

STANDARD TOOLBAR

OPERATIONS AND MAINTENANCE MANUAL



OVERVIEW

The Standard Toolbar provides an efficient and environmentally friendly method for a variety of dragline operations. The Standard Toolbar has the ability to apply 3,000-12,000 gallons per acre. With high-rate Phantom Edge units, this output can be increased to 20,000+ gallons per acre. Featuring a simple yet effective design, the Standard Toolbar can efficiently work through various types of terrain, lowering fuel consumption and required horsepower. The 6" and optional 8" swing arm includes a double pivot that improves turning. The ability to fold and unfold the wings makes it easy to transport the Toolbar to and from the fields during operations. The standard Flux manifold on the Toolbar is set low for easy access and achieves a consistent distribution through each of the ports.

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SAFETY AND WARNINGS

- Read and understand this manual and all safety signs before operating and maintaining. Review the safety instructions and precautions annually.
- Replace any CAUTION, WARNING, DANGER or instruction safety decal that is not readable or is missing.
- Stay clear of any moving parts, such as shafts, couplings and universal joints.
- Do not attempt to operate this equipment under the influence of drugs or alcohol.
- Give the unit a visual inspection for any loose hardware, worn parts or cracked welds, and make necessary repairs prior to using the product.
- If equipment has been altered in any way from original design, the manufacturer does not accept any liability for injury or warranty.
- Check all hose clamps for a tight fit before operating.
- **Warning: Operating this equipment without experience and a thorough understanding of how it functions could result in damage to the equipment, injury, or death.**

Please be aware of the following common stickers on the Standard Toolbar as well as others not shown



SAFETY AND WARNINGS

- The Standard Toolbar should only be operated by responsible persons who have thoroughly read the operators manual and have been properly instructed to do so. Do not allow untrained persons to operate the machine
- Follow the maintenance schedule outlined in this manual
- Be certain that gate valves are in the desired position and all clamps are in a locked position before operating the toolbar.
- Be certain all shields and guards are kept in place
- Hydraulic system parts and connections can contain high pressures which, if suddenly and unexpectedly released, can cause serious injury or death. Do not check for leaks with your bare hands
- Repair any loose or damaged hydraulic hoses. Inspect all hoses carefully before use. Tighten all connections securely.
- Support equipment properly when working beneath it
- Make sure no one is working on, or close to the machine before starting or moving it
- Be sure to install the swing arm transport bar before entering roadways

TOOLBAR SPECIFICATIONS

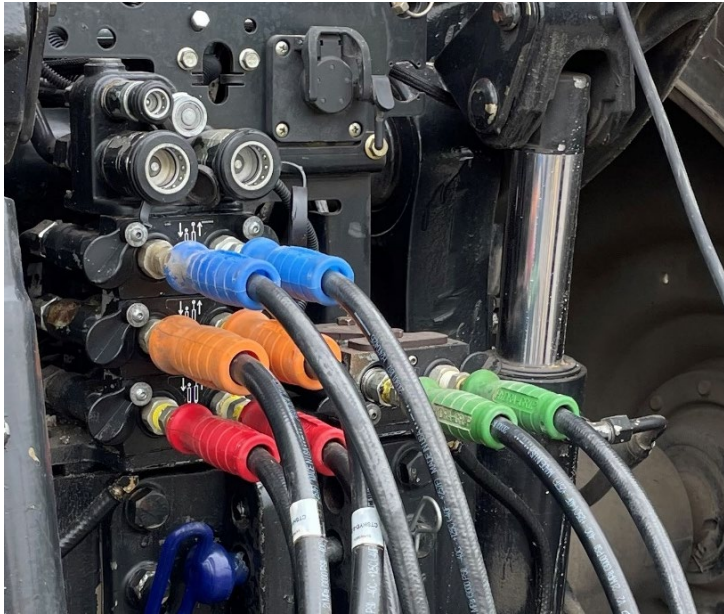
Toolbar Dimensions	Toolbar Weight	Travel Width	Travel Height
26' 20 units on 16" spacing	17,400 lbs	16'	11.5'
30' 22 units on 16" spacing	16,300 lbs	16'	12.5'
28' 18 units on 18" spacing	16,200 lbs	14.5'	11.9'
33' 22 units on 18" spacing	17,700 lbs	17'	12.8'
26' 16 units on 20" spacing	14,600 lbs	15.2'	11.4'
33' 20 units on 20" spacing	16,200 lbs	14.9'	13.9'
28' 14 units on 24" spacing	14,000 lbs	12.8'	12.0'
32' 16 units on 24" spacing	15,000 lbs	16.7'	11.7'
36' 18 units on 24" spacing	15,900 lbs	16.7'	13.0'

Weight may vary depending on options

QUICK START GUIDE

- Hook up the hitch to the tractor with the proper pin (page 15)
- Connect the hydraulic hoses into the tractor (page 7)
- Connect the electrical plug to the tractor (page 17)
- Adjust the turnbuckle to level the frame and swing arm (page 14)
- Verify that the clog indicator is operational (page 12)
- Verify that the valve indicator lights are operational (page 12)
- Verify that the DOT and LED lights work (page 17)
- Verify that the manifold turns in the correct direction when engaged (page 11)
- Verify that the flowmeter is setup with the correct information

HYDRAULIC FUNCTIONS



Machine Lift Cylinder

- Hydraulic hoses/fittings indicated by Red hydraulic handles
- Raises and lowers the Machine and its wheels

Wing Fold/Pig Dump Selector Valve

- Hydraulic hoses/fittings indicated by Green hydraulic handles
- Lifts and lowers the wings for transportation and for field use
- Connects to the pig dump valve



Manifold Motor

- Hydraulic hoses/fittings indicated by Orange hydraulic handles
- Runs the motor in the manifold to evenly distribute the manure

Main Shutoff Valve

- Hydraulic hoses/fittings indicated by Blue hydraulic handles
- Connects to the main line shut off

HYDRAULICS - FIELD OPERATION

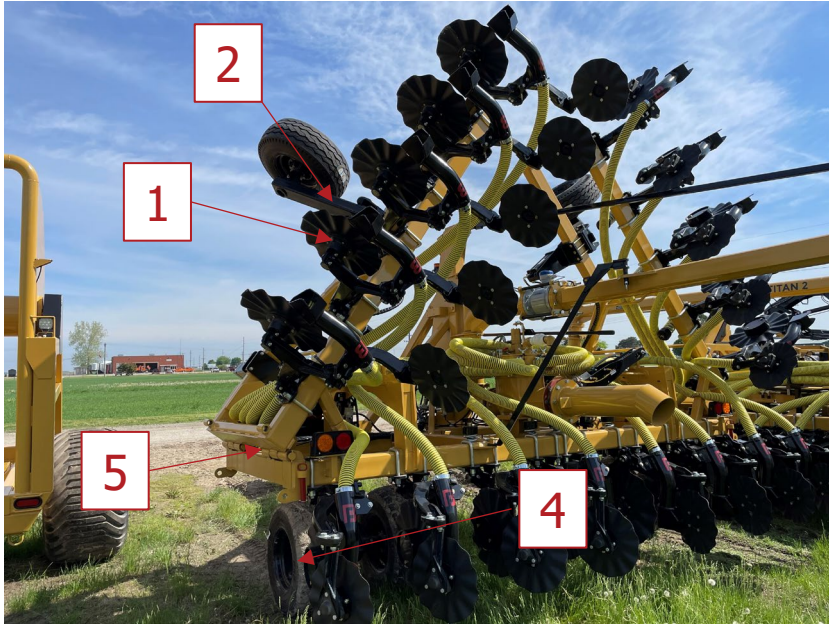


- During operation, insert wing pin into horizontal position
- If the wing pin is not inserted (not recommended by manufacturer) ensure that the wing cylinders (Green) are fully extended



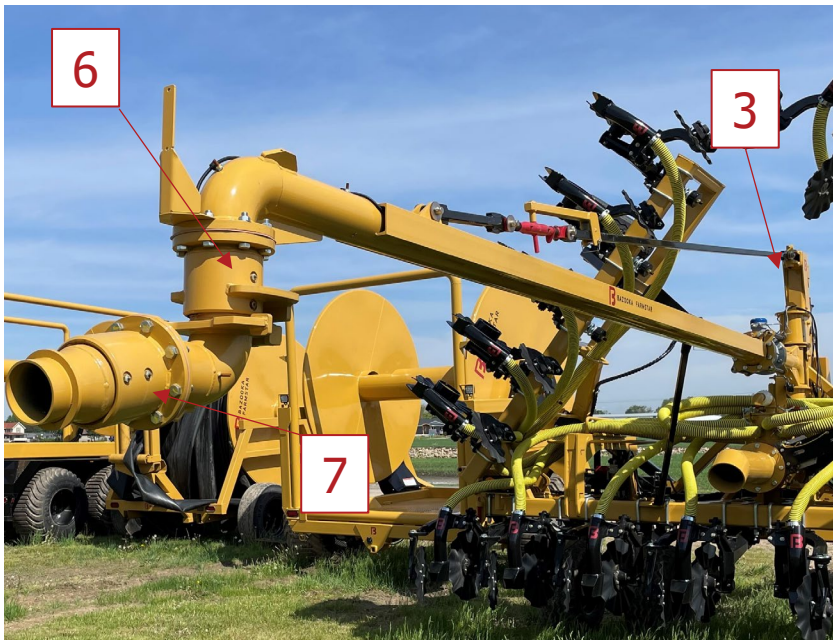
- Use the switch shown to the left to operate the selector valve and redirect hydraulic flow

MAINTENANCE - GREASE



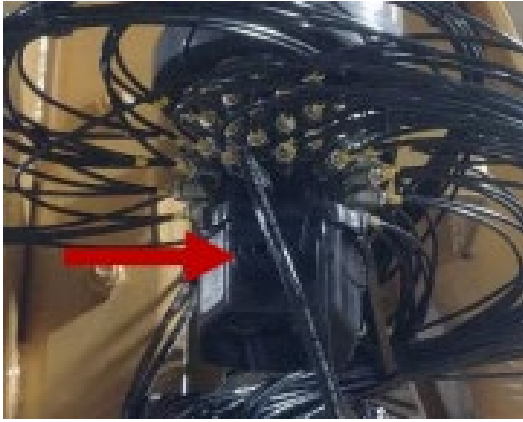
Grease Points

1. Auxiliary lift bogey pivot (x2) apply daily
2. Main lift bogey pivot (x2) apply daily
3. Swing arm (x5) apply every 160hrs
4. Wheel hubs (x4) apply every 160hrs
5. Wing pivots (x2) apply daily
6. Pipe swivels (x4) apply daily
7. Hose swivels (x4) apply daily



- Make sure to grease the entire toolbar prior to long term storage
- See Phantom Operation Manual for Phantom Grease information
- Use a quality lithium soap compatible E.P. grease meeting the NLGI #2 specification and containing no more than 1% molybdenum disulfide

AUTO GREASE



- **Powering the unit** – The AC3 receives power from the 7-pin tractor electrical connector.
- **Pump flow setting** - Remove the black blank plug to reveal a small disk. Numbering 0 to 9. This adjusts the amount of grease that comes out at each point. The dial will be set to 2 when it comes from the factory, but since none of the grease points require an exact amount of grease, find a setting that you feel adequately greases your machine.
- **Refilling the reservoir** - Refill the reservoir by using the quick coupler attached to the auto greaser and fill it using the fill line at the rear of the bar.
- **Replacing line** - Each grease line has a numbered tag. If damaged, disconnect the line from the pump and replace with the same length cut from 164ft (50m) grease line given. It is recommended that you use wire cutters to cut the line. Make sure not to crimp the line. Finally, replace the tag and reroute the grease line.

Switch Position	Setting
0	Continuous operation 1.8rpm
1	Continuous operation 0.9rpm
2	3 minute delay
3	7 minute delay
4	11 minute delay
5	15 minute delay
6	19 minute delay
7	24 minute delay
8	30 minute delay
9	36 minute delay

Refer to the AC3 Auto Grease Manual for further information

MANIFOLD MOTOR SETUP



Manifold Motor Instructions

- The manifold motor blades should rotate counterclockwise with the angle of the chopping blade as the leading edge
- Recommended hydraulic operation range is 15-25% of hydraulic flow (3-5 GPM)
- Adjustments to manifold hydraulic flow should be made slowly to avoid damaging the manifold



Manifold Blocking Plate Recommendations

- 9" Best fit for 800 to 1000 gallons per minute
- 6' Best fit for 1000 to 1200 gallons per minute
- 3" Best fit for 1200 to 1400 gallons per minute

PIG AND MAIN LIGHTS



MAIN (Main Line Shutoff)

- Shows status of manure flow to the manifold
- When the light is red manure is flowing
- When lights are off, the valve is closed

PIG (Pig Discharge/Cleanout)

- Opens and closes for cleanout during pumping and to discharge pig from the system
- When light is red manure is being discharged
- When lights are off, the valve is closed

Knife Gate Status Indicators



Closed



Partially Open

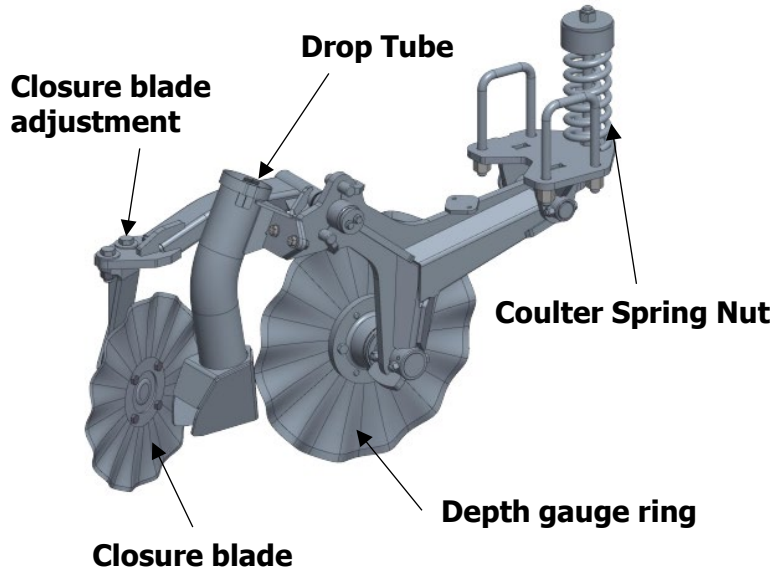


Fully Open

Clog Light

- If equipped the clog light can be adjusted by turning the socket screw with a 3 mm Allen wrench
- Turn Counterclockwise to lower the trigger pressure
- Turn Clockwise to raise the trigger pressure

PHANTOM ADJUSTMENTS



Set Up and General Operation

- Set Units to the correct spacing.
- Ensure U-Bolts are seated properly and tightened to the proper torque settings.
- Ensure Coulter Springs are set to preload height (10.25" – 10.375").
- For best performance, insert hoses fully into drop tube until it contacts the "V" at the bottom and can't be pushed any further and fully tighten hose clamp.
- Make sure the Toolbar is running level with the ground when unit is at depth to ensure optimum performance of the phantom unit.
- Units should be running at the depth gauge ring when units are at proper depth. Adjust the toolbar if the unit is too shallow or too deep. Additionally, coulter spring may need tightened to penetrate the ground easier.
- The drop tube should be applying manure to the center of the trench. If not, check to see if the mounting bracket is bent/loose.
- The closure blade should be covering the trench, if not, the angle of the mounting bracket may need to be adjusted. For slower speeds, the closure blade can be set at a more aggressive angle. At higher speeds, the closure blade can be set at a less aggressive angle.
- CAUTION – Coulter units are not recommended for use in frozen ground. Frozen ground could potentially damage coulter units.
- In tough ground conditions, edge units can be used to effectively penetrate the ground and improve coverage.

LEVELING THE FRAME



Swing Arm Turnbuckle

- Adjust the swing arm so that it is slightly above level to account for the weight of the hose
- Turn the turnbuckle counterclockwise to lower the swing arm
- Turn the turnbuckle clockwise to raise the swing arm



Frame Turnbuckle

- After connecting the hose, verify the frame is level to ensure functionality
- Turn the turnbuckle counterclockwise to lower the tongue
- Turn the turnbuckle clockwise to raise the tongue

HITCH SETUP

Bull Pull Hitch

- Hitch fits CAT3 hitch with bushing
- For a CAT4 hitch remove the snap ring and bushing
- For CAT3 – Use a 1-1/2" pin
- For CAT4 – Use a 2" pin



MAINTENANCE - TIRES

Specifications

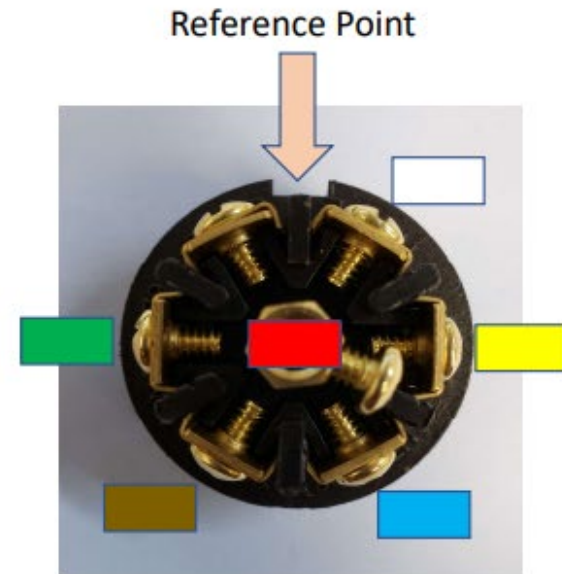
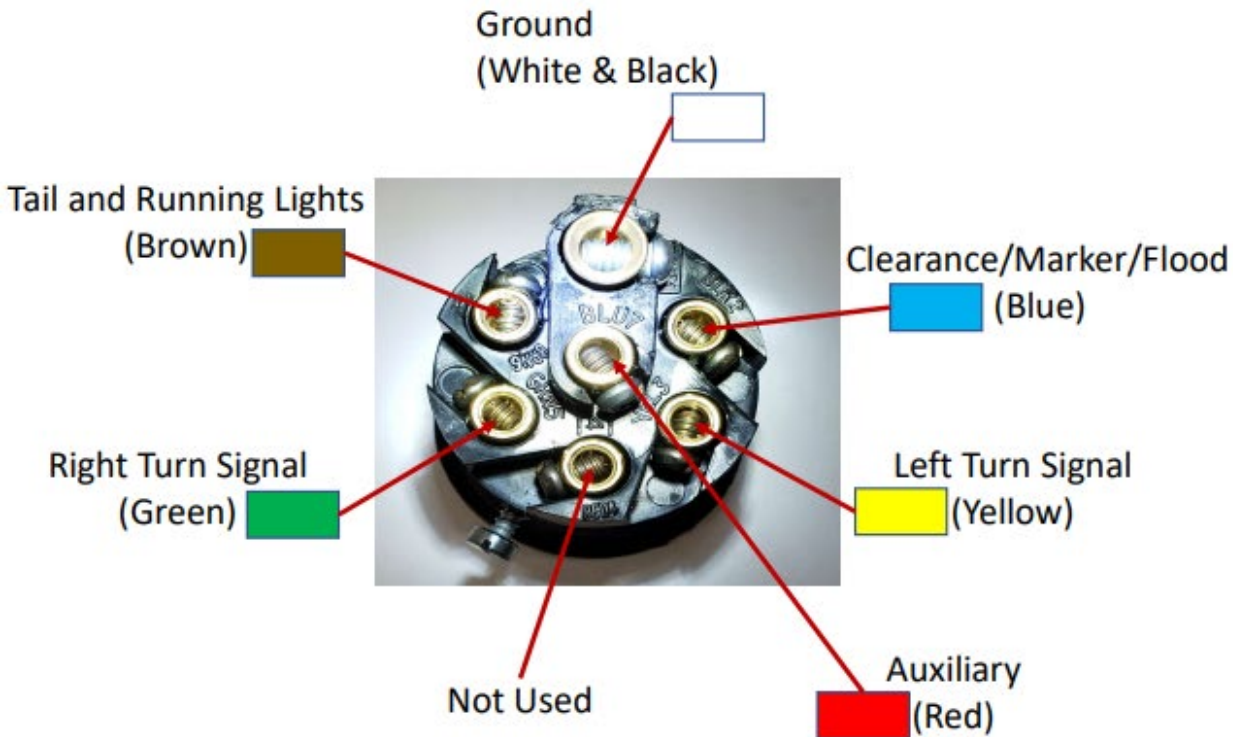


- Flotation tires are factory set to 60 psi and have a max pressure of 75 psi at 30 mph
- The standard frame and gauge tires are factory set to 70 psi and have a max pressure of 90psi
- Lug nuts should be torqued to 100 lb*ft

Warning

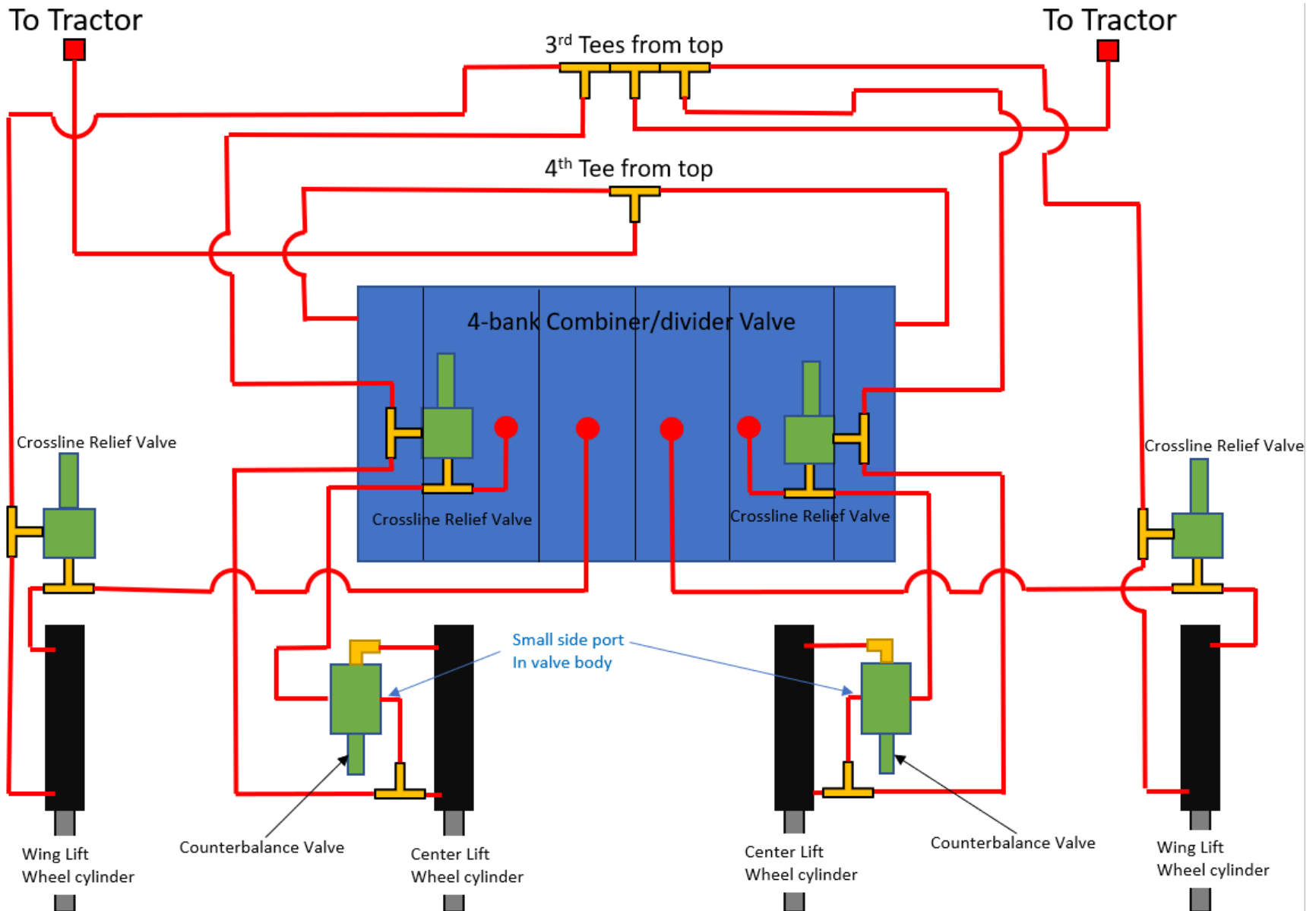
- Regularly inspect tires for wear, checking, and tire pressure.
- Always order and install tires and wheels with appropriate capacity to meet or exceed the anticipated weight to be placed on the equipment
- Inflating or servicing tires can be dangerous. Whenever possible, trained personnel should be called to service and/or mount tires.

ELECTRICAL PLUG SCHEMATIC



Viewed from the back side

HYDRAULICS LAYOUT



BAZOOKA FARMSTAR WARRANTY POLICY

This warranty document outlines the warranty coverage provided by Bazooka Farmstar and is subject to the following provisions.

Customer Responsibility

It is the customer's responsibility to maintain the equipment in accordance with the instructions provided in the operations manual.

If an equipment failure occurs, the customer must cease operation immediately until proper repairs have been made. **Any damage resulting from continued operation after a failure may not be covered under warranty.**

Limited Warranty Coverage

New manufactured equipment warranty begins the date the equipment is invoiced to the original purchaser, or from the date the equipment was first put into use.

Limited Warranty Coverage is only valid on registered equipment to the original owner.

We guarantee components manufactured at Bazooka Farmstar to be free of material defects or workmanship issues for 1 year and unlimited hours.

For purchased components, including hydraulics and electronics, full warranty is limited to **6 months or 500 hours of operation on any finished goods with an engine**, whichever occurs first.

Our dealers do not have authority to access, evaluate, or administer warranty on behalf of Bazooka Farmstar.

We do not guarantee our products to meet local municipal, state, or national laws or regulations.

Transportation of Equipment

In the event of warranty coverage, Bazooka Farmstar may cover the transportation costs of disabled equipment at our discretion. We limit transport to the distance of the nearest authorized dealer, up to a maximum of **200 miles**.

Any arrangement for transport must be pre-approved by Bazooka Farmstar.

BAZOOKA FARMSTAR WARRANTY POLICY

Exclusions

This warranty does not cover damage caused by improper use, maintenance neglect, or modifications made to the equipment.

Certain components may be covered by their original manufacturer's warranty, which may differ from Bazooka Farmstar's warranty. This includes engines which are exclusively covered by manufacturer's warranty.

Any use of aftermarket or replacement parts not purchased through, manufactured by, or approved by Bazooka Farmstar will void warranty.

Submitting a Claim

If a defect is suspected, a dealer must submit a warranty claim along with necessary documentation. Bazooka Farmstar reserves the right to inspect the equipment to determine the cause of the defect and the required labor hours before repairs are performed.

If your Account Manager informs you that parts need to be returned as part of your warranty evaluation, a Return Material Authorization (RMA)** will be sent to you and you will have 30 days to return the items.

Upon receipt of the failed replacement parts, a warranty evaluation will be performed to determine a disposition. If approved, a credit will be issued in full.

Bazooka Farmstar will send your approval or denial via email for your records.

** We understand that evaluation, especially when involving a third party, may extend past 60 days. However, if the claim is in process and the items were returned by the expected return date on the RMA, no finance charges will be assessed.*

**This change is only applicable to warranty orders that require parts to be shipped when warranty coverage is not clearly approved, or the problem is not easily identified. Manufactured products containing material defects or workmanship issues, or instances where Bazooka Farmstar is undeniably at fault for the problem, will continue to be processed with no additional charges.*

***Issuance of an RMA does not guarantee credit or approval of warranty coverage.*