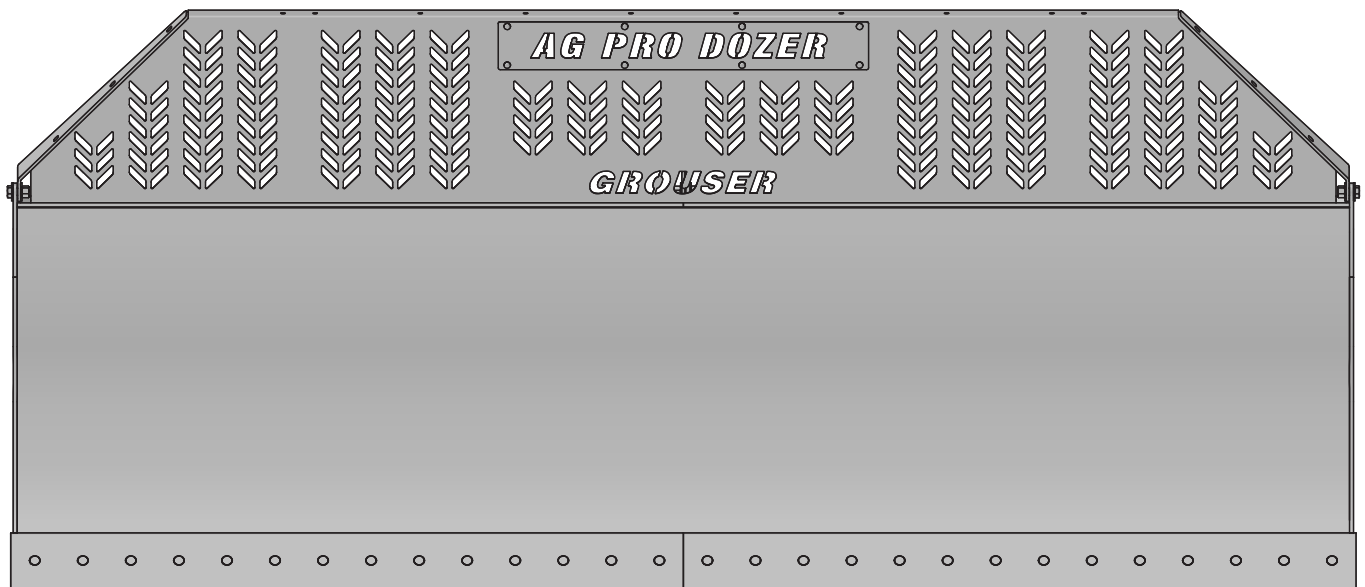




Ag Pro Classic w/Single Pivot

Owner's Manual & Parts Book



Grouser Products

755 2nd Ave NW - West Fargo, ND 58078

Phone: 1-701-282-7710

Fax: 1-701-282-8131

E-mail: grouser@grouser.com

Website: www.grouser.com

PN: 63-45408

Purchase Date
Serial Number
Model Number
Tractor Model
Dealer

Serial Number: 10209489-Current

Date 12-1-2024

Description	Page
Welcome To The Owner_____	2
Safety Precautions, Torque Specifications & Pre-Installation _____	3
Decals_____	4
Maintenance & Lubrication_____	5
Initial Startup_____	6
Connecting and Disconnecting _____	7
Skid Shoe Adjustment & Tilt Plate Adjustment _____	8
Ag Pro Classic 12' Blade _____	9
Ag Pro Classic 14'-20' Blade _____	10-11
Hydraulic Angle - Hydraulic Tilt System _____	12-13
Hydraulic Angle - Hydraulic Tilt Hydraulics _____	14-15
Hydraulic Angle - No Tilt System _____	16-17
No Angle - Hydraulic Tilt System _____	18-19
Ag Pro Classic 14'-20' No Angle - No Tilt Blade _____	20
No Angle - No Tilt System _____	21
Blade Attachments _____	22-23
Replacement Wear Parts _____	24
Hydraulic Schematics _____	25
Hydraulic Multi-Coupler Maintenance _____	26-27
Contact Us, Improvements & Warranty _____	28

Thank you for your recent purchase of a Grouser Ag Pro Classic 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 Ag Pro Classic 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 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.

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 Ag Pro Classic Dozer:

1. The Ag Pro Classic 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 Ag Pro Classic 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 Ag Pro Classic 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 Ag Pro Classic:

1. Thoroughly clean the Ag Pro Classic Dozer before storage. Use paint where necessary to prevent rust.
2. Check the Ag Pro Classic 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 the lift frame, hoses, top arms, and any boxes of hardware from the undercarriage. If any components are missing, call Grouser.

Install undercarriage per the tractor specific mounting instructions.

HAHT	Hydraulic Angle - Hydraulic Tilt
HANT	Hydraulic Angle - No Tilt
NAHT	No Angle - Hydraulic Tilt
NANT	No Angle - No Tilt

AG PRO16

PN: 27-14845

PN: 27-14842-XX

XX = Length of Blade



Serial Number Tag

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

WARNING

PINCH AREA
Keep away

Failure to comply could result in death or serious injury.

27-2409

PN: 27-2409

GROUSER

PN: 27-9505

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

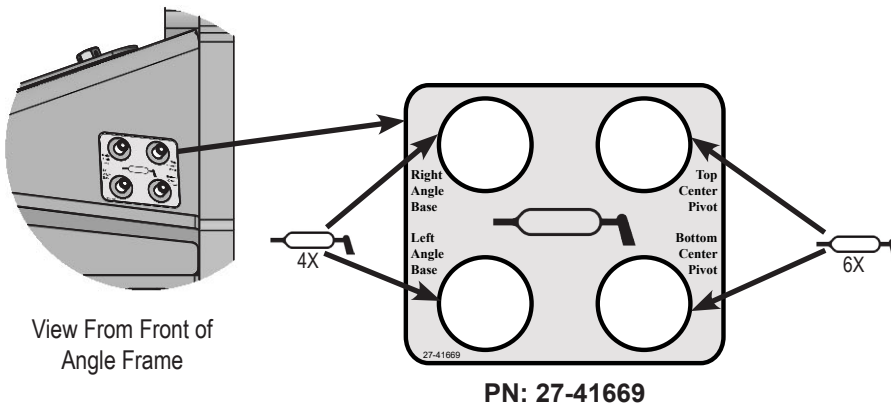
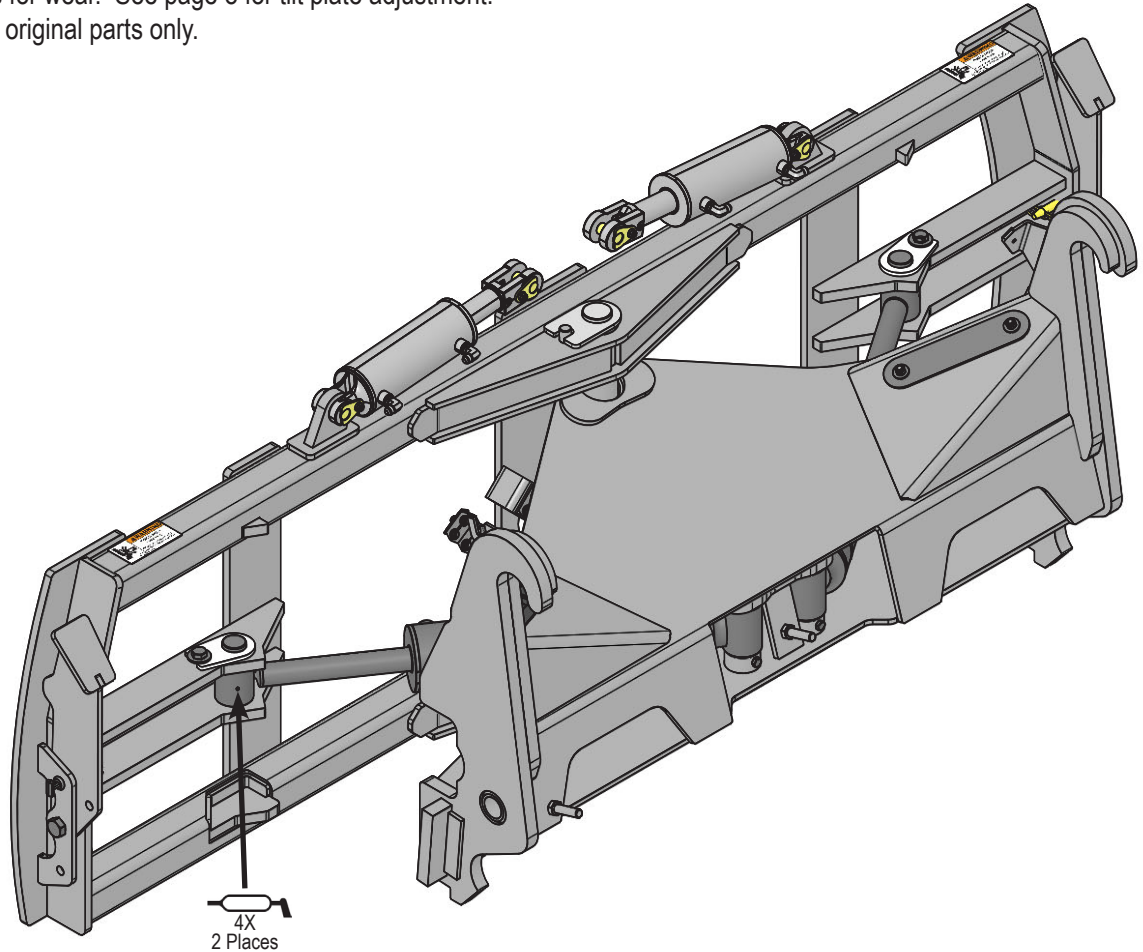
FAILURE TO FOLLOW MAY RESULT IN DAMAGE

Parts May Vary Slightly In Appearance From Your Product
27-40917R1

PN: 27-40917

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 Ag Pro Classic Dozer. For cutting edge information, see pages 24 .
- Check hydraulic cylinders and hoses for damage or leaks. For replacement parts, see hydraulic pages 14-19.
- 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.
- For multi-coupler maintenance, see pages 26-27.
- Inspect all tilt-ways for wear. See page 8 for tilt plate adjustment.
- Replace parts with original parts only.



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

Lift Function:

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

Tilt Function:

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

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

Angle Function:

1. Loosen the fittings on the rod and base end of the left angle cylinder.
2. Actuate the angle function to extend the left angle cylinder and supply oil to the base 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 left cylinder.
4. Continue to actuate the left angle function in the same direction until the cylinder is fully extended.
5. Actuate the left angle function in the opposite direction.
6. When oil starts to flow from the rod end fitting, stop oil flow, and tighten the rod end fitting on the left angle cylinder.
7. Continue to actuate the left angle function until cylinder is fully retracted.
8. Loosen the fittings on the rod and base end of the right angle cylinder.
9. Actuate the angle function to extend the right angle cylinder and supply oil to the base end of the right cylinder.
10. When oil starts to flow from the fittings, stop oil flow, and tighten the fitting on the base end of the right cylinder.
11. Continue to actuate the right angle function in the same direction until the cylinder is fully extended.
12. Actuate the right angle function in the opposite direction.
13. When oil starts to flow from the rod end fitting, stop oil flow, and tighten the rod end fitting on the right angle cylinder.
14. Continue to actuate the right angle function until cylinder is fully retracted.
15. Cycle the left cylinder in and out 5 more times and then the right cylinder in and out 5 more times.
16. Check tractor oil level and fill if necessary.

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

NOTE: Prior to connecting the blade, clean the fixed and mobile multi-couplers (refer to pages 26-27). Contamination causes leaks and contamination is not warrantable.

To Connect:

Note: If necessary, use a spotter to help center the blade on the lift system.

1. If necessary, lift the locking latch and push the quick attach lock handle on the left side of the lift system to open the quick attach system. Refer to Page #12 for further clarification on the quick attach system.
2. Drive the tractor forward slowly until the top edge of the male quick attach is under the top hook of the female quick attach on the blade assembly.
3. Raise the lift system until the male quick attach engages the female hook. If both sides don't fully engage, reposition. Continue to raise the lift system until the blade is off the ground and the female quick attaches are 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 to engage the quick attach pins and lift the locking latch to lock the handle in place.
6. Clean and connect hydraulic multi-coupler on the top arm. Refer to Pages 26-27 for cleaning and connecting information.
7. If initial startup, refer to Page 6 before operating any function of the blade.

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

To Disconnect:

1. Lower the blade until the cutting edge is off the ground a few inches.
2. Shut off the tractor engine and set the parking brake.
3. Unhook the multi-coupler on the top arm.
4. Remove the multi-coupler covers from the parking stations on the blade assembly and install on the multi-couplers on the top arms.
5. Plug the blade side multi-couplers into the parking station.
6. Lift the locking latch and push the quick attach lock handle to disengage the quick attach pins.
7. Start tractor, disengage the parking brake, and lower the blade until cutting edge is on the ground.
8. Continue to slowly lower the lift system to disengage the blade.
9. Slowly back away from the blade. When lift system is clear from the blade, raise the lift system.
10. Shut off the tractor engine and set the parking brake.

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.

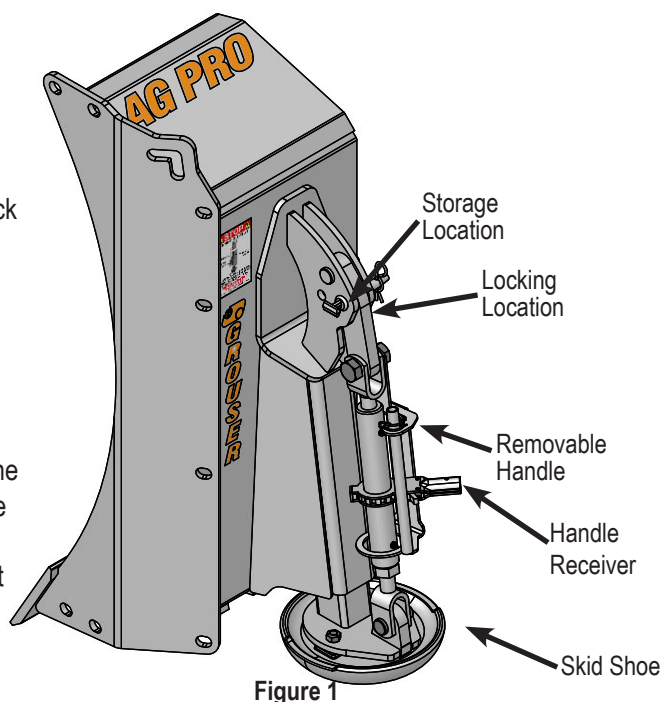


Figure 1

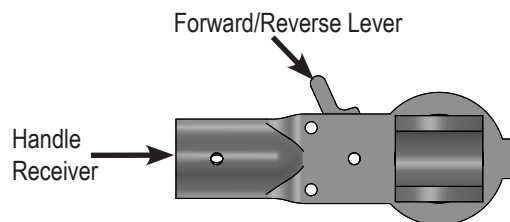


Figure 2

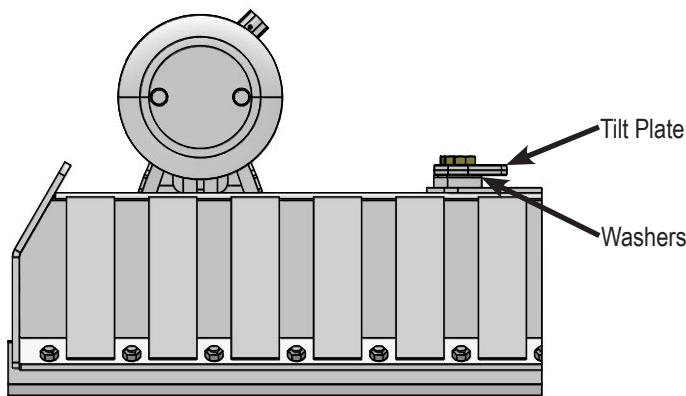
Preferred Method:

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

Non-Preferred Method:

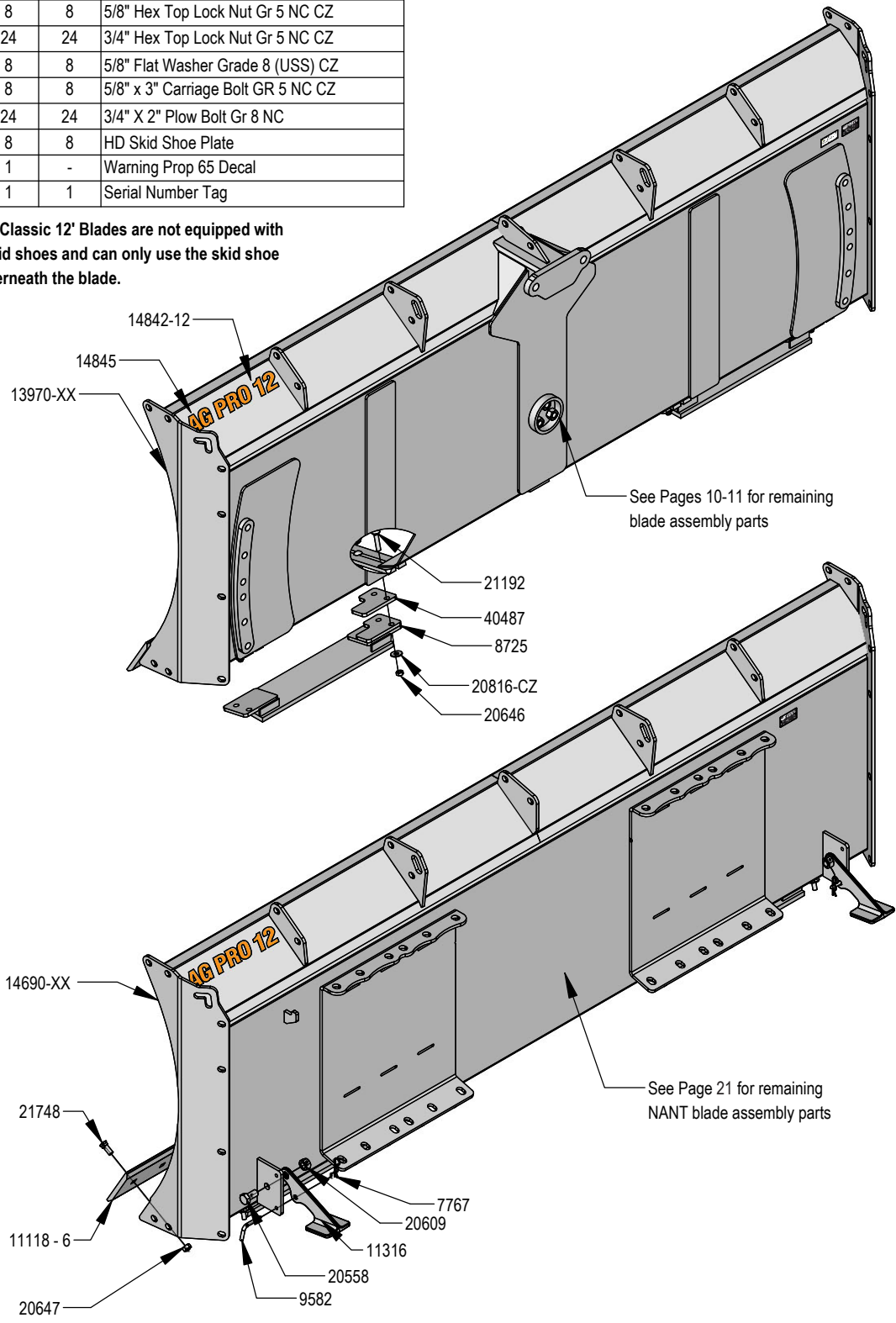
Note: Do not remove all of the bolts at the same time if the blade is not laying face down.

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

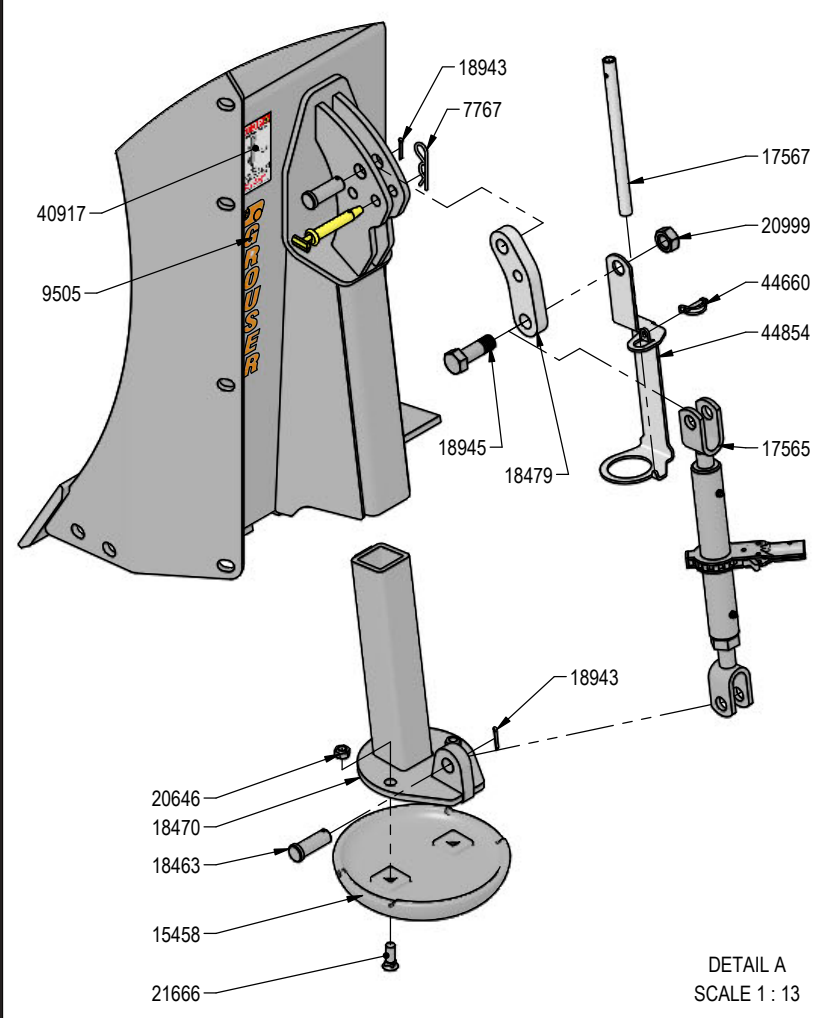


PART NO.	XAXT QTY.	NANT QTY.	DESCRIPTION
7767	-	2	Cylinder Pin Clip
8725	2	2	Skid Shoe
9582	-	2	Pin
11118 - 6	2	2	6' - 3/4"x 8" Cutting Edge
11316	-	2	Arm, Blade Stand
13970-XX	1	-	Blade Weld
14690-XX	-	1	Blade Weld
14842-12	1	1	12' Decal
14845	1	1	Ag Pro Blade Decal
20558	-	2	1" X 2" Hex Bolt Gr 8 NC YZ
20609	-	2	1" Hex Center Lock Nut Gr 5 NC CZ
20646	8	8	5/8" Hex Top Lock Nut Gr 5 NC CZ
20647	24	24	3/4" Hex Top Lock Nut Gr 5 NC CZ
20816-CZ	8	8	5/8" Flat Washer Grade 8 (USS) CZ
21192	8	8	5/8" x 3" Carriage Bolt GR 5 NC CZ
21748	24	24	3/4" X 2" Plow Bolt Gr 8 NC
40487	8	8	HD Skid Shoe Plate
40962	1	-	Warning Prop 65 Decal
NA	1	1	Serial Number Tag

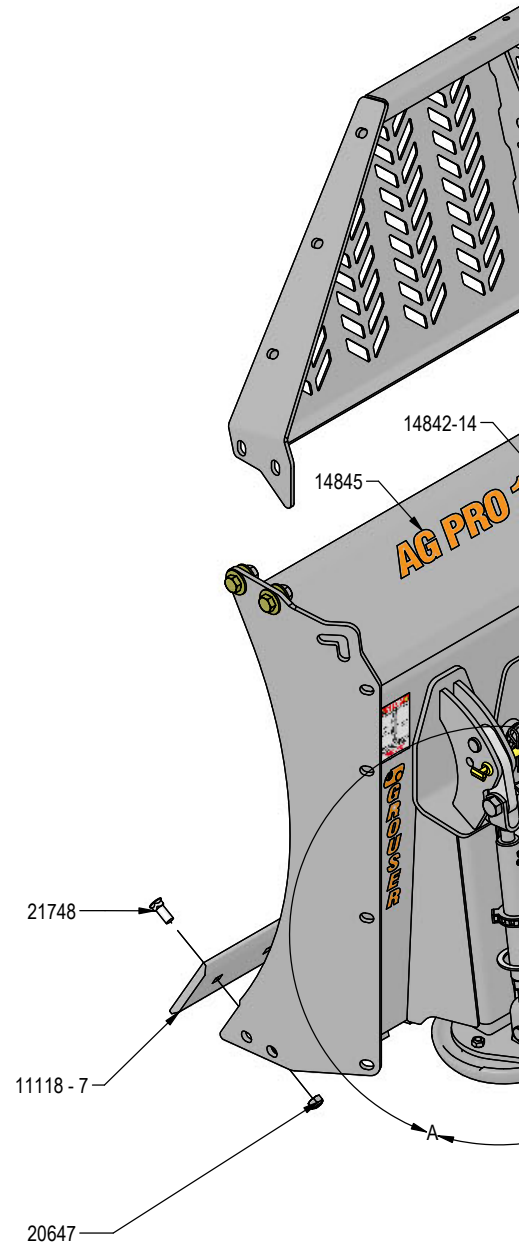
Note: Ag Pro Classic 12' Blades are not equipped with mushroom skid shoes and can only use the skid shoe mounted underneath the blade.

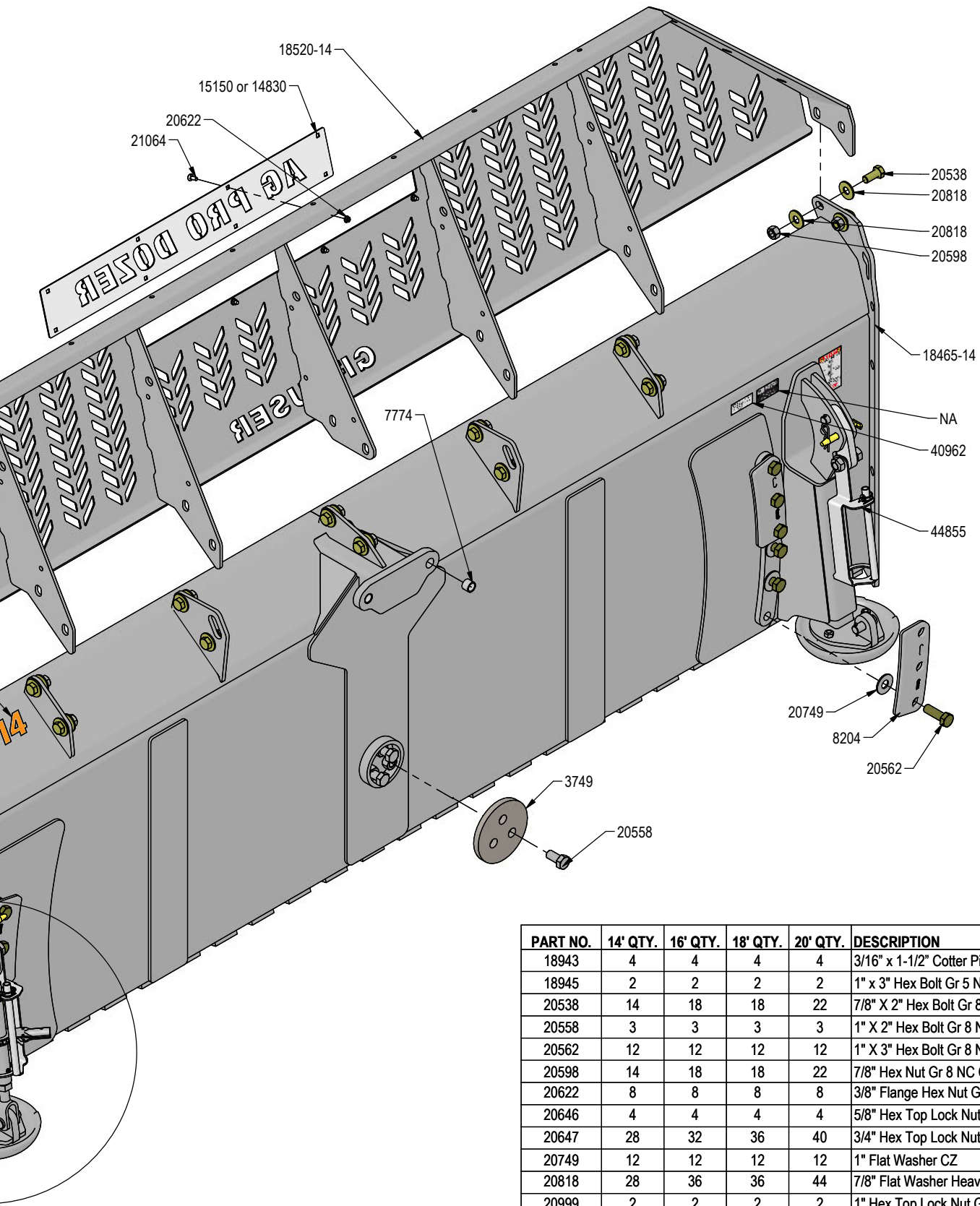


PART NO.	14' QTY.	16' QTY.	18' QTY.	20' QTY.	DESCRIPTION
3749	1	1	1	1	Backdrag Brace Plate
7767	2	2	2	2	Cylinder Pin Clip
7774	2	2	2	2	1" x 1" Spring Bushing
8204	4	4	4	4	Tilt Plate
9505	2	2	2	2	Grouser Vertical Decal
11118 - 6	-	-	3	2	6' - 3/4"x 8" Cutting Edge
11118 - 7	2	-	-	-	7' - 3/4"x 8" Cutting Edge
11118 - 8	-	2	-	1	8' - 3/4"x 8" Cutting Edge
14830	-	-	-	-	Custom Name Plate
14842-14	1	-	-	-	14' Decal
14842-16	-	1	-	-	16' Decal
14842-18	-	-	1	-	18' Decal
14842-20	-	-	-	1	20' Decal
14845	1	1	1	1	Ag Pro Blade Decal
15150	1	1	1	1	Ag Pro Dozer Name Plate
15458	2	2	2	2	12" Round Mushroom Skid Shoe
15712	2	2	2	2	3/4" x 3-1/4" Pin
17565	2	2	2	2	Ratchet Jack
17567	2	2	2	2	Handle, Ratchet Jack
18463	4	4	4	4	1" x 2.75" Pin
18465-14	1	-	-	-	Blade Weld
18465-16	-	1	-	-	Blade Weld
18465-18	-	-	1	-	Blade Weld
18465-20	-	-	-	1	Blade Weld
18470	2	2	2	2	Mushroom Skid Shoe Mount
18479	2	2	2	2	Skid Shoe Link
18520-14	1	-	-	-	Top Extension Weld
18520-16	-	1	-	-	Top Extension Weld
18520-18	-	-	1	-	Top Extension Weld
18520-20	-	-	-	1	Top Extension Weld



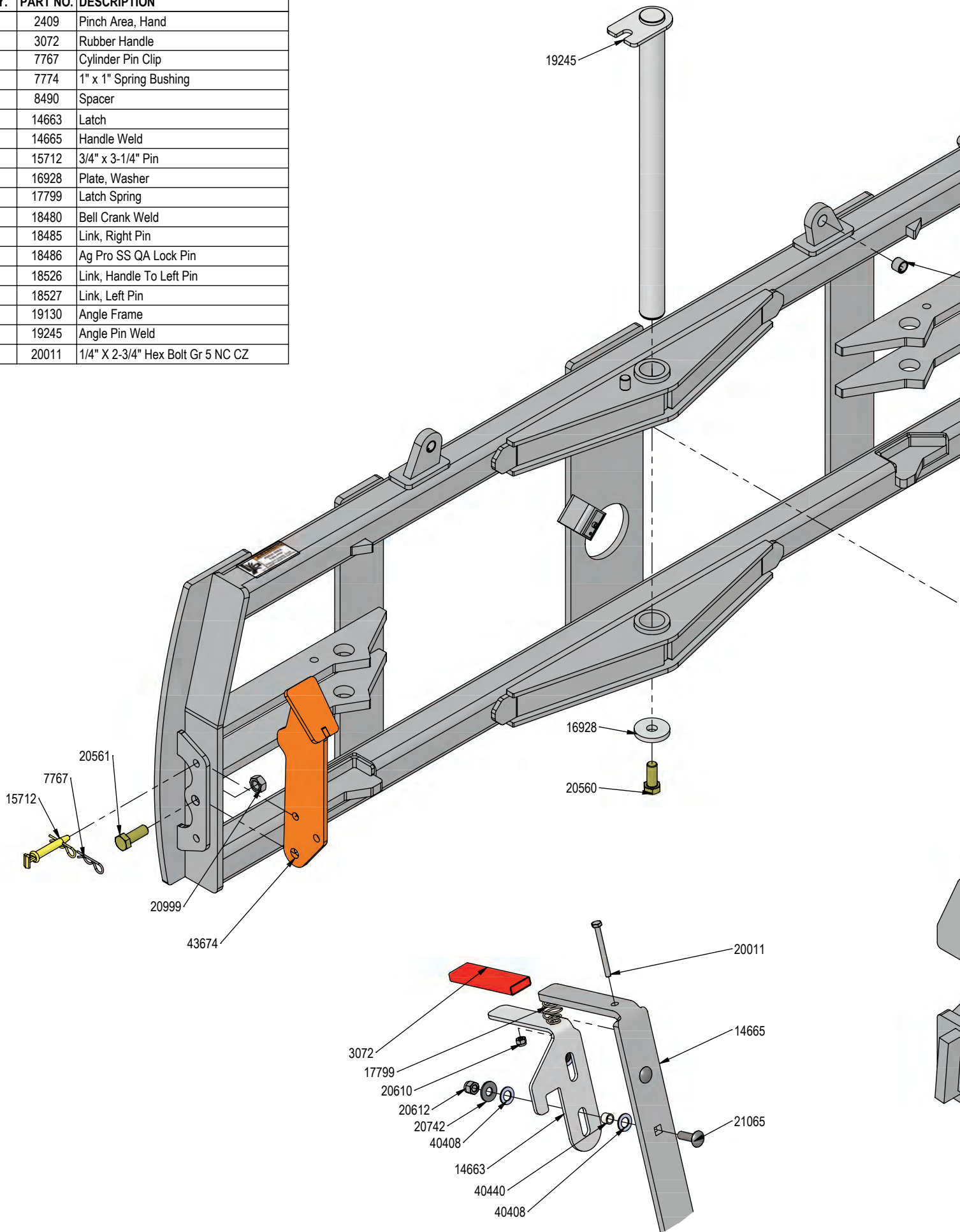
DETAIL A
SCALE 1 : 13

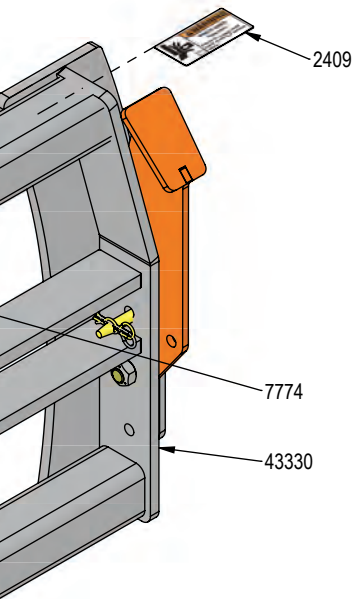




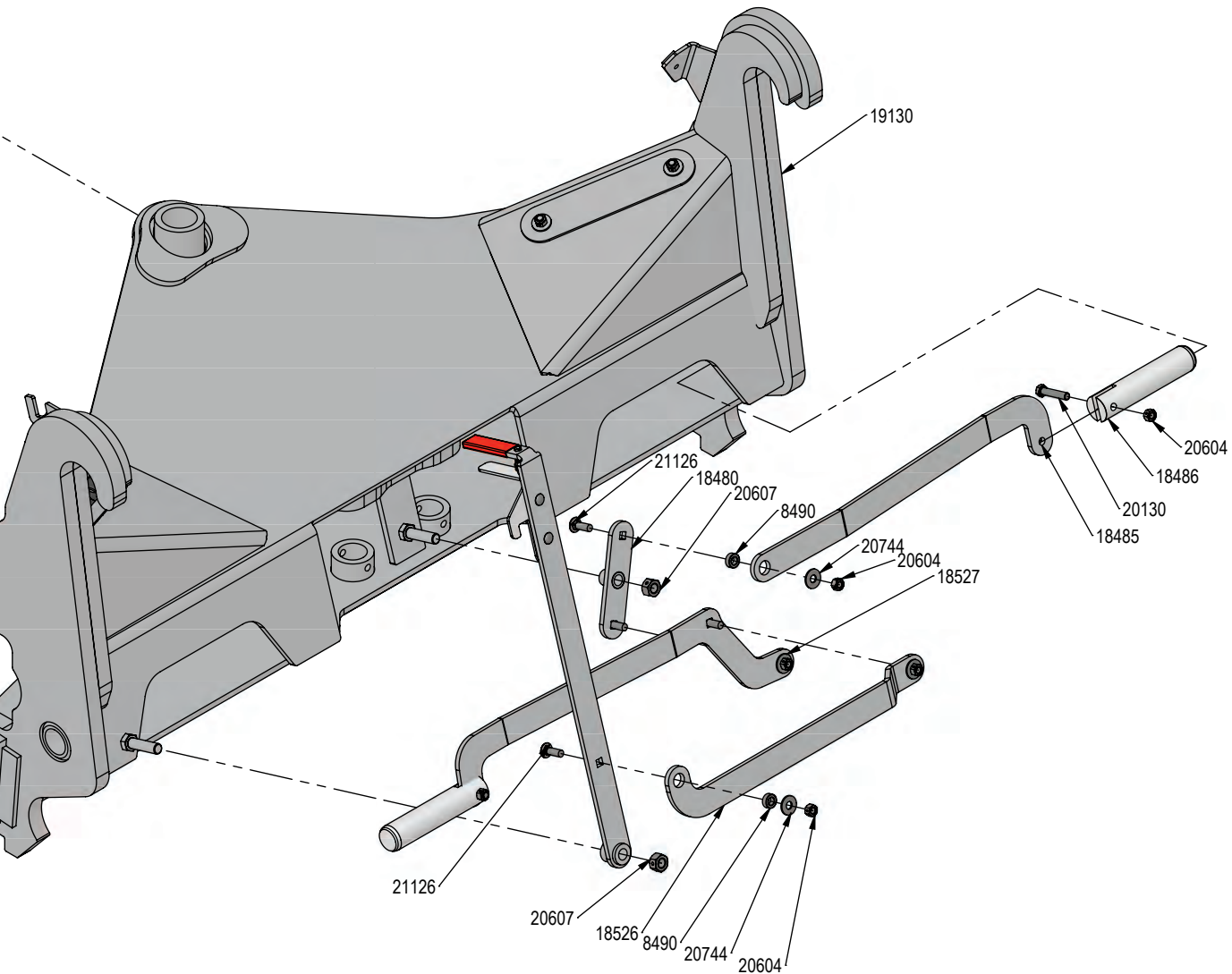
PART NO.	14' QTY.	16' QTY.	18' QTY.	20' QTY.	DESCRIPTION
18943	4	4	4	4	3/16" x 1-1/2" Cotter Pin
18945	2	2	2	2	1" x 3" Hex Bolt Gr 5 NC - Short Thread
20538	14	18	18	22	7/8" X 2" Hex Bolt Gr 8 NC YZ
20558	3	3	3	3	1" X 2" Hex Bolt Gr 8 NC YZ
20562	12	12	12	12	1" X 3" Hex Bolt Gr 8 NC YZ
20598	14	18	18	22	7/8" Hex Nut Gr 8 NC CZ
20622	8	8	8	8	3/8" Flange Hex Nut Gr 5 NC CZ
20646	4	4	4	4	5/8" Hex Top Lock Nut Gr 5 NC CZ
20647	28	32	36	40	3/4" Hex Top Lock Nut Gr 5 NC CZ
20749	12	12	12	12	1" Flat Washer CZ
20818	28	36	36	44	7/8" Flat Washer Heavy Duty Gr 8 (USS) YZ
20999	2	2	2	2	1" Hex Top Lock Nut Gr 8 NC YZ
21064	8	8	8	8	3/8" x 1" Carriage Bolt Gr 5 NC CZ
21666	4	4	4	4	5/8" X 1-3/4" Plow Bolt Gr 5 NC (#3 Flat Head)
21748	28	32	36	40	3/4" X 2" Plow Bolt Gr 8 NC
40917	2	2	2	2	Ratchet Holder Storage Decal
40962	1	1	1	1	Warning Prop 65 Decal
44660	2	2	2	2	1/4" x 1-9/16" Pipe Lynch Pin
44854	1	1	1	1	Ratchet Keeper - Left
44855	1	1	1	1	Ratchet Keeper
NA	1	1	1	1	Serial Number Tag

QTY.	PART NO.	DESCRIPTION
2	2409	Pinch Area, Hand
1	3072	Rubber Handle
2	7767	Cylinder Pin Clip
2	7774	1" x 1" Spring Bushing
4	8490	Spacer
1	14663	Latch
1	14665	Handle Weld
2	15712	3/4" x 3-1/4" Pin
1	16928	Plate, Washer
1	17799	Latch Spring
1	18480	Bell Crank Weld
1	18485	Link, Right Pin
2	18486	Ag Pro SS QA Lock Pin
1	18526	Link, Handle To Left Pin
1	18527	Link, Left Pin
1	19130	Angle Frame
1	19245	Angle Pin Weld
1	20011	1/4" X 2-3/4" Hex Bolt Gr 5 NC CZ





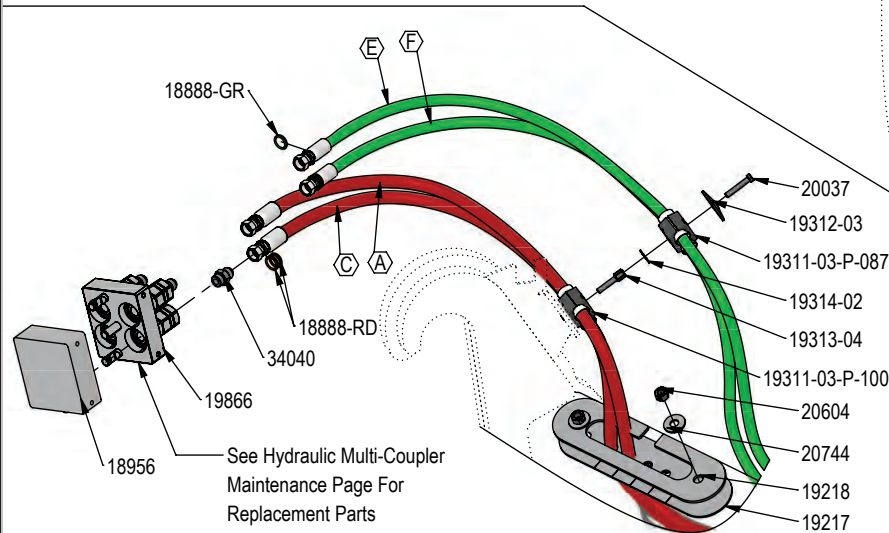
QTY.	PART NO.	DESCRIPTION
2	20130	1/2" X 2-1/2" Hex Bolt Gr 5 NC CZ
1	20560	1" X 2-1/2" Hex Bolt Gr 8 NC YZ
2	20561	1" X 2-3/4" Hex Bolt Gr 8 NC YZ
6	20604	1/2" Hex Center Lock Nut Gr 5 NC CZ
2	20607	3/4" Hex Center Lock Nut Gr 5 NC CZ
1	20610	1/4" Nylock Hex Nut Gr 5 NC CZ
2	20612	3/8" Nyloc Hex Nut Gr 5 NC CZ
2	20742	3/8" Flat Washer CZ
4	20744	1/2" Flat Washer CZ
2	20999	1" Hex Top Lock Nut Gr 8 NC YZ
2	21065	3/8" x 1-1/4" Carriage Bolt Gr 5 NC CZ
4	21126	1/2" x 1-1/2" Carriage Bolt Gr 5 NC CZ
4	40408	3/8" Flat Nylon Washer
2	40440	.378" ID x .503" OD x .375" Spacer
1	43330	Tilt Frame Weld
2	43674	Blade Stand



DWG. NO.: 45098

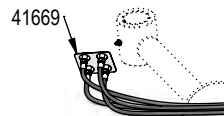
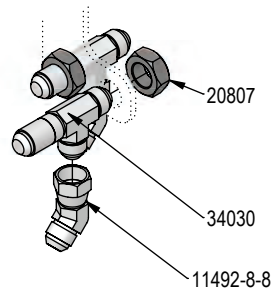
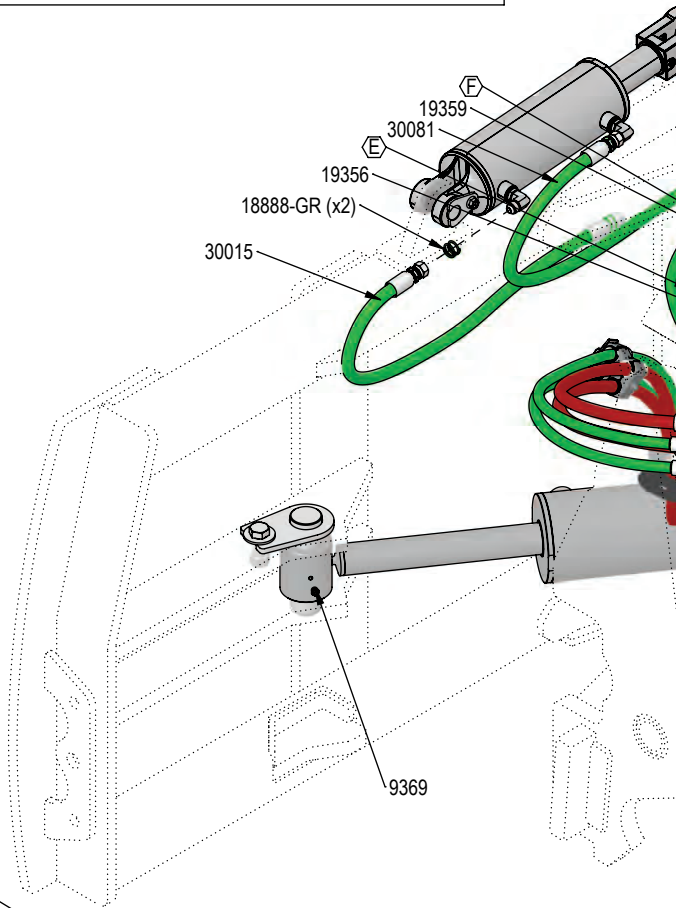
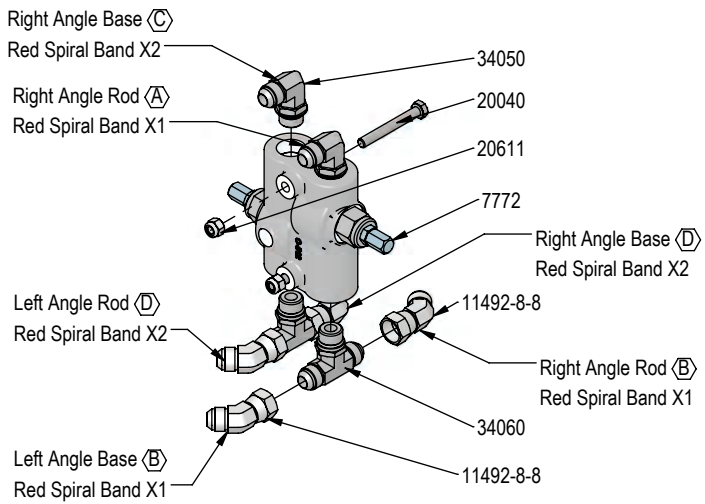
QTY.	PART NO.	DESCRIPTION
1	7772	Valve
2	9369	Straight 1/8" NPT Grease Zerk
6	11492-8-8	Male JIC x Female JIC Swivel Nut Elbow 45°
2	11699-10-8	JIC Union
2	12931	Formed Steel Line
2	12932	Cylinder Saddle
2	12933	Hose Clamp (worm drive - 5.0)
2	13515	Spacer, NR Pin
4	13580	Pin Weld
2	13933-2-2	1/8" NPT Street Elbow
8	16695	2.25" x 2.00" x 1.50" Spring Bushing
2	18487	Angle Cyl Base Pin
2	18490	Angle Cylinder Rod Pin Weld
18	18888-GR	-12 Green - Spiral Band
18	18888-RD	-12 Red - Spiral Band
1	18956	Multi-Coupling Plate - 4 Port Parking Station
2	18994-0440	44" Grease Hose (w/lock nut and grease zerk)
2	18994-0570	57" Grease Hose (w/lock nut and grease zerk)
1	19217	Rubber Seal
1	19218	Seal Clamp Plate
1	19219	Cover Plate
3	19311-03-P-087	Hose Clamp
1	19311-03-P-100	Hose Clamp
3	19312-03	Twin Cover Plate
1	19313-04	Twin Stacking Bolt
1	19314-02	Twin Safety Plate
2	19355	75.5" x 1/2" -8JIC/-8JIC Hose (w/1 Collar & Cordura)
1	19356	122" x 3/8" -8JIC/-8JIC Hose (w/ 3 Collar & Cordura)
1	19359	128.5" x 3/8" -8JIC/-8JIC Hose (w/ 3 Collar & Cordura)
1	19866	Multi-Coupling Plate - 4 Port Mobile (Includes Couplers)
3	20037	5/16" X 1-3/4" Hex Bolt Gr 5 NC CZ
2	20040	5/16" X 2-1/2" Hex Bolt Gr 5 NC CZ
2	20134	1/2" X 3-1/2" Hex Bolt Gr 5 NC CZ
2	20219	3/4" X 2-1/4" Hex Bolt Gr 5 NC CZ
6	20604	1/2" Hex Center Lock Nut Gr 5 NC CZ
2	20607	3/4" Hex Center Lock Nut Gr 5 NC CZ

Note: Every hydraulic function from the front to the back of the system is designated by a letter and can also be referenced on the Hydraulic Schematic.

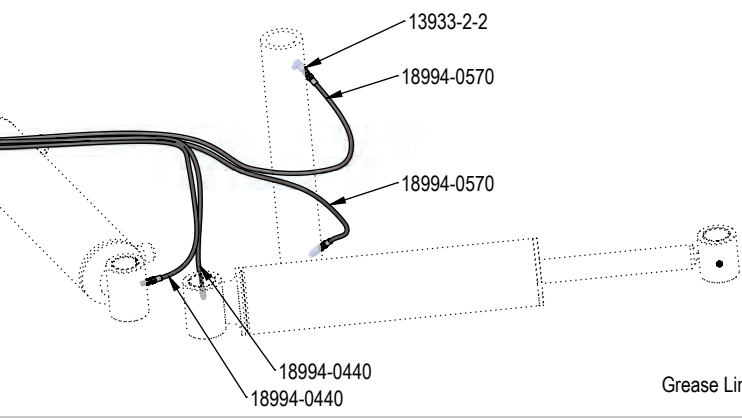
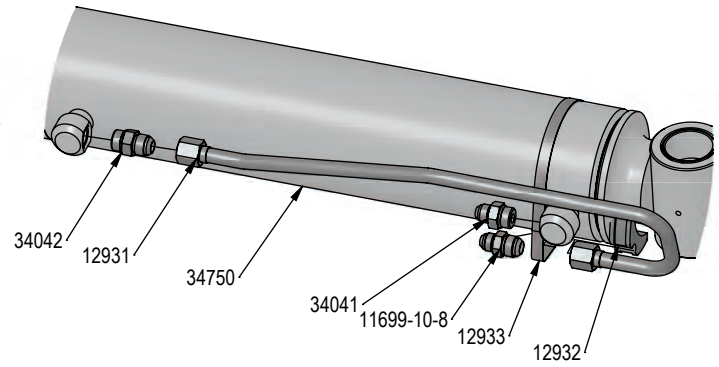
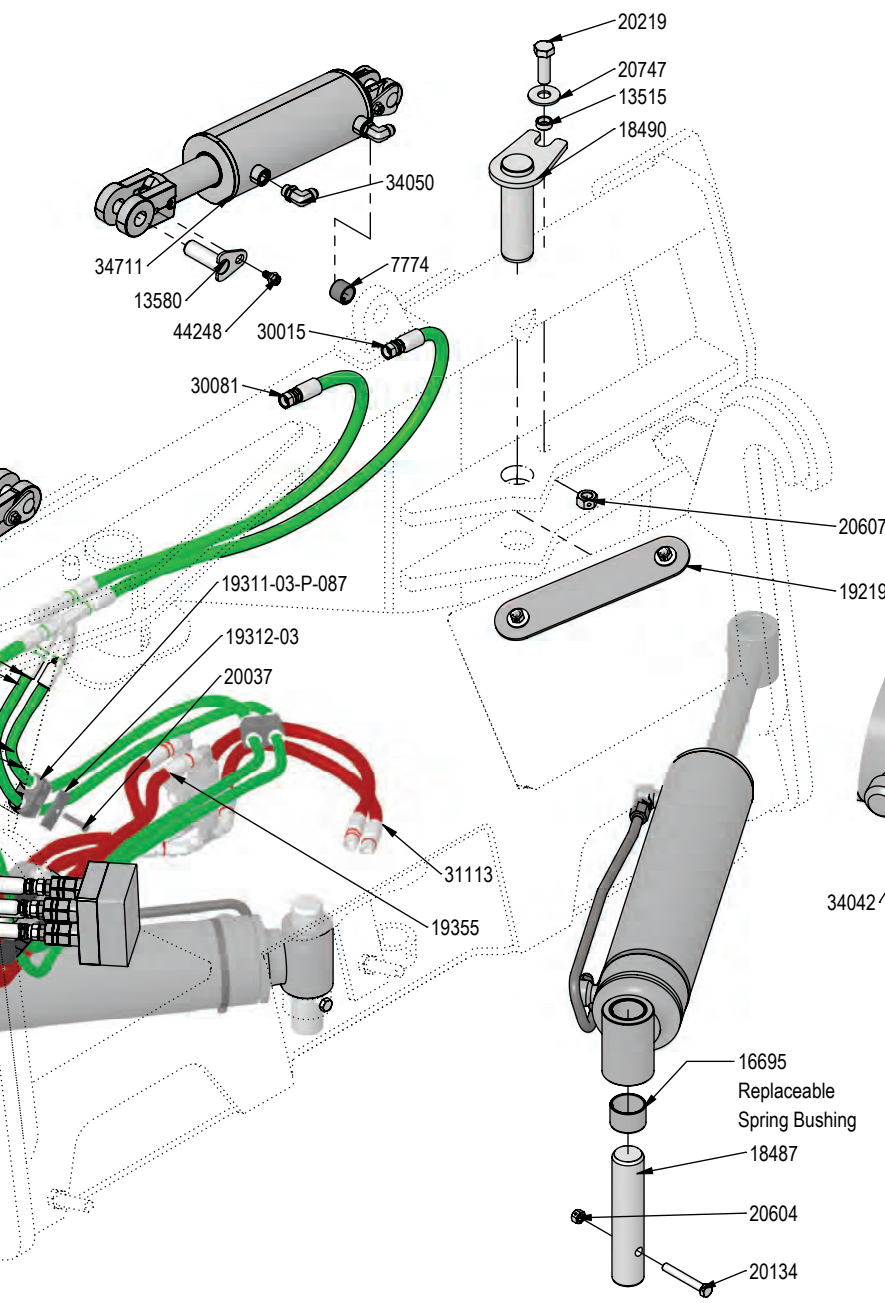


Note: The cylinder part number is stamped on the base end of the cylinder opposite of the hydraulic ports.

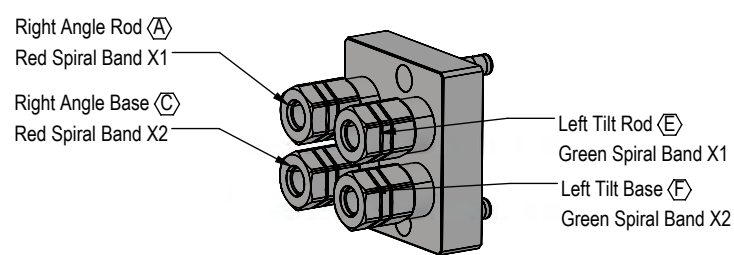
Cylinder	Part No.	Description
26-34711	49-12271	Seal Kit 4x8 Nitrided Rod, Clevis Ends
26-34750	49-12275	Seal Kit 5 x 20 Nitrided Rod



QTY.	PART NO.	DESCRIPTION
2	20611	5/16" Nyloc Hex Nut Gr 5 NC CZ
4	20744	1/2" Flat Washer CZ
2	20747	3/4" Flat Washer CZ
2	20807	3/4" Hex Jam Nut NF CZ
2	30015	30" x 3/8" -8JIC/-8JIC Hose
2	30081	37" x 3/8" -8JIC/-8JIC Hose
4	31113	28" x 1/2" -8 JIC/-8 JIC Hose w/ Cordura
2	34030	Bulkhead Run Tee JIC
4	34040	Straight JIC x O-Ring
2	34041	Straight JIC x O-Ring
2	34042	Straight JIC x O-Ring
6	34050	Straight Thread Elbow 90° JIC x O-Ring
2	34060	Branch Tee JIC x O-Ring
2	34711	4 x 8 Hydraulic Cylinder
2	34750	5 x 20 Cylinder Bushed Tube Ends
1	41669	Grease Location Decal
4	44248	3/8 Flanged Hex Head Shoulder Bolt



Grease Lines

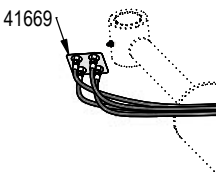
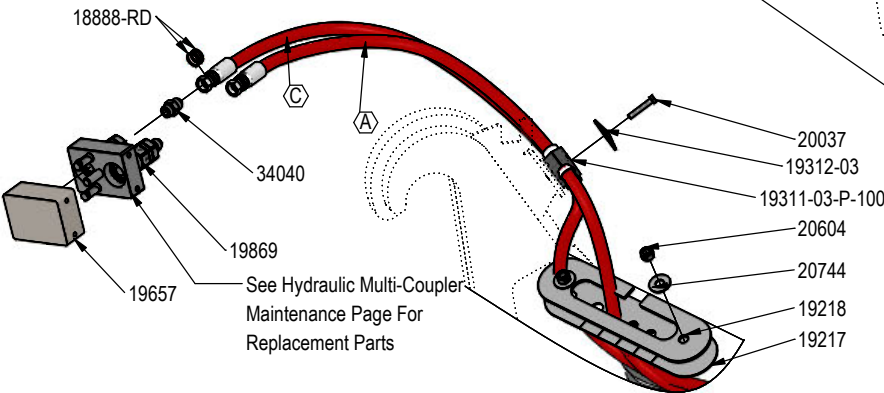
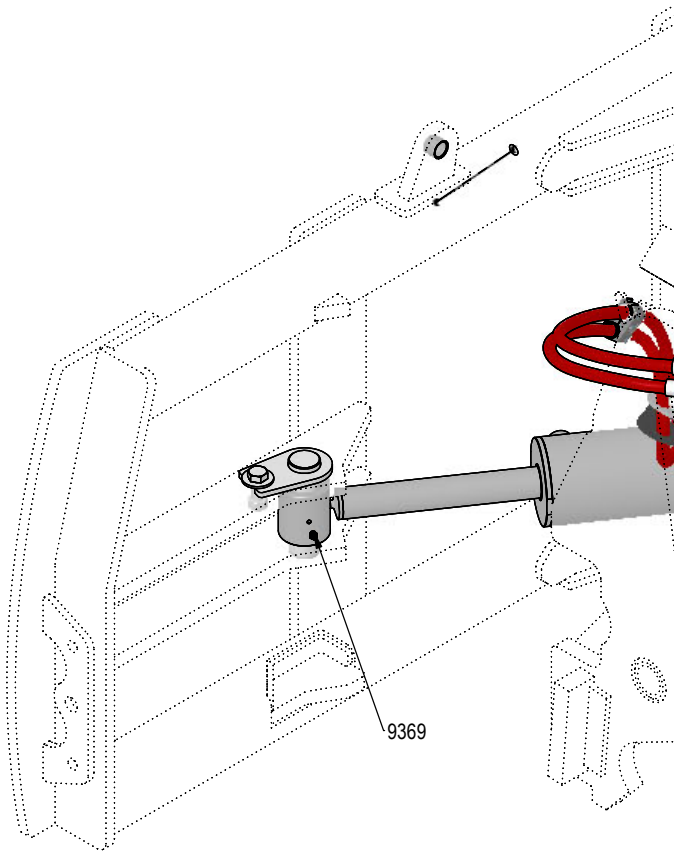
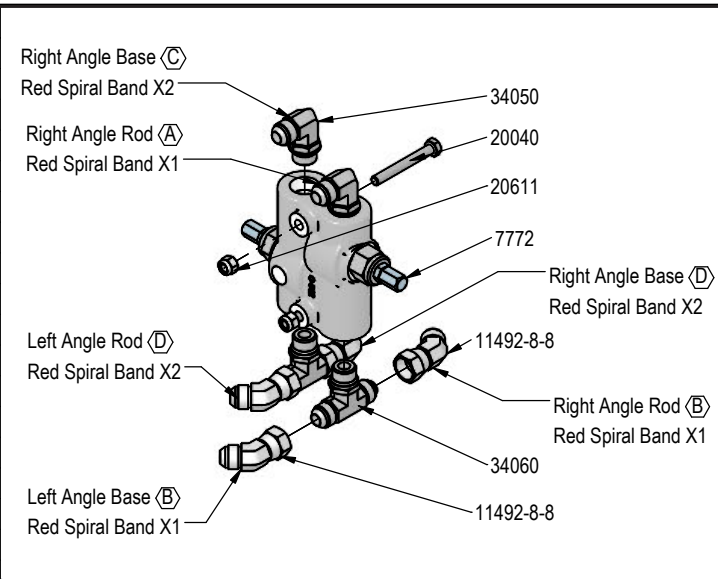


Note: View is from Multi-Coupler Installed on Top Arm.
All hoses are marked with colored spiral bands and should be attached to designated ports on the Multi-Coupler.

DWG. NO.: 45098

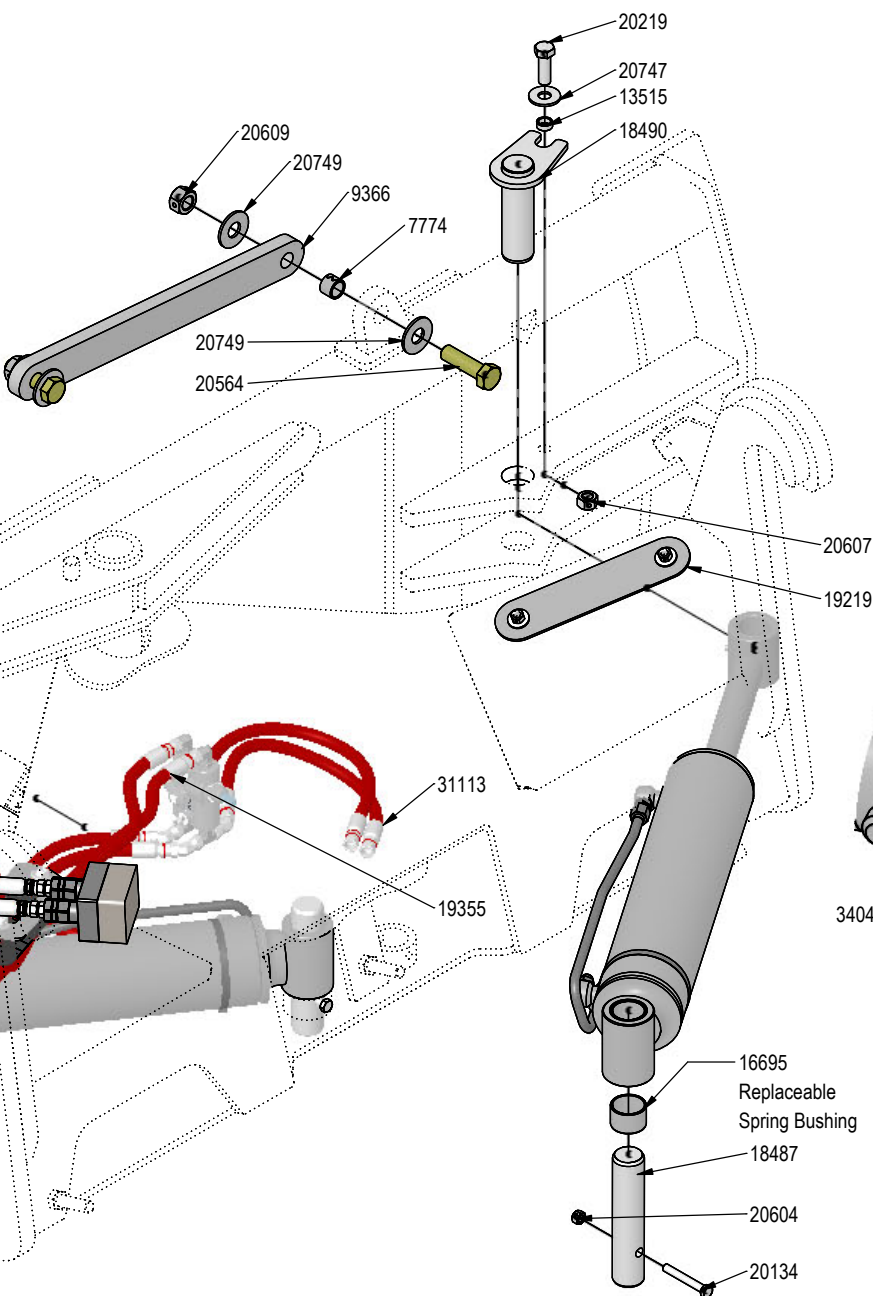
QTY.	PART NO.	DESCRIPTION
1	7772	Valve
2	7774	1" x 1" Spring Bushing
1	9366	Ag Pro Non Tilt Bar
2	9369	Straight 1/8" NPT Grease Zerk
4	11492-8-8	Male JIC x Female JIC Swivel Nut Elbow 45°
2	11699-10-8	JIC Union
2	12931	Formed Steel Line
2	12932	Cylinder Saddle
2	12933	Hose Clamp (worm drive - 5.0)
2	13515	Spacer, NR Pin
2	13933-2-2	1/8" NPT Street Elbow
8	16695	2.25" x 2.00" x 1.50" Spring Bushing
2	18487	Angle Cyl Base Pin
2	18490	Angle Cylinder Rod Pin Weld
18	18888-RD	-12 Red - Spiral Band
2	18994-0440	44" Grease Hose (w/lock nut and grease zerk)
2	18994-0570	57" Grease Hose (w/lock nut and grease zerk)
1	19217	Rubber Seal
1	19218	Seal Clamp Plate
1	19219	Cover Plate
1	19311-03-P-100	Hose Clamp
1	19312-03	Twin Cover Plate
2	19355	75.5" x 1/2" -8JIC/-8JIC Hose (w/1 Collar & Cordura)
1	19657	Multi-Coupling Plate - 2 Port Parking Station
1	19869	Multi-Coupling Plate - 2 Port - Mobile

Note: Every hydraulic function from the front to the back of the system is designated by a letter and can also be referenced on the Hydraulic Schematic.

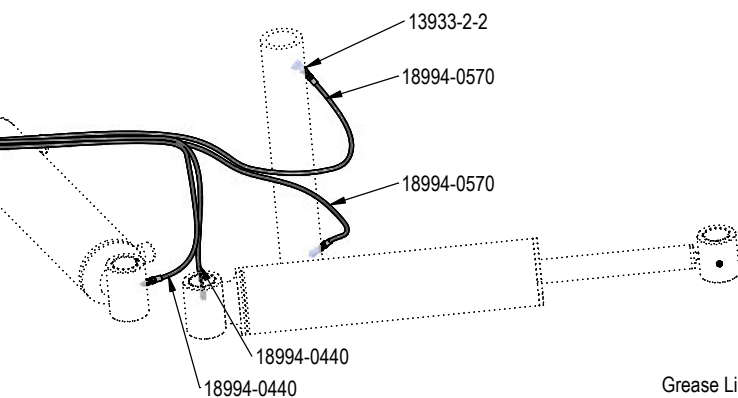
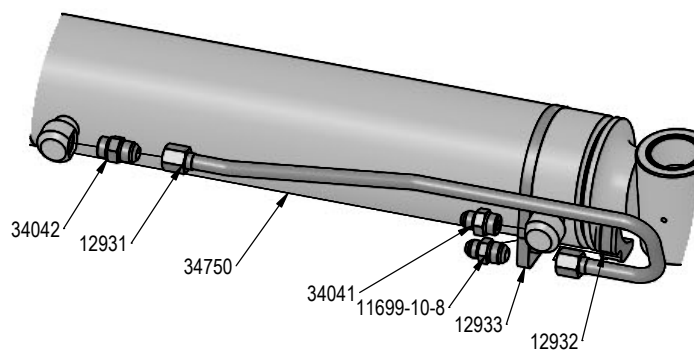


Note: The cylinder part number is stamped on the base end of the cylinder opposite of the hydraulic ports.

Cylinder	Part No.	Description
26-34750	49-12275	Seal Kit 5 x 20 Nitrided Rod



QTY.	PART NO.	DESCRIPTION
1	20037	5/16" X 1-3/4" Hex Bolt Gr 5 NC CZ
2	20040	5/16" X 2-1/2" Hex Bolt Gr 5 NC CZ
2	20134	1/2" X 3-1/2" Hex Bolt Gr 5 NC CZ
2	20219	3/4" X 2-1/4" Hex Bolt Gr 5 NC CZ
2	20564	1" X 3-1/2" Hex Bolt Gr 8 NC YZ
6	20604	1/2" Hex Center Lock Nut Gr 5 NC CZ
2	20607	3/4" Hex Center Lock Nut Gr 5 NC CZ
2	20609	1" Hex Center Lock Nut Gr 5 NC CZ
2	20611	5/16" Nyloc Hex Nut Gr 5 NC CZ
4	20744	1/2" Flat Washer CZ
2	20747	3/4" Flat Washer CZ
4	20749	1" Flat Washer CZ
4	31113	28" x 1/2" -8 JIC/-8 JIC Hose w/ Cordura
2	34040	Straight JIC x O-Ring
2	34041	Straight JIC x O-Ring
2	34042	Straight JIC x O-Ring
2	34050	Straight Thread Elbow 90° JIC x O-Ring
2	34060	Branch Tee JIC x O-Ring
2	34750	5 x 20 Cylinder Bushed Tube Ends
1	41669	Grease Location Decal



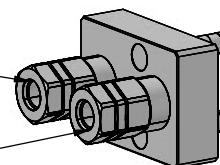
Grease Lines

Right Angle Rod (A)

Red Spiral Band X1

Right Angle Base (C)

Red Spiral Band X2



Note: View is from Multi-Coupler Installed on Top Arm.

All hoses are marked with colored spiral bands and should be attached to designated ports on the Multi-Coupler.

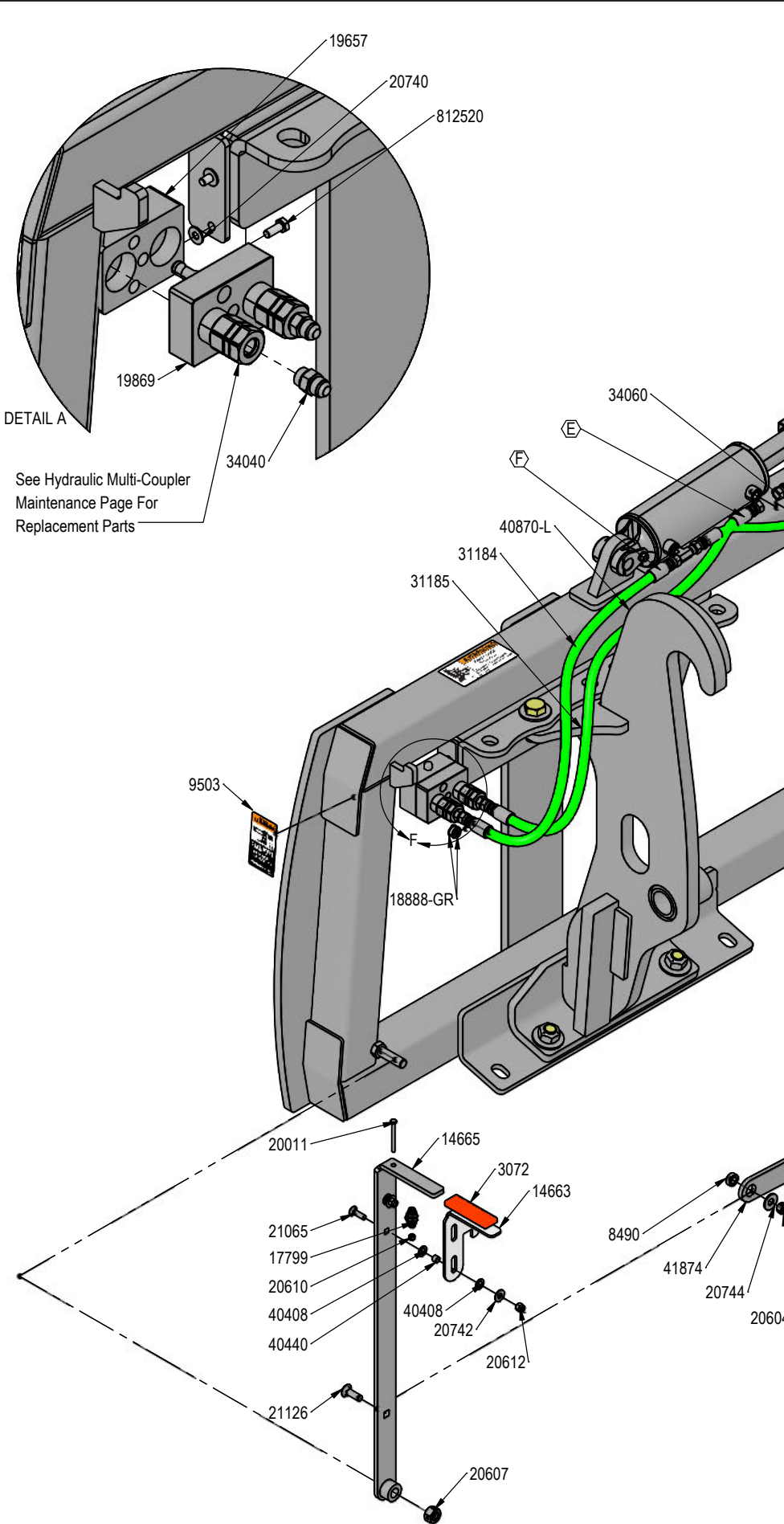
DWG. NO.: 45094

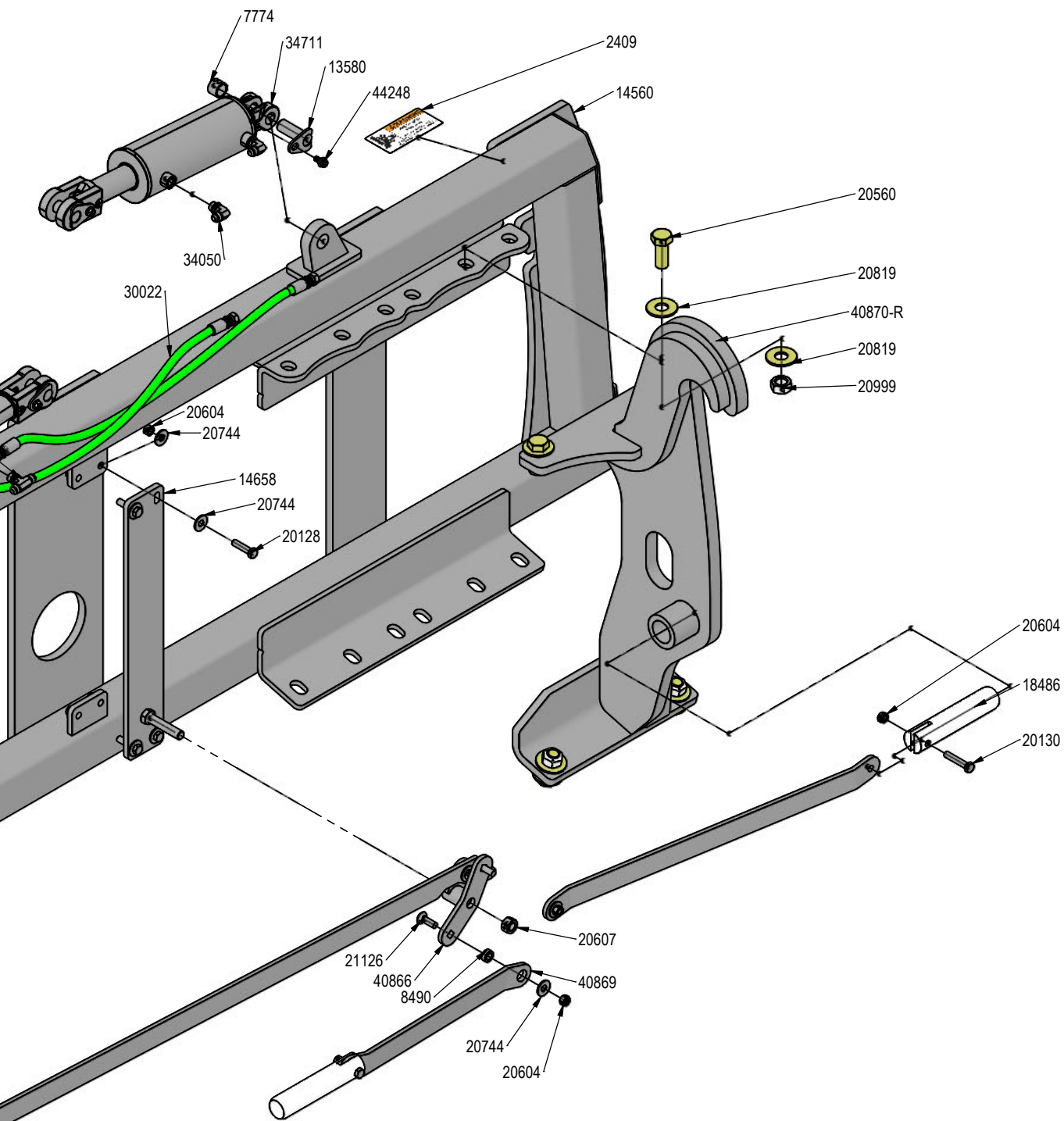
QTY.	PART NO.	DESCRIPTION
2	2409	Pinch Area, Hand
1	3072	Rubber Handle
2	7774	1" x 1" Spring Bushing
4	8490	Spacer
2	9503	Pinch Point, Foot
4	13580	Pin Weld
1	14560	Tilt Frame Weld
1	14658	Bracket, Center
1	14663	Latch
1	14665	Handle Weld
1	17799	Latch Spring
2	18486	Ag Pro SS QA Lock Pin
6	18888-GR	-12 Green - Spiral Band
1	19657	Multi-Coupling Plate - 2 Port Parking Station
1	19869	Multi-Coupling Plate - 2 Port - Mobile
1	20011	1/4" X 2-3/4" Hex Bolt Gr 5 NC CZ
4	20128	1/2" X 2" Hex Bolt Gr 5 NC CZ
2	20130	1/2" X 2-1/2" Hex Bolt Gr 5 NC CZ
8	20560	1" X 2-1/2" Hex Bolt Gr 8 NC YZ
10	20604	1/2" Hex Center Lock Nut Gr 5 NC CZ
2	20607	3/4" Hex Center Lock Nut Gr 5 NC CZ
1	20610	1/4" Nylock Hex Nut Gr 5 NC CZ
2	20612	3/8" Nyloc Hex Nut Gr 5 NC CZ
2	20740	1/4" Flat Washer CZ
2	20742	3/8" Flat Washer CZ
12	20744	1/2" Flat Washer CZ
16	20819	1" Flat Washer Heavy Duty Gr 8 (USS) YZ
8	20999	1" Hex Top Lock Nut Gr 8 NC YZ
2	21065	3/8" x 1-1/4" Carriage Bolt Gr 5 NC CZ
4	21126	1/2" x 1-1/2" Carriage Bolt Gr 5 NC CZ
2	30022	39" x 3/8" -8JIC/-8JIC Hose
1	31184	37" x 1/2" -8 JIC/-8 JIC Hose W/ Cordura
1	31185	47" x 1/2" -8 JIC/-8 JIC Hose W/ Cordura
2	34040	Straight JIC x O-Ring
2	34050	Straight Thread Elbow 90° JIC x O-Ring
2	34060	Branch Tee JIC x O-Ring
2	34711	4 x 8 Hydraulic Cylinder
4	40408	3/8" Flat Nylon Washer
2	40440	.378" ID x .503" OD x .375" Spacer
1	40866	Bell Crank
2	40869	Link, Bell Crank To Pin
1	40870-L	SS Bolt in Quick Attach - Left
1	40870-R	SS Bolt in Quick Attach - Right
1	41874	Plate, Link
4	44248	3/8 Flanged Hex Head Shoulder Bolt
2	812520	M8-1.25 x 20mm Class 10.9 Hex Bolt CZ

Note: Every hydraulic function from the front to the back of the system is designated by a ○ and a letter and can also be referenced on the Hydraulic Schematic.

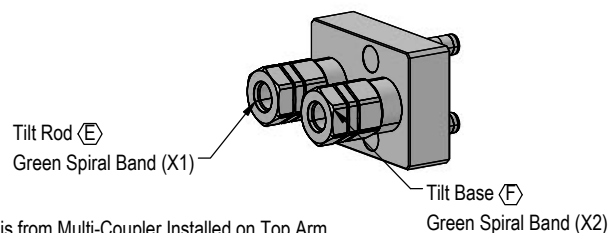
Note: The cylinder part number is stamped on the base end of the cylinder opposite of the hydraulic ports.

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





DETAIL B

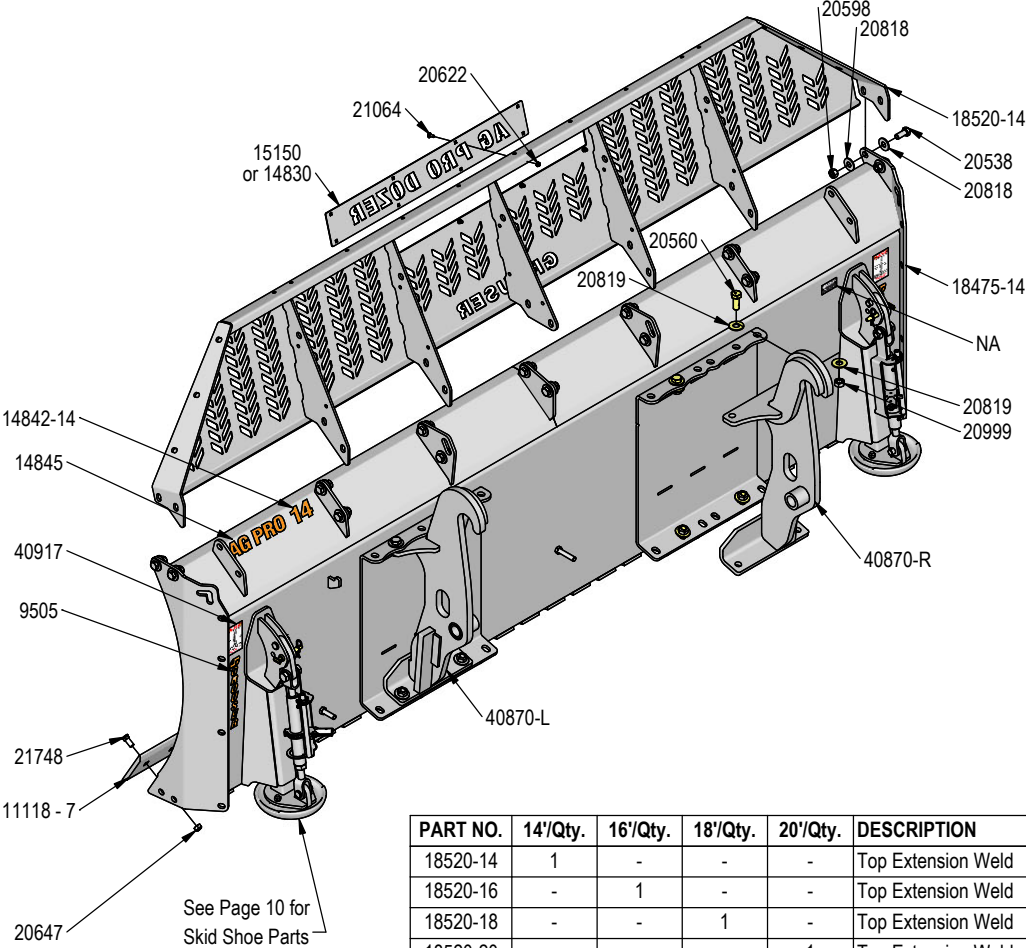


Note: View is from Multi-Coupler Installed on Top Arm.
All hoses are marked with colored spiral bands and should be attached to designated ports on the Multi-Coupler.

DWG. NO.: 42476

PART NO.	14'/Qty.	16'/Qty.	18'/Qty.	20'/Qty.	DESCRIPTION
9505	2	2	2	2	Grouser Vertical Decal
11118 - 6	-	-	3	2	6' - 3/4"x 8" Cutting Edge
11118 - 7	2	-	-	-	7' - 3/4"x 8" Cutting Edge
11118 - 8	-	2	-	1	8' - 3/4"x 8" Cutting Edge
14842-14	1	-	-	-	14' Decal
14842-16	-	1	-	-	16' Decal
14842-18	-	-	1	-	18' Decal
14842-20	-	-	-	1	20' Decal
14845	1	1	1	1	Ag Pro Blade Decal
14830	1	1	1	1	Custom Name Plate
15150	1	1	1	1	Ag Pro Dozer Name Plate
18475-14	1	-	-	-	Blade Weld
18475-16	-	1	-	-	Blade Weld
18475-18	-	-	1	-	Blade Weld
18475-20	-	-	-	1	Blade Weld

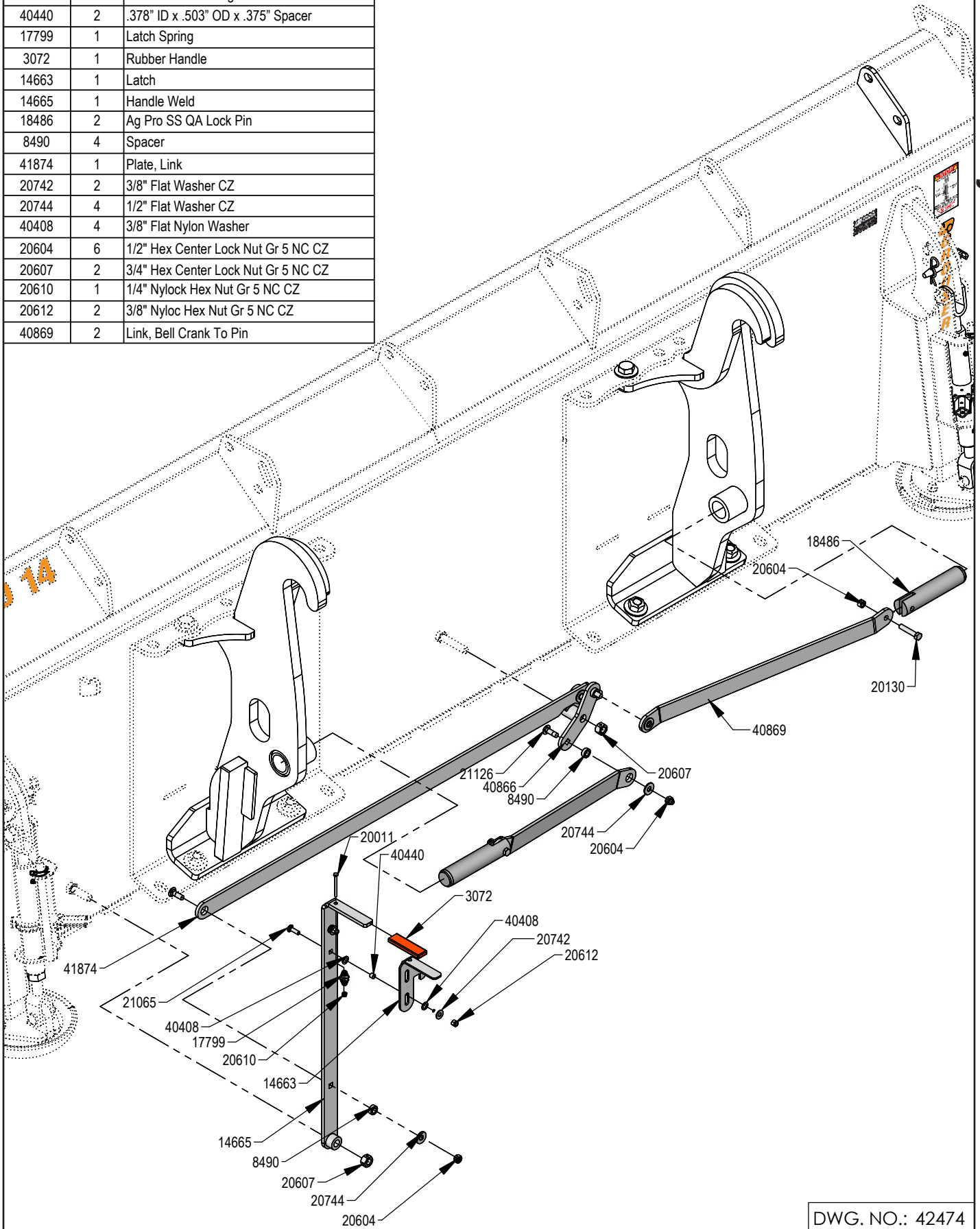
15150 for Ag Pro Dozer Name Plate and 14830 for Custom Name Plate



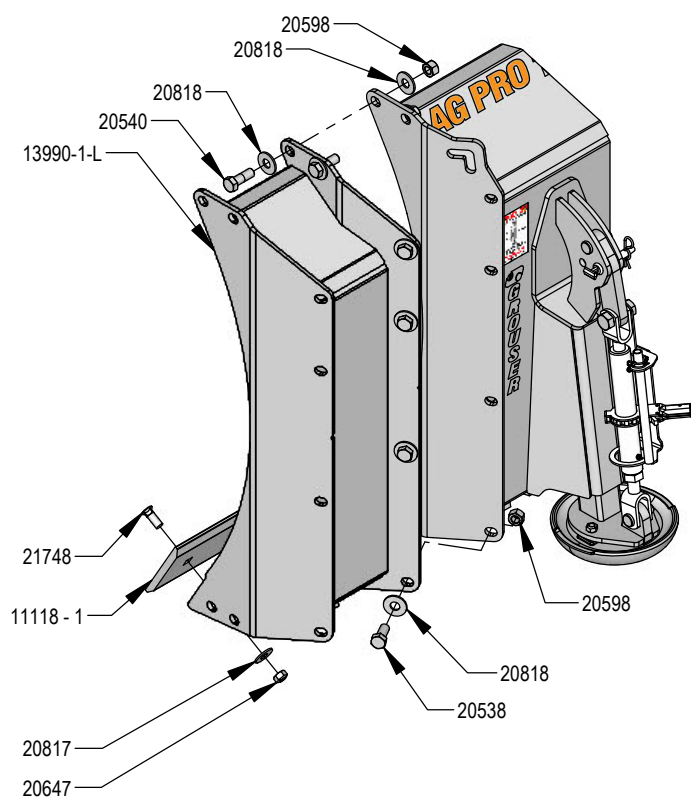
14' System Shown

PART NO.	14'/Qty.	16'/Qty.	18'/Qty.	20'/Qty.	DESCRIPTION
18520-14	1	-	-	-	Top Extension Weld
18520-16	-	1	-	-	Top Extension Weld
18520-18	-	-	1	-	Top Extension Weld
18520-20	-	-	-	1	Top Extension Weld
20538	14	18	18	22	7/8" X 2" Hex Bolt Gr 8 NC YZ
20560	8	8	8	8	1" X 2-1/2" Hex Bolt Gr 8 NC YZ
20598	14	18	18	22	7/8" Hex Nut Gr 8 NC CZ
20622	8	8	8	8	3/8" Flange Hex Nut Gr 5 NC CZ
20647	28	32	34	36	3/4" Hex Top Lock Nut Gr 5 NC CZ
20818	28	36	36	44	7/8" Flat Washer Heavy Duty Gr 8 (USS) YZ
20819	16	16	16	16	1" Flat Washer Heavy Duty Gr 8 (USS) YZ
20999	8	8	8	8	1" Hex Top Lock Nut Gr 8 NC YZ
21064	8	8	8	8	3/8" x 1" Carriage Bolt Gr 5 NC CZ
21748	28	32	34	36	3/4" X 2" Plow Bolt Gr 8 NC
40870-L	1	1	1	1	SS Bolt in Quick Attach - Left
40870-R	1	1	1	1	SS Bolt in Quick Attach - Right
40917	2	2	2	2	Ratchet Holder Storage Decal
NA	1	1	1	1	Serial Number Tag

PART NO.	QTY.	DESCRIPTION
40866	1	Bell Crank
20011	1	1/4" X 2-3/4" Hex Bolt Gr 5 NC CZ
20130	2	1/2" X 2-1/2" Hex Bolt Gr 5 NC CZ
21065	2	3/8" x 1-1/4" Carriage Bolt Gr 5 NC CZ
21126	4	1/2" x 1-1/2" Carriage Bolt Gr 5 NC CZ
40440	2	.378" ID x .503" OD x .375" Spacer
17799	1	Latch Spring
3072	1	Rubber Handle
14663	1	Latch
14665	1	Handle Weld
18486	2	Ag Pro SS QA Lock Pin
8490	4	Spacer
41874	1	Plate, Link
20742	2	3/8" Flat Washer CZ
20744	4	1/2" Flat Washer CZ
40408	4	3/8" Flat Nylon Washer
20604	6	1/2" Hex Center Lock Nut Gr 5 NC CZ
20607	2	3/4" Hex Center Lock Nut Gr 5 NC CZ
20610	1	1/4" Nylock Hex Nut Gr 5 NC CZ
20612	2	3/8" Nyloc Hex Nut Gr 5 NC CZ
40869	2	Link, Bell Crank To Pin



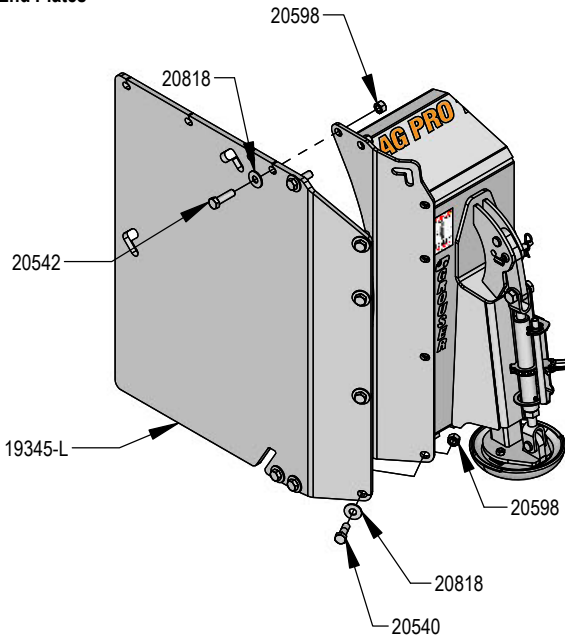
End Extensions



PART NO.	40920-1-A QTY.	DESCRIPTION
13990-1-L	1	1' End Extension - Left
13990-1-R	1	1' End Extension - Right
20538	12	7/8" x 2" Hex Bolt Gr 8 NC
20540	4	7/8" x 2-1/2" Hex Bolt Gr 8 NC
11118 - 1	2	1' - 3/4" x 8" Cutting Edge
20817	4	3/4" Flat Washer Heavy Duty Gr 8 (USS)
20818	20	7/8" Flat Washer Heavy Duty Gr 8 (USS)
20598	16	7/8" Hex Nut Gr 8 NC
20647	4	3/4" Hex Top Lock Nut Gr 5 NC
21748	4	3/4" X 2" Plow Bolt Gr 8 NC

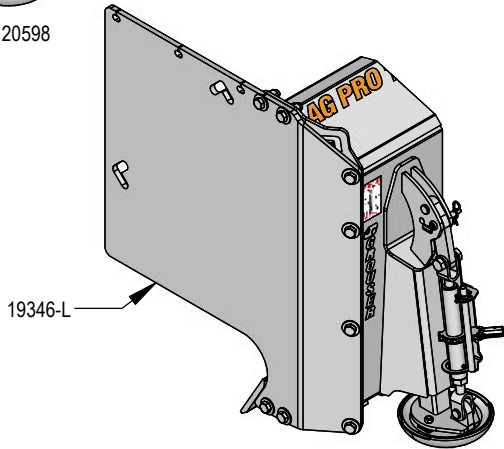
Right Side Not Shown

End Plates

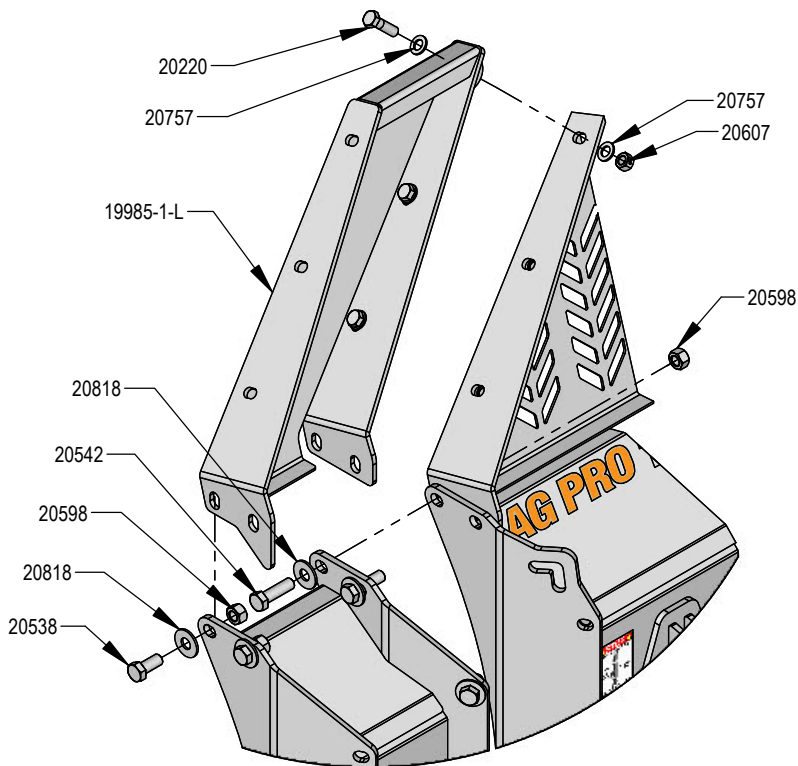


PART NO.	19346-K QTY.	19345-K QTY.	DESCRIPTION
19345-L	-	1	3/4" Box End Plate - Left
19345-R	-	1	3/4" Box End Plate - Right
19346-L	1	-	3/4" Silage Box End Plate - Left
19346-R	1	-	3/4" Silage Box End Plate - Right
20540	12	12	7/8" X 2-1/2" Hex Bolt Gr 8 NC YZ
20542	4	4	7/8" X 3" Hex Bolt Gr 8 NC YZ
20598	16	16	7/8" Hex Nut Gr 8 NC CZ
20818	16	16	7/8" Flat Washer Heavy Duty Gr 8 (USS) YZ

Right Side Not Shown



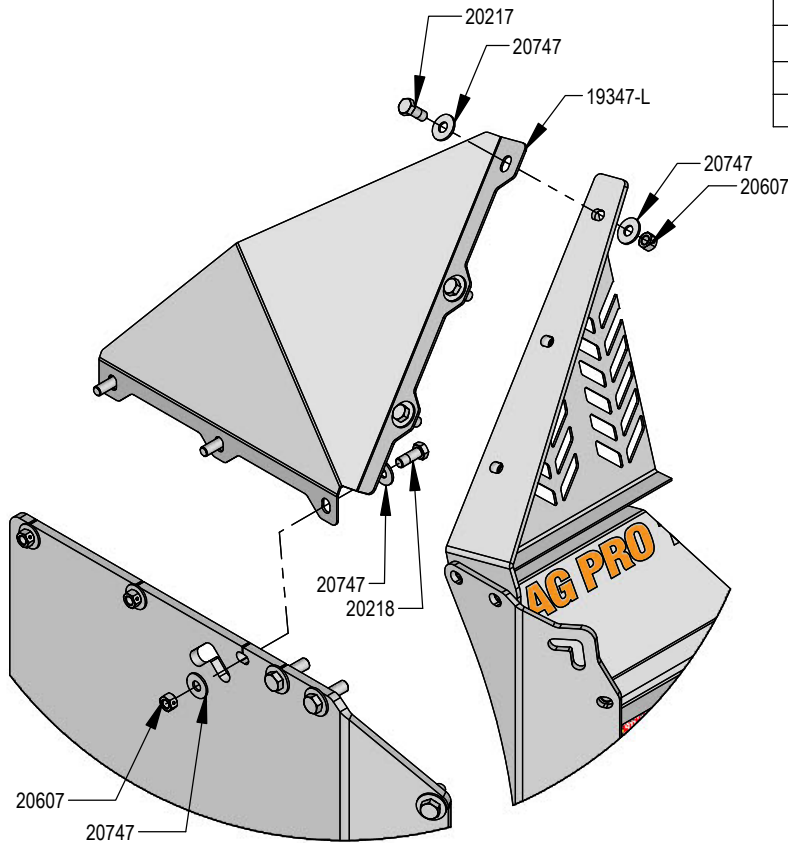
Top Extensions For End Extensions



PART NO.	19985-1-A QTY.	DESCRIPTION
19985-1-L	1	End Extension, Top Extension
19985-1-R	1	End Extension, Top Extension
20220	6	3/4" X 2-1/2" Hex Bolt Gr 5 NC CZ
20538	4	7/8" X 2" Hex Bolt Gr 8 NC YZ
20542	4	7/8" X 3" Hex Bolt Gr 8 NC YZ
20757	12	3/4" SAE Hardened Flat Washer - 1-1/2" OD
20818	8	7/8" Flat Washer Heavy Duty Gr 8 (USS) YZ
20598	4	7/8" Hex Nut Gr 8 NC CZ
20607	6	3/4" Hex Center Lock Nut Gr 5 NC CZ

Right Side Not Shown

Top Extensions For End Plates

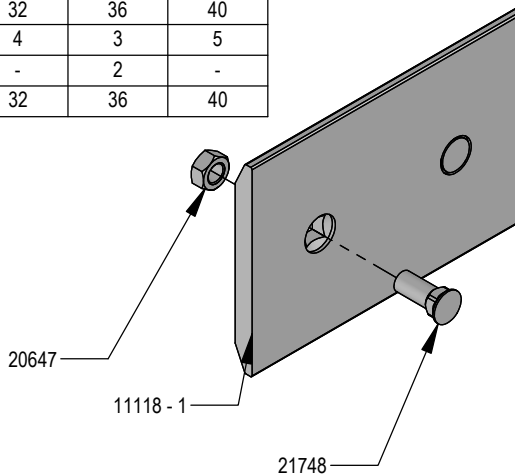


PART NO.	19347-K QTY.	DESCRIPTION
20217	6	3/4" X 1 3/4" Hex Bolt Gr 5 NC CZ
20218	6	3/4" X 2" Hex Bolt Gr 5 NC CZ
19347-L	1	End Plate Top Ext.
19347-R	1	End Plate Top Ext.
20747	24	3/4" Flat Washer CZ
20607	12	3/4" Hex Center Lock Nut Gr 5 NC CZ

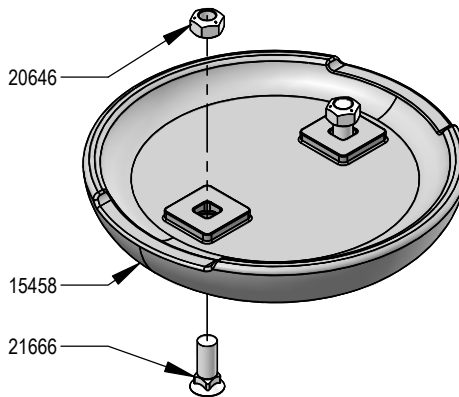
Right Side Not Shown

PART NO.	DESCRIPTION	11118-1K QTY.	11118-2K QTY.	11118-3K QTY.	11118-4K QTY.	11118-5K QTY.	11118-6K QTY.	11118-7K QTY.	11118-8K QTY.
21748	3/4" X 2" Plow Bolt Gr 8 NC	2	4	6	8	10	12	14	16
11118 - 1	1' - 3/4" x 8" Cutting Edge	1	-	-	-	-	-	-	-
11118 - 2	2' - 3/4" x 8" Cutting Edge	-	1	-	-	-	-	-	-
11118 - 3	3' - 3/4" x 8" Cutting Edge	-	-	1	-	-	-	-	-
11118 - 4	4' - 3/4" x 8" Cutting Edge	-	-	-	1	-	-	-	-
11118 - 5	5' - 3/4" x 8" Cutting Edge	-	-	-	-	1	-	-	-
11118 - 6	6' - 3/4" x 8" Cutting Edge	-	-	-	-	-	1	-	-
11118 - 7	7' - 3/4" x 8" Cutting Edge	-	-	-	-	-	-	1	-
11118 - 8	8' - 3/4" x 8" Cutting Edge	-	-	-	-	-	-	-	1
20647	3/4" Hex Top Lock Nut Gr 5 NC CZ	2	4	6	8	10	12	14	16

PART NO.	DESCRIPTION	11118-12K QTY.	11118-14K QTY.	11118-16K QTY.	11118-18K QTY.	11118-20K QTY.
21748	3/4" X 2" Plow Bolt Gr 8 NC	24	28	32	36	40
11118 - 4	4' - 3/4" x 8" Cutting Edge	3	2	4	3	5
11118 - 3	3' - 3/4" x 8" Cutting Edge	-	2	-	2	-
20647	3/4" Hex Top Lock Nut Gr 5 NC CZ	24	28	32	36	40

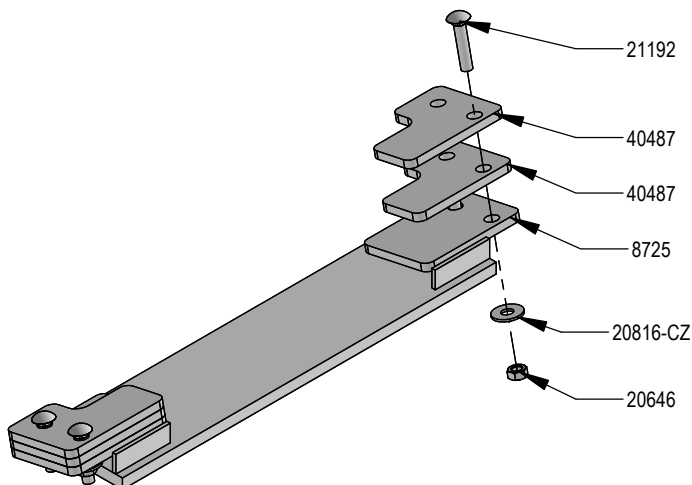


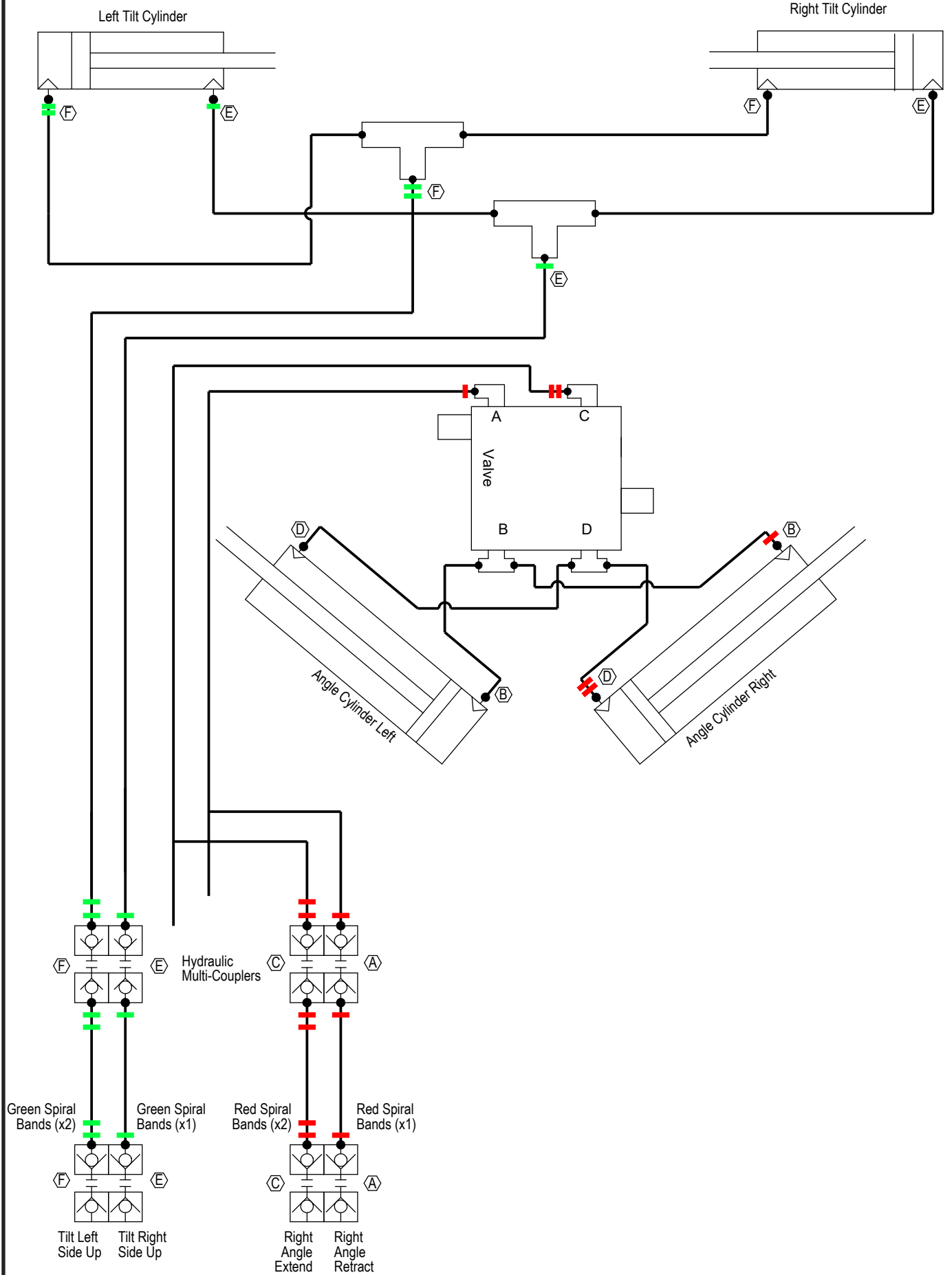
PART NO.	DESCRIPTION	15458-1K QTY.	15458-K QTY.
21666	5/8" X 1-3/4" Plow Bolt Gr 5 NC (#3 Flat Head)	2	4
15458	12" Round Mushroom Skid Shoe	1	2
20646	5/8" Hex Top Lock Nut Gr 5 NC CZ	2	4



PART NO.	DESCRIPTION	QTY.
21192	5/8" x 3" Carriage Bolt GR 5 NC CZ	8
40487	HD Skid Shoe Plate	8
8725	Skid Shoe	2
20816-CZ	5/8" Flat Washer Grade 8 (USS) CZ	8
20646	5/8" Hex Top Lock Nut Gr 5 NC CZ	8

Contact Grouser Products and order each part individually.





Tractor Service Valve

Before Each Use:

- 1. Disconnect the mobile half from the parking station and the cap from the fixed half.
- 2. Check that there is no contamination (salt, sand, dirt, etc.):
 - A. On the pins.
 - B. Inside the cam.
 - C. In the locking mechanism area.
 - D. On the face of the plates and couplings.
- 3. In case of contamination, remove it with a cloth and/or compressed air.
- 4. Check that there is still a lubricant/anti-corrosion (grease or silicone - see Note 1):
 - A. On the pins.
 - B. Inside the cam.
 - C. In the locking mechanism area.
- 5. Connect the mobile and fixed halves together.

After Each Use:

- 1. Disconnect the mobile half from the fixed half.
- 2. Clean all contamination (salt, sand, dirt, etc.) from the following areas:
 - A. On the pins.
 - B. Inside the cam.
 - C. In the locking mechanism area.
 - D. On the face of the plates and couplings.

*Use a cloth or compressed air. It is advised to not use water to clean these surfaces
- 3. Apply a lubricant/anti-corrosion (grease or silicone - see Note 1):
 - A. On the pins.
 - B. Inside the cam.
 - C. In the locking mechanism area.
- 4. Connect the cap to the fixed half and the mobile half to the parking station.

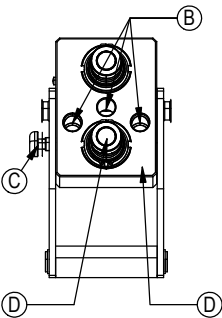
Note 1:

When sand and salt are present, or the plates under go a washdown, a heavy duty silicone spray lubricant should be used to replace grease from the factory. The lubricant should help protect from corrosion without collecting dust and contaminants, and will resist washing off when exposed to water.

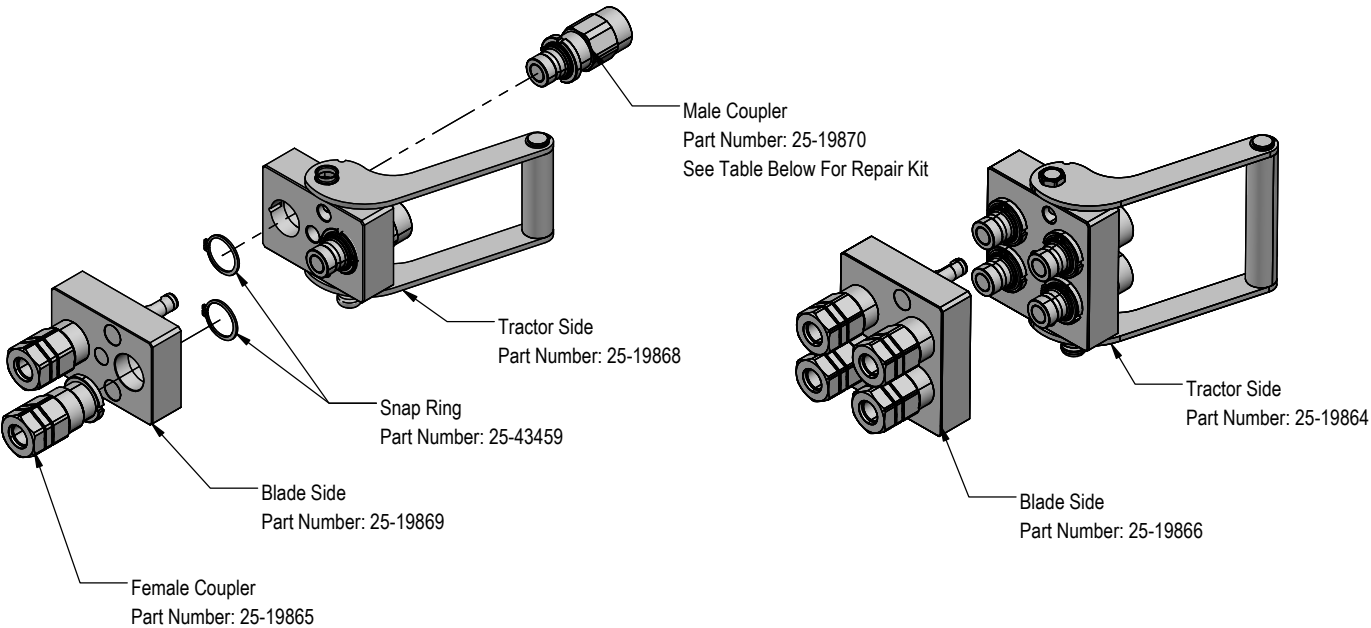
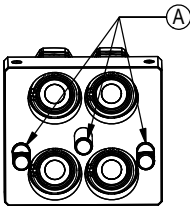
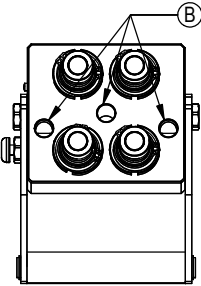
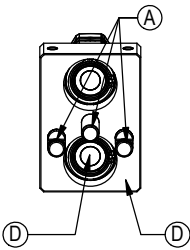
Recommended Lubricant Brands:

Fluid Film (Aerosol or Non-Aerosol), LPS-2 Heavy Duty Lubricant, or CRC 3-36.

Fixed Half



Mobile Half



PN	Description
25-43425	Male Coupler O-Ring Repair Kit

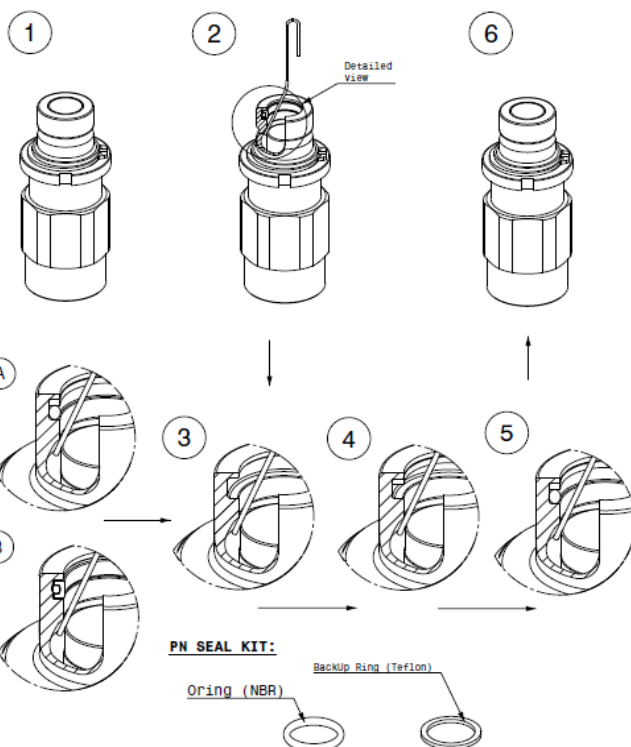
Cleaning The Male Interface Seal:

1. Make sure the coupling is securely fastened into the plate or place in a vice.
2. Using a blunt, non-marring tool, depress the valve face until the seal is exposed. Insert a bent metal wire between the valve face and the body of the coupling. Use caution not to damage or scratch the seal when inserting the wire.
3. Inspect the seal and interior surfaces for contamination.
4. In case of contamination, carefully wipe surfaces with a soft cloth, or use compressed air to blow the contamination out. Do Not press hard on the seal as contamination can scratch the seal surface.
5. Using a non-marring tool, depress the valve face and remove the metal wire. Release the valve to the flush position.

Cleaning The Female Bushing:

1. Make sure the coupling is securely fastened into the plate or place in a vice.
2. Using a non-marring tool, depress the outer ring to expose the bushing. There is no need to expose the valve seal, so stop pressing before the valve is opened.
3. Inspect the interior body and bushing surfaces for contamination.
4. In case of contamination, carefully wipe surfaces with a soft cloth, or use compressed air to blow the contamination out.
5. Release the outer ring so that it returns to the flush position.

MALE FAP - REPAIR KIT INSTRUCTIONS



DISASSEMBLING STEPS (see figures)

1. Place the coupling in a vice.
2. Bend positioning clip as shown. Using a blunt, non marring object, depress valve face until seals are exposed. Insert the positioning clip between valve face and body, captivating the valve face.
3. Using an O-ring pick or similar device, remove the seal from retaining groove. Clean properly the retaining groove with a clean cloth.

Note: Some M FAP are originally assembled with different seal technologies (see figures A and B) but both used O-ring and backUp ring as replacement kit.

ASSEMBLING STEPS (see figures)

4. Insert the backup ring (4) in the seat and even with the use of a non sharpen tool. Place the BackUp ring on the superior shoulder of the seat in order to leave space for the O-ring (see figure 4).
5. Lubricate the O-ring with a fluid compatible with the seals compound. **Warning: using non compatible fluid would compromise the efficiency of the coupling.**
6. Push the piston with a blunt, non marring tool and take the metal clip out. Release the piston.

FUNCTIONING CHECK

Assemble the male coupling with the female in order to check the functioning and check for leaks.

BY REPLACING THE SEALS, YOU REMOVE THE WARRANTY AND BECOME RESPONSIBLE FOR THE SAFETY AND THE EFFICIENCY OF THE COUPLING!

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.



755 2nd Ave NW - West Fargo, ND 58078
+1 701-282-7710 | info@grouser.com
www.grouser.com