



## Belly Blade

# Installation Instructions

Kubota MX4800, 5100, 5200 & 5800 - 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	16-1615040	16mm x 1.50mm x 40mm Metric Hex Bolt Gr 10.9 FineZC
3	16-20062	3/8" x 3/4" Hex Bolt Gr 5 NC 57-20762
2	16-20065	3/8" X 1 1/4" Hex Bolt Gr 5 NC
4	16-20192	5/8" X 3" 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	2.50" U-Clamp
2	18-19545	200 Kubota MX5200 No Loader Bracket
1	18-19550	200 Kubota MX5200 Valve Mount
1	31-34050	Straight Thread Elbow 90° JIC x O-Ring (6801-08-08)
2	31-34051	Straight Thread Elbow 90° JIC x O-Ring (6801-08-10)
2	31-34100	Swivel Nut Elbow 90° JIC (6500-8-8)
2	31-34159	Male Connector JIC x Pipe (2404-8-6)
1	31-34170	Male Elbow 90° JIC x Pipe (2501-8-6)
1	35-30127	54" x 1/2" -8JIC/-8JIC Hose
2	35-30128	57" x 1/2" -8JIC/-8JIC Hose (3.5M)
5	39-10199	Belly Blade Control Handles
1	43-7995	Pin 1" x 2.125"
1	43-7767	Cylinder Hitch Pin Clip
1	44-19548	200 Kubota MX5200 Valve Mount Support
1	44-10247	Kubota No Loader Valve Manifold Block
3	49-10246	O-Ring Size 20
1	54-19540	200 Kubota MX5200 Undercarriage Weld
1	56-10280-B	Belly Blade 5 Section Valve System
8	57-20756	5/8" SAE Hardened Flat Washer - 1-5/16" OD
4	57-20757	3/4" SAE Hardened Flat Washer - 1-1/2" OD
3	57-20762	3/8" Lock Washer
4	57-20792	3/8 Fender Washer (1.25" OD)
10	59-34950	Zip / Cable Tie 120# 29"
6	70-20607	3/4" Hex Center Lock Nut Gr 2 NC
4	70-20646	5/8" Hex Top Lock Nut Gr 5 NC
2	70-59d6	NUT POLYLOCK 3/8"-16 (YELLOW ZINC)

## 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

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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.

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## Safety Information

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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.

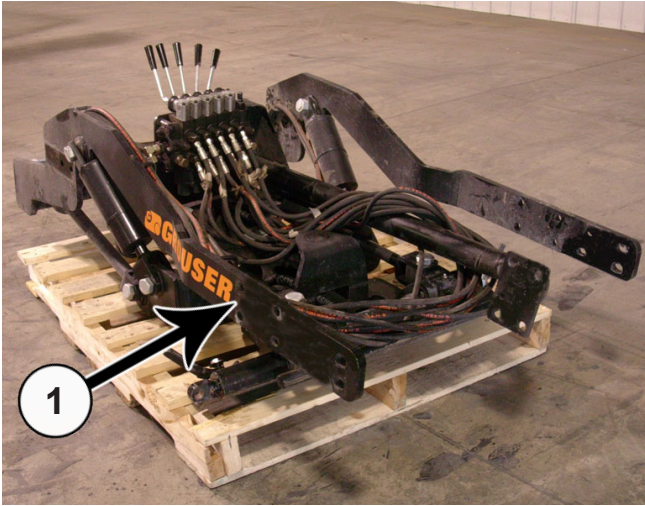
No equipment can be safer than the person running the controls. A careful, informed operator is the best safety device.

# 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.

**NOTE:** To ease assembly, remove rear tires and support the tractor safely.

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



4. The Belly Blade will arrive on a pallet. Unwrap and set the blade aside. Remove the undercarriage assembly from the pallet (1).

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. If the rear tires are not removed, raise the back of tractor, and place blocks safely underneath the tractor tires or use an appropriate hoist. Keep enough distance between the blocks, so the undercarriage will fit.

7. If the rear tires are removed, raise the back of the tractor and use jack stands that are recommended for your tractor to support the tractor safely. Keep enough distance between the jack stands, so the undercarriage will fit.

## Plumbing

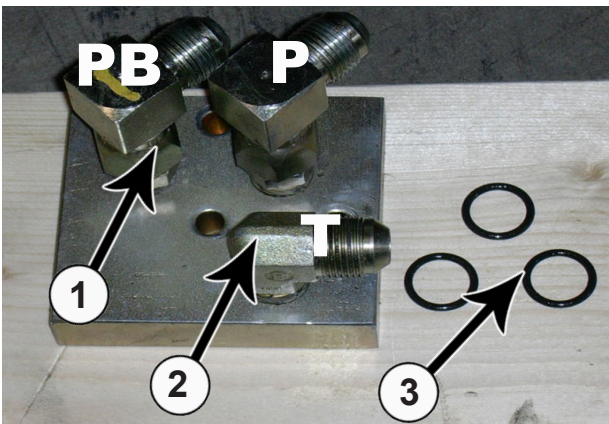
- Note:**
1. Have an oil pan available to collect hydraulic oil when removing hydraulic lines.
  2. Before removing any hydraulic lines, release all hydraulic pressure with the engine off.



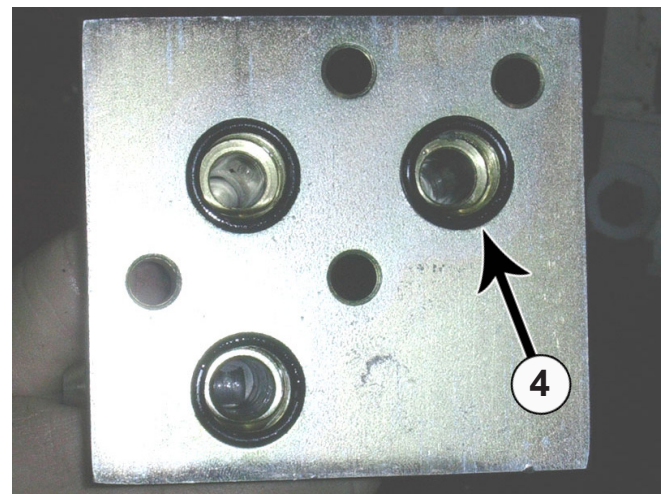
### Caution



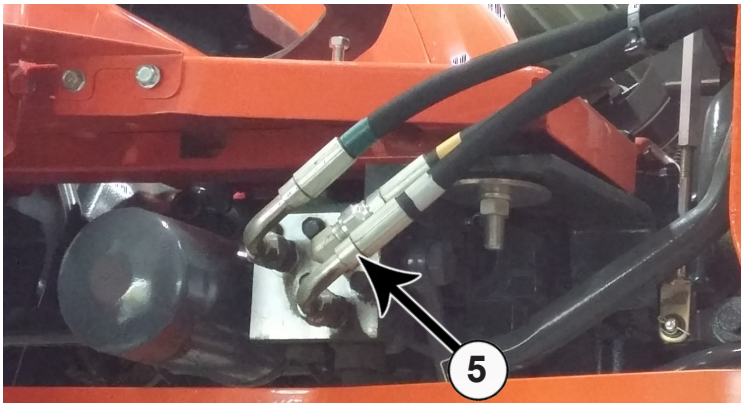
Avoid injury! Hydraulic oil that is under pressure will penetrate the skin and cause a serious injury. If this occurs, it needs to be surgically removed by a doctor familiar with this type of injury within a few hours or gangrene may result.



8. On the new manifold cover, install two straight fittings (PN: 31-34159) with a 90° fitting (PN: 31-34100) in the top two holes (PB & P) (1) and a 90° fitting (PN: 31-34170) in the bottom hole (T) (2). Three O-rings (PN: 49-10246) (3) will be used on the back of the new manifold cover.



9. The back of the manifold cover (PN: 44-10247) with the three O-rings in place (4).

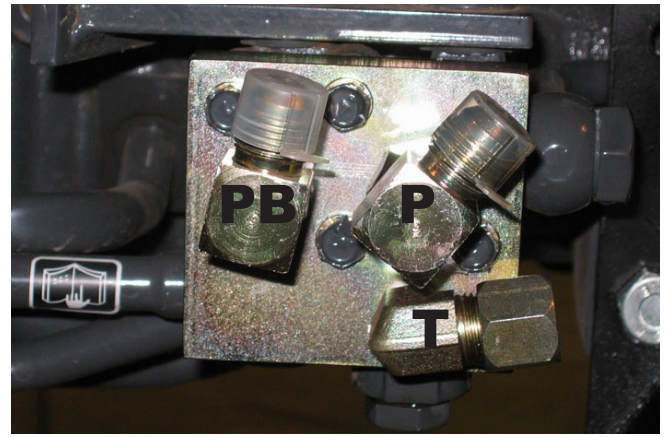


**10.** Remove the manifold cover and O-rings from the hydraulic supply manifold located under the operator's platform.

**NOTE:** Picture shows the manifold set up for a loader and is used for showing the location of the manifold

**NOTE:** Oil will run from the manifold until the new manifold cover is installed and the bottom fitting on the new cover is plugged.

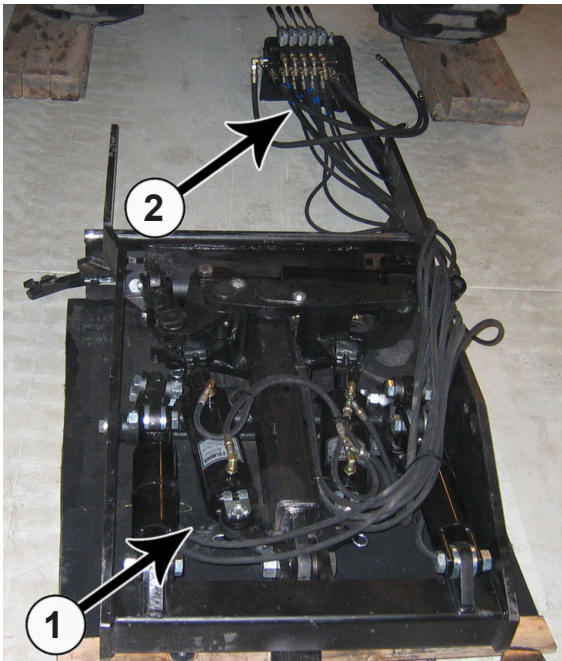
**11.** Install the new manifold cover to the manifold with the 4 bolts from the previously removed cover (5). Verify that O-rings are still in place. Tighten bolts to 19-23 ft.-lbs.



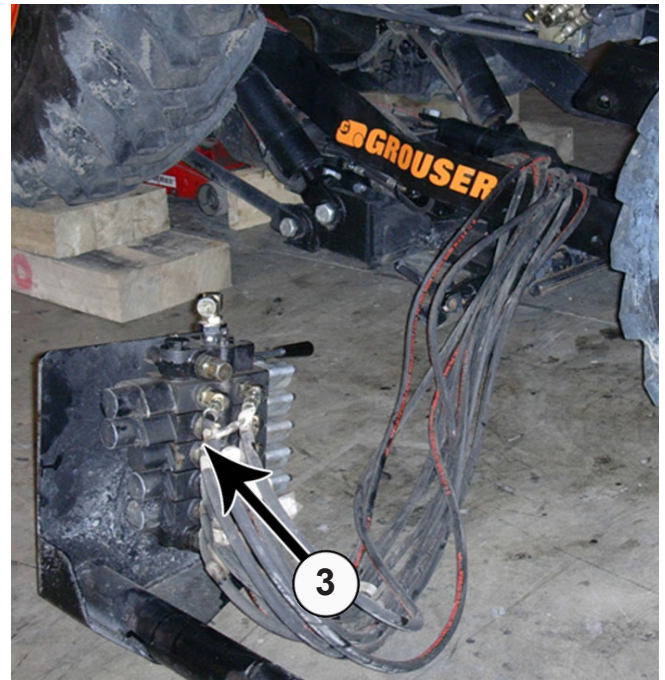
**12.** Attach a 57" hose to the PB and the T ports. Attach a 54" hose to the P port. Lay the other ends of the hoses on the operator's platform to keep them out of the way for installing the undercarriage. The hoses will be attached later in Steps #31-33.

**NOTE:** Cap fitting not supplied.

## Placing Undercarriage Under Tractor

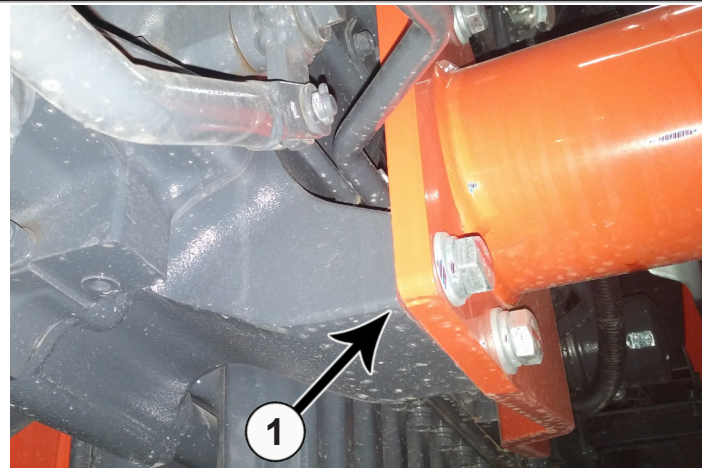
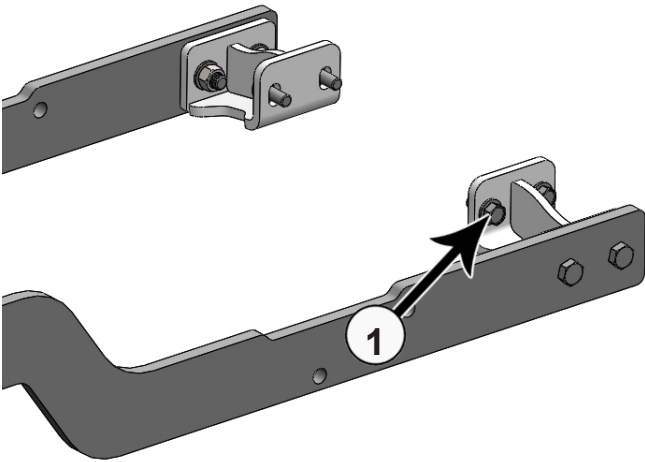


**13.** Align the undercarriage (1) behind the tractor. Lay out the valve and hoses in front of the undercarriage (2). The hoses should be over the right undercarriage arm.



**14.** 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 (3).

# Bracket Installation



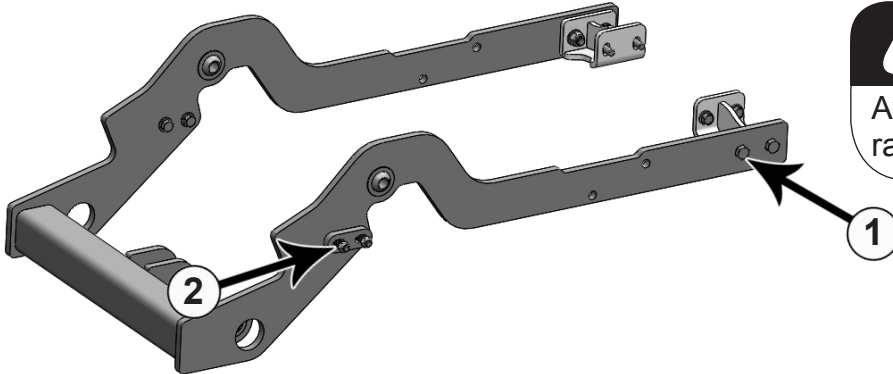
15. Install the front brackets to the front side of the tractor where the loader mounts are attached with 2 - 16mm x 40mm bolts (PN: 16-1615040) and a 5/8" flat washer (PN: 57-20756) on each bolt on each side (1). Picture on the right shows a loader bracket and is used to only show where the front brackets get mounted.

## 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.

16. Use jacks to raise the undercarriage until the undercarriage holes line up with the holes on the front bracket. The use of a block in the front will ensure that both arms are raised at the same time.

17. Once the front holes are aligned, insert two 3/4" x 2-1/2" bolts (1) (PN: 16-20220) into the undercarriage arms and the front bracket on each side (1).

18. Once the bolts are through, attach with a 3/4" flat washer (PN: 57-20757) and a 3/4" nut (PN: 70-20607) on each bolt.

19. Raise the rear of the undercarriage until the holes on the undercarriage line up with the holes on the tractor.

20. For each side, insert two 5/8" x 3" bolts (PN: 16-20192) with a 5/8 washer (2) (PN: 57-20756) (2).

21. The heads of the bolts should be facing the inside of the tractor.

22. Once the bolts are through the undercarriage and the tractor frame, attach with a 5/8" top lock nut (PN: 70-20646) on each bolt.

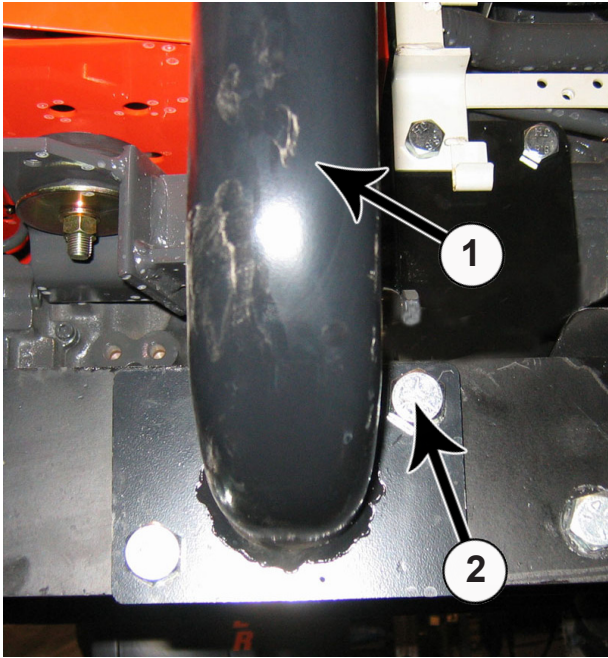
23. Push the undercarriage back till it is pushing against the tractor bracket.

24. Torque all fasteners to the correct specifications after all bolts and nuts have been installed.

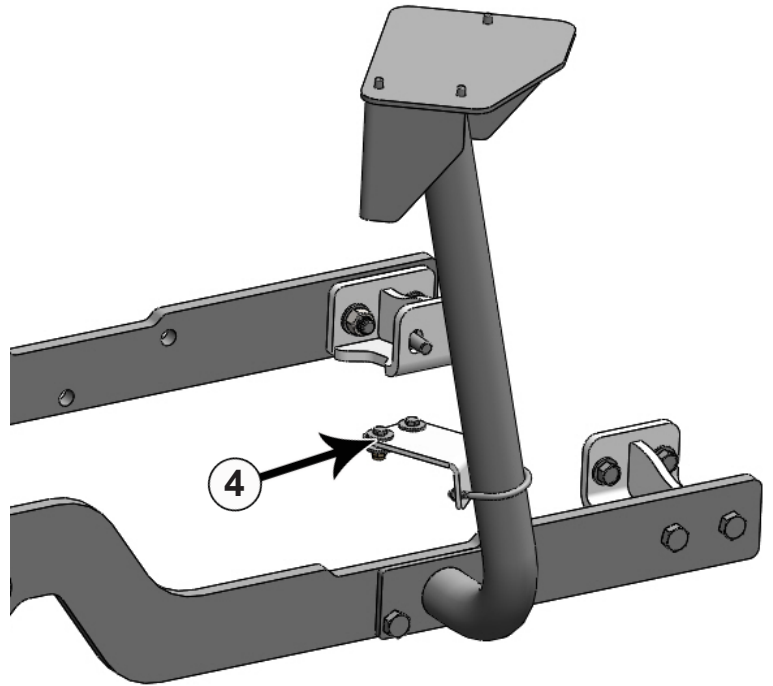
25. Remove the jacks.

# Control Valve and Stand Installation

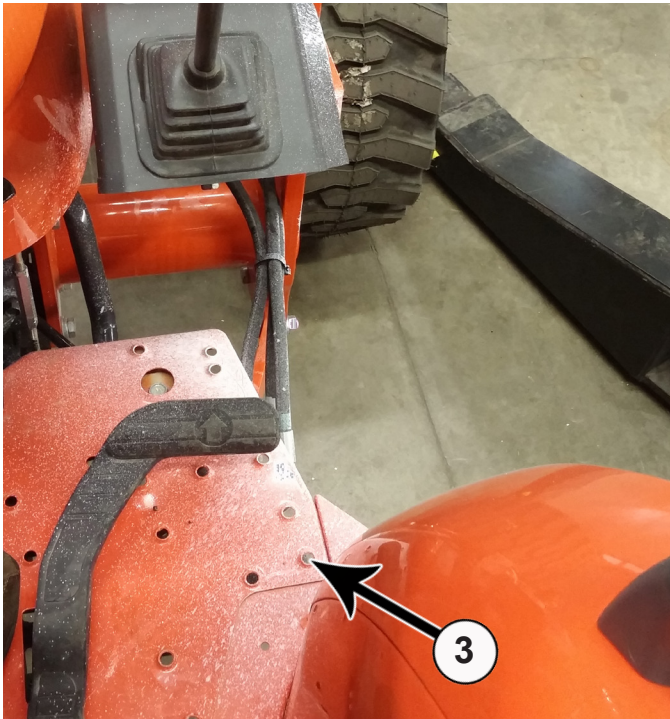
**NOTE:** Make sure that the hoses stay above the undercarriage bracket on the right side of the tractor to keep them away from the blade.



**26.** Align the valve stand (PN: 18-19550) (1) with the undercarriage. Use two 3/4" x 2" bolts (PN: 16-20218) (2) with two 3/4" center lock nuts (PN: 70-20607) to securely attach the stand to the undercarriage.

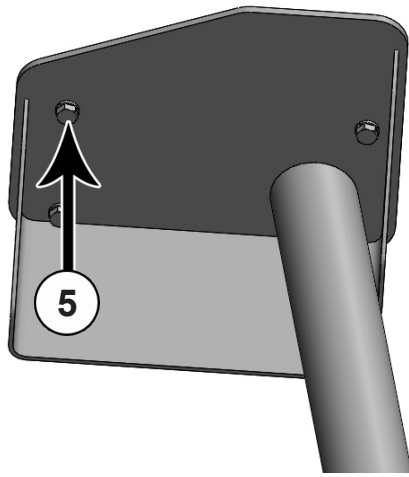


**27.** Attach the valve mount support to the top of the operator platform with 2 - 3/8" x 1-1/4 bolts (PN: 16-20065), 4 - 3/8" fender washers (PN: 57-20792), and 2 - 3/8" nuts (PN: 70-59D6). Attach the valve stand to the valve mount support with a U-bolt (PN: 18-10248) (4). Torque all bolts to the correct specification.

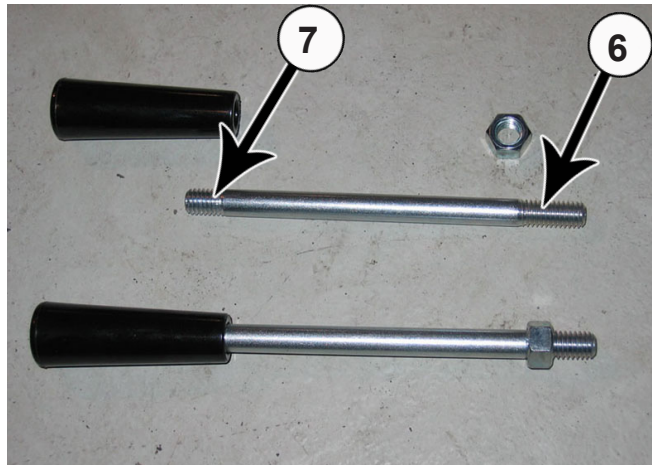


**NOTE:** Photo to show where the valve mount support will be installed (3).



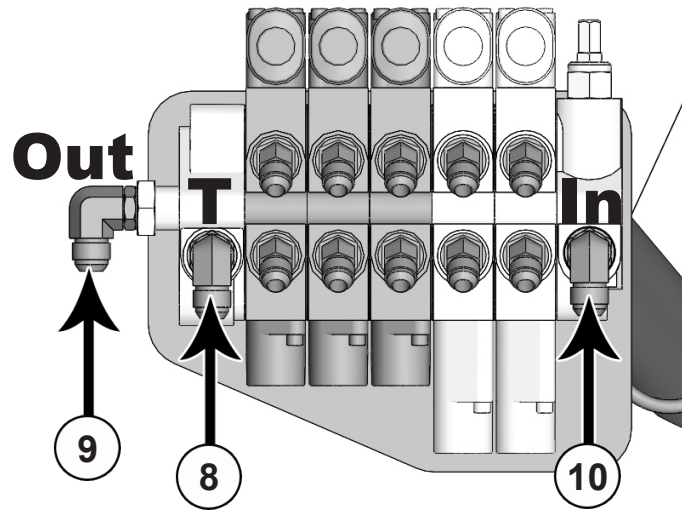


**28.** Attach the control valve (PN: 56-10200) to the valve stand with three 3/8" x 3/4" bolts (PN: 16-20062) and lock washers (PN: 57-20762) (5).



**29.** Assemble control valve handles (PN: 39-10199). Put the nut on the side of the bolt that has longer threads (6). Put the black handle on the other end that has shorter threads (7).

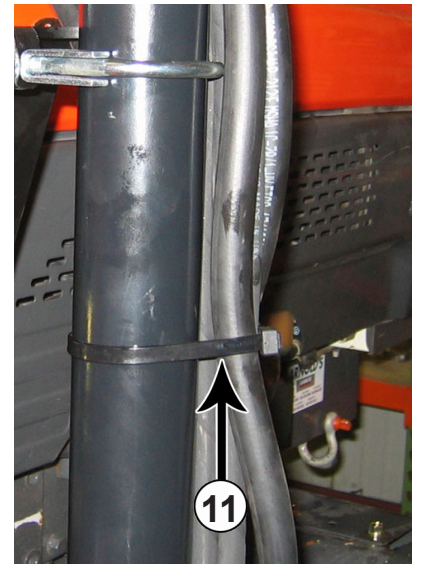
**30.** Insert assembled handles into belly blade control valve. Tighten the nut on each (6).



**31.** Attach the 57" hose from the **T** labeled fitting on the manifold cover to the **Tank** port on the Belly Blade Control Valve (BBCV) (8).

**32.** Attach the 57" hose from the **PB** labeled fitting on the manifold cover to the **Out** port on the BBCV (9).

**33.** Attach the 57" hose from the **P** labeled fitting on the manifold cover to the **In** port on the BBCV (10).



**34.** 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).

**35.** Reinstall tires on the tractor and lower the tractor. The undercarriage installation is complete.

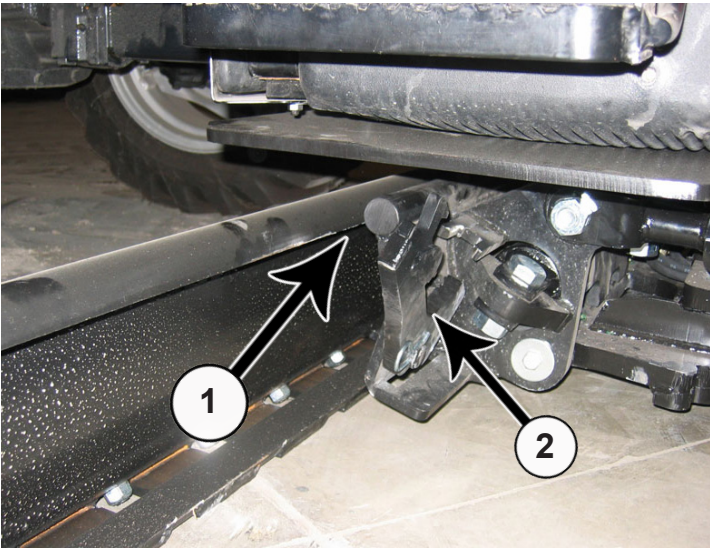
**36.** Reconnect the battery.

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

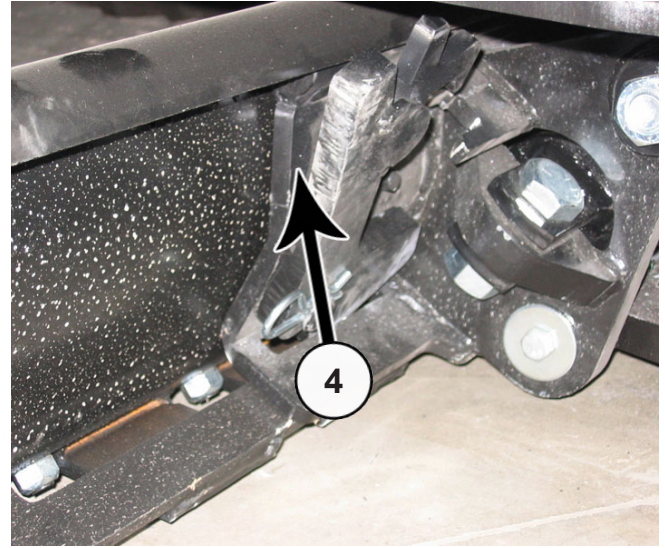
**Note:** Watch the blade carefully for any collisions when running the controls.

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

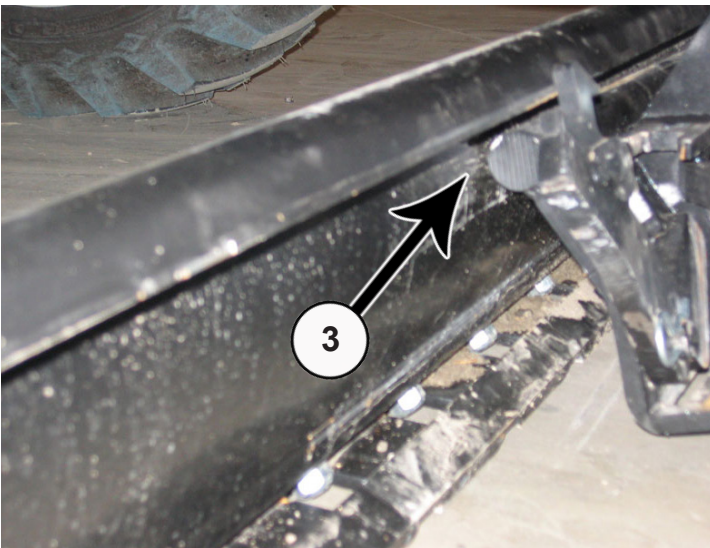
# Blade Installation



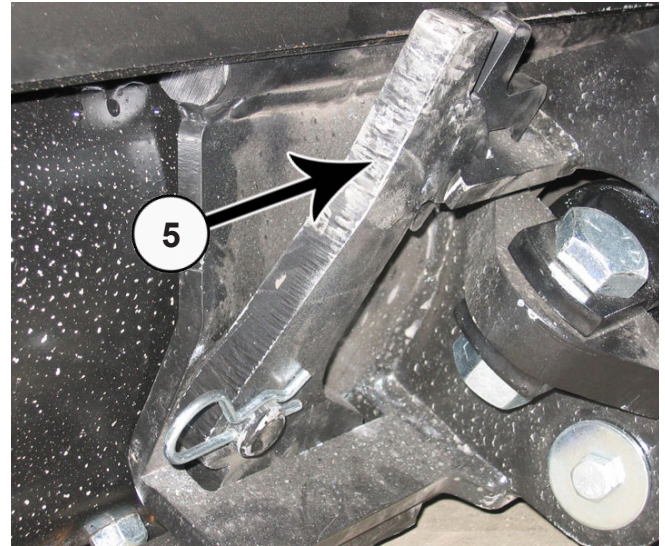
**39.** Slide blade under tractor until the quick attach is in line with the center of the blade (1). Make sure that the quick attach locking levers are still up (2) .



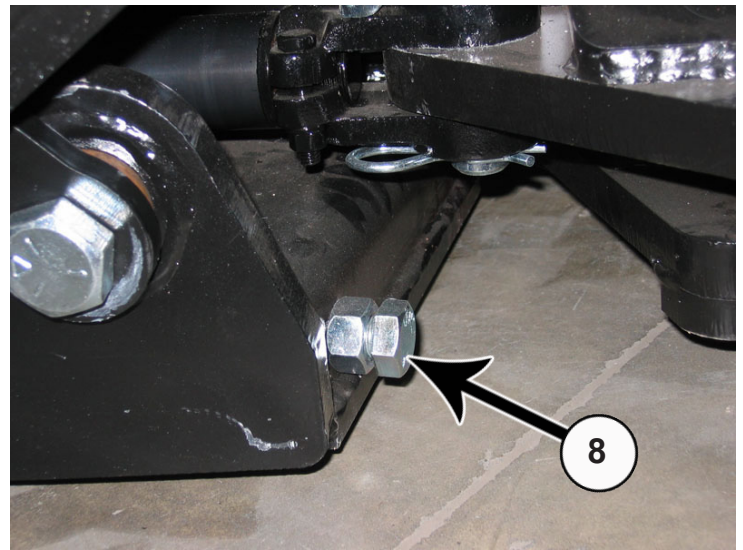
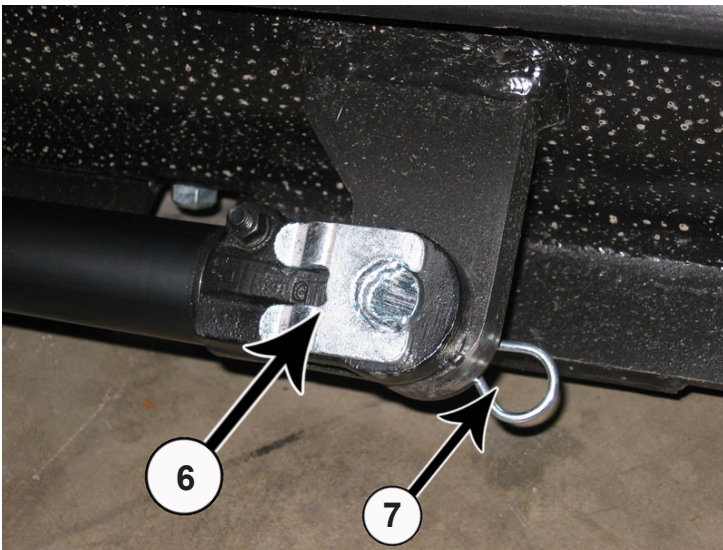
**41.** Pitch the male quick attach back to lift the blade off the ground (4).



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



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



**43.** 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).

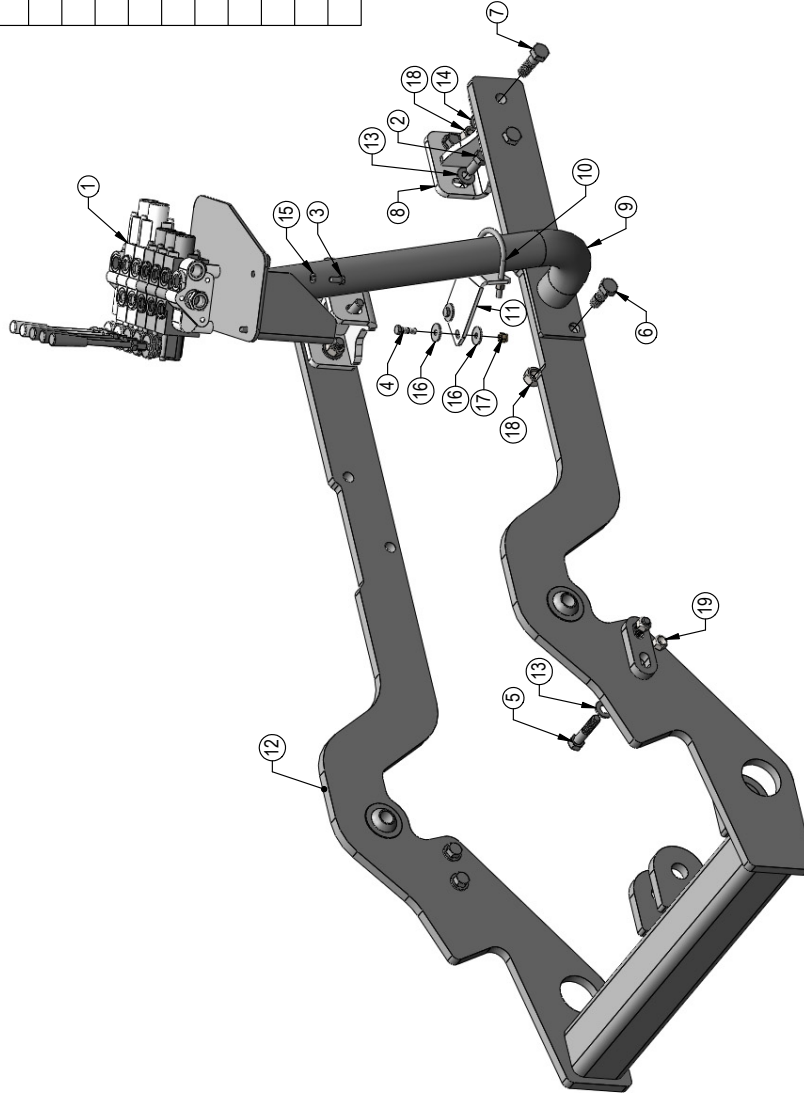
**44.** After mounting the blade, apply up and down pressure to verify proper blade installation.

**45.** Cycle through blade functions checking for interferences.

**46.** 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.

**47.** 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.	PART NO.	QTY.	DESCRIPTION
1	56-10200-5	1	Valve
2	16-1615040	4	16mm x 1.50mm x 40mm Metric Hex Bolt Gr. 10.9 Fine ZC
3	16-20062	3	3/8" x 3/4" Hex Bolt Gr. 5 NC
4	16-20065	2	3/8" X 1-1/4" Hex Cap Screw Gr. 5 NC
5	16-20192	4	5/8" X 3" Gr. 5 Hex Bolt
6	16-20218	2	3/4" X 2" Hex Bolt Gr. 5 NC
7	16-20220	4	3/4" x 2-1/2" Hex Bolt Gr. 5 NC
8	18-19545	2	Bracket, No Loader
9	18-19550	1	Valve Mount Weld
10	18-10248	1	2-1/2" Tube Clamp Assy
11	44-19548	1	Plate, Support
12	54-19540	1	Kubota MX5200 Undercarriage Weld
13	57-20756	8	5/8" Flat Washer - 1-5/16" OD
14	57-20757	4	3/4" Flat Washer - 1-1/2" OD
15	57-20762	3	3/8" Lock Washer
16	57-20792	4	3/8" Fender Washer
17	70-59D6	2	3/8" Polylock Nut
18	70-20607	6	3/4" Hex Center Lock Nut NC
19	70-20646	4	5/8" Hex Top Lock Nut Gr. 5 NC



**GROUSER PRODUCTS INC.**

755 2nd Ave NW  
West Fargo, ND 58078

Phone 701.282.7710  
Fax 701.282.8131

Finish:

Mat:

TITLE

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES.  
TOLERANCES ARE:  
DECIMALS .XX ± .06  
.XXX +/- .030  
ANGLES ± 2 °

Drawn:

**Kubota MX5200 UC Assy**

Date:

Scale: Quantity Used On:

1:12

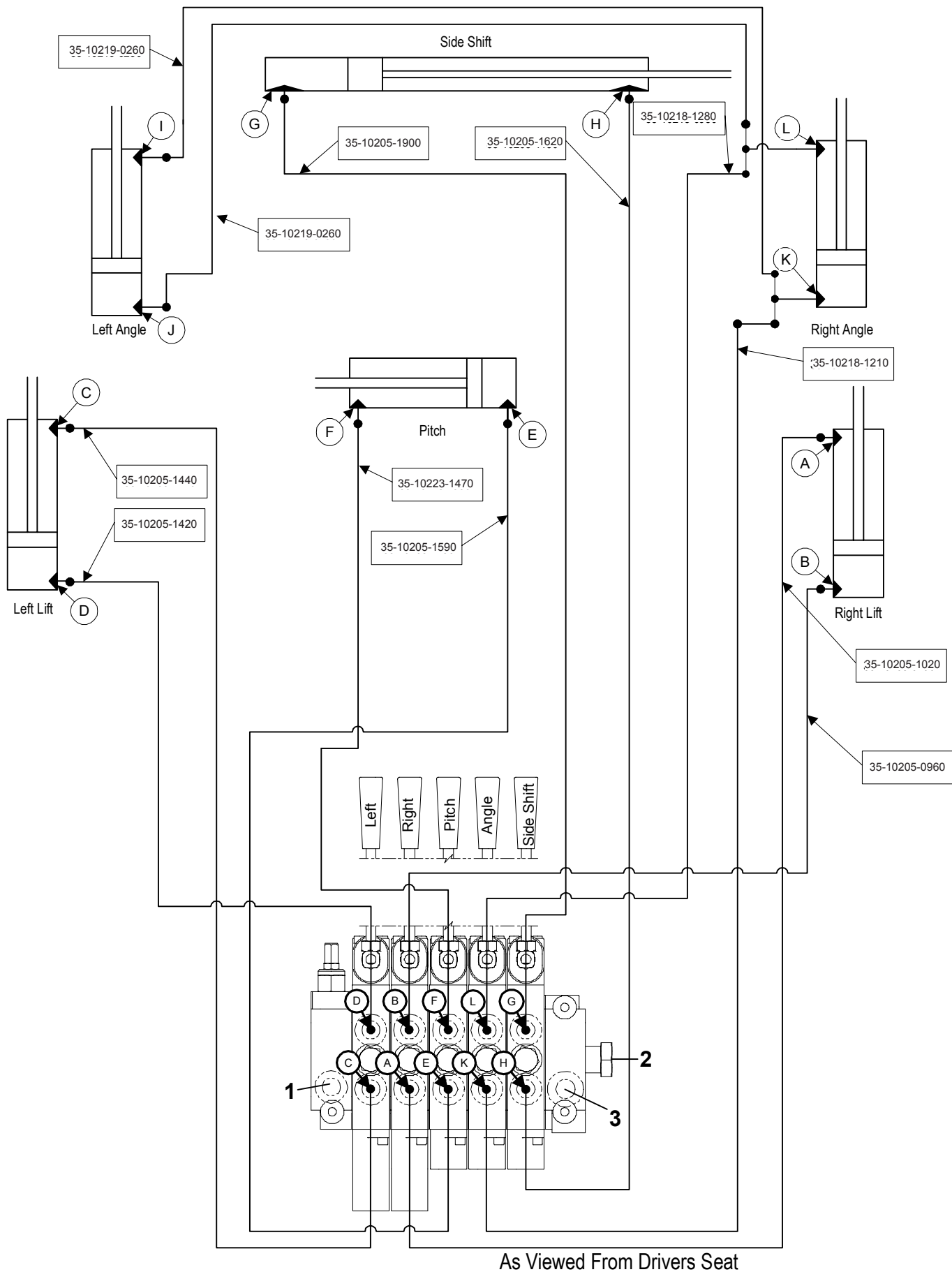
DWG. NO.

**-19540-A**

Sheet:

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# Hydraulic Schematic



# Notes

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# Notes

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# Warranty Statement

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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 one year. If such equipment is found to be defective within one year, 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

755 2nd Ave NW • West Fargo, ND 58078

**Fax:** 1-701-282-8131

**E-mail:** [grouser@grouser.com](mailto:grouser@grouser.com)

**Website:** [www.grouser.com](http://www.grouser.com)