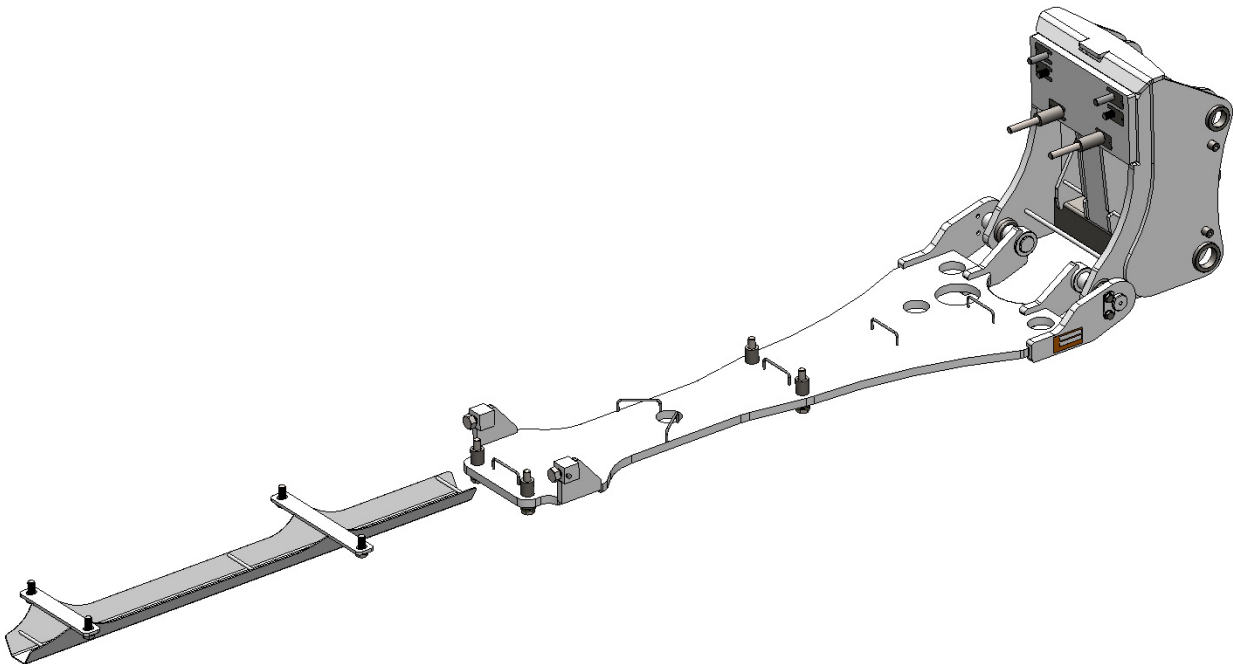




Fendt 1000 Vario & Challenger 1000

Undercarriage Installation Instructions



For Models Without Factory Three Point Linkage:

Fendt 1000 Vario: 1038, 1042, 1046, 1050

Challenger 1000: 1038, 1042, 1046, 1050

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 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.

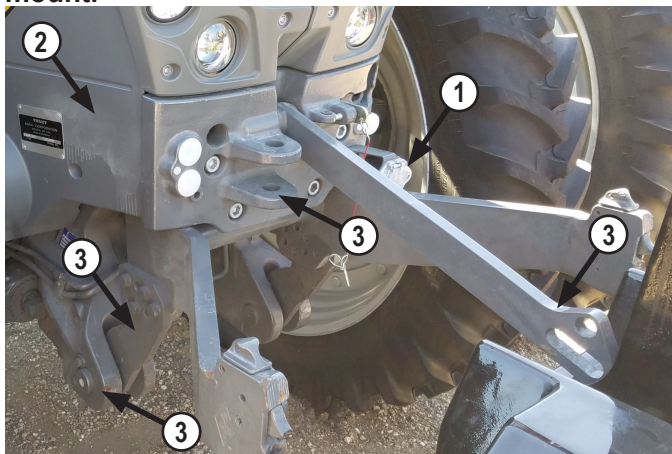
Undercarriage Installation

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:

- 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.
- Tractor frame not shown in some diagrams for clarity.
- Unstrap and remove any components that are attached for shipping.
- Read all instructions prior to performing installation.
- Grouser 240 lift system needs to be down to install the front bolts on the new undercarriage mount.

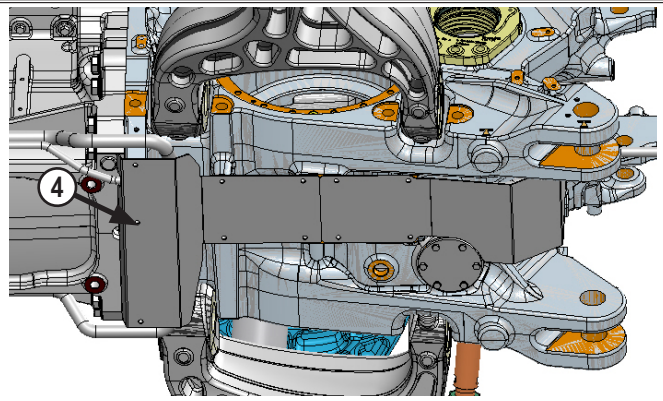


1. Remove the electrical socket (1) from the front of the tractor. It will be reinstalled in Step #22. The bracket can stay on the front casting plate.

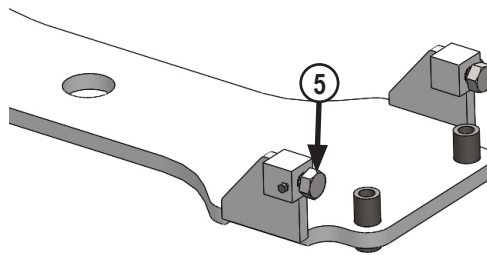
2. Remove the side shields (2).

3. Remove the front weights, front rigid arms and brackets, bottom pins and retaining hardware, the top link and the front casting plate (3).

NOTE: The threaded hole at the end of the bottom pin is for installing a bolt to aid in pulling out the pin.

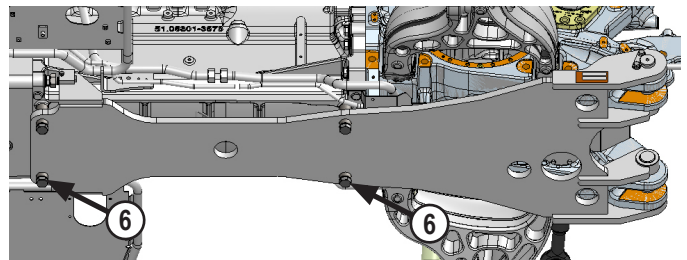


4. Remove the rear shield from underneath the front of the tractor (4).



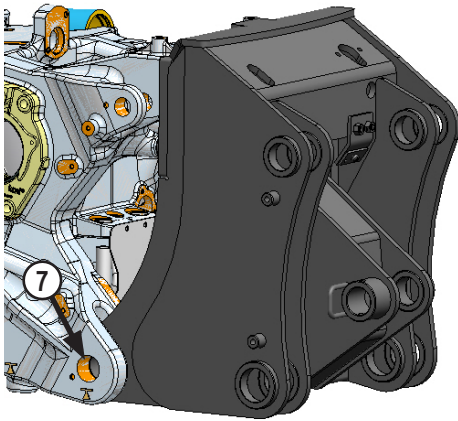
5. Install 2 - 1" x 2" bolts in the threaded blocks at the rear of the support (5). Turn the bolts all the way in for installation. The bolts will be adjusted in Step #19.

6. Position the front support under the tractor with the front ears towards the front of the tractor and center with the frame of the tractor.

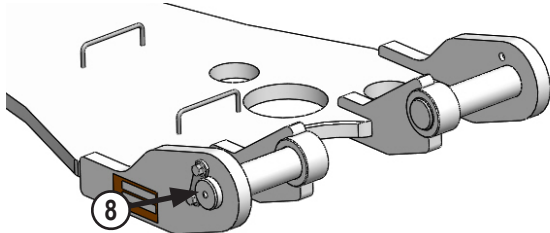


7. Raise the front support until the support lines up with the ears on the tractor frame and the undercarriage mount.

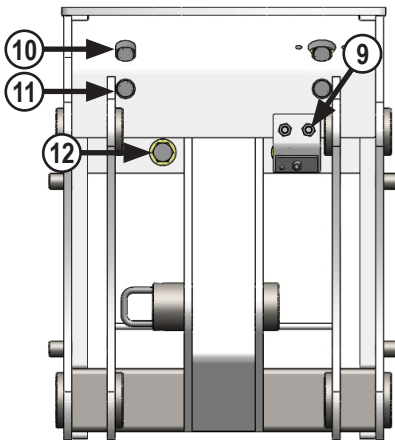
8. Install 4 - 20mm x 120mm bolts with 4 - .81" ID washers through the vertical standoffs and into the bottom of the engine casting (6).



9. Raise the front undercarriage mount until the bottom holes line up with the front casting holes and the front ears of the front support (7).



10. Install the new pins through the front ears of the front support, tractor frame and the undercarriage mount. Secure with 4 - 14mm x 25mm bolts, 4 - 14mm flat washers, and 2 - pin retainer plates (8).



11. Remove the hose clamp bracket to allow more room to install the bottom bolt (9).

12. Install 2 - 20mm x 90mm bolts with 2 - .81" ID washers through the top holes in the undercarriage mount and tractor front nose casting (10).

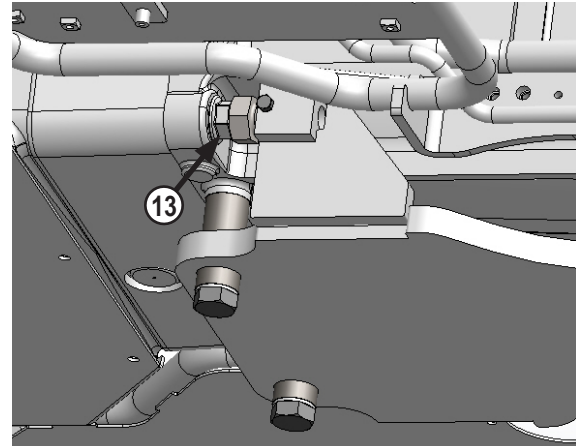
13. Install 2 - 20mm x 60mm bolts with 2 - .81" ID washers through the second row of holes in the undercarriage mount and tractor front nose casting (11).

14. Install 2 - 20mm x 210mm bolts, 2 - .81" ID washers, and 2 - standoffs through the bottom holes in the undercarriage mount and tractor front nose casting. The standoffs fit between the undercarriage mount and the tractor front nose casting (12).

NOTE: Shims may be needed between the front nose casting and the new undercarriage mount.

15. Tighten the front 20mm bolts until the front mount is tight against the tractor frame. Install shims between the tractor frame and the undercarriage until there is no gap. To install the shims, it may be necessary to slightly loosen the bolts. The quantity of shims used for each bolt may vary depending on how much of gap is present.

16. Torque the front 20mm bolts to 432 ft-lbs.



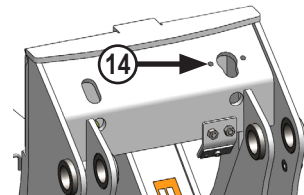
17. Evenly unscrew the 1" bolts at the rear of the front support until they are tight against the engine casting bolt heads (13). Torque the 1" bolts to 90-95 ft-lbs.

18. Install 2 - 5/16" x 3/4" bolts into the blocks at the rear of the front support to lock the 1" x 2" bolts. Torque the 5/16" bolts to 19 ft-lbs.

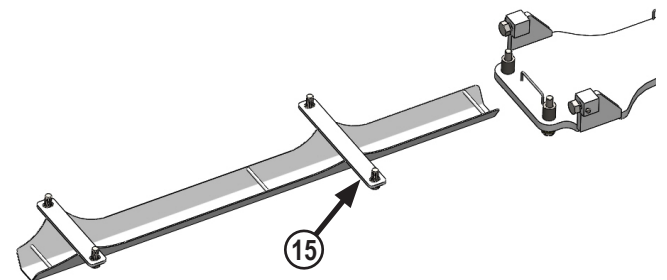
19. Torque the vertical 20mm bolts to 432 ft-lbs.

20. Torque the 14mm retaining bolts for the ear pins at the front of the support to 103 ft-lbs.

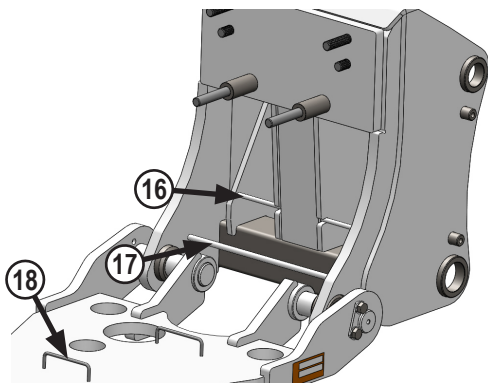
21. Reattach the hose clamp bracket that was removed in Step #11.



22. Reattach the front electrical socket with 2 - 8mm x 25mm bolts and the original washers and nuts to the top of the undercarriage mount (14).

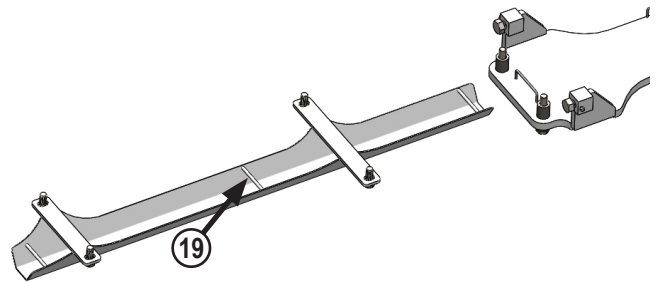


23. Position the hose trough under the tractor behind the front support (15). Refer to diagram on Page 6 for correct orientation of the hose trough.



24. Route the hoses from the front of the undercarriage under the first set of bars (16) and then over the bottom bar (17) on the undercarriage.

25. Continue to route the hoses through the hose loops on the front support (18).



26. Route the hoses through the hose trough. Keep the hoses below the bars on the hose trough (19).

27. Raise the hose trough and attach to the tractor with 4 - 20mm x 50mm bolts and 4 - 0.81" ID washers.

28. Torque the 20mm bolts to 432 ft-lbs.

29. Route the hoses to the back of the tractor and plug the hoses into the open SCV's at the rear of the tractor.

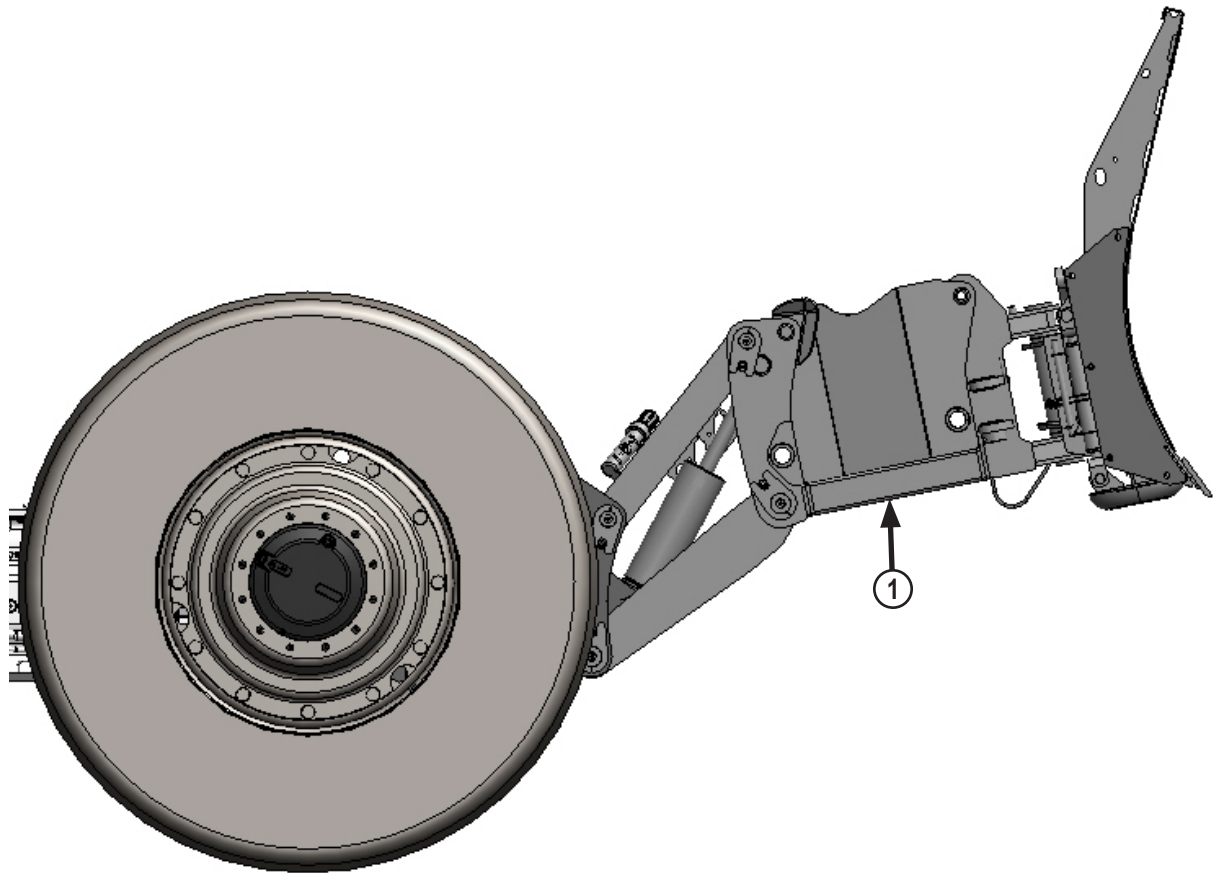
30. Protect the hoses around sharp corners and moving objects. Use zip ties to hold the hoses in place.

Warning: Fully oscillate the blade angle, tilt, steering and suspension to check for adequate clearance. If necessary, purchase and install steering stops from your local dealership to avoid collision and subsequent damage. The minimum clearance between the front support pin and the tire should be about 1"

Maintenance

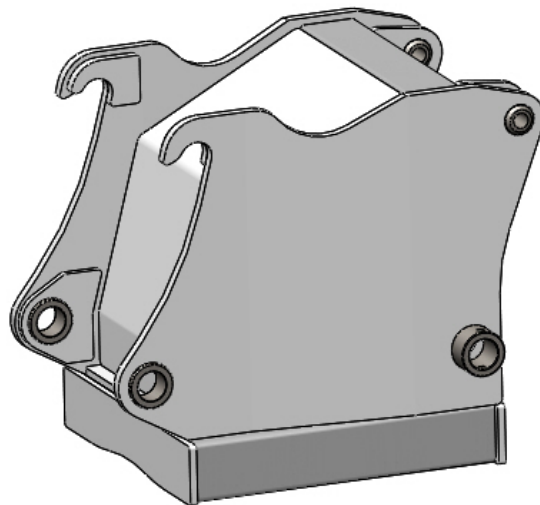
1. After first 8 hours of use, re-torque all bolts. Check to make sure the 1" bolts at the back of the front support are tight against the bolt heads as shown in Step #17.
2. Check all fasteners regularly to ensure proper operation of equipment.
3. Inspect all equipment for existing or potential damages every 10 hours or less.

Additional Extension

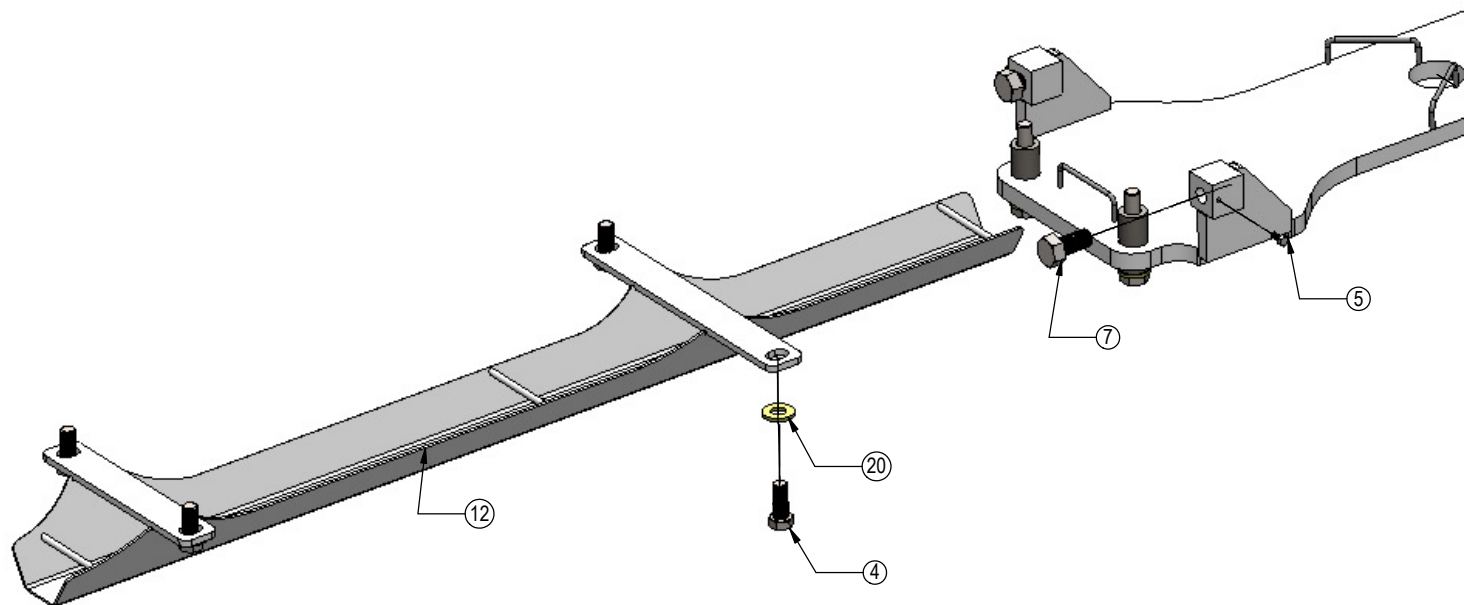


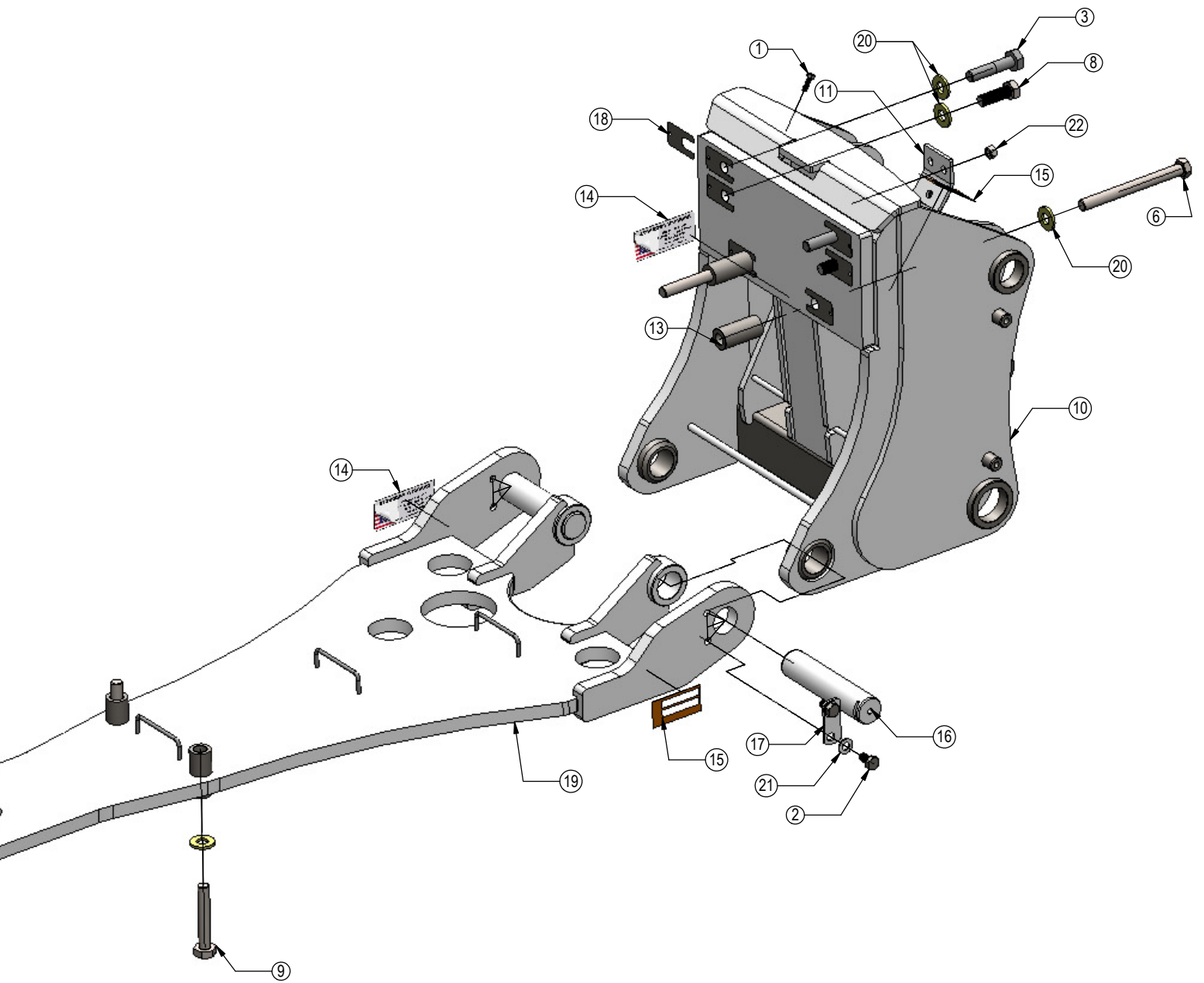
1. An additional extension (1) is necessary for most tractors that have duals. Tire size and row spacing will determine if your system will require the extension.
2. All 650 and 710 dual front tire configurations require the extension.
3. Call Grouser with tire information to discuss if the extension is necessary for your system.

NOTE: Grouser Products is not responsible for damage to tires or blade if the extension is not installed.



ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	2	16-812525	8mm x 1.25mm x 25mm Metric Hex Bolt Gr 10.9
2	4	16-1415025	14mm x 1.50mm x 25mm Hex Bolt Gr 10.9
3	2	16-1510	20mm x 2.5mm x 90mm Hex Bolt
4	4	16-1878	20mm x 2.5mm x 50mm Gr. 10.9 Hex Bolt
5	2	16-20032	5/16" x 3/4" Hex Bolt Gr 5 NC
6	2	16-20250210	20mm x 2.50mm x 210mm Hex Bolt Gr 10.9
7	2	16-20558	1" x 2" Hex Bolt Gr. 8 NC
8	2	16-2487	20mm x 2.5mm x 60mm Hex Bolt Gr. 10.9
9	4	16-2489	20mm x 2.5mm x 120mm Hex Bolt Gr 10.9
10	1	17-40265	Mount Weld
11	1	18-40280	Hose Clamp Bracket
12	1	18-40330	Hose Channel
13	2	19-40281	Stand Off
14	2	27-18887	Grouser Name Plate Decal
15	2	27-9506	Serial Tag Decal
16	2	43-19795R1	Pin
17	2	44-19789R1	Pin Retainer Plate (14mm)
18	30	44-40409	Shim
19	1	54-19790R3	Front Support Weld
20	14	57-19088	1.6875" OD x .813" ID x .187" HD Washer YZ
21	4	57-20824	14mm Flat Washer
22	2	70-20604	1/2" Center Lock Hex Nut





Improvements

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

Warranty

Grouser Products warrants to the original purchaser of each item that the product be free from defects in material and workmanship under normal use and service for a period of **two (2) years for Agriculture Series Blades and one (1) year for Heavy Duty Series from date of original retail delivery.**

The obligation of the consumer under this warranty:

1. To read the operators manual and to operate, lubricate, maintain and store equipment in accordance with the instructions listed in the operators manual.
2. To inspect equipment and if any part needs repair or replacement when continued use would cause damage or wear to other parts or safety.
3. All equipment or parts claimed to be defective in material or workmanship must be made available for inspection at the place of business of a dealer authorized to handle the equipment covered by this warranty, or, upon request by Grouser Products, shipped to the Grouser Products factory in West Fargo, North Dakota.

The obligation of the dealer under this warranty:

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

The obligation of Grouser Products under this warranty:

1. Repair or replace, any equipment or parts, in the judgment of Grouser Products to be defective in material or workmanship.
2. Grouser Products will cover the cost of parts and ground shipping at dealer invoice only.
3. Grouser Products shall have no obligation to bear the cost of labor or transportation in connection with replacement or repair of any such defective parts.

This warranty does not cover:

1. Depreciation or damage caused by normal wear, accident, improper assembly, improper adjustments.
2. Improper maintenance including lack of proper lubrication, or improper use. Including loose bolts, nuts, or fitting due to over tightening or vibration after 20 hours of operation.
3. Repairs or alterations without authorization from a Grouser Products representative.
4. Grouser Products shall have no liability if the equipment has been altered or reworked without the written authorization of Grouser Products.

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

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

Contact Us

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



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