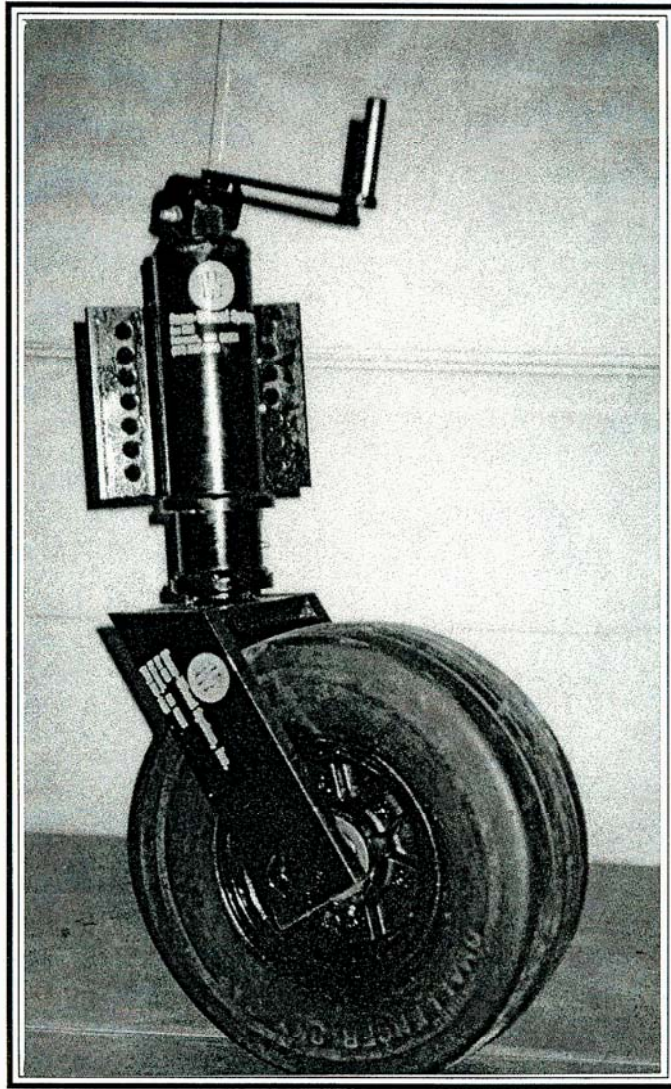


# **SNOW - WHEEL SYSTEM**



## **Installation - Maintenance**

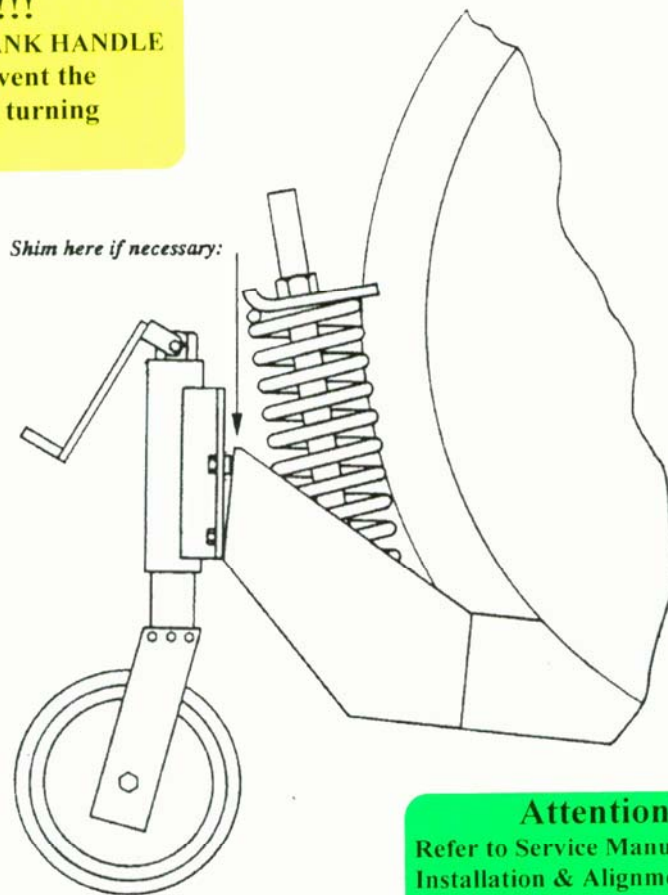
**Manual for  
6600 Series  
Swivel Wheel**



**6600 Series Photo View**

# Swivel Wheel Alignment

**Caution!!!!**  
DO NOT REMOVE CRANK HANDLE  
This is a stop to prevent the  
adjusting screw from turning



**Attention!!!!**  
Refer to Service Manual for proper  
Installation & Alignment of wheels.  
Improper alignment will cause early  
tire failure.

**Note:** Adjust Snow Wheels on clean flat floor.

1. Reverse plow 90° to the right and shim wheel so tire sits flat on the floor.
2. Raise plow slightly to make sure wheel rotates 360°. If **not**, trim for clearance.
3. Reverse plow clear to the left and shim wheels so tire sits flat on the floor.
4. Repeat step **no. 2**.
5. Be sure to **add gusset's** to reinforce plow if you have to trim plow.

# Operations

## • Snow Wheel Operation for Snowplows

Your Snow Wheels are designed to give you years of service. Before you put your Snow Wheels on the road check to make sure wheel alignment is correct. The wheels should be adjusted so that about 85% of the plow's weight is carried on the wheels. This will extend the life of the cutting edge and still scrape the pavement clean.

Snow Wheels can be adjusted to carry all of the plow's weight. This will keep the cutting edge above the surface on gravel roads and eliminate gravel thrown into the ditch.


## • Snow Wheel Operation and Service Instructions for Snowblowers

When transporting loader mounted plows on highways at speeds 10 to 25 m.p.h. you should carry **more than half of the weight of the plow on the loader**. That will extend the life of the Snow Wheel tires. **Failure to do so will damage the tires.**

This can be achieved by putting the loader in float position and picking up on the snowblower until you travel without the loader hopping or you feel comfortable with the speed you are traveling.

**Caution:** Do not attempt to cross railroad tracks with the snowblower down on the Snow Wheels.

## • Service Instructions for Snowplows & Snowblowers

If you look closely at the inner side of each hub, there is a **Hydraulic Shut-Off Grease Fitting**. Make sure hub is full of **QUALITY GREASE** at all times. This provides lubrication, prevents condensation and (water build-up). Pump grease into hub cavity until full. When full, grease will discharge from the relief valve fitting.  This fitting is designed to **PREVENT** over greasing and blowing out *bearing seals*.

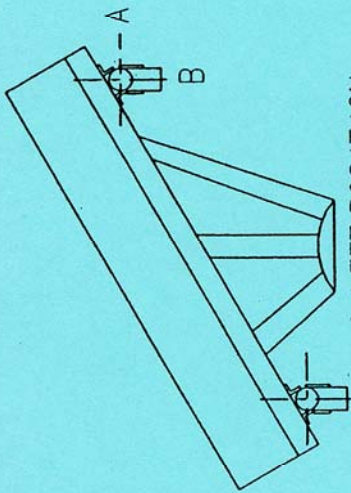
The first **four** (4) hours of use and after **eight** (8) hours, check **all wheel nuts** and **hub caps** for **tightness**.

**Re-pack wheel bearing every 5,000 plow miles OR ONCE A YEAR** at the end of the snow season. **Make sure hubs are full of QUALITY grease to prevent condensation and water build up.**

Use a good grade of medium to light wheel bearing grease. Retaining nut should be **tightened to 15 ft. lbs.** Make sure bearing surfaces are properly seated. Then back off one (1) notch and insert cotter key. Make sure wheel rolls freely before reassembling.

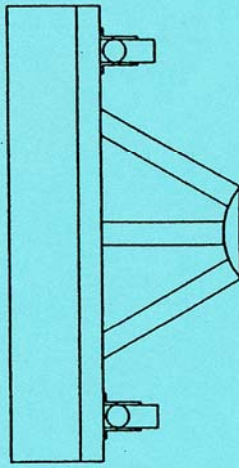
**NOTE:** Once per year be sure to check **alignment** of wheels on snowplow and snowblower.

**DO NOT** over grease swivel bearing (pg 4) on 6650 models. Over greasing will prevent wheel from **SWIVELING 360°**. Grease can be relieved by pushing in on the **Grease Zerk ball**.



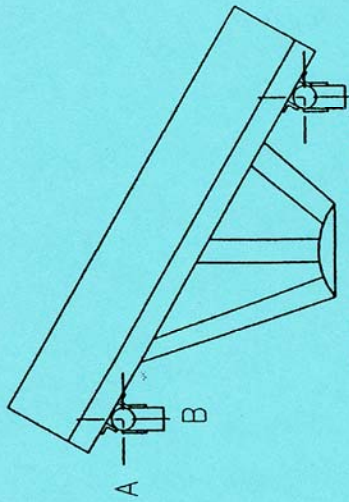
LEFT POSITION

(WHEELS MUST BE PLUMB IN BOTH DIRECTIONS) REFER TO "A" AND "B"



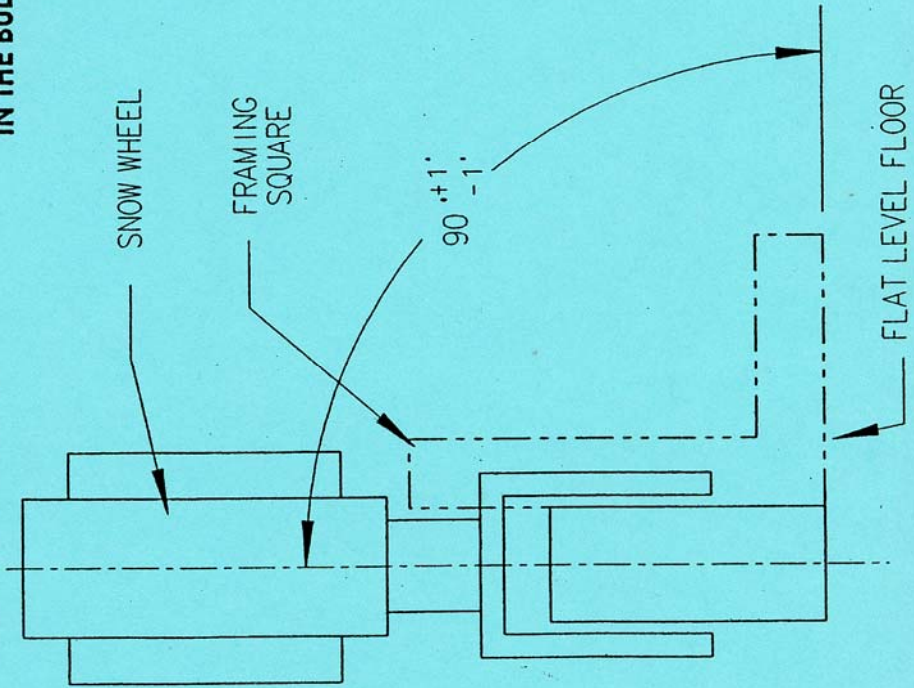
BULL DOZER POSITION

**CAUTION:**  
DO NOT ALIGN SNOW WHEEL IN THE BULL DOZER POSITION.



RIGHT POSITION

(WHEELS MUST BE PLUMB IN BOTH DIRECTIONS) REFER TO "A" AND "B"



- NOTE:**
1. PLOW MUST BE MOUNTED TO TRUCK TO ALIGN OR CHECK ALIGNMENT OF SWIVEL WHEELS.
  2. WHEEL MUST HAVE 14½" OF SET BACK FROM CENTERLINE, WHEELS MUST BE ABLE TO SWIVEL 360 DEGREES WITHOUT ANY INTERFERENCE.

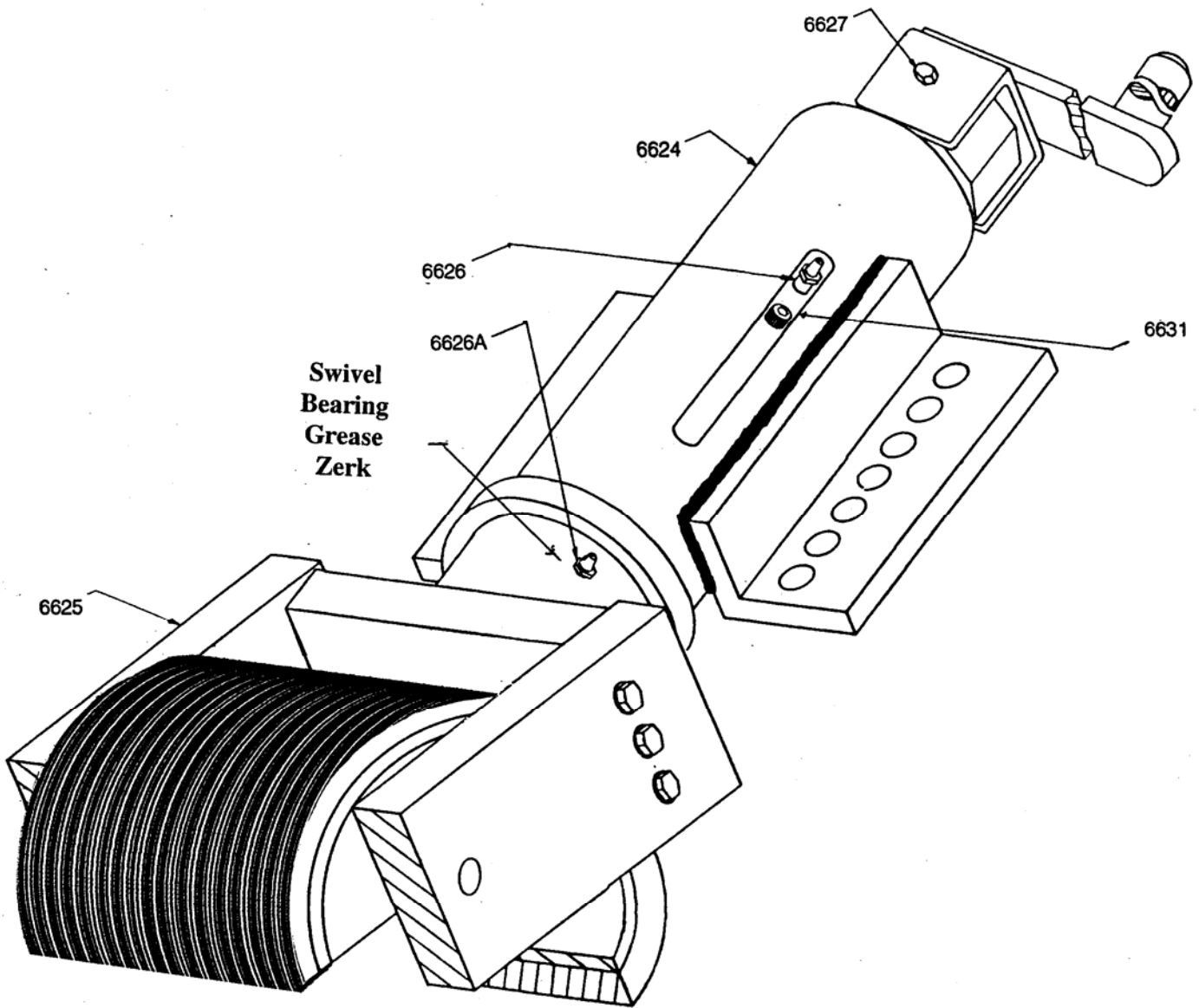
SNOW WHEEL SYSTEM

6600 SWIVEL WHEEL APP '1

DWG BY : TJB

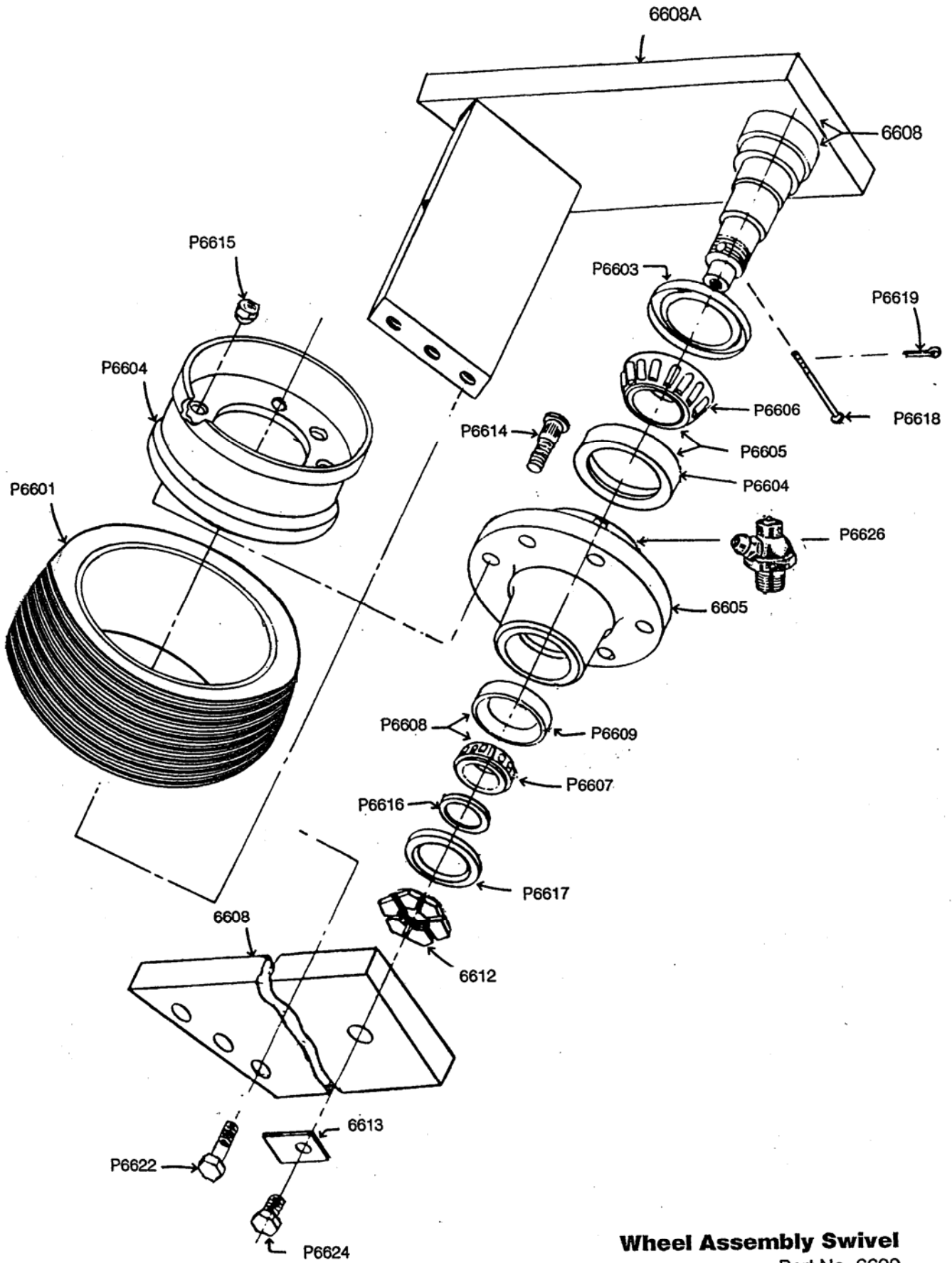
DATE : 04/07/02

SCALE : NONE

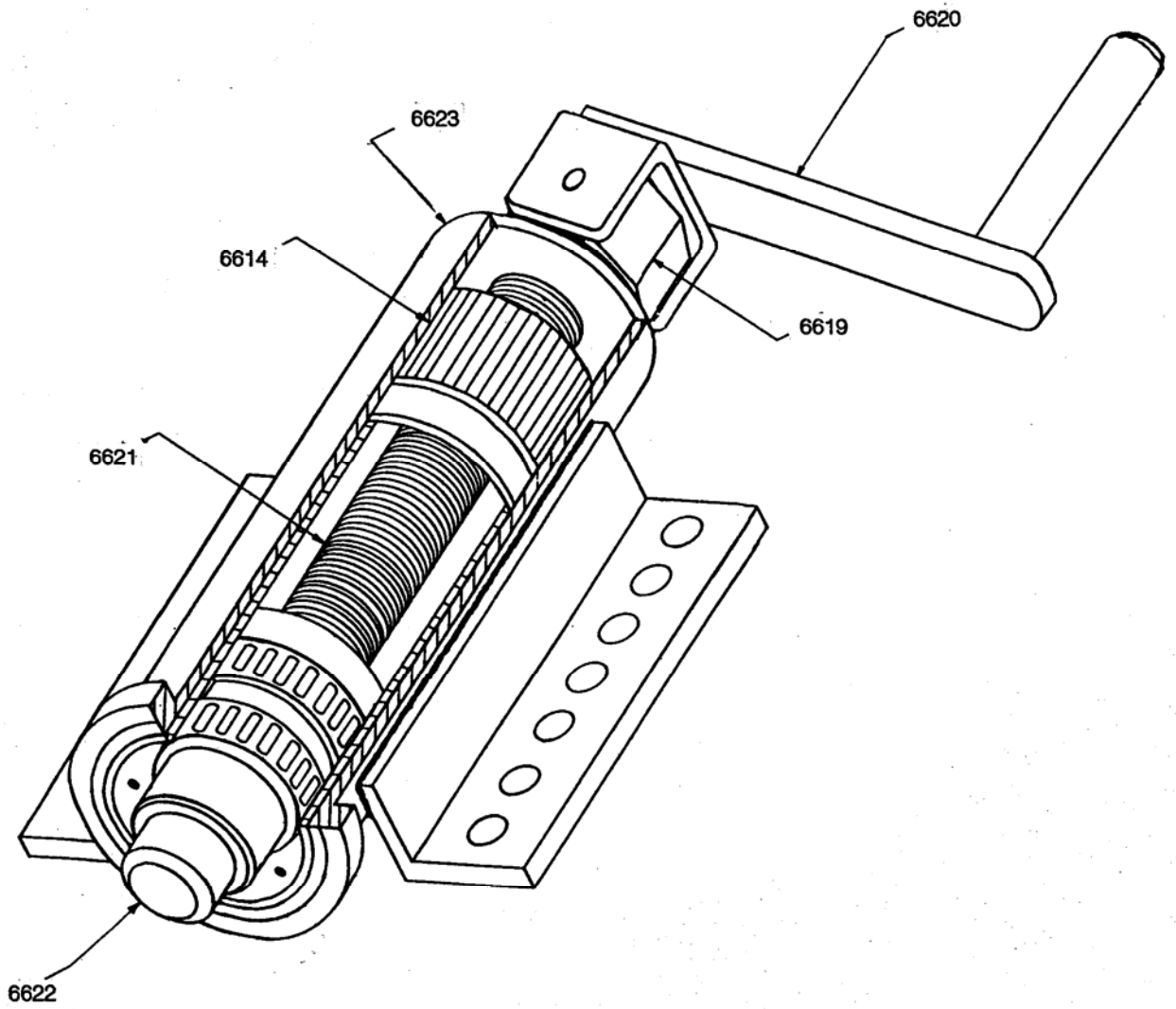


**Swivel Wheel With Adjuster**

Part No. 6650



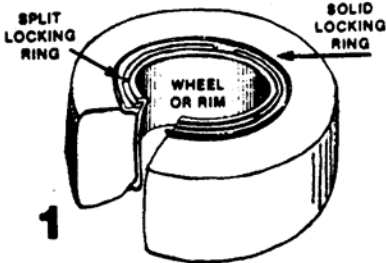
**Wheel Assembly Swivel**  
 Part No. 6609





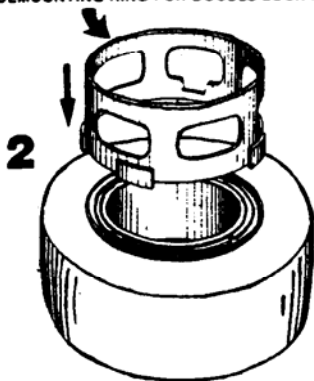
# Mounting/Demounting

## DEMOUNTING (double ring)

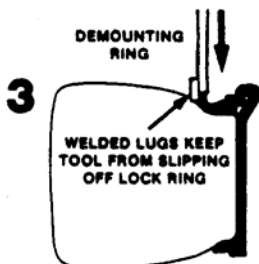


1 CUTAWAY VIEW OF DOUBLE RING MOUNTING

DEMOUNTING RING FOR DOUBLE LOCK RING



2



3 DETAIL SHOWING DEMOUNTING RING IN POSITION

LOOSENED LOCK RING SECTIONS REMOVABLE WITH BAR

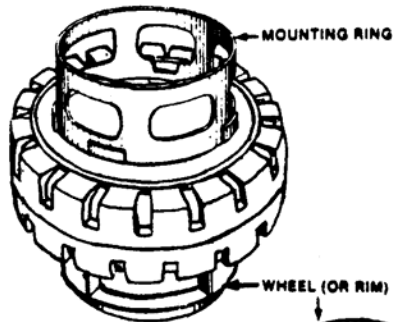


4

APPLY PRESSURE TO OUTER SOLID LOCKING RING. REMOVE INNER LOCKING RING SECTIONS. SOLID LOCKING RING IS NOW EASILY REMOVABLE.

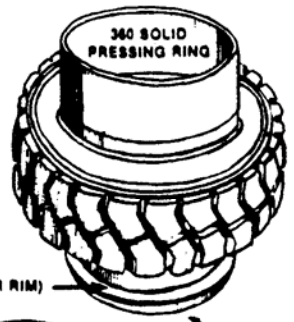
## MOUNTING (double ring)

STANDARD CHALLENGER



1

CHALLENGER 360



DETAIL NOTE: LUG IS WELDED AT BASE TO WHEEL OR RIM AND UP ONE SIDE OF FLANGE. LUGS SHOULD BE 1/2" THICK, AS LONG AS POSSIBLE WITHOUT INTERFERING WITH LOCK RING(S), AND AS HIGH AS THE FLANGE OF THE WHEEL OR RIM. FOR SIZE 825x15 AND LARGER USE 8 LUGS MINIMUM.

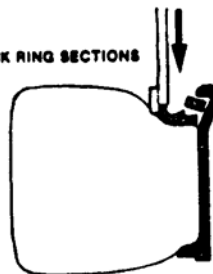


DETAIL NOTE: WELDED LUGS MUST NOT BE USED WITH "360" TIRES

2

INNER LOCK RING SECTIONS

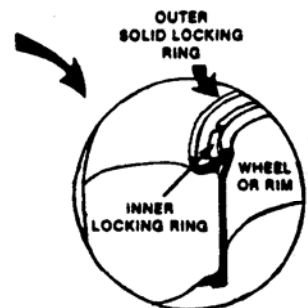
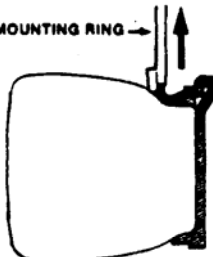
PRESS TIRE ONTO WHEEL (OR RIM); APPLY PRESSURE TO OUTER SOLID LOCKING RING; INSERT INNER LOCKING RING SECTIONS (see detail); RELEASE PRESSURE.



MOUNTING RING

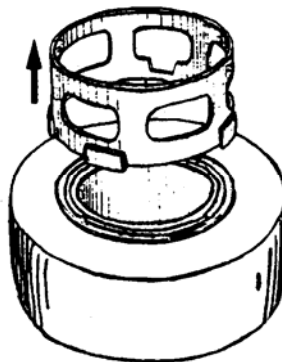
3

DETAIL SHOWING BOTH SECTIONED INNER RING AND SOLID OUTER RING IN POSITION

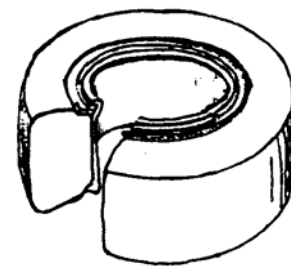


DETAIL NOTE: THE INNER LOCKING RING SHOULD BE CUT IN SECTIONS FOR EASE OF HANDLING

4



REMOVE MOUNTING RING



CUTAWAY VIEW OF DOUBLE RING MOUNTING



# SNOW-WHEEL SYSTEM

P.O. Box 528 • 212 Home Street • Fairmont, MN 56031-0528 • Fax & Ph. (507) 238-1980

• Parts List • Prices subject to change without notice

Part No.	Description
P6601	Snow Wheel Tire .....
P6603	Inner Seal C/R 22558 .....
P6604	Inner Bearing Cup 25520 .....
P6605	Inner Bearing Assembly .....
P6606	Inner Bearing Cone 25580 .....
P6607	Outer Bearing Cone LM 67048 .....
P6608	Outer Bearing Assembly .....
P6609	Outer Bearing Cup LM 67010 .....
P6614	Stud .....
P6615	Nut .....
P6616	Retaining Washer .....
P6617	Seal Outer C/R 19210 .....
P6618	Retaining Pin .....
P6619	Cotter Pin .....
P6620	Swivel Wheel Spindle Only .....
P6622	Bolt 1/2" x 2" Grade 5 .....
P6624	Bolt 5/8" x 3/4" Grade 5 .....
P6626	Hydraulic Shut-off grease fitting .....
6604	3 Piece - 6 Hole Rim .....
6605	Hub .....
6608	Spindle Support .....
6608A	Swivel Arm & Spindle .....
6609	Swivel Snow-Wheel Assembly without Adjuster .....
6612	Retaining Nut .....
6613	Retaining Clip .....
6614	Urethane Composite Spring .....
6619	1 1/2" L.H. Nut .....
6620	Crank Handle .....
6621	1 1/2" x 11" L.H. Screw .....
6622	3" Swivel Assembly Inside Tube .....
6623	Swivel Outer Tube .....
6624	Swivel Adjuster Complete .....
6625	Swivel Arm & Spindle with Adjuster Tube .....
6626	Grease Fitting (1/8" NPT) .....
6626A	Grease Fitting (Drive in style) .....
6627	3/8" x 3" Bolt Grade 5 .....
6629	Hub Complete .....
6631	7/16" x 1/2" Socket Hex Cap Screw .....
6650	Complete Wheel Assembly .....

## **Warranty:**

**Snow-Wheel Systems, Inc.** warrants its products for a period of one year from date of purchase.

The warranty provides that our product must perform satisfactorily or we will repair, replace or refund the purchase price at the option of the purchaser.

Any parts returned to **Snow-System, Inc.** shall be shipped prepaid.

The warranty is void if the product has been obviously abused or subjected to other than normal usage.

We reserve the right to make improvements without notice or obligation regarding models previously sold.



## **Snow-Wheel System, Inc.**

212 Home Street

P.O. Box 528

Fairmont, MN 56031 • Fax & Ph. (507) 238-1980