



Puma (Tier 3) Standard Axle Front Hitch Support 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.
 1. Read all instructions prior to installation.
 2. Position the front hitch support under the tractor and center with the frame of the tractor.
 3. Support the front linkage frame and remove the long pivot pin that holds the lift arms to the frame.
 4. Lift the front of the front hitch support.
 5. Once the ears are aligned with the frame and the lift arms of the front 3-point, insert the front push pole pin (PN: 43-12510).
 6. Once the pin is in place, insert a 1/2" x 1-1/2" bolt with a 1/2" fender washer (PN: 57-20794) through the hole of the push pole. See attached diagram for clarification.
 7. On the opposite side, slide the pin plate (PN: 44-12515) over the end of the pin. Once the plate is in the groove on the pin, push the plate tight against the groove so that the plate will keep the pin from sliding out.
 8. Install a 1/2" x 1-1/2" bolt with a 1/2" fender washer (PN: 57-20794) through hole of pin plate. Verify that the plate is tight against the pin and tighten the bolt.
 9. Torque the 1/2" bolts to 75 ft-lbs.

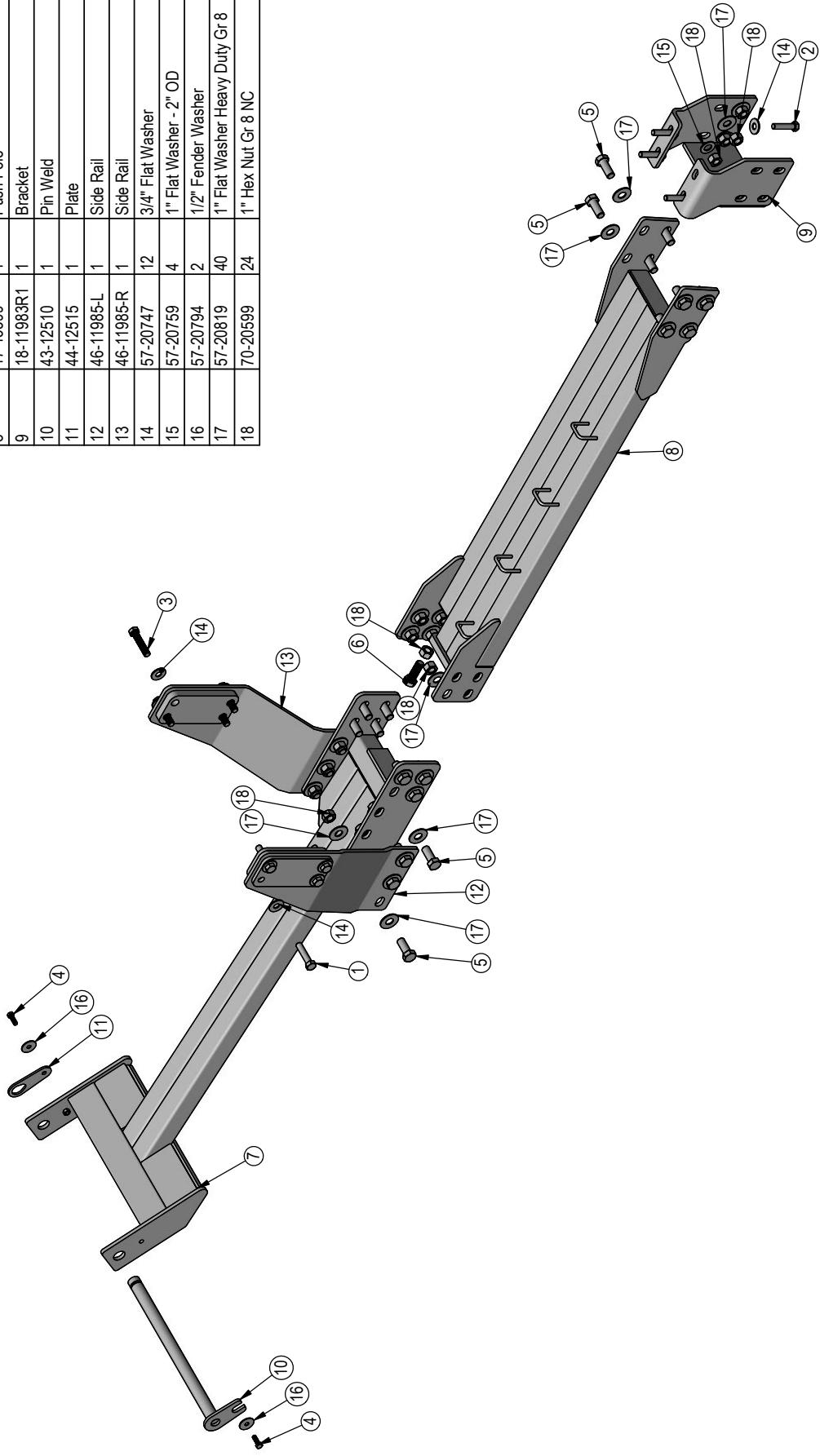
NOTE: If your machine has the front loader kit installed, remove the brackets. If there is a spacer with the exhaust support, the spacer will be used when installing the right rail in Step #11.

NOTE: If your machine does not have the front loader kit installed, remove the hardware attaching the exhaust support to the right side of the tractor. If there is a spacer with the exhaust support, the spacer will be used when installing the right rail. Remove the hardware attaching the exhaust to the exhaust support. While keeping the exhaust in the same location, slide the support out to make room for installing the right rail in Step #11. Reattach the exhaust to the exhaust support.

10. Use 4 - 20mm x 90mm bolts (PN: 16-1510) with a 3/4" flat washer (PN: 57-20747) on each bolt in the holes of the left rail (PN: 46-11985-L) to attach the left rail to the tractor frame.
11. Use 4 - 20mm x 100mm bolts (PN: 16-1877) with a 3/4" flat washer (PN: 57-20747) on each bolt in the holes of the right rail (PN: 46-11985-R) to attach the spacer, exhaust support, and right rail to the tractor frame. See attached diagram for any clarification.

- 12.** Attach the left and right rails to the left and right sides of the front push pole with 3 - 1" x 2-1/2" bolts (PN: 16-20560), 6 - 1" heavy flat washers (PN: 57-20819), and 3 - 1" nuts (PN: 70-20599) for each side.
- 13.** Once all bolts are installed, torque the 20mm bolts to 432 ft-lbs. and all 1" bolts to 903 ft-lbs.
- 14.** Remove the four bolts from the drawbar under the rear axle.
- 15.** Attach the push pole bracket (PN: 18-11983) to the drawbar under the rear axle with 4 - 18mm x 80mm bolts (PN: 16-1815080) and 4 - 3/4" flat washers (PN: 57-20747).
- 16.** Push the push pole bracket back until it is tight against the tractor's drawbar bracket. Torque the 18mm bolts to 405 ft-lbs. See attached diagram for any clarification.
- 17.** Install 2 - 1" x 3" bolts (PN: 16-20562) and 2 - 1" nuts (PN: 70-20599) on the front end of the push pole (PN: 17-13399).
- 18.** Lift the end of the push pole (PN: 17-13399) with the installed bolts and nuts from Step #17 up to the front push pole.
- 19.** Attach the push pole to the front push pole with 4 - 1" x 2-1/2" bolts (PN: 16-20560), 8 - 1" heavy flat washers (PN: 57-20819), and 4 - 1" nuts (PN: 70-20599) for each side. Finger tighten the bolts and nuts.
- 20.** Lift the rear of the push pole up to the push pole bracket. Insert 4 - 1" x 2-1/2" bolts (PN: 16-20560) with a 1" heavy flat washer (PN: 57-20819) on each bolt through the holes on the push pole and bracket.
- 21.** After the bolts are through the holes on the push pole bracket, install a 1" SAE flat washer (PN: 57-20759) and a 1" nut (PN: 70-20599) on the front four bolts. Install a 1" heavy flat washer (PN: 57-20819) and a 1" nut (PN: 70-20599) on the rear four bolts. Finger tighten the bolts and nuts.
- 22.** Push the push pole as far forward as possible. Torque the rear 1" bolts on the push pole to 903 ft-lbs. and then torque the front 1" bolts on the push pole to 903 ft-lbs.
- 23.** Unscrew the two 1" x 3" bolts at the front of the push pole until they are tight against the U/C. Torque the 1" bolts to 90-95 ft-lbs. Tighten the nuts up tight against the push pole.
- 24.** After first 8 hours of use, re-torque all bolts.
- 25.** Check all fasteners regularly to ensure proper operation of equipment.

ITEM NO.	PART NO.	Qty.	DESCRIPTION
1	16-1510	4	20mm x 2.5mm Hex Bolt Gr 10.9
2	16-1815080	4	18mm x 1.50mm x 80mm Metric Hex Bolt Gr 10.9 Fine
3	16-1877	4	20mm x 2.5mm x 100mm Hex Bolt Gr. 10.9
4	16-20126	2	1/2" x 1-1/2" Hex Bolt Gr 5 NC
5	16-20560	22	1" x 2-1/2" Hex Bolt Gr 8 NC
6	16-20562	2	1" x 3" Hex Bolt Gr 8 NC
7	17-12500	1	Push Pole
8	17-13399	1	Push Pole
9	18-11983R1	1	Bracket
10	43-12510	1	Pin Weld
11	44-12515	1	Plate
12	46-11985-L	1	Side Rail
13	46-11985-R	1	Side Rail
14	57-20747	12	3/4" Flat Washer
15	57-20759	4	1" Flat Washer - 2" OD
16	57-20794	2	1/2" Fender Washer
17	57-20819	40	1" Flat Washer Heavy Duty Gr 8
18	70-20599	24	1" Hex Nut Gr 8 NC



GROUSER PRODUCTS 755 2nd Ave NW West Fargo, ND 58078 Phone 701-282-7710	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.	Unless Otherwise Specified Dimensions are in Inches. Tolerances are: Decimals .XX ± .06 .XXX +/- .030 Angles ± 2°	Drawn By: SAC Date: 11/25/2020
	Title: Puma Front Support Assy.	Dwg. No.: 54-12500-A	Scale: 1:20 Sheet: 1
Material:	Qty: 1 Used On:		
Finish:			

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