GROUSER® PRODUCTS

3-5 - AG PRO SS

Owner's Manual

&

Parts Book

Purchase Date
Serial Number
Model Number
Tractor Model
Dealer

PN: 63-19439 SN: 10204095-10205548 Date 2-26-2017

Contents

To The Owner

This manual contains information concerning the operation, adjustment, and maintenance of the 3-5 blade assembly. 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 11.
- Inspect all tilt-ways for aggressive wear. See page 11 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 3-5 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.

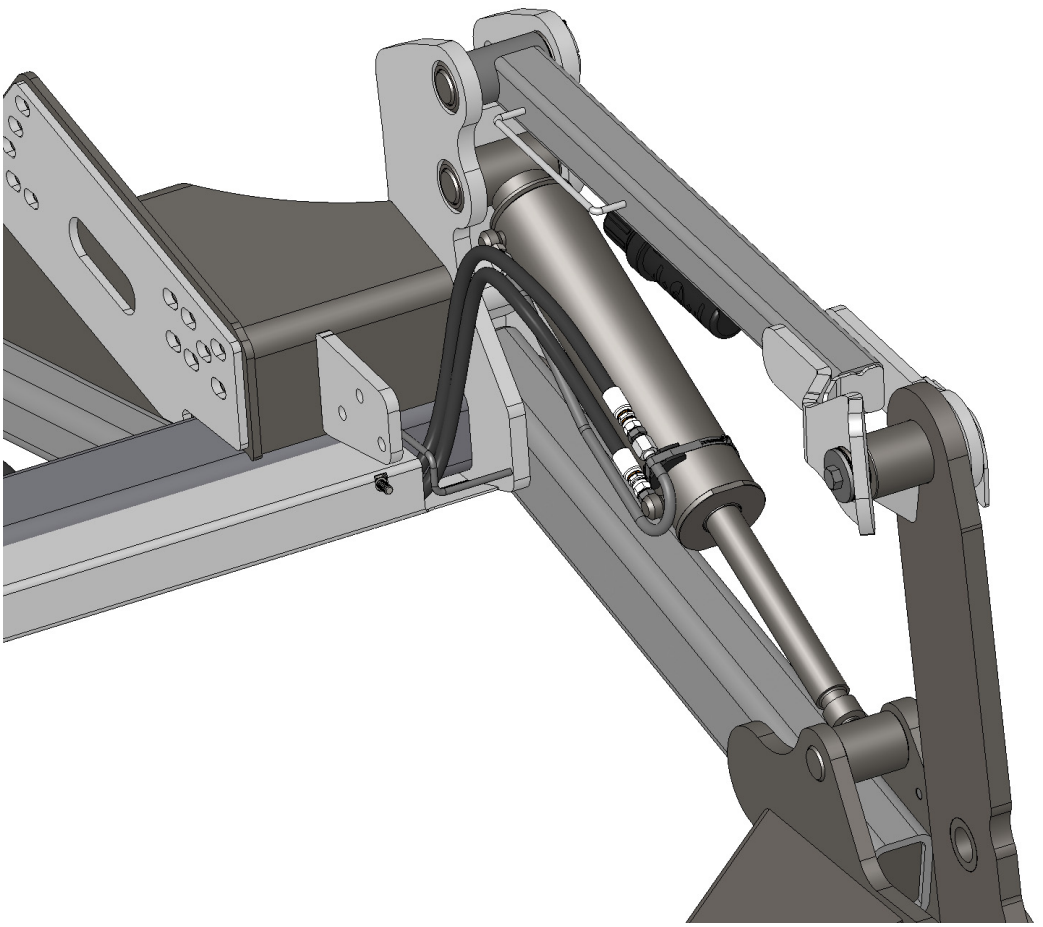
Undercarriage Installation

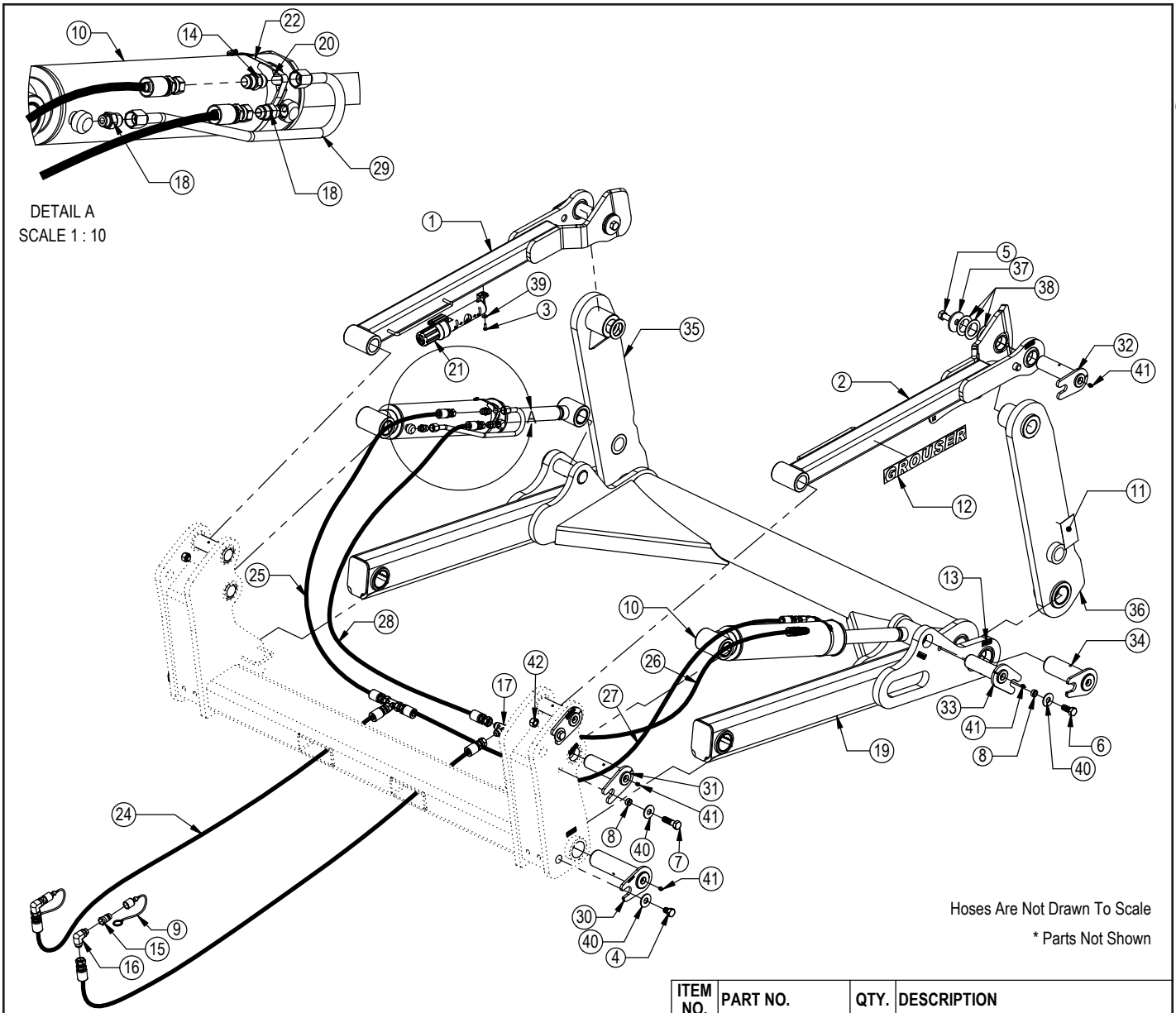
Install undercarriage per the tractor specific mounting instructions.

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 2” washers as shims to keep top arm pin tight and in place. Only use as many as needed until pin is tight. 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. See picture below for proper hose routing.





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.	PART NO.	QTY.	DESCRIPTION
1	11-18100-L	1	Top Arm, Ag Pro S
2	11-18100-R	1	Top Arm, Ag Pro S
3	16-20002	2	1/4" x 3/4 " Hex Bolt Gr 5 NC
4	16-20214	2	3/4" x 1" Hex Bolt Gr 5 NC
5	16-20216	2	3/4" x 1-1/2" Hex Bolt Gr 5 NC
6	16-20217	4	3/4" x 1-3/4" Hex Bolt Gr 5 NC
7	16-20220	4	3/4" x 2-1/2" Hex Bolt Gr 5 NC
8	19-13515	8	Spacer, NR Pin
9	25-3457	2	Pioneer Dust Cap Lift (Orange)
10	26-34745	2	4.5 x 18 Hydraulic Cylinder
11	27-9503	2	Pinch Decal (Foot)
12	27-9504	2	Decal, Grouser Horizontal
13	27-9507	12	Decal, Grease
14	31-11699-10-10	2	JIC Union
15	25-34342	2	Tappet Quick Coupler Male - Poppet Style
16B,C	31-34059	2	Straight Thread Elbow 90° JIC x O-Ring
16A	31-6802-12-10	2	Straight Thread Elbow 45° JIC x O-Ring
17	31-34194	2	Union Tee
18	31-6400-10-8	4	Straight JIC x O-Ring
19	32-18630	1	Lift Frame, Ag Pro Plus
20	34-12932	2	Cylinder Saddle

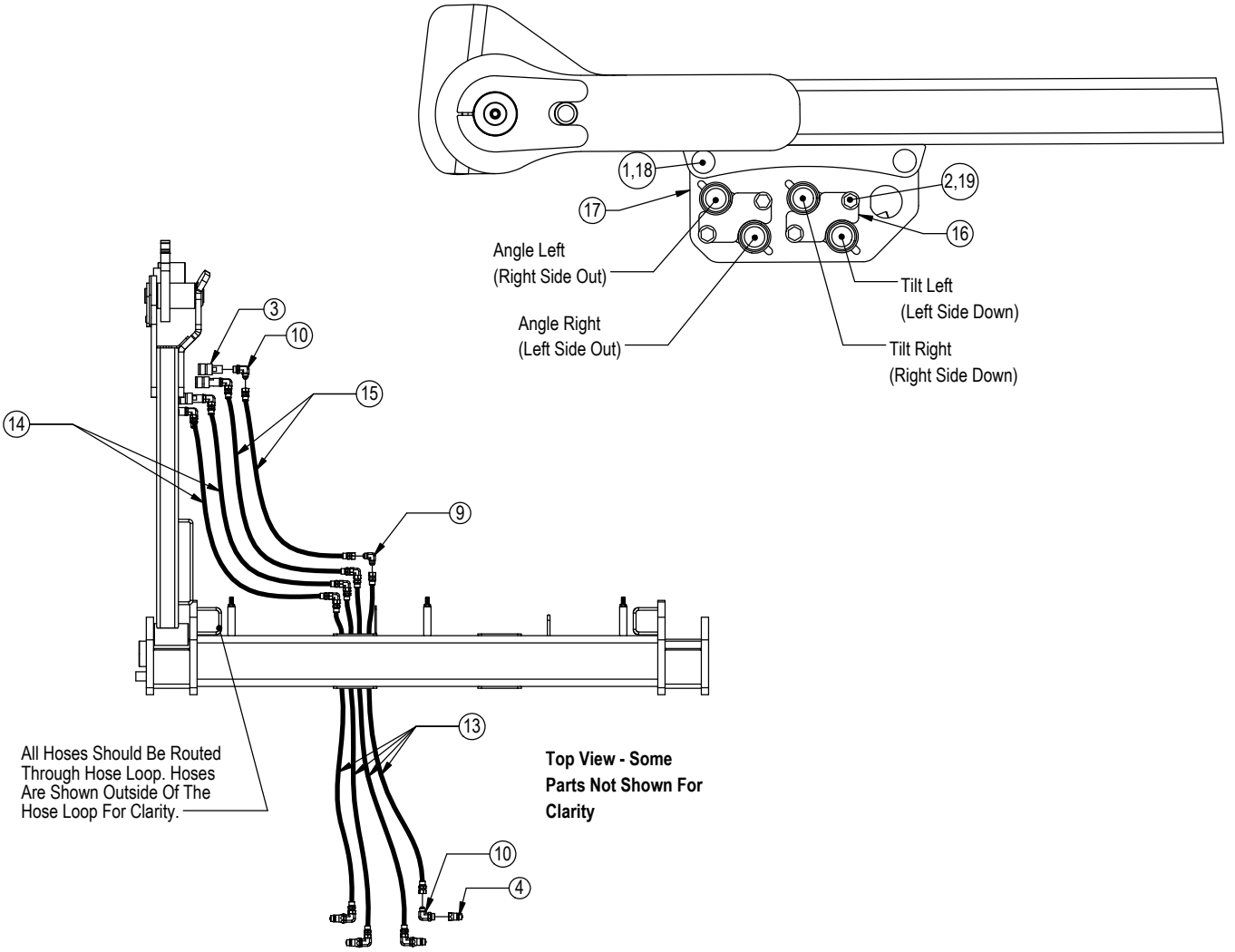
ITEM NO.	PART NO.	QTY.	DESCRIPTION
21	34-14961	1	Manual Canister Small
22	34-16578	2	Hose Clamp (worm drive - 4.5)
23*	34-18889-OR	15	-14 ORANGE - Spiral Band
24A,B	35-12329-2930	2	293" x 3/4" -12 FJIC x -12 FJIC Hose
24C	35-12329-3200	2	320" x 3/4" -12 FJIC x -12 FJIC Hose
25	35-12636-0515	1	51.5" x 5/8" -10 FJIC x -12 FJIC Hose
26	35-12636-0535	1	53.5" x 5/8" -10 FJIC x -12 FJIC Hose
27	35-12636-0665	1	66.5" x 5/8" -10 FJIC x -12 FJIC Hose
28	35-12636-0670	1	67" x 5/8" -10 FJIC x -12 FJIC Hose
29	35-18240	2	Lift Cylinder Steel Line
30	43-14725	2	Lift Frame / UC Pin
31	43-18120	4	Top Pin Weld
32	43-18127	2	Top Arm Pin Weld
33	43-18175	2	Lift Cyl Pin Weld
34	43-18635	2	Ag Pro Plus QA Pin
35	45-18110-L	1	Male Quick Attach, Ag Pro S - Left
36	45-18110-R	1	Male Quick Attach, Ag Pro S - Right
37	57-1530	2	3" OD X .75 ID X .25" HD Flat Washer
38	57-1811	6	2" Washer
39	57-20740	2	1/4" Flat Washer
40	57-20747	10	3/4" Flat Washer
41	58-9369	12	Straight 1/8" NPT Grease Zerk
42	70-20607	2	3/4" Center Lock Hex Nut NC

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 Page 7-8 for further information on hose routing and hose positions. The quantity and location of the female couplers is determined by blade functionality.

7. Attach the coupler mounts to the left and right top arms and install the female quick couplers and 90° fittings. See Page 7 & 8 for proper orientation.
8. 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.
9. 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.
10. Continue on Page 9 for instructions on how to remove the air from the system.



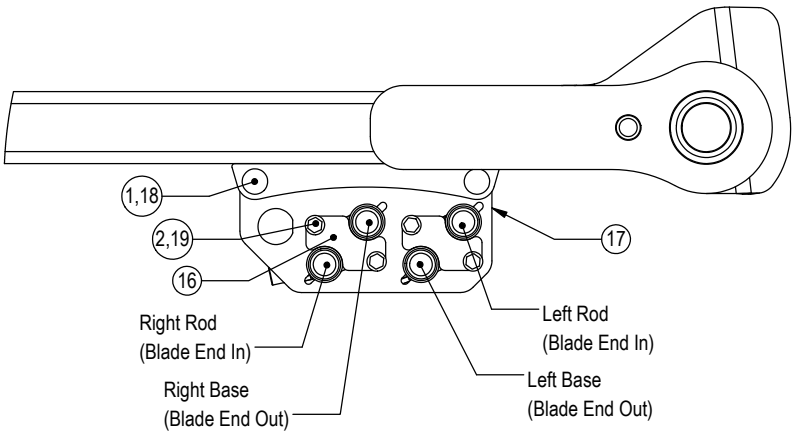
* Parts Now Shown

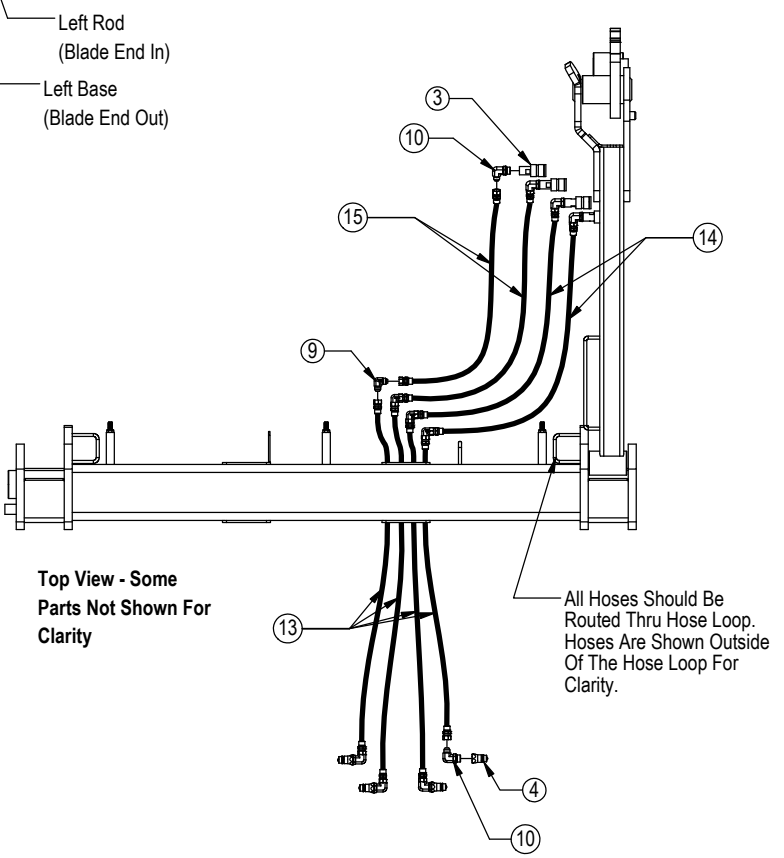
Item #A & B for Claas Tractors

Item #C for Steiger, New Holland, Claas, and JD Tractors

Item #D for Versatile and Challenger Tractors

		Configuration	HAHT	NAHT
Item No.	Part No.	Description	Qty.	Qty.
1	16-21125	1/2" x 1-1/4" Carriage Bolt Gr 5 NC	2	2
2	16-35C612	3/8" x 3/4" Flanged Bolt	4	4
3	25-34321	Tappet Quick Coupler Female	4	2
4	25-34342	Tappet Quick Coupler Male - Poppet Style	4	2
5*	25-3453	Pioneer Dust Cap Tilt (Green)	2	2
6*	25-3454	Pioneer Dust Plug Tilt (Green)	2	2
7*	25-3455	Pioneer Dust Cap Angle (Red)	2	0
8*	25-3456	Pioneer Dust Plug Angle (Red)	2	0
9	31-15199-8-8	JIC Union Elbow 90°	4	2
10	31-34051	Straight Thread Elbow 90° JIC x O-Ring	8	4
10A	31-34051	Straight Thread Elbow 90° JIC x O-Ring	4	2
10B	31-6802-08-10	Straight Thread Elbow 45° JIC x O-Ring	4	2
11*	34-18888-GR	-12 GREEN - Spiral Band	4	4
12*	34-18888-RD	-12 RED - Spiral Band	4	0
13D	35-30172	318" (24.42") x 1/2" -8JIC/-8JIC Hose	4	2
13C	35-30183	293" (24.42") x 1/2" -8JIC/-8JIC Hose w/165" Cordura	4	2
14	35-31133	72" x 1/2" -8JIC/-8JIC Hose w/ Cordura	2	2
15	35-31134	75" x 1/2" -8JIC/-8JIC Hose w/ Cordura	2	0
16	44-14734	Female Coupler Retainer	2	1
17	44-16236	Female Coupler Mount	1	1
18	70-20604	1/2" Hex Center Lock Nut Gr 2 NC	2	2
19	70-20622	3/8" Flange Hex Nut Gr 5 NC	4	2





* Parts Now Shown
Item #A & B for Claas Tractors
Item #C for Steiger, New Holland, Claas, and JD Tractors
Item #D for Versatile and Challenger Tractors

Item 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	25-3403	Pioneer Dust Cap Left Cylinder (Blue)
6*	2	25-3404	Pioneer Dust Plug Left Cylinder (Blue)
7*	2	25-3405	Pioneer Dust Cap Right Cylinder (Brown)
8*	2	25-3406	Pioneer Dust Plug Right Cylinder (Rod)
9	4	31-15199-8-8	JIC Union Elbow 90°
10	8	31-34051	Straight Thread Elbow 90° JIC x O-Ring
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
11*	4	34-18888-BL	-12 BLUE - Spiral Band
12*	4	34-18888-BR	-12 BROWN - Spiral Band
13D	4	35-30172	318" (24.42") x 1/2" -8JIC/-8JIC Hose
13C	4	35-30183	293" (24.42") x 1/2" -8JIC/-8JIC Hose w/165" Cordura
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 hydraulics, air must be removed from the system. Follow the steps below for each function on your blade.

Lift Function:

1. With the lift frame down on the ground, 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 10.

Blade Width Function:

1. Loosen the fittings on the rod and base end of the blade width cylinders.
2. Actuate the function to extend the right cylinder and supply oil to the base end.
3. When oil starts to flow from the fitting, stop oil flow, and tighten the fitting on the base end of the right cylinder.
4. Fully extend the right cylinder.
5. Actuate the function in the opposite direction to supply oil to the rod end of the right cylinder.
6. When all air is removed from the system, stop oil flow and tighten the fitting on the rod end of the right cylinder.
7. Repeat Steps 2-7 for the left cylinder.
8. Cycle both cylinders in and out 5 more times.
9. Check tractor oil level and fill if necessary.

Tilt Function:

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 work properly, bleed the air out of the system for that function again. If problem still persists, call Grouser Products.

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 #12-13 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. Connect hydraulics couplers on the top arm. Refer to Page #7-8 for proper locations of all functions.
7. Refer to the Initial Startup Instructions on Page 9 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. Slowly lower the lift system to disengage the blade.
4. 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.

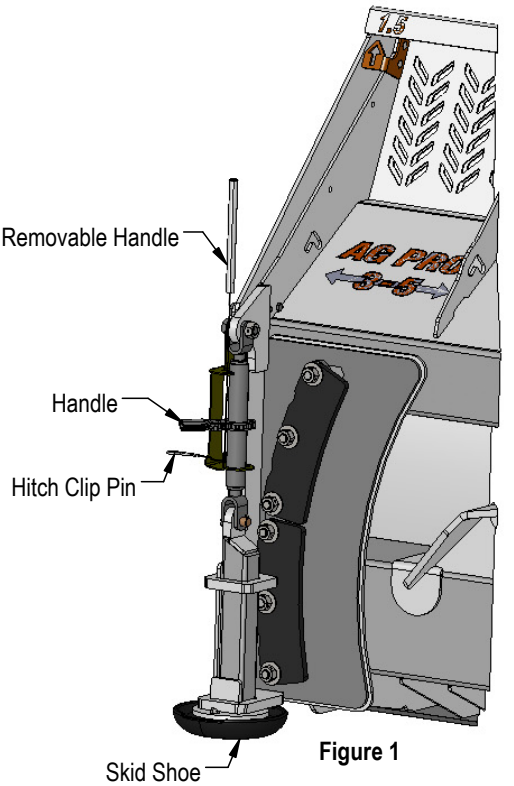


Figure 1

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.

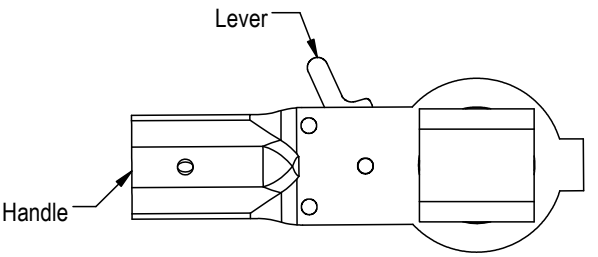
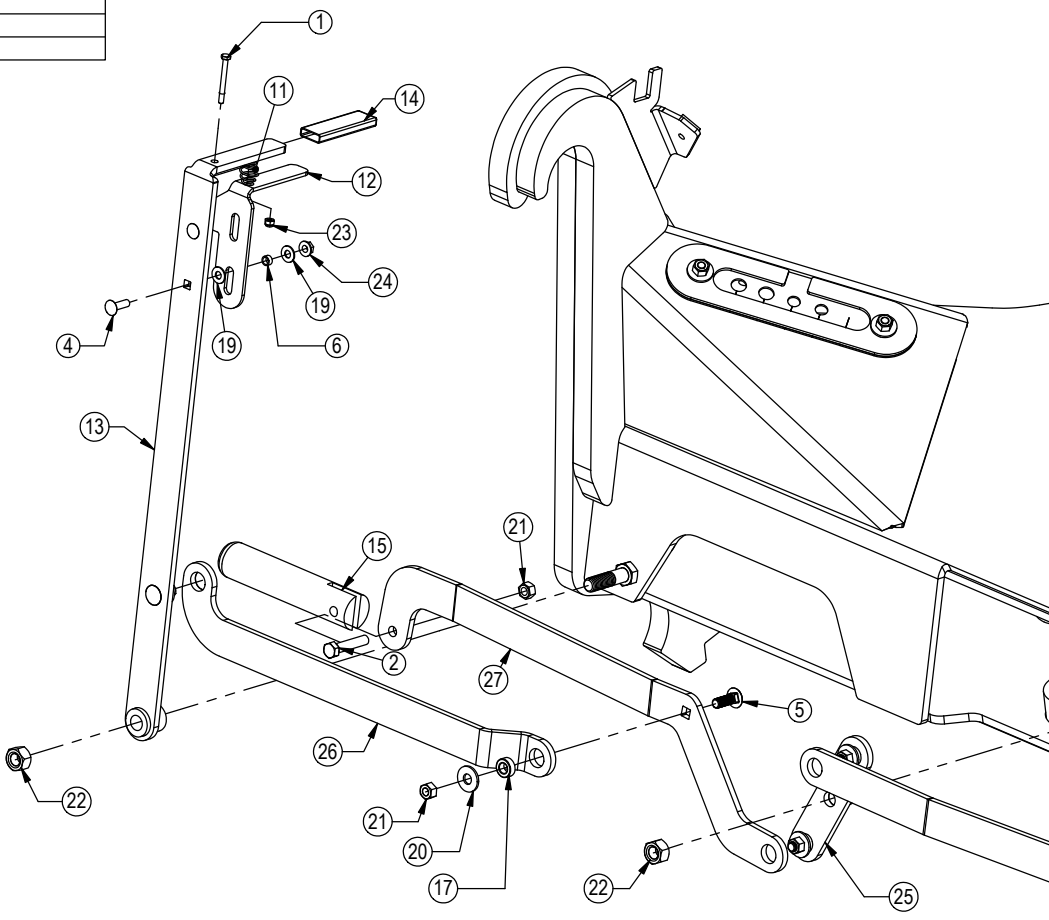
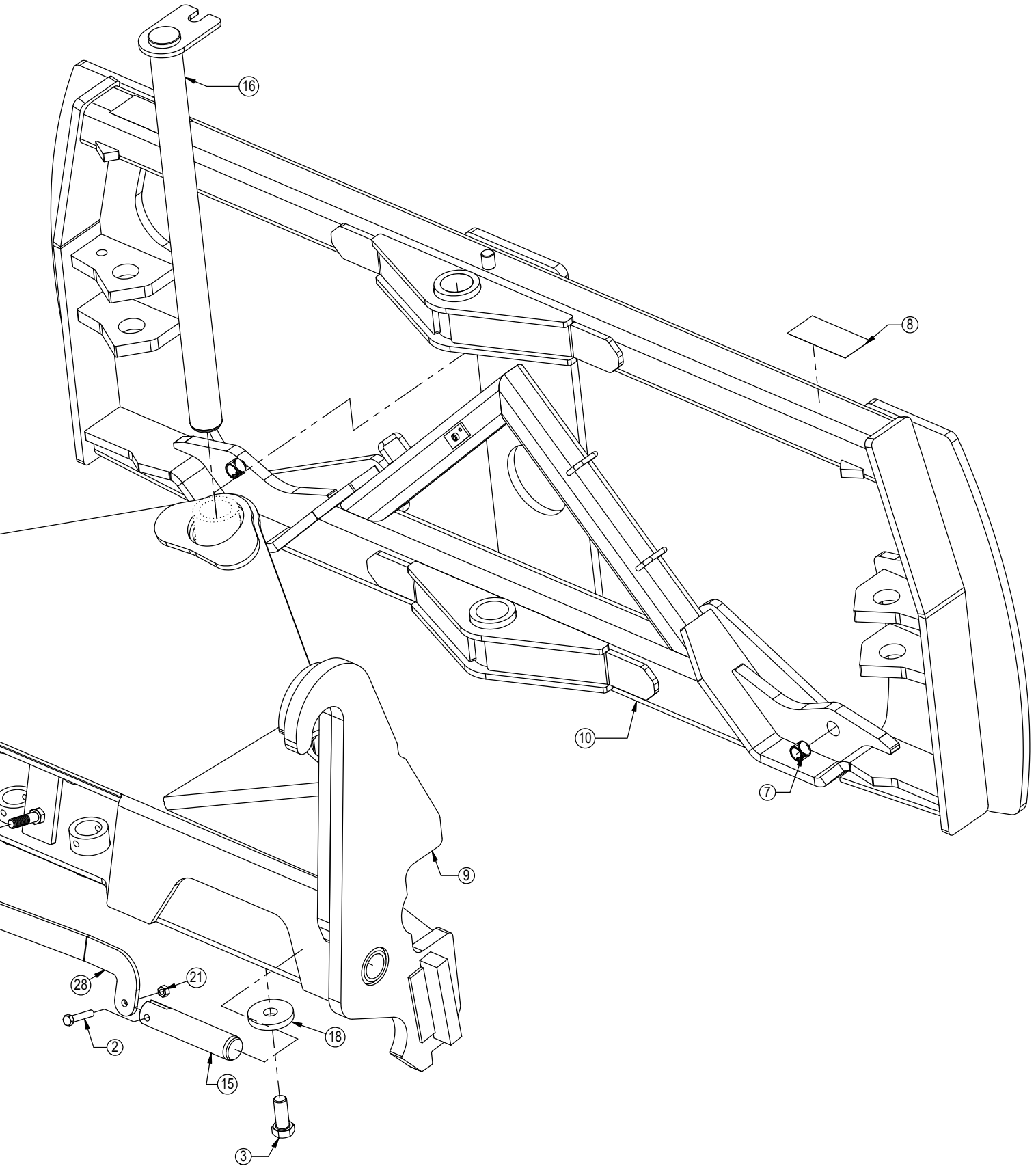


Figure 2

ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	16-20011	1	1/4" x 2-3/4" Hex Bolt Gr 5 NC
2	16-20130	2	1/2" x 2-1/2" Hex Bolt Gr 5 NC
3	16-20560	1	1" x 2-1/2" Gr.8 NC Hex Bolt
4	16-21065	2	3/8" x 1.25 Carriage Bolt Gr 5 NC
5	16-21126	4	1/2" x 1-1/2" Carriage Bolt Gr 5 NC
6	19-13577	2	Bushing, Spacer
7	19-7774	2	1" x 1" Spring Bushing
8	27-2409	2	Pinch Decal (Hand)
9	32-19130R1	1	Angle Frame
10	32-19240R1	1	Tilt Frame Weld
11	34-17799	1	Latch Spring
12	39-14663R1	1	Latch
13	39-14665R3	1	Handle Weld
14	39-3072	1	Rubber Handle
15	43-18486R1	2	AG Pro S QA Lock Pin
16	43-19245	1	Angle Pin Weld
17	44-8490	4	Spacer
18	57-16928R1	1	Plate, Washer
19	57-19696	4	3/8 Flat Nylon Washer
20	57-20744	4	1/2" Flat Washer
21	70-20604	6	1/2" Center Lock Hex Nut
22	70-20607	2	3/4" Center Lock Hex Nut NC
23	70-20610	1	1/4" Nyloc Hex Nut Gr 5 NC
24	70-20622	2	3/8" Flange Hex Nut Gr 5 NC
25	75-18480	1	Bell Crank Weld
26	75-18483R1	1	Link, Handle To Left Pin
27	75-18484R1	1	Link, Left Pin
28	75-18485R1	1	Link, Right Pin

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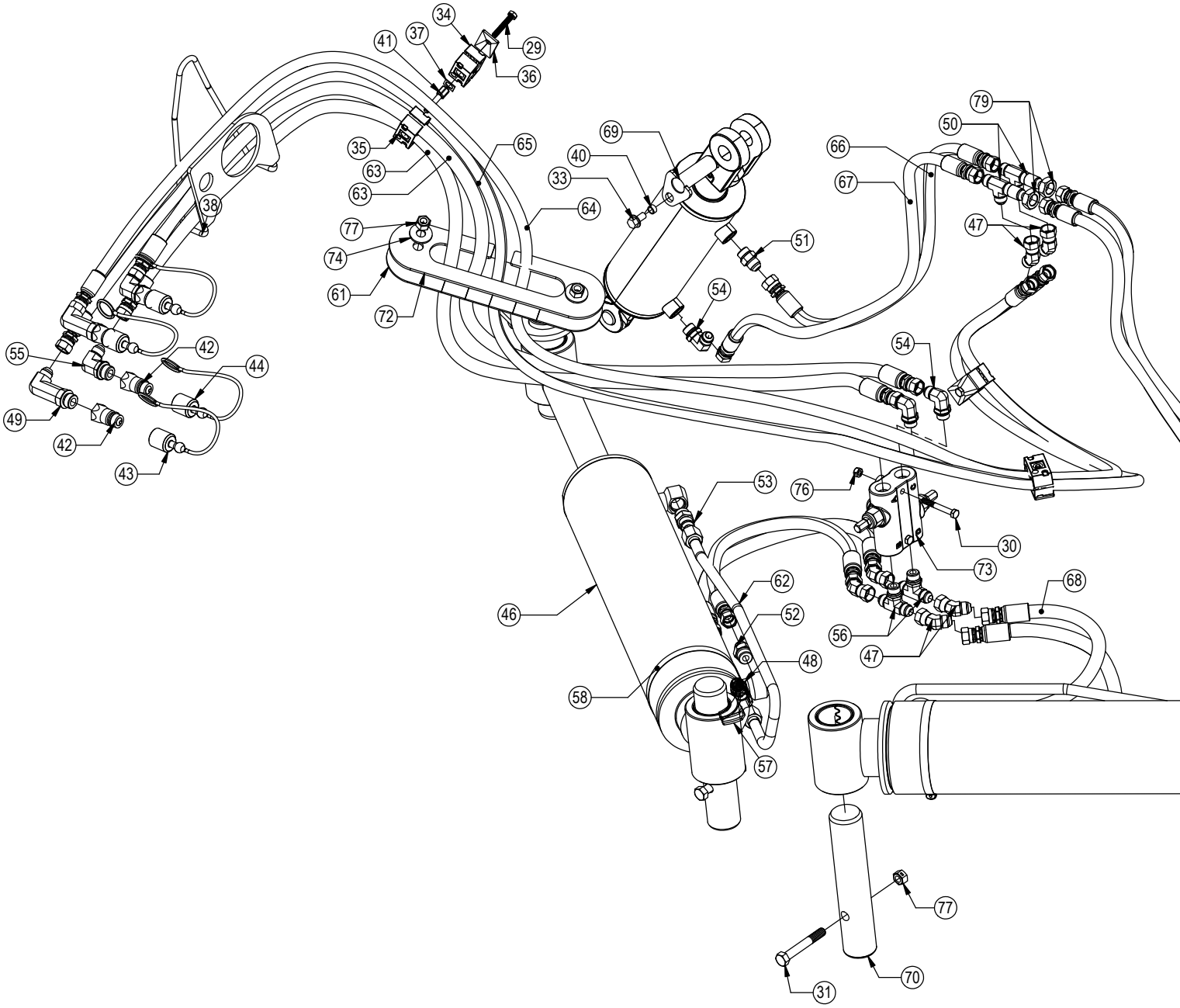
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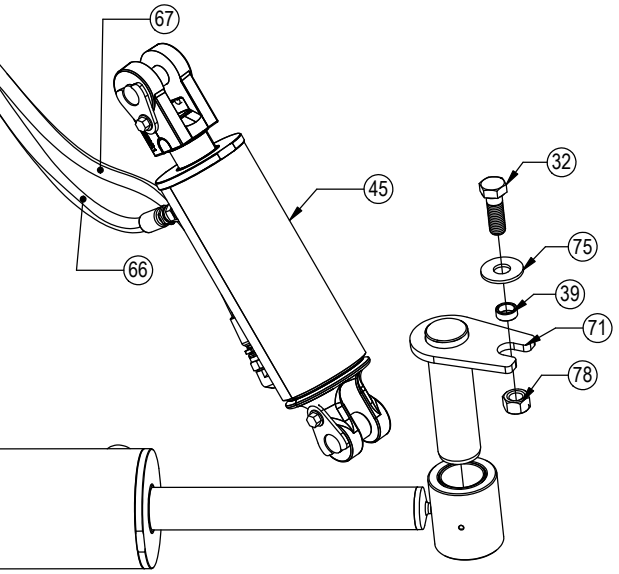
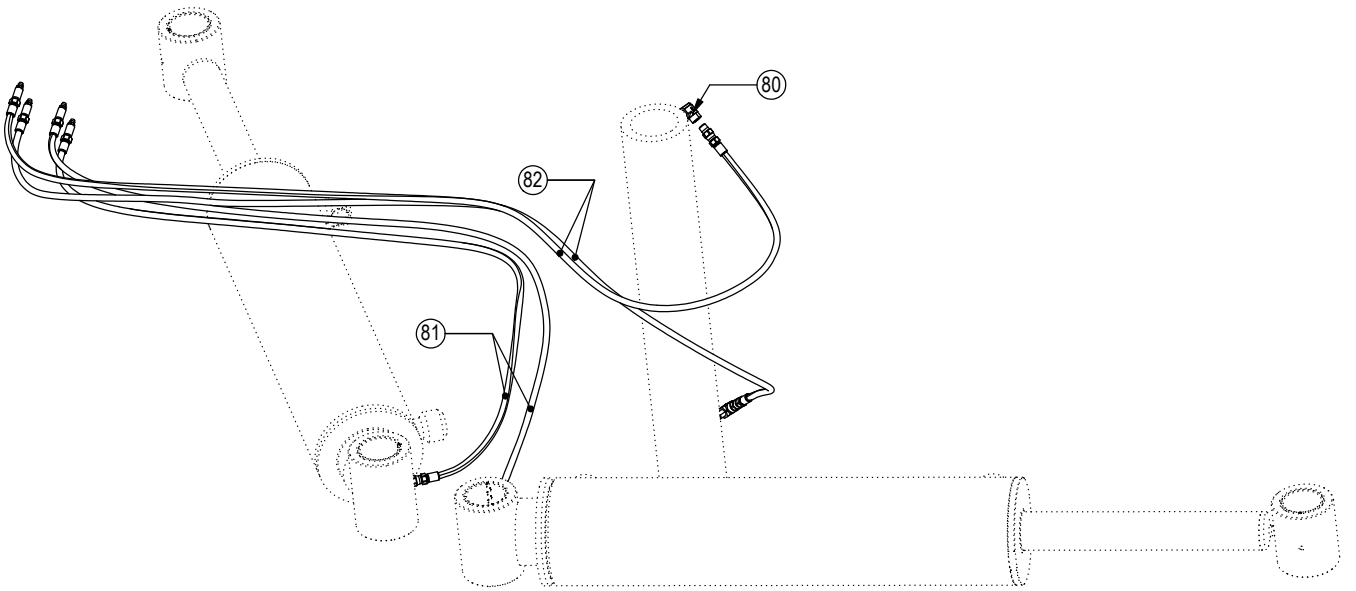


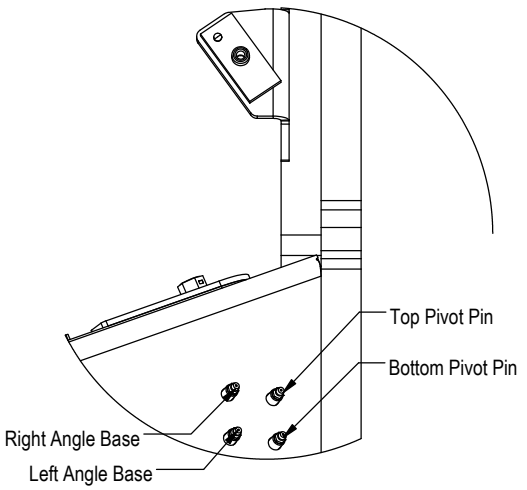
ITEM NO.	QTY.	PART NO.	DESCRIPTION
29	3	16-20037	5/16" x 1-3/4" Hex Bolt Gr. 5 NC
30	2	16-20040	5/16" x 2-1/2" Hex Bolt Gr 5 NC
31	2	16-20134	1/2" x 3-1/2" Hex Bolt Gr. 5 NC
32	2	16-20219	3/4" x 2-1/4" Gr.5 Hex Bolt NC
33	4	16-35C612	3/8" x 3/4" Flange Bolt
34	3	18-19311-03-P-087	Hose Clamp
35	1	18-19311-03-P-100	Hose Clamp
36	3	18-19312-03	Twin Cover Plate
37	1	18-19314-02	Twin Safety Plate
38	1	18-19315-L	Hose Guide Weld
39	2	19-13515	Spacer, NR Pin
40	4	19-13577	Bushing, Spacer
41	1	18-19313-04	Twin Stacking Bolt (TS-STB-04-Y-56H)
42	4	25-34342	Tappet Quick Coupler Male - Poppet Style
43	2	25-3453	Pioneer Dust Cap Tilt (Green)
44	2	25-3455	Pioneer Dust Cap Angle (Red)
45	2	26-34747	4 x 8 Hydraulic Cylinder
46	2	26-34750	5 x 20 Cylinder Bushed Tube Ends
47	6	31-11492-8-8	Male JIC x Female JIC Swivel Nut Elbow 45°
48	2	31-11699-10-8	JIC Union
49	2	31-15676-LL-8-10	Straight Thread Extra Long Elbow 90° JIC x O-Ring
50	2	31-34030	Bulkhead Run Tee JIC
51	2	31-34040	Straight JIC x O-Ring
52	2	31-34041	Straight JIC x O-Ring
53	2	31-34042	Straight JIC x O-Ring
54	4	31-34050	Straight Thread Elbow 90° JIC x O-Ring
55	2	31-34051	Straight Thread Elbow 90° JIC x O-Ring
56	2	31-34060	Branch Tee JIC x O-Ring
57	2	34-12932	Cylinder Saddle
58	2	34-12933	Hose Clamp (worm drive - 5.0)
59*	4	34-18888-GR	-12 GREEN - Spiral Band
60*	4	34-18888-RD	-12 Red - Spiral Band
61	1	34-19217	Rubber Seal
62	2	35-12931	Formed Steel Line
63	2	35-19355	71" x 1/2" -8JIC/-8JIC Hose
64	1	35-19356	115.50" x 3/8" -8JIC/-8JIC Hose
65	1	35-19359	123" x 3/8" -8JIC/-8JIC Hose
66	2	35-30018	33" x 3/8" -8JIC/-8JIC Hose
67	2	35-30081	37" x 3/8" -8JIC/-8JIC Hose
68	4	35-31113	28" x 1/2" -8 JIC/-8 JIC Hose w/ Cordura
69	4	43-13580	Pin Weld
70	2	43-18487	Angle Cyl Base Pin
71	2	43-18490	Angle Cyl Rod Pin Weld
72	1	44-19218	Seal Clamp Plate
73	1	56-7772	Valve
74	2	57-20744	1/2" Flat Washer
75	2	57-20747	3/4" Flat Washer
76	2	70-20581	5/16" Hex Nut
77	4	70-20604	1/2" Center Lock Hex Nut
78	2	70-20607	3/4" Center Lock Hex Nut NC
79	2	70-20807	3/4" Hex Jam Nut NF

* Parts Not Shown

No. On 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

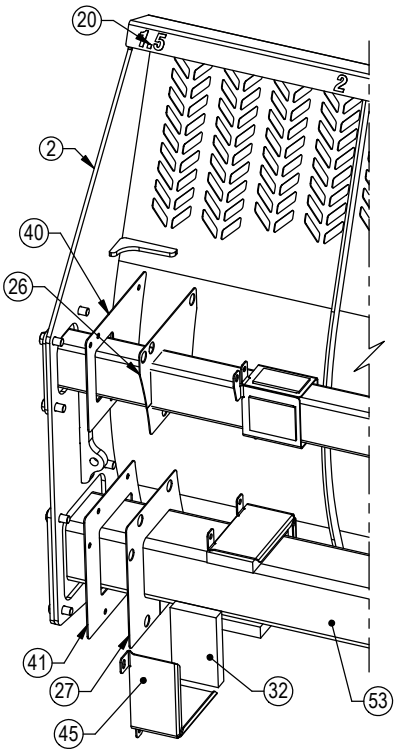
ITEM NO.	QTY.	PART NO.	DESCRIPTION
80	2	31-13933-2-2	1/8" NPT Street Elbow
81	2	58-18994-0430	Grease Hose w/ Long Bulkhead (w/lock nut and grease zerk)
82	2	58-18994-0570	Grease Hose w/ Long Bulkhead (w/lock nut and grease zerk)

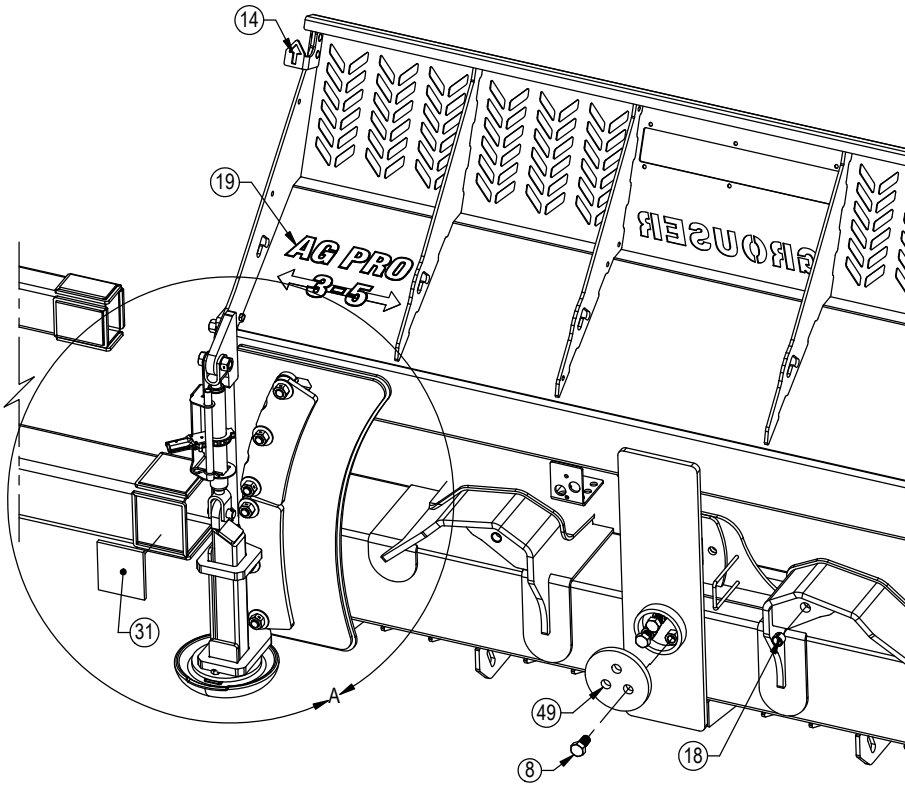




View From Front Of Angle Frame

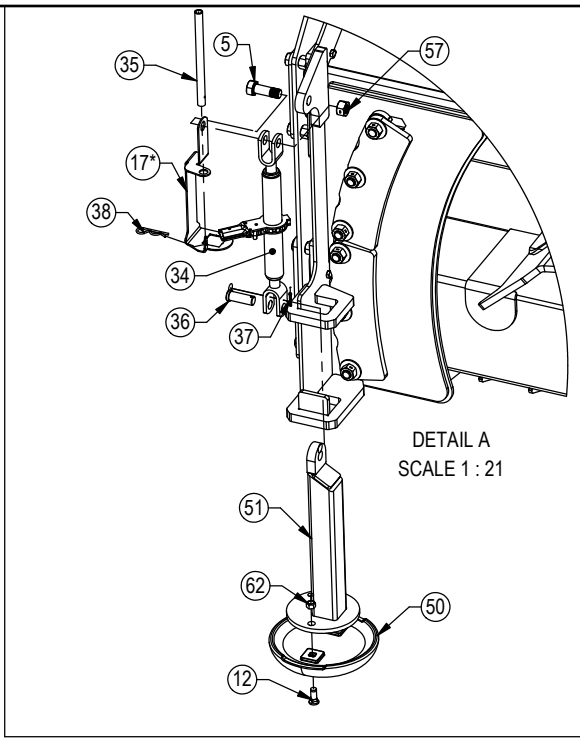
Female Quick Connects At Rear Of Tractor





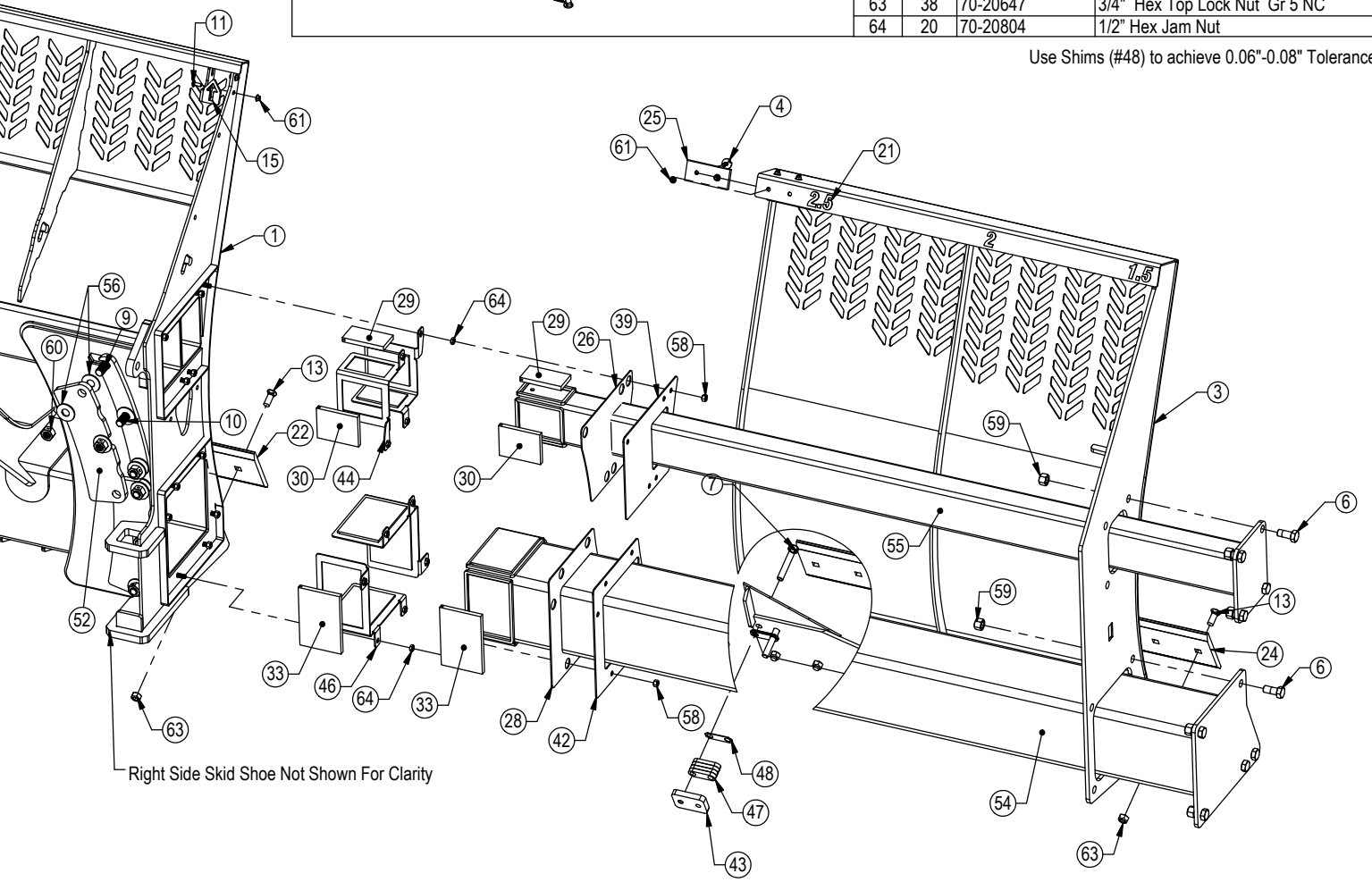
* Part Not Shown

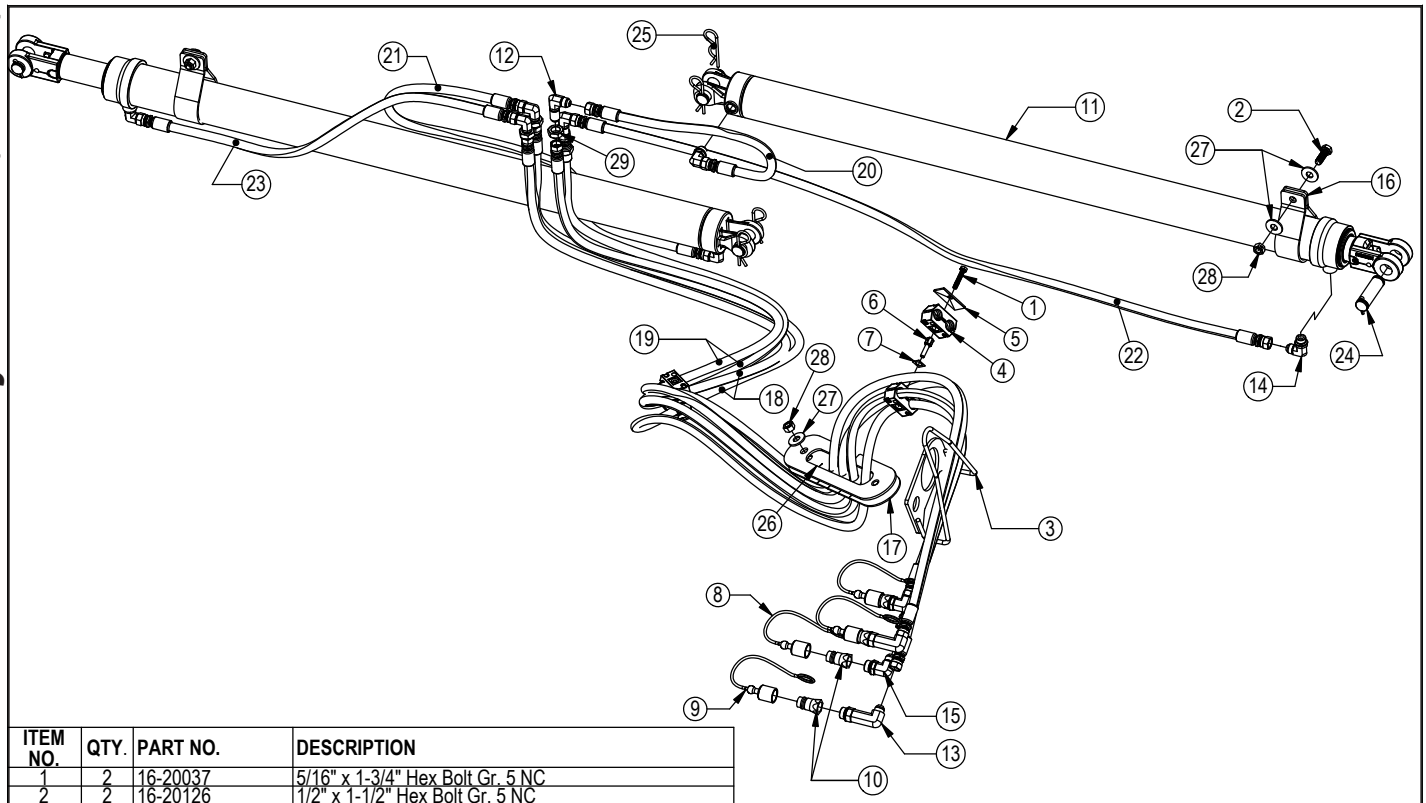
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	15-18735R2	XAXT Blade Weld
2	1	15-18760-L	3-5 Slider End Weld - Left
3	1	15-18760-R	3-5 Slider End Weld - Right
4	12	16-16305	3/8" x 1.25" Flanged Elevator Bolt
5	2	16-18945	1" x 3" Hex Bolt Gr 5 NC - Short Thread
6	18	16-20538	7/8" x 2" Hex Bolt Gr 8 NC
7	4	16-20517	3/4" X 4-1/2" Hex Bolt Gr. 8 NC
8	3	16-20558	1" X 2" Hex Bolt Gr. 8 NC
9	4	16-20561	1" x 2-3/4" Hex Bolt Gr.8 NC
10	8	16-20563	1" x 3-1/4" Hex Bolt Gr.8 NC
11	4	16-21064	3/8" x 1" Carriage Bolt Gr 5 NC
12	4	16-21666	5/8" x 1-3/4" Plow Bolt Gr 5 NC
13	38	16-21748	3/4" X 2" Plow Bolt Gr 8 NC
14	1	18-16304-L	Bracket, Left Location
15	1	18-16304-R	Bracket, Right Location
16	1	18-18498-L R2	Ratchet Keeper - Left
17*	1	18-18498-R R2	Ratchet Keeper - Right
18	2	19-7774	1" x 1" Spring Bushing
19	1	27-18936	Ag Pro 3-5 Decal
20	1	27-18937-L	Ag Pro 3-5 Width Decal - Left
21	1	27-18937-R	Ag Pro 3-5 Width Decal - Right
22	1	29-11118-4	4' - 3/4"x 8" Cutting Edge
23*	1	29-11118-5	5' - 3/4"x 8" Cutting Edge
24	2	29-18777	58" - 3/4 x 8 Cutting Edge
25	6	34-16158	Bearing, 2.625 x 6.00 W/Holes
26	2	34-16419	Top Seal
27	1	34-16420	8" Tube Seal
28	1	34-16421	10" Tube Seal
29	8	34-16425	Top Narrow UHMW
30	8	34-16426	Top Wide UHMW
31	4	34-16427	8" Inner UHMW
32	4	34-16428	8" Outer UHMW
33	8	34-16429	10" UHMW
34	2	34-17565	Skid Shoe Ratchet Jack (S01054100)



ITEM NO.	QTY.	PART NO.	DESCRIPTION
35	2	34-17567	Handle, Ratchet Jack
36	2	43-18463	1" x 2.75" Pin (S57190400)
37	2	43-18943	3/16" x 1-1/2" Cotter Pin
38	2	43-7767	Cylinder Pin Clip
39	1	44-16401 R1	Plate, Top Cover Right
40	1	44-16402 R1	Plate, Top Cover Left
41	1	44-16403	Plate, 8" Cover
42	1	44-16404 R1	Plate, 10" Cover
43	2	44-16417 R1	Plate, Slider
44	4	44-16422	Top Outer Retainer
45	2	44-16423 R1	8" Outer Retainer
46	2	44-16424	10" Outer Retainer
47	2	44-16525	Standoff
48	12	44-16977 R1	Plate, Slider Standoff Shim
49	1	44-3749R1	Backdrag Brace Plate
50	2	50-15458	12" Round Mushroom Skid Shoe
51	2	50-18775	Slider Skid Shoe Weld
52	4	52-18299R1	Tilt Plate
53	1	53-18768R1	8 x 8 Tube Weld, 3-5 Slider
54	1	53-18770R2	10 x 10 Tube Weld, 3-5 Slider
55	2	53-18772R1	4 x 6 Tube Weld, 3-5 Slider
56	24	57-20749	1" Flat Washer
57	2	70-18999	1" Hex Center Lock Nut Gr 2 NC - YZ
58	24	70-20584	1/2" Hex Nut Gr 5 NC
59	18	70-20598	7/8" Hex Nut Gr 8 NC
60	12	70-20609	1" Hex Center Lock Nut Gr.2 NC
61	16	70-20622	3/8" Flange Hex Nut Gr 5 NC
62	4	70-20646	5/8" Hex Top Lock Nut Gr 5 NC
63	38	70-20647	3/4" Hex Top Lock Nut Gr 5 NC
64	20	70-20804	1/2" Hex Jam Nut

Use Shims (#48) to achieve 0.06"-0.08" Tolerance



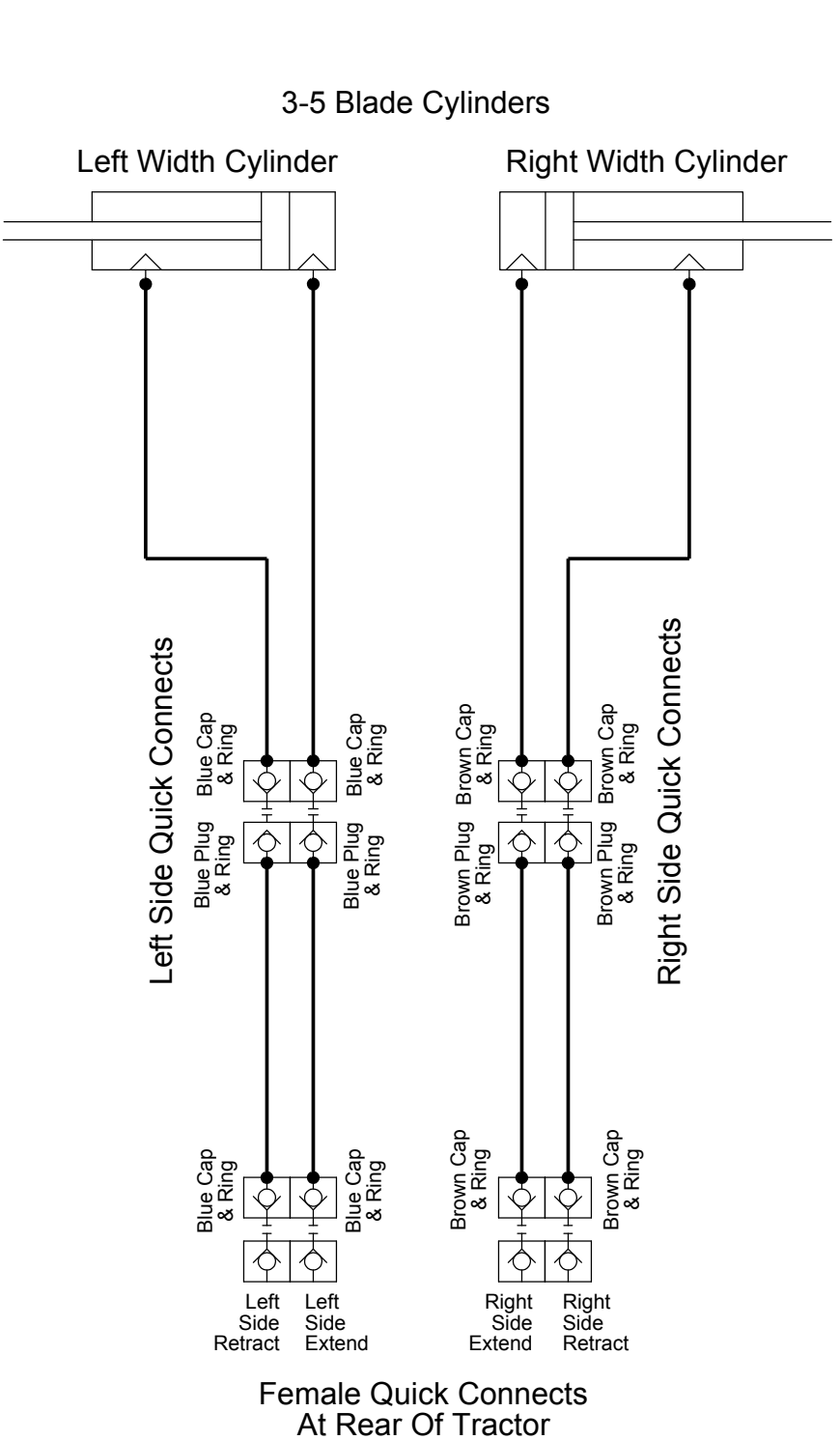


ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	2	16-20037	5/16" x 1-3/4" Hex Bolt Gr. 5 NC
2	2	16-20126	1/2" x 1-1/2" Hex Bolt Gr. 5 NC
3	1	18-19315-R	Hose Guide Weld
4	4	18-19311-03-P-087	Hose Clamp
5	2	18-19312-03	Twin Cover Plate
6	2	18-19313-03	Twin Stacking Bolt
7	2	18-19314-02	Twin Safety Plate
8	2	25-3403	Pioneer Dust Cap Slider (Blue) (Left Cylinder)
9	2	25-3405	Pioneer Dust Cap Slider (Brown) (Right Cylinder)
10	4	25-34342	Tappet Quick Coupler Male - Poppet Style
11	2	26-34741	3 x 48 Hydraulic Cylinder
12	4	31-13669-8-8	Male JIC 90° Elbow Bulkhead Fitting
13	2	31-15676-LL-8-10	Straight Thread Extra Long Elbow 90° JIC x O-Ring
14	4	31-34050	Straight Thread Elbow 90° JIC x O-Ring
15	2	31-34051	Straight Thread Elbow 90° JIC x O-Ring
16	2	34-17585	Cylinder Strap
17	1	34-19217	Rubber Seal
18	2	35-19357	121" x 3/8" -8JIC/-8JIC Hose
19	2	35-19358	113" x 3/8" -8JIC/-8JIC Hose
20	1	35-30012	27" x 3/8" -8JIC - 8JIC Hose
21	1	35-30023	42" x 3/8" -8JIC/-8JIC Hose
22	1	35-30029	60" x 3/8" -8 JIC/-8 JIC Hose
23	1	35-30079	40" x 3/8" -8JIC/-8JIC Hose
24	4	43-16306	Cylinder Pin with Cotter Pins
25	4	43-7767	Cylinder Pin Clip
26	1	44-19218	Seal Clamp Plate
27	6	57-20744	1/2" Flat Washer
28	4	70-20604	1/2" Center Lock Hex Nut
29	4	70-20807	3/4" Hex Jam Nut NF

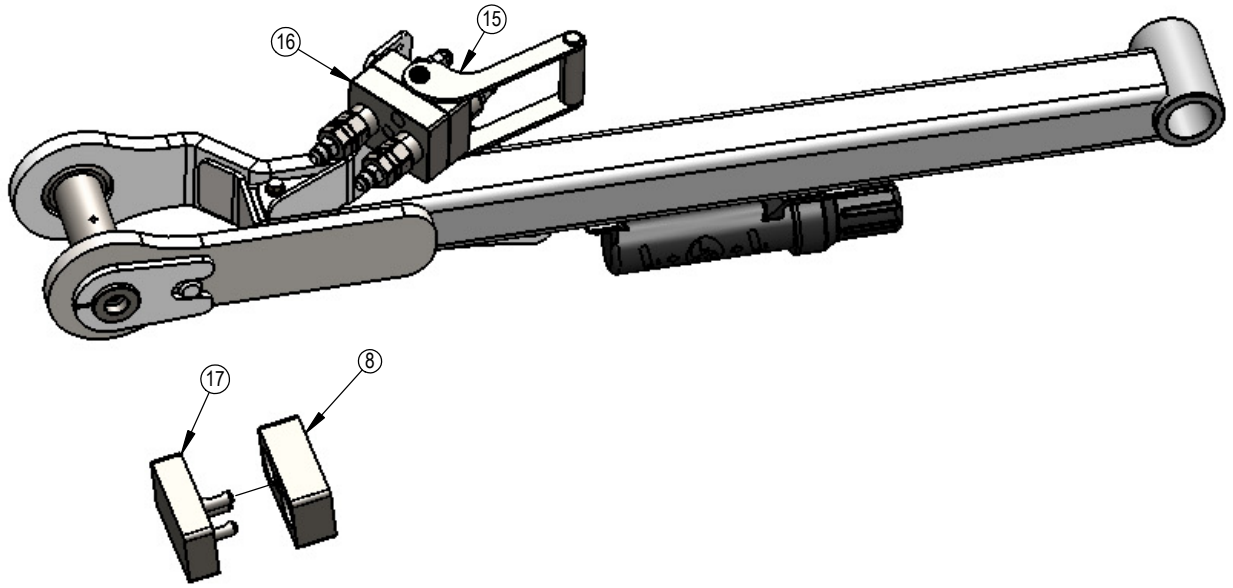
No. On Cylinder	Part No.	Description
26-34741	49-17797	Seal Kit 3x48

* Parts Not Shown

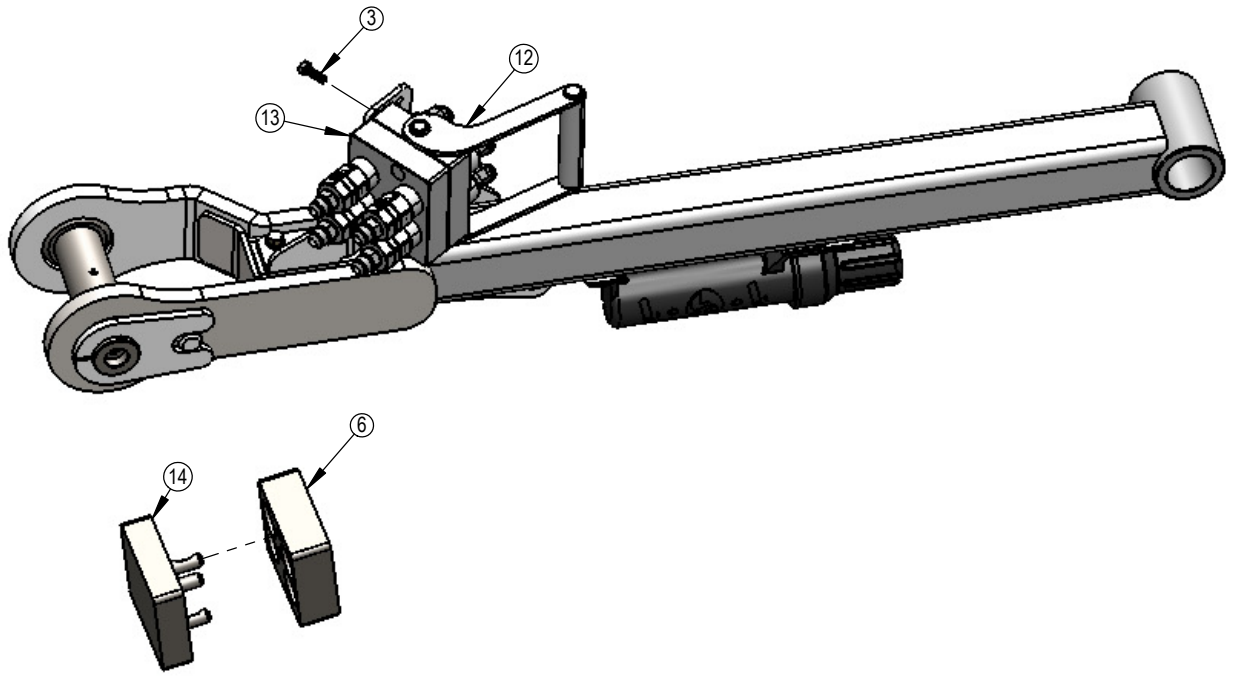
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	6	16-21064	3/8" x 1" Carriage Bolt Gr 5 NC
2	1	44-18995	Ag Pro 3-5M Name Plate
3*	1	44-15600	Custom Name Plate
4	6	70-20622	3/8" Flange Hex Nut Gr 5 NC


3-5 Blade Cylinders
Left Width Cylinder
Right Width Cylinder
Left Side Quick Connects
Right Side Quick Connects
Blue Cap & Ring
Blue Plug & Ring
Brown Cap & Ring
Brown Plug & Ring
Left Side Retract
Left Side Extend
Right Side Extend
Right Side Retract
Female Quick Connects
At Rear Of Tractor

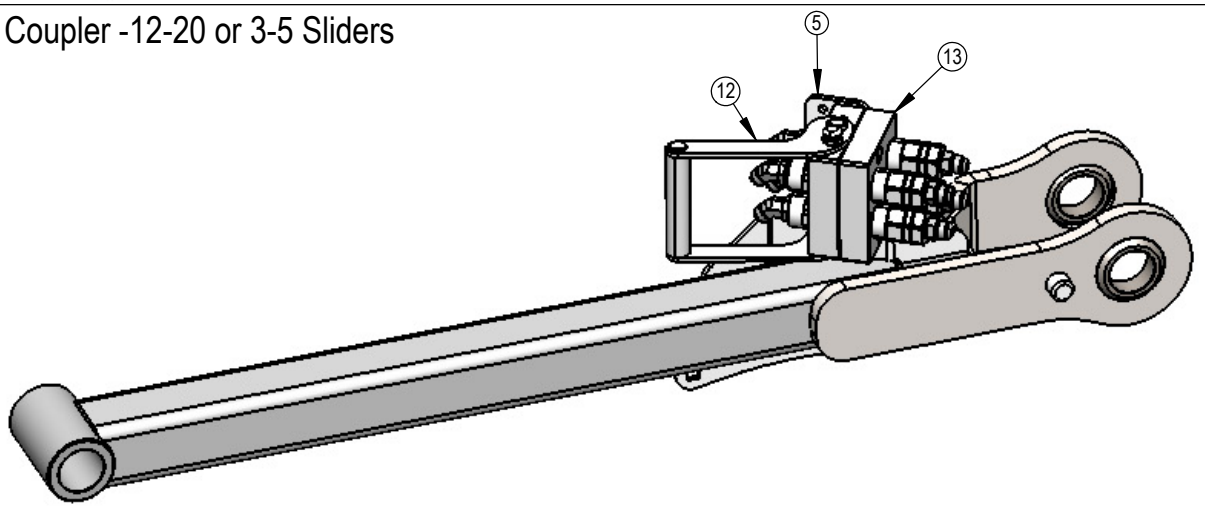
2 Port Multi Coupler - NAHT or HANT Electric



4 Port Multi Coupler -HANT 2-Stick or HAHT Electric



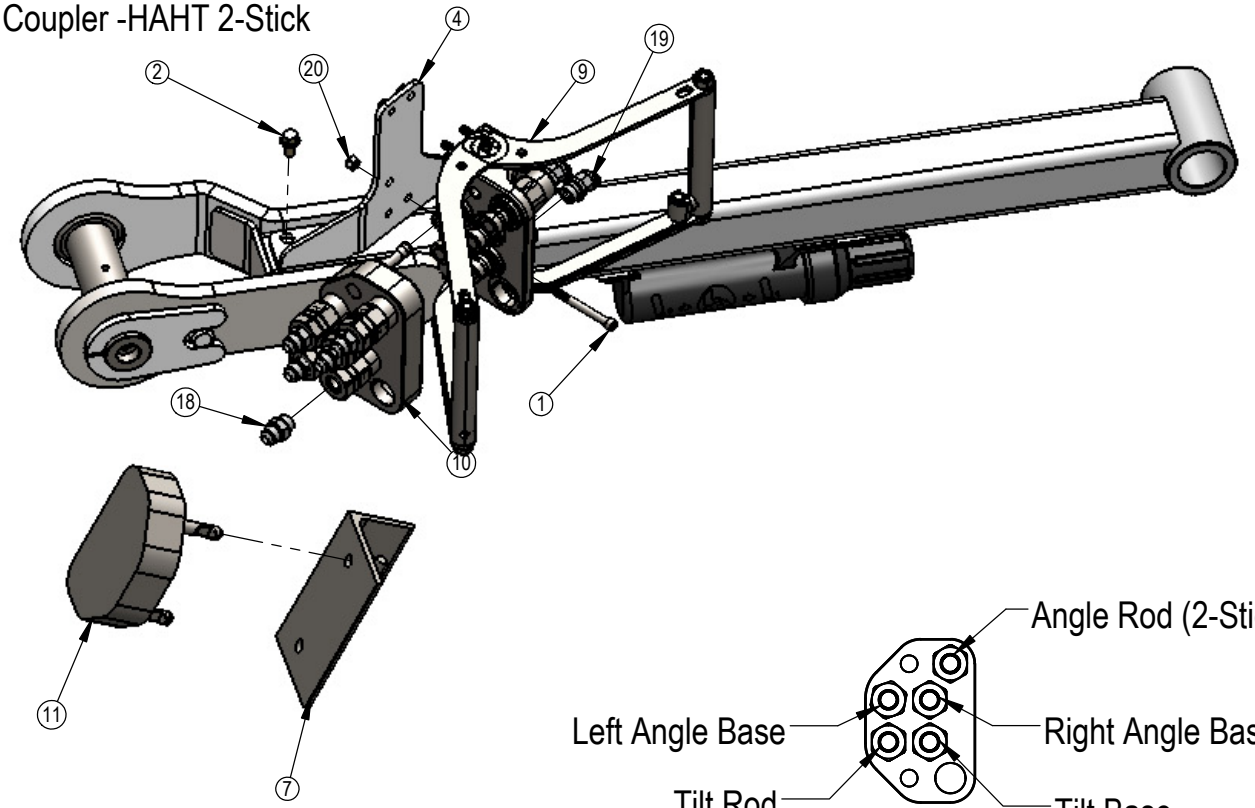
4 Port Multi Coupler -12-20 or 3-5 Sliders



ITEM NO.	PART NO.	HAHT 2-Stick	HANT 2-Stick or HAHT Electric	NAHT or HANT Electric	12-20 or 3-5 Blades	DESCRIPTION
1	16-18957	4	-	-	-	5/16” x 3-1/4” Allen Head Screw
2	16-35C612	3	3	3	3	3/8" x 3/4" Flange Bolt
3	16-812525	-	2	2	2	8mm x 1.25mm x 25mm Metric Hex Bolt Gr 10.9
4	18-18430R1	1	1	1	-	Quick Coupler Mount
5	18-18514	-	-	-	1	Quick Coupler Mount
6	25-18956	-	1	-	1	Multi-Coupling Plate - 4 Port Parking Station
7	25-18961	1	-	-	-	Multi-Coupling Plate - 5/6 Port Parking Station
8	25-19657	-	-	1	-	Multi-Coupling Plate - 2 Port Parking Station
9	25-19861	1	-	-	-	Multi-Coupling Plate - 5 Port - Fixed
10	25-19862	1	-	-	-	Multi-Coupling Plate - 5 Port - Mobile
11	25-19863	1	-	-	-	Multi-Coupling Plate - 5 Port - Cap
12	25-19864	-	1	-	1	Multi-Coupling Plate - 4 Port Fixed
13	25-19866	-	1	-	1	Multi-Coupling Plate - 4 Port Mobile
14	25-19867	-	1	-	1	Multi-Coupling Plate - 4 Port - Cap
15	25-19868	-	-	1	-	Multi-Coupling Plate - 2 Port - Fixed
16	25-19869	-	-	1	-	Multi-Coupling Plate - 2 Port - Mobile
17	25-19871	-	-	1	-	Multi-Coupling Plate - 2 Port - Cap
18	31-34040	5	4	2	4	Straight JIC x O-Ring
19	31-34150	5	4	2	4	Straight Thread Elbow 45° JIC x O-Ring (6802-8-8)
20	70-20611	4	-	-	-	5/16" Nyloc Hex Nut Gr 5 NC

1. Parking Stations are located on the angle frames or blades. Place the Cap in the Parking Stations when blade is in use. When disconnecting the blade, place the Cover on the Fixed Multi-Coupler and the Mobile Multi-Coupler in the Parking Station.
2. Apply a heavy duty silicone spray lubricant to pins to protect from corrosion.

5 Port Multi Coupler -HAHT 2-Stick



Contact Us

As always, if you have any questions about your 3-5 Dozer or other products made by Grouser, feel free to contact us.

Grouser Products
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Website: 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.

GROUSER® PRODUCTS