

# 1540

#### **Rear Mounted Blade**

Rev 03-07

Part No. 697P

## **PART'S MANUAL**



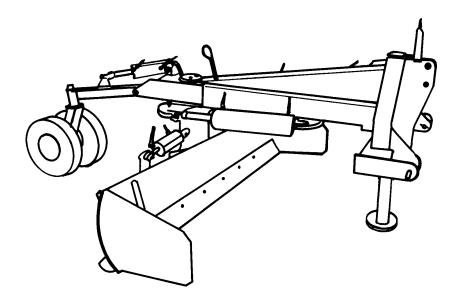
An Operator's Manual was shipped with the equipment in the Manual Canister. This Operator's Manual is an integral part of the safe operation of this machine and must be maintained with the unit at all times. READ, UNDERSTAND, and FOLLOW the Safety and Operation Instructions contained in this manual before operating the equipment. If the Operator's Manual is not with the equipment, contact your dealer or Servis-Rhino (800-446-5158) to obtain a Free copy before operating the equipment.

#### ATTENCIÓN!

LEA EL INSTRUCTIVO

Si No Lee Ingles, Pida Ayuda a Alguien Que Si Lo Lea Para Que le Traduzca las Medidas de Seguridad.





#### **RHINO**®

1020 S. Sangamon Ave. Gibson City, IL 60936 800-446-5158

Email: parts@servis-rhino.com



## TO THE OWNER/OPERATOR/DEALER

All implements with moving parts are potentially hazardous. There is no substitute for a cautious, safe-minded operator who recognizes the potential hazards and follows reasonable safety practices. The manufacturer has designed this implement to be used with all its safety equipment properly attached to minimize the chance of accidents.

**BEFOREYOUSTART!!** Read the safety messages on the implement and shown in your manual.

Observe the rules of safety and common sense!



FAILING TO FOLLOW SAFETY MESSAGES AND OPERATING INSTURCTIONS CAN CAUSE SERIOUS BODILY INJURY OR EVEN DEATH TO OPERATOR AND OTHERS IN THE AREA.



2. NO RIDERS, NO CHILDREN 3. USE SAFETY SHOES, HARD 4. BLOCK UP SECURELY **OPERATORS** 



HAT, SAFETY GLASSES, SEATBELTS, & ROPS

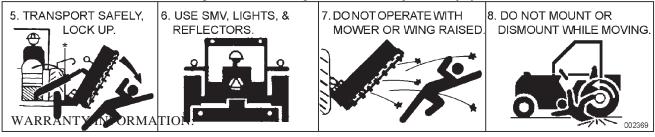


BEFORE WORKING UNDER



- 1. Study and understand Operator's Manuals, Safety Signs, and Instructional Decals for tractor & flail mower to prevent misuse, abuse, & accidents. Practice before operating mower in a confined area or near passersby.
- Learn how to stop engine suddenly in an emergency. Be alert for passersby and especially children.
- 2. Allow no children on or near implement or tractor. Allow no riders on tractor or implement. Falling off can cause serious injury or death from being runover by tractor or mower or contact with Flail Mower Blades.
- 3. Operate only with tractor having Roll-Over Protective Structure (ROPS) and with seatbelt fastened securely and snugly to prevent injury and possible death from falling off or tractor overturn. Personal Protective Equipment such as Hard Hat, Safety Glasses, Safety Shoes, and Ear Plugs are recommended.
- 4. Block up or support raised machine and all lifted components securely before putting hands or feet under or working underneath any lifted component to prevent crushing injury or death from sudden dropping or inadvertent operation of controls. Make certain that area is clear before lowering or folding.
- 5. Before transporting, put Lift Lever in detent or full-lift position. Install Transport Safety Devices securely on folding implements. Slow down when turning and on hillsides.
- Install \*\*Restrictor in folding circuit to slow down lowering and unfolding if action is faster than is desirable.
- 6. Make certain that SMV sign, Warning Lights, and Reflectors are clearly visible. Follow local traffic codes.
- 7. Never operate with Flail Mower or Folding Section raised if passersby, bystanders or traffic are in the area to reduce possibility of injury or death form objects thrown by Blades under Shields or implement structure.
- 8. Before dismounting, secure flail mower in transport position or lower to ground.
- Put tractor in park or set brake, disengage PTO, stop engine, remove key, and wait until noise of rotation has ceased to prevent entanglement in rotating parts which may cause injury or death.

Never mount or dismount a moving vehicle. Crushing from runover may cause injury or death.



Read and understand the complete Warranty Statement found in this Manual. Fill out the Warranty Registration Form in full and return it within 30 Days. Make certain the Serial Number of the Machine is recorded on the Warranty Card and on the Warranty Form that you retain. The use of "will-fit" parts will void your warranty and can cause catastrophic failure with possible injury or death.



#### PARTS ORDERING GUIDE

The following instructions are offered to help eliminate needless delay and error in processing purchase orders for the equipment in this section.

- 1. The Parts Section is prepared in logical sequence and grouping of parts that belong to the basic machine featured in this manual. Part Numbers and Descriptions are given to help locate the parts and quantities required.
- 2. The Purchase Order must include the name and address of the person or organization ordering the parts, who should be charged, and if possible, the serial number of the machine for which the parts are ordered.
- 3. The Purchase Order must clearly list the quantity of each part, the complete and correct part number (be sure to include all periods), and the basic name of the part.
- 4. The Manufacturer reserves the right to substitute parts where applicable.
- 5. Some parts are unlisted items which are special production items not normally stocked and are subject to special handling. Request a quotation for such parts before sending a Purchase Order.
- 6. The Manufacturer reserves the right to change prices without prior notice.

NOTE: Please refer to The Safety Section in the front of this Manual for the proper Part Number when ordering Replacement Safety Decals.



For maximum safety and to guarantee optimum product reliability, always use genuine Servis-Rhino Parts. The use of inferior replacement parts may cause premature or catastrophic failure which could result in serious injury or death. Direct any questions regarding parts to:



**RHINO®** 

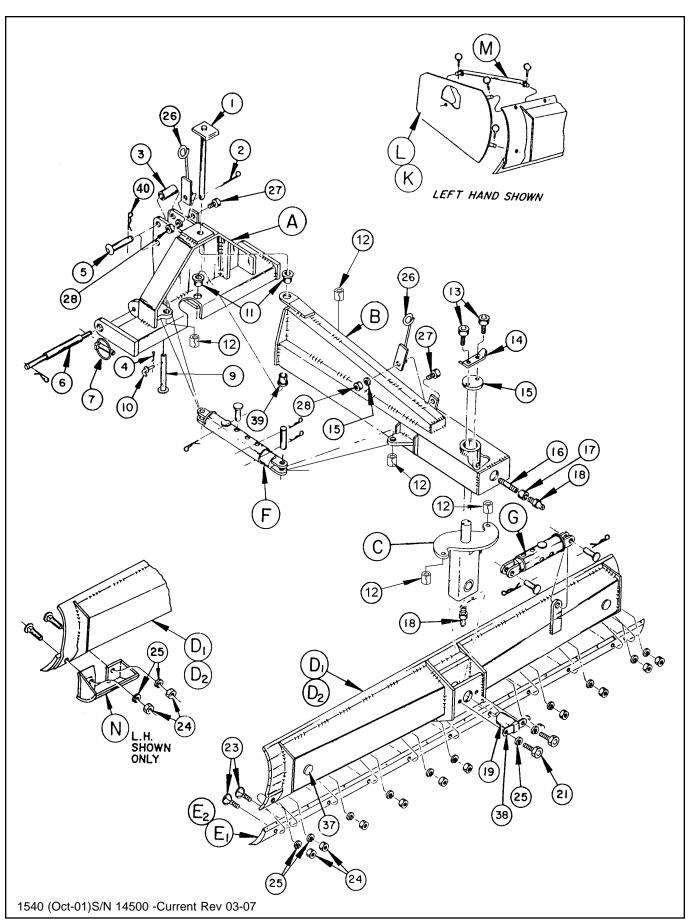
1020 S. Sangamon Ave. Gibson City, IL 60936 800-446-5158

**Email:** parts@servis-rhino.com

## **PART NAME INDEX**

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|--|
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#### **GENERAL ASSEMBLY Rev 03-07**

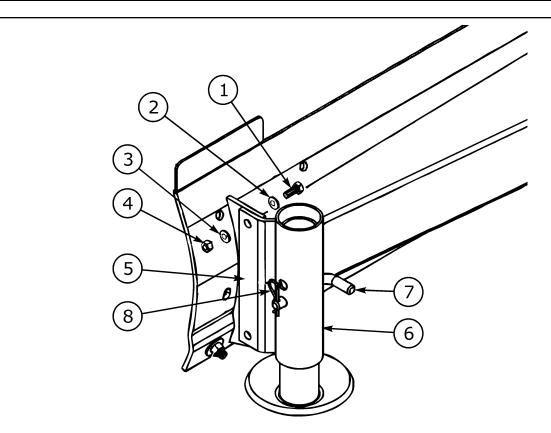


## **GENERAL ASSEMBLY Rev 03-07**

| ITEM | PART NO.   | QTY. | DESCRIPTION  |
|------|------------|------|--|
| Α    | 00775902   | 1    | A-FRAME  |
| В    | 00775901   | 1    | MAINFRAME  |
| С    | 00775900   | 1    | MOLDBOARD CARRIER  |
| D1   | 69104B1    | 1    | MOLDBOARD (8')   |
| D2   | 69137B1    | 1    | MOLDBOARD (10)   |
| E1   | 441111     | 1    | GRADER BLADE (8')  |
| E2   | 691372     | 1    | GRADER BLADE (10')   |
| F    | B69115A    | 2    | ADJUSTING LINK   |
| G    | B69116B    | 1    | ADJUSTING LINK   |
| K    | 0691360200 | 1    | END PLATE (RIGHT)  |
| L    | 0691360300 | 1    | END PLATE (LEFT)   |
| M    | 0691360100 | 2    | BRACE, END PLATE   |
|      | 0691360001 | 8    | LOCKING PIN  |
| N    | 0691380000 | 2    | SKID SHOE W/HARDWARE (16151 -BELOW)                        |
|      | 2A3101120  | 4    | PLOW BOLT (16151-BELOW)                                    |
| 1    | 69105A     | 1    | PIVOT PIN  |
| 2    | 164024     | 1    | COTTER PIN   |
| 3    | 69113      | 1    | TOP LINK BUSHING   |
| 4    | 2192       | 1    | HAIR PIN COTTER  |
| 5    | 69109      | 1    | TOP LINK PIN   |
| 6    | 69141      | 2    | WRIST PIN  |
| 7    | 2196       | 4    | PIN, LYNCH   |
| 9    | 0831140000 | 1    | SUPPORT STAND  |
| 10   | 69112      | 1    | LOCK PIN   |
| 11   | 6910114    | 2    | BUSHING  |
| 12   | 0692010009 | 5    | BUSHING (FOR USE WITH ALL 1" PIN CYLINDERS AND ADJ. LINKS) |
|      | 02969064   | 5    | BUSHING (FOR USE WITH ALL 1 1/4" PIN CYLINDERS)            |
| 13   | 02929200   | 2    | BOLT   |
| 14   | 69117      | 1    | RETAINER CLIP  |
| 15   | 69110      | 1    | KING PIN CAP   |
| 16   | 19C1220    | 1    | NIPPLE   |
| 17   | 8639-2     | 1    | COUPLING   |
| 18   | 4720       | 2    | GREASE FITTING   |
| 19   | 69106      | 1    | MOLDBOARD PIVOT PIN WELDMENT                               |
| 21   | 02675800   | 2    | BOLT   |
| 23   | 2A3101116  | 10*  | PLOW BOLT  |
| 24   | 00010400   | 10*  | NUT (16151 -BELOW)   |
| 25   | 00010300   | 12*  | LOCKWASHER (16151 -BELOW)                                  |
| 26   | 0691320000 | 2    | HYDRAULIC HOSE BRACKET ASSY                                |
| 27   | 02675800   | 2    | BOLT   |
| 28   | 00695100   | 2    | NUT, TOPLOCK   |
| 38   | 69111      | 1    | RETAINER   |
| 39   | 0831010008 | 1    | BUSHING LOWER MAINFRAME                                    |
| 40   | 0691360001 | 1    | PIN, KLICK 1/4 X 1-3/4                                     |

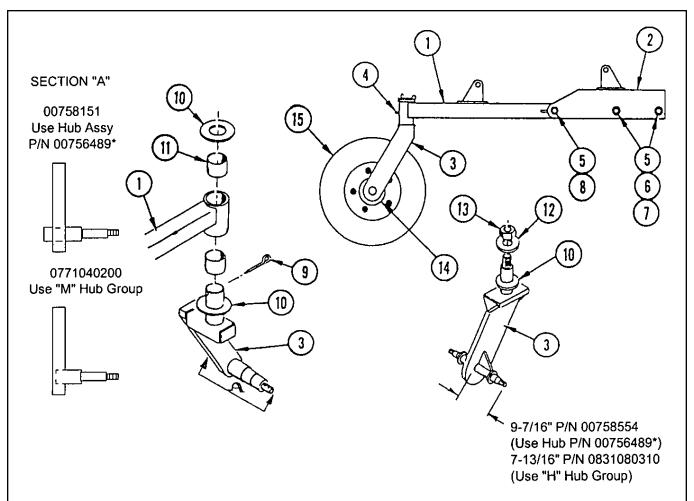
<sup>\*</sup> Add 2 for 10' Moldboard

### SKID SHOE ASSEMBLY S/N 16152-CURRENT Rev 03-07



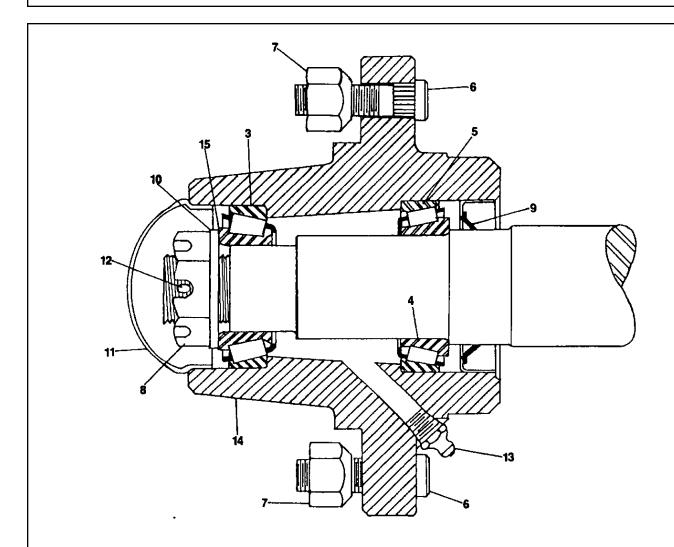
| PART NO. | QTY.   | DESCRIPTION  |
|----------|--|--|
|          |  |  |
| 02845500 | 4  | HEXB 5/8 NC 2 PL5  |
| 00001401 | 4  | WASHER   |
| 00010300 | 4  | LOCKWASHER 5/8   |
| 00010400 | 4  | NUT 5/8 NC HEX PL  |
| 00768246 | 2  | WELDMENT, SKID SHOE MOUNT  |
| 00768243 | 2  | WELDMENT, SKID SHOE  |
| 00768249 | 2  | PIN, ADJUSTING   |
| 37107B13 | 2  | CLIP-X HAIR PIN  |
|          | 02845500<br>00001401<br>00010300<br>00010400<br>00768246<br>00768243<br>00768249 | 02845500 4<br>00001401 4<br>00010300 4<br>00010400 4<br>00768246 2<br>00768243 2<br>00768249 2 |

#### **GAUGE WHEEL**



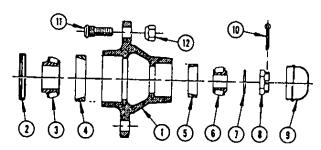
| ITEM | PART NO.   | QTY. | DESCRIPTION                   |
|------|------------|------|-------------------------------|
| 1    | 0831080200 | 1    | BEAM WELDMENT W/BUSHINGS      |
| 2    | 0691500100 | 1    | TAILWHEEL BRACKET             |
| 3    | 00758151   | 1    | CASTER WLDMT (SINGLE SPINDLE) |
|      | 00758554   | 1    | CASTER WLDMT (DOUBLE SPINDLE) |
| 4    | 4720       | 1    | GREASE FITTING                |
| 5    | 7A121080   | 3    | BOLT                          |
| 6    | 00003901   | 2    | LOCKWASHER                    |
| 7    | 5B12100    | 2    | NUT                           |
| 8    | 5GR12100   | 1    | LOCKNUT                       |
| 9    | 165024     | 1    | COTTER PIN (SINGLE SPINDLE)   |
| 10   | 301042     | 2    | THRUST WASHER                 |
| 11   | 54103A11   | 2    | PIVOT BUSHING                 |
| 12   | 59113      | 1    | WASHER                        |
| 13   | 5JRA2460   | 1    | NUT (DOUBLE SPINDLE)          |
| 14   | 00756489   | 1    | HUB ASSEMBLY                  |
| 15   | 00025200   | 1    | PUNCTURE PROOF TIRE & WHEEL   |

### WHEEL HUB ASSEMBLY



| I | ITEM | PART NO.   | QTY. | DESCRIPTION             |
|---|------|------------|------|-------------------------|
| I | 3    | 00756576   | 1    | BEARING CUP(OUTSIDE)    |
| l | 4    | 00750434   | 1    | BEARING CONE(INSIDE)    |
| l | 5    | 00756577   | 1    | BEARING CUP(INSIDE)     |
| l | 6    | 00756488   | 5    | STUD BOLT               |
| l | 7    | 00750614   | 5    | NUT                     |
| l | 8    | 00756490   | 1    | BEARING ADJUSTING NUT   |
| l | 9    | 00756491   | 1    | SEAL                    |
| l | 10   | 00756493   | 1    | WASHER                  |
| l | 11   | 00756492   | 1    | DUST CAP                |
| l | 12   | 00000400   | 1    | COTTER PIN              |
| l | 13   | 00003500   | 1    | GREASE FITTING          |
| l | 14   | 00756000   | 1    | WHEEL HUB               |
| l | 15   | 0371242102 | 1    | BEARING CONE(OUTSIDE)   |
| l | 16   | 00756001   | ref  | SPINDLE, SINGLE WHEEL   |
| l |      | 00756489   | ref  | HUB(W/CUPS & STUDS)     |
| ۱ |      | 00756528   | ref  | WHEEL HUB ACCESSORY KIT |
| ۱ | 17   | 00756002   | ref  | SPINDLE, DUAL WHEEL     |
| 1 |      |            |      |                         |

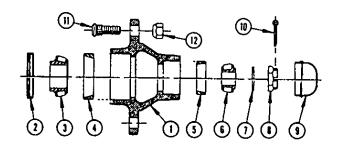
### **WHEEL HUB**



NOTE Used with Dual Gauge Wheel Only!

| ITEM                                 | PART NO.   | QTY.                            | DESCRIPTION  |
|--------------------------------------|--|---------------------------------|--|
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8 | 371247SA<br>371247F<br>371247E<br>371247D<br>W-33<br>371247C<br>371247H<br>371247J | 1<br>1<br>1<br>1<br>1<br>1<br>1 | HUB ASSEMBLY (INCL. 4, 5, 11, 12) GREASE SEAL BEARING CONE (INNER) BEARING CUP (INNER) BEARING CUP (OUTER) BEARING CONE (OUTER) SPINDLE WASHER SPINDLE NUT |
| 9<br>10                              | 1621/2010<br>371247G   | 1                               | COTTER PIN<br>HUB CAP  |
| 9<br>10<br>11                        | 1621/2010<br>371247G<br>PT115  | 1<br>1<br>5                     | HUB CAP<br>LUG BOLT  |
| 12                                   | PT116  | 5                               | LUGNUT   |

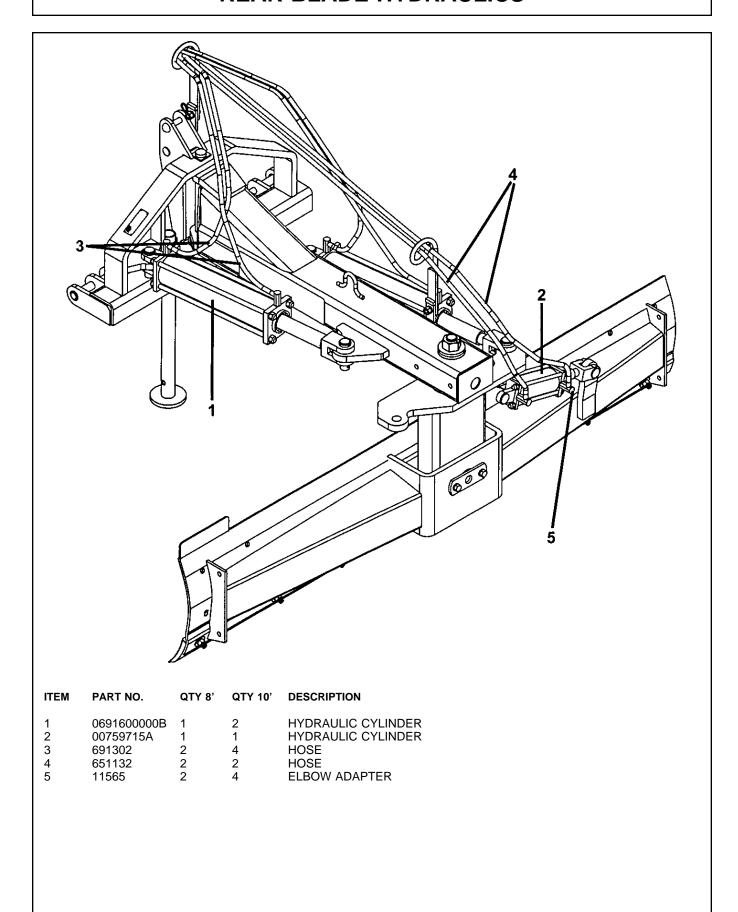
### **WHEEL HUB**



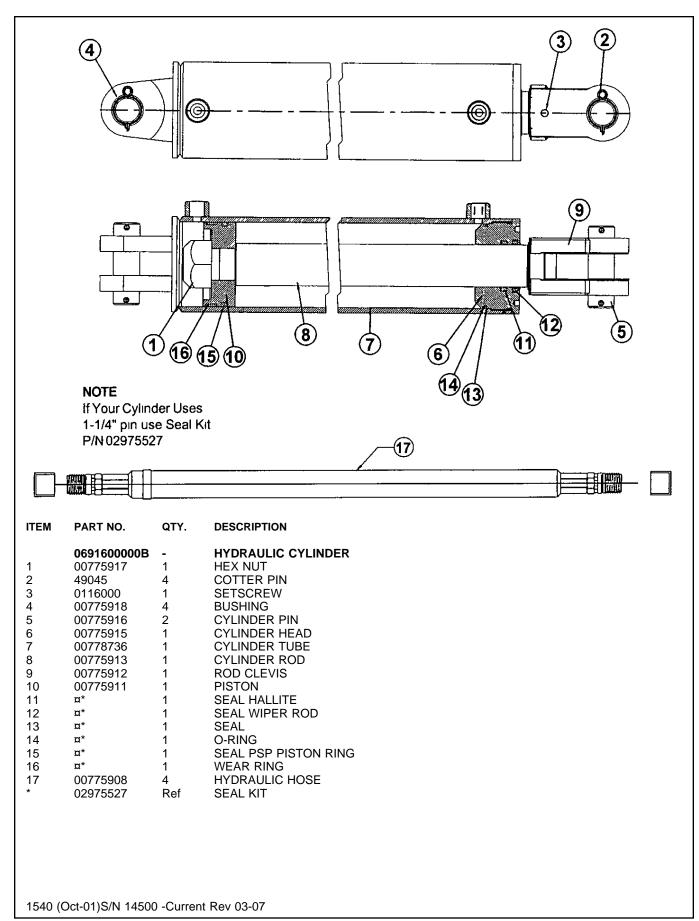
NOTE Used with Single Gauge Wheel Only!

| ITEM                                 | PART NO.  | QTY.                                      | DESCRIPTION   |
|--------------------------------------|---|---|---|
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8 | PT110SA<br>PT106<br>PT107<br>W-33<br>PT108<br>PT109<br>PT113A<br>PT114<br>1621/2010 | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | HUB ASSEMBLY (INCL. 4, 5, 11, 12) GREASE SEAL BEARING CONE (INNER) BEARING CUP (INNER) BEARING CUP (OUTER) BEARING CONE (OUTER) SPINDLE WASHER SPINDLE NUT COTTER PIN |
| 10                                   | PT112   | 1   | HUB CAP   |
| 11                                   | PT115   | 5   | LUG BOLT  |
| 12                                   | PT116   | 5   | LUGNUT  |

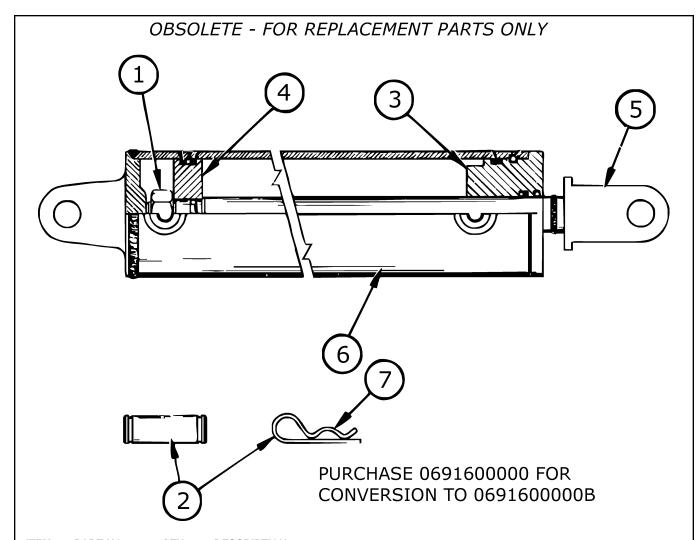
#### **REAR BLADE HYDRAULICS**



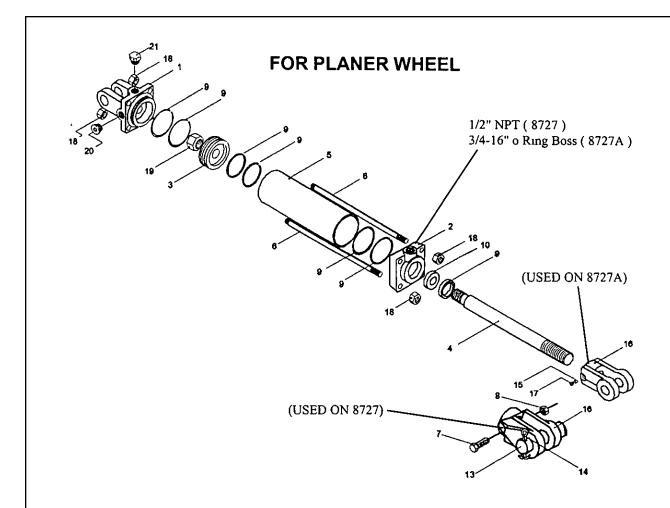
#### **HYDRAULIC CYLINDER Rev 03-05**



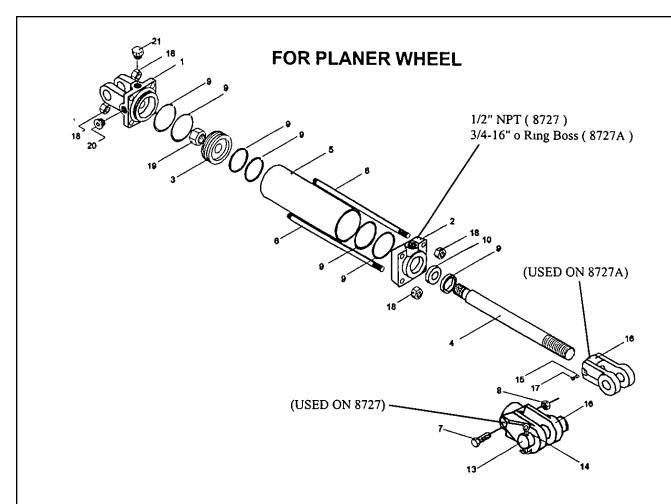
#### **CYLINDER - HYDRAULIC Rev 03-07**



| ITEM | PART NO.   | QTY. | DESCRIPTION                   |
|------|------------|------|-------------------------------|
|      | 0691600000 | -    | CYLINDER HYD 16 STX4BOREX2ROD |
| 1    | 0781070002 | 1    | LOCKNUT PISTON                |
| 2    | 0781070013 | 2    | PIN, CLEVIS                   |
| 3    | 0781070014 | 1    | HEAD                          |
| 4    | 0781070015 | 1    | PISTON                        |
| 5    | 0691600016 | 1    | ROD,PISTON W/CLEVIS           |
| 6    | 0691000100 | 1    | BARREL,HYD.CYLINDER           |
| 7    | 37107B13   | 2    | CLIP-X HAIR PIN               |
|      | 0781070200 | -    | SEAL KIT                      |
|      |            |      |                               |

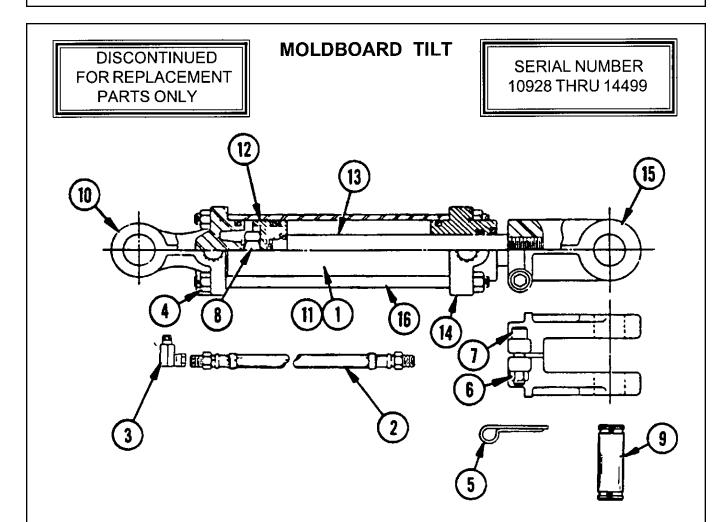


| ITEM | PART NO. | QTY.  | DESCRIPTION                           |
|------|----------|-------|---------------------------------------|
|      | 8727     |       | COMPLETE ASSEMBLY                     |
| 1    | 8755     | 1     | CAP                                   |
| 2    | 8757     | 1     | HEAD                                  |
| 3    | 00760671 | 1     | PISTON                                |
| 4    | 8753     | 1     | PISTON ROD                            |
| 5    | 8752     | 1     | TUBE                                  |
| 6    | 8756     | 4     | TIE ROD                               |
| 7    | 00023100 | 1     | BOLT                                  |
| 8    | 00013901 | 1     | HEX NUT                               |
| 9    | 8763     | 1     | SEAL KIT                              |
| 13   | 8354     | 2 ref | PIVOT PIN                             |
| 14   | 00606000 | 2 ref | COTTER PIN                            |
| 16   | 8754     | 1     | OUTER CLEVIS                          |
| 18   | 02031800 | 8     | TIE ROD NUT                           |
| 19   | 4675     | 1     | PISTON NUT                            |
| 21   | 7339     | 1     | BREATHER PLUG                         |
|      | 651132   | 2 ref | HYDRAULIC HOSE (NOT SHOWN)            |
|      | 94514    | 2 ref | SWIVEL FITTING 90 DEGREES (NOT SHOWN) |

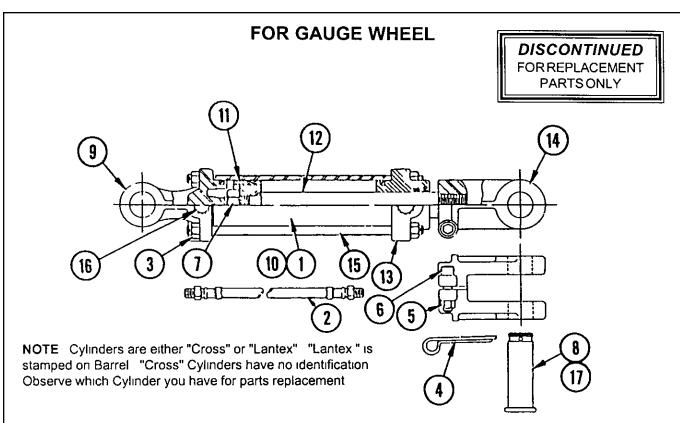


| ITEM   | PART NO.  | QTY.  | DESCRIPTION   |
|--|---|---|---|
| 1<br>2<br>3<br>4<br>5<br>6<br>15<br>16<br>17<br>18<br>19<br>20<br>21 | 8727A<br>00774729<br>00774734<br>00774730<br>00774753<br>3047111<br>3047112<br>3047117<br>1917140<br>00774740<br>33003H5C<br>5JRC12160<br>1917132<br>2417154<br>00774700<br>651132<br>94514<br>0652141311<br>8354<br>00606000<br>00774760 | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>2*<br>2*<br>2*<br>2* | COMPLETE ASSEMBLY CLEVIS CAP ROD CAP PISTON ROD TUBE TIE ROD NYLON THREAD PROTECTOR ROD CLEVIS SET SCREW TIE ROD NUT PISTON NUT PORT PLUG BREATHER SEALANT (NOT SHOWN) HOSE (NOT SHOWN) ELBOW (NOT SHOWN) PIN (NOT SHOWN) PIN (NOT SHOWN) COTTER PIN (NOT SHOWN) SEAL KIT FOR 8727A CYL |
|  |   |   |   |

#### **HYDRAULIC CYLINDER**

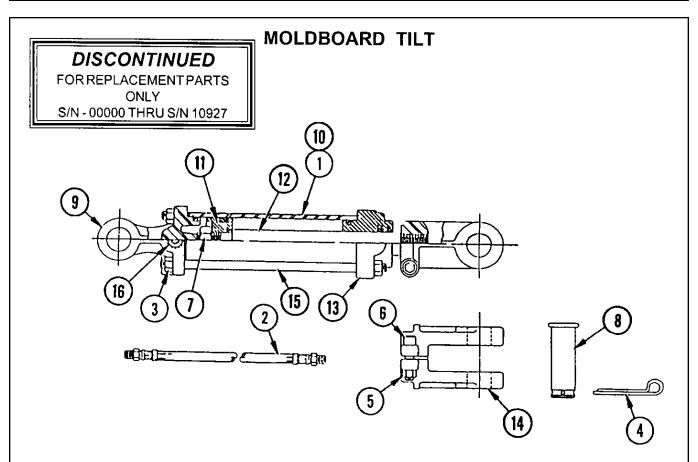


| ITEM   | PART NO.   | QTY.  | DESCRIPTION  |
|--|--|---|--|
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 | PART NO.  00759715A 2417158 2417157 00774733 00774747 00774741 x* x* x* x* x* x* 3047117 1917140 00774740 33005H5C 5JRC16140 1917132 | QTY.  - 1 1 1 1 1 2 1 1 2 1 1 1 1 1 1 1 1 1 | HYDRAULIC CYLINDER CLEVIS CAP ROD CAP PISTON ROD TUBE TIE ROD END CAP O-RING ROD, WIPER SEAL ROD, DUST SEAL PISTON SEAL PISTON SEAL PISTON WEAR RING END CAP BACKUP WASHERS NYLON THREAD PROTECTOR ROD CLEVIS SET SCREW TIE ROD NUT PISTON NUT PORT PLUG |
| 18<br>19<br>20                               | 1917132<br>11565<br>651132   | 1<br>2<br>2                                 | ELBOW, FITTING 90DEGREES HYDRAULIC HOSE  |
| 15   | 00774740   | 1   | SET SCREW  |
| _  |  | · -   |  |
|  |  | 2   |  |
| 10   |  | 1   | PISTON SEAL  |
|  |  | =   | •  |
| 7  | ¤*   | 2   | END CAP O-RING   |
|  |  | · -   | _  |
| 4  | 00774736   | 1   | ROD  |
| 2  | 2417158<br>2417157   | -   | CLEVIS CAP<br>ROD CAP  |
| ITEM   | PART NO.   | QTY.  | DESCRIPTION  |

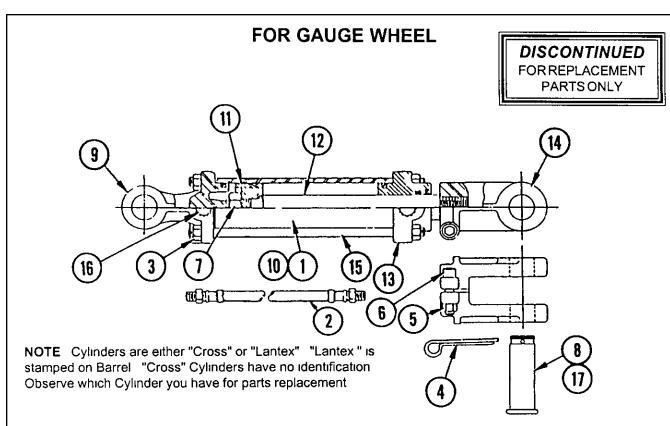


OLD STYLE - 3" BORE

| ITEM | PART NO. | QTY. | DESCRIPTION                     |
|------|----------|------|---------------------------------|
| 1    | 00759715 | 1    | HYDRAULIC CYLINDER W/CLEVIS PIN |
| 2    | 691302   | 1    | HYDRAULIC HOSE                  |
| 3    | 94514    | 1    | STREET ELBOW                    |
| 4    | 4376     | 8    | NUT                             |
| 5    | 7343     | 2    | COTTER PIN                      |
| 6    | 4378     | 1    | NUT                             |
| 7    | 4427     | 1    | BOLT                            |
| 8    | 4675     | 1    | PISTON NUT                      |
| 9    | 8354     | 2    | CLEVIS PIN                      |
| 10   | 8784     | 1    | CAP                             |
| 11   | 00759734 | 1    | TUBE                            |
| 12   | 00759733 | 1    | PISTON                          |
| 13   | 00759735 | 1    | PISTON ROD                      |
| 14   | 8786     | 1    | HEAD                            |
| 15   | 8754     | 1    | FEMALE CLEVIS                   |
| 16   | 00759736 | 4    | TIE ROD                         |
|      | 00759737 | 1    | SEAL KIT                        |

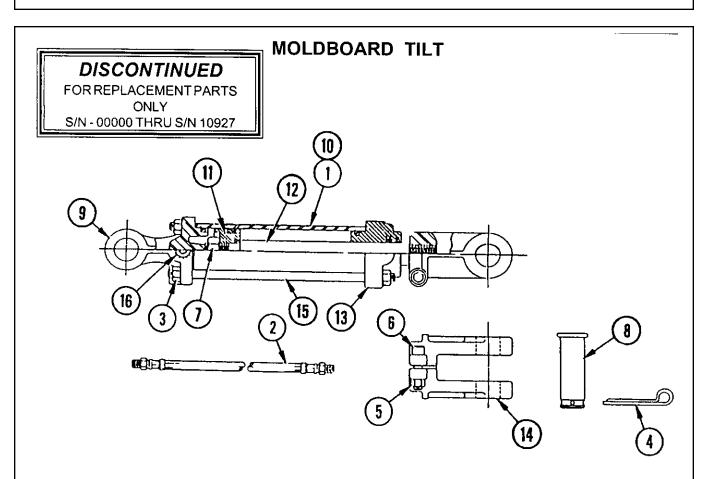


| ITEM | PART NO. | QTY. | DESCRIPTION                    |
|------|----------|------|--------------------------------|
| 1    | B69135A  | 1    | COMPLETE CYLINDER W/CLEVIS PIN |
| 2    | 651132   | 2    | HYDRAULIC HOSE                 |
| 3    | 00001200 | 8    | HEX NUT                        |
| 4    | 00000400 | 2    | COTTER PIN                     |
| 5    | 5B6160   | 1    | HEX NUT                        |
| 6    | 7E62414  | 1    | BOLT                           |
| 7    | 691351   | 1    | PISTON NUT                     |
| 8    | 8354     | 1    | CLEVIS PIN                     |
| 9    | 69135A2  | 1    | CLEVIS BASE                    |
| 10   | 6913010  | 1    | TUBE                           |
| 11   | 6913011  | 1    | PISTON                         |
| 12   | 6913012  | 1    | ROD                            |
|      | 691353   | 1    | ROD                            |
| 13   | 6913013  | 1    | HEAD                           |
|      | 69130A13 | 1    | HEAD                           |
| 14   | 691354   | 1    | CLEVIS, PISTON ROD             |
| 15   | 6913014  | 4    | TIE ROD                        |
|      | 69130A14 | 4    | TIE ROD                        |
| 16   | 00749508 | 1    | PIPE PLUG                      |
| 17   | 691356   | 1    | CLEVIS BASE PIN                |

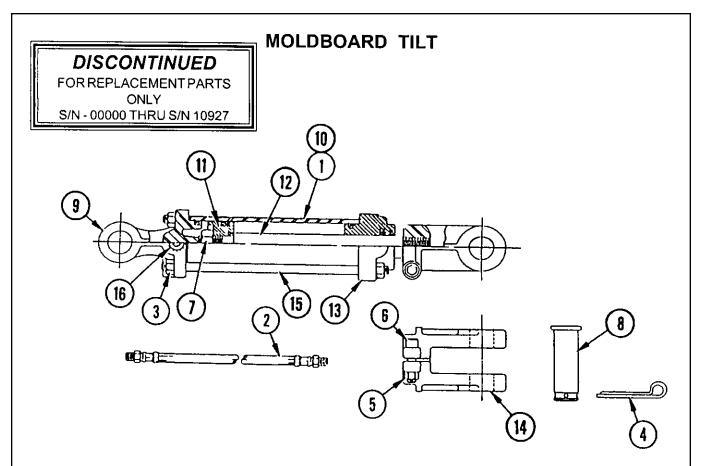


#### OLD STYLE - 3" BORE

| l | ITEM | PART NO.   | QTY. | DESCRIPTION                    |
|---|------|------------|------|--------------------------------|
| l | 1    | B69135A    | 1    | COMPLETE CYLINDER W/CLEVIS PIN |
| l | 2    | 651132     | 2    | HYDRAULIC HOSE                 |
| l | 3    | 00001200   | 8    | HEX NUT                        |
| l | 4    | 00000400   | 2    | COTTER PIN                     |
| l | 5    | 5B6240     | 1    | HEX NUT                        |
| l | 6    | 7E62414    | 1    | BOLT                           |
| l | 7    | 691351     | 1    | PISTON NUT                     |
| l | 8    | 8354       | 1    | CLEVIS PIN                     |
| l | 9    | 0691350014 | 1    | CLEVIS BASE                    |
| l | 10   | 0691350006 | 1    | TUBE                           |
| l | 11   | 0691350004 | 1    | PISTON                         |
| l | 12   | 0691350005 | 1    | ROD                            |
| l | 13   | 0691350010 | 1    | HEAD                           |
| ١ | 14   | 0651130022 | 1    | CLEVIS, PISTON ROD             |
| ١ | 15   | 0691350011 | 4    | TIE ROD                        |
| ı |      |            |      |                                |

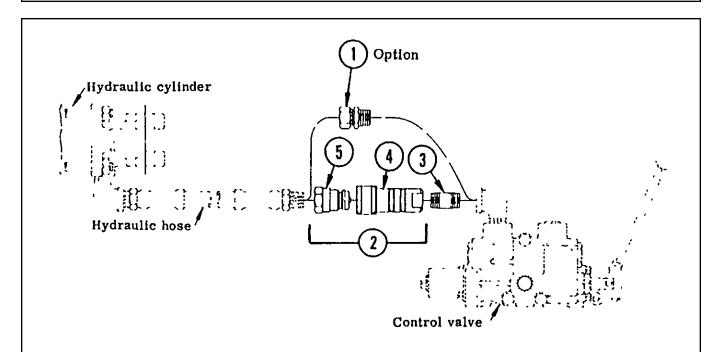


| I | ITEM | PART NO. | QTY. | DESCRIPTION                           |
|---|------|----------|------|---------------------------------------|
| I | 1    | B69131B1 | 1    | HYDRAULIC CYLINDER COMPLETE           |
| I | 2    | 651132   | 1    | HYDRAULIC HOSE                        |
| I | 3    | 00001200 | 8    | NUT                                   |
| I | 4    | 00000400 | 2    | COTTER PIN                            |
| I | 5    | 5B6160   | 1    | HEX NUT                               |
| I | 6    | 6511322  | 1    | BOLT                                  |
| I | 7    | 6511320  | 1    | PISTON NUT                            |
| I | 8    | 8354     | 2    | CLEVIS PIN                            |
| I | 9    | 65113A12 | 1    | BASE CLEVIS                           |
| I | 10   | 691314   | 1    | TUBE                                  |
| I | 11   | 691315   | 1    | PISTON                                |
| I | 12   | 69131B10 | 1    | PISTON ROD                            |
| I |      | 691316   | 1    | PISTON ROD                            |
| I | 13   | 65113B8  | 1    | HEAD                                  |
| I |      | 65130A4  | 1    | HEAD                                  |
| I | 14   | 691354   | 1    | PISTON ROD CLEVIS                     |
| I |      | 65130A12 | 1    | PISTON ROD CLEVIS                     |
| I | 15   | 691317   | 4    | TIE ROD                               |
| J | 16   | 00749508 | 1    | PIPE PLUG                             |
| J |      | 65113A30 | ref  | SEAL KIT (NOT SHOWN)                  |
| I |      | 691318   | ref  | SEAL KIT (NOT SHOWN)                  |
| ı |      |          |      | · · · · · · · · · · · · · · · · · · · |



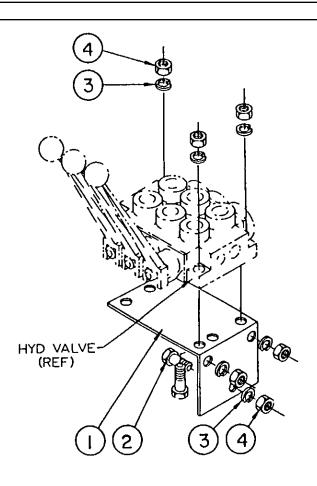
| ITEM | PART NO.   | QTY. | DESCRIPTION                 |
|------|------------|------|-----------------------------|
| 1    | B69131B1   | 1    | HYDRAULIC CYLINDER COMPLETE |
| 2    | 651132     | 1    | HYDRAULIC HOSE              |
| 3    | 00001200   | 8    | NUT                         |
| 4    | 00000400   | 2    | COTTER PIN                  |
| 5    | 5B6240     | 1    | HEX NUT                     |
| 6    | 7E62414    | 1    | BOLT                        |
| 7    | 691351     | 1    | PISTON NUT                  |
| 8    | 8354       | 2    | CLEVIS PIN                  |
| 9    | 0651130001 | 1    | BASE CLEVIS                 |
| 10   | 0691310002 | 1    | TUBE                        |
| 11   | 0651130005 | 1    | PISTON                      |
| 12   | 0691310001 | 1    | PISTON ROD                  |
| 13   | 0651130016 | 1    | HEAD                        |
| 14   | 0651130022 | 1    | PISTON ROD CLEVIS           |
| 15   | 691317     | 4    | TIE ROD                     |
|      | 0651130014 | ref  | SEAL KIT (NOT SHOWN)        |

## **HOSE CONNECTIONS - HYDRAULIC**



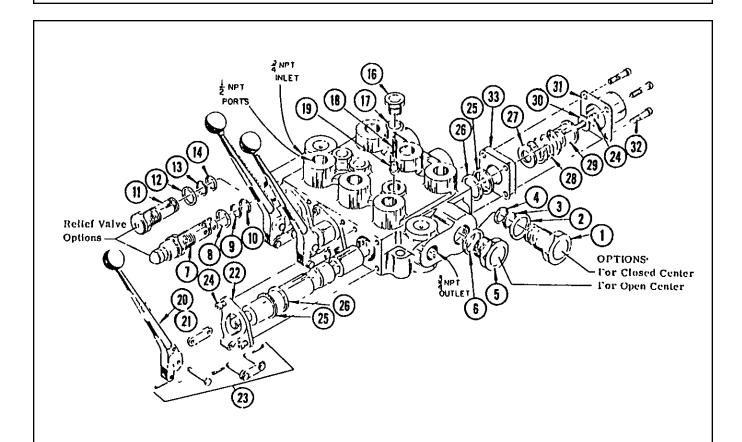
| ITEM | PART NO. | QTY. | DESCRIPTION            |
|------|----------|------|------------------------|
| 1    | 94514    | 1    | SWIVEL FITTING         |
| 2    | B65131   | 1    | QUICK COUPLER ASSEMBLY |
| 3    | 02963649 | 1    | NIPPLE                 |
| 4    | 651311   | 1    | COUPLER                |
| 5    | 651312   | 1    | COUPLER TIP - MALE     |

## **BRACKET ASSY - CONTROL VALVE**



| ITEM             | PART NO.                               | QTY.             | DESCRIPTION  |
|------------------|--|------------------|--|
| 1<br>2<br>3<br>4 | B651401<br>00016200<br>13500<br>5B5180 | 1<br>6<br>6<br>6 | BRACKET W/FASTENERS<br>BOLT<br>LOCKWASHER<br>HEX NUT |
|                  |  |                  |  |

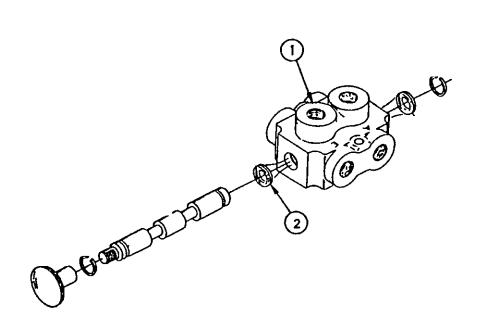
### **CONTROL VALVE ASSEMBLY**



### **CONTROL VALVE ASSEMBLY**

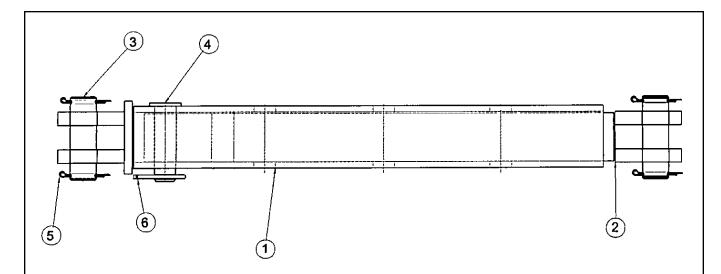
| ITEM | PART NO.   | QTY.        | DESCRIPTION                         |
|------|------------|-------------|-------------------------------------|
|      | 0691700000 | 1           | CONTROL VALVE (OPEN CTR)            |
|      | 0691710000 | 1           | CONTROL VALVE (CLOSED CTR)          |
| 1    | 6514042    | 1           | CLOSED CTR PLUG ASSY(INCL. 2,3, &4) |
| 2    | 6514041    | 1           | O-RING SEAL                         |
| 3    | 6514044    | 1           | BACK-UP WASHER                      |
| 4    | 6514045    | 1           | O-RING SEAL                         |
| 5    | 6514039    | 1           | CONV. PLUG ASSY.(FOR OPEN CTR)      |
| 6    | 6514041    | 1           | O-RING SEAL                         |
| 7    | 0691700001 | 1           | ADJ. RELIEF ASSEMBLY(INCL. 10-13)   |
| 8    | 6514034    | 1           | O-RING SEAL                         |
| 9    | 6514035    | 1           | BACK-UP WASHER                      |
| 10   | 6514036    | 1           | O-RING SEAL                         |
| 11   | 6514037    | 1           | NO-RELIEF ASSEMBLY(INCL. 12-14)     |
| 12   | 6514034    | 1           | O-RING SEAL                         |
| 13   | 6514035    | 1           | BACK-UP WASHER                      |
| 14   | 6514036    | 1           | O-RING SEAL                         |
| 16   | 6514029    | 3           | PLUG ONLY                           |
| 17   | 6514028    | 3           | O-RING SEAL                         |
| 18   | 6514027    | 3           | SPRING                              |
| 19   | 6514026    | 3           | LOAD CHECK POPPET                   |
| 20   | 65140A49   | 3           | HANDLE & BRACKET ASSY(INCL 21-23)   |
| 21   | 65140A47   | 3           | HANDLE                              |
| 22   | 65140A46   | 3           | HANDLE BRACKET                      |
| 23   | 65140A48   | 3           | PIN KIT                             |
| 24   | 7E4204     | 3           | BOLT                                |
| 25   | 6514012    | 6           | RETAINER PLATE                      |
| 26   | 6514013    | 6           | SPOOL SEAL                          |
| 27   | 6514018    | 3           | STOP WASHER                         |
| 28   | 6514019    | 3           | SPRING                              |
| 29   | 6514020    | 3<br>3<br>3 | STOP COLLAR                         |
| 30   | 6514021    |             | WASHER                              |
| 31   | 6514022    | 3           | END CAP                             |
| 32   | 00021400   | 12          | BOLT                                |
| 33   | 6514014    | 3           | SPACER                              |
|      |            |             |                                     |

### **VALVE SELECTOR**



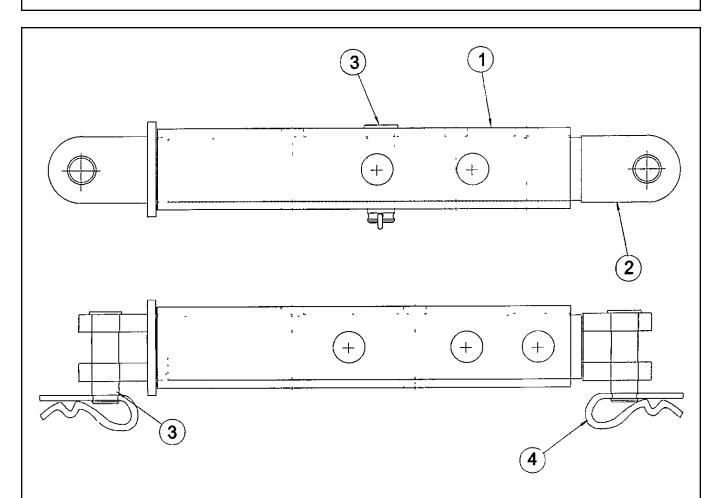
| ITEM | PART NO.   | QTY. | DESCRIPTION               |
|------|------------|------|---------------------------|
| 1    | 0781300000 | 1    | VALVE ASSEMBLY (COMPLETE) |
| 2    | 0781300005 | 2    | SEAL                      |

### **ADJUST LINK ASSEMBLY**



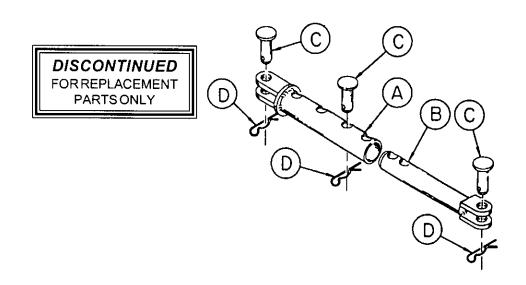
| PART NO. | QTY.   | DESCRIPTION  |
|----------|--|--|
| B69116B  | -  | ADJUST LINK ASSEMBLY   |
| 00776119 | 1  | WDMT. ADJUSTING LINK HOUSING   |
| 00776121 | 1  | WDMT. ADJUSTING LINK ROD   |
| 00775916 | 2  | PIN, CYLINDER  |
| 691154   | 1  | PIN, CLEVIS  |
| 00606000 | 4  | PIN, COTTER  |
| 37107B13 | 1  | CLIP, HAIR PIN   |
| 02969064 | 2  | BUSHING SPRING (NOT SHOWN)   |
|          | <b>B69116B</b> 00776119 00776121 00775916 691154 00606000 37107B13 | <b>B69116B</b> - 00776119 1 00776121 1 00775916 2 691154 1 00606000 4 37107B13 1 |

## **ADJUST LINK ASSEMBLY**



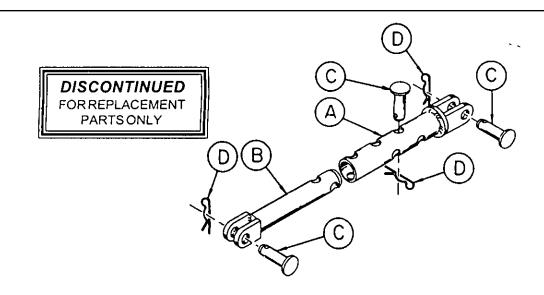
| ITEM | PART NO. | QTY. | DESCRIPTION            |
|------|----------|------|------------------------|
|      | B69116B¤ | -    | ADJUST LINK ASSEMBLY   |
| 1    | 69116B1  | 1    | ADJUSTING LINK HOUSING |
| 2    | 69116A2  | 1    | ADJUSTING LINK ROD     |
| 3    | 691154   | 3    | PIN                    |
| 4    | 37107B13 | 3    | CLIP PIN               |

### **ADJUSTING LINK - MANUAL**



| ITEM | PART NO. | QTY. | DESCRIPTION                       |
|------|----------|------|-----------------------------------|
| -    | B69115A  | -    | MAINFRAME SWING & MOLDBOARD PIVOT |
| Α    | 69115A1  | 1    | ADJUSTING LINK HOUSING WELDMENT   |
| В    | 69115A2  | 1    | ADJUSTING LINK ROD WELDMENT       |
| С    | 691154   | 3    | CLEVIS PIN                        |
| D    | 00000400 | 3    | COTTER PIN                        |
|      |          |      |                                   |

### **ADJUSTING LINK - MANUAL**



| ITEM | PART NO. | QTY. | DESCRIPTION                     |
|------|----------|------|---------------------------------|
|      | B69116B  | -    | MOLDBOARD TILT                  |
| Α    | 69116B1  | 1    | ADJUSTING LINK HOUSING WELDMENT |
| В    | 69116A2  | 1    | ADJUSTING LINK ROD WELDMENT     |
| С    | 691154   | 3    | CLEVIS PIN                      |
| D    | 00000400 | 3    | COTTER PIN                      |

#### **SAFETY DECAL SHEETS**



| ITEM | PART NO. | QTY. | DESCRIPTION                         |
|------|----------|------|-------------------------------------|
| 1    | 00776261 | 1    | SHEET,1540 BLADE DECAL              |
| 2    | 00776481 | 1    | SHEET,MANUALCANISTER DECAL          |
| 3    | 1458392  | 1    | DECAL, RED REFLECTOR (NOT SHOWN)    |
| 4    | 1458393  | 1    | DECAL, YELLOW REFLECTOR (NOT SHOWN) |

## SERVIS-RHINO LIMITED WARRANTY

#### 1. LIMITED WARRANTIES

- 1.01. Servis-Rhino warrants for one year from the purchase date to the original non-commercial, governmental, or municipal purchaser ("Purchaser") and warrants for six months to the original commercial or industrial purchaser ("Purchaser") that the goods purchased are free from defects in material or workmanship.
- 1.02. Manufacturer will replace for the Purchaser any part or parts found, upon examination at one of its factories, to be defective under normal use and service due to defects in material or workmanship.
- 1.03. This limited warranty does not apply to any part of the goods which has been subjected to improper or abnormal use, negligence, alteration, modification, or accident, damaged due to lack of maintenance or use of wrong fuel, oil, or lubricants, or which has served its normal life. This limited warranty does not apply to any part of any internal combustion engine, or expendable items such as blades, shields, guards, or pneumatic tires except as specifically found in your Operator's Manual.
- 1.04. Except as provided herein, no employee, agent, Dealer, or other person is authorized to give any warranties of any nature on behalf of Manufacturer.

#### 2. REMEDIES AND PROCEDURES.

- 2.01. This limited warranty is not effective unless the Purchaser returns the Registration and Warranty Form to Manufacturer within 30 days of purchase.
- 2.02. Purchaser claims must be made in writing to the Authorized Dealer ("Dealer") from whom Purchaser purchased the goods or an approved Authorized Dealer ("Dealer") within 30 days after Purchaser learns of the facts on which the claim is based.
- 2.03. Purchaser is responsible for returning the goods in question to the Dealer.
- 2.04. If after examining the goods and/or parts in question, Manufacturer finds them to be defective under normal use and service due to defects in material or workmanship, Manufacturer will:
  - (a) Repair or replace the defective goods or part(s) or
  - (b) Reimburse Purchaser for the cost of the part(s) and reasonable labor charges (as determined by Manufacturer) if Purchaser paid for the repair and/or replacement prior to the final determination of applicability of the warranty by Manufacturer.

The choice of remedy shall belong to Manufacturer.

2.05. Purchaser is responsible for any labor charges exceeding a reasonable amount as determined by Manufacturer and for returning the goods to the Dealer, whether or not the claim is approved. Purchaser is responsible for the transportation cost for the goods or part(s) from the Dealer to the designated factory.

#### 3. LIMITATION OF LIABILITY.

3.01. MANUFACTURER DISCLAIMS ANY EXPRESS (EXCEPT AS SET FORTH HEREIN) AND IMPLIED WARRANTIES WITH RESPECT TO THE GOODS INCLUDING, BUT NOT LIMITED TO, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

- 3.02. MANUFACTURER MAKES NO WARRANTY AS TO THE DESIGN, CAPABILITY, CAPACITY, OR SUITABILITY FOR USE OF THE GOODS.
- 3.03. EXCEPT AS PROVIDED HEREIN, MANUFACTURER SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO PURCHASER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS, OR DAMAGE CAUSED OR ALLEGED TO BE CAUSED DIRECTLY OR INDIRECTLY BY THE GOODS INCLUDING, BUT NOT LIMITED TO, ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES RESULTING FROM

THE USE OR OPERATION OF THE GOODS OR ANY BREACH OF THIS WARRANTY. NOT WITHSTANDING THE ABOVE LIMITATIONS AND WARRANTIES, MANUFACTURER'S LIABILITY HEREUNDER FOR DAMAGES INCURRED BY PURCHASER OR OTHERS SHALL NOT EXCEED THE PRICE OF THE GOODS.

3.04.NO ACTION ARISING OUT OF ANY CLAIMED BREACH OF THIS WARRANTY OR TRANSACTIONS UNDER THIS WARRANTY MAY BE BROUGHT MORE THAN TWO (2) YEARS AFTER THE CAUSE OF ACTION HAS OCCURRED.

#### 4. MISCELLANEOUS.

- 4.01. Proper Venue for any lawsuits arising from or related to this limited warranty shall be only in Guadalupe County,
- 4.02. Manufacturer may waive compliance with any of the terms of this limited warranty, but no waiver of any terms shall be deemed to be a waiver of any other term.
- 4.03.If any provision of this limited warranty shall violate any applicable law and is held to be unenforceable, then the invalidity of such provision shall not invalidate any other provisions herein.
- 4.04.Applicable law may provide rights and benefits to purchaser in addition to those provided herein.

#### KEEP FOR YOUR RECORDS

ATTENTION: Purchaser should fill in the blanks below for his reference when buying repair parts and/or for proper machine identification when applying for warranty.

| Servis-Rhino Implement Model | Serial Number |
|------------------------------|---------------|
| Date Purchased               | _ Dealer      |

ATTENTION: READ YOUR OPERATOR'S MANUAL

RHINO®
1020 S. Sangamon Ave.
Gibson City, IL 60936
800-446-5158
Email: parts@servis-rhino.com





## TO THE OWNER/OPERATOR/DEALER

To keep your implement running efficiently and safely, read your manual thoroughly and follow these directions and the Safety Messages in this Manual. The Table of Contents clearly identifies each section where you can easily find the information you need.

The OCCUPATIONAL SAFETY AND HEALTH ACT (1928.51 Subpart C) makes these minimum safety requirements of tractor operators:

#### REQUIRED OF THE OWNER:

- 1. Provide a Roll-Over-Protective Structure that meets the requirements of this Standard; and
- 2. Provide Seatbelts that meet the requirements of this paragraph of this Standard and SAE J4C; and
- 3. Ensure that each employee uses such Seatbelt while the tractor is moving; and
- 4. Ensure that each employee tightens the Seatbelt sufficiently to confine the employee to the protected area provided by the ROPS.

#### REQUIRED OF THE OPERATOR

- 1. Securely fasten seatbelt if the tractor has a ROPS.
- 2. Where possible, avoid operating the tractor near ditches, embankments, and holes.
- 3. Reduce speed when turning, crossing slopes, and on rough, slick, or muddy surfaces.
- 4. Stay off slopes too steep for safe operation.
- 5. Watch where you are going especially at row ends, on roads, and around trees.
- 6. Do not permit others to ride.
- 7. Operate the tractor smoothly no jerky turns, starts, or stops.
- 8. Hitch only to the drawbar and hitch points recommended by the tractor manufacturer.
- 9. When the tractor is stopped, set brakes securely and use park lock, if available.



Equip tractors with rollover protection (ROPS) and keep all machinery guards in place...

Please work, drive, play and live each day with care and concern for your safety and that of your family and fellow citizens.

