



Forward this manual to all operators.
Failure to operate this equipment as
directed may cause injury or death.

INSTALLATION AND OPERATION MANUAL

Model R26EX TIRE CHANGER

FOR SERVICING
AUTOMOBILE
AND LIGHT TRUCK
SINGLE PIECE
TIRES / WHEELS



Keep this operation manual near the machine at all times. Make sure that ALL USERS read this manual .

SHIPPING DAMAGE CLAIMS

When this equipment is shipped, title passes to the purchaser upon receipt from the carrier. Consequently, claims for the material damaged in shipment must be made by the purchaser against the transportation company at the time shipment is received.

BE SAFE

Your new Ranger 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 of the operator. DO NOT operate or repair this equipment without reading this manual and the important safety instructions shown inside.



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Failure to follow danger, warning, and caution instructions may lead to serious personal injury or death to operator or bystander or damage to property.

Do not operate this machine until you read and understand all the dangers, warnings and cautions in this manual.

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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.



THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH IF NOT FOLLOWED COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS AND CAN CAUSE PERSONAL INJURY OR DEATH. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE THIS MACHINE.

DEFINITIONS OF HAZARD LEVELS

OWNER'S RESPONSIBILITY

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



DANGER

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



WARNING

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



CAUTION

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



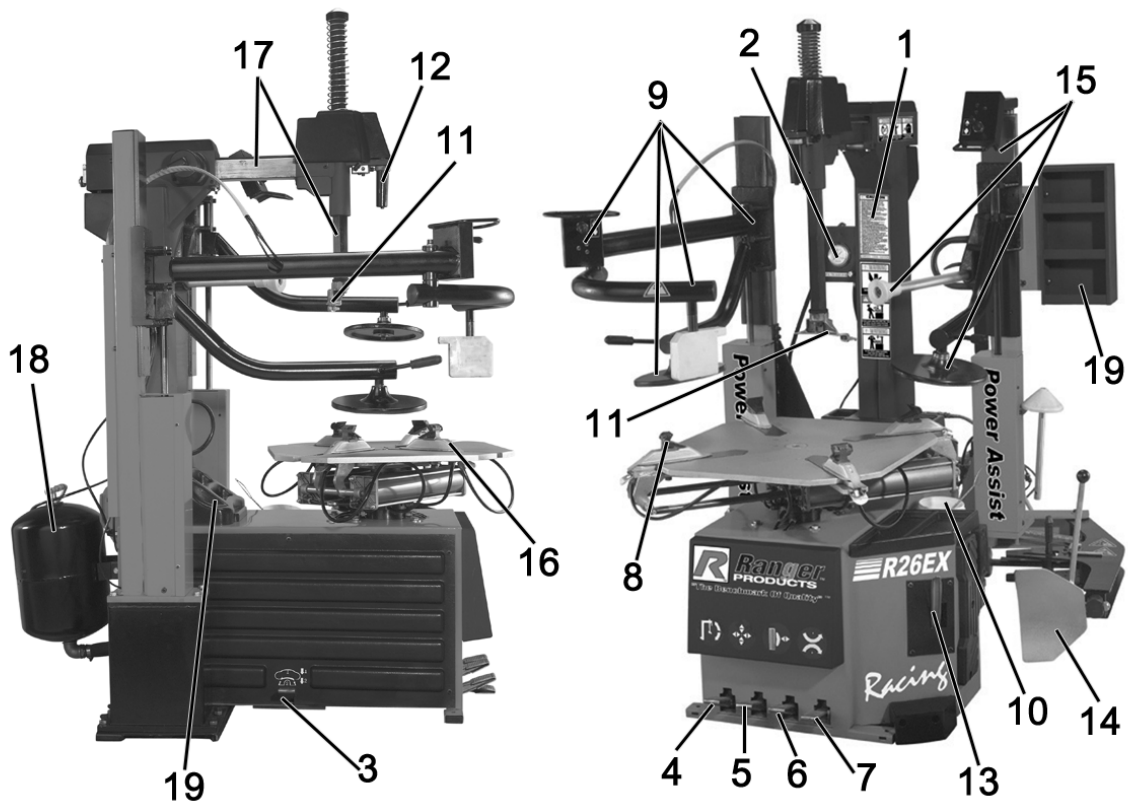
Watch for this symbol! It means BE ALERT! Your safety, or the safety of others, is involved!

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

- ◆ Follow all installation instructions.
- ◆ Make sure installation conforms to all applicable Local, State, and Federal Codes, Rules, and Regulations; such as State and Federal OSHA Regulations and Electrical Codes.
- ◆ 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.



DESCRIPTION OF PARTS



(1) Tower — Support for horizontal and vertical slides.

(2) Air Inflation Gauge — Registers tire pressure when clip-on chuck is attached to valve stem and inflation pedal is released.

(3) Inflation Pedal — Three position pedal that allows inflation of tires through air hose and clip-on chuck.

(4) Tower Tilt Pedal — Three position pedal that moves tower forward and back.

(5) Clamp Control Pedal — Three position pedal that opens and closes rim clamps.

(6) Bead Breaker Pedal — Controls operation of bead breaker shoe.

(7) Table Top Pedal — Three position pedal that controls rotation of table top.

(8) Clamps — Secures wheel to table top for tire changing. Adjust outward to allow outside clamping of wheels up to 26 inches.

(9) Left Helpers & Support — Includes mount/demount helpers, slides, cylinder & valve for operation.

(10) Lube Bucket Dispenser — For rubber lubricant.

(11) Combination Mount/Demount Head — Mounts and demounts tire from wheel.

(12) Slide Adjustment Handle — Adjusts horizontal and vertical slide assembly for proper horizontal and vertical positioning of mount/demount head. Locks and unlocks horizontal and vertical slides and sets correct position to maintain head/wheel clearance.

(13) Bead Lifting Tool — Used to lift and position tire bead correctly on mount/demount head.

(14) Bead Breaker Shoe — Pivoting shoe for loosening tire beads.

(15) Right Helpers & Support — Includes Mount/Demount roller and disk, slides, cylinder and valve for operation.

(16) Bead Sealing “Jet-Blast” Nozzles — Expands tire sidewall to bead seat area of rim to seal and allow inflation.

(17) Horizontal & Vertical Slides — Allows correct positioning of mount/demount head.

(18) Air Tank — Air storage tank for inflation and “Jet-Blast” bead sealing operation.

OPERATING INSTRUCTION

The unit must be properly operated and maintained to help avoid accidents that could damage the unit and injure the operator or bystanders. This section of the Operating Instructions manual review basic operations and use of controls. These instructions should be reviewed with all employees before they are allowed to work with the machine. Keep these instructions near the machine for easy reference.

BEAD LOOSENING AND DEMOUNTING



This machine may operate differently from machines you have previously operated. Practice with a regular steel wheel and tire combination to familiarize yourself with the machine's operation and function.

- ◆ Remember to remove all weights from both sides of the wheel. Weights left on the back side of the wheel may cause the wheel to be clamped unlevel. This may result in the combination mount/demount head contacting the rim causing scratches. On alloy wheels, always rotate the wheel one turn after setting the head to insure proper wheel chucking.
- ◆ Always review nicks and scratches with owners of expensive wheel and tire combinations prior to servicing.
- ◆ Review the performance wheel section of this manual prior to servicing performance tire/wheel combinations.

1. Deflate tire completely by removing the valve core from the valve stem. (See Fig. 1).



2. The clamps on the table top may extend beyond the table top itself. To avoid damaging the clamps and/or wheel, move the clamps to their full inward position before positioning a tire for bead loosening.

3. Always loosen the bead on the narrow side of the wheels drop center first. (See Fig. 4 for better description of the drop center.)

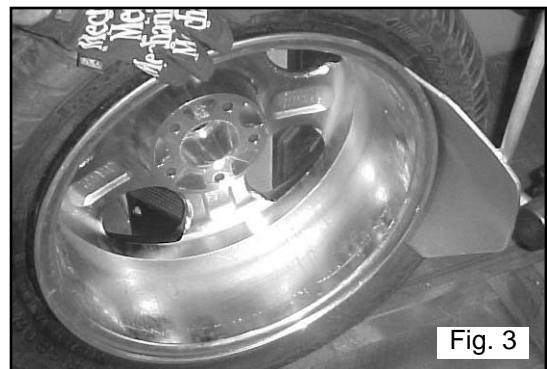
4. Use extra care in positioning the bead breaker shoe on larger wheels/tires, and on alloy wheels. Make sure the shoe rests next to but not on the rim, and not on the tire sidewall.

5. Pull the bead breaker shoe away from the machine and roll the wheel into position. The valve stem should be in the 2 o'clock position.

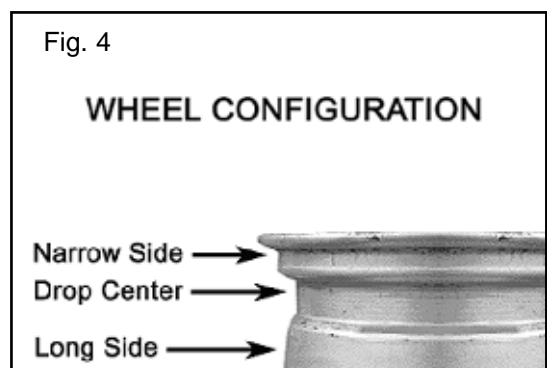
6. Position the bead breaker shoe against the tire next to, but not on, the rim. Press the breaker pedal to actuate the shoe and loosen the bead. It may be necessary to loosen the bead in multiple locations around the tire. (See Fig. 2).



7. 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. (See Fig. 3).



8. Determine the mounting side of the wheel. The mounting side is the narrow side of the drop center. The tire is removed for clarity. (See Fig. 4).

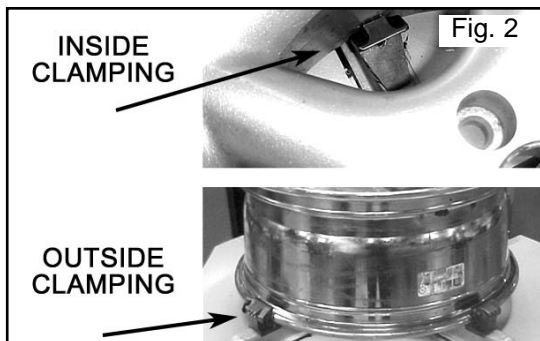


9. Place tire/wheel assembly on table top with mounting side up (See Fig. 1)



10. Use the clamp control pedal to move the clamps inward (pedal down) or outward (pedal up). (See Fig. 2.)

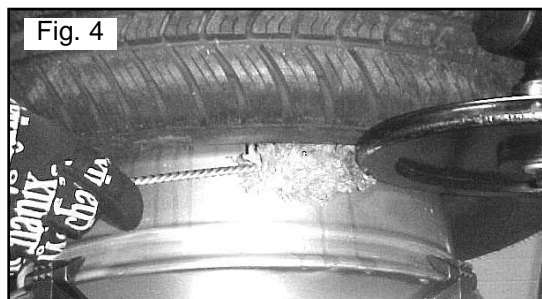
NOTE
Clamp steel wheels from the inside (clamps push outward against wheel). Clamp mag and custom wheels from the outside (Clamps push inward against the outside rim edge). Refer to the Performance Tires and Wheels section.



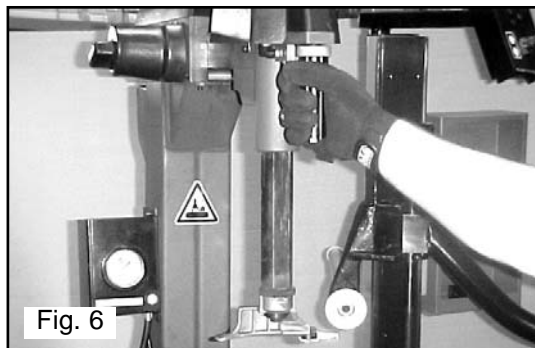
11. Apply tire manufacturer's approved rubber lubricant liberally to entire circumference of both beads after loosening bead and placing on table top. Using the mount/demount roller to hold down the top bead while rotating the turntable will make lubrication easier. (See Fig. 3)



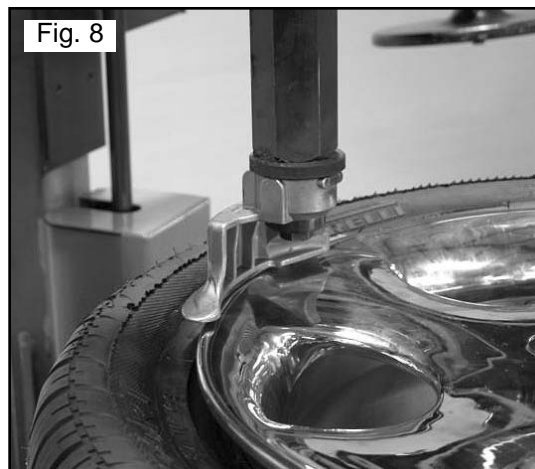
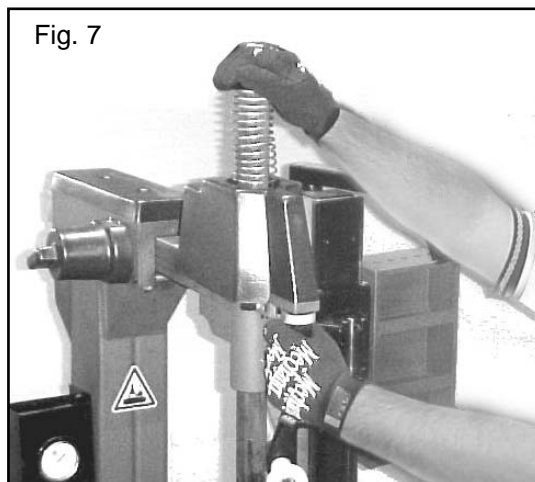
12. Use the lower bead helpers to assist in the bottom bead lubrication. (See Fig. 4)



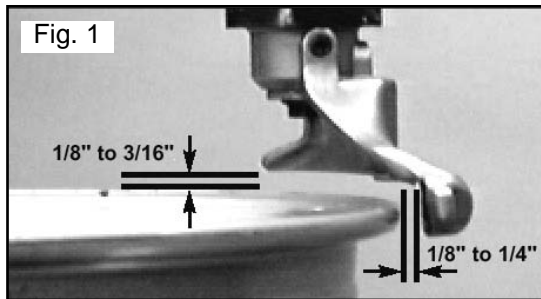
13. Move the tower forward by depressing the Tower Tilt Pedal then twist the handle to unlock the horizontal slide. Pull the mount/demount Head forward. (See Fig. 5-6)



14. Push the vertical slide down and position the demount head into contact with the rim edge. (See Fig. 7-8)



15. Twist the locking valve to lock the slides into place. As the slides are 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. (See Fig. 1)

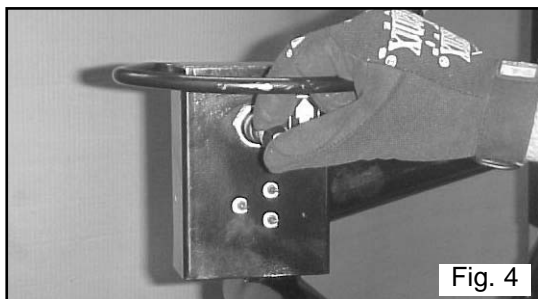


NOTE
 This clearance will be maintained as long as the slide locking valve remains locked. The operator may tilt the tower back out of the way and back into place again without needing to reposition the head when changing a like set of wheels. The tool clearance may change with machine use and should be inspected often. Failure to maintain proper clearance may result in damage to the wheel rim or tire.

16. Move the left hand top helper into position opposite the mount/demount head positioning the edge of the helper just outside the rim edge. (See Fig. 2-3)



17. Press down on the left hand control valve. (See Fig. 4)



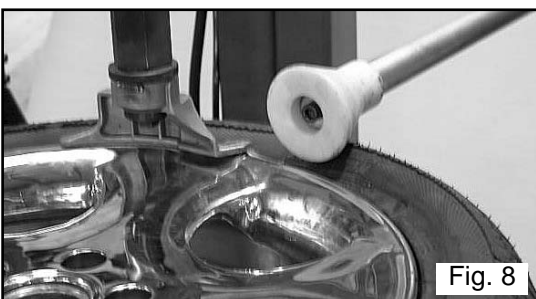
18. Power the left top helper down to force the tire bead into the drop the center of the wheel. (See Fig. 5-6)



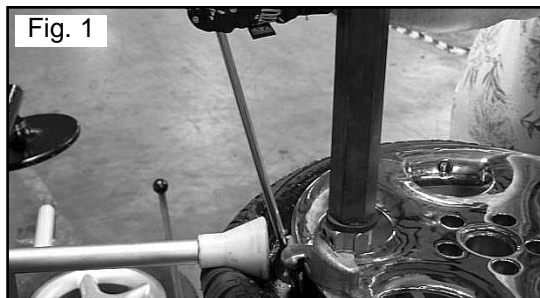
19. Move the right hand top helper roller into position over the tire just outside the rim edge. (See Fig. 7)



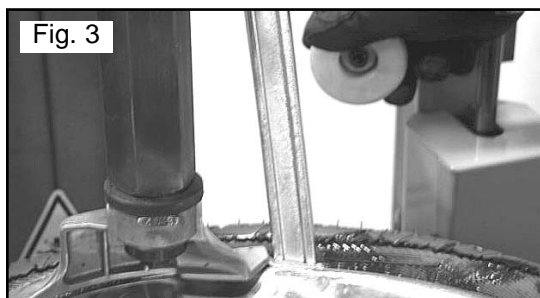
20. Press down on the right hand control valve and force the tire bead down. This will make it easier to insert the tool bar. (See Fig. 8-9)



21. Insert the smooth curved end of tool bar over the right end knob of the mount/demount head and below the top bead of the tire. (See Fig. 1-2)



22. With the tool bar in position, move the right hand helper roller out of the way. (See Fig. 3)



23. Push the tool bar down toward the wheel to lift the tire bead up and over the right -side knob portion of the demount head. Hold the tool bar in this position. (See Fig. 4-5)



The tool bar 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.

24. Depress the table top pedal to rotate the wheel clockwise. Leave the left hand helper in position opposite the demount head and allow it to follow the wheel rotation to assist the bead into drop center while demounting. Hold the tool bar down until demounting nears completion. (See Fig. 6-8)



25. Lift and hold the tire so it is positioned with the lower bead in the drop-center portion of the wheel. If the tire is large/wide or has become stuck on the lower part of the rim, the left and right lower bead helper disks may be used to unstuck and raise the tire. (See Fig. 9)



26. Insert the smooth curved end of the tool bar over the right end of demount head and below the lower bead of the tire. Push the tool bar down toward the wheel to lift the tire bead up and over the right -side knob portion of the demount head. Hold the tool bar in this position. (See Fig. 1-2)



27. Depress the table top pedal to rotate the wheel. The demount head will guide the bead up and over the edge of the wheel. Continue rotation until the lower bead is de-mounted. The helper disks should be removed during rotation. Swing them out of the way to complete de-mounting. (See Fig. 3)



28. After the tire has been removed from the wheel, depress the tower tilt pedal to move the tower away from the wheel. (See Fig. 4)



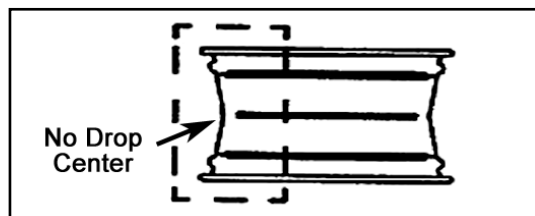
CUSTOM AND SPECIAL WHEELS

If a custom wheel is damaged in dismounting, 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.

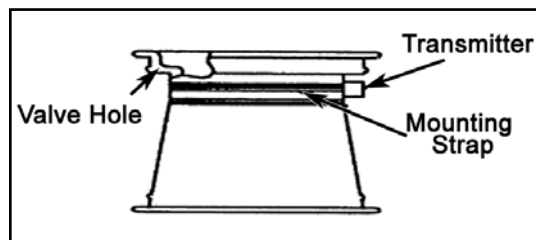


European Performance Wheels (Asymmetrical Hump)

Some European wheels have very large humps except near the valve hole. On these wheels, the beads should be loosened at the valve hole on both the upper and lower sides first.

Wheels with Low Pressure Warning Sensors

Performance wheels on some vehicles (including Corvette, BMW, Lamborghini Diablo) have a pressure sensor strapped to the rim opposite the valve hole. On these wheels, the beads should be loosened at the valve hole on both upper and lower sides first.



DEMOUNTING TUBE TYPE TIRES

1. After both tire beads are loosened, lubricate the beads and rim liberally.
2. 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.
3. After upper bead is demounted, remove tube and demount lower bead.

NOTE

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 counter-clockwise, lift the pedal up with your toe.

FOR TUBE-TYPE TIRES

With tube-type tires, demount the upper bead and remove the tube before de-mounting the lower bead.

MOUNTING

This information must be read and followed carefully to prevent accidents and injuries during mounting.

WARNING

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.

DANGER

Attempts to force a bead seat on mis-matched tires and wheels can cause the tire to violently explode, causing serious personal injury or death to operator and/or bystanders.

WARNING

Never mount a tire and wheel handed to you by anyone without checking both tire and wheel for damage and compatibility. Be extra cautious of persons without knowledge of tire service. Keep by-standers out of service area.

WARNING

Never mount a damaged tire. Never mount a tire on a rusty or damaged wheel. Damaged tires and/or wheels may explode.

WARNING

If you damage the tire bead during mounting, STOP!, remove the tire and mark it as damaged. Do not mount a damaged tire.

1. 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. (See Fig. 1)



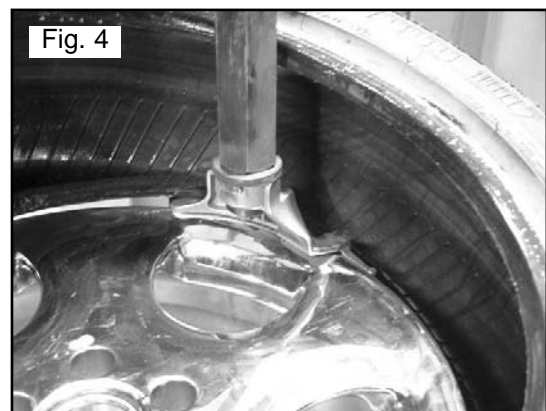
2. Inspect tire for damage, paying close attention to the beads. Verify size match between tire and wheel. (See Fig. 2)



3. Lubricate both tire beads liberally with tire manufacturer approved lubricant. (See Fig. 3)



4. Place tire over wheel and move tower and mount/demount head into position as described earlier. Position tire so that the lower bead is above the left "duckbill" side of the mount/demount head and below the right front knob. (See Fig. 4)



5. Manually force the tire down into the drop center of the wheel directly across from the mount head to reduce the tensional force on the bead. Depress the table top pedal and rotate the wheel to mount the lower bead. Rotate the table top until the lower bead is fully mounted. (See Fig. 1-2)



6. For the top bead, rotate the table top until the valve stem is directly across from the mount head. Lift the upper bead above the left "duckbill" side of the mount/demount head and below the right front knob. (See Fig. 3-4)



NOTE
If table top rotation stalls, reverse the table top momentarily until the tire bead is again loose on the wheel. Lubricate tire beads liberally with tire manufacturer approved lubricant. Reposition the tire on the mount head, make sure the bead is correctly positioned in the drop center of the wheel, then attempt mounting again.

7. With the right side assist roller, press down on the tire near the right side of the mount head. (See Fig. 5-6)



! WARNING

Do not force the tire onto the rim. Bead damage could result making the tire unsafe and/or creating the risk of injury.

8. With the left side helper, press down on the tire near the right side assist roller to hold the tire in the drop center. (See Fig. 7)



9. Depress the table top pedal and rotate the tire until the bead is mounted. The left side helper shoe will follow the tire during rotation. (See Fig. 8)



MOUNTING TUBE TYPE TIRES

1. Lubricate the beads and rim liberally.
2. Position the demount head and bead lifting tool as described earlier. Mount the bottom bead first.
3. Round out the tube with a small amount of air. Avoid pinching or forcing the tube.
4. Apply rubber lubricant to the tube.
5. Insert the tube into the tire paying careful attention not to pinch the tube.
6. 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.
7. Mount the top bead.

INFLATION INSTRUCTIONS

Tire inflation is performed in four steps: Restraint, Bead Seal, Bead Seat, and Inflation. Read the explanation of each step and understand them thoroughly before proceeding.



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.



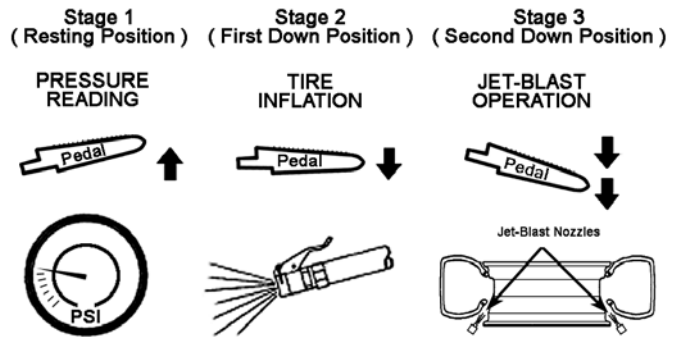
Tire failure under pressure is hazardous. This tire changer is not intended to be a safety device to contain exploding tires, tubes, wheels, or bead sealing equipment. Inspect tire and wheel carefully for match, wear, or defects before mounting. Always use approved tire bead lubricant during mounting and inflation. The inflation pedal, located at the center of the left side of the machine, controls the flow of air through the inflation hose.



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.

INFLATION PEDAL OPERATION

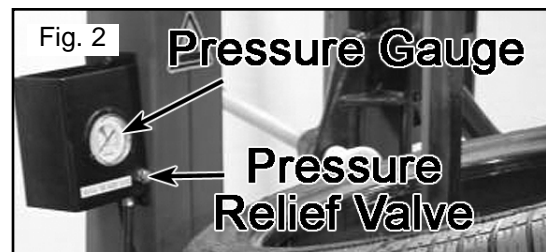
The three-position inflation pedal located at the center of the left side of the machine serves three different functions. It checks air pressure in the tire; controls the flow of air through the inflation hose; and operates the “Jet-Blast” bead sealing nozzles . (See Fig. 1)



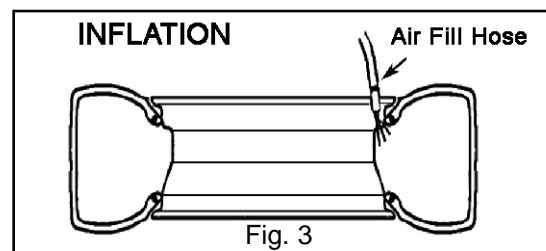
Inflation Pedal Positions



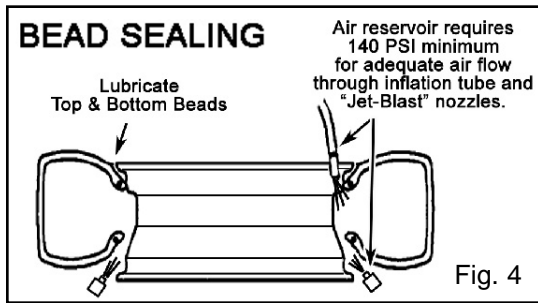
Position One - Tire Pressure – With the inflation hose attached to the tire valve and the pedal in this position, the air gauge will register the air pressure in the tire. Whenever your foot is removed from the pedal, it will return to this position. (See Fig. 2)



Position Two - Tire Inflation – This is the first activated position. With the inflation hose attached to the tire valve and the pedal in this position, 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. (See Fig. 3)



Position Three - Bead Sealing – This is the second (pressed all the way down) activated position. With the inflation hose attached to the tire valve and the pedal in this position, line pressure is allowed to flow through the valve and to the “Jet-Blast” nozzles on the table top for bead sealing. (See Fig. 4)

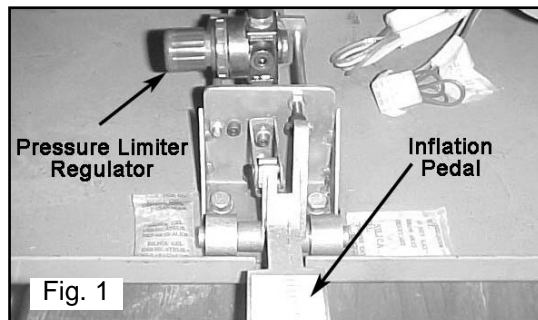


CAUTION

Do not use the "Jet-Blast" bead sealing nozzles without a tire and wheel positioned on the table top. Dirt and debris could be blown into the air with enough force to injure the operator or bystanders. Do not use this position to inflate a tire.

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 (smaller tires may reach higher pressures). It is the operators responsibility to follow all instructions and to control inflation pressure as specified in these instructions. (See Fig. 1)



WARNING

Check the function of the pressure limiter regularly and 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.

STAGES OF INFLATION

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

STAGE ONE / WHEEL RESTRAINT

As an added safety precaution, a wheel restraint device has been added to protect operators during tire inflation.

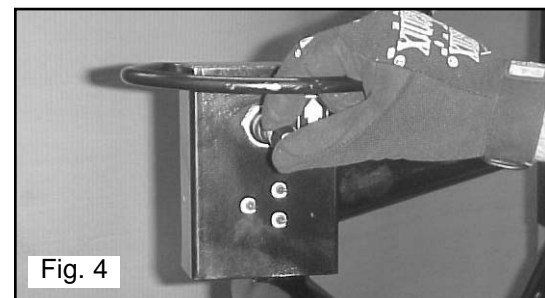
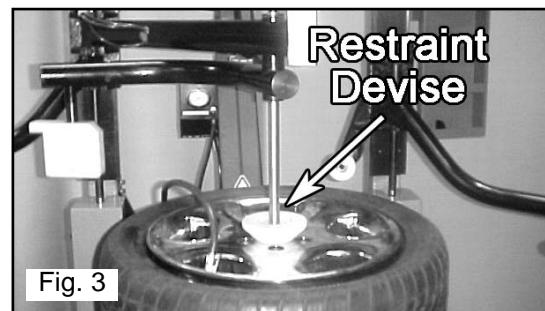
WARNING

This device 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.

1. Raise the left helper and support assembly and insert the restraint device as shown. (See Fig. 2)



2. Make sure the restraint tool is centered in the center hub of the wheel then press down on the left hand control valve. (See Fig. 3-4)

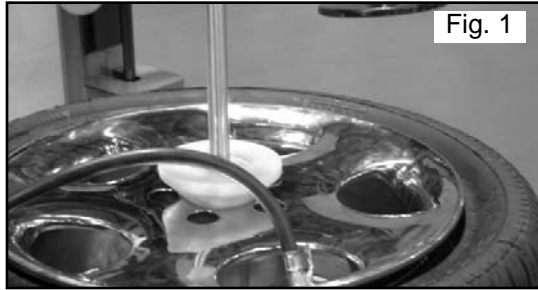


CAUTION

Hold the restraint tool firmly in place when installing and/or removing from the left helper assembly. The unit can drop suddenly to the floor. Be sure to keep feet clear at all times.

STAGE TWO / BEAD SEALING

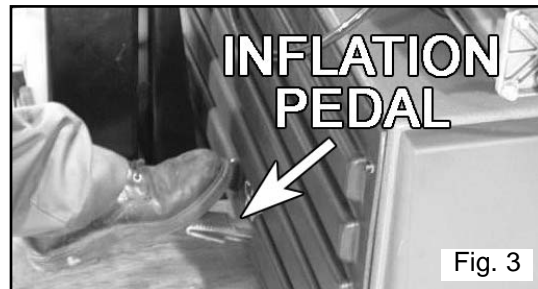
1. Position valve stem in front of operator and connect the inflation hose. (See Fig. 1)



2. Hold tire up against upper edge of the wheel. Be sure tires top bead is over the bottom of the valve stem. (See Fig. 2)



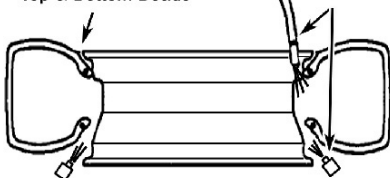
3. Depress inflation pedal to position two and hold about one second to begin air flow through tire valve, then depress pedal to position three and hold briefly – less than 1 full second. The blast of air from the jets will expand tire and seal the beads. (See Fig. 3-4)



BEAD SEALING

Lubricate
Top & Bottom Beads

Air reservoir requires
140 PSI minimum
for adequate air flow
through inflation tube and
"Jet-Blast" nozzles.



4. Release the inflation pedal and allow it to return to position one. Verify that both beads are completely sealed to the wheel. Repeat these steps if beads have not sealed. It may 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, the valve core may be removed from the valve stem to allow more air flow into the tire to assist with bead seal. After bead seal is achieved, remove the chuck and reinstall the valve core.

STAGE THREE / 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.

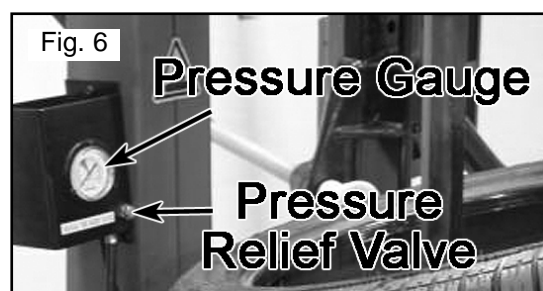


Operator should keep hands, arms, and entire body away from the tire during the remaining bead seat and inflation procedures. Do not stand over tire, as personal injury could result from inflating tire. Avoid distraction during inflation. Check tire pressure frequently to avoid over inflation. Excessive pressure can cause tires to explode, causing serious injury or death to operator or bystander.

1. Once tire pressure is indicated on the air gauge (inflation pedal in position one; foot removed from pedal), 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. (See Fig. 5)



2. Release air pressure from the tire by pressing the manual release valve button. NOTE: The inflation hose must be attached to the valve stem during this procedure. (See Fig. 6)



! WARNING

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 may propel upward and outward with sufficient force to cause serious injury or death to operator or bystander.

! WARNING

MIS-MATCHED TIRES AND WHEELS
Never attempt to mount and inflate mis-matched tires and wheels. Mis-matched tire and wheel combinations can explode, causing personal injury or death to operator and bystanders. For safety, do not attempt to mount and inflate mis-matched tires and wheels.

! DANGER

NEVER increase air pressure to exceed 40 PSI when attempting Bead Seat. If operator is unable to obtain Bead Seat, something is wrong. Deflate tire completely, inspect tire and wheel, correct any problems found, relubricate both tire beads, and reattempt Bead Seal and Seat procedures. Follow all safety instructions in this manual and on machine.

! DANGER

IMPORTANT
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 operator to stand outside the trajectory.

! WARNING

THE INFLATION PRESSURE LIMITER IS PRE-SET AT THE FACTORY AND SHOULD NEED NO ADJUSTMENT. ADJUST ONLY IF PRESSURE EXCEEDS 60 PSI. Operating a tire changer with a defective, improperly adjusted, or by-passed pressure limiter could result in a tire explosion with severe injury or death to the operator or bystanders. Always be sure that the pressure limiter is operating properly on the machine at all times. Pressure limiter is set at 60 PSI. Any required inflation above 60 PSI should be performed in an inflation chamber/safety cage. A tire explosion may cause personal injury or death to operator or bystanders.

STAGE FOUR / TIRE INFLATION

1. Make sure both beads are seated. When both beads are seated, the tire is ready for inflation.
2. Replace the valve core if it was removed.
3. Depress the inflation pedal to position two to inflate the tire. **DO NOT STAND OVER TIRE DURING INFLATION.**
4. 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 from the tire by pressing the manual release valve button.



Safety Cage

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.

WARNING

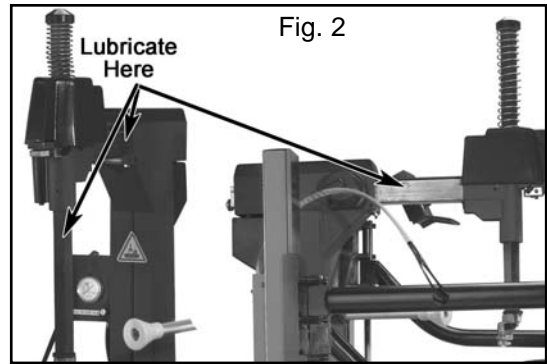
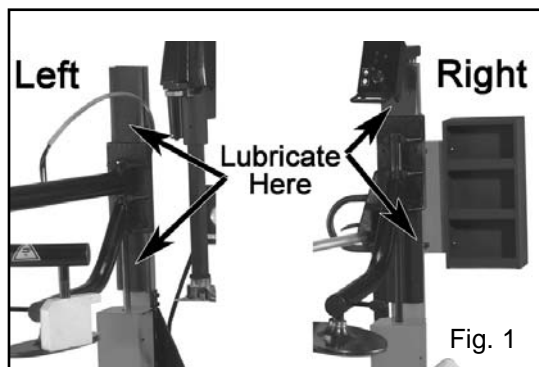
- ◆ **Before making any inspection, adjustment, or repair, disconnect the power source and block out all moving parts to prevent injury.**
- ◆ **Keep the machine and the immediate work area clean. Do not use compressed air to remove dirt and debris from the machine. Foreign material may be propelled 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.**

DAILY

- ◆ Check the tire pressure gauge function daily, and check the accuracy monthly. Use a pressurized tire and a high quality stick-type pressure gauge. If necessary, adjust the dial of the machine gauge. If the gauge is defective, replace it immediately.
- ◆ Make sure all fasteners are securely tightened and all guards and covers are in place.
- ◆ Check for worn, damaged or missing parts including grips and protective covers. Replace them before allowing the unit to be used.

MONTHLY

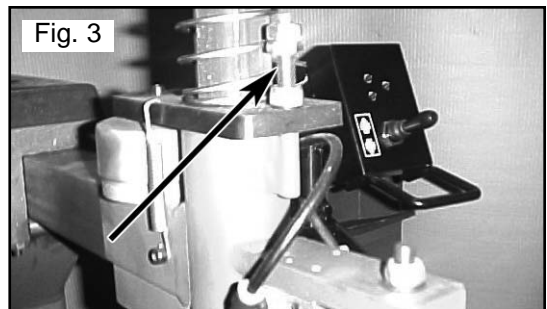
- ◆ The vertical and horizontal slides and the helper slides should be cleaned with a vaporizing solvent and then lubricated with chassis grease once a month. (See Fig. 1-2)



- ◆ Check adjustment of the mount/demount head monthly.
- ◆ Check function of the inflation hose pressure limiter/regulator monthly. Always secure/stow the cover if adjustments are made. **The pressure regulator should never be adjusted to exceed 60 PSI.**
- ◆ The table top, clamps, steel mount/demount head, and other working surfaces should be cleaned with a vaporizing solvent every month.
- ◆ 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.
- ◆ Replace any damaged or missing safety decals. They are available from the factory.

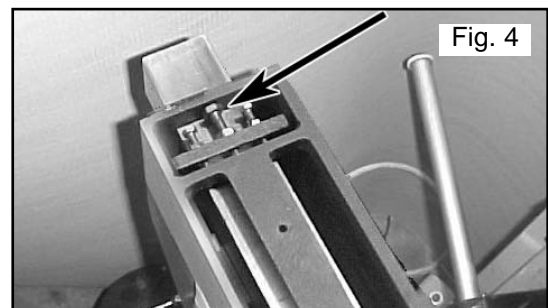
Mount/Demount Tool Head Adjustment

To adjust tool head lift, adjust locking nut up or down until lift clearance is 1/8" to 3/16". Recheck clearance before replacing cover. (See Fig. 3)



To Adjust Tool Head Setback

Remove top cover, loosen jam nut and adjust screw until setback clearance is 1/16" to 3/16". Tighten jam nut and check. (See Fig. 4)



Mount/Demount Head Cleaning

Clean dirt and debris from the mount/demount tool roller with small screw driver or pick. (See Fig. 1)



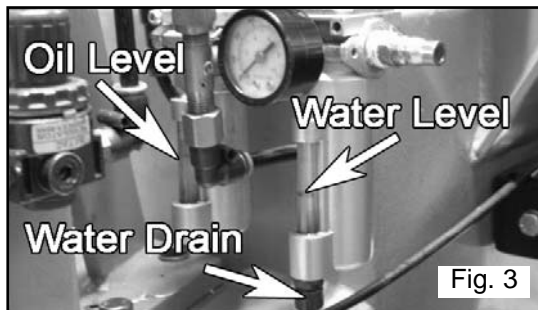
Water Separator/Lubricator Maintenance

Check oil and water levels regularly, and perform these maintenance items weekly:

- ◆ Disconnect air supply to machine. (See Fig. 2)



- ◆ Observe the sight glass on the water separator/filter unit. If water is observed, drain by pressing upwards on the drain plug at the bottom of the reservoir. (See Fig. 3)



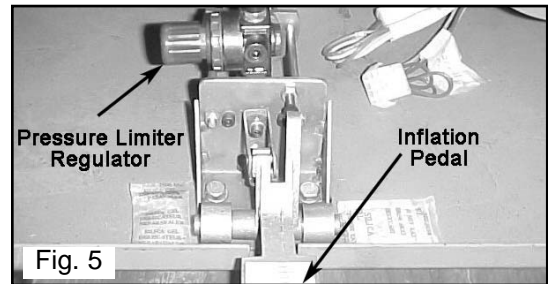
- ◆ Add oil to the lubricator if the fluid level is below the middle of the sight glass. Remove the reservoir by turning counter-clockwise and pulling down. Add SAE 10W non-detergent oil or an air tool oil if necessary. (See Fig. 4)



- ◆ Reconnect the air when service/adjustments are complete.

Inflation Pedal Pressure Limiter Maintenance

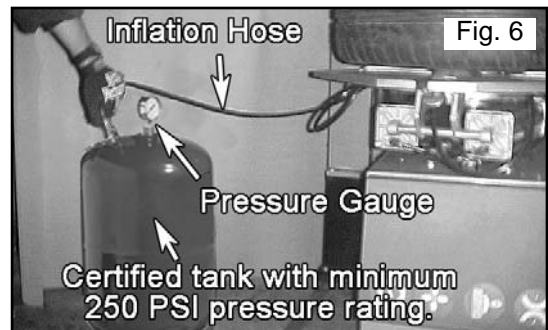
The inflation pedal pressure limiter helps prevent inflation of standard size or larger tires or tubes beyond 60 PSI to minimize risk of explosion. This device is for the safety of the operator and bystanders. Proper operation of the pressure limiter is essential to safe operation of the machine. (See Fig. 5)



THE PRESSURE LIMITER IS PRE-SET AT THE FACTORY AND SHOULD NEED NO ADJUSTMENT. ADJUST ONLY IF PRESSURE EXCEEDS 60 PSI.
Operating a tire changer with a defective, improperly adjusted, or by-passed pressure limiter could result in a tire explosion with severe injury or death to the operator or bystanders. Always be sure that the pressure limiter is operating properly on the machine at all times. Pressure limiter is set at 60 PSI. Any required inflation above 60 PSI should be performed in an inflation chamber/safety cage. A tire explosion may cause personal injury or death to operator or bystanders.

Check operation of the pressure limiter as follows at least once a month:

1. Remove tires and/or wheels from the machine.
2. Connect the inflation hose to an empty service tank with a pressure gauge (gauge should read 0). Use a certified tank with at least 250 PSI pressure rating. (See Fig. 6)

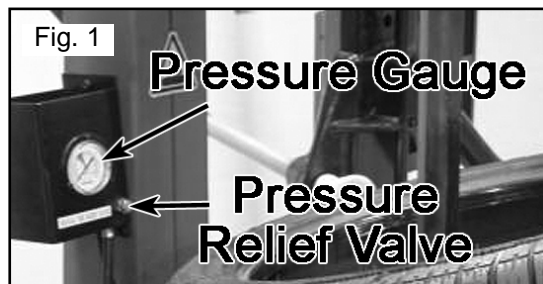


3. Depress inflation pedal to position one to start air flow through the hose and into the tank. Maintain a steady pressure for constant flow.
4. Watch the rising pressure on the tank gauge and the gauge on the machine. Machine gauge should cycle between check and inflation pressures while tank gauge climbs steadily. As tank pressure reaches 60 PSI, the pressure limiter should stop the air flow automatically. Both gauges should read 60 PSI \pm 5 PSI.

5. If the pressure exceeds 60 PSI, adjust the knob on the regulator by lifting the locking cover and turning COUNTERCLOCKWISE. After adjustment is made, secure cover in the locked position.

6. Repeat steps 1-6. Re-adjust if necessary.

7. After pressure limit has been set, check the manual release valve function by pressing the button and releasing pressure from the tank until it reaches 50 PSI. Disconnect inflation hose, and release air inside tank. (See Fig. 1)



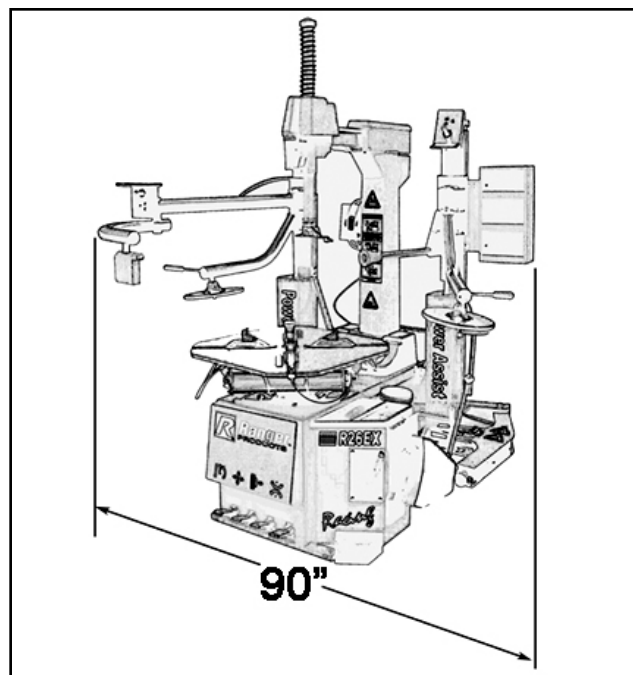
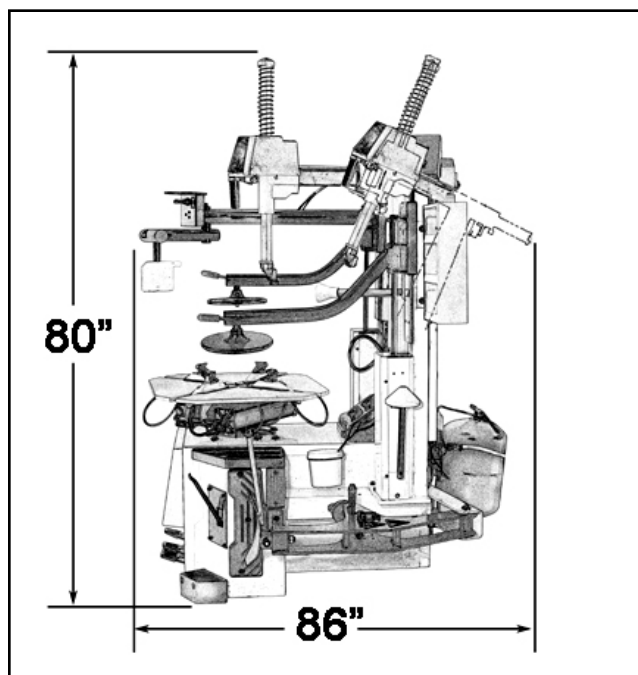
INSTALLATION INSTRUCTIONS



Proper unit installation is necessary for safe use and efficient operation. Proper installation also helps protect the unit from damage and makes service easier. Always keep this manual unit.

Location

Select a location using the drawings below. 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.



Air Source

This model requires a 14 to 15 CFM air source at 150 PSI minimum pressure. The safe operating pressure range for this model is between 110 PSI and 175 PSI at the machine. The unit is furnished with a 1/4" pipe thread male fitting for easy connection. This connection is located on the right side of the rear of the machine. A 1/4" ID hose (or pipe) for connection to the machine is satisfactory. Sufficient air pressure assures good performance. (See Fig. 2)



Electrical Source

This unit requires power from a 15 amp electrical circuit. Refer to the serial tag of the machine for specific electrical requirements. Have a licensed electrical technician perform any necessary changes to the power source before plugging in the unit. The electrical source must have a solid connection between ground and building ground.

For additional copies
or further information, contact:
Bend-Pak Inc. / Ranger Products
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Santa Paula, CA. 93060
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IMPORTANT SAFETY WARNINGS

 <h2>CAUTION</h2>	 <h2>WARNING</h2>	 <h2>CAUTION</h2>
		
<p>KEEP HANDS CLEAR OF BEAD AREA WHEN INFLATING.</p>	<p>BE SURE TO READ ALL WARNING LABELS AND INSTRUCTION MANUAL PRIOR TO OPERATION OF THIS MACHINE</p>	<p>ALWAYS WEAR SAFETY GLASSES WHEN OPERATING THIS MACHINE.</p>

 **DANGER**



STAND CLEAR WHILE INFLATING TIRE. TIRE OR WHEEL FAILURE UNDER PRESSURE MAY CAUSE SERIOUS INJURY OR DEATH.

 **WARNING**



DO NOT WEAR LOOSE CLOTHING, LONG HAIR OR JEWELRY. MOVING PARTS CAN SNAG AND PULL

 **WARNING**



KEEP HANDS CLEAR OF ALL PINCH POINTS

 **CAUTION**
READ FIRST

- ✓ Be sure to **READ ALL WARNING LABELS** and instruction manual prior to operation of this machine. Failure to comply with proper safety instructions may lead to serious harm or even death of operator and/or bystanders.
- ✓ Improper operation of this machine may cause damage to machine or cause personal harm or injury.
- ✓ **ALWAYS** wear safety goggles when operating this machine.
- ✓ **KEEP HANDS CLEAR** of all pinch points.
- ✓ Check machine for damaged parts prior to operation. **DO NOT USE MACHINE** if any component is broken or damaged.
- ✓ **NEVER EXCEED** the factory recommended air pressure of tire. Over inflating the tire beyond the manufacturer's recommendation can cause tire burst or explosion.
- ✓ Operators should inspect all tires and rims for possible defects prior to mounting.
- ✓ **ALWAYS INSPECT TIRES BEFORE MOUNTING.** Defective or damaged tires may burst or explode when inflating and may lead to serious harm or injury.
- ✓ **ALWAYS MAKE SURE TIRE SIZE MATCHES RIM SIZE** prior to mounting. Mounting tires on defective or improper rims can cause tire burst or explosion and may lead to serious harm or injury.
- ✓ This machine is not intended to be a restraining device for exploding tires, tubes, or rims. All operators should take proper precaution to implement safety and to avoid personal injury or harm.
- ✓ **DO NOT** lean over the tire while inflating. **KEEP HANDS AND BODY CLEAR** at all times and as far back as possible during inflation. An exploding tire, rim, or component thereof can cause injury or death to operator and/or bystanders. **REMAIN CLEAR AT ALL TIMES.**
- ✓ To inflate tires, use short bursts while carefully monitoring the pressure, tire, rim, and bead.
- ✓ While seating beads **NEVER EXCEED 40 p.s.i.** If bead does not seat at 40 p.s.i., immediately relieve pressure and check for mismatch of tire, damaged bead and/or other cause.
- ✓ **ALWAYS USE** good quality tire lubricant when servicing tires.

Always Think Safety!



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