



# 770 - Steiger - NAHT Owner's Manual & Parts Book

**For Models:**

Case Steiger Quad - 450, 500, 550, 600

Purchase Date

Serial Number

Model Number

Tractor Model

Dealer

# Contents

Description	Page
To The Owner, Angle / Tilt Function Abbreviation Key & Unpacking Components	2
Belly Pan Assembly	3
Undercarriage Installation Instructions	4-5
Assembling Lift Components & Initial System Startup	6
Lift System	7
Hose Routing	8
Skid Shoe and Tilt Plate Adjustment & Torque Specifications	9
Maintenance & Safety Precautions	10
No Angle - Hydraulic Tilt System & Hydraulics	11-12
Blade Assembly	12
U-End Extensions	13
Quick Attach System	14-15
Tractor Side Hydraulic Hose Routing	16-17
Hydraulic Connections	18
Hydraulic Schematic	19
Contact Us, Improvements, & Warranty	20

## To The Owner

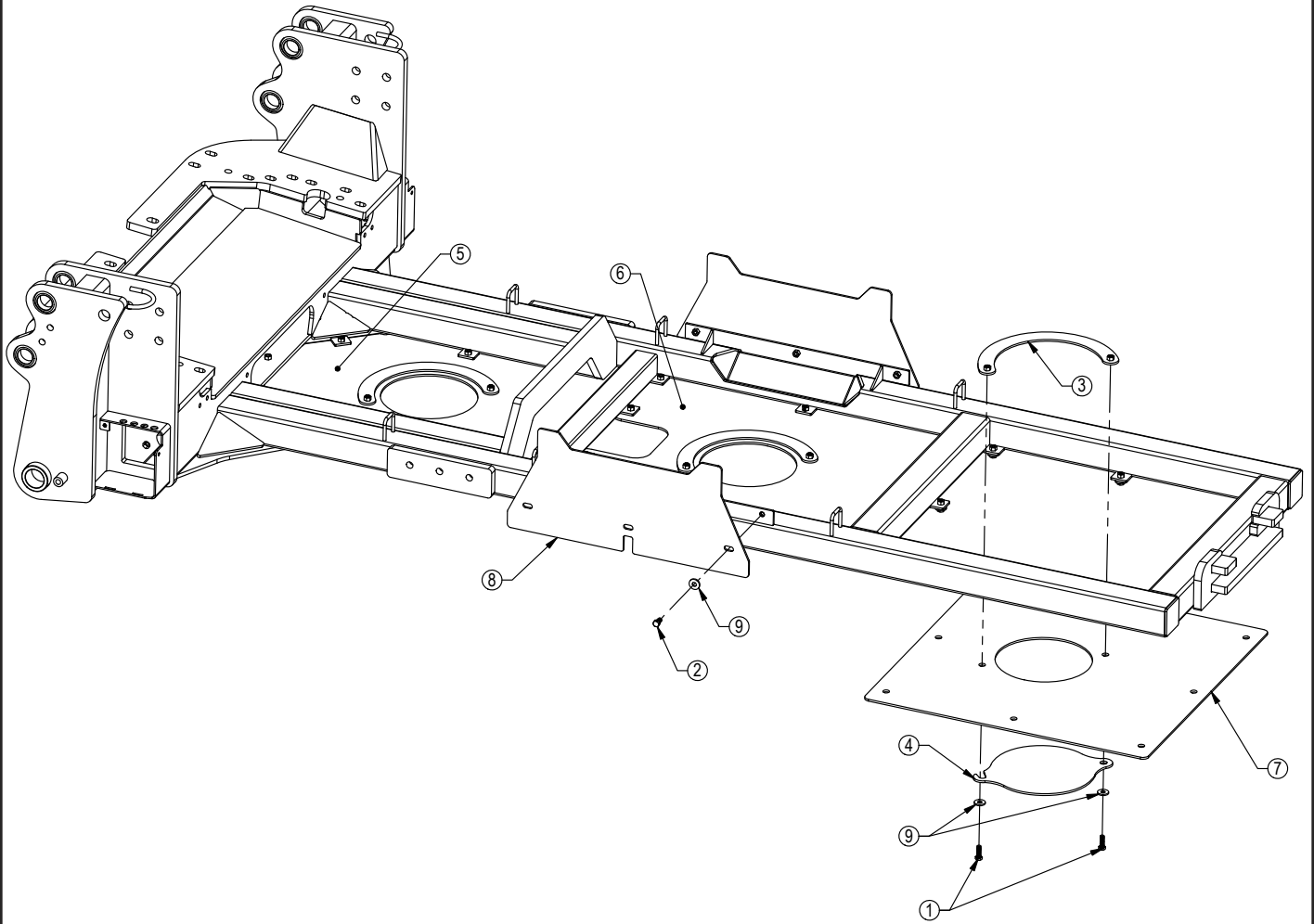
This manual contains information concerning the operation, adjustment, and maintenance of the 770 blade assembly. You have purchased dependable, long lasting equipment, but only by proper care and operation can you expect to receive the performance and long service built into our products. Please have all operators read this manual carefully and keep the manual available for ready reference. If you have any questions or concerns, contact Grouser Products.

## Angle / Tilt Function Abbreviation Key

HAHT	Hydraulic Angle - Hydraulic Tilt	6-Way
HANT	Hydraulic Angle - No Tilt	4-Way
NAHT	No Angle - Hydraulic Tilt	4-Way
NANT	No Angle - No Tilt	2-Way

## 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.



Item No.	Qty.	Part No.	Description
1	25	16-20124	1/2" x 1" Hex Bolt Gr 5 NC
2	6	16-20126	1/2" x 1-1/2" Hex Bolt Gr 5 NC
3	3	18-12855	Bracket, Belly Pan Cover - Arctic
4	3	44-12854	Plate, Belly Pan Cover - Arctic
5	1	44-15826	Belly Pan - 770 Steiger - Arctic - Pan 1 of 3 (Front)
6	1	44-15827	Belly Pan - 770 Steiger - Arctic - Pan 2 of 3 (Mid)
7	1	44-15828	Belly Pan - 770 Steiger - Arctic - Pan 3 of 3 (Rear)
8	2	44-15832	Axle Cover Plate - 770 Steiger - Arctic
9	31	57-20744	1/2" Flat Washer

# Undercarriage Installation Instructions

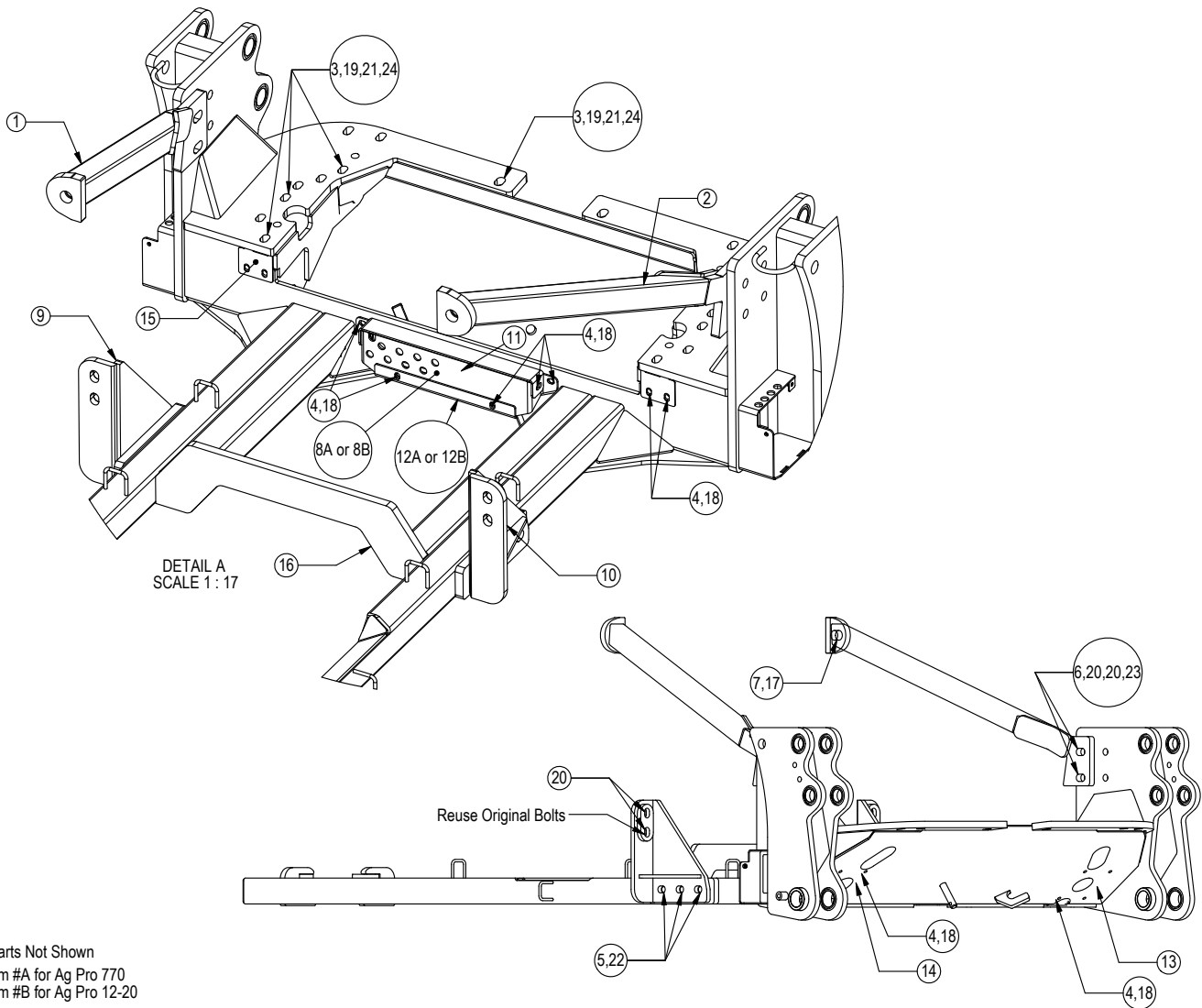
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## **Caution:**

- Always use precaution when working around any equipment.
- Always wear safety glasses.
- Follow tractor manufacturer's safety guidelines when installing this product.

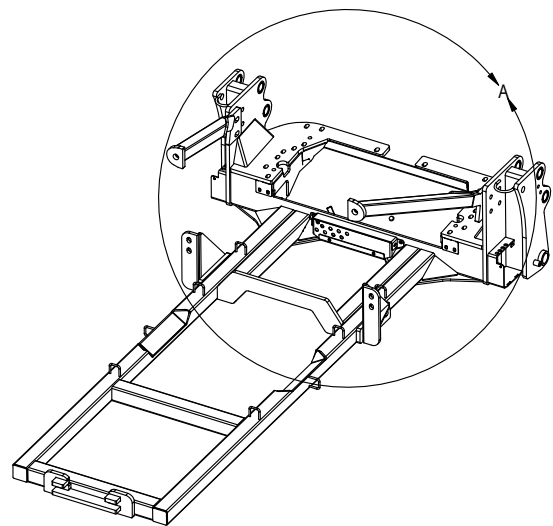
**NOTE: For all steps below, see diagram on Page 5 for clarification.**

1. Read all instructions prior to installation.
2. Remove existing toolboxes, front weights, and tow cable holder if equipped. Tow cable can be reinstalled later if a bracket is purchased from Grouser Products.
3. If the bottom covers (PN: 44-14382-R,L) are not factory installed, attach to U/C with 1/2" x 1-1/4" bolts (PN: 16-20125) and 1/2" flat washers (PN: 57-20744).
4. If the bulkhead bracket (PN: 18-14370 or 18-15576) is not factory installed, attach to the U/C with 2 - 1/2" x 1-1/4" bolts (PN: 16-20125) and 1/2" flat washers (PN: 57-20744). See pages 7 and 22-25 for bulkhead fittings, steel lines, and hose locations.
5. If bulkhead covers (PN: 44-14375 & 44-14376 or 44-15591) are not factory installed, verify that all hydraulics are installed correctly and then attach the covers to the U/C with 6 - 1/2" x 1-1/4" bolts (PN: 16-20125) and 1/2" flat washers (PN: 57-20744).
6. Position the undercarriage (U/C) under tractor and center on the frame of the tractor.
7. Lift the rear of the U/C up and set the top plates of the U/C on the cross member. Push the U/C back until the vertical push plates are firmly against the cross member. Lift the U/C to within 3/4" of touching the tractor frame.
8. Insert 8 - 20mm x 90mm bolts (PN: 16-1510) with a 3/4" hardened flat washer (PN: 57-20757) on each bolt through the front holes of the tractor frame that line up with the front vertical holes of the U/C.
9. After all bolts are through the tractor frame and U/C, attach with a 3/4" heavy washer (PN: 57-3680) and a 20mm nut (PN: 70-20872-10). Verify that the rear of the U/C is firmly against the cross member. Tighten until frame is tight vertically.
10. Attach the upper support arms (PN: 11-15140-R,L) to the U/C with 2 - 1" x 3-1/2" bolts (PN: 16-20564), 4 - 1" heavy duty flat washer (PN: 57-20819), and 2 - 1" nuts (PN: 70-20599) on each side of the U/C.
11. Attach the upper support arms to the tractor with a 1-1/4" x 3-1/2" bolt (PN: 16-20896) and 1-1/4" flat washer (PN: 57-11671) on each side.
12. Remove the 2 - 24mm bolts and spacers from front axle on the left and right side of the tractor. Discard the spacers.
13. Attach the quad yoke brackets (PN: 18-14550-R,L) to each side of the U/C with 6 - 1" x 2-1/2" bolts (PN: 16-20560) and a 1" x .375" thick washer (PN: 57-3682) on each bolt.
14. Dip the previously removed 24mm bolts in W30 oil and install the yoke brackets with the 24mm bolt and a heavy flat washer (PN: 57-20819) on each bolt.
15. Once all bolts have been installed, torque the front 20mm bolts to 432 ft-lbs., the 1-1/4" bolts to 1,105 ft-lbs., the 24mm bolts (for quad tractor) to 555 ft-lbs., and the 1" bolts to 903 ft-lbs.
16. Bolt the side bolt cover (PN: 44-15575) to both sides of the undercarriage with 1/2" x 1-1/4" bolts (PN: 16-20125) and a 1/2" flat washer (PN: 57-20744) on each bolt.
17. After first 8 hours of use, re-torque all bolts.
18. Check all fasteners regularly to ensure proper operation of equipment.



\* Parts Not Shown  
 Item #A for Ag Pro 770  
 Item #B for Ag Pro 12-20

Item No.	Qty.	Part No.	Description
1	1	11-15140-L	Upper Undercarriage Support Arm Left - Quad
2	1	11-15140-R	Upper Undercarriage Support Arm Right - Quad
3	8	16-1510	20mm x 2.5mm x 90mm Metric Hex Bolt Gr 10.9 ZC
4	20	16-20125	1/2" X 1 1/4" Hex Bolt Gr 5 NC
5	6	16-20560	1" X 2-1/2" Hex Bolt Gr 8 NC
6	4	16-20564	1" X 3-1/2" Hex Bolt Gr 8 NC
7	2	16-20896	1-1/4" x 3-1/2" Hex Bolt Gr 5 NC Zinc
8A	1	18-14370	Bracket, Bulkhead - AG Wide Frame
8B*	1	18-15576	Bracket, Bulkhead - 12-20 Slider
9	1	18-14550-L	Steiger Quad Yoke Bracket - Left
10	1	18-14550-R	Steiger Quad Yoke Bracket - Right
11	1	44-14375	Plate, Top Bulkhead Cover - AG Wide Frame
12A	1	44-14376	Plate, Bottom Bulkhead Cover - AG Wide Frame
12B*	1	44-15591	Plate, Bottom Bulkhead Cover - 12-20 Slider
13	1	44-14382-L	Plate, Bottom Cover Left - AG Wide Frame
14	1	44-14382-R	Plate, Bottom Cover Right - AG Wide Frame
15	2	44-15575	Plate, 770 Undercarriage Side Bolt Cover
16	1	54-14360	770 Steiger / T9 Large Frame Quad and Wheeled UC
17	2	57-11671	1-1/4" Flat Washer
18	20	57-20744	1/2" Flat Washer
19	8	57-20757	3/4" Hardened Flat Washer - 1-1/2" OD
20	12	57-20819	1" Flat Washer Heavy Duty Gr 8 (USS)
21	8	57-3680	2.00 OD X .75 ID x .375" Washer CZ Plated
22	6	57-3682	2.50 OD X 1.00" ID x .375" Washer CZ Plated
23	4	70-20599	1" Hex Nut Gr 8 NC
24	8	70-20872-10	20mm Hex Nut 2.5 Pitch Class 10 Zinc



TITLE:  
 770 Steiger Quad UC Assy.

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# Assembling Lift Components

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Now that the undercarriage is installed, some assembly of components is necessary. Follow the steps listed below. Refer to Page 7 for the correct hardware and orientation of parts.

1. Remove all pins on each side of the undercarriage.
2. Position the lift frame between the two plates on both sides of the undercarriage.
3. Align the lift frame to the bottom holes of the undercarriage and attach with the proper pins and hardware.
4. Lift the end of the cylinders up and attach to the undercarriage with the proper pins and hardware.
5. Attach the top arms to the top of the undercarriage with the proper pins and hardware.
6. Remove the male quick attaches that are in the female quicks on the blade, angle frame, or tilt frame.
7. Attach the male quick attaches to the lift frame and top arms with the proper pins and hardware.
8. If the quick couplers and coupler mount are not already attached to the left top arm, attach the coupler mount to the left top arm with 4 - 3/8" flange nuts. See Page #16 for proper orientation.
9. Take the lift hoses that are already attached to the furthest forward fittings on the left and right side of the undercarriage and attach them to the lift cylinders.

**Note: For Step #10-15, refer to Page #16-18 for further information on hose routing and hose positions. The amount and location of the female couplers is determined by functions the blade is set up for.**

10. Run the remaining hoses thru the hose loop on the top arm and attach a 90° fitting to all the hoses.
11. Install a female quick coupler onto each 90° fitting from the previous step.
12. Install each coupler into the designated hole on the coupler mount and hold them in place with the coupler retainer plate, 3/8" x 3/4" bolts and 3/8" flange nuts.
13. Take the 3/8" hoses and attach each one to their designated fitting at the center of the undercarriage.
14. Route the hoses thru the hose loops on the undercarriage.
15. Continue to route the hoses thru the tractor. Keep away from all moving parts. Refer to Page 8 for hose routing.
16. If applicable, attach the wire harness to the coupler mount on the top arm with 1/4" bolts and 1/4" nuts. Run the other end of the wire harness up into the cab of the tractor.
17. Locate the fused power supply. Connect the red wire to power and the black to ground. Attach the 2-lever plug to the wire harness or install provided switch into an open switch hole in the right overhead console or another convenient place in the tractor. Connect the wire harness to the switch.
18. Pull the pin puller handle on the left side of the quick attach system towards the outside of the blade to open the quick attach system. Refer to Page #14-15 for further clarification on the quick attach system.
19. Tilt the male quick attaches forward slightly.
20. Drive the tractor forward slowly until the top edge of the male quick attach is under the top lip of the female quick attach already on the blade assembly.
21. Tilt the male quick attaches backward till the blade is off the ground and the female quick attaches are against the front of the male quick attaches.
22. Shut off machine and set the parking brake.
23. Move the pin puller handle on the left side of the blade assembly towards the center of the blade to lock the blade in place and use the latch to lock the handle in place. If applicable, turn up the blade stands on the blade.
24. Plug the male couplers into the female couplers on the top arm. Refer to Page #18 for proper coupler locations for all functions. If applicable, plug the male blade break away end of the wire harness into the female blade break away end of the wire harness on the top arm.

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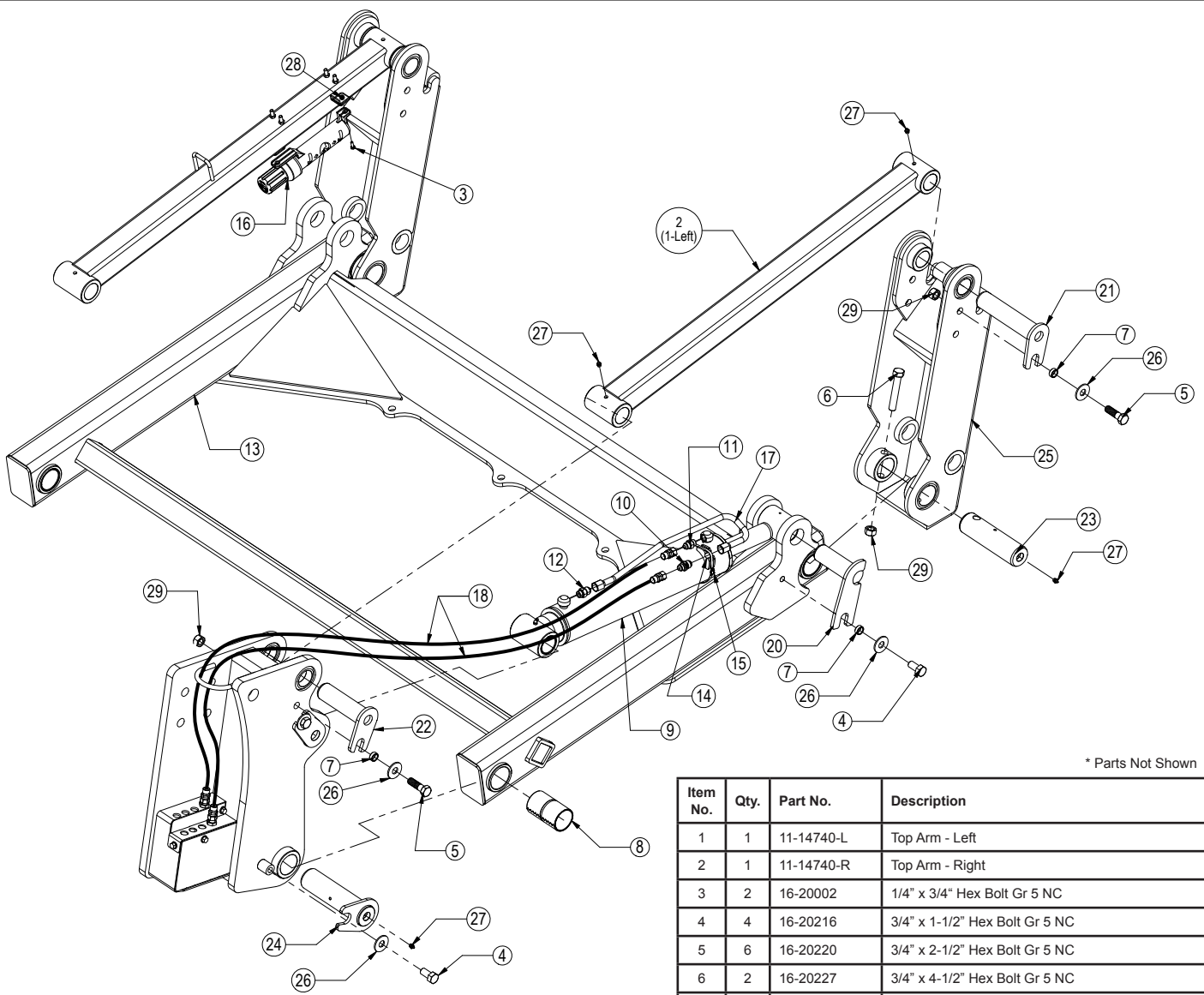
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## Initial System Startup

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Start the tractor and run the blade thru all the functions. If any function does not work properly, bleeding of the system may be required. If problem still persists, call Grouser Products.



\* Parts Not Shown

Item No.	Qty.	Part No.	Description
1	1	11-14740-L	Top Arm - Left
2	1	11-14740-R	Top Arm - Right
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	6	16-20220	3/4" x 2-1/2" Hex Bolt Gr 5 NC
6	2	16-20227	3/4" x 4-1/2" Hex Bolt Gr 5 NC
7	8	19-13515	3/4" ID - Non Rotating Pin Spacer Bushing
8	4	19-13525	2.75 x 2.50 x 4.75 Spring Bushing
9	2	26-34738	4x20 Long Cylinder - Bushed Tube Ends (647267)
10	2	31-11699-10-8	JIC Union (2403-10-8)
11	2	31-34040	Straight JIC x O-Ring (6400-8-8)
12	2	31-6400-10-8	Straight JIC x O-Ring (6400-10-8)
13	1	32-14900	770 Low Obstruction Lift Frame
14	2	34-12932	Cylinder Saddle (ZR518)
15	2	34-12994	Hose Clamp
16	1	34-14961	Manual Canister
17	2	35-12931	Formed Steel Line (Lift Cylinder)
18	4	35-12494-0630	63" x 1/2" -8JIC/-8JIC Cold Temp Hose W/Cordura
19*	1	43-12929-L	Pin Weld - Long Ear (Lift Cyl. / Lift Frame) - Left
20	1	43-12929-R	Pin Weld - Long Ear (Lift Cyl. / Lift Frame) - Right
21	2	43-13478	Pin Weld (Top Arm / QA)
22	4	43-13482	Pin Weld (Top Arm / UC & Lift Cyl. / UC)
23	2	43-14720	Pin (Lift Frame / QA)
24	2	43-14725	Pin Weld (Lift Frame / UC)
25	2	45-12175	700 Series Male Quick Attach
26	10	57-20747	3/4" Flat Washer
27	8	58-9369	Grease Zerk 1/8" NPT Straight
28	2	70-20580	1/4" Hex Nut Gr 5 NC
29	8	70-20607	3/4" Hex Center Lock Nut Gr 2 NC

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
26-34738	49-12272	Seal Kit 4" Bore x 2" Rod (647204) Nitrided Rod

# Hose Routing

**Note: Installer is responsible to route hoses in a practical manner. The hoses need to be routed away from sharp corners and moving parts and need to be secure.**

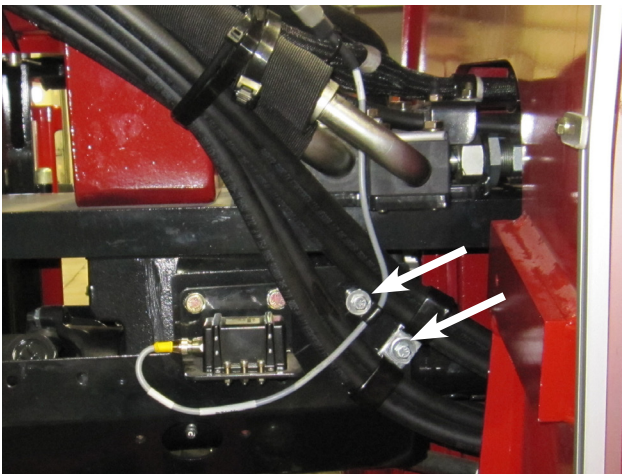


1. Route the hoses from the bulkhead fittings at the middle of the undercarriage thru all the hose loops on the undercarriage. Once at the end of the undercarriage route the hoses up along the tractor frame following any of the tractor's hoses while still staying away from any sharp corners and moving parts.



3. Route 2 sets of hoses on the right side of the tractor as shown in the picture. Use the 3/4" long spacer to space out the hose clamps on the tractor. Use a 5/16" x 2" bolt, 2 - 5/16" washers and a 5/16" nut to attach to the tractor.

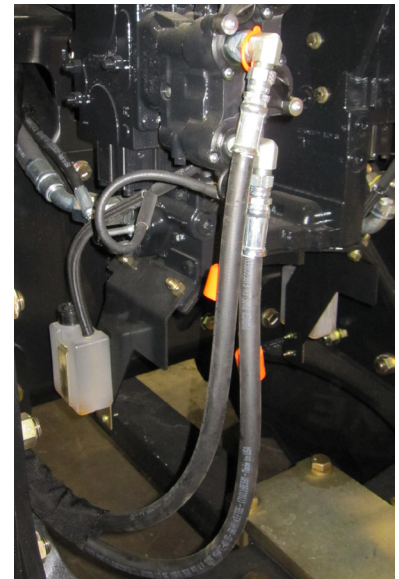
4. After attaching the hoses, enter the rear frame and route the hoses thru the hose loops along the inside of the frame.



2. Route 1 and/or 2 sets of hoses on the left side of the tractor as shown in the picture. Use a 5/16" x 1" bolt, 2 - 5/16" washers, and a 5/16" nut to bolt the 2 clamps to the plate on the tractor. Use the 1-1/4" long spacer to space out the wire harness on the tractor. Use a 5/16" x 2" bolt, 2 - 5/16" washers and a 5/16" nut.

**NOTE: If there are more than 2 sets of hoses to run to the back of the tractor, continue with Step # 3. If there is only 1 or 2 sets of hoses continue with step #4.**

**NOTE: These pictures show 4 sets of hydraulic hoses. The same applies for any number of hoses. Hoses should be routed on the left side first and then route the remaining hoses on the right side of the tractor frame.**



5. Exit thru the rear frame as shown in the picture. Install a 90° and a male coupler at the end of each hose. Plug each coupler into a rear SCV. As an example, keep both lift hoses together on one section. Refer to hydraulic schematics on Page 27 for further information.

6. After all hoses are routed, group hoses together and secure with zip ties. Use the heavy duty zip ties for securing the hoses that are routed thru the tractor frame. See the picture in Step #1 above for an example.

7. Check the hoses when the tractor is at full oscillation and fully turned to check for any interference.

8. Return to Page 6 and continue the installation with Step #16.



# Skid Shoe and Tilt Plate Adjustment

## Skid Shoe Adjustment:

1. Raise and secure blade to access skid shoe bolts and nuts.
2. Loosen nuts and set skid shoe depth by sliding the shoe back and forth in direction 'A' shown in Figure 1.
3. Once the depth is set, tighten bolts to 150 ft-lbs.
4. When skid shoes are worn down, replace with new skid shoes.

## Tilt Plate Adjustment:

1. Remove bolts and tilt plates.

Note: Don't remove all of the bolts at the same time.

2. Add or remove washers as needed to adjust tilt-way clearance to have 1/16" - 1/8" of clearance in direction 'B' shown in Figure 1.
3. Once the tilt-way clearance is set, tighten bolts to 640 ft-lbs.

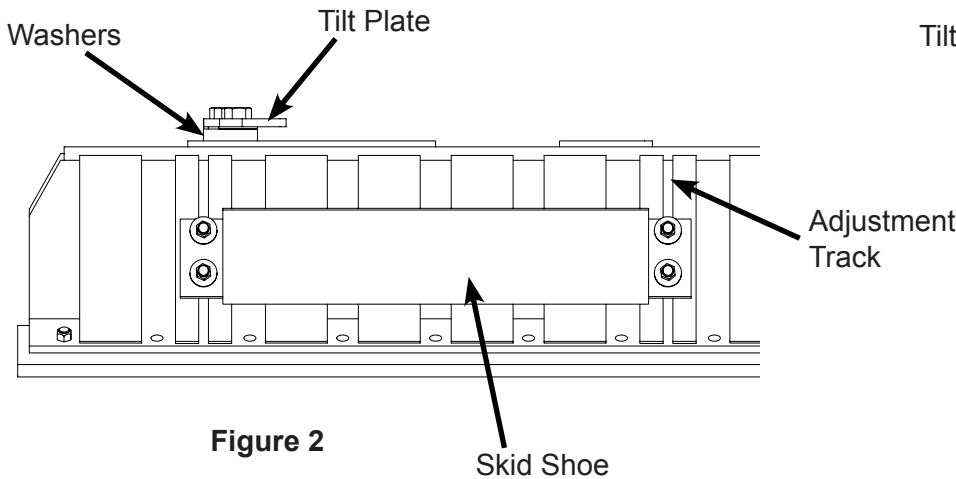


Figure 2

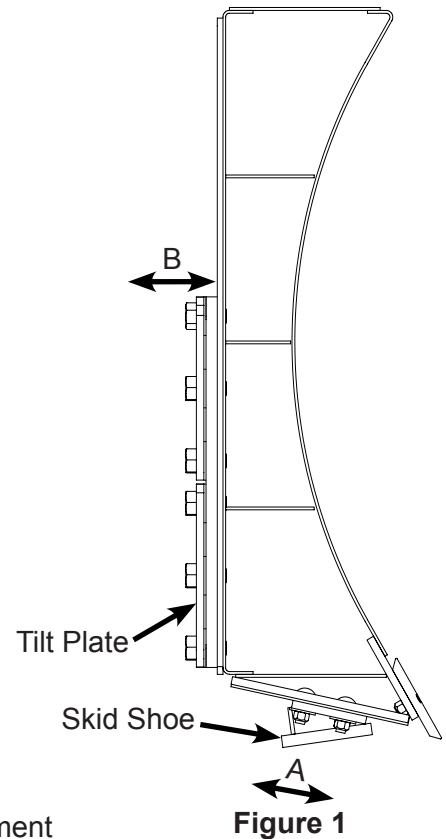


Figure 1

## Torque Specifications

All bolts should be tightened to the specifications that are stated. If specifications are not stated, follow torque charts below.

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

# Maintenance

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**Due to the harsh environment many of our 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 9.
- 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. For replacement parts, see hydraulic pages for your specific system.
- 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

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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:**

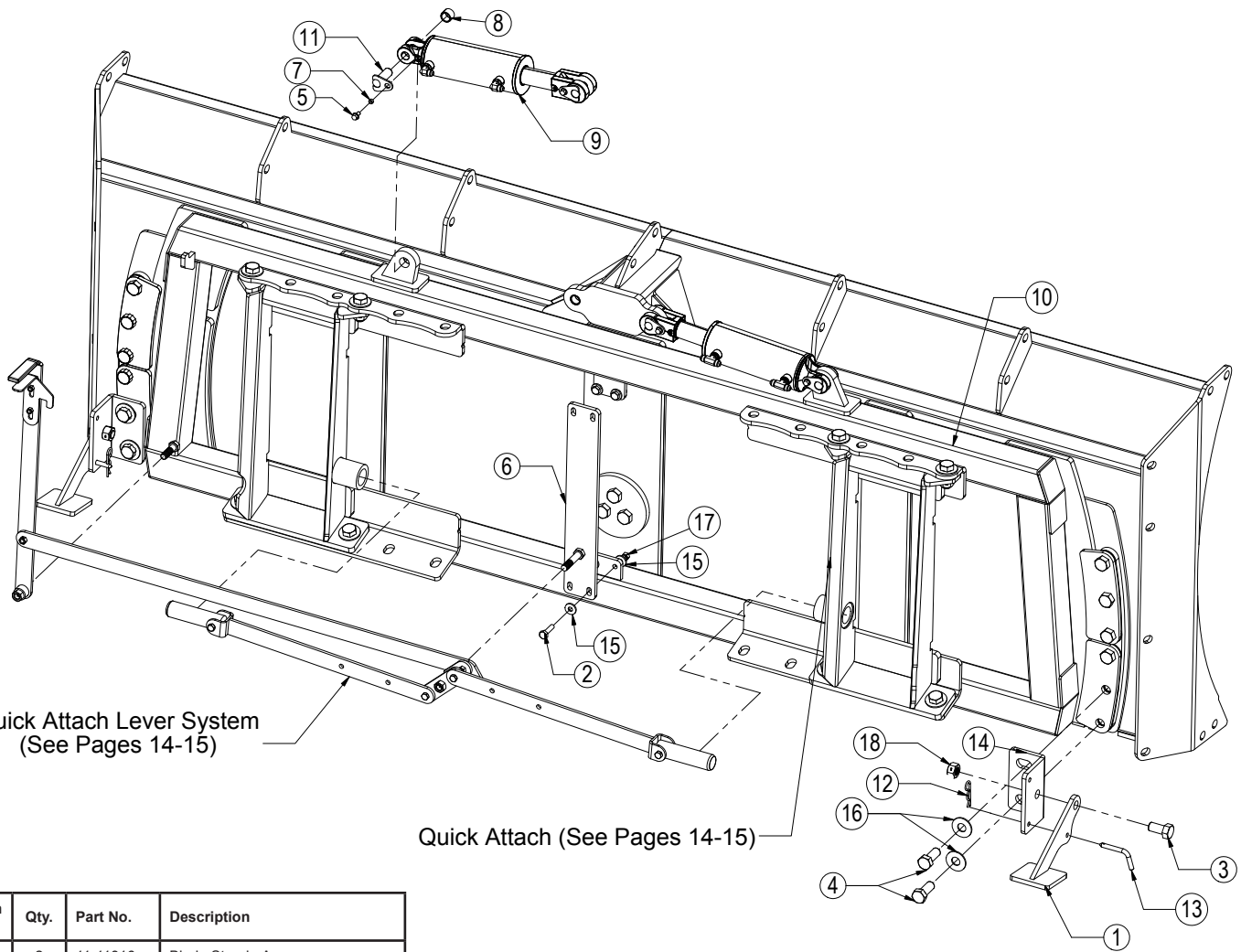
1. The 770 Dozer should be operated only by those who are responsible and instructed to do so.
2. Read the owner's manual carefully before using this equipment. Lack of operating knowledge can lead to accidents.
3. Keep the dozer maintained in reliable and satisfactory condition to ensure your safety.
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 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.

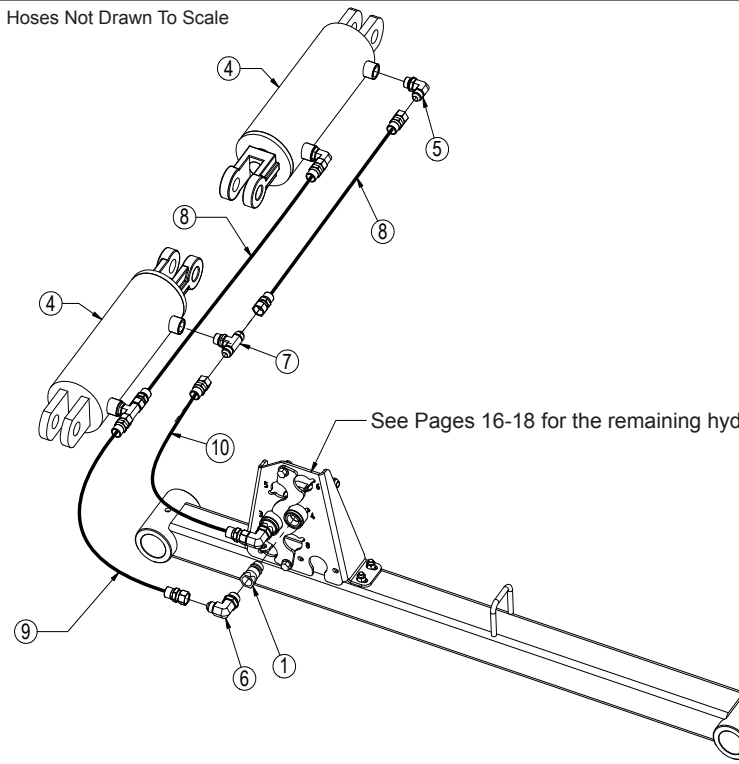


Quick Attach Lever System  
(See Pages 14-15)

Quick Attach (See Pages 14-15)

Item No.	Qty.	Part No.	Description
1	2	11-11316	Blade Stand - Arm
2	4	16-20128	1/2" x 2" Hex Bolt Gr 5 NC
3	2	16-20558	1" x 2" Hex Bolt Gr 8 NC
4	4	16-20564	1" x 3-1/2" Hex Bolt Gr 8 NC
5	4	16-35C612	3/8" x 3/4" Flanged Bolt
6	1	18-14658	NAXT Center Bracket
7	4	19-13577	NR Pin Spacer Clevis End
8	2	19-7774	1" x 1" Spring Bushing
9	2	26-34711	4 x 8 Cylinder w/ Cast Clevis Ends
10	1	32-14560	NAHT Tilt Frame
11	4	43-13580	1" Clevis Bolt In Pin
12	2	43-7767	Hitch Clip Pin
13	2	43-9582	Bent Claw Pin
14	2	44-11315	Blade Stand - Plate
15	8	57-20744	1/2" Flat Washer
16	4	57-20749	1" Flat Washer
17	4	70-20604	1/2" Hex Center Lock Nut Gr 2 NC
18	2	70-20609	1" Hex Center Lock Nut Gr 2 NC

Hoses Not Drawn To Scale



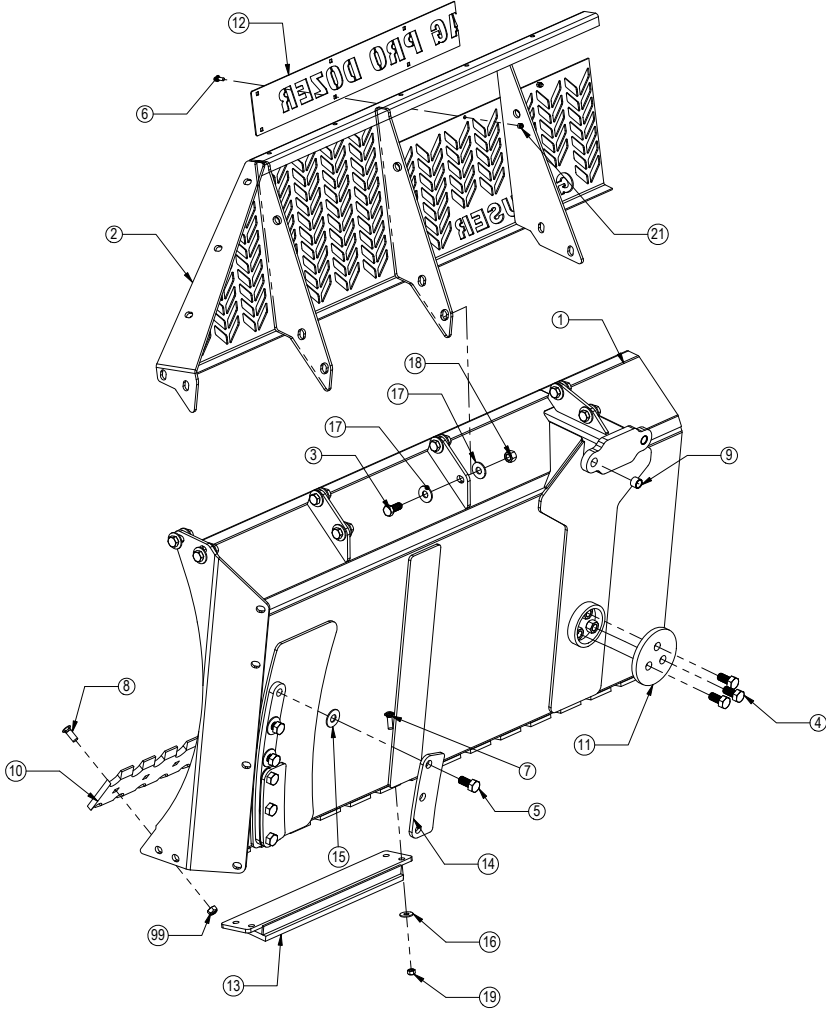
See Pages 16-18 for the remaining hydraulics.

Item No.	Qty.	Part No.	Description
1	2	25-34322	Tappet Quick Coupler Male
2*	2	25-3453	Pioneer Dust Cap Tilt (Green)
3*	2	25-3454	Pioneer Dust Plug Tilt (Green)
4	2	26-34711	4 x 8 Cylinder W/ Cast Clevis Ends
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)
7	2	31-34060	Branch Tee JIC x O-Ring (6803-8-8-8)
8	2	35-12211-0390	39" x 3/8" -8JIC/-8JIC Cold Temp Hose
9	1	35-12216-0350	35" x 1/2" -8JIC/-8JIC Cold Temp Hose
10	1	35-12216-0480	48" x 1/2" -8JIC/-8JIC Cold Temp Hose

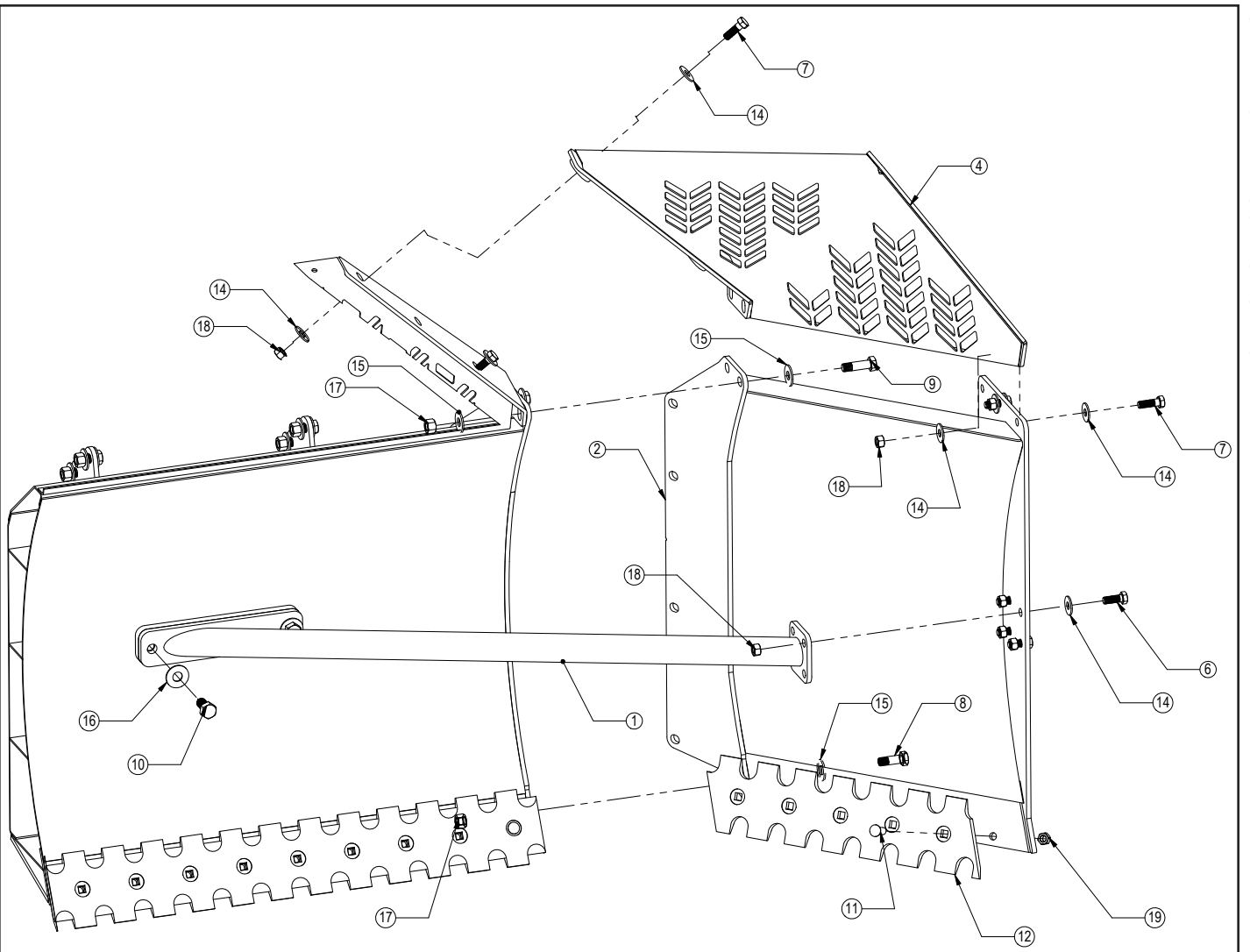
\* Parts Not Shown

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
26-34711	49-12271	Seal Kit 4 x 8 (647135) Nitrided Rod, Clevis Ends



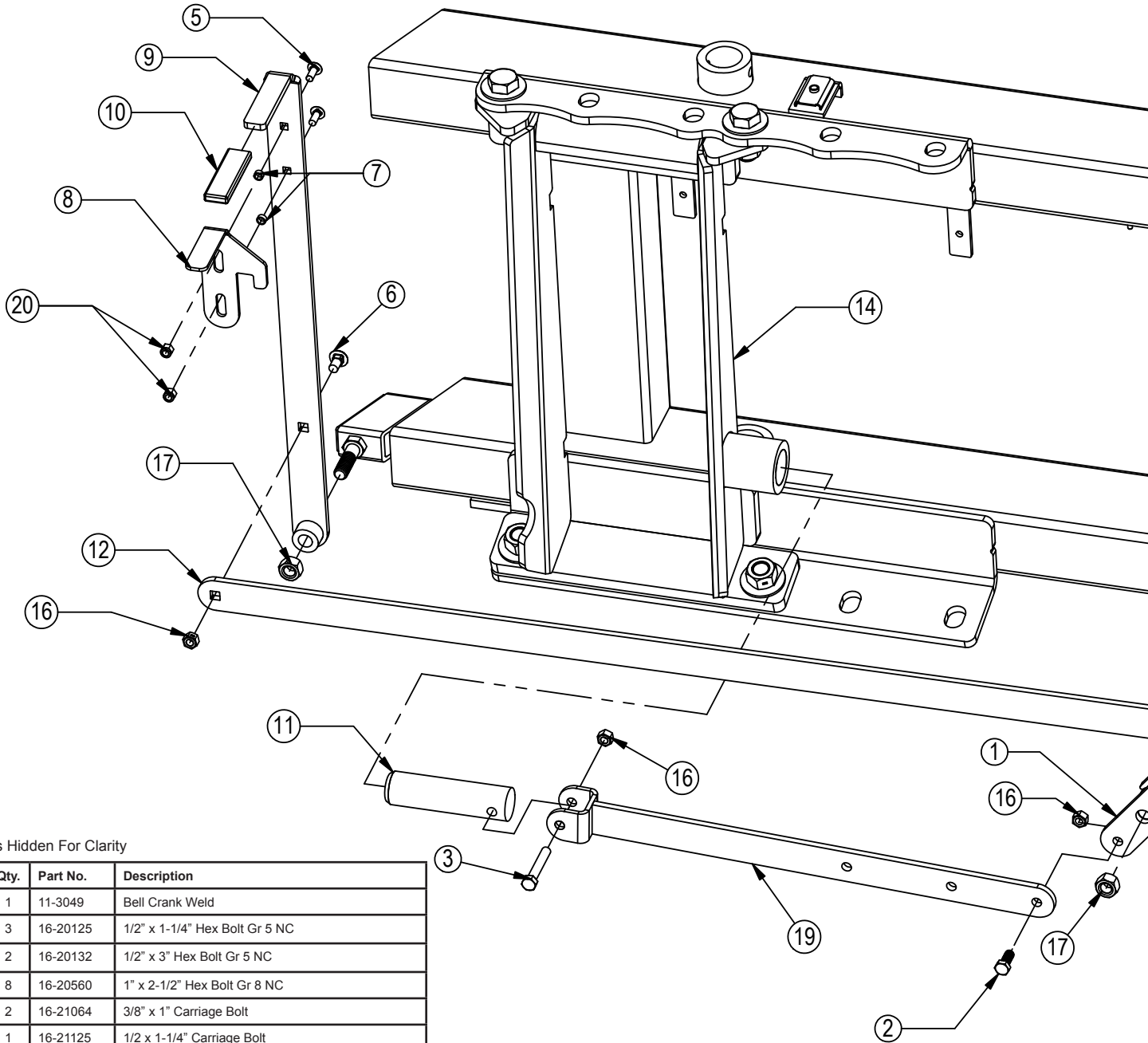
			Blade Length	12'
Item No.	Part No.	Description		Qty.
1	15-13970-12	AG Pro Blade 12' - Slant Top		1
2	15-14730-12	12' x 24" Bolt on Top Extension - Slant Top		1
3	16-20538	7/8" x 2" Hex Bolt Gr 8 NC		14
4	16-20558	1" x 2" Hex Bolt Gr 8 NC		3
5	16-20562	1" x 3" Hex Bolt Gr 8 NC		12
6	16-21064	3/8" x 1" Carriage Bolt Gr 5 NC		8
7	16-21188	5/8" x 2" Carriage Bolt Gr 5 NC		8
8	16-21688	3/4" x 2" Plow Bolt Gr 5 NC		24
9	19-7774	1" x 1" Spring Bushing		2
10	29-11223-6	6'- 3/4" x 8" Serrated Cutting Edge		2
11	44-3749	Backdrag Brace Plate		1
12	44-14830	Custom Name Plate		1
13	50-8725	Skid Shoe 33"		2
14	52-8204	Tilt Plate		4
15	57-20749	1" Flat Washer		12
16	57-20816	5/8" Flat Washer Grade 8 (USS)		8
17	57-20818	7/8" Flat Washer Heavy Duty Grade 8 (USS)		28
18	70-20598	7/8" Hex Nut Gr 8 NC		14
19	70-20646	5/8" Hex Top Lock Nut Gr 5 NC		8
20	70-20647	3/4" Hex Top Lock Nut Gr 5 NC		24
21	70-20622	3/8" Flange Nut		8



Only Left Side Shown

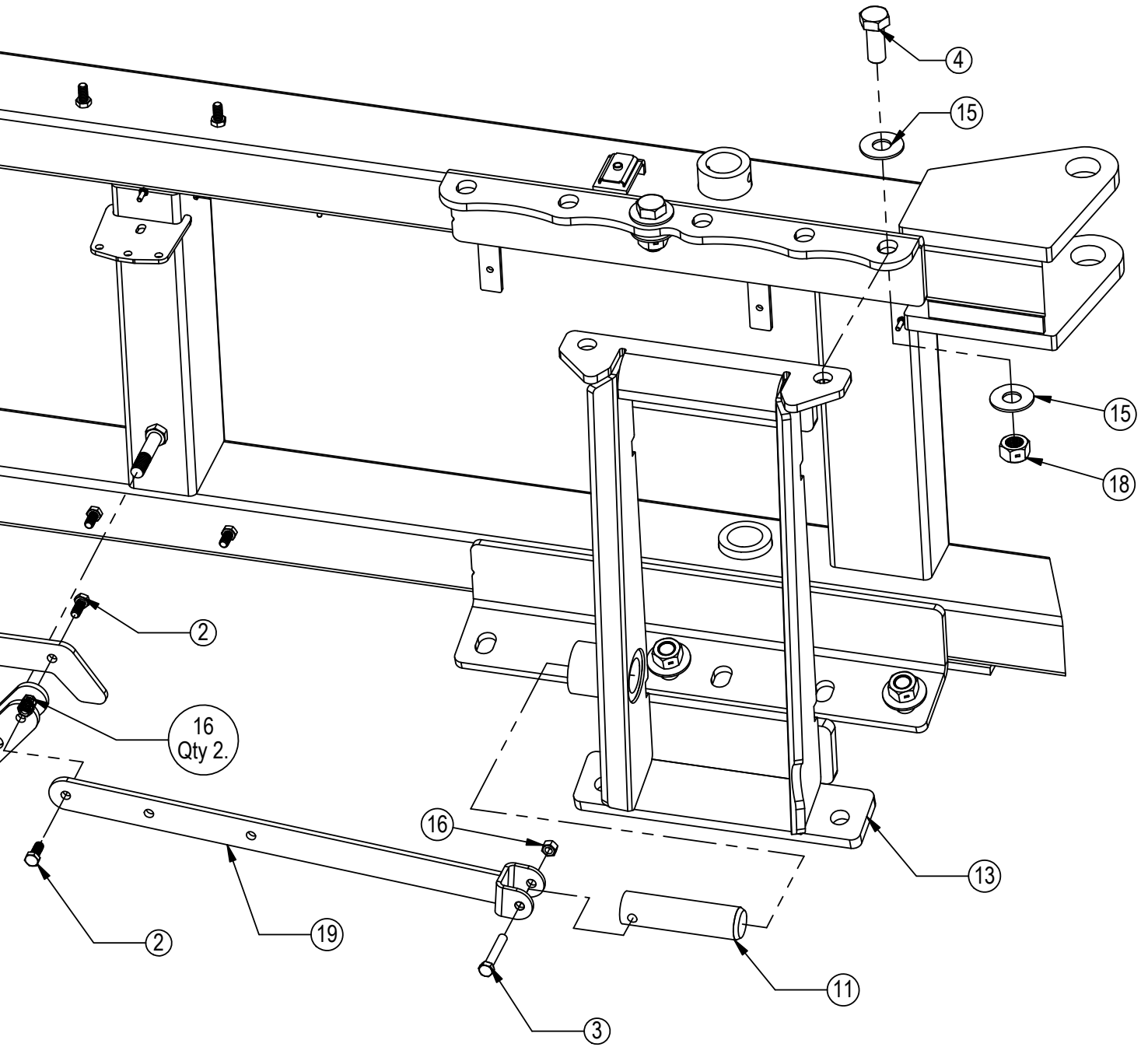
Item No.	Qty.	Part No.	Description
1	2	11-3699	U-End Extension Reinforcement Arm
2	1	15-15810-L	Slant Top U-End Extension - Left
3*	1	15-15810-R	Slant Top U-End Extension - Right
4	1	15-15815-L	Slant Top U-End Extension - Top Ext. - Left
5*	1	15-15815-R	Slant Top U-End Extension - Top Ext. - Right
6	8	16-20218	3/4" x 2" Hex Bolt Gr 8 NC
7	8	16-20219	3/4" x 2-1/4" Hex Bolt Gr 8 NC
8	12	16-20538	7/8" x 2" Hex Bolt Gr 8 NC
9	4	16-20542	7/8" x 3" Hex Bolt Gr 8 NC
10	4	16-20558	1" x 2" Hex Bolt Gr 8 NC
11	10	16-21688	3/4" x 2" Plow Bolt Gr 5 NC
12	1	29-16603-L	Serrated Cutting Edge 8" Left Cut
13*	1	29-16603-R	Serrated Cutting Edge 8" Right Cut
14	24	57-20747	3/4" Flat Washer
15	12	57-20818	7/8" Flat Washer Heavy Duty Grade 8 (USS)
16	4	57-20819	1" Flat Washer Heavy Duty Grade 8 (USS)
17	16	70-20598	7/8" Hex Nut Gr 8 NC
18	16	70-20607	3/4" Hex Center Lock Nut NC
19	10	70-20647	3/4" Hex Top Lock Nut Gr 5 NC

\* Parts Not Shown

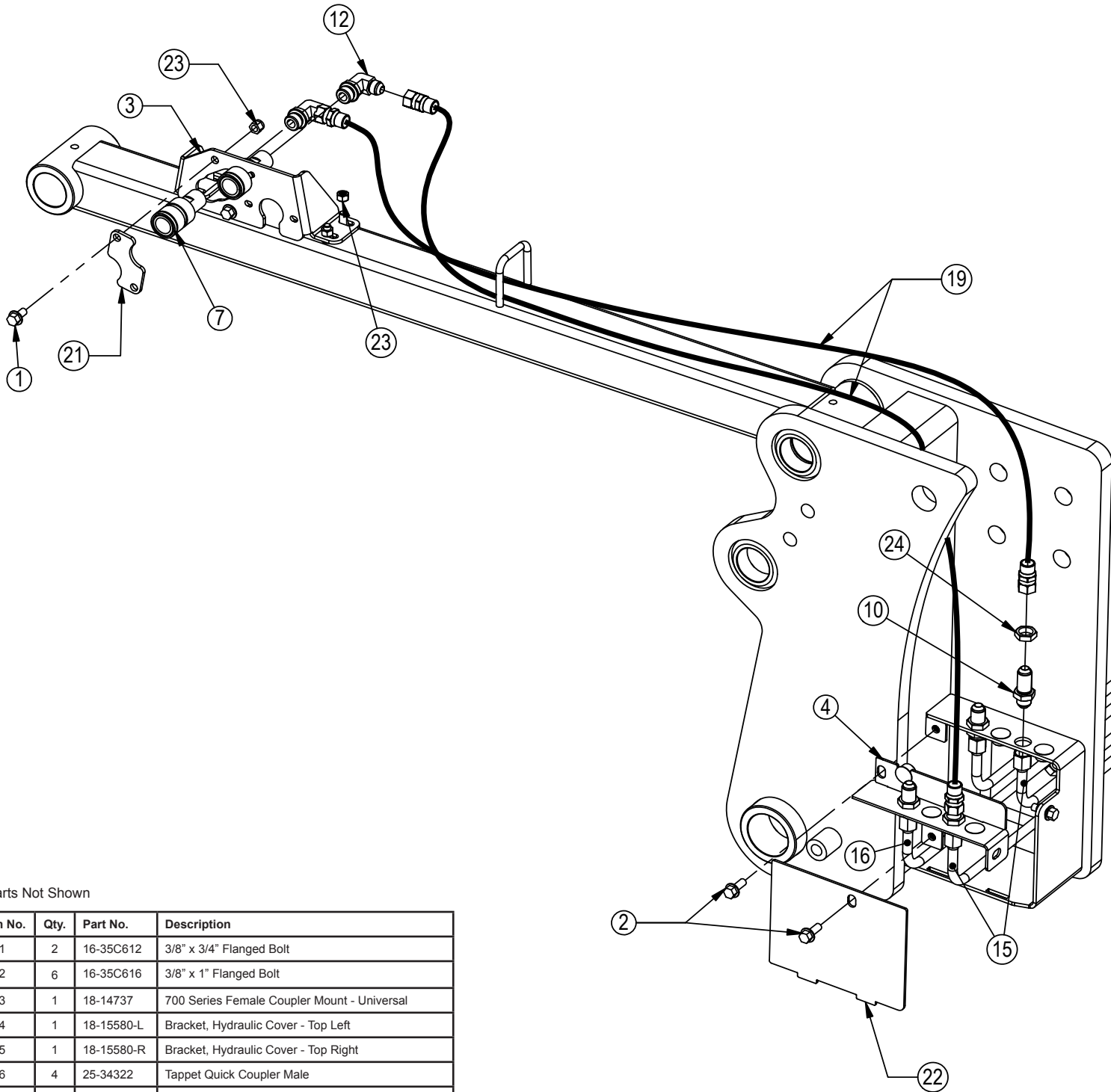


Some Parts Hidden For Clarity

Item No.	Qty.	Part No.	Description
1	1	11-3049	Bell Crank Weld
2	3	16-20125	1/2" x 1-1/4" Hex Bolt Gr 5 NC
3	2	16-20132	1/2" x 3" Hex Bolt Gr 5 NC
4	8	16-20560	1" x 2-1/2" Hex Bolt Gr 8 NC
5	2	16-21064	3/8" x 1" Carriage Bolt
6	1	16-21125	1/2 x 1-1/4" Carriage Bolt
7	2	19-13577	NR Pin Spacer Clevis End
8	1	39-14663	AG Pro Pin Puller Latch
9	1	39-14665	AG Pro Pin Puller Handle Weld
10	1	39-3072	Handle Cover (Orange)
11	2	43-3050	QA Lock Pin
12	1	44-14662	AG Pro Pin Puller Link Plate
13	1	45-14710-R	AG Pro Female Vertical Bolt On Quick Attach, Right
14	1	45-14710-L	AG Pro Female Vertical Bolt On Quick Attach, Left
15	16	57-20819	1" Flat Washer Heavy Duty Gr 8 (USS)
16	6	70-20604	1/2" Hex Center Lock Nut Gr 2 NC
17	2	70-20607	3/4" Hex Center Lock Nut Gr 2 NC
18	8	70-20609	1" Hex Center Lock Nut Gr 2 NC
19	2	75-14655	AG Pro Pin Puller Link Weld
20	2	70-20622	3/8" Flange Nut



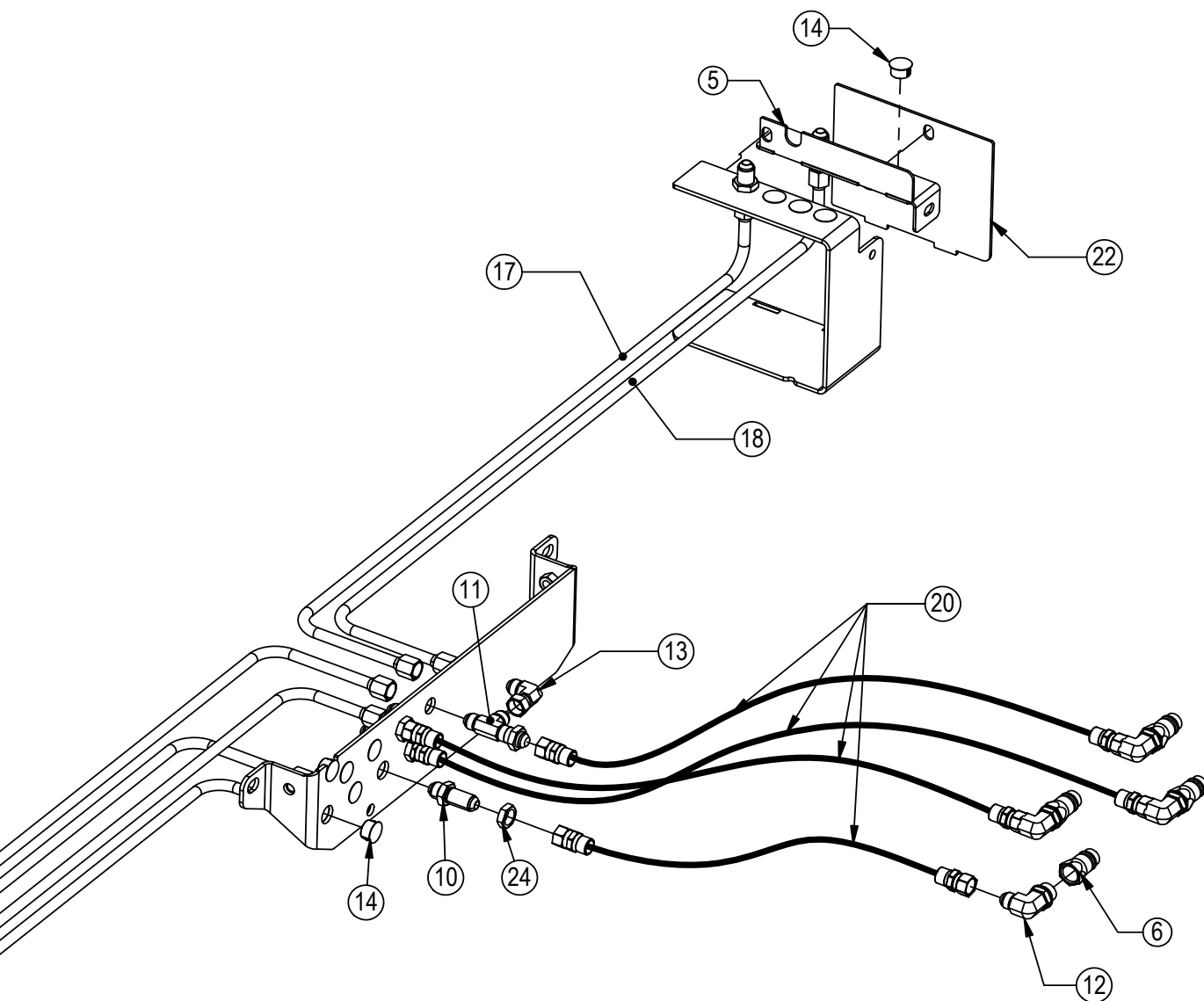
Hoses Not Drawn To Scale



\* Parts Not Shown

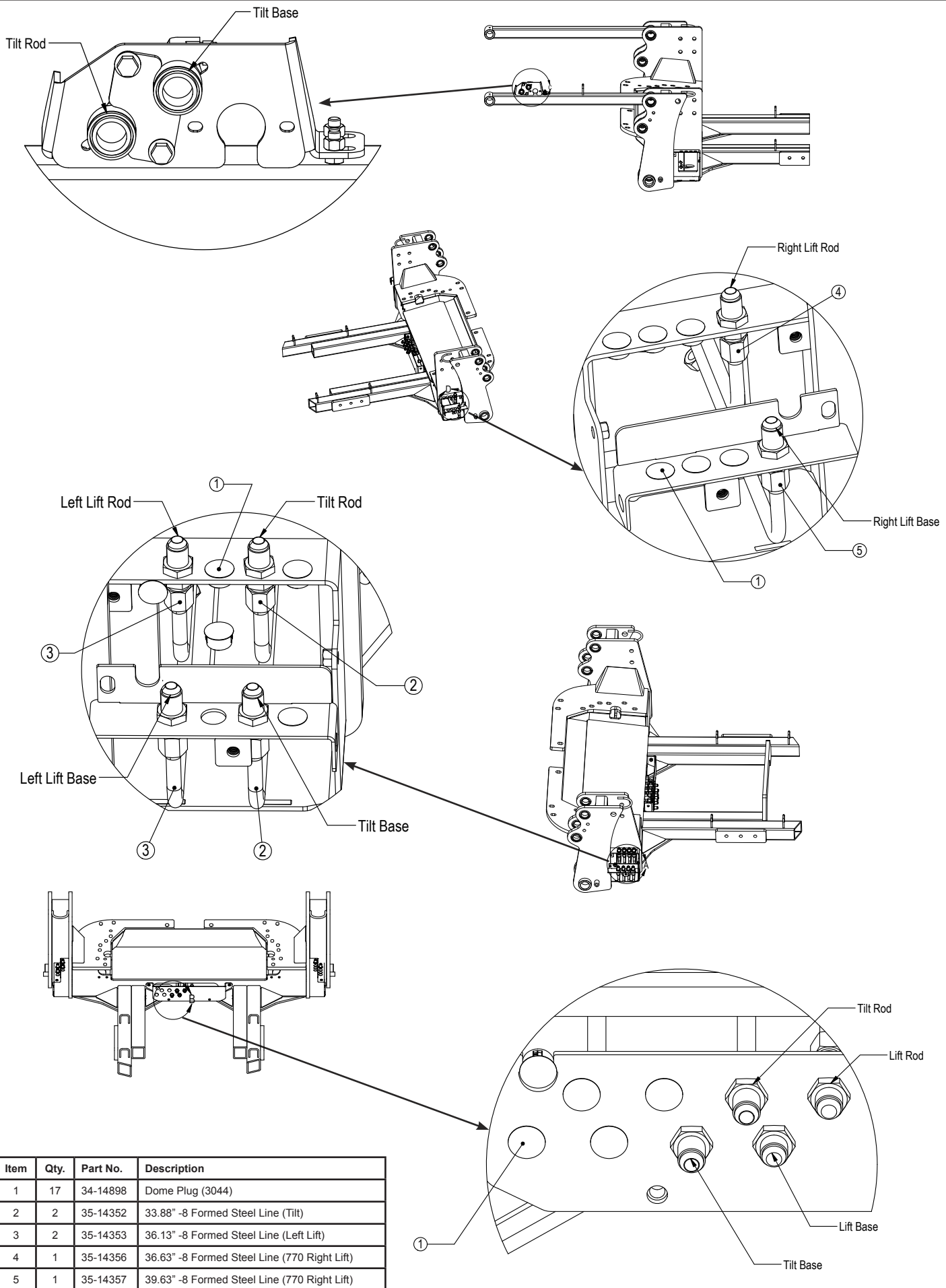
Item No.	Qty.	Part No.	Description
1	2	16-35C612	3/8" x 3/4" Flanged Bolt
2	6	16-35C616	3/8" x 1" Flanged Bolt
3	1	18-14737	700 Series Female Coupler Mount - Universal
4	1	18-15580-L	Bracket, Hydraulic Cover - Top Left
5	1	18-15580-R	Bracket, Hydraulic Cover - Top Right
6	4	25-34322	Tappet Quick Coupler Male
7	2	25-34321	Tappet Quick Coupler Female
8*	2	25-3453	Pioneer Dust Cap Tilt (Green)
9*	2	25-3457	Pioneer Dust Cap Lift (Orange)
10	8	31-34000	Bulkhead Union JIC (2700-8-8)
11	2	31-34030	Bulkhead Run Tee JIC (2704-8-8-8)
12	6	31-34051	Straight Thread Elbow 90° JIC x O-Ring (6801-8-10)
13	2	31-34100	Swivel Nut Elbow 90° JIC (6500-8-8)



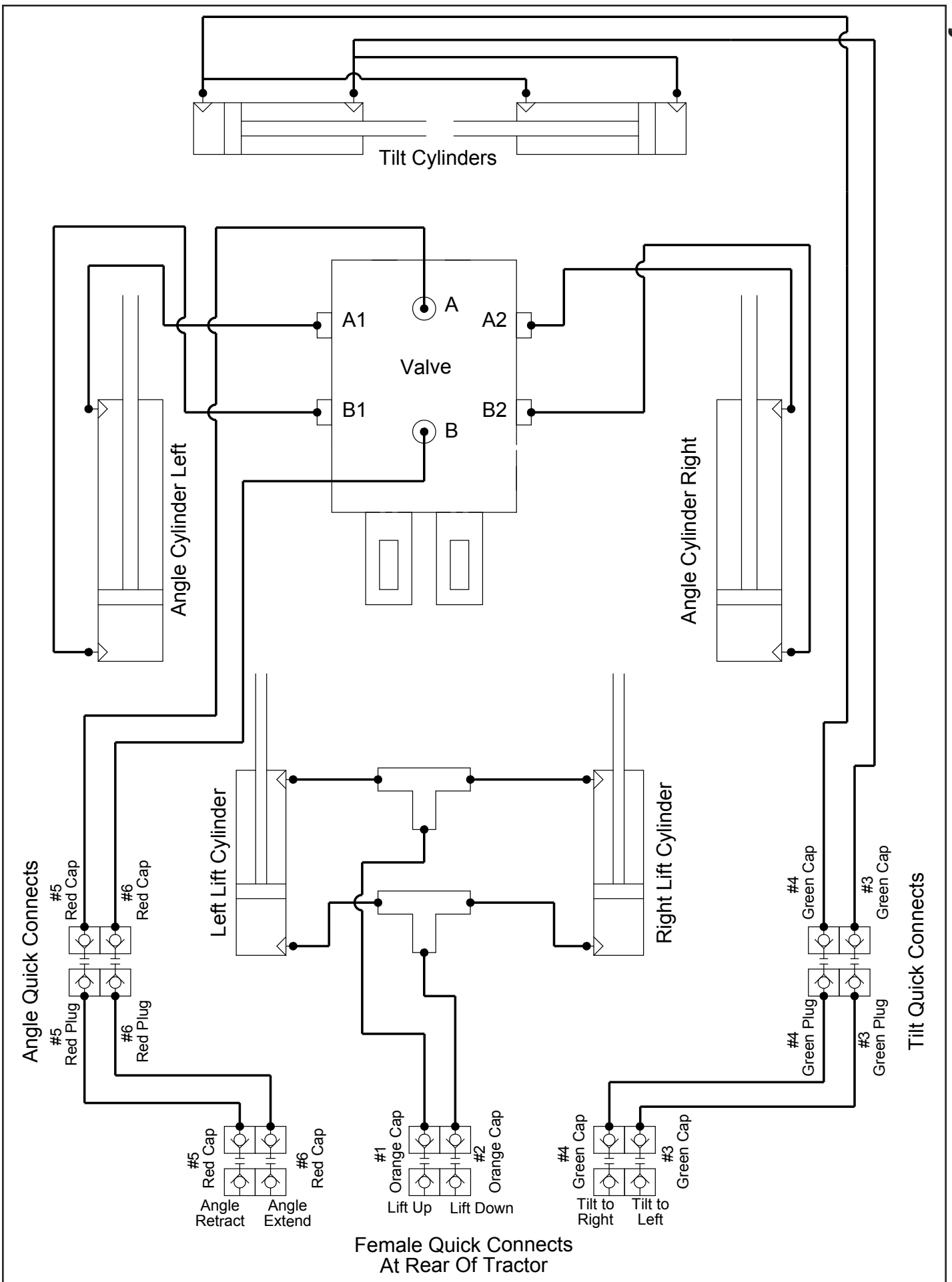


\* Parts Not Shown

Item No.	Qty.	Part No.	Description
14	17	34-14898	Dome Plug (3044)
15	2	35-14352	33.88" -8 Formed Steel Line (Tilt)
16	2	35-14353	36.13" -8 Formed Steel Line (Left Lift)
17	1	35-14356	36.63" -8 Formed Steel Line (770 Right Lift)
18	1	35-14357	39.63" -8 Formed Steel Line (770 Right Lift)
19	2	35-12494-0690	69" x 1/2" -8JIC/-8JIC Cold Temp Hose W/ Cordura
20	4	35-12216-3180	318" (26.5') x 1/2" -8JIC/-8JIC Cold Temp Hose
21	1	44-14738	700 Series Female Coupler Retainer-Universal
22	2	44-15120	700 Series Side Cover Plate - Left
23	6	70-20622	3/8" Flange Hex Nut NC
24	10	70-20807	3/4" Hex Jam Nut



Item	Qty.	Part No.	Description
1	17	34-14898	Dome Plug (3044)
2	2	35-14352	33.88" -8 Formed Steel Line (Tilt)
3	2	35-14353	36.13" -8 Formed Steel Line (Left Lift)
4	1	35-14356	36.63" -8 Formed Steel Line (770 Right Lift)
5	1	35-14357	39.63" -8 Formed Steel Line (770 Right Lift)



Angle Quick Connects

Left Lift Cylinder

Right Lift Cylinder

Tilt Quick Connects

Female Quick Connects  
At Rear Of Tractor

## Contact Us

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As always, if you have any questions about your 770 Dozer or other products made by Grouser, feel free to contact us.

### **Grouser Products**

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



## Improvements

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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

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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 one year. If such equipment is found to be defective within one year, 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.

