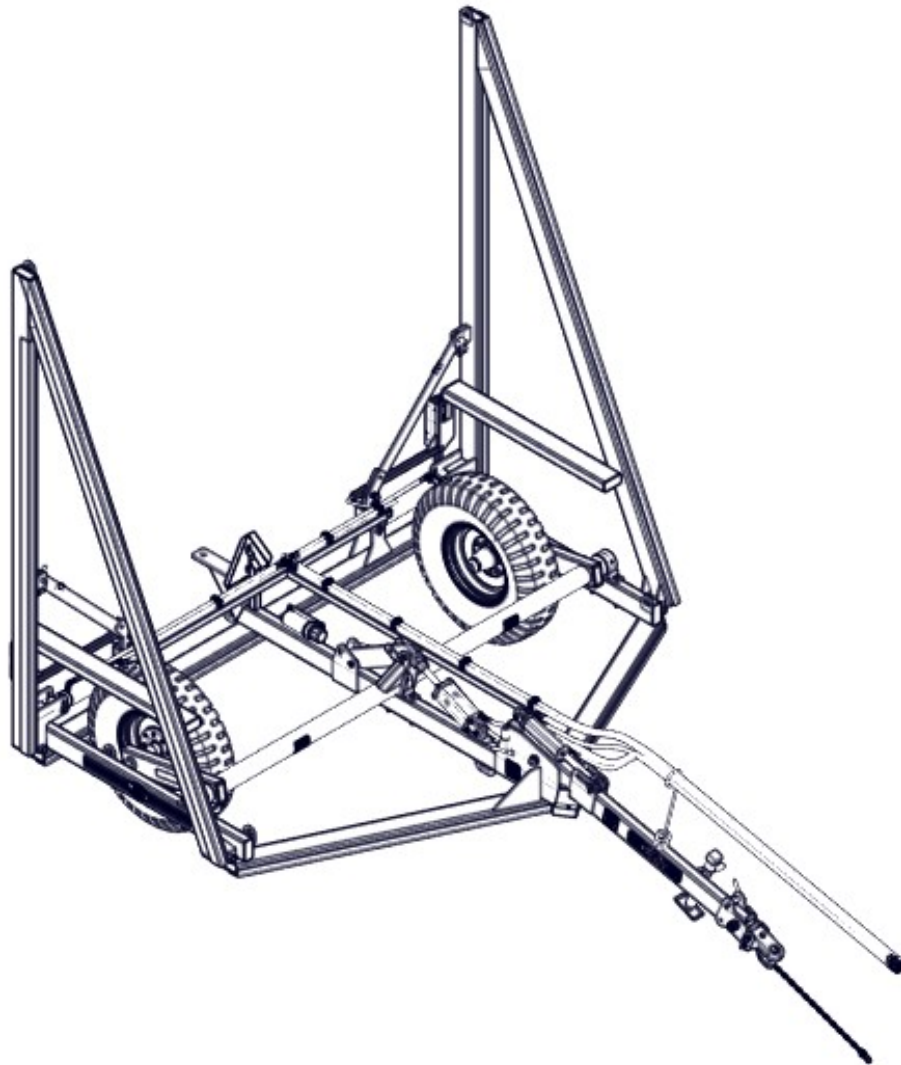
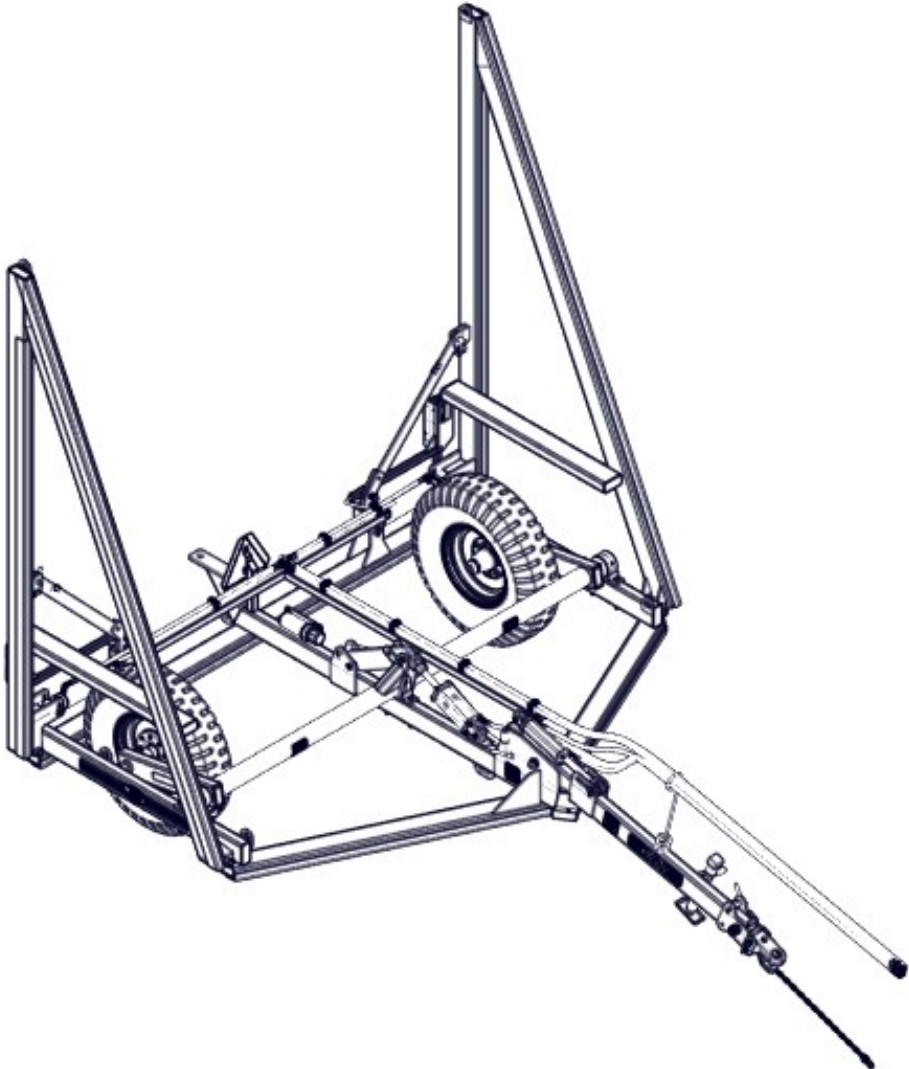




**RJF HAYLAND FLOAT**  
**Operator's & Parts Manual**  
**Model No. F90000-0010.05**



# RJF HAYLAND FLOAT



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# INTRODUCTION

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Congratulations on your choice of a Hayland Float to complement your farming operation. This equipment has been designed and manufactured to meet the needs of the discriminating buyer for the efficient leveling of hay land, pastures, riding arenas, and many other areas such as mole hills, humps and hollows.

The safe, efficient and trouble free operation of your Hayland Float requires that you and anyone else who will be operating or maintaining the machine read and understand the Safety, Operation, Maintenance and Trouble Shooting information contained within the Operator's Manual.

Use the Table of Contents as a guide when searching for specific information.

Keep this manual handy for frequent reference and to pass on to new operators or owners. Call your Renn dealer or distributor if you need assistance, information or additional copies of the manual. Contact your dealer for a complete listing of parts.

**OPERATOR ORIENTATION** - The directions left, right, front and rear, as mentioned throughout the manual, are as seen from the tractor driver's seat and facing in the direction of travel.

# LIMITED WARRANTY



## • NEW EQUIPMENT WARRANTY

Subject to the limitations and exclusions set out herein, RENN Mill Center Inc. ("Renn") warrants that if any component or part of a machine manufactured by Renn proves to be defective in material or workmanship within

1. (1) year from the delivery date of the original sale to a purchaser who purchases the equipment for their own farming operation use; OR
2. (90) days from the delivery date of the original sale to any other purchaser.

Renn will at Renn's option either repair or replace the defective part without charge. No payments will be made in lieu of repair to the machine. This limited warranty may be enforced by the first purchaser or first consumer user; all subsequent purchasers acquire the product "as is" without any benefit of this limited warranty.

## • LIMITATIONS AND EXCLUSIONS

This limited warranty by Renn does not extend to or include:

1. New tires - installed on the equipment which are subject to a separate warranty by the tire manufacturer—see warranty sheet included with your owners manual. All warranty claims must be submitted to the tire manufacturer for approval and payment.
2. Used tires
3. Drive Belts
4. Drive Chains

This limited warranty covers defects in material and workmanship in the parts manufactured by Renn except:

1. Damage resulting from accident, misuse, abuse, neglect or from other than normal and ordinary use of the equipment.
2. Damage resulting from failure to clean or use the product in accordance with the manufacturer's instructions.
3. Renn reserves the manufacturer's right to determine the responsibility for damage as detailed in 1 and 2 above.

Renn shall, as to each defect, be released from all obligations and liabilities under this warranty if:

1. The equipment shall have been operated with any accessory, equipment, component or part not manufactured by Renn or not approved for use by Renn.
2. The equipment shall have been repaired, altered or modified without Renn's approval or if the equipment shall have been operated subsequent to its involvement in an accident or breakdown unless the purchaser furnishes reasonable evidence that such repair, modification or operation subsequent to its involvement in an accident or breakdown was not the cause of the defect;
3. If the purchaser or consumer does not, within 30 days from the date of discovery of the defect, return the defective machine, accessory, equipment component or part at the purchaser's or users expense to an authorized dealer, purchaser shall be responsible for submission of reasonable evidence or proof of date of discovery of subsequent defect.

## • WARRANTY AND PARTS REPLACED BY WARRANTY

Renn further warrants that if any genuine Renn part or component utilized by authorized Renn dealers in accordance with this limited warranty proves to be defective in material or workmanship within 90 days of such utilization, Renn will, at Renn's option either repair or replace the defective part without charge. Purchaser shall be responsible for any shipping charges including freight to and from the place where the warranty work is done or performed.

## • WHAT YOU MUST DO TO ENFORCE THIS WARRANTY

1. Warranty services must be performed by a dealer authorized by Renn. The purchaser must, at the purchaser's expense, deliver, mail or ship the defective part to any duly authorized dealer in the purchaser's area. If the purchaser is unable to locate a dealer in the purchaser's area, please contact Renn. Renn will either refer you to an authorized dealer or instruct you where to return the product. Do not return the product to Renn, without Renn's prior authorization
2. Purchaser must pay any postage, shipping charges, insurance costs, freight and other expenses to and from the place where the warranty work is done or performed if required to return equipment or any component or part to an authorized dealer or as directed by Renn. Purchaser shall be obligated to pay any premium payable for overtime labour if overtime is incurred as a result of a request by the purchaser.

## • UNAPPROVED SERVICE OR MODIFICATION

All obligations of Renn under this warranty shall be terminated:

1. If service is performed by someone other than a dealer authorized by Renn or,
2. If equipment is altered or modified in ways not approved by Renn.

Accidents and normal maintenance

This warranty covers only defective material and workmanship. It does not cover depreciation or damage caused by normal wear, accident, improper maintenance, improper protection in storage or improper use. The cost of normal maintenance and replacement of service items, oil filters, cutting parts, tires, bearings, chains, sprockets or brake parts shall be paid for by the purchaser.

## • NO REPRESENTATION OR IMPLIED WARRANTY

1. Where permitted by law, neither Renn nor any company affiliated with it makes any warranties, representation or promises expressed or implied as to the quality or performance of its products other than those set forth above.
2. Renn makes no warranty of merchantability or fitness for a particular purpose.

## • IMPROVEMENTS OR CHANGES

Renn reserves the right to make improvements or changes in design and specifications at any time without incurring any obligation to owners of previously sold units.

## • WARRANTY CLAIM PROCEDURE

Warranty Claim Form must be delivered to Renn within 60 days after the warranty work was performed. Defective parts must be held for inspection for 90 days after the work was performed. Renn may request that parts be returned to the Renn factory for inspection. If approved, Renn will issue a credit within 60 days of receiving the warranty claim.

## • ACKNOWLEDGEMENT REQUIRED

Renn shall have no obligation under this warranty unless the "Warranty Registration" included with your owners manual signed by purchaser and dealer is delivered to Renn within 30 days from the date of sale.

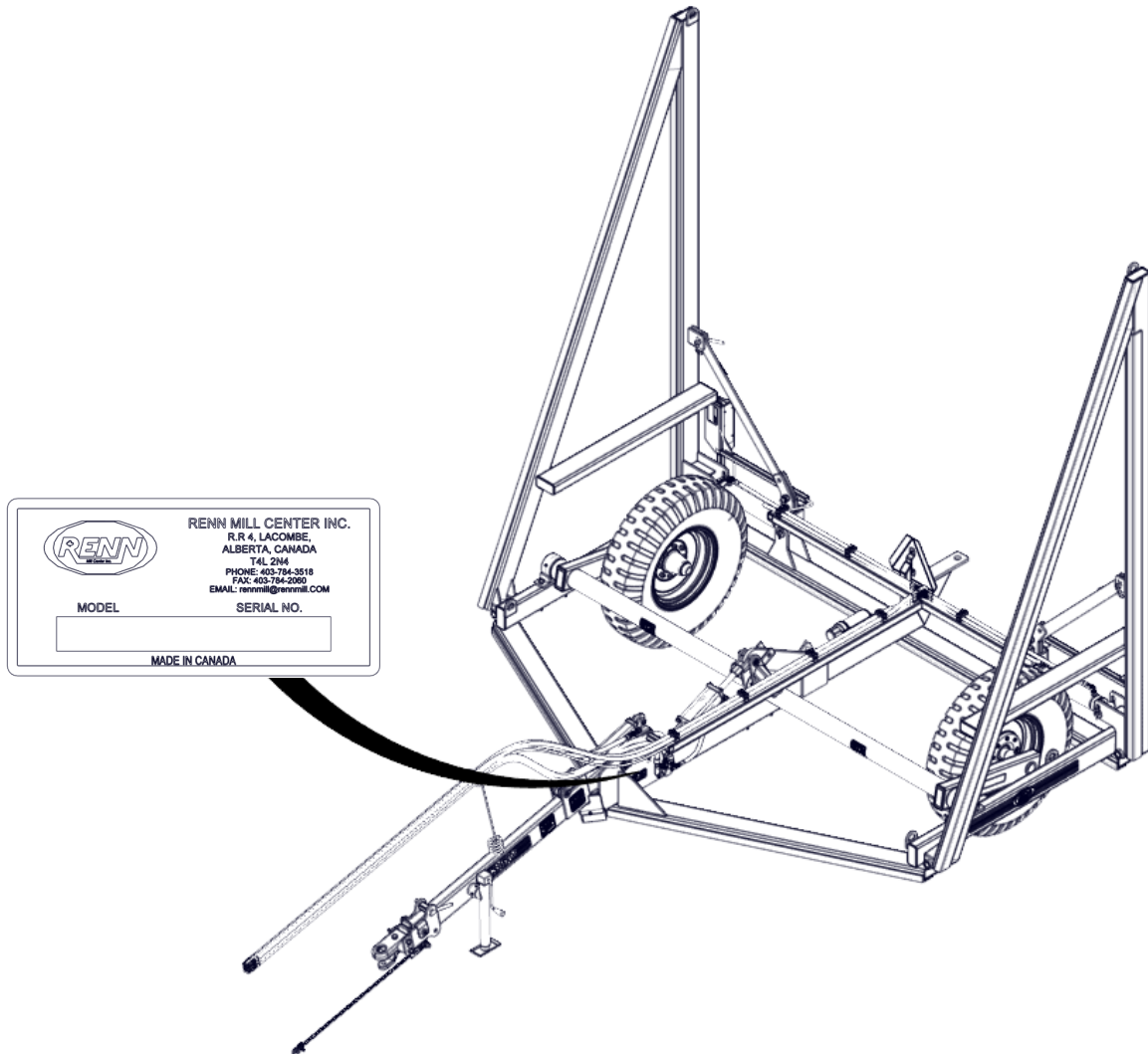
## IMPORTANT NOTICE

**To activate warranty coverage, the owner / dealer must complete the Warranty Registration form that can be found online and return to RENN Mill Center Inc. R.R. 4, Lacombe, Alberta, Canada, T4L 2N4 within 30 days of retail sale.**

## SERIAL NUMBER LOCATION

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The serial number plate is located on the side face of the center frame assembly connection plate, on the driver's side of the machine.



**IMPORTANT:** For fast, correct service when ordering parts, supply the following information to your local Renn Dealer:

- 1) The model number
- 2) The serial number

This information is essential when ordering parts for your Hayland Float.

## 2 SAFETY

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### Safety Alert Symbol

This Safety Alert symbol means

**ATTENTION!  
BE ALERT!  
YOUR SAFETY IS  
INVOLVED!**



The Safety Alert symbol identifies important safety messages on the Hayland Float and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

Why is SAFETY important to you?

#### 3 Big Reasons

**Accidents Disable and Kill**

**Accidents Cost**

**Accidents Can Be Avoided**

#### SIGNAL WORDS:

Note the use of the signal words **DANGER**, **WARNING**, and **CAUTION** with the safety messages. The appropriate signal word for each message has been selected using the following guidelines:

##### **DANGER -**

Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

##### **WARNING -**

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

##### **CAUTION -**

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.



## 2 SAFETY

---



You are responsible for the SAFE operation and maintenance of your Hayland Float. YOU must ensure that you and anyone else who is going to operate, maintain or work around the Hayland Float be familiar with the operating and maintenance procedures and related SAFETY information contained in this manual. This manual will take you step-by-step through your working day and will alert you to all good safety practices that should be adhered to while operating the Float.

Remember, YOU are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices a working part of your safety program. Be certain that EVERYONE operating this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

- Hayland Float owners must give operating instructions to operators or employees before allowing them to operate the machine, and at least annually thereafter per OSHA (Occupational Safety and Health Administration) regulation 1928.57.
- The most important safety device on this equipment is a SAFE operator. It is the operator's responsibility to read and understand ALL Safety and Operating instructions in the manual and to follow them. All accidents can be avoided.
- Renn feels that a person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death.
- Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety of the Float and could affect the life of the equipment.
- Think SAFETY! Work SAFELY!

### **2.1 General Safety**

1. Only trained, competent persons shall operate the Hayland Float. An untrained operator is not qualified to operate the machine.
2. Have a first-aid kit available for use, should the need arise, and know how to use it.
3. Have a fire extinguisher available for use, should the need arise, and know how to use it.
4. Wear appropriate protective gear. This list includes but is not limited to:
  - A hard hat
  - Protective shoes with slip resistant soles
  - Protective goggles
  - Hearing protection
5. Review safety related items with all personnel annually.

## 2 SAFETY

---



### **2.2 Operating Safety**

1. Read and understand the Operator's Manual and all safety signs before using the machine.
2. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
3. Do not allow riders on the float or tractor during operation or transportation.
4. Be aware of overhead power lines at all times.
5. Attach any necessary flags and signs to the Float before transporting.
6. Attach securely to the towing unit using a hardened pin with a retainer and a safety chain.  
The pin should be the maximum allowable size possible.
7. Stay away from wing frames when raising or lowering wings. Keep others away.
8. Clean reflectors, SMV signs and lights before transporting.
9. Use the hazard flashers on the tractor when transporting.
10. Install all lock pins before transporting.
11. Before adding pressure to the hydraulic system, make sure all components are tight and that steel lines, hoses and couplings are in good condition.
12. Review safety instructions with all personnel annually.

### **2.3 Maintenance Safety**

1. Place all controls in neutral, stop the engine, set the parking brake, and remove the ignition key before servicing or maintaining.
2. Perform a lock out tag out (LOTO) procedure if required.
3. Relieve pressure from the hydraulic circuit before servicing or disconnecting from the tractor.
4. Place stands or blocks under the frame before working beneath the machine or when changing tires.
5. Use only appropriate tools, jacks and hoists for the job.
6. Install and secure all guards and shields before resuming operation.
7. Make sure wing lock arms are installed and securely pinned.

## 2 SAFETY

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### **2.4 Hydraulic Safety**

1. Always place all tractor hydraulic controls in neutral before dismounting.
2. Make sure that all components in the hydraulic system are kept in good condition and are clean.
3. Replace any worn, cut, abraded, flattened or crimped hoses.
4. Do not attempt any makeshift repairs to the hydraulic fittings or hoses by using tape, clamps or cements. The hydraulic system operates under extremely high pressures. Such repairs will fail suddenly and create a hazardous and unsafe condition.
5. Wear proper hand and eye protection when searching for a high pressure hydraulic leak. Use a piece of wood or cardboard as a shield instead of hands to isolate and identify a leak.
6. If injured by a concentrated high pressure stream of hydraulic fluid, seek medical attention immediately. Serious infection or toxic reaction can develop from hydraulic fluid piercing the skin surface.
7. Before applying pressure to the system, make sure all components are tight and that hoses, fittings and couplings are in good condition.

### **2.5 Storage Safety**

1. Store the unit in an area away from human activity.
2. Do not permit children to play on or around the stored Float.

### **2.6 Safety Decals**

1. Keep safety decals clean and legible at all times.
2. Replace safety decals that are missing or have become illegible.
3. Replaced parts that previously displayed a safety decal should also display the same decal.
4. Safety decals are available through your authorized Renn Dealer.

## 2 SAFETY



### **2.7 Sign-Off Form**

Anyone operating and/or maintaining the bagger must read and clearly understand ALL Safety, Operating, and Maintenance information presented in this manual.

Do not operate or allow anyone else to operate this equipment until such information has been reviewed. Review this information annually, before the season start-up.

Make these periodic reviews of SAFETY and OPERATION a standard practice for all of your equipment. We feel that an untrained operator is unqualified to operate this machine. A sign-off sheet is provided for your record keeping to show that all personnel who will be working with the equipment have read and understood the information in the Operator's Manual and have been instructed in the operation of the equipment.

### **Sign-Off Form**

<i>DATE</i>	<i>EMPLOYEE SIGNATURE</i>	<i>EMPLOYER SIGNATURE</i>

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# 3 DECAL LOCATIONS

## 3.1 Safety Decal Locations

The types of safety decals and the locations on the equipment are shown in the following illustrations. Good safety requires that you familiarize yourself with the various safety decals, the type of warning and the area, or particular function related to that area, that requires your SAFETY AWARENESS.

- THINK SAFETY!!, WORK SAFELY!!



148900-0053



148900-0046



148900-0059



148900-0057



148900-0051



147000-0004



147000-0003 (YELLOW)



147000-0002 (YELLOW)

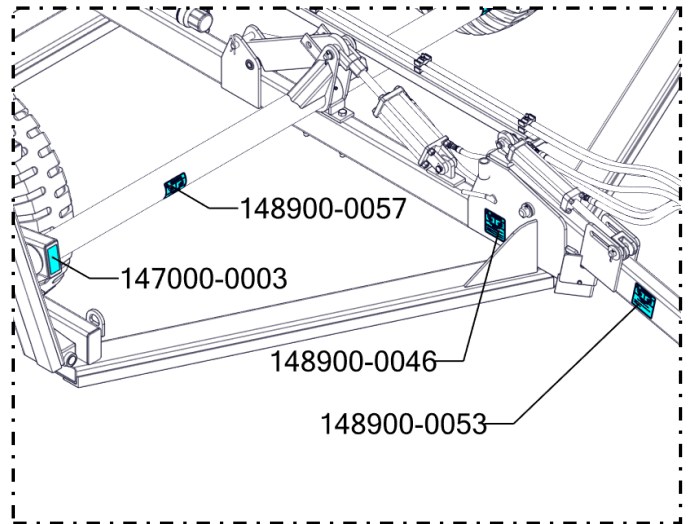
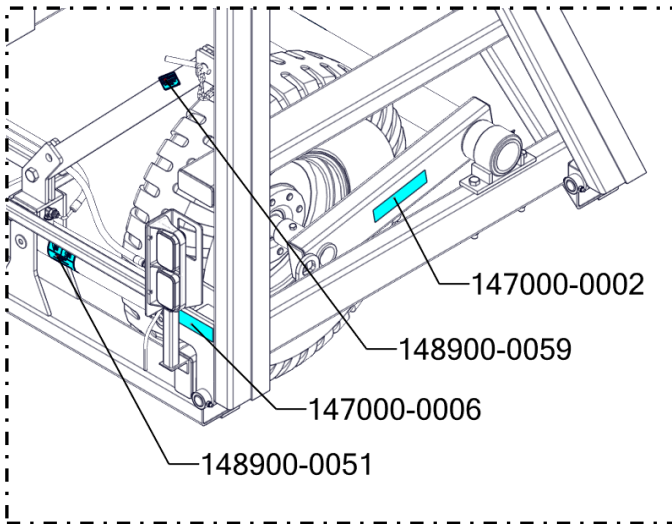
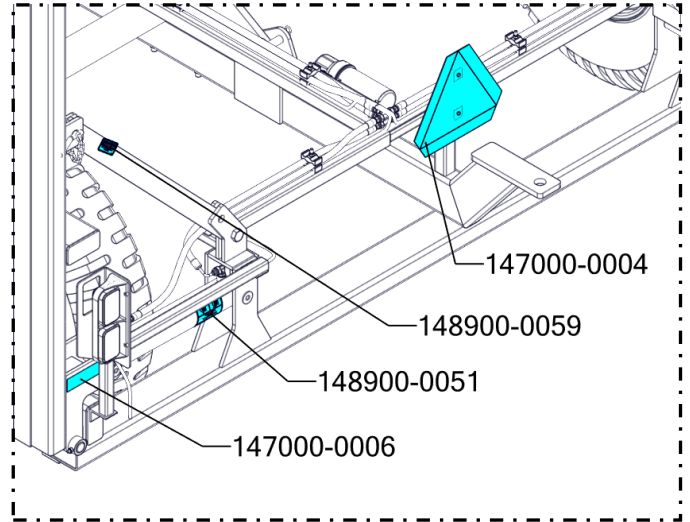
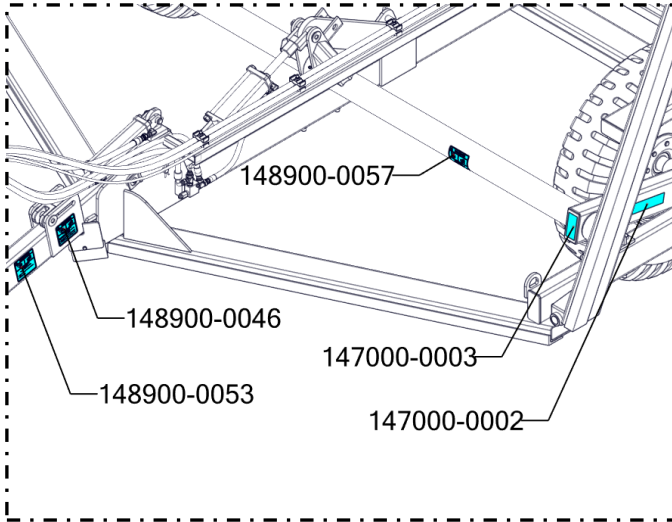


147000-0006 (RED)

REMEMBER - If safety decals have been damaged, removed, become illegible or parts that have been replaced do not contain safety decals, new decals must be applied. New safety decals are available from your authorized dealer.

# 3 DECAL LOCATIONS

## 3.1 Safety Decal Locations



## 3 DECAL LOCATIONS

---

### 3.2 Information Decal Locations

The types of informational and operational decals and locations on the equipment are shown in the following illustrations. Good operation requires that you familiarize yourself with the various operational decals, the type of warning and the area, or particular function related to that area, that requires your AWARENESS.

- WORK SAFELY!!



148900-0008



148700-0102

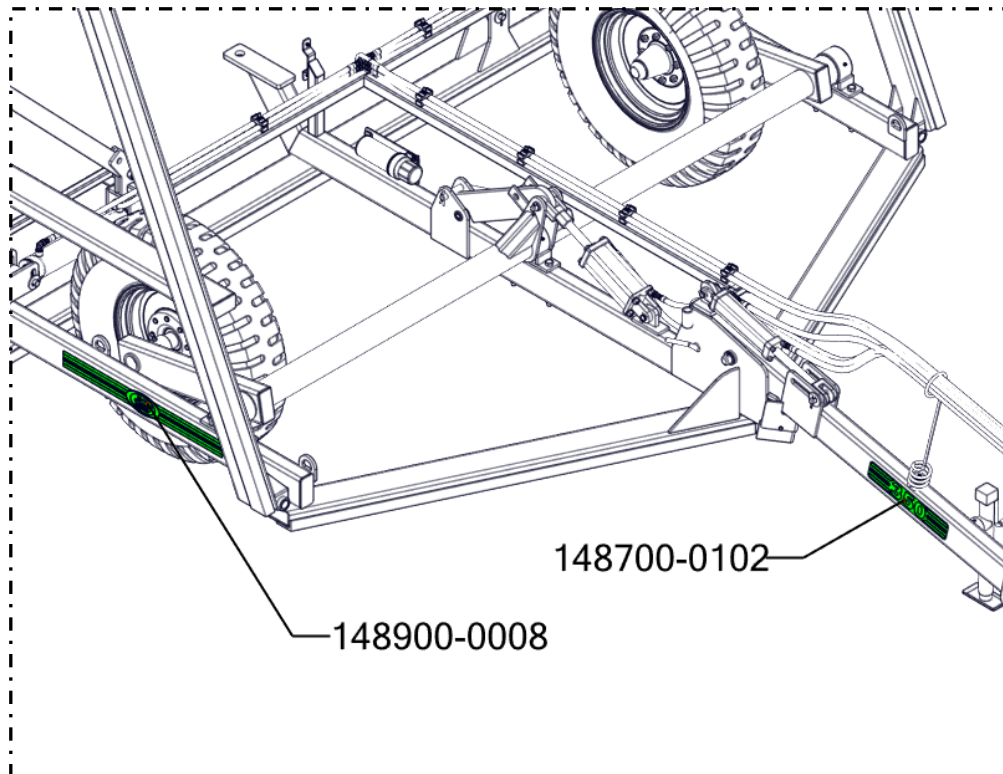
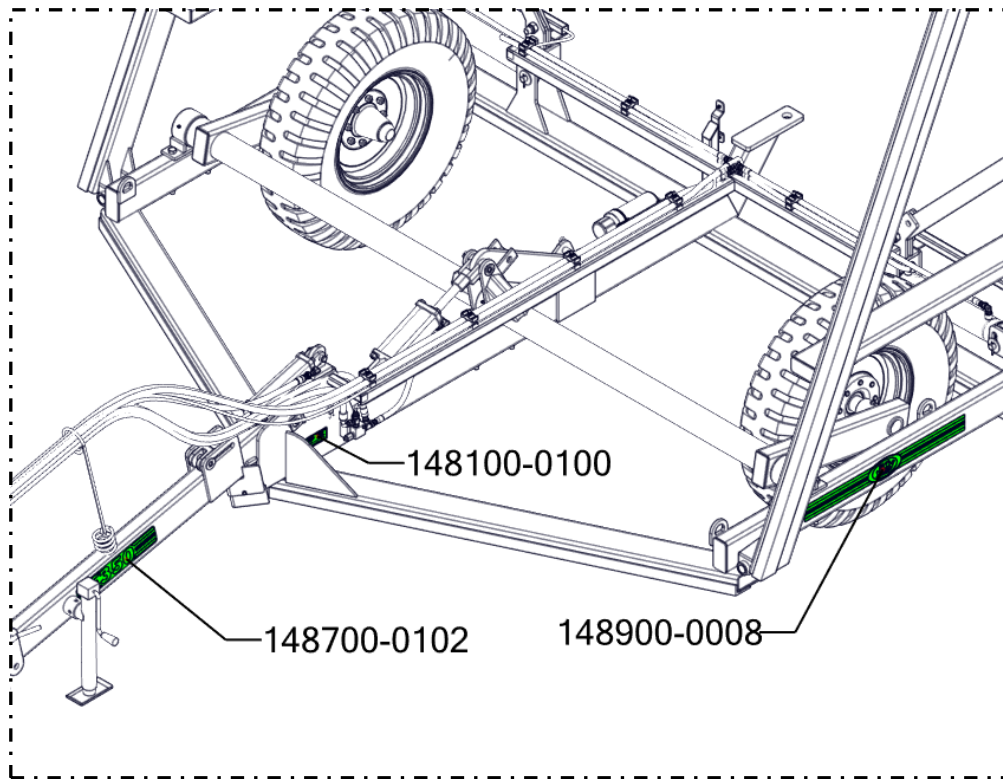


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# 3 DECAL LOCATIONS

## 3.2 Information Decal Locations



## 4 OPERATION

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### **4.1 To the New Operator or Owner**

The Renn Hayland Float is designed to level pastures, hayland, riding arenas and other areas by removing mole hills and humps and by filling in hollows. Be familiar with all operating and safety procedures before starting.

**It is the responsibility of the owner and operator to read this manual and to train all other operators before they start working with the machine. Follow all safety instructions exactly. Safety is everyone's business. By following recommended procedures, a safe working environment is provided for the operator, bystanders and the area around the worksite. Untrained operators are not qualified to operate the machine.**

Many features incorporated into this machine are the result of suggestions made by customers like yourself. Read this manual carefully to learn how to operate the machine safely and how to set it to provide maximum efficiency.

By following the operating instructions, in conjunction with a good maintenance program, your Hayland Float will provide you with many years of trouble-free service.

### **4.2 Pre-Operational Checklist**

The efficient and safe operation of the Hayland Float requires that each operator read and understand the operating procedures and all related safety precautions outlined in this section. A pre-operational checklist is provided for the operator. It is important for both personal safety and maintaining the good mechanical condition of the Hayland Float that this checklist be followed.

Before operating the Float, and each time thereafter, the following areas should be checked:

1. Inspect the machine if it is the start of the season as per section 4.11.
2. Make sure the Float is properly lubricated as per the maintenance schedule.
3. Only use a tractor that has adequate horse power.
4. Ensure that the Float is properly attached to the tractor. Be sure to use a retainer and the safety chain.
5. Check the hydraulic system. Be sure that the hydraulic reservoir in the tractor is filled to the required specifications.
6. Inspect all hydraulic lines, hoses, fittings and couplers for tightness. Use a clean cloth to wipe any accumulated dirt from the couplers before connecting to the hydraulic system of the tractor.
7. Ensure that the tires are properly inflated.

## 4 OPERATION

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### **4.3 Break-in**

Although there are no operational restrictions on the Hayland Float when used for the first time, it is recommended that the following mechanical items be checked:

#### **A. Before Starting**

1. Attach the Hayland Float to a tractor.
2. Extend the wing fold and the frame lift cylinders to fully charge with oil and remove air. Do this with the lock pins in place or damage to the Hayland Float could occur.
3. Top up the tractor oil reservoir if required.

#### **B. After operating for a 1/2 hour**

1. Re-torque all the wheel bolts.
2. Re-torque all other fasteners and hardware.
3. Check that no hoses are pinched, rubbing or being crimped. Realign as required.
4. Check for oil leaks. Stop leaks before continuing.
5. Lubricate all grease fittings.

#### **C. After Operating for 5 hours and 10 hours**

1. Re-torque all wheel bolts, fasteners and hardware.
2. Check hose routing.
3. Follow the normal servicing and maintenance schedule as defined in the Maintenance Section.

### **4.4 Tractor Specifications**

The Hayland Float is designed to be used with agricultural tractors. To ensure good performance, the following specifications must be met:

#### **1) Horsepower**

The Hayland Float requires a tractor with a minimum of 80 horsepower to obtain best results.

#### **2) Drawbar**

The Hayland Float is equipped with an adjustable hitch that will accommodate a drawbar height of 17"-20". This will allow the frame to be level when connected to the tractor.

#### **3) Hydraulic System**

The tractor must be equipped with 3 remote hydraulic circuits with 5 gpm at 1500 psi. One set is used to raise/lower the wings, the second set is to raise/lower the hitch, and the third set is to raise/lower the frame while operating. On tractors equipped with higher flow rates and adjustable flow controls, the flow should be reduced to prevent excessive cylinder speeds. Either open or closed hydraulic systems can be used.

## 4 OPERATION

### 4.5 Connecting To The Tractor

The Hayland Float is equipped with an adjustable clevis style hitch. It is a two piece design, and the clevis portion can be removed. Do not use the hitch with the clevis on top as it does not have sufficient strength to support the vertical loads imposed by the Hayland Float. If the tractor draw bar includes a clevis, the clevis on the Hayland Float must be removed to prevent binding when turning or on uneven terrain.

Follow this procedure when attaching:

1. Clear the area of bystanders and remove foreign objects from the machine and working area.
2. Make sure there is enough room to back the tractor up to the hitch point.
3. Start the tractor and slowly back it up to the hitch point.
4. Stop the tractor engine, place all controls in neutral, set the parking brake and remove the ignition key before dismounting.
5. Use the jack to raise or lower the hitch to align with the draw bar.
6. Install a draw bar pin with provisions for a mechanical retainer (Figure 1). Install the retainer.
7. Check the Hayland Float to make sure that the drawbar is level.
8. Attach the safety chain between the machine and the tractor draw bar cage.
9. Connect the hydraulics. To connect, proceed as follows (**Warning: High Pressure Fluid Hazard**):
  - a. Use a clean cloth or paper towel to clean the couplers on the ends of the hoses. Also clean the area around the couplers on the tractor.
  - b. Remove the plastic plugs from the couplers and insert the male ends. Be sure to match the high and return pressure lines to the same valve bank.
  - c. Connect the remaining couplers. Be sure to match the system with the desired control lever in the tractor.
10. Route the hoses along the hitch and secure in position to prevent entanglement with any moving parts.
11. Raise jack and rotate to field position.
12. When unhooking from the tractor, reverse the above procedure.

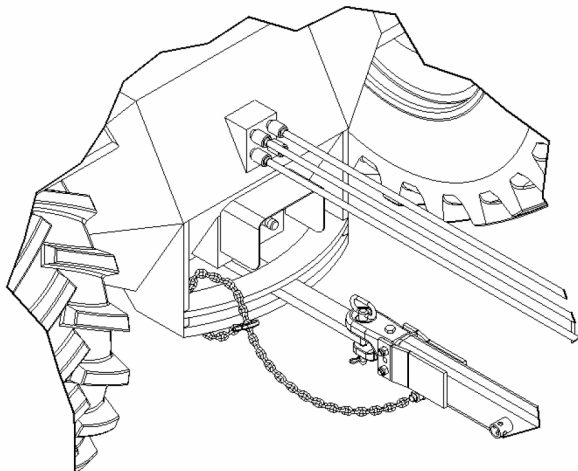


Fig 1: Connecting to Tractor

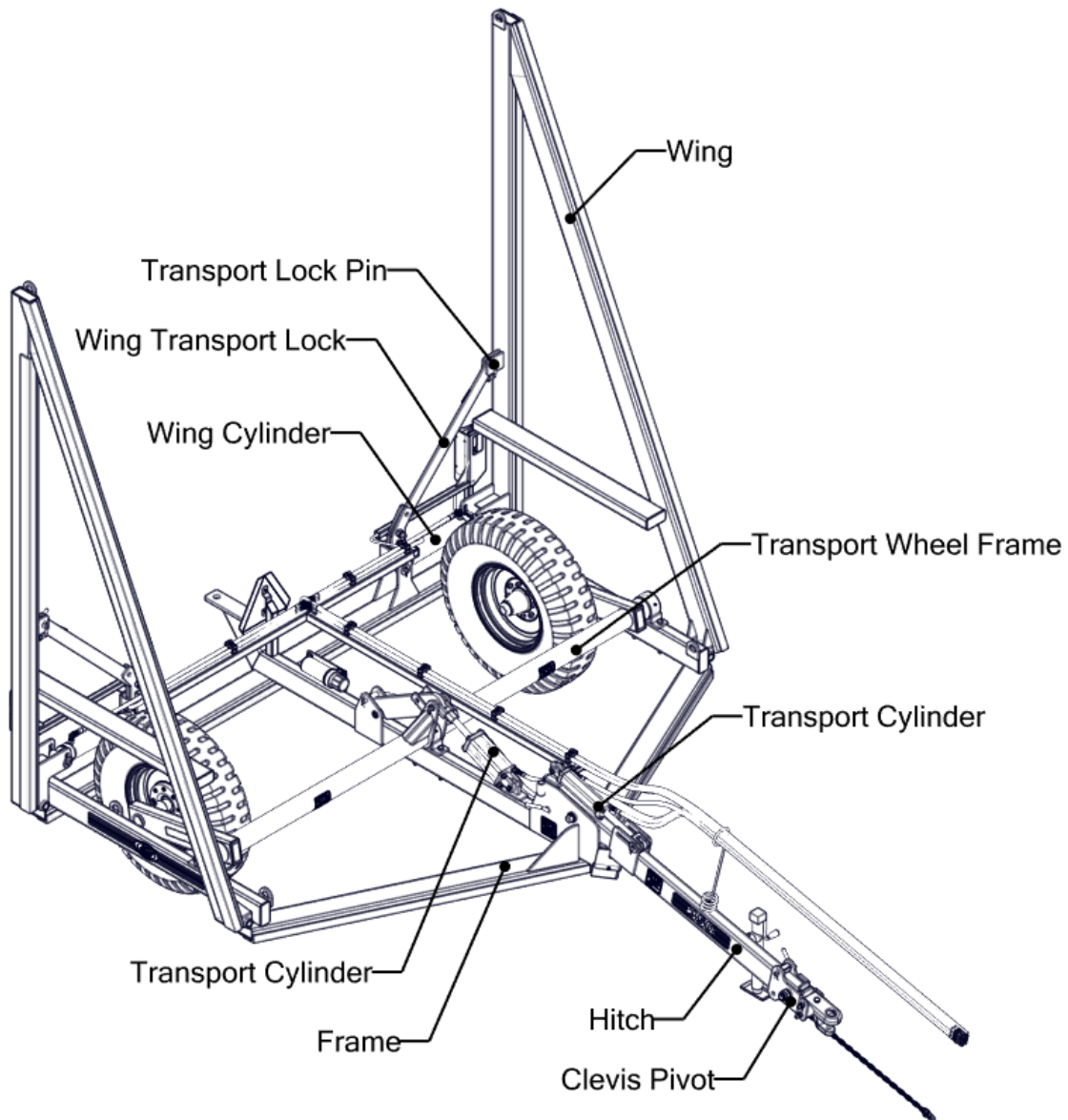
 <b>WARNING</b>	
	
<b>HIGH-PRESSURE FLUID HAZARD</b> To prevent serious injury or death:	
<ul style="list-style-type: none"><li>• Relieve pressure on system before repairing or adjusting or disconnecting.</li><li>• Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.</li><li>• Keep all components in good repair.</li></ul>	
SW 700	

## 4 OPERATION

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### 4.6 Controls

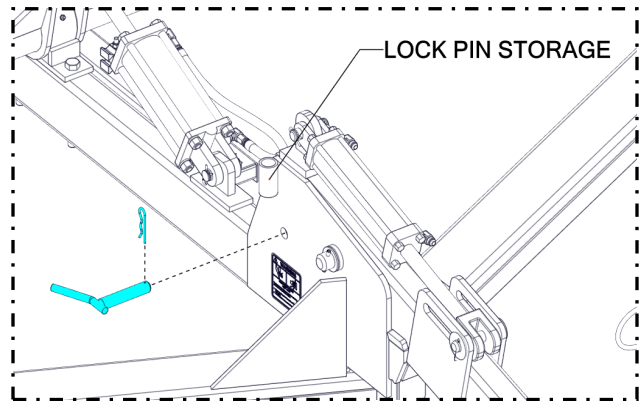
The Hayland Float is designed to level any rough ground surface. It consists of a main frame that has two wings attached. A hydraulically actuated folding mechanism is used to raise or lower the wings for field use or transport. The Float is leveled in the field operation position by hydraulics to adjust the amount of cutting the front frame members do to the ground surface. Locking devices are included to secure the Hayland Float in transport position.



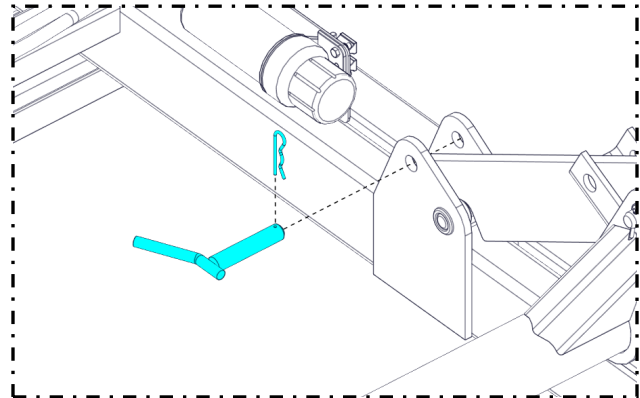
## 4 OPERATION

### 4.7 Opening the Hayland Float For Field Operation

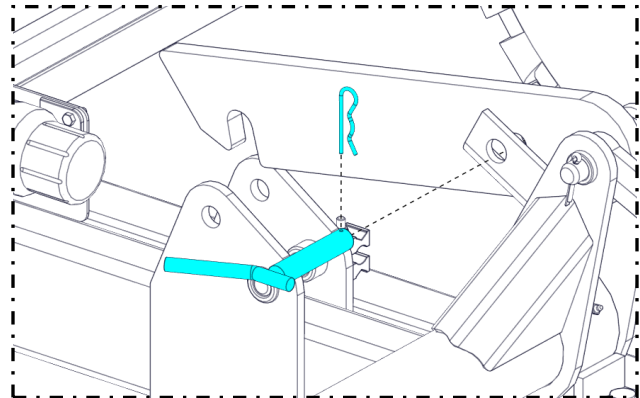
- 1) Remove the hitch lock pin and place in the storage location.



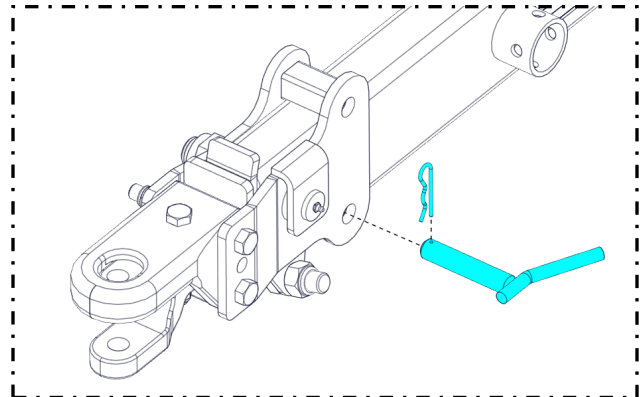
- 2) Remove the axle transport lock pin.



- 3) Lift the lock arm up and pin into the operating position, using the pin removed in step 2.

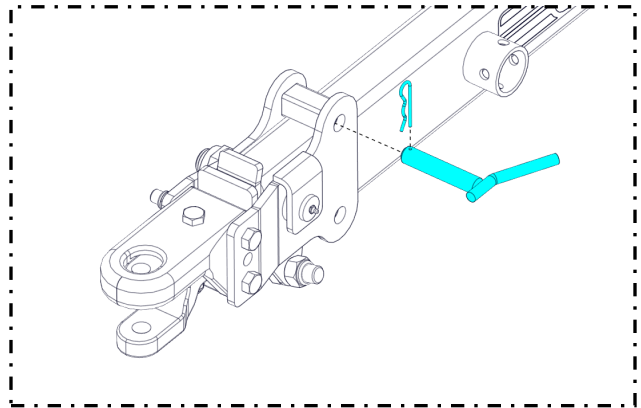


- 4) Remove the hitch clevis lock pin from the transport mode position.



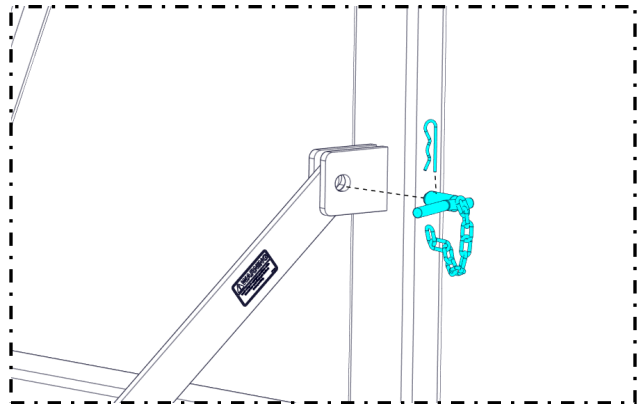
## 4 OPERATION

- 5) Install the clevis lock pin in the operating mode position.

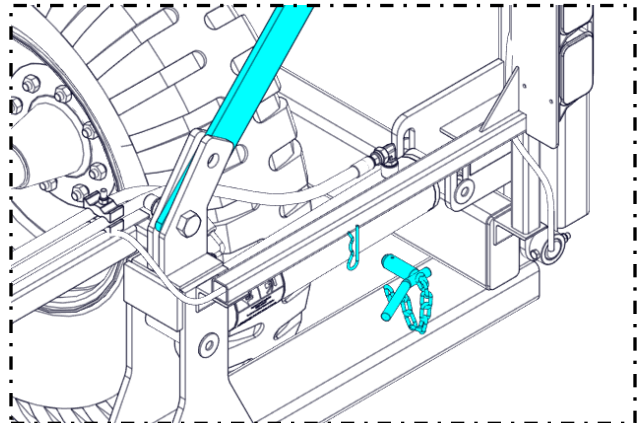


- 6) Remove the lock pins from both of the wing position lock arms.

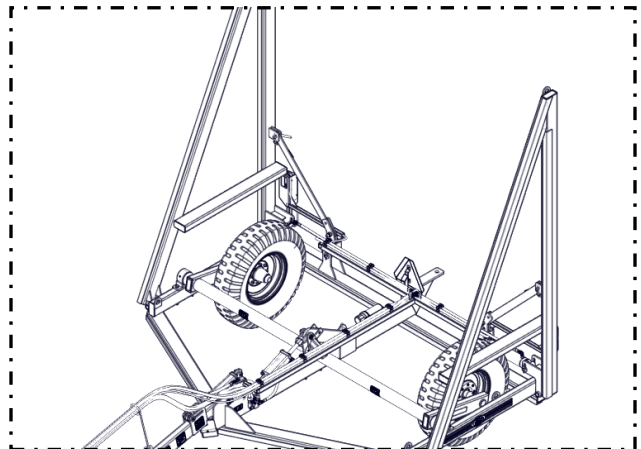
Before removing the lock pins, ensure that there is enough hydraulic pressure in the wing cylinders to prevent the wings from falling.



- 7) Lift both of the wing lock arms and pin into the operating mode position, securing in place with the pin removed in step 6.



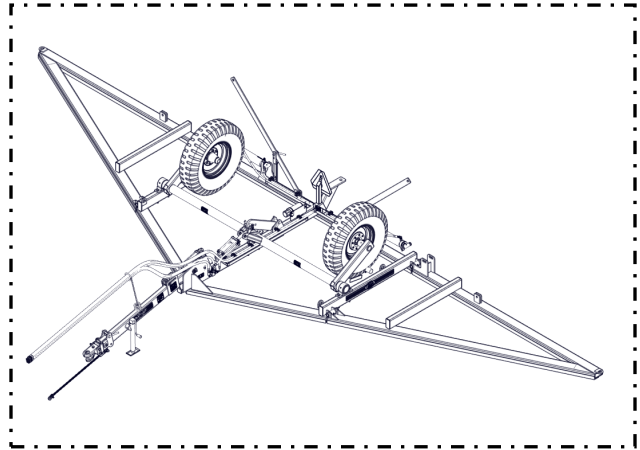
- 8) Use the axle hydraulics and hitch lift hydraulics to lower the float to the ground.



## 4 OPERATION

---

- 9) Lower the wings to the ground using the hydraulic cylinders.



### **4.8 Field Operation**

The Hayland Float functions by scraping any high areas of soil off and allowing that soil to fill the lower areas. Depending on soil conditions the front edge of the Hayland Float may dig into the ground too aggressively. If this occurs, adjust the hitch angle with the hitch lift hydraulic circuit until the desired results are achieved.

### **4.9 Returning the Hayland Float to Transport Position**

1. Perform the steps in section 4.7 in reverse order.



## 5 SERVICE AND MAINTENANCE

---

### 5.1 Servicing Record

See Lubrication and Maintenance sections for details of service. Copy this page to continue record.

ACTION CODE:   CL.....CLEAN                    T.....TIGHTEN  
                   L.....LUBRICATE                CH.....CHECK

<div style="display: flex; justify-content: space-between;"> <span>MAINTENANCE</span> <span>Hours Serviced By</span> </div>										
<b>8 Hours, Daily</b>										
I Clean off any entanglements										
G Hitch Pivot Pin (1)										
<b>Weekly</b>										
G Axle Tube (3)										
G Wing Cylinders (4)										
<b>Annually</b>										
G Wheel Bearings										
W Machine										
G Clevis Pivot Pin										
G Wing Pivot Pins (50 Hours)										

## 5 SERVICE AND MAINTENANCE

---

### 5.2 Servicing Intervals

#### **Grease**

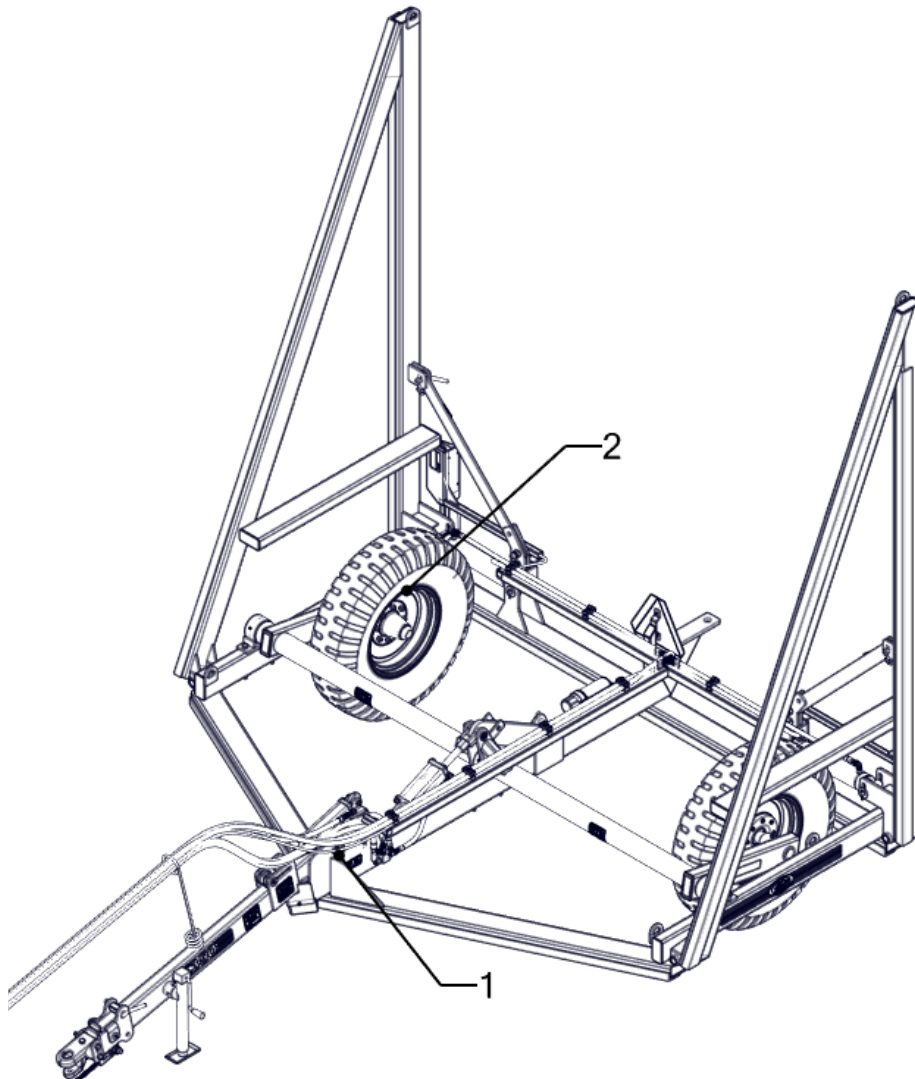
Use an S.A.E. multi-purpose high temperature grease with extreme pressure (EP) performance. An S.A.E. multi-purpose lithium base grease is also acceptable.

Use the Maintenance Checklist provided to keep a record of all scheduled maintenance.

1. Only use a hand-held grease gun for all greasing.
2. Wipe grease fittings with a clean cloth before greasing to avoid injecting dirt and grit.
3. Replace and repair broken fittings immediately.
4. If a fitting will not take grease, remove it and clean it thoroughly. Clean the lubricant passageway also. Replace fittings as necessary.

#### **Daily:**

1. Grease hitch pivot pin.
2. Check wheel bearings. Remove twine or other entangled material.



## 5 SERVICE AND MAINTENANCE

---

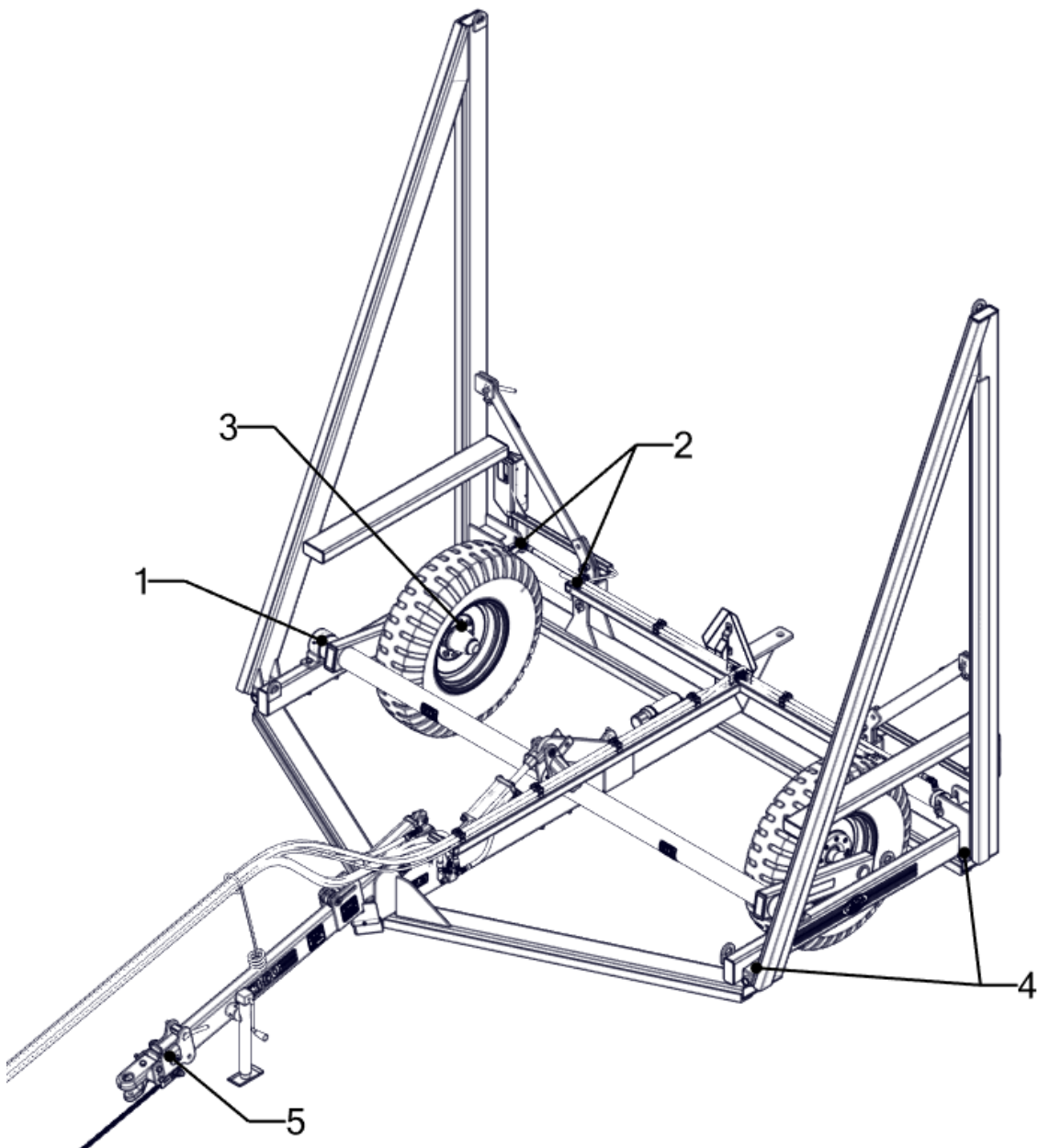
### 5.2 Servicing Intervals

#### WEEKLY:

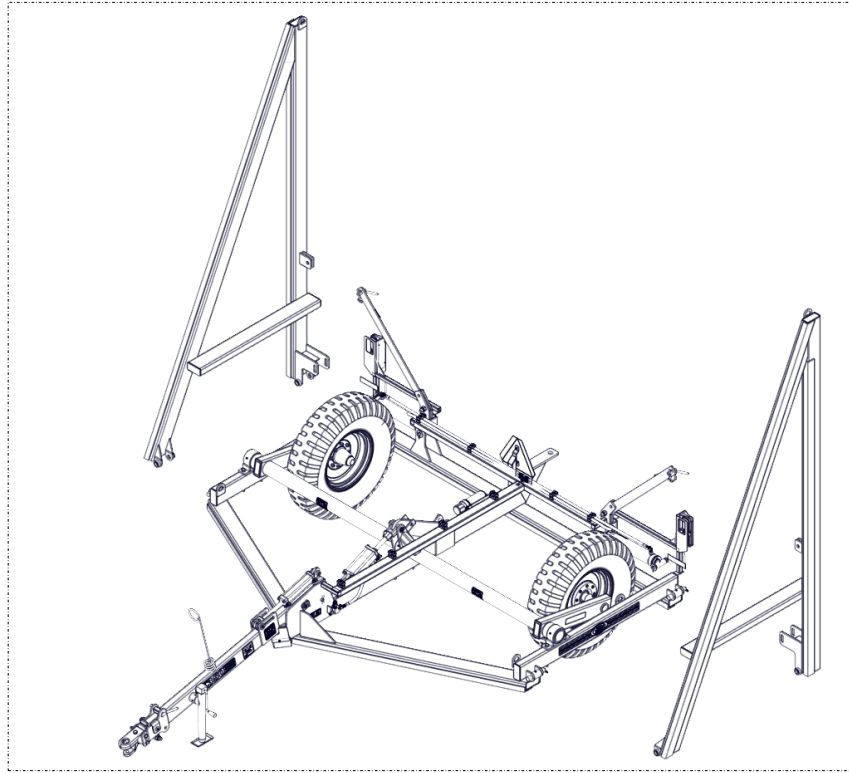
1. Grease the axle tube bushings (three locations).
2. Grease the wing lift cylinders (four locations).

#### ANNUALLY:

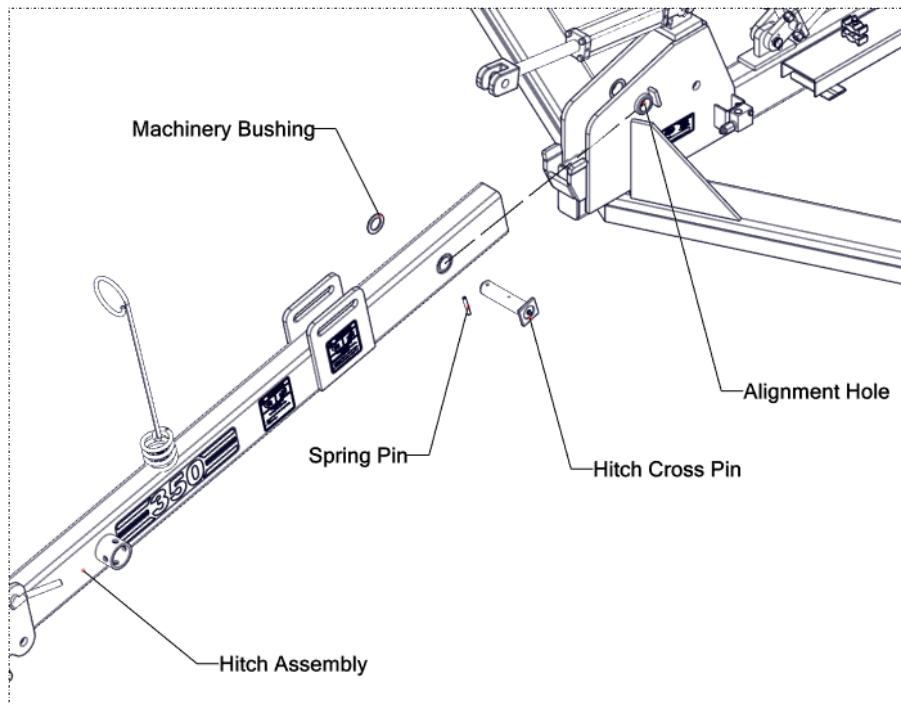
3. Repack wheel bearings.
4. Grease wing pivot pins (two locations - **every 50 hours of operation**).
5. Clevis pivot pin location.
6. Wash and clean machine.



## 6 PRE-DELIVERY INSTRUCTION (PDI)

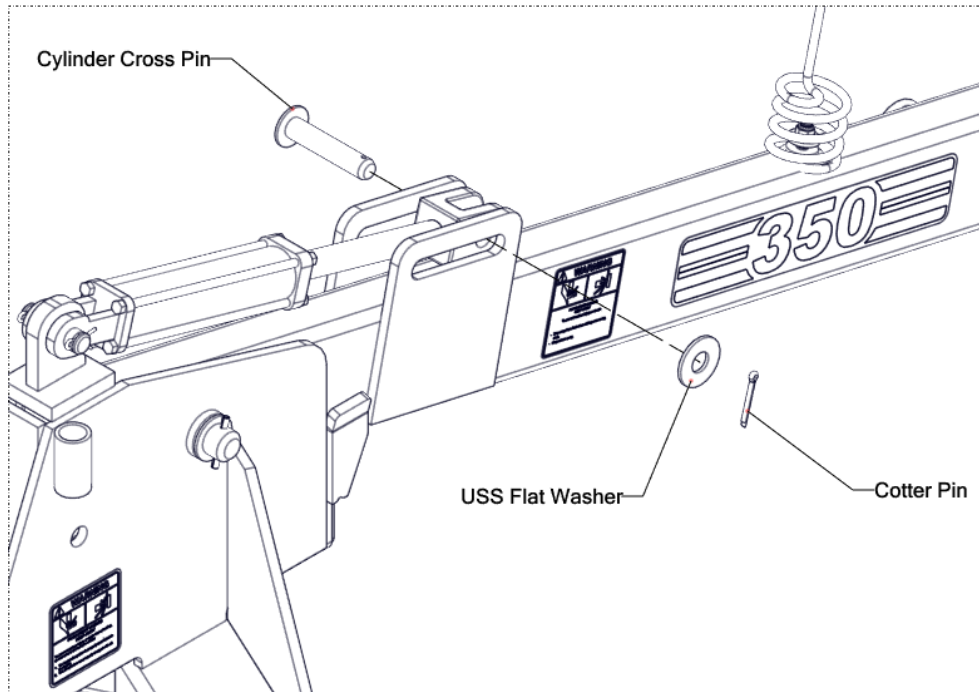


- Lift the hitch assembly and align it with the alignment hole on the main frame. **Note: The hitch assembly is heavy (approx. 250 lbs.). Please use a safe lifting device for lifting and aligning the hitch to the main frame.**
- Insert the hitch cross pin through the hole and secure using the machinery washer and spring pin.

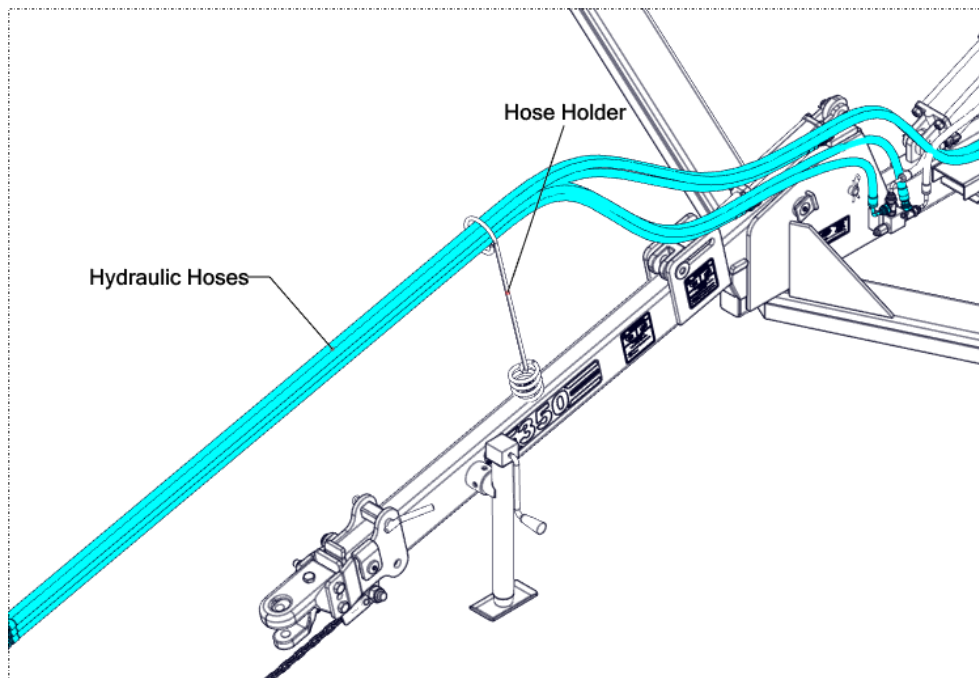


## 6 PRE-DELIVERY INSTRUCTION (PDI)

- Align the hitch lift cylinder clevis with the slot and insert the cylinder cross pin. Secure using the flat washer and cotter pin.

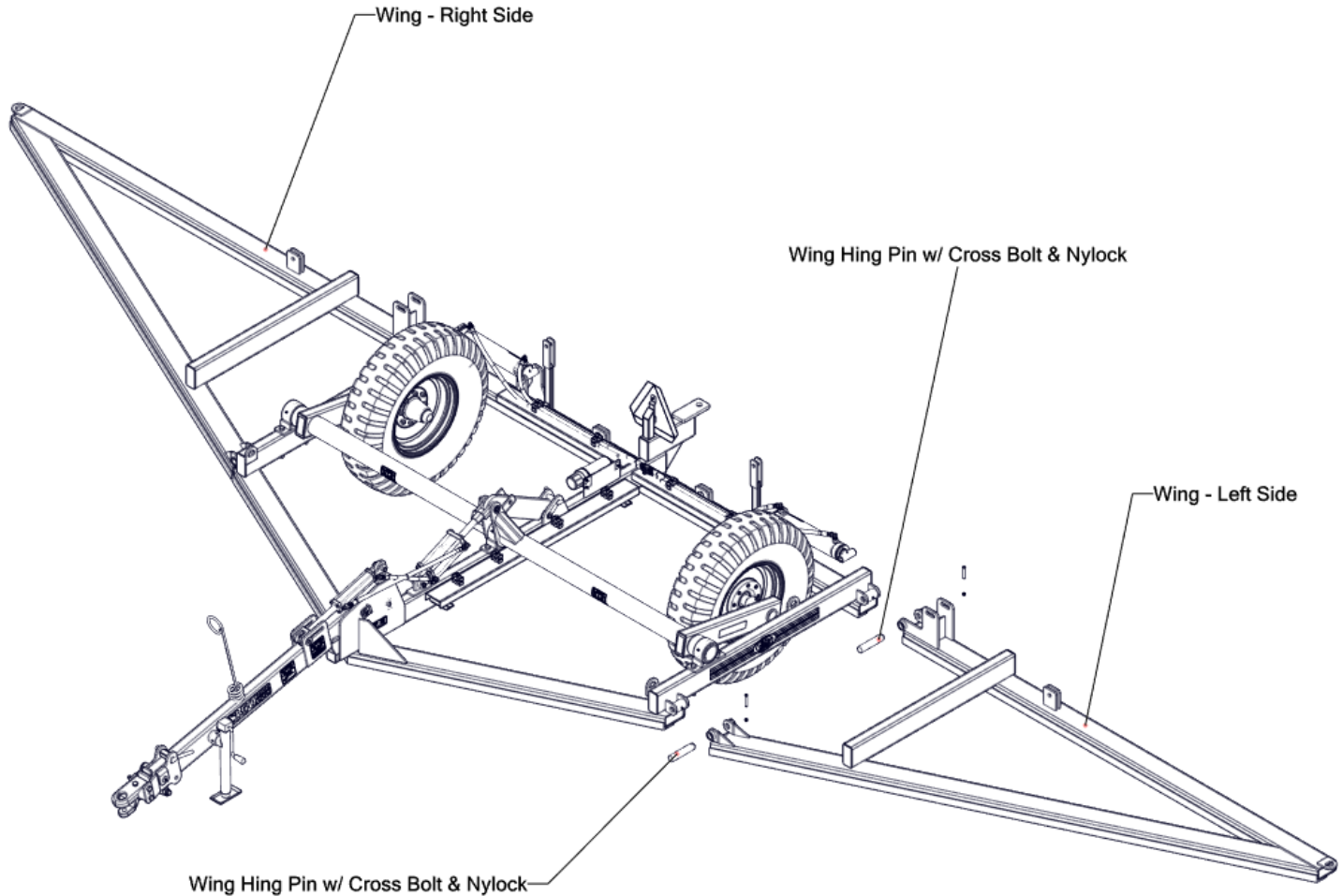


- Route the hydraulic hoses through the spring hose holder as shown above.



## 6 PRE-DELIVERY INSTRUCTION (PDI)

---



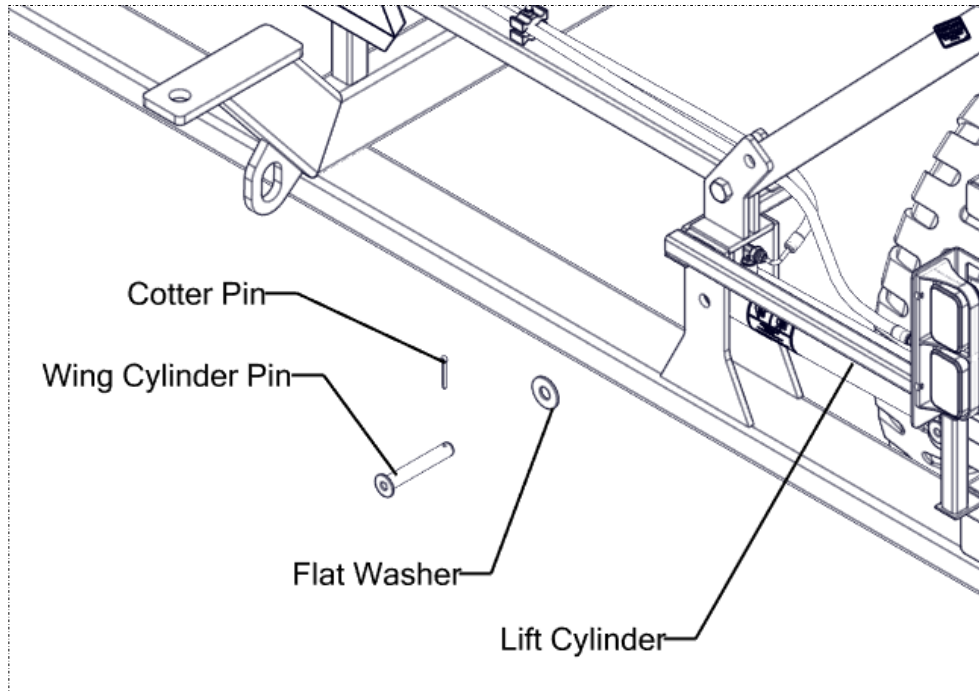
Follow the steps below for attaching wings and testing hydraulics.

### **Testing :-**

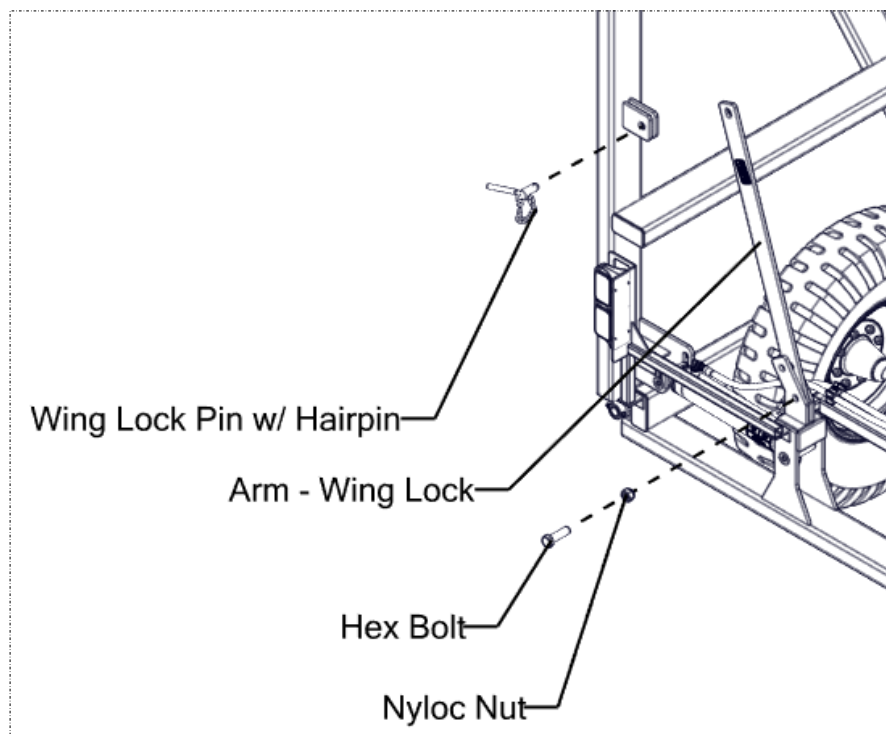
1. Check all hydraulic fittings for tightness prior to testing.
2. Stroke wing cylinders to the extended position and hold for 3-5sec to remove air (Note: cylinders will need to be supported).
3. Stroke cylinders to the retracted position and hold for 3-5sec to remove air.
4. Cycle wing cylinders 3 times before pinning to wings.
5. Attach the wings to the main body. **Note: Potential for danger here due to interchange of oil between cylinders. Keep area clear under wings when raising or lowering.**
6. Operate axle and hitch at least 3 times.
7. Check for leaks when cylinder is held at extended/retracted positions.
8. Check that all lock pins are secured.

## 6 PRE-DELIVERY INSTRUCTION (PDI)

- Use existing pin and hardware to secure cylinder to the wing as shown above. Test cylinders and hydraulics.



- Raise the wings vertically.
- Secure using wing lock arm and existing hardware.



## 7 TRANSPORTATION

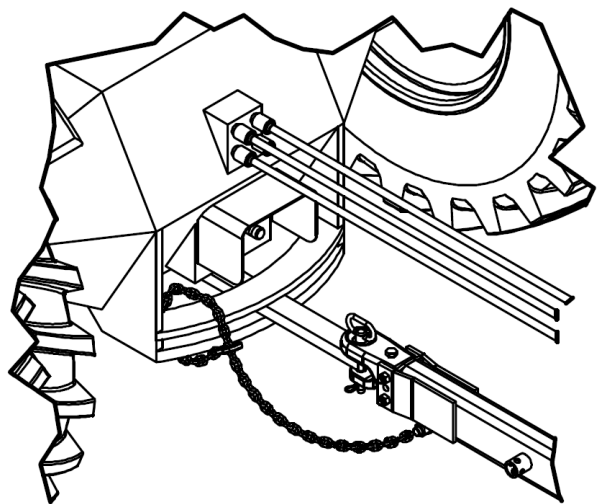


Hayland Floats are designed to be easily and conveniently moved from location to location.

1. Make sure that you are in compliance with all local regulations regarding transporting equipment on public roads and highways.
2. Make sure the SMV( Slow Moving Vehicle) emblem and all the lights and reflectors that are required by local highway and transportation authorities are in place, are clean and can be seen clearly by all overtaking and oncoming traffic.
3. Attach securely to the tractor using a retainer on the drawbar pin and a safety chain.
4. Do not allow anyone to ride on the Hayland Float or tractor during transportation.
5. Install the lift frame lock pin before transporting.
6. Do not exceed 20 mph (32 kph). Reduce speed on rough roads and surfaces.
7. Stay away from overhead obstructions and power lines. Electrocutation can occur without direct contact.
8. Always use the hazard warning flashers on the tractor when transporting unless prohibited by law.
9. Add extra lights or use pilot vehicles when transporting during times of limited visibility.
10. Keep to the right and yield the right-of-way to allow faster traffic to pass.
11. Verify that the Hayland Float has been properly folded for transport. (see Section 4.9)  
Check that all locking devices are in place and are secured with their retaining devices.
12. Use highway rated tires when transporting unit regularly on roads. Implement tires are rated at maximum 50 kph (30 mph)
13. Recommended truck hitch height for transportation is 17”.

### NOTE

Use **two** safety chains when transporting by truck and cross under the hitch when connecting.





## 8 STORAGE

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### **8.1 Placing in Storage**

At the end of the season, the machine should be thoroughly inspected and prepared for storage. Repair or replace any worn or damaged components to prevent any unnecessary down time at the start of the season.

Follow this procedure:

1. Wash the entire machine thoroughly using a water hose or pressure washer to remove all dirt, mud, debris or residue.
2. Inspect all moving parts. Remove all foreign material. Be sure that all components are clean and can move freely.
3. Inspect all hydraulic hoses, fittings, lines, couplers and valves. Tighten any loose fittings. Replace any hose that is badly cut, nicked or abraded or is separating from the crimped end of the fitting.
4. Inspect for damaged or broken components. Repair or replace components as required.
5. Lubricate all grease points. Make sure all grease cavities have been filled with grease to remove any water residue from washing.
6. Touch up all paint nicks and scratches to prevent rusting.
7. Fold the Hayland Float into transport position (Refer to Section 4.9).
8. Move the machine to its storage location.
9. Select an area that is dry, level and free of debris.
10. Place planks under the jack for added support if required.
11. Unhook the machine from the tractor (Refer to Section 4.5).

### **8.2 Removing from Storage & Pre-Season Preparation**

When removing from storage and preparing to use, follow this procedure:

1. Clear the area of bystanders, especially small children, and remove foreign objects from the machine and the working area.
2. Remove any storage covers used to protect the machine.
3. Attach the Float to the tractor.
4. **INSPECTION:**
  - a) Check that all hydraulic lines are seated and completely coupled.
  - b) Check that all of the bearing locking collars on the shafts are tight and in good condition.
  - c) Check that all set screws on the bearing collars are tight.
  - d) Check that all bearing mounting bolts are tight.
  - e) Check that all tires are inflated per the recommended pressures.
  - f) Re-torque all wheel bolts.
5. Lubricate all grease fittings.
6. Replace any defective parts.
7. Go through the **Pre-Operational Checklist** (Section 4.2) before using.

## 9 TROUBLESHOOTING GUIDE

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The following table lists a number of difficulties that could be encountered and suggested remedies.

If you encounter a problem that is difficult to solve, please call your dealer. **Before you call, please have this Operator's Manual and the Serial Number of your Hayland Float at hand.**

SYMPTOM	PROBABLE CAUSE	SOLUTION
Front of Hayland Float is digging into the ground too much	Too much hitch pressure	Retract hitch lift cylinder to reduce hitch pressure
Hayland float is not leveling high spots adequately	Insufficient ground pressure	Extend hitch lift cylinders to increase ground pressure
	Wheels are supporting frame	Ensure frame is lowered completely to the ground (wheels should come off ground)
	Front edge float is worn	Replace cutting edge (3 x 2 x 3/8 angle)

# 10 SPECIFICATIONS

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## **10.1 General Specifications**

Weight.....4824 lbs

Minimum Tractor Horsepower .....80 hp - PTO

## **10.2 Tire Specifications**

Tire/Rim.....11R22.5 Tire/Rim 8-bolt

Tire Pressure ..... Check Tire for Info

## **10.3 Bolt Torque Specifications**

Wheel Bolts/nuts ..... 120-140 ft.lbs.

.....*All Other Bolts—Refer to Bolt Torque Chart On Following Page*

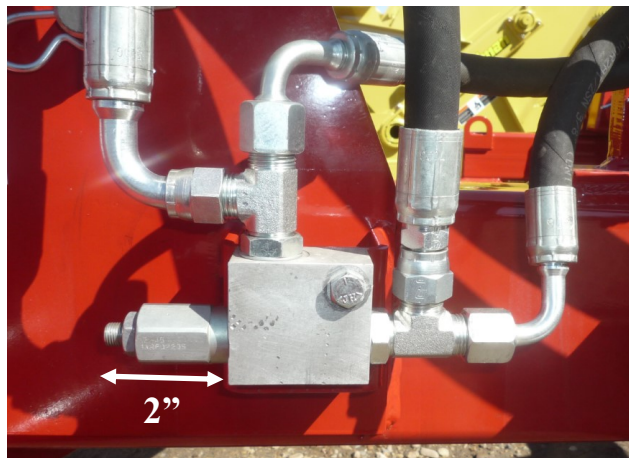
## **10.4 Hydraulics**

Number of circuits required ..... 3

Required Oil Flow .....5 GPM





Required Oil Pressure ..... 1500 psi

..... The pressure relief valve for raising the wheels is factory set to 500 psi  
..... The end of the set screw should be set at approximately 2” from the valve body.



# 10 SPECIFICATIONS

## BOLT TORQUE CHART

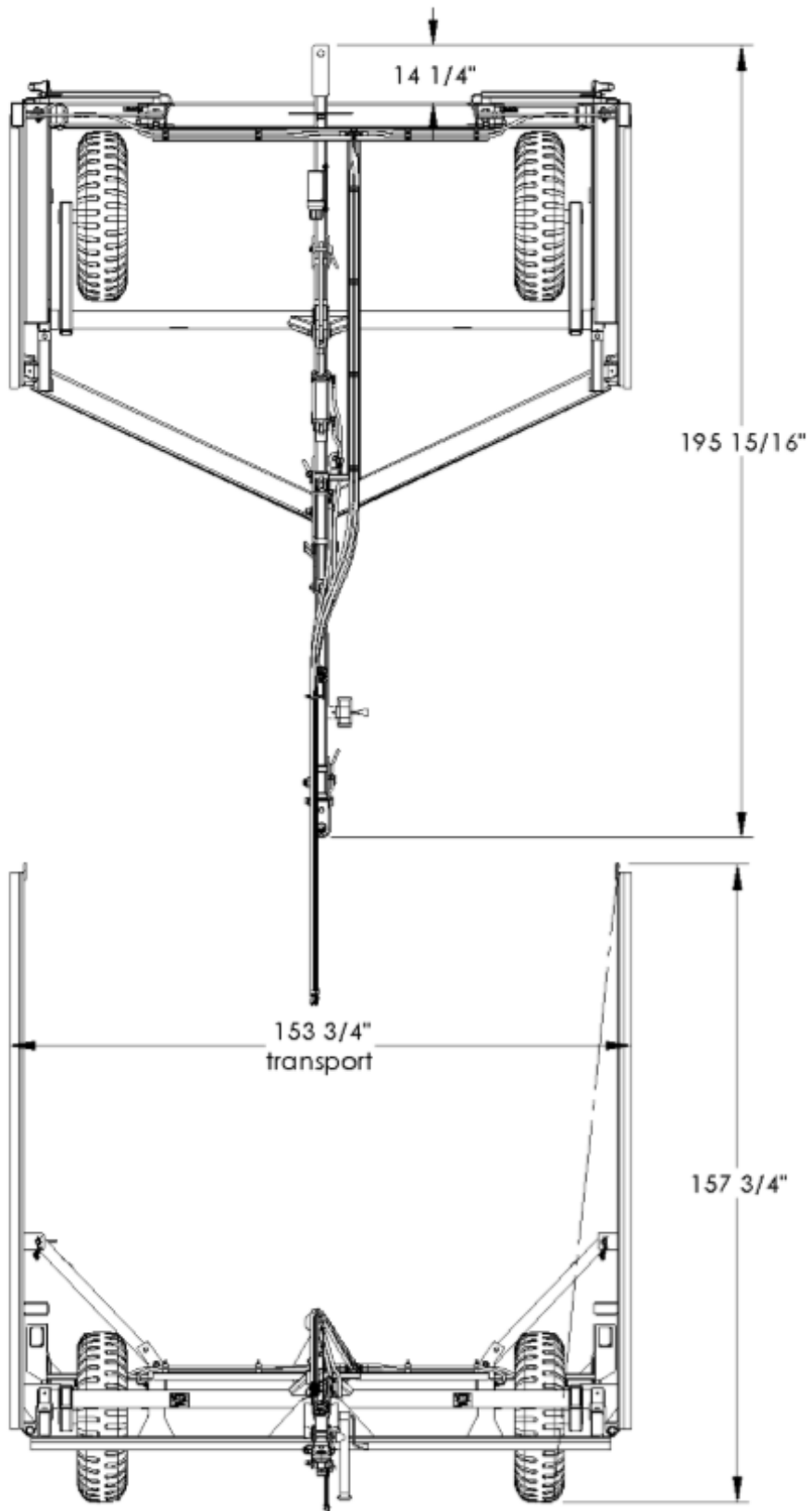
SIZE							
	SAE GRADE 2		SAE GRADE 5		SAE GRADE 8		L9
	ASSEMBLY TORQUE DRY	LUBRICATED	ASSEMBLY TORQUE DRY	LUBRICATED	ASSEMBLY TORQUE DRY	LUBRICATED	ASSEMBLY TORQUE LUBRICATED
1/4-20	66*	49*	8	75*	12	9	11
1/4-28	76*	56*	10	86*	14	10	13
5/16-18	11	8	17	13	20	18	21
5/16-24	12	9	19	14	25	20	23
3/8-16	20	15	30	23	45	30	33
3/8-24	23	17	35	25	50	35	38
7/16-14	30	24	50	35	70	55	60
7/16-20	35	25	55	40	80	60	65
1/2-13	50	35	75	55	110	80	95
1/2-20	55	40	90	65	120	90	105
9/16-12	65	50	110	80	150	110	140
9/16-18	75	55	120	90	170	130	150
5/8-11	90	70	150	110	220	170	185
5/8-18	100	80	180	130	240	180	205
3/4-10	160	120	260	200	380	280	290
3/4-16	180	140	300	220	420	320	355
7/8-9	190	140	400	300	600	460	505
7/8-14	210	155	440	320	660	500	585
1-8	220	160	580	440	900	680	775
1-14	240	170	640	480	1000	740	900
1 1/8-7	300	220	800	600	1280	960	1150
1 1/8-12	340	260	880	660	1440	1080	1325
1 1/4-7	420	320	1120	840	1820	1360	1600
1 1/4-12	460	360	1240	920	2000	1500	1750
1 3/8-6	560	420	1460	1100	2380	1780	—
1 3/8-12	640	460	1680	1260	2720	2040	—
1 1/2-6	740	560	1940	1460	3160	2360	3250
1 1/2-12	840	620	2200	1640	3560	2660	3650

**ITEMS WITH \* = INCH POUNDS  
ALL OTHERS = FOOT POUNDS**

**"LUBRICATED"  
INCLUDES LUBRICANTS, LUBRIZING, PLATING, AND HARDENED WASHERS**

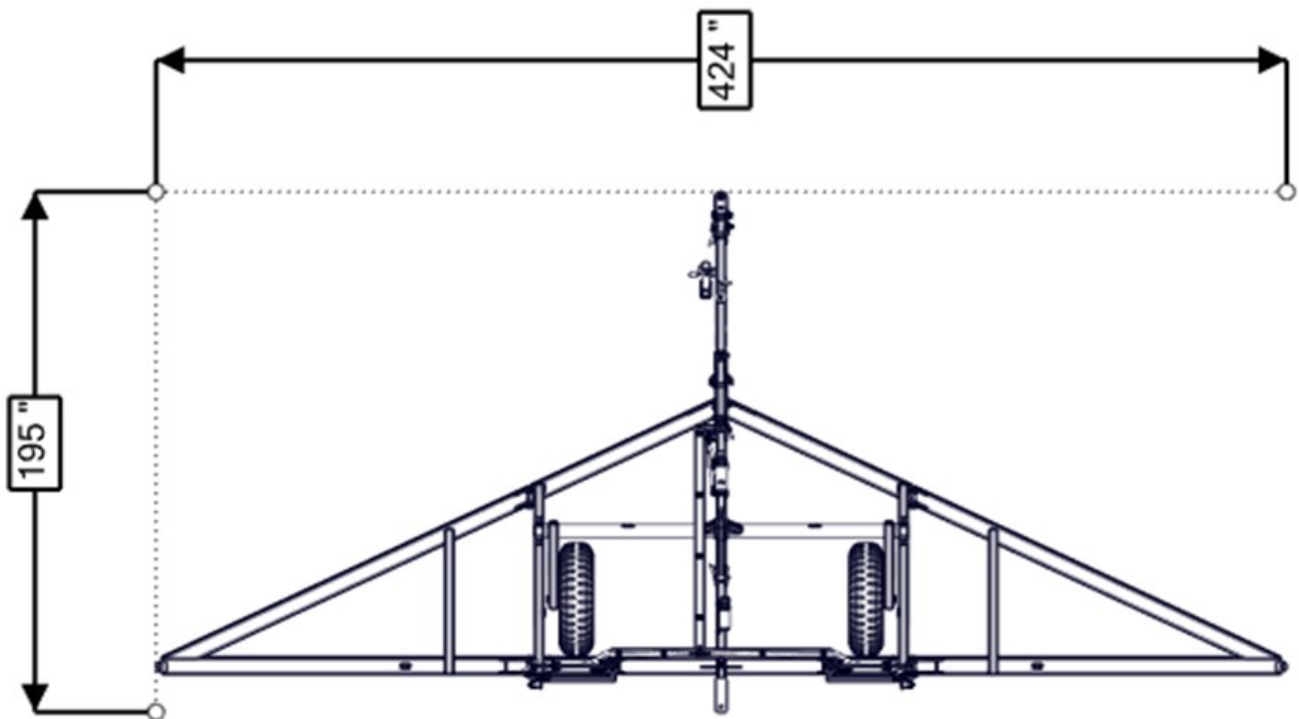
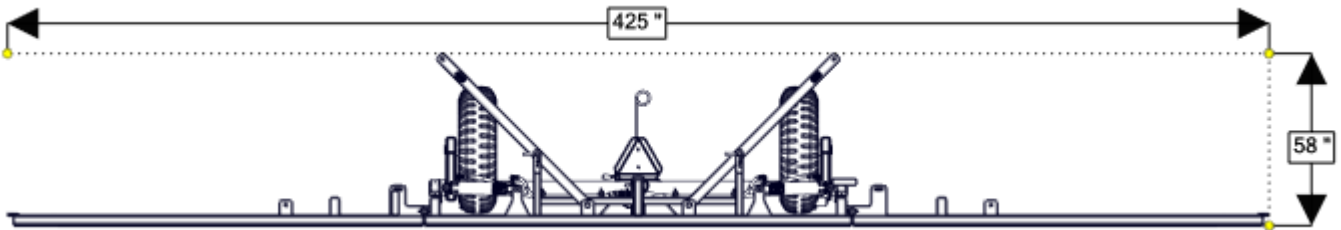
# 10 SPECIFICATIONS

## 10.5 Overall Dimensions



# 10 SPECIFICATIONS

## 10.5 Overall Dimensions



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## 11 PARTS

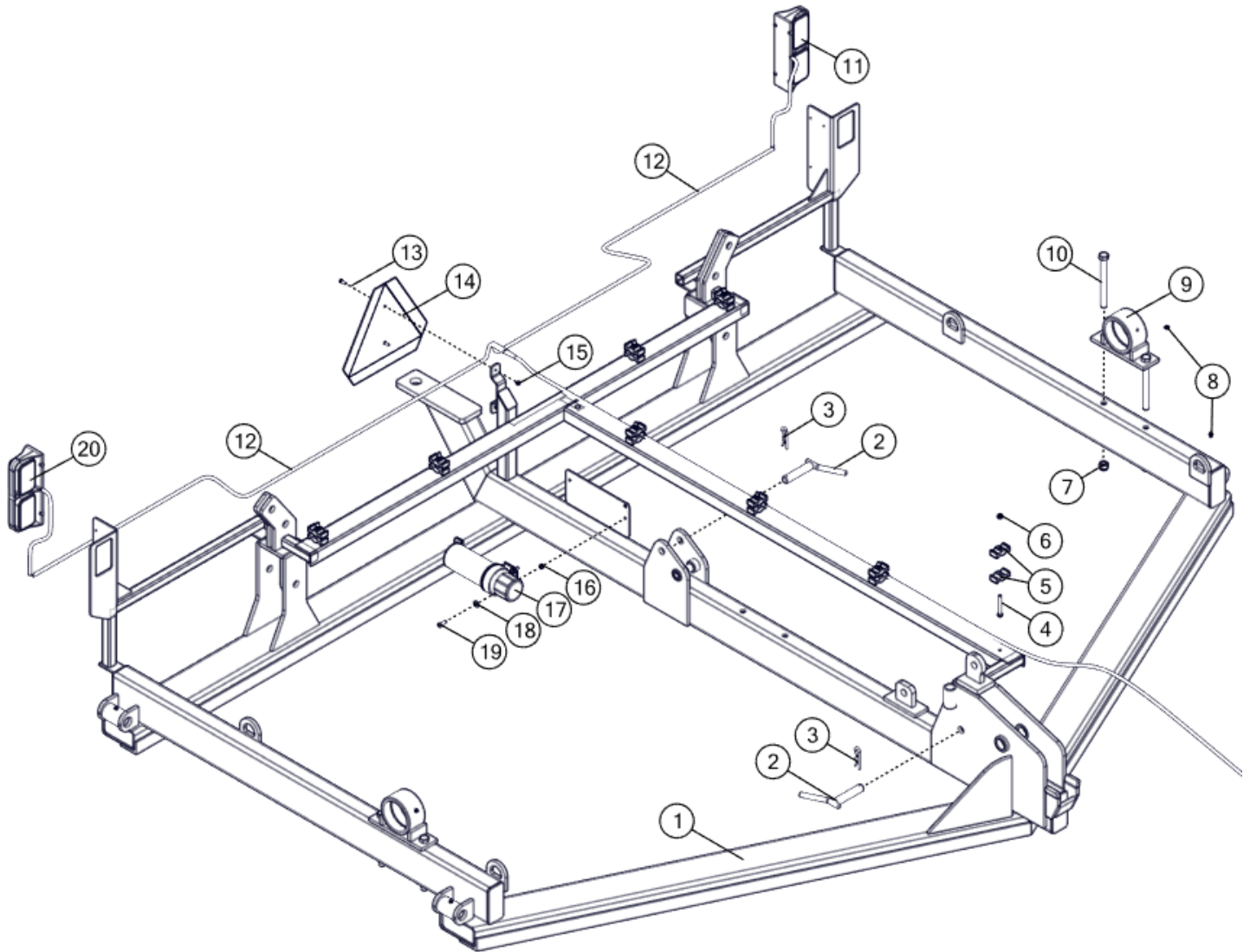
### 11.1 Main Frame Assembly

REF #	PART #	DESCRIPTION	QTY
1	F60000-0042.02	Main Chassis Weldment	1
2	066100-0002	Pin - Transport Lock	2
3	161300-0777	Hair Pin - 5/32" x 3-15/16"	2
4	159400-0005	Hex Bolt - 3/8" NC x 3" Gr.5 PL	8
5	070000-0601	Hose Clamp Half	16
6	167200-0652	Nyloc Nut - 3/8" NC Gr.5 PL	8
7	167200-0692	Nyloc Nut - 3/4" NC Gr.5 PL	4
8	133200-0040	Grease Nipple - 1/8" NPT	6
9	F60000-0011.00	Axle Support Assy	2
10	159400-0824	Hex Bolt 3/4" NC x 8" Gr.5 PL	4
11	147000-0600	LED Dual Tail Light Kit - Left	1
12	147000-0617	Float light Harness	1
13	159300-0543	Hex Bolt - 1/4" NC x 3/4" Gr.5 PL	2
14	147000-0004	Slow Moving Vehicle Emblem	1
15	167200-0642	Nyloc Nut - 1/4" NC Gr.5 PL	2
16	167200-0648	Nyloc Nut - 5/16" NC Gr.5 PL	3
17	147000-0010	Manual Canister	1
18	168000-0040	Flat Washer - 5/16" USS PL	3
19	159300-0735	Hex Bolt - 5/16" NC x 1" Gr.5 PL	3
20	147000-0601	LED Dual Tail Light Kit - Right	1



# 11 PARTS

## 11.1 Main Frame Assembly



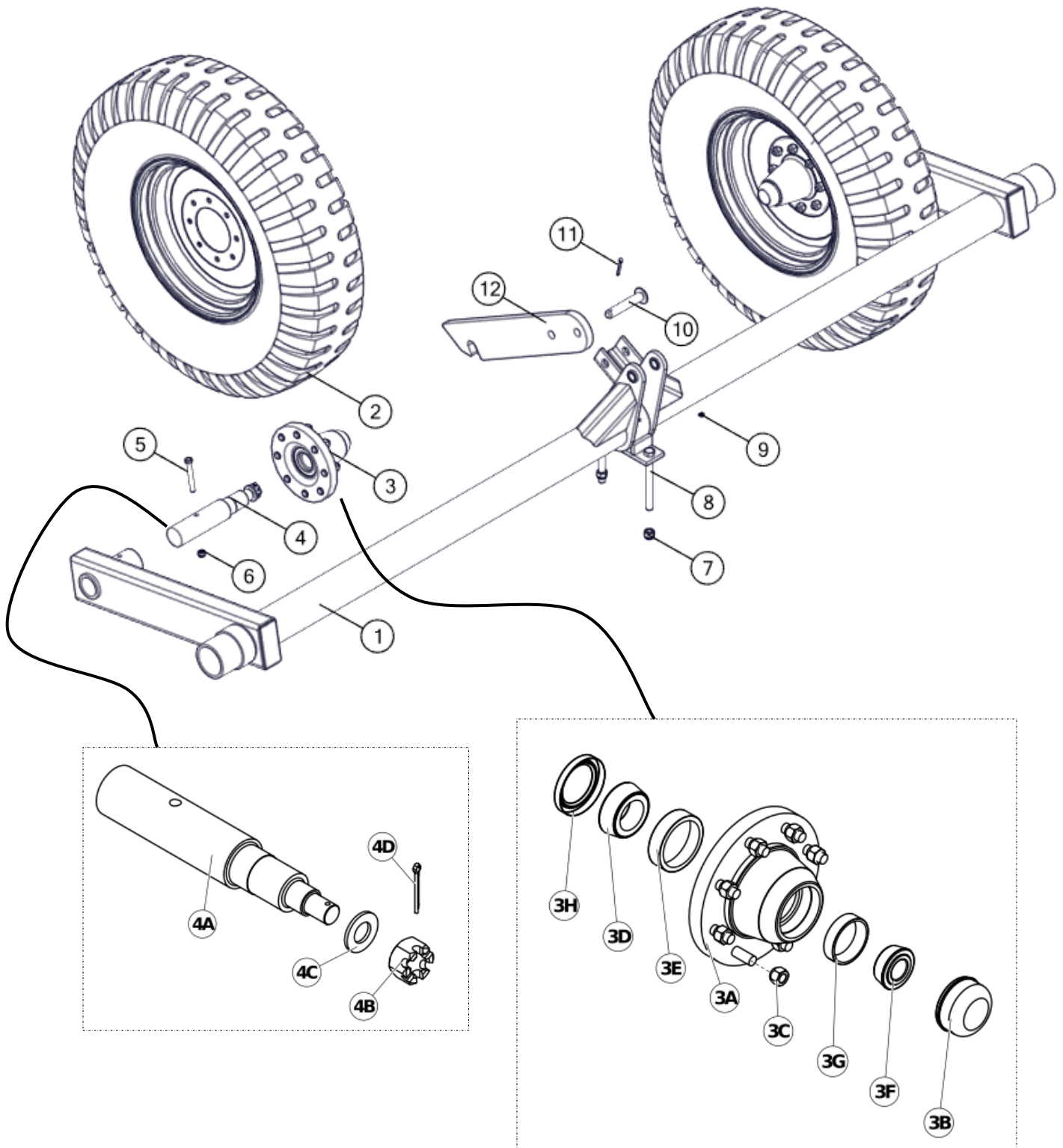
## 11 PARTS

### 11.2 Axle Assembly

REF #	PART #	DESCRIPTION	QTY
1	F60000-0010.00	Axle Weldment	1
2	100100-0620	11R22.5 on a 8 bolt rim	2
3	340800-0650	Hub 8 Bolt c/w Cups, Cones 6500 Series	2
3A	340800-0650	6500 Series 8 Bolt Hub	2
3B	340200-0017	Dust Cap	2
3C	340400-0040	Wheel Nut - 9/16"	2
3D	114500-0040	Inner Cone - 3780	2
3E	115000-0040	Inner Cup - 3720	2
3F	114500-0019	Outer Cone - 2790	2
3G	115000-0019	Outer Cup - 2720	2
3H	340100-0017	Dust Seal	2
4	340500-0650	Spindle 2.50 x 14 w/Nut & Wash 6500 Series	2
4A	F40000-0063.00	6500 Series Spindle - 2-1/2" x 14"	2
4B	340700-0033	Spindle Nut - 1" x 14 UNF	2
4C	168000-0598	Flat Washer - 1" SAE PL	2
4D	170000-0200	Cotter Pin - 3/16" x 2"	2
5	159400-0488	Hex Bolt - 1/2" NC x 4" Gr.5 PL	2
6	167200-0688	Nyloc Nut - 1/2" NC Gr.5 PL	2
7	167200-0692	Nyloc Nut - 3/4" NC Gr.5 PL	2
8	159400-0824	Hex Bolt 3/4" NC x 8" Gr.5 PL	2
9	133200-0040	Grease Nipple - 1/8" NPT	1
10	066100-0073	CROSS PIN - WASHER TOP	1
11	170000-0270	COTTER PIN, 1/4" X 2"	1
12	F40000-0062.01	Safety Lock Arm - Cyl	1

# 11 PARTS

## 11.2 Axle Assembly



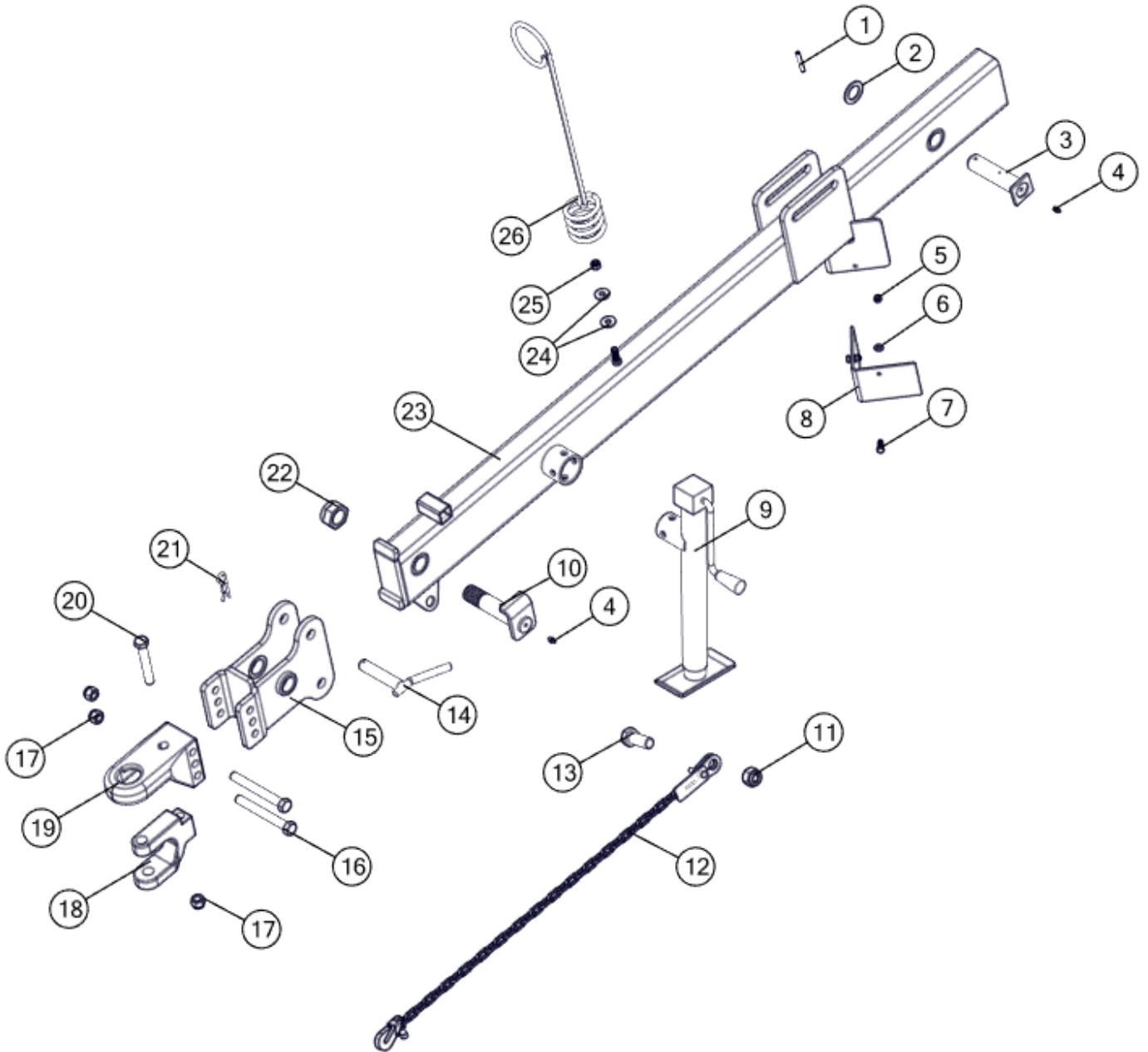
## 11 PARTS

### 11.3 Drawbar Assembly

REF #	PART #	DESCRIPTION	QTY
1	172200-0790	Spring Pin - 5/16 x 2-1/2"	1
2	168000-0629	Machinery Bushing - 1-1/2" ID x 10 Ga	1
3	066100-0099	Cross Pin - 1-1/2" Greasable	1
4	133200-0040	Grease Nipple - 1/8" NPT	2
5	167200-0652	Nyloc Nut - 3/8" NC Gr.5 PL	2
6	168000-0540	Flat Washer - 3/8" SAE	2
7	159300-0961	Hex Bolt - 3/8" NC x 1" Gr.5 PL	2
8	F40000-0198.00	Hitch Guard - Belting	1
9	341100-0057	Jack Mount	1
10	066100-0100	Threaded Pin - 1-1/2" x 6-7/8"	1
11	167200-0694	Nyloc Nut - 1" NC Gr.5 PL	1
12	140000-0490	Safety Chain	1
13	159400-0974	Hex Bolt - 1" NC x 2-1/2" Gr.5 PL	1
14	066100-0002	Pin - Transport Lock	1
15	F60000-0041.00	Clevis Pivot Weldment - Hitch	1
16	159400-0819	Hex Bolt - 3/4" NC x 6-1/2" Gr.5 PL	2
17	167200-0692	Nyloc Nut - 3/4" NC Gr.5 PL	3
18	343000-0206	Clevis	1
19	343000-0237	Base Hitch	1
20	159400-0815	Hex Bolt - 3/4" NC x 5" Gr.5 PL	1
21	161300-0777	Hair Pin - 5/32" x 3-15/16"	1
22	167200-0435	Top Lock Nut - 1-1/2" NC Gr. 5 PL	1
23	F60000-0029.01	Pivoting Hitch - Center Section - Float	1
24	168000-0065	Flat Washer - 1/2" USS PLTD	2
25	167200-0688	Nyloc Nut - 1/2" NC Gr.5 PL	1
26	303400-0140	Hose Holder	1

# 11 PARTS

## 11.3 Drawbar Assembly



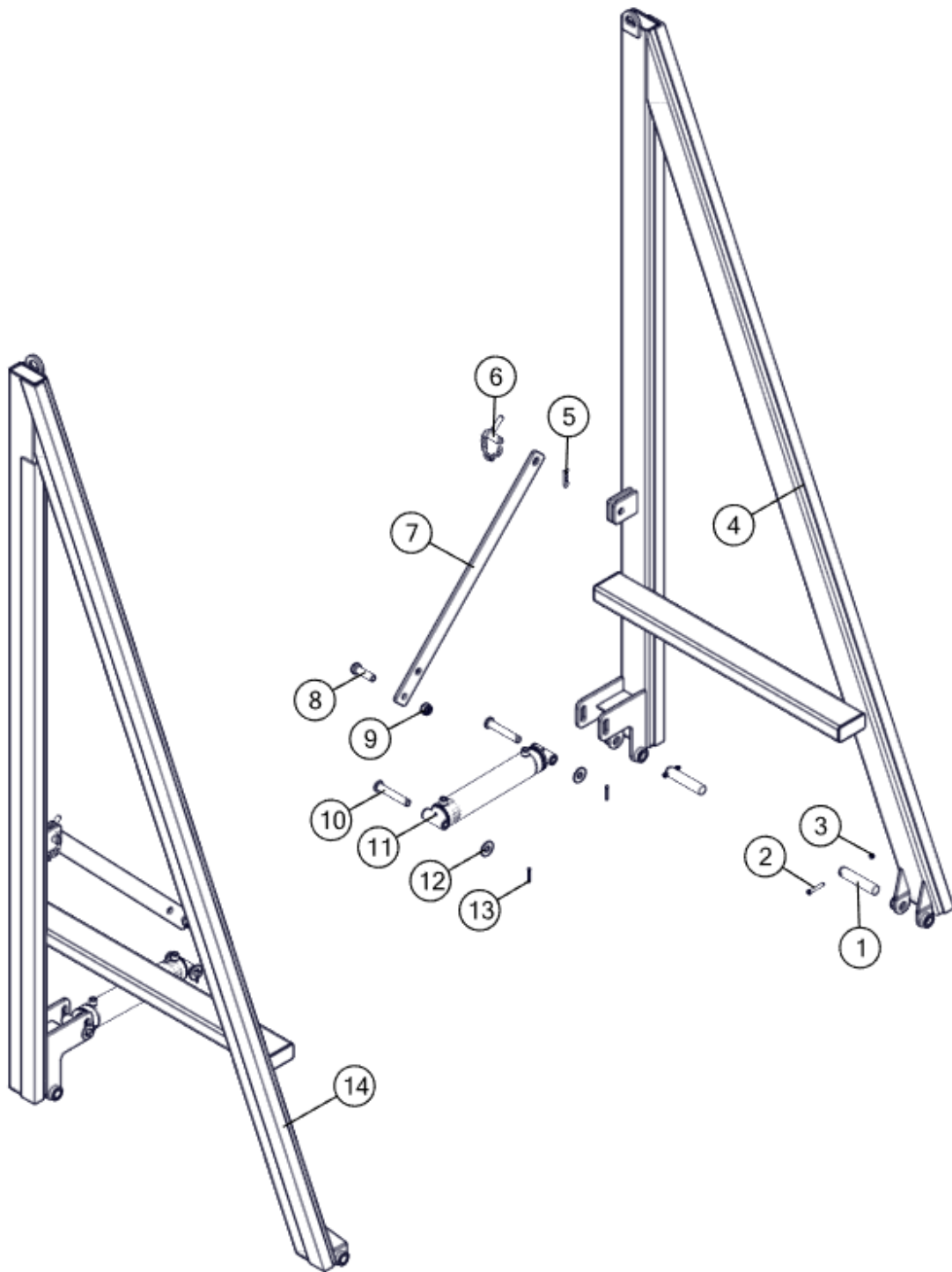
## 11 PARTS

### 11.4 Wing Assembly

REF #	PART #	DESCRIPTION	QTY
1	066100-0098	Pivot Pin - Wing x 1-1/2"	4
2	159400-0005	Hex Bolt - 3/8" NC x 3" Gr.5 PL	4
3	167200-0652	Nyloc Nut - 3/8" NC Gr.5 PL	4
4	F60000-0027.02	Wing - Left	1
5	161300-0777	Hair Pin - 5/32" x 3-15/16"	2
6	066100-0071	Lock Pin - Wing - PLATED	2
7	F40000-0187.00	Arm - Wing Lock	2
8	159500-0056	Hex Bolt 1" NC x 3-1/2" Gr.5 P	2
9	167200-0694	Nyloc Nut - 1" NC Gr.5 PL	2
10	066100-0070	Cross Pin - Wing Fold Cyl - plated	4
11	107700-0100	Wing Cylinder 3-1/2" x 16-5/16" Stroke	2
12	168000-0139	Flat Washer - 1" USS PL	4
13	170000-0270	COTTER PIN, 1/4" X 2"	4
14	F60000-0028.02	Wing - Right	1

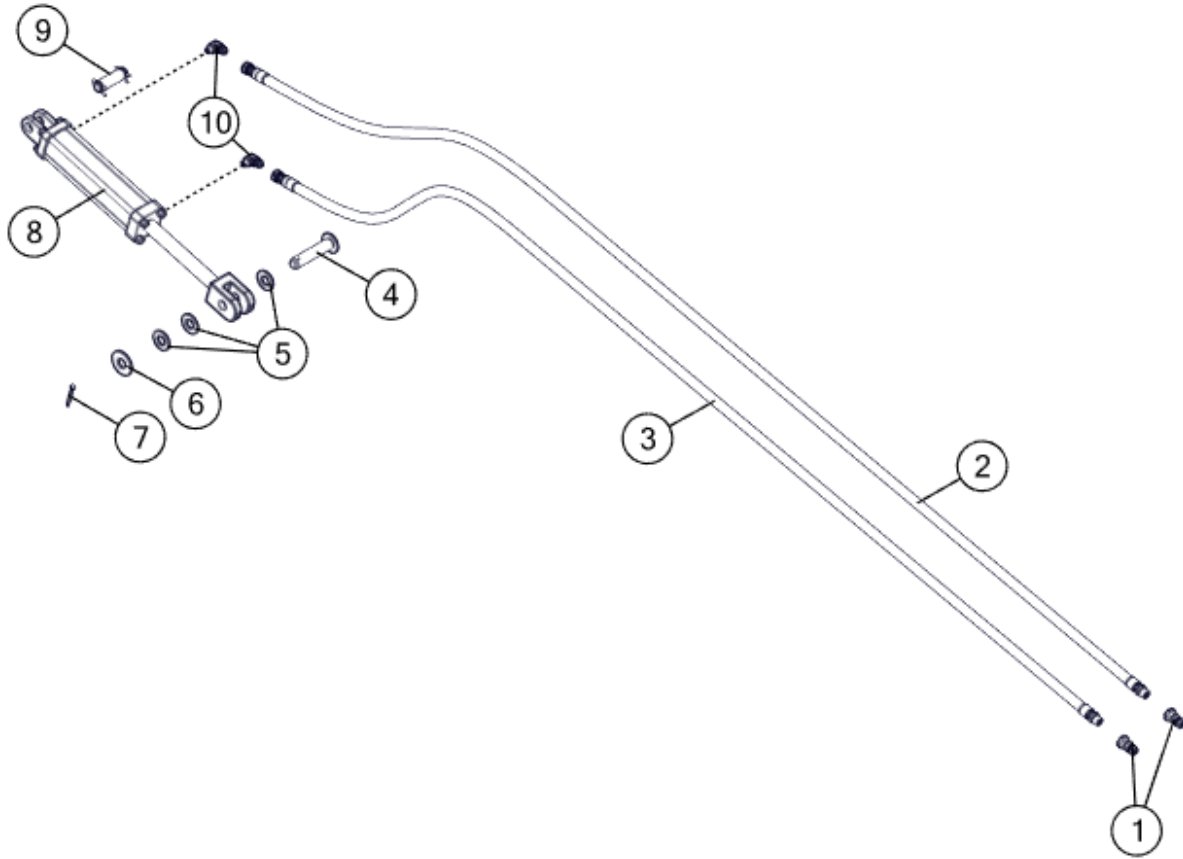
# 11 PARTS

## 11.4 Wing Assembly



## 11 PARTS

### 11.5 Hitch Hydraulics

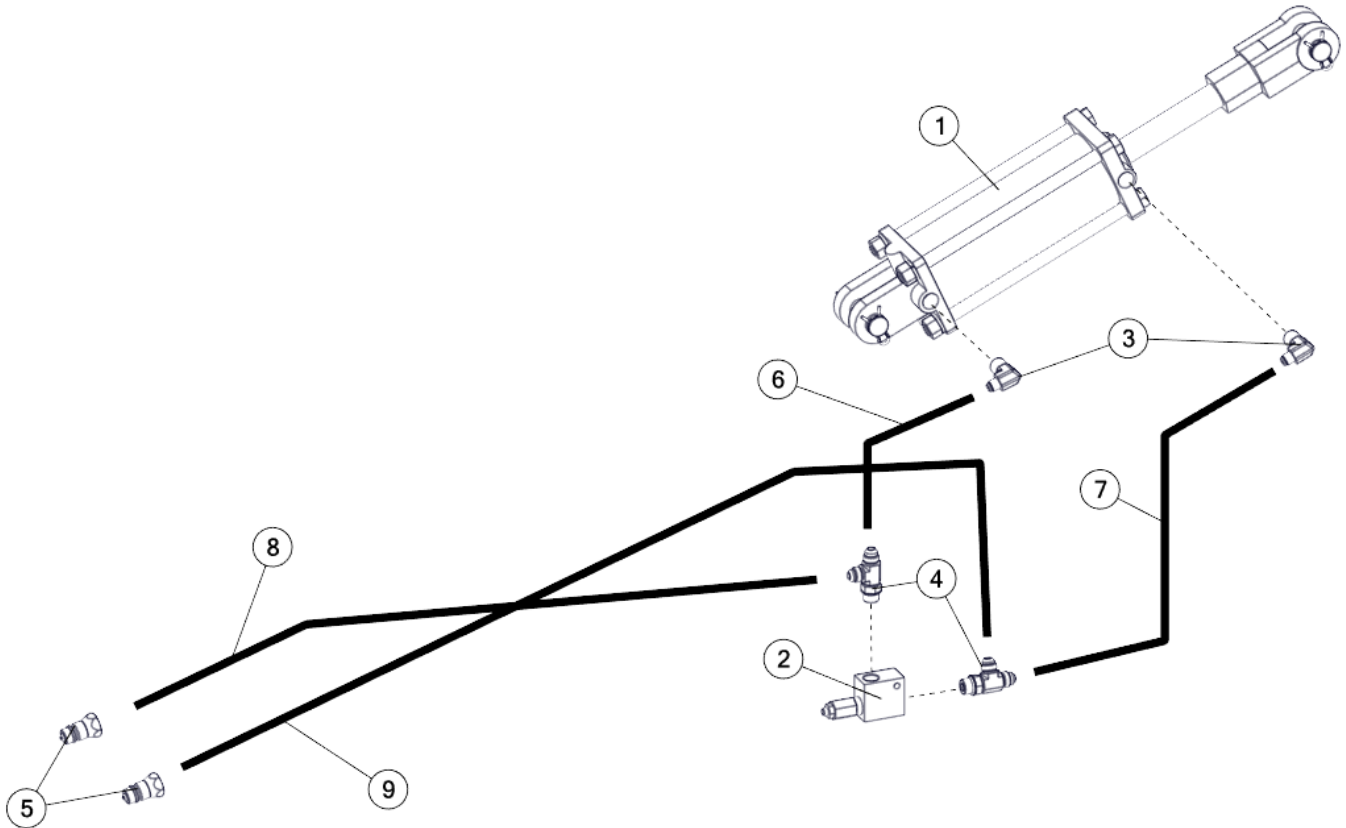


REF #	PART #	DESCRIPTION	QTY
1	104000-0610	Hydraulic - Q/C Male Poppet 1/2" FNPT	2
2	393000-0129	Hyd Hose 1/2" 2W x 129" - #8 JICFsw x 1/2" MPT	1
3	393000-0117	Hyd Hose 1/2" 2W x 117" - #8 JICFsw x 1/2" MPT	1
4	066100-0068	Cylinder Cross Pin - Pivot Hitch	1
5	168000-0598	Flat Washer - 1" SAE PL	3
6	168000-0139	Flat Washer - 1" USS PL	1
7	170000-0270	COTTER PIN, 1/4" X 2"	1
8	107200-0010	2-1/2 x 8 cyl body - AG Braber	1
9	107000-0103	Cylinder Pin - 1" Dia x 3"	1
10	082500-0806	90° Elbow - 3/8" MNPT x #8 JICM	2



## 11 PARTS

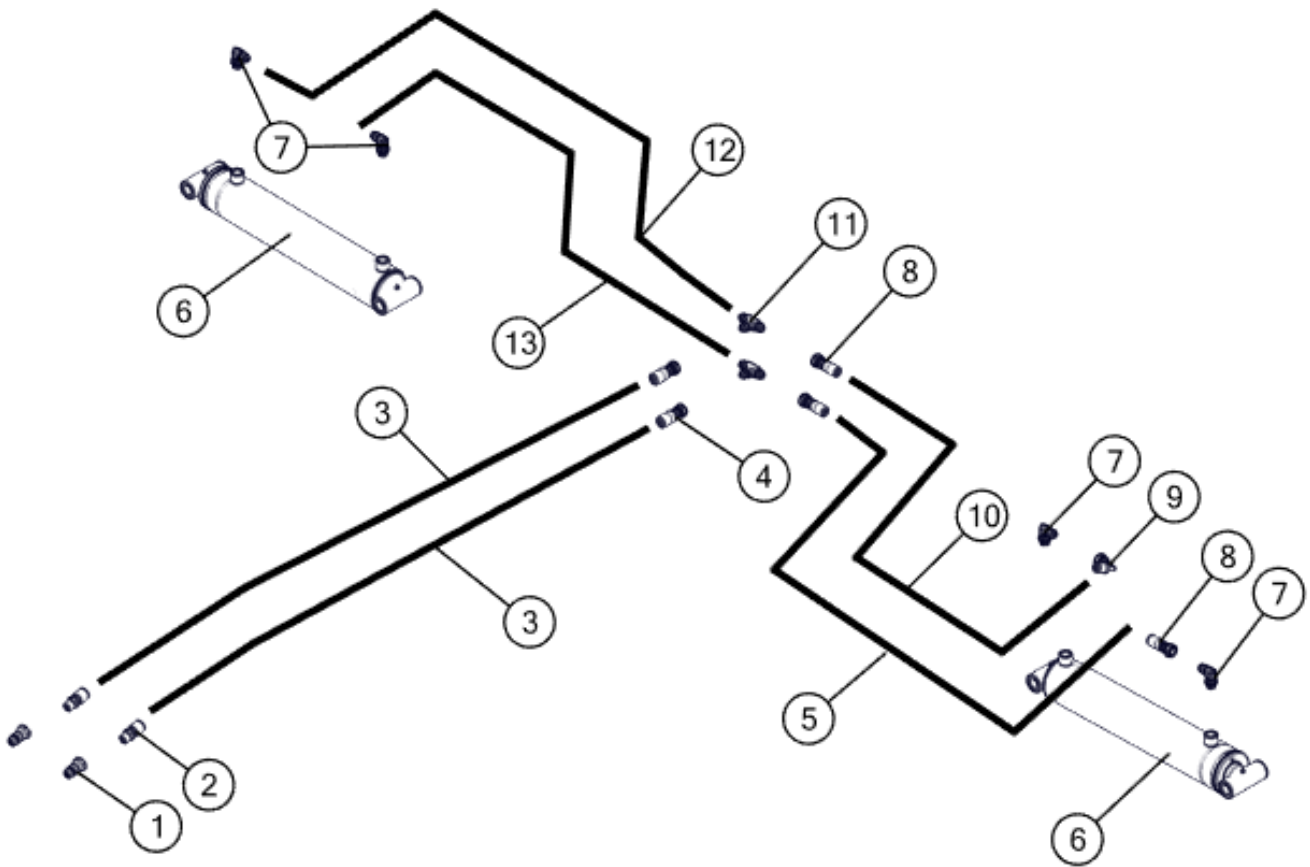
### 11.6 Axle Hydraulics



REF #	PART #	DESCRIPTION	QTY
1	F70000-0014.00	3-1/2 x 8 Cylinder - Tie Rod Style with built in stroke limiter	1
2	110100-0399	Pressure Relief Valve	1
3	082500-0807	90° Elbow - 1/2" MPT x #6 JICM	2
4	085100-0908	Tee - #8 ORBM x #8 JICM x #8 JICM	2
5	104000-0610	Hydraulic - Q/C Male Poppet 1/2" FNPT	2
6	393400-0009	Hydraulic Hose - 3/8" x 9" x #6 JICF x #8 JICF 90°	1
7	393400-0023	Hydraulic Hose - 3/8" X 19" - #8JICFsw X #6JICF	1
8	393000-0148	Hydraulic Hose - 1/2" x 148" x #8 JICF 90° x 1/2" MPT	1
9	393000-0151	Hydraulic Hose - 1/2" x 151" x #8 JICF x 1/2" MPT	1

## 11 PARTS

### 11.7 Wings Hydraulics



REF #	PART #	DESCRIPTION	QTY
1	104000-0610	Hydraulic - Q/C Male Poppet 1/2" FNPT	2
2	071000-0808	Hose End - 1/2" Dia x 1/2" MNPT	2
3	393000-0218	Hyd Hose 1/2" 2W x 218" - #8 JICFsw x 1/2" MPT	2
4	073600-0808	Hose End - 1/2"Dia x # 8 JICF-sw	2
5	393400-0053	Hyd Hose 3/8" 2W x 53" - #8 JICFsw x #8 JICFsw	1
6	107700-0100	Wing Cylinder 3-1/2" x 16-5/16" Stroke	2
7	086800-0808	90° Elbow - #8 ORB x #8 JICM-sw	4
8	073600-0608	Hose End - 3/8"Dia x # 8 JICF-sw	3
9	071000-0605	Hose End - 3/8" Dia x #8 JICF-sw 90°	1
10	393400-0042	Hyd Hose 3/8" 2W x 42" - #8 JICFsw x #8 JICF x 90de	1
11	085000-0308	Tee - #8 JICM x #8 JICM x #8 JICM	2
12	393400-0069	Hyd Hose 3/8" 2W x 69" - #8 JICFsw x #8 JICFsw	1
13	392700-0058	Hyd Hose 3/8" 2W x 58" - #8 JICFsw x #8 JICF x 90de	1







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