



# AG PRO SS

## Owner's Manual & Parts Book

Purchase Date
Serial Number
Model Number
Tractor Model
Dealer

# Contents

Description	Page
To The Owner, Maintenance, Safety Precautions, Torque Specifications & Warning	2-3
Unpacking Components & Assembling Lift Components	4
Lift System	5
Installing Hydraulic Coupler Components	6
Initial Startup Instructions	7
Connecting and Disconnecting the Blade	8
Skid Shoe and Tilt Plate Adjustment	9
Hydraulic Angle & Hydraulic Tilt System	10-14
Hydraulic Angle & Hydraulic Tilt Hydraulic Schematic	15
Blade Assembly & Name Plate	16-17
Notes	18-19
Contact Us, Improvements, & Warranty	20

## To The Owner

This manual contains information concerning the operation, adjustment, and maintenance of the Ag Pro SS blade system. You have purchased dependable, long lasting equipment, but only by proper care and operation can you expect to receive the performance and long service built into our products. Please have all operators read this manual carefully and keep the manual available for ready reference. If you have any questions or concerns, contact Grouser Products.

## Maintenance

**Due to the harsh environment your equipment operates in, the following tasks should be performed every 10 hours or less.**

- Inspect all equipment before operation for existing or potential damages.
- Lubricate all joints with high quality grease.
- Inspect and tighten all bolts to torque specifications on page 3.
- Check replaceable cutting edge for wear ensuring there is enough material to prevent permanent damage to the blade.
- Make sure all non-rotating pins are secured properly.
- Check hydraulic cylinders and hoses for damage or leaks.
- Check skid shoes for wear and replace if necessary. For adjustment, see page 9.
- Inspect all tilt-ways for aggressive wear. See page 9 for tilt plate adjustment.

# Safety Precautions

A careful operator is the best operator. Most accidents can be avoided by observing certain precautions. To help prevent accidents, read and take the following precautions before operating this equipment. In addition to these precautions, please follow all safety and operational instructions of your tractor manufacturer.

## The Dozer:

1. The Ag Pro SS Dozer should be operated only by those who are responsible and instructed to do so.
2. Read the owner's manual carefully before using this equipment. Lack of operating knowledge can lead to accidents.
3. Keep the dozer maintained in reliable and satisfactory condition to ensure your safety.
4. Make sure the area is clear of people before moving any equipment.
5. Do not modify or permit anyone else to modify or alter the equipment and its components without first consulting Grouser Products.

## Servicing the Dozer:

1. Read and follow all safety instructions provided by the tractor manufacturer.
2. Always use proper personal safety gear when performing maintenance on equipment.
3. Before servicing, relieve hydraulic pressure, stop engine and fully engage parking brake.
4. Escaping hydraulic fluid under pressure can penetrate skin causing serious injury. If fluid is injected into skin, obtain medical attention immediately.
  - DO NOT use your hand to check for leaks. Use a piece of cardboard or paper to search for leaks.
  - Stop the engine and relieve pressure before connecting or disconnecting lines.
  - Tighten all connections before starting the engine or pressurizing lines.

## Storing the Dozer:

1. Thoroughly clean the inside and outside of the dozer before storage. Use paint where necessary to prevent rust.
2. Check the dozer for worn or damaged parts. Install new parts as required.
3. Lubricate all pins and joints.

# Torque Specifications

All bolts should be tightened to the specifications in the charts below.

	Torque - Dry (ft-lbs)			
	SAE Grade 5		SAE Grade 8	
Size	UNC	UNF	UNC	UNF
5/16	17	19	24	27
3/8	30	35	45	50
7/16	50	55	70	80
1/2	75	85	110	120
9/16	110	120	150	170
5/8	150	170	210	240
3/4	260	300	380	420
7/8	430	470	600	670
1	640	720	910	1020

	Torque - Dry (ft-lbs)
Size	Grade 10.9
M18 x 2.50	284
M20 x 2.50	401
M22 x 2.50	547
M24 x 3.00	694

# Warning

When using the dozer blade, pay special attention to the area between the blade and the hood of the tractor. In the right conditions, material can build up. Grouser Products is not responsible for careless operation of the blade.

# Unpacking Components

---

Unstrap and remove the lift frame, hoses, top arms, and any boxes of hardware from the undercarriage. If any components are missing, call Grouser.

## Undercarriage Installation

---

Install undercarriage per the tractor specific mounting instructions.

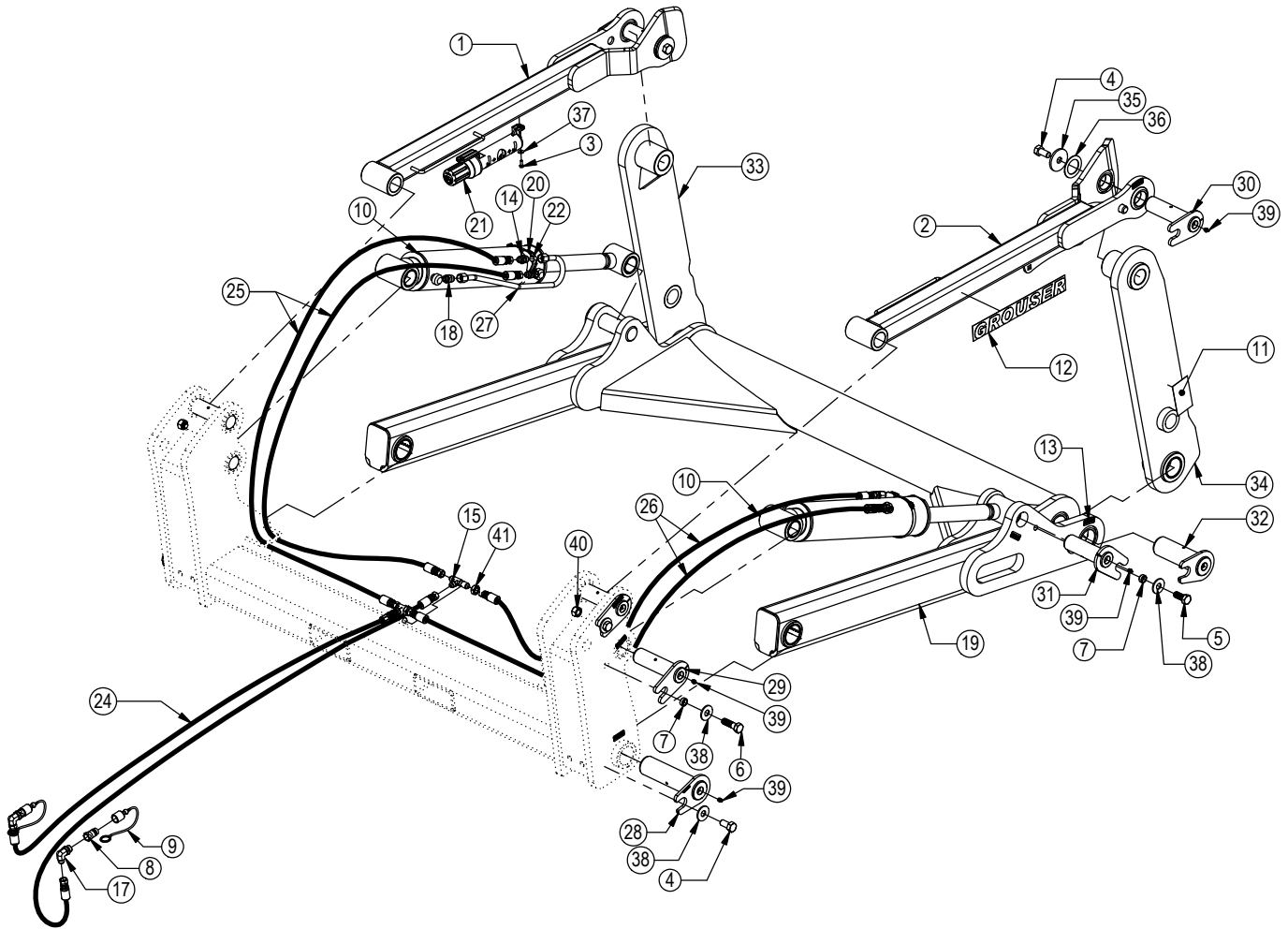
## Assembling Lift Components

---

Some assembly of Lift system components is necessary. Follow the steps listed below. Refer to Page 5 for the correct hardware and orientation of parts.

1. Remove all pins and fasteners on each side of the undercarriage and set aside for later installation.
2. Position the lift frame between the two plates on both sides of the undercarriage and align to the bottom holes.
3. Attach the lift frame, the base end of the lift cylinders, and the top arms to the undercarriage. Refer to Page 5 for proper components and orientation.
4. Attach the male quick attaches to the lift frame, and to the top arms. Use the 2" washer as a shim to keep top arm pin tight and in place. See Page 5 for proper orientation.
5. Tighten all fasteners.
6. Connect the lift hoses to the lift cylinders. The hoses are marked with 2 Orange Bands for the base end and 1 Orange Band for the rod end.
7. Verify that hoses are not twisted and protected from rubbing on any sharp edges.

Hoses Are Not Drawn To Scale



Item #A for Claas Tractors

Item #B for Steiger, New Holland, Claas, and JD 9R Tractors

Item #C for Versatile and Challenger Tractors

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	11-18100-L	Top Arm, Ag Pro S
2	1	11-18100-R	Top Arm, Ag Pro S
3	2	16-20002	1/4" x 3/4" Hex Bolt Gr 5 NC
4	4	16-20216	3/4" x 1-1/2" Hex Bolt Gr 5 NC
5	4	16-20217	3/4" x 1-3/4" Hex Bolt Gr 5 NC
6	4	16-20220	3/4" x 2-1/2" Hex Bolt Gr 5 NC
7	8	19-13515	Spacer, NR Pin
8	2	25-34342	Tappet Quick Coupler Male - Poppet Style
9	2	25-3457	Pioneer Dust Cap Lift (Orange)
10	2	26-34745	4.5 x 18 Hydraulic Cylinder
11	2	27-9503	Pinch Decal (Foot)
12	2	27-9504	Decal, Grouser Horizontal
13	12	27-9507	Decal, Grease
14	2	31-11699-10-8	JIC Union
15	2	31-34030	Bulkhead Run Tee JIC
16	2	31-34040	Straight JIC x O-Ring
17	2	31-34051	Straight Thread Elbow 90° JIC x O-Ring
17A*	2	31-6802-8-10	Straight Thread Elbow 45° JIC x O-Ring
18	2	31-6400-10-8	Straight JIC x O-Ring
19	1	32-18630	Lift Frame, Ag Pro Plus
20	2	34-12932	Cylinder Saddle
21	1	34-14961	Manual Canister Small
22	2	34-16578	Hose Clamp (worm drive - 4.5)
23*	6	34-18888-OR	-12 Orange - Spiral Band

\* Parts Not Shown

ITEM NO.	QTY.	PART NO.	DESCRIPTION
24B	2	35-30183	293" x 1/2" -8 FJIC x -8 FJIC Hose
24C	2	35-30172	318" x 1/2" -8 FJIC x -8 FJIC Hose
25	2	35-31128	57" x 1/2" -8 FJIC x -8 FJIC Hose
26	2	35-31134	75" x 1/2" -8 FJIC x -8 FJIC Hose
27	2	35-18240	Lift Cylinder Steel Line
28	2	43-14725	Lift Frame / UC Pin
29	4	43-18120	Top Pin Weld
30	2	43-18127	Top Arm Pin Weld
31	2	43-18175	Lift Cyl Pin Weld
32	2	43-18635	Ag Pro Plus QA Pin
33	1	45-18110-L	Male Quick Attach, Ag Pro S - Left
34	1	45-18110-R	Male Quick Attach, Ag Pro S - Right
35	2	57-1530	3" OD X .75 ID X .25" HD Flat Washer
36	2	57-1811	2" Washer
37	2	57-20740	1/4" Flat Washer
38	10	57-20747	3/4" Flat Washer
39	12	58-9369	Straight 1/8" NPT Grease Zerk
40	2	70-20607	3/4" Hex Center Lock Nut NC
41	2	70-20807	3/4" Hex Jam Nut NF

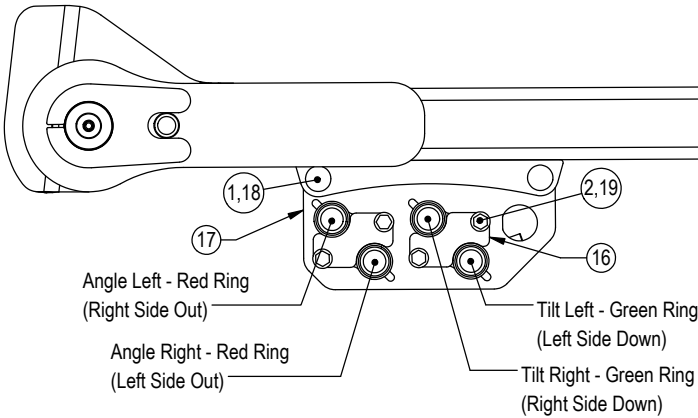
No. On Cylinder	Part No.	Description
26-34745	49-12278	Seal Kit 4.5" Bore x 2" Rod (658366) Nitrided Rod

# Installing Hydraulic Coupler Components

**Note: Refer to Diagram below for further information on hose routing and hose positions. The quantity and location of the female couplers is determined by blade functionality.**

8. Attach the coupler mounts to the left top arm and install the female quick couplers and 90° fittings. See Diagram below for proper orientation.
9. Install each coupler into the designated hole on the coupler mount and fasten them in place with the coupler retainer plate, 3/8" x 3/4" bolts and 3/8" flange nuts.
10. Identify each remaining hose at the front of the undercarriage by the colored bands on the end of the hose and connect the hose to the corresponding 90° fitting and female coupler in the coupler mount.
11. Continue on Page 7 for instructions on how to remove the air from the system.

Tractor Side - Hydraulic Hose Routing



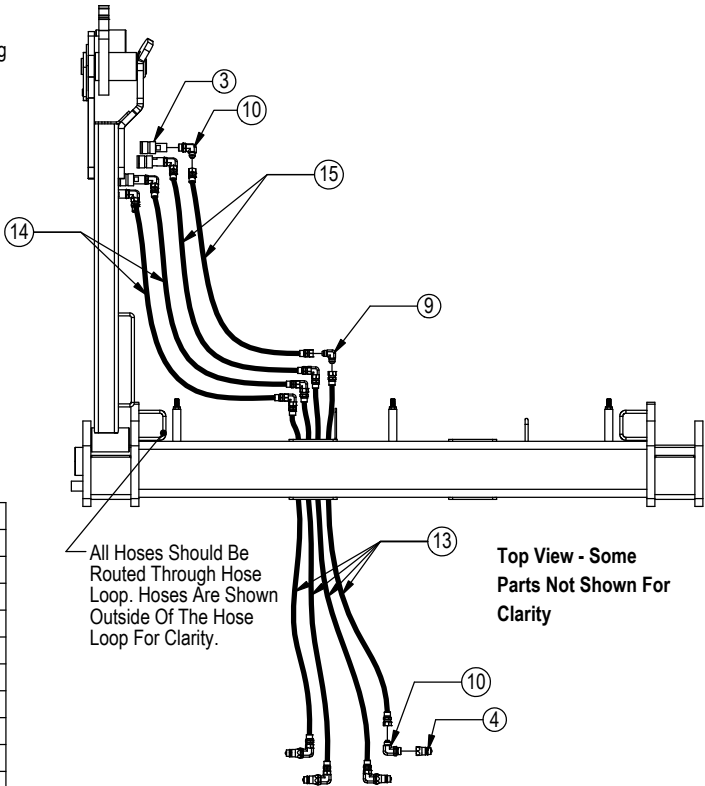
\* Parts Now Shown

Item #A & B for Claas Tractors - 23-19461

Item #C for Steiger, New Holland, and JD Tractors - 23-18886

Item #D for Versatile and Challenger Tractors - 23-19459

No.	Qty.	Part No.	Description
1	2	16-21125	1/2" x 1-1/4" Carriage Bolt Gr 5 NC
2	4	16-35C612	3/8" x 3/4" Flanged Bolt
3	4	25-34321	Tappet Quick Coupler Female
4	4	25-34342	Tappet Quick Coupler Male - Poppet Style
5*	2	25-3453	Pioneer Dust Cap Tilt (Green)
6*	2	25-3454	Pioneer Dust Plug Tilt (Green)
7*	2	25-3455	Pioneer Dust Cap Angle (Red)
8*	2	25-3456	Pioneer Dust Plug Angle (Red)
9	4	31-15199-8-8	JIC Union Elbow 90°
10A	4	31-34051	Straight Thread Elbow 90° JIC x O-Ring
10B	4	31-6802-08-10	Straight Thread Elbow 45° JIC x O-Ring
10C,D	8	31-34051	Straight Thread Elbow 90° JIC x O-Ring
11*	4	34-18888-GR	-12 Green - Spiral Band
12*	4	34-18888-RD	-12 Red - Spiral Band
13A,C	4	35-30183	293" (24.42") x 1/2" -8JIC/-8JIC Hose w/165" Cordura
13D	4	35-30172	318" (24.42") x 1/2" -8JIC/-8JIC Hose
14	2	35-31133	72" x 1/2" -8JIC/-8JIC Hose w/ Cordura
15	2	35-31134	75" x 1/2" -8JIC/-8JIC Hose w/ Cordura
16	2	44-14734	Female Coupler Retainer
17	1	44-16236	Female Coupler Mount
18	2	70-20604	1/2" Hex Center Lock Nut Gr 2 NC
19	4	70-20622	3/8" Flange Hex Nut Gr 5 NC



# Initial Startup Instructions

---

Prior to operating the blade system, all air must be purged from the hydraulic system. Follow the steps below for each function on your blade.

## ***Lift Function:***

1. With the lift frame down and blocked, loosen the fittings on both ends of the lift cylinders.
2. Actuate the raise function to supply oil to the rod end of the cylinders.
3. When oil starts to flow from the fittings, stop oil flow, and tighten the fitting on the rod end of the lift cylinders.
4. Continue to flow oil until the system is fully raised and then block the lift frame.
5. Actuate the function in the opposite direction to supply oil to the base end of the lift cylinders.
6. When all air is removed from the lift system, stop oil flow and tighten the fittings on the base end of the lift cylinders.
7. Raise lift system and remove blocks. Cycle up and down 5 more times.
8. Check tractor oil level and fill if necessary.
9. Continue with connecting the blade on Page 8.

## ***Tilt Function:***

**Note: Damage will incur if blade stands are down during blade operation.**

1. Use a lift or jack to tilt the blade system until the left side is fully up, loosen the fittings on the rod and base end of both tilt cylinders.
2. Actuate the tilt function to extend the right tilt cylinder and supply oil to the base end of the right cylinder and to the rod end of the left cylinder.
3. When oil starts to flow from the fittings, stop oil flow, and tighten the fitting on the base end of the right cylinder and rod end of the left cylinder.
4. Remove the lift or jack.
5. Continue to actuate the tilt function until oil flows out of the remaining open ports.
6. Actuate the tilt function in the opposite direction.
7. When all air is removed from the tilt system, stop oil flow, and tighten the remaining fittings on the cylinders.
8. Cycle both cylinders in and out 5 more times.
9. Check tractor oil level and fill if necessary.

## ***Angle Function:***

1. Use a fork lift to angle the blade system until the left side is fully out, loosen the fittings on the rod and base end of the angle cylinders.
2. Actuate the angle function to extend the right angle cylinder and supply oil to the base end of the right cylinder and to the rod end of the left cylinder.
3. When oil starts to flow from the fittings, stop oil flow, and tighten the fitting on the base end of the right cylinder and rod end of the left cylinder.
4. Remove the fork lift.
5. Continue to actuate the angle function until oil flows out of the remaining open ports.
6. Actuate the angle function in the opposite direction.
7. When all air is removed from the angle system, stop oil flow, and tighten the remaining fittings on the cylinders.
8. Cycle both cylinders in and out 5 more times.
9. Check tractor oil level and fill if necessary.

Run the blade through all the functions. If any function does not operate correctly, refer to corresponding section above and re-bleed. If problem still persists, call Grouser Products.

**NOTE: If blade does not function to the operator's liking or preferred direction, swap the couplers at the rear of the tractor or control the function location in the cab.**

# Connecting and Disconnecting the Blade

---

## **To Connect:**

1. Lift the locking latch and push the quick attach lock handle on the left side of the angle system to open the quick attach system. Refer to Page #10-11 for further clarification on the quick attach system.
2. Drive the tractor forward slowly until the top hub of the male quick attach is under the top hook of the angle frame.
3. Raise the lift system until the male quick attach engages the female. If both sides don't fully engage, re-position. Continue to raise the lift system until the blade is off the ground and the angle frame is against the front of the male quick attaches.
4. Shut off the tractor engine and set the parking brake.
5. Pull the quick attach lock handle and lift the locking latch to the lock the handle in place.
6. Remove the lower pin from both blade stands
7. Raise both blade stands and insert the pin in the top hole to lock in position as shown on Page 11.

**Note: Damage will incur if blade stands are down during blade operation.**

8. Connect hydraulics couplers on the top arm. Refer to Page #6 for proper locations of all functions.
9. Refer to the Initial Startup Instructions on Page 7 before operating any function on the blade.

## **To Disconnect:**

**Note: Blade should be off the ground when unlocking the blade.**

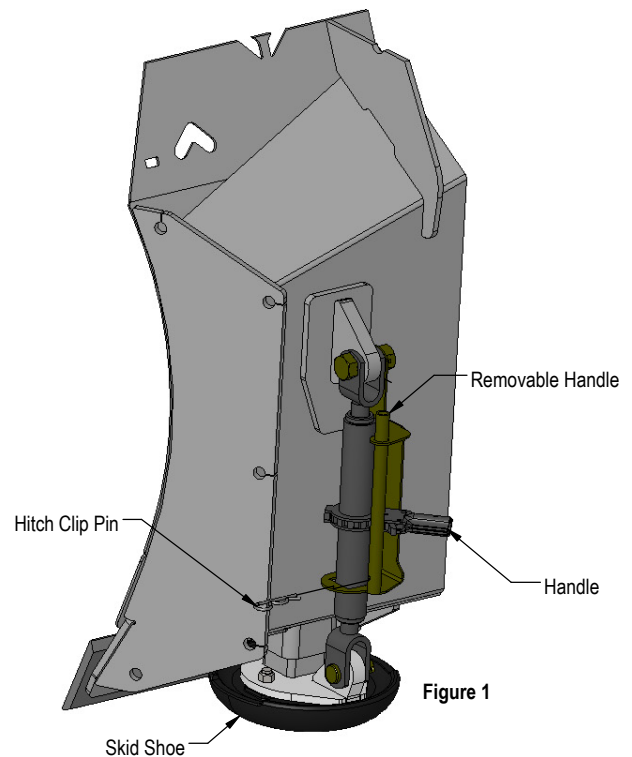
1. Unhook all of the couplers on the top arm.
2. Lift the locking latch and push the quick attach lock handle to unlock the quick attach system.
3. Remove the top pin from both blade stands
4. Lower both blade stands and insert the pin in the bottom hole to lock the blade stand in place.
5. Slowly lower the lift system to disengage the blade.
6. Slowly back away from the blade. When lift system is clear from the blade, raise the lift system.



# Skid Shoe and Tilt Plate Adjustment

## Skid Shoe Adjustment:

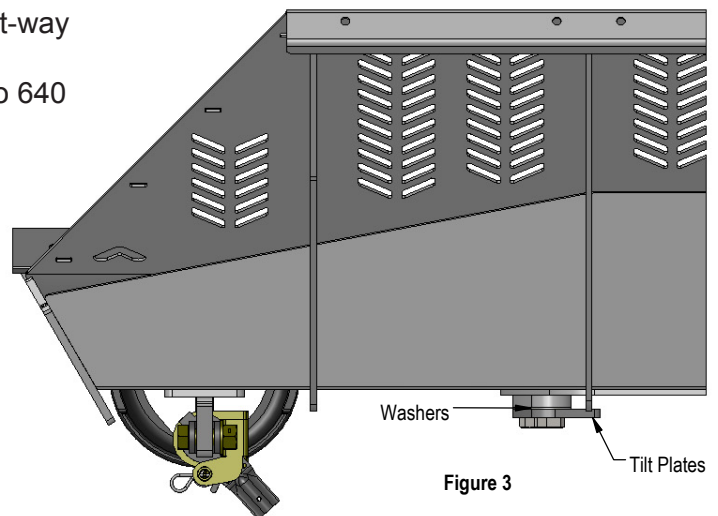
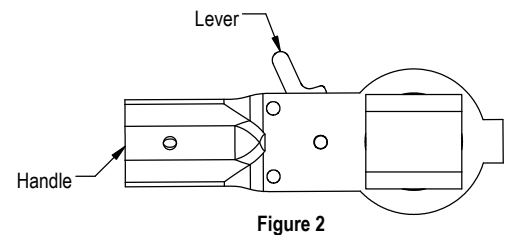
1. Remove the handle from the ratchet keeper by pulling the hitch clip pin and insert into the handle on the ratchet jack.
2. Loosen the locking nut on the ratchet jack.
3. Hold the body of the ratchet jack and rotate the ratchet jack handle to raise or lower the skid shoes.
4. If the skid shoe is not moving in the proper direction, move the forward/reverse lever on the handle (see Figure 2). Rotate the ratchet jack handle again to move the skid shoe in the direction needed.
5. After skid shoe is adjusted, rotate the ratchet jack handle until it rests up against the ratchet keeper. Return the removable handle to the ratchet keeper ensuring that the ratchet jack handle is captured by the removable handle and the ratchet keeper. Secure the handle to the ratchet keeper with a hitch clip pin.
6. Tighten the locking nut against the ratchet jack body to keep it from moving.
7. When skid shoes are worn down to the bolt heads, replace with new skid shoes.



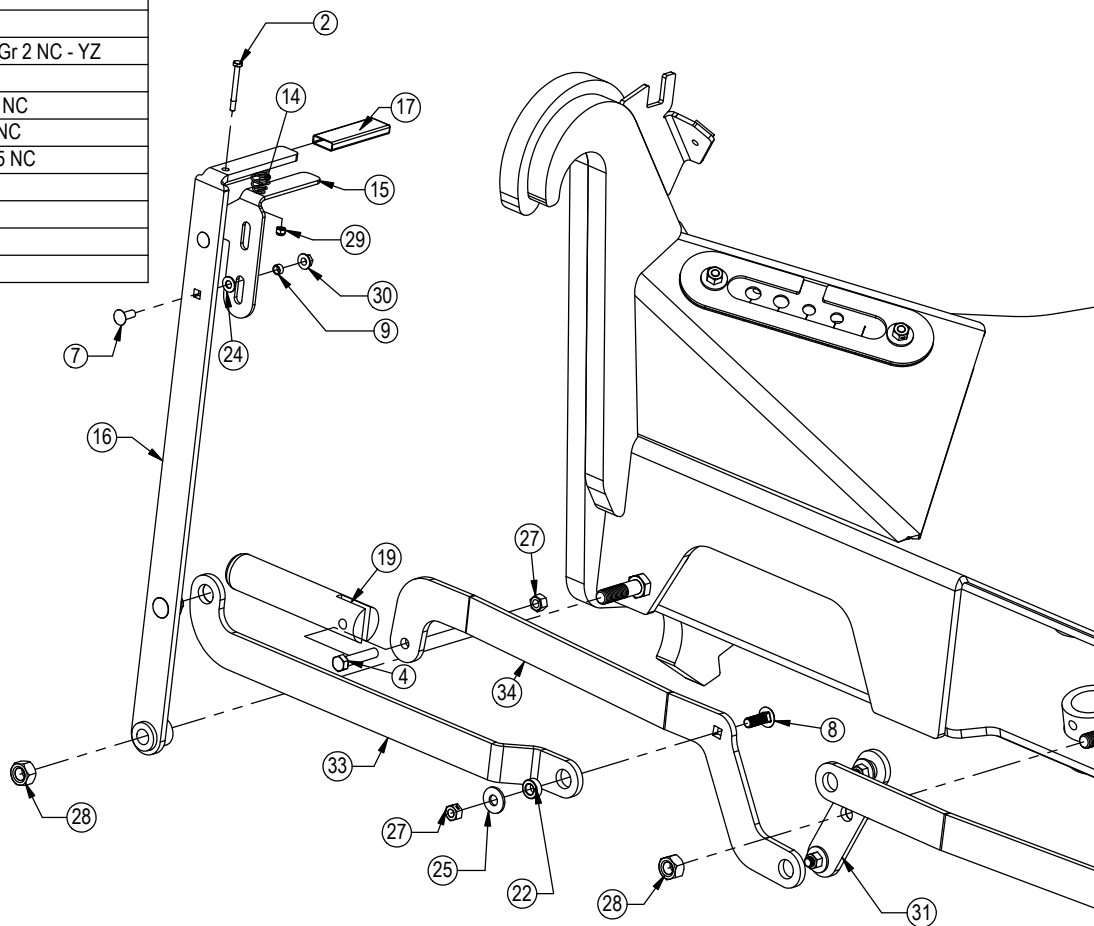
## Tilt Plate Adjustment:

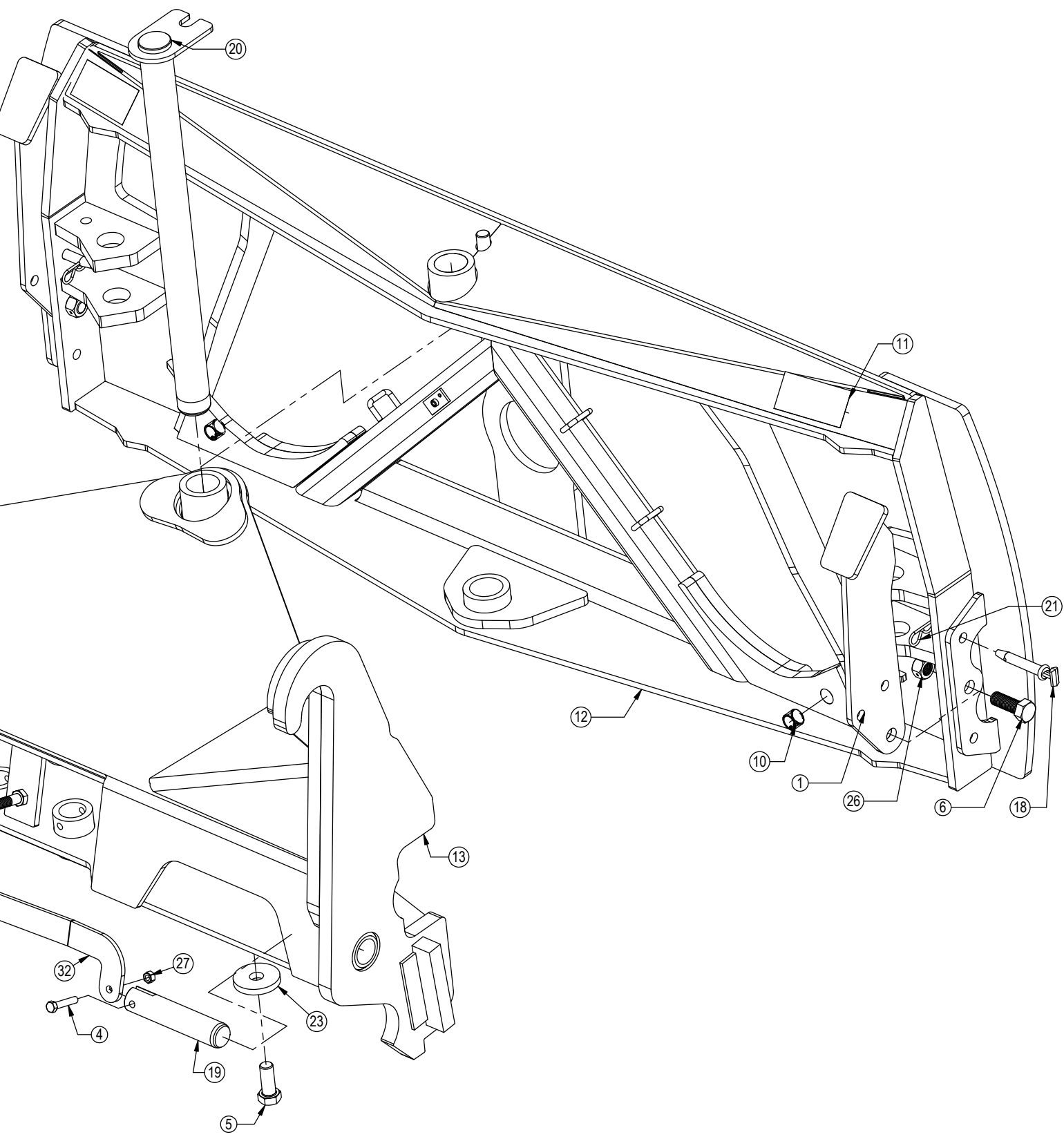
**If the clearance between the tilt frame and the tilt plates is not meeting the recommended specification of 1/16" - 1/8", follow the steps below to adjust the tilt plates.**

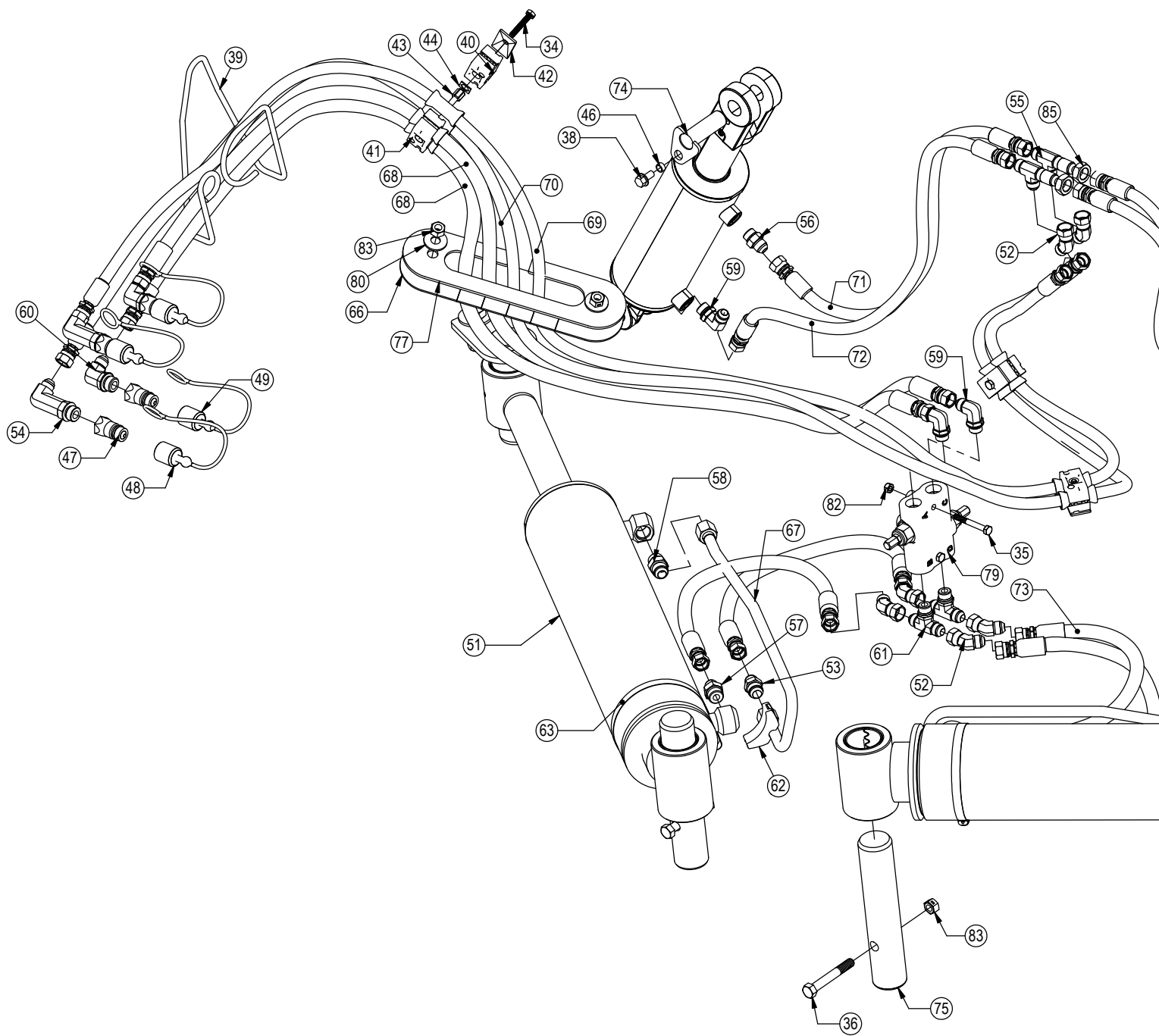
1. Remove bolts and each tilt plate separately.
- Note: Don't remove all of the bolts at the same time.
2. Install or remove washers as needed to adjust tilt-way clearance to have 1/16" - 1/8" of clearance.
  3. Once the tilt-way clearance is set, tighten bolts to 640 ft-lbs.

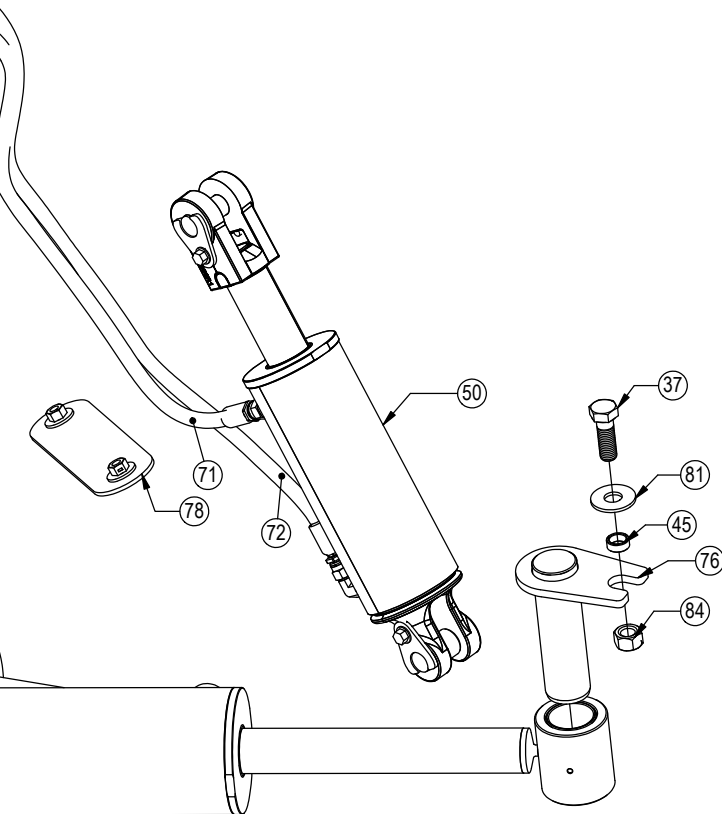


NO.	QTY.	PART NO.	DESCRIPTION
1	2	11-18495R1	Blade Stand
2	1	16-20011	1/4" x 2-3/4" Hex Bolt Gr 5 NC
3	1	16-20040	5/16" x 2-1/2" Hex Bolt Gr 5 NC
4	2	16-20130	1/2" x 2-1/2" Hex Bolt Gr 5 NC
5	1	16-20560	1" x 2-1/2" Gr.8 NC Hex Bolt
6	2	16-20561	1" x 2-3/4" Hex Bolt Gr.8 NC
7	2	16-21064	3/8" x 1" Carriage Bolt Gr 5 NC
8	4	16-21126	1/2" x 1-1/2" Carriage Bolt Gr 5 NC
9	2	19-13577	Bushing, Spacer
10	2	19-7774	1" x 1" Spring Bushing
11	2	27-2409	Pinch Decal (Hand)
12	1	32-17960R5	Tilt Frame Weld
13	1	32-19130R1	Angle Frame
14	1	34-17799	Latch Spring
15	1	39-14663R1	Latch
16	1	39-14665R3	Handle Weld
17	1	39-3072	Rubber Handle
18	2	43-15712	Pin, 3/4" x 3-1/4"
19	2	43-18486R1	AG Pro S QA Lock Pin
20	1	43-18491R1	Angle Pin Weld
21	2	43-7767	Cylinder Pin Clip
22	4	44-8490	Spacer
23	1	57-16928R1	Plate, Washer
24	2	57-20742	3/8 Flat Washer
25	4	57-20744	1/2" Flat Washer
26	2	70-18999	1" Hex Center Lock Nut Gr 2 NC - YZ
27	6	70-20604	1/2" Center Lock Hex Nut
28	2	70-20607	3/4" Hex Center Lock Nut NC
29	1	70-20610	1/4" Nyloc Hex Nut Gr 5 NC
30	2	70-20622	3/8" Flange Hex Nut Gr 5 NC
31	1	75-18480	Bell Crank Weld
32	1	75-18485R1	Link, Right Pin
33	1	75-18526	Link, Handle To Left Pin
34	1	75-18527	Link, Left Pin







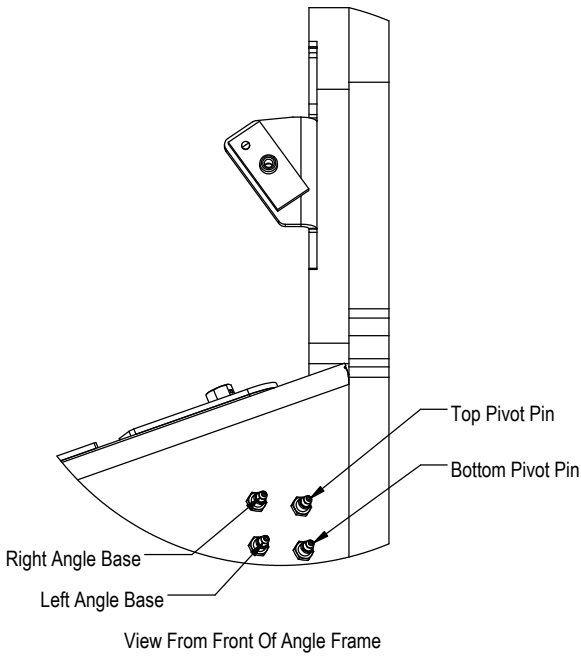
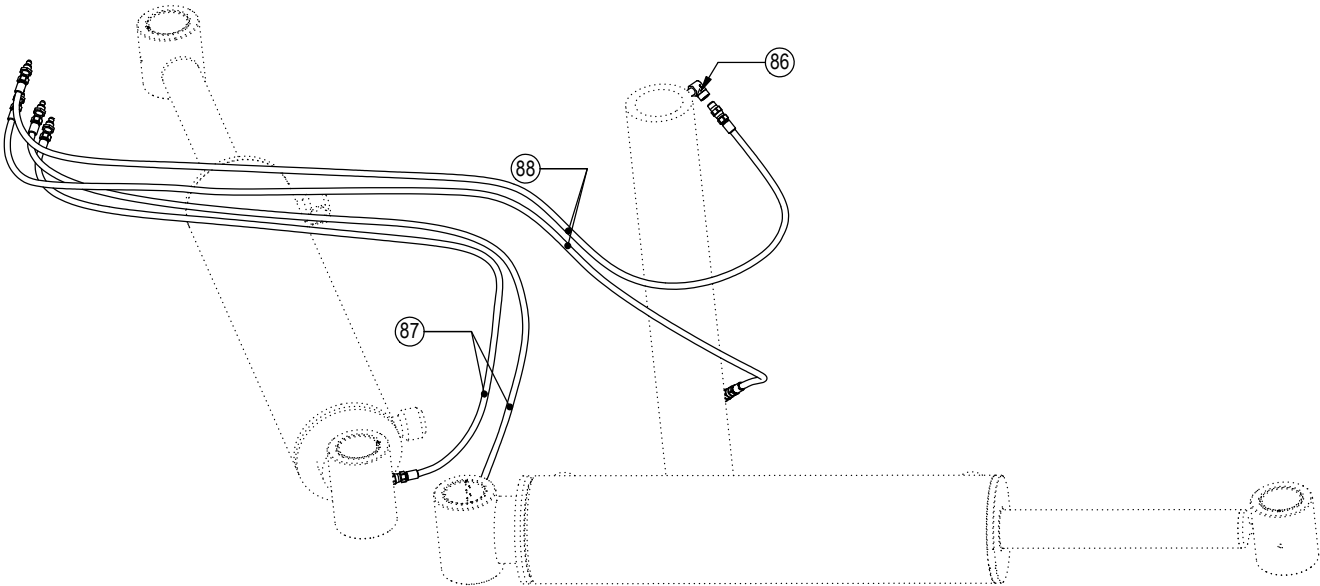


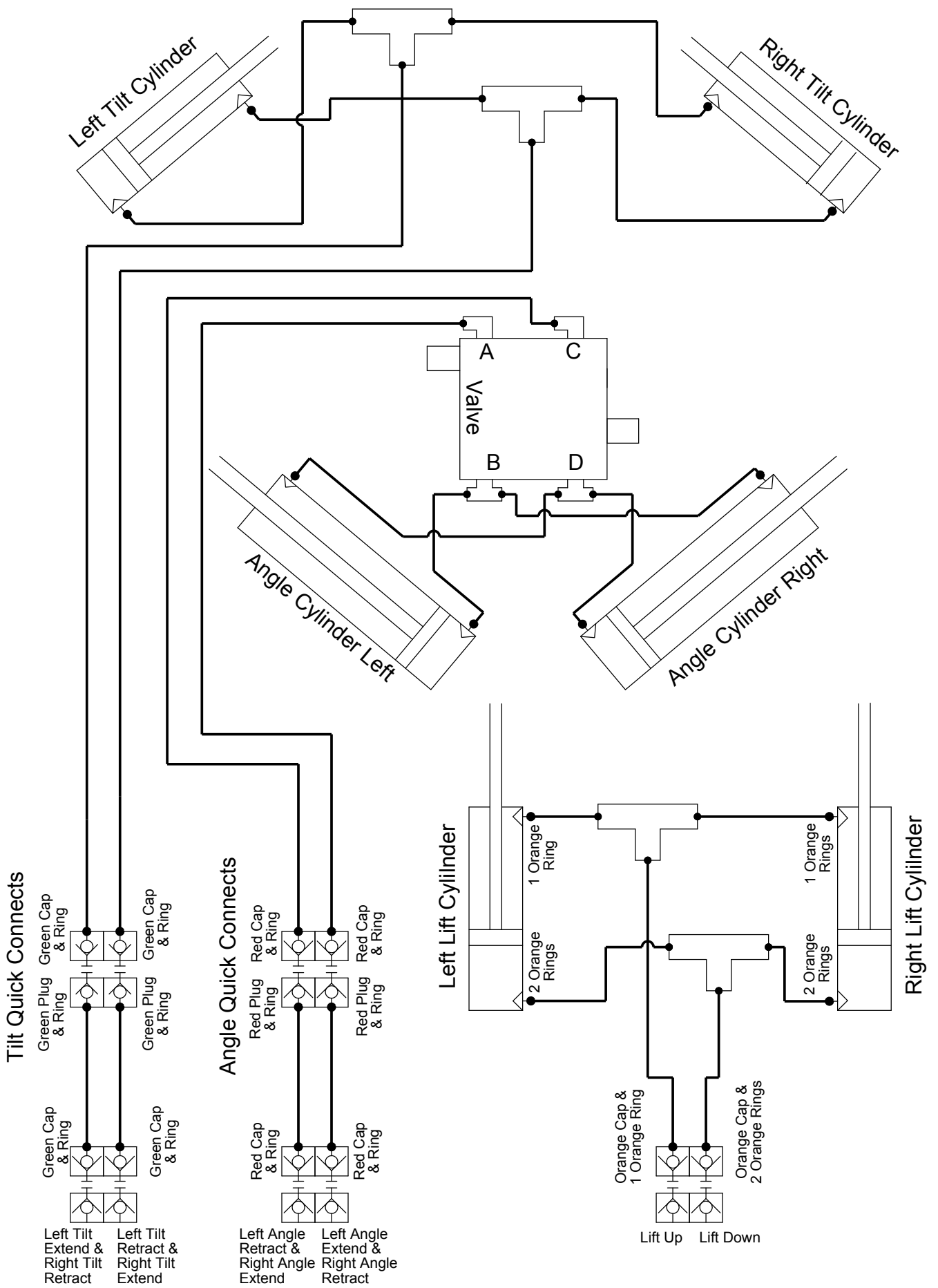
NO.	QTY.	PART NO.	DESCRIPTION
34	3	16-20037	5/16" x 1-3/4" Hex Bolt Gr. 5 NC
35	2	16-20040	5/16" x 2-1/2" Hex Bolt Gr 5 NC
36	2	16-20134	1/2" x 3-1/2" Hex Bolt Gr. 5 NC
37	2	16-20219	3/4" x 2-1/4" Gr.5 Hex Bolt NC
38	4	16-35C612	3/8" x 3/4" Flange Bolt
39	1	18-19308	Hose Guide, Left
40	3	18-19311-03-P-087	Hose Clamp
41	1	18-19311-03-P-100	Hose Clamp
42	3	18-19312-03	Twin Cover Plate
43	1	18-19313-03	Twin Stacking Bolt
44	1	18-19314-02	Twin Safety Plate
45	2	19-13515	Spacer, NR Pin
46	4	19-13577	Bushing, Spacer
47	4	25-34342	Tappet Quick Coupler Male - Poppet Style
48	2	25-3453	Pioneer Dust Cap Tilt (Green)
49	2	25-3455	Pioneer Dust Cap Angle (Red)
50	2	26-34747	4 x 8 Hydraulic Cylinder
51	2	26-34750	5 x 20 Cylinder Bushed Tube Ends
52	6	31-11492-8-8	Male JIC x Female JIC Swivel Nut Elbow 45°
53	2	31-11699-10-8	JIC Union
54	2	31-15676-LL-8-10	Straight Thread Extra Long Elbow 90° JIC x O-Ring
55	2	31-34030	Bulkhead Run Tee JIC
56	2	31-34040	Straight JIC x O-Ring
57	2	31-34041	Straight JIC x O-Ring
58	2	31-34042	Straight JIC x O-Ring
59	4	31-34050	Straight Thread Elbow 90° JIC x O-Ring
60	2	31-34051	Straight Thread Elbow 90° JIC x O-Ring
61	2	31-34060	Branch Tee JIC x O-Ring
62	2	34-12932	Cylinder Saddle
63	2	34-12933	Hose Clamp (worm drive - 5.0)
64*	4	34-18888-GR	-12 Green - Spiral Band
65*	4	34-18888-RD	-12 Red - Spiral Band
66	1	34-19217	Rubber Seal
67	2	35-12931	Formed Steel Line
68	2	35-19355	71" x 1/2" -8JIC/-8JIC Hose
69	1	35-19356	117.50" x 3/8" -8JIC/-8JIC Hose
70	1	35-19359	123" x 3/8" -8JIC/-8JIC Hose
71	2	35-30018	33" x 3/8" -8JIC/-8JIC Hose
72	2	35-30081	37" x 3/8" -8JIC/-8JIC Hose
73	4	35-31113	28" x 1/2" -8 JIC/-8 JIC Hose w/ Cordura
74	4	43-13580	Pin Weld
75	2	43-18487	Angle Cyl Base Pin
76	2	43-18490	Angle Cyl Rod Pin Weld
77	1	44-19218	Seal Clamp Plate
78	1	44-19219	Cover Plate
79	1	56-7772	Valve
80	4	57-20744	1/2" Flat Washer
81	2	57-20747	3/4" Flat Washer
82	2	70-20581	5/16" Hex Nut
83	6	70-20604	1/2" Center Lock Hex Nut
84	2	70-20607	3/4" Hex Center Lock Nut NC
85	2	70-20807	3/4" Hex Jam Nut NF

\* Parts Not Shown

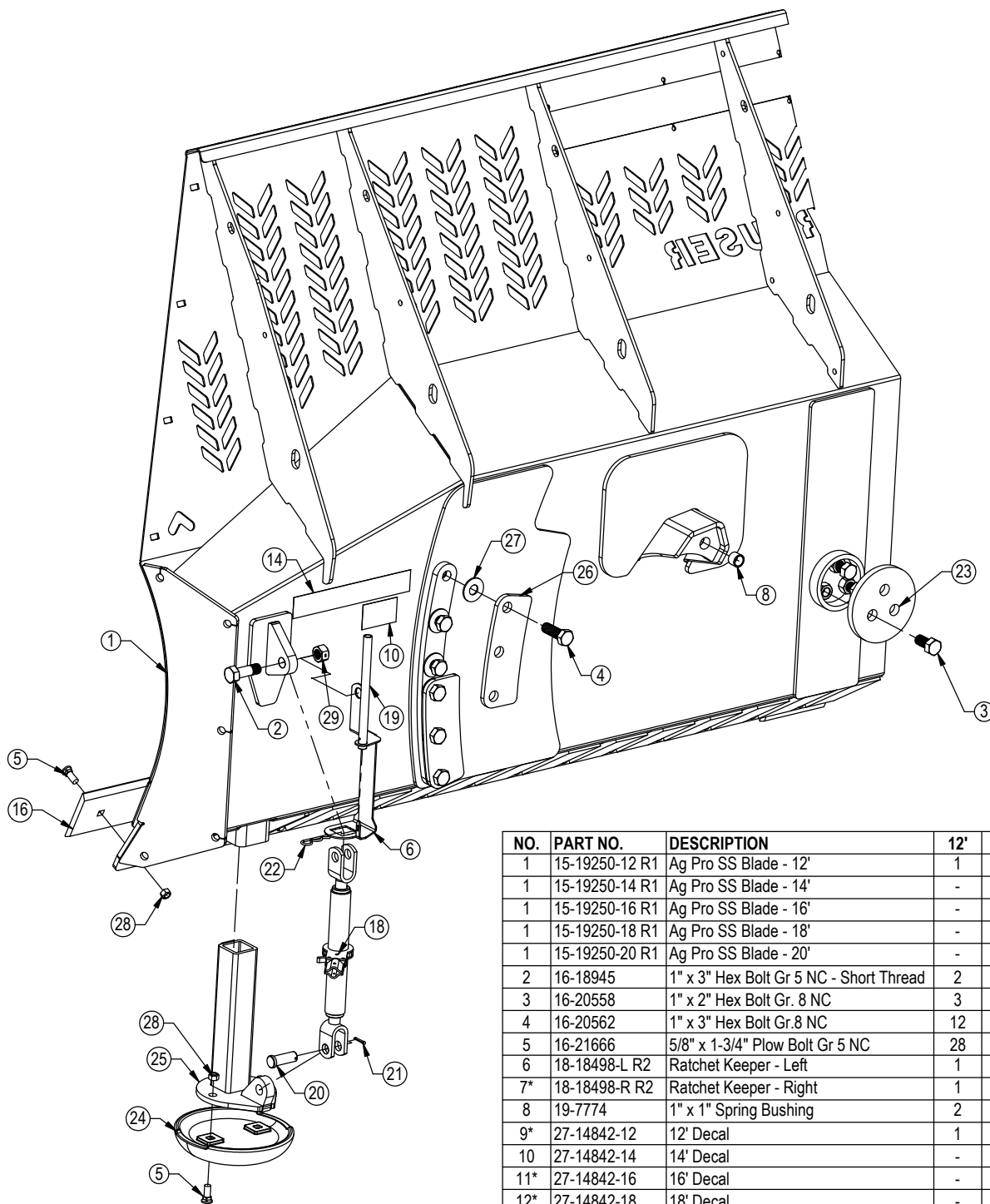
Cylinder	Part No.	Description
26-34747	49-12271	Seal Kit 4x8 Nitrided Rod, Clevis Ends
26-34750	49-12275	Seal Kit 5 x 20 Nitrided Rod

NO.	QTY.	PART NO.	DESCRIPTION
86	2	31-13933-2-2	1/8" NPT Street Elbow
87	2	58-18994-0430	Grease Hose w/ Long Bulkhead (w/lock nut and grease zerk)
88	2	58-18994-0570	Grease Hose w/ Long Bulkhead (w/lock nut and grease zerk)





Female Quick Connects At Rear Of Tractor



\* Parts Not Shown

NO.	PART NO.	DESCRIPTION	12'	14'	16'	18'	20'
1	15-19250-12 R1	Ag Pro SS Blade - 12'	1	-	-	-	-
1	15-19250-14 R1	Ag Pro SS Blade - 14'	-	1	-	-	-
1	15-19250-16 R1	Ag Pro SS Blade - 16'	-	-	1	-	-
1	15-19250-18 R1	Ag Pro SS Blade - 18'	-	-	-	1	-
1	15-19250-20 R1	Ag Pro SS Blade - 20'	-	-	-	-	1
2	16-18945	1" x 3" Hex Bolt Gr 5 NC - Short Thread	2	2	2	2	2
3	16-20558	1" x 2" Hex Bolt Gr. 8 NC	3	3	3	3	3
4	16-20562	1" x 3" Hex Bolt Gr.8 NC	12	12	12	12	12
5	16-21666	5/8" x 1-3/4" Plow Bolt Gr 5 NC	28	32	36	40	44
6	18-18498-L R2	Ratchet Keeper - Left	1	1	1	1	1
7*	18-18498-R R2	Ratchet Keeper - Right	1	1	1	1	1
8	19-7774	1" x 1" Spring Bushing	2	2	2	2	2
9*	27-14842-12	12' Decal	1	-	-	-	-
10	27-14842-14	14' Decal	-	1	-	-	-
11*	27-14842-16	16' Decal	-	-	1	-	-
12*	27-14842-18	18' Decal	-	-	-	1	-
13*	27-14842-20	20' Decal	-	-	-	-	1
14	27-19450	Ag Pro SS Blade Decal	1	1	1	1	1
15*	29-7950-6	Cutting Edge	2	-	-	3	2
16	29-7950-7	Cutting Edge	-	2	-	-	-
17*	29-7950-8	Cutting Edge	-	-	2	-	1
18	34-17565	Skid Shoe Ratchet Jack	2	2	2	2	2
19	34-17567	Handle, Ratchet Jack	2	2	2	2	2
20	43-18463	1" x 2.75" Pin	2	2	2	2	2
21	43-18943	3/16" x 1-1/2" Cotter Pin	2	2	2	2	2
22	43-7767	Cylinder Pin Clip	2	2	2	2	2
23	44-3749R1	Backdrag Brace Plate	1	1	1	1	1
24	50-15458	12" Round Mushroom Skid Shoe	2	2	2	2	2
25	50-17545 R3	Mushroom Shoe Assembly	2	2	2	2	2
26	52-8204	Tilt Plate	4	4	4	4	4
27	57-20749	1" Flat Washer	12	12	12	12	12
28	70-20646	5/8" Hex Top Lock Nut Gr 5 NC	28	32	36	40	44
29	70-18999	1" Hex Center Lock Nut Gr 2 NC - YZ	2	2	2	2	2



NO.	QTY.	PART NO.	DESCRIPTION
1	8	16-21064	3/8" x 1" Carriage Bolt Gr 5 NC
2	1	44-19415	Ag Pro Silage Special Name Plate
3*	1	44-14830	Custom Name Plate
4	8	70-20622	3/8" Flange Hex Nut Gr 5 NC

\* Parts Not Shown



# Notes

---

# Notes

---

# Contact Us

---

As always, if you have any questions about your Ag Pro SS Dozer or other products made by Grouser, feel free to contact us.

## **Grouser Products**

755 2nd Ave NW - West Fargo, ND 58078

**Phone:** 1-800-747-6182

**Fax:** 1-701-282-8131

**E-mail:** [grouser@grouser.com](mailto:grouser@grouser.com)

**Website:** [www.grouser.com](http://www.grouser.com)



# Improvements

---

Grouser Products Inc. is continually striving to improve its products. We reserve the right to change prices, specification, or equipment at any time without notice. We also reserve the right to make improvements or changes when it becomes practical and possible to do so without incurring any obligation to make changes or additions to the equipment sold previously.

# Warranty

---

Grouser Products warrants to the original purchaser of each item that the product be free from defects in material and workmanship under normal use and service for a period of two years from date of original retail delivery. If such equipment is found to be defective within two years, it is the obligation of Grouser Products under this warranty to repair or replace (exclusive of the cost of labor and transportation), any equipment or parts, in the judgment of Grouser Products to be defective in material or workmanship.

All equipment or parts claimed to be defective in material or workmanship must be made available for inspection at the place of business of a dealer authorized to handle the equipment covered by this warranty, or, upon request by Grouser Products, shipped to the Grouser Products factory in West Fargo, North Dakota. Grouser Products shall have no obligation to bear the cost of labor or transportation in connection with replacement or repair of any such defective parts in the setup process.

This warranty covers only defects in material and workmanship. It does not cover depreciation or damage caused by normal wear, accident, improper assembly, improper adjustments, improper maintenance including lack of proper lubrication, or improper use. Therefore, Grouser Products liability under this warranty shall not be effective or actionable unless the equipment is assembled, maintained and operated in accordance with the operating instructions accompanying the equipment. Grouser Products shall have no liability if the equipment has been altered or reworked without the written authorization of Grouser Products.

Grouser Products' parts, which are furnished under this warranty and properly installed, shall be warranted to the same extent as the original parts under this warranty if, and only if, such parts are found to be defective within the original warranty period covering the original equipment.

