

# Ashland

## EARTHMOVERS



# I-155-TS

## PARTS MANUAL

ver 5-06



Ashland Industries Inc.  
1115 Rail Drive  
P.O. Box 717  
Ashland, WI. 54806  
877-634-4622 Toll Free - phone  
715-682-4622 phone  
715-682-9717 fax  
[www.ashlandind.com](http://www.ashlandind.com)

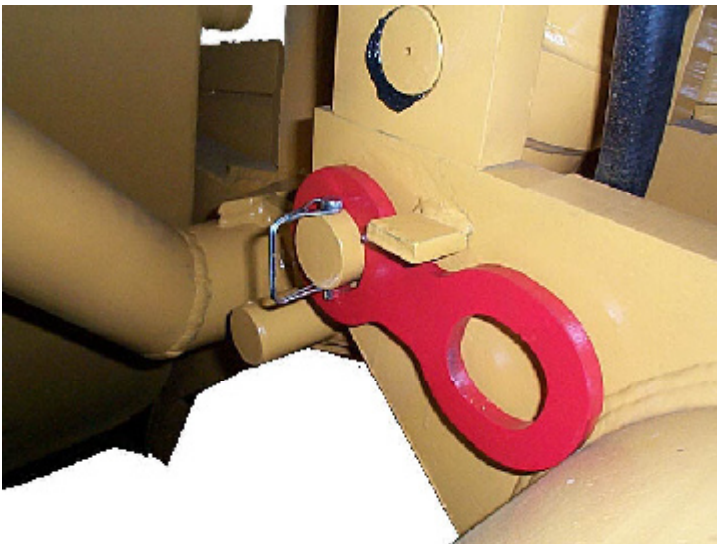


# IMPORTANT



Please locate red Transport Links and remove prior to operation. Retract Lift Cylinder Circuit, Remove Safety Snap Pin, Remove link and replace into storage position as shown in figure

2. Reinstall Safety Snap Pins.





## **HOW TO ORDER PARTS:**

### **IMPORTANT**

Parts must be ordered through your local authorized ASHLAND dealer.

Be sure to state MODEL and SERIAL NUMBER of your machine, PART NUMBER, DESCRIPTION and QUANTITY needed.

Unless this is done, we cannot provide prompt service or assure shipment of the correct parts.



Ashland Industries weldable replacement parts are available to rebuild, modify or update your scraper to current factory specifications.

## **INDEX**

|      |       |   |
|------|-------|---|
| Page | 4.    | Safety Guidelines   |
| Page | 5.    | Operators and Maintenance Instructions                                    |
| Page | 6.    | Transport Lock-up Links   |
| Page | 7.    | Complete Yoke Type Hitch  |
| Page | 8-10. | Illustration and Parts List - Swivel Hitch Assembly                       |
| Page | 11.   | Illustration and Parts List - Apron Assembly                              |
| Page | 12.   | Illustration and Parts List - Front End Assembly to S/N 20411             |
| Page | 13.   | Illustration and Parts List - Front End Assembly from S/N 20412           |
| Page | 14-15 | Illustration and Parts List - Bowl and Frame                              |
| Page | 16.   | Illustration and Parts List - Push Off Gate Assembly                      |
| Page | 17.   | Illustration and Parts List - Rear Wheel and Hub Assembly to S/N 20495    |
| Page | 18.   | Illustration and Parts List - Rear Wheel and Hub Assembly from S/N 20496  |
| Page | 19-21 | Illustration and Parts List - Apron Cylinder 4" x 13"                     |
| Page | 22.   | Illustration and Parts List - Lift Cylinder 5" X 20"                      |
| Page | 23-24 | Illustration and Parts List - Push Off Cylinder 5" x 60"                  |
| Page | 25.   | Illustration and Parts List, Nitrogen / Hyd. Accumulator                  |
| Page | 26.   | Illustration and Parts List, Decals                                       |
| Page | 27.   | Illus. - Hydraulic Plumbing, Front Unit (Dual Hyd.), Front Section        |
| Page | 28.   | Illus. - Hydraulic Plumbing, Front Unit, Rear Section to SN 20495         |
| Page | 29.   | Illus. - Hydraulic Plumbing, Front Unit, Rear Section from SN 20496       |
| Page | 30.   | Illustration - Hydraulic Plumbing, Rear Unit to SN 20495                  |
| Page | 31.   | Illustration - Hydraulic Plumbing, Rear Unit from SN 20496                |
| Page | 32.   | Parts List - Hydraulic Plumbing, Rear Unit                                |
| Page | 33.   | Illustration - Hydraulic Plumbing, Hoses, Front Unit to SN 20495          |
| Page | 34.   | Illustration - Hydraulic Plumbing, Hoses, Front Unit from SN 20496        |
| Page | 35.   | Illustration - Hydraulic Plumbing, Hoses, Front Unit to SN 20495          |
| Page | 36.   | Illustration - Hydraulic Plumbing, Hoses, Front Unit from SN 20496        |
| Page | 37.   | Parts List - Hydraulic Plumbing, Hoses                                    |
| Page | 38-43 | Identification, Illustration, Parts List and Adjustment - Hydraulic Valve |
| Page | 44-48 | Service Manual Appendix   |
| Page | 49-50 | Troubleshooting   |
| Page | 51.   | Warranty Statement  |



## SAFETY SIGNAL WORDS

Note the use of the signal words DANGER, WARNING and CAUTION with the safety messages. The appropriate signal word for each has been selected using the following guidelines:

**DANGER:** Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded.

**WARNING:** Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

**CAUTION:** Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.



## GENERAL SAFETY GUIDELINES

Safety of the operator is one of the main concerns in designing and developing a new piece of equipment. Designers and manufacturers build in as many safety features as possible. However, every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury, study the following precautions and insist those working with you, or for you, follow them.

Replace any CAUTION, WARNING, DANGER or instruction safety decal that is not readable or is missing. Location of such decals is indicated in this booklet.

Do not attempt to operate this equipment under the influence of drugs or alcohol.

Review the safety instructions with all users annually.

This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible adult familiar with farm machinery and trained in this equipment's operations. **Do not allow persons to operate or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works.**

To prevent injury or death, use a tractor equipped with a Roll Over Protective System (ROPS). Do not paint over, remove or deface any safety signs or warning decals on your equipment. Observe all safety signs and practice the instructions on them.

Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question - **DON'T TRY IT.**

# **OPERATORS AND MAINTENANCE INSTRUCTIONS**

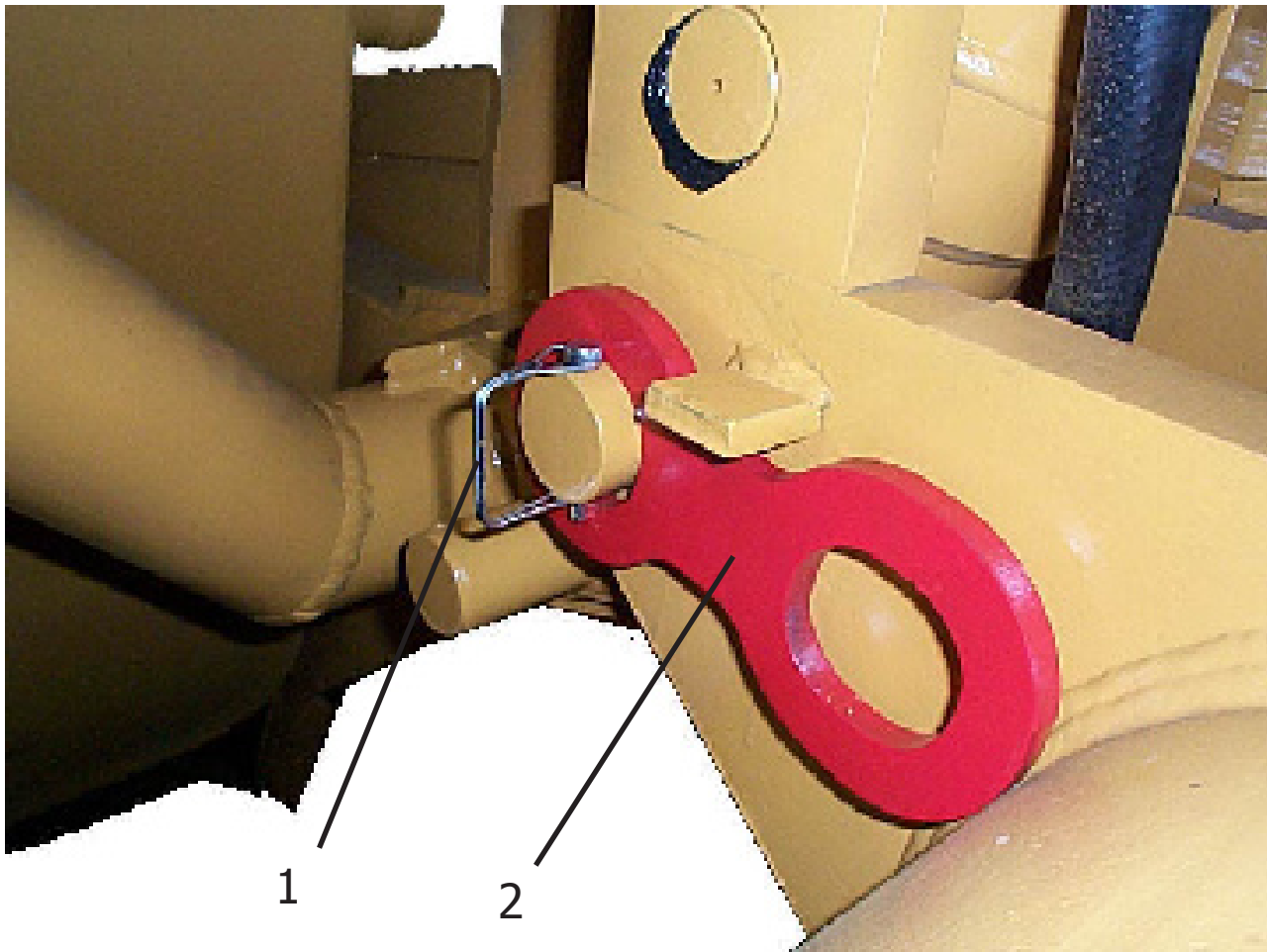
This scraper is a durable piece of equipment and with proper care will yield many years of trouble free operation. The scraper requires a power source with TWO 4 way (double acting) hydraulic control valves.

The scraper should be greased at all points where grease fittings are provided. Connect hydraulic hoses to the tractor and retract lift cylinders to **REMOVE TRANSPORT LOCK PINS** (point A), then extend and retract all cylinders several times to force out any air from the hydraulic cylinders and lines. Check the oil levels in the tractor hydraulic system and add to maintain the proper level. Care should be used when adding oil or when disconnecting any oil line to keep all dirt out of the oil as dirt is a major factor in the failure of hydraulic components.

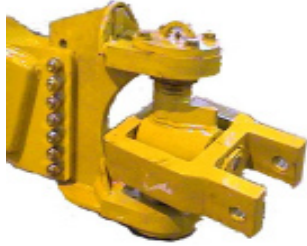
When the scraper is placed into operation, the operator will have to "feel out" the amount of depth of cut to obtain maximum loading efficiency. This is usually accomplished by taking a lesser and more uniform cut; however, some soil conditions such as loose sand may require a "pumping action" obtained by taking successive deep cuts and lifting out of cut as the tractor begins to lose power or traction.

1. After 10 hours work, all bolts should be checked and tightened if necessary.
2. Every 10 hours all grease fittings should be lubricated.
3. After 50 hours work, all bolts should be rechecked and tightened if necessary. Check wheel bearings and adjust if necessary.
4. After 300 hours work, clean and repack wheel bearings and replace, if necessary, cutting edges, worn pins, etc.
5. Tighten all wheel bolts after first two hours use. Check daily for two weeks. Keep torqued to 750 ft. lbs..
6. Maintain tire pressure at 45 to 50 psi.

**Transport Lock Links  
I-155 TS  
Serial Number 20521 and above**



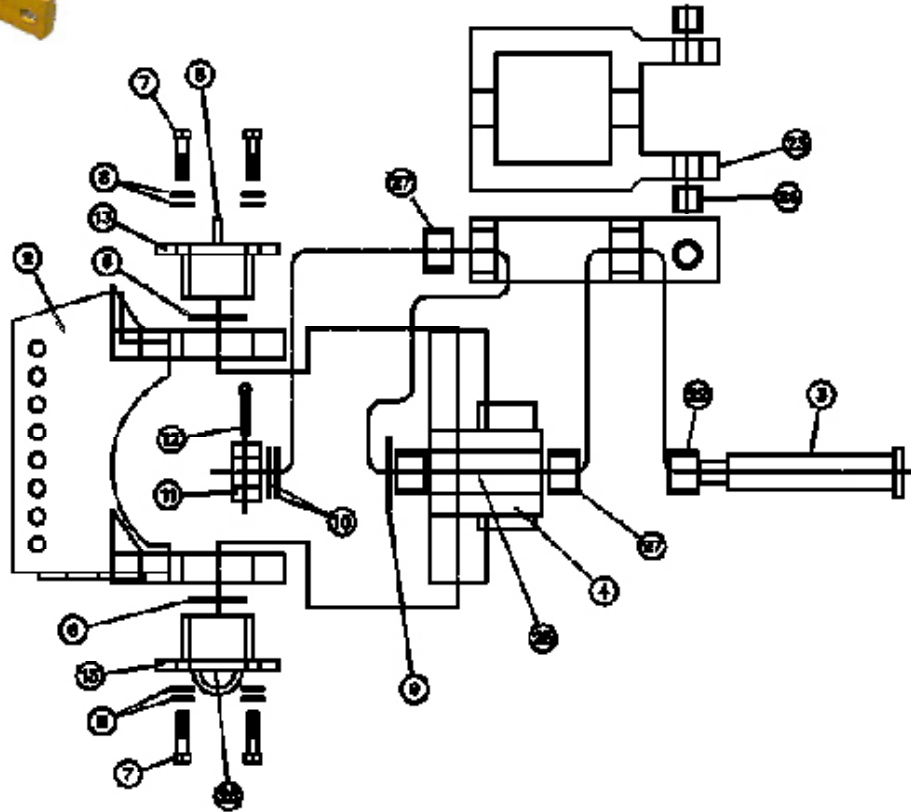
| <b>KEY NO.</b> | <b>PART NO.</b> | <b>DESCRIPTION</b>        |
|----------------|-----------------|---------------------------|
| 1.             | A125006         | Pin, Safety Snap Pin      |
| 2.             | A123309-83      | Link, Transport Lock, Red |



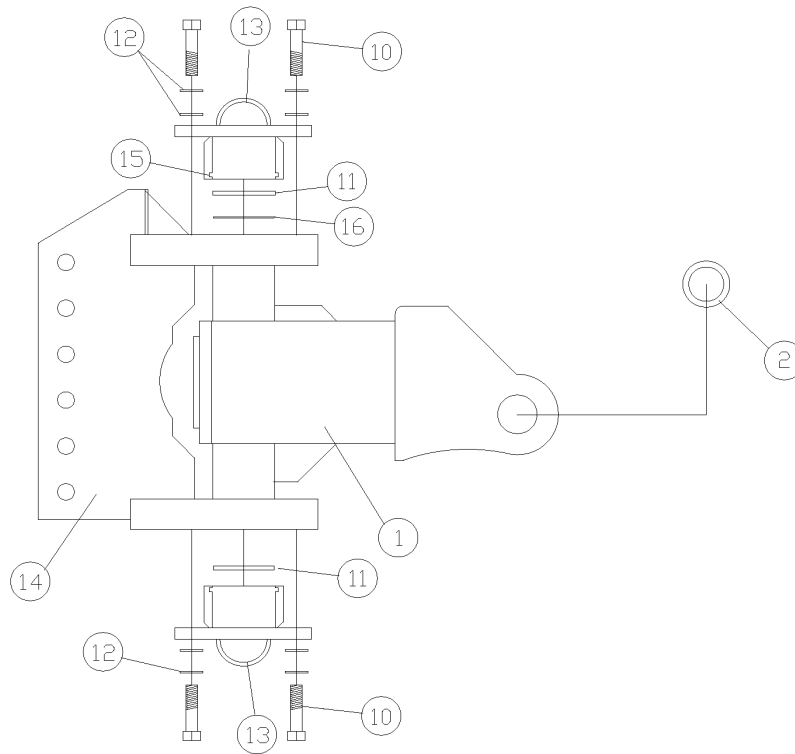
# A125056

## Complete Yoke Type Hitch

Implemented April 2003



| <b>KEY NO.</b> | <b>PART NO.</b> | <b>DESCRIPTION</b>            |
|----------------|-----------------|-------------------------------|
| 2.             | A125056-02      | UTIL HITCH BRKT               |
| 3.             | A125056-03      | MDU HITCH PIN                 |
| 4.             | A125056-04      | MDU HITCH SWIVEL              |
| 5.             | A125056-05      | 19C 18D HITCH CAP             |
| 6.             | A125056-06      | 19C 18D WASHER SWIVEL HITCH   |
| 7.             | A125056-07      | BOLT: 3/4 X 3 HEX GR 8        |
| 8.             | A125056-08      | WASHER: FLAT - 3/4 HARD F-436 |
| 9.             | A125056-09      | WASHER: FKAT-2-1/2 HARD F-436 |
| 10.            | A125056-10      | WASHER: FLAT-1-1/2 HARD F-436 |
| 11.            | A125056-11      | NUT: SLOTTED 1-1/2 COARSE     |
| 12.            | A125056-12      | PIN: COTTER 5/16 X 2-1/2      |
| 13.            | A125056-13      | 19C 18D SWIVEL HITCH CAP SEAL |
| 23.            | A125056-23      | REYNOLDS UTILITY HITCH YOKE   |
| 24.            | A125056-24      | BUSHING: 175150150            |
| 25.            | A125056-25      | ZERK - STRAIGHT               |
| 26.            | A125056-26      | ZERK - 90 DEGREE              |
| 27.            | A125056-27      | BUSHING: 300251200            |



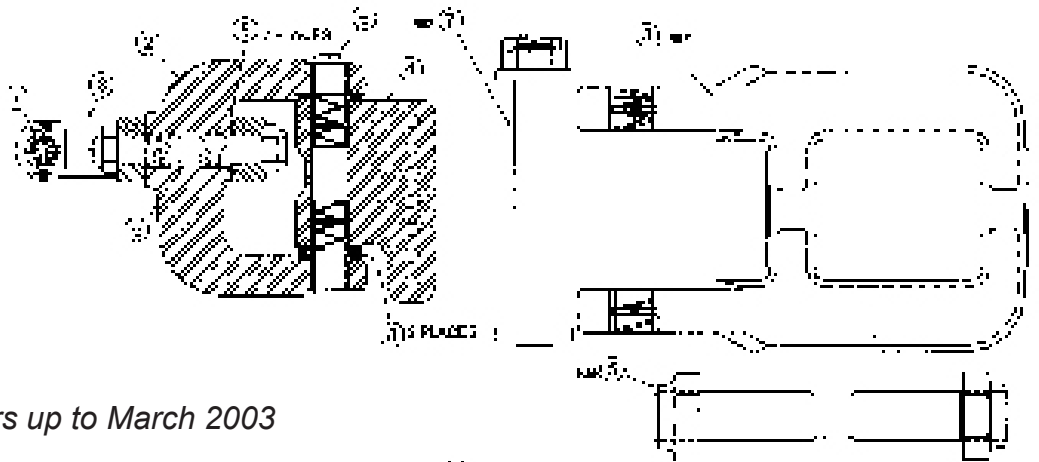
**SUPER CAPACITY SWIVEL HITCH ASSEMBLY  
A125057**

**COMPLETE HITCH: H.D. ICON 360 DEG. SWIVEL**

| <b>ITEM</b> | <b>QTY</b> | <b>PART NUMBER</b>          | <b>DESCRIPTION</b>  |
|-------------|------------|-----------------------------|---|
| 1           | 1          | A125057-01                  | Swivel Hitch Yoke   |
| 2           | 2          | A125057-02A<br>A125057-02JD | Bushing, 2-1/2" OD, Reynolds Spec.<br>Bushing, 60 mm ID, John Deere Spec. |
| 10          | 8          | AFB-00064                   | HHCS: 3/4 NC X 3" GR. 8 ZINC  |
| 11          | 2          | A125056-06                  | WASHER: FOR ICON HITCH CAP  |
| 12          | 16         | AFW-00007                   | WASHER: FLAT 3/4" ZINC USS  |
| 13          | 2          | A125057-13                  | HITCH CAP, ICON   |
| 14          | 1          | A125057-14                  | SWIVEL HITCH BRACKET, 7 HOLE  |
| 15          | 2          | A125057-15                  | SEAL, HITCH CAP   |
| 16          | 1          | A125057-16                  | SHIM, HITCH CAP   |



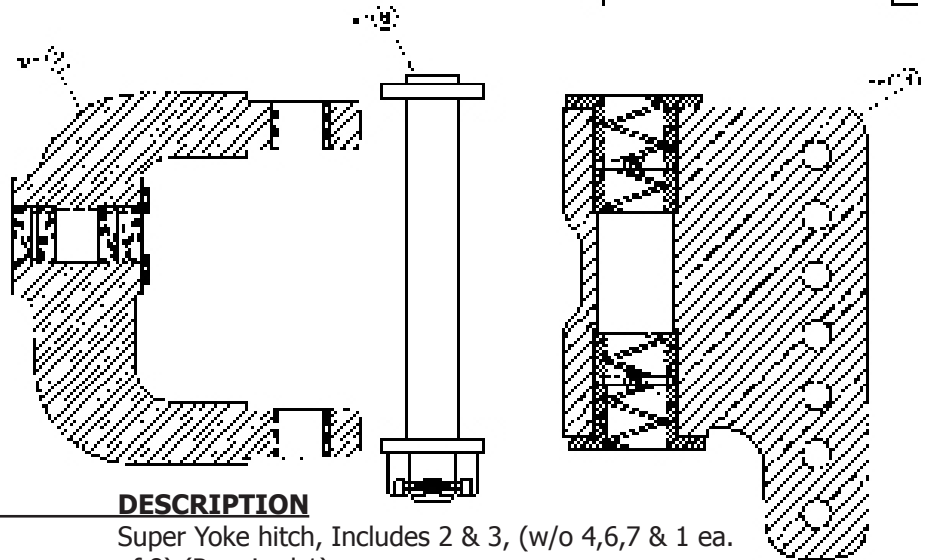
# I-155TS SUPER SWIVEL HITCH ASSEMBLY



*Used on scrapers up to March 2003*

## IMPORTANT

Some units prior to this serial number were upgraded to a H.D. cast type yoke hitch (page 6) by the customer. Please determine if the entire yoke hitch is casted or flat steel. The Casted Hitch has "OFCO" casted into the A-Frame Hitch.



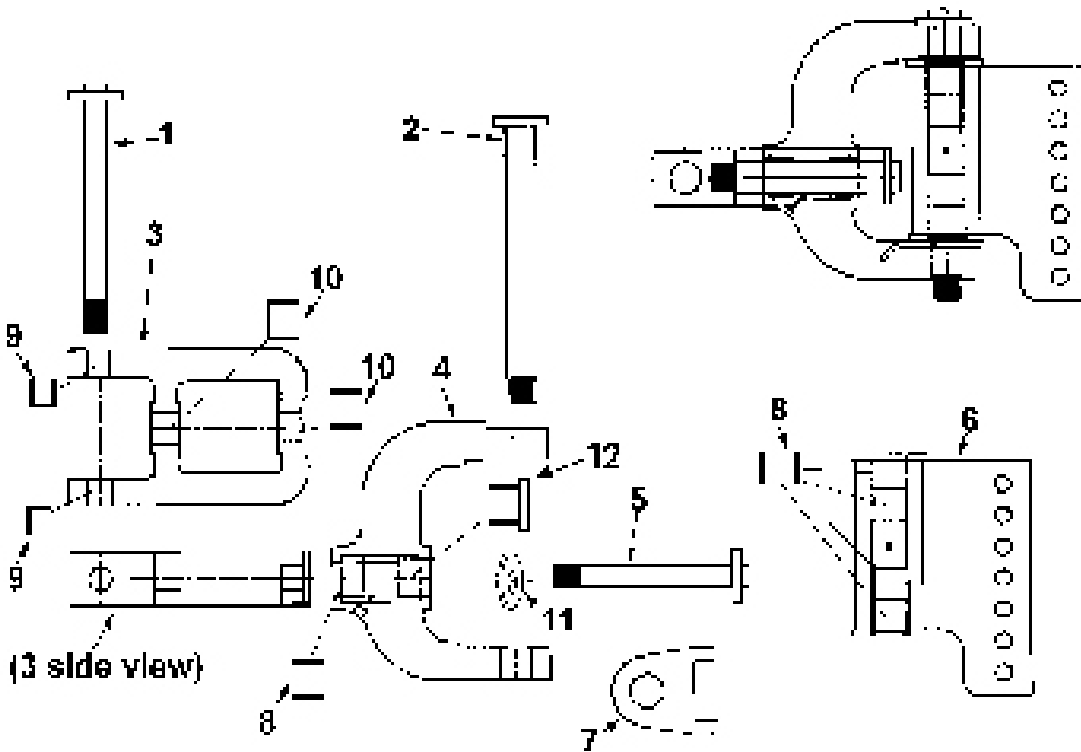
| KEY NO. | PART NO.       | DESCRIPTION   |
|---------|----------------|---|
| 1.      | A1063527       | Super Yoke hitch, Includes 2 & 3, (w/o 4,6,7 & 1 ea. of 8) (Required 1) |
| 2.      | A1062280       | Rear Super Yoke, Assembly (1 required)                                  |
|         | A1063177       | Bushing ( 2 required)   |
|         | A1063144       | Bushing, Spiral (2 required)  |
| 3.      | 14505          | Fitting, Grease (2 required)  |
|         | A1063281       | Front Super Yoke, Assembly (1 required)                                 |
|         | A1063145       | Busing, Spiral (2 required)   |
| 4.      | 14505          | Fitting, Grease (2 required)  |
|         | A1063282       | Pivot Pin Housing, Assembly (1 required)                                |
|         | A1063143       | Bushing, Spiral (2 required)  |
| 5.      | 14505          | Fitting, Grease (2 required)  |
|         | A1063283       | Pin, Horizontal Assembly with Nuts (1 required)                         |
|         | A1063212       | Pin only (1 required)   |
| 6.      | A1044362       | Nut, Lock Nylon, 2-12 UNF (2 required)                                  |
|         | A1063284       | Pin, Vertical Assembly with nut,wash,c.pin (1 required)                 |
|         | A1063214       | Pin only (1 required)   |
| 7.      | A1063259       | Washer (1 required)   |
|         | ARF03024-00260 | Nut, Slotted. Hex 2.00 NC G5 (1 required)                               |
|         | ARF06020-00083 | Pin, Cotter .375" x 4.00" (1 required)                                  |
|         | AB581          | Hitch Pin, Assembly (1 required)  |
|         | AB580          | Pin Weldment (1 required)   |
| 8.      | AB195          | Washer, 3.00"OD x 1.56" (1 required)                                    |
|         | AFN-00014      | Nut, Slotted, 1.5" NC G5 (1 required)                                   |
|         | ARF06020-00060 | Pin, Cotter   |
|         | A1063146       | Washer, Thrust (4 required)   |
|         | A1063285       | Complete Hitch  |

# SWIVEL HITCH ASSEMBLY I-155 TS

Up to Serial Number 20495  
I-155TS Front Unit

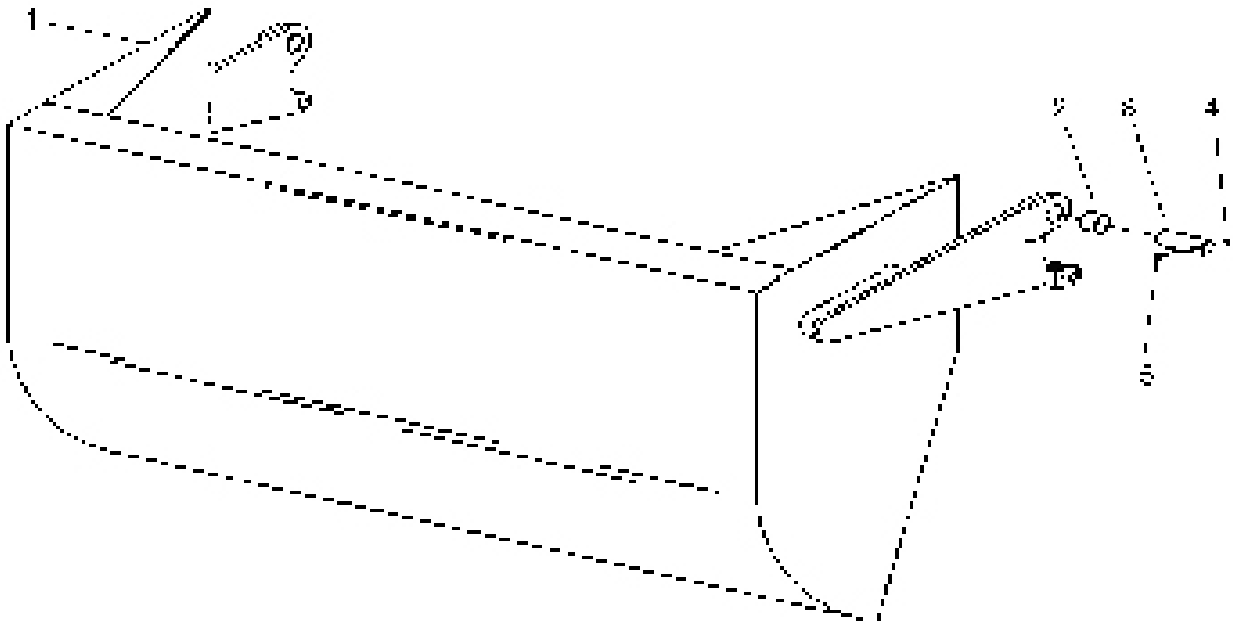
## IMPORTANT

Some units prior to this serial number were upgraded to a H.D. cast type yoke hitch (page 6) by the customer. Please determine if the entire yoke hitch is casted or flat steel. The Casted Hitch has "OFCO" casted into the A-Frame Hitch.



| KEY NO. | PART NO.     | DESCRIPTION                                   |
|---------|--------------|---|
| 1.      | A123299-08   | Pin: Four Ear Drawbar To Hitch                |
|         | A123299-07   | Pin: Two Ear Drawbar To Hitch                 |
|         | AFN-00014    | Nut: 1-1/2" NC Slotted                        |
| 2.      | A123299-06   | Pin: Sq. Tab Head 2 X 18-1/2"                 |
|         | AFN-00018    | Nut: 1-1/2" NF Top Lock                       |
| 3.      | A123299-03RA | A-Frame Hitch                                 |
| 4.      | A123299-02   | C-Frame Hitch: Offset                         |
| 5.      | A123299-05   | Pin: Sq. Tab Head 1-1/2 NF X 12-1/2"          |
|         | AFN-00018    | Nut: 1-1/2" NF Top Lock                       |
| 6.      | A123299-01   | Vertical Mounting Tube: 7 Hole                |
| 7.      | A123299-04   | Wear Pad With Locking Legs                    |
| 8.      | ABS-00001    | Bushing: Spring 2" ID X 2-3/8" OD             |
| 9.      | A123299-09   | Bushing: 2" OD x 1-1/2" ID x 1-1/2" (2 req'd) |
| 10.     | A123299-10   | Bushing: 2-3/8" OD x 2" ID x 1-1/2" (2 req'd) |
| 11.     | A123299-11   | Washer  |
| 12.     | A123299-14   | Thrust Bushing with Flange, 2" ID x 2-3/8" OD |

# I-155TS APRON ASSEMBLY

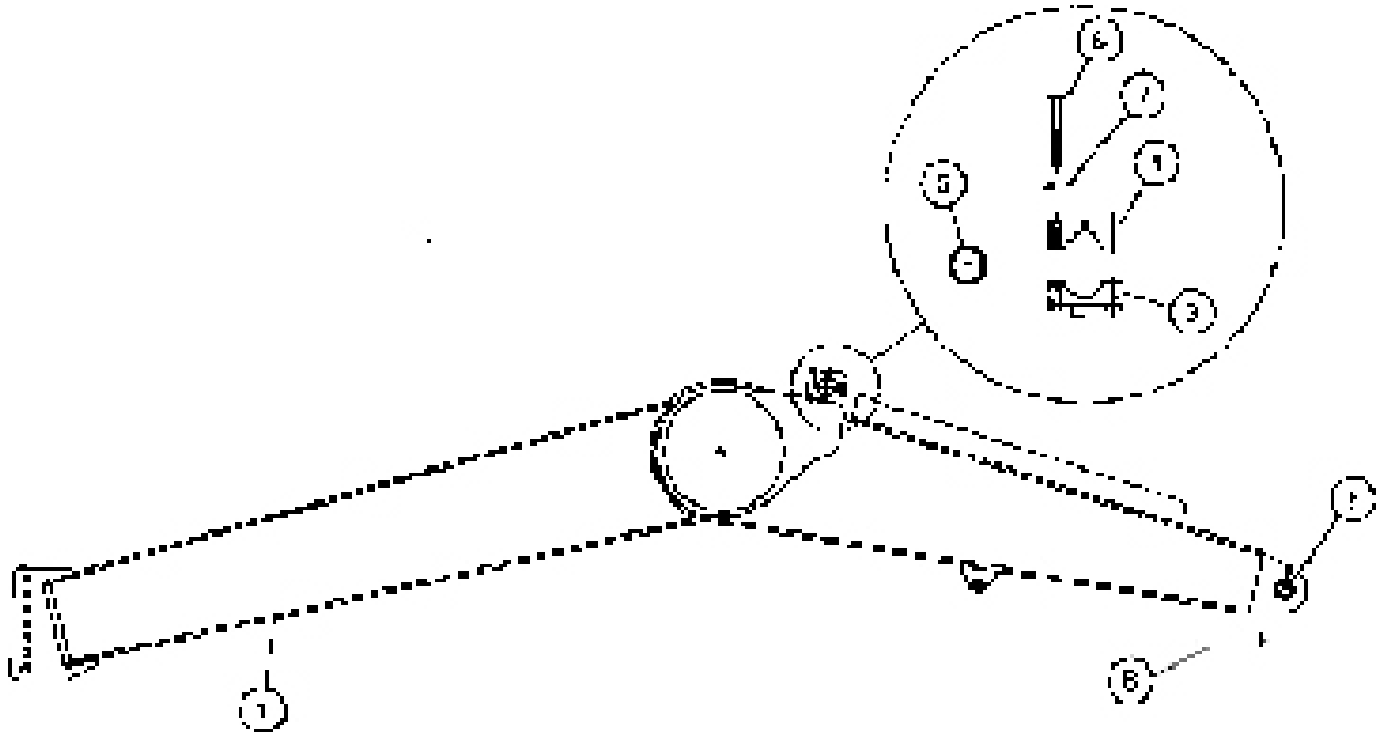


| <b>KEY NO.</b> | <b>PART NO.</b> | <b>DESCRIPTION</b>                   |
|----------------|-----------------|--------------------------------------|
| 1.             | A123310A        | Apron Model I-155 TS                 |
| 2.             | A16027          | Bushing: 2" OD x 1-1/2" ID x 2" Long |
| 3.             | A123337         | Pin: 1-1/2" x 5-3/8"                 |
| 4.             | 7450            | Nut: 3/8" NC                         |
| 5.             | AFB-00049       | Bolt: 3/8" NC x 3"                   |

## MODEL I-155TS

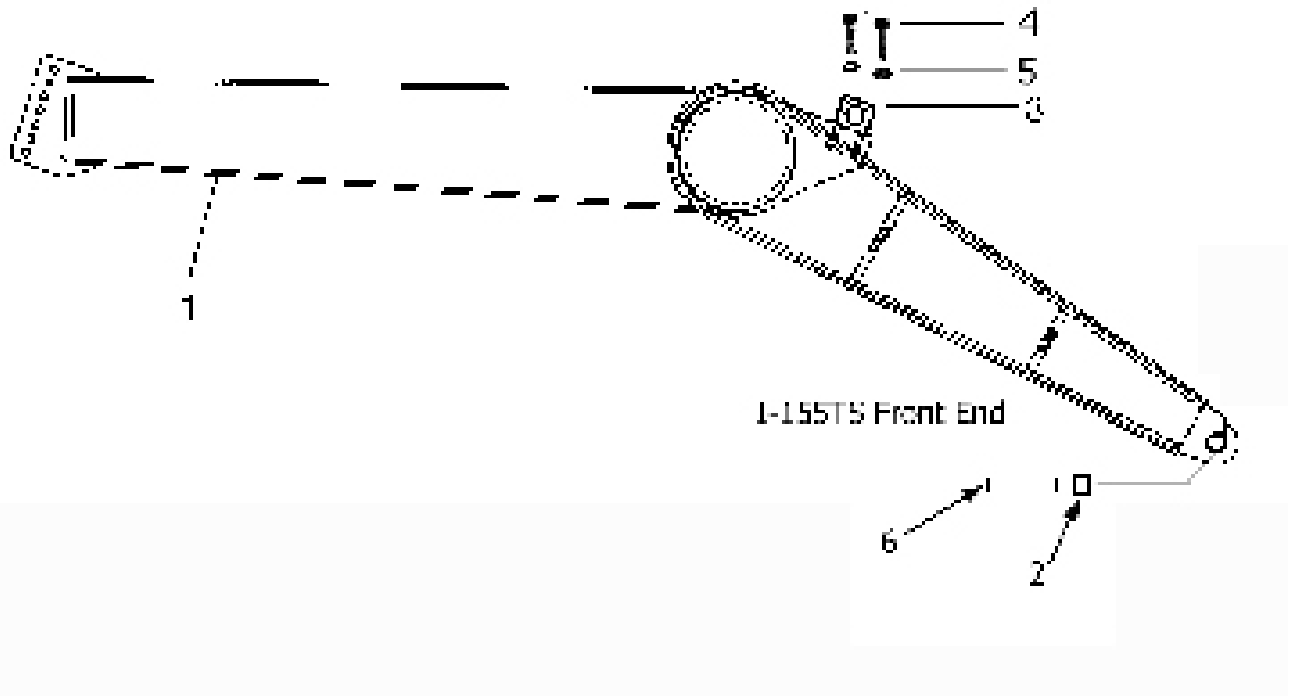
### FRONT END WITH 2 PIECE TRUNION MOUNT BLOCK

FOR MODELS WITH S/N 20326 TO 20411 ONLY



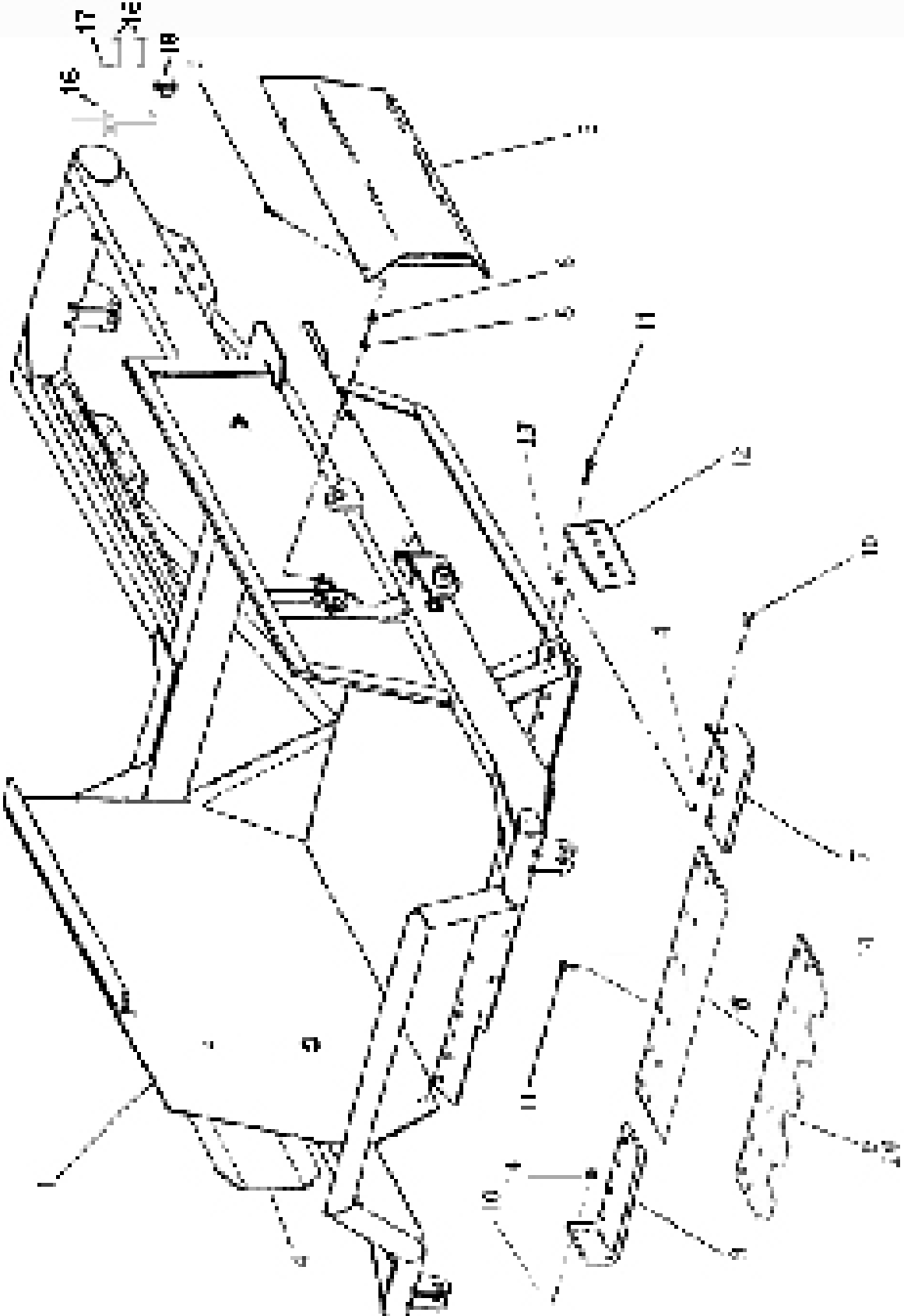
| <b>KEY NO.</b> | <b>PART NO.</b> | <b>DESCRIPTION</b>                        |
|----------------|-----------------|---|
| 1.             | A123329         | Front End Assembly                        |
| 2.             | A14039          | Bushing: 2.375 OD X 2.000 ID X 2" Long    |
| 3.             | A1230501-01     | Trunion Mount Block - Lower Half          |
| 4.             | A1230501-02     | Trunion Mount Block - Upper Half          |
| 5.             | A123502         | Bushing                                   |
| 6.             | AFB-00064       | HHCS: 3/4 NC X 3" Gr. 8                   |
| 7.             | AFW-00002       | Washer: 3/4" Lock                         |
| 8.             | A10152A         | Pin Frame Attachment, 2" OD x 8-1/8" Long |

**MODEL I-155 TS FRONT END**  
**FOR MODELS WITH S/N 20412 AND UP**



| <b>KEY NO.</b> | <b>PART NO.</b> | <b>DESCRIPTION</b>                         |
|----------------|-----------------|--|
| 1.             | A123329         | Front End Assembly                         |
| 2.             | A14039          | Bushing: 2.375 OD X 2.000 ID X 2" Long     |
| 3.             | A123293A        | Trunion Mount Block                        |
| 4.             | AFB-00039       | Bolts, 3/4" x 5-1/2"                       |
| 5.             | AFW-00002       | Lockwasher, 3/4"                           |
| 6.             | A10152A         | Pin, Frame Attachment, 2" OD x 8-1/8" Long |

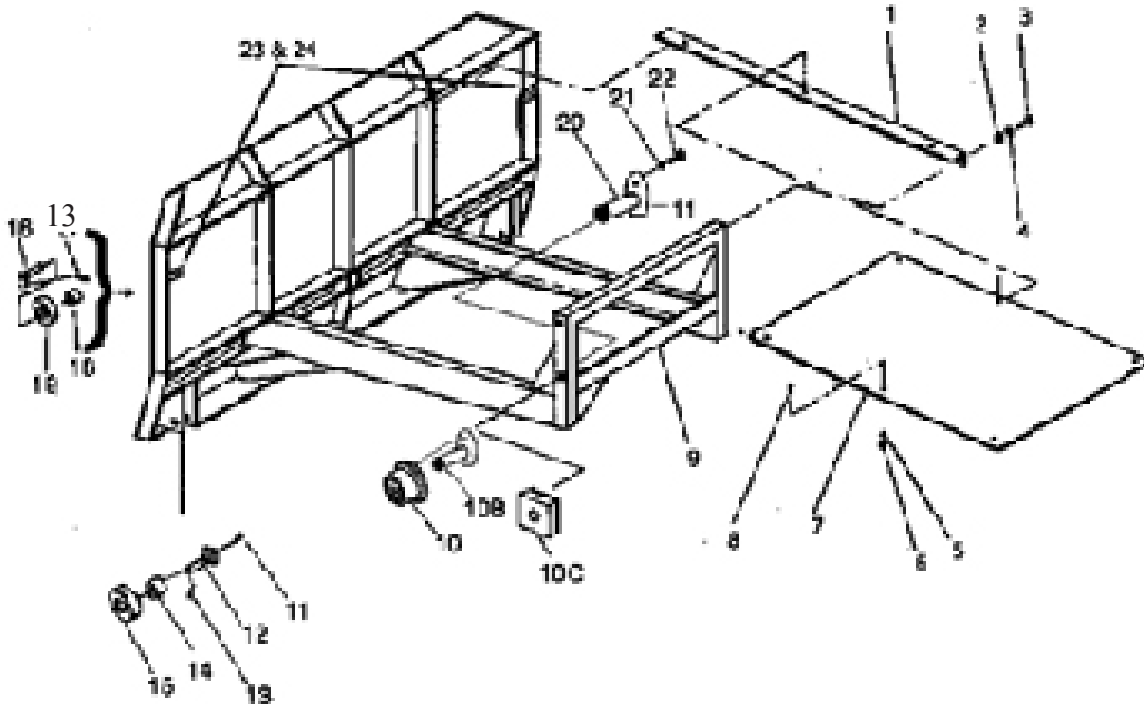
**MODEL I-155 TS  
BOWL & FRAME ASSEMBLY**



**MODEL I-155 TS  
BOWL & FRAME ASSEMBLY**

| <b>KEY NO.</b> | <b>PART NO.</b>                           | <b>DESCRIPTION</b>   |
|----------------|---|--|
| 1.             | A123309                                   | Bowl and Frame, Model I-155  |
| 2.             | AFB-00094                                 | Flanged Bolt: 3/8 NC X 1"  |
| 3.             | A10157<br>A123309-77<br>A123309-62L       | to S/N 20495: Cylinder Guard - Left Hand<br>S/N 20496 to S/N 20749: Cylinder Guard - Left Hand<br>S/N 20750 and above                        |
| 4.             | A10158<br>A123309-62RS                    | Cylinder Guard - Right Hand to S/N 20749<br>S/N 20750 and above  |
| 7.             | A123332L                                  | Left Cutting Edge  |
| 8.             | A123330SER<br>A123330<br>PB9P-NC-088-0275 | Center Cutting Edge, Serrated 1-1/8" x 12" x 63"<br>Center Cutting Edge, Straight 1-1/8" x 12" x 63"<br>Plow Bolt 7/8" x 2-3/4", 12 Required |
| 9.             | A123332R                                  | Right Cutting Edge   |
| 10.            | PB9P-NC-088-0275                          | Plow Bolt: 7/8 NC X 2-3/4", 6 Required   |
| 11.            | AFB-0018                                  | Bolt, 1" NC x 3" long, 5 per Blade Required  |
| 12.            | A123357                                   | Bank Shaver/router bit Reversible, L & R   |
| 13.            | AFN-00012                                 | Nut: 1" NC, 5 per Blade Required   |
| 14.            | AFN-00019                                 | Nut: 7/8" NC, 6 Required   |
| 15.            | A123309-93                                | 3" Locking Lug for Rear Hitch  |
| 16.            | A123309-96                                | Pin (2 Reg) for Locking Lug  |
| 17.            | AFP-00001                                 | Pin Cotter, 1/4" x 3"  |
| 18.            | A125006                                   | Safety Snap Pin  |

# I-155TS PUSH OFF GATE ASSEMBLY



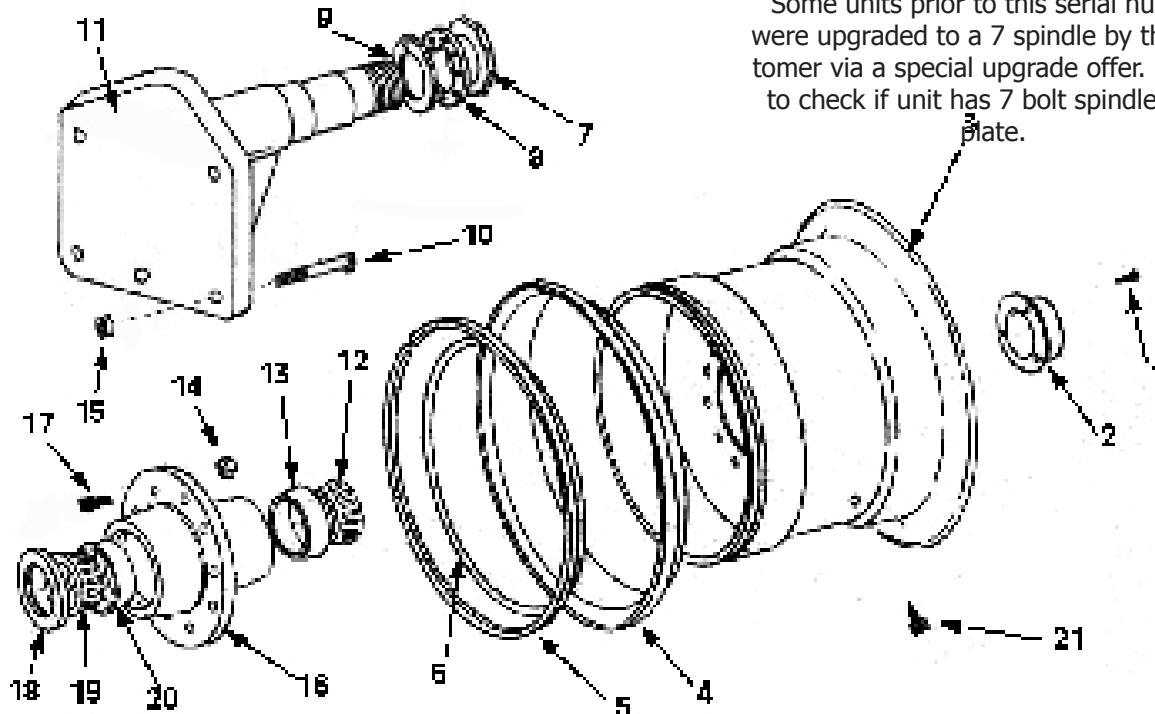
| <b>KEY NO.</b> | <b>PART NO.</b> | <b>DESCRIPTION</b>                      |
|----------------|-----------------|---|
| 1.             | A14022          | Brace                                   |
| 2.             | AFN-00006       | Nut: 3/4" NC                            |
| 3.             | AFB-00037       | Bolt: 3/4" NC x 2" Lg.                  |
| 4.             | AFW-00002       | Lockwasher: 3/4"                        |
| 5.             | 8100            | Lockwasher: 1/2"                        |
| 6.             | AFN-00015       | Nut: 1/2" NC                            |
| 7.             | A14023          | Dirt Shield                             |
| 8.             | AFB-00015       | Bolt: 1/2" NC x 1-1/2"                  |
| 9.             | A16024          | Pushoff Gate: Model I-150               |
| 10.            | A123306         | To S.N. 20495: Roller: Rear Gate        |
|                | A123307         | To S.N. 20495 Bushing                   |
| 10B.           | A123305A        | Pin: 1-1/4 X 2-3/4" for Wear Pad        |
| 10C.           | A123353         | Wear Pad                                |
| 11.            | AHF-00028       | Grease Fitting: 1/8" NPT -90 degree     |
| 12.            | A6007A          | Pin: 1-1/4" x 4-1/8" Lg.                |
| 13.            | AFP-00001       | Cotter Pin: 1/4 X 3-1/2"                |
| 14.            | A10163          | Bushing: 1-3/4" OD x 1-1/4" ID          |
| 15.            | A123459         | V-Roller: 3-1/2 OD X 1-3/4 ID           |
| 16.            | A123323-21      | Pin: 1-1/4 X 4 1/8" Tab Head            |
| 17.            | 7036            | Bolt: 1/2 NC X 2"                       |
| 18.            | A10163          | Bushing: 1-3/4" OD x 1-1/4" ID          |
| 19.            | A10164          | Roller: 4-1/4 OD X 1-3/4 ID.            |
| 20.            | A123305A        | Pin: 1-1/4 x 2-3/4" w/grease for Roller |
| 21.            | 8100            | Lockwasher: 1/2"                        |
| 22.            | AFB-00033       | Bolt: 1/2 NC X 2-1/2"                   |
| 23.            | A125020         | Remote Grease Lines, 32" (2)            |
| 24.            | A125021         | Remote Grease Lines, 54" (2)            |



# Up to S.N. 20495 (5 hole Spindle)

## IMPORTANT

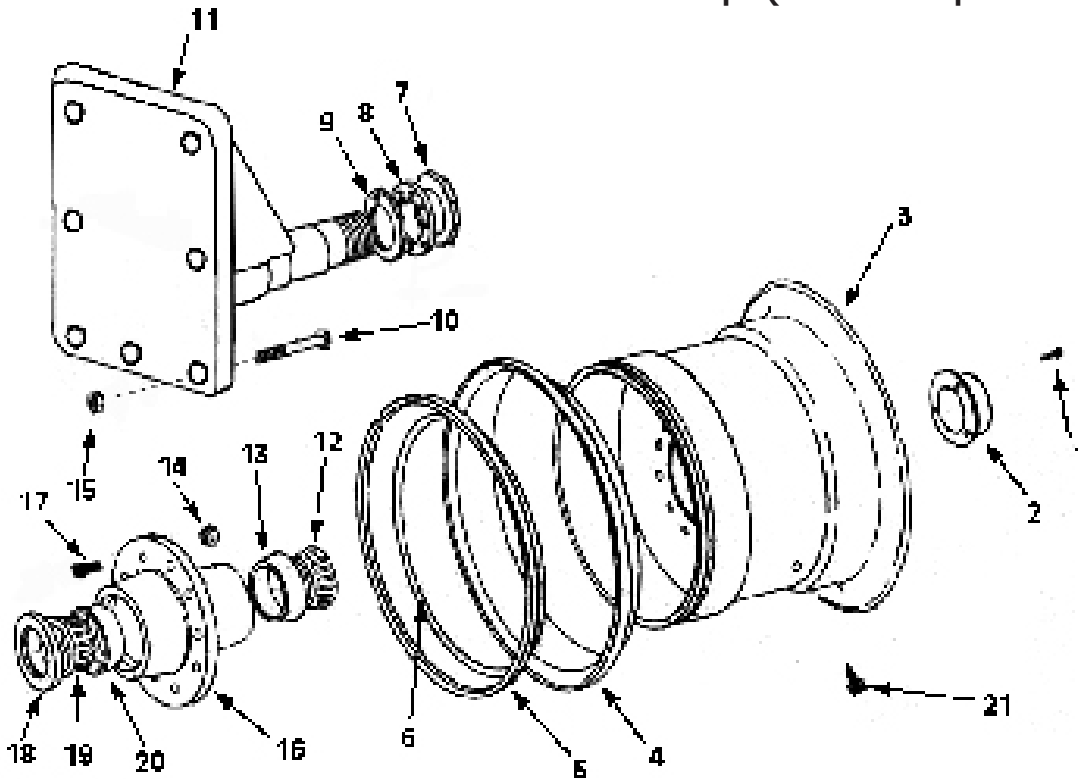
Some units prior to this serial number were upgraded to a 7 spindle by the customer via a special upgrade offer. Be sure to check if unit has 7 bolt spindle base plate.



### PARTS LIST REAR WHEEL and HUB ASSEMBLY MODEL I-155 TS

| KEY NO. | PART NO.  | DESCRIPTION                    |
|---------|-----------|--------------------------------|
| 1.      | AFB-00020 | Bolt 5/16" NC X 3/4" Lg.       |
| 2.      | A14004    | Hub Cap                        |
| 3.      | A12036    | Wheel Ass'y. 25" x 25"         |
|         | A12036-1  | Center Dish Weldment, Flat     |
|         | A12036-2  | Six Gussets for Center Dish    |
| 4.      | A12041    | Side Ring                      |
| 5.      | A12042    | Lock Ring                      |
| 6.      | A12047    | O-Ring                         |
| 7.      | A10048    | Spindle Nut                    |
| 8.      | A10049A   | Lock Collar                    |
| 9.      | A10172    | Nut with Lock Pin              |
| 10.     | AFB-00067 | Bolt 1-1/4" NF X 7-1/2" Lg.    |
| 11.     | A12044    | Spindle                        |
| 12.     | A14015    | Bearing Cone (Timken# 644)     |
| 13.     | A14014    | Bearing Cup (Timken# 632)      |
| 14.     | A12051    | Lug Nut                        |
| 15.     | AFN-00009 | Lock Nut: 1-1/4" NF            |
| 16.     | A12035    | Hub                            |
| 17.     | A12050    | Lug                            |
| 18.     | A12037    | Grease Seal (National# 416039) |
| 19.     | A12038    | Bearing Cup (Timken# 854)      |
| 20.     | A12039    | Bearing Cone (Timken#861)      |
| 21.     | A14016    | Valve Stem                     |

## S.N. 20496 & up (7 hole Spindle)



### IMPORTANT

Some units prior to this serial number were upgraded to a 7 spindle by the customer via a special upgrade offer. Be sure to check if unit has 7 bolt spindle base plate.

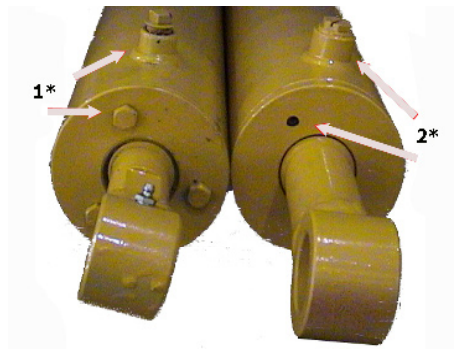
## REAR WHEEL and HUB ASSEMBLY MODEL I-155 TS

| KEY NO. | PART NO.  | DESCRIPTION                     |
|---------|-----------|---------------------------------|
| 1.      | AFB-00080 | Bolt 5/16" NC x 1/2" Lg.        |
| 2.      | A14004    | Hub Cap                         |
| 3.      | A12036    | Wheel Ass'y. 25" x 25"          |
|         | A12036-1  | Center Dish Weldment, Flat      |
|         | A12036-2  | Six Gussets for Center Dish     |
| 4.      | A12041    | Side Ring                       |
| 5.      | A12042    | Lock Ring                       |
| 6.      | A12047    | O-Ring                          |
| 7.      | A10048    | Spindle Nut                     |
| 8.      | A10049A   | Lock Collar                     |
| 9.      | A10172    | Nut with Lock Pin               |
| 10.     | AFB-00067 | Bolt 1-1/4" NF X 7-1/2" Lg.     |
| 11.     | A123350   | Spindle                         |
| 12.     | A125001   | Bearing Cone (Timken# H715348)  |
| 13.     | A125002   | Bearing Cup (Timken# H715311)   |
| 14.     | A12051    | Lug Nut                         |
| 15.     | AFN-00009 | Lock Nut: 1-1/4" NF             |
| 16.     | A12035    | Hub                             |
| 17.     | A12050    | Lug                             |
| 18.     | A12037    | Grease Seal (National# 416039)  |
| 19.     | A125003   | Bearing Cone (Timken# HM624749) |
| 20.     | A125004   | Bearing Cup (Timken# HM624710)  |
| 21.     | A14016    | Valve Stem                      |

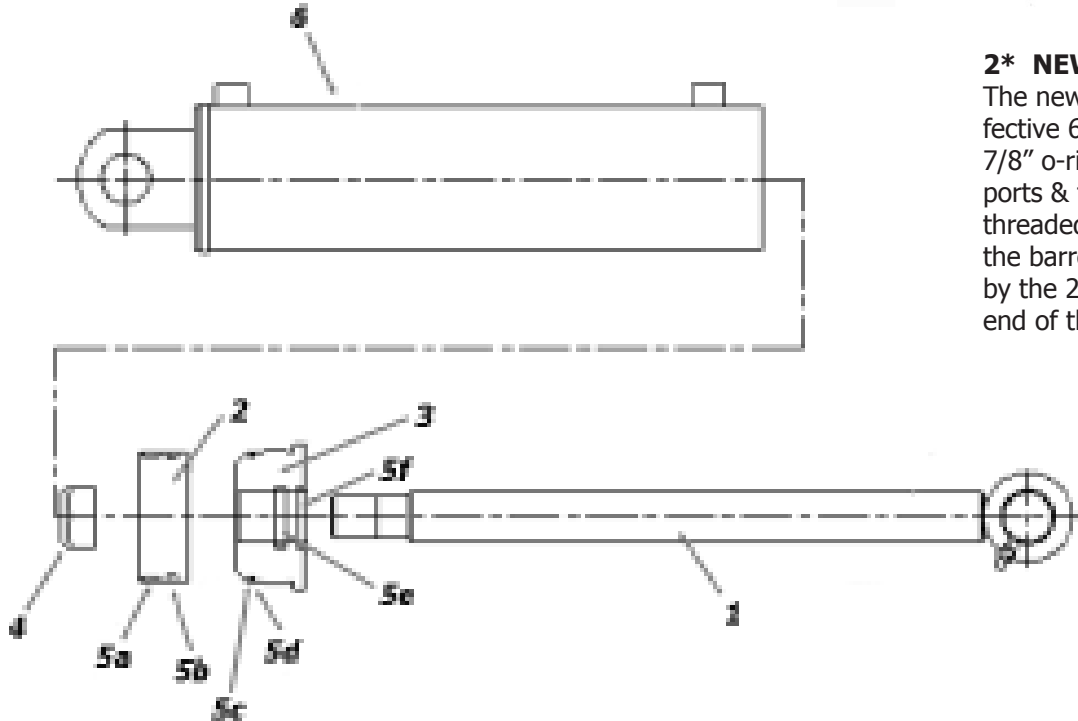
If you have 3 capscrew head-cap refer to the next page.

**APRON CYLINDER 4"x13"**  
**Part #A125050**  
**s.n. 20750 and above**  
**effective 06/03**

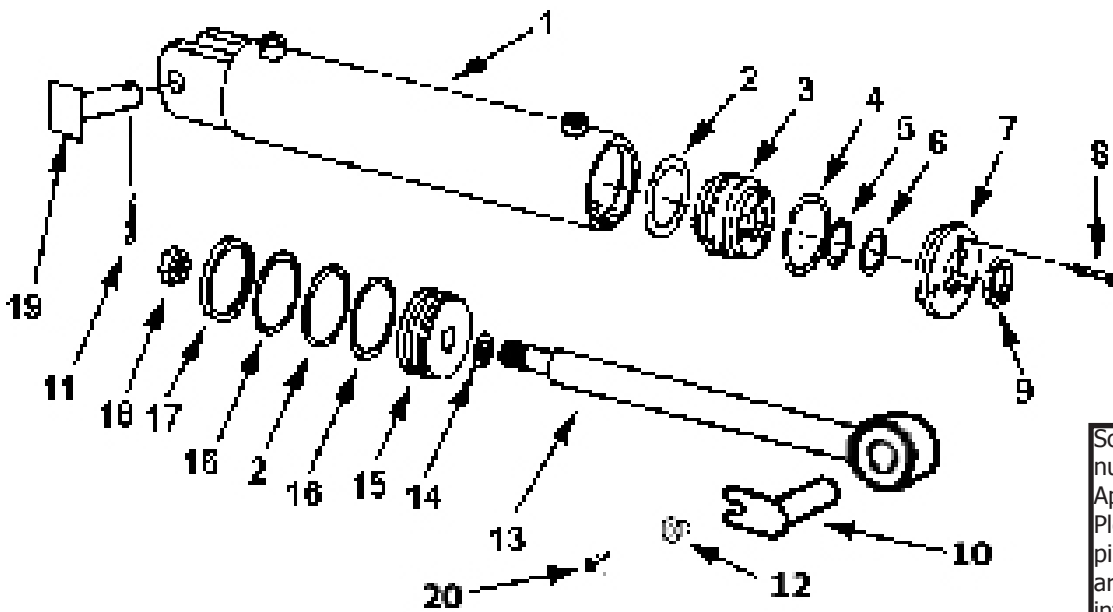
**1\* OLD STYLE**  
 The older apron cylinder can be identified by 3/8" NPT ports & 3 bolts on the headcap of the gland.



**2\* NEW STYLE**  
 The new style, effective 6/25/03, has 7/8" o-ring base ports & the gland is threaded into I.D. of the barrel. Identified by the 2 holes on the end of the cylinder.



| <b>ITEM</b> | <b>PART ITEM</b> | <b>DESCRIPTION</b>                                    |
|-------------|------------------|---|
| 1           | A125050-01       | Rod 1-3/4" with welded eye                            |
| 2           | A125050-02       | Piston  |
| 3           | A125050-03       | Gland, Threaded                                       |
| 4           | A125050-04       | Lock Nut, 1-1/8" NF                                   |
| 5           | A125050-05       | Seal Kit, a-f   |
|             | A125050-05a      | Nylon Wear Ring                                       |
|             | A125050-05b      | FSP Seal  |
|             | A125050-05c      | O-Ring  |
|             | A125050-05d      | Backup Washer   |
|             | A125050-05e      | Hallite Rod Seal                                      |
|             | A125050-05f      | Snap-in Rod Wiper                                     |
|             | A123362          | Pin, 1-1/2" with slot for keeper bushing              |
|             | 8602             | Pin, Cotter 1/4" x 2" Zinc                            |
|             | A123351          | Bushing, retaining flange, 9/16" ID x 3/4" OD, 3/4" L |
|             | A123363          | Pin: 1-1/2" square head                               |
|             | AFB-00015        | HHCS 1/2" NC x 1-1/2" Gr. 8                           |

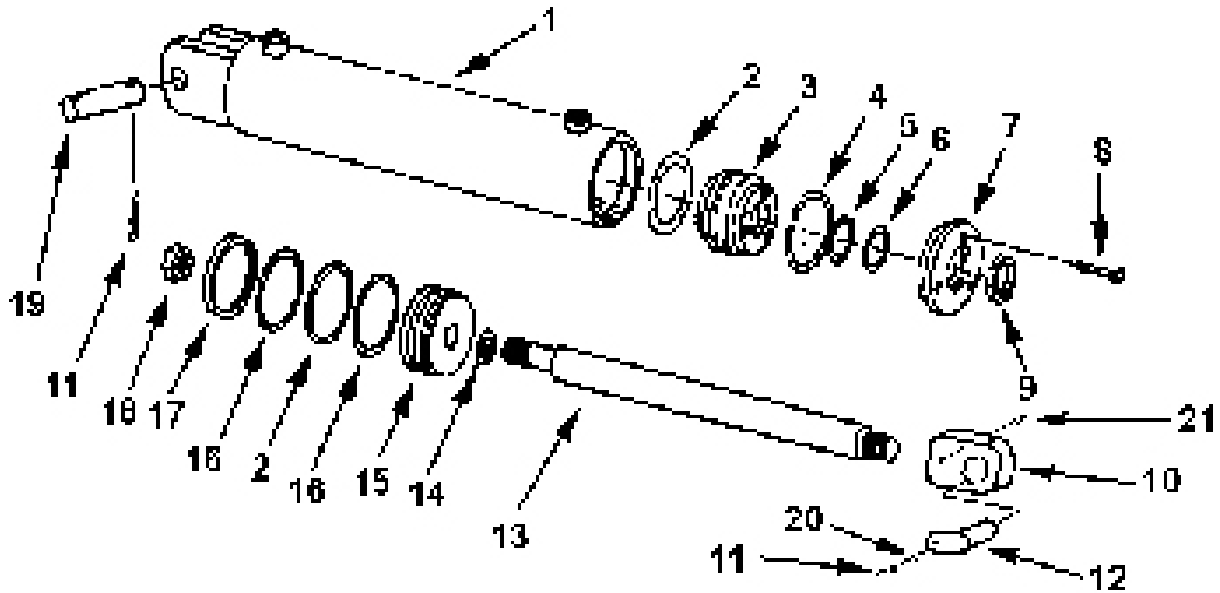


**MODEL I-155 TS**  
**LEFT & RIGHT SIDE APRON CYLINDER 4 X 13**  
**PART NO. A123365**

**IMPORTANT**

Some units prior to this serial number were upgraded to a H.D. Apron Cylinder by the customer. Please determine if the cylinder pins are 1-1/2" diameter. If pins are 1" or 1-1/4" and is inserted into a thread block ear on the rod end please refer to page 21.

| <b>KEY NO.</b>  | <b>PART NO.</b> | <b>DESCRIPTION</b>                                    |
|---|-----------------|---|
| 1.  | A123365-05      | Cylinder Barrel                                       |
| 2.  | A300H06         | O-Ring: 4" OD x 3/16"                                 |
| 3.  | A300H11         | Head Gland  |
| 4.  | A300H12         | Retainer Ring   |
| 5.  | A22H15          | O-Ring: 1-1/2" ID x 1/8"                              |
| 6.  | A22H15A         | Backup Washer: 1-1/2"                                 |
| 7.  | A300H13         | Gland Cap   |
| 8.  | A22H18          | Capscrew: 1/4" NC x 1"                                |
| 9.  | A22H17          | Wiper Seal: 1-1/2" ID                                 |
| 10.   | A123362         | Pin, 1-1/2" with slot for keeper bushing              |
| 11.   | 8602            | Pin, Cotter 1/4" x 2" Zinc                            |
| 12.   | A123351         | Bushing, retaining flange, 9/16" ID x 3/4" OD, 3/4" L |
| 13.   | A123365-03      | Rod, S/N 20497 + Welded Eye with 1-1/2" Hole          |
| ** If your unit has thread block type rod end see following page ** |                 |   |
| 14.   | A45H05          | Piston Gasket: 1"                                     |
| 15.   | A300H07         | Piston: 4" Dia.                                       |
| 16.   | A300H05         | Backup Washer: 4" OD                                  |
| 17.   | A300H04         | Cast Iron Ring: 4" OD                                 |
| 18.   | A300H03         | Piston Nut, 1" NF                                     |
| 19.   | A123363         | Pin: 1-1/2" square head                               |
| 20.   | AFB-00015       | HHCS 1/2" NC x 1-1/2" Gr. 8                           |
|   | A300H14B        | Packing Kit, Containing:                              |
|   | (1) A300H04     | (1) A22H15  |
|   | (2) A300H05     | (1) A22H15A   |
|   | (2) A300H06     | (1) A22H17  |
|   | (1) A45H05      |   |

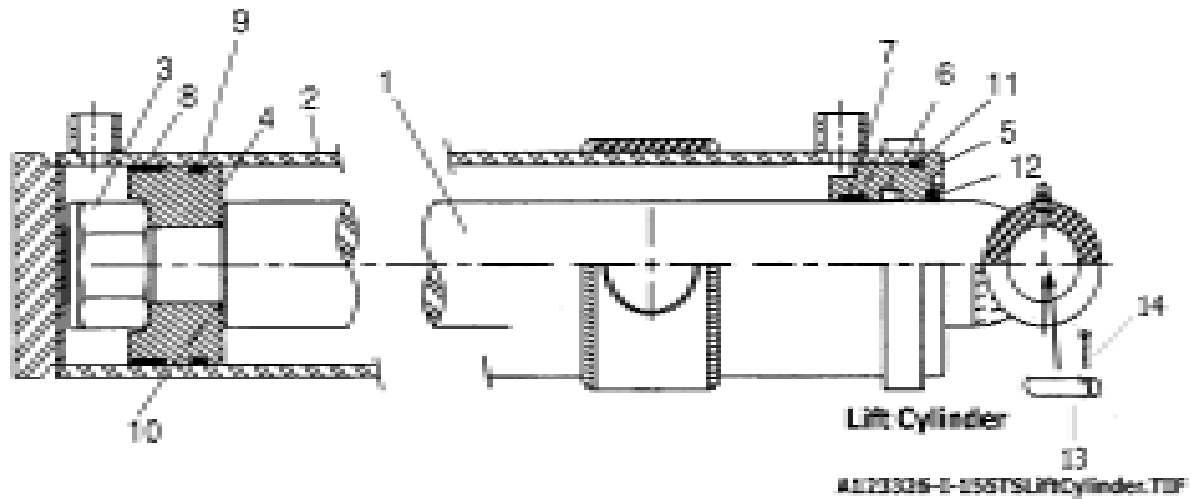


**LEFT & RIGHT SIDE APRON CYLINDER 4 X 13  
PART NO. A123319**

**IMPORTANT**  
Some units prior to this serial number were upgraded to a H.D. Apron Cylinder by the customer. Please determine if the cylinder pins are 1-1/2" diameter (page 20). If pins are 1" or 1-1/4" (Key # 12) and are inserted into a thread block ear (Key # 10) on the rod end please refer to this page.

| <b>KEY NO.</b> | <b>PART NO.</b> | <b>DESCRIPTION</b>  |
|----------------|-----------------|---|
| 1.             | A175H01         | Cylinder Barrel   |
| 2.             | A300H06         | O-Ring: 4" OD x 3/16"                                       |
| 3.             | A300H11         | Head Gland  |
| 4.             | A300H12         | Retainer Ring   |
| 5.             | A22H15          | O-Ring: 1-1/2" ID x 1/8"                                    |
| 6.             | A22H15A         | Backup Washer: 1-1/2"                                       |
| 7.             | A300H13         | Gland Cap   |
| 8.             | A22H18          | Capscrew: 1/4" NC x 1"                                      |
| 9.             | A22H17          | Wiper Seal: 1-1/2" ID                                       |
| 10.            | A123345         | Up to S/N 20458 -Block Type, 1" Hole                        |
|                | A123310-16      | S/N 20459 and Up - Block Type, 1-1/4" Hole                  |
| 11.            | AFB-00015       | HHCS: 1/2 NC X 1-1/2"                                       |
| 12.            | A123336         | Up to S/N 20458 Pin: Tab Hd. w/Grs. Ftg. 1" x 3-5/8"        |
|                | A123347         | S/N 20459 to 20496 Pin: Tab Hd. w/Grs. Ftg. 1-1/4" x 3-5/8" |
| 13.            | A175H02         | Shaft: 1-1/2" Dia.  |
| 14.            | A45H05          | Piston Gasket: 1"   |
| 15.            | A300H07         | Piston: 4" Dia.   |
| 16.            | A300H05         | Backup Washer: 4" OD  |
| 17.            | A300H04         | Cast Iron Ring: 4" OD                                       |
| 18.            | A300H03         | Piston Nut, 1" NF   |
| 19.            | A1217 E         | Pin: 1" x 3-1/2" ETD-150                                    |
| 20.            | 8100            | Lockwasher: 1/2"  |
| 21.            | AFB-00062       | Socket Screw: 3/8" NC - 3/4" with Brass Tip                 |
|                | A300H14B        | Packing Kit, Containing:                                    |
|                | (1) A300H04     | (1) A22H15  |
|                | (2) A300H05     | (1) A22H15A   |
|                | (2) A300H06     | (1) A22H17  |
|                | (1) A45H05      |   |

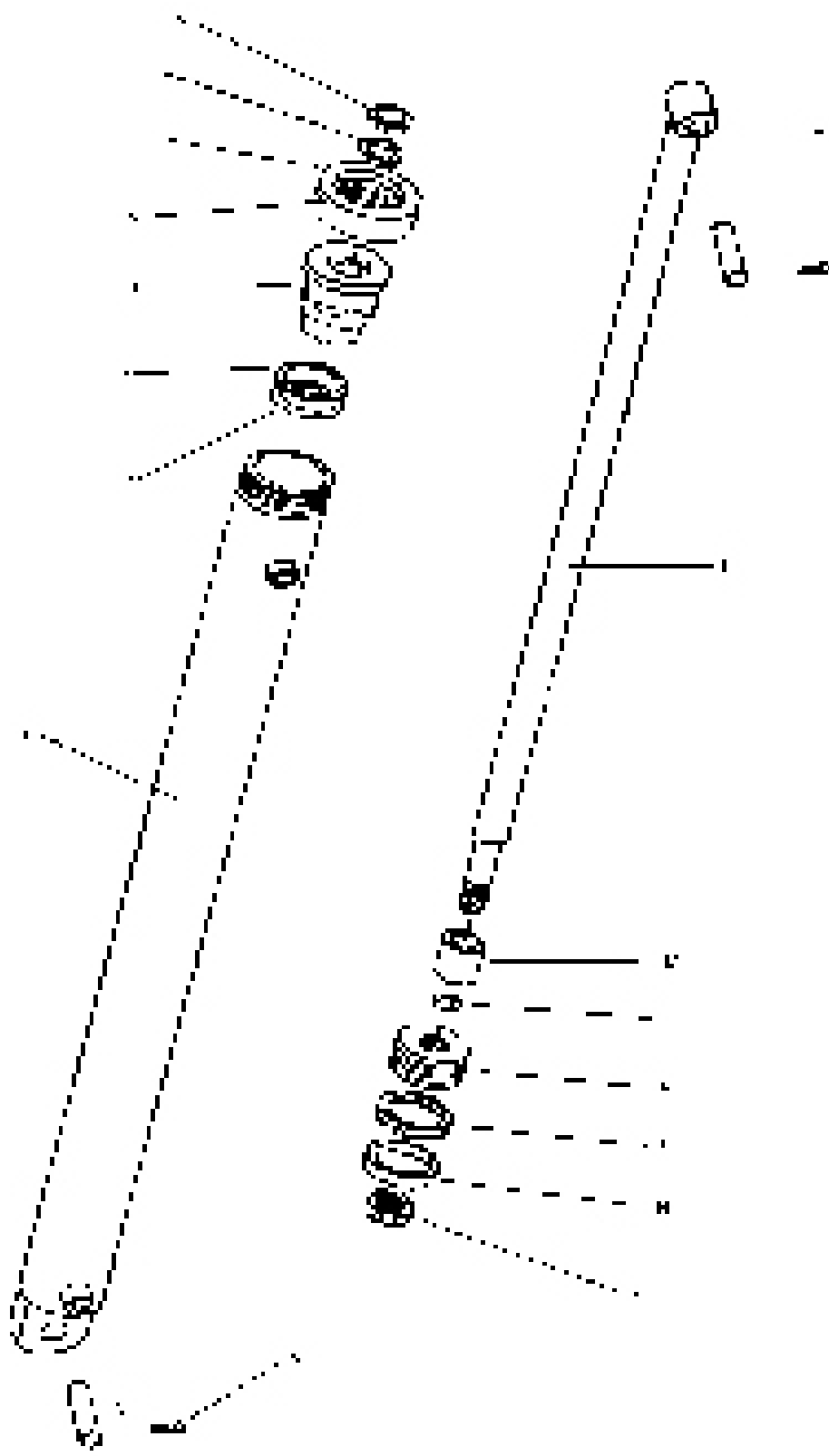
## LIFT CYLINDER 5 X 20"



### MODEL I-155 TS LIFT CYLINDER 5 X 20" PART NO. A123326

| KEY NO. | PART NO.   | DESCRIPTION           |
|---------|------------|-----------------------|
| 1.      | A123326-1  | Piston Rod: 2-1/2"    |
| 2.      | A123326-2  | Barrel Weldment       |
| 3.      | AFN-00018  | Nut: Lock 1-1/2-12    |
| 4.      | A123324-4  | Piston                |
| 5.      | A123324-3  | Gland                 |
| 6.      | A123324-6  | Rod Seal              |
| 7.      | A123324-5  | Wear Band             |
| 8.      | A123324-8  | Wear Ring             |
| 9.      | A123324-9  | Piston Seal           |
| 10.     | A123324-10 | O-Ring                |
| 11.     | A123324-11 | O-Ring                |
| 12.     | A123324-7  | Rod Wiper             |
|         | AHS-00140  | Seal Kit (Items 6-12) |
| 13.     | A123335    | Pin, 2" x 10-1/2" lg. |
| 14.     | AFP-00001  | Cotter Pin, 1-4" x 3" |

**MODEL I-155 TS  
PUSHOFF CYLINDER 5 X 60"  
PART NO. A560H114A**



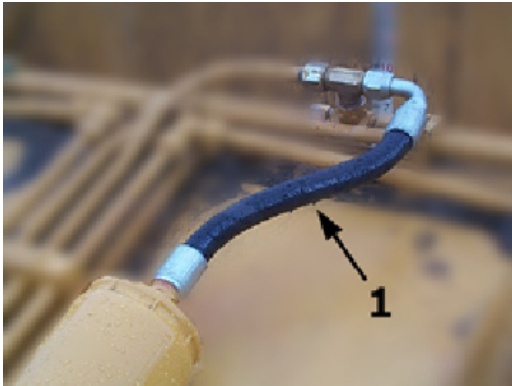
**MODEL I-155 TS  
PUSHOFF CYLINDER 5 X 60"  
PART NO. A560H114A**

| <b>KEY NO.</b> | <b>PART NO.</b> | <b>DESCRIPTION</b>                   |
|----------------|-----------------|--------------------------------------|
| 1.             | A140H20         | Barrel Assembly: 5" Bore             |
| 2.             | A400H06         | O-Ring: 5" OD X 4-1/2" ID            |
| 3.             | A400H05         | Back Up Washer: 5" OD X 4-1/2" ID    |
| 4.             | A140H21         | Head Gland: 5"                       |
| 5.             | AFB-00061       | Set Screw: 3/8" NC                   |
| 6.             | A140H19         | Collar                               |
| 7.             | A140H07         | Shaft Seal: 2-1/2" ID X 3" OD OU-Cup |
| 8.             | A140H08         | Wiper Seal: 2-1/2" ID X 2-15/16" OD  |
| 9.             | 8602            | Cotter Pin: 1/4" X 2"                |
| 10.            | A14033          | Pin: 1-1/4" Dia. X 5" Lg.            |
| 11.            | A140H27         | Shaft: 2-1/2" Dia.                   |
| 12.            | A175H06         | Spacer                               |
| 13.            | A22H15          | O-Ring: 1-1/2" x 1-3/4" OD           |
| 14.            | A140H22         | Piston: 5"                           |
| 15.            | A140H24         | Piston Seal: 5" OD X 4-1/4" ID       |
| 16.            | A140H25         | Wear Ring: 5" OD                     |
| 17.            | AFN-00018       | Lock Nut: 1-1/2" NF                  |
| 18.            | A9024           | Pin: 1-1/4" x 4-3/4"                 |
|                | A140H28         | Packing Kit: Containing:             |
|                |                 | (1) A140H25            (1) A400H06   |
|                |                 | (1) A140H07           (1) A140H08    |
|                |                 | (1) A22H15            (1) A400H05    |
|                |                 | (1) A140H24                          |

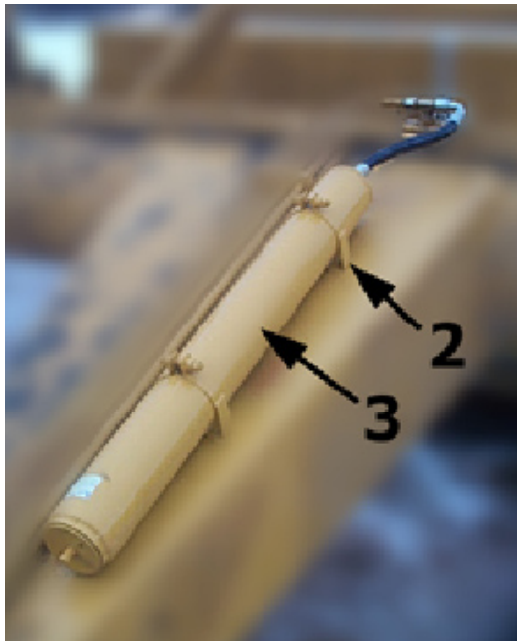


## MODEL I-155 TS Nitrogen over Hydraulic Accumulator

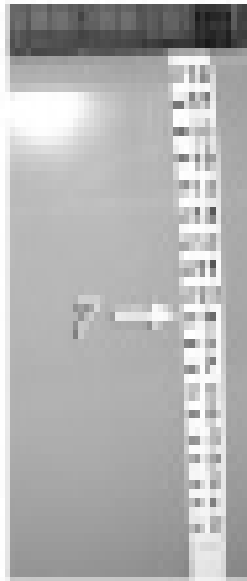
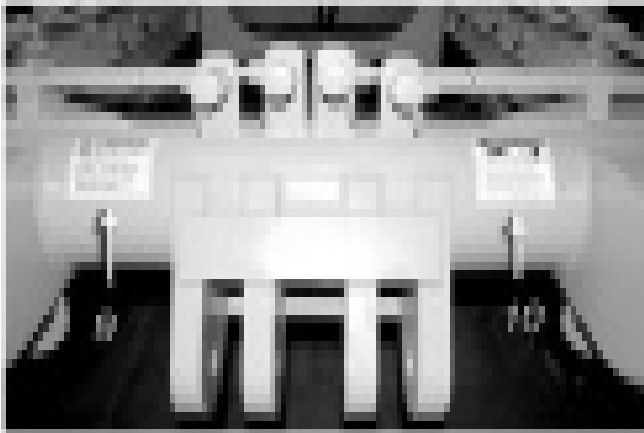
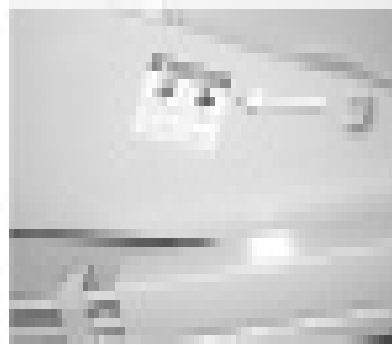
| <b>KEY NO.</b> | <b>PART NO.</b> | <b>DESCRIPTION</b>               |
|----------------|-----------------|----------------------------------|
| 1.             | A155H67         | Hose, 3/4" x 16" MORB with sweep |
| 2.             | A125009         | Bracket, Welded with bolts       |
| 3.             | A125005         | Accumulator Cylinder             |



This Accumulator is rated at 4,000 psi and is pre-charged at the plant at 2,800 psi. Any circuit pressure above 2,800 will bleed off into this accumulator until it reaches 2.11 gallons of hydraulic oil displacement. This accumulator can be recharged with nitrogen however the accumulator is NOT REBUILDABLE.

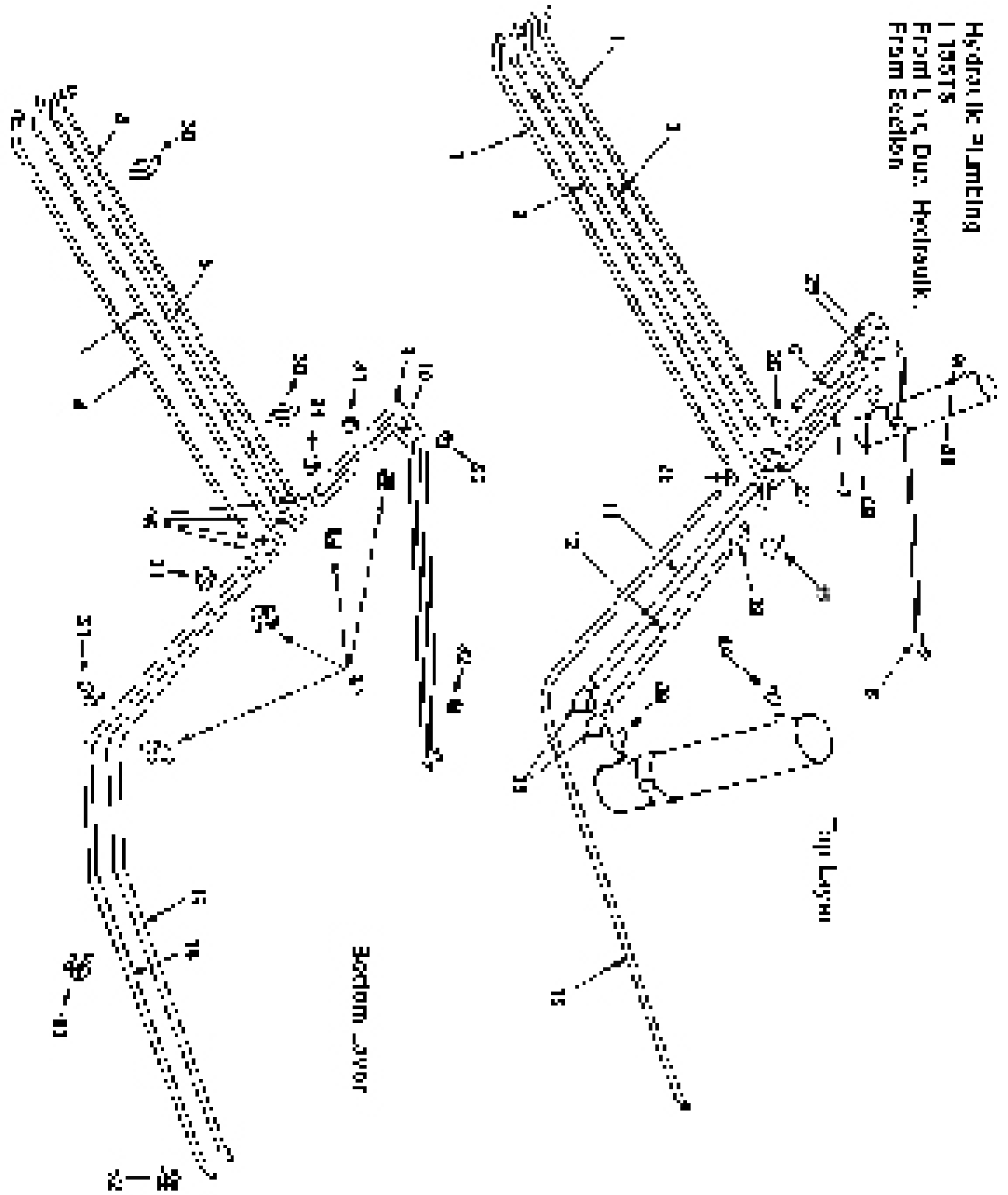


## MODEL I-155 TS DECALS



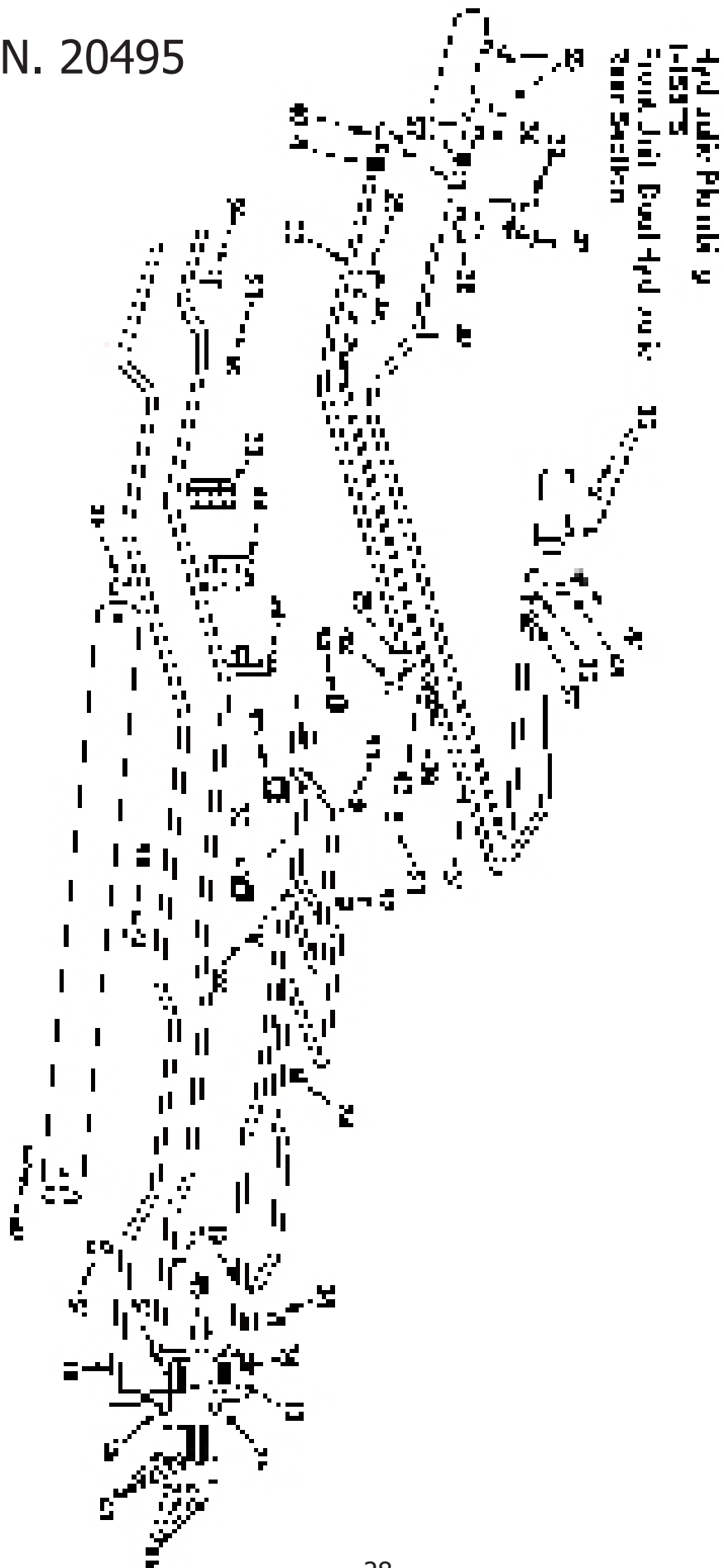
| <b>KEY</b> | <b>PART NO.</b> | <b>DESCRIPTION</b>             | <b>AMT REQUIRED/SCRAPER</b> |
|------------|-----------------|--------------------------------|-----------------------------|
| 1.         | ADS-00003       | Decal Blade Wedge, Gradient    | 2 required/scraper          |
| 2.         | ADS-00001       | Decal Ashland Logo, Large      | 2 required/scraper          |
| 3.         | ADS-00011       | Decal Pinch Point,             | 4 required/scraper          |
| 4.         | ADS-00004       | Decal I-155 Numerals only      | 2 required/scraper          |
| 5.         | ADS-00005       | Decal "TS"                     | 2 required/scraper          |
| 6.         | ADS-STRIPEKIT   | Decal Stripes,                 | 2 required/scraper          |
| 7.         | A123286         | Decal Apron opening            | 1 required/scraper          |
| 9.         | ADS-00015       | Decal "when pulling in tandem" | 1 required/scraper          |
| 10.        | 750464          | Decal "Hydraulic Pressure"     | 2 required/scraper          |
| 11.        | ADS-00002       | Decal Small "Ashland"          | 1 required/scraper          |

Hydraulic Plumbing  
 1 195TS  
 Front L. of Duct Hydraulic  
 From Section

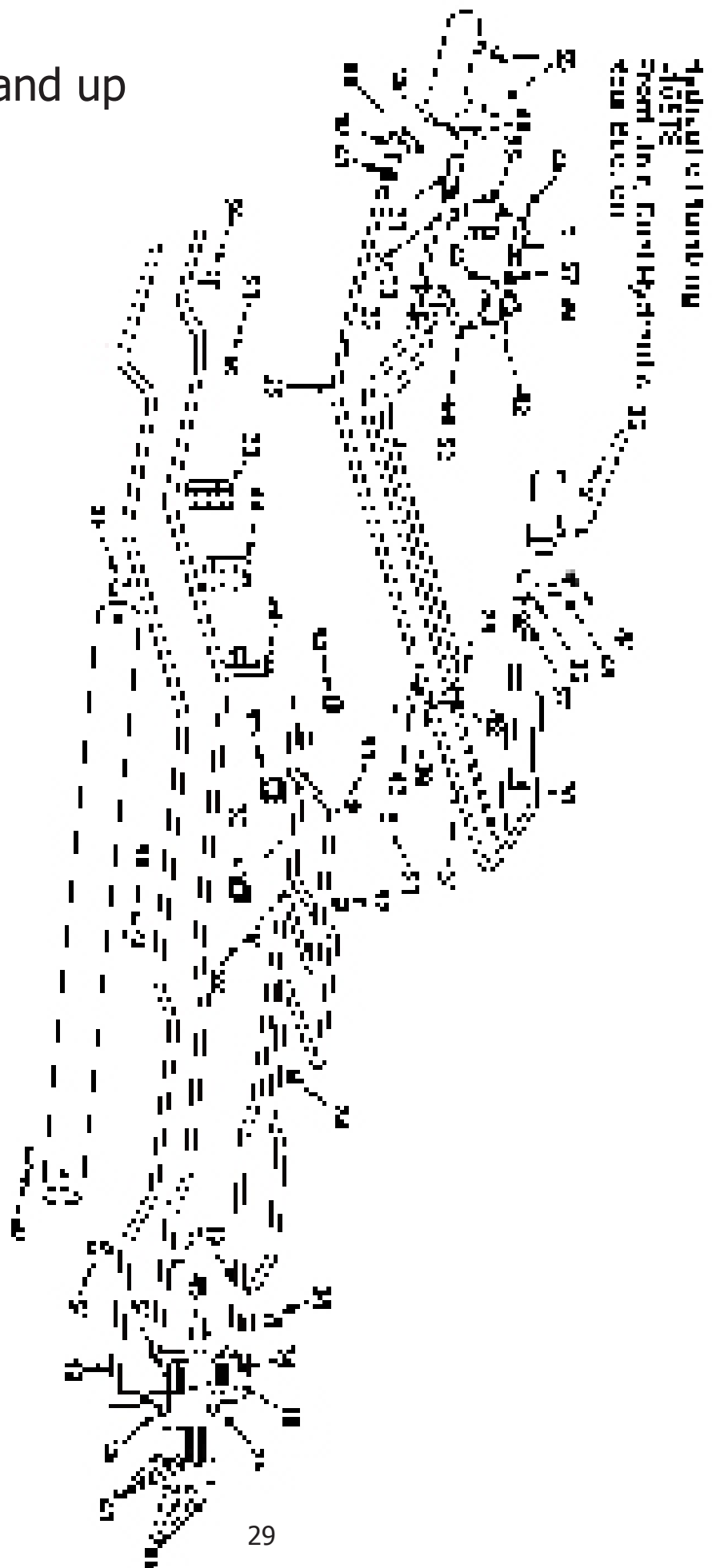


MOD-155TS-F-3HYD PARTIAL: Field Installation converting Front unit to 3-circuits

up to S. N. 20495

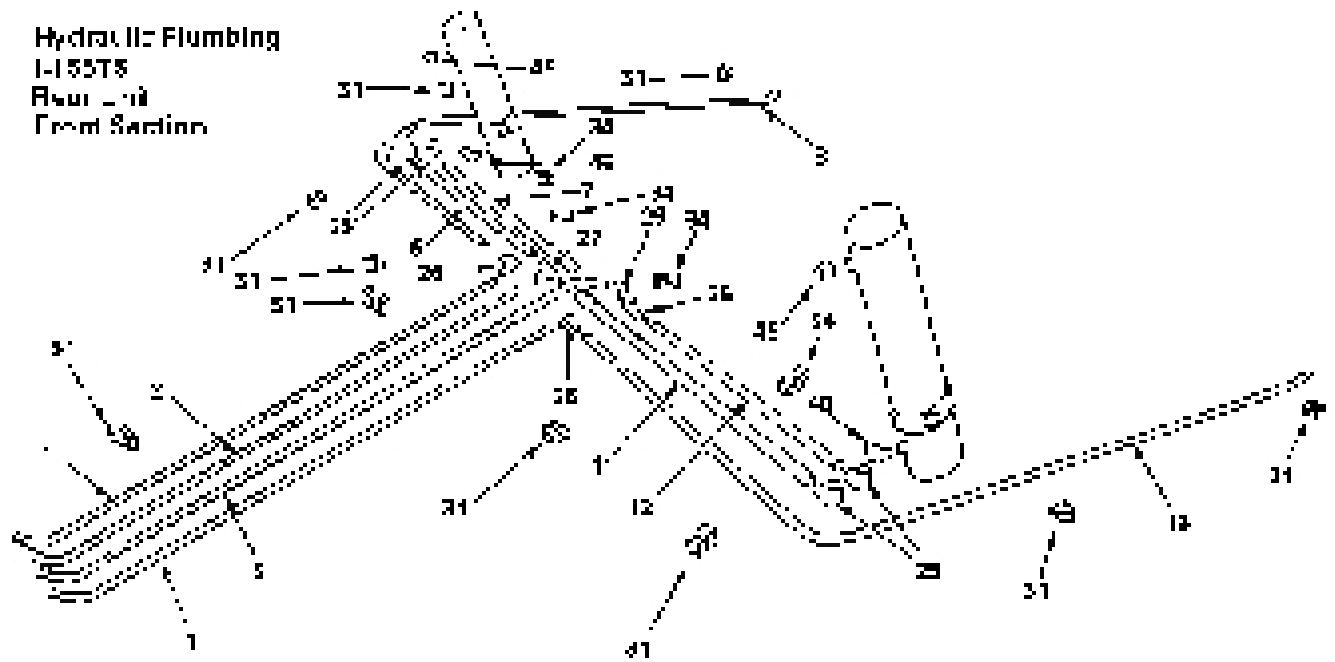


S. N. 20496 and up

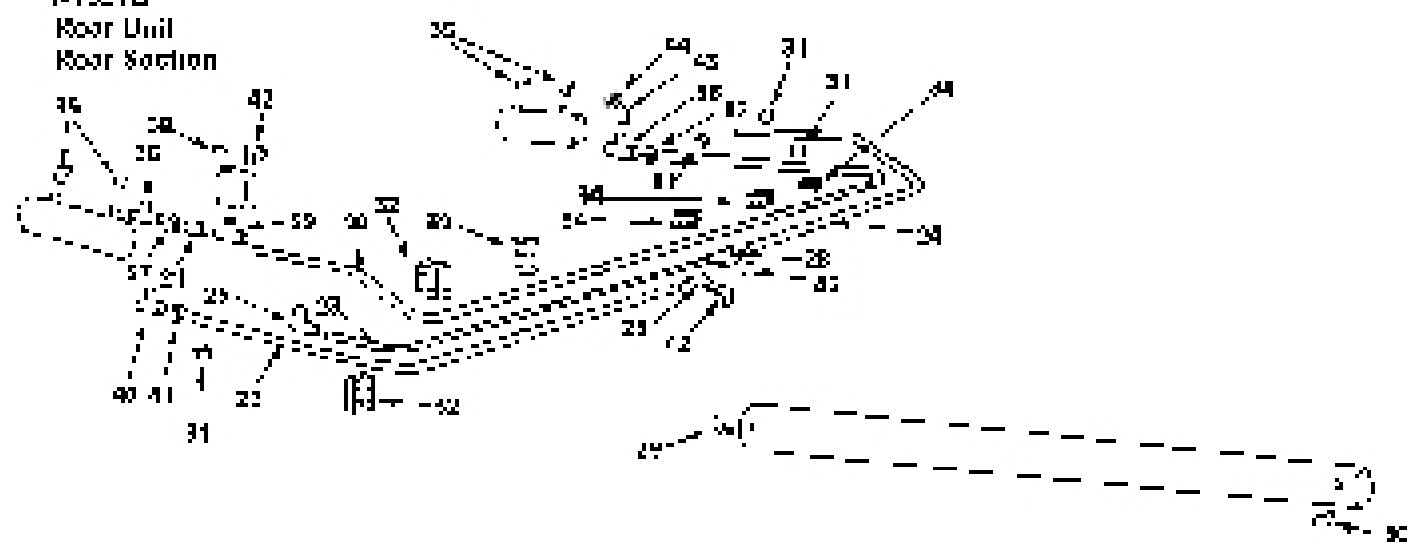


up to S. N. 20495

Hydraulic Plumbing  
I-155T8  
Rear Unit  
Front Section

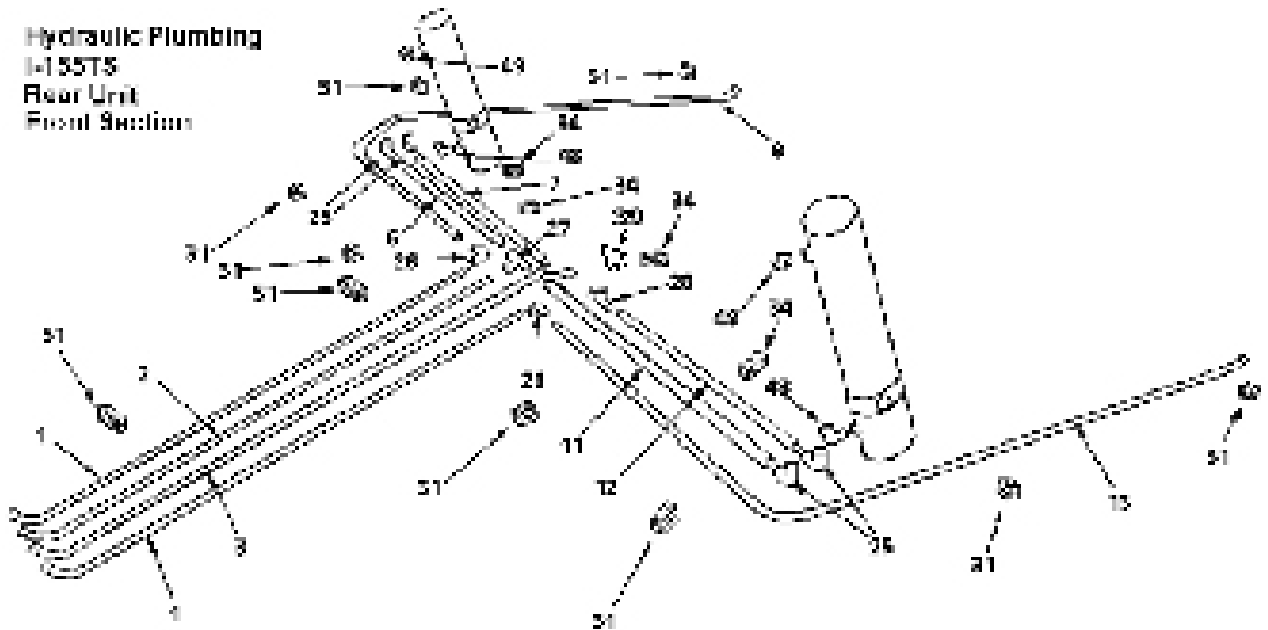


Hydraulic Plumbing  
I-155T8  
Rear Unit  
Rear Section

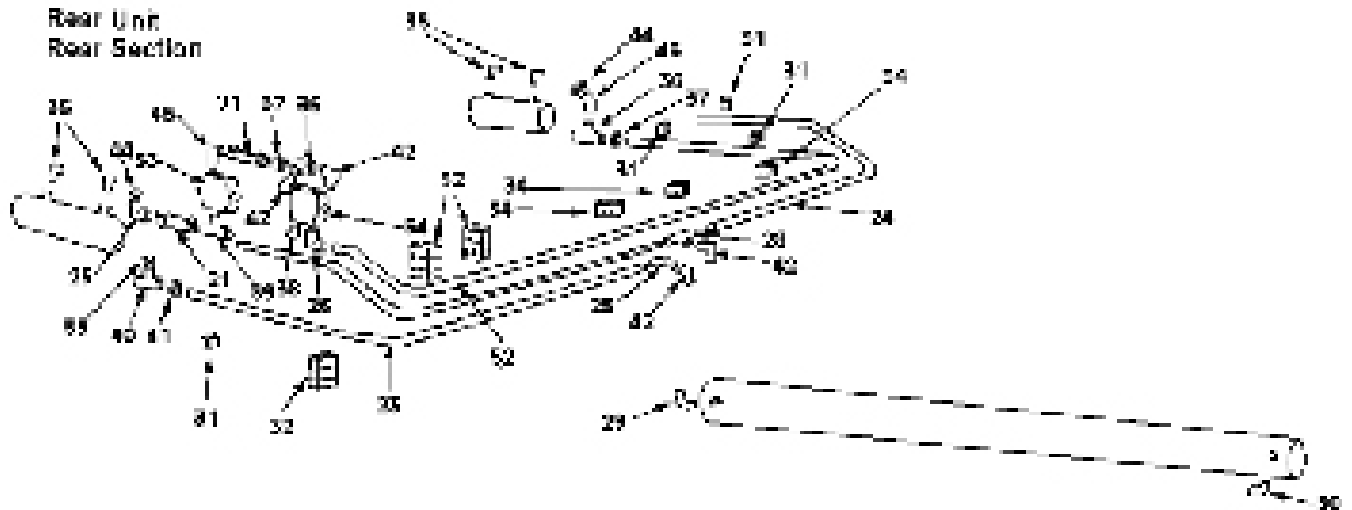


# S. N. 20496 and up

Hydraulic Plumbing  
I-155TS  
Rear Unit  
Front Section



Hydraulic Plumbing  
I-155TS  
Rear Unit  
Rear Section

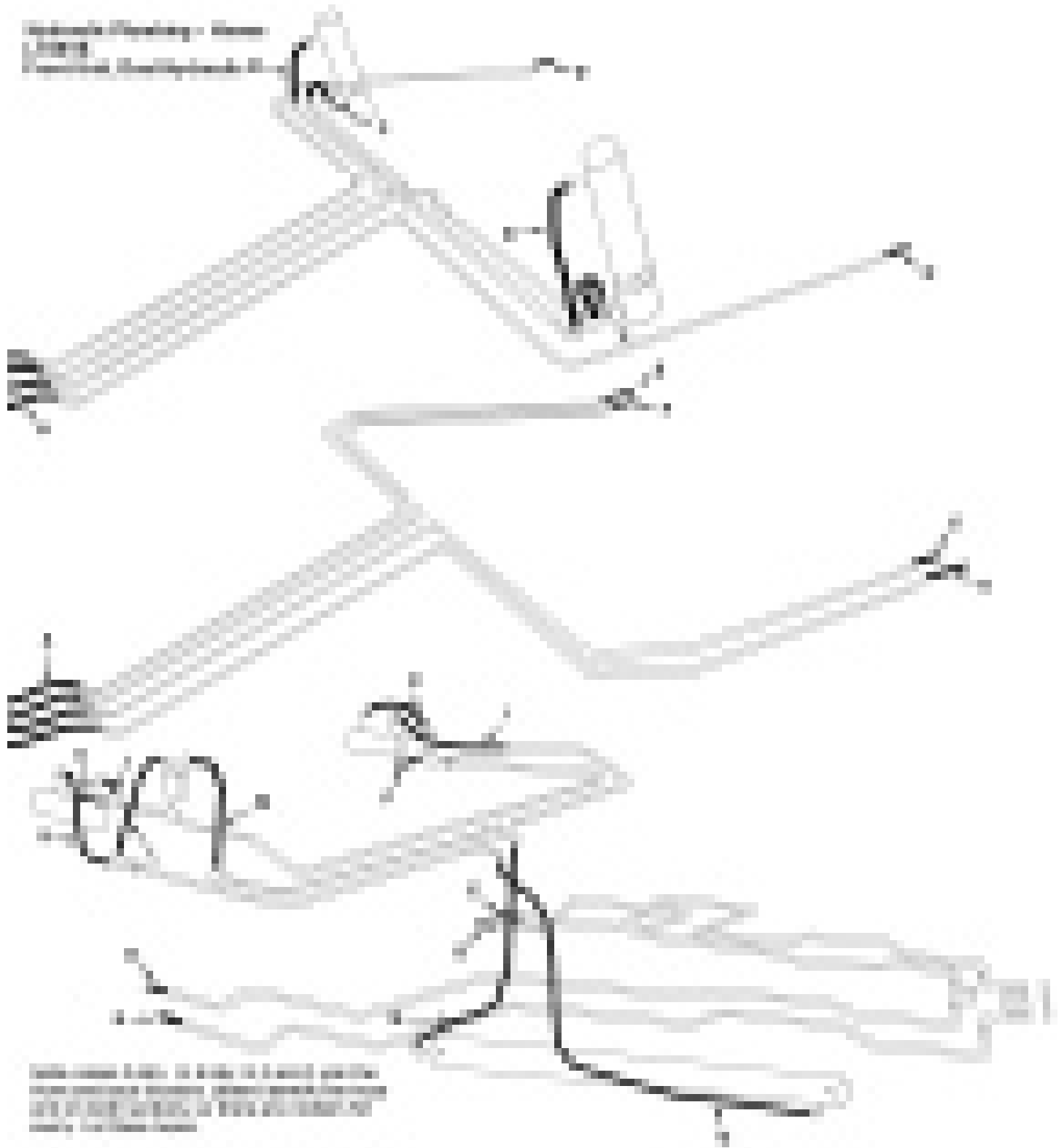


## PARTS LIST - HYDRAULIC PLUMBING - MODEL I-155TS

| Key No. | Part No.      | Description  |
|---------|---------------|--|
| 1       | A155H01       | Tubing, Front, Top, Far Right and Far Left         |
| 2       | A155H02       | Tubing, Front, Top, 2nd From Right                 |
| 3       | A155H03       | Tubing, Front, Top, 2nd From Left                  |
| 4       | A155H04       | Tubing, Front, Bottom, Outside                     |
| 5       | A155H05       | Tubing, Front, Bottom, Inside                      |
| 6       | A155H06       | Tubing, Top, Right Side                            |
| 7       | A155H07       | Tubing, Top, Right Side                            |
| 8       | A155H08       | Tubing, Top, Right Arm                             |
| 9       | A155H09       | Tubing, Bottom, Outer, Right Arm                   |
| 10      | A155H10       | Tubing, Bottom, Inner, Right Arm                   |
| 11      | A155H11       | Tubing, Top, Left Side                             |
| 12      | A155H12       | Tubing, Top, Left Side                             |
| 13      | A155H13       | Tubing, Top, Left Arm                              |
| 14      | A155H14       | Tubing, Bottom, Outer, Left Arm                    |
| 15      | A155H15       | Tubing, Bottom, Inner, Left Arm                    |
| 16      | A155H16       | Tubing, Back, Outer Right                          |
| 17      | A155H17       | Tubing, Back, Inner Left                           |
| 18      | A155H18       | Tubing, Back, Outer Left                           |
| 19      | A155H19       | Tubing, Back, Inner Right                          |
| 20      | A155H20       | Tubing, Wraps Around Back of Bowl                  |
| 21      | A155H21       | Tubing, Short, Left Side of Bowl                   |
| 22      | A155H22       | Tubing, Top, Around Left Side of Bowl              |
| 23      | A155H23       | Tubing, Bottom, Around Left Side of Bowl           |
| 24      | A155H24       | Tubing, Around Right Side of Bowl                  |
| 25      | AHA-00009     | ADAPTER: 90 DEG. 3/4 M JIC X 1/2 F NPT             |
| 26      | AHA-00019     | ADAPTER: 90 DEG. 3/4 M JIC X 3/4 M JIC             |
| 27      | AHA-00022     | ADAPTER: T 3/4 M JIC X 3/4 M JIC X 3/4 M JIC       |
| 28      | AHA-00015     | ADAPTER: T 3/4 M JIC X 3/4 F NPT X 3/4 M JIC       |
| 29      | AHA-00018     | ADAPTER: 90 DEG. 3/4 M JIC X 3/4 M NPT             |
| 30      | AHL-00004     | CLAMP, HYD TUBING: 4 TUBE                          |
| 31      | AHL-00001     | CLAMP, HYD TUBING: 1 TUBE                          |
| 32      | AHL-00022     | CLAMP, HYD TUBING: 2 TUBE STACKING                 |
| 33      | AHL-00022 (2) | CLAMP, HYD TUBING: 3 TUBE STACKING                 |
| 34      | AHL-00002     | CLAMP, HYD TUBING: 2 TUBE                          |
| 35      | A45H07        | ADAPTER: 90 DEG. SWIVEL 3/8 M NPT X 1/2 F NPT      |
| 36      | AHA-00020     | ADAPTER: T 3/4 F NPT X 3/4 F NPT X 3/4 F NPT       |
| 37      | AHA-00006     | ADAPTER: STR. 3/4 M JIC X 3/4 M NPT                |
| 38      | A22H03        | ADAPTER: 90 DEG. SWIVEL 3/8 M NPT X 3/8 F NPT      |
| 39      | A175H17       | ADAPTER: T 3/4 M JIC X 3/4 M NPT X 3/4 M JIC       |
| 40      | AHA-00014     | ADAPTER: T 1/2 F NPT X 1/2 F NPT X 1/2 F NPT       |
| 41      | AHA-00005     | ADAPTER: STR. 3/4 M JIC X 1/2 M NPT                |
| 42      | AHA-00010     | ADAPTER: 90 DEG. 3/4 M NPT X 3/4 F NPT             |
| 43      | AHA-00021     | ADAPTER: 45 DEG. 3/4 F NPT X 3/4 M NPT             |
| 44      | AHA-00017     | ADAPTER: HEX REDUCER BUSHING 3/4 M NPT X 1/2 F NPT |
| 45      | AHA-00030     | ADAPTER: 90 DEG. 3/4 M JIC X 3/4 M NPT EXTRA LONG  |
| 46      | AHF-00025     | DUST CAPS  |
| 47      | AHF-00023     | FEMALE QUICK COUPLERS                              |
| 48      | AHA-00026     | ADAPTER: 90 DEG. 1-1/16 MORB X 3/4 F NPT           |
| 49      | AHA-00037     | ADAPTER: STR. SWIVEL 1-1/16 MORB X 3/4 F NPT       |
| 50      | A101H77       | ADAPTER: 90 DEG. SWIVEL 3/4 M NPT X 3/4 F NPT      |
| 51      | AHL-00004     | CLAMP, HYD TUBING: 4 TUBE                          |
| 52      | A155H25       | Tubing, Around Left Side of Bowl                   |
| 53      | A101H48       | Counterbalance Valve                               |
| 54      | A101H47       | Sequencing Valve                                   |
| 55      | AHA-00025     | ADAPTER: HEX REDUCER BUSHING 1/2 M NPT X 3/8 F NPT |

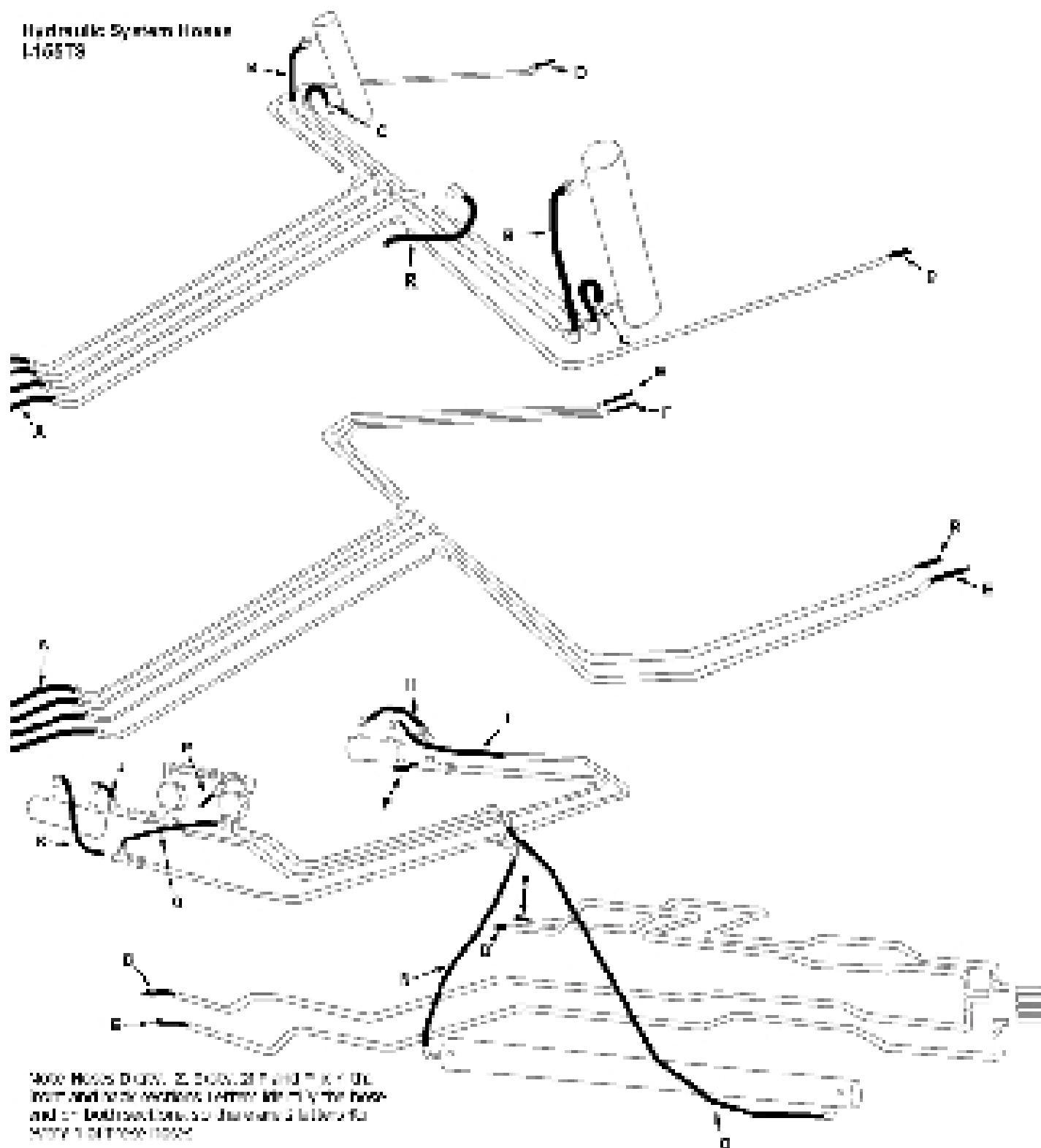


up to S. N. 20495



# S. N. 20496 and up

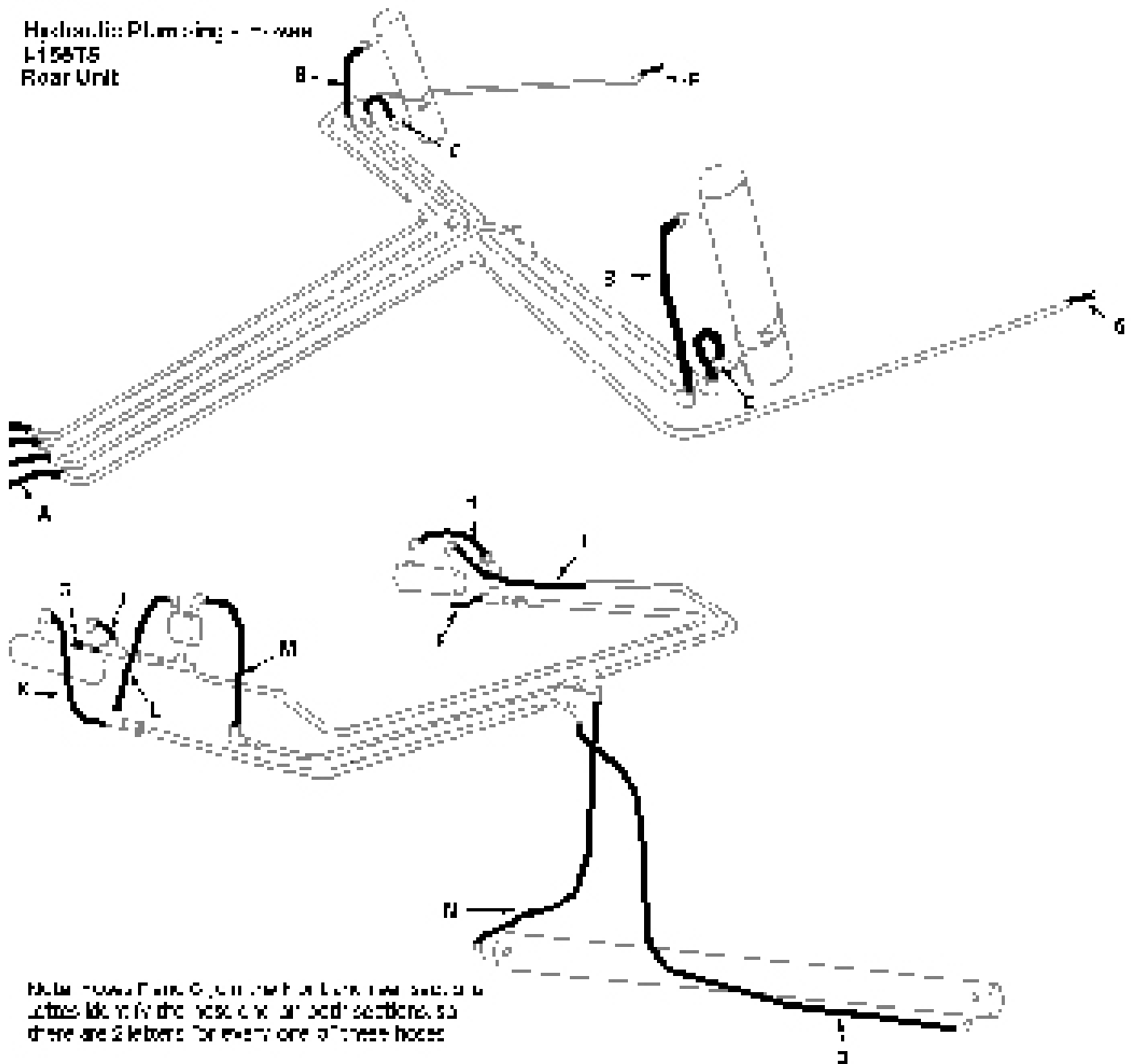
Hydraulic System Hose  
I-16878



\*4000 HOSES DUCTS, 25, 3000, 32 P and 34 K 1/2 IN.  
 both and to be worked better with the hose  
 and on both sections of the hose 2 letters for  
 every 1/2 of the hose

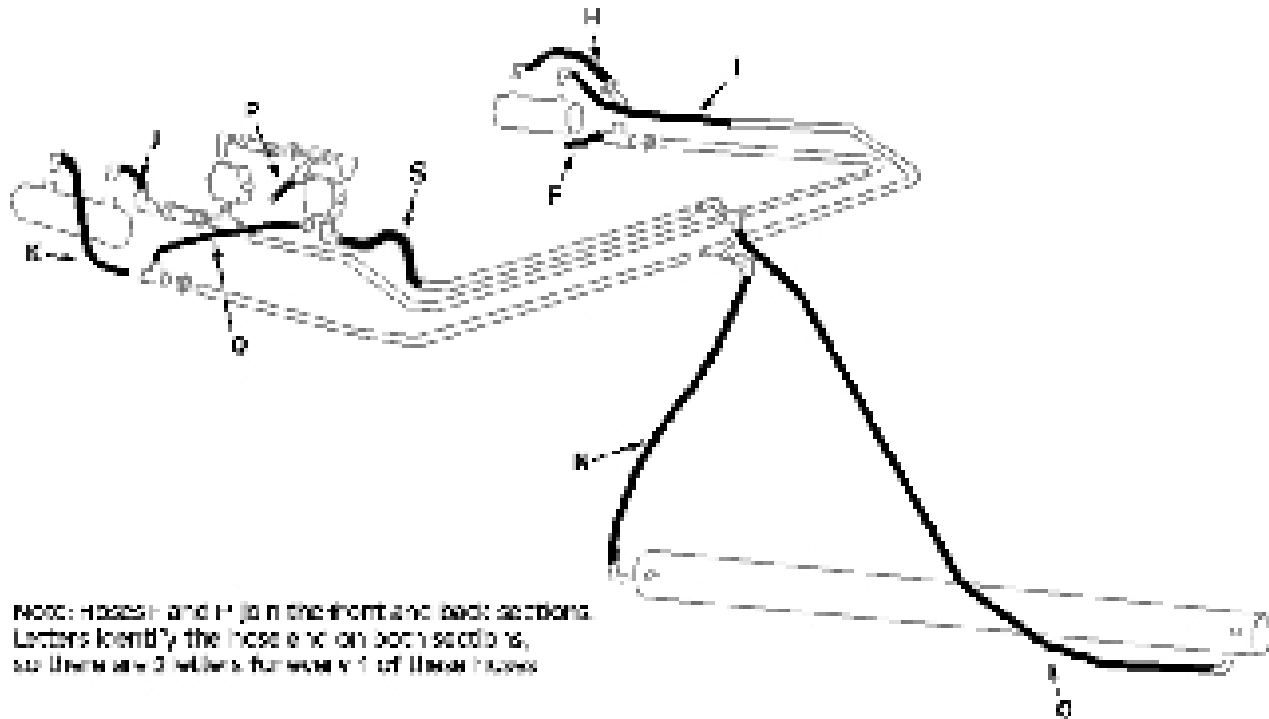
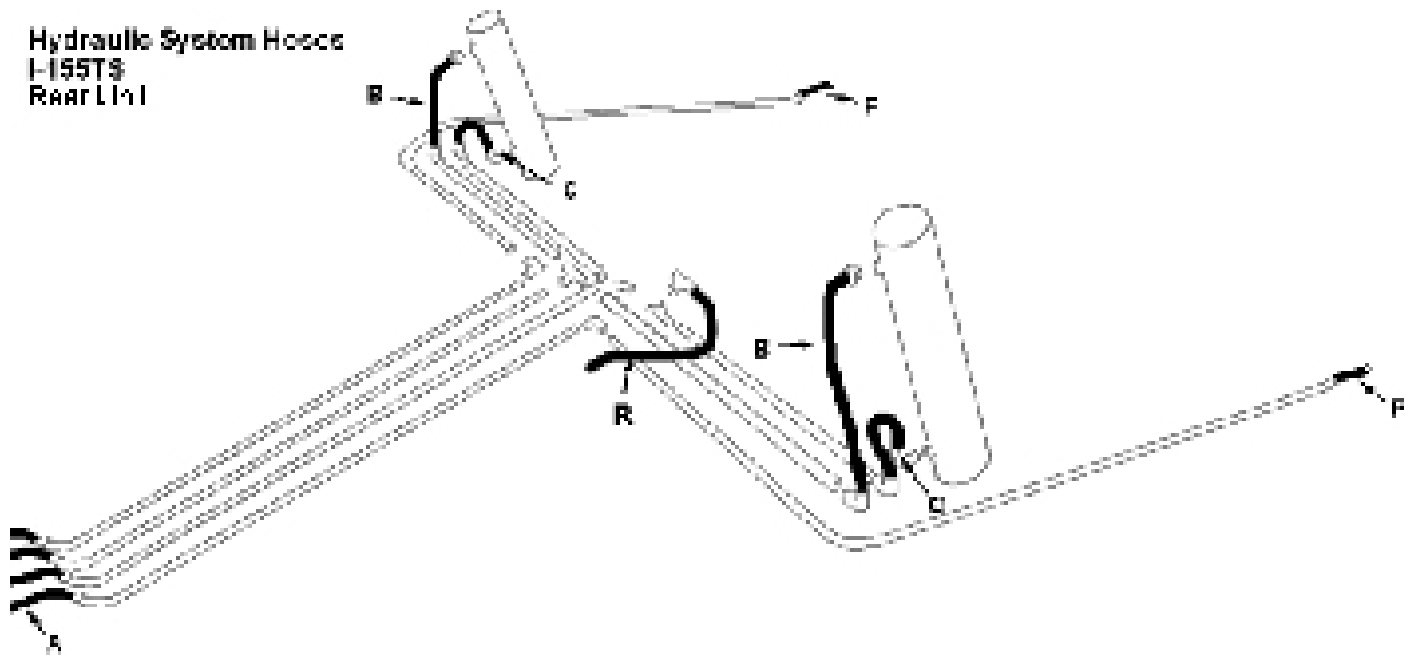
up to S. N. 20495

Hydraulic Plumbing - **7-6000**  
**L158T5**  
Rear Unit



# S. N. 20496 and up

Hydraulic System Hoses  
I-155TS  
Rear Lin



Note: Hoses H and F in the front and back sections.  
Letters identify the hose end on both sections,  
so there are 2 letters for each of these hoses

## PARTS LIST - HYDRAULIC PLUMBING - HOSES - MODEL I-155TS

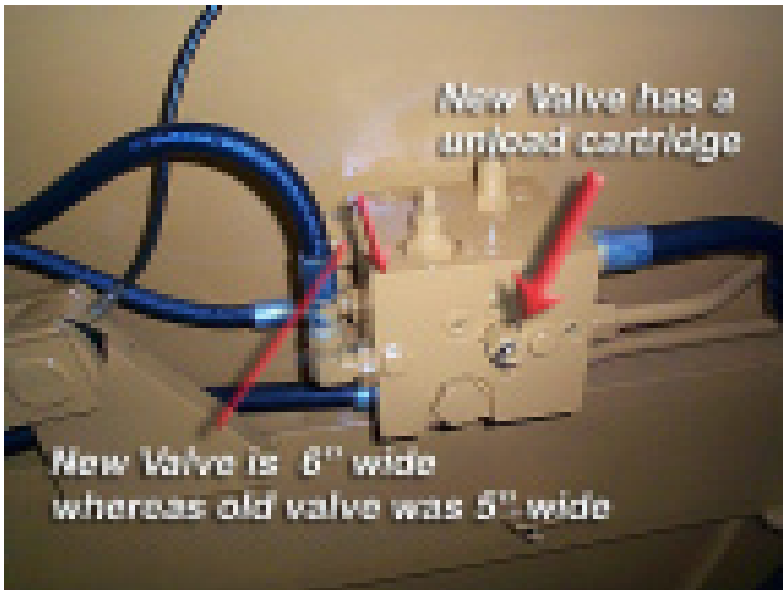
| Key No. | Part No. | Description  |
|---------|----------|--|
| A       | A155H50  | 3/4" x 75" Long, M JIC, M NPT, Double Braid High Pressure Hose     |
| B       | A155H51  | 3/4" x 22" Long, M NPT, M NPT, Double Braid High Pressure Hose     |
| C       | A155H52  | 3/4" x 28" Long, M NPT, M NPT, Double Braid High Pressure Hose     |
| D       | A155H53  | 3/4" x 36" Long, M JIC, M JIC, Double Braid High Pressure Hose     |
| E       | A155H54  | 3/4" x 33" Long, M JIC, M JIC, Double Braid High Pressure Hose     |
| F       | A155H55  | 3/4" x 43 3/4" Long, M JIC, M NPT, Double Braid High Pressure Hose |
| G       | A155H56  | 3/4" x 41 1/4" Long, M JIC, M NPT, Double Braid High Pressure Hose |
| H       | A155H57  | 1/2" x 30" Long, M NPT, M NPT, Single Braid High Pressure Hose     |
| I       | A155H58  | 1/2" x 20" Long, M JIC, M NPT, Single Braid High Pressure Hose     |
| J       | A155H59  | 1/2" x 16" Long, M NPT, M NPT, Single Braid High Pressure Hose     |
| K       | A155H60  | 1/2" x 30" Long, M NPT, M NPT, Single Braid High Pressure Hose     |
| L       | A155H61  | 3/8" x 15" Long, M NPT, M NPT, Single Braid High Pressure Hose     |
| M       | A155H62  | 3/4" x 21" Long, M NPT, M NPT, Double Braid High Pressure Hose     |
| N       | A155H63  | 3/4" x 18" Long, M NPT, F JIC, Double Braid High Pressure Hose     |
| O       | A155H64  | 3/4" x 79" Long, M NPT, M NPT, Double Braid High Pressure Hose     |
| P       | A155H65  | 3/4" x 60" Long, M JIC, M NPT, Double Braid High Pressure Hose     |
| Q       | A155H66  | 3/8" x 22" Long, M NPT, M NPT, Single Braid High Pressure Hose     |
| R       | A155H67  | 3/4" X 16" Long MORB, 90 Deg. Long Sweep MJIC                      |
| S       | A155H68  | 3/4 x 28" Long MNPT, MNPT  |

# HYDRAULIC VALVE IDENTIFICATION



New Valve

Old Valve

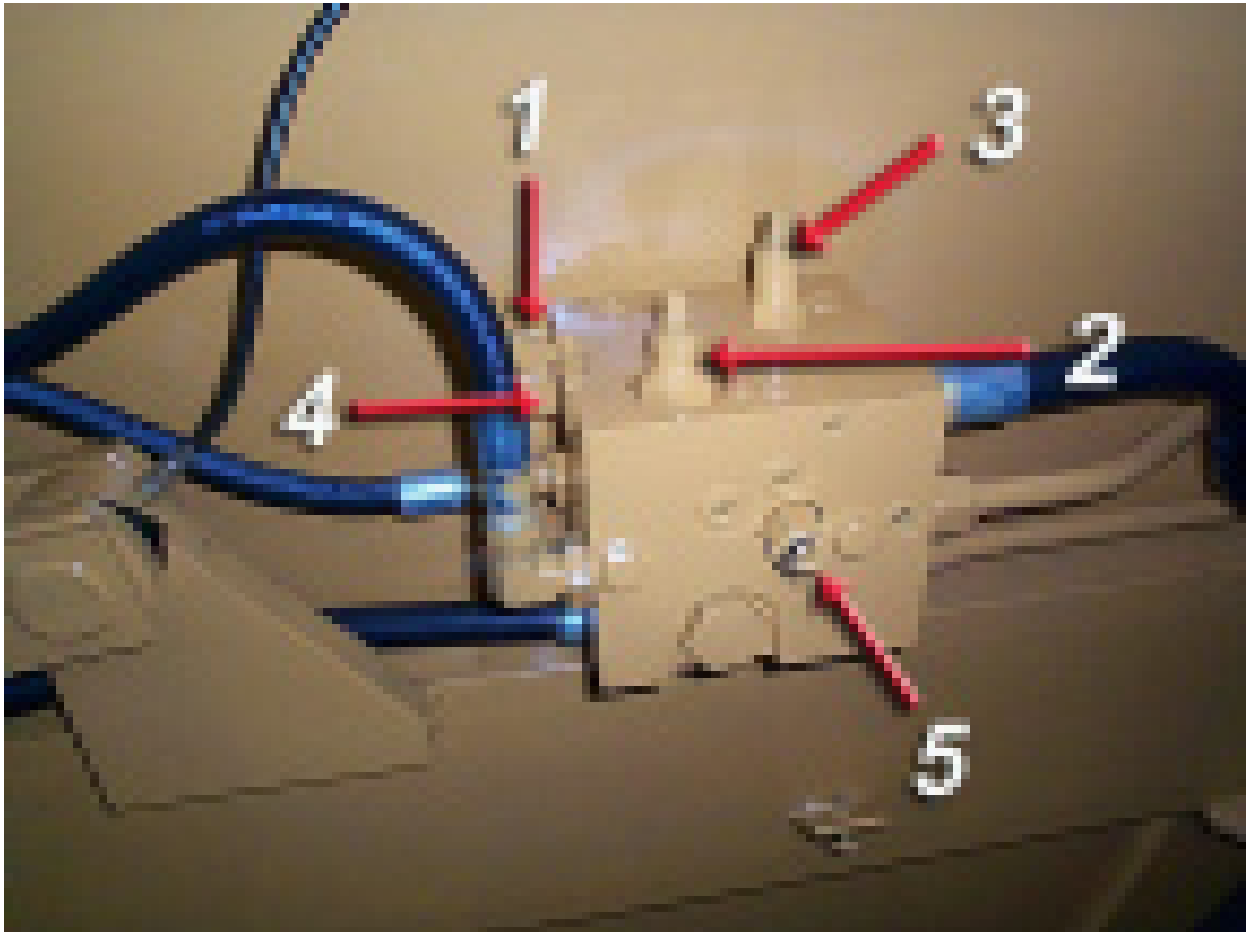


Visually there are several things you can check to ensure you have the correct valve. The new valve (shown on the left) is 6" wide whereas the older valve (shown below) was 5" wide. The new valve utilizes a unload cartridge that sticks outward on the side of the valve.



**IMPORTANT:** This Hyd. Manifold was intergrated into production Nov. 2003 It replaces A125055 valve which was used on S.N. 20750 to 20853. To confirm which valve you have, confirm with earlier valve I.D. page

**HYDRAULIC MANIFOLD ASSEMBLY  
A125070  
S.N. 20853 & above**



| <b>ITEM #</b> | <b>PART NO.</b> | <b>DESCRIPTION</b>         |
|---------------|-----------------|----------------------------|
| 1             | A125070-01      | DIRECTIONAL CONTROL VALVE  |
| 2             | A125070-02      | APRON SEQUENCE CARTRIDGE   |
| 3             | A125070-03      | PUSHOFF SEQUENCE CARTRIDGE |
| 4             | A125070-04      | CHECK VALVE CARTRIDGE      |
| 5             | A125070-05      | UNLOAD CARTRIDGE           |

## SETTING THE APRON AND PUSHOFF VALVE

The manifold block containing the pushoff sequence valve cartridge and apron sequence valve cartridge is used to control two hydraulic circuits with one hydraulic remote. When the tractor hydraulic remote is activated, oil flows first to the apron cylinders until they are fully extended. Once the cylinders are fully extended, the apron circuits' hydraulic pressure begins to increase. Once the pressure threshold is surpassed (which is adjustable. See adjustment section), the sequence valve diverts the oil flow to the pushoff's hydraulic circuit. Once the push off is completely extended the operator then reverses the tractor's hydraulic remote. The counterbalance valve will hold the apron open until the push off is fully retracted. The Apron sequence valve then opens and allows the apron to close.

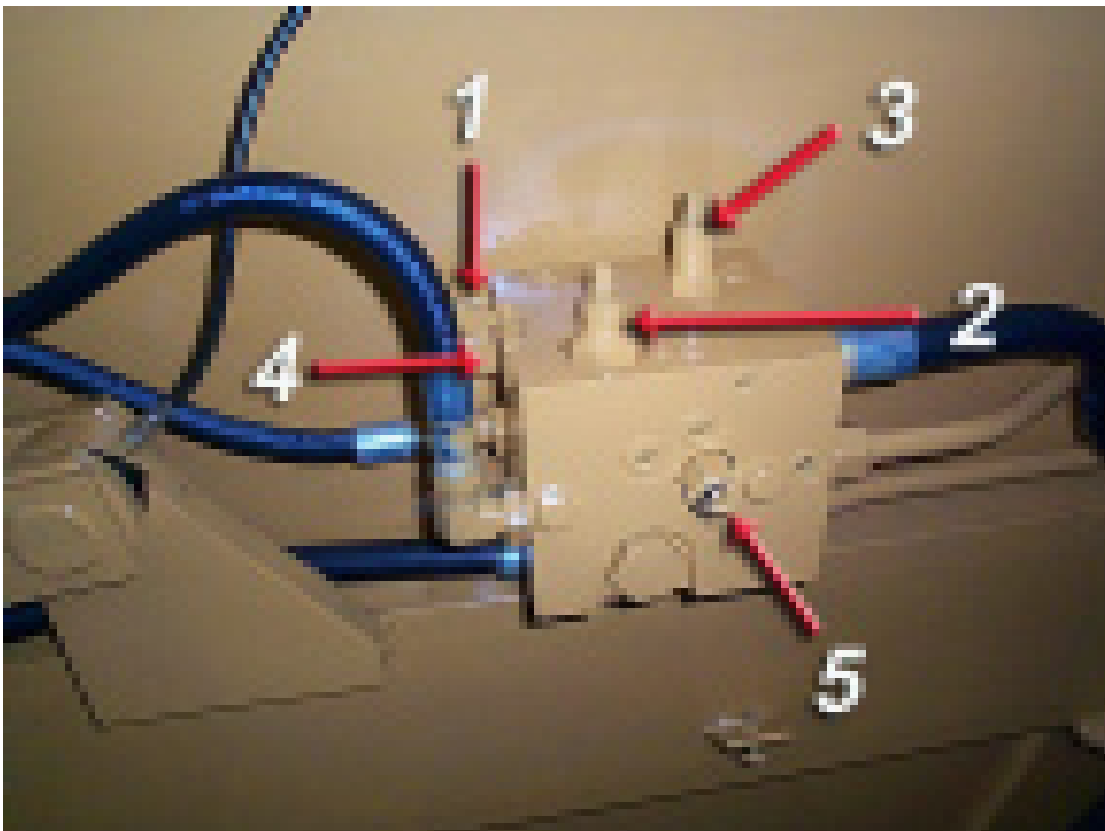
### Setting the valves:

#### STEP 1 PUSHOFF SEQUENCE VALVE

Loosen the lock nut (3/4") on the sequence valve cartridge. Turn the setscrew (1/4") clockwise until the front apron rises before the push-off begins to advance. (Earth-mover should be empty) Turn the adjustment screw an additional 1/4 turn clockwise and tighten jam nut.

#### STEP 2 APRON SEQUENCE VALVE

Loosen the lock nut (3/4") on the counterbalance valve cartridge. Turn the setscrew (1/4") clockwise until the apron holds in a raised position while rear gate is being retracted. Turn adjustment screw an additional 1/4 turn, tighten jam nut. DO NOT tighten adjusting screw more than necessary.

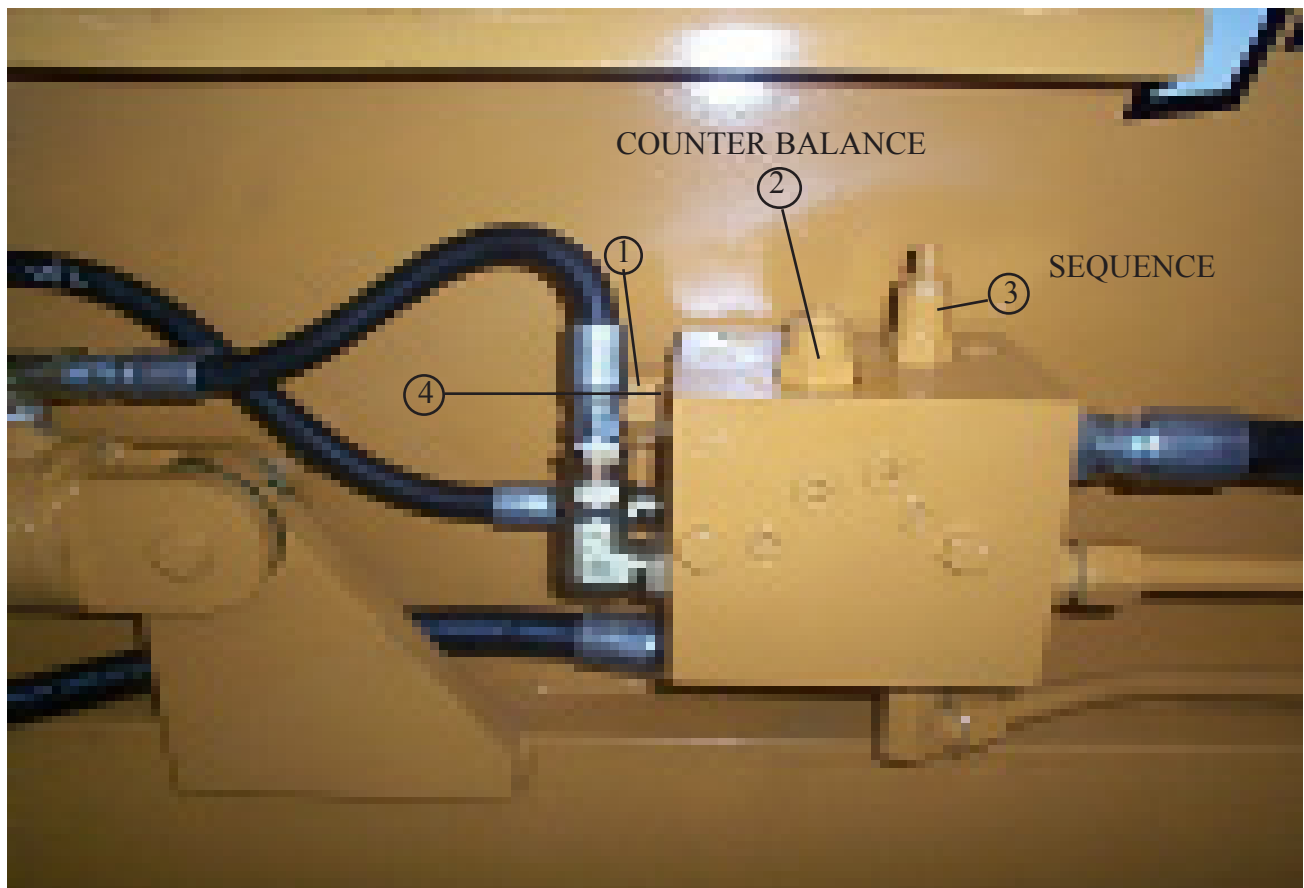




**IMPORTANT:** This Hyd. Manifold has been replaced by A125070 on Nov 2003. To confirm which valve you have, confirm with earlier valve I.D. page

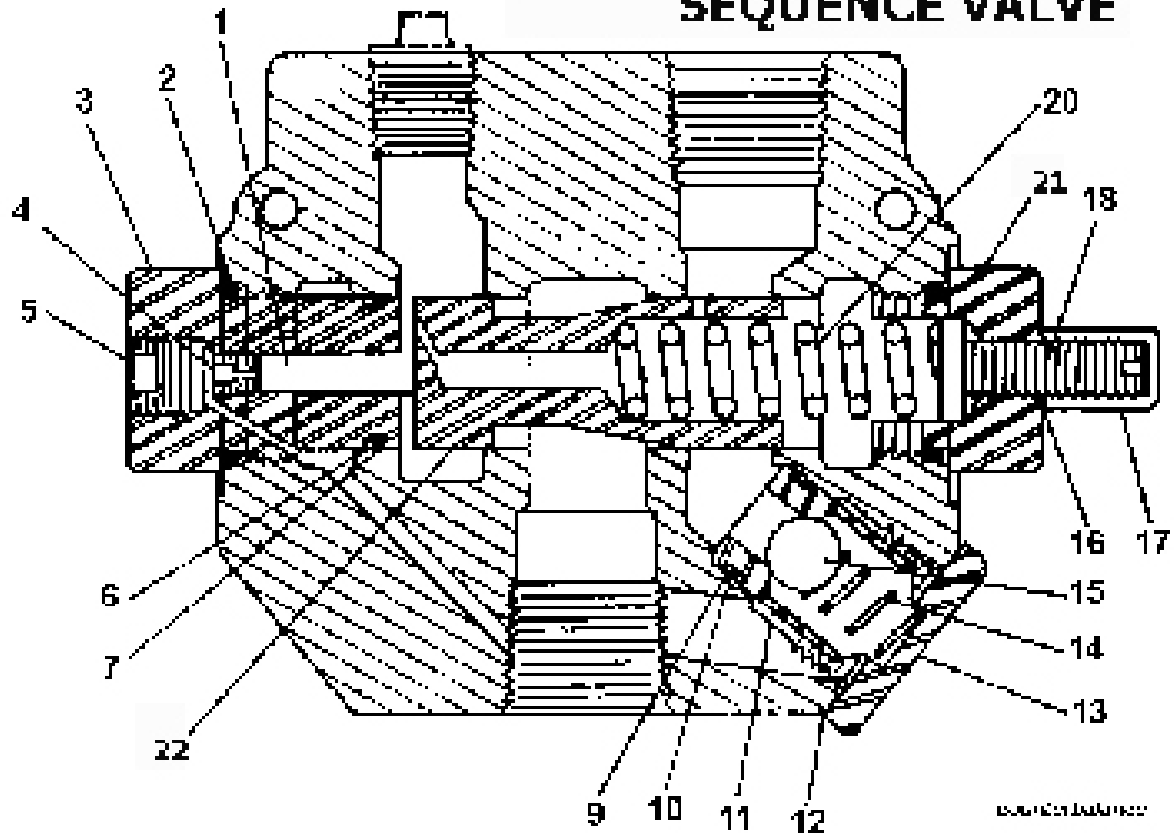
**HYDRAULIC MANIFOLD ASSEMBLY  
A125055**

**S.N. 20750 to 20853**



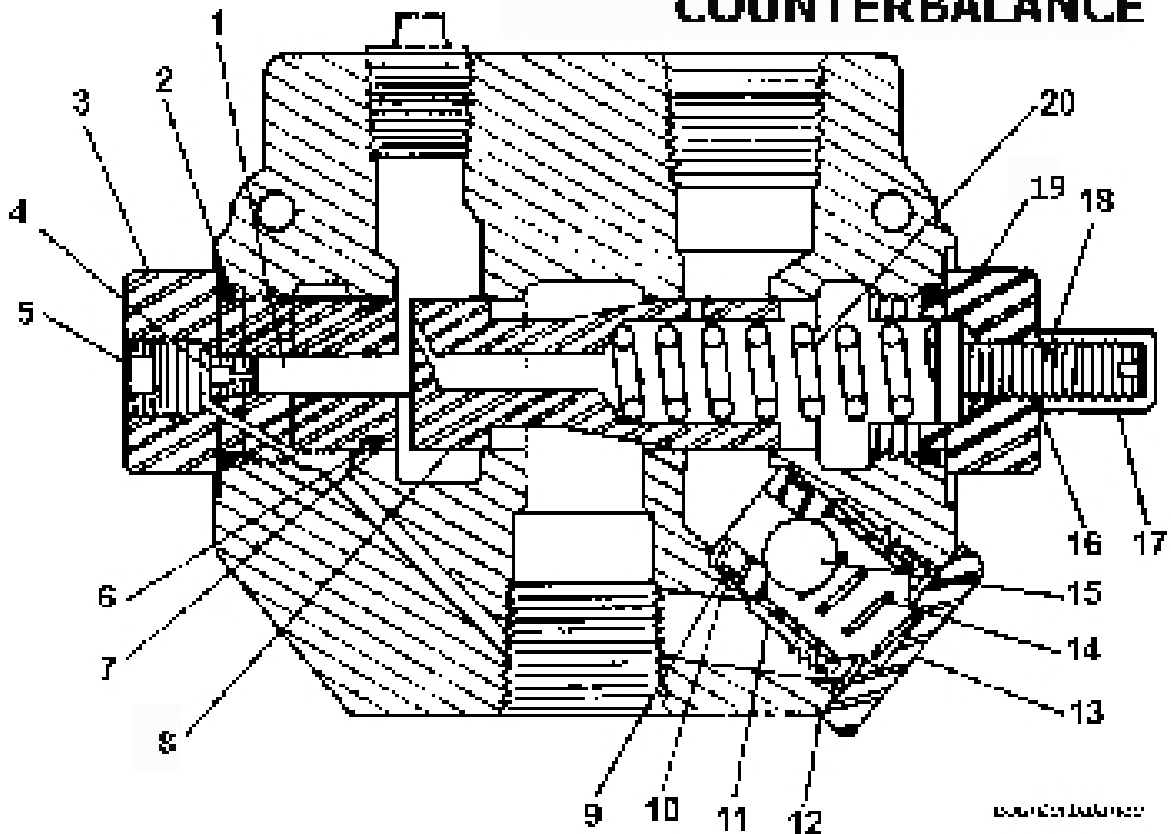
| <b>ITEM #</b> | <b>PART NO.</b> | <b>DESCRIPTION</b>                |
|---------------|-----------------|-----------------------------------|
| 1             | A125055-01      | DIRECTIONAL CONTROL VALVE         |
| 2             | A125055-02      | COUNTER BALANCE CARTRIDGE         |
| 3             | A125055-03      | SEQUENCE CARTRIDGE                |
| 4             | A125055-04      | CHECK VALVE                       |
| 5             | A125055         | COMPLETE ASSEMBLY WITH ALL VALVES |

## SEQUENCE VALVE



SEQUENCE VALVE PART #A101H47

## COUNTERBALANCE



COUNTERBALANCE VALVE PART #A101H48

# SEQUENCE AND COUNTERBALANCE VALVE PARTS LIST

## SEQUENCE VALVE PART #A101H47 COUNTERBALANCE VALVE PART #A101H48

| <b>KEY #</b> | <b>PART NO.</b> | <b>DESCRIPTION</b>         |
|--------------|-----------------|----------------------------|
| 1            | A101H49         | Piston                     |
| 2            | A101H50         | O-ring                     |
| 3            | A101H51         | External pilot plug        |
| 4            | A101H52         | Orifice                    |
| 5            | A101H53         | Plug                       |
| 6            | A101H54         | O-ring                     |
| 7            | A101H55         | Backup washer              |
| *8           | A101H56         | Metering spool             |
| 9            | A101H57         | Backup washer              |
| 10           | A101H58         | O-ring                     |
| 11           | A101H59         | Check seat                 |
| 12           | A101H60         | Aluminum washer            |
| 13           | A101H61         | Check plug                 |
| 14           | A101H62         | Check spring               |
| 15           | A101H63         | Check ball                 |
| 16           | A101H64         | Aluminum washer            |
| 17           | A101H65         | Acorn nut                  |
| 18           | A101H66         | Adjusting screw            |
| 19           | A101H67         | Adjusting plug - RD1075 CB |
| 20           | A101H68         | Metering spring            |
| 21           | A101H69         | Adjusting Plug - RD1075 SM |
| 22           | A101H70         | Metering Spool             |
| *            | A101H71         | Valve body                 |

\* NOT SOLD SEPARATELY

# MAINTENANCE CHECKLIST

---

1. Grease all zerks.
  - a) Every 5 hours of operation.
  - b) See Lubrication Points section on next page.
  
2. Greasing the hubs.
  - a) Re-pack wheel bearings after 600 hrs of operation.
  - b) Completely clean grease out of hub and bearings every 1200 hours of operation.
  
3. Check tire pressure.
  - a) 29.5 – 25, 28-ply tire requires a tire pressure of 45-50 psi.  
If pressure drops, first secure valve stem, and if pressure continues to drop, contact Ashland Industries.
  
4. Check all pins for signs of wear.
  - a) Daily
  
5. Check wheel lug nut torque.
  - a) After first 2 hours of operation.
  - b) Recheck daily for next 2 weeks.
  - c) Tighten wheel lug nuts in a star pattern.
  - d) Torque wheel lug nuts to 750 ft-lbs.
  
6. Check and retighten all bolts.
  - a) After initial 10 hours of use.
  - b) Again after 50 hours of use.
  - c) See Torque Specifications on next page.
  
7. Inspect cutting edges.
  - a) Daily
  - b) Replace cutting edges when center blade has been worn to approximately 6" and side edges worn to approximately 4".

**CAUTION!** Failure to replace worn cutting edges may result in unnecessary wear to the earthmover sides and floor.

Note: Please specify left or right "L" shaped cutting edges when ordering replacements.

# TORQUE SPECIFICATIONS

---

| <i>Grade 8</i>  |               |
|-----------------|---------------|
| <i>Bolt</i>     | <i>Torque</i> |
| <i>Diameter</i> | <i>ft-lbs</i> |
| 1/4"            | 12            |
| 5/16"           | 25            |
| 3/8"            | 45            |
| 7/16"           | 70            |
| 1/2"            | 110           |
| 9/16"           | 150           |
| 5/8"            | 220           |
| 3/4"            | 380           |
| 7/8"            | 600           |
| 1"              | 900           |
| 1-1/8"          | 1280          |
| Lug Nuts        | 750           |

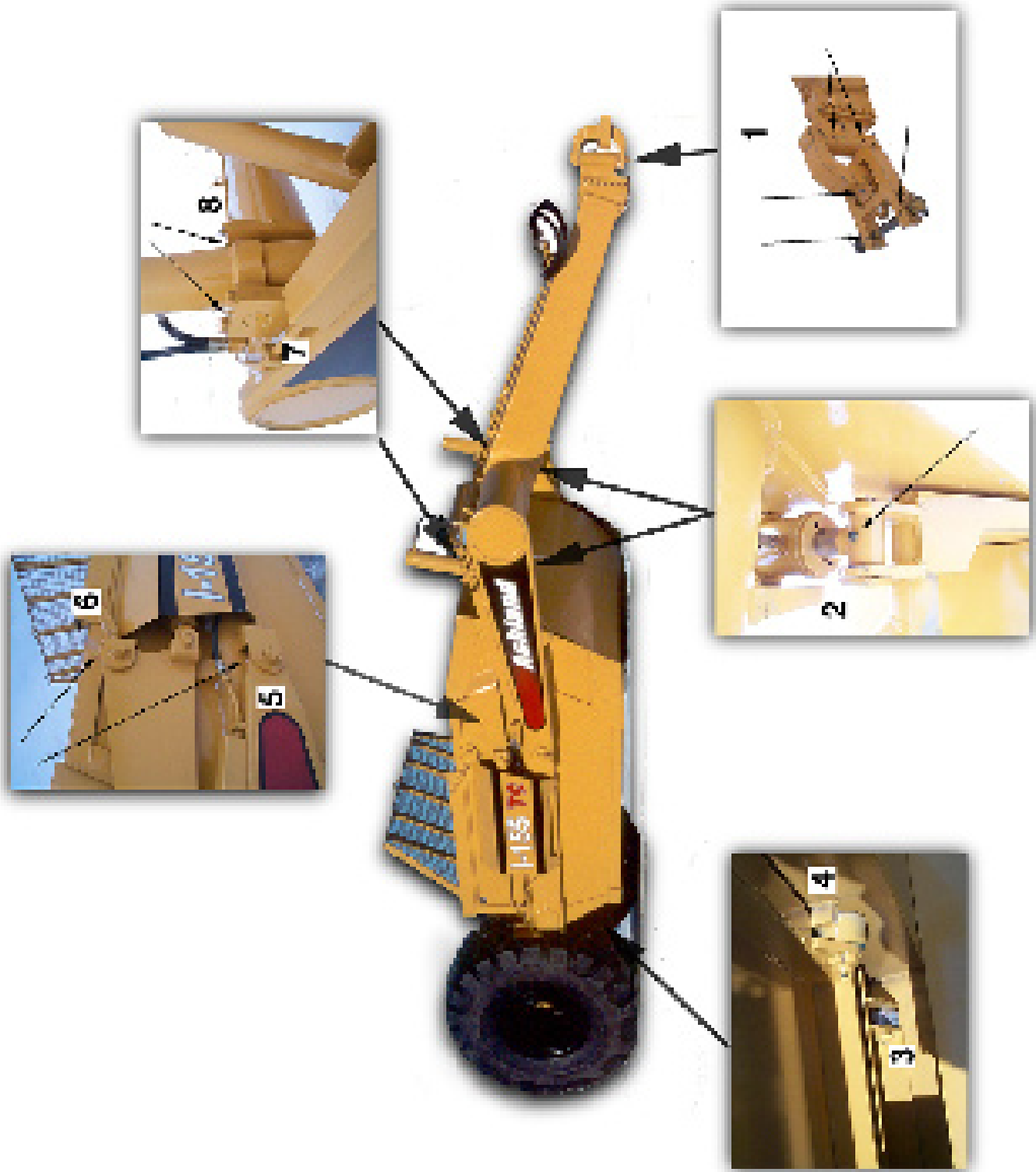
## LUBRICATION

---

1. Grease all zerks every 8 hrs of operation with high quality, general-purpose grease.
  - a) Grease until grease flows from around pin.

### Lubrication Points

1. Hitch – Horizontal and vertical pins.
2. Lift Cylinders – Rod end; Both left & right sides.
3. Front Arm Pivot Joint – Both left & right sides.
4. Apron Pivot Pin; Both left & right sides.
5. Hold-down Rollers – Both left & right sides.
6. Tapered Rollers – Both left & right sides.
7. Lift Cylinders – Trunnion Mount Blocks; Both left & right sides
8. Lift Cylinders – Trunnion Mount Blocks; Both left & right sides



# HYDRAULIC SYSTEM

---

## **Standard Two-Circuit Hydraulic Plumbing**

The apron cylinders and the push-off cylinder are controlled on the same circuit with the sequence of the operation controlled by a sequence valve. The other hydraulic circuit controls the lift cylinders on the earthmover.

**\*To adjust the sequence valve, see Troubleshooting section.**

## **Optional Three-Circuit Hydraulic Plumbing**

The apron cylinders, push-off cylinder, and lift cylinders are all on separate hydraulic circuits.



**CAUTION!** Relieve all hydraulic pressure before working on the hydraulic system.

---

**WARNING!** High Pressure Fluid Hazard – To prevent serious injury or death from high pressure fluid:

- a) Relieve pressure on hydraulic system before repairing, adjusting, or disconnecting.
  - b) Wear proper hand and eye protection when searching for leaks.
  - c) Keep all components in good repair.
-

## PUSHING THE EARTHMOVER

---

The I-155TS was designed to be pushed when equipped with the optional push-bar. However, Ashland Industries, Inc. **STRONGLY** recommends using extreme caution when pushing the I-155TS earthmover to prevent any unnecessary damage.



**CAUTION!** The I-155TS earthmover must be pushed in a straight line with a maximum of a 150 hp dozer. Do not ram or jar the earthmover while pushing and push at a constant speed.





# TROUBLESHOOTING

---

## Introduction

---

With proper care and maintenance, the I-155TS will give many years of reliable service. When a situation arises where the earthmover performance is not satisfactory, this section will give some pointers on finding and correcting the problem.

---

### Grease zerk will not take grease.

---

1. Grease zerk plugged.
  - a) Remove and replace grease zerk.
2. Pin is frozen.
  - a) Remove, clean, and inspect pin.
  - b) Replace pin if necessary.
3. Bushing grease passage is not aligned with grease zerk.
  - a) Remove, clean, inspect, and realign bushing.
  - b) Replace bushing if necessary and realign.

---

### Cylinders will not hold in preset position, i.e. the cylinder creeps.

---

1. Seals leaking internally.
  - a) Remove and replace seal kit.

---

## Machine cuts unevenly.

---

1. Cutting edges worn unevenly.
  - a) Replace cutting edges.
2. Improperly inflated tires.
  - a) Check air pressure in tires.

---

## Apron closes slowly

or

## Apron and push-off are not working well together.

---

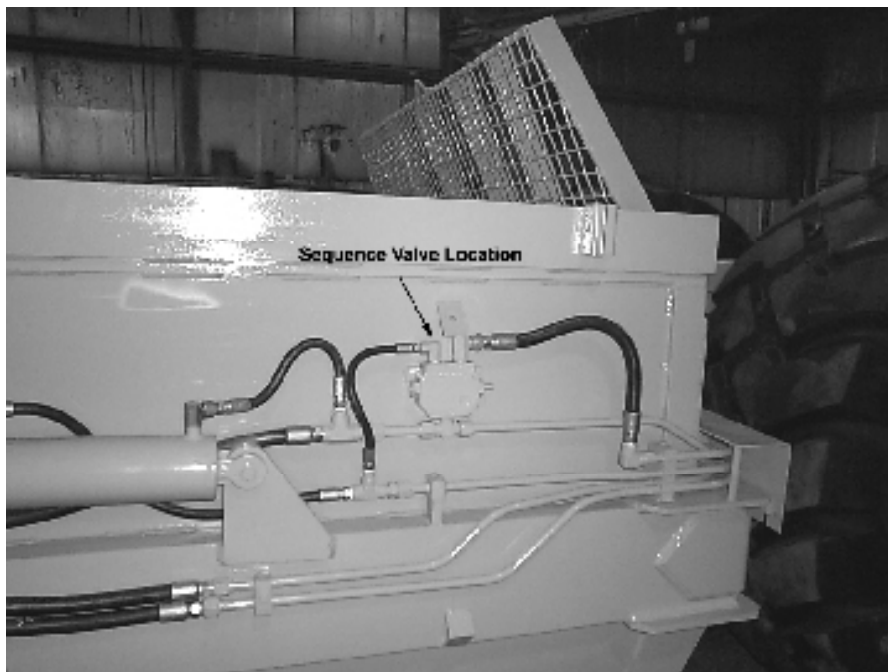
1. Sequence valve needs adjusting.
  - a) Remove acorn nut from end of sequence valve with a 1/2" wrench. Turn adjustment screw, using a 4mm hex wrench, clockwise until front apron rises before the push-off advances while the earthmover is empty. Turn the adjustment screw an additional 1/4 turn clockwise, then replace the acorn nut and tighten.
  - b) Torque check valve assembly and int. pilot plug to **25 ft-lbs maximum**.

**CAUTION!** Overtightening check valve assembly and int. pilot plug will cause internal damage to the sequence valve.



**Note: Check valve assembly may leak slightly when torqued to 25 ft-lbs.**

---



# Limited Warranty Statement

Ashland Industries Inc. warrants each new product to be free from defects in material and workmanship. This warranty is applicable only for the normal service life expectancy of the product or components, not to exceed **six consecutive months** from the date of delivery of the new Ashland Industries product to the purchaser, or the date the product is first put into service via a rental agreement or other means, whichever occurs first.

The major components of swivel hitches used on Industrial series scrapers are warranted for three consecutive months from the date of delivery of the new Ashland Industries product to the purchaser, or the date the product is first put into service via a rental agreement or other means, whichever occurs first, except those components described below.

Genuine Ashland Industries Inc. replacement parts and components will be warranted for 30 days from date of purchase, or the remainder of the original equipment warranty period, whichever is longer.

Under no circumstances will it cover any merchandise or components thereof, which in the opinion of the company, has been subjected to misuse, unauthorized modification, alterations, an accident or if repairs have been made with parts other than those obtained through Ashland Industries Inc.

Ashland Industries Inc. in no way warrants Tires since their respective manufacturer warrants these items separately. Please call Ashland Industries Inc. to receive phone numbers of tire suppliers.

Ashland Industries Inc. in no way warrants wearable items such as cutting edges, front dolly wheel balls, socket halves, rollers, bushings, yoke hitch pins, hitch bushings, etc..

Our obligation under this warranty shall be limited to repairing or replacing, free of charge to the original purchaser, any part that, in our judgement, shall show evidence of such defect, provided further that such part shall be returned within 30 days from the date of failure to Ashland Industries Inc. routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid. Upon warranty approval proper credits will be reimbursed for transportation.

This warranty shall not be interpreted to render Ashland Industries Inc. liable for injury or damages of any kind or nature to person or property. This warranty does not extend to the loss revenue, extra labor cost associated with downtime, substitute machinery, rental or for any other reason.

Except as set forth above, Ashland Industries Inc. shall have no obligation or liability of any kind on account of any of its equipment and shall not be liable for special or consequential damages. Ashland Industries Inc. make no other warranty, expressed or implied, and, specifically, Ashland Industries Inc. disclaims any implied warrant or merchantability or fitness for a particular purpose. Some states or provinces do not permit limitations or exclusions of implied warranties or incidental or consequential damages, so the limitations or exclusion in this warranty may not apply.

This warranty is subject to any existing conditions of supply which may direct affect our ability to obtain materials or manufacture replacement parts.

Ashland Industries Inc. reserves the right to make improvements in design or changes in specifications at any time, without incurring any obligation to owners of units previously sold

No one is authorized to alter, Modify or enlarge this warranty nor the exclusion, limitations and reservations.

Ashland Industries Inc.  
Warranty Department