



Belly Blade

Installation Instructions

Massey 2615 - Direct Lift
Without Factory Loader

Purchase Date
Serial Number
Model Number
Tractor Model
Dealer

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Bolt Torque Specifications

Bolt Dia. (inch)	Thread per inch	Grade 5	Grade 8
		Torque (ft·lbs.)	Torque (ft·lbs.)
1/4	20	8	12
1/4	28	10	14
5/16	18	17	25
5/16	24	19	29
3/8	16	30	45
3/8	24	35	50
7/16	14	50	70
7/16	20	55	80
1/2	13	75	110
1/2	20	90	120
9/16	12	110	150
9/16	18	120	170
5/8	11	150	220
5/8	18	180	240
3/4	10	260	380
3/4	16	300	420
7/8	9	430	600
7/8	14	470	660
1	8	640	900
1	12	710	990

Bolt Dia. (mm)	Pitch	Grade 8.8	Grade 10.9
		Torque (ft·lbs.)	Torque (ft·lbs.)
4	0.70	2	
5	0.80	4	
5	1.00	7	11
7	1.00	12	
8	1.25	17	26
8	1.00	18	
10	1.50	35	51
10	1.20	37	
10	1.00	39	
12	1.75	59	88
12	1.50	62	
12	1.25	65	
14	2.00	94	139
14	1.50	101	
16	2.00	146	210
18	2.50	210	
20	2.50	292	
22	2.50	398	
44	3.00	503	

Kit Inventory

Qty.	PN	Description
4	16-16200280	16mm x 2.00mm x 280mm Metric Hex Bolt Gr 10.9 Coarse ZC
3	16-20062	3/8" x 3/4" Hex Bolt Gr 5 NC
4	16-20189	5/8" X 2 1/4" Hex Bolt Gr 5 NC
2	16-20216	3/4" X 1-1/2" Hex Bolt Gr 5 NC
2	16-20218	3/4" X 2" Hex Bolt Gr 5 NC
4	16-20220	3/4" X 2 1/2" Hex Bolt Gr 5 NC
1	18-10248	2-1/2" Tube Clamp Assembly (UDO250-A1)
1	18-40365	200 Massey 2615 - Loader Valve Mount
2	18-40370	200 Massey 2615 - Rear Bracket
2	35-30149	156" x 1/2" -8JIC/-8JIC Hose (3.5M)
1	43-7995	Pin 1" x 2.125"
1	43-7767	Cylinder Hitch Pin Clip
1	44-40376	200 Massey 2615 Valve Mount Support
1	54-40360	Massey 2615 Direct Lift Undercarriage
12	57-20747	3/4" Flat Washer
3	57-20762	3/8" Lock Washer
4	57-20816	5/8" Flat Washer Grade 8 (USS) Plated
4	57-20827	20mm Flat Washer
10	59-34950	Zip / Cable Tie 120# 29"
8	70-20607	3/4" Hex Center Lock Nut Gr 2 NC
4	70-20870-1	16mm Hex Top Lock Nut 2.0 Pitch Class 10 Clear Zinc

Parts Installed on Valve

Qty.	PN	Description
1	31-13938-10	-10 O-Ring Hex Head Plug (6408-10)
2	31-34051	Straight Thread Elbow 90° JIC x O-Ring (6801-08-10)
10	31-34149	Straight Thread Elbow 45° JIC x O-Ring (6802-4-8)
5	39-10199	Belly Blade Control Handles
1	56-10280-B	Belly Blade 5 Section Valve System

Blade Assembly - Shipment includes one of the following

Qty	PN	Description
1	15-10300-6	6 ft. Moldboard
1	15-10300-7	7 ft. Moldboard
1	15-10300-8	8 ft. Moldboard
1	15-10300-9	9 ft. Moldboard
1	15-10300-10	10 ft. Moldboard

General Information

Locate the Belly Blade assembly identification number and record the information on the front of this manual. This may be needed when contacting your service center or dealer.



Using Your Manual

Read this manual completely prior to assembling to help you and others avoid injuries. This manual provides information on the proper way of installing the Belly Blade to prevent injuries and any machine damage.

All references to the tractor or undercarriage are taken from the view at the tractor's seat.

Your machine may vary slightly from the machine in this manual, but the same installation procedure will be compatible.

Important Messages

This manual contains messages that will bring attention to potential safety concerns and machine damage. Read all of the information carefully and thoroughly to avoid injury and machine damage. Below is an example.

⚠Caution⚠

Avoid injury! This text will explain the possible hazards or death to the bystanders or the operator if the correct procedures are ignored.

Safety Information

1. Wear protective eye wear.
2. Always block tractor safely.
3. Engage parking brake before raising the tractor.
4. Follow all tractor manufacturing safety recommendations when working on the tractor.

Accident Prevention

An accident prevention program can be successful when a responsible equipment operator is cooperating. An operator can prevent accidents when they accept a full measure of their responsibility. The designers, manufacturers, and engineers can help, but a single careless act by the operator can outweigh all of their efforts.

No equipment can be safer than the person running the controls. A careful, informed operator is the best safety device.

Preparing Tractor For Installation

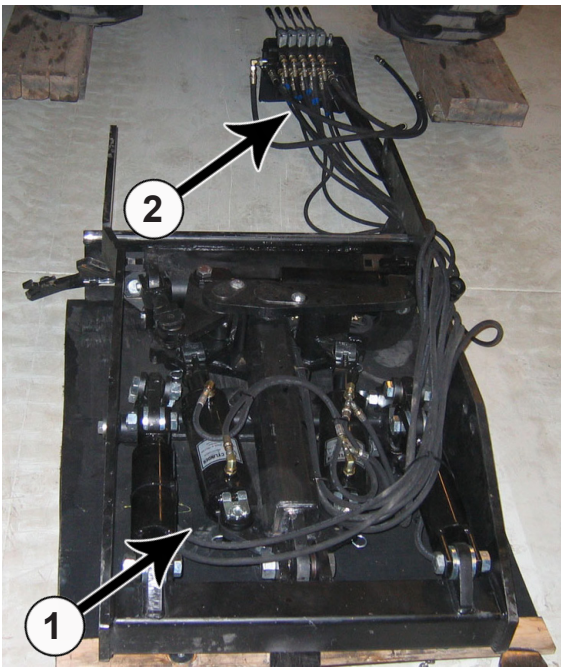
1. Park the tractor on a smooth, level surface.
2. Set parking brake and block front tires to keep from rolling.
3. Disconnect the battery.

IMPORTANT: Raise the tractor high enough for the undercarriage to fit under the rear axle when installing the undercarriage.

IMPORTANT: For easier installation, follow the tractor manufacturer's safety guidelines and instructions for supporting the tractor and removing the rear tires.

4. The Belly Blade will arrive on a pallet. Unwrap and set the blade aside. Remove the undercarriage assembly from the pallet.
5. Check the inventory and ensure that all parts are included with the Belly Blade Kit. If any parts are missing, contact your dealer.
6. Remove the drawbar and drawbar bracket. Keep the tractor studs in the tractor and the nuts will be reused to attach the undercarriage in Step #11.

Placing Undercarriage Under Tractor



7. Align the undercarriage (1) behind the tractor. Lay out the valve and hoses in front of the undercarriage (2). The hoses should be over the right undercarriage arm.
8. Remove any brackets from the belly blade undercarriage.
9. Guide the undercarriage and the valve stand under the tractor. Make sure that the valve and valve stand exit the right side of the tractor between the front and rear tires.

Installing Undercarriage

NOTE: When jacking up the undercarriage, make sure to not jack too high or you may hit other parts of the tractor.

NOTE: When raising the undercarriage, properly guide the hoses to avoid pinching them between the tractor frame and the undercarriage.

NOTE: Do not tighten hardware until all mounting bolts have been installed.



Caution



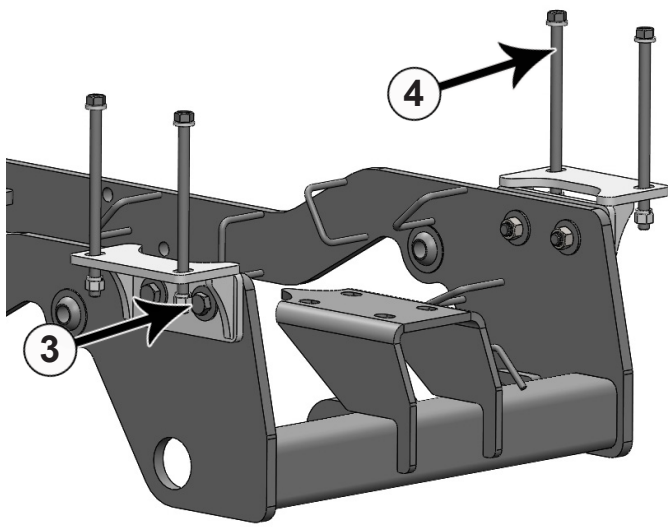
Avoid injury! Watch for pinch points when raising the undercarriage.

10. Use jacks to raise the undercarriage until the rear of the undercarriage is against the tractor where the drawbar bracket was removed.

11. Attach the rear of the undercarriage to the drawbar bracket studs with a new washer and an original nut on each stud.

12. Raise the front of the undercarriage and attach to the tractor with 4 - 5/8" bolts and 4 - 5/8" flat washers.

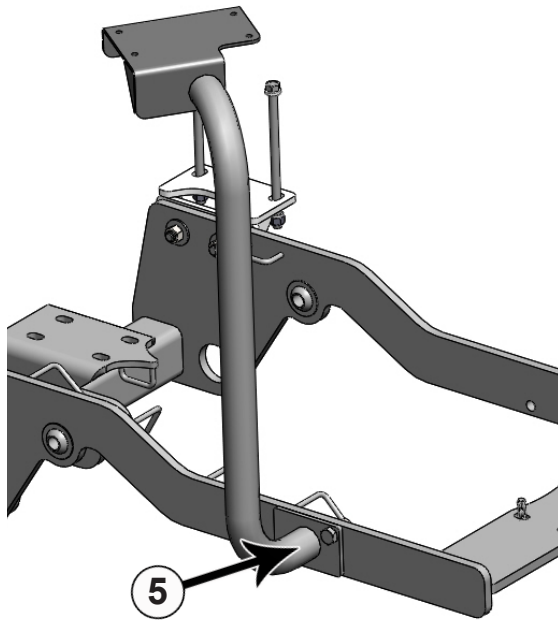
NOTE: Refer to the drawing on Page 10 for further clarification.



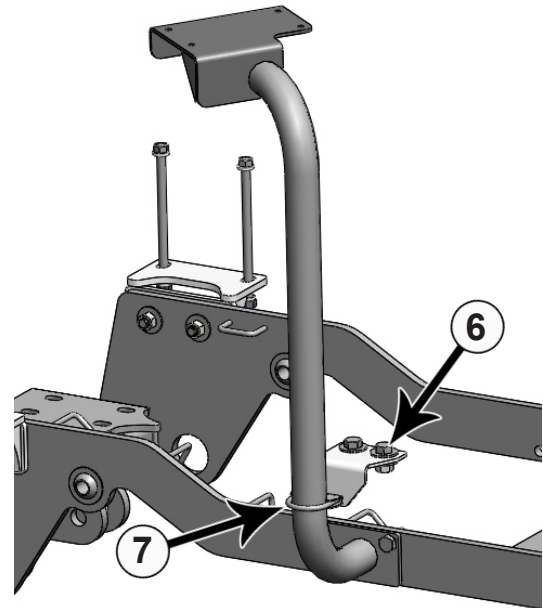
13. Remove the rear 3-point bracket from the rear axle. It'll be reattached with the new rear brackets in Step #16. Discard the bolts and nuts but keep the washers.
14. Attach the new rear brackets to the undercarriage with 2 - 3/4" x 2-1/2" bolts, 4 - 3/4" flat washers, and 2 - 3/4" center lock nuts on each side (3). Refer to Page 10 for proper orientation of the bracket.
15. Insert 2 - 16mm x 280mm bolts and 2 original tractor washers from the top of the axle on each side through the new rear brackets (4).
16. Attach the rear 3-point bracket and the new rear brackets to the axle with 2 of the original tractor washers and 2 - 16mm lock nuts on each side (4).
17. Torque all fasteners to the correct specifications after all bolts and nuts have been installed.
18. Remove the jacks.

Control Valve and Stand Installation

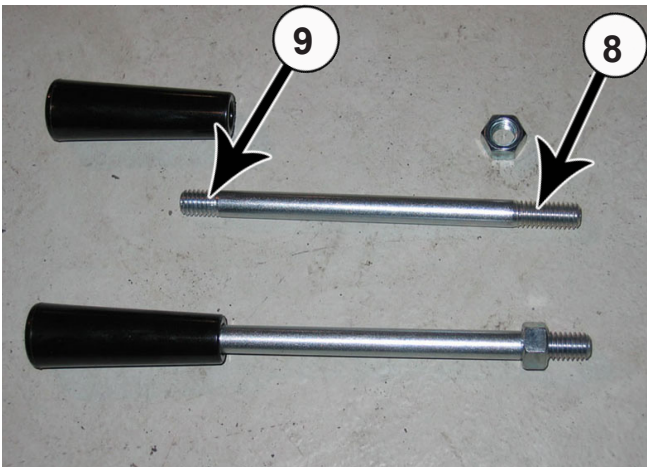
NOTE: Make sure that the hoses stay above the undercarriage bracket on the right side of the tractor to keep them away from the blade.



19. Attach the valve stand to the side of the undercarriage. Install with 2 - 3/4" x 2" bolts and attach with a 3/4" nut on each bolt (5).



20. Attach the valve mount support to top of the operator platform with 2 - 3/4" x 1-1/2" bolts, 4 - 3/4" flat washers, and 2 - 3/4" center lock nuts (6). Attach the valve stand to the valve mount support with a U-bolt (7). Torque all bolts to the correct specification.
21. If the valve is not attached to the valve stand, attach the control valve to the valve stand with three 3/8" x 3/4" bolts and lock washers.



22. Assemble control valve handles (PN: 39-10199). Put the nut on the side of the bolt that has longer threads (8). Put the black handle on the other end that has shorter threads (9).

23. Insert assembled handles into belly blade control valve. Tighten the nut on each (8).

Plumbing

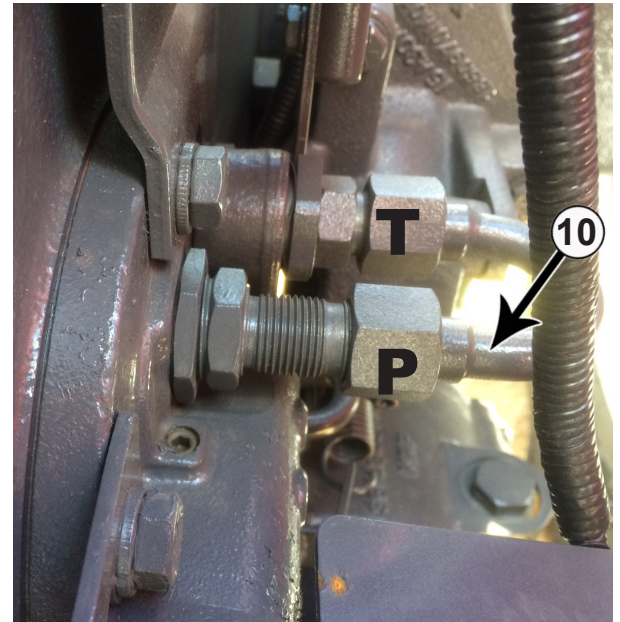
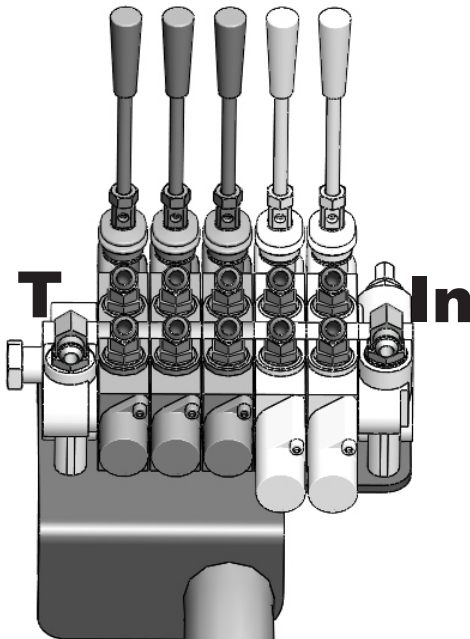
- Note:**
1. Have an oil pan available to collect hydraulic oil when removing hydraulic lines.
 2. Before removing any hydraulic lines, release all hydraulic pressure with the engine off.

⚠

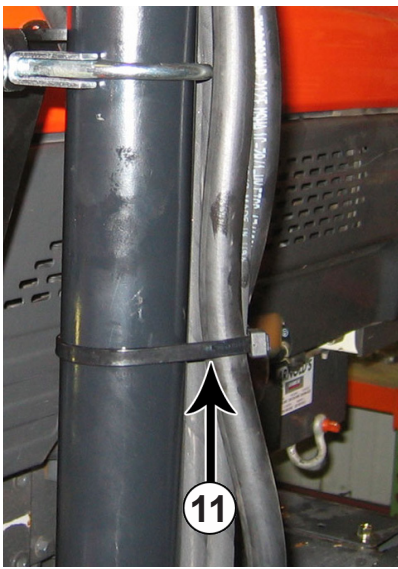
Caution

⚠

Avoid injury! Hydraulic oil that is under pressure will penetrate the skin and cause a serious injury. If this occurs, it needs to be surgically removed by a doctor familiar with this type of injury within a few hours or gangrene may result.



24. On the left side of the tractor and below the operator seat, remove the oil pipe (10).
 25. Connect the hose from the Tank Port on the belly blade control valve to the Tank port on the tractor.
 26. Connect the hose from the In Port on the belly blade control valve to the P port on the tractor.
- NOTE:** The hose for the Tank ports has 2 purple rings on both ends of the hose and the hose from the In port on the control valve to the P port on the tractor has only 1 purple ring on both ends.



27. Make sure all hoses underneath the tractor are clear of any moving parts on the Belly Blade and tractor. Ensure that all hoses are above the undercarriage. Group hoses together and secure hoses with zip ties (11) (PN: 59-34950).

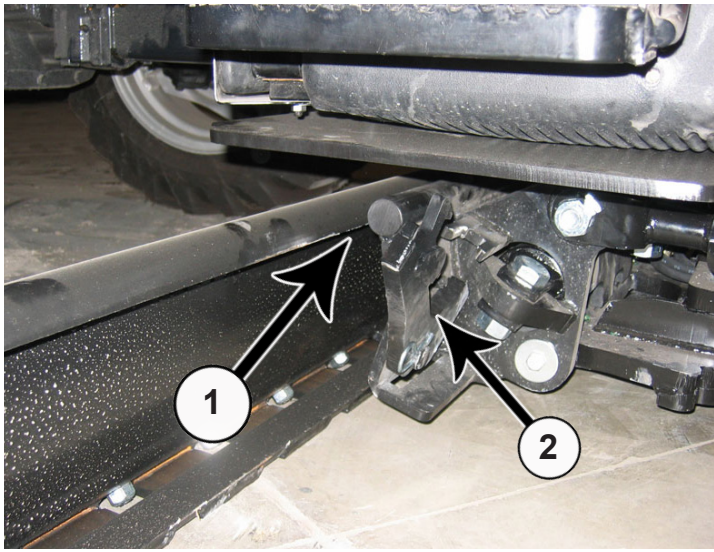
28. Reconnect the battery.

29. Start the tractor and run the controls to check for any leaks.

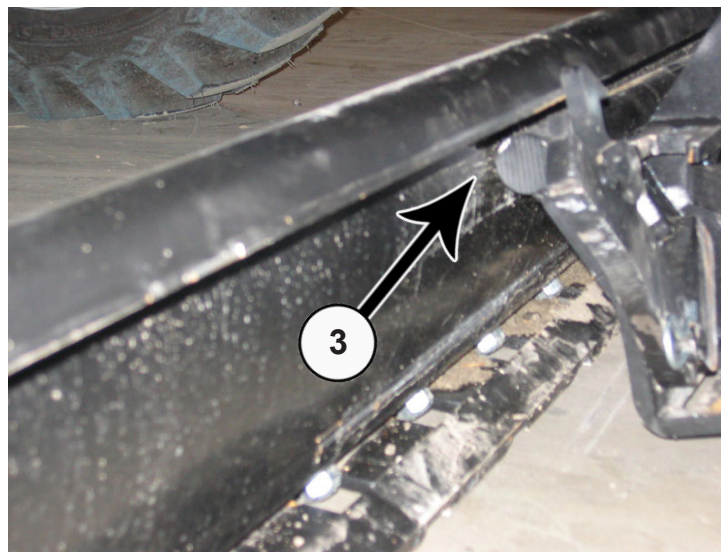
Note: Watch the blade carefully for any collisions when running the controls.

30. Check the hydraulic fluid level in the tractor. Refer to the tractor owner's manual for the correct fluid level. Add oil as recommended.

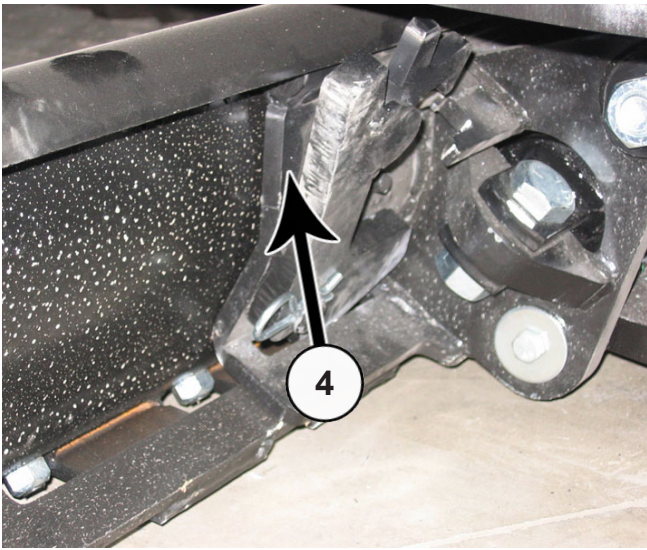
Blade Installation



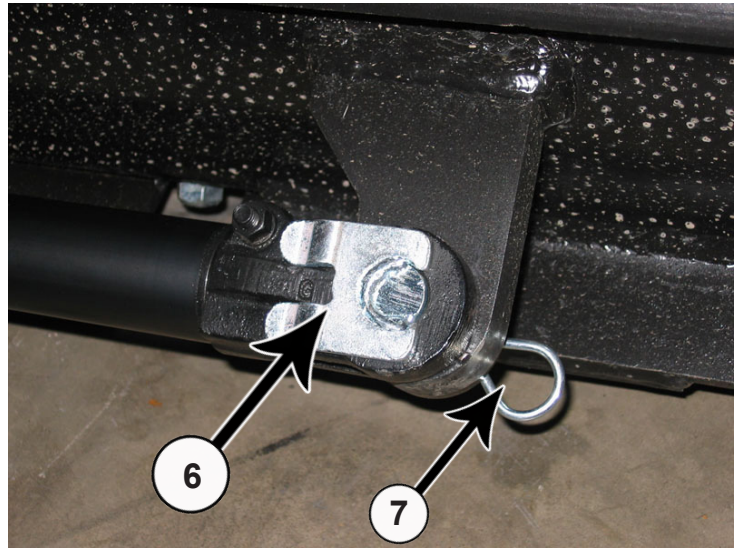
31. Slide blade under tractor until the quick attach is in line with the center of the blade (1). Make sure that the quick attach locking levers are still up (2) .



32. Pitch the male quick attach forward. Position the blade so the top round bar will hook under blade lip (3).



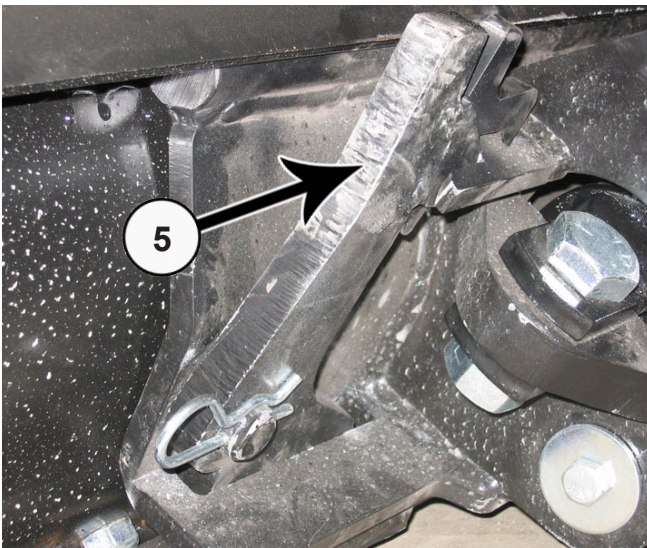
33. Pitch the male quick attach back to lift the blade off the ground (4).



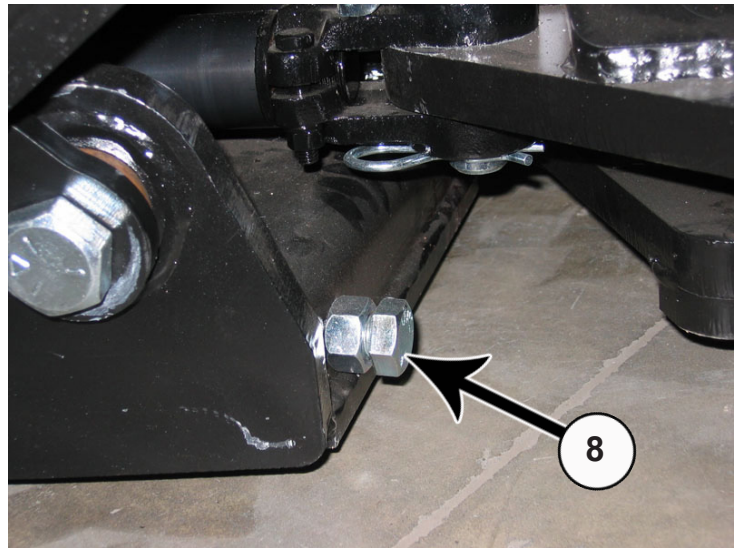
35. Extend the side shift cylinder out to the cylinder connector. Insert pin (PN: 43-7995) (6) and the clip pin (PN: 43-7767) on the bottom (7).

36. After mounting the blade, apply up and down pressure to verify proper blade installation.

37. Cycle through blade functions checking for interferences.



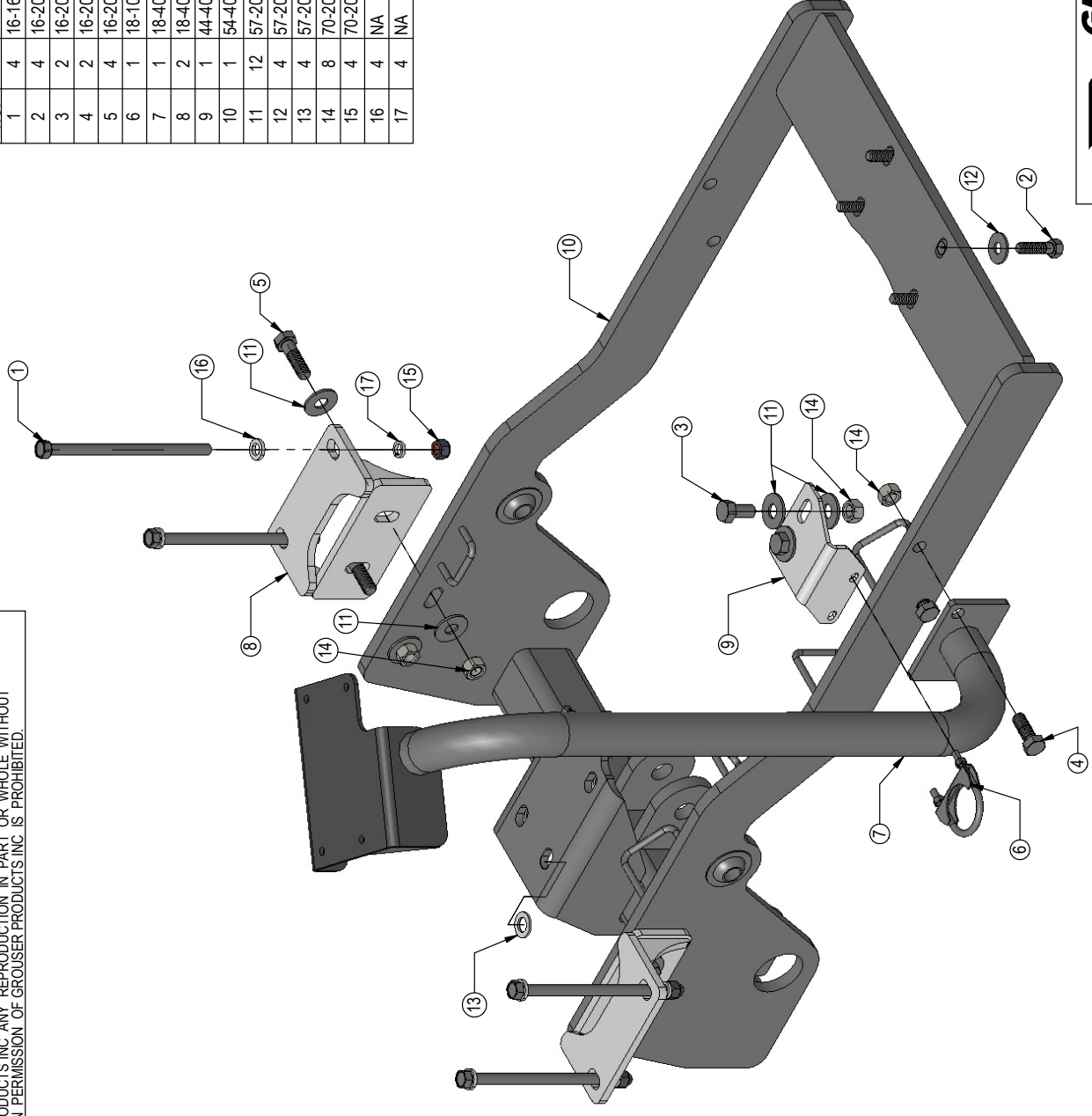
34. Lock the quick attach lever on each side (5). Verify that the lever engaged the corresponding slot on the bottom of the blade.



38. Adjust angle stops (8) so blade does not interfere with tires during angle of blade. Use a wrench to loosen the nut and to the turn the bolt either in or out depending if the blade is hitting the tire. After adjustment, tighten the nut.

39. Tractor and blade are ready for use. Refer to the blade operator's manual for safety, operation, and maintenance information.

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.



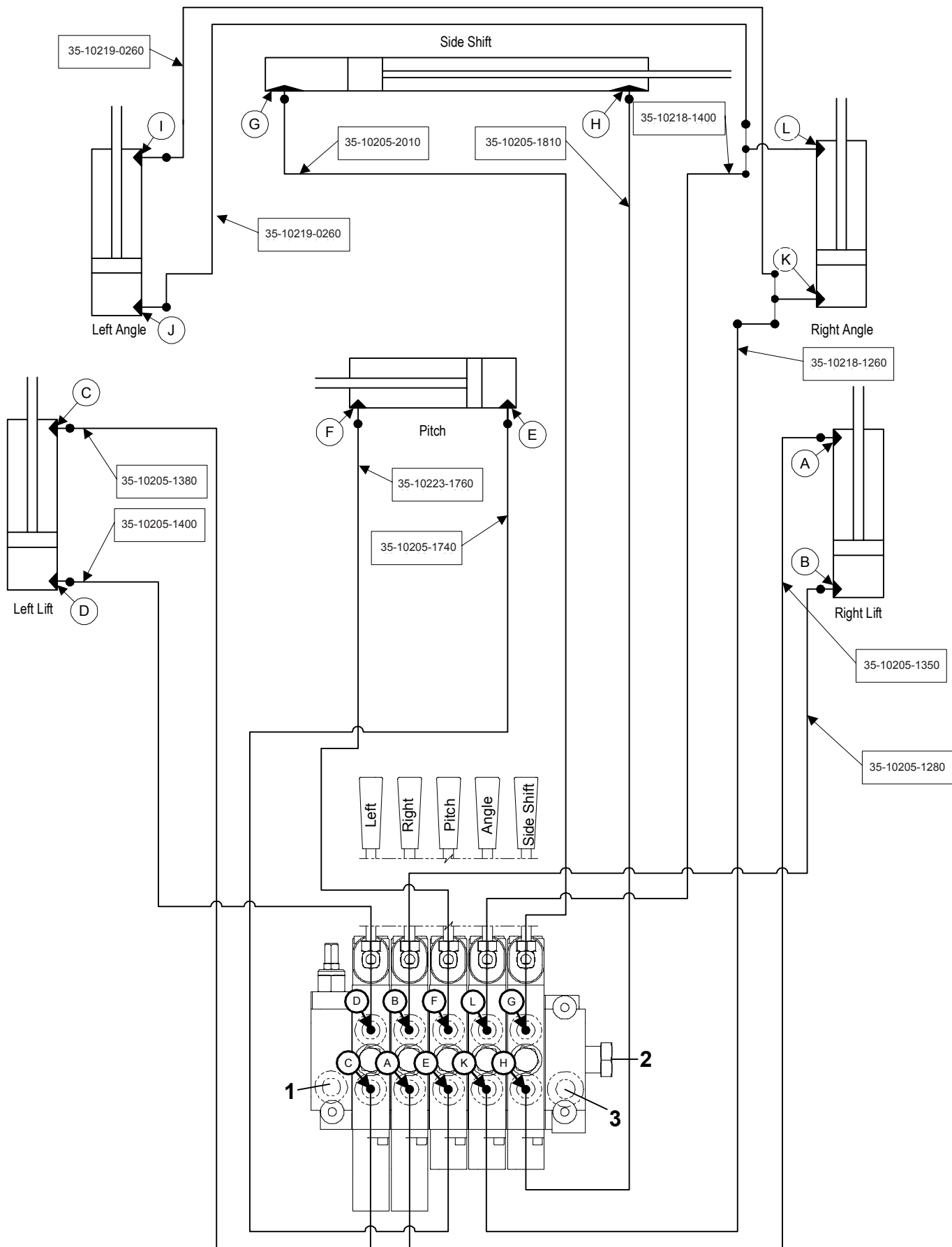
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	4	16-16200280	16mm x 2.00mm x 280mm Metric Hex Bolt Gr 10.9 Coarse ZC
2	4	16-20189	5/8" x 2-1/4" Gr.5 Hex Bolt
3	2	16-20216	3/4" x 1-1/2" Hex Bolt Gr 5 NC
4	2	16-20218	3/4" x 2" Hex Bolt Gr.5 NC
5	4	16-20220	3/4" x 2-1/2" Hex Bolt Gr 5 NC
6	1	18-10248	2-1/2" Tube Clamp Assy
7	1	18-40365	Mount, Valve
8	2	18-40370	Side Bracket
9	1	44-40376	Valve Mount Support
10	1	64-40360	Massey 2615 Direct Lift UC
11	12	57-20747	3/4" Flat Washer
12	4	57-20816	5/8" Flat Washer Grade 8 (USS) Plated
13	4	57-20827	20mm Flat Washer
14	8	70-20607	3/4" Center Lock Hex Nut NC
15	4	70-20870-1	16mm Hex Top Lock Nut 2.0 Pitch Class 10 Clear Zinc
16	4	NA	OEM Washer
17	4	NA	OEM Washer



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 Phone 701.282.7710
 Fax 701.282.8131

TITLE: **Massey 2615**
 Date: 4/12/2017

Hydraulic Schematic



As Viewed From Drivers Seat

Warranty Statement

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. 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. Grouser Products will pay \$35 / hr. on the modification or repair of defective parts in the setup procedure.

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.

Contact Information

1-800-747-6182 or 1-701-282-7710

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