



# KATOOL

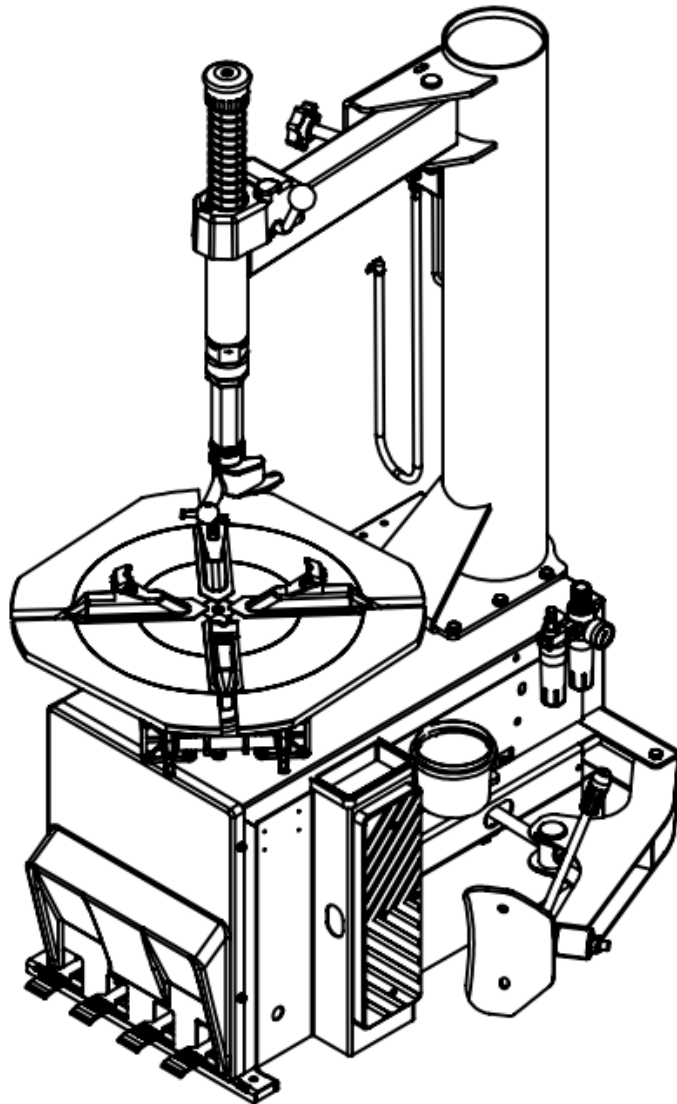
## **Installation, Operation and Maintenance User's Manual**

ITSK.COM

**Tire Changer Model# KT-810**

## Semi-automatic swing arm tire changer

Parameters: rim: 12"-24", Tire width: 14"-26", tire diameter: 1160mm



● FAILURE TO OPERATE THIS EQUIPMENT AS DIRECTED MAY CAUSE INJURY OR DEATH. PLEASE READ THIS ENTIRE MANUAL PRIOR TO INSTALLATION AND OPERATION. BY USING THIS PRODUCT, YOU AGREE THAT YOU FULLY UNDERSTAND AND COMPREHEND THE FULL CONTENTS OF THIS MANUAL. MAKE SURE ALL OPERATORS READ AND UNDERSTAND.

- Do not operate this machine until you read and understand all the dangers, warnings and cautions in this manual.
- Follow all installation instructions.
- Carefully check the unit for correct initial function.
- Read and follow the safety instructions. Keep them readily available for machine operators.
- Make certain all operators are properly trained, know how to safely and correctly operate the unit, and are properly supervised.
- Allow unit operation only with all parts in place and operating safely.
- Carefully inspect the unit on a regular basis and perform all maintenance as required.
- Service and maintain the unit only with authorized or approved replacement parts.
- Keep all instructions permanently with the unit and all decals on the unit clean and visible.

## **IMPORTANT SAFETY INSTRUCTIONS**

### **READ BEFORE OPERATING UNIT**

- Keep the machine away from moist, corrosive and hot surrounding.
- Protective goggles, safety glasses, or a face shield must be worn by the operator. Care should be taken to see that all eye and face safety precautions are followed by the operator. **ALWAYS WEAR SAFETY GLASSES.**
- Keep guards and safety features in place and in working order.
- Wear proper protective clothing. Safety toe, non-slip footwear and protective hair covering to contain hair is recommended. Do not wear loose clothing, or jewelry when operating the machine.
- If an extension cord is necessary, a cord with a current rating equal to or greater than that of the equipment should be used. Cords rated for less current than the equipment may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
- Read and understand this manual before operating.
- Do not operate damaged equipment or if the power cord is cut or worn.
- Keep work area clean and well lighted. Cluttered and/ or dark areas invite accidents.
- Avoid dangerous environments. Do not use power tools or electrical equipment in damp or wet locations, or expose them to rain and moisture
- Avoid unintentional starting. Be sure the tire changer is turned off before servicing.
- Disconnect the tire changer before servicing.
- Use only manufacturer's recommended accessories. Improper accessories may result in personal injury or property damage.
- Repair or replace any part that is damaged or worn and that may cause unsafe operation.
- Do not operate damaged equipment until it has been examined by a qualified service technician.
- Never overload or stand on the tire changer.
- Do not allow untrained persons to operate machinery.
- To reduce the risk of fire, do not operate equipment in the vicinity of open containers or flammable liquids.
- Adequate ventilation should be provided when working on operating internal combustion engines.
- Keep hair, loose clothing, fingers, and all parts of body away from moving parts.
- Use equipment only as described in this manual.
- Use only manufacturer's recommended attachments.

## TABLE OF CONTENTS

Overview .....	6
1.1 Important note .....	6
1.2 Qualified users.....	6
1.3 Notes.....	6
1.4 Danger warning signs .....	8
1.5 Noise standard.....	8
Equipment description .....	9
2.1 Product introduction .....	9
2.2 Technical parameters .....	9
2.3 Transportation .....	9
2.4 Figure and part name .....	10
Installation and commissioning instructions .....	13
3.1 Installation Preparation.....	13
3.2 Precautions during installation .....	14
3.3 Main installation procedure.....	15
3.4 Check the project table after installation.....	16
3.5 Commissioning and debugging.....	16
Operation.....	17
4.1 Operating notes .....	17
4.2 Disassembly operation process .....	17

4.3 Mounting.....	23
Maintenance .....	34
5.1 Maintenance .....	34
5.2 Storage and scrap.....	37
Fault causes and Solutions .....	37
Parts List and Exploded Drawings .....	39
Warranty.....	41

## **Overview**

### **1.1 Important note**

1.1.1 Thank you for your purchase and use of this product. Please read and follow the safety instructions. Keep them readily available for machine operators.

1.1.2 Service and maintain the unit only with authorized or approved replacement parts.

### **1.2 Qualified users**

1.2.1 Make certain all operators are properly trained, know how to safely and correctly operate the unit, and are properly supervised.

1.2.2 Electrical appliances must be operated by the normal electrician.

1.2.3 Do not attempt to operate this equipment if you have never been trained on basic tire service and mounting / dismounting procedures.

### **1.3 Notes**

1.3.1 Before using the product, please carefully read every part of the manual, especially the operation of the safety and mechanical maintenance of the part.

1.3.2 Use the tire assembly machine must be operated by professional training personnel.

1.3.3 Tire disassemble is forbidden to use in explosive gas.

1.3.4 Before the machine is connected, the user must ensure that the use of power and gas supply and mechanical requirements, the circuit system must be operated by professional staff.

1.3.5 In the operation process, do not face close to the turntable, so as to avoid dust and other debris hit the operator's eyes. In order to ensure safety, mechanical operation, to be careful, do not touch the inflatable pedal, so as to avoid accidents.

1.3.6 To operate tire inflation must be very careful, strictly according to the instructions for operation, if the tire suddenly burst, tire assembly machine design and structure is not to protect the operator's personal safety (or any mechanical in the vicinity of the kind).

1.3.7 Operation of the tire changer, necklace, loose clothing, etc., may give the operator to bring personal injury.

1.3.8 In the process of removing or installing the operation of the tire, the turntable has always been to ensure that the clockwise rotation; if there is a counter clockwise rotation indicates that the turntable is a failure or operator error.

1.3.9 Manufacturers are responsible for the damage caused by the use of other parts of the manufacturer or the damage of the safety device.

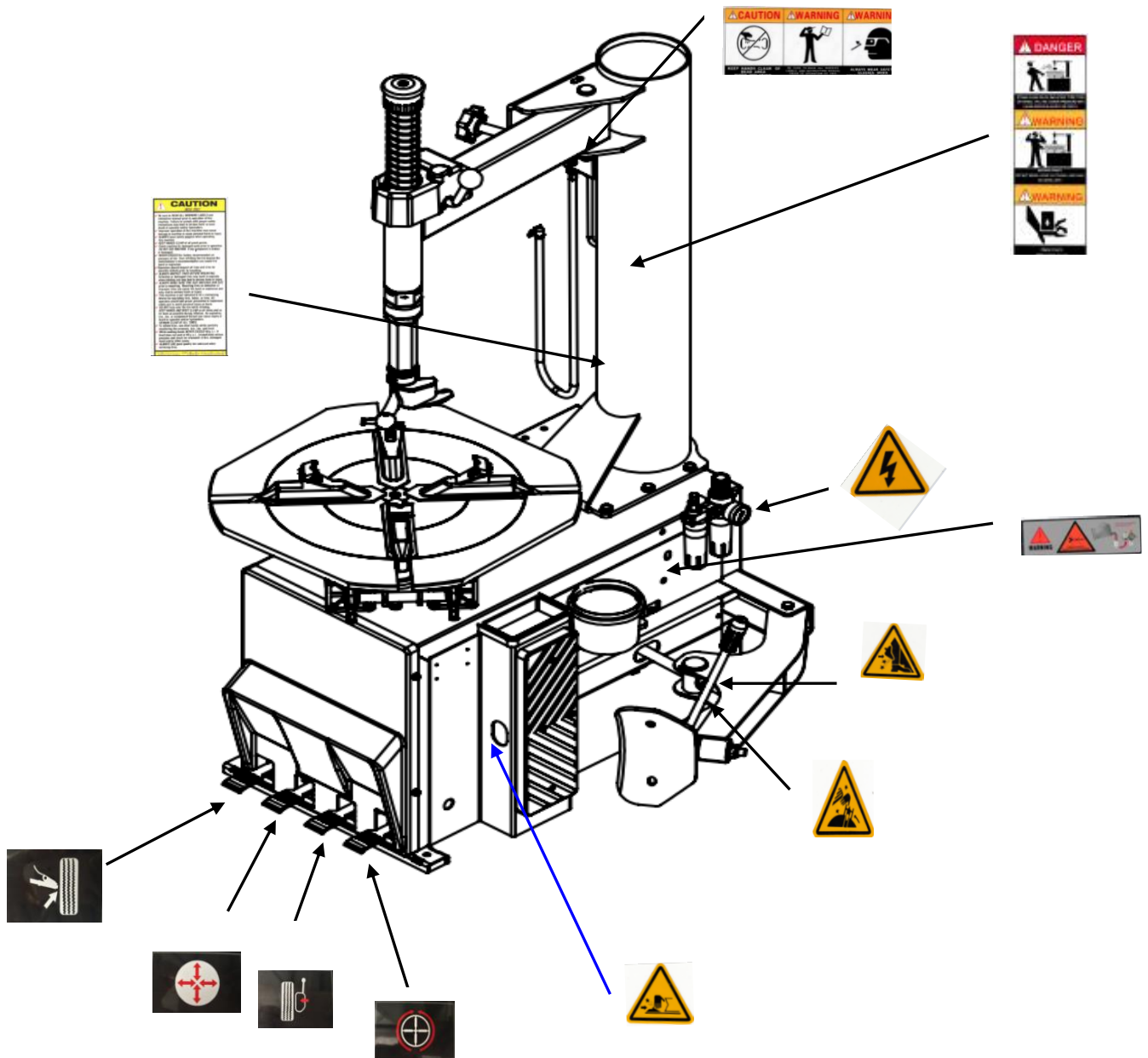
1.3.10 periodically check the oil mist, oil, if the oil level is low and need to unscrew the oil cup and then add. Oil mist using models for ISO Hg and viscosity for ISO vg32 oil mist special oil (such as: Esso Fedis k32, 1405, Mobil Vacouline, KLUBER32)

1.3.11 if the product is not used for a long time, please user A. disconnect all power supply, B. and lubricate the turntable fixture slide to prevent oxidation.

1.3.12 when deciding to scrap equipment, to determine the total energy of all the energy to be cut off, according to the relevant laws and regulations for all non-ferrous metals and non-ferrous metal scrap processing.



## 1.4 Warning signs



## 1.5 Noise standard

The noise of the tire changer shall be less than 70dB. for your health, and it is recommended that you place a noise meter in your operating area.

## Equipment description

### 2.1 Product introduction

This model of semi-automatic tire changer is a convenient and quick disassemble and installation of wheel size of 10" to 28", the tire width of 110-380mm and the diameter of the tire is 1040mm.

### 2.2 Technical parameters

Special points	Technical parameters
Outer rim	10 " — 22 "
Inner rim	12 " — 24 "
Maximum tire diameter	1040mm ( 41 " )
Maximum tire width	380mm ( 15 " )
Pressing force (10bar)	5510 lbs. (2500kg)
Operating air pressure	8bar—10bar ( 116—145psi )
Maximum charge pressure	3.5bar ( 50psi )
Power supply voltage	120V 1ph / 220V 3ph
Motor power	1.1kw / 0.75kw / 1.5kw
Outline dimension	1120×750×860
Net weight	485 lbs. (220kg)
Working state noise	<70dB ( A )

### 2.3 Transportation

Handling of the machine must be performed only with an appropriate lifting device such as a forklift or pallet jack. Only personnel who are experienced and qualified on material handling procedures should handle any transportation or moving of machine.

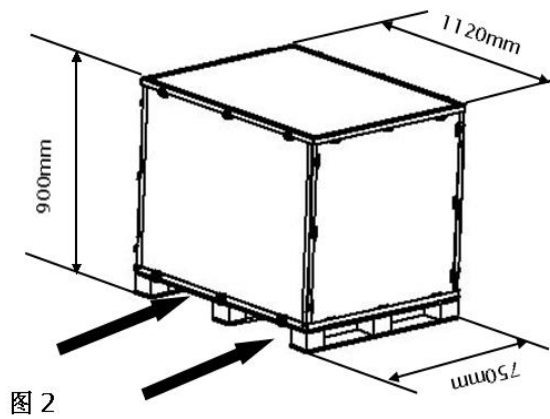


图 2

## 2.4 Figure and part name

G: Wheel Clamp

P: Tower

U: Bead Breaker Pedal

I: Mounting / Dismounting head

R: Bead Breaker

V2: Turntable Pedal

V3: Pedal Inflatable

Z: Bead Breaker Pad

Y: Turntable

N: Horizontal Pendulum arm

K: Locking Handle

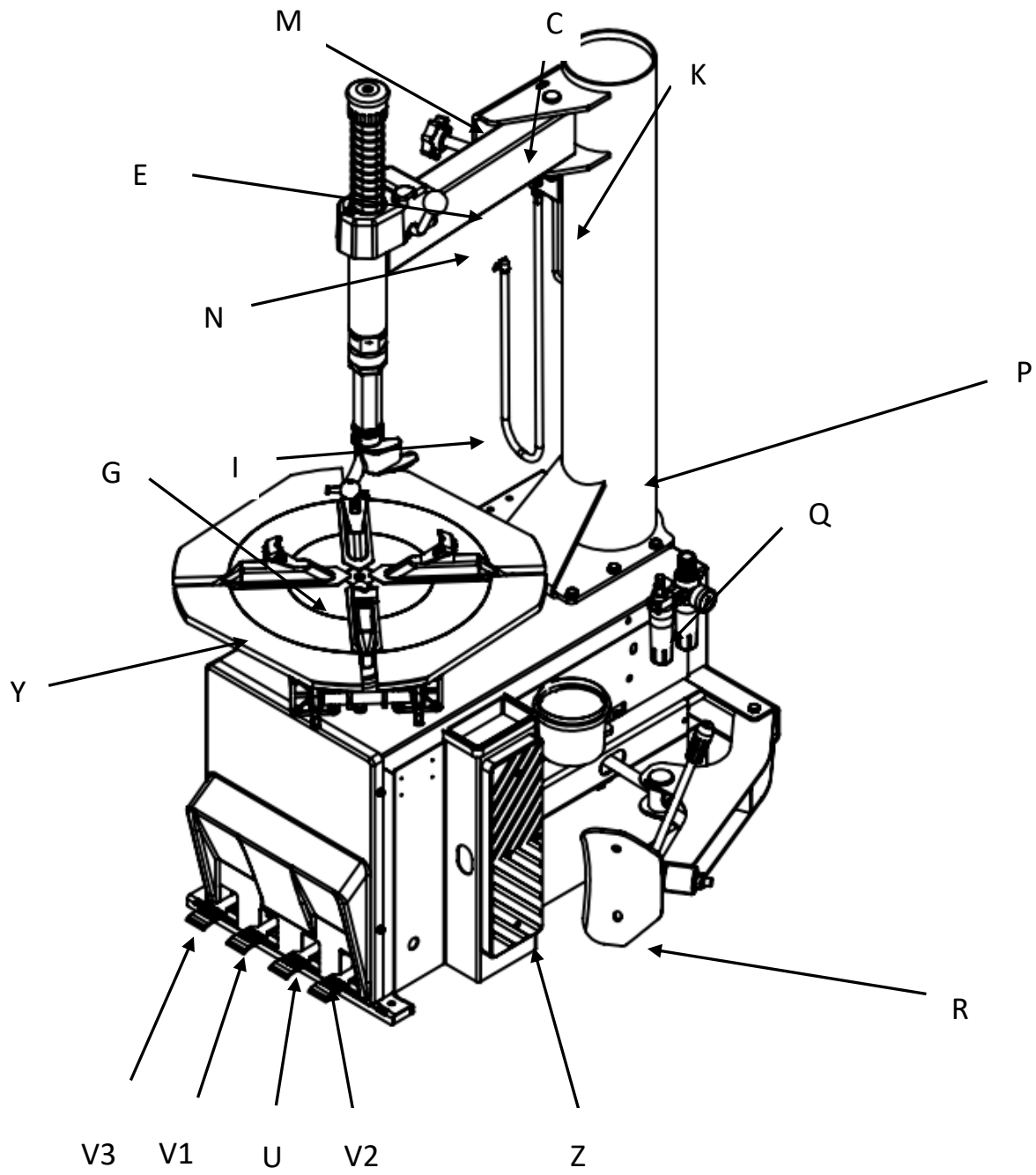
Q: Oil Drier

V1: Wheel Clamp Pedal

C: Turbo Blast Hose Assembly

E: Hand Wheel

M: Vertical Reverse Spring

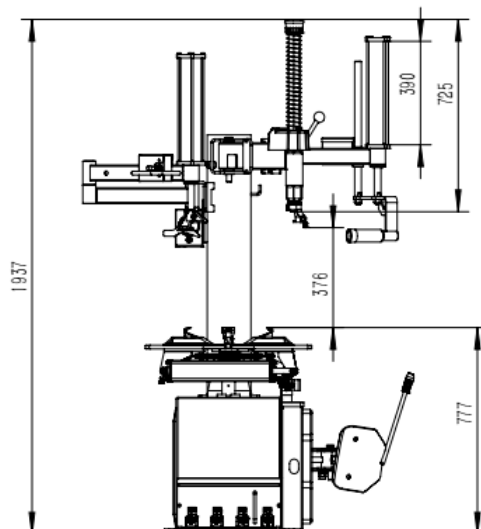
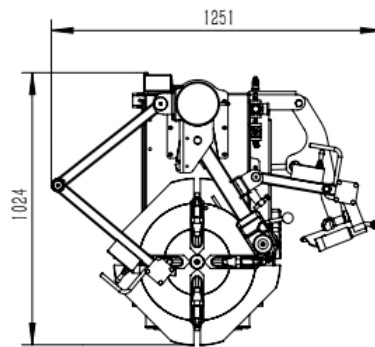


# Installation and commissioning instructions

## 3.1 Installation Preparation

### 3.1.1 installation location

- The area should provide the operator with enough space to use the equipment in a safe manner.
- The area selected should be well lit, easy to clean and should be away from oil, grease, brake lathe chips, etc. Avoid areas where bystanders and customers may be present.
- Equipment installation location should be at least up to the standard shown in Picture, which can ensure the normal operation and the machine parts are not subject to any restrictions. The tire changer is forbidden to use in explosive gas.



### 3.1.2 Installation equipment and tools

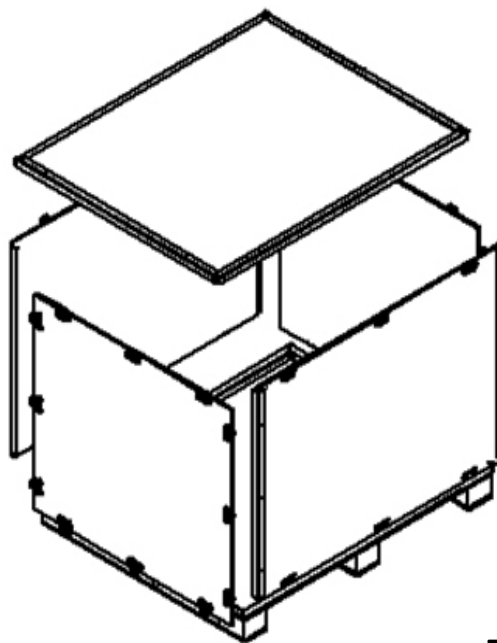
- ◇ Installation equipment and tools

### 3.1.3 inspection products

- ◇ The shipment should be thoroughly inspected as soon as it is received. The signed Bill of Lading is acknowledgement by the shipping carrier as receipt of this product as listed in your invoice as being in a good condition of shipment. If any of these goods listed on this Bill of Lading are missing or damaged, do not accept goods until the shipping carrier makes a notation on the freight bill of the missing or damaged goods. Do this for your own protection.

### 3.1.4 Unpacking

- ◇ Check the packaging damage and the rain and other damage phenomenon, using the tool unpack the packing as shown in Picture, please dispose of packaging box, lest the environmental pollution.



**Figure 5**

- ◇ Check the condition of the machine, in accordance with the packing list to check if there is any damage or lost, once found contact the dealer and manufacture immediately. If you find that the leakage but still installed, we will not assume any responsibility. If you have any questions, please do not use the machine, the supplier contact.

## 3.2 Precautions during installation

- ◇ All bolts must be tightened.
- ◇ Power cord, no broken skin, no broken pipe, and other damage.

### 3.3 Main installation procedure

#### 3.3.1 Standard configuration installation

- ◆ The first step: unscrew wooden pallet fixing screws, tire changer placed at the installation site. (installation site must conform to the requirements.
- ◆ The second step: unscrewing the bolts from the box, the column is installed in the machine box on the specified position, tighten the bolts.
- ◆ The third step: Fix the inflation box on the left side of tower with box.



- ◆ The forth step: Fix the turbo blast at back of machine box.





### 3.4 Check the project table after installation

No.	Inspection item	Yes	No	Remarks
1	Whether the power supply voltage is consistent with the requirements of the equipment			
2	Whether the components are installed correctly			
3	Whether the bolts, screws, nuts are tightened			

**Note:** Please fill in the inspection item list after the installation is finished.

### 3.5 Commissioning and debugging

#### 3.5.1 Commissioning

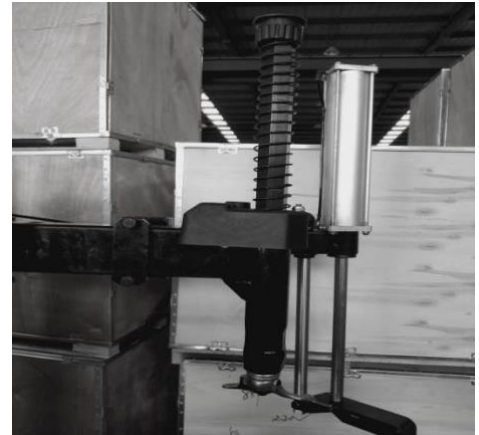
- ◇ After the installation of the machine but before the connection with the power supply, it is necessary to determine the user's power supply, the gas source and the requirements of the machine is consistent.
- ◇ The machine is connected to the circuit, the circuit must be fitted with a fuse that is in line with the operating rules. The automatic circuit breaker of 25A is required to be operated by professional personnel. The power plug of the tire changer is provided with the customer.
- ◇ The compressed air system is connected to the machine by a pipe joint on the right side of the tank.

#### 3.5.2 Debugging

- ◇ Step 1: turn on the power and gas supply, depress the Turntable Rotation pedal, turntable should be clockwise. Raise the Turntable Rotation pedal, the turntable should be anti-clockwise rotation. (If the turntable is opposite to the specified rotation direction, the position of the two lines in the three-phase plug should exchange position.)
- ◇ The second step: depress the Bead Breaker Pedal, start the Bead Breaker device; when the pedal is released, the Bead Breaker device to return to the original position.
- ◇ The third step: depress the Jaw Clamp Pedal, open the 4 clamps; release the Jaw Clamp Pedal, the Jaw Clamps returns to the original position.

◇ The forth step: Swing Arm / Vertical Shaft / Mount-Demount Head Assembly

- Raise the Vertical Shaft / Mount-demount head assembly to the highest position and lock it in place by pushing the Locking Handle up.
- Check the Socket Head Cap Screw on the Cap, tighten if necessary.
- Check the operation of the Vertical Shaft and the Locking Handle.



## Operation

### 4.1 Operating notes

- ◇ Check the connection of air pipe is in place, ensure that no air leakage, ensure the operation space to meet the requirements, then start work.
- ◇ Before any operation, the gas in the tire is needed to be released, and the balance block of the tire balancing device is removed.

### 4.2 Disassemble operation process

#### 4.2.1 Bead Loosening

- ◇ Deflate tire completely by removing the valve core from the valve stem. To avoid damaging the clamps and/or wheel, move the clamps to their full inward position before positioning a tire for bead loosening.
- ◇ Pull the bead breaker blade away from the machine and roll the wheel into position. If servicing a performance wheel or any other wheel with Tire Pressure Sensor), make sure

that the valve stem is either in the 12 o'clock or 6 o'clock position.

- ◇ Position the bead breaker blade against the tire next to, but not on, the rim or the sidewall of the tire. Press the breaker pedal to actuate the blade and loosen the bead. It may be necessary to loosen the bead in multiple locations around the tire. Use extra care in positioning the bead breaker blade on larger wheels/tires, and on alloy wheels.



- ◇ Turn wheel around and repeat procedure on the other side of the wheel. This should be the long side of the drop center. It will be easier to clamp the wheel to the table top if the lower bead is loosened last.
- ◇ Determine the mounting side of the wheel. The mounting side is the narrow side of the drop center.

## WHEEL CONFIGURATION



### 4.2.2 Wheel Clamping

- ◇ Fixed the block in the left helper arm in the center of wheels.
- ◇ Place tire/wheel assembly on Table Top with mounting side up.



- ◇ Use the Wheel Clamp Foot Pedal to move the Clamps inward (pedal down) or outward (pedal up).

#### 4.2.3 Tire mounting

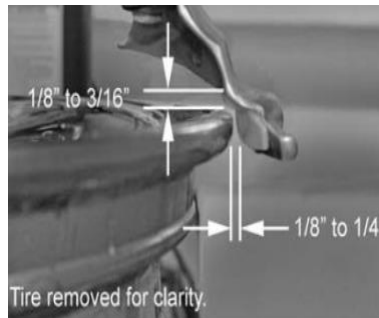
- ◇ Apply tire manufacturer's approved rubber lubricant liberally to entire circumference of both upper and lower beads after loosening bead and placing on table top.



THE RIM AND BEAD MUST BE LIBERALLY LUBRICATED. FAILURE TO USE AN ADEQUATE LUBRICANT CAN LEAD TO THE BEAD BINDING ON THE RIM AND DAMAGE TO THE MOTOR AND OR VOID THE WARRANTY.

- ◇ After the wheel is secured to the Turntable, swing the Vertical Arm into position. Use the large adjusting Knob to position the Mount/Demount Head directly over the edge of the rim.
- ◇ Push the Vertical Shaft down and position the Mount/ Demount Head into contact with the rim edge.

- ◇ Pull the locking handle towards you to lock the Vertical Shaft into position. As the slide is locked, the Mount/ Demount Head will move upward approximately 1/8 inch and backward 1/8 inch from the rim edge. The Mount/Demount head roller should not be in contact with the rim edge.



#### NOTE:

**THIS CLEARANCE WILL BE MAINTAINED AS LONG AS THE VERTICAL SHAFT REMAINS LOCKED. THE OPERATOR MAY SWING THE ARM OUT OF THE WAY AND BACK INTO PLACE AGAIN WITHOUT NEEDING TO REPOSITION THE HEAD WHEN CHANGING A LIKE SET OF WHEELS. THE TOOL CLEARANCE MAY CHANGE WITH MACHINE USE AND SHOULD BE INSPECTED OFTEN. FAILURE TO MAINTAIN PROPER CLEARANCE MAY RESULT IN DAMAGE TO THE WHEEL RIM OR TIRE.**

- ◇ Rotate the wheel using the Turntable Pedal until the valve stem is at the 3 o'clock position in relation to the Mount/Demount Head.
- ◇ Insert the smooth curved end of the Bead Lifting Tool over the tab side of the Mount/Demount Head and below the top bead of the tire.
- ◇ Push the Bead Lifting Tool down and away from the wheel to lower the bead into the Drop Center while lifting up on the Table Top Pedal to rotate the turntable counter clockwise.





**THE BEAD LIFTING TOOL AND DEMOUNT HEAD MAY ENCOUNTER RESISTANCE OR COME UNDER LOAD AT TIMES DURING THE MOUNT AND DEMOUNT PROCEDURES. KEEP ONE HAND FIRMLY ON THE TOOL TO AVOID POSSIBLE TOOL KICK BACK. USE THE REVERSING FEATURE (LIFT TABLE TOP PEDAL UPWARDS) TO BACK OUT OF JAM UPS.**

**NOTE:**

**FOR LOW PROFILE TIRES, GET THE UPPER BEAD INTO THE DROP CENTER OF THE WHEEL.**

- ◇ Push the Bead Lifting Tool down toward the wheel to lift the tire bead up and over the tab of the demount head. Hold the Bead Lifting Tool in this position. Depress the Table Top Foot Pedal to rotate the wheel clockwise.



- ◇ Hold the Bead Lifting Tool down until the upper bead is solidly above the rim. Continue rotating the wheel clockwise until the upper bead is completely demount.
- ◇ Liberally lubricate the lower bead again, if there was any difficulty lubricating the lower bead earlier.
- ◇ Insert the smooth curved end of the Bead Lifting Tool over the tab end of Mount / Demount Head and below the lower bead of the tire. Push the Bead Lifting Tool down toward the wheel to lift the tire bead up and over the left tab side knob portion of the Mount/ Demount Head. Hold the Bead Lifting Tool in this position.



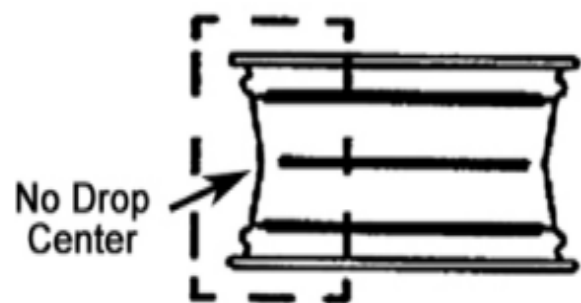
- ◇ Depress the Table Top Pedal to rotate the wheel
- ◇ The Mount / Demount Head will guide the bead up and over the edge of the wheel. Continue rotation until the lower bead is demount.

## CUSTOM AND SPECIAL WHEELS

IF A CUSTOM WHEEL IS DAMAGED WHILE DEMOUNTING, STOP, AND AVOID DAMAGING THE OTHER WHEELS. CONTINUE ONLY WHEN THE CAUSE IS IDENTIFIED AND CORRECTED.

## ALLOY WHEELS

Some manufacturers offer wheels with little or no drop center. These are not DOT approved. The tire or wheel - or both - can be damaged and the tire could explode under pressure, resulting in serious injury or death. If you attempt to mount/demount this type of wheel, use extreme caution.



## WHEELS WITH TIRE PRESSURE WARNING SENSORS

- ◇ After both tire beads are loosened, try to remove the tube. If you cannot remove the tube lubricate the beads and rim liberally.

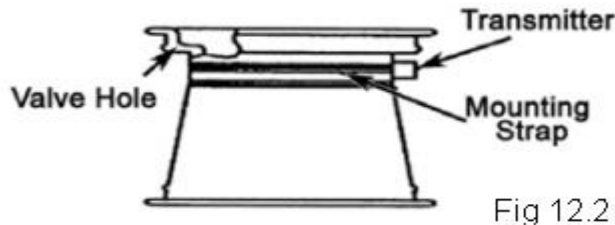


Fig 12.2

## DEMOUNTING TUBE TYPE TIRES

### 4.2.4 Demount Tube type tires

- ◇ After both tire beads are loosened, try to remove the tube. If you cannot remove the tube lubricate the beads and rim liberally.
- ◇ Position the demount head and bead lifting tool as described earlier paying careful attention not to pinch the tube. Depress the table top pedal and rotate only a short distance at a time. This allows you to stop the process should you suspect the tube is getting pinched.
- ◇ After upper bead is demount, remove tube and demount lower bead.

#### REMEMBER:

TABLE TOP ROTATION CAN BE STOPPED AT ANY TIME BY REMOVING YOUR FOOT FROM THE ROTATION PEDAL. NORMAL TABLE TOP ROTATION

FOR DEMOUNTING IS CLOCKWISE. DEPRESS THE TABLE TOP PEDAL TO ROTATE THIS DIRECTION. TO ROTATE THE TABLE TOP COUNTERCLOCKWISE, LIFT THE PEDAL UP WITH YOUR TOE.

### 4.3 Mounting

- ◇ Inspect the wheel closely for damage. Clean the wheel and remove any light corrosion or rubber residue. Do not attempt to service heavily corroded wheels.
- ◇ inspect tire for damage, paying close attention to the beads. Verify size match between



tire and wheel.

- ◇ Lubricate both tire beads liberally with tire manufacturer's approved lubricant.



THE RIM AND BEAD MUST BE LIBERALLY LUBRICATED. FAILURE TO USE AN ADEQUATE LUBRICANT CAN LEAD TO THE BEAD BINDING ON THE RIM AND LEAD TO DAMAGE TO THE MOTOR AND OR VOID THE WARRANTY.



THE INFORMATION IN THIS SECTION MUST BE READ AND FOLLOWED CAREFULLY TO PREVENT ACCIDENTS AND INJURIES DURING MOUNTING.



CHECK TIRE AND WHEEL CAREFULLY BEFORE MOUNTING. MAKE SURE THE TIRE BEAD DIAMETER AND WHEEL DIAMETER MATCH EXACTLY. CONSULT THE RUBBER MANUFACTURER'S ASSOCIATION FOR APPROVED RIM WIDTHS FOR TIRE SIZES.

ATTEMPTS TO FORCE A BEAD SEAT ON MISMATCHED TIRES AND WHEELS CAN CAUSE THE TIRE TO VIOLENTLY EXPLODE, LEADING TO SERIOUS PERSONAL INJURY OR DEATH TO OPERATOR AND/OR BYSTANDERS.

NEVER MOUNT A TIRE AND WHEEL HANDED TO YOU BY ANYONE WITHOUT CHECKING BOTH TIRE AND WHEEL FOR DAMAGE AND COMPATIBILITY. BE NEVER MOUNT A DAMAGED TIRE. NEVER MOUNT A TIRE ON A RUSTY OR DAMAGED WHEEL. DAMAGED TIRES AND/OR WHEELS MAY EXPLODE.





**IF YOU DAMAGE THE TIRE BEAD DURING MOUNTING, STOP! REMOVE THE TIRE AND MARK IT AS DAMAGED. DO NOT MOUNT A DAMAGED TIRE.**

- ◇ Place tire over wheel and move Vertical Arm and Mount/ Demount Head into position as described earlier.
- ◇ Manually push the tire down into the drop center of the wheel directly across from the Mount/ Demount Head to reduce the tension force on the bead. Depress the Table Top Pedal and rotate the wheel to begin mounting the lower bead. Rotate the Table Top until the lower bead is fully mounted.

**NOTE:**

**LOW PROFILE TIRES MAY REQUIRE USE OF THE BEAD LIFTING TOOL.**

**NOTE:**

**THE FOLLOWING PROCEDURES SHOW THE ASSIST TOWER BEING USED; THE TIRE CHANGER YOU ARE USING MAY NOT HAVE THE ASSIST TOWER INSTALLED.**

- ◇ Swing the Assist Tower into position and lower the Roller Arms so that they press down on the tire to hold the upper bead in the drop center. The Upper Arm must be locked and positioned next to the Mount-demount Head.
- ◇ Depress the Table Top Pedal. As the Turntable rotates the Lower Arm will follow the tire around. Keep rotating the table until the bead is mounted



**DO NOT FORCE THE TIRE ONTO THE RIM. BEAD DAMAGE COULD  
RESULT MAKING THE TIRE UNSAFE AND/OR CREATING THE RISK OF  
INJURY.**

## **MOUNTING TUBE TYPE TIRES**

- ◇ Lubricate the beads and rim liberally.
- ◇ Position the Mount/Demount Head as described earlier. Mount the bottom bead first.
- ◇ Apply rubber lubricant to the tube. Insert the tube into the tire, paying careful attention not to pinch the tube. Round out the tube with a small amount of air.
- ◇ Lower the Arm Rollers onto the tire as described earlier.
- ◇ Round out the tube with a small amount of air. Apply rubber lubricant to the tube.
- ◇ Depress the Table Top Pedal and rotate only a short distance at a time.
- ◇ Mount the top bead.

## INFLATION

Review the following descriptions and diagrams carefully. Refer to them as necessary during wheel restraint, bead sealing, bead seating, and inflation to verify that you are proceeding properly and safely.



**CHECK INFLATION GAUGE FOR PROPER OPERATION. ACCURATE PRESSURE READINGS ARE IMPORTANT TO SAFE TIRE INFLATION. REFER TO THE OPERATING MAINTENANCE SECTION OF THIS MANUAL FOR INSTRUCTIONS. IF THE RIM HAS BEEN CLAMPED FROM THE OUTSIDE FOR TIRE MOUNTING, RELEASE THE CLAMPS ONCE BEAD SEAL IS OBTAINED, LIFT THE TIRE, AND MOVE THE CLAMPS TO THE CENTER OF THE TABLE TOP.**

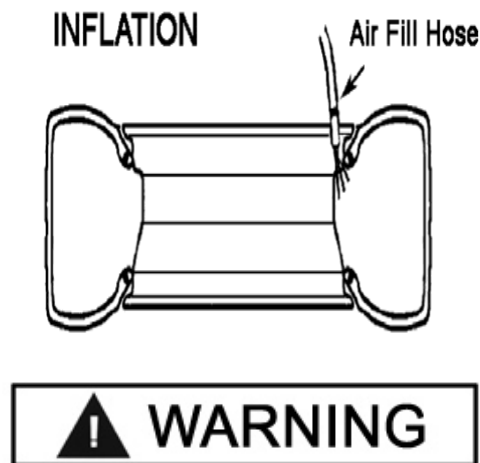
**THE CLIP-ON AIR CHUCK ON THE END OF THE INFLATION HOSE AND ALL INFLATION RELATED COMPONENTS SHOULD BE CHECKED WEEKLY FOR PROPER OPERATION. DO NOT USE THIS MACHINE FOR TIRE INFLATION IF ANY PARTS ARE DAMAGED OR APPEAR NOT IN PROPER WORKING ORDER.**



**TIRE FAILURE UNDER PRESSURE IS HAZARDOUS. THIS TIRE CHANGER IS NOT INTENDED TO BE A SAFETY DEVICE TO CONTAIN EXPLODING TIRES, TUBES, WHEELS, OR BEAD SEALING EQUIPMENT. INSPECT TIRE AND WHEEL CAREFULLY FOR MATCH, WEAR, OR DEFECTS BEFORE MOUNTING. ALWAYS USE APPROVED TIRE BEAD LUBRICANT DURING MOUNTING AND INFLATION.**

- ◇ Position One - Tire Pressure - With the Inflation Hose attached to the tire valve and the pedal in this position, the air gauge will register the air pressure in the tire. Whenever your foot is removed from the pedal, it will return to this position

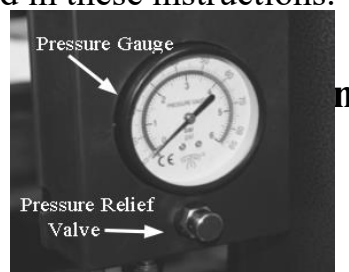
- ◇ Tire Inflation - With the Inflation Hose attached to the tire valve and the pedal depressed, line pressure is allowed to flow through the valve and into the tire for inflation. Tire pressure is not indicated on the gauge in this position



**CHECK THE FUNCTION OF THE PRESSURE LIMITER REGULARLY. MAINTAIN IT ACCORDING TO THE INSTRUCTIONS PROVIDED IN THIS MANUAL FOR SAFE AND PROPER OPERATION. DO NOT TAMPER WITH OR ATTEMPT TO ADJUST THE PRESSURE LIMITER. TIRES REQUIRING INFLATION BEYOND 60 PSI SHOULD ONLY BE INFLATED IN A SAFETY CAGE.**

### Tire Inflation

- ◇ The unit is equipped with a Pressure Limiter/Regulator to assist the operator with proper tire inflation. The Pressure Limiter will keep most car and light truck tires from inflating beyond 60 PSI. It is the operator's responsibility to follow all instructions and to control inflation pressure as specified in these instructions.



## Stage of Inflation

**THIS MACHINE IS NOT INTENDED TO BE A RESTRAINING DEVICE FOR EXPLODING TIRES, TUBES, OR RIMS. KEEP HANDS AND BODY CLEAR AT ALL TIMES AND AS FAR BACK AS POSSIBLE DURING INFLATION. DO NOT LEAN OVER THE TIRE WHILE INFLATING. AN EXPLODING TIRE, RIM OR OTHER WHEEL COMPONENT CAN CAUSE DEATH TO OPERATOR AND/OR BYSTANDER. REMAIN CLEAR AT ALL TIMES.**

**THIS OBJECT IS A RESTRAINT DEVICE ONLY. IT WILL NOT PROTECT OPERATORS IN THE EVENT OF CATASTROPHIC TIRE/WHEEL RUPTURE OR FAILURE. ALWAYS USE EXTREME CAUTION DURING THE INFLATION PROCEDURE. AS AN ADDED SAFETY PRECAUTION, SAFETY CAGES THAT CONFORM TO OSHA STANDARD 1910.177 ARE RECOMMENDED.**

## BEAD SEALING

- ◇ Position valve stem in front of operator and connect the inflation hose after removing the valve core.
- ◇ Step on the inflation pedal to allow air to flow into the tire and seal the beads.



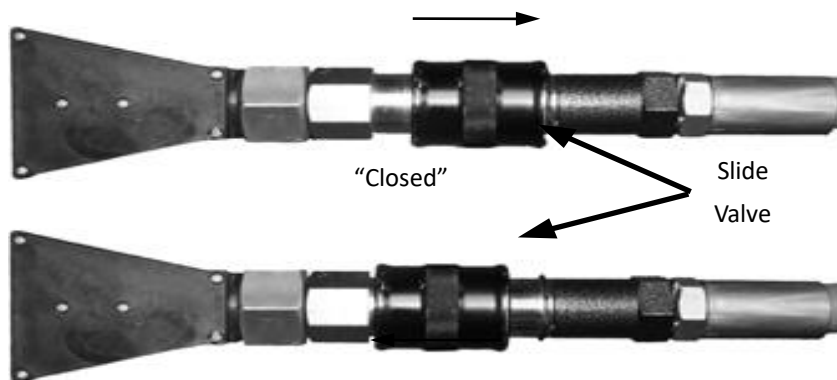
## TO SEAL LOW PROFILE OR DIFFICULT BEADS, USE THE TURBO



**NEVER POINT NOZZLE TOWARDS YOURSELF OR OTHER PERSONS. INSPECT NOZZLE, TIRE AND WHEEL FOR DEBRIS. NOZZLE MUST BE POINTED TOWARD TIRE BEAD AREA. HOLD NOZZLE SECURELY WITH BOTH HANDS AT ALL TIMES. NEVER OPERATE THE NOZZLE WITHOUT A TIRE AND WHEEL POSITIONED ON THE TABLE. DIRT AND DEBRIS COULD BE BLOWN INTO THE AIR WITH ENOUGH FORCE TO INJURE THE OPERATOR OR BYSTANDERS.**

## BLAST TO SEAL THE BEAD

- ◇ To Open the Slide Valve, PUSH the Slide Valve Forward
- ◇ Close PULL the Slide Valve closed.



- ◇ Position the Turbo Blast Nozzle to direct air towards the Rim Center just under the Rim Lip.



- ◇ Depress inflation pedal and open the Turbo-Blast Valve for less than one full second. The blast of air from the Turbo Blast Nozzle will expand tire and seal the beads.
- ◇ Repeat these steps if beads have not sealed. It will be necessary to wait a few seconds for the air storage tank to recover before attempting again. If tire and wheel are properly lubricated and operator cannot achieve bead seal after a few attempts, check to see if the valve core has been removed from the valve stem to allow more air flow into the tire to assist with bead seal. After the chuck and reinstall the valve core.



## BEAD SEATING

Bead seating usually occurs on the long-tapered side of the wheel first and the shorter side last. Bead seating will usually require at least 7 PSI in the tire. 40 PSI is the maximum safe pressure at this stage regardless of tire operating pressure. Most European import cars and many aftermarket alloy wheels are very tight and can be difficult to bead seat. Also note that asymmetrical hump and run-flat tires are extremely difficult to bead seat. Follow tire manufacturer's recommended procedure for bead seating.



**OPERATOR SHOULD KEEP HANDS, ARMS, AND ENTIRE BODY AWAY FROM THE TIRE DURING THE FOLLOW- ING BEAD SEAT AND INFLATION PROCEDURES. DO NOT STAND OVER TIRE, AS PERSONAL INJURY COULD RESULT FROM INFLATING TIRE.**

- ◇ Once tire pressure is indicated on the air gauge (inflation pedal depressed, continue to inject air into the tire in short intervals. Check the pressure frequently. Stand back during bead seat. Keep hands, arms, and entire body away from tire during this procedure. Tire beads should move outward and “pop” into their bead seat position as pressure inside the tire increases. If this does not happen, a problem exists. Investigate carefully.
- ◇ Release air pressure from the tire by pressing the manual Pressure Relief Valve.



**NEVER ATTEMPT TO MOUNT AND INFLATE MISMATCHED TIRES AND WHEELS. MISMATCHED TIRE AND WHEEL COMBINATIONS CAN EXPLODE, CAUSING PERSONAL INJURY OR DEATH TO OPERATOR AND BYSTANDERS. FOR SAFETY, DO NOT ATTEMPT TO MOUNT AND INFLATE MISMATCHED TIRES AND WHEELS.**



**CHECK TIRE PRESSURE FREQUENTLY. NEVER EXCEED 40 PSI WHILE SEATING BEADS. ONCE SEATED, NEVER EXCEED TIRE MANUFACTURER'S RECOMMENDED AIR PRESSURE. TIRES CAN EXPLODE, ESPECIALLY IF THEY ARE INFLATED BEYOND THEIR LIMITS. AT ALL PRESSURE LEVELS WHEN INFLATING THROUGH THE VALVE STEM, KEEP HANDS, ARMS, AND ENTIRE BODY AWAY FROM INFLATING TIRE. AN EXPLODING TIRE, WHEEL, OR BEAD SEALING EQUIPMENT IF OPERATOR IS UNABLE TO OBTAIN BEAD SEAT, SOMETHING IS WRONG. DEFLATE TIRE COMPLETELY, INSPECT TIRE AND WHEEL, CORRECT ANY PROBLEMS FOUND, RE-LUBRICATE BOTH TIRE BEADS, AND REATTEMPT BEAD SEAL AND SEAT PROCEDURES. FOLLOW ALL SAFETY INSTRUCTIONS IN THIS MANUAL AND ON MACHINE**

## **STAGE FOUR / TIRE INFLATION**

- ◇ Make sure both beads are seated. When both beads are seated, the tire is ready for inflation.
- ◇ Replace the valve core if it was removed.
- ◇ Depress the Inflation Pedal to inflate the tire. DO NOT STAND OVER TIRE DURING INFLATION.
- ◇ Do not inflate the tire above the manufacturer's recommended pressure as stamped on the tire sidewall. The typical inflation pressure for automobile tires is between 24 and 45 PSI. Light truck inflation pressure typically covers a wider range. Release air pressure

**CHECK TIRE PRESSURE FREQUENTLY. NEVER EXCEED 40 PSI WHILE SEATING BEADS. ONCE SEATED, NEVER EXCEED TIRE MANUFACTURER'S RECOMMENDED AIR PRESSURE. TIRES CAN EXPLODE, ESPECIALLY IF THEY ARE INFLATED BEYOND THEIR LIMITS. AT ALL PRESSURE LEVELS WHEN INFLATING THROUGH THE VALVE STEM, KEEP HANDS, ARMS, AND ENTIRE BODY AWAY**

from the tire by pressing the manual Pressure Relief Valve



**NOTE:**

**WHEN INFLATING TIRES THAT REQUIRE MORE THAN 60 PSI, ALWAYS USE A SAFETY CAGE AND AIR HOSE WITH A CLIP-ON AIR CHUCK AND IN-LINE VALVE. THE HOSE MUST HAVE ENOUGH LENGTH BETWEEN THE CHUCK AND THE OPERATION/IN-LINE VALVE TO ALLOW THE TECHNICIAN TO STAND OUTSIDE THE TRAJECTORY**

**BEFORE MAKING ANY INSPECTION**

**ADJUSTMENT, OR REPAIR, DISCONNECT THE POWER SOURCE AND OR AIR SUPPLY AND BLOCK OUT ALL MOVING PARTS TO PREVENT INJURY.**

**KEEP THE MACHINE AND THE IMMEDIATE WORK AREA CLEAN. DO NOT USE COMPRESSED AIR TO REMOVE DIRT AND DEBRIS FROM THE MACHINE. FOREIGN MATERIAL MAY BE PROPELLED INTO THE AIR AND INTO OPERATOR OR BYSTANDER CAUSING PERSONAL INJURY.**

**WEAR PROTECTIVE CLOTHING AND USE EYE PROTECTION WHEN MAKING  
ANY ADJUSTMENTS  
OR REPAIRS TO THE MACHINE.**

### 5.1.1 Maintenance

- ◇ Prohibit unauthorized personnel for maintenance operation. To extend the service life of the tire changer, maintenance should be performed according to the requirements of the manual. If the machine is not maintained regularly, the operation and reliability cannot be guaranteed, and even cause danger to the operator or the people in the vicinity of the machine. Before any maintenance operation, circuit and gas supply device must be disconnected, turn off the switch. In order to release the pressure of the air from the line, it is necessary to press the pedal 3-4 times.
- ◇ It must be professional staff using the original spare parts do the timely replacement of damaged parts. The safety device (safety valve, control valve) of the unauthorized removal or replacement is a violation of state regulations on work safety. (Note: the manufacturer is not responsible for damage caused by the parts of other manufacturer and the damage caused by the disassembling of the safety device).

### 5.1.2 Tending

- ◇ Regular use of diesel oil to clean the turntable, to prevent the formation of dirt. Daub lubricating oil in the skidway of the clamps.
- ◇ As shown in figure 15-a, control oil mist level that in the oil mist device, if the oil level is lower, you need to unscrew the oil F, and then as figure 15-a., control oil mist level, HG ISO and viscosity of VG32 ISO type oil mist is recommended. (like: ESSO Febis K32, MOBIL Vacouline 1405, KLUBER32). when stepping the pedal 3 to 4 times, check whether there are oil drops into the oil cup F, if not, adjust screw D.
- ◇ As shown in figure 15-b, 20 days after the first use of the machine, re-tighten the screw A and B that is in the clamps.

- ◇ As shown in figure 15-c, machine horsepower is not enough, check the triangle belt of the motor by the following steps: (before any operation, to cut off the power) first, Unscrew the 4 screws on the side of the box, remove the left side protective plate of the tire changer, second, use special adjustment screw X (Figure 15-c) that is in the motor support base to adjust the triangle belt.
- ◇ As shown in figure 15-d, If the (I) lock is not good or cannot be stopped at the top of the 2mm, it is necessary to adjust the nut on the operating arm.
- ◇ As shown in figure 15-e, when cleaning or replacing silencer which controls the opening or closure of the clamps(G), follow the following steps: first, unscrew the 4 screws on the side of the box, remove the left side protective plate on the tire changer. Second, in the pedal (V1, V2) system which controls the opening or closure of the clamps(G), unscrew silencer. Clean with compressed air nozzle, if damaged, replace with the same parts.

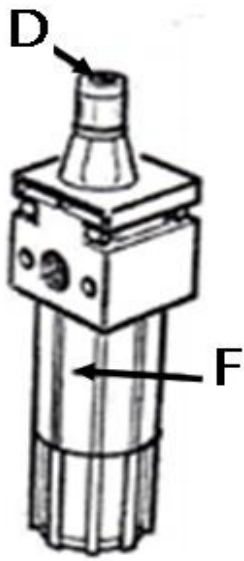


Figure 15-a

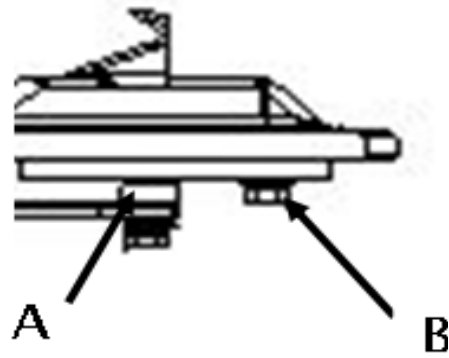


Figure 15-b

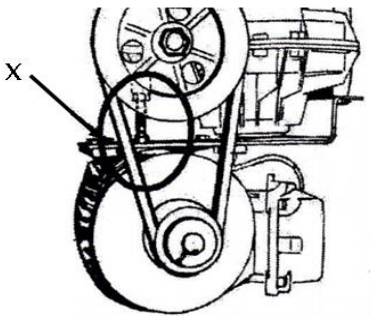


Figure 15-c

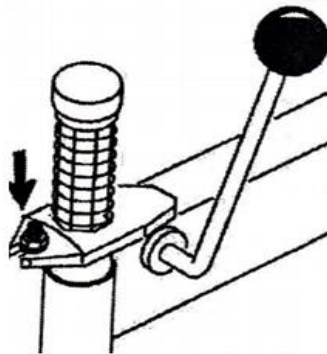


Figure 15-d

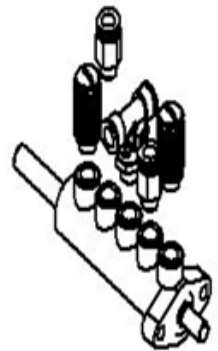


Figure 15-e

## 5.2 Storage and scrap

### 5.2.1 Storage

- ◇ If you want a long-time storage of machine, please disconnect all the energy supply, and lubricate the skidway of the clamps on the turntable to prevent oxidation.

### 5.2.2 Scrap

- ◇ In accordance with the law of the metal and nonmetal for scrap processing. In the specified place release the oil inside the machine.

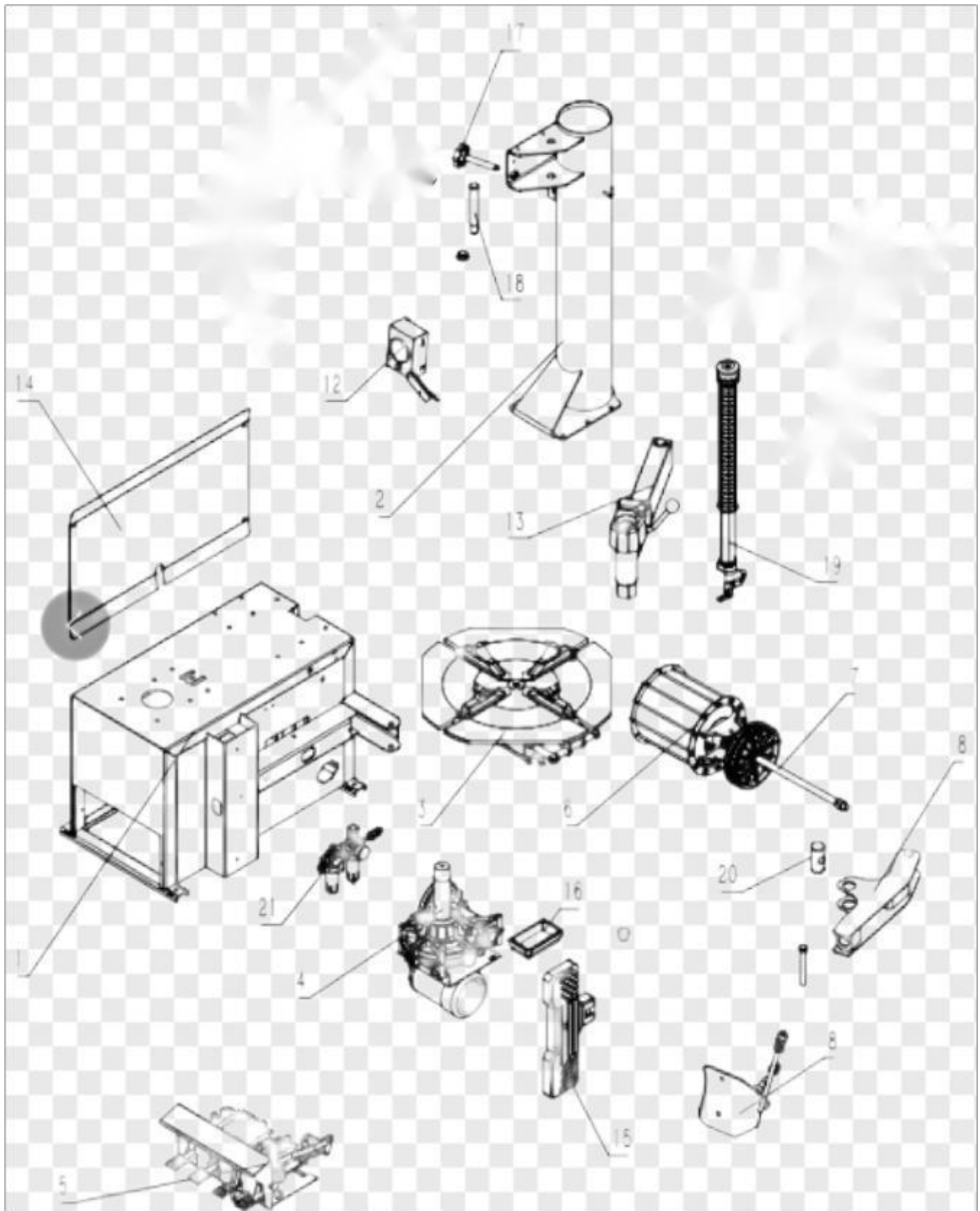
## Fault causes and Solutions

Note: if you cannot solve the failure, please contact the manufacturer to provide help. We will be the first time to help you to solve the failure. Provide the relevant fault information and fault pictures, thus the manufacturer can get rid of the trouble at the fastest speed.

Failure phenomenon	Failure cause	Resolvent
Unidirectional rotation of the turntable	Universal steering switch damage	Replace universal steering switch
Rotary table does not rotate	Triangle damage	Replace triangle belt
	Universal steering switch damage	Replace universal steering switch
	Motor fault or line fault	Check motor and external plug or socket
Rotary clamp opening / closing speed is slow	Muffler blockage	Clean or replace muffler
The turntable can't lock	Clamps have trouble	Replace clamps

the rim correctly	Rotary cylinder has trouble	Replace cylinder or repair cylinder sealing ring
Working head can touch the rim	Lock plate adjustment is not correct or faulty	Adjust or replace the locking plate (Figure 18/d)
	Working head screw loose	Tighten screws (Figure 12/a)
The pedal is not located at work position.	Return spring has trouble	Replace return spring
Operating difficulties of the tire device	Muffler blockage	To clean or replace the silencer (Figure 18/f)
	Cylinder sealing ring damage of pressure device	Replace sealing ring

## Parts List and Exploded Drawings





1	88013000	Box Weld
2	620+310A	Tower Weld
3	6206000	Turntable ASSY
4	6207000	Gear Box ASSY
5	8808000	Pedals ASSY
6	8805100	Φ200 Aluminum Cylinder Unit
7	8805200	Φ200 Aluminum Cylinder piston
8	5804000	Universal Blade Weld
9	620B420	Bead Breaker Weld
12	5704200	Inflation Box Unit
13	8803000	Horizontal Arm Unit
14	580A111	Side Cover
15	5621012	Bead Breaker Pad
16	8801013	Soap Bucket
17	8802008	Hand Wheel
18	8803007	Column Limit Rod
19	5622500	Hexagon Shaft Unit
20	62013404	Bead Breaker Blade Arm
21	301300	Air Drier Unit

## **LIMITED WARRANTY**

Lenox® Wheel Service Equipment is warranted for the period of one year on all operating components to be free of defects in material and workmanship. Lenox® shall repair or replace at their option for the warranty period those parts returned to the factory freight prepaid which prove upon inspection to be defective. Lenox® will pay labor costs for the first 12 months only on parts returned as previously described. These warranties do not extend to defects caused by ordinary wear, abuse, misuse, shipping damage, improper installation or lack of required maintenance. This warranty is exclusive and in lieu of all other warranties expressed or implied. In no event shall Lenox® be liable for special, consequential or incidental damages for the breach or delay in performance of the warranty. Lenox® reserves the right to make design changes or add improvements to its product line without incurring any obligation to make such changes on product sold previously. Warranty adjustments within the above stated policies are based on the model and serial number of the equipment. This data must be furnished with all warranty claims.