency.

### 2. Technical parameter

- ※ air source working pressure: 8-10bar.
- ※ rated operation working pressure: 8bar
- ※ turning radius of press roller (working arm): 765mm
- ※ the distance between the center of turning shaft and the edge of tire: 270mm.
- ※ height adjustment range of working arm: 365mm.

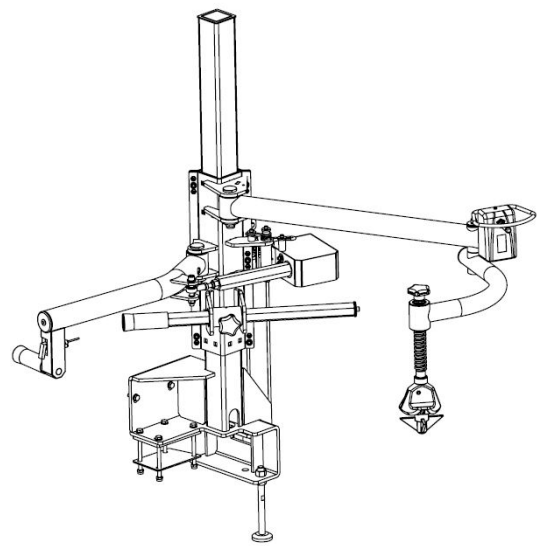


FIG1

- ※ Equipment basic dimension:

model	H(mm)	L(mm)	W(mm)	N.W.(kg)
390H	1700	Max.1500	Max.1460	95

### 3. Working environment requirement

Working temperature: 0°C~45°C

Relative humidity: 30~95%

When you choose the installation site, you should make sure it is corresponding to the current safety regulation. The tire changer must be connected with the power supply and pneumatic source, therefore, we suggest to choose the installation site of the tire

changer to the location near the power supply and pneumatic source to guarantee the correct operation of all the parts of the machine. Installation environment should be well ventilated and the machine around must leave 0.5m to 1m space to make all the parts of the machine run properly and no limit. If the machine is installed outdoors, the machine should be equipped with the shed to rain-proof and sun bock.

### Chapter 3 basic structure of 390H right helper and combination mode

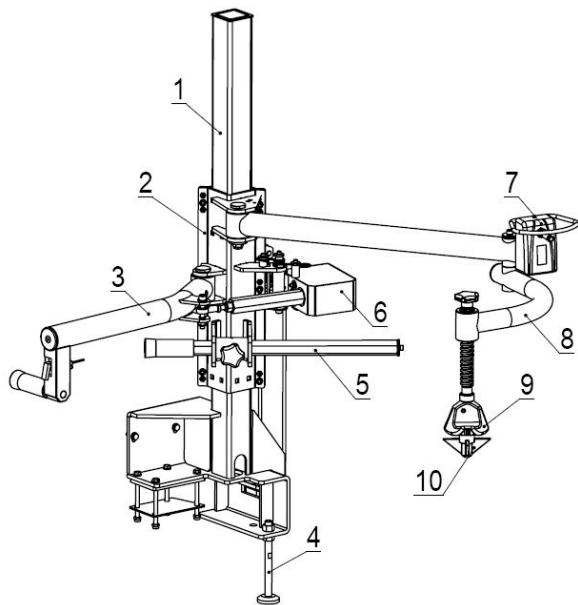


FIG2

- |                   |                           |
|-------------------|---------------------------|
| 1. Vertical pole  | 2. Bracket (slide base)   |
| 3. Pressing arm   | 4. Support bolt           |
| 5. Hex press rod  | 6. pneumatic locking box  |
| 7. Control switch | 8. Pneumatic pressing arm |
| 9. Press plate    | 10. Centering pestle      |

### Chapter 4 installation and debugging

carefully read the manual before installation, any modification to the parts without the permission of the manufacturer may cause the damage to the machine.

The personnel to execute commission must have some knowledge of electricity.

The operator must under the special trained and be authorized.

carefully check the equipment list, if any question, contact the dealer or the manufacturer immediately.

To secure the success of the installation and commission, you should prepare the following common tools:

Two wrenches (10"), one socket wrenches, one hexangular wrench, one vice and one screw driver, one hammer and one multi-purpose meter.

#### 4.1 open box

4.1.1 According to the de-package instruction on the package box, to detach the box and remove the package material to check if the machine damage or not and if the spare parts completed. Cut off the power source and air source before installation!

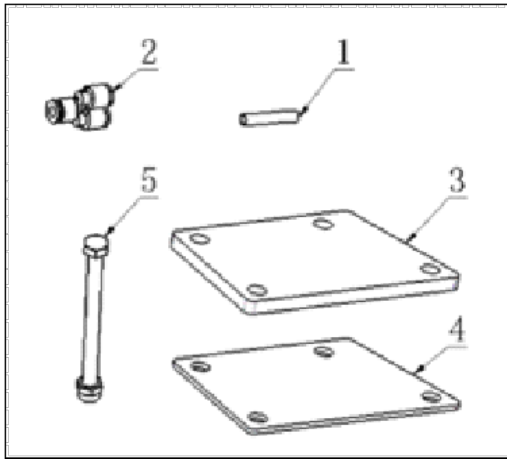


FIG3

4.1.2 open the box and check all the parts according to the “accessory content” and FIG3. Clean them to prepare installation like FIG4 and prepare the needed tools.

Accessory content:

- 1:  $\Phi 8$ PU hose
- 2:  $\Phi 8$  Y-Tee
- 3: Base flat board
- 4: Base plate
- 5: screw M10X130 (nuts and flat washer) 4 sets

#### 4.2 installation

4.2.1 Firstly put the base board (FIG3-4) onto the machine frame (FIG4) and align the four holes.



FIG4

4.2.2 put the helper onto the base board vertically, align the holes in base board then insert the screws (FIG3-5) then install the base flat board (FIG3-3) from the bottom to the screws; then install the flat washer and screw nuts slightly, just contact (FIG5).

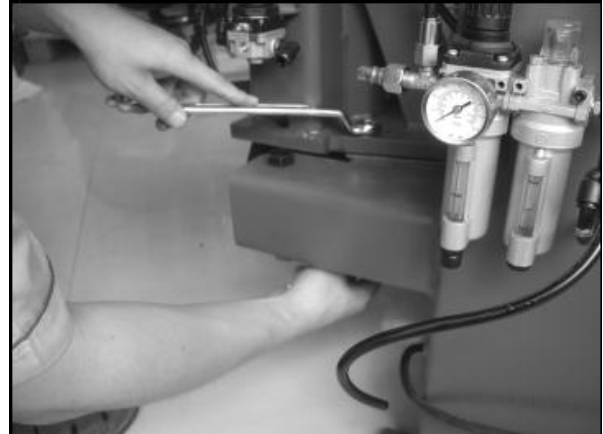


FIG5

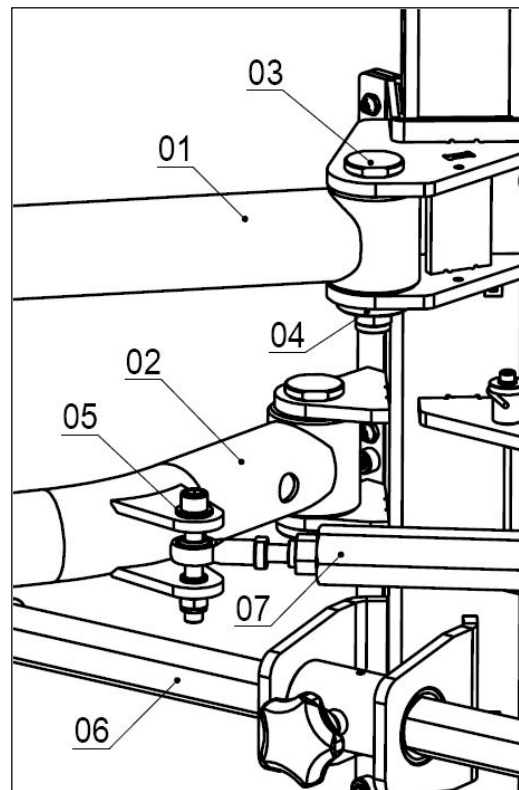


FIG6

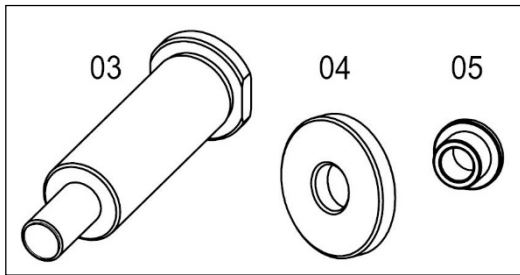


FIG7

4.2.4 Connect the press arms FIG6-01 and FIG6-02 to the slide base using shaft (FIG7-03) and washer (FIG7-04) then tight them with nut M16.

4.2.5 Connect the hex rod (FIG6-07) to press arm (FIG6-02) using 2xspacer (FIG7-05) and screw M12x20 then tight them with nut M12.

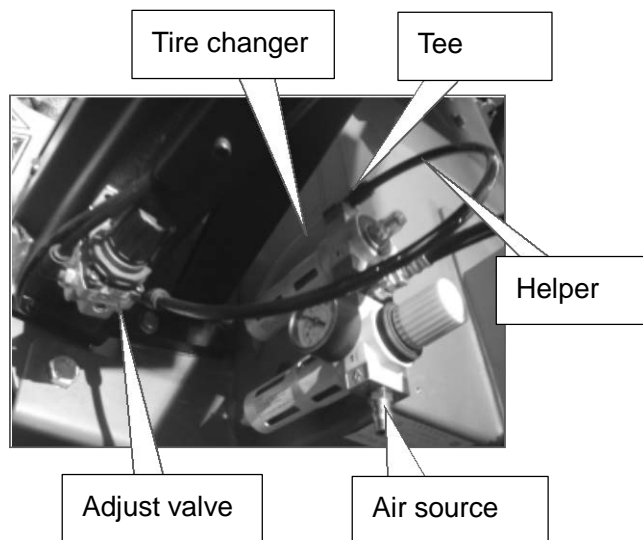


FIG8

4.2.7 Detach the outlet hose of air regulator then connect the Y-Tee and outlet using short  $\Phi 8$ PU hose. The detached hose connect another end (FIG8).

4.2.8 Connect the last end of Y-Tee and inlet of adjustable valve on helper using  $\Phi 8$ PU hose (FIG3-1).

4.2.9 Connect the air source and adjust the helper to complete vertical position using the screws (FIG1-4)

then tight and lock the four screws. If there's no air leaking and move shaking, and all the parts can rotate and slide normally, the installation of the helper completed.

## Chapter 5 operation

### 5.1 demounting operation

5.1.1 Separate the tire lip and rim using the bead break blade on tire changer.

5.1.2 First, position the claw according to the dimension of the tire and then clamp the rim by the claw and position the tire press cone roller at the center of the rim (FIG9). Push down the manual valve to press down the rim until the external rim of the rim is lower than the surface of the claw. At this moment, you can immediately lock the rim. Lift up the support arm and place it at the working position and take off the press cone roller and place it on the support.



FIG9

5.1.3 Use the press roller to press the tire (FIG10) and rotate the tire at the same time (note: press little

by little and cannot too fast). And use the brush to spread the lubricant on edge of the lip. Position the demount tool head in the demount position. Place the press beside of the demount tool to press down the lip and insert the crowbar below the demount tool in between the rim and lip (FIG11). Lift up the press and move it to the position opposite to the demount tool and press the lip into the tire detach groove and then rotate the crowbar to lift the lip onto the demount tool (FIG12). Rotate the turntable to detach the upper lip.

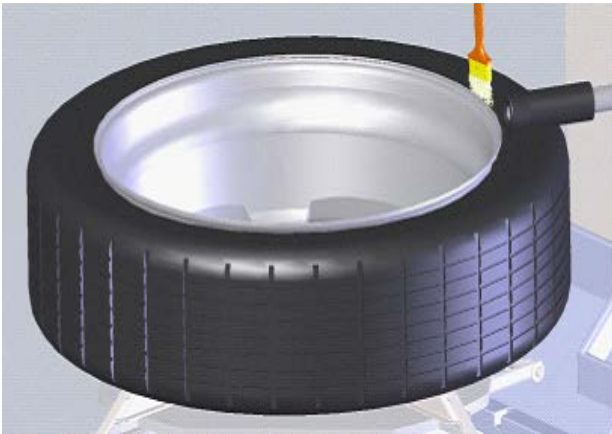


FIG10



FIG11

5.1.4 Detach the lower lip according to the operation standards of tire changer.



FIG12



FIG13

## 5.2 mounting operation

Before mount tire, check if the size of tire and rim is the same.

5.2.1 Clear the dust and rust on the rim then lock the rim onto the turntable. Choose to clamp the rim outside or inside according to the rim shape but the groove of out-tire must be at the upper side.

5.2.2 Lubricate the lip then tilt the tire onto the rim. Position the lower bead above the tail of the tool head and lower than the head of tool head (FIG14).



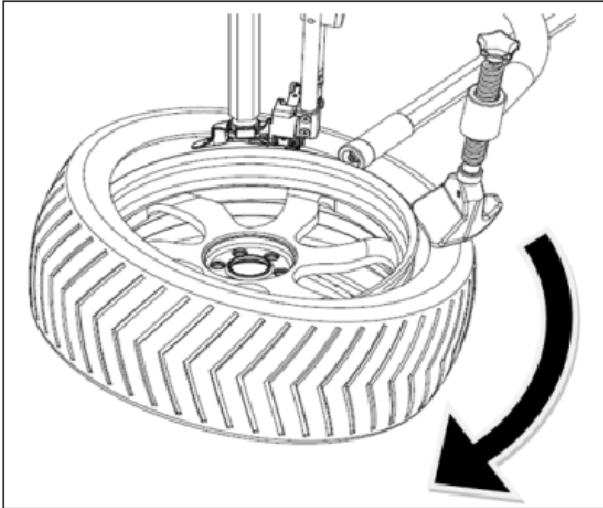


FIG 14

5.2.3 Rotate the turntable clockwise till the lower lip leading into the out-tire groove.

5.2.4 If there's inner tube, lift the demounting head and enclose it then assemble the valve core.

5.2.5 Position the upper bead above the tail of the tool head and then press the tire press roller on the tire making the upper bead lower than the head of tool head (FIG15). Rotate the turntable clockwise till mounting the tire completely (FIG16).



FIG 15



FIG 16

**Note: if the tire is too hard, use the press arm (FIG2-3) to assist in order to achieve the demounting operation using three-point pressing method.**

## **Chapter 6 Maintenance**

### **6.0 Maintenance**

Cut off the power supply and pneumatic source before any maintenance.

A. clear and lubricate the horizontal pressing arm regularly.

B. lubricate the support shaft and slide rail monthly.

Note: suggest to repeat this operation to achieve the machine's effective normal use.

We recommend that you check and perform special maintenance, the special maintenance when do you think is necessary.

### **6.1 storage**

If the machine do not use for long time like 6 months or longer, it's necessary to disconnect all of the energy source to prevent all the possible damage of parts and air hose.

When the machine will use again, first check the status of all protection components before and check all the device function before using the machine.

## Chapter 7 Troubleshooting

If the pneumatic and electric installation problems, deal with the problem in the following order:

1. Again, consider the final step

Did you work in accordance with the manual?

Did the equipment work as required?

2. Check the equipment according to this chapter.

3. Call location agent for help.

Troubleshooting:

Not move when operate the handle valve

1. Air press lack

\* Check the air source if it's proper.

2. Air hose damaged or twist.

\* call the authorized service center.

Helper arm move

1. There's error when install the wear rib.

\* adjust the screws at the side and lubricate.

The press roller is not align to the center of the turntable.

\* adjust the fixture screw to align the center.

Reverse failure

\* Three position five-way valve problem. Contact to the authorized service center.

## Chapter 8 dispose device

8.0 dispose device

Contact location dealer to consult the dispose regulations when you want to dispose the device.

8.1 dispose instruction in EU countries

When the duration of service of equipment expires, if you want to dispose it, you must:

1. Do not use equipment as the city garbage disposal, mandatory collected separately;

2. Consult retailers the regular collection point;

3. Adhere to the correct standard of waste management, prevent the potential influence of environment and human health.