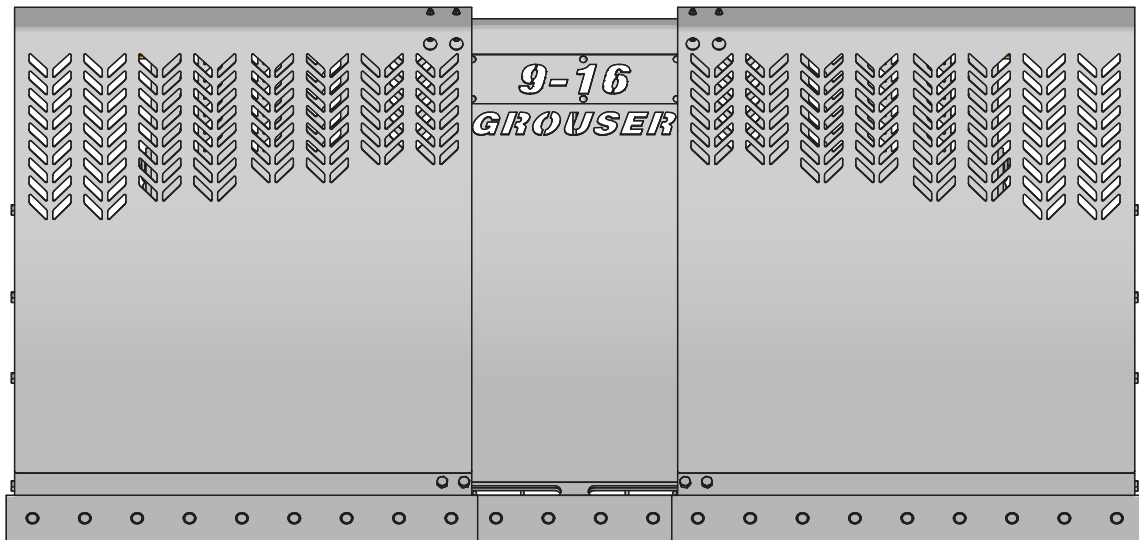




9-16 - AG 241i

Owner's Manual & Parts Book



Grouser Products
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Purchase Date
Serial Number
Model Number
Tractor Model
Dealer

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Thank you for your recent purchase of a Grouser 9-16 Dozer. Welcome to the family of satisfied Grouser blade owners. Grouser Products is committed to offering quality products to help professionals in their daily jobs. We are also committed to providing you the highest level of customer satisfaction possible. Again, thank you for your patronage. We look forward to serving you.

This manual contains information concerning the operation, adjustment, safety and maintenance of the 9-16 Dozer. You have purchased a dependable, long lasting piece of equipment. You can expect to receive long lasting performance and long service built into our products with proper care and operation. Please have all operators read and understand this manual carefully. Keep the manual available for reference. If, for any reason, you have questions or comments, we would be happy to hear from you. Call our toll-free number, 701-282-7710, or send us an e-mail at info@grouser.com. You can expect us to respond to your e-mail in a timely manner.

HAHT	Hydraulic Angle - Hydraulic Tilt
HANT	Hydraulic Angle - No Tilt

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, please follow all safety and operational instructions of your tractor manufacturer.

The 9-16 Dozer:

1. The 9-16 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 9-16 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.
6. Lower the blade to the ground when not in use.

Servicing the 9-16 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 9-16:

1. Thoroughly clean the 9-16 Dozer before storage. Use paint where necessary to prevent rust.
2. Check the 9-16 Dozer for worn or damaged parts. Install new parts as required.
3. Lubricate all pins and joints.

Tighten all bolts to the values listed below unless otherwise noted. Refer to the parts lists for proper length and grade of the bolts.

Size	Torque - Dry (ft-lbs)			
	SAE Grade 5		SAE Grade 8	
	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

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

Unstrap and remove any boxes of hardware from the undercarriage. If any components are missing, call Grouser.

Install undercarriage per the tractor specific mounting instructions.

4.5

PN: 27-40970-L

8

8

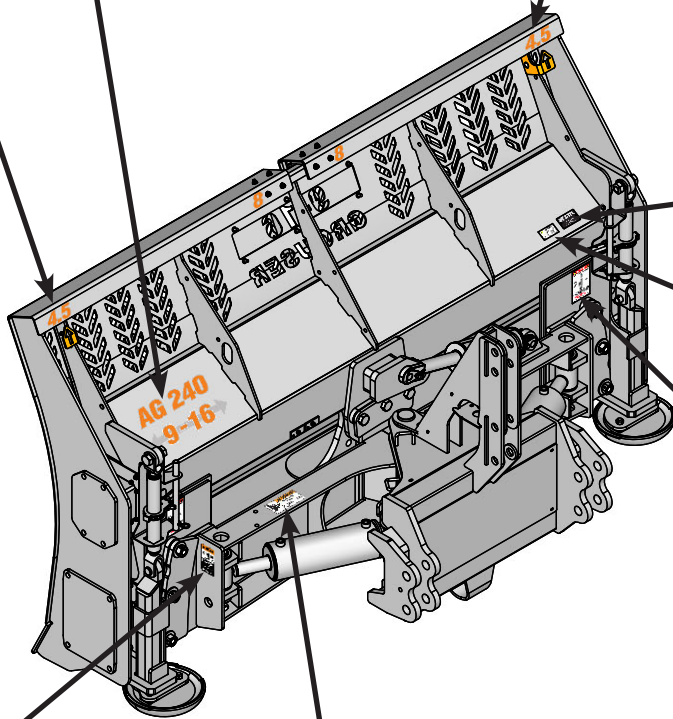
PN: 27-40970-R

4.5

AG 240

9-16

PN: 27-40969



WARNING: This product can expose you to chemicals including lead and lead compounds, mineral oils, and phthalates which are known to the State of California to cause cancer and birth defects or other reproductive harm.
For more information go to www.P65Warnings.ca.gov 27-40962R1

PN: 27-40962

STOP

PROPER RATCHET STORAGE

Handle
Ratchet Handle
Ratchet Keeper

Ratchet Handle Must Be Secured Between The Ratchet Keeper And The Handle When Not In Use
FAILURE TO FOLLOW MAY RESULT IN DAMAGE

Parts May Vary Slightly In Appearance From Your Product 27-40917

PN: 27-40917

WARNING

PINCH POINT

AVOID INJURY FROM FRAME PIVOT AND STOPS.

- Keep hands and feet away.

27-9503

PN: 27-9503
Left and Right Side

WARNING

PINCH AREA
Keep away

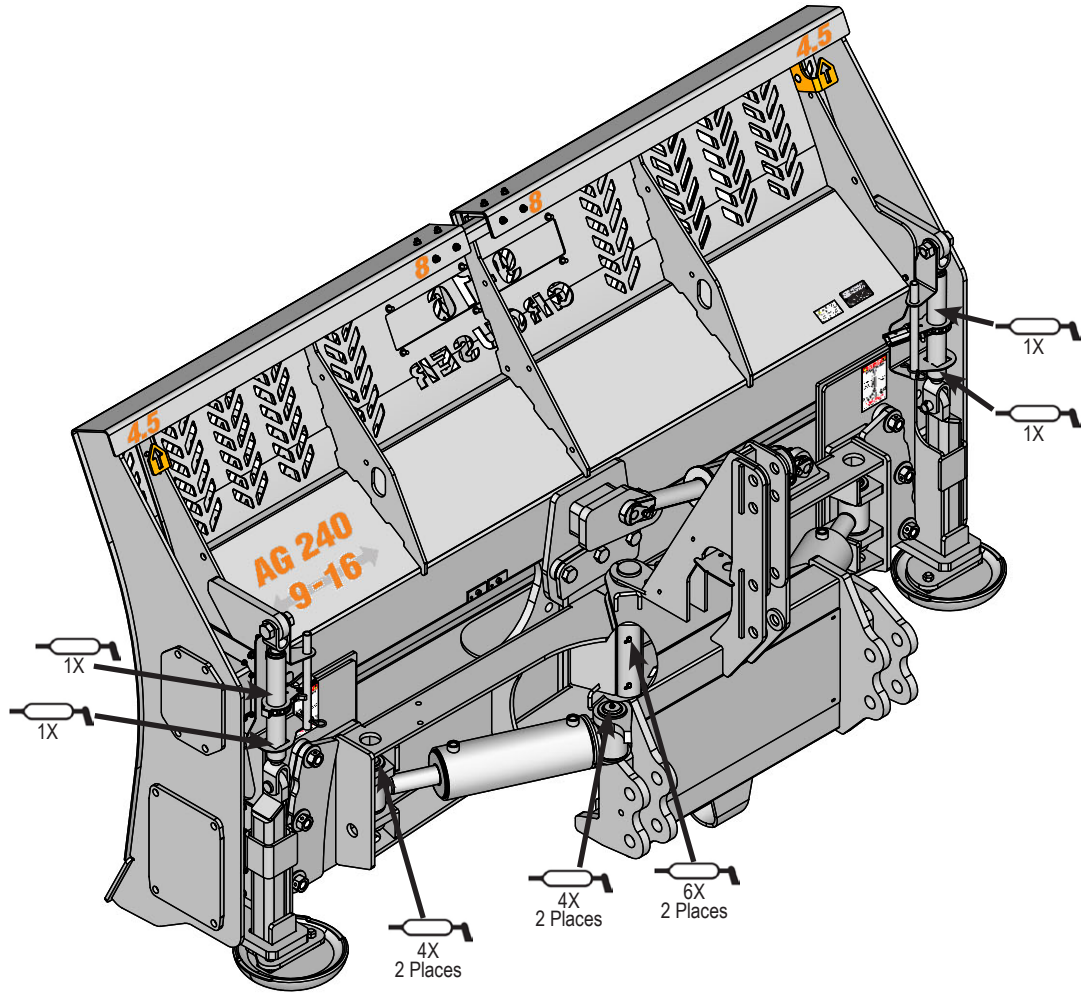
Failure to comply could result in death or serious injury.

27-2409

PN: 27-2409

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

- Inspect all equipment before operation for existing or potential damage.
- Lubricate all joints with high quality grease. See below for grease locations.
- Inspect all bolts, and tighten any loose bolts to torque specifications on page 3.
- Check replaceable cutting edge for wear ensuring there is enough material to prevent permanent damage to the 9-16 Dozer. For cutting edge information, see pages 8-9 and 19 .
- Check hydraulic cylinders and hoses for damage or leaks. For replacement parts, see hydraulic pages 10-18 and 20-21.
- Make sure all non-rotating pins are secured properly.
- Inspect all decals and order replacement decals from your dealer if any are damaged or worn.
- Inspect all tilt-ways for wear. See page 7 for tilt plate adjustment.
- Replace parts with original parts only.



1. Verify that the top arm is installed correctly. See the picture of the decal that is on the angle frame below for reference. If you are using a Grouser Hitch, use the lower 2 sets of holes for the top link. If you are using a Factory Hitch, use the upper 2 sets of holes for the top link.
2. With the blade hooked up, set the blade on the ground. Adjust the top arm until the the center angle pin is vertical and perpendicular to the ground.
3. Carefully run the blade up and down to make sure that the top link doesn't collide with anything.

STOP

PROPER TOP LINK INSTALLATION

D FACTORY HITCH
C Pin Locations: D & 2
C & 1

B GROUSER HITCH
A Pin Locations: B & 2
A & 1

PLEASE VERIFY TOP LINK ROTATION BEFORE IN SERVICE

FAILURE TO FOLLOW MAY RESULT IN DAMAGE

27-18209R2

Skid Shoe Adjustment:

1. Remove the handle from the ratchet keeper by pulling the hitch clip pin and insert it into the handle receiver 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, flip the forward/reverse lever on the handle (see Figure 2). Rotate the ratchet jack handle again to move the skid shoe in the desired direction.
5. After the skid shoe is adjusted, rotate the ratchet jack handle until it rests 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 the hitch clip pin.
6. Tighten the locking nut against the ratchet jack body to keep it from moving.
7. When skid shoes are worn up to the bolt heads, replace skid shoes.

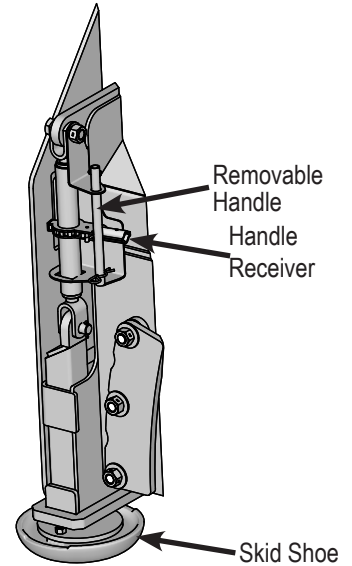


Figure 1

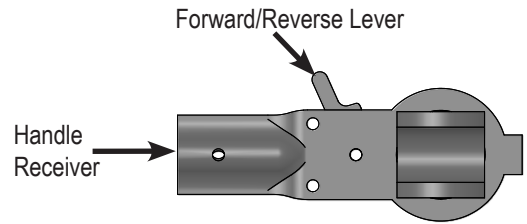


Figure 2

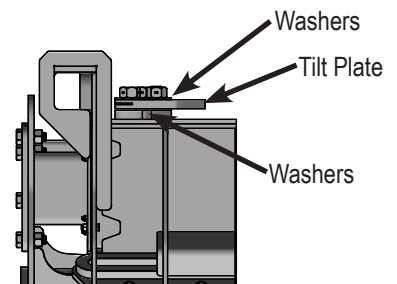
Preferred Method:

1. The preferred blade position for adjusting the tilt plates is laying face down on blocks.
2. Remove the 3 nuts from the right tilt plate.
3. Add or remove washers as needed to adjust tilt-way clearance to 1/16" - 1/8".
4. Reinstall the nuts in the right tilt plate.
5. Follow Steps #2-4 for the left tilt plate and the top tilt plate.
6. Once the tilt-way clearance is set, torque bolts to 640 ft-lbs.

Non-Preferred Method:

Note: Do not remove all of the bolts at the same time if the blade is not laying face down.

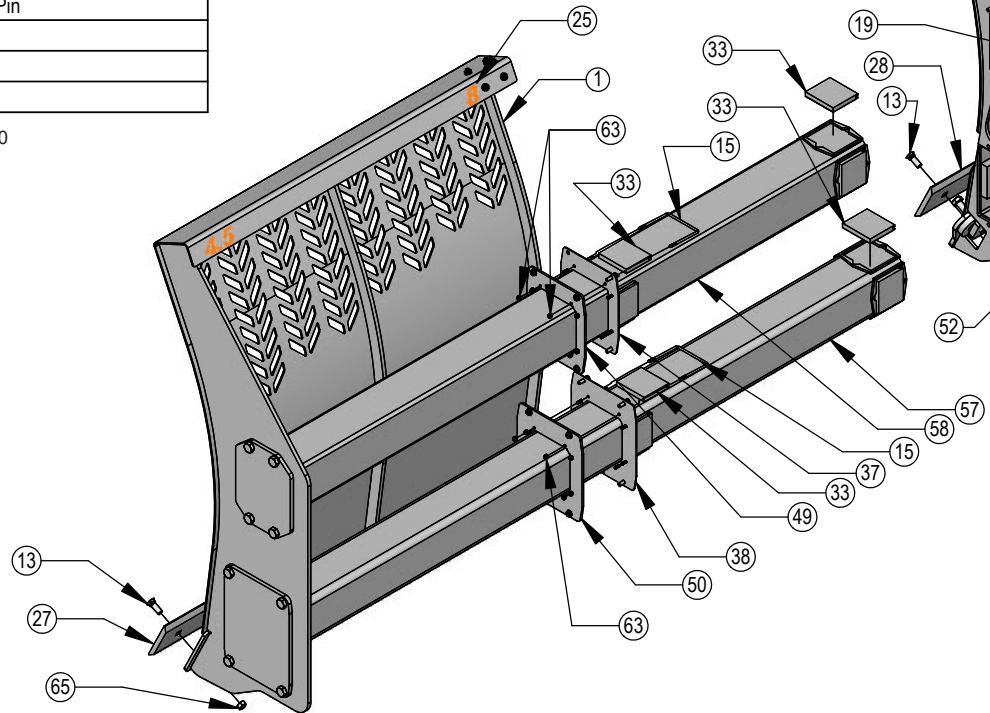
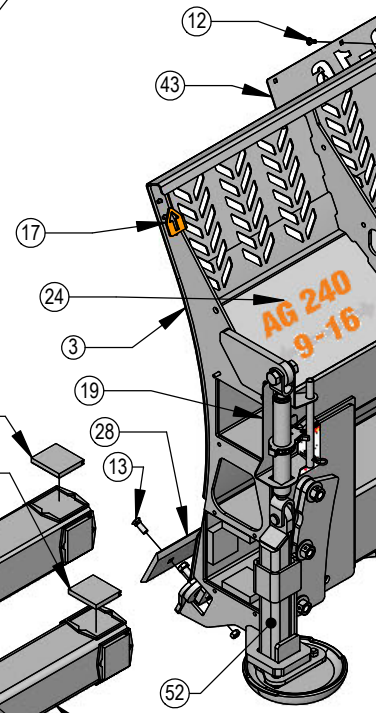
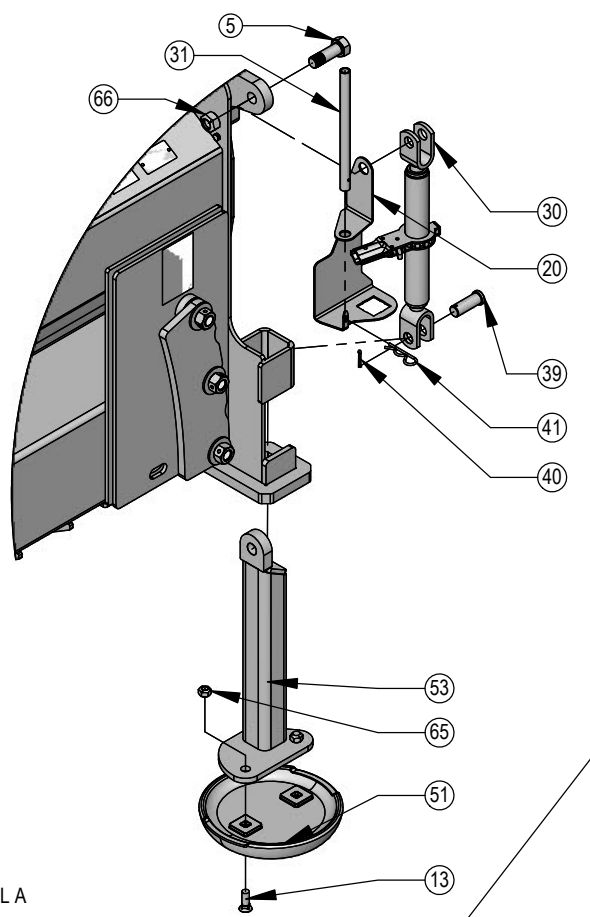
1. The non-preferred blade position for adjusting the tilt plates is the blade in the upright position.
2. Remove the 3 nuts from the right tilt plate.
3. Add or remove washers as needed to adjust tilt-way clearance to 1/16" - 1/8".
4. Reinstall the nuts in the right tilt plate.
5. Follow Steps #2-5 for the left tilt plate and the top tilt plate.
6. Once the tilt-way clearance is set, torque bolts to 640 ft-lbs.



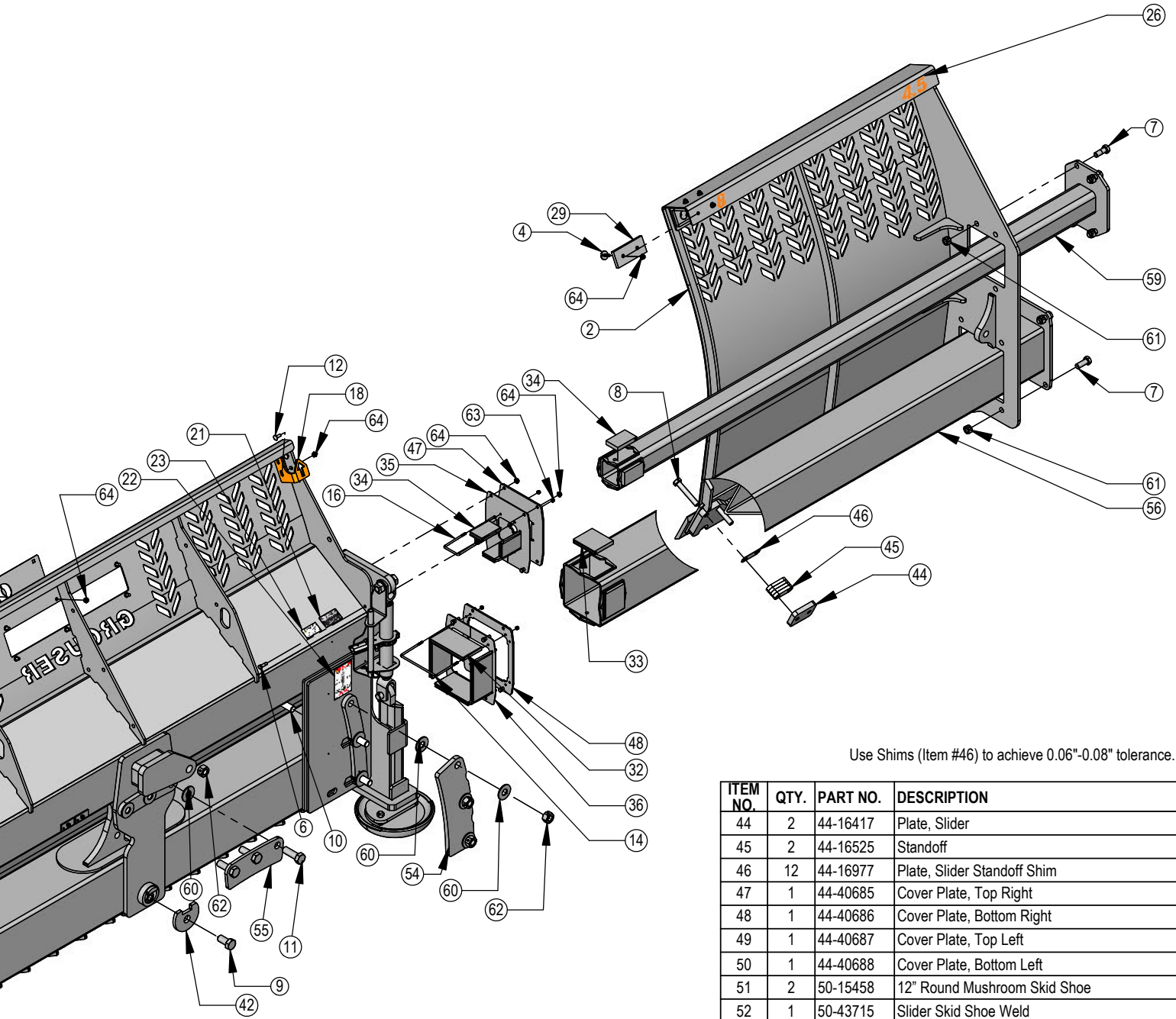
9-16 Blade

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	15-40645-L	9-16 Slider End Weld
2	1	15-40645-R	9-16 Slider End Weld
3	1	15-41780	Blade Weld
4	18	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	14	16-20065	3/8" X 1-1/4" Hex Bolt Gr 5 NC CZ
7	16	16-20508	3/4" X 2" Hex Bolt Gr 8 NC YZ
8	4	16-20517	3/4" X 4-1/2" Hex Bolt Gr 8 NC YZ
9	1	16-20558	1" X 2" Hex Bolt Gr 8 NC YZ
10	6	16-20561	1" X 2-3/4" Hex Bolt Gr 8 NC YZ
11	3	16-20562	1" X 3" Hex Bolt Gr 8 NC YZ
12	10	16-21064	3/8" x 1" Carriage Bolt Gr 5 NC CZ
13	38	16-21666	5/8" X 1-3/4" Plow Bolt Gr 5 NC (#3 Flat Head)
14	4	16-40693	.25 x 7.25 x 4.50 Square U-Bolt
15	8	16-40694	.25 x 4.75 x 4.50 Square U-Bolt
16	4	16-40695	.25 x 2.75 x 4.50 Square U-Bolt
17	1	18-16304-L	Bracket, Left Location
18	1	18-16304-R	Bracket, Right Location
19	1	18-19994-L	Ratchet Keeper
20	1	18-19994-R	Ratchet Keeper
21	1	NA	Grouser Dozer Metal Serial Tag
22	2	27-40917	Ratchet Holder Storage Decal
23	1	27-40962	Warning Prop 65 Decal
24	1	27-40969	Ag 240 9-16 Decal
25	1	27-40970-L	Ag 240 9-16 Width Decal - 4.5-8 (Left Side)
26	1	27-40970-R	Ag 240 9-16 Width Decal - 8-4.5 (Right Side)
27	2	29-7950-54	Cutting Edge
28	1	29-7950-8	Cutting Edge
29	9	34-16158	Bearing, 2.625 x 6.00 W/Holes
30	2	34-17565	Ratchet Jack
31	2	34-17567	Handle, Ratchet Jack
32	4	34-40656	7 x 4 Bearing
33	20	34-40657	4.5 x 4 Bearing
34	8	34-40658	2.5 x 4 Bearing
35	1	34-40689	Seal, Top Right
36	1	34-40690	Seal, Bottom Right
37	1	34-40691	Seal, Top Left
38	1	34-40692	Seal, Bottom Left
39	2	43-18463	1" x 2.75" Pin
40	2	43-18943	3/16" x 1-1/2" Cotter Pin
41	2	43-7767	Cylinder Pin Clip
42	1	44-15339	Back Drag Plate
43	1	44-15600	Custom Name Plate

DETAIL A



Item #3 - For HANT Blade - Part No is 15-42030



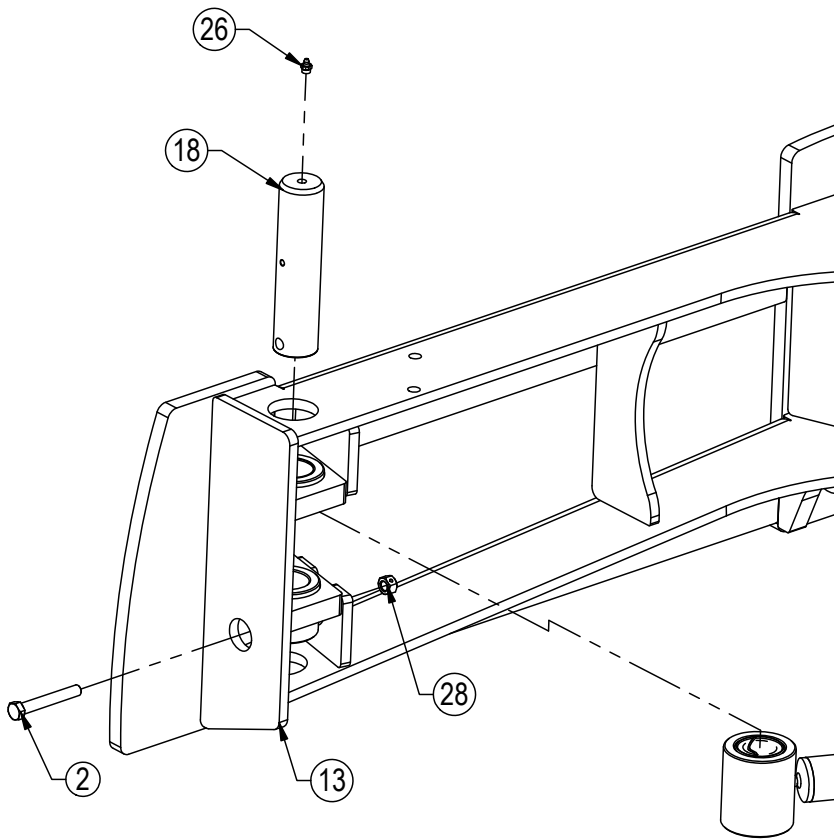
Use Shims (Item #46) to achieve 0.06"-0.08" tolerance.

ITEM NO.	QTY.	PART NO.	DESCRIPTION
44	2	44-16417	Plate, Slider
45	2	44-16525	Standoff
46	12	44-16977	Plate, Slider Standoff Shim
47	1	44-40685	Cover Plate, Top Right
48	1	44-40686	Cover Plate, Bottom Right
49	1	44-40687	Cover Plate, Top Left
50	1	44-40688	Cover Plate, Bottom Left
51	2	50-15458	12" Round Mushroom Skid Shoe
52	1	50-43715	Slider Skid Shoe Weld
53	1	50-43720	Slider Skid Shoe Weld
54	2	52-18299	Tilt Plate
55	1	52-8204	Tilt Plate
56	1	53-40655	8x8 Tube Weld
57	1	53-40660	6 x 6 Tube Weld
58	1	53-40665	6x6 Tube Weld, Top
59	1	53-40670	4x4 Tube Weld
60	15	57-20749	1" Flat Washer CZ
61	16	70-20607	3/4" Hex Center Lock Nut Gr 5 NC CZ
62	9	70-20609	1" Hex Center Lock Nut Gr 5 NC CZ
63	32	70-20610	1/4" Nylock Hex Nut Gr 5 NC CZ
64	44	70-20622	3/8" Flange Hex Nut Gr 5 NC CZ
65	38	70-20646	5/8" Hex Top Lock Nut Gr 5 NC CZ
66	2	70-20999	1" Hex Top Lock Nut Gr 8 NC YZ

DWG. NO.: 41780-A

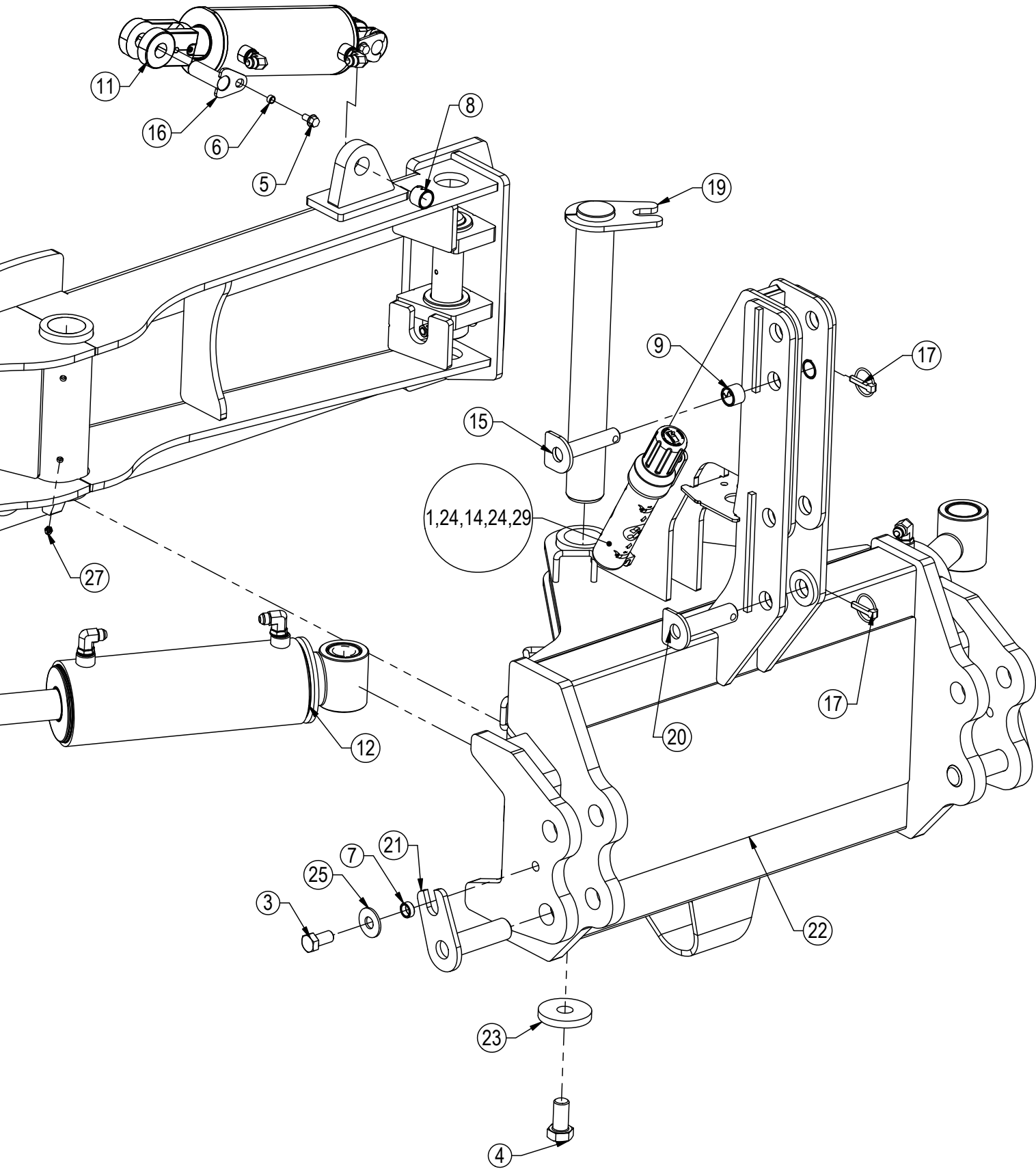
Item #A for Cat 2
 Item #B for Cat 3N
 Item #C for 241 System
 Item #D is for Challenger 1000 and Fendt 1000 Tractors
 * Parts Not Shown

Item No.	Qty.	Part No.	Description
1	2	16-20034	5/16" x 1" Hex Bolt Gr 5 NC
2	4	16-20134	1/2" x 3-1/2" Hex Bolt Gr 5 NC
3	2	16-20216	3/4" x 1-1/2" Hex Bolt Gr 5 NC
4	1	16-20558	1" x 2" Hex Bolt Gr 8 NC
5	2	16-35C612	3/8" x 3/4" Flanged Bolt
6	2	16-13577	NR Pin Spacer Clevis End
7	2	19-13515	3/4" ID Non Rotating Pin Spacers
8	1	19-7774	1"x1" Spring Bushing
9A	2	19-7774	1" x 1" Spring Bushing
10C*	2	22-8813	Quick Claw Uni Ball
11	1	26-34711	4 x 8 Cylinder w/ Cast Clevis Ends (647134)
12	2	26-34748	5 x 12 Cylinder Tube Ends (658378)
12D	2	26-34759	5 x 10 Cylinder Tube Ends
13	1	32-41775	Tilt Frame
14	1	34-14961	Manual Canister
15A	1	43-11665	Top Link Pin - Cat 2
16	2	43-13580	1" Clevis Bolt in Pin
17	1	43-16764	7/16" x 1-3/4" Lynch Pin
18	4	43-18405	Cylinder Pin
19	1	43-16925	Angle Pin
20	1	43-3287	Top Link Pin - Cat 3N
21	2	43-3289	Lower Lift Pin
22	1	45-18420	ISO Angle Frame
23	1	57-16928	3.50" OD x 1.06" ID Washer
24	4	57-20741	5/16" Flat Washer
25	2	57-20747	3/4" Flat Washer
26	4	58-9369	Grease Zerk 1/8" NPT Straight
27	1	58-9369	Grease Zerk 1/8" NPT 45°
28	4	70-20604	1/2" Hex Center Lock Nut NC
29	2	70-20611	5/16" Nyloc Nut

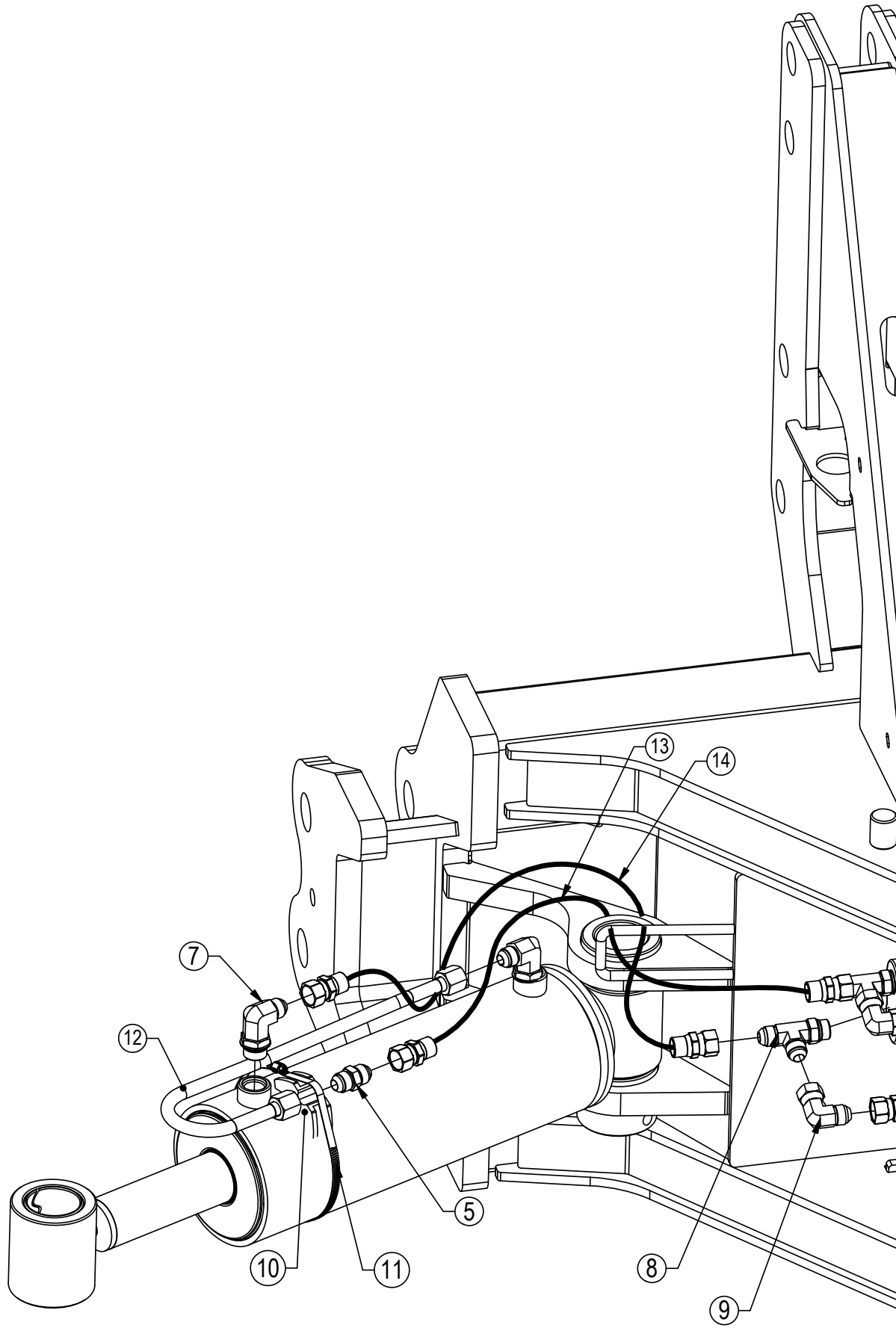


NOTE: When ordering cylinder seal kits, the part number on the cylinder is needed. The number is stamped on the base end of the cylinder opposite of the hydraulic ports.

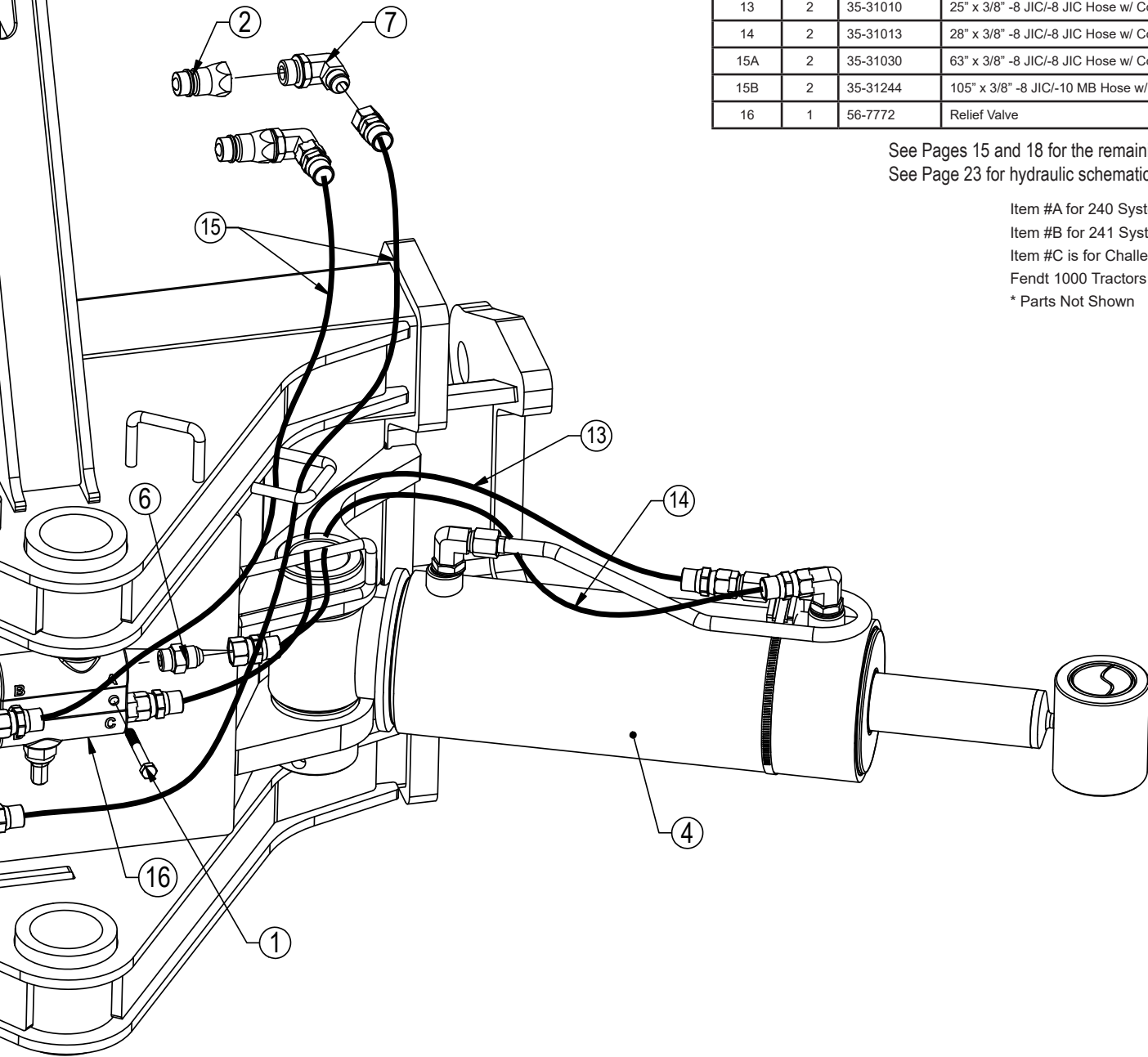
No. On Cylinder	Part No.	Description
26-34748	49-12277	Monarch Seal Kit 5 x 12 (649246) Nitrided Rod
26-34711	49-12271	Seal Kit 4 x 8 (647135) Nitrided Rod, Clevis Ends



Hoses Not Drawn To Scale



Item No.	Qty.	Part No.	Description
1	2	16-20040	5/16" X 2 1/2 " Hex Bolt Gr 5 NC
2	2	25-34342	Tappet Quick Coupler - Male
3*	2	25-3455	Pioneer Dust Cap Angle (Red)
4	2	26-34748	5 x 12 Cylinder W/ Tube Ends
4C	2	26-34759	5 x 10 Cylinder W/ Tube Ends
5	2	31-11699-8-8	JIC Union (2403-8-)
6	2	31-34040	Straight JIC x O-Ring (6400-8-8)
7A	6	31-34051	Straight Thread Elbow 90° JIC x O-Ring (6801-8-10)
7B	4	31-34051	Straight Thread Elbow 90° JIC x O-Ring (6801-8-10)
8	2	31-34070	Run Tee JIC x O-Ring (6804-8-8-8)
9	2	31-34100	Swivel Nut Elbow 90° JIC (6500-8-8)
10	2	34-12932	Cylinder Saddle
11	2	34-12933	Hose Clamp (SAE 96)
12	2	35-17260	240 Formed Steel Line
13	2	35-31010	25" x 3/8" -8 JIC/-8 JIC Hose w/ Cordura (4M)
14	2	35-31013	28" x 3/8" -8 JIC/-8 JIC Hose w/ Cordura (4M)
15A	2	35-31030	63" x 3/8" -8 JIC/-8 JIC Hose w/ Cordura (4M)
15B	2	35-31244	105" x 3/8" -8 JIC/-10 MB Hose w/ Cordura (4M)
16	1	56-7772	Relief Valve

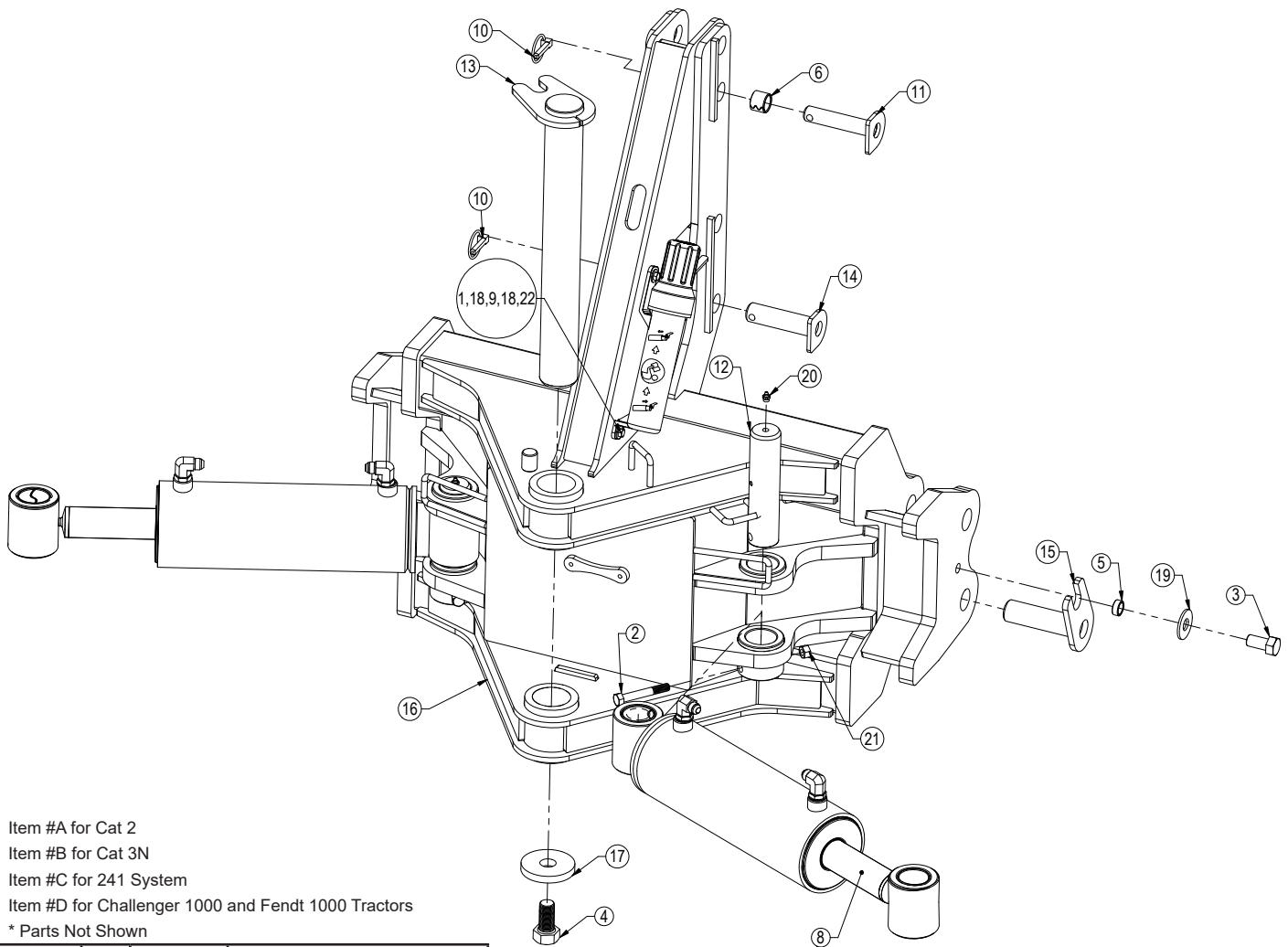


See Pages 15 and 18 for the remaining hydraulics.
See Page 23 for hydraulic schematic.

Item #A for 240 System
Item #B for 241 System
Item #C is for Challenger 1000 and
Fendt 1000 Tractors
* Parts Not Shown

NOTE: When ordering cylinder seal kits, the part number on the cylinder is needed. The number is stamped on the base end of the cylinder opposite of the hydraulic ports.

No. On Cylinder	Part No.	Description
26-34748	49-12277	Monarch Seal Kit 5 x 12 (649246) Nitrided Rod



Item #A for Cat 2

Item #B for Cat 3N

Item #C for 241 System

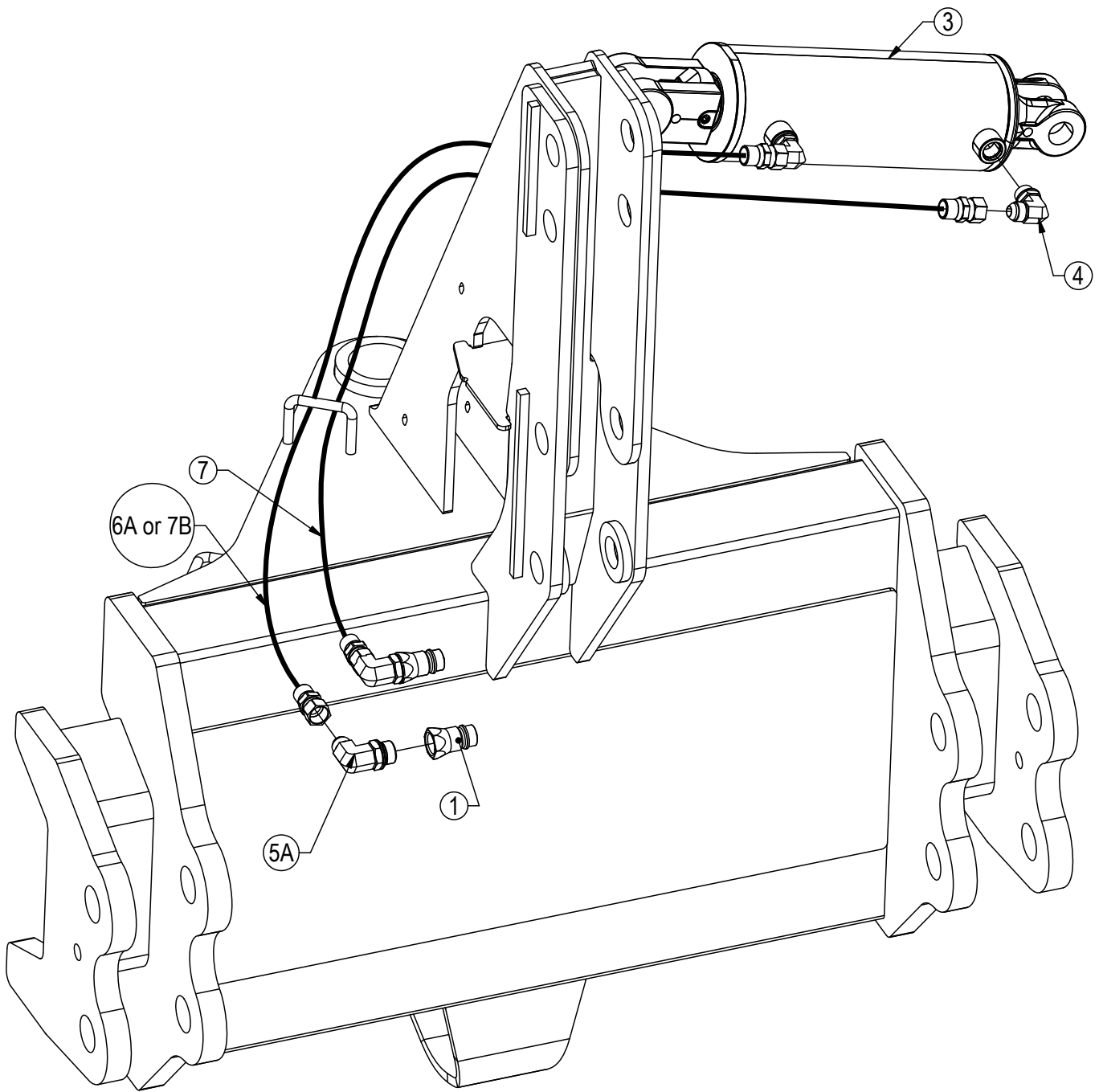
Item #D for Challenger 1000 and Fendt 1000 Tractors

* Parts Not Shown

Item No.	Qty.	Part No.	Description
1	2	16-20034	5/16" x 1" Hex Bolt Gr 5 NC
2	2	16-20134	1/2" x 3-1/2" Hex Bolt Gr 5 NC
3	2	16-20216	3/4" x 1-1/2" Hex Bolt Gr 5 NC
4	1	16-20558	1" x 2" Hex Bolt Gr 8 NC
5	2	19-13515	3/4" ID Non Rotating Pin Spacers
6A	2	19-7774	1" x 1" Spring Bushing
7C*	2	22-8813	Quick Claw Uni Ball
8	2	26-34748	5 x 12 Cylinder Tube Ends
8D	2	26-34759	5 x 10 Cylinder Tube Ends
9	1	34-14961	Manual Canister
10	1	43-16764	7/16" x 1-3/4" Lynch Pin
11A	1	43-11665	Top Link Pin - Cat 2
12	2	43-18405	Cylinder Pin
13	1	43-16925	Angle Pin
14B	1	43-3287	Top Link Pin - Cat 3N
15	2	43-3289	Lower Lift Pin
16	1	45-18420	ISO Angle Frame
17	1	57-16928	3.50" OD x 1.06" ID Washer
18	4	57-20741	5/16" Flat Washer
19	2	57-20747	3/4" Flat Washer
20	2	58-9369	Grease Zerk 1/8" NPT Straight
21	2	70-20604	1/2" Hex Center Lock Nut NC
22	2	70-20611	5/16" Nyloc Hex Nut

NOTE: When ordering cylinder seal kits, the part number on the cylinder is needed. The number is stamped on the base end of the cylinder opposite of the hydraulic ports.

No. On Cylinder	Part No.	Description
26-34748	49-12277	Monarch Seal Kit 5 x 12 (649246) Nitrided Rod



Item #A for 240 System

Item #B for 241 System

* Parts Not Shown

Hoses Not Drawn To Scale

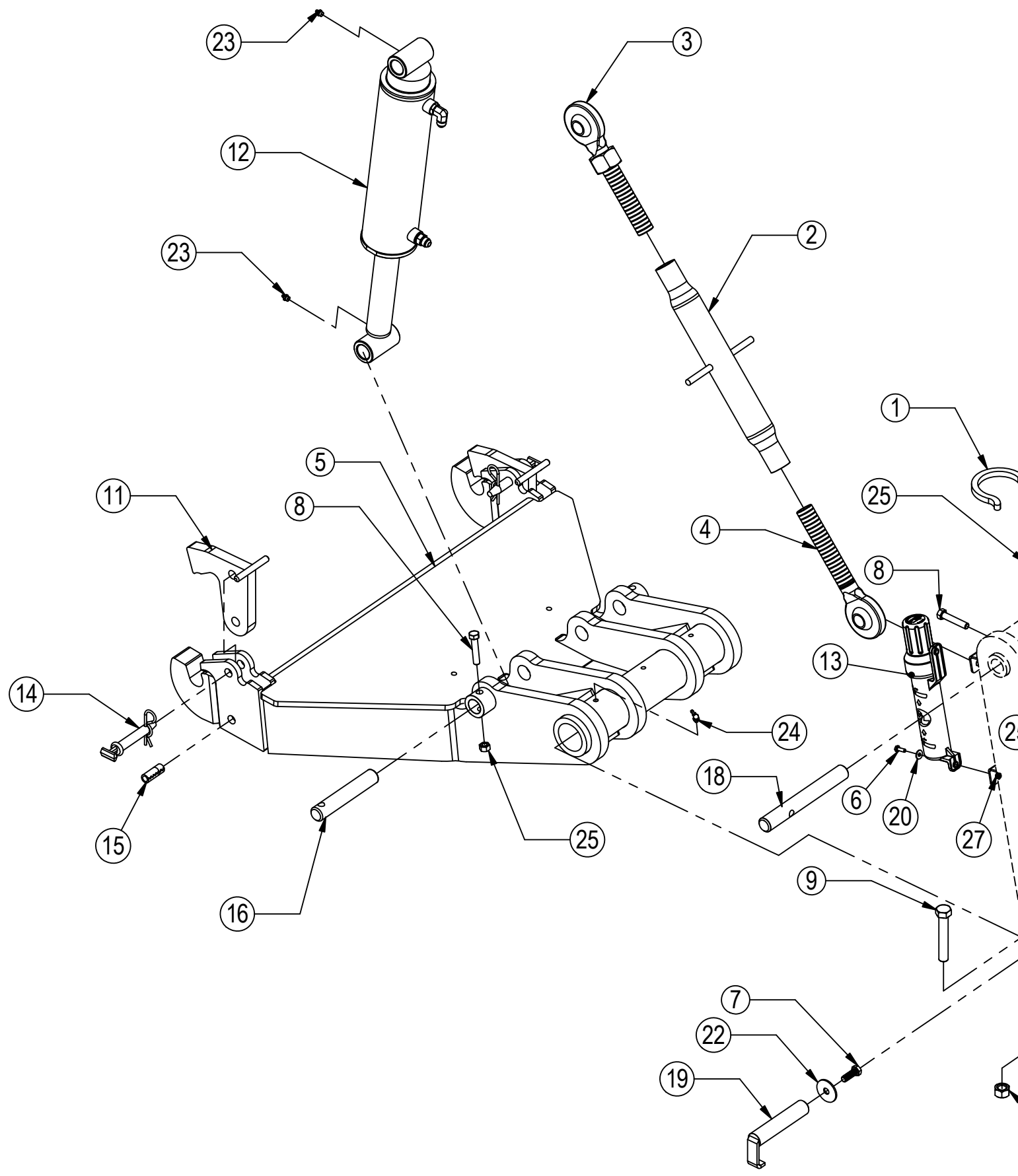
Item No.	Qty.	Part No.	Description
1	2	25-34342	Tappet Quick Coupler - Male
2*	2	25-3453	Pioneer Dust Cap Tilt (Green)
3	1	26-34711	4 x 8 Cylinder W/ Cast Clevis Ends
4	2	31-34050	Straight Thread Elbow 90° JIC x O-Ring (6801-8-8)
5A	2	31-34051	Straight Thread Elbow 90° JIC x O-Ring (6801-8-10)
6A	1	35-31030	63" x 3/8" -8 JIC/-8 JIC Hose w/ Cordura (4M)
7A	1	35-31032	69" x 3/8" -8 JIC/-8 JIC Hose w/ Cordura (4M)
7B	2	35-31244	105" x 3/8" -8 JIC/-10 MB Hose w/ Cordura (4M)

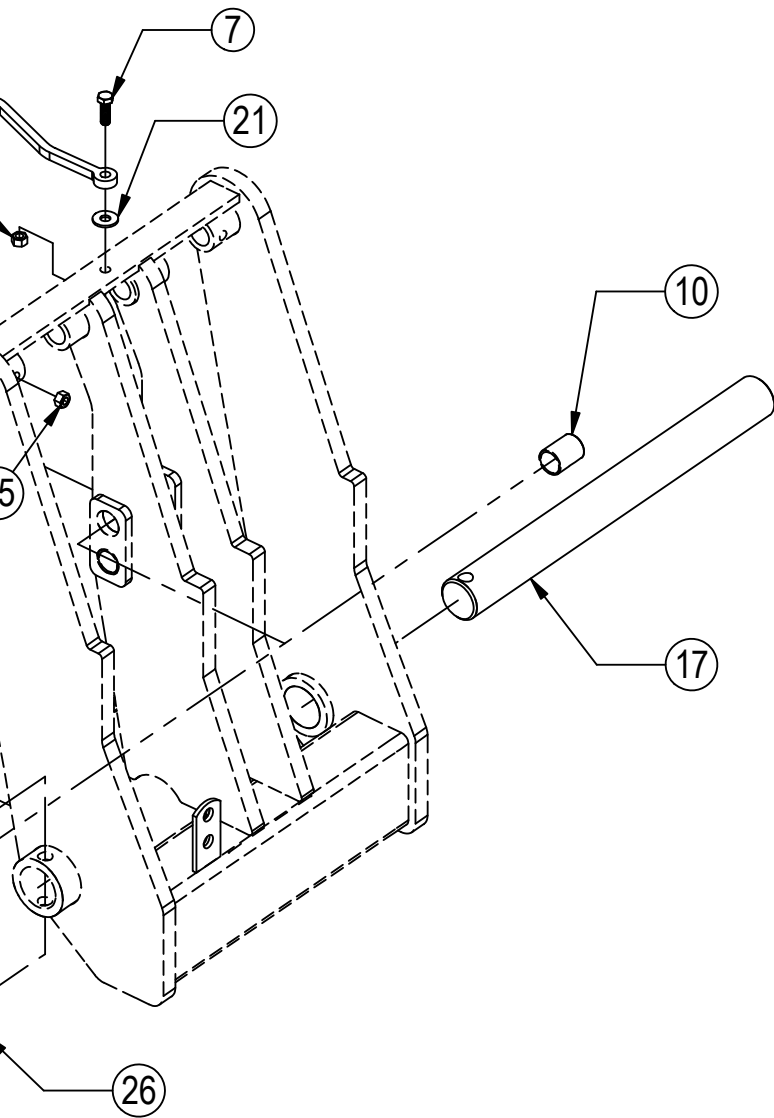
See Pages 12-13 for the remaining hydraulics.

See Page 23 for hydraulic schematic.

NOTE: When ordering cylinder seal kits, the part number on the cylinder is needed. The number is stamped on the base end of the cylinder opposite of the hydraulic ports.

No. On Cylinder	Part No.	Description
26-34711	49-12271	Seal Kit 4 x 8 (647135) Nitrided Rod, Clevis Ends

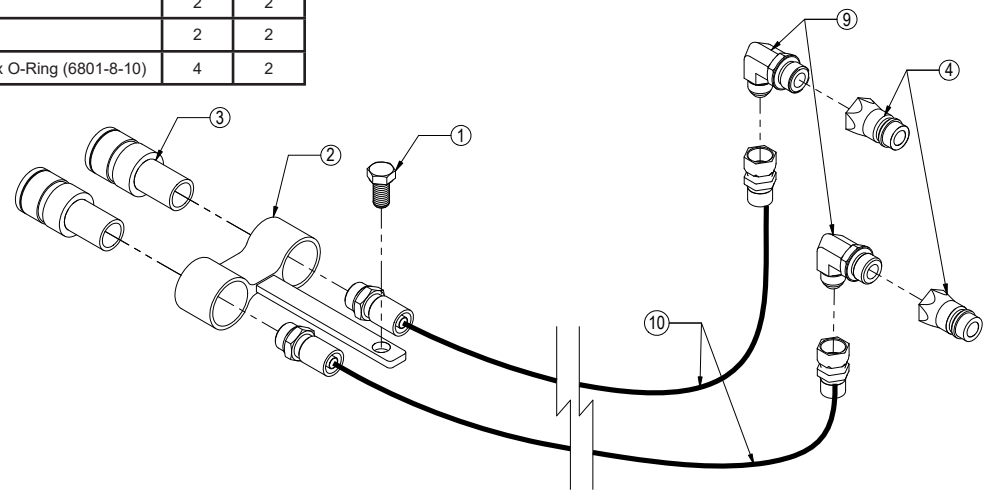




Item No.	Qty.	Part No.	Description
1	1	11-1455	FH-400 Top Arm Hook
2,3,4	1	11-11135	FH-400 Pitch Control Top Arm Link
2	1	11-11137	FH-400 Pitch Control Arm Housing
3	1	11-11136RH	FH-400 Pitch Control Arm Screw Assy- Right Hand
4	1	11-11136LH	FH-400 Pitch Control Arm Screw Assy - Left Hand
5	1	11-15710	FH-400 Solid Lower Arm - V2
6	2	16-20002	1/4" x 3/4" Hex Bolt Gr 5 NC
7	2	16-20126	1/2" x 1-1/2" Hex Bolt Gr 5 NC
8	4	16-20130	1/2" x 2-1/2" Hex Bolt Gr 5 NC
9	1	16-20227	3/4" x 4-1/2" Hex Bolt Gr 5 NC
10	4	19-3774	1.5"x1.25"x2.00" Spring Bushing (150125200)
11	2	22-15701	FH-400 Solid Lower Arm Latch
12	2	26-34728	4 x 12 Cylinder Tube Ends
13	1	34-14961	Manual Canister
14	2	43-15712	3/4" x 3-1/4" Safety Hitch Pin
15	2	43-17905	3/4" x 1/2" x 2" Spring Pin
16	2	43-8234	Rod End Lift Cylinder Pin (1-1/4" x 7.25")
17	1	43-8322	Main Lift Arm Pin (2-7/16" x 25")
18	2	43-9334	Base Cylinder Pin (1-1/4" x 10.03")
19	1	43-11471	Top Arm/UC Pin
20	2	57-20740	1/4" Flat Washer
21	1	57-20744	1/2" Flat Washer
22	1	57-20794	1/2" Fender Washer (2.00" ODX .500"ID x .125")
23	4	58-9369	Grease Zerk 1/8" NPT Straight
24	3	58-9371	Grease Zerk 1/8" NPT 45°
25	5	70-20604	1/2" Hex Center Lock Nut Gr 2 NC
26	1	70-20607	3/4" Hex Center Lock Nut Gr 2 NC
27	2	70-20610	1/4" Nyloc Hex Nut Gr 5 NC

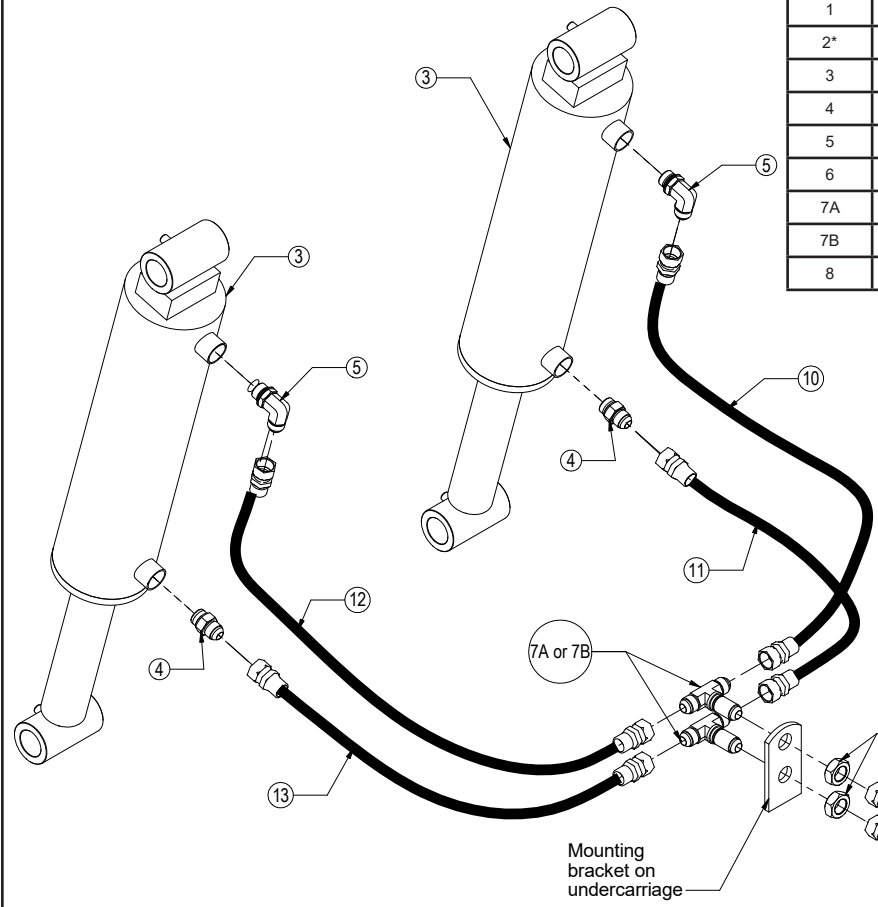
Item No.	Part No.	Description	Configuration	HAHT Qty.	HANT Qty.
1	16-20126	1/2" x 1-1/2" Hex Bolt Gr 5 NC		2	1
2	18-8973	Coupler Mounting Bracket		2	1
3	25-34321	Tappet Quick Coupler Female		4	2
4	25-34342	Tappet Quick Coupler - Male		4	2
5*	25-3453	Pioneer Dust Cap Tilt (Green)		2	-
6*	25-3454	Pioneer Dust Plug Tilt (Green)		2	-
7*	25-3455	Pioneer Dust Cap Angle (Red)		2	2
8*	25-3456	Pioneer Dust Plug Angle (Red)		2	2
9	31-34051	Straight Thread Elbow 90° JIC x O-Ring (6801-8-10)		4	2

* Parts Not Shown
 Item # 10 - Hose lengths vary for different tractors. Call Grouser for correct hose.
 Hoses Not Drawn to Scale

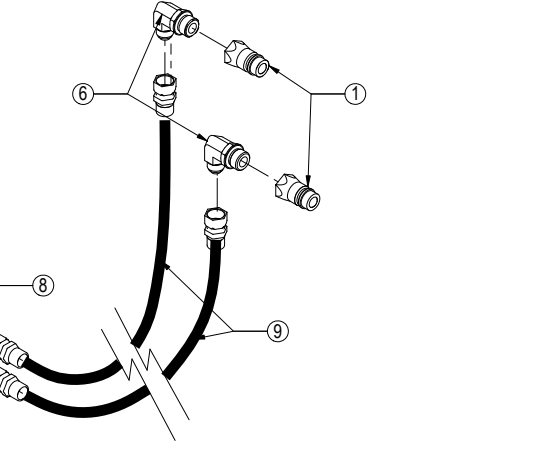


See Page 20 for hydraulic schematic.

Item No.	Qty.	Part No.	Description
1	2	25-34342	Tappet Quick Coupler - Male
2*	2	25-3457	Pioneer Dust Cap Lift (Orange)
3	2	26-34728	4 x 12 Cylinder W/ Tube Ends
4	2	31-34040	Straight JIC x O-Ring (6400-8-8)
5	2	31-34050	Straight Thread Elbow 90° JIC x O-Ring (6801-8-8)
6	2	31-34051	Straight Thread Elbow 90° JIC x O-Ring (6801-8-10)
7A	2	31-34030	Bulkhead Run Tee JIC (2704-8-8-8)
7B	2	31-34020	Bulkhead Branch Tee JIC (2703-8-8-8)
8	2	70-20807	3/4" Hex Jam Nut NF



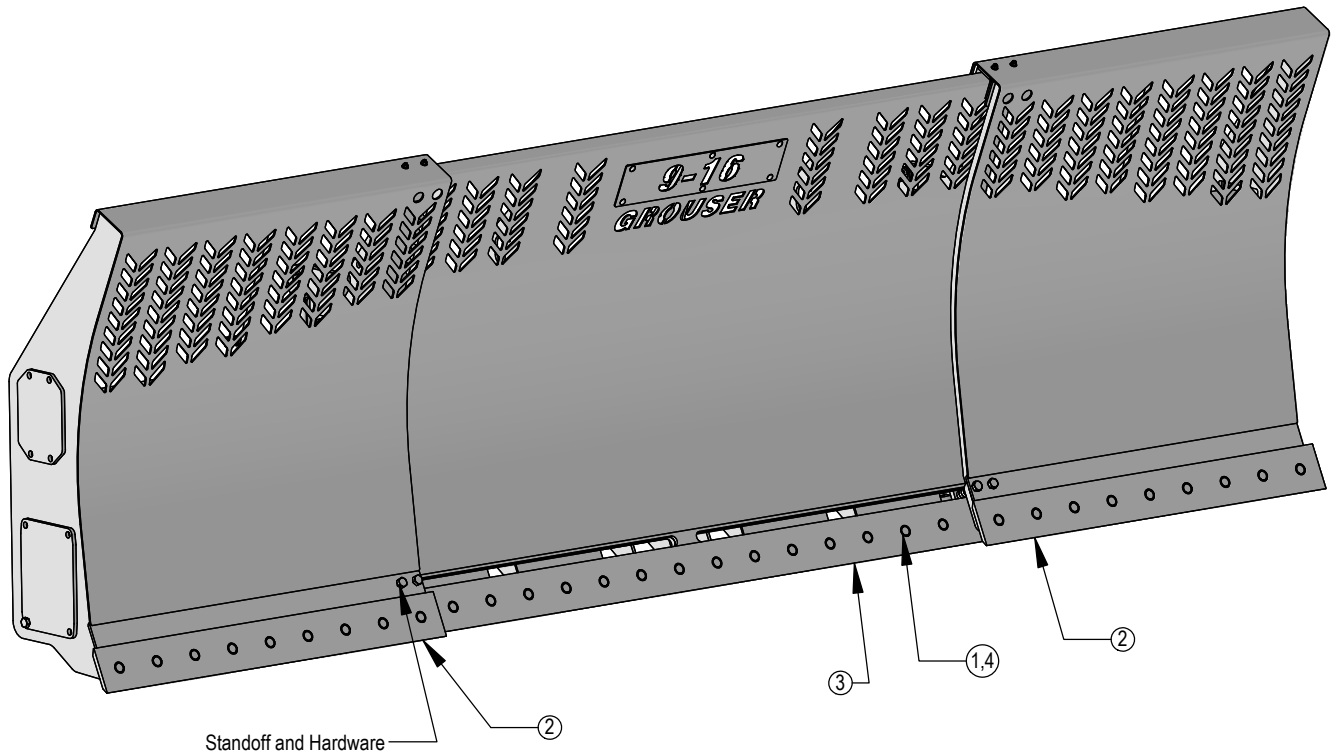
Item #A for 240 System
 Item #B for 241 System
 * Parts Not Shown
 Item #9 and 10 - Hose lengths vary for different tractors. Call Grouser for correct hoses. Hoses Not Drawn To Scale



NOTE: When ordering cylinder seal kits, the part number on the cylinder is needed. The number is stamped on the base end of the cylinder opposite of the hydraulic ports.

No. On Cylinder	Part No.	Description
26-34728	49-12272	Seal Kit 4 x 2 (647204) Nitrided Rod

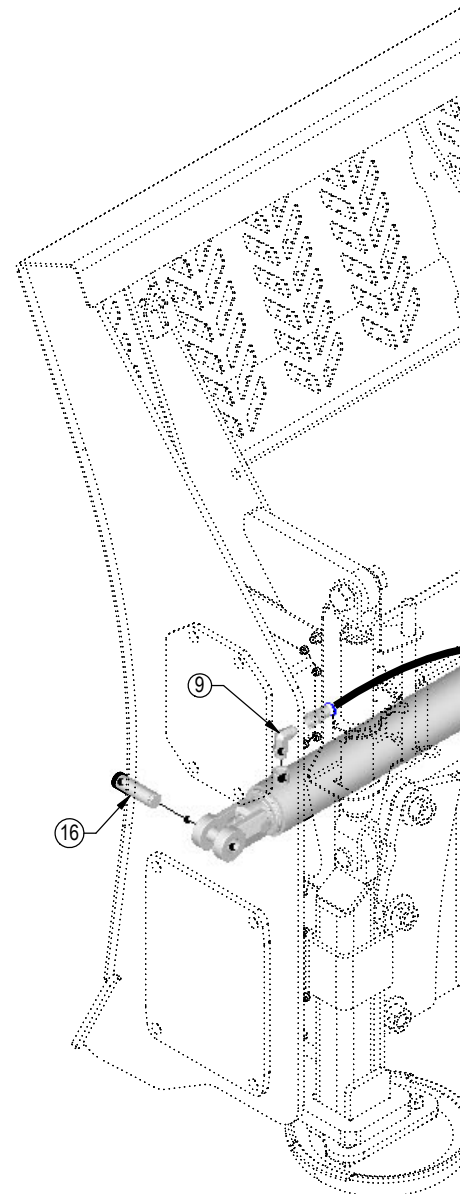
1. Lift the blade a comfortable distance off the ground for working on removing the cuttings edges. Block the lift system to prevent the blade from lowering while working on the blade.
2. Extend the ends out to gain access to the nuts.
3. Set parking bracket and shut off the engine.
4. Remove standoffs and hardware to allow the ends to be pulled away from the center blade section to gain access to the last 2 nuts on the blade ends
5. Remove all cutting edge hardware for the center section and both ends.
6. Either turn the cutting edges around, if it's the first time, or replace the cutting edges.
7. Reinstall all cutting edge hardware for the center section first and then reinstall hardware for the ends.
8. Reinstall the standoffs and hardware that were removed in Step #4.



ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	34	16-21666	5/8" x 1-3/4" Plow Bolt Gr 5 NC
2	2	29-7950-54	Cutting Edge
3	1	29-7950-8	Cutting Edge
4	34	70-20646	5/8" Hex Top Lock Nut Gr 5 NC

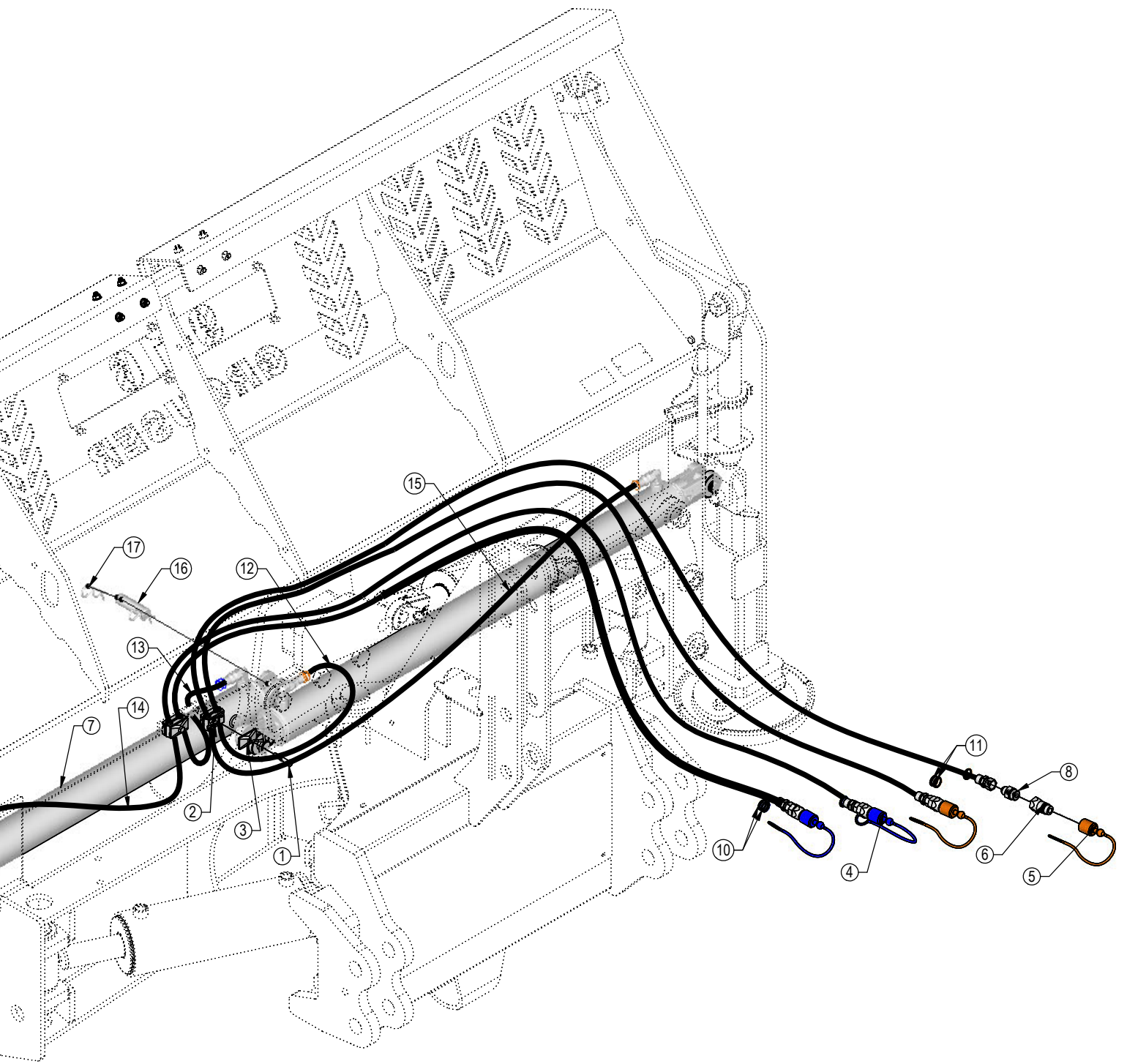
9-16 Blade Hydraulics

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	2	16-20037	5/16" X 1-3/4" Hex Bolt Gr 5 NC CZ
2	2	18-19311-02-P-062	Hose Clamp
3	2	18-19312-02	Twin Cover Plate
4	2	25-3403	Pioneer Dust Cap Slider (Blue) (Left Cylinder)
5	2	25-3405	Pioneer Dust Cap Slider (Brown) (Right Cylinder)
6	4	25-34342	Tappet Quick Coupler Male
7	2	26-34760	3 x 42 Hydraulic Cylinder
8	4	31-34041	Straight JIC x O-Ring
9	4	31-34050	Straight Thread Elbow 90° JIC x O-Ring
10	6	34-18888-BL	-12 Blue - Spiral Band
11	6	34-18888-BR	-12 Brown - Spiral Band
12	1	35-40949-1000	100" x 3/8" -8JIC/-8JIC Hose W/Cordura
13	1	35-40949-1050	105" x 3/8" -8JIC/-8JIC Hose W/Cordura
14	1	35-40949-1100	110" x 3/8" -8JIC/-8JIC Hose W/Cordura
15	1	35-40949-1390	139" x 3/8" -8JIC/-8JIC Hose W/Cordura
16	4	43-16306	Cylinder Pin w/ Cotter Pins
17	4	43-7767	Cylinder Pin Clip



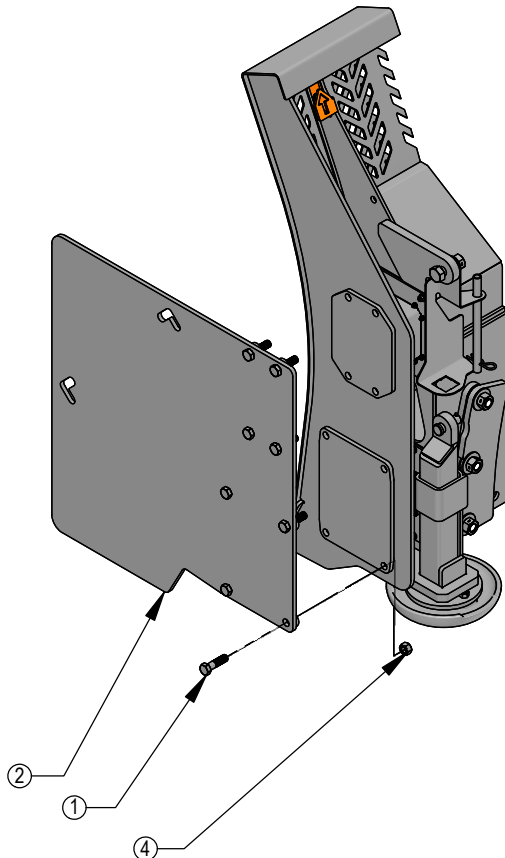
NOTE: When ordering cylinder seal kits, the part number on the cylinder is needed. The number is stamped on the base end of the cylinder opposite of the hydraulic ports.

No. On Cylinder	Part No.	Description
26-34760	49-17797	Seal Kit 3 x 42

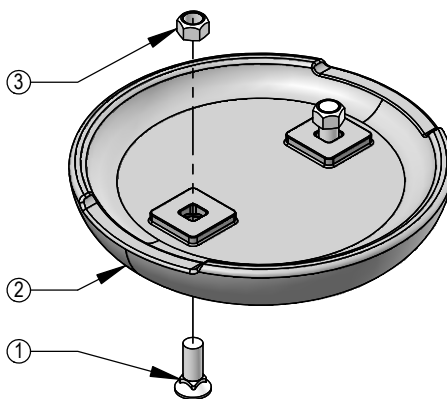


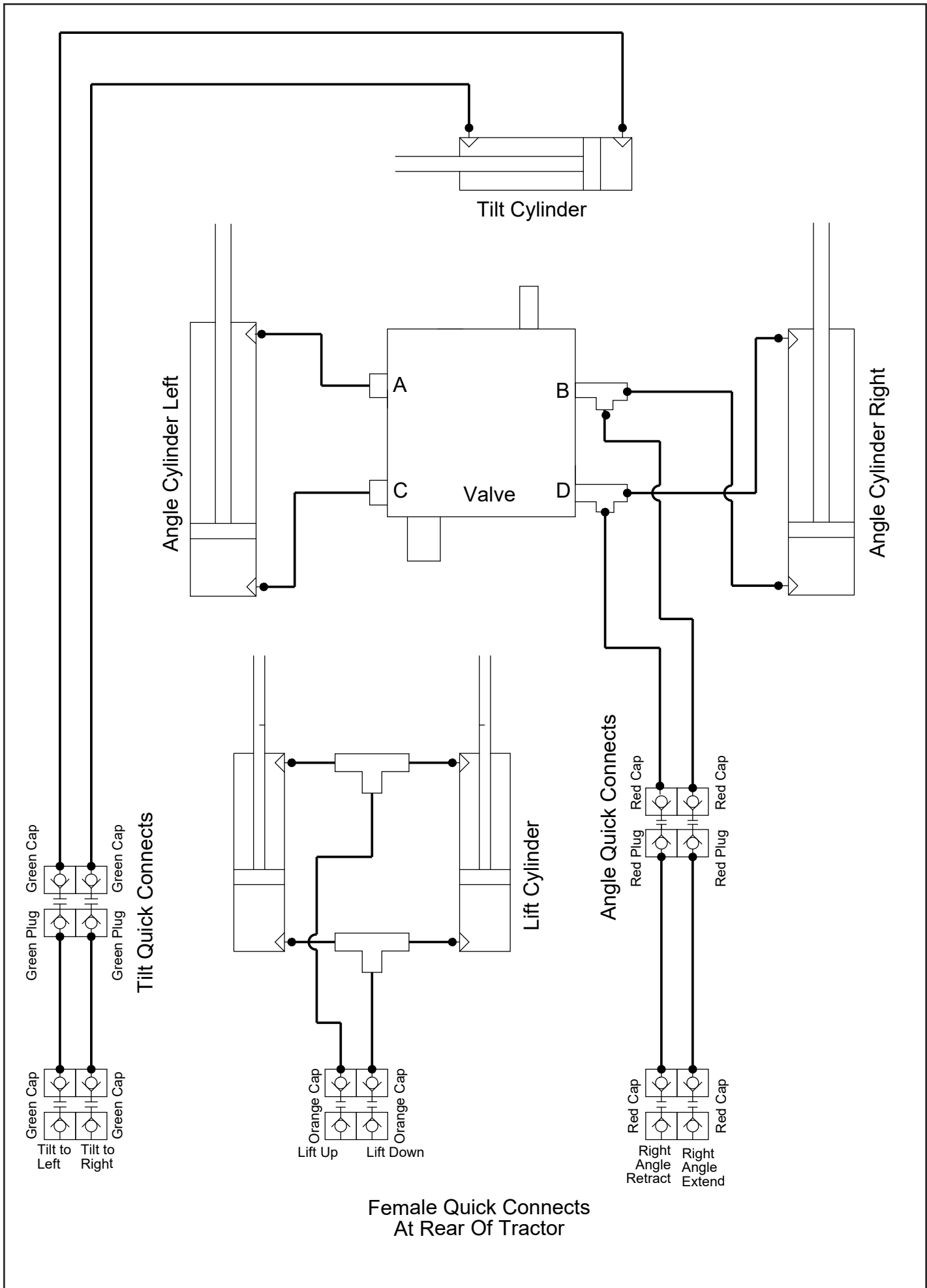
ITEM NO.	41779-K QTY.	PART NO.	DESCRIPTION
1	16	16-20511	3/4" x 2-3/4" Hex Bolt Gr 8 NC
2	1	44-41779-L	9-16 Box End Plate, Left
3*	1	44-41779-R	9-16 Box End Plate, Right
4	16	70-20597	3/4" Hex Nut Gr.8 NC

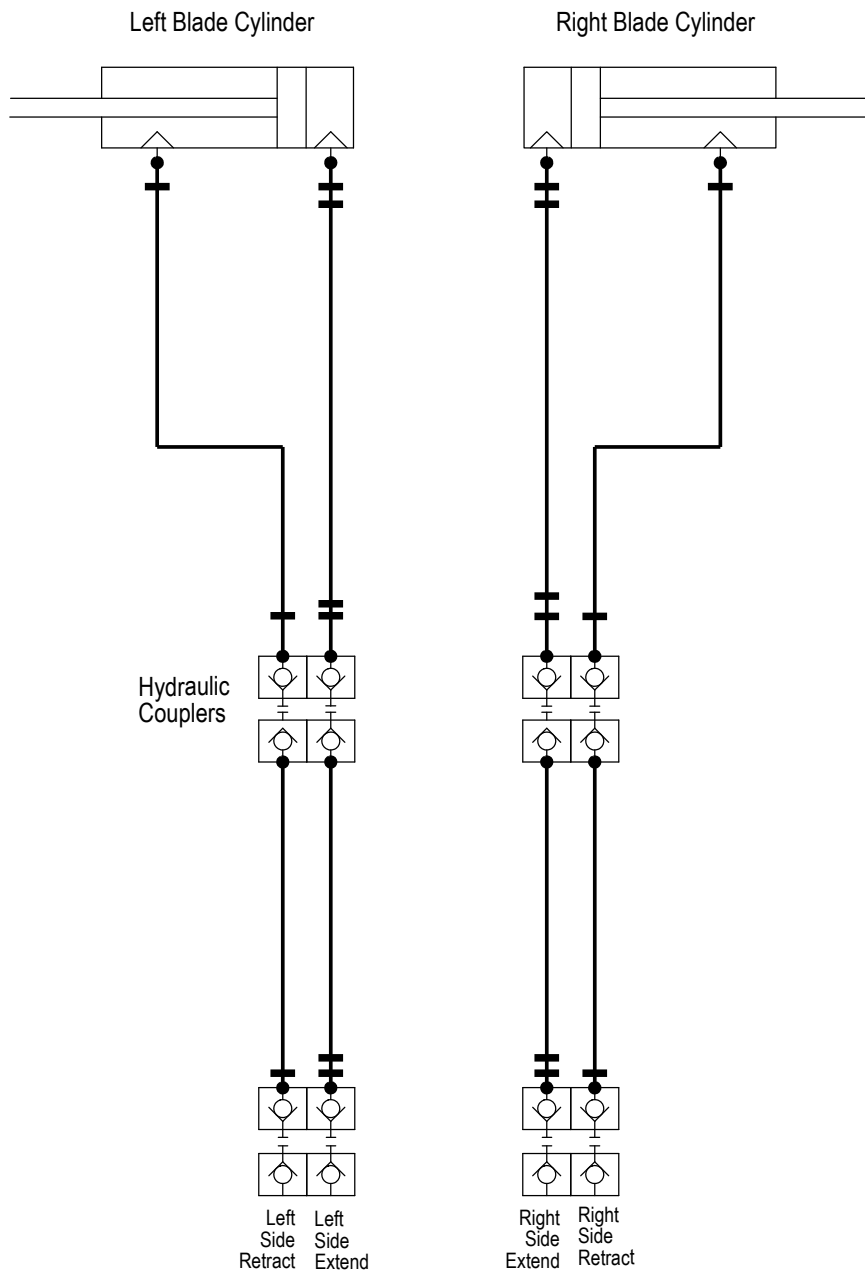
* Part Not Shown



ITEM NO.	PART NO.	DESCRIPTION	15458-1K QTY.	15458-K QTY.
1	16-21666	5/8" x 1-3/4" Plow Bolt Gr 5 NC	2	4
2	50-15458	12" Round Mushroom Skid Shoe	1	2
3	70-20646	5/8" Hex Top Lock Nut Gr 5 NC	2	4







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 (2) years for Agriculture Series Blades and one (1) year for Heavy Duty Series from date of original retail delivery.**

The obligation of the consumer under this warranty:

1. To read the operators manual and to operate, lubricate, maintain and store equipment in accordance with the instructions listed in the operators manual.
2. To inspect equipment and if any part needs repair or replacement when continued use would cause damage or wear to other parts or safety.
3. 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.

The obligation of the dealer under this warranty:

1. Complete warranty registration form and submit within 30 days of sale.
2. Contact Grouser Products for authorization prior to performing any warranty repairs or part replacement.
3. Complete warranty request form and submit with photos and supporting documentation.

The obligation of Grouser Products under this warranty:

1. Repair or replace, any equipment or parts, in the judgment of Grouser Products to be defective in material or workmanship.
2. Grouser Products will cover the cost of parts and ground shipping at dealer invoice only.
3. 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.

This warranty does not cover:

1. Depreciation or damage caused by normal wear, accident, improper assembly, improper adjustments.
2. Improper maintenance including lack of proper lubrication, or improper use. Including loose bolts, nuts, or fitting due to over tightening or vibration after 20 hours of operation.
3. Repairs or alterations without authorization from a Grouser Products representative.
4. 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.

NO EMPLOYEE OR REPRESENTATIVE OF GROUSER PRODUCTS IS AUTHORIZED TO CHANGE THE WARRANTY IN ANY WAY OR GRANT ANY OTHER WARRANTY.

Contact Us

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



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