Form 6097-T, 01-12
Supersedes Form 6097-T, 10-09c

TCX575 Tire Changer

Operation Instructions

HUNTER Engineering Company

EC Declaration of Conformity

We herewith declare, HUNTER ENGINEERING COMPANY
11250 Hunter Drive
Bridgeton, Missouri 63044-2391 USA

that the following described machine in our delivered version complies with the appropriate basic safety and health requirements based on its design and type, as brought into circulation by us. In case of alteration of the machine, not agreed upon by us, this declaration will lose its validity.

Description of the machine/machinery part	Series TCX Tire Changers
Machine type:	TCX400 Series TCX500 Series TCX600 Series TCX3000 Series
Serial Number:	Various
Applicable EC Directives	2006/42/EC 2006/95/EC 2009/105/EC 86/217/EEC 2004/108/EC
Applicable Harmonized Standards	EN ISO 12000-1 EN 60204 EN ISO 12000-2
Notified Body according to annex VII (name, address)	Not applicable
Responsible for:	Not applicable
Date/Authorized Signature:	_____ January 06, 2011
Title of signatory:	Stephen Hassenfritz Engineering Administrator

Archives

_____
Mach.-No.

OWNER INFORMATION

Model Number _____

Serial Number _____

Date Installed _____

Service and Parts Representative _____

Phone Number _____

Sales Representative _____

Phone Number _____

Concept and Procedure Explanation

Safety Precautions	**Trained**	**Declined**
Warning and Caution Labels	☐	☐
Bead Press Rollers	☐	☐
Maintenance and Performance Checks	**Trained**	**Declined**
Mounting Head Inspection	☐	☐
Adjustment and Filling of Oilers	☐	☐
Bead Breaking	**Trained**	**Declined**
Standard Wheels	☐	☐
Low Profile Wheels	☐	☐
Clamping	**Trained**	**Declined**
Steel Jaw Internal/External Clamping	☐	☐
Demounting	**Trained**	**Declined**
Standard Wheels with Bead Lever and Plastic Sleeve Protector	☐	☐
Operation of Leverless Head to Prevent Head Damage to Tires	☐	☐
Bead Lubrication During Removal of Low Profile Tires	☐	☐
Reverse Drop Center Wheels	☐	☐
Single/Dual Arm Bead Press System Overview	☐	☐

Mounting	**Trained**	**Declined**
Standard Wheels	☐	☐
Mounting of Stiff, Low Profile Tires	☐	☐
Proper Bead Lubrication for Mounting Protection	☐	☐
Single/Dual Arm Bead Press System Operation	☐	☐

Inflation	**Trained**	**Declined**
Safety Precautions	☐	☐
Lubrication and Removal of Valve Core	☐	☐
Bead Sealing and Seating	☐	☐

Individuals and Date Trained

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Contents

1. Getting Started

1.1 Introduction

This manual provides operation instructions and information required to maintain the TCX575 tire changer. An advanced operation section has been provided in *"Advanced Procedures," page 28*.

"References"

This manual assumes that you are already familiar with the basics of tire identification and service. The first section provides the basic information to operate the TCX575. The following sections contain detailed information about equipment, procedures, and maintenance. *"Italics"* are used to refer to specific parts of this manual that provide additional information or explanation. For example, *Refer to "Equipment Components," page 6.* These references should be read for additional information to the instructions being presented.

The owner of the TCX575 is solely responsible for enforcing safety procedures and arranging technical training. The TCX575 is to be operated only by a qualified trained technician. Maintaining records of personnel trained is solely the responsibility of the owner or management.

The TCX575 is intended for mounting, demounting, and inflating most tires with an approximate dimension of 40 inches in diameter and 15 inches in width.

1.2 For Your Safety

Hazard Definitions

Watch for these symbols:

⚠ **CAUTION:**	Hazards or unsafe practices, which could result in minor personal injury, product, or property damage.

⚠ **WARNING:**	**Hazards or unsafe practices, which could result in severe personal injury or death.**

⚠ **DANGER:**	**Immediate hazards, which will result in severe personal injury or death.**

These symbols identify situations that could be detrimental to your safety and/or cause equipment damage.

IMPORTANT SAFETY INSTRUCTIONS

Keep all instructions permanently with the unit.

Use equipment only as described in this manual.

To reduce the risk of fire, do not operate the equipment in the vicinity of open containers of flammable liquids (gasoline).

Do not operate the equipment with a damaged cord or if the equipment has been damaged - until it has been examined by a qualified serviceman.

If an extension cord is necessary, a cord with a current rating equal to or more than that of the equipment should be used. Cords rated for less current than the equipment may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.

Always unplug equipment from electrical outlet when not in use. Never use the cord to pull the plug from the outlet. Grasp plug and pull to disconnect.

Read and follow all caution and warning labels affixed to equipment and tools. Keep all decals, labels, and notices clean and visible.

Read and understand all instructions before operating this machine.

Misuse of this equipment can cause personal injury and shorten the life of the tire changer.

To prevent accidents or damage to the tire changer, use only Hunter recommended procedures and accessories.

Wear OSHA approved eye protection while operating the tire changer.

Wear non-slip safety footwear when operating the tire changer.

Do not wear jewelry or loose clothing when operating the tire changer.

Wear proper back support when lifting or removing wheels from the tire changer.

⚠ WARNING: Keep hands and clothing clear of moving parts. Do not lean or reach over tire when inflating.

Never stand on the tire changer.

⚠ WARNING: Do not exceed these pressure limitations:

- **Supply line pressure (from compressor) is 220 psi.**
- **Operating pressure (gauge on regulator) is 145 psi.**
- **Bead seating pressure (gauge on hose) is the tire manufacturer's maximum pressure as stated on the sidewall of the tire.**

Mixing tire and rim sizes may affect steering, handling, and the braking of the vehicle.

Keep hands and clothing clear of moving parts.

⚠ DANGER: Activate air inflation jets only when sealing bead.

Bleed air pressure from system before disconnecting supply line or other pneumatic components. Air is stored in a reservoir for operation of inflation jets.

⚠ WARNING: Only activate the air inflation jets if the rim securing device is locked in place and the tire is properly clamped (when possible).

WARNING: Never mount a tire to a rim that is not the same diameter (e.g., 16 1/2 inch tire mounting on a 16 inch rim).

CAUTION: Do not hose down or power wash electric tire changers.

Do not operate the tire changer with worn, rubber or plastic parts.

Wheels equipped with low tire pressure sensors or special tire and rim designs may require certain procedures. Consult manufacturer's service manuals.

Service and maintain machine regularly as outlined in this Manual. For further information contact:

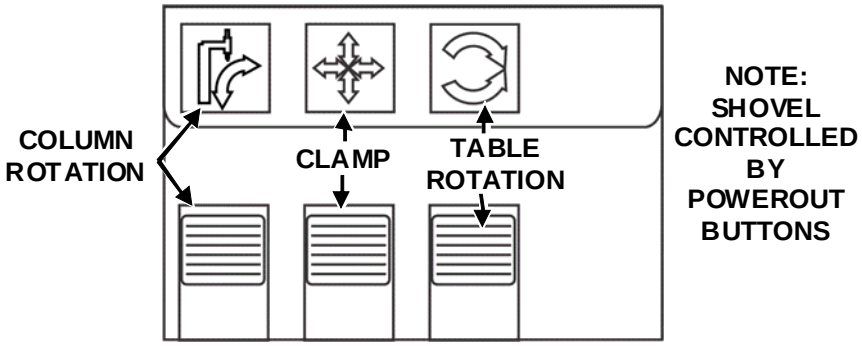
Hunter Engineering Company
11250 Hunter Drive
Bridgeton, Missouri 63044
800-448-6848
314-731-3020

Internet address: www.hunter.com

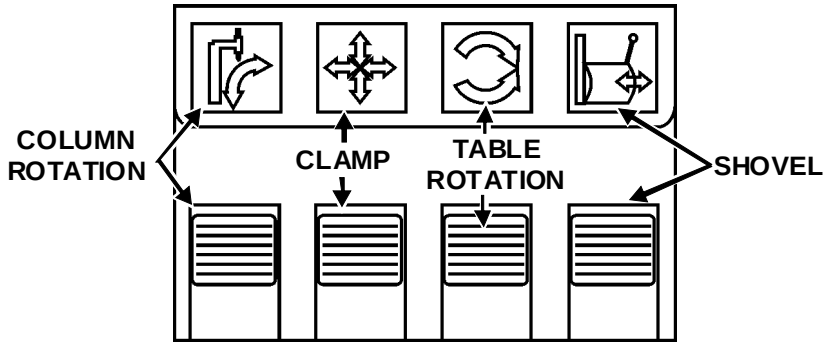
1.3 Control Pedals

Control pedals on the TCX575 tire changer are configured as shown below:

PowerOut Version

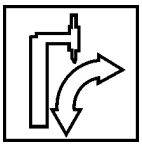
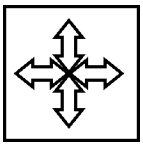
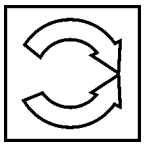
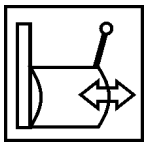


Non-PowerOut Version



NOTE: **If the unit is equipped with a wheel lift**, there is an additional pedal at the far right upper portion of the face of the unit.

Throughout this manual, control pedals are referred to by the associated symbol.

COLUMN ROTATION	CLAMP	TABLE ROTATION	SHOVEL (non PowerOut)
			

1.4 Wheel Rotation Pedal

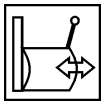
Step down on the rotation pedal  to rotate the wheel **clockwise**.

Release the pedal to stop rotation. Depressing the pedal halfway rotates the wheel at slow speed. Depressing the pedal all the way rotates the wheel at fast speed.

Lift up on the pedal to rotate the wheel **counterclockwise**. Release the pedal to stop rotation.

1.5 Tire Bead Breaker Shovel Pedal (Non-PowerOut versions)

> ⚠ **WARNING: Keep arms and legs from between the bead breaker arm and the side of the housing.**

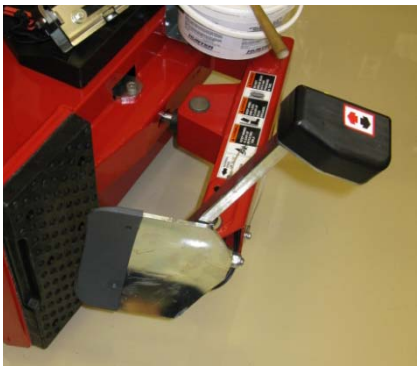
Step down on the bead breaker shovel pedal  to close bead breaker arm and loosen bead.

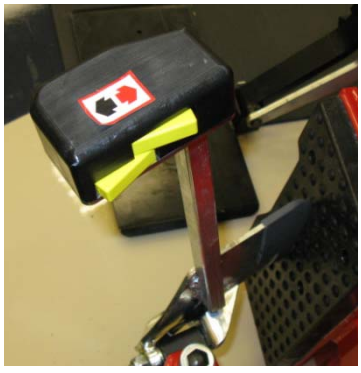
Release the pedal to allow the bead breaker arm to open.

1.6 Tire Bead Breaker Shovel - PowerOut Versions

> ⚠ **WARNING: Keep arms and legs from between the bead breaker arm and the side of the housing.**

The PowerOut system provides bead breaking controls on the handle for convenience, particularly with larger diameter assemblies.

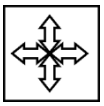




Press the "In" button to close bead breaker arm and loosen bead.

Press the "Out" button to allow the bead breaker arm to open.

1.7 Wheel Clamping Pedal

The wheel clamping pedal  has three positions (modes of operation): up (expand), neutral (stop), and down (retract).

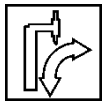
With the clamps in the fully retracted position or clamped against the outside of a rim, step down fully on the pedal to expand the wheel clamps (**clamps move outward**). The clamps continue to expand until contacting the rim or until fully expanded.

While the clamps are expanding, partially stepping down on the pedal will **stop the clamps**. The pedal can also be placed in the stopped position with the clamps in the fully expanded position. From this stopped position, additional partial steps on the pedal will incrementally retract clamps.

With the clamps in the fully expanded position or clamped against the inside of a rim, step down partially on the pedal to retract the wheel clamps (**clamps move inward**). To completely retract the clamps, step down fully on the pedal and the clamps will move completely inward.

Change the position of pedal by briefly stepping down and then releasing.

1.8 Column Rotation Pedal

The column rotation pedal  operates the automatic column.

> **WARNING: Before activating automatic column, make sure the path of the column is clear of people and other obstructions.**

The column tilt pedal has two positions.

With the pedal up, the column rotates toward the operator.

With the pedal down, the column rotates away from the operator.

1.9 Air Inflation Pedal

On the left side of the base, the air inflation pedal operates the two-stage air inflation system. *Refer to illustration on page 6.* The pedal controls the air going to the inflation hose and the air inflation jets.

> **WARNING: Do not lean or reach over tire when inflating.**

> **CAUTION:** Keep hands clear of wheel during sealing and seating of beads.

When operating air inflator, stand to the left side of the base. Do not stand in front of the tire changer while operating the air inflator.

Step down partially on the pedal to inflate tires through inflation hose.

Step down completely on the pedal to activate the air inflator jets to seal tire beads.

1.10 Inflator and Pressure Limiter

As a safety device, the pressure limiter prevents the operator from using excessive air pressure.

Bead seating pressure should never exceed the tire manufacturer's maximum bead seating pressure as stated on the sidewall of the tire.

If tires being mounted require more than the tire manufacturer's maximum bead seating pressure, the wheel should be removed from the tire changer, placed in an inflation cage, and inflated per manufacturer's instructions.

1.11 Mount / Demount Head

The mount/demount head is suspended from the column above the turntable.

The head has a mounting and demounting lip that is designed to install or remove the bead of tire as the wheel is rotated clockwise.

In addition, the head also incorporates an automatic lever to ease the demounting process.

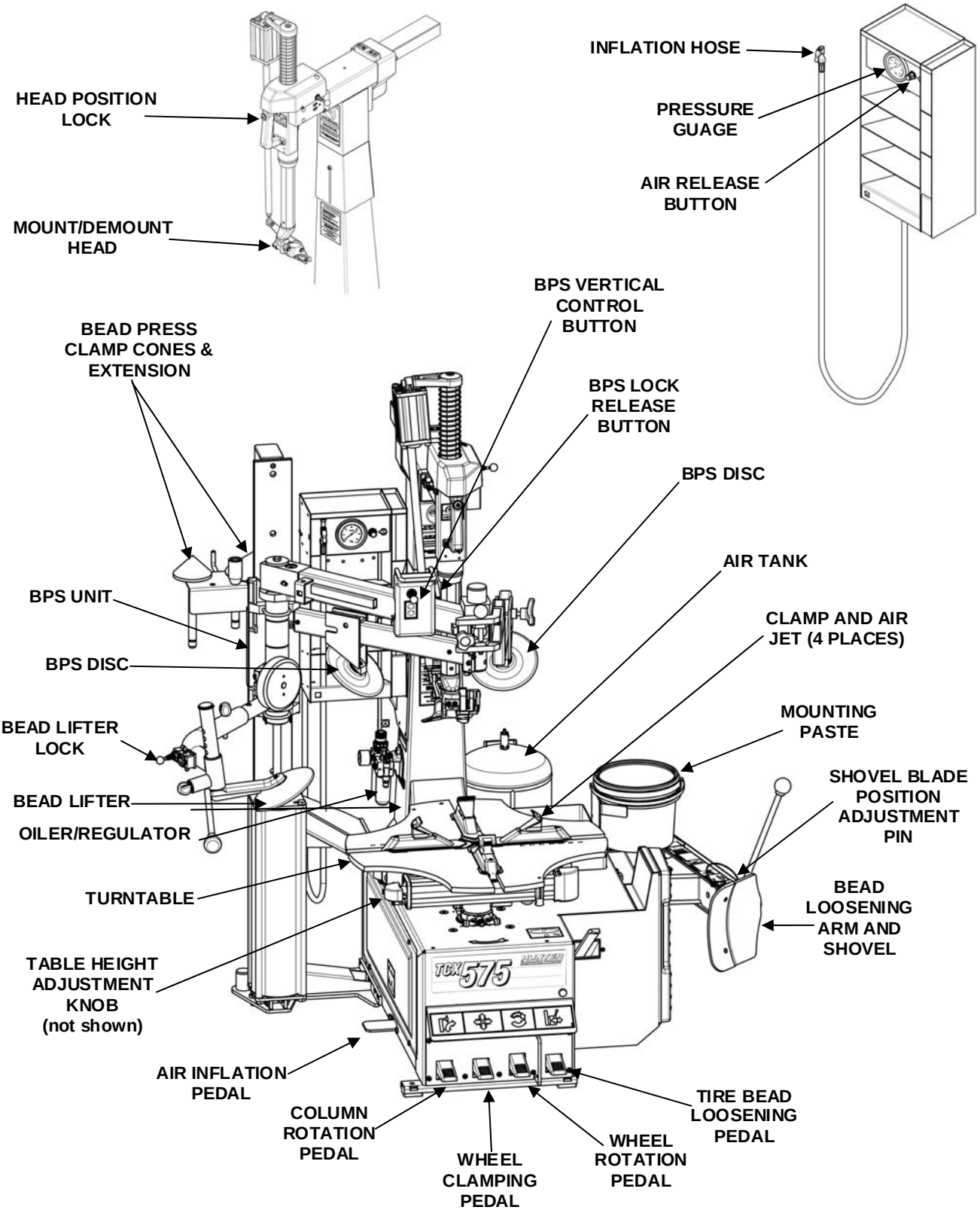
The bead of tire is placed on top of mounting lip during mounting.

The bead of tire is placed on top of demounting lip during demounting.

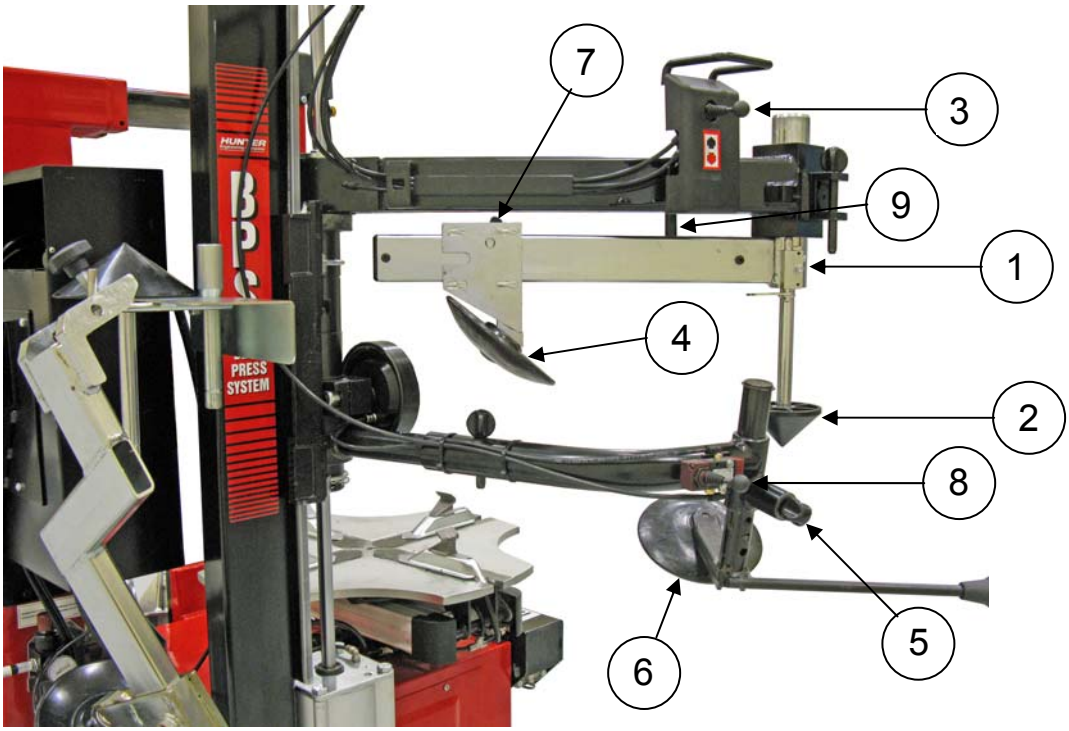
The automatic lever is placed inside the tire to ease the demounting process.

1.12 Equipment Components

TCX575 Tire Changer Components



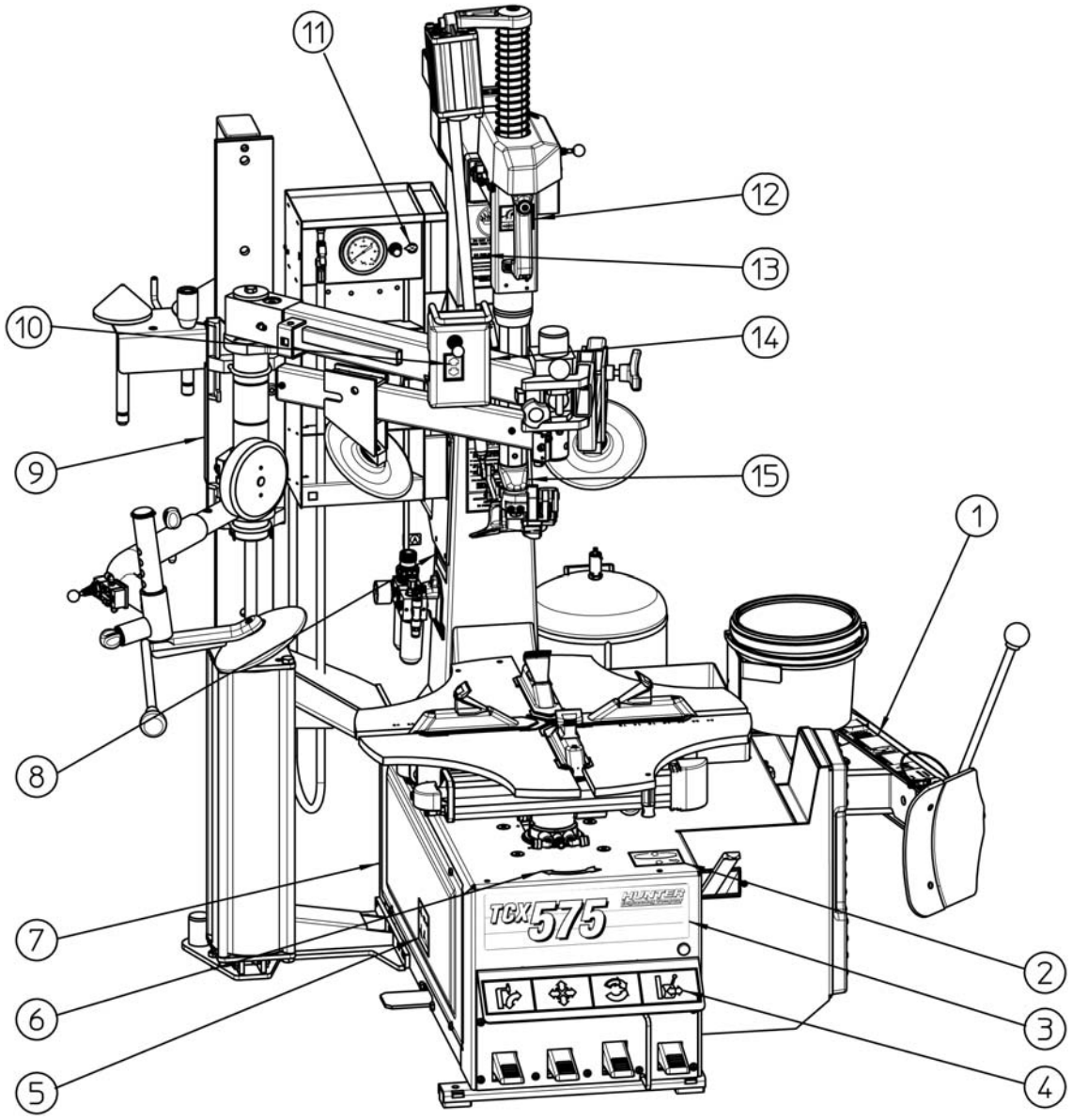
Bead Press System (BPS) Components



The functional parts of the BPS are:

1. Articulated Arm
2. Rim Presser cone
3. Control Lever
4. Bead presser roller
5. Match mounting lock
6. Demounting/match mounting disc
7. Sliding locking lever
8. Demounting arm lock
9. Arm end of travel pin

TCX575 Tire Changer Decal Locations



No.	Part Number	Description
1	RP11-4-402023A	DECAL-RIM, TABLE, BEAD BREAKER, BEAD AIR PRESSURE
2	RP11-3020482	DECAL-TURNTABLE HEIGHT ADJUSTMENT
3	128-1231-2	DECAL-HUNTER LOGO
4	RP11-4-404470	DECAL-PEDAL OPERATION
5	RP11-4-402030	DECAL-INFLATION PEDAL OPERATION
6	RP11-3020842	DECAL-TABLE ROTATION
7	RP11-4-406883	DECAL-MODEL SERIAL NUMBER
8	RP11-4-402027	DECAL-MAXIMUM INLET PRESSURE
9	RP11-4-402018	DECAL-HUNTER BEAD PRESS SYSTEM
10	RP11-3013640	DECAL-BPS POSITIONING
11	RP11-4-402021	DECAL-MANUAL TIRE BLEED VALVE
12	RP11-4-402038	DECAL-VERTICAL COLUMN LOCK BUTTON OPERATION
13	RP11-4-402028	DECAL-WARNING PRESSUREL IMITATIONS
14	RP11-3016548	DECAL-BPS LOCK
15	RP11-4-402022	DECAL-WARNING OPERATION

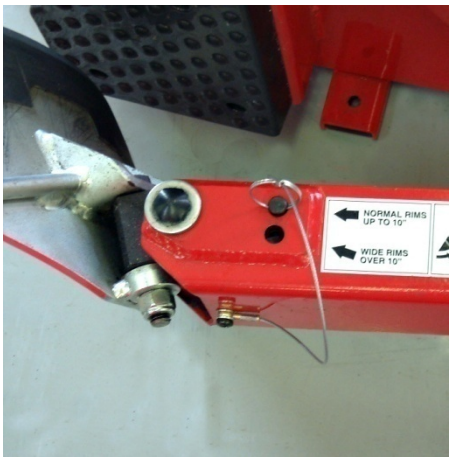
2. Basic Procedures

2.1 Bead Breaking

> **WARNING:** **All air pressure inside the tire must be removed before proceeding. Never attempt to loosen the bead until all air is removed from the tire. Failure to remove all air from tire may result in injury to operator, or damage to equipment, tire, or wheel.**

Remove valve stem core to deflate tire completely. Remove all weights from the rim to protect the rim and extend life of the mount/demount head.

The shovel blade has two-position adjustment. The second position is for wheels 10” wide and larger, but also may be used to break the beads of extreme low profile tires.



PowerOut Versions

Press the "Out" button to allow the bead breaker arm to open and position the wheel against the side of the tire changer, between the bead-breaker arm and the housing.

Press the "In" button to bring the bead breaker arm toward the tire and position the shovel blade on the sidewall of the tire. Locate the blade close, but not contacting, the edge of the rim.

Press the "In" button again to close bead breaker arm and loosen bead.

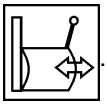
Release the "In" button to disengage the bead-breaker arm and press the "Out" button to allow the bead breaker arm to open. If the bead has not completely loosened, rotate the wheel and repeat the bead breaking procedure at a different area on the tire.

Turn the wheel and break the opposite bead using the same procedure.

Non-PowerOut Versions

Swing the bead-breaker arm out and position the wheel against the side of the tire changer, between the bead-breaker arm and the housing.

Swing the bead-breaker arm toward the tire and position the shovel blade on the sidewall of the tire. Locate the blade close, but not contacting, the edge of the rim.

Step down on the bead-breaker shovel pedal  .

The bead-breaker arm will be pulled toward the tire changer to loosen the bead.

Release the pedal to disengage the bead-breaker arm and then swing the arm to the open position. If the bead has not completely loosened, rotate the wheel and repeat the bead breaking procedure at a different area on the tire.

Turn the wheel and break the opposite bead using the same procedure.

2.2 Placing Wheel on Tire Changer

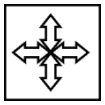
Identify and recognize special wheel combinations such as Reverse Drop Center (needs inverted on changer), AH, “Run-Flat” Extended Mobility Tires, and standard tires with pressure sensors.

Clamping the Wheel from Inside of Rim - Steel Rims

Identify the inner locations on the rim where the clamps will come in contact.

Position the clamps in the fully retracted position (clamps completely in).

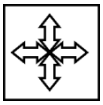
Place the wheel centered onto the turntable.

Step down on the clamping pedal  to expand the clamps to the rim.

NOTE:	**Avoid clamping <u>inside</u> rim of alloy wheels.** Steel jaws may damage the finish of inside rim surface during use.

Verify that the wheel has been properly clamped and centered.

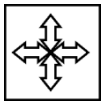
Clamping the Wheel from Outside of Rim - Alloy Rims

Place the clamping pedal  in the stopped position by partially stepping down on the pedal with the clamps expanding or in the fully expanded position.

From this stopped position, use additional partial steps on the clamping pedal to incrementally retract the clamps. Set the clamps to the mark on the turntable that corresponds to the size of rim to be clamped (12”- 14” - 16”).

Place the wheel onto the turntable.

Continue to incrementally retract the clamps until all four clamps contact the rim.

Step down once only on the clamping pedal  to fully retract the clamps to the rim.

NOTE:	Always verify that all four clamps are on the rim before applying pressure to prevent possible failure.

Plastic jaw covers may be used to help maintain rim protection when clamping externally. Plastic jaw covers may be replaced periodically when worn by ordering kit RP11-8-11400085 which contains 2 sets of plastic covers.

2.3 Demounting Standard Tire from Rim

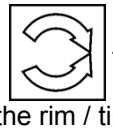
Top Bead Demounting

Position the mount/demount head against the outer edge of the upper rim lip. The plastic surfaces should contact the rim lip.

Slide the mount/demount head in or out along the upper rail and lower the head into position. Push the button on handle to lock head into position. The mount / demount head will automatically build in the proper spacing.

⚠ CAUTION: Always make sure the wheel is being rotated while inserting the automatic lever.

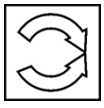
Locate an area with a gap between the tire and wheel.

Press the wheel rotation pedal  to rotate the wheel clockwise. While rotating, insert the automatic lever into the rim / tire assembly.

⚠ CAUTION: Always ensure that the automatic lever is inserted in a gap between the rim and the tire. If the automatic lever is inserted without a gap, tire damage can occur.

GOOD	**BAD**
	 **WARNING** THIS CAN DAMAGE THE TIRE
MOUNT HEAD CORRECTLY PLACED	**MOUNT HEAD INCORRECTLY PLACED**

NOTE: If the automatic lever does not completely seat under the upper bead, continue to rotate until it does.

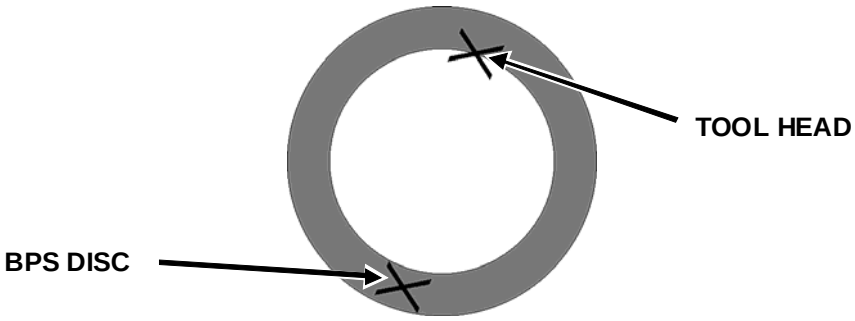
Press the wheel rotation  pedal until the valve location is in the one o'clock position.

Position the valve stem directly beneath the tool head.

Pull up on the automatic lever to pull the bead over the edge of the rim.

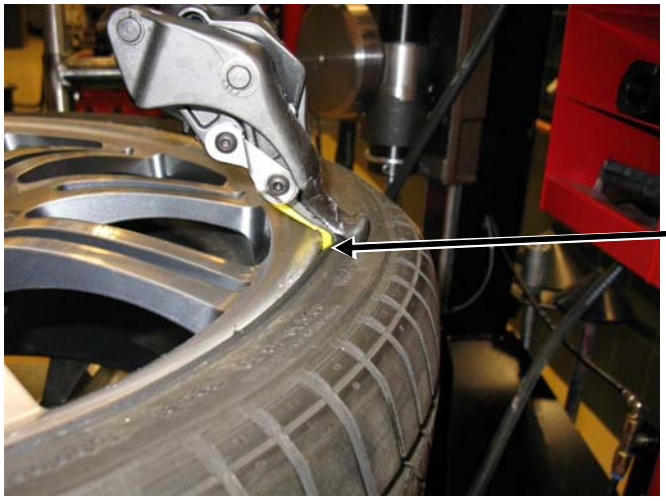
Difficult Tires

On difficult tires where the automatic bead lever does not have sufficient power to pull the tire over, use the Bead Press System (BPS) on the opposite side of the tire and press down.

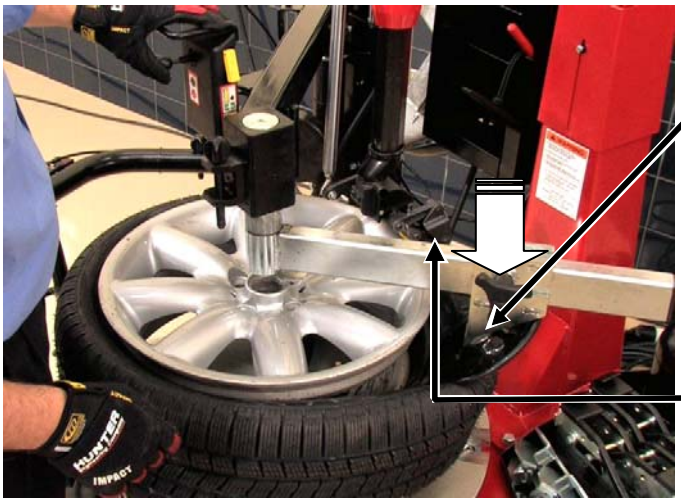


Press the wheel rotation pedal  to rotate the wheel clockwise and fully demount the upper bead.

Some of the more difficult tires may not allow for proper insertion of the automatic bead lever because not enough of a gap can be created between the tire and the rim edge.



If this is the case, reposition the upper BPS disc as shown below. Lower the upper BPS disc and push down to create a gap between the tire and the rim edge (A), then insert the automatic bead lever (B).



Raise the BPS disc, and then rotate.

Precautionary Notes

When basic procedures are NOT followed, sharp angled wheel flanges increase potential damage to tires during mounting. Be sure the mounting head is placed on the rim with sufficient gap between the bead and bead seat. If the tire is incorrectly pushed onto the rim by the side of the mounting head, it may become “trapped” and increases mounting stress to the tire bead.

Insufficient lubrication and failure to place tire into drop center during mounting may also cause the mount/demount head to fail prematurely.

Bottom Bead Demounting with Tool Head

Position the tire on the rim assembly as shown below. Insert the automatic lever into the rim / tire assembly.

Lift the tire up and over the automatic lever and raise the automatic lever to lift the lower bead.

NOTE:	Alternatively, you may lift the tire up first, lower the automatic lever, lift the tire into place and then lower the automatic lever beneath the bottom bead.

With the tire in position, press the wheel rotation pedal  to rotate the wheel clockwise and demount the bottom bead.

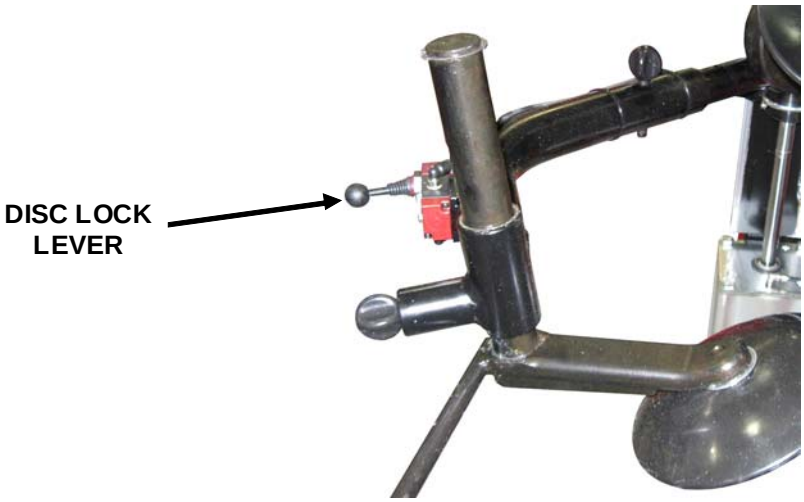
Bottom Bead Demounting with Disc

Demounting the bottom bead on certain wheel assemblies, large and heavy assemblies and some run-flat assemblies for example, may be best performed by using the lower disc.

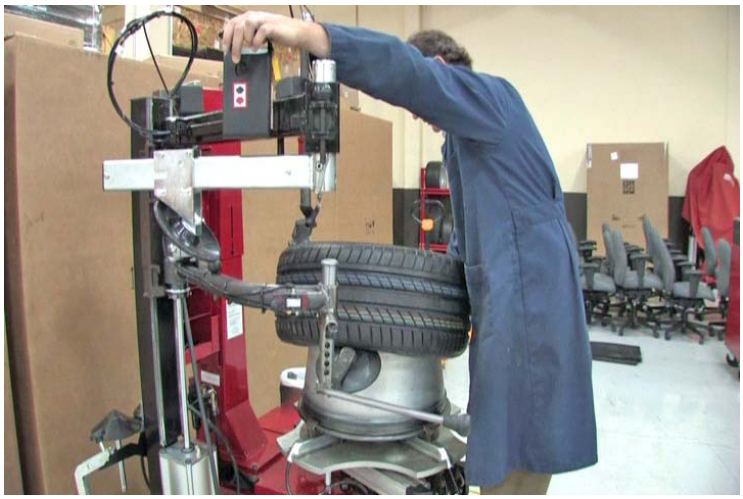
Return the tool head to the “resting” position.

Lower and align the lower disc to touch the bottom of the rim edge.

Lock the disc in place using the disc lock lever.



While supporting the opposite side of the tire, raise the lower disc until it is just above the rim edge.



This will create a gap between the rim edge and the tire.

With the tire in position, press the wheel rotation pedal  to rotate the wheel clockwise and demount the bottom bead.

Difficult Tires

Some of the more difficult tires may have the tendency to “fold” under the lower disc.

If this is the case, reposition the lower disc. While supporting the opposite side of the tire, again, raise the lower disc until it is just above the rim edge. Create a gap between the rim edge and the tire.

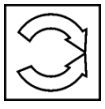
Temporarily unlock the lower disc lock lever and pull the lower disc in between the rim edge and the tire. Then lock the lower disc in place.

With the tire in position, press the wheel rotation pedal  to rotate the wheel clockwise and demount the bottom bead.

Alternate Procedure

Using the Bead Lever

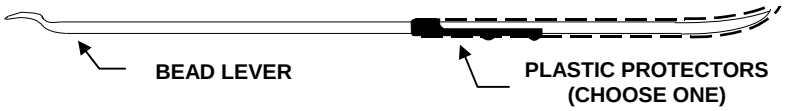
NOTE:	Clean the mount/demount head to remove dirt and debris before demounting the tire from the rim.

Press the wheel rotation  pedal until the valve location is in the one o'clock position.

Position the mount/demount head against the outer edge of the upper rim lip.

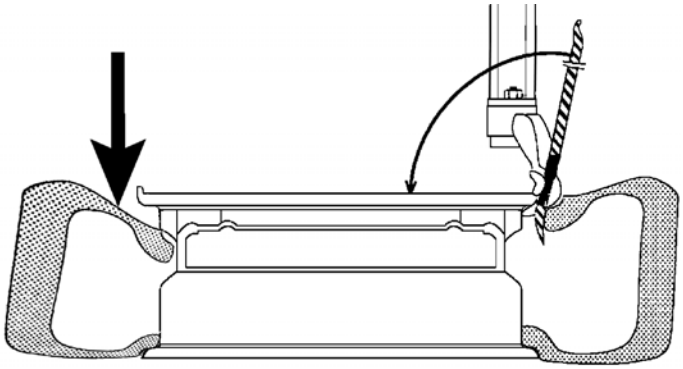
Slide the mount/demount head in or out along the upper rail and lower the head into position. Push the button on handle to lock head into position.

A plastic protector sleeve may be installed on the bead lever tool to aid in rim protection.



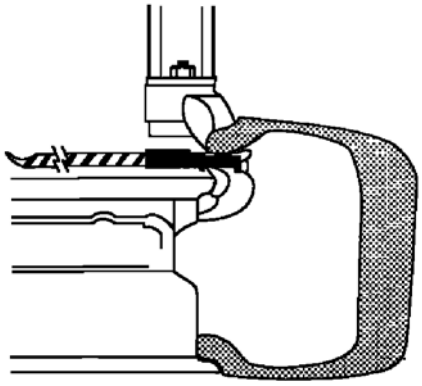
Position the bead lever between the demounting lip of the head and bead of tire. The demonting lip is on the right side of the head.

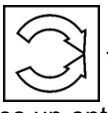
Push down on the tire sidewall 180 degrees from the mount/demount head to slip the bead into the drop center of rim.



Using the bead lever tool, lift the tire bead over the demounting lip of the head.

The bead lever tool must be pulled down parallel to the rim.



Lift the wheel rotation pedal  to rotate the wheel **counter clockwise** slightly such that the upper bead rides up onto the demount lip.

Push the wheel rotation pedal  to rotate the wheel **clockwise.**

Remove the bead lever tool from the tire when it easily slides out, approximately after a quarter rotation of the wheel.

Continue to press the wheel rotation pedal to rotate the wheel **clockwise** until the entire bead is lifted from the rim.

Lift tire and repeat this procedure for lower bead.

With the BPS bead lifter - If the lower bead becomes reseated onto the rim, the lower bead lifter may be placed under the tire and used to lift the tire into the drop center.

Always insert a bead lever into the BPS bead lifter to position and stabilize the roller. Raise bead lifter and rotate tire to loosen bead. Remove bead lifter.

Swing the mount/demount arm assembly up and away from the wheel.

Remove tire from rim.

2.4 Mounting Standard Tire to Rim

Always use this “checklist” as a guide when mounting tires to ensure proper service.

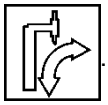
There are four basic steps when mounting a tire to a rim:

- Position the bead on top of the mounting lip of the mount/demount head.
- Position the bead under the demounting lip of the mount/demount head.
- Lock the tire to the rim in the mounting position.
- Slip the bead into the drop center.

These four basic steps to mounting do not necessarily follow the same sequence, however all four steps need to be performed to mount a tire to a rim.

Mount a standard tire to rim as follows:

Lubricate inside and outside of both beads of the tire to be mounted with supplied mounting paste.

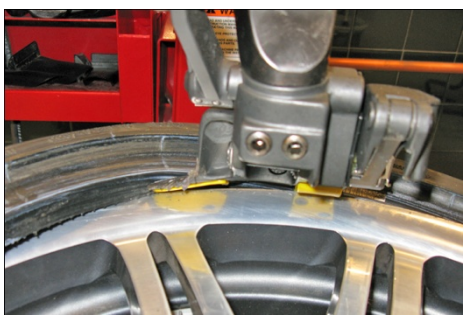
Position tire on top of the rim and tilt tire forward. Move the mount / demount head into “working” position by pressing the column rotation pedal  .

Lower the mount / demount head into position on the edge of the rim and lock it into place.

Rotate the assembly clockwise until the lower bead drops into the drop center of the rim.

NOTE:	When mounting the top bead, it is important to get the correct positioning of the tire on the mount / demount head.

MOUNT HEAD <u>CORRECTLY</u> PLACED



MOUNT HEAD <u>INCORRECTLY</u> PLACED

Position the tire such that the back of the tire is over the mount / demount head and the front of the tire under the finger of the mount / demount head.

Move the articulated arm of the BPS to the 3 o'clock position and lower the upper bead press disc down onto the edge of the tire.

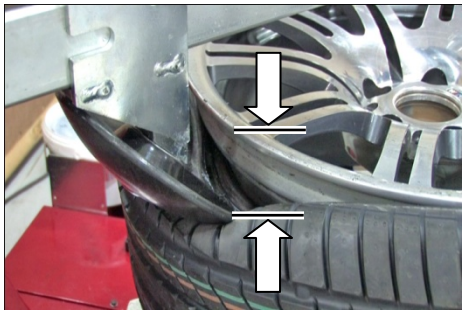
With the tire in position, press the wheel rotation pedal  to rotate the wheel clockwise and mount the top bead.

2.5 Match Mounting

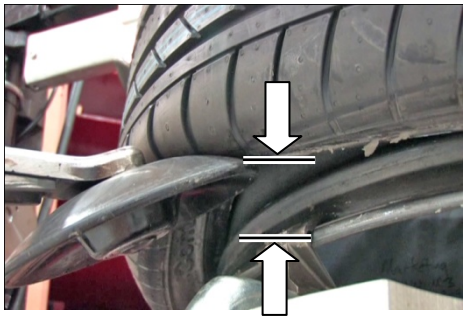
Move the articulated arm of the BPS to the edge of the rim and lower the upper bead press disc down. Lower the upper bead press disc to approximately half the depth of the rim.

Position the lower disc at the rim edge on the bottom of the assembly and lock it in place.

Raise the lower disc such that the pitch between the upper and discs is approximately equal.



UPPER DISC



LOWER DISC

With the tire in position, press the wheel rotation pedal  to rotate the wheel clockwise. The tire will be stalled and the rim will rotate to allow the Match Mounting procedure.

2.6 Tire Inflation

Verify that the wheel has been properly clamped and centered.

> **WARNING: Never attempt to inflate a tire that is clamped from the outside. If possible, re-clamp the wheel from the inside before inflating.**

Verify that both upper and lower tire beads and rim bead seat have been properly lubricated with an approved mounting paste.

Remove valve stem core if not already done.

Connect inflation hose to valve stem.

Pull up on the tire lightly to reduce the gap between upper bead and the rim.

> **WARNING: Do not stand over tire during inflation.**

Step down completely on the air inflation pedal (pedal on the left side of the base) to release a high-pressure air blast through jets on the clamps to assist in seating the beads of the tire.

> NOTE: To increase the effectiveness of the inflation jets, always liberally lubricate beads and raise the lower bead while activating inflation jets.

Step down partially on the pedal to inflate tire and seal beads with inflation hose. Frequently stop to check bead seating pressure on gauge.

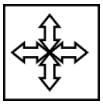
> **WARNING: Do not exceed tire manufacturer's maximum pressure as stated on the sidewall of the tire when seating beads.**

Reinstall valve stem core into the valve stem after beads have been seated, and then inflate tire to vehicle manufacturer recommended pressure.

If tire is over-inflated, air may be removed from the tire by pressing the brass manual air release button located below the air pressure gauge.

Disconnect inflation hose from valve stem.

2.7 Removal of Wheel from Tire Changer

Lift the clamping pedal  to release the rim from the clamping device.

3. Advanced Procedures

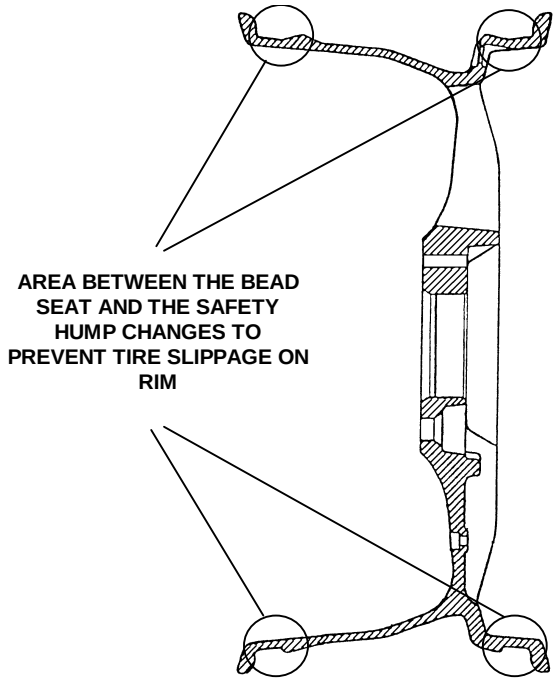
The capabilities of the TCX575 allows the user to utilize numerous advanced procedures on a variety of rims and tires. For the operator to take advantage of these features, this section explains in detail what additional steps can be taken.

3.1 Advanced Bead Breaking Procedures

Bead Breaking "AH" Wheels (e.g. BMW M3, M5, Some Porsches, Range Rover, Lancia, etc.)

"AH" (Asymmetrical Humps), "Bead Locking System" wheels may be identified by looking on the back of a rim for "AH" in the rim size designation casting (e.g. 8X17-AH).

"AH" wheels are designed so that the lowest point of the safety hump is located at the valve stem or 180 degrees out. These two points are where it is easiest to loosen the bead from the bead seat.



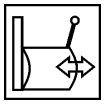
Bead Loosen "AH" Wheels as follows:

Swing the bead breaker arm out and away from the housing.

Position the wheel against the side of the tire changer between the bead breaker arm and the housing.

Rotate the wheel so that the valve stem is in line with or 180 degrees from the blade.

Swing the bead breaker arm toward the tire and position the blade one to two inches from the edge of the rim on the sidewall of the tire.

Step down on the bead breaker shovel pedal  .

The bead breaker arm will be pulled toward the tire changer to loosen the bead.

Release the pedal to disengage the bead breaker arm and then swing the arm to the open position.

If the bead has not been completely loosened, rotate the wheel 180 degrees and repeat the bead breaking procedure.

Turn the wheel and loosen the opposite bead using the same procedure.

NOTE:	Do not attempt to use the BPS Device for bead breaking. It is only to be used to loosen beads that have already been loosened with the side shovel.

4. Maintenance, Calibration and Replacement Parts

4.1 Maintenance Schedule

> ⚠ **CAUTION:** Do not hose down or power wash electric tire changers.

Proper care and maintenance are necessary to ensure that the TCX575 operates properly. Proper care will also ensure that rims and tires are not damaged during the mount/demount process.

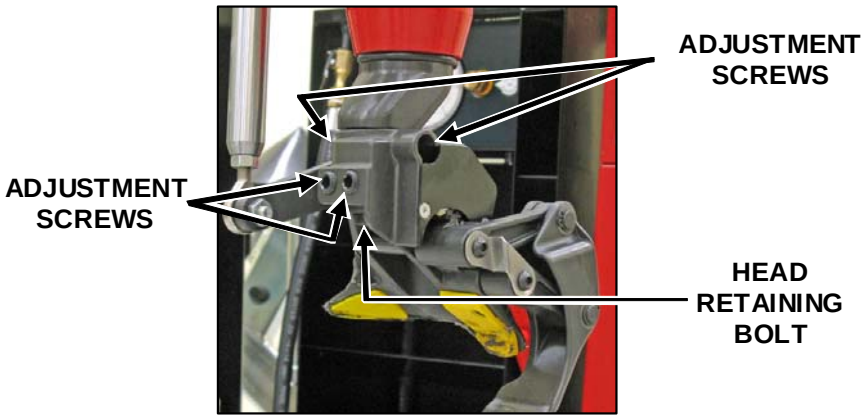
Maintenance Schedule	Perform the Following Maintenance
Daily	Drain condensation from pressure regulator reservoir by pressing in on the fitting located on the bottom of the regulator. Check for worn or damaged rubber and nylon components that should be replaced to prevent damage from occurring. Replace worn parts as needed (tool supports, rubber pads, lever protector sleeve and mount/demount head). Clean all areas that contact rims or tires to prevent possible scratching to rim.
Weekly	Clean tire changer with shop towels or a vacuum cleaner. **Do not clean with or use compressed air, which can blast dirt between moving parts.** Do not use cleaning solvents to clean pressure regulator/oiler.
Periodically	Refill the pressure regulator/oiler using **only** Hunter Lubri-Oil, 148-133-2, as needed. **Petroleum-based oils should never be used in the oiler and may void all warranties.** Adjust the oiler to release one drop of oil every three rotations of the clamping table by adjusting the screw on top. Check for loose bolts and tighten per specifications.

4.2 Mount/Demount Head Assembly

Mount/Demount Head Calibration

The mount/demount head is pre-calibrated from the factory, however, double checking the calibration is recommended. Calibration requires the use of an (approximately) 18 inch bare rim.

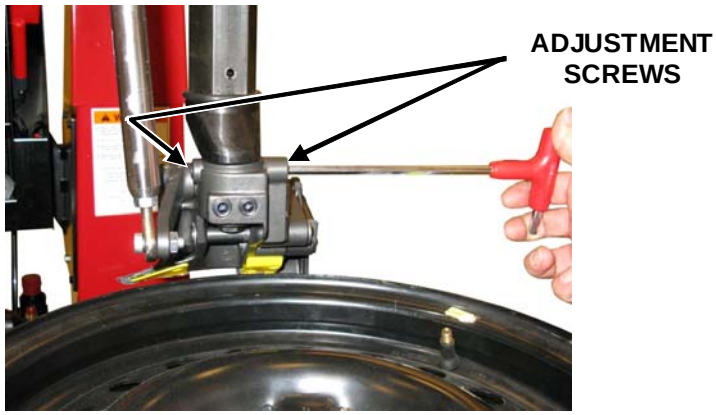
1. Clamp rim without a tire on the tire changer turntable.
2. Before making any adjustments, loosen the four adjustment screws and tighten the head retaining bolt until some grip is obtained.



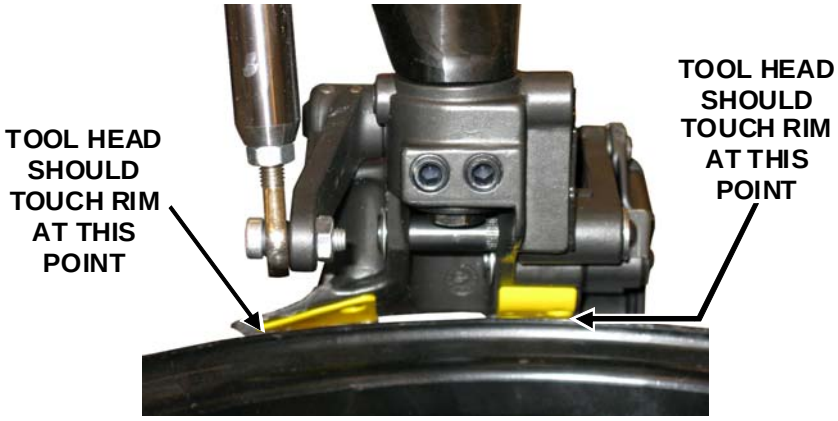
3. Position the tool head manually against the edge of the rim so that both sides of the tool head are resting on it. Keep the tool head in position without engaging the head position lock.

Horizontal Adjustment of the Tool Head

1. Lower the automatic lever of the tool head to access the adjustment screws on the side.
2. Use the side adjustment screws to set the tool head perfectly horizontal in relation to the rim.



3. The tool head should be touching the rim at the points shown below:



4. Tighten the side adjustment screws, but not completely.

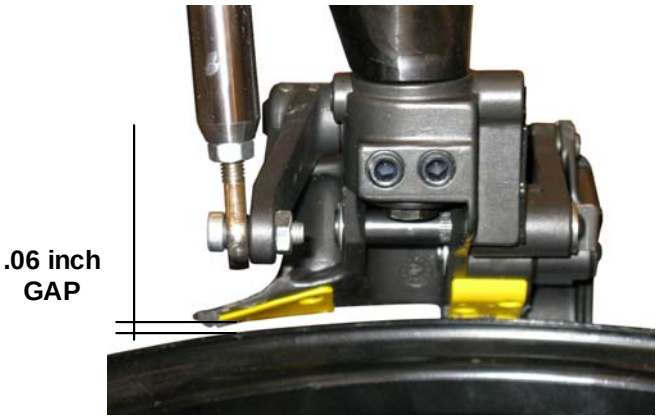
Radial Adjustment of the Tool Head

1. Release the tool head, then reposition it on the rim and lock it in place with the head position lock.
2. Adjust the two front adjustment screws and set the tool head so the left side is touching the rim and the right side is flush with the edge of the rim.

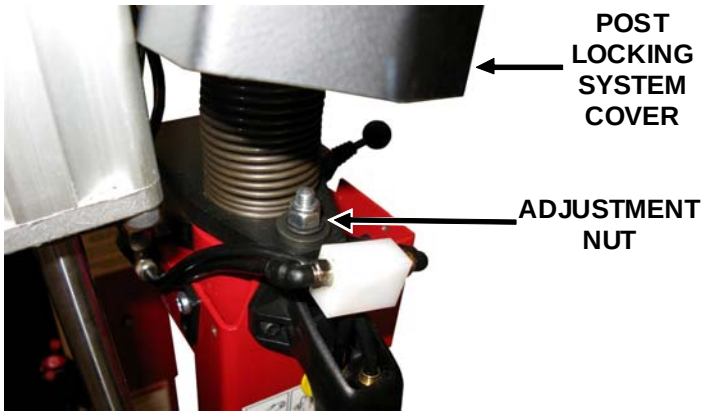
3. Fully tighten the adjustment screws starting with the head retaining bolt. Release the post and reposition the tool head on the rim for gap adjustment.

Adjusting the Vertical Gap

1. Reposition the tool head on the rim and lock it in place with the head position lock. Using a feeler gauge, check the distance between the tool head and the rim. The distance should be .06 inch.



2. If the gap is not correct, release the head position lock and adjust the nut beneath the post locking system cover to adjust the gap. The cover must be removed. Back off the nut to increase the gap and tighten to reduce the gap.



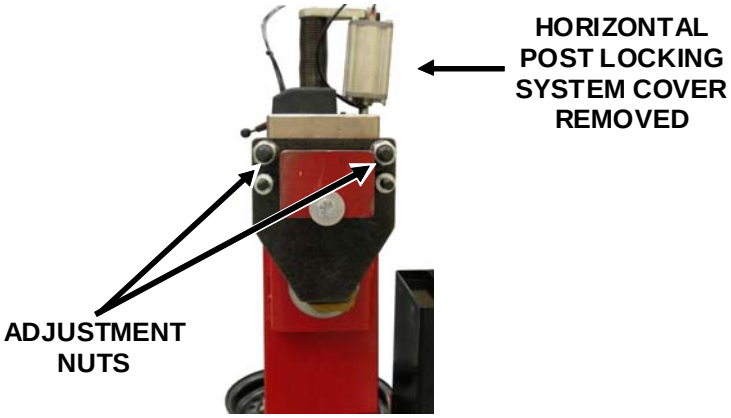
3. Reposition the tool head on the rim and lock it in place with the head position lock. Re-check gap.

Adjusting the Horizontal Gap

1. Release the tool head, then reposition it on the rim and lock it in place with the head position lock.

2. Using a feeler gauge, check the horizontal gap between the tool head and the rim. The distance should be 1/16 inch.

3. If the gap is not correct, release the head position lock and adjust the nuts beneath the horizontal post locking system cover to adjust the gap. The cover must be removed. Back off the nuts to increase the gap and tighten to reduce the gap.



> ⚠ **CAUTION:** To ensure that the horizontal locking plate functions correctly, the two nuts must be adjusted symmetrically.

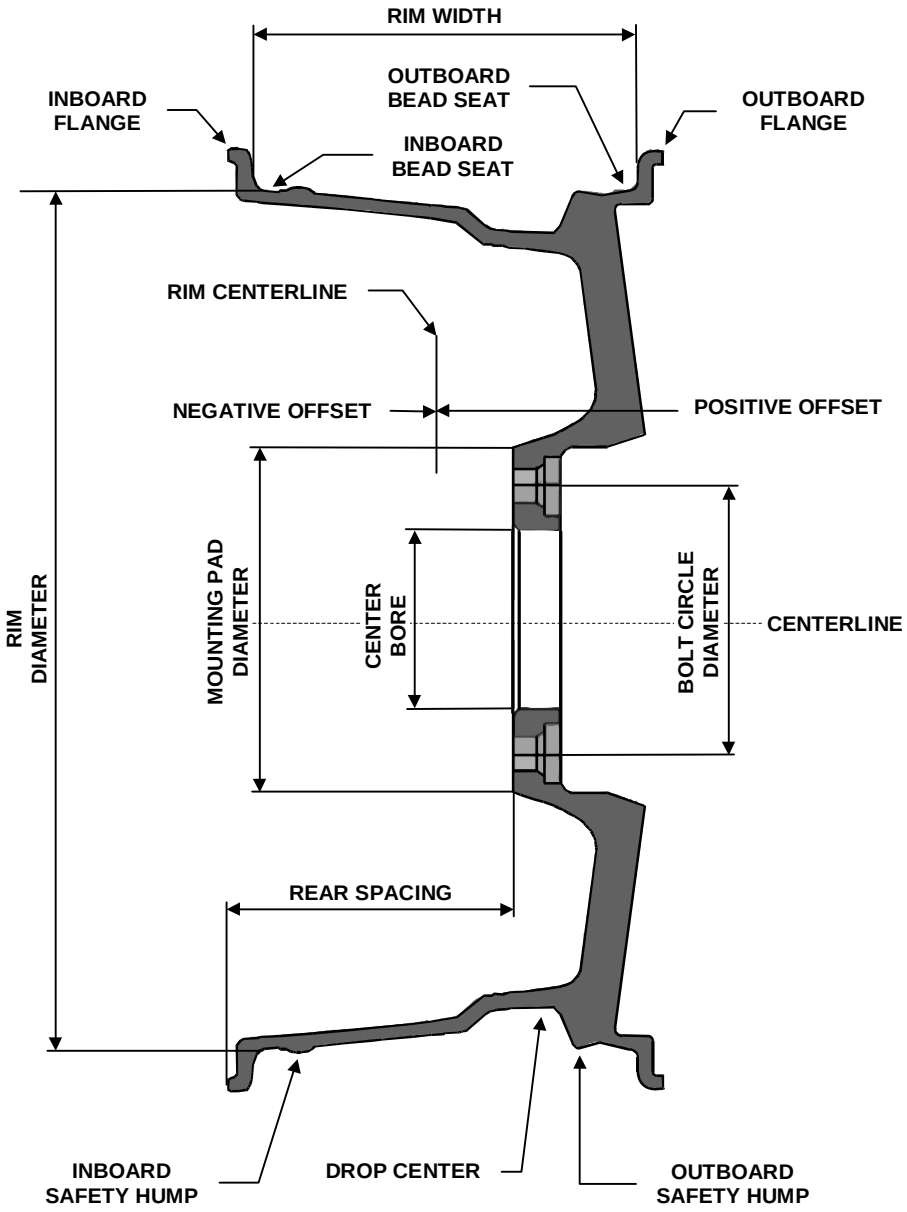
4. Reposition the tool head on the rim and lock it in place with the head position lock. Re-check gap.
5. When the adjustments are complete, check the gap between the hook of the tool head and the outboard safety hump of the rim. The distance should be between .08 and .16 inch. If not, repeat the calibration process.

4.3 Replacement Parts

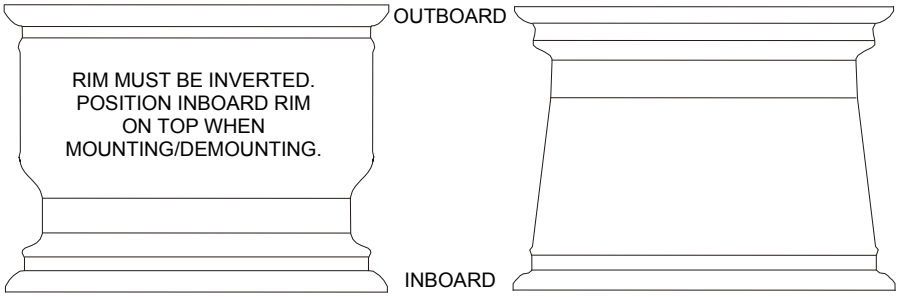
NAME	NUMBER
Safety Goggles	179-15-2
Brush	RP6-1506
Mounting Paste	RP6-3784
Mount/Demount Head	RP11-3314813
Hand Held Bead Lever - straight	RP11-3009516
Bead Lever Protector Sleeve (Std) (4)	RP11-8-11400098
Jaw Protection Kit (2 sets - 8 covers)	RP11-8-11400085
Mount/demount Protector Kit consisting of: 10 demounting protectors 5 mounting protectors 15 protector screws	RP11-8-11400293

5. Glossary

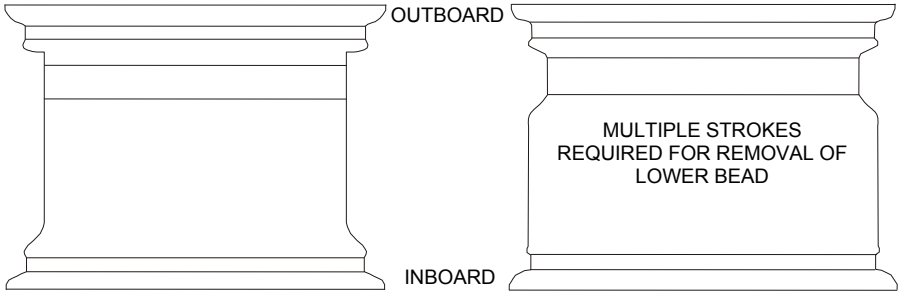
5.1 Rim Diagram



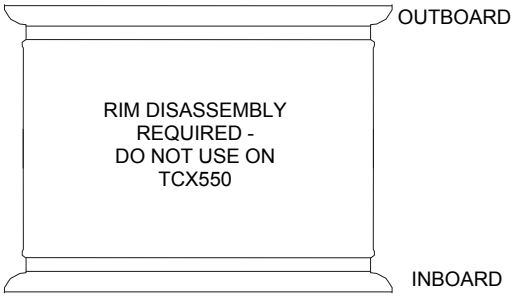
5.2 Illustrations of Various Rim Designs



REVERSE DROP CENTER **CONICAL**



LONG DROP CENTER **CYLINDRICAL**



NO DROP CENTER

Hunter Research and Training Center

HUNTER TRAINING

Hunter operates the most advanced, up-to-date Training Center in the industry today.

The courses have been designed to meet the needs of new and experienced technicians who want to increase their mechanical and diagnostic capabilities. The low student-teacher ratio (average 7 to 1) and the emphasis on “hands-on” training (70% time in shop) create an excellent learning environment.

Highlights of the Hunter Training Center include:

- ✓ An instruction staff with years of shop, field, and teaching experience.
- ✓ Fully-equipped service bays.
- ✓ Classrooms equipped with modern teaching aids.
- ✓ The most up-to-date wheel alignment, balancing service, and brake equipment on the market today

Classes Available

- ❑ **Align 1** (Basic Alignment Theory and Practice) - 3 day / 24 hours
- ❑ **Align 2** (Advanced theory / Aftermarket Adjustment) - 2 day / 16 hours
- ❑ **Align 3** (Advanced Diagnostics and OEM Procedures) - 2 day / 16 hours
- ❑ **Performance Tire** (Basic and Advanced Tire Changing) - 1 day 8 hours
- ❑ **Road Force® / GSP9700 Certification** - 2 day / 16 hours
- ❑ **Rolling Smooth** (Basic & Advanced vibration theory) - 1 day / 8 hours
- ❑ **Heavy-Duty Truck Alignment 1** (Fundamental Alignment) - 3 day / 24 hours
- ❑ **Heavy-Duty Truck Alignment 2** (Advanced Alignment) - 2 day / 16 hours