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

<table>
<thead>
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<th>Purchase Date</th>
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<tbody>
<tr>
<td>Serial Number</td>
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<tr>
<td>Model Number</td>
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<tr>
<td>Tractor Model</td>
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<td>Dealer</td>
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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.

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.

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

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

See Detail A
## Table of Parts

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<th>ITEM NO.</th>
<th>QTY.</th>
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<th>DESCRIPTION</th>
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<td>Support Arm Shim, .063&quot;</td>
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*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

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<td>Tow Cable Bracket</td>
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<td>43-16764</td>
<td>7/16” x 1-3/4” Lynch Pin</td>
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<td>44-15585</td>
<td>Tow Cable Holding Plate</td>
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<td>5</td>
<td>2</td>
<td>70-20598</td>
<td>7/8” Hex Nut Gr 8 NC</td>
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Notes
Contact Us

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

Grouser Products
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Improvements

Grouser Products Inc. is continually striving to improve its products. We reserve the right to change prices, specification, or equipment at any time without notice. We also reserve the right to make improvements or changes when it becomes practical and possible to do so without incurring any obligation to make changes or additions to the equipment sold previously.

Warranty

Grouser Products warrants to the original purchaser of each item that the product be free from defects in material and workmanship under normal use and service for a period of two years from date of original retail delivery. If such equipment is found to be defective within two years, it is the obligation of Grouser Products under this warranty to repair or replace (exclusive of the cost of labor and transportation), any equipment or parts, in the judgment of Grouser Products to be defective in material or workmanship.

All equipment or parts claimed to be defective in material or workmanship must be made available for inspection at the place of business of a dealer authorized to handle the equipment covered by this warranty, or, upon request by Grouser Products, shipped to the Grouser Products factory in West Fargo, North Dakota. Grouser Products shall have no obligation to bear the cost of labor or transportation in connection with replacement or repair of any such defective parts in the setup process.

This warranty covers only defects in material and workmanship. It does not cover depreciation or damage caused by normal wear, accident, improper assembly, improper adjustments, improper maintenance including lack of proper lubrication, or improper use. Therefore, Grouser Products liability under this warranty shall not be effective or actionable unless the equipment is assembled, maintained and operated in accordance with the operating instructions accompanying the equipment. Grouser Products shall have no liability if the equipment has been altered or reworked without the written authorization of Grouser Products.

Grouser Products' parts, which are furnished under this warranty and properly installed, shall be warranted to the same extent as the original parts under this warranty if, and only if, such parts are found to be defective within the original warranty period covering the original equipment.