

THE OUTLAW

OPERATIONS AND MAINTENANCE MANUAL



**BAZOOKA
FARMSTAR**

OVERVIEW

The Full Throttle Pit Boom Trailer is a pump trailer designed for quick set-up, convenience, and ease of travel while also providing the power needed to pump manure into the field. The Trailer is comprised of a force feeding 35 FT boom, submersible pump, main pump, and the engine. Manure is fed to the main pump by the submersible pump and is then pumped to the Toolbar or the next Booster Pump. The trailer is equipped with a 500 HP – 780 HP engine, a 500 gallon steel fuel tank, drive train, and a clutch (optional). The trailer components such as the engine/main pump and knife gate valves are controlled with the NEXUS controller which can be found on the passenger side of the trailer.

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SAFETY AND WARNINGS

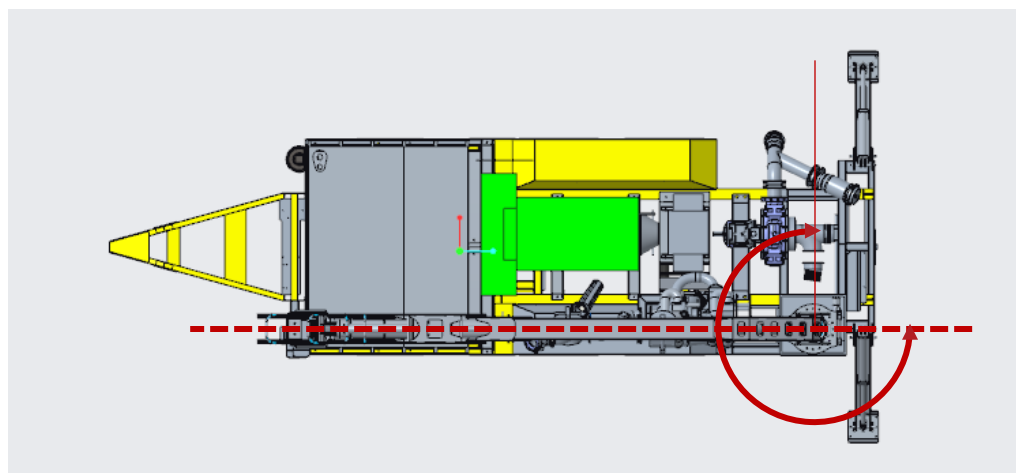
- Read and understand this manual and all safety signs before operating and maintaining. Review the safety instructions and precautions annually.
- Replace any CAUTION, WARNING, DANGER or instruction safety decal that is not readable or is missing.
- Stay clear of any moving parts, such as shafts, couplings 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.

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



OUTLAW BOOM SPECIFICATIONS

Boom	Max depth	Max Reach
35' Pit Boom	19' (below grade) at 19' from side of trailer	34' 6" (from drivers side of trailer) at ground level
41' extended	23.5' (below grade) at 20' from side of trailer	41' (from drivers side of trailer) at ground level



- From travel mode, all outlaw trailers have 90 ° of rotation over the passenger side of the trailer and 180 ° of rotation over the driver side of the trailer.
- Angle of rotation may be able to exceed maximum rotational limits given that the hydraulic hoses in the boom pedestal allow it.

OUTRIGGER OPERATION

- Front downriggers are operated with the yellow hand controller found on the front of the trailer (SEE PG 6).
- Rear outriggers are to be operated only at low engine idle using control valve at rear of trailer (SEE PG 6).
- Move only one function at a time on the control valve.



OUTRIGGER OPERATION

FRONT DOWNRIGGERS



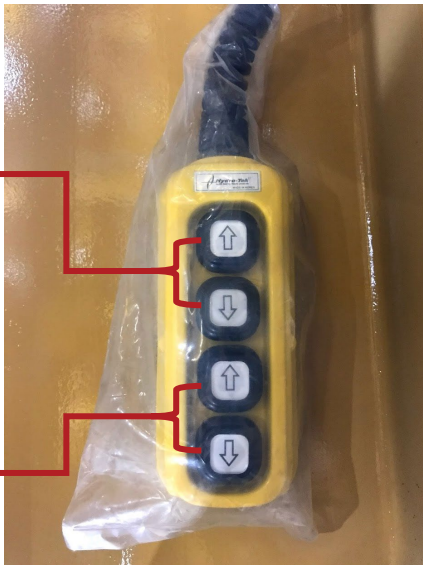
Front downrigger controller location

Rear outrigger controller location

REAR OUTRIGGERS



FRONT DOWNRIGGER CONTROLLER

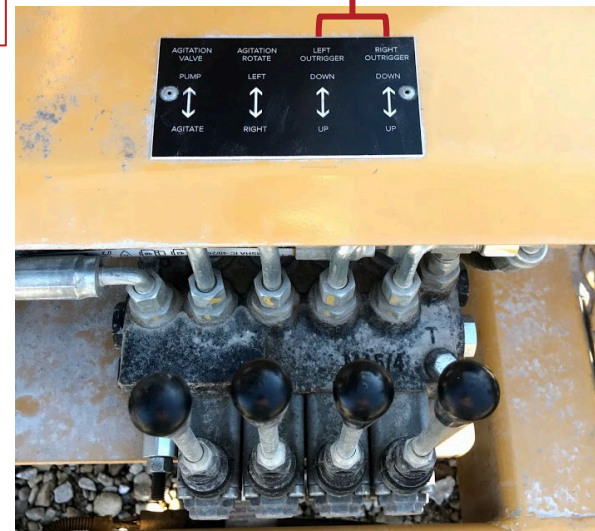


Passenger side downrigger control

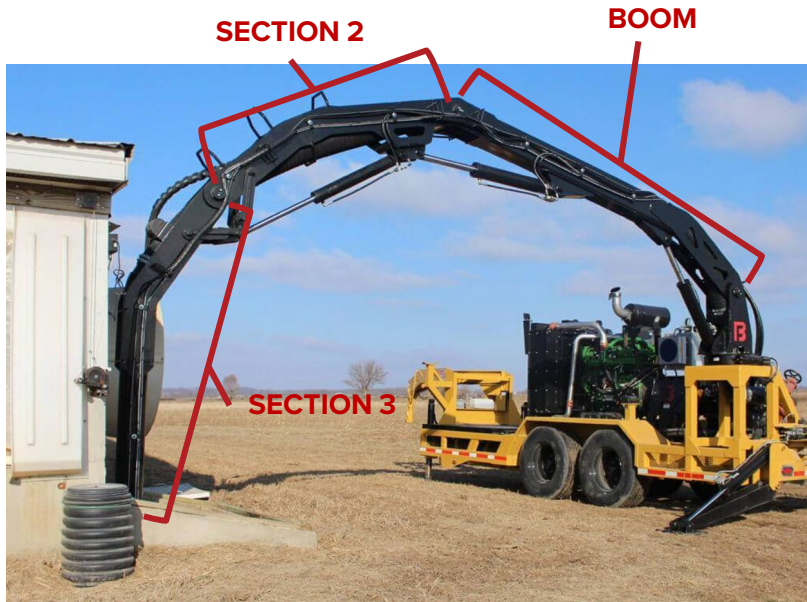
Driver side downrigger control

Rear outrigger control information

REAR OUTRIGGER CONTROLS



OUTLAW PIT BOOM OPERATION



Boom control location



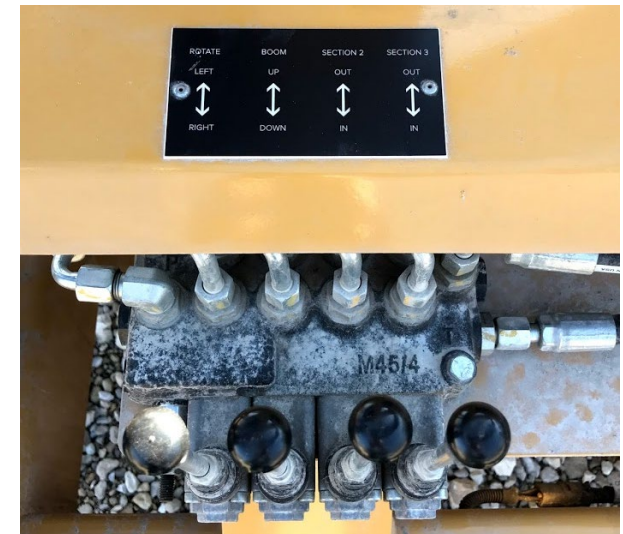
BOOM CONTROLLER

PRE-OPERATION

- Front and Rear Outriggers must always be lowered and set on a solid, stable surface before operating the boom. It is recommended to use blocks under the jack pads when operating on soft surfaces.
- Trailer must be level and balanced before operating boom

BOOM OPERATION

- The boom is to be operated only at low engine idle.
- Move only one function at a time on the control valve.
 - Generally, the procedure is to boom up as far as possible, rotate to desired position, and unfold 2nd and 3rd boom sections alternating several feet at a time.
- Carefully monitor boom position as it is unfolded.
- When folding boom back onto the trailer:
 - Set the front boom rest on the stand
 - Extend the Section 3 control to set the submersible pump on its resting pad. TOO MUCH DOWNPRESSURE MAY DAMAGE COMPONENTS



OUTLAW PIT BOOM DRAINING OPERATION

METHOD 1 [OLDER MODELS]

Lift submersible pump above liquid level while main pump is still running at idle speed to allow all liquid in boom to be discharged into hose. Once drained, close the pump discharge gate valve to seal off cleaned out boom and pump.

METHOD 2

Newer models have a ball valve underneath the boom pedestal that allows the intake plumbing to be drained when open. Ensure pump discharge gate valve is closed prior to opening ball valve. Hose may be added to drain back to pit.

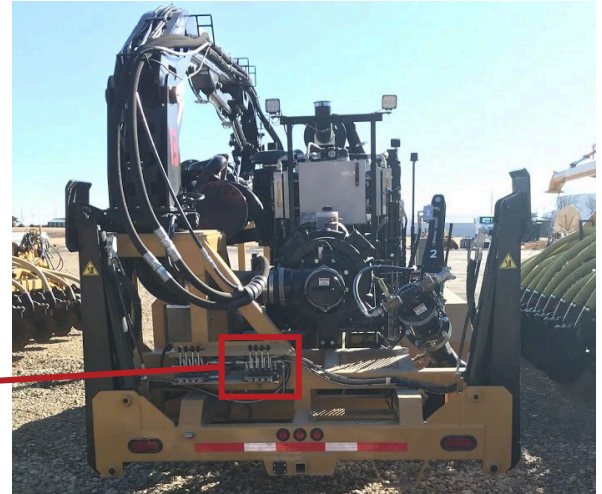


BALL VALVE USED IN METHOD 2

AGITATION VALVE OPERATION



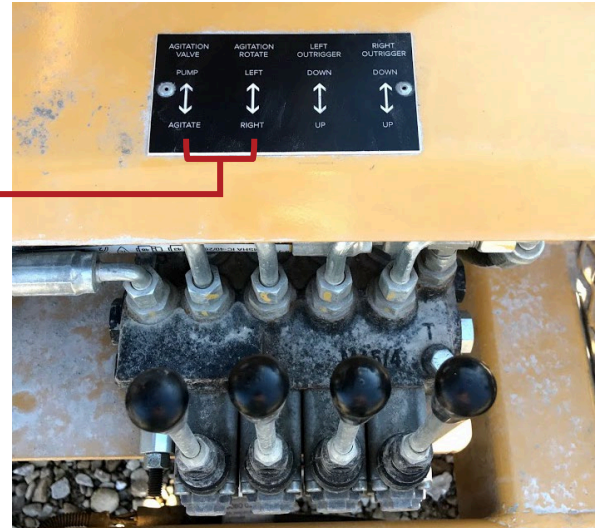
Agitation valve controller location



AGITATION VALVE CONTROLLER

- Open valve for agitation only when engine is at idle. Once agitation valve is closed and manure is being pumped to field, engine rpm can be increased.
- Nozzle angle adjustments can be made at any time during operation

Agitation valve control information



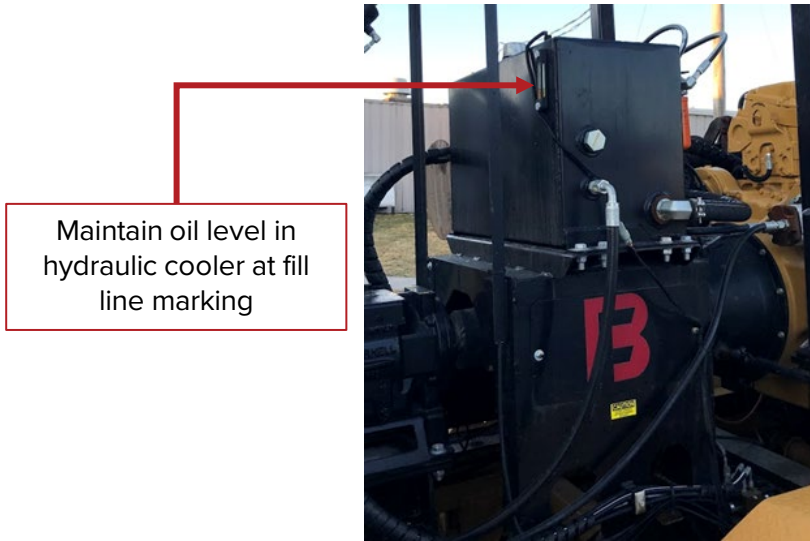
60 GPM WET KIT SUBMERSIBLE PUMP OPERATION



Maintain oil level in hydraulic cooler at fill line marking

- For 60 GPM Wet Kit equipped trailers, grease the bearing housing on the submersible pump daily.
- To start pumping, engage the lever on the passenger side fender.
- Valve operates in forward and reverse. Verify submersible pump impeller is turning clockwise when viewed from underside to confirm which direction is “forward”.
- Reverse can be used to clear a blockage in impeller.

HYDROSTAT SUBMERSIBLE PUMP OPERATION



Maintain oil level in hydraulic cooler at fill line marking

HYDRAULIC OIL TANK



SUBMERSIBLE PUMP OIL RESERVOIR

- For hydrostat equipped trailers, keep the submersible pump oil reservoir on boom full of SAE 75W90 Full Synthetic gear oil.
- To start pumping, ensure that the submersible pump toggle switch is in the forward position, and turn the submersible pump throttle to develop approximately 10-20 psi of suction pressure.
- Engage main pump clutch (if applicable), and ensure discharge gate valve is open.
- Adjust hydrostat throttle to ensure 5-10 psi is maintained as engine rpm is increased.
- Do not run submersible pump hydraulic pressure over 4500 psi for extended periods. When the main pump is set to output the desired flow and pressure, turn down the submersible pump knob to 4500 psi or less, while maintaining at least 5 psi on the suction pressure. At no time should suction pressure drop below 5 psi

MAINTENANCE – FRONT END



12 V DC Hydraulic Power Pack

Brake fluid reservoir

- Maintain adequate fluid level in the hydraulic level reservoir
- Check brake fluid level before moving the trailer.
 - Use DOT 3 brake fluid from a sealed container

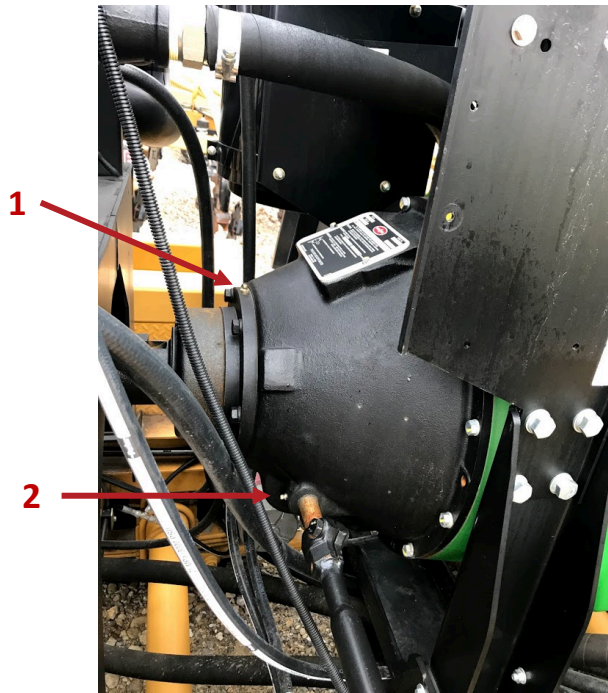
MAINTENANCE – GREASE POINTS



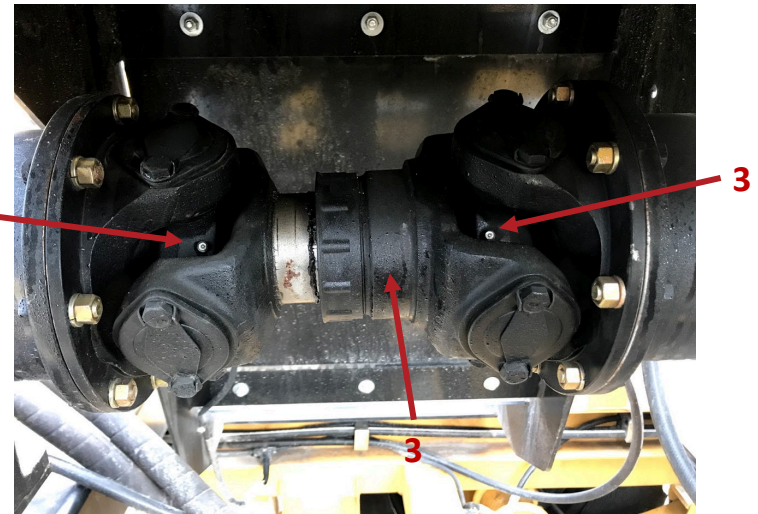
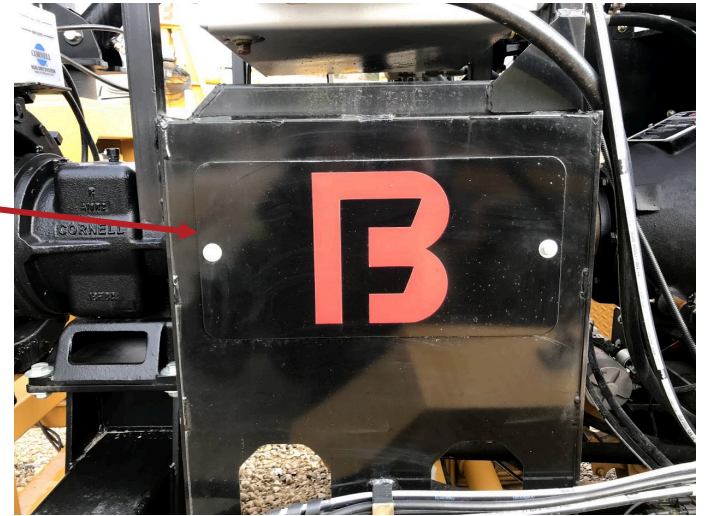
1. Front downrigger (driver side)
Front downrigger (passenger side)
2. Rear outrigger (driver side)
Rear outrigger (passenger side)
3. Slew Ring (a),(b),(c)
4. A section lower cylinder base end
5. Base – A section pin (driver side)
Base – A section pin (passenger side)
6. A section lower cylinder rod end
7. A section upper cylinder base end
8. A section – B section pin (driver side)
A section – B section pin (passenger side)
9. A section upper cylinder rod end
10. B section cylinder base end
11. B section cylinder rod end
12. B section linkage (driver side)
B section linkage (passenger side)
13. B section – C section pin (driver side)
B section – C section pin (passenger side)
14. C section linkage (driver side)
C section linkage (passenger side)
15. Hydrostat pump
16. Tire hub (1 Per hub)

Apply grease to entire cylinder rod regularly to reduce corrosion

MAINTENANCE – CLUTCH OPTION



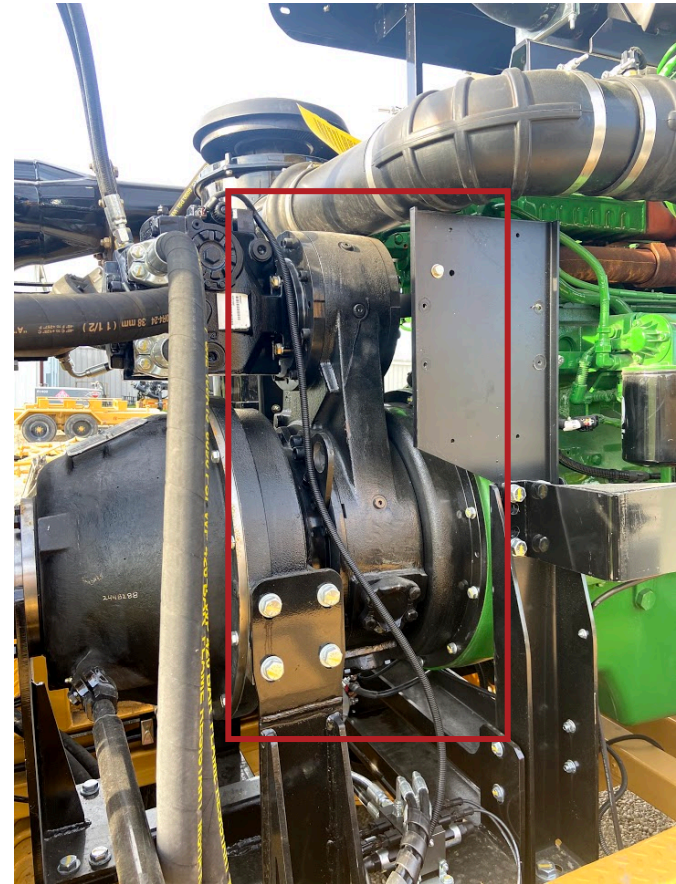
Drive line is located behind the inspection cover



1. Clutch
 2. Clutch handle
 3. Drive line universal joints (x5)
- Clutch handle engagement torque must be set within specified range to ensure proper function and to prevent premature wear on clutch plates.
 - For clutch maintenance please reference the clutch manual. Clutch models may vary depending on engine.

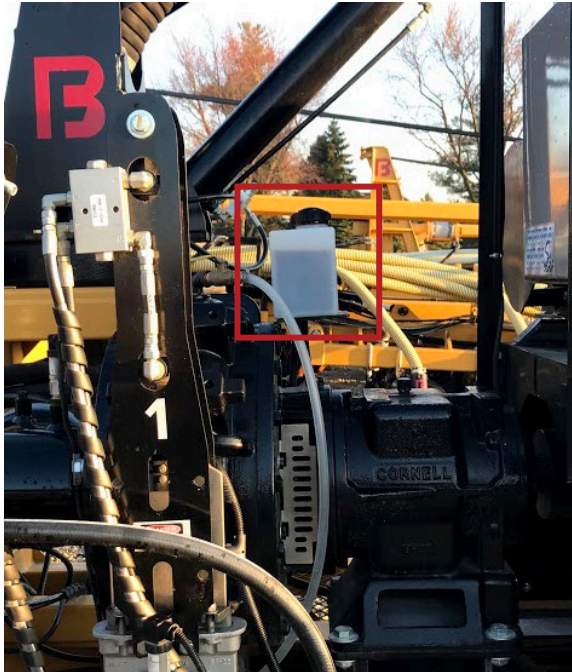
AMO80 REAR AUXILIARY DRIVE

- The AMO80 Rear Auxiliary Drive may not be found on all models of the outlaw
- Oil type – Shell Omala S2 GX 220
- Change oil after first 50 hours and then follow instructions of manufacturer operation manual
- Please refer to Twin Disc pump drive AMO80 operator's manual for operation and maintenance instructions



AMO-80 REAR AUX DRIVE

MAINTENANCE – CORNELL PUMP RUN DRY



- Ensure that run dry reservoir is full of T32 hydraulic oil before operating Outlaw trailer.
- Refer to Cornell pump maintenance manual for detailed pump and bearing housing maintenance

MAINTENANCE – TIRES

Super Single Tires

- 385/65R22.5
- Maximum speed 68 MPH
- Inflation pressure – 130 PSI



550 Flotation Tires

- 550/45-22.5
- Maximum speed 40 MPH
- Inflation pressure – 45 psi

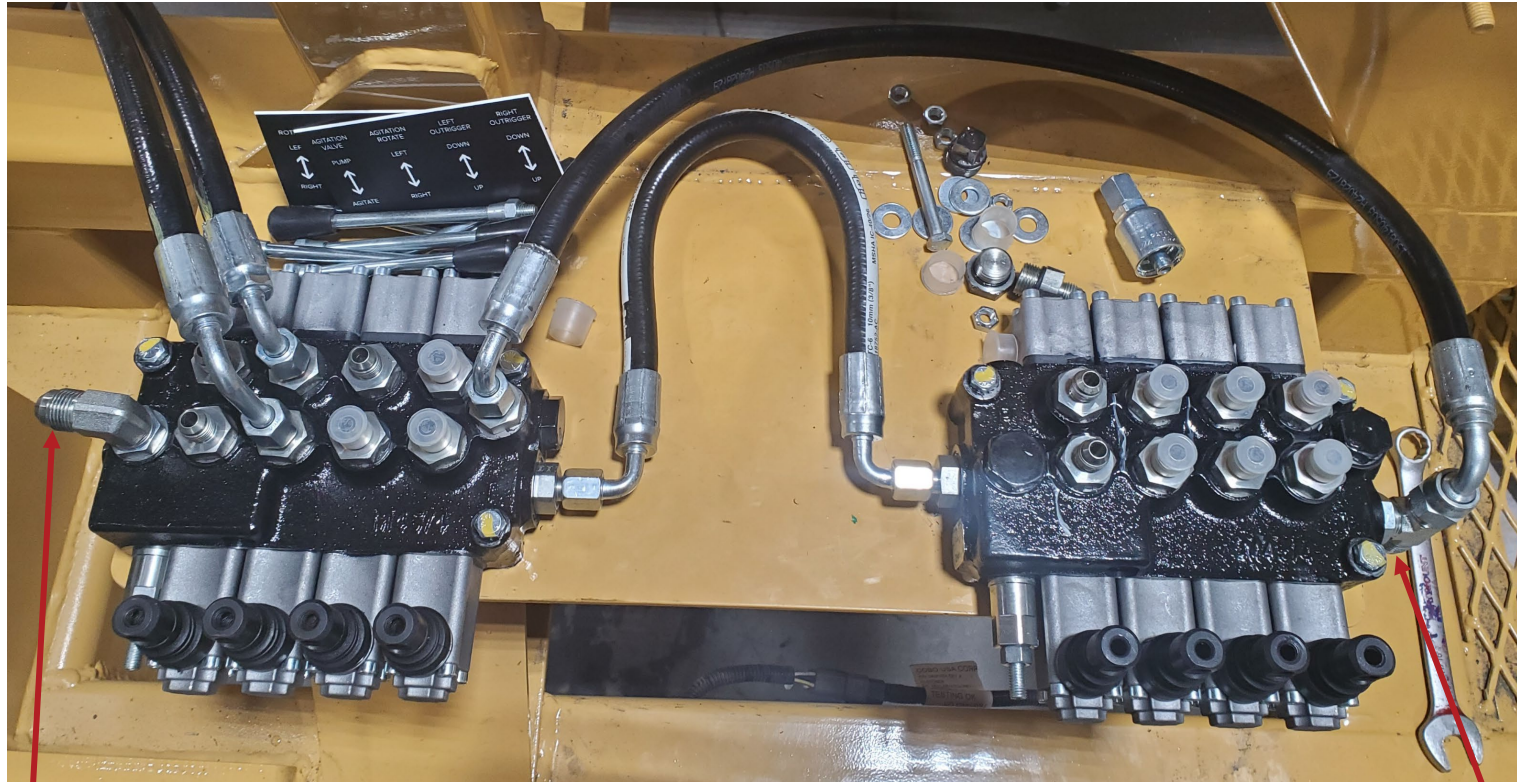


WARNING

- 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.

OUTLAW EMERGENCY HYDRAULIC SETUP

In case of Outlaw engine failure, use these instructions to enable boom and rear outrigger movement with tractor hydraulics



Connect hydraulic supply/pressure line from tractor to this end of drivers side valve

Connect tractor return line to under side of tee on passenger side valve. DO NOT PRESSURIZE THIS LINE, MAY DAMAGE VALVE

All connections should use 1/2" female JIC ends

OTHER NOTES

- Do not obstruct air flow in front of the engine radiator. Maintain at least 18" in front of the radiator.
- Refer to Engine manual for proper maintenance procedures.