



# Ag Pro Plus HD

## Undercarriage Installation Instructions

### Case Steiger Tier 4B

470-620 Quad

**For Models:**

**Steiger Quad (Tier 4B):** 470, 500, 540, 580, 620

Purchase Date
Serial Number
Model Number
Tractor Model
Dealer

# To The Owner

This manual contains information concerning the installation of the undercarriage. 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 read this manual carefully and keep the manual available for ready reference. If you have any questions or concerns, contact Grouser Products.

## Caution:

- Always use caution when working around any equipment.
- Always wear safety glasses.
- Follow tractor manufacturer's safety guidelines when installing this product.
- Use paint where necessary to prevent rust.
- Do not modify or permit anyone else to modify or alter the equipment and its components without first consulting Grouser Products.



Serial Number Location

## Note:

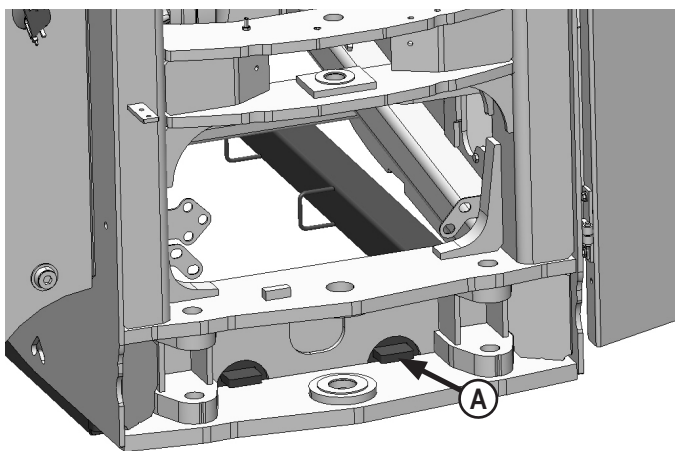
- Read all instructions prior to performing installation.
- When installing hardware, only finger tighten until all hardware is in place.
- A full diagram of the assembly with the full list of parts is on pages 6-7.
- Unstrap and remove any components that are attached for shipping.
- Tractor frame not shown in some diagrams for clarity.

## Pre-Installation

2. If applicable, remove front weights, weight bracket, toolboxes, and tow cable holder. If a tow cable kit was purchased from Grouser, the tow cable will be reinstalled in a later step.
3. Unscrew the 1" vertical bolts at the rear of the undercarriage.
4. Drill the front 6 - holes to 1" on the tractor where the undercarriage will be installed. Refer to the diagram of the undercarriage for clarification of what holes will be used for the installation.

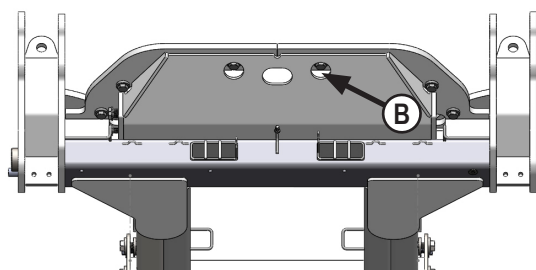
## Undercarriage Installation

5. Position undercarriage under tractor, center on the frame of the tractor.

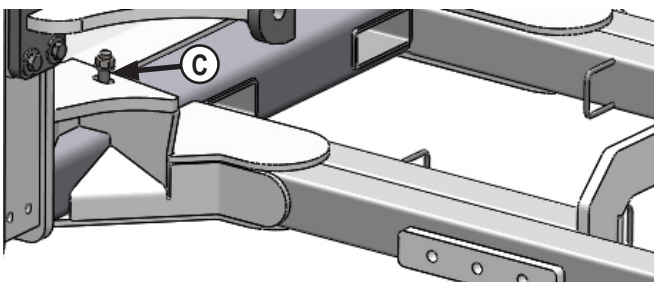


6. Lift the rear of the undercarriage and set the top plates on the tractor cross member (A). Push the undercarriage back until the vertical push plates are firmly against the cross member.

**NOTE: When lifting the undercarriage, watch for any potential pinching of hoses or any other components to prevent any damage.**

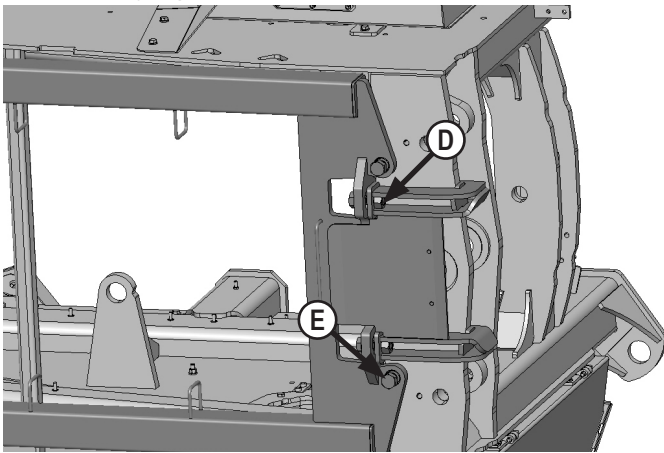


7. Lift the front of the undercarriage up and insert 6 - 1" x 3-1/2 bolts and 6 - .375" thick washers from the bottom through the front 6 slots of the undercarriage that line up with the vertical holes on the tractor frame (B).
8. After all 6 bolts are through the tractor frame, attach with a 1" hardened washer and a 1" nut from the top.



9. Insert 2 - 20mm x 90mm bolts and 2 - .375" thick washers from the bottom through the remaining 2 rear slots of the undercarriage that line up with the vertical holes on the tractor frame (C).

10. After the rear 2 bolts are through the tractor frame, attach with a 3/4" hardened washer and a 20mm nut from the top. Verify that the rear of the undercarriage is still firmly against the cross member.



11. At the rear of the undercarriage and pivot area of the tractor, hook the rear hose routing bracket to the tractor frame and bolt to the rear of the undercarriage with 2 - 1" x 3" bolts, 2 - 1" hardened washers, and 2 - 1" nuts. The nut will fit between the plates on the brackets (D).

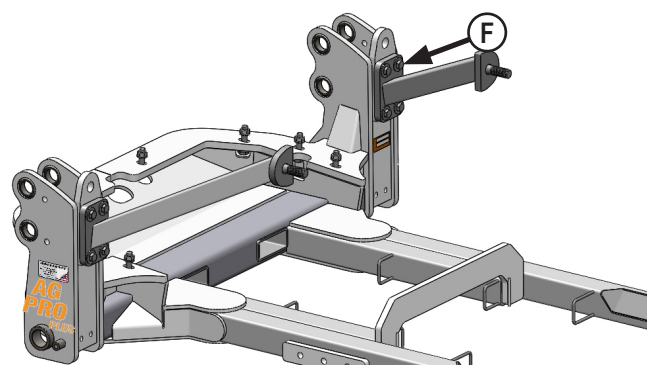
12. Center the bracket on the undercarriage and tractor as close as you can. Torque the 1" bolts on the bracket to 903 ft-lbs. There can be a gap between the bracket and the undercarriage.

13. Tighten the 1" x 2" vertical at the rear of the undercarriage (E).

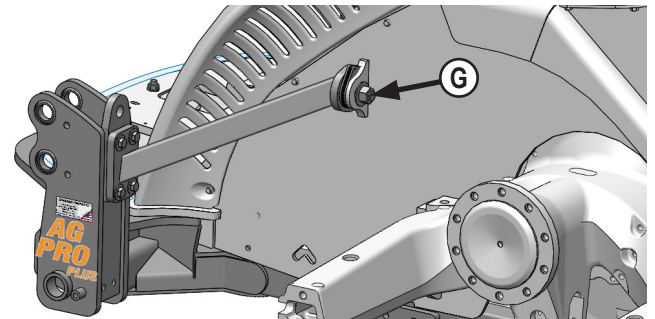
14. Torque the rear vertical 1" bolts (E) to 500-600 ft-lbs.

15. Torque the front vertical 1" bolts (B) to 903 ft-lbs.

16. Torque the front vertical 20mm bolts (C) to 432 ft-lbs.

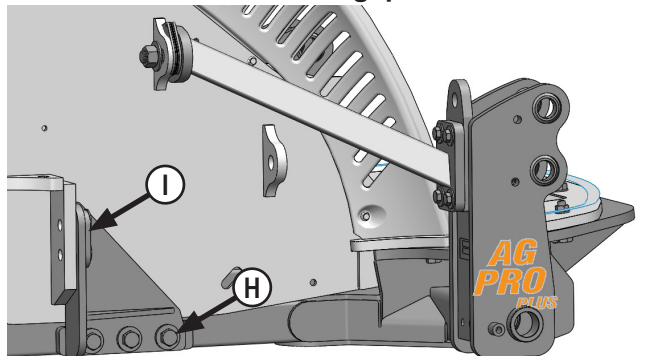


17. Attach the front upper support arms to the undercarriage with 4 - 3/4" x 2-1/2" bolts and 4 - 3/4" hardened flat washers on each side (F).



18. Attach the front upper support arms to the tractor with 2 - 1-1/4" flat washer and 2 - 1-1/4" (G).

**NOTE: Add shims between the support arm and the tractor frame to reduce any gap if necessary. Use shims until there is a gap less than 1/16".**



19. Remove the 2 - 24mm bolts and spacers from the front axle on the left and right side of the tractor. Discard the spacers.

20. Install the yoke brackets to each side of the undercarriage with 3 - 1" x 2-1/2" bolts and 3 - 1" ID x .375" thick washers (H).

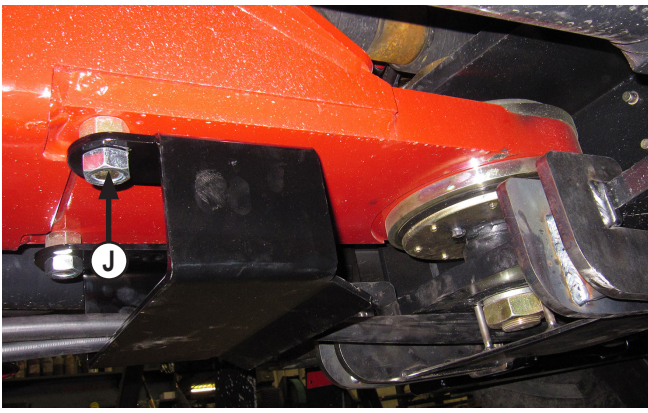
21. Dip the previously removed 24mm bolts in W30 oil and install the yoke brackets with the 24mm bolts and a heavy 1" flat washer on each bolt (I).

22. Torque the upper support arm 3/4" bolts (F) to 380 ft-lbs.

23. Torque the upper support arm 1-1/4" nuts (G) to 1,105 ft-lbs.

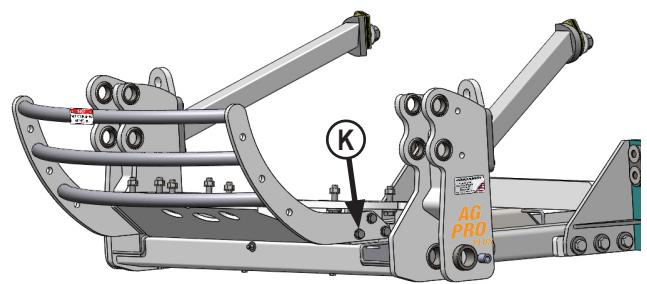
24. Torque the 24mm bolts (I) to 555 ft-lbs.

25. Torque the yoke bracket 1" bolts (H) to 903 ft-lbs.



**26.** Attach the rear hose routing plate to the tractor frame behind the pivot point and before the drawbar. There will be 2 bolts sticking down. Attach with 2 - 20mm nuts (**J**). Make sure the lip of the plate is facing towards the front of the tractor.

**27.** Torque the 20mm nuts (**J**) to 432 ft-lbs.



**28.** Install the grill guard to the front of the undercarriage with 3 - 3/4" x 1-3/4" bolts and 3 - 3/4" flat washers on each side (**K**).

**29.** Torque the 3/4" bolts (**K**) to 257 ft-lbs.

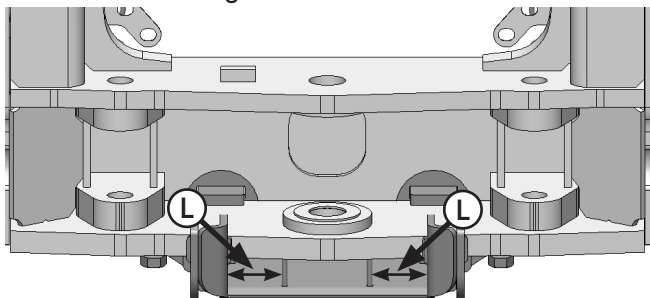
**NOTE: If applicable, refer to Page 9 to attach the front of the tow cable.**

**30.** After first 8 hours of use, re-torque all bolts.

**31.** Check all fasteners regularly to ensure proper operation of equipment.

# Hose Routing

32. Route hoses through the hose loops on the undercarriage and through the large loop at the rear of the undercarriage.



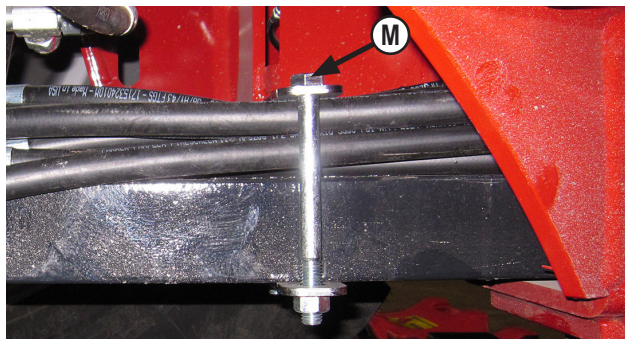
33. Send hoses through the bracket at the pivot point but stay on the outside of the rods that are by the center large nut on the tractor. The hoses should be between the rods and the inside plates of the bracket (L).

34. Route the hoses through the hose routing plate that was installed in Step #26 on Page 4.

35. Use Zip Ties to group some hoses on the left and right side of the hose routing plate. Strap the Zip Ties over the top part of the routing plate that is bolted to the tractor frame to keep the hoses towards the outside of each side of the routing plate.

36. Continue to route the hoses down the top of the drawbar to the back of the tractor where you can plug them into the tractor SCV Ports.

**NOTE: Refer to diagram at the bottom of the page if clarification is needed for Step #37-42.**



37. Strap the hoses to the drawbar with a set of hose holding plates in 2 locations (M). Place 1 set as close to the front of the drawbar as possible and the other behind the axle before the hoses would be routed upwards to be plugged in.

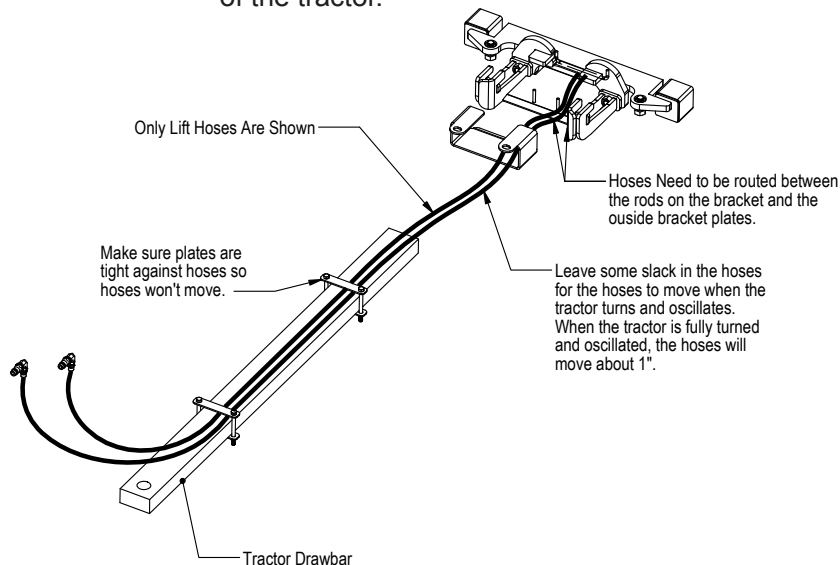
38. Make sure to keep some slack in the hose between the pivot point of the tractor and the first set of hose holding plates. The hoses will move when the tractor moves and oscillates.

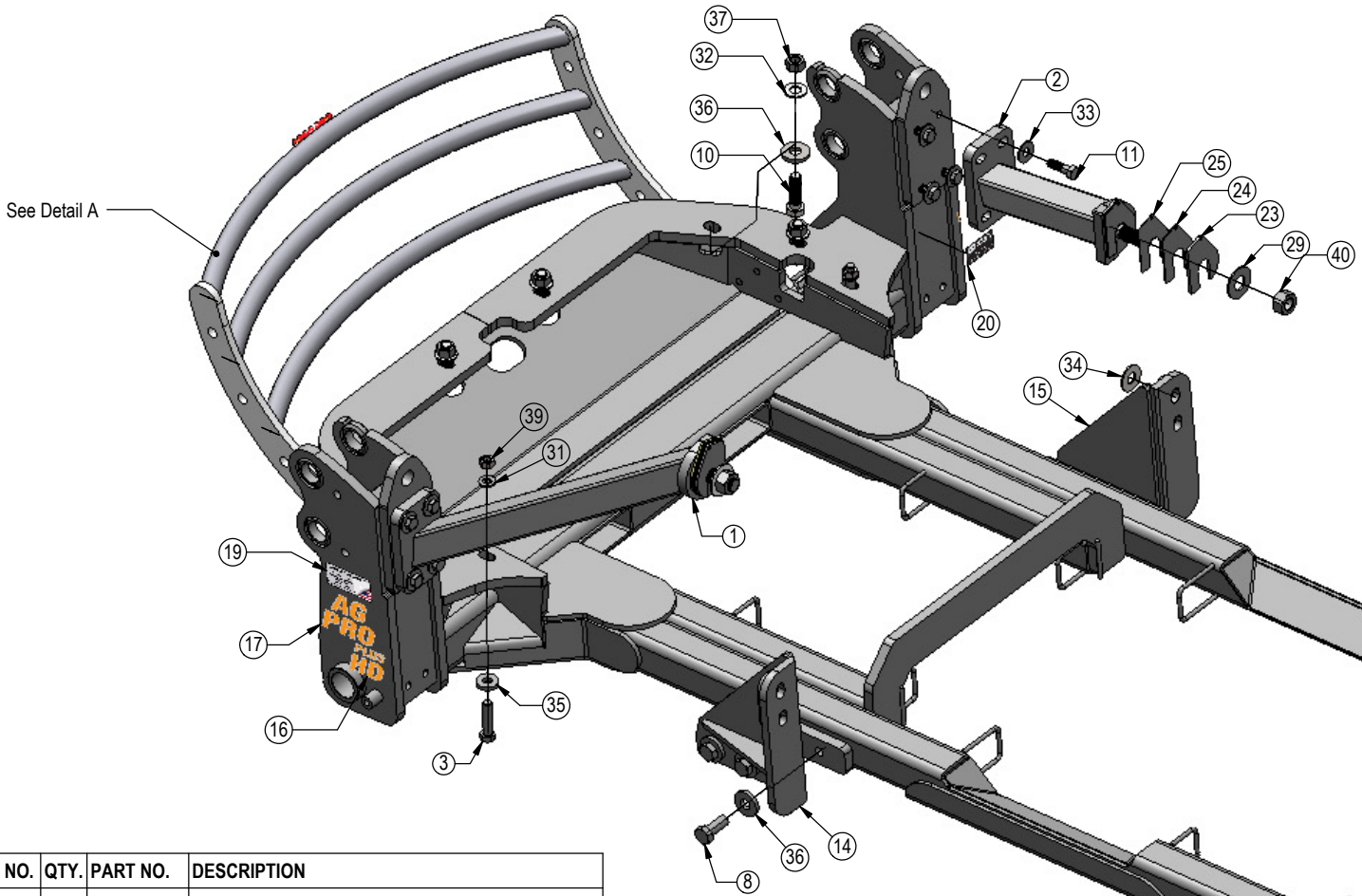
39. For each set of plates, use 2 - 1/2" x 5-1/2" bolts and 2 - 1/2" lock nuts. If you have a 12-20 or 3-5 dozer blade, use 1/2" x 6" bolts instead.

40. Tighten the 1/2" nuts so the hoses are tight and don't move. If you have the nuts as far as they go and can't get the plates tight against the hoses, use the provided 3/4" spacers and 1/2" washers between the plates and the nuts to get everything tight against the drawbar. Refer to drawing on pages 8-9 for clarification.

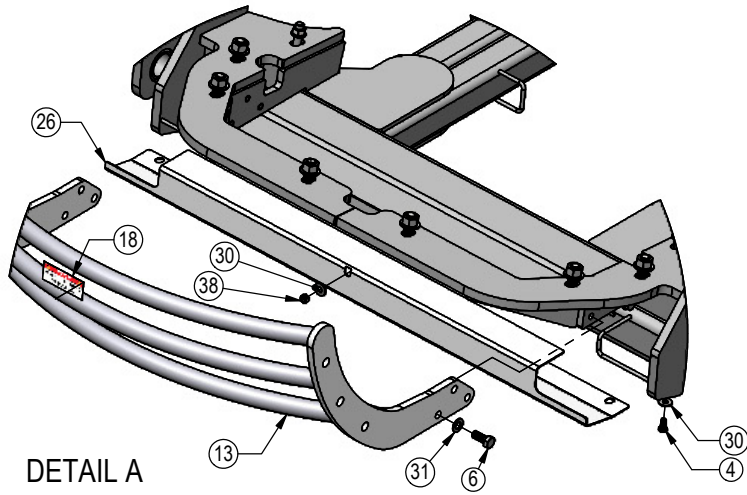
41. Make sure you still have some slack in the hoses by the pivot area so the hoses don't get pulled too tight when the tractor moves but don't make them too loose that they will get caught on any debris. Turn the tractor and oscillate the tractor to verify there is enough slack.

42. Plug the hoses into the open SCV's at the back of the tractor.





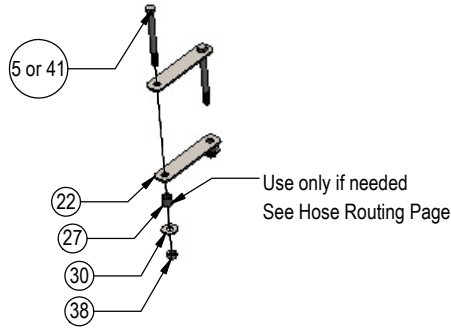
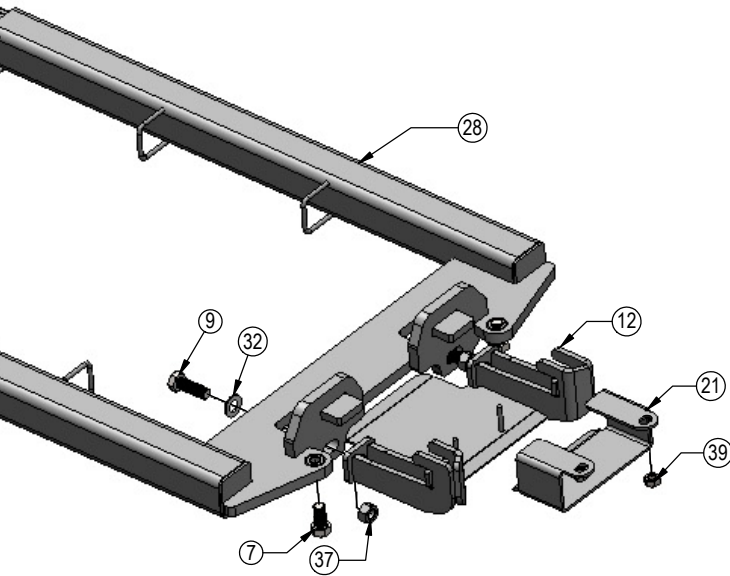
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	11-18716-L	Support Arm, Quad (T4B)
2	1	11-18716-R	Support Arm, Quad (T4B)
3	2	16-1510	20mm x 2.5mm x 90mm Hex Bolt
4	4	16-20124	1/2" x 1" Hex Bolt Gr.5 NC
5	4	16-20139	1/2" x 5-1/2" Hex Bolt Gr 5 NC
6	6	16-20217	3/4" x 1-3/4" Hex Bolt Gr 5 NC
7	2	16-20558	1" x 2" Hex Bolt Gr. 8 NC
8	6	16-20560	1" x 2-1/2" Gr.8 NC Hex Bolt
9	2	16-20562	1" x 3" Hex Bolt Gr.8 NC
10	6	16-20564	1" x 3-1/2" Hex Bolt Gr.8 NC
11	8	16-22220	3/4" x 2-1/2" Hex Bolt Gr.8 NC
12	1	18-17280R1	Hose Bracket
13	1	18-18059R1	Grill Guard Weld
14	1	18-18706-L	Bracket, Yoke
15	1	18-18706-R	Bracket, Yoke
16	1	27-15588	HD Decal
17	2	27-18880	Ag Pro Plus Decal
18	1	27-18882	Not For Pushing or Pulling Decal
19	1	27-18887	Grouser Name Plate Decal
20	1	27-9506R1	Grouser Dozer Metal Serial Tag
21	1	44-17208R1	Plate
22	4	44-17245	Plate
23	4	44-18721	Support Arm Shim, .25"
24	4	44-18722	Support Arm Shim, .125"

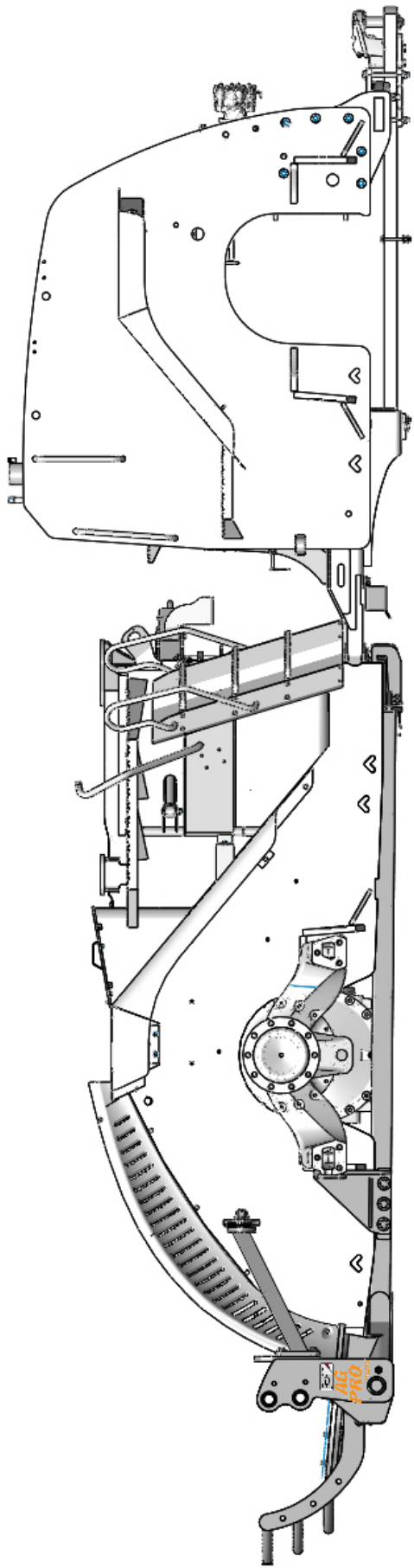


DETAIL A  
SCALE 1 : 19

ITEM NO.	QTY.	PART NO.	DESCRIPTION
25	4	44-18723	Support Arm Shim, .063"
26	1	44-40504	Plate, Cover
27	4	53-15528	Round Tube
28	1	54-40565R1	Undercarriage Weld
29	2	57-11671	1-1/4" Flat Washer
30	9	57-20744	1/2" Flat Washer
31	8	57-20757	3/4" Flat Washer - 1-1/2" OD
32	8	57-20759	1.00" Flat Washer-2" OD
33	8	57-20817	3/4" Flat Washer Heavy Duty Gr 8 (USS)
34	4	57-20819	1" Flat Washer Heavy Duty Gr 8 (USS)
35	2	57-3680	3/4" ID x 2.00 OD x .375" Heavy Washer CZ Plated
36	12	57-3682	1.00" ID x 2-1/2" OD x .375" Heavy Washer CZ Plated
37	8	70-20599	1" Hex Nut Gr 8 NC
38	5	70-20604	1/2" Center Lock Hex Nut
39	4	70-20872-10	20mm Hex Nut 2.5 Pitch Class 10 Zinc
40	2	70-20981	1-1/4" Hex Nut Gr 5 NC
41*	4	16-20140	1/2" x 6" Hex Bolt Gr 5 NC

Item #41 - Used only with 12-20 & 3-5 Dozer Hydraulics in place of Item #5



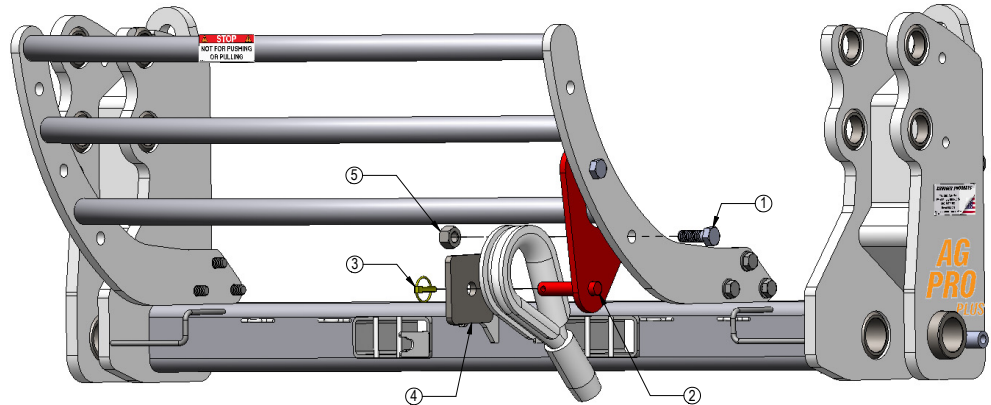




# Assembling Lift Components

Refer to the Ag Pro Plus Owner's Manual & Parts Book for instructions on how to assemble the lift components.

## Tow Cable Components



Item No.	Qty.	Part No.	Description
1	2	16-20540	7/8" X 2-1/2" Hex Bolt Gr 8 NC
2	1	18-19095	Tow Cable Bracket
3	1	43-16764	7/16" x 1-3/4" Lynch Pin
4	1	44-15585	Tow Cable Holding Plate
5	2	70-20598	7/8" Hex Nut Gr 8 NC

## Notes

**Page Left Blank Intentionally**



# 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](mailto:info@grouser.com)  
[www.grouser.com](http://www.grouser.com)