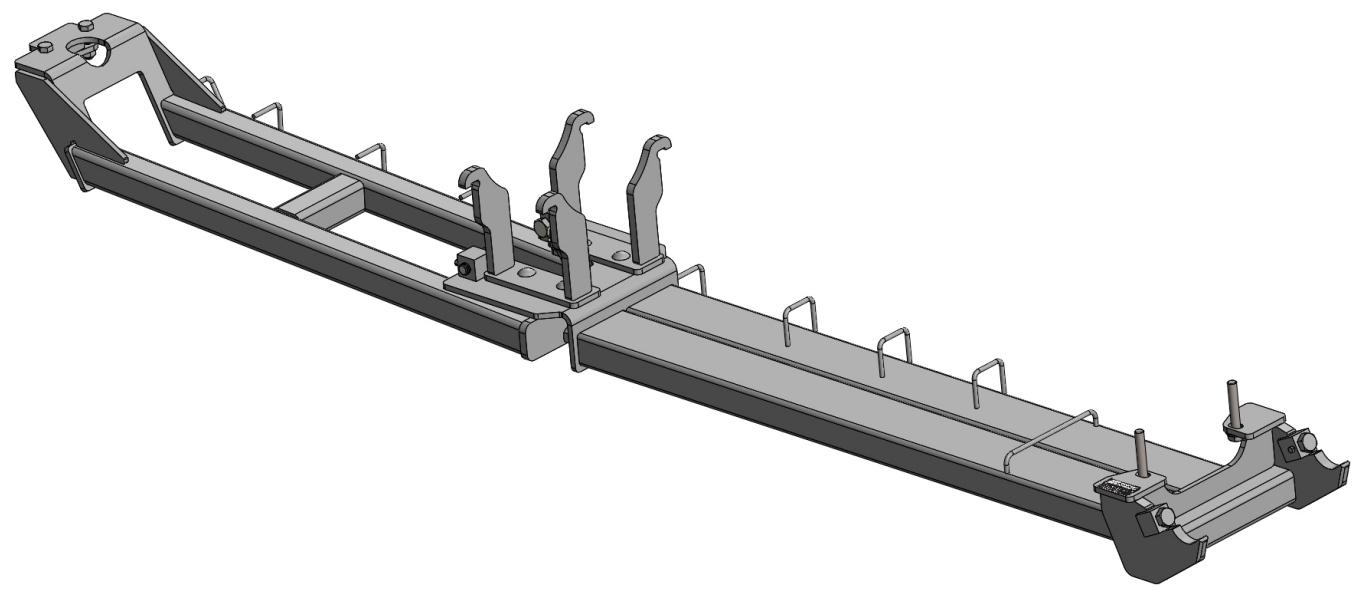




# ***Case Optum & New Holland T7 HD Three Point Linkage Reinforcement Installation Instructions***



**For Models:**  
**Case Optum:** 270, 300  
**New Holland T7 HD:** 290, 315

Purchase Date
Serial Number
Model Number
Tractor Model
Dealer

# To The Owner

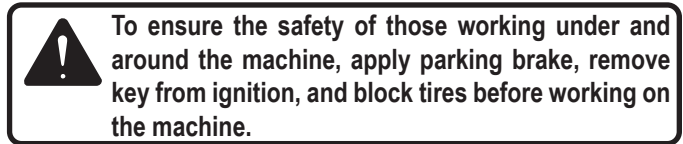
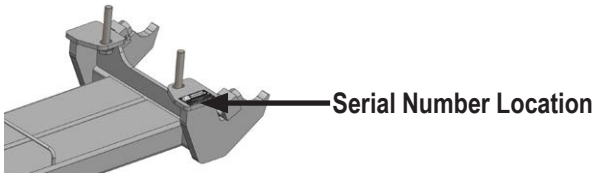
This manual contains information concerning the installation of the front support. You have purchased dependable, long lasting equipment, but only by proper care and operation can you expect to receive the performance and long service built into our products. Please have all operators read this manual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

## 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:

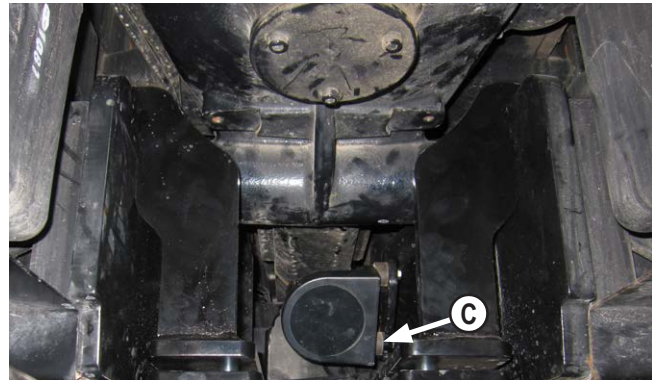
- When installing hardware, only finger tighten until all hardware is in place.
- A full diagram of the assembly with the full list of parts is on pages 4-5.
- Unstrap and remove any components that are attached for shipping.
- Read all instructions prior to performing installation.



## Pre-Installation



1. Disconnect speed sensor wire harness.
2. Remove speed sensor and bracket from fuel tank frame (A). The speed sensor will be reinstalled in Step #4. Keep original bracket in case front support is ever removed.

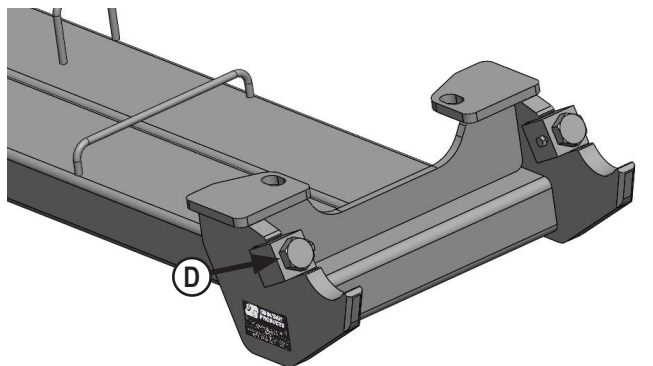


4. Install speed sensor (C) along with original spacers on right bracket with 3 - 1/4" x 1-1/2" bolts and 3 - 1/4" washers.

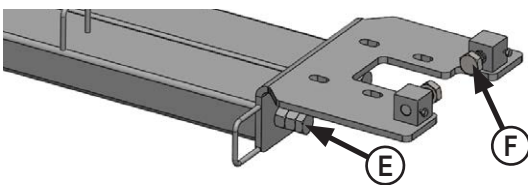


3. Install the left and right brackets on fuel tank frame (B). The top hook on the brackets will rest on the fuel tank frame. Only left side is shown in picture

**NOTE:** Refer to diagram on pages 4-5 for correct orientation of brackets. The speed sensor will be reinstalled on the right bracket.

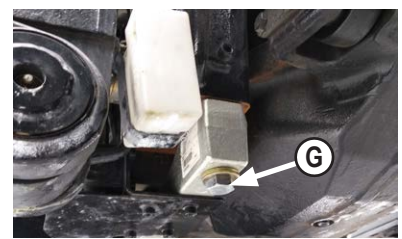


5. Install 2 - 1" x 2-1/2" bolts in threaded blocks at front of support (D). Turn bolts all the way in for installation. The bolts will be adjusted in Step #15.



6. Install 2 - 1" x 6" bolts and 2 - 1" nuts at rear of front support (E). Turn bolts all the way in for installation. The bolts will be adjusted in Step #20.

7. Install 2 - 1" x 3" bolts from the inside into threaded boxes at rear of front support (F). Turn bolts in until the bolt end is flush with face of block. The bolts will be adjusted in Step #18.



8. Remove bolts from behind front 3-point and in front of front axle (G).

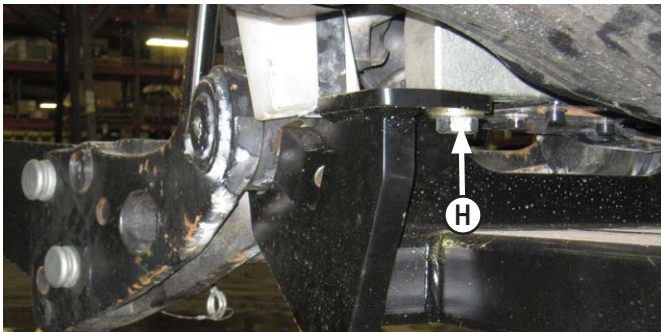
**NOTE: The block will remain in place and will be attached with new hardware in Step #10.**

## Installation

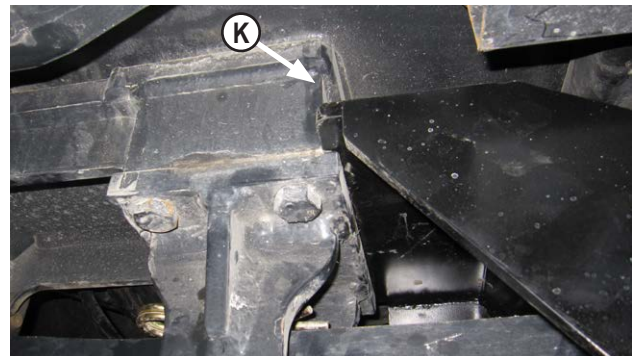
9. Center front support under tractor.



**Caution: When lifting front support, watch for any potential pinching of hoses or any other components to prevent any damage.**

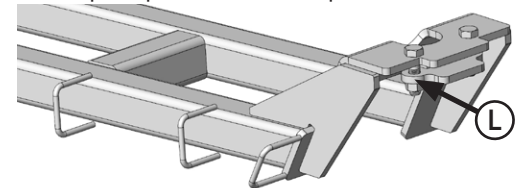


10. Install 2 - 20mm x 120mm bolts and 2 - 7/8" washers in vertical slots at front of front support (H). The front hooks will rest up against factory 3-point frame.



**NOTE: The drawbar may need to be pulled out to allow room for the push pole to be lifted into place.**

13. Lift rear of push pole and set on top of drawbar bracket (K).

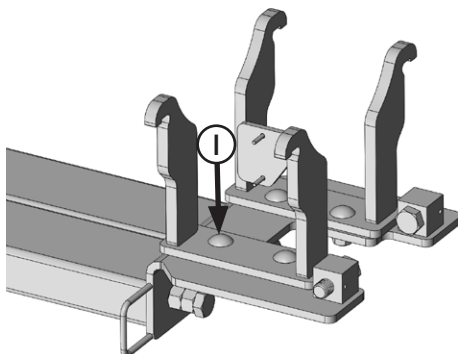


14. Attach clamp plate to rear of push pole with 2 - 3/4" nuts (L).

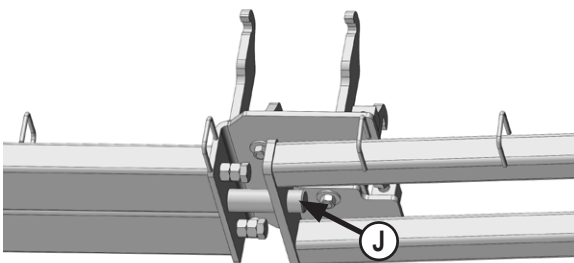
15. Evenly unscrew 1" bolts at front of front support until they are tight against 3-point frame (D). Torque 1" bolts to 90-95 ft-lbs.

16. Torque 20mm bolts (H) to 432 ft-lbs.

17. Verify that the brackets from Step #3 are still in position. Torque 3/4" carriage bolts (K) to 257 ft-lbs.

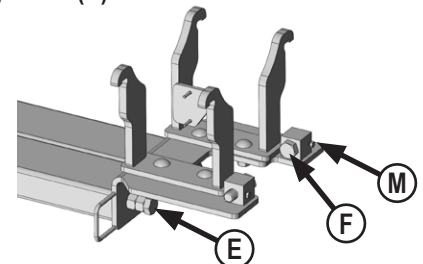


11. Lift rear of front support and attach to the left and right brackets with 4 - 3/4" x 2" carriage bolts, 4 - 3/4" flat washers, and 4 - 3/4" nuts (I).



12. Center push pole under rear of tractor. Lift and slide the front end of the push pole onto the round pin at rear of front support (J).

**NOTE: View is from underneath the front support.**



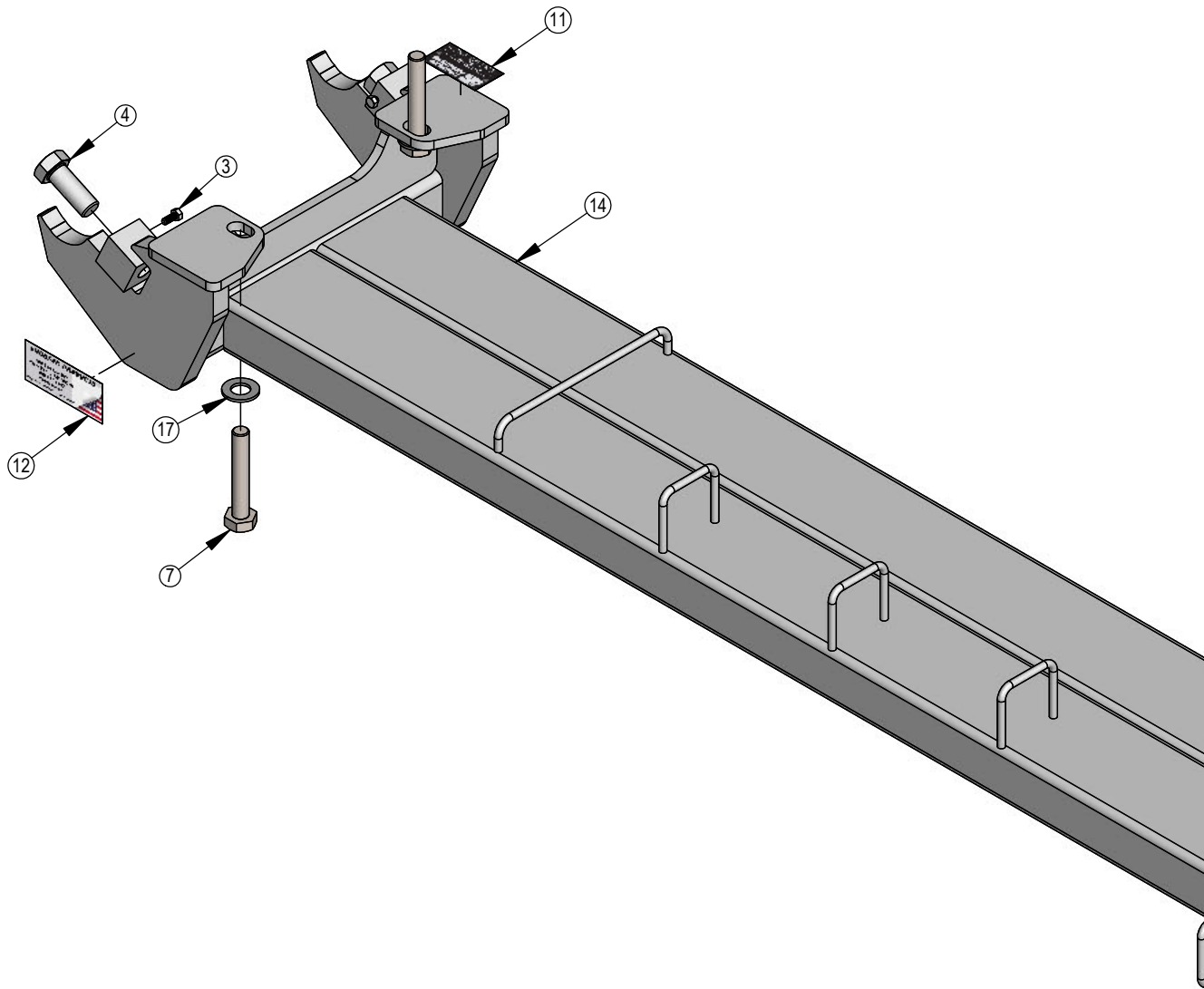
18. Evenly screw in 1" bolts in threaded boxes at rear of front support until they are tight against fuel tank frame (F). Torque 1" bolts to 8-10 ft-lbs.

19. Install 4 - 5/16" x 3/4" bolts into blocks at front and rear of front support to lock 1" bolts (D & M). Torque 5/16" bolts to 19 ft-lbs.

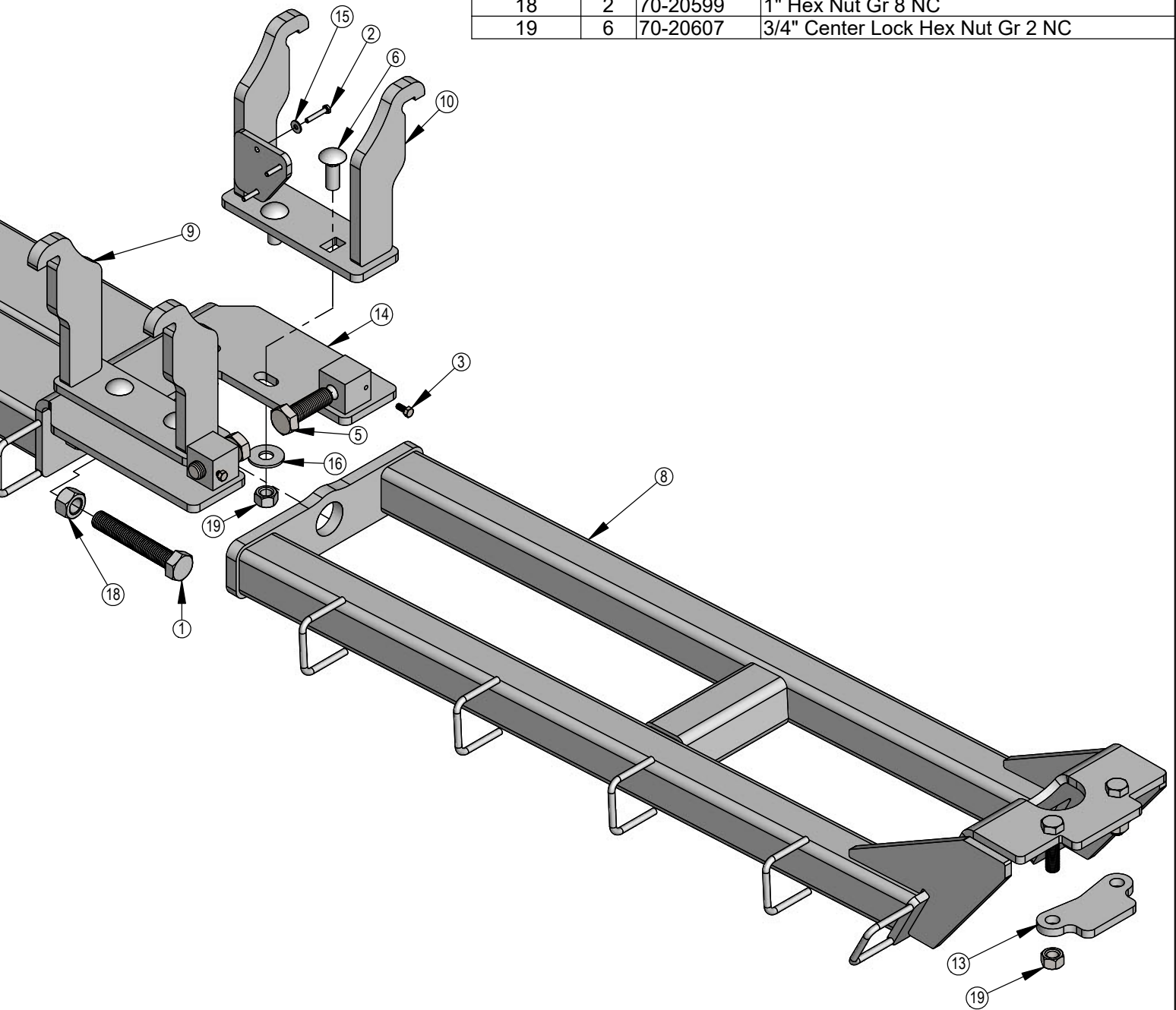
20. Evenly unscrew 1" bolts at rear of front support until they are tight against push pole (E). Torque 1" bolts to 90-95 ft-lbs.

21. Tighten nuts tight against rear of front support. Use nuts to lock bolts in place.

22. Torque rear clamp plate 3/4" nuts (N) to 257 ft-lbs.



ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	2	16-17271	1" X 6" Hex Bolt Gr 8 NC (Full Thread)
2	3	16-20006	1/4" X 1-1/2" Hex Bolt Gr 5 NC
3	4	16-20032	5/16" x 3/4" Hex Bolt Gr. 5
4	2	16-20560	1" x 2-1/2" Hex Bolt Gr 8 NC
5	2	16-20562	1" x 3" Hex Bolt Gr 8 NC
6	4	16-21218	3/4" x 2.00" Carriage Bolt Gr.5
7	2	16-2489	20mm x 2.5mm x 120mm Hex Bolt Gr 10.9
8	1	17-41835	Case Optum Push Pole
9	1	18-40730	Bracket, Left
10	1	18-40731	Bracket, Right
11	1	NA	Grouser Dozer Metal Serial Tag
12	1	27-18887	Grouser Name Plate Decal
13	1	44-41832	Plate, Clamp
14	1	54-40790	Front Support Weld, Optum
15	3	57-20740	1/4" Flat Washer
16	4	57-20747	3/4" Flat Washer
17	2	57-20758	7/8" SAE Hardened Flat Washer - 1-3/4" OD
18	2	70-20599	1" Hex Nut Gr 8 NC
19	6	70-20607	3/4" Center Lock Hex Nut Gr 2 NC



DWG. NO.: 40790-A



# Torque Arm - Front Hitch

## Installation Instructions

### Caution:

- Always use precaution when working around any equipment.
- Always wear safety glasses.
- Follow tractor manufacturer's safety guidelines when installing this product.
- Read all instructions prior to installation.
  1. Set the front hitch arms to the fixed position. The front hitch arms cannot be in float with the torque arm installed.  
**!!!The front hitch arms cannot be in float with the torque arm installed!!! Refer to tractor manufacturer's operator's manual for front hitch arms fixed position pin location.**
  2. Position the torque arm between the front hitch arms. The longest and straight edge of the plate should be closest to the tractor. See the photo below for correct orientation.
  3. Support the torque arm and install a bolting plate with 4 - 3/4" x 4" bolts and 4 - 3/4" nuts on each side.
  4. Once the bolts are all installed, push the torque arm evenly towards the tractor. Keep the torque arm parallel to the front of the tractor.
  5. Torque the 3/4" bolts to 100 ft-lbs.
  6. Operate the front hitch arms up and down and check for any interference.
  7. After first 8 hours of use, re-torque all bolts.
  8. Check all fasteners regularly to ensure proper operation of equipment.

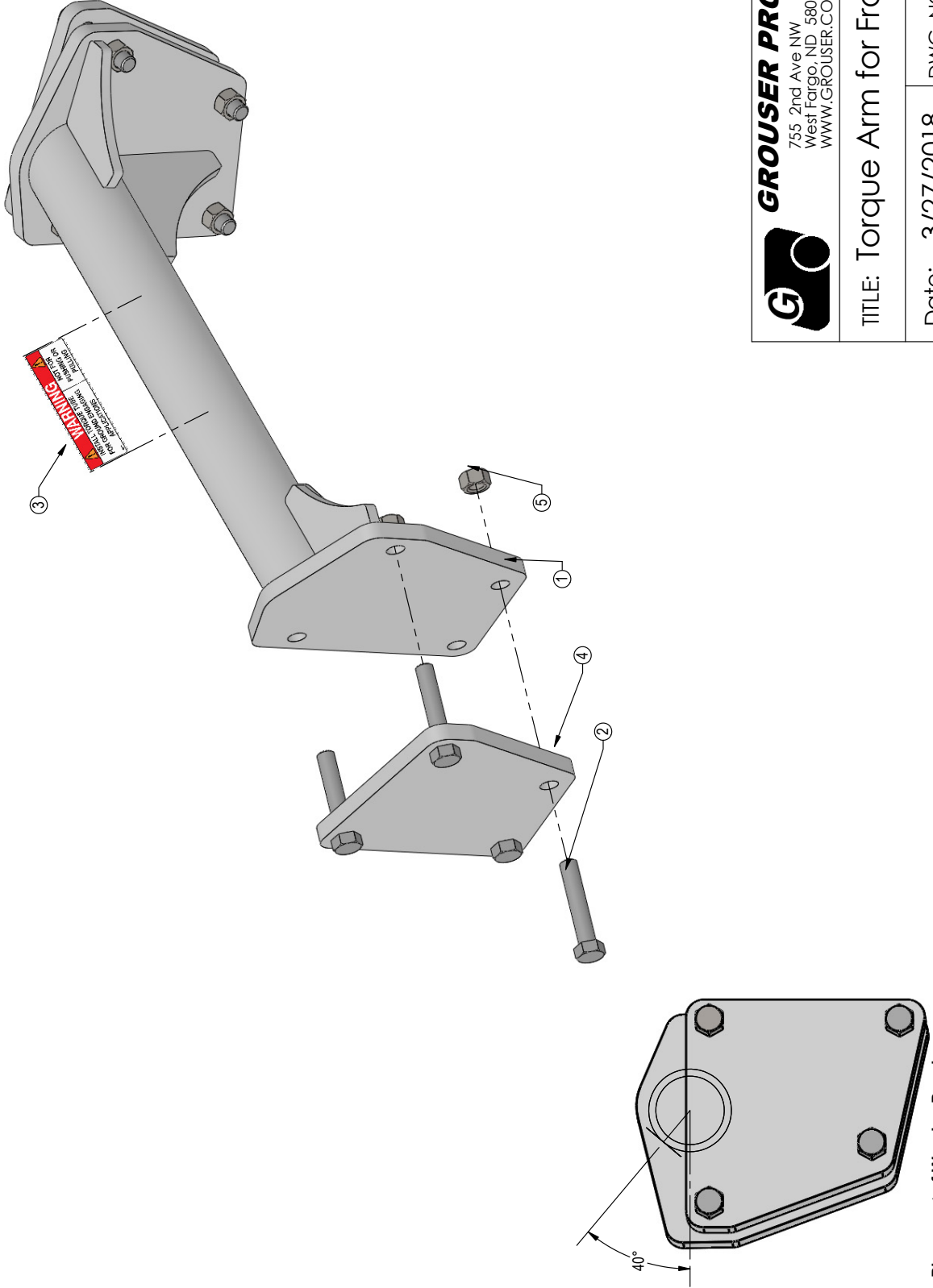


Note: The style of front hitch arms may vary slightly.  
Photo shows weight package installed.



THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF GROUSER PRODUCTS INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF GROUSER PRODUCTS INC IS PROHIBITED.

ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	11-40795	1	Optum Torque Arm
2	16-20226	8	3/4" X 4" Hex Bolt Gr. 5 NC
3	27-40405	1	Warning Decal - Torque Arm
4	44-40796	2	Optum Torque Arm - Plate
5	70-20607	8	3/4" Center Lock Hex Nut NC



Placement of Warning Decal



**GROUSER PRODUCTS INC.**  
 755 2nd Ave NW Phone 701.282.7710  
 West Fargo, ND 58078 Fax 701.282.8131  
 WWW.GROUSER.COM

TITLE: Torque Arm for Front Hitches

Date: 3/27/2018

DWG. NO.: 40795-A

# Improvements

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

## Warranty

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Grouser Products warrants to the original purchaser of each item that the product be free from defects in material and workmanship under normal use and service for a period of **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

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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