## **AWARNING**

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

## INSTALLATION AND OPERATION MANUAL

TIRE CHANGER

FOR SERVICING TRUCK, BUS AND COMMERCIAL VAN TIRES AND RIMS





Keep this operation manual near the machine at all times. Make sure that <u>ALL USERS</u> read this manual entirely .

## **ATTENTION:**

Please pour **hydraulic oil** into the pump station oil tank before you operate this tyre changer for the first time!

**BE SAFE** 

Your new tire changer was designed and built

with safety in mind. However, your overall safety can be increased by proper training and thoughtful operation on the part o the operator. DO NOT operate or repair this equipment without reading this manual and the important safety instructions shown inside.

The truck tire changer has been specifically

	designed to demount and mount truck,	bus and commercial van tires	, with rims from 14" – 26	' (356 mm - 660 mm)	and
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a maximum 63" (1600 mm) diameter. Any other use is improper and not authorized or recommended. Before beginning any kind of work on or with this machine, carefully read and understand the contents of these operating instructions. Manufacturer shall not liable for any injury to persons or damage to things caused by improper use of this machine. KEEP THIS MANUAL NEAR THE MACHINE AND CONSULT IT AS NEEDED DURING OPERATION. Failure to follow danger, warning, and caution instructions may lead to serious personal injury or death to operator or bystander or damage to property.

### **OPERATOR PROTECTIVE EQUIPMENT**

Personal protective equipment helps make tire changing safer. However, equipment does not take the place of safe operating practices.

Always wear durable work clothing during tire service activity. Shop aprons or shop coats may also be worn, however loose fitting clothing should be avoided.

Tight fitting leather gloves are recommended to protect operators hands when handling worn tires and wheels.

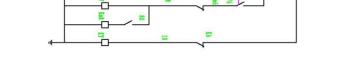
Sturdy leather work shoes with steel toes and oil resistant soles should be used by tire service personnel to help prevent injury in typical shop activities.

Eye protection is essential during tire service activity. Safety glasses with side shields, goggles, or face shields are acceptable.



Back belts provide support during lifting activities and are also helpful in providing operator protection.

Consideration should also be given to the use of hearing protection if tire service activity is performed in an enclosed area, or if noise levels are high.





Electic shock



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When operation lake cre for head



Oiling

# DEFINITIONS OF HAZARD LEVELS

Identify the hazard levels used in this manual with the following definitions and signal words:

## **ADANGER**

#### **DANGER**

Watch for this symbol: It Means: Immediate hazards which will result in severe personal injury or death.

## **AWARNING**

#### WARNING

Watch for this symbol: It Means: Hazards or unsafe practices which could result in severe personal injury or death.

## **ACAUTION**

#### **CAUTION**

Watch for this symbol: It Means: Hazards or unsafe practices which may result in minor personal injury or product or property damage.



Watch for this symbol! It means BE ALERT! Your safety, or the safety of others, is involved!

#### **OWNER'S RESPONSIBILITY**

To maintain machine and user safety, the responsibility of the owner is to read and follow these instructions:

- 4 Follow all installation instructions.
- 4 Make sure installation conforms to all applicable Local, State, and Federal Codes, Rules, and Regulations.
- 4 Carefully check the unit for correct initial function.
- 4 Read and follow the safety instructions. Keep them readily available for machine operators.
- 4 Make certain all operators are properly trained, know how to safely and correctly operate the unit, and are properly supervised.
- 4 It is the responsibility of the facility owner to properly designate work areas and areas where by-standers are not permitted.
- 4 Allow unit operation only with all parts in place and operating safely.
- 4 Carefully inspect the unit on a regular basis and perform all maintenance as required.
- 4 Service and maintain the unit only with authorized or approved replacement parts.
- 4 Keep all instructions permanently with the unit and all decal's on the unit clean and visible.

## **AWARNING**

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

#### DANGER! ALWAYS STAY CLEAR OF MOVING PARTS!



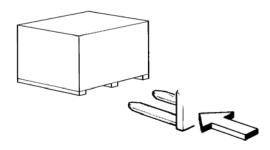






#### INTRODUCTION

Handling of the machine must be performed only with an appropriate lifting device such as a forklift or pallet jack.



## **AWARNING**

Only personnel who are experienced and qualified on material handling procedures should handle any transportation or moving of machine.

#### **Uncrating Instructions**

Carefully remove the crating and packing materials and all skid and pallet fasteners.

## **ACAUTION**

Be careful when cutting steel banding material as items may become loose and fall causing personal harm or injury. Always wear gloves when uncrating the machine to prevent scratches, abrasions, or cuts due to the contact with packing materials.

#### INSTALLATION

# **ADANGER**

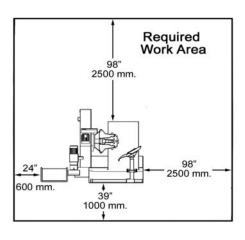
**Disconnect, tag and lock out** power source before attempting to install, service, relocate or perform any maintenance.

**Do not** lift or move unit without appropriately rated equipment. Be sure the unit is securely attached to lifting device used.

**Do not** lift unit by holding onto arms, carriage or other non-approved lifting areas.

**Never** use the wood shipping skid for mounting the unit.

Machine size is approximately 83" x 72" (2085mm.x 1820mm.) with a minimum work area distance from walls as shown in the diagram.



## **AWARNING**

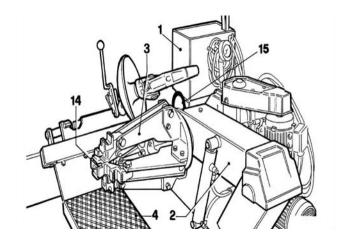
These measurements are the tire changers working range. Persons other than specially trained and authorized operators are expressly forbidden to enter this area.

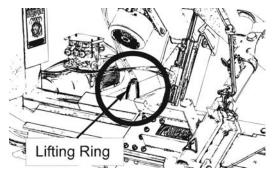
#### **Transporting / Moving**

The tire changer has a lifting ring which has been positioned specifically for moving the machine.

Before attempting to transport the machine, follow these instructions:

- 1) Make sure the horizontal chuck arm ( 2 ) is completely lowered.
- 2) Make sure the chuck jaws (3) are closed.
- 3) Bring the sliding table (4) all the way left towards the horizontal chuck arm.
- 4) Insert a lifting hook and cable with a minimum lifting capacity of 1500-pounds (680 kg.) around the lifting ring. (15) Make sure the cable is of sufficient length to properly clear the tire changer when handling.
- 5) Lift only with an approved capacity lifting truck or approved devise that is capable of safely handling the load.





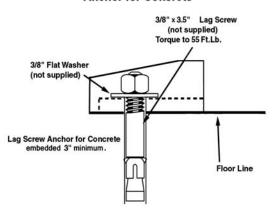
#### **Mounting**

It is not essential to anchor the machine to the floor, however, the floor must be smooth and level and permit the platform rollers to move freely. When anchoring to a concrete floor use the mounting holes that are provided in the frame. Make sure the machine is solid and level and supported evenly on all anchor points. Solid shims may be used if necessary.

# **ADANGER**

Choose a safe location that is in compliance with current work place safety regulations. Failure to properly install the machine can lead to improper and unsafe operation.

#### **Anchor for Concrete**



#### Wiring Instructions

1. Check the voltage, phase and proper amperage requirements for the motor shown on the motor plate. Wiring should be performed by a certified electrician only.

## **ADANGER**

Overheating, short circuits and fire damage will result from inadequate wiring. Wiring must be installed in accordance with National Electric Code and local codes and standards covering electrical apparatus and wiring.

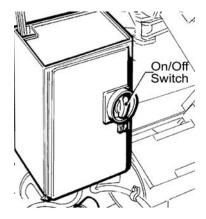
Be certain that adequate wire sizes are used, and that:

4 Service is of adequate amp rating.

- 4 The supply line has the same electrical characteristics (voltage, cycles and phase) as the motor.
- 4 The line wire is the proper size and that no other equipment is operated from the same line. The chart below gives minimum recommended wire sizes for compressor installations.

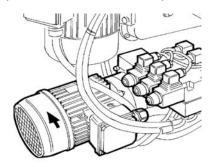
#### **Motor Rotation Check**

Once the machine is hooked-up, turn the machine on using the on/off switch.



### **AWARNING**

Ensure that the rotation direction of the pump is the same as indicated by the arrow on the motor cover. If not, reverse any two phase cables on the plug. Wiring should be performed by a certified electrician only.



Specifications are subject to change without notice.

\*Different voltages available upon request.

# IMPORTANT SAFETY INSTRUCTIONS

## **AWARNING**

- 1. **READ AND UNDERSTAND** all safety warning procedures before operating unit.
- 2. **KEEP HANDS AND FEET CLEAR**. Remove hands and feet from any moving parts.
- KEEP WORK AREA CLEAN. Cluttered work areas invite injuries.
- Consider work area environment. Do not expose equipment to rain . DO NOT use in damp or wet locations. Keep area well lighted.
- 5. **ONLY TRAINED OPERATORS** should operate this equipment. All non-trained personnel should be kept away from work area. Never let non-trained personnel come in contact with, or operate machine.
- USE MACHINE CORRECTLY. Use machine in the proper manner. Never use adapters other than what is approved by the manufacturer.
- 7. **DO NOT** override or disable safety valves and/or devices.
- ALWAYS INSURE that the arm lock is engaged before any attempt is made to service wheels and/or tires.
- 9. **DRESS PROPERLY**. Non-skid steel-toe footwear is recommended when operating machine.
- 10. **GUARD AGAINST ELECTRIC SHOCK**. This equipment must be grounded while in use to protect the operator from electric shock. Never connect the green power cord wire to a live terminal. This is for ground only.



- 11. **DANGER!** The motor on this machine contains high voltage. Disconnect power at the receptacle before performing any electrical repairs. Secure plug so that it cannot be accidentally plugged in during service.
- 12. **WARNING! RISK OF EXPLOSION**. This equipment has internal arcing or sparking parts which should not be exposed to flammable vapors. This machine should not be located in a recessed area or below floor level.



- 13. **MAINTAIN WITH CARE**. Keep unit clean for better and safe performance. Follow manual for proper lubrication and maintenance instructions. Keep control pedals and/or buttons dry, clean and free from grease and oil.
- 14. **STAY ALERT**. Watch what you are doing. Use common sense. Be aware.
- 15. **CHECK FOR DAMAGED PARTS**. Check for condition of all moving parts, breakage of parts or any condition that may affect the machines operation. Do not use if any component is broken or damaged.
- 16. **NEVER** remove safety related components or device from the machine. Do not use if safety related components are damaged or missing.
- 17. To reduce fire hazard, keep engine/motor exterior free of oil, solvent, or excessive grease.



18. Unreadable and missing warning labels must be replaced immediately. Do not use the tire changer if one or more labels are missing. Do not add any object that could prevent the operator from seeing the labels.



# TIRE AND WHEEL SERVICE SAFETY INSTRUCTIONS

# **ADANGER**

Only properly trained personnel should service tires and wheels on the machine. Read all safety and operating instructions thoroughly before use. The following safety instructions are for one piece wheels only. Always refer to the manufacturer's procedures for multi-piece wheels.

**Always** wear durable personal protective work clothing and safety gear during tire service activity. Refer to page two for Operator Protective Equipment.

**ALWAYS** remove all wheel weights and the valve core to deflate the tire before servicing.

ALWAYS keep all working surfaces clean and free of debris.

**ALWAYS** be aware of what each person is and will do before attempting any two-person operation.

**ALWAYS** cover the electric motor and switch box before hosing down the tire changer. Be sure water does not enter the motor or switch box.

**ALWAYS** disconnect the electric power and air supply before attempting any maintenance.

#### **Bead Loosening**

**NEVER** place anything between the bead loosener disc and the tire/wheel.

**NEVER** allow the bead loosener disc to contact the wheel or wheel damage may occur.

**NEVER** place any part of your body between the bead loosener disc and the tire/wheel, severe bodily injury may result.

#### **Demounting & Mounting**

ALWAYS clean and inspect the wheel prior to any service.

**NEVER** stand on the sliding carriage, frame or work table while demounting or mounting a tire.

**ALWAYS** keep hands, feet, and other objects away from moving parts while the machine is turned on.

**ALWAYS** place the narrow bead seat to the outside when clamping. Failure to demount the tire from the narrow bead seat side may cause damage to the tire beads.

**ALWAYS** apply an approved rubber lubricant to rim flanges and both tire beads before demounting or mounting and seating the beads.

**NEVER** mount a tire on a damaged or rusty wheel as tire or wheel failure may result during inflation. Explosion from failure may result in severe injury or death of the operator and bystanders.

#### Inflation

**ALWAYS** be sure the bead opposite the tool is in the drop center before rotating the tire when demounting or mounting to avoid damage to the tire beads.

**NEVER** seat beads or inflate a tire on the tire changer. The machine is not designed as a safety device or stand for bead seating or inflation.

**ALWAYS** follow all applicable Local, State, and Federal Codes, Rules, and Regulations.

**ALWAYS** use an approved inflation chamber or inflation cage equipped with a self-gripping chuck and remote inflation gauge and valve.

**ALWAYS** inflate the tire to manufacturer's recommended cold operating pressure.

**DO NOT OVER INFLATE!** Tire or wheel failure during and after inflation may result in an explosion capable of causing severe injury or death.

**NEVER** reinflate a tire that has been run underinflated or flat without first demounting the tire and checking for wheel and tire damage.

**ALWAYS** inspect the tire interior for loose or broken cords, cuts, penetrating objects, and other damage. Discard tires that cannot be properly repaired.

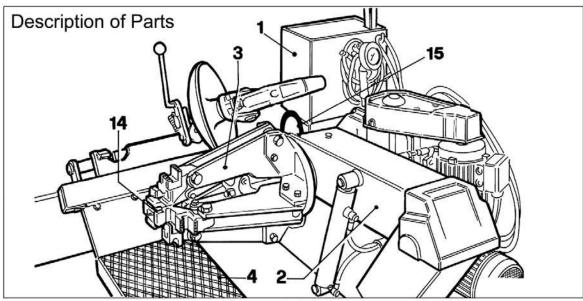
**NEVER** rework, weld, heat or braze wheels.

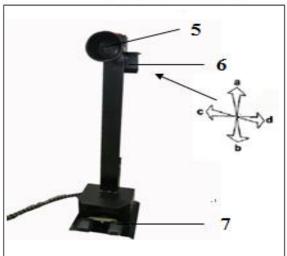
**NEVER** strike the tire or wheel with a hammer.

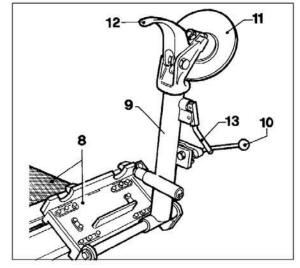
**ALWAYS** be sure the tire diameter exactly matches the wheel diameter.

# **ADANGER**

Tire failure under pressure can be hazardous. Always place wheels inside an approved inflation chamber or cage before inflating. Use an approved remote inflation valve, hose, and gauge. ALWAYS wear safety goggles for eye protection. Do not stand beside the wheel or cage during inflation. Keep hands and other parts of the body out of the cage during inflation. Observe the tire pressure frequently. Do not exceed the manufacturer's recommended maximum inflation pressure. Failure to follow these instructions may cause the tire and rim to separate with tremendous force, resulting in serious personal injury or death.

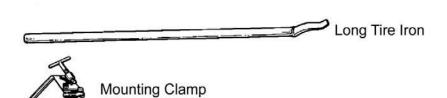






- 1 -Main Power Console / On-Off Switch
- 2 Horizontal Chuck Arm
- 3 Self-Centering Chuck
- 4 Sliding table
- 5 Chuck Arm Joystick Control
- 6 Chuck Control Switch
- 7 Wheel (CW /CCW) Rotate Control
- 8 Sliding Carriage

- 9 Mount-Demount Tool Holder Arm
- 10 Arm Lock Lever
- 11 Bead Breaking Disk
- 12 Bead Tool
- 13 Tool Lock Handle
- 14 Self-Centering Chuck / Jaws
- 15 Lifting Hook



#### **OPERATING INSTRUCTIONS**

#### **Controls**

The mobile control enables the operator to work at any position around the machine. Before operating the machine ensure that you thoroughly understand the operation and function of all controls.

- 1. To turn the machine on, rotate the ON/OFF switch to the ON position. The pump motor will start running and will remain in operation until the machine is turned off. The power required is minimum when the hydraulic cylinders are not in use.
- 2. Press the chuck rotation pedal ( **7** ) to the right: The chuck will rotate clockwise. Press to the left and the chuck rotates counterclockwise.



- 3. Move the joystick control ( 5 ) to position A and the horizontal chuck arm will move upward. Move the joystick control ( 5 ) to position B and the horizontal chuck arm will move downward.
- 4. Move the joystick control (**5**) to position C and the sliding carriage will move left. Move the joystick control (**5**) to position D and the sliding carriage will move right.
- 5. Move the switch (  $\bf 6$  ) upward and the self-centering chuck jaws will open. Move the switch (  $\bf 6$  ) downward and the self-centering chuck jaws will close.

## **AWARNING**

- 4 Ensure that the horizontal arm is fully raised prior to rotation of the self-centering chuck .
- 4 Before lifting the toolholder arm be sure that nobody is standing in the operational area or areas of danger.

4 When opening the chuck ensure that the jaws do not contact or hit other parts of the machine.

#### NOTE:

All the controls are very sensitive and small movements of the machine can be done with precision.

#### **Demounting and Mounting**

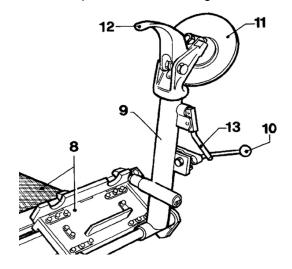


Before mounting a tire on a rim, pay attention to the following:

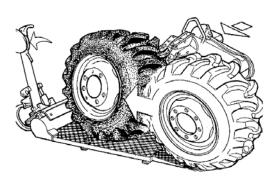
- 4 The rim and all of its parts must be clean and in good condition.
- 4 Remove all wheel-weights, including tape weights inside the rim.
- 4 The tire must be clean and dry, without any damage to the bead, sidewalls or tread area(s).
- 4 Replace the rubber valve stem or o-ring with a new one.
- 4 If the tire requires a tube or a flap, make sure the tube is dry and in good condition.
- 4 Lubrication is necessary to mount the tire correctly and get a proper centering. Be sure and use an approved lubricant only.
- 4 Make sure the tire is the correct size for the rim.

### **Locking / Mounting The Wheel**

- 1. Take the mobile control unit to a comfortable working position clear of moving components.
- 2. Place the the tool-holder arm (  $\bf 9$  ) into the upright position.
- 3. Operating from the mobile control, move the sliding table ( **4 & 8** ) away from the self-centering chuck and place the wheel in vertical position on the sliding table.

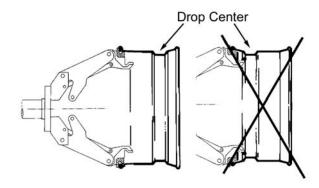


TRUCK TIRE CHANGER



## **ACAUTION**

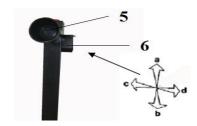
The drop center of the rim (when it exists) must be kept towards the outside of the machine.



## **AWARNING**

If the wheel is heavy, always be sure to use a suitable external lifting device (i.e. fork lift, crane etc.). Always practice workplace safety. Back belts provide support during lifting activities and are also helpful in providing operator protection.

4. Continuing to operate from the mobile control, lift or lower the horizontal arm and center the self-centering chuck relative to the center of the wheel. Move the joystick control (5) to position A and the horizontal chuck arm will move upward. Move the joystick control (5) to position B and the horizontal chuck arm will move downward.

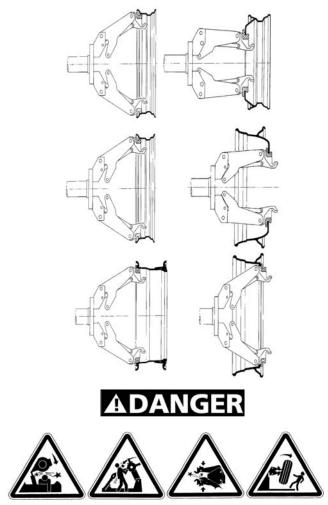


5. With the jaws in the closed position, move the joystick control (5) to position C and the sliding carriage and table will move left towards the self-centering chuck.

6. Slowly continue moving the sliding carriage and table left until the center of the wheel positions over the closed self-centering chuck jaws.

11

7. Operate the chuck switch ( **6** ) to open the self-centering chuck and lock onto the inside of the wheel using the approved mounting illustrations shown below making sure the drop center of the rim (when it exists) is kept towards the outside of the jaws.



- 4 When the horizontal arm is lowered, there is always a potential for crushing anything in its movement range. Always keep well out of the working range of the various moving arms and parts.
- 4 When the chuck jaws open or close, there is always a potential for crushing anything in their movement range. Always keep hands and fingers out of the jaws working range.
- 4 When locking the wheel, make sure that clamps are properly positioned on the rim, so as to prevent the tire from falling.
- 4 This operation can be extremely dangerous. Do it manually only if you are certain you can keep the wheel balanced. For large and heavy tires an adequate lifting device must be used.

## **Demounting Tubeless Truck Tires (Up to 13")**

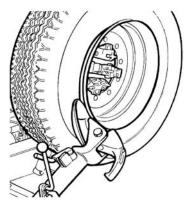
Tubeless truck tires are usually mounted on drop-center rims. It is possible to demount these tires simply by pressure, and with proper lubrication

1. Remove all of the wheel-weights from the rim. Remove the valve stem or core and deflate the tire.

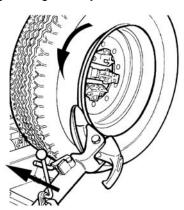
# **ADANGER**

**ALWAYS** remove valve core to deflate tire before servicing.

2. Position the bead loosener disc or tubeless roller on the outside bead of the tire as shown below.

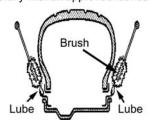


3. Lift or lower the chuck so that the bead loosener disc or tubeless roller remains close to the rim edge. Turn the chuck counterclockwise while at the same time moving the tool holder sliding carriage slowly left.

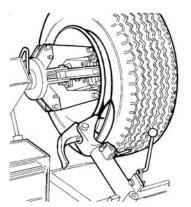


4. Continue to turn the chuck and lubricate the bead and the rim liberally with an approved lubricant. Use only approved lubricants for tires and wheels. Continue until the first bead is fully detached.

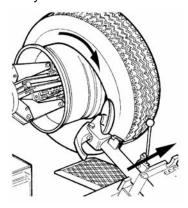
Lubricate the bead and the rim liberally with an approved lubricant.



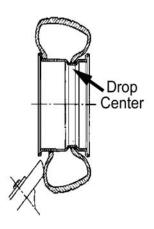
- 5. Bring the tool carrier arm and disc back from the edge of the wheel then release the hook and raise the tool holder arm to the rest position.
- 6. Press the tool lock handle to unlock the tool head and turn the head180° until it locks automatically and the disc is facing to the right.
- 7. Lower the tool-holder arm into its working position and allow it to lock securely.
- 8. Position the bead loosener disc close to the rim edge.



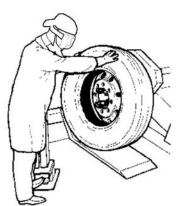
9. Turn the chuck counterclockwise while at the same time moving the tool holder sliding carriage slowly right until the inside bead is fully detached.



10. Continue rotating the chuck, moving tool holder carriage towards the outside until the beads are completely demounted. Ensure that the outer bead slides into the drop center opposite to the tool, otherwise the demounting operation is impossible.

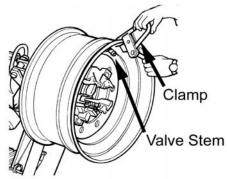


11. Move to the front of the tire and hold it with both hands 4. Turn the chuck clockwise until the tire is completely in the last part of demounting operation to prevent the tire from falling or rolling away out of control.

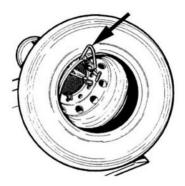


### **Mounting Tubeless Truck Tires (Up to 13")**

1. Liberally lubricate the entire inner surface of the rim and the tire beads. Attach the mounting clamp to the outer rim flange with the valve at 11 o'clock and the clamp at 12 o'clock.



2. Move the horizontal chuck arm all the way down then roll the tire on the foot board and hang it onto the mounting clamp.

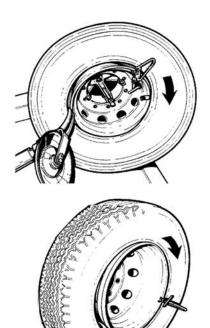


3. Lift the horizontal chuck arm and position the mounting hook or tubeless roller approximately 1/2" (1.5 cm.) to the inside of the rim edge and approximately 1/2" (1.5 cm.) away from the rim edge. The mounting clamp should be at approximately 11 o'clock.

## **AWARNING**

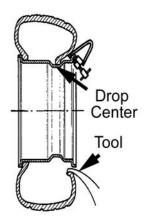
Never use hand pressure to hold the tire onto the rim as personal injury may result.

mounted.



## **ACAUTION**

Ensure that the outer bead moves into the drop center when the clamp is opposite to the tool.



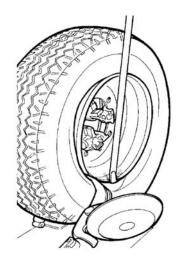
## **AWARNING**

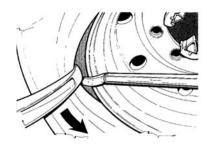
Stop the chuck before one complete turn is made to avoid personal injury or serious damage to the mounting clamp and/or rim.

### **Demounting Duplex and Supersingle Tubeless Truck Tires (Over 13"Wide)**

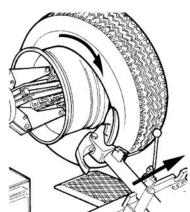
- 1. Loosen the outer bead of the tire as described previously.
- 2. For this type of tire it is not possible to demount both beads at the same time with the disc as described earlier.

3. Engage the hook of the mount/demount tool between the bead and the rim then lift the horizontal chuck arm making the rim raise just enough to clear the hook about 1/2" from the rim flange. Move the mount/demount tool towards the outside. This will allow you to place the long tire iron bar in between the bead and the rim flange.



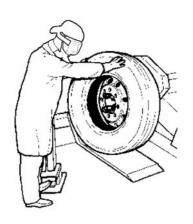


- 4. Rotate the chuck counterclockwise until the outer bead is completely demounted.
- 5. Demount the inner bead with the bead breaker disc, as described earlier. Continue rotating the chuck, moving tool holder carriage towards the outside until the beads are completely demounted.



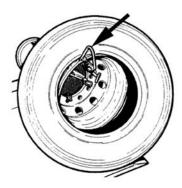
## **ACAUTION**

Move to the front of the tire and hold it with both hands in the last part of demounting operation to prevent the tire from falling or rolling away out of control.

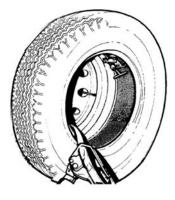


### Mounting Duplex And Supersingle Tubeless Truck Tires (Over 13"Wide)

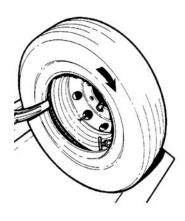
1. Hang the inner bead of the tire on the mounting clamp.



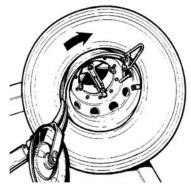
2. Position the mounting hook about 3/4" (1.5 cm) to the inside of the inner rim edge and 1/2" (1 cm) away.



3. Rotate the chuck clockwise. Normally less than 1/4 of a revolution is sufficient to mount the first bead.



- 4. Re-attach the mounting clamp to the outer rim flange with the valve forward of the mounting clamp.
- 5. Rotate the chuck clockwise until the tire is completely mounted.



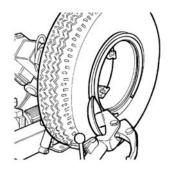
## **AWARNING**

Always stop the chuck before one complete turn is made to avoid personal injury or serious damage to the mounting clamp and/or rim.

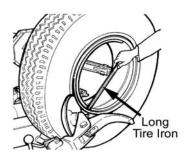
# **ADANGER**

Do not inflate the tire on the machine. This machine is not an inflation device. For inflation place the wheel in an approved inflation restraint device.

- 1. Remove all wheel-weights from the rim. Remove the valve stem or core and deflate the tire completely.
- 2. Position the tool close to the rim edge.
- 3. Turn the chuck counterclockwise and loosen the bead as described previously. Do not lubricate.



4. To remove the lock ring, squeeze one edge with the tire iron bar and place the bead loosener disc as shown.



5. Turn the chuck clockwise (or counterclockwise) until the lock ring is completely removed.



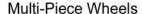
No one should stand in front of the wheel when removing the lock ring.

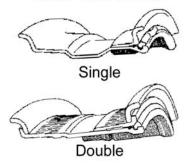
6. Continue to demount all components of the rim manually or with the disc tool. When loosening the inner bead be sure not to damage the valve stem.



# Demounting Tires From Multi-Piece Rim/Wheel Assemblies (Tube Type Tires)

The multi-piece split-rim/wheel assembly can be in single or multi-piece configurations.



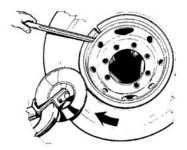


# Mounting Tires Onto Multi-Piece Rim/Wheel Assemblies

1. Roll the tire onto the sliding table (the tube and flap must first be in place). For tube type only, the valve should be placed at 12 o'clock, for easier mounting.

## **AWARNING**

- O.T.R. tires and rims are very heavy and an outside lifting tool may be required.
- 2. Slide the tire onto the rim with the sliding table or with the bead loosener disc, if necessary.
- 3. Mount all the assembly components.
- 4. Engage one edge of the lock ring in its seat and complete the mounting process with the bead loosener disc. In the initial mounting phase hold the rim edge in its seat with a tire iron bar.



# **ADANGER**

Do not inflate the tire on the machine. This machine is not an inflation device. For inflation place the wheel in an approved inflation restraint device. Refer to OSHA standard number 1910.177.

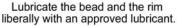
# Demounting Tractor and O.T.R. Wheels With One-Piece Rims

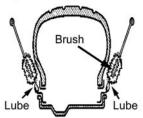
These wheels may be tube-type or tubeless. The rim has a slight conical surface and a very high rim flange which does not allow you to demount both beads at the same time with the disc as described earlier.

- 1. Remove all wheel-weights from the rim. Remove the valve stem or core and deflate the tire completely.
- 2. Place the disc tool next to the rim edge and loosen tire inner bead.
- 3. Loosen the outer bead in the same way, taking care not to damage the valve stem.

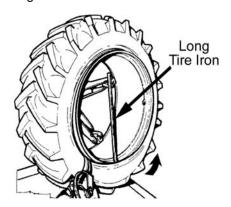


4. Lubricate both beads and the rim surface.





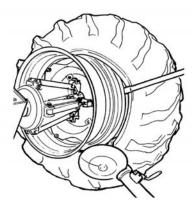
5. Place the hook tool between the bead and rim then lift the horizontal chuck arm to move the hook tool away from the rim edge (1" or 2-3 cm). Move the tool towards the outside to apply the long tire iron bar.



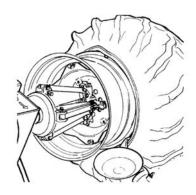
6. Turn the chuck counterclockwise until the outer bead is completely demounted. If the tire is a tube-type, push the valve stem towards the inside of the rim then lift the tool holder arm to the rest position. Shift the tire from the rim, by moving the sliding carriage towards the outside. This will make it much easier to remove the tube.



7. Place the hook tool as shown. The edge of the hook should be about 1" (2-3 cm) away from the rim edge and about 1" (2-3 cm) to the outside. Put the long tire bar in between the bead and the rim.



8. Rotate the chuck counterclockwise until the tire is completely demounted.

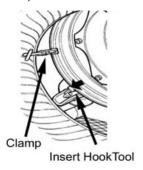


# **ADANGER**

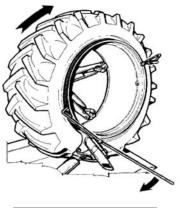
During the final phase of the demounting operation remove the tire bar and hold the tire with both hands, in order to keep it in a vertical position.

# Mounting Tractor And O.T.R. Wheels On One-piece Rims

- 1. Liberally lubricate both beads and the rim.
- 2. Firmly fit the mounting clamp to the outer rim flange at 9 o'clock. Roll the tire onto the sliding table and position it over the mounting clamp attached to the rim edge.
- 3. Place the hook about (1" or 2-3 cm) away from the rim edge and (1" or 2-3 cm) to the outside.



- 4. Turn the chuck clockwise until the first bead is mounted. Remove the clamp.
- 5. Place the tube (if any) in the tire and secure the valve stem to the rim.
- 6. Firmly fit the mounting clamp to the outer rim edge at 11 o'clock with the valve stem at 10 o'clock in such a way as to hold the outer bead. If necessary make use of the tool to create the space to fit the clamp.
- 7. Place the hook tool as described then rotate the chuck clockwise till the tire bead is completely mounted. If necessary, use the bead bar to keep the bead in the drop center.



# **ADANGER**

Do not inflate the tire on the machine. This machine is not an inflation device. For inflation place the wheel in an approved inflation restraint device. Refer to OSHA standard number 1910.177.

#### MAINTENANCE INSTRUCTIONS

Read and follow all the maintenance instructions provided in this manual to keep the machine in good operating condition. Regular inspections and proper maintenance are essential to preventing accidents and injuries. These instructions will help you service the unit. Instructions are for a person with some mechanical ability and training. No attempt has been made to describe all basic steps like how to loosen or tighten fasteners. Basic procedures such as cycling systems and checking operation of the equipment are not fully described since they are described in this manual. Do not attempt to perform work beyond your ability or at which you have no experience. If you need assistance, call an authorized service center or contact the factory.

# **ADANGER**

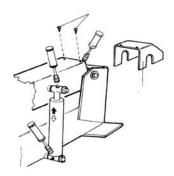
The motor on this machine contains high voltage. Disconnect power at the receptacle before performing any electrical repairs. Secure plug so that it cannot be accidentally plugged in during service.

#### **DAILY**

- 4 Make sure all fasteners are securely tightened and all safety locks, controls, knobs, hooks, pins and guards and covers are in place and operating correctly.
- 4 Check for worn, damaged or missing parts. Replace them before allowing the unit to be used.

#### **MONTHLY**

- 4 The vertical and horizontal slides and the helper slides should be cleaned with a vaporizing solvent and then lubricated with chassis grease once a month.
- 4 Check operation of the mount/demount tool holder.
- 4 The sliding table / carriage, clamps, steel mount/demount head, and other working surfaces should be cleaned with a vaporizing solvent every month.
- 4 On a daily basis, inspect the unit and check to be certain that all systems are operating normally. Follow detailed inspection and testing procedures as specified for various components at regular intervals.
- 4 Replace any damaged or missing safety decal's. They are available from the factory.



#### **EVERY SIX WEEKS**

Grease periodically the following parts, after having cleaned them carefully with diesel oil:

- 4 Carriage slides.
- 4 Horizontal tool holding arm spindle.
- 4 Grease the horizontal arm lifting cylinder.
- 4 Check periodically the oil level inside the hydraulic

power unit with the scale and add if necessary. Before checking fluid, all cylinders must be completely retracted.



# RECORD ALL MAINTENANCE NOTES AND SERVICE HISTORY HERE

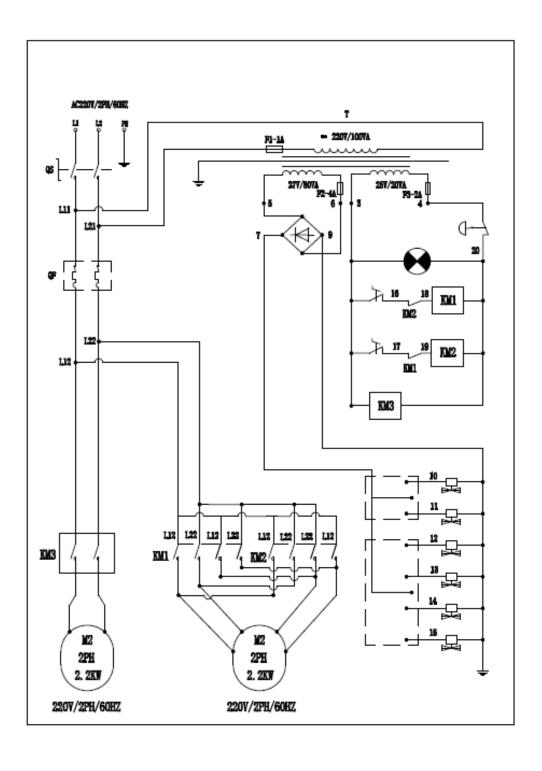
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# Troubleshooting

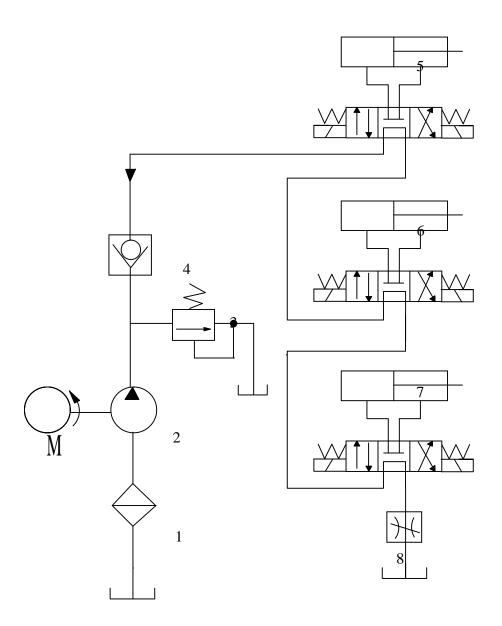
19

Trouble	Cause	Remedy
Pump motor turns but none of the hydraulic movement works.	<ul> <li>The automatic circuit breaker is off.</li> <li>A fuse of the low-voltage section is blown.</li> <li>Transformer is burned out.</li> </ul>	<ul> <li>Disconnect the machine from electric supply. Open the electric cabinet and check the automatic circuit breaker and low voltage fuses. Reset the circuit breaker or replace the fuses as needed.</li> <li>This operation can be performed only by qualified personnel.</li> <li>Call the authorized service center for assistance.</li> </ul>
Pump motor does not turn but the chuck motor operates normally.	The thermal safety switch pro- tecting the hydraulic motor is/was activated.	<ul> <li>Disconnect the machine from electric supply. Open the electric cabinet and reset the thermal safety switch.</li> <li>This operation can be performed only by qualified personnel.</li> <li>Call the authorized service center for assistance.</li> </ul>
The thermal switch that protects the pump motor is very easily activated.	The voltage of the electric line is too low.	<ul> <li>Check voltage on electric supply.</li> <li>This operation can be performed only by qualified personnel.</li> <li>Call the authorized service center for assistance.</li> </ul>
The circuit breaker is very easily activated.	<ul> <li>The machine is not stable on the floor.</li> <li>The electric cabinet is not firmly attached.</li> <li>The voltage of the electric line is too low.</li> </ul>	<ul> <li>Check that the machine is securely bolted to the floor.</li> <li>Attach the electric cabinet firmly.</li> <li>Check voltage on electric supply.</li> <li>This operation can be performed only by qualified personnel.</li> </ul>
The transformer protection fuses easily blow.	Short circuit in the electric cord connecting the portable control unit to the electric cabinet.	Call the authorized service center for assistance.
The chuck does not hold the wheel firmly.	<ul> <li>The teeth of the chuck jaws are full of dirt or worn out.</li> <li>The protectors for light-alloy wheels are damaged or worn out.</li> <li>The check valve or manifold of the chuck cylinder leak oil.</li> </ul>	<ul> <li>Clean the teeth of the chuck jaws with a wire brush.</li> <li>Replace the protectors for alloy wheels.</li> <li>Call the authorized service center for assistance.</li> </ul>

# ELECTRIC CONTROL SCHEMATIC DIAGRAM

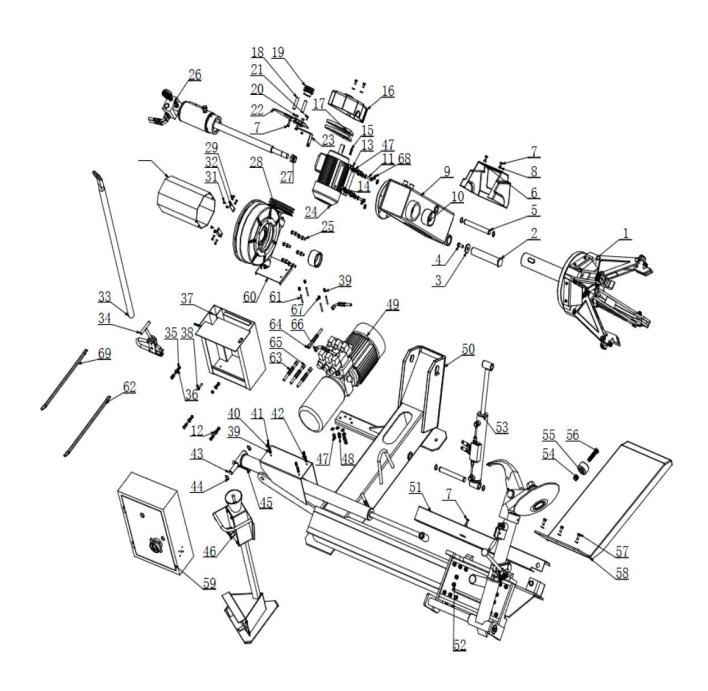


### HYDRAULIC PRESS SCHEMATIC DIAGRAM



- 1. Filter Screen 5. Magnetic Control of Tyre Clump&Undog Hydro Linder
- 2. Gear Pump
- 6. Supporting Arm Hoist Cylinder
- 3. Overflow Valve 7. Magnetic Control of Trolley Hydro-cylinder
- 4. Check Valve
- 8. Throttle Valve

## GENERAL ASSEMBLING DRAWING



#### WARRANTY

The truck tyre changer is warranted for one year to the original purchaser, to be free of defects in material and workmanship.

The manufacturer shall repair or replace at their option for this period those parts returned to the factory freight prepaid which prove after inspection to be defective.

This warranty only applies to the original purchaser of the equipment. This warranty does not extend to defects caused by ordinary wear, abuse, misuse, shipping damage, or damage as the result of improper maintenance.

This warranty is exclusive and in lieu of all other warranties expressed or implied.

In no event shall the manufacturer be liable for special, consequential or incidental damages for the breach or delay in performance of the warranty.

The manufacturer 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.